

METEOROLOGICAL OFFICE.

---

DAILY WEATHER REPORTS.

---

1<sup>ST</sup> JULY TO 31<sup>ST</sup> DECEMBER,

1891.

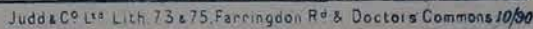
*Soc. Reg. Lond.*

22.2.93.



*July to December 1891.*

*July to December 1891.*





# DAILY WEATHER REPORT,

JULY TO DECEMBER, 1891.

## PREFACE.

The four Tables following give the Means for Pressure, Temperature, and Rainfall, with which the current Values in the Daily Weather Report may be compared.

TABLE I.—SHOWING FOR THE TELEGRAPHIC REPORTING STATIONS THE MEAN VALUES OF BAROMETRIC PRESSURE FOR EACH MONTH AND FOR THE WHOLE YEAR—DERIVED FROM OBSERVATIONS MADE AT 8 A.M. DAILY DURING THE 20 YEARS 1871—90.

| STATIONS.       | JAN.   | FEB.   | MAR.   | APRIL. | MAY.   | JUNE.  | JULY.  | AUGUST. | SEPT.  | OCT.   | NOV.   | DEC.   | ANNUAL | LIMITS OF YEARS OF ACTUAL OBSERVATION. | NO. OF YEARS. |
|-----------------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--|---------------|
|                 | Ins.   | Ins.   | Ins.   | Ins.   | Ins.   | Ins.   | Ins.   | Ins.    | Ins.   | Ins.   | Ins.   | Ins.   | Ins.   |  |               |
| Sumburgh Head.  | 29.675 | 29.775 | 29.751 | 29.840 | 29.879 | 29.883 | 29.784 | 29.781  | 29.797 | 29.726 | 29.683 | 29.673 | 29.771 | 1872—1890                              | 19            |
| Stornoway -     | 29.682 | 29.773 | 29.778 | 29.824 | 29.886 | 29.876 | 29.795 | 29.796  | 29.815 | 29.756 | 29.699 | 29.705 | 29.782 | 1873—1890                              | 18            |
| Wick - -        | 29.719 | 29.804 | 29.793 | 29.848 | 29.901 | 29.898 | 29.806 | 29.810  | 29.829 | 29.763 | 29.722 | 29.718 | 29.801 | 1871—1890                              | 20            |
| Nairn - -       | 29.745 | 29.814 | 29.810 | 29.848 | 29.908 | 29.904 | 29.815 | 29.819  | 29.843 | 29.779 | 29.738 | 29.743 | 29.814 | " " "                                  | 20            |
| Aberdeen -      | 29.787 | 29.848 | 29.825 | 29.858 | 29.918 | 29.916 | 29.826 | 29.832  | 29.858 | 29.793 | 29.758 | 29.767 | 29.832 | " " "                                  | 20            |
| Leith - -       | 29.825 | 29.870 | 29.853 | 29.863 | 29.932 | 29.930 | 29.844 | 29.849  | 29.881 | 29.822 | 29.789 | 29.807 | 29.855 | " " "                                  | 20            |
| Shields - -     | 29.881 | 29.906 | 29.880 | 29.866 | 29.943 | 29.948 | 29.867 | 29.871  | 29.903 | 29.846 | 29.813 | 29.845 | 29.881 | " " "                                  | 20            |
| Spurn Head -    | 29.926 | 29.934 | 29.896 | 29.863 | 29.956 | 29.964 | 29.900 | 29.905  | 29.929 | 29.867 | 29.842 | 29.873 | 29.905 | 1880—1890                              | 11            |
| York - -        | 29.932 | 29.939 | 29.908 | 29.875 | 29.962 | 29.969 | 29.901 | 29.906  | 29.939 | 29.882 | 29.846 | 29.890 | 29.912 | 1873—1890                              | 18            |
| Loughborough -  | 29.967 | 29.963 | 29.932 | 29.879 | 29.973 | 29.980 | 29.928 | 29.928  | 29.959 | 29.904 | 29.877 | 29.924 | 29.935 | 1871—1890                              | 20            |
| Ardrossan -     | 29.838 | 29.873 | 29.865 | 29.857 | 29.935 | 29.932 | 29.856 | 29.857  | 29.885 | 29.831 | 29.791 | 29.820 | 29.862 | " " "                                  | 20            |
| Mullaghmore -   | 29.817 | 29.854 | 29.872 | 29.839 | 29.929 | 29.936 | 29.869 | 29.868  | 29.890 | 29.845 | 29.780 | 29.821 | 29.800 | 1879—1890                              | 12            |
| Donaghadee -    | 29.856 | 29.884 | 29.882 | 29.859 | 29.947 | 29.946 | 29.877 | 29.879  | 29.905 | 29.850 | 29.810 | 29.848 | 29.879 | 1873—1890                              | 18            |
| Liverpool -     | 29.924 | 29.934 | 29.911 | 29.867 | 29.961 | 29.966 | 29.906 | 29.906  | 29.935 | 29.879 | 29.851 | 29.895 | 29.911 | 1871—1890                              | 20            |
| Holyhead -      | 29.902 | 29.914 | 29.907 | 29.857 | 29.956 | 29.966 | 29.910 | 29.907  | 29.929 | 29.872 | 29.835 | 29.879 | 29.903 | " " "                                  | 20            |
| Parsonstown -   | 29.895 | 29.906 | 29.925 | 29.864 | 29.958 | 29.972 | 29.913 | 29.920  | 29.937 | 29.897 | 29.847 | 29.901 | 29.911 | 1873—1890                              | 18            |
| Valencia - -    | 29.887 | 29.919 | 29.925 | 29.854 | 29.963 | 29.975 | 29.935 | 29.927  | 29.947 | 29.896 | 29.865 | 29.905 | 29.917 | 1871—1890                              | 20            |
| Roche's Point - | 29.908 | 29.916 | 29.927 | 29.851 | 29.959 | 29.973 | 29.932 | 29.927  | 29.946 | 29.892 | 29.865 | 29.912 | 29.917 | " " "                                  | 20            |
| Pembroke -      | 29.936 | 29.937 | 29.929 | 29.852 | 29.961 | 29.974 | 29.936 | 29.928  | 29.948 | 29.888 | 29.864 | 29.916 | 29.922 | " " "                                  | 20            |
| Scilly - -      | 29.969 | 29.959 | 29.947 | 29.856 | 29.974 | 29.996 | 29.974 | 29.962  | 29.971 | 29.910 | 29.897 | 29.951 | 29.947 | " " "                                  | 20            |
| Prawle Point -  | 30.006 | 29.993 | 29.965 | 29.876 | 29.992 | 30.007 | 29.987 | 29.975  | 29.998 | 29.931 | 29.914 | 29.970 | 29.968 | 1879—1890                              | 12            |
| Jersey - -      | 30.022 | 30.007 | 29.961 | 29.872 | 29.989 | 30.010 | 30.001 | 29.984  | 29.988 | 29.925 | 29.928 | 29.985 | 29.973 | 1876—1890                              | 15            |
| Hurst Castle -  | 30.002 | 29.986 | 29.954 | 29.871 | 29.982 | 29.998 | 29.968 | 29.965  | 29.991 | 29.922 | 29.902 | 29.958 | 29.958 | 1874—1890                              | 17            |
| Dover - -       | 30.012 | 29.985 | 29.938 | 29.864 | 29.970 | 29.982 | 29.957 | 29.949  | 29.970 | 29.916 | 29.893 | 29.953 | 29.949 | 1871—1890                              | 20            |
| London - -      | 30.006 | 29.989 | 29.950 | 29.878 | 29.981 | 29.992 | 29.957 | 29.954  | 29.978 | 29.923 | 29.898 | 29.954 | 29.955 | " " "                                  | 20            |
| Oxford - -      | 29.999 | 29.985 | 29.951 | 29.884 | 29.981 | 29.986 | 29.946 | 29.948  | 29.971 | 29.924 | 29.896 | 29.955 | 29.952 | " " "                                  | 20            |
| Cambridge -     | 29.993 | 29.979 | 29.941 | 29.880 | 29.976 | 29.985 | 29.937 | 29.937  | 29.965 | 29.912 | 29.887 | 29.941 | 29.944 | 1873—1890                              | 18            |
| Yarmouth -      | 29.979 | 29.964 | 29.920 | 29.872 | 29.967 | 29.977 | 29.929 | 29.928  | 29.948 | 29.894 | 29.865 | 29.916 | 29.930 | 1871—1890                              | 20            |

NOTE.—When the records available have not extended over the whole of the period 1871-90, the following rules have been observed for purposes of interpolation:—

- (1) Where the observations available have not covered a period of eleven years or more they have been rejected.
- (2) When the observations have covered a period of eleven years, or more, the means have been reduced to their approximate values for the whole period by comparison with the values at adjacent stations.

At Malin Head and Belmullet the observations are insufficient in point of duration to obtain proper averages.



TABLE II. — SHOWING FOR THE TELEGRAPHIC REPORTING STATIONS THE MEAN VALUES C  
MONTH AND FOR THE WHOLE YEAR, DERIVED FROM OBSERVATIONS

| STATIONS.               | JANUARY. |      | FEBRUARY. |      | MARCH. |      | APRIL. |      | MAY. |      | JUNE. |      | JULY. |
|-------------------------|----------|------|-----------|------|--------|------|--------|------|------|------|-------|------|-------|
|                         | Dry.     | Wet. | Dry.      | Wet. | Dry.   | Wet. | Dry.   | Wet. | Dry. | Wet. | Dry.  | Wet. | Wet.  |
| Sumburgh Head - - - - - | 39.7     | 38.4 | 38.5      | 37.4 | 38.3   | 36.9 | 41.7   | 40.2 | 46.1 | 44.0 | 50.3  | 48.0 | 51.1  |
| Stornoway - - - - -     | 39.5     | 38.4 | 39.1      | 38.1 | 39.1   | 38.1 | 43.8   | 42.3 | 48.6 | 46.4 | 53.3  | 51.1 | 55.5  |
| Wick - - - - -          | 38.2     | 36.8 | 38.1      | 36.7 | 39.0   | 37.2 | 43.1   | 41.2 | 49.1 | 45.6 | 53.3  | 50.7 | 55.8  |
| Nairn - - - - -         | 37.2     | 35.6 | 37.1      | 35.4 | 38.0   | 36.2 | 42.7   | 40.4 | 48.6 | 45.4 | 54.3  | 50.1 | 56.7  |
| Aberdeen - - - - -      | 37.3     | 35.6 | 37.3      | 35.7 | 38.5   | 36.5 | 43.2   | 40.7 | 48.9 | 45.4 | 54.8  | 50.8 | 57.5  |
| Leith - - - - -         | 38.6     | 37.2 | 38.6      | 37.1 | 39.5   | 37.7 | 44.1   | 41.7 | 50.1 | 46.7 | 55.9  | 52.3 | 58.4  |
| Shields - - - - -       | 38.2     | 36.9 | 38.6      | 37.3 | 39.4   | 37.8 | 43.5   | 41.4 | 49.0 | 46.0 | 54.8  | 51.7 | 58.3  |
| Spurn Head - - - - -    | 37.7     | 36.7 | 38.4      | 37.6 | 39.7   | 38.4 | 44.0   | 42.3 | 49.3 | 47.2 | 55.3  | 52.8 | 59.5  |
| York - - - - -          | 36.7     | 35.7 | 37.5      | 36.4 | 38.5   | 37.0 | 43.8   | 41.6 | 49.8 | 46.7 | 56.2  | 52.7 | 59.2  |
| Loughborough - - - - -  | 36.4     | 35.4 | 37.5      | 36.4 | 39.0   | 37.3 | 44.4   | 42.1 | 51.1 | 47.7 | 57.8  | 53.2 | 61.4  |
| Ardrossan - - - - -     | 40.0     | 38.8 | 39.4      | 38.2 | 40.1   | 38.5 | 44.4   | 42.1 | 49.5 | 46.7 | 55.1  | 52.1 | 57.3  |
| Mullaghmore - - - - -   | 41.6     | 40.4 | 42.0      | 40.3 | 41.9   | 40.2 | 45.3   | 43.0 | 50.2 | 47.4 | 54.9  | 52.0 | 57.2  |
| Donaghadee - - - - -    | 40.0     | 39.2 | 40.3      | 39.3 | 40.8   | 39.5 | 44.6   | 42.9 | 49.6 | 47.5 | 55.0  | 52.8 | 57.4  |
| Liverpool - - - - -     | 38.6     | 37.0 | 38.9      | 37.3 | 40.3   | 38.2 | 45.0   | 42.1 | 50.8 | 46.9 | 56.7  | 52.7 | 59.4  |
| Holyhead - - - - -      | 41.7     | 40.3 | 41.5      | 40.1 | 42.0   | 40.5 | 45.8   | 43.8 | 50.5 | 48.0 | 55.7  | 53.2 | 58.1  |
| Parsonstown - - - - -   | 38.9     | 37.8 | 39.4      | 38.1 | 40.4   | 38.8 | 45.0   | 42.5 | 51.0 | 47.8 | 56.0  | 52.1 | 58.1  |
| Valencia - - - - -      | 44.5     | 43.3 | 44.6      | 42.9 | 44.9   | 42.8 | 48.2   | 45.6 | 52.8 | 49.7 | 57.2  | 54.1 | 58.9  |
| Roche's Point - - - - - | 43.2     | 41.9 | 43.1      | 41.6 | 43.3   | 41.5 | 46.8   | 44.5 | 51.7 | 48.8 | 56.8  | 53.0 | 58.8  |
| Pembroke - - - - -      | 42.7     | 41.3 | 42.1      | 40.9 | 42.1   | 40.3 | 45.2   | 43.4 | 49.9 | 47.7 | 55.2  | 53.0 | 58.0  |
| Scilly - - - - -        | 46.4     | 44.9 | 46.0      | 44.4 | 46.0   | 44.2 | 48.6   | 46.6 | 52.7 | 50.3 | 57.3  | 55.1 | 60.2  |
| Prawle Point - - - - -  | 42.0     | 41.0 | 41.5      | 40.5 | 42.6   | 41.2 | 46.2   | 44.6 | 51.4 | 49.4 | 56.9  | 54.1 | 59.6  |
| Jersey - - - - -        | 41.8     | 40.4 | 42.3      | 41.0 | 44.0   | 42.0 | 48.5   | 45.9 | 53.6 | 50.5 | 58.6  | 55.1 | 62.0  |
| Hurst Castle - - - - -  | 40.3     | 39.5 | 40.3      | 39.3 | 41.0   | 40.1 | 45.5   | 44.2 | 51.6 | 49.9 | 57.7  | 55.1 | 61.1  |
| Dover - - - - -         | 39.2     | 38.1 | 39.2      | 38.1 | 40.7   | 39.2 | 46.3   | 44.0 | 52.5 | 49.3 | 58.2  | 54.1 | 61.9  |
| London - - - - -        | 37.6     | 36.6 | 38.6      | 37.4 | 40.1   | 38.2 | 46.1   | 43.2 | 52.5 | 48.5 | 58.9  | 54.1 | 62.0  |
| Oxford - - - - -        | 37.1     | 36.1 | 37.9      | 36.8 | 38.9   | 37.4 | 44.4   | 42.1 | 50.6 | 47.5 | 56.8  | 53.1 | 60.0  |
| Cambridge - - - - -     | 36.2     | 35.4 | 37.3      | 36.2 | 38.9   | 37.5 | 45.2   | 43.0 | 51.7 | 48.5 | 58.1  | 54.1 | 61.3  |
| Yarmouth - - - - -      | 37.5     | 36.7 | 38.2      | 37.3 | 40.2   | 38.6 | 44.7   | 43.0 | 50.6 | 48.1 | 56.9  | 54.1 | 60.9  |

NOTE.—When the records available have not extended over the whole of the period 1871 to 1890, the following rules have been adopted.

- (1) Where the observations available have not covered a period of eleven years or more they have been rejected.
- (2) When the observations have covered a period of eleven years or more the means have been used to their full extent.

At Malin Head and Belmullet the observations are not sufficient in point of time to be included in the table.



## VALUES OF THE DRY BULB AND WET BULB TEMPERATURES FOR EACH

OBSERVATIONS MADE AT 8 A.M. DAILY DURING THE 20 YEARS 1871-90.

| STATION. | JULY. |      | AUGUST. |      | SEPTEMBER. |      | OCTOBER. |      | NOVEMBER. |      | DECEMBER. |      | ANNUALS. |           | LIMITS OF YEARS. | NUMBER OF YEARS. |
|----------|-------|------|---------|------|------------|------|----------|------|-----------|------|-----------|------|----------|-----------|------------------|------------------|
|          | Dry.  | Wet. | Dry.    | Wet. | Dry.       | Wet. | Dry.     | Wet. | Dry.      | Wet. | Dry.      | Wet. | Dry.     | Wet.      |                  |                  |
| 1        | 51.5  | 53.4 | 51.7    | 50.8 | 49.1       | 46.0 | 44.3     | 42.0 | 40.3      | 39.6 | 38.1      | 45.0 | 43.4     | 1871—1890 | 20               |                  |
| 5        | 53.6  | 54.9 | 53.2    | 51.4 | 50.1       | 45.6 | 44.5     | 41.7 | 40.7      | 39.4 | 38.5      | 46.0 | 44.6     | 1873—1890 | 18               |                  |
| 8        | 53.5  | 55.2 | 53.2    | 51.9 | 50.0       | 46.3 | 44.6     | 41.4 | 39.8      | 38.1 | 36.8      | 45.7 | 43.8     | 1871—1890 | 20               |                  |
| 7        | 53.3  | 55.5 | 52.7    | 51.3 | 48.9       | 44.8 | 42.9     | 39.8 | 38.2      | 37.1 | 35.6      | 45.3 | 42.9     | „ „       | 20               |                  |
| 5        | 53.9  | 56.5 | 53.4    | 52.1 | 49.7       | 45.6 | 43.6     | 40.5 | 38.7      | 36.9 | 35.2      | 45.8 | 43.3     | „ „       | 20               |                  |
| 4        | 54.9  | 57.5 | 54.4    | 53.2 | 50.8       | 46.7 | 44.9     | 41.7 | 40.0      | 38.5 | 37.0      | 46.9 | 44.6     | „ „       | 20               |                  |
| 3        | 55.0  | 57.2 | 54.5    | 53.1 | 51.0       | 47.2 | 45.4     | 42.1 | 40.5      | 38.3 | 36.9      | 46.6 | 44.5     | „ „       | 20               |                  |
| 5        | 56.8  | 58.8 | 56.6    | 55.5 | 53.8       | 48.8 | 47.3     | 43.2 | 41.9      | 38.8 | 37.7      | 47.4 | 45.8     | 1880—1890 | 11               |                  |
| 2        | 55.9  | 57.7 | 55.0    | 52.9 | 51.1       | 45.9 | 44.5     | 40.6 | 39.3      | 36.4 | 35.4      | 46.3 | 44.3     | 1873—1890 | 18               |                  |
| 4        | 57.6  | 59.3 | 56.9    | 54.0 | 52.2       | 45.9 | 44.6     | 40.5 | 39.3      | 36.3 | 35.4      | 47.0 | 44.9     | 1871—1890 | 20               |                  |
| 3        | 54.6  | 57.2 | 54.8    | 53.5 | 51.4       | 47.8 | 45.8     | 43.1 | 41.3      | 40.0 | 38.7      | 47.3 | 45.3     | „ „       | 20               |                  |
| 2        | 54.4  | 57.3 | 54.5    | 54.0 | 51.6       | 49.1 | 46.9     | 45.1 | 43.1      | 42.2 | 39.8      | 48.4 | 46.1     | 1879—1890 | 12               |                  |
| 4        | 55.5  | 56.9 | 55.3    | 53.5 | 52.3       | 47.8 | 46.6     | 43.2 | 42.0      | 40.2 | 39.3      | 47.4 | 46.0     | 1873—1890 | 18               |                  |
| 4        | 55.6  | 58.5 | 55.2    | 54.5 | 51.9       | 47.8 | 45.8     | 42.5 | 40.7      | 38.8 | 37.1      | 47.7 | 45.0     | 1871—1890 | 20               |                  |
| 1        | 55.8  | 58.4 | 56.2    | 55.7 | 53.5       | 50.3 | 48.3     | 45.8 | 44.0      | 42.8 | 41.1      | 49.0 | 47.1     | „ „       | 20               |                  |
| 1        | 54.8  | 57.3 | 55.2    | 53.0 | 51.1       | 46.2 | 44.5     | 41.9 | 40.2      | 37.8 | 36.6      | 47.1 | 45.0     | 1873—1890 | 18               |                  |
| 9        | 56.4  | 59.3 | 56.9    | 56.5 | 54.2       | 51.4 | 49.2     | 47.4 | 45.5      | 44.6 | 42.4      | 50.9 | 48.6     | 1871—1890 | 20               |                  |
| 8        | 55.9  | 58.9 | 56.3    | 55.5 | 53.4       | 50.2 | 48.3     | 46.1 | 44.5      | 42.9 | 41.5      | 49.8 | 47.7     | „ „       | 20               |                  |
| 0        | 56.0  | 58.6 | 56.5    | 53.1 | 53.9       | 51.2 | 49.2     | 46.9 | 45.1      | 43.6 | 42.2      | 49.3 | 47.5     | „ „       | 20               |                  |
| 2        | 58.1  | 60.9 | 58.8    | 58.4 | 56.3       | 53.7 | 51.6     | 50.0 | 48.0      | 47.0 | 45.1      | 52.3 | 50.3     | „ „       | 20               |                  |
| 6        | 57.3  | 60.1 | 57.9    | 57.0 | 55.2       | 51.2 | 49.6     | 46.2 | 44.7      | 42.5 | 41.1      | 49.8 | 48.1     | 1879—1890 | 12               |                  |
| 0        | 58.9  | 62.8 | 59.6    | 59.9 | 57.0       | 53.3 | 50.7     | 47.7 | 45.8      | 43.1 | 41.4      | 51.5 | 49.1     | 1871—1890 | 20               |                  |
| 1        | 58.8  | 61.0 | 58.9    | 57.1 | 55.7       | 50.8 | 49.2     | 44.9 | 44.0      | 40.6 | 39.8      | 49.3 | 47.9     | 1874—1890 | 17               |                  |
| 9        | 58.4  | 62.0 | 58.6    | 57.7 | 55.2       | 50.2 | 48.2     | 44.3 | 42.8      | 39.8 | 38.6      | 49.3 | 47.1     | 1871—1890 | 20               |                  |
| 0        | 57.8  | 60.9 | 57.3    | 55.8 | 53.5       | 47.5 | 45.9     | 42.2 | 40.8      | 37.8 | 36.7      | 48.3 | 45.9     | „ „       | 20               |                  |
| 0        | 56.6  | 58.8 | 56.0    | 54.0 | 52.1       | 46.2 | 44.9     | 41.2 | 40.0      | 37.0 | 35.9      | 46.9 | 44.9     | „ „       | 20               |                  |
| 3        | 57.7  | 60.0 | 57.1    | 54.6 | 53.0       | 46.4 | 45.3     | 40.7 | 39.9      | 36.2 | 35.5      | 47.2 | 45.3     | 1873—1890 | 18               |                  |
| 9        | 57.8  | 60.5 | 57.6    | 56.3 | 54.4       | 49.0 | 47.6     | 43.1 | 42.0      | 37.9 | 37.0      | 48.0 | 46.2     | 1871—1890 | 20               |                  |

Following rules have been observed for purposes of interpolation:—

they are rejected.

have been reduced to their approximate values for the whole period by comparison with the values at adjacent and similarly exposed Stations.

Stations deficient in point of duration to obtain proper averages.



TABLE III.—SHOWING FOR THE TELEGRAPHIC REPORTING STATIONS THE MEAN VALUES OF THE DAILY  
FOR EACH MONTH AND FOR THE WHOLE YEAR—DERIVED FROM

| STATIONS.           | JANUARY. |      |       | FEBRUARY. |      |       | MARCH. |      |       | APRIL. |      |       | MAY. |      |       | JUNE. |      |       |
|---------------------|----------|------|-------|-----------|------|-------|--------|------|-------|--------|------|-------|------|------|-------|-------|------|-------|
|                     | Max.     | Min. | Mean. | Max.      | Min. | Mean. | Max.   | Min. | Mean. | Max.   | Min. | Mean. | Max. | Min. | Mean. | Max.  | Min. | Mean. |
| Sumburgh Head - - - | 42.9     | 35.6 | 39.3  | 42.4      | 34.5 | 38.5  | 42.6   | 33.9 | 38.3  | 46.0   | 36.7 | 41.4  | 50.3 | 40.2 | 45.3  | 54.6  | 45.0 | 49.8  |
| Stornoway - - -     | 43.3     | 34.5 | 38.9  | 43.5      | 34.6 | 39.1  | 44.9   | 34.5 | 39.7  | 48.9   | 37.2 | 43.1  | 53.3 | 41.1 | 47.2  | 58.0  | 45.9 | 52.0  |
| Wick - - -          | 42.4     | 33.3 | 37.9  | 43.1      | 33.2 | 38.2  | 44.8   | 34.0 | 39.4  | 48.9   | 36.9 | 42.9  | 53.9 | 40.6 | 47.3  | 58.9  | 45.5 | 52.2  |
| Nairn - - -         | 42.2     | 32.9 | 37.6  | 43.4      | 33.4 | 38.4  | 45.6   | 33.9 | 39.8  | 50.9   | 37.3 | 44.1  | 56.3 | 42.2 | 49.3  | 62.2  | 47.8 | 55.0  |
| Aberdeen - - -      | 42.4     | 33.2 | 37.8  | 43.2      | 33.8 | 38.5  | 45.4   | 34.4 | 39.9  | 49.3   | 38.0 | 43.7  | 55.0 | 41.9 | 48.5  | 61.2  | 47.2 | 54.2  |
| Leith - - -         | 44.4     | 33.7 | 39.1  | 45.7      | 34.3 | 40.0  | 47.9   | 34.6 | 41.3  | 52.0   | 37.9 | 45.0  | 57.8 | 42.4 | 50.1  | 63.9  | 47.9 | 55.9  |
| Shields - - -       | 43.0     | 34.2 | 38.6  | 43.8      | 35.1 | 39.5  | 45.9   | 35.2 | 40.6  | 49.0   | 38.6 | 43.8  | 54.4 | 42.9 | 48.7  | 60.6  | 48.7 | 54.7  |
| Spurn Head - - -    | 41.7     | 34.5 | 38.1  | 42.3      | 35.9 | 39.1  | 44.7   | 36.6 | 40.7  | 48.4   | 40.3 | 44.4  | 54.3 | 45.1 | 49.7  | 60.4  | 51.4 | 55.9  |
| York - - -          | 42.7     | 32.5 | 37.6  | 44.6      | 33.9 | 39.3  | 48.1   | 34.0 | 41.1  | 53.5   | 37.7 | 45.6  | 59.6 | 42.2 | 50.9  | 66.1  | 48.4 | 57.3  |
| Loughborough - - -  | 43.0     | 32.3 | 37.7  | 45.3      | 33.9 | 39.6  | 49.5   | 34.2 | 41.9  | 55.1   | 38.1 | 46.6  | 61.7 | 42.6 | 52.2  | 68.6  | 49.0 | 58.8  |
| Ardrossan - - -     | 44.2     | 30.3 | 40.3  | 44.6      | 36.3 | 40.5  | 46.3   | 36.3 | 41.3  | 51.5   | 39.5 | 45.5  | 56.5 | 43.9 | 50.2  | 62.0  | 49.5 | 55.8  |
| Mullaghmore - - -   | 46.1     | 38.0 | 42.1  | 46.6      | 38.6 | 42.6  | 47.9   | 38.4 | 43.2  | 51.9   | 42.3 | 47.1  | 56.7 | 46.3 | 51.5  | 61.1  | 51.4 | 56.2  |
| Donaghadee - - -    | 44.4     | 36.1 | 40.3  | 45.5      | 36.9 | 41.2  | 47.2   | 37.1 | 42.2  | 51.0   | 40.0 | 45.5  | 56.0 | 44.2 | 50.1  | 61.2  | 49.3 | 55.1  |
| Liverpool - - -     | 43.5     | 35.2 | 39.4  | 44.5      | 36.2 | 40.4  | 47.0   | 36.8 | 41.9  | 52.6   | 40.4 | 46.5  | 58.0 | 45.0 | 51.5  | 63.8  | 50.9 | 57.4  |
| Holyhead - - -      | 45.6     | 38.7 | 42.2  | 45.5      | 38.7 | 42.1  | 47.2   | 38.9 | 43.1  | 51.4   | 42.0 | 46.7  | 56.2 | 46.2 | 51.2  | 61.6  | 51.5 | 56.6  |
| Parsonstown - - -   | 45.6     | 34.2 | 39.9  | 46.9      | 35.6 | 41.3  | 49.8   | 35.0 | 42.4  | 54.6   | 38.0 | 46.3  | 59.5 | 42.7 | 51.1  | 64.5  | 48.5 | 56.2  |
| Valencia - - -      | 49.5     | 40.4 | 45.0  | 49.7      | 40.7 | 45.2  | 51.1   | 40.2 | 45.7  | 53.9   | 42.8 | 48.4  | 58.1 | 46.3 | 52.2  | 62.2  | 51.1 | 56.7  |
| Roche's Point - - - | 47.7     | 39.5 | 43.6  | 48.4      | 39.6 | 44.0  | 49.7   | 39.6 | 44.7  | 53.7   | 42.1 | 47.9  | 58.9 | 46.2 | 52.6  | 64.5  | 51.1 | 57.8  |
| Pembroke - - -      | 45.5     | 39.6 | 42.6  | 45.5      | 39.4 | 42.5  | 46.6   | 39.1 | 42.9  | 50.4   | 41.9 | 46.2  | 55.0 | 45.9 | 50.5  | 60.3  | 51.5 | 55.9  |
| Seilly - - -        | 48.8     | 42.9 | 45.9  | 48.9      | 42.8 | 45.9  | 49.5   | 42.5 | 46.0  | 52.1   | 44.7 | 48.4  | 56.3 | 48.2 | 52.3  | 61.3  | 53.0 | 57.1  |
| Prawle Point - - -  | 46.2     | 37.6 | 41.9  | 46.8      | 38.1 | 42.5  | 48.1   | 37.7 | 42.9  | 51.9   | 40.7 | 46.3  | 56.6 | 45.3 | 51.0  | 61.5  | 50.5 | 56.0  |
| Jersey - - -        | 45.8     | 38.3 | 42.1  | 46.9      | 39.3 | 43.1  | 49.5   | 39.9 | 44.7  | 54.2   | 43.5 | 48.9  | 59.4 | 47.2 | 53.3  | 64.6  | 52.5 | 58.0  |
| Hurst Castle - - -  | 45.0     | 36.3 | 40.7  | 45.7      | 36.7 | 41.2  | 47.8   | 37.2 | 42.5  | 52.1   | 41.0 | 46.6  | 58.6 | 45.7 | 52.2  | 64.2  | 51.9 | 58.0  |
| Dover - - -         | 43.5     | 35.3 | 39.7  | 44.4      | 36.1 | 40.3  | 46.4   | 36.9 | 41.7  | 51.1   | 41.5 | 46.3  | 57.0 | 46.7 | 51.9  | 63.0  | 52.5 | 57.1  |
| London - - -        | 44.1     | 33.8 | 39.0  | 45.8      | 35.1 | 40.5  | 50.0   | 35.4 | 42.7  | 56.0   | 39.7 | 47.9  | 62.3 | 44.4 | 53.4  | 69.1  | 50.6 | 59.9  |
| Oxford - - -        | 43.1     | 33.6 | 38.4  | 45.0      | 34.9 | 40.0  | 49.0   | 34.9 | 42.0  | 54.0   | 38.9 | 46.5  | 60.6 | 43.4 | 52.0  | 66.9  | 49.5 | 58.0  |
| Cambridge - - -     | 43.3     | 31.7 | 37.5  | 45.5      | 32.8 | 39.2  | 50.2   | 33.0 | 41.6  | 55.8   | 37.3 | 46.6  | 62.0 | 42.0 | 52.0  | 68.6  | 48.5 | 58.0  |
| Yarmouth - - -      | 41.5     | 33.8 | 37.7  | 42.6      | 34.5 | 38.6  | 45.2   | 34.9 | 40.1  | 49.1   | 39.9 | 44.5  | 55.4 | 44.9 | 50.2  | 62.0  | 51.1 | 56.0  |

NOTE:—When the records available have not extended over the whole of the period, 1871-90, the

- (1) Where the observations available have not covered a period of eleven years or more, they have
- (2) When the observations have covered a period of eleven years or more, the means have been

At Malin Head and Belmullet the observations



MAXIMUM AND MINIMUM TEMPERATURES, AND OF THE MAXIMUM AND MINIMUM COMBINED,  
FROM OBSERVATIONS EXTENDING OVER THE 20 YEARS 1871—1890.

| JULY. |      |       | AUGUST. |      |       | SEPTEMBER. |      |       | OCTOBER. |      |       | NOVEMBER. |      |       | DECEMBER. |      |       | ANNUALS. |      |       | Limits<br>of<br>Years. | Number of<br>Years. |
|-------|------|-------|---------|------|-------|------------|------|-------|----------|------|-------|-----------|------|-------|-----------|------|-------|----------|------|-------|------------------------|---------------------|
| Max.  | Min. | Mean. | Max.    | Min. | Mean. | Max.       | Min. | Mean. | Max.     | Min. | Mean. | Max.      | Min. | Mean. | Max.      | Min. | Mean. | Max.     | Min. | Mean. |                        |                     |
| 57.4  | 48.0 | 52.7  | 57.7    | 48.4 | 53.1  | 55.0       | 46.1 | 50.6  | 49.8     | 41.6 | 45.7  | 45.6      | 37.8 | 41.7  | 42.6      | 35.2 | 38.9  | 48.9     | 40.3 | 44.6  | 1871—90                | 20                  |
| 60.2  | 48.9 | 54.6  | 59.8    | 48.8 | 54.3  | 56.3       | 45.8 | 51.1  | 51.0     | 40.5 | 45.8  | 46.2      | 37.0 | 41.6  | 43.1      | 34.2 | 38.7  | 50.7     | 40.3 | 45.5  | " "                    | 20                  |
| 61.8  | 48.7 | 55.3  | 61.1    | 48.3 | 54.7  | 57.7       | 45.5 | 51.6  | 51.7     | 40.5 | 46.1  | 46.1      | 36.1 | 41.1  | 42.2      | 32.7 | 37.5  | 51.1     | 39.6 | 45.4  | 1872—90                | 19                  |
| 64.3  | 50.9 | 57.6  | 63.4    | 50.3 | 56.9  | 59.2       | 46.5 | 52.9  | 51.9     | 40.8 | 46.4  | 45.3      | 35.7 | 40.5  | 41.9      | 32.8 | 37.4  | 52.2     | 40.4 | 46.3  | 1871—90                | 20                  |
| 63.9  | 50.6 | 57.3  | 63.1    | 50.1 | 56.6  | 59.2       | 46.7 | 53.0  | 52.5     | 41.4 | 47.0  | 46.2      | 36.5 | 41.4  | 41.9      | 32.6 | 37.3  | 51.9     | 40.5 | 46.3  | " "                    | 20                  |
| 66.7  | 51.2 | 59.0  | 65.7    | 51.3 | 58.5  | 61.9       | 47.5 | 54.7  | 54.7     | 41.8 | 48.3  | 48.1      | 37.0 | 42.6  | 44.0      | 33.7 | 38.9  | 54.4     | 41.1 | 47.8  | " "                    | 20                  |
| 64.1  | 52.2 | 58.2  | 63.6    | 51.9 | 57.8  | 59.8       | 48.8 | 54.3  | 53.2     | 42.7 | 48.0  | 47.3      | 37.9 | 42.6  | 42.9      | 33.9 | 38.4  | 52.3     | 41.8 | 47.1  | " "                    | 20                  |
| 65.1  | 55.2 | 60.2  | 64.3    | 55.0 | 59.7  | 60.4       | 52.7 | 56.6  | 53.3     | 45.7 | 49.5  | 46.8      | 40.2 | 43.5  | 42.4      | 35.3 | 38.9  | 52.0     | 44.0 | 48.0  | 1880—90                | 11                  |
| 68.7  | 51.9 | 60.3  | 67.9    | 51.3 | 59.6  | 62.9       | 47.7 | 55.3  | 54.5     | 41.4 | 48.0  | 47.5      | 36.4 | 42.0  | 42.3      | 32.3 | 37.3  | 54.9     | 40.8 | 47.9  | 1871—90                | 20                  |
| 71.5  | 52.6 | 62.1  | 70.4    | 51.8 | 61.1  | 65.0       | 47.8 | 56.4  | 55.7     | 41.1 | 48.4  | 48.0      | 36.6 | 42.3  | 42.7      | 32.2 | 37.5  | 56.4     | 41.0 | 48.7  | " "                    | 20                  |
| 63.5  | 52.8 | 58.2  | 63.6    | 52.8 | 58.2  | 59.6       | 49.4 | 54.5  | 53.7     | 43.7 | 48.7  | 47.8      | 39.1 | 43.5  | 44.5      | 35.9 | 40.2  | 53.2     | 43.0 | 48.1  | 1872—90                | 19                  |
| 62.9  | 54.0 | 58.5  | 63.3    | 53.8 | 58.6  | 60.2       | 50.9 | 55.6  | 54.2     | 45.7 | 50.0  | 49.6      | 41.2 | 45.4  | 46.5      | 37.8 | 42.2  | 53.9     | 44.9 | 49.4  | 1879—90                | 12                  |
| 63.2  | 51.8 | 57.5  | 62.2    | 52.2 | 57.2  | 59.6       | 49.2 | 54.4  | 53.6     | 43.6 | 48.6  | 48.3      | 39.2 | 43.8  | 45.8      | 36.2 | 41.0  | 53.2     | 43.0 | 48.1  | 1873—90                | 18                  |
| 65.9  | 54.2 | 60.0  | 65.8    | 54.1 | 60.1  | 61.2       | 50.8 | 56.0  | 53.8     | 44.7 | 49.3  | 47.8      | 39.6 | 43.7  | 43.5      | 35.6 | 39.6  | 54.0     | 43.6 | 48.8  | 1871—90                | 20                  |
| 63.8  | 54.3 | 59.1  | 64.1    | 54.8 | 59.5  | 60.7       | 52.6 | 56.7  | 54.7     | 47.3 | 51.0  | 49.7      | 42.9 | 46.3  | 46.4      | 39.1 | 42.8  | 53.9     | 45.6 | 49.8  | 1872—90                | 19                  |
| 66.4  | 51.5 | 59.0  | 66.0    | 51.4 | 58.7  | 61.5       | 47.4 | 54.5  | 54.8     | 41.0 | 47.9  | 49.1      | 37.1 | 43.1  | 44.7      | 33.1 | 38.9  | 55.3     | 41.3 | 48.3  | " "                    | 19                  |
| 64.0  | 53.6 | 58.8  | 64.7    | 54.1 | 59.4  | 61.8       | 51.5 | 56.7  | 56.6     | 46.8 | 51.7  | 52.3      | 43.0 | 47.7  | 49.7      | 40.0 | 44.9  | 56.1     | 45.9 | 51.0  | 1871—90                | 20                  |
| 66.1  | 53.2 | 59.7  | 66.1    | 53.8 | 60.0  | 61.7       | 51.0 | 56.4  | 56.0     | 46.1 | 51.1  | 51.1      | 42.0 | 46.6  | 47.9      | 38.9 | 43.4  | 56.0     | 45.3 | 50.7  | 1872—90                | 19                  |
| 62.5  | 54.8 | 58.7  | 63.2    | 55.6 | 59.4  | 60.1       | 53.0 | 56.6  | 54.9     | 48.0 | 51.5  | 50.1      | 43.8 | 47.0  | 46.8      | 40.3 | 43.6  | 53.4     | 46.1 | 49.8  | " "                    | 19                  |
| 64.4  | 56.2 | 60.3  | 64.9    | 57.0 | 61.0  | 61.8       | 54.7 | 58.3  | 56.6     | 50.2 | 53.4  | 52.4      | 46.7 | 49.6  | 49.5      | 43.4 | 46.5  | 55.5     | 48.5 | 52.1  | 1871—90                | 20                  |
| 64.5  | 53.7 | 59.1  | 65.3    | 54.4 | 59.9  | 62.4       | 52.2 | 57.3  | 56.7     | 46.2 | 51.5  | 51.1      | 41.9 | 46.5  | 47.0      | 38.2 | 42.6  | 54.8     | 44.7 | 49.8  | 1879—90                | 12                  |
| 68.3  | 53.2 | 62.3  | 68.8    | 57.1 | 63.0  | 65.4       | 54.8 | 60.1  | 58.2     | 48.6 | 53.4  | 51.9      | 44.1 | 48.0  | 47.3      | 39.3 | 43.3  | 56.7     | 46.7 | 51.7  | 1871—90                | 20                  |
| 67.8  | 55.5 | 61.7  | 68.1    | 55.9 | 62.0  | 64.3       | 52.1 | 58.2  | 57.1     | 45.8 | 51.5  | 50.5      | 40.6 | 45.6  | 45.6      | 36.3 | 41.0  | 55.6     | 44.6 | 50.1  | 1874—90                | 17                  |
| 66.8  | 56.3 | 61.6  | 67.2    | 56.7 | 62.0  | 63.4       | 52.9 | 58.2  | 56.1     | 46.2 | 51.2  | 49.3      | 40.6 | 45.0  | 44.3      | 35.9 | 40.1  | 54.4     | 44.8 | 49.6  | 1872—90                | 19                  |
| 72.4  | 54.0 | 63.2  | 71.8    | 53.5 | 62.7  | 66.4       | 49.6 | 58.0  | 56.7     | 42.7 | 49.7  | 49.3      | 38.0 | 43.7  | 44.0      | 33.9 | 39.0  | 57.3     | 42.6 | 50.0  | 1871—90                | 20                  |
| 69.6  | 53.4 | 61.5  | 69.3    | 53.0 | 61.2  | 64.0       | 48.9 | 56.5  | 55.5     | 42.2 | 48.9  | 48.2      | 37.6 | 42.9  | 42.9      | 33.5 | 38.2  | 55.7     | 42.0 | 48.9  | " "                    | 20                  |
| 71.9  | 52.2 | 62.1  | 71.3    | 51.8 | 61.6  | 65.6       | 48.1 | 56.9  | 56.5     | 41.0 | 48.8  | 48.6      | 35.8 | 42.2  | 42.8      | 31.6 | 37.2  | 56.8     | 40.5 | 48.7  | " "                    | 20                  |
| 66.6  | 54.9 | 60.8  | 66.3    | 54.8 | 60.6  | 62.1       | 51.4 | 56.8  | 54.3     | 44.6 | 49.5  | 47.5      | 39.0 | 43.3  | 41.9      | 33.7 | 37.8  | 52.9     | 43.1 | 48.0  | 1872—90                | 19                  |

following rules have been observed for purposes of interpolation:—

been rejected.

reduced to their approximate value for the whole period by comparison with the values at adjacent and similarly exposed Stations.

are insufficient in point of duration to obtain proper averages.



TABLE IV.—SHOWING FOR THE TELEGRAPHIC REPORTING STATIONS THE MEAN RAINFALL FOR EACH MONTH  
AND FOR THE WHOLE YEAR—DERIVED FROM OBSERVATIONS EXTENDING OVER THE 25 YEARS 1866 TO 1890.

| STATIONS.           | JAN. | FEB. | MAR. | APRIL. | MAY. | JUNE. | JULY. | AUG. | SEPT. | OCT. | NOV. | DEC. | ANNUAL. | LIMITS OF YEARS. | NO. OF YEARS. |
|---------------------|------|------|------|--------|------|-------|-------|------|-------|------|------|------|---------|------------------|---------------|
|                     | Ins. | Ins. | Ins. | Ins.   | Ins. | Ins.  | Ins.  | Ins. | Ins.  | Ins. | Ins. | Ins. | Ins.    |                  |               |
| Sumburgh Head - - - | 3.72 | 3.19 | 2.79 | 2.07   | 1.72 | 1.98  | 2.27  | 3.16 | 3.32  | 4.27 | 4.16 | 4.25 | 36.90   | 1871—1890        | 20            |
| Stornoway - - -     | 5.30 | 3.86 | 3.79 | 2.65   | 2.61 | 2.85  | 3.02  | 3.67 | 4.10  | 5.04 | 4.70 | 5.63 | 47.22   | 1855—1890        | 36            |
| Wick - - -          | 2.05 | 2.04 | 2.02 | 1.68   | 1.69 | 1.74  | 2.34  | 2.57 | 2.53  | 3.02 | 2.93 | 3.10 | 27.71   | 1866—1890        | 25            |
| Nairn - - -         | 1.99 | 1.48 | 1.68 | 1.26   | 1.61 | 1.70  | 2.59  | 2.75 | 2.58  | 2.38 | 2.29 | 1.95 | 24.26   | 1866—1890        | 25            |
| Aberdeen - - -      | 2.31 | 2.35 | 2.33 | 2.16   | 1.99 | 1.77  | 2.78  | 3.03 | 2.97  | 2.87 | 3.14 | 3.24 | 30.94   | " "              | 25            |
| Leith - - -         | 1.93 | 1.45 | 1.41 | 1.57   | 1.67 | 1.80  | 2.85  | 2.56 | 2.34  | 1.97 | 2.20 | 1.86 | 23.61   | " "              | 25            |
| Shields - - -       | 1.75 | 1.50 | 1.75 | 1.80   | 1.69 | 1.71  | 2.66  | 2.85 | 2.50  | 2.48 | 2.61 | 2.57 | 25.87   | " "              | 25            |
| Spurn Head - - -    | 1.35 | 1.36 | 1.22 | 1.45   | 1.57 | 1.54  | 1.74  | 1.86 | 2.02  | 2.27 | 2.40 | 2.14 | 20.92   | 1880—1890        | 11            |
| York - - -          | 1.87 | 1.70 | 1.73 | 1.75   | 1.85 | 2.17  | 2.70  | 2.54 | 2.70  | 2.60 | 2.19 | 2.28 | 26.08   | 1866—1890        | 25            |
| Loughborough - - -  | 2.04 | 1.78 | 1.64 | 1.78   | 2.09 | 2.22  | 2.34  | 2.53 | 2.76  | 2.80 | 2.24 | 2.24 | 26.46   | 1872—1890        | 19            |
| Ardrossan - - -     | 4.25 | 3.04 | 2.44 | 2.14   | 2.34 | 2.49  | 2.91  | 3.78 | 3.67  | 3.87 | 3.88 | 3.73 | 33.54   | 1866—1890        | 25            |
| Mullaghmore - - -   | 4.36 | 3.09 | 2.87 | 2.05   | 2.42 | 2.79  | 3.72  | 3.65 | 4.95  | 4.75 | 4.48 | 4.51 | 43.64   | 1876—1890        | 15            |
| Donaghadee - - -    | 2.98 | 2.42 | 2.05 | 1.92   | 2.26 | 1.92  | 2.82  | 3.04 | 3.04  | 3.14 | 3.20 | 2.84 | 31.63   | 1873—1890        | 18            |
| Liverpool - - -     | 2.22 | 1.69 | 1.72 | 1.55   | 1.84 | 1.89  | 2.96  | 2.83 | 3.30  | 3.46 | 2.96 | 2.59 | 29.01   | 1866—1890        | 25            |
| Holyhead - - -      | 3.38 | 2.60 | 2.27 | 1.90   | 1.90 | 1.98  | 2.40  | 2.77 | 3.23  | 4.31 | 3.88 | 3.82 | 34.44   | " "              | 25            |
| Parsonstown - - -   | 3.12 | 2.20 | 2.33 | 2.04   | 2.24 | 2.39  | 2.96  | 3.38 | 3.16  | 3.16 | 2.83 | 3.04 | 32.85   | " "              | 25            |
| Valencia - - -      | 6.69 | 4.95 | 4.20 | 3.83   | 3.20 | 3.27  | 3.90  | 4.70 | 4.53  | 5.88 | 5.42 | 5.99 | 56.56   | " "              | 25            |
| Roche's Point - - - | 5.50 | 4.43 | 3.71 | 3.24   | 3.14 | 3.13  | 3.29  | 3.62 | 4.08  | 4.09 | 4.62 | 4.95 | 47.80   | 1868—1890        | 23            |
| Pembroke - - -      | 3.75 | 2.82 | 2.40 | 1.94   | 2.03 | 1.94  | 2.54  | 2.77 | 3.53  | 3.96 | 4.05 | 3.99 | 35.76   | 1871—1890        | 20            |
| Scilly - - -        | 3.73 | 2.71 | 2.40 | 2.27   | 1.73 | 1.84  | 2.46  | 2.39 | 3.41  | 3.70 | 3.72 | 4.02 | 34.38   | " "              | 20            |
| Prawle Point - - -  | 3.09 | 2.02 | 1.95 | 2.07   | 1.56 | 1.60  | 2.24  | 2.14 | 2.46  | 3.60 | 3.20 | 3.76 | 29.69   | 1879—1890        | 12            |
| Jersey - - -        | 3.21 | 2.55 | 2.33 | 2.08   | 1.87 | 1.91  | 2.40  | 2.24 | 3.05  | 4.45 | 4.30 | 3.82 | 34.21   | 1866—1890        | 25            |
| Hurst Castle - - -  | 2.94 | 2.25 | 1.83 | 1.83   | 1.77 | 1.92  | 2.20  | 2.26 | 3.01  | 3.26 | 3.01 | 2.78 | 29.06   | " "              | 25            |
| Dover - - -         | 2.58 | 1.95 | 1.83 | 1.77   | 1.79 | 1.59  | 1.95  | 2.04 | 2.64  | 3.22 | 3.48 | 3.00 | 27.84   | " "              | 25            |
| London - - -        | 2.12 | 1.73 | 1.49 | 1.84   | 1.86 | 2.11  | 2.38  | 2.21 | 2.35  | 2.57 | 2.23 | 2.10 | 24.99   | " "              | 25            |
| Oxford - - -        | 2.26 | 1.92 | 1.59 | 1.78   | 1.95 | 2.21  | 2.58  | 2.24 | 2.66  | 2.56 | 2.31 | 2.10 | 26.16   | " "              | 25            |
| Cambridge - - -     | 1.54 | 1.46 | 1.40 | 1.69   | 1.90 | 2.23  | 2.42  | 2.19 | 2.26  | 2.27 | 2.01 | 1.88 | 23.25   | " "              | 25            |
| Yarmouth - - -      | 1.95 | 1.82 | 1.82 | 1.70   | 1.86 | 1.88  | 2.85  | 2.15 | 2.91  | 2.92 | 3.06 | 2.66 | 27.58   | " "              | 25            |

NOTE.—When the records available have not extended over the whole of the period 1866-1890 the following rules have been observed for purposes of interpolation:—

- (1) Where the observations available have not covered a period of eleven years, or more, they have been rejected.
- (2) When the observations have covered a period of eleven years, or more, the means have been reduced to their approximate values for the whole period by comparison with the values at adjacent and similarly exposed stations.

At Malin Head and Belmullet the observations are insufficient in point of duration to obtain proper averages.



# DAILY WEATHER REPORT.

for Tuesday 1<sup>st</sup> December. 1891.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           | YESTERDAY EVENING.                        |       |       |                      |          | 8 A.M. TO DAY.                            |   |             |      |   |       |                      |                   |             |      | PAST 24 HOURS.            |      |      |
|---------------------|---|-------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|-------------------|-------------|------|---------------------------|------|------|
|                     | BAROM.                                    | TEMP. | WIND. |                      | Weather. | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND. |                      | Sea.<br>(0 to 3.) | SHADE TEMP. |      | Amount<br>of<br>Rainfall. |      |      |
|                     | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry.  | Dir.  | Force.<br>(0 to 12.) |          | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Dir.  | Force.<br>(0 to 12.) |                   | Max.        | Min. |                           |      |      |
| SCANDINAVIA.        | Haparanda ...                             | 29.51 | 20    | SE                   | 2        | 0   | 29.54                                   | +0.2        | 28   | 27                                      | +1.2  | SW                   | 2                 | 0           | ?    | 5                         | —    |      |
|                     | Hernösand ...                             | 29.52 | 20    | N                    | 2        | 0   | 29.52                                   | +1.7        | 28   | 23                                      | -1    | W                    | 0                 | 0           | 30   | 16                        | 0.04 |      |
|                     | Stockholm ...                             | 29.53 | 23    | SE                   | 2        | 0   | 29.56                                   | +0.3        | 33   | 32                                      | +1.2  | W                    | 2                 | 1           | 34   | 18                        | —    |      |
|                     | Wisby ...                                 | 29.54 | 36    | SE                   | 4        | 0   | 29.57                                   | +0.1        | 36   | 35                                      | +1    | S                    | 4                 | 1           | 37   | 25                        | —    |      |
|                     | Bodö ...                                  | 29.62 | 33    | E                    | 2        | 6   | 29.74                                   | +1.2        | 37   | 35                                      | +2    | E                    | 2                 | 0           | ?    | 27                        | —    |      |
|                     | Christiansund                             | 29.67 | 41    | SE                   | 2        | 6   | 29.74                                   | +0.4        | 40   | 36                                      | -5    | ENE                  | 2                 | 6           | 43   | 37                        | —    |      |
|                     | Skudesnaes ...                            | 29.80 | 43    | SE                   | 6        | 6   | 29.84                                   | +1.6        | 44   | 41                                      | +2    | SE                   | 7                 | 0           | ?    | 41                        | —    |      |
|                     | Christiania Fjord<br>(Færder)             | 29.87 | 36    | NNE                  | 3        | m   | 29.90                                   | +1.6        | 35   | 35                                      | -1    | W                    | 0                 | m           | 37   | ?                         | —    |      |
|                     | Skagen (The Scaw)                         | 29.86 | 35    | SW                   | 1        | f   | 29.85                                   | +1.5        | 35   | 33                                      | +2    | SW                   | 1                 | f           | ?    | 30                        | —    |      |
|                     | Fanö ...                                  | 29.89 | 35    | W                    | 0        | f   | 29.95                                   | +1.8        | 35   | 35                                      | -2    | SE                   | 2                 | f           | 37   | 32                        | —    |      |
| BRITISH ISLANDS.    | Sumburgh Head                             | 29.45 | 45    | S                    | 4        | 0   | 29.57                                   | +0.1        | 46   | 45                                      | +2    | ENE                  | 3                 | 0           | 5    | 47                        | 35   | 0.03 |
|                     | Stornoway ...                             | 29.41 | 44    | W                    | 5        | 0   | 29.25                                   | -0.9        | 47   | 46                                      | +2    | S                    | 6                 | 6           | 47   | 41                        | 0.25 |      |
|                     | Wick ...                                  | 29.45 | 45    | W                    | 3        | 6   | 29.42                                   | -0.6        | 45   | 44                                      | +2    | S                    | 5                 | 6           | 47   | 40                        | 0.03 |      |
|                     | Nairn ...                                 | 29.50 | 42    | W                    | 0        | 6   | 29.38                                   | -0.9        | 45   | 43                                      | +3    | SW                   | 2                 | C           | 47   | 35                        | —    |      |
|                     | Aberdeen ...                              | 29.61 | 43    | SW                   | 3        | 0   | 29.52                                   | -1.0        | 46   | 45                                      | +1.0  | ENE                  | 4                 | 0.9         | 47   | 36                        | —    |      |
|                     | Leith ...                                 | 29.63 | 45    | S                    | 1        | 0   | 29.45                                   | -1.6        | 45   | 47                                      | +1.0  | S                    | 1                 | 6           | 50   | 38                        | —    |      |
|                     | Shields ...                               | 29.70 | 35    | SW                   | 2        | m   | 29.61                                   | -1.1        | 41   | 40                                      | +1    | ENE                  | 3                 | 0           | 41   | 30                        | 0.06 |      |
|                     | Spurn Head ...                            | 29.75 | 38    | SW                   | 3        | 6   | 29.78                                   | +0.1        | 41   | 40                                      | +1    | ENE                  | 6                 | C           | 42   | 36                        | 0.03 |      |
|                     | York ...                                  | 29.75 | 36    | ENE                  | 1        | 6   | 29.71                                   | -0.8        | 37   | 37                                      | +1.0  | ENE                  | 1                 | 0           | 40   | 28                        | 0.03 |      |
|                     | Loughborough                              | 29.79 | 36    | ENE                  | 2        | 0   | 29.74                                   | -0.4        | 40   | 39                                      | +1.3  | SE                   | 2                 | C           | 42   | 27                        | 0.03 |      |
| BRITISH ISLANDS.    | Ardrossan ...                             | 29.61 | 47    | SW                   | 3        | 0   | 29.41                                   | -1.8        | 45   | 48                                      | +3    | ENE                  | 5                 | 0           | 45   | 44                        | 0.03 |      |
|                     | Malin Head ...                            | 29.58 | 43    | S                    | 3        | 0   | 29.20                                   | -2.8        | 46   | 44                                      | +4    | S                    | 5                 | 0           | 47   | 40                        | 0.01 |      |
|                     | Mullaghmore ...                           | 29.56 | 45    | SW                   | 2        | ang                                       | 29.17                                   | -3.8        | 48   | 45                                      | +3    | S                    | 8                 | pos         | 45   | 44                        | 0.01 |      |
|                     | Belmullet ...                             | 29.53 | 46    | SW                   | 3        | 0   | 29.09                                   | -4.5        | 47   | 47                                      | +1    | SW                   | 4                 | 0.8         | 48   | 44                        | 0.15 |      |
|                     | Donaghadee ...                            | 29.66 | 42    | SW                   | 3        | m   | 29.40                                   | -2.2        | 45   | 47                                      | +2    | SW                   | 5                 | C           | 51   | 40                        | 0.04 |      |
|                     | Liverpool (Bidston)                       | 29.72 | 41    | SE                   | 3        | 0   | 29.60                                   | -1.6        | 46   | 44                                      | +1.3  | SE                   | 5                 | 0           | 46   | 38                        | 0.20 |      |
|                     | Holyhead ...                              | 29.68 | 45    | W                    | 3        | 6   | 29.48                                   | -2.1        | 45   | 45                                      | +1    | ENE                  | 6                 | dgm         | 50   | 44                        | 0.07 |      |
|                     | Parsonstown ...                           | 29.62 | 44    | W                    | 0        | C   | 29.26                                   | -3.6        | 48   | 46                                      | +2    | SE                   | 2                 | 7           | 45   | 42                        | 0.04 |      |
|                     | Valencia ...                              | 29.57 | 48    | ENE                  | 2        | 6   | 29.33                                   | -4.4        | 48   | 47                                      | +1    | SW                   | 4                 | 7.2         | 51   | 45                        | 0.60 |      |
|                     | Roche's Point...                          | 29.65 | 47    | S                    | 2        | 7   | 29.31                                   | -3.6        | 50   | 50                                      | +1    | S                    | 8                 | 7.8         | 50   | 46                        | 0.50 |      |
| BRITISH ISLANDS.    | Pembroke (St. Ann's Hd.)                  | 29.71 | 50    | SW                   | 5        | 0   | 29.54                                   | -2.1        | 51   | 51                                      | +1    | S                    | 6                 | 7.7         | 52   | 47                        | 0.43 |      |
|                     | Scilly ...                                | 29.77 | 52    | SW                   | 5        | C   | 29.53                                   | -2.3        | 52   | 57                                      | +4    | S                    | 6                 | 0           | 53   | 46                        | 0.27 |      |
|                     | Prawle Point ...                          | 29.87 | 50    | SW                   | 4        | 0   | 29.71                                   | -1.2        | 51   | 45                                      | +6    | S                    | 7                 | 0.9         | 51   | 42                        | —    |      |
|                     | Jersey (St. Aubin's)                      | 29.52 | 48    | SW                   | 3        | 6   | 29.88                                   | +0.4        | 48   | 46                                      | +1    | ENE                  | 5                 | 6           | 53   | 45                        | 0.02 |      |
|                     | Hurst Castle ...                          | 29.88 | 44    | SW                   | 1        | 6   | 29.83                                   | +0.2        | 48   | 47                                      | +1    | S                    | 6                 | C           | 45   | 39                        | 0.01 |      |
|                     | Dungeness ...                             | 29.86 | 42    | W                    | 2        | m   | 29.91                                   | +1.3        | 48   | 47                                      | 0     | SW                   | 5                 | C           | 51   | 32                        | 0.07 |      |
|                     | London ...                                | 29.87 | 38    | W                    | 1        | 0   | 29.86                                   | +0.5        | 44   | 43                                      | +1    | S                    | 2                 | 6           | 44   | 36                        | 0.02 |      |
|                     | Oxford ...                                | 29.88 | 37    | SW                   | 2        | f   | 29.86                                   | -0.2        | 45   | 44                                      | +1.5  | ENE                  | 3                 | C           | 45   | 30                        | 0.01 |      |
|                     | Cambridge ...                             | 29.87 | 36    | S                    | 1        | f   | 29.86                                   | +0.5        | 40   | 40                                      | +1    | S                    | 1                 | 6           | 40   | 29                        | 0.03 |      |
|                     | Yarmouth ...                              | 29.83 | 38    | W                    | 2        | f   | 29.88                                   | +0.8        | 42   | 41                                      | +1    | SW                   | 3                 | 6           | 42   | 32                        | 0.01 |      |
| GERMANY & HOLLAND.  | Cuxhaven ...                              | 29.88 | 41    | SW                   | 1        | f   | 29.97                                   | +1.1        | 40   | 35                                      | +5    | SW                   | 1                 | f           | 41   | 37                        | 0.30 |      |
|                     | Berlin ...                                | 30.00 | 33    | SW                   | 3        | f   | 30.04                                   | +1.0        | 34   | 34                                      | +1    | W                    | 0                 | f           | 36   | 33                        | —    |      |
|                     | Wiesbaden ...                             | 30.07 | 28    | *                    | *        | *   | 30.11                                   | +1.2        | 36   | 35                                      | +1    | W                    | 0                 | 0           | 36   | 33                        | —    |      |
|                     | Munich ...                                | 30.07 | 28    | 2                    | 0        | *   | 30.12                                   | +1.0        | 31   | 31                                      | +1    | NW                   | 2                 | C           | 36   | 33                        | —    |      |
|                     | The Helder ...                            | 29.91 | 37    | S                    | 1        | f   | 30.00                                   | +1.5        | 37   | 37                                      | +1    | S                    | 1                 | f           | 41   | 36                        | —    |      |
|                     | Brussels (9 a.m.)                         | 30.06 | *     | *                    | *        | *   | 30.06                                   | +2.0        | 38   | 38                                      | 0     | S                    | 1                 | f           | 42   | 34                        | 0.04 |      |
|                     | Cape Gris Nez                             | 29.85 | 46    | W                    | 3        | m   | 29.91                                   | +1.4        | 40   | 40                                      | -5    | ENE                  | 4                 | 6           | 50   | 37                        | 0.16 |      |
|                     | Paris ...                                 | 30.00 | 41    | SW                   | 2        | 6   | 30.08                                   | -2.0        | 33   | 33                                      | -1    | W                    | 3                 | f           | 50   | 32                        | 0.04 |      |
|                     | Brest ...                                 | 29.90 | 51    | SW                   | 3        | 0   | 29.75                                   | -1.5        | 52   | 52                                      | +3    | S                    | 5                 | C           | 54   | 46                        | —    |      |
|                     | Lorient ...                               | 29.92 | 45    | SW                   | 2        | C   | 29.85                                   | -0.3        | 52   | 48                                      | +4    | S                    | 5                 | C           | 53   | 46                        | —    |      |
| FRANCE AND BELGIUM. | Rochefort ...                             | 30.00 | 47    | S                    | 3        | C   | 30.02                                   | +0.9        | 41   | 41                                      | -1    | ENE                  | 4                 | f           | 54   | 37                        | —    |      |
|                     | Belfort ...                               | ?     | 36    | SW                   | 3        | 6   | ?                                       | ?           | 38   | 31                                      | +10   | SW                   | 3                 | f           | 48   | ?                         | —    |      |
|                     | Lyons ...                                 | 30.04 | 48    | N                    | 2        | f   | 30.12                                   | +1.1        | 42   | 41                                      | +1.0  | N                    | 1                 | f           | 55   | 46                        | —    |      |
|                     | Nice ...                                  | 30.02 | 53    | E                    | 2        | a   | 30.03                                   | +0.2        | 45   | 46                                      | +2    | E                    | 1                 | C           | 53   | 46                        | —    |      |
|                     | Perpignan ...                             | 30.01 | 47    | NE                   | 2        | 6   | 30.10                                   | +1.3        | 40   | 35                                      | -5    | NW                   | 2                 | 6           | ?    | 37                        | —    |      |
|                     | Biarritz ...                              | 30.02 | 51    | S                    | 2        | 0   | 30.02                                   | +0.8        | 45   | 44                                      | 0     | S                    | 2                 | 6           | 52   | 43                        | 0.04 |      |
|                     | Corunna ...                               | 30.08 | 35    | S                    | 3        | 0   | 30.08                                   | +0.5        | 37   | 37                                      | +6    | SW                   | 4                 | 7           | 57   | ?                         | 0.24 |      |
|                     | Lisbon ...                                | 30.08 | 35    | S                    | 3        | 0   | 30.08                                   | +0.5        | 37   | 37                                      | +6    | SW                   | 4                 | 7           | 57   | ?                         | 0.24 |      |
|                     | Peninsula                                 | 30.08 | 35    | S                    | 3        | 0   | 30.08                                   | +0.5        | 37   | 37                                      | +6    | SW                   | 4                 | 7           | 57   | ?                         | 0.24 |      |
|                     | Peninsula                                 | 30.08 | 35    | S                    | 3        | 0   | 30.08                                   | +0.5        | 37   | 37                                      | +6    | SW                   | 4                 | 7           | 57   | ?                         | 0.24 |      |

For Explanation of Columns, see bottom of p. 2.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Tuesday, 1<sup>st</sup> December, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; →→ = forces 8 to 10;

→→ = forces 5 to 7; →→ = forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

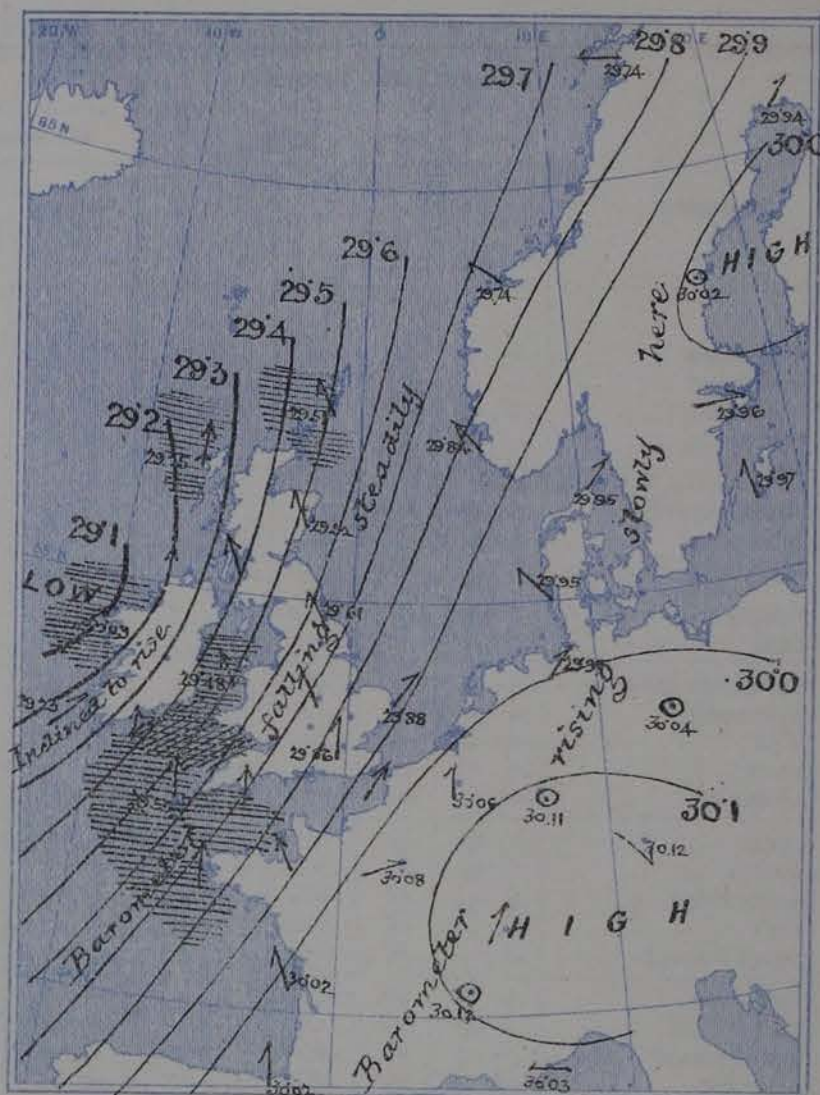
☼ = Rough, ☼☼ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.906         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.910         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.          | TEMPERATURE.  |               |           |      | RAINFALL.<br>(Inches.) |
|--------------------|---------------|---------------|-----------|------|------------------------|
|                    | Daily<br>Max. | Daily<br>Min. | at 8 a.m. |      |                        |
|                    |               |               | Dry.      | Wet. |                        |
| Sumburgh Head..... | 42.6          | 35.2          | 39.6      | 38.1 | 4.25                   |
| Stornoway .....    | 43.1          | 34.2          | 39.4      | 38.5 | 5.63                   |
| Wick .....         | 42.2          | 32.7          | 38.1      | 36.8 | 3.10                   |
| Nairn .....        | 41.9          | 32.8          | 37.1      | 35.9 | 1.95                   |
| Aberdeen .....     | 41.0          | 32.6          | 36.9      | 35.2 | 3.24                   |
| Leith.....         | 44.0          | 33.7          | 38.5      | 37.0 | 1.86                   |
| Shields.....       | 42.9          | 33.9          | 38.3      | 36.9 | 2.57                   |
| Spurn Head.....    | 42.4          | 35.3          | 38.8      | 37.7 | 2.14                   |
| York.....          | 42.3          | 32.2          | 36.4      | 35.4 | 2.28                   |
| Loughborough.....  | 42.7          | 32.2          | 38.3      | 35.4 | 2.24                   |
| Ardrossan.....     | 44.5          | 35.9          | 40.0      | 39.7 | 3.73                   |
| Mullaghmore.....   | 46.5          | 37.8          | 42.2      | 39.8 | 4.51                   |
| Donaghadee.....    | 45.8          | 36.2          | 40.2      | 39.3 | 2.84                   |
| Holyhead.....      | 46.4          | 39.1          | 42.8      | 41.1 | 3.82                   |
| Liverpool.....     | 45.5          | 35.6          | 38.8      | 37.1 | 2.59                   |
| Parsonstown.....   | 44.7          | 33.1          | 37.9      | 36.6 | 3.04                   |
| Valencia.....      | 49.7          | 40.0          | 44.6      | 42.4 | 5.99                   |
| Roche's Point..... | 47.9          | 38.9          | 42.9      | 41.5 | 4.95                   |
| Pembroke.....      | 43.8          | 40.3          | 43.0      | 42.2 | 3.99                   |
| Scilly.....        | 49.5          | 43.1          | 47.0      | 45.1 | 4.02                   |
| Prawle Point.....  | 47.0          | 38.2          | 42.5      | 41.1 | 3.78                   |
| Jersey.....        | 47.8          | 39.3          | 43.1      | 41.4 | 3.82                   |
| Hurst Castle.....  | 45.6          | 36.3          | 40.6      | 39.8 | 2.77                   |
| Dover.....         | 44.2          | 35.9          | 39.8      | 38.6 | 3.00                   |
| LONDON.....        | 44.0          | 33.9          | 37.8      | 36.7 | 2.10                   |
| Oxford.....        | 42.9          | 33.5          | 37.0      | 35.9 | 2.10                   |
| Cambridge.....     | 42.8          | 31.6          | 36.2      | 35.5 | 1.88                   |
| Yarmouth.....      | 41.9          | 33.7          | 37.0      | 37.0 | 2.86                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.1 ins: and more to 29.9 ins: over Germany, France, the eastern shore of the North Sea and Sweden.  
Lowest, 29.1 ins: and less, off the northwest coast of Ireland.

Gradients are rather steep in the west and northwest, moderate over England, slight over the Continent.

Barometer fallen generally, most in the west, but shows some tendency to rise again in the southwest of Ireland.

## TEMPERATURE

Highest, 52° at Orient, Brest and Bally, 48° at Valencia Island, and at Hunt Castle and Dungannon.

Lowest, (1) 28° at Hafnarfjörður, 23° at Harnosand; (2) 31° at Munich, 33° at Paris, and 34° at Berlin.

In London it has risen to 44°, after being as low as 36° in the night and is still rising decidedly.

## WIND

S<sup>3</sup> over the United Kingdom generally - moderate on our northeast and east coasts, strong in the English and Irish Channels, and blowing a gale on several parts of the Irish coast.

## WEATHER

Very foggy over Germany, France, and the eastern shores of the North Sea, fine and bright over the southeastern and eastern counties of England, dull, rainy, and squally in the west. The rainy weather is spreading eastwards.

Rain has fallen generally - heavily in the west.

## SEA

High at Lamlash, rough on our western and northern coasts generally and at Brest, moderate in the southeast and south.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A large low-pressure system has now reached our extreme northwest coasts from the SW<sup>nd</sup>, and is spreading somewhat in an easterly direction over Great Britain. S<sup>3</sup> gales or strong breezes have set in along our western coasts, accompanied by rainy squally weather, but in the east the sky has cleared (temporarily). Temperature has increased - rapidly over England, and is high for the time of year. General appearance is unsettled, and the strong S<sup>3</sup> winds and rain seem likely to spread to all our coasts and to blow hard in the west and north.

## FORECASTS

For the 24 hours ending at NOON on 2<sup>nd</sup> December 1891.

### DISTRICTS.

### FORECASTS.

|      |                  |  |
|------|------------------|--|
| ft 0 | SCOTLAND NORTH   | S <sup>3</sup> winds, strong to a gale; squally, shortery, unsettled, mild.          |
| ft 1 | SCOTLAND EAST    |  |
| 2    | ENGLAND N.E.     | Same as No 5.  |
| 3    | ENGLAND EAST     |  |
| 4    | MIDLAND COUNTIES |  |
| 5    | ENGLAND SOUTH    | S <sup>3</sup> winds, fresh or strong; becoming rainy again, gusty, unsettled, mild. |

### DISTRICTS.

### FORECASTS.

|          |                    |  |
|----------|--------------------|--|
| ft 6     | { SCOTLAND<br>WEST | } S <sup>ly</sup> gales and strong winds, unsettled,<br>changeable, rainy.   |
| ft 7     | { ENGLAND<br>N.W.  |  |
| ft 8     | { ENGLAND<br>S.W.  |  |
| ft 9     | { IRELAND<br>NORTH |  |
| ft 10    | { IRELAND<br>SOUTH |  |
| WARNINGS |                    | { At 7.30 pm on Monday to western coasts of<br>Ireland and Scotland, South Cone. At 10 am.<br>today to all our other western and northern coasts |

Note.—The South Cone, point downwards (ft), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
The North Cone, point upwards (ft), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

| THER: WIND      |       |    |    |    |      |     |   | THER: WIND    |       |    |    |    |      |     |   |
|-----------------|-------|----|----|----|------|-----|---|---------------|-------|----|----|----|------|-----|---|
| BAR:            | D.    | W. | D. | F. | WEA. | SEA |   | BAR:          | D.    | W. | D. | F. | WEA. | SEA |   |
| Skudeanaes ...  | 29.76 | 44 | 42 | SE | 4    | 0   | 4 | Holyhead ...  | 29.65 | 46 | 46 | S  | 5    | m   | 5 |
| Sumburgh Head   | 29.74 | 44 | 43 | SE | 3    | C   | 5 | Valencia ...  | 29.64 | 53 | 47 | S  | 2    | o   | 2 |
| Stornoway ...   | 29.73 | 47 | 46 | SE | 5    | C   | 5 | Scilly ...    | 29.77 | 52 | 50 | SE | 4    | C   | 5 |
| Aberdeen ...    | 29.66 | 43 | 40 | S  | 4    | og  | 4 | Jersey ...    | 29.70 | 52 | 50 | W  | 3    | C   | 3 |
| Shields ...     | 29.69 | 37 | 37 | SE | 3    | og  | 2 | Dungeness ... | 29.76 | 50 | 49 | W  | 3    | m   | 2 |
| Ardrossan ...   | 29.57 | 47 | 46 | SE | 3    | 0   | 2 | London ...    | 29.83 | 42 | 42 | Z  | 0    | og  | 2 |
| Mulin Head ...  | 29.54 | 46 | 44 | SE | 3    | C   | 3 | Yarmouth ...  | 29.79 | 42 | 41 | NW | 3    | og  | 3 |
| Mullaghmore ... | 29.53 | 43 | 40 | SE | 3    | C   | 2 | Rochefort ... | 29.74 | 51 | 51 | S  | 3    | C   | ? |
| Belmullet ...   | 29.57 | 47 | 45 | SE | 2    | 0   | * |               |       |    |    |    |      |     |   |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning varying greatly in different parts of Europe, foggy over England, the Netherlands, and some parts of Germany and Poland; dull and rainy in the north of Ireland and the west of Scotland, as well as at some of the French and Belgian stations; snow falling at St. Petersburg. Fine in most of the central and southern countries, but cloudy over Algeria and Central Spain, with rain at Nemours and Madrid. Slight drizzling rain falling during day in many parts of England, and a heavy fall setting in over Ireland at night.

Temperature highest 61° at Brindisi, 60° at Malta, 59° at Algiers and Constantinople, and 57° at Oran and Safelle, above 50° at most of the Adriatic and Mediterranean stations, and above 45° in the west of our Islands. Lowest (1) 13° at Archangel, 16° at Haparanda, 19° at Uleaborg, and 21° at Kuopio; (2) 23° at Rzesow and Munich, and 24° at Warsaw; (3) 27° at Loughborough, 29° at York, and 30° at Oxford. Daily maxima a little above 50° at some of our southwestern and southern stations, as well as on the French coast, thermometer rising to 57° at Lisbon.

Wind S<sup>3</sup> or SW<sup>3</sup> at most of our own western and northern stations, with a gale in the Hebrides, but W<sup>1</sup> in the south of Ireland. Light from the S<sup>nd</sup> or SE<sup>nd</sup> over Norway, Denmark, and the greater part of Central Europe. Calm over the central and southern parts of England and also in Sweden. Variable over Russia, France, southern Europe and Algeria. Light S<sup>3</sup> or SW<sup>3</sup> breezes setting in later over England and France; wind backing to the S<sup>nd</sup> in the south of Ireland.

Barometer highest 30.2 ins. and upwards, in an anticyclone lying over southern Russia; 30.1 ins. and upwards, in another system lying off the south of Italy. Lowest 29.4 ins. and less, in a depression lying off the northwest of Scotland. Depression subsequently moving away to the northward, but new disturbance beginning to approach the Irish coast, and barometer falling slightly in extreme west.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Wednesday, 2<sup>nd</sup> December, 1891.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

| METEOROLOGICAL OFFICE, 55, PATERNOSTER STREET, LONDON. H. H. SCOTT, Secretary. |                    |       |                   |          |                                  |                                   |       |             |                                   |      |                   |          |                 |      |             |                     |      |  |
|--|--------------------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------|-------------|-----------------------------------|------|-------------------|----------|-----------------|------|-------------|---------------------|------|--|
| STATIONS.  | YESTERDAY EVENING. |       |                   |          |                                  | 8 A.M. TO DAY.                    |       |             |                                   |      |                   |          |                 |      |             | PAST 24 HOURS.      |      |  |
|  | BAROM.             | TEMP. | WIND.             |          |                                  | BAROMETER.                        |       | SHADE TEMP. |                                   |      | WIND.             |          |                 |      | SHADE TEMP. |                     |      |  |
|  |                    |       |                   |          |                                  |                                   |       |             |                                   |      |                   |          |                 |      |             |                     |      |  |
| Reading at 32° F. and Sea Level.   | Dry.               | Dir.  | Force. (0 to 12.) | Weather. | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.  | Wet.        | Difference from 8 a.m. yesterday. | Dir. | Force. (0 to 12.) | Weather. | Sea. (0 to 12.) | Max. | Min.        | Amount of Rainfall. |      |  |
| SCANDINAVIA.   |                    |       |                   |          |                                  |                                   |       |             |                                   |      |                   |          |                 |      |             |                     |      |  |
| Haparanda ...  | 29.97              | 31    | SW                | 2        | S                                | 30.00                             | +0.06 | 23          | 23                                | -5   | Z                 | 0        | 0               | *    | 32          | 19                  | 0.04 |  |
| Hernösand ...  | 30.02              | 28    | Z                 | 0        | 0                                | 30.05                             | +0.03 | 27          | 26                                | +4   | Z                 | 0        | 0               | *    | 30          | 19                  | -    |  |
| Stockholm ...  | 30.06              | 31    | Z                 | 0        | 0                                | 30.06                             | +0.10 | 30          | 30                                | -3   | Z                 | 0        | 0               | *    | 36          | 30                  | -    |  |
| Wisby ...  | 30.12              | 36    | N                 | 4        | C                                | 30.06                             | +0.09 | 32          | 31                                | -4   | ESE               | 4        | 0               | *    | 39          | 32                  | -    |  |
| Bodö ...   | 29.80              | 38    | E                 | 2        | b                                | 29.82                             | +0.08 | 38          | 34                                | -1   | E                 | 2        | 0               | *    | 39          | 34                  | -    |  |
| Christiansund  | 29.79              | 38    | ESE               | 4        | b                                | 29.68                             | -0.06 | 41          | 36                                | +1   | ESE               | 5        | 0               | *    | 41          | 37                  | -    |  |
| Skudesnaes ...   | 29.80              | 45    | SE                | 8        | 0                                | 29.70                             | -0.14 | 44          | 41                                | 0    | SE                | 8        | 0               | *    | 45          | 43                  | -    |  |
| Christiania Fjord (Færd)   | 29.99              | 36    | NHE               | 3        | f                                | 29.94                             | -0.01 | 40          | 38                                | +5   | SSE               | 3        | 0               | *    | ?           | 34                  | -    |  |
| Skagen (The Scav)  | 30.01              | 39    | SSE               | 3        | b                                | 29.94                             | -0.01 | 38          | 37                                | -1   | SSE               | 3        | 0               | *    | 39          | 34                  | -    |  |
| Fanö ...   | 29.97              | 36    | NHE               | 4        | m                                | 29.81                             | -0.14 | 38          | 37                                | +3   | SE                | 6        | 0               | *    | 39          | 32                  | -    |  |
| BRITISH ISLANDS.   |                    |       |                   |          |                                  |                                   |       |             |                                   |      |                   |          |                 |      |             |                     |      |  |
| Sumburgh Head  | 29.35              | 48    | SSE               | 6        | 0                                | 29.25                             | -0.26 | 47          | 47                                | +1   | S                 | 1        | 0               | *    | 42          | 43                  | 0.21 |  |
| Stornoway ...  | 29.03              | 49    | SW                | 7        | r                                | 29.16                             | -0.09 | 45          | 44                                | -2   | SW                | 7        | 0               | *    | 51          | 33                  | 0.10 |  |
| Wick ...   | 29.21              | 48    | S                 | 7        | r                                | 29.27                             | -0.15 | 42          | 42                                | -3   | S                 | 1        | 0               | *    | 44          | 40                  | 0.15 |  |
| Nairn ...  | 29.15              | 53    | SE                | 3        | 0                                | 29.24                             | -0.14 | 35          | 34                                | -10  | Z                 | 0        | 0               | *    | 57          | 33                  | 0.02 |  |
| Aberdeen ...   | 29.33              | 48    | SSE               | 7        | ogg                              | 29.31                             | -0.21 | 39          | 38                                | -7   | SSW               | 2        | 0               | *    | 48          | 38                  | 0.33 |  |
| Leith ...  | 29.79              | 50    | SE                | 1        | f                                | 29.33                             | -0.16 | 36          | 36                                | -13  | S                 | 1        | 0               | *    | 51          | 35                  | 0.13 |  |
| Shields ...  | 29.43              | 47    | S                 | 5        | 0                                | 29.31                             | -0.30 | 42          | 41                                | +1   | Z                 | 0        | 0               | *    | 48          | 38                  | 0.05 |  |
| Spurn Head ...   | 29.56              | 45    | SSE               | 6        | C                                | 29.32                             | -0.46 | 44          | 44                                | +3   | SSE               | 2        | 0               | *    | 46          | 37                  | 0.34 |  |
| York ...   | 29.54              | 47    | SSE               | 3        | 0                                | 29.32                             | -0.39 | 45          | 45                                | +6   | SE                | 1        | 0               | *    | 47          | 37                  | 0.27 |  |
| Loughborough   | 29.52              | 47    | S                 | 5        | 0                                | 29.31                             | -0.43 | 46          | 45                                | +6   | W                 | 1        | 0               | *    | 49          | 40                  | 0.41 |  |
| Ardrossan ...  | 29.24              | 51    | SSE               | 3        | r                                | 29.29                             | -0.12 | 41          | 40                                | -8   | ESE               | 3        | 0               | *    | 53          | 40                  | 0.29 |  |
| Malin Head ...   | 29.19              | 44    | WSW               | 4        | cp                               | 29.21                             | +0.01 | 40          | 39                                | -6   | S                 | 4        | 0               | *    | 48          | 37                  | 0.21 |  |
| Mullaghmore ...  | 29.22              | 43    | WSW               | 4        | b                                | 29.24                             | +0.07 | 42          | 40                                | -6   | SSW               | 4        | 0               | *    | 50          | 39                  | 0.26 |  |
| Belmullet ...  | 29.22              | 43    | S                 | 3        | bc                               | 29.24                             | +0.15 | 45          | 43                                | -2   | WSW               | 4        | 0               | *    | 47          | 40                  | 0.65 |  |
| Donaghadee ...   | 29.27              | 46    | SSW               | 4        | C                                | 29.29                             | -0.11 | 39          | 39                                | -10  | SSW               | 4        | 0               | *    | 51          | 38                  | 0.13 |  |
| Liverpool (Bidezon)  | 29.37              | 49    | SE                | 4        | r                                | 29.35                             | -0.25 | 43          | 41                                | -3   | SSW               | 1        | 0               | *    | 49          | 41                  | 0.23 |  |
| Holyhead ...   | 29.33              | 48    | SW                | 3        | rmg                              | 29.33                             | -0.15 | 45          | 44                                | -4   | WSW               | 2        | 0               | *    | 51          | 44                  | 0.73 |  |
| Parsonstown ...  | 29.30              | 40    | Z                 | 0        | b                                | 29.34                             | +0.08 | 36          | 35                                | -12  | Z                 | 0        | 0               | *    | 49          | 36                  | 0.17 |  |
| Valencia ...   | 29.30              | 46    | S                 | 9        | b                                | 29.39                             | +0.16 | 47          | 44                                | -1   | SW                | 5        | 0               | *    | 51          | 40                  | 0.21 |  |
| Roche's Point...   | 29.35              | 44    | WSW               | 2        | b                                | 29.42                             | +0.11 | 41          | 39                                | -9   | N                 | 1        | 0               | *    | 50          | 40                  | ?    |  |
| Pembroke (St. Ann's Id.)   | 29.39              | 49    | WSW               | 5        | 0                                | 29.39                             | -0.15 | 49          | 46                                | -2   | W                 | 4        | 0               | *    | 52          | 46                  | 0.75 |  |
| Scilly ...   | 29.44              | 50    | WSW               | 4        | C                                | 29.48                             | -0.07 | 50          | 47                                | -2   | WSW               | 5        | 0               | *    | 53          | 47                  | 0.35 |  |
| Prawle Point ...   | 29.50              | 52    | SSW               | 6        | r                                | 29.46                             | -0.25 | 47          | 47                                | -4   | W                 | 3        | 0               | *    | 51          | 46                  | 0.45 |  |
| Jersey (St. Aubin's)   | 29.69              | 51    | S                 | 6        | ogmru                            | 29.50                             | -0.38 | 50          | 49                                | +2   | W                 | 4        | 0               | *    | 52          | 47                  | 0.63 |  |
| Hurst Castle ...   | 29.62              | 50    | SSW               | 8        | rm                               | 29.40                             | -0.43 | 48          | 48                                | 0    | WSW               | 5        | 0               | *    | 52          | 47                  | 0.82 |  |
| Dungeness ...  | 29.78              | 46    | SW                | 6        | C                                | 29.36                             | -0.85 | 51          | 50                                | +3   | SW                | 7        | 0               | *    | 51          | 45                  | 0.41 |  |
| London ...   | 29.68              | 47    | SSE               | 4        | ogg                              | 29.39                             | -0.47 | 47          | 45                                | +3   | W                 | 3        | 0               | *    | 51          | 43                  | 0.59 |  |
| Oxford ...   | 29.55              | 49    | SSE               | 5        | r                                | 29.38                             | -0.42 | 45          | 45                                | 0    | WSW               | 2        | 0               | *    | 49          | 45                  | 0.78 |  |
| Cambridge ...  | 29.63              | 47    | S                 | 3        | r                                | 29.32                             | -0.54 | 46          | 45                                | +6   | HW                | 1        | 0               | *    | 49          | 38                  | 0.51 |  |
| Yarmouth ...   | 29.75              | 45    | SW                | 6        | C                                | 29.32                             | -0.56 | 42          | 42                                | 0    | SSW               | 5        | 0               | *    | 47          | 41                  | 0.35 |  |
| GERMANY & HOLLAND.   |                    |       |                   |          |                                  |                                   |       |             |                                   |      |                   |          |                 |      |             |                     |      |  |
| Cuxhaven ...   | 30.04              | 38    | SSW               | 1        | f                                | 29.89                             | -0.08 | 37          | 36                                | -3   | S                 | 5        | 0               | *    | 40          | 35                  | -    |  |
| Berlin ...   | 30.10              | 38    | Z                 | 0        | f                                | 30.04                             | -0.00 | 37          | 36                                | +3   | SE                | 2        | 0               | *    | 39          | 34                  | 0.04 |  |
| Wiesbaden ...  | *                  | *     | *                 | *        | *                                | 29.93                             | -0.18 | 38          | 37                                | +2   | Z                 | 0        | 0               | *    | 41          | 36                  | -    |  |
| Munich ...   | 30.12              | 30    | Z                 | 0        | b                                | 30.02                             | -0.10 | 22          | 22                                | -9   | SE                | 3        | 0               | *    | 37          | 21                  | -    |  |
| The Helder ...   | 29.93              | 41    | S                 | 2        | f                                | 29.60                             | -0.40 | 38          | 37                                | +1   | SSE               | 3        | 0               | *    | 41          | 37                  | -    |  |
| FRANCE AND BELGIUM.  |                    |       |                   |          |                                  |                                   |       |             |                                   |      |                   |          |                 |      |             |                     |      |  |
| Brussels (9 a.m.)  | *                  | *     | *                 | *        | *                                | 29.61                             | -0.45 | 41          | 41                                | +3   | SSE               | 5        | 0               | *    | 42          | 36                  | 0.08 |  |
| Cape Gris Nez  | 29.78              | 41    | S                 | 6        | C                                | 29.40                             | -0.51 | 48          | 48                                | +8   | SSW               | 7        | 0               | *    | ?           | 39                  | 0.32 |  |
| Paris ...  | 29.95              | 41    | S                 | 3        | 0                                | ?                                 | ?     | 46          | 44                                | +13  | S                 | 4        | 0               | *    | ?           | 38                  | 0.12 |  |
| Brest ...  | ?                  | 53    | SSW               | 6        | f                                | ?                                 | ?     | 51          | 51                                | -1   | WSW               | 5        | 0               | *    | 54          | 48                  | 1.06 |  |
| Lorient ...  | 29.67              | 54    | S                 | 5        | r                                | 29.57                             | -0.38 | 58          | 49                                | +1   | W                 | 5        | 0               | *    | 54          | 52                  | 0.87 |  |
| Rocheport ...  | 29.92              | 48    | SSW               | 5        | r                                | 29.69                             | -0.33 | 54          | 53                                | +13  | SSW               | 5        | 0               | *    | ?           | ?                   | 0.63 |  |
| Belfort ...  | ?                  | 36    | N                 | 3        | bc                               | ?                                 | ?     | 34          | ?                                 | -4   | N                 | 3        | 0               | *    | 43          | 30                  | -    |  |
| Lyons ...  | 30.07              | 42    | E                 | 1        | C                                | 29.93                             | -0.19 | 45          | 43                                | +9   | S                 | 4        | 0               | *    | 46          | 36                  | -    |  |
| Nice ...   | 30.06              | 49    | Z                 | 0        | b                                | 30.06                             | +0.03 | 44          | 41                                | -5   | E                 | 1        | 0               | *    | 55          | 43                  | -    |  |
| Perpignan ...  | 30.06              | 47    | E                 | 2        | b                                | 29.98                             | -0.12 | 44          | 43                                | +4   | W                 | 2        | 0               | *    | 56          | 38                  | -    |  |
| Biarritz ...   | 29.92              | 58    | S                 | 4        | b                                | 29.78                             | -0.24 | 61          | 54                                | +12  | SW                | 6        | 0               | *    | ?           | ?                   | -    |  |
| PORTUGAL.  |                    |       |                   |          |                                  |                                   |       |             |                                   |      |                   |          |                 |      |             |                     |      |  |
| Corunna ...  | *                  | *     | *                 | *        | *                                | 30.16                             | +0.08 | 60          | 60                                | +3   | SW                | 4        | 0               | *    | 60          | 57                  | 0.43 |  |
| Lisbon ...   | 30.12              | 59    | SSW               | 5        | 0                                | ?                                 | ?     | ?           | ?                                 | ?    | ?                 | ?        | ?               | *    | ?           | ?                   | -    |  |



# WEATHER CHARTS

for 8 a.m. on WEDNESDAY, 2<sup>nd</sup> DECEMBER 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;  
→ = forces 5 to 7; → = forces 1 to 4.  
○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

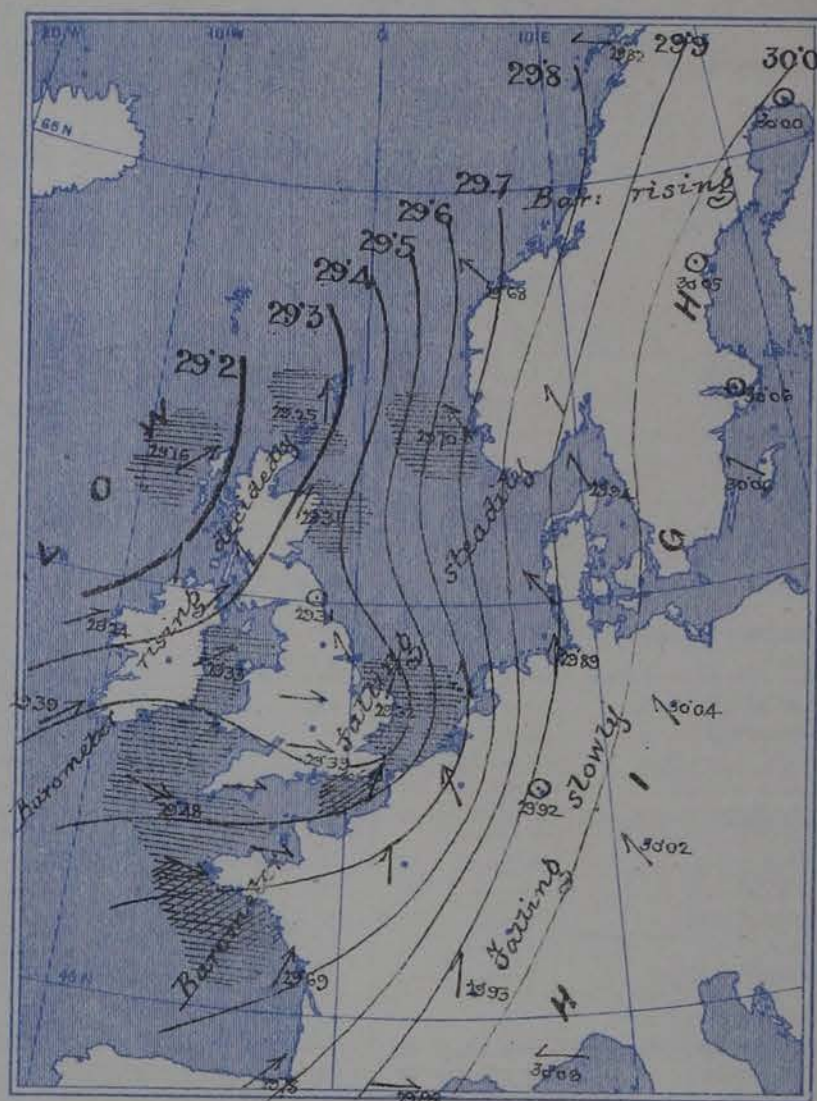
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

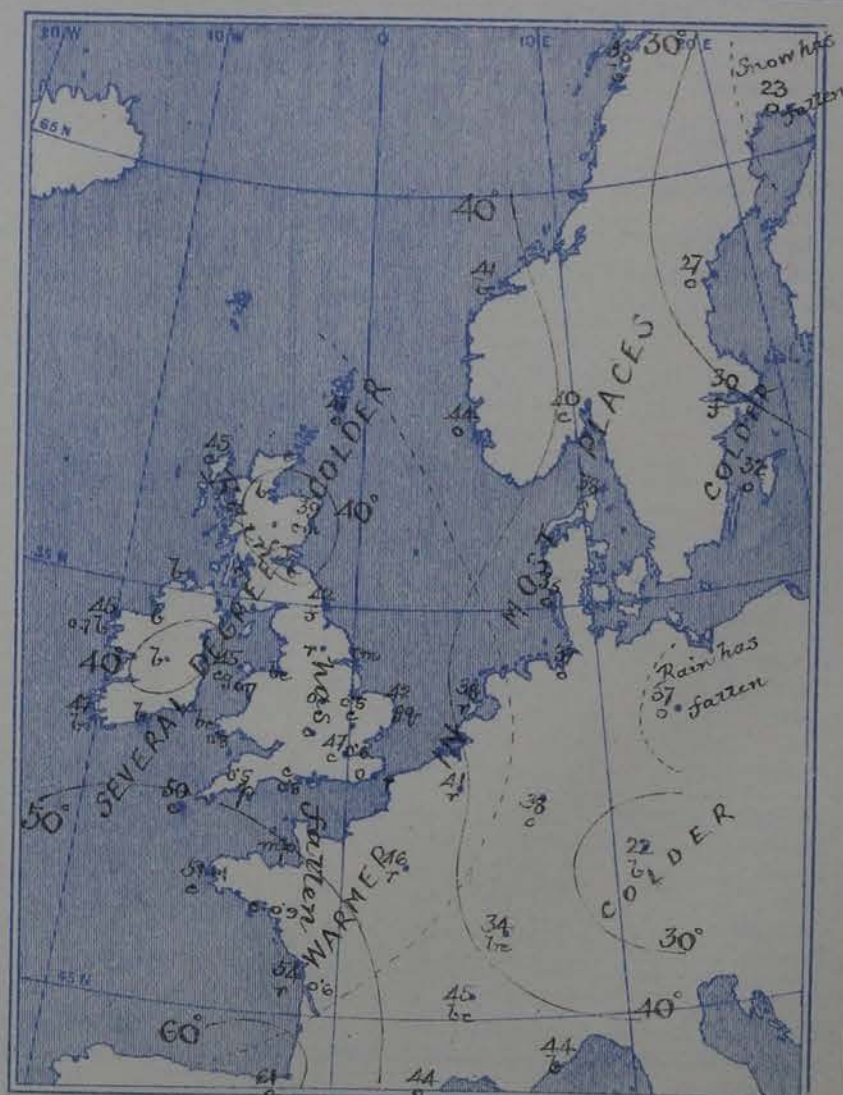
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |                   |      | RAINFALL<br>(Inches.) |
|---------------|---------------|---------------|-------------------|------|-----------------------|
|               | Daily<br>Max. | Daily<br>Min. | at 8 a.m.<br>Dry. | Wet. |                       |
| Sumburgh Head | 42.6          | 35.2          | 39.6              | 38.1 | 4.25                  |
| Stornoway     | 43.1          | 34.2          | 39.4              | 38.5 | 5.63                  |
| Wick          | 42.2          | 32.7          | 38.1              | 36.8 | 3.10                  |
| Nairn         | 41.9          | 32.8          | 37.1              | 35.6 | 1.95                  |
| Aberdeen      | 41.9          | 32.6          | 36.9              | 35.2 | 3.24                  |
| Leith         | 44.0          | 33.7          | 38.5              | 37.0 | 1.86                  |
| Shields       | 42.9          | 33.9          | 38.3              | 36.9 | 2.57                  |
| Spurn Head    | 42.4          | 35.3          | 38.8              | 37.7 | 2.14                  |
| York          | 42.3          | 32.3          | 36.4              | 35.4 | 2.28                  |
| Loughborough  | 42.7          | 32.2          | 36.3              | 35.4 | 2.24                  |
| Ardrossan     | 44.5          | 35.9          | 40.0              | 38.7 | 3.73                  |
| Mullaghmore   | 46.5          | 37.8          | 42.2              | 39.8 | 4.51                  |
| Donaghadee    | 45.8          | 36.2          | 40.2              | 39.3 | 2.81                  |
| Holyhead      | 46.4          | 39.1          | 42.8              | 41.1 | 3.82                  |
| Liverpool     | 43.5          | 35.6          | 38.8              | 37.1 | 2.59                  |
| Parsonstown   | 44.7          | 33.1          | 37.8              | 36.6 | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.6              | 42.4 | 5.99                  |
| Roche's Point | 47.9          | 38.9          | 42.9              | 41.5 | 4.95                  |
| Pembroke      | 43.8          | 40.3          | 43.6              | 42.2 | 3.99                  |
| Silly         | 49.5          | 43.1          | 47.0              | 45.1 | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5              | 41.1 | 3.76                  |
| Jersey        | 47.3          | 39.3          | 43.1              | 41.4 | 3.82                  |
| Hurst Castle  | 45.6          | 36.3          | 40.6              | 39.8 | 2.77                  |
| Dover         | 44.3          | 35.9          | 39.8              | 38.6 | 3.60                  |
| LONDON        | 41.0          | 33.9          | 37.8              | 36.7 | 2.10                  |
| Oxford        | 42.9          | 33.5          | 37.0              | 35.9 | 2.10                  |
| Cambridge     | 42.8          | 31.6          | 36.2              | 35.5 | 1.88                  |
| Yarmouth      | 41.9          | 33.7          | 37.9              | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.0 ins. and more to 29.9 ins. over the Baltic, Sweden, Germany, and the east and south of France.

Lowest, 29.2 ins. and less, off our extreme northwestern coasts, 29.4 ins. and less over Central England.

Gradients rather steep over the North Sea, Holland, and northeast of France.

Barometer rising decidedly in the southwest and south, moderately in the northwest, falling in northeast.

## TEMPERATURE

Highest, 61° at Biarritz, 51° at Brest and Penzance, 50° at Seilly.

Lowest, (1) 23° at Haparanda, 27° at Helsingfors, 30° at Stockholm; (2) 35° at Nain, 36° at Ansonstown; (3) 22° at Munich, 34° at Belfast.

It has fallen decidedly over Ireland, risen over England and France, but the fall seems to be spreading eastwards.

## WIND

SW<sup>2</sup> in the extreme east and northwest of our Islands, W<sup>1</sup> in the southwest, SSW<sup>2</sup> (a moderate gale) in the Strait of Dover. S<sup>1</sup> to SE<sup>1</sup> over the North Sea.

It is apparently backing again in Ireland.

## WEATHER

Rainy over the Netherlands, some parts of France and the southeast of England, but had improved (temporarily) over our Islands. Large quantities of rain have fallen except in the north.

The general appearance remains very unstable and rainlike.

## SEA

High over the Bay of Biscay, rough on nearly all our coasts, but has gone down in the northwest.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large depression which lay off our northwestern coasts yesterday has travelled away to the northward, and a well-marked secondary, now lying over England is moving northeastwards. The barometer has consequently begun to rise briskly in the west and south, but is falling in the northeast, the gales in the west and north have died down, the rain after falling heavily in most places has ceased, except at our most eastern stations and in Holland, temperature is falling, but the wind is backing again in the west.

## FORECASTS

For the 24 hours ending at NOON on 5<sup>th</sup> December, 1891.

| DISTRICTS.         | FORECASTS.   | DISTRICTS.       | FORECASTS.   |
|--------------------|--|------------------|--|
| 0 SCOTLAND NORTH   | SW <sup>2</sup> and S <sup>2</sup> winds, force doubtful at present; unsettled, showery, colder. | 6 SCOTLAND WEST  | Wind mainly S <sup>2</sup> , force doubtful at present; but probably increasing; unsettled, rainy. |
| 1 SCOTLAND EAST    |  | 7 ENGLAND N.W.   |  |
| 2 ENGLAND N.E.     |  | 8 ENGLAND S.W.   |  |
| 3 ENGLAND EAST     | Same as W5.  | 9 IRELAND NORTH  |  |
| 4 MIDLAND COUNTIES |  | 10 IRELAND SOUTH |  |
| 5 ENGLAND SOUTH    | W <sup>2</sup> to S <sup>2</sup> winds, very changeable, unsettled, showery, colder.             |                  |  |

## WARNINGS

The SOUTH CONE is still up in districts 0.1 and 6 to 10.

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.

The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

| THER: WIND      |       |    |    |     |      |       |   | THER: WIND    |       |    |    |     |      |       |   |
|-----------------|-------|----|----|-----|------|-------|---|---------------|-------|----|----|-----|------|-------|---|
| BAR:            | D.    | W. | D. | F.  | WEA. | SEA   |   | BAR:          | D.    | W. | D. | F.  | WEA. | SEA   |   |
| Skudesnaes ...  | 29.82 | 45 | 42 | SE  | 7    | 0     | 4 | Holyhead ...  | 29.35 | 50 | 49 | S   | 6    | fm g  | 6 |
| Sumburgh Head   | 29.41 | 48 | 47 | SSE | 4    | 0     | 6 | Valencia ...  | 29.31 | 47 | 45 | WSW | 3    | b c m | 3 |
| Stornoway ...   | 29.11 | 50 | 50 | SW  | 8    | 0     | 6 | Scilly ...    | 29.42 | 53 | 53 | S   | 7    | τ     | 5 |
| Aberdeen ...    | 29.41 | 47 | 45 | SSE | 5    | 0 q u | 5 | Jersey ...    | 29.77 | 51 | 49 | SSE | 5    | 0     | 4 |
| Shields ...     | 29.51 | 46 | 44 | SSE | 4    | 0     | 3 | Dungeness ... | 29.87 | 48 | 47 | SW  | 5    | c     | 4 |
| Ardrossan ...   | 29.22 | 52 | 50 | SSE | 5    | 1     | 4 | London ...    | 29.76 | 50 | 47 | SSE | 4    | 0     | 4 |
| Malin Head ...  | 29.08 | 46 | 46 | SSW | 5    | 0     | 3 | Yarmouth ...  | 29.81 | 45 | 43 | SSW | 5    | c     | 4 |
| Mullaghmore ... | 29.16 | 47 | 46 | SW  | 5    | 0 r g | 4 | Rochefort ... | 29.97 | 45 | ?  | S   | 4    | c     | 4 |
| Belmullet ...   | 29.17 | 46 | 45 | WSW | 3    | 0 p   | 4 |               |       |    |    |     |      |       |   |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning dull and rainy in the west and north of our Islands; fair in the east and southeast. Raining greatly at the Continental stations, but mostly cloudy, with fog over Denmark, the Netherlands, France, and some parts of Sweden and Germany, rain at Berlin, Rome and Algiers and snow at Uleaborg. Rainy weather spreading eastwards later to all parts of the United Kingdom and also to the west and north of France, amounts large at many of our western and southern stations.

Temperature highest 65° at Malta, 64° at Brindisi, and 57° at Lisbon and La Calle; above 50° at the Mediterranean and Adriatic stations generally, as well as in the extreme southwest of our Islands and the northwest of France. Below the freezing point over the greater part of Sweden, Russia, Austria and south Germany, the lowest readings being 13° at Archangel, 23° at Helsingfors and Kiev, and 25° at Murmel. Subsequently rising to 50° or a little more in many parts of the United Kingdom, and reaching 57° at Skarva.

Wind strong from the SE<sup>1</sup> in the east and extreme north of our Islands, with a gale in Ireland, moderate from the same quarter in the east and southeast of Great Britain, and light in France. SE<sup>1</sup> over the greater part of Norway, Denmark, and the Baltic, light and variable over Russia and Central Europe; E<sup>1</sup> in Italy, SE<sup>1</sup> in Algeria, SW<sup>1</sup> in Spain. S<sup>1</sup> gale setting in later on the Scotch coasts and wind blowing very strongly in the Channel, but subsiding considerably in Ireland.

Barometer highest 30.4 ins. and upwards, in an anticyclone lying over the south of Russia; 30.2 ins. and upwards in another system lying over the south of Portugal. Lowest, 29.1 ins. and less, in a large and rather deep depression lying to the westward of Ireland; gradient steep over the west and north of our Islands. Depression subsequently moving northwards, and barometer rising in west but secondary disturbance forming over England.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.  
\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Thursday, 3<sup>rd</sup> December, 1891.*  
 Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

| R. H. SCOTT, Secretary.  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Office, 65, Victoria Street, London.                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOROLOGICAL OFFICE, 65, VICTORIA STREET, LONDON. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE METEOR  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Thursday, 3<sup>rd</sup> Dec<sup>r</sup>, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

— forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4;

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

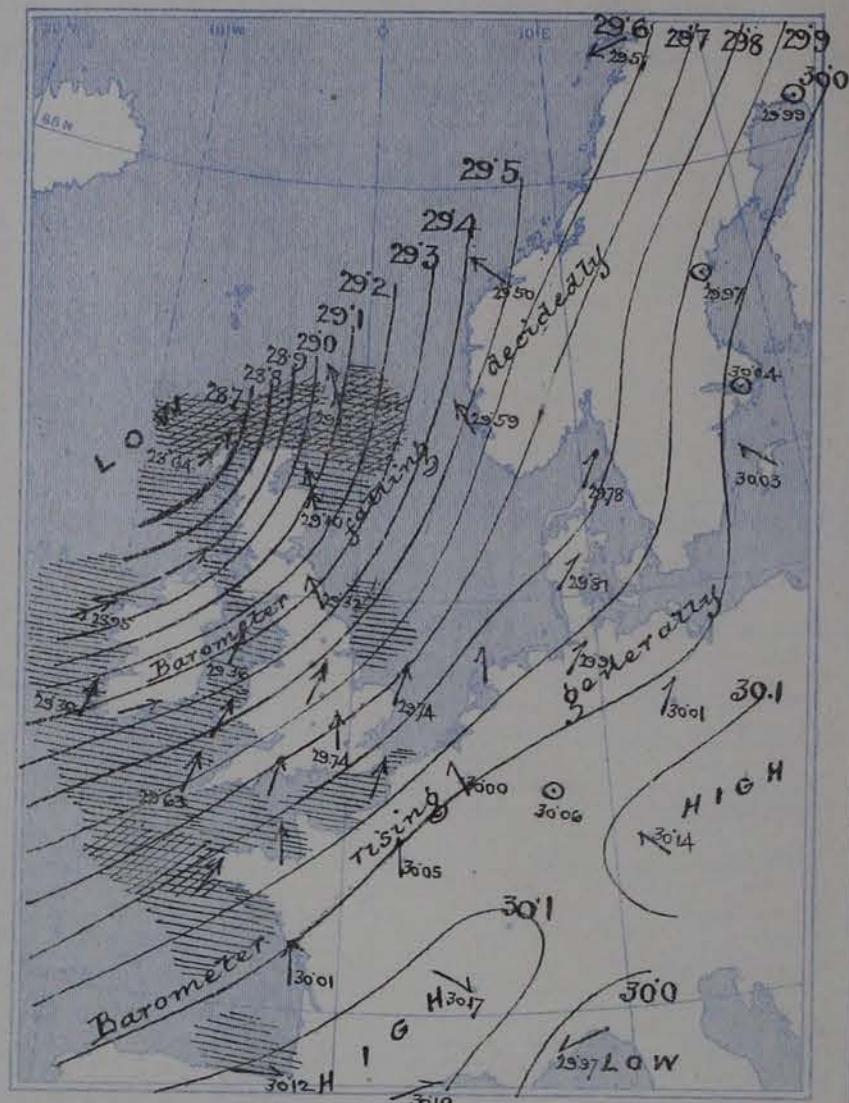
— = Rough, — = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.       | MEAN READINGS. |
|-----------------|----------------|
| Sumburgh Head   | 29.673         |
| Stornoway       | 29.706         |
| Wick            | 29.718         |
| Nairn           | 29.743         |
| Aberdeen        | 29.747         |
| Leith           | 29.807         |
| Glasgow         | 29.816         |
| Spurn Head      | 29.873         |
| York            | 29.890         |
| Loughborough    | 29.994         |
| Ardrossan       | 29.870         |
| Mullaghnore     | 29.824         |
| Doughhead       | 29.848         |
| Holyhead        | 29.870         |
| Liverpool       | 29.895         |
| Parsonstown     | 29.901         |
| Valencia        | 29.903         |
| Rochester Point | 29.912         |
| Penzance        | 29.916         |
| Scilly          | 29.931         |
| Præstø Point    | 29.979         |
| Jersey          | 29.955         |
| Hurst Castle    | 29.968         |
| Dover           | 29.971         |
| LONDON          | 29.974         |
| Oxford          | 29.983         |
| Cambridge       | 29.941         |
| Tynemouth       | 29.946         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER**—is shown by letters of the Beaufort Scale.

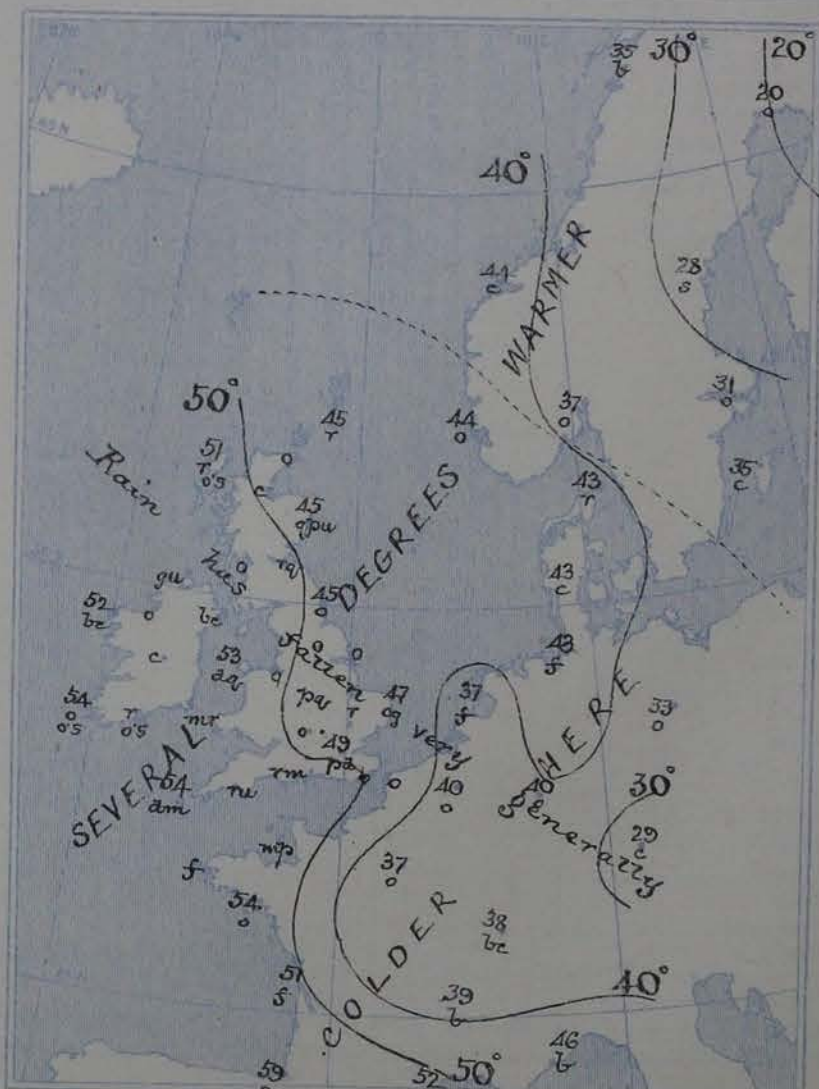
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.       | TEMPERATURE. |      |      |      | RAINFALL<br>(inches.) |
|-----------------|--------------|------|------|------|-----------------------|
|                 | Oct.         | Nov. | Dec. | Jan. |                       |
| Sumburgh Head   | 42.0         | 35.2 | 39.6 | 38.1 | 1.26                  |
| Stornoway       | 42.1         | 34.2 | 39.4 | 38.5 | 5.03                  |
| Wick            | 42.2         | 32.7 | 38.1 | 38.8 | 3.10                  |
| Nairn           | 41.9         | 32.8 | 37.1 | 35.0 | 1.55                  |
| Aberdeen        | 41.0         | 32.0 | 36.9 | 35.2 | 3.24                  |
| Leith           | 41.0         | 33.7 | 38.5 | 37.0 | 1.86                  |
| Glasgow         | 42.9         | 33.9 | 38.3 | 36.9 | 2.87                  |
| Spurn Head      | 42.4         | 35.3 | 38.8 | 37.7 | 2.14                  |
| York            | 42.3         | 32.3 | 36.4 | 35.4 | 2.28                  |
| Loughborough    | 42.7         | 32.2 | 36.3 | 35.4 | 2.24                  |
| Ardrossan       | 41.0         | 35.0 | 40.0 | 38.7 | 3.75                  |
| Mullaghnore     | 40.8         | 37.8 | 42.2 | 39.8 | 4.51                  |
| Doughhead       | 43.8         | 38.2 | 40.2 | 39.3 | 2.84                  |
| Holyhead        | 40.4         | 39.1 | 42.8 | 41.1 | 5.82                  |
| Liverpool       | 42.5         | 36.6 | 38.8 | 37.3 | 2.40                  |
| Parsonstown     | 41.7         | 38.1 | 37.8 | 36.0 | 3.04                  |
| Valencia        | 40.7         | 40.0 | 41.5 | 42.4 | 8.99                  |
| Rochester Point | 41.0         | 38.0 | 42.5 | 41.5 | 4.00                  |
| Penzance        | 42.8         | 40.3 | 43.0 | 42.2 | 3.90                  |
| Scilly          | 42.5         | 45.1 | 47.0 | 45.1 | 1.02                  |
| Præstø Point    | 47.0         | 38.9 | 42.5 | 41.1 | 3.78                  |
| Jersey          | 47.3         | 39.3 | 45.1 | 41.4 | 3.82                  |
| Hurst Castle    | 45.6         | 36.8 | 40.0 | 39.8 | 2.77                  |
| Dover           | 41.3         | 35.0 | 39.8 | 38.6 | 3.00                  |
| LONDON          | 41.0         | 34.9 | 37.8 | 36.7 | 2.10                  |
| Oxford          | 42.9         | 33.5 | 37.0 | 35.0 | 2.10                  |
| Cambridge       | 42.8         | 31.6 | 38.2 | 35.5 | 1.88                  |
| Tynemouth       | 41.0         | 35.7 | 37.9 | 37.0 | 2.60                  |

NOTE.—The Temperature means are for the 20 years 1871-90; the Rainfall means are mainly those for the 25 years 1866-90.





## GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.1 ins: and more over Germany and Austria, (2) 30.2 ins: and more to 30.1 ins: over Spain and the southwest of France.  
Lowest, 28.7 ins: and less, in the neighbourhood of the Hebrides.

Gradients steep over our islands, especially in the northwest. Barometer still falling in the north and east, but changing undecidably in the southwest.

## TEMPERATURE

Height, 59° at Lisbon and Biarritz, 54° at Lorient, Bally, Rock Point and Valencia Island, 51° at Donsway.

Lavret, (1)  $20^\circ$  at Hapavanda,  $28^\circ$  at Hunisands,  $32^\circ$  at Shetholm; (2)  $29^\circ$  at Muniel,  $33^\circ$  at Berlin and  $37^\circ$  at Paris.

In London the thermometer after falling to  $40^{\circ}$  in the shade and  $30^{\circ}$  on the grass very early in the morning, has risen to  $48^{\circ}$  again, and the air is very damp.

## WIND

$S^7$  (SSE to SSW) over our Islands; it is blowing a gale on our eastern and northern coasts, and a strong squally breeze over England.

It is  $SW^3$ , moderate, over the Bay of Biscay,  $S^3$  on the eastern shores of the North Sea,  $SE^3$  in Norway.

## WEATHER

Full, equally, and unceasing in most places; varying over Great Britain, but in the west of Ireland a temporary decrease is reported.

The rainfall since yesterday though general has not been heavy.

## SEA

High at most northern stations, rough on our own and the <sup>24</sup> trench coasts generally.

A large and somewhat deep depression has reached our extreme northwestern coasts from the Atlantic, causing a renewal of the S<sup>1</sup> and SW<sup>1</sup> gales in the west and north of our Islands, and strong squally winds from the same quarter over England. Temperature has risen. Rain has again set in at most stations and the appearance is very unsettled.

The disturbance seems to be moving rapidly to the northeastward, but there are some indications that further disturbances are approaching Valencia Island from southwest. At present, however, these indications are not of a threatening character.

## FORECASTS

For the 24 hours ending at NOON on 4<sup>th</sup> December 1891.

| DISTRICTS. |                         | FORECASTS.  | DISTRICTS.   |                       | FORECASTS.  |
|------------|-------------------------|---|--|-----------------------|---|
| ✓T         | 0 { SCOTLAND<br>NORTH   | } S <sup>W</sup> to S <sup>W</sup> gales and rain, moderating<br>later, with finer and cooler weather | ✓T   | 6 { SCOTLAND<br>WEST  | } Same as N <sup>o</sup> 0 and 1.                                   |
| ✓T         | 1 { SCOTLAND<br>EAST    |   | ✓T   | 7 { ENGLAND<br>N.W.   |   |
|            | 2 { ENGLAND<br>N.E.     | } Same as N <sup>o</sup> 5.   | ✓T   | 8 { ENGLAND<br>S.W.   | Same as N <sup>o</sup> 10.  |
|            | 3 { ENGLAND<br>EAST     |   | ✓T   | 9 { IRELAND<br>NORTH  | Same as N <sup>o</sup> 0 and 1.                                     |
|            | 4 { MIDLAND<br>COUNTIES |   | ✓T   | 10 { IRELAND<br>SOUTH | S <sup>W</sup> gales and strong winds; very<br>rainy and unsettled. |
|            | 5 { ENGLAND<br>SOUTH    |   | S <sup>W</sup> and S <sup>W</sup> winds, strong; squally,<br>rainy - Possibly a gale from S <sup>W</sup> | WARNINGS.             |   |



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA  | SEA |               | BAR:  | THER: |    | WIND |    | WEA | SEA |
|-------------------|-------|-------|----|------|----|------|-----|---------------|-------|-------|----|------|----|-----|-----|
|                   |       | D.    | W. | D.   | F. |      |     |               |       | D.    | W. | D.   | F. |     |     |
| Skudesnaes ...    | 29.60 | 44    | 40 | SE   | 8  | 0    | 5   | Holyhead ...  | 29.48 | 48    | 45 | WSW  | 3  | bc  | 2   |
| Sumburgh Head ... | 29.26 | 46    | 45 | SE   | 4  | 0    | 6   | Valencia ...  | 29.46 | 51    | 48 | SSW  | 5  | omg | 2   |
| Stornoway ...     | 29.18 | 44    | 44 | SW   | 4  | r    | 5   | Scilly ...    | 29.65 | 52    | 48 | WSW  | 4  | bc  | 4   |
| Aberdeen ...      | 29.32 | 42    | 39 | SW   | 2  | b    | 5   | Jersey ...    | 29.69 | 51    | 48 | WSW  | 4  | bcp | 3   |
| Shields ...       | 29.35 | 45    | 42 | SW   | 2  | b    | 5   | Dungeness ... | 29.51 | 51    | 50 | W    | 4  | c   | 5   |
| Ardrossan ...     | 29.34 | 47    | 45 | SW   | 3  | c    | 2   | London ...    | 29.54 | 51    | 49 | SW   | 3  | c   | 4   |
| Malin Head ...    | 29.27 | 45    | 43 | SSW  | 4  | b    | 3   | Yarmouth ...  | 29.46 | 49    | 47 | W    | 4  | bcm | 4   |
| Mullaghmore ...   | 29.32 | 47    | 44 | SSW  | 4  | b    | 4   | Rochefort ... | 29.75 | 55    | 52 | W    | 5  | bc  | *   |
| Belmullet ...     | 29.30 | 48    | 46 | WSW  | 6  | oq p | *   |               |       |       |    |      |    |     |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning fine in the west and north of the United Kingdom and in the west of Norway, as well as in Italy and the extreme south of France. Dull in most other parts of Europe, with fog over the Baltic, rain in the north of England and many parts of France and Spain and snow in Ireland. Considerable improvement taking place later over England, but rain setting in over Ireland at night.

Temperature highest 61° at Biarritz, Brindisi, Malta and Constantinople, 60° at Corunna, and 57° at Algiers; above 50° at most of the Mediterranean and Adriatic stations and just reaching that point at some of the Channel stations. Lowest (1) 13° at Archangel, 22° at Haparanda, 25° at Kiev, and 26° at Kharkov; (2) 22° at Munich; (3) 35° at Narvi, and 36° at Petersburg. Rising during day to 50° or more in many parts of the United Kingdom and reaching 57° at Portsmouth, remaining below 40° at some of the German stations.

Wind S<sup>1</sup> or SW<sup>1</sup> in the north and extreme west of our Islands, with a moderate gale in the Hebrides. Moderate or fresh from the West or SW<sup>1</sup> in the Channel and south of England. Light from the SE<sup>1</sup> over Germany, the Netherlands and the north of England. Strong from the same quarter on the eastern shore of the North Sea with a gale at Hull and elsewhere. Light and variable over Russia; E<sup>1</sup> at several of the Austrian and Italian stations; variable in Algeria, SW<sup>1</sup> over Spain and the west of France. Subsequently backing to the S<sup>1</sup> or SE<sup>1</sup> in Ireland and increasing to a gale.

Barometer highest 30.4 in: and upwards, in a large anticyclone lying over Russia, 30.3 in: and upwards, in another system lying over Morocco. Lowest 29.2 in: and less, in a depression off the northwest of Scotland, 29.4 in: and less, in a large secondary system lying over England. Both systems moving away northwards during day, but larger and much deeper disturbance approaching our western coasts in evening.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

WEATHER.—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew. \* AN ASTERISK is inserted in all places for which information is not usually received. The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.  
" Weekly " " " £1 10 0 "



# DAILY WEATHER REPORT.

for Friday 4<sup>th</sup> December.

1891.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| PUBLISHED BY THE METEOROLOGICAL OFFICE, 25, VICARAGE STREET, LONDON. R. H. SCOTT, Secretary. |       |                    |                   |          |                                  |                                   |                |      |                                   |        |                   |          |                |      |      |                     |                |  |  |
|--|-------|--------------------|-------------------|----------|----------------------------------|-----------------------------------|----------------|------|-----------------------------------|--------|-------------------|----------|----------------|------|------|---------------------|----------------|--|--|
| STATIONS.  |       | YESTERDAY EVENING. |                   |          |                                  |                                   | 8 A.M. TO DAY. |      |                                   |        |                   |          |                |      |      |                     | PAST 24 HOURS. |  |  |
|  |       | BAROM.             | TEMP.             | WIND.    |                                  |                                   | BAROMETER.     |      | SHADE TEMP.                       |        |                   | WIND.    |                |      |      | SHADE TEMP.         |                |  |  |
|  |       |                    |                   |          |                                  |                                   |                |      |                                   |        |                   |          |                |      |      |                     |                |  |  |
| Reading at 32° F. and Sea Level.   | Dry.  | Dirac.             | Force. (0 to 12.) | Weather. | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.           | Wet. | Difference from 8 a.m. yesterday. | Dirac. | Force. (0 to 12.) | Weather. | Sea. (0 to 9.) | Max. | Min. | Amount of Rainfall. |                |  |  |
| SCANDINAVIA.   |       |                    |                   |          |                                  |                                   |                |      |                                   |        |                   |          |                |      |      |                     |                |  |  |
| Haparanda ...  | 25.81 | 28                 | SW                | 4        | 0                                | 25.80                             | -69            | 28   | 28                                | SE     | 4                 | 0        | *              | 30   | 18   | 0.32                |                |  |  |
| Hernösand ...  | 25.69 | 36                 | S                 | 8        | 0                                | 25.12                             | -85            | 37   | 36                                | S      | 6                 | 0        | *              | 37   | 21   | 0.59                |                |  |  |
| Stockholm ...  | 25.82 | 38                 | S                 | 2        | 7                                | 25.41                             | -63            | 41   | 39                                | SE     | 4                 | 0        | *              | 37   | 25   | 0.24                |                |  |  |
| Wisby ...  | 25.91 | 38                 | SE                | 4        | 0                                | 25.57                             | -45            | 42   | 42                                | SE     | 4                 | 7        | *              | 30   | 30   | 0.24                |                |  |  |
| Bodö ...   | 25.92 | 33                 | ESE               | 5        | 6                                | 25.78                             | -79            | 40   | 35                                | ESE    | 5                 | 0        | 3              | ?    | 28   | —                   |                |  |  |
| Christiansund  | 28.56 | 47                 | ESE               | 6        | C                                | 28.95                             | -55            | 47   | 45                                | WSE    | 9                 | 7        | 5              | ?    | 44   | 0.01                |                |  |  |
| Skudesnaes ...   | 25.22 | 49                 | S                 | 9        | 0                                | 25.45                             | -14            | 48   | 45                                | W      | 5                 | C        | 5              | ?    | 44   | 0.12                |                |  |  |
| Christiania Fjord (Færder)   | 25.52 | 44                 | SW                | 7        | 0                                | 25.36                             | -43            | 44   | 44                                | W      | 8                 | 6        | 5              | ?    | ?    | 0.04                |                |  |  |
| Skagen (The Scaw)  | 25.50 | 46                 | SW                | 8        | 7                                | 25.51                             | -37            | 46   | 45                                | SW     | 7                 | 6        | 5              | 50   | 39   | 0.32                |                |  |  |
| Fanö ...   | 25.67 | 46                 | SW                | 6        | 7                                | 25.75                             | -06            | 46   | 46                                | WSE    | 2                 | C        | *              | 48   | 48   | 0.20                |                |  |  |
| Sumburgh Head  | 28.67 | 50                 | SW                | 7        | 7                                | 25.24                             | +12            | 46   | 46                                | W      | 6                 | 6        | 7              | 51   | 42   | 0.18                |                |  |  |
| Stornoway ...  | 28.85 | 47                 | W                 | 3        | 0                                | 25.38                             | +74            | 45   | 45                                | W      | 6                 | 0        | 6              | 51   | 48   | 0.25                |                |  |  |
| Wick ...   | 28.91 | 48                 | SW                | 3        | C                                | 25.48                             | +56            | 44   | 42                                | SW     | 5                 | 6C       | 4              | 52   | 42   | 0.05                |                |  |  |
| Nairn ...  | 28.97 | 49                 | SW                | 3        | C                                | 25.44                             | +61            | 46   | 48                                | SW     | 3                 | 6C       | 2              | 57   | 42   | 0.06                |                |  |  |
| Aberdeen ...   | 25.07 | 51                 | SW                | 5        | 69                               | 25.56                             | +46            | 44   | 40                                | SW     | 2                 | 6C       | 4              | 55   | 42   | 0.01                |                |  |  |
| Leith ...  | 25.26 | 48                 | SW                | 4        | 7                                | 25.65                             | +54            | 46   | 44                                | SW     | 5                 | 69       | *              | 57   | 34   | 0.07                |                |  |  |
| Shields ...  | 25.38 | 54                 | SW                | 2        | 6m                               | 25.72                             | +40            | 47   | 44                                | SW     | 3                 | 6C       | 2              | 57   | 42   | —                   |                |  |  |
| Spurn Head ...   | 25.52 | 52                 | SW                | 5        | 0                                | 25.86                             | +34            | 46   | 45                                | SW     | 3                 | C        | 4              | 53   | 44   | 0.05                |                |  |  |
| York ...   | 25.47 | 58                 | WSE               | 4        | 0                                | 25.85                             | +38            | 43   | 42                                | SW     | 1                 | 6        | *              | 53   | 41   | 0.04                |                |  |  |
| Loughborough   | 25.58 | 56                 | SW                | 5        | 0                                | 25.86                             | +32            | 47   | 45                                | SW     | 3                 | 6        | *              | 56   | 47   | 0.12                |                |  |  |
| BRITISH ISLANDS.   |       |                    |                   |          |                                  |                                   |                |      |                                   |        |                   |          |                |      |      |                     |                |  |  |
| Ardrossan ...  | 25.25 | 51                 | SW                | 6        | 0                                | 25.67                             | +59            | 45   | 46                                | SW     | 4                 | 0        | 4              | 53   | 48   | —                   |                |  |  |
| Malin Head ...   | 25.21 | 48                 | SW                | 6        | 0p                               | 25.58                             | +37            | 45   | 44                                | SW     | 4                 | 0p       | 3              | 52   | 40   | 0.04                |                |  |  |
| Mullaghmore ...  | 25.35 | 49                 | WSE               | 6        | C9p                              | 25.65                             | +66            | 48   | 47                                | SW     | 5                 | C        | 4              | 53   | 48   | 0.03                |                |  |  |
| Belmullet ...  | 25.36 | 48                 | WSE               | 8        | 6C                               | 25.66                             | +31            | 45   | 47                                | SW     | 4                 | C        | *              | 52   | 39   | 0.28                |                |  |  |
| Donaghadee ...   | 25.40 | 51                 | WSE               | 7        | C                                | 25.71                             | +57            | 44   | 43                                | SW     | 5                 | 6C       | 4              | 53   | 43   | —                   |                |  |  |
| Liverpool (Bidston)  | 25.54 | 51                 | W                 | 5        | 0                                | 25.84                             | +40            | 51   | 48                                | S      | 3                 | C        | 3              | 53   | 48   | 0.01                |                |  |  |
| Holyhead ...   | 25.52 | 52                 | SW                | 6        | 0m9                              | 25.82                             | +46            | 50   | 45                                | WSE    | 4                 | C9       | 4              | 54   | 48   | 0.03                |                |  |  |
| Parsonstown ...  | 25.49 | 45                 | SW                | 1        | 6                                | 25.75                             | +58            | 46   | 44                                | SW     | 1                 | 6C       | *              | 55   | 41   | 0.01                |                |  |  |
| Valencia ...   | 25.58 | 52                 | SW                | 4        | 6C                               | 25.85                             | +55            | 52   | 50                                | SW     | 5                 | 0m       | 5              | 55   | 51   | —                   |                |  |  |
| Roche's Point...   | 25.60 | 51                 | WSE               | 5        | C                                | 25.86                             | +49            | 50   | 48                                | W      | 3                 | 6        | 4              | 54   | 49   | 0.06                |                |  |  |
| Pembroke (St. Ann's Hd.)   | 25.63 | 53                 | WSE               | 5        | 7                                | 25.93                             | +43            | 52   | 51                                | WSE    | 4                 | C9       | 6              | 54   | 50   | 0.10                |                |  |  |
| Scilly ...   | 25.80 | 53                 | SW                | 6        | m                                | 25.98                             | +33            | 52   | 51                                | SW     | 4                 | 6        | 6              | 55   | 50   | 0.04                |                |  |  |
| Prawle Point ...   | 25.83 | 53                 | WSE               | 6        | m                                | 25.84                             | +32            | 52   | 52                                | WSE    | 3                 | 09       | 3              | 53   | 51   | 0.16                |                |  |  |
| Jersey (St. Aubin's)   | 25.97 | 53                 | SW                | 4        | 0m9                              | 25.11                             | +25            | 56   | 54                                | SW     | 5                 | 0m9d     | 4              | 57   | 51   | 0.02                |                |  |  |
| Hurst Castle ...   | 25.85 | 53                 | WSE               | 7        | 0m9d                             | 25.08                             | +26            | 51   | 51                                | WSE    | 6                 | m        | 4              | 54   | 50   | 0.11                |                |  |  |
| Dungeness ...  | 25.88 | 53                 | SW                | 6        | 9d                               | 25.99                             | +17            | 53   | 53                                | WSE    | 6                 | 0d       | 6              | 53   | 49   | 0.05                |                |  |  |
| London ...   | 25.81 | 56                 | SW                | 4        | 0                                | 25.94                             | +20            | 52   | 51                                | WSE    | 1                 | 09d      | *              | 57   | 48   | 0.02                |                |  |  |
| Oxford ...   | 25.76 | 53                 | SW                | 6        | 09                               | 25.98                             | +31            | 49   | 48                                | SW     | 3                 | 6C       | *              | 56   | 48   | 0.05                |                |  |  |
| Cambridge ...  | 25.74 | 54                 | S                 | 3        | 6                                | 25.97                             | +27            | 47   | 47                                | SW     | 1                 | 6        | *              | 56   | 46   | 0.01                |                |  |  |
| Yarmouth ...   | 25.69 | 48                 | SW                | 5        | 09                               | 25.93                             | +19            | 51   | 50                                | WSE    | 2                 | 6Cm      | 3              | 53   | 45   | 0.06                |                |  |  |
| GERMANY & HOLLAND.   |       |                    |                   |          |                                  |                                   |                |      |                                   |        |                   |          |                |      |      |                     |                |  |  |
| Cuxhaven ...   | 25.95 | 45                 | SW                | 5        | f                                | 25.85                             | -02            | 50   | 50                                | WSE    | 4                 | 7        | *              | 52   | ?    | 0.06                |                |  |  |
| Berlin ...   | 30.10 | 38                 | S                 | 3        | C                                | 30.08                             | +07            | 45   | 43                                | SW     | 4                 | 0        | *              | 45   | ?    | —                   |                |  |  |
| Wiesbaden ...  | *     | *                  | *                 | *        | *                                | 30.24                             | +18            | 45   | 44                                | SW     | 2                 | 0        | *              | 46   | 40   | —                   |                |  |  |
| Munich ...   | 30.31 | 31                 | SW                | 3        | 6                                | 30.36                             | +22            | 32   | 31                                | SW     | 3                 | 6        | *              | 39   | 28   | 0.04                |                |  |  |
| The Helder ...   | 25.83 | 47                 | SW                | 5        | 7                                | 25.96                             | +07            | 50   | 49                                | SW     | 2                 | 0        | 3              | 50   | 37   | 0.04                |                |  |  |
| FRANCE AND BELGIUM.  |       |                    |                   |          |                                  |                                   |                |      |                                   |        |                   |          |                |      |      |                     |                |  |  |
| Brussels (9 a.m.)  | *     | *                  | *                 | *        | *                                | 30.11                             | +11            | 54   | 53                                | SW     | 5                 | 0        | *              | 54   | 39   | —                   |                |  |  |
| Cape Gris Nez  | 25.86 | 50                 | S                 | 6        | 7                                | 25.98                             | +17            | 52   | 52                                | S      | 6                 | 7        | 6              | 52   | 45   | 0.04                |                |  |  |
| Paris ...  | 30.11 | 45                 | SW                | 2        | 7                                | 30.22                             | +17            | 53   | 53                                | SW     | 3                 | 0        | *              | 53   | ?    | 0.04                |                |  |  |
| Brest ...  | ?     | 54                 | SW                | 6        | f                                | ?                                 | ?              | 53   | 53                                | SW     | 4                 | f        | 6              | 53   | 54   | 0.04                |                |  |  |
| Lorient ...  | 30.04 | 53                 | SW                | 4        | f                                | 30.16                             | +27            | 53   | 52                                | SW     | 5                 | m        | 6              | 53   | 54   | 0.04                |                |  |  |
| Rochefort ...  | 30.19 | 53                 | W                 | 4        | f                                | 30.30                             | +29            | 53   | 53                                | WSE    | 4                 | 7        | 2              | 57   | 51   | 0.12                |                |  |  |
| Belfort ...  | 30.25 | 36                 | W                 | 3        | 6C                               | ?                                 | ?              | 38   | 34                                | W      | 5                 | 7        | *              | 46   | ?    | —                   |                |  |  |
| Lyons ...  | 30.17 | 49                 | ESE               | 1        | f                                | 30.41                             | +24            | 41   | 41                                | E      | 1                 | f        | 1              | 46   | 39   | —                   |                |  |  |
| Nice ...   | 30.17 | 45                 | E                 | 1        | 6                                | 30.30                             | +33            | 45   | 42                                | E      | 2                 | 6        | *              | 53   | 48   | —                   |                |  |  |
| Perpignan ...  | 30.20 | 62                 | W                 | 4        | 6                                | 30.31                             | +21            | 57   | 53                                | W      | 3                 | 6        | *              | 53   | 52   | —                   |                |  |  |
| Biarritz ...   | 30.24 | 64                 | SE                | 2        | 0                                | 30.37                             | +17            | 52   | 50                                | SE     | 3                 | 6        | 5              | 68   | 50   | —                   |                |  |  |
| PENINSULA.   |       |                    |                   |          |                                  |                                   |                |      |                                   |        |                   |          |                |      |      |                     |                |  |  |
| Corunna ...  | 30.30 | *                  | *                 | *        | *                                | 30.30                             | +02            | 59   | 58                                | 0      | 2                 | 0        | 6              | 63   | 57   | 0.04                |                |  |  |
| Lisbon ...   | 30.30 | 60                 | 2                 | 0        | 0                                | 30.30                             | +02            | 59   | 58                                | 0      | 2                 | 0        | 6              | 63   | 57   | 0.04                |                |  |  |



# WEATHER CHARTS

for 8 a.m. on Friday, 4<sup>th</sup> Dec: 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

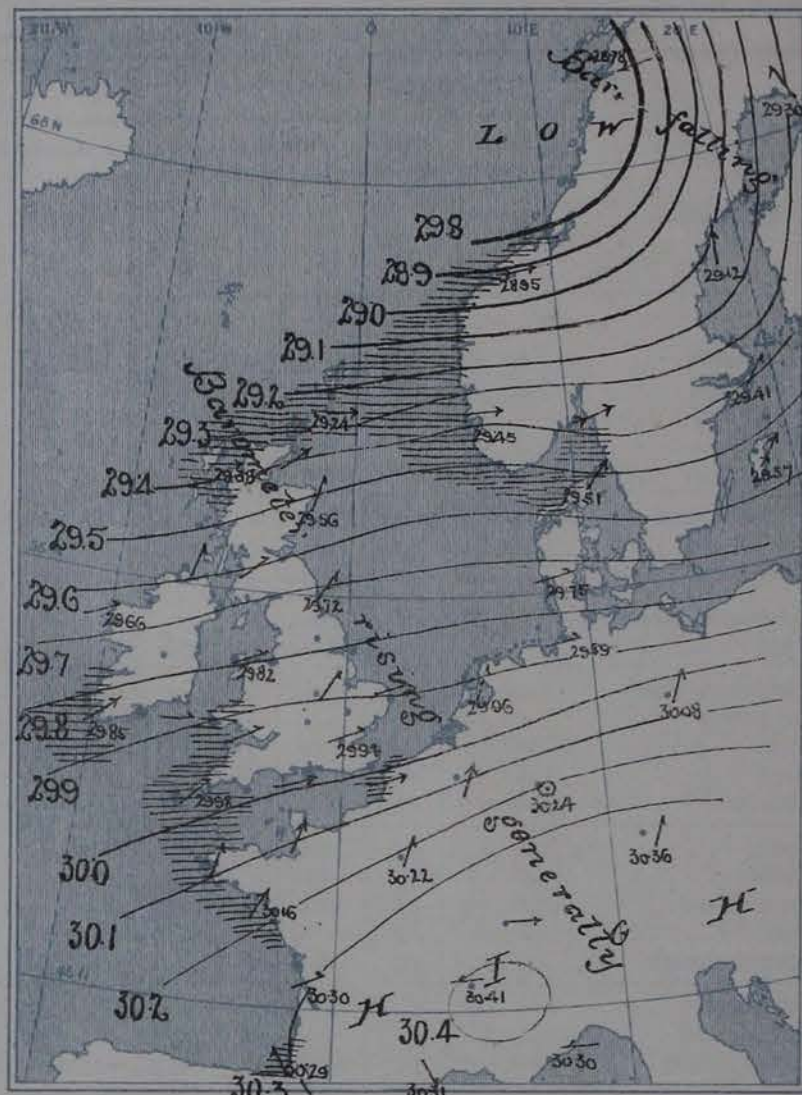
▨ = Rough. ▨ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.830         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.818         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.          | TEMPERATURE. |       |           |      | RAINFALL<br>(Inches.) |
|--------------------|--------------|-------|-----------|------|-----------------------|
|                    | Daily        | Daily | at 8 a.m. |      |                       |
|                    | Max.         | Min.  | Dry.      | Wet. |                       |
| Sumburgh Head..... | 42.6         | 35.2  | 39.6      | 38.1 | 4.25                  |
| Stornoway.....     | 43.1         | 34.2  | 39.4      | 38.5 | 5.63                  |
| Wick.....          | 42.2         | 32.7  | 38.1      | 36.8 | 3.10                  |
| Nairn.....         | 41.9         | 32.8  | 37.1      | 35.6 | 1.95                  |
| Aberdeen.....      | 41.9         | 32.6  | 36.9      | 35.2 | 3.24                  |
| Leith.....         | 44.0         | 33.7  | 38.5      | 37.0 | 1.86                  |
| Shields.....       | 42.9         | 33.9  | 38.3      | 36.9 | 2.57                  |
| Spurn Head.....    | 42.4         | 35.3  | 38.8      | 37.7 | 2.14                  |
| York.....          | 42.3         | 32.3  | 36.4      | 35.4 | 2.28                  |
| Loughborough.....  | 42.7         | 32.2  | 36.3      | 35.4 | 2.24                  |
| Ardrossan.....     | 44.5         | 35.9  | 40.0      | 38.7 | 3.73                  |
| Mullaghmore.....   | 46.5         | 37.8  | 42.2      | 39.8 | 4.51                  |
| Donaghadee.....    | 45.8         | 36.2  | 40.2      | 38.3 | 2.84                  |
| Holyhead.....      | 46.4         | 39.1  | 42.8      | 41.1 | 3.82                  |
| Liverpool.....     | 43.5         | 35.0  | 38.8      | 37.1 | 2.59                  |
| Parsonstown.....   | 44.7         | 33.1  | 37.8      | 36.6 | 3.04                  |
| Valencia.....      | 49.7         | 40.0  | 44.6      | 42.4 | 5.99                  |
| Roche's Point..... | 47.9         | 38.9  | 42.9      | 41.5 | 4.95                  |
| Pembroke.....      | 43.8         | 40.3  | 43.6      | 42.2 | 3.99                  |
| Silly.....         | 49.5         | 43.1  | 47.0      | 45.1 | 4.02                  |
| Prawle Point.....  | 47.0         | 38.2  | 42.5      | 41.1 | 3.76                  |
| Jersey.....        | 47.3         | 39.3  | 43.1      | 41.4 | 3.82                  |
| Hurst Castle.....  | 45.6         | 36.3  | 40.6      | 39.8 | 2.77                  |
| Dover.....         | 44.3         | 35.9  | 39.8      | 38.6 | 3.00                  |
| LONDON.....        | 44.0         | 33.9  | 37.8      | 36.7 | 2.10                  |
| Oxford.....        | 42.0         | 33.5  | 37.0      | 35.9 | 2.10                  |
| Cambridge.....     | 42.8         | 31.6  | 36.2      | 35.5 | 1.88                  |
| Yarmouth.....      | 41.9         | 33.7  | 37.9      | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 ins. and more to 30.1 ins. over Spain, France, and Germany.  
 Lowest, 28.8 ins. and less, off the northwest of Norway.  
 Gradients steep over Scandinavia, moderate in our Islands, slight over France.  
 Barometer still rising on all our coasts.

## TEMPERATURE

Highest, 59° at Lisbon, 57° at Perpignan, 56° at Jersey, 53° at Paris.  
 Lowest, (1) 28° at Haparanda, 37° at Harnosand; (2) 32° at Munich, 38° at Relfat.  
 It is above 40° in all parts of our Islands, and above 50° at all our southwestern and southern stations.

## WIND

Blowing a gale from the SW<sup>d</sup> over the eastern and southern parts of Scandinavia, but moderate to strong only over our Islands the Channel and Bay of Biscay, and still SW<sup>3</sup> in direction.

## WEATHER

Fine over the major part of Great Britain, cloudy in the west and south, with slight rain in some places.  
 In Norway it is dull and rainy, in the Elzevir Peak clear.  
 Rainfall has again been general, but slight in nearly all places. Thunder and lightning occurred in the northeast of Ireland.

## SEA

Still high to rough in the north, rough on our southwestern coasts and off Ushant, moderate elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large depression of yesterday has now reached the extreme northwest of Norway, and on all our coasts the barometer continues to rise. The wind, however, remains SW<sup>3</sup>, the gales have all died down, and the weather which is very mild generally is improving a little. Conditions, however, are by no means settled, although no fresh fall of the barometer is reported from Ireland at present.

## FORECASTS

For the 24 hours ending at NOON on 5<sup>th</sup> DEC<sup>r</sup> 1891.

### DISTRICTS.

### FORECASTS.

### DISTRICTS.

### FORECASTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

SW<sup>2</sup> to S<sup>2</sup> winds, mild, showery

Same as N<sup>o</sup> 5

SW<sup>2</sup> winds, moderate; very mild and close. Doubtful later.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

### WARNINGS

Wind backing S<sup>W</sup><sup>2</sup>, force uncertain; showery, mild.

10-15 am today to Scotland, and northwest, west, and southwest Ireland. Lower Cone for the present.

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | THER: WIND |    |    |    |    |     |     |               | THER: WIND |    |    |    |    |     |     |
|-------------------|------------|----|----|----|----|-----|-----|---------------|------------|----|----|----|----|-----|-----|
|                   | BAR:       | D. | W. | D. | F. | WEA | SEA |               | BAR:       | D. | W. | D. | F. | WEA | SEA |
| Skudesnaes ...    | 29.44      | 48 | 44 | SE | 5  | 7   | 5   | Holyhead ...  | 29.43      | 54 | 53 | SW | 6  | omg | 6   |
| Sumburgh Head ... | 29.74      | 50 | 50 | SE | 7  | 0   | 7   | Valencia ...  | 29.44      | 54 | 52 | SW | 7  | om  | 6   |
| Stornoway ...     | 29.60      | 50 | 50 | SW | 7  | 7   | 7   | Scilly ...    | 29.70      | 53 | 55 | SW | 6  | m   | 5   |
| Aberdeen ...      | 29.56      | 54 | 48 | SW | 6  | 6cg | 7   | Jersey ...    | 29.52      | 56 | 54 | SW | 4  | mog | 4   |
| Shields ...       | 29.28      | 56 | 53 | SW | 6  | 0   | 7   | Dungeness ... | 29.80      | 53 | 53 | SW | 7  | 7p  | 6   |
| Ardrossan ...     | 29.15      | 52 | 50 | SW | 7  | 0   | 6   | London ...    | 29.76      | 57 | 53 | SW | 3  | 0   | *   |
| Malin Head ...    | 29.55      | 57 | 47 | SW | 5  | 0   | 5   | Yarmouth ...  | 29.70      | 51 | 50 | SW | 5  | omg | 4   |
| Mullaghmore ...   | 29.18      | 52 | 49 | SW | 5  | om  | 7   | Rochefort ... | 29.13      | 56 | 55 | W  | 4  | m   | ?   |
| Belmullet ...     | 29.22      | 51 | 49 | SW | 5  | 0   | *   |               |            |    |    |    |    |     |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather dull over the greater part of Europe; squally and rainy over the United Kingdom, rainy also in Denmark and at Malta. Fog prevalent over Holland, north Germany, Poland, and Central Ireland; snow falling at Archangel and Helsingfors. Sky clearing later at several of the Irish and Scotch <sup>stations</sup>, but thunder and lightning occurring in the north of Ireland at night.

Temperature highest 63° at Algiers and 59° at Catania, Lisbon, Brindisi and Malta; above 55° at most of the Mediterranean stations and also on the coasts of the Spanish Peninsula; above 50° in all the more western and southern parts of the United Kingdom, and as high as 55° at Bournemouth. Lowest, 19° at Archangel, 20° at Haparanda, 22° at Moscow, 27° at Kuopio, and 28° at Helsingfors and Kiev, below the freezing point in most parts of Sweden and Russia, and also at some of the German stations. Rising during day to 55° or more in many parts of the United Kingdom, and reaching 59° at York and Liverpool; exceeding 60° in the south of France.

Wind strong from the S<sup>W</sup> (SSE to SW) over the whole of our Islands with a hard gale in Scotland and the north of Ireland; light or moderate from the same quarter over Denmark, Germany and the greater part of France; strong from SE. in the west of Norway. Light and variable over Russia and Austria, moderate from N. or NW. over Italy. Veering later to the S<sup>W</sup> or W<sup>W</sup> in most parts of the United Kingdom, gale continuing in Scotland, but moderating in Ireland.

Barometer highest, 30.4 in; and upwards, in an anticyclone lying over the southern parts of Central Russia; 30.2 in; and upwards over the south of Spain;—the two <sup>systems</sup> were united by a "col" stretching across the southern parts of France and Germany and the north of Austria. Lowest 28.7 in; and less, in a deep depression the centre of which lay to the westward of the Hebrides. Gradients steep in the west and north of the United Kingdom. Depression subsequently travelling northwards and barometer rising in nearly all parts of our Islands.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

WEATHER.—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received. The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Saturday, 5<sup>th</sup> December, 1891.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

| H. H. SCOTT, Secretary.       |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
|-------------------------------|----------------------------------|-------|--------|----------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|--------|----------------------|----------|-------------------|-------------|----------------|---------------------|
| STATIONS.                     | YESTERDAY EVENING.               |       |        |                      |          | 8 A.M. TO DAY.                   |                                   |             |      |                                   |        |                      |          |                   |             | PAST 24 HOURS. |                     |
|                               | BAROM.                           | TEMP. | WIND.  |                      | Weather. | BAROMETER.                       |                                   | SHADE TEMP. |      |                                   | WIND.  |                      | Weather. | Sea.<br>(0 to 9.) | SHADE TEMP. |                | Amount of Rainfall. |
|                               | Reading at 32° F. and Sea Level. | Dry.  | Dirce. | Force.<br>(0 to 12.) |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dirce. | Force.<br>(0 to 12.) |          |                   | Max.        | Min.           |                     |
| SCANDINAVIA.                  |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Haparanda ...                 | 29.09                            | 32    | SW     | 2                    | S        | 29.08                            | - 22                              | 29          | 29   | + 1                               | SW     | 2                    | 0        | *                 | 32          | 25             | 0.08                |
| Hernösand ...                 | 29.26                            | 41    | SW     | 4                    | bc       | 29.38                            | + 26                              | 41          | 36   | + 4                               | SW     | 2                    | 0        | *                 | 41          | 32             | -                   |
| Stockholm ...                 | 29.62                            | 41    | SW     | 2                    | b        | 29.68                            | + 27                              | 42          | 40   | + 1                               | WSW    | 4                    | bc       | *                 | 46          | 34             | -                   |
| Wishby ...                    | 29.74                            | 43    | WSW    | 4                    | b        | 29.91                            | + 34                              | 43          | 41   | + 1                               | WSW    | 4                    | 0        | *                 | 46          | 36             | 0.08                |
| Bodö ...                      | 28.80                            | 42    | SW     | 5                    | r        | 28.76                            | - 02                              | 41          | 40   | + 1                               | SW     | 4                    | r        | 9                 | 45          | 36             | 0.28                |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Christiansund                 | 29.13                            | 47    | WSW    | 10                   | r        | 29.43                            | + 48                              | 45          | 44   | - 2                               | WSW    | 7                    | 0        | 7                 | 47          | 43             | 0.12                |
| Skudesnaes ...                | 29.64                            | 48    | W      | 6                    | c        | 29.63                            | + 18                              | 47          | 46   | - 1                               | SSW    | 7                    | r        | 4                 | 49          | 46             | -                   |
| Christiania Fjord<br>(Færder) | 29.58                            | 44    | SSW    | 5                    | b        | 29.74                            | + 38                              | 44          | 42   | 0                                 | SSW    | 5                    | r        | 4                 | 45          | ?              | -                   |
| Skagen (The Scaw)             | 29.76                            | 45    | WSW    | 4                    | c        | 29.86                            | + 35                              | 45          | 44   | - 1                               | WSW    | 3                    | 0        | 2                 | 46          | 43             | -                   |
| Fanö ...                      | 29.96                            | 45    | WSW    | 4                    | b        | 30.01                            | + 26                              | 44          | 44   | - 2                               | SW     | 2                    | 0        | *                 | 48          | 32             | 0.04                |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Sumburgh Head                 | 29.46                            | 45    | W      | 4                    | b        | 29.29                            | + 05                              | 45          | 44   | - 1                               | W      | 4                    | 0        | 6                 | 48          | 43             | 0.15                |
| Stornoway ...                 | 29.53                            | 46    | SW     | 5                    | 0        | 29.45                            | + 07                              | 44          | 43   | - 1                               | W      | 4                    | 0        | *                 | 47          | 40             | 0.51                |
| Wick ...                      | 29.61                            | 43    | SW     | 1                    | b        | 29.49                            | + 06                              | 45          | 44   | + 1                               | SW     | 5                    | 0        | 2                 | 48          | 41             | -                   |
| Nairn ...                     | 29.61                            | 46    | W      | 3                    | bc       | 29.50                            | + 06                              | 46          | 45   | 0                                 | SW     | 3                    | 0        | 2                 | 51          | 44             | 0.02                |
| Aberdeen ...                  | 29.71                            | 45    | SSW    | 2                    | b        | 29.59                            | + 03                              | 49          | 45   | + 5                               | SW     | 5                    | cq       | 4                 | 50          | 39             | -                   |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Leith ...                     | 29.78                            | 48    | SW     | 3                    | bc       | 29.71                            | + 06                              | 51          | 49   | + 5                               | W      | 4                    | r        | *                 | 51          | 45             | 0.27                |
| Shields ...                   | 29.90                            | 47    | WSW    | 1                    | bm       | 29.74                            | + 02                              | 50          | 47   | + 3                               | SW     | 5                    | 0        | 2                 | 53          | 43             | -                   |
| Spurn Head ...                | 30.00                            | 46    | SSW    | 3                    | b        | 29.92                            | + 06                              | 48          | 47   | + 2                               | SW     | 5                    | 0        | 4                 | 51          | 42             | -                   |
| York ...                      | 29.96                            | 49    | W      | 3                    | b        | 29.92                            | + 07                              | 49          | 46   | + 6                               | SSW    | 1                    | bc       | *                 | 53          | 41             | -                   |
| Loughborough                  | 30.04                            | 47    | WSW    | 2                    | b        | 29.98                            | + 12                              | 49          | 47   | + 2                               | SSW    | 5                    | cq       | *                 | 54          | 42             | -                   |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Ardrossan ...                 | 29.81                            | 50    | SSW    | 3                    | c        | 29.71                            | + 04                              | 50          | 50   | + 1                               | SSW    | 4                    | r        | 4                 | 50          | 47             | 0.36                |
| Malin Head ...                | 29.70                            | 48    | SSW    | 5                    | b        | 29.65                            | + 07                              | 47          | 46   | + 2                               | SSW    | 3                    | 0        | 3                 | 49          | 45             | 0.18                |
| Mullaghmore ...               | 29.71                            | 51    | SSW    | 6                    | c        | 29.69                            | + 04                              | 48          | 48   | 0                                 | SSW    | 2                    | op       | 2                 | 52          | 47             | 0.1                 |
| Belmullet ...                 | 29.67                            | 50    | SSW    | 7                    | ou       | 29.66                            | + 00                              | 50          | 49   | + 1                               | SW     | 5                    | 0        | *                 | 51          | 48             | 0.20                |
| Donaghadee ...                | 29.87                            | 48    | S      | 3                    | b        | 29.75                            | + 04                              | 49          | 49   | + 5                               | SW     | 4                    | r        | 3                 | 51          | 43             | 0.16                |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Liverpool (Bidston)           | 30.01                            | 50    | SSW    | 2                    | bc       | 29.94                            | + 10                              | 54          | 48   | 0                                 | S      | 4                    | 0        | 4                 | 54          | 48             | -                   |
| Holyhead ...                  | 29.96                            | 50    | SW     | 3                    | b        | 29.89                            | + 07                              | 51          | 51   | + 1                               | SSW    | 5                    | ogm      | 4                 | 53          | 50             | -                   |
| Parsonstown ...               | 29.87                            | 48    | SW     | 1                    | c        | 29.76                            | - 03                              | 52          | 51   | + 6                               | SW     | 2                    | r        | *                 | 53          | 45             | 0.04                |
| Valencia ...                  | 29.85                            | 53    | S      | 7                    | 0        | 29.79                            | - 06                              | 53          | 52   | + 1                               | S      | 7                    | r        | 0                 | 54          | 51             | 0.56                |
| Roche's Point...              | 29.95                            | 51    | SW     | 5                    | c        | 29.86                            | - 00                              | 52          | 50   | + 2                               | SW     | 7                    | 0        | 5                 | 53          | 49             | -                   |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Pembroke (St. Ann's Hd.)      | 30.06                            | 52    | SW     | 4                    | c        | 30.01                            | + 08                              | 51          | 50   | - 1                               | SSW    | 4                    | og       | 5                 | 53          | 50             | 0.02                |
| Scilly ...                    | 30.06                            | 51    | S      | 4                    | 0        | 30.07                            | + 09                              | 51          | 51   | - 1                               | SSW    | 4                    | f        | 6                 | 56          | 50             | 0.01                |
| Prawle Point ...              | 30.16                            | 51    | WSW    | 3                    | bc       | 30.14                            | + 10                              | 53          | 53   | + 1                               | SW     | 4                    | f        | 4                 | 53          | 50             | 0.08                |
| Jersey (St. Aubin's)          | 30.22                            | 54    | W      | 3                    | rf       | 30.26                            | + 15                              | 54          | 53   | - 2                               | SW     | 4                    | cm       | 4                 | 56          | 53             | 0.18                |
| Hurst Castle ...              | 30.17                            | 50    | WSW    | 3                    | b        | 30.16                            | + 13                              | 52          | 52   | + 1                               | SW     | 6                    | omd      | 4                 | 54          | 50             | 0.01                |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Dungeness ...                 | 30.16                            | 51    | W      | 4                    | bc       | 30.17                            | + 18                              | 53          | 52   | 0                                 | SW     | 6                    | d        | 4                 | 53          | 49             | 0.09                |
| London ...                    | 30.17                            | 48    | SW     | 1                    | bf       | 30.14                            | + 20                              | 54          | 53   | + 2                               | SW     | 2                    | c        | *                 | 56          | 45             | 0.03                |
| Oxford ...                    | 30.16                            | 45    | SW     | 2                    | b        | 30.10                            | + 12                              | 50          | 49   | + 1                               | SW     | 2                    | bm       | *                 | 54          | 44             | 0.01                |
| Cambridge ...                 | 30.13                            | 46    | SW     | 1                    | b        | 30.08                            | + 11                              | 50          | 49   | + 3                               | SW     | 1                    | c        | *                 | 56          | 40             | 0.03                |
| Yarmouth ...                  | 30.06                            | 49    | W      | 3                    | b        | 30.06                            | + 13                              | 53          | 51   | + 2                               | WSW    | 3                    | bc       | 3                 | 55          | 42             | 0.01                |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Cuxhaven ...                  | 30.02                            | 46    | WSW    | 4                    | r        | 30.18                            | + 29                              | 46          | 45   | - 4                               | WSW    | 4                    | f        | *                 | 50          | 45             | 0.06                |
| Berlin ...                    | 30.16                            | 49    | SW     | 3                    | r        | 30.18                            | + 10                              | 45          | 44   | 0                                 | SW     | 2                    | 0        | *                 | 50          | 45             | -                   |
| Wiesbaden ...                 | *                                | *     | *      | *                    | *        | 30.37                            | + 13                              | 49          | 48   | + 4                               | W      | 0                    | 0        | *                 | 50          | 45             | 0.04                |
| Munich ...                    | 30.41                            | 43    | SW     | 3                    | 0        | 30.47                            | + 11                              | 39          | 37   | + 7                               | SW     | 4                    | 0        | *                 | 48          | 32             | -                   |
| The Helder ...                | 30.15                            | 48    | SW     | 2                    | b        | 30.14                            | + 18                              | 48          | 48   | - 2                               | SSW    | 3                    | f        | 3                 | 50          | 46             | 0.04                |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Brussels (9 a.m.)             | *                                | *     | *      | *                    | *        | 30.17                            | + 19                              | 51          | 51   | - 1                               | SSW    | 5                    | 0        | 5                 | 54          | 48             | 0.12                |
| Cape Gris Nez                 | 30.14                            | 51    | WSW    | 5                    | bc       | 30.36                            | + 14                              | 51          | 50   | - 2                               | S      | 2                    | 0        | *                 | 61          | 49             | -                   |
| Paris ...                     | 30.31                            | 56    | S      | 3                    | bc       | ?                                | ?                                 | 55          | ?    | 0                                 | SW     | 4                    | 0        | 6                 | 55          | 52             | 0.16                |
| Brest ...                     | ?                                | 53    | WSW    | 2                    | f        | ?                                | ?                                 | 55          | ?    | 0                                 | SW     | 4                    | 0        | 6                 | 55          | 52             | -                   |
| Lorient ...                   | 30.23                            | 55    | SSW    | 3                    | m        | 30.29                            | + 13                              | 54          | 53   | - 1                               | E      | 2                    | bc       | 5                 | 55          | 52             | -                   |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Rochefort ...                 | 30.30                            | 57    | S      | 2                    | m        | ?                                | ?                                 | 50          | 50   | - 5                               | ENE    | 3                    | 0        | *                 | 57          | 50             | -                   |
| Belfort ...                   | ?                                | 38    | W      | 3                    | c        | ?                                | ?                                 | 45          | ?    | + 7                               | W      | 3                    | 0        | *                 | 51          | 33             | -                   |
| Lyons ...                     | 30.45                            | 48    | W      | 1                    | 0        | 30.47                            | + 06                              | 42          | 42   | + 1                               | N      | 1                    | 0        | *                 | 53          | 39             | -                   |
| Nice ...                      | 30.38                            | 48    | NE     | 1                    | b        | 30.41                            | + 11                              | 46          | 42   | + 1                               | ENE    | 1                    | 0        | 1                 | 57          | 45             | -                   |
| Perpignan ...                 | 30.39                            | 52    | Z      | 0                    | b        | 30.43                            | + 12                              | 48          | 47   | - 9                               | E      | 2                    | 0        | *                 | 63          | 42             | -                   |
| Biarritz ...                  | 30.30                            | 57    | NE     | 1                    | m        | 30.31                            | + 02                              | 52          | 51   | 0                                 | ENE    | 2                    | 0        | 5                 | 63          | 48             | -                   |
|                               |                                  |       |        |                      |          |                                  |                                   |             |      |                                   |        |                      |          |                   |             |                |                     |
| Corunna ...                   | *                                | *     | *      | *                    | *        | 30.30                            | - 00                              | 54          | 53   | - 5                               | NE     | 4                    | 0        | 6                 | 61          | 54             | -                   |
| Lisbon ...                    | 30.29                            | 58    | ENE    | 4                    | c        | ?                                | ?                                 | ?           | ?    | ?                                 | ?      | ?                    | ?        | ?                 | ?           | ?              | -                   |

For Explanation of Columns, see bottom of p. 1.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Saturday, 5<sup>th</sup> Dec<sup>r</sup>, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;

→ forces 5 to 7; → forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

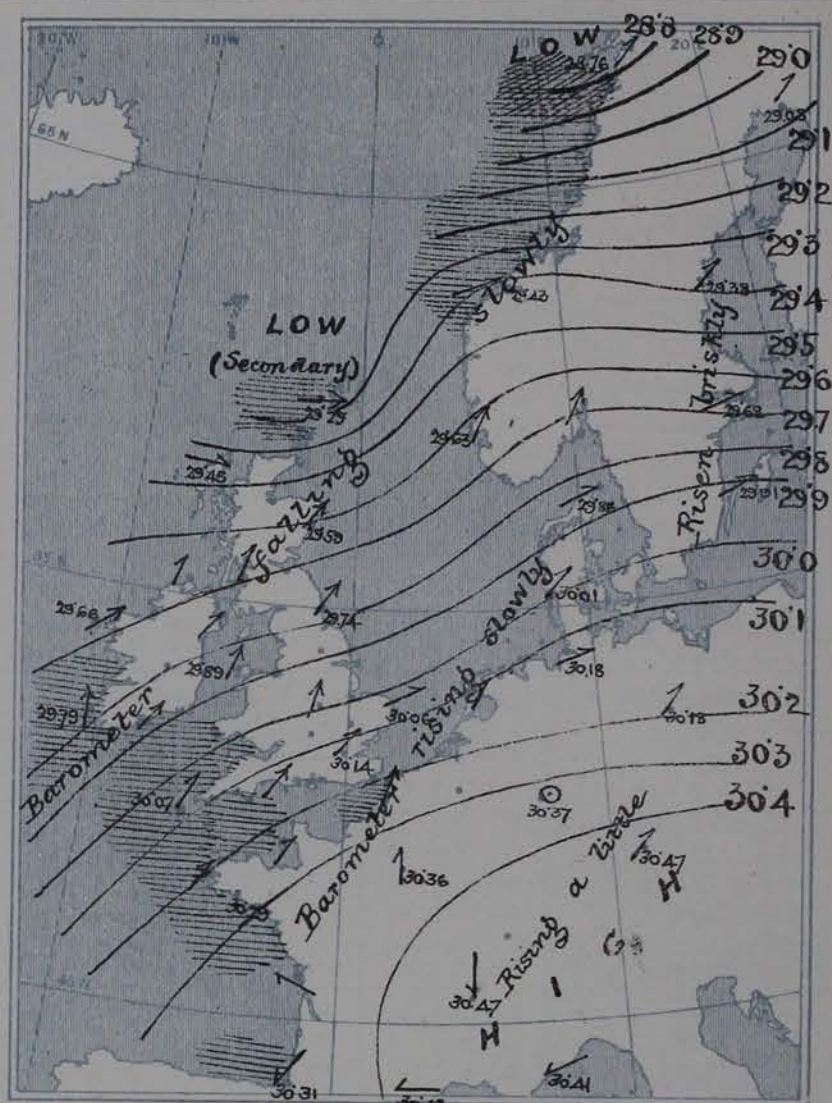
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.935         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |           |           | RAINFALL.<br>(Inches.) |
|---------------|---------------|---------------|-----------|-----------|------------------------|
|               | Daily<br>Max. | Daily<br>Min. | at 8 a.m. | at 8 a.m. |                        |
|               |               |               | Dry.      | Wet.      |                        |
| Sumburgh Head | 42.6          | 35.2          | 39.0      | 38.1      | 4.25                   |
| Stornoway     | 43.1          | 31.2          | 39.4      | 38.5      | 5.63                   |
| Wick          | 42.2          | 32.7          | 38.1      | 36.8      | 3.10                   |
| Nairn         | 41.9          | 32.8          | 37.1      | 35.6      | 1.95                   |
| Aberdeen      | 41.9          | 32.6          | 36.9      | 35.2      | 3.24                   |
| Leith         | 44.0          | 33.7          | 38.5      | 37.0      | 1.86                   |
| Shields       | 42.9          | 33.9          | 38.3      | 36.9      | 2.57                   |
| Spurn Head    | 42.4          | 35.3          | 38.8      | 37.7      | 2.14                   |
| York          | 42.3          | 32.3          | 36.4      | 35.4      | 2.28                   |
| Loughborough  | 42.7          | 32.2          | 36.3      | 35.4      | 2.24                   |
| Ardrossan     | 44.5          | 35.9          | 40.0      | 38.7      | 3.73                   |
| Mullaghmore   | 46.5          | 37.8          | 42.2      | 39.8      | 4.51                   |
| Donaghadee    | 45.8          | 36.2          | 40.2      | 39.3      | 2.84                   |
| Holyhead      | 46.4          | 39.1          | 42.8      | 41.1      | 3.82                   |
| Liverpool     | 43.5          | 35.6          | 38.8      | 37.1      | 2.59                   |
| Parsonstown   | 44.7          | 33.1          | 37.8      | 36.6      | 3.04                   |
| Valencia      | 49.7          | 40.0          | 44.6      | 42.4      | 5.99                   |
| Roche's Point | 47.9          | 38.9          | 42.9      | 41.5      | 4.95                   |
| Pembroke      | 43.8          | 40.3          | 43.6      | 42.2      | 3.99                   |
| Scilly        | 49.5          | 43.1          | 47.0      | 45.1      | 4.02                   |
| Prawle Point  | 47.0          | 38.2          | 42.5      | 41.1      | 3.76                   |
| Jersey        | 47.3          | 39.3          | 43.1      | 41.4      | 3.82                   |
| Hurst Castle  | 45.6          | 36.3          | 40.0      | 39.8      | 2.77                   |
| Dover         | 44.3          | 35.9          | 39.8      | 38.6      | 3.00                   |
| LONDON        | 44.0          | 33.9          | 37.8      | 36.7      | 2.10                   |
| Oxford        | 42.9          | 33.5          | 37.0      | 35.9      | 2.10                   |
| Cambridge     | 42.8          | 31.6          | 36.2      | 35.5      | 1.88                   |
| Yarmouth      | 41.9          | 33.7          | 37.9      | 37.0      | 2.66                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 in. and more to 30.1 in. over France, Germany, the Netherlands, Channel and south of England.  
Lowest, 28.8 in. and less, over Yimark; 29.7 in. and less, over the northwestern parts of Ireland.  
Gradients steep in the north, rather steep over our Islands, moderate to very slight over France.  
Barometer still falling slowly in the west, but steady over our southeastern countries.

## TEMPERATURE

Highest, 55° at Thet, 54° at Jersey and in London, and above 50° at our western and southern stations generally, and at Paris.  
Lowest, (1) 29° at Haparanda, 41° at Bodö and Hernösand; (2) 39° at Munich, 42° at Lyons.  
The maxima recorded yesterday ranged between 50° and 56° over all but our most northern districts. The air is very "muggy".

## WIND

SSW<sup>1</sup> to WSW<sup>2</sup> in Norway, strong to a gale in force.  
SW<sup>4</sup> to S<sup>3</sup> in our Islands - moderate to fresh in most places, but blowing a moderate gale in the south of Ireland.  
SW<sup>1</sup> to SE<sup>3</sup> on the French coast, light to moderate in force.

## WEATHER

Fine in Sweden and on our northeastern coasts, dull and foggy at several French stations and on the coasts of Devon and Cornwall. Cloudy or overcast elsewhere, with some rain in several places.  
Rain has fallen generally over our Islands and the north of France, but the amounts have been small.

## SEA

Very high on the coast of Norway, rough on our southwestern coasts and on the coasts of Brittany, moderate generally elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer has risen at nearly all stations - especially on the eastern shores of the North Sea; in the west of Ireland, however, it has begun to fall again, and the fall is spreading northwards. Temperature is very high for the time of year, the wind is SW<sup>4</sup> to S<sup>3</sup>, and a further increase of wind force and of rainy weather seems probable as the new low pressure system seems to be advancing very slowly towards Ireland from the westward.

## FORECASTS

For the 24 hours ending at NOON on 6<sup>th</sup> December, 1891.

### DISTRICTS.

### FORECASTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

W<sup>2</sup> to S<sup>2</sup> winds, increasing in force; squally, rainy.

Same as No. 5.

SW<sup>4</sup> and S<sup>3</sup> winds, becoming strong and squally with rain.

### DISTRICTS.

### FORECASTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

S<sup>2</sup> and SW<sup>4</sup> gales and strong winds with rain, very unsettled.

### WARNINGS

The following were issued yesterday -  
(1) To districts 6 to 10, at 3.20 pm. Hoist S. Cone again.  
(2) To district 0 at 7.5 pm. Hoist South Cone again.

Note. - The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA. | SEA |               | BAR:  | THER: |    | WIND |    | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|---------------|-------|-------|----|------|----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |               |       | D.    | W. | D.   | F. |      |     |
| Skudeanaes ...    | 29.58 | 48    | 46 | W    | 6  | 0    | 5   | Holyhead ...  | 29.93 | 51    | 50 | SW   | 4  | 6    | 4   |
| Sumburgh Head ... | 29.43 | 47    | 47 | WSW  | 5  | 0    | 6   | Valencia ...  | 29.86 | 54    | 52 | S    | 7  | bcm  | 6   |
| Stornoway ...     | 29.50 | 47    | 46 | W    | 3  | 0    | 4   | Scilly ...    | 30.06 | 55    | 53 | SSW  | 4  | b    | 6   |
| Aberdeen ...      | 29.62 | 47    | 43 | SW   | 3  | b    | 3   | Jersey ...    | 30.19 | 55    | 54 | W    | 3  | 0    | 3   |
| Shields ...       | 29.77 | 53    | 48 | SW   | 4  | bc   | 2   | Dungeness ... | 30.09 | 53    | 53 | W    | 4  | c    | 3   |
| Ardrossan ...     | 29.76 | 50    | 49 | SSW  | 3  | c    | 2   | London ...    | 30.08 | 56    | 52 | WSW  | 2  | bc   | *   |
| Malin Head ...    | 29.69 | 49    | 47 | SW   | 4  | b    | 3   | Yarmouth ...  | 29.98 | 54    | 51 | W    | 3  | bc   | 3   |
| Mullaghmore ...   | 29.75 | 50    | 48 | SSW  | 5  | c    | 3   | Rochefort ... | 30.30 | 57    | 56 | S    | 3  | m    | *   |
| Belmullet ...     | 29.73 | 51    | 48 | WSW  | 6  | c    | *   |               |       |       |    |      |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather fine over the greater part of our Islands, but dull and misty in the extreme south of England. Fine also over Austria, Italy, and the south of France, but cloudy or overcast elsewhere, with rain at one or two of the Norwegian, German and French stations, and snow over Lapland and northern Russia. Dull weather subsequently spreading eastwards over the United Kingdom, and rain falling in many places.

Temperature highest 62° at Malta, and 59° at Linton, Brindisi, Palermo, Algiers, and La Calle, above 55° at many of the Mediterranean stations, and above 50° over a considerable portion of England and France. Lowest 16° at Archangel, Uleaborg, and Moscow, 27° at Kuepis, and 28° at Napasanda, St. Petersburg and Kharkov; below the freezing point in most parts of Russia, and also at some of the Austrian stations. Subsequently rising to 55° or more in the south and south east of England, and to 60° or more in the south of France.

Wind moderate or fresh from the SW<sup>d</sup> over our Islands, Denmark, Germany and France, strong to a gale from the same quarter or from W. over the southern part of Scandinavia; strong from S. or SE. over Finland and the north of Scandinavia. Light from the NE<sup>d</sup> over the south of Russia and also in Italy. Variable in Spain and Algeria. Subsequently backing to the SW<sup>d</sup> in the west of Ireland, and increasing to a moderate or fresh gale.

Barometer highest 30.3 ins. to 30.4 ins. or a little more in a long band stretching from the south of Russia across Austria and the north of Italy and covering the greater part of France and Spain. Lowest 28.8 ins. and less, in a deep depression lying off the northwest of Norway. Gradients steep over Scandinavia and Finland. Depression subsequently travelling away to the northeastward, but new disturbances beginning to approach Ireland in evening.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for Sunday 6<sup>th</sup> Dec<sup>r</sup>. 1891.  
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           | YESTERDAY EVENING.                        |         |       |                      |   | 8 A.M. TO DAY.                            |   |             |      |   |       |                      |   |                   |             | PAST 24 HOURS. |                           |      |
|---------------------|---|---------|-------|----------------------|---|---|---|-------------|------|---|-------|----------------------|---|-------------------|-------------|----------------|---------------------------|------|
|                     | BAROM.                                    | TEMP.   | WIND. |                      |   | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND. |                      |   | Sea.<br>(0 to 5.) | SHADE TEMP. |                | Amount<br>of<br>Rainfall. |      |
|                     | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry.    | Dir.  | Force.<br>(0 to 12.) |   | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Dir.  | Force.<br>(0 to 12.) |   |                   | Max.        | Min.           |                           |      |
| SCANDINAVIA.        | Haparanda ...                             | 29.06   | 33    | SW                   | 2 | b   | 29.18                                   | + .10       | 29   | 29                                      | 0     | N                    | 2 | 0                 | *           | 36             | 27                        | —    |
|                     | Hernösand ...                             | 29.24   | 37    | S                    | 2 | b   | 29.38                                   | — .00       | 35   | 34                                      | — 6   | Z                    | 0 | bc                | *           | 41             | 30                        | 0.04 |
|                     | Stockholm ...                             | 29.55   | 44    | SW                   | 4 | 0   | 29.48                                   | — .20       | 41   | 40                                      | — 1   | W                    | 2 | 0                 | *           | 46             | 39                        | —    |
|                     | Wisby ...                                 | 29.74   | 44    | SW                   | 6 | 0   | 29.55                                   | — .36       | 44   | 44                                      | + 1   | SW                   | 4 | r                 | *           | 44             | 39                        | 0.16 |
|                     | Bodö ...                                  | 29.15   | 40    | SW                   | 4 | 0   | 29.43                                   | + .67       | 31   | 29                                      | — 10  | NW                   | 2 | 0                 | 1           | 41             | 30                        | —    |
|                     | Christiansund                             | 29.34   | 42    | SW                   | 8 | 0   | 29.50                                   | + .07       | 36   | 35                                      | — 9   | NE                   | 1 | c                 | 6           | 42             | 36                        | 0.35 |
|                     | Skudesnaes ...                            | 29.60   | 45    | WSW                  | 2 | c   | 29.38                                   | — .25       | 41   | 41                                      | — 6   | Z                    | 0 | 0                 | 4           | 48             | 41                        | 0.32 |
|                     | Christiania Fjord<br>(Fæder)              | 29.54   | 44    | SSW                  | 6 | m   | 29.40                                   | — .34       | 42   | 41                                      | — 2   | Z                    | 0 | r                 | 3           | 45             | 41                        | —    |
|                     | Skagen (The Scaw)                         | 29.65   | 46    | SW                   | 5 | r   | 29.34                                   | — .52       | 46   | 46                                      | + 1   | WSW                  | 3 | r                 | 3           | 46             | 43                        | 0.55 |
|                     | Fanö ...                                  | 29.82   | 47    | SW                   | 6 | c   | 29.54                                   | — .47       | 48   | 47                                      | + 4   | WSW                  | 7 | r                 | *           | 48             | 34                        | 0.16 |
| BRITISH ISLANDS.    | Sumburgh Head                             | 29.51   | 40    | Z                    | 0 | b   | 29.38                                   | + .09       | 41   | 41                                      | — 4   | W                    | 1 | r                 | 3           | 45             | 38                        | 0.12 |
|                     | Stornoway ...                             | 29.52   | 41    | W                    | 4 | bc  | 29.53                                   | + .08       | 40   | 39                                      | — 4   | W                    | 4 | c                 | 4           | 47             | 36                        | 0.14 |
|                     | Wick ...                                  | 29.55   | 41    | NW                   | 1 | b   | 29.48                                   | — .01       | 40   | 39                                      | — 5   | NW                   | 5 | bcw               | 2           | 45             | 37                        | —    |
|                     | Nairn ...                                 | 29.55   | 43    | SW                   | 1 | b   | 29.55                                   | + .05       | 40   | 39                                      | — 6   | SW                   | 2 | r                 | 2           | 46             | 35                        | 0.13 |
|                     | Aberdeen ...                              | 29.59   | 46    | SSW                  | 1 | 0   | 29.61                                   | + .02       | 39   | 36                                      | — 10  | WSW                  | 3 | b                 | 2           | 50             | 37                        | —    |
|                     | Leith ...                                 | 29.64   | 49    | W                    | 3 | 0   | 29.72                                   | + .01       | 42   | 41                                      | — 8   | WSW                  | 2 | bc                | *           | 51             | 40                        | 0.18 |
|                     | Shields ...                               | 29.68   | 53    | SW                   | 3 | r   | 29.75                                   | + .01       | 44   | 41                                      | — 6   | WSW                  | 5 | bc                | 2           | 55             | 43                        | 0.13 |
|                     | Spurn Head ...                            | 29.81   | 51    | SSW                  | 5 | c   | 29.88                                   | — .04       | 44   | 42                                      | — 4   | WSW                  | 5 | b                 | 4           | 51             | 42                        | —    |
|                     | York ...                                  | 29.79   | 53    | SW                   | 2 | b   | 29.89                                   | — .03       | 45   | 42                                      | — 4   | W                    | 4 | b                 | *           | 54             | 41                        | 0.03 |
|                     | Loughborough                              | 29.89   | 52    | SSW                  | 4 | c   | ? 29.99                                 | + .01       | 42   | 40                                      | — 7   | WSW                  | 3 | bc                | *           | 50             | 42                        | 0.06 |
| GERMANY & HOLLAND.  | Ardrossan ...                             | 29.66   | 48    | SSW                  | 3 | 0   | 29.80                                   | + .09       | 46   | 45                                      | — 4   | SW                   | 5 | apq               | 4           | 49             | 43                        | 0.29 |
|                     | Malin Head ...                            | 29.64   | 46    | SW                   | 4 | 0   | 29.77                                   | + .12       | 44   | 43                                      | — 3   | W                    | 5 | bc                | 3           | 48             | 42                        | 0.16 |
|                     | Mullaghmore ...                           | 29.71   | 47    | SW                   | 4 | c   | 29.83                                   | — .19       | 44   | 43                                      | — 4   | WSW                  | 5 | cp                | 4           | 49             | 43                        | 0.16 |
|                     | Belmullet ...                             | 29.70   | 47    | W                    | 4 | b   | 29.82                                   | + .16       | 47   | 44                                      | — 3   | WSW                  | 6 | b                 | *           | 51             | 43                        | 0.20 |
|                     | Donaghadee ...                            | 29.74   | 47    | SSW                  | 3 | r   | 29.87                                   | + .12       | 40   | 40                                      | — 9   | W                    | 4 | b                 | 2           | 50             | 40                        | 0.24 |
|                     | Liverpool (Bidston)                       | 29.82   | 52    | S                    | 3 | 0   | 29.98                                   | + .04       | 45   | 42                                      | — 6   | WSW                  | 5 | bc                | 4           | 52             | 43                        | 0.45 |
|                     | Holyhead ...                              | 29.79   | 51    | SW                   | 6 | r   | 29.99                                   | + .10       | 46   | 44                                      | — 5   | W                    | 4 | bc                | 4           | 52             | 45                        | 0.43 |
|                     | Parsonstown ...                           | 29.77   | 46    | Z                    | 0 | r   | 30.02                                   | + .26       | 42   | 41                                      | — 10  | SW                   | 1 | bc                | *           | 53             | 39                        | 0.43 |
|                     | Valencia ...                              | 29.88   | 46    | WNW                  | 3 | r   | 30.10                                   | + .31       | 47   | 44                                      | — 6   | WSW                  | 3 | 0                 | 4           | 53             | 43                        | 0.63 |
|                     | Roche's Point...                          | 29.80   | 50    | WSW                  | 2 | r   | 30.09                                   | + .23       | 44   | 42                                      | — 8   | W                    | 2 | bc                | 4           | 53             | 40                        | 0.40 |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.)                  | 29.90   | 52    | SW                   | 5 | c   | 30.11                                   | + .10       | 49   | 48                                      | — 2   | W                    | 4 | bc                | 5           | 55             | 48                        | 0.05 |
|                     | Scilly ...                                | 29.99   | 53    | SW                   | 5 | 0   | ? 30.23                                 | + .16       | 50   | 47                                      | — 1   | W                    | 4 | c                 | 5           | 54             | 47                        | 0.02 |
|                     | Prawle Point ...                          | 30.06   | 53    | SW                   | 6 | f   | 30.20                                   | + .06       | 45   | 44                                      | — 8   | WSW                  | 3 | b                 | 2           | 53             | 44                        | 0.07 |
|                     | Jersey (St. Aubin's)                      | 30.20   | 56    | SSW                  | 4 | c   | 30.24                                   | — .02       | 50   | 48                                      | — 4   | ? WNW                | 3 | bm                | 3           | 58             | 49                        | 0.07 |
|                     | Hurst Castle ...                          | 30.10   | 53    | SW                   | 5 | r   | 30.17                                   | + .01       | 46   | 45                                      | — 6   | W                    | 4 | bc                | 3           | 54             | 45                        | 0.19 |
|                     | Dungeness ...                             | 30.19   | 54    | WSW                  | 6 | c   | 30.07                                   | — .10       | 49   | 47                                      | — 4   | WNW                  | 4 | bc                | 3           | 55             | 48                        | 0.04 |
|                     | London ...                                | 30.06   | 53    | SW                   | 3 | bc  | 30.10                                   | — .04       | 44   | 42                                      | — 10  | WSW                  | 2 | bc                | *           | 58             | 44                        | 0.08 |
|                     | Oxford ...                                | 29.99   | 51    | SSW                  | 5 | 0   | 30.11                                   | + .01       | 43   | 41                                      | — 7   | WSW                  | 1 | b                 | *           | 57             | 43                        | 0.05 |
|                     | Cambridge ...                             | 29.99   | 53    | SW                   | 3 | bc  | 30.06                                   | — .02       | 44   | 42                                      | — 6   | SW                   | 2 | b                 | *           | 57             | 43                        | 0.02 |
|                     | Yarmouth ...                              | 29.97   | 54    | SW                   | 4 | c   | 29.96                                   | — .10       | 44   | 42                                      | — 9   | W                    | 4 | b                 | 3           | 55             | 43                        | 0.03 |
| PENINSULA.          | Cuxhaven ...                              | ? 30.06 | 50    | WSW                  | 5 | r   | 29.80                                   | — .38       | 52   | 51                                      | + 6   | WSW                  | 7 | r                 | *           | 52             | 48                        | 0.08 |
|                     | Berlin ...                                | 30.17   | 52    | SW                   | 3 | 0   | 29.99                                   | — .19       | 53   | 48                                      | + 8   | SW                   | 4 | c                 | *           | 54             | 50                        | —    |
|                     | Wiesbaden ...                             | *       | *     | *                    | * | *   | 30.19                                   | — .18       | 46   | 46                                      | — 3   | Z                    | 0 | f                 | *           | 52             | 45                        | —    |
|                     | Munich ...                                | 30.41   | ? 37  | Z                    | 0 | b   | 30.30                                   | — .17       | 32   | 31                                      | — 7   | SW                   | 3 | b                 | *           | 50             | 32                        | —    |
|                     | The Helder ...                            | 30.03   | 50    | SW                   | 4 | b   | 29.91                                   | — .23       | 48   | 47                                      | 0     | W                    | 5 | c                 | 4           | 50             | 48                        | 0.04 |
|                     | Brussels (8 a.m.)                         | *       | *     | *                    | * | *   | 30.08                                   | — .12       | 52   | 50                                      | + 1   | SW                   | 5 | r                 | *           | 58             | 52                        | —    |
|                     | Cape Gris Nez                             | 30.11   | 53    | SSW                  | 5 | 0   | 30.05                                   | — .12       | 52   | 51                                      | + 1   | SW                   | 5 | c                 | *           | 54             | 48                        | 0.04 |
|                     | Paris ...                                 | 30.30   | 52    | SSE                  | 2 | b   | 30.23                                   | — .13       | 50   | 48                                      | — 1   | S                    | 3 | 0                 | *           | 57             | 46                        | —    |
|                     | Brest ...                                 | 30.20   | 55    | WSW                  | 4 | 0   | 30.24                                   | ?           | 52   | 52                                      | — 3   | NW                   | 3 | b                 | 5           | 54             | 50                        | —    |
|                     | Lorient ...                               | 30.23   | 55    | S                    | 2 | 0   | 30.24                                   | — .05       | 53   | 52                                      | — 1   | WSW                  | 2 | 0                 | 5           | 57             | 52                        | —    |
| FRANCE AND BELGIUM. | Rocheport ...                             | 30.27   | 52    | SW                   | 2 | 0   | 30.32                                   | ?           | 53   | 53                                      | + 3   | WSW                  | 2 | 0                 | 2           | 57             | 52                        | 0.04 |
|                     | Belfort ...                               | ?       | 39    | W                    | 3 | c   | ?                                       | ?           | 42   | 34                                      | — 3   | W                    | 3 | f                 | *           | 59             | 36                        | —    |
|                     | Lyons ...                                 | 30.41   | 46    | ENE                  | 1 | 0   | 30.37                                   | — .10       | 41   | 41                                      | — 1   | WSW                  | 1 | f                 | *           | 48             | 41                        | —    |
|                     | Nice ...                                  | 30.36   | 48    | Z                    | 0 | b   | 30.29                                   | — .12       | 46   | 40                                      | 0     | E                    | 1 | bc                | 1           | 55             | 45                        | —    |
|                     | Perpignan ...                             | 30.39   | 53    | NE                   | 1 | 0   | 30.34                                   | — .09       | 44   | 44                                      | — 4   | SW                   | 1 | c                 | *           | 55             | 43                        | —    |
|                     | Biarritz ...                              | 30.31   | 56    | S                    | 3 | b   | 30.35                                   | + .04       | 54   | 53                                      | + 2   | ESE                  | 2 | 0                 | 2           | 61             | 50                        | —    |
| PENINSULA.          | Corunna ...                               | *       | *     | *                    | * | *   | 30.39                                   | — .02       | 53   | 52                                      | — 1   | SE                   | 1 | m                 | 2           | 61             | 46                        | —    |
|                     | Lisbon ...                                | 30.32   | 56    | NNE                  | 4 | bc  | 30.28                                   | — .02       | 53   | 52                                      | — 1   | NE                   | 4 | bc                | 5           | 63             | 54                        | —    |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Sunday, 6<sup>th</sup> Dec., 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;  
→ = forces 5 to 7; → = forces 1 to 4.  
☉ = dead calm.

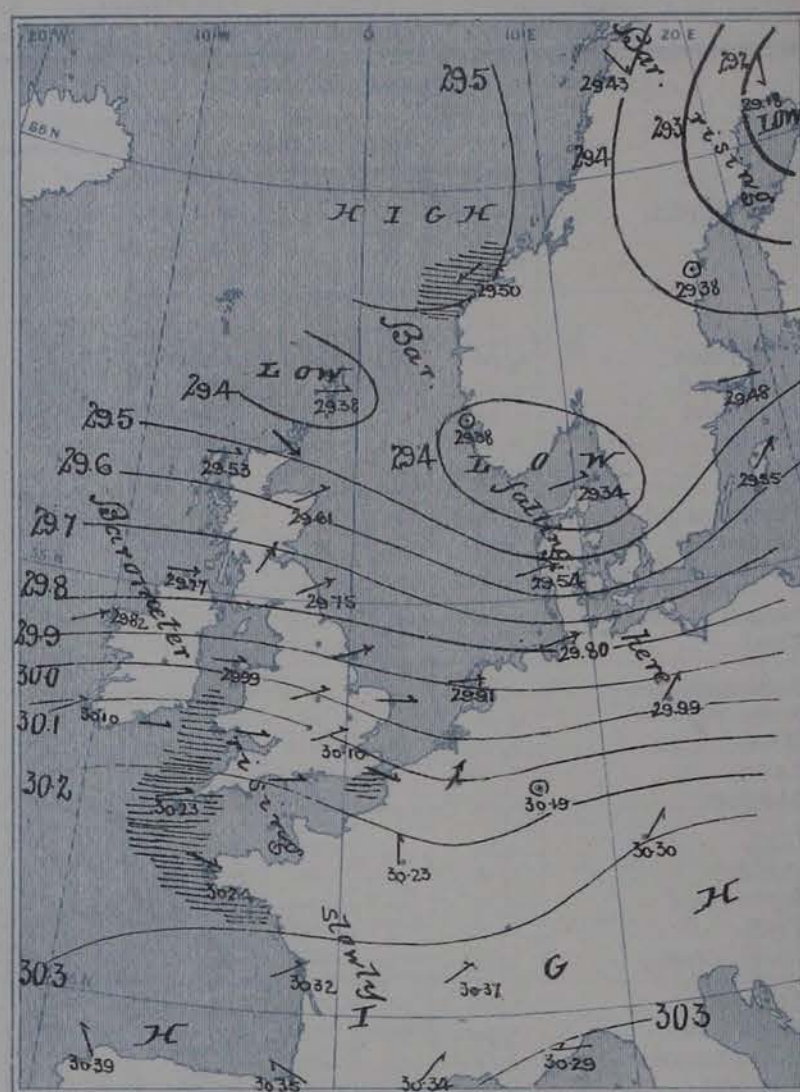
**SEA DISTURBANCE**—Where considerable, is shown thus:

☼ = Rough. ☼ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.  
During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.874         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.870         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

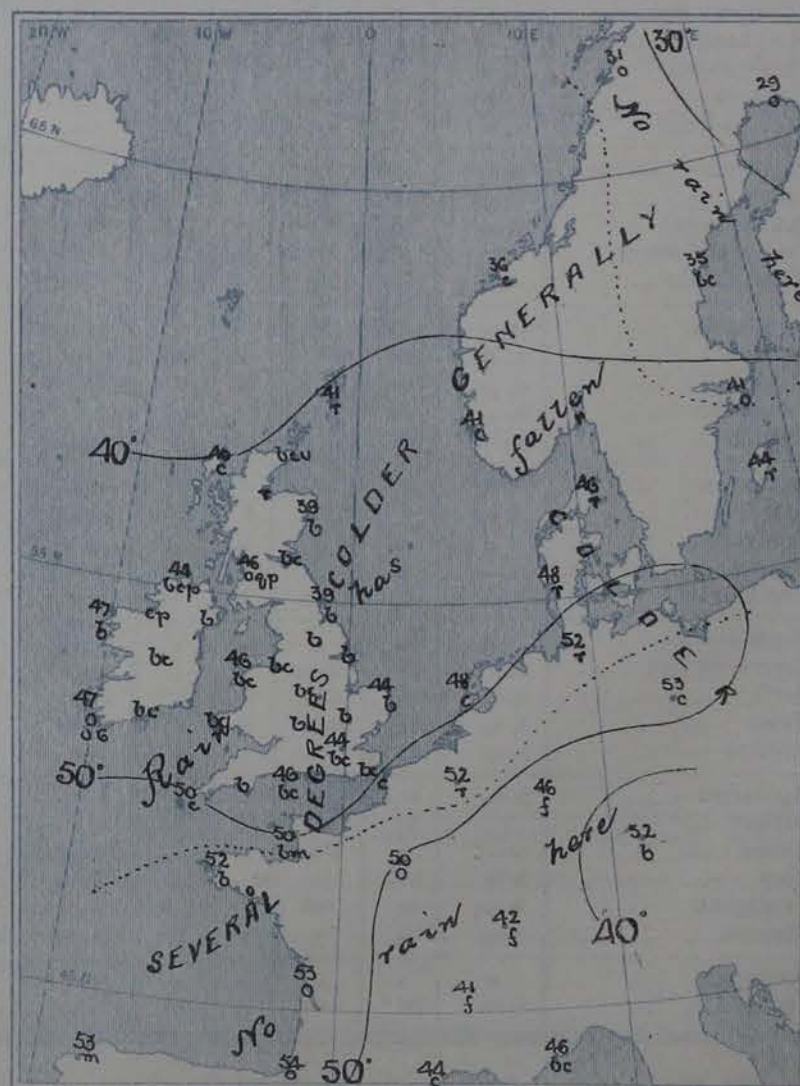
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |           |           | RAINFALL<br>(Inches.) |
|---------------|---------------|---------------|-----------|-----------|-----------------------|
|               | Daily<br>Max. | Daily<br>Min. | At 8 a.m. | At 8 a.m. |                       |
| Sumburgh Head | 42.6          | 35.2          | 39.6      | 38.1      | 4.25                  |
| Stornoway     | 43.1          | 34.2          | 39.4      | 38.5      | 5.63                  |
| Wick          | 42.2          | 32.7          | 38.1      | 36.8      | 3.10                  |
| Nairn         | 41.9          | 32.8          | 37.1      | 35.6      | 1.95                  |
| Aberdeen      | 41.9          | 32.6          | 36.9      | 35.2      | 3.24                  |
| Leith         | 44.0          | 33.7          | 38.5      | 37.0      | 1.86                  |
| Shields       | 42.9          | 33.9          | 38.3      | 36.9      | 2.57                  |
| Spurn Head    | 42.4          | 35.3          | 38.8      | 37.7      | 2.14                  |
| York          | 42.3          | 32.3          | 36.4      | 35.4      | 2.28                  |
| Loughborough  | 42.7          | 32.2          | 36.3      | 35.4      | 2.24                  |
| Ardrossan     | 44.5          | 35.9          | 40.0      | 38.7      | 3.73                  |
| Mullaghmore   | 46.5          | 37.8          | 42.2      | 39.8      | 4.51                  |
| Donaghadee    | 45.8          | 36.2          | 40.2      | 39.3      | 2.84                  |
| Holyhead      | 46.4          | 39.1          | 42.8      | 41.1      | 3.82                  |
| Liverpool     | 43.5          | 35.6          | 38.8      | 37.1      | 2.59                  |
| Parsonstown   | 44.7          | 33.1          | 37.8      | 36.6      | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.6      | 42.4      | 5.99                  |
| Roche's Point | 47.9          | 38.0          | 42.9      | 41.5      | 4.95                  |
| Pembroke      | 45.8          | 40.3          | 43.6      | 42.2      | 3.99                  |
| Silly         | 49.5          | 43.1          | 47.0      | 45.1      | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5      | 41.1      | 3.75                  |
| Jersey        | 47.3          | 39.3          | 43.1      | 41.4      | 3.82                  |
| Hurst Castle  | 45.0          | 36.3          | 40.6      | 39.8      | 2.77                  |
| Dover         | 44.3          | 35.9          | 39.8      | 38.6      | 3.60                  |
| LONDON        | 44.0          | 33.9          | 37.8      | 36.7      | 2.10                  |
| Oxford        | 42.9          | 33.5          | 37.0      | 35.9      | 2.10                  |
| Cambridge     | 42.8          | 34.6          | 36.2      | 35.5      | 1.88                  |
| Yarmouth      | 41.9          | 33.7          | 37.0      | 37.0      | 2.60                  |

NOTE.—The Temperature means are for the 20 years 1871-90; the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest 30.4 in: at Madrid, 30.3 in: and more to 30.1 in: all over Spain, France, Germany and south of our Islands.  
 Lowest, 29.4 in: and less, in two depressions - one over the Shetlands, the other over the south of Norway.  
 Gradients somewhat steep over our Islands, the North Sea and Germany, slight in the extreme north and extreme south of our area.  
 Barometer rising on all our coasts, falling to eastward of the North Sea.

## TEMPERATURE

Highest 50° to 54° on the Spanish coasts, in the west and north of France and in the Shetland Islands.  
 Lowest, 29° to 31° over Lapland; 39° at Aberdeen, 40° at Wick and Nairn, 42° at Larne and Loughborough.  
 It has fallen decidedly, over the whole of the United Kingdom since yesterday, but risen over Germany.

## WIND

W<sup>2</sup> over the United Kingdom generally, moderate to fresh in force.  
 W<sup>2</sup> to SW<sup>2</sup>, strong to a gale over Holstein and North Germany.  
 Light and variable over France and South Germany.  
 E<sup>1</sup> over Spain.

## WEATHER

Much more fair over the United Kingdom than of late, but sky in London does not look settled, (Ciriform clouds coming fast from W.) Rain has fallen generally, but amounts are small.

## SEA

Rather rough in the southwest and south, moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

# FORECASTS

For the 24 hours ending at NOON on 7<sup>th</sup> DEC<sup>r</sup> 1891.

| DISTRICTS.         | FORECASTS.  | DISTRICTS.       | FORECASTS.                                  |
|--------------------|-------------|------------------|---|
| 0 SCOTLAND NORTH   | None issued | 6 SCOTLAND WEST  | None issued                                 |
| 1 SCOTLAND EAST    |             | 7 ENGLAND N.W.   |   |
| 2 ENGLAND N.E.     |             | 8 ENGLAND S.W.   |   |
| 3 ENGLAND EAST     |             | 9 IRELAND NORTH  |   |
| 4 MIDLAND COUNTIES |             | 10 IRELAND SOUTH |   |
| 5 ENGLAND SOUTH    |             | WARNINGS         | To district 0. at 1030 am, hoist north cone |

Note.—The South Cone, point downwards (V), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (^), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA. | SEA |               | BAR:  | THER: |    | WIND |    | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|---------------|-------|-------|----|------|----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |               |       | D.    | W. | D.   | F. |      |     |
| Skudesnaes ...    | 29.60 | 48    | 47 | WSW  | 6  | o    | 5   | Holyhead ...  | 29.85 | 52    | 50 | SW   | 6  | amgq | 6   |
| Sumburgh Head ... | 29.46 | 45    | 44 | W    | 4  | c    | 5   | Valencia ...  | 29.89 | 49    | 48 | SW   | 2  | r    | 2   |
| Stornoway ...     | 29.54 | 47    | 46 | W    | 4  | bc   | 4   | Scilly ...    | 30.04 | 53    | 52 | SSW  | 5  | c    | 6   |
| Aberdeen ...      | 29.62 | 48    | 44 | WSW  | 1  | o    | 3   | Jersey ...    | 30.21 | 56    | 53 | S    | 3  | c    | 3   |
| Shields ...       | 29.71 | 54    | 49 | SW   | 5  | c    | 2   | Dungeness ... | 30.12 | 54    | 53 | WSW  | 6  | o    | 5   |
| Ardrossan ...     | 29.68 | 48    | 47 | SSW  | 3  | c    | 2   | London ...    | 30.08 | 58    | 55 | SW   | 4  | opd  | *   |
| Malin Head ...    | 29.64 | 47    | 46 | SW   | 4  | o    | 3   | Yarmouth ...  | 30.00 | 55    | 53 | SW   | 3  | b    | 3   |
| Mullaghmore ...   | 29.71 | 49    | 48 | SW   | 5  | opg  | 3   | Rechefort ... | 30.31 | 56    | 53 | S    | 3  | c    | 2   |
| Belmullet ...     | 29.71 | 49    | 46 | WSW  | 4  | o    | *   |               |       |       |    |      |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather cloudy or overcast in all but the southern countries, with fog at some of the Irish and German stations, as well as over the western parts of the English Channel. Rain falling in Ireland and the west of Scotland, as well as at Bonn, Prague and Warsaw. Slight rain falling during day in nearly all parts of the United Kingdom, and large amounts in the south of Ireland. Fog and rain appearing over the south of Russia in evening.

Temperatures highest 61° at Khiridisi, 60° at Malta, 58° at Algiers, and 57° at Barcelona and Tunis; above 50° over the Mediterranean generally, as well as in all the more southern parts of the United Kingdom. Lowest 22° at Archangel, 28° at Khabarov, 29° at Khabarovka, 32° at Uleabog, and 33° at Kiev and Vienna; below 40° in all parts of Russia and Austria, as well as in south Germany. Rising during day to between 55° and 58° at most of the English stations, and to 60° or more in several parts of France, Spain, and Italy; maximum reading very little above 50° in Germany.

Wind S<sup>3</sup> or SW<sup>3</sup> over our Islands, with a moderate gale in the south of Ireland. SW<sup>3</sup> or W<sup>3</sup> over the greater part of northern and central Europe; moderate or fresh in force generally, but strong to a gale in the west of Norway. Light from the N<sup>3</sup> or NE<sup>3</sup> over the more southern countries, but variable in Algeria. Subsequently veering to the W<sup>3</sup> on the west coasts of Ireland and Scotland, but gale in south of Ireland subsiding. No important change occurring at Continental stations.

Barometer highest 30.4 ins. and upwards in a broad band stretching from east to west over southern and eastern Europe. Lowest 28.8 ins. and less, in a deep depression lying off the coast of Finmark; 29.3 ins. and less, in a secondary disturbance lying to the northward of Scotland. Both systems travelling away <sup>north</sup> eastwards during day, but shallow secondary depressions travelling eastwards across our Islands, and barometer changing rather irregularly.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 8 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Monday, 7<sup>th</sup> December, 1891.*

*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

| STATIONS.           |                             | YESTERDAY EVENING.                        |       |        |                      |          | 8 A.M. TO DAY.                            |   |             |      |   |        |                      |          |                   |             | PAST 24 HOURS |                           |  |
|---------------------|-----------------------------|---|-------|--------|----------------------|----------|---|---|-------------|------|---|--------|----------------------|----------|-------------------|-------------|---------------|---------------------------|--|
|                     |                             | BAROM.                                    | TEMP. | WIND.  |                      | Weather. | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND.  |                      | Weather. | Sea.<br>(0 to 6.) | SHADE TEMP. |               | Amount<br>of<br>Rainfall. |  |
|                     |                             | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry.  | Dirac. | Force.<br>(0 to 12.) |          | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Dirac. | Force.<br>(0 to 12.) |          |                   | Max.        | Min.          |                           |  |
| SCANDINAVIA.        | Haparanda ...               | 29.37                                     | 23    | N      | 4                    | b        | 29.55                                     | + 37                                    | ?           | 13   | ?                                       | N      | 4                    | b        | *                 | 34          | 23            | -                         |  |
|                     | Hernösand ...               | 29.55                                     | 27    | NW     | 4                    | b        | 29.71                                     | + 33                                    | 17          | 16   | - 18                                    | Z      | 0                    | b        | *                 | 39          | ?             | -                         |  |
|                     | Stockholm ...               | 29.43                                     | 37    | NW     | 2                    | 0        | 29.81                                     | + 33                                    | 28          | 27   | - 13                                    | N      | 2                    | b        | *                 | 46          | ?             | 0.08                      |  |
|                     | Wisby ...                   | 29.39                                     | 40    | SSW    | 8                    | r        | 29.86                                     | + 31                                    | 37          | 35   | - 7                                     | NW     | 4                    | 0        | *                 | 46          | 36            | 0.20                      |  |
|                     | Bodö ...                    | 29.59                                     | 28    | N      | 2                    | b        | 29.61                                     | + 18                                    | 25          | 22   | - 6                                     | NW     | 2                    | b        | 1                 | 32          | 23            | -                         |  |
|                     | Christiansund               | 29.60                                     | 35    | SE     | 2                    | b        | 29.62                                     | + 12                                    | 36          | 34   | 0                                       | SE     | 2                    | 0        | 3                 | 37          | 34            | -                         |  |
|                     | Skudesnaes ...              | 29.62                                     | 42    | NW     | 2                    | c        | 29.71                                     | + 33                                    | 43          | 39   | + 2                                     | NSW    | 2                    | 0        | 4                 | 43          | 41            | 0.20                      |  |
|                     | Christiania Fjord<br>(Færd) | 29.64                                     | 39    | NW     | 3                    | b        | 29.74                                     | + 34                                    | 36          | 35   | - 6                                     | N      | 3                    | 0        | 3                 | 42          | 36            | 0.16                      |  |
|                     | Skagen (The Scaw)           | 29.73                                     | 40    | Z      | 0                    | 0        | 29.77                                     | + 43                                    | 45          | 40   | - 1                                     | NSW    | 1                    | b        | 1                 | 46          | 36            | 0.51                      |  |
|                     | Faßö ...                    | 29.85                                     | 44    | NW     | 6                    | c        | 29.90                                     | + 36                                    | 41          | 40   | - 7                                     | N      | 2                    | bc       | *                 | 48          | 37            | 0.04                      |  |
| BRITISH ISLANDS.    | Sumburgh Head               | 29.56                                     | 42    | NW     | 2                    | c        | 29.64                                     | + 26                                    | 38          | 37   | - 3                                     | NW     | 2                    | bc       | 3                 | 43          | 37            | 0.09                      |  |
|                     | Stornoway ...               | 29.73                                     | 37    | N      | 2                    | bc       | 29.61                                     | + 09                                    | 31          | 31   | - 9                                     | Z      | 0                    | b        | 2                 | 41          | 27            | 0.04                      |  |
|                     | Wick ...                    | 29.72                                     | 35    | NW     | 5                    | c        | 29.65                                     | + 17                                    | 29          | 28   | - 11                                    | N      | 2                    | c        | 2                 | 41          | 25            | 0.05                      |  |
|                     | Nairn ...                   | 29.65                                     | 39    | N      | 2                    | bc       | 29.64                                     | + 09                                    | 28          | 28   | - 12                                    | Z      | 0                    | b        | 0                 | 42          | 26            | 0.05                      |  |
|                     | Aberdeen ...                | 29.60                                     | 40    | NSW    | 3                    | b        | 29.68                                     | + 07                                    | 30          | 29   | - 9                                     | NW     | 1                    | om       | 3                 | 43          | 30            | -                         |  |
|                     | Leith ...                   | 29.86                                     | 42    | N      | 2                    | bc       | 29.61                                     | - 11                                    | 38          | 38   | - 5                                     | SSE    | 1                    | T        | *                 | 45          | 35            | -                         |  |
|                     | Shields ...                 | 29.91                                     | 44    | N      | 3                    | b        | 29.63                                     | - 12                                    | 41          | 40   | - 3                                     | SE     | 4                    | T        | 3                 | 48          | 38            | 0.01                      |  |
|                     | Spurn Head ...              | 29.98                                     | 43    | NSW    | 3                    | b        | 29.56                                     | - 32                                    | 44          | 44   | 0                                       | SSE    | 6                    | T        | 5                 | 47          | 41            | 0.07                      |  |
|                     | York ...                    | 30.02                                     | 45    | NSW    | 1                    | b        | 29.45                                     | - 44                                    | 44          | 43   | - 1                                     | E      | 3                    | T        | *                 | 49          | 38            | 0.19                      |  |
|                     | Loughborough                | 30.06                                     | 43    | SW     | 1                    | b        | 29.47                                     | - 52                                    | 46          | 46   | + 4                                     | SE     | 4                    | Tq       | *                 | 49          | 42            | 0.09                      |  |
| GERMANY & HOLLAND.  | Ardrossan ...               | 29.91                                     | 45    | SW     | 5                    | c        | 29.54                                     | - 26                                    | 39          | 39   | - 7                                     | NE     | 2                    | of       | 1                 | 47          | 38            | 0.14                      |  |
|                     | Malin Head ...              | 29.88                                     | 43    | NSW    | 4                    | bc       | 29.49                                     | - 28                                    | 44          | 43   | 0                                       | ENE    | 5                    | og       | 3                 | 46          | 38            | -                         |  |
|                     | Mullaghmore ...             | 29.93                                     | 43    | SW     | 4                    | bc       | 29.47                                     | - 41                                    | 43          | 42   | - 1                                     | NW     | 5                    | og       | 4                 | 47          | 41            | 0.01                      |  |
|                     | Belmullet ...               | 29.70                                     | 47    | N      | 4                    | b        | 29.55                                     | - 27                                    | 43          | 42   | - 4                                     | N      | 2                    | bc       | *                 | 47          | 40            | 0.20                      |  |
|                     | Donaghadee ...              | 29.98                                     | 40    | NSW    | 2                    | b        | 29.46                                     | - 41                                    | 41          | 40   | + 1                                     | E      | 8                    | T        | 6                 | 45          | 39            | 0.32                      |  |
|                     | Liverpool (Bidston)         | 30.05                                     | 44    | SSW    | 3                    | 0        | 29.35                                     | - 64                                    | 46          | 45   | 0                                       | ESE    | 5                    | T        | 3                 | 48          | 41            | 0.20                      |  |
|                     | Holyhead ...                | 30.06                                     | 46    | SW     | 4                    | cq       | 29.22                                     | - 76                                    | 46          | 45   | + 1                                     | SE     | 5                    | cq       | 5                 | 49          | 41            | 0.70                      |  |
|                     | Parsonstown ...             | 29.98                                     | 42    | Z      | 0                    | 0        | 29.30                                     | - 72                                    | 34          | 33   | - 8                                     | NW     | 1                    | T        | *                 | 48          | 33            | 0.54                      |  |
|                     | Valencia ...                | 29.97                                     | 47    | SE     | 3                    | og       | 29.56                                     | - 54                                    | 45          | 43   | - 2                                     | NW     | 5                    | Tq       | 5                 | 50          | 41            | 0.54                      |  |
|                     | Roche's Point...            | 30.04                                     | 50    | SW     | 3                    | c        | 29.26                                     | - 83                                    | 41          | 40   | - 3                                     | NW     | 9                    | c        | 6                 | 53          | 40            | 0.65                      |  |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.)    | 30.09                                     | 53    | SW     | 3                    | c        | 29.11                                     | - 100                                   | 50          | 49   | + 1                                     | SSW    | 8                    | og       | 8                 | 53          | 46            | 0.42                      |  |
|                     | Scilly ...                  | 30.09                                     | 50    | S      | 4                    | c        | 29.53                                     | - 060                                   | 50          | 48   | 0                                       | N      | 10                   | c        | 7                 | 53          | 47            | 0.30                      |  |
|                     | Prawle Point...             | 30.17                                     | 48    | NSW    | 2                    | b        | 29.53                                     | - 67                                    | 50          | 48   | + 5                                     | NSW    | 8                    | og       | 7                 | 52          | 45            | 0.16                      |  |
|                     | Jersey (St. Aubin's)        | 30.23                                     | 49    | NW     | 2                    | cqm      | 29.74                                     | - 50                                    | 48          | 46   | - 2                                     | NSW    | 5                    | Tm       | 4                 | 56          | 46            | 0.29                      |  |
|                     | Hurst Castle ...            | 30.20                                     | 49    | NSW    | 3                    | bc       | 29.60                                     | - 57                                    | 45          | 45   | - 1                                     | SSW    | 6                    | om       | 4                 | 53          | 43            | 0.29                      |  |
|                     | Dungeness ...               | 30.18                                     | 49    | NW     | 4                    | c        | 29.74                                     | - 33                                    | 51          | 50   | + 2                                     | SSW    | 6                    | 0        | 5                 | 53          | 46            | 0.01                      |  |
|                     | London ...                  | 30.17                                     | 46    | SW     | 2                    | c        | 29.62                                     | - 48                                    | 51          | 50   | + 7                                     | S      | 3                    | og       | *                 | 51          | 42            | 0.08                      |  |
|                     | Oxford ...                  | 30.14                                     | 45    | S      | 1                    | 0        | 29.57                                     | - 54                                    | 42          | 41   | - 1                                     | SSW    | 3                    | T        | *                 | 50          | 42            | 0.27                      |  |
|                     | Cambridge ...               | 30.11                                     | 48    | SW     | 2                    | 0        | 29.57                                     | - 49                                    | 49          | 48   | + 5                                     | SE     | 3                    | a        | *                 | 49          | 40            | 0.02                      |  |
|                     | Yarmouth ...                | 30.10                                     | 44    | N      | 3                    | b        | 29.68                                     | - 28                                    | 46          | 45   | + 2                                     | S      | 5                    | og       | 4                 | 47          | 41            | 0.03                      |  |
| GERMANY & HOLLAND.  | Cuxhaven ...                | 29.94                                     | 45    | N      | 6                    | c        | 30.03                                     | + 23                                    | 40          | 39   | - 12                                    | SSW    | 2                    | f        | *                 | 52          | 40            | 0.06                      |  |
|                     | Berlin ...                  | 30.07                                     | 45    | NW     | 4                    | b        | 30.12                                     | + 13                                    | 37          | 36   | - 16                                    | SW     | 2                    | f        | *                 | 55          | 36            | 0.12                      |  |
|                     | Wiesbaden ...               | *   | *     | *      | *                    | *        | 30.10                                     | - 09                                    | 45          | 43   | - 1                                     | Z      | 0                    | 0        | *                 | 50          | 41            | -                         |  |
|                     | Munich ...                  | 30.31                                     | 40    | SW     | 2                    | b        | 30.18                                     | - 12                                    | 34          | 34   | + 2                                     | SE     | 2                    | b        | *                 | 50          | 32            | -                         |  |
|                     | The Holder ...              | 30.12                                     | 46    | N      | 2                    | b        | 29.94                                     | + 03                                    | 39          | 38   | - 9                                     | S      | 1                    | f        | 1                 | 48          | 39            | -                         |  |
|                     | Brussels (a.m.)             | *   | *     | *      | *                    | *        | 29.92                                     | - 45                                    | 45          | 45   | - 3                                     | SSE    | 4                    | 0        | *                 | 52          | 36            | 0.04                      |  |
|                     | Cape Gris Nez               | 30.18                                     | 49    | N      | 4                    | b        | 29.80                                     | - 45                                    | 49          | 48   | - 3                                     | S      | 5                    | T        | 5                 | 52          | 41            | -                         |  |
|                     | Paris ...                   | 30.27                                     | 52    | SW     | 2                    | 0        | 29.99                                     | - 24                                    | 49          | 48   | - 1                                     | S      | 3                    | 0        | *                 | 57          | 48            | -                         |  |
|                     | Brest ...                   | ?   | 53    | S      | 1                    | m        | ?   | ?                                       | 52          | 49   | 0                                       | N      | 7                    | bc       | *                 | 55          | 52            | -                         |  |
|                     | Lorient ...                 | 30.21                                     | 52    | SSW    | 2                    | b        | 29.84                                     | - 40                                    | 54          | 51   | + 1                                     | SW     | 6                    | T        | 6                 | 55          | 50            | 0.08                      |  |
| FRANCE AND BELGIUM. | Roche fort ...              | 30.30                                     | 53    | N      | 3                    | 0        | 30.06                                     | - 26                                    | 53          | 52   | 0                                       | SSW    | 4                    | 0        | *                 | 55          | 50            | -                         |  |
|                     | Belfort ...                 | ?   | 36    | N      | 3                    | c        | ?   | ?                                       | 32          | 28   | - 10                                    | N      | 3                    | bc       | *                 | 49          | 30            | -                         |  |
|                     | Lyons ...                   | 30.36                                     | 46    | S      | 1                    | 0        | 30.15                                     | - 22                                    | 44          | 43   | + 3                                     | SSE    | 1                    | 0        | *                 | 46          | 41            | -                         |  |
|                     | Nice ...                    | *   | *     | *      | *                    | *        | *   | *                                       | *           | *    | *                                       | *      | *                    | *        | *                 | *           | *             | -                         |  |
|                     | Perpignan ...               | 30.25                                     | 50    | Z      | 0                    | b        | 30.20                                     | - 14                                    | 50          | 49   | + 6                                     | Z      | 0                    | 0        | *                 | 63          | 42            | -                         |  |
|                     | Biarritz ...                | 30.26                                     | 55    | E      | 2                    | 0        | 30.21                                     | - 14                                    | 52          | 46   | - 2                                     | NSW    | 5                    | c        | 3                 | 57          | 45            | -                         |  |
|                     | Cornwall ...                | *   | *     | *      | *                    | *        | *   | *                                       | *           | *    | *                                       | *      | *                    | *        | *                 | *           | *             | -                         |  |
|                     | Lisbon ...                  | 30.25                                     | 58    | N      | 2                    | b        | 30.31                                     | + 03                                    | 51          | 50   | - 2                                     | NE     | 3                    | bc       | 5                 | 61          | 52            | -                         |  |
|                     | Porto ...                   | *   | *     | *      | *                    | *        | *   | *                                       | *           | *    | *                                       | *      | *                    | *        | *                 | *           | *             | -                         |  |
|                     | Madrid ...                  | *   | *     | *      | *                    | *        | *   | *                                       | *           | *    | *                                       | *      | *                    | *        | *                 | *           | *             | -                         |  |



# WEATHER CHARTS

for 8 a.m. on Monday, 7<sup>th</sup> December, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;  
→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

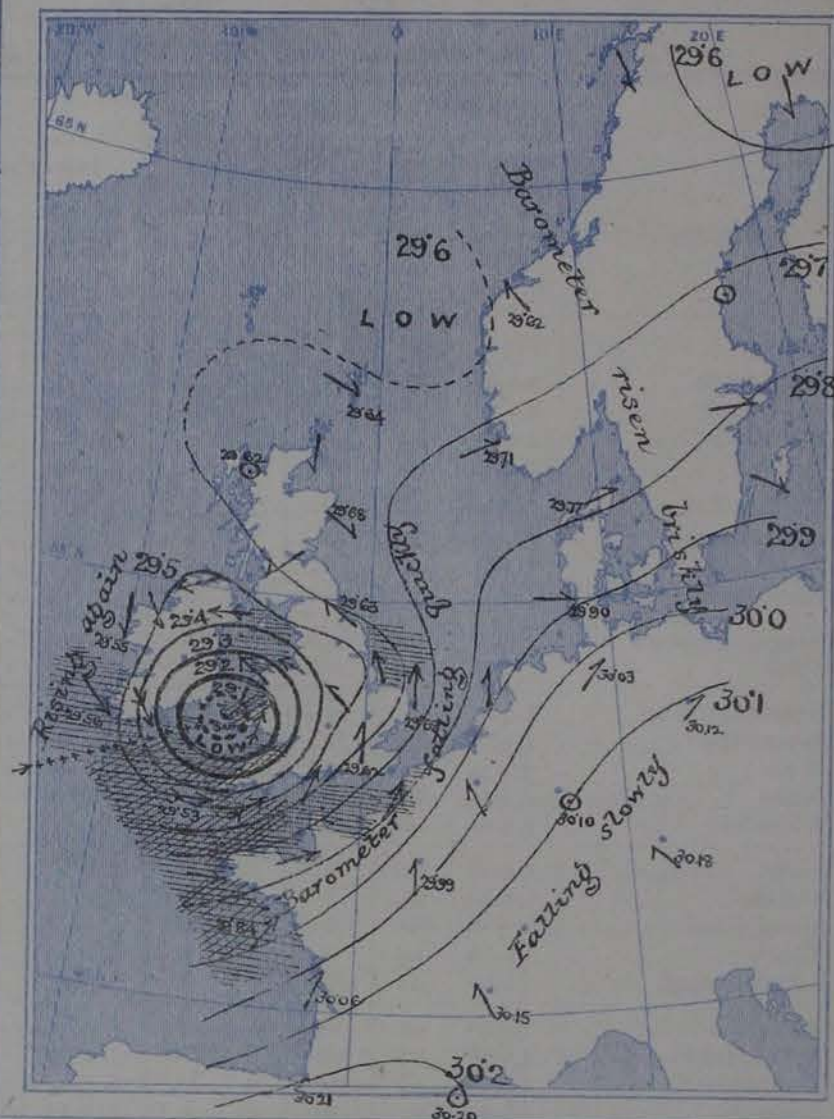
**SEA DISTURBANCE**—Where considerable, is shown thus:

▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.  
During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.896         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.818         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |                   |                   | RAINFALL<br>(Inches.) |
|---------------|---------------|---------------|-------------------|-------------------|-----------------------|
|               | Early<br>Max. | Early<br>Min. | at 8 a.m.<br>Dry. | at 8 a.m.<br>Wet. |                       |
| Sumburgh Head | 42.6          | 35.2          | 39.0              | 38.1              | 4.25                  |
| Stornoway     | 43.1          | 34.2          | 39.4              | 38.6              | 5.63                  |
| Wick          | 42.2          | 32.7          | 38.1              | 36.8              | 3.10                  |
| Nairn         | 41.0          | 32.8          | 37.1              | 36.6              | 1.95                  |
| Aberdeen      | 41.9          | 32.6          | 36.9              | 35.2              | 3.24                  |
| Leith         | 44.0          | 33.7          | 38.5              | 37.0              | 1.86                  |
| Shields       | 42.2          | 33.9          | 38.8              | 36.9              | 2.57                  |
| Spurn Head    | 42.4          | 35.3          | 38.8              | 37.7              | 2.14                  |
| York          | 42.3          | 32.3          | 36.4              | 35.4              | 2.28                  |
| Loughborough  | 42.7          | 32.2          | 36.3              | 35.4              | 2.24                  |
| Ardrossan     | 44.5          | 35.9          | 40.0              | 38.7              | 3.73                  |
| Mullaghmore   | 46.5          | 37.8          | 42.2              | 39.8              | 4.51                  |
| Donaghadee    | 45.8          | 36.2          | 40.2              | 39.3              | 2.84                  |
| Holyhead      | 40.4          | 39.1          | 42.8              | 41.1              | 0.82                  |
| Liverpool     | 45.5          | 35.6          | 38.8              | 37.1              | 2.59                  |
| Parsonstown   | 44.7          | 33.1          | 37.8              | 36.6              | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.5              | 42.3              | 5.99                  |
| Roche's Point | 47.9          | 38.9          | 42.9              | 41.5              | 4.95                  |
| Pembroke      | 43.8          | 40.3          | 43.6              | 42.2              | 3.99                  |
| Silly         | 49.5          | 43.1          | 47.0              | 45.1              | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5              | 41.1              | 3.76                  |
| Jersey        | 47.3          | 39.3          | 43.1              | 41.4              | 3.82                  |
| Hurst Castle  | 45.6          | 36.5          | 40.6              | 39.8              | 2.77                  |
| Dover         | 44.3          | 35.0          | 39.8              | 38.6              | 3.00                  |
| LONDON        | 44.6          | 33.9          | 37.8              | 36.7              | 2.10                  |
| Oxford        | 42.9          | 33.5          | 37.0              | 35.9              | 2.10                  |
| Cambridge     | 42.8          | 31.6          | 36.2              | 35.5              | 1.86                  |
| Yarmouth      | 41.9          | 33.7          | 37.9              | 37.0              | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.2 in. and more over Spain, 30.0 in. and more over Germany, and 29.6 in. and more over Scotland.  
 Lowest, about 29.1 in. in a depression between Pembroke and Wexford.  
 Gradients steep in the southwest and south, slight in the north.  
 Barometer falling quickly over Great Britain, but has begun to rise again very quickly in the west and south of Ireland.

## TEMPERATURE

Highest, 52° to 54° in the west and south of France, 51° in London and at Dungeness.  
 Lowest (1) 28° at Narvik, 29° at Wick, 30° at Aberdeen; (2) 17° at Kinnisand, 25° at Rzes and 28° at Stockholm.  
 It has fallen rapidly over Scotland during the night, risen quickly over England since an early hour this morning.

## WIND

Very light and variable in Scotland — strong S<sup>3</sup> to SE<sup>3</sup> in the east and north of England — E<sup>3</sup> over the Irish Sea, but blowing a strong gale from W. in Devon and Cornwall, from NW at Rockpoint, and a fresh gale from SSW at Pembroke.

## WEATHER

Clear and bright in Scotland, very unsettled and squally over England and Ireland, with rain in many places. Rainfall has been heavy at the western stations. Aurora was again seen at the northern stations last night.

## SEA

Very high in the southwest, rather rough in the south and east, smooth in the north.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A deep but not large depression has advanced rapidly to St. George's Channel from the southwestward, and appears to be still moving in a northeasterly direction at a great rate (apparently about 50 miles an hour). The wind has increased greatly over all the southern half of the Kingdom, and is blowing a strong gale from between SW and NW at the mouths of the English and St. George's Channels, over the eastern half of England there is a strong squally breeze from between S and E. The SW<sup>3</sup> to W<sup>3</sup> gale seems likely to spread all over England, with showers and falling temperature; E<sup>3</sup> gales or strong winds are likely to be felt in the north.

## FORECASTS

For the 24 hours ending at NOON on 8<sup>th</sup> Dec<sup>r</sup> 1891.

| DISTRICTS.         | FORECASTS.   | DISTRICTS.       | FORECASTS.  |
|--------------------|--|------------------|---|
| 0 SCOTLAND NORTH   | Wind becoming E <sup>3</sup> , force moderate; colder.                                     | 6 SCOTLAND WEST  | E <sup>3</sup> to N <sup>3</sup> gales and strong winds; sleet or snow squalls. |
| 1 SCOTLAND EAST    | E <sup>3</sup> winds, increasing in force, with snow.                                      | 7 ENGLAND N.W.   |   |
| 2 ENGLAND N.E.     | SE <sup>3</sup> to SW <sup>3</sup> winds and gales; much rain, very unsettled.             | 8 ENGLAND S.W.   | NW <sup>3</sup> gales, moderating; some cold showers.                           |
| 3 ENGLAND EAST     |  | 9 IRELAND NORTH  | N <sup>3</sup> winds, strong, a gale in places.                                 |
| 4 MIDLAND COUNTIES | SW <sup>3</sup> to W <sup>3</sup> gales, much rain, then NW <sup>3</sup> winds and colder. | 10 IRELAND SOUTH | cold showers.   |
| 5 ENGLAND SOUTH    |  |                  |   |

### WARNINGS

To our east and south coasts at 10 a.m. Hoist South Cone; to our northeast and northwest coasts Hoist North Cone.

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA. | SEA |               | BAR:  | THER: |    | WIND |    | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|---------------|-------|-------|----|------|----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |               |       | D.    | W. | D.   | F. |      |     |
| Skudesnaes ...    | 29.52 | 41    | 40 | mw   | 2  | 1    | 3   | Holyhead ...  | 30.06 | 48    | 45 | msw  | 1  | bc   | 4   |
| Sumburgh Head ... |       |       |    |      |    |      |     | Valencia ...  |       |       |    |      |    |      |     |
| Stornoway ...     | 29.68 | 41    | 41 | w    | 4  | 0    | 4   | Scilly ...    |       |       |    |      |    |      |     |
| Aberdeen ...      |       |       |    |      |    |      |     | Jersey ...    | 30.25 | 55    | 50 | mw   | 3  | bc   | 3   |
| Shields ...       |       |       |    |      |    |      |     | Dungeness ... | 30.17 | 52    | 49 | msw  | 3  | b    | 2   |
| Ardrossan ...     |       |       |    |      |    |      |     | London ...    |       |       |    |      |    |      | *   |
| Malin Head ...    | 29.85 | 45    | 43 | w    | 5  | c    | 3   | Yarmouth ...  |       |       |    |      |    |      |     |
| Mullaghmore ...   |       |       |    |      |    |      |     | Rochefort ... | 30.31 | 55    | 55 | se   | 3  | 0    | 1   |
| Belmullet ...     | 29.97 | 46    | 43 | msw  | 4  | cph  | *   |               |       |       |    |      |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

*Weather* fine and bright over the greater part of the United Kingdom but showery on our extreme north and northwest coasts. Fine also over southern Europe and Algeria but dull elsewhere with fog at some of the French and German stations and with rain in Denmark, the south of Scandinavia and many parts of Russia. Subsequently becoming dull and unsettled in the southwest of our Islands with heavy rain at night.

*Temperature* fallen considerably in our Islands but risen at most of the Continental stations - morning readings highest 61° at Malta, 59° at Brindisi and Algiers, 56° at La Calle; lower 50° over the central and southern parts of the Mediterranean generally, as well as on the French and Spanish coasts. Lowest (1) 18° at Archangel, 19° at Haparanda, and 31° at Bodo; (2) 31° at Hermanstadt, 32° at Munich, and 36° at Vienna, (3) 39° at Aberdeen. Subsequently rising above 50° in the southern parts of the United Kingdom and reaching 56° at Jersey, but remaining below 45° in the extreme north.

*Winds* moderate or fresh from the W<sup>nd</sup> over our Islands and from the SW<sup>nd</sup> over Denmark, Germany and the Baltic, but calm or light and variable in Scandinavia. Light from the NW<sup>nd</sup> in Italy and from the NE<sup>nd</sup> or E<sup>nd</sup> in Spain and the south of France. Variable over Austria and the south of Russia, SE<sup>nd</sup> or S<sup>nd</sup> in Algeria. Subsequently backing to the S<sup>nd</sup> on our western coasts and increasing to a gale at night from that quarter or from SE in the south of Ireland & the S<sup>nd</sup> of England.

*Barometer* highest 30.4 ins. and upwards over central Spain and also over Westphalia, 30.3 ins. and upwards in a large system covering the greater part of southern and eastern Europe. Lowest 29.2 ins. and upwards in a depression lying over Lapland; 29.4 ins. and less in two other systems lying respectively off the north of Scotland and over the extreme south of Norway. Two last mentioned disturbances subsequently passing away to the eastwards but new depression approaching the southwest of our Islands in evening.

### SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 29<sup>TH</sup> NOV. TO 5<sup>TH</sup> DEC. 1891.

During this week pressure has been highest over northern, central and southern Europe and lowest off the northwest of the British Islands; depressions have continued to pass from southwest to northeast outside our western and northwestern coasts. Some of these have been deep and large and have caused S<sup>W</sup> to S<sup>W</sup> gales and rains, at all the western and northern stations, while their secondaries, which have passed more directly over the Kingdom have caused the rainy weather and at times strong winds to spread to all parts of our area. Temperature has been very high for the time of year, the daily maxima in almost all districts having been considerably above 50° on most days, while on several occasions they have ranged from 55° to 59° and once (at York and Liverpool on the 3<sup>rd</sup>) were as high as 59°. The air has been very soft and humid, the rainfall frequent but not unusually heavy.

At the close of the week the barometer was rising generally, and the high-pressure area in the south seemed to be spreading gradually to the northwards. The wind was veering, the air drying and temperature was inclined to fall. The distribution of pressure, however, was of a very unstable type and halos were reported in some localities while cirrus clouds were travelling rapidly from westward.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Tuesday 8<sup>th</sup> December.* 1891.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           |                               | YESTERDAY EVENING.                             |                   |       |                      |          | 8 A.M. TO DAY.                   |                                   |             |      |                                   |       |                      |          |                   |             | PAST 24 HOURS. |                     |  |
|---------------------|-------------------------------|--|-------------------|-------|----------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|----------------------|----------|-------------------|-------------|----------------|---------------------|--|
|                     |                               | BAROM.<br><br>Reading at 32° F. and Sea Level. | TEMP.<br><br>Dry. | WIND. |                      | Weather. | BAROMETER.                       |                                   | SHADE TEMP. |      |                                   | WIND. |                      | Weather. | Sea.<br>(0 to 5.) | SHADE TEMP. |                | Amount of Rainfall. |  |
|                     |                               |  |                   | Dir.  | Force.<br>(0 to 12.) |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dir.  | Force.<br>(0 to 12.) |          |                   | Max.        | Min.           |                     |  |
| SCANDINAVIA.        | Haparanda ...                 | 29.72  | -4                | 2     | 0                    | 6        | 29.74                            | +19                               | -2          | -3   | ?                                 | 2     | 0                    | f        | *                 | 25          | 74             | —                   |  |
|                     | Hernösand ...                 | 29.79  | 11                | 2     | 0                    | 6c       | 29.69                            | -102                              | 24          | 24   | 7                                 | 2     | 0                    | f        | *                 | 25          | 77             | —                   |  |
|                     | Stockholm ...                 | 29.78  | 33                | SE    | 2                    | 0        | 29.58                            | -20                               | 35          | 34   | 7                                 | SE    | 2                    | c        | *                 | 30          | 37             | —                   |  |
|                     | Wisby ...                     | 29.78  | 36                | S     | 4                    | 6        | 29.49                            | -29                               | 38          | 37   | +1                                | E     | 4                    | c        | *                 | 35          | 34             | 0.04                |  |
|                     | Bodö ...                      | 29.58  | 30                | ESE   | 2                    | 5        | 29.45                            | -13                               | 28          | 26   | +3                                | E     | 4                    | c        | 2                 | 30          | 21             | —                   |  |
|                     | Christiansund                 | 29.56  | 37                | SE    | 3                    | 6c       | 29.35                            | -21                               | 36          | 33   | 0                                 | SE    | 3                    | b        | 3                 | 37          | 36             | —                   |  |
|                     | Skudesnaes ...                | 29.57  | 41                | SE    | 1                    | c        | 29.56                            | -15                               | 41          | 35   | -2                                | SE    | 1                    | o        | 3                 | 43          | 36             | —                   |  |
|                     | Christiania Fjord<br>(Færder) | 29.65  | 33                | N     | 3                    | 0        | 29.56                            | -9                                | 30          | 30   | -6                                | NNW   | 4                    | o        | 1                 | 36          | 30             | —                   |  |
|                     | Skagen (The Scaw)             | 29.35  | 42                | SE    | 4                    | 7        | 29.52                            | -17                               | 41          | 38   | -4                                | NE    | 2                    | o        | 1                 | 45          | 35             | 0.04                |  |
|                     | Fanö ...                      | 29.37  | 38                | SE    | 6                    | 7        | 29.49                            | -14                               | 37          | 38   | -2                                | NW    | 4                    | o        | *                 | 43          | 37             | 0.16                |  |
| BRITISH ISLANDS.    | Sumburgh Head                 | 29.56  | 35                | NNW   | 1                    | c        | 29.33                            | -23                               | 38          | 38   | 0                                 | W     | 2                    | 7        | 3                 | 41          | 36             | 0.09                |  |
|                     | Stornoway ...                 | 29.63  | 35                | 2     | 0                    | c        | 29.63                            | +01                               | 37          | 36   | +6                                | NW    | 4                    | o        | 4                 | 38          | 29             | —                   |  |
|                     | Wick ...                      | 29.61  | 31                | NW    | 1                    | 6c       | 29.51                            | -10                               | 37          | 36   | +8                                | NW    | 3                    | o        | 2                 | 38          | 29             | 0.05                |  |
|                     | Nairn ...                     | 29.62  | 34                | SW    | 1                    | 6        | 29.56                            | -6                                | 40          | 40   | +12                               | SW    | 2                    | o        | 1                 | 40          | 26             | —                   |  |
|                     | Aberdeen ...                  | 29.59  | 37                | NW    | 3                    | c        | 29.61                            | -2                                | 38          | 32   | +8                                | WSW   | 3                    | 6c       | 3                 | 38          | 28             | —                   |  |
|                     | Leith ...                     | 29.56  | 42                | E     | 2                    | 0        | 29.68                            | +12                               | 45          | 44   | +7                                | WSW   | 3                    | 7        | *                 | 45          | 39             | 0.19                |  |
|                     | Shields ...                   | 29.34  | 41                | NE    | 7                    | 7        | 29.72                            | +38                               | 43          | 41   | +2                                | WSW   | 4                    | c        | 4                 | 45          | 33             | 1.32                |  |
|                     | Spurn Head ...                | 29.17  | 44                | W     | 2                    | 7        | 29.87                            | +70                               | 37          | 38   | -5                                | WSW   | 4                    | c        | 4                 | 46          | 37             | 0.16                |  |
|                     | York ...                      | 29.16  | 45                | E     | 2                    | 7        | 29.88                            | +72                               | 44          | 42   | 0                                 | WSW   | 2                    | 6c       | *                 | 47          | 34             | 0.25                |  |
|                     | Loughborough                  | 29.25  | 46                | W     | 6                    | 0        | 29.53                            | +28                               | 39          | 38   | -7                                | W     | 4                    | 6m       | *                 | 47          | 38             | 0.26                |  |
| GERMANY & HOLLAND.  | Ardrossan ...                 | 29.64  | 40                | 2     | 0                    | 6        | 29.78                            | +14                               | 48          | 46   | +8                                | W     | 4                    | c        | 3                 | 48          | 36             | 0.04                |  |
|                     | Malin Head ...                | 29.70  | 44                | NW    | 3                    | 6        | 29.75                            | +5                                | 47          | 45   | +3                                | W     | 5                    | c        | 3                 | 47          | 41             | 0.03                |  |
|                     | Mullaghmore ...               | 29.76  | 45                | NW    | 4                    | c        | 29.85                            | +9                                | 45          | 44   | +2                                | WSW   | 4                    | c        | 2                 | 46          | 42             | 0.05                |  |
|                     | Belmullet ...                 | 29.80  | 45                | NNW   | 5                    | 6c       | 29.81                            | +1                                | 48          | 47   | +5                                | WSW   | 4                    | o        | *                 | 48          | 42             | 0.18                |  |
|                     | Donaghadee ...                | 29.68  | 42                | NNE   | 7                    | 6        | 29.85                            | +17                               | 42          | 40   | +1                                | NNW   | 5                    | 6        | 4                 | 44          | 38             | 0.42                |  |
|                     | Liverpool (Bidston)           | 29.50  | 42                | NW    | 7                    | 7        | 29.54                            | +4                                | 43          | 41   | -3                                | WSW   | 5                    | 6c       | 4                 | 46          | 41             | 0.12                |  |
|                     | Holyhead ...                  | 29.62  | 46                | NNW   | 9                    | 6c       | 29.55                            | -7                                | 45          | 43   | -1                                | WSW   | 4                    | 6c       | 4                 | 47          | 42             | 0.28                |  |
|                     | Parsonstown ...               | 29.83  | 42                | NW    | 9                    | c        | 29.55                            | -28                               | 41          | 41   | +7                                | SW    | 1                    | 6c       | *                 | 45          | 38             | 0.17                |  |
|                     | Valencia ...                  | 29.53  | 47                | WSW   | 5                    | 6c       | 29.57                            | +4                                | 50          | 48   | +5                                | SW    | 4                    | o        | 4                 | 50          | 43             | 0.06                |  |
|                     | Roche's Point...              | 29.88  | 44                | NW    | 5                    | 6        | 30.03                            | +15                               | 47          | 46   | +6                                | WSW   | 2                    | c        | 4                 | 48          | 41             | —                   |  |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.)      | 29.73  | 45                | NW    | 7                    | 6c       | 30.06                            | +33                               | 45          | 47   | -1                                | W     | 5                    | 6c       | 5                 | 50          | 37             | 0.07                |  |
|                     | Scilly ...                    | 29.88  | 50                | NW    | 7                    | c        | 30.15                            | +27                               | 50          | 49   | 0                                 | WSW   | 5                    | c        | 5                 | 53          | 49             | 0.02                |  |
|                     | Prawle Point ...              | 29.76  | 46                | NNW   | 7                    | 6        | 30.16                            | +40                               | 49          | 45   | -3                                | W     | 3                    | 6        | 2                 | 50          | 38             | 0.05                |  |
|                     | Jersey (St. Aubin's)          | 29.81  | 50                | W     | 6                    | c        | 30.22                            | +41                               | 48          | 48   | 0                                 | W     | 4                    | 6c       | 4                 | 53          | 46             | 0.28                |  |
|                     | Hurst Castle ...              | 29.45  | 48                | W     | 10                   | c        | 30.12                            | +67                               | 45          | 43   | 0                                 | W     | 4                    | 6c       | 4                 | 51          | 43             | 0.11                |  |
|                     | Dungeness ...                 | 29.32  | 48                | W     | 10                   | c        | 30.07                            | +75                               | 41          | 40   | -10                               | NNW   | 4                    | 6        | 3                 | 53          | 35             | 0.25                |  |
|                     | London ...                    | 29.34  | 47                | WSW   | 5                    | 0        | 30.06                            | +72                               | 38          | 37   | -13                               | SW    | 2                    | 6        | *                 | 51          | 37             | 0.30                |  |
|                     | Oxford ...                    | 29.57  | 44                | NNW   | 7                    | 7        | 30.05                            | +48                               | 39          | 38   | -3                                | W     | 3                    | 6        | *                 | 45          | 38             | 0.10                |  |
|                     | Cambridge ...                 | 29.25  | 47                | S     | 5                    | 7        | 30.02                            | +45                               | 40          | 38   | -9                                | SW    | 1                    | 6        | *                 | 50          | 35             | 0.30                |  |
|                     | Yarmouth ...                  | 29.19  | 45                | WSW   | 5                    | 7c       | 29.51                            | +32                               | 38          | 37   | -8                                | W     | 3                    | 6m       | 2                 | 48          | 36             | 0.28                |  |
| PENINSULA.          | Cuxhaven ...                  | 29.62  | 42                | SW    | 4                    | 7        | 29.47                            | -15                               | 42          | 41   | +2                                | NNW   | 7                    | 6c       | *                 | 52          | 40             | 0.28                |  |
|                     | Berlin ...                    | 29.65  | 42                | SE    | 3                    | c        | 29.88                            | +23                               | 44          | 42   | +7                                | W     | 4                    | 7        | *                 | 45          | ?              | 0.20                |  |
|                     | Wiesbaden ...                 | 29.82  | 39                | S     | 4                    | c        | 29.82                            | 0                                 | 46          | 43   | +1                                | W     | 5                    | o        | *                 | ?           | ?              | 0.16                |  |
|                     | Munich ...                    | 29.85  | 39                | SW    | 4                    | c        | 29.82                            | -3                                | 42          | 37   | +8                                | W     | 8                    | c        | *                 | 43          | 34             | —                   |  |
|                     | The Helder ...                | 29.26  | 45                | S     | 4                    | 7        | 29.82                            | +56                               | 46          | 43   | +7                                | NW    | 5                    | c        | 4                 | 48          | 37             | 0.48                |  |
|                     | Brussels (9 a.m.)             | 29.35  | 45                | W     | 8                    | 7        | 30.00                            | +65                               | 43          | 41   | -2                                | NNW   | 5                    | o        | *                 | 45          | 41             | 0.20                |  |
|                     | Cape Gris Nez                 | 29.35  | 45                | W     | 8                    | 7        | 30.01                            | +66                               | 45          | 42   | -4                                | NNW   | 6                    | 6c       | 6                 | 52          | 41             | 0.20                |  |
|                     | Paris ...                     | 29.80  | 45                | SW    | 5                    | 6        | 30.20                            | +40                               | 41          | 39   | -8                                | SW    | 3                    | 6        | *                 | 53          | 41             | —                   |  |
|                     | Brest ...                     | 30.00  | 45                | NNW   | 6                    | c        | 30.25                            | +25                               | 50          | 49   | -2                                | NNW   | 3                    | c        | 4                 | 50          | 48             | 0.04                |  |
|                     | Lorient ...                   | 30.01  | 51                | NNW   | 7                    | 6        | 30.25                            | +24                               | 50          | 45   | -4                                | NNW   | 2                    | o        | 5                 | 52          | 48             | —                   |  |
| FRANCE AND BELGIUM. | Rochefort ...                 | 30.12  | 51                | WSW   | 5                    | 0        | 30.34                            | +22                               | 48          | 46   | -5                                | NNW   | 3                    | c        | *                 | 57          | 46             | 0.08                |  |
|                     | Belfort ...                   | 30.13  | 49                | S     | 1                    | 6        | 30.33                            | +20                               | 42          | 39   | -2                                | NNE   | 1                    | 6c       | *                 | 57          | 41             | 0.04                |  |
|                     | Lyons ...                     | 30.24  | 51                | 2     | 0                    | 6        | 30.32                            | +12                               | 52          | 46   | +2                                | NW    | 3                    | 6        | *                 | 59          | 44             | —                   |  |
|                     | Perpignan ...                 | 30.26  | 53                | W     | 5                    | 0        | 30.38                            | +12                               | 53          | 50   | +1                                | 2     | o                    | 7        | 5                 | 61          | 50             | —                   |  |
|                     | Biarritz ...                  | 30.26  | 53                | W     | 5                    | 0        | 30.38                            | +12                               | 53          | 50   | +1                                | 2     | o                    | 7        | 5                 | 61          | 50             | —                   |  |
|                     | Corunna ...                   | 30.36  | 57                | N     | 2                    | 6        | 30.40                            | +4                                | 51          | 48   | 0                                 | N     | 2                    | 6        | *                 | 59          | 50             | 0.32                |  |
| PENINSULA.          | Lisbon ...                    | 30.36  | 57                | N     | 2                    | 6        | 30.40                            | +4                                | 51          | 48   | 0                                 | N     | 2                    | 6        | *                 | 59          | 50             | 0.32                |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Tuesday, 8<sup>th</sup> December, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

— forces above 10; — forces 8 to 10;  
— forces 5 to 7; — forces 1 to 4.  
— = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

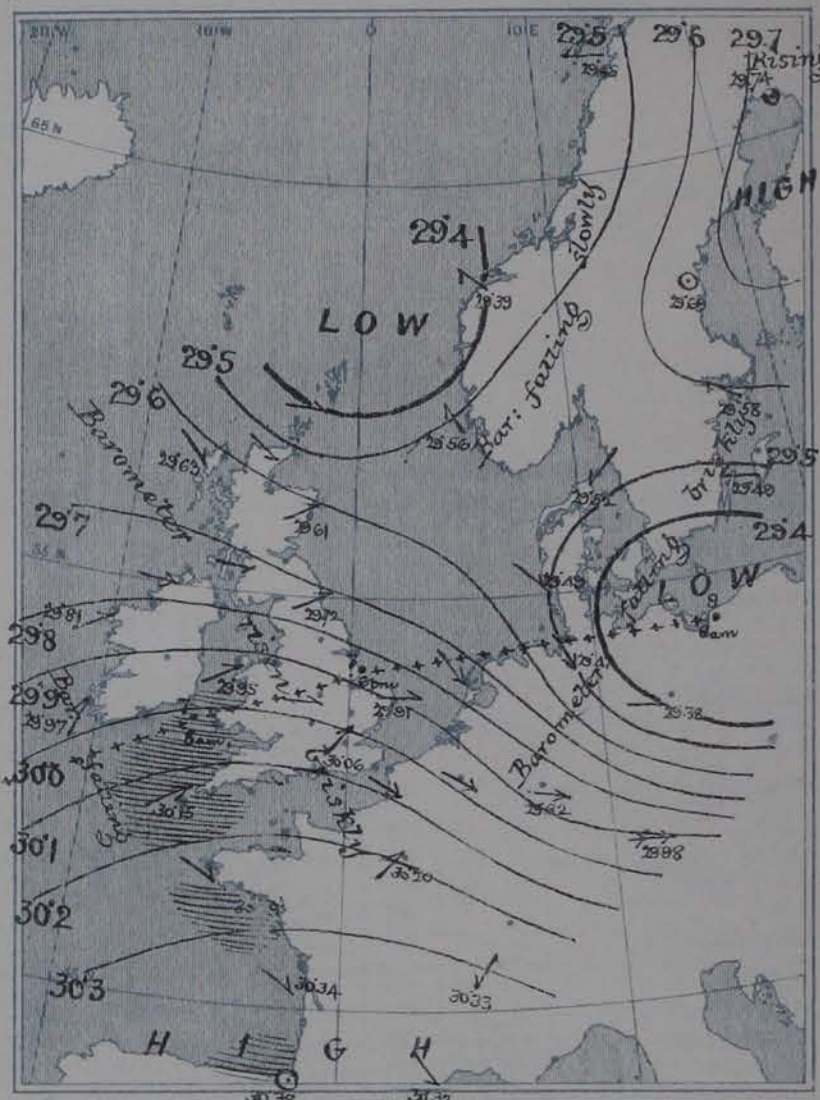
— = Rough. — = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Androssan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

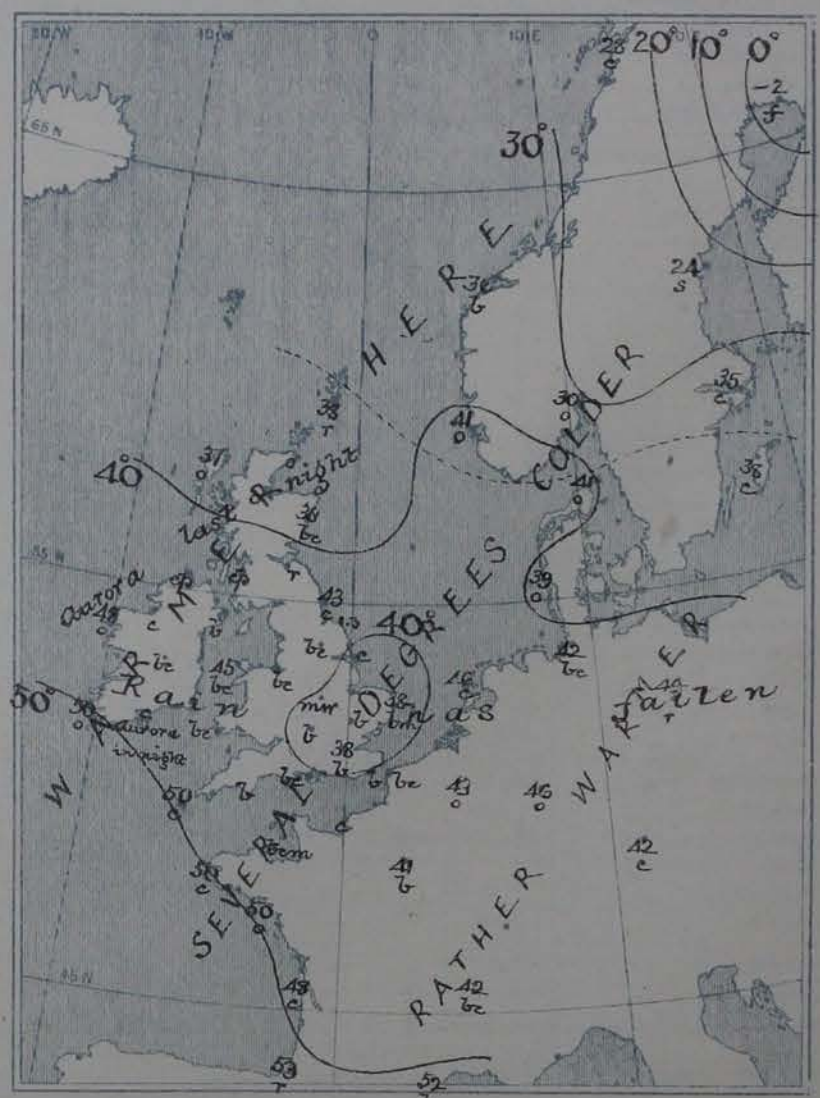
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE. |        |           |      | RAINFALL<br>(Inches.) |
|---------------|--------------|--------|-----------|------|-----------------------|
|               | Day.         | Night. | RE 8 a.m. | Wat. |                       |
| Sumburgh Head | 42.6         | 35.2   | 39.6      | 38.1 | 4.25                  |
| Stornoway     | 43.1         | 39.2   | 39.4      | 38.5 | 5.63                  |
| Wick          | 42.2         | 32.7   | 38.1      | 36.8 | 3.10                  |
| Nairn         | 41.9         | 32.8   | 37.1      | 35.6 | 1.95                  |
| Aberdeen      | 41.9         | 32.6   | 36.9      | 35.2 | 3.24                  |
| Leith         | 44.0         | 33.7   | 38.5      | 37.0 | 1.86                  |
| Shields       | 42.9         | 33.9   | 38.3      | 36.9 | 2.57                  |
| Spurn Head    | 42.4         | 35.3   | 38.8      | 37.7 | 2.14                  |
| York          | 42.8         | 32.3   | 36.4      | 35.4 | 2.28                  |
| Loughborough  | 42.7         | 32.2   | 36.3      | 35.4 | 2.24                  |
| Androssan     | 41.5         | 35.9   | 40.0      | 38.7 | 3.70                  |
| Mullaghmore   | 46.6         | 37.8   | 42.2      | 39.8 | 4.51                  |
| Donaghadee    | 45.6         | 39.2   | 40.2      | 39.3 | 2.84                  |
| Holyhead      | 46.4         | 39.1   | 42.8      | 41.1 | 3.82                  |
| Liverpool     | 43.5         | 35.6   | 38.8      | 37.1 | 2.59                  |
| Parsonstown   | 41.7         | 33.1   | 37.8      | 36.6 | 3.04                  |
| Valencia      | 49.7         | 40.0   | 44.6      | 42.4 | 5.99                  |
| Roche's Point | 47.9         | 38.9   | 42.9      | 41.5 | 4.95                  |
| Pembroke      | 47.8         | 40.3   | 43.6      | 42.2 | 3.99                  |
| Silly         | 49.5         | 43.1   | 47.0      | 45.1 | 4.02                  |
| Prawle Point  | 47.0         | 38.2   | 42.5      | 41.1 | 3.79                  |
| Jersey        | 47.3         | 39.3   | 43.1      | 41.4 | 3.82                  |
| Hurst Castle  | 45.6         | 36.3   | 40.6      | 39.8 | 2.77                  |
| Dover         | 41.3         | 37.9   | 39.8      | 38.6 | 3.60                  |
| LONDON        | 44.0         | 33.6   | 37.8      | 36.7 | 2.10                  |
| Oxford        | 42.9         | 33.5   | 37.0      | 35.9 | 2.10                  |
| Cambridge     | 42.8         | 31.6   | 36.2      | 35.5 | 1.88                  |
| Yarmouth      | 41.9         | 33.7   | 37.9      | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 in. to 30.4 in. in a large anticyclone lying over the Spanish Peninsula and the southern parts of France.  
 Lowest, 29.4 in. and less, in a depression lying over North Germany and the southern parts of the Baltic, and also in a shallow system lying over the west of Norway.  
 Gradients rather steep over Germany and the Netherlands, and moderate over Ireland and England, but slight elsewhere.  
 Barometers falling in Scandinavia, Denmark and Germany and also in the west of Ireland, but rising elsewhere.

## TEMPERATURE

Highest, 53° at Biarritz, 52° at Rapaun, 51° at Lisbon, and 50° at Valencia Island, Scilly, Mauritius, and Pondicherry.  
 Lowest, -2° at Haparanda, +24° at Helsingfors, 28° at Oslo, 30° at Vaerø, 34° at Vind, and 35° at Stockholm.  
 Ground frost occurred last night over the inland parts of Great Britain; in London the thermometer on the grass fell to 28°.

## WIND

Moderate from the W. over Great Britain and France, but SW. in Ireland.  
 Moderate from the E. in the south of Sweden and from the SE. in the west of Norway.  
 Strong from the NW. or W. over Germany and the Netherlands, with a gale at Munich.

## WEATHER

Fine and bright over England and the central and southern parts of France.  
 Cloudy or overcast elsewhere, with rain at Berlin and Biarritz, and snow at Helsingfors.  
 Rain fell yesterday in nearly all parts of Western Europe, the largest amounts being 1.3 in. at Shields, and 0.4 in. at Daghadee.  
 Bright aurora was seen last night at several of the Irish and Scotch stations.

## SEA

Rather rough off the southwest of England and the west and north of France, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Another depression is approaching Ireland, and although its depth is at present uncertain there is every indication of a renewal of rainy unsettled weather over our Islands, with increasing southerly winds over Ireland and England.

# FORECASTS

For the 24 hours ending at NOON on 9<sup>th</sup> DECEMBER 1891.

| DISTRICTS. |                  | FORECASTS.   | DISTRICTS.  |               | FORECASTS.        |
|------------|------------------|--|---|---------------|-------------------|
| 0          | SCOTLAND NORTH   | Wind backing to the SE <sup>w</sup> ; fair at first; unsettled later, with some rain or sleet. | 6   | SCOTLAND WEST | Same as N°0 and 1 |
| 1          | SCOTLAND EAST    |  | 7   | ENGLAND N.W.  |                   |
| 2          | ENGLAND N.E.     | Same as N°5.   | 8   | ENGLAND S.W.  | Same as N°5.      |
| 3          | ENGLAND EAST     |  | 9   | IRELAND NORTH |                   |
| 4          | MIDLAND COUNTIES |  | 10  | IRELAND SOUTH |                   |
| 5          | ENGLAND SOUTH    | Wind backing to the S <sup>nd</sup> and increasing in force; fine to unsettled and some rain.  | WARNINGS  |               |                   |
|            |                  |  | Orders were issued at 10 am to hoist the SOUTH CONE in district 10, but to lower the NORTH CONE in districts 1 and 6. The signals are still flying in districts 2, 3, 5, 7 and 9. |               |                   |

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.

Orders were issued at 10 am to hoist the South Cone in district 10, but to lower the North Cone in districts 1 and 6. The signals are still flying in districts 2, 3, 5, 7 and 9.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | THER: WIND |    |    |     |    |      |     |               | THER: WIND |    |    |     |    |       |     |
|-------------------|------------|----|----|-----|----|------|-----|---------------|------------|----|----|-----|----|-------|-----|
|                   | BAR:       | D. | W. | D.  | F. | WEA. | SEA |               | BAR:       | D. | W. | D.  | F. | WEA.  | SEA |
| Skudesnaes ...    | 29.65      | 43 | 41 | SE  | 4  | 0    | 4   | Holyhead ...  | 30.24      | 43 | 43 | WNW | 8  | 7mg   | 6   |
| Sumburgh Head ... | 29.55      | 38 | 36 | WNW | 1  | 6c   | 3   | Valencia ...  | 29.83      | 48 | 45 | WNW | 5  | CGP   | 5   |
| Stornoway ...     | 29.60      | 37 | 36 | WNW | 3  | 6    | 3   | Sailly ...    | 29.70      | 50 | 48 | WNW | 10 | 0/17g | 7   |
| Aberdeen ...      | 29.52      | 36 | 34 | WNW | 2  | 0g   | 3   | Jersey ...    | 29.69      | 52 | 47 | SW  | 6  | 6c    | 6   |
| Shields ...       | 29.19      | 45 | 45 | E   | 3  | 70   | 4   | Dangerous ... | 29.42      | 51 | 49 | SW  | 9  | 0p    | 6   |
| Ardrossan ...     | 29.56      | 43 | 41 | NE  | 3  | 0    | 1   | London ...    | 29.31      | 51 | 49 | SEW | 9  | CGP   | 8   |
| Malin Head ...    | 29.53      | 44 | 42 | WNW | 4  | C    | 3   | Yarmouth ...  | 29.34      | 47 | 46 | SEW | 6  | CGP   | 5   |
| Mullaghmore ...   | 29.64      | 46 | 44 | WNW | 5  | C    | 3   | Rochefort ... | 30.04      | 56 | 54 | WNW | 6  | 7     | ?   |
| Belmullet ...     | 29.71      | 47 | 44 | WNW | 4  | 0    | *   |               |            |    |    |     |    |       |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning fine and bright at most of the Mediterranean stations, as well as over the south-east of France, south Germany and Scotland, dull and unsettled elsewhere, with rain in many places, but especially unsettled over Ireland and England. Rain falls nearly all over the British Isles, France, and Germany, and very heavy (1.3 ins: at Shields), hail at Oxford.

Temperature changing very frequently and considerably — fallen rapidly in Scotland, and over Ireland and the Gulf of Bothnia. Morning readings below 60° at all stations, and below 50° over nearly the whole of the United Kingdom. Lowest (1) 17° at Hummels, 19° at Wiesbaden, 21° at Archangel, 25° at Kuopio, 30° at Hangö; (2) 28° to 30° over the northeastern parts of Scotland, 34° at Harbin. Falling over Scandinavia later, and sharp frost occurring at many places in the night.

Wind in morning very light and variable over southwestern, southern, central, and southeastern Europe, and also on the eastern shores of the North Sea, moderate to fresh from NW. over Ireland and the Baltic Provinces, W to S over Central Russia. Well marked cyclone over the British Islands — the wind blowing a very strong gale from between NW. and SW. on our southwestern coasts, and a strong breeze from S. and SE. over England, and from E. in the north of Ireland. Severe W<sup>1</sup> gales spreading eastwards over the Channel and southern half of England later.

Barometer highest 30.3 ins: to 30.1 ins: over the whole of southwestern, southern, southeastern and Central Europe. Lowest, 29.3 ins: and less, in a large depression over northern Russia, and 29.1 ins: in a deep but not large system over Ireland and England. Latter disturbance travelling eastwards rapidly and reaching North Sea by evening. Barometer rising very quickly in its rear.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Wednesday, 9<sup>th</sup> December, 1891.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

| STATIONS.                     | YESTERDAY EVENING.               |       |       |                      |          | 8 A.M. TO DAY.                   |                                   |             |      |                                   |       |                      |          |                   |             | PAST 24 HOURS. |                     |   |
|-------------------------------|----------------------------------|-------|-------|----------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|----------------------|----------|-------------------|-------------|----------------|---------------------|---|
|                               | BAROM.                           | TEMP. | WIND. |                      | Weather. | BAROMETER.                       |                                   | SHADE TEMP. |      |                                   | WIND. |                      | Weather. | Sea.<br>(0 to 3.) | SHADE TEMP. |                | Amount of Rainfall. |   |
|                               | Reading at 32° F. and Sea Level. | Dry.  | Dir.  | Force.<br>(0 to 12.) |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dir.  | Force.<br>(0 to 12.) |          |                   | Max.        | Min.           |                     |   |
| SCANDINAVIA.                  |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Haparanda ...                 | 29.74                            | -3    | Z     | 0                    | 0        | 29.67                            | -0.07                             | 6           | ?    | +8                                | Z     | 0                    | 0        | *                 | ?           | -9             | -                   |   |
| Hernösand ...                 | 29.52                            | 34    | S     | 8                    | +        | 29.44                            | -0.25                             | 32          | 31   | +8                                | Z     | 0                    | 5        | *                 | 36          | 7              | 0.51                |   |
| Stockholm ...                 | 29.61                            | 33    | E     | 2                    | +        | 29.53                            | -0.05                             | 33          | 33   | -2                                | S     | 2                    | 5        | *                 | 37          | 32             | 0.24                |   |
| Wisby ...                     | 29.56                            | 38    | N     | 4                    | C        | 29.60                            | +0.11                             | 38          | 37   | 0                                 | SSW   | 4                    | 5        | *                 | 39          | 34             | 0.12                |   |
| Bodö ...                      | 29.28                            | 34    | E     | 6                    | C        | 29.28                            | -0.17                             | 35          | 27   | +7                                | E     | 4                    | C        | 2                 | 30          | 25             | -                   |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Christiansund ...             | 29.30                            | 33    | SW    | 9                    | S        | 29.39                            | -0.00                             | 30          | 28   | -6                                | SW    | 5                    | S        | 5                 | 39          | 28             | 0.28                |   |
| Skudenes ...                  | 29.62                            | 37    | WNW   | 3                    | 0        | 29.26                            | -0.30                             | 35          | 34   | -6                                | ESE   | 6                    | 0 to 5   | 4                 | 43          | 34             | 0.20                |   |
| Christiania Fjord<br>(Færder) | 29.50                            | ?     | SSW   | 5                    | C        | 29.54                            | -0.02                             | 35          | 34   | +5                                | Z     | 0                    | 0        | 2                 | 39          | 30             | -                   |   |
| Skagen (The Seaw)             | 29.53                            | 41    | WSW   | 4                    | +        | 29.55                            | +0.03                             | 39          | 37   | -2                                | SSW   | 1                    | +        | 1                 | 41          | 37             | 0.08                |   |
| Fanö ...                      | 29.71                            | 43    | N     | 2                    | C        | 29.59                            | +0.10                             | 44          | 43   | +5                                | SSW   | 2                    | 0        | *                 | 45          | 39             | 0.04                |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Sumburgh Head ...             | 29.60                            | 35    | WNW   | 3                    | C        | 29.17                            | -0.20                             | 32          | 32   | -6                                | NE    | 4                    | S        | 5                 | 41          | 30             | 0.02                |   |
| Stornoway ...                 | 29.58                            | 33    | E     | 4                    | S        | 29.00                            | -0.63                             | 40          | 40   | +3                                | NW    | 4                    | +        | 4                 | 44          | 33             | 0.45                |   |
| Wick ...                      | 29.64                            | 34    | Z     | 0                    | 0        | 29.03                            | -0.48                             | 41          | 40   | +4                                | N     | 1                    | C        | 3                 | 42          | 32             | 0.40                |   |
| Nairn ...                     | 29.60                            | 33    | SE    | 1                    | S        | 29.05                            | -0.51                             | 34          | 34   | -6                                | Z     | 0                    | m        | 1                 | 40          | 31             | 0.19                |   |
| Aberdeen ...                  | 29.67                            | 36    | N     | 1                    | 0        | 29.10                            | -0.51                             | 41          | 40   | +3                                | SW    | 3                    | bcm      | 2                 | 45          | 35             | 0.16                |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Leith ...                     | 29.61                            | 43    | SW    | 1                    | 0        | 29.17                            | -0.51                             | 45          | 44   | 0                                 | WSW   | 3                    | bc       | *                 | 49          | 43             | 0.16                |   |
| Shields ...                   | 29.75                            | 45    | N     | 1                    | 0        | 29.23                            | -0.49                             | 45          | 43   | +2                                | SSW   | 3                    | C        | 2                 | 47          | 41             | 0.03                |   |
| Spurn Head ...                | 29.85                            | 44    | SW    | 4                    | 0        | 29.35                            | -0.52                             | 45          | 45   | +6                                | SSW   | 4                    | +        | 3                 | 48          | 38             | 0.06                |   |
| York ...                      | 29.87                            | 45    | SSW   | 2                    | 0        | 29.33                            | -0.55                             | 45          | 44   | +1                                | WSW   | 3                    | C        | *                 | 48          | 41             | 0.18                |   |
| Loughborough ...              | 29.89                            | 45    | SSW   | 3                    | C        | 29.40                            | -0.55                             | 44          | 43   | +5                                | SW    | 3                    | 0        | *                 | 49          | 39             | 0.09                |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Ardrossan ...                 | 29.59                            | 48    | S     | 4                    | 0        | 29.21                            | -0.52                             | 46          | 45   | -2                                | WSW   | 4                    | cp       | 3                 | 51          | 45             | 0.23                |   |
| Malin Head ...                | 29.45                            | 46    | S     | 5                    | og       | 29.17                            | -0.58                             | 45          | 43   | -2                                | WSW   | 5                    | bc       | 3                 | 47          | 43             | 0.04                |   |
| Mullaghmore ...               | 29.44                            | 48    | SSW   | 7                    | pg       | 29.30                            | -0.55                             | 44          | 42   | -1                                | SW    | 5                    | bc       | 4                 | 48          | 43             | 0.10                |   |
| Belmullet ...                 | 29.44                            | 49    | SW    | 7                    | 0        | 29.30                            | -0.51                             | 47          | 44   | -1                                | N     | 6                    | b        | *                 | 49          | 44             | 0.22                |   |
| Donaghadee ...                | 29.63                            | 46    | SSW   | 5                    | +        | 29.31                            | -0.54                             | 41          | 40   | -1                                | N     | 5                    | b        | 3                 | 47          | 39             | 0.06                |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Liverpool (Bidston)           | 29.81                            | 47    | SSE   | 3                    | 0        | 29.40                            | -0.54                             | 44          | 42   | +1                                | N     | 5                    | C        | 4                 | 49          | 43             | 0.15                |   |
| Holyhead ...                  | 29.75                            | 49    | SW    | 5                    | opg      | 29.43                            | -0.52                             | 45          | 43   | 0                                 | N     | 6                    | bc       | 6                 | 50          | 44             | 0.42                |   |
| Parsonstown ...               | 29.59                            | 49    | SW    | 2                    | 0        | 29.45                            | -0.50                             | 41          | 40   | 0                                 | SW    | 1                    | b        | *                 | 49          | 40             | 0.04                |   |
| Valencia ...                  | 29.60                            | 51    | SW    | 6                    | ou       | 29.55                            | -0.42                             | 45          | 44   | -5                                | N     | 4                    | C        | 5                 | 52          | 44             | 0.40                |   |
| Roche's Point...              | 29.68                            | 50    | SSW   | 7                    | +        | 29.57                            | -0.46                             | 44          | 42   | -3                                | WSW   | 3                    | b        | 4                 | 51          | 42             | 0.20                |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Pembroke (St. Ann's Hd.)      | 29.82                            | 50    | SW    | 5                    | C        | 29.56                            | -0.50                             | 48          | 45   | -1                                | NW    | 6                    | bc       | 6                 | 51          | 47             | 0.64                |   |
| Scilly ...                    | 29.93                            | 50    | SSW   | 5                    | cp       | 29.69                            | -0.46                             | 50          | 49   | 0                                 | WNW   | 6                    | C        | 5                 | 53          | 47             | 0.48                |   |
| Prawle Point ...              | 30.00                            | 50    | WSW   | 5                    | 0        | 29.63                            | -0.53                             | 45          | 44   | -2                                | N     | 5                    | b        | 4                 | 50          | 44             | 0.27                |   |
| Jersey (St. Aubin's)          | 30.15                            | 51    | WSW   | 4                    | 0        | 29.66                            | -0.56                             | 51          | 48   | +3                                | N     | 5                    | cqm      | 4                 | 53          | 47             | 0.10                |   |
| Hurst Castle ...              | 30.02                            | 50    | N     | 4                    | C        | 29.55                            | -0.57                             | 48          | 48   | +3                                | N     | 5                    | ct       | 4                 | 51          | 44             | 0.49                |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Dungeness ...                 | 30.05                            | 49    | WNW   | 4                    | C        | 29.52                            | -0.55                             | 48          | 47   | +7                                | S     | 8                    | +        | 6                 | 51          | 40             | 0.06                |   |
| London ...                    | 30.05                            | 46    | SW    | 3                    | bc       | 29.49                            | -0.57                             | 47          | 46   | +9                                | WSW   | 1                    | ogt      | *                 | 50          | 37             | 0.16                |   |
| Oxford ...                    | 29.90                            | 46    | SW    | 3                    | 0        | 29.49                            | -0.56                             | 45          | 44   | +6                                | S     | 2                    | +        | *                 | 48          | 39             | 0.31                |   |
| Cambridge ...                 | 29.96                            | 45    | SW    | 1                    | 0        | 29.48                            | -0.54                             | 45          | 44   | +5                                | SW    | 2                    | +        | *                 | 49          | 38             | 0.08                |   |
| Yarmouth ...                  | 29.96                            | 43    | SW    | 2                    | b        | 29.48                            | -0.43                             | 46          | 45   | +8                                | SSW   | 4                    | og       | 4                 | 46          | 35             | 0.01                |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Cuxhaven ...                  | 29.86                            | 43    | N     | 4                    | bc       | 29.78                            | +0.31                             | 42          | 41   | 0                                 | SW    | 3                    | 0        | *                 | 45          | 41             | -                   |   |
| Berlin ...                    | 29.95                            | 40    | N     | 4                    | 0        | 29.94                            | +0.56                             | 35          | 34   | -9                                | SW    | 4                    | b        | *                 | 45          | 34             | 0.12                |   |
| Wiesbaden ...                 | *                                | *     | *     | *                    | *        | 29.98                            | +0.16                             | 39          | 37   | -7                                | N     | 2                    | 0        | *                 | 48          | 37             | 0.08                |   |
| Munich ...                    | 30.24                            | 39    | SW    | 4                    | 0        | 30.06                            | +0.08                             | 28          | 27   | -14                               | SSE   | 5                    | bc       | *                 | 43          | 27             | 0.04                |   |
| The Helder ...                | 29.95                            | 45    | SW    | 2                    | C        | 29.63                            | -0.19                             | 45          | 43   | -1                                | SSW   | 4                    | C        | 3                 | 48          | 45             | -                   |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Brussels (9 a.m.)             | *                                | *     | *     | *                    | *        | 29.75                            | -0.25                             | 43          | 40   | 0                                 | SSW   | 5                    | 0        | *                 | 46          | 42             | 0.04                |   |
| Cape Gris Nez ...             | 30.04                            | 49    | WSW   | 5                    | bc       | 29.63                            | -0.38                             | 46          | 44   | +1                                | S     | 6                    | +        | 5                 | 50          | 43             | 0.04                |   |
| Paris ...                     | 30.23                            | 46    | SW    | 3                    | 0        | 29.84                            | -0.36                             | 43          | 41   | +2                                | S     | 5                    | 0        | *                 | 52          | 41             | -                   |   |
| Brest ...                     | ?                                | 52    | WSW   | 3                    | 0        | ?                                | ?                                 | 51          | 47   | +1                                | NW    | 6                    | b        | 5                 | 54          | 48             | -                   |   |
| Lorient ...                   | 30.17                            | 50    | SW    | 3                    | 0        | 29.75                            | -0.54                             | 51          | 47   | +1                                | WNW   | 5                    | bc       | 5                 | 54          | 50             | 0.24                |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Rochefort ...                 | 30.31                            | 50    | S     | 3                    | 0        | 29.80                            | -0.54                             | 51          | 50   | +3                                | WSW   | 6                    | 0        | *                 | 54          | 46             | 0.35                |   |
| Belfort ...                   | ?                                | 36    | E     | 3                    | bc       | ?                                | ?                                 | 34          | ?    | ?                                 | E     | 2                    | bc       | *                 | 46          | 28             | -                   |   |
| Lyons ...                     | 30.32                            | 42    | NW    | 1                    | bc       | 30.05                            | -0.28                             | 32          | 32   | -10                               | S     | 1                    | b        | *                 | 47          | 32             | 0.04                |   |
| Nice ...                      | 30.08                            | 49    | E     | 1                    | bc       | 30.10                            | -0.44                             | 44          | 41   | -3                                | E     | 1                    | b        | 1                 | 55          | 45             | -                   |   |
| Perpignan ...                 | 30.28                            | 50    | NW    | 2                    | b        | 30.08                            | -0.24                             | 43          | 40   | -9                                | SW    | 1                    | b        | *                 | 57          | 36             | -                   |   |
| Biarritz ...                  | 30.29                            | 51    | S     | 2                    | b        | 29.99                            | -0.39                             | 53          | 46   | 0                                 | S     | 3                    | 0        | 4                 | 57          | 46             | 0.04                |   |
|                               |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |                |                     |   |
| Corunna ...                   | *                                | *     | *     | *                    | *        | *                                | *                                 | *           | *    | *                                 | *     | *                    | *        | *                 | *           | *              | *                   | * |
| Lisbon ...                    | 30.38                            | 57    | Z     | 0                    | 0        | 30.35                            | -0.05                             | 55          | 52   | +4                                | WNW   | 3                    | 0        | *                 | 61          | 51             | 0.08                |   |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on WEDNESDAY, 9<sup>th</sup> DEC<sup>r</sup>, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; →→ = forces 8 to 10;

→→ = forces 5 to 7; →→ = forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

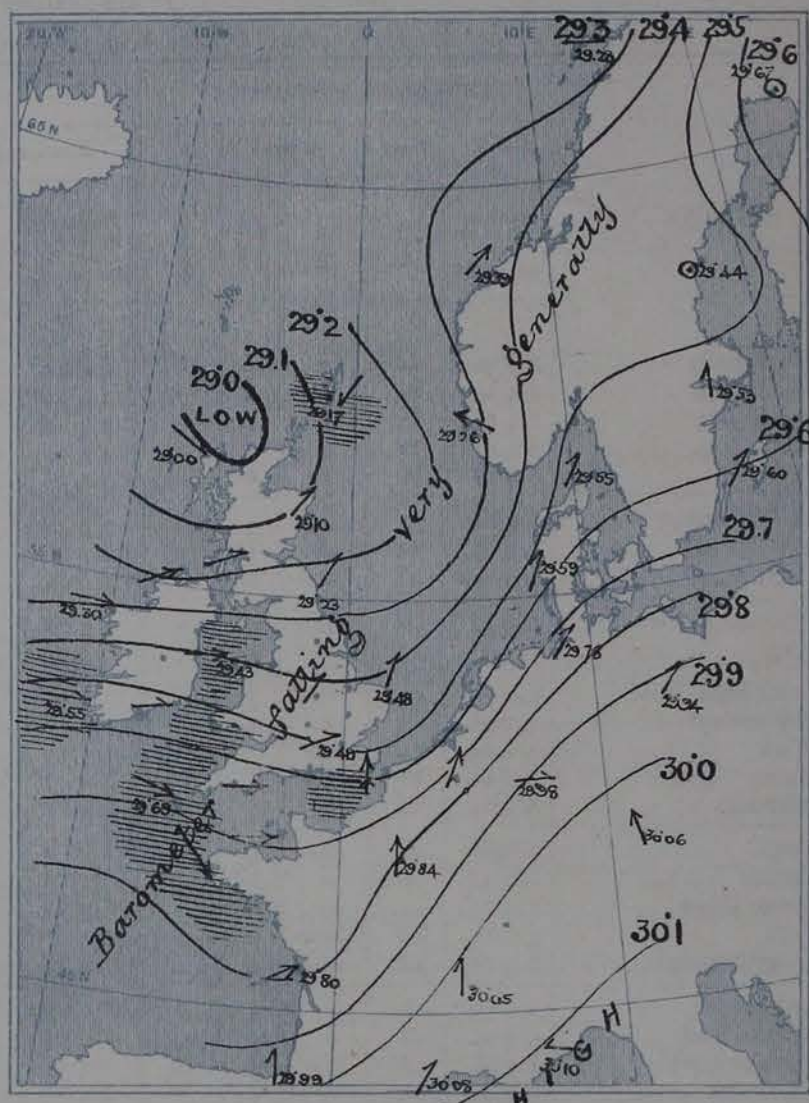
☼ = Rough. ☼☼ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
|               | INS.           |
| Sumburgh Head | 29.673         |
| Sornoway      | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Sailly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.968         |
| Dover         | 29.953         |
| LONDON        | 29.934         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.915         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

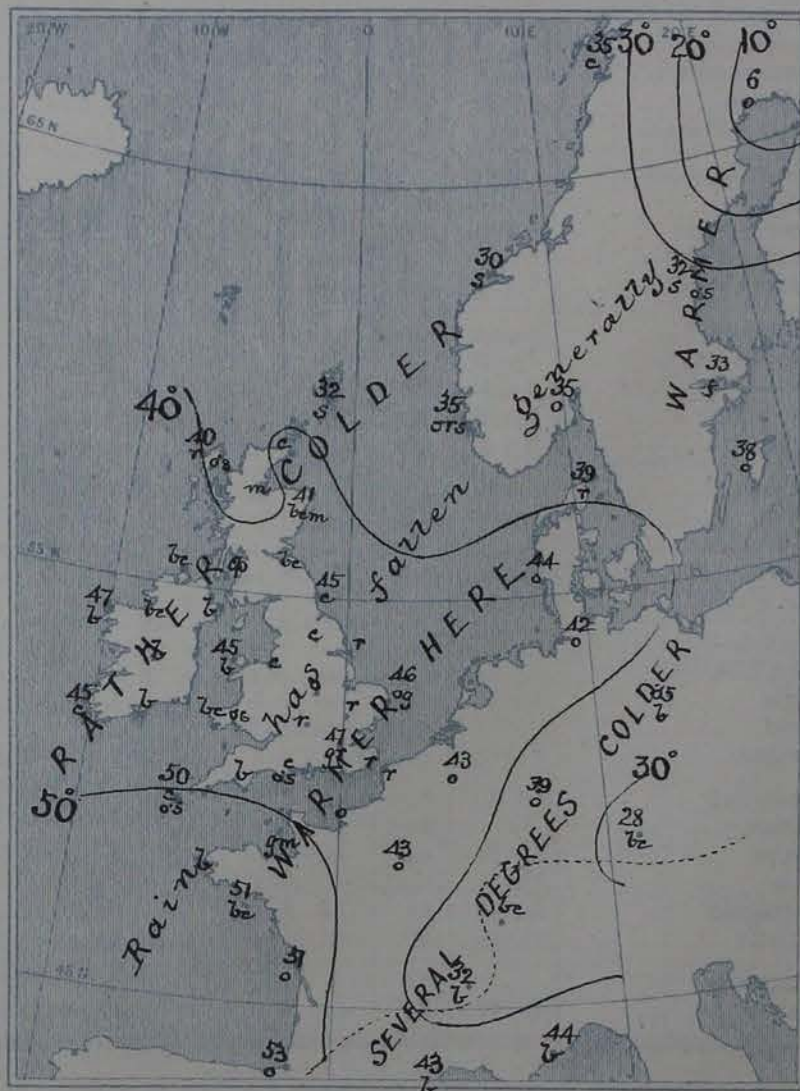
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.           | TEMPERATURE. |       |           |      | RAINFALL<br>(Inches.) |
|---------------------|--------------|-------|-----------|------|-----------------------|
|                     | Daily        | Daily | at 8 a.m. |      |                       |
|                     | Max.         | Min.  | Dry.      | Wet. |                       |
| Sumburgh Head.....  | 42.6         | 35.2  | 39.6      | 38.1 | 4.25                  |
| Sornoway .....      | 43.1         | 34.2  | 39.4      | 38.5 | 5.63                  |
| Wick .....          | 42.2         | 32.7  | 38.1      | 38.8 | 3.10                  |
| Nairn .....         | 41.9         | 32.8  | 37.1      | 35.6 | 1.95                  |
| Aberdeen .....      | 41.0         | 32.6  | 36.9      | 35.2 | 3.24                  |
| Leith .....         | 44.0         | 33.7  | 38.5      | 37.0 | 1.86                  |
| Shields .....       | 42.9         | 33.9  | 38.3      | 36.9 | 2.57                  |
| Spurn Head .....    | 42.4         | 35.3  | 38.8      | 37.7 | 2.14                  |
| York .....          | 42.3         | 32.3  | 36.4      | 35.4 | 2.28                  |
| Loughborough .....  | 42.7         | 32.2  | 36.3      | 35.4 | 2.24                  |
| Ardrossan .....     | 44.5         | 35.9  | 40.0      | 38.7 | 3.73                  |
| Mullaghmore .....   | 46.5         | 37.8  | 42.2      | 39.8 | 4.51                  |
| Donaghadee.....     | 45.8         | 36.2  | 40.2      | 39.3 | 2.84                  |
| Holyhead .....      | 46.4         | 39.1  | 42.8      | 41.1 | 3.82                  |
| Liverpool .....     | 43.5         | 35.6  | 38.8      | 37.1 | 2.59                  |
| Parsonstown .....   | 44.7         | 33.1  | 37.8      | 36.0 | 3.94                  |
| Valencia .....      | 49.7         | 40.0  | 44.6      | 42.4 | 5.99                  |
| Roche's Point ..... | 47.9         | 38.9  | 42.9      | 41.5 | 4.95                  |
| Pembroke .....      | 43.8         | 40.3  | 43.6      | 42.2 | 3.99                  |
| Sailly .....        | 49.5         | 43.1  | 47.0      | 45.1 | 4.02                  |
| Prawle Point .....  | 47.0         | 38.2  | 42.5      | 41.1 | 3.76                  |
| Jersey .....        | 47.3         | 39.3  | 43.1      | 41.4 | 3.82                  |
| Hurst Castle .....  | 45.9         | 36.3  | 40.6      | 39.8 | 2.77                  |
| Dover .....         | 44.3         | 35.9  | 39.8      | 38.6 | 3.00                  |
| LONDON .....        | 44.0         | 33.9  | 37.8      | 36.7 | 2.10                  |
| Oxford .....        | 42.9         | 33.5  | 37.0      | 35.9 | 2.10                  |
| Cambridge .....     | 42.8         | 31.6  | 36.2      | 35.5 | 1.88                  |
| Yarmouth .....      | 41.9         | 33.7  | 37.9      | 37.0 | 2.86                  |

NOTE—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 in: and upwards, over the southern parts of the Spanish Peninsula.  
 Lowest, 29.0 in: and less, in a depression, the centre of which lay off the north of Scotland.  
 Gradients rather steep over the eastern and southern parts of the North Sea, but moderate or slight elsewhere.  
 Barometer falling generally, - most in the north of our Islands.

## TEMPERATURE

Highest 55° at Lister, 53° at Biarritz, 51° at Jersey, Brest, Boulogne, and Rochefort, and 50° at Scilly.  
 Lowest, 6° at Itapavanda, 28° at Munich, 30° at Hemsö, 32° at Lumburg, 34° at Hemsö and Lyons.  
 A considerable rise has taken place over the eastern and southeastern parts of England, but a fall in the west.

## WIND

Moderate to strong from the W<sup>nd</sup> in all the more western parts of our Islands and France, but SW<sup>ly</sup> or S<sup>ly</sup> in the east, as well as over the Netherlands, Denmark and the south of Sweden.  
 Strong from the SE<sup>nd</sup> in the west of Norway.  
 A moderate gale from the S<sup>nd</sup> or SW<sup>nd</sup> has prevailed at many of our western and southern stations.

## WEATHER

Fine in the western parts of our Islands, as well as in the east of Scotland, Germany, and the south of France.  
 Dull elsewhere, with rain in the east and southeast of England, sheet at Huddersfield, and snow at Lumburg, Hemsö, and Lyons.  
 Since yesterday morning rain has fallen generally, the largest amounts being 0.5 in: at Hemsö, 0.4 in: at Lumburg, and 0.5 in: at Scilly and Hunt Castle.

## SEA

Rough or rather so on many parts of our western and southern coasts, as well as at Hemsö, but moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The fine weather now prevailing in the west will probably spread to our eastern stations, but the barometer is very unsteady at Valencia, so that the improvement is not likely to prove permanent.

# FORECASTS

For the 24 hours ending at NOON on 10<sup>th</sup> December 1891.

## DISTRICTS.

## FORECASTS.

- |   |                  |   |
|---|------------------|---|
| 0 | SCOTLAND NORTH   | W <sup>ly</sup> to NW <sup>ly</sup> winds; changeable, some cold showers.   |
| 1 | SCOTLAND EAST    |   |
| 2 | ENGLAND N.E.     | SW <sup>ly</sup> to W <sup>ly</sup> winds, moderate or fresh; dull and rainy at first, improving temporarily later. |
| 3 | ENGLAND EAST     |   |
| 4 | MIDLAND COUNTIES |   |
| 5 | ENGLAND SOUTH    | SW <sup>ly</sup> to W <sup>ly</sup> winds, fresh or strong; mild and rainy at first, then finer and colder.         |

## DISTRICTS.

## FORECASTS.

- |    |               |  |
|----|---------------|--|
| 6  | SCOTLAND WEST | W <sup>ly</sup> to NW <sup>ly</sup> winds, strong in places; fair generally, but local showers |
| 7  | ENGLAND N.W.  |  |
| 8  | ENGLAND S.W.  |  |
| 9  | IRELAND NORTH |  |
| 10 | IRELAND SOUTH |  |

## WARNINGS

At 0.30 pm to districts 7 to 9, hoist south cone  
 at 6.55 pm to district 6 "hoist south cone"  
 The signals are now flying in districts 6 to 10.

Note.—The South Cone, point downwards (▼), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

| THER: WIND      |       |    |    |     |    |      |     | THER: WIND    |       |    |    |     |    |      |     |
|-----------------|-------|----|----|-----|----|------|-----|---------------|-------|----|----|-----|----|------|-----|
| BAR:            |       | D. | W. | D.  | F. | WEA. | SEA | BAR:          |       | D. | W. | D.  | F. | WEA. | SEA |
| Skudesnaes ...  | 29.49 | 43 | 40 | S   | 6  | r    | 4   | Holyhead ...  | 29.89 | 49 | 47 | SW  | 4  | og   | 4   |
| Sumburgh Head   | 29.55 | 35 | 33 | NW  | 3  | c    | 3   | Valencia ...  | 29.76 | 51 | 49 | S   | 7  | rm   | 6   |
| Stornoway ...   | 29.67 | 35 | 35 | NW  | 3  | O    | 3   | Scilly ...    | 30.06 | 52 | 50 | SSW | 5  | 0    | 5   |
| Aberdeen ...    | 29.74 | 40 | 36 | WNW | 2  | c    | 2   | Jersey ...    | 30.20 | 52 | 49 | SW  | 4  | 0    | 4   |
| Shields ...     | 29.79 | 46 | 43 | W   | 3  | c    | 3   | Dungeness ... | 30.06 | 51 | 49 | W   | 4  | bc   | 3   |
| Ardrossan ...   | 29.73 | 47 | 47 | SW  | 5  | r    | 4   | London ...    | 30.06 | 50 | 47 | SW  | 2  | c    | *   |
| Malin Head ...  | 29.63 | 46 | 45 | S   | 4  | O    | 3   | Yarmouth ...  | 29.95 | 45 | 43 | WSW | 3  | 6    | 3   |
| Mullaghmore ... | 29.67 | 48 | 47 | SSW | 5  | or   | 4   | Rochefort ... | 30.31 | 51 | 49 | SSW | 3  | 0    | *   |
| Belmullet ...   | 29.62 | 48 | 47 | WSW | 6  | od   | *   |               |       |    |    |     |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning fine over southern Russia, and on the Algerian and Spanish coasts, very changeable and unsettled elsewhere, though temporarily fine over the British Islands. Rain later over Germany and France, and in all parts of the United Kingdom. Snow in Scandinavia and the north of Scotland.

Temperature fallen somewhat over Russia, France, and England, risen over Germany, Scotland, and Ireland, and changing very fitfully all over Western Europe. Morning readings exceeding 50° at many of the Spanish and Mediterranean stations, and touching that value at Constantinople, Scilly and Valencia Island, and exceeding 40° over Central Europe and many parts of our Islands; lower elsewhere. Lowest, -2°F at Haparanda, +8° at Uleaborg, 9° at Kuopio, 18° at St. Petersburg, 24° at Herisand, 27° at Moscow, 28° at Riga and also at Odessa. Rising later to 50° and more in the southwest and west of the British Islands, to 57° in the southwest of France, and to 61° at Lisbon.

Wind light and variable over Russia and also over the Iberian Peninsula, moderate to fresh from the W. (NW to SW) over the British Islands; two well marked cyclonic circulations prevalent - one over North Germany and the Baltic, another over the southeast of France and the north of Italy with neighbouring parts of the Mediterranean. Backing to the S. on our western coasts later, and rising to a moderate gale.

Barometer highest 30.4 in. and more to 30.2 in. over southwestern Europe, 30.1 in. and more to 30.0 in. over southeastern Europe. Lowest 29.4 in. and less, in a depression off the west of Norway, and in another over North Germany and the Baltic, 29.5 in. and less, over the northeast of Russia, 30.0 in. and less, in a depression over the Gulf of Genoa. Rising over Germany and the Netherlands later, but falling fast in the northwest of our Islands, as a new depression came towards Scotland from the Atlantic.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. mist; (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „







# WEATHER CHARTS

for 8 a.m. on Thursday, 10<sup>th</sup> Dec<sup>r</sup>, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;

→ forces 6 to 7; → forces 4 to 5.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus

— Rough. — High.

## MEAN HEIGHT OF THE BAROMETER

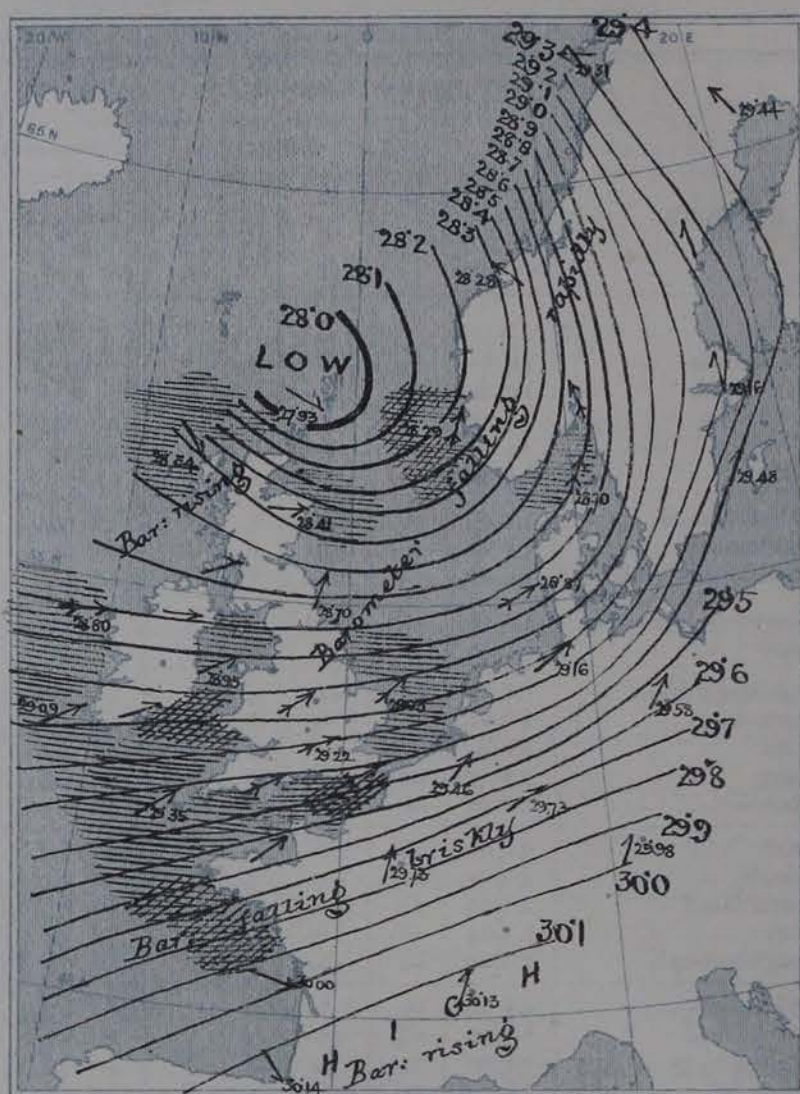
at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

### STATIONS.

### MEAN READINGS.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumbargh Head | 29.573         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

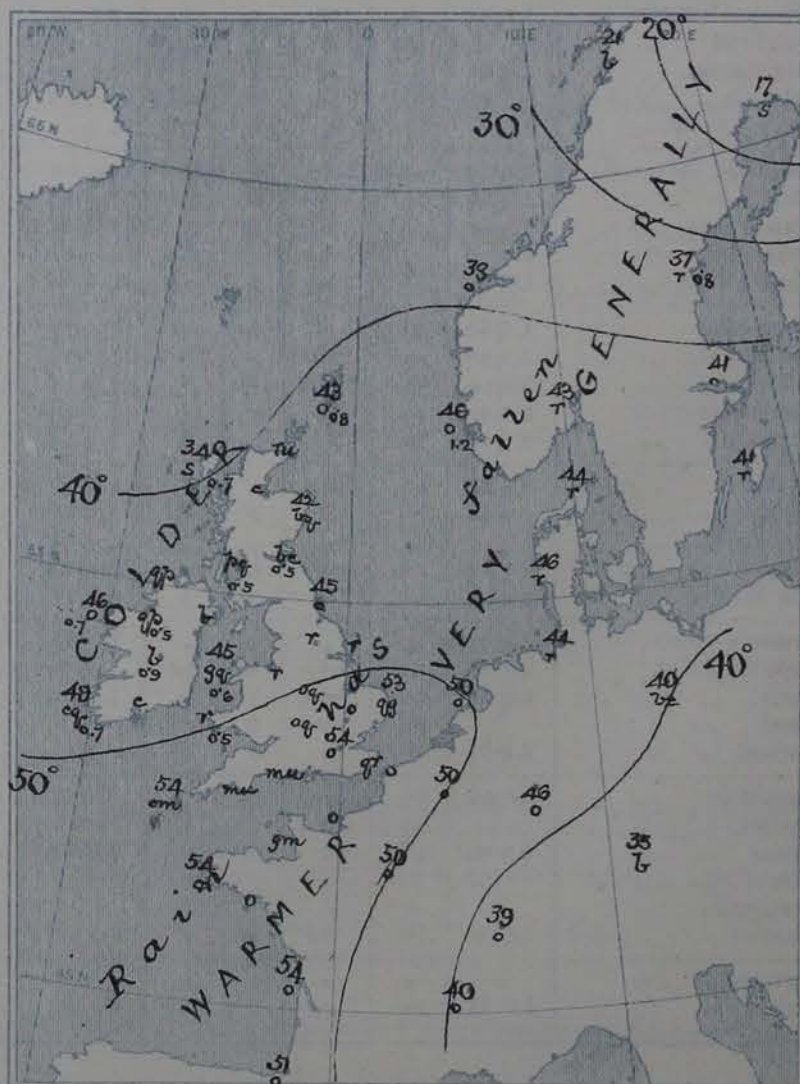
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE. |               |                   |      | RAINFALL.<br>(Inches.) |
|---------------|--------------|---------------|-------------------|------|------------------------|
|               | Day<br>Max.  | Night<br>Min. | Dry.<br>at 8 a.m. | Wet. |                        |
| Sumbargh Head | 42.6         | 35.2          | 39.6              | 38.1 | 1.25                   |
| Stornoway     | 43.1         | 34.2          | 39.4              | 38.5 | 5.83                   |
| Wick          | 42.2         | 32.7          | 38.1              | 36.8 | 3.10                   |
| Nairn         | 41.9         | 32.8          | 37.1              | 35.6 | 1.95                   |
| Aberdeen      | 41.9         | 32.6          | 36.9              | 35.2 | 3.24                   |
| Leith         | 44.0         | 33.7          | 38.5              | 37.0 | 1.86                   |
| Shields       | 42.9         | 33.9          | 38.3              | 36.9 | 2.57                   |
| Spurn Head    | 42.4         | 35.3          | 38.8              | 37.7 | 2.14                   |
| York          | 42.3         | 32.3          | 36.4              | 35.4 | 2.28                   |
| Loughborough  | 42.7         | 32.1          | 36.3              | 35.4 | 2.24                   |
| Ardrossan     | 44.5         | 35.9          | 40.0              | 38.7 | 3.73                   |
| Mullaghmore   | 46.5         | 37.8          | 42.2              | 39.8 | 4.51                   |
| Donaghadee    | 45.8         | 36.2          | 40.2              | 39.3 | 2.81                   |
| Holyhead      | 46.4         | 39.1          | 42.8              | 41.1 | 3.82                   |
| Liverpool     | 43.5         | 35.6          | 38.8              | 37.1 | 2.59                   |
| Parsonstown   | 44.7         | 33.1          | 37.8              | 36.6 | 3.04                   |
| Valencia      | 49.7         | 40.0          | 44.6              | 42.4 | 5.99                   |
| Roche's Point | 47.9         | 38.5          | 42.9              | 41.5 | 4.95                   |
| Pembroke      | 43.8         | 40.3          | 43.6              | 42.2 | 3.99                   |
| Silly         | 49.5         | 43.1          | 47.0              | 45.1 | 4.02                   |
| Prawle Point  | 47.0         | 38.2          | 42.5              | 41.1 | 3.76                   |
| Jersey        | 47.3         | 39.3          | 43.1              | 41.4 | 3.82                   |
| Hurst Castle  | 45.5         | 36.3          | 40.0              | 39.8 | 2.77                   |
| Dover         | 44.3         | 35.0          | 39.8              | 38.6 | 3.00                   |
| LONDON        | 44.0         | 33.9          | 37.8              | 36.7 | 2.10                   |
| Oxford        | 42.9         | 33.5          | 37.0              | 35.9 | 2.10                   |
| Cambridge     | 42.8         | 31.6          | 36.2              | 35.5 | 1.88                   |
| Yarmouth      | 41.0         | 32.7          | 35.5              | 32.0 | 2.46                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

|             |  |
|-------------|--|
| PRESSURE    | <p>Highest 30.31 ins. and upwards in the south of Portugal.</p> <p>Lowest 28.0 ins. and less in a depression the centre of which lies near the Shetlands.</p> <p>Gradients steep over the whole of northwestern Europe, but slight over Spain and the south of France.</p> <p>Barometer falling in most places, but rising again in the north of Scotland.</p>   |
| TEMPERATURE | <p>Highest 55° at Jersey, Cambridge and Lorient, and 54° at Scilly, London, Brest and Rochefort.</p> <p>Lowest 17° at Haparanda, 21° at Rodö, 34° at Stornoway, 35° at Munich, 37° at Harnosand, and 38° at Christiansund.</p> <p>During yesterday the thermometer rose to between 50° and 55° in many parts of the United Kingdom.</p>  |
| WIND        | <p>Strong to a gale from W. or S.W. over the greater part of the United Kingdom but N.W. in the north of Scotland.</p> <p>Strong S.W. gales are blowing in Denmark and S. gales in the south of Norway, but in Germany and the south of France the S.W. wind is of moderate strength.</p>  |
| WEATHER     | <p>Cloudy or overcast generally, with rain in many parts of the United Kingdom and also in Denmark and the south of Norway. Snow is falling in the Hebrides.</p> <p>Since yesterday morning heavy rain has fallen at many of our western and northern stations, the largest amounts being 1.2 ins. at Skudesnes, 0.9 ins. at Parsonstown, 0.8 ins. at Lumburg H., &amp; 0.7 ins. at Stornoway, Belmullet &amp; Valmeir Island. Bright aurora was seen last night at Wick &amp; thunder &amp; lightning occurred in the north of Ireland.</p> |
| SEA         | <p>Rough or high on nearly all coasts.</p>   |

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the north seems likely to travel away in a northerly or northeasterly direction, but secondary disturbances will probably continue to travel eastwards across our Islands.

## FORECASTS

For the 24 hours ending at NOON on 11<sup>TH</sup> DECEMBER, 1891.

### DISTRICTS.

### FORECASTS.

|   |                  |  |
|---|------------------|--|
| 0 | SCOTLAND NORTH   | { W. and N.W. winds, strong; squally, some snow showers.     |
| 1 | SCOTLAND EAST    |  |
| 2 | ENGLAND N.E.     | { Same as No. 5.   |
| 3 | ENGLAND EAST     |  |
| 4 | MIDLAND COUNTIES |  |
| 5 | ENGLAND SOUTH    |  |
|   |                  | { S.W. and W. gales and strong winds; squally, some showers. |

### DISTRICTS.

### FORECASTS.

|    |               |  |
|----|---------------|--|
| 6  | SCOTLAND WEST | { W. to N.W. strong winds and gales; squally, showery.         |
| 7  | ENGLAND N.W.  |  |
| 8  | ENGLAND S.W.  | { S.W. to W. or N.W. strong winds and gales; squally, showery. |
| 9  | IRELAND NORTH | Same as Nos. 6 and 7.  |
| 10 | IRELAND SOUTH | Same as No. 8.   |

### WARNINGS

At 10.20 am to district 10 - keep up S. Cone. The signals are now flying in all districts excepting 0 and 1.

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.

The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA | SEA |               | BAR:  | THER: |    | WIND |    | WEA | SEA |
|-------------------|-------|-------|----|------|----|-----|-----|---------------|-------|-------|----|------|----|-----|-----|
|                   |       | D.    | W. | D.   | F. |     |     |               |       | D.    | W. | D.   | F. |     |     |
| Skudesnaes ...    | 28.97 | 46    | 45 | SSW  | 6  | T   | 5   | Holyhead ...  | 29.39 | 47    | 44 | SW   | 5  | cg  | 5   |
| Sumburgh Head ... | 28.98 | 36    | 35 | ESE  | 4  | S   | 6   | Valencia ...  | 29.40 | 52    | 52 | SW   | 7  | T   | 6   |
| Stornoway ...     | 28.84 | 44    | 44 | W    | 3  | T   | 3   | Scilly ...    | 29.66 | 52    | 49 | WSW  | 6  | 0   | 5   |
| Aberdeen ...      | 29.04 | 43    | 40 | SSW  | 4  | bc  | 3   | Jersey ...    | 29.76 | 54    | 48 | W    | 5  | bcq | 4   |
| Shields ...       | 29.24 | 47    | 43 | SW   | 4  | C   | 2   | Dungeness ... | 29.58 | 50    | 47 | WNW  | 6  | C   | 4   |
| Ardrossan ...     | 29.17 | 47    | 46 | SSW  | 3  | C   | 3   | London ...    | 29.57 | 50    | 46 | WSW  | 2  | bc  | 4   |
| Malin Head ...    | 29.08 | 45    | 44 | SW   | 6  | O   | 4   | Yarmouth ...  | 29.46 | 46    | 44 | WNW  | 4  | bc  | 4   |
| Mullaghmore ...   | 29.16 | 46    | 44 | SSW  | 6  | OT  | 5   | Rocheport ... | 29.93 | 56    | ?  | WNW  | 6  | T   | 4   |
| Belmullet ...     | 29.13 | 46    | 46 | SW   | 7  | T   | *   |               |       |       |    |      |    |     |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning fine over Spain, the greater part of Algeria, Italy and southeastern Europe; temporarily fine in Ireland and some parts of Scotland, very unsettled elsewhere. Rain falling over England, with some parts of France and Germany, snow over the Shetlands, Russia and northern Europe. Rain later all over western Europe - the largest amounts reported being 1.2 ins. at Skudesnaes, 0.9 ins. at Parsonstown and more than half an inch at several Irish stations, Stornoway and Sumburgh Head. Thunder and lightning reported in the northwest of Ireland sleet at Jersey.

Temperature. Still changing very fitfully. Highest morning readings, 60° at Malta and above 50° on the southern and western sides of the Mediterranean generally, as well as in Portugal and on the west coast of France. Below 50° over the United Kingdom and below 40° at Nain; lowest of all (1) -4.5° at Archangel and Kuopio, 6° at Haparanda, 20° at Helsingfors, 22° at St. Petersburg, 25° at Moscow, (2) 32° at Lyons, 35° at Berlin and Cracow; (3) 30° at Christiansund, 32° at Sumburgh Head. Rising to between 50° and 56° over Ireland, England and France later but failing to reach 50° in Scotland.

Wind light and variable over the Mediterranean and southern Europe, moderate over Russia, moderate to a gale over the more northwestern districts - well defined cyclonic circulations over the British Islands and France and also over the Baltic and western Russia. SW<sup>2</sup> gales again setting in over Ireland and the Irish Sea during afternoon and afterwards spreading to England.

Barometer. Highest 30.4 ins. and more to 30.0 ins. over Spain, and exceeding 30.0 ins. over the Mediterranean, Adriatic and Austria, 29.8 ins. and more to 29.7 ins. over northern Russia. Lowest 29.5 ins. and less in a depression over the Baltic Provinces; 29.0 ins. and less in another off Cape Wrath, still further depressions advancing to our northwestern coasts later.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. m. y. (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.  
\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.  
" Weekly " " " £1 10 0 "



# DAILY WEATHER REPORT.

for *Friday, 11<sup>th</sup> December, 1891.*  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           |                             | YESTERDAY EVENING.               |       |        |                   |          | 8 A.M. TO DAY.                   |                                   |             |      |                                   |        |                   |          |             |      | PAST 24 HOURS.      |      |  |
|---------------------|-----------------------------|----------------------------------|-------|--------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|--------|-------------------|----------|-------------|------|---------------------|------|--|
|                     |                             | BAROM :                          | TEMP. | WIND.  |                   | Weather. | BAROMETER.                       |                                   | SHADN TEMP. |      |                                   | WIND.  |                   | Sea.     | SUADE TEMP. |      | Amount of Rainfall. |      |  |
|                     |                             |                                  |       | Force. |                   |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dirac. | Force.            |          | Max.        | Min. |                     |      |  |
|                     |                             | Reading at 32° F. and Sea Level. | Dry.  | Dirac. | Force. (0 to 12.) |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dirac. | Force. (0 to 12.) | Weather. |             | Max. | Min.                |      |  |
| SCANDINAVIA.        | Haparanda ...               | 29.08                            | 22    | SE     | 6                 | S        | 28.84                            | - .60                             | 15          | ?    | - 2                               | SE     | 8                 | S        | *           | 23   | 10                  | 0.59 |  |
|                     | Hernösand ...               | 28.44                            | 36    | SE     | 9                 | +        | 28.42                            | ?                                 | 38          | 36   | + 1                               | S      | 4                 | C        | *           | 39   | 21                  | 0.67 |  |
|                     | Stockholm ...               | 28.62                            | 43    | S      | 4                 | 0        | 28.66                            | - .50                             | 40          | 38   | - 1                               | SW     | 4                 | 0        | *           | 46   | 28                  | 0.35 |  |
|                     | Wisby ...                   | 28.74                            | 43    | N      | 8                 | +        | 28.83                            | - .63                             | 41          | 40   | 0                                 | SW     | 6                 | 0        | *           | 45   | 37                  | 0.35 |  |
|                     | Bodö ...                    | 28.40                            | 31    | E      | 8                 | 0        | 28.44                            | - .87                             | 31          | 28   | + 10                              | E      | 8                 | 0        | 5           | 31   | 19                  | -    |  |
|                     | Christiansund               | 28.04                            | 37    | Z      | 0                 | bc       | 28.43                            | + .15                             | 41          | 39   | + 3                               | SW     | 8                 | 0        | 4           | 41   | 36                  | 0.32 |  |
|                     | Skudesnaes ...              | 28.43                            | 41    | N      | 10                | 0        | 28.73                            | + .44                             | 40          | 38   | - 6                               | WNW    | 4                 | 0        | 6           | 46   | 39                  | 0.24 |  |
|                     | Christiania Fjord (Fjorder) | 28.37                            | 44    | SSW    | 10                | b        | 28.67                            | + .05                             | 43          | 40   | 0                                 | N      | 5                 | 0        | 5           | 46   | 43                  | -    |  |
|                     | Skagen (The Scaw)           | 28.65                            | 41    | N      | 7                 | b        | 28.76                            | + .06                             | 42          | 41   | - 2                               | SW     | 2                 | 0        | 2           | 45   | 37                  | 0.20 |  |
|                     | Fanö ...                    | 28.86                            | 45    | WSW    | 6                 | b        | 28.79                            | - .08                             | 43          | 42   | - 3                               | WSW    | 6                 | C        | *           | 48   | 43                  | 0.43 |  |
| BRITISH ISLANDS.    | Sumburgh Head               | 28.49                            | 37    | NW     | 5                 | C        | 28.84                            | + .91                             | 35          | 35   | - 8                               | N      | 1                 | 0        | 4           | 44   | 33                  | 0.10 |  |
|                     | Stornoway ...               | 28.71                            | 35    | N      | 4                 | C        | 29.17                            | + .63                             | 33          | 33   | - 1                               | N      | 6                 | S        | 6           | 38   | 30                  | 0.14 |  |
|                     | Wick ...                    | 28.55                            | 34    | NW     | 4                 | C        | 29.01                            | + .77                             | 35          | 34   | - 9                               | NW     | 4                 | C        | 3           | 44   | 31                  | 0.12 |  |
|                     | Nairn ...                   | 28.68                            | 34    | SW     | 1                 | 0        | 29.09                            | + .64                             | 35          | 34   | - 5                               | WNW    | 6                 | 0        | 3           | 40   | 31                  | 0.01 |  |
|                     | Aberdeen ...                | 28.73                            | 34    | WSW    | 1                 | 0        | 29.08                            | + .67                             | 36          | 32   | - 6                               | WSW    | 6                 | CQS      | 4           | 42   | 34                  | 0.03 |  |
|                     | Leith ...                   | 28.67                            | 42    | SW     | 2                 | T        | 29.22                            | + .61                             | 35          | 33   | - 9                               | WSW    | 3                 | 0        | *           | 45   | 32                  | 0.53 |  |
|                     | Shields ...                 | 28.79                            | 44    | SSW    | 2                 | bc       | 29.20                            | + .50                             | 37          | 34   | - 8                               | N      | 4                 | C        | 2           | 47   | 33                  | 0.01 |  |
|                     | Spurn Head ...              | 28.93                            | 43    | SSW    | 5                 | b        | 29.30                            | + .41                             | 38          | 37   | - 6                               | N      | 7                 | 0        | 8           | 45   | 36                  | 0.14 |  |
|                     | York ...                    | 28.89                            | 45    | WSW    | 4                 | b        | 29.37                            | + .48                             | 37          | 35   | - 6                               | N      | 3                 | 0        | *           | 48   | 34                  | 0.12 |  |
|                     | Loughborough                | 29.01                            | 45    | SW     | 6                 | b        | 29.43                            | + .50                             | 39          | 35   | - 13                              | N      | 6                 | 0        | 53          | 38   | 0.49                |      |  |
| GERMANY & HOLLAND.  | Arrossan ...                | 28.60                            | 47    | SSW    | 4                 | p        | 29.31                            | + .54                             | 41          | 39   | - 2                               | WSW    | 5                 | 0        | 4           | 47   | 35                  | 0.33 |  |
|                     | Malin Head ...              | 28.55                            | 43    | N      | 5                 | bc       | 29.40                            | + .71                             | 38          | 36   | - 4                               | NW     | 5                 | CQS      | 4           | 44   | 34                  | 0.53 |  |
|                     | Mullaghmore ...             | 28.68                            | 46    | N      | 7                 | CQS      | 29.50                            | + .71                             | 38          | 37   | - 5                               | WNW    | 6                 | CQS      | 6           | 46   | 37                  | 0.26 |  |
|                     | Belmullet ...               | 28.84                            | 42    | NW     | 11                | 0        | 29.61                            | + .81                             | 39          | 37   | - 7                               | WNW    | 7                 | 0        | *           | 48   | 33                  | 0.35 |  |
|                     | Donaghadee ...              | 28.68                            | 45    | SSW    | 5                 | C        | 29.40                            | + .61                             | 34          | 32   | - 8                               | WNW    | 5                 | 0        | 4           | 46   | 32                  | 0.21 |  |
|                     | Liverpool (Bidston)         | 28.88                            | 48    | SW     | 5                 | 0        | 29.39                            | + .44                             | 40          | 36   | - 3                               | N      | 8                 | C        | 6           | 48   | 38                  | 0.10 |  |
|                     | Holyhead ...                | 28.86                            | 48    | SW     | 7                 | CQ       | 29.49                            | + .54                             | 41          | 38   | - 4                               | WNW    | 9                 | CQ       | 8           | 49   | 40                  | 0.01 |  |
|                     | Parsonstown ...             | 28.86                            | 46    | SW     | 2                 | T        | 29.65                            | + .68                             | 36          | 35   | - 6                               | SW     | 1                 | 0        | *           | 47   | 35                  | 0.20 |  |
|                     | Valencia ...                | 29.25                            | 46    | WNW    | 8                 | CQS      | 29.81                            | + .72                             | 44          | 40   | - 5                               | WNW    | 6                 | 0        | 51          | 40   | 0.14                |      |  |
|                     | Roche's Point ...           | 29.11                            | 45    | WNW    | 8                 | bc       | 29.72                            | + .60                             | 42          | 39   | - 5                               | WNW    | 5                 | 0        | 51          | 40   | 0.10                |      |  |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.)    | 29.01                            | 50    | WSW    | 9                 | C        | 29.67                            | + .54                             | 47          | 44   | + 1                               | N      | 8                 | C        | 7           | 51   | 37                  | 0.08 |  |
|                     | Scilly ...                  | 29.33                            | 50    | N      | 7                 | C        | 29.83                            | + .48                             | 50          | 47   | - 4                               | SW     | 7                 | C        | 7           | 56   | 46                  | 0.22 |  |
|                     | Prawle Point ...            | 29.31                            | 50    | N      | 7                 | bc       | 29.80                            | + .45                             | 44          | 43   | - 8                               | N      | 7                 | CQS      | 6           | 52   | 41                  | 0.52 |  |
|                     | Jersey (St. Aubin's)        | 29.48                            | 52    | N      | 6                 | TU       | 29.88                            | + .28                             | 52          | 46   | - 3                               | N      | 6                 | bc       | 5           | 56   | 47                  | 0.37 |  |
|                     | Hurst Castle ...            | 29.28                            | 50    | N      | 9                 | C        | 29.72                            | + .37                             | 46          | 45   | - 7                               | WNW    | 7                 | CQ       | 6           | 54   | 42                  | 0.32 |  |
|                     | Dungeness ...               | 29.20                            | 51    | SW     | 9                 | T        | 29.64                            | + .37                             | 45          | 44   | - 8                               | N      | 7                 | C        | 4           | 54   | 44                  | 0.21 |  |
|                     | London ...                  | 29.18                            | 48    | SW     | 4                 | C        | 29.61                            | + .39                             | 42          | 38   | - 12                              | N      | 4                 | bc       | *           | 55   | 41                  | 0.43 |  |
|                     | Oxford ...                  | 29.15                            | 46    | WSW    | 6                 | T        | 29.61                            | + .46                             | 41          | 38   | - 12                              | N      | 3                 | bc       | *           | 54   | 40                  | 0.18 |  |
|                     | Cambridge ...               | 29.11                            | 46    | SW     | 3                 | b        | 29.53                            | + .46                             | 41          | 38   | - 14                              | WSW    | 6                 | 0        | *           | 56   | 39                  | 0.48 |  |
|                     | Yarmouth ...                | 29.09                            | 46    | WSW    | 5                 | CQ       | 29.41                            | + .38                             | 40          | 37   | - 13                              | N      | 5                 | bc       | 4           | 54   | 38                  | 0.35 |  |
| PENINSULA.          | Cuxhaven ...                | 29.07                            | 45    | WSW    | 8                 | T        | 29.05                            | - .11                             | 42          | 41   | - 2                               | WSW    | 8                 | T        | *           | 48   | 41                  | 0.50 |  |
|                     | Berlin ...                  | 29.32                            | 50    | SSW    | 6                 | 0        | 29.34                            | - .24                             | 42          | 41   | + 2                               | SW     | 4                 | 0        | *           | 52   | 40                  | 0.16 |  |
|                     | Wiesbaden ...               | *                                | *     | *      | *                 | *        | 29.68                            | - .05                             | 45          | 41   | - 1                               | N      | 6                 | 0        | *           | 52   | 43                  | 0.32 |  |
|                     | Munich ...                  | 29.81                            | 38    | SSW    | 5                 | bc       | 29.80                            | - .18                             | 48          | 45   | + 13                              | N      | 8                 | 0        | *           | 48   | 35                  | 0.04 |  |
|                     | The Helder ...              | 29.09                            | 46    | SW     | 3                 | C        | 29.25                            | + .12                             | 43          | 40   | - 7                               | N      | 10                | 0        | 5           | 50   | 43                  | 0.28 |  |
|                     | Brussels (9 a.m.)           | *                                | *     | *      | *                 | *        | 29.62                            | + .16                             | 43          | 39   | - 7                               | WSW    | 6                 | 0        | *           | 53   | 42                  | 0.43 |  |
|                     | Cape Gris Nez               | 29.22                            | 50    | SW     | 8                 | T        | 29.56                            | + .17                             | 46          | 42   | - 7                               | N      | 8                 | bc       | 9           | 55   | 41                  | 0.20 |  |
|                     | Paris ...                   | 29.61                            | 54    | SSW    | 7                 | 0        | 29.91                            | + .18                             | 44          | 40   | - 6                               | WSW    | 3                 | 0        | *           | 56   | 43                  | 0.16 |  |
|                     | Brest ...                   | ?                                | 52    | N      | 6                 | T        | ?                                | ?                                 | 51          | 47   | - 3                               | N      | 4                 | 0        | 6           | 55   | 48                  | 0.12 |  |
|                     | Lorient ...                 | 29.62                            | 51    | WSW    | 8                 | T        | 30.03                            | + .29                             | 52          | 45   | - 3                               | N      | 5                 | bc       | 6           | 55   | 48                  | 0.20 |  |
| FRANCE AND BELGIUM. | Rocheport ...               | 29.91                            | 55    | WSW    | 7                 | 0        | 30.12                            | + .12                             | 52          | 50   | - 2                               | WNW    | 5                 | 0        | *           | 57   | 48                  | 0.08 |  |
|                     | Belfort ...                 | ?                                | 41    | N      | 8                 | T        | ?                                | ?                                 | 42          | 39   | + 3                               | N      | 8                 | T        | *           | 45   | 34                  | 0.28 |  |
|                     | Lyons ...                   | 30.02                            | 43    | S      | 2                 | bc       | 30.13                            | .00                               | 46          | 46   | + 6                               | N      | 1                 | T        | *           | 54   | 40                  | 0.04 |  |
|                     | Nice ...                    | 30.13                            | 49    | SE     | 1                 | C        | 30.07                            | + .02                             | 42          | 38   | - 9                               | E      | 2                 | 0        | 1           | 57   | 41                  | -    |  |
|                     | Perpignan ...               | 30.05                            | 58    | S      | 2                 | b        | 30.25                            | + .11                             | 53          | 51   | + 2                               | N      | 4                 | T        | *           | 64   | 48                  | 0.12 |  |
|                     | Biarritz ...                | 30.05                            | 58    | S      | 2                 | b        | 30.25                            | + .11                             | 53          | 51   | + 2                               | N      | 4                 | T        | *           | 64   | 48                  | 0.12 |  |
| PENINSULA.          | Corunna ...                 | *                                | *     | *      | *                 | *        | 30.32                            | - .00                             | 54          | 54   | + 1                               | NE     | 3                 | f        | *           | 57   | 52                  | 0.04 |  |
|                     | Lisbon ...                  | 30.31                            | 56    | SW     | 1                 | bc       | 30.32                            | - .00                             | 54          | 54   | + 1                               | NE     | 3                 | f        | *           | 57   | 52                  | 0.04 |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Friday, 11<sup>th</sup> December, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

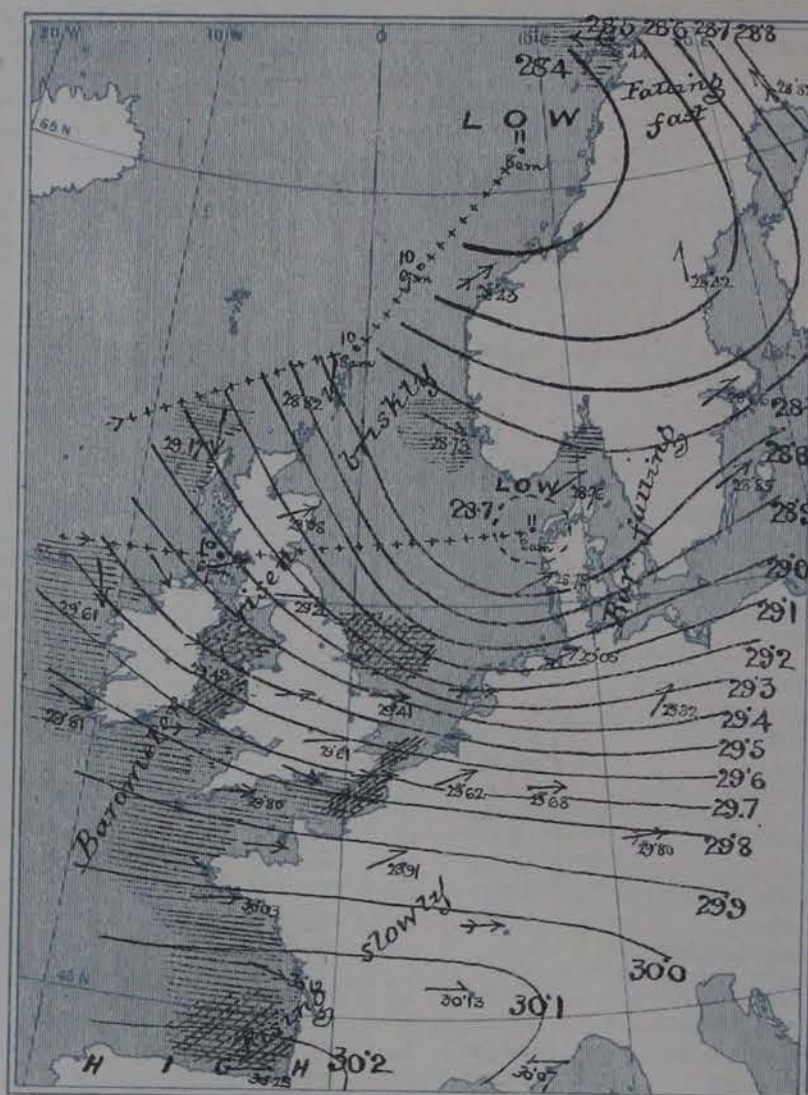
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
|               | in.            |
| Sumburgh Head | 29.573         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.953         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

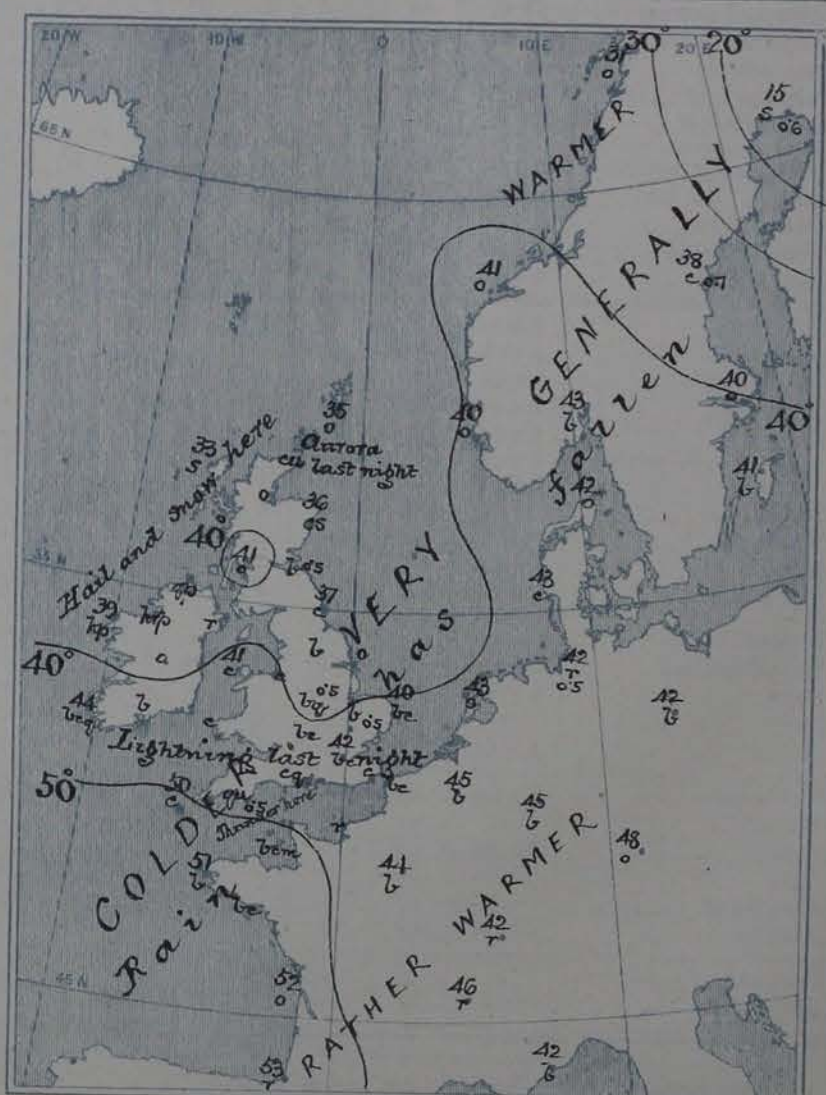
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |                   |      | RAINFALL<br>(Inches.) |
|---------------|---------------|---------------|-------------------|------|-----------------------|
|               | Daily<br>Max. | Daily<br>Min. | at 8 a.m.<br>Dry. | Wet. |                       |
| Sumburgh Head | 42.6          | 35.2          | 39.6              | 38.1 | 4.25                  |
| Stornoway     | 43.1          | 34.2          | 39.4              | 38.5 | 5.63                  |
| Wick          | 42.2          | 32.7          | 38.1              | 36.8 | 3.10                  |
| Nairn         | 41.9          | 32.8          | 37.1              | 35.6 | 1.95                  |
| Aberdeen      | 41.9          | 32.6          | 36.0              | 35.2 | 3.24                  |
| Leith         | 44.0          | 33.7          | 38.5              | 37.0 | 1.86                  |
| Shields       | 42.0          | 33.9          | 38.3              | 36.9 | 2.57                  |
| Spurn Head    | 42.4          | 35.3          | 38.8              | 37.7 | 2.14                  |
| York          | 42.3          | 32.8          | 36.4              | 35.4 | 2.28                  |
| Loughborough  | 42.7          | 34.2          | 36.3              | 35.4 | 2.24                  |
| Ardrossan     | 44.5          | 35.0          | 40.0              | 38.7 | 3.73                  |
| Mullaghmore   | 46.5          | 37.8          | 42.2              | 39.8 | 4.51                  |
| Donaghadee    | 45.8          | 36.2          | 40.2              | 39.3 | 2.84                  |
| Holyhead      | 46.4          | 39.1          | 42.8              | 41.1 | 3.82                  |
| Liverpool     | 43.5          | 35.6          | 38.8              | 37.1 | 2.59                  |
| Parsonstown   | 44.7          | 33.1          | 37.8              | 36.6 | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.6              | 42.4 | 5.99                  |
| Roche's Point | 47.0          | 38.0          | 42.9              | 41.5 | 4.95                  |
| Pembroke      | 45.8          | 40.3          | 43.6              | 42.2 | 3.99                  |
| Silly         | 49.5          | 43.1          | 47.0              | 45.1 | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5              | 41.1 | 3.70                  |
| Jersey        | 47.2          | 39.3          | 43.1              | 41.4 | 3.82                  |
| Hurst Castle  | 45.6          | 36.3          | 40.0              | 39.8 | 2.77                  |
| Dover         | 44.4          | 35.2          | 39.8              | 38.6 | 3.00                  |
| LONDON        | 44.0          | 33.9          | 37.8              | 36.7 | 2.10                  |
| Oxford        | 42.0          | 33.5          | 37.0              | 35.9 | 2.10                  |
| Cambridge     | 42.8          | 31.6          | 36.2              | 35.5 | 1.88                  |
| Yarmouth      | 41.0          | 33.7          | 37.9              | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 in: and upwards, over the southern parts of the Spanish Peninsula.  
 Lowest, 28.4 in: and less, in a depression lying off the west of Norway; 28.7 in: and less, in a secondary disturbance lying off the west of Denmark.  
 Gradients steep over the North Sea, the Netherlands, and North Germany, and rather steep over our islands, but slight in France and Scandinavia.  
 Barometer rising generally, but falling in North Germany, and also in the north of Sweden.

## TEMPERATURE

Highest, 54° at Lisbon, 53° at Biarritz, 52° at Jersey, Lorient and Rochefort, 51° at Brest, and 50° at Seilly.  
 Lowest, 15° at Haparanda, 31° at Bodo, 33° at Stenouway, 34° at Davahead, and 35° at Lumburgh. Wick, Nairn, and Leith.  
 During yesterday, the thermometer rose to 55° in London and to 56° at Seilly, Jersey, and Cambridge.

## WIND

Strong to a gale from the West or NW<sup>nd</sup> over nearly the whole of the United Kingdom, and from the W<sup>nd</sup> or SW<sup>nd</sup> over Germany and the Netherlands.  
 Moderate to strong from the SW<sup>nd</sup> over Denmark and the south of Scandinavia.  
 Gale from the SE<sup>nd</sup> or E<sup>nd</sup> are reported over the north of Scandinavia.

## WEATHER

Fine at present over a considerable portion of the United Kingdom, but hail showers reported at some of our northwestern stations and snow in the Hebrides and at Aberdeen.  
 Dull at many of the Continental stations, with snow at Haparanda, and rain in the south of France, but fine over Belgium and Germany.  
 Rain fell generally yesterday the largest amount being 0.5 in: at Leith, Loughborough, Malin, Wick, Newcastle, and Cambridge.  
 Aurora was seen last night at Wick, and thunder and lightning occurred at several of our western and southern stations.

## SEA

Very high at Spurn, Holyhead and Cape Fin Rey, and high or rough on nearly all the more exposed parts of our coasts.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indications of the advance of any new disturbance from the westward, but secondary depressions are very likely to pass across our islands, so that squally, showery weather is probable in most districts.

# FORECASTS

For the 24 hours ending at NOON on 12<sup>th</sup> December. 1891.

| DISTRICTS. |                  | FORECASTS. |  | DISTRICTS. |               | FORECASTS.  |   |
|------------|------------------|------------|--|------------|---------------|---|---|
| † 0        | SCOTLAND NORTH   | {          | NW <sup>ly</sup> winds, strong, perhaps a gale; squally, some snow showers.                  | † 6        | SCOTLAND WEST | Same as Nos 0 and 1.  |   |
| † 1        | SCOTLAND EAST    |            |  | † 7        | ENGLAND N.W.  | {   | W <sup>ly</sup> and NW <sup>ly</sup> gales, moderating later; squally, some cold showers. |
| † 2        | ENGLAND N.E.     | † 8        | ENGLAND S.W.   |            |               |   |   |
| † 3        | ENGLAND EAST     | † 9        | IRELAND NORTH  |            |               |   |   |
| † 4        | MIDLAND COUNTIES | † 10       | IRELAND SOUTH  |            |               |   |   |
| † 5        | ENGLAND SOUTH    |            | W <sup>ly</sup> winds, strong, a gale on coast; squally, some showers of cold rain or sleet. | WARNINGS   |               | At 0.30 pm yesterday to districts 7 to 9, "Keep up south cone"; at 7.10 pm to districts 0, 1, and 6, "hoist north cone". The signals are now flying on all coasts |   |

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

| THER: WIND        |       |    |    |     |    |      |     | THER: WIND    |       |    |    |     |    |      |     |
|-------------------|-------|----|----|-----|----|------|-----|---------------|-------|----|----|-----|----|------|-----|
|                   | BAR:  | D. | W. | D.  | F. | WEA. | SEA |               | BAR:  | D. | W. | D.  | F. | WEA. | SEA |
| Skudesnaes ...    | 28.19 | 46 | 43 | WSW | 8  | 1    | 8   | Holyhead ...  | 28.95 | 48 | 45 | WSW | 6  | bcy  | 5   |
| Sumburgh Head ... | 28.29 | 38 | 37 | WSW | 6  | 0    | 6   | Valencia ...  | 28.99 | 49 | 47 | SW  | 9  | py   | 7   |
| Stornoway ...     | 28.66 | 38 | 37 | WSW | 4  | 0    | 4   | Scilly ...    | 29.30 | 56 | 54 | WSW | 7  | 0    | 6   |
| Aberdeen ...      | 28.68 | 39 | 35 | W   | 8  | 6    | 4   | Jersey ...    | 29.50 | 55 | 53 | SW  | 6  | ogm  | 5   |
| Shields ...       | 28.76 | 46 | 44 | SW  | 4  | bc   | 2   | Dungeneas ... | 29.22 | 53 | 53 | SW  | 10 | 1    | 7   |
| Ardrossan ...     | 28.71 | 46 | 45 | SSW | 4  | p    | 4   | London ...    | 29.17 | 54 | 52 | W   | 6  | ogq  | 8   |
| Mulin Head ...    | 28.60 | 43 | 43 | SW  | 5  | 0    | 4   | Yarmouth ...  | 29.09 | 45 | 44 | WSW | 4  | ogq  | 4   |
| Mullaghmore ...   | 28.66 | 46 | 44 | SSW | 6  | ogpm | 6   | Rochefort ... | 29.13 | 55 | 54 | W   | 6  | 0    | 2   |
| Belmullet ...     | 28.65 | 47 | 45 | WSW | 8  | bcqp | *   |               |       |    |    |     |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather continuing in a very stormy rainy condition over the British Isles and North Sea, and unsettled over northwestern Europe generally. Somewhat unsettled also over the southern and eastern parts of the Mediterranean, with rain at Algiers and La Calle, but fairly quiet over Rousais, and the southern parts of Germany, France, and Spain. Rain falling later in all parts of Western Europe, snow, sleet or hail in the north of our Islands; thunder and lightning occurring in many parts of Ireland and the south of England.

Temperature changing frequently and suddenly, but not greatly. Morning readings below 60° at all stations excepting Malta, below 50° in many parts even of Spain, the south of France, and northern Italy, but exceeding 50° in the west and north of France and the south of England. Lowest of all 3° F. at Archangel, 17° at Haparanda, 19° at Kuopio, 20° at St. Petersburg, 22° at Moscow, Not below 40° at any of our own stations. Rising later to between 50° and 55° over the southern and southwestern part of England and Ireland, as well as in France, to 57° at Nice and Lisbon and to 64° at Biarritz.

Wind light and variable over southwestern, southern, and eastern Europe, stronger elsewhere. Blowing a strong gale from W. over the British Islands, and from SW. to S. on the eastern shore of the North Sea; moderate to strong from the S. over the Baltic, and from E. over Lapland and the north of Norway. Gales from W. and SW., varying much in force, continuing over our Islands during day and night and blowing very hard in many of the squalls — especially on our western and southern coasts.

Barometer highest (1) 30.3 ins. and more to 30.2 ins. over the Spanish Peninsula; (2) exceeding 30.1 ins. over southeastern Europe and Asia Minor, and exceeding 30.0 ins. all over southern Europe and the greater part of the Mediterranean. Lowest 28.0 ins. and less, in a very large depression, having its centre over the Shetlands; and rather below 30.0 ins. in some part of northern Italy. Northern depression subsequently travelling northwards, but new (secondary) one reaching our northwest coasts by evening and travelling eastwards quickly.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Saturday, 12<sup>th</sup> December, 1891.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

| STATIONS.           |                            | YESTERDAY EVENING.               |       |       |                   |          | 8 A.M. TO DAY.                   |                                   |             |      |                                   |       |                   |          |      |             | PAST 24 HOURS. |                     |  |
|---------------------|----------------------------|----------------------------------|-------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|------|-------------|----------------|---------------------|--|
|                     |                            | Barom.                           | Temp. | Wind. |                   | Weather. | Barometer.                       |                                   | Shade Temp. |      |                                   | Wind. |                   | Weather. | Sea. | Shade Temp. |                | Amount of Rainfall. |  |
|                     |                            | Reading at 32° F. and Sea Level. | Dry.  | Dir.  | Force. (0 to 12.) |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dir.  | Force. (0 to 12.) |          |      | Max.        | Min.           |                     |  |
| SCANDINAVIA.        | Haparanda ...              | 28.97                            | 13    | NE    | 4                 | 0        | 29.17                            | +33                               | 12          | 12   | -3                                | N     | 2                 | 0        | *    | 23          | 12             | 0.12                |  |
|                     | Hernösand ...              | 28.82                            | 36    | E     | 0                 | 6        | 29.19                            | +77                               | 25          | 24   | -13                               | N     | 2                 | 6        | *    | 39          | ?              | -                   |  |
|                     | Stockholm ...              | 28.89                            | 34    | E     | 0                 | 6        | 29.13                            | +47                               | 31          | 28   | -9                                | NW    | 2                 | 6        | *    | 43          | 31             | -                   |  |
|                     | Wishby ...                 | 28.91                            | 37    | S     | 4                 | 6        | 29.14                            | +29                               | 39          | 37   | -2                                | NW    | 8                 | 0        | *    | 43          | 34             | -                   |  |
|                     | Bodö ...                   |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     | Christiansund ...          | 28.91                            | 35    | W     | 7                 | S        | 29.10                            | +67                               | 33          | 33   | -8                                | W     | 7                 | S        | 4    | 41          | 33             | 0.71                |  |
|                     | Skudesnæs ...              | 29.19                            | 37    | NW    | 7                 | bc       | 29.48                            | +75                               | 36          | 34   | -4                                | NW    | 7                 | 0        | 5    | 40          | 34             | 0.08                |  |
|                     | Christiania Fjord (Frøder) | 28.91                            | 41    | NW    | 4                 | 0        | 29.32                            | +65                               | 37          | 32   | -6                                | NW    | 5                 | 6        | 4    | 43          | 36             | -                   |  |
|                     | Skagen (The Scaw)          | 29.04                            | 41    | NW    | 5                 | 0        | 29.41                            | +65                               | 38          | 34   | -4                                | NW    | 6                 | 6        | 3    | 43          | 34             | 0.32                |  |
|                     | Fanø ...                   | 29.22                            | 41    | NSW   | 6                 | bc       | 29.67                            | +88                               | 37          | 36   | -6                                | NW    | 4                 | bc       | *    | 45          | 36             | 0.12                |  |
| BRITISH ISLANDS.    | Sumburgh Head              | 29.22                            | 38    | NW    | 4                 | c        | 29.53                            | +69                               | 36          | 34   | +1                                | NW    | 5                 | 0        | 5    | 39          | 33             | 0.04                |  |
|                     | Stornoway ...              | 29.54                            | 33    | N     | 6                 | S        | 29.77                            | +60                               | 35          | 35   | +2                                | NW    | 4                 | 0        | 4    | 38          | 30             | 0.20                |  |
|                     | Wick ...                   | 29.51                            | 34    | NW    | 4                 | 0        | 29.71                            | +70                               | 32          | 31   | -3                                | NW    | 4                 | bc       | 2    | 41          | 30             | 0.40                |  |
|                     | Nairn ...                  | 29.53                            | 33    | W     | 2                 | c        | 29.80                            | +71                               | 33          | 32   | -2                                | W     | 1                 | 6        | 1    | 37          | 30             | 0.13                |  |
|                     | Aberdeen ...               | 29.52                            | 34    | NW    | 5                 | cqsp     | 29.82                            | +74                               | 35          | 31   | -1                                | W     | 4                 | bc       | 3    | 36          | 32             | 0.29                |  |
|                     | Leith ...                  | 29.60                            | 34    | SW    | 1                 | bc       | 29.90                            | +68                               | 37          | 35   | +2                                | SW    | 2                 | bc       | *    | 40          | 32             | -                   |  |
|                     | Shields ...                | 29.63                            | 38    | W     | 4                 | b        | 29.94                            | +74                               | 36          | 34   | -1                                | W     | 2                 | bc       | 2    | 40          | 33             | -                   |  |
|                     | Spurn Head ...             | 29.72                            | 38    | W     | 6                 | bc       | 30.03                            | +73                               | 36          | 35   | -2                                | NSW   | 4                 | c        | 4    | 45          | 35             | -                   |  |
|                     | York ...                   | 29.74                            | 37    | W     | 3                 | b        | 30.03                            | +66                               | 36          | 35   | -1                                | S     | 1                 | b        | *    | 47          | 33             | -                   |  |
|                     | Loughborough               | 29.81                            | 37    | W     | 6                 | b        | 30.06                            | +63                               | 35          | 33   | -4                                | SW    | 2                 | cm       | *    | 44          | 35             | 0.01                |  |
| GERMANY & HOLLAND.  | Ardrossan ...              | 29.69                            | 42    | NW    | 6                 | bqrs     | 29.91                            | +60                               | 43          | 41   | +2                                | SSW   | 2                 | 0        | 2    | 47          | 36             | 0.04                |  |
|                     | Malin Head ...             | 29.78                            | 42    | NW    | 6                 | bqrs     | 29.82                            | +42                               | 36          | 34   | -2                                | SE    | 3                 | 0        | 3    | 43          | 34             | 0.02                |  |
|                     | Mullaghmore ...            | 29.92                            | 43    | NW    | 6                 | bc       | 29.82                            | +32                               | 39          | 36   | +1                                | SW    | 5                 | ogm      | 5    | 43          | 36             | 0.05                |  |
|                     | Belmullet ...              | 29.98                            | 41    | NW    | 4                 | b        | ?                                | ?                                 | 34          | 34   | -5                                | E     | 6                 | os       | *    | 43          | 33             | 0.34                |  |
|                     | Donaghadee ...             | 29.85                            | 35    | W     | 6                 | b        | 29.95                            | +55                               | 34          | 34   | 0                                 | S     | 2                 | b        | 0    | 40          | 32             | 0.03                |  |
|                     | Liverpool (Bilston)        | 29.83                            | 41    | W     | 7                 | bc       | 30.04                            | +65                               | 37          | 35   | -3                                | SSW   | 2                 | 0        | 3    | 43          | 37             | 0.08                |  |
|                     | Holyhead ...               | 29.89                            | 42    | NW    | 7                 | cq       | 29.98                            | +49                               | 42          | 39   | +1                                | S     | 1                 | og       | 2    | 43          | 39             | -                   |  |
|                     | Parsonstown ...            | 30.01                            | 37    | E     | 0                 | bc       | 29.77                            | +12                               | 35          | 35   | -1                                | SE    | 2                 | r        | *    | 41          | 31             | 0.14                |  |
|                     | Valencia ...               | 30.06                            | 42    | NW    | 1                 | bc       | 29.55                            | -26                               | 49          | 49   | +5                                | SE    | 7                 | rm       | 6    | 49          | 37             | 0.61                |  |
|                     | Roche's Point...           | 30.06                            | 42    | NW    | 4                 | b        | 29.74                            | +02                               | 47          | 47   | +5                                | SE    | 7                 | r        | 5    | 47          | 35             | 0.40                |  |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.)   | 30.01                            | 44    | NW    | 5                 | bc       | 29.94                            | +27                               | 44          | 43   | -3                                | SE    | 6                 | 0        | 5    | 47          | 41             | 0.02                |  |
|                     | Scilly ...                 | 30.04                            | 47    | NW    | 5                 | c        | 29.93                            | +10                               | 50          | 49   | 0                                 | S     | 6                 | r        | 6    | 51          | 42             | 0.16                |  |
|                     | Prawle Point ...           | 30.04                            | 41    | NW    | 2                 | b        | 30.09                            | +29                               | 45          | 44   | +1                                | SSE   | 4                 | ogu      | 3    | 43          | 36             | 0.11                |  |
|                     | Jersey (St. Aubin's)       | 30.06                            | 49    | W     | 4                 | bqrs     | 30.20                            | +32                               | 48          | 43   | -4                                | SSE   | 3                 | ogm      | 3    | 53          | 37             | 0.12                |  |
|                     | Hurst Castle ...           | 29.98                            | 43    | NW    | 6                 | b        | 30.16                            | +44                               | 44          | 40   | -2                                | SSW   | 3                 | c        | 3    | 47          | 35             | 0.04                |  |
|                     | Dungeness ...              | 29.87                            | 41    | NW    | 4                 | bc       | 30.18                            | +54                               | 32          | 32   | -13                               | N     | 2                 | b        | 3    | 48          | 30             | -                   |  |
|                     | London ...                 | 29.91                            | 40    | NW    | 3                 | b        | 30.15                            | +54                               | 30          | 30   | -12                               | SW    | 1                 | bm       | *    | 47          | 30             | -                   |  |
|                     | Oxford ...                 | 29.97                            | 38    | W     | 4                 | b        | 30.14                            | +53                               | 33          | 32   | -8                                | NSW   | 1                 | f        | *    | 45          | 33             | -                   |  |
|                     | Cambridge ...              | 29.85                            | 38    | NSW   | 2                 | b        | 30.15                            | +62                               | 33          | 32   | -8                                | S     | 1                 | b        | *    | 46          | 32             | -                   |  |
|                     | Yarmouth ...               | 29.74                            | 38    | W     | 5                 | b        | 30.07                            | +66                               | 33          | 32   | -7                                | W     | 3                 | bm       | 3    | 42          | 32             | -                   |  |
| GERMANY & HOLLAND.  | Cuxhaven ...               | 29.38                            | 40    | W     | 7                 | r        | 29.77                            | +72                               | 40          | 39   | -2                                | NW    | 7                 | r        | *    | 43          | 39             | 0.16                |  |
|                     | Berlin ...                 | 29.59                            | 39    | W     | 4                 | c        | 29.83                            | +49                               | 38          | 36   | -4                                | W     | 6                 | bc       | *    | 52          | 36             | 0.12                |  |
|                     | Wiesbaden ...              | *                                | *     | *     | *                 | *        | 30.17                            | +49                               | 37          | 35   | -8                                | W     | 3                 | b        | *    | 48          | 36             | 0.20                |  |
|                     | Munich ...                 | 29.98                            | 42    | SW    | 8                 | b        | 30.22                            | +42                               | 38          | 32   | -15                               | SW    | 5                 | c        | *    | 48          | 32             | -                   |  |
|                     | The Helder ...             |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     | Brussels (9 a.m.)          | *                                | *     | *     | *                 | *        |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     | Cape Gris Nez              | 29.86                            | 44    | W     | 7                 | b        | 30.13                            | +57                               | 41          | 38   | -5                                | W     | 3                 | b        | 5    | 50          | 37             | -                   |  |
|                     | Paris ...                  | 30.05                            | 45    | NW    | 5                 | r        | 30.28                            | +37                               | 33          | 33   | -11                               | S     | 2                 | b        | *    | 52          | 32             | 0.04                |  |
|                     | Brest ...                  | ?                                | 50    | W     | 3                 | bc       | ?                                | ?                                 | 51          | 48   | 0                                 | SSW   | 3                 | c        | *    | 54          | 46             | 0.12                |  |
|                     | Lorient ...                | 30.13                            | 50    | NW    | 4                 | c        | 30.16                            | +13                               | 51          | 48   | -1                                | SSW   | 3                 | 0        | 5    | 54          | 46             | -                   |  |
| FRANCE AND BELGIUM. | Rochefort ...              | 30.20                            | 52    | W     | 4                 | c        | 30.28                            | +16                               | 48          | 47   | -4                                | SE    | 3                 | 0        | *    | 55          | 46             | -                   |  |
|                     | Belfort ...                | ?                                | 40    | ?     | 5                 | c        | ?                                | ?                                 | 38          | 32   | -4                                | W     | 3                 | c        | *    | 46          | 36             | 0.20                |  |
|                     | Lyons ...                  | 30.24                            | 45    | S     | 1                 | b        | 30.37                            | +24                               | 36          | 35   | -10                               | S     | 1                 | bc       | *    | 55          | 36             | -                   |  |
|                     | Nice ...                   | 30.02                            | 51    | ESE   | 1                 | b        | 30.11                            | +04                               | 44          | 42   | +2                                | E     | 2                 | bc       | 2    | 59          | 42             | -                   |  |
|                     | Perpignan ...              | 30.27                            | 46    | SW    | 1                 | c        | 30.33                            | +16                               | 46          | 44   | +9                                | W     | 1                 | 0        | *    | 61          | 37             | -                   |  |
|                     | Biarritz ...               | 30.30                            | 59    | N     | 2                 | r        | 30.28                            | +03                               | 52          | 50   | -1                                | SE    | 2                 | 0        | 7    | 61          | 48             | -                   |  |
|                     | Corunna ...                | *                                | *     | *     | *                 | *        |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     | Lisbon ...                 | 30.31                            | 54    | NE    | 4                 | 0        | 30.29                            | -03                               | 49          | 48   | -5                                | NE    | 4                 | b        | *    | 55          | 48             | -                   |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     | GERMANY & HOLLAND.         |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |
|                     |                            |                                  |       |       |                   |          |                                  |                                   |             |      |                                   |       |                   |          |      |             |                |                     |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Saturday, 12<sup>th</sup> Dec<sup>r</sup>, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;

→ forces 5 to 7; → forces 1 to 4.

⊙ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

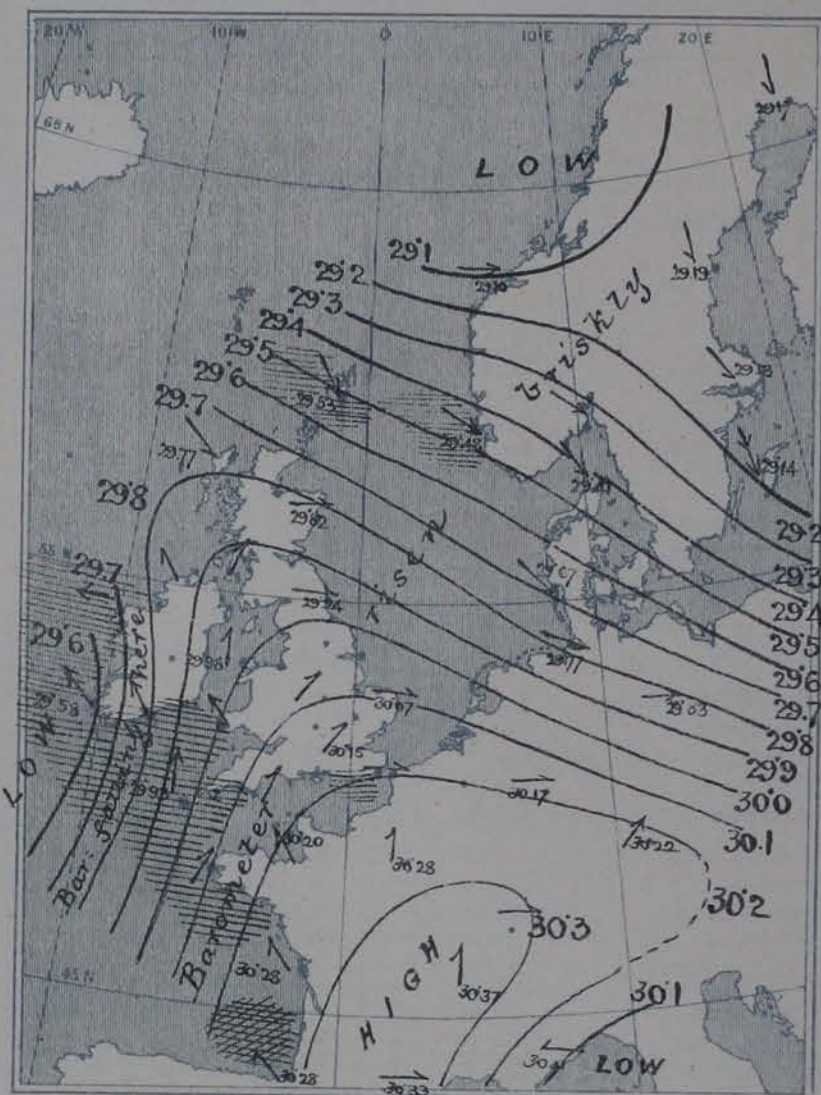
≡ = Rough. ≡ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Sornoway      | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrrossan    | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |           |       | RAINFALL.<br>(Inches.) |
|---------------|---------------|---------------|-----------|-------|------------------------|
|               | Daily<br>Max. | Daily<br>Min. | At 8 a.m. | Wind. |                        |
| Sumburgh Head | 42.6          | 35.2          | 39.0      | 38.1  | 4.25                   |
| Sornoway      | 43.1          | 34.2          | 39.4      | 38.5  | 5.63                   |
| Wick          | 42.2          | 32.7          | 38.1      | 36.8  | 3.10                   |
| Nairn         | 41.9          | 32.8          | 37.1      | 35.6  | 1.95                   |
| Aberdeen      | 41.9          | 32.6          | 36.9      | 35.2  | 3.24                   |
| Leith         | 44.0          | 33.7          | 38.5      | 37.0  | 1.86                   |
| Shields       | 42.9          | 33.9          | 38.3      | 36.9  | 2.67                   |
| Spurn Head    | 42.4          | 33.3          | 38.8      | 37.7  | 2.14                   |
| York          | 42.3          | 32.3          | 36.4      | 35.4  | 2.28                   |
| Loughborough  | 42.7          | 32.2          | 36.3      | 35.4  | 2.24                   |
| Ardrrossan    | 41.5          | 33.9          | 40.0      | 38.7  | 3.73                   |
| Mullaghmore   | 40.5          | 37.8          | 42.2      | 39.8  | 4.51                   |
| Donaghadee    | 45.8          | 36.2          | 40.2      | 39.3  | 2.84                   |
| Holyhead      | 46.4          | 39.1          | 42.8      | 41.1  | 3.82                   |
| Liverpool     | 43.5          | 35.6          | 38.8      | 37.1  | 2.59                   |
| Parsonstown   | 44.7          | 33.1          | 37.8      | 36.6  | 3.04                   |
| Valencia      | 49.7          | 40.0          | 44.6      | 42.4  | 5.99                   |
| Roche's Point | 47.9          | 38.9          | 42.9      | 41.5  | 4.95                   |
| Pembroke      | 43.8          | 40.3          | 43.0      | 42.2  | 3.99                   |
| Scilly        | 49.9          | 43.1          | 47.0      | 46.1  | 4.02                   |
| Prawle Point  | 47.0          | 38.2          | 42.5      | 41.1  | 3.76                   |
| Jersey        | 47.3          | 39.3          | 43.1      | 41.4  | 3.82                   |
| Hurst Castle  | 45.6          | 36.3          | 40.6      | 39.8  | 2.77                   |
| Dover         | 47.3          | 35.9          | 39.8      | 38.6  | 3.00                   |
| LONDON        | 44.0          | 33.9          | 37.8      | 36.7  | 2.10                   |
| Oxford        | 42.9          | 33.5          | 37.0      | 35.9  | 2.10                   |
| Cambridge     | 42.8          | 31.6          | 36.2      | 35.5  | 1.88                   |
| Yarmouth      | 41.9          | 33.7          | 37.9      | 37.0  | 2.66                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

|             |   |
|-------------|---|
| PRESSURE    | Highest, 30.3 ins. and upwards, in an anticyclone lying over the southern parts of France.<br>Lowest, 29.1 ins. and less, in the northwest of Norway; 29.6 ins. and less, in a depression lying to the southwestward of Ireland.<br>Gradients moderate generally, but becoming steep over the southwest of our Islands.<br>Barometer rising generally, but falling quickly in Ireland and the southwest of England. |
| TEMPERATURE | Highest, 52° at Biarritz, 51° at Brest and Lorient, 50° at Seilly, 49° at Valence Island and Lirbo, and 48° at Jersey and Rochefort.<br>Lowest, 12° at Haparanda, 25° at Helsingfors, 30° in London, 31° at Stockholm, and 32° at Nish and Helsingfors.<br>Frost occurred last night in many parts of the United Kingdom; in London the thermometer in the grass fell to 20°.                                       |
| WIND        | S <sup>1</sup> or SE <sup>1</sup> on the west coasts of our Islands and France, strong in force in the south of Ireland and the southwest of England.<br>Moderate from the W <sup>nd</sup> on the east coasts of Great Britain, and from the NW <sup>nd</sup> in the extreme north.<br>Strong from W. or NW. on the eastern shores of the North Sea, but light from the N <sup>nd</sup> in Sweden.                  |
| WEATHER     | Rainy in the southwest of our Islands, dull in the northwest (with snow at Helmslet) and in the west of France.<br>Fine in most other parts of Western Europe, but dull in the east of Norway, with rain at Christianund.<br>Snow fell yesterday in many parts of Scotland; snow-halos were seen in the evening at several of our western and southern stations.  |
| SEA         | High at Biarritz, rough on our southwest coasts and rather rough in the Straits of Dover, as well as at Skudesnæs and Sumburg H <sup>l</sup> .  |

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which is approaching the southwest of Ireland is evidently of considerable size and depth, and is likely to occasion an increase of wind in all parts of the Kingdom, with squally, rainy weather.

## FORECASTS

For the 24 hours ending at NOON on December 13<sup>th</sup> 1891.

| DISTRICTS.         | FORECASTS.  | DISTRICTS.       | FORECASTS.   |
|--------------------|---|------------------|--|
| 0 SCOTLAND NORTH   | Wind backing to the SE <sup>nd</sup> and freshening, fine to unsettled and some snow.           | 6 SCOTLAND WEST  | Same as N <sup>o</sup> 0 and 1.  |
| 1 SCOTLAND EAST    |   | 7 ENGLAND N.W.   | SE <sup>ly</sup> winds, increasing to a gale, squally, rainy.                |
| 2 ENGLAND N.E.     |   | 8 ENGLAND S.W.   | S <sup>ly</sup> to SW <sup>ly</sup> strong winds and gales, squally, rainy.  |
| 3 ENGLAND EAST     | Same as N <sup>o</sup> 5  | 9 IRELAND NORTH  | Same as N <sup>o</sup> 7.  |
| 4 MIDLAND COUNTIES |   | 10 IRELAND SOUTH | SE <sup>ly</sup> to S <sup>ly</sup> strong winds and gales, squally, rainy.  |
| 5 ENGLAND SOUTH    | S <sup>ly</sup> winds, increasing in force; fair to squally and rainy, temperature rising fast. | WARNINGS         | Orders issued at 10 am today to reburst the SOUTH CONE in districts 7 to 10. |

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.

The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR.  | THER. |    | WIND |    | WEA. | SEA |               | BAR.  | THER. |    | WIND |    | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|---------------|-------|-------|----|------|----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |               |       | D.    | W. | D.   | F. |      |     |
| Skudesnaes ...    | 28.91 | 37    | 37 | NW   | 5  | rs   | 4   | Holyhead ...  | 29.75 | 42    | 39 | NW   | 7  | bcy  | 6   |
| Sumburgh Head ... | 29.12 | 37    | 34 | NW   | 2  | bc   | 4   | Valencia ...  | 30.01 | 46    | 40 | NW   | 4  | cq   | 4   |
| Stornoway ...     | 29.42 | 36    | 35 | N    | 4  | S    | 5   | Scilly ...    | 29.97 | 49    | 45 | NW   | 6  | C    | 6   |
| Aberdeen ...      | 29.36 | 36    | 33 | N    | 5  | bcy  | 4   | Jersey ...    | 29.99 | 49    | 47 | N    | 5  | bc   | 5   |
| Shields ...       | 29.49 | 39    | 36 | N    | 4  | bc   | 2   | Dungeness ... | 29.74 | 45    | 43 | NW   | 5  | C    | 3   |
| Ardrossan ...     | 29.55 | 40    | 39 | WSW  | 3  | C    | 3   | London ...    | 29.73 | 47    | 43 | WSW  | 4  | bc   | *   |
| Malin Head ...    | 29.62 | 39    | 38 | NW   | 6  | C    | 5   | Yarmouth ...  | 29.60 | 42    | 38 | NW   | 6  | bcy  | 4   |
| Mullaghmore ...   | 29.80 | 40    | 37 | NW   | 7  | bcy  | 6   | Rocheport ... | 30.19 | 54    | 50 | NW   | 4  | bc   | *   |
| Belmullet ...     | 29.86 | 42    | 39 | NW   | 6  | b    | *   |               |       |       |    |      |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning still very rough and unsettled over the British Islands and northwestern Europe, and the change spreading eastwards to northern Russia; sky overcast in many places, with snow over Finland and Lapland, as well as several parts of Scotland, rain in the eastern shores of the North Sea, but a distinct tendency to improvement over Ireland and England. Still fine and quiet over southeastern and southeastern Europe, fair over the Mediterranean. Snow later over our northern and northwestern districts, rain in the west and southwest, and some shower in France.

Temperature falling decidedly over the British Islands, rising over Central Europe, northern Russia and Finland. Morning readings ranging between 50° and 60° on the southeastern, southern, and southwestern shores of the Mediterranean, and exceeding 50° in Portugal and the west of France, as well as at Prague and Cracow; below that value over our Islands and Central Europe, and as low as (1) 15° at Haparanda, 27° at Moscow; (2) 26° at Bismarckstadt, 31° at Kharkov and Buda-Pesth; (3) 33° at Stornoway, 35° at Nain and Leith, 37° at York, 38° in the north of Ireland. Not touching 50° in our Islands all day, but touching 59° at Wex, 61° at Perpignan and Biarritz.

Wind light to moderate and anticyclonic over southeastern and southeastern Europe, fresh to a strong gale over the more northern countries, and blowing a hard gale from NW. and W. over Ireland and England, from W. in the Netherlands, a fresh to strong breeze from SW. over the Baltic, from S to SE. in Finland, and from E in Lapland. Gale in our Islands moderating later, and wind veering northwards very generally.

Barometer highest 30.3 ins: and more to 30.2 ins: over the Iberian Peninsula, 30.2 ins: and more over the Black Sea, Turkey in Europe, and Asia Minor, and exceeding 30.1 ins: over the Mediterranean and Italy. Lowest 28.4 ins: and less, in a large depression, the central parts of which lay over the northwest of Norway, and about 28.7 ins: in another (deep secondary) system over Denmark. Both systems travelling northward or eastwards later, and barometer rising quickly on all our coasts.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

WEATHER.—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.  
\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 3 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.  
" Weekly " " " £1 10 0 "



# DAILY WEATHER REPORT.

for Sunday 13<sup>th</sup> December. 1891.  
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| Issued by the Meteorological Office, 45, Victoria Street, London. R. H. SCOTT, Secretary. |                             |                    |       |   |      |          |                |                      |   |   |      |       |   |          |                   |             |                      |                           |      |
|---|-----------------------------|--------------------|-------|---|------|----------|----------------|----------------------|---|---|------|-------|---|----------|-------------------|-------------|----------------------|---------------------------|------|
| STATIONS.   |                             | YESTERDAY EVENING. |       |   |      |          | 8 A.M. TO DAY. |                      |   |   |      |       |   |          |                   |             | PAST 24 HOURS.       |                           |      |
|   |                             | BAROM.             | TEMP. | WIND.                                     |      | Weather. | BAROMETER.     |                      | SHADE TEMP.                               |   |      | WIND. |   | Weather. | Sea.<br>(0 to 3.) | SHADE TEMP. |                      | Amount<br>of<br>Rainfall. |      |
|   |                             |                    |       | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry. |          | Dir.           | Force.<br>(0 to 12.) | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry. | Wet.  | Difference<br>from 8 a.m.<br>yesterday. |          |                   | Dir.        | Force.<br>(0 to 12.) |                           | Max. |
| SCANDINAVIA.  | Haparanda ...               | 29.46              | 5     | NE  | 2    | 0        | 29.68          | + .51                | -12                                       | -13                                     | -24  | Z     | 0                                       | bc       | *                 | 18          | ?                    | 0.04                      |      |
|   | Hernösand ...               | 29.47              | 15    | Z   | 0    | 6        | 29.42          | + .23                | 25  | 24                                      | 0    | N     | 2                                       | s        | *                 | 37          | 12                   | 0.04                      |      |
|   | Stockholm ...               | 29.46              | 28    | W   | 2    | 6        | 29.50          | + .37                | 26  | 25                                      | -5   | SW    | 2                                       | 6        | *                 | 36          | 27                   | —                         |      |
|   | Wisby ...                   | 29.58              | 37    | NW  | 4    | 6        | 29.62          | + .48                | 36  | 36                                      | -3   | SW    | 4                                       | bc       | *                 | 24          | 32                   | —                         |      |
|   | Bodö ...                    | 29.19              | 21    | E   | 6    | r        | 29.39          |                      | 20  | 19                                      |      | E     | 6                                       | 0        | 3                 | 25          | 19                   | —                         |      |
|   | Christiansund               | 29.12              | 37    | WSW                                       | 9    | s        | 29.26          | + .16                | 35  | 33                                      | + 2  | ? WSW | 3                                       | c        | 5                 | 37          | 32                   | 0.55                      |      |
|   | Skudesnaes ...              | 29.69              | 29    | NW  | 2    | c        | 29.15          | - .33                | 38  | 34                                      | + 2  | E     | 6                                       | 0        | 4                 | 39          | 36                   | 0.12                      |      |
|   | Christiania Fjord<br>(Færd) | 29.56              | 38    | WNW                                       | 5    | 6        | 29.41          | + .09                | 37  | 33                                      | 0    | NNE   | 3                                       | 0        | 3                 | ?           | 36                   | —                         |      |
|   | Skagen (The Seaw)           |                    | 29    | WNW                                       | 4    | bc       | 29.38          | - .03                | 37  | 36                                      | -1   | S     | 4                                       | r        | 3                 | 39          | 34                   | 0.04                      |      |
|   | Fanö ...                    |                    |       |   |      |          |                |                      |   |   |      |       |   | *        |                   |             |                      |                           |      |
| BRITISH ISLANDS.  | Sumburgh Head               | 29.86              | 35    | Z   | 0    | bc       | 29.14          | - .39                | 34  | 36                                      | + 3  | ENE   | 1                                       | 0        | 3                 | 41          | 34                   | 0.05                      |      |
|   | Stornoway ...               | 29.47              | 41    | SW  | 4    | 0        | 28.94          | - .78                | 38  | 38                                      | + 3  | SE    | 4                                       | r        | 4                 | 41          | 32                   | 0.05                      |      |
|   | Wick ...                    | 29.53              | 40    | S   | 2    | 0        | 29.02          | - .69                | 40  | 40                                      | + 8  | SE    | 7                                       | ow       | 6                 | 41          | 30                   | 0.18                      |      |
|   | Nairn ...                   | 29.44              | 34    | Z   | 0    | 0        | 29.01          | - .79                | 34  | 34                                      | + 1  | Z     | 0                                       | 0        | 1                 | 35          | 30                   | 0.03                      |      |
|   | Aberdeen ...                | 29.59              | 38    | SSE                                       | 4    | opq      | 29.03          | - .79                | 35  | 35                                      | 0    | WNW   | 3                                       | c        | 6                 | 39          | 33                   | 0.22                      |      |
|   | Leith ...                   | 29.42              | 34    | E   | 2    | r        | 29.03          | - .87                | 35  | 35                                      | -2   | Z     | 0                                       | rm       | *                 | 40          | 33                   | 0.28                      |      |
|   | Shields ...                 | 29.55              | 35    | ESE                                       | 5    | sr       | 29.06          | - .88                | 43  | 40                                      | + 7  | WSW   | 2                                       | bc       | 3                 | 43          | 30                   | 0.13                      |      |
|   | Spurn Head ...              | 29.57              | 37    | SSE                                       | 6    | r        | 29.18          | - .95                | 45  | 45                                      | + 9  | S     | 4                                       | 0        | 4                 | 49          | 37                   | 0.16                      |      |
|   | York ...                    | 29.59              | 35    | S   | 3    | r        | 29.08          | - .95                | 43  | 42                                      | + 7  | ESE   | 1                                       | 0        | *                 | 50          | 32                   | 0.54                      |      |
|   | Loughborough                | 29.60              | 45    | S   | 6    | r        | 29.16          | - .90                | 46  | 45                                      | + 11 | S     | 2                                       | r        | *                 | 53          | 31                   | 0.21                      |      |
| GERMANY & HOLLAND.  | Ardrossan ...               | 29.36              | 35    | E   | 4    | r        | 29.05          | - .86                | 46  | 45                                      | + 3  | W     | 2                                       | 0        | 3                 | 44          | 32                   | 0.65                      |      |
|   | Malin Head ...              | 29.25              | 38    | SE  | 5    | 0        | 28.95          | - .87                | 42  | 41                                      | + 6  | WNW   | 3                                       | 0        | 2                 | 44          | 32                   | 0.48                      |      |
|   | Mullaghmore ...             | 29.24              | 47    | SW  | 1    | 0        | 28.95          | - .87                | 44  | 43                                      | + 5  | SSW   | 4                                       | 0        | 2                 | 45          | 34                   | 0.63                      |      |
|   | Belmullet ...               | 29.21              | 48    | SW  | 4    | 0        | 28.91          | - .87                | 46  | 45                                      | + 12 | S     | 4                                       | bc       | *                 | 49          | 33                   | 0.23                      |      |
|   | Donaghadee ...              | 29.32              | 47    | S   | 5    | 0        | 29.02          | - .92                | 42  | 43                                      | + 9  | SW    | 3                                       | c        | 3                 | 47          | 33                   | 0.74                      |      |
|   | Liverpool (Bidston)         | 29.48              | 41    | SSE                                       | 4    | 0        | 29.08          | - .96                | 43  | 43                                      | + 6  | ESE   | 3                                       | r        | 3                 | 51          | 33                   | 0.43                      |      |
|   | Holyhead ...                | 29.40              | 51    | SSW                                       | 5    | rgm      | 28.98          | - 1.00               | 45  | 45                                      | + 3  | SE    | 4                                       | rmg      | 3                 | 52          | 34                   | 1.03                      |      |
|   | Parsonstown ...             | 29.33              | 49    | Z   | 0    | r        | 29.02          | - .875               | 42  | 42                                      | + 8  | Z     | 0                                       | c        | *                 | 52          | 34                   | 0.74                      |      |
|   | Valencia ...                | 29.34              | 51    | SSW                                       | 7    | ogpdr    | 29.03          | - .82                | 50  | 48                                      | + 1  | SW    | 6                                       | omg      | 6                 | 54          | 44                   | 1.32                      |      |
|   | Roche's Point...            | 29.41              | 50    | WSW                                       | 5    | r        | 29.08          | - .66                | 43  | 42                                      | -4   | W     | 4                                       | r        | 5                 | 52          | 42                   | 1.70                      |      |
| FRANCE AND BELGIUM.   | Pembroke (St. Ann's Hd.)    | 29.46              | 52    | SW  | 7    | r        | ?              | ?                    | 45  | 45                                      | + 1  | W     | 11                                      | rg       | 9                 | 52          | 39                   | 0.98                      |      |
|   | Seilly ...                  | 29.59              | 54    | SSW                                       | 7    | p        | 29.31          | - .62                | 52  | 49                                      | + 2  | WSW   | 9                                       | c        | 7                 | 54          | 49                   | 1.14                      |      |
|   | Prawle Point...             | 29.73              | 53    | SSW                                       | 7    | 0        | 29.26          | - .83                | 51  | 48                                      | + 6  | WSW   | 8                                       | cgl      | ?                 | 53          | 42                   | 0.14                      |      |
|   | Jersey (St. Aubin's)        | 29.93              | 53    | SSE                                       | 4    | ogrw     | 29.50          | - .70                | 50  | 48                                      | + 2  | SW    | 7                                       | ogrlhrw  | 5                 | 54          | 46                   | 0.53                      |      |
|   | Hurst Castle ...            | 29.78              | 52    | SSW                                       | 8    | cdm      | 29.28          | - .88                | 52  | 50                                      | + 8  | WSW   | 10                                      | cgl      | 6                 | 54          | 41                   | 0.32                      |      |
|   | Dungeness ...               | 29.91              | 48    | SW  | 6    | r        | 29.40          | - .78                | 51  | 50                                      | + 19 | SW    | 8                                       | cq       | 6                 | 52          | 28                   | 0.08                      |      |
|   | London ...                  | 29.79              | 49    | S   | 4    | ogd      | 29.24          | - .91                | 51  | 47                                      | + 21 | WSW   | 8                                       | 0        | *                 | 53          | 30                   | 0.22                      |      |
|   | Oxford ...                  | 29.61              | 51    | S   | 5    | 0        | 29.18          | - .96                | 49  | 48                                      | + 16 | S     | 5                                       | rq       | *                 | 53          | 30                   | 0.23                      |      |
|   | Cambridge ...               | 29.68              | 44    | SW  | 3    | r        | 29.16          | - .99                | 49  | 47                                      | + 16 | S     | 3                                       | r        | *                 | 52          | 31                   | 0.09                      |      |
|   | Yarmouth ...                | 29.83              | 42    | S   | 6    | rg.      | 29.31          | - .76                | 48  | 47                                      | + 15 | SSW   | 5                                       | 0        | 4                 | 48          | 31                   | 0.13                      |      |
| PENINSULA.  | Cuxhaven ...                | 29.98              | 43    | W   | 4    | r        | 29.44          | - .33                | 43  | 43                                      | + 3  | SW    | 6                                       | 0        | *                 | 45          | 40                   | 0.22                      |      |
|   | Berlin ...                  | 30.09              | 37    | W   | 4    | c        | 29.78          | - .05                | 34  | 33                                      | -4   | S     | 4                                       | s        | *                 | 39          | 32                   | —                         |      |
|   | Wiesbaden ...               | *                  | *     | *   | *    | *        | 29.86          | - .31                | 37  | 36                                      | 0    | W     | 3                                       | 0        | *                 | 41          | 32                   | —                         |      |
|   | Munich ...                  | 30.31              | 29    | Z   | 0    | 6        | 30.04          | - .18                | 31  | 30                                      | -2   | SW    | 5                                       | c        | *                 | 36          | 27                   | —                         |      |
|   | The Helder ...              | 29.93              | 40    | S   | 3    | r        | 29.43          |                      | 47  | 46                                      |      | SW    | 4                                       | c        | 4                 | 47          | 39                   | 0.08                      |      |
|   | Brussels (9 a.m.)           | *                  | *     | *   | *    | *        | 29.63          |                      | 47  | 46                                      |      | SSW   | 5                                       | 0        | *                 | 47          | 33                   | 0.04                      |      |
|   | Cape Gris Nez               | 29.93              | 45    | S   | 5    | 0        | 29.83          | - .60                | 49  | 48                                      | + 8  | S     | 5                                       | c        | 5                 | ?           | 39                   | 0.08                      |      |
|   | Paris ...                   | 30.15              | 43    | S   | 2    | 0        | 29.84          | - .44                | 49  | 47                                      | + 16 | SSW   | 4                                       | a        | *                 | ?           | 33                   | —                         |      |
|   | Brest ...                   | ?                  | 55    | SW  | 4    | 0        | ?              | ?                    | 54  | 54                                      | + 3  | W     | 8                                       | r        | 5                 | 55          | 50                   | 0.35                      |      |
|   | Lorient ...                 | 29.97              | 55    | SSW                                       | 5    | 0        | 29.62          | - .54                | 56  | 53                                      | + 5  | SW    | 8                                       | r        | 7                 | ?           | 50                   | 0.04                      |      |
| FRANCE AND BELGIUM.   | Rochefort ...               | 30.15              | 51    | S   | 4    | mv       | 29.97          | - .21                | 55  | 53                                      | + 7  | SW    | 5                                       | 0        | 3                 | 57          | 46                   | —                         |      |
|   | Belfort ...                 | ?                  | 36    | NE  | 2    | c        | ?              | ?                    | 35  | ?                                       | -3   | NE    | 2                                       | bc       | *                 | 45          | 31                   | —                         |      |
|   | Lyons ...                   | 30.27              | 40    | N   | 1    | 6        | 30.15          | - .22                | 35  | 35                                      | -1   | E     | 1                                       | 6        | *                 | 50          | 34                   | —                         |      |
|   | Nice ...                    | 30.19              | 48    | Z   | 0    | bc       | 30.20          | + .09                | 45  | 43                                      | + 1  | E     | 1                                       | 6        | 1                 | 55          | 43                   | —                         |      |
|   | Perpignan ...               | 30.26              | 48    | Z   | 0    | 6        | 30.21          | - .12                | 45  | 44                                      | -1   | W     | 2                                       | 0        | *                 | 61          | 39                   | —                         |      |
|   | Biarritz ...                | 30.15              | 58    | E   | 2    | 6        | 30.12          | - .16                | 56  | 48                                      | + 4  | SSW   | 3                                       | 6        | 3                 | 61          | 52                   | —                         |      |
|   | Corunna ...                 | *                  | *     | *   | *    | *        |                |                      |   |   |      |       |   |          |                   |             |                      |                           |      |
| Lisbon ...  | 30.62                       | 55                 | WSW   | 2   | 0    | 30.36    | + .07          | 53                   | 51  | + 4                                     | NNE  | 1     | c                                       | 2        | 55                | 49          | —                    |                           |      |

For Explanation of Columns, see bottom of p. 1.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Sunday, 15<sup>th</sup> Dec: 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

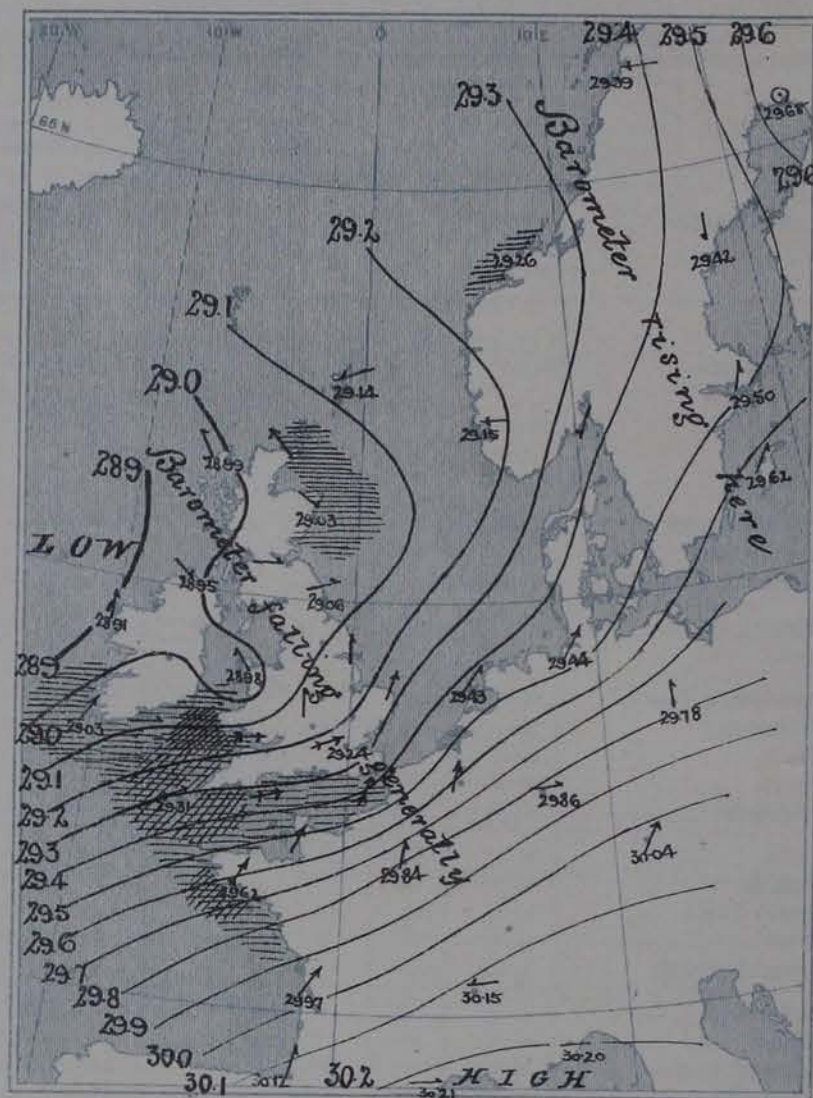
☼ = Rough. ☼ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.874         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.988         |
| Dover         | 29.953         |
| LONDON        | 29.951         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.910         |





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 ins. and upwards, over the southern parts of the Spanish Peninsula.  
 Lowest, 28.9 ins. and less, in a complex depression the centre of which lies off the northwest of Ireland.  
 Gradients steep over France and the extreme south of our Islands, but moderate or slight elsewhere.  
 Barometer falling at nearly all stations - rapidly over the northern and central parts of our Islands.

## TEMPERATURE

Highest, 56° at Lorient and Biarritz, 55° at Copenhagen, 53° at Lisbon, and 52° at Seville and Hunt Castle.  
 Lowest, -12° F. at Haparanda, +20° at Oslo, 25° at Helsingfors, 26° at Stockholm, 28° at Wierb, and 34° at Narvik.  
 A rapid rise took place over England yesterday, and in the course of the night the thermometer rose to between 52° and 54° at several of our southern stations.

## WIND

Strong to a whole gale from the SW<sup>nd</sup> or W<sup>nd</sup> over the south of our Islands and the north of France, moderate or fresh from the SW<sup>nd</sup> over the Netherlands and the central and southern parts of France.  
 Varying greatly in direction over the northern parts of our area, but SE<sup>ly</sup> in North Wales and also in the extreme north of Scotland.  
 Strong from the E<sup>ly</sup> in the west of Norway.

## WEATHER

Dull over the greater part of Western Europe, with rain at many of our own stations, and with thunder and lightning over the English Channel.  
 Fine in the south of Sweden and also over the southern parts of France, but snow falling at Helsingfors and Umeå.  
 Heavy rain has fallen in the west of our Islands the largest amounts being 1.7 in. at Rochelle, 1.3 in. at Valencia, 1.1 in. at Seville, and 1.0 in. at Holyhead and Pembroke.

## SEA

Very high on our southern coasts (tremendous at Pembroke) rough in the south and southwest generally, as well as off the northeast of Scotland.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

# FORECASTS

For the 24 hours ending at NOON on 14<sup>th</sup> December 1891.

## DISTRICTS.

## FORECASTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

*None issued*

## DISTRICTS.

## FORECASTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

## WARNINGS

*None issued*

At 3.50 pm yesterday to districts 3 and 5 "hoist south cone"; and the signals are still flying there as well as in districts 7 to 10.

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | F.   | WEA. | SEA |  | BAR:          | THER: |    | WIND |     | F. | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|------|-----|--|---------------|-------|----|------|-----|----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |      |     |  |               | D.    | W. | D.   | F.  |    |      |     |
| Skudesnaes ...    | 29.61 | 39    | 34 | WNW  | 5  | chsg | 4    |     |  | Holyhead ...  | 29.59 | 42 | 42   | SSE | 5  | rmg  | 4   |
| Sumburgh Head ... | 29.60 | 40    | 35 | WNW  | 3  | bc   | 5    |     |  | Valencia ...  | 29.47 | 52 | 52   | SSW | 6  | rmg  | 6   |
| Stornoway ...     | 29.64 | 38    | 35 | NW   | 2  | o    | 4    |     |  | Scilly ...    | 29.75 | 54 | 54   | S   | 7  | up   | 6   |
| Aberdeen ...      | 29.77 | 36    | 32 | SW   | 2  | o    | 3    |     |  | Jersey ...    | 29.03 | 53 | 51   | S   | 4  | o    | 4   |
| Shields ...       | 29.87 | 38    | 36 | SSW  | 3  | m    | 2    |     |  | Dungeness ... | 30.06 | 47 | 45   | SSW | 5  | o    | 4   |
| Ardrossan ...     | 29.61 | 35    | 35 | E    | 4  | r    | 2    |     |  | London ...    | 30.01 | 44 | 41   | S   | 1  | dyf  | *   |
| Malin Head ...    | 29.46 | 35    | 35 | SE   | 6  | o    | 3    |     |  | Yarmouth ...  | 30.04 | 39 | 37   | SW  | 3  | c    | 3   |
| Mullaghmore ...   | 29.38 | 40    | 39 | ENE  | 6  | Tg   | 5    |     |  | Rochefort ... | 30.21 | 54 | ?    | SE  | 3  | m    | *   |
| Belmullet ...     | 29.31 | 43    | 43 | SSE  | 5  | ow   | *    |     |  |               |       |    |      |     |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning fine and bright over Spain and Algeria, fair over southern, southeastern, and eastern Europe generally, and temporarily fine over Great Britain and the northern half of France, dull and unsettled over northern Russia, with rain in places; dull and becoming very rough and rainy over Ireland and St. George's Channel. Very heavy rain at our western stations later, and smaller quantities in most other parts of our Islands and neighbourhood, some snow locally in Russia, Germany, Austria, Scotland, and the northern parts of England, fine weather continuing over southern and southwestern Europe.

Temperature risen fast over Russia and Ireland, fallen over all the intermediate countries. Morning readings exceeding 50° at most of the Mediterranean stations and in the west of France, much lower elsewhere. Lowest of all (1) - 5° F at Archangel, 12° at Haparanda, 25° at Helsingfors, 30° at Kuopio; (2) 30° in London, 32° at Dungeness, 33° at Oxford, Cambridge, Brussels, and Paris, as well as at Havre. Rising very fast over Ireland, England and the north of France later, and exceeding 50° in many places; exceeding 60° over Italy and Algeria.

Wind very light and variable over southwestern, southern, and southeastern Europe, much stronger over the northern and northwestern countries; (1) blowing a gale from NW. over Denmark and Scandinavia, strong from W. over North Germany and from SW. to S. over the eastern shores of the Baltic; (2) blowing a gale from SE. in Ireland, and a strong breeze from S. and SE. in St. George's Channel; moderate NW<sup>1</sup> in the north of Scotland, and along our east coasts, and a light breeze from SW. over our inland countries. Strong S<sup>2</sup> wind spreading over Ireland and England later, and strong gales setting in over the Channel and over southern countries.

Barometer highest 30.4 ins. and more to 30.2 ins. in an anticyclone covering Spain and France, and exceeding 30.0 ins. as far east as Turkey in Europe. Lowest 29.6 ins. and less, in a new depression approaching Ireland, 29.1 ins. and less, in a shallower disturbance over the northwest of Norway and in another over Finland and the Baltic Provinces. Gradients steep over Germany, the North Sea, the British Isles and Bay of Biscay. The new depression in the west moving northwards later, and spreading out laterally over Great Britain.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. equally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.  
" Weekly " " " £1 10 0 "



# DAILY WEATHER REPORT.

for *Monday, 14<sup>th</sup> December, 1891.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

| STATIONS.           |                              | YESTERDAY EVENING.                        |       |       |                      |          | 8 A.M. TO DAY.                            |   |             |      |   |       |                      |                   |             |      | PAST 24 HOURS.            |      |  |
|---------------------|------------------------------|---|-------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|-------------------|-------------|------|---------------------------|------|--|
|                     |                              | BAROM.                                    | TEMP. | WIND. |                      | Weather. | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND. |                      | Sea.<br>(0 to 3.) | SHADE TEMP. |      | Amount<br>of<br>Rainfall. |      |  |
|                     |                              | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry.  | Dir.  | Force.<br>(0 to 12.) |          | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Dir.  | Force.<br>(0 to 12.) |                   | Max.        | Min. |                           |      |  |
| SCANDINAVIA.        | Haparanda                    | 29.55                                     | -6    | Z     | 0                    | bc       | 29.55                                     | -13                                     | -1          | -1   | +11                                     | NNW   | 2                    | 0                 | *           | 9    | -12                       | -    |  |
|                     | Hernösand                    | 29.30                                     | 27    | E     | 2                    | c        | 29.26                                     | -18                                     | 26          | 26   | +1                                      | N     | 6                    | S                 | *           | 27   | 14                        | 0.08 |  |
|                     | Stockholm                    | 29.08                                     | 34    | SE    | 2                    | †        | 28.96                                     | -54                                     | 39          | 38   | +13                                     | SE    | 2                    | †                 | *           | 39   | 25                        | 0.16 |  |
|                     | Wishby                       | 29.12                                     | 42    | S     | 8                    | S        | 28.92                                     | -70                                     | 37          | 36   | +9                                      | SE    | 2                    | †                 | *           | 43   | 28                        | 0.51 |  |
|                     | Bodö                         | 29.28                                     | 19    | E     | 6                    | 0        | 29.33                                     | -66                                     | 21          | 19   | +1                                      | E     | 4                    | 0                 | 2           | ?    | 18                        | -    |  |
|                     | Christiansund                | 29.13                                     | 34    | WSW   | 2                    | b        | 29.19                                     | -07                                     | 33          | 30   | -2                                      | ESE   | 4                    | bc                | 4           | 37   | 32                        | -    |  |
|                     | Skudesnaes                   | 28.98                                     | 36    | NNE   | 4                    | c        | 29.27                                     | +12                                     | 34          | 29   | -4                                      | NNW   | 4                    | b                 | 4           | 38   | 32                        | -    |  |
|                     | Christiania Fjord<br>(Færdø) | 28.88                                     | 33    | NE    | 7                    | S        | 29.05                                     | -36                                     | 32          | 31   | -5                                      | N     | 7                    | S                 | 2           | 37   | 30                        | -    |  |
|                     | Skagen (The Scaw)            | 28.81                                     | 43    | WSW   | 4                    | 0        | 28.96                                     |   | 35          | 33   |   | N     | 6                    | S                 | 4           | 43   | 34                        | 0.23 |  |
|                     | Fanø                         | 28.81                                     | 44    | SW    | 2                    | C        | 29.14                                     |   | 39          | 37   |   | NW    | 4                    | C                 | *           | 46   | 37                        | 0.20 |  |
| BRITISH ISLANDS.    | Sumburgh Head                | 29.15                                     | 36    | NE    | 2                    | C        | 29.33                                     | +19                                     | 35          | 35   | -4                                      | N     | 2                    | r                 | 3           | 40   | 33                        | 0.10 |  |
|                     | Stornoway                    | 29.09                                     | 40    | E     | 4                    | 0        | 29.55                                     | +56                                     | 38          | 38   | 0                                       | NW    | 5                    | C                 | 4           | 41   | 35                        | 0.04 |  |
|                     | Wick                         | 29.13                                     | 38    | NE    | 3                    | 0        | 29.45                                     | +33                                     | 36          | 35   | -4                                      | NW    | 4                    | C                 | 4           | 41   | 32                        | 0.30 |  |
|                     | Nairn                        | 29.13                                     | 36    | Z     | 0                    | †        | 29.54                                     | +53                                     | 35          | 35   | +1                                      | N     | 2                    | C                 | 2           | 37   | 32                        | 0.05 |  |
|                     | Aberdeen                     | 29.14                                     | 37    | NW    | 2                    | C        | 29.57                                     | +54                                     | 36          | 35   | +1                                      | N     | 3                    | bc                | 3           | 39   | 34                        | 0.02 |  |
|                     | Leith                        | 29.10                                     | 38    | Z     | 0                    | m        | 29.63                                     | +60                                     | 36          | 36   | +1                                      | SW    | 1                    | bc m              | *           | 40   | 34                        | 0.30 |  |
|                     | Shields                      | 29.06                                     | 41    | W     | 2                    | cm       | 29.58                                     | +52                                     | 38          | 38   | -5                                      | NW    | 2                    | r                 | 2           | 44   | 37                        | 0.19 |  |
|                     | Spurn Head                   | 29.07                                     | 44    | NNW   | 4                    | 0        | 29.54                                     | +36                                     | 41          | 41   | -4                                      | WSW   | 3                    | r                 | 3           | 47   | 40                        | 0.18 |  |
|                     | York                         | 29.09                                     | 42    | WSW   | 1                    | 0        | 29.57                                     | +49                                     | 42          | 41   | -1                                      | N     | 1                    | 0                 | *           | 45   | 37                        | 0.20 |  |
|                     | Loughborough                 | 29.11                                     | 43    | SW    | 2                    | 0        | 29.61                                     | +45                                     | 43          | 42   | -3                                      | N     | 5                    | Cq-p              | *           | 49   | 41                        | 0.39 |  |
| BRITISH ISLANDS.    | Ardrossan                    | 29.10                                     | 38    | ENE   | 1                    | of       | 29.70                                     | +65                                     | 41          | 40   | -5                                      | NNW   | 2                    | b                 | 1           | 46   | 37                        | 0.14 |  |
|                     | Malin Head                   | 29.11                                     | 42    | SW    | 2                    | 0        | 29.74                                     | +79                                     | 44          | 40   | +2                                      | NW    | 4                    | C p               | 3           | 45   | 40                        | 0.06 |  |
|                     | Mullaghmore                  | 29.14                                     | 43    | WSW   | 1                    | C        | 29.83                                     | +88                                     | 42          | 41   | -2                                      | NW    | 4                    | C p               | 3           | 47   | 41                        | 0.10 |  |
|                     | Belmullet                    | 29.18                                     | 48    | NW    | 3                    | op       | 29.86                                     | +95                                     | 43          | 39   | -3                                      | NNW   | 2                    | C                 | *           | 50   | 41                        | 0.16 |  |
|                     | Donaghadee                   | 29.09                                     | 42    | WSW   | 2                    | C        | 29.76                                     | +73                                     | 42          | 40   | -1                                      | NNW   | 5                    | C                 | 3           | 45   | 40                        | 0.03 |  |
|                     | Liverpool (Bidston)          | 29.11                                     | 42    | SSE   | 1                    | C        | 29.65                                     | +57                                     | 44          | 41   | +1                                      | NNW   | 8                    | 0                 | 6           | 46   | 42                        | 0.34 |  |
|                     | Holyhead                     | 29.05                                     | 45    | SSE   | 1                    | Cq       | 29.77                                     | +79                                     | 45          | 43   | 0                                       | NW    | 9                    | bq                | 7           | 47   | 44                        | 0.33 |  |
|                     | Parsonstown                  | 29.16                                     | 45    | Z     | 0                    | 0        | 29.91                                     | +89                                     | 38          | 37   | -5                                      | Z     | 0                    | 0                 | *           | 47   | 37                        | 0.37 |  |
|                     | Valencia                     | 29.42                                     | 49    | NNW   | 7                    | Oq-p     | 29.97                                     | +94                                     | 44          | 43   | -6                                      | Z     | 0                    | 0                 | 1           | 51   | 43                        | 0.18 |  |
|                     | Roche's Point                | 29.21                                     | 50    | NNW   | 6                    | C        | 29.96                                     | +88                                     | 43          | 41   | 0                                       | N     | 2                    | bc                | 4           | 51   | 41                        | 0.25 |  |
| BRITISH ISLANDS.    | Pembroke (St. Ann's Hd.)     | 29.10                                     | 51    | WSW   | 7                    | C        | 29.93                                     | ?                                       | 47          | 45   | +2                                      | NNW   | 5                    | bc                | 6           | 50   | 42                        | 0.36 |  |
|                     | Scilly                       | 29.39                                     | 42    | W     | 9                    | Cq       | 30.03                                     | +72                                     | 51          | 49   | -1                                      | N     | 5                    | C                 | 5           | 53   | 48                        | 0.15 |  |
|                     | Prawle Point                 | 29.31                                     | 51    | WSW   | 8                    | 0        | 29.96                                     | +70                                     | 44          | 42   | -7                                      | NNW   | 5                    | b                 | 4           | 51   | 38                        | 0.26 |  |
|                     | Jersey (St. Aubert)          | 29.42                                     | 53    | WSW   | 7                    | Cq-pm    | 30.00                                     | +50                                     | 50          | 46   | 0                                       | NNW   | 4                    | bc                | 4           | 55   | 49                        | 0.24 |  |
|                     | Hurst Castle                 | 29.31                                     | 51    | W     | 9                    | bc-q     | 29.83                                     | +55                                     | 47          | 45   | -5                                      | NNW   | 7                    | bc                | 6           | 53   | 45                        | 0.10 |  |
|                     | Dungeness                    | 29.25                                     | 50    | W     | 9                    | Cq-p     | 29.69                                     | +29                                     | 47          | 46   | -4                                      | NW    | 5                    | C                 | 5           | 52   | 44                        | 0.25 |  |
|                     | London                       | 29.22                                     | 49    | W     | 6                    | Cq-p     | 29.75                                     | +51                                     | 45          | 42   | -6                                      | NNW   | 4                    | b                 | *           | 52   | 44                        | 0.22 |  |
|                     | Oxford                       | 29.16                                     | 48    | SW    | 4                    | †        | 29.76                                     | +58                                     | 44          | 41   | -5                                      | N     | 3                    | b                 | *           | 51   | 44                        | 0.50 |  |
|                     | Cambridge                    | 29.18                                     | 45    | S     | 1                    | †        | 29.71                                     | +55                                     | 44          | 43   | -5                                      | N     | 1                    | C                 | *           | 52   | 41                        | 0.42 |  |
|                     | Yarmouth                     | 29.02                                     | 45    | W     | 7                    | 0        | 29.58                                     | +27                                     | 41          | 40   | -7                                      | N     | 2                    | Cm                | 4           | 48   | 39                        | 0.23 |  |
| GERMANY & HOLLAND.  | Cuxhaven                     | 29.07                                     | 43    | SSW   | 6                    | †        | 29.24                                     | -20                                     | 42          | 40   | -1                                      | NW    | 7                    | bc                | *           | 47   | ?                         | 0.20 |  |
|                     | Berlin                       | 29.25                                     | 44    | SSW   | 4                    | 0        | 29.19                                     | -59                                     | 45          | 43   | +11                                     | N     | 4                    | 0                 | *           | 48   | 34                        | 0.28 |  |
|                     | Wiesbaden                    | *   | *     | *     | *                    | *        | ?   | ?                                       | 48          | 45   | +11                                     | SW    | 4                    | †                 | *           | 50   | 37                        | 0.32 |  |
|                     | Munich                       | *   | *     | *     | *                    | *        | 29.61                                     | -43                                     | 42          | 39   | +11                                     | SW    | 6                    | b                 | *           | 48   | 30                        | 0.16 |  |
|                     | The Helder                   | 29.06                                     | 46    | W     | 5                    | †        | 29.50                                     | +07                                     | 45          | 41   | -2                                      | NW    | 3                    | e                 | 3           | 48   | 45                        | 0.28 |  |
|                     | Brussels (Gare)              | *   | *     | *     | *                    | *        | 29.62                                     | -01                                     | 45          | 44   | -2                                      | N     | 4                    | C                 | *           | 50   | 44                        | 0.67 |  |
|                     | Cape Gris Nez                | 29.25                                     | 51    | WSW   | 8                    | †        | 29.61                                     | +08                                     | 48          | 46   | -1                                      | N     | 6                    | 0                 | 6           | 54   | 45                        | 0.12 |  |
|                     | Paris                        | 29.60                                     | 51    | SW    | 4                    | b        | 29.77                                     | -07                                     | 49          | 46   | 0                                       | N     | 5                    | †                 | *           | 55   | 47                        | 0.12 |  |
|                     | Brest                        | ?   | 53    | N     | 8                    | 0        | ?   | ?                                       | 51          | 47   | -3                                      | NNW   | 5                    | C                 | 6           | 61   | 46                        | 0.08 |  |
|                     | Lorient                      | 29.71                                     | 54    | N     | 8                    | C        | 30.10                                     | +48                                     | 51          | 46   | -5                                      | NNW   | 6                    | b                 | 6           | 56   | 50                        | 0.20 |  |
| FRANCE AND BELGIUM. | Rocheport                    | 29.90                                     | 55    | W     | 7                    | C        | 30.16                                     | +19                                     | 53          | 53   | -2                                      | NNW   | 6                    | b                 | *           | 57   | 46                        | 0.16 |  |
|                     | Belfort                      | ?   | 44    | W     | 9                    | †        | ?   | ?                                       | 46          | 41   | +11                                     | N     | 8                    | †                 | *           | 48   | 35                        | 0.63 |  |
|                     | Lyons                        | 29.79                                     | 47    | S     | 4                    | 0        | 30.03                                     | -12                                     | 47          | 42   | +12                                     | NNW   | 2                    | bc                | *           | 53   | 35                        | 0.04 |  |
|                     | Nice                         | 30.07                                     | 51    | NW    | 1                    | b        | 29.86                                     | -34                                     | 50          | 41   | +5                                      | SW    | 6                    | b                 | 5           | 55   | 43                        | -    |  |
|                     | Perpignan                    | 30.15                                     | 46    | W     | 1                    | b        | 30.18                                     | -03                                     | 58          | 48   | +13                                     | N     | 7                    | C                 | *           | 55   | 43                        | -    |  |
|                     | Biarritz                     | 30.13                                     | 61    | SW    | 5                    | 0        | 30.34                                     | +22                                     | 57          | 56   | +1                                      | NNW   | 6                    | C                 | 7           | 63   | 54                        | 0.12 |  |
|                     | Cornua                       | *   | *     | *     | *                    | *        | ?   | ?                                       | ?           | ?    | ?                                       | ?     | ?                    | ?                 | ?           | ?    | ?                         | -    |  |
|                     | Lisbon                       | 30.43                                     | 58    | WSW   | 3                    | C        | 30.45                                     | +09                                     | 51          | 51   | -2                                      | NE    | 4                    | f                 | *           | 61   | 50                        | -    |  |
|                     | Porto                        | *   | *     | *     | *                    | *        | ?   | ?                                       | ?           | ?    | ?                                       | ?     | ?                    | ?                 | ?           | ?    | ?                         | -    |  |
|                     | Madrid                       | *   | *     | *     | *                    | *        | ?   | ?                                       | ?           | ?    | ?                                       | ?     | ?                    | ?                 | ?           | ?    | ?                         | -    |  |



# WEATHER CHARTS

for 8 a.m. on Monday, 14<sup>th</sup> December, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;

→ forces 5 to 7; → forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

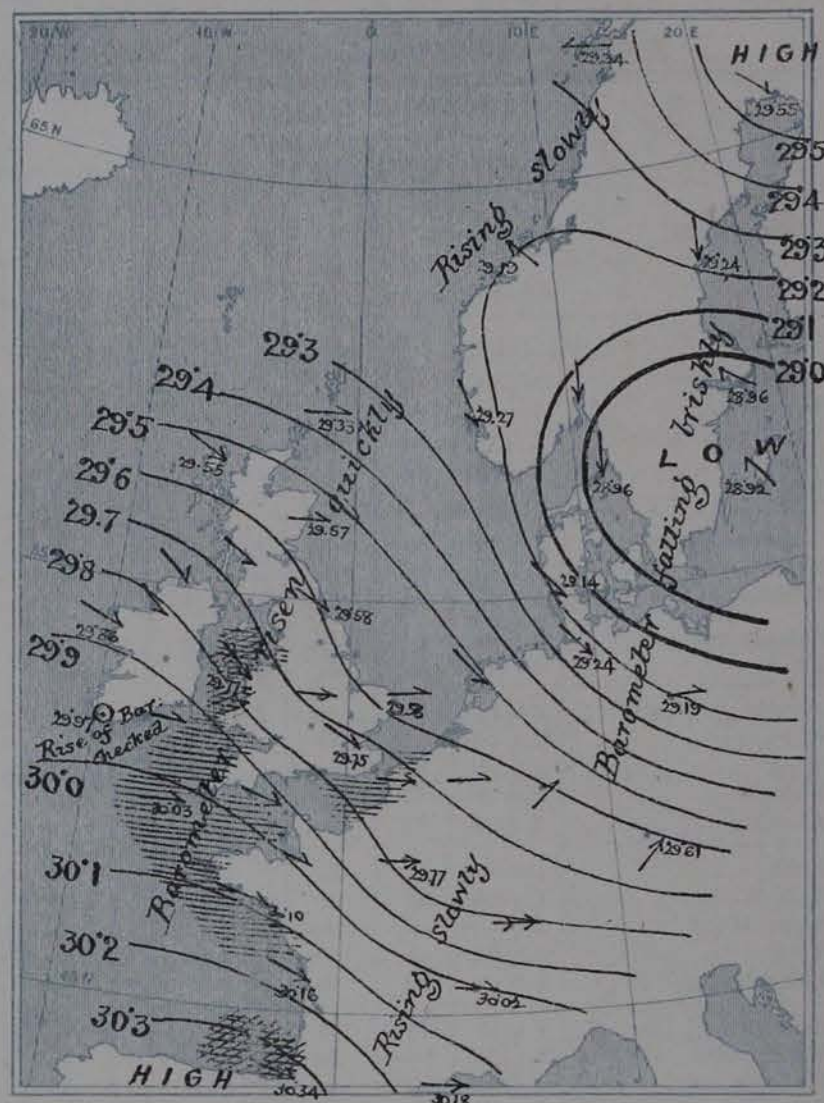
☼ = Rough. ☼ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stormoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.757         |
| Leith         | 29.807         |
| Shielda       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Androssan     | 29.930         |
| Mullaghmore   | 29.921         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.906         |
| Roshe's Point | 29.912         |
| Pembroke      | 29.916         |
| Sally         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.955         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.934         |
| Oxford        | 29.935         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

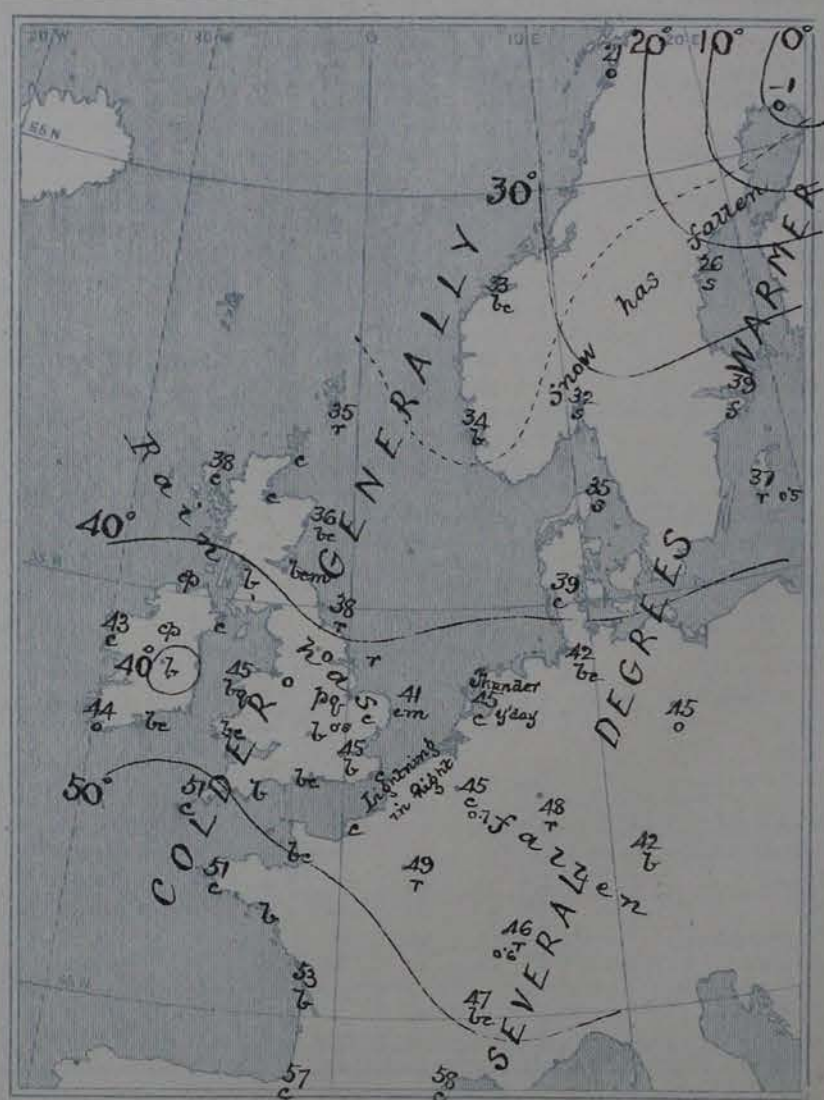
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.      | TEMPERATURE. |       |           |      | RAINFALL.<br>(Inches.) |
|----------------|--------------|-------|-----------|------|------------------------|
|                | Daily        | Daily | at 8 a.m. |      |                        |
|                | Max.         | Min.  | Dry.      | Wet. |                        |
| Sumburgh Head. | 42.6         | 35.2  | 39.6      | 38.1 | 4.25                   |
| Stormoway      | 43.1         | 34.2  | 39.4      | 38.5 | 5.63                   |
| Wick           | 42.2         | 32.7  | 38.1      | 36.8 | 3.10                   |
| Nairn          | 41.9         | 32.8  | 37.1      | 35.6 | 1.95                   |
| Aberdeen       | 41.9         | 32.6  | 36.9      | 35.2 | 3.24                   |
| Leith          | 44.0         | 33.7  | 38.5      | 37.0 | 1.86                   |
| Shields        | 42.9         | 33.9  | 38.3      | 36.9 | 2.57                   |
| Spurn Head     | 42.4         | 35.3  | 38.8      | 37.7 | 2.14                   |
| York           | 42.3         | 32.3  | 36.4      | 35.4 | 2.28                   |
| Loughborough   | 42.7         | 32.2  | 36.3      | 35.4 | 2.24                   |
| Androssan      | 44.5         | 35.9  | 40.0      | 38.7 | 3.73                   |
| Mullaghmore    | 46.5         | 37.8  | 42.2      | 39.8 | 4.51                   |
| Donaghadee     | 45.8         | 36.2  | 40.2      | 39.3 | 2.84                   |
| Holyhead       | 46.4         | 39.1  | 42.8      | 41.1 | 3.82                   |
| Liverpool      | 43.5         | 35.6  | 38.8      | 37.1 | 2.59                   |
| Parsonstown    | 41.7         | 33.1  | 37.8      | 36.6 | 3.04                   |
| Valencia       | 49.7         | 40.0  | 44.6      | 42.4 | 5.90                   |
| Roshe's Point  | 47.9         | 38.9  | 42.9      | 41.7 | 4.95                   |
| Pembroke       | 43.5         | 40.3  | 43.6      | 42.2 | 3.99                   |
| Sally          | 49.5         | 43.1  | 47.0      | 45.1 | 4.02                   |
| Prawle Point   | 47.0         | 38.2  | 42.6      | 41.1 | 3.70                   |
| Jersey         | 47.3         | 39.3  | 43.1      | 41.4 | 3.82                   |
| Hurst Castle   | 45.6         | 36.3  | 40.6      | 39.8 | 2.77                   |
| Dover          | 44.3         | 35.9  | 39.8      | 38.6 | 3.00                   |
| LONDON         | 44.9         | 33.9  | 37.8      | 36.7 | 2.10                   |
| Oxford         | 42.9         | 33.6  | 37.9      | 35.9 | 2.10                   |
| Cambridge      | 42.8         | 31.6  | 36.2      | 35.5 | 1.88                   |
| Yarmouth       | 41.9         | 33.7  | 37.9      | 37.0 | 2.66                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 ins: and upwards, in Portugal.

Lowest, 29.0 ins: and less, in a depression lying over the Baltic and south of Sweden.

Gradients moderate generally, but rather irregular.

Barometer rising at all but the Swedish and German stations, but rise slackening at Valence Island.

## TEMPERATURE

Highest, 58° at Perpignan, 57° at Bismarck, 53° at Rochefort, and 51° at Bally, Brest, Lorient, and Lisbon.

Lowest, -1° Fahr. at Naparanda, +21° at Bato, 26° at Helsingfors, 32° at Lander, and 33° at Christiansund.

Since yesterday morning a slight fall has taken place over the greater part of our Islands.

## WIND

NW<sup>ly</sup> or W<sup>ly</sup> over the greater part of Western Europe, moderate or fresh in force generally, but strong to a gale over the Irish Sea.  
SW<sup>ly</sup> or W<sup>ly</sup> in Germany. Strong from the NW<sup>ly</sup> in the neighbourhood of the Elbe, but moderate from the SE<sup>ly</sup> in the south of Sweden and from the E<sup>ly</sup> in the west of Norway.  
A strong to whole gale from the W<sup>ly</sup> was experienced yesterday over the south and southeast of England.

## WEATHER

Fine over the greater part of our Islands and France, but showery in the north of Ireland, and rainy in the northeast of England as well as over Central France.  
Changeable and unsettled at the Scandinavian, Danish, and German stations with rain at Visby and Kiel, and snow at Helsingfors and Slagen.  
Rain fell generally yesterday, the largest amount being 0.7 in at Brussels, 0.6 in at Belfast, and 0.5 in at Oxford.  
Lightning was seen last night at Dungeness and thunder occurred at the Heider.

## SEA

High at Helighead and Bismarck, and rough or rather so on our southwestern, southern, and the French coasts generally.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The rapid check in the barometric rise at Valence Island seems to point to the approach of further depressions from the westward, and the wind is therefore likely to "back" generally with unsettled rainy weather in the west.

## FORECASTS

For the 24 hours ending at NOON on 15<sup>th</sup> December, 1891.

### DISTRICTS.

### FORECASTS.

- 0 SCOTLAND NORTH
- 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

NW<sup>ly</sup> winds, backing later; fair generally.

NW<sup>ly</sup> to W<sup>ly</sup> or SW<sup>ly</sup> winds; some showers at first then fine. Cold at night with local fogs.

### DISTRICTS.

### FORECASTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

Same as No 0 to 2.

W<sup>ly</sup> to SW<sup>ly</sup> or S<sup>ly</sup> winds; fine to cloudy and some rain.

Wind backing to the S<sup>ly</sup> and freshening; fair to dull and rainy.

### WARNINGS

At 10.15 am to district 6, "lower cone". The signals are still up in districts 3 and 5 but expire this afternoon.

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



### YESTERDAY'S 2 P.M. REPORTS.

| THER: WIND      |       |    |    |     |    |      |     | THER: WIND    |       |    |    |     |    |      |     |
|-----------------|-------|----|----|-----|----|------|-----|---------------|-------|----|----|-----|----|------|-----|
|                 | BAR:  | D. | W. | D.  | F. | WEA. | SEA |               | BAR:  | D. | W. | D.  | F. | WEA. | SEA |
| Skudesnaes ...  | 28.97 | 87 | 84 | NNE | 6  | 0    | 8   | Holyhead ...  | 29.06 | 47 | 45 | SW  | 2  | C    | 2   |
| Sumburgh Head   |       |    |    |     |    |      |     | Valencia ...  |       |    |    |     |    |      |     |
| Stornoway ...   | 29.04 | 41 | 40 | E   | 4  | 0    | 4   | Scilly ...    |       |    |    |     |    |      |     |
| Aberdeen ...    |       |    |    |     |    |      |     | Jersey ...    | 29.49 | 55 | 50 | new | 7  | 60p  | 5   |
| Shields ...     |       |    |    |     |    |      |     | Dungeness ... | 29.15 | 51 | 49 | new | 10 | 69p  | 7   |
| Ardrossan ...   |       |    |    |     |    |      |     | London ...    |       |    |    |     |    |      | 8   |
| Malin Head ...  | 28.99 | 44 | 42 | S   | 2  | 0    | 2   | Yarmouth ...  |       |    |    |     |    |      |     |
| Mullaghmore ... |       |    |    |     |    |      |     | Rochefort ... | 29.91 | 57 | 54 | W   | 7  | 0    | 8   |
| Belmullet ...   | 28.98 | 50 | 49 | N   | 2  | 6    | 8   |               |       |    |    |     |    |      |     |

GENERAL REMARKS ON THE WEATHER OVER EUROPE  
DURING THE PAST 24 HOURS.

Weather in morning fine over southwestern, southern, and south-eastern Europe generally, very unsettled over the British Islands, Northwestern and Northern Europe, but especially rough over the southern parts of England, the Channel, Brittany, and the north of France. Rain in many parts of our Islands, snow in parts of Russia, Sweden and Denmark, thunder, lightning and hail at Jersey. Rain later in all parts of the United Kingdom and France, but amounts not very large; lightning at Dungeness.

Temperature fallen over Russia and Central Europe, still changing fitfully in the northwest. Morning readings 60° or more at Malta and some Algerian stations exceeding 50° in the south of Italy, on all the Spanish coasts, in the west and north of France, the south of England and at Valencia; lower elsewhere. Below 40° in Scotland and lowest of all (1) -12°F. at Hapsersund, -2° at Archangel, +9° at Kuopio, 20° at Bodo, 26° at Stockholm, 30° at Riga and Kiev; (2) 23° at Vienna, 28° at Hermannstadt, 29° at Buda Pesth, 30° at Prague, 31° at Munich.

Wind. Light and variable over the southern and eastern countries, moderate to a strong gale in the northwest and north. Strong SW<sup>2</sup> to W<sup>2</sup> gales in the Channel and south of England fresh SW<sup>2</sup> wind in the Netherlands, SSE<sup>2</sup> in the Sound, E<sup>2</sup> in Norway, SE<sup>2</sup> in the north of Scotland, S<sup>2</sup> in the west of Ireland, W<sup>2</sup> gales very severe over our southern countries and the Channel during day but varying light breezes prevailing in the north, and wind tending to draw NW<sup>wd</sup> in Ireland.

Barometer Highest 30.4 ins. and more to 30.1 ins. over the Iberian Peninsula, and 30.2 ins. and more to 30 ins. in a large ridge stretching thence in an easterly direction over the Mediterranean, S.<sup>W.</sup> and S.W.<sup>W.</sup> Europe. Lowest (1) 28.9 ins. and less in a depression off our extreme northwest coasts, and below 29.1 ins. over north Britain generally; (2) 29.5 ins. and less in a shallow disturbance over the north of Russia. Depression over British Islands becoming very complex later, and spreading southeastwards, new disturbance forming over the Skager Rack, Denmark and south of Sweden.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD  
FROM THE 8<sup>TH</sup> TO 12<sup>TH</sup> DEC. 1891.

The weather of last week was exceedingly stormy and unsettled with frequent, and in some cases heavy, falls of rain but with fairly long intervals of bright sunshine. Towards the close of the period snow fell in nearly all the more northern parts of the Kingdom and on the night of the 10<sup>th</sup> thunder and lightning occurred at several of our western and southern stations.

Barometrical pressure has been continuously highest over Spain while numerous cyclonic disturbances have travelled either directly over the United Kingdom or along our extreme northwestern and northern coasts.

The first with minimum readings below 29.1 ins. advanced over Wales from the southwest on the night of the 6<sup>th</sup> and after crossing the north of England travelled away rapidly to the Baltic. During its progress strong gales from between S.W. and N.W. were experienced on all our southern coasts while slight E<sup>2</sup> gales were experienced on all our southern coasts while slight E<sup>2</sup> gales were reported over the northern part of Ireland and England, with rain in nearly all districts.

The second with minimum readings below 290 ins. appeared off the north of Scotland on the morning of the 3<sup>rd</sup> and was joined on the following night by

The third an exceedingly large and deep system with minimum readings below 28.0 ins. The centre of this disturbance skirted the north of Scotland and afterwards travelled away northeastwards to Norway, its progress being accompanied by strong gales from between S and W. in nearly all parts of western Europe and very heavy rain in many places. On the night of the 10<sup>th</sup> a well marked secondary disturbance passed across the south of Scotland and the North Sea to Denmark and occasioned further severe gales on many of our western and southern coasts. In the rear of these two systems the wind veered to the NW<sup>wd</sup>, the weather improved and temperature fell fast, frost being experienced in many places on the night of 11<sup>th</sup>.

The fourth, a somewhat complex system with minimum readings below 29.2 ins. appeared off the west of Ireland on the morning of the 12<sup>th</sup> and subsequently spread eastwards over the Kingdom, occasioning heavy rain in the west and strong S.W.<sup>ly</sup> gales on our southwestern & southern coast.

Temperature has been upon the whole very high for the time of year excepting in the extreme north, the daily maxima over England and Ireland being frequently above  $50^{\circ}$  and on more than one occasion above  $55^{\circ}$ .

EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS: For Family Wagon Report, forwarded by Book Post, £1 0 0 per annum.

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|



# DAILY WEATHER REPORT.

for *Tuesday 15<sup>th</sup> December.* 1891.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           |                            | YESTERDAY EVENING. |       |  |                                   |          | 8 A.M. TO DAY. |             |      |                                   |       |                  |          |      |             |      | PAST 24 HOURS. |                     |  |
|---------------------|----------------------------|--------------------|-------|--|-----------------------------------|----------|----------------|-------------|------|-----------------------------------|-------|------------------|----------|------|-------------|------|----------------|---------------------|--|
|                     |                            | Barom.             | Temp. | Wind.  |                                   | Weather. | Barometer.     | SHADE TEMP. |      |                                   | Wind. |                  | Weather. | Sea. | SHADE TEMP. |      |                |                     |  |
|                     |                            |                    |       | Reading at 22 <sup>nd</sup> F and Sea Level. | Difference from 8 a.m. yesterday. |          |                | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dir.  | Force (0 to 12.) |          |      | Dir.        | Min. | Max.           | Amount of Rainfall. |  |
| SCANDINAVIA.        | Haparanda ...              | 29.64              | 1     | NE   | 2                                 | bc       | 29.66          | +11         | -14  | -14                               | -13   | NNE              | 4        | 6    |             | 1    | 2              | —                   |  |
|                     | Hernösand ...              | 29.45              | 20    | N  | 2                                 | s        | 29.63          | +18         | 12   | 12                                | -14   | NW               | 6        | bc   |             | 30   | 2              | 0.16                |  |
|                     | Stockholm ...              | 29.10              | 36    | N  | 2                                 | T        | 29.35          | +25         | 28   | 27                                | -11   | NW               | 4        | 0    |             | 30   | 27             | 0.04                |  |
|                     | Wisby ...                  | 29.04              | 40    | NNE  | 4                                 | T        | 29.29          | +25         | 39   | 37                                | +2    | NNE              | 6        | T    |             | 31   | 34             | 0.24                |  |
|                     | Bedö ...                   | 29.47              | 15    | E  | 4                                 | 0        | 29.59          | +12         | 22   | 20                                | +1    | E                | 4        | C    | 2           | ?    | 16             | —                   |  |
|                     | Christiansund ...          | 29.26              | 35    | SW   | 4                                 | C        | 29.47          | +21         | 34   | 33                                | +1    | E                | 1        | 0    | 3           | 35   | 33             | 0.04                |  |
|                     | Skudesnaes ...             | 29.51              | 36    | E  | 1                                 | a        | 29.64          | +13         | 39   | 37                                | +5    | WNW              | 4        | 0    | 3           | 31   | 34             | 0.04                |  |
|                     | Christiania Fjord (Hardey) | 29.29              | 30    | WNW  | 2                                 | 6        | 29.39          | +10         | 26   | 26                                | -6    | NNE              | 2        | 6    | 1           | 32   | 25             | —                   |  |
|                     | Skagen (The Seaw)          | 29.45              | 36    | N  | 3                                 | 6        | 29.55          | +10         | 33   | 34                                | +2    | NNE              | 1        | 6    | 0           | ?    | 34             | —                   |  |
|                     | Fanö ...                   | 29.13              | 40    | WNW  | 4                                 | C        | 29.72          | +59         | 38   | 36                                | -1    | NW               | 2        | C    |             | 40   | 36             | 0.12                |  |
| BRITISH ISLANDS.    | Sumburgh Head ...          | 29.55              | 35    | WNW  | 3                                 | C        | 29.73          | +18         | 33   | 36                                | +4    | NW               | 3        | 0    | 4           | 40   | 34             | 0.21                |  |
|                     | Stornoway ...              | 29.77              | 35    | NW   | 3                                 | 6        | 29.78          | +1          | 32   | 32                                | -6    | 2                | 0        | bc   | 3           | 40   | 29             | —                   |  |
|                     | Wick ...                   | 29.70              | 36    | NW   | 2                                 | bc       | 29.81          | +11         | 32   | 31                                | -4    | NW               | 2        | bc   | 2           | 35   | 31             | 0.05                |  |
|                     | Nairn ...                  | 29.76              | 36    | W  | 2                                 | C        | 29.83          | +7          | 25   | 26                                | -6    | 2                | 0        | C    | 1           | 35   | 27             | 0.05                |  |
|                     | Aberdeen ...               | 29.76              | 36    | W  | 3                                 | 6        | 29.87          | +11         | 31   | 29                                | -5    | W                | 1        | bc   | 2           | 40   | 31             | —                   |  |
|                     | Leith ...                  | 29.84              | 38    | WNW  | 2                                 | 6        | 29.90          | +6          | 25   | 25                                | -7    | 2                | 0        | f    |             | 41   | 28             | —                   |  |
|                     | Shields ...                | 29.75              | 35    | W  | 3                                 | 6        | 29.83          | +8          | 34   | 33                                | -4    | WNW              | 1        | m    | 2           | 43   | 33             | 0.03                |  |
|                     | Spurn Head ...             | 29.86              | 42    | WNW  | 4                                 | C        | 29.96          | +10         | 34   | 36                                | -4    | SW               | 1        | Cm   | 2           | 43   | 36             | 0.02                |  |
|                     | York ...                   | 29.86              | 40    | WNW  | 1                                 | 6        | 29.96          | +10         | 32   | 32                                | -10   | 2                | 0        | f    |             | 44   | 30             | —                   |  |
|                     | Loughborough ...           | 29.93              | 39    | W  | 2                                 | 0        | 29.95          | +2          | 37   | 37                                | -6    | ESE              | 1        | om   |             | 45   | 35             | —                   |  |
| BRITISH ISLANDS.    | Arrossan ...               | 29.86              | 41    | 2  | 0                                 | 6        | 29.84          | +14         | 36   | 35                                | -5    | NE               | 2        | om   | 1           | 45   | 34             | —                   |  |
|                     | Malin Head ...             | 29.86              | 42    | W  | 1                                 | 0        | 29.66          | -20         | 40   | 39                                | -4    | SE               | 5        | om   | 2           | 45   | 35             | —                   |  |
|                     | Mullaghmore ...            | 29.87              | 42    | SW   | 1                                 | om       | 29.65          | -22         | 40   | 43                                | +6    | 2                | 0        | om   | 2           | 45   | 40             | 0.02                |  |
|                     | Belmullet ...              | 29.85              | 43    | SE   | 2                                 | 0        | 29.73          | -12         | 50   | 53                                | +7    | WNW              | 5        | om   |             | 53   | 39             | 0.24                |  |
|                     | Donaghadee ...             | 29.93              | 37    | SW   | 2                                 | n        | 29.83          | +10         | 45   | 45                                | +3    | SE               | 5        | T    | 4           | 45   | 37             | 0.03                |  |
|                     | Liverpool (Bidston)        | 29.94              | 42    | W  | 3                                 | C        | 29.91          | +26         | 40   | 39                                | -4    | SE               | 3        | 0    | 3           | 45   | 39             | —                   |  |
|                     | Holyhead ...               | 29.93              | 43    | 2  | 0                                 | om       | 29.85          | +8          | 43   | 43                                | -2    | SE               | 1        | om   | 2           | 46   | 42             | 0.01                |  |
|                     | Parsonstown ...            | 29.91              | 41    | 2  | 0                                 | om       | 29.77          | -14         | 52   | 51                                | +4    | 2                | 0        | T    |             | 52   | 36             | 0.47                |  |
|                     | Valencia ...               | 29.81              | 45    | SE   | 5                                 | om       | 29.80          | -1          | 53   | 52                                | +9    | SW               | 6        | om   | 6           | 54   | 43             | 0.56                |  |
|                     | Roche's Point ...          | 29.85              | 416   | SE   | 5                                 | T        | 29.87          | +2          | 53   | 53                                | +10   | WNW              | 4        | Tm   | 5           | 53   | 43             | 0.60                |  |
| BRITISH ISLANDS.    | Pembroke (St. Ann's P.L.)  | 29.95              | 47    | WNW  | 3                                 | T        | 29.91          | -4          | 51   | 51                                | +4    | WNW              | 4        | Tm   | 5           | 52   | 44             | 0.30                |  |
|                     | Scilly ...                 | 29.94              | 52    | W  | 5                                 | 0        | 30.06          | +12         | 52   | 52                                | +1    | W                | 5        | m    | 5           | 52   | 45             | 0.22                |  |
|                     | Prawle Point ...           | 29.02              | 45    | SW   | 1                                 | T        | 30.03          | +1          | 52   | 52                                | +8    | W                | 5        | m    | 4           | 52   | 42             | 0.39                |  |
|                     | Jersey (St. Aubin's)       | ?                  | ?     | ?  | ?                                 | ?        | 30.10          | +10         | 54   | 54                                | +4    | W                | 4        | om   | 4           | 54   | 46             | 0.24                |  |
|                     | Hurst Castle ...           | 30.03              | 47    | WNW  | 3                                 | C        | 29.97          | +16         | 40   | 40                                | +1    | WNW              | 2        | Tm   | 4           | 40   | 44             | 0.42                |  |
|                     | Dungeness ...              | 30.00              | 45    | WNW  | 4                                 | 0        | 30.00          | +0          | 45   | 44                                | -2    | E                | 1        | om   | 0           | 51   | 41             | 0.04                |  |
|                     | London ...                 | 30.01              | 44    | W  | 2                                 | Cm       | 30.01          | +0          | 43   | 41                                | -2    | SE               | 1        | om   |             | 49   | 40             | 0.01                |  |
|                     | Oxford ...                 | 30.01              | 41    | WNW  | 1                                 | 0        | 30.00          | +24         | 41   | 40                                | -3    | SE               | 1        | bc   |             | 48   | 41             | 0.01                |  |
|                     | Cambridge ...              | 29.95              | 39    | 2  | 0                                 | 0        | 30.00          | +25         | 37   | 37                                | -7    | SW               | 1        | C    |             | 40   | 35             | —                   |  |
|                     | Yarmouth ...               | 29.88              | 40    | WNW  | 3                                 | 6        | 29.98          | +10         | 35   | 34                                | -6    | W                | 2        | bc   | 3           | 44   | 33             | 0.02                |  |
| GERMANY & HOLLAND.  | Cuxhaven ...               | 29.95              | 41    | WNW  | 4                                 | T        | 29.79          | +16         | 42   | 41                                | 0     | NW               | 4        | C    |             | 44   | 41             | 0.08                |  |
|                     | Berlin ...                 | 29.61              | 40    | WNW  | 4                                 | 6        | 29.73          | +12         | 38   | 37                                | -7    | WNW              | 4        | T    |             | 46   | 37             | 0.04                |  |
|                     | Wiesbaden ...              | ?                  | ?     | ?  | ?                                 | ?        | 30.05          | ?           | 40   | 38                                | -8    | NW               | 2        | bc   |             | 48   | 36             | 0.01                |  |
|                     | Munich ...                 | 29.92              | 37    | W  | 5                                 | T        | 30.04          | +12         | 38   | 37                                | -4    | W                | 6        | C    |             | 45   | 34             | 0.39                |  |
|                     | The Helder ...             | 29.84              | 44    | WNW  | 4                                 | bc       | 29.99          | +15         | 44   | 41                                | -1    | WNW              | 2        | C    | 3           | 45   | 43             | —                   |  |
|                     | Brussels (9 a.m.)          | ?                  | ?     | ?  | ?                                 | ?        | 30.06          | +14         | 35   | 35                                | -10   | SE               | 1        | 6    |             | 46   | 35             | 0.04                |  |
|                     | Cape Gris Nez ...          | 29.96              | 46    | WNW  | 5                                 | C        | 29.99          | +3          | 43   | 42                                | -5    | E                | 2        | 0    | 1           | 48   | 41             | 0.04                |  |
|                     | Paris ...                  | 30.13              | 46    | W  | 3                                 | C        | 30.07          | +20         | 43   | 43                                | -6    | SE               | 2        | T    |             | ?    | 42             | 0.20                |  |
|                     | Brest ...                  | ?                  | 53    | WNW  | 5                                 | T        | ?              | ?           | 54   | 53                                | +3    | W                | 4        | 0    | 5           | 59   | 51             | 0.16                |  |
|                     | Lorient ...                | 30.12              | 52    | W  | 5                                 | 0        | 30.15          | +3          | 58   | 53                                | +4    | W                | 5        | 0    | 5           | 58   | 50             | 0.12                |  |
| FRANCE AND BELGIUM. | Rocheport ...              | 30.26              | 53    | WNW  | 4                                 | m        | 30.25          | +29         | 53   | 52                                | 0     | W                | 5        | 0    |             | 55   | 52             | —                   |  |
|                     | Belfort ...                | ?                  | 40    | W  | 6                                 | 0        | ?              | ?           | 38   | 36                                | -8    | W                | 3        | 0    |             | 47   | 36             | 0.32                |  |
|                     | Lyons ...                  | ?                  | ?     | ?  | ?                                 | ?        | ?              | ?           | ?    | ?                                 | ?     | ?                | ?        |      | ?           | ?    | ?              |                     |  |
|                     | Nice ...                   | 29.87              | 54    | NW   | 6                                 | 6        | 29.95          | +8          | 53   | ?                                 | 0     | E                | 1        | 6    | 2           | 55   | 45             | —                   |  |
|                     | Perpignan ...              | 30.32              | 58    | W  | 4                                 | 6        | 30.26          | +26         | 59   | 52                                | +1    | NW               | 5        | 6    |             | 61   | 55             | —                   |  |
|                     | Biarritz ...               | 30.35              | 57    | W  | 4                                 | 0        | 30.35          | +0          | 56   | 53                                | -1    | NW               | 4        | 0    |             | 57   | 52             | —                   |  |
|                     | Coruna ...                 | 30.35              | 56    | N  | 4                                 | 6        | 30.36          | +1          | 49   | 47                                | -2    | NE               | 5        | 6    | 5           | 63   | 48             | —                   |  |
|                     | Lisbon ...                 | ?                  | ?     | ?  | ?                                 | ?        | ?              | ?           | ?    | ?                                 | ?     | ?                | ?        |      | ?           | ?    | ?              |                     |  |
|                     | ?                          | ?                  | ?     | ?  | ?                                 | ?        | ?              | ?           | ?    | ?                                 | ?     | ?                | ?        |      | ?           | ?    | ?              |                     |  |
|                     | ?                          | ?                  | ?     | ?  | ?                                 | ?        | ?              | ?           | ?    | ?                                 | ?     | ?                | ?        |      | ?           | ?    | ?              |                     |  |



# WEATHER CHARTS

for 8 a.m. on Tuesday, 15<sup>th</sup> December, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

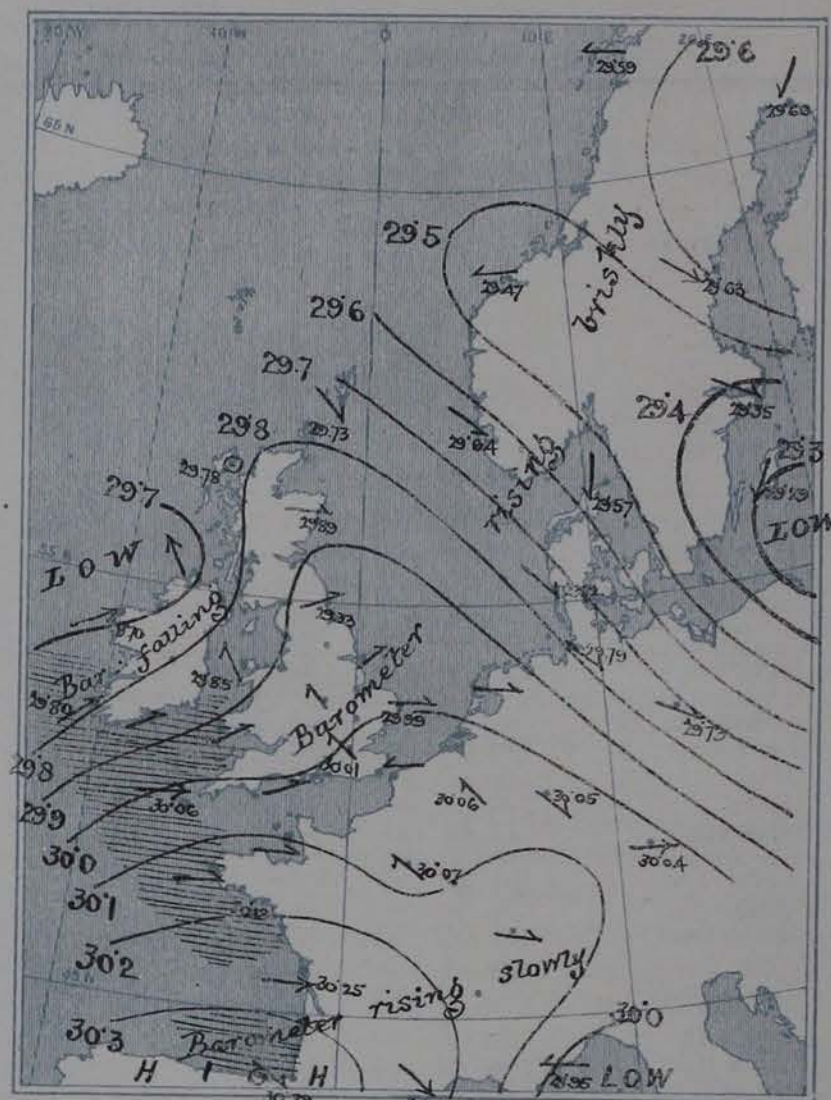
at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

### STATIONS.

### MEAN READINGS.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.830         |
| Mullaglmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.955         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

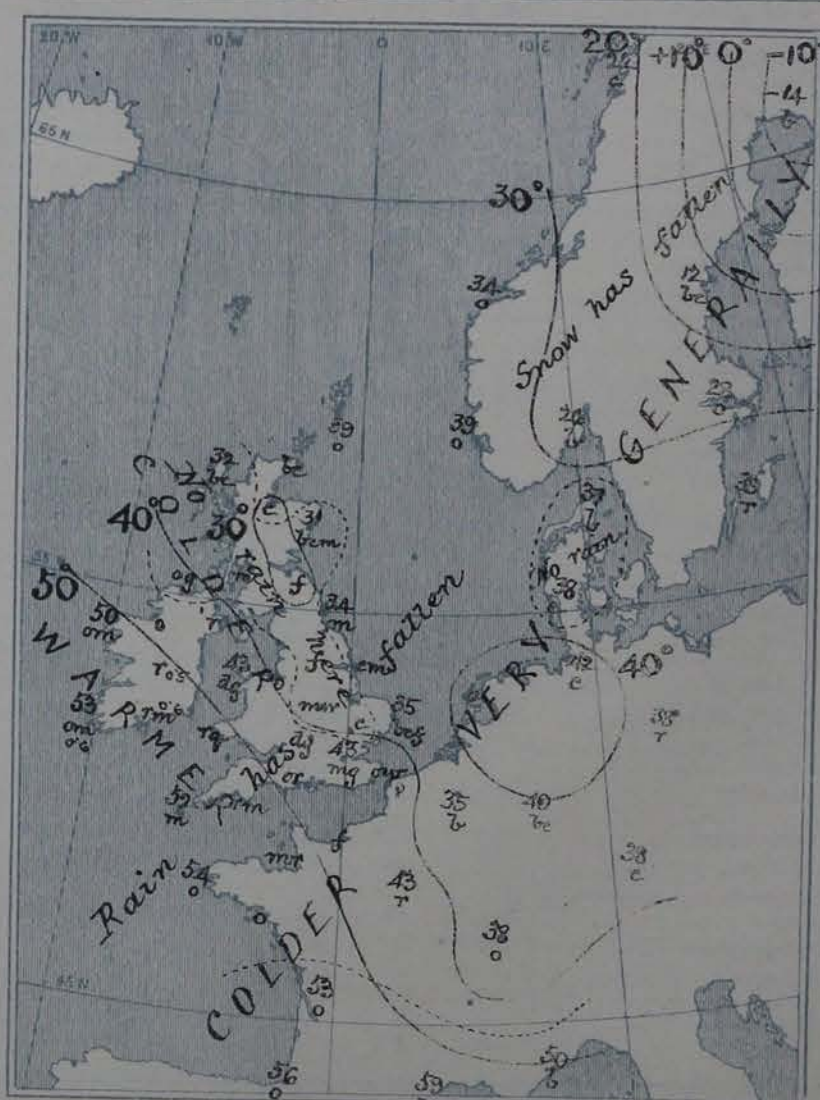
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |           |           | RAINFALL.<br>(Inches.) |
|---------------|---------------|---------------|-----------|-----------|------------------------|
|               | Daily<br>Max. | Daily<br>Min. | At 8 a.m. | At 8 a.m. |                        |
|               |               |               | Dry.      | Wet.      |                        |
| Sumburgh Head | 42.6          | 35.2          | 39.6      | 38.1      | 4.25                   |
| Stornoway     | 43.1          | 34.2          | 39.4      | 38.5      | 5.63                   |
| Wick          | 42.2          | 32.7          | 38.1      | 36.8      | 3.10                   |
| Nairn         | 41.9          | 32.8          | 37.1      | 35.6      | 1.95                   |
| Aberdeen      | 41.9          | 32.6          | 36.9      | 35.2      | 3.24                   |
| Leith         | 44.0          | 33.7          | 38.5      | 37.0      | 1.86                   |
| Shields       | 42.9          | 33.9          | 38.3      | 36.9      | 2.57                   |
| Spurn Head    | 42.4          | 35.3          | 38.8      | 37.7      | 2.14                   |
| York          | 42.3          | 32.3          | 36.4      | 35.4      | 2.28                   |
| Loughborough  | 42.7          | 32.2          | 36.3      | 35.4      | 2.24                   |
| Ardrossan     | 44.5          | 35.9          | 40.0      | 38.7      | 3.73                   |
| Mullaglmore   | 46.5          | 37.8          | 42.2      | 39.8      | 4.51                   |
| Donaghadee    | 45.8          | 36.2          | 40.2      | 39.3      | 2.84                   |
| Holyhead      | 46.4          | 39.1          | 42.8      | 41.1      | 3.82                   |
| Liverpool     | 43.5          | 35.0          | 38.8      | 37.1      | 2.59                   |
| Parsonstown   | 44.7          | 33.1          | 37.8      | 36.6      | 3.04                   |
| Valencia      | 49.7          | 40.0          | 44.6      | 42.4      | 5.99                   |
| Roche's Point | 47.9          | 38.9          | 42.9      | 41.5      | 4.95                   |
| Pembroke      | 43.8          | 40.3          | 43.6      | 42.2      | 3.99                   |
| Scilly        | 49.5          | 43.1          | 47.0      | 45.1      | 4.02                   |
| Prawle Point  | 47.0          | 38.2          | 42.5      | 41.1      | 3.76                   |
| Jersey        | 47.3          | 39.3          | 43.1      | 41.4      | 3.82                   |
| Hurst Castle  | 45.6          | 36.3          | 40.6      | 39.8      | 2.77                   |
| Dover         | 44.3          | 35.2          | 39.8      | 38.6      | 3.00                   |
| LONDON        | 44.0          | 33.9          | 37.8      | 36.7      | 2.10                   |
| Oxford        | 42.9          | 33.5          | 37.0      | 35.9      | 2.10                   |
| Cambridge     | 42.8          | 31.6          | 36.2      | 35.5      | 1.88                   |
| Yarmouth      | 41.9          | 33.7          | 37.9      | 37.0      | 2.68                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 ins. and more, to 30.1 ins. over Spain and the western and central parts of France; 29.6 ins. and more over England and the Gulf of Biscay.  
 Lowest, 29.7 ins. and less, in a depression off the northwest of Ireland.  
 Gradients have decreased generally.  
 Barometer still inclined to fall at Valence Island.

## TEMPERATURE

Highest, 50° to 59° in the south and east of France, 54° at Jersey, 53° in the south of Ireland, 52° at Sicily.  
 Lowest, (1) -14° F. at Hafnarfjörður, 12° at Helsingfors, 22° at Riga; (2) 29° at Harbin and Keith, 31° at Aberdeen, 32° at York.  
 It is apparently rising again over Great Britain, after having fallen decidedly at the northern stations in the night.

## WIND

Extremely variable — NW<sup>1</sup>, light to moderate, in the north of Scotland and in the eastern shores of the North Sea.  
 Nearly calm over England; SW<sup>1</sup> to SE<sup>1</sup>, moderate to strong, at our western stations; W<sup>1</sup> over the greater part of the Channel and Bay of Biscay.  
 The gales have all died down.

## WEATHER

Fine in the north of Sweden, in Scotland, and in several parts of France; dull and gloomy elsewhere, with rain in several parts of our islands and at Paris, Berlin, and Wiesbaden.  
 Rainfall during past 24 hours has been considerable on our western coasts, slight in the south and in Norway.

## SEA

Still rough on our southwestern coasts and off Ushant, moderate in the Channel, smooth in the northeast.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which appeared to be advancing towards our western coasts yesterday evening and some secondary systems which had come more inland are all shallow; the result is that while very dull and rainy weather has again appeared over Ireland and England the force of the wind is at present not great.

As the appearance is still unsettled, and the barometer is still inclined to fall in the west it has been thought desirable not to lower the signals at once.

## FORECASTS

For the 24 hours ending at NOON on 16<sup>th</sup> December 1891.

| DISTRICTS.              | FORECASTS.  | DISTRICTS.   | FORECASTS.  |
|-------------------------|---|--|---|
| 0 { SCOTLAND<br>NORTH   | { Calms and Varying breezes; unsettled,<br>sleet or snow at times.                | 6 { SCOTLAND<br>WEST   | { Varying S <sup>ly</sup> winds, force uncertain<br>at present, but increasing; rainy,<br>very unsettled. |
| 1 { SCOTLAND<br>EAST    |   | 7 { ENGLAND<br>N.W.  |   |
| 2 { ENGLAND<br>N.E.     | S <sup>ly</sup> and SW <sup>ly</sup> breezes; changeable,<br>some rain or sleet.  | 8 { ENGLAND<br>S.W.  |   |
| 3 { ENGLAND<br>EAST     | { Varying S <sup>ly</sup> breezes, light at first,<br>with rain, uncertain later. | 9 { IRELAND<br>NORTH   |   |
| 4 { MIDLAND<br>COUNTIES |   | 10 { IRELAND<br>SOUTH  |   |
| 5 { ENGLAND<br>SOUTH    |   | WARNINGS   |   |
|                         |   | At 3.25 pm to district 10. — Hoist south cone<br>again; at 7 pm to districts 8, 7, 5, and 3.<br>Hoist south Cone again |   |

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR.  | THER. |    | WIND |    | WEA  | SEA |               | BAR.  | THER. |    | WIND |    | WEA | SEA |
|-------------------|-------|-------|----|------|----|------|-----|---------------|-------|-------|----|------|----|-----|-----|
|                   |       | D.    | W. | D.   | F. |      |     |               |       | D.    | W. | D.   | F. |     |     |
| Skudesnaes ...    | 29.01 | 36    | 38 | E    | 2  | 0    | 3   | Holyhead ...  | 29.72 | 45    | 44 | WNW  | 4  | 05  | 4   |
| Sumburgh Head ... | 29.46 | 35    | 36 | W    | 2  | c    | 3   | Valencia ...  | 29.52 | 45    | 44 | ESE  | 2  | 7m  | 2   |
| Stornoway ...     | 29.70 | 40    | 35 | WNW  | 3  | 6    | 3   | Scilly ...    | 30.03 | 47    | 46 | S    | 4  | m   | 5   |
| Aberdeen ...      | 29.66 | 35    | 36 | WNW  | 5  | 65   | 3   | Jersey ...    |       |       |    |      |    |     |     |
| Shields ...       | 29.75 | 43    | 39 | W    | 4  | 6    | 2   | Dungeness ... | 29.87 | 45    | 46 | WNW  | 6  | 6c  | 5   |
| Ardrossan ...     | 29.79 | 44    | 42 | WNW  | 2  | 6    | 1   | London ...    | 29.91 | 45    | 45 | WNW  | 3  | 0   | 8   |
| Malin Head ...    | 29.84 | 43    | 41 | WNW  | 3  | c    | 3   | Yarmouth ...  | 29.78 | 44    | 42 | WNW  | 3  | cm  | 3   |
| Mullaghmore ...   | 29.85 | 44    | 42 | W    | 2  | omph | 3   | Rocheport ... | 30.23 | 54    | 51 | WNW  | 5  | c   | ?   |
| Belmullet ...     | 29.82 | 44    | 41 | ESE  | 2  | 0    | *   |               |       |       |    |      |    |     |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather fine over the greater part of our Islands and France, but showery in the north of Ireland, and rainy in the northeast of England, as well as over central France, fine also over Algeria and the southern parts of France and Italy. Dull over the northern, eastern, and central parts of the Continent, with rain at Vicksburg and Copenhagen and snow at Helsingfors and St. Petersburg. Rain setting in later over the southwestern parts of the United Kingdom and spreading eastwards; lunar halo seen in various parts of England.

Temperature highest 60° at Malta, 59° at Cagliari, 58° at Palermo, and 57° at Rome and Brindisi, above 50° over the Mediterranean, and Adriatic generally, as well as over the Bay of Biscay and at the mouth of the Channel. Lowest -5° F at Uleaborg, -1° at the Lofoten, +7° F at Archangel, 11° at Kuopio, 21° at Rodo, and 26° at Helsingfors, below the freezing point in many parts of Scandinavia and Siberia, and very little above it in Scotland. Rising during day to 50° or more at several of our southwestern stations, but remaining below 40° in the north of Scotland. Frost occurring over Scotland at night.

Wind NW over the greater part of Western Europe, moderate or fresh in force generally, but strong to a gale over the Irish Sea, as well as at London and Cagliari. Moderate to strong from the SW over Italy and central Europe, light from the S in Russia; moderate from SE in the south of Sweden and from E in the east of Norway. Subsequently backing to the SE in the west and south of Ireland, and to the W or SW in many other parts of the United Kingdom.

Barometer highest 30.3 in. to 30.5 in. over Spain and Algeria, 30.0 in. and upwards over the south of Russia. Lowest 28.9 in. and less, in a well-marked depression lying over the south of Sweden. Gradients rather steep over all the more central parts of Europe. Depression subsequently moving eastwards, but new disturbance approaching the southwest of our Islands, and barometer falling briskly in Ireland and the southwest of England.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.  
\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.  
" Weekly " " " £1 10 0



# DAILY WEATHER REPORT.

for *Wednesday, 16<sup>th</sup> December, 1891.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

| YESTERDAY EVENING.  |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |      |                     |      | 8 A.M. TO DAY. |  |  |  |  |  |  |  |  |  | PAST 24 HOURS. |  |  |
|---------------------|----------------------------------|-------|-------|----------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|----------------------|----------|-------------------|-------------|------|---------------------|------|----------------|--|--|--|--|--|--|--|--|--|----------------|--|--|
| STATIONS.           | BAROM.                           | TEMP. | WIND. |                      | Weather. | BAROMETER.                       |                                   | SHADE TEMP. |      |                                   | WIND. |                      | Weather. | Sea.<br>(0 to 3.) | SHADE TEMP. |      |                     |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Reading at 32° F. and Sea Level. | Dry.  | Dir.  | Force.<br>(0 to 12.) |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dir.  | Force.<br>(0 to 12.) |          |                   | Max.        | Min. | Amount of Rainfall. |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     |                                  |       |       |                      |          |                                  |                                   |             |      |                                   |       |                      |          |                   |             |      |                     |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
| SCANDINAVIA.        | Haparanda ...                    | 29.76 | 9     | Z                    | 0        | bc                               | 29.84                             | +18         | 12   | 2                                 | +26   | NNW                  | 2        | C                 | *           | 12   | -15                 |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Hernösand ...                    | 29.79 | 13    | N                    | 4        | C                                | 29.89                             | +26         | 17   | 16                                | +5    | NW                   | 2        | C                 | *           | 19   | 3                   |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Stockholm ...                    | 29.72 | 22    | NW                   | 2        | 0                                | 29.78                             | +43         | 18   | 17                                | -10   | NW                   | 4        | C                 | *           | 36   | 19                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Wisby ...                        | 29.66 | 31    | N                    | 8        | 0                                | 29.74                             | +45         | 31   | 28                                | -8    | NNE                  | 4        | C                 | *           | 30   | 28                  | 0.04 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Bodo ...                         | 29.76 | 21    | E                    | 4        | b                                | 29.89                             | +30         | 21   | 18                                | -1    | E                    | 4        | C                 | 2           | 23   | 19                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Christiansund ...                | 29.70 | 31    | Z                    | 0        | b                                | 29.76                             | +29         | 30   | 28                                | -4    | ESE                  | 1        | b                 | 3           | 34   | 28                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Skudesnaes ...                   | 29.70 | 37    | Z                    | 0        | 0                                | 29.69                             | +05         | 36   | 32                                | -3    | EHE                  | 2        | 0                 | 2           | 39   | 34                  | 0.04 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Christiania Fjord (Færdor) ...   | 29.73 | 27    | NE                   | 2        | 0                                | 29.76                             | +17         | 26   | 24                                | 0     | NE                   | 3        | 0                 | 2           | 28   | 25                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Skagen (The Seaw) ...            | 29.69 | 36    | Z                    | 0        | b                                | 29.62                             | +05         | 32   | 32                                | -5    | E                    | 5        | 0                 | 2           | 37   | 30                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Fanø ...                         | 29.81 | 38    | N                    | 2        | C                                | 29.46                             | -26         | 33   | 33                                | -5    | ESE                  | 4        | S                 | *           | 43   | 32                  | 0.08 |                |  |  |  |  |  |  |  |  |  |                |  |  |
| BRITISH ISLANDS.    | Sumburgh Head ...                | 29.64 | 36    | Z                    | 0        | 0                                | 29.74                             | +01         | 38   | 35                                | -1    | NNE                  | 1        | 0                 | 3           | 40   | 35                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Sternoway ...                    | 29.36 | 38    | SE                   | 8        | +                                | 29.79                             | +01         | 43   | 43                                | +11   | N                    | 4        | C                 | 5           | 43   | 30                  | 0.85 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Wick ...                         | 29.55 | 40    | S                    | 5        | +                                | 29.76                             | -05         | 41   | 40                                | +9    | E                    | 3        | 0                 | 5           | 42   | 30                  | 0.70 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Nairn ...                        | 29.43 | 35    | SSE                  | 2        | +                                | 29.68                             | -15         | 41   | 40                                | +12   | ESE                  | 2        | op                | 2           | 41   | 25                  | 0.33 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Aberdeen ...                     | 29.60 | 37    | SSE                  | 5        | ogrg                             | 29.67                             | -22         | 42   | 40                                | +11   | NE                   | 7        | cqpu              | 6           | 42   | 31                  | 0.45 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Leith ...                        | 29.49 | 39    | SE                   | 2        | +                                | 29.61                             | -29         | 43   | 42                                | +14   | NW                   | 1        | 0                 | *           | 46   | 28                  | 0.57 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Shields ...                      | 29.60 | 39    | SSE                  | 4        | +                                | 29.52                             | -41         | 44   | 42                                | +10   | NSW                  | 5        | +                 | 3           | 49   | 34                  | 0.50 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Spurn Head ...                   | 29.70 | 42    | S                    | 4        | rm                               | 29.63                             | -33         | 45   | 43                                | +8    | NSW                  | 5        | 0                 | 4           | 48   | 35                  | 0.15 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | York ...                         | 29.76 | 39    | SSE                  | 1        | +                                | 29.64                             | -32         | 46   | 43                                | +14   | N                    | 5        | 0                 | *           | 53   | 31                  | 0.22 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Loughborough ...                 | 29.74 | 51    | SW                   | 5        | 0                                | 29.78                             | -17         | 43   | 40                                | +6    | N                    | 4        | b                 | *           | 52   | 37                  | 0.15 |                |  |  |  |  |  |  |  |  |  |                |  |  |
| GERMANY & HOLLAND.  | Ardrossan ...                    | 29.45 | 49    | SW                   | 2        | om                               | 29.65                             | -19         | 47   | 46                                | +11   | NW                   | 3        | bc                | 3           | 49   | 35                  | 0.70 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Malin Head ...                   | 29.40 | 48    | NSW                  | 6        | 0                                | 29.76                             | +10         | 47   | 46                                | +7    | NW                   | 7        | og                | 5           | 50   | 38                  | 0.41 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Mullaghmore ...                  | 29.57 | 49    | SW                   | 6        | cp                               | 29.99                             | +30         | 48   | 45                                | 0     | NW                   | 7        | 0                 | 6           | 52   | 46                  | 0.15 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Belmullet ...                    | 29.61 | 49    | N                    | 7        | 0                                | 30.05                             | +35         | 47   | 45                                | -9    | NNW                  | 2        | bc                | *           | 51   | 46                  | 0.07 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Donaghadee ...                   | 29.54 | 52    | N                    | 5        | +                                | 29.76                             | -07         | 48   | 44                                | +3    | NW                   | 8        | bc                | 6           | 52   | 43                  | 0.26 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Liverpool (Bidston) ...          | 29.65 | 51    | SW                   | 5        | +                                | 29.78                             | -13         | 46   | 43                                | +6    | N                    | 8        | 0                 | 6           | 52   | 40                  | 0.18 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Holyhead ...                     | 29.65 | 51    | SW                   | 5        | rmgy                             | 29.89                             | +04         | 47   | 44                                | +4    | NNW                  | 8        | bcg               | 6           | 52   | 43                  | 0.16 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Parsonstown ...                  | 29.69 | 51    | SW                   | 1        | C                                | 30.05                             | +26         | 43   | 42                                | -9    | N                    | 1        | bc                | *           | 54   | 43                  | 0.10 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Valencia ...                     | 29.88 | 49    | N                    | 4        | C                                | 30.14                             | +34         | 40   | 39                                | -13   | Z                    | 0        | bm                | 1           | 54   | 39                  | 0.09 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Roche's Point ...                | 29.81 | 52    | NNW                  | 4        | C                                | 30.11                             | +24         | 42   | 40                                | -11   | NW                   | 1        | b                 | 4           | 54   | 41                  | 0.10 |                |  |  |  |  |  |  |  |  |  |                |  |  |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.) ...     | 29.77 | 51    | NSW                  | 7        | +                                | 30.07                             | +16         | 48   | 47                                | -3    | N                    | 5        | bc                | 5           | 52   | 48                  | 0.12 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Scilly ...                       | 29.97 | 53    | SW                   | 6        | m                                | 30.15                             | +09         | 49   | 47                                | -3    | NNW                  | 4        | C                 | 6           | 54   | 49                  | 0.02 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Prawle Point ...                 | 29.97 | 52    | SW                   | 6        | 0                                | 30.11                             | +08         | 45   | 44                                | -7    | N                    | 3        | bm                | 2           | 52   | 44                  | 0.12 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Jersey (St. Aubin's) ...         | 30.12 | 54    | NSW                  | 4        | orm                              | 30.17                             | +07         | 50   | 46                                | -4    | N                    | 4        | bcm               | 3           | 55   | 48                  | 0.07 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Hurst Castle ...                 | 29.96 | 52    | NSW                  | 6        | cg                               | 30.02                             | +03         | 46   | 45                                | -2    | N                    | 6        | bm                | 4           | 52   | 45                  | 0.04 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Dungeness ...                    | 29.92 | 50    | NSW                  | 5        | op                               | 29.93                             | -07         | 45   | 43                                | 0     | NNW                  | 6        | bc                | 5           | 51   | 44                  | 0.05 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | London ...                       | 29.91 | 52    | NSW                  | 4        | 0                                | 29.92                             | -09         | 43   | 40                                | 0     | N                    | 3        | b                 | *           | 54   | 42                  | 0.06 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Oxford ...                       | 29.81 | 50    | SSW                  | 4        | +                                | 29.93                             | -07         | 42   | 40                                | +1    | NSW                  | 5        | b                 | *           | 52   | 40                  | 0.10 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Cambridge ...                    | 29.82 | 51    | S                    | 2        | C                                | 29.85                             | -15         | 43   | 40                                | +6    | NSW                  | 3        | b                 | *           | 52   | 36                  | 0.12 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Yarmouth ...                     | 29.82 | 45    | SSW                  | 3        | of                               | 29.72                             | -27         | 42   | 40                                | +7    | N                    | 4        | b                 | 3           | 45   | 34                  | 0.23 |                |  |  |  |  |  |  |  |  |  |                |  |  |
| PENINSULA.          | Cuxhaven ...                     | 29.90 | 40    | N                    | 2        | 0                                | 29.44                             | -35         | 40   | 39                                | -2    | N                    | 5        | +                 | *           | 43   | 37                  | 0.32 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Berlin ...                       | 29.95 | 38    | NNW                  | 3        | C                                | 29.64                             | -09         | 34   | 33                                | -4    | SE                   | 2        | S                 | *           | 41   | 34                  | 0.04 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Wiesbaden ...                    | *     | *     | *                    | *        | *                                | ?                                 | ?           | 48   | 47                                | +8    | SW                   | 2        | C                 | *           | 48   | 37                  | 0.28 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Munich ...                       | 30.15 | 36    | SW                   | 4        | 0                                | 29.89                             | -15         | 45   | 43                                | +7    | N                    | 7        | +                 | *           | 46   | 34                  | 0.07 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | The Helder ...                   | 29.89 | 41    | S                    | 2        | +                                | 29.63                             | -36         | 46   | 44                                | +2    | NNW                  | 5        | C                 | 4           | 48   | 39                  | 0.20 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Brussels (9 a.m.) ...            | *     | *     | *                    | *        | *                                | 29.88                             | -18         | 46   | 42                                | +11   | NNW                  | 5        | C                 | *           | 51   | 35                  | 0.20 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Cape Gris Nez ...                | 29.91 | 51    | NSW                  | 5        | f                                | 29.91                             | -08         | 47   | 44                                | +4    | N                    | 6        | C                 | 6           | 52   | 37                  | 0.12 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Paris ...                        | 30.12 | 54    | NSW                  | 2        | 0                                | 30.06                             | -01         | 52   | 48                                | +9    | N                    | 5        | C                 | *           | 54   | 43                  | 0.24 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Brest ...                        | ?     | 54    | N                    | 4        | 0                                | ?                                 | ?           | 51   | 50                                | -3    | NW                   | 3        | C                 | 3           | 54   | 50                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Lorient ...                      | 30.21 | 54    | NSW                  | 5        | C                                | 30.17                             | -02         | 53   | 53                                | -2    | N                    | 3        | +                 | 4           | 55   | 52                  | 0.04 |                |  |  |  |  |  |  |  |  |  |                |  |  |
| FRANCE AND BELGIUM. | Rochefort ...                    | 30.33 | 53    | NNW                  | 5        | bc                               | 30.27                             | +02         | 52   | 50                                | -1    | N                    | 4        | 0                 | *           | 55   | 50                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Belfort ...                      | ?     | 38    | N                    | 5        | +                                | ?                                 | ?           | 36   | 32                                |       | N                    | 5        | +                 | *           | 46   | 35                  | 0.40 |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Lyons ...                        | 30.26 | 51    | N                    | 1        | 0                                | 30.25                             |             | 47   | 44                                |       | NSW                  | 1        | C                 | *           | 53   | 47                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Nice ...                         | 30.07 | 49    | ESE                  | 1        | bc                               | 30.04                             | +09         | 44   | 39                                | -6    | E                    | 1        | b                 | 1           | 59   | 34                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Perpignan ...                    | 30.34 | 56    | NW                   | 3        | b                                | 30.23                             | -03         | 40   | 39                                | -19   | N                    | 2        | b                 | *           | 61   | 39                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Biarritz ...                     | 30.40 | 55    | N                    | 2        | 0                                | 30.36                             | -03         | 51   | 47                                | -5    | S                    | 3        | 0                 | 4           | 57   | 43                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |
| PENINSULA.          | Corunna ...                      | *     | *     | *                    | *        | *                                | *                                 | *           | *    | *                                 | *     | *                    | *        | *                 | *           | *    | *                   | *    |                |  |  |  |  |  |  |  |  |  |                |  |  |
|                     | Lisbon ...                       | 30.32 | 56    | NE                   | 4        | b                                | 30.29                             | -07         | 48   | 46                                | -1    | NE                   | 4        | b                 | *           | 59   | 48                  |      |                |  |  |  |  |  |  |  |  |  |                |  |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Wednesday, 16<sup>th</sup> December, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their bars and feathers refer to force thus—

— forces above 10; — forces 8 to 10;

— forces 5 to 7; — forces 1 to 4.

— dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

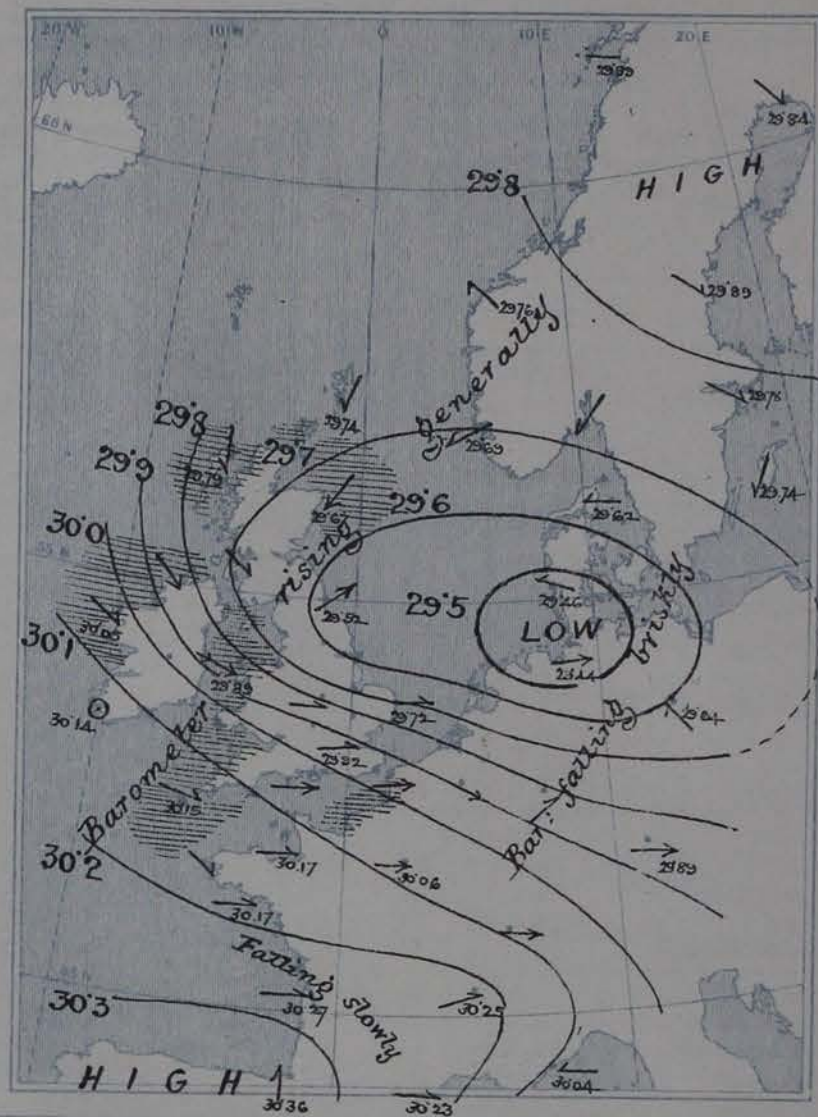
— Rough. — High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
|               | ins.           |
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spinn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardsman       | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.870         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.903         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Sally         | 29.931         |
| Pravie Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.941         |
| Oxford        | 29.933         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER**—is shown by Letters of the Beaufort Scale.

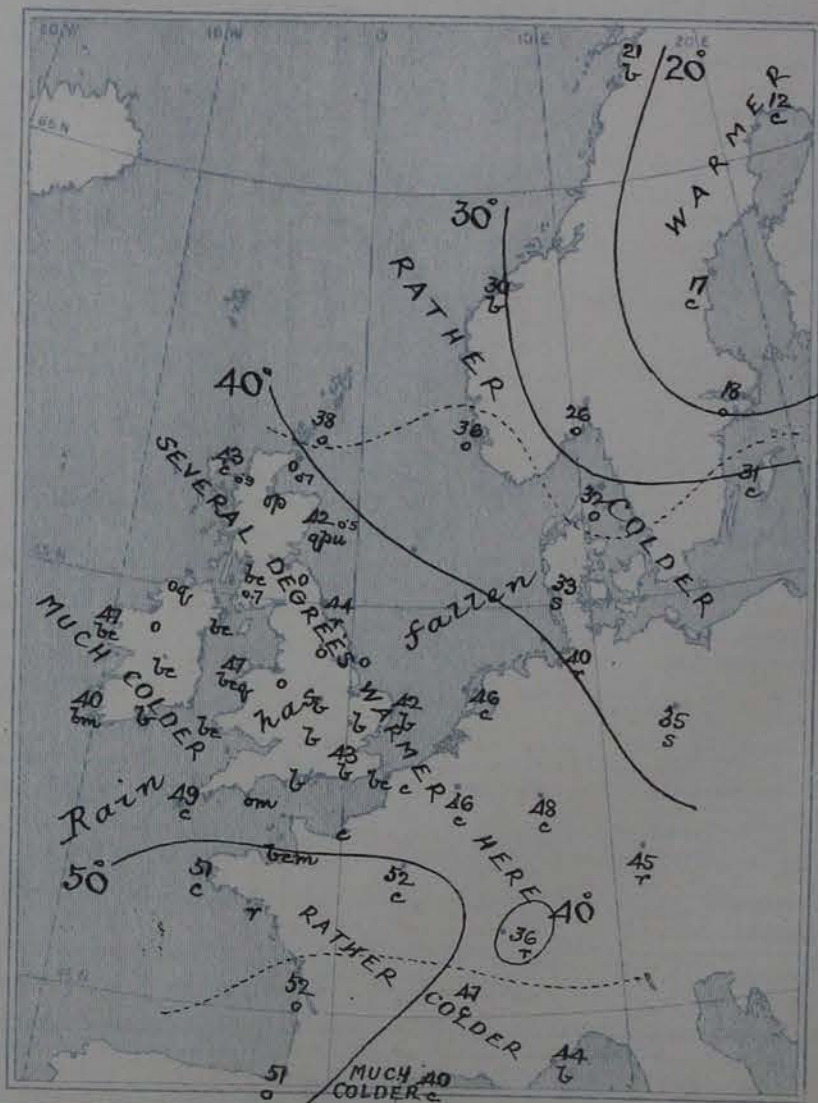
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |           |           | RAINFALL.<br>inches. |
|---------------|---------------|---------------|-----------|-----------|----------------------|
|               | Daily<br>Max. | Daily<br>Min. | at 8 a.m. | at 4 p.m. |                      |
| Sumburgh Head | 42.0          | 35.2          | 29.6      | 38.1      | 4.25                 |
| Stornoway     | 43.1          | 34.2          | 30.4      | 38.5      | 3.03                 |
| Wick          | 42.2          | 32.5          | 33.1      | 38.8      | 3.10                 |
| Nairn         | 41.9          | 32.8          | 37.1      | 33.0      | 1.95                 |
| Aberdeen      | 41.9          | 32.6          | 36.0      | 35.2      | 5.24                 |
| Leith         | 44.0          | 33.7          | 38.5      | 37.0      | 1.86                 |
| Shields       | 42.9          | 33.0          | 38.3      | 36.9      | 2.57                 |
| Spinn Head    | 42.4          | 35.3          | 38.8      | 37.7      | 2.14                 |
| York          | 42.3          | 32.3          | 36.4      | 35.4      | 2.28                 |
| Loughborough  | 42.7          | 32.2          | 36.3      | 35.4      | 2.24                 |
| Ardsman       | 44.5          | 35.9          | 40.0      | 38.7      | 3.73                 |
| Mullaghmore   | 46.5          | 37.8          | 42.2      | 39.8      | 1.51                 |
| Donaghadee    | 45.8          | 36.2          | 40.2      | 39.3      | 2.81                 |
| Holyhead      | 46.4          | 35.1          | 42.8      | 41.1      | 3.82                 |
| Liverpool     | 43.5          | 35.6          | 38.8      | 37.1      | 3.59                 |
| Parsonstown   | 44.7          | 33.1          | 37.8      | 36.6      | 3.04                 |
| Valencia      | 49.7          | 40.0          | 41.6      | 42.4      | 7.90                 |
| Roche's Point | 45.0          | 38.0          | 42.0      | 41.3      | 4.35                 |
| Pembroke      | 44.8          | 40.3          | 43.6      | 42.2      | 3.09                 |
| Sally         | 49.5          | 43.1          | 47.0      | 45.1      | 4.02                 |
| Pravie Point  | 47.0          | 43.2          | 42.5      | 41.1      | 3.78                 |
| Jersey        | 47.5          | 39.3          | 40.1      | 41.4      | 3.89                 |
| Hurst Castle  | 45.6          | 39.3          | 40.6      | 39.8      | 2.77                 |
| Dover         | 41.3          | 33.9          | 39.8      | 38.6      | 2.00                 |
| LONDON        | 44.0          | 33.0          | 37.8      | 36.7      | 2.10                 |
| Oxford        | 42.9          | 33.5          | 37.0      | 35.9      | 2.10                 |
| Cambridge     | 42.8          | 31.6          | 36.2      | 35.6      | 1.84                 |
| Yarmouth      | 41.9          | 35.7          | 37.0      | 37.0      | 2.66                 |

**NOTE**—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1865-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 in. and upwards, in an anticyclone lying over the north of Spain and the southern parts of the Bay of Biscay; 29.8 in. and upwards over the northern part of Scandinavia.  
 Lowest, 29.5 in. and less, in a depression lying over north Germany and the south of Denmark.  
 Gradients rather steep over England and the north of Ireland, but slight elsewhere.  
 Barometer falling in Denmark, Germany, and some parts of France, but rising elsewhere.

## TEMPERATURE

Highest, 53° at Orient, 52° at Paris and Rochefort, 51° at Brest and Bismarck, and 49° at Seilly.  
 Lowest, 12° at Haparanda, 17° at Helsingfors, 18° at Stockholm, 21° at Rode, 26° at Tander, and 30° at Christiansund.  
 The maxima registered yesterday were above 50° in many parts of Ireland and England.

## WIND

Strong to a gale from the NW<sup>d</sup> over the Irish Sea, moderate or fresh from the W<sup>d</sup> over England and Ireland generally, as well as over the Netherlands, Germany, and the south part of France.  
 E<sup>r</sup> or NE<sup>r</sup> over Norway, Denmark, and the north of Scotland, with a moderate gale at Aberdeen.  
 A moderate gale from the W<sup>d</sup> was experienced last night on some parts of our southern coasts.

## WEATHER

Fine in all the more southern and south-western parts of the United Kingdom, as well as in the coast of Norway and the south of France.  
 Cloudy or overcast elsewhere, with showers on the northeast coasts of Great Britain, and rain or snow in Denmark and Germany.  
 Rain fell yesterday in all parts of the United Kingdom, the largest amounts being 0.9 in. at Rosneath and 0.7 in. at Mirk and Ardrossan.  
 A heavy corona was seen at Mullaghmore.

## SEA

Rough on our western and extreme northern coasts, as well as in the Straits of Dover.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer appears to be still rising in the west of Ireland, but the wind there is falling light and is inclined to back, so that further depressions are probably approaching from the Atlantic.

# FORECASTS

For the 24 hours ending at NOON on 17<sup>th</sup> DEC<sup>r</sup> 1891.

| DISTRICTS.         | FORECASTS.  | DISTRICTS.       | FORECASTS.   |
|--------------------|---|------------------|--|
| 0 SCOTLAND NORTH   | N <sup>r</sup> and NE <sup>r</sup> winds, backing later; showery to fair.                                 | 6 SCOTLAND WEST  | NW <sup>r</sup> winds, backing later; fair generally.                                  |
| 1 SCOTLAND EAST    |   | 7 ENGLAND N.W.   | NW <sup>r</sup> gales, moderating and backing later; fair to cloudy and unsettled.     |
| 2 ENGLAND N.E.     | W <sup>r</sup> to NW <sup>r</sup> winds, moderate or fresh; showery to fair.                              | 8 ENGLAND S.W.   | W <sup>r</sup> to SW <sup>r</sup> or S <sup>r</sup> winds; fair to dull and some rain. |
| 3 ENGLAND EAST     |   | 9 IRELAND NORTH  | Same as N <sup>r</sup> 7.  |
| 4 MIDLAND COUNTIES | W <sup>r</sup> and NW <sup>r</sup> winds, moderate inland, strong on coast; fair generally cold at night. | 10 IRELAND SOUTH | Same as N <sup>r</sup> 8.  |
| 5 ENGLAND SOUTH    |   |                  |  |

## WARNINGS

At 7.25 pm yesterday to district 0, and part of 1. "Hoist South cone". The signals are still flying in districts 3, 5, 7, 8, and 10.

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA | SEA |               | BAR:  | THER: |    | WIND |    | WEA | SEA |
|-------------------|-------|-------|----|------|----|-----|-----|---------------|-------|-------|----|------|----|-----|-----|
|                   |       | D.    | W. | D.   | F. |     |     |               |       | D.    | W. | D.   | F. |     |     |
| Skudesnaes ...    | 29.71 | 39    | 37 | N    | 1  | 0   | 3   | Holyhead ...  | 29.79 | 51    | 51 | SW   | 4  | ogw | 4   |
| Sumburgh Head ... | 29.73 | 37    | 35 | Z    | 0  | c   | 4   | Valencia ...  | 29.73 | 54    | 53 | SSW  | 8  | rm  | 6   |
| Stornoway ...     | 29.58 | 40    | 39 | SE   | 4  | 0   | 4   | Scilly ...    | 30.03 | 53    | 53 | SW   | 5  | 0   | 5   |
| Aberdeen ...      | 29.78 | 39    | 36 | SSW  | 2  | og  | 2   | Jersey ...    | 30.15 | 54    | 54 | W    | 4  | 0   | 4   |
| Shields ...       | 29.82 | 39    | 37 | SE   | 3  | r   | 3   | Dungeness ... | 29.97 | 49    | 49 | SW   | 4  | r   | 3   |
| Ardrossan ...     | 29.62 | 37    | 37 | NE   | 3  | r   | 2   | London ...    | 29.94 | 50    | 49 | SW   | 2  | gfd | *   |
| Malin Head ...    | 29.43 | 48    | 48 | S    | 5  | 0   | 3   | Yarmouth ...  | 29.96 | 42    | 41 | SSW  | 3  | st  | 3   |
| Mullaghmore ...   | 29.53 | 52    | 51 | SSW  | 5  | og  | 3   | Rochefort ... | 30.35 | 55    | 53 | W    | 3  | 0   | *   |
| Belmullet ...     | 29.51 | 51    | 51 | HSW  | 7  | 0   | *   |               |       |       |    |      |    |     |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning fine and bright over the Iberian Peninsula and the south of France and for a time in Scotland, Denmark, and the south of Norway also; cloudy and very unsettled elsewhere, with rain in many parts of Ireland, England, and the north of France, and the south of Sweden, snow in the northern parts of Russia. Rain later throughout our islands, Germany, and the north of France - falls exceeding 0.7 in. in the west and north of Scotland, but less elsewhere.

Temperature changing irregularly - fallen over Scotland and Central Europe. Morning readings below 60° except at Malta, but exceeding 50° on the Atlantic coasts of Spain, France, and the British Isles, as well as over the Mediterranean; below 40° in the north and east of our islands and also over northern and central Europe and central Algeria. Lowest of all (1) - 14° F. at Haparanda, +14° at Archangel, 15° at Kiofio, 28° at Heligfors and Moscow, 30° at St. Petersburg; (2) 29° at Harin and Leth, 31° at Aberdeen, 32° at York. Rising later to between 50° and 55° over Ireland and England and to nearly 60° in many parts of France, but not touching 45° in the north and northeast of Scotland.

Wind very variable. (1) moderate to strong from SW. on our southwestern coasts, from SE. in the northwest; (2) light to moderate from NW. in Scotland and on the eastern shores of the North Sea, moderate W. in North Germany, but NE. over Finland, and N. over Sweden; (3) Strong to a gale from W. and NW. over many parts of the Mediterranean, but light E. at Nice; (4) moderate and anticyclonic on the shores of the Iberian Peninsula. Increasing to a gale at many of our western stations later, and freshening considerably in the Channel.

Barometer highest 30.5 ins. and more to 30.7 ins. over Spain, Algeria, and the southeast of France. Lowest, (1) 30.0 ins. and less, in a depression over the Gulf of Genoa; (2) 29.7 ins. and less, in another off the northwest of Ireland; (3) 29.1 ins. and less, in a third over the Baltic Provinces, whence a large "hollow" extended southwards to the Black Sea, and another northwards to the coast of Norway. The depression in the northwest growing deeper later and spreading southeastwards.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ „

£1 10 0 „



# DAILY WEATHER REPORT.

for *Thursday, 17<sup>th</sup> December, 1891.*  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

Published by the Hydrographic Office, 55, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           | YESTERDAY EVENING.                        |       |        |                      |          | 8 A.M. TO DAY.                            |   |             |      |   |        |                      |          |                   |             | PAST 24 HOURS. |                           |      |
|---------------------|---|-------|--------|----------------------|----------|---|---|-------------|------|---|--------|----------------------|----------|-------------------|-------------|----------------|---------------------------|------|
|                     | BAROM.                                    | TEMP. | WIND.  |                      | Weather. | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND.  |                      | Weather. | Sea.<br>(0 to 9.) | SHADE TEMP. |                | Amount<br>of<br>Rainfall. |      |
|                     | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry.  | Direc. | Force.<br>(0 to 12.) |          | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Direc. | Force.<br>(0 to 12.) |          |                   | Max.        | Min.           |                           |      |
|                     |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
| SCANDINAVIA.        | Haparanda ...                             | 30.12 | 5      | N                    | 2        | b   | 30.36                                   | + 52        | 3    | 2                                       | - 9    | N                    | 2        | b                 | *           | 14             | 1                         | -    |
|                     | Hernösand ...                             | 30.14 | 12     | Z                    | 0        | b   | 30.41                                   | + 52        | 12   | 11                                      | - 5    | NW                   | 2        | b                 | *           | 18             | 9                         | -    |
|                     | Stockholm ...                             | 29.97 | 22     | NW                   | 2        | S   | 30.20                                   | + 42        | 21   | 20                                      | + 3    | NW                   | 4        | S                 | *           | 23             | 16                        | 0.08 |
|                     | Wisby ...                                 | 29.82 | 30     | ESE                  | 6        | C   | 30.07                                   | + 33        | 30   | 27                                      | - 1    | NNE                  | 8        | S                 | *           | 32             | 27                        | 0.12 |
|                     | Bodo ...                                  | 30.16 | 27     | E                    | 2        | b   | 30.41                                   | + 52        | 18   | 16                                      | - 3    | E                    | 2        | b                 | 1           | 21             | 16                        | -    |
|                     | Christiansund                             | 30.10 | 31     | ESE                  | 2        | bc  | 30.36                                   | + 60        | 35   | ?                                       | + 5    | ESE                  | 1        | C                 | 3           | 36             | 30                        | -    |
|                     | Skudesnaes ...                            | 30.13 | 32     | ESE                  | 4        | b   | 30.41                                   | + 72        | 29   | 28                                      | - 7    | ESE                  | 2        | b                 | 3           | 36             | 27                        | -    |
|                     | Christiania Fjord<br>(Færder)             | 30.11 | 24     | NE                   | 4        | b   | 30.41                                   | + 65        | 21   | 19                                      | - 5    | NE                   | 4        | b                 | 2           | 27             | 21                        | 0.08 |
|                     | Skagen (The Scaw)                         | 30.14 | 29     | NE                   | 3        | O   | 30.43                                   | + 81        | 26   | 24                                      | - 6    | NE                   | 3        | bc                | 1           | 32             | 23                        | -    |
|                     | Fanö ...                                  | 29.97 | 33     | NNE                  | 4        | O   | 30.33                                   | + 87        | 29   | 27                                      | - 4    | Z                    | 0        | C                 | *           | 36             | 27                        | -    |
| BRITISH ISLANDS.    | Sumburgh Head                             | 30.14 | 38     | N                    | 1        | C   | 30.31                                   | + 57        | 40   | 38                                      | + 2    | SSE                  | 1        | C                 | 2           | 40             | 34                        | 0.02 |
|                     | Stornoway ...                             | 30.12 | 37     | Z                    | 0        | b   | 30.18                                   | + 39        | 43   | 42                                      | 0      | SW                   | 6        | b                 | 6           | 44             | 35                        | 0.02 |
|                     | Wick ...                                  | 30.17 | 30     | N                    | 1        | b   | 30.26                                   | + 50        | 42   | 39                                      | + 1    | S                    | 4        | C                 | 2           | 44             | 29                        | -    |
|                     | Nairn ...                                 | 30.17 | 36     | Z                    | 0        | bc  | 30.27                                   | + 59        | 26   | 25                                      | - 15   | Z                    | 0        | b                 | 1           | 42             | 23                        | 0.02 |
|                     | Aberdeen ...                              | 30.19 | 35     | NW                   | 2        | bc  | 30.38                                   | + 71        | 33   | 31                                      | - 9    | SW                   | 1        | bc                | 3           | 42             | 30                        | 0.02 |
|                     | Leith ...                                 | 30.21 | 39     | NE                   | 1        | bc  | 30.39                                   | + 78        | 28   | 28                                      | - 15   | Z                    | 4        | f                 | *           | 45             | 27                        | -    |
|                     | Shields ...                               | 30.15 | 43     | NW                   | 3        | C   | 30.42                                   | + 90        | 34   | 33                                      | - 10   | SW                   | 2        | bc                | 2           | 46             | 33                        | 0.04 |
|                     | Spurn Head ...                            | 30.11 | 43     | N                    | 4        | C   | 30.43                                   | + 80        | 39   | 39                                      | - 6    | NE                   | 2        | bc                | 2           | 45             | 37                        | 0.01 |
|                     | York ...                                  | 30.10 | 44     | N                    | 2        | O   | 30.46                                   | + 82        | 28   | 28                                      | - 18   | Z                    | 0        | f                 | *           | 49             | 27                        | -    |
|                     | Loughborough                              | 30.11 | 45     | NW                   | 3        | O   | 30.43                                   | + 65        | 31   | 31                                      | - 12   | Z                    | 0        | f                 | *           | 48             | 29                        | -    |
| GERMANY & HOLLAND.  | Ardrossan ...                             | 30.01 | 39     | Z                    | 0        | bc  | 30.38                                   | + 73        | 34   | 34                                      | - 13   | NE                   | 2        | b                 | 2           | 47             | 33                        | -    |
|                     | Malin Head ...                            | 30.14 | 45     | S                    | 3        | O   | 30.19                                   | + 43        | 43   | 41                                      | - 4    | SSE                  | 5        | b                 | 1           | 47             | 36                        | 0.05 |
|                     | Mullaghmore ...                           | 30.17 | 44     | WSW                  | 1        | C   | 30.17                                   | + 18        | 46   | 42                                      | - 2    | SSE                  | 6        | C                 | 4           | 49             | 40                        | -    |
|                     | Belmullet ...                             | 30.14 | 43     | SE                   | 2        | b   | 30.11                                   | + 06        | 46   | 45                                      | - 1    | S                    | 4        | O                 | *           | 50             | 41                        | -    |
|                     | Donaghadee ...                            | 30.20 | 45     | SSE                  | 3        | b   | 30.32                                   | + 56        | 45   | 43                                      | - 3    | SSE                  | 5        | b                 | 4           | 50             | 44                        | 0.01 |
|                     | Liverpool (Bidston)                       | 30.18 | 43     | NE                   | 1        | b   | 30.44                                   | + 66        | 33   | 33                                      | - 13   | SE                   | 2        | f                 | 2           | 48             | 33                        | 0.04 |
|                     | Holyhead ...                              | 30.16 | 46     | NE                   | 3        | b   | 30.36                                   | + 47        | 39   | 38                                      | - 8    | SE                   | 2        | bc                | 2           | 49             | 35                        | 0.01 |
|                     | Parsonstown ...                           | 30.20 | 39     | Z                    | 0        | b   | 30.25                                   | + 20        | 41   | 40                                      | - 2    | Z                    | 0        | b                 | *           | 48             | 35                        | -    |
|                     | Valencia ...                              | 30.17 | 46     | ESE                  | 2        | b   | 30.18                                   | + 04        | 49   | 49                                      | + 9    | SE                   | 6        | rm                | 5           | 52             | 38                        | 0.07 |
|                     | Roche's Point...                          | 30.20 | 45     | SE                   | 1        | b   | 30.25                                   | + 14        | 50   | 48                                      | + 8    | S                    | 3        | C                 | 4           | 51             | 38                        | -    |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.)                  | 30.18 | 48     | NW                   | 3        | bc  | 30.35                                   | + 28        | 45   | 44                                      | - 3    | SE                   | 5        | bc                | 5           | 49             | 43                        | -    |
|                     | Scilly ...                                | 30.21 | 49     | NW                   | 4        | bc  | 30.28                                   | + 13        | 50   | 48                                      | + 1    | SE                   | 5        | C                 | 5           | 50             | 46                        | -    |
|                     | Prawle Point ...                          | 30.20 | 45     | NW                   | 2        | b   | 30.40                                   | + 29        | 45   | 42                                      | 0      | ESE                  | 3        | C                 | 2           | 50             | 42                        | -    |
|                     | Jersey (St. Aubin's)                      | 30.18 | 51     | NW                   | 3        | bc  | 30.40                                   | + 23        | 46   | 41                                      | - 4    | E                    | 3        | bc                | 3           | 52             | 43                        | -    |
|                     | Hurst Castle ...                          | 30.14 | 47     | W                    | 4        | C   | 30.42                                   | + 40        | 47   | 46                                      | + 1    | NE                   | 2        | bc                | 3           | 52             | 36                        | -    |
|                     | Dungeness ...                             | 30.01 | 48     | N                    | 5        | d   | 30.39                                   | + 46        | 33   | 33                                      | - 12   | N                    | 2        | bc                | 1           | 51             | 33                        | -    |
|                     | London ...                                | 30.12 | 48     | NW                   | 4        | O   | 30.45                                   | + 53        | 34   | 33                                      | - 9    | Z                    | 0        | f                 | *           | 50             | 32                        | 0.01 |
|                     | Oxford ...                                | 30.22 | 45     | NW                   | 4        | O   | 30.47                                   | + 54        | 29   | 29                                      | - 13   | Z                    | 0        | f                 | *           | 49             | 29                        | -    |
|                     | Cambridge ...                             | 30.08 | 45     | N                    | 3        | O   | 30.48                                   | + 63        | 30   | 30                                      | - 13   | Z                    | 0        | b                 | *           | 49             | 28                        | -    |
|                     | Yarmouth ...                              | 29.97 | 44     | N                    | 5        | b   | 30.39                                   | + 67        | 41   | 38                                      | - 1    | NNE                  | 4        | bc                | 4           | 45             | 38                        | 0.01 |
| GERMANY & HOLLAND.  | Cuxhaven ...                              | 29.60 | 37     | ESE                  | 5        | †   | 30.30                                   | + 86        | 32   | 30                                      | - 8    | NE                   | 4        | b                 | *           | 45             | 30                        | 0.32 |
|                     | Berlin ...                                | 29.61 | 34     | NE                   | 3        | †   | 30.12                                   | + 48        | 32   | 30                                      | - 2    | N                    | 4        | C                 | *           | 45             | 32                        | 0.63 |
|                     | Wiesbaden ...                             | *     | *      | *                    | *        | *   | 30.18                                   | ?           | 37   | 34                                      | - 11   | N                    | 2        | bc                | *           | 48             | 36                        | 0.43 |
|                     | Munich ...                                | 29.84 | 39     | NW                   | 2        | O   | 29.92                                   | + 03        | 32   | 32                                      | - 13   | NW                   | 5        | S                 | *           | 46             | 32                        | 0.39 |
|                     | The Helder ...                            | 29.97 | 42     | NNE                  | 5        | †   | 30.39                                   | + 76        | 38   | 36                                      | - 8    | NNE                  | 2        | C                 | 3           | 46             | 37                        | 0.04 |
|                     | Brussels (9 a.m.)                         | *     | *      | *                    | *        | *   | 30.36                                   | + 48        | 36   | 35                                      | - 10   | N                    | 3        | O                 | *           | 46             | 35                        | 0.04 |
|                     | Cape Gris Nez                             | 29.96 | 48     | W                    | 6        | O   | ?                                       | ?           | 42   | 39                                      | - 5    | NE                   | 4        | bc                | 4           | 50             | 39                        | -    |
|                     | Paris ...                                 | 30.07 | 48     | WSW                  | 2        | O   | 30.35                                   | + 29        | 36   | 36                                      | - 16   | N                    | 2        | b                 | *           | 52             | 35                        | -    |
|                     | Brest ...                                 | ?     | 50     | NW                   | 1        | b   | ?                                       | ?           | 44   | 43                                      | - 7    | E                    | 1        | b                 | 2           | 54             | 39                        | -    |
|                     | Lorient ...                               | 30.21 | 54     | NW                   | 3        | b   | 30.32                                   | + 15        | 44   | 43                                      | - 9    | E                    | 3        | bc                | 4           | 55             | 43                        | -    |
| FRANCE AND BELGIUM. | Rochefort ...                             | 30.22 | 53     | W                    | 5        | O   | 30.24                                   | - 03        | 42   | 41                                      | - 10   | NE                   | 3        | b                 | *           | 55             | 39                        | 0.12 |
|                     | Belfort ...                               | ?     | 38     | W                    | 3        | †   | ?                                       | ?           | 38   | 34                                      | + 2    | W                    | 3        | O                 | *           | 47             | 34                        | 0.12 |
|                     | Lyons ...                                 | 30.17 | 45     | ESE                  | 1        | O   | 30.23                                   | - 02        | 39   | 36                                      | - 8    | N                    | 3        | b                 | *           | 52             | 39                        | 0.08 |
|                     | Nice ...                                  | 29.95 | 48     | Z                    | 0        | C   | 29.73                                   | - 31        | 51   | 39                                      | + 7    | N                    | 1        | b                 | 1           | 55             | 43                        | -    |
|                     | Perpignan ...                             | 30.23 | 51     | NW                   | 3        | O   | 30.15                                   | - 08        | 52   | 48                                      | + 12   | NW                   | 4        | b                 | *           | 57             | 40                        | -    |
|                     | Biarritz ...                              | 30.32 | 56     | W                    | 2        | O   | 30.26                                   | - 10        | 51   | 48                                      | 0      | S                    | 1        | O                 | 3           | 56             | 48                        | -    |
| PENINSULA.          | Corunna ...                               | *     | *      | *                    | *        | *   | ?                                       | ?           | ?    | ?                                       | ?      | ?                    | ?        | ?                 | ?           | ?              | -                         |      |
|                     | Lisbon ...                                | 30.23 | 55     | Z                    | 0        | b   | 30.21                                   | - 08        | 44   | 44                                      | - 4    | NE                   | 2        | f                 | *           | 57             | 43                        | -    |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Thursday, 17<sup>th</sup> Decr. 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

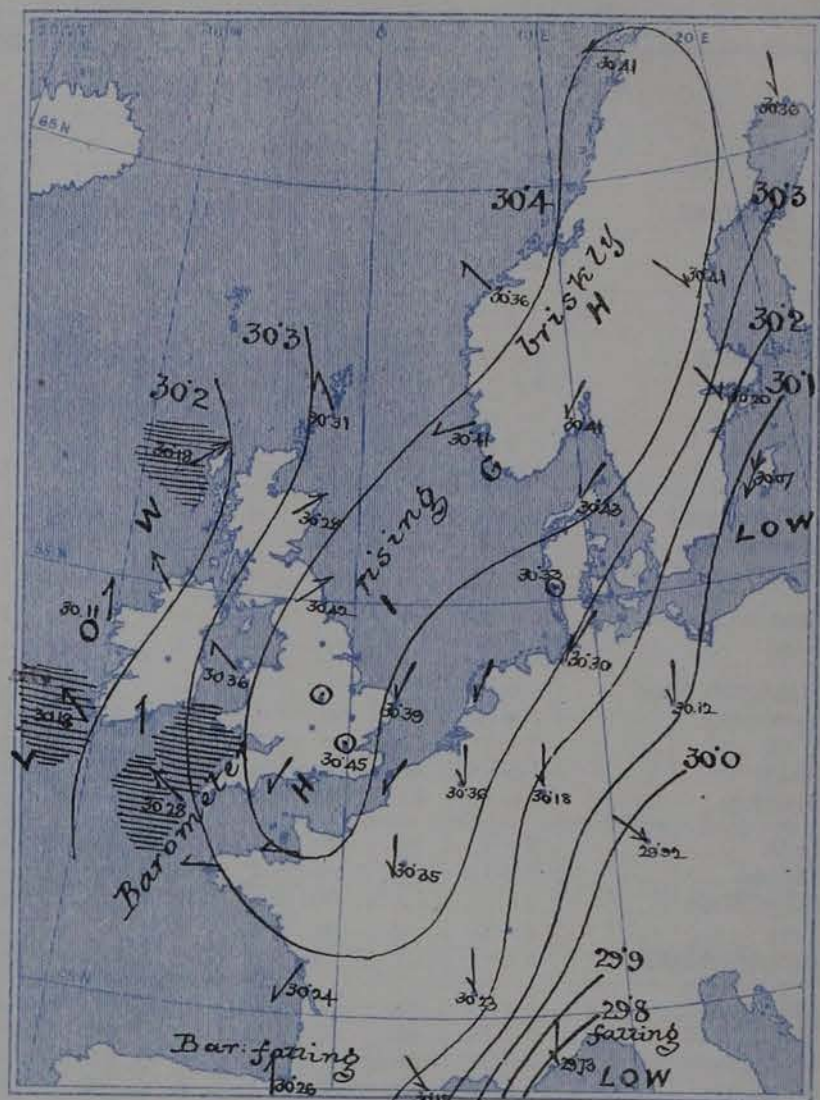
☼ = Rough. ☼ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.573         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.921         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.918         |
| Silly         | 29.931         |
| Prawle Point  | 29.970         |
| Jersey        | 29.965         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.934         |
| Oxford        | 29.953         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

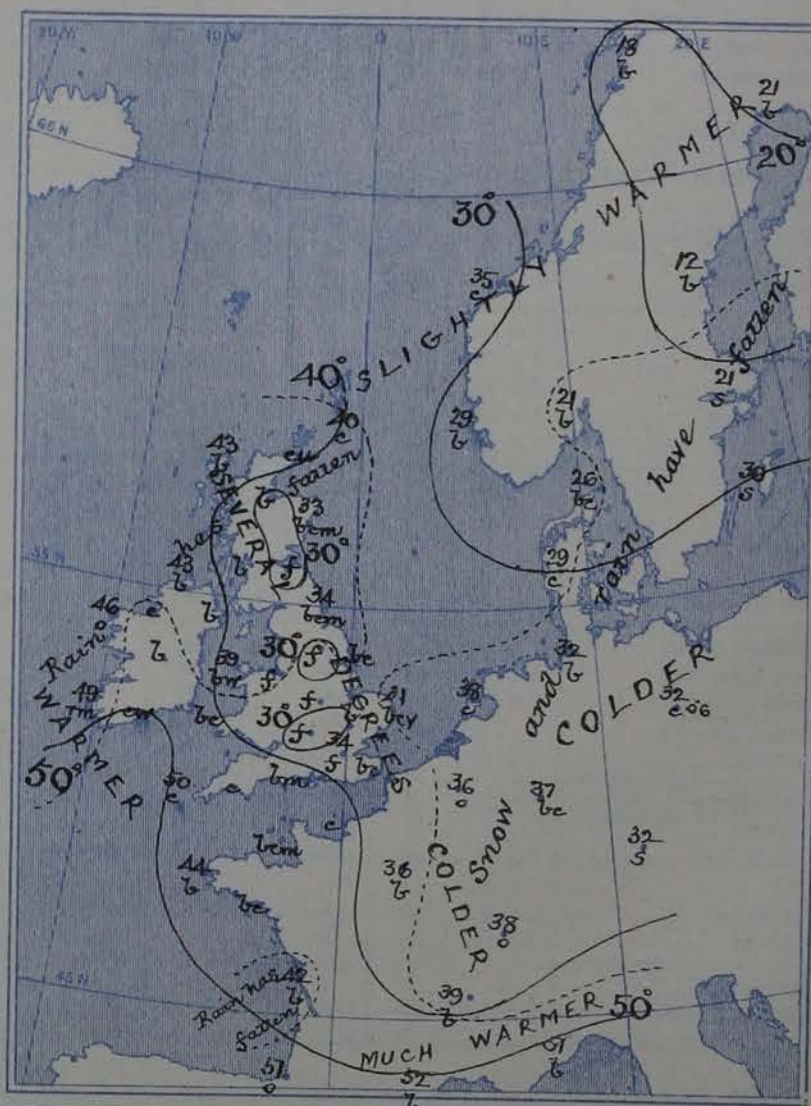
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |                   |                   | RAINFALL<br>(Inches.) |
|---------------|---------------|---------------|-------------------|-------------------|-----------------------|
|               | Daily<br>Max. | Daily<br>Min. | Dry,<br>at 8 a.m. | Wet,<br>at 8 a.m. |                       |
| Sumburgh Head | 42.6          | 35.2          | 39.6              | 38.1              | 4.25                  |
| Stornoway     | 43.1          | 34.2          | 39.4              | 38.5              | 5.63                  |
| Wick          | 42.2          | 32.7          | 38.1              | 36.8              | 3.10                  |
| Nairn         | 41.9          | 32.8          | 37.1              | 35.6              | 1.95                  |
| Aberdeen      | 41.9          | 32.6          | 36.9              | 35.2              | 3.24                  |
| Leith         | 44.0          | 33.7          | 38.5              | 37.0              | 1.86                  |
| Shields       | 42.9          | 33.9          | 38.3              | 36.9              | 2.57                  |
| Spurn Head    | 42.4          | 35.3          | 38.8              | 37.7              | 2.14                  |
| York          | 42.3          | 32.3          | 36.4              | 35.4              | 2.28                  |
| Loughborough  | 42.7          | 32.2          | 36.3              | 35.4              | 2.24                  |
| Ardrossan     | 44.5          | 35.9          | 40.0              | 38.7              | 3.73                  |
| Mullaghmore   | 46.5          | 37.8          | 42.2              | 39.8              | 4.51                  |
| Donaghadee    | 45.8          | 36.2          | 40.2              | 39.3              | 2.84                  |
| Holyhead      | 46.4          | 39.1          | 42.8              | 41.1              | 3.82                  |
| Liverpool     | 43.5          | 35.6          | 38.8              | 37.1              | 2.59                  |
| Parsonstown   | 44.7          | 33.1          | 37.8              | 36.6              | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.6              | 42.4              | 5.99                  |
| Roche's Point | 47.9          | 38.9          | 42.9              | 41.5              | 4.95                  |
| Pembroke      | 43.8          | 40.3          | 43.6              | 42.2              | 3.99                  |
| Silly         | 49.5          | 43.4          | 47.0              | 45.1              | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5              | 41.1              | 3.76                  |
| Jersey        | 47.3          | 39.3          | 43.1              | 41.4              | 3.82                  |
| Hurst Castle  | 45.6          | 36.3          | 40.6              | 39.8              | 2.77                  |
| Dover         | 44.3          | 35.9          | 39.8              | 38.6              | 3.00                  |
| LONDON        | 44.0          | 33.9          | 37.8              | 36.7              | 2.10                  |
| Oxford        | 42.9          | 33.5          | 37.0              | 35.9              | 2.10                  |
| Cambridge     | 42.8          | 31.6          | 36.2              | 35.5              | 1.88                  |
| Yarmouth      | 41.9          | 33.7          | 37.9              | 37.0              | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.4 in. and more to 30.2 in. in an anticyclone stretching from the Bay of Biscay across England, the north of France, and North Sea to Scandinavia.  
 Lowest, (1) About 30.1 in. off the extreme northwest of Ireland, (2) about 30.1 in. over the Baltic, (3) about 29.7 in. over the Gulf of Genoa.  
 Gradients steep over the north of Italy and south of France, moderate over Ireland and the west of Scotland, very slight over St. Petersburg and the North Sea.  
 Barometer rising except in the southeast of France and extreme north of Scotland.

## TEMPERATURE

Highest, 51° to 52° in the southwest and south of France, 50° at Tilly and Stockholm, 49° at Valencia, 47° at Forest Castle.  
 Lowest, (1) 12° F. at Helsingfors, 21° at Haparanda and Stockholm, (2) 26° at Havn, 28° at York, 29° at Oxford, 34° in London.  
 It has fallen very fast over Great Britain during the night.

## WIND

Fresh to strong from SE. in Ireland, and from SW. at Stornoway.  
 Moderate SE. in the Irish Sea.  
 Light NE. on our east coast and in the Netherlands.  
 A NE. gale is reported at Nisby.

## WEATHER

Fine and bright in nearly all parts of our Islands and their neighbourhood, but low fogs reported over the inland countries. Snow falling in the Baltic.  
 [Newspapers report heavy snow to have fallen in North Germany].

## SEA

Rather rough in the extreme west and southwest and in the Minch, slight or smooth in the east and south.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

During the past twenty-four hours the barometer has risen decidedly over the whole of our Islands and their neighbourhood and a long band of high pressure is now the dominant system over our area. Calms light breezes and foggy cold weather have become prevalent over Great Britain, while moderate to strong breezes from SE. are reported in Ireland, and light E. in the Channel. The anticyclone shows no tendency to give way at present.

## FORECASTS

For the 24 hours ending at NOON on 18<sup>th</sup> December. 1891.

### DISTRICTS.

### FORECASTS.

|   |                  |   |
|---|------------------|---|
| 0 | SCOTLAND NORTH   | } SW <sup>ly</sup> and S <sup>ly</sup> winds; some showers.   |
| 1 | SCOTLAND EAST    |   |
| 2 | ENGLAND N.E.     |   |
| 3 | ENGLAND EAST     | } S <sup>ly</sup> winds, light; fine.   |
| 4 | MIDLAND COUNTIES |   |
| 5 | ENGLAND SOUTH    | } Variable airs inland with fog; NE <sup>ly</sup> to E <sup>ly</sup> on coast, with fine quiet weather. |
|   |                  |   |

### DISTRICTS.

### FORECASTS.

|    |               |   |
|----|---------------|---|
| 6  | SCOTLAND WEST | } SE <sup>ly</sup> and S <sup>ly</sup> breezes; fair generally.             |
| 7  | ENGLAND N.W.  |   |
| 8  | ENGLAND S.W.  |   |
| 9  | IRELAND NORTH | } SE <sup>ly</sup> breezes, fresh or strong; fine in east, showery in west. |
| 10 | IRELAND SOUTH |   |

### WARNINGS

None issued.

Note.—The South Cone, point downwards (▼), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA | SEA |  | BAR:          | THER: |    | WIND |     | WEA | SEA |
|-------------------|-------|-------|----|------|----|-----|-----|--|---------------|-------|----|------|-----|-----|-----|
|                   |       | D.    | W. | D.   | F. |     |     |  |               | D.    | W. | D.   | F.  |     |     |
| Skudesnaes ...    | 29.92 | 36    | 32 | ESE  | 2  | b   | 2   |  | Holyhead ...  | 30.04 | 47 | 47   | W   | 6   | 5   |
| Sumburgh Head ... | 30.01 | 39    | 37 | N    | 1  | bc  | 2   |  | Valencia ...  | 30.19 | 51 | 49   | ESE | 2   | 2   |
| Stornoway ...     | 30.04 | 44    | 43 | NE   | 3  | c   | 3   |  | Scilly ...    | 30.19 | 50 | 48   | WNW | 4   | 5   |
| Aberdeen ...      | 30.05 | 41    | 39 | WNW  | 2  | bc  | 5   |  | Jersey ...    | 30.14 | 52 | 49   | WNW | 3   | 3   |
| Shields ...       | 29.94 | 46    | 43 | N    | 3  | c   | 3   |  | Dungeness ... | 29.93 | 49 | 45   | WNW | 6   | 5   |
| Ardrossan ...     | 30.07 | 45    | 43 | N    | 3  | b   | 2   |  | London ...    | 29.93 | 50 | 47   | WNW | 4   | 3   |
| Malin Head ...    | 30.06 | 46    | 44 | WNW  | 2  | b   | 4   |  | Yarmouth ...  | 29.75 | 45 | 44   | W   | 5   | 3   |
| Mullaghmore ...   | 30.11 | 49    | 46 | WNW  | 2  | bc  | 4   |  | Rochefort ... | 30.23 | 53 | 52   | W   | 5   | 3   |
| Belmullet ...     | 30.13 | 50    | 48 | S    | 2  | c   | *   |  |               |       |    |      |     |     |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

*Weather* fine in all the more southern and southern part of the United Kingdom, as well over the west of Norway, and the whole of southern Europe, cloudy or overcast elsewhere, with passing showers on the northeast coasts of Great Britain, steady rain at many of the German stations, and snow over the Fjelds of Finland and the Baltic Provinces, as well as at Tunis and Berlin. Fine weather subsequently extending to all parts of the United Kingdom, but rain falling at some of the French stations.

*Temperature* highest 62° at Malta, 56° at Algiers, and 55° at Bordini, La Calle and Tunis; above 50° over the Mediterranean, and the Bay of Biscay generally, and just touching that point at Jersey. Lowest 1° at Kiopec, 12° at Nakhavanda and Ulesburg, 15° at Archangel and 16° at Hango and Helsingfors, below 20° over Sweden and northern Russia generally, and below the freezing point over nearly the whole of northern Europe, as well as over Central Spain. Rising during day to 50° or a little more in the extreme west and south of our Islands, and to 55° or more at several of the French stations, but frost occurring in many parts of the United Kingdom at night.

*Wind* strong to a gale from the NW<sup>nd</sup> over the Irish Sea, moderate or fresh from the NW<sup>nd</sup> over England and Ireland generally, as well as over the Netherlands, western Germany, and the greater part of France. S<sup>th</sup> or SE<sup>th</sup> in Eastern Germany, and E<sup>th</sup> or NE<sup>th</sup> over Norway, Denmark, and the north of Scotland, with a moderate gale at Aberdeen. Light or moderate from the NW<sup>nd</sup> over Finland, Sweden, and the Baltic. Variable over Spain, Italy, Algeria, and the Mediterranean. Subsequently veering to the NW<sup>nd</sup> over England, but backing to the SE<sup>th</sup> in Ireland; gale over Irish Sea entirely subsiding.

*Barometer* highest 30.3 in. to 30.45 in. in an anticyclone lying over Spain, Algeria, and the southwest of France. Lowest 29.5 in. and less, in a long shallow area lying over northern Russia, and also in a well defined depression over the south of Denmark and ~~also~~ in a small secondary system lying off the northeast coasts of Great Britain. Depressions subsequently moving away to the eastward, and barometer rising in all parts of Western Europe, but rise slackening considerably in the west of Ireland.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.  
\* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

Terms:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Friday, 18<sup>th</sup> December,* 1891.  
 Issued by the Meteorological Office, 63, Victoria Street, London. *R. H. SCOTT, Secretary.*

| Issued by the Meteorological Office, 65, Victoria Street, London. R. H. SCOTT, Secretary. |  |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |
|---|--|---|-------|--------|----------------------|----------|---|---|-------------|------|---|--------|----------------------|----------|-------------------|-------------|----------------|---------------------------|
| STATIONS.   |  | YESTERDAY EVENING.                        |       |        |                      |          | 8 A.M. TO DAY.                            |   |             |      |   |        |                      |          |                   |             | PAST 24 HOURS. |                           |
|   |  | BAROM.                                    | TEMP. | WIND.  |                      | Weather. | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND.  |                      | Weather. | Sea.<br>(0 to 3.) | SHADE TEMP. |                | Amount<br>of<br>Rainfall. |
|   |  | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry.  | Direc. | Force.<br>(0 to 12.) |          | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Direc. | Force.<br>(0 to 12.) |          |                   | Max.        | Min.           |                           |
| SCANDINAVIA.  |  |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |
| Haparanda ...   |  | 30.50                                     | 8     | N      | 2                    | O        | 30.57                                     | + 21                                    | 3           | 3    | 0                                       | N      | 2                    | 10       | 0                 |             |                |                           |
| Hernösand ...   |  | 30.67                                     | 4     | Z      | 0                    | b        | 30.64                                     | + 23                                    | -3          | -3   | -15                                     | Z      | 0                    | 14       | ?                 |             |                |                           |
| Stockholm ...   |  | 30.45                                     | 24    | NE     | 8                    | S        | 30.55                                     | + 35                                    | 24          | 23   | + 3                                     | NW     | 4                    | 27       | 18                |             |                |                           |
| Wisby ...   |  | 30.29                                     | 30    | NNE    | 8                    | O        | 30.45                                     | + 38                                    | 27          | 25   | - 3                                     | NE     | 6                    | 32       | 23                | 0.04        |                |                           |
| Bodö ...  |  | 30.13                                     | 20    | E      | 1                    | c        | 30.40                                     | - 01                                    | 23          | 21   | + 5                                     | E      | 1                    | ?        | 16                |             |                |                           |
| Christiansund   |  | 30.49                                     | 34    | ESE    | 3                    | b        | 30.44                                     | + 08                                    | 32          | 29   | - 3                                     | ESE    | 4                    | 36       | 32                |             |                |                           |
| Skudesnaes ...  |  | 30.58                                     | 35    | SSE    | 6                    | c        | 30.62                                     | + 21                                    | 32          | 31   | + 3                                     | SSE    | 6                    | 36       | 28                |             |                |                           |
| Christiania Fjord<br>(Færder)   |  | 30.56                                     | 24    | N      | 5                    | b        | 30.67                                     | + 26                                    | 22          | 19   | + 1                                     | N      | 2                    | ?        | 21                |             |                |                           |
| Skagen (The Scaw)   |  | 30.59                                     | 26    | NE     | 1                    | b        | 30.65                                     | + 22                                    | 26          | 24   | 0                                       | E      | 1                    | 28       | 23                |             |                |                           |
| Fanö ...  |  | 30.57                                     | 23    | NE     | 2                    | b        | 30.72                                     | + 39                                    | 24          | 24   | - 5                                     | NE     | 1                    | 30       | 21                |             |                |                           |
| Sumburgh Head   |  | 30.31                                     | 43    | SSE    | 3                    | c        | 30.23                                     | - 08                                    | 45          | 43   | + 5                                     | SSW    | 2                    | 45       | 40                | 0.01        |                |                           |
| Stornoway ...   |  | 30.13                                     | 45    | SW     | 8                    | O        | 30.17                                     | - 01                                    | 47          | 47   | + 4                                     | SW     | 7                    | 47       | 40                | 0.08        |                |                           |
| Wick ...  |  | 30.26                                     | 42    | S      | 4                    | b        | 30.23                                     | - 03                                    | 44          | 44   | + 2                                     | SSW    | 5                    | 44       | 40                |             |                |                           |
| Nairn ...   |  | 30.25                                     | 35    | Z      | 0                    | b        | 30.27                                     | - 00                                    | 42          | 41   | + 16                                    | Z      | 0                    | 44       | 23                | 0.02        |                |                           |
| Aberdeen ...  |  | 30.39                                     | 35    | S      | 3                    | bm       | 30.37                                     | - 01                                    | 38          | 36   | + 5                                     | S      | 3                    | 38       | 33                |             |                |                           |
| Leith ...   |  | 30.42                                     | 37    | SSW    | 1                    | bc       | 30.44                                     | + 05                                    | 35          | 35   | + 7                                     | Z      | 0                    | 38       | 27                |             |                |                           |
| Shields ...   |  | 30.45                                     | 36    | SSW    | 2                    | m        | 30.51                                     | + 09                                    | 32          | 31   | - 2                                     | SSW    | 2                    | 41       | 28                |             |                |                           |
| Spurn Head ...  |  | 30.50                                     | 38    | WSW    | 1                    | cm       | 30.57                                     | + 14                                    | 38          | 37   | - 1                                     | SSE    | 2                    | 40       | 35                |             |                |                           |
| York ...  |  | 30.48                                     | 27    | SSW    | 1                    | f        | 30.57                                     | + 11                                    | 28          | 28   | 0                                       | S      | 1                    | 32       | 22                |             |                |                           |
| Loughborough  |  | 30.48                                     | 27    | WSW    | 1                    | f        | 30.56                                     | + 13                                    | 24          | 24   | - 7                                     | ESE    | 1                    | 32       | 22                |             |                |                           |
| BRITISH ISLANDS.  |  |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |
| Ardrossan ...   |  | 30.36                                     | 43    | NE     | 2                    | om       | 30.40                                     | + 02                                    | 42          | 42   | + 8                                     | ESE    | 3                    | 43       | 33                |             |                |                           |
| Malin Head ...  |  | 30.20                                     | 46    | S      | 4                    | og       | 30.25                                     | + 06                                    | 45          | 44   | + 2                                     | S      | 5                    | 46       | 42                |             |                |                           |
| Mullaghmore ...   |  | 30.17                                     | 49    | S      | 4                    | og       | 30.27                                     | + 10                                    | 49          | 46   | + 3                                     | S      | 6                    | 50       | 44                |             |                |                           |
| Belmullet ...   |  | 30.16                                     | 49    | SSE    | 6                    | og       | 30.22                                     | + 11                                    | 48          | 47   | + 2                                     | S      | 4                    | 49       | 45                | 0.03        |                |                           |
| Donaghadee ...  |  | 30.35                                     | 46    | SSW    | 3                    | c        | 30.40                                     | + 08                                    | 45          | 44   | 0                                       | SSW    | 3                    | 47       | 43                |             |                |                           |
| Liverpool (Bidston)   |  | 30.46                                     | 33    | SE     | 3                    | b        | 30.52                                     | + 08                                    | 34          | 33   | + 1                                     | SE     | 3                    | 37       | 31                |             |                |                           |
| Holyhead ...  |  | 30.40                                     | 40    | SSE    | 3                    | c        | 30.46                                     | + 10                                    | 44          | 42   | + 5                                     | S      | 4                    | 44       | 39                |             |                |                           |
| Parsonstown ...   |  | 30.26                                     | 47    | SE     | 1                    | c        | 30.35                                     | + 10                                    | 47          | 46   | + 6                                     | SE     | 1                    | 48       | 40                |             |                |                           |
| Valencia ...  |  | 30.22                                     | 49    | SE     | 6                    | rgm      | 30.30                                     | + 12                                    | 50          | 50   | + 1                                     | SE     | 4                    | 50       | 48                | 0.47        |                |                           |
| Roche's Point...  |  | 30.29                                     | 49    | S      | 4                    | O        | 30.35                                     | + 10                                    | 48          | 48   | - 2                                     | S      | 6                    | 51       | 48                | 0.05        |                |                           |
| Pembroke (St. Ann's Hd.)  |  | 30.36                                     | 46    | SSE    | 5                    | bc       | 30.45                                     | + 10                                    | 46          | 45   | + 1                                     | SSE    | 6                    | 47       | 44                |             |                |                           |
| Scilly ...  |  | 30.29                                     | 49    | ESE    | 5                    | O        | 30.41                                     | + 13                                    | 46          | 43   | - 4                                     | SE     | 6                    | 52       | 43                |             |                |                           |
| Prawle Point...   |  | 30.42                                     | 46    | E      | 2                    | c        | 30.54                                     | + 14                                    | 43          | 39   | - 2                                     | ESE    | 4                    | 46       | 38                |             |                |                           |
| Jersey (St. Aubin's)  |  | 30.43                                     | 45    | ESE    | 3                    | bm       | 30.57                                     | + 17                                    | 39          | 35   | - 7                                     | E      | 4                    | 49       | 37                |             |                |                           |
| Hurst Castle ...  |  | 30.47                                     | 41    | E      | 2                    | bm       | 30.57                                     | + 15                                    | 40          | 38   | - 7                                     | ESE    | 3                    | 47       | 35                |             |                |                           |
| Dungeness ...   |  | 30.46                                     | 42    | NE     | 2                    | c        | 30.61                                     | + 22                                    | 36          | 33   | + 3                                     | SE     | 4                    | 45       | 32                |             |                |                           |
| London ...  |  | 30.51                                     | 38    | SE     | 1                    | bm       | 30.59                                     | + 14                                    | 33          | 31   | - 1                                     | SE     | 1                    | 44       | 29                |             |                |                           |
| Oxford ...  |  | 30.54                                     | 28    | E      | 1                    | f        | 30.61                                     | + 14                                    | 25          | 25   | - 4                                     | NNE    | 1                    | 37       | 25                |             |                |                           |
| Cambridge ...   |  | 30.54                                     | 33    | Z      | 0                    | b        | 30.62                                     | + 14                                    | 31          | 31   | + 1                                     | S      | 1                    | 45       | 28                |             |                |                           |
| Yarmouth ...  |  | 30.49                                     | 41    | ESE    | 1                    | bc       | 30.58                                     | + 19                                    | 36          | 35   | - 5                                     | NW     | 2                    | 42       | 35                |             |                |                           |
| GERMANY & HOLLAND.  |  |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |
| Cuxhaven ...  |  | 30.47                                     | 32    | NNE    | 3                    | c        | 30.59                                     | + 29                                    | 31          | 30   | - 1                                     | NE     | 3                    | 33       | 30                |             |                |                           |
| Berlin ...  |  | 30.37                                     | 28    | NW     | 4                    | b        | 30.44                                     | + 32                                    | 27          | 26   | - 5                                     | NW     | 4                    | 34       | 25                |             |                |                           |
| Wiesbaden ...   |  | *   | *     | *      | *                    | *        | 30.52                                     | + 34                                    | 27          | 25   | - 10                                    | Z      | 0                    | 43       | 25                |             |                |                           |
| Munich ...  |  | 30.30                                     | 26    | NW     | 2                    | O        | 30.39                                     | + 47                                    | 19          | 18   | - 13                                    | NW     | 4                    | 34       | 16                | 0.12        |                |                           |
| The Helder ...  |  | 30.56                                     | 37    | NE     | 1                    | bc       | 30.65                                     | + 26                                    | 34          | 30   | - 4                                     | ESE    | 1                    | 39       | 32                |             |                |                           |
| FRANCE AND BELGIUM.   |  |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |
| Brussels (9 a.m.)   |  | *   | *     | *      | *                    | *        | 30.63                                     | + 27                                    | 24          | 24   | - 12                                    | NE     | 1                    | 39       | 23                |             |                |                           |
| Cape Gris Nez   |  | 30.45                                     | 37    | E      | 2                    | bc       | 30.55                                     | ?                                       | 29          | 27   | - 13                                    | E      | 2                    | 46       | 28                |             |                |                           |
| Paris ...   |  | 30.44                                     | 38    | NNE    | 2                    | bc       | 30.55                                     | + 20                                    | 26          | 24   | - 10                                    | NNE    | 2                    | 43       | 24                |             |                |                           |
| Brest ...   |  | ?   | 48    | SE     | 2                    | b        | ?   | ?                                       | 37          | 35   | - 7                                     | SE     | 3                    | 50       | 32                |             |                |                           |
| Lorient ...   |  | 30.36                                     | 45    | ESE    | 4                    | b        | 30.45                                     | + 13                                    | 35          | 31   | - 9                                     | E      | 4                    | 54       | 34                |             |                |                           |
| Rochefort ...   |  | 30.36                                     | 43    | ESE    | 4                    | b        | 30.39                                     | + 15                                    | 33          | 31   | - 9                                     | ESE    | 4                    | 55       | 28                |             |                |                           |
| Belfort ...   |  | ?   | 35    | E      | 2                    | bc       | ?   | ?                                       | 25          | 23   | - 13                                    | NE     | 3                    | 41       | 25                |             |                |                           |
| Lyons ...   |  | 30.31                                     | 35    | N      | 3                    | b        | 30.34                                     | + 11                                    | 28          | 26   | - 11                                    | NW     | 4                    | 41       | 27                |             |                |                           |
| Nice ...  |  | 29.84                                     | 50    | SW     | 1                    | b        | 30.01                                     | + 28                                    | 38          | 30   | - 13                                    | NE     | 1                    | 55       | 37                |             |                |                           |
| Perpignan ...   |  | 30.15                                     | 49    | N      | 3                    | b        | 30.17                                     | + 02                                    | 43          | 35   | - 9                                     | NW     | 3                    | 57       | 42                |             |                |                           |
| Biarritz ...  |  | 30.23                                     | 50    | ESE    | 3                    | b        | 30.26                                     | + 02                                    | 33          | 30   | - 18                                    | SE     | 4                    | 55       | 30                |             |                |                           |
| PENIN. SULA.  |  |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |
| Corunna ...   |  | *   | *     | *      | *                    | *        | *   | *                                       | *           | *    | *                                       | *      | *                    | *        | *                 | *           | *              | *                         |
| Lisbon ...  |  | 30.16                                     | 51    | NW     | 3                    | b        | 30.17                                     | - 04                                    | 42          | 42   | - 2                                     | NNE    | 3                    | 57       | 41                |             |                |                           |

For Explanation of Columns, see bottom of p. 1.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Friday, 18<sup>th</sup> December, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;  
→ forces 5 to 7; → forces 1 to 4.  
○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

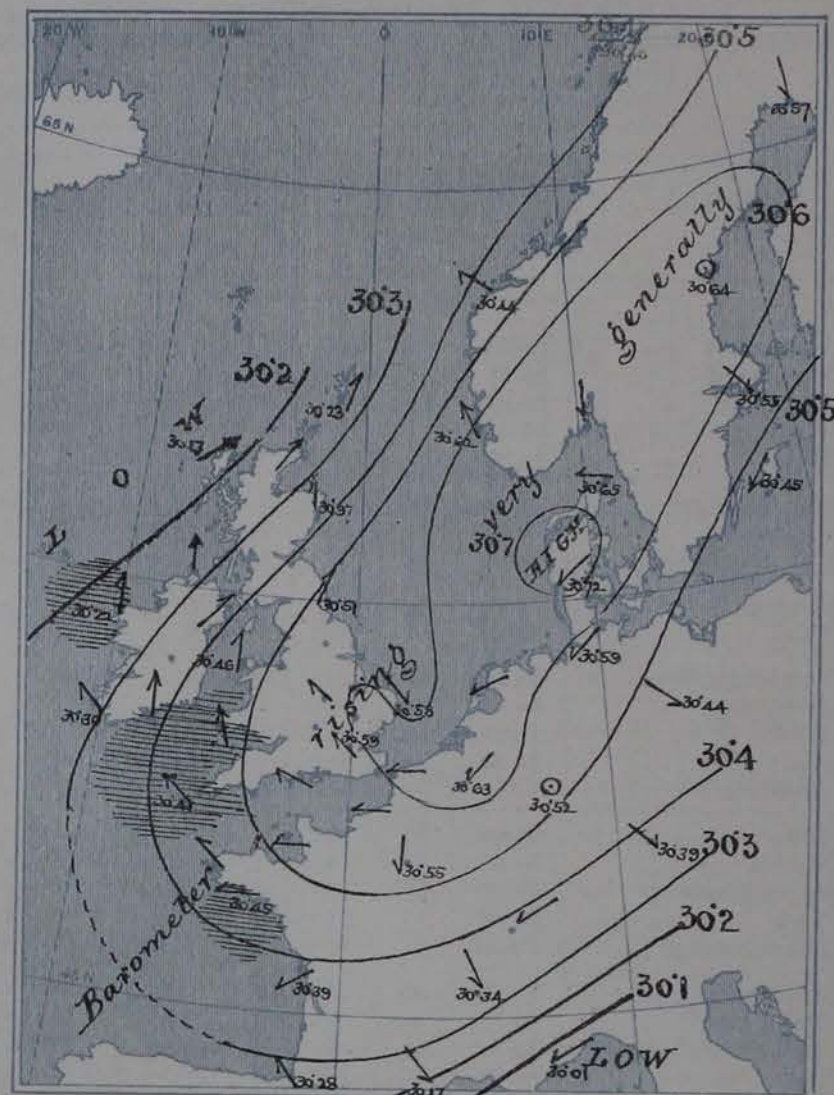
≡ = Rough. ≡ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
|               | ins.           |
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.830         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.953         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

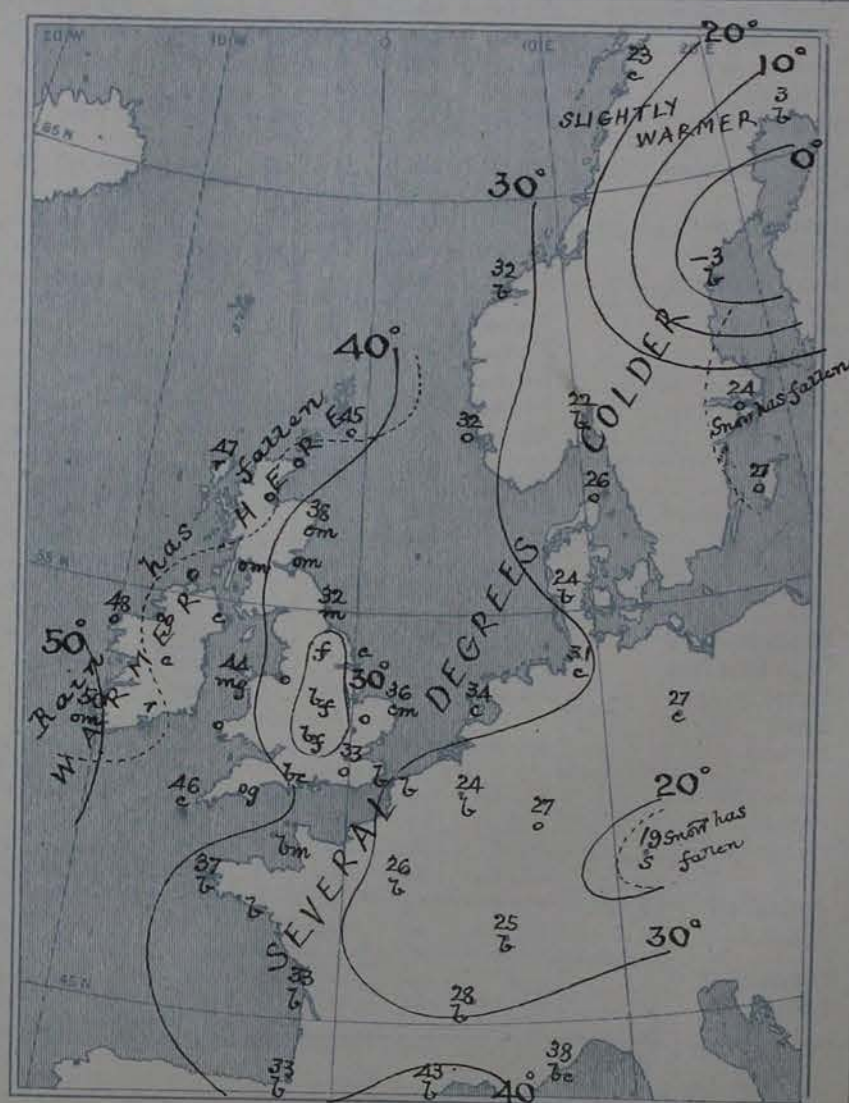
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December).

| STATIONS.     | TEMPERATURE.  |               |                   |      | RAINFALL<br>(Inches.) |
|---------------|---------------|---------------|-------------------|------|-----------------------|
|               | Daily<br>Max. | Daily<br>Min. | at 8 a.m.<br>Dry. | Wet. |                       |
| Sumburgh Head | 42.6          | 35.2          | 39.6              | 38.1 | 4.25                  |
| Stornoway     | 43.1          | 34.2          | 39.4              | 38.5 | 5.83                  |
| Wick          | 42.2          | 32.7          | 38.1              | 36.8 | 3.10                  |
| Nairn         | 41.9          | 32.8          | 37.1              | 35.6 | 1.95                  |
| Aberdeen      | 41.9          | 32.6          | 36.9              | 35.2 | 3.24                  |
| Leith         | 44.0          | 33.7          | 38.5              | 37.0 | 1.86                  |
| Shields       | 42.9          | 33.9          | 38.3              | 36.9 | 2.57                  |
| Spurn Head    | 42.4          | 35.3          | 38.8              | 37.7 | 2.14                  |
| York          | 42.3          | 32.3          | 36.4              | 35.4 | 2.28                  |
| Loughborough  | 42.7          | 32.2          | 36.3              | 35.4 | 2.24                  |
| Ardrossan     | 44.5          | 35.9          | 40.0              | 38.7 | 3.73                  |
| Mullaghmore   | 46.5          | 37.8          | 42.2              | 39.8 | 4.51                  |
| Donaghadee    | 45.8          | 36.2          | 40.2              | 39.3 | 2.84                  |
| Holyhead      | 46.4          | 39.1          | 42.8              | 41.1 | 3.82                  |
| Liverpool     | 43.5          | 35.6          | 38.8              | 37.1 | 2.59                  |
| Parsonstown   | 44.7          | 33.1          | 37.8              | 36.6 | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.6              | 42.4 | 5.99                  |
| Roche's Point | 47.9          | 38.9          | 42.9              | 41.5 | 4.95                  |
| Pembroke      | 43.8          | 40.3          | 43.6              | 42.2 | 3.99                  |
| Scilly        | 49.5          | 43.1          | 47.0              | 45.1 | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5              | 41.1 | 3.76                  |
| Jersey        | 47.3          | 39.3          | 43.1              | 41.4 | 3.82                  |
| Hurst Castle  | 45.6          | 36.3          | 40.0              | 39.8 | 2.77                  |
| Dover         | 44.3          | 35.9          | 39.8              | 38.6 | 3.00                  |
| LONDON        | 44.0          | 33.9          | 37.8              | 36.7 | 2.10                  |
| Oxford        | 42.9          | 33.5          | 37.0              | 35.9 | 2.10                  |
| Cambridge     | 42.8          | 31.6          | 36.2              | 35.5 | 1.88                  |
| Yarmouth      | 41.9          | 33.7          | 37.0              | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





## GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.7 in: and more to 30.4 in: in an anticyclone which stretches from the Bay of Biscay across England, the north of France, and the North Sea to Denmark and Scandinavia.

Lowest, (1) 30.2 in: and less, off our extreme northernmost coasts; and (2) about 30.0 in: over the Gulf of Genoa.

Gradients moderate in the west and northwest, slight in the east and south, but rather steep for NE winds over the southeast of France.

Barometer rising in most places, but a slight fall is in progress at some Scotch stations.

## TEMPERATURE

Highest, 50° at Valencia Island, 49° at Mullaghmore, 47° at Stromsøy, 46° at Scilly, and 45° at Sumburgh Hd.  
Lowest, (1) -3° F. at Kermisand, +3° at Naparanda, 22° at Vaerden, 24° at Stockholm, (2) 24° at Loughborough, 25° at Oxford, 26° at Paris, 28° at York, 33° in London.  
The fall over England, France and Germany has been very decided during the night.

## WIND

Light to moderate from NW. over Germany, from NE. over France, from E. over the Bay of Biscay and from SE. over the greater part of England. In Ireland and Scotland it is S<sup>ly</sup>, and blew strongly at the exposed districts. A moderate to fresh gale has been felt in the extreme north and northwest during the night.

## WEATHER

Dull and showery in Ireland and the northwest of Scotland, fair generally, and in most places clear. Fog, however, is reported over our Midland counties, snow in South Germany.

## SEA

Still rough in the Minch and on our extreme west and southwest coasts, slight in the Channel, smooth on our east coasts.


### PROBABLE CHANGES IN SYSTEM NOW PREVALENT


The anticyclone noticed in the East and south yesterday remains in force, and has even increased greatly in intensity and while moderate gradients for S<sup>W</sup> winds prevail over Ireland and Scotland, those over the more eastern districts are slight and variable. Temperature is low within the anticyclone, - Loughborough is 26° colder than Valencia Island. Weather is apparently settled and quiet except in the west and northwest.

## FORECASTS

For the 24 hours ending at NOON on 19<sup>th</sup> December 1891.

| DISTRICTS. |                   | FORECASTS.   | DISTRICTS.          |                  | FORECASTS.   |                  |
|------------|-------------------|--|---------------------|------------------|--|------------------|
| † 0        | SCOTLAND<br>NORTH | { SW <sup>1/2</sup> winds, fresh or strong; some<br>rain, mild.                                      | 6                   | SCOTLAND<br>WEST | { Same as N.O.   |                  |
|            | 1                 |  | SCOTLAND<br>EAST    | 7                |  | ENGLAND<br>N.W.  |
|            | 2                 |  | ENGLAND<br>N.E.     | 8                |  | ENGLAND<br>S.W.  |
|            | 3                 |  | ENGLAND<br>EAST     | † 9              |  | IRELAND<br>NORTH |
|            | 4                 |  | MIDLAND<br>COUNTIES |                  |  | 10               |
| 5          | ENGLAND<br>SOUTH  | { SE <sup>1/2</sup> or S <sup>1/2</sup> breezes, light; fine.  | WARNINGS            |                  | { S <sup>1/2</sup> winds, strong; rain at times.   |                  |
|            |                   |  |                     |                  |  |                  |
|            |                   | { SE <sup>1/2</sup> to E <sup>1/2</sup> breezes, moderate, freshening<br>in Channel; fair generally. |                     |                  | { At 1.30pm yesterday to extreme north and<br>northwest of Scotland and Ireland<br>"Hoist South Cone". |                  |
|            |                   |  |                     |                  |  |                  |

*Note.*—The South Cone, point downwards () means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.

the *South Cone*.  
The *North Cone*, point upwards (  ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South Cone* is hoisted in preference to the *North Cone*.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | F.  | WEA. | SEA |  | BAR:          | THER: |    | WIND |     | F. | WEA. | SEA |
|-------------------|-------|-------|----|------|----|-----|------|-----|--|---------------|-------|----|------|-----|----|------|-----|
|                   |       | D.    | W. | D.   | W. |     |      |     |  |               | D.    | W. | D.   | W.  |    |      |     |
| Skudesnaes ...    | 30.50 | 34    | 32 | ESE  | 1  | 6   | 2    |     |  | Holyhead ...  | 30.88 | 43 | 40   | S   | 3  | 6    | 2   |
| Sumburgh Head ... | 30.32 | 42    | 39 | SSE  | 2  | c   | 3    |     |  | Valencia ...  | 30.18 | 50 | 50   | SE  | 6  | oam  | 5   |
| Stornoway ...     | 30.16 | 46    | 45 | S    | 7  | c   | 6    |     |  | Scilly ...    | 30.29 | 51 | 49   | SE  | 5  | c    | 5   |
| Aberdeen ...      | 30.38 | 38    | 35 | S    | 2  | bm  | 4    |     |  | Jersey ...    | 30.43 | 48 | 45   | ESE | 3  | c    | 3   |
| Shields ...       | 30.43 | 41    | 38 | S    | 2  | bm  | 3    |     |  | Dungeness ... | 30.42 | 45 | 41   | NE  | 3  | bc   | 2   |
| Ardrossan ...     | 30.36 | 43    | 42 | NE   | 2  | o   | 1    |     |  | London ...    | 30.47 | 44 | 40   | SE  | 1  | b    | *   |
| Malin Head ...    | 30.16 | 46    | 44 | S    | 6  | o   | 3    |     |  | Yarmouth ...  | 30.44 | 42 | 40   | NNE | 1  | bcv  | 4   |
| Mullaghmore ...   | 30.20 | 48    | 44 | SSE  | 5  | opm | 4    |     |  | Rochefort ... | 30.33 | 52 | 47   | ESE | 4  | b    | 2   |
| Belmullet ...     | 30.14 | 44    | 42 | SSE  | 6  | od  | *    |     |  |               |       |    |      |     |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

*Weather* fine and bright in nearly all parts of western, northern, and southern Europe, but foggy over the inland parts of England, and rainy at Valencia Island. Dull in most of the eastern and central countries, with snow at some of the Russian stations, as well as at Lemberg and Munich. Rain falling later in the extreme west and north of our Islands, no important change occurring elsewhere.

*Temperature* highest 59° at Palermo, 57° at Langunaire, Cagliari, and Tunis, and 56° at Loughow; above 50° over the Mediterranean generally, and just touching that point at Scilly and Rochepoint. Lowest 9° at Uleaborg, 10° at Archangel and Kuopio, 12° at Helsingfors, 13° at Rango, and 18° at Hodo and Helsinki, below the freezing point over Russia and northern Europe generally, as well as over the central parts of our Islands. Daily maxima below 40° in many parts of Great Britain and as low as 32° at York and Loughborough; thermometer exceeding 50° in the southwest of our Islands, and also in the west and south of France.

*Winds* E<sup>ly</sup> in the west of France; SE<sup>ly</sup> in the west of our Islands, and strong in force at some of the Irish stations; S<sup>ly</sup> or SW<sup>ly</sup> in the north of Scotland. Moderate to strong from the NW<sup>d</sup> over Sweden, Finland, the Baltic, and the greater part of Central Europe and from the NW<sup>d</sup> in the south of France. Light from the SW<sup>d</sup> over the south of Russia and the greater part of Italy; variable in Algeria. Subsequently increasing to a moderate offish gale from the SW<sup>d</sup> or SW<sup>ly</sup> in the extreme north and northwest of our Islands.

*Barometer* highest 30.4 in. and upwards, in a long band stretching in a southerly and south-southwesterly direction from the north of Scandinavia across the North Sea to England and the Channel. Lowest 29.5 in. and less, in a shallow depression over Central Russia; 29.6 in. and less, in another shallow system over Galicia, 29.7 in. and less in a third, and somewhat deeper disturbance lying over the Gulf of Genoa. Depression subsequently travelling in a north-north-easterly direction outside our extreme western and northwestern coasts, but anticyclonic band growing broader and increasing in intensity.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

.. Weekly .. .. .. £1 10 0 ..



# DAILY WEATHER REPORT.

for *Saturday, 19<sup>th</sup> December, 1891.*  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| H. H. SCOTT, Secretary.                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| LONDON, 11, PATERNOSTER STREET, E.C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| YESTERDAY EVENING.                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 A.M. TO DAY.                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PAST 24 HOURS                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| STATIONS.                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BAROMETER.                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SHADE TEMP.                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WIND.                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SHADE TEMP.                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Amount of Rainfall                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SCANDINAVIA.                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Haparanda ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hernösand ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stockholm ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Visby ...                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bodö ...                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Christiansund ...                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skudesnaes ...                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Christiania Fjord (Færder) ...          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skagen (The Scaw) ...                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Faro ...                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sumburgh Head ...                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stornoway ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wick ...                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nairn ...                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aberdeen ...                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leith ...                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shields ...                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spurn Head ...                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| York ...                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loughborough ...                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ardrossan ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malin Head ...                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mullaghmore ...                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Belmullet ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Donaghadee ...                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liverpool (Bidston) ...                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Holyhead ...                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Parsonstown ...                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Valencia ...                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Roche's Point ...                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pembroke (St. Ann's Hd.) ...            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scilly ...                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Prawle Point ...                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jersey (St. Aubin's) ...                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hurst Castle ...                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dungeness ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| London ...                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oxford ...                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cambridge ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Yarmouth ...                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cuxhaven ...                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Berlin ...                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wiesbaden ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Munich ...                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The Helder ...                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brussels (9 a.m.) ...                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cape Gris Nez ...                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Paris ...                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brest ...                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lorient ...                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rochefort ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Belfort ...                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lyons ...                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nice ...                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Perpignan ...                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Biarritz ...                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corunna ...                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lisbon ...                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Saturday, 19<sup>th</sup> Dec., 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

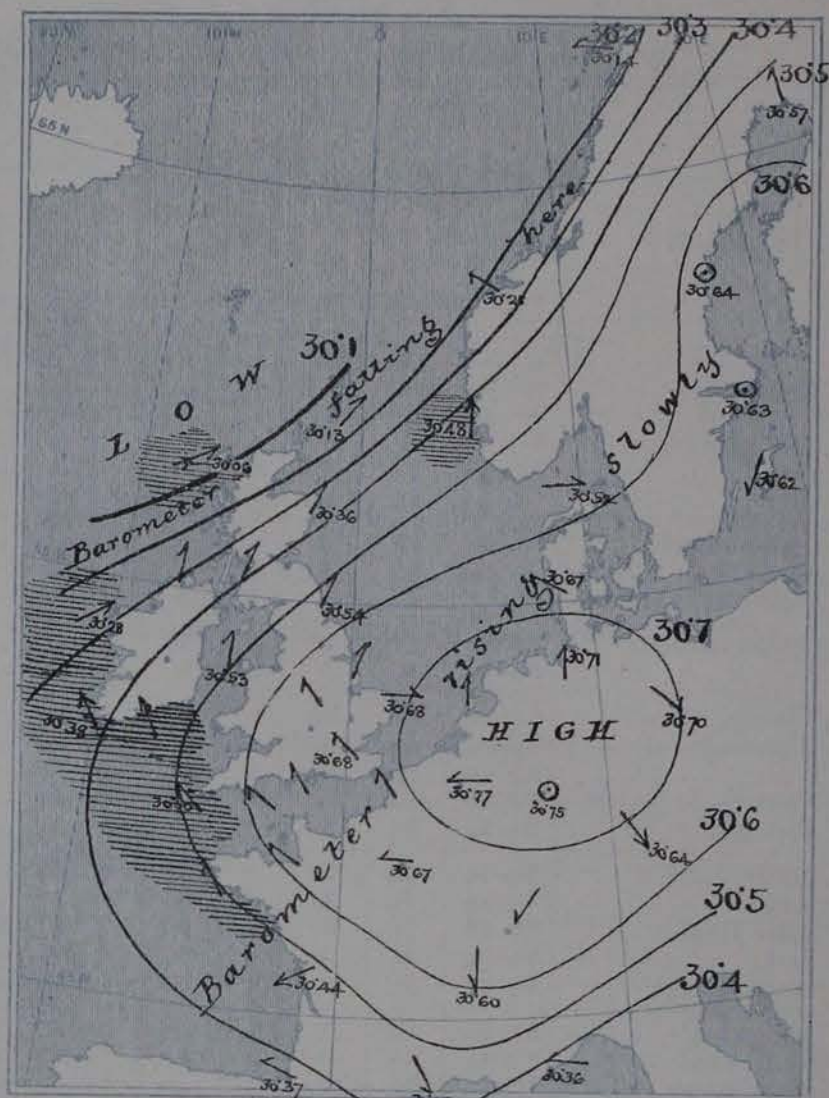
☼ = Rough; ☼ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS |
|---------------|---------------|
| Sumbargh Head | 29.573        |
| Stornoway     | 29.705        |
| Wick          | 29.718        |
| Nairn         | 29.743        |
| Aberdeen      | 29.767        |
| Leith         | 29.807        |
| Shields       | 29.845        |
| Spurn Head    | 29.873        |
| York          | 29.895        |
| Loughborough  | 29.924        |
| Ardrossan     | 29.820        |
| Mullaghmore   | 29.821        |
| Donaghadee    | 29.848        |
| Holyhead      | 29.879        |
| Liverpool     | 29.895        |
| Parsonstown   | 29.901        |
| Valencia      | 29.905        |
| Roche's Point | 29.912        |
| Pembroke      | 29.916        |
| Silly         | 29.931        |
| Prawle Point  | 29.970        |
| Jersey        | 29.985        |
| Hurst Castle  | 29.958        |
| Dover         | 29.953        |
| LONDON        | 29.954        |
| Oxford        | 29.955        |
| Cambridge     | 29.941        |
| Yarmouth      | 29.916        |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER**—is shown by Letters of the Beaufort Scale.

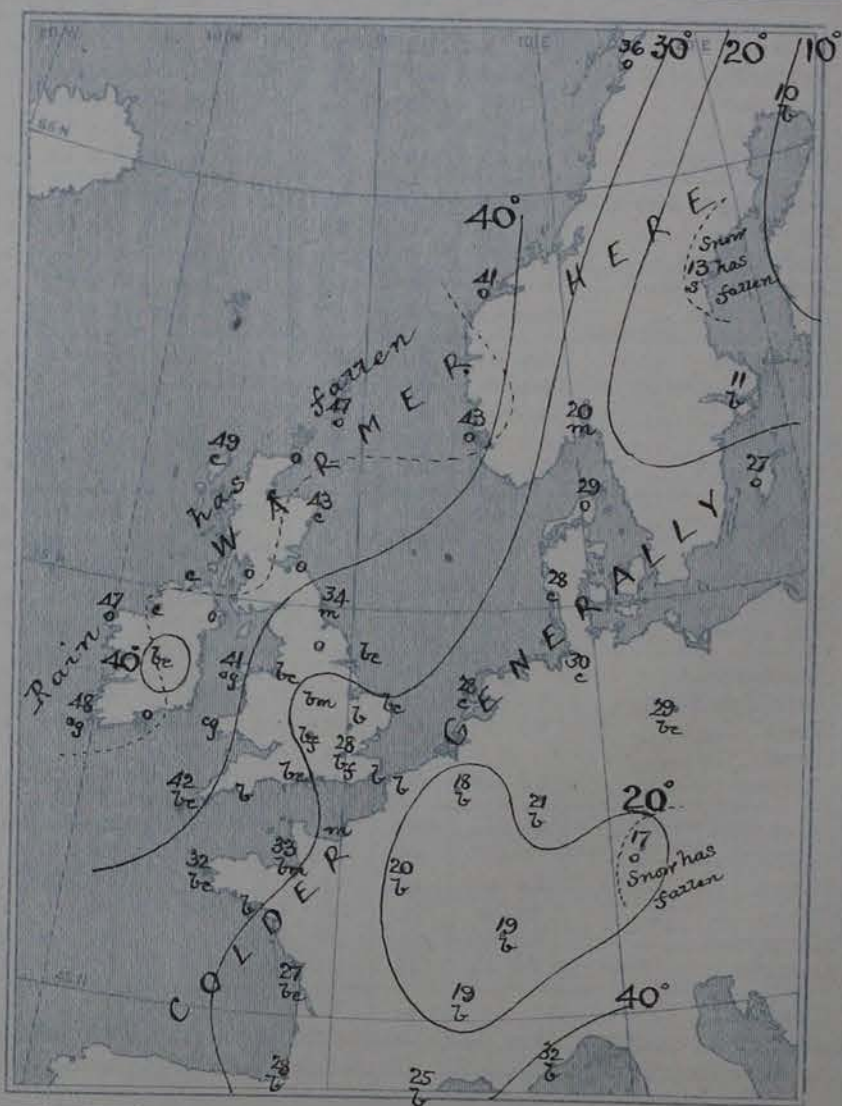
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE   |               |           |           | RAINFALL<br>(Inches.) |
|---------------|---------------|---------------|-----------|-----------|-----------------------|
|               | Daily<br>Max. | Daily<br>Min. | At 8 a.m. | At 8 a.m. |                       |
| Sumbargh Head | 42.0          | 35.2          | 39.5      | 38.1      | 4.26                  |
| Stornoway     | 43.1          | 34.2          | 39.4      | 38.5      | 5.63                  |
| Wick          | 42.2          | 32.7          | 38.1      | 36.8      | 3.10                  |
| Nairn         | 41.9          | 32.8          | 37.1      | 35.6      | 1.95                  |
| Aberdeen      | 41.9          | 32.6          | 36.9      | 35.2      | 3.24                  |
| Leith         | 41.0          | 33.7          | 38.5      | 37.0      | 1.86                  |
| Shields       | 42.2          | 33.9          | 38.3      | 36.9      | 2.57                  |
| Spurn Head    | 42.4          | 35.3          | 38.8      | 37.7      | 2.14                  |
| York          | 42.3          | 32.3          | 36.4      | 35.4      | 2.28                  |
| Loughborough  | 42.7          | 32.2          | 36.3      | 35.4      | 2.24                  |
| Ardrossan     | 41.6          | 35.9          | 40.0      | 38.7      | 3.73                  |
| Mullaghmore   | 46.5          | 37.8          | 42.2      | 39.8      | 4.51                  |
| Donaghadee    | 45.8          | 36.2          | 40.2      | 39.3      | 2.84                  |
| Holyhead      | 46.1          | 39.1          | 42.8      | 41.1      | 3.82                  |
| Liverpool     | 39.5          | 35.6          | 38.8      | 37.1      | 2.59                  |
| Parsonstown   | 41.7          | 33.1          | 37.8      | 36.6      | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.6      | 42.4      | 5.90                  |
| Roche's Point | 47.0          | 38.9          | 42.9      | 41.5      | 4.05                  |
| Pembroke      | 43.8          | 40.3          | 43.6      | 42.2      | 3.90                  |
| Silly         | 49.5          | 41.1          | 47.0      | 45.1      | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5      | 41.1      | 3.75                  |
| Jersey        | 47.3          | 39.3          | 43.1      | 41.4      | 3.82                  |
| Hurst Castle  | 46.6          | 36.3          | 40.6      | 39.8      | 2.77                  |
| Dover         | 41.3          | 35.9          | 39.8      | 38.6      | 3.00                  |
| LONDON        | 41.0          | 33.9          | 37.8      | 36.7      | 2.10                  |
| Oxford        | 42.9          | 34.5          | 37.0      | 35.9      | 2.10                  |
| Cambridge     | 42.8          | 31.6          | 36.2      | 35.6      | 1.88                  |
| Yarmouth      | 41.9          | 35.7          | 37.9      | 37.0      | 2.66                  |

**NOTE**—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.7 in. and more to 30.4 in. in an anticyclone covering the Netherlands, France, England, and the North Sea.  
Lowest, 30.1 in. and less, over the Hebrides and neighbouring parts of the Atlantic.

Gradients moderate in the north, slight in the east and south.

Barometer still falling in the north (but slowly) rising over France and Germany, steady over England.

## TEMPERATURE

Highest, 49° at Stornoway, 48° at Harris and Valencia Island, 47° at Sumburgh H., Balmullet, and Rocher Point.

Lowest, (1) 10° to 13° F. on the Swedish coast; (2) 17° at Munich, 19° at Belfast and Lyons, 20° at Paris; (3) 26° at Cambridge, 27° at Loughborough, 28° at Oxford and in London; (4) 37° at Harrogate.

In London the minima recorded were 16° in the shade and 17° on the grass.

## WIND

Strong S. in the west of Ireland, moderate over the Irish Sea and in Scotland; a SW. gale prevails in the North.

Light to moderate SE. breezes are blowing over England and the Channel, E. over the Bay of Biscay.

Variable airs and calms are reported over northwestern Germany and in Sweden.

## WEATHER

Still dull and apparently showing on our extreme western and northern coasts, fine and bright over England, France and Germany, but with dry fog or haze locally.

## SEA

Still rough in the North, and rather so on our extreme western and southwestern coasts, as well as off Ireland, slight or smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A further rise of the barometer has taken place during the past twenty-four hours in almost all parts of western and central Europe, but a slight fall in the north. The anticyclone recently observed now lies somewhat to the southward of the position it occupied yesterday, while moderate gradients for SW. winds are spreading gradually over Norway and the northern parts of our Islands. Sharp frost prevails over England.

## FORECASTS

For the 24 hours ending at NOON on 20<sup>th</sup> December, 1891.

### DISTRICTS.

### FORECASTS.

|   |   |                  |   |
|---|---|------------------|---|
| 1 | 0 | SCOTLAND NORTH   | SW. gales and strong winds; rain at times.        |
| 1 | 1 | SCOTLAND EAST    | } SW. breezes, moderate; fair.                    |
| 2 | 2 | ENGLAND N.E.     |   |
| 3 | 3 | ENGLAND EAST     | } Calms and SE. airs; fine, foggy at times, cold. |
| 4 | 4 | MIDLAND COUNTIES |   |
| 5 | 5 | ENGLAND SOUTH    |   |

### DISTRICTS.

### FORECASTS.

|          |    |               |  |
|----------|----|---------------|--|
| 6        | 6  | SCOTLAND WEST | } S. and SW. winds, moderate or fresh; some showers.                                 |
| 7        | 7  | ENGLAND N.W.  |  |
| 8        | 8  | ENGLAND S.W.  | SE. winds, moderate; fair, cold.   |
| 9        | 9  | IRELAND NORTH | } S. winds, fresh or strong, and showery in the west; moderate and fine in the east. |
| 10       | 10 | IRELAND SOUTH |  |
| WARNINGS |    |               | The SOUTH CONE is still flying in district 9, and the western part of 9.             |

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

| THER: WIND      |       |    |    |     |      |       |   | THER: WIND    |       |    |    |     |      |     |   |
|-----------------|-------|----|----|-----|------|-------|---|---------------|-------|----|----|-----|------|-----|---|
| BAR:            | D.    | W. | D. | F.  | WEA. | SEA   |   | BAR:          | D.    | W. | D. | F.  | WEA. | SEA |   |
| Skudesnaes ...  | 30.59 | 32 | 32 | SE  | 6    | 0     | 4 | Holyhead ...  | 30.47 | 45 | 42 | S   | 4    | 0 q | 4 |
| Sumburgh Head   | 30.20 | 46 | 45 | SW  | 2    | r     | 4 | Valencia ...  | 30.32 | 51 | 50 | SE  | 5    | 0 m | 4 |
| Stornoway ...   | 30.17 | 47 | 47 | SW  | 6    | r     | 6 | Scilly ...    | 30.47 | 45 | 45 | SE  | 6    | c   | 6 |
| Aberdeen ...    | 30.37 | 39 | 37 | S   | 3    | cm    | 3 | Jersey ...    | 30.57 | 38 | 34 | E   | 4    | b   | 3 |
| Shields ...     | 30.50 | 36 | 36 | SSW | 3    | cm    | 2 | Dungeness ... | 30.62 | 36 | 33 | SE  | 3    | b   | 2 |
| Ardrossan ...   | 30.37 | 46 | 46 | SE  | 4    | r     | 3 | London ...    | 30.63 | 38 | 36 | SE  | 2    | c   | 3 |
| Malin Head ...  | 30.24 | 47 | 46 | S   | 5    | 0     | 3 | Yarmouth ...  | 30.58 | 38 | 37 | SE  | 3    | c   | 3 |
| Mullaghmore ... | 30.27 | 50 | 48 | SSE | 6    | 0 q m | 4 | Rochefort ... | 30.38 | 37 | 34 | EHE | 1    | b c | 2 |
| Belmullet ...   | 30.26 | 49 | 48 | SSW | 2    | 0     | * |               |       |    |    |     |      |     |   |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather dull in the western and northern parts of our islands, with rain at Stornoway and Rockport; dull also over the greater part of Russia and Central Europe; snow falling at St. Petersburg and Munich. Fair or fine in most other localities, but foggy over Central England. A little rain falling during day in nearly all parts of Ireland and the west and north of Scotland, but sky clearing over England.

Temperature highest 58° at Malta, 56° at La Palme, 55° at Algiers, and 54° at Palma and Brindisi, above 50° over the central and southern parts of the Mediterranean generally, and just reaching that point at Valencia Island. Lowest -24° at Archangel, -3° at Helsingfors, +3° at Haparanda, 12° at Uleaborg, and 13° at Umea, below 20° over the northern parts of Sweden and Russia generally, below the freezing point over the whole of northern and central Europe, as well as over the inland parts of England. Daily maxima below 40° at most of the English stations, but thermometer rising considerably above 45° in Ireland and the north of Scotland, and reaching 51° at Valencia Island.

Winds moderate from the E<sup>nd</sup> or SE<sup>nd</sup> over the Channel and Bay of Biscay, strong from the SE<sup>nd</sup> on our southwest coast, and from the S<sup>nd</sup> in the extreme north and northwest, moderate to strong from the SE<sup>nd</sup> in the east of Norway. N<sup>th</sup> or NE<sup>th</sup> over Finland, the Baltic, and north Germany, NW<sup>th</sup> over Austria and eastern and southern Germany. Strong from the NE<sup>nd</sup> over Italy and the Adriatic, and light from the same quarter in Spain. Variable or S<sup>th</sup> in Algeria.

Barometer highest 30.6 in: to 30.7 in: in a long band stretching southward from the Gulf of Bothnia to Holland, Belgium, and the southeast of England. Lowest 29.6 in: and less, in a large and wellmarked depression lying over France, 30.2 in: and less, in some large systems travelling northwards behind our own extreme western and northern coasts. No important change occurring during day, but anticyclone tending to spread further southwards.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received. The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.  
" Weekly " " " £1 10 0 "



# DAILY WEATHER REPORT.

for Sunday 20<sup>th</sup> December.

1891.

Issued by the Meteorological Office, 23, Victoria Street, London. R. H. SODDY, Secretary.

| STATIONS.           |                               | YESTERDAY EVENING.              |                |               |                     |          | 8 AM TO DAY.            |                       |        |      |               |                     |          |                    |                                     |      | PAST 24 HOURS.        |      |  |
|---------------------|-------------------------------|---------------------------------|----------------|---------------|---------------------|----------|-------------------------|-----------------------|--------|------|---------------|---------------------|----------|--------------------|-------------------------------------|------|-----------------------|------|--|
|                     |                               | Barom.<br>at 5 P.<br>Sea Level. | Therm.<br>Dry. | Wind.<br>Dir. | Force<br>(0 to 12). | Weather. | Barom.                  |                       | Therm. |      | Wind.<br>Dir. | Force<br>(0 to 12). | Weather. | Rain<br>(0 to .3). | Therm.                              |      | Amount<br>of<br>Rain. |      |  |
|                     |                               |                                 |                |               |                     |          | at 8 A.M.<br>Sea Level. | at 5 P.<br>Sea Level. | Dry.   | Wet. |               |                     |          |                    | Therm.<br>from 8 A.M.<br>Yesterday. | Max. |                       | Min. |  |
|                     |                               |                                 |                |               |                     |          |                         |                       |        |      |               |                     |          |                    |                                     |      |                       |      |  |
| SCANDINAVIA.        | Haparanda ...                 | 30.34                           | 21             | SSW           | 6                   | s        | 29.72                   | - .85                 | 29     | 28   | + 19          | SW                  | 4        | r                  | ?                                   | 10   | 0.24                  |      |  |
|                     | Hernösand ...                 | 30.39                           | 23             | S             | 8                   | s        | 30.09                   | - .55                 | 29     | 30   | + 16          | S                   | 2        | o                  | ?                                   | 5    | 0.08                  |      |  |
|                     | Stockholm ...                 | 30.65                           | 20             | Z             | 0                   | o        | 30.42                   | - .21                 | 31     | 31   | + 20          | SSW                 | 2        | o                  | ?                                   | 10   | —                     |      |  |
|                     | Wibby ...                     | 30.68                           | 23             | ESE           | 4                   | b        | 30.60                   | - .02                 | 32     | 30   | + 5           | SSW                 | 4        | o                  | ?                                   | 21   | —                     |      |  |
|                     | Bodö ...                      | 29.75                           | 41             | S             | 4                   | r        | 29.51                   | - .63                 | 45     | 44   | + 9           | SW                  | 8        | r                  | ?                                   | 34   | 0.47                  |      |  |
|                     | Christiansund                 | 30.05                           | 46             | SW            | 6                   | o        | 29.93                   | - .28                 | 46     | 42   | + 5           | WSW                 | 6        | bc                 | 5                                   | 46   | ?                     | 0.12 |  |
|                     | Skudesnaes ...                | 30.49                           | 45             | SSW           | 6                   | o        | 30.46                   | - .02                 | 43     | 40   | 0             | SSW                 | 6        | o                  | 5                                   | 45   | 41                    | 0.08 |  |
|                     | Christiania Fjord<br>(Færder) | 30.53                           | 28             | NNE           | 2                   | f        | 30.38                   | - .14                 | 42     | 39   | + 22          | WSW                 | 6        | c                  | 4                                   | ?    | 25                    | —    |  |
|                     | Skagen (The Seaw)             | 30.57                           | 33             | W             | 3                   | o        | 30.54                   | + .02                 | 36     | 35   | + 7           | WSW                 | 1        | o                  | 0                                   | 37   | 29                    | —    |  |
|                     | Faaf ...                      | 30.65                           | 38             | SW            | 2                   | o        | 30.70                   | + .03                 | 36     | 36   | + 8           | SW                  | 2        | o                  | ?                                   | 37   | 28                    | —    |  |
| BRITISH ISLANDS.    | Sumburgh Head                 | 30.17                           | 47             | SW            | 3                   | o        | 30.16                   | + .03                 | 47     | 45   | 0             | SW                  | 3        | o                  | 4                                   | 48   | 45                    | 0.03 |  |
|                     | Stornoway ...                 | 30.12                           | 47             | SW            | 8                   | o        | 30.20                   | + .14                 | 48     | 47   | - 1           | SW                  | 6        | o                  | 6                                   | 49   | 45                    | 0.02 |  |
|                     | Wick ...                      | 30.24                           | 44             | W             | 5                   | c        | 30.27                   | + .09                 | 46     | 44   | 0             | W                   | 4        | o                  | 2                                   | 46   | 41                    | —    |  |
|                     | Nairn ...                     | 30.24                           | 45             | SW            | 3                   | c        | 30.29                   | + .09                 | 46     | 44   | - 2           | SW                  | 3        | o                  | 2                                   | 46   | 40                    | —    |  |
|                     | Aberdeen ...                  | 30.38                           | 42             | SSW           | 4                   | o        | 30.42                   | + .06                 | 38     | 36   | - 5           | SSW                 | 2        | bc                 | 3                                   | 45   | 38                    | —    |  |
|                     | Leith ...                     | 30.44                           | 44             | Z             | 0                   | o        | 30.47                   | + .04                 | 40     | 38   | - 5           | WSW                 | 3        | b                  | ?                                   | 46   | 38                    | —    |  |
|                     | Shields ...                   | 30.57                           | 33             | SW            | 2                   | m        | 30.57                   | + .03                 | 28     | 27   | - 6           | SW                  | 2        | cm                 | 2                                   | 37   | 26                    | —    |  |
|                     | Spurn Head ...                | 30.60                           | 32             | S             | 4                   | bc       | 30.63                   | + .02                 | 31     | 30   | + 1           | SSW                 | 4        | bc                 | 3                                   | 33   | 29                    | —    |  |
|                     | York ...                      | 30.58                           | 32             | S             | 1                   | b        | 30.64                   | + .04                 | 26     | 26   | - 7           | S                   | 1        | b                  | ?                                   | 35   | 24                    | —    |  |
|                     | Loughborough                  | 30.60                           | 29             | ESE           | 1                   | b        | 30.63                   | + .02                 | 24     | 24   | - 3           | ESE                 | 1        | bm                 | ?                                   | 38   | 24                    | —    |  |
| BRITISH ISLANDS.    | Ardrossan ...                 | 30.44                           | 46             | SE            | 4                   | o        | 30.49                   | + .07                 | 44     | 42   | - 2           | SSW                 | 4        | c                  | 3                                   | 46   | 43                    | —    |  |
|                     | Malin Head ...                | 30.30                           | 43             | S             | 5                   | o        | 30.36                   | + .09                 | 40     | 38   | - 2           | S                   | 5        | o                  | 4                                   | 44   | 39                    | —    |  |
|                     | Mullaghmore ...               | 30.35                           | 46             | S             | 5                   | c        | 30.41                   | + .08                 | 43     | 40   | - 1           | SSW                 | 5        | c                  | 4                                   | 47   | 40                    | —    |  |
|                     | Belmullet ...                 | 30.29                           | 48             | SW            | 7                   | o        | 30.36                   | + .08                 | 47     | 45   | 0             | SSW                 | 5        | o                  | 4                                   | 48   | 46                    | —    |  |
|                     | Donaghadee ...                | 30.47                           | 45             | SSW           | 3                   | o        | 30.51                   | + .03                 | 35     | 33   | - 7           | WSW                 | 3        | b                  | 1                                   | 45   | 31                    | —    |  |
|                     | Liverpool (Bidston)           | 30.58                           | 32             | SSE           | 2                   | b        | 30.61                   | + .01                 | 28     | 27   | - 4           | SE                  | 2        | b                  | 2                                   | 37   | 28                    | —    |  |
|                     | Holyhead ...                  | 30.51                           | 41             | SSE           | 4                   | o        | 30.57                   | + .04                 | 41     | 39   | 0             | SSE                 | 3        | cg                 | 2                                   | 42   | 39                    | —    |  |
|                     | Parsonstown ...               | 30.44                           | 44             | Z             | 0                   | c        | 30.50                   | + .05                 | 32     | 32   | - 5           | Z                   | 0        | b                  | ?                                   | 45   | 32                    | —    |  |
|                     | Valencia ...                  | 30.39                           | 48             | SSE           | 4                   | o        | 30.45                   | + .07                 | 47     | 44   | - 1           | SSE                 | 4        | c                  | 4                                   | 49   | 46                    | —    |  |
|                     | Roche's Point ...             | 30.46                           | 46             | S             | 5                   | c        | 30.48                   | + .03                 | 47     | 44   | 0             | S                   | 5        | bc                 | 4                                   | 49   | 45                    | —    |  |
| BRITISH ISLANDS.    | Pembroke (St. Ann's Hd.)      | 30.57                           | 42             | S             | 4                   | b        | 30.57                   | + .04                 | 41     | 40   | - 1           | SE                  | 4        | b                  | 4                                   | 43   | 40                    | —    |  |
|                     | Scilly ...                    | 30.46                           | 44             | SE            | 5                   | bc       | 30.46                   | - .04                 | 44     | 41   | + 2           | SE                  | 4        | b                  | 4                                   | 46   | 40                    | —    |  |
|                     | Prawle Point ...              | 30.58                           | 40             | ESE           | 4                   | b        | 30.59                   | - .02                 | 41     | 37   | + 3           | ESE                 | 3        | b                  | 2                                   | 41   | 35                    | —    |  |
|                     | Jersey (St. Anne's)           | 30.62                           | 36             | E             | 3                   | b        | 30.62                   | - .04                 | 32     | 29   | - 1           | ENE                 | 3        | bmw                | 3                                   | 39   | 30                    | —    |  |
|                     | Hurst Castle ...              | 30.64                           | 37             | SSE           | 4                   | b        | 30.64                   | - .02                 | 32     | 31   | - 3           | ENE                 | 3        | bmw                | 1                                   | 41   | 31                    | —    |  |
|                     | Dungeness ...                 | 30.67                           | 35             | SSE           | 1                   | b        | 30.66                   | - .03                 | 32     | 30   | + 1           | ESE                 | 2        | b                  | 1                                   | 37   | 29                    | —    |  |
|                     | London ...                    | 30.67                           | 30             | SE            | 1                   | f        | 30.67                   | - .01                 | 24     | 23   | - 4           | ESE                 | 1        | b                  | ?                                   | 35   | 24                    | —    |  |
|                     | Oxford ...                    | 30.66                           | 30             | SE            | 1                   | b        | 30.68                   | - .01                 | 24     | 21   | - 7           | SSE                 | 1        | b                  | ?                                   | 35   | 21                    | —    |  |
|                     | Cambridge ...                 | 30.67                           | 29             | Z             | 0                   | b        | 30.70                   | + .01                 | 23     | 23   | - 3           | S                   | 1        | b                  | ?                                   | 36   | 21                    | —    |  |
|                     | Yarmouth ...                  | 30.65                           | 32             | SW            | 1                   | bc       | 30.67                   | - .01                 | 30     | 29   | 0             | W                   | 1        | b                  | 2                                   | 34   | 28                    | —    |  |
| GERMANY & HOLLAND.  | Cuxhaven ...                  | 30.76                           | 32             | W             | 2                   | bc       | 30.78                   | + .07                 | 31     | 30   | + 1           | WSW                 | 2        | o                  | ?                                   | 32   | 30                    | —    |  |
|                     | Berlin ...                    | 30.73                           | 26             | NW            | 2                   | c        | 30.76                   | + .06                 | 28     | 27   | - 1           | NW                  | 2        | f                  | ?                                   | 32   | 23                    | —    |  |
|                     | Wiesbaden ...                 | ?                               | 18             | ?             | ?                   | ?        | 30.73                   | - .02                 | 21     | 20   | 0             | Z                   | 0        | b                  | ?                                   | 28   | 18                    | —    |  |
|                     | Munich ...                    | 30.65                           | 18             | SW            | 4                   | o        | 30.62                   | - .02                 | 15     | 15   | - 2           | E                   | 4        | o                  | ?                                   | 25   | 12                    | 0.04 |  |
|                     | The Helder ...                | 30.77                           | 24             | S             | 1                   | b        | 30.78                   | + .01                 | 23     | 22   | - 5           | S                   | 1        | b                  | 1                                   | 30   | 21                    | —    |  |
|                     | Brussels (9 A.M.)             | ?                               | ?              | ?             | ?                   | ?        | 30.75                   | - .02                 | 17     | 17   | - 1           | ENE                 | 1        | b                  | ?                                   | 31   | 16                    | —    |  |
|                     | Cape Gris Nez                 | 30.63                           | 28             | ESE           | 1                   | b        | 30.62                   | - .04                 | 23     | 23   | - 1           | E                   | 1        | m                  | 1                                   | 30   | 21                    | —    |  |
|                     | Paris ...                     | 30.61                           | 36             | NE            | 2                   | b        | 30.51                   | - .16                 | 19     | 19   | - 1           | NNE                 | 2        | b                  | ?                                   | 32   | 19                    | —    |  |
|                     | Brest ...                     | ?                               | 38             | SE            | 3                   | b        | ?                       | ?                     | 36     | 35   | + 4           | ESE                 | 4        | b                  | 3                                   | 41   | 34                    | —    |  |
|                     | Lorient ...                   | 30.49                           | 28             | E             | 15                  | b        | 30.49                   | - .04                 | 31     | 30   | - 1           | E                   | 4        | b                  | 3                                   | 37   | 30                    | —    |  |
| FRANCE AND BELGIUM. | Rochefort ...                 | 30.42                           | 33             | ENE           | 6                   | b        | 30.40                   | - .04                 | 27     | 25   | 0             | ENE                 | 6        | b                  | 3                                   | 34   | 23                    | —    |  |
|                     | Belfort ...                   | ?                               | 22             | NE            | 5                   | b        | ?                       | ?                     | 27     | 26   | + 5           | NE                  | 4        | b                  | ?                                   | 27   | 16                    | —    |  |
|                     | Lyons ...                     | 30.56                           | 24             | NNW           | 2                   | b        | 30.32                   | - .08                 | 17     | 16   | - 2           | N                   | 2        | b                  | ?                                   | 27   | 17                    | —    |  |
|                     | Nice ...                      | 30.35                           | 35             | NE            | 1                   | b        | 30.32                   | - .04                 | 32     | 27   | 0             | NE                  | 1        | b                  | 2                                   | 45   | 30                    | —    |  |
|                     | Perpignan ...                 | 30.41                           | 31             | NW            | 1                   | b        | 30.38                   | - .07                 | 27     | 26   | + 2           | WSW                 | 1        | b                  | ?                                   | 39   | 25                    | —    |  |
|                     | Bisritz ...                   | 30.30                           | 34             | E             | 4                   | b        | 30.27                   | - .10                 | 25     | 22   | - 3           | ESE                 | 4        | b                  | 2                                   | 37   | 21                    | —    |  |
|                     | Coronna ...                   | ?                               | ?              | ?             | ?                   | ?        | ?                       | ?                     | ?      | ?    | ?             | ?                   | ?        | ?                  | ?                                   | ?    | ?                     | ?    |  |
|                     | Lisbon ...                    | 30.19                           | 44             | NNE           | 3                   | f        | 30.18                   | - .03                 | 42     | 41   | + 6           | NNE                 | 4        | b                  | ?                                   | 45   | 36                    | —    |  |
|                     |                               |                                 |                |               |                     |          |                         |                       |        |      |               |                     |          |                    |                                     |      |                       |      |  |
|                     |                               |                                 |                |               |                     |          |                         |                       |        |      |               |                     |          |                    |                                     |      |                       |      |  |

For Explanation of Columns, see bottom of p. 4.

Received too late for insertion in Charts on 1.



# WEATHER CHARTS

for 8 a.m. on Sunday, 20<sup>th</sup> Dec: 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; →→ = forces 8 to 10;

→→ = forces 5 to 7; →→ = forces 1 to 4.

☉ = dead calm.

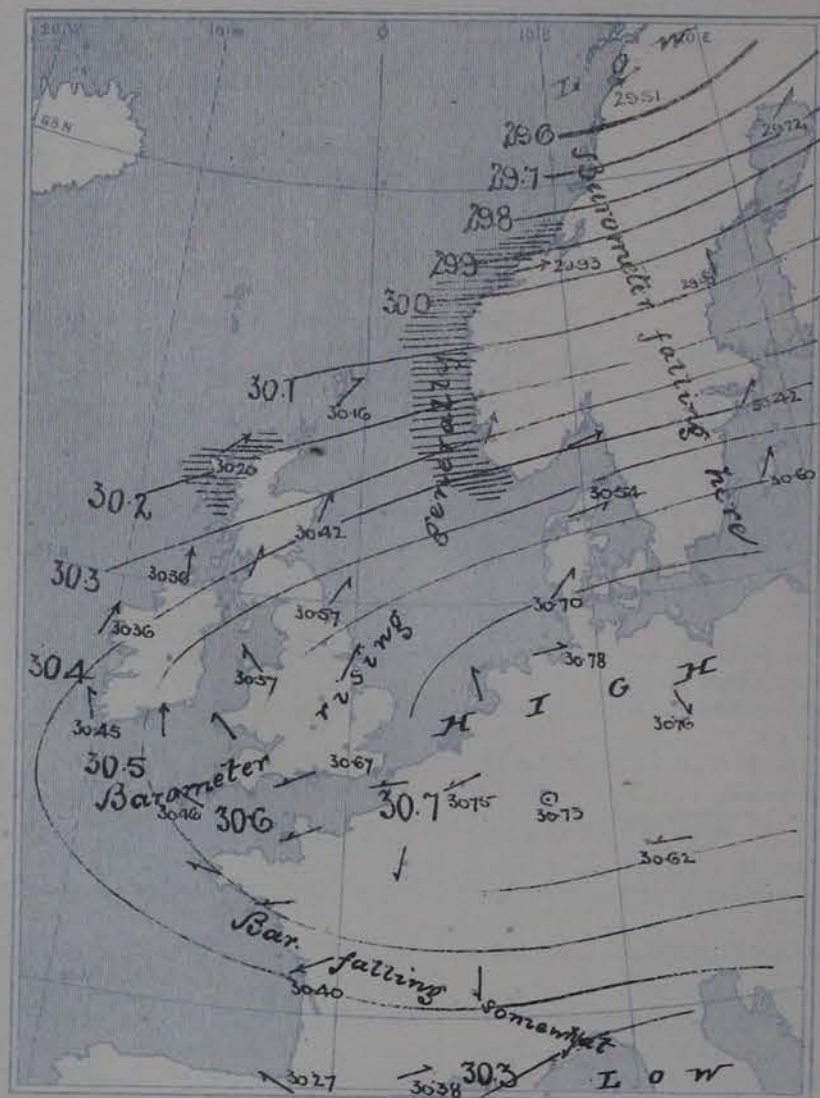
**SEA DISTURBANCE**—Where considerable, is shown thus:

☰ = Rough, ☱ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.  
During the 20 Years 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sunburgh Head | 29.673         |
| Sternway      | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Abbotsbury    | 29.929         |
| Mullaghmore   | 29.921         |
| Douaghadee    | 29.848         |
| Holyhead      | 29.870         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Sally         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.969         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.944         |
| Oxford        | 29.935         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.7 ins. and more to 30.5 ins. in an anticyclone covering north Germany, France, the North Sea and England.  
 Lowest, 29.6 ins. and less, over Denmark and the west of Iceland, and 30.2 ins. and less, in Portugal and the southwest of Spain.  
 Gradients rather steep over Scandinavia, moderate over Scotland, Ireland, and the southern half of France, slight elsewhere.  
 Barometer falling over northern Europe, rising in Scotland, steady over England, falling slowly over France.

## TEMPERATURE

Highest, 48° at Hornum and Belmullet, 47° at Valencia and Edinburgh. 46° at Christiania, 44° at Sully, 42° at Lisbon.  
 Lowest, (1) 15° at Munich, 17° at Lyons and Bourges, 19° at Paris, 27° at Berlin, 21° at Oxford, 23° at Cambridge, 24° at Loughborough and London, 26° at York and 31° at Cassel.  
 It has fallen decidedly over our inland countries during the night.

## WIND

Strong to a gale from SW in Norway — moderate SW in Scotland.  
 Moderate to fresh S in Ireland — moderate to fresh E over the Bay of Biscay, light E over the Channel.  
 Nearly calm over Central England. The SW gale in the North Sea has died down.

## WEATHER

Cloudy and showery in the extreme north and northwest, dull in the far north.  
 Fine and dry in most other places, with fog in several parts of England.

## SEA

Still rough in the North and moderate off our northern, eastern, and southwestern coasts generally, slight off Ulster, smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

# FORECASTS

For the 24 hours ending at NOON on 21<sup>st</sup> Dec 1891.

## DISTRICTS.

## FORECASTS.

- 1 SCOTLAND NORTH
- 2 SCOTLAND EAST
- 3 ENGLAND N.E.
- 4 ENGLAND EAST
- 5 MIDLAND COUNTIES
- 6 ENGLAND SOUTH

None issued

## DISTRICTS.

## FORECASTS.

- 6 SCOTLAND WEST
- 7 ENGLAND N.W.
- 8 ENGLAND S.W.
- 9 IRELAND NORTH
- 10 IRELAND SOUTH

## WARNINGS

None issued

The South Cone is still flying in district 6 and part of 9.

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 4 P.M. REPORTS.

|               | BAR.  | D. | W. | D.  | F. | WEA. | SEA. |               | BAR.  | D. | W. | D.  | F. | WEA. | SEA. |
|---------------|-------|----|----|-----|----|------|------|---------------|-------|----|----|-----|----|------|------|
| Wales...      | 30.49 | 43 | 42 | SSE | 6  | of   | 4    | Holyhead...   | 30.51 | 41 | 39 | SSE | 4  | og   | 4    |
| Stranraer...  | 30.14 | 47 | 46 | SW  | 3  | o    | 4    | Malin...      | 30.37 | 49 | 45 | SSE | 4  | om   | 4    |
| Stornoway...  | 30.12 | 48 | 48 | SW  | 8  | o    | 6    | Islilly...    | 30.48 | 45 | 42 | SE  | 5  | bc   | 5    |
| Arundel...    | 30.37 | 44 | 41 | SSW | 4  | bcg  | 3    | Jersey...     | 30.62 | 37 | 32 | ESE | 3  | b    | 3    |
| Wexford...    | 30.51 | 36 | 35 | SW  | 2  | c    | 2    | Dungeness...  | 30.67 | 37 | 33 | S   | 3  | b    | 1    |
| Arundel...    | 30.42 | 46 | 44 | SSW | 4  | o    | 3    | London...     | 30.67 | 36 | 34 | SE  | 2  | bf   | 2    |
| Malin Head... | 30.24 | 42 | 40 | S   | 6  | c    | 3    | Farmouth...   | 30.67 | 33 | 31 | SW  | 1  | bc   | 2    |
| Malin Head... | 30.34 | 45 | 42 | SSE | 5  | o    | 4    | Colchester... | 30.43 | 33 | 30 | ENE | 5  | b    | ?    |
| Bel. Mt. ...  | 30.36 | 48 | 46 | SW  | 2  | o    | *    |               |       |    |    |     |    |      |      |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather fine and bright over England, France, the Netherlands, Western Germany, and the greater part of Southern Europe. Gull elsewhere with snow at several of the Swedish, Russian, and Austrian stations, as well as at Palermo. Rain falling later in the west of Norway; no important change occurring elsewhere.

Temperature highest (1) 55° at Algiers, 52° at Malta, 50° at Palermo and 47° at Rome; (2) 49° at Stockholm, 48° at Kinn and Kilen in Island and 47° at Lumburg, H. Schmall, and Rotherham. Lowest 0 zero at Archangel, 2° at Kuopio, 4° at Hango, and 9° at St. Petersburg; below 20° at most of the Swedish and Russian stations, as well as in some parts of Germany and Austria; below the freezing point in nearly all parts of northern, central and eastern Europe, as well as over the greater part of England. Daily maxima below 40° at most of the English stations, but thermometer rising to between 45° and 50° on our extreme western and northern coasts. Exceeding 60° in some parts of Spain and also in Algeria.

Wind light or moderate from the East over France and Spain, and from the SE<sup>th</sup> over the greater part of England. Fresh to strong from the SE<sup>th</sup> or S<sup>th</sup> in Ireland, and from the SW<sup>th</sup> in Scotland, with a gale at Stornoway; light from the SE<sup>th</sup> in the west of Norway. Light from the N<sup>th</sup> over the greater part of Russia and Central Europe, but NW<sup>th</sup> in Austria. Strong from the N<sup>th</sup> in Italy; variable in Algeria. No important change occurring during day.

Barometer highest 30.7 in. and upwards over Germany and the Netherlands and also over Finland. Lowest 29.8 in. and less, in a depression lying over Asia Minor; 30.1 in. and less, in another disturbance lying to the northward of Scotland. Low-pressure system off Scotch coasts subsequently travelling northwards to the north-west of Norway; no other change of importance occurring during day.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

WEATHER.—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.  
\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. in Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

Terms.—For Daily Weather Reports forwarded by Book Post, 21 6 0 per annum.

Weekly

21 10 0



# DAILY WEATHER REPORT.

for *Monday, 21<sup>st</sup> December, 1891.*  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           |                               | YESTERDAY EVENING. |       |   |      |          | 8 A.M. TO DAY. |                      |   |   |      |       |   |          |                   |             | PAST 24 HOURS.       |                           |      |
|---------------------|-------------------------------|--------------------|-------|---|------|----------|----------------|----------------------|---|---|------|-------|---|----------|-------------------|-------------|----------------------|---------------------------|------|
|                     |                               | BAROM.             | TEMP. | WIND.                                     |      | Weather. | BAROMETER.     |                      | SHADE TEMP.                               |   |      | WIND. |   | Weather. | Sea.<br>(0 to 5.) | SHADE TEMP. |                      | Amount<br>of<br>Rainfall. |      |
|                     |                               |                    |       | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry. |          | Dir.           | Force,<br>(0 to 12.) | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry. | Wet.  | Difference<br>from 8 a.m.<br>yesterday. |          |                   | Dir.        | Force,<br>(0 to 12.) |                           | Max. |
| SCANDINAVIA.        | Haparanda ...                 | 29.19              | 37    | SW  | 6    | bc       | 29.54          | -18                  | 35  | 35                                      | +6   | NSW   | 6                                       | bc       | *                 | 39          | 19                   | -                         |      |
|                     | Hernösand ...                 | 29.88              | 38    | S   | 4    | b        | 30.04          | -05                  | 38  | 35                                      | +9   | N     | 2                                       | bc       | *                 | 39          | 19                   | -                         |      |
|                     | Stockholm ...                 | 30.22              | 38    | N   | 6    | c        | 30.27          | -15                  | 36  | 35                                      | +5   | N     | 2                                       | bc       | *                 | 39          | 18                   | -                         |      |
|                     | Wishby ...                    | 30.40              | 38    | NSW                                       | 4    | 0        | 30.36          | -24                  | 41  | 39                                      | +9   | NSW   | 4                                       | 0        | *                 | ?           | 21                   | -                         |      |
|                     | Bodö ...                      |                    |       |   |      |          |                |                      |   |   |      |       |   |          |                   |             |                      |                           |      |
|                     | Christiansund                 | 30.16              | 44    | SW  | 9    | 1        | 30.22          | +29                  | 43  | 41                                      | -3   | SW    | 5                                       | r        | 5                 | 50          | 41                   | 0.43                      |      |
|                     | Skudesnaes ...                | 30.46              | 45    | SSW                                       | 2    | 0        | 30.45          | -01                  | 44  | 44                                      | +1   | NSW   | 2                                       | 0        | 4                 | 45          | 43                   | -                         |      |
|                     | Christiania Fjord<br>(Færder) | 30.34              | 42    | SSW                                       | 5    | b        | 30.33          | -05                  | 44  | 42                                      | +2   | NSW   | 3                                       | c        | 3                 | ?           | ?                    | -                         |      |
|                     | Skagen (The Seaw.)            | 30.46              | 41    | N   | 5    | 0        | 30.42          | -12                  | 42  | 41                                      | +5   | N     | 4                                       | 0        | 2                 | ?           | 36                   | -                         |      |
|                     | Fanö ...                      | 30.70              | 35    | N   | 4    | c        | 30.69          | -01                  | 34  | 32                                      | -2   | Z     | 0                                       | c        | *                 | 37          | 32                   | -                         |      |
| BRITISH ISLANDS.    | Sumburgh Head                 | 30.31              | 47    | N   | 4    | 0        | 30.36          | +20                  | 47  | 45                                      | 0    | N     | 3                                       | 0        | 4                 | 49          | 45                   | 0.01                      |      |
|                     | Stornoway ...                 | 30.33              | 47    | SW  | 6    | 0        | 30.38          | +18                  | 47  | 46                                      | -1   | SW    | 6                                       | 0        | 6                 | 49          | 45                   | -                         |      |
|                     | Wick ...                      | 30.40              | 45    | N   | 3    | c        | 30.48          | +21                  | 43  | 40                                      | -3   | N     | 2                                       | c        | 1                 | 47          | 41                   | -                         |      |
|                     | Nairn ...                     | 30.42              | 46    | SW  | 2    | c        | 30.49          | +20                  | 37  | 36                                      | -9   | SW    | 2                                       | b        | 1                 | 48          | 35                   | -                         |      |
|                     | Aberdeen ...                  | 30.51              | 39    | SW  | 3    | b        | 30.54          | +12                  | 33  | 32                                      | -5   | SW    | 1                                       | bm       | 1                 | 42          | 33                   | -                         |      |
|                     | Leith ...                     | 30.56              | 38    | NSW                                       | 3    | bc       | 30.58          | +11                  | 39  | 38                                      | -1   | SW    | 2                                       | cm       | *                 | 44          | 36                   | -                         |      |
|                     | Shields ...                   | 30.58              | 34    | SW  | 2    | bc       | 30.59          | +02                  | 30  | 30                                      | +2   | SW    | 2                                       | m        | 2                 | 34          | 26                   | -                         |      |
|                     | Spurn Head ...                | 30.66              | 34    | S   | 2    | b        | 30.65          | +02                  | 31  | 30                                      | 0    | S     | 2                                       | b        | 2                 | 34          | 29                   | -                         |      |
|                     | York ...                      | 30.64              | 29    | S   | 1    | b        | 30.65          | +01                  | 22  | 22                                      | -4   | S     | 1                                       | f        | *                 | 31          | 20                   | -                         |      |
|                     | Loughborough                  | 30.63              | 27    | ESE                                       | 1    | b        | 30.64          | +01                  | 19  | 19                                      | -5   | ESE   | 1                                       | f        | *                 | 7           | 17                   | -                         |      |
| GERMANY & HOLLAND.  | Ardrossan ...                 | 30.54              | 44    | SSW                                       | 3    | bc       | 30.57          | +08                  | 44  | 41                                      | 0    | S     | 3                                       | e        | 3                 | 45          | 43                   | -                         |      |
|                     | Malin Head ...                | 30.49              | 39    | SSE                                       | 4    | b        | 30.50          | +14                  | 36  | 34                                      | -4   | S     | 2                                       | bf       | 3                 | 42          | 34                   | -                         |      |
|                     | Mullaghmore ...               | 30.51              | 42    | S   | 4    | b        | 30.52          | +11                  | 38  | 36                                      | -5   | NW    | 2                                       | b        | 2                 | 45          | 37                   | -                         |      |
|                     | Belmullet ...                 | 30.44              | 47    | SSW                                       | 4    | 0        | 30.46          | +10                  | 43  | 37                                      | -4   | SSE   | 3                                       | b        | *                 | 47          | 37                   | -                         |      |
|                     | Donaghadee ...                | 30.57              | 35    | SW  | 2    | b        | 30.60          | +09                  | 32  | 32                                      | -3   | SSW   | 2                                       | b        | 0                 | 45          | 32                   | -                         |      |
|                     | Liverpool (Bilston)           | 30.64              | 32    | ESE                                       | 2    | b        | 30.63          | +02                  | 28  | 27                                      | 0    | ESE   | 3                                       | bm       | 2                 | 35          | 28                   | -                         |      |
|                     | Holyhead ...                  | 30.59              | 40    | Z   | 0    | b        | 30.60          | +03                  | 35  | 34                                      | -6   | Z     | 0                                       | bmw      | 0                 | 44          | 33                   | -                         |      |
|                     | Parsonstown ...               | 30.57              | 39    | Z   | 0    | b        | 30.56          | +06                  | 36  | 35                                      | +4   | SE    | 1                                       | c        | *                 | 44          | 32                   | -                         |      |
|                     | Valencia ...                  | 30.50              | 47    | ESE                                       | 5    | bc       | 30.52          | +07                  | 44  | 41                                      | -3   | E     | 2                                       | b        | 3                 | 49          | 40                   | -                         |      |
|                     | Roche's Point ...             | 30.54              | 47    | S   | 4    | b        | 30.56          | +08                  | 45  | 43                                      | -2   | SSE   | 4                                       | b        | 4                 | 50          | 44                   | -                         |      |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.)      | 30.59              | 42    | ESE                                       | 2    | b        | 30.60          | +03                  | 35  | 34                                      | -6   | E     | 2                                       | bm       | 3                 | 45          | 34                   | -                         |      |
|                     | Scilly ...                    | 30.53              | 46    | ESE                                       | 4    | b        | 30.52          | +06                  | 46  | 43                                      | +2   | E     | 5                                       | c        | 5                 | 48          | 41                   | -                         |      |
|                     | Prawle Point ...              | 30.60              | 40    | ESE                                       | 3    | b        | 30.57          | -02                  | 40  | 39                                      | -1   | EHE   | 4                                       | cf       | 3                 | 44          | 32                   | -                         |      |
|                     | Jersey (St. Aubin's)          | 30.61              | 36    | E   | 2    | bc       | 30.59          | -03                  | 32  | 30                                      | 0    | E     | 3                                       | bm       | 3                 | 39          | 31                   | -                         |      |
|                     | Hurst Castle ...              | 30.65              | 33    | EHE                                       | 2    | m        | 30.64          | 00                   | 31  | 30                                      | -1   | HE    | 3                                       | m        | 1                 | 40          | 28                   | -                         |      |
|                     | Dungeness ...                 | 30.63              | 35    | E   | 3    | c        | 30.65          | -01                  | 32  | 29                                      | 0    | SE    | 3                                       | b        | 1                 | 35          | 30                   | -                         |      |
|                     | London ...                    | 30.67              | 32    | E   | 1    | f        | 30.66          | -01                  | 24  | 23                                      | 0    | SE    | 1                                       |          | *                 | 35          | 22                   | -                         |      |
|                     | Oxford ...                    | 30.70              | 23    | Z   | 0    | b        | 30.68          | 00                   | 21  | 21                                      | 0    | Z     | 0                                       |          | *                 | 32          | 20                   | -                         |      |
|                     | Cambridge ...                 | 30.70              | 26    | Z   | 0    | b        | 30.71          | +01                  | 20  | 20                                      | -3   | NW    | 1                                       |          | *                 | 38          | 18                   | -                         |      |
|                     | Yarmouth ...                  | 30.64              | 33    | N   | 1    | bc       | 30.65          | -02                  | 31  | 30                                      | +1   | NSW   | 1                                       | bcf      | 2                 | 35          | 29                   | -                         |      |
| PENINSULA.          | Cuxhaven ...                  | 30.79              | 30    | NSW                                       | 1    | c        | 30.75          | -03                  | 24  | 23                                      | -1   | NSW   | 1                                       | b        | *                 | 31          | 23                   | -                         |      |
|                     | Berlin ...                    | 30.78              | 29    | Z   | 0    | c        | 30.76          | 00                   | 26  | 25                                      | -1   | SSE   | 2                                       |          | *                 | 30          | 23                   | -                         |      |
|                     | Wiesbaden ...                 | *                  | *     | *   | *    | *        | 30.72          | -01                  | 19  | 18                                      | -2   | Z     | 0                                       |          | *                 | 27          | 18                   | -                         |      |
|                     | Munich ...                    | 30.61              | 11    | NE  | 4    | b        | 30.60          | -02                  | 4   | 4                                       | -11  | NE    | 4                                       |          | *                 | 19          | 3                    | -                         |      |
|                     | The Helder ...                | 30.76              | 25    | SE  | 1    | b        | 30.73          | -04                  | 21  | 20                                      | -2   | S     | 1                                       | b        | 1                 | 28          | 21                   | -                         |      |
|                     | Brussels (W a.m.)             | *                  | *     | *   | *    | *        | 30.69          | -06                  | 19  | 18                                      | +2   | ESE   | 1                                       | b        | *                 | 29          | 17                   | -                         |      |
|                     | Cape Gris Nez                 | 30.61              | 26    | E   | 1    | m        | 30.61          | -01                  | 23  | 23                                      | 0    | E     | 1                                       | b        | 1                 | 32          | 21                   | -                         |      |
|                     | Paris ...                     | 30.36              | 26    | NE  | 3    | b        | 30.59          | +08                  | 19  | 18                                      | 0    | NNE   | 3                                       | b        | *                 | 31          | 18                   | -                         |      |
|                     | Brest ...                     | ?                  | 27    | EHE                                       | 2    | b        | ?              | ?                    | 32  | 29                                      | -4   | E     | 1                                       | b        | 5                 | 46          | 30                   | -                         |      |
|                     | Lorient ...                   | 30.47              | 37    | ?   | 4    | b        | 30.46          | -03                  | 29  | 25                                      | -2   | EHE   | 3                                       | b        | 4                 | 41          | 28                   | -                         |      |
| FRANCE AND BELGIUM. | Rochefort ...                 | 30.39              | 33    | EHE                                       | 6    | b        | 30.36          | -04                  | 24  | 23                                      | -3   | EHE   | 6                                       | b        | *                 | 36          | 21                   | -                         |      |
|                     | Belfort ...                   |                    |       |   |      |          |                |                      |   |   |      |       |   |          |                   |             |                      |                           |      |
|                     | Lyons ...                     | 30.45              | 23    | N   | 1    | b        | 30.51          | -01                  | 17  | 16                                      | 0    | N     | 1                                       | b        | *                 | 27          | 17                   | -                         |      |
|                     | Nice ...                      | 30.25              | 37    | E   | 6    | b        | 30.38          | +06                  | 29  | 23                                      | -3   | E     | 1                                       | b        | 4                 | 45          | 28                   | -                         |      |
|                     | Perpignan ...                 |                    |       |   |      |          |                |                      |   |   |      |       |   |          |                   |             |                      |                           |      |
|                     | Biarritz ...                  | 30.30              | 37    | E   | 3    | b        | 30.28          | +01                  | 23  | 21                                      | -2   | SE    | 3                                       | b        | 2                 | 39          | 21                   | -                         |      |
| PENINSULA.          | Corunna ...                   | *                  | *     | *   | *    | *        |                |                      |   |   |      |       |   |          |                   |             |                      |                           |      |
|                     | Lisbon ...                    | 30.15              | 50    | NE  | 4    | b        | 30.13          | -05                  | 44  | 41                                      | +2   | NNE   | 4                                       | b        | *                 | 54          | 42                   | -                         |      |

For Explanation of Columns, see bottom of p. 1.

† Received too late for insertion in *Charis* on p. 2.



# WEATHER CHARTS

for 8 a.m. on Monday, 21<sup>st</sup> Dec<sup>r</sup>, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

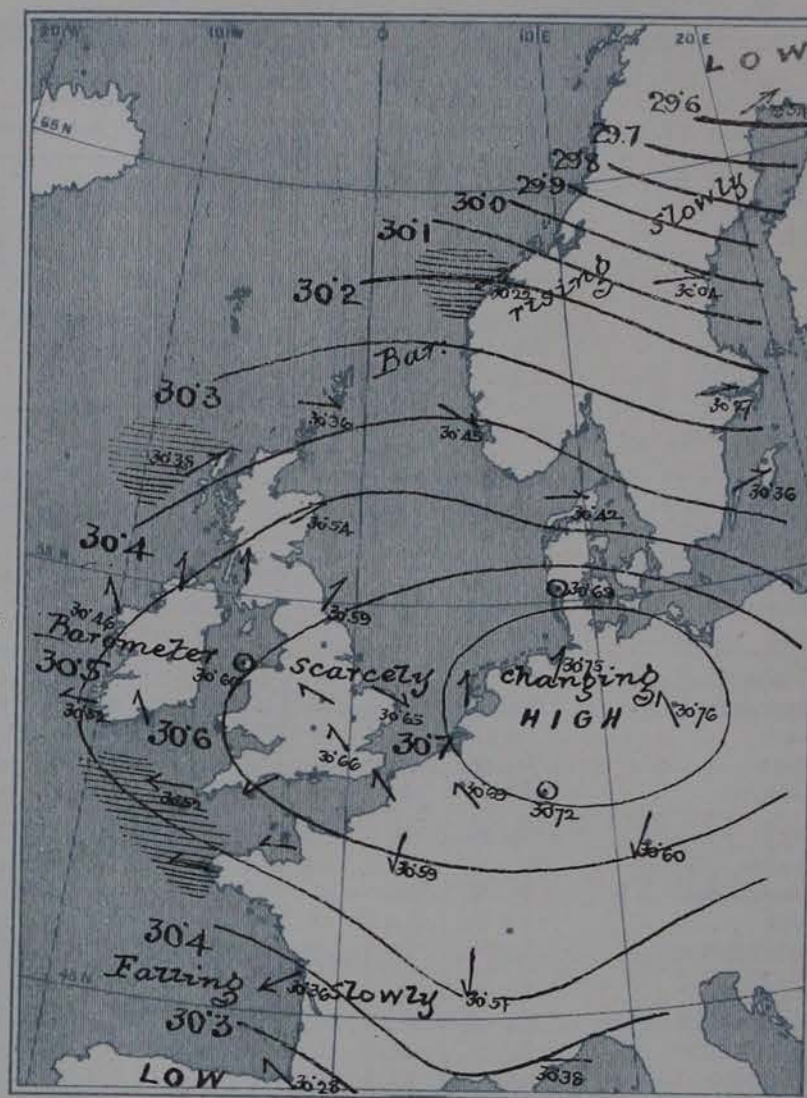
☼ = Rough. ☼ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.988         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

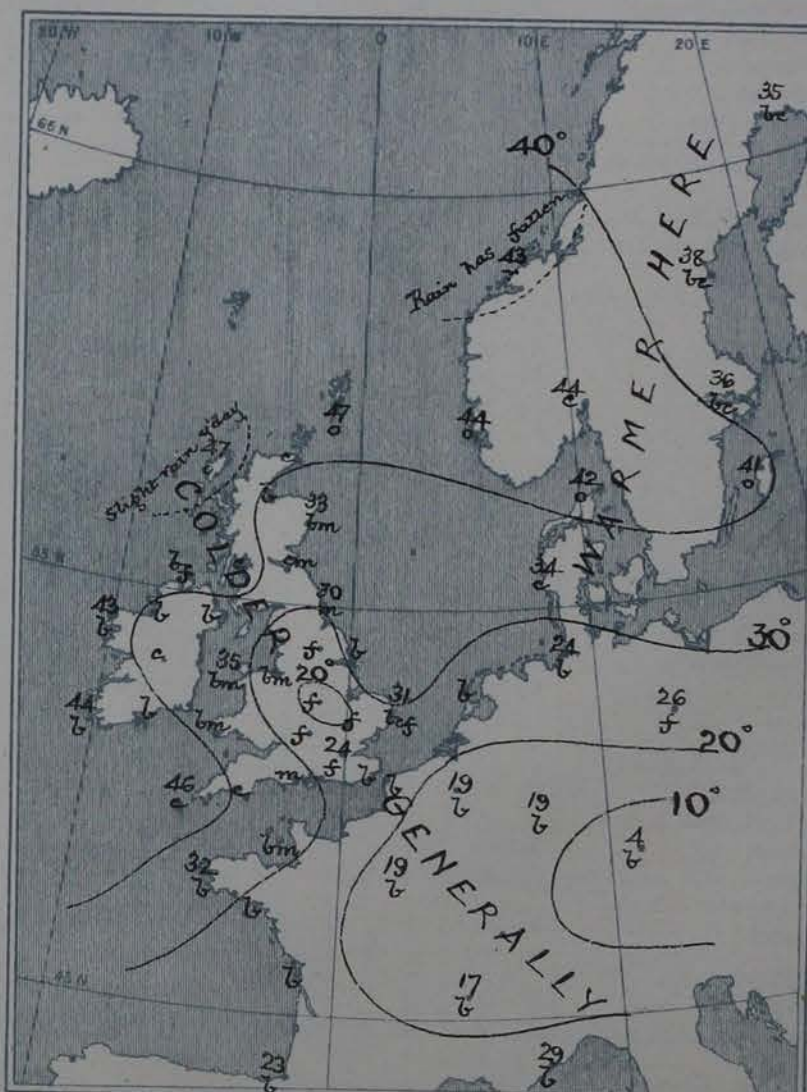
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.           | TEMPERATURE.  |               |           |      | RAINFALL<br>(Inches.) |
|---------------------|---------------|---------------|-----------|------|-----------------------|
|                     | Daily<br>Max. | Daily<br>Min. | at 8 a.m. |      |                       |
|                     |               |               | Dry.      | Wet. |                       |
| Sumburgh Head.....  | 42.6          | 35.2          | 39.6      | 38.1 | 4.25                  |
| Stornoway .....     | 43.1          | 34.2          | 39.4      | 38.5 | 5.63                  |
| Wick.....           | 42.2          | 32.7          | 38.1      | 36.8 | 3.10                  |
| Nairn .....         | 41.9          | 32.8          | 37.1      | 35.6 | 1.95                  |
| Aberdeen .....      | 41.9          | 32.6          | 36.9      | 35.2 | 3.24                  |
| Leith.....          | 44.0          | 33.7          | 38.5      | 37.0 | 1.86                  |
| Shields .....       | 42.9          | 33.9          | 38.3      | 36.9 | 2.57                  |
| Spurn Head.....     | 42.4          | 35.3          | 38.8      | 37.7 | 2.14                  |
| York .....          | 42.3          | 32.3          | 36.4      | 35.4 | 2.28                  |
| Loughborough .....  | 42.7          | 32.2          | 36.3      | 35.4 | 2.24                  |
| Ardrossan .....     | 44.5          | 35.9          | 40.0      | 38.7 | 3.73                  |
| Mullaghmore .....   | 46.5          | 37.8          | 42.2      | 39.8 | 4.51                  |
| Donaghadee.....     | 45.8          | 38.2          | 40.2      | 39.3 | 2.84                  |
| Holyhead.....       | 46.4          | 39.1          | 42.8      | 41.1 | 3.82                  |
| Liverpool .....     | 43.5          | 35.6          | 38.8      | 37.1 | 2.59                  |
| Parsonstown .....   | 44.7          | 33.1          | 37.8      | 36.6 | 3.04                  |
| Valencia .....      | 49.7          | 40.0          | 44.6      | 42.4 | 5.99                  |
| Roche's Point ..... | 47.9          | 38.9          | 42.9      | 41.5 | 4.95                  |
| Pembroke.....       | 43.8          | 40.3          | 43.6      | 42.2 | 3.99                  |
| Scilly .....        | 49.5          | 43.1          | 47.0      | 45.1 | 4.02                  |
| Prawle Point .....  | 47.0          | 38.2          | 42.5      | 41.1 | 3.76                  |
| Jersey .....        | 47.3          | 39.3          | 43.1      | 41.4 | 3.82                  |
| Hurst Castle .....  | 45.6          | 36.3          | 40.6      | 39.8 | 2.77                  |
| Dover .....         | 44.3          | 35.9          | 39.8      | 38.6 | 3.00                  |
| LONDON .....        | 44.0          | 33.9          | 37.8      | 36.7 | 2.10                  |
| Oxford .....        | 42.9          | 33.5          | 37.0      | 35.9 | 2.10                  |
| Cambridge .....     | 42.8          | 31.6          | 36.2      | 35.5 | 1.88                  |
| Yarmouth .....      | 41.9          | 33.7          | 37.9      | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.7 in. and more to 30.5 in. in an anticyclone covering Germany, France, England and Ireland.  
 Lowest, 29.6 in. and less, in the extreme north of Sweden.  
 Gradients slight over England, the North Sea and North Germany, moderate in most other places, but steep over the northern parts of Sweden.  
 Barometer rising in the north of Scandinavia, steady elsewhere.

## TEMPERATURE

Highest, 47° at Lumburg, 46° at Stenouay, 46° at Scilly, and 44° at Valence Island.  
 Lowest, (1) 4° F. at Munich, 17° at Lyons, 19° at Paris, Brussels, and Wiesbaden, 26° at Berlin; (2) 19° at Highborough, 20° at Cambridge, 21° at Oxford, 22° at York, 24° in London.  
 Over inland England the thermometer did not rise above 35° yesterday except at Cambridge.

## WIND

Nearly calm over the Netherlands and England, E<sup>1</sup> in the Channel, S<sup>1</sup> in Ireland, SW<sup>1</sup> in Scotland, and SW<sup>1</sup> to W<sup>1</sup> over Scandinavia. It is moderate in strength on our own coasts, strong in the north of Sweden and in the Minch.

## WEATHER

Very foggy over England, fine elsewhere except in the far north, where the sky is overcast and some rain is falling.

## SEA

Still rough in the Minch, rather rough off Ushant, moderate to smooth elsewhere.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone which has been lying over Western Europe during the past few days continues in force, so that while E<sup>1</sup> breezes and fine bright weather are reported over France, the Bay of Biscay, and Channel, W<sup>1</sup> and SW<sup>1</sup> winds are felt in the north, calms and fogs over England. Hard frost holds except in the west and north.

## FORECASTS

For the 24 hours ending at NOON on 22<sup>nd</sup> Decr. 1891.

### DISTRICTS.

### FORECASTS.

|   |                  |   |
|---|------------------|---|
| 0 | SCOTLAND NORTH   | SW <sup>1</sup> breezes, mild, some rain at times.                                |
| 1 | SCOTLAND EAST    | SW <sup>1</sup> breezes, light; some haze or fog.                                 |
| 2 | ENGLAND N.E.     |   |
| 3 | ENGLAND EAST     | Calms and Varying E <sup>1</sup> breezes, dry, cold, foggy inland, fine on coast. |
| 4 | MIDLAND COUNTIES |   |
| 5 | ENGLAND SOUTH    |   |

### DISTRICTS.

### FORECASTS.

|    |               |  |
|----|---------------|--|
| 6  | SCOTLAND WEST | Same as No. 0.   |
| 7  | ENGLAND N.W.  | S <sup>1</sup> breezes, light; fine, fog inland.                     |
| 8  | ENGLAND S.W.  | E <sup>1</sup> breezes, moderate; fair.                              |
| 9  | IRELAND NORTH | SE <sup>1</sup> and S <sup>1</sup> breezes, moderate or light, fine. |
| 10 | IRELAND SOUTH |  |

### WARNINGS

NONE ISSUED.

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.

The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR.  | THER. |    | WIND |    | WEA. | SEA |               | BAR.  | THER. |    | WIND |    | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|---------------|-------|-------|----|------|----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |               |       | D.    | W. | D.   | F. |      |     |
| Skudesnaes ...    | 30.45 | 44    | 43 | SSW  | 6  | of   | 5   | Holyhead ...  | 30.58 | 43    | 40 | S    | 3  | 6    | 2   |
| Sumburgh Head ... | 30.29 | 49    | 48 | SW   | 6  | 0    | 6   | Valencia ...  | 30.60 | 39    | 33 | EHE  | 3  | 6    | 3   |
| Stornoway ...     | 30.44 | 41    | 39 | SSZ  | 4  | 60   | 3   | Scilly ...    | 30.63 | 35    | 33 | E    | 3  | 6    | 1   |
| Aberdeen ...      | 30.43 | 47    | 44 | SW   | 5  | 0    | *   | Jersey ...    | 30.39 | 36    | 35 | ENE  | 6  | 6    | 3   |
| Shields ...       |       |       |    |      |    |      |     | Dungeness ... |       |       |    |      |    |      |     |
| Ardrossan ...     |       |       |    |      |    |      |     | London ...    |       |       |    |      |    |      | *   |
| Malin Head ...    |       |       |    |      |    |      |     | Yarmouth ...  |       |       |    |      |    |      |     |
| Mullaghmore ...   |       |       |    |      |    |      |     | Rocheport ... |       |       |    |      |    |      |     |
| Belmullet ...     |       |       |    |      |    |      |     |               |       |       |    |      |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather fine over the greater part of our Islands but foggy in the southeast of England and on our extreme north and northwest coasts; fine also over France, Spain, Austria, Algeria and the Mediterranean. Dull in most parts of northern, central and eastern Europe, with rain in the north of Norway and snow in Finland as well as at Kharkov and Plesko. No important change occurring during day.

Temperature highest (1) 55° at San Fernando, 50° at Algiers and La Calle, and 47° at Brindisi; (2) 48° at Stornoway and Belmullet, and 44° at Sumburgh Head, Valencia Island and Roche's Point. Lowest -22° F. at Moscow, -6° at Kiev, -5° at St. Petersburg, 0° at Riga, and +8° at Archangel, below 10° over the greater part of Russia and Austria, below 15° over central England and below freezing point over all the more central parts of Europe. Daily maxima over the inland parts of England varying between 51° and 53° but thermometer exceeding 45° on our extreme southwestern, western and northern coasts and reaching 50° at Valencia Island.

Wind light from the NE or N over central and southern France and from E or SE over Spain the Bay of Biscay, the Channel and the greater part of England. Fresh from the S in Ireland; moderate from the SW in Scotland and strong from the same quarter over Scandinavia and northern Russia with a gale at Rode. Light from the N over Austria, eastern Germany and the central and southern parts of Russia. Cyclonic circulation of strong winds reported over Italy and the Adriatic. No important change occurring later.

Barometer highest 30.7 ins. and upwards in a long band extending westwards from central and northern Russia to Germany and the Netherlands. Lowest 29.6 ins. and less in a large and rather deep depression lying off the coasts of Finmark, 30.0 ins. and less in a shallower disturbance lying off the south of Italy. Norwegian depression subsequently travelling away to the north-eastward and barometer rising over Scandinavia.

### SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD. FROM THE 13<sup>TH</sup> TO 14<sup>TH</sup> DEC. 1891.

In the course of this week there has been a complete change in the weather over the United Kingdom. The strong SW winds and gales, mild temperatures, heavy rains, low pressures and cyclonic systems have given way to light or moderate anticyclonic breezes, calms in many places, high pressures, sharp frosts over England and the Continent, dry air and some fog. The change set in on Wednesday evening in the rear of a depression which had previously passed across the northern parts of our Islands and then travelled away to the Baltic.

At the close of the week the anticyclone was still holding.

#### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

WEATHER.—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS.—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Tuesday 22<sup>nd</sup> December.* 1891.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           | YESTERDAY EVENING.                        |       |        |                      |          | 8 A.M. TO DAY.                            |   |             |      |   |        |                      |          |                   |             | PAST 24 HOURS. |                           |      |
|---------------------|---|-------|--------|----------------------|----------|---|---|-------------|------|---|--------|----------------------|----------|-------------------|-------------|----------------|---------------------------|------|
|                     | BAROM.                                    | TEMP. | WIND.  |                      | Weather. | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND.  |                      | Weather. | Sea.<br>(0 to 5.) | SHADE TEMP. |                | Amount<br>of<br>Rainfall. |      |
|                     | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry.  | Direc. | Force.<br>(0 to 12.) |          | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Direc. | Force.<br>(0 to 12.) |          |                   | Max.        | Min.           |                           |      |
|                     |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
| SCANDINAVIA.        | Haparanda ...                             | 29.69 | 30     | 2                    | 0        | 6   | 29.84                                   | +30         | 25   | 23                                      | -10    | NW                   | 2        | 6                 | *           | 41             | ?                         | —    |
|                     | Hernösand ...                             | 30.11 | 35     | W                    | 6        | 6   | 30.20                                   | +16         | 30   | 36                                      | +1     | SW                   | 2        | c                 | *           | 45             | 34                        | —    |
|                     | Stockholm ...                             | 30.28 | 33     | W                    | 1        | 6   | 30.27                                   | 0.0         | 35   | 33                                      | -1     | W                    | 2        | 0                 | *           | 41             | 32                        | —    |
|                     | Wistby ...                                | 30.32 | 40     | W                    | 4        | 0   | 30.30                                   | -0.6        | 35   | 38                                      | -2     | WNW                  | 4        | 6c                | *           | 41             | 32                        | —    |
|                     | Bodö ...                                  | 29.90 | 41     | NW                   | 8        | c   | 30.02                                   | +1.02       | 41   | 38                                      | +18    | WNW                  | 5        | c                 | 3           | 41             | 39                        | —    |
|                     | Christiansund ...                         | 30.25 | 42     | SW                   | 3        | 7   | 30.29                                   | +0.7        | 46   | 44                                      | +3     | SW                   | 9        | c                 | 5           | 46             | 42                        | 0.67 |
|                     | Skudesnaes ...                            | 30.30 | 45     | WNW                  | 1        | 0   | 30.30                                   | +0.5        | 41   | 41                                      | -3     | NW                   | 1        | 6c                | 2           | 45             | 39                        | —    |
|                     | Christiania Fjord<br>(Frier)              | 30.36 | 44     | WNW                  | 3        | c   | 30.34                                   | +0.1        | 42   | 40                                      | -2     | WNW                  | 2        | 6                 | 2           | ?              | 37                        | —    |
|                     | Skagen (The Seaw)                         | 30.38 | 40     | WNW                  | 1        | 6   | 30.37                                   | -0.5        | 35   | 38                                      | -3     | WNW                  | 1        | 6                 | 0           | 43             | 37                        | —    |
|                     | Fanö ...                                  | 30.58 | 39     | WNW                  | 2        | 0   | 30.56                                   | -1.3        | 40   | 39                                      | +6     | W                    | 2        | 0                 | *           | 43             | 34                        | —    |
| BRITISH ISLANDS.    | Sumburgh Head                             | 30.40 | 47     | W                    | 3        | 0   | 30.40                                   | +0.4        | 43   | 42                                      | -4     | 2                    | 0        | c                 | 3           | 48             | 40                        | —    |
|                     | Stornoway ...                             | 30.40 | 44     | SW                   | 6        | 6   | 30.36                                   | -0.2        | 43   | 41                                      | -4     | SW                   | 3        | 6                 | 4           | 47             | 40                        | —    |
|                     | Wick ...                                  | 30.47 | 35     | SW                   | 1        | 6   | 30.39                                   | -0.9        | 39   | 37                                      | -4     | SW                   | 1        | 6                 | 0           | 46             | 35                        | —    |
|                     | Nairn ...                                 | 30.46 | 37     | 2                    | 0        | 6   | 30.42                                   | -0.7        | 27   | 26                                      | -10    | 2                    | 0        | 6                 | 1           | 44             | 25                        | —    |
|                     | Aberdeen ...                              | 30.53 | 31     | WNW                  | 1        | 6m  | 30.50                                   | -0.4        | 25   | 24                                      | -8     | WNW                  | 1        | 6m                | 1           | 36             | 25                        | —    |
|                     | Leith ...                                 | 30.56 | 36     | SW                   | 1        | 6c  | 30.57                                   | -0.1        | 29   | 29                                      | -10    | SW                   | 1        | m                 | *           | 42             | 28                        | —    |
|                     | Shields ...                               | 30.57 | 33     | SW                   | 1        | m   | 30.55                                   | -0.4        | 29   | 28                                      | -1     | SW                   | 1        | 6m                | 2           | 35             | 24                        | —    |
|                     | Spurn Head ...                            | 30.63 | 32     | SW                   | 2        | 6m  | 30.63                                   | -0.2        | 26   | 25                                      | -5     | W                    | 1        | 6m                | 2           | 35             | 24                        | —    |
|                     | York ...                                  | 30.64 | 23     | S                    | 1        | f   | 30.64                                   | -0.1        | 17   | 17                                      | -5     | S                    | 1        | f                 | *           | 27             | 14                        | —    |
|                     | Loughborough                              | 30.63 | 20     | ESE                  | 1        | f   | 30.65                                   | +0.1        | 12   | 12                                      | -7     | SE                   | 1        | 6m                | *           | 29             | 12                        | —    |
| GERMANY & HOLLAND.  | Ardrossan ...                             | 30.57 | 42     | ENE                  | 1        | 6   | 30.57                                   | 0.0         | 35   | 33                                      | -9     | ENE                  | 1        | 0 f               | 1           | 45             | 33                        | —    |
|                     | Malin Head ...                            | 30.48 | 42     | S                    | 4        | 6   | 30.44                                   | -0.6        | 39   | 36                                      | +3     | S                    | 4        | 6                 | 2           | 43             | 36                        | —    |
|                     | Mullaghmore ...                           | 30.52 | 39     | E                    | 1        | 6   | 30.47                                   | -0.5        | 42   | 35                                      | +4     | ENE                  | 5        | 6                 | 3           | 45             | 35                        | —    |
|                     | Belmullet ...                             | 30.47 | 41     | SE                   | 3        | 6   | 30.35                                   | -0.7        | 38   | 37                                      | -5     | W                    | 2        | 6                 | *           | 46             | 38                        | —    |
|                     | Donaghadee ...                            | 30.60 | 37     | S                    | 2        | 6   | 30.57                                   | -0.3        | 33   | 33                                      | +1     | S                    | 2        | 6                 | 0           | 43             | 32                        | —    |
|                     | Liverpool (Bilston)                       | 30.62 | 32     | ESE                  | 3        | 6   | 30.64                                   | +0.1        | 23   | 22                                      | -5     | ESE                  | 2        | 6 f               | 2           | 36             | 23                        | —    |
|                     | Holyhead ...                              | 30.60 | 30     | 2                    | 0        | 6   | 30.60                                   | 0.0         | 36   | 34                                      | +1     | 2                    | 0        | 6m                | 0           | 45             | 33                        | —    |
|                     | Parsonstown ...                           | 30.53 | 37     | 2                    | 0        | 6   | 30.51                                   | -0.5        | 37   | 36                                      | +1     | SE                   | 1        | 6                 | *           | 42             | 31                        | —    |
|                     | Valencia ...                              | 30.45 | 45     | ESE                  | 3        | 6m  | 30.42                                   | -1.0        | 46   | 43                                      | +2     | SE                   | 7        | c                 | 6           | 50             | 42                        | —    |
|                     | Roche's Point...                          | 30.53 | 47     | SE                   | 4        | 6   | 30.52                                   | -0.4        | 46   | 43                                      | +1     | S                    | 5        | c                 | 4           | 49             | 44                        | —    |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd)                   | 30.52 | 40     | E                    | 3        | m   | 30.59                                   | -0.1        | 40   | 39                                      | +5     | SE                   | 4        | 6c                | 3           | 41             | 34                        | —    |
|                     | Scilly ...                                | 30.50 | 45     | E                    | 5        | 6   | 30.53                                   | +0.1        | 42   | 40                                      | -4     | SE                   | 4        | 6c                | 4           | 48             | 40                        | —    |
|                     | Prawle Point ...                          | 30.61 | 41     | ENE                  | 4        | 6   | 30.63                                   | +0.6        | 37   | 34                                      | -3     | ENE                  | 3        | 6m                | 2           | 44             | 33                        | —    |
|                     | Jersey (St. Aubin's)                      | 30.59 | 33     | ESE                  | 3        | 6m  | 30.65                                   | +0.6        | 28   | 26                                      | -4     | E                    | 2        | 6m                | 2           | 37             | 27                        | —    |
|                     | Hurst Castle ...                          | 30.65 | 35     | E                    | 4        | 6m  | 30.67                                   | +0.8        | 29   | 29                                      | -2     | ENE                  | 2        | m                 | 1           | 40             | 29                        | —    |
|                     | Dungeness ...                             | 30.65 | 36     | E                    | 2        | 6   | 30.66                                   | +0.1        | 26   | 26                                      | -6     | N                    | 2        | 6                 | 1           | 37             | 23                        | —    |
|                     | London ...                                | 30.66 | 28     | ESE                  | 1        | 6m  | 30.69                                   | +0.3        | 19   | 19                                      | -5     | 2                    | 0        | f                 | *           | 35             | 19                        | —    |
|                     | Oxford ...                                | 30.71 | 21     | 2                    | 0        | f   | 30.71                                   | +0.3        | 18   | 18                                      | -3     | 2                    | 0        | f                 | *           | 27             | 18                        | —    |
|                     | Cambridge ...                             | 30.68 | 20     | SW                   | 1        | f   | 30.70                                   | -0.1        | 17   | 16                                      | -3     | SW                   | 1        | 6                 | *           | 26             | 14                        | —    |
|                     | Yarmouth ...                              | 30.65 | 34     | W                    | 1        | 6m  | 30.66                                   | +0.1        | 26   | 26                                      | -5     | W                    | 2        | 6m                | 2           | 36             | 24                        | —    |
| GERMANY & HOLLAND.  | Cuxhaven ...                              | 30.72 | 30     | SW                   | 2        | 0   | 30.66                                   | -0.9        | 34   | 33                                      | +10    | SW                   | 3        | 0                 | *           | 35             | ?                         | —    |
|                     | Berlin ...                                | 30.70 | 39     | SW                   | 3        | 0   | 30.62                                   | -1.4        | 27   | 25                                      | +1     | W                    | 3        | 0                 | *           | ?              | 23                        | —    |
|                     | Wiesbaden ...                             | 30.69 | 20     | 19                   | 19       | 19  | 30.69                                   | -0.3        | 20   | 19                                      | +1     | NE                   | 1        | 0                 | *           | 27             | 18                        | —    |
|                     | Munich ...                                | 30.63 | 12     | SE                   | 5        | c   | 30.64                                   | +0.4        | 11   | 11                                      | +7     | SW                   | 4        | f                 | *           | 14             | 3                         | —    |
|                     | The Helder ...                            | 30.73 | 23     | S                    | 1        | 6   | 30.69                                   | -0.4        | 29   | 28                                      | +8     | S                    | 1        | 0                 | 1           | ?              | 21                        | —    |
|                     | Brussels (9 a.m.)                         | ?     | ?      | ?                    | ?        | ?   | 30.71                                   | +0.2        | 21   | 19                                      | +2     | SE                   | 1        | 6c                | *           | 32             | 19                        | —    |
|                     | Cape Gris Nez                             | 30.64 | 21     | NE                   | 1        | 6   | 30.67                                   | +0.8        | 15   | 15                                      | -4     | NE                   | 2        | 6                 | *           | 30             | 15                        | —    |
|                     | Paris ...                                 | ?     | 34     | E                    | 1        | 6   | ?                                       | ?           | 33   | 28                                      | +1     | SE                   | 2        | 6                 | 3           | 43             | 27                        | —    |
|                     | Brest ...                                 | 30.49 | 31     | ENE                  | 4        | 6   | 30.56                                   | +1.0        | 26   | 25                                      | -3     | ENE                  | 4        | 6                 | 2           | 37             | 26                        | —    |
|                     | Lorient ...                               | 30.47 | 30     | ENE                  | 4        | 6   | 30.49                                   | +1.3        | 26   | 24                                      | +2     | ENE                  | 3        | 6                 | 2           | 34             | 23                        | —    |
| FRANCE AND BELGIUM. | Rochefort ...                             | 30.61 | 23     | N                    | 1        | 6   | 30.65                                   | +1.4        | 16   | 15                                      | -1     | NW                   | 1        | 6                 | *           | 28             | 15                        | —    |
|                     | Belfort ...                               | 30.43 | 37     | E                    | 1        | 6   | 30.50                                   | +1.2        | 34   | 27                                      | +5     | E                    | 1        | 6                 | 4           | 43             | ?                         | —    |
|                     | Lyons ...                                 | 30.44 | 35     | W                    | 1        | 0   | 30.50                                   | -0.3        | 36   | 34                                      | -2     | WNW                  | 1        | 0                 | *           | 41             | 33                        | 0.16 |
|                     | Nico ...                                  | 30.31 | 34     | E                    | 3        | 6   | 30.38                                   | +1.0        | 27   | 25                                      | +4     | E                    | 2        | 6                 | 1           | 37             | 23                        | —    |
|                     | Perpignan ...                             | ?     | ?      | ?                    | ?        | ?   | ?                                       | ?           | ?    | ?                                       | ?      | ?                    | ?        | ?                 | ?           | ?              | ?                         | —    |
|                     | Blairitz ...                              | ?     | ?      | ?                    | ?        | ?   | ?                                       | ?           | ?    | ?                                       | ?      | ?                    | ?        | ?                 | ?           | ?              | ?                         | —    |
|                     | Comblanchette ...                         | ?     | ?      | ?                    | ?        | ?   | ?                                       | ?           | ?    | ?                                       | ?      | ?                    | ?        | ?                 | ?           | ?              | ?                         | —    |
|                     | Lisbon ...                                | 30.02 | 47     | NNE                  | 4        | 6   | 29.94                                   | -1.9        | 42   | 38                                      | -2     | NE                   | 6        | 0                 | 5           | 54             | 39                        | —    |
|                     | ?   | ?     | ?      | ?                    | ?        | ?   | ?                                       | ?           | ?    | ?                                       | ?      | ?                    | ?        | ?                 | ?           | ?              | ?                         | —    |



# WEATHER CHARTS

for 8 a.m. on Tuesday, 22<sup>nd</sup> Dec<sup>r</sup>, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;  
→ forces 5 to 7; → forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

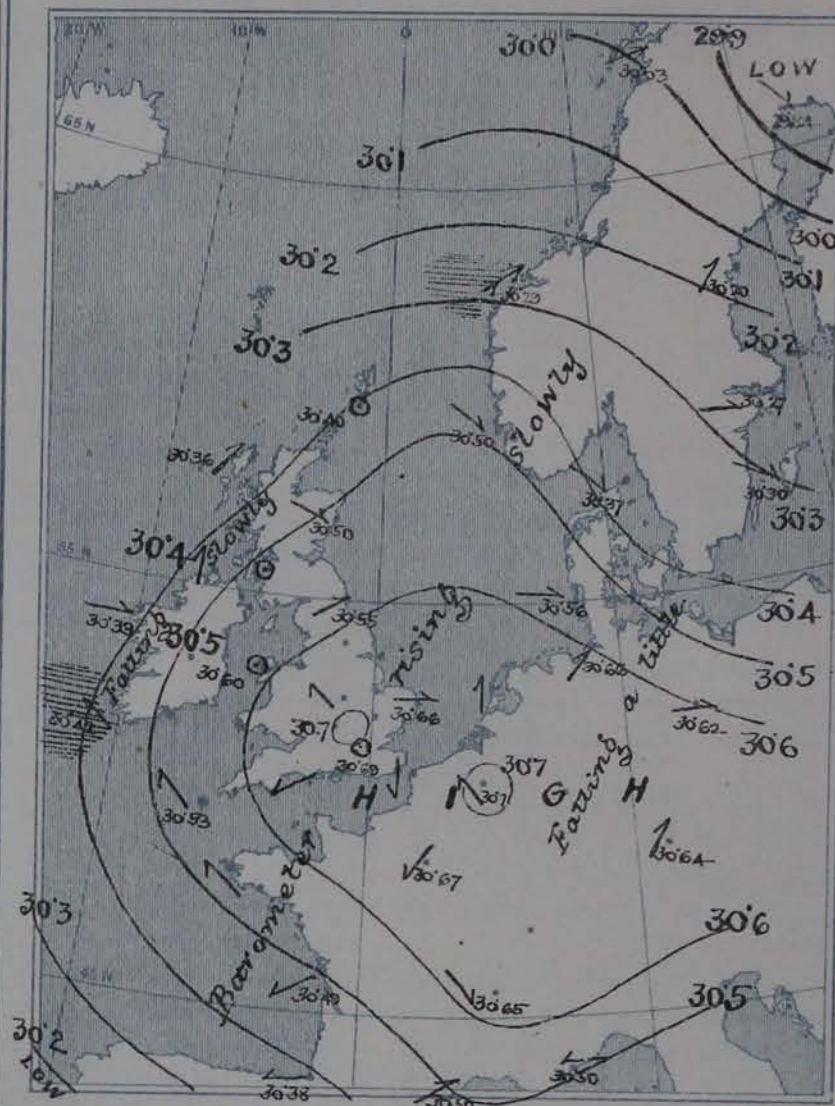
☼ = Rough. ☼ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.931         |
| Prawle Point  | 29.970         |
| Jersey        | 29.965         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

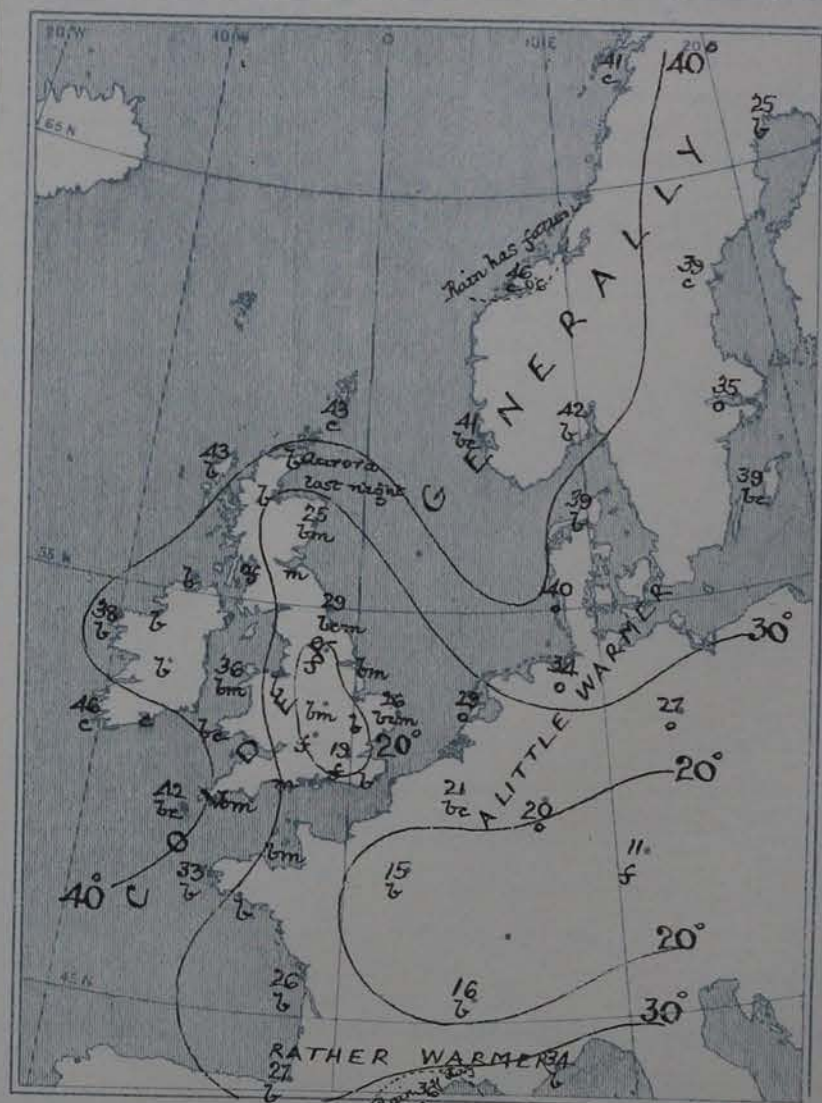
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |                   |      | RAINFALL<br>(inches.) |
|---------------|---------------|---------------|-------------------|------|-----------------------|
|               | Daily<br>Max. | Daily<br>Min. | At 8 a.m.<br>Dry. | Wet. |                       |
| Sumburgh Head | 42.6          | 35.2          | 39.6              | 38.1 | 4.25                  |
| Stornoway     | 43.1          | 34.2          | 39.4              | 38.5 | 5.63                  |
| Wick          | 42.2          | 32.7          | 38.1              | 36.8 | 3.10                  |
| Nairn         | 41.9          | 32.8          | 37.1              | 35.6 | 1.95                  |
| Aberdeen      | 41.9          | 32.6          | 36.9              | 35.2 | 3.21                  |
| Leith         | 41.0          | 33.7          | 38.5              | 37.0 | 1.86                  |
| Shields       | 42.9          | 33.9          | 38.3              | 36.9 | 2.67                  |
| Spurn Head    | 42.4          | 35.3          | 38.8              | 37.7 | 2.14                  |
| York          | 42.3          | 32.3          | 36.4              | 35.4 | 2.28                  |
| Loughborough  | 42.7          | 32.2          | 36.3              | 35.4 | 2.24                  |
| Ardrossan     | 44.5          | 35.9          | 40.0              | 38.7 | 3.73                  |
| Mullaghmore   | 46.5          | 37.8          | 42.2              | 39.8 | 4.51                  |
| Donaghadee    | 45.5          | 36.2          | 40.2              | 39.3 | 2.81                  |
| Holyhead      | 46.4          | 39.1          | 42.8              | 41.1 | 3.82                  |
| Liverpool     | 43.5          | 35.6          | 38.8              | 37.1 | 2.59                  |
| Parsonstown   | 44.7          | 33.1          | 37.8              | 36.6 | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.6              | 42.4 | 5.99                  |
| Roche's Point | 47.9          | 38.9          | 42.9              | 41.5 | 4.95                  |
| Pembroke      | 43.8          | 40.3          | 43.6              | 42.2 | 3.99                  |
| Scilly        | 49.5          | 43.1          | 47.0              | 45.1 | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5              | 41.1 | 3.73                  |
| Jersey        | 47.3          | 39.3          | 43.1              | 41.4 | 3.82                  |
| Hurst Castle  | 45.6          | 36.3          | 40.6              | 39.8 | 2.77                  |
| Dover         | 44.3          | 35.9          | 39.8              | 38.6 | 3.00                  |
| LONDON        | 44.0          | 39.9          | 37.8              | 36.7 | 2.10                  |
| Oxford        | 42.9          | 33.5          | 37.0              | 35.9 | 2.10                  |
| Cambridge     | 42.8          | 31.6          | 36.2              | 35.5 | 1.88                  |
| Yarmouth      | 41.9          | 33.7          | 37.9              | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.6 ins. to 30.7 ins. over England, the Netherlands, Germany, and the northern parts of France.  
 Lowest, 29.9 ins. and less, in the north of Sweden.  
 Gradients slight. Barometer falling in the west and north of our Islands, but rising elsewhere.

## TEMPERATURE

Highest, 46° at Christiansund, Valencia Island, and Rocher Point, 43° at Lumburg Hill and Portsmouth, and 42° at Mullaghmore, Scilly, and Lisbon.  
 Lowest, 11° at Munich, 12° at Loughborough, 15° at Paris, 16° at Lyons, and 17° at York and Cambridge.  
 The maxima registered yesterday were as low as 26° at Cambridge, 27° at Oxford, and 29° at Loughborough.

## WIND

Light from the E<sup>nd</sup> over France and the Channel.  
 Moderate to strong from the SE<sup>nd</sup> on our southwest coasts.  
 S<sup>th</sup> or SW<sup>th</sup> in the extreme northwest and north of our Islands.  
 SW<sup>th</sup> or W<sup>th</sup> in Scandinavia, with a gale at Christiansund.

## WEATHER

Fine over the greater part of Western Europe, but foggy over the inland parts of England, and hazy at many of the coast stations.  
 B. in Germany, as well as at Stockholm.  
 Heavy rain fell yesterday in the west of Norway. Slight Aurora was seen at Kiel at night.

## SEA

Slight or smooth generally, but rough at Valencia Island and rather rough at Christiansund.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indications of any important change in the weather. Depressions are apparently moving northward outside our western coasts, but their influence is scarcely likely to extend eastwards just at present.

# FORECASTS

For the 24 hours ending at NOON on 23<sup>rd</sup> December, 1891.

## DISTRICTS.

## FORECASTS.

- |   |                  |   |
|---|------------------|---|
| 0 | SCOTLAND NORTH   | SW <sup>th</sup> winds, light to fresh; fine to dull and some rain.       |
| 1 | SCOTLAND EAST    |   |
| 2 | ENGLAND N.E.     | Light breezes, chiefly SW <sup>th</sup> ; fair generally, but local fogs. |
| 3 | ENGLAND EAST     |   |
| 4 | MIDLAND COUNTIES | Variable or E <sup>th</sup> airs; fine in places, but mostly foggy.       |
| 5 | ENGLAND SOUTH    |   |

## DISTRICTS.

## FORECASTS.

- |    |               |   |
|----|---------------|---|
| 6  | SCOTLAND WEST | E <sup>th</sup> or SE <sup>th</sup> winds, light; fair generally, but local fogs.   |
| 7  | ENGLAND N.W.  |   |
| 8  | ENGLAND S.W.  | SE <sup>th</sup> winds, moderate or fresh; fair generally                           |
| 9  | IRELAND NORTH | SE <sup>th</sup> and S <sup>th</sup> winds, freshening; fair to dull and some rain. |
| 10 | IRELAND SOUTH |   |

## WARNINGS

None issued.

Note.—The South Cone, point downwards (∧), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (∧), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | THER: WIND |    |    |    |    |      |      |               | THER: WIND |    |    |     |    |      |      |
|-------------------|------------|----|----|----|----|------|------|---------------|------------|----|----|-----|----|------|------|
|                   | BAR:       | D. | W. | D. | F. | WEA. | SEA. |               | BAR:       | D. | W. | D.  | F. | WEA. | SEA. |
| Skudesnaes ...    | 30.47      | 45 | 45 | W  | 2  | C    | 4    | Holyhead ...  | 30.60      | 42 | 40 | W   | 0  | G    | 0    |
| Sumburgh Head ... | 30.57      | 47 | 44 | W  | 3  | O    | 4    | Valencia ...  | 30.48      | 48 | 45 | ESE | 4  | Gm   | 4    |
| Stornoway ...     | 30.42      | 46 | 44 | SW | 4  | C    | 4    | Scilly ...    | 30.49      | 47 | 44 | E   | 4  | G    | 5    |
| Aberdeen ...      | 30.52      | 36 | 34 | W  | 1  | Gm   | 1    | Jersey ...    | 30.57      | 33 | 33 | E   | 3  | Gm   | 3    |
| Shields ...       | 30.55      | 35 | 35 | SW | 2  | m    | 2    | Dungeness ... | 30.65      | 36 | 34 | ESE | 2  | G    | 1    |
| Ardrossan ...     | 30.57      | 42 | 41 | SW | 2  | be   | 2    | London ...    | 30.66      | 35 | 34 | ESE | 1  | fb   | *    |
| Malin Head ...    | 30.48      | 43 | 38 | SW | 3  | G    | 2    | Yarmouth ...  | 30.63      | 36 | 34 | SW  | 1  | G    | 2    |
| Mullaghmore ...   | 30.50      | 45 | 40 | E  | 4  | G    | 3    | Rochefort ... | 30.57      | 33 | 32 | ENE | 4  | G    | !    |
| Belmullet ...     | 30.46      | 46 | 42 | SE | 3  | G    | *    |               |            |    |    |     |    |      |      |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather dry and quiet over the British Islands, western, central, and southern Europe — fine and bright in most places, but very foggy over the inland parts of England and at Berlin; squally, changeable, and unsettled over northern Europe, with rain in places. Some rain later at Christiansund in the north, and at Perpignan in the south. Thick cold fogs continuing over England and much hoar frost.

Temperature risen greatly over central Russia and considerably in some parts of Germany, fallen over Western Europe. Highest morning readings 47° at Sumburgh Hd. and Stornoway, 46° at Billy, 44° at Skudesnaes, Ardrossan, and Liebo, 43° at Christiansund, Wick, and Belmullet. Lowest (1) 4° at Munich, 14° at Vienna, 17° at Lyons, 19° at Paris and Brussels; (2) 19° at Loughborough, 20° at Cambridge, and less than 25° at our inland stations generally; (3) 7° at Warsaw, 8° at Breslau, 13° at Moscow, 14° at Remberg, 15° at Kharkov; (4) 23° at Porto. Rising later to between 30° and 40° over many parts of Central England, but (to 27° only at York and 29° at Loughborough), reaching 50° at Valencia Island, 47° at Stornoway, and 45° at many of our western stations.

Wind NE<sup>3</sup>, moderate to a gale over southern Europe, moderate E<sup>3</sup> over the Bay of Biscay, light in the Channel, moderate SE<sup>3</sup> in Ireland, light SW<sup>3</sup> in Scotland, and strong SW<sup>3</sup> (NW to SW) over northern Europe. Nearly calm over England, the Netherlands, and Germany. Inclined to freshen from SE over Ireland later — little change elsewhere.

Barometer highest 30.8 ins. to 30.5 ins. in a large anticyclone lying over Ireland, England, France, Germany, Austria-Hungary and southern Russia. Lowest, 29.0 ins. and less, in the extreme north of Europe (gradient steep over the northern parts of Scandinavia and Russia, and 30.1 ins. and less, over Algeria and the southern half of Spain. Inclined to fall a little in Ireland later, steady over England.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility; unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received. The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS.—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

Weekly " " " £1 10 0 "



# DAILY WEATHER REPORT.

for *Wednesday, 23<sup>rd</sup> December, 1891.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

| STATIONS.                          |       | YESTERDAY EVENING. |                   |                                    |                                   |          | 8 A.M. TO DAY. |                                   |             |                   |      |       |    |          |      |             | PAST 24 HOURS. |                     |  |
|------------------------------------|-------|--------------------|-------------------|------------------------------------|-----------------------------------|----------|----------------|-----------------------------------|-------------|-------------------|------|-------|----|----------|------|-------------|----------------|---------------------|--|
|                                    |       | Barom.             | Temp.             | Wind.                              |                                   | Weather. | Barometer.     |                                   | Shade Temp. |                   |      | Wind. |    | Weather. | Sea. | Shade Temp. |                | Amount of Rainfall. |  |
|                                    |       |                    |                   |                                    |                                   |          |                |                                   |             |                   |      |       |    |          |      |             |                |                     |  |
|                                    |       |                    |                   |                                    |                                   |          |                |                                   |             |                   |      |       |    |          |      |             |                |                     |  |
| Reading at 3 1/2 P. and Sea Level. | Dry.  | Dir.               | Force. (0 to 12.) | Reading at 3 1/2 P. and Sea Level. | Difference from 8 A.M. yesterday. | Dry.     | Wet.           | Difference from 8 A.M. yesterday. | Dir.        | Force. (0 to 12.) | Max. | Min.  |    |          |      |             |                |                     |  |
| SCANDINAVIA.                       |       |                    |                   |                                    |                                   |          |                |                                   |             |                   |      |       |    |          |      |             |                |                     |  |
| Haparanda ...                      | 29.99 | 18                 | Z                 | 0                                  | 0                                 | 29.61    | - 23           | 37                                | 35          | + 12              | SW   | 2     | 0  | *        | ?    | 16          |                |                     |  |
| Hernösand ...                      | 30.14 | 44                 | S                 | 0                                  | C                                 | 30.02    | - 18           | 37                                | 34          | - 2               | SW   | 2     | 0  | *        | 45   | 32          |                |                     |  |
| Stockholm ...                      | 30.31 | 34                 | N                 | 2                                  | 0                                 | 30.25    | - 02           | 28                                | 27          | - 7               | WSW  | 2     | 0  | *        | 37   | ?           |                |                     |  |
| Wisby ...                          | 30.32 | 38                 | WSW               | 4                                  | 0                                 | 30.32    | + 02           | 36                                | 35          | - 3               | WSW  | 4     | 0  | *        | 39   | 36          |                |                     |  |
| Bodö ...                           | 30.27 | 44                 | SW                | 7                                  | T                                 | 29.62    | - 40           | 44                                | 43          | + 3               | SW   | 9     | T  | 6        | 45   | 37          | 0.28           |                     |  |
| Christiansund                      | 30.29 | 44                 | SW                | 4                                  | 0                                 | 30.07    | - 22           | 43                                | 41          | - 3               | SW   | 6     | 0  | 5        | 46   | 41          |                |                     |  |
| Skudesnaes ...                     | 30.47 | 39                 | Z                 | 0                                  | f                                 | 30.35    | - 15           | 41                                | 41          | 0                 | SSE  | 4     | 0  | 3        | 42   | 36          |                |                     |  |
| Christiania Fjord (Færder)         | 30.36 | 39                 | WSW               | 2                                  | 0                                 | 30.25    | - 09           | 33                                | 33          | - 9               | N    | 2     | f  | 1        | 42   | 32          |                |                     |  |
| Skagen (The Seaw)                  | 30.39 | 35                 | WSW               | 1                                  | 0                                 | 30.32    | - 05           | 37                                | 37          | - 2               | N    | 2     | m  | 1        | 41   | 34          |                |                     |  |
| Fanö ...                           | 30.54 | 39                 | W                 | 4                                  | 0                                 | 30.47    | - 09           | 39                                | 38          | - 1               | W    | 2     | 0  | *        | 41   | 39          |                |                     |  |
| Sumburgh Head                      | 30.30 | 40                 | Z                 | 0                                  | 0                                 | 30.15    | - 25           | 45                                | 42          | + 2               | SW   | 3     | 0  | 3        | 46   | 40          |                |                     |  |
| Stornoway ...                      | 30.27 | 44                 | SW                | 6                                  | 0                                 | 30.16    | - 20           | 47                                | 46          | + 4               | SW   | 3     | 0  | 6        | 47   | 41          |                |                     |  |
| Wick ...                           | 30.36 | 40                 | SSW               | 2                                  | 0                                 | 30.22    | - 17           | 39                                | 38          | 0                 | S    | 3     | bc | 2        | 45   | 32          |                |                     |  |
| Nairn ...                          | 30.35 | 40                 | Z                 | 0                                  | 0                                 | 30.25    | - 17           | 43                                | 41          | + 16              | SW   | 1     | 0  | 1        | 45   | 25          |                |                     |  |
| Aberdeen ...                       | 30.42 | 32                 | SSW               | 1                                  | bm                                | 30.36    | - 14           | 27                                | 26          | + 2               | WSW  | 1     | bm | 1        | 36   | 25          |                |                     |  |
| Leith ...                          | 30.51 | 34                 | Z                 | 0                                  | bc                                | 30.39    | - 18           | 38                                | 37          | + 9               | Z    | 0     | m  | *        | 41   | 27          |                |                     |  |
| Shields ...                        | 30.53 | 32                 | WSW               | 1                                  | bm                                | 30.43    | - 12           | 29                                | 29          | 0                 | WSW  | 1     | m  | 2        | 38   | 24          |                |                     |  |
| Spurn Head ...                     | 30.57 | 33                 | WSW               | 2                                  | bm                                | 30.47    | - 16           | 30                                | 30          | + 4               | N    | 1     | bc | 1        | 35   | 25          |                |                     |  |
| York ...                           | 30.58 | 19                 | Z                 | 0                                  | f                                 | 30.50    | - 14           | 15                                | 15          | - 2               | Z    | 0     | f  | *        | 20   | 19          | 0.01           |                     |  |
| Loughborough                       | 30.59 | 18                 | WSW               | 1                                  | f                                 | 30.48    | - 17           | 14                                | 14          | + 2               | ESE  | 1     | bc | *        | 30   | 12          |                |                     |  |
| BRITISH ISLANDS.                   |       |                    |                   |                                    |                                   |          |                |                                   |             |                   |      |       |    |          |      |             |                |                     |  |
| Ardrossan ...                      | 30.50 | 44                 | SSE               | 2                                  | 0                                 | 30.38    | - 19           | 45                                | 43          | + 16              | S    | 3     | 0  | 3        | 45   | 34          |                |                     |  |
| Malin Head ...                     | 30.40 | 39                 | S                 | 3                                  | 0                                 | 30.29    | - 15           | 39                                | 38          | 0                 | S    | 3     | bc | 2        | 42   | 37          |                |                     |  |
| Mallaghmore ...                    | 30.42 | 43                 | SSW               | 5                                  | C                                 | 30.35    | - 12           | 45                                | 40          | + 5               | SSW  | 5     | C  | 3        | 47   | 41          |                |                     |  |
| Belmullet ...                      | 30.34 | 45                 | S                 | 4                                  | 0                                 | 30.28    | - 11           | 46                                | 44          | + 8               | SSW  | 2     | C  | *        | 48   | 38          |                |                     |  |
| Donaghadee ...                     | 30.51 | 40                 | S                 | 3                                  | bc                                | 30.41    | - 16           | 40                                | 40          | + 7               | S    | 3     | bc | 1        | 43   | 32          |                |                     |  |
| Liverpool (Bidston)                | 30.57 | 30                 | SE                | 3                                  | 0                                 | 30.48    | - 16           | 23                                | 22          | 0                 | SE   | 2     | f  | 2        | 33   | 23          |                |                     |  |
| Holyhead ...                       | 30.55 | 40                 | S                 | 2                                  | og                                | 30.46    | - 14           | 33                                | 32          | - 3               | Z    | 0     | bc | 0        | 43   | 33          |                |                     |  |
| Parsonstown ...                    | 30.37 | 40                 | Z                 | 0                                  | bc                                | 30.42    | - 09           | 35                                | 34          | - 2               | Z    | 0     | 0  | *        | 44   | 34          |                |                     |  |
| Valencia ...                       | 30.42 | 49                 | SSE               | 4                                  | og                                | 30.38    | - 04           | 47                                | 45          | + 1               | SE   | 4     | 0  | 4        | 49   | 44          |                |                     |  |
| Roche's Point...                   | 30.48 | 48                 | S                 | 5                                  | 0                                 | 30.41    | - 11           | 46                                | 43          | 0                 | S    | 4     | bc | 4        | 49   | 44          |                |                     |  |
| Pembroke (St. Ann's Id.)           | 30.54 | 40                 | SE                | 2                                  | C                                 | 30.45    | - 14           | 35                                | 35          | - 5               | E    | 2     | bm | 2        | 41   | 35          |                |                     |  |
| Scilly ...                         | 30.50 | 41                 | E                 | 2                                  | bm                                | 30.37    | - 16           | 41                                | 39          | - 1               | EHE  | 2     | C  | 3        | 46   | 38          |                |                     |  |
| Prawle Point ...                   | 30.57 | 39                 | E                 | 2                                  | 0                                 | 30.42    | - 21           | 37                                | 37          | 0                 | EHE  | 2     | cm | 2        | 41   | 34          |                |                     |  |
| Jersey (St. Aubin's)               | 30.58 | 32                 | EHE               | 2                                  | bm                                | 30.43    | - 22           | 30                                | 28          | + 2               | E    | 2     | bm | 2        | 37   | 27          |                |                     |  |
| Hurst Castle ...                   | 30.60 | 33                 | E                 | 3                                  | bm                                | 30.47    | - 20           | 30                                | 29          | + 1               | NE   | 2     | m  | 0        | 40   | 28          |                |                     |  |
| Dungeness ...                      | 30.60 | 37                 | E                 | 1                                  | 0                                 | 30.46    | - 20           | 38                                | 36          | + 12              | E    | 3     | bc | 2        | 42   | 23          |                |                     |  |
| London ...                         | 30.62 | 22                 | E                 | 1                                  | f                                 | 30.49    | - 20           | 27                                | 26          | + 8               | Z    | 0     | f  | *        | 30   | 19          |                |                     |  |
| Oxford ...                         | 30.62 | 20                 | Z                 | 0                                  | 0                                 | 30.51    | - 20           | 16                                | 16          | - 2               | Z    | 0     | bc | *        | 25   | 16          |                |                     |  |
| Cambridge ...                      | 30.65 | 25                 | Z                 | 0                                  | 0                                 | 30.50    | - 20           | 18                                | 18          | + 1               | SW   | 1     | 0  | *        | 34   | 15          |                |                     |  |
| Yarmouth ...                       | 30.61 | 31                 | N                 | 2                                  | bm                                | 30.49    | - 17           | 27                                | 27          | + 1               | WSW  | 2     | bm | 2        | 35   | 24          |                |                     |  |
| GERMANY & HOLLAND.                 |       |                    |                   |                                    |                                   |          |                |                                   |             |                   |      |       |    |          |      |             |                |                     |  |
| Cuxhaven ...                       | 30.66 | 36                 | WSW               | 1                                  | m                                 | 30.57    | - 09           | 26                                | 25          | - 8               | SSW  | 1     | f  | *        | 36   | 25          |                |                     |  |
| Berlin ...                         | 30.62 | 31                 | N                 | 3                                  | 0                                 | 30.57    | - 05           | 34                                | 31          | + 7               | Z    | 0     | 0  | *        | 34   | 27          |                |                     |  |
| Wiesbaden ...                      | *     | *                  | *                 | *                                  | *                                 | 30.56    | - 13           | 19                                | 18          | - 1               | Z    | 0     | 0  | *        | 28   | 18          |                |                     |  |
| Munich ...                         | 30.60 | 14                 | NE                | 3                                  | 0                                 | 30.51    | - 13           | 13                                | 13          | + 2               | SE   | 2     | f  | *        | 18   | 10          |                |                     |  |
| The Helder ...                     | 30.64 | 33                 | SSW               | 1                                  | C                                 | 30.55    | - 14           | 28                                | 28          | - 1               | S    | 1     | 0  | 1        | 36   | 27          |                |                     |  |
| FRANCE AND BELGIUM.                |       |                    |                   |                                    |                                   |          |                |                                   |             |                   |      |       |    |          |      |             |                |                     |  |
| Brussels (3 A.M.)                  | *     | *                  | *                 | *                                  | *                                 | 30.52    | - 19           | 21                                | 21          | 0                 | Z    | 0     | 0  | *        | 30   | 20          |                |                     |  |
| Cape Gris Nez                      | 30.58 | 31                 | E                 | 1                                  | m                                 | 30.47    | - 20           | 28                                | 27          | - 3               | EHE  | 2     | m  | 1        | 34   | 25          |                |                     |  |
| Paris ...                          | 30.60 | 26                 | NE                | 2                                  | 0                                 | 30.47    | - 20           | 18                                | 18          | + 3               | NE   | 2     | 0  | *        | 29   | 15          |                |                     |  |
| Brest ...                          | ?     | 36                 | E                 | 2                                  | 0                                 | ?        | ?              | 29                                | 27          | - 4               | E    | 1     | 0  | 2        | 45   | 27          |                |                     |  |
| Lorient ...                        | 30.49 | 33                 | EHE               | 4                                  | 0                                 | 30.33    | - 26           | 25                                | 24          | - 1               | EHE  | 3     | 0  | 2        | 36   | 25          |                |                     |  |
| Rochefort ...                      | 30.47 | 32                 | EHE               | 4                                  | 0                                 | 30.30    | - 19           | 28                                | 27          | + 2               | EHE  | 4     | 0  | *        | 39   | 23          |                |                     |  |
| Belfort ...                        | ?     | 17                 | NE                | 2                                  | 0                                 | ?        | ?              | 19                                | ?           | ?                 | NE   | 2     | 0  | *        | 26   | 16          |                |                     |  |
| Lyons ...                          | 30.61 | 22                 | N                 | 1                                  | 0                                 | 30.52    | - 13           | 16                                | 16          | 0                 | S    | 1     | 0  | *        | 28   | 16          |                |                     |  |
| Nice ...                           | 30.50 | 39                 | E                 | 1                                  | 0                                 | 30.45    | - 05           | 34                                | 29          | 0                 | E    | 1     | 0  | 2        | 48   | 32          |                |                     |  |
| Perpignan ...                      | 30.48 | 40                 | WSW               | 1                                  | 0                                 | 30.38    | - 12           | 35                                | 34          | - 1               | WSW  | 1     | 0  | *        | 51   | 34          |                |                     |  |
| Biarritz ...                       | 30.34 | 38                 | E                 | 4                                  | 0                                 | 30.21    | - 17           | 35                                | 34          | + 8               | Z    | 0     | +  | 1        | 41   | 27          |                |                     |  |
| PENINSULA.                         |       |                    |                   |                                    |                                   |          |                |                                   |             |                   |      |       |    |          |      |             |                |                     |  |
| Corunna ...                        | *     | *                  | *                 | *                                  | *                                 | *        | *              | *                                 | *           | *                 | *    | *     | *  | *        | *    | *           | *              |                     |  |
| Lisben ...                         | 29.89 | 45                 | NE                | 6                                  | 0                                 | 29.94    | 00             | 46                                | 43          | + 4               | ENE  | 5     | C  | 5        | 48   | ?           |                |                     |  |



# WEATHER CHARTS

for 8 a.m. on Wednesday, 23<sup>rd</sup> Dec: 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;

→ forces 5 to 7; → forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

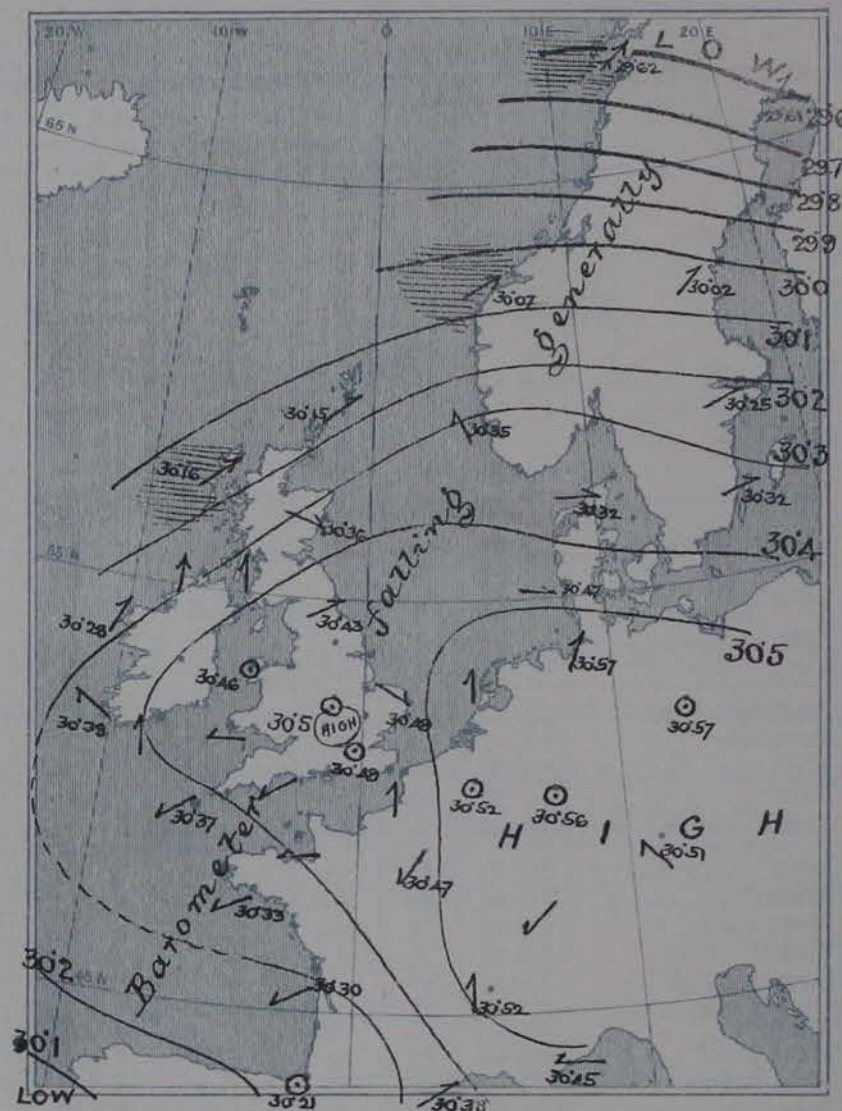
≡ = Rough. ≡ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.934         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

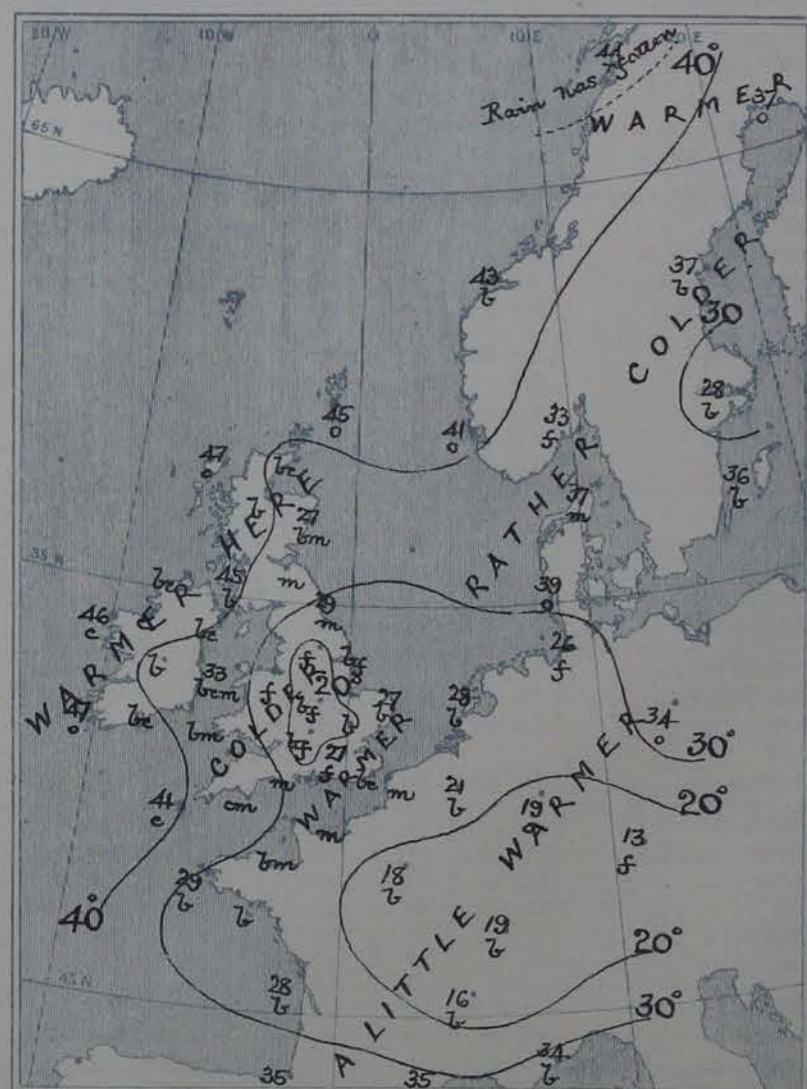
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |           |      | RAINFALL<br>(Inches.) |
|---------------|---------------|---------------|-----------|------|-----------------------|
|               | Daily<br>Max. | Daily<br>Min. | at 8 a.m. |      |                       |
|               |               |               | Dry.      | Wet. |                       |
| Sumburgh Head | 42.6          | 35.2          | 39.6      | 38.1 | 4.25                  |
| Stornoway     | 43.1          | 34.2          | 39.4      | 38.5 | 5.63                  |
| Wick          | 42.2          | 32.7          | 38.1      | 35.8 | 3.10                  |
| Nairn         | 41.0          | 32.8          | 37.1      | 35.6 | 1.05                  |
| Aberdeen      | 41.9          | 32.6          | 36.9      | 35.2 | 3.24                  |
| Leith         | 44.0          | 33.7          | 38.5      | 37.0 | 1.86                  |
| Shields       | 42.9          | 33.9          | 38.3      | 36.9 | 2.57                  |
| Spurn Head    | 42.4          | 35.3          | 38.8      | 37.7 | 2.14                  |
| York          | 42.3          | 32.3          | 36.4      | 35.1 | 2.28                  |
| Loughborough  | 42.7          | 32.2          | 36.3      | 35.4 | 2.24                  |
| Ardrossan     | 41.5          | 35.9          | 40.0      | 38.7 | 3.73                  |
| Mullaghmore   | 40.3          | 37.8          | 42.2      | 39.8 | 1.51                  |
| Donaghadee    | 45.8          | 36.2          | 40.2      | 39.3 | 2.84                  |
| Holyhead      | 46.4          | 39.1          | 42.8      | 41.1 | 3.82                  |
| Liverpool     | 43.5          | 35.6          | 38.8      | 37.1 | 2.59                  |
| Parsonstown   | 44.7          | 33.1          | 37.8      | 36.6 | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.6      | 42.4 | 5.99                  |
| Roche's Point | 47.9          | 38.9          | 42.9      | 41.3 | 4.95                  |
| Pembroke      | 43.8          | 40.3          | 43.6      | 42.2 | 3.99                  |
| Silly         | 49.5          | 43.4          | 47.0      | 45.1 | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5      | 41.1 | 3.78                  |
| Jersey        | 47.3          | 39.3          | 43.1      | 41.4 | 3.82                  |
| Hurst Castle  | 45.6          | 36.3          | 40.6      | 39.8 | 2.77                  |
| Dover         | 44.3          | 35.9          | 39.8      | 38.6 | 3.00                  |
| LONDON        | 44.0          | 33.9          | 37.8      | 36.7 | 2.10                  |
| Oxford        | 42.9          | 33.5          | 37.0      | 35.9 | 2.10                  |
| Cambridge     | 42.8          | 31.6          | 36.2      | 35.5 | 1.88                  |
| Yarmouth      | 41.9          | 33.7          | 37.0      | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.5 in: and upwards, over Germany, the Netherlands, and the east of France.  
 Lowest, 29.6 in: and less, in the extreme north of Scandinavia, 30.0 in: and less, in the south of Portugal.  
 Gradients moderate over the northern parts of Scandinavia, but slight elsewhere.  
 Barometer falling generally, but not briskly.

## TEMPERATURE

Highest, 47° at Stromsøy and Valencia Island, 46° at Kilmullet, Rocher Point, and Lisbon, and 45° at Loughbeg Hd., Inverness, and Mullaghmore.  
 Lowest, 13° at Munich, 14° at Loughborough, 15° at York, 16° at Oxford and Lyons, and 18° at Cambridge and Paris.  
 The maxima registered over England yesterday were below the freezing point in many places; at York the thermometer did not rise above 20°.

## WIND

Light from the E<sup>ast</sup> over France and the Channel, moderate or fresh from the S<sup>outh</sup> in Ireland and Scotland; variable over the central parts of England.  
 N<sup>orth</sup> or SW<sup>est</sup> over Scandinavia, light in force generally, but strong to a gale in the west of Norway.  
 Calm over Germany and the Netherlands.

## WEATHER

Fine over the greater part of our area, but still foggy over the inland parts of England, as well as at Flanders and Copenhagen.  
 Dull in the north of Scandinavia, with rain at Bodø.  
 No rain fell yesterday in any part of Western Europe.

## SEA

Slight or smooth generally, but moderate off the south of Ireland, and rough off the Hebrides and west of Norway.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone over our Islands is gradually breaking up, but the fall in the barometer is at present too uniform to bring about any very decided change in the general distribution of pressure.

# FORECASTS

For the 24 hours ending at NOON on 24<sup>th</sup> Dec<sup>r</sup> 1891.

## DISTRICTS.

## FORECASTS.

- |   |                  |  |
|---|------------------|--|
| 0 | SCOTLAND NORTH   | SW <sup>ly</sup> winds, fresh or strong; drizzle some rain.                          |
| 1 | SCOTLAND EAST    | SW <sup>ly</sup> winds, light or moderate; fair generally, but local fogs. Milder.   |
| 2 | ENGLAND N.E.     |  |
| 3 | ENGLAND EAST     | Variable or E <sup>ly</sup> airs; gloomy and foggy at first, some improvement later. |
| 4 | MIDLAND COUNTIES |  |
| 5 | ENGLAND SOUTH    |  |

## DISTRICTS.

## FORECASTS.

- |    |               |   |
|----|---------------|---|
| 6  | SCOTLAND WEST | SE <sup>ly</sup> and S <sup>ly</sup> winds, light; fair generally but local fogs. |
| 7  | ENGLAND N.W.  |   |
| 8  | ENGLAND S.W.  | E <sup>ly</sup> and SE <sup>ly</sup> winds, light; fair generally.                |
| 9  | IRELAND NORTH | S <sup>ly</sup> winds, freshening; fair to drizzle and some rain.                 |
| 10 | IRELAND SOUTH |   |

## WARNINGS

None Issued

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA. | SEA |  | BAR:          | THER: |    | WIND |     | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|--|---------------|-------|----|------|-----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |  |               | D.    | W. | D.   | F.  |      |     |
| Skudesnaes ...    | 30.51 | 42    | 41 | Z    | 0  | 0    | 2   |  | Holyhead ...  | 30.58 | 41 | 39   | S   | 2    | 0   |
| Sumburgh Head ... | 30.34 | 44    | 42 | Z    | 0  | 0    | 2   |  | Valencia ...  | 30.43 | 49 | 45   | SE  | 6    | 0   |
| Stornoway ...     | 30.29 | 45    | 44 | SW   | 6  | 0    | 6   |  | Scilly ...    | 30.52 | 45 | 43   | SE  | 3    | 0   |
| Aberdeen ...      | 30.43 | 35    | 32 | S    | 1  | 0m   | 1   |  | Jersey ...    | 30.60 | 36 | 32   | E   | 3    | 0   |
| Shields ...       | 30.52 | 38    | 34 | WSW  | 2  | 0m   | 2   |  | Dungeness ... | 30.62 | 39 | 36   | E   | 2    | 0   |
| Ardrossan ...     | 30.51 | 44    | 43 | ESE  | 1  | 0f   | 1   |  | London ...    | 30.64 | 30 | 29   | Z   | 0    | 0   |
| Malin Head ...    | 30.37 | 41    | 39 | SSW  | 6  | 0    | 2   |  | Yarmouth ...  | 30.61 | 34 | 32   | W   | 2    | 0m  |
| Mullaghmore ...   | 30.41 | 44    | 40 | SSE  | 5  | 0c   | 4   |  | Rochefort ... | 30.49 | 39 | 36   | ESE | 3    | 0   |
| Belmullet ...     | 30.39 | 45    | 42 | S    | 4  | 0    | *   |  |               |       |    |      |     |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

*The Continental Information has not arrived.*

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.  
\* AN ASTERISK is inserted in all places for which information is not usually received.

The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

Weekly " " " £1 10 0 "



# DAILY WEATHER REPORT.

for *Thursday 24<sup>th</sup> December.* 1891.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           | YESTERDAY EVENING.                        |               |       |                      |          | 8 A.M. TO DAY.                            |   |             |      |   |       |                      |          |                   |             | PAST 24 HOURS. |                           |      |
|---------------------|---|---------------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|----------|-------------------|-------------|----------------|---------------------------|------|
|                     | BAROM.                                    | TEMP.         | WIND. |                      | Weather. | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND. |                      | Weather. | Sea.<br>(0 to 9.) | SHADE TEMP. |                | Amount<br>of<br>Rainfall. |      |
|                     | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry.          | Dir.  | Force.<br>(0 to 12.) |          | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Dir.  | Force.<br>(0 to 12.) |          |                   | Max.        | Min.           |                           |      |
| SCANDINAVIA.        | Haparanda ...                             | 29.47         | 32    | SW                   | 3        | bc  | 29.75                                   | +14         | 33   | 32                                      | -4    | NW                   | 2        | 6                 | *           | 39             | 24                        | —    |
|                     | Hernösand ...                             | 29.95         | 31    | W                    | 2        | 6   | 30.10                                   | +0.8        | 31   | 31                                      | -6    | 2                    | 0        | bc                | *           | 45             | 27                        | —    |
|                     | Stockholm ...                             | 30.13         | 31    | WNW                  | 2        | c   | 30.21                                   | -0.4        | 30   | 29                                      | +2    | W                    | 2        | 6                 | *           | 36             | 25                        | —    |
|                     | Wishby ...                                | 30.24         | 35    | WNW                  | 4        | 6   | 30.27                                   | -0.5        | 36   | 35                                      | 0     | WNW                  | 4        | 0                 | *           | 37             | 32                        | —    |
|                     | Bodö ...                                  | 29.64         | 39    | WNW                  | 9        | 7   | 29.77                                   | +1.7        | 41   | 40                                      | -3    | WNW                  | 8        | c                 | 5           | 45             | 37                        | 0.08 |
|                     | Christiansund                             | 29.59         | 47    | SW                   | 7        | 0   | 30.05                                   | -0.2        | 45   | 42                                      | +2    | SW                   | 2        | 7                 | 5           | ?              | 48                        | 0.24 |
|                     | Skudesnaes ...                            | 30.29         | 44    | S                    | 2        | 0   | 30.22                                   | -1.3        | 42   | 41                                      | +1    | SE                   | 4        | 0                 | 3           | ?              | 41                        | —    |
|                     | Christiania Fjord<br>(Fæder)              | 30.22         | 36    | NNW                  | 3        | 6   | 30.23                                   | -0.2        | 35   | 34                                      | +2    | ENE                  | 2        | 6                 | 1           | 37             | 28                        | —    |
|                     | Skagen (The Scaw)                         | 30.28         | 38    | WNW                  | 3        | m   | 30.28                                   | -0.4        | 38   | 37                                      | +1    | WNW                  | 2        | m                 | 1           | 41             | 36                        | —    |
|                     | Fanö ...                                  | 30.40         | 37    | W                    | 2        | 0   | 30.33                                   | -1.4        | 29   | 28                                      | -10   | SE                   | 2        | 6                 | *           | 39             | 28                        | —    |
| BRITISH ISLANDS.    | Sumburgh Head                             | 30.12         | 46    | SW                   | 3        | c   | 30.02                                   | -1.3        | 45   | 44                                      | 0     | SW                   | 1        | c                 | 3           | 47             | 44                        | —    |
|                     | Stornoway ...                             | 30.14         | 45    | SW                   | 3        | 0   | 30.00                                   | -1.6        | 46   | 46                                      | -1    | W                    | 4        | 0                 | 4           | 48             | 40                        | 0.04 |
|                     | Wick ...                                  | 30.18         | 41    | S                    | 2        | 6   | 30.07                                   | -1.5        | 37   | 37                                      | -2    | 2                    | 0        | 6                 | 0           | 45             | 36                        | —    |
|                     | Nairn ...                                 | 30.20         | 40    | S                    | 0        | 6   | 30.08                                   | -1.7        | 35   | 33                                      | -2    | 2                    | 0        | 6                 | 0           | 45             | 33                        | —    |
|                     | Aberdeen ...                              | 30.27         | 35    | SW                   | 1        | 6   | 30.15                                   | -2.1        | 28   | 27                                      | +1    | WNW                  | 1        | 6m                | 1           | 36             | 27                        | —    |
|                     | Leith ...                                 | 30.34         | 36    | S                    | 0        | m   | 30.19                                   | -2.0        | 36   | 36                                      | -2    | SW                   | 2        | f                 | *           | 39             | 30                        | —    |
|                     | Shields ...                               | 30.38         | 37    | SW                   | 1        | 6   | 30.19                                   | -2.4        | 31   | 31                                      | +2    | W                    | 1        | f                 | 2           | 37             | 25                        | —    |
|                     | Spurn Head ...                            | 30.36         | 32    | W                    | 1        | 6m  | 30.25                                   | -2.2        | 31   | 31                                      | +1    | S                    | 1        | bc                | 1           | 34             | 29                        | —    |
|                     | York ...                                  | 30.37         | 22    | S                    | 0        | f   | 30.23                                   | -2.7        | 20   | 20                                      | +5    | S                    | 1        | f                 | *           | 27             | 14                        | —    |
|                     | Loughborough                              | 30.35         | 21    | SE                   | 1        | f   | 30.23                                   | -2.5        | 23   | 23                                      | +9    | W                    | 1        | f                 | *           | 27             | 13                        | —    |
| GERMANY & HOLLAND.  | Ardrossan ...                             | 30.32         | 39    | ENE                  | 1        | 0   | 30.20                                   | -1.8        | 37   | 37                                      | -8    | ENE                  | 1        | over              | 1           | 46             | 36                        | —    |
|                     | Malin Head ...                            | 30.25         | 40    | S                    | 4        | 6m  | 30.13                                   | -1.6        | 40   | 38                                      | +1    | S                    | 4        | bc                | 2           | 48             | 38                        | —    |
|                     | Mullaghmore ...                           | 30.28         | 44    | SW                   | 4        | 0m  | 30.18                                   | -1.7        | 40   | 38                                      | -5    | S                    | 1        | bc                | 2           | 46             | 37                        | —    |
|                     | Belmullet ...                             | 30.26         | 45    | SW                   | 2        | c   | 30.13                                   | -1.5        | 44   | 43                                      | -2    | S                    | 2        | 0                 | *           | 48             | 43                        | 0.04 |
|                     | Donaghadee ...                            | 30.38         | 38    | SE                   | 2        | c   | 30.21                                   | -2.0        | 32   | 32                                      | -8    | S                    | 3        | 6                 | 1           | 43             | 30                        | —    |
|                     | Liverpool (Bidston)                       | 30.35         | 30    | ESE                  | 2        | 6   | 30.24                                   | -2.4        | 22   | 21                                      | -1    | SE                   | 2        | c                 | 2           | 33             | 22                        | —    |
|                     | Holyhead ...                              | 30.34         | 32    | ENE                  | 1        | c   | 30.22                                   | -2.4        | 23   | 23                                      | 0     | 2                    | 0        | cng               | 0           | 41             | 31                        | —    |
|                     | Parsonstown ...                           | 30.33         | 35    | S                    | 0        | 6   | 30.23                                   | -1.5        | 27   | 26                                      | -8    | 2                    | 0        | bc                | *           | 42             | 26                        | —    |
|                     | Valencia ...                              | 30.32         | 48    | SE                   | 2        | cm  | 30.22                                   | -1.6        | 34   | 33                                      | -13   | SE                   | 1        | 6m                | 1           | 48             | 32                        | —    |
|                     | Roche's Point...                          | 30.33         | 37    | ENE                  | 2        | 6   | 30.26                                   | -1.5        | 34   | 33                                      | -12   | NE                   | 3        | m                 | 3           | 46             | 33                        | —    |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.)                  | 30.32         | 35    | E                    | 2        | m   | 30.22                                   | -2.3        | 36   | 35                                      | +1    | E                    | 2        | mg                | 2           | 37             | 34                        | —    |
|                     | Scilly ...                                | 30.25         | 44    | ENE                  | 2        | c   | 30.15                                   | -2.2        | 44   | 41                                      | +3    | ESE                  | 2        | bc                | 3           | 46             | 39                        | —    |
|                     | Prawle Point ...                          | 30.38         | 42    | E                    | 3        | 6   | 30.20                                   | -2.2        | 40   | 38                                      | +3    | ENE                  | 3        | bc                | 2           | 42             | 37                        | —    |
|                     | Jersey (St. Aubin's)                      | 30.31         | 35    | ESE                  | 2        | 6   | 30.21                                   | -2.2        | 29   | 27                                      | -1    | E                    | 1        | 6m                | 1           | 39             | 26                        | —    |
|                     | Hurst Castle ...                          | 30.34         | 36    | E                    | 4        | m   | 30.25                                   | -2.2        | 25   | 25                                      | -5    | ENE                  | 1        | f                 | 0           | 42             | 25                        | —    |
|                     | Dungeness ...                             | 30.35         | 38    | SE                   | 3        | bc  | 30.23                                   | -2.3        | 22   | 22                                      | -16   | NNW                  | 2        | m                 | 1           | 41             | 20                        | —    |
|                     | London ...                                | 30.36         | 29    | S                    | 0        | f   | 30.25                                   | -2.4        | 26   | 25                                      | -1    | 2                    | 0        | f                 | *           | 32             | 25                        | —    |
|                     | Oxford ...                                | 30.36         | 24    | S                    | 0        | 0   | 30.26                                   | -2.5        | 21   | 21                                      | +5    | 2                    | 0        | f                 | *           | 26             | 16                        | —    |
|                     | Cambridge ...                             | 30.38         | 30    | S                    | 0        | 0   | 30.27                                   | -2.3        | 18   | 17                                      | 0     | N                    | 1        | f                 | *           | 33             | 17                        | —    |
|                     | Yarmouth ...                              | 30.36         | 33    | S                    | 0        | 6f  | 30.25                                   | -2.4        | 28   | 27                                      | +1    | 2                    | 0        | 6f                | 2           | 34             | 26                        | —    |
| GERMANY & HOLLAND.  | Cuxhaven ...                              | 30.47         | 30    | S                    | 2        | m   | 30.36                                   | -2.1        | 24   | 23                                      | -2    | SE                   | 1        | m                 | *           | 37             | 23                        | —    |
|                     | Berlin ...                                | 30.50         | 34    | SE                   | 2        | 0   | 30.43                                   | -1.4        | 33   | 32                                      | -1    | SE                   | 2        | 0                 | *           | 36             | 32                        | —    |
|                     | Wiesbaden ...                             | 30.41         | 33    | SE                   | 2        | *   | 30.37                                   | -1.9        | 27   | 26                                      | +8    | NE                   | 1        | 0                 | *           | 30             | 23                        | —    |
|                     | Munich ...                                | 30.41         | 13    | SE                   | 2        | f   | 30.36                                   | -1.5        | 9    | 9                                       | -4    | SE                   | 3        | m                 | *           | 19             | 9                         | —    |
|                     | The Helder ...                            | 30.43         | 30    | S                    | 1        | 6   | 30.30                                   | -2.5        | 27   | 26                                      | -1    | SE                   | 1        | 6                 | 1           | 31             | 27                        | —    |
|                     | Brussels (9 a.m.)                         | 30.35         | 28    | E                    | 1        | m   | 30.24                                   | -2.3        | 29   | 28                                      | +1    | SE                   | 1        | m                 | 0           | 36             | 21                        | —    |
|                     | Cape Gris Nez                             | 30.36         | 26    | ENE                  | 2        | 6   | 30.26                                   | -2.1        | 15   | 15                                      | -3    | NE                   | 1        | 6                 | *           | 35             | 14                        | —    |
|                     | Brest ...                                 | 30.37         | 27    | E                    | 1        | 6   | 30.27                                   | -2.1        | 37   | 31                                      | +8    | SE                   | 1        | 6                 | 2           | 43             | 28                        | —    |
|                     | Lorient ...                               | 30.23         | 36    | E                    | 3        | 6   | 30.12                                   | -2.2        | 33   | 30                                      | +8    | ENE                  | 3        | 0                 | 4           | 39             | 25                        | —    |
|                     | FRANCE AND BELGIUM.                       | Rochefort ... | 30.19 | 35                   | E        | 3   | bc                                      | 30.09       | -2.1 | 36                                      | 33    | +8                   | E        | 3                 | c           | *              | 45                        | 28   |
| Belfort ...         |   | 30.21         | 21    | NE                   | 2        | 6   | 30.15                                   | -1.6        | 15   | 10                                      | -4    | NE                   | 2        | 6                 | *           | 23             | 14                        | —    |
| Lyons ...           |   | 30.40         | 27    | E                    | 1        | 6   | 30.36                                   | -1.6        | 20   | 19                                      | +4    | WNW                  | 1        | 6                 | *           | 32             | 34                        | —    |
| Nice ...            |   | 30.38         | 41    | E                    | 1        | 6   | 30.39                                   | -0.6        | 34   | 28                                      | 0     | NE                   | 3        | bc                | 3           | 32             | 34                        | —    |
| Perpignan ...       |   | 30.27         | 45    | S                    | 0        | 7   | 30.14                                   | -2.4        | 51   | 51                                      | +16   | SE                   | 2        | 7                 | *           | 51             | ?                         | 0.43 |
| Biarritz ...        |   | 30.11         | 40    | ESE                  | 3        | bc  | 30.03                                   | -1.8        | 46   | 42                                      | +11   | S                    | 2        | 0                 | 1           | 3              | 34                        | —    |
| Corunna ...         |   | 30.04         | 49    | N                    | 2        | 0   | 30.10                                   | +1.6        | 43   | 42                                      | -3    | N                    | 3        | 6                 | 2           | 32             | 43                        | —    |
| Lisbon ...          |   | 30.04         | 49    | N                    | 2        | 0   | 30.10                                   | +1.6        | 43   | 42                                      | -3    | N                    | 3        | 6                 | 2           | 32             | 43                        | —    |
| Penins.             |   |               |       |                      |          |   |   |             |      |   |       |                      |          |                   |             |                |                           |      |
| SUL.                |   |               |       |                      |          |   |   |             |      |   |       |                      |          |                   |             |                |                           |      |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Thursday 24<sup>th</sup> Dec<sup>r</sup>. 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

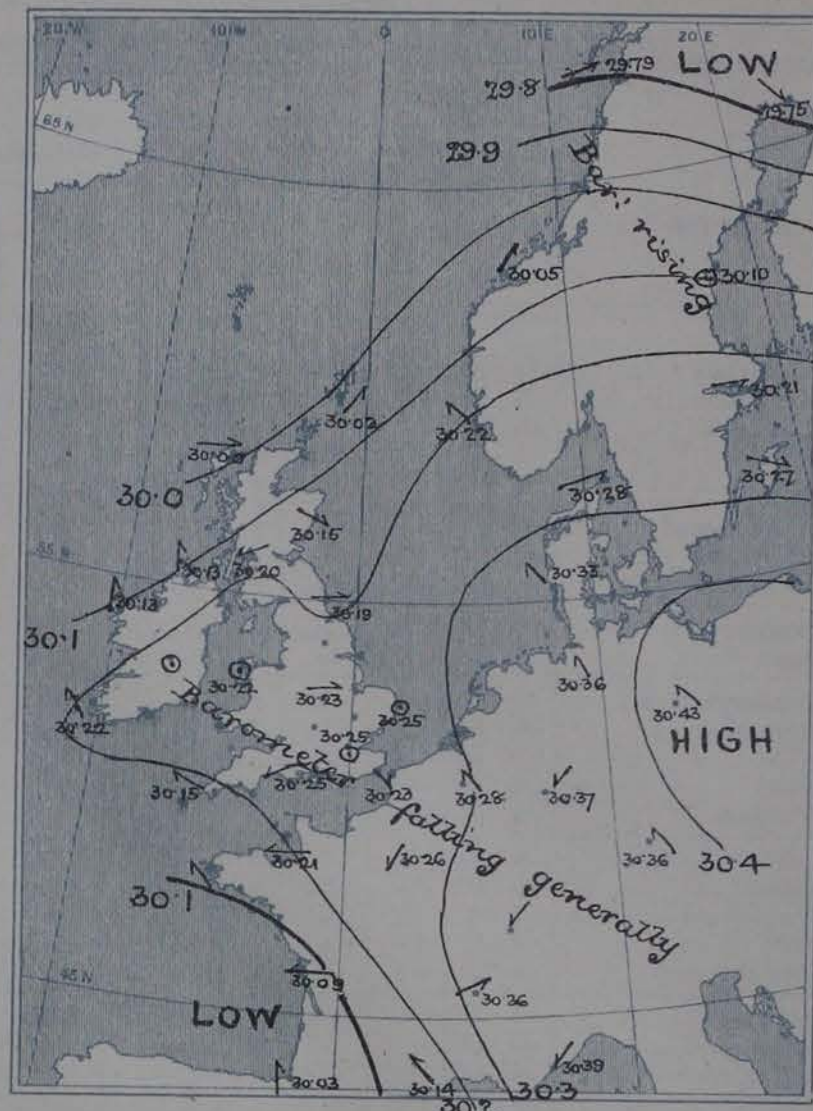
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.934         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |                   |      | RAINFALL<br>(Inches.) |
|---------------|---------------|---------------|-------------------|------|-----------------------|
|               | Daily<br>Max. | Daily<br>Min. | At 8 a.m.<br>Dry. | Wet. |                       |
| Sumburgh Head | 42.6          | 35.2          | 39.6              | 38.1 | 4.25                  |
| Stornoway     | 43.1          | 34.2          | 39.4              | 38.5 | 5.83                  |
| Wick          | 42.2          | 32.7          | 38.1              | 36.8 | 3.10                  |
| Nairn         | 41.9          | 32.8          | 37.1              | 35.6 | 1.95                  |
| Aberdeen      | 41.9          | 32.6          | 36.9              | 35.2 | 3.24                  |
| Leith         | 41.0          | 33.7          | 38.5              | 37.0 | 1.86                  |
| Shields       | 42.9          | 33.9          | 38.3              | 36.9 | 2.57                  |
| Spurn Head    | 42.4          | 35.3          | 38.8              | 37.7 | 2.14                  |
| York          | 42.3          | 32.3          | 36.4              | 35.4 | 2.28                  |
| Loughborough  | 42.7          | 32.2          | 36.3              | 35.4 | 2.24                  |
| Ardrossan     | 41.5          | 35.9          | 40.0              | 38.7 | 3.73                  |
| Mullaghmore   | 46.5          | 37.8          | 42.2              | 39.8 | 4.51                  |
| Donaghadee    | 45.8          | 36.2          | 40.2              | 39.3 | 2.84                  |
| Holyhead      | 46.4          | 39.1          | 42.8              | 41.1 | 3.82                  |
| Liverpool     | 43.5          | 35.6          | 38.8              | 37.1 | 2.59                  |
| Parsonstown   | 44.7          | 33.1          | 37.8              | 36.6 | 3.04                  |
| Valencia      | 49.7          | 40.0          | 44.6              | 42.4 | 5.99                  |
| Roche's Point | 47.9          | 38.9          | 42.9              | 41.5 | 4.95                  |
| Pembroke      | 43.8          | 40.3          | 43.6              | 42.2 | 3.99                  |
| Silly         | 49.5          | 43.1          | 47.0              | 45.1 | 4.02                  |
| Prawle Point  | 47.0          | 38.2          | 42.5              | 41.1 | 3.76                  |
| Jersey        | 47.3          | 39.3          | 43.1              | 41.4 | 3.82                  |
| Hurst Castle  | 45.6          | 36.3          | 40.6              | 39.8 | 2.77                  |
| Dover         | 44.3          | 35.9          | 39.8              | 38.6 | 3.00                  |
| LONDON        | 44.0          | 33.9          | 37.8              | 36.7 | 2.10                  |
| Oxford        | 42.9          | 33.5          | 37.0              | 35.9 | 2.10                  |
| Cambridge     | 42.8          | 31.0          | 36.2              | 35.5 | 1.88                  |
| Yarmouth      | 41.9          | 33.7          | 37.9              | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

|             |  |
|-------------|--|
| PRESSURE    | <p><u>Highest</u> 30.4 ins. and upwards in Germany, 30.2 ins. and upwards in a ridge extending over England and Ireland.</p> <p><u>Lowest</u> 29.8 ins. and less in the north of Scandinavia.</p> <p><u>Gradients</u> slight. <u>Barometer</u> falling at all but the Scandinavian stations, — most over England.</p>  |
| TEMPERATURE | <p><u>Highest</u> (1) 51° at Perpignan, 46° at Biarritz, and 43° at Lisbon, (2) 46° at Stormorway, 45° at Christiansund and Sumburgh Head, and 44° at Belmullet.</p> <p><u>Lowest</u> 9° at Munich, 15° at Paris and Belfort, 18° at Cambridge, 20° at York &amp; Lyons, and 21° at Osgood.</p> <p>The maxima registered yesterday were below the freezing point in many parts of England.</p> |
| WIND        | <p>Light from the eastward over France and the extreme south and southwest of our Islands, and from the SE<sup>w</sup> over Germany and the Netherlands.</p> <p>Light or moderate from the SW<sup>w</sup> in the north of Ireland and from the SW<sup>w</sup> in Scotland.</p> <p>W<sup>2</sup> in Scandinavia; light in force generally, but strong to a gale at Rods.</p>                    |
| WEATHER     | <p>Still foggy over the greater part of England, but fine in most other parts of western Europe.</p> <p>Dull in Germany and the west of Norway, with rain at Christiansund.</p> <p>A little rain fell yesterday in the Hebrides, the west of Norway &amp; the extreme west of Ireland.</p>   |
| SEA         | <p>Slight or smooth generally, but rather rough off the west of Norway.</p>  |

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no signs of any important change in the general distribution of pressure. The anticyclone continues to give way slowly but the fall of the barometer is too uniform to produce any decided current of wind over our Islands and the fog over England will therefore probably continue for a time.

## FORECASTS

For the 24 hours ending at NOON on 25<sup>TH</sup> DEC. 1891.

| DISTRICTS.         | FORECASTS.   | DISTRICTS.       | FORECASTS.  |
|--------------------|--|------------------|---|
| 0 SCOTLAND NORTH   | SW <sup>2</sup> winds, moderate or fresh, dull, rain locally.            | 6 SCOTLAND WEST  | E <sup>2</sup> and SE <sup>2</sup> winds, fair generally, but local fogs. |
| 1 SCOTLAND EAST    | Light breezes, chiefly SW <sup>2</sup> , fair generally, but local fogs. | 7 ENGLAND N.W.   |   |
| 2 ENGLAND N.E.     |  | 8 ENGLAND S.W.   | E <sup>2</sup> winds, light, fair generally.                              |
| 3 ENGLAND EAST     | Calms and variable airs, cold, foggy.                                    | 9 IRELAND NORTH  | S <sup>2</sup> winds, light or moderate, fair generally.                  |
| 4 MIDLAND COUNTIES |  | 10 IRELAND SOUTH |   |
| 5 ENGLAND SOUTH    |  |                  |   |
|                    |  | WARNINGS         | None Issued.  |

Note.—The South Cone, point downwards (∇), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.

The North Cone, point upwards (∇), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA. | SEA |  | BAR:          | THER: |    | WIND |     | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|--|---------------|-------|----|------|-----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |  |               | D.    | W. | D.   | F.  |      |     |
| Skudesnaes ...    | 30.38 | 44    | 41 | SW   | 2  | 0    | 3   |  | Holyhead ...  | 30.35 | 41 | 38   | NE  | 1    | 1   |
| Sumburgh Head ... | 30.12 | 46    | 44 | SW   | 3  | 0    | 4   |  | Valencia ...  | 30.32 | 48 | 45   | SE  | 4    | 4   |
| Stornoway ...     | 30.13 | 48    | 47 | SW   | 6  | 7    | 6   |  | Scilly ...    | 30.28 | 45 | 42   | ENE | 3    | 3   |
| Aberdeen ...      | 30.30 | 34    | 32 | W    | 1  | 6m   | 1   |  | Jersey ...    | 30.32 | 37 | 33   | E   | 2    | 2   |
| Shields ...       | 30.38 | 34    | 32 | SW   | 1  | f    | 2   |  | Dungeness ... | 30.35 | 40 | 36   | E   | 2    | 1   |
| Ardrossan ...     | 30.34 | 44    | 43 | S    | 2  | cm   | 2   |  | London ...    | 30.39 | 32 | 31   | 2   | 0    | *   |
| Malin Head ...    | 30.26 | 42    | 40 | S    | 4  | cm   | 2   |  | Yarmouth ...  | 30.40 | 34 | 32   | 2   | 0    | 2   |
| Mullaghmore ...   | 30.29 | 46    | 41 | SW   | 4  | 6c   | 3   |  | Rochefort ... | 30.25 | 48 | 38   | ENE | 3    | ?   |
| Belmullet ...     | 30.28 | 48    | 46 | SW   | 2  | 6    | *   |  |               |       |    |      |     |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE FOR THE 24 HOURS ENDING AT 8 AM ON WEDNESDAY.

Weather in morning very quiet over southeastern, southern, western and the greater part of northern Europe; clear and bright in most places, but very foggy over England and at one or two Continental stations; dull over central Russia and southeastern Europe. Rain later in the NW. of Norway, no important change elsewhere.

Temperature very low in almost all places; highest morning values 52° at Malta, and exceeding 40° at many other Mediterranean stations, as well as on the Portuguese coast, southwest and extreme north of our Islands and the west of Norway. Much lower elsewhere, and as low as 11° to 20° over the greater part of central Europe and the inland parts of England, and 23° to 30° over Finland and northern Russia, rising later to between 40° and 49° at several of our western and northern stations, but remaining below the freezing point over central England all day.

Wind NE<sup>2</sup> and rather strong at several of the Mediterranean and Spanish stations, E<sup>2</sup> moderate over the Bay of Biscay; SE<sup>2</sup> to SW<sup>2</sup> in Ireland and Scotland; very strong at Valencia, SW<sup>2</sup> in Norway (strong gale at Christiansund), W<sup>2</sup> to NW<sup>2</sup> over the Baltic, Finland and northern Russia, calm or nearly so over England, France and Germany. Decreasing in force in Ireland and Norway later, no change elsewhere.

Barometer highest 30.7 ins. and more to 30.5 ins. in a large anticyclone covering nearly the whole of western Europe, having its centre near Brussels. Lowest 29.4 ins. and less in a low pressure area over northern Russia, and below 30 ins. over the southwest of Spain; gradients nowhere steep and in most places slight. Falling over our Islands and their neighbourhood later, but very little change taking place in the general distribution of pressure.

Continental Information for yesterday not arrived.

NOTICE. The report for tomorrow (Christmas Day) will be issued on Monday the 28<sup>th</sup> inst.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

WEATHER.—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 8 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Friday* 25<sup>th</sup> December 1891.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| R. H. SCOTT, Secretary.   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4.                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED WEEKLY.   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LONDON: PRINTED BY J. H. COOKE, 15, ABchurch Lane, E. C. 4.                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SOLD BY ALL NEWSDEALERS.  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55, PATERNOSTER STREET, LONDON. E. C. 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PUBLISHED BY THE STATIONER'S OFFICE, 55,                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Friday, 25<sup>th</sup> Dec., 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;  
→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

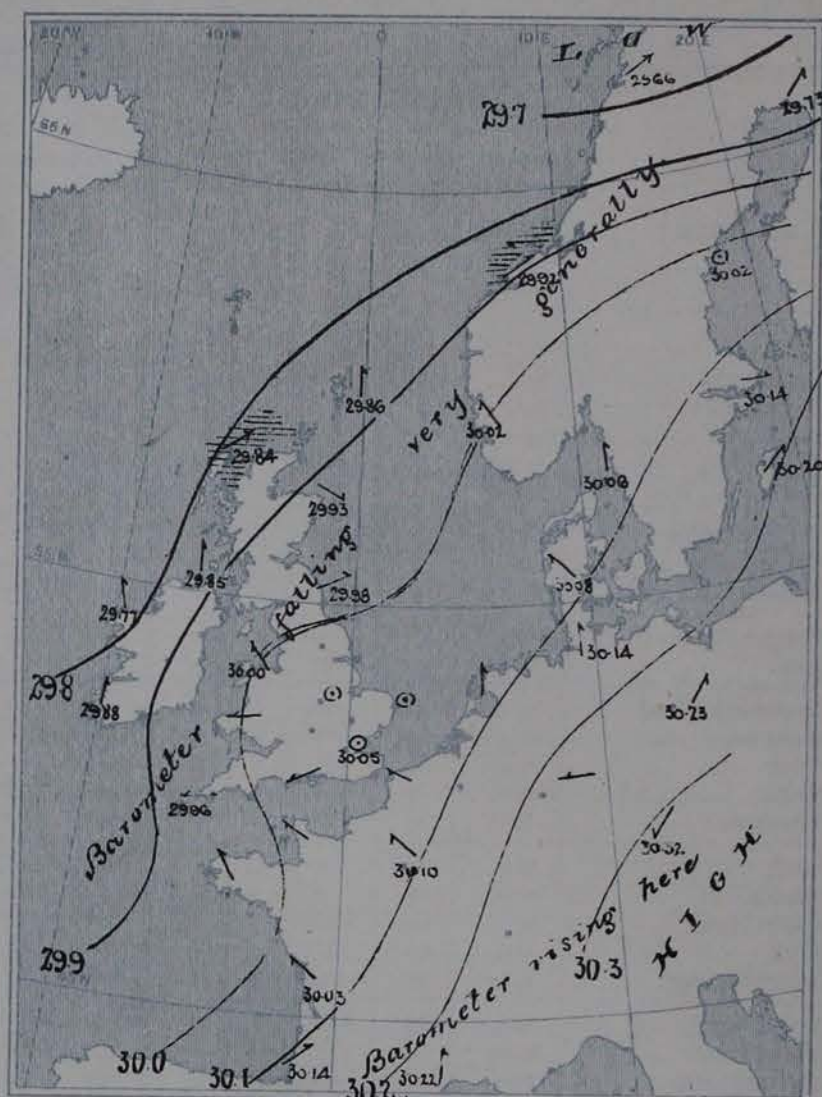
▨ = Rough. ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.870         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Sailly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.944         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

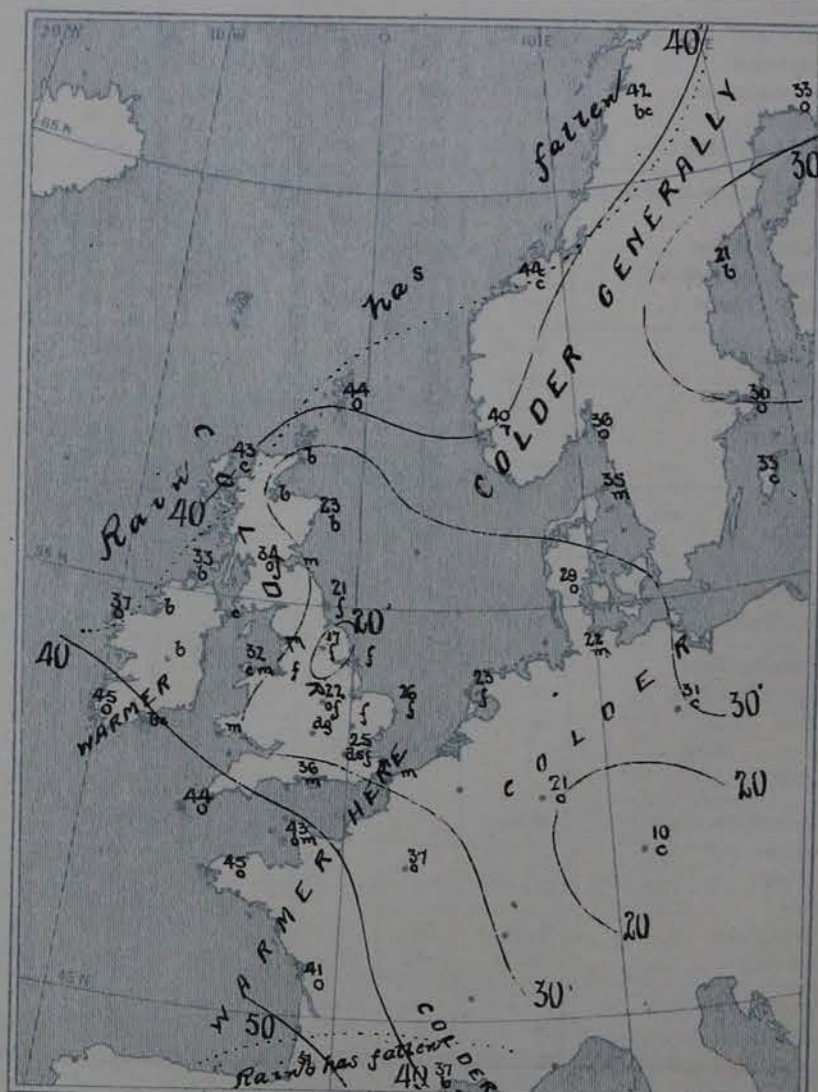
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

## MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.          | TEMPERATURE.  |               |           |      | RAINFALL.<br>(Inches.) |
|--------------------|---------------|---------------|-----------|------|------------------------|
|                    | Daily<br>Max. | Daily<br>Min. | at 8 a.m. |      |                        |
|                    |               |               | Dry.      | Wet. |                        |
| Sumburgh Head..... | 42.6          | 35.2          | 39.6      | 38.1 | 4.26                   |
| Stornoway.....     | 43.1          | 34.2          | 39.4      | 38.5 | 5.03                   |
| Wick.....          | 42.2          | 32.7          | 38.1      | 36.8 | 3.10                   |
| Nairn.....         | 41.9          | 32.8          | 37.1      | 35.6 | 1.95                   |
| Aberdeen.....      | 41.9          | 32.6          | 36.9      | 35.2 | 3.24                   |
| Leith.....         | 44.0          | 33.7          | 38.5      | 37.0 | 1.86                   |
| Shields.....       | 42.9          | 33.9          | 38.3      | 36.9 | 2.57                   |
| Spurn Head.....    | 42.4          | 35.3          | 38.8      | 37.7 | 2.14                   |
| York.....          | 42.3          | 32.3          | 36.4      | 35.4 | 2.28                   |
| Loughborough.....  | 42.7          | 32.2          | 36.3      | 35.4 | 2.24                   |
| Ardrossan.....     | 41.5          | 35.9          | 40.0      | 38.7 | 3.73                   |
| Mullaghmore.....   | 40.5          | 37.8          | 42.2      | 39.8 | 4.51                   |
| Donaghadee.....    | 45.8          | 36.2          | 40.2      | 39.3 | 2.84                   |
| Holyhead.....      | 46.4          | 39.1          | 42.8      | 41.1 | 3.82                   |
| Liverpool.....     | 43.5          | 35.6          | 38.8      | 37.1 | 2.59                   |
| Parsonstown.....   | 44.7          | 33.1          | 37.8      | 36.6 | 3.04                   |
| Valencia.....      | 49.7          | 40.0          | 44.6      | 42.4 | 5.89                   |
| Roche's Point..... | 47.0          | 38.9          | 42.9      | 41.5 | 4.95                   |
| Pembroke.....      | 45.8          | 40.3          | 43.6      | 42.2 | 3.99                   |
| Sailly.....        | 40.5          | 43.1          | 47.0      | 45.1 | 4.02                   |
| Prawle Point.....  | 47.0          | 38.2          | 42.5      | 41.1 | 3.75                   |
| Jersey.....        | 47.3          | 39.3          | 43.1      | 41.4 | 3.82                   |
| Hurst Castle.....  | 45.6          | 36.3          | 40.6      | 39.8 | 2.77                   |
| Dover.....         | 44.3          | 35.9          | 39.8      | 38.6 | 3.00                   |
| LONDON.....        | 44.0          | 33.9          | 37.8      | 36.7 | 2.10                   |
| Oxford.....        | 42.9          | 33.5          | 37.0      | 35.9 | 2.10                   |
| Cambridge.....     | 42.8          | 31.6          | 36.2      | 35.5 | 1.88                   |
| Yarmouth.....      | 41.9          | 33.7          | 37.9      | 37.0 | 2.66                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.


|             |   |
|-------------|---|
| PRESSURE    | <p>Highest, 30.2 ins. and upwards, over the Baltic, Germany, Switzerland, and the south of France.</p> <p>Lowest, 29.7 ins. and less, in the north of Scandinavia; 29.8 ins. and less, in the extreme west of Ireland.</p> <p>Gradients slight. Barometer falling generally—most in the west and north of our Islands.</p>  |
| TEMPERATURE | <p>Highest, 51° at Biarritz, 47° at Lisbon, 45° at Valencia Island and Pelly, and 44° at Christiansund and Seemlungt Hd.</p> <p>Lowest (1) 10° at Munich and 21° at Wiesbaden, (2) 17° at York, 20° at Cambridge, and 21° at Shields and Spinn Hd.</p> <p>The maxima registered over England yesterday were as low as 23° at York and Cambridge and 24° at Oxford, a considerable rise is now in progress at our southern stations.</p> |
| WIND        | <p>Light from the E<sup>nd</sup> or SE<sup>nd</sup> over the greater part of England and France, but calm over our midland and eastern counties.</p> <p>Light or moderate from the S<sup>nd</sup> in Ireland and from the SW<sup>nd</sup> in Scotland.</p> <p>S<sup>h</sup> or SE<sup>h</sup> on the eastern shores of the North Sea; W<sup>h</sup> or SW<sup>h</sup> in Sweden.</p>  |
| WEATHER     | <p>Still foggy over the greater part of England, with rain and sleet in London, forming a "glazed frost".</p> <p>Fine in most other parts of the United Kingdom, but dull in the west of Ireland.</p> <p>Dull in France and also on the eastern shores of the North Sea, with rain at Skudenmøns.</p>   |
| SEA         | <p>Slight or smooth generally, but moderate on our extreme southwest coasts and rather rough at Christiansund and Stormøns.</p>   |


PROBABLE CHANGES IN SYSTEM NOW PREVALENT

## FORECASTS

For the 24 hours ending at NOON on 26<sup>th</sup> DEC<sup>r</sup> 1891.

| DISTRICTS.         | FORECASTS.  | DISTRICTS.       | FORECASTS.   |
|--------------------|-------------|------------------|--------------|
| 0 SCOTLAND NORTH   | None issued | 6 SCOTLAND WEST  | None issued  |
| 1 SCOTLAND EAST    |             | 7 ENGLAND N.W.   |              |
| 2 ENGLAND N.E.     |             | 8 ENGLAND S.W.   |              |
| 3 ENGLAND EAST     |             | 9 IRELAND NORTH  |              |
| 4 MIDLAND COUNTIES |             | 10 IRELAND SOUTH |              |
| 5 ENGLAND SOUTH    |             | WARNINGS         | None issued. |

Note.—The South Cone, point downwards (  ), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.

The North Cone, point upwards (  ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA. | SEA |  | BAR:          | THER: |    | WIND |     | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|--|---------------|-------|----|------|-----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |  |               | D.    | W. | D.   | F.  |      |     |
| Skudesnaes ...    | 30.19 | 42    | 39 | SSE  | 6  | o    | 4   |  | Holyhead ...  | 30.16 | 37 | 37   | Z   | o    | o   |
| Sumburgh Head ... | 29.99 | 46    | 43 | WSW  | 2  | b    | 3   |  | Valencia ...  | 30.13 | 44 | 40   | SE  | 1    | bm  |
| Stornoway ...     | 29.98 | 46    | 46 | SW   | 3  | c    | 3   |  | Scilly ...    | 30.09 | 47 | 45   | E   | 3    | c   |
| Aberdeen ...      | 30.10 | 34    | 31 | WNW  | 1  | bm   | 1   |  | Jersey ...    | 30.13 | 42 | 38   | E   | 2    | bc  |
| Shields ...       | 30.13 | 37    | 34 | WNW  | 2  | bm   | 2   |  | Dungeness ... | 30.17 | 41 | 38   | SW  | 1    | m   |
| Ardrossan ...     | 30.14 | 42    | 42 | S    | 2  | o    | 1   |  | London ...    | 30.19 | 26 | 24   | Z   | o    | ogf |
| Malin Head ...    | 30.08 | 41    | 39 | S    | 3  | bc   | 3   |  | Yarmouth ...  | 30.17 | 37 | 35   | NNW | 1    | bf  |
| Mullaghmore ...   | 30.11 | 43    | 40 | SSW  | 4  | o    | 3   |  | Rochefort ... | 30.04 | 43 | 42   | E   | 4    | o   |
| Belmullet ...     | 30.14 | 44    | 43 | SSW  | 2  | c    | *   |  |               |       |    |      |     |      | *   |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather still very foggy over England, but fine in other parts of western, northern and southern Europe. Dull over Russia, Germany and Austria with fog at Opatowitz and Hermandstadt; rain falling at Christiansund. Heavy rain falling later in the extreme south of France, and smaller amounts at night in the Hebrides and west of Ireland.

Temperature highest (1) 59° at La Caille, 58° at Algiers and Malta, and 56° at Tunis; (2) 46° at Stornoway, 45° at Christiansund and Sumburgh Hd., and 44° at Belmullet. Lowest 9° at Munich, 15° at Paris and Belfast, 18° at Cambridge, and 19° at Le Mans; frost prevailing over nearly the whole of Russia and Central Europe, as well as over a considerable portion of the United Kingdom. Daily maxima as low as 23° at York and Cambridge, 24° at Oxford, and 27° at Loughborough, and below 40° in most parts of Great Britain, but thermometer exceeding 50° in the south of France.

Wind light from the SE<sup>th</sup> in Germany and the Netherlands, from the E<sup>th</sup> over Spain, France, and the extreme south of our Islands, from the S<sup>th</sup> in the north of Ireland and from the SW<sup>th</sup> in Scotland. W<sup>th</sup> over Scandinavia and central and northern Russia, with a gale at Rodo. Light from the N<sup>th</sup> over the south of Russia and the greater part of Italy, variable in Tunis, 3<sup>th</sup> in Algeria. No important change during day.

Barometer highest 30.1 ins. to 30.5 ins. and more, in a large anticyclone covering the greater part of Europe, its central position being located over Austria. Lowest 29.2 ins. and less, in a deep depression passing Eastwards over the extreme north of Russia; gradients steep in the far north. Barometer falling gradually during day, in nearly all places, but no important change occurring in general distribution of pressure.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received. The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

“ Weekly “ “ “ “ £1 10 0 “



# DAILY WEATHER REPORT.

for *Saturday, 26<sup>th</sup> December, 1891.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

10, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           | YESTERDAY EVENING.                        |       |        |                      |          | 8 A.M. TO DAY.                            |   |             |      |   |        |                      |          |                   |             | PAST 24 HOURS. |                           |      |
|---------------------|---|-------|--------|----------------------|----------|---|---|-------------|------|---|--------|----------------------|----------|-------------------|-------------|----------------|---------------------------|------|
|                     | BAROM.                                    | TEMP. | WIND.  |                      | Weather. | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND.  |                      | Weather. | Sea.<br>(0 to 9.) | SHADE TEMP. |                | Amount<br>of<br>Rainfall. |      |
|                     | Reading<br>at 32° F.<br>and<br>Sea Level. | Dry.  | Dirce. | Force.<br>(0 to 12.) |          | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Dirce. | Force.<br>(0 to 12.) |          |                   | Max.        | Min.           |                           |      |
| SCANDINAVIA.        | Haparanda ...                             |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
|                     | Hernösand ...                             |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
|                     | Stockholm ...                             |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
|                     | Wishby ...                                |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
|                     | Bodo ...                                  |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
|                     | Christiansund ...                         |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
|                     | Skudesnaes ...                            |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
|                     | Christiania Fjord<br>(Færd)               |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
|                     | Skagen (The Sea)                          | 29.96 | 32     | WSW                  | 1        | m   | +29.91                                  | -15         | 37   | 36                                      | +2     | SW                   | 4        | m                 | 1           | 37             | 30                        | -    |
|                     | Faenø ...                                 | 30.01 | 30     | SSE                  | 2        | b   | +29.98                                  | -10         | 37   | 36                                      | +8     | SW                   | 1        | b                 | *           | 37             | 28                        | -    |
| BRITISH ISLANDS.    | Sumburgh Head                             | 29.68 | 42     | S                    | 2        | o   | 29.47                                   | -39         | 43   | 42                                      | -1     | SE                   | 4        | o                 | 4           | 45             | 40                        | 0.01 |
|                     | Stornoway ...                             | 29.57 | 41     | SW                   | 6        | c   | 29.23                                   | -58         | 47   | 47                                      | +4     | SW                   | 8        | t                 | 7           | 47             | 40                        | 0.06 |
|                     | Wick ...                                  | 29.64 | 37     | S                    | 1        | b   | 29.49                                   | -36         | 44   | 43                                      | +4     | S                    | 5        | bc                | 3           | 44             | 36                        | -    |
|                     | Nairn ...                                 | 29.63 | 38     | SW                   | 1        | b   | ?                                       | ?           | 45   | 44                                      | +16    | SW                   | 4        | c                 | 2           | 46             | 26                        | -    |
|                     | Aberdeen ...                              | 29.76 | 33     | SSW                  | 3        | b   | 29.57                                   | -36         | 41   | 39                                      | +18    | SSE                  | 5        | bcq               | 4           | 41             | 23                        | -    |
|                     | Leith ...                                 | 29.81 | 36     | WSW                  | 1        | o   | 29.57                                   | -40         | 44   | 42                                      | +9     | S                    | 2        | c                 | *           | 44             | 32                        | -    |
|                     | Shields ...                               | 29.89 | 34     | SSW                  | 2        | f   | 29.71                                   | -27         | 35   | 34                                      | +14    | S                    | 4        | c                 | 2           | 35             | 19                        | -    |
|                     | Spurn Head ...                            | 29.95 | 30     | SSW                  | 2        | om  | 29.87                                   | -16         | 38   | 38                                      | +17    | SSW                  | 4        | f                 | 3           | 38             | 19                        | -    |
|                     | York ...                                  | 29.91 | 26     | S                    | 1        | f   | 29.81                                   | -21         | 37   | 37                                      | +20    | SE                   | 1        | f                 | *           | 37             | 15                        | -    |
|                     | Loughborough                              | 29.94 | 31     | SSE                  | 1        | o   | 29.83                                   | -18         | 42   | 41                                      | +20    | SSW                  | 3        | 50                | *           | 42             | 22                        | -    |
| BRITISH ISLANDS.    | Ardrossan ...                             | 29.78 | 42     | S                    | 3        | o   | 29.49                                   | -44         | 46   | 46                                      | +12    | S                    | 7        | o                 | 6           | 46             | 33                        | -    |
|                     | Malin Head ...                            | 29.60 | 40     | S                    | 6        | o   | 29.24                                   | -61         | 48   | 47                                      | +15    | S                    | 6        | ogr               | 2           | 48             | 33                        | -    |
|                     | Mullaghmore ...                           | 29.61 | 43     | SSE                  | 4        | cp  | 29.23                                   | -65         | 51   | 49                                      | +15    | SSE                  | 8        | cp                | 6           | 51             | 36                        | 0.01 |
|                     | Belmullet ...                             | 29.54 | 45     | S                    | 7        | ou  | 29.15                                   | -62         | 49   | 48                                      | +12    | SW                   | 6        | op                | *           | 50             | 36                        | 0.20 |
|                     | Donaghadee ...                            | 29.81 | 42     | SSW                  | 4        | o   | 29.49                                   | -47         | 47   | 47                                      | +14    | SSW                  | 7        | t                 | 5           | 47             | 33                        | 0.03 |
|                     | Liverpool (Bidston)                       | 29.91 | 28     | ESE                  | 1        | b   | 29.72                                   | -31         | 38   | 37                                      | +16    | SE                   | 4        | o                 | 3           | 38             | 21                        | -    |
|                     | Holyhead ...                              | 29.89 | 38     | SSE                  | 1        | cq  | 29.60                                   | -40         | 47   | 46                                      | +15    | S                    | 6        | gmqr              | 5           | 47             | 31                        | 0.02 |
|                     | Parsonstown ...                           | 29.73 | 39     | Z                    | 0        | b   | 29.38                                   | -54         | 49   | 48                                      | +17    | SE                   | 1        | t                 | 6           | 50             | 31                        | 0.12 |
|                     | Valencia ...                              | 29.67 | 48     | SSE                  | 6        | rm  | 29.32                                   | -56         | 52   | 51                                      | +7     | S                    | 7        | rm                | 6           | 53             | 44                        | 0.36 |
|                     | Roche's Point...                          | 29.80 | 48     | SSW                  | 5        | b   | 29.44                                   | -49         | 49   | 49                                      | +12    | SSW                  | 6        | t                 | 5           | 49             | 37                        | 0.50 |
| BRITISH ISLANDS.    | Pembroke (St. Ann's Hd.)                  | 29.90 | 44     | SSE                  | 3        | c   | 29.63                                   | -38         | 49   | 49                                      | +19    | S                    | 6        | qr                | 6           | 50             | 29                        | 0.02 |
|                     | Scilly ...                                | 29.92 | 48     | SSW                  | 4        | bc  | 29.66                                   | -30         | 50   | 50                                      | +6     | S                    | 6        | or                | 5           | 51             | 43                        | 0.03 |
|                     | Prawle Point ...                          | 29.98 | 47     | SSW                  | 3        | c   | 29.64                                   | -30         | 50   | 49                                      | +6     | S                    | 5        | og                | 4           | 50             | 41                        | 0.07 |
|                     | Jersey (St. Aubin's)                      | 30.05 | 48     | SW                   | 3        | cqm                                       | 30.02                                   | -02         | 47   | 45                                      | +4     | S                    | 4        | bcpm              | 3           | 48             | 42                        | 0.01 |
|                     | Hurst Castle ...                          | 30.00 | 46     | SSW                  | 3        | c   | 29.96                                   | -07         | 48   | 48                                      | +12    | SSW                  | 5        | c                 | 2           | 49             | 25                        | 0.02 |
|                     | Dungeness ...                             | 30.02 | 38     | Z                    | 0        | f   | 30.02                                   | -03         | 47   | 46                                      | +8     | SW                   | 5        | op                | 4           | 47             | 37                        | 0.05 |
|                     | London ...                                | 30.01 | 32     | Z                    | 0        | ff  | 29.97                                   | -08         | 45   | 44                                      | +20    | SSW                  | 2        | bc                | *           | 45             | 25                        | 0.06 |
|                     | Oxford ...                                | 30.00 | 35     | NE                   | 1        | o   | 29.90                                   | -15         | 43   | 42                                      | +19    | S                    | 3        | o                 | *           | 43             | 24                        | 0.05 |
|                     | Cambridge ...                             | 30.02 | 32     | S                    | 1        | o   | 29.94                                   | -13         | 42   | 39                                      | +22    | S                    | 1        | c                 | *           | 42             | 20                        | -    |
|                     | Yarmouth ...                              | 30.00 | 32     | N                    | 1        | cf  | 29.99                                   | -08         | 42   | 41                                      | +16    | SSW                  | 2        | bcf               | 2           | 42             | 24                        | -    |
| GERMANY & HOLLAND.  | Cuxhaven ...                              | 30.10 | 26     | SSW                  | 2        | m   | 30.09                                   | -05         | 20   | 28                                      | +6     | WSW                  | 2        | f                 | *           | ?              | 22                        | -    |
|                     | Berlin ...                                | *     | *      | *                    | *        | *   | 30.30                                   | +02         | 28   | 27                                      | +7     | E                    | 1        | bc                | *           | 32             | 21                        | -    |
|                     | Wiesbaden ...                             | *     | *      | *                    | *        | *   | 30.30                                   | +02         | 28   | 27                                      | +7     | E                    | 1        | bc                | *           | 32             | 21                        | -    |
|                     | Munich ...                                | 30.35 | 22     | Z                    | 0        | o   | 30.38                                   | +06         | 21   | 21                                      | +11    | SSE                  | 4        | b                 | *           | 23             | 10                        | -    |
|                     | The Helder ...                            | 30.05 | 34     | S                    | 1        | f   | 30.08                                   | 00          | 37   | 37                                      | +14    | SSW                  | 2        | f                 | 3           | 39             | 23                        | -    |
|                     | Brussels (8 a.m.)                         | *     | *      | *                    | *        | *   | 30.16                                   |             | 40   | 41                                      |        | S                    | 2        | o                 | *           | 41             | 34                        | 0.08 |
|                     | Cape Gris Nez                             | 30.02 | 39     | S                    | 2        | f   | 30.04                                   | -02         | 42   | 41                                      | +6     | S                    | 4        | f                 | 4           | 42             | 34                        | -    |
|                     | Paris ...                                 | 30.17 | 40     | S                    | 3        | o   | 30.21                                   | +11         | 39   | 39                                      | +2     | SSE                  | 2        | o                 | *           | ?              | 37                        | 0.12 |
|                     | Brest ...                                 | ?     | 51     | W                    | 1        | o   | ?                                       | ?           | 51   | 48                                      | +6     | SW                   | 5        | o                 | 5           | 52             | 41                        | -    |
|                     | Lorient ...                               | 30.05 | 49     | SW                   | 3        | o   | 30.00                                   |             | 51   | 47                                      |        | S                    | 4        | o                 | 4           | 52             | 43                        | -    |
| FRANCE AND BELGIUM. | Rochefort ...                             | 30.17 | 46     | S                    | 2        | o   | 30.11                                   | +08         | 38   | 37                                      | -3     | SSE                  | 3        | b                 | *           | 50             | 36                        | -    |
|                     | Belfort ...                               | ?     | 34     | NE                   | 1        | b   | ?                                       | ?           | 34   | ?                                       |        | ?                    | ?        | b                 | *           | 39             | 27                        | -    |
|                     | Lyons ...                                 | *     | *      | *                    | *        | *   | *                                       | *           | *    | *                                       | *      | *                    | *        | *                 | *           | *              | *                         | -    |
|                     | Nice ...                                  | 30.42 | 44     | E                    | 1        | t   | 30.37                                   |             | 45   | 44                                      |        | E                    | 3        | t                 | 3           | 50             | 39                        | 0.75 |
|                     | Perpignan ...                             | 30.28 | 44     | Z                    | 0        | o   | 30.20                                   | -02         | 42   | 41                                      | +5     | SW                   | 1        | o                 | *           | 52             | 37                        | -    |
|                     | Biarritz ...                              | 30.20 | 53     | S                    | 2        | b   | 30.16                                   | +02         | 48   | 42                                      | -3     | S                    | 3        | b                 | 2           | 57             | 43                        | -    |
|                     | Corunna ...                               | *     | *      | *                    | *        | *   | *                                       | *           | *    | *                                       | *      | *                    | *        | *                 | *           | *              | *                         | -    |
|                     | Lisbon ...                                | 30.28 | 49     | N                    | 1        | b   | 30.31                                   | +12         | 42   | 42                                      | -5     | NNE                  | 1        | f                 | *           | 52             | 41                        | 0.16 |
|                     |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |
|                     |   |       |        |                      |          |   |   |             |      |   |        |                      |          |                   |             |                |                           |      |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Saturday, 26<sup>th</sup> Dec<sup>r</sup>. 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; →→ = forces 8 to 10;

→→ = forces 5 to 7; → = forces 1 to 4.

⊙ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

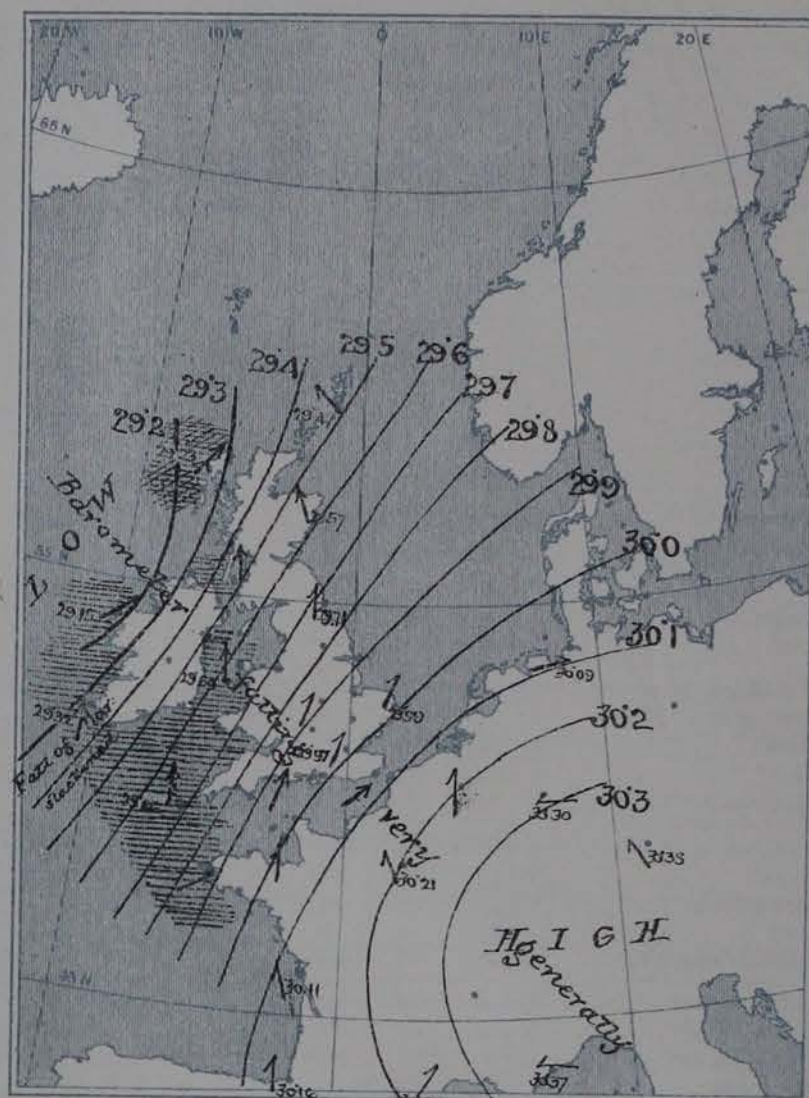
≡ = Rough. ≡ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.          | TEMPERATURE.  |               |           |      | RAINFALL.<br>(Inches.) |
|--------------------|---------------|---------------|-----------|------|------------------------|
|                    | Daily<br>Max. | Daily<br>Min. | at 8 a.m. |      |                        |
|                    |               |               | Dry.      | Wet. |                        |
| Sumburgh Head..... | 42.6          | 35.2          | 39.6      | 38.1 | 4.26                   |
| Stornoway.....     | 43.1          | 34.2          | 39.4      | 38.5 | 5.63                   |
| Wick.....          | 42.2          | 32.7          | 38.1      | 36.8 | 3.10                   |
| Nairn.....         | 41.9          | 32.8          | 37.1      | 35.6 | 1.95                   |
| Aberdeen.....      | 41.9          | 32.6          | 36.9      | 35.2 | 3.24                   |
| Leith.....         | 41.0          | 33.7          | 38.5      | 37.0 | 1.86                   |
| Shields.....       | 42.9          | 33.9          | 38.3      | 36.9 | 2.57.                  |
| Spurn Head.....    | 42.4          | 35.3          | 38.8      | 37.7 | 2.14                   |
| York.....          | 42.3          | 32.3          | 36.4      | 35.4 | 2.28                   |
| Loughborough.....  | 42.7          | 32.2          | 36.3      | 35.4 | 2.24                   |
| Ardrossan.....     | 41.5          | 35.9          | 40.0      | 38.7 | 3.73                   |
| Mullaghmore.....   | 46.5          | 37.8          | 42.2      | 39.8 | 4.51                   |
| Donaghadee.....    | 45.8          | 36.2          | 40.2      | 39.3 | 2.84                   |
| Holyhead.....      | 46.4          | 39.1          | 42.8      | 41.1 | 3.82                   |
| Liverpool.....     | 43.5          | 35.6          | 38.8      | 37.1 | 2.59                   |
| Parsonstown.....   | 43.7          | 33.1          | 37.8      | 36.6 | 3.04                   |
| Valencia.....      | 49.7          | 40.0          | 44.6      | 42.4 | 5.99                   |
| Roche's Point..... | 47.9          | 38.9          | 42.9      | 41.5 | 4.95                   |
| Pembroke.....      | 45.8          | 40.3          | 43.0      | 42.2 | 3.99                   |
| Scilly.....        | 49.5          | 43.1          | 47.0      | 45.1 | 4.02                   |
| Prawle Point.....  | 47.0          | 38.2          | 42.5      | 41.1 | 3.78                   |
| Jersey.....        | 47.3          | 39.3          | 43.1      | 41.4 | 3.82                   |
| Hurst Castle.....  | 45.6          | 36.3          | 40.6      | 39.8 | 2.77                   |
| Dover.....         | 44.3          | 35.9          | 39.8      | 38.6 | 3.00                   |
| LONDON.....        | 44.0          | 33.9          | 37.8      | 36.7 | 2.10                   |
| Oxford.....        | 42.9          | 33.5          | 37.0      | 35.9 | 2.10                   |
| Cambridge.....     | 42.8          | 31.6          | 36.2      | 35.5 | 1.88                   |
| Yarmouth.....      | 41.9          | 33.7          | 37.9      | 37.0 | 2.66                   |

NOTE—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 in. and upwards, over Switzerland and the southern parts of France and Germany.  
 Lowest, 29.2 in. and less, in a large depression lying off our western coasts.  
 Gradients rather steep over our Islands, but slight on the Continent.  
 Barometer falling at all but the German stations;—quickly in the northwest and north of our Islands, but fall checked at Valencia del.

## TEMPERATURE

Highest, 52° at Valencia Island, 51° at Mullaghmore, Brest, and Orient, and 50° at Bally and Howland.  
 Lowest, 21° at Munich, 28° at Buxhaven and Wistoden, 34° at Belfast, 35° at Shields, and 37° at York.  
 A great rise has taken place over our Islands, the change since yesterday morning amounting to as much as 22° at Cambridge and 20° at York, Loughborough and in London.

## WIND

S<sup>3</sup> over nearly the whole of our Islands and France, strong in force on our western coasts, with a gale at Stromsøy and Mullaghmore.  
 Light from SE. or E. over the southern parts of France and Germany.

## WEATHER

Dull and rainy at most of our western stations, and showery in the south of England.  
 Still foggy in the east of England, but fine in the east of Scotland, as well as in Germany and the west of France.  
 Since yesterday morning rain has fallen in the west and south of our Islands generally, the largest amounts being 0.5 in. at Hook, and 0.4 in. at Valencia Island.

## SEA

High at Stromsøy and rough on our western coasts generally, but moderate to smooth in the south and east.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Further depressions are likely to appear off our western coasts shortly, and freshening S<sup>3</sup> winds and rain will probably set in over the eastern parts of the Kingdom.

# FORECASTS

For the 24 hours ending at NOON on 27<sup>th</sup> Dec<sup>r</sup> 1891.

| DISTRICTS. |                  | FORECASTS.   | DISTRICTS. |               | FORECASTS.  |
|------------|------------------|--|------------|---------------|---|
| † 0        | SCOTLAND NORTH   | S <sup>2</sup> winds, increasing to a gale; fair to dull and rainy. Milder.          | † 6        | SCOTLAND WEST | S <sup>3</sup> winds, strong, a gale in places; squally, rain at times. |
| † 1        | SCOTLAND EAST    |  | † 7        | ENGLAND N.W.  |   |
| 2          | ENGLAND N.E.     |  | † 8        | ENGLAND S.W.  |   |
| 3          | ENGLAND EAST     | Same as N°5  | † 9        | IRELAND NORTH | S <sup>2</sup> gales and strong winds; squally, rain at times.          |
| 4          | MIDLAND COUNTIES |  | † 10       | IRELAND SOUTH |   |
| 5          | ENGLAND SOUTH    | S <sup>2</sup> and SW <sup>2</sup> winds, freshening; milder, changeable, some rain. | WARNINGS   |               | At 7.10 pm yesterday to districts 0.1 and 6                             |

Note.—The South Cone, point downwards (↓), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.

At 7-10 pm yesterday to districts 0.1 and 6 to 10. "Hoist South Cone".



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA. | SEA |  | BAR:          | THER: |    | WIND |     | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|--|---------------|-------|----|------|-----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |  |               | D.    | W. | D.   | F.  |      |     |
| Skudesnaes ...    | 29.95 | 39    | 37 | SSE  | 6  | 0    | 3   |  | Holyhead ...  | 29.92 | 39 | 38   | SSE | 2    | 2   |
| Sumburgh Head ... | 29.75 | 44    | 42 | S    | 1  | C    | 2   |  | Valencia ...  |       |    |      |     |      |     |
| Stornoway ...     | 29.65 | 44    | 40 | SW   | 6  | C    | 6   |  | Scilly ...    |       |    |      |     |      |     |
| Aberdeen ...      |       |       |    |      |    |      |     |  | Jersey ...    | 30.05 | 47 | 43   | SSW | 3    | 3   |
| Shields ...       |       |       |    |      |    |      |     |  | Dungeness ... | 30.02 | 42 | 41   | Z   | 0    | 0   |
| Ardrossan ...     | 29.86 | 42    | 41 | NE   | 1  | 0    | 1   |  | London ...    |       |    |      |     |      |     |
| Malin Head ...    |       |       |    |      |    |      |     |  | Yarmouth ...  |       |    |      |     |      |     |
| Mullaghmore ...   |       |       |    |      |    |      |     |  | Rochefort ... | 30.12 | 47 | 45   | SSE | 3    | 2   |
| Belmullet ...     | 29.62 | 44    | 43 | SSW  | 5  | 0    | *   |  |               |       |    |      |     |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE

for 24 hours ended at 8 a.m. on Thursday 24<sup>th</sup> Dec.

Weather very foggy over England as well as at some of the German stations. Fine in most other parts of Europe, but dull in many of the central and eastern countries, with snow at Berlin. A little rain falling later in the Helides, the extreme west of Ireland and the west of Norway, and larger amounts in the south of France.

Temperature highest (1) 57° at Nemours, 55° at Malta, and 54° at Cron, Algiers and La Calle; (2) 47° at Stornoway and Valencia Island, and 46° at Belmullet and Rochefort. Lowest (1) 14° at Loughborough, 15° at York, and 16° at Oxford; (2) 13° at Munich, 16° at Lyons, and 18° at Paris; (3) 14° at St. Petersburg and 15° at Moscow; hard frost prevailing in most parts of England, and central and northern Europe. Daily maxima below the freezing point over our midland countries and below 40° in many parts of France. Thermometer exceeding 50° in the southern parts of France and Italy, and exceeding 60° in Algeria; the highest reading of all being 64° at Algiers.

Wind light from the E<sup>nd</sup> over France and the extreme south of England, moderate from the S<sup>nd</sup> in Ireland, and from the SW<sup>nd</sup> in the north of Scotland. SW<sup>ly</sup> over the greater part of Scandinavia, with a gale at Rost; light from the NW<sup>nd</sup> or N<sup>nd</sup> in Russia, and from the NE<sup>nd</sup> over Italy. Calm or variable over Central England, the Netherlands, Germany and Austria; variable also in Algeria. The important change occurring during day.

Barometer highest 30.1 in. to 30.5 in. and more in a large anticyclone covering the greater part of Europe, its central portion being located over the Netherlands, Germany, Austria, and Switzerland. Lowest 29.6 in. and less in a depression lying over the extreme north of Scandinavia; 30.0 in. and less, over the south of Spain. Barometer falling generally during day, and anticyclone becoming somewhat reduced in height.

Continental Information for yesterday not arrived.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received. The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

“ Weekly “ “ “ £1 10 0 “



# DAILY WEATHER REPORT.

for Sunday 27<sup>th</sup> December. 1891.  
Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           | YESTERDAY EVENING.               |       |        |                   |   | 8 A.M. TO DAY.                   |                                   |             |      |                                   |        |                   |   |     |   | PAST 24 HOURS. |      |                     |
|---------------------|----------------------------------|-------|--------|-------------------|---|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|--------|-------------------|---|-----|---|----------------|------|---------------------|
|                     | BAROM.                           | TEMP. | WIND.  |                   |   | BAROMETER.                       |                                   | SHADE TEMP. |      |                                   | WIND.  |                   |   |     |   | SHADE TEMP.    |      | Amount of Rainfall. |
|                     | Reading at 32° F. and Sea Level. | Dry.  | Dirac. | Force. (0 to 12.) |   | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dirac. | Force. (0 to 12.) |   |     |   | Max.           | Min. |                     |
| SCANDINAVIA.        | Haparanda ...                    | 29.72 | 30     | Z                 | 0 | 0                                | 29.84                             | + .08       | 27   | 27                                | - 4    | Z                 | 0 | 0   | * | 32             | 23   | -                   |
|                     | Hernösand ...                    | 29.84 | 26     | Z                 | 0 | 0                                | 29.87                             | + .11       | 21   | 21                                | - 5    | Z                 | 0 | 0   | * | 28             | 18   | -                   |
|                     | Stockholm ...                    | 29.92 | 35     | SW                | 2 | 0                                | 29.96                             | + .05       | 36   | 36                                | + 6    | Z                 | 0 | f   | * | 36             | 25   | -                   |
|                     | Wisby ...                        | 30.02 | 36     | SSW               | 4 | 0                                | 30.05                             | + .05       | 37   | 36                                | + 3    | SSW               | 4 | 0   | * | 37             | 32   | -                   |
|                     | Bodö ...                         | 29.68 | 41     | SSW               | 1 | 0                                | 29.65                             | - .07       | 37   | 34                                | - 3    | E                 | 2 | b   | 1 | 42             | 24   | -                   |
|                     | Christiansund                    | 29.65 | 38     | SE                | 4 | 6c                               | 29.49                             | - .18       | 38   | 36                                | - 2    | SE                | 3 | c   | 4 | ?              | 36   | -                   |
|                     | Skudesnaes ...                   | 29.73 | 44     | SSE               | 8 | r                                | 29.61                             | - .19       | 44   | 43                                | + 2    | SSE               | 8 | r   | 7 | ?              | 41   | 0.20                |
|                     | Christiania Fjord (Færder)       | 29.88 | 42     | SSW               | 5 | m                                | 29.84                             | - .01       | 41   | 41                                | + 1    | SSW               | 5 | m   | 4 | 43             | 40   | -                   |
|                     | Skagen (The Scaw)                | 29.93 | 40     | WSW               | 5 | m                                | 29.89                             | - .02       | 36   | 36                                | - 1    | SW                | 5 | m   | 2 | 40             | 34   | -                   |
|                     | Fanö ...                         | 29.99 | 39     | S                 | 4 | 0                                | 29.88                             | - .10       | 33   | 33                                | - 4    | SSE               | 4 | b   | * | 41             | 33   | -                   |
| BRITISH ISLANDS.    | Sumburgh Head                    | 29.28 | 46     | SSE               | 5 | r                                | 29.27                             | - .01       | 43   | 40                                | - 3    | W                 | 2 | 0   | 5 | 46             | 43   | 0.04                |
|                     | Stornoway ...                    | 29.06 | 49     | SW                | 8 | 0                                | 29.24                             | + .01       | 39   | 39                                | - 8    | W                 | 8 | r   | 6 | 49             | 35   | 0.20                |
|                     | Wick ...                         | 29.21 | 45     | S                 | 6 | 0                                | 29.33                             | - .16       | 37   | 36                                | - 7    | SW                | 1 | b   | 3 | 46             | 36   | -                   |
|                     | Nairn ...                        | 29.18 | 49     | SW                | 3 | 0                                | 29.35                             | - .17       | 37   | 37                                | - 7    | SW                | 2 | b   | 1 | 50             | 36   | 0.01                |
|                     | Aberdeen ...                     | 29.35 | 44     | SSW               | 6 | opq                              | 29.50                             | - .07       | 38   | 34                                | - 3    | SW                | 2 | b   | 4 | 46             | 27   | 0.03                |
|                     | Leith ...                        | 29.34 | 42     | SW                | 3 | 0                                | 29.57                             | - .00       | 39   | 37                                | - 5    | WSW               | 4 | b   | * | 49             | 38   | 0.05                |
|                     | Shields ...                      | 29.48 | 45     | SSE               | 4 | ow                               | 29.66                             | - .05       | 38   | 36                                | + 3    | SW                | 2 | bm  | 2 | 45             | 33   | 0.01                |
|                     | Spurn Head ...                   | 29.66 | 43     | S                 | 6 | op                               | 29.74                             | - .13       | 39   | 38                                | + 1    | WSW               | 4 | c   | 3 | 43             | 37   | 0.01                |
|                     | York ...                         | 29.62 | 44     | S                 | 2 | 0                                | 29.76                             | - .05       | 37   | 36                                | - 0    | W                 | 1 | b   | * | 45             | 33   | 0.07                |
|                     | Loughborough                     | 29.64 | 45     | SSW               | 5 | 0                                | 29.76                             | - .07       | 37   | 36                                | - 5    | W                 | 3 | b   | * | 48             | 37   | 0.07                |
| BRITISH ISLANDS.    | Ardrossan ...                    | 29.29 | 48     | S                 | 4 | r                                | 29.58                             | + .09       | 44   | 43                                | - 2    | SSW               | 5 | c   | 4 | 48             | 42   | 0.32                |
|                     | Malin Head ...                   | 29.21 | 45     | SSW               | 5 | cp                               | 29.37                             | + .13       | 38   | 36                                | - 10   | SSW               | 7 | bp  | 4 | 50             | 35   | 0.10                |
|                     | Mullaghmore ...                  | 29.25 | 45     | SSW               | 5 | cm                               | 29.47                             | + .24       | 40   | 38                                | - 11   | SW                | 6 | cpq | 7 | 52             | 37   | 0.12                |
|                     | Belmullet ...                    | 29.24 | 46     | SE                | 4 | 0                                | 29.41                             | + .26       | 42   | 42                                | - 6    | WSW               | 6 | opq | * | 49             | 40   | 0.09                |
|                     | Donaghadee ...                   | 29.30 | 46     | SSW               | 4 | 0                                | 29.60                             | + .11       | 36   | 35                                | - 11   | SW                | 5 | b   | 3 | 50             | 34   | 0.17                |
|                     | Liverpool (Bidston)              | 29.50 | 45     | SSE               | 4 | 0                                | 29.76                             | + .04       | 36   | 34                                | - 2    | SW                | 3 | b   | 3 | 46             | 36   | 0.07                |
|                     | Holyhead ...                     | 29.43 | 48     | S                 | 6 | rgm                              | 29.74                             | + .14       | 41   | 39                                | - 6    | WSW               | 4 | b   | 4 | 49             | 40   | 0.21                |
|                     | Parsonstown ...                  | 29.36 | 44     | SW                | 4 | b                                | 29.65                             | + .25       | 37   | 35                                | - 12   | SE                | 1 | b   | * | 50             | 33   | 0.15                |
|                     | Valencia ...                     | 29.44 | 42     | WSW               | 5 | op                               | 29.64                             | + .32       | 46   | 44                                | - 6    | S                 | 7 | bw  | 6 | 52             | 36   | 0.16                |
|                     | Roche's Point...                 | 29.43 | 45     | W                 | 3 | b                                | 29.76                             | + .32       | 46   | 44                                | - 3    | WSW               | 5 | bc  | 5 | 50             | 29   | 0.20                |
| BRITISH ISLANDS.    | Pembroke (St. Ann's Hd.)         | 29.50 | 48     | SSW               | 6 | r                                | 29.81                             | + .18       | 46   | 45                                | - 3    | WSW               | 6 | bc  | 5 | 50             | 43   | 0.34                |
|                     | Scilly ...                       | 29.57 | 49     | SW                | 5 | r                                | 29.91                             | + .25       | 46   | 43                                | - 4    | WSW               | 5 | c   | 6 | 52             | 43   | 0.30                |
|                     | Prawle Point ...                 | 29.65 | 50     | SSW               | 6 | r                                | 29.93                             | + .09       | 41   | 39                                | - 9    | W                 | 3 | bc  | 2 | 50             | 38   | 0.10                |
|                     | Jersey (St. Aubin's)             | 29.85 | 49     | S                 | 5 | rgm                              | 29.99                             | - .03       | 44   | 42                                | - 3    | WNW               | 3 | bc  | 3 | 49             | 44   | 0.23                |
|                     | Hurst Castle ...                 | 29.75 | 48     | SSW               | 8 | r                                | 29.92                             | - .04       | 42   | 41                                | - 6    | W                 | 4 | b   | 4 | 50             | 41   | 0.27                |
|                     | Dungeness ...                    | 29.89 | 47     | SW                | 7 | 0                                | 29.85                             | - .17       | 43   | 43                                | - 4    | W                 | 3 | cp  | 3 | 48             | 43   | 0.05                |
|                     | London ...                       | 29.87 | 46     | SSW               | 4 | 02                               | 29.92                             | - .05       | 38   | 37                                | - 7    | SW                | 2 | b   | * | 48             | 37   | 0.11                |
|                     | Oxford ...                       | 29.68 | 46     | SSW               | 5 | 0                                | 29.86                             | - .04       | 37   | 36                                | - 6    | WSW               | 2 | b   | * | 47             | 36   | 0.08                |
|                     | Cambridge ...                    | 29.76 | 42     | S                 | 1 | 0                                | 29.84                             | - .10       | 37   | 36                                | - 5    | SW                | 1 | b   | * | 46             | 35   | 0.04                |
|                     | Yarmouth ...                     | 29.85 | 43     | S                 | 5 | 0                                | 29.78                             | - .21       | 41   | 40                                | - 1    | WSW               | 2 | b   | 2 | 45             | 39   | 0.03                |
| GERMANY & HOLLAND.  | Cuxhaven ...                     | 30.10 | 37     | SSW               | 2 | f                                | 29.99                             | - .10       | 35   | 34                                | + 7    | SSW               | 3 | c   | * | 38             | 33   | -                   |
|                     | Berlin ...                       | 30.23 | 37     | S                 | 2 | 0                                | 30.14                             | - .21       | 33   | 32                                | + 6    | SE                | 2 | c   | * | 39             | 32   | -                   |
|                     | Wiesbaden ...                    | *     | *      | *                 | * | *                                | 30.09                             | - .21       | 34   | 33                                | + 6    | E                 | 1 | 0   | * | 36             | 28   | -                   |
|                     | Munich ...                       | 30.25 | 22     | Z                 | 0 | 0                                | 30.15                             | - .23       | 25   | 25                                | + 4    | E                 | 1 | 0   | * | 28             | 21   | -                   |
|                     | The Helder ...                   | 30.01 | 38     | S                 | 2 | f                                | 29.85                             | - .23       | 38   | 37                                | + 1    | S                 | 2 | 0   | 3 | 39             | 36   | -                   |
| FRANCE AND BELGIUM. | Brussels (9 a.m.)                | *     | *      | *                 | * | *                                | 29.91                             | - .25       | 41   | 40                                | + 1    | SSW               | 3 | r   | * | 44             | 36   | -                   |
|                     | Cape Gris Nez                    | 29.91 | 41     | S                 | 5 | c                                | 29.84                             | - .20       | 46   | 46                                | + 4    | W                 | 4 | r   | 4 | ?              | 39   | 0.16                |
|                     | Paris ...                        | 30.08 | 39     | SSE               | 2 | b                                | 29.97                             | - .24       | 39   | 39                                | - 0    | S                 | 3 | r   | * | ?              | 35   | 0.16                |
|                     | Brest ...                        | ?     | 51     | SW                | 6 | r                                | ?                                 | ?           | 48   | 42                                | - 3    | W                 | 4 | bc  | 5 | 54             | 45   | 0.59                |
|                     | Lorient ...                      | 29.81 | 51     | SSW               | 5 | r                                | 30.02                             | + .02       | 46   | 41                                | - 5    | WSW               | 2 | b   | 6 | 52             | 45   | 0.20                |
| FRANCE AND BELGIUM. | Rochefort ...                    | 30.02 | 44     | SSE               | 4 | bc                               | 30.02                             | - .09       | 47   | 46                                | + 9    | WNW               | 4 | 0   | 2 | 50             | 41   | 0.35                |
|                     | Belfort ...                      | ?     | 34     | E                 | 1 | 0                                | ?                                 | ?           | 41   | 41                                | + 7    | E                 | 1 | r   | * | ?              | ?    | -                   |
|                     | Lyons ...                        | 30.23 | 41     | NNE               | 1 | c                                | 30.13                             | - .17       | 37   | 37                                | - 4    | W                 | 1 | r   | * | 43             | 35   | 0.08                |
|                     | Nice ...                         | 30.30 | 48     | E                 | 3 | r                                | 30.18                             | - .19       | 43   | 40                                | - 2    | ESE               | 2 | r   | 4 | 48             | 43   | 1.69                |
|                     | Perpignan ...                    | 30.13 | 50     | Z                 | 0 | 0                                | 30.10                             | - .10       | 42   | 39                                | - 0    | NW                | 2 | b   | * | 58             | 37   | 0.08                |
| PENIN- SULA.        | Biarritz ...                     | 30.11 | 50     | SSW               | 3 | b                                | 30.15                             | - .01       | 52   | 48                                | + 4    | WNW               | 5 | 0   | 4 | 55             | 46   | 0.16                |
|                     | Corunna ...                      | *     | *      | *                 | * | *                                | ?                                 | ?           | 48   | 45                                | - 3    | SSW               | 4 | c   | 7 | 57             | 43   | 0.51                |
| PENIN- SULA.        | Lisbon ...                       | 30.27 | 55     | SW                | 4 | 0                                | 30.30                             | - .01       | 50   | 48                                | + 8    | NNW               | 2 | b   | 6 | 55             | 48   | 0.12                |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Sunday, 27<sup>th</sup> Dec., 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP.

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

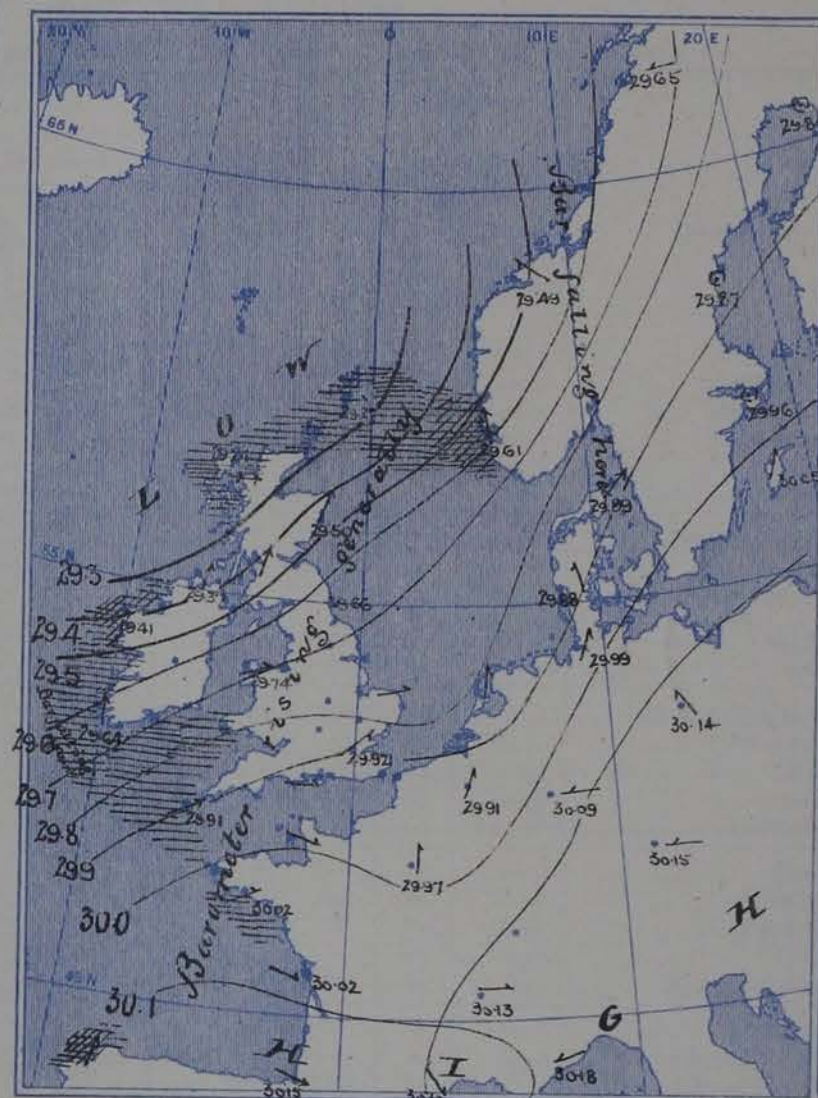
▨ = Rough, ▨ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871-1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Seilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.3 ins. and upwards, over the central and southern parts of the Spanish Peninsula.  
 Lowest, 29.3 ins. and less, in an elongated depression lying off the north and northwest of Scotland.  
 Gradients moderate in the west and north of our Islands, slight elsewhere.  
 Barometer rising over the greater part of the United Kingdom and also in the west of France, but falling elsewhere.

## TEMPERATURE

Highest, 52° at Bantry, 50° at Lisbon, 48° at Brest and Corunna, 47° at Rochefort, and 46° at Valencia Island, Rocher, Pembroke and Sully.  
 Lowest, (1) 21° at Helsingfors and (2) at Haparanda; (2) 25° at Munich, and 33° at Berlin; (3) 37° at New, Portsmouth, York, Loughborough, Oxford, Cambridge.  
 During yesterday the thermometer rose to between 45° and 50° in most parts of the United Kingdom, and to 52° at Mullaghmore, Valencia Island and Sully.

## WIND

SW<sup>1</sup> or W<sup>1</sup> in most parts of our Islands, and strong in force on our extreme west and northwest coasts, with a gale at Helsingfors, but S at Valencia Island.  
 Moderate from the W<sup>nd</sup> or NW<sup>nd</sup> in the west of France, light from the E<sup>nd</sup> or SE<sup>nd</sup> in Germany.  
 SE<sup>1</sup> or S<sup>1</sup> on the eastern shores of the North Sea, with a gale at Skudenes; calm in Sweden.

## WEATHER

Fine over the greater part of the United Kingdom, but showery in the extreme northwest.  
 Cloudy or overcast at most of the Continental stations, with rain over the central and southern parts of France, as well as at Skudenes.  
 Rain fell yesterday in most places— heavily in the south of France, as much as 1.7 ins. reported at Nice.

## SEA

Rough on our southwestern, western, and extreme northern coasts generally, and high at Mullaghmore, as well as at Corunna, moderate or slight off the east and south of our Islands.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

# FORECASTS

For the 24 hours ending at NOON on 28<sup>th</sup> Dec<sup>r</sup> 1891.

## DISTRICTS.

- † 0 SCOTLAND NORTH
- † 1 SCOTLAND EAST
- 2 ENGLAND N.E.
- 3 ENGLAND EAST
- 4 MIDLAND COUNTIES
- 5 ENGLAND SOUTH

## FORECASTS.

None issued

## DISTRICTS.

- † 6 SCOTLAND WEST
- † 7 ENGLAND N.W.
- † 8 ENGLAND S.W.
- † 9 IRELAND NORTH
- † 10 IRELAND SOUTH

## WARNINGS

## FORECASTS.

None issued

At 9.25 am. today to part of district 8. "Hoist South Cone". The signals which were hoisted in the west and north on Friday are still flying

Note.—The South Cone, point downwards (†), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
 The North Cone, point upwards (†), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA.  | SEA |               | BAR:  | THER: |    | WIND |    | WEA.  | SEA |
|-------------------|-------|-------|----|------|----|-------|-----|---------------|-------|-------|----|------|----|-------|-----|
|                   |       | D.    | W. | D.   | F. |       |     |               |       | D.    | W. | D.   | F. |       |     |
| Skudesnaes ...    | 29.78 | 43    | 42 | SSE  | 4  | 0     | 4   | Holyhead ...  | 29.45 | 48    | 48 | S    | 6  | r mgy | 5   |
| Sumburgh Head ... | 29.35 | 45    | 44 | SSE  | 4  | 0     | 5   | Valencia ...  | 29.34 | 49    | 47 | SW   | 5  | cm    | 5   |
| Stornoway ...     | 29.12 | 48    | 48 | SW   | 8  | r     | 6   | Scilly ...    | 29.57 | 52    | 52 | S    | 6  | r     | 5   |
| Aberdeen ...      | 29.43 | 43    | 41 | SSE  | 7  | og pu | 5   | Jersey ...    | 29.88 | 49    | 48 | SSE  | 5  | 0     | 4   |
| Shields ...       | 29.56 | 41    | 40 | SSE  | 4  | 0     | 2   | Dungeness ... | 29.74 | 47    | 46 | SW   | 6  | bcw   | 5   |
| Ardrossan ...     | 29.33 | 48    | 47 | S    | 6  | r     | 6   | London ...    | 29.86 | 48    | 46 | S    | 3  | bc    | 8   |
| Malin Head ...    | 29.16 | 48    | 46 | S    | 5  | 0     | 3   | Yarmouth ...  | 29.91 | 45    | 44 | SSW  | 4  | cg    | 4   |
| Mullaghmore ...   | 29.19 | 49    | 47 | SSW  | 6  | og    | 5   | Rochefort ... | 30.06 | 49    | 46 | SSE  | 3  | b     | 4   |
| Belmullet ...     | 29.20 | 48    | 45 | WSW  | 4  | 0     | *   |               |       |       |    |      |    |       |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning fair and quiet over eastern, southern, and Central Europe, but more or less unsettled over the western and northwestern countries, especially over the British Islands, but clear at several of the French stations, fog over the Netherlands, and in some northern parts of France. Some rain at times in all parts of our Islands later, large falls in the south of France, and a considerable quantity in the north of Italy.

Temperature risen rapidly over the British Islands, and considerably in the north of France; frost completely broken over the United Kingdom. Morning readings exceeding 50° at most Mediterranean stations, as well as at Lorient, Brest, and Valencia Island, and exceeding 40° almost all over the British Islands. Lowest 6° at Hermannstadt, 13° at Odessa, 15° at Nicolaioff and Kio, and below 30° over central Europe and Russia generally. Rising to 50° in many parts of our Islands later to nearly 60° in the south of France, and to more than 60° in the south of Italy, but not reaching 40° over Germany.

Wind light and anticyclonic over nearly the whole of the Continent, but SW<sup>2</sup> to S<sup>2</sup> moderate over Scandinavia, and S<sup>2</sup>, fresh to a gale over the British Islands; E<sup>2</sup>, moderate in the south of France. Moderating in Ireland later, but increasing in strength over England, the North Sea and Norway, and blowing a moderate gale at some of our Channel stations.

Barometer highest (1) 30.6 in: and more to 30.4 in: in anticyclone lying over southern and many parts of Central Europe; (2) 30.3 in: over Algeria and the southern half of Spain. Lowest 29.1 in: and less, in a depression off our northwestern coasts; gradients rather steep over the United Kingdom. Rising in Ireland, falling over Great Britain and Western Europe later, as the low pressure area in the northwest "surged" eastwards and travelled north-eastwards.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 8 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ „ 21 10 0 „



# DAILY WEATHER REPORT.

for Monday, 28<sup>th</sup> December, 1891.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.                   | YESTERDAY EVENING.               |       |       |                  |          | 8 A.M. TO DAY.                   |                                   |             |      |                                   |       |                  |                |             |      | PAST 24 HOURS.      |      |  |
|-----------------------------|----------------------------------|-------|-------|------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|------------------|----------------|-------------|------|---------------------|------|--|
|                             | Barom.                           | Temp. | Wind. |                  | Weather. | Barometer.                       |                                   | Shade Temp. |      |                                   | Wind. |                  | Sea. (0 to 1.) | Shade Temp. |      | Amount of Rainfall. |      |  |
|                             | Reading at 32° F. and Sea Level. | Dry.  | Dir.  | Force (0 to 12.) |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dir.  | Force (0 to 12.) |                | Max.        | Min. |                     |      |  |
| SCANDINAVIA.                |                                  |       |       |                  |          |                                  |                                   |             |      |                                   |       |                  |                |             |      |                     |      |  |
| Haparanda ...               | 29.93                            | 30    | Z     | 0                | 0        | 29.97                            | + 13                              | 28          | 27   | + 1                               | Z     | 0                | 0              | *           | 32   | 27                  | -    |  |
| Hernösand ...               | 29.92                            | 24    | Z     | 0                | 0        | 29.85                            | - 02                              | 31          | 31   | + 10                              | Z     | 0                | 0              | *           | 32   | 16                  | 0.04 |  |
| Stockholm ...               | 30.01                            | 36    | Z     | 0                | 0        | 30.01                            | + 05                              | 34          | 34   | - 2                               | Z     | 0                | 0              | *           | 37   | 32                  | -    |  |
| Wisby ...                   | 30.04                            | 39    | S     | 4                | 0        | 30.06                            | + 01                              | 36          | 35   | - 1                               | SSE   | 4                | bc             | *           | 39   | 32                  | -    |  |
| Bodö ...                    | 29.57                            | 36    | E     | 2                | 6        | 29.73                            | + 08                              | 37          | 33   | 0                                 | E     | 2                | 0              | 1           | 37   | 32                  | -    |  |
| Christiansund               | 29.63                            | 44    | SW    | 2                | 0        | 29.68                            | + 19                              | 38          | 35   | 0                                 | ESE   | 2                | c              | 4           | 45   | 37                  | -    |  |
| Skudesnaes ...              | 29.76                            | 43    | SSE   | 2                | 6        | 29.78                            | + 17                              | 41          | 39   | - 3                               | SE    | 6                | bc             | 4           | 45   | 39                  | 0.20 |  |
| Christiania Fjord (Fjorder) | 29.83                            | 41    | S     | 3                | 7        | 29.83                            | - 01                              | 42          | 41   | + 1                               | WNW   | 3                | c              | 3           | 43   | 41                  | -    |  |
| Skagen (The Scaw)           | 29.82                            | 40    | SSW   | 6                | 7        | 29.89                            | + 00                              | 37          | 36   | + 1                               | W     | 1                | m              | 0           | 39   | 36                  | 0.04 |  |
| Fanö ...                    | 29.89                            | 40    | SW    | 2                | 0        | 29.95                            | + 07                              | 37          | 36   | + 4                               | SW    | 2                | bc             | *           | 41   | 33                  | -    |  |
| Sumburgh Head               | 29.41                            | 42    | S     | 4                | c        | 29.43                            | + 16                              | 43          | 41   | 0                                 | SSW   | 1                | 0              | 3           | 44   | 40                  | -    |  |
| Stornoway ...               | 29.27                            | 41    | W     | 6                | 0        | 29.41                            | + 17                              | 37          | 37   | - 2                               | W     | 4                | bc             | 4           | 43   | 32                  | 0.15 |  |
| Wick ...                    | 29.43                            | 43    | SW    | 3                | bc       | 29.46                            | + 13                              | 37          | 36   | 0                                 | SW    | 2                | bc             | 1           | 44   | 34                  | -    |  |
| Nairn ...                   | 29.37                            | 42    | SW    | 3                | c        | 29.49                            | + 14                              | 35          | 34   | - 3                               | Z     | 0                | bc             | 1           | 44   | 32                  | 0.01 |  |
| Aberdeen ...                | 29.55                            | 41    | S     | 6                | bc       | 29.57                            | + 07                              | 35          | 34   | - 3                               | SSW   | 2                | bc             | 4           | 43   | 35                  | -    |  |
| Leith ...                   | 29.59                            | 40    | SSW   | 4                | b        | 29.60                            | + 03                              | 37          | 36   | - 2                               | W     | 2                | b              | *           | 44   | 35                  | 0.05 |  |
| Shields ...                 | 29.74                            | 42    | SSW   | 5                | b        | 29.63                            | - 03                              | 37          | 36   | - 1                               | SW    | 2                | c              | 2           | 43   | 34                  | -    |  |
| Spurn Head ...              | 29.89                            | 38    | SSW   | 3                | b        | 29.71                            | - 03                              | 38          | 37   | - 1                               | SSW   | 4                | c              | 3           | 41   | 36                  | 0.06 |  |
| York ...                    | 29.83                            | 37    | SSW   | 2                | b        | 29.72                            | - 04                              | 36          | 36   | - 1                               | WSW   | 1                | b              | *           | 42   | 32                  | 0.02 |  |
| Loughborough                | 29.87                            | 38    | SE    | 3                | b        | 29.74                            | - 02                              | 38          | 37   | + 1                               | WSW   | 3                | bc             | *           | 45   | 36                  | 0.06 |  |
| BRITISH ISLANDS.            |                                  |       |       |                  |          |                                  |                                   |             |      |                                   |       |                  |                |             |      |                     |      |  |
| Ardrossan ...               | 29.51                            | 46    | S     | 7                | 7        | 29.60                            | + 02                              | 40          | 39   | - 4                               | SW    | 6                | bc             | 5           | 46   | 39                  | 0.09 |  |
| Malin Head ...              | 29.42                            | 39    | SSW   | 5                | b        | 29.56                            | + 19                              | 37          | 35   | - 1                               | SSW   | 4                | bph            | 4           | 41   | 34                  | 0.05 |  |
| Mullaghmore ...             | 29.48                            | 39    | SW    | 5                | ogyl     | 29.60                            | + 13                              | 38          | 37   | - 2                               | SW    | 5                | bc             | 7           | 41   | 35                  | 0.49 |  |
| Belmullet ...               | 29.48                            | 43    | SW    | 6                | 0        | 29.60                            | + 19                              | 42          | 41   | - 1                               | SW    | 2                | 0              | *           | 44   | 38                  | 0.20 |  |
| Donaghadee ...              | 29.56                            | 44    | WSW   | 6                | 7        | 29.66                            | + 06                              | 32          | 32   | - 4                               | SSW   | 2                | b              | 1           | 44   | 31                  | 0.11 |  |
| Liverpool (Bilston)         | 29.78                            | 39    | SSE   | 3                | c        | 29.75                            | - 01                              | 37          | 35   | + 1                               | SW    | 3                | bc             | 3           | 44   | 36                  | 0.11 |  |
| Holyhead ...                | 29.70                            | 47    | SW    | 5                | cogyl    | 29.74                            | + 00                              | 40          | 39   | - 1                               | WSW   | 4                | cpm            | 4           | 48   | 39                  | 0.58 |  |
| Parsonstown ...             | 29.58                            | 39    | Z     | 0                | b        | 29.72                            | + 07                              | 35          | 34   | - 2                               | Z     | 0                | bc             | *           | 45   | 33                  | 0.06 |  |
| Valencia ...                | 29.63                            | 43    | W     | 4                | bc       | 29.77                            | + 13                              | 46          | 45   | 0                                 | WSW   | 2                | 0              | 4           | 48   | 39                  | 0.39 |  |
| Roche's Point ...           | 29.65                            | 43    | SW    | 4                | p        | 29.78                            | + 02                              | 42          | 41   | - 4                               | W     | 3                | c              | 4           | 48   | 38                  | 0.55 |  |
| Pembroke (St. Ann's Id.)    | 29.74                            | 47    | SSW   | 5                | c        | 29.80                            | - 01                              | 46          | 45   | 0                                 | W     | 5                | bc             | 5           | 48   | 41                  | 0.19 |  |
| Scilly ...                  | 29.82                            | 49    | S     | 6                | 0        | 29.89                            | - 02                              | 49          | 47   | + 3                               | WSW   | 5                | c              | 6           | 50   | 43                  | 0.09 |  |
| Prawle Point ...            | 29.93                            | 46    | SSW   | 5                | b        | 29.89                            | - 04                              | 45          | 43   | + 4                               | WSW   | 4                | bc             | 3           | 48   | 40                  | 0.26 |  |
| Jersey (St. Aubin's)        | 30.08                            | 47    | SSE   | 3                | b        | 29.97                            | - 02                              | 48          | 46   | + 4                               | SW    | 4                | cp             | 3           | 50   | 43                  | 0.09 |  |
| Hurst Castle ...            | 29.99                            | 45    | SSW   | 4                | c        | 29.90                            | - 02                              | 41          | 40   | - 1                               | WNW   | 7                | c              | 3           | 48   | 40                  | 0.44 |  |
| Dungeness ...               | 30.02                            | 42    | WNW   | 3                | bc       | 29.86                            | + 01                              | 44          | 44   | + 1                               | SW    | 7                | pu             | 5           | 46   | 40                  | 0.14 |  |
| London ...                  | 29.99                            | 38    | WSW   | 2                | b        | 29.84                            | - 08                              | 39          | 38   | + 1                               | W     | 3                | b              | *           | 44   | 37                  | 0.10 |  |
| Oxford ...                  | 29.94                            | 38    | S     | 2                | b        | 29.84                            | - 02                              | 37          | 36   | 0                                 | SW    | 2                | bc             | *           | 44   | 36                  | 0.23 |  |
| Cambridge ...               | 29.94                            | 37    | SW    | 1                | b        | 29.82                            | - 02                              | 36          | 35   | - 1                               | SW    | 1                | c              | *           | 43   | 32                  | 0.04 |  |
| Yarmouth ...                | 29.95                            | 37    | SW    | 2                | b        | 29.80                            | + 02                              | 41          | 40   | 0                                 | SW    | 4                | c              | 3           | 42   | 33                  | 0.08 |  |
| GERMANY & HOLLAND.          |                                  |       |       |                  |          |                                  |                                   |             |      |                                   |       |                  |                |             |      |                     |      |  |
| Cuxhaven ...                | 29.96                            | 40    | SSW   | 2                | 7        | 30.04                            | + 05                              | 37          | 36   | + 2                               | SW    | 2                | f              | *           | 41   | 35                  | 0.06 |  |
| Berlin ...                  | 30.08                            | 35    | SE    | 3                | 0        | 30.08                            | - 06                              | 36          | 35   | + 3                               | Z     | 0                | f              | *           | 37   | 33                  | 0.04 |  |
| Wiesbaden ...               | "                                | "     | "     | "                | "        | "                                | "                                 | 34          | 33   | 0                                 | NE    | 1                | 0              | *           | 37   | 32                  | -    |  |
| Munich ...                  | 30.12                            | 28    | Z     | 0                | 0        | 30.17                            | + 02                              | 34          | 34   | + 9                               | ESE   | 5                | f              | *           | 34   | 25                  | 0.16 |  |
| The Helder ...              | 30.02                            | 39    | WSW   | 1                | b        | 29.99                            | + 14                              | 32          | 32   | - 6                               | ESE   | 2                | f              | 2           | 41   | 32                  | 0.12 |  |
| FRANCE AND BELGIUM.         |                                  |       |       |                  |          |                                  |                                   |             |      |                                   |       |                  |                |             |      |                     |      |  |
| Brussels (9 a.m.)           | "                                | "     | "     | "                | "        | 30.04                            | + 13                              | 34          | 33   | - 7                               | SSE   | 3                | b              | *           | 41   | 32                  | 0.12 |  |
| Cape Gris Nez               | 30.02                            | 43    | WSW   | 4                | bc       | 29.90                            | + 06                              | 40          | 40   | - 6                               | SSW   | 5                | f              | 5           | 48   | 36                  | 0.20 |  |
| Paris ...                   | 30.15                            | 36    | SSW   | 2                | b        | 30.10                            | + 13                              | 35          | 34   | - 4                               | S     | 3                | bc             | *           | 43   | 31                  | 0.16 |  |
| Brest ...                   | "                                | 49    | W     | 4                | c        | "                                | "                                 | 47          | 45   | - 1                               | WNW   | 4                | c              | 5           | 52   | 45                  | 0.20 |  |
| Lorient ...                 | 30.08                            | 46    | SSW   | 3                | b        | 30.02                            | - 00                              | 49          | 45   | + 3                               | WSW   | 3                | 0              | 6           | 52   | 45                  | 0.24 |  |
| Rochefort ...               | 30.21                            | 46    | S     | 4                | 7        | 30.12                            | + 10                              | 48          | "    | + 1                               | WSW   | 5                | f              | 2           | 50   | 47                  | 0.28 |  |
| Belfort ...                 | "                                | 48    | W     | 1                | 7        | "                                | "                                 | 34          | "    | - 7                               | W     | 1                | 0              | *           | 48   | 34                  | 0.16 |  |
| Lyons ...                   | 30.23                            | 41    | N     | 1                | 0        | 30.32                            | + 19                              | 32          | 32   | - 5                               | W     | 1                | b              | *           | 42   | 32                  | 0.20 |  |
| Nice ...                    | 30.23                            | 45    | Z     | 0                | c        | 30.15                            | - 03                              | 45          | 40   | + 2                               | NE    | 2                | bc             | 2           | 46   | 39                  | 0.24 |  |
| Perpignan ...               | 30.28                            | 51    | NW    | 3                | 0        | 30.33                            | + 23                              | 36          | 36   | - 6                               | W     | 2                | b              | *           | 55   | 35                  | -    |  |
| Biarritz ...                | 30.28                            | 51    | WNW   | 4                | 0        | 30.24                            | + 09                              | 50          | 43   | - 2                               | SW    | 3                | 0              | 6           | 54   | 45                  | 0.08 |  |
| GENUINE SUEZ.               |                                  |       |       |                  |          |                                  |                                   |             |      |                                   |       |                  |                |             |      |                     |      |  |
| Corunna ...                 | "                                | "     | "     | "                | "        | "                                | "                                 | "           | "    | "                                 | "     | "                | "              | "           | "    | "                   | "    |  |
| Lisbon ...                  | 30.41                            | 51    | NW    | 2                | b        | 30.45                            | + 15                              | 46          | 42   | - 4                               | Z     | 0                | b              | 6           | 55   | 45                  | -    |  |

For Explanation of Columns, see bottom of p. 1.

\* Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Monday, 28<sup>th</sup> December, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ forces above 10; → forces 8 to 10;

→ forces 5 to 7; → forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

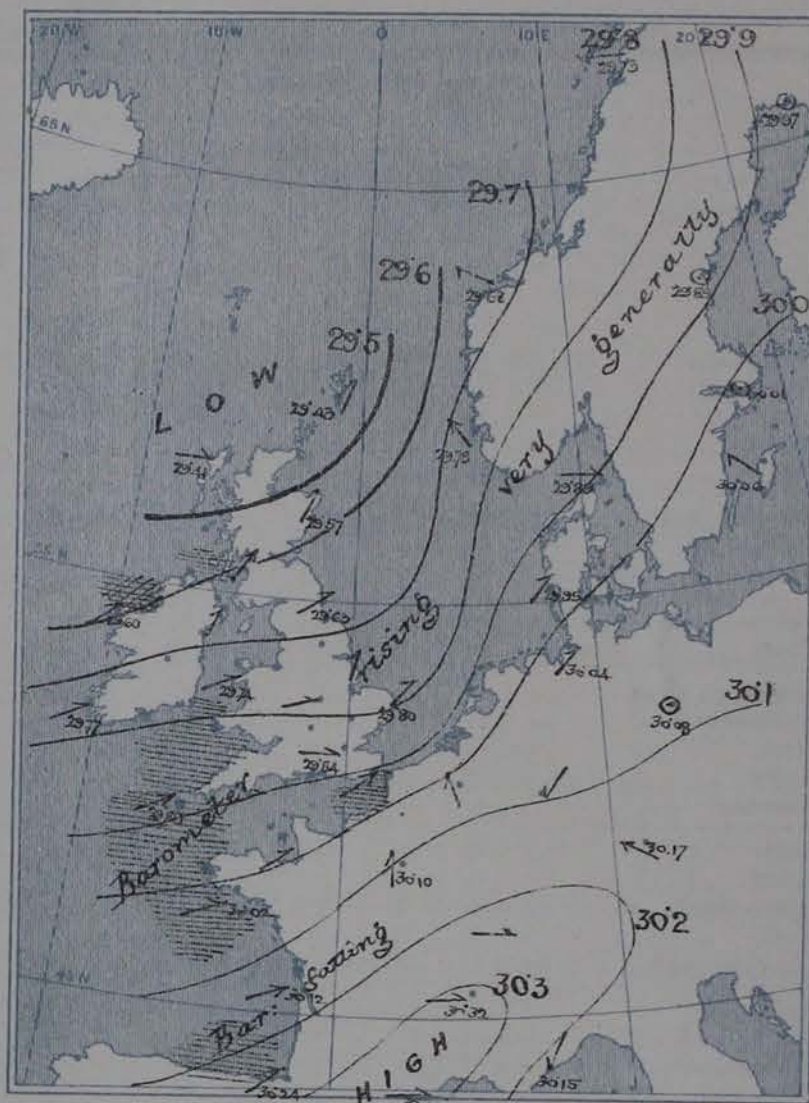
≡ = Rough, ≡ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Silly         | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.935         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.          | TEMPERATURE.  |               |           |      | RAINFALL.<br>(Inches.) |
|--------------------|---------------|---------------|-----------|------|------------------------|
|                    | Daily<br>MAX. | Daily<br>Min. | At 8 a.m. |      |                        |
|                    |               |               | Dry.      | Wet. |                        |
| Sumburgh Head..... | 42.6          | 35.2          | 39.6      | 38.1 | 4.25                   |
| Stornoway.....     | 43.1          | 34.2          | 39.4      | 38.5 | 5.63                   |
| Wick.....          | 42.2          | 32.7          | 38.1      | 36.8 | 3.10                   |
| Nairn.....         | 41.9          | 32.8          | 37.1      | 35.6 | 1.95                   |
| Aberdeen.....      | 41.9          | 32.6          | 36.9      | 35.2 | 3.24                   |
| Leith.....         | 44.0          | 33.7          | 38.5      | 37.0 | 1.86                   |
| Shields.....       | 42.9          | 33.9          | 38.3      | 36.9 | 2.57                   |
| Spurn Head.....    | 42.4          | 35.3          | 38.8      | 37.7 | 2.14                   |
| York.....          | 42.3          | 32.3          | 36.4      | 35.4 | 2.28                   |
| Loughborough.....  | 42.7          | 32.2          | 36.3      | 35.4 | 2.24                   |
| Ardrossan.....     | 44.5          | 35.9          | 40.0      | 38.7 | 3.73                   |
| Mullaghmore.....   | 46.5          | 37.8          | 42.2      | 39.8 | 4.51                   |
| Donaghadee.....    | 45.8          | 36.2          | 40.2      | 39.3 | 2.84                   |
| Holyhead.....      | 46.4          | 39.1          | 42.8      | 41.1 | 3.82                   |
| Liverpool.....     | 43.5          | 35.6          | 38.8      | 37.1 | 2.59                   |
| Parsonstown.....   | 44.7          | 33.1          | 37.8      | 36.6 | 3.04                   |
| Valencia.....      | 49.7          | 40.0          | 44.6      | 42.4 | 5.99                   |
| Roche's Point..... | 47.9          | 38.9          | 42.9      | 41.5 | 4.95                   |
| Pembroke.....      | 43.8          | 40.3          | 43.6      | 42.2 | 3.99                   |
| Silly.....         | 49.5          | 43.4          | 47.0      | 45.1 | 4.02                   |
| Prawle Point.....  | 47.0          | 38.2          | 42.5      | 41.1 | 3.76                   |
| Jersey.....        | 47.3          | 39.3          | 43.1      | 41.4 | 3.82                   |
| Hurst Castle.....  | 45.6          | 36.3          | 40.6      | 39.8 | 2.77                   |
| Dover.....         | 44.3          | 35.9          | 39.8      | 38.6 | 3.00                   |
| LONDON.....        | 44.0          | 35.9          | 37.8      | 36.7 | 2.10                   |
| Oxford.....        | 42.9          | 33.5          | 37.0      | 35.9 | 2.10                   |
| Cambridge.....     | 42.8          | 31.6          | 36.2      | 35.5 | 1.88                   |
| Yarmouth.....      | 41.9          | 33.7          | 37.9      | 37.0 | 2.66                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

|             |   |
|-------------|---|
| PRESSURE    | <p>Highest, 30.4 ins. and upwards, in the south of Portugal.</p> <p>Lowest, 29.4 ins. and less, in a depression lying off the north of Scotland.</p> <p>Gradients slight. <u>Barometer</u> rising generally, but falling a little over France, the Netherlands, and the east of England.</p>  |
| TEMPERATURE | <p>Highest, 50° at Biarritz, 49° at Bells, and 48° at Jersey and Rochefort, and 46° at Pembroke and Lisbon.</p> <p>Lowest, 28° at Haparanda, 31° at Helsingfors, 32° at Donaghadee and the Hebrides, and 34° at Brussels and Stockholm.</p> <p>Slight frost occurred last night in many parts of the United Kingdom.</p>  |
| WIND        | <p>Moderate from the SW<sup>nd</sup> over the greater part of the United Kingdom, but strong over the eastern parts of the Channel.</p> <p>SE<sup>ly</sup> or E<sup>ly</sup> in the west of Norway; calm in Sweden; light and variable in Germany.</p>  |
| WEATHER     | <p>Fine at present over the greater part of our Islands, as well as over the central and southern part of France, but showery at one or two of our eastern stations.</p> <p>Dull in Scandinavia, Germany, and the west of France, with rain at Munich and Rochefort.</p> <p>Since yesterday, rain has fallen generally, the largest amounts being 0.6 in. at Rochefort and Holyhead, and 0.5 in. at Mullaghmore.</p> <p>Thunder and lightning occurred last night at several of our western stations.</p> |
| SEA         | <p>High at Mullaghmore and rough or rather so on many parts of our western and southern coasts.</p>   |


## PROBABLE CHANGES IN SYSTEM NOW PREVALENT


The barometer is at present rising in the west, but the change is not at all decided, and it seems probable that further depressions will shortly approach our southwestern coasts.

## FORECASTS

For the 24 hours ending at NOON on 29<sup>th</sup> DEC<sup>r</sup>, 1891.

| DISTRICTS.         | FORECASTS.   | DISTRICTS.       | FORECASTS.  |
|--------------------|--|------------------|---|
| 0 SCOTLAND NORTH   | SW <sup>ly</sup> to S <sup>ly</sup> winds, fine to unsettled and some cold showers.    | 6 SCOTLAND WEST  | SW <sup>ly</sup> to S <sup>ly</sup> winds, fresh; unsettled, some cold showers. |
| 1 SCOTLAND EAST    |  | 7 ENGLAND N.W.   |   |
| 2 ENGLAND N.E.     |  | 8 ENGLAND S.W.   |   |
| 3 ENGLAND EAST     | Same as N° 5   | 9 IRELAND NORTH  |   |
| 4 MIDLAND COUNTIES |  | 10 IRELAND SOUTH |   |
| 5 ENGLAND SOUTH    | SW <sup>ly</sup> winds, moderate or fresh; fair generally, but cold showers in places. | WARNINGS         | At 10.30 am to part of district 8. "Lower Cone".                                |

Note.—The South Cone, point downwards (  ), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.

The North Cone, point upwards (  ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR.  | THER. |    | WIND |    | WEA. | SEA |               | BAR.  | THER. |    | WIND |    | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|---------------|-------|-------|----|------|----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |               |       | D.    | W. | D.   | F. |      |     |
| Skudesnaes ...    | 29.64 | 45    | 45 | S    | 6  | T    | 6   | Holyhead ...  | 29.73 | 47    | 43 | SW   | 5  | bcq  | 5   |
| Sumburgh Head ... |       |       |    |      |    |      |     | Valencia ...  |       |       |    |      |    |      |     |
| Stornoway ...     | 29.25 | 41    | 40 | W    | 7  | T    | 6   | Scilly ...    |       |       |    |      |    |      |     |
| Aberdeen ...      |       |       |    |      |    |      |     | Jersey ...    | 30.05 | 49    | 43 | NSW  | 3  | 6    | 3   |
| Shields ...       |       |       |    |      |    |      |     | Dungeness ... | 29.97 | 46    | 44 | W    | 3  | 6c   | 3   |
| Ardrossan ...     |       |       |    |      |    |      |     | London ...    |       |       |    |      |    |      | 8   |
| Malin Head ...    | 29.40 | 39    | 38 | SSW  | 7  | 0    | 5   | Yarmouth ...  |       |       |    |      |    |      |     |
| Mullaghmore ...   |       |       |    |      |    |      |     | Rocheport ... | 30.15 | 47    | 45 | W    | 2  | 0    | 2   |
| Belmullet ...     | 29.43 | 43    | 41 | SSW  | 6  | 0    | *   |               |       |       |    |      |    |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather in morning fine and bright over Austria, Hungary, in Algeria, the west of France and the greater part of the British Islands dull elsewhere and unsettled over the western and northwestern countries; rain falling in many parts of France, the northwest of Ireland, the Shetlands and south of Norway, snow at St. Petersburg. Rain at some part of ensuing 24 hours in all parts of France, England and Ireland, thunder and lightning at several western and northern stations, but weather in London fine and bright till after midnight.

Temperature fell a little over our Islands. Morning readings exceeding 50° over the Mediterranean only, exceeding 40° on the Atlantic coast of France and the British Islands and over the Adriatic, lower elsewhere. Lowest of all (1) 25° at Munich, (2) 11° at Hermannstadt and Nicolaieff, 14° at Odessa, 19° at Kiev, 23° at Warsaw, 24° at Moscow; (3) 21° at Helsingfors, 27° at Haparanda and Archangel. Rising later to between 45° and 50° in many parts of our Islands and west of Norway and to between 50° and 56° in the west and south of France.

Wind light and variable over the southwestern and southern parts of Europe, SW? over Austria and southern Russia; mainly SW? (S to W) over northwestern and northern Europe, but of more brisk force, and blowing a moderate gale at some of our extreme western stations. Freshening from SW? over England later, but moderating in Ireland and veering W?.

Barometer Highest (1) 30.5 ins. and more to 30.3 ins. over southeastern Europe; (2) 30.3 ins. and more over Algeria and Spain; and exceeding 30.1 ins. in the south of France. Lowest 29.3 ins. and less in an elongated depression lying to the northward and westward of Scotland; gradient slight in south and east. Rising slightly over Scotland and Ireland later but falling over England as a secondary disturbance approached our southwest coast.

## SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD. FROM THE 20<sup>TH</sup> TO 26<sup>TH</sup> DEC. 1891.

During the greater part of last week a large anticyclone extended over our Islands from the Continent. In Ireland and Scotland the wind was mostly light from the S.W? or S.W? and the weather fine and mild but over England and especially in the inland districts calms and light variable airs were reported with hard frosts and with thick fogs, the weather being particularly dark and gloomy in London. On the nights of the 20<sup>th</sup> to 24<sup>th</sup> the minimum temperatures over the central parts of the country were mostly below 20°, while in the daytime the thermometer frequently remained several degrees below the freezing point. The lowest readings at present reported are 12° at Loughborough, 13° at York, 14° at Cambridge, and 16° at Oxford; in London the thermometer fell to 19° on the night of the 21<sup>st</sup> and to 20° on the night of the 24<sup>th</sup>.

On the 25<sup>th</sup> and 26<sup>th</sup> the barometer fell steadily but it was not until the 25<sup>th</sup> that any change took place in the relative distribution of pressure. On the last mentioned date the barometric fall became considerable in the west and at night a large depression passed along our extreme western coasts in a northerly direction occasioning slight S? gales in many places with heavy rain in some parts of Ireland. The S? wind quickly extended over the whole Kingdom and a rapid rise of temperature occurred generally, the 8 a.m. readings of the 26<sup>th</sup> being in many cases as much as 20° higher than those of the previous morning. Early on the 25<sup>th</sup> a little rain and sleet fell in London and produced the unusual and striking phenomenon known as "glazed frost", the entire district being covered with a thin sheet of ice.

## EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1

WEATHER.—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received.  
The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for Tuesday 29<sup>th</sup> December.

1891.

Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           | YESTERDAY EVENING.               |       |       |                   |          |     | 8 A.M. TO DAY.                   |                                   |             |      |                                   |       |                   |          |                |             | PAST 24 HOURS. |                     |  |
|---------------------|----------------------------------|-------|-------|-------------------|----------|-----|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|----------------|-------------|----------------|---------------------|--|
|                     | BAROM.                           | TEMP. | WIND. |                   | Weather. |     | BAROMETER.                       |                                   | SHADE TEMP. |      |                                   | WIND. |                   | Weather. | Sea. (0 to 9.) | SHADE TEMP. |                | Amount of Rainfall. |  |
|                     | Reading at 32° F. and Sea Level. | Dry.  | Dir.  | Force. (0 to 12.) |          |     | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dir.  | Force. (0 to 12.) |          |                | Max.        | Min.           |                     |  |
| SCANDINAVIA.        | Haparanda ...                    | 29.52 | 31    | SW                | 2        | 0   | 29.53                            | -0.14                             | 34          | 34   | +6                                | SW    | 4                 | 7        | *              | ?           | 25             | 0.01                |  |
|                     | Hernösand ...                    | 29.53 | 35    | S                 | 2        | C   | 29.56                            | +0.01                             | 32          | 31   | +1                                | S     | 2                 | 6        | *              | 36          | 19             | —                   |  |
|                     | Stockholm ...                    | 30.01 | 37    | S                 | 2        | 7   | 29.95                            | -0.06                             | 33          | 33   | +3                                | SE    | 2                 | 7        | *              | 39          | 32             | 0.04                |  |
|                     | Wisby ...                        | 30.05 | 37    | SE                | 4        | 0   | 29.98                            | -0.07                             | 33          | 36   | +2                                | S     | 4                 | 0        | *              | 39          | 32             | —                   |  |
|                     | Bodö ...                         | 29.63 | 33    | E                 | 2        | C   | 29.58                            | -0.05                             | 33          | 31   | -4                                | E     | 4                 | 6        | 2              | 39          | 30             | —                   |  |
|                     | Christiansund ...                | 29.56 | 35    | S                 | 4        | 6   | 29.55                            | -0.01                             | 42          | 36   | +4                                | SE    | 7                 | C        | 4              | 43          | 37             | —                   |  |
|                     | Skudesnaes ...                   | 29.67 | 42    | SE                | 8        | 0   | 29.24                            | -0.43                             | 41          | 35   | 0                                 | SE    | 7                 | 7        | 8              | 43          | 35             | 0.12                |  |
|                     | Christiania Fjord (Færd)         | 29.89 | 40    | SE                | 2        | 6   | 29.65                            | -0.24                             | 40          | 38   | -2                                | S     | 6                 | 0        | 4              | 41          | 36             | —                   |  |
|                     | Skagen (The Seaw)                | 29.85 | 36    | SW                | 4        | f   | ?                                | ?                                 | 35          | 37   | +2                                | SW    | 6                 | 0        | 4              | ?           | 34             | —                   |  |
|                     | Fanö ...                         | 29.87 | 35    | S                 | 6        | 0   | 29.71                            | -0.16                             | 36          | 36   | -1                                | SE    | 6                 | 0        | *              | 39          | 34             | —                   |  |
| BRITISH ISLANDS.    | Sumburgh Head                    | 29.37 | 40    | SE                | 3        | 6C  | 29.84                            | -0.47                             | 41          | 35   | -2                                | W     | 6                 | 7        | 6              | 45          | 38             | 0.54                |  |
|                     | Stornoway ...                    | 29.26 | 43    | SW                | 8        | 7   | 29.53                            | -0.27                             | 35          | 35   | +2                                | W     | 8                 | 7        | 7              | 48          | 35             | 0.86                |  |
|                     | Wick ...                         | 29.35 | 38    | S                 | 5        | 0   | 29.56                            | -0.21                             | 38          | 37   | +1                                | W     | 5                 | 6C       | 4              | 44          | 35             | 0.35                |  |
|                     | Nairn ...                        | 29.33 | 41    | SW                | 4        | 0   | 29.01                            | -0.32                             | 36          | 36   | +1                                | SW    | 3                 | C        | 2              | 46          | 29             | 0.19                |  |
|                     | Aberdeen ...                     | 29.51 | 35    | SW                | 3        | 6   | 29.12                            | -0.39                             | 38          | 36   | +2                                | SW    | 3                 | 6C       | 4              | 45          | 35             | 0.03                |  |
|                     | Leith ...                        | 29.54 | 36    | W                 | 4        | 7   | 29.23                            | -0.31                             | 40          | 38   | +2                                | W     | 5                 | 0        | *              | 51          | 34             | 0.20                |  |
|                     | Shields ...                      | 29.61 | 37    | SW                | 2        | C   | 29.27                            | -0.34                             | 45          | 41   | +4                                | W     | 5                 | C        | 2              | 50          | 33             | 0.01                |  |
|                     | Spurn Head ...                   | 29.81 | 37    | SW                | 4        | 6C  | 29.47                            | -0.34                             | 46          | 45   | +1                                | W     | 5                 | C        | 4              | 47          | 35             | 0.08                |  |
|                     | York ...                         | 29.78 | 37    | W                 | 1        | 6   | 29.46                            | -0.32                             | 42          | 42   | +6                                | W     | 2                 | 6        | *              | 50          | 32             | 0.05                |  |
|                     | Loughborough                     | 29.80 | 36    | W                 | 1        | 6   | 29.50                            | -0.30                             | 49          | 47   | +2                                | W     | 5                 | C        | *              | 49          | 35             | 0.17                |  |
| BRITISH ISLANDS.    | Ardrossan ...                    | 29.50 | 44    | S                 | 4        | 7   | 29.26                            | -0.24                             | 43          | 42   | +1                                | W     | 7                 | 0        | 6              | 48          | 40             | 0.53                |  |
|                     | Malin Head ...                   | 29.25 | 41    | S                 | 6        | 07  | 29.20                            | -0.05                             | 44          | 43   | +1                                | W     | 6                 | 6C       | 5              | 49          | 32             | 0.24                |  |
|                     | Mullaghmore ...                  | 29.35 | 48    | SW                | 7        | 79  | 29.38                            | -0.03                             | 45          | 41   | +4                                | W     | 7                 | 6C       | 7              | 51          | 37             | 0.21                |  |
|                     | Belmullet ...                    | 29.33 | 45    | SW                | 7        | 0   | 29.37                            | -0.04                             | 45          | 42   | +3                                | W     | 9                 | 6C       | *              | 51          | 40             | 0.45                |  |
|                     | Donaghadee ...                   | 29.33 | 43    | SW                | 4        | 7   | 29.37                            | -0.04                             | 42          | 41   | +1                                | SW    | 5                 | 6        | 3              | 45          | 32             | 0.22                |  |
|                     | Liverpool (Bidston)              | 29.75 | 38    | SE                | 2        | C   | 29.50                            | -0.25                             | 46          | 42   | +4                                | W     | 7                 | 0        | 5              | 51          | 36             | 0.22                |  |
|                     | Holyhead ...                     | 29.62 | 46    | SW                | 4        | 79  | 29.52                            | -0.10                             | 47          | 44   | +3                                | W     | 3                 | C        | 5              | 51          | 40             | 0.47                |  |
|                     | Parsonstown ...                  | 29.53 | 49    | SW                | 2        | 0   | 29.55                            | -0.02                             | 45          | 42   | +3                                | SW    | 2                 | C        | *              | 52          | 34             | 0.16                |  |
|                     | Valencia ...                     | 29.61 | 51    | SW                | 7        | 0mg | 29.67                            | -0.06                             | 49          | 46   | +3                                | W     | 5                 | 6C       | 5              | 52          | 46             | 0.09                |  |
|                     | Roche's Point...                 | 29.61 | 50    | SW                | 5        | 0g  | 29.64                            | -0.03                             | 48          | 46   | +2                                | W     | 4                 | C        | 4              | 50          | 42             | 0.15                |  |
| BRITISH ISLANDS.    | Pembroke (St. Ann's Hd.)         | 29.79 | 45    | SW                | 5        | 7   | 29.66                            | -0.13                             | 50          | 49   | +1                                | W     | 6                 | 0g       | 6              | 51          | 45             | 0.05                |  |
|                     | Scilly ...                       | 29.85 | 51    | SW                | 4        | 6C  | 29.83                            | -0.02                             | 52          | 52   | +0                                | W     | 5                 | C        | 5              | 52          | 47             | 0.02                |  |
|                     | Prawle Point ...                 | 29.53 | 48    | W                 | 4        | C   | 29.78                            | -0.25                             | 50          | 50   | +0                                | SW    | 6                 | 6C       | 5              | 50          | 43             | 0.09                |  |
|                     | Jersey (St. Aubin's)             | 30.04 | 48    | W                 | 4        | mg  | 29.50                            | -0.54                             | 52          | 51   | +1                                | W     | 5                 | 0dm      | 4              | 52          | 46             | 0.15                |  |
|                     | Hurst Castle ...                 | 29.93 | 45    | W                 | 4        | 0f  | 29.76                            | -0.17                             | 49          | 49   | +0                                | W     | 7                 | 0mdf     | 3              | 50          | 41             | 0.02                |  |
|                     | Dungeness ...                    | 29.94 | 44    | W                 | 4        | 0   | 29.70                            | -0.24                             | 49          | 49   | +0                                | SW    | 7                 | 79       | 5              | 49          | 42             | 0.06                |  |
|                     | London ...                       | 29.92 | 41    | SW                | 1        | 0m  | 29.68                            | -0.24                             | 51          | 50   | +1                                | S     | 2                 | 0        | *              | 51          | 38             | 0.05                |  |
|                     | Oxford ...                       | 29.88 | 38    | SW                | 2        | 0   | 29.65                            | -0.23                             | 50          | 48   | +2                                | SW    | 4                 | C        | *              | 51          | 36             | 0.02                |  |
|                     | Cambridge ...                    | 29.85 | 33    | SW                | 1        | 6C  | 29.60                            | -0.25                             | 50          | 49   | +1                                | SW    | 3                 | 0        | *              | 51          | 32             | 0.11                |  |
|                     | Yarmouth ...                     | 29.86 | 37    | SW                | 2        | 6C  | 29.57                            | -0.29                             | 47          | 46   | +1                                | SW    | 5                 | 0g       | 4              | 47          | 34             | 0.10                |  |
| GERMANY & HOLLAND.  | Cuxhaven ...                     | 30.01 | 36    | S                 | 2        | f   | 29.88                            | -0.13                             | 36          | 35   | -1                                | SW    | 3                 | 0        | *              | 38          | 35             | —                   |  |
|                     | Berlin ...                       | 30.11 | 36    | W                 | 2        | 0   | 30.03                            | -0.08                             | 32          | 31   | -1                                | W     | 2                 | 0        | *              | 39          | 28             | 0.16                |  |
|                     | Wiesbaden ...                    | 30.22 | 35    | W                 | 2        | 6   | 30.04                            | -0.18                             | 35          | 34   | +1                                | SW    | 2                 | 0        | *              | 39          | 32             | 0.24                |  |
|                     | Munich ...                       | 30.22 | 35    | W                 | 2        | 6   | 30.16                            | -0.06                             | 32          | 32   | -2                                | S     | 5                 | 8        | *              | 36          | 28             | 0.12                |  |
|                     | The Helder ...                   | 29.93 | 36    | SW                | 1        | 6   | 29.66                            | -0.27                             | 39          | 39   | +0                                | SW    | 4                 | 7        | 3              | 39          | 32             | 0.20                |  |
| FRANCE AND BELGIUM. | Brussels (9 a.m.)                | ?     | ?     | ?                 | ?        | ?   | 29.85                            | -0.15                             | 42          | 42   | +0                                | SW    | 5                 | 7        | *              | 42          | 34             | 0.21                |  |
|                     | Cape Gris Nez                    | 29.94 | 45    | W                 | 5        | C   | 29.77                            | -0.17                             | 47          | 47   | +0                                | SW    | 6                 | 7        | 5              | 47          | 39             | 0.35                |  |
|                     | Paris ...                        | 30.12 | 39    | S                 | 3        | 0   | 30.01                            | -0.11                             | 44          | 43   | +1                                | SW    | 4                 | 0        | *              | ?           | ?              | 0.16                |  |
|                     | Brest ...                        | ?     | 51    | W                 | 3        | C   | ?                                | ?                                 | 51          | 51   | +4                                | W     | 4                 | 0        | 5              | 52          | 46             | —                   |  |
|                     | Lorient ...                      | 30.09 | 50    | W                 | 3        | 6C  | 30.01                            | -0.08                             | 51          | 50   | +1                                | W     | 4                 | 7        | 5              | 51          | 48             | 0.24                |  |
| FRANCE AND BELGIUM. | Rocheport ...                    | 30.21 | 45    | W                 | 4        | 7   | 30.13                            | -0.08                             | 51          | 50   | +1                                | SW    | 6                 | 7        | *              | 52          | 40             | 0.20                |  |
|                     | Belfort ...                      | ?     | 35    | W                 | 1        | 7   | ?                                | ?                                 | 38          | 34   | +4                                | W     | 1                 | 0        | *              | 41          | 36             | 0.12                |  |
|                     | Lyons ...                        | 30.31 | 38    | W                 | 1        | 0   | 30.32                            | 0.01                              | 38          | 36   | +2                                | S     | 1                 | 6C       | *              | 41          | 32             | —                   |  |
|                     | Nice ...                         | 30.20 | 46    | E                 | 1        | 6   | 30.24                            | +0.04                             | 40          | 35   | -5                                | E     | 1                 | 6C       | 1              | 55          | 39             | —                   |  |
|                     | Perpignan ...                    | 30.23 | 42    | SW                | 2        | 6   | ?                                | ?                                 | 37          | 34   | +3                                | ?     | ?                 | 6        | *              | 56          | 35             | —                   |  |
|                     | Biarritz ...                     | 30.32 | 54    | W                 | 3        | 0   | 30.33                            | +0.01                             | 54          | 49   | +5                                | SW    | 3                 | 0        | 7              | 57          | 46             | —                   |  |
| PENIN. ISLANDS.     | Corunna ...                      | 30.45 | 38    | W                 | 2        | 6C  | 30.57                            | +0.12                             | 44          | 44   | -2                                | N     | 2                 | C        | 6              | 55          | 44             | —                   |  |
|                     | Lisbon ...                       | 30.45 | 38    | W                 | 2        | 6C  | 30.57                            | +0.12                             | 44          | 44   | -2                                | N     | 2                 | C        | 6              | 55          | 44             | —                   |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Tuesday, 29<sup>th</sup> Dec<sup>r</sup>, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows show the prevalent winds. They fly with the wind and

their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shown thus:

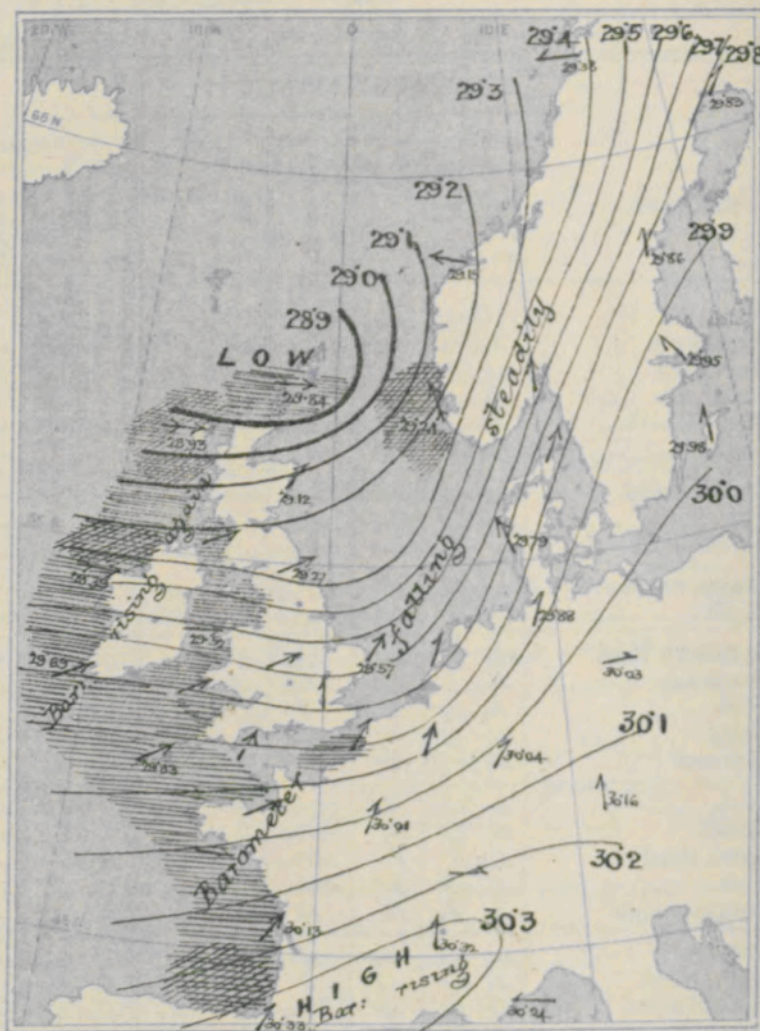
▨ = Rough. ▨ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Seilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.934         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

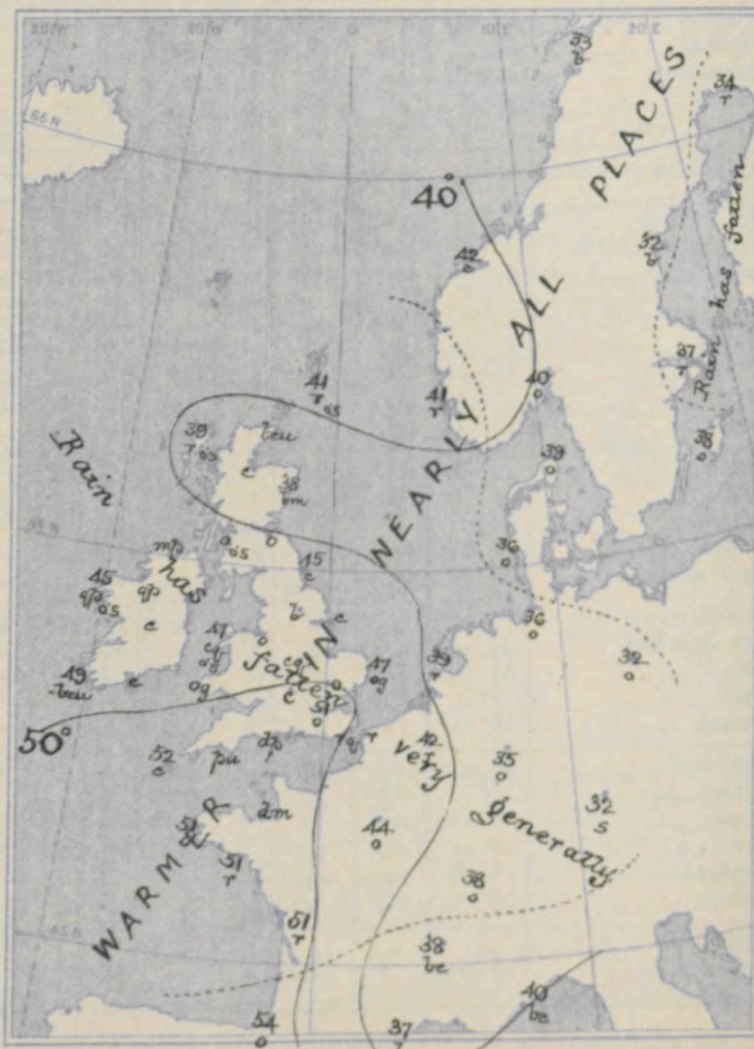
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.           | TEMPERATURE. |       |           |      | RAINFALL<br>(Inches.) |
|---------------------|--------------|-------|-----------|------|-----------------------|
|                     | Daily        | Daily | at 8 a.m. |      |                       |
|                     | Max.         | Min.  | Dry.      | Wet. |                       |
| Sumburgh Head.....  | 42.6         | 35.2  | 39.6      | 38.1 | 4.25                  |
| Stornoway .....     | 43.1         | 34.2  | 39.4      | 38.5 | 5.83                  |
| Wick .....          | 42.2         | 32.7  | 38.1      | 36.8 | 3.10                  |
| Nairn .....         | 41.9         | 32.8  | 37.1      | 35.6 | 1.95                  |
| Aberdeen .....      | 41.9         | 32.6  | 36.9      | 35.2 | 3.24                  |
| Leith .....         | 41.0         | 33.7  | 38.5      | 37.0 | 1.86                  |
| Shields .....       | 42.9         | 33.9  | 38.3      | 36.9 | 2.57                  |
| Spurn Head .....    | 42.4         | 35.3  | 38.8      | 37.7 | 2.14                  |
| York .....          | 42.3         | 32.3  | 38.4      | 35.4 | 2.28                  |
| Loughborough .....  | 42.7         | 32.2  | 38.3      | 35.4 | 2.24                  |
| Ardrossan .....     | 44.5         | 35.9  | 40.0      | 38.7 | 3.73                  |
| Mullaghmore .....   | 46.5         | 37.8  | 42.2      | 39.8 | 4.51                  |
| Donaghadee.....     | 45.8         | 36.2  | 40.2      | 39.3 | 2.84                  |
| Holyhead.....       | 46.4         | 39.1  | 42.8      | 41.1 | 3.82                  |
| Liverpool .....     | 43.5         | 35.6  | 38.8      | 37.1 | 2.59                  |
| Parsonstown .....   | 44.7         | 33.1  | 37.8      | 36.6 | 3.04                  |
| Valencia .....      | 49.7         | 40.0  | 44.6      | 42.4 | 5.99                  |
| Roche's Point ..... | 47.9         | 38.9  | 42.9      | 41.5 | 4.95                  |
| Pembroke.....       | 43.8         | 40.3  | 43.0      | 42.2 | 3.99                  |
| Seilly .....        | 49.5         | 43.1  | 47.0      | 45.1 | 4.02                  |
| Prawle Point .....  | 47.0         | 38.2  | 42.5      | 41.1 | 3.73                  |
| Jersey .....        | 47.3         | 39.3  | 43.1      | 41.4 | 3.82                  |
| Hurst Castle .....  | 45.6         | 36.3  | 40.6      | 39.8 | 2.77                  |
| Dover .....         | 44.3         | 35.9  | 39.8      | 38.6 | 3.00                  |
| LONDON .....        | 44.0         | 33.9  | 37.8      | 36.7 | 2.10                  |
| Oxford .....        | 42.9         | 33.5  | 37.0      | 35.9 | 2.10                  |
| Cambridge .....     | 42.8         | 31.6  | 36.2      | 35.5 | 1.88                  |
| Yarmouth .....      | 41.9         | 33.7  | 37.9      | 37.0 | 2.66                  |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.5 in: and upwards, over the southern part of the Spanish Peninsula.  
Lowest, 28.9 in: and less, in a depression, the centre of which lies off the north of Scotland.  
Gradients steep over Scandinavia and the North Sea, and rather steep over our islands, but slight over France and Germany.  
Barometer rising again at many of the Irish and Scotch stations, but falling in most other parts of Western Europe.

## TEMPERATURE

Highest, 54° at Biarritz, 52° at Scilly and Jersey, and 51° in London, and at Brest, Lorient, and Rochefort.  
Lowest, 32° at Helsingfors, Berlin, and Munich, 33° at Riga, 34° at Haparanda, 35° at Norrbotten, and 36° at Leno, Copenhague, and Narvik.  
A considerable rise has taken place over Ireland and England, and a slight rise in Scotland.

## WIND

Fresh or strong from the W<sup>nd</sup> or SW<sup>nd</sup> over the greater part of the United Kingdom, with a gale at Stromøy and Belmullet, light or moderate from the same quarters in France.  
Strong to a gale from the S<sup>nd</sup> or SE<sup>nd</sup> on the eastern shores of the North Sea.  
A strong gale from the S<sup>nd</sup> was experienced last night in the north and east of Scotland.

## WEATHER

Squally and showery over the greater part of Western Europe, as well as in Scandinavia;  
Raining over the Netherlands and west of France; dull in Germany, with snow at Munich; fine in the south of France.  
Since yesterday morning rain has fallen in all parts of the United Kingdom, the largest amounts being 0.9 in: at Stromøy, and 0.5 in: at Edinburgh H<sup>t</sup>, Anderson, Belmullet, and Holyhead.

## SEA

Very high at Helsingfors, high at Stromøy, Mullaghmore, and Binniz, and rough or rather so on nearly all the more exposed parts of our coast.

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off the north of Scotland will probably travel away to the northeastward, but fresh disturbances are likely to appear in the west shortly.

# FORECASTS

For the 24 hours ending at NOON on 30<sup>th</sup> December. 1891.

| DISTRICTS. |                      | FORECASTS.  |          | DISTRICTS.         |  | FORECASTS.   |  |
|------------|----------------------|---|----------|--------------------|--|--|--|
| †          | 0 { SCOTLAND NORTH   | W <sup>½</sup> to SW <sup>¾</sup> strong winds and gales; squally, rain at times.                             |          | †                  | 6 { SCOTLAND WEST  | } W <sup>½</sup> to SW <sup>¾</sup> winds, strong, a gale in places; squally, showery. |  |
| †          | 1 { SCOTLAND EAST    | } W <sup>½</sup> and SW <sup>¾</sup> winds, varying in force, strong at times; fair to squally and some rain. | †        | 7 { ENGLAND N.W.   |  |  |  |
| †          | 2 { ENGLAND N.E.     |   | †        | 8 { ENGLAND S.W.   |  |  |  |
| †          | 3 { ENGLAND EAST     | } W <sup>½</sup> and SW <sup>¾</sup> winds, strong, perhaps a gale; squally, some showers.                    | †        | 9 { IRELAND NORTH  | } W <sup>½</sup> to SW <sup>¾</sup> or S <sup>½</sup> winds, strong to a gale; squally, some rain. |  |  |
|            | 4 { MIDLAND COUNTIES |   | †        | 10 { IRELAND SOUTH |  |  |  |
| †          | 5 { ENGLAND SOUTH    |   | WARNINGS |                    | Orders were issued at 7.30 pm yesterday  |  |  |

Note.—The South Cone, point downwards (⌈), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
The North Cone, point upwards (⌋), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   |       | THER: |    | WIND |    |      |     |               |     | THER: |    | WIND |    |    |      |     |  |
|-------------------|-------|-------|----|------|----|------|-----|---------------|-----|-------|----|------|----|----|------|-----|--|
|                   | BAR:  | D.    | W. | D.   | F. | WEA. | SEA |               |     | BAR:  | D. | W.   | D. | F. | WEA. | SEA |  |
| Skudesnaes ...    | 29.76 | 42    | 40 | SE   | 7  | c    | 5   | Holyhead ...  | ... | 29.77 | 44 | 42   | SW | 4  | c    | 4   |  |
| Sumburgh Head ... | 29.46 | 41    | 38 | SW   | 7  | b    | 3   | Valencia ...  | ... | 29.71 | 55 | 45   | SW | 6  | om   | 5   |  |
| Stornoway ...     | 29.38 | 39    | 35 | SW   | 3  | o    | 3   | Scilly ...    | ... | 29.81 | 52 | 53   | W  | 5  | c    | 5   |  |
| Aberdeen ...      | 29.59 | 37    | 35 | SW   | 3  | bm   | 4   | Jersey ...    | ... | 30.01 | 53 | 47   | W  | 5  | c    | 4   |  |
| Shields ...       | 29.71 | 41    | 38 | SW   | 3  | c    | 2   | Dungenees ... | ... | 29.82 | 46 | 44   | W  | 5  | c    | 5   |  |
| Ardrossan ...     | 29.60 | 43    | 42 | SW   | 4  | o    | 3   | London ...    | ... | 29.81 | 45 | 42   | W  | 2  | b    | *   |  |
| Malin Head ...    | 29.53 | 39    | 38 | S    | 5  | o    | 4   | Yarmouth ...  | ... | 29.82 | 41 | 39   | W  | 3  | bc   | 3   |  |
| Mullaghmore ...   | 29.55 | 44    | 42 | SW   | 5  | 70 g | 6   | Rocheport ... | ... | 30.17 | 51 | 49   | W  | 3  | o    | *   |  |
| Belmullet ...     | 29.49 | 47    | 46 | SW   | 5  | 7    | *   |               |     |       |    |      |    |    |      |     |  |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather fine over the greater part of the United Kingdom, but showery on some parts of our northwest coast, fine also at most of the French, Spanish, Italian and Algerian stations. Dull over northern, central, and eastern Europe, with fog over North Germany, and with rain over South Germany and many parts of Austria. Dull rainy weather subsequently spreading from the W<sup>nd</sup> over the whole of the United Kingdom; amount of rainfall large in the extreme north and northwest.

Temperature highest 59° at Malta, 54° at Algiers and Cagliari, and 53° at Florence and Serina; varying between 45° and 50° in the west of France and the extreme southwest of our Islands. Lowest 21° at Odessa and Nicolaiiff, 26° at Uleaborg, and 28° at Haparanda and Kuopio; below the freezing point over Russia and South Germany and just touching that point at Donaghadee, Lyons and Madrid. Frost taking place in early part of night in some eastern parts of Great Britain, but thermometer afterwards rising quickly.

Wind moderate from the SW<sup>nd</sup> over the greater part of the United Kingdom and France, but strong at some of the Channel stations; light to fresh from the southeastward in the west of Norway. Calm or light and variable over the greater part of Sweden, Russia, and central Europe, and Italy, but chiefly SE<sup>3</sup> over the Baltic. Variable also in Spain; chiefly S<sup>2</sup> or SE<sup>1</sup> in Algeria. Subsequently backing to the SW<sup>nd</sup> in all the more western and northern parts of our Islands, and increasing to a moderate gale in Ireland and to a strong gale in Scotland.

Barometer highest 30.4 ins. to 30.5 ins. or rather more in an anticyclone lying over the Iberian Peninsula; 30.3 ins. and upwards, over the southern parts of Russia. Lowest 29.4 ins. and less, in a shallow depression lying off the north of Scotland. New and much deeper disturbance advancing later to our extreme northwest coasts, and barometer falling quickly in Ireland and Scotland.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received. The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Wednesday 30<sup>th</sup> December.* 1891.  
 Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS.           |                          | YESTERDAY EVENING.               |       |       |                   |          | 8 A.M. TO DAY.                   |                                   |             |      |                                   |       |                   |                |             |      | PAST 24 HOURS.      |  |  |
|---------------------|--------------------------|----------------------------------|-------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------------|-------------|------|---------------------|--|--|
|                     |                          | BAROM.                           | TEMP. | WIND. |                   | Weather. | BAROMETER.                       |                                   | SHADE TEMP. |      |                                   | WIND. |                   | Sea. (0 to 9.) | SHADE TEMP. |      | Amount of Rainfall. |  |  |
|                     |                          | Reading at 32° F. and Sea Level. | Dry.  | Dir.  | Force. (0 to 12.) |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dir.  | Force. (0 to 12.) |                | Max.        | Min. |                     |  |  |
| SCANDINAVIA.        | Haparanda ...            | 29.83                            | 32    | SEW   | 4                 | 0        | 29.75                            | -0.08                             | 31          | 31   | SE                                | 4     | 0                 | *              | 34          | 31   | —                   |  |  |
|                     | Hernösand ...            | 29.68                            | 36    | S     | 6                 | 0        | 29.58                            | -0.10                             | 36          | 36   | S                                 | 4     | 0                 | *              | 37          | 27   | 0.12                |  |  |
|                     | Stockholm ...            | 29.68                            | 37    | SE    | 2                 | 0        | 29.52                            | -0.16                             | 37          | 35   | SE                                | 2     | 0                 | *              | 39          | 34   | —                   |  |  |
|                     | Wisby ...                | 29.71                            | 37    | SESE  | 4                 | 7        | 29.49                            | -0.22                             | 38          | 34   | SESE                              | 6     | 8                 | *              | 39          | 32   | 0.04                |  |  |
|                     | Bodö ...                 | 29.29                            | 37    | E     | 4                 | 6        | 29.27                            | -0.02                             | 40          | 35   | SESE                              | 6     | 0                 | 3              | 39          | 30   | —                   |  |  |
|                     | Christiansund            | 29.10                            | 44    | SE    | 4                 | 6c       | 29.11                            | -0.04                             | 40          | 35   | SE                                | 3     | 6                 | 4              | 45          | 39   | —                   |  |  |
|                     | Skudesnaes ...           | 29.19                            | 42    | WSEW  | 2                 | 6c       | 29.27                            | +0.08                             | 41          | 38   | WSEW                              | 5     | C                 | 5              | 45          | 39   | 0.59                |  |  |
|                     | Christiania Fjord (Færd) | 29.27                            | 41    | S     | 6                 | 0        | 29.32                            | -0.05                             | 35          | 35   | WSEW                              | 3     | F                 | 4              | 41          | 34   | —                   |  |  |
|                     | Skagen (The Scaw)        | 29.31                            | 39    | SEW   | 7                 | 0        | 29.35                            | ?                                 | 35          | 36   | W                                 | 2     | 7                 | 2              | 39          | 34   | 0.24                |  |  |
|                     | Fanö ...                 | 29.41                            | 40    | W     | 4                 | C        | 29.48                            | -0.07                             | 38          | 37   | WSEW                              | 4     | C                 | *              | 41          | 36   | 0.32                |  |  |
| BRITISH ISLANDS.    | Sumburgh Head            | 29.54                            | 33    | W     | 5                 | 0        | 29.03                            | +0.51                             | 40          | 37   | W                                 | 4     | C                 | 5              | 44          | 38   | 0.47                |  |  |
|                     | Stornoway ...            | 29.02                            | 36    | W     | 7                 | SE       | 29.15                            | +0.13                             | 35          | 35   | W                                 | 4     | C                 | 4              | 39          | 32   | 0.10                |  |  |
|                     | Wick ...                 | 29.07                            | 36    | W     | 4                 | 6c       | 29.19                            | +0.12                             | 35          | 34   | W                                 | 4     | 0                 | 3              | 39          | 33   | 0.15                |  |  |
|                     | Nairn ...                | 29.13                            | 35    | W     | 2                 | 5        | 29.23                            | +0.10                             | 37          | 36   | W                                 | 1     | 0                 | 1              | 39          | 33   | 0.35                |  |  |
|                     | Aberdeen ...             | 29.23                            | 36    | W     | 3                 | 6        | 29.32                            | +0.09                             | 37          | 35   | W                                 | 4     | C                 | 3              | 41          | 34   | —                   |  |  |
|                     | Leith ...                | 29.34                            | 35    | WSEW  | 5                 | 7        | 29.40                            | +0.06                             | 40          | 39   | WSEW                              | 3     | C                 | *              | 41          | 34   | 0.40                |  |  |
|                     | Shields ...              | 29.40                            | 41    | WSEW  | 4                 | 6c       | 29.48                            | +0.08                             | 39          | 37   | S                                 | 3     | C                 | 2              | 46          | 37   | —                   |  |  |
|                     | Spurn Head ...           | 29.44                            | 42    | WSEW  | 5                 | C        | 29.62                            | +0.18                             | 39          | 38   | SEW                               | 4     | 0                 | 3              | 45          | 37   | 0.02                |  |  |
|                     | York ...                 | 29.46                            | 40    | W     | 3                 | 6        | 29.53                            | +0.07                             | 40          | 39   | E                                 | 1     | 0                 | *              | 47          | 36   | 0.10                |  |  |
|                     | Loughborough             | 29.61                            | 43    | W     | 4                 | 6        | 29.65                            | +0.04                             | 43          | 41   | W                                 | 1     | 0m                | *              | 50          | 39   | 0.01                |  |  |
| GERMANY & HOLLAND.  | Ardrossan ...            | 29.45                            | 41    | W     | 7                 | SE       | 29.42                            | +0.03                             | 43          | 43   | WSEW                              | 4     | 0                 | 4              | 45          | 38   | 0.30                |  |  |
|                     | Malin Head ...           | 29.25                            | 38    | W     | 7                 | SE       | 29.38                            | +0.13                             | 43          | 41   | W                                 | 4     | 0                 | 3              | 44          | 36   | 0.17                |  |  |
|                     | Mullaghmore ...          | 29.48                            | 40    | W     | 7                 | SE       | 29.45                            | +0.03                             | 43          | 41   | W                                 | 4     | 0m                | 7              | 46          | 40   | 0.01                |  |  |
|                     | Belmullet ...            | 29.51                            | 40    | WSEW  | 8                 | SE       | 29.43                            | +0.08                             | 43          | 42   | W                                 | 5     | 0                 | *              | 46          | 41   | 0.14                |  |  |
|                     | Donaghadee ...           | 29.50                            | 39    | W     | 6                 | 7        | 29.51                            | +0.01                             | 41          | 40   | S                                 | 3     | 6c                | 2              | 43          | 39   | 0.03                |  |  |
|                     | Liverpool (Bidston)      | 29.58                            | 44    | WSEW  | 6                 | C        | 29.63                            | +0.05                             | 43          | 41   | W                                 | 3     | 0                 | 3              | 47          | 42   | 0.02                |  |  |
|                     | Holyhead ...             | 29.60                            | 46    | W     | 5                 | C        | 29.55                            | +0.05                             | 47          | 46   | W                                 | 4     | 0m                | 4              | 45          | 44   | 0.02                |  |  |
|                     | Parsonstown ...          | 29.62                            | 44    | W     | 5                 | 6c       | 29.54                            | +0.08                             | 44          | 43   | W                                 | 2     | 0                 | *              | 47          | 42   | 0.09                |  |  |
|                     | Valencia ...             | 29.72                            | 50    | WSEW  | 4                 | 0        | 29.51                            | +0.21                             | 51          | 51   | S                                 | 5     | 7m                | 5              | 52          | 47   | 0.11                |  |  |
|                     | Roche's Point...         | 29.71                            | 48    | W     | 4                 | C        | 29.54                            | +0.17                             | 51          | 51   | W                                 | 5     | 7                 | 5              | 51          | 46   | 0.10                |  |  |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.) | 29.88                            | 50    | W     | 6                 | m        | 29.78                            | +0.10                             | 52          | 52   | WSEW                              | 6     | m                 | ?              | 53          | 50   | 0.36                |  |  |
|                     | Scilly ...               | 29.87                            | 48    | WSEW  | 6                 | p        | 29.77                            | +0.10                             | 51          | 51   | WSEW                              | 6     | 0m                | 5              | 51          | 47   | 0.80                |  |  |
|                     | Prawle Point ...         | 29.87                            | 53    | W     | 4                 | 0        | 29.80                            | +0.07                             | 53          | 52   | W                                 | 5     | 0m                | 4              | 53          | 50   | 0.34                |  |  |
|                     | Jersey (St. Aubin's)     | 29.81                            | 48    | W     | 6                 | 6        | 29.74                            | +0.07                             | 49          | 49   | WSEW                              | 6     | 0m                | 5              | 50          | 48   | 0.10                |  |  |
|                     | Hurst Castle ...         | 29.82                            | 48    | W     | 6                 | 6        | 29.74                            | +0.08                             | 49          | 49   | WSEW                              | 6     | 0m                | 5              | 50          | 48   | 0.10                |  |  |
|                     | Dungeness ...            | 29.78                            | 47    | WSEW  | 4                 | C        | 29.75                            | +0.03                             | 47          | 47   | WSEW                              | 4     | 2                 | 4              | 49          | 46   | 0.10                |  |  |
|                     | London ...               | 29.75                            | 51    | WSEW  | 4                 | 0p       | 29.72                            | +0.03                             | 47          | 46   | W                                 | 1     | 0m                | *              | 53          | 45   | 0.06                |  |  |
|                     | Oxford ...               | 29.75                            | 47    | W     | 2                 | 0        | 29.70                            | +0.05                             | 46          | 45   | W                                 | 2     | 0m                | *              | 51          | 46   | 0.02                |  |  |
|                     | Cambridge ...            | 29.69                            | 45    | W     | 1                 | 0        | 29.70                            | +0.01                             | 46          | 40   | WSEW                              | 1     | 0                 | *              | 52          | 37   | 0.06                |  |  |
|                     | Yarmouth ...             | 29.65                            | 46    | WSEW  | 4                 | 6c       | 29.69                            | +0.04                             | 41          | 40   | W                                 | 3     | 0m                | 3              | 49          | 40   | —                   |  |  |
| PENINSULA.          | Cuxhaven ...             | 29.57                            | 40    | W     | 4                 | 7        | 29.61                            | +0.04                             | 36          | 35   | W                                 | 3     | 6                 | *              | 41          | 34   | 0.20                |  |  |
|                     | Berlin ...               | 29.70                            | 37    | W     | 3                 | 7        | 29.66                            | +0.04                             | 37          | 37   | W                                 | 3     | 0                 | *              | 37          | 32   | 0.20                |  |  |
|                     | Wiesbaden ...            | 29.75                            | 37    | W     | 3                 | 7        | 29.66                            | +0.09                             | 37          | 37   | W                                 | 3     | 0                 | *              | 37          | 32   | 0.20                |  |  |
|                     | Munich ...               | 29.85                            | 37    | W     | 3                 | 7        | 29.81                            | +0.04                             | 42          | 41   | W                                 | 6     | 7                 | *              | 48          | 39   | 0.35                |  |  |
|                     | The Helder ...           | 29.65                            | 42    | W     | 3                 | 6        | 29.69                            | +0.04                             | 42          | 41   | WSEW                              | 2     | 6                 | 3              | 48          | 39   | 0.12                |  |  |
|                     | Brussels (9 a.m.)        | 29.80                            | 41    | WSEW  | 6                 | f        | 29.78                            | +0.02                             | 45          | 45   | W                                 | 5     | 0                 | *              | 48          | 42   | 0.24                |  |  |
|                     | Cape Gris Nez            | 29.84                            | 41    | WSEW  | 6                 | f        | 29.78                            | +0.06                             | 45          | 45   | W                                 | 4     | 7                 | 5              | 50          | 45   | 0.16                |  |  |
|                     | Paris ...                | 30.04                            | 52    | W     | 4                 | f        | 29.95                            | +0.09                             | 52          | 51   | W                                 | 3     | 7                 | *              | 51          | 47   | 0.24                |  |  |
|                     | Brest ...                | 30.09                            | 52    | W     | 4                 | f        | 30.00                            | +0.09                             | 52          | 51   | W                                 | 5     | f                 | 5              | 52          | 50   | 0.08                |  |  |
|                     | Lorient ...              | 30.10                            | 51    | WSEW  | 4                 | m        | 30.00                            | +0.10                             | 51          | 51   | WSEW                              | 4     | m                 | 5              | 52          | 50   | 0.20                |  |  |
| PENINSULA.          | Corunna ...              | 30.23                            | 51    | W     | 5                 | 7        | 30.19                            | +0.04                             | 51          | 50   | W                                 | 5     | 7                 | ?              | 54          | 46   | 0.12                |  |  |
|                     | Belfort ...              | 30.25                            | 44    | W     | 3                 | 7        | 30.17                            | +0.08                             | 44          | 42   | W                                 | 4     | 7                 | *              | 41          | 37   | 0.20                |  |  |
|                     | Lyons ...                | 30.26                            | 44    | W     | 3                 | 7        | 30.17                            | +0.09                             | 44          | 42   | W                                 | 2     | 7                 | *              | 45          | 39   | 0.04                |  |  |
|                     | Nice ...                 | 30.36                            | 51    | WSEW  | 2                 | 0        | 30.29                            | +0.07                             | 51          | 51   | W                                 | 4     | 0                 | 2              | 52          | 45   | —                   |  |  |
|                     | Perpignan ...            | 30.38                            | 56    | WSEW  | 3                 | 0        | 30.35                            | +0.03                             | 56          | 53   | WSEW                              | 3     | 0                 | 6              | 59          | 52   | —                   |  |  |
|                     | Biarritz ...             | 30.38                            | 56    | WSEW  | 3                 | 0        | 30.35                            | +0.03                             | 56          | 53   | WSEW                              | 3     | 0                 | 6              | 59          | 52   | —                   |  |  |
|                     | Corunna ...              | 30.62                            | 51    | WSE   | 1                 | 6        | 30.60                            | +0.02                             | 46          | 46   | W                                 | 2     | 0                 | *              | 54          | 44   | —                   |  |  |
|                     | Lisbon ...               | 30.62                            | 51    | WSE   | 1                 | 6        | 30.60                            | +0.02                             | 46          | 46   | W                                 | 2     | 0                 | *              | 54          | 44   | —                   |  |  |
|                     | Corunna ...              | 30.62                            | 51    | WSE   | 1                 | 6        | 30.60                            | +0.02                             | 46          | 46   | W                                 | 2     | 0                 | *              | 54          | 44   | —                   |  |  |
|                     | Lisbon ...               | 30.62                            | 51    | WSE   | 1                 | 6        | 30.60                            | +0.02                             | 46          | 46   | W                                 | 2     | 0                 | *              | 54          | 44   | —                   |  |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on WEDNESDAY, 30<sup>TH</sup> DEC 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

☉ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

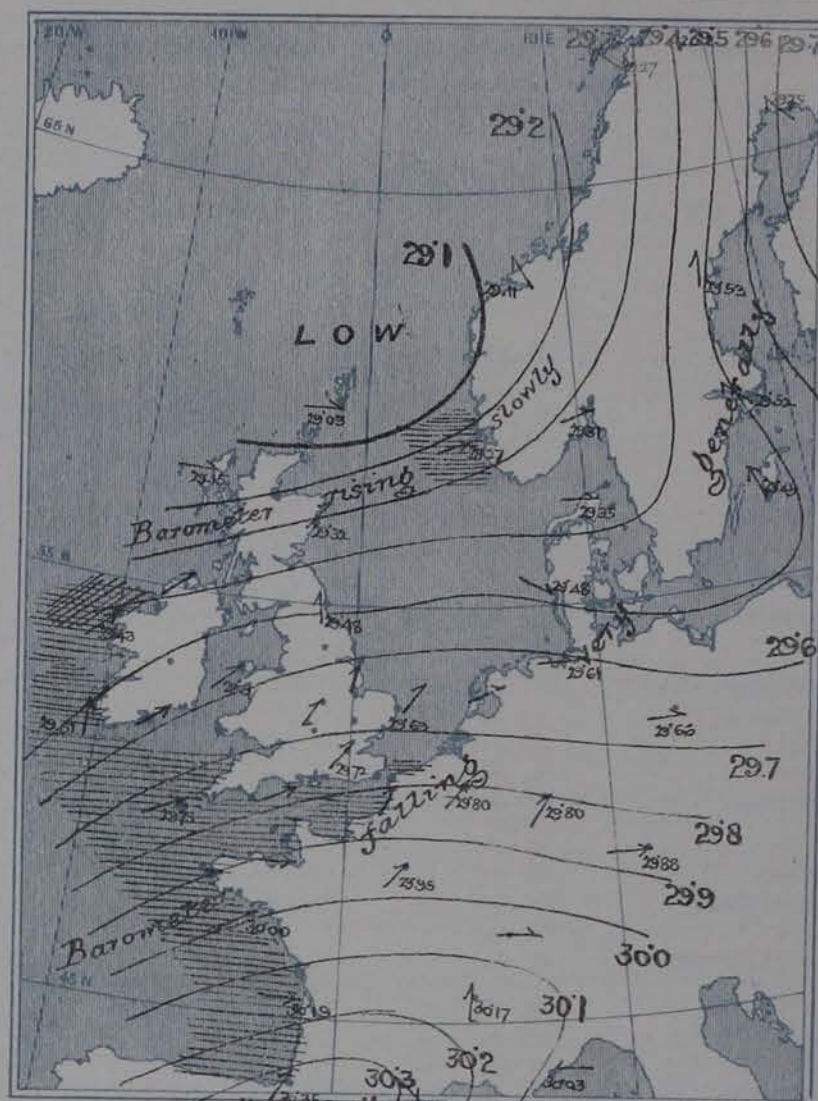
☼ = Rough. ☼ = High.

## MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.954         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.     | TEMPERATURE.  |               |                   |      | RAINFALL.<br>(Inches.) |
|---------------|---------------|---------------|-------------------|------|------------------------|
|               | Daily<br>Max. | Daily<br>Min. | Dry.<br>at 8 a.m. | Wet. |                        |
| Sumburgh Head | 42.6          | 35.2          | 39.6              | 38.1 | 4.25                   |
| Stornoway     | 43.1          | 34.2          | 39.4              | 38.5 | 5.63                   |
| Wick          | 42.2          | 32.7          | 38.1              | 36.8 | 3.10                   |
| Nairn         | 41.9          | 32.8          | 37.1              | 35.6 | 1.95                   |
| Aberdeen      | 41.9          | 32.6          | 36.9              | 35.2 | 3.24                   |
| Leith         | 44.0          | 33.7          | 38.5              | 37.0 | 1.86                   |
| Shields       | 42.9          | 33.9          | 38.3              | 36.9 | 2.57                   |
| Spurn Head    | 42.4          | 35.3          | 38.8              | 37.7 | 2.14                   |
| York          | 42.3          | 32.3          | 36.4              | 35.4 | 2.28                   |
| Loughborough  | 42.7          | 32.2          | 36.3              | 35.4 | 2.24                   |
| Ardrossan     | 44.5          | 35.9          | 40.0              | 38.7 | 3.73                   |
| Mullaghmore   | 46.5          | 37.8          | 42.2              | 39.8 | 4.51                   |
| Donaghadee    | 45.8          | 36.2          | 40.2              | 39.3 | 2.84                   |
| Holyhead      | 46.4          | 39.1          | 42.8              | 41.1 | 3.82                   |
| Liverpool     | 43.5          | 35.6          | 38.8              | 37.1 | 2.59                   |
| Parsonstown   | 44.7          | 33.1          | 37.8              | 36.6 | 3.04                   |
| Valencia      | 49.7          | 40.0          | 44.6              | 42.3 | 5.99                   |
| Roche's Point | 47.9          | 38.9          | 42.9              | 41.5 | 4.95                   |
| Pembroke      | 43.8          | 40.3          | 43.6              | 42.2 | 3.99                   |
| Scilly        | 49.5          | 43.1          | 47.0              | 45.1 | 4.02                   |
| Prawle Point  | 47.0          | 38.2          | 42.5              | 41.4 | 3.76                   |
| Jersey        | 47.3          | 39.3          | 43.1              | 41.4 | 3.82                   |
| Hurst Castle  | 45.6          | 36.3          | 40.6              | 39.8 | 2.77                   |
| Dover         | 44.3          | 35.9          | 39.8              | 38.6 | 3.00                   |
| LONDON        | 44.0          | 33.9          | 37.8              | 36.7 | 2.10                   |
| Oxford        | 42.0          | 33.5          | 37.0              | 35.9 | 2.10                   |
| Cambridge     | 42.8          | 31.6          | 36.2              | 35.5 | 1.88                   |
| Yarmouth      | 41.9          | 33.7          | 37.9              | 37.0 | 2.66                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





## GENERAL SITUATION AT 8 A.M.

## PRESSURE

Highest, 30.6 in: and upwards, over the southern part of the Spanish Peninsula.  
Lowest, 29.1 in: and less, in a large area lying to the northward of Scotland.  
Gradients moderate or slight generally. Barometer rising in the north and east of our Islands, as well as on the eastern shores of the North Sea, but falling elsewhere.

## TEMPERATURE

Highest,  $58^{\circ}$  at Perpignan,  $56^{\circ}$  at Biarritz,  $55^{\circ}$  at Jersey, and  $52^{\circ}$  at Valencia Island, Scilly, and Brest.  
Lowest,  $31^{\circ}$  at Haparanda,  $35^{\circ}$  at Wirby, Gaedso, Stromsund, and Wick,  $36^{\circ}$  at Flushing, and  $37^{\circ}$  at Kairu, Aberdeen, and Berlin.  
 \*During yesterday the thermometer rose above  $50^{\circ}$  at most of our southern stations; in London and at Scilly and Jersey it reached  $53^{\circ}$ .

## WIND

SW<sup>n</sup> over the greater part of our Islands, but S<sup>s</sup> at Valeneis Island; strong in force on our southern coasts. Moderate from the W<sup>nd</sup> in the north of Scotland, as well as over Denmark, Germany, and the greater part of France. S<sup>s</sup> in Sweden, SE<sup>s</sup> in the west of Norway.

## WEATHER

Cloudy or overcast over nearly the whole of Western Europe, with mist in the south of England, and with rain in the south of Ireland, as well as at Skagen, Rockefeller, and Munich. Snow is falling at Wick.  
Snow or sleet fell yesterday in the west and north of Scotland, hail in the north of Ireland, and rain in most other localities, the largest amounts being 0.8 in. at Howle Point, and 0.5 in. at Lumbough Id. Lightning was seen in the evening at several of our northern stations, and a thunderstorm occurred at Stromsburg.

## SEA

High at Mullaghmore, and rather rough on our southeastern and southern coasts, as well as at Skudenats, but moderate to smooth elsewhere.


### PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new depression which is approaching Ireland seems likely to occasion a considerable increase of wind from the S<sup>nd</sup> or SW<sup>nd</sup> on our western and southern coasts, with heavy rain in some parts of Ireland and England.

## FORECASTS

For the 24 hours ending at NOON on 31<sup>ST</sup> DEC<sup>R</sup> 1891.

| DISTRICTS. |                  | FORECASTS.   | DISTRICTS. |  | FORECASTS.   |
|------------|------------------|--|------------|--|--|
| † 0        | SCOTLAND NORTH   | Wind backing to the S <sup>w</sup> and increasing in force; fair to unsettled and some rain. | † 6        | SCOTLAND WEST                                  | Same as N <sup>o</sup> 0 and 1.  |
| † 1        | SCOTLAND EAST    |  | † 7        | ENGLAND N.W.                                   |  |
| † 2        | ENGLAND N.E.     | S <sup>w</sup> winds, increasing in force; dull squally, some rain.                          | † 8        | ENGLAND S.W.                                   | S <sup>w</sup> to SW <sup>w</sup> strong winds and gales; squally, rainy.                                    |
| † 3        | ENGLAND EAST     |  | † 9        | IRELAND NORTH                                  |  |
| † 4        | MIDLAND COUNTIES |  | † 10       | IRELAND SOUTH                                  | S <sup>w</sup> to W <sup>w</sup> strong winds and gales; squally and rainy at first, some improvement later. |
| † 5        | ENGLAND SOUTH    | WARNINGS   |            | The SOUTH COAST is still flying on all coasts. |  |

*Note.*—The South Cone, point downwards () , means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.

the South Cone. The North Cone, point upwards (↑), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA. | SEA |  | BAR:          | THER: |    | WIND |     | WEA. | SEA |
|-------------------|-------|-------|----|------|----|------|-----|--|---------------|-------|----|------|-----|------|-----|
|                   |       | D.    | W. | D.   | F. |      |     |  |               | D.    | W. | D.   | F.  |      |     |
| Skudesnaes ...    | 29.11 | 45    | 43 | SW   | 4  | c    | 7   |  | Holyhead ...  | 29.55 | 46 | 44   | WNW | 7    | 7   |
| Sumburgh Head ... | 29.90 | 40    | 38 | W    | 4  | bc   | 6   |  | Valencia ...  | 29.72 | 51 | 48   | WNW | 5    | 5   |
| Stornoway ...     | 29.98 | 28    | 27 | W    | 4  | c    | 5   |  | Scilly ...    | 29.88 | 53 | 52   | WNW | 6    | 5   |
| Aberdeen ...      | 29.17 | 40    | 36 | SW   | 6  | bcg  | 4   |  | Jersey ...    | 29.86 | 52 | 51   | W   | 4    | 5   |
| Shields ...       | 29.28 | 45    | 41 | WNW  | 4  | c    | 2   |  | Dungeness ... | 29.73 | 45 | 45   | WNW | 5    | 4   |
| Ardrossan ...     | 29.32 | 42    | 41 | W    | 4  | 7c   | 6   |  | London ...    | 29.71 | 52 | 48   | WNW | 4    | 4   |
| Mulin Head ...    | 29.25 | 42    | 40 | W    | 7  | 0c   | 5   |  | Yarmouth ...  | 29.60 | 49 | 46   | WNW | 5    | 3   |
| Mullaghmore ...   | 29.48 | 44    | 41 | WNW  | 7  | cqk7 | 7   |  | Rocheport ... | 30.17 | 52 | 51   | WNW | 6    | 3   |
| Belmullet ...     | 29.46 | 44    | 42 | WNW  | 9  | cqk7 | *   |  |               |       |    |      |     |      |     |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather squally, and showery over the greater part of the United Kingdom. Dull at most of the Continental stations, with rain in many places, fog over the Baltic, and snow at Newfahrewasser, Moscow, and Munich. Fine and bright over the southern parts of France and Spain. Hail showers falling later in the north of Ireland, and snow or sleet in the west and north of Scotland. Lightning seen at night, at several of our more northern stations, accompanied by thunder at Stornoway.

Temperature highest (1) 58° at Malta, 54° at Algiers and Brindisi, and 52° at Legna; (2) 54° at Biarritz, and 52° at Seilly and Jonez; ranging between 45° and 50° in all the more southern parts of the United Kingdom, but below 40° in Scotland. Lowest, 29° at Archangel, 24° at Hermannstadt, 25° at Kharkov, 27° at Riga and Kiev, and 28° at Odessa, Swinemunde and Tchern; as low as the freezing point in many parts of Central Europe. Rising during day to between 50° and 53° over the southern parts of the United Kingdom, and to 55° or more in the south of France, the highest reading of all being 61° at Perpignan.

Wind fresh or strong from the SW<sup>nd</sup> or W<sup>nd</sup> over the greater part of our Islands, with a gale in the extreme northwest, moderate from the SW<sup>nd</sup> or S<sup>nd</sup> over France, Germany, and the Netherlands. Strong to a gale from the SE<sup>nd</sup> on the eastern shores of the North Sea, light or moderate from the same quarters over Sweden and the Baltic. Light and variable over the greater part of southern and Eastern Europe, and also over Algeria and the Mediterranean. No important change occurring during day.

Barometer highest 30.5 ins: to 30.6 ins: in an anticyclone lying over Spain and Algeria, 30.3 ins: and upwards over Russia. Lowest 28.9 ins: and less, in a well marked depression lying off the north of Scotland, 30.0 ins: and less, in a very shallow system lying over Poland. Depression in north subsequently travelling away in a northeasterly direction, and barometer rising in all parts of the United Kingdom, but rise slackening in west towards evening.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received. The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ £1 10 0 „



# DAILY WEATHER REPORT.

for *Thursday, 31<sup>st</sup> December, 1891.*  
*Issued by the Meteorological Office, 63, Victoria Street, London. R. H. SCOTT, Secretary.*

| STATIONS.           |                             | YESTERDAY EVENING.               |       |        |                   |          | 8 A.M. TO DAY.                   |                                   |             |      |                                   |        |                   |          |                   |             | PAST 24 HOURS. |                     |  |
|---------------------|-----------------------------|----------------------------------|-------|--------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|--------|-------------------|----------|-------------------|-------------|----------------|---------------------|--|
|                     |                             | BAROM.                           | TEMP. | WIND.  |                   | Weather. | BAROMETER.                       |                                   | SHADE TEMP. |      |                                   | WIND.  |                   | Weather. | Sea.<br>(0 to 9.) | SHADE TEMP. |                | Amount of Rainfall. |  |
|                     |                             | Reading at 32° F. and Sea Level. | Dry.  | Dirac. | Force. (0 to 12.) |          | Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | Dry.        | Wet. | Difference from 8 a.m. yesterday. | Dirac. | Force. (0 to 12.) |          |                   | Max.        | Min.           |                     |  |
| SCANDINAVIA.        | Haparanda ...               | 29.72                            | 30    | S      | 4                 | 0        | 29.62                            | -13                               | 30          | 30   | -1                                | SE     | 6                 | 0        | *                 | 34          | 28             | 0.04                |  |
|                     | Hernösand ...               | 29.45                            | 36    | S      | 8                 | 0        | 29.43                            | -10                               | 35          | 34   | -1                                | S      | 2                 | 0        | *                 | 37          | 30             | 0.32                |  |
|                     | Stockholm ...               | 29.51                            | 34    | SSE    | 4                 | 0        | 29.49                            | -03                               | 35          | 33   | -2                                | S      | 2                 | 0        | *                 | 37          | 32             | 0.16                |  |
|                     | Wisby ...                   | 29.57                            | 37    | SSE    | 4                 | 0        | 29.51                            | +02                               | 34          | 33   | -1                                | SSE    | 4                 | 0        | *                 | 37          | 32             | 0.12                |  |
|                     | Bodö ...                    | 29.25                            | 41    | ESE    | 4                 | 6c       | 29.16                            | -11                               | 39          | 34   | -1                                | SE     | 4                 | 0        | 2                 | 41          | 36             | -                   |  |
|                     | Christiansund               | 29.10                            | 39    | SSE    | 4                 | 6        | 28.94                            | -17                               | 39          | 34   | -1                                | SSE    | 1                 | 0        | 4                 | 40          | 37             | -                   |  |
|                     | Skudesnaes ...              | 29.20                            | 41    | SSW    | 7                 | 0        | 28.97                            | -23                               | 39          | 37   | -2                                | W      | 5                 | 0        | 5                 | 43          | 37             | 0.35                |  |
|                     | Christiania Fjord<br>(Færd) | 29.37                            | 37    | WSW    | 3                 | 6        | 29.12                            | -20                               | 39          | 38   | +4                                | SSE    | 5                 | 7        | 4                 | ?           | 35             | -                   |  |
|                     | Skagen (The Scaw)           | 29.39                            | 38    | SSW    | 5                 | 6        | ?                                | ?                                 | 38          | 37   | -1                                | S      | 6                 | 7        | 3                 | 39          | 34             | 0.12                |  |
|                     | Fanö ...                    | 29.46                            | 37    | SE     | 2                 | 7        | 29.06                            | -42                               | 42          | 42   | +4                                | WNW    | 4                 | 0        | *                 | 43          | 38             | 0.16                |  |
| BRITISH ISLANDS.    | Sumburgh Head               | 29.03                            | 35    | SW     | 1                 | S        | 28.92                            | -11                               | 37          | 36   | -3                                | WNW    | 1                 | 0        | 3                 | 40          | 33             | 0.44                |  |
|                     | Stornoway ...               | 29.10                            | 36    | W      | 4                 | C        | 29.02                            | -13                               | 36          | 36   | +1                                | W      | 4                 | 7        | 4                 | 39          | 33             | 0.21                |  |
|                     | Wick ...                    | 29.11                            | 38    | WNW    | 4                 | 0        | 29.01                            | -18                               | 32          | 31   | -3                                | WNW    | 2                 | CSP      | 2                 | 38          | 32             | 0.06                |  |
|                     | Nairn ...                   | 29.13                            | 36    | Z      | 0                 | 0        | 29.07                            | -16                               | 34          | 33   | -3                                | SW     | 1                 | 6c       | 1                 | 37          | 32             | 0.13                |  |
|                     | Aberdeen ...                | 29.21                            | 37    | SSW    | 3                 | 6c       | 29.12                            | -20                               | 35          | 32   | -2                                | WSW    | 3                 | 6        | 2                 | 39          | 35             | -                   |  |
|                     | Leith ...                   | 29.24                            | 41    | WSW    | 3                 | 6c       | 29.19                            | -21                               | 37          | 36   | -3                                | W      | 4                 | 6        | *                 | 43          | 35             | 0.03                |  |
|                     | Shields ...                 | 29.31                            | 40    | S      | 2                 | p        | 29.22                            | -26                               | 41          | 39   | +2                                | W      | 3                 | C        | 2                 | 43          | 36             | -                   |  |
|                     | Spurn Head ...              | 29.36                            | 42    | SSE    | 4                 | 7f       | 29.32                            | -30                               | 43          | 42   | +4                                | WSW    | 6                 | C        | 6                 | 47          | 38             | 0.13                |  |
|                     | York ...                    | 29.38                            | 41    | S      | 1                 | f        | 29.35                            | -24                               | 41          | 39   | +1                                | W      | 2                 | 6        | *                 | 45          | 37             | 0.10                |  |
|                     | Loughborough                | 29.37                            | 52    | SSW    | 6                 | 0        | 29.38                            | -27                               | 45          | 44   | +2                                | W      | 2                 | OU       | *                 | 54          | 42             | 0.59                |  |
| GERMANY & HOLLAND.  | Ardrossan ...               | 29.26                            | 45    | SW     | 9                 | 0        | 29.26                            | -16                               | 42          | 40   | -1                                | W      | 4                 | C        | 3                 | 45          | 39             | 0.10                |  |
|                     | Malin Head ...              | 29.25                            | 42    | WSW    | 5                 | OT       | 29.24                            | -14                               | 41          | 38   | -2                                | W      | 4                 | C        | 4                 | 44          | 38             | 0.25                |  |
|                     | Mullaghmore ...             | 29.31                            | 43    | SW     | 4                 | OQT      | 29.37                            | -08                               | 42          | 40   | -1                                | W      | 7                 | C        | 6                 | 45          | 39             | 0.22                |  |
|                     | Belmullet ...               | 29.34                            | 44    | WSW    | 4                 | 0        | 29.39                            | -04                               | 43          | 41   | -2                                | W      | 7                 | C        | *                 | 45          | 40             | 0.25                |  |
|                     | Donaghadee ...              | 29.33                            | 42    | SSW    | 2                 | 7        | 29.36                            | -15                               | 38          | 37   | -3                                | SW     | 4                 | 7        | 3                 | 43          | 35             | 0.07                |  |
|                     | Liverpool (Bidston)         | 29.35                            | 49    | WSW    | 3                 | 0        | 29.41                            | -19                               | 42          | 41   | -1                                | W      | 6                 | C        | 5                 | 52          | 42             | 0.56                |  |
|                     | Holyhead ...                | 29.34                            | 50    | SSW    | 4                 | OQM      | 29.44                            | -13                               | 43          | 42   | -4                                | W      | 5                 | C        | 6                 | 51          | 43             | 0.32                |  |
|                     | Parsonstown ...             | 29.37                            | 53    | SW     | 2                 | 0        | 29.53                            | -01                               | 40          | 38   | -4                                | Z      | 0                 | C        | *                 | 54          | 39             | 0.29                |  |
|                     | Valencia ...                | 29.49                            | 55    | SW     | 8                 | OM       | 29.67                            | +16                               | 44          | 41   | -8                                | W      | 5                 | C        | 5                 | 55          | 42             | 0.33                |  |
|                     | Roche's Point...            | 29.50                            | 53    | W      | 7                 | 7        | 29.62                            | +08                               | 44          | 41   | -7                                | W      | 5                 | C        | 5                 | 54          | 43             | 0.20                |  |
| FRANCE AND BELGIUM. | Pembroke (St. Ann's Hd.)    | 29.51                            | 51    | W      | 8                 | 0        | 29.56                            | -07                               | 47          | 46   | -1                                | W      | 6                 | C        | 5                 | 52          | 46             | 0.42                |  |
|                     | Scilly ...                  | 29.76                            | 53    | W      | 8                 | 0        | 29.71                            | -07                               | 52          | 51   | 0                                 | W      | 7                 | AMT      | 6                 | 53          | 50             | 0.05                |  |
|                     | Prawle Point...             | 29.74                            | 51    | WSW    | 6                 | 0        | 29.65                            | -12                               | 51          | 51   | 0                                 | SW     | 7                 | OTU      | 6                 | 51          | 50             | 0.16                |  |
|                     | Jersey (St. Aubin's)        | 29.89                            | 53    | WSW    | 7                 | 0        | 29.85                            | -05                               | 52          | 51   | -1                                | SW     | 6                 | ODM      | 5                 | 54          | 50             | 0.03                |  |
|                     | Hurst Castle ...            | 29.67                            | 50    | W      | 7                 | 0        | 29.62                            | -12                               | 50          | 50   | +1                                | W      | 8                 | ODM      | 5                 | 51          | 48             | 0.02                |  |
|                     | Dungeness ...               | 29.59                            | 50    | WSW    | 7                 | d        | 29.55                            | -20                               | 50          | 50   | +3                                | WSW    | 9                 | 0        | 6                 | 50          | 46             | 0.04                |  |
|                     | London ...                  | 29.56                            | 55    | WSW    | 3                 | 0        | 29.50                            | -22                               | 53          | 51   | +6                                | WSW    | 7                 | OQ       | *                 | 55          | 46             | 0.26                |  |
|                     | Oxford ...                  | 29.55                            | 52    | SW     | 5                 | 0        | 29.48                            | -22                               | 52          | 50   | +6                                | SW     | 6                 | OQ       | *                 | 54          | 46             | 0.24                |  |
|                     | Cambridge ...               | 29.53                            | 52    | SW     | 2                 | 7        | 29.43                            | -27                               | 53          | 51   | +13                               | W      | 2                 | 7        | *                 | 55          | 39             | 0.25                |  |
|                     | Yarmouth ...                | 29.43                            | 47    | SW     | 4                 | 7        | 29.38                            | -31                               | 47          | 46   | +6                                | WNW    | 4                 | 7        | 4                 | 50          | 40             | 0.25                |  |
| PENINSULA.          | Cuxhaven ...                | 29.65                            | 43    | SW     | 2                 | 0        | 29.25                            | -36                               | 46          | 45   | +10                               | W      | 6                 | 7        | *                 | 47          | 36             | 0.12                |  |
|                     | Berlin ...                  | 29.72                            | 37    | Z      | 0                 | 6        | 29.39                            | -27                               | 36          | 36   | -1                                | S      | 1                 | 7        | *                 | 41          | 34             | 0.12                |  |
|                     | Wiesbaden ...               | *                                | *     | *      | *                 | *        | 29.69                            | -11                               | 50          | 48   | +8                                | SW     | 5                 | 0        | *                 | 52          | 39             | 0.55                |  |
|                     | Munich ...                  | 29.83                            | 42    | SW     | 5                 | 7        | 29.79                            | -04                               | 49          | 48   | +9                                | SW     | 8                 | 0        | *                 | 49          | 39             | 0.87                |  |
|                     | The Helder ...              | 29.46                            | 41    | SE     | 1                 | f        | 29.32                            | -37                               | 47          | 46   | +5                                | SW     | 5                 | 0        | 4                 | 47          | 41             | 0.12                |  |
|                     | Brussels (9 a.m.)           | *                                | *     | *      | *                 | *        | 29.63                            | -17                               | 50          | 49   | +5                                | SW     | 7                 | 7        | *                 | 60          | 44             | 0.47                |  |
|                     | Cape Gris Nez               | 29.60                            | 50    | SW     | 6                 | 7        | 29.57                            | -21                               | 50          | 50   | +3                                | SW     | 8                 | f        | *                 | 52          | 43             | 0.28                |  |
|                     | Paris ...                   | 29.85                            | 54    | SW     | 4                 | 0        | 29.91                            | -04                               | 50          | 48   | 9                                 | SW     | 4                 | 0        | *                 | 54          | 49             | 0.04                |  |
|                     | Brest ...                   | ?                                | 53    | WNW    | 5                 | f        | ?                                | ?                                 | 53          | 53   | +1                                | W      | 5                 | 0        | 6                 | 53          | 48             | -                   |  |
|                     | Lorient ...                 | 30.02                            | 51    | W      | 4                 | m        | 29.99                            | -01                               | 52          | 50   | +1                                | WSW    | 4                 | m        | 5                 | 52          | 50             | 0.08                |  |
| PENINSULA.          | Rochefort ...               | 30.12                            | 51    | W      | 5                 | 7        | 30.12                            | -07                               | 51          | 50   | 0                                 | W      | 5                 | 0        | *                 | 52          | 50             | 0.20                |  |
|                     | Belfort ...                 | ?                                | 40    | W      | 4                 | 7        | ?                                | ?                                 | 42          | ?    | +3                                | W      | 4                 | 7        | *                 | 44          | 38             | 0.59                |  |
|                     | Lyons ...                   | 30.12                            | 47    | S      | 2                 | 7        | 30.18                            | +01                               | 36          | 36   | -8                                | EHE    | 1                 | f        | *                 | 48          | 36             | 0.20                |  |
|                     | Nice ...                    | 29.92                            | 45    | E      | 1                 | 6c       | 29.92                            | -11                               | 45          | 43   | +3                                | WSW    | 7                 | 6        | 2                 | 52          | 41             | -                   |  |
|                     | Perpignan ...               | 30.15                            | 60    | WNW    | 5                 | 0        | 30.13                            | -16                               | 60          | 48   | +2                                | WNW    | 6                 | 6        | *                 | 62          | 55             | -                   |  |
|                     | Biarritz ...                | 30.33                            | 57    | WNW    | 3                 | 6        | 30.27                            | -08                               | 51          | 46   | -5                                | Z      | 0                 | 6        | 6                 | 59          | 48             | -                   |  |

For Explanation of Columns, see bottom of p. 4.

† Received too late for insertion in Charts on p. 2.



# WEATHER CHARTS

for 8 a.m. on Thursday, 31<sup>st</sup> Dec<sup>r</sup>, 1891.

## BAROMETER, WIND AND SEA.

### EXPLANATION OF MAP

**BAROMETER**—Isobars are drawn for each tenth of an inch.

Changes since previous morning are stated in words.

**WIND**—Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

→ = forces above 10; → = forces 8 to 10;

→ = forces 5 to 7; → = forces 1 to 4.

○ = dead calm.

**SEA DISTURBANCE**—Where considerable, is shewn thus:

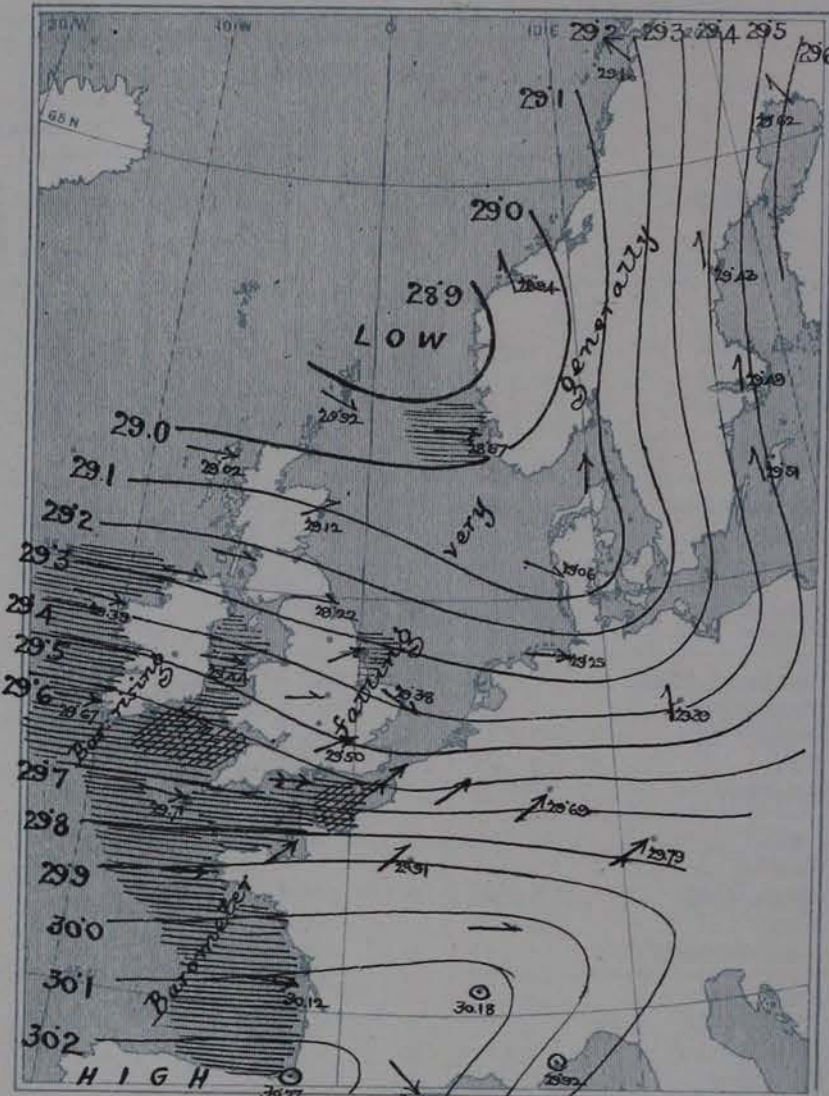
▨ = Rough. ▨ = High.

### MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of December.

During the 20 Years: 1871—1890.

| STATIONS.     | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.673         |
| Stornoway     | 29.705         |
| Wick          | 29.718         |
| Nairn         | 29.743         |
| Aberdeen      | 29.767         |
| Leith         | 29.807         |
| Shields       | 29.845         |
| Spurn Head    | 29.873         |
| York          | 29.890         |
| Loughborough  | 29.924         |
| Ardrossan     | 29.820         |
| Mullaghmore   | 29.821         |
| Donaghadee    | 29.848         |
| Holyhead      | 29.879         |
| Liverpool     | 29.895         |
| Parsonstown   | 29.901         |
| Valencia      | 29.905         |
| Roche's Point | 29.912         |
| Pembroke      | 29.916         |
| Scilly        | 29.951         |
| Prawle Point  | 29.970         |
| Jersey        | 29.985         |
| Hurst Castle  | 29.958         |
| Dover         | 29.953         |
| LONDON        | 29.974         |
| Oxford        | 29.955         |
| Cambridge     | 29.941         |
| Yarmouth      | 29.916         |



## TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

**TEMPERATURE**—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

**WEATHER** is shown by Letters of the Beaufort Scale.

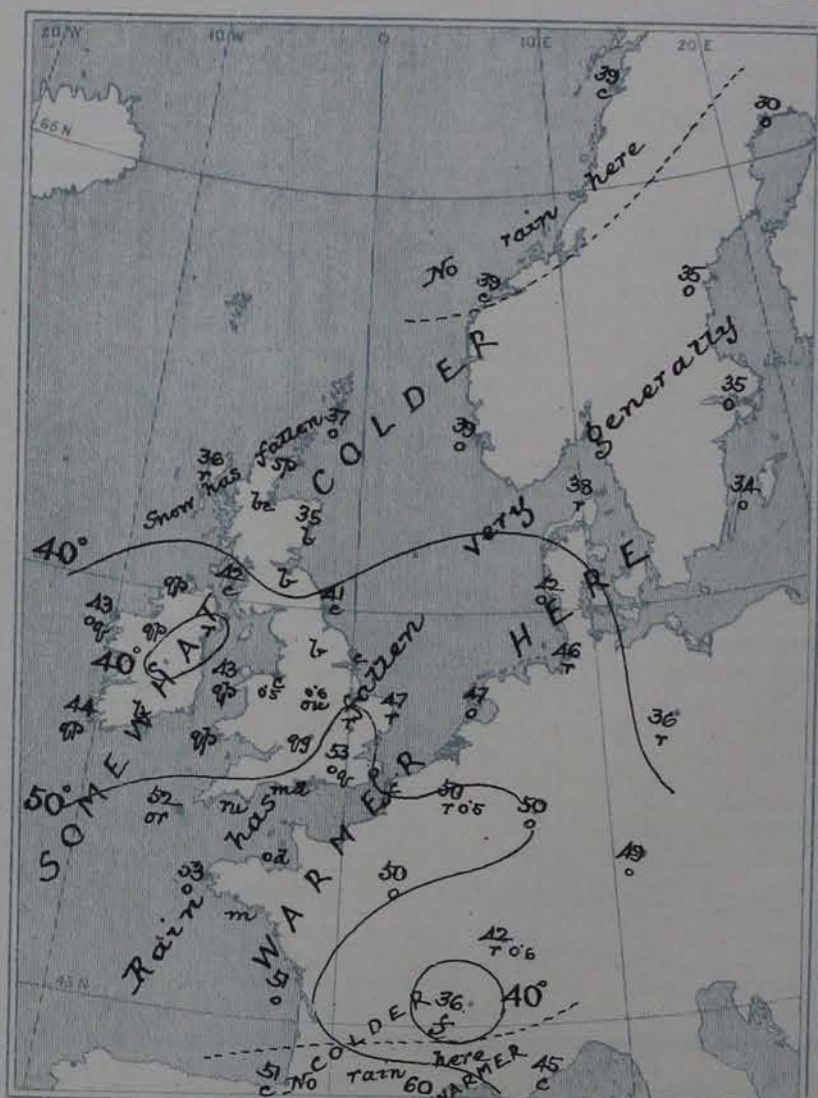
**RAINFALL**—A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more are quoted in figures.

### MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of December.)

| STATIONS.          | TEMPERATURE. |       |           |      | RAINFALL.<br>(Inches.) |
|--------------------|--------------|-------|-----------|------|------------------------|
|                    | Daily        | Daily | at 8 a.m. |      |                        |
|                    | Max.         | Min.  | Dry.      | Wet. |                        |
| Sumburgh Head..... | 42.6         | 35.2  | 39.6      | 38.1 | 4.25                   |
| Stornoway.....     | 43.1         | 34.2  | 39.4      | 38.5 | 5.63                   |
| Wick.....          | 42.2         | 32.7  | 38.1      | 36.8 | 3.10                   |
| Nairn.....         | 41.9         | 32.8  | 37.1      | 35.6 | 1.95                   |
| Aberdeen.....      | 41.9         | 32.6  | 36.9      | 35.2 | 3.24                   |
| Leith.....         | 41.9         | 33.7  | 38.5      | 37.0 | 1.86                   |
| Shields.....       | 42.9         | 33.9  | 38.3      | 36.9 | 2.57                   |
| Spurn Head.....    | 42.4         | 35.3  | 38.8      | 37.7 | 2.14                   |
| York.....          | 42.3         | 32.3  | 36.4      | 35.4 | 2.28                   |
| Loughborough.....  | 42.7         | 32.2  | 36.3      | 35.4 | 2.24                   |
| Ardrossan.....     | 41.5         | 33.9  | 40.0      | 38.7 | 3.73                   |
| Mullaghmore.....   | 46.5         | 37.8  | 42.2      | 39.8 | 4.51                   |
| Donaghadee.....    | 45.8         | 36.2  | 40.2      | 39.3 | 2.84                   |
| Holyhead.....      | 46.4         | 39.1  | 42.8      | 41.1 | 3.82                   |
| Liverpool.....     | 43.5         | 35.6  | 38.8      | 37.1 | 2.59                   |
| Parsonstown.....   | 44.7         | 33.1  | 37.8      | 36.6 | 3.04                   |
| Valencia.....      | 49.7         | 40.0  | 44.6      | 42.4 | 5.69                   |
| Roche's Point..... | 47.9         | 38.9  | 42.9      | 41.5 | 4.95                   |
| Pembroke.....      | 43.8         | 40.3  | 43.6      | 42.2 | 3.99                   |
| Scilly.....        | 49.5         | 43.1  | 47.0      | 45.1 | 4.02                   |
| Prawle Point.....  | 47.0         | 38.2  | 42.5      | 41.1 | 3.76                   |
| Jersey.....        | 47.3         | 39.3  | 43.1      | 41.4 | 3.82                   |
| Hurst Castle.....  | 45.6         | 36.3  | 40.6      | 39.8 | 2.77                   |
| Dover.....         | 44.3         | 35.9  | 39.8      | 38.6 | 3.00                   |
| LONDON.....        | 44.0         | 33.9  | 37.8      | 36.7 | 2.10                   |
| Oxford.....        | 42.9         | 33.5  | 37.0      | 35.9 | 2.10                   |
| Cambridge.....     | 42.8         | 31.6  | 36.2      | 35.5 | 1.88                   |
| Yarmouth.....      | 41.9         | 33.7  | 37.9      | 37.0 | 2.66                   |

NOTE.—The Temperature means are for the 20 years 1871-90, the Rainfall means are mainly those for the 25 years 1866-90.





# GENERAL SITUATION AT 8 A.M.

|             |  |
|-------------|--|
| PRESSURE    | Highest 30.3 ins. and upwards over the southern parts of the Spanish Peninsula.<br>Lowest 28.9 ins. and less in a depression lying off the west of Norway; 29.1 ins. and less in a secondary system lying off the Danish coasts.<br>Gradients rather steep over the Netherlands, the south of England & the N. of France, but moderate elsewhere.<br>Barometer rising in the west of our Islands, but falling elsewhere, - briskly on the eastern shores of the North Sea. |
| TEMPERATURE | Highest 60° at Perpignan, 53° in London and at Cambridge and Brest, and 52° at Seilly, Jersey, Bayona & Lorient.<br>Lowest (1) 30° at Haparanda, 34° at Wisby, and 35° at Hernesund and Stockholm; (2) 32° at Wick, and 34° at Naun; (3) 36° at Berlin and Lyons.<br>During yesterday the thermometer rose to 55° at Valencia Island, London and Cambridge and to 54° at Loughborough, Parsonstown, Jersey and Oxford.   |
| WIND        | W <sup>1</sup> over our Islands and the west of France, light or moderate in force on our north and east coasts, but strong in the west and south, with a gale over the eastern part of the Channel.<br>Strong from the SW <sup>2</sup> over the Netherlands and the west and south of Germany.<br>Light to fresh from the SW <sup>2</sup> or SE <sup>2</sup> in Scandinavia.  |
| WEATHER     | Cloudy or overcast over the greater part of western Europe, with rain or passing showers in many places, and with snow at Wick.<br>Fine and bright in the east of Scotland and also in the south of France.<br>Rain fell generally yesterday, the largest amounts being 0.9 in. at Munich and 0.6 in. at Loughborough, Liverpool, Belfort & Wiesbaden.   |
| SEA         | Very high at Cape Gris Nez, high at Pembroke and rough on our western and southern coasts generally.   |

## PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indication of the approach of any new depressions from the westward, but the general conditions remain very unsettled.

## FORECASTS

For the 24 hours ending at NOON on 1<sup>ST</sup> JAN. 1892.

| DISTRICTS.         | FORECASTS.   | DISTRICTS.       | FORECASTS.  |
|--------------------|--|------------------|---|
| 0 SCOTLAND NORTH   | W <sup>1</sup> to SW <sup>2</sup> winds, light or moderate; changeable, some cold showers. | 6 SCOTLAND WEST  | Same as Nos 0 to 2.   |
| 1 SCOTLAND EAST    |  | 7 ENGLAND N.W.   | W <sup>1</sup> to SW <sup>2</sup> winds, fresh or strong; squally, some rain. |
| 2 ENGLAND N.E.     |  | 8 ENGLAND S.W.   |   |
| 3 ENGLAND EAST     | W <sup>1</sup> and SW <sup>2</sup> winds, fresh; changeable; some showers.                 | 9 IRELAND NORTH  |   |
| 4 MIDLAND COUNTIES |  | 10 IRELAND SOUTH |   |
| 5 ENGLAND SOUTH    | W <sup>1</sup> and SW <sup>2</sup> winds, strong; squally; some showers, rather cooler.    | WARNINGS         | None Issued.  |

Note.—The South Cone, point downwards (∇), means that gales, or strong winds, are probable, at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the North Cone is hoisted in preference to the South Cone.  
The North Cone, point upwards (∇), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the South Cone is hoisted in preference to the North Cone.



# YESTERDAY'S 2 P.M. REPORTS.

|                   | BAR:  | THER: |    | WIND |    | WEA.  | SEA |  | BAR:          | THER: |    | WIND |     | WEA. | SEA   |
|-------------------|-------|-------|----|------|----|-------|-----|--|---------------|-------|----|------|-----|------|-------|
|                   |       | D.    | W. | D.   | F. |       |     |  |               | D.    | W. | D.   | F.  |      |       |
| Skudesnaes ...    | 29.68 | 43    | 40 | SW   | 6  | c     | 5   |  | Holyhead ...  | 29.39 | 47 | 47   | SSW | 3    | 1 m g |
| Sumburgh Head ... | 29.05 | 38    | 36 | W    | 4  | o s p | 5   |  | Valencia ...  | 29.49 | 54 | 43   | SW  | 7    | o m   |
| Stornoway ...     | 29.13 | 39    | 38 | W    | 4  | o     | 4   |  | Scilly ...    | 29.76 | 53 | 53   | W   | 7    | m     |
| Aberdeen ...      | 29.25 | 39    | 37 | S    | 3  | c m   | 3   |  | Jersey ...    | 29.86 | 53 | 53   | W   | 6    | o     |
| Shields ...       | 29.37 | 43    | 41 | S    | 2  | Q     | 2   |  | Dungeness ... | 29.62 | 49 | 49   | W   | 6    | T f   |
| Ardrossan ...     | 29.31 | 44    | 43 | SW   | 3  | Q     | 3   |  | London ...    | 29.55 | 54 | 52   | SW  | 3    | o g T |
| Malin Head ...    | 29.28 | 41    | 41 | SW   | 4  | o     | 5   |  | Yarmouth ...  | 29.56 | 43 | 42   | SW  | 3    | OT    |
| Mullaghmore ...   | 29.34 | 43    | 42 | SSW  | 4  | o m   | 6   |  | Rochefort ... | 29.97 | 52 | 52   | W   | 5    | T     |
| Belmullet ...     | 29.34 | 44    | 44 | SW   | 3  | o d   | *   |  |               |       |    |      |     |      |       |

## GENERAL REMARKS ON THE WEATHER OVER EUROPE DURING THE PAST 24 HOURS.

Weather cloudy or overcast over the greater part of Europe, with rain in many places, and with snow at Ulsby, Helsingfors, Kiev, Cracow and Hermandstadt. Fine and bright in Algeria and the south of Italy, heavy rain falling during day in many parts of England the Netherlands and Germany, but sky clearing in the E. of Scotland.

Temperature highest 57° at Malta, 56° at Cagliari, 55° at Corunna and Bangassore, and 54° at Gpote; above 50° in the extreme southwest of our Islands and above 45° over the south of England. Lowest (1) 18° at Kharbov, 22° at Archangel, 24° at Moscow, and 28° at Kiev, (2) 35° at Stornoway and Wick, and 37° at Nairn and Aberdeen. Rising during day to between 50° and 55° over all the more southern parts of the United Kingdom; exceeding 55° in the south of France and reaching 62° at Perpignan.

Wind SW? over the greater part of our Islands, France and Spain, and strong in force at the channel stations. Moderate from the W? in the N. of Scotland, as well as over Denmark and Germany S? or SE? over Russia and Scandinavia; variable in Austria, Italy & Algeria. Subsequently increasing to a fresh gale on the south coasts of England and Ireland; no important change occurring elsewhere.

Barometer highest 30.6 ins and upwards in an anticyclone lying over Spain; 30.3 ins. and upwards in another system lying over Russia. Lowest 29.1 ins. and less in a large but somewhat shallow depression lying to the N. of our Islands. Shallow secondary disturbances travelling E. across our Islands during day and gradients becoming steep over the Channel and south of England.

### EXPLANATION OF THE COLUMNS GIVEN ON PAGE 1.

**WEATHER.**—Beaufort Scale is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

\* AN ASTERISK is inserted in all places for which information is not usually received. The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark the observations are taken at 8 p.m. (Christiania time).

Subscriptions both for the Daily and Weekly Weather Reports may be paid, in advance, to the Meteorological Office.

TERMS:—For Daily Weather Report, forwarded by Book Post, £1 0 0 per annum.

„ Weekly „ „ „ „ £1 10 0 „



# ADDITIONS AND CORRECTIONS TO THE

## 1. REPORTS RECEIVED TOO LATE FOR INSERTION DAILY.

| DATE. | STATIONS.     | YESTERDAY EVENING.                          |                    |       |                     |          |   | 8 A.M. TO-DAY.                          |             |      |   |       |                     |          |                  |             |      | PAST 24 HOURS.            |  |  |
|-------|---------------|---|--------------------|-------|---------------------|----------|---|---|-------------|------|---|-------|---------------------|----------|------------------|-------------|------|---------------------------|--|--|
|       |               | Barometer<br>at 32° F.<br>and<br>Sea Level. | Temp. in<br>Shade. | WIND. |                     | Weather. | BAROMETER.                                |   | SHADE TEMP. |      |   | WIND. |                     | Weather. | Sea<br>(0 to 9.) | SHADE TEMP. |      | Amount<br>of<br>Rainfall. |  |  |
|       |               |   |                    | Dir.  | Force<br>(0 to 12.) |          | Reading<br>at 32° F.<br>and<br>Sea Level. | Difference<br>from 8 a.m.<br>yesterday. | Dry.        | Wet. | Difference<br>from 8 a.m.<br>yesterday. | Dir.  | Force<br>(0 to 12.) |          |                  | Max.        | Min. |                           |  |  |
| 1     | Corunna       | *   | *                  | *     | *                   | *        | 29.97                                     | -                                       | 56          | 55   | -                                       | SSW   | 4                   | m        | 2                | 57          | 41   | -                         |  |  |
| 2     | Corunna       | *   | *                  | *     | *                   | *        | 29.99                                     | +0.02                                   | 60          | 59   | +4                                      | WSW   | 5                   | T        | 4                | 63          | ?    | 0.08                      |  |  |
| 3     | Corunna       | *   | *                  | *     | *                   | *        | 30.20                                     | +2.1                                    | 63          | 60   | +3                                      | WSW   | 3                   | b        | 5                | 63          | 57   | 0.24                      |  |  |
| 4     | Corunna       | *   | *                  | *     | *                   | *        | 30.34                                     | +1.4                                    | 60          | 58   | -3                                      | SSE   | 4                   | c        | 6                | ?           | 57   | -                         |  |  |
| 5     | Brussels      | *   | *                  | *     | *                   | *        | 30.29                                     | +1.8                                    | 52          | -    | -2                                      | SSW   | 2                   | 0        | *                | 55          | 52   | 0.08                      |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.40                                     | +0.6                                    | 54          | -    | -6                                      | SE    | 1                   | m        | 4                | 64          | 48   | -                         |  |  |
| 7     | Nice          | 30.24                                       | 48                 | E     | 1                   | b        | 30.23                                     | -0.6                                    | 44          | -    | -2                                      | E     | 1                   | bc       | 1                | 59          | ?    | -                         |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.12                                     | -2.7                                    | 59          | 57   | +6                                      | WSW   | 5                   | c        | 3                | 61          | ?    | -                         |  |  |
| 8     | Belfort       | 30.04                                       | 44                 | WSW   | 7                   | 0        | 30.31                                     | ?                                       | 44          | ?    | +12                                     | WSW   | 7                   | 0        | *                | 51          | ?    | 0.12                      |  |  |
|       | Nice          | 30.16                                       | 50                 | Z     | 0                   | 0        | 29.93                                     | -30                                     | 47          | -    | +3                                      | Z     | 0                   | c        | 4                | 55          | 43   | -                         |  |  |
| 9     | Corunna       | *   | *                  | *     | *                   | *        | 30.26                                     | ?                                       | 56          | 53   | ?                                       | WSW   | 6                   | bc       | 4                | 59          | 48   | 0.04                      |  |  |
| 10    | Nice          | 29.97                                       | 48                 | E     | 1                   | 0        | 30.05                                     | -0.5                                    | 51          | -    | +7                                      | ESE   | 1                   | bc       | 1                | 55          | 41   | 0.04                      |  |  |
|       | Perpignan     | 30.12                                       | 50                 | WSW   | 5                   | b        | 30.17                                     | +0.9                                    | 46          | -    | +3                                      | WSW   | 2                   | 0        | *                | 57          | ?    | -                         |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.23                                     | -0.3                                    | 57          | ?    | +1                                      | WSW   | 6                   | 0        | 4                | 59          | 48   | -                         |  |  |
| 11    | Perpignan     | 30.13                                       | 45                 | Z     | 0                   | 0        | 30.17                                     | 00                                      | 37          | -    | -9                                      | SW    | 1                   | b        | *                | 60          | 35   | -                         |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.34                                     | +1.1                                    | 51          | 51   | -6                                      | S     | 4                   | f        | 6                | 61          | 48   | 0.20                      |  |  |
| 12    | The Helder    | 29.70                                       | 43                 | W     | 6                   | b        | 30.04                                     | +7.4                                    | 44          | -    | +1                                      | WSW   | 4                   | 0        | 4                | 45          | 41   | ?                         |  |  |
|       | Brussels      | *   | *                  | *     | *                   | *        | 30.20                                     | +5.8                                    | 45          | -    | +2                                      | WSW   | 2                   | c        | *                | 46          | 33   | -                         |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.29                                     | -0.5                                    | 58          | 56   | +7                                      | S     | 5                   | c        | 4                | 59          | 48   | 0.12                      |  |  |
| 13    | Jano          | 29.82                                       | 40                 | WSW   | 2                   | 0        | 29.19                                     | -4.8                                    | 44          | -    | +7                                      | SW    | 4                   | T        | *                | 45          | 32   | 0.32                      |  |  |
| 14    | Corunna       | *   | *                  | *     | *                   | *        | 30.49                                     | -                                       | 54          | 53   | -                                       | SSW   | 3                   | 0        | 5                | 63          | 48   | -                         |  |  |
| 15    | Lyon          | 30.27                                       | 46                 | W     | 1                   | 0        | 30.19                                     | +1.6                                    | 42          | -    | -5                                      | E     | 1                   | 0        | *                | 57          | 39   | 0.04                      |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.50                                     | +0.1                                    | 54          | 52   | 0                                       | S     | 1                   | 0        | 3                | 61          | 50   | -                         |  |  |
| 16    | Corunna       | *   | *                  | *     | *                   | *        | 30.42                                     | -0.8                                    | 47          | 46   | -7                                      | W     | 1                   | b        | 3                | 57          | 43   | -                         |  |  |
| 17    | Corunna       | *   | *                  | *     | *                   | *        | 30.28                                     | -1.4                                    | 42          | 40   | -5                                      | SSE   | 2                   | b        | 2                | 54          | 37   | 1.18                      |  |  |
| 18    | Corunna       | *   | *                  | *     | *                   | *        | 30.27                                     | -0.1                                    | 41          | 39   | -1                                      | SSE   | 2                   | b        | 2                | 50          | 39   | -                         |  |  |
| 19    | Corunna       | *   | *                  | *     | *                   | *        | 30.28                                     | +0.1                                    | 41          | 38   | 0                                       | S     | 2                   | b        | 3                | 52          | 34   | -                         |  |  |
| 21    | Bodo          | 29.96                                       | 26                 | SSW   | 4                   | 0        | 29.20                                     | -51                                     | 23          | -    | -22                                     | WSW   | 6                   | 0        | 3                | ?           | 16   | -                         |  |  |
|       | Belfort       | ?   | 20                 | NE    | 6                   | b        | ?   | ?                                       | 18          | -    | -9                                      | NE    | 7                   | bc       | *                | ?           | 16   | -                         |  |  |
|       | Perpignan     | 30.24                                       | 36                 | Z     | 0                   | b        | 30.35                                     | -0.3                                    | 30          | -    | +3                                      | WSW   | 2                   | s        | *                | 46          | ?    | 0.32                      |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.29                                     | -                                       | 42          | 39   | -                                       | SSE   | 3                   | b        | 2                | 54          | 32   | -                         |  |  |
| 22    | Cape Gris Nez | 30.62                                       | 29                 | E     | 1                   | m        | 30.62                                     | +0.1                                    | 27          | -    | +4                                      | SE    | 2                   | m        | 2                | 32          | ?    | -                         |  |  |
|       | Belfort       | ?   | 17                 | NE    | 3                   | bc       | ?   | ?                                       | 14          | -    | -4                                      | NE    | 3                   | bc       | *                | 23          | 13   | -                         |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.35                                     | +0.6                                    | 43          | 39   | +1                                      | E     | 4                   | b        | 3                | 52          | 37   | -                         |  |  |
| 23    | Corunna       | *   | *                  | *     | *                   | *        | 30.12                                     | -2.3                                    | 44          | 40   | +1                                      | WSW   | 3                   | m        | 1                | 54          | 36   | -                         |  |  |
| 24    | Corunna       | *   | *                  | *     | *                   | *        | 30.12                                     | 00                                      | 45          | 43   | +1                                      | ESE   | 1                   | c        | 4                | 59          | 37   | -                         |  |  |
| 25    | Brussels      | *   | *                  | *     | *                   | *        | 30.12                                     | -1.8                                    | 35          | -    | +10                                     | SSE   | 3                   | 0        | *                | 35          | 25   | -                         |  |  |
|       | Orient        | 30.05                                       | 40                 | E     | 3                   | 0        | 30.01                                     | -1.0                                    | 39          | -    | +6                                      | ESE   | 1                   | c        | 3                | 40          | ?    | -                         |  |  |
|       | Belfort       | ?   | 23                 | NE    | 1                   | bc       | ?   | -                                       | 28          | -    | +13                                     | NE    | 1                   | bc       | *                | 36          | 14   | -                         |  |  |
|       | Lyon          | 30.26                                       | 35                 | E     | 1                   | 0        | 30.26                                     | -10                                     | 35          | -    | +15                                     | E     | 1                   | 0        | *                | 38          | ?    | -                         |  |  |
|       | Nice          | 30.37                                       | 45                 | NE    | 7                   | T        | 30.39                                     | 00                                      | 45          | -    | +11                                     | NE    | 1                   | T        | 5                | 46          | ?    | 0.43                      |  |  |
| 26    | Haparanda     | 29.79                                       | 24                 | S     | 2                   | b        | 29.76                                     | +0.3                                    | 31          | 31   | -2                                      | SW    | 2                   | 0        | *                | 34          | 23   | -                         |  |  |
|       | Hernösand     | 29.93                                       | 24                 | Z     | 0                   | 0        | 29.76                                     | -2.6                                    | 26          | 25   | +5                                      | S     | 2                   | 0        | *                | 27          | ?    | -                         |  |  |
|       | Stockholm     | 30.01                                       | 28                 | Z     | 0                   | 0        | 29.91                                     | -2.3                                    | 30          | 29   | 0                                       | SW    | 2                   | 0        | *                | 36          | 25   | -                         |  |  |
|       | Husby         | 30.01                                       | 34                 | SSW   | 4                   | 0        | 30.00                                     | -2.0                                    | 34          | 32   | +1                                      | WSW   | 7                   | 0        | *                | 36          | 28   | -                         |  |  |
|       | Bodo          | 29.68                                       | 42                 | WSW   | 1                   | T        | 29.58                                     | -0.8                                    | 40          | 37   | -2                                      | SE    | 1                   | c        | *                | 43          | 36   | 0.20                      |  |  |
|       | Christiansund | 29.79                                       | 39                 | ESE   | 2                   | 0        | 29.67                                     | -2.5                                    | 40          | 35   | -4                                      | SW    | 2                   | bc       | 5                | ?           | 37   | -                         |  |  |
|       | Skudesnaes    | 29.88                                       | 39                 | SSE   | 6                   | 0        | 29.84                                     | -1.8                                    | 42          | 39   | +2                                      | SSE   | 6                   | 0        | 4                | ?           | 39   | -                         |  |  |
|       | Faerder       | 29.92                                       | 34                 | WSW   | 2                   | m        | 29.85                                     | -2.3                                    | 40          | 39   | +4                                      | WSW   | 2                   | 0        | 2                | 54          | 34   | -                         |  |  |
|       | Lyon          | 30.32                                       | 42                 | SSW   | 1                   | bc       | 30.30                                     | +0.4                                    | 41          | -    | +6                                      | W     | 1                   | T        | *                | 50          | ?    | 0.79                      |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.15                                     | -                                       | 51          | 49   | -                                       | S     | 5                   | 0        | 4                | 55          | 41   | 0.04                      |  |  |
| 28    | Corunna       | *   | *                  | *     | *                   | *        | 30.38                                     | ?                                       | 53          | 51   | +5                                      | SSE   | 5                   | 0        | 6                | 54          | 45   | 0.12                      |  |  |
| 29    | Corunna       | *   | *                  | *     | *                   | *        | 30.49                                     | +1.1                                    | 57          | 56   | +4                                      | W     | 5                   | k        | 7                | 59          | 50   | ?                         |  |  |
| 30    | Pembroke      | 29.73                                       | 49                 | WSW   | 5                   | 0        | 29.64                                     | -0.2                                    | 49          | 49   | -1                                      | SSW   | 4                   | f        | 5                | 51          | 48   | 0.12                      |  |  |
|       | Corunna       | *   | *                  | *     | *                   | *        | 30.52                                     | +0.3                                    | 55          | 54   | -2                                      | SSW   | 3                   | c        | 5                | 61          | 52   | -                         |  |  |
| 31    | Corunna       | *   | *                  | *     | *                   | *        | 30.37                                     | -1.5                                    | 56          | 53   | +1                                      | SSE   | 4                   | b        | 5                | 63          | 32   | -                         |  |  |



## 2. CORRECTIONS.

[illegible]