

METEOROLOGICAL OFFICE

LONDON.

DAILY WEATHER REPORTS.

1ST JULY - 31ST DECEMBER.

1888.

See Reg. Lond.

6/7/89

July to December 1888.

July to December 1888.



DAILY WEATHER REPORT.

for *Saturday, 1st December* 1888.
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | + YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|-----------------------------|------------------------------------|-----------------|-------|------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|------------------|----------|---------------|-------------|----------------|---------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea (0 to 3.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 30.19 | -11 | 72 | 0 | b | 30.22 | + .20 | 15 | 15 | + .28 | S | 2 | 0 | * | ? | -17 | - | |
| | Hernösand ... | 30.15 | 5 | NE | 2 | 0 | 30.17 | + .10 | 12 | 12 | + .7 | NNE | 2 | 0 | * | ? | 1 | - | |
| | Stockholm ... | 29.99 | 28 | NNE | 2 | 0 | 29.94 | - .01 | 32 | 30 | + .17 | ENE | 6 | 0 | * | ? | 14 | - | |
| | Wisby ... | 29.90 | 35 | NE | 6 | 0 | 29.82 | - .11 | 36 | 35 | + .8 | SSE | 4 | 0 | * | 37 | 25 | - | |
| | Bodö ... | 29.90 | 25 | ENE | 2 | b | 29.88 | - .00 | 24 | 22 | + .1 | ENE | 2 | 0 | 1 | 27 | 19 | - | |
| | Christiansund... | 29.74 | 28 | ESE | 5 | b | 29.74 | - .02 | 32 | 28 | + .4 | ESE | 4 | 0 | 3 | 32 | 25 | - | |
| | Skudesnaes ... | 29.71 | 37 | E | 4 | 0 | 29.72 | - .01 | 37 | 34 | + .5 | E | 2 | 0 | 3 | 37 | ? | - | |
| | Christiania Fjord (Fjorder) | 29.89 | 25 | NNE | 5 | 0 | 29.88 | ? | 28 | 26 | + .6 | NNE | 5 | 0 | 2 | ? | ? | - | |
| | Skagen (The Boav) | 29.73 | 33 | SE | 5 | 0 | 29.73 | - .05 | 34 | 33 | + .3 | E | 5 | 0 | 0 | 34 | 30 | 0.08 | |
| | Fanö ... | 29.52 | 40 | SE | 4 | 0 | 29.59 | + .08 | 40 | 40 | + .2 | SSE | 4 | 0 | * | 41 | 37 | 0.24 | |
| BRITISH ISLANDS. | Sumburgh Head | 29.53 | 40 | SSE | 5 | r | 29.53 | - .00 | 42 | 41 | + .1 | SSE | 4 | 0 | 6 | 42 | 40 | 0.06 | |
| | Stornoway ... | 29.37 | 44 | S | 3 | r | 29.33 | - .01 | 46 | 45 | + .5 | SW | 6 | 0 | 5 | 46 | 39 | 0.06 | |
| | Wick ... | 29.45 | 41 | SE | 4 | 0 | 29.55 | + .09 | 43 | 42 | 0 | SE | 2 | 0 | 2 | 43 | 40 | - | |
| | Nairn ... | 29.46 | 33 | 2 | 0 | b | 29.49 | + .11 | 35 | 33 | - .2 | 2 | 0 | bc | 1 | 43 | 26 | - | |
| | Aberdeen... | 29.49 | 43 | SE | 4 | 0 | 29.58 | + .09 | 38 | 32 | - .7 | SW | 1 | bc | 5 | 43 | 32 | 0.05 | |
| | Leith ... | 29.46 | 42 | NNE | 1 | 0 | 29.59 | + .19 | 36 | 35 | - .6 | S | 1 | f | * | 43 | 39 | 0.05 | |
| | Shields ... | 29.42 | 44 | ENE | 1 | r | 29.58 | + .19 | 35 | 35 | - .9 | WSW | 3 | 0 | 4 | 48 | 34 | 0.01 | |
| | Spurn Head ... | 29.29 | 44 | N | 3 | r | 29.63 | + .34 | 44 | 42 | - .1 | W | 3 | 0 | 3 | 45 | 42 | 0.23 | |
| | York ... | 29.37 | 44 | N | 1 | m | 29.65 | + .31 | 37 | 36 | - .6 | WNW | 1 | 0 | * | 43 | 36 | 0.02 | |
| | Loughborough | 29.39 | 44 | WNW | 1 | 0 | 29.69 | + .39 | 35 | 35 | - .8 | WNW | 1 | bc | * | 45 | 35 | - | |
| BRITISH ISLANDS. | Ardrossan ... | 29.45 | 40 | ENE | 2 | bc | 29.58 | + .21 | 45 | 45 | + .2 | S | 3 | 0 | 2 | 45 | 37 | - | |
| | Malin Head ... | 29.42 | 44 | S | 3 | bc | 29.45 | + .17 | 42 | 41 | - .1 | S | 5 | 0 | 4 | 45 | 40 | - | |
| | Mullaghmore ... | 29.43 | 38 | 2 | 0 | b | 29.52 | + .25 | 47 | 45 | + .6 | SSW | 4 | 0 | 2 | 48 | 37 | - | |
| | Belmullet ... | 29.45 | 47 | WSW | 2 | b | 29.47 | + .21 | 50 | 48 | + .11 | WSW | 5 | 0 | * | 50 | 38 | 0.03 | |
| | Donaghadee ... | 29.45 | 45 | E | 3 | b | 29.61 | + .30 | 35 | 34 | - .12 | SW | 3 | 0 | 2 | 48 | 34 | 0.01 | |
| | Barrow-in-Furness | 29.43 | 42 | NNE | 3 | bc | 29.64 | + .31 | 38 | 37 | - .6 | NE | 2 | 0 | * | 45 | 36 | - | |
| | Liverpool (Bidston) | 29.43 | 43 | E | 1 | 0 | 29.68 | + .38 | 42 | 41 | - .2 | WSW | 3 | 0 | 3 | 46 | 40 | 0.01 | |
| | Holyhead ... | 29.42 | 45 | E | 3 | og | 29.68 | + .42 | 45 | 43 | 0 | WSW | 3 | 0 | 2 | 46 | 42 | 0.04 | |
| | Parsonstown ... | 29.48 | 37 | 2 | 0 | b | 29.65 | + .35 | 38 | 37 | + .6 | S | 1 | 0 | * | 45 | 31 | - | |
| | Valencia ... | 29.53 | 48 | NW | 3 | b | 29.67 | + .40 | 51 | 49 | + .7 | SW | 5 | 0 | 5 | 51 | 40 | 0.06 | |
| BRITISH ISLANDS. | Roche's Point... | 29.49 | 39 | NW | 2 | b | 29.69 | + .39 | 45 | 44 | + .11 | WSW | 1 | 0 | 4 | 46 | 34 | - | |
| | Pembroke ... | 29.45 | 47 | WSW | 2 | bc | 29.78 | + .47 | 48 | 45 | 0 | WSW | 3 | 0 | 2 | 49 | 45 | 0.01 | |
| | Scilly ... | 29.38 | 45 | NW | 2 | op | 29.80 | + .47 | 51 | 48 | + .2 | W | 4 | 0 | 4 | 52 | 43 | 0.35 | |
| | Prawle Point ... | 29.47 | 46 | W | 2 | bc | 29.80 | + .47 | 43 | 42 | - .1 | WNW | 3 | 0 | 3 | 51 | 38 | 0.02 | |
| | Jersey ... | 29.52 | 51 | WSW | 4 | bc | 29.82 | + .46 | 46 | 43 | - .3 | NW | 3 | bc | 3 | 54 | 44 | 0.15 | |
| | Hurst Castle ... | 29.47 | 48 | W | 3 | b | 29.77 | + .50 | 43 | 42 | - .2 | WNW | 2 | 0 | 2 | 50 | 36 | 0.02 | |
| | Dungeness ... | 29.41 | 47 | W | 6 | e | 29.69 | + .49 | 44 | 42 | - .3 | W | 3 | 0 | 3 | 50 | 34 | 0.22 | |
| | London ... | 29.44 | 43 | W | 2 | or | 29.74 | + .50 | 38 | 37 | - .8 | WSW | 1 | 0 | * | 47 | 36 | 0.50 | |
| | Oxford ... | 29.50 | 42 | SW | 1 | bc | 29.73 | + .48 | 38 | 37 | - .5 | WSW | 1 | 0 | * | 44 | 37 | 0.33 | |
| | Cambridge ... | 29.40 | 44 | NW | 1 | r | 29.71 | + .45 | 38 | 37 | - .6 | W | 1 | 0 | * | 44 | 36 | 0.21 | |
| GERMANY. | Yarmouth ... | 29.31 | 44 | WSW | 4 | r | 29.61 | + .38 | 42 | 41 | - .3 | W | 3 | og | 4 | 46 | 40 | 0.32 | |
| | Cuxhaven ... | 29.47 | 50 | SSE | 2 | f | 29.64 | + .16 | 41 | 41 | - .1 | S | 3 | 0 | * | ? | 39 | - | |
| | Berlin ... | 29.65 | 44 | SW | 1 | 0 | 29.81 | + .30 | 39 | 38 | - .2 | SSW | 2 | 0 | * | 43 | 36 | 0.04 | |
| | Wiesbaden ... | * | * | * | * | * | 29.82 | + .31 | 42 | 41 | 0 | SW | 1 | 0 | * | 48 | 41 | 0.04 | |
| FRANCE & NETHERLANDS. | Munich ... | 29.81 | 37 | 2 | 0 | 0 | 29.87 | + .21 | 32 | 32 | - .6 | 2 | 0 | f | * | 48 | 28 | - | |
| | The Helder ... | 29.38 | 45 | SSW | 4 | f | 29.55 | + .23 | 46 | 45 | + .4 | SW | 5 | 0 | 3 | 46 | ? | 0.08 | |
| | Brussels .. | * | * | * | * | * | 29.75 | + .39 | 42 | 41 | - .3 | SSW | 4 | 0 | * | 49 | 41 | 0.04 | |
| | Cape Gris Nez... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | Paris ... | 29.63 | 43 | S | 3 | b | 29.77 | + .30 | 42 | 41 | - .2 | S | 3 | 0 | * | 48 | ? | 0.04 | |
| | Brest ... | 29.52 | 50 | WSW | 7 | 0 | 29.89 | + .44 | 50 | 50 | 0 | NW | 5 | 0 | 5 | ? | ? | 0.08 | |
| | Lorient ... | 29.55 | 51 | WNW | 8 | 0 | 29.91 | + .50 | 50 | 47 | + .4 | WNW | 5 | 0 | 4 | 52 | 46 | 0.16 | |
| | Rochefort ... | 29.78 | 50 | SW | 5 | 0 | 29.95 | + .40 | 51 | 48 | + .5 | WNW | 8 | 0 | 3 | 52 | 45 | 0.28 | |
| | Belfort ... | 29.54 | 38 | W | 1 | 0 | ? | ? | 42 | 42 | - .4 | W | 1 | 0 | * | 47 | 38 | 0.16 | |
| | Lyons ... | 29.76 | 47 | S | 1 | bc | 29.95 | + .26 | 40 | 37 | - .1 | S | 3 | bc | * | 54 | 41 | - | |
| PENIN-SULA. | Nice ... | 29.85 | 49 | NE | 5 | bc | 29.84 | + .05 | 44 | 43 | - .6 | W | 5 | bc | 1 | 55 | 41 | 0.43 | |
| | Perpignan ... | 29.78 | 49 | W | 1 | 0 | 30.02 | + .37 | 46 | 41 | + .10 | SW | 1 | 0 | * | 58 | 43 | 0.04 | |
| | Biarritz ... | 29.84 | 51 | NW | 9 | 0 | 30.06 | + .43 | 51 | 49 | - .2 | NW | 7 | 0 | 4 | 57 | 45 | 0.67 | |
| | Corunna ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | Lisbon ... | 29.95 | 51 | N | 4 | bc | 30.03 | + .29 | 45 | 41 | - .4 | NNE | 5 | 0 | 3 | 39 | 43 | 0.08 | |

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on Saturday, 1st December, 1888.

BAROMETER, WIND & 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 the barbs and feathers refer to force, thus —

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

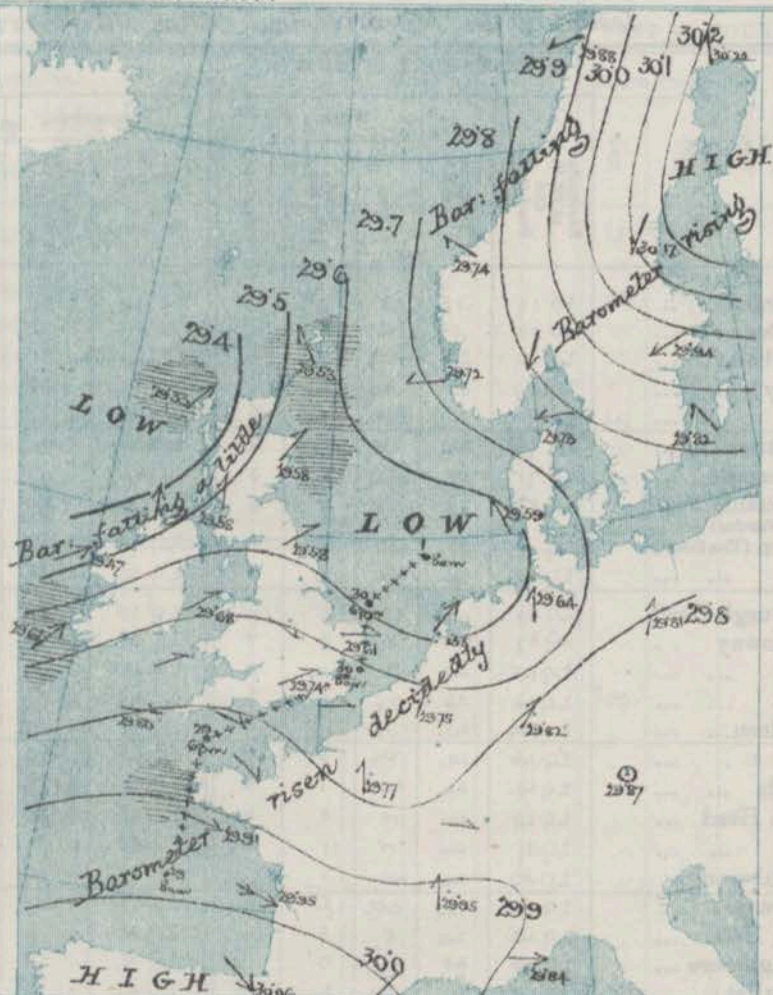
Sea Disturbance — where considerable is shown thus.

— Rough — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 15 Years 1871—1885.

| STATIONS | MEAN READINGS |
|---------------|---------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.922 |
| Jersey | 29.935 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

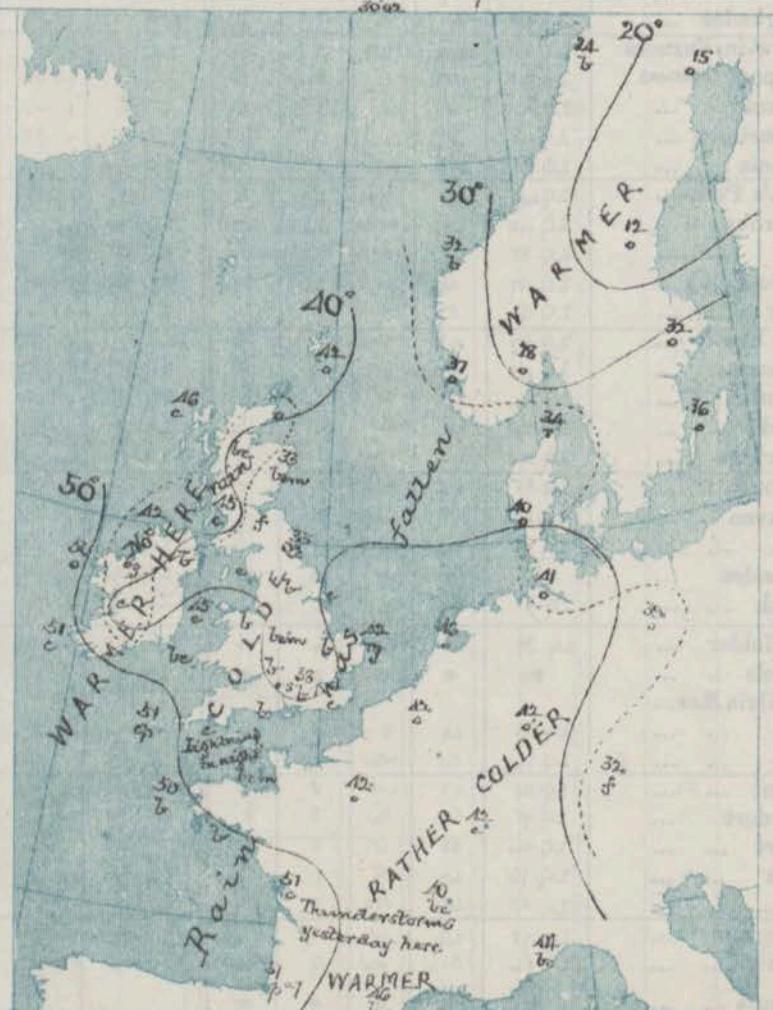
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|--------------------|------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Temp. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 ins. and upwards, over the Gulf of Rithmia, 30.0 ins. and upwards, over the Iberian Peninsula and the south of France.
 Lowest, 29.4 ins. and less, in a depression lying off the west of Scotland; 29 ins. and less, in a shallow disturbance lying over the southern part of the North Sea.
 Gradients moderate or slight generally. Barometer falling in Norway, the south of Sweden and the extreme northwest of our Islands, but rising elsewhere.

TEMPERATURE

Highest, 51° at Valencia, Seville, Rochefort, and Biarritz, 50° at Birmmole, Brest, Lorient, and 48° at Lennbrook.
 Lowest, 12° at Haparanda, 15° at Haparanda, 24° at Bodo, 28° at Trondheim, 32° at Stockholm, Christiansund and Munich, and 33° at Aberdeen.
 Frost occurred last night over Scotland and also (on the ground) over the central parts of England.

WIND

Fresh from the SWnd on our extreme western coasts, light from the Wnd in the south and east.
 Fresh or strong from the NWnd over the Bay of Biscay; moderate from E. over Scandinavia.

WEATHER

Drill in Sweden, Denmark, and the extreme west of our Islands, with rain at Hagen.
 Fine in most other localities, but showery at Seville and Biarritz.
 Rain fell yesterday in many parts of our Islands and France, and thunderstorms occurred at Rochefort and Lyons.

SEA

Rough at Lumburghead, and rather rough at Harwich, Aberdeen, and Valencia, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression over the North Sea appears to be dispersing and the weather over our eastern and southeastern districts is likely to remain generally fine.

The low pressure system off the west of Scotland is apparently of no great depth, but some increase of wind from the SWnd or Snd is probable on the extreme western and northern coasts.

FORECASTS

For the 24 hours ending at NOON on 2nd Dec^r 1888.

DISTRICTS.

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

FORECASTS.

0 { Sth winds, freshening; fair to unsettled and some rain.
 1 { }
 2 { }
 3 { }
 4 { }
 5 { }
 Wth to SWth winds, moderate; fair generally

DISTRICTS.

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


FORECASTS.


6 { Same as N^o 0 and 1.
 7 { SWth winds, freshening; fair to unsettled and some rain.
 8 { Wth and SWth winds, moderate or fresh; fair generally, but some showers.

9 { Same as N^o 7.

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. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | | | | | | | Holyhead ... | 29.34 | 45 | 44 | a 3 | cp | 3 |
| Sumburgh Head ... | 29.53 | 40 | 40 | SSE 5 | r | 7 | Valencia ... | 29.41 | 46 | 45 | 20 0 | of | 1 |
| Stornoway ... | 29.35 | 41 | 41 | SE 6 | 0 | 1 | Scilly ... | 29.37 | 49 | 46 | SW 5 | op | 5 |
| Aberdeen ... | 29.49 | 42 | 39 | SE 5 | ogq | 6 | Jersey ... | 29.46 | 53 | 48 | WSW 5 | e | 4 |
| Shields ... | 29.38 | 45 | 43 | ESE 2 | 0 | 4 | Dungeness ... | 29.31 | 47 | 45 | W 6 | e | 5 |
| Ardrossan ... | 29.41 | 40 | 40 | NE 1 | e | 1 | London ... | 29.33 | 45 | 44 | W 1 | ogm | * |
| Malin Head ... | 29.36 | 44 | 44 | E 2 | 0 | 2 | Yarmouth ... | 29.23 | 46 | 45 | W 2 | ofg | 4 |
| Mullaghmore ... | 29.26 | 45 | 43 | ESE 2 | 6 | 2 | Rochefort ... | 29.65 | 50 | 49 | WSW 4 | 0 | 2 |
| Belmullet ... | 29.26 | 49 | 49 | S 1 | 6 | * | | | | | | | |

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

The reports for yesterday morning showed that pressure varied from 30.0 ins. and more over the southern part of the Mediterranean, and from about the same value over Northern Europe to less than 29.3 ins. in a depression lying off the west of Ireland, as well as in a secondary disturbance lying over the southeast of England. The wind was consequently, W⁴ to S³ over France, and the southern part of our Islands, E² elsewhere; in force it was strong at several of the Western and Central French stations, as well as in Scotland, but was light or moderate elsewhere. The weather continued in a most unsettled, showery condition over the western countries, and thunderstorms had again occurred in the south. Temperature continued to decrease over Northern Europe, and remained low over Hungary. The lowest readings were (1) -13° (F) at Haparanda, -4° at Uleaborg, +5° at Helsingfors, 11° at Archangel, 14° at Stockholm, 23° at Rostock, 28° at Kolding, (2°) 27° at Hermannstadt, and 28° at Rendsburg. The highest values were 62° at Malta, 61° at Algiers, Cagliari, and Sanguinara, 59° at Palermo, 57° at Naples, 56° at Civitavecchia, 53° at Rimini, and 49° at Scilly.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Sunday 2nd DECEMBER. 1888.
 Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | † YESTERDAY EVENING. | | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|------------------------------------|-----------------|-------|-------------------|----------|------------|----------------------------------|-----------------------------------|------|-------|-----------------------------------|----------|--------------|-------------|-------------------|---------------------|----------------|------|------|
| | Barometer at 35° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | Barometer. | SHADE TEMP. | | | WIND. | | Weather. | Sea. 0 to 9. | SHADE TEMP. | | Amount of Rainfall. | | | |
| | | | Dir. | Force. (0 to 12.) | | | Reading at 35° 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 .. | 30.24 | 22 | S | 2 | 0 | 30.17 | — .05 | 25 | 24 | + | 10 | SSE | 2 | 0 | * | 25 | — | — |
| | Hernösand ... | 30.12 | 23 | NE | 2 | 0 | 29.98 | — .19 | 33 | 32 | + | 21 | E | 2 | 0 | * | 27 | 5 | 0.08 |
| | Stockholm ... | 29.84 | 34 | NE | 4 | 0 | 29.88 | — .06 | 33 | 32 | + | 1 | S | 2 | 0 | * | 36 | 28 | 0.12 |
| | Wisby ... | 29.79 | 39 | SSE | 4 | 0 | 29.97 | — .15 | 39 | 38 | + | 3 | S | 4 | 0 | * | 39 | 32 | 0.08 |
| | Bodö ... | 29.84 | 22 | ENE | 6 | 0 | 29.68 | — .20 | 30 | 28 | + | 6 | ENE | 4 | 0 | 5 | 27 | 19 | — |
| | Christiansund... | 29.60 | 39 | ESE | 3 | 0 | 29.55 | — .19 | 39 | 36 | + | 7 | ESE | 2 | 0 | 2 | 39 | — | — |
| | Skudesnaes ... | 29.74 | 38 | SE | 6 | 0 | 29.71 | — .01 | 41 | 39 | + | 4 | SSE | 6 | 0 | 5 | 41 | 37 | — |
| | Christiania Fjord (Fjord) | 29.77 | 31 | NNE | 5 | 0 | 29.83 | — .05 | 32 | 31 | + | 4 | NNE | 2 | 0 | 1 | 32 | 28 | — |
| | Skagen (The Scaw) | 29.77 | 36 | SE | 3 | 0 | 29.83 | — .10 | 37 | 37 | + | 3 | SE | 2 | 0 | 1 | 45 | 34 | 0.12 |
| | Fanö ... | 29.69 | 41 | S | 2 | 0 | 29.88 | — .29 | 41 | 41 | + | 1 | WSW | 2 | 0 | * | 43 | 39 | 0.04 |
| BRITISH ISLANDS. | Sumburgh Head | 29.38 | 44 | SSE | 5 | 0 | 29.45 | — .08 | 44 | 42 | + | 2 | W | 4 | 0 | 6 | 45 | 42 | 0.02 |
| | Stornoway ... | 29.28 | 43 | SW | 5 | 0 | 29.45 | — .12 | 42 | 42 | — | 4 | SW | 5 | 0 | 4 | 48 | 38 | 0.02 |
| | Wick ... | 29.35 | 46 | S | 6 | 0 | 29.53 | — .02 | 46 | 39 | — | 3 | S | 2 | 0 | 2 | 46 | 36 | — |
| | Nairn ... | 29.33 | 44 | WSW | 2 | 0 | 29.55 | — .06 | 40 | 37 | + | 5 | SW | 1 | 0 | 1 | 45 | 32 | 0.07 |
| | Aberdeen... | 29.48 | 44 | SSW | 5 | 0 | 29.66 | — .08 | 39 | 38 | + | 6 | SW | 2 | 0 | 4 | 46 | 33 | 0.02 |
| | Leith ... | 29.52 | 40 | SW | 1 | 0 | 29.68 | — .09 | 45 | 43 | + | 9 | SW | 1 | 0 | * | 50 | 33 | — |
| | Shields ... | 29.64 | 42 | SSW | 3 | 0 | 29.73 | — .15 | 48 | 46 | + | 13 | SSW | 1 | 0 | 2 | 49 | 34 | — |
| | Spurn Head ... | 29.74 | 44 | WSW | 3 | 0 | 29.88 | — .25 | 46 | 45 | + | 2 | SSW | 3 | 0 | 3 | 47 | 41 | — |
| | York ... | 29.76 | 44 | S | 1 | 0 | 29.85 | — .20 | 46 | 44 | + | 9 | S | 2 | 0 | * | 48 | 35 | — |
| | Loughborough | 29.80 | 44 | SW | 2 | 0 | 29.93 | — .24 | 48 | 46 | + | 13 | SW | 3 | 0 | * | 49 | 34 | — |
| GERMANY. | Ardrossan ... | 29.51 | 48 | S | 4 | 0 | 29.67 | — .09 | 48 | 48 | + | 3 | SSW | 3 | 0 | 2 | 48 | 44 | 0.11 |
| | Malin Head ... | 29.44 | 45 | SW | 4 | 0 | 29.55 | — .10 | 44 | 44 | + | 2 | S | 4 | 0 | 4 | 48 | 42 | 0.25 |
| | Mullaghmore ... | 29.50 | 49 | WSW | 5 | 0 | 29.58 | — .06 | 49 | 48 | + | 2 | SW | 4 | 0 | 3 | 50 | 45 | 0.35 |
| | Belmullet ... | 29.52 | 48 | SW | 5 | 0 | 29.58 | — .11 | 46 | 46 | — | 4 | NNE | 1 | 0 | * | 51 | 45 | 0.31 |
| | Donaghadee ... | 29.57 | 48 | SSW | 3 | 0 | 29.68 | — .07 | 48 | 47 | + | 13 | SW | 3 | 0 | 1 | 49 | 34 | 0.04 |
| | Barrow-in-Furness | 29.67 | 48 | S | 3 | 0 | 29.79 | — .15 | 49 | 48 | + | 11 | S | 4 | 0 | * | 49 | 38 | — |
| | Liverpool (Bidston) | 29.73 | 49 | SW | 3 | 0 | 29.84 | — .16 | 51 | 48 | + | 9 | SW | 3 | 0 | 3 | 52 | 42 | — |
| | Holyhead ... | 29.69 | 51 | SW | 5 | 0 | 29.79 | — .11 | 52 | 50 | + | 7 | SW | 6 | 0 | 5 | 52 | 44 | 0.01 |
| | Parsonstown ... | 29.64 | 50 | SW | 2 | 0 | 29.64 | — .01 | 51 | 49 | + | 13 | SW | 2 | 0 | * | 51 | 37 | 0.02 |
| | Valencia ... | 29.69 | 53 | SSW | 6 | 0 | 29.64 | — .03 | 54 | 53 | + | 3 | SSW | 8 | 0 | 6 | 54 | 48 | 0.55 |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.76 | 45 | SW | 4 | 0 | 29.74 | — .05 | 52 | 51 | + | 7 | SSW | 6 | 0 | 5 | 52 | 44 | — |
| | Pembroke ... | 29.81 | 51 | WSW | 4 | 0 | 29.89 | — .14 | 52 | 51 | + | 4 | SSW | 5 | 0 | 4 | 52 | 48 | 0.02 |
| | Scilly ... | 29.87 | 52 | WSW | 5 | 0 | 29.94 | — .14 | 53 | 50 | + | 2 | SSW | 6 | 0 | 4 | 52 | 49 | 0.01 |
| | Prawle Point ... | 29.93 | 51 | WSW | 4 | 0 | 30.03 | — .23 | 51 | 49 | + | 8 | WSW | 4 | 0 | 4 | 52 | 42 | — |
| | Jersey ... | 29.99 | 51 | W | 3 | 0 | 30.15 | — .23 | 52 | 49 | + | 6 | SSW | 4 | 0 | 4 | 55 | 45 | 0.05 |
| | Harst Castle ... | 29.91 | 49 | W | 3 | 0 | 30.07 | — .30 | 50 | 50 | + | 7 | WSW | 5 | 0 | 1 | 51 | 42 | 0.01 |
| | Dungeness ... | 29.88 | 45 | WSW | 4 | 0 | 30.06 | — .37 | 51 | 49 | + | 7 | W | 3 | 0 | 3 | 51 | 41 | — |
| | London ... | 29.90 | 44 | W | 2 | 0 | 30.05 | — .31 | 49 | 49 | + | 11 | WSW | 3 | 0 | * | 49 | 37 | — |
| | Oxford ... | 29.89 | 45 | W | 2 | 0 | 30.01 | — .28 | 47 | 46 | + | 9 | SW | 3 | 0 | * | 48 | 38 | — |
| | Cambridge ... | 29.84 | 40 | W | 1 | 0 | 30.02 | — .31 | 45 | 44 | + | 7 | SW | 1 | 0 | * | 48 | 35 | — |
| GERMANY. | Yarmouth ... | 29.80 | 41 | W | 3 | 0 | 29.95 | — .34 | 44 | 43 | + | 2 | WSW | 4 | 0 | 3 | 44 | 38 | 0.02 |
| | Cuxhaven ... | 29.67 | 42 | S | 2 | 0 | 29.94 | — .30 | 42 | 42 | + | 1 | SW | 2 | 0 | * | 44 | 41 | 0.10 |
| | Berlin ... | 29.90 | 43 | S | 2 | 0 | 30.04 | — .23 | 39 | 38 | + | 0 | SW | 3 | 0 | * | 46 | 36 | — |
| | Wiesbaden ... | * | * | * | * | * | 30.19 | — .07 | 42 | 41 | + | 0 | 2 | 0 | 0 | * | 46 | 41 | — |
| | Munich ... | 30.01 | 38 | SW | 2 | 0 | 30.25 | — .38 | 40 | 37 | + | 8 | SW | 5 | 0 | * | 41 | 32 | 0.04 |
| | The Helder ... | 29.81 | 46 | W | 3 | 0 | 29.97 | — .42 | 47 | 47 | + | 1 | SW | 3 | 0 | 2 | 48 | 45 | 0.43 |
| | Brussels ... | * | * | * | * | * | 30.13 | — .38 | 44 | 43 | + | 2 | SW | 4 | 0 | * | 46 | 41 | — |
| | Cape Gris Nez... | 29.88 | 46 | WSW | 4 | 0 | 30.07 | — .30 | 47 | 47 | + | 0 | SW | 5 | 0 | 4 | 50 | 45 | — |
| | Paris ... | 30.00 | 44 | SW | 3 | 0 | 30.23 | — .46 | 42 | 41 | + | 0 | SW | 3 | 0 | * | 49 | 39 | — |
| | Brest ... | 30.04 | 32 | W | 4 | 0 | 30.15 | — .26 | 37 | 46 | + | 0 | WSW | 5 | 0 | 4 | 37 | 39 | — |
| FRANCE & NETHERLANDS. | Lorient ... | 30.06 | 53 | W | 4 | 0 | 30.14 | — .23 | 3 | 44 | + | 3 | SSW | 5 | 0 | 4 | 53 | 48 | 0.04 |
| | Rocheport ... | 30.16 | 50 | WSW | 3 | 0 | 30.29 | — .34 | 45 | 44 | + | 6 | SSE | 4 | 0 | 2 | 46 | 37 | — |
| | Belfort ... | 30.00 | 44 | W | 1 | 0 | 30.32 | — .37 | 41 | 41 | + | 0 | W | 1 | 0 | * | 46 | 34 | — |
| | Lyons ... | 30.14 | 44 | W | 1 | 0 | 30.32 | — .37 | 37 | 36 | + | 3 | NNW | 1 | 0 | * | 51 | 36 | — |
| | Nice ... | 29.93 | 53 | WSW | 8 | 0 | 30.17 | — .33 | 44 | 37 | + | 0 | ENE | 3 | 0 | 1 | 57 | 41 | — |
| | Perpignan ... | 30.17 | 50 | W | 2 | 0 | 30.29 | — .27 | 36 | 35 | + | 10 | W | 3 | 0 | * | 59 | 35 | — |
| | Biarritz ... | 30.14 | 50 | SW | 4 | 0 | 30.25 | — .19 | 40 | 37 | + | 11 | SE | 4 | 0 | 3 | 61 | 39 | 0.16 |
| | Cornwall ... | * | * | * | * | * | 30.12 | — .01 | 42 | 39 | + | 2 | SSE | 1 | 0 | 3 | 52 | 39 | — |
| | Lisbon ... | 30.13 | 50 | NNE | 7 | 0 | 30.23 | — .20 | 42 | 39 | + | 3 | NNE | 5 | 0 | * | 55 | 41 | — |
| | PERIN- SULA. | | | | | | | | | | | | | | | | | | |

WEATHER CHARTS

for 8 a.m. on

Sunday, 2nd December

1888.

BAROMETER, WIND & 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 the barbs and feathers refer to force, thus —
 → = forces above 10; → = forces 8 to 10;
 → = forces 5 to 7; → = forces 1 to 4;
 ○ = dead calm.

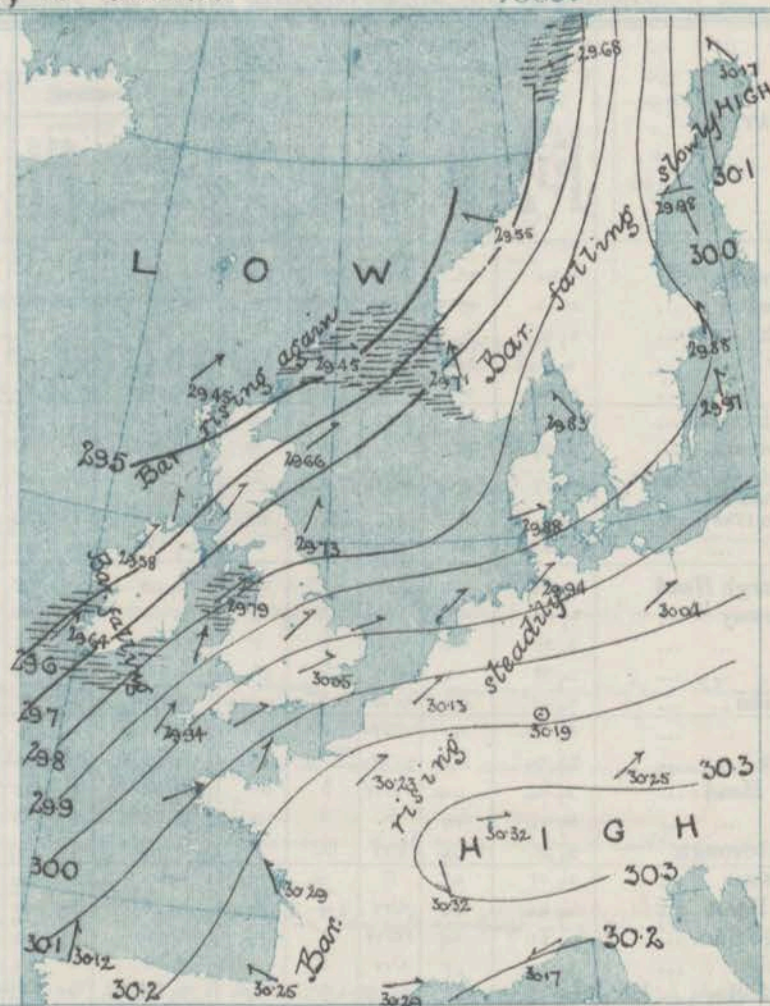
Sea Disturbance — where considerable, is shown thus.

— Rough. — High.

MEAN HEIGHT of the BAROMETER

at 6 a.m. for the month of December.
 During the 15 Years 1871 — 1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.767 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.988 |
| Yarmouth | 29.914 |



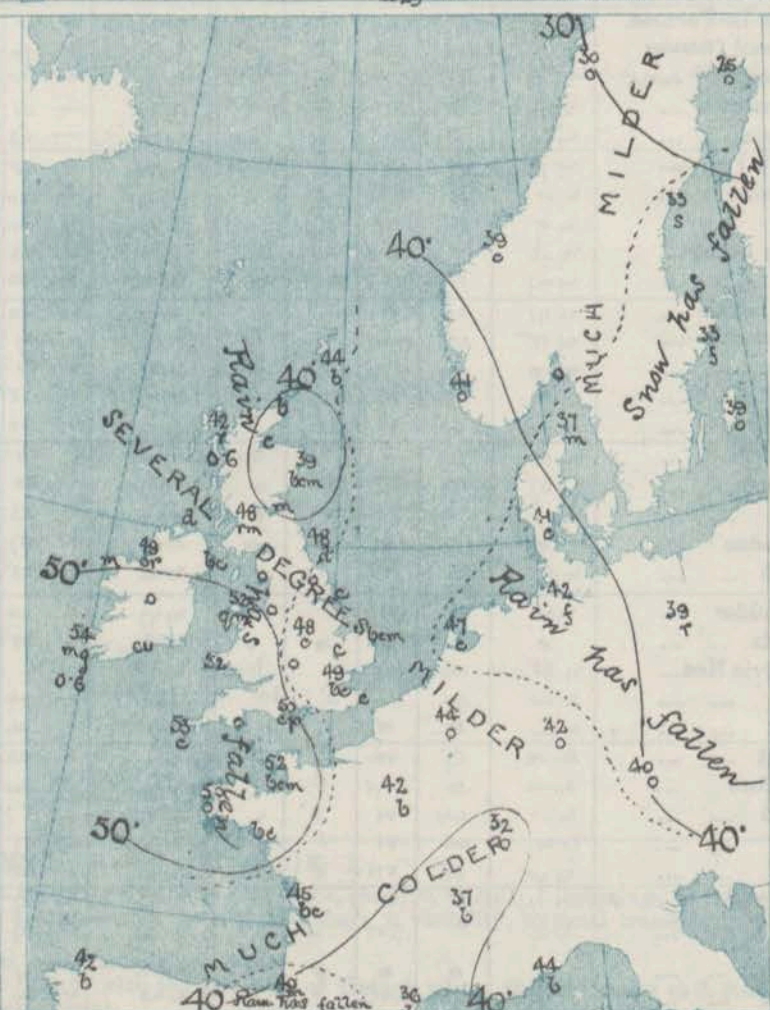
TEMPERATURE, & WEATHER at 8 A.M., with RAINFALL in PAST 24 HOURS.

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. (Inches.) |
|---------------|---------------|---------------|-------------------|-------------------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. New. | at 8 a.m. Old. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 41.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.6 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

Note — The Temperature means are for the 15 years 1871 — 85, the Rainfall means are mainly those for the 20 years 1868 — 85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 in. and upwards, over central France; 30.1 in. and upwards in the north of Sweden.
Lowest, 29.5 in. and less, in a depression lying to the northward of Scotland.

Gradient moderate but increasing in west. Barometer falling in the south of Ireland and also over the northern parts of Scandinavia, but rising elsewhere.

TEMPERATURE

Highest, 54° at Valencia, 53° at Sicily and 52° at Holyhead, Hooker Point, Pembroke, Jersey and Dorset.

Lowest, 25° at Haparanda, 30° at Rode, 32° at Åre and Belfast, 33° at Helsingfors and Stockholm, and 37° at Lyons.

WIND

Chiefly S.W. in direction, and light or moderate in force, but strong at some of our western stations, with a gale at Valencia E. over the northern parts of Scandinavia, and the south of France.

WEATHER

Fine in France, the south-east of England, and the north and east of Scotland.

Cloudy or overcast elsewhere with rain on our extreme north-west coasts and also at Berlin.

In the course of the past 24 hours rain has fallen in many parts of the United Kingdom.

SEA

Rough on our extreme western and northern coasts, but moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lay off the west of Scotland yesterday is now passing away to the northward of our islands, but the new fall of the barometer which has set in over the south of Ireland seems to indicate the approach of fresh disturbances from the Atlantic.

FORECASTS

For the 24 hours ending at NOON on 3rd December, 1888.

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

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.

The SOUTH CONE was hoisted on Saturday afternoon in districts 0, 6, and part of 1, and this morning in districts 7 to 10.

YESTERDAY'S 2 P.M. REPORTS.

| | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. | | |
|-------------------|-------|------|------|-------|------|------|---|---------------|-------|------|-------|------|------|-----|---|
| Skudesnaes ... | 29.43 | 38 | 33 | ESE | 4 | 0 | 3 | Holyhead ... | 29.64 | 51 | 49 | SW | 4 | 0g | 4 |
| Sumburgh Head ... | 29.41 | 44 | 40 | SE | 4 | c | 6 | Valencia ... | 29.67 | 52 | 50 | SW | 6 | omp | 5 |
| Stornoway ... | 29.20 | 48 | 48 | SW | 8 | r | 6 | Scilly ... | 29.85 | 53 | 50 | WSW | 5 | c | 4 |
| Aberdeen ... | 29.58 | 40 | 38 | S | 3 | c | 6 | Jersey ... | 29.94 | 54 | 49 | NW | 3 | 6 | 3 |
| Shields ... | 29.63 | 45 | 42 | WSW | 2 | bm | 3 | Dungeness ... | 29.81 | 48 | 46 | W | 3 | c | 2 |
| Ardrossan ... | 29.53 | 48 | 48 | S | 5 | r | 5 | London ... | 29.81 | 48 | 46 | W | 2 | bm | * |
| Malin Head ... | 29.40 | 47 | 47 | S | 5 | 0 | 5 | Yarmouth ... | 29.72 | 44 | 42 | W | 3 | bm | 3 |
| Mullaghmore ... | 29.48 | 50 | 48 | SSW | 5 | omp | 4 | Rochefort ... | 30.08 | 54 | 51 | NW | 5 | c | 2 |
| Belmullet ... | 29.46 | 51 | 50 | SW | 7 | 0d | * | | | | | | | | |

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

The report for yesterday morning showed that pressure was highest 30.3 ins: and upwards in the neighbourhood of the White Sea, and high 30.1 ins: and upwards over Spain and Algeria. The lowest readings, 29.4 ins: and less, were found in a depression lying off the west of Scotland, but a shallow depression with readings below 29.6 ins: was lying over the southern part of the North Sea. The wind was fresh from the S^W in the north of our Islands, light from W. on our south coasts, and strong from the same quarter or from NW over the north of France. Over Northern Europe, however, it was chiefly E³ (NE to SE), while over the more central countries and in Italy, moderate SW breezes were reported. The weather varied greatly in different localities, but was upon the whole in a cloudy, unsettled state, with rain locally and a thunderstorm at Rome. Temperature had risen somewhat in the extreme west and north, but elsewhere the changes were very irregular; readings ranged from 60° and upwards over South Italy, and 55° and upwards at many of the Spanish, Italian, and Algerian stations to several degrees below the freezing point over Lapland and Northern Russia. The highest individual readings were 65° at Palermo, 62° at Algiers and Cagliari, 55° at Brindisi, and 58° at Rome, Naples, and Oren; the lowest were -8° F. at Archangel, +12° at Helsingfors, 15° at Haparanda, 17° at Abo, 18° at Kuopio, 28° at Osk and 23° at St. Petersburg.

In the course of the day, the depression off the west of Scotland travelled northwards and as it passed along a fresh SW⁴ gale was experienced in the Shetlands. In the eastern and southern parts of the Kingdom the weather remained generally fair and quiet.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Monday, 3rd December 1888.
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|---------------------------|------------------------------|-----------------|-------|-------------------|----------|--------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|----------------|-------------|----------------|---------------------|--|
| STATIONS. | | Barometer at 5 P. Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | Dir. | Force. (0 to 12.) | | Reading at 5 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 .. | 30.15 | 27 | SE | 4 | S | 30.08 | -0.09 | 30 | 29 | +5 | S | 2 | 0 | * | ? | 19 | 0.04 | |
| | Hernösand ... | 29.94 | 34 | SE | 0 | 0 | 30.04 | +0.06 | 33 | 32 | 0 | SW | 2 | 0 | * | 37 | 23 | 0.12 | |
| | Stockholm ... | 30.06 | 36 | SE | 0 | f | 30.10 | +0.32 | 36 | 35 | +3 | SSE | 2 | f | * | 37 | 30 | - | |
| | Wibby ... | 30.11 | 40 | S | 4 | 0 | 30.17 | +0.20 | 39 | 38 | 0 | SSW | 4 | 0 | * | 41 | 36 | - | |
| | Bodö ... | 29.69 | 37 | ESE | 6 | 0 | 29.68 | -0.00 | 38 | 34 | +8 | E | 4 | 0 | 2 | 38 | 30 | - | |
| | Christiansund... | 29.65 | 34 | SE | 3 | b | 29.67 | +0.12 | 40 | 37 | +1 | ESE | 2 | 0 | 2 | 40 | 36 | - | |
| | Skudesnaes ... | 29.81 | 43 | SSE | 6 | 0 | 29.75 | +0.04 | 45 | 45 | +4 | SSE | 6 | r | 5 | ? | ? | 0.32 | |
| | Christiania Fjord (Fjord) | 29.94 | 36 | NNE | 2 | f | 29.90 | +0.07 | 42 | 42 | +10 | SSE | 3 | r | 2 | ? | 36 | - | |
| | Skagen (The Cow) | 29.97 | 41 | SW | 1 | f | 29.96 | +0.13 | 42 | 41 | +5 | SW | 2 | r | 1 | 43 | 36 | 0.12 | |
| | Fanö ... | 30.04 | 45 | SW | 4 | 0 | 30.07 | +0.19 | 44 | 44 | +3 | SW | 4 | m | * | 46 | 41 | - | |
| BRITISH ISLANDS. | Sumburgh Head | 30.54 | 45 | WSW | 2 | 0 | 29.49 | +0.04 | 45 | 44 | +1 | SSE | 3 | 0 | 5 | 46 | 44 | - | |
| | Sornoway ... | 29.53 | 42 | SW | 3 | bc | 29.19 | -0.26 | 49 | 49 | +7 | S | 4 | r | 6 | 49 | 39 | 0.71 | |
| | Wick ... | 29.58 | 42 | S | 1 | b | 29.33 | -0.20 | 48 | 48 | +8 | S | 4 | ru | 4 | 48 | 36 | 0.05 | |
| | Nairn ... | 29.58 | 42 | SE | 0 | 0 | 29.31 | -0.24 | 50 | 48 | +10 | SW | 3 | 0 | 1 | 50 | 36 | 0.01 | |
| | Aberdeen... | 29.62 | 44 | S | 1 | ogm | 29.47 | -0.19 | 48 | 47 | +9 | SSE | 5 | oggr | 5 | 48 | 33 | 0.33 | |
| | Leith ... | 29.59 | 47 | SW | 1 | r | 29.47 | -0.21 | 55 | 52 | +10 | SW | 5 | cp | * | 55 | 44 | 0.11 | |
| | Shields ... | 29.72 | 50 | SW | 1 | bc | 29.65 | -0.08 | 52 | 49 | +4 | S | 5 | e | 2 | 53 | 46 | 0.01 | |
| | Spurn Head ... | 29.90 | 49 | S | 4 | c | 29.85 | -0.03 | 50 | 49 | +4 | SSW | 6 | 0 | 5 | 50 | 46 | 0.05 | |
| | York ... | 29.85 | 50 | S | 2 | 0 | 29.77 | -0.08 | 52 | 50 | +6 | S | 4 | 0 | * | 54 | 44 | 0.05 | |
| | Loughborough | 29.94 | 50 | SSW | 3 | r | 29.86 | -0.07 | 51 | 50 | +3 | SSW | 5 | ogj | * | 54 | 44 | 0.09 | |
| GERMANY. | Ardrossan ... | 29.61 | 50 | S | 4 | 0 | 29.40 | -0.27 | 52 | 52 | +4 | S | 5 | r | 4 | 52 | 47 | 0.64 | |
| | Malin Head ... | 29.62 | 46 | SW | 1 | bf | 29.23 | -0.32 | 54 | 52 | +10 | SSW | 5 | opu | 4 | 53 | 43 | 0.33 | |
| | Mullaghmore ... | 29.61 | 47 | SE | 0 | b | 29.25 | -0.33 | 56 | 54 | +7 | SW | 7 | oppe | 5 | 56 | 40 | 0.51 | |
| | Belmullet ... | 29.60 | 45 | ESE | 2 | 0 | 29.24 | -0.34 | 52 | 52 | +6 | SSW | 4 | om | * | 54 | 44 | 0.63 | |
| | Donaghadee ... | 29.63 | 50 | SSW | 3 | c | 29.43 | -0.25 | 53 | 53 | +5 | SSW | 6 | r | 4 | 53 | 49 | 0.38 | |
| | Barrow-in-Furness | 29.76 | 48 | S | 5 | r | 29.63 | -0.16 | 50 | 50 | +1 | S | 7 | op | * | 50 | 47 | 0.42 | |
| | Liverpool (Bidston) | 29.82 | 52 | SSW | 4 | 0 | 29.71 | -0.13 | 53 | 51 | +2 | SSE | 4 | 0 | 3 | 54 | 49 | 0.05 | |
| | Holyhead ... | 29.76 | 51 | SSW | 4 | rgm | 29.60 | -0.19 | 53 | 53 | +1 | SSW | 8 | ggm | 6 | 53 | 50 | 0.47 | |
| | Parsonstown ... | 29.66 | 51 | SW | 1 | bc | 29.41 | -0.23 | 55 | 54 | +4 | SW | 3 | r | * | 55 | 50 | 0.58 | |
| | Valencia ... | 29.68 | 52 | SSW | 5 | ogm | 29.39 | -0.25 | 56 | 55 | +2 | SSW | 7 | rm | 6 | 56 | 50 | 0.61 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.73 | 51 | SW | 5 | rm | 29.51 | -0.23 | 53 | 53 | +1 | SW | 7 | r | 5 | 53 | 48 | 0.95 | |
| | Pembroke ... | 29.82 | 51 | SSW | 6 | r | 29.66 | -0.23 | 53 | 53 | +1 | S | 7 | dqj | 7 | 54 | 50 | 0.23 | |
| | Scilly ... | 29.90 | 53 | SSW | 8 | 0 | 29.75 | -0.19 | 55 | 55 | +2 | SSW | 8 | rj | 6 | 55 | 51 | 0.10 | |
| | Prawle Point... | 30.03 | 52 | SW | 5 | 0 | 29.94 | -0.09 | 53 | 51 | +2 | S | 6 | ou | 6 | 54 | 51 | 0.01 | |
| | Jersey ... | 30.15 | 54 | SSW | 4 | cg | 30.09 | -0.06 | 50 | 48 | -2 | SSE | 6 | om | 5 | 56 | 49 | - | |
| | Hurst Castle ... | 30.08 | 53 | SSW | 5 | bc | 30.02 | -0.05 | 52 | 51 | +2 | SW | 7 | cpd | 5 | 54 | 50 | 0.03 | |
| | Dungeness ... | 30.10 | 52 | WSW | 5 | c | 30.08 | +0.02 | 49 | 49 | -2 | SW | 6 | c | 5 | 53 | 49 | 0.02 | |
| | London ... | 30.06 | 50 | SW | 3 | op | 30.02 | -0.03 | 50 | 48 | +1 | WSW | 4 | c | * | 55 | 48 | 0.01 | |
| | Oxford ... | 30.03 | 49 | SW | 2 | c | 29.96 | -0.05 | 50 | 49 | +3 | S | 3 | as | * | 54 | 47 | 0.01 | |
| | Cambridge ... | 30.04 | 47 | SW | 1 | 0 | 29.96 | -0.06 | 50 | 48 | +5 | SW | 2 | 0 | * | 55 | 43 | - | |
| PENINSULA. | Yarmouth ... | 30.02 | 47 | SSW | 3 | bc | 29.99 | +0.04 | 48 | 46 | +4 | SSW | 5 | be | 4 | 50 | 37 | 0.01 | |
| | Cuxhaven ... | 30.07 | 44 | WSW | 2 | f | 30.17 | +0.23 | 46 | 45 | +4 | SSW | 3 | f | * | 47 | ? | - | |
| | Berlin ... | 30.62 | 43 | W | 1 | r | 30.31 | +0.27 | 44 | 43 | +5 | SW | 1 | 0 | * | 46 | ? | 0.04 | |
| | Wiesbaden ... | * | * | * | * | * | 30.35 | +0.16 | 39 | 37 | -3 | SW | 0 | 0 | * | 48 | 37 | - | |
| | Munich ... | 30.37 | 44 | SE | 0 | c | 30.37 | +0.12 | 28 | 27 | -12 | SE | 4 | c | * | 45 | 27 | - | |
| | The Helder ... | 30.10 | 47 | SSW | 3 | bc | 30.11 | +0.14 | 46 | 45 | -1 | SSW | 4 | c | 3 | 48 | 46 | - | |
| | Brussels ... | * | * | * | * | * | 30.25 | +0.12 | 42 | 41 | -1 | S | 3 | bc | * | 48 | ? | - | |
| | Cape Gris Nez... | 30.30 | 46 | SSE | 3 | c | 30.28 | +0.05 | 34 | 34 | -8 | WSW | 1 | b | * | 49 | 33 | - | |
| | Brest ... | 30.04 | 54 | SSW | 8 | 0 | 30.04 | -0.11 | 51 | 48 | +1 | SW | 8 | 0 | 7 | 57 | ? | 0.16 | |
| | Lorient ... | 30.17 | 54 | SSW | 4 | bc | 30.11 | -0.03 | 53 | 50 | 0 | S | 7 | bc | 5 | 55 | 50 | - | |
| Rocheport ... | 30.31 | 46 | SSE | 5 | m | 30.31 | +0.02 | 35 | 35 | -10 | SE | 5 | f | 2 | 50 | 30 | - | | |
| Belfort ... | 30.27 | 40 | W | 1 | b | 30.31 | -0.01 | 34 | 33 | ? | E | 1 | b | * | 46 | 28 | - | | |
| Lyons ... | 30.35 | 41 | WSW | 1 | b | 30.36 | +0.04 | 31 | 30 | -6 | W | 1 | b | * | 48 | 30 | - | | |
| Nice ... | 30.32 | 48 | E | 3 | b | 30.32 | +0.15 | 43 | 37 | -1 | E | 4 | b | 1 | 53 | 39 | - | | |
| Perpignan ... | 30.28 | 43 | E | 3 | b | 30.34 | +0.05 | 38 | 31 | -3 | SW | 3 | b | * | 60 | 30 | - | | |
| Biarritz ... | 30.23 | 51 | ESE | 4 | b | 30.21 | -0.04 | 42 | 39 | +2 | S | 3 | b | 3 | 55 | 37 | - | | |
| Corunna ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | - | |
| Lisbon ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | - | |

WEATHER CHARTS

for 8 a.m. on *Monday 3rd December.*

1888.

BAROMETER, WIND & 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 —

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

○ = dead calm.

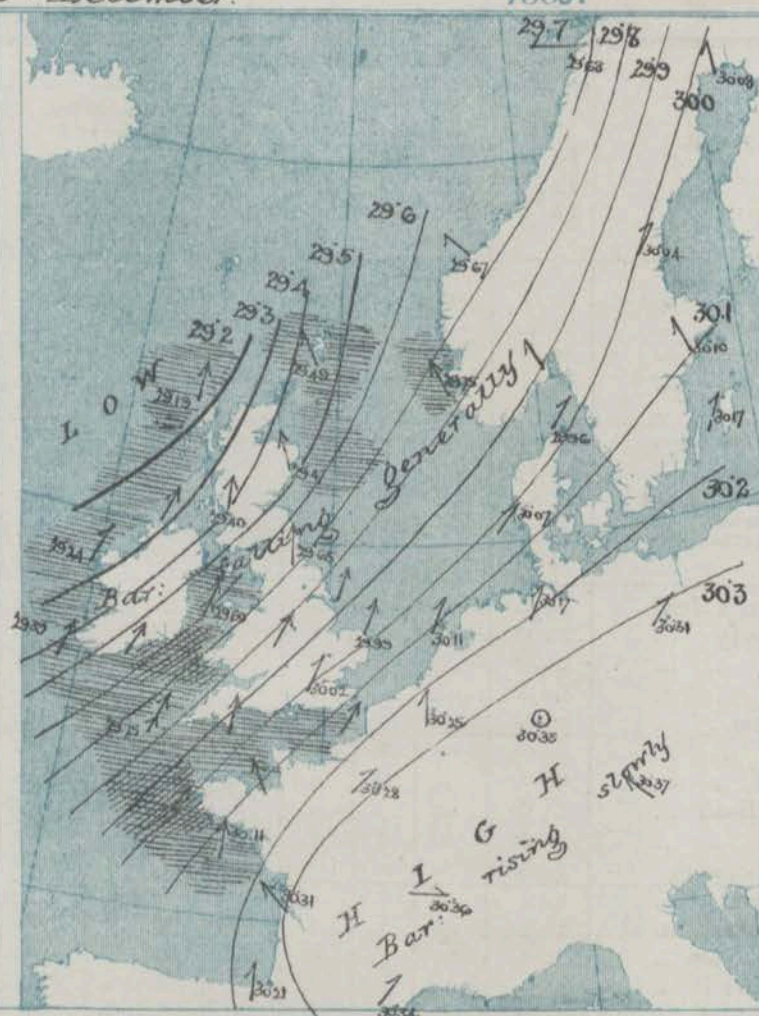
Sea Disturbance — where considerable, is shown thus.

■ = Rough ■ = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871–1885.

| STATIONS. | MEAN READINGS. |
|----------------|----------------|
| | ins. |
| Sumburgh Head. | 29.667 |
| Stornoway. | 29.701 |
| Wick. | 29.711 |
| Nairn. | 29.739 |
| Aberdeen. | 29.757 |
| Leith. | 29.803 |
| Shields. | 29.843 |
| York. | 29.888 |
| Loughborough. | 29.923 |
| Ardrossan. | 29.819 |
| Donaghadee. | 29.847 |
| Holyhead. | 29.879 |
| Liverpool. | 29.895 |
| Parsonstown. | 29.909 |
| Valencia. | 29.908 |
| Roche's Point. | 29.915 |
| Pembroke. | 29.918 |
| Scilly. | 29.962 |
| Jersey. | 29.985 |
| Hurst Castle. | 29.959 |
| Dover. | 29.957 |
| LONDON. | 29.951 |
| Oxford. | 29.954 |
| Cambridge. | 29.938 |
| Yarmouth. | 29.914 |



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.

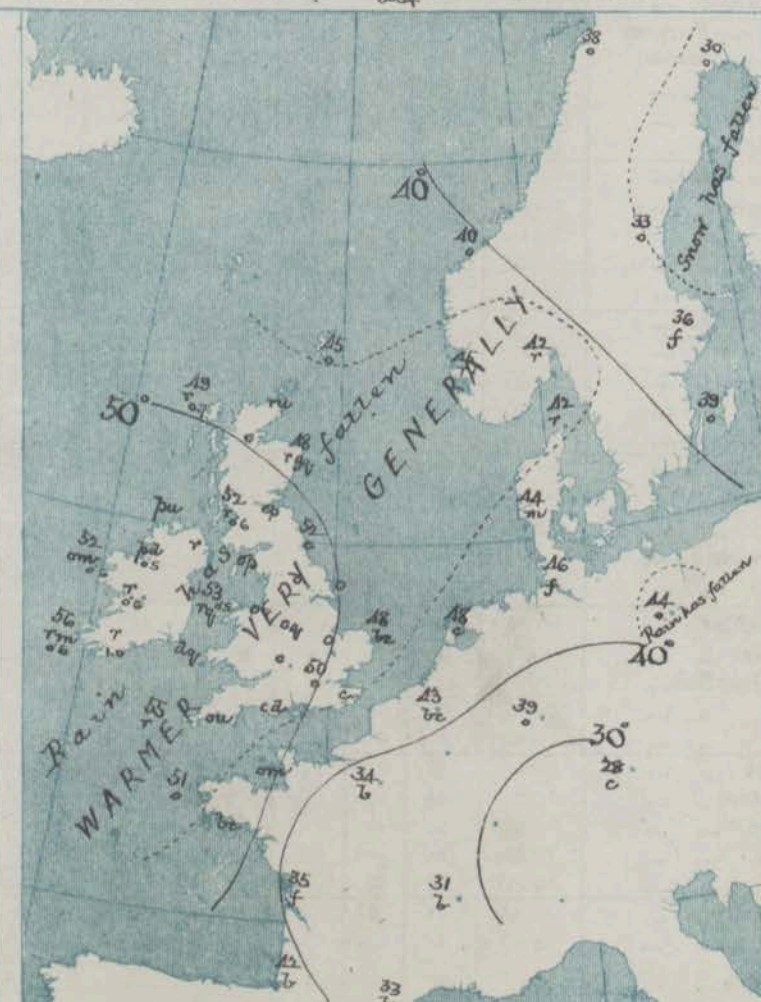
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|-----------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | | |
| | | | Dry. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871–85, the Rainfall means are mainly those for the 20 years 1866–85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 in. and upwards, in an anticyclone lying over Germany and France.
Lowest, 29.2 in. and less, in a depression lying off the west of Scotland.
Gradients steep over our islands, but moderate or slight elsewhere.
Barometer falling at all but the Swedish, German, and southern French stations.

TEMPERATURE

Highest, 56° at Mullaghmore and Valencia, 55° at Leith, Rönneby, and Scilly, 54° at Malin Head, and 53° at several of our western stations.
Lowest, 28° at Marwick, 30° at Haparanda, 31° at Lyng, 33° at Helsingfors and Kiruna, and 34° at Umeå.

WIND

Strong from the S. or S.W. over our islands with gales at some of the western stations.
Light or moderate from the same quarter in Sweden and Denmark.
Moderate from the S.E. or S. in Norway, and also in South Germany.

WEATHER

Fine over the Netherlands, the extreme southeast of England and the greater part of France.
Cloudy or overcast elsewhere, with rain at many of our western and northern stations.
Since yesterday morning 1.0 in. of rain has fallen at Hook's Point, 0.7 in. at Pernow, 0.6 in. at Anderson, Rönneby, and Valencia.

SEA

High at Loughs and Bristol, and rough or rather so on nearly all parts of our coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off the west of Scotland is likely to be followed by other disturbances travelling northwards along our western coasts, and strong winds or gales will probably continue generally.

Our eastern and south-eastern districts are, however, not seriously threatened at present.

FORECASTS

For the 24 hours ending at NOON on 4th DECEMBER, 1888.

DISTRICTS.

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

FORECASTS.

S. winds, increasing to a gale; squally, some rain.

S. and S.W. winds, strong and squally, fair to dull and some rain.

DISTRICTS.

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

FORECASTS.

S. and S.W. strong winds and gales; squally, some rain.

S.W. to S. winds, increasing to a gale; squally, some rain.

WARNINGS

The SOUTH CONE was hoisted on Saturday afternoon in districts 0, 6, and part of 1, and on Sunday morning 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. | Dry. | Wet. | Wind. | Waa. | Sea. | | Bar. | Dry. | Wet. | Wind. | Waa. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudenease ... | 29.78 | 43 | 41 | SSE 6 | 0 | 5 | Holyhead ... | 29.77 | 52 | 51 | SSW 7 | 7 | 6 |
| Sunburgh Head ... | | | | | | | Valencia ... | | | | | | |
| Stornoway ... | 29.51 | 46 | 46 | SW 3 | 0 | 3 | Scilly ... | | | | | | |
| Aberdeen ... | | | | | | | Jersey ... | 30.15 | 56 | 52 | SSW 4 | 60 | 4 |
| Shields ... | | | | | | | Dungeness ... | 30.08 | 53 | 50 | WSW 5 | 5 | 5 |
| Ardrossan ... | | | | | | | London ... | | | | | | |
| Malin Head ... | 29.56 | 46 | 46 | SS 0 | 0 | 4 | Yarmouth ... | | | | | | |
| Mullaghmore ... | | | | | | | Rochefort ... | 30.30 | 48 | 48 | SSS 5 | m | 2 |
| Belmullet ... | 29.58 | 50 | 49 | WSW 1 | 60 | 4 | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest 30.3 inches and upwards in an anticyclone lying over Central France, and high 30.1 inches and upwards over Northern Russia. The lowest readings 29.5 inches and less were reported in a depression which was passing away to the northward of our Islands, but a well marked disturbance with readings below 29.7 inches was lying over the S.W. of Ireland. The wind was S.W. or S.W. over the greater part of North Western Europe, and strong in force in the extreme S.W. of the British Islands. In Scandinavia, and Northern Russia, however, it drew into Southeast or East and over Southern Europe it was light and variable, while in Austria a decided circulation was shown round the depression noticed above. The weather was fair generally, but a good deal of cloud prevailed in places, and rain was reported in some parts of Germany, and Austria as well as on the extreme northwest coasts of our Islands. Temperature had fallen somewhat over France and Italy, as well as in the extreme N. of our Islands but risen elsewhere; readings ranged from 55° and upwards over the southern parts of our Islands, Spain and Italy to 52° or less over the northern parts of Russia and Scandinavia. The highest individual readings were 62° at Malta and Nemours, 60° at Algiers, 59° at Brindisi and Oran, and 54° at Valencia, Barcelona and San Fernando; the lowest were 25° at Baparat and Kuepio, 26° at Ulkeborg, 30° at Bodo, 31° at Moscow, 32° at Faerder and Skotland and 33° at Stockholm.

In the course of the day a new depression appeared off our western coasts, and the wind increased to a gale in some places. No important change was, however, observed in the weather.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 25th NOVEMBER TO THE 1st DECEMBER 1888.

The weather of the past week has continued in a rough unsettled state, with considerable falls of rain in most districts, and occasional thunder and lightning at our S.W. and the French stations.

At the commencement of the period an anticyclone lay over Spain and France, while a deep depression, in the centre of which readings were below 29.4 inches, travelled in an E.N.E. direction from the Atlantic to Scandinavia. As the disturbance passed our Islands, fresh to strong S.W. gales were experienced in most parts of the Kingdom, with heavy rain at some of our northern stations. An aurora was seen in the north of Scotland on the night of the 25th November.

On the 26th the anticyclone over France receded in a S.E. direction, and on the following day a well marked depression travelled N.E. from the S of Ireland to the North Sea, occasioning fresh S.W. to S.W. gales on our southern coasts and E. gales in the north, with heavy rain in many places. On the 28th & 29th further disturbance appeared off our SW coasts, and gales from the S.E. were experienced at many of the English and Irish stations, but as pressure had in the meantime increased over Scandinavia and the North Sea, the depression ultimately passed away in a northwesterly direction to the Atlantic. On the night of the 29th, however, a small system travelled from the Bay of Biscay to the S.E. of England, where heavy rain was reported.

At the close of the week pressure was again increasing over Spain and France, while a new series of depressions was beginning to approach our western and northern coasts. The wind was therefore shifting to the S and S.W. generally, with unsettled weather in the west and north, but fair conditions in the Southeast.

Temperature has remained high for the time of year over Ireland and England, but over Scotland the weather during the latter half of the week was rather cold, sharp frosts being experienced at the inland and northern stations. The maximum readings on the 25th were below 40° in most parts of Scotland.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Tuesday, 4th December* 1888.
 Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|-------------------------------|---|--------------------|-------|---------------------|----------|---|---|-------------|------|---|-------|---------------------|----------|-------------------|-------------|----------------|---------------------------|--|
| | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 30.03 | 33 | S | 4 | 2 | 29.78 | - 30 | 33 | 33 | + 3 | S | 6 | S | * | 36 | 27 | 0.32 | |
| | Hernösand ... | 29.97 | 35 | S | 8 | 7 | 29.69 | - 35 | 37 | 37 | + 4 | S | 8 | S | * | 37 | 32 | 0.32 | |
| | Stockholm ... | 30.12 | 39 | NE | 3 | 0 | 30.03 | - 07 | 39 | 38 | + 3 | SSE | 3 | S | * | 39 | 34 | 0.04 | |
| | Wisby ... | 30.17 | 40 | S | 4 | 1 | 30.16 | - 01 | 42 | 42 | + 3 | S | 4 | S | * | 43 | 37 | 0.04 | |
| | Bodö ... | 29.60 | 36 | E | 4 | 0 | 29.16 | - 52 | 42 | 40 | + 4 | SSE | 4 | S | 2 | ? | 32 | 0.24 | |
| | Christiansund... | 29.18 | 42 | ESE | 4 | 0 | 29.34 | - 33 | 48 | 45 | + 8 | SW | 5 | S | 4 | 48 | ? | 0.12 | |
| | Skudesnaes ... | 29.86 | 45 | ESE | 8 | 7 | 29.70 | - 05 | 47 | 47 | + 2 | SW | 4 | O | 6 | ? | 45 | 1.30 | |
| | Christiania Fjord (Færdar) | 29.86 | 43 | S | 5 | 1 | 29.75 | - 15 | 44 | 42 | + 2 | SSW | 7 | O | 4 | ? | ? | - | |
| | Skagen (The Scaw) | 29.92 | 43 | SW | 3 | 7 | 29.82 | - 14 | 43 | 43 | + 1 | SW | 4 | S | 2 | 45 | 41 | 0.55 | |
| | Fanö ... | 30.03 | 44 | S | 6 | 0 | 29.98 | - 09 | 43 | 43 | - 1 | SSW | 5 | O | * | 46 | 43 | 0.04 | |
| BRITISH ISLANDS. | Sumburgh Head | 29.14 | 48 | SW | 2 | 0 | 29.59 | + 10 | 44 | 43 | - 1 | N | 1 | O | 4 | 49 | 44 | 0.35 | |
| | Sornoway ... | 29.11 | 51 | SW | 4 | 7 | 29.62 | + 43 | 41 | 41 | - 8 | 20 | 0 | O | 3 | 52 | 40 | 0.68 | |
| | Wick ... | 29.18 | 52 | SW | 1 | 6 | 29.64 | + 31 | 46 | 46 | - 2 | 20 | 0 | O | 0 | 53 | 45 | 0.07 | |
| | Nairn ... | 29.17 | 55 | 20 | 0 | 0 | 29.59 | + 28 | 50 | 49 | 0 | 20 | 0 | O | 1 | 56 | 49 | 0.07 | |
| | Aberdeen... | 29.30 | 51 | SSE | 5 | 7 | 29.66 | + 19 | 49 | 48 | + 1 | S | 2 | O | 4 | 54 | 48 | 0.06 | |
| | Leith ... | 29.32 | 56 | SW | 5 | 0 | 29.67 | + 20 | 52 | 49 | - 3 | SW | 2 | cm | * | 58 | 51 | 0.08 | |
| | Shields ... | 29.48 | 55 | S | 4 | 0 | 29.75 | + 10 | 53 | 51 | + 1 | SW | 3 | O | 2 | 56 | 49 | - | |
| | Spurn Head ... | 29.71 | 50 | S | 6 | 7 | 29.89 | + 04 | 49 | 47 | - 1 | S | 3 | b | 3 | 52 | 44 | 0.05 | |
| | York ... | 29.67 | 55 | S | 4 | m | 29.86 | + 09 | 52 | 50 | 0 | SSE | 1 | b | * | 57 | 50 | 0.04 | |
| | Loughborough | 29.76 | 54 | SSW | 6 | 0 | 29.92 | + 06 | 51 | 50 | 0 | SW | 3 | b | * | 55 | 51 | 0.02 | |
| GERMANY. | Ardrossan ... | 29.32 | 52 | S | 6 | 0 | 29.69 | + 29 | 50 | 49 | - 2 | SSW | 3 | O | 3 | 52 | 49 | 0.43 | |
| | Malin Head ... | 29.30 | 52 | NEW | 4 | 6 | 29.75 | + 52 | 47 | 47 | - 7 | W | 3 | odp | 3 | 54 | 47 | 0.12 | |
| | Mullaghmore ... | 29.25 | 53 | SW | 6 | 0 | 29.76 | + 51 | 47 | 46 | - 9 | SW | 2 | O | 2 | 57 | 46 | 0.29 | |
| | Belmullet ... | 29.33 | 52 | SW | 6 | 0 | 29.76 | + 52 | 47 | 46 | - 5 | SSE | 2 | O | * | 52 | 44 | 0.84 | |
| | Donaghadee ... | 29.39 | 56 | SSW | 5 | 0 | 29.77 | + 34 | 47 | 47 | - 6 | W | 3 | bc | 1 | 56 | 45 | 0.06 | |
| | Barrow-in-Furness | 29.55 | 52 | SSW | 5 | 0 | 29.79 | + 16 | 50 | 50 | 0 | SW | 5 | O | * | 52 | 50 | 0.59 | |
| | Liverpool (Bidston) | 29.62 | 56 | S | 3 | 0 | 29.86 | + 15 | 52 | 50 | - 1 | SW | 3 | O | 3 | 56 | 51 | 0.02 | |
| | Holyhead ... | 29.86 | 54 | SSW | 8 | rmg | 29.85 | + 25 | 52 | 51 | - 1 | SW | 5 | cgm | 5 | 54 | 51 | 0.25 | |
| | Parsonstown ... | 29.49 | 55 | 20 | 0 | 7 | ? | ? | 50 | 49 | - 5 | 20 | 0 | O | * | 55 | 49 | 0.11 | |
| | Valencia ... | 29.50 | 54 | SSW | 7 | om | 29.82 | + 43 | 52 | 52 | - 4 | SSW | 4 | S | 4 | 57 | 50 | 0.23 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.59 | 53 | SW | 5 | 0 | 29.87 | + 36 | 52 | 51 | - 1 | WSW | 3 | bc | 4 | 55 | 50 | 0.20 | |
| | Pembroke ... | 29.64 | 53 | SSW | 7 | 7 | 29.91 | + 25 | 52 | 52 | - 1 | SSW | 4 | cg | 4 | 54 | 52 | 0.53 | |
| | Scilly ... | 29.74 | 55 | SSW | 7 | 7 | 29.96 | + 21 | 54 | 53 | - 1 | SW | 4 | om | 5 | 55 | 52 | 0.27 | |
| | Prawle Point ... | 29.84 | 53 | S | 6 | 7 | 30.02 | + 08 | 53 | 53 | 0 | SSW | 4 | m | 5 | 54 | 46 | 0.11 | |
| | Jersey ... | 30.02 | 53 | SSE | 6 | cgm | 30.08 | - 01 | 53 | 52 | + 3 | S | 4 | om | 4 | 56 | 48 | 0.07 | |
| | Hurst Castle ... | 29.92 | 53 | SSW | 8 | 0 | 30.05 | + 03 | 53 | 53 | + 1 | SW | 5 | opd | 5 | 54 | 52 | 0.05 | |
| | Dungeness ... | 29.99 | 53 | SW | 5 | 1 | 30.05 | - 03 | 51 | 50 | + 2 | SW | 5 | p | 5 | 53 | 49 | 0.06 | |
| | London ... | 29.99 | 52 | SSW | 4 | | 30.04 | + 02 | 53 | 52 | + 3 | S | 2 | odp | * | 54 | 50 | 0.02 | |
| | Oxford ... | 29.86 | 52 | SE | 5 | 7 | 30.00 | + 04 | 52 | 51 | + 2 | S | 3 | O | * | 54 | 50 | 0.12 | |
| | Cambridge ... | 29.91 | 51 | S | 1 | 0 | 30.00 | + 04 | 51 | 50 | + 1 | S | 1 | O | * | 51 | 49 | - | |
| PENINSULA. | Yarmouth ... | 29.90 | 48 | SSW | 6 | cg | 29.99 | - 00 | 51 | 50 | + 3 | SSW | 4 | cgm | 3 | 51 | 47 | - | |
| | Cuxhaven ... | 30.14 | 44 | SSW | 2 | 0 | 30.09 | - 08 | 40 | ? | - 6 | SSW | 2 | O | * | ? | 40 | - | |
| | Berlin ... | 30.30 | 44 | SW | 2 | 0 | 30.27 | - 04 | 36 | 35 | - 8 | SSE | 2 | O | * | 48 | 36 | - | |
| | Wiesbaden ... | * | * | * | * | * | 30.33 | - 02 | 33 | 32 | - 6 | SW | 1 | O | * | 45 | 30 | - | |
| | Munich ... | 30.32 | 30 | SSE | 1 | 6 | 30.35 | - 02 | 25 | 25 | - 3 | SW | 2 | O | * | 41 | 25 | - | |
| | The Helder ... | 30.01 | 45 | SSW | 5 | 6 | 30.06 | - 05 | 45 | 44 | - 1 | SSW | 3 | O | 3 | 48 | 43 | - | |
| | Brussels ... | * | * | * | * | * | 30.19 | - 06 | 41 | 38 | - 2 | SSW | 3 | O | * | 49 | 41 | - | |
| | Cape Gris Nez... | 30.02 | 44 | SW | 7 | 60 | 30.04 | - 04 | 47 | 46 | - 1 | SSW | 7 | f | 5 | 52 | 43 | 0.04 | |
| | Paris ... | 30.21 | 40 | S | 1 | 6 | 30.25 | - 04 | 34 | 32 | 0 | S | 1 | m | * | 49 | 34 | - | |
| | Brest ... | 29.97 | 54 | SSW | 9 | 7 | 30.05 | + 01 | 51 | 53 | + 3 | WSW | 1 | O | 2 | 55 | ? | 0.20 | |
| PENINSULA. | Lorient ... | 30.06 | 55 | S | 7 | 0 | 30.07 | - 04 | 56 | 55 | + 3 | SSW | 5 | O | 5 | ? | 52 | 0.63 | |
| | Rochefort ... | 30.22 | 44 | SE | 5 | 6 | 30.25 | - 06 | 44 | 43 | + 9 | SSE | 5 | O | 2 | 50 | ? | - | |
| | Belfort ... | 30.28 | 34 | E | 1 | 6 | 30.32 | + 01 | 26 | 25 | - 8 | E | 1 | O | * | 43 | ? | - | |
| | Lyons ... | 30.32 | 39 | W | 1 | 6 | 30.37 | + 01 | 29 | 28 | - 2 | WSW | 1 | O | * | 45 | 28 | - | |
| | Nice ... | 30.30 | 47 | E | 4 | 6 | 30.32 | - 00 | 42 | 35 | 0 | E | 4 | O | 1 | 55 | 41 | - | |
| | Perpignan ... | 30.31 | 41 | SW | 3 | 6 | 30.33 | - 01 | 37 | 36 | + 4 | SW | 3 | O | * | 53 | 33 | - | |
| | Biarritz ... | 30.17 | 54 | SSE | 4 | 6 | 30.20 | - 01 | 48 | 44 | + 6 | SSW | 3 | O | 2 | 59 | ? | - | |
| | Corunna ... | * | * | * | * | * | | | | | | | | | | | | - | |
| | Lisbon ... | * | * | * | * | * | | | | | | | | | | | | - | |

For Explanation of Columns, see p. 4.

† Received too late for insertion in this issue.

WEATHER CHARTS

for 8 a.m. on

Tuesday, 4th December.

1888.

BAROMETER, WIND & 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.

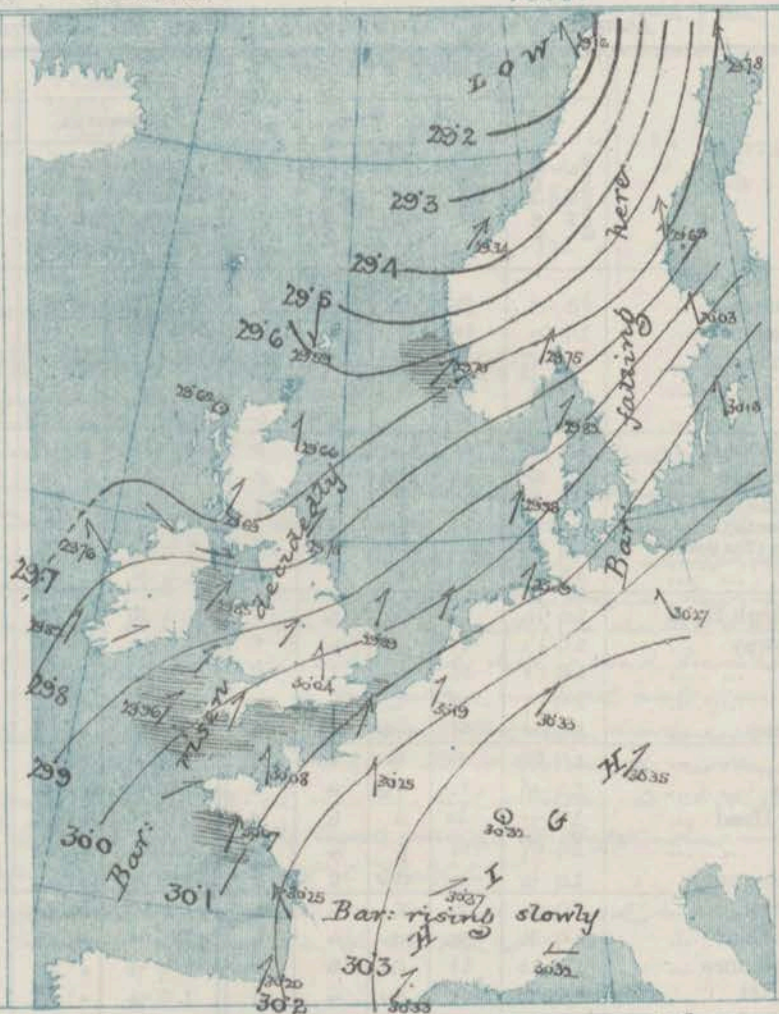
Sea Disturbance — where considerable, is shown thus.

— Rough — High.

MEAN HEIGHT of the BAROMETER:

at 8 a.m. for the month of December
During the 15 Years 1871—1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roches Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

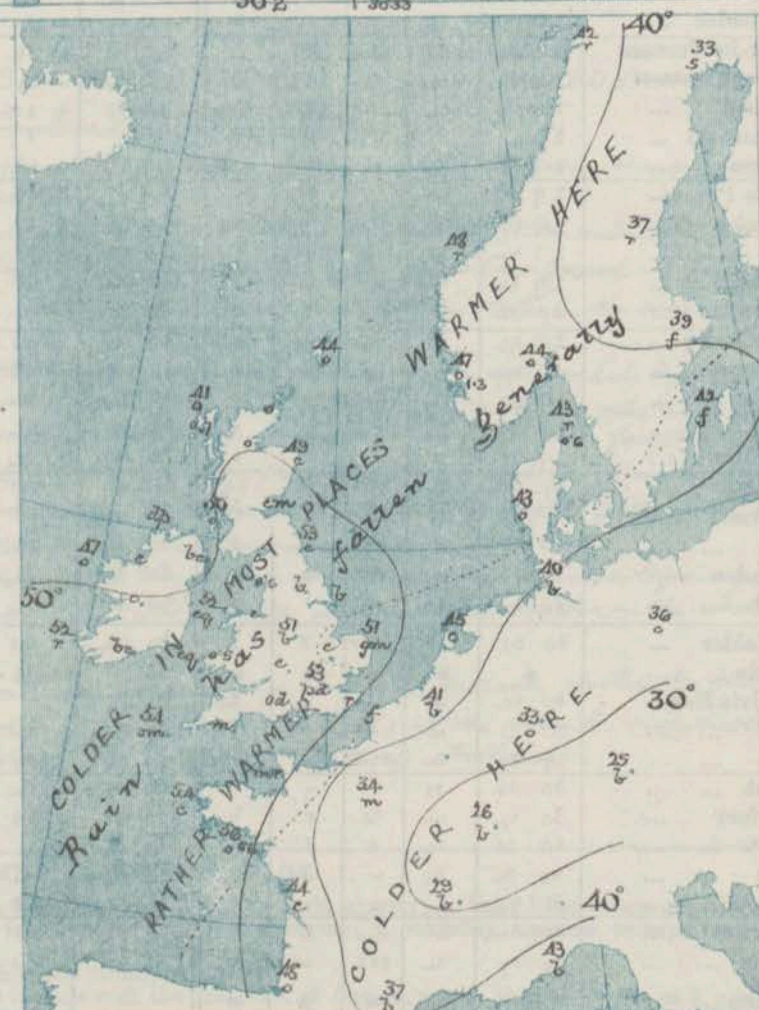
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|-------------------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Dry. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roches Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 43.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

| | |
|-------------|---|
| PRESSURE | Highest, 30.3 in. and upwards, in an anticyclone lying over South Germany and the east of France. Lowest, 29.2 in. and less, in a depression lying off the northwest of Norway. Gradient moderate. Barometer rising at all but the Swedish and German stations. |
| TEMPERATURE | Highest, 56° at Lorient, 54° at Scilly, 53° at Shields, Havre, Jersey, Hurst Castle, and London. Lowest, 25° at Munich, 23° at Lyons, 33° at Haparanda and Wierbosen, 34° at Paris, 36° at Berlin, and 37° at Leipzig. |
| WIND | Calm or variable in the north of Scotland; light W. in the north of Ireland. S. or SW elsewhere; light to fresh in force generally. Fresh S. or SW gales were experienced yesterday at some of our western and southern stations. |
| WEATHER | Dull and rainy in the west of Norway and the southwest of Ireland, as well as at some of the Channel stations. Fair or fine in most other localities. Rain fell yesterday at all but our southern stations, the heaviest amount being 1.3 in. at Skiduness, .07 in. at Stornoway, and .0 in. at Buncrana. |
| SEA | Rough at Skiduness and rather rough in the Channel as well as at Holyhead, but moderate to smooth elsewhere. |

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Although the barometer is at present rising in all parts of the United Kingdom the wind in the extreme west appears to be backing to the S.W. The general appearance is therefore still very unsettled, and a renewal of rough weather will probably take place shortly.

FORECASTS

for the 24 hours ending at NOON on 5TH DEC^R 1888.

| DISTRICTS. | FORECASTS. | DISTRICTS. | FORECASTS. |
|----------------------|---|-------------------|---|
| † 0 SCOTLAND NORTH | S. winds, freshening, fair to unsettled and some rain. | † 6 SCOTLAND WEST | SW. to S. winds, increasing in force; fair to squally and rainy |
| † 1 SCOTLAND EAST | | 7 ENGLAND N.W. | |
| † 2 ENGLAND N.E. | S. and SW. winds, increasing in force; changeable, some rain. | 8 ENGLAND S.W. | |
| † 3 ENGLAND EAST | | 9 IRELAND NORTH | S. winds, increasing in force; squally, some rain. |
| † 4 MIDLAND COUNTIES | | 10 IRELAND SOUTH | |
| † 5 ENGLAND SOUTH | | | |
| | | WARNINGS | The SOUTH CONE was hoisted last evening in districts 0 to 3, and 5 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.

YESTERDAY'S 2 P.M. REPORTS.

| | Bar. | Dry. | Wet. | Wind. | Wea. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wea. | Sea. |
|-------------------|-------|------|------|-------|-------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 29.68 | 40 | ? | SSE 8 | r y | 6 | Holyhead ... | 29.53 | 51 | 53 | SSW 8 | qmr | 6 |
| Sumburgh Head ... | 29.17 | 48 | 48 | SSE 4 | r | 5 | Valencia ... | 29.44 | 55 | 54 | SSW 6 | rm | 6 |
| Stornoway ... | 29.09 | 52 | 52 | SW 6 | r | 6 | Scilly ... | 29.72 | 55 | 55 | S 8 | r | 6 |
| Aberdeen ... | 29.30 | 50 | 49 | SSE 6 | og qd | 6 | Jersey ... | 30.05 | 52 | 50 | SSE 5 | c | 5 |
| Shields ... | 29.51 | 54 | 52 | S 5 | o | 2 | Dungeness ... | 30.01 | 52 | 48 | SW 6 | c | 5 |
| Ardrossan ... | 29.34 | 52 | 52 | S 4 | o | 3 | London ... | 29.96 | 53 | 49 | SSE 5 | og | * |
| Malin Head ... | 29.23 | 54 | 53 | S 3 | o | 3 | Yarmouth ... | 29.93 | 50 | 48 | SSW 5 | bc | 4 |
| Mullaghmore ... | 29.23 | 57 | 36 | SSW 7 | org | 6 | Rochefort ... | 30.24 | 44 | 42 | SSE 5 | b | 2 |
| Belmullet ... | 29.20 | 53 | 52 | SW 4 | o | * | | | | | | | |

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

The report for yesterday morning showed that pressure was highest, 30.3 ins. and upwards, in an anticyclone lying over the southern parts of France, Germany and Austria, and lowest 29.2 ins. and less, in a depression lying off the west of Scotland. Another low pressure system, with readings below 29.8 ins. was, however, reported over the south of Russia. Strong S¹ or SW¹ winds prevailed over the whole of the United Kingdom, with a gale in the west, and moderate SE² breezes in Scandinavia and Northern Russia. Over Spain and Italy, however, the wind was chiefly NE³, while in Algeria it was very variable. The weather was dull and unsettled over the whole of Northwestern and Northern Europe, with rain in the west and north of the United Kingdom, but over the more central and southern parts of the Continent conditions were mostly fine. Temperature had fallen somewhat over the Netherlands, France and Italy, as well as at some of the German and Austrian stations, but risen elsewhere; readings ranged from 55° and upwards over Algeria, Spain, South Italy, and the west of Ireland to a few degrees below the freezing point over Central Europe and to many degrees below zero over the White Sea. The highest individual readings were 59° at Genoa, Cagliari, and Algiers, 57° at Barcelona, Oporto, Brindisi, Tangier and Limours, and 56° at Mullaghmore, Valencia, Palma and Tunis; the lowest were -13° at Archangel, +21° at Clermont, 24° at Cap and Moscow, 26° at Krasno, 28° at St Petersburg, 29° at Uleaborg, 30° at Besancon, and 32° at Kiev and Lyons.

In the course of the day the depression off the west of Scotland travelled steadily in a north-northwesterly direction. Strong winds or gales, however, continued to blow in many parts of the Kingdom, with rain at all but the southeastern stations.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Wednesday 5th December 1888.
Issued by the Meteorological Office, 116, Victoria Street, London. R.H. SCOTT, Secretary.

| STATIONS. | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|---|--------------------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|----------|-------------------|-------------|----------------|---------------------------|------|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | 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 .. | 29.54 | 35 | S | 2 | b | 29.86 | + .08 | 36 | 35 | + 3 | W | 2 | bc | * | 36 | 32 | 0.55 |
| | Hernösand ... | 29.90 | 35 | Z | 0 | b | 30.23 | + .44 | 36 | 30 | — 7 | Z | 0 | c | * | 43 | ? | 0.16 |
| | Stockholm ... | 30.04 | 43 | SW | 2 | r | 30.13 | + .10 | 42 | 41 | + 3 | Z | 0 | f | * | 45 | 37 | 0.20 |
| | Wisby ... | 30.43 | 41 | SSW | 4 | r | 30.20 | + .04 | 41 | 41 | — 1 | WSW | 4 | f | * | 45 | 39 | 0.16 |
| | Bodö ... | 29.60 | 45 | SW | 8 | r | 29.86 | + .40 | 40 | 38 | — 2 | WSW | 6 | r | 4 | 45 | 37 | 0.12 |
| | Christiansund... | 29.91 | 42 | WSW | 4 | o | 29.95 | + .61 | 41 | 39 | — 7 | SSE | 3 | c | 3 | ? | 39 | 0.25 |
| | Skudesnaos ... | 29.97 | 45 | SSE | 4 | o | 30.18 | + .41 | 45 | 44 | — 2 | SSE | 6 | c | 5 | ? | 45 | — |
| | Christiania Fjord (Færd) | 29.98 | 43 | SSW | 4 | f | 30.10 | + .35 | 37 | 37 | — 7 | Z | 0 | f | 1 | 45 | 26 | — |
| | Skagen (The Scaw) | 30.03 | 45 | WSW | 3 | f | 30.14 | + .32 | 44 | 43 | + 1 | SW | 2 | f | 1 | 46 | 41 | 0.01 |
| | Fanö ... | 30.16 | 44 | SW | 4 | f | 30.20 | + .22 | 44 | 44 | + 1 | SW | 2 | f | * | 45 | 43 | 0.04 |
| BRITISH ISLANDS. | Sumburgh Head | 29.86 | 42 | Z | 0 | o | 29.90 | + .31 | 46 | 45 | + 2 | Z | 0 | c | 4 | 46 | 40 | 0.02 |
| | Stornoway ... | 29.78 | 46 | SW | 4 | o | 29.65 | + .03 | 49 | 49 | + 8 | SW | 6 | r | 4 | 49 | 38 | 0.17 |
| | Wick ... | 29.87 | 45 | S | 1 | c | 29.75 | + .11 | 45 | 45 | + 2 | S | 5 | sm | 3 | 48 | 42 | — |
| | Nairn ... | 29.83 | 46 | Z | 0 | c | 29.71 | + .12 | 52 | 48 | + 2 | SW | 3 | c | 1 | 52 | 41 | 0.08 |
| | Aberdeen... | 29.90 | 46 | Z | 0 | om | 29.86 | + .20 | 47 | 46 | — 2 | SSE | 4 | om | 4 | 52 | 45 | — |
| | Leith ... | 29.93 | 49 | WSW | 2 | o | 29.82 | + .15 | 52 | 49 | — 3 | S | 1 | om | * | 53 | 48 | 0.04 |
| | Shields ... | 29.98 | 50 | S | 1 | m | 29.94 | + .19 | 50 | 47 | — 3 | S | 4 | c | 2 | 55 | 46 | — |
| | Spurn Head ... | 30.04 | 51 | SSW | 3 | c | 30.03 | + .14 | 49 | 48 | — 1 | S | 5 | c | 4 | 55 | 47 | — |
| | York ... | 30.02 | 54 | S | 1 | c | 30.01 | + .15 | 51 | 50 | — 1 | SSE | 2 | c | * | 57 | 48 | — |
| | Loughborough | 30.08 | 53 | SW | 1 | c | 30.06 | + .14 | 52 | 53 | + 3 | SSW | 2 | cg | * | 59 | 48 | — |
| GERMANY. | Ardrossan ... | 29.92 | 49 | SSW | 2 | o | 29.80 | + .11 | 51 | 51 | + 1 | SSE | 4 | c | 3 | 51 | 48 | 0.12 |
| | Malin Head ... | 29.74 | 50 | S | 4 | bc | 29.69 | — .06 | 52 | 50 | + 5 | SSW | 4 | cg | 3 | 52 | 47 | 0.01 |
| | Mullaghmore ... | 29.80 | 52 | SSW | 5 | c | 29.71 | — .05 | 53 | 51 | + 6 | SSW | 4 | cg | 3 | 55 | 43 | 0.02 |
| | Belmullet ... | 29.76 | 52 | SW | 4 | c | 29.70 | — .06 | 51 | 51 | + 4 | SW | 5 | c | * | 52 | 46 | 0.05 |
| | Donaghadee ... | 29.47 | 51 | SSE | 2 | c | 29.81 | + .04 | 52 | 52 | + 5 | SW | 3 | c | 2 | 52 | 45 | 0.09 |
| | Barrow-in-Furness | 29.97 | 50 | SE | 3 | r | 29.90 | + .11 | 50 | 50 | — 0 | SE | 4 | op | * | 51 | 47 | 0.04 |
| | Liverpool (Bidston) | 30.02 | 50 | S | 2 | b | 29.95 | + .09 | 53 | 52 | + 1 | SSE | 3 | c | 2 | 56 | 47 | — |
| | Holyhead ... | 30.00 | 51 | SSW | 4 | a | 29.89 | + .04 | 53 | 53 | + 1 | SSW | 5 | rg | 5 | 53 | 50 | 0.20 |
| | Parsonstown ... | 29.86 | 51 | SW | 2 | c | 29.78 | ? | 52 | 53 | + 4 | Z | 0 | c | * | 55 | 49 | 0.13 |
| | Valencia ... | 29.46 | 53 | SE | 7 | rg | 29.77 | — .05 | 54 | 53 | + 2 | S | 2 | om | 3 | 55 | 50 | 0.63 |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.86 | 52 | SSW | 5 | o | 29.81 | — .06 | 53 | 53 | + 1 | S | 3 | f | 4 | 54 | 51 | 0.80 |
| | Pembroke ... | 30.03 | 52 | S | 3 | c | 29.91 | — .00 | 53 | 53 | + 1 | S | 7 | rg | 6 | 54 | 52 | 0.08 |
| | Scilly ... | 29.99 | 53 | SSE | 5 | cm | 29.94 | — .02 | 54 | 54 | — 0 | S | 7 | r | 6 | 55 | 52 | 0.17 |
| | Prawle Point ... | 30.12 | 53 | SSW | 2 | o | 30.11 | + .09 | 54 | 54 | + 1 | S | 5 | bc | 4 | 54 | 50 | 0.02 |
| | Jersey ... | 30.17 | 53 | SSE | 4 | ogm | 30.22 | + .14 | 53 | 57 | — 0 | S | 5 | cg | 5 | 55 | 52 | 0.10 |
| | Hurst Castle ... | 30.14 | 53 | SSW | 4 | om | 30.18 | + .13 | 53 | 53 | — 0 | SSW | 5 | ap | 4 | 55 | 52 | 0.15 |
| | Dungeness ... | 30.14 | 51 | SW | 5 | r | 30.20 | + .15 | 53 | 52 | + 2 | SW | 5 | c | 4 | 53 | 50 | 0.05 |
| | London ... | 30.14 | 52 | SSW | 3 | o | 30.18 | + .14 | 53 | 52 | — 0 | S | 2 | c | * | 57 | 50 | 0.01 |
| | Oxford ... | 30.13 | 50 | SSW | 2 | b | 30.13 | + .13 | 54 | 53 | + 2 | S | 3 | od | * | 58 | 49 | — |
| | Cambridge ... | 30.11 | 51 | S | 1 | c | 30.14 | + .14 | 53 | 52 | + 2 | S | 1 | c | * | 52 | 45 | — |
| PENINSULA. | Yarmouth ... | 30.10 | 52 | SSW | 2 | c | 30.16 | + .17 | 52 | 49 | — 1 | SSW | 3 | cm | 3 | 53 | 47 | — |
| | Cuxhaven ... | 30.16 | 45 | SW | 2 | o | 30.25 | + .16 | 45 | 44 | + 5 | SW | 2 | c | * | 46 | ? | 0.32 |
| | Berlin ... | 30.32 | 38 | S | 1 | b | 30.36 | + .09 | 35 | 34 | — 1 | Z | 0 | c | * | 45 | 34 | — |
| | Wiesbaden ... | * | * | * | * | * | 30.43 | + .10 | 30 | 29 | — 3 | SW | 1 | f | * | 36 | 28 | — |
| | Munich ... | 30.41 | 32 | Z | 0 | bc | 30.42 | + .07 | 24 | 24 | — 1 | SW | 1 | b | * | 41 | 23 | — |
| | The Helder ... | 30.18 | 46 | SSW | 3 | f | 30.23 | + .17 | 46 | 46 | + 1 | SSW | 3 | f | 2 | 46 | 44 | 0.16 |
| | Brussels ... | * | * | * | * | * | 30.32 | + .13 | 46 | 45 | + 5 | SSW | 1 | c | * | 51 | 41 | — |
| | Cape Gris Nez... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| | Paris ... | 30.32 | 43 | S | 3 | bc | 30.36 | + .11 | 34 | 32 | — 0 | S | 1 | ? s | * | 49 | 33 | — |
| | Brest ... | 30.17 | 55 | SSW | 4 | o | 30.16 | + .11 | 55 | 53 | + 1 | SW | 8 | c | 7 | 57 | ? | 0.24 |

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on Wednesday, 5th December.

1888.

BAROMETER, WIND & SEA.

(Explanation of Map)

Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words. Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —

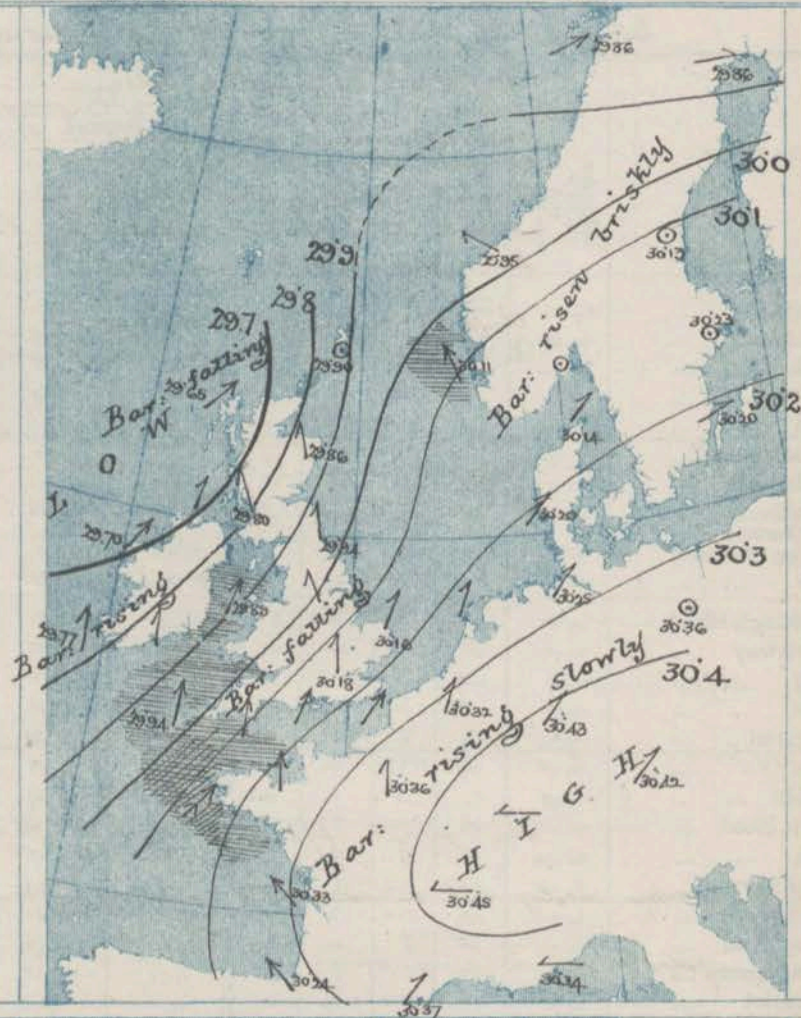
→ = forces above 10; →→ = forces 8 to 10;
 → = forces 5 to 7; → = forces 1 to 4;
 ○ = dead calm.

Sea Disturbance — where considerable, is shown thus:
 [Symbol] = Rough. [Symbol] = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
 During the 15 Years 1871—1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

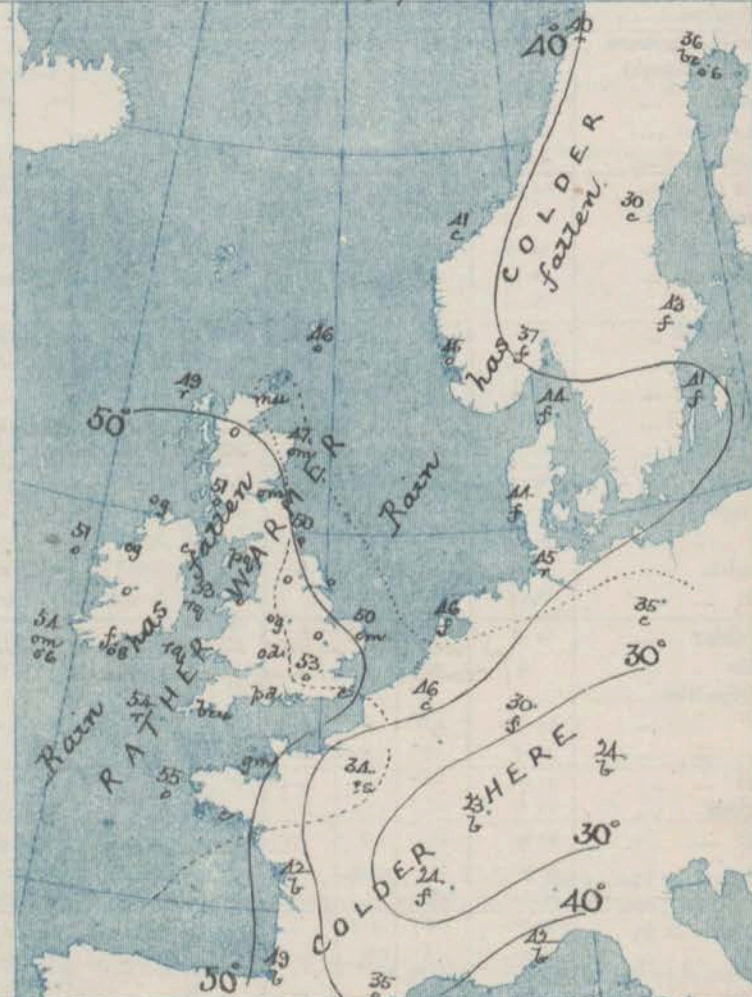
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
 for the month of December.

| STATIONS | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|------------------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Dry | Wet | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 3.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

| | |
|-------------|---|
| PRESSURE | Highest 30.4 inches and upwards in an anticyclone lying over S. Germany and the east of France. Lowest 29.7 inches and less in a large but somewhat shallow depression lying off the W. of Scotland. Gradients moderate but increasing in the northwest and north. Barometer falling at most of our western and northern stations, but rising again in the south of Ireland. |
| TEMPERATURE | Highest 54° at Loughboro', Parsonstown, Valencia, Sally, Bracon, P. and Oxford and 53° at several of our other W. and S. Stations. Lowest 23° at Belfast, 24° at Dublin and Lyons, 30° at Hernosand and Wiesbaden, 34° at Paris and 35° at Perpignan. During yesterday the thermometer rose to 57° at York and in London, 58° at Oxford, and 59° at Loughboro' and Cambridge. |
| WIND | Chiefly S. Strong in force at some of our S.W. stations, but moderate or fresh elsewhere. In the north of Scandinavia the wind draws into West, while in the S and E of France, it is light from the E. |
| WEATHER | Dull over the greater part of the United Kingdom, with rain in the W. of England and also at Hornum. Foggy over Denmark, the S. of Sweden and some parts of Germany and France. Since yesterday, 0.8 inch of rain has fallen at Roche's Point and 0.6 inch at Valencia. |
| SEA | High at Belfast, rough off the south-west of England, and rather rough at Holyhead, but moderate to smooth elsewhere. |

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The general appearance remains unchanged. Further depressions are likely to move along our western coasts, and an occasional increase of wind is probable in most districts, with mild unsettled weather.

FORECASTS

for the 24 hours ending at NOON on 6th December 1883.

DISTRICTS.

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

FORECASTS.

S^W winds, increasing in force, perhaps a gale; dull, some rain.

S^W and S.W. winds, strong and squally, cloudy generally, with slight rain.

DISTRICTS.

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

FORECASTS.

Same as N^{os} 0 and 1.

S^W and S.W. strong winds and gales, squally, some rain.

S.W. winds moderate, to S^W strong; unsettled, some rain.

WARNINGS

The SOUTH CONE was hoisted last evening in districts 7 & 10, but the SIGNALS have been lowered this morning in districts 2, 3 and 5.

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. | Dry. | Wet. | Wind. | Wes. | Ses. | | Bar. | Dry. | Wet. | Wind. | Wes. | Ses. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 29.85 | 45 | 44 | SSE 4 | f | 7 | Holyhead ... | 29.95 | 52 | 51 | SW 3 | c | 3 |
| Sumburgh Head ... | 29.81 | 43 | 41 | L 0 | o | 4 | Valencia ... | 29.83 | 54 | 52 | SSE 6 | omg | 5 |
| Stornoway ... | 29.78 | 46 | 45 | L 0 | b | 1 | Scilly ... | 30.00 | 54 | 54 | S 4 | om | 4 |
| Aberdeen ... | 29.83 | 48 | 47 | NNE 1 | o | 4 | Jersey ... | 30.14 | 54 | 54 | SSE 4 | o | 4 |
| Shields ... | 29.91 | 52 | 52 | W 1 | c | 2 | Dungeness ... | 30.11 | 51 | 51 | SW 5 | r | 5 |
| Ardrossan ... | 29.87 | 49 | 49 | SSW 3 | o | 3 | London ... | 30.08 | 57 | 55 | SSE 3 | bc | * |
| Malin Head ... | 29.82 | 47 | 46 | SSE 3 | bc | 3 | Yarmouth ... | 30.04 | 53 | 52 | SSW 3 | cm | 3 |
| Mullaghmore ... | 29.80 | 52 | 50 | SSW 4 | o | 3 | Rocheport ... | 30.28 | 50 | 48 | SSE 5 | o | 2 |
| Belmullet ... | 29.77 | 50 | 50 | SSW 3 | o | * | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest, 30.5 inches and upwards, in an anticyclone lying over Northern Russia, and high, 30.3 inches and upwards, in another system lying over Austria, Southern Germany, and the E. and S.E. of France. The lowest readings, 29.2 inches and less, were reported in a depression lying over the northwest of Norway. S.E. or S.W. winds prevailed over the greater part of Western and Northern Europe, and although moderate or fresh generally, they blew with the force of a gale over Finland and the Gulf of Bothnia. Over Italy, Spain and Algeria, however, variable or light E. breezes were reported. The weather was dull and rainy in the west of Norway, and the S.W. of Ireland as well as at some of the Channel stations, but fair in most other localities. Temperature had risen somewhat in Scandinavia, the S of Ireland and the west and north of France, but fallen elsewhere; readings ranged from 55° and upwards at some of the western French stations, and 50° and upwards over the greater part of the British Islands as well as at the Spanish and Mediterranean stations to several degrees below the freezing point over Central Russia, and to considerably below zero in the neighbourhood of the White Sea. The highest individual readings were 61° at Malta, 58° at Cagliari, 57° at Tangier and Algiers, 56° at Lorient, 55° at Marseilles, and 54° at Tully, Brest and Bordeaux; the lowest were -14.7 at Archangel, +5 at Moscow, 8 at St. Petersburg, 21 at Clermont, 22 at Kieps, 25 at Munich and Gaf, 26 at Belfort, 27 at Karlsruhe and Besancon and 28 at Alsborg and Kio. —

In the course of the day, the depression off the northwest of Norway travelled away in a northeasterly direction, but a new system began to approach the west of Ireland. The winds on our extreme western coasts therefore backed to the southward or south-eastward, with rain in many places.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Thursday, 6th December* 1888.
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | + YESTERDAY EVENING. | | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|------------------------------------|-----------------|-------|------------------|----------|----------------------------------|------------------------------|------|------|-----------------------------------|------|------------------|-------|------------------|----------|---------------|----------------|------|---------------------|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | Reading at 32° F. and Sea Level. | BAROMETR. | | | SHADE TEMP. | | | WIND. | | Weather. | Sea (0 to 2). | SHADE TEMP. | | |
| | | | Dir. | Force (0 to 12). | | | Reading at 8 a.m. yesterday. | Dry. | Wet. | Difference from 8 a.m. yesterday. | Dir. | Force (0 to 12). | Dir. | Force (0 to 12). | | | Max. | Min. | Amount of Rainfall. |
| SCANDINAVIA. | Haparanda .. | 29.94 | 29 | 2 | 0 | 6 | 29.87 | + 01 | 23 | 23 | - 13 | 20 | 0 | 0 | 0 | 0 | 36 | ? | - |
| | Hernösand ... | 30.06 | 33 | 2 | 0 | 0 | 30.01 | - 12 | 32 | 31 | + 2 | 20 | 0 | 0 | 0 | 0 | 31 | 28 | - |
| | Stockholm ... | 30.18 | 40 | 20 | 0 | 6 | 30.12 | - 01 | 44 | 43 | + 2 | 20 | 0 | 0 | 0 | 0 | 40 | 39 | - |
| | Wisby ... | 30.26 | 41 | SW | 4 | 0 | 30.20 | - 00 | 40 | 39 | - 1 | SSW | 4 | 0 | 0 | 0 | 40 | 39 | - |
| | Bodö ... | 29.88 | 38 | SW | 4 | 0 | 29.73 | - 15 | 41 | 39 | + 1 | SSW | 2 | 0 | 0 | 0 | 43 | 36 | 0.08 |
| | Christiansund... | 29.90 | 44 | ESE | 2 | 0 | 29.81 | - 14 | 44 | 43 | + 3 | ESE | 1 | 0 | 0 | 0 | 40 | 41 | 0.04 |
| | Skudesnaes ... | 30.01 | 46 | ESE | 8 | 7 | 30.03 | - 08 | 45 | 45 | 0 | 20 | 0 | 0 | 0 | 0 | 46 | 45 | 0.43 |
| | Christiana Fjord (Færd) | 30.13 | 42 | SW | 3 | 6 | 30.01 | - 09 | 44 | 44 | + 7 | SSW | 4 | 0 | 0 | 0 | 40 | ? | 0.04 |
| | Skagen (The Seaw) | 30.18 | 44 | SW | 2 | m | 30.11 | - 03 | 44 | 44 | 0 | SW | 3 | m | 1 | 1 | 45 | 41 | - |
| | Fanö ... | 30.25 | 44 | SSW | 4 | 6 | 30.22 | + 02 | 44 | 44 | 0 | S | 4 | 0 | 0 | 0 | 45 | 43 | - |
| BRITISH ISLANDS. | Sumburgh Head | 29.74 | 46 | 20 | 0 | 0 | 29.87 | - 03 | 48 | 47 | + 2 | 20 | 0 | 0 | 4 | 4 | 50 | 44 | - |
| | Stornoway ... | 29.67 | 51 | SW | 6 | 0 | 29.83 | + 18 | 50 | 49 | + 1 | SW | 4 | 0 | 0 | 4 | 51 | 47 | 0.11 |
| | Wick ... | 29.75 | 49 | 20 | 0 | 0 | 29.91 | + 16 | 48 | 46 | 0 | 20 | 0 | 0 | 0 | 0 | 50 | 45 | - |
| | Nairn ... | 29.74 | 52 | 20 | 0 | 0 | 29.90 | + 19 | 49 | 47 | - 3 | SW | 1 | 0 | 0 | 1 | 54 | 48 | - |
| | Aberdeen... | 29.82 | 50 | S | 1 | ogr | 30.00 | + 14 | 46 | 45 | - 1 | S | 2 | 0 | 0 | 3 | 51 | 45 | 0.06 |
| | Leith ... | 29.84 | 53 | SW | 1 | 0 | 30.02 | + 20 | 52 | 49 | 0 | SW | 1 | 0 | 0 | 0 | 55 | 45 | 0.08 |
| | Shields ... | 29.93 | 57 | S | 2 | 7 | 30.04 | + 10 | 53 | 52 | + 3 | SSW | 1 | 0 | 0 | 2 | 57 | 48 | 0.04 |
| | Spurn Head ... | 30.05 | 52 | S | 4 | e | 30.13 | + 10 | 50 | 49 | + 1 | SSW | 3 | 0 | 0 | 2 | 54 | 49 | - |
| | York ... | 30.00 | 57 | ESE | 2 | c | 30.12 | + 11 | 54 | 53 | + 3 | S | 1 | 0 | 0 | 0 | 59 | 50 | - |
| | Loughborough | 30.07 | 54 | SSW | 4 | 0 | 30.17 | + 11 | 52 | 51 | - 2 | SSW | 1 | 0 | 0 | 0 | 58 | 52 | - |
| GERMANY. | Ardrossan ... | 29.85 | 51 | 20 | 0 | odp | 30.00 | + 20 | 49 | 49 | - 2 | SE | 2 | 0 | 0 | 1 | 51 | 49 | 0.11 |
| | Malin Head ... | 29.76 | 51 | SSW | 4 | b | 29.92 | + 23 | 49 | 48 | - 3 | S | 4 | 0 | 0 | 4 | 53 | 48 | - |
| | Mullaghmore ... | 29.81 | 51 | SW | 5 | b | 29.92 | + 21 | 50 | 49 | - 3 | SSW | 4 | 0 | 0 | 3 | 55 | 49 | - |
| | Belmullet ... | 29.78 | 52 | SW | 5 | bc | 29.89 | + 19 | 50 | 50 | - 1 | S | 4 | 0 | 0 | 0 | 52 | 50 | 0.21 |
| | Donaghadee ... | 29.88 | 51 | SW | 2 | 0 | 30.02 | + 21 | 45 | 45 | - 7 | SSW | 2 | 0 | 0 | 1 | 53 | 45 | 0.08 |
| | Barrow-in-Furness | 29.94 | 51 | S | 4 | 0 | 30.09 | + 19 | 49 | 48 | - 1 | SE | 3 | 0 | 0 | 0 | 52 | 49 | 0.52 |
| | Liverpool (Bidston) | 29.99 | 54 | S | 2 | 0 | 30.12 | + 17 | 50 | 48 | - 3 | SSW | 2 | 0 | 0 | 2 | 58 | 50 | 0.03 |
| | Holyhead ... | 29.95 | 53 | SSW | 4 | rm | 30.08 | + 19 | 51 | 50 | - 2 | S | 4 | 0 | 0 | 4 | 53 | 50 | 0.87 |
| | Parsonstown ... | 29.88 | 51 | 20 | 0 | b | 29.98 | + 20 | 50 | 49 | - 4 | SE | 1 | 0 | 0 | 0 | 54 | 46 | - |
| | Valencia ... | 29.88 | 54 | S | 5 | og | 29.89 | + 12 | 52 | 51 | - 2 | SE | 5 | 0 | 0 | 5 | 55 | 50 | 0.01 |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.92 | 52 | SW | 4 | 6 | 29.99 | + 18 | 51 | 51 | - 2 | S | 5 | 0 | 0 | 5 | 53 | 51 | 0.10 |
| | Pembroke ... | 30.00 | 53 | S | 4 | 6 | 30.11 | + 20 | 52 | 51 | - 1 | S | 3 | 0 | 0 | 3 | 54 | 51 | 0.20 |
| | Scilly ... | 30.00 | 55 | S | 6 | 6 | 30.04 | + 10 | 54 | 54 | 0 | S | 5 | 0 | 0 | 5 | 55 | 52 | 0.17 |
| | Prawle Point ... | 30.14 | 54 | SSW | 5 | m | 30.18 | + 07 | 54 | 54 | 0 | S | 4 | 0 | 0 | 5 | 54 | 52 | 0.14 |
| | Jersey ... | 30.26 | 54 | ESE | 4 | b | 30.25 | + 03 | 50 | 49 | - 3 | ESE | 3 | 0 | 0 | 3 | 57 | 49 | 0.02 |
| | Hurst Castle ... | 30.20 | 54 | SSW | 5 | 0 | 30.23 | + 05 | 54 | 53 | + 1 | SSW | 4 | 0 | 0 | 4 | 56 | 52 | 0.01 |
| | Dungeness ... | 30.23 | 52 | SW | 4 | b | 30.24 | + 04 | 51 | 50 | - 2 | SW | 3 | 0 | 0 | 2 | 53 | 50 | 0.02 |
| | London ... | 30.21 | 52 | SSW | 3 | c | 30.23 | + 05 | 52 | 51 | - 1 | SSW | 3 | 0 | 0 | 0 | 58 | 51 | 0.01 |
| | Oxford ... | 30.16 | 53 | S | 3 | 0 | 30.21 | + 08 | 53 | 53 | - 1 | S | 3 | 0 | 0 | 0 | 56 | 52 | - |
| | Cambridge ... | 30.15 | 51 | S | 1 | b | 30.21 | + 07 | 52 | 52 | - 1 | S | 1 | 0 | 0 | 0 | 56 | 48 | - |
| PENINSULA. | Yarmouth ... | 30.16 | 51 | SSW | 3 | c | 30.21 | + 05 | 51 | 50 | + 1 | SW | 2 | 0 | 0 | 3 | 54 | 47 | - |
| | Cuxhaven ... | 30.29 | 45 | SSW | 1 | f | 30.29 | + 04 | 45 | 45 | 0 | SW | 2 | 0 | 0 | 0 | 46 | 42 | 0.10 |
| | Berlin ... | 30.38 | 37 | 20 | 0 | b | 30.40 | + 04 | 32 | 31 | - 3 | SE | 1 | 0 | 0 | 0 | 39 | 30 | - |
| | Wiesbaden ... | * | * | * | * | * | 30.42 | - 01 | 38 | 32 | + 3 | 20 | 0 | 0 | 0 | 0 | 52 | ? | - |
| | Munich ... | 30.44 | 22 | NE | 2 | m | 30.42 | 00 | 18 | 18 | - 6 | NE | 2 | 0 | 0 | 0 | 36 | 18 | - |
| | The Helder ... | 30.26 | 48 | SSW | 4 | f | 30.26 | + 03 | 41 | 40 | - 5 | S | 4 | 0 | 0 | 1 | 48 | 41 | - |
| | Brussels ... | * | * | * | * | * | 30.38 | + 06 | 39 | 36 | - 7 | S | 1 | 0 | 0 | 0 | 61 | 39 | - |
| | Cape Gris Nez... | 30.21 | 50 | SW | 3 | 0 | 30.27 | - 02 | 46 | 43 | - 5 | S | 1 | 0 | 0 | 2 | 55 | 45 | - |
| | Paris ... | 30.36 | 38 | SE | 1 | b | 30.34 | - 02 | 29 | 29 | - 5 | ESE | 1 | 0 | 0 | 0 | 50 | 28 | - |
| | Brest ... | 30.21 | 55 | SSW | 7 | 0 | 30.19 | + 03 | 55 | 50 | - 0 | S | 4 | 0 | 0 | 5 | 57 | ? | - |
| GERMANY. | Lorient ... | 30.26 | 35 | S | 4 | 0 | 30.20 | - 02 | 50 | 50 | - 5 | ESE | 4 | 0 | 0 | 5 | 57 | 48 | - |
| | Rocheport ... | 30.34 | 46 | SE | 4 | b | 30.26 | - 07 | 41 | 39 | - 1 | SSW | 4 | 0 | 0 | 2 | 55 | 36 | - |
| | Belfort ... | 30.37 | 30 | E | 1 | b | 30.35 | - 04 | 26 | 26 | + 3 | E | 1 | 0 | 0 | 0 | 45 | ? | - |
| | Lyons ... | 30.47 | 28 | WSW | 1 | b | 30.43 | - 02 | 25 | 25 | + 1 | SW | 1 | 0 | 0 | 0 | 29 | 23 | - |
| | Nice ... | 30.36 | 46 | E | 4 | b | 30.31 | - 03 | 46 | 37 | + 4 | E | 4 | 0 | 0 | 0 | 54 | ? | - |
| | Perpignan ... | 30.38 | 42 | SE | 1 | b | 30.34 | - 03 | 43 | 42 | + 8 | W | 3 | 0 | 0 | 0 | 54 | ? | - |
| | Biarritz ... | 30.26 | 55 | SE | 5 | b | 30.20 | - 04 | 43 | 38 | - 6 | SSW | 3 | 0 | 0 | 2 | 63 | 39 | - |
| | Corunna ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | - |
| | Lisbon ... | 30.24 | 53 | ESE | 5 | bc | 30.10 | - 19 | 48 | 47 | - 2 | ESE | 7 | 0 | 0 | 5 | 57 | 48 | - |

For Explanation of Columns, see p. 4.

‡ Received too late for insertion in Charts on p. 8.

WEATHER CHARTS

for 8 a.m. on

Thursday, 6th December

1888.

BAROMETER, WIND & 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.

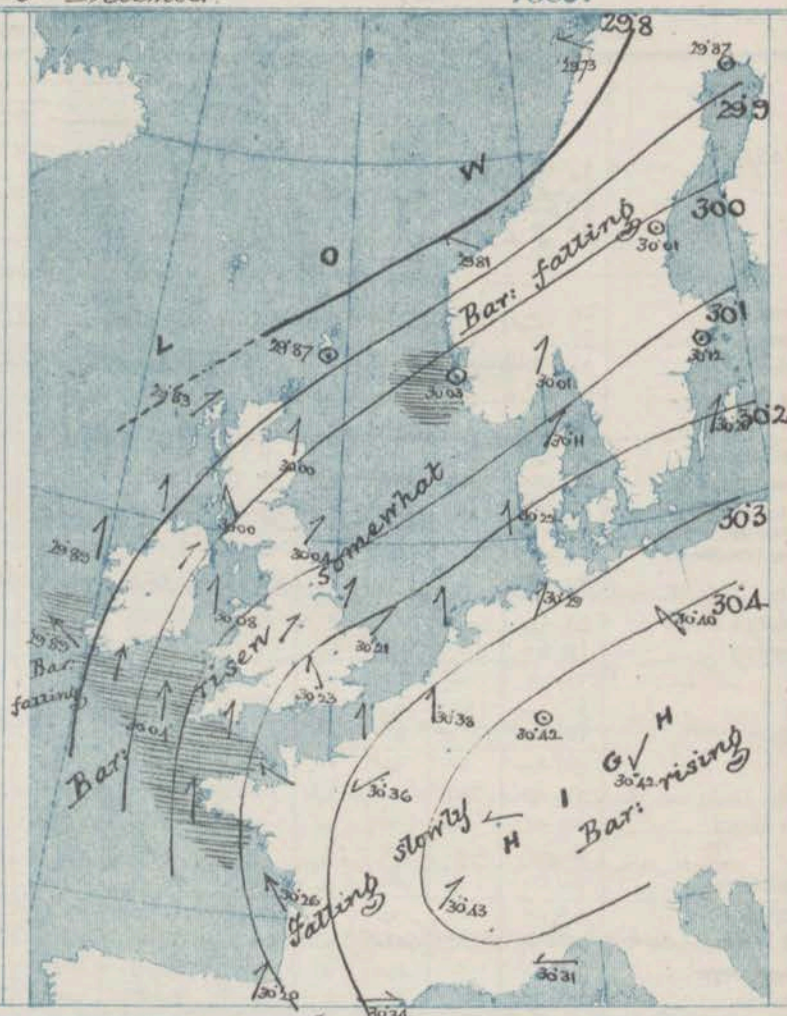
Sea Disturbance — where considerable, is shown thus.

— = Rough — = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 15 Years 1871—1885.

| STATION IS. | MEAN READINGS |
|---------------|---------------|
| | ins. |
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

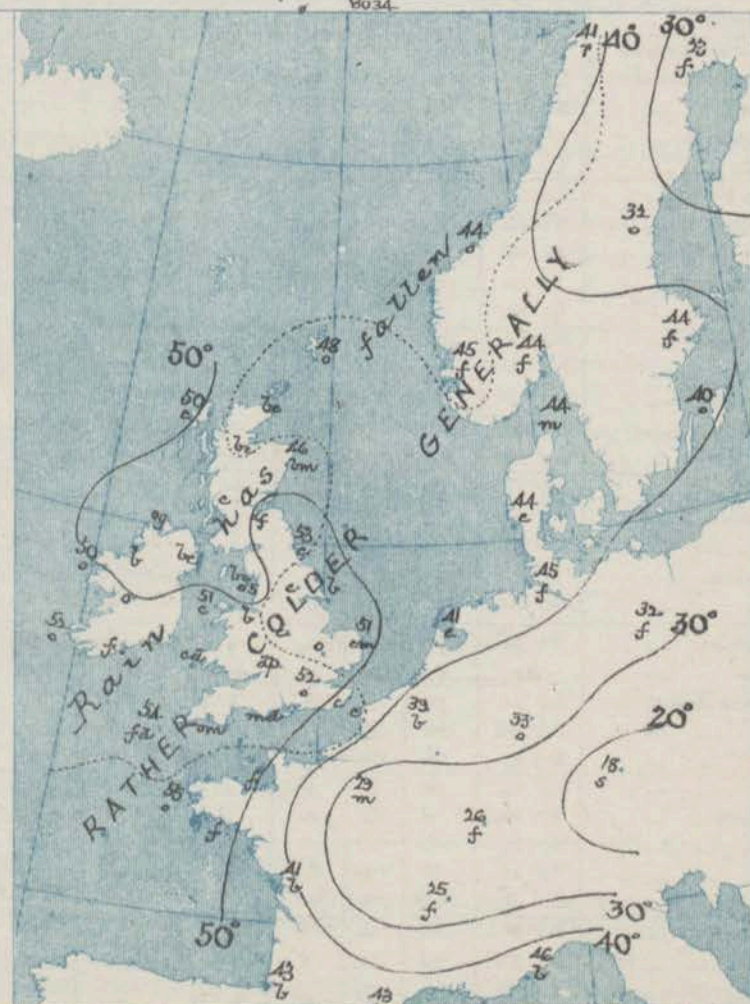
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches). |
|---------------|---------------|---------------|-----------|------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | | |
| | | | Temp. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 35.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 ins. and upwards, in an anticyclone lying over Germany and the east of France.

Lowest, 29.73 ins. at Bodø, 29.83 ins. at Stornoway; 29.89 ins. at Valencia.

Gradients moderate or slight. Barometer rising in all the more northern and eastern parts of our Islands, but falling a little at our southwestern and most of the Continental stations.

TEMPERATURE

Highest, 55° at Bristol, 54° at York, Scilly, Pwllheli and Hurst Castle, and 53° at Shields and Oxford.

Lowest, 18° at Munich, 23° at Haparanda, 25° at Lyons, 26° at Belfast, 29° at Paris, and 32° at Amsterdam and Berlin.

During yesterday the thermometer rose to 68° at Loughborough, Liverpool, and in London; and to 55° at York.

WIND

Light from the S.W. in the north and east of our Islands and also on the eastern shores of the North Sea.

Moderate on fresh from S. or S.E. on our southern and the French coasts.

Calm in Sweden, variable in Germany, and the east of France.

WEATHER

Dull on our south and southwest coasts with fog and drizzling rain in places.

Fine in the north and east of our Islands, foggy in the south of Scandinavia, North Germany and the east of France.

Rain fell yesterday in the west and southwest, the largest amount being 0.5 in. at Barrow in Lunenburg.

SEA

Rather rough on our southwest coasts and also at Skudeenals, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indications of any very decided change in the general conditions, but the wind over our southern and south-eastern districts may possibly back to the S.E. with some decrease in temperature.

FORECASTS

for the 24 hours ending at NOON on 7th DECEMBER 1888.

DISTRICTS.

FORECASTS.

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

SW^{ly} winds, light, to S^{ly}, fresh; fair to dull and some rain.

S^{ly} to SE^{ly} winds, moderate; fair generally, becoming less mild.

DISTRICTS.

FORECASTS.

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

SE^{ly} and S^{ly} winds, light to fresh; fair to dull and some rain.

S^{ly} winds, increasing in force; unsettled, some rain.

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. | Dry. | Wet. | Wind. | Wca. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wca. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 30.07 | 46 | 46 | SSE 6 | o f | 5 | Holyhead ... | 29.90 | 53 | 53 | SSW 5 | r qm | 5 |
| Sumburgh Head ... | 29.75 | 47 | 47 | S 2 | o | 4 | Valencia ... | 29.83 | 55 | 54 | SSW 5 | em | 5 |
| Stornoway ... | 29.67 | 50 | 50 | SW 5 | e | 4 | Scilly ... | 29.97 | 55 | 55 | SSW 6 | f | 5 |
| Aberdeen ... | 29.81 | 50 | 48 | SW 2 | o qm | 4 | Jersey ... | 30.23 | 55 | 51 | SE 4 | bc | 4 |
| Shields ... | 29.90 | 56 | 54 | S 3 | e | 2 | Dungeness ... | 30.22 | 53 | 52 | SW 5 | e | 4 |
| Ardrossan ... | 29.80 | 51 | 51 | S 2 | r | 2 | London ... | 30.18 | 58 | 55 | SW 4 | c | 3 |
| Malin Head ... | 29.72 | 53 | 51 | SSW 4 | o | 3 | Yarmouth ... | 30.16 | 54 | 53 | SSW 4 | e | 3 |
| Mullaghmore ... | 29.76 | 58 | 52 | SW 4 | em | 2 | Rochefort ... | 30.32 | 50 | ? | SE 4 | b | 2 |
| Belmullet ... | 29.73 | 52 | 51 | SW 3 | o | * | | | | | | | |

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

The report for yesterday morning showed that pressure varied from 30.3 in. and more, over the whole of Central France, Germany and Russia to rather below 29.7 in. off our extreme north-west coasts, the gradient being very slight at the Continental stations, moderate over the British Isles, where they were favourable for S⁴ winds. The winds reported were moderate to strong from the S² over the United Kingdom, while they were of less force — from NE. over Spain and the Mediterranean, from SE. in the southwest of France, and from SW. and W. over Scandinavia, North Germany, and the Baltic. The weather was cloudy in the northwest and north, with rain at times — fair as a whole in most other places, but rainy at the Black Sea stations, and in some parts of Western Russia. Temperature was very high for the time of year over the coast of France, the British Isles and North Sea, but frost prevailed over Central and Eastern Europe. The highest morning values were 55° at Malta and Algiers, 55° at Brindisi, Corunna, and Brest, 54° at San Fernando, Scilly, Carronston, Oxford and Loughborough, 53° at Cambridge, London, Liverpool and Pembroke, and 52° at Leith and Naun; the lowest were -1° F. at Archangel, +13° at Moscow, 21° at Bern, 23° at Carlsruhe and Belfast, 24° at Lyons and Munich, 24° at Budapest, 30° at Hernösand and Mirebaden, and 34° at Paris.

Little change occurred during the day, but in London the thermometer rose to 58° during the afternoon.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Friday, 7th December 1888.
 Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | + YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|-------------------------------|---|--------------------|--------|----------------------|----------|---|---|-------------|------|---|--------|----------------------|----------|------------------|-------------|----------------|---------------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | Dirco. | 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. | Dirco. | Force. (0 to 12.) | | | Max. | Min. | | |
| SCANDINAVIA. | Haparanda .. | 29.71 | 32 | ESE | 1 | b | 29.75 | -12 | 29 | 28 | +6 | 2 | 0 | bc | 0 | 34 | 19 | - | |
| | Hernösand ... | 29.95 | 32 | W | 0 | b | 30.10 | +0.9 | 40 | 38 | +8 | 2 | 0 | c | 0 | 32 | - | - | |
| | Stockholm ... | 30.05 | 45 | WSW | 2 | c | 30.21 | +0.9 | 40 | 39 | -4 | WNW | 2 | 0 | * | 16 | - | - | |
| | Wisby ... | 30.21 | 44 | WSW | 6 | b | 30.27 | +0.7 | 42 | 42 | +2 | WNW | 4 | 0 | * | 16 | 37 | - | |
| | Bodö ... | 29.69 | 43 | WSW | 6 | r | 29.88 | +1.5 | 42 | 41 | +1 | SSW | 2 | 0 | 1 | 45 | 39 | 0.16 | |
| | Christiansund... | 30.02 | 46 | WSW | 7 | c | 29.92 | +1.1 | 41 | 41 | 0 | ESE | 3 | bc | 3 | 46 | 41 | 0.04 | |
| | Skudesnaes ... | | | | | | | | | | | | | | | | | | |
| | Christiania Fjord (Færdor) | 30.14 | 39 | SW | 4 | b | 30.19 | +1.8 | 40 | 39 | -4 | W | 0 | 0 | 2 | 41 | 39 | - | |
| | Skagen (The Scaw) | 30.20 | 45 | W | 3 | f | 30.23 | +1.2 | 43 | 43 | -1 | SW | 2 | f | 1 | 46 | 43 | 0.04 | |
| | Fanö ... | 30.31 | 44 | SSW | 2 | m | 30.29 | +0.7 | 39 | 39 | -5 | SSW | 2 | f | * | 46 | 39 | - | |
| BRITISH ISLANDS. | Sumburgh Head | 29.98 | 44 | W | 0 | 0 | 29.65 | -22 | 49 | 47 | -1 | SSE | 4 | 0 | 5 | 51 | 44 | 0.01 | |
| | Stornoway .. | 29.81 | 50 | SW | 6 | 0 | 29.44 | -39 | 51 | 50 | +1 | SW | 8 | r | 6 | 52 | 48 | 0.26 | |
| | Wick ... | 29.94 | 48 | S | 1 | c | 29.60 | -31 | 49 | 46 | +1 | S | 6 | 0 | 4 | 50 | 45 | - | |
| | Nairn ... | 29.93 | 53 | W | 0 | c | 29.59 | -31 | 52 | 47 | +3 | SW | 3 | 0 | 1 | 55 | 47 | - | |
| | Aberdeen... | 30.04 | 46 | S | 2 | b | 29.77 | -23 | 46 | 45 | 0 | SSE | 4 | c | 4 | 51 | 44 | 0.01 | |
| | Leith ... | 30.03 | 49 | SW | 1 | 0 | 29.75 | -27 | 52 | 49 | 0 | SW | 1 | cm | * | 56 | 45 | - | |
| | Shields ... | 30.09 | 51 | S | 1 | m | 29.91 | -13 | 44 | 42 | -9 | SW | 2 | c | 2 | 55 | 42 | - | |
| | Spurn Head ... | 30.15 | 49 | ESE | 3 | 0 | 30.00 | -13 | 46 | 44 | -4 | SSE | 5 | b | 3 | 55 | 44 | - | |
| | York ... | 30.14 | 52 | SSE | 1 | b | 29.95 | -17 | 40 | 38 | -14 | SE | 2 | b | * | 55 | 39 | - | |
| | Loughborough | 30.15 | 54 | SE | 1 | 0 | 29.98 | -19 | 39 | 38 | -13 | SE | 2 | c | * | 58 | 38 | - | |
| GERMANY. | Ardrossan ... | 29.97 | 50 | ESE | 2 | 0 | 29.70 | -30 | 49 | 48 | 0 | SE | 4 | 0 | 3 | 64 | 48 | - | |
| | Malin Head ... | 29.78 | 51 | SSE | 5 | c | 29.52 | -40 | 52 | 50 | +3 | S | 5 | ond | 4 | 54 | 49 | 0.10 | |
| | Mullaghmore ... | 29.72 | 54 | SSE | 7 | ogr | 29.53 | -39 | 54 | 52 | +4 | SSW | 6 | or | 5 | 57 | 50 | 0.50 | |
| | Belmullet ... | 29.61 | 53 | SW | 6 | ou | 29.50 | -39 | 52 | 51 | +2 | SW | 6 | c | * | 54 | 50 | 0.65 | |
| | Donaghadee ... | 29.95 | 51 | S | 5 | 0 | 29.69 | -33 | 52 | 52 | +7 | SW | 5 | 0 | 3 | 52 | 45 | 0.03 | |
| | Barrow-in-Furness | 30.05 | 50 | SE | 4 | c | 29.85 | -24 | 45 | 42 | -4 | SE | 6 | bc | 4 | 52 | 44 | - | |
| | Liverpool (Bidston) | 30.06 | 52 | SE | 5 | b | 29.88 | -24 | 43 | 40 | -7 | SE | 5 | bc | 3 | 55 | 42 | - | |
| | Holyhead ... | 30.00 | 55 | S | 3 | 0 | 29.80 | -28 | 52 | 46 | +1 | SSE | 5 | 0 | 4 | 56 | 51 | - | |
| | Parsonstown ... | 29.80 | 54 | SE | 3 | 0 | 29.63 | -35 | 53 | 52 | +3 | S | 2 | 0 | * | 56 | 49 | 0.13 | |
| | Valencia ... | 29.67 | 54 | SSE | 8 | 0 | 29.61 | -28 | 54 | 52 | +2 | SSW | 6 | cu | 6 | 56 | 50 | 1.21 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.79 | 52 | S | 7 | org | 29.68 | -31 | 52 | 52 | +1 | SW | 5 | c | 5 | 53 | 50 | 0.40 | |
| | Pembroke ... | 29.98 | 53 | SSE | 4 | c | 29.82 | -29 | 52 | 50 | 0 | SSE | 6 | bc | 6 | 54 | 50 | 0.01 | |
| | Scilly ... | 29.91 | 53 | SSE | 6 | 0 | 29.81 | -23 | 54 | 53 | 0 | S | 6 | 0 | 6 | 55 | 52 | 0.01 | |
| | Prawle Point ... | 30.07 | 50 | SSE | 4 | c | 29.95 | -23 | 50 | 48 | -4 | S | 4 | b | 4 | 55 | 48 | - | |
| | Jersey ... | 30.13 | 51 | SE | 3 | b | 30.02 | -23 | 45 | 42 | -5 | SSE | 4 | b | 4 | 52 | 45 | - | |
| | Hurst Castle ... | 30.14 | 50 | SSE | 4 | b | 30.00 | -23 | 50 | 47 | -4 | S | 4 | b | 3 | 57 | 47 | - | |
| | Dungeness ... | 30.20 | 50 | SW | 3 | b | 30.07 | -17 | 47 | 44 | -4 | S | 3 | bc | 3 | 53 | 46 | - | |
| | London ... | 30.20 | 48 | SSE | 2 | bc | 30.04 | -19 | 42 | 41 | -10 | SE | 2 | b | * | 56 | 41 | - | |
| | Oxford ... | 30.13 | 49 | SE | 2 | b | 30.00 | -21 | 43 | 41 | -10 | SSE | 2 | b | * | 55 | 43 | - | |
| | Cambridge ... | 30.19 | 50 | S | 1 | b | 30.05 | -16 | 41 | 39 | -11 | SE | 1 | b | * | 56 | 39 | - | |
| PENIN- SULA. | Yarmouth ... | 30.22 | 48 | S | 3 | bc | 30.08 | -13 | 47 | 46 | -4 | SSW | 4 | b | 3 | 52 | 45 | - | |
| | Cuxhaven ... | 30.38 | 43 | SW | 1 | f | 30.53 | +0.4 | 35 | 35 | -10 | SE | 3 | f | * | 7 | 34 | - | |
| | Berlin ... | 30.44 | 55 | W | 0 | b | 30.41 | +0.1 | 28 | 28 | -4 | SSE | 1 | c | * | 37 | 27 | - | |
| | Wiesbaden ... | * | * | * | * | * | 30.34 | -0.8 | 27 | 27 | -6 | SW | 1 | c | * | 36 | 27 | - | |
| | Munich ... | 30.41 | 23 | NE | 3 | f | 30.56 | +0.6 | 26 | 26 | +8 | SE | 3 | f | * | 28 | 18 | - | |
| | The Helder ... | 30.29 | 41 | S | 1 | b | 30.21 | -0.5 | 37 | 36 | -4 | SSE | 1 | bc | 1 | 46 | 37 | - | |
| | Brussels ... | * | * | * | * | * | 30.21 | -17 | 36 | 34 | -3 | W | 0 | f | * | 50 | 36 | - | |
| | Cape Gris Nez... | 30.20 | 46 | S | 4 | b | 30.06 | -21 | 43 | 41 | -3 | SSE | 1 | bc | 1 | 54 | 41 | - | |
| | Paris ... | 30.26 | 38 | NNE | 1 | b | 30.17 | -17 | 32 | 30 | +3 | E | 1 | m | * | 48 | 30 | - | |
| | Brest ... | 30.05 | 52 | SE | 5 | S | 29.92 | -27 | 49 | 49 | -6 | SE | 7 | 0 | 6 | 57 | ? | 0.08 | |
| PENIN- SULA. | Lorient ... | 30.07 | 50 | SE | 5 | c | 29.98 | -22 | 46 | 45 | -4 | E | 4 | m | 5 | 55 | 41 | - | |
| | Rochefort ... | 30.17 | 46 | SE | 5 | b | 30.08 | -18 | 42 | 41 | +1 | SE | 7 | b | 3 | 54 | 36 | - | |
| | Belfort ... | 30.31 | 26 | NE | 1 | 0 | 30.28 | -0.7 | 25 | 25 | -1 | NE | 1 | f | * | 50 | 22 | - | |
| | Lyons ... | 30.36 | 26 | NW | 1 | f | 30.28 | -1.5 | 25 | 25 | 0 | NW | 1 | 0 | * | 28 | 23 | - | |
| | Nice ... | 30.34 | 44 | E | 3 | b | 30.34 | +0.3 | 44 | 37 | -2 | NE | 3 | b | 1 | 54 | 39 | - | |
| | Perpignan ... | 30.26 | 51 | NE | 1 | 0 | 30.23 | -1.1 | 38 | ? | -5 | W | 0 | b | * | 54 | 37 | - | |
| | Biarritz ... | 30.07 | 55 | SE | 4 | b | 30.00 | -20 | 38 | 35 | -5 | ESE | 5 | b | 3 | 63 | 36 | - | |
| | Corunna ... | * | * | * | * | * | | | | | | | | | | | | - | |
| | Lisbon ... | * | * | * | * | * | | | | | | | | | | | | - | |

1888.

(Explanation of Map)

Wind ——— Arrows saw the prevalent winds. They fly with the wind and their barbs and feathers refer to force. thus —

\Rightarrow = forces above W_1 \Rightarrow = forces 8 to W_1
 \longrightarrow = forces 5 to 7_1 \longrightarrow = forces 1 to 4,
 \odot = dead calms.

Sea Disturbance—where considerable, is shewn thus.

MEAN HEIGHT of the BAROMETER

at 3 a.m. for the month of December
During the 15 Years 1871—1885.

December 1918

Bar. rising

Bar. falling decidedly

Bar. slowly falling

HIGH

29.5, 29.6, 29.7, 29.8, 29.9, 30.0, 30.1, 30.2, 30.3, 30.4

29.50, 29.51, 29.52, 29.53, 29.54, 29.55, 29.56, 29.57, 29.58, 29.59, 29.60, 29.61, 29.62, 29.63, 29.64, 29.65, 29.66, 29.67, 29.68, 29.69, 29.70, 29.71, 29.72, 29.73, 29.74, 29.75, 29.76, 29.77, 29.78, 29.79, 29.80, 29.81, 29.82, 29.83, 29.84, 29.85, 29.86, 29.87, 29.88, 29.89, 29.90, 29.91, 29.92, 29.93, 29.94, 29.95, 29.96, 29.97, 29.98, 29.99, 30.00, 30.01, 30.02, 30.03, 30.04, 30.05, 30.06, 30.07, 30.08, 30.09, 30.10, 30.11, 30.12, 30.13, 30.14, 30.15, 30.16, 30.17, 30.18, 30.19, 30.20, 30.21, 30.22, 30.23, 30.24, 30.25, 30.26, 30.27, 30.28, 30.29, 30.30, 30.31, 30.32, 30.33, 30.34, 30.35, 30.36, 30.37, 30.38, 30.39, 30.40, 30.41, 30.42, 30.43, 30.44, 30.45, 30.46, 30.47, 30.48, 30.49, 30.50, 30.51, 30.52, 30.53, 30.54, 30.55, 30.56, 30.57, 30.58, 30.59, 30.60, 30.61, 30.62, 30.63, 30.64, 30.65, 30.66, 30.67, 30.68, 30.69, 30.70, 30.71, 30.72, 30.73, 30.74, 30.75, 30.76, 30.77, 30.78, 30.79, 30.80, 30.81, 30.82, 30.83, 30.84, 30.85, 30.86, 30.87, 30.88, 30.89, 30.90, 30.91, 30.92, 30.93, 30.94, 30.95, 30.96, 30.97, 30.98, 30.99, 31.00

TEMPERATURE, & WEATHER at 8 A.M.,
with RAINFALL in PAST 24 HOURS.

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

A hand-drawn map of the North Atlantic Ocean, showing isotherms and various handwritten annotations. The map includes latitude and longitude lines, with handwritten labels such as "RAIN RATHER", "COLDER", "MOT PLACES", "fatter", and "here". Numerous numerical values are scattered across the map, likely representing temperature or salinity data.

NOTE—The Temperature means are for the 16 years 1871–85, the Rainfall means are mainly those for the 20 years 1866–85

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.30 in. to 30.40 in. and more, over Germany and the southern parts of the Baltic.
 Lowest, 29.5 in. and less, in a depression lying off our northwestern coasts.
 Gradients, rather steep in the northwest, moderate in the east and south, slight over Germany.
 Barometer, falling in north, steady in south, rising a little at Valencia.

TEMPERATURE

Highest, 54° at Mullaghmore, Valencia, and Sicily, and above 50° at all our eastern and northwestern stations.
 Lowest, 25° at Lyons and Belfast, 28° at Berlin, 28° at Haparanda, and 32° at Loughborough.
 It has decreased greatly over England and frost occurred on the grass in the south of London early this morning.

WIND

SE³, strong over the Bay of Biscay—SW² strong on our western coasts.
 SW² strong to a gale in Iceland. S¹ moderate over England and the North Sea.

WEATHER

Fine in the east and northeast. Foggy over Germany and Belgium.
 Cloudy or overcast at the eastern and northern stations, with much rain in places.
 A threatening appearance is reported in the west and north.

SEA

Rough on our southwestern, western, and northwest coasts, moderate to slight in the south and east. Smooth at the Alder.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression lying off our northwest coasts is apparently passing off, but a threatening appearance of the sky is still reported at Valencia, and there are other indications that further disturbances are approaching our western districts.

FORECASTS

for the 24 hours ending at NOON on 8th DEC^r 1888.

DISTRICTS.

FORECASTS.

| | | |
|-----|------------------|--|
| f 0 | SCOTLAND NORTH | SW ² and S ² winds, strong to a gale; rain at times. |
| f 1 | SCOTLAND EAST | |
| 2 | ENGLAND N.E. | S ² winds, moderate to fresh; fair as a whole. |
| 3 | ENGLAND EAST | |
| 4 | MIDLAND COUNTIES | |
| 5 | ENGLAND SOUTH | |

DISTRICTS.

FORECASTS.

| | | |
|----------|---------------|---|
| f 6 | SCOTLAND WEST | SW ² and S ² winds, strong, a gale at times; rainy. |
| f 7 | ENGLAND N.W. | |
| f 8 | ENGLAND S.W. | |
| f 9 | IRELAND NORTH | |
| f 10 | IRELAND SOUTH | |
| WARNINGS | | The SOUTH CONE is now flying 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.

| | Bar. | Dry. | Wet. | Wind. | Wea. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wea. | Sea. |
|-------------------|-------|------|------|-------|-------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 30.12 | 45 | 45 | SE 2 | f | 5 | Holyhead ... | 30.05 | 53 | 51 | SE 3 | c | 3 |
| Sumburgh Head ... | 29.95 | 47 | 46 | 23 0 | o | 4 | Valencia ... | 29.73 | 55 | 53 | SE 8 | r | 7 |
| Stornoway ... | 29.88 | 50 | 49 | SW 5 | o | 4 | Scilly ... | 29.99 | 54 | 53 | SE 6 | o | 5 |
| Aberdeen ... | 30.06 | 50 | 48 | S 1 | bcm | 3 | Jersey ... | 30.16 | 52 | 49 | SE 3 | bc | 3 |
| Shields ... | 30.09 | 55 | 51 | SSW 2 | bcm | 2 | Dungeness ... | 30.23 | 53 | 50 | SW 2 | bc | 2 |
| Ardrossan ... | 30.01 | 50 | 50 | SE 2 | o | 1 | London ... | 30.21 | 56 | 54 | SE 3 | cm | 3 |
| Malin Head ... | 29.85 | 51 | 49 | S 5 | o | 3 | Yarmouth ... | 30.23 | 49 | 48 | S 3 | cm | 3 |
| Mullaghmore ... | 29.81 | 54 | 51 | SE 6 | o g p | 4 | Rochefort ... | 30.19 | 52 | 50 | SE 4 | b | 2 |
| Belmullet ... | 29.74 | 52 | 51 | SE 5 | o | * | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest, 30.4 ins. and upwards, in an anticyclonic band lying over the southern part of Germany, Austria, and Russia, and lowest, 29.8 ins. and less, in a large area lying to the northward of our Islands and Norway. The wind was SE^{ly} in the west of France, S^{ly} in our Islands, and SW^{ly} over the Baltic and Northern Russia. Over Southern Europe, however, it was chiefly N^{ly} (NE to NW) while in the northwest of Norway it was E^{ly}. The weather was dull, Northern Europe and also in the south and southwest of our Islands, but fair or fine in most other localities. Fog was, however, very prevalent over the more Central Countries. Temperature had fallen in most places, and reading ranged from 50° and upwards over the greater part of Ireland and England, as well as in Spain, Algeria, and South Italy to several degrees below the freezing point over the central part of France, Germany, Austria and Russia. The highest individual readings were 58° at Comina, 57° at Banguinane, 56° at Algiers and Tunis, 55° at Beirut, and 54° at York, Scilly, Pau, Brest, Saint Cast, Brindisi, Ushant, Oron and Epas; the lowest were 17° at Besançon, 18° at Clermont, Munich and Charkov, 22° at Bern, 23° at Staparanda, and Kiew, 24° at Archangel and Gap, and 25° at Lyons.

Later in the day the barometer began to fall briskly on our western coasts, and in the course of the night a depression moved in a north-northeasterly direction outside Ireland and Scotland. Fresh to strong S^{ly} gales with rain were experienced in the far west, and a SW^{ly} gale in the Hebrides.

EXPLANATION OF 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).

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DAILY WEATHER REPORT.

for Saturday, 8th December

1888.

Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | + YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|------------------------------------|-----------------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|----------------|-------------|----------------|---------------------|------|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | 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 .. | 29.82 | 25 | 2 | 0 | 6 | 29.60 | - 15 | 33 | 32 | + 4 | S | 2 | bc | * | 34 | 23 | - |
| | Hernösand ... | 29.92 | 25 | S | 2 | 0 | 29.67 | - 13 | 32 | 31 | - 8 | 2 | 0 | bc | * | 43 | 32 | - |
| | Stockholm ... | 30.13 | 43 | SW | 2 | 0 | 29.97 | - 24 | 37 | 36 | - 3 | SSW | 2 | bc | * | 48 | 37 | - |
| | Wisby ... | 30.29 | 43 | SW | 2 | 0 | 30.12 | - 15 | 38 | 37 | - 4 | S | 4 | bc | * | 52 | ? | - |
| | Bodö ... | 29.63 | 42 | SSE | 4 | 7 | 29.35 | - 53 | 44 | 41 | + 2 | SSE | 4 | bc | 2 | ? | 39 | 0.51 |
| | Christiansund... | 29.62 | 55 | SW | 3 | 0 | 29.63 | - 29 | 45 | 42 | + 1 | SW | 7 | 0 | 4 | 55 | 41 | - |
| | Skudesnaes ... | 29.96 | 45 | SSE | 8 | 0 | 29.90 | - 19 | 45 | 45 | - 1 | WSW | 1 | 7 | 5 | 46 | 43 | - |
| | Christiania Fjord (Fjord) | 30.12 | 42 | SW | 3 | 6 | 29.94 | - 25 | 42 | 41 | + 2 | SW | 3 | m | 1 | 43 | ? | - |
| | Skagen (The Scaw) | 30.16 | 40 | SW | 3 | 6 | 29.98 | - 25 | 37 | 37 | - 6 | SW | 2 | bc | 1 | 45 | 34 | - |
| | Fanö ... | 30.17 | 34 | S | 2 | 6 | 30.08 | - 21 | 40 | 39 | + 1 | SW | 2 | bc | * | 43 | 32 | - |
| BRITISH ISLANDS. | Sumburgh Head | 29.56 | 47 | SW | 4 | 0 | 29.76 | + 11 | 45 | 43 | - 2 | WSW | 3 | 0 | 6 | 48 | 44 | 0.03 |
| | Stornoway ... | 29.59 | 46 | W | 4 | bc | 29.85 | + 41 | 44 | 44 | - 7 | W | 4 | bc | 4 | 52 | 40 | 0.42 |
| | Wick ... | 29.61 | 49 | S | 2 | bc | 29.86 | + 26 | 40 | 38 | - 9 | SW | 1 | bc | 0 | 50 | 40 | - |
| | Nairn ... | 29.62 | 53 | SW | 3 | 0 | 29.92 | + 33 | 42 | 40 | - 10 | SW | 3 | bc | 1 | 54 | 42 | - |
| | Aberdeen... | 29.73 | 49 | S | 4 | 0 | 30.00 | + 23 | 39 | 37 | - 7 | SW | 1 | om | 4 | 50 | 38 | - |
| | Leith ... | 29.78 | 50 | SW | 3 | 0 | 30.03 | + 28 | 44 | 41 | - 8 | W | 1 | cm | * | 54 | 42 | - |
| | Shields ... | 29.87 | 45 | SSW | 4 | m | 30.03 | + 12 | 44 | 43 | - 0 | W | 2 | c | 2 | 46 | 40 | - |
| | Spurn Head ... | 29.95 | 46 | S | 4 | 6 | 30.04 | + 04 | 47 | 46 | + 1 | WNW | 1 | 0 | 2 | 49 | 42 | - |
| | York ... | 29.96 | 46 | SSE | 2 | 6 | 30.07 | + 09 | 45 | 44 | + 5 | E | 1 | bc | * | 48 | 39 | 0.08 |
| | Loughborough | 29.97 | 46 | SSE | 3 | c | 30.06 | + 08 | 46 | 46 | + 7 | WNW | 1 | bc | * | 55 | 39 | 0.03 |
| GERMANY. | Ardrossan ... | 29.76 | 51 | S | 4 | cp | 30.05 | + 35 | 45 | 45 | - 4 | W | 3 | bc | 2 | 51 | 45 | 0.12 |
| | Malin Head ... | 29.77 | 46 | WNW | 3 | bp | 30.05 | + 53 | 44 | 42 | - 8 | WSW | 3 | bc | 4 | 52 | 43 | 0.15 |
| | Mullaghmore ... | 29.85 | 47 | W | 4 | c | 30.09 | + 56 | 43 | 41 | - 11 | SW | 3 | bc | 2 | 54 | 39 | 0.25 |
| | Belmullet ... | 29.88 | 46 | WNW | 4 | c | 30.11 | + 61 | 45 | 43 | - 7 | W | 2 | bc | * | 52 | 45 | 0.11 |
| | Donaghadee ... | 29.82 | 51 | SW | 3 | c | 30.09 | + 40 | 37 | 37 | - 15 | W | 2 | bc | 1 | 52 | 35 | - |
| | Barrow-in-Furness | 29.89 | 48 | SE | 4 | 7 | 30.07 | + 32 | 45 | 44 | - 0 | W | 2 | 0 | * | 49 | 44 | 0.09 |
| | Liverpool (Biston) | 29.92 | 49 | SSE | 2 | 0 | 30.09 | + 21 | 46 | 45 | + 3 | W | 1 | 0 | 3 | 51 | 43 | 0.05 |
| | Holyhead ... | 29.88 | 51 | SSW | 5 | cm | 30.10 | + 30 | 48 | 45 | - 4 | WNW | 3 | 0 | 4 | 53 | 45 | 0.01 |
| | Parsonstown ... | 29.91 | 45 | W | 0 | 6 | 30.15 | + 52 | 32 | 31 | - 21 | W | 0 | bc | * | 53 | 32 | 0.06 |
| | Valencia ... | 29.98 | 47 | NW | 2 | 6 | 30.18 | + 57 | 38 | 36 | - 16 | NE | 1 | bc | 2 | 54 | 36 | 0.05 |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.91 | 50 | W | 3 | c | 30.16 | + 48 | 40 | 38 | - 12 | W | 2 | bc | 4 | 53 | 36 | - |
| | Pembroke ... | 29.92 | 52 | SSW | 4 | 7 | 30.09 | + 27 | 48 | 46 | - 4 | W | 3 | bc | 2 | 53 | 47 | 0.16 |
| | Scilly ... | 29.89 | 54 | SSW | 4 | 0 | 30.04 | + 23 | 51 | 50 | - 3 | W | 5 | bc | 5 | 55 | 50 | 0.32 |
| | Prawle Point ... | 30.00 | 51 | SSE | 2 | 0 | 30.05 | + 10 | 51 | 51 | + 1 | W | 0 | bc | 2 | 52 | 48 | 0.10 |
| | Jersey ... | 30.04 | 49 | SSE | 4 | c | 30.07 | + 05 | 49 | 47 | + 4 | SE | 3 | bc | 3 | 50 | 44 | - |
| | Hurst Castle ... | 30.04 | 47 | SSW | 3 | bc | 30.08 | + 08 | 50 | 49 | - 0 | SSW | 2 | c | 2 | 54 | 48 | - |
| | Dungeness ... | 30.07 | 49 | S | 4 | c | 30.07 | - 00 | 49 | 46 | + 2 | SSW | 4 | bc | 3 | 50 | 46 | - |
| | London ... | 30.06 | 40 | S | 2 | c | 30.09 | + 05 | 41 | 41 | - 1 | W | 0 | bc | * | 55 | 33 | - |
| | Oxford ... | 30.05 | 44 | SSE | 2 | 6 | 30.08 | + 08 | 45 | 45 | + 2 | W | 0 | bc | * | 53 | 42 | - |
| | Cambridge ... | 30.02 | 41 | W | 0 | 6 | 30.08 | + 03 | 45 | 44 | + 4 | W | 0 | bc | * | 54 | 36 | - |
| PENINSULA. | Yarmouth ... | 30.04 | 47 | S | 4 | 6 | 30.08 | - 00 | 41 | 41 | - 6 | SW | 1 | bc | 3 | 48 | 40 | - |
| | Cuxhaven ... | 30.22 | 39 | SSE | 3 | 6 | 30.17 | - 16 | 32 | 31 | - 3 | SSE | 3 | bc | * | 39 | 30 | - |
| | Berlin ... | 30.37 | 32 | SE | 1 | 6 | 30.30 | - 11 | 29 | 28 | + 1 | SE | 2 | bc | * | 36 | 25 | - |
| | Wiesbaden ... | * | * | * | * | * | 30.39 | + 05 | 30 | 29 | + 3 | W | 0 | bc | * | 32 | 24 | - |
| | Munich ... | 30.37 | 28 | SW | 2 | 0 | 30.41 | + 05 | 24 | 24 | - 2 | SW | 2 | bc | * | 30 | 23 | - |
| | The Helder ... | 30.14 | 35 | SSE | 1 | 6 | 30.13 | - 08 | 35 | 35 | - 2 | S | 1 | bc | 1 | 41 | 32 | - |
| | Brussels ... | * | * | * | * | * | 30.21 | - 00 | 38 | 36 | + 2 | S | 4 | bc | * | 46 | ? | - |
| | Cape Gris Nez... | 30.04 | 39 | S | 3 | 6 | 30.09 | + 03 | 42 | 41 | - 1 | SSW | 4 | bc | 2 | 45 | 39 | - |
| | Paris ... | 30.19 | 39 | SSE | 3 | 6 | 30.23 | + 06 | 32 | 32 | - 0 | SE | 1 | m | * | 45 | 31 | - |
| | Brest ... | 30.02 | 52 | SSE | 4 | 0 | 30.08 | + 16 | 50 | 49 | + 1 | SSE | 4 | bc | 4 | 57 | ? | 0.12 |
| PENINSULA. | Lorient ... | 30.02 | 51 | E | 5 | 0 | 30.03 | + 05 | 54 | 54 | + 8 | S | 1 | bc | 5 | 54 | 46 | 0.04 |
| | Rochefort ... | 30.09 | 50 | SSE | 5 | 6 | 30.16 | + 08 | 49 | 48 | + 7 | SSE | 7 | bc | 3 | 65 | 39 | - |
| | Belfort ... | 30.32 | 27 | NE | 1 | 6 | 30.36 | + 08 | 21 | 21 | - 4 | E | 1 | bc | * | 32 | ? | - |
| | Lyons ... | 30.29 | 44 | NW | 3 | 6 | 30.37 | + 09 | 35 | 34 | + 10 | SSE | 1 | bc | * | 52 | ? | - |
| | Nice ... | 30.35 | 48 | E | 4 | 6 | 30.41 | + 07 | 43 | 37 | - 1 | E | 5 | bc | 1 | 57 | 39 | - |
| | Perpignan ... | 30.21 | 52 | SE | 4 | 6 | 30.28 | + 05 | 48 | 47 | + 10 | SE | 3 | bc | * | 65 | ? | - |
| | Biarritz ... | 30.06 | 59 | SSW | 7 | c | 30.14 | + 14 | 58 | 50 | + 20 | S | 5 | bc | 2 | 64 | ? | 0.04 |
| | Coranna ... | * | * | * | * | * | 30.13 | + 25 | 53 | 52 | - 7 | NE | 5 | bc | 5 | 61 | 53 | 1.58 |
| | Lisbon ... | 30.02 | 58 | NE | 1 | 7 | 30.13 | + 25 | 53 | 52 | - 7 | NE | 5 | bc | 5 | 61 | 53 | 1.58 |

WEATHER CHARTS

for 8 a.m. on

Saturday 8th December

1888.

BAROMETER, WIND & 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 the barbs and feathers refer to force, thus —

→ = forces above 10, →→ = forces 8 to 10,

→→ = forces 5 to 7, → = forces 1 to 4,

○ = dead calm.

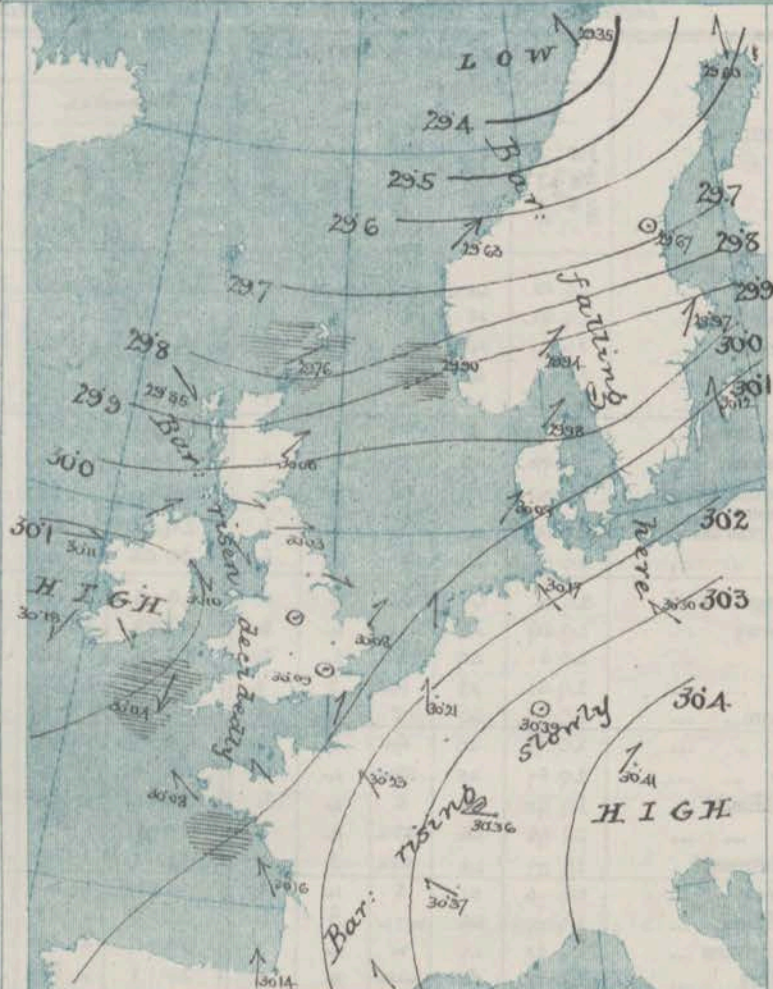
Sea Disturbance — where considerable, is shown thus.

■ = Rough, ■ = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 15 Years 1871 — 1885.

| STATION IS. | MEAN READINGS. |
|---------------|----------------|
| | in. |
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

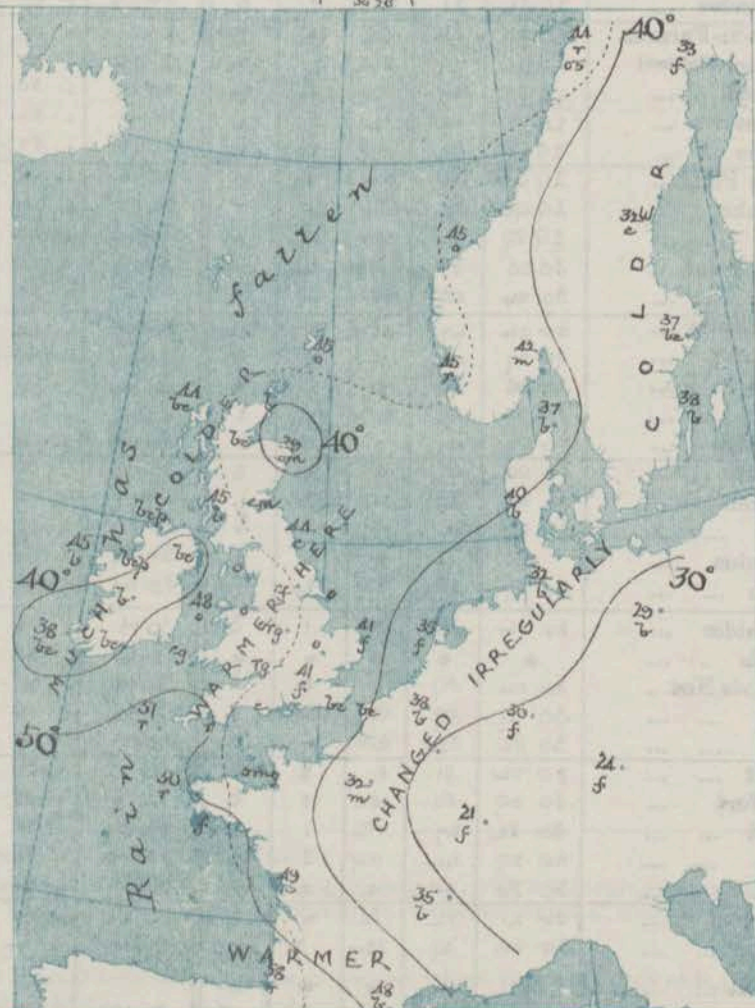
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|-----------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | | |
| | | | Dry | Wet | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.0 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.6 | 32.8 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871 — 85, the Rainfall means are mainly those for the 20 years 1866 — 85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 in: to 30.4 in: and more, in a high-pressure area over Southeastern Europe.
 Lowest, 29.4 in: and less, in a depression lying over the northwest coast of Norway.
 Gradients slight and irregular in our islands, moderate elsewhere.
 Barometer rising except over Scandinavia, the Baltic and North Germany.

TEMPERATURE

Highest, 58° at Biarritz, 54° at Brest, 48° to 51° along our south coasts.
 Lowest, 21° at Belfast, 24° at Munich, 28° at Berlin, 32° at Paris, Darmstadt, and Hamburg, and 41° in London.
 It has fallen rapidly in Ireland and Scotland, risen fast in the east and south of France, and less quickly over England.

WIND

Still S² or SE² over France, Germany and the southeast of England, light to moderate in force.
 It has veered to the W² in Scotland and the northern part of Ireland and England | to NW and N on our southwest coasts, and to the NE² at Valencia, and has fallen light very generally.

WEATHER

Fine in many parts of Ireland and Scotland, as well as in France and Germany; rather rainy in most parts of England and at the mouth of the Channel. Rain fell yesterday at all our western and northwestern stations.

SEA

Is going down except in the far north and is moderate to smooth on our various coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The general appearance is less unsettled than it has been for some time past.

FORECASTS

For the 24 hours ending at NOON on 9TH DEC^R 1888.

DISTRICTS.

FORECASTS.

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

W² winds, light; fair as a whole.
 Calms and NW² or N² airs; colder, foggy, some drizzling rain.

DISTRICTS.

FORECASTS.


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


W² and SW² winds; some showers, hazy.

N² and variable airs; fine, foggy at times, then clearer and milder.

WARNINGS

The SOUTH CONE has been lowered in districts 0, 1, 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.

| | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. |
|-----------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|-------|------|
| Skudesnaes ... | | | | | | | Holyhead ... | 29.82 | 52 | 50 | SSW 6 | rmg q | 6 |
| Sumburgh Head | 29.55 | 47 | 46 | S 4 | r | 6 | Valencia ... | 29.84 | 51 | 48 | rw 3 | bom | 3 |
| Stornoway ... | 29.44 | 52 | 52 | SW 7 | o | 4 | Scilly ... | 29.84 | 55 | 54 | rw 4 | o | 5 |
| Aberdeen ... | 29.71 | 47 | 44 | SSW 5 | og | 5 | Jersey ... | 30.01 | 47 | 46 | SE 4 | c | 4 |
| Shields ... | 29.81 | 48 | 43 | SSW 4 | c | 2 | Dungeness ... | 30.05 | 50 | 46 | S 4 | g | 3 |
| Ardrossan ... | 29.70 | 51 | 51 | S 5 | o | 5 | London ... | 30.02 | 54 | 47 | SSW 3 | bom | * |
| Malin Head ... | 29.65 | 49 | 49 | W 4 | o | 3 | Yarmouth ... | 30.06 | 48 | 46 | SSW 4 | b | 3 |
| Mullaghmore ... | 29.70 | 50 | 48 | W 5 | op | 4 | Rocheport ... | 30.08 | 54 | 50 | SSW 5 | bc | 2 |
| Belmullet ... | 29.74 | 49 | 47 | W 4 | op | * | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest 30.5 ins. and upwards, in an anticyclone lying over the central parts of Russia and Austria, and lowest, 29.5 ins. and less, in a large depression lying to the northward of our Islands. The barometer was, however, low, 29.7 ins. and less, over Lapland and the White Sea. The wind was S² (SE to SW) over the whole of Western Europe, and W¹ (SW to NW) over the Baltic, Finland, and Northern Russia. At the Mediterranean stations, however, it was chiefly N². The weather was dull and unsettled in the extreme western and northern regions with rain in places but fair or fine elsewhere. Over Central Europe, however, a good deal of fog was reported.

Temperature had risen somewhat in the west and north of our Islands, as well as in Algeria and Spain, but fallen elsewhere; readings ranged from 50° and upwards over the Mediterranean, Spain, and the western and northwestern parts of the United Kingdom to a few degrees below the freezing point over the whole of Russia and Central Europe. The highest individual readings were 60° at Lisbon and Algiers, 58° at Genua, 57° at Palma, San Fernando, and Avon, 55° at Malta, and 54° at Mullaghmore, Valencia Island and Barcelona; the lowest were 22° at Charleroi, 23° at Besancon and Kumanstadt, 24° at Remberg and Kiew, 25° at Belfast, Lyons and Nicolaieff, and 26° at Odessa.

In the course of the day the depression to the NWnd of our Islands travelled away, in a north-northeasterly direction, and the barometer rose briskly on all our western and northern coasts, while the wind there veered to the Wnd or NWnd. In the south and east little change was observed.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Sunday 9th Dec^r 1888.
Issued by the Meteorological Office, 116, Victoria Street, London. R.H. SCOTT, Secretary.

| STATIONS. | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|-----------------------------|---|--------------------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|----------|-------------------|-------------|----------------|---------------------------|--|
| | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 2.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 29.28 | 34 | W | 2 | b | 29.08 | — .52 | 35 | 33 | + 2 | SW | 4 | c | * | 36 | 28 | — | |
| | Hernösand ... | 29.64 | 36 | Z | 0 | b | 29.56 | — .11 | 34 | 30 | + 2 | NW | 2 | bc | * | 42 | 30 | — | |
| | Stockholm ... | 29.82 | 39 | SW | 2 | o | 29.78 | — .24 | 38 | 35 | + 1 | WSW | 2 | o | * | 48 | 34 | — | |
| | Wisby ... | 29.97 | 37 | WSW | 4 | b | 29.87 | — .31 | 37 | 37 | — 1 | SW | 6 | o | * | 45 | 36 | — | |
| | Bodö ... | 29.08 | 36 | WSW | 9 | m | 29.08 | — .27 | 39 | 38 | — 5 | WSW | 9 | r | b | 45 | 36 | 0.08 | |
| | Christiansund... | 29.64 | 41 | WSW | 9 | r | 29.69 | + .06 | 38 | 35 | — 7 | WNW | 8 | c | b | 45 | 36 | 0.16 | |
| | Skudesnaes ... | 29.97 | 39 | Z | 0 | o | 29.82 | — .08 | 41 | 39 | — 4 | WNW | 3 | r | 4 | 45 | 39 | 0.12 | |
| | Christiania Fjord (Færd) | 29.89 | 41 | WSW | 3 | b | 29.73 | — .21 | 38 | 37 | — 4 | WSW | 2 | b | 1 | 43 | 37 | — | |
| | Skagen (The Sew) | 29.93 | 43 | SW | 2 | f | 29.76 | — .12 | 40 | 40 | + 3 | W | 1 | o | 1 | 43 | 34 | — | |
| | Fanö ... | 30.02 | 42 | SW | 4 | o | 29.89 | — .19 | 43 | 42 | + 3 | WSW | 3 | c | * | 45 | 39 | — | |
| BRITISH ISLANDS. | Sumburgh Head | 29.83 | 44 | WSW | 1 | o | 29.91 | + .15 | 39 | 38 | — 6 | N | 2 | c | 4 | 48 | 37 | 0.15 | |
| | Stornoway .. | 29.90 | 42 | W | 3 | c | 30.09 | + .24 | 45 | 44 | + 1 | Z | 0 | bc | 3 | 46 | 36 | 0.13 | |
| | Wick ... | 29.93 | 39 | Z | 0 | b | 30.02 | + .16 | 36 | 35 | — 4 | N | 2 | bc | 1 | 46 | 35 | — | |
| | Nairn ... | 29.93 | 40 | SW | 1 | bc | 30.10 | + .18 | 39 | 38 | — 3 | SW | 1 | bc | 1 | 45 | 38 | — | |
| | Aberdeen... | 30.01 | 38 | SW | 1 | b | 30.09 | + .09 | 38 | 36 | — 1 | W | 4 | b | 3 | 42 | 35 | — | |
| | Leith ... | 30.05 | 40 | W | 2 | bc | 30.15 | + .12 | 39 | 37 | — 5 | W | 1 | bm | * | 46 | 36 | 0.01 | |
| | Shields ... | 30.08 | 44 | SW | 1 | m | ? | ? | 37 | 37 | — 7 | W | 3 | b | 2 | 45 | 36 | — | |
| | Spurn Head ... | 30.05 | 46 | NNW | 2 | r | 30.12 | + .08 | 41 | 39 | — 6 | W | 4 | b | 3 | 44 | 37 | 0.24 | |
| | York ... | 30.09 | 48 | N | 1 | o | 30.17 | + .10 | 36 | 34 | — 9 | NW | 1 | b | * | 47 | 34 | 0.06 | |
| | Loughborough | 30.09 | 46 | NW | 1 | r | 30.21 | + .15 | 36 | 35 | — 10 | NNW | 1 | b | * | 48 | 35 | 0.36 | |
| GERMANY. | Ardrossan ... | 30.06 | 46 | Z | 0 | b | 30.24 | + .19 | 44 | 43 | — 0 | NW | 2 | b | 3 | 47 | 43 | 0.10 | |
| | Malin Head ... | 30.07 | 44 | W | 4 | bc | 30.24 | + .19 | 41 | 38 | — 2 | WSW | 2 | b | 3 | 48 | 35 | 0.07 | |
| | Mullaghmore ... | 30.13 | 45 | WSW | 4 | cp | 30.28 | + .19 | 41 | 38 | — 2 | WSW | 2 | b | 3 | 48 | 33 | 0.04 | |
| | Belmullet ... | 30.17 | 45 | WNW | 3 | b | 30.31 | + .20 | 34 | 34 | — 11 | SE | 1 | b | * | 48 | 33 | 0.04 | |
| | Donaghadee ... | 30.13 | 39 | W | 2 | b | 30.25 | + .16 | 38 | 37 | + 1 | W | 3 | b | 1 | 43 | 35 | 0.01 | |
| | Barrow-in-Furness | 30.11 | 43 | NNW | 2 | b | 30.21 | + .14 | 42 | 40 | — 3 | NW | 1 | bc | * | 46 | 40 | — | |
| | Liverpool (Bidston) | 30.13 | 44 | NW | 1 | c | 30.24 | + .15 | 44 | 42 | — 2 | WNW | 3 | b | 3 | 47 | 41 | — | |
| | Holyhead ... | 30.14 | 46 | N | 2 | c | 30.25 | + .15 | 44 | 43 | — 2 | NNW | 3 | bc | 2 | 49 | 45 | — | |
| | Parsonstown ... | 30.18 | 38 | Z | 0 | b | 30.31 | + .17 | 27 | 26 | — 5 | Z | 0 | b | * | 45 | 26 | — | |
| | Valencia ... | 30.22 | 44 | WNW | 1 | b | 30.30 | + .12 | 37 | 36 | — 1 | NNE | 1 | b | 1 | 53 | 38 | — | |
| FRANCE & NETHERLANDS. | Roche's Point... | 30.20 | 46 | NW | 1 | b | 30.29 | + .13 | 36 | 35 | — 4 | N | 2 | b | 3 | 49 | 35 | — | |
| | Pembroke ... | 30.14 | 44 | N | 3 | bc | 30.28 | + .19 | 41 | 40 | — 7 | N | 1 | bw | 0 | 48 | 40 | — | |
| | Scilly ... | 30.11 | 49 | N | 5 | c | 30.26 | + .22 | 48 | 43 | — 3 | NE | 4 | c | 4 | 51 | 46 | 0.09 | |
| | Prawle Point ... | 30.09 | 48 | N | 1 | o | 30.26 | + .21 | 40 | 39 | — 11 | N | 2 | bc | 2 | 50 | 38 | 0.40 | |
| | Jersey ... | 30.06 | 52 | S | 3 | om | 30.23 | + .16 | 50 | 49 | + 1 | NNE | 2 | ogm | 2 | 52 | 46 | 0.26 | |
| | Hurst Castle ... | 30.07 | 49 | Z | 0 | f | 30.23 | + .15 | 42 | 41 | — 8 | N | 3 | c | 1 | 50 | 41 | 0.21 | |
| | Dungeness ... | 30.04 | 50 | SSW | 4 | r | 30.19 | + .12 | 44 | 43 | — 5 | NW | 3 | m | 2 | 50 | 44 | 0.12 | |
| | London ... | 30.07 | 48 | Z | 0 | orf | 30.24 | + .15 | 38 | 37 | — 3 | NW | 1 | bcf | * | 51 | 38 | 0.15 | |
| | Oxford ... | 30.10 | 46 | SSE | 1 | r | 30.25 | + .17 | 36 | 36 | — 9 | W | 1 | f | * | 47 | 36 | 0.15 | |
| | Cambridge ... | 30.09 | 45 | Z | 0 | r | 30.21 | + .13 | 26 | 35 | — 9 | WNW | 1 | o | * | 47 | 38 | 0.28 | |
| PENIN- SULA. | Yarmouth ... | 30.05 | 44 | SW | 2 | r | 30.13 | + .05 | 37 | 36 | — 4 | NW | 2 | bm | 2 | 45 | 34 | 0.13 | |
| | Cuxhaven ... | 30.14 | 41 | SW | 1 | f | 29.99 | — .18 | 41 | 40 | + 9 | WSW | 3 | f | * | 40 | 32 | — | |
| | Berlin ... | * | * | * | * | * | 30.28 | — .11 | 28 | 27 | — 2 | Z | 0 | o | * | 30 | 28 | — | |
| | Wiesbaden ... | * | * | * | * | * | 30.24 | — .07 | 21 | 21 | — 3 | SW | 2 | b | * | 30 | 19 | ? | |
| | Munich ... | 30.39 | 27 | SE | 1 | f | 30.24 | — .07 | 21 | 21 | — 3 | SW | 2 | b | * | 30 | 19 | ? | |
| | The Helder ... | 30.07 | 41 | SSW | 1 | f | 30.07 | — .06 | 45 | 43 | + 10 | NNW | 3 | c | 2 | 46 | 35 | 0.04 | |
| | Brussels ... | * | * | * | * | * | ? | ? | 45 | 45 | + 7 | SW | 3 | r | * | 50 | 38 | 0.12 | |
| | Cape Gris Nez... | 30.05 | 48 | SSW | 5 | c | 30.14 | + .05 | 46 | 45 | + 4 | N | 4 | o | 3 | 50 | 41 | 0.16 | |
| | Paris ... | 30.20 | 47 | S | 3 | b | 30.18 | — .05 | 47 | 46 | + 15 | SW | 3 | o | * | 53 | 32 | 0.04 | |
| | Brest ... | 30.14 | 49 | Z | 0 | b | 30.25 | + .17 | 48 | 46 | — 2 | NNE | 3 | o | 4 | 59 | 41 | — | |

For Explanation of Columns, see p. 2.

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

WEATHER

for 8 a.m. on

CHARTS

Sunday, 9th December

1888.

BAROMETER, WIND & SEA.

(Explanation of Map)

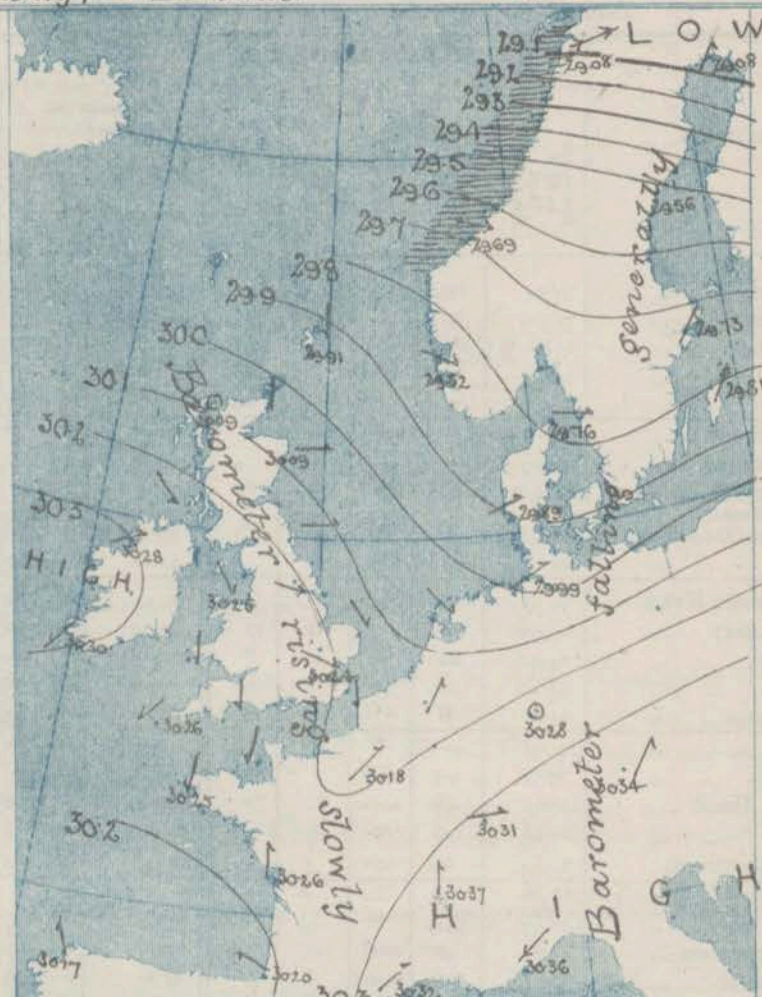
Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —
 * — = forces above 10; * — = forces 8 to 10;
 — = forces 5 to 7; — = forces 1 to 4;
 ○ = dead calm.

Sea Disturbance — where considerable, is shown thus.
 ■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
 During the 15 Years 1871–1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

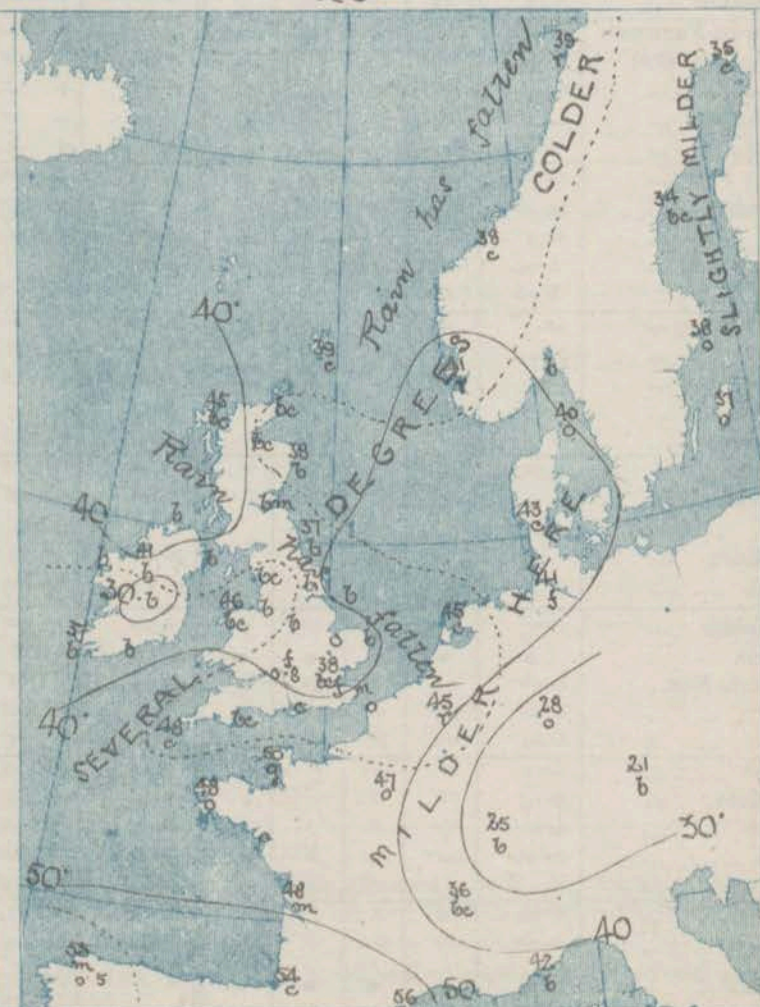
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|------------------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Dry | Wet | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871–85, the Rainfall means are mainly those for the 20 years 1866–85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 in. and upwards, in a large anticyclone lying over the southern parts of France and Germany, and also in a smaller system lying over the W. of Ireland.
Lowest, 29.1 in. and less, in a depression lying over the north of Scandinavia.
Gradients rather steep over the north of Scandinavia, but moderate or slight elsewhere.
Barometer rising at all but the Scandinavian, Danish and German stations, - most in the west.

TEMPERATURE

Highest, 56° at Perpignan, 55° at Corsica, 54° at Biarritz and Lisbon, and 50° at Jersey and Lorient.
Lowest, 21° at Munich, 25° at Belfast, 27° at Larne, 28° at Newcastle, 30° at Helsingfors, and 35° at Haparanda.

WIND

Moderate W. or N.W. over the north and east of our Islands and the eastern shores of the White Sea.
S.W. over Sweden, Denmark, Germany and the Netherlands.
Light from the N. or our southwest coast and the northwest of France.

WEATHER

Fine over our Islands and the east and south of France.
Cloudy or overcast elsewhere, with rain at Bodo, Thudencen, and Biarritz.
Rain fell yesterday at many of our northern and eastern stations, the largest amount being 0.8 in. at Oxford.

SEA

Rough off the west of Norway, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone over the west of Ireland is apparently spreading eastwards, and fair weather is likely to continue over the greater part of the United Kingdom.

FORECASTS

for the 24 hours ending at NOON on 10TH DEC^R 1888.

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

NONE ISSUED.

Notes.—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. | Dry. | Wet. | Wind. | Wea. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wea. | Sea. | | |
|-----------------|-------|------|------|-------|------|------|---|---------------|-------|------|-------|------|------|----|---|
| Skudesnæs ... | 29.97 | 44 | 42 | WSW | 1 | 0 | 4 | Holyhead ... | 30.12 | 47 | 43 | N | 3 | c | 2 |
| Sumburgh Head | 29.83 | 45 | 43 | WSW | 2 | 6 | 5 | Valencia ... | 30.20 | 52 | 47 | NW | 1 | b | 2 |
| Stornoway ... | 29.91 | 45 | 44 | W | 3 | 6 | 3 | Scilly ... | 30.08 | 50 | 47 | N | 6 | c | 5 |
| Aberdeen ... | 30.02 | 42 | 38 | SSW | 1 | 6 | 3 | Jersey ... | 30.06 | 50 | 50 | S | 3 | r | 3 |
| Shields ... | 30.07 | 45 | 43 | W | 2 | c | 2 | Dungeness ... | 30.06 | 49 | 48 | SSW | 4 | c | 4 |
| Ardrossan ... | 30.07 | 45 | 45 | W | 2 | b | 1 | London ... | 30.06 | 51 | 48 | Z | 0 | of | * |
| Malin Head ... | 30.06 | 46 | 43 | WSW | 4 | 6 | 3 | Yarmouth ... | 30.06 | 44 | 40 | SW | 2 | of | 2 |
| Mullaghmore ... | 30.11 | 47 | 44 | SW | 4 | cp | 3 | Rocheport ... | 30.05 | 54 | 52 | S | 7 | c | 3 |
| Belmullet ... | 30.13 | 46 | 43 | W | 2 | cp | * | | | | | | | | |

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

Continental Information will appear tomorrow.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Monday, 10th December 1889.
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|-----------------------------|------------------------------------|-----------------|-------------------|---|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------------------|---|----------|---------------|-------------|----------------|---------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea (0 to 5). | SHADE TEMP. | | | |
| | | | | 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. | Force. (0 to 12.) | | | | Max. | Min. | Amount of Rainfall. | |
| SCANDINAVIA. | Haparanda .. | 29.06 | 31 | 2 | 0 | bc | 29.15 | + 0.7 | 22 | 22 | - 13 | N | 2 | 0 | * | 36 | ? | - | |
| | Hernösand ... | 29.43 | 83 | 2 | 2 | b | 29.35 | - 2.1 | 32 | 29 | - 2 | WNW | 2 | 0 | * | 37 | ? | - | |
| | Stockholm ... | 29.54 | 35 | 2 | 0 | 0 | 29.49 | - 2.4 | 29 | 26 | - 9 | WNW | 2 | 0 | * | 41 | ? | - | |
| | Wisby ... | 29.56 | 39 | WSW | 4 | r | 29.52 | - 2.9 | 35 | 32 | - 2 | WNW | 6 | 0 | * | 43 | 34 | 0.16 | |
| | Bodö ... | 29.21 | 87 | WSW | 8 | 0 | 29.37 | + 2.9 | 37 | 35 | - 2 | WNW | 6 | 0 | * | ? | 34 | 0.08 | |
| | Christiansund... | 29.72 | 33 | WNW | 8 | s | 29.87 | + 1.8 | 35 | 33 | - 3 | WNW | 9 | 0 | 7 | 36 | 29 | 0.16 | |
| | Skudesnaes ... | 29.58 | 36 | NW | 7 | s | 30.04 | + 2.2 | 33 | 32 | - 8 | WNW | 5 | 0 | 1 | 41 | ? | - | |
| | Christiania Fjord (Fjorder) | 29.62 | 34 | NW | 2 | c | 29.85 | + 1.2 | 35 | 30 | - 3 | WNW | 5 | 0 | 1 | ? | 34 | - | |
| | Skagen (The Scaw) | 29.65 | 40 | N | 5 | b | 29.73 | - 0.3 | 37 | 33 | - 3 | NE | 4 | bc | 2 | 44 | 34 | - | |
| | Fanö ... | 29.90 | 38 | NW | 6 | c | 29.88 | - 0.1 | 35 | 33 | - 8 | NW | 6 | c/p | * | 45 | 34 | 0.08 | |
| BRITISH ISLANDS. | Sumburgh Head | 30.07 | 36 | N | 4 | 0 | 30.17 | + 2.6 | 38 | 35 | - 1 | WNW | 1 | 0 | 4 | 40 | 33 | 0.05 | |
| | Stornoway .. | 30.21 | 43 | W | 3 | r | 30.25 | + 1.6 | 37 | 36 | - 8 | W | 0 | f | 3 | 45 | 35 | 0.09 | |
| | Wick ... | 30.16 | 37 | N | 1 | c | 30.29 | + 2.7 | 36 | 35 | 0 | N | 1 | 0 | 0 | 37 | 35 | 0.09 | |
| | Nairn ... | 30.21 | 42 | SW | 2 | 0 | 30.28 | + 1.8 | 37 | 36 | - 2 | W | 0 | 0 | 1 | 44 | 37 | 0.01 | |
| | Aberdeen... | 30.20 | 38 | W | 2 | b | 30.33 | + 2.4 | 34 | 33 | - 4 | NW | 1 | bcw | 3 | 42 | 33 | 0.01 | |
| | Leith ... | 30.26 | 38 | W | 1 | b | 30.31 | + 1.6 | 39 | 37 | 0 | W | 1 | b/f | * | 46 | 37 | - | |
| | Shields ... | 30.23 | 39 | W | 3 | b | 30.32 | ? | 38 | 36 | + 1 | W | 0 | m | 2 | 45 | 34 | - | |
| | Spurn Head ... | - | - | - | - | - | 30.28 | + 1.6 | 40 | 39 | - 1 | WNW | 4 | c | 3 | 43 | 37 | - | |
| | York ... | 30.27 | 37 | NW | 1 | b | 30.33 | + 1.6 | 32 | 32 | - 4 | WNW | 1 | b | * | 45 | 30 | - | |
| | Loughborough | 30.31 | 38 | WNW | 1 | b | 30.34 | + 1.3 | 26 | 26 | - 10 | WNW | 1 | f | * | 47 | 26 | - | |
| GERMANY. | Ardrossan ... | 30.28 | 44 | E | 1 | b | 30.32 | - | 35 | 35 | - | ESE | 1 | bcw | 1 | 48 | 34 | - | |
| | Malin Head ... | 30.32 | 45 | NW | 2 | b | 30.27 | + 0.3 | 37 | 35 | - 7 | SSE | 3 | b | 2 | 47 | 36 | 0.01 | |
| | Mullaghmore ... | 30.33 | 38 | W | 0 | b | 30.23 | - 0.5 | 40 | 39 | - 1 | ESE | 4 | b | 2 | 53 | 34 | - | |
| | Belmullet ... | 30.31 | 39 | ESE | 2 | b | 30.17 | - 1.4 | 39 | 38 | + 5 | W | 4 | bc | * | 48 | 34 | - | |
| | Donaghadee ... | 30.34 | 40 | W | 2 | b | 30.33 | + 0.8 | 32 | 32 | - 6 | W | 2 | b | 1 | 45 | 31 | - | |
| | Barrow-in-Furness | 30.29 | 43 | WNW | 2 | b | 30.31 | + 1.0 | 35 | 35 | - 7 | NE | 2 | b | * | 46 | 34 | - | |
| | Liverpool (Bidston) | 30.32 | 44 | NW | 2 | b | 30.34 | + 1.0 | 36 | 36 | - 8 | SE | 1 | f | 2 | 47 | 34 | 0.02 | |
| | Holyhead ... | 30.33 | 46 | WNW | 3 | b | 30.32 | + 0.7 | 40 | 39 | - 6 | S | 1 | bcw | 1 | 48 | 38 | - | |
| | Parsonstown ... | 30.35 | 32 | W | 0 | b | 30.25 | - 0.7 | 37 | 35 | + 10 | SE | 1 | bc | * | 37 | 26 | - | |
| | Valencia ... | 30.29 | 43 | W | 2 | b | 30.12 | - 1.8 | 50 | 47 | + 13 | SSE | 7 | 0 | 6 | 50 | 35 | 0.01 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 30.31 | 40 | E | 2 | b | 30.23 | - 0.6 | 42 | 44 | + 12 | NE | 5 | bc | 4 | 48 | 35 | - | |
| | Pembroke ... | 30.33 | 42 | NE | 2 | b | 30.31 | + 0.3 | 36 | 36 | - 5 | ESE | 3 | b | 1 | 44 | 36 | - | |
| | Scilly ... | 30.23 | 49 | ESE | 4 | b | 30.22 | + 0.1 | 48 | 45 | 0 | ESE | 5 | c | 3 | 50 | 45 | - | |
| | Prawle Point ... | 30.31 | 43 | NE | 3 | b | 30.31 | + 0.5 | 43 | 40 | + 3 | ESE | 3 | bc | 2 | 50 | 38 | - | |
| | Jersey ... | 30.27 | 48 | ESE | 3 | bc | 30.30 | + 0.7 | 41 | 40 | - 9 | E | 3 | bcw | 3 | 51 | 44 | - | |
| | Hurst Castle ... | 30.31 | 43 | N | 2 | b | 30.34 | + 1.1 | 34 | 34 | - 8 | NE | 1 | bcw | 0 | 50 | 33 | - | |
| | Dungeness ... | 30.27 | 37 | N | 3 | f | 30.27 | + 0.8 | 29 | 29 | - 15 | N | 3 | f | 1 | 45 | 24 | - | |
| | London ... | 30.30 | 40 | NW | 1 | b | 30.34 | + 1.0 | 28 | 28 | - 10 | W | 0 | f | * | 43 | 28 | - | |
| | Oxford ... | 30.33 | 36 | W | 0 | b | 30.36 | + 1.1 | 28 | 28 | - 8 | W | 0 | f | * | 47 | 27 | - | |
| | Cambridge ... | 30.30 | 37 | NW | 1 | b | 30.35 | + 1.4 | 28 | 27 | - 8 | NW | 1 | b | * | 47 | 26 | - | |
| PENINSULA. | Yarmouth ... | 30.23 | 39 | NW | 2 | b | 30.25 | + 1.2 | 35 | 34 | - 2 | NW | 3 | b/f | 3 | 42 | 30 | - | |
| | Cuxhaven ... | 29.99 | 42 | WNW | 4 | r | 29.95 | - 0.4 | 40 | 38 | - 1 | WNW | 1 | f | * | 43 | 37 | 0.08 | |
| | Berlin ... | 29.98 | 40 | W | 3 | r | 29.93 | - 0.5 | 38 | 36 | - | W | 4 | c | * | 41 | 36 | 0.08 | |
| | Wiesbaden ... | * | * | * | * | * | 30.21 | - 0.7 | 32 | 32 | + 4 | W | 0 | 0 | * | 39 | ? | - | |
| | Munich ... | 30.21 | 37 | SW | 2 | 0 | 30.17 | - 0.4 | 33 | 33 | + 12 | W | 3 | r | * | 43 | 21 | 0.12 | |
| | The Helder ... | 30.13 | 44 | WNW | 5 | c | 30.16 | + 0.9 | 42 | 40 | - 3 | WNW | 4 | c | 3 | 45 | 41 | 0.04 | |
| | Brussels ... | * | * | * | * | * | 30.27 | + 0.3 | 37 | 36 | - 8 | WSW | 3 | 0 | * | 47 | 37 | 0.04 | |
| | Cape Gris Nez... | 30.27 | 43 | NE | 4 | b | 30.29 | + 1.5 | 41 | 39 | - 5 | N | 4 | bc | 4 | 48 | 39 | - | |
| | Paris ... | 30.27 | 44 | NE | 1 | c | 30.30 | + 1.2 | 31 | 31 | - 16 | NE | 1 | 0 | * | 50 | 31 | 0.04 | |
| | Brest ... | 30.18 | 50 | E | 4 | m | 30.25 | + 0.0 | 45 | 42 | - 3 | E | 4 | b | 2 | 57 | 39 | 0.20 | |

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on Monday, 10th December

1888.

BAROMETER, WIND & 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 the barbs and feathers refer to force, thus —

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

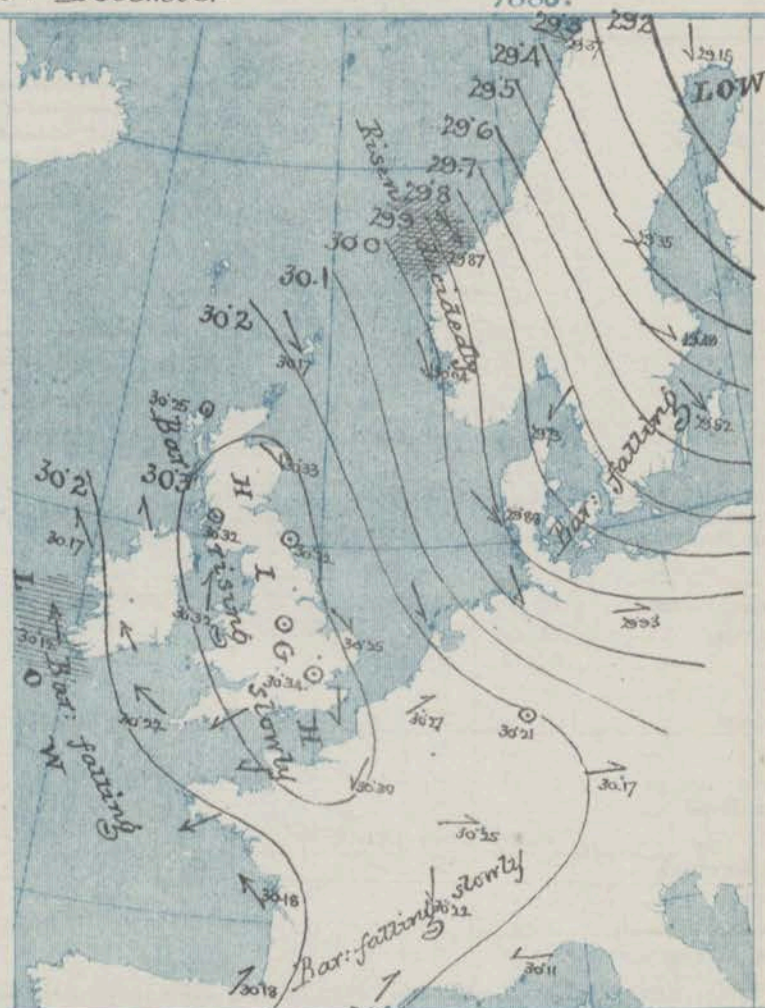
Sea Disturbance — where considerable, is shown thus.

— Rough — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 15 Years 1871 — 1885.

| STATIONS | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

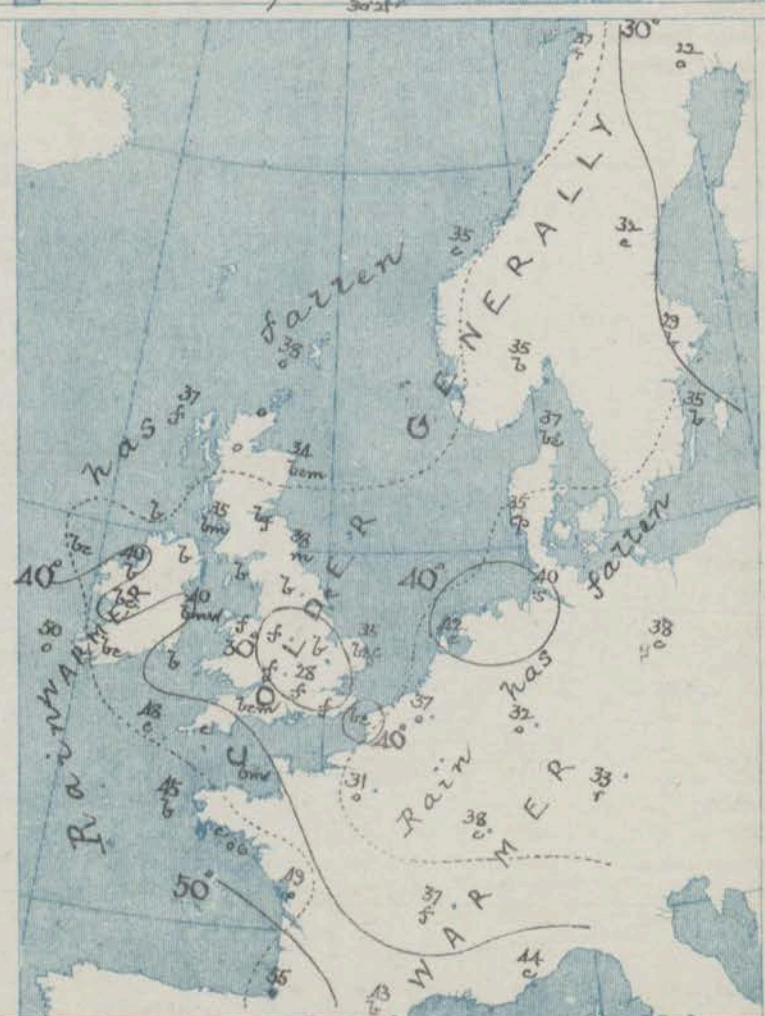
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

For the month of December.

| STATIONS | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|--------------------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Temp. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871 — 85, the Rainfall means are mainly those for the 20 years 1868 — 85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 ins. and upwards, in an anticyclone lying over Great Britain and the north of France.
Lowest, 29.2 ins. and less, over the northern part of the Gulf of Bothnia.
Gradients rather steep over Scandinavia, but moderate or slight elsewhere.
Barometer rising over Great Britain and Norway, but falling in most other localities.

TEMPERATURE

Highest, 55° at Biarritz, 52° at Lybourn, 50° at Valencia, 49° at Rochefort, and 48° at Rochestant and Seilly.
Lowest, 22° at Haparanda, 26° at Loughborough, 28° at Cambridge, Oxford, and in London, and 29° at Stockholm and Rungness.
Sharp frost occurred over England last night; in London the thermometer on the grass fell to 20°.

WIND

SE² on our extreme west and southwest coasts, with a moderate gale at Valencia.
NW² over Scandinavia, Denmark, and the North Sea; strong to a gale on the Norwegian coast.
Variable over the central part of Great Britain.

WEATHER

Fair generally, but foggy over England and the south of Scotland.
Rain is falling at Bodo and Helsingfors and snow at Aushaven.
A little rain fell yesterday at some of our northern and northwestern stations.

SEA

High at Christiansund and rough at Valencia, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone over Great Britain is moving eastwards and the barometer is now beginning to fall somewhat decidedly on our extreme western coasts.

Increasing SE² ^(wind) will probably set in at all our western stations, with gales in the south of Ireland. Over our eastern districts, however, no material change in the weather is likely at present.

FORECASTS

for the 24 hours ending at NOON on 11th DEC^r 1888.

DISTRICTS.

FORECASTS.

| | | |
|---|------------------|---|
| 0 | SCOTLAND NORTH | Variable breezes, finally S ² ; cold and foggy at first then milder and finer. |
| 1 | SCOTLAND EAST | |
| 2 | ENGLAND N.E. | Light variable airs; cold, with thick local fogs. |
| 3 | ENGLAND EAST | |
| 4 | MIDLAND COUNTIES | NE ² and E ² winds, light; cold with thick local fogs. |
| 5 | ENGLAND SOUTH | |

DISTRICTS.

FORECASTS.

| | | |
|----------|---------------|--|
| 6 | SCOTLAND WEST | E ² and SE ² winds, freshening; fair generally. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | SE ² winds, fresh or strong; fair to dull and some rain. |
| 9 | IRELAND NORTH | Same as No 6. |
| 10 | IRELAND SOUTH | SE ² and S ² strong winds or gales; cloudy, some rain. |
| WARNINGS | | The SOUTH CONE has been hoisted this morning in district 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. | Dry. | Wet. | Wind. | Wca. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wca. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 29.83 | 40 | 37 | W 6 | c | + | Holyhead ... | 30.31 | 47 | 44 | W 3 | c | 2 |
| Sumburgh Head ... | | | | | | | Valencia ... | | | | | | |
| Stornoway ... | 30.18 | 44 | 44 | W 4 | r | 3 | Scilly ... | | | | | | |
| Aberdeen ... | | | | | | | Jersey ... | 30.26 | 50 | 48 | E 3 | o | 3 |
| Shields ... | | | | | | | Dungeness ... | 30.23 | 45 | 42 | N 3 | m | 1 |
| Ardrossan ... | | | | | | | London ... | | | | | | |
| Malin Head ... | 30.30 | 46 | 43 | W 3 | 6 | 3 | Yarmouth ... | | | | | | |
| Mullaghmore ... | | | | | | | Rochefort ... | 30.24 | 54 | 52 | SSE 4 | c | 2 |
| Belmullet ... | 30.33 | 48 | 45 | S 2 | 6 | * | | | | | | | |

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

The reports for yesterday morning showed that pressure varied from 30.3 inches and more over Italy, the Adriatic, Austria, Switzerland and the southeast of France, and from about the same value in a new anticyclone which had appeared off the west of Ireland, to rather below 29.1 inches in a low pressure area lying over Lapland and the Arctic Sea. The gradients were slight over the British Islands and the greater part of the Continent, but remained somewhat steep in the far north. The wind remained S.W. over Central Europe, the Netherlands and the Baltic, but had become light to moderate in force, while S.W. to W. winds strong to a gale in force were prevalent over Northern Europe.

In the British Islands the wind had veered to North-West and North and was very light. The weather had cleared very materially over the greater part of the United Kingdom, but remained cloudy and unsettled in the North and over Germany, and the sea had gone down greatly. Temperature had again fallen over the British Islands and was low in most places; sharp frost prevailed over Central Ireland, as well as over Central and Northern Europe, but over the Bay of Biscay, Spain and many parts of the Mediterranean the thermometer ranged between 50° and 56°. The highest individual values reported were 61° at Algiers, 60° at Oran, 56° at Bilbao and Perpignan, 55° at Barcelona and Tanguier, 54° at Biarritz and Lisbon, 52° at Malta and Brindisi, and 48° at Brest and Scilly; the lowest were (1) 19° at Archangel and 20° at Uleaborg, (2) 21° at Munich, 23° at Karlsruhe and Bern, 25° at Belfast, 27° at Gracow, 28° at Wiesbaden, Prague and Vienna, 29° at Warsaw; and (3) 27° at Parnostown. During the day some rain fell at our northern stations and to the eastward of the North Sea, but over Ireland and England the weather was fine, with some fog at the southeastern stations.

SUMMARY OF CHANGES IN THE WEATHER

BRITISH ISLANDS AND THEIR NEIGHBOURHOOD.

FROM THE 2ND TO THE 8TH DECEMBER 1888.

The mild weather which has been so prevalent over the British Islands for several weeks past, continued in force until Friday night. The S.W. and S.W. winds were general, and at times blew hard at the western and northern stations; temperature was high; the air humid and misty; over all the western and northern districts, rain was a daily occurrence, and at times the fall spread to our eastern and southern counties also. The wind was strongest on Monday, Wednesday and Friday, but even in the west the gales were not severe.

On Friday night, however, and early on Saturday a great change took place; the barometer rose fast in the west, the winds died down to light or moderate force, and veered to West at the northern stations and to North-West and North in the west. Temperature fell rapidly, frost became prevalent over Central Ireland, and extended slowly to England at the close of the week.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Tuesday, 11th December 1888.*
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|-------------------------------|---|--------------------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|----------|-------------------|-------------|----------------|---------------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | Dir. | Force. (0 to 12.) | | Reading at 8 a.m. 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 .. | 29.41 | 8 | NE | 6 | b | 30.11 | + .96 | -6 | ? | - 28 | NE | 2 | b | * | 28 | ? | - | |
| | Hernösand ... | 29.65 | 35 | N | 4 | b | 30.05 | + .40 | 21 | 20 | - 11 | N | 6 | b | * | 39 | ? | - | |
| | Stockholm ... | 29.59 | 34 | WNW | 2 | o | 29.84 | + .35 | 31 | 29 | + 2 | N | 8 | o | * | 37 | 27 | - | |
| | Wisby ... | 29.61 | 37 | WNW | 8 | o | 29.80 | + .28 | 35 | 34 | 0 | N | 8 | o | * | 41 | 30 | - | |
| | Bodö ... | 29.68 | 39 | WNW | 2 | c | 29.96 | + .59 | 36 | 33 | - 1 | N | 2 | bc | 1 | 41 | 32 | 0.04 | |
| | Christiansund... | 30.07 | 37 | WNW | 6 | o | 30.19 | + .32 | 36 | 35 | + 1 | WNW | 3 | c | 5 | 37 | 34 | 0.12 | |
| | Skudesnaes ... | 30.15 | 37 | WNW | 5 | o | 30.19 | + .15 | 31 | 29 | - 2 | N | 2 | o | 3 | 37 | ? | - | |
| | Christiania Fjord (Færdar) | 29.92 | 36 | NW | 4 | b | 30.08 | + .23 | 36 | 30 | + 1 | WNW | 5 | b | 1 | 37 | ? | - | |
| | Skagen (The Scaw) | 29.93 | 38 | N | 4 | b | 30.08 | + .35 | 38 | 36 | + 1 | NNE | 4 | b | 2 | 39 | 37 | 0.12 | |
| | Fanö ... | 30.04 | 38 | NW | 6 | c | 30.13 | + .25 | 31 | 29 | - 4 | NW | 1 | b | * | 39 | 30 | - | |
| BRITISH ISLANDS. | Sumburgh Head | 30.21 | 39 | Z | 0 | r | 30.16 | - .01 | 39 | 38 | + 1 | SSE | 1 | c | 3 | 40 | 33 | 0.17 | |
| | Stornoway .. | 30.19 | 44 | S | 4 | b | 29.98 | - .27 | 46 | 45 | + 9 | S | 6 | o | 6 | 46 | 33 | 0.02 | |
| | Wick ... | 30.28 | 37 | Z | 0 | b | 30.13 | - .16 | 41 | 40 | + 5 | S | 1 | b | 0 | 43 | 35 | - | |
| | Nairn ... | 30.26 | 32 | Z | 0 | f | 30.10 | - .18 | 27 | 25 | - 10 | Z | 0 | bef | 1 | 41 | 25 | - | |
| | Aberdeen... | 30.31 | 33 | SW | 1 | bm | 30.21 | - .12 | 35 | 34 | + 1 | SSW | 2 | cm | 3 | 38 | 28 | - | |
| | Leith ... | 30.32 | 35 | W | 1 | b | 30.20 | - .11 | 32 | 31 | - 7 | Z | 0 | f | * | 43 | 27 | - | |
| | Shields ... | 30.33 | 41 | W | 1 | c | 30.25 | - .07 | 34 | 33 | - 4 | SSW | 1 | m | 2 | 42 | 32 | - | |
| | Spurn Head ... | 30.31 | 42 | NW | 1 | bc | 30.28 | - .00 | 40 | 37 | 0 | SSW | 2 | bc | 3 | 44 | 37 | - | |
| | York ... | 30.35 | 37 | NW | 1 | o | 30.28 | - .05 | 34 | 33 | + 2 | SSE | 1 | b | * | 41 | 31 | - | |
| | Loughborough | 30.37 | 29 | Z | 0 | f | 30.32 | - .02 | 27 | 27 | + 1 | ESE | 1 | f | * | 31 | 26 | - | |
| GERMANY. | Ardrossan ... | 30.30 | 38 | ESE | 1 | b | 30.14 | - .18 | 37 | 36 | + 2 | ESE | 3 | cm | 3 | 43 | 33 | - | |
| | Malin Head ... | 30.17 | 41 | SE | 4 | o | 29.96 | - .31 | 44 | 43 | + 7 | SSE | 6 | od | 5 | 44 | 37 | 0.06 | |
| | Mullaghmore ... | 30.12 | 45 | SE | 6 | c | 29.90 | - .33 | 50 | 48 | + 10 | S | 6 | opg | 4 | 50 | 39 | 0.12 | |
| | Belmullet ... | 30.05 | 43 | SSE | 6 | r | 29.86 | - .31 | 48 | 48 | + 9 | SW | 2 | o | * | 49 | 38 | 0.25 | |
| | Donaghadee ... | 30.27 | 46 | SSW | 4 | b | 30.10 | - .23 | 45 | 44 | + 13 | SSW | 6 | r | 4 | 49 | 32 | 0.02 | |
| | Barrow-in-Furness | 30.33 | 36 | E | 3 | f | 30.22 | - .09 | 36 | 35 | + 1 | E | 4 | b | * | 42 | 34 | - | |
| | Liverpool (Bidston) | 30.34 | 36 | ESE | 3 | b | 30.24 | - .10 | 31 | 30 | - 5 | SE | 5 | o | 3 | 37 | 29 | - | |
| | Holyhead ... | 30.29 | 39 | ESE | 1 | o | 30.14 | - .18 | 43 | 41 | + 3 | SSE | 4 | c/p | 2 | 46 | 35 | 0.01 | |
| | Parsonstown ... | 30.14 | 43 | SE | 2 | b | 29.95 | - .30 | 49 | 46 | + 12 | SE | 2 | o | * | 49 | 36 | 0.29 | |
| | Valencia ... | 30.02 | 51 | SE | 7 | rg | 29.93 | - .17 | 48 | 47 | - 2 | WSW | 1 | o | 2 | 54 | 47 | 0.84 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 30.15 | 48 | SSE | 6 | r | 29.97 | - .26 | 50 | 50 | + 2 | SW | 3 | r | 4 | 50 | 48 | 1.15 | |
| | Pembroke ... | 30.26 | 43 | SSE | 5 | b | 30.11 | - .20 | 47 | 45 | + 11 | SSE | 6 | c | 5 | 47 | 36 | - | |
| | Scilly ... | 30.19 | 51 | SE | 6 | bc | 30.07 | - .15 | 52 | 51 | + 4 | S | 6 | r | 5 | 52 | 47 | 0.12 | |
| | Prawle Point ... | 30.29 | 46 | E | 4 | bcw | 30.22 | - .09 | 46 | 43 | + 3 | ESE | 5 | bc | 3 | 47 | 41 | - | |
| | Jersey ... | 30.32 | 42 | E | 3 | b | 30.28 | - .02 | 38 | 37 | - 3 | ESE | 3 | cm | 3 | 47 | 37 | - | |
| | Hurst Castle ... | 30.34 | 35 | WNW | 1 | b | 30.28 | - .06 | 40 | 40 | + 6 | ESE | 3 | cm | 1 | 43 | 33 | - | |
| | Dungeness ... | 30.31 | 35 | N | 3 | m | 30.24 | + .02 | 33 | 31 | + 4 | N | 3 | c | 1 | 42 | 27 | - | |
| | London ... | 30.36 | 30 | Z | 0 | f | 30.31 | - .03 | 28 | 28 | 0 | Z | 0 | f | * | 33 | 27 | - | |
| | Oxford ... | 30.37 | 28 | Z | 0 | f | 30.32 | - .04 | 25 | 25 | - 3 | N | 1 | f | * | 31 | 25 | - | |
| | Cambridge ... | 30.36 | 34 | NW | 1 | o | 30.31 | - .04 | 27 | 26 | - 1 | Z | 0 | bm | * | 41 | 26 | - | |
| PORTUGAL. | Yarmouth ... | 30.31 | 40 | NNE | 1 | c | 30.31 | + .06 | 38 | 37 | + 3 | NW | 1 | cm | 3 | 42 | 33 | 0.02 | |
| | Cuxhaven ... | 30.08 | 39 | WNW | 6 | b | 30.14 | + .19 | 39 | 37 | - 1 | N | 4 | b | * | 41 | 37 | 0.04 | |
| | Berlin ... | 30.01 | 33 | WNW | 3 | b | 30.07 | + .14 | 32 | 31 | - 6 | WNW | 3 | o | * | 41 | 28 | - | |
| | Wiesbaden ... | * | * | * | * | * | 30.28 | + .07 | 33 | 32 | + 1 | Z | 0 | c | * | 39 | 32 | - | |
| | Munich ... | 30.17 | 32 | SW | 4 | c | 30.25 | + .08 | 28 | 27 | - 5 | SW | 4 | b | * | 36 | 28 | - | |
| | The Helder ... | 30.26 | 40 | N | 3 | bc | 30.25 | + .09 | 42 | 39 | 0 | WNW | 3 | c | 2 | 43 | 39 | - | |
| | Brussels ... | * | * | * | * | * | 30.32 | + .05 | 39 | 36 | + 2 | NW | 1 | m | * | 43 | ? | - | |
| | Cape Gris Nez... | 30.28 | 42 | NNE | 5 | r | 30.29 | - .00 | 40 | 39 | - 1 | S | 1 | o | 1 | 45 | 37 | 0.08 | |
| | Paris ... | 30.32 | 33 | NE | 3 | c | 30.34 | + .04 | 30 | 30 | - 1 | ESE | 3 | o | * | 35 | 29 | - | |
| | Brest ... | 30.28 | 50 | SE | 4 | o | 30.22 | - .03 | 47 | 45 | + 2 | SE | 5 | o | 3 | 57 | 39 | - | |

For Explanation of Columns, see p. 4. † At Westminster the thermometer rose to 39°.

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

WEATHER CHARTS

for 8 a.m. on Tuesday, 11th December, 1888.

BAROMETER, WIND & 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.

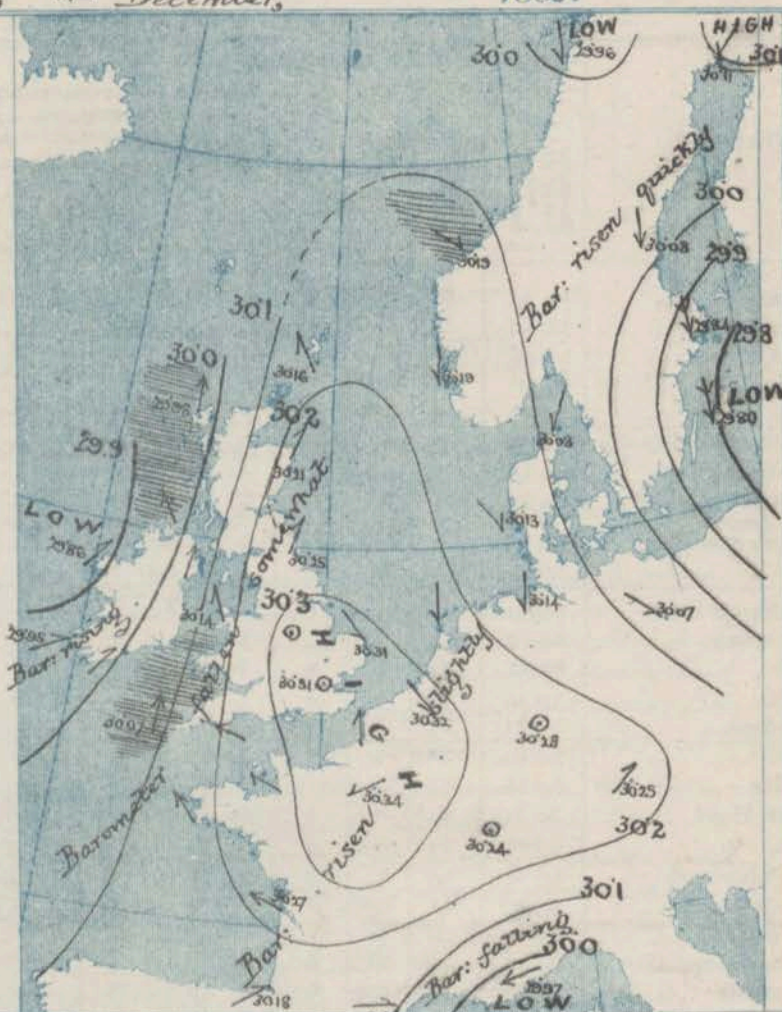
Sea Disturbance — where considerable is shown thus.

■ = Rough ■ = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871–1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| | Ins. |
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

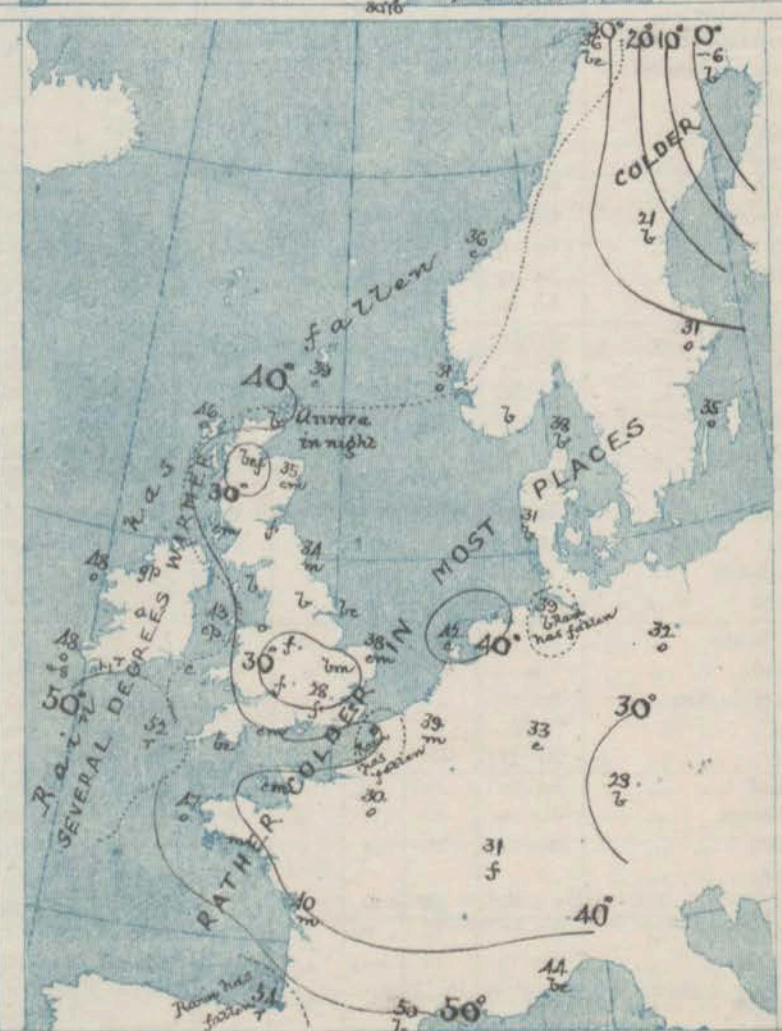
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|------------------|------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Dry | Wet | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.09 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871–85, the Rainfall means are mainly those for the 20 years 1866–85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.3 in.; and upwards, in an anticyclone extending from the southeast of England to Central France.
Lowest, 29.8 in.; and less, over the Baltic, 29.3 in.; and less, off the northwest of Ireland, 30.0 in.; and less, over the Gulf of Genoa.
Gradients moderate over our western and northern coasts, but slight elsewhere.
Barometer falling in nearly all parts of our Islands, but rising at the Continental stations.

TEMPERATURE

Highest, 54° at Biarritz, 52° at Scilly and Looe, 50° at Mullaghmore, Rocherpoint and Bepignan and 48° at Valentia.
Lowest, -6° F. at Haparanda, +21° at Hemsö, 25° at Oxford, and 27° at Paris, Loughborough and Cambridge.
Sharp frost occurred over Great Britain last night; in London the thermometer on the grass fell to 19°.

WIND

Strong from SE. or S. on our western and northwestern coasts; variable in the southeast of England.
Moderate E. over France; light NW. on the eastern shores of the North Sea.
Strong to a gale from the N. in the south of Sweden.

WEATHER

Rainy at several of our western and northwestern stations; foggy over Central England.
Fine in the east of Scotland, as well as at most of the Continental stations.
Since yesterday morning 1.2 in. of rain has fallen at Rocherpoint and 0.8 in. at Valentia.

SEA

Rough at Stromway and rather rough at Malin Head, Pembroke, and Scilly, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The low pressure system in the extreme northwest is apparently moving northwards, and the barometer is rising again at Valentia. At our other western stations, however, the mercury is falling steadily, and as the S. winds are extending gradually eastwards a change to milder ^{weather} is likely to take place over England.

FORECASTS

for the 24 hours ending at NOON on 12th DEC^r 1888.

DISTRICTS.

FORECASTS.

| | | |
|---|------------------|---|
| 0 | SCOTLAND NORTH | S. winds freshening; weather becoming milder and unsettled with some rain. |
| 1 | SCOTLAND EAST | |
| 2 | ENGLAND N.E. | |
| 3 | ENGLAND EAST | Variable airs and cold local fogs; followed by S. breezes and milder finer weather. |
| 4 | MIDLAND COUNTIES | |
| 5 | ENGLAND SOUTH | |



DISTRICTS.

FORECASTS.

| | | |
|----|---------------|---|
| 6 | SCOTLAND WEST | SE. and S. winds, strong; unsettled, some rain. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | S. winds, strong; perhaps a gale; unsettled, some rain. |
| 9 | IRELAND NORTH | S. and SW. winds, strong; unsettled, some rain. |
| 10 | IRELAND SOUTH | |

WARNINGS

The SOUTH CONE was hoisted yesterday 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.

| | Bar. | Dry. | Wet. | Wind. | Woa. | Sea. | | Bar. | Dry. | Wet. | Wind. | Woa. | Sea. |
|-----------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 30.10 | 35 | 34 | NNW 4 | ers | 4 | Holyhead ... | 30.31 | 44 | 42 | ESE 2 | b | 1 |
| Snmburgh Head | 30.22 | 39 | 39 | Z 0 | r | 5 | Valencia ... | 30.06 | 50 | 48 | SE 7 | rg | 6 |
| Stornoway ... | 30.24 | 46 | 45 | SW 2 | b | 3 | Scilly ... | 30.22 | 57 | 48 | SE 5 | o | 4 |
| Aberdeen ... | 30.32 | 38 | 36 | SW 1 | bm | 3 | Jersey ... | 30.29 | 46 | 43 | ESE 4 | b | 3 |
| Shields ... | 30.33 | 42 | 40 | W 1 | c | 2 | Dungeness ... | 30.29 | 42 | 39 | N 3 | m | 1 |
| Ardrossan ... | 30.30 | 38 | 36 | ESE 1 | b | 1 | London ... | 30.34 | 39 | 37 | Z 0 | f | * |
| Malin Head ... | 30.22 | 43 | 40 | SSE 4 | b | 3 | Yarmouth ... | 30.27 | 42 | 40 | NNE 4 | cqf | 4 |
| Mullaghmore ... | 30.14 | 45 | 41 | SE 6 | cmu | 4 | Rochefort ... | 30.21 | 52 | 52 | E 5 | m | 2 |
| Belmullet ... | 30.10 | 42 | 41 | SE 5 | om | * | | | | | | | |

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

The report for yesterday morning showed that an elongated area of high pressure, with its major axis lying from NNW to SSE, covered the whole of the British Isles and France, while a low pressure system lay over the White Sea and north of Russia. Readings varied from between 30.20 ins. to 30.35 ins. over Western Europe to about 29.0 ins. on the shores of the White Sea. The winds reported were consequently very variable, W¹ over Russia, NW¹ (strong to a gale) over Scandinavia, NW¹, light on our eastern coast, NE¹ to E¹ in the south, and SE¹ to S¹ over the Bay of Biscay and the western part of the British Isles. In the last named regions they were fresh to strong in force. The weather after being very rainy in the west of France and rather showery over Germany, was improving in many places, but much fog prevailed over England—especially in London, where it was very thick locally. Temperature was low over the British Isles generally, — frost prevailing in many inland districts, but the thermometer was inclined to rise decidedly in Ireland and France. The lowest individual values reported were 22° at Haparanda, 25° at Kuopio, 26° at Uleaborg, Loughborough and Bude-Bath, 27° at Humberstadt, 28° in London, Oxford, and Cambridge, and 29° at Helmingfors; the highest were 61° at San Fernando, 57° at Barcelona, 55° at Biarritz, 52° at Brindisi and Bellas.

During the day, thick fog prevailed in the southeast of England, while on our western coast the S¹ wind became still stronger, and rain fell.

General Remarks on the Weather for the 24 hours ending 8 a.m. on Sunday 9th DEC.

The report for Saturday morning showed that pressure varied from between 30.3 ins. and 30.5 ins. over Central and Southern Europe, and from 30.1 ins. and more over the southern half of Ireland, to less than 29.4 ins. in a depression off the northwest of Norway. The barometer was rising over the British Isles generally, owing to the approach of a new, but small anticyclone towards the south of Ireland from the Wnd. The S¹ gales prevalent on our western coasts on the few previous days had died down, the wind had veered to the Wnd at the more northern stations and to NW. over Ireland and St. George's Channel, and the thermometer had fallen rapidly, both in Ireland and Scotland. The weather though still unsettled over Northwestern Europe, showed a decided tendency to improve in many places, and the air became less humid than for some time past. Temperature varied from 50° and more over the Bay of Biscay and Mediterranean to several degrees below the freezing point over Central and Northern Europe. The highest individual values were 61° at Palma, 57° at Algiers and Oporto, 56° at Courma and Sanguinaires, 54° at Lorient, and 51° at Scilly; the lowest were 21° at Belfort, 23° at Archangel, 24° at Jap, Munich, Humberstadt, and at Carlsruhe, 28° at Rascow, 30° at Uleaborg and Rascow, 31° at Florence and Pesaro.

Later on fair weather became more general over the British Isles and temperature was low at all our Central stations.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Wednesday 12th DEC^r 1888.
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|-------------------------------|------------------------------------|-----------------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|----------------|-------------|----------------|---------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 2.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 30.30 | — 3 | Z | 0 | bc | 30.23 | + 12 | 12 | 12 | + 18 | S | 4 | S | * | ? | — 11 | 0.04 | |
| | Hernösand ... | 30.32 | 19 | NE | 2 | 0 | 30.33 | + 28 | 26 | 24 | + 8 | SW | 2 | 0 | * | 36 | 18 | — | |
| | Stockholm ... | 30.21 | 28 | N | 2 | bc | 30.27 | + 53 | 25 | 23 | — 6 | Z | 0 | 0 | * | 36 | 21 | — | |
| | Wisby ... | 30.13 | 29 | NW | 6 | bc | 30.21 | + 52 | 25 | 24 | — 10 | ENE | 4 | 3 | * | 39 | ? | — | |
| | Bodö ... | 30.10 | 39 | WNW | 6 | 0 | 30.07 | + 11 | 40 | 38 | + 4 | WSW | 6 | 0 | 3 | ? | 24 | 0.04 | |
| | Christiansund... | 30.23 | 34 | ESE | 2 | 0 | 30.20 | + 21 | 31 | 29 | — 5 | ESE | 1 | 3 | 3 | 29 | 27 | 0.16 | |
| | Skudesnaes ... | 30.29 | 37 | SSE | 4 | 0 | 30.26 | + 17 | 39 | 37 | + 8 | SSE | 4 | 0 | 4 | ? | ? | — | |
| | Christiania Fjord (Furder) | 30.28 | 35 | NNW | 2 | 0 | 30.33 | + 15 | 31 | 29 | — 5 | SSW | 2 | 1 | 1 | 37 | 27 | — | |
| | Skagen (The Sound) | 30.19 | 36 | NW | 1 | 0 | 30.27 | + 29 | 31 | 30 | — 4 | Z | 0 | 0 | * | 37 | 27 | — | |
| | Fanö ... | 30.24 | 29 | NW | 1 | 0 | 30.25 | + 32 | 27 | 26 | — 4 | Z | 0 | 0 | * | 37 | 27 | — | |
| BRITISH ISLANDS. | Sumburgh Head | 30.04 | 42 | SSE | 3 | 0 | 30.06 | — 10 | 44 | 43 | + 5 | S | 1 | 0 | 5 | 44 | 39 | 0.12 | |
| | Stornoway ... | 29.89 | 44 | SW | 7 | * | 29.98 | — 00 | 47 | 47 | + 1 | SSW | 6 | 0 | 5 | 47 | 42 | 0.12 | |
| | Wick ... | 30.02 | 42 | S | 1 | 0 | 30.04 | — 07 | 40 | 39 | — 1 | S | 1 | 0 | 1 | 43 | 39 | 0.02 | |
| | Nairn ... | 30.00 | 42 | Z | 0 | 0 | 30.08 | — 02 | 37 | 36 | + 10 | SW | 1 | 0 | 1 | 43 | 27 | 0.02 | |
| | Aberdeen... | 30.12 | 41 | SSE | 5 | 0 | 30.16 | — 05 | 39 | 37 | + 4 | S | 1 | 0 | 4 | 41 | 35 | — | |
| | Leith ... | 30.12 | 37 | SSE | 1 | + | 30.15 | — 02 | 39 | 39 | + 7 | W | 1 | 0 | * | 39 | 28 | 0.04 | |
| | Shields ... | 30.19 | 36 | SSW | 2 | bc | 30.23 | — 02 | 36 | 35 | + 2 | SSW | 2 | 0 | 2 | 40 | 38 | — | |
| | Spurn Head ... | 30.24 | 40 | SSE | 3 | 0 | 30.32 | + 04 | 38 | 36 | — 2 | S | 4 | 0 | 3 | 42 | 36 | — | |
| | York ... | 30.21 | 36 | S | 1 | 0 | 30.24 | — 04 | 36 | 34 | + 2 | S | 2 | 0 | 4 | 40 | 33 | — | |
| | Loughborough | 30.24 | 32 | SE | 1 | 0 | 30.30 | — 02 | 34 | 33 | + 7 | ESE | 1 | 0 | * | 38 | 27 | 0.01 | |
| GERMANY. | Ardrossan ... | 30.36 | 39 | ENE | 1 | + | 30.18 | + 04 | 40 | 40 | + 3 | ESE | 2 | 0 | 1 | 40 | 36 | 0.28 | |
| | Malin Head ... | 29.97 | 44 | S | 3 | 0 | 30.07 | + 11 | 39 | 38 | — 5 | SSE | 3 | 0 | 3 | 46 | 39 | 0.20 | |
| | Mullaghmore ... | 30.01 | 45 | SW | 2 | 0 | 30.08 | + 15 | 45 | 41 | — 5 | SSW | 4 | 0 | 4 | 50 | 40 | 0.18 | |
| | Belmullet ... | 30.01 | 47 | WSW | 3 | 0 | 30.00 | + 14 | 46 | 45 | — 2 | S | 6 | 0 | * | 50 | 44 | — | |
| | Donaghadee ... | 30.05 | 46 | SSW | 4 | + | 30.18 | + 08 | 32 | 32 | — 13 | SW | 3 | 0 | 2 | 46 | 31 | 0.64 | |
| | Barrow-in-Furness | 30.12 | 39 | E | 5 | 0 | 30.21 | — 01 | 40 | 40 | + 4 | SE | 5 | 0 | * | 40 | 35 | 0.08 | |
| | Liverpool (Bidston) | 30.13 | 37 | SE | 5 | 0 | 30.24 | — 00 | 38 | 38 | + 7 | SE | 3 | 0 | 3 | 39 | 31 | 0.15 | |
| | Holyhead ... | 30.06 | 45 | S | 5 | rmq | 30.21 | + 07 | 42 | 42 | — 1 | S | 1 | 0 | 2 | 47 | 40 | 0.31 | |
| | Parsonstown ... | 30.06 | 42 | Z | 0 | 0 | 30.15 | + 20 | 35 | 34 | — 14 | SE | 1 | 0 | * | ? | 33 | 0.20 | |
| | Valencia ... | 30.11 | 46 | W | 2 | 0 | 30.08 | + 13 | 51 | 49 | + 3 | S | 4 | 0 | 4 | 32 | 29 | 0.01 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 30.08 | 46 | WNW | 2 | 0 | 30.17 | + 20 | 48 | 46 | — 2 | S | 3 | 0 | 4 | 50 | 35 | 0.20 | |
| | Pembroke ... | 30.06 | 47 | SSE | 5 | + | 30.22 | + 11 | 44 | 43 | — 3 | ESE | 2 | 0 | 2 | 48 | 40 | 0.32 | |
| | Scilly ... | 30.11 | 52 | WNW | 5 | 0 | 30.22 | + 15 | 47 | 45 | — 5 | SW | 1 | 0 | 4 | 53 | 44 | 0.35 | |
| | Prawle Point ... | 30.13 | 47 | SE | 6 | + | 30.25 | + 23 | 39 | 39 | — 7 | ? | 2 | 0 | 3 | 49 | 37 | 0.10 | |
| | Jersey ... | 30.25 | 41 | SE | 4 | bc | 30.27 | — 01 | 43 | 42 | + 5 | SSE | 3 | 0 | 3 | 44 | 37 | 0.25 | |
| | Hurst Castle ... | 30.23 | 45 | SEW | 4 | bc | 30.28 | — 00 | 43 | 43 | + 3 | ESE | 5 | 0 | 1 | 48 | 40 | 0.10 | |
| | Dungeness ... | 30.28 | 44 | SW | 3 | 0 | 30.32 | + 03 | 39 | 37 | + 6 | S | 5 | 0 | 3 | 47 | 31 | — | |
| | London ... | 30.28 | 40 | SE | 2 | cmv | 30.33 | + 02 | 32 | 30 | + 4 | E | 1 | 0 | * | 49 | 27 | — | |
| | Oxford ... | 30.24 | 36 | SSE | 3 | bc | 30.32 | — 00 | 37 | 35 | + 12 | SE | 1 | 0 | * | 39 | 25 | — | |
| | Cambridge ... | 30.27 | 40 | SE | 1 | 0 | 30.35 | + 04 | 32 | 31 | + 5 | SE | 1 | 0 | * | 44 | 25 | — | |
| PENIN-SULA. | Yarmouth ... | 30.29 | 41 | SE | 3 | 0 | 30.26 | + 05 | 39 | 37 | + 1 | SW | 1 | 0 | 3 | 41 | 36 | — | |
| | Cuxhaven ... | 30.26 | 38 | N | 3 | 0 | 30.43 | + 29 | 33 | 32 | — 6 | SSE | 1 | 0 | * | 38 | 31 | — | |
| | Berlin ... | 30.22 | 35 | NW | 4 | 0 | 30.39 | + 32 | 29 | 27 | — 3 | NW | 2 | 0 | * | 36 | 28 | — | |
| | Wiesbaden ... | * | * | * | * | * | 30.43 | + 15 | 32 | 32 | — 0 | SW | 1 | 0 | * | 39 | 30 | — | |
| | Munich ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | The Helder ... | 30.32 | 39 | NNE | 1 | 0 | 30.40 | + 15 | 37 | 37 | — 5 | SSE | 1 | 0 | 1 | 43 | 37 | 0.04 | |
| | Brussels ... | * | * | * | * | * | 30.43 | + 11 | 35 | 34 | — 4 | E | 1 | 0 | * | 41 | 32 | — | |
| | Cape Gris Nez... | 30.29 | 41 | S | 1 | 0 | 30.35 | + 06 | 31 | 29 | — 9 | SE | 4 | 0 | 2 | 45 | 30 | — | |
| | Paris ... | 30.35 | 31 | NNE | 1 | 0 | 30.38 | + 04 | 23 | 23 | — 7 | N | 1 | 0 | * | 32 | 28 | — | |
| | Brest ... | 30.21 | 45 | N | 1 | + | 30.31 | + 09 | 45 | 45 | — 2 | Z | 0 | 0 | 1 | 57 | 39 | 0.39 | |
| PENIN-SULA. | Lorient ... | 30.23 | 44 | SE | 7 | + | 30.27 | + 03 | 41 | 41 | — 0 | ESE | 1 | 0 | 5 | 50 | 26 | 0.12 | |
| | Rochefort ... | 30.32 | 37 | E | 4 | 0 | 30.32 | + 05 | 36 | 35 | — 4 | ESE | 5 | 0 | 2 | 50 | 30 | 0.16 | |
| | Belfort ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | Lyons ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | Nice ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | Perpignan ... | 30.13 | 53 | NW | 5 | 0 | 30.25 | + 15 | 48 | 44 | — 2 | WSW | 2 | 0 | * | 61 | 44 | — | |
| | Biarritz ... | 30.25 | 50 | NE | 4 | 0 | 30.26 | + 08 | 50 | 49 | — 4 | SSE | 4 | 0 | 2 | 57 | 46 | 0.04 | |
| | Corunna ... | * | * | * | * | * | 30.28 | — 35 | 48 | 48 | — 4 | NNE | 4 | 0 | 6 | 64 | 46 | — | |
| | Lisbon ... | 30.26 | 56 | N | 4 | 0 | 30.26 | — 35 | 48 | 48 | — 4 | NNE | 4 | 0 | 6 | 64 | 46 | — | |

For Explanation of Columns, see p. 4. — 5. At Marseilles the thermometer rose to 41°

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

WEATHER CHARTS

for 8 a.m. on

WEDNESDAY, 12TH December,

1888.

BAROMETER, WIND & 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.

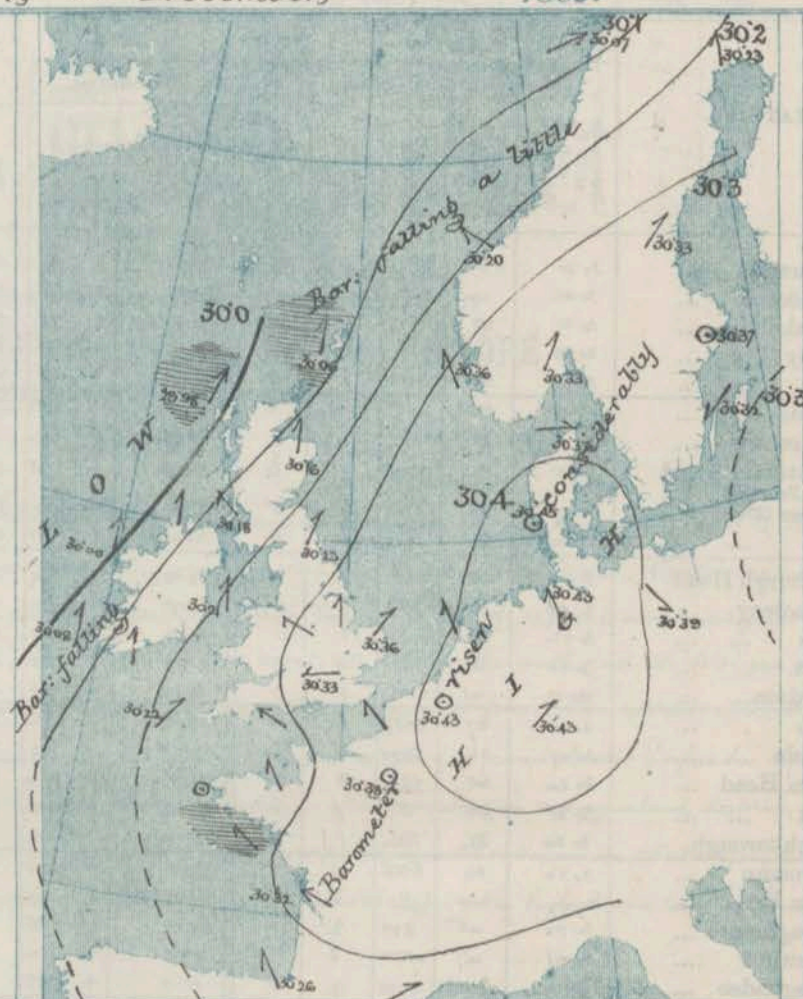
— Rough — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.

During the 15 Years 1871 — 1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

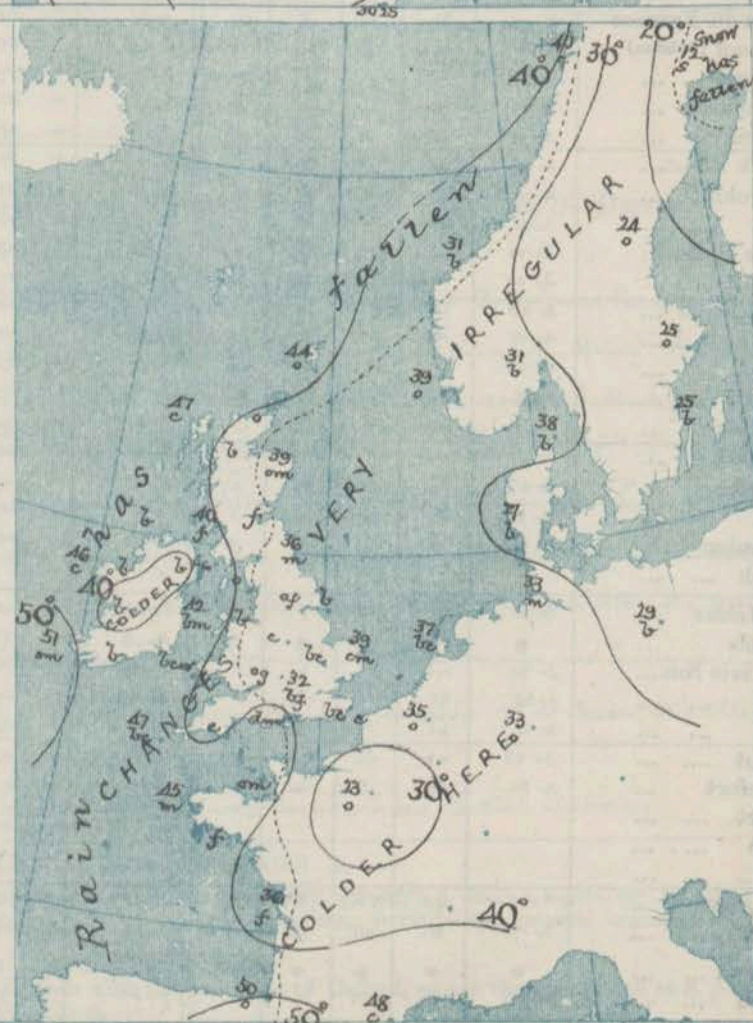
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|--------------------|-------------------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Prev. | at 8 a.m. Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871 — 85, the Rainfall means are mainly those for the 20 years 1868 — 85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.30 to 30.45 in a large high pressure area covering France, Germany, the North Sea and S.W. half of Scandinavia.
Lowest 29.0 in and lower in a low pressure area lying off our extreme northwestern coasts.
Gradients slight in the east and south, moderate in the west and north.
Barometer rising except in the extreme west of Ireland and northwest of Norway.

TEMPERATURE

Highest 51° at Valencia, 50° at Biarritz, 48° at Lisbon and Perpignan, 47° at Sicily and Horta and 46° at Belmullet.
Lowest 15° at Caparanda, 16° at Paris, 14° to 15° at Kermadec, 12° at Helig, 11° at Vöge, 10° at Funchal and 9.2° in London.
It has changed irregularly during the past 24 hours.

WIND

Moderate or light S.E. over France and the greater part of England.
Moderate to strong S.E. in Ireland, the west of Scotland, and west of Norway.
Strong S.W. at Christiansund, N. in Germany, and N.E. at Lisbon.

WEATHER

Fair in most places, with fog and haze in some localities.
Rain fell in the southwest coast and north yesterday and is still falling at Hurst Point. A lunar halo was seen over the southeast of England last night.

SEA

Rather rough in the extreme north, moderate in the far west and southwest, slight or smooth in the south and east.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

It seems probable that as the anticyclone in the east spreads westwards over our Islands and France temperature in those countries will decrease considerably, and fog again become prevalent in many places.

FORECASTS

for the 24 hours ending at NOON on 13th December 1888.

DISTRICTS.

FORECASTS.

| | | |
|---|------------------|---|
| 0 | SCOTLAND NORTH | S ^{ly} breezes, moderate or light; cloudy, ^{showers} some |
| 1 | SCOTLAND EAST | |
| 2 | ENGLAND N.E. | S ^{ly} winds; cold, foggy locally, frost inland at night. |
| 3 | ENGLAND EAST | |
| 4 | MIDLAND COUNTIES | |
| 5 | ENGLAND SOUTH | S ^{ly} breezes, light; cold, fog inland, and frost at night. |

DISTRICTS.

FORECASTS.

| | | |
|----|---------------|---|
| 6 | SCOTLAND WEST | S ^{ly} breezes, light; fair, rather hazy. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | |
| 9 | IRELAND NORTH | S ^{ly} winds, freshening; some rain in far 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. | Dry. | Wet. | Wind. | Wca. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wca. | Sea. | | |
|-------------------|-------|------|------|-------|------|------|---|---------------|-------|------|-------|------|------|-----|---|
| Skudesnaes ... | 30.04 | 35 | 32 | SE | 1 | b | 3 | Holyhead ... | 30.09 | 43 | 42 | SE | 5 | rmg | 4 |
| Sumburgh Head ... | 30.11 | 42 | 40 | SE | 2 | o | 4 | Valencia ... | 30.05 | 52 | 47 | W | 3 | bm | 3 |
| Stornoway ... | 29.89 | 47 | 47 | S | 7 | o | 6 | Scilly ... | 30.05 | 51 | 51 | W | 5 | r | 5 |
| Aberdeen ... | 30.14 | 40 | 38 | SE | 5 | eqm | 5 | Jersey ... | 30.24 | 40 | 38 | SE | 4 | b | 3 |
| Shields ... | 30.15 | 39 | 36 | SE | 2 | m | 2 | Dungeness ... | 30.27 | 45 | 41 | SW | 3 | c | 2 |
| Ardrossan ... | 30.07 | 39 | 39 | ENE | 1 | r | 3 | London ... | 30.23 | 41 | 38 | S | 1 | f | 3 |
| Malin Head ... | 29.92 | 46 | 46 | WSW | 4 | o | 3 | Yarmouth ... | 30.29 | 41 | 38 | W | 0 | b | 3 |
| Mullaghmore ... | 29.94 | 47 | 46 | W | 2 | og | 3 | Rochefort ... | | | | | | | |
| Belmullet ... | 29.94 | 50 | 47 | WSW | 3 | b | * | | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest, 30.3 inches and upwards, in an anticyclone lying over the southeast of England and the north and central parts of France, and lowest, 29.5 inches and less, in a large depression lying over Central Russia. With these conditions SE & breezes were reported in France, and S & breezes over the greater part of our Islands, while N & and NW winds were general over Scandinavia, the Baltic and Central Europe, and variable airs in Italy and Algeria. Snow was falling over Poland, the Gulf of Finland and the Baltic, and rain in the west of our Islands, while fog was reported at many of the English and French stations. Elsewhere, however, the weather was mostly fair. Temperature had risen over the west and north of the United Kingdom, but fallen elsewhere, and readings ranged from 50° and upwards over Spain, Algeria, the south of Italy and the extreme southwest of our Islands to several degrees below zero over Lapland and Northern Russia. The highest individual readings were 64° at Oran, 61° at Brindisi, 59° at Algiers, 58° at Malaga, 54° at Biarritz, Genoa, Barcelona and Oporto and 52° at Gilly, San Fernando, Lisbon and Wexmouth; the lowest were -17° at Archangel -6° at Haparanda and Uleaborg, +8° at Kuopio, 21° at Hernosand, 23° at St. Petersburg, 25° at Oxford, 26° at Helsingfors and 27° at Vaasa, Loughborough and Cambridge.

In the course of the day very little change was observed either in pressure, winds or weather.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Thursday, 13th December 1888.
 Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|----------------------------|------------------------------------|-----------------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|----------------|-------------|----------------|---------------------|--|
| | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 30.08 | 21 | Z | 0 | 0 | 29.93 | -30 | 17 | 16 | +5 | Z | 0 | c | * | 23 | 2 | 0.04 | |
| | Hernösand ... | 30.31 | 18 | Z | 0 | b | 30.19 | -14 | 19 | 19 | -5 | Z | 0 | b | * | 25 | 16 | - | |
| | Stockholm ... | 30.49 | 25 | NW | 2 | b | 30.31 | -06 | 35 | ? | +10 | WSW | 2 | 0 | * | ? | 21 | - | |
| | Wishby ... | 30.47 | 28 | ESE | 4 | bc | 30.45 | +13 | 34 | 31 | +9 | W | 6 | b | * | 34 | 23 | - | |
| | Bodö ... | 30.01 | 41 | SW | 6 | 0 | 29.85 | -22 | 42 | 40 | +2 | SW | 6 | 0 | 3 | ? | 34 | - | |
| | Christiansund... | 30.19 | 35 | ESE | 3 | c | 30.10 | -10 | 37 | 35 | +6 | SW | 3 | b | 4 | 37 | ? | - | |
| | Skudesnaes ... | 30.39 | 41 | ESE | 4 | † | 30.39 | +03 | 43 | 40 | +4 | S | 6 | 0 | 5 | ? | 39 | 0.08 | |
| | Christiania Fjord (Færdor) | 30.37 | 31 | W | 2 | b | 30.37 | +04 | 39 | 38 | +8 | SSW | 5 | 0 | 2 | ? | 25 | - | |
| | Skagen (The Scaw) | 30.47 | 31 | WSW | 2 | c | 30.49 | +12 | 33 | 32 | +2 | W | 3 | c | 2 | 36 | 28 | - | |
| | Fanö ... | 30.55 | 27 | S | 1 | † | 30.58 | +13 | 30 | 30 | +3 | S | 4 | † | * | 34 | 25 | - | |
| BRITISH ISLANDS. | Sumburgh Head | 30.07 | 43 | S | 2 | c | 30.03 | -63 | 43 | 42 | -1 | S | 2 | c | 4 | 45 | 42 | - | |
| | Stornoway ... | 29.91 | 47 | SW | 8 | ou | 29.89 | -09 | 48 | 48 | +1 | SW | 7 | 0 | 6 | 48 | 45 | 0.03 | |
| | Wick ... | 30.05 | 41 | S | 4 | c | 30.03 | -03 | 44 | 42 | +4 | S | 5 | 0 | 4 | 45 | 39 | - | |
| | Nairn ... | 30.05 | 43 | SW | 3 | bc | 30.04 | -04 | 45 | 41 | +8 | ESE | 2 | c | 1 | 46 | 35 | - | |
| | Aberdeen... | 30.19 | 40 | S | 3 | bc | 30.18 | +02 | 42 | 40 | +3 | S | 4 | 0 | 4 | 42 | 37 | - | |
| | Leith ... | 30.22 | 40 | W | 1 | bc | 30.21 | +03 | 41 | 39 | +2 | S | 1 | om | * | 43 | 35 | - | |
| | Shields ... | 30.29 | 36 | SSW | 2 | m | 30.31 | +08 | 38 | 32 | -3 | S | 3 | cm | 2 | 39 | 32 | - | |
| | Spurn Head ... | 30.37 | 38 | S | 4 | b | 30.36 | +04 | 38 | 37 | 0 | S | 5 | b | 4 | 40 | 36 | - | |
| | York ... | 30.30 | 36 | SE | 2 | 0 | 30.32 | +08 | 30 | 29 | -6 | SE | 1 | b | * | 38 | 30 | - | |
| | Loughborough | 30.30 | 35 | SE | 2 | 0 | 30.35 | +05 | 29 | 28 | -5 | SE | 1 | bc | * | 40 | 29 | - | |
| GERMANY. | Ardrossan ... | 30.18 | 45 | SSE | 3 | 0 | 30.16 | -02 | 48 | 42 | +3 | ESE | 4 | om | 3 | 46 | 38 | - | |
| | Malin Head ... | 30.02 | 44 | S | 6 | og | 30.00 | -07 | 46 | 44 | +7 | S | 6 | 0 | 4 | 46 | 39 | - | |
| | Mullaghmore ... | 30.02 | 50 | SSE | 6 | 0 | 29.94 | -14 | 50 | 45 | +5 | SSE | 6 | c | 4 | 50 | 43 | - | |
| | Belmullet ... | 29.94 | 49 | SW | 6 | 0 | 29.86 | -14 | 49 | 47 | +3 | SSE | 5 | 0 | * | 50 | 46 | - | |
| | Donaghadee ... | 30.18 | 45 | S | 3 | b | 30.13 | -05 | 47 | 46 | +15 | SSW | 5 | 0 | 3 | 47 | 32 | 0.01 | |
| | Barrow-in-Furness | 30.24 | 40 | SE | 5 | b | 30.24 | +03 | 37 | 35 | -3 | SE | 5 | b | * | 42 | 36 | - | |
| | Liverpool (Bidston) | 30.28 | 38 | SE | 3 | 0 | 30.28 | +04 | 32 | 30 | -6 | SE | 3 | bc | 3 | 41 | 31 | - | |
| | Holyhead ... | 30.22 | 45 | SSE | 1 | bc | 30.20 | -01 | 42 | 40 | 0 | SSE | 4 | 0 | 4 | 47 | 42 | 0.01 | |
| | Parsonstown ... | 30.10 | 46 | SE | 2 | c | 30.01 | -14 | 47 | 44 | +12 | SE | 3 | 0 | * | 47 | 34 | 0.02 | |
| | Valencia ... | 30.00 | 32 | SSE | 6 | 0 | 29.83 | -25 | 52 | 49 | +1 | SE | 7 | 0 | 6 | 52 | 50 | - | |
| FRANCE & NETHERLANDS. | Roche's Point... | 30.11 | 50 | S | 4 | bc | 29.99 | -18 | 50 | 47 | +2 | S | 7 | 0 | 5 | 51 | 48 | - | |
| | Pembroke ... | 30.21 | 45 | SE | 4 | c | 30.18 | -04 | 44 | 43 | 0 | SE | 5 | og | 4 | 48 | 42 | 0.01 | |
| | Scilly ... | 30.15 | 50 | SE | 5 | c | 30.08 | -14 | 46 | 44 | -1 | ESE | 6 | 0 | 6 | 51 | 45 | 0.01 | |
| | Prawle Point ... | 30.28 | 43 | ESE | 2 | bc | 30.23 | -02 | 42 | 39 | +3 | E | 5 | c | 4 | 46 | 37 | - | |
| | Jersey ... | 30.32 | 42 | SE | 3 | ogm | 30.25 | -02 | 36 | 34 | -7 | ESE | 4 | bm | 3 | 44 | 36 | - | |
| | Hurst Castle ... | 30.34 | 43 | SSE | 3 | c | 30.30 | +02 | 38 | 37 | -5 | ESE | 3 | bc | 1 | 45 | 37 | - | |
| | Dungeness ... | 30.37 | 41 | SSE | 5 | 0 | 30.35 | +03 | 35 | 34 | -4 | SSE | 5 | c | 4 | 44 | 35 | - | |
| | London ... | 30.41 | 35 | SSE | 1 | b | 30.36 | +03 | 29 | 29 | -3 | ESE | 1 | † | * | 41 | 25 | - | |
| | Oxford ... | 30.39 | 35 | SE | 2 | b | 30.34 | +02 | 28 | 27 | -9 | SE | 1 | † | * | 39 | 28 | - | |
| | Cambridge ... | 30.41 | 33 | Z | 0 | b | 30.37 | +02 | 29 | 29 | -3 | SE | 1 | b | * | 42 | 25 | - | |
| PENIN-SULA. | Yarmouth ... | 30.39 | 41 | S | 4 | bc | 30.39 | +03 | 40 | 37 | +1 | SSE | 4 | b | 4 | 42 | 38 | - | |
| | Cuxhaven ... | 30.51 | 32 | S | 1 | m | 30.60 | +17 | 25 | 25 | -5 | S | 2 | m | * | 34 | 27 | - | |
| | Berlin ... | 30.57 | 34 | NW | 1 | 0 | 30.67 | +28 | 33 | 32 | +4 | SE | 1 | 0 | * | 36 | ? | - | |
| | Wiesbaden ... | * | * | * | * | * | 30.56 | +13 | 27 | 26 | -6 | SW | 1 | b | * | 37 | 27 | - | |
| | Munich ... | 30.45 | 22 | E | 4 | b | 30.52 | | 20 | 19 | | E | 5 | b | * | 32 | 19 | - | |
| | The Helder ... | 30.50 | 31 | SE | 1 | † | 30.50 | +10 | 30 | 29 | -7 | SE | 1 | b | 1 | 37 | 30 | - | |
| | Brussels ... | * | * | * | * | * | 30.46 | +03 | 27 | 24 | -8 | E | 1 | bc | * | ? | ? | - | |
| | Cape Gris Nez... | 30.39 | 43 | SSE | 1 | b | 30.28 | -07 | 27 | 27 | -4 | E | 3 | b | 1 | 37 | 27 | - | |
| | Paris ... | 30.39 | 26 | NE | 1 | b | 30.36 | -02 | 23 | 23 | 0 | NE | 1 | b | * | 34 | 22 | - | |
| | Brest ... | 30.29 | 43 | SSE | 4 | 0 | 30.16 | -15 | 46 | 38 | +1 | SE | 5 | 0 | 5 | 60 | 37 | - | |
| PENIN-SULA. | Lorient ... | 30.26 | 39 | ESE | 3 | † | 30.17 | -10 | 35 | 34 | -6 | ESE | 5 | m | 5 | 45 | 34 | - | |
| | Rochefort ... | 30.30 | 39 | E | 5 | c | 30.19 | -13 | 33 | 32 | -3 | E | 7 | † | 3 | 43 | 25 | - | |
| | Belfort ... | 30.33 | 28 | E | 1 | b | 30.40 | | 26 | 25 | | E | 3 | † | * | 32 | 22 | - | |
| | Lyons ... | 30.38 | 29 | N | 3 | b | 30.40 | | 26 | 25 | | N | 1 | † | * | 36 | 25 | - | |
| | Nice ... | 30.31 | 45 | ESE | 5 | c | 30.39 | -05 | 41 | 36 | +1 | ESE | 7 | c | 4 | 48 | 39 | - | |
| | Perpignan ... | 30.29 | 45 | E | 1 | 0 | 30.20 | -05 | 49 | 46 | +1 | SE | 3 | c | * | 59 | 43 | - | |
| | Biarritz ... | 30.16 | 55 | Z | 0 | 0 | 30.12 | -14 | 40 | 39 | -10 | ESE | 4 | m | 3 | 57 | 37 | - | |
| | Corunna ... | * | * | * | * | * | | | | | | | | | | | | | |
| | Lisbon ... | 30.14 | 55 | NNE | 4 | b | 30.02 | -26 | 48 | 47 | 0 | SE | 5 | b | 3 | 59 | 45 | - | |

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on

Thursday, 13th December.

1888.

BAROMETER, WIND & SEA.

(Explanation of Map)

Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words. 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.

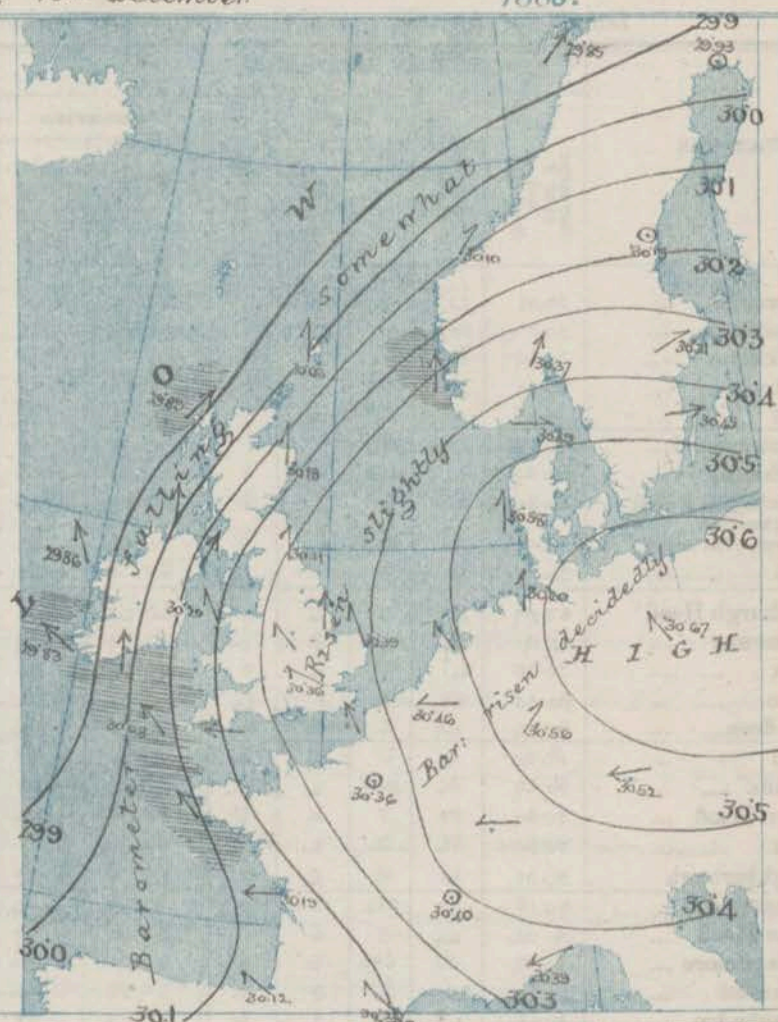
Sea Disturbance — where considerable is shown thus.

— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
 During the 15 Years 1871—1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.900 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

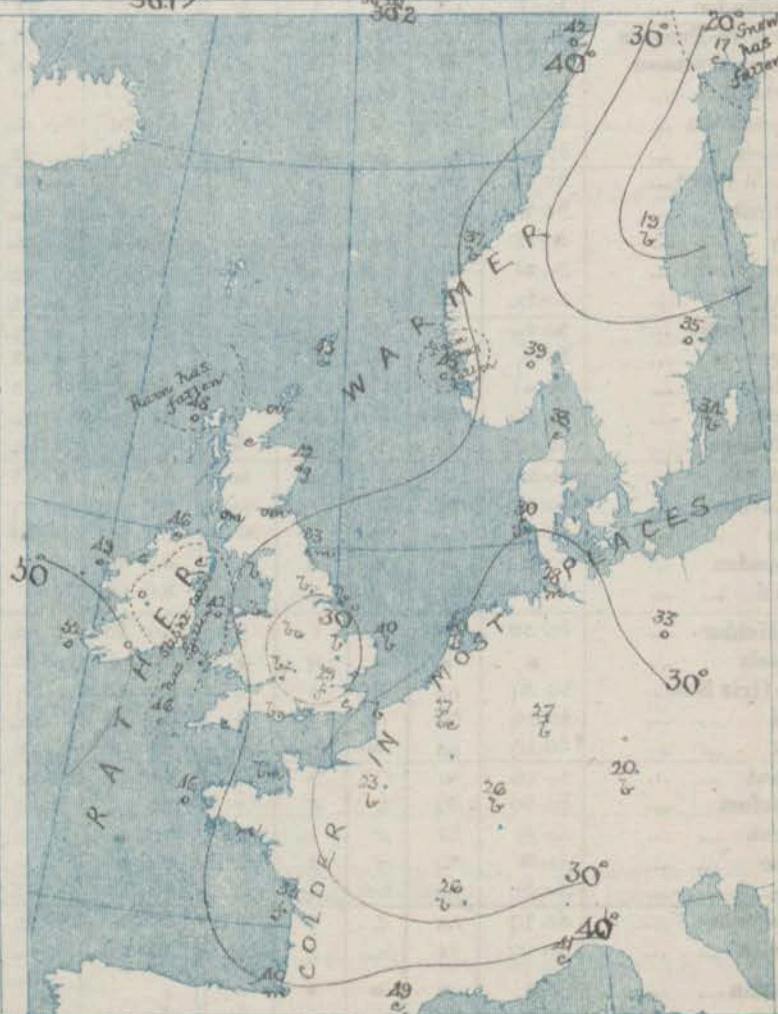
Rainfall A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
 for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|-------------------|-------------------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Day. | at 8 a.m. Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.38 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

| | |
|-------------|--|
| PRESSURE | Highest, 30.5 in. to 30.7 in. over Germany, Denmark, and the southern part of the Baltic. Lowest, 29.9 in. and less, over the Shetlands and western part of Ireland. Gradients, moderate in the east and south, rather steep in the west and northwest. Isobars rising slightly in the east, falling somewhat in the west and north. |
| TEMPERATURE | At 52° at Valencia, 50° at Mullaghmore and Rochie Point, 45° at Lifeyuan, and 42° at Stromness and Boston. Lowest, 17° at Haparanda, 15° at Simsbury, 20° at Kinnik, 25° at this, 27° at Brussels, and 29° in London. It has fallen over France and England, risen over Ireland and Scotland. The frost was very sharp over our southeastern coasts early this morning. |
| WIND | E ² and SE ² at the southern and eastern stations - strong over the Bay of Biscay, moderate on our southern and eastern coasts. SE ² (a moderate gale) in the south of Ireland - S ² , strong on our west and northwest coasts. S ² , moderate to light over the North Sea. E ² , strong in the south of France. |
| WEATHER | Fine in the east and south, but foggy or hazy in places - (dull in the west and north, with slight rain at times, and a threatening appearance at Wick. Very little rain fell at some western and northern stations - none elsewhere. |
| SEA | Rough in the extreme west and southwest, moderate on our other coasts and at Christiansund, smooth on the Dutch coast. |

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The fall of the barometer in the west seems to be due to a depression which is skirting the west coast of Ireland in its journey northeastwards. The system does not seem likely to spread eastwards very much, not to cause any important modification of the weather now prevailing.

FORECASTS

For the 24 hours ending at NOON on 14TH DEC^R 1888.

DISTRICTS.

FORECASTS.

| | | |
|---|------------------|---|
| 0 | SCOTLAND NORTH | S ² winds, fresh to strong; squally. |
| 1 | SCOTLAND EAST | |
| 2 | ENGLAND N.E. | SE ² and S ² winds, moderate; fair, cold, frost inland at night. |
| 3 | ENGLAND EAST | |
| 4 | MIDLAND COUNTIES | SE ² winds, moderate or light, cold, fair, fog and frost in night and morning. |
| 5 | ENGLAND SOUTH | |



DISTRICTS.

FORECASTS.

| | | |
|----|---------------|---|
| 6 | SCOTLAND WEST | SE ² or S ² winds, strong; squally; some showers. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | S ² winds, strong a gale in far west; squally, some showers. |
| 9 | IRELAND NORTH | |
| 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. | Dry. | Wet. | Wind. | Woa. | Sea. | | Bar. | Dry. | Wet. | Wind. | Woa. | Sea. |
|-----------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 30.37 | 40 | 38 | SSE 6 | 0 | 4 | Holyhead ... | 30.22 | 46 | 45 | S 2 | cq | 2 |
| Sumburgh Head | 30.05 | 45 | 44 | S 2 | c | 5 | Valencia ... | 30.03 | 52 | 50 | SE 7 | og | 6 |
| Stornoway ... | 29.95 | 47 | 47 | SW 7 | 0 | 6 | Scilly ... | 30.18 | 51 | 48 | S 4 | c | 5 |
| Aberdeen ... | 30.18 | 38 | 37 | S 2 | bcm | 4 | Jersey ... | 30.29 | 43 | 42 | ESE 3 | 0 | 3 |
| Shields ... | 30.25 | 39 | 37 | SSW 2 | bcm | 2 | Dungeness ... | 30.36 | 42 | 38 | SSE 5 | bc | 4 |
| Ardrossan ... | 30.16 | 45 | 45 | SSE 3 | c | 2 | London ... | 30.37 | 41 | 37 | SE 2 | bc | * |
| Malin Head ... | 30.01 | 45 | 42 | S 6 | c | 4 | Yarmouth ... | 30.37 | 42 | 39 | SSW 3 | bc | 3 |
| Mullaghmore ... | 30.04 | 47 | 44 | S 5 | og | 4 | Rocheport ... | 30.32 | 41 | 40 | E 3 | m | 2 |
| Belmullet ... | 29.97 | 50 | 48 | SW 6 | 0 | * | | | | | | | |

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

The reports for yesterday morning showed that while the highest pressures of all, 30.4 ins. and upwards, were reported over Denmark, the Netherlands, and Western Germany, a large anticyclone in which readings exceeded 30.3 ins. extended from Finland across the south of Scandinavia and the adjacent portions of the Baltic and North Sea to the southern parts of France, Germany, and Austria. The lowest readings 29.9 ins. and less, were found in a large area lying over Central Russia, but another low pressure system, in which the barometer was below 30.0 ins. lay to the eastward and northward of our Islands. The winds were chiefly anticyclonic, and varied from E. and NE. over France and Spain and from S. in our Islands and Scandinavia to N. over the Gulf of Finland, the Baltic, and Central Europe generally. At the Mediterranean stations light variable breezes were reported. The weather was fair on the whole but a good deal of fog prevailed over the central parts of the United Kingdom and Germany, and snow was falling at several of the Russian stations. Temperature had changed irregularly in our Islands and Scandinavia, but fallen elsewhere; readings ranged from 50° and upwards over the Mediterranean as well as in Portugal and the extreme south-west of our Islands to many degrees below zero over Northern Russia. The highest individual readings were 58° at Malta and Algiers, 55° at Sanguinaires, 54° at Croisette, 53° at Oran, 52° at Oporto and Brindisi, and 51° at Valencia Island and Nemours; the lowest were -31° F. at Archangel, -12° at St. Petersburg, -11° at Kuspio, -7° at Ulsaborg, -4° at Moscow, +1° at Helsingfors, 5° at Hango, 12° at Haparanda, 13° at Riga, and 20° at Memel.

In the course of the day the barometer fell slightly on our extreme western coasts, and the wind then increased a little from SE. and S. Sharp frost was experienced over England during the night; in London the thermometer on the grass fell to 14°.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Friday, 14th December 1888.
Issued by the Meteorological Office, 116, Victoria Street, London. R.H. SCOTT, Secretary.

Issued by the Meteorological Office, 10, Victoria Street, London. R.H. SCOTT, Secretary.

| STATIONS. | † YESTERDAY EVENING. | | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------------|------------------------------------|-----------------|-------|-------------------|----------|---|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|-------------|-------------|------|---------------------|----------------|--|--|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | Barometer. Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | SHADE TEMP. | | Difference from 8 a.m. yesterday. | WIND. | | Sea 0 to 9. | SHADE TEMP. | | Amount of Rainfall. | | | |
| | | | Dir. | Force. (0 to 12.) | | | | Dry. | Wet. | | Dir. | Force. (0 to 12.) | | Max. | Min. | | | | |
| SCANDINAVIA. | | | | | | | | | | | | | | | | | | | |
| Haparanda .. | 29.58 | 35 | 1 | 1 | 0 | 29.36 | - .57 | 38 | 37 | + 2.1 | SW | 4 | 0 | * | ? | 14 | - | | |
| Hernösand ... | 29.98 | 26 | 2 | 0 | 0 | 29.73 | - .46 | 22 | 21 | + 3 | 2 | 0 | 60 | * | 28 | 18 | - | | |
| Stockholm ... | 30.18 | 38 | W | 6 | 0 | 29.99 | - .32 | 33 | 31 | - 2 | WSW | 4 | 0 | * | 39 | 23 | - | | |
| Wisby ... | 30.35 | 35 | SW | 8 | 0 | 30.20 | - .25 | 33 | 32 | - 1 | W | 6 | 0 | * | 39 | 27 | - | | |
| Bodö ... | 29.86 | 41 | SW | 9 | 0 | 29.23 | - .62 | 40 | 39 | - 2 | SW | 9 | 0 | 6 | 43 | 34 | 0.55 | | |
| Christiansund... | 29.97 | 35 | NE | 1 | 0 | 29.57 | - .38 | 44 | 37 | + 7 | SW | 4 | 0 | 6 | ? | 32 | - | | |
| Skudesnaes ... | 30.30 | 42 | SSE | 8 | 0 | 30.06 | - .33 | 42 | 39 | - 1 | SSW | 8 | 0 | 6 | 43 | 41 | - | | |
| Christiania Fjord (Fierder) | 30.30 | 39 | SW | 7 | 0 | 30.08 | - .29 | 40 | 38 | + 1 | SW | 8 | 0 | 4 | ? | 39 | - | | |
| Skagen (The Scaw) | 30.41 | 31 | W | 4 | 0 | 30.19 | - .30 | 30 | ? | - 3 | SW | 4 | 0 | 2 | 34 | 25 | - | | |
| Fanö ... | 30.49 | 27 | SSE | 4 | 0 | 30.28 | - .30 | 26 | 26 | - 4 | SSE | 3 | 0 | * | 34 | ? | - | | |
| BRITISH ISLANDS. | | | | | | | | | | | | | | | | | | | |
| Sumburgh Head | 29.95 | 43 | S | 1 | 0 | 29.90 | - .13 | 44 | 41 | + 1 | NW | 1 | 0 | 4 | 45 | 42 | 0.01 | | |
| Stornoway ... | 29.82 | 48 | S | 8 | 0 | 30.02 | + .13 | 42 | 41 | - 6 | S | 3 | 0 | 3 | 49 | 40 | 0.07 | | |
| Wick ... | 29.96 | 45 | S | 4 | 0 | 29.99 | - .04 | 42 | 42 | - 2 | 2 | 0 | om | 0 | 46 | 41 | - | | |
| Nairn ... | 29.97 | 42 | SW | 1 | 0 | 30.01 | - .03 | 45 | 44 | 0 | 2 | 0 | 0 | 1 | 48 | 40 | 0.03 | | |
| Aberdeen... | 30.08 | 38 | SSE | 5 | 0 | 30.05 | - .13 | 41 | 40 | - 1 | SW | 1 | 0 | 4 | 42 | 39 | - | | |
| Leith ... | 30.14 | 36 | W/W | 1 | 0 | 30.10 | - .11 | 42 | 41 | + 1 | 2 | 0 | 0 | * | 42 | 39 | - | | |
| Shields ... | 30.20 | 35 | S | 3 | 0 | 30.16 | - .15 | 29 | 29 | - 4 | SW | 3 | 0 | 2 | 37 | 26 | - | | |
| Spurn Head ... | 30.28 | 35 | S | 4 | 0 | 30.22 | - .14 | 32 | 31 | - 6 | SW | 3 | 0 | 3 | 40 | 28 | - | | |
| York ... | 30.24 | 32 | SE | 2 | 0 | 30.19 | - .13 | 27 | 27 | - 3 | SE | 1 | 0 | * | 32 | 26 | - | | |
| Loughborough | 30.29 | 27 | SSE | 1 | 0 | 30.24 | - .11 | 33 | 33 | + 4 | SE | 1 | 0 | * | 35 | 23 | - | | |
| GERMANY. | | | | | | | | | | | | | | | | | | | |
| Ardrossan ... | 30.09 | 42 | SE | 4 | 0 | 30.09 | - .07 | 45 | 45 | + 2 | S | 4 | 0 | 3 | 45 | 40 | - | | |
| Malin Head ... | 29.91 | 45 | S | 5 | 0 | 30.07 | + .07 | 46 | 46 | 0 | N | 3 | 0 | 3 | 47 | 41 | 0.02 | | |
| Mullaghmore ... | 29.92 | 48 | SE | 6 | 0 | 30.07 | + .13 | 48 | 47 | - 2 | SW | 4 | 0 | 3 | 51 | 47 | 0.05 | | |
| Belmullet ... | 29.85 | 50 | S | 5 | 0 | 30.11 | + .25 | 46 | 45 | - 3 | N | 4 | 0 | * | 50 | 46 | 0.82 | | |
| Donaghadee ... | 30.07 | 45 | SSW | 4 | 0 | 30.11 | - .02 | 47 | 47 | 0 | SSW | 3 | 0 | 2 | 47 | 45 | - | | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | | |
| Barrow-in-Furness | 30.19 | 35 | SE | 4 | 0 | 30.19 | - .05 | 33 | 33 | - 4 | E | 4 | 0 | 2 | 37 | 31 | - | | |
| Liverpool (Bidston) | 30.19 | 32 | SE | 4 | 0 | 30.20 | - .08 | 30 | 29 | - 2 | SE | 2 | 0 | 2 | 36 | 28 | - | | |
| Holyhead ... | 30.14 | 42 | SSE | 4 | 0 | 30.16 | - .04 | 44 | 42 | + 2 | S | 2 | 0 | 2 | 45 | 41 | - | | |
| Parsonstown ... | 29.98 | 45 | SE | 3 | 0 | 30.09 | + .08 | 47 | 46 | 0 | SE | 1 | 0 | * | 47 | 44 | - | | |
| Valencia ... | 29.91 | 53 | SSE | 4 | 0 | 30.06 | + .18 | 53 | 52 | + 1 | SSE | 3 | 0 | 4 | 53 | 50 | 0.07 | | |
| Roche's Point... | 30.01 | 50 | S | 4 | 0 | 30.09 | + .10 | 50 | 49 | 0 | S | 2 | 0 | 4 | 51 | 49 | 0.01 | | |
| Pembroke ... | 30.13 | 44 | SSE | 5 | 0 | 30.16 | - .02 | 47 | 46 | + 3 | SSE | 3 | 0 | 3 | 47 | 43 | - | | |
| Scilly ... | 30.04 | 49 | SE | 6 | 0 | 30.09 | + .01 | 47 | 45 | + 1 | SE | 4 | 0 | 4 | 50 | 45 | - | | |
| Prawle Point ... | 30.18 | 43 | SE | 4 | 0 | 30.18 | - .05 | 46 | 45 | + 4 | SE | 3 | 0 | 3 | 47 | 40 | - | | |
| Jersey ... | 30.21 | 40 | SE | 3 | 0 | 30.19 | - .06 | 41 | 39 | + 5 | E | 2 | 0 | 2 | 44 | 36 | - | | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | | |
| Hurst Castle ... | 30.24 | 39 | E | 3 | 0 | 30.24 | - .06 | 43 | 43 | + 5 | E | 2 | 0 | 2 | 45 | 38 | 0.01 | | |
| Dungeness ... | 30.28 | 38 | SSE | 5 | 0 | 30.24 | - .11 | 39 | 38 | + 4 | SSE | 3 | 0 | 3 | 42 | 34 | - | | |
| London ... | 30.29 | 31 | SE | 1 | 0 | 30.26 | - .10 | 34 | 32 | + 5 | SE | 1 | 0 | * | 37 | 28 | - | | |
| Oxford ... | 30.28 | 29 | SE | 2 | 0 | 30.26 | - .08 | 34 | 33 | + 6 | 2 | 0 | 0 | * | 38 | 27 | - | | |
| Cambridge ... | 30.30 | 29 | 2 | 0 | 0 | 30.28 | - .09 | 35 | 34 | + 6 | SW | 1 | 0 | * | 35 | 26 | - | | |
| GERMANY. | | | | | | | | | | | | | | | | | | | |
| Yarmouth ... | 30.32 | 40 | SSE | 5 | 0 | 30.27 | - .12 | 32 | 31 | - 8 | W | 2 | 0 | 3 | 41 | 30 | - | | |
| Cuxhaven ... | 30.54 | 29 | SSE | 2 | 0 | 30.32 | - .28 | 23 | 21 | - 5 | S | 2 | 0 | * | 30 | 21 | - | | |
| Berlin ... | 30.66 | 27 | SSE | 4 | 0 | 30.49 | - .18 | 21 | 20 | - 12 | SE | 2 | 0 | * | 34 | 21 | - | | |
| Wiesbaden ... | * | * | * | * | * | 30.45 | - .11 | 22 | 21 | - 5 | E | 2 | 0 | * | 34 | 18 | - | | |
| Munich ... | 30.46 | 20 | E | 5 | 0 | 30.45 | - .07 | 14 | 14 | - 6 | SW | 3 | 0 | * | 30 | 12 | - | | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | | |
| The Helder ... | 30.37 | 32 | SE | 1 | 0 | 30.28 | - .22 | 26 | 25 | - 4 | 2 | 0 | 0 | 1 | 34 | 25 | - | | |
| Brussels ... | * | * | * | * | * | 30.34 | - .12 | 29 | 29 | + 2 | S | 1 | 0 | * | 37 | ? | - | | |
| Cape Gris Nez... | 30.26 | 31 | SE | 1 | 0 | 30.27 | - .01 | 30 | 29 | + 3 | SE | 1 | 0 | 1 | 36 | 27 | - | | |
| Paris ... | 30.32 | 29 | E | 3 | 0 | 30.30 | - .06 | 24 | 24 | + 1 | NE | 1 | 0 | * | 35 | 23 | - | | |
| Brest ... | 30.14 | 38 | SE | 4 | 0 | 30.15 | - .01 | 36 | 36 | - 10 | E | 4 | 0 | * | ? | 36 | - | | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | | |
| Lorient ... | 30.16 | 36 | E | 5 | 0 | 30.10 | - .07 | 38 | ? | + 3 | E | 5 | 0 | 4 | 39 | 34 | - | | |
| Rocheport ... | 30.17 | 42 | E | 4 | 0 | 30.11 | - .08 | 42 | 41 | + 9 | ESE | 5 | 0 | 2 | 46 | ? | - | | |
| Belfort ... | 30.39 | 29 | E | 1 | 0 | 30.38 | - .02 | 25 | 23 | - 1 | NE | 1 | 0 | * | 30 | 20 | - | | |
| Lyons ... | 30.38 | 33 | N | 1 | 0 | 30.39 | - .01 | 31 | 29 | + 5 | NW | 1 | 0 | * | 40 | ? | - | | |
| Nice ... | 30.45 | 40 | ESE | 4 | 0 | 30.53 | + .14 | 34 | 30 | - 7 | E | 8 | 0 | 4 | 45 | 32 | - | | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | | |
| Perpignan ... | 30.21 | 52 | SE | 5 | 0 | 30.26 | + .06 | 53 | 51 | + 4 | SE | 5 | 0 | * | 56 | 42 | 0.20 | | |
| Biarritz ... | 30.03 | 48 | E | 4 | 0 | 29.99 | - .13 | 44 | 41 | + 4 | ESE | 4 | 0 | 2 | 50 | 39 | - | | |
| PENINSULA. | | | | | | | | | | | | | | | | | | | |
| Corunna ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| Lisbon ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |

For Explanation of Columns, see p. 4.

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

1888.

(Explanation of Map)

Wind — Arrows show the prevalent winds. They fly with the wind and the barbs and feathers refer to force there —

\Rightarrow = forces above W_i \Rightarrow = forces 8 to W_i
 \longrightarrow = forces 8 to T_i \longrightarrow = forces 1 to 4_i
 \odot = dead culm.

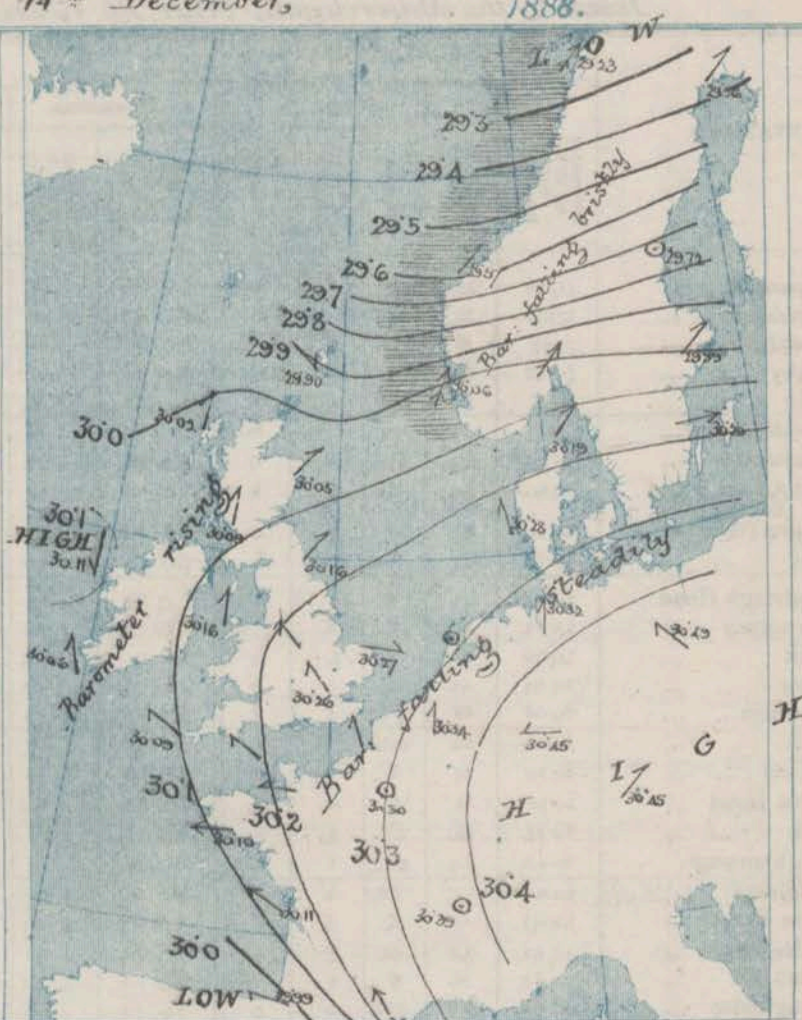
Sea Disturbance—where considerable, is shewn thus

 = Rough = High.

MEAN HEIGHT of the BAROMETER

at 6 a. m. in the month of December
During the 15 Years 1871—1886

| During the 13 Years 1871-1884. | | 1885. |
|--------------------------------|----------------|-------|
| STATIONS. | MEAN READINGS. | ins. |
| Sumburgh Head | 29 | 667 |
| Stornoway | 29 | 701 |
| Wick | 29 | 711 |
| Nairn | 29 | 739 |
| Aberdeen | 29 | 757 |
| Leith | 29 | 803 |
| Shields | 29 | 843 |
| York | 29 | 888 |
| Loughborough | 29 | 923 |
| Ardrossan | 29 | 819 |
| Donaghadee | 29 | 847 |
| Holyhead | 29 | 879 |
| Liverpool | 29 | 895 |
| Parsonstown | 29 | 909 |
| Valencia | 29 | 908 |
| Roche's Point | 29 | 915 |
| Pembroke | 29 | 918 |
| Scilly | 29 | 962 |
| Jersey | 29 | 985 |
| Hurst Castle | 29 | 959 |
| Dover | 29 | 957 |
| LONDON | 29 | 951 |
| Oxford | 29 | 954 |
| Cambridge | 29 | 938 |
| Yarmouth | 29 | 914 |



TEMPERATURE, & WEATHER at 8 A.M.,
with RAINFALL in PAST 24 HOURS.

Weather is shown by Letters of the Beaufort Scale.

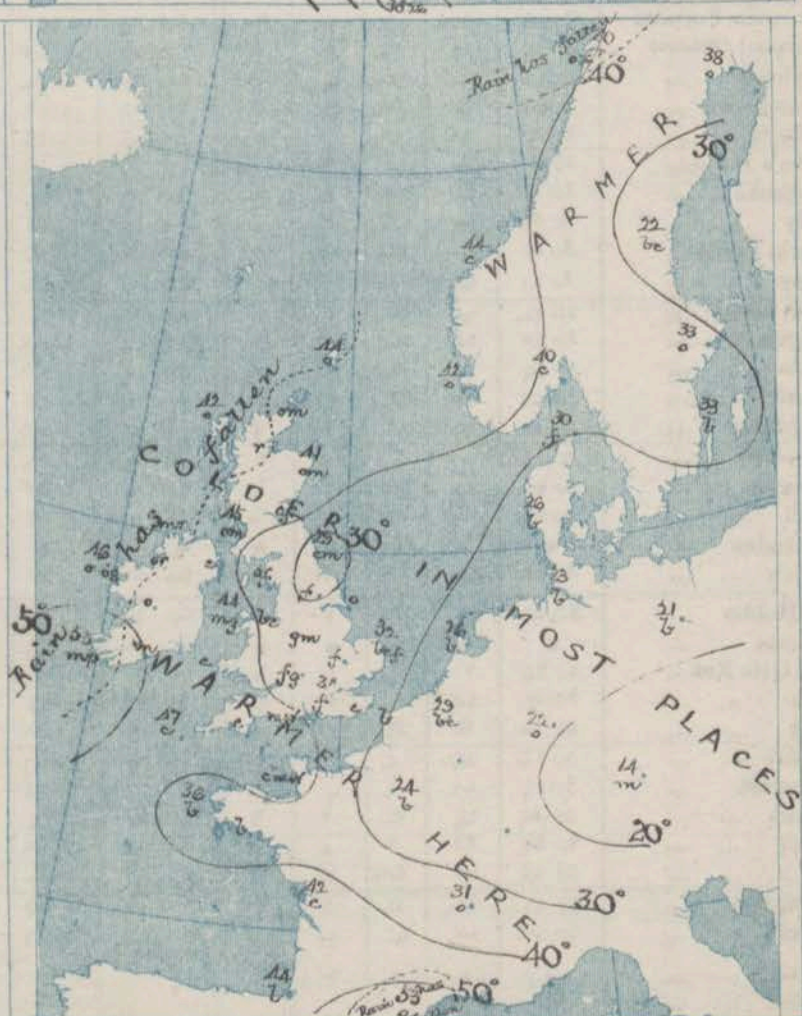
Rainfall. A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE

AND RAINFALL.
for the month of December

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|-----------|------|------------------------|
| | Daily Max. | Daily Min. | at 3 a.m. | | |
| | | | Few. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 35.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Rocha's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Sailly | 49.8 | 43.6 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 35.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE - The Temperature means are for the 46 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85



GENERAL SITUATION AT 8 A.M.

| | |
|-------------|--|
| PRESSURE | Highest, 30.4 in: and upwards, in an anticyclone lying over Germany; 30 in: and upwards, in a new high-pressure system off the coast of Ireland. Lowest, 29.3 in: and less, in a large depression lying over the north of Scandinavia. Gradients steep over Scandinavia, but moderate or slight elsewhere. Barometer falling at all but our western stations. |
| TEMPERATURE | Highest, 53° at Kalmuck and Perpignan, 50° at Rocher Point, 48° at Mullaghmore, and 47° at Donaghadee, Larne, Falmouth and Bally. Lowest, 41° at Munich, 31° at Berlin, 22° at Helsingfors and Wiesbaden, 23° at Cadix, 24° at Paris, 25° at Belfast, 26° at Leno and Hilder, and 27° at York. Sharp frost occurred over England last night; in London the thermometer on the grass fell to 18°. |
| WIND | Light or moderate from the SE. or E. over France and the south of our Islands. Light from S.W. on the east coasts of Great Britain; moderate from N. in the northwest of Ireland. Fresh to strong S.W. gales are blowing on the Norwegian coast. |
| WEATHER | Rainy at several of the Irish stations, as well as at Harin and Bodo. Foggy over Central England; fine or fair in most other localities. |
| SEA | Rough on the Norwegian coast, but moderate to smooth elsewhere. |

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the large depression in the north moves eastwards the anticyclone over Central Europe will probably continue to give way.
The new high-pressure system in the west seems likely to spread gradually eastwards over our Islands.

FORECASTS

For the 24 hours ending at NOON on 15TH DEC^R 1888.

DISTRICTS.

FORECASTS.

| | | |
|---|------------------|--|
| 0 | SCOTLAND NORTH | W. to NW. winds, moderate or fresh; drizzle, some rain. |
| 1 | SCOTLAND EAST | |
| 2 | ENGLAND N.E. | SW. to NW. winds, light; cloudy, some mist and rain, becoming milder. |
| 3 | ENGLAND EAST | |
| 4 | MIDLAND COUNTIES | SE. to Variable airs; foggy at first, then fair with sharp frost tonight, finally some rain. |
| 5 | ENGLAND SOUTH | |

DISTRICTS.

FORECASTS.

| | | |
|----|---------------|---|
| 6 | SCOTLAND WEST | S. winds, shifting to NW. or N.; drizzle and some rain to fair. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | SE. to NE. winds, moderate; changeable, some rain, colder. |
| 9 | IRELAND NORTH | N. winds, moderate; cloudy and some rain to fair. Colder. |
| 10 | IRELAND SOUTH | |

WARNINGS

The SOUTH CONE was hoisted last evening in districts 9, 10, and part of 8, but has been lowered again this morning.

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. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 30.37 | 42 | 40 | S 8 | r | 5 | Holyhead ... | 30.16 | 41 | 39 | SSE 4 | cm | 4 |
| Sumburgh Head ... | 29.99 | 44 | 42 | S 4 | c | 5 | Valencia ... | 29.88 | 53 | 50 | SE 7 | ogw | 6 |
| Stornoway ... | 29.86 | 49 | 48 | E 7 | c | 6 | Scilly ... | 30.06 | 49 | 47 | SE 6 | o | 6 |
| Aberdeen ... | 30.12 | 42 | 39 | S 5 | cgg | 5 | Jersey ... | 30.23 | 88 | 86 | SE 4 | o | 3 |
| Shields ... | 30.23 | 36 | 34 | S 3 | cm | 2 | Dungeness ... | 30.30 | 39 | 36 | SSE 4 | c | 3 |
| Ardrossan ... | 30.11 | 43 | 42 | SE 4 | o | 3 | London ... | 30.32 | 36 | 34 | SE 3 | bm | * |
| Malin Head ... | 29.93 | 47 | 45 | S 6 | bc | 5 | Yarmouth ... | 30.34 | 41 | 38 | SSE 4 | b | 4 |
| Mullaghmore ... | 29.93 | 49 | 45 | SE 6 | cq | 4 | Rochefort ... | 30.19 | 44 | 42 | E 5 | b | 2 |
| Belmullet ... | 29.83 | 50 | 49 | S 6 | bc | * | | | | | | | |

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

The reports for yesterday morning showed that pressure varied from between 30.4 in: and 30.7 in: in a large high pressure area, which covered the whole of Central and Eastern Europe and the Baltic, to less than 29.8 in: in the north of Norway, the Hebrides, and the west of Ireland. Gradients were moderate or slight on the Continent rather steep over the western and northwestern parts of our Islands. The winds which were chiefly NE³ and N³ over the Mediterranean and south of Russia, SE² over the Bay of Biscay and south of Ireland, SW² on our extreme northwestern coasts and W² over Northern Europe—blew strongly in the south of France and at our extreme western and northwestern stations, but were of little force elsewhere. The weather was fair generally, but dull in the west and northwest, and threatening in some places. Temperature was low except in the extreme west and southwest. Hard frost prevailed over Central Russia, while in the far north, the thermometer was rising. The lowest individual readings were -18° at Moscow, -7° at Kiev, -5° at Kharkov, +1° at Lemberg and Archangel, 8° at Cracow, 20° at Munich, 23° at Neufahrwasser and Paris, 26° to 28° over Eastern France, 28° at Cuxhaven and Oxford, and 29° in London. The highest were 54° at Algiers, 50° to 52° in the west and south of Ireland, 49° at Perpignan, and 48° at Lisbon and Lorient.

EXPLANATION OF 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).

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DAILY WEATHER REPORT.

for *Saturday, 15th December* 1888.
 Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|--------------------------------|---|--------------------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|----------|-------------------|-------------|----------------|---------------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 28.85 | 37 | SW | 8 | 0 | 29.21 | -15 | 24 | 22 | -14 | NNW | 6 | b | * | 39 | ? | - | |
| | Hernösand ... | 29.41 | 36 | SW | 2 | 6 | 29.60 | -13 | 29 | 25 | +7 | NW | 6 | b | * | 37 | 21 | - | |
| | Stockholm ... | 29.67 | 37 | SW | 6 | 0 | 29.72 | -27 | 38 | 29 | 0 | NNW | 4 | b | * | 41 | 28 | - | |
| | Wisby ... | 29.90 | 34 | SW | 6 | 6 | 29.76 | -44 | 39 | 38 | +6 | NNW | 6 | b | * | 41 | 28 | - | |
| | Bodö ... | 29.26 | 32 | NNW | 8 | ? | 29.48 | +25 | 25 | 22 | -15 | NW | 9 | s | 6 | ? | 21 | - | |
| | Christiansund... | 29.68 | 35 | NNW | 9 | 8 | 29.91 | +34 | 38 | 31 | -11 | NNW | 8 | c | 6 | ? | 28 | - | |
| | Skudesnaes ... | 29.97 | 43 | W | 6 | 6c | 30.15 | +09 | 35 | 33 | -7 | NNW | 2 | c | 4 | 43 | 34 | 0.20 | |
| | Christiania Fjord (Fjorder) | 29.79 | 41 | WSW | 7 | 0 | 29.95 | -13 | 38 | 32 | -2 | NNW | 3 | b | 2 | 41 | 37 | - | |
| | Skagen (The Scaw) | 29.89 | 40 | NW | 3 | 0 | 29.95 | -24 | 39 | 37 | +9 | NW | 2 | 6c | 1 | 41 | 30 | - | |
| | Fant ... | 30.12 | 39 | WSW | 4 | c | 30.17 | -11 | 39 | 38 | +13 | WSW | 3 | b | * | 41 | ? | - | |
| BRITISH ISLANDS. | Sumburgh Head | 29.99 | 43 | NNW | 3 | c | 30.15 | +25 | 36 | 35 | -8 | Z | 0 | 0 | 3 | 46 | 34 | 0.05 | |
| | Stornoway ... | 30.18 | 42 | W | 3 | 6c | 30.28 | +26 | 40 | 40 | -2 | SW | 2 | r | 3 | 45 | 37 | 0.12 | |
| | Wick ... | 30.18 | 40 | NNW | 1 | 6 | 30.24 | +25 | 40 | 39 | -2 | NW | 2 | c | 0 | 43 | 35 | 0.05 | |
| | Nairn ... | 30.18 | 40 | W | 1 | 6 | 30.29 | +28 | 41 | 39 | -4 | SW | 1 | 6c | 1 | 46 | 38 | 0.01 | |
| | Aberdeen... | 30.19 | 39 | W | 1 | 6 | 30.32 | +27 | 39 | 37 | -2 | WSW | 2 | c | 2 | 44 | 35 | 0.01 | |
| | Leith ... | 30.19 | 45 | WSW | 1 | 0 | 30.37 | +27 | 37 | 35 | -2 | W | 1 | 6m | * | 46 | 35 | 0.04 | |
| | Shields ... | 30.19 | 42 | WSW | 2 | 0 | 30.37 | +21 | 37 | 36 | +8 | WSW | 1 | 6m | 2 | 42 | 28 | - | |
| | Spurn Head ... | 30.23 | 35 | SW | 3 | f | 30.34 | +12 | 41 | 40 | +9 | NW | 1 | r | 2 | 41 | 30 | 0.02 | |
| | York ... | 30.20 | 31 | SE | 1 | f | 30.34 | +15 | 37 | 37 | +10 | Z | 0 | f | * | 37 | 26 | 0.02 | |
| | Loughborough | 30.28 | 36 | SW | 1 | f | 30.38 | +14 | 35 | 35 | +2 | E | 1 | ogdm | * | 39 | 33 | 0.05 | |
| GERMANY. | Ardrossan ... | 30.20 | 45 | NW | 3 | 6 | 30.40 | +31 | 33 | 33 | -12 | ESE | 1 | 6m | 1 | 46 | 33 | - | |
| | Malin Head ... | 30.25 | 46 | N | 3 | 6 | 30.43 | +36 | 45 | 41 | -1 | NW | 3 | b | 3 | 47 | 43 | 0.02 | |
| | Mullaghmore... | 30.28 | 47 | NNE | 4 | c | 30.46 | +39 | 38 | 37 | +10 | Z | 0 | 6 | 2 | 48 | 33 | 0.05 | |
| | Belmullet ... | 30.30 | 46 | NNE | 4 | c | 30.49 | +38 | 39 | 39 | -7 | N | 1 | 6c | * | 48 | 39 | - | |
| | Donaghadee ... | 30.24 | 48 | W | 3 | c | 30.42 | +31 | 40 | 39 | -7 | NNW | 3 | b | 1 | 48 | 37 | - | |
| | Barrow-in-Furness | 30.23 | 37 | E | 4 | 0 | 30.37 | +18 | 41 | 40 | +8 | NE | 2 | f | * | 41 | 32 | 0.04 | |
| | Liverpool (Bidston) | 30.26 | 39 | SE | 1 | 0 | 30.39 | +19 | 41 | 40 | +11 | NNW | 1 | 6f | 1 | 45 | 30 | 0.03 | |
| | Holyhead ... | 30.24 | 47 | S | 3 | om | 30.40 | +24 | 46 | 43 | +2 | N | 3 | 6c | 2 | 48 | 44 | 0.01 | |
| | Parsonstown ... | 30.23 | 49 | Z | 0 | r | 30.45 | +36 | 40 | 39 | -7 | Z | 0 | c | * | 49 | 40 | 0.07 | |
| | Valencia ... | 30.22 | 53 | SSE | 1 | 0 | 30.42 | +36 | 48 | 47 | -5 | NNE | 2 | om | 1 | 53 | 46 | 0.10 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 30.23 | 50 | SSE | 3 | 0 | 30.41 | +32 | 47 | 46 | -3 | NNE | 1 | 0 | 4 | 51 | 46 | 0.01 | |
| | Pembroke ... | 30.26 | 47 | ESE | 3 | c | 30.39 | +23 | 38 | 38 | -9 | E | 2 | f | 2 | 48 | 37 | - | |
| | Scilly ... | 30.16 | 50 | E | 4 | c | 30.32 | +23 | 47 | 45 | 0 | ESE | 4 | c | 4 | 51 | 45 | - | |
| | Prawle Point ... | 30.21 | 48 | ESE | 2 | 6 | 30.36 | +18 | 42 | 41 | -4 | NE | 2 | 0 | 2 | 38 | 40 | - | |
| | Jersey ... | 30.20 | 45 | SE | 1 | 6m | 30.32 | +13 | 44 | 42 | +3 | NNE | 1 | 6m | 1 | 50 | 40 | - | |
| | Hurst Castle ... | 30.27 | 44 | E | 2 | m | 30.37 | +13 | 32 | 32 | -11 | NE | 4 | f | 1 | 49 | 32 | 0.01 | |
| | Dungeness ... | 30.25 | 42 | ESE | 2 | 6 | 30.35 | +11 | 33 | 33 | -6 | NNE | 3 | f | 2 | 48 | 31 | 0.02 | |
| | London ... | 30.30 | 35 | Z | 0 | f | 30.40 | +14 | 30 | 30 | -4 | Z | 0 | f | * | 42 | 30 | - | |
| | Oxford ... | 30.34 | 36 | Z | 0 | f | 30.41 | +15 | 30 | 30 | -4 | Z | 0 | qf | * | 38 | 30 | - | |
| | Cambridge ... | 30.32 | 34 | Z | 0 | f | 30.39 | +11 | 32 | 31 | -3 | Z | 0 | qf | * | 36 | 28 | - | |
| PENIN- SULA. | Yarmouth ... | 30.30 | 32 | W | 1 | f | 30.34 | +07 | 33 | 33 | +1 | W | 3 | f | 3 | 34 | 30 | 0.01 | |
| | Cuxhaven ... | 30.25 | 28 | SSE | 6 | m | 30.25 | -07 | 38 | 38 | +15 | W | 2 | f | * | ? | ? | - | |
| | Berlin ... | 30.32 | 26 | SW | 1 | 6 | 30.30 | -19 | 30 | 29 | +9 | W | 3 | 0 | * | 32 | 21 | - | |
| | Wiesbaden ... | * | * | * | * | * | 30.41 | -04 | 22 | 22 | 0 | Z | 0 | r | * | 30 | 21 | - | |
| | Munich ... | 30.40 | 18 | SW | 1 | m | 30.40 | -05 | 15 | 15 | +1 | SW | 3 | f | * | 27 | 14 | - | |
| | The Helder ... | 30.29 | 38 | WSW | 3 | 0 | 30.32 | +04 | 41 | 39 | +15 | W | 1 | c | 1 | 41 | 25 | - | |
| | Brussels ... | * | * | * | * | * | 30.38 | +04 | 31 | 31 | +2 | Z | 0 | f | * | 39 | 30 | - | |
| | Cape Gris Nez... | 30.30 | 31 | SE | 1 | 6 | 30.34 | +07 | 38 | 37 | +8 | E | 3 | 6 | 1 | 41 | ? | 0.04 | |
| | Paris ... | 30.29 | 35 | E | 1 | 6 | 30.33 | +03 | 28 | 25 | +4 | NE | 1 | 6 | * | 43 | 26 | - | |
| | Brest ... | 30.17 | 43 | E | 3 | 6 | 30.26 | +11 | 39 | 36 | +3 | ESE | 1 | 6c | 4 | 50 | ? | - | |
| PENIN- SULA. | Lorient ... | 30.12 | 45 | E | 5 | 6c | 30.24 | +14 | 42 | 41 | +4 | ESE | 5 | 6 | 4 | 46 | 36 | - | |
| | Rochefort ... | 30.14 | 50 | SE | 4 | r | 30.16 | +05 | 46 | 43 | +4 | E | 5 | 0 | 2 | 55 | 41 | 0.08 | |
| | Belfort ... | 30.35 | 29 | NE | 1 | 6 | 30.33 | -05 | 26 | 23 | +1 | NE | 1 | 6 | * | 36 | 17 | - | |
| | Lyons ... | 30.37 | 39 | ESE | 1 | 6c | 30.35 | -04 | 31 | 30 | 0 | N | 1 | 6c | * | 45 | 29 | - | |
| | Nice ... | 30.48 | 40 | ESE | 6 | c | 29.81 | -72 | 46 | 38 | +12 | ESE | 8 | 0 | 5 | ? | ? | - | |
| | Perpignan ... | 30.25 | 51 | ESE | 5 | r | 30.06 | -20 | 51 | 50 | -2 | E | 9 | r | * | 55 | 48 | 1.02 | |
| | Biarritz ... | 30.00 | 47 | ESE | 5 | r | 29.98 | -01 | 42 | 41 | -2 | ESE | 4 | c | 3 | 50 | 39 | 0.04 | |
| | Corunna ... | * | * | * | * | * | 29.98 | - | 46 | 46 | - | SE | 4 | 6 | 3 | 57 | 43 | - | |
| | Lisbon ... | 29.76 | 53 | NE | 7 | c | 29.76 | +12 | 49 | 47 | -1 | NE | 8 | 0 | ? | 57 | 46 | 0.16 | |

for 8 a.m. on Saturday, 15th December, 1888.

(Explanation of Map)

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

\Rightarrow = forces above 10; \rightarrow = forces 8 to 10;
 \longrightarrow = forces 5 to 7; \rightarrow = forces 1 to 4;
 \odot = dead calm.

 = Rough = High

at 8 a. m. for the month of December
During the 15 Years 1871—1885.

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.

AND RAINFALL.
for the month of December.

A hand-drawn map of the North Atlantic region, showing weather patterns and temperature data. The map includes latitude and longitude lines, with handwritten notes such as "Bright aurora last night", "Snow has fallen", "PLACES IN MOST", and "WARMER IN". Various temperature readings are scattered across the map, including "36 H", "33 E", "39 L", "38 G", "39 G", "39 L", "38 F", "31", "22 G", "15 F", "20°", "30°", "40°", "30°", "36°", "33°", "30°", "24°", "19°", "15°", "10°", "5°", "0°", "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°".

NOTE - The Temperature means are for the 46 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.4 ins: and upwards, in three anticyclonic areas lying respectively over Ireland, Central England and Western Germany.
 Lowest, 29.3 ins: and less, over the north of Sweden, 29.8 ins: and less in Prussia.
 Gradients moderate over Scandinavia and the southern part of the Bay of Biscay, but slight elsewhere.
 Barometer rising at all but the southern French stations.

TEMPERATURE

Highest, 49° at Lintov, 46° at Valencia, 47° at Rochester and Seilly, and 46° at Holyhead and Rochfort.
 Lowest, 15° at Munich, 22° at Wiesbaden, 24° at Vapavanda, 25° at Bodo, 26° at Belfast, 28° at Paris, and 30° in London and at Bedford.
 Slight frost again occurred over England last night.

WIND

Light from the Wnd on our north and east coasts and also over the greater part of the North Sea.
 Strong to gale from the NWnd over the north of Scandinavia.
 Light or moderate from NE. in the south of our Islands and from E. in the west of France.

WEATHER

Foggy over England as well as in some parts of the Netherlands and Germany.
 Fair in most other localities, but rain falling at Tromsø and Spurn H^d and snow at Bodo.
 Slight rain fell yesterday in many parts of the United Kingdom. Bright aurora was seen at Wick at night.

SEA

Rough off the west of Norway and moderate on our southwest coast, but slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large anticyclone now existing over our Islands and the Continent seems to be fairly well established. In the north of Scotland, however, the barometric rise appears to be slackening, and, as the wind there is inclined to back it is not unlikely that another depression will shortly advance over Scandinavia from the westward.

FORECASTS

for the 24 hours ending at NOON on 16th DEC^r 1883.

DISTRICTS.

FORECASTS.

- | | | |
|---|------------------|--|
| 0 | SCOTLAND NORTH | SW nd and W nd winds, moderate or fresh; cloudy, some rain. |
| 1 | SCOTLAND EAST | W nd and NW nd winds, light; fair generally, but some mist or fog. |
| 2 | ENGLAND N.E. | |
| 3 | ENGLAND EAST | Calms and light variable airs; cold foggy. |
| 4 | MIDLAND COUNTIES | |
| 5 | ENGLAND SOUTH | |



DISTRICTS.

FORECASTS.

- | | | |
|----|---------------|--|
| 6 | SCOTLAND WEST | Same as Nos 1 and 2. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | NE nd winds, light; fair generally, but local fogs. |
| 9 | IRELAND NORTH | N nd to variable breezes; fair generally, but local fogs. |
| 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 E. or S.W., the South Cone is hoisted in preference to the North Cone.

YESTERDAY'S 2 P.M. REPORTS.

| | Bar. | Dry. | Wet. | Wind. | Wca. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wca. | Sea. |
|-------------------|-------|------|------|-------|-------|------|---------------|-------|------|------|-------|-------|------|
| Skudesnaes ... | 29.94 | 43 | 43 | WSW 6 | P 1/2 | 6 | Holyhead ... | 30.20 | 46 | 44 | SSW 3 | o g m | 2 |
| Sumburgh Head ... | 29.95 | 44 | 42 | WSW 3 | c | 4 | Valencia ... | 30.14 | 53 | 52 | SSE 3 | o g m | 3 |
| Stornoway ... | 30.11 | 45 | 44 | Z 0 | o | 3 | Scilly ... | 30.14 | 51 | 48 | ESE 4 | c | 4 |
| Aberdeen ... | 30.12 | 44 | 42 | W 1 | c | 3 | Jersey ... | 30.17 | 48 | 45 | ESE 1 | b | 1 |
| Shields ... | 30.15 | 49 | 37 | SW 2 | sw | 2 | Dungeness ... | 30.25 | 46 | 43 | SSE 3 | b | 2 |
| Ardrossan ... | 30.13 | 45 | 45 | S 3 | o | 3 | London ... | 30.27 | 42 | 41 | SE 1 | f | * |
| Malin Head ... | 30.19 | 46 | 44 | N 3 | b | 3 | Yarmouth ... | 30.26 | 34 | 33 | W 4 | b c f | 3 |
| Mullaghmore ... | 30.18 | 47 | 46 | N 4 | o | 3 | Rochefort ... | 30.13 | 55 | 51 | ESE 5 | b | 2 |
| Belmullet ... | 30.20 | 48 | 45 | NNE 4 | o | * | | | | | | | |

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

The reports for yesterday morning showed that pressure varied from between 30.3 ins: and 30.8 ins: in a large high pressure area which covered the whole of Central and South-eastern Europe to about 29.3 ins: in a large depression, the centre of which lay a little to the northward of Lapland, and was apparently moving southwards. Thus, while W and SW winds of considerable strength prevailed over Scandinavia, Lapland, and Finland, with comparatively mild weather for the position, the wind over the British Islands was SE^{1/2} and S^{1/2}, and over Central and Eastern Europe very light and variable. The weather was quiet in most places, foggy in many, while some rain had fallen at the extreme northern and northwestern stations, and a large quantity in the south of France and at Liebn, there was none reported in the vast majority of places. Frost still prevailed over Russia and central Europe and in some parts of England, but the region of severest cold lay considerably to the southward of the position it occupied on Thursday. Thus the lowest morning readings recorded were -2° F. at Kharkov, 0° at Nicolaïeff, +3° at Odessa and Lemberg, 5° at Hermanstadt, 9° at Cracow and Archangel, 12° at Breslau, 14° at Munich, 21° at Helsingfors and Berlin, 24° at Paris, 27° at York and 29° at Brussels. The highest were 57° at Algiers, 54° at Cagliari and Malta, 53° at Herpignan and Valencia, 48° at Mullaghmore, 44° at Christiansund and 40° as far north as Bodo.

There was little change over Northern Europe during the day.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Sunday 16th DEC^r

1888.

Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|----------------------------|------------------------------------|-----------------|-------|------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|------------------|----------|---------------|-------------|----------------|---------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 29.35 | 12 | NNW | 2 | b | 29.17 | — .04 | 4 | 4 | — 20 | Z | 0 | bc | * | 37 | ? | — | |
| | Hernösand ... | 29.63 | 25 | W | 4 | b | 29.38 | — .22 | 29 | 26 | — 0 | NNW | 6 | bc | * | 37 | 25 | — | |
| | Stockholm ... | 29.32 | 30 | Z | 0 | o | 29.52 | — .20 | 28 | 25 | — 5 | Z | 0 | c | * | 39 | 27 | — | |
| | Wisby ... | 29.91 | 35 | NNW | 4 | b | 29.62 | — .14 | 34 | 30 | — 5 | W | 4 | c | * | 39 | 30 | — | |
| | Bodö ... | 29.30 | 25 | NNW | 6 | s | 29.26 | — .22 | 28 | 28 | — 3 | W | 8 | s | 5 | ? | 19 | — | |
| | Christiansund... | 29.36 | 33 | SE | 4 | o | 29.86 | — .05 | 31 | 29 | — 2 | WNW | 8 | o | 6 | 34 | 28 | 0.09 | |
| | Skudesnaes ... | 29.87 | 43 | WNW | 5 | o | 30.06 | — .09 | 41 | 38 | — 6 | NNW | 6 | o | 4 | 43 | ? | 0.29 | |
| | Christiania Fjord (Farder) | 29.81 | 37 | W | 4 | c | 29.75 | — .20 | 41 | 35 | — 3 | W | 4 | b | 2 | ? | 36 | — | |
| | Skagen (The Scaw) | 29.85 | 38 | W | 5 | r | 29.78 | — .17 | 39 | 36 | — 0 | NNW | 5 | o | 2 | 41 | 32 | 0.08 | |
| | Fanö ... | 29.19 | 41 | W | 4 | c | 30.08 | — .09 | 41 | 38 | — 2 | NNW | 5 | b | * | 43 | 37 | — | |
| BRITISH ISLANDS. | Sumburgh Head | 29.97 | 44 | NNW | 5 | r | 30.01 | — .14 | 44 | 44 | — 8 | W | 5 | r | 5 | 45 | 36 | 0.18 | |
| | Stornoway ... | 30.28 | 46 | W | 5 | r | 30.23 | — .05 | 46 | 46 | — 6 | W | 6 | r | 5 | 46 | 39 | 0.18 | |
| | Wick ... | 30.16 | 46 | NNW | 3 | bc | 30.16 | — .08 | 44 | 44 | — 4 | NNW | 1 | o | 0 | 46 | 35 | 0.08 | |
| | Nairn ... | 30.27 | 45 | W | 2 | c | 30.24 | — .05 | 46 | 43 | — 5 | WSW | 2 | c | 1 | 47 | 39 | — | |
| | Aberdeen... | 30.27 | 43 | WSW | 3 | bc | 30.26 | — .06 | 40 | 38 | — 1 | SW | 1 | bc | 2 | 46 | 39 | — | |
| | Leith ... | 30.39 | 40 | W | 1 | b | 30.35 | — .02 | 44 | 42 | — 7 | W | 4 | bc | * | 44 | 35 | — | |
| | Shields ... | 30.39 | 35 | WSW | 4 | bc | 30.38 | — .01 | 40 | 38 | — 3 | SW | 2 | bc | 2 | 42 | 34 | — | |
| | Spurn Head ... | 30.29 | 41 | WNW | 2 | nr | 30.40 | — .06 | 38 | 36 | — 3 | W | 3 | bc | 3 | 44 | 35 | — | |
| | York ... | 30.38 | 34 | N | 1 | f | 30.44 | — .10 | 27 | 27 | — 10 | N | 1 | f | * | 41 | 26 | — | |
| | Loughborough | 30.44 | 40 | Z | 0 | f | 30.47 | — .09 | 28 | 27 | — 7 | Z | 0 | f | * | 41 | 28 | 0.02 | |
| GERMANY. | Ardrossan ... | 30.42 | 45 | WSW | 3 | b | 30.41 | — .01 | 46 | 45 | — 13 | W | 3 | o | 2 | 46 | 33 | — | |
| | Malin Head ... | 30.47 | 46 | NW | 4 | o | 30.45 | — .02 | 45 | 42 | — 0 | WNW | 4 | o | 3 | 46 | 44 | 0.02 | |
| | Mullaghmore ... | 30.53 | 46 | NNW | 2 | om | 30.51 | — .05 | 45 | 42 | — 7 | W | 4 | o | 2 | 48 | 37 | — | |
| | Belmullet ... | 30.86 | 45 | N | 2 | o | 30.52 | — .03 | 45 | 42 | — 6 | SW | 2 | o | * | 48 | 39 | — | |
| | Donaghadee ... | 30.49 | 42 | W | 3 | c | 30.51 | — .09 | 37 | 36 | — 3 | WNW | 2 | bc | 1 | 45 | 35 | — | |
| | Barrow-in-Furness | 30.44 | 38 | N | 3 | b | 30.46 | — .09 | 44 | 43 | — 3 | NW | 1 | om | * | 44 | 37 | — | |
| | Liverpool (Bidston) | 30.46 | 40 | NW | 1 | bc | 30.48 | — .09 | 44 | 42 | — 3 | NW | 1 | o | 2 | 45 | 39 | — | |
| | Holyhead ... | 30.47 | 46 | NNE | 2 | bc | 30.50 | — .10 | 46 | 43 | — 0 | NNW | 1 | o | 1 | 47 | 45 | — | |
| | Parsonstown ... | 30.55 | 35 | Z | 0 | b | 30.56 | — .11 | 26 | ? | — 14 | Z | 0 | c | * | ? | 26 | — | |
| | Valencia ... | 30.53 | 44 | NNE | 2 | b | 30.57 | — .15 | 35 | 34 | — 13 | Z | 0 | b | 1 | 50 | 32 | — | |
| FRANCE & NETHERLANDS. | Roche's Point... | 30.50 | 44 | NNE | 1 | bc | 30.63 | — .12 | 35 | 34 | — 12 | NNE | 2 | b | 3 | 48 | 34 | 0.01 | |
| | Pembroke ... | 30.46 | 42 | NNE | 2 | b | 30.52 | — .13 | 40 | 39 | — 2 | NE | 1 | b | 0 | 46 | 37 | — | |
| | Scilly ... | 30.39 | 48 | ENE | 4 | bc | 30.47 | — .15 | 48 | 45 | — 1 | ENE | 2 | o | 3 | 48 | 45 | — | |
| | Prawle Point ... | 30.43 | 43 | NE | 2 | c | 30.49 | — .13 | 39 | 38 | — 3 | NE | 2 | c | 2 | 47 | 36 | — | |
| | Jersey ... | 30.37 | 47 | ENE | 3 | b | 30.47 | — .15 | 44 | 43 | — 0 | ENE | 3 | bc | 3 | 49 | 43 | — | |
| | Hurst Castle ... | 30.42 | 40 | NE | 4 | m | 30.49 | — .12 | 38 | 38 | — 6 | NE | 2 | m | 1 | 43 | 32 | 0.01 | |
| | Dungones ... | 30.38 | 42 | NNE | 3 | o | 30.46 | — .11 | 39 | 39 | — 6 | NE | 2 | o | 2 | 42 | 31 | — | |
| | London ... | 30.42 | 34 | Z | 0 | o | 30.49 | — .09 | 36 | 36 | — 6 | NW | 1 | of | * | 39 | 30 | 0.01 | |
| | Oxford ... | 30.45 | 39 | Z | 0 | f | 30.51 | — .10 | 35 | 35 | — 5 | NNW | 1 | ogf | * | 40 | 30 | — | |
| | Cambridge ... | 30.43 | 37 | Z | 0 | f | 30.48 | — .09 | 34 | 34 | — 2 | SW | 1 | f | * | 39 | 30 | — | |
| PENIN-SULA. | Yarmouth ... | 30.38 | 37 | WNW | 2 | f | 30.42 | — .08 | 31 | 30 | — 2 | WNW | 2 | f | 3 | 39 | 29 | 0.01 | |
| | Cuxhaven ... | 30.21 | 40 | W | 3 | f | 30.46 | — .09 | 41 | 40 | — 3 | NW | 4 | bc | * | 41 | 38 | 0.02 | |
| | Berlin ... | 30.27 | 35 | W | 2 | r | 30.03 | — .22 | 37 | 36 | — 7 | WNW | 5 | r | * | 37 | 34 | 0.08 | |
| | Wiesbaden ... | * | * | * | * | * | 30.40 | — .01 | 29 | 28 | — 7 | E | 1 | o | * | 30 | 22 | — | |
| | Munich ... | 30.35 | 27 | Z | 0 | m | 30.36 | — .04 | 16 | 16 | — 1 | NNW | 2 | c | * | 25 | 14 | — | |
| | The Helder ... | 30.36 | 41 | NNW | 1 | b | 30.36 | — .04 | 44 | 43 | — 3 | NNW | 3 | c | 2 | 45 | 39 | — | |
| | Brussels ... | * | * | * | * | * | 30.44 | — .06 | 36 | 36 | — 5 | NNW | 3 | f | * | 39 | 31 | — | |
| | Cape Gris Nez... | 30.40 | 41 | E | 3 | o | 30.46 | — .12 | 41 | 40 | — 3 | NE | 4 | o | 2 | 43 | 36 | — | |
| | Paris ... | 30.34 | 34 | NNE | 0 | b | 30.43 | — .10 | 32 | 30 | — 4 | NE | 3 | b | * | 41 | 28 | — | |
| | Brest ... | 30.34 | 44 | ENE | 1 | b | 30.43 | — .17 | 43 | 43 | — 4 | ENE | 5 | b | 4 | 50 | 36 | — | |

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on

Sunday, 16th December

BAROMETER, WIND & 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.

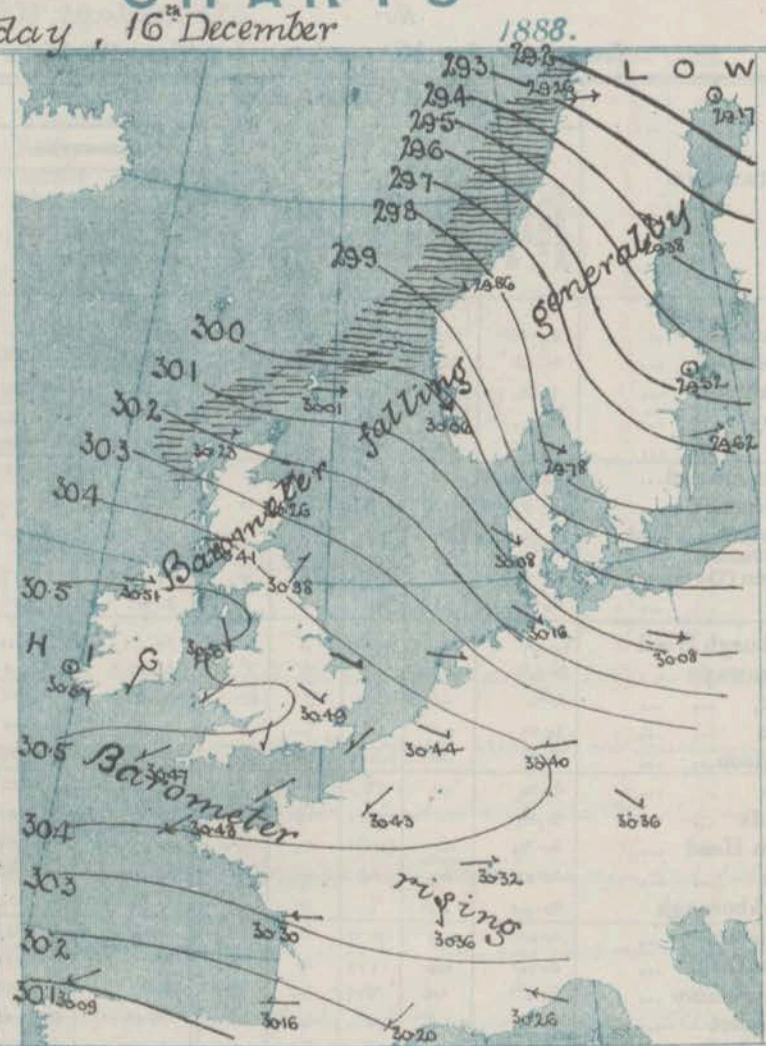
Sea Disturbance — where considerable, is shown thus.

— Rough. — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871—1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

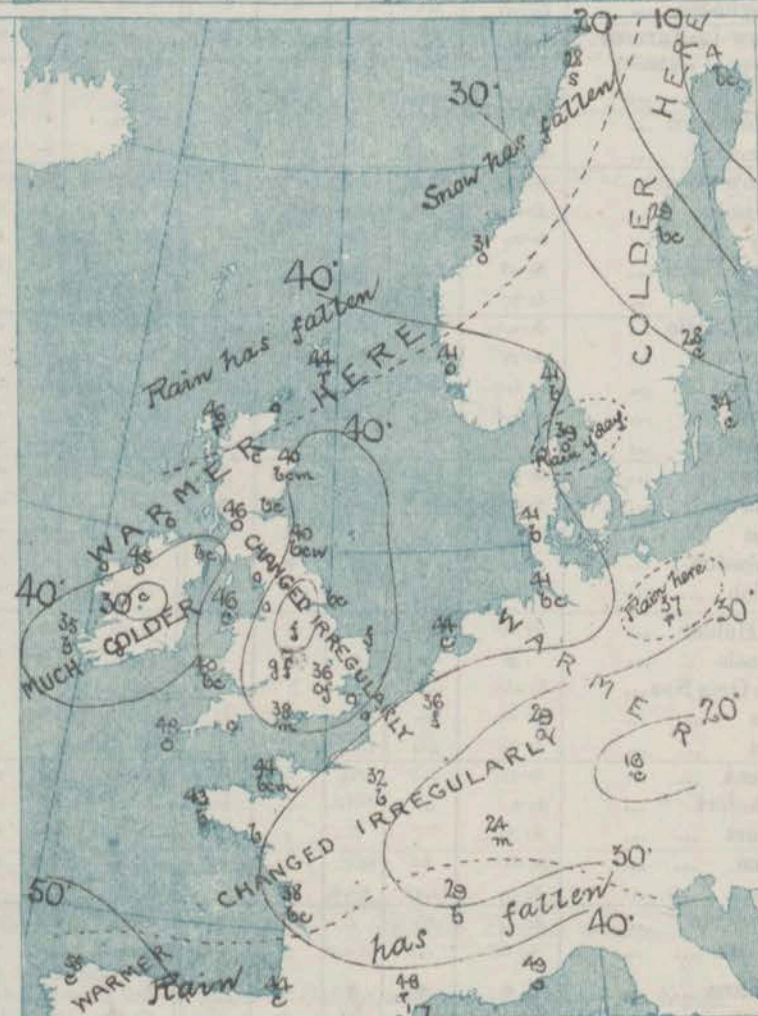
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE. AND RAINFALL.

for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches). |
|---------------|---------------|---------------|-----------|-----------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | at 8 a.m. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 35.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 6.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

Note — The Temperature means are for the 15 years 1871—85. the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.5 in. and upwards, over Ireland, and South Wales.
 Lowest, 29.2 in. and less, in the north of Scandinavia; 29.3 in. and less, over the south of Spain.
 Gradients, rather steep over Scandinavia, but moderate to smooth elsewhere.
 Barometer falling in Sweden, Denmark, and the extreme northwest of our Islands, but rising elsewhere.

TEMPERATURE

Highest, 55° at Lissima, 50° at Lissim, 48° at Liss, 48° at Bally and Rapsman, and 46° at Stornoway, Minn, and Ardaraan.
 Lowest, 4° at Haparanda, 16° at Kemich, 24° at Delfort, 26° at Lissim, 27° at York, and 28° at Rode, Stockholm and Loughborough.
 Frost occurred last night in most places.

WIND

W. over Scandinavia, the North Sea and the north and east of our Islands, moderate or fresh in force generally, but strong to a gale in the east of Norway.
 Light from NE. on the south coast of Ireland and England.
 Strong from E. or NE. over Spain and the Bay of Biscay.

WEATHER

Drill in the north and northwest of our Islands and the west of Norway, with snow at Rode and rain in the Shetlands and Hebrides.
 Foggy over Eastern and Central England, as well as at Brussels. Fine in most other localities.
 Rain fell yesterday in the extreme north.

SEA

Rather rough in the extreme north, but slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone noticed over Ireland yesterday has continued to spread eastwards, while fresh depressions have appeared over the north of Scandinavia and to the northward of our Islands. The changes in pressure are not very extensive.

FORECASTS

for the 24 hours ending at NOON on 17th DEC^r 1888.

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.

The NORTH CONE was hoisted yesterday afternoon in district 0 and part of 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. | Dry. | Wet. | Wind. | Woa. | Sea. | | Bar. | Dry. | Wet. | Wind. | Woa. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudeaanæs ... | 30.11 | 39 | 35 | WNW | 2 | 0 | Holyhead ... | 30.44 | 45 | 47 | NNE | 2 | bc |
| Sumburgh Head ... | 29.99 | 45 | 43 | WNW | 4 | r | Valencia ... | 30.47 | 48 | 46 | ENE | 3 | cm |
| Stornoway ... | 30.29 | 45 | 45 | W | 2 | 0 | Scilly ... | 30.37 | 48 | 46 | ENE | 2 | 0 |
| Aberdeen ... | 30.38 | 44 | 39 | WSW | 2 | bc | Jersey ... | 30.32 | 49 | 46 | NE | 3 | 7 |
| Shields ... | 30.38 | 41 | 39 | WSW | 2 | 7 | Dungeness ... | 30.36 | 39 | 38 | NNE | 3 | f |
| Ardrossan ... | 30.41 | 44 | 43 | ? | 2 | 7 | London ... | 30.41 | 36 | 36 | L | 0 | fg |
| Malin Head ... | 30.45 | 46 | 43 | NW | 3 | 7 | Yarmouth ... | 30.35 | 39 | 38 | WNW | 3 | 7 |
| Mullaghmore ... | 30.50 | 44 | 44 | WSW | 2 | com | Rochefort ... | 30.21 | 45 | 46 | ENE | 5 | 7 |
| Belmullet ... | 30.52 | 48 | 46 | SW | 1 | bc | | | | | | | |

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

The reports for yesterday morning showed that while the highest pressures, 30.5 in. and upwards, were lying over South Austria, the Adriatic and Southern Europe a long and broad anticyclonic band extended from the Black Sea, Asia Minor and the Eastern part of the Mediterranean across Central Europe to the west of our Islands. The lowest reading, 28.7 in. and less, were reported in a deep depression, the centre of which lay over the White Sea, but a shallow disturbance with readings below 29.8 in. was lying over the southern parts of the Iberian Peninsula. Strong winds or gales from the NW^{wd} were reported over the north of Scandinavia, and moderate or fresh W^{ly} breezes over Finland and Northern Russia. Over Central Europe, however, the wind was light and variable, while in Spain, France and the south of our Islands it was E^{ly} or NE^{ly}. In the south of France a strong E^{ly} gale was blowing. Rain was falling in the south of France and snow at Pado and St. Petersburg, but elsewhere the weather was mostly fair; over England, Germany and the Netherlands, however, fog was very prevalent. Temperature had fallen several degrees in Norway and the west and north of our Islands, but changed irregularly elsewhere; readings ranged from 55° and upwards at some of the Mediterranean stations to several degrees below the freezing point over Austria, the southern parts of Germany and Russia and the north of Scandinavia. The highest individual readings were 59° at Algiers and Biskra, 58° at Cagliari, 57° at Sangüinaria, 55° at San Fernando, 51° at Perpignan, 50° at Croisette, and 49° at Liebrn; the lowest were 5° at Humantadt, 9° at Cracow and Kuda Kethi, 11° at Kiev, 14° at Vienna, 15° at Munich and Odessa, 16° at Prague and Nicolaieff, 19° at Lemberg and Warsaw and 20° at Carlsruhe.

Later in the day a new depression appeared to the northward of our Islands, and some increase of cloud took place on our extreme northern coast, with rain in the Shetlands and Hebrides. Elsewhere no decided change was reported.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Monday, 17th December 1888.*
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|-----------------------------|------------------------------------|-----------------|-------------------|------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------------|-------------|------|----------------|---------------------|--|
| | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Sea. (0 to 9.) | SHADE TEMP. | | | | |
| | | | | Force. (0 to 12.) | Dir. | | 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. | Max. | Min. | Amount of Rainfall. | |
| SCANDINAVIA. | Haparanda .. | 29.50 | 1 | Z | 0 | b | 29.63 | + .16 | -8 | -8 | - 12 | Z | 0 | b | * | 19 | ? | - | |
| | Hernösand ... | 29.68 | 27 | Z | 2 | o | 29.75 | + .07 | 15 | 15 | - 14 | Z | 0 | o | * | 30 | ? | - | |
| | Stockholm ... | 29.83 | 23 | W | 4 | b | 29.77 | + .06 | 23 | 21 | - 5 | Z | 0 | c | * | 32 | 23 | - | |
| | Wisby ... | 29.86 | 32 | N | 6 | b | 29.76 | + .10 | 30 | 29 | - 4 | S | 4 | o | * | 37 | 30 | - | |
| | Bodö ... | 29.54 | 26 | E | 2 | o | 29.81 | + .05 | 26 | 26 | - 2 | ENE | 4 | o | 2 | 28 | 21 | - | |
| | Christiansund... | 29.62 | 33 | SE | 4 | s | 29.37 | - .25 | 45 | 45 | + 14 | WSW | 9 | r | 6 | 45 | 30 | 0.91 | |
| | Skudesnaes ... | 29.87 | 44 | WSW | 4 | r | 29.18 | - .69 | 45 | 44 | + 4 | WSW | 6 | r | 4 | ? | 37 | 1.34 | |
| | Christiania Fjord (Fjorder) | 29.46 | 40 | WSW | 2 | o | 29.62 | - .16 | 40 | 37 | - 1 | Z | 0 | o | 2 | 44 | 39 | - | |
| | Skagen (The Scaw) | 29.78 | 42 | W | 4 | o | ? | ? | 43 | 42 | + 4 | W | 6 | o | 3 | 43 | 32 | 0.04 | |
| | Fanö ... | 30.08 | 42 | WSW | 4 | o | 29.99 | - .09 | 43 | 42 | + 2 | W | 6 | c | * | 43 | 41 | - | |
| BRITISH ISLANDS. | Sumburgh Head | 29.84 | 46 | W | 4 | o | 29.78 | - .06 | 45 | 47 | + 4 | W | 5 | o | 5 | 49 | 44 | 0.08 | |
| | Stornoway .. | 30.05 | 45 | W | 6 | o | 29.96 | - .09 | 48 | 48 | + 2 | W | 6 | o | 5 | 48 | 45 | 0.03 | |
| | Wick ... | 29.99 | 46 | W | 3 | c | 29.93 | - .06 | 46 | 44 | + 2 | W | 4 | c | 1 | 47 | 38 | - | |
| | Nairn ... | 30.09 | 48 | W | 3 | bc | 30.01 | - .08 | 47 | 45 | + 1 | W | 4 | bc | 2 | 48 | 40 | - | |
| | Aberdeen... | 30.12 | 45 | W | 1 | o | 30.05 | - .07 | 47 | 44 | + 7 | WSW | 2 | bc | 2 | 49 | 38 | - | |
| | Leith ... | 30.20 | 44 | W | 4 | o | 30.20 | - .00 | 44 | 42 | - 2 | W | 3 | c | * | 46 | 41 | - | |
| | Shields ... | 30.26 | 43 | SW | 3 | b | 30.20 | - .06 | 39 | 37 | - 1 | SW | 5 | b | 2 | 45 | 38 | - | |
| | Spurn Head ... | 30.33 | 41 | WSW | 3 | b | 30.25 | - .08 | 39 | 38 | + 1 | WSW | 3 | b | 3 | 43 | 36 | - | |
| | York ... | 30.33 | 40 | W | 1 | b | 30.25 | - .08 | 38 | 37 | + 11 | SW | 1 | b | * | 44 | 26 | - | |
| | Loughborough | 30.40 | 42 | WSW | 2 | o | 30.35 | - .05 | 35 | 34 | + 7 | WSW | 1 | b | * | 42 | 27 | - | |
| GERMANY. | Ardrossan ... | 30.31 | 45 | W | 3 | bc | 30.26 | - .05 | 45 | 45 | - 1 | SW | 4 | o | 3 | 46 | 43 | - | |
| | Malin Head ... | 30.32 | 45 | WSW | 4 | c | 30.22 | - .10 | 42 | 42 | - 3 | SSW | 4 | om | 4 | 45 | 42 | - | |
| | Mullaghmore ... | 30.39 | 39 | SW | 4 | b | 30.28 | - .11 | 43 | 41 | - 2 | SSW | 3 | o | 3 | 45 | 38 | - | |
| | Belmullet ... | 30.39 | 47 | W | 4 | o | 30.26 | - .13 | 48 | 47 | + 3 | W | 4 | o | * | 49 | 44 | - | |
| | Donaghadee ... | 30.39 | 37 | SW | 2 | b | 30.33 | - .06 | 37 | 36 | - 1 | SW | 3 | bc | 1 | 42 | 37 | - | |
| | Barrow-in-Furness | 30.38 | 42 | SW | 3 | o | 30.33 | - .05 | 43 | 41 | - 1 | SW | 3 | o | * | 45 | 41 | - | |
| | Liverpool (Bidston) | 30.43 | 42 | WSW | 3 | o | 30.38 | - .05 | 39 | 37 | - 5 | WSW | 1 | o | 2 | 46 | 38 | - | |
| | Holyhead ... | 30.45 | 42 | W | 1 | o | 30.36 | - .09 | 43 | 41 | - 3 | WSW | 3 | c | 2 | 46 | 39 | - | |
| | Parsonstown ... | 30.45 | 32 | Z | 0 | b | 30.35 | - .10 | 28 | 27 | + 2 | Z | 0 | bc | * | ? | 25 | - | |
| | Valencia ... | 30.47 | 42 | SE | 1 | b | 30.32 | - .15 | 46 | 43 | + 11 | SE | 3 | om | 3 | 48 | 34 | - | |
| FRANCE & NETHERLANDS. | Roche's Point... | 30.46 | 43 | N | 1 | em | 30.34 | - .12 | 45 | 43 | + 10 | S | 1 | o | 3 | 48 | 35 | - | |
| | Pembroke ... | 30.47 | 43 | NE | 1 | b | 30.38 | - .09 | 44 | 39 | + 1 | SE | 1 | c | 0 | 45 | 39 | - | |
| | Scilly ... | 30.41 | 45 | E | 3 | o | 30.31 | - .10 | 48 | 45 | - 3 | E | 3 | o | 2 | 48 | 44 | - | |
| | Prawle Point ... | 30.47 | 38 | NE | 3 | c | 30.38 | - .09 | 42 | 41 | + 3 | NE | 2 | o | 2 | 43 | 36 | - | |
| | Jersey ... | 30.45 | 44 | E | 2 | c | 30.38 | - .07 | 37 | 36 | - 7 | E | 3 | om | 3 | 48 | 36 | - | |
| | Hurst Castle ... | 30.47 | 36 | NE | 2 | b | 30.41 | - .06 | 35 | 35 | - 3 | NE | 1 | m | 1 | 40 | 35 | 0.01 | |
| | Dungeness ... | 30.44 | 38 | N | 1 | m | 30.38 | - .06 | 30 | 30 | - 9 | NE | 3 | f | 2 | 34 | 28 | - | |
| | London ... | 30.45 | 35 | W | 1 | of | 30.39 | - .06 | 34 | 34 | - 2 | W | 1 | ogt | * | 37 | 34 | - | |
| | Oxford ... | 30.47 | 31 | W | 2 | bc | 30.40 | - .07 | 31 | 31 | - 4 | W | 1 | b | * | 36 | 31 | - | |
| | Cambridge ... | 30.44 | 38 | Z | 0 | o | 30.35 | - .09 | 32 | 32 | - 2 | Z | 0 | b | * | 38 | 30 | - | |
| PORTUGAL. | Yarmouth ... | 30.39 | 33 | W | 3 | f | 30.30 | - .09 | 33 | 33 | + 2 | W | 4 | bc | 3 | 34 | 24 | 0.02 | |
| | Cuxhaven ... | 30.20 | 40 | W | 4 | o | 30.13 | - .07 | 41 | 40 | - 1 | W | 4 | o | * | 42 | 40 | - | |
| | Berlin ... | 30.17 | 40 | W | 4 | o | 30.10 | - .07 | 39 | 37 | + 2 | W | 5 | o | * | 41 | 37 | 0.04 | |
| | Wiesbaden ... | * | * | * | * | * | 30.41 | + .01 | 33 | 32 | + 4 | NE | 2 | o | * | 41 | 28 | - | |
| | Munich ... | 30.41 | 30 | W | 1 | o | 30.36 | - .05 | 24 | 24 | + 8 | SW | 1 | m | * | 32 | 16 | - | |
| | The Helder ... | 30.33 | 42 | WSW | 4 | c | 30.25 | - .08 | 43 | 42 | - 1 | W | 4 | c | 3 | 45 | 41 | - | |
| | Brussels ... | * | * | * | * | * | 30.40 | - .04 | 36 | 35 | - 1 | WSW | 3 | f | 3 | 37 | 34 | - | |
| | Cape Gris Nez... | 30.41 | 40 | WSW | 1 | c | 30.37 | - .04 | 41 | 41 | - 1 | W | 4 | o | 3 | 43 | ? | - | |
| | Paris ... | 30.46 | 32 | NE | 1 | b | 30.41 | - .05 | 28 | 28 | - 4 | NE | 3 | o | * | 33 | 28 | - | |
| | Brest ... | 30.42 | 44 | E | 4 | b | 30.35 | - .07 | 35 | 34 | - 8 | NE | 1 | b | 2 | 32 | 34 | - | |

WEATHER CHARTS

for 8 a.m. on Monday, 17th December, 1888.

BAROMETER, WIND & SEA.

(Explanation of Map)

Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words. Arrows show the prevalent winds. They fly with the wind and the barbs and feathers refer to force, thus —

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

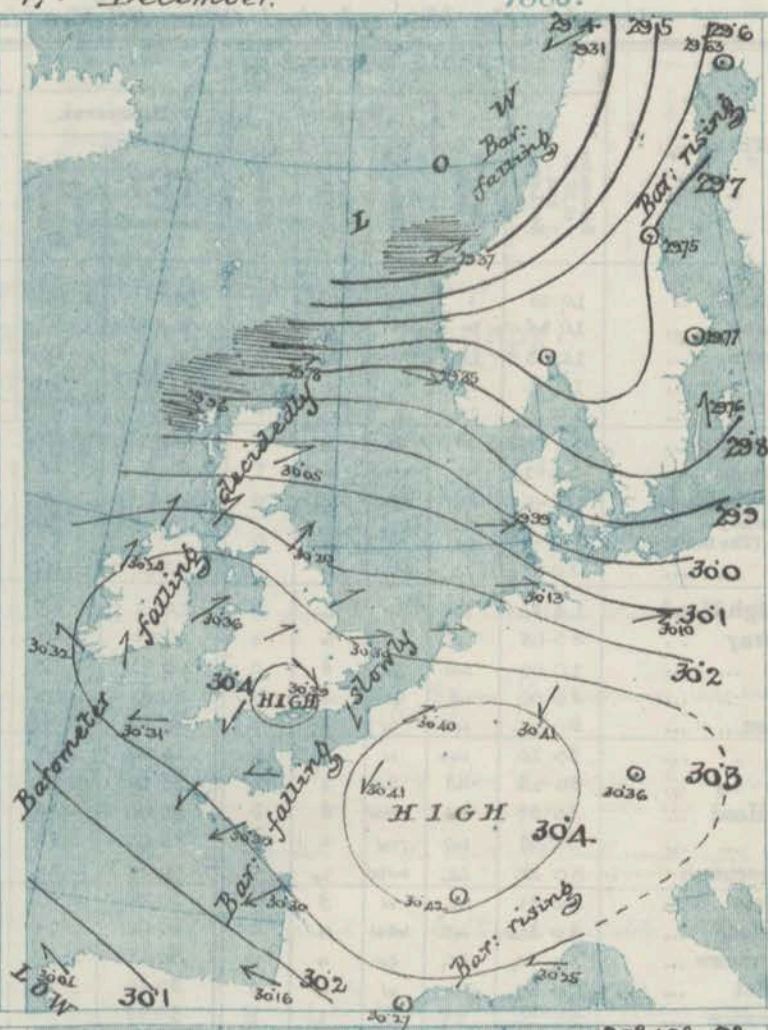
Sea Disturbance — where considerable, is shown thus.

— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 15 Years 1871 — 1885.

| STATION. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.963 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

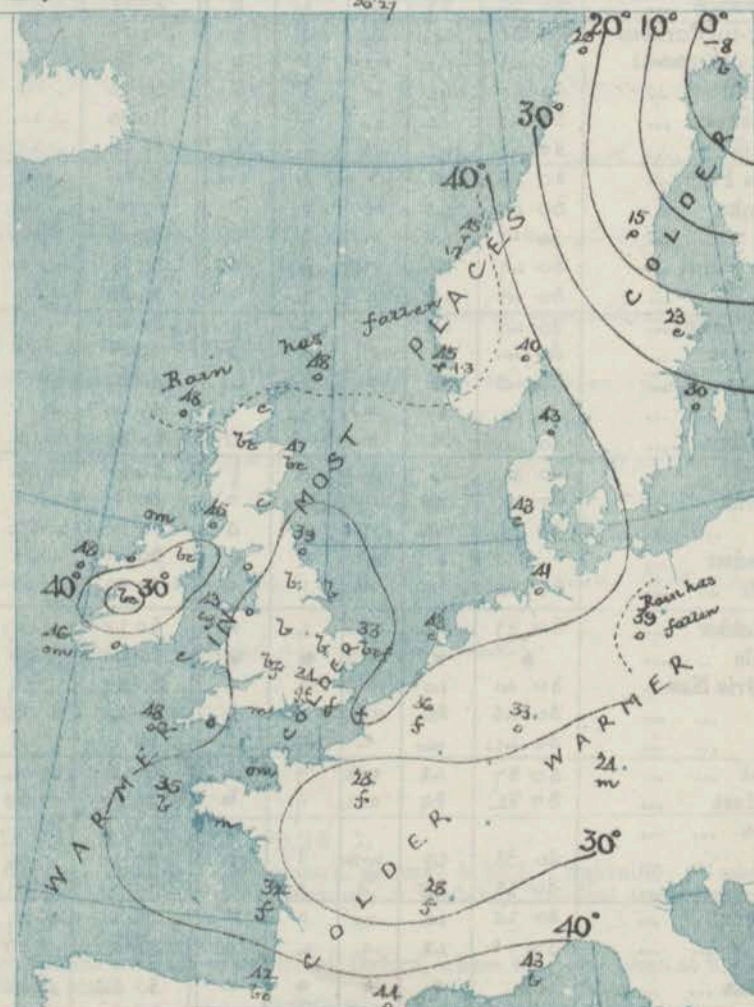
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|----------------|---------------|---------------|-----------|-----------------------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | at 8 a.m. Type Wet | |
| Sumburgh Head. | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.80 |
| Wick | 42.1 | 32.6 | 38.0 | 35.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 3.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.8 | 37.5 | 2.95 |

Note — The Temperature means are for the 15 years 1871 — 85, the Rainfall means are mainly those for the 20 years 1866 — 85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.30 ins. to 30.42 ins. in an anticyclone lying over Ireland, England and France.
Lowest, 29.3 ins. and less, in a depression lying off the north-west coast of Norway.
Gradient rather steep in the north and east; slight in the west and south.
Barometer falling fast in north and west, slightly in the south-east and south.

TEMPERATURE

Highest, 52° at Lisbon, 48° at Sicily, Bismarck, Stornoway and Sumburgh Head, 47° at Aberdeen, 46° at Valencia, and 43° to 44° in the south of France.
Lowest, 7° F. at Haparanda, +15° at Helsingfors, 28° at Paris and Hannover, 30° at Quimper, and 34° in London.

It is rising decidedly in the east of Ireland and north of England, and the change is spreading southwards.

WIND

Light NE in the Channel — Strong E over the Bay of Biscay.
Becoming S (light to moderate) over Ireland. SW light over England.
W moderate to strong in Scotland, and showing a gale in the west of Norway.

WEATHER

Foggy and dull in the south and south-east, fine and bright over our midland and north-eastern counties.
Overcast in the extreme west and north, raining at Christiansund.
Heavy rain has fallen in the west of Norway, and a small quantity at some of our extreme northern and eastern stations.

SEA

Rough in the far north, moderate in the north, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the barometer is falling rather quickly at Valencia and Stornoway, it is probable that rough unsettled weather is approaching our northern coast from the Atlantic; it may probably extend to our eastern and southern stations later.

FORECASTS

for the 24 hours ending at NOON on 18th DEC^r 1888.

DISTRICTS.

FORECASTS.

| | | |
|---|------------------|--|
| 0 | SCOTLAND NORTH | W ² and SW ² winds, mild, unsettled. |
| 1 | SCOTLAND EAST | |
| 2 | ENGLAND N.E. | W ² and SW ² winds, moderate; fair at first and mild, uncertain later. |
| 3 | ENGLAND EAST | |
| 4 | MIDLAND COUNTIES | Calms followed by SW ² breezes, with milder and finer weather. |
| 5 | ENGLAND SOUTH | |

DISTRICTS.

FORECASTS.

| | | |
|----|---------------|--|
| 6 | SCOTLAND WEST | Same as N ^o 0 and 1. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | Wind veering to S. or SW; fine to unsettled, milder. |
| 9 | IRELAND NORTH | SW ² and S ² winds, force uncertain at present, mild, dull, showery. |
| 10 | IRELAND SOUTH | |

WARNINGS

The NORTH CONE is still up in district 0 and part of 1.

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 (A) 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. | Dry. | Wet. | Wind. | Wca. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wca. | Sea. |
|--------------------|-------|------|------|--------|------|------|---------------|-------|------|------|----------|------|------|
| Skidowna ... | 30.97 | 47 | 36 | Se 2 | P | 3 | Holyhead ... | 30.46 | 45 | 45 | W 1 | 0 | 1 |
| Stumburgh Head ... | | | | | | | Valencia ... | | | | | | |
| Stornoway ... | 30.11 | 48 | 46 | W 6 | 0 | 5 | Scilly ... | | | | | | |
| Aberdeen ... | | | | | | | Jersey ... | 30.45 | 48 | 45 | N.E. 3 | 60 | 3 |
| Shields ... | | | | | | | Dungeness ... | 30.43 | 38 | 37 | N.E. 1 | m | 1 |
| Ardrossan ... | | | | | | | London ... | | | | | | |
| Malin Head ... | 30.35 | 45 | 43 | N.W. 4 | 0 | 4 | Yarmouth ... | | | | | | |
| Mullaghmore ... | | | | | | | Rocheport ... | 30.32 | 45 | 41 | E.N.E. 7 | 6 | 1 |
| Belmullet ... | 30.41 | 46 | 44 | N.W. 4 | 0 | * | | | | | | | |

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

The Continental Information has not been received.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD. FROM THE 9th TO THE 15th DECEMBER 1888.

The weather of the past week has been generally cold and inclement over England, with light anticyclonic breezes and thick local fogs. In Ireland and Scotland conditions have been somewhat more genial, but the sky has been usually cloudy, with occasional rain.

During the first three days of the period a large and well developed anticyclone passed from west to east across Ireland and England to the Continent. On Monday, the 10th, when the central portion of the system lay directly over Great Britain, light breezes were reported generally, with thick fogs over the inland districts, but on the following day when a depression moved northwards along the Irish and Scotch coasts, strong S.W. winds and rain were experienced in the western and northern parts of the Kingdom.

On the 12th and 13th the highest pressures were reported over the Netherlands and Germany while depressions continued to move northwards outside our Atlantic coasts. S.W. or S.E. winds now became general; in the east and south they were moderate in force, with cold, anticyclonic weather, but in the west very strong breezes were reported, with cloudy weather and rain at times.

On the 14th a large depression moved eastwards across the north of Scandinavia and the Continental anticyclone receded southwards, but a new high pressure system now appeared off the west of Ireland and in the course of the ensuing 48 hours this spread eastwards across the United Kingdom. The strong S.E. winds in the west consequently gave place to moderate breezes from the northward, and cold, foggy weather again set in over nearly all parts of the Kingdom.

Temperature has been below the average over England, and sharp frosts have been experienced at the central and eastern stations. On the 10th the thermometer over our Midland Counties remained below 32°, all day. In Ireland and Scotland the readings of the thermometer have not differed materially from the normal.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Tuesday, 18th December 1888.*
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | + YESTERDAY EVENING. | | | | | 9 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|--------------|------------------------------------|-----------------|--------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|--------|-------------------|----------|----------------|-------------|----------------|---------------------|------|
| | Barometer at 28° P. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 2.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | Dirac. | Force. (0 to 12.) | | Reading at 28° P. 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 .. | 29.19 | 19 | S | 6 | S | 29.13 | - .50 | 14 | 11 | + .22 | N | 2 | bc | * | 19 | - 11 | 0.89 |
| | Hernösand ... | 29.36 | 30 | SW | 4 | 0 | 29.46 | - .29 | 33 | 32 | + .18 | SW | 2 | b | * | ? | ? | ? |
| | Stockholm ... | 29.59 | 34 | S | 2 | 0 | 29.58 | - .19 | 37 | 35 | + .14 | WSW | 2 | bc | * | ? | 21 | 0.04 |
| | Wisby ... | 29.72 | 36 | SW | 4 | 0 | 29.71 | - .05 | 39 | 38 | + .9 | WSW | 4 | b | * | ? | ? | - |
| | Bodö ... | 28.98 | 39 | WSW | 8 | 0 | 29.19 | - .12 | 39 | 36 | + .13 | WSW | 7 | c | * | ? | ? | 0.28 |
| | Christiansund... | 29.48 | 45 | WSW | 9 | r | 29.48 | + .11 | 46 | 45 | + .1 | WSW | 9 | r | 7 | 46 | 39 | 1.38 |
| | Skudesnaes ... | 29.97 | 45 | WSW | 4 | 0 | ? 30.00 | + .15 | 45 | 43 | 0 | W | 4 | 0 | 3 | 46 | 45 | - |
| | Christiania Fjord | ? | 45 | WSW | 5 | b | 29.75 | + .13 | 44 | 42 | + .4 | WSW | 5 | b | 2 | ? | ? | - |
| | (Færdor) | | | | | | | | | | | | | | | | | |
| | Skagen (The Scaw) | 29.82 | 42 | NW | 6 | b | 29.87 | ? | 42 | 41 | - .1 | W | 4 | b | 2 | 43 | 41 | - |
| | Fanö ... | 30.11 | 42 | W | 4 | 0 | 30.13 | + .14 | 41 | 40 | - .2 | W | 4 | b | * | 45 | 41 | - |
| | Sumburgh Head | 29.81 | 48 | W | 4 | 0 | 29.82 | + .04 | 48 | 45 | 0 | W | 4 | 0 | 5 | 49 | 46 | - |
| | Stornoway ... | 29.94 | 50 | W | 6 | 0 | 29.87 | - .09 | 48 | 47 | 0 | SW | 6 | 0 | 5 | 50 | 45 | 0.02 |
| | Wick ... | 29.97 | 45 | W | 4 | 0 | 29.91 | - .02 | 43 | 42 | - .3 | SW | 2 | b | 1 | 50 | 40 | - |
| | Nairn ... | 30.01 | 47 | W | 2 | b | 29.96 | - .05 | 43 | 40 | - .4 | W | 1 | b | 1 | 50 | 43 | - |
| | Aberdeen... | 30.08 | 38 | W | 1 | b | 30.03 | - .02 | 33 | 31 | - .14 | S | 1 | bcm | 3 | 50 | 32 | - |
| | Leith ... | 30.18 | 40 | WSW | 2 | b | 30.09 | - .11 | 39 | 37 | - .5 | NE | 1 | f | * | 45 | 36 | - |
| | Shields ... | 30.21 | 39 | WSW | 2 | b | 30.13 | - .07 | 32 | 31 | - .7 | SW | 1 | m | 2 | 44 | 30 | - |
| | Spurn Head ... | 30.23 | 40 | W | 3 | b | 30.16 | - .09 | 31 | 30 | - .8 | SSW | 2 | bc | 2 | 43 | 29 | - |
| | York ... | 30.22 | 38 | W | 1 | b | 30.14 | - .11 | 26 | 26 | - .12 | S | 1 | f | * | 45 | 26 | - |
| | Loughborough | 30.30 | 36 | WSW | 1 | b | 30.21 | - .14 | 26 | 26 | - .9 | SE | 1 | cm | * | 45 | 25 | - |
| | Ardrossan ... | 30.22 | 43 | SW | 3 | cm | 30.08 | - .18 | 43 | 42 | - .2 | SSW | 3 | 0 | 2 | 45 | 41 | - |
| | Malin Head ... | 30.17 | 42 | SSW | 4 | 0 | 29.99 | - .23 | 38 | 38 | - .4 | SSW | 4 | bcm | 4 | 46 | ? 37 | - |
| | Mullaghmore ... | 30.22 | 41 | SSW | 3 | c | 30.03 | - .25 | 41 | 39 | - .2 | S | 4 | c | 4 | 45 | 39 | - |
| | Belmullet ... | 30.19 | 47 | W | 4 | 0 | 29.96 | - .30 | 39 | 39 | - .9 | SSW | 3 | b | * | 48 | 39 | - |
| | Donaghadee ... | 30.27 | 38 | WSW | 3 | c | 30.09 | - .24 | 38 | 37 | + .1 | SSW | 3 | c | 1 | 43 | 35 | - |
| | Barrow-in-Furness | 30.27 | 43 | W | 2 | c | 30.18 | - .15 | 37 | 36 | - .6 | SE | 1 | bc | * | 44 | 36 | - |
| | Liverpool (Bidston) | 30.30 | 40 | WSW | 1 | b | 30.14 | - .24 | 27 | 25 | - .12 | SSW | 4 | f | 3 | 44 | 26 | - |
| | Holyhead ... | 30.27 | 44 | SW | 2 | c | 30.11 | - .25 | 38 | 38 | - .5 | SSW | 1 | bcm | 1 | 45 | 37 | - |
| | Parsonstown ... | 30.25 | 32 | 2 | 0 | b | 30.07 | - .28 | 33 | 32 | + .5 | 2 | 0 | 0 | * | ? | 25 | - |
| | Valencia ... | 30.22 | 47 | SE | 4 | 0 | 30.01 | - .31 | 48 | 45 | + .2 | SE | 2 | c | 2 | 48 | 44 | - |
| | Roche's Point... | 30.25 | 47 | S | 2 | 0 | 30.03 | - .31 | 49 | 47 | + .4 | SSW | 2 | c | 3 | 49 | 45 | - |
| | Pembroke ... | 30.29 | 40 | SE | 2 | c | 30.09 | - .29 | 42 | 41 | + .1 | SE | 4 | c | 4 | 43 | 36 | - |
| | Scilly ... | 30.21 | 49 | ESE | 5 | b | 30.03 | - .28 | 48 | 46 | 0 | S | 3 | c | 4 | 50 | 46 | - |
| | Prawle Point ... | 30.30 | 46 | E | 2 | b | 30.12 | - .26 | 47 | 43 | + .5 | ESE | 3 | b | 3 | 48 | 40 | - |
| | Jersey ... | 30.30 | 44 | ESE | 1 | b | 30.17 | - .21 | 40 | 38 | + .3 | SE | 4 | bcm | 3 | 46 | 36 | - |
| | Hurst Castle ... | 30.35 | 37 | E | 1 | m | 30.18 | - .23 | 43 | 43 | + .8 | E | 3 | f | 0 | 43 | 35 | 0.01 |
| | Dungeness ... | 30.33 | 35 | NW | 2 | f | 30.23 | - .15 | 34 | 34 | + .4 | N | 2 | f | 1 | 39 | 29 | - |
| | London ... | 30.37 | 32 | SW | 1 | of | 30.24 | - .15 | 27 | 27 | - .7 | 2 | 0 | f | * | 37 | 27 | - |
| | Oxford ... | 30.36 | 31 | SSW | 1 | 0 | 30.22 | - .18 | 26 | 26 | - .5 | 2 | 0 | f | * | 34 | 26 | - |
| | Cambridge ... | 30.32 | 33 | SW | 1 | 0 | 30.23 | - .12 | 25 | 24 | - .7 | 2 | 0 | bc | * | 42 | 24 | - |
| | Yarmouth ... | 30.28 | 36 | W | 3 | bcm | 30.24 | - .06 | 26 | 26 | - .7 | W | 1 | f | 3 | 37 | 24 | - |
| | Cuxhaven ... | ? | 40 | WSW | 4 | 0 | 30.21 | + .08 | 43 | 42 | + .2 | WSW | 3 | f | * | 43 | 40 | - |
| | Berlin ... | 30.14 | 41 | W | 3 | r | 30.23 | + .13 | 39 | 38 | - .10 | WSW | 2 | 0 | * | 41 | 37 | 0.04 |
| | Wiesbaden ... | * | * | * | * | * | 30.35 | - .06 | 28 | 25 | - .5 | NE | 1 | 0 | * | 34 | 27 | - |
| | Munich ... | 30.32 | 32 | 2 | 0 | b | 30.32 | - .04 | 28 | ? | - .1 | SE | 3 | c | * | 45 | 23 | - |
| | The Helder ... | 30.28 | 43 | WSW | 3 | bc | 30.23 | - .02 | 41 | 40 | - .2 | SW | 1 | f | 2 | 45 | 41 | - |
| | Brussels ... | * | * | * | * | * | ? 30.30 | - .10 | 28 | 27 | - .8 | S | 1 | f | * | 39 | 27 | - |
| | Cape Gris Nez... | 30.33 | 42 | SW | 3 | m | 30.22 | - .15 | 35 | 35 | - .6 | 2 | 0 | f | 2 | 45 | 32 | - |
| | Paris ... | 30.38 | 27 | NE | 1 | 0 | 30.27 | - .14 | 23 | 23 | - .5 | NE | 1 | 0 | * | 30 | 22 | - |
| | Brest ... | 30.26 | 44 | E | 3 | b | 30.15 | - .20 | 43 | 42 | + .8 | SE | 4 | 0 | 4 | 50 | ? | - |
| | Lorient ... | 30.22 | 41 | ESE | 5 | b | 30.15 | - .15 | 34 | 33 | - .1 | E | 3 | 0 | 2 | 45 | 34 | - |
| | Rocheport ... | 30.26 | 37 | ESE | 5 | b | 30.18 | - .12 | 34 | 33 | + .2 | E | 5 | 0 | 2 | 45 | 23 | - |
| | Belfort ... | | | | | | | | | | | | | | * | | | - |
| | Lyons ... | 30.40 | 38 | NE | 1 | f | 30.33 | - .09 | 25 | 25 | - .3 | SSW | 1 | f | * | 30 | 25 | - |
| | Nico... .. | 30.18 | 48 | E | 11 | b | 30.22 | - .03 | 42 | 37 | - .1 | NE | 7 | f | 1 | 57 | 39 | - |
| | Perpignan ... | 30.25 | 47 | N | 1 | 0 | 30.23 | - .04 | 48 | 47 | + .4 | 2 | 0 | 0 | * | 51 | ? | 0.04 |
| | Biarritz ... | 30.12 | 48 | E | 5 | bc | 30.12 | - .04 | 48 | 44 | + .6 | ESE | 5 | b | 2 | 52 | ? | - |
| | Corunna ... | * | * | * | * | * | | | | | | | | | | | | - |
| | Lisbon ... | 30.03 | 56 | E | 4 | t | 30.12 | + .18 | 48 | 47 | - .4 | NE | 3 | b | 2 | 61 | 48 | 0.08 |

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on *Tuesdays* 18th December 1888.

BAROMETER, WIND & SEA.

(Explanation of Map)

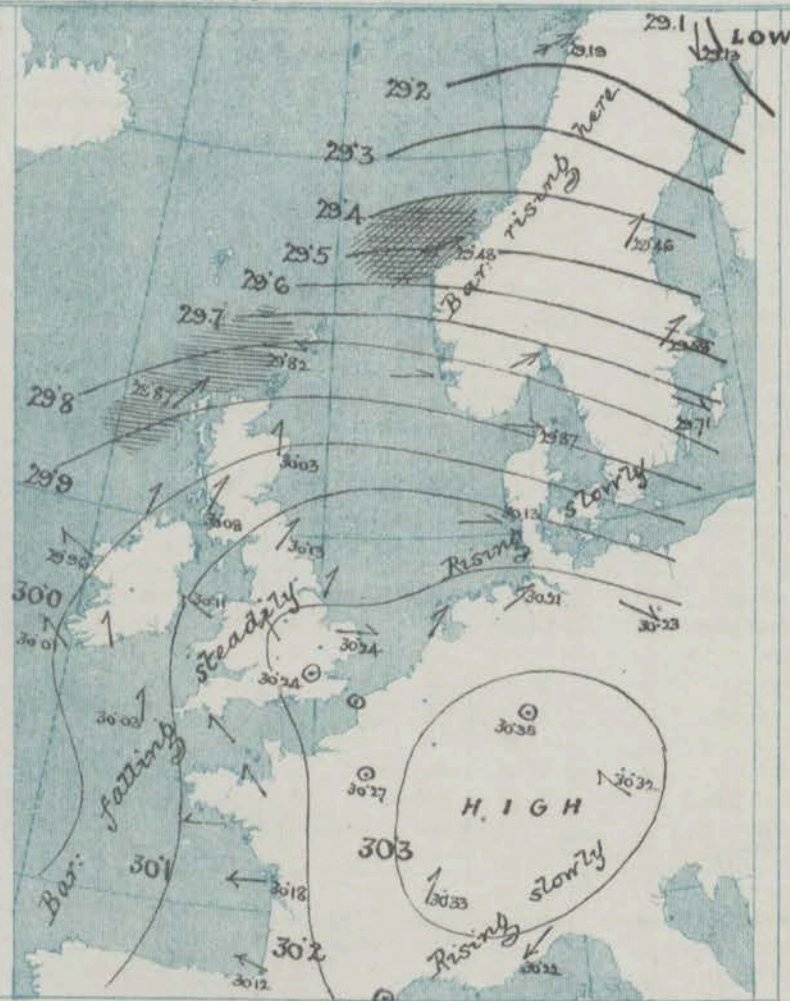
Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind — Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force, thus —
 — = forces above 10, — = forces 8 to 10,
 — = forces 5 to 7, — = forces 1 to 4,
 ○ = dead calm.

Sea Disturbance — where considerable is shown thus.
 — = Rough, — = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 15 Years 1871—1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

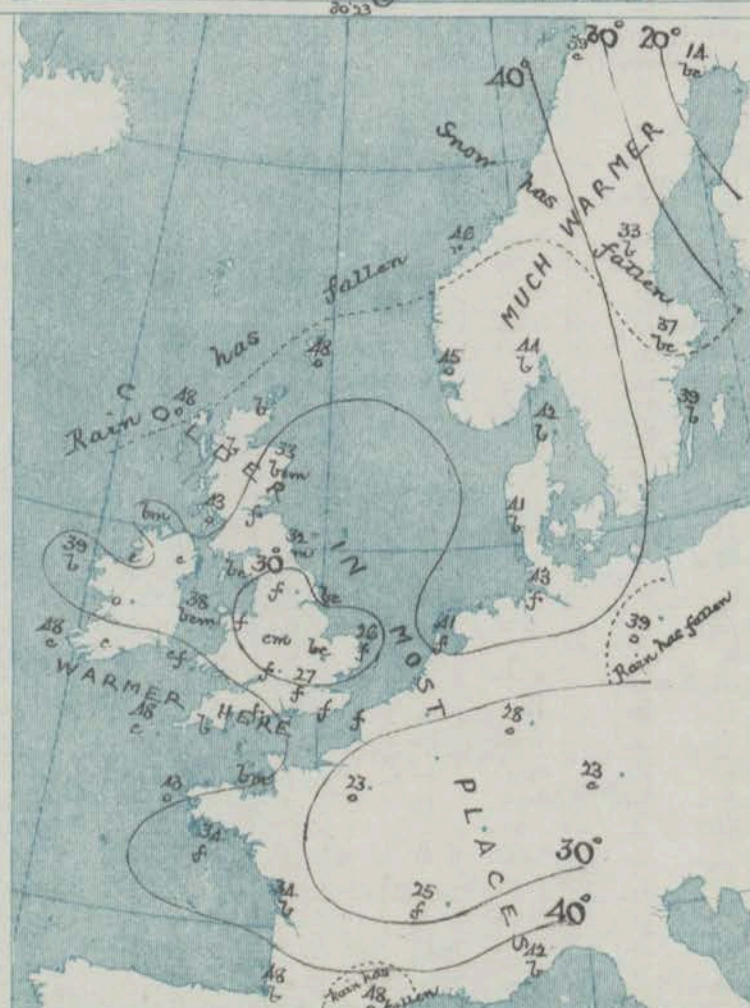
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
 for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|------------------|------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. New | Wet | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.6 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.05 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.10 ins. to 30.35 ins. in an anticyclone lying over Germany, France, and England.
 Lowest, 29.0 ins. at Valence, 29.82 ins. at Lumburg Ht., 29.13 ins. at Bodo, and 29.13 ins. at Haparanda.
 Gradients, slight in south and west, moderate in north. Barometers falling except in Norway and Sweden.

TEMPERATURE

Highest, 45° at Rockebint, 43° at Lerpjær, Diöben, Scilly, Valence, Stormöy and Lumburg Ht., and 46° at Christiansund.
 Lowest, 14° at Haparanda, 22° at Paris and Munich, 25° at Lyon and Cambridge, 26° at York and Oxford, 27° in London and at Liverpool.
 It has fallen decidedly over the major part of our Islands.

WIND

Calm over Central England; moderate E. over the Bay of Biscay.
 SE. to SW. on our western coast — W. over the North Sea.
 SW. gales prevail on the northwest coast of Norway.

WEATHER

Very foggy over France, the Channel, and England.
 Fair or fine elsewhere, but cloudy in many parts of Ireland.
 A good deal of rain has fallen in the west of Norway.

SEA

High at Christiansund, rough in the far north generally, moderate in the extreme northwest and west, slight or smooth in the Irish and English Channels.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The fall of the barometer in the west may possibly cause some increase of the S. wind over England, and consequently some rise of temperature and diminution of fog. The indications, however, are not by any means definite.

FORECASTS

For the 24 hours ending at NOON on 19th DEC^r.

1888.

DISTRICTS.

FORECASTS.

| | | |
|---|------------------|---|
| 0 | SCOTLAND NORTH | SW. winds, strong; changeable, some rain. |
| 1 | SCOTLAND EAST | SW. winds, moderate; fair as a whole. |
| 2 | ENGLAND N.E. | |
| 3 | ENGLAND EAST | Very light winds, wet fog in several places, but less cold than at present. |
| 4 | MIDLAND COUNTIES | |
| 5 | ENGLAND SOUTH | |

DISTRICTS.

FORECASTS.

| | | |
|----|---------------|--|
| 6 | SCOTLAND WEST | S. winds, (SE to SW) moderate; fair as a whole. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | S. and variable breezes; weather somewhat uncertain. |
| 9 | IRELAND NORTH | |
| 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. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. |
|-------------------|-------|------|------|---------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 29.94 | 46 | 45 | W 1/2 S | r | 4 | Holyhead ... | 30.32 | 44 | 42 | SW 1 | o g | 1 |
| Sumburgh Head ... | 29.81 | 48 | 47 | W 1/2 S | o | 5 | Valencia ... | 30.25 | 48 | 44 | SE 5 | bc m | 5 |
| Stornoway ... | 29.99 | 50 | 49 | W 6 | o | 5 | Scilly ... | 30.26 | 49 | 47 | SE 5 | bc | 3 |
| Aberdeen ... | 30.04 | 49 | 43 | W 1/2 S | o | 2 | Jersey ... | 30.33 | 42 | 40 | E 3 | b | 3 |
| Shields ... | 30.18 | 43 | 41 | W 1/2 S | o | 2 | Dungeness ... | 30.34 | 38 | 38 | NW 3 | m | 2 |
| Ardrossan ... | 30.23 | 45 | 44 | SEW 4 | e | 3 | London ... | 30.37 | 37 | 36 | 2 o | fg | * |
| Malin Head ... | 30.20 | 44 | 42 | SSW 4 | o | 4 | Yarmouth ... | 30.18 | 37 | 36 | W 3 | b | 3 |
| Mullaghmore ... | 30.14 | 45 | 41 | SSW 5 | e | 5 | Rocheport ... | 30.26 | 44 | 40 | EHE 5 | b | 2 |
| Belmullet ... | 30.20 | 48 | 46 | SW 4 | o | * | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest 30.4 ins. and upwards in a large anticyclone lying over West Germany and the east of France and also in a smaller system lying over the south of England. The lowest readings 29.3 ins. and less were found in a depression lying over Central Russia, but another depression, with readings below 29.4 ins., was reported off the west of Norway. The wind was moderate from the Wnd over the north and east of our islands, the North Sea and Central Europe, and from between NE. and NW. over Finland and the Baltic Provinces, but in Spain, France, and the south of England it was E^{ly} or NE^{ly}, while in Algeria and South Italy it was light and variable. Snow was falling over Central Russia, and rain in the west of Norway, while fog was very prevalent in the southeast of England and northeast of France. Elsewhere, however, the weather was mostly fair. Temperature had fallen in Sweden, Russia and France, but risen in most other countries; readings ranged from 50° and upwards at some of the Spanish, Algerian and Mediterranean stations to a few degrees below zero over Lapland, Finland, and the White Sea. The highest individual readings were 61° at Malta, 60° at Cagliari, 59° at Sfax, 58° at Sanguinaria, 56° at Algiers, 55° at Barcelona, 53° at Annas and Kiskia, and 52° at Lisbon and Oren; the lowest were -10° F. at Uleaborg, -8° at Hafnarvada, 0 zero at Archangel and Kiuspio, +7° at Helsingfors, 11° at Stockholm, 15° at Hirtsholm, 16° at Helsing, 22° at Clermont, and 23° at Stockholm and Nancy.

In the course of the day the depression off the west of Norway travelled eastwards and heavy W^{ly} gales were experienced on the Norwegian coast. In our islands very little change occurred either in pressure winds or weather, but sharp frost was experienced over our eastern and central districts at night.

Remarks on the Weather over Europe during the 24 hours ended 8 am Dec 17th.

The reports for Sunday morning showed that while the highest pressures of all, 30.5 ins. and upwards, were reported in Ireland and South Wales, a long anticyclone band extended from the coast of our islands across England and the Continent to South-east Europe. The lowest pressures, 29.0 ins. and less, were reported in a depression lying over the White Sea, but another depression, with readings below 29.2 ins. existed over the northern part of the Gulf of Bothnia. The wind was W^{ly} over nearly the whole of Northern Europe, and although moderate in strength generally it blew with the force of a gale in the west of Norway. Over France, Italy, Spain, and the south of our islands, however, E^{ly} or NE^{ly} breezes were reported. The weather was fair in most places, but snow was falling in Lapland and Finland, and rain in the Shetlands, Hebrides and the extreme south of France, while fog was very general over England. Temperature had changed irregularly, and readings ranged from 55° and upwards at some of the Spanish, Algerian, and Mediterranean stations, to several degrees below the freezing point over Russia and the central parts of Germany, Austria and France. The highest individual readings were 62° at Sanguinaria, 60° at Malta, 58° at Algiers, 57° at Kiskia, 55° at Annas, Barcelona, and San Fernando, and 54° at Oporto. The lowest were 4° at Hafnarvada, 5° at Hammabadt, 14° at Buda Pesth, 15° at Archangel and Vienna, 16° at Uleaborg and Munich, 17° at Nicolaieff, 19° at Stockholm, and 20° at Kiuspio.

Later in the day the barometer fell rather decidedly in the coast of Norway and the north of our islands, but no important change occurred in the winds or weather.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Wednesday 13th December. 1888.
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | † YESTERDAY EVENING. | | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|---|--------------------|-------|----------------------|----------|----|---|---|-------------|------|---|-------|----------------------|----------|------------------|---|----------------|------|---------------------------|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea (0 to 9.) | | SHADE TEMP. | | |
| | | | Dir. | Force. (0 to 12.) | | | Reading at 8 a.m. and Sea Level. | Difference from 8 a.m. yesterday. | Dry. | Wet. | Difference from 8 a.m. yesterday. | Dir. | Force. (0 to 12.) | | | | Max. | Min. | Amount of Rainfall. |
| SCANDINAVIA. | Haparanda ... | 29.34 | 5 | 2 | 0 | 0 | 29.52 | + .39 | 9 | 8 | - 5 | 2 | 0 | 0 | * | * | 21 | -6 | - |
| | Hernösand ... | 29.53 | 41 | SW | 4 | 0 | 29.67 | + .21 | 35 | 34 | + 2 | 2 | 0 | 0 | * | * | 41 | 28 | - |
| | Stockholm ... | 29.42 | 38 | W | 2 | 0 | 29.52 | + .24 | 38 | 34 | - 2 | W | 4 | 0 | * | * | 48 | 32 | - |
| | Wisby ... | 29.85 | 38 | WSW | 4 | 0 | 29.58 | + .77 | 37 | 36 | - 2 | W | 2 | 0 | * | * | 39 | 34 | - |
| | Bodö ... | 29.20 | 37 | WSW | 6 | 0 | 29.55 | + .36 | 37 | 34 | - 2 | WSW | 2 | 0 | 1 | * | 39 | 34 | 0.08 |
| | Christiansund... | 29.67 | 47 | WSW | 9 | 0 | 29.67 | + .19 | 42 | 40 | - 4 | SW | 6 | 0 | 6 | * | 48 | 41 | 0.35 |
| | Skudesnaes ... | 29.95 | 42 | S | 2 | 0 | 29.78 | - .22 | 41 | 39 | - 4 | SE | 4 | 0 | 4 | * | 45 | 39 | - |
| | Christiania Fjord (Færd) | 29.82 | 42 | WSW | 4 | 0 | 29.87 | + .06 | 39 | 38 | - 5 | SW | 2 | 0 | 2 | * | 43 | 37 | - |
| | Skagen (The Sea) | 29.90 | 41 | W | 6 | 0 | 29.89 | + .02 | 40 | 39 | - 2 | SSW | 2 | 0 | 1 | * | 43 | 39 | - |
| | Fanö ... | 30.10 | 39 | WSW | 2 | 0 | 29.98 | - .20 | 32 | 32 | - 9 | SSE | 4 | f | * | * | 43 | 32 | - |
| BRITISH ISLANDS. | Sumburgh Head | 29.78 | 45 | W | 3 | 0 | 29.54 | - .28 | 43 | 40 | - 5 | S | 1 | 0 | 3 | * | 49 | 43 | - |
| | Stornoway ... | 29.74 | 43 | SW | 7 | 0 | 29.39 | - .48 | 48 | 48 | 0 | S | 6 | 0 | 6 | * | 48 | 43 | - |
| | Wick ... | 29.77 | 44 | SW | 2 | 0 | 29.66 | - .35 | 41 | 40 | - 2 | SW | 2 | 0 | 0 | * | 50 | 39 | - |
| | Nairn ... | 29.48 | 37 | 2 | 0 | 0 | 29.53 | - .43 | 41 | 39 | - 2 | 2 | 0 | 0 | 1 | * | 44 | 38 | - |
| | Aberdeen... | 29.87 | 37 | SSW | 2 | 0 | 29.64 | - .39 | 40 | 39 | + 4 | S | 2 | 0 | 3 | * | 40 | 32 | - |
| | Leith ... | 29.90 | 36 | W | 1 | f | 29.65 | - .44 | 44 | 42 | + 5 | SSW | 1 | 0 | 3 | * | 46 | 30 | - |
| | Shields ... | 29.95 | 37 | SW | 1 | cm | 29.75 | - .38 | 36 | 35 | + 4 | SSW | 4 | 0 | 2 | * | 44 | 28 | - |
| | Spurn Head ... | 30.01 | 36 | SSE | 3 | 0 | 29.86 | - .30 | 40 | 40 | + 9 | S | 4 | 0 | 3 | * | 40 | 30 | - |
| | York ... | 29.99 | 27 | S | 1 | f | 29.87 | - .33 | 38 | 38 | + 12 | S | 1 | 0 | 3 | * | 38 | 28 | 0.02 |
| | Loughborough | 30.04 | 25 | SSE | 2 | 0 | 29.88 | - .33 | 45 | 44 | + 19 | S | 2 | 0 | 3 | * | 45 | 26 | - |
| GERMANY. | Ardrossan ... | 29.90 | 43 | 2 | 0 | 0 | 29.59 | - .49 | 49 | 49 | + 6 | S | 4 | 0 | 3 | * | 49 | 37 | - |
| | Malin Head ... | 29.79 | 42 | SSW | 3 | cm | 29.36 | - .63 | 49 | 48 | + 11 | S | 6 | 0 | 4 | * | 49 | 38 | - |
| | Mullaghmore ... | 29.79 | 45 | SSE | 5 | 0 | 29.98 | - .65 | 57 | 49 | + 10 | SSE | 6 | 0 | 4 | * | 53 | 38 | - |
| | Belmullet ... | 29.74 | 46 | S | 5 | 0 | 29.29 | - .67 | 57 | 50 | + 12 | S | 7 | 0 | 3 | * | 57 | 39 | 0.05 |
| | Donaghadee ... | 29.89 | 40 | S | 3 | 0 | 29.57 | - .82 | 50 | 50 | + 12 | SSW | 5 | 0 | 3 | * | 50 | 37 | - |
| | Barrow-in-Furness | 29.96 | 40 | SE | 2 | 0 | 29.71 | - .47 | 43 | 43 | + 6 | SE | 6 | 0 | 3 | * | 44 | 35 | 0.02 |
| | Liverpool (Bidston) | 29.98 | 34 | SSE | 2 | 0 | 29.77 | - .37 | 43 | 42 | + 16 | SE | 3 | 0 | 3 | * | 44 | 27 | - |
| | Holyhead ... | 29.94 | 45 | S | 3 | 0 | 29.66 | - .45 | 50 | 49 | + 12 | SSE | 5 | 0 | 4 | * | 50 | 35 | 0.03 |
| | Parsonstown ... | 29.86 | 42 | 2 | 0 | 0 | 29.46 | - .61 | 52 | 50 | + 19 | SE | 2 | 0 | 3 | * | 52 | 32 | 0.02 |
| | Valencia ... | 29.88 | 62 | SE | 6 | 0 | 29.88 | - .63 | 52 | 42 | + 6 | S | 7 | 0 | 6 | * | 52 | 45 | 0.04 |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.86 | 49 | SSW | 4 | 0 | 29.51 | - .53 | 52 | 57 | + 3 | SSW | 6 | 0 | 5 | * | 52 | 48 | 0.15 |
| | Pembroke ... | 29.86 | 50 | S | 5 | 0 | 29.69 | - .40 | 52 | 51 | + 10 | S | 6 | 0 | 5 | * | 52 | 42 | 0.07 |
| | Seilly ... | 29.98 | 52 | S | 5 | 0 | 29.70 | - .33 | 54 | 53 | + 6 | S | 6 | 0 | 6 | * | 54 | 47 | 0.02 |
| | Prawle Point ... | 30.05 | 49 | SSW | 4 | 0 | 29.87 | - .25 | 57 | 50 | + 4 | S | 5 | 0 | 4 | * | 57 | 44 | - |
| | Jersey ... | 30.12 | 43 | SSE | 2 | cm | 30.00 | - .17 | 43 | 42 | + 3 | SE | 4 | 0 | 3 | * | 45 | 37 | - |
| | Hurst Castle ... | 30.08 | 45 | SW | 3 | 0 | 29.96 | - .22 | 47 | 47 | + 4 | SSW | 4 | 0 | 1 | * | 49 | 41 | - |
| | Dungones ... | 30.08 | 45 | S | 2 | 0 | 30.00 | - .23 | 48 | 47 | + 14 | SW | 4 | 0 | 2 | * | 48 | 33 | - |
| | London ... | 30.09 | 32 | 2 | 0 | 0 | 29.96 | - .28 | 46 | 45 | + 19 | S | 2 | 0 | 3 | * | 46 | 27 | 0.01 |
| | Oxford ... | 30.05 | 35 | SSE | 1 | 0 | 29.97 | - .30 | 45 | 45 | + 19 | S | 3 | 0 | 3 | * | 46 | 26 | 0.01 |
| | Cambridge ... | 30.08 | 32 | S | 1 | 0 | 29.95 | - .28 | 41 | 39 | + 16 | S | 1 | 0 | 3 | * | 41 | 24 | - |
| PENINSULA. | Yarmouth ... | 30.08 | 36 | SW | 1 | f | 29.98 | - .26 | 40 | 39 | + 14 | SW | 2 | 0 | 3 | * | 40 | 25 | 0.02 |
| | Cuxhaven ... | 30.19 | 39 | SW | 2 | f | 29.99 | - .22 | 35 | 34 | - 8 | S | 2 | 0 | 3 | * | 43 | 28 | - |
| | Berlin ... | 30.22 | 34 | W | 2 | 0 | 30.10 | - .13 | 28 | 28 | - 11 | SSE | 2 | 0 | 3 | * | 41 | 27 | - |
| | Wiesbaden ... | * | * | * | * | * | 30.21 | - .14 | 27 | 26 | - 1 | NE | 1 | 0 | 3 | * | 30 | 27 | - |
| | Munich ... | 30.25 | 23 | SW | 1 | m | 30.21 | - .11 | 23 | 23 | 0 | S | 3 | 0 | 3 | * | 39 | 21 | - |
| | The Helder ... | 30.11 | 31 | SSE | 1 | f | 29.99 | - .23 | 39 | 39 | + 12 | SW | 2 | 0 | 2 | * | 43 | 28 | - |
| | Brussels ... | * | * | * | * | * | 30.10 | - .20 | 33 | 32 | + 5 | SSW | 1 | 0 | 3 | * | 34 | 28 | - |
| | Cape Gris Nez... | 30.10 | 40 | S | 1 | 0 | 30.01 | - .21 | 41 | 40 | + 6 | S | 3 | 0 | 2 | * | 43 | 34 | - |
| | Paris ... | 30.17 | 27 | SW | 2 | 0 | 30.13 | - .14 | 31 | 31 | + 8 | S | 1 | 0 | 3 | * | 31 | 27 | - |
| | Brest ... | 30.12 | 47 | SSE | 4 | 0 | 29.85 | - .30 | 57 | 50 | + 8 | S | 5 | 0 | 4 | * | 57 | 37 | - |

WEATHER CHARTS

for 8 a.m. on

Wednesday, 19th December.

1888.

BAROMETER, WIND & 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.

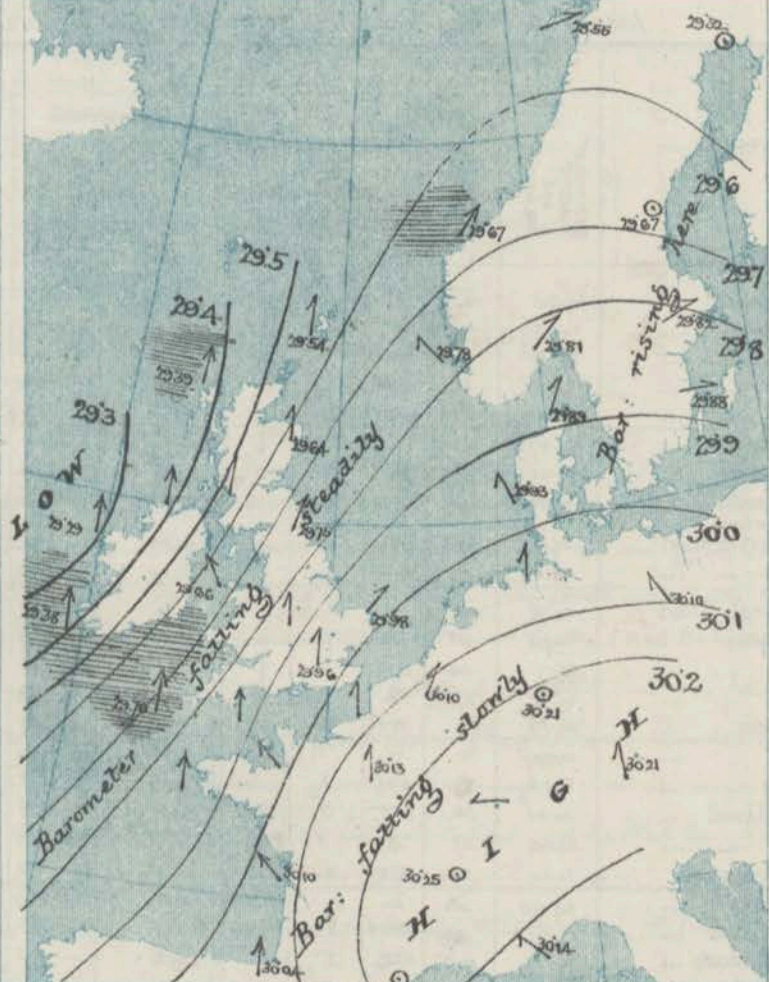
Sea Disturbance — where considerable is shown thus.

■ = Rough, ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871—1885.

| STATIONS. | MEAN READINGS |
|---------------|---------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

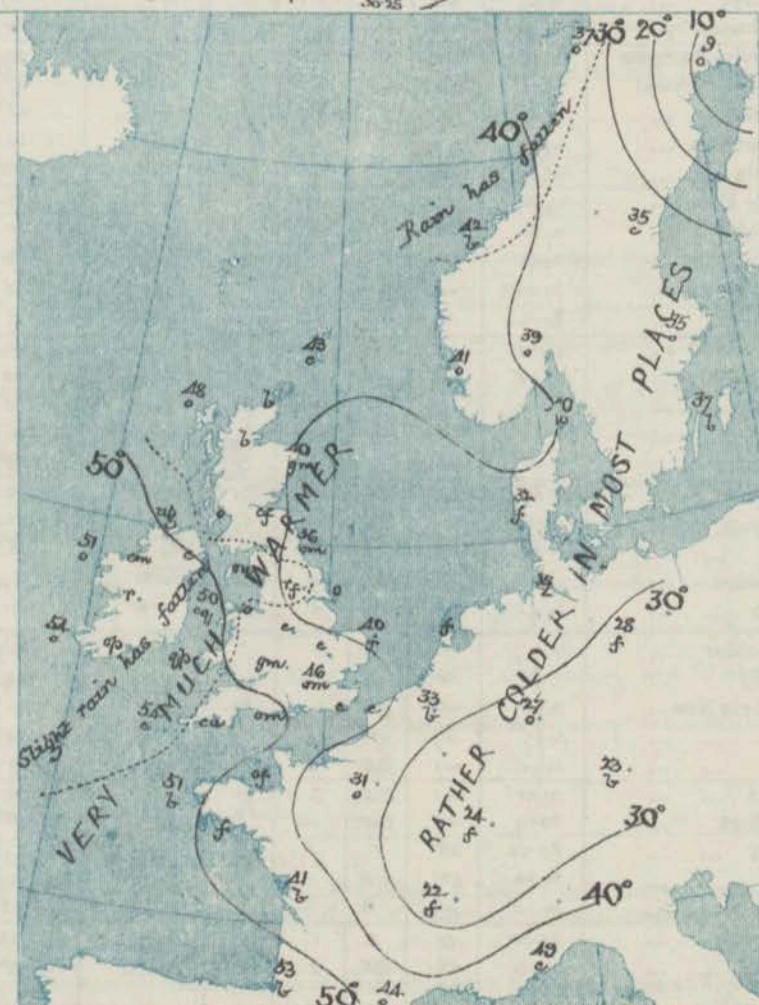
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches). |
|---------------|---------------|---------------|-----------|------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | | |
| | | | Dry. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.1 in: to 30.2 in: in a high pressure area lying over Germany, and Central and Southern France.
Lowest 29.2 in: and less in a large depression, the centre of which lies off our western coast.
Gradients rather steep in our Islands, moderate to slight over the Continent.
Barometer rising over Scandinavia, falling elsewhere, most in Ireland.

TEMPERATURE

Highest 51° at Valencia and Seville, 51° at Lisbon and Biarritz, 52° at Portsmouth, 51° at Mullaghmore and 46° at Hornumway.
Lowest 9° at Kaparanda, 23° at Ullrich, 24° at Lyons 20° at Berlin, 51° at Paris and 33° at Brussels.
It has risen rapidly over Ireland, England and Brittany since yesterday.

WIND

Has become S. on all our coasts — light in the east, strong in the west.
It is S.E., moderate, over the Bay of Biscay and in Denmark.
S.W. in the north of Norway, — calm in the north of Sweden.

WEATHER

Clouded generally over the United Kingdom — dull and showery in the west, fair elsewhere. The fog
still holds at Yarmouth and at several Continental stations.
Rain has fallen in the west, and wet fogs have been very prevalent over England.

SEA

Rough in the extreme southwest, west and north; moderate in the northwest.
Flight or smooth in the southeast and east.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is at present no decided indication of any further change of importance.

FORECASTS

For the 24 hours ending at NOON on 20th December 1888.

DISTRICTS.

FORECASTS.

| | | |
|---|------------------|--|
| 0 | SCOTLAND NORTH | S. breezes, freshening; fair to showery. |
| 1 | SCOTLAND EAST | |
| 2 | ENGLAND N.E. | S. breezes, freshening; fair generally mild. |
| 3 | ENGLAND EAST | |
| 4 | MIDLAND COUNTIES | S. breezes, moderate, fair, mild. |
| 5 | ENGLAND SOUTH | |



DISTRICTS.

FORECASTS.

| | | |
|----|---------------|---|
| 6 | SCOTLAND WEST | S. breezes, strong; squally some showers. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | |
| 9 | IRELAND NORTH | |
| 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. | Dry. | Wet. | Wind. | Wea. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wea. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudeaness ... | 29.98 | 44 | 43 | W | 1 | 0 | Holyhead ... | 30.00 | 47 | 42 | S | 2 | b |
| Sumburgh Head ... | 29.82 | 44 | 44 | W | 4 | 0 | Valencia ... | 29.90 | 51 | 48 | SE | 4 | bcm |
| Stornoway ... | 29.80 | 45 | 45 | SW | 6 | 0 | Scilly ... | 30.00 | 52 | 50 | SW | 4 | 0 |
| Aberdeen ... | 29.93 | 36 | 35 | SW | 1 | bcm | Jersey ... | 30.14 | 42 | 40 | SSE | 3 | c |
| Shields ... | 30.03 | 40 | 38 | SW | 1 | cm | Dungeness ... | 30.12 | 44 | 43 | SSE | 2 | c |
| Ardrossan ... | 29.97 | 44 | 43 | S | 3 | 2 | London ... | 30.13 | 36 | 25 | L | 0 | f |
| Malin Head ... | 29.82 | 40 | 40 | SW | 6 | bc | Yarmouth ... | 30.13 | 35 | 34 | SW | 2 | f |
| Mullaghmore ... | 29.86 | 40 | 42 | SSE | 5 | c | Rochefort ... | 30.19 | 49 | 47 | SSE | 4 | bc |
| Belmullet ... | 29.84 | 46 | 44 | S | 4 | bc | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest, 30.5 inches and upwards, in an anticyclone lying over Scandinavia, South Germany and the east of France, and lowest, 29.1 inches and less, in a large depression lying over Lapland. The wind, was E. or N.E. in France, S.E. in the south of our Islands, S. or S.W. in Scotland, W. or S.W. over Northern and Central Europe, and variable at the Italian and Mediterranean stations. In force it was light or moderate on all but the Norwegian coast, where strong gales from West-South-West were reported. Fog prevailed over England, France and the Channel, rain was falling at Christianound as well as at Algiers and Oran, and snow at Riga and Moscow, but elsewhere the weather was mostly fair. Temperature had risen considerably over Northern Europe, and slightly over the central and southern countries, but had fallen in the east; readings ranged from 53° and upwards at some of the Algerian and Mediterranean stations to several degrees below the freezing point over Russia, Lapland and the central parts of England, France and Germany. The highest individual readings were 60° at Oran and Sfax, 59° at Cagliari, 57° at Algiers, 55° at Bilbao, Barcelona and Biskra, 54° at San Remo and Tangier, and 53° at Croisette, Palermo and Nemours; the lowest were 9° at Moscow, 12° at Nicolaïeff, 14° at Kharanda, 17° at Uleaborg, 19° at Charleville and Besancon, 22° at Clermont and Nancy, and 23° at Kuopio, Paris and Bremen.

In the course of the day, the barometer fell steadily in our Islands, and rain fell at some of our eastern stations. Over England, however, the weather remained cold and foggy until late in the evening when some improvement began to take place.

NOTE. The Report for Sunday the 23rd inst: will be issued on the 26th, and that for 2nd Mas day on the 27th inst:.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Thursday, 20th December 1888.*
 Issued by the Meteorological Office, 116 Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | † YESTERDAY EVENING. | | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|--------------|---|--------------------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|----------|-------------------|-------------|------|---------------------------|---|--|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | Barometer. Reading at 32° F. and Sea Level. | Difference from 8 a.m. yesterday. | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | | |
| | | | Dir. | Force. (0 to 12.) | | | | Dry. | Wet. | Difference from 8 a.m. yesterday. | Dir. | Force. (0 to 12.) | | | Max. | Min. | | | |
| SCANDINAVIA. | Haparanda .. | 29.55 | 2 | 0 | f | 29.92 | + .40 | 14 | 13 | + .5 | NE | 2 | f | * | ? | -4 | - | | |
| | Hernösand ... | 29.59 | 32 | 0 | b | 29.82 | + .45 | 30 | 30 | - .5 | 2 | 0 | Oct | * | 43 | 30 | - | | |
| | Stockholm ... | 29.82 | 35 | 0 | 0 | 29.83 | + .01 | 35 | 33 | 0 | 2 | 0 | Oct | * | 41 | 32 | - | | |
| | Wisby ... | 29.57 | 36 | SSW | 4 | 29.88 | 00 | 34 | 34 | - .3 | WNW | 2 | 0 | * | 41 | 34 | - | | |
| | Bodö ... | 29.64 | 36 | E | 2 | 29.54 | - .01 | 39 | 35 | + .2 | ENE | 2 | b | 1 | ? | 32 | - | | |
| | Christiansund... | 29.59 | 37 | SSW | 1 | 29.50 | - .17 | 42 | 41 | 0 | SEE | 4 | c | 4 | ? | ? | - | | |
| | Skudesnaes ... | 29.73 | 42 | SSE | 6 | 29.66 | - .12 | 44 | 44 | + .3 | SSE | 8 | r | 5 | ? | ? | - | | |
| | Christiania Fjord (Færd) | 29.80 | 40 | S | 4 | 29.79 | - .02 | 39 | 39 | 0 | 2 | 0 | f | 1 | 41 | 34 | - | | |
| | Skagen (The Scaw) | 29.84 | 36 | SW | 1 | 29.79 | - .10 | 41 | 41 | + .1 | SW | 3 | f | 1 | 41 | 32 | - | | |
| | Fanö ... | 29.90 | 40 | SSW | 3 | 29.89 | - .04 | 39 | 39 | + .7 | SSW | 3 | f | * | 43 | 32 | - | | |
| | Sumburgh Head | 29.33 | 40 | S | 3 | 29.32 | - .22 | 46 | 45 | + .3 | SW | 1 | 0 | 4 | 49 | 240 | 0.03 | | |
| | Stornoway ... | 29.12 | 51 | SW | 7 | 29.27 | - .12 | 45 | 45 | - .3 | SW | 2 | c | 3 | 52 | 43 | 0.12 | | |
| | Wick ... | 29.30 | 47 | S | 5 | 29.35 | - .16 | 45 | 44 | + .4 | SW | 3 | 0 | 3 | 49 | 41 | - | | |
| | Nairn ... | 29.26 | 52 | SSW | 3 | 29.36 | - .17 | 45 | 42 | + .4 | 2 | 0 | bc | 1 | 54 | 38 | - | | |
| | Aberdeen... | 29.46 | 47 | SSE | 5 | 29.47 | - .17 | 45 | 43 | + .5 | S | 2 | ogpm | 5 | 49 | 40 | 0.01 | | |
| | Leith ... | 29.45 | 43 | W | 3 | 29.46 | - .19 | 42 | 41 | - .2 | W | 1 | orm | * | 54 | 41 | 0.05 | | |
| | Shields ... | 29.60 | 47 | SSW | 4 | 29.54 | - .21 | 44 | 43 | + .8 | SSW | 4 | 0 | 2 | 48 | 36 | - | | |
| | Spurn Head ... | 29.76 | 44 | S | 4 | 29.63 | - .23 | 42 | 41 | + .2 | SSE | 5 | 0 | 4 | 44 | 39 | - | | |
| | York ... | 29.68 | 45 | SSE | 2 | 29.55 | - .26 | 44 | 43 | + .6 | SE | 2 | 0 | * | 47 | 34 | 0.01 | | |
| | Loughborough | 29.76 | 46 | S | 3 | 29.62 | - .26 | 45 | 44 | 0 | SE | 2 | 0 | * | 48 | 43 | - | | |
| | Ardrossan ... | 29.38 | 51 | S | 4 | 29.43 | - .16 | 42 | 42 | - .7 | ENE | 1 | om | 1 | 51 | 41 | 0.22 | | |
| | Malin Head ... | 29.13 | 51 | S | 7 | 29.39 | + .03 | 42 | 40 | - .7 | S | 3 | bm | 4 | 52 | 42 | 0.12 | | |
| | Mullaghmore ... | 29.24 | 44 | W | 5 | 29.41 | + .03 | 42 | 40 | - .9 | SSW | 2 | c | 4 | 54 | 41 | 0.29 | | |
| | Belmullet ... | 29.27 | 45 | SSW | 4 | 29.39 | + .10 | 42 | 41 | - .9 | SE | 3 | b | * | 52 | 41 | 0.41 | | |
| | Donaghadee ... | 29.37 | 52 | SW | 5 | 29.43 | - .14 | 43 | 42 | - .7 | NNE | 2 | c | 1 | 52 | 42 | 0.14 | | |
| | Barrow-in-Furness | 29.56 | 48 | SE | 6 | 29.45 | - .26 | 47 | 46 | + .4 | SE | 7 | 0 | * | 48 | 43 | 0.12 | | |
| | Liverpool (Bidston) | 29.61 | 48 | SSE | 4 | 29.48 | - .29 | 48 | 46 | + .5 | SE | 4 | 0 | 3 | 50 | 43 | 0.01 | | |
| | Holyhead ... | 29.51 | 52 | S | 6 | 29.40 | - .26 | 49 | 49 | - .1 | S | 5 | rgm | 5 | 52 | 49 | 0.19 | | |
| | Parsonstown ... | 29.34 | 48 | SW | 3 | 29.47 | + .01 | 35 | 34 | - .17 | 2 | 0 | bc | * | ? | 35 | 0.24 | | |
| | Valencia ... | 29.40 | 46 | NW | 1 | 29.47 | + .09 | 43 | 41 | - .11 | SE | 1 | bc | 1 | 54 | 40 | 0.63 | | |
| | Roche's Point... | 29.36 | 52 | SSW | 8 | 29.47 | - .04 | 37 | 36 | - .15 | NW | 1 | b | 4 | 54 | 36 | 0.55 | | |
| | Pembroke ... | 29.56 | 52 | S | 6 | 29.47 | - .22 | 47 | 46 | - .5 | WSW | 4 | c | 5 | 53 | 46 | 0.07 | | |
| | Scilly ... | 29.54 | 52 | S | 7 | 29.53 | - .17 | 48 | 46 | - .6 | WNW | 4 | c | 5 | 55 | 46 | 0.06 | | |
| | Prawle Point ... | 29.71 | 51 | S | 5 | 29.54 | - .33 | 51 | 51 | 0 | S | 6 | d | 5 | 52 | 47 | 0.02 | | |
| | Jersey ... | 29.82 | 47 | SE | 5 | 29.65 | - .35 | 47 | 45 | + .4 | SE | 4 | om | 4 | 48 | 42 | - | | |
| | Hurst Castle ... | 29.80 | 48 | SSE | 4 | 29.62 | - .34 | 49 | 48 | + .2 | SSE | 5 | bc | 2 | 49 | 42 | - | | |
| | Dungeness ... | 29.91 | 45 | SW | 5 | 29.71 | - .29 | 43 | 42 | - .5 | S | 4 | c | 4 | 49 | 42 | - | | |
| | London ... | 29.87 | 45 | SSW | 2 | 29.67 | - .29 | 43 | 42 | - .3 | SE | 2 | bc | * | 48 | 42 | - | | |
| | Oxford ... | 29.79 | 45 | S | 3 | 29.63 | - .29 | 44 | 43 | - .1 | SSE | 2 | bc | * | 46 | 40 | - | | |
| | Cambridge ... | 29.83 | 45 | S | 1 | 29.68 | - .24 | 42 | 41 | + .1 | S | 1 | 0 | * | 50 | 38 | - | | |
| | Yarmouth ... | 29.89 | 45 | SSW | 4 | 29.72 | - .26 | 43 | 42 | + .3 | S | 4 | bm | 3 | 45 | 38 | - | | |
| | Cuxhaven ... | 30.02 | 36 | SSW | 3 | 29.95 | - .04 | 35 | 35 | 0 | S | 2 | 0 | * | 37 | 39 | - | | |
| | Berlin ... | 30.06 | 34 | SW | 4 | 30.01 | - .09 | 30 | 30 | + .2 | E | 1 | 0 | * | 36 | 28 | - | | |
| | Wiesbaden ... | * | * | * | * | 29.97 | - .24 | 33 | 32 | + .6 | 2 | 0 | f | * | 34 | ? | - | | |
| | Munich ... | 30.07 | 30 | NW | 1 | 29.95 | - .26 | 19 | 19 | - .4 | SW | 3 | m | * | 39 | 18 | - | | |
| | The Helder ... | 29.95 | 34 | S | 1 | 29.84 | - .15 | 34 | 34 | - .5 | S | 1 | f | 1 | 43 | 34 | - | | |
| | Brussels ... | * | * | * | * | 29.83 | - .24 | 37 | 35 | + .4 | SSE | 3 | b | * | 40 | ? | - | | |
| | Cape Gris Nez... | 29.89 | 39 | S | 4 | 29.73 | - .28 | 40 | 39 | - .1 | SSW | 5 | b | 4 | 46 | 36 | - | | |
| | Paris ... | 29.99 | 32 | NNE | 1 | 29.82 | - .31 | 29 | 29 | - .2 | SSE | 1 | b | * | 36 | 24 | - | | |
| | Brest ... | 29.79 | 52 | SSE | 7 | 29.62 | - .23 | 54 | 52 | + .3 | SSW | 4 | r | 4 | ? | ? | - | | |
| | Lorient ... | 29.78 | 49 | SE | 5 | 29.66 | - .30 | 50 | 49 | + .2 | SE | 4 | m | 5 | 64 | 46 | - | | |
| | Rochefort ... | 29.91 | 48 | SE | 5 | 29.75 | - .35 | 44 | 43 | + .3 | SSE | 5 | c | 2 | 52 | 39 | - | | |
| | Belfort ... | 30.02 | ? | W | 1 | 29.92 | - .24 | 32 | 31 | + .8 | W | 1 | c | * | 42 | 22 | - | | |
| | Lyons ... | 30.12 | 27 | NNE | 1 | 29.96 | - .29 | 32 | 32 | + .10 | N | 1 | b | * | ? | ? | - | | |
| | Nice ... | 30.08 | 50 | ENE | 4 | 29.99 | - .15 | 45 | 39 | - .4 | ENE | 5 | b | 1 | 55 | 41 | - | | |
| | Perpignan ... | 30.01 | 38 | SW | 1 | 29.83 | - .42 | 38 | 38 | - .6 | SW | 1 | c | * | 52 | 38 | - | | |
| | Biarritz ... | 29.86 | 57 | S | 5 | 29.68 | - .36 | 58 | 50 | - .5 | S | 4 | 0 | 2 | 63 | 52 | - | | |
| | Corunna ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | - | |
| | Lisbon ... | 29.71 | 59 | SSW | 7 | 29.87 | - .18 | 53 | 47 | 0 | NW | 7 | 0 | ? | 89 | 52 | 2.65 | | |
| PENIN-SULA. | | | | | | | | | | | | | | | | | | | |

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on

Thursday, 20th December.

1888.

BAROMETER, WIND & SEA.

(Explanation of Map)

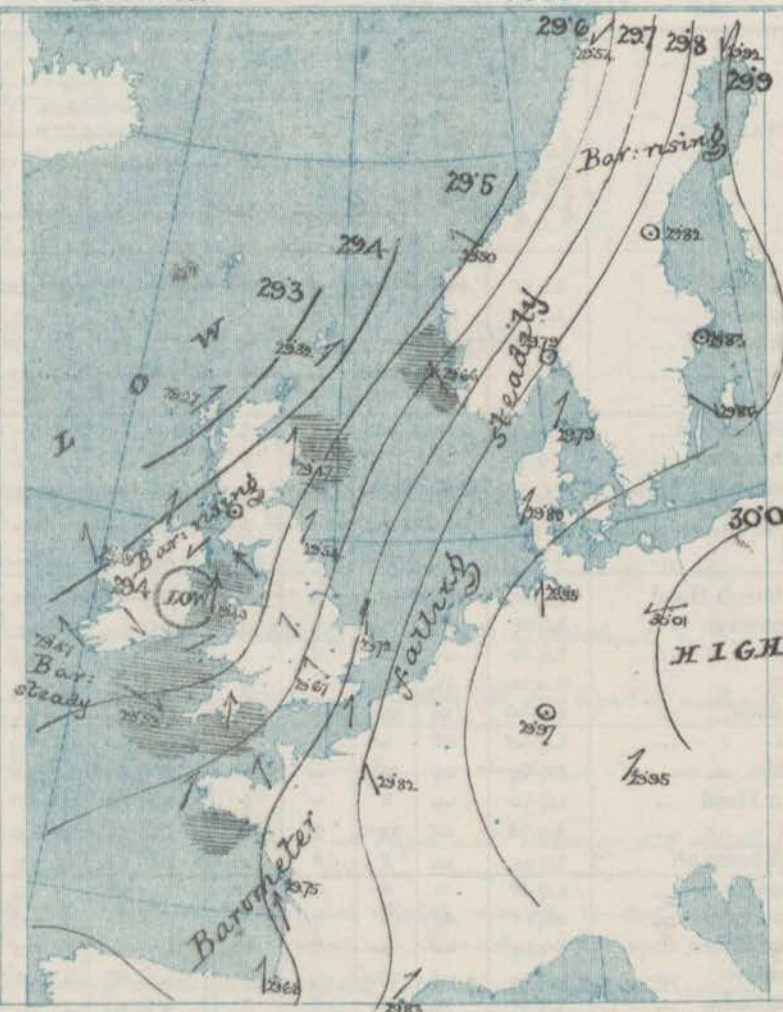
Barometer — Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.
Wind — Arrows show the prevalent winds. They fly with the wind and the barbs and feathers refer to force, thus —
 * — force above 10; — force 8 to 10;
 — force 5 to 7; — force 1 to 4;
 ○ — dead calm.

Sea Disturbance — where considerable, is shown thus:
 — Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
 During the 15 Years 1871—1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.919 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

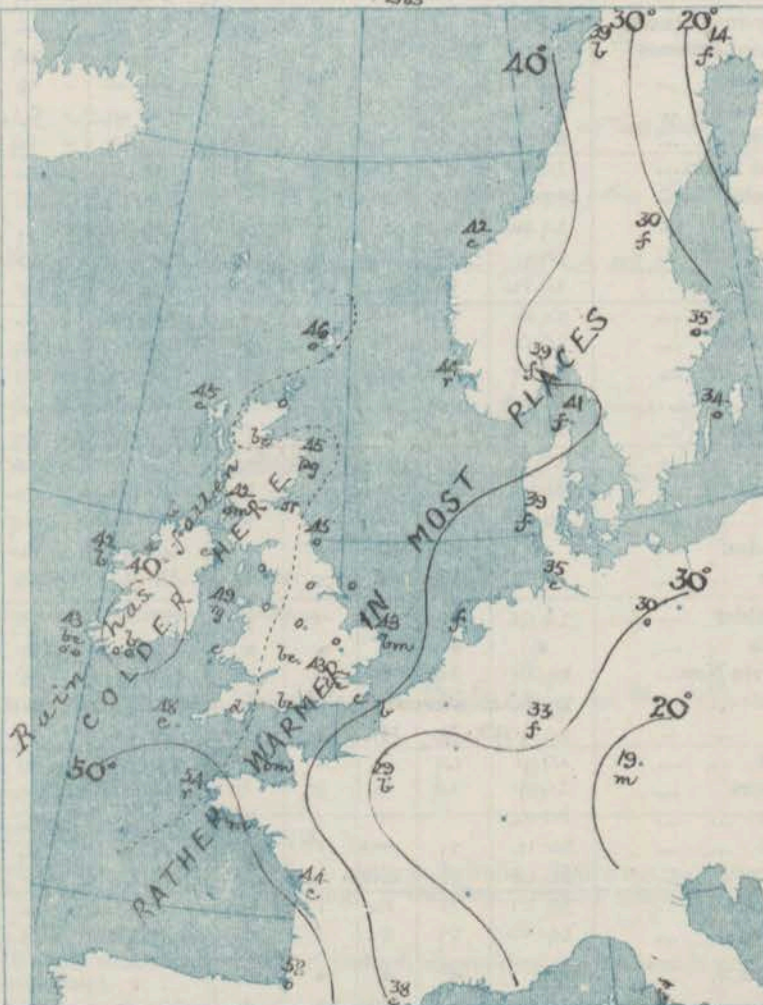
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
 for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|-----------|------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | | |
| | | | Prev. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 41.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 29.90 ins. to 30.0 ins. and more, over Germany, and the east of France, 29.8 ins. and more, over the southern part of the Spanish Peninsula.
Lowest, 29.3 ins. and less, in the Hebrides, and 29.4 ins. and less in a local depression lying over the Irish Sea.
Gradients moderate to slight and rather irregular. Barometer rising in the west, falling elsewhere.

TEMPERATURE

Highest, 58° at Biarritz, 54° at Brest, 53° at Lisbon, and 49° at Holyhead.
Lowest, 14° at Haparanda, 13° at Munich, 23° at Paris, 30° at Berlin and Kirmatow, 34° at the Hecla, and 35° at Pansnaborn.
It has fallen fast in Ireland during the night, changed irregularly over Great Britain.

WIND

Very light and variable in Ireland, light S.W. in Scotland.
S.E. and S. over England and the Bay of Biscay, moderate in force generally, but blowing a moderate gale at Harwich in Funnies.
In Norway it is S.E. and E., and blows hard at Skidsmea.

WEATHER

Changeable over Great Britain, with rain in several places.
Fine in Ireland, fair on the Continent, with local fogs.
Rain has fallen at all the coast stations - most (0.4 ins.) at Harwich and Holmulet. Lunar halos were seen in the southwest last night.

SEA

Rather rough on the shore of the Irish Sea and at Harwich, moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression over the Irish Sea will probably move northeastwards during the day, and the wind in that region fall light. There is no decided indication of any important change of weather at present.

FORECASTS

For the 24 hours ending at NOON on 21ST DEC^R 1888.

DISTRICTS.

FORECASTS.

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

SE^{ly} and varying winds; changeable, showery.
S^{ly} winds, rainy to fair.
SE^{ly} winds, light or moderate; fair as a whole, cold at night.

DISTRICTS.



FORECASTS.

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

Same as No 0 and 1.
Wind becoming light and variable; with finer weather. Cold at night.
W^{ly} winds, moderate to light and backing fair as a whole.
Calms followed by S^{ly} breezes; fine to showery, becoming milder again.

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 upward () 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. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|--------|------|
| Skudesnaes ... | 29.77 | 43 | 41 | S 6 | 0 | 4 | Holyhead ... | 29.57 | 52 | 50 | S 6 | om q/p | 5 |
| Sumnergh Head ... | 29.44 | 44 | 43 | S 2 | C | 3 | Valencia ... | 29.23 | 53 | 51 | S 9 | rm | 4 |
| Stornoway ... | 29.21 | 50 | 50 | SW 6 | r | 6 | Scilly ... | 29.59 | 55 | 53 | S 7 | 0 | 6 |
| Aberdeen ... | 29.53 | 46 | 44 | SSW 4 | CU | 4 | Jersey ... | 29.89 | 48 | 47 | SE 5 | 0 | 4 |
| Shields ... | 29.66 | 45 | 44 | SSW 2 | om | 2 | Dungeness ... | 29.94 | 47 | 46 | SW 4 | C | 3 |
| Ardrossan ... | 29.44 | 50 | 49 | S 4 | 0 | 3 | London ... | 29.89 | 48 | 46 | S 3 | om | * |
| Malin Head ... | 29.16 | 52 | 50 | S 6 | 0 | 5 | Yarmouth ... | 29.90 | 45 | 44 | SSW 3 | bm | 3 |
| Mallaghmore ... | 29.24 | 53 | 50 | SSW 8 | op | 6 | Rochefort ... | 30.00 | 52 | 49 | SE 5 | 0 | ? |
| Belmullet ... | 29.14 | 51 | 50 | S 7 | or q | * | | | | | | | |

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

The report for yesterday morning showed that pressure was highest, 30.3 ins: and upwards, in an anticyclone lying over Switzerland and South Austria, and lowest, 29.3 ins: and less, in a depression lying off the west of Ireland. Another disturbance, with readings below 29.5 ins: was however, situated over Finland. The wind was S^W over the greater part of Western Europe, and strong in force in Ireland and the coast of England. Over Northern Europe, however, it drew into the W^W, while in Italy and Algeria it was light and variable. Fog was reported at several of the French and German stations, as well as in the east of England, and showers were falling in the west of our Islands, but elsewhere the weather was mostly fair. Temperature had fallen a little over Northern and Central Europe, but risen elsewhere;—quickly at the English stations. Readings ranged from 65 and upwards in Algeria and some parts of Spain to a few degrees below the freezing point over the central parts of France, Germany, and Austria and to about zero over the White Sea. The highest readings were 61° at Vix, 60° at San Fernando, 59° at Algiers, 58° at Tunis and Bona and 57° at Cagliari and 56° at Oran, the lowest were 0° at Archangel, 1° at Haparanda, 10° at Moscow, 13° at Koenigs, 15° at Ulaabog, 22° at Besancon and Lyons, 24° at Chartres, Cassel, Prague and Belfort, and 25° at Carlsruhe and Vienna.

In the course of the day the depression to the W^W of our Islands travelled northwards and occasioned a considerable increase of wind from the S^W on the Scotch coast. In Ireland, however, the wind veered to W or NW and moderated.

EXPLANATION OF 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 ANTIDRINK 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Friday, 21st December* 1888.
 Issued by the Meteorological Office, 116, Victoria Street, London. R.H. SCOTT, Secretary.

| STATIONS. | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|--------------------------------|---|--------------------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|----------|-------------------|-------------|----------------|---------------------------|--|
| | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 29.13 | 5 | E | 4 | S | 29.97 | +05 | 5 | 5 | -9 | SE | 2 | 0 | * | 16 | -4 | - | |
| | Hernösand ... | 29.89 | 26 | S | 2 | 0 | 29.93 | +11 | 31 | 31 | +1 | 2 | 0 | f | * | 32 | 24 | - | |
| | Stockholm ... | 29.93 | 33 | 2 | 0 | 0 | 29.97 | +14 | 36 | 35 | +1 | SSW | 2 | f | * | 34 | 30 | - | |
| | Wisby ... | 29.96 | 34 | SSW | 4 | 0 | 30.01 | +13 | 34 | 33 | 0 | SSW | 4 | 0 | * | 39 | 32 | - | |
| | Bodö ... | 29.60 | 33 | ENE | 6 | 1 | 29.75 | +21 | 33 | 31 | -6 | ENE | 4 | bc | 2 | 39 | 32 | 0.02 | |
| | Christiansund... | 29.61 | 43 | ENE | 2 | 0 | 29.52 | +02 | 42 | 39 | -3 | ENE | 3 | bc | 4 | 46 | 39 | 0.04 | |
| | Skudesnaes ... | 29.73 | 43 | SSW | 8 | 0 | 29.62 | -04 | 43 | 41 | -1 | SSW | 6 | 0 | 6 | 43 | 43 | - | |
| | Christiania Fjord (Fjorder) | 29.75 | 41 | SSW | 4 | 0 | 29.88 | +09 | 39 | 39 | 0 | SSW | 2 | r | 2 | 41 | 37 | - | |
| | Skagen (The Scaw) | 29.80 | 39 | SW | 2 | 0 | 29.86 | +07 | 39 | 38 | -2 | SW | 4 | 0 | 2 | 41 | 37 | - | |
| | Fanö ... | 29.85 | 36 | SSW | 6 | 0 | 29.76 | -13 | 35 | 35 | -4 | SE | 5 | f | * | 39 | 34 | - | |
| BRITISH ISLANDS. | Sumburgh Head | 29.41 | 44 | W | 0 | 0 | 29.22 | -10 | 45 | 44 | -1 | S | 3 | 0 | 4 | 47 | 43 | 0.09 | |
| | Stornoway .. | 29.29 | 47 | SW | 5 | bc | 28.97 | -30 | 45 | 44 | 0 | S | 6 | 0 | 5 | 48 | 41 | 0.02 | |
| | Wick ... | 29.35 | 47 | S | 5 | bc | 29.14 | -21 | 43 | 42 | -2 | S | 5 | c | 3 | 52 | 42 | 0.03 | |
| | Nairn ... | 29.31 | 42 | 2 | 0 | 0 | 29.12 | -24 | 39 | 37 | -6 | 2 | 0 | bc | 1 | 47 | 37 | 0.03 | |
| | Aberdeen... | 29.40 | 45 | SSW | 4 | 0.07 | 29.21 | -26 | 45 | 44 | 0 | SE | 5 | ogq | 5 | 46 | 42 | 0.25 | |
| | Leith ... | 29.36 | 44 | W | 1 | c | 29.17 | -29 | 42 | 40 | 0 | S | 1 | om | * | 50 | 37 | 0.04 | |
| | Shields ... | 29.44 | 45 | 3 | 3 | d | 29.22 | -32 | 45 | 45 | +1 | SE | 3 | d | 2 | 47 | 43 | 0.03 | |
| | Spurn Head ... | 29.32 | 42 | SSW | 3 | c | 29.30 | -33 | 44 | 44 | +2 | SSW | 5 | r | 4 | 44 | 40 | 0.01 | |
| | York ... | 29.48 | 43 | ENE | 2 | m | 29.23 | -32 | 45 | 44 | +1 | SE | 3 | 0 | * | 45 | 42 | 0.03 | |
| | Loughborough | 29.52 | 46 | ENE | 3 | 0 | 29.26 | -36 | 48 | 47 | +3 | SSW | 2 | 0 | * | 48 | 44 | 0.04 | |
| GERMANY. | Ardrossan ... | 29.34 | 44 | ENE | 1 | om | 29.07 | -36 | 41 | 40 | -1 | E | 3 | b | 2 | 44 | 38 | 0.13 | |
| | Malin Head ... | 29.29 | 42 | S | 4 | om | 28.86 | -55 | 45 | 44 | +3 | SSW | 6 | ou | 6 | 45 | 39 | - | |
| | Mullaghmore ... | 29.28 | 44 | SE | 5 | b | 28.74 | -67 | 48 | 47 | +6 | SSW | 7 | r | 5 | 50 | 39 | 0.18 | |
| | Belmullet ... | 29.20 | 42 | SE | 5 | ou | 28.65 | -74 | 47 | 47 | +5 | SE | 5 | c | * | 47 | 41 | 0.18 | |
| | Donaghadee ... | 29.38 | 41 | SW | 2 | c | 29.01 | -42 | 47 | 45 | +4 | S | 6 | c | 4 | 47 | 37 | 0.01 | |
| | Barrow-in-Furness | 29.40 | 46 | ENE | 4 | r | 29.13 | -32 | 44 | 43 | -3 | SE | 6 | cu | * | 47 | 41 | 0.18 | |
| | Liverpool (Bidston) | 29.44 | 45 | SW | 2 | r | 29.14 | -34 | 42 | 40 | -6 | SE | 4 | c | 3 | 49 | 39 | 0.06 | |
| | Holyhead ... | 29.42 | 45 | SW | 1 | bc | 29.02 | -38 | 45 | 42 | -4 | SE | 5 | og | 5 | 50 | 42 | 0.02 | |
| | Parsonstown ... | 29.34 | 40 | 2 | 0 | bc | 28.75 | -72 | 47 | 47 | +12 | ENE | 3 | r | * | 48 | 34 | 0.22 | |
| | Valencia ... | 29.21 | 50 | SSW | 7 | og | 28.69 | -78 | 51 | 48 | +8 | S | 5 | bc | 5 | 52 | 41 | 0.41 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.33 | 49 | SSW | 5 | b | 28.76 | -71 | 50 | 49 | +13 | SSW | 5 | c | 5 | 50 | 37 | 0.60 | |
| | Pembroke ... | 29.44 | 48 | S | 5 | c | 28.92 | -55 | 49 | 49 | +2 | S | 7 | ogp | 7 | 49 | 44 | 0.03 | |
| | Seilly ... | 29.45 | 49 | SSW | 4 | bc | 28.91 | -62 | 52 | 50 | +4 | S | 6 | c | 6 | 54 | 47 | 0.11 | |
| | Prawle Point ... | 29.51 | 44 | W | 2 | r | 29.08 | -46 | 50 | 49 | -1 | SSW | 6 | ou | 6 | 52 | 42 | 0.20 | |
| | Jersey ... | 29.55 | 49 | SSW | 4 | og | 29.26 | -39 | 49 | 47 | +2 | SE | 7 | om | 5 | 49 | 45 | 0.06 | |
| | Hurst Castle ... | 29.54 | 49 | SSW | 4 | ou | 29.29 | -33 | 48 | 47 | -1 | S | 6 | c | 3 | 49 | 48 | 0.09 | |
| | Dungeness ... | 29.62 | 47 | S | 5 | c | 29.41 | -30 | 49 | 48 | +6 | S | 5 | r | 4 | 49 | 43 | 0.05 | |
| | London ... | 29.59 | 46 | S | 2 | 0 | 29.35 | -32 | 47 | 45 | +4 | S | 2 | c | * | 50 | 43 | 0.02 | |
| | Oxford ... | 29.52 | 46 | S | 3 | 0 | 29.28 | -35 | 46 | 44 | +2 | SSW | 2 | cu | * | 48 | 44 | 0.03 | |
| | Cambridge ... | 29.58 | 42 | S | 2 | bc | 29.31 | -37 | 48 | 48 | +6 | S | 2 | r | * | 48 | 39 | - | |
| PENINSULA. | Yarmouth ... | 29.61 | 43 | SSW | 3 | bc | 29.40 | -32 | 45 | 44 | +2 | SSW | 5 | og | 4 | 45 | 41 | - | |
| | Cuxhaven ... | 29.89 | 34 | SSW | 5 | 0 | 29.80 | -15 | 34 | 33 | -1 | SSW | 5 | 0 | * | 34 | 33 | - | |
| | Berlin ... | 29.96 | 30 | ENE | 4 | f | 29.84 | -12 | 30 | 29 | 0 | SE | 2 | 0 | * | 34 | 27 | - | |
| | Wiesbaden ... | * | * | * | * | * | 29.80 | -17 | 30 | 30 | -3 | 2 | 0 | f | * | 34 | 30 | - | |
| | Munich ... | 29.89 | 27 | 2 | 0 | f | 29.82 | -13 | 32 | 32 | +3 | SE | 2 | c | * | 30 | 19 | - | |
| | The Helder ... | 29.72 | 34 | SSW | 1 | b | 29.58 | -26 | 35 | 34 | +1 | SE | 1 | b | 1 | 37 | 32 | - | |
| | Brussels ... | * | * | * | * | * | 29.58 | -25 | 44 | 40 | +7 | SSW | 3 | c | * | 45 | 32 | 0.04 | |
| | Cape Gris Nez... | 29.62 | 42 | SSW | 5 | bc | 29.40 | -33 | 44 | 43 | +4 | S | 5 | r | 4 | 46 | 32 | 0.04 | |
| | Paris ... | 29.73 | 41 | SSW | 1 | c | 29.58 | -24 | 43 | 41 | +14 | SE | 3 | 0 | * | 46 | 32 | - | |
| | Brest ... | 29.62 | 48 | W | 3 | bc | 29.22 | -40 | 52 | 52 | -2 | SSW | 9 | 0 | 5 | ? | ? | 0.43 | |
| PENINSULA. | Lorient ... | 29.56 | 49 | W | 5 | 0 | 29.25 | -41 | 53 | 51 | +3 | S | 9 | 0 | 7 | 54 | 45 | 0.20 | |
| | Rochefort ... | 29.71 | 50 | SSW | 7 | 0 | 29.56 | -19 | 49 | 48 | +5 | SSW | 7 | 0 | 3 | 52 | 43 | 0.16 | |
| | Belfort ... | 29.86 | 31 | W | 1 | b | 29.76 | -16 | 34 | 33 | +2 | W | 1 | f | * | 39 | 23 | - | |
| | Lyons ... | 29.87 | 42 | W | 1 | 0 | 29.76 | -20 | 43 | 42 | +11 | E | 1 | r | * | 45 | 32 | 0.04 | |
| | Nice ... | 29.92 | 48 | ENE | 1 | 0 | 29.86 | -13 | 46 | 42 | +4 | ENE | 5 | 0 | 2 | 55 | 43 | - | |
| | Perpignan ... | 29.75 | 48 | SW | 1 | c | 29.69 | -14 | 41 | 41 | +3 | SW | 0 | c | * | 58 | 37 | - | |
| | Biarritz ... | 29.73 | 55 | W | 8 | 0 | 29.54 | -19 | 55 | 49 | -3 | SW | 7 | 0 | 5 | 61 | 48 | - | |
| PENINSULA. | Corunna ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 0.12 | |
| | Lisbon ... | 29.96 | 54 | SW | 5 | r | 29.87 | -09 | 59 | 59 | +6 | SW | 7 | r | ? | ? | ? | 0.12 | |

WEATHER CHARTS

for 8 a.m. on Friday, 21st December 1888.

BAROMETER, WIND & 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.

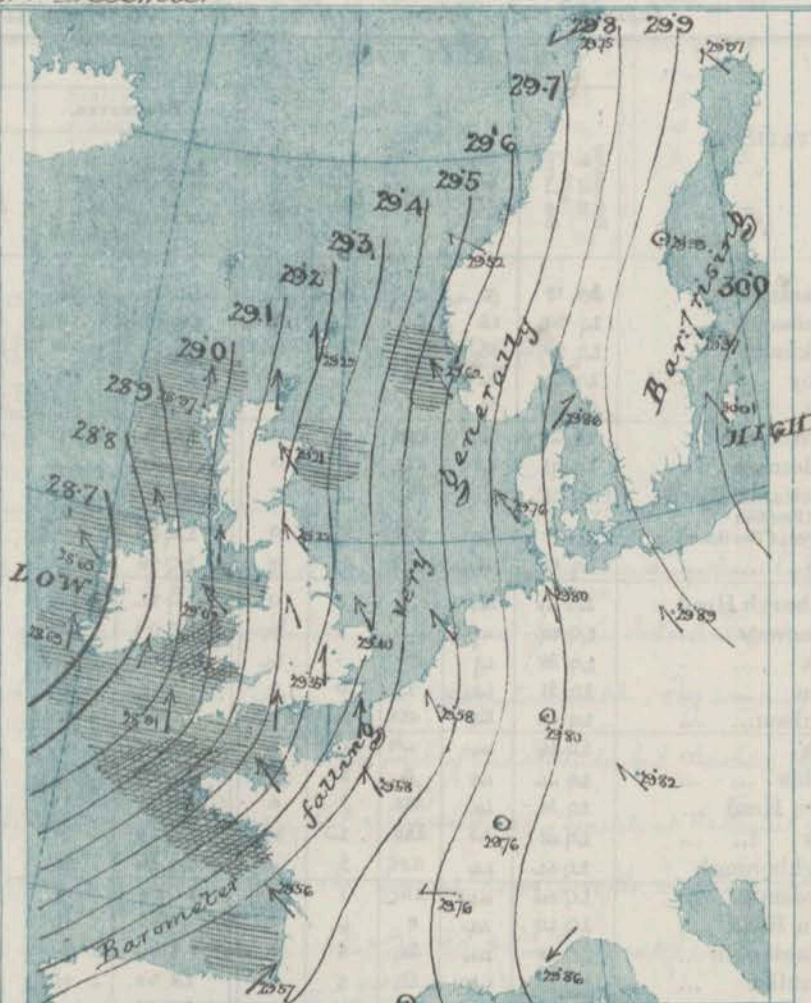
Sea Disturbance — where considerable is shown thus.

— Rough — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871 — 1885.

| STATIONS | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

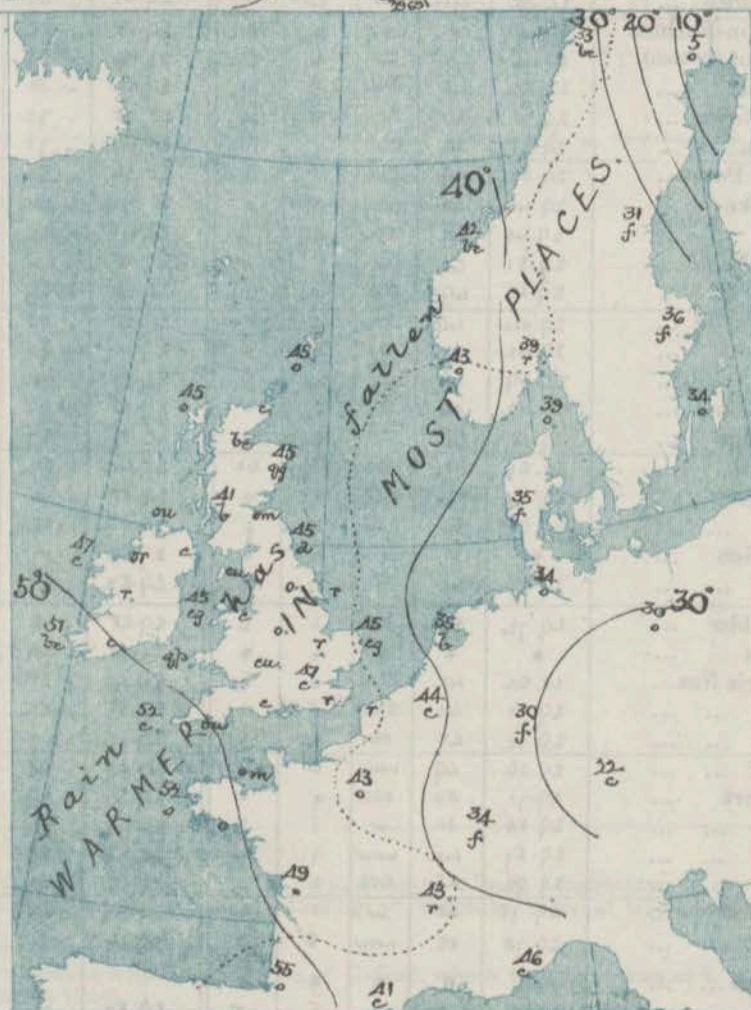
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|-----------|------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | | |
| | | | Dry. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway. | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.96 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

Note — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 29.8 ins. to 30.0 ins. and more, over Sweden, the Baltic, and Germany.
Lowest, 28.7 ins. and less, in a large low pressure area the centre of which lies off the west coast of Ireland.
Gradients steep over Bay of Biscay, rather so (but irregular) over our islands.
Barometer falling except over Sweden; in Ireland the fall since yesterday has exceeded a tenth.

TEMPERATURE

Highest, 59° at Lisbon, 55° at Biarritz, 52° at Seville, 51° at Valencia, 48° at Marseilles, 47° in London, 45° at Stomoway, and 42° at Christiansund.
Lowest, 5° at Haparanda, 22° at Munich, 30° at Berlin and Wiesbaden, and 31° at Hermonand.
It has risen quickly over Ireland and France, and is high over the British Isles and France generally.

WIND

SW^{ly}, strong to gale, over Spain — S^{ly} over Brittany and the British Isles.
Moderate to fresh at the eastern stations, strong in the west, and a gale over the Bay of Biscay.
In Germany it is light to moderate from SE.

WEATHER

Fair in the far east — changeable and somewhat showery elsewhere.
Rain has fallen at almost all our own stations — most in the south of Ireland.
Aurora borealis was seen at Androsan last night.

SEA

High at Lomehote, Brest and Lorient, rough generally except on our east coast where it is moderate.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Fresh to strong S^{ly} breezes, with mild and rather showery weather are still probable.

FORECASTS

for the 24 hours ending at NOON on 22nd DEC. 1888.

DISTRICTS.

FORECASTS.

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

S^{ly} winds, fresh; some showers,

S^{ly} winds, strong to fresh;
unsettled, some rain.

DISTRICTS.

FORECASTS.

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

S^{ly} winds, unsettled, rain at times.

WARNINGS

The SOUTH CONE was hoisted yesterday afternoon in district 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. | Dry. | Wet. | Wind. | Wca. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wca. | Sea. |
|-----------------|-------|------|------|----------|---------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 29.71 | 43 | 43 | SSW 8 | o f | 6 | Holyhead ... | 29.43 | 45 | 45 | NW 3 | o p | 3 |
| Samburgh Head | 29.40 | 46 | 46 | 20 0 | b | 4 | Valencia ... | 29.34 | 49 | 45 | SSE 5 | om | 4 |
| Stornoway ... | 29.32 | 47 | 47 | SW 4 | 0 | 3 | Scilly ... | 29.49 | 49 | 46 | SW 3 | c | 5 |
| Aberdeen ... | 29.44 | 45 | 46 | S 3 | o g d m | 5 | Jersey ... | 29.58 | 47 | 45 | SE 3 | 0 | 3 |
| Shields ... | 29.48 | 46 | 45 | SSW 4 | o u | 2 | Dungeness ... | 29.64 | 47 | 45 | S 5 | be | 4 |
| Androssan ... | 29.34 | 44 | 44 | E 11 E 1 | r | 1 | London ... | 29.60 | 49 | 46 | SE 2 | 0 | # |
| Malin Head ... | 29.34 | 43 | 44 | S 3 | 0 | 3 | Yarmouth ... | 29.64 | 45 | 44 | SSE 3 | bm | 3 |
| Mullaghmore ... | 29.35 | 48 | 46 | S 4 | cm | 3 | Rochefort ... | 29.72 | 49 | 48 | SSE 5 | 0 | 2 |
| Belmullet ... | 29.31 | 45 | 46 | SSE 4 | b | * | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest 30.1 ins. and upwards over the Black Sea and Eastern Austria, and lowest 29.3 ins. and less, in a depression lying off the northwest of Scotland. A well defined secondary disturbance, with readings below 29.4 ins. was, however, lying over the Irish Sea. The wind was moderate and fresh from the SE^{wd} or S^{wd} over the greater part of Western Europe, but elsewhere it was light and variable. The weather was foggy over Sweden, Denmark and Central Europe, and cloudy in most other regions, with rain at several of our western and northern stations, as well as at Lissia, Madrid and Calcutta. Temperature had fallen in the west and north of our Islands, and also in Russia and Algeria, but risen elsewhere; readings ranged from 50° and upwards in Spain and the west of France and the south of Italy to several degrees below the freezing point over the central parts of Germany and Austria, and to a little below zero over Northern Russia. The highest individual readings were 62° at Nemours, 58° at Rianitz, 57° at Billas and Oran, 56° at Algiers, and 55° at Sanguinaire and La Calle; the lowest were -2° F. at Archangel, +12° at Mleatof, 14° at Haparanda, 17° at Moscow, 21° at Carlsruhe, 22° at Breslau, 25° at Cracow and Humberstadt, and 26° at Limburg.

Later in the day a new depression began to approach our extreme western coasts and at night a fresh SE^{wd} to S^{wd} gale was experienced in the south and west of Ireland. No decided change was, however, in the weather.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Saturday, 22nd December 1888.

Issued by the Meteorological Office, 116, Victoria Street, London. R.H. SCOTT, Secretary.

| | | + YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|---------------------------|------------------------------------|-----------------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|--------------|-------------|----------------|---------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. 0 to 2. | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 30.34 | 7 | SE | 2 | 0 | 30.39 | + .42 | 9 | 9 | + .4 | SE | 4 | S | * | 9 | 3 | 0.20 | |
| | Hernösand ... | 30.04 | 38 | SE | 0 | 0 | 30.15 | + .22 | 85 | 32 | + .4 | S | 2 | 0 | * | 86 | 25 | 0.08 | |
| | Stockholm ... | 30.06 | 34 | SE | 2 | 0 | 30.11 | + .14 | 33 | 31 | - .3 | ESE | 2 | 0 | * | 41 | 32 | 0.04 | |
| | Wisby ... | 30.04 | 35 | E | 4 | 8 | 30.06 | + .05 | 30 | 29 | - .4 | E | 4 | 0 | * | 37 | ? | - | |
| | Bodö ... | 29.75 | 34 | ESE | 6 | 6 | 29.82 | + .07 | 33 | 31 | 0 | ESE | 4 | 6 | 2 | 36 | 30 | - | |
| | Christiansund... | 29.59 | 47 | ESE | 4 | 60 | 29.60 | + .08 | 46 | 40 | + .4 | SE | 6 | 60 | 3 | ? | ? | - | |
| | Skudesnaes ... | 29.59 | 44 | SE | 8 | 0 | 29.62 | - .00 | 44 | 36 | - .2 | ESE | 4 | C | 4 | 45 | 41 | - | |
| | Christiania Fjord (Fæder) | 29.89 | 37 | ESE | 4 | 0 | 29.92 | + .04 | 36 | 35 | - .3 | ESE | 4 | 0 | 2 | 39 | 34 | - | |
| | Skagen (The Seaw) | 29.82 | 36 | SE | 4 | 0 | 29.80 | - .06 | 37 | 35 | - .2 | SE | 4 | 0 | 2 | 39 | 36 | - | |
| | Fanö ... | 29.63 | 36 | SE | 6 | 0 | 29.59 | - .17 | 35 | 34 | 0 | ESE | 7 | C | * | 37 | 34 | - | |
| BRITISH ISLANDS. | Sumburgh Head | 29.16 | 45 | SSE | 6 | 0 | 29.32 | + .10 | 44 | 42 | - .1 | ESE | 6 | 0 | 7 | 46 | 42 | 0.08 | |
| | Stornoway ... | 28.83 | 49 | JE | 6 | 0 | 29.00 | + .03 | 48 | 47 | + .3 | SE | 5 | 0 | 4 | 49 | 43 | 0.08 | |
| | Wick ... | 29.10 | 46 | S | 7 | 0 | 29.27 | + .13 | 45 | 44 | + .2 | S | 8 | 0 | 6 | 48 | 43 | 0.02 | |
| | Nairn ... | 28.94 | 47 | ESE | 2 | 60 | 29.07 | - .05 | 47 | 45 | + .8 | E | 2 | 0 | 1 | 48 | 36 | - | |
| | Aberdeen... | 29.08 | 46 | SE | 7 | 0 | 29.16 | - .05 | 45 | 44 | 0 | SE | 7 | opw | 7 | 47 | 45 | 0.06 | |
| | Leith ... | 28.98 | 47 | SW | 8 | 0 | 29.02 | - .15 | 48 | 45 | + .6 | E | 1 | ? | * | 48 | 40 | 0.02 | |
| | Shields ... | 29.06 | 46 | SE | 4 | ? | 29.03 | - .19 | 46 | 46 | + .1 | SE | 3 | ? | 4 | 47 | 43 | 0.15 | |
| | Spurn Head ... | 29.09 | 45 | SE | 6 | 0 | 29.04 | - .26 | 47 | 45 | + .3 | SE | 7 | C | 5 | 47 | 44 | 0.05 | |
| | York ... | 29.08 | 47 | S | 3 | 0 | 28.92 | - .31 | 46 | 45 | + .1 | E | 2 | 0 | * | 48 | 44 | 0.13 | |
| | Loughborough | 29.02 | 48 | ESE | 4 | 0 | 28.99 | - .27 | 47 | 45 | - .1 | SSE | 2 | 0 | * | 49 | 45 | 0.02 | |
| GERMANY. | Arrossan ... | 28.88 | 46 | E | 5 | 0 | 28.95 | - .12 | 46 | 46 | + .5 | E | 2 | 6 | 1 | 49 | 40 | 0.02 | |
| | Malin Head ... | 28.70 | 46 | SE | 5 | 6 | 28.91 | + .05 | 48 | 47 | + .3 | ESE | 4 | opm | 4 | 48 | 41 | 0.05 | |
| | Mullaghmore ... | 28.66 | 48 | SE | 5 | 0 | 28.83 | + .09 | 48 | 46 | 0 | NE | 5 | cgp | 4 | 51 | 46 | 0.28 | |
| | Belmullet ... | 28.61 | 42 | SE | 4 | 0 | 28.92 | + .27 | 49 | 48 | + .2 | NE | 5 | 0 | * | 49 | 46 | 0.94 | |
| | Donaghadee ... | 28.50 | 49 | ESE | 6 | 0 | 28.89 | - .12 | 49 | 47 | + .2 | E | 6 | 60 | 4 | 50 | 45 | 0.05 | |
| | Barrow-in-Furness | 28.90 | 47 | SE | 7 | 0 | 28.92 | - .21 | 46 | 45 | + .2 | E | 3 | 0 | * | 49 | 44 | 0.06 | |
| | Liverpool (Bidston) | 28.87 | 48 | ESE | 6 | 0 | 28.91 | - .23 | 46 | 44 | + .4 | ESE | 4 | 0 | 3 | 49 | 42 | 0.01 | |
| | Holyhead ... | 28.70 | 31 | SE | 6 | 0 | 28.80 | - .22 | 49 | 46 | + .4 | SSE | 5 | C | 5 | 52 | 45 | 0.01 | |
| | Parsonstown ... | 28.59 | 49 | SE | 1 | ? | 28.67 | - .08 | 44 | 43 | - .3 | NE | 1 | 0 | * | ? | 44 | 0.26 | |
| | Valencia ... | 28.56 | 42 | SE | 0 | 60 | 28.96 | + .27 | 44 | 42 | - .7 | NW | 8 | omq | 6 | 51 | 40 | 0.95 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 28.47 | 48 | NE | 2 | 0 | 28.71 | - .05 | 48 | 46 | - .2 | NW | 5 | 0 | 4 | 51 | 44 | 1.85 | |
| | Pembroke ... | 28.37 | 50 | S | 8 | 0 | 28.78 | - .14 | 48 | 48 | - .1 | SSW | 5 | cgp | 6 | 51 | 49 | 0.44 | |
| | Scilly ... | 28.63 | 49 | SSW | 8 | 60 | 28.95 | + .04 | 48 | 45 | - .4 | WNW | 8 | oq | 7 | 53 | 46 | 0.23 | |
| | Prawle Point ... | 28.78 | 49 | SSE | 6 | 0 | 28.97 | - .11 | 48 | 45 | - .2 | SW | 6 | cu | 6 | 51 | 38 | 0.10 | |
| | Jersey ... | 28.92 | 51 | SE | 7 | 0 | 29.13 | - .13 | 49 | 46 | 0 | SW | 5 | bcha | 5 | 52 | 47 | 0.05 | |
| | Hurst Castle ... | 28.94 | 50 | SSE | 8 | ? | 29.05 | - .24 | 50 | 49 | + .2 | SSW | 7 | bcp | 5 | 51 | 48 | 0.17 | |
| | Dungeness ... | 29.15 | 49 | S | 6 | 0 | 29.12 | - .29 | 50 | 48 | + .1 | SSW | 6 | C | 5 | 50 | 48 | 0.05 | |
| | London ... | 29.06 | 51 | SE | 6 | 0q | 29.10 | - .25 | 48 | 47 | + .1 | S | 2 | 0 | * | 51 | 46 | 0.13 | |
| | Oxford ... | 28.95 | 49 | SE | 3 | ? | 29.01 | - .27 | 47 | 46 | + .1 | S | 4 | bqpp | * | 50 | 45 | 0.22 | |
| | Cambridge ... | 29.07 | 47 | SSE | 3 | 0 | 29.09 | - .22 | 47 | 46 | - .1 | S | 2 | C | * | 52 | 45 | 0.10 | |
| PENIN-SULA. | Yarmouth ... | 29.20 | 45 | SSE | 6 | 0 | 29.16 | - .24 | 46 | 45 | + .1 | SSE | 5 | C | 5 | 46 | 43 | 0.02 | |
| | Cuxhaven ... | 29.65 | 32 | SSE | 6 | 0 | 29.54 | - .26 | 38 | 32 | - .1 | ESE | 6 | 0 | * | 34 | 32 | - | |
| | Berlin ... | 29.76 | 32 | ESE | 3 | 0 | 29.68 | - .21 | 33 | 32 | + .3 | SE | 3 | 0 | * | ? | ? | - | |
| | Wiesbaden ... | * | * | * | * | * | 29.44 | - .36 | 38 | 32 | + .3 | SE | 0 | C | * | ? | 30 | - | |
| | Munich ... | 29.63 | 22 | NE | 2 | 6 | 29.50 | - .32 | 21 | 21 | - .1 | E | 3 | 6 | * | 41 | 19 | - | |
| | The Helder ... | 29.38 | 39 | ESE | 3 | 0 | 29.32 | - .26 | 39 | 37 | + .4 | ESE | 3 | C | 2 | 41 | 34 | - | |
| | Brussels ... | * | * | * | * | * | 29.34 | - .24 | 46 | 43 | - .2 | SSE | 4 | ? | * | 50 | 46 | 0.04 | |
| | Cape Gris Nez... | 29.14 | 47 | S | 7 | 6 | 29.16 | - .24 | 46 | 45 | + .2 | S | 7 | C | 5 | 50 | ? | 0.08 | |
| | Paris ... | 29.25 | 50 | SE | 4 | 0 | 29.29 | - .29 | 47 | 45 | + .4 | S | 3 | 0 | * | 52 | ? | 0.12 | |
| | Brest ... | 28.91 | 50 | SSW | 9 | 0 | 29.19 | - .03 | 48 | 45 | - .4 | WNW | 7 | C | 6 | 54 | ? | 1.06 | |

WEATHER CHARTS

for 8 a.m. on Saturday, 22nd December.

1888.

BAROMETER, WIND & 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 the barbs and feathers refer to force, thus —

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

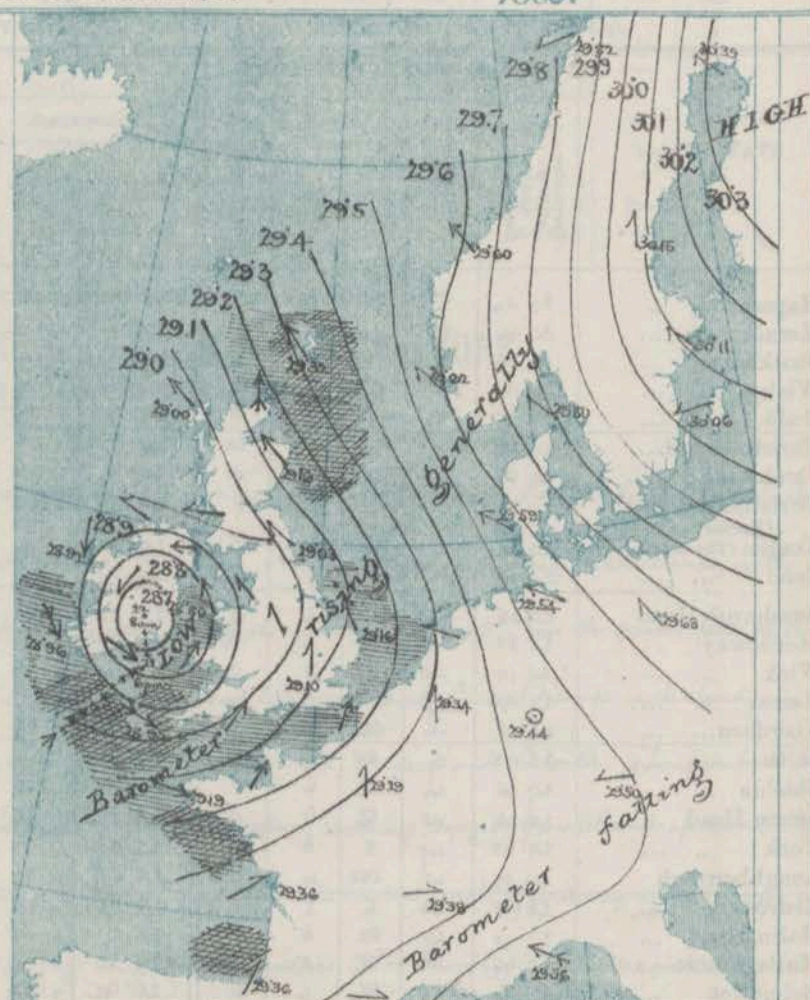
Sea Disturbance — where considerable, is shewn thus.

■ = Rough. ■ = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 15 Years 1871—1885.

| STATION IS. | MEAN READINGS. |
|---------------|----------------|
| | in. |
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.961 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

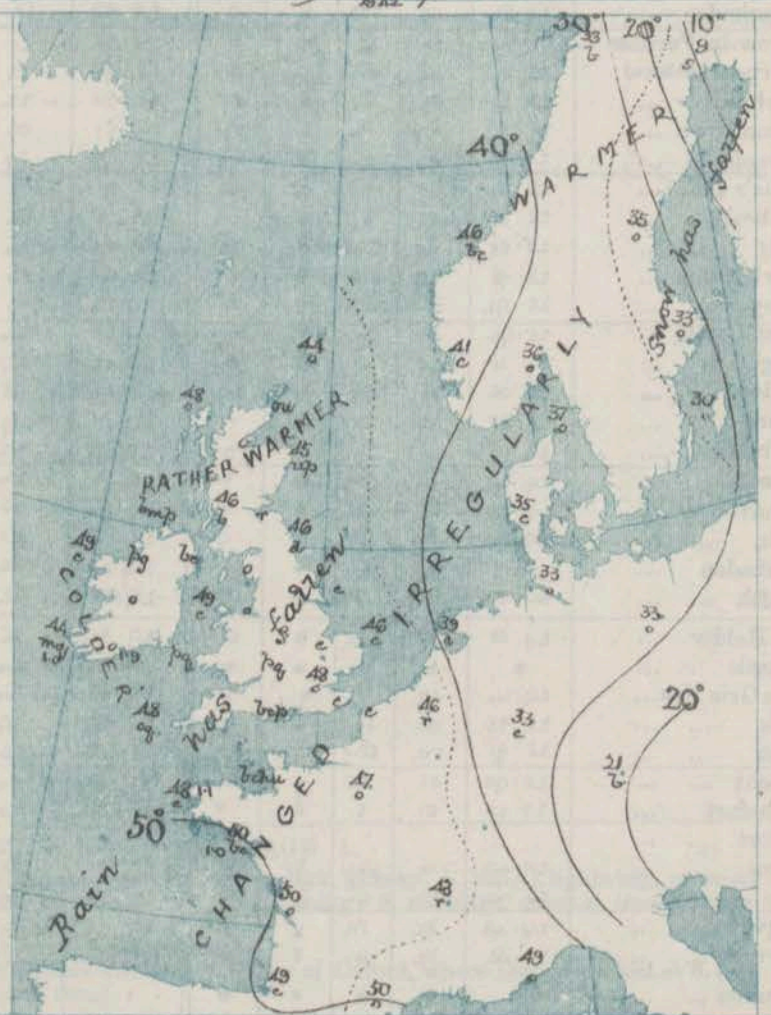
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|------------------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Dry | Wet | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.5 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85



GENERAL SITUATION AT 8 A.M.

| | |
|-------------|---|
| PRESSURE | Highest, 30.5 ins. and upwards, over the Gulf of Bothnia. Lowest, 28.7 ins. and less, in a depression lying over Central Ireland. Gradients rather steep over our islands, the North Sea and Scandinavia, but slight over Germany and France. Barometer rising at all but the Danish, German and southern French stations—quickly in the south of Ireland. |
| TEMPERATURE | Highest, 51° at Helten and 50° at Hunt Castle, Dungeness, Dorset, Rochefort and Pauzanov. Lowest, 3° at Haparanda, 2° at Munich, 3° at Vidy, and 33° at Rode, Stockholm, Cuxhaven, Berlin and Wiesbaden. |
| WIND | Strong to gale from the SE. over the North Sea and the adjacent coasts. Fresh from E. or NE. on our northwest coasts; strong to a gale from NW. or W. in the southwest. Strong from S. or SW. over the Channel, and fresh from W. over the Bay of Biscay. |
| WEATHER | Cloudy generally with showers in many parts of the United Kingdom and coast at Haparanda. Rain fell yesterday in most parts of our islands and France, the largest amount being 1.9 ins. at Rochefort, 1.1 ins. at Brest, 1.0 ins. at Valencia, 0.9 ins. at Balmuccia and 0.7 ins. at Palermo. |
| SEA | High off the north and east of Scotland, as well as at the mouth of the Channel and in the Bay of Biscay—rough or rather so in most other localities. |

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the west seems to be gradually filling up, but the general appearance is not at all settled, and equally showing weather is likely to continue in most districts.

FORECASTS

for the 24 hours ending at NOON on 23rd DEC^r 1888.

| DISTRICTS. | FORECASTS. | DISTRICTS. | FORECASTS. |
|----------------------|---|--------------------|---|
| † 0 SCOTLAND NORTH | SE ^{ly} winds strong; cloudy, rain at times. | † 6 SCOTLAND WEST | E ^{ly} and SE ^{ly} winds, force doubtful; changeable, some showers. |
| † 1 SCOTLAND EAST | | † 7 ENGLAND N. W. | |
| † 2 ENGLAND N. E. | | † 8 ENGLAND S. W. | SW ^{ly} strong winds and gales; squally some showers. |
| † 3 ENGLAND EAST | S ^{ly} winds, fresh or strong; changeable, some showers. | † 9 IRELAND NORTH | E ^{ly} and NE ^{ly} winds, strong; squally, some showers. |
| † 4 MIDLAND COUNTIES | | † 10 IRELAND SOUTH | NW ^{ly} winds, strong; squally, some showers. |
| † 5 ENGLAND SOUTH | | | |

WARNINGS

The SOUTH CONE was hoisted yesterday in districts 0 to 3, 5, 6 and 8, and the NORTH CONE in districts 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.

YESTERDAY'S 2 P.M. REPORTS.

| | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. |
|-------------------|-------|------|------|-------|---------|------|---------------|-------|------|------|-------|-------|------|
| Skudesnaes ... | 29.60 | 45 | 41 | SE 6 | c | 5 | Holyhead ... | 28.85 | 49 | 47 | SSE 6 | c q p | 6 |
| Samburgh Head ... | 29.17 | 46 | 45 | SSE 5 | r | 6 | Valencia ... | 28.59 | 46 | 44 | E 2 | o | 3 |
| Stornoway ... | 28.87 | 46 | 45 | S 6 | o | 5 | Scilly ... | 28.40 | 50 | 48 | S 9 | o | 7 |
| Aberdeen ... | 29.09 | 46 | 45 | SE 6 | o q r g | 6 | Jersey ... | | | | | | |
| Shields ... | 29.10 | 47 | 45 | SEA 2 | c | 2 | Dungeness ... | 29.25 | 49 | 48 | S 5 | c | 4 |
| Ardrossan ... | 28.91 | 45 | 45 | E 4 | r | 4 | London ... | 29.17 | 51 | 49 | SE 5 | o | * |
| Malin Head ... | 28.70 | 47 | 46 | SE 4 | c | 5 | Yarmouth ... | 29.31 | 45 | 44 | S 4 | c q | 4 |
| Mullaghmore ... | 28.68 | 51 | 48 | SE 5 | c | 3 | Rocheport ... | 29.30 | 52 | 50 | S 8 | o | 3 |
| Belmullet ... | 28.61 | 48 | 47 | SE 3 | c | * | | | | | | | |

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

The report for yesterday morning showed that pressure was increasing decidedly over northern, but going away quickly over western and southeastern Europe, and that readings ranged from about 30.3 ins: over Ireland and from between 30.1 ins: and 30.3 ins: over Northern Russia generally to as low as 28.7 ins: over the west of Ireland and apparently to a still lower value over the Atlantic. The gradients were slight over Eastern, moderate over Central, and steep over Western Europe. Strong S winds had set in over the British Isles, and SW gales over the Bay of Biscay and south of France, accompanied by rain and a very unsettled appearance of the sky, but over Central Europe and Russia the wind was light and variable and the weather fair. Temperature had risen in the west, and ranged from nearly 60° in Portugal, and somewhat above 50° over the Mediterranean, the west of France and the southwest of our Islands to much below zero in the extreme north of Russia. The lowest morning values were -15° F. at Archangel, -2° at Kuopio, +3° at Uleaborg, 5° at Abo, 9° at Stockholm and Moscow, 21° at Lemberg and Munich, 25° at Kiev, 26° at Warsaw, and 30° at Minsk; the highest were 53° at Lisbon and Oren, 56° at Cagliari, 55° at Kharitz, 52° at Brest, 51° at Valencia, and 45° at Samburgh Head.

Later on a small but very deep depression arrived off the south of Ireland from the SW and SE to S gales were felt in many parts of the United Kingdom, with rain.

NOTE. The Report for Sunday the 25th inst: will be issued on the 26th, and that for XMas day on the 27th inst:

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for SUNDAY 23RD DECEMBER.

1888.

Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | + YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|-------------------------------|------------------------------------|-----------------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|----------------|-------------|----------------|---------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 30.49 | 13 | SE | 4 | 5 | 30.65 | +2.6 | -2 | -2 | -11 | S | 4 | 6 | * | 14 | ? | 0.24 | |
| | Hörnösand ... | 30.22 | 30 | S | 6 | 0 | 30.50 | +3.5 | 28 | 27 | -7 | S | 6 | 0 | * | 36 | 27 | - | |
| | Stockholm ... | 30.22 | 30 | ENE | 4 | 0 | 30.34 | +2.3 | 27 | 24 | -6 | E | 6 | 0 | * | 36 | 27 | - | |
| | Wisby ... | 30.17 | 30 | E | 4 | 0 | 30.24 | +1.8 | 25 | 24 | -5 | E | 6 | 6 | * | 37 | ? | - | |
| | Bodö ... | 29.89 | 35 | ENE | 6 | 6c | 30.02 | +2.1 | 34 | 32 | +1 | ENE | 4 | 6c | 2 | 36 | 30 | - | |
| | Christiansund... | 29.74 | 43 | ESE | 4 | 6 | 29.89 | +2.9 | 39 | 36 | -7 | ESE | 1 | 6 | 2 | 2 | 37 | - | |
| | Skudesnaes ... | 29.78 | 41 | SE | 6 | C | 29.90 | +2.8 | 37 | 32 | -4 | ESE | 8 | 0 | 5 | 41 | 37 | - | |
| | Christiania Fjord (Furder) | 30.04 | 36 | ENE | 5 | 0 | 30.13 | +2.1 | 33 | 31 | -3 | NE | 5 | 0 | 2 | 37 | 30 | - | |
| | Skagen (The Scaw) | 29.96 | 35 | SE | 5 | 0 | 30.04 | +2.4 | 33 | 32 | -4 | SE | 4 | 8 | 3 | 37 | 32 | - | |
| | Fanö ... | 29.71 | 37 | E | 6 | 0 | 29.77 | +1.8 | 37 | 37 | +2 | ESE | 6 | 0 | * | 37 | 34 | - | |
| BRITISH ISLANDS. | Samburgh Head | 29.49 | 43 | SW | 6 | 2 | 29.63 | +3.1 | 43 | 42 | -1 | SSE | 6 | 2 | 8 | 44 | 42 | 0.07 | |
| | Stornoway ... | 29.24 | 46 | SE | 3 | 0 | 29.41 | +4.1 | 43 | 42 | -5 | E | 2 | 6 | 3 | 48 | 37 | 0.02 | |
| | Wick ... | 29.38 | 47 | SE | 8 | 0 | 29.58 | +2.8 | 45 | 45 | 0 | SE | 7 | 0 | 7 | 48 | 44 | 0.04 | |
| | Nairn ... | 29.29 | 47 | E | 1 | 6c | 29.48 | +4.1 | 39 | 38 | -8 | 2 | 0 | C | 1 | 49 | 39 | 0.01 | |
| | Aberdeen... | 29.36 | 48 | SE | 7 | 0.2c | 29.57 | +4.1 | 44 | 43 | -1 | SE | 5 | 0.2c | 7 | 46 | 44 | 0.19 | |
| | Leith ... | 29.34 | 46 | SW | 1 | C | 29.51 | +4.9 | 42 | 41 | -6 | S | 2 | C | * | 49 | 40 | - | |
| | Shields ... | 29.28 | 47 | ESE | 3 | 0 | 29.56 | +5.3 | 41 | 41 | -5 | 2 | 0 | cm | 3 | 48 | 39 | - | |
| | Spurn Head ... | 29.31 | 46 | SE | 6 | 6c | 29.53 | +4.9 | 40 | 40 | -7 | ESE | 3 | f | 4 | 47 | 39 | 0.01 | |
| | York ... | 29.27 | 48 | SE | 3 | 0 | 29.50 | +5.8 | 39 | 38 | -7 | E | 1 | cm | * | 49 | 39 | - | |
| | Loughborough | 29.27 | 47 | SE | 2 | 0 | 29.49 | +5.0 | 42 | 42 | -4 | SE | 3 | 0 | * | 51 | 41 | 0.02 | |
| GERMANY. | Ardrossan ... | 29.23 | 47 | E | 1 | 0 | 29.47 | +5.2 | 43 | 43 | -3 | NE | 2 | om | 1 | 48 | 43 | - | |
| | Malin Head ... | 29.23 | 47 | NE | 2 | C | 29.44 | +5.3 | 44 | 44 | -4 | SW | 2 | of | 4 | 48 | 42 | 0.02 | |
| | Mullaghmore ... | 29.22 | 48 | NNE | 4 | omg | 29.48 | +6.5 | 45 | 45 | -3 | NW | 5 | omg | 4 | 48 | 45 | 0.15 | |
| | Belmullet ... | 29.29 | 46 | N | 8 | od | 29.53 | +6.1 | 41 | 40 | -8 | NNW | 1 | 6c | * | 49 | 41 | 0.40 | |
| | Donaghadee ... | 29.19 | 49 | ESE | 4 | 0 | 29.45 | +5.6 | 47 | 46 | -2 | SE | 3 | C | 2 | 49 | 45 | 0.03 | |
| | Barrow-in-Furness | 29.17 | 47 | E | 3 | 0 | 29.44 | +5.2 | 44 | 43 | -2 | NE | 2 | 6c | * | 49 | 43 | - | |
| | Liverpool (Bidston) | 29.15 | 47 | ESE | 3 | 0 | 30.42 | +5.2 | 45 | 42 | -1 | ESE | 4 | 0 | 5 | 49 | 44 | 0.01 | |
| | Holyhead ... | 29.10 | 46 | SE | 2 | 0g | 30.40 | +6.0 | 45 | 44 | -4 | E | 3 | cmg | 2 | 50 | 44 | 0.24 | |
| | Parsonstown ... | 29.17 | 46 | 2 | 0 | 0 | 30.51 | +8.4 | 44 | 43 | 0 | NW | 1 | 0 | * | 44 | 43 | 0.27 | |
| | Valencia ... | 29.36 | 45 | NNW | 7 | 0.2c | 29.64 | +6.8 | 45 | 41 | +1 | NNW | 3 | C | 4 | 46 | 43 | 0.30 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.11 | 47 | N | 6 | 2g | 29.54 | +6.3 | 45 | 43 | -3 | NNW | 4 | C | 4 | 49 | 43 | 0.20 | |
| | Pembroke ... | 29.00 | 48 | S | 4 | 2 | 30.39 | +6.1 | 48 | 47 | 0 | NNW | 5 | cmg | 4 | 49 | 46 | 0.18 | |
| | Scilly ... | 29.18 | 50 | NNW | 8 | 0g | 29.51 | +3.6 | 49 | 47 | +1 | NW | 8 | 0g | 7 | 50 | 46 | 0.37 | |
| | Prawle Point ... | 29.24 | 47 | SW | 6 | 0 | 29.46 | +4.9 | 46 | 45 | -2 | W | 3 | C | 4 | 49 | 44 | 0.40 | |
| | Jersey ... | 29.39 | 49 | WSW | 4 | 6 | 29.52 | +3.9 | 50 | 48 | +1 | WSW | 5 | 6cm | 5 | 53 | 46 | 0.02 | |
| | Hurst Castle ... | 29.31 | 50 | SW | 6 | 6g | 29.51 | +4.6 | 49 | 48 | -1 | SW | 7 | cm | 5 | 52 | 48 | 0.07 | |
| | Dungeness ... | 29.36 | 50 | SW | 4 | C | 29.56 | +4.4 | 45 | 45 | -5 | SW | 4 | C | 3 | 50 | 45 | 0.05 | |
| | London ... | 29.35 | 47 | SW | 3 | 6m | 29.57 | +4.7 | 44 | 41 | -4 | SE | 2 | 6 | * | 52 | 48 | - | |
| | Oxford ... | 29.33 | 45 | SW | 3 | 6 | 29.46 | +4.5 | 44 | 43 | -3 | SE | 3 | 0 | * | 51 | 43 | 0.01 | |
| | Cambridge ... | 29.34 | 46 | SE | 1 | C | 29.56 | +4.7 | 40 | 40 | -7 | SE | 1 | C | * | 51 | 36 | - | |
| PENINSULA. | Yarmouth ... | 29.39 | 48 | S | 3 | C | 29.58 | +4.2 | 44 | 43 | -2 | ESE | 4 | C | 4 | 47 | 42 | 0.01 | |
| | Cuxhaven ... | 29.63 | 36 | ESE | 7 | 0 | 29.73 | +1.9 | 35 | 35 | +2 | ESE | 6 | 0 | * | 3 | 3 | - | |
| | Berlin ... | 29.72 | 35 | ESE | 4 | 0 | 29.78 | +1.0 | 35 | 34 | +2 | ESE | 4 | 0 | * | 36 | 33 | - | |
| | Wiesbaden ... | * | * | * | * | * | 29.64 | +2.0 | 31 | 30 | -2 | 2 | 0 | C | * | 37 | 30 | - | |
| | Munich ... | 29.60 | 30 | SW | 3 | 0 | 29.60 | +1.0 | 27 | 27 | +6 | NE | 3 | 0 | * | 34 | 21 | - | |
| | The Helder ... | 29.52 | 37 | ESE | 1 | 2 | 29.65 | +3.3 | 36 | 35 | -3 | ESE | 1 | f | 2 | 41 | 36 | 0.20 | |
| | Brussels ... | * | * | * | * | * | 29.64 | +3.0 | 42 | 41 | -4 | SE | 3 | m | * | 49 | 37 | 0.04 | |
| | Cape Gris Nez... | ? | 45 | SW | 5 | C | 29.54 | +3.8 | 42 | 40 | -4 | S | 4 | 6 | 2 | 50 | 39 | - | |
| | Paris ... | 29.49 | 45 | NE | 1 | 6 | 29.62 | +3.3 | 35 | 35 | -12 | NE | 1 | f | * | 50 | 33 | - | |
| | Brest ... | 29.45 | 50 | NNW | 7 | C | 29.58 | +3.9 | 51 | 47 | +3 | NW | 4 | C | 5 | 54 | ? | ? | |

For Explanation of Columns, see p. 4.

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

WEATHER CHARTS

for 8 a.m. on

Sunday, 23rd December

1888.

BAROMETER, WIND & SEA.

(Explanation of Map)

Barometer — Iso-bars 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 the barbs and feathers refer to force, thus —

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

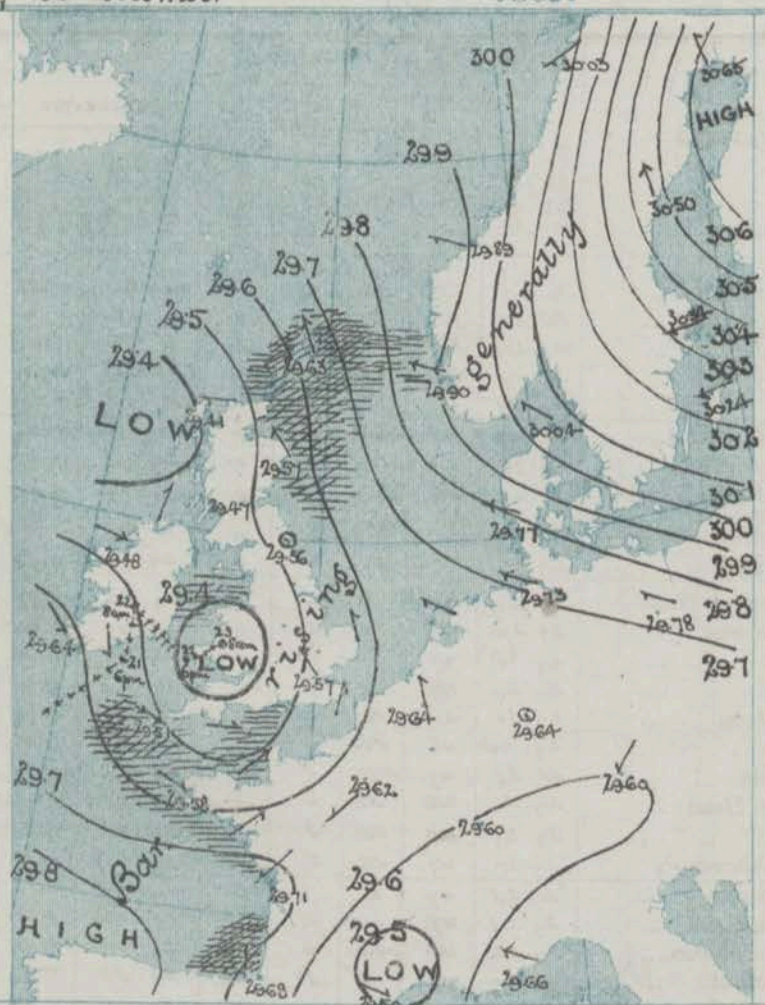
Sea Disturbance — where considerable, is shown thus.

— Rough — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 15 Years 1871—1885.

| STATION IS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

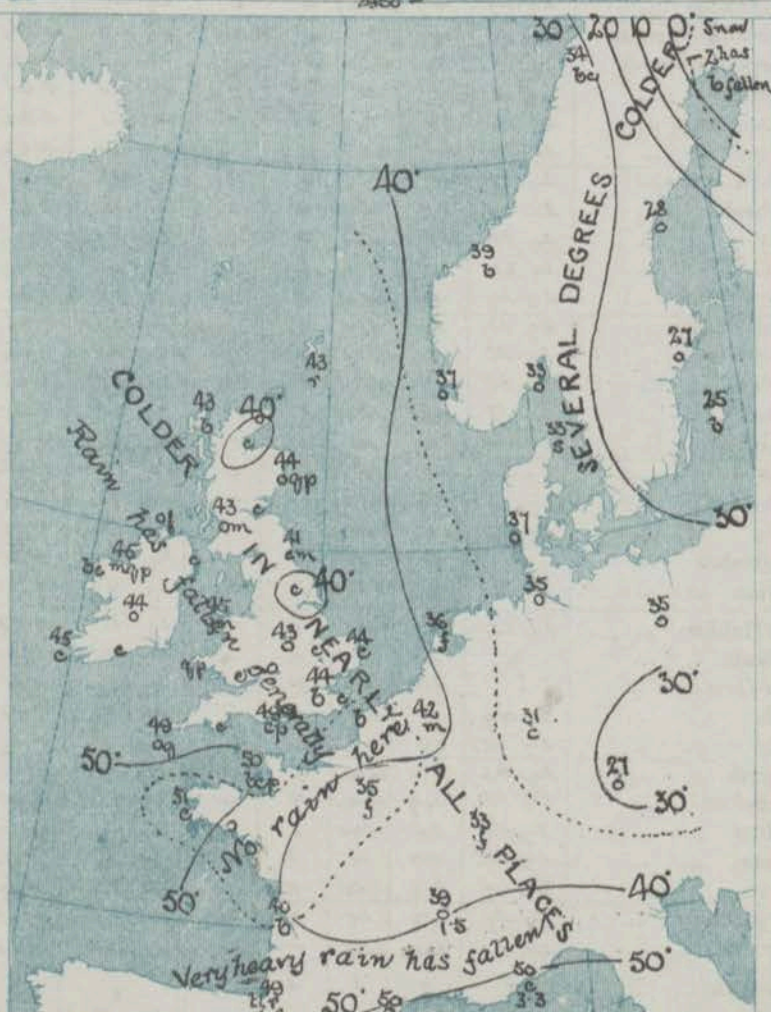
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December.

| STATIONS | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|-----------|-------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | | |
| | | | Temp. | Wind. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 35.2 | 5.68 |
| Wick | 42.1 | 32.8 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 3.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

Note — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.6 ins. and upwards over the northern part of the Gulf of Bothnia.
Lowest 29.4 ins. and less in a depression lying off the west of Scotland, and also in another disturbance lying over Wales.
Gradients rather steep over Scandinavia, but moderate to smooth elsewhere.
Barometer rising generally.

TEMPERATURE

Highest 51° at Brest, 50 at Jersey, Perpignan and Nice, 49 at Scilly, Hurst Castle and Berritz, and 48° at Pembroke and Lorient.
Lowest -2° at Haparanda, $+25^{\circ}$ at Wisby, 27° at Stockholm and Munich, 28° at Hernsand, 31° at Wiesbaden, and 33° at
 Tuerder, Skagen and Belfort.

WIND

Moderate to strong from the NW. on our southwest coasts; moderate from N. in the southwest of France.
E^{ly} or SE^{ly} elsewhere, strong in force over Scandinavia, Denmark and the North Sea.

WEATHER

Cloudy or overcast at all but the Irish and the north Scandinavian stations, with showers in many parts of St. Britain, and fog over the Netherlands and east of France. Since yesterday thunderstorms and very heavy rain have occurred in the south of France; at Biarritz 1.4 in. has fallen, at Lyons, 1.5 in. at Nice, 3.3 inches.

SEA

Very high at Lumburgh Head and also at Biarritz, high off the east of Scotland, as well as at Bally, and rough or rather so on many parts of our western, southern and the French coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lay over Central Ireland yesterday has become very much shallower, and is now situated over Wales. There are at present no indication of the approach of any new disturbance.

FORECASTS

for the 24 hours ending at NOON on 24th DECEMBER. 1888

DISTRICTS.

| | | |
|---------|---|----------|
| π_0 | { | SCOTLAND |
| | | NORTH |
| π_1 | { | SCOTLAND |
| | | EAST |
| π_2 | { | ENGLAND |
| | | N.E. |
| π_3 | { | ENGLAND |
| | | EAST |
| π_4 | { | MIDLAND |
| | | COUNTIES |
| π_5 | { | ENGLAND |
| | | SOUTH |

FORECASTS.

NONE ISSUED

DISTRICTS.


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


WARNINGS

FORECASTS.

NONE ISSUED

The South cone is still playing in districts 5, 6, 7, 8, and 9. The North cone is in districts 7 and 9.

Nats.—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 ~~over~~ *veer* towards S. or S.W., the *South Cone* is hoisted in preference to the *North Cone*.

YESTERDAY'S 2 P.M. REPORTS.

| | Bar. | Dry. | Wet. | Wind. | Wes. | Ses. | | Bar. | Dry. | Wet. | Wind. | Wes. | Ses. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 29.71 | 41 | 57 | SE 6 | C | 4 | Holyhead ... | 29.98 | 50 | 46 | SE 3 | C | 4 |
| Sumburgh Head ... | 29.41 | 42 | 42 | SE 6 | R | 7 | Valencia ... | 29.20 | 46 | 44 | WNW 7 | R 2 | 6 |
| Stornoway ... | 29.14 | 47 | 47 | SE 4 | O | 4 | Scilly ... | 29.12 | 48 | 46 | WNW 9 | R | 7 |
| Aberdeen ... | 29.27 | 45 | 44 | SE 7 | OW | 7 | Jersey ... | 29.27 | 52 | 49 | SW 4 | BC | 4 |
| Shields ... | 29.17 | 47 | 46 | ESE 3 | C | 4 | Dungeness ... | 29.26 | 50 | 48 | SE 6 | C | 5 |
| Ardrossan ... | 29.11 | 48 | 47 | E 1 | O | 1 | London ... | 29.25 | 50 | 48 | S 2 | C | * |
| Malin Head ... | 29.09 | 48 | 47 | W 4 | O | 4 | Yarmouth ... | 29.29 | 46 | 45 | SE 4 | C | 4 |
| Mullaghmore ... | 29.06 | 48 | 47 | NNE 4 | C | 5 | Rochefort ... | 29.52 | 51 | 49 | S 4 | O | 2 |
| Belmullet ... | 29.12 | 48 | 48 | N 7 | OW | * | | | | | | | |

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

The reports for yesterday morning showed that pressure ranged from 30.3 inches and 30.5 inches over Central and Northern Russia and from 29.5 inches and more, over the southern parts of Spain and the eastern parts of the Mediterranean, to 28.7 inches and less in a small, but deep depression the centre of which lay over Ireland. Gradients were rather steep in almost all districts of Northwestern Europe, chiefly so over Ireland. The wind was mainly SE^{ly} and E^{ly} over the Baltic and N. Germany, E^{ly} to SE^{ly} in Scotland and Norway, NE^{ly} to N^{ly} over Ireland, SW^{ly} over France, and S^{ly} to SE^{ly} over England. The weather was fine but very cold over the eastern countries of Europe, unsettled and showery in the west. Temperature ranged from several degrees below zero (Fahrenheit) over Northern and Central Russia, and from below the freezing point over Central Germany to 50° and more over Spain, the S.W. of France and the Mediterranean. The lowest readings were -10° F. at Archangel, -5° at Moscow, -2° at Kuopio, 0° (zero) at St. Petersburg, 9° at Kopenhagen, and 11° at Kiev, 12° at Kharkov, 18° at Helsingfors, 21° at Munich, 30° at Wetzlar, and 33° at Buchhaven. The highest were 62° at Algiers, 60° at Malta, 59° at Cagliari and 56° at Tangier and Palermo, 54° at Barcelona, Marseille, and Genoa, 50° at Perpignan, 48° at Lundy and Stornoway, and 46° at Christiansund.

During the day the depression in the west filled up quickly, and the winds began to vary in direction over Western Europe.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Monday, 24th December* 1888.
 Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | + YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|---------------------|---|--------------------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|----------|-------------------|-------------|----------------|---------------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 5.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | | 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 .. | 30.72 | -2 | S | 2 | 0 | 30.69 | +0.04 | 3 | 3 | +5 | S | 4 | 0 | * | 18 | -8 | 0.04 | |
| | Hernösand ... | 30.60 | 24 | S | 4 | 0 | 30.52 | +0.02 | 26 | 24 | -2 | S | 6 | 0 | * | 32 | 21 | - | |
| | Stockholm ... | 30.43 | 23 | ESE | 8 | 0 | 30.36 | +0.02 | 27 | 24 | 0 | ESE | 6 | 0 | * | 32 | 19 | - | |
| | Wisby ... | 30.29 | 24 | E | 6 | 0 | 30.25 | +0.01 | 25 | 24 | 0 | ESE | 4 | 0 | * | 34 | 21 | - | |
| | Bodö ... | 30.06 | 31 | ESE | 6 | 0 | 30.00 | -0.03 | 29 | 26 | -5 | ESE | 6 | 6c | 3 | 36 | 24 | - | |
| | Christiansund... | 29.83 | 41 | SE | 4 | 0 | 29.59 | -0.30 | 39 | 32 | 0 | SE | 8 | C | 3 | 41 | 36 | - | |
| | Skudesnaes ... | 29.83 | 39 | SE | 8 | 0 | 29.65 | -0.25 | 36 | 32 | -1 | SE | 8 | 0 | 5 | 39 | 36 | - | |
| | Christiania Fjord | 30.17 | 32 | ESE | 5 | 0 | 30.06 | -0.07 | 31 | 30 | -2 | ESE | 6 | 0 | 3 | 34 | 27 | - | |
| | (Fjorder) | | | | | | | | | | | | | | | | | | |
| | Skagen (The Seaw) | 30.06 | 31 | SE | 7 | 0 | 29.96 | -0.08 | 28 | 28 | -5 | SE | 5 | S | 3 | 34 | 28 | - | |
| Fanö ... | 29.82 | 35 | SE | 6 | 7 | 29.77 | -0.05 | 34 | 33 | -3 | ESE | 5 | 0 | 4 | 37 | 34 | 0.04 | | |
| BRITISH ISLANDS. | Sumburgh Head | 29.44 | 42 | SSE | 6 | 7 | 29.06 | -0.57 | 43 | 43 | 0 | SSE | 6 | 7 | 8 | 43 | 42 | 0.42 | |
| | Stornoway .. | 29.15 | 47 | S | 7 | 0 | 29.94 | -0.47 | 43 | 42 | 0 | S | 5 | 7 | 5 | 47 | 40 | 0.46 | |
| | Wick ... | 29.34 | 45 | S | 8 | 0 | 29.00 | -0.55 | 43 | 42 | -2 | S | 1 | 0 | 4 | 46 | 42 | - | |
| | Nairn ... | 29.32 | 46 | E | 1 | 0 | 29.06 | -0.42 | 41 | 39 | +2 | SE | 0 | C | 1 | 47 | 37 | - | |
| | Aberdeen... | 29.47 | 44 | SSE | 6 | 6c | 29.13 | -0.44 | 44 | 42 | 0 | SSE | 6 | agw | 8 | 46 | 43 | 0.16 | |
| | Leith ... | 29.44 | 43 | S | 1 | 6 | 29.14 | -0.37 | 44 | 42 | +2 | S | 1 | bcw | * | 48 | 40 | - | |
| | Shields ... | 29.53 | 42 | SE | 2 | 0 | 29.21 | -0.35 | 44 | 43 | +3 | SSW | 4 | 7 | 3 | 45 | 40 | 0.10 | |
| | Spurn Head ... | 29.56 | 43 | SE | 4 | 6c | 29.35 | -0.18 | 43 | 43 | +3 | S | 7 | 7 | 5 | 44 | 40 | 0.04 | |
| | York ... | 29.58 | 44 | SE | 1 | 0 | 29.28 | -0.22 | 43 | 42 | +4 | SE | 3 | 0 | * | 46 | 37 | 0.12 | |
| | Loughborough | 29.54 | 46 | SE | 2 | 0 | 29.40 | -0.09 | 45 | 44 | +2 | S | 5 | agp | * | 46 | 41 | 0.02 | |
| GERMANY. | Ardrossan ... | 29.39 | 46 | NSE | 4 | 7 | 29.11 | -0.36 | 46 | 46 | +3 | SW | 4 | p | 3 | 46 | 43 | 0.13 | |
| | Malin Head ... | 29.27 | 42 | SSW | 4 | 0 | 29.11 | -0.33 | 41 | 41 | -3 | WSW | 4 | bp | 4 | 45 | 35 | 0.26 | |
| | Mullaghmore... | 29.30 | 44 | S | 6 | 7 | 29.18 | -0.30 | 43 | 41 | -2 | WSW | 5 | bc | 4 | 46 | 40 | 0.26 | |
| | Belmullet ... | 29.23 | 46 | SSW | 7 | 7 | 29.25 | -0.28 | 43 | 41 | +2 | NW | 6 | bcph | * | 50 | 40 | 0.20 | |
| | Donaghadee ... | 29.41 | 47 | SW | 2 | 0 | 29.18 | -0.27 | 44 | 43 | -3 | SSW | 5 | b | 3 | 47 | 42 | 0.12 | |
| | Barrow-in-Furness | 29.45 | 44 | SE | 4 | 0 | 29.22 | -0.22 | 46 | 46 | +2 | SW | 2 | bc/p | * | 47 | 42 | 0.16 | |
| | Liverpool (Bidston) | 29.46 | 44 | SE | 2 | 0 | 29.30 | -0.13 | 47 | 44 | +2 | SW | 3 | e | 3 | 47 | 42 | 0.10 | |
| | Holyhead ... | 29.67 | 47 | WSW | 1 | 0 | 29.29 | -0.11 | 49 | 47 | +4 | SW | 5 | og | 5 | 50 | 44 | 0.30 | |
| | Parsonstown ... | 29.44 | 41 | NW | 1 | 0 | 29.32 | -0.19 | 42 | 40 | -2 | WSW | 2 | 0 | * | ? | 39 | 0.14 | |
| | Valencia ... | 29.40 | 48 | S | 7 | 7 | 29.40 | -0.24 | 48 | 44 | +3 | W | 3 | 0 | 4 | 53 | 42 | 0.16 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 29.50 | 48 | SSW | 4 | 0 | 29.38 | -0.16 | 49 | 47 | +4 | WSW | 3 | 0 | 4 | 49 | 45 | 0.20 | |
| | Pembroke ... | 29.56 | 47 | W | 4 | 0 | 29.40 | +0.01 | 51 | 50 | +3 | SW | 5 | og | 4 | 51 | 46 | 0.08 | |
| | Scilly ... | 29.62 | 48 | WNW | 5 | 0 | 29.50 | -0.01 | 52 | 51 | +3 | W | 6 | om | 6 | 52 | 46 | 0.12 | |
| | Prawle Point ... | 29.62 | 46 | WNW | 3 | C | 29.52 | +0.06 | 51 | 51 | +5 | WSW | 4 | 0 | 3 | 51 | 44 | 0.07 | |
| | Jersey ... | 29.66 | 49 | W | 3 | C | 29.64 | +0.12 | 48 | 47 | -2 | SSE | 5 | om | 4 | 52 | 46 | 0.17 | |
| | Hurst Castle ... | 29.58 | 49 | SW | 4 | C | 29.52 | -0.04 | 49 | 49 | 0 | SW | 7 | om | 4 | 52 | 48 | 0.06 | |
| | Dungeness ... | 29.61 | 48 | SSW | 5 | C | 29.58 | +0.02 | 49 | 47 | +4 | WSW | 6 | 0 | 4 | 50 | 45 | 0.06 | |
| | London ... | 29.60 | 46 | SSW | 4 | 0 | 29.54 | -0.03 | 47 | 45 | +3 | S | 5 | 0 | * | 49 | 43 | - | |
| | Oxford ... | 29.58 | 45 | SE | 1 | 0 | 29.47 | +0.01 | 46 | 45 | +2 | S | 5 | 7 | * | 48 | 43 | 0.02 | |
| | Cambridge ... | 29.60 | 46 | SE | 1 | 0 | 29.50 | -0.06 | 46 | 44 | +6 | S | 3 | 7 | * | 49 | 38 | 0.02 | |
| PENINSULA. | Yarmouth ... | 29.63 | 44 | SSE | 4 | 6c | 29.55 | -0.03 | 45 | 44 | +1 | SSW | 3 | og | 4 | 45 | 41 | - | |
| | Cuxhaven ... | 29.77 | 36 | SE | 4 | 6 | 29.77 | +0.04 | 86 | 36 | +1 | SSE | 3 | f | * | 37 | 33 | - | |
| | Berlin ... | 29.80 | 33 | ESE | 4 | 0 | 29.90 | +0.12 | 33 | ? | -2 | SE | 2 | f | * | 36 | 32 | - | |
| | Wiesbaden ... | * | * | * | * | * | 29.94 | +0.30 | 32 | 31 | +1 | SE | 0 | f | * | 36 | 28 | - | |
| | Munich ... | 29.75 | 31 | NW | 2 | 0 | 29.98 | +0.28 | 27 | 27 | 0 | SW | 2 | m | * | 32 | 27 | - | |
| | The Helder ... | 29.72 | 37 | SE | 1 | 6 | 29.67 | +0.02 | 39 | 39 | +3 | S | 3 | f | 2 | 39 | 34 | - | |
| | Brussels ... | * | * | * | * | * | 29.77 | +0.13 | 42 | 41 | 0 | S | 4 | 0 | * | 46 | 41 | - | |
| | Cape Gris Nez... | 29.63 | 40 | S | 4 | 6 | 29.65 | +0.11 | 45 | 45 | +3 | SW | 7 | C | 5 | 46 | 39 | - | |
| | Paris ... | 29.75 | 40 | SW | 1 | 6 | 29.84 | +0.22 | 42 | 42 | +7 | SSW | 3 | 0 | * | 41 | 35 | - | |
| | Brest ... | 29.77 | 49 | WNW | 5 | 0 | 29.73 | +0.15 | 53 | 51 | +2 | W | 8 | 7 | 4 | 54 | 41 | 0.32 | |
| PENINSULA. | Lorient ... | 29.78 | 48 | WNW | 5 | 6c | 29.71 | +0.10 | 52 | 52 | +4 | WNW | 8 | 7 | 4 | 52 | 46 | 0.16 | |
| | Rochefort ... | 29.82 | 50 | NW | 4 | C | 29.95 | +0.24 | 51 | 48 | +11 | WSW | 4 | 0 | 2 | 52 | ? | 0.08 | |
| | Belfort ... | 29.76 | 34 | W | 1 | 6 | 30.00 | +0.40 | 38 | ? | +5 | W | 1 | 6c | * | ? | 25 | - | |
| | Lyons ... | 29.82 | 40 | S | 1 | 0 | 29.99 | +0.42 | 40 | 39 | +1 | W | 1 | 6c | * | ? | ? | - | |
| | Nice ... | 29.88 | 47 | ESE | 1 | 7 | 29.99 | +0.33 | 45 | 43 | -5 | ESE | 4 | C | 5 | 54 | 41 | 0.51 | |
| | Perpignan ... | 29.85 | 48 | NW | 4 | 0 | 30.04 | +0.54 | 39 | 38 | -11 | NE | 1 | 6 | * | 53 | 38 | - | |
| | Biarritz ... | 29.87 | 53 | WNW | 8 | 7 | 30.00 | +0.32 | 50 | 46 | +1 | SW | 4 | 0 | 6 | 55 | 46 | 0.79 | |
| | Corunna ... | * | * | * | * | * | | | | | | | | | | | | | |
| | Lisbon ... | 30.08 | 49 | N | 4 | C | 30.19 | +0.26 | 50 | 47 | +4 | SW | 1 | C | 5 | 54 | ? | - | |

WEATHER CHARTS

for 8 a.m. on Monday, 24th December

1888.

BAROMETER, WIND & 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;
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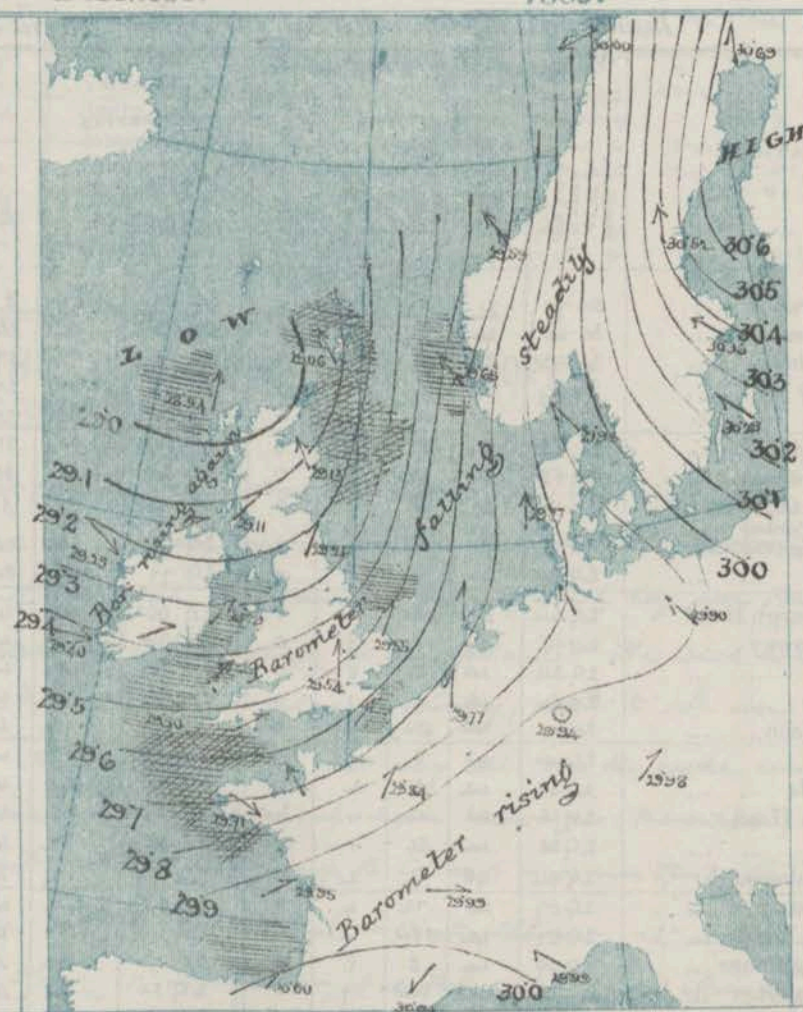
Sea Disturbance — where considerable is shown thus.

— Rough — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871 — 1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.808 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
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| Cambridge | 29.938 |
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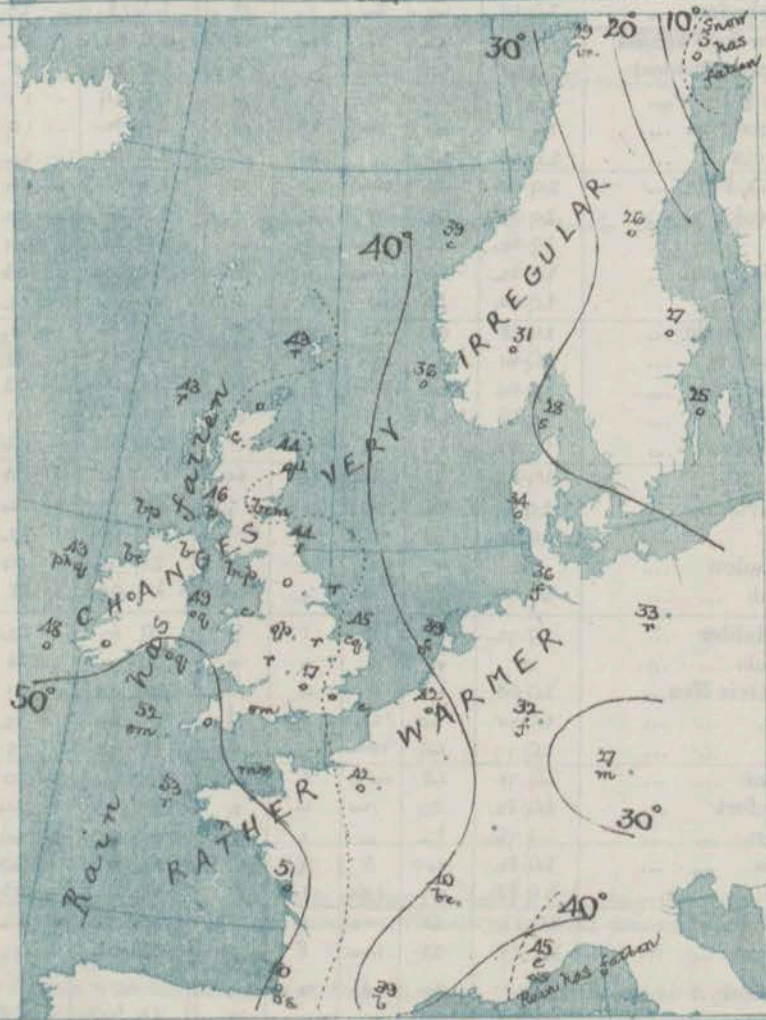
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|-------------------|------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Dry. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 35.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 35.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.6 in. and upwards over the Gulf of Bothnia, 30.1 in. and upwards over the ^{W.} part of the German Bismarck, Lowest 29.0 in. and less in a depression lying off the north of Scotland. Gradually deep over Scandinavia, and the North Sea, but moderate elsewhere. Barometer falling in Scandinavia, Denmark and the N. and E. of our Islands, but rising elsewhere.

TEMPERATURE

Highest 55° at Bristol, 54° at Falmouth, 53° at London, 52° at Plymouth, 51° at Rochefort, and 50° at Biscaya and Lisbon. Lowest 3° at Kopenhagen, 2° at Ulsby, 1° at Kopenhagen, 0° at Stockholm, 0° at Hagen, 0° at Bodo, and 0° at Wiesbaden.

WIND

Moderate to strong from West or South West over France and the west of our Islands. Strong from South on our north and east coasts; strong to a gale from South East in Scandinavia. A fresh gale from the S.W. was experienced last night in the east of Scotland and the W. of Helande.

WEATHER

Cloudy or overcast generally, with rain in many parts of Great Britain and France, snow at Hagen and fog in Germany. Rain fell yesterday in nearly all parts of Western Europe, the largest amounts being 0.8 inch at ^{Germany} and 0.5 inch at Nice.

SEA

Very high at Lumburgh Head and Aberdeen, high at Lorient, and rough or rather so in several of the more exposed parts of our coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the north is now travelling away from our Islands, and the barometer is rising on our western coasts.

The general appearance is, however, not at all settled, and it is probable that another depression will shortly advance from the Atlantic.

FORECASTS

For the 24 hours ending at NOON on 25th December 1893.

DISTRICTS.

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

FORECASTS.

S^W winds, strong and squally at times, changeable, some rain.

S^W winds, fresh or strong, changeable, some rain.

DISTRICTS.

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

FORECASTS.

S^W to S^W winds, force doubtful; some rain, unsettled and some rain.

N^W to S^W winds, force doubtful; unsettled, some rain.

Same as N^o 6 and 7.

Same as N^o 8.

The SOUTH CONE was hoisted last evening in districts 0, 1, 6, 7, 9, 10 and part of 8.

WARNINGS

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. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. |
|-----------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnæse ... | 29.88 | 29 | 31 | ESE 8 | 0 | 5 | Holyhead ... | 29.45 | 47 | 46 | 20 0 | c | 0 |
| Sumburgh Head | | | | | | | Valencia ... | | | | | | |
| Stornoway ... | 29.29 | 47 | 47 | S 6 | 6 | 5 | Scilly ... | | | | | | |
| Aberdeen ... | | | | | | | Jersey ... | 29.59 | 51 | 49 | W 3 | c | 3 |
| Shields ... | | | | | | | Dungeness ... | 29.59 | 48 | 46 | SSW 5 | c | 3 |
| Ardrossan ... | | | | | | | London ... | | | | | | * |
| Malin Head ... | 29.38 | 44 | 44 | SW 3 | 0 | 3 | Yarmouth ... | | | | | | |
| Mullaghmore ... | | | | | | | Rochefort ... | 29.76 | 51 | 49 | WNW 5 | c | 2 |
| Belmullet ... | 29.30 | 45 | 43 | SW 6 | 0 | * | | | | | | | |

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

The Continental Information has not arrived.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 16TH TO THE 22ND DECEMBER 1888

In the course of this week there has been a complete reversal of the conditions which prevailed at the commencement. At that time the distribution of pressure was mainly anticyclonic, the gradients favourable for N.W. and W. winds at our northern and eastern stations, and for N.E. to E. winds over France and the Bay of Biscay, but were not deep. Over Scandinavia and the Baltic, however, the winds were cyclonic, the weather rough and very rainy. Fog was prevalent over France and the British Islands, especially over England, and the wind was of little strength. The anticyclone now moved slowly to the south-eastward and, by 8 a.m. on Tuesday, its central area had reached Germany, and the east of France, while its N.W. side was still spread over England. Thick fogs continued at the English stations (very thick in London), while on our western and northern coasts the weather was clear, but becoming less settled.

On Wednesday a large area of low pressure, not very deep, was lying over the Atlantic off our western coasts, and cyclonic S.W. winds of considerable strength had become general, with rain in the west and north, and dull mild weather generally. Throughout the remainder of the week these conditions continued, but were complicated by the advance of a small, shallow secondary system to Ireland on Thursday, and by a much deeper one, to the same region, on Saturday. The latter produced S.E. (SE to SW) gales over Great Britain, and strong E. to N.E. winds and gales in Ireland. Rain fell everywhere — heavily in the southwest — and the sea became very rough, especially in the north.

At the close of the week the disturbance was filling up, quickly, over the Irish Sea.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Tuesday 25th December 1888.
 Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | † YESTERDAY EVENING. | | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|---------------------------|------------------------------------|-----------------|-------|-------------------|----------|----------------------------------|-----------------------------------|------|-------------|-----------------------------------|-------|-------------------|----------|--------------|-------------|------|---------------------|--|--|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | Reading at 8 A.M. and Sea Level. | BAROMETER. | | SHADE TEMP. | | WIND. | | Weather. | Sea. 0 to 2. | SHADE TEMP. | | Amount of Rainfall. | | |
| | | | Dir. | Force. (0 to 12.) | | | Difference from 8 a.m. yesterday. | Dry. | Wet. | Difference from 8 a.m. yesterday. | Dir. | Force. (0 to 12.) | | | Max. | Min. | | | |
| SCANDINAVIA. | | | | | | | | | | | | | | | | | | | |
| Haparanda ... | 30.57 | -3 | Z | 0 | b | 30.50 | - .19 | -1 | -1 | -4 | S | 4 | b | * | 30 | -4 | - | | |
| Hernösand ... | 30.35 | 26 | S | 8 | o | 30.19 | - .33 | 27 | 26 | + 1 | S | 8 | o | * | 30 | 23 | - | | |
| Stockholm ... | 30.18 | 17 | SE | 6 | o | 30.06 | - .30 | 24 | 23 | - 3 | SE | 6 | s | * | 28 | ? | 0.24 | | |
| Wisby ... | 30.14 | 26 | ESE | 6 | o | 30.02 | - .23 | 25 | 24 | 0 | ESE | 6 | o | * | 32 | 21 | 0.12 | | |
| Bodö ... | 29.87 | 31 | ENE | 6 | bc | 29.73 | - .27 | 31 | 31 | + 2 | ENE | 4 | o | 2 | ? | 25 | - | | |
| Christiansund... | 29.48 | 39 | SE | 9 | c | 29.49 | - .10 | 38 | 38 | - 1 | SE | 8 | bc | 3 | 39 | 36 | - | | |
| Skudesnaes ... | 29.42 | 38 | SE | 9 | o | 29.56 | - .09 | 37 | 35 | + 1 | E | 6 | o | 5 | 37 | 34 | - | | |
| Christiania Fjord (Vardø) | 29.86 | 30 | ? | ? | s | 29.75 | - .31 | 31 | 31 | 0 | NE | 5 | s | 2 | ? | 27 | - | | |
| Skagen (The Seaw) | 29.43 | 32 | SE | 7 | s | 29.63 | - .33 | 34 | 34 | + 6 | SE | 6 | r | 3 | 36 | 28 | 0.08 | | |
| Faaf ... | 29.60 | 38 | S | 6 | r | 29.49 | - .25 | 38 | 38 | + 4 | SSE | 4 | r | * | ? | 34 | 0.32 | | |
| BRITISH ISLANDS. | | | | | | | | | | | | | | | | | | | |
| Sumburgh Head | 29.04 | 42 | WNW | 4 | o | 29.42 | + .36 | 38 | 35 | - 5 | WSW | 1 | shp | 5 | 46 | 34 | 0.48 | | |
| Stornoway ... | 29.20 | 36 | NW | 3 | bc | 29.31 | + .37 | 41 | 40 | - 2 | S | 6 | bc | 5 | 44 | 30 | 0.10 | | |
| Wick ... | 29.18 | 45 | NW | 1 | b | 29.52 | + .52 | 36 | 35 | - 7 | SW | 2 | b | 2 | 47 | 32 | 0.01 | | |
| Nairn ... | 29.24 | 36 | W | 1 | bc | 29.47 | + .41 | 32 | 30 | - 9 | Z | 0 | b | 1 | 45 | 30 | 0.02 | | |
| Aberdeen... | 29.26 | 38 | W | 3 | b | 29.51 | + .35 | 33 | 31 | - 11 | SSW | 1 | b | 4 | 44 | 29 | - | | |
| Leith ... | 29.24 | 37 | W | 1 | b | 29.50 | + .36 | 35 | 33 | - 9 | S | 1 | bc | * | 45 | 32 | 0.01 | | |
| Shields ... | 29.35 | 42 | SW | 2 | c | 29.58 | + .37 | 35 | 34 | - 9 | SW | 2 | c | 2 | 48 | 38 | 0.06 | | |
| Spurn Head ... | 29.39 | 44 | W | 1 | o | 29.61 | + .26 | 38 | 37 | - 5 | SSW | 2 | c | 3 | 47 | 36 | 0.03 | | |
| York ... | 29.38 | 45 | W | 1 | o | 29.60 | + .32 | 35 | 34 | - 8 | SE | 1 | o | * | 48 | 32 | - | | |
| Loughborough | 29.43 | 45 | WSW | 1 | o | 29.69 | + .29 | 32 | 32 | - 13 | SE | 1 | c | * | 30 | 31 | 0.05 | | |
| Ardrossan ... | 29.36 | 42 | W | 3 | o | 29.45 | + .34 | 36 | 36 | - 10 | ENE | 3 | bm | 3 | 46 | 35 | 0.08 | | |
| Malin Head ... | 29.38 | 40 | WSW | 4 | b | 29.25 | + .14 | 26 | 36 | - 5 | S | 4 | ogw | 4 | 45 | 36 | 0.32 | | |
| Mullaghmore ... | 29.44 | 39 | SW | 4 | c | 29.23 | + .05 | 41 | 38 | - 2 | SE | 6 | og | 5 | 44 | 35 | 0.17 | | |
| Belmullet ... | 29.48 | 41 | WNW | 6 | o | 29.07 | - .18 | 38 | 38 | - 5 | SSE | 9 | rq | * | 44 | 37 | 0.38 | | |
| Donaghadee ... | 29.44 | 38 | WSW | 3 | b | 29.44 | + .26 | 38 | 37 | - 6 | SSW | 3 | c | 1 | 44 | 35 | 0.01 | | |
| Barrow-in-Furness | 29.40 | 43 | W | 4 | b | 29.54 | + .32 | 39 | 38 | - 7 | SE | 5 | c | * | 47 | 38 | - | | |
| Liverpool (Bidston) | 29.41 | 43 | W | 3 | o | 29.58 | + .28 | 37 | 35 | - 10 | SSE | 3 | o | 3 | 48 | 36 | 0.01 | | |
| Holyhead ... | 29.44 | 47 | W | 3 | c | 29.50 | + .21 | 45 | 40 | - 4 | SSE | 3 | cg | 3 | 49 | 40 | - | | |
| Parsonstown ... | 29.52 | 36 | Z | 0 | b | 29.28 | - .04 | 40 | 38 | - 2 | SE | 3 | o | * | 45 | 32 | - | | |
| Valencia ... | 29.60 | 43 | WNW | 3 | c | 29.20 | - .20 | 49 | 47 | + 1 | SW | 7 | ol | 7 | 50 | 37 | 0.36 | | |
| GERMANY. | | | | | | | | | | | | | | | | | | | |
| Roche's Point... | 29.59 | 42 | WNW | 2 | b | 29.27 | - .11 | 50 | 49 | + 2 | S | 8 | pu | 5 | 50 | 40 | - | | |
| Pembroke ... | 29.53 | 47 | NW | 4 | bc | 29.51 | + .11 | 48 | 46 | - 3 | S | 6 | cu | 4 | 51 | 46 | 0.24 | | |
| Scilly ... | 29.57 | 49 | WNW | 6 | o | 29.48 | - .02 | 51 | 51 | - 1 | S | 7 | r | 6 | 52 | 45 | 0.08 | | |
| Prawle Point ... | 29.55 | 46 | WNW | 4 | bc | 29.68 | + .16 | 48 | 44 | - 3 | S | 5 | cu | 4 | 51 | 40 | 0.10 | | |
| Jersey ... | 29.58 | 52 | S | 3 | o | 29.78 | + .44 | 48 | 46 | 0 | SSW | 4 | bm | 3 | 53 | 39 | 0.05 | | |
| Hurst Castle ... | 29.51 | 49 | WSW | 3 | o | 29.79 | + .21 | 44 | 43 | - 5 | SSW | 4 | bc | 3 | 52 | 38 | 0.11 | | |
| Dunoon ... | 29.47 | 50 | SW | 6 | o | 29.77 | + .19 | 38 | 37 | - 11 | NW | 4 | c | 2 | 50 | 24 | 0.23 | | |
| London ... | 29.48 | 48 | SSW | 2 | or | 29.73 | + .19 | 36 | 35 | - 11 | S | 2 | bc | * | 32 | 33 | 0.22 | | |
| Oxford ... | 29.53 | 42 | SSW | 2 | r | 29.77 | + .25 | 25 | 34 | - 11 | S | 2 | b | * | 51 | 24 | 0.55 | | |
| Cambridge ... | 29.45 | 45 | Z | 0 | o | 29.76 | + .26 | 33 | 33 | - 13 | SW | 1 | b | * | 48 | 32 | 0.24 | | |
| Yarmouth ... | 29.46 | 46 | WSW | 3 | o | 29.70 | + .15 | 35 | 34 | - 10 | W | 3 | bm | e | 46 | 38 | 0.37 | | |
| Cuxhaven ... | 29.70 | 38 | SSE | 3 | f | 29.50 | - .27 | 41 | 40 | + 5 | S | 1 | r | * | 41 | ? | 0.24 | | |
| Berlin ... | 29.89 | 34 | SSW | 1 | b | 29.73 | - .17 | 36 | 34 | + 2 | S | 2 | r | * | 36 | 32 | 0.08 | | |
| Wiesbaden ... | * | * | * | * | * | 29.78 | - .16 | 39 | 38 | + 7 | Z | 0 | o | * | 39 | ? | 0.28 | | |
| Munich ... | 29.97 | 30 | W | 2 | b | 29.93 | - .05 | 32 | 32 | + 5 | SW | 2 | o | * | 43 | 27 | - | | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | | |
| The Helder ... | 29.50 | 43 | S | 4 | r | 29.65 | - .02 | 43 | 42 | + 4 | WNW | 3 | b | 3 | 45 | 39 | 0.32 | | |
| Brussels ... | * | * | * | * | * | 29.80 | + .03 | 42 | 41 | 0 | WSW | 5 | c | * | 47 | 42 | 0.39 | | |
| Cape Gris Nez... | 29.48 | 48 | SW | 7 | o | 29.38 | - .27 | 43 | 42 | - 2 | WNW | 4 | b | 3 | 50 | 43 | 0.28 | | |
| Paris ... | 29.42 | 45 | SSW | 5 | o | 29.88 | + .04 | 38 | 38 | - 4 | SSW | 1 | b | * | 47 | 38 | 0.28 | | |
| Brest ... | 29.69 | 53 | W | 4 | o | 29.79 | + .06 | 51 | 49 | - 2 | SW | 5 | a | 5 | 55 | 41 | 0.16 | | |
| Lorient ... | 29.67 | 51 | SSW | 3 | bc | 29.80 | + .09 | 48 | 47 | - 4 | SSE | 3 | o | 6 | 54 | 45 | 0.39 | | |
| Rochefort ... | 29.84 | 51 | S | 8 | r | 29.96 | + .01 | 50 | 50 | - 1 | SSW | 5 | f | 2 | 54 | 43 | 0.68 | | |
| Belfort ... | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| Lyons ... | 29.99 | 41 | S | 3 | bc | 30.02 | + .03 | 42 | 41 | + 2 | SSW | 3 | o | * | 50 | 40 | 0.12 | | |
| Nice ... | 29.99 | 50 | E | 3 | b | 29.99 | 00 | 44 | 40 | - 1 | ENE | 4 | b | 0 | 57 | 48 | - | | |
| Perpignan ... | 30.03 | 44 | Z | 0 | b | 30.06 | + .02 | 45 | 45 | + 6 | Z | 0 | o | * | 56 | 39 | 0.20 | | |
| Barrieta ... | 29.95 | 54 | SW | 7 | r | 30.02 | + .02 | 54 | 52 | + 4 | SW | 4 | r | 4 | 55 | 46 | 0.20 | | |
| SPAIN. | | | | | | | | | | | | | | | | | | | |
| Corunna ... | * | * | * | * | * | 30.02 | + .04 | 59 | 57 | + 5 | WSW | 7 | o | 5 | 59 | 52 | 0.24 | | |
| Lisbon ... | 30.23 | 57 | SW | 4 | f | 30.28 | + .09 | 56 | 56 | + 6 | WSW | 5 | f | 2 | 57 | 55 | 0.16 | | |

WEATHER CHARTS

for 8 a.m. on

Tuesday, 25th December

1888.

BAROMETER, WIND & 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 the barbs and feathers refer to force, thus —
 — = forces above 10; — = forces 8 to 10;
 — = forces 5 to 7; — = forces 1 to 4;
 ○ = dead calm.

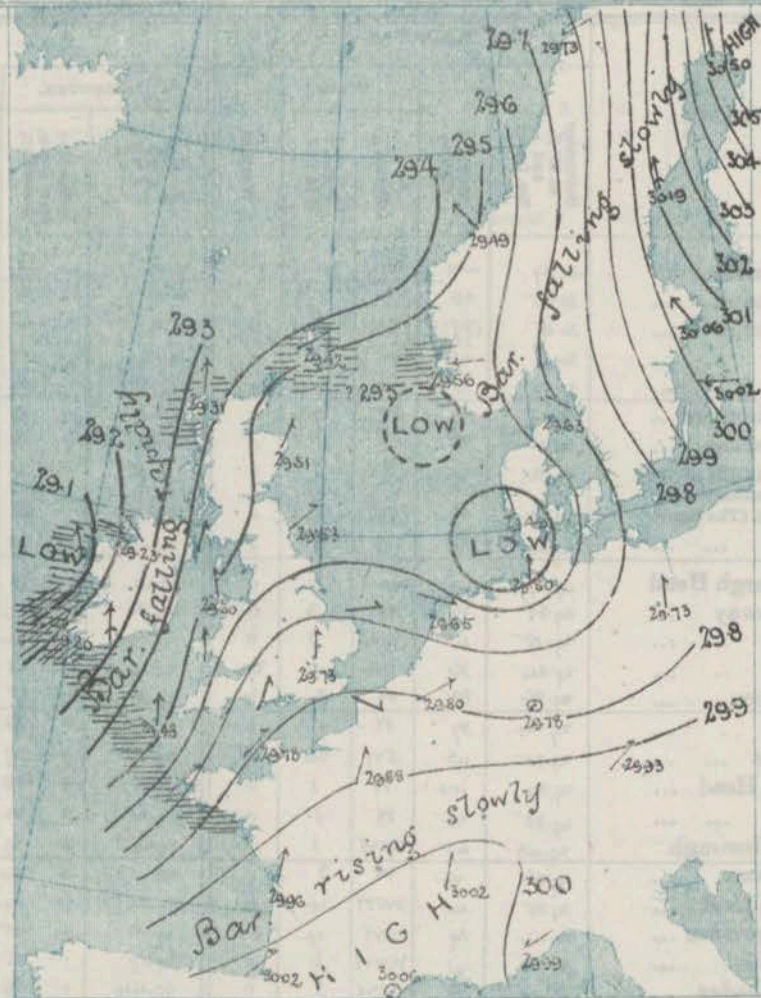
Sea Disturbance — where considerable, is shown thus.
 — = Rough — = High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December

During the 15 Years 1871-1885.

| STATIONS. | MEAN READINGS. |
|----------------|----------------|
| Sumburgh Head. | 29.667 |
| Stornoway. | 29.701 |
| Wick. | 29.711 |
| Nairn. | 29.739 |
| Aberdeen. | 29.757 |
| Leith. | 29.803 |
| Shields. | 29.843 |
| York. | 29.888 |
| Loughborough. | 29.923 |
| Ardrossan. | 29.819 |
| Donaghadee. | 29.847 |
| Holyhead. | 29.879 |
| Liverpool. | 29.895 |
| Parsonstown. | 29.909 |
| Valencia. | 29.908 |
| Roche's Point. | 29.915 |
| Pembroke. | 29.918 |
| Scilly. | 29.962 |
| Jersey. | 29.985 |
| Hurst Castle. | 29.959 |
| Dover. | 29.957 |
| LONDON. | 29.951 |
| Oxford. | 29.954 |
| Cambridge. | 29.938 |
| Yarmouth. | 29.914 |



TEMPERATURE, & WEATHER at 8 A.M., with RAINFALL in PAST 24 HOURS.

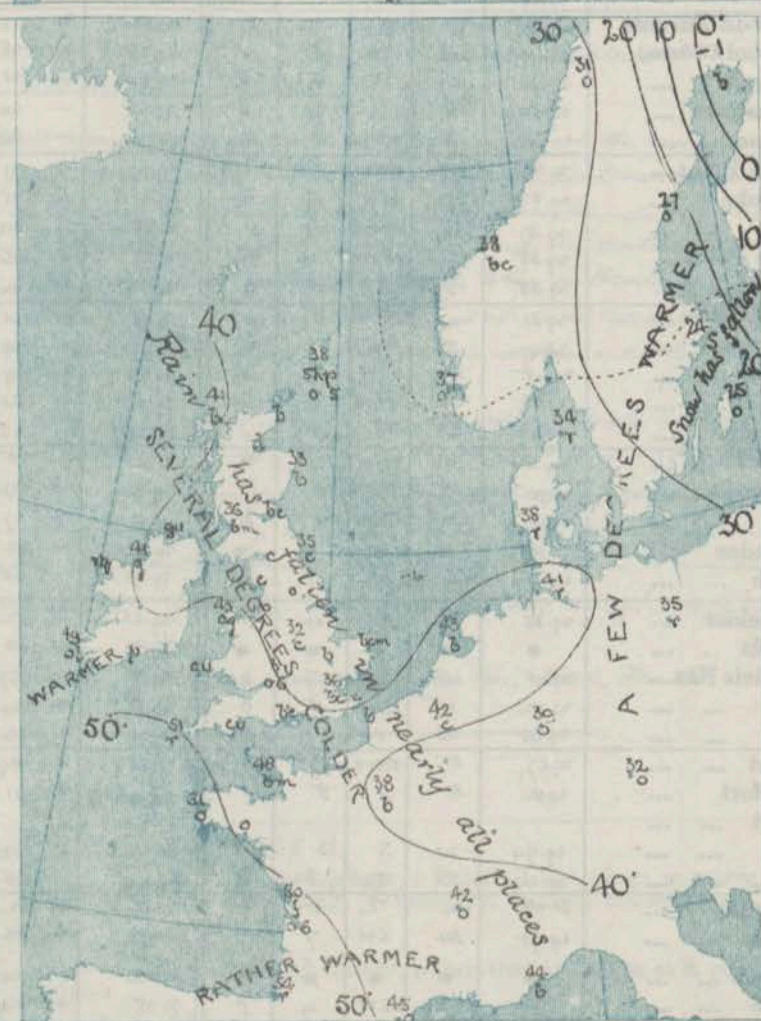
Temperature — Isotherms are drawn for each 10° changes since previous morning are stated in words.
Weather — is shown by letters of the Beaufort Scale.
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches) |
|----------------|---------------|---------------|-----------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | Wet. | |
| Sumburgh Head. | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway. | 44.4 | 33.2 | 39.2 | 38.2 | 5.66 |
| Wick. | 42.1 | 32.6 | 38.0 | 36.0 | 3.13 |
| Nairn. | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen. | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith. | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields. | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York. | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough. | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan. | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee. | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead. | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool. | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown. | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia. | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point. | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke. | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly. | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey. | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle. | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover. | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON. | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford. | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge. | 43.5 | 32.3 | 36.9 | 36.1 | 1.98 |
| Yarmouth. | 42.4 | 34.2 | 38.3 | 37.5 | 2.05 |

NOTE — The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1868-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.30 in. at Kopenhagen, 30.2 in. and upwards over the southern part of the Iberian Peninsula.
 Lowest, 29.1 in. and less in a depression lying off the west of Ireland, 29.5 in. and less in another disturbance lying off the S.W. of Denmark.
 Gradients sharp over Scandinavia, and rather steep over the coast of our Islands, but moderate or slight elsewhere.
 Barometer falling rapidly in Ireland, and less decidedly in Scandinavia, Denmark and Germany, but rising elsewhere.

TEMPERATURE

Highest, 56° at Lisbon, 54° at Biarritz, 51° at Sally and Brest, 50° at Roches Point and Rochefort and 49° at Valencia.
 Lowest, -1° at Kopenhagen, 24° at Stockholm, 25° at Viborg, 27° at Helsingfors, 31° at Riga and Kaarder, 32° at Vaini, Lough Guro and Illunick.
 Sharp frost was experienced last night over the inland parts of England; in London the thermometer on the grass fell to 23°.

WIND

Strong from the S.W. on our western coast, with gales at Schenck and Roches Point.
 Light from S.W. on the eastern coast of Great Britain, strong to a gale from S.E. in Scandinavia.

WEATHER

Fine over the eastern and central parts of Great Britain.
 Cloudy or overcast elsewhere with rain on our extreme W. and S.W. coasts as well as in Denmark and North Germany.
 Rain fell yesterday in most parts of Western Europe. Bright aurora was seen in the north of Scotland at night.

SEA

High at Valencia, rough on our southwest coasts generally, and rather rough off the north of Scotland, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression which lay off the north of Scotland yesterday has travelled away to the northward, but in the course of the past night a new disturbance has advanced with great rapidity to the coast of Ireland. Gradients in the west are increasing quickly.

FORECASTS

For the 24 hours ending at NOON on 26TH DEC^R. 1888.

DISTRICTS.

- 10 SCOTLAND NORTH
- 11 SCOTLAND EAST
- 12 ENGLAND N.E.
- 13 ENGLAND EAST
- 14 MIDLAND COUNTIES
- 15 ENGLAND SOUTH

FORECASTS.

NONE ISSUED

DISTRICTS.

- 16 SCOTLAND WEST
- 17 ENGLAND N.W.
- 18 ENGLAND S.W.
- 19 IRELAND NORTH
- 20 IRELAND SOUTH

WARNINGS

FORECASTS.

NONE ISSUED

The S. Cone is hoisted, this morning in all districts excepting 10.

Note.—The South Cone, point downwards (11) 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 (16) 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. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 29.54 | 37 | 33 | SE 8 | 0 | 5 | Holyhead ... | 29.37 | 46 | 43 | W 4 | c | 4 |
| Sumburgh Head ... | 29.05 | 44 | 40 | SSE 5 | r | 8 | Valencia ... | 29.50 | 43 | 41 | W 4 | pm | 4 |
| Stornoway ... | 29.11 | 44 | 39 | SW 4 | bc | 4 | Scilly ... | 29.46 | 50 | 49 | W 5 | r | 5 |
| Aberdeen ... | 29.08 | 43 | 41 | SSW 2 | cu | 4 | Jersey ... | 29.58 | 50 | 50 | SW 5 | o | 4 |
| Shields ... | 29.24 | 46 | 43 | SW 4 | bc | 2 | Dungeness ... | 29.48 | 48 | 48 | SW 4 | r | 5 |
| Ardrossan ... | 29.21 | 46 | 45 | W 3 | c | 2 | London ... | 29.47 | 50 | 50 | SW 2 | om | |
| Malin Head ... | 29.38 | 43 | 41 | WNW 4 | bc | 4 | Yarmouth ... | 29.46 | 46 | 45 | SSW 4 | cgd | 4 |
| Mullaghmore ... | 29.35 | 42 | 39 | W 5 | cp | 4 | Rochefort ... | 29.41 | 53 | 50 | SW 4 | r | 3 |
| Belmullet ... | 29.39 | 42 | 41 | W 5 | 0 | * | | | | | | | |

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

The reports for yesterday morning showed that pressure varied from between 30.7 ins: & 31.0 inches over Central and Northern Russia, and from 30.1 inches and more over the southern half of Spain, to rather below 29.0 ins: in a depression, the centre of which lay off the extreme northwest of Scotland, and to a little below 29.9 inches in two other shallow disturbances, one of which lay over Poland, and the other over the Mediterranean. Thus, while S.E. winds prevailed over the Baltic, Finland and Western Russia, S. to W. winds were felt over the British Islands and France, and N.W. to N.E. breezes over the south of France. The weather was cloudy generally, - foggy in the east and showery in the west of Europe. Temperature ranged from between 50° and 60° over the greater part of the Mediterranean as well as over the Bay of Biscay and at the mouth of the Channel to much below zero over Central Russia and to several degrees below the freezing point over the Baltic, Poland and Southern Russia. The highest individual values were 60° at Tunis, 59° at Cagliari, 58° at Brindisi, 54° at Palermo, 53° at Brest, 52° at Lally and Rochefort, 49° at Holyhead, 46° at Ardrossan, and 43° even at Sumburgh Head. The lowest were -20° f. at Moscow, -8° at St. Petersburg, -6° at Archangel -5° at Kharkov, 0° at Kuopio, +16° at Helsingfors, 20° at Warsaw, 27° at Llundan, 29° at Karmarstadt and at Bodö.

No important change was observed later.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Wednesday, 26th December 1888.
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS | YESTERDAY EVENING | | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|----------------------------------|-------------------|--------|-------|--------|----------|--|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|--------|----------|------|-------|----------------|------|---------------------|
| | Bar. | Therm. | Wind. | | Weather. | | Barometer. | | SHADE TEMP. | | | Wind. | | Weather. | Sea. | Wind. | SHADE TEMP. | | Amount of Rainfall. |
| | | | Dir. | Force. | | | Reading at 8 P.M. and Sea Level. | Difference from 8 A.M. yesterday. | Dry. | Wet. | Difference from 8 A.M. yesterday. | Dir. | Force. | | | | Max. | Min. | |
| SCANDINAVIA. | | | | | | | | | | | | | | | | | | | |
| Haparanda ... | 29.41 | 2 | SE | 6 | 1 | | 29.89 | -11 | 5 | 4 | +6 | SSC | 4 | bc | 4 | 5 | -6 | | |
| Hernösand ... | 29.41 | 29 | SSC | 8 | 5 | | 29.03 | -16 | 28 | 28 | +1 | SSC | 6 | 4 | 4 | 20 | 28 | 0.08 | |
| Stockholm ... | 29.98 | 28 | SE | 4 | 5 | | 29.90 | -16 | 28 | 26 | +2 | SSC | 4 | 0 | 4 | 23 | 23 | 0.08 | |
| Wisby ... | 29.92 | 28 | SSC | 6 | 5 | | ? | ? | 30 | 29 | +5 | SSC | 6 | 5 | 4 | 30 | 24 | 0.20 | |
| Bodö ... | 29.76 | 24 | SSC | 4 | 0 | | 29.75 | +02 | 27 | 24 | -4 | SSC | 6 | 0 | 3 | 32 | 25 | | |
| Christiansund ... | 29.58 | 37 | SE | 2 | 0 | | 29.39 | -10 | 36 | 31 | -2 | SSC | 6 | 6 | 1 | ? | 34 | | |
| Skudesnaes ... | 29.56 | 38 | R | 4 | 0 | | 29.23 | -33 | 36 | 36 | +2 | SSC | 8 | 4 | 4 | ? | 36 | | |
| Christiania Fjord (Fjorder) | 29.68 | 32 | NE | 5 | 2 | | 29.51 | -24 | 36 | 36 | +5 | SSC | 5 | 4 | 2 | ? | | | |
| Skagen (The Sea) | 29.61 | 37 | SSW | 3 | 0 | | 29.42 | -21 | 38 | 37 | +4 | S | 5 | 4 | 3 | ? | 34 | 0.32 | |
| Fanö ... | 29.62 | 39 | S | 2 | 0 | | 29.46 | -03 | 41 | 41 | +3 | S | 2 | 0 | 4 | 41 | 36 | 0.32 | |
| BRITISH ISLANDS. | | | | | | | | | | | | | | | | | | | |
| Sumburgh Head | 29.30 | 41 | SSC | 4 | 0 | | 29.06 | -36 | 37 | 36 | -1 | N | 2 | OSP | 5 | 44 | 35 | 0.40 | |
| Stornoway ... | 28.97 | 40 | SE | 7 | 0 | | 29.12 | -09 | 39 | 37 | -2 | W | 5 | bc | 4 | 41 | 36 | 0.13 | |
| Wick ... | 29.16 | 48 | S | 8 | 0 | | 29.18 | -34 | 35 | 34 | -1 | SW | 3 | 6 | 2 | 43 | 34 | 0.35 | |
| Nairn ... | 29.02 | 37 | E | 1 | 0 | | 29.28 | -14 | 34 | 33 | +2 | SW | 3 | 6 | 1 | 40 | 29 | 0.10 | |
| Aberdeen ... | 29.14 | 42 | SE | 7 | 0 | | 29.36 | -15 | 36 | 35 | +3 | SW | 3 | 6 | 4 | 43 | 33 | 0.26 | |
| Leith ... | 29.11 | 37 | SW | 3 | 0 | | 29.44 | -04 | 38 | 36 | +3 | W | 3 | bm | 4 | 43 | 32 | 0.04 | |
| Shields ... | 29.21 | 41 | SE | 5 | 4 | | 29.54 | -04 | 38 | 37 | +3 | WSW | 3 | 0 | 3 | 42 | 34 | 0.12 | |
| Spurn Head ... | 29.30 | 43 | SSC | 4 | 4 | | 29.59 | -02 | 39 | 38 | +1 | SW | 4 | 0 | 4 | 44 | 35 | 0.07 | |
| York ... | 29.28 | 42 | SE | 3 | 0 | | 29.56 | -04 | 38 | 37 | +3 | SE | 1 | bc | 4 | 44 | 34 | 0.15 | |
| Loughborough | 29.36 | 46 | SW | 4 | 0 | | 29.66 | -03 | 39 | 37 | +7 | SW | 8 | 0 | 4 | 47 | 32 | 0.15 | |
| GERMANY. | | | | | | | | | | | | | | | | | | | |
| Arcturum ... | 29.06 | 45 | SW | 3 | bp | | 29.62 | +07 | 41 | 38 | +5 | WSW | 4 | 6 | 3 | 45 | 35 | 0.08 | |
| Malin Head ... | 29.08 | 44 | NW | 3 | bp | | 29.51 | +26 | 41 | 38 | +5 | NW | 5 | bc | 5 | 44 | 36 | 0.30 | |
| Mullaghmore ... | 29.21 | 45 | WSW | 6 | bp | | 29.60 | +37 | 39 | 37 | -2 | WSW | 5 | 0 | 4 | 45 | 36 | 0.43 | |
| Belmullet ... | 29.27 | 45 | SSW | 5 | 0 | | 29.64 | +57 | 41 | 38 | +3 | WSW | 5 | bp | 4 | 46 | 37 | 0.25 | |
| Doughadee ... | 29.14 | 42 | SW | 4 | bc | | 29.59 | +15 | 35 | 34 | -3 | WSW | 3 | bc | 1 | 44 | 32 | 0.31 | |
| Barrow-in-Furness | 29.49 | 43 | S | 5 | 4 | | 29.59 | +05 | 41 | 39 | +2 | NW | 2 | bc | 4 | 46 | 38 | 0.19 | |
| Liverpool (Midtown) | 29.28 | 44 | WSW | 4 | 0 | | 29.63 | +05 | 39 | 37 | +2 | WSW | 4 | 0 | 3 | 48 | 37 | 0.25 | |
| Holyhead ... | 29.21 | 47 | WSW | 6 | 0 | | 29.64 | +14 | 42 | 39 | -3 | W | 5 | 0 | 5 | 48 | 41 | 0.15 | |
| Parsonstown ... | 29.54 | 43 | SE | 2 | 0 | | 29.69 | +41 | 34 | 33 | -6 | SW | 1 | 0 | 4 | 46 | 33 | 0.35 | |
| Valencia ... | 29.50 | 43 | WSW | 6 | 0 | | 29.78 | +58 | 42 | 38 | -7 | WSW | 5 | bc | 5 | 50 | 37 | 0.31 | |
| Roche's Point ... | 29.45 | 45 | WSW | 3 | bc | | 29.77 | +50 | 40 | 37 | -10 | WSW | 3 | 6 | 3 | 50 | 38 | 0.30 | |
| Pembroke ... | 29.39 | 43 | WSW | 8 | bc | | 29.73 | +22 | 46 | 44 | -2 | W | 4 | 0 | 4 | 51 | 44 | 0.21 | |
| Scilly ... | 29.65 | 50 | WSW | 8 | 0 | | 29.81 | +33 | 46 | 43 | -5 | WSW | 8 | 0 | 6 | 53 | 43 | 0.27 | |
| Prawle Point ... | 29.56 | 48 | W | 6 | 0 | | 29.72 | +04 | 45 | 43 | -3 | WSW | 5 | 0 | 5 | 52 | 41 | 0.10 | |
| Jersey ... | 29.63 | 53 | S | 4 | 0 | | 29.89 | +15 | 47 | 44 | -1 | W | 4 | bc | 4 | 54 | 44 | 0.17 | |
| Hurst Castle ... | 29.50 | 50 | W | 6 | m | | 29.71 | -02 | 45 | 43 | +1 | W | 6 | bc | 4 | 51 | 43 | 0.24 | |
| Dunqueness ... | 29.49 | 50 | SSW | 8 | 4 | | 29.72 | -05 | 42 | 42 | +6 | SW | 4 | 0 | 5 | 50 | 37 | 0.18 | |
| London ... | 29.45 | 49 | SSW | 3 | 4 | | 29.74 | +01 | 40 | 38 | +4 | SW | 2 | bc | 4 | 50 | 36 | 0.12 | |
| Oxford ... | 29.50 | 44 | SW | 3 | 0 | | 29.73 | +01 | 39 | 38 | +4 | SW | 3 | 0 | 4 | 48 | 34 | 0.16 | |
| Cambridge ... | 29.44 | 45 | SW | 1 | 4 | | 29.73 | -03 | 36 | 36 | +3 | SW | 1 | 0 | 4 | 48 | 31 | 0.09 | |
| Yarmouth ... | 29.46 | 44 | SSC | 6 | 0 | | 29.69 | -01 | 38 | 37 | +3 | WSW | 2 | bc | 3 | 44 | 33 | 0.15 | |
| Cuxhaven ... | 29.68 | 39 | W | 4 | 4 | | 29.89 | +09 | 41 | 40 | 0 | SW | 3 | 0 | 4 | 43 | 39 | 0.20 | |
| Berlin ... | 29.86 | 42 | SSC | 2 | 0 | | 29.75 | +02 | 37 | 36 | +2 | S | 1 | 4 | 4 | 43 | 34 | 0.24 | |
| Wiesbaden ... | 29.81 | 40 | SSC | 2 | 0 | | 29.81 | +03 | 40 | 39 | +1 | SW | 2 | 0 | 4 | 46 | 39 | 0.16 | |
| Munich ... | 30.03 | 35 | SW | 0 | 0 | | 29.94 | +01 | 35 | 34 | +3 | SW | 3 | 0 | 4 | 45 | 28 | 0.04 | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | | |
| The Helder ... | 29.78 | 43 | SW | 4 | 0 | | 29.78 | -02 | 43 | 42 | +1 | SW | 4 | 0 | 5 | 50 | 39 | 0.08 | |
| Brussels ... | 29.67 | 46 | S | 4 | 0 | | 29.74 | +36 | 46 | 45 | +3 | WSW | 4 | 0 | 5 | 50 | 39 | 0.08 | |
| Cape Gris Nez ... | 29.75 | 51 | SSW | 5 | 0 | | 29.89 | +01 | 45 | 44 | +7 | WSW | 5 | 0 | 4 | 52 | 39 | 0.04 | |
| Paris ... | 29.77 | 52 | NW | 7 | 0 | | 29.95 | +16 | 50 | 49 | -1 | NW | 5 | 0 | 5 | 55 | 46 | 0.16 | |
| Brest ... | 29.77 | 52 | NW | 7 | 0 | | 29.94 | +14 | 49 | 46 | +1 | WSW | 5 | 0 | 5 | 55 | 46 | 0.16 | |
| Lorient ... | 29.91 | 50 | SW | 7 | 0 | | 30.06 | +10 | 50 | 49 | 0 | W | 5 | 0 | 4 | 55 | 43 | 0.05 | |
| Rochefort ... | 29.92 | 39 | W | 1 | 0 | | 29.96 | | 46 | 45 | | W | 1 | 0 | 4 | 48 | 33 | 0.35 | |
| Belfort ... | 30.07 | 47 | SW | 3 | 0 | | 30.10 | +11 | 46 | 43 | +2 | ENE | 3 | 0 | 1 | 57 | 39 | | |
| Nice ... | 30.15 | 48 | SW | 0 | 0 | | 30.03 | -03 | 49 | 46 | +4 | S | 1 | 0 | 4 | 56 | 39 | | |
| Verpignan ... | 30.03 | 59 | SW | 0 | 0 | | 30.08 | +06 | 53 | 52 | -1 | NW | 7 | 0 | 4 | 59 | 52 | 0.16 | |
| Biarritz ... | 30.03 | 59 | SW | 0 | 0 | | 30.08 | +06 | 53 | 52 | -1 | NW | 7 | 0 | 4 | 59 | 52 | 0.16 | |
| PORTUGAL. | | | | | | | | | | | | | | | | | | | |
| Corunna ... | 30.03 | 59 | SW | 0 | 0 | | 30.08 | +06 | 53 | 52 | -1 | NW | 7 | 0 | 4 | 59 | 52 | 0.16 | |
| Lisbon ... | 30.03 | 59 | SW | 0 | 0 | | 30.08 | +06 | 53 | 52 | -1 | NW | 7 | 0 | 4 | 59 | 52 | 0.16 | |

WEATHER CHARTS

for 8 a.m. on WEDNESDAY - 26TH DECEMBER 1888.

BAROMETER, WIND & 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.

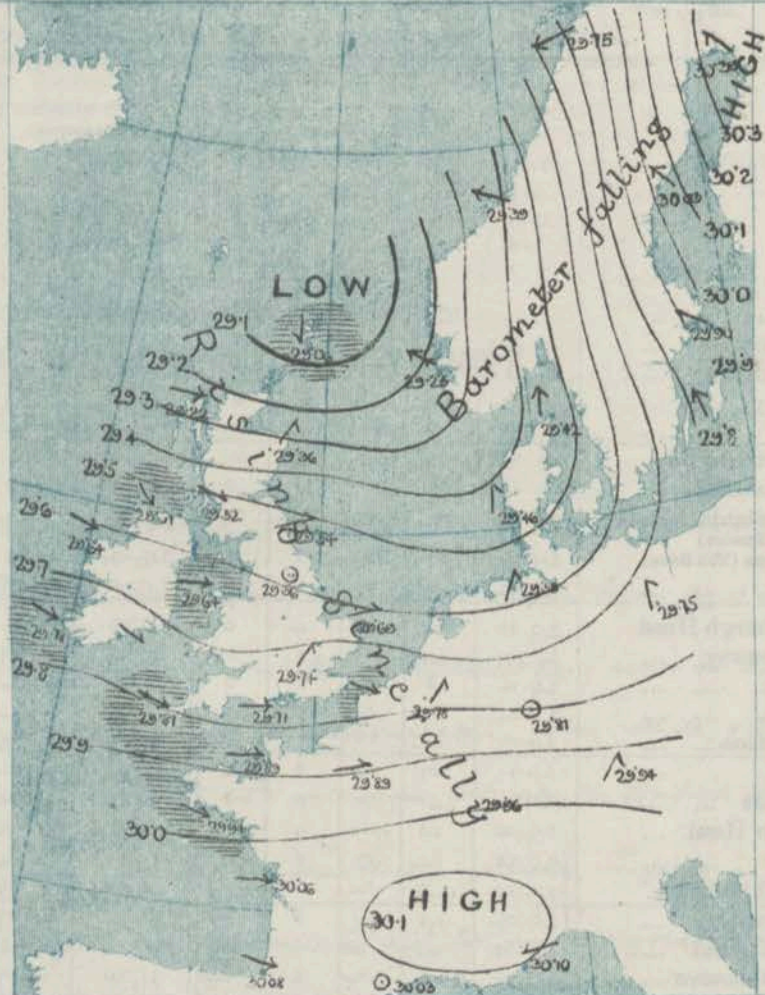
Sea Disturbance — where considerable is shown thus.

■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871-1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.997 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

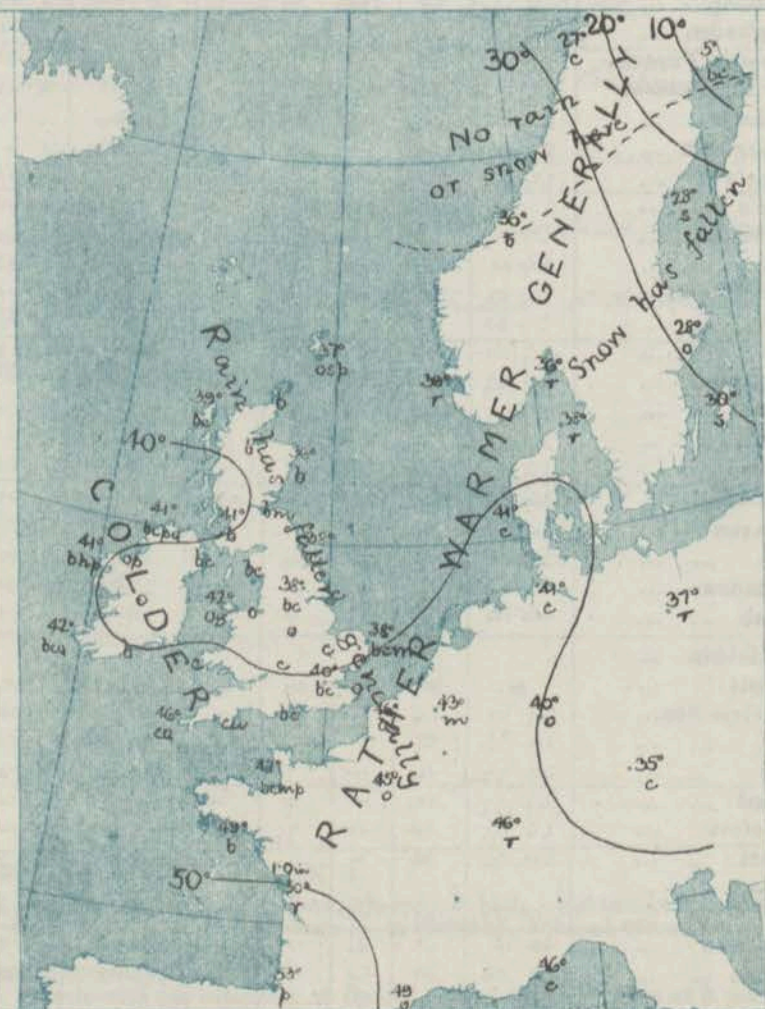
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|--------------|--------------|------------------|------------------|-----------------------|
| | Daily Max | Daily Min | at 8 a.m. Dry | at 8 a.m. Wet | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1868-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.0 vis. to 30.4 vis. over the north of Sweden — 30.0 vis. to 30.1 vis. over Southern Europe.
Lowest, 29.1 vis. and less, in a depression near the Shetland Isles.
Gradient moderate for W. winds in our Islands and the North Sea — steep for S. winds over Scandinavia.
Baromet. rising decidedly over the United Kingdom, falling to the eastward of the North Sea.

TEMPERATURE

Highest, 53° at Biarritz, 50° at Brest, 46° at Seilly and C. J. N. N. Y.
Lowest, 5° F. at Haparanda, 28° at Stockholm, 34° at Nain, 37° at Berlin, and 38° at Yarmouth.
It has fallen fast at our western stations since yesterday morning, risen in the east.

WIND

Moderate to fresh from the W. in our Islands (a gale at Seilly).
Strong to a gale from the S.E. over Scandinavia.
Strong from N.W. over the Bay of Biscay, moderate S.W. in Holland.

WEATHER

Very changeable clear at present in many parts of our Islands.
Faint showers in north of Ireland, — snow at Sumburgh Head.
Showers of rain fell yesterday in all parts of our Islands.

SEA

Rather rough on all but our eastern coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the appearance of the weather is much less unsettled than it was yesterday, the warning signals have all been lowered this morning.

FORECASTS

For the 24 hours ending at NOON on 27th DEC^r 1888.

DISTRICTS.

FORECASTS.

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

W¹ and SW¹ winds, changeable, unsettled, some showers.

W¹ winds, moderate or fresh; some cold rain, with bright intervals.

DISTRICTS.



FORECASTS.

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

W¹ winds, moderate, fair as a whole.

WARNINGS

Signals hoisted yesterday have all been lowered this morning.

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. | Dry. | Wet. | Wind. | Wca. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wca. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | | | | | | | Holyhead ... | 29.12 | 45 | 45 | S 8 | vgm | 6 |
| Sumburgh Head ... | 29.41 | 39 | 35 | S 1 | 3 | 4 | Valencia ... | | | | | | |
| Stornoway ... | 29.15 | 40 | 39 | SE 6 | 0 | 6 | Scilly ... | | | | | | |
| Aberdeen ... | | | | | | | Jersey ... | 29.62 | 50 | 49 | SSW 6 | 0 | 5 |
| Shield, .. | | | | | | | Dungeness ... | 29.61 | 48 | 47 | SSW 6 | 0 | 4 |
| Andersonan ... | 29.16 | 42 | 41 | ENE 3 | 7 | 2 | London ... | | | | | | |
| Malin Head ... | 28.96 | 43 | 41 | SSW 5 | 0 | 4 | Yarmouth ... | | | | | | |
| Mullaghmore ... | 29.02 | 45 | 43 | SW 5 | cp | 4 | Rochefort ... | 29.72 | 55 | 55 | SW 7 | 6 | 3 |
| Belmullet ... | 29.08 | 46 | 43 | W 7 | oqyp | * | | | | | | | |

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

The Continental Information is not yet to hand.

EXPLANATION OF 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).

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DAILY WEATHER REPORT.

for Thursday 27th December

1888.

Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|------------------------------------|-----------------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|---------------|-------------|----------------|---------------------|--|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | 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 .. | 30.25 | 2 | SE | 4 | b | 30.26 | - .13 | 9 | 8 | + 4 | ESE | 2 | o | * | ? | - 2 | — | |
| Hernösand ... | 29.89 | 29 | SSE | 6 | s | 29.75 | - .28 | 32 | 32 | + 4 | SE | 6 | = | * | ? | 27 | 0.32 | |
| Stockholm ... | 29.80 | 32 | NNE | 4 | s | 29.74 | - .16 | 34 | 35 | + 6 | Z | 0 | f | * | 34 | 25 | 0.08 | |
| Wisby ... | 29.83 | 32 | SW | 6 | s | 29.78 | - .27 | 35 | 34 | + 5 | SW | 4 | f | * | ? | 27 | 0.43 | |
| Bodö ... | 29.67 | 27 | ENE | 9 | o | 29.48 | - .27 | 26 | 22 | - 1 | ENE | 4 | b | 5 | 28 | 23 | — | |
| Christiansund... | 29.22 | 41 | SE | 4 | c | 29.30 | - .09 | 40 | 35 | + 4 | ESE | 4 | b | 1 | 41 | 36 | — | |
| Skudesnaes ... | 29.53 | 40 | WSW | 7 | c | 29.67 | + .44 | 41 | 38 | + 2 | SW | 4 | c | 5 | 43 | 37 | — | |
| Christiania Fjord | 29.58 | 39 | SW | 3 | b | 29.70 | + .19 | 37 | 36 | + 1 | WSW | 2 | b | 2 | 41 | 36 | — | |
| (Færdar) | | | | | | | | | | | | | | | | | | |
| Skagen (The Seaw) | 29.65 | 36 | WSW | 2 | bc | 29.75 | + .23 | 33 | 32 | - 5 | WSW | 2 | bc | 1 | 41 | 32 | 0.04 | |
| Fanö ... | 29.77 | 39 | S | 2 | o | 29.84 | + .38 | 37 | 37 | - 4 | SSW | 2 | bc | * | 43 | 36 | — | |
| BRITISH ISLANDS. | | | | | | | | | | | | | | | | | | |
| Sumburgh Head | 29.21 | 40 | W | 6 | r | 29.37 | + .45 | 39 | 35 | + 2 | W | 3 | c | 5 | 41 | 34 | 0.12 | |
| Stornoway ... | 29.45 | 37 | NW | 6 | o | 29.50 | + .28 | 38 | 37 | - 1 | SW | 2 | o | 3 | 39 | 32 | 0.08 | |
| Wick ... | 29.48 | 34 | SW | 2 | b | 29.58 | + .40 | 35 | 34 | - 0 | SW | 1 | b | 0 | 43 | 32 | 0.04 | |
| Nairn ... | 29.50 | 34 | WSW | 3 | b | 29.59 | + .31 | 31 | 29 | - 3 | Z | 0 | b | 1 | 38 | 31 | — | |
| Aberdeen... | 29.54 | 34 | SW | 2 | b | 29.68 | + .32 | 31 | 29 | - 5 | SSW | 1 | b | 3 | 38 | 29 | — | |
| Leith ... | 29.67 | 36 | W | 3 | b | 29.69 | + .23 | 34 | 32 | - 4 | SW | 1 | bm | * | 40 | 32 | 0.02 | |
| Shields ... | 29.69 | 39 | SW | 2 | c | 29.77 | + .23 | 34 | 33 | - 4 | SSW | 3 | m | 2 | 41 | 32 | — | |
| Spurn Head ... | 29.79 | 39 | SW | 2 | c | 29.86 | + .27 | 36 | 35 | - 3 | SW | 3 | b | 3 | 42 | 34 | 0.01 | |
| York ... | 29.74 | 38 | SW | 1 | o | 29.87 | + .25 | 32 | 31 | - 6 | SE | 1 | b | * | 45 | 30 | 0.02 | |
| Loughborough | 29.86 | 37 | S | 1 | b | 29.88 | + .22 | 35 | 35 | - 4 | S | 2 | o | * | 44 | 32 | 0.01 | |
| GERMANY. | | | | | | | | | | | | | | | | | | |
| Ardrossan ... | 29.68 | 41 | W | 4 | bino | 29.60 | + .08 | 37 | 37 | - 4 | E | 3 | om | 2 | 42 | 35 | 0.10 | |
| Malin Head ... | 29.66 | 37 | WSW | 4 | bpha | 29.40 | - .11 | 37 | 37 | - 4 | SSE | 6 | omr | 6 | 41 | 34 | 0.25 | |
| Mullaghmore... | 29.74 | 39 | WSW | 5 | cp | 29.32 | - .28 | 42 | 40 | + 3 | SSE | 7 | org | 4 | 44 | 35 | 0.10 | |
| Belmullet ... | 29.75 | 40 | WSW | 3 | cpbr | 29.29 | - .35 | 45 | 43 | + 4 | W | 7 | bc | * | 46 | 36 | 0.15 | |
| Donaghadee ... | 29.77 | 35 | SW | 3 | b | 29.56 | - .03 | 44 | 42 | + 9 | GSW | 5 | o | 3 | 44 | 30 | 0.01 | |
| Barrow-in-Furness | 29.76 | 41 | SW | 3 | bc | 29.71 | + .2 | 37 | 36 | - 4 | SE | 6 | c | * | 41 | 36 | 0.02 | |
| Liverpool (Bidston) | 29.83 | 38 | W | 4 | b | 29.75 | + .12 | 36 | 35 | - 3 | SE | 3 | o | 3 | 42 | 32 | 0.08 | |
| Holyhead ... | 29.83 | 42 | W | 3 | c | 29.63 | - .01 | 44 | 43 | + 2 | SSE | 6 | rgq | 6 | 45 | 41 | 0.04 | |
| Parsonstown ... | 29.84 | 35 | Z | 0 | c | 29.29 | - .30 | 45 | 44 | + 11 | SSW | 2 | o | * | 45 | 32 | 0.31 | |
| Valencia ... | 29.88 | 41 | W | 2 | bcp | 29.51 | - .27 | 47 | 44 | + 5 | W | 4 | c | 4 | 50 | 37 | 0.90 | |
| Roche's Point... | 29.91 | 40 | W | 3 | bc | 29.48 | - .29 | 30 | 49 | + 10 | WSW | 5 | bc | 5 | 50 | 40 | 0.65 | |
| Pembroke ... | 29.91 | 45 | W | 4 | bc | 29.62 | - .11 | 49 | 49 | + 3 | S | 7 | pg | 5 | 50 | 40 | 0.14 | |
| Scilly ... | 29.97 | 49 | W | 5 | c | 29.77 | - .04 | 52 | 50 | + 6 | SSW | 7 | og | 7 | 52 | 44 | 0.08 | |
| Prawle Point ... | 29.99 | 41 | WNW | 4 | b | 29.87 | + .15 | 48 | 47 | + 3 | SW | 5 | cu | 5 | 48 | 37 | 0.05 | |
| Jersey ... | 30.03 | 48 | WNW | 4 | bc | 30.03 | + .14 | 46 | 44 | - 1 | S | 4 | bm | 4 | 51 | 41 | 0.22 | |
| Hurst Castle ... | 29.96 | 42 | WNW | 4 | b | 29.93 | + .22 | 48 | 46 | + 3 | SW | 6 | cp | 4 | 50 | 40 | 0.06 | |
| Dungeness ... | 29.89 | 44 | W | 4 | bc | 29.99 | + .27 | 46 | 44 | + 2 | WSW | 6 | c | 4 | 50 | 35 | 0.01 | |
| London ... | 29.90 | 39 | W | 2 | b | 29.95 | + .21 | 40 | 38 | - 0 | SW | 2 | bc | * | 46 | 33 | 0.03 | |
| Oxford ... | 29.95 | 36 | WSW | 4 | b | 29.90 | + .17 | 36 | 35 | - 3 | SSE | 3 | c | * | 44 | 34 | — | |
| Cambridge ... | 29.87 | 40 | SW | 1 | b | 29.90 | + .17 | 35 | 35 | - 1 | S | 1 | b | * | 43 | 31 | — | |
| Yarmouth ... | 29.82 | 39 | W | 2 | bc | 29.94 | + .25 | 34 | 33 | - 4 | WSW | 2 | bcu | 2 | 42 | 31 | — | |
| Cuxhaven ... | 29.75 | 39 | WSW | 2 | o | 29.95 | + .36 | 37 | 37 | - 4 | W | 2 | c | * | 41 | 35 | — | |
| Berlin ... | 29.91 | 40 | SSW | 1 | b | 29.99 | + .24 | 37 | 34 | - 0 | SSW | 3 | r | * | 43 | 34 | 0.12 | |
| Wiesbaden ... | * | * | * | * | * | 30.13 | + .32 | 33 | 33 | - 7 | Z | 0 | b | * | 43 | 32 | — | |
| Munich ... | 30.10 | 37 | W | 2 | r | 30.18 | + .24 | 34 | 34 | - 1 | SW | 3 | c | * | 48 | 32 | 0.28 | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | |
| The Helder ... | 29.83 | 42 | WSW | 1 | b | 29.97 | + .32 | 41 | 39 | - 7 | WSW | 1 | b | 2 | 45 | 41 | — | |
| Brussels ... | * | * | * | * | * | 30.10 | + .32 | 36 | 35 | - 7 | SSW | 3 | b | * | 47 | 35 | 0.08 | |
| Cape Gris Nez... | 29.86 | 46 | W | 7 | c | 30.03 | + .29 | 45 | 43 | - 1 | SW | 7 | bc | 5 | 48 | 39 | 0.16 | |
| Paris ... | 30.05 | 43 | SSW | 3 | b | 30.16 | + .27 | 32 | 32 | - 13 | S | 1 | b | * | 57 | 31 | — | |
| Brest ... | 30.11 | 49 | NW | 5 | b | 30.05 | + .10 | 57 | 46 | + 1 | SW | 7 | o | 5 | 54 | 40 | 0.16 | |
| Lorient ... | 30.10 | 49 | NW | 1 | b | 30.06 | + .12 | 49 | 47 | - 0 | SSW | 4 | bc | 5 | 52 | 43 | — | |
| Roche fort ... | 30.18 | 47 | WNW | 4 | b | 30.19 | + .13 | 46 | 45 | - 4 | SSE | 4 | c | 2 | 55 | 39 | — | |
| Belfort ... | 29.91 | 39 | W | 1 | bc | 29.98 | + .2 | 32 | 32 | - 14 | W | 1 | m | * | 46 | 30 | 0.16 | |
| Lyons ... | 30.18 | 42 | E | 1 | b | 30.24 | + .37 | 37 | 37 | - 1 | N | 1 | c | * | 48 | 33 | 0.16 | |
| Nice ... | 30.06 | 48 | SW | 1 | o | 30.05 | - .05 | 45 | 45 | - 1 | ESE | 1 | o | 2 | 48 | 42 | 0.08 | |
| Perpignan ... | 30.13 | 53 | Z | 0 | o | 30.15 | + .12 | 49 | 46 | - 0 | N | 3 | o | * | 59 | 45 | — | |
| Biarritz ... | 30.17 | 55 | WNW | 4 | o | 30.17 | + .09 | 47 | 46 | - 6 | S | 1 | r | 5 | 59 | 45 | 0.16 | |
| PENINSULA. | | | | | | | | | | | | | | | | | | |
| Corunna ... | * | * | * | * | * | | | | | | | | | | | | | |
| Lisbon ... | 30.24 | 59 | WSW | 5 | r | 30.25 | - .02 | 52 | 49 | - 5 | N | 4 | o | ? | 61 | 50 | 0.95 | |

WEATHER CHARTS

for 8 a.m. on

Thursday 27th December

1888.

BAROMETER, WIND & 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.

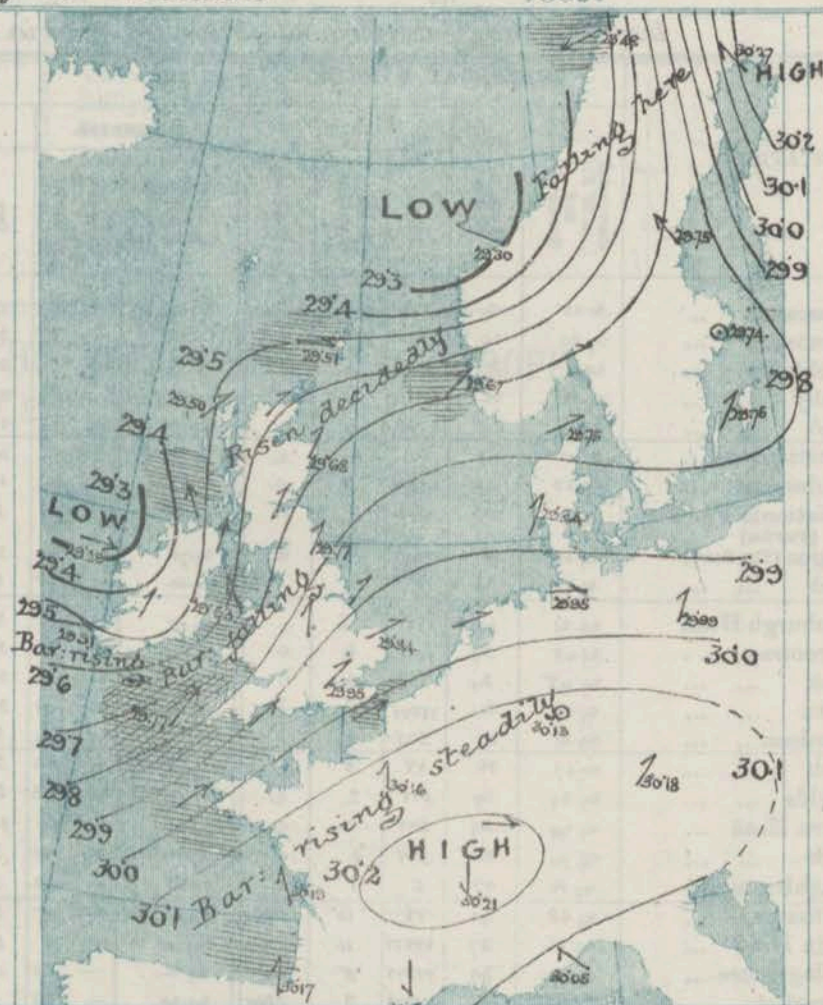
Sea Disturbance — where considerable, is shown thus.

■ = Rough, ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871 — 1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.808 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

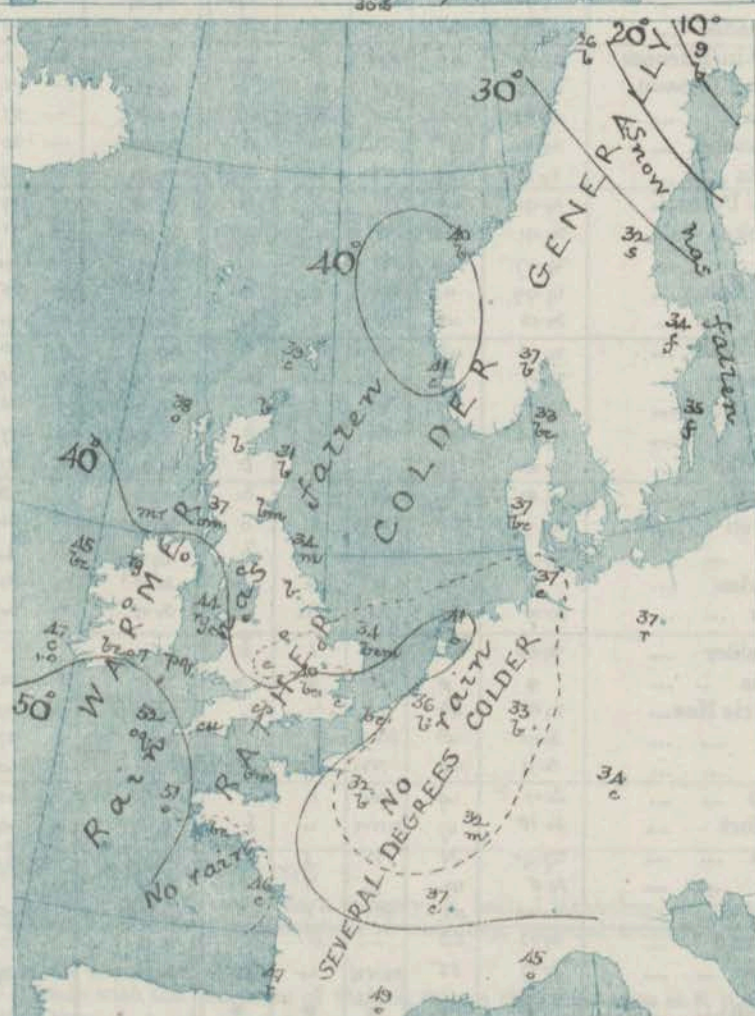
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS | TEMPERATURE. | | | | RAINFALL. (Inches.) |
|---------------|---------------|---------------|-----------|-----------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | Prev. Wet | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.84 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.06 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.01 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.8 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 6.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 1.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

Notes — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1865—85.



GENERAL SITUATION AT 8 A.M.

| | |
|-------------|---|
| PRESSURE | <p><u>Highest</u> 30.1 ins to 30.2 ins, over Spain, France and South Germany; 30.0 ins to 30.3 ins over the north of Sweden.</p> <p><u>Lowest</u> 29.3 ins and less, in two depressions,—one lying near Christiansund, and the other near Mullaghmore.</p> <p><u>Gradients</u> slight over France, Germany and the North Sea; rather steep over the Irish Sea and the west of Norway.</p> <p><u>Barometres</u> falling in the north west and west of Great Britain; rising at the eastern and south-eastern stations, and also in the south of Ireland.</p> |
| TEMPERATURE | <p><u>Highest</u> 52° at Lisbon and Lillo, 51° at Forest, 50° at Roche Point, 45° at Belmullet and 41° at Skudlora.</p> <p><u>Lowest</u> 9° at Haparanda, 31° at Halm and Aberdeen, 32° at Hørnø, Paris and York and 34° at Lillo, Skudlora and Yarmouth.</p> <p>It has risen considerably in the west during the night (but seems to be falling again already); fallen at the English and French stations.</p> |
| WIND | <p>SE^{ly} to E^{ly} over the northern part of Scandinavia; moderate to strong in force.</p> <p>S^{ly} to W^{ly} over the British Isles, North Sea and English Channel; light at the eastern stations, strong in the south, strong to a moderate gale in the west.</p> <p>In the south and west of Ireland it has already veered to W, and is moderating.</p> |
| WEATHER | <p>Fine at our eastern stations and in France; dull, squally and stormy in the west and north west.</p> <p>Variable over the Baltic and Germany; very rainy in the extreme south west of France.</p> <p>Rain has fallen since yesterday morning over nearly the whole of the British Islands; sleet and snow at several Scotch stations.</p> |
| SEA | <p>High at Lillo, rough at Holyhead, rather rough at other of the western and extreme northern stations; moderate in the English Channel; smooth off our east coast.</p> |


PROBABLE CHANGES IN SYSTEM NOW PREVALENT


There is no indication of any decided change in the general character of the weather which has prevailed during the past few days.

FORECASTS

for the 24 hours ending at NOON on 28th DEC^r 1888.

| DISTRICTS. | FORECASTS. | DISTRICTS. | FORECASTS. |
|----------------------|--|--------------------|--|
| 0 { SCOTLAND NORTH | Southerly and South westerly winds, moderate to strong; rain at times. | 6 { SCOTLAND WEST | Wind veering Westwards and moderating; showery to fair. Cold at night. |
| 1 { SCOTLAND EAST | | 7 { ENGLAND N.W. | |
| 2 { ENGLAND N.E. | Southerly and South westerly winds, moderate; some rain, but with bright intervals | 8 { ENGLAND S.W. | Westerly to southerly wind; changeable, unsettled, rain at times. |
| 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. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. | | |
|-------------------|-------|------|------|-------|------|------|---|---------------|-------|------|-------|------|------|----|---|
| Skudesnaes ... | 29.38 | 43 | 42 | SW | 8 | c | 5 | Holyhead ... | 29.75 | 42 | 39 | WNW | 4 | bc | 4 |
| Sumburgh Head ... | 29.11 | 40 | 37 | W | 5 | c | 5 | Valencia ... | 29.88 | 43 | 41 | W | 3 | r | 4 |
| Stornoway ... | 29.38 | 37 | 36 | NW | 5 | s | 5 | Scilly ... | 29.93 | 48 | 43 | W | 8 | bc | 6 |
| Aberdeen ... | 29.50 | 38 | 34 | SW | 3 | b | 3 | Jersey ... | 29.95 | 50 | 47 | W | 4 | bc | 4 |
| Shields ... | 29.65 | 41 | 39 | WSW | 3 | c | 2 | Dungeness ... | 29.81 | 47 | 44 | SW | 6 | o | 4 |
| Ardrossan ... | 29.61 | 41 | 40 | W | 4 | r | 3 | London ... | 29.82 | 44 | 42 | W | 2 | or | 4 |
| Malin Head ... | 29.60 | 40 | 37 | WSW | 5 | c | 5 | Yarmouth ... | 29.45 | 42 | 41 | W | 2 | bc | 2 |
| Mullaghmore ... | 29.40 | 39 | 37 | W | 5 | sp | 3 | Rezebeft ... | 30.42 | 54 | 52 | SW | 1 | c | 2 |
| Belmullet ... | 29.41 | 41 | 40 | WSW | 3 | bc | * | | | | | | | | |

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

The reports for yesterday morning showed that pressure ranged from between 30.5 inches and 30.8 inches (and more) over Russia, and from about 30.5 inches, over the southern parts of Spain, to about 29.5 inches, in a depression the centre of which lay close to the Shetland Islands, and to rather below 30.1 inches, at Malta. The barometer was rising quickly in the Irish coasts, falling a little in the coast of Norway. The wind was strong to a gale from the S.W. over the Baltic and Scandinavia, and moderate to strong, from the Westwards over the western and southern parts of the British Islands, while in France and Germany, it was moderate to light from between W. and S. The weather was very changeable (showery with bright intervals) over the western countries, while snow and hail fell at times both in the N. & N.W. of our Islands and at some of the Baltic ports. Over the Spanish Peninsula very large quantities of rain had fallen; and in many parts of France the fall had been large. Temperature varied from much below zero over Central Russia, and from below the freezing point at all the Baltic, Polish and Russian stations to upwards of 50° over the west of France, Portugal and the greater part of the Mediterranean. The lowest individual values were -24° at Moscow, -18° at Kuopio, -13° at Kharkov -9° at Kiev -5° at Uleaborg, 5° at Agaparanda, 21° at Helsingfors and Lemberg, 27° at Bodo, 28° at Stockholm, 30° at Wisby, the highest were 60° at Malta, 59° at Aron, 57° at Lisbon, 56° at Oporto and San Fernando, 53° at Biarritz, 50° at Brak and 46° at Tally and Pembroke.

Very little change occurred during the day.

EXPLANATION OF 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).

‡ The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Friday, 28th December 1888.

Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | † YESTERDAY EVENING. | | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------------|------------------------------------|-----------------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|----------------|-------------|------|---------------------|--|--|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 2.) | SHADE TEMP. | | | | |
| | | | 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. | Amount of Rainfall. | | |
| SCANDINAVIA. | | | | | | | | | | | | | | | | | | | |
| Haparanda .. | 29.90 | ? | Z | 0 | o | 29.99 | -.27 | 12 | 11 | + 3 | S | 2 | o | * | 12 | 1 | 0.28 | | |
| Hernösand ... | 29.90 | 33 | S | 2 | o | 29.93 | + .18 | 14 | 13 | - 18 | Z | 0 | b | * | 34 | ? | — | | |
| Stockholm ... | 29.90 | 34 | Z | 0 | o | 30.06 | + .32 | 34 | 32 | 0 | Z | 0 | o | * | 36 | 30 | — | | |
| Wisby ... | 29.98 | 34 | SW | 4 | o | 30.13 | + .35 | 34 | 32 | - 1 | SW | 4 | o | * | 37 | 32 | — | | |
| Bodö ... | 29.49 | 26 | ESE | 6 | b | 29.55 | + .07 | 33 | 32 | + 7 | ENE | 4 | o | 2 | ? | ? | — | | |
| Christiansund... | 29.56 | 38 | NSW | 6 | c | 29.54 | + .24 | 35 | 31 | - 5 | ESE | 4 | b | 4 | 41 | 32 | 0.04 | | |
| Skudenes ... | 29.92 | 40 | ESE | 6 | c | 29.46 | - .21 | 40 | 39 | - 1 | SE | 6 | r | 5 | 43 | 37 | — | | |
| Christiania Fjord (Fjorder) | 29.83 | 35 | Z | 0 | b | 29.78 | + .08 | 36 | 36 | - 1 | SSE | 8 | r | 4 | 37 | 34 | — | | |
| Skagen (The Scaw) | 29.89 | 36 | W | 3 | b | 29.75 | + .03 | 37 | 37 | + 4 | S | 8 | r | 4 | 37 | 32 | 0.24 | | |
| Fanö ... | 29.91 | 36 | SW | 4 | b | 29.76 | - .08 | 36 | 35 | - 1 | S | 6 | b | * | 41 | 34 | — | | |
| BRITISH ISLANDS. | | | | | | | | | | | | | | | | | | | |
| Sumburgh Head | 29.47 | 40 | SSE | 1 | o | 29.21 | - .30 | 41 | 40 | + 2 | S | 1 | o | 5 | 43 | 34 | 0.18 | | |
| Stornoway ... | 29.40 | 37 | SE | 6 | r | 29.44 | - .26 | 39 | 39 | + 1 | N | 7 | r | 6 | 40 | 33 | 0.38 | | |
| Wick ... | 29.30 | 39 | S | 8 | r | 29.21 | - .37 | 39 | 38 | + 4 | W | 2 | o | 5 | 41 | 34 | 0.24 | | |
| Nairn ... | 29.20 | 38 | Z | 0 | o | 29.16 | - .43 | 38 | 37 | + 7 | WSW | 2 | o | 1 | 40 | 28 | — | | |
| Aberdeen... | 29.27 | 41 | SSE | 6 | agp | 29.26 | - .42 | 39 | 38 | + 8 | S | 2 | b | 4 | 42 | 31 | 0.09 | | |
| Leith ... | 29.30 | 39 | SE | 1 | c | 29.28 | - .41 | 40 | 39 | + 8 | SW | 2 | c | * | 43 | 32 | 0.02 | | |
| Shields ... | 29.38 | 41 | S | 3 | o | 29.36 | - .41 | 38 | 37 | + 4 | SSW | 2 | c | 2 | 42 | 32 | 0.07 | | |
| Spurn Head ... | 29.48 | 47 | SSE | 8 | r | 29.39 | - .47 | 46 | 45 | + 10 | S | 7 | r | 6 | 47 | 36 | 0.35 | | |
| York ... | 29.47 | 45 | S | 3 | r | 29.37 | - .44 | 38 | 37 | + 6 | NNW | 1 | r | * | 45 | 31 | 0.86 | | |
| Loughborough | 29.54 | 48 | SW | 3 | r | 29.41 | - .47 | 40 | 40 | + 5 | WNW | 2 | agdp | * | 49 | 35 | 0.99 | | |
| Ardrossan ... | 29.30 | 44 | W | 4 | b | 29.28 | - .32 | 42 | 42 | + 6 | WNW | 3 | o | 5 | 44 | 37 | 0.01 | | |
| Malin Head ... | 29.16 | 39 | SW | 6 | agp | 29.35 | - .05 | 42 | 41 | + 5 | NW | 4 | b | 3 | 44 | 37 | 0.27 | | |
| Mullaghmore ... | 29.26 | 42 | SSW | 5 | c | 29.29 | + .07 | 44 | 41 | + 2 | NNW | 5 | cp | 4 | 45 | 40 | 0.14 | | |
| Belmullet ... | 29.26 | 44 | W | 8 | agp | 29.50 | + .21 | 44 | 43 | - 1 | N | 5 | o | * | 46 | 42 | 0.09 | | |
| Donaghadee ... | 29.36 | 40 | SSW | 3 | b | 29.38 | - .23 | 38 | 37 | - 6 | W | 3 | b | 1 | 45 | 34 | 0.31 | | |
| GERMANY. | | | | | | | | | | | | | | | | | | | |
| Barrow-in-Furness | 29.42 | 44 | SW | 3 | o | 29.24 | - .37 | 41 | 41 | + 4 | SE | 3 | c | * | 45 | 36 | 0.24 | | |
| Liverpool (Bldston) | 29.47 | 44 | SW | 1 | o | 29.41 | - .34 | 36 | 35 | 0 | S | 1 | o | 2 | 46 | 35 | 0.33 | | |
| Holyhead ... | 29.45 | 45 | WSW | 4 | c | 29.40 | - .23 | 44 | 42 | 0 | W | 4 | c | 4 | 50 | 43 | 0.49 | | |
| Parsonstown ... | 29.43 | 38 | Z | 0 | b | 29.46 | + .07 | 37 | 36 | - 8 | Z | 0 | b | * | 46 | 35 | 0.01 | | |
| Valencia ... | 29.48 | 43 | WNW | 3 | agp | 29.54 | - .03 | 44 | 42 | - 3 | NNW | 3 | cp | 3 | 49 | 40 | 0.02 | | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | | |
| Roche's Point... | 29.50 | 45 | W | 3 | b | 29.50 | + .02 | 41 | 39 | - 9 | WNW | 3 | c | 3 | 51 | 35 | — | | |
| Pembroke ... | 29.49 | 48 | W | 5 | r | 29.46 | - .16 | 45 | 44 | - 4 | WNW | 4 | b | 3 | 50 | 39 | 0.90 | | |
| Soilly ... | 29.55 | 52 | SSW | 8 | r | 29.48 | - .24 | 47 | 42 | - 5 | N | 4 | c | 5 | 53 | 45 | 0.48 | | |
| Prawle Point ... | 29.64 | 51 | SW | 6 | o | 29.48 | - .39 | 40 | 40 | - 8 | N | 2 | c | 4 | 51 | 39 | 0.07 | | |
| Jersey ... | 29.84 | 50 | SSW | 5 | b | 29.52 | - .51 | 51 | 49 | + 5 | SW | 6 | agm | 5 | 51 | 45 | 0.07 | | |
| Hurst Castle ... | 29.91 | 50 | SW | 8 | cp | 29.45 | - .48 | 50 | 50 | + 2 | SW | 7 | r | 5 | 51 | 39 | 0.28 | | |
| Dunoon ... | 29.99 | 49 | SW | 6 | c | 29.58 | - .41 | 45 | 44 | - 1 | SSW | 7 | o | 6 | 50 | 45 | — | | |
| London ... | 29.91 | 49 | SW | 5 | cp | 29.49 | - .46 | 47 | 46 | + 7 | SW | 6 | rg | * | 49 | 40 | 0.06 | | |
| Oxford ... | 29.67 | 49 | S | 6 | o | 29.41 | - .49 | 48 | 47 | + 12 | S | 4 | rgu | * | 49 | 36 | 0.26 | | |
| Cambridge ... | 29.91 | 46 | S | 2 | o | 29.42 | - .48 | 47 | 46 | + 12 | S | 3 | r | * | 49 | 34 | 0.03 | | |
| Yarmouth ... | 29.91 | 45 | SSW | 6 | cp | 29.53 | - .41 | 45 | 44 | + 11 | SSW | 6 | agp | 5 | 46 | 33 | 0.01 | | |
| Cuxhaven ... | 30.02 | 36 | SSW | 2 | o | 29.89 | - .06 | 34 | 33 | - 3 | SS | 4 | c | * | 38 | 32 | — | | |
| Berlin ... | 30.15 | 40 | W | 2 | o | 30.12 | + .13 | 31 | 30 | - 6 | SE | 1 | b | * | 40 | 30 | — | | |
| Wiesbaden ... | * | * | * | * | * | 30.01 | - .12 | 28 | 27 | - 5 | Z | 0 | b | * | 41 | 27 | — | | |
| Munich ... | 30.16 | 31 | NE | 2 | b | 30.01 | - .17 | 30 | 30 | - 4 | SE | 4 | m | * | 41 | 27 | — | | |
| PENINSULA. | | | | | | | | | | | | | | | | | | | |
| The Helder ... | 29.85 | 29 | S | 5 | c | 29.78 | - .24 | 36 | 35 | - 8 | S | 5 | b | 3 | 43 | 39 | — | | |
| Brussels ... | * | * | * | * | * | 29.80 | - .30 | 39 | 37 | + 3 | SSE | 4 | c | * | 42 | 36 | — | | |
| Cape Gris Nez... | 29.83 | 44 | SW | 8 | b | 29.63 | - .40 | 41 | 40 | - 4 | SSW | 8 | o | 7 | 48 | 39 | — | | |
| Paris ... | 30.05 | 39 | S | 3 | o | 29.85 | - .31 | 36 | 36 | + 4 | S | 3 | o | * | 40 | 32 | — | | |
| Brest ... | 29.83 | 51 | WSW | 8 | o | 29.82 | - .53 | 52 | 50 | + 1 | W | 4 | o | 5 | 55 | 41 | 0.12 | | |
| Lorient ... | 29.87 | 51 | SSW | 7 | o | 29.80 | - .50 | 52 | 50 | + 3 | SSW | 5 | r | 5 | 54 | 46 | 0.51 | | |
| Rochefort ... | 30.04 | 46 | SSE | 7 | m | 29.82 | - .37 | 45 | 45 | - 1 | S | 5 | o | 4 | 52 | 39 | 0.42 | | |
| Belfort ... | 30.07 | 37 | W | 1 | b | 29.98 | 0.00 | 30 | 30 | - 2 | W | 1 | m | * | 43 | 27 | — | | |
| Lyons ... | 30.14 | 38 | N | 3 | o | 30.02 | - .19 | 35 | 34 | - 2 | E | 1 | m | * | 43 | 35 | — | | |
| Nice ... | 30.01 | 49 | Z | 0 | b | 30.03 | - .02 | 47 | 43 | + 2 | E | 3 | c | 1 | 55 | 41 | 0.39 | | |
| Perpignan ... | 30.09 | 47 | Z | 0 | b | 29.99 | - .16 | 45 | 43 | - 4 | W | 1 | o | * | 58 | 39 | — | | |
| Biarritz ... | 30.05 | 52 | Z | 0 | o | 29.84 | - .33 | 51 | 44 | + 4 | S | 5 | o | 3 | 55 | 45 | 0.04 | | |
| PENINSULA. | | | | | | | | | | | | | | | | | | | |
| Corunna ... | * | * | * | * | * | 30.01 | - .24 | 55 | 52 | + 3 | SSW | 7 | o | 5 | 57 | 48 | 0.04 | | |
| Lisbon ... | 30.22 | 51 | NW | 4 | b | 30.01 | - .24 | 55 | 52 | + 3 | SSW | 7 | o | 5 | 57 | 48 | 0.04 | | |

WEATHER CHARTS

for 8 a.m. on

Friday, 28th December

1888.

BAROMETER, WIND & 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 the 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.

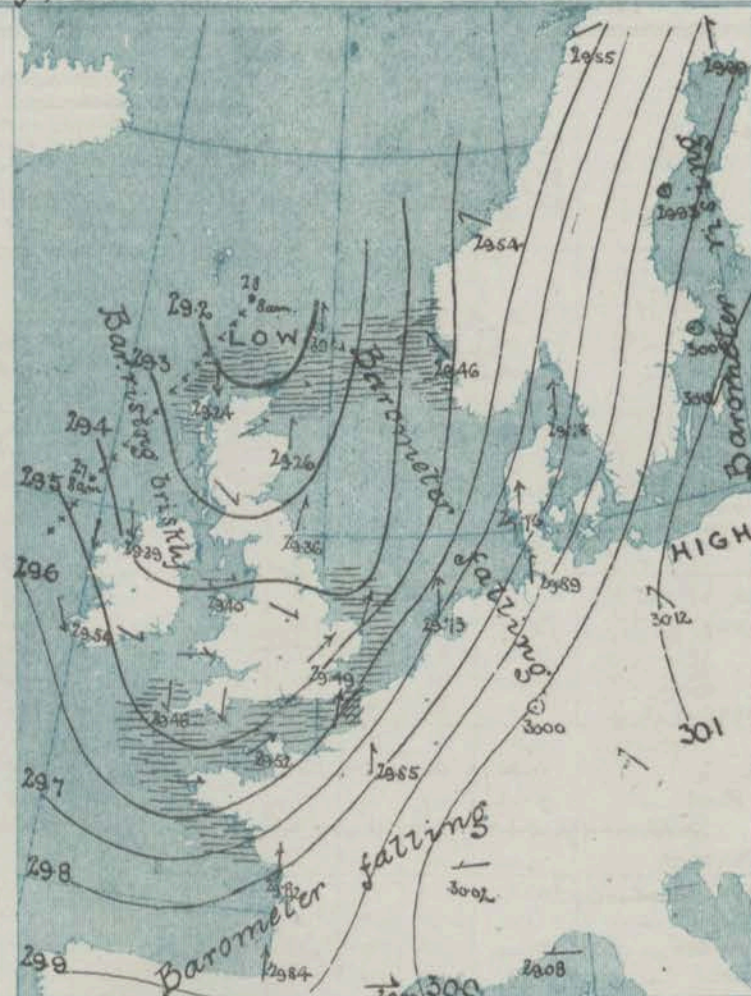
■ = Rough. ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.

During the 15 Years 1871-1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| | in. |
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

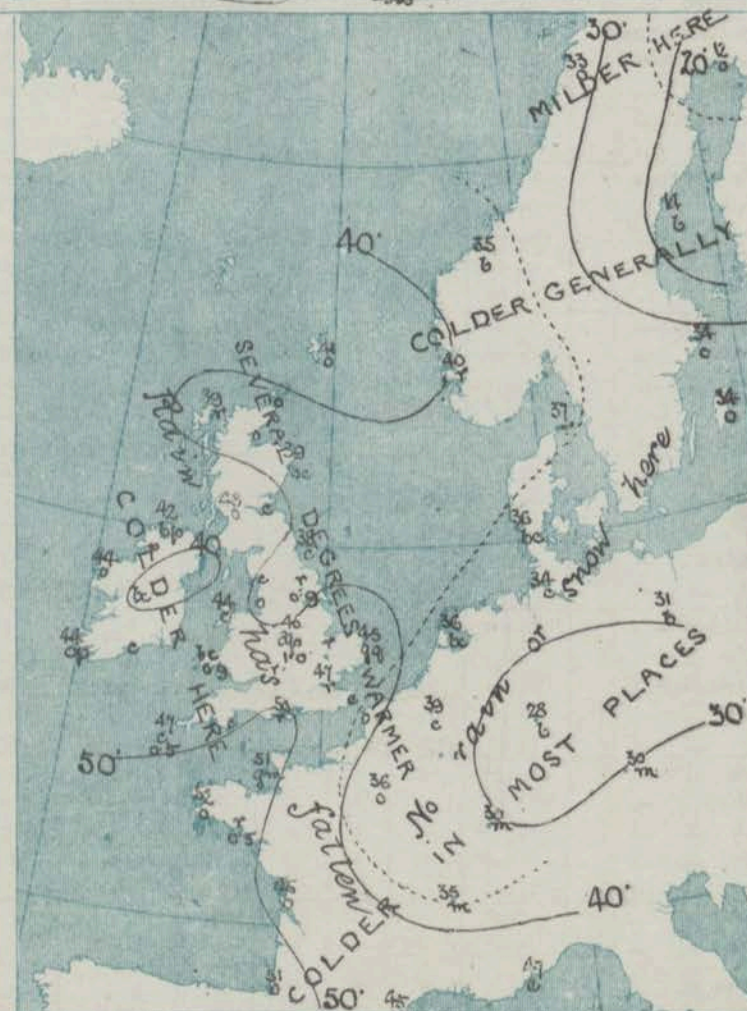
MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.

for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|--------------------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Free. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.6 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 40.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

Note — The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.1 in and more over the Baltic and Germany - about 29.6 in off the west of Ireland.
Lowest 29.2 in off the north of Scotland and rather below 29.5 in; over Devon and Cornwall.
Gradients somewhat steep for S.W. winds in the east, moderate for N.W. winds in west.
Barometer rising decidedly both over Scandinavia and in the west of our Islands. Falling over England, France and Spain.

TEMPERATURE

Highest 53° at Lisbon, 52° at Brest, 51° at Biarritz, 50° at Hurst Castle and 47° in London.
Lowest 12° at Copparanda, 14° at Kemiöland, 15° at Wiesbaden, 30° at Elberich and Belfast, and 36° at Liverpool.
It is falling rather decidedly in the west, and the fall seems to be spreading eastward.

WIND

S.W. to S.W. at all the coast stations - strong to a moderate gale in force.
N.W. to N.W. on our western coasts - fresh in the far west, and a moderate gale at Hornsey.
A fresh gale from South-West has been felt at times in the Channel during the past 24 hours.

WEATHER

Dull and rainy in the east and south - fair and drier in the west.
Rain has fallen very generally during the past 24 hours; lightning has been seen at Allain Head.

SEA

Rough or rather so on most coasts, but has gone down off the west of Ireland.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The fall of the barometer in the south and east, and the rise in the west and northwest, are sufficiently decided to render a change to N.W. winds and cold, over the whole of our Islands very probable.

FORECASTS

for the 24 hours ending at NOON on 29TH DEC^R 1888.

DISTRICTS.

FORECASTS.

| | | |
|---|------------------|---|
| 0 | SCOTLAND NORTH | } Wind shifting to the Northward, with cold weather. Sleet or snow showers. |
| 1 | SCOTLAND EAST | |
| 2 | ENGLAND N.E. | } Wind lulling and shifting to the Northward, with falling temperature, and some cold showers - Frost at night. |
| 3 | ENGLAND EAST | |
| 4 | MIDLAND COUNTIES | |
| 5 | ENGLAND SOUTH | |

DISTRICTS.

FORECASTS.

| | | |
|----|---------------|---|
| 6 | SCOTLAND WEST | } Northerly winds, fresh or strong; cold, becoming drier. |
| 7 | ENGLAND N.W. | |
| 8 | ENGLAND S.W. | |
| 9 | IRELAND NORTH | |
| 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. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. | |
|-------------------|-------|------|------|-------|-------|------|---------------|-------|------|------|-------|------|-------|---|
| Skudermoes ... | | | | | | | Holyhead ... | 29.43 | 49 | 47 | W 8 W | 4 | 0 g | 5 |
| Sumburgh Head ... | 29.51 | 36 | 34 | SE 5 | 0 | 5 | Valencia ... | 29.51 | 49 | 45 | W 8 | 3 | 6 c p | 4 |
| Stornoway ... | 29.31 | 38 | 37 | SE 5 | 0 | 4 | Scilly ... | 29.63 | 52 | 51 | SSW 8 | 8 | 1 g | 4 |
| Aberdeen ... | 29.48 | 40 | 37 | SE 5 | 0 q u | 4 | Jersey ... | 29.92 | 49 | 47 | SSW 5 | 5 | 1 | 4 |
| Shields ... | 29.49 | 40 | 39 | S 4 | Y | 2 | Dungeness ... | 29.87 | 48 | 45 | SW 6 | 6 | 0 | 4 |
| Ardrossan ... | 29.27 | 40 | 40 | E 4 | T | 3 | London ... | 29.80 | 49 | 46 | S 5 | 5 | 0 q | 4 |
| Malin Head ... | 29.22 | 42 | 38 | SW 5 | 0 | 4 | Yarmouth ... | 29.83 | 44 | 42 | SSW 4 | 4 | 0 q | 3 |
| Mullaghmore ... | 29.31 | 45 | 41 | SSW 5 | 0 | 4 | Rochefort ... | 30.14 | 51 | 49 | S 5 | 5 | 0 | 2 |
| Belmullet ... | 29.28 | 45 | 42 | W 6 | c p q | * | | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest 30.5 ins. and upwards, in a large anticyclone covering the greater part of Russia, and lowest 29.3 ins. and less, in two well defined depressions, one of which was lying off the coast of Norway and the other off the northwest of Ireland. A shallow disturbance with readings below 29 ins. existed over the Gulf of Genoa. S² (SE to SW) winds were reported over the greater part of Northwestern Europe, and over the Baltic and the west of our Islands they blew with the force of a strong breeze or moderate gale. In Spain and the north of Italy, however, the wind was chiefly NW², while in other parts of Southern Europe it was light and variable. The weather although temporarily fine in some localities was upon the whole in a cloudy showery state, with snow over the Gulf of Bothnia and Finland. Temperature had risen several degrees in the west of our Islands, and slightly in Algeria, but fallen elsewhere; readings ranged from 55° and upwards at several of the Spanish and Mediterranean stations to many degrees below zero over Central Russia. The highest individual readings were 60° at Oran, 59° at Algiers, 58° at Cagliari, 57° at Brindisi and Nemours, 56° at Palma, and 55° at La Calle; the lowest were -15° F. at Moscow, -13° at Kiev, -7° at Charkov, -5° at Nicolaieff, -4° at St. Petersburg, +9° at Haparanda and Umea, +11° at Athens, +12° at Riga, +14° at Odessa, +15° at Helmsfors.

In the course of the day the depression off the northwest of Ireland moved slowly northeastward while numerous secondary disturbances appeared over various parts of the United Kingdom. Equally, rainy weather was therefore experienced in most places, and a moderate to fresh gale from the SW² blew in the Channel and southeast of England.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Saturday 29th December 1888.*
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | + YESTERDAY EVENING. | | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|---|--------------------|-------|----------------------|----------|---|---|-------------|------|---|-------|----------------------|----------|-------------------|-------------|------|---------------------------|--|--|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | Amount of Rainfall. | | |
| | | | 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 .. | 30.02 | 28 | SW | 2 | 0 | 29.89 | + .10 | 33 | 33 | + 2.1 | S | 4 | 0 | * | ? | 9 | ? | | |
| Hernösand ... | 29.96 | 33 | SSW | 8 | S | 29.95 | + .02 | 34 | 32 | + 2.0 | SSW | 8 | 0 | * | 34 | 12 | 0.04 | | |
| Stockholm ... | 30.10 | 36 | SSW | 2 | 0 | 30.09 | + .03 | 35 | 32 | + 1 | S | 2 | 0 | * | 36 | 32 | - | | |
| Wisby ... | 30.23 | 36 | S | 2 | 0 | 30.12 | - .01 | 35 | 33 | + 1 | SSW | 4 | 0 | * | 39 | 32 | - | | |
| Bodö ... | 29.65 | 32 | ESE | 2 | 0 | 29.60 | + .05 | 32 | 29 | - 1 | ESE | 2 | 0 | 1 | 36 | 28 | - | | |
| Christiansund... | 29.48 | 40 | ESE | 3 | 0 | 29.56 | + .02 | 38 | 37 | + 3 | WSW | 3 | 0 | 4 | 41 | ? | 0.04 | | |
| Skudesnaes ... | 29.45 | 43 | S | 8 | r | 29.66 | + .20 | 43 | 42 | + 3 | SSW | 2 | bc | 5 | 45 | ? | 1.02 | | |
| Christiania Fjord | 29.74 | 40 | SSE | 8 | b | 29.76 | - .02 | 38 | 37 | + 2 | SSE | 8 | r | 5 | ? | ? | - | | |
| (Færdar) | | | | | | | | | | | | | | | | | | | |
| Skagen (The Scaw) | 29.78 | 38 | S | 7 | bc | 29.75 | - .03 | 37 | 36 | 0 | SSW | 8 | r | 4 | 39 | 37 | 0.08 | | |
| Fanö ... | 29.76 | 35 | SSE | 4 | r | 29.77 | + .01 | 35 | 34 | - 1 | S | 4 | 0 | * | 37 | 34 | 0.04 | | |
| BRITISH ISLANDS. | | | | | | | | | | | | | | | | | | | |
| Sumburgh Head | 29.35 | 41 | NW | 3 | c | 29.76 | + .55 | 37 | 35 | - 4 | NW | 3 | 0 | 5 | 42 | 34 | 0.03 | | |
| Stornoway ... | 29.56 | 37 | NW | 4 | b | 29.90 | + .66 | 34 | 34 | - 5 | NW | 2 | 0 | 3 | 42 | 32 | 0.08 | | |
| Wick ... | 29.50 | 36 | N | 3 | b | 29.88 | + .67 | 34 | 33 | - 5 | N | 1 | 0 | 2 | 42 | 33 | 0.08 | | |
| Nairn ... | 29.56 | 37 | W | 1 | b | 29.89 | + .68 | 33 | 32 | - 5 | W | 0 | 0 | 1 | 40 | 31 | 0.01 | | |
| Aberdeen... | 29.50 | 39 | NW | 4 | cyp | 29.91 | + .65 | 33 | 32 | - 6 | WNW | 2 | bc | 3 | 40 | 33 | 0.03 | | |
| Leith ... | 29.58 | 39 | W | 2 | bc | 29.91 | + .63 | 36 | 33 | - 6 | W | 1 | 0 | * | 43 | 32 | - | | |
| Shields ... | 29.49 | 41 | W | 3 | 0 | 29.91 | + .55 | 31 | 30 | - 7 | WNW | 2 | 0 | 2 | 42 | 30 | - | | |
| Spurn Head ... | 29.54 | 41 | WSW | 2 | c | 29.83 | + .44 | 38 | 37 | - 3 | NW | 3 | 0 | 3 | 46 | 36 | 0.06 | | |
| York ... | 29.51 | 41 | W | 1 | c | 29.86 | + .49 | 33 | 32 | - 5 | NW | 1 | 0 | * | 41 | 31 | 0.01 | | |
| Loughborough | 29.50 | 40 | NW | 1 | b | 29.89 | + .48 | 32 | 31 | - 8 | NW | 1 | 0 | * | 46 | 32 | - | | |
| Ardrrossan ... | 29.60 | 42 | NW | 2 | b | 29.94 | + .66 | 34 | 33 | - 9 | N | 1 | 0 | 1 | 45 | 33 | - | | |
| Malin Head ... | 29.68 | 43 | N | 4 | b | 30.00 | + .65 | 40 | 38 | - 2 | N | 4 | 0 | 4 | 45 | 38 | 0.02 | | |
| Mullaghmore ... | 29.76 | 42 | NNE | 4 | cyp | 30.04 | + .65 | 41 | 38 | - 3 | N | 5 | 0 | 3 | 46 | 36 | 0.07 | | |
| Belmullet ... | 29.81 | 42 | N | 4 | cp | 30.12 | + .62 | 38 | 36 | - 6 | NW | 2 | 0 | * | 46 | 37 | 0.10 | | |
| Donaghadee ... | 29.64 | 45 | NNE | 7 | b | 29.98 | + .65 | 35 | 35 | - 3 | W | 4 | 0 | 2 | 45 | 35 | 0.06 | | |
| GERMANY. | | | | | | | | | | | | | | | | | | | |
| Barrow-in-Furness | 29.56 | 42 | NW | 3 | b | 29.89 | + .55 | 35 | 34 | - 6 | NNE | 2 | bc | * | 45 | 34 | 0.04 | | |
| Liverpool (Widston) | 29.59 | 43 | W | 3 | c | 29.93 | + .52 | 38 | 36 | + 2 | NW | 2 | 0 | 3 | 45 | 36 | 0.08 | | |
| Holyhead ... | 29.62 | 46 | NW | 5 | cp | 29.94 | + .54 | 43 | 40 | - 1 | NW | 5 | bc | 4 | 47 | 41 | 0.02 | | |
| Parsonstown ... | 29.75 | 36 | W | 0 | b | 30.05 | + .59 | 30 | 29 | - 7 | W | 0 | 0 | * | 43 | 28 | - | | |
| Valencia ... | 29.83 | 45 | N | 5 | ogf | 30.08 | + .57 | 39 | 37 | - 5 | N | 1 | 0 | 1 | 48 | 36 | 0.14 | | |
| Roche's Point... | 29.72 | 43 | N | 4 | b | 30.05 | + .55 | 38 | 36 | - 3 | N | 3 | 0 | 3 | 48 | 35 | - | | |
| Pembroke ... | 29.66 | 44 | NW | 3 | bc | 29.94 | + .48 | 41 | 40 | - 4 | NNE | 4 | bc | 1 | 47 | 41 | 0.05 | | |
| Scilly ... | 29.62 | 48 | NW | 4 | 0 | 29.91 | + .43 | 47 | 43 | 0 | NNE | 6 | 0 | 5 | 49 | 43 | 0.26 | | |
| Prawle Point ... | 29.65 | 41 | NW | 2 | bc | 29.87 | + .29 | 38 | 36 | - 2 | N | 1 | 0 | 2 | 42 | 36 | - | | |
| Jersey ... | 29.61 | 47 | NW | 3 | 0 | 29.75 | + .23 | 45 | 43 | - 6 | NE | 4 | ogf | 3 | 51 | 43 | 0.70 | | |
| Hurst Castle ... | 29.64 | 40 | N | 2 | b | 29.82 | + .37 | 40 | 39 | - 10 | NNE | 5 | om | 4 | 51 | 38 | 0.36 | | |
| Dunooness ... | 29.57 | 48 | SSW | 6 | r | 29.74 | + .16 | 41 | 41 | - 4 | NE | 4 | r | 3 | 48 | 41 | 0.66 | | |
| London ... | 29.62 | 41 | NW | 1 | m | 29.82 | + .33 | 38 | 37 | - 9 | N | 1 | ogf | * | 50 | 36 | 0.21 | | |
| Oxford ... | 29.67 | 36 | W | 0 | bc | 29.87 | + .46 | 35 | 34 | - 13 | N | 1 | 0 | * | 43 | 34 | 0.04 | | |
| Cambridge ... | 29.60 | 38 | SW | 1 | 0 | 29.86 | + .44 | 35 | 34 | - 12 | N | 1 | 0 | * | 49 | 34 | 0.08 | | |
| Yarmouth ... | 29.58 | 44 | WNW | 2 | 0 | 29.79 | + .26 | 39 | 38 | - 6 | WNW | 2 | 0 | 3 | 46 | 35 | 0.02 | | |
| Cuxhaven ... | 29.82 | 37 | S | 3 | 0 | 29.85 | - .04 | 36 | 35 | + 2 | SSW | 3 | 0 | * | 38 | 33 | - | | |
| Berlin ... | 30.02 | 34 | SE | 3 | b | 29.97 | - .15 | 33 | 32 | + 2 | SE | 1 | 0 | * | 37 | ? | - | | |
| Wiesbaden ... | * | * | * | * | * | 29.94 | - .07 | 31 | 30 | + 3 | W | 0 | 0 | * | 37 | ? | - | | |
| Manich ... | 29.99 | 28 | NE | 3 | b | 29.97 | - .04 | 26 | 26 | - 4 | SE | 4 | m | * | 30 | 25 | - | | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | | |
| The Helder ... | 29.64 | 40 | S | 3 | c | 29.78 | + .05 | 40 | 40 | + 4 | S | 1 | r | 1 | 41 | 36 | 0.16 | | |
| Brussels ... | * | * | * | * | * | 29.80 | .00 | 40 | 38 | + 1 | SSE | 1 | 0 | * | 44 | ? | - | | |
| Cape Gris Nez... | 29.62 | 42 | SSW | 7 | r | 29.73 | + .10 | 44 | 43 | + 3 | NE | 7 | r | 4 | 45 | 41 | 0.67 | | |
| Paris ... | 29.76 | 44 | SSE | 3 | 0 | 29.75 | - .10 | 41 | 39 | + 5 | E | 1 | 0 | * | 47 | ? | - | | |
| Brest ... | 29.67 | 46 | CNE | 4 | 0 | 29.82 | + .30 | 44 | 43 | - 8 | NE | 4 | 0 | 5 | 55 | 36 | - | | |
| Lorient ... | 29.57 | 48 | E | 1 | r | 29.72 | + .16 | 43 | 42 | - 9 | NNE | 5 | r | 4 | 54 | 41 | 0.75 | | |
| Rochefort ... | 29.71 | 49 | S | 8 | 0 | 29.69 | - .13 | 46 | 45 | + 1 | SSE | 5 | 0 | 2 | 52 | 41 | - | | |
| Belfort ... | 29.96 | 35 | W | 1 | b | 29.90 | - .08 | 37 | 36 | + 7 | SW | 1 | bc | * | 43 | 27 | 0.04 | | |
| Lyons ... | 29.89 | 44 | SSE | 3 | bc | 29.82 | - .20 | 46 | 44 | + 11 | SE | 3 | 0 | * | 51 | ? | - | | |
| Nice ... | 30.32 | 46 | E | 4 | 0 | 30.01 | - .02 | 45 | 45 | - 2 | CNE | 4 | 0 | 3 | 56 | 43 | 0.12 | | |
| Perpignan ... | 29.83 | 46 | SW | 3 | b | 29.74 | - .25 | 54 | 48 | + 9 | S | 4 | 0 | * | 53 | 41 | - | | |
| Biarritz ... | 29.68 | 55 | SE | 5 | 0 | 29.60 | - .24 | 53 | 47 | + 2 | E | 4 | 0 | 4 | 58 | ? | - | | |
| PORTUGAL. | | | | | | | | | | | | | | | | | | | |
| Corunna ... | * | * | * | * | * | | | | | | | | | | | | | | |
| Lisbon ... | 29.73 | 30 | WNW | 5 | b | 29.82 | - .19 | 49 | 45 | - 6 | NW | 7 | 0 | 5 | 57 | 45 | 0.67 | | |

WEATHER CHARTS

for 8 a.m. on

Saturday, 29th December.

1888.

BAROMETER, WIND & 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.

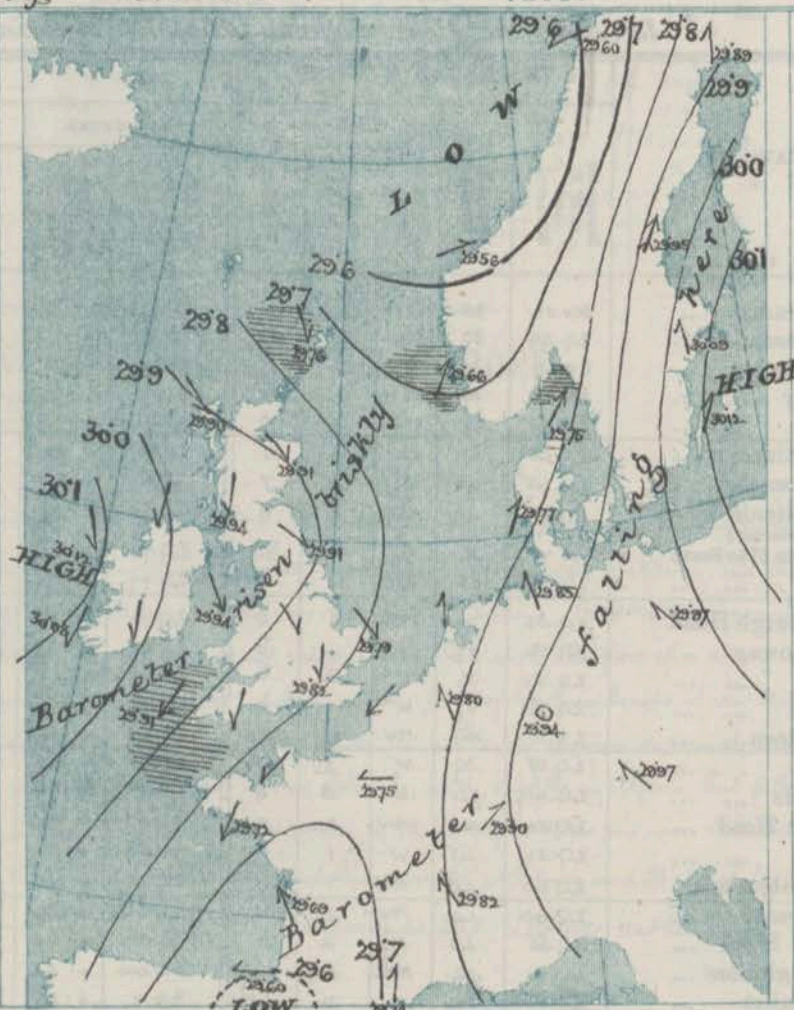
Sea Disturbance — where considerable, is shown thus.

■ — Rough. ■ — High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871 — 1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

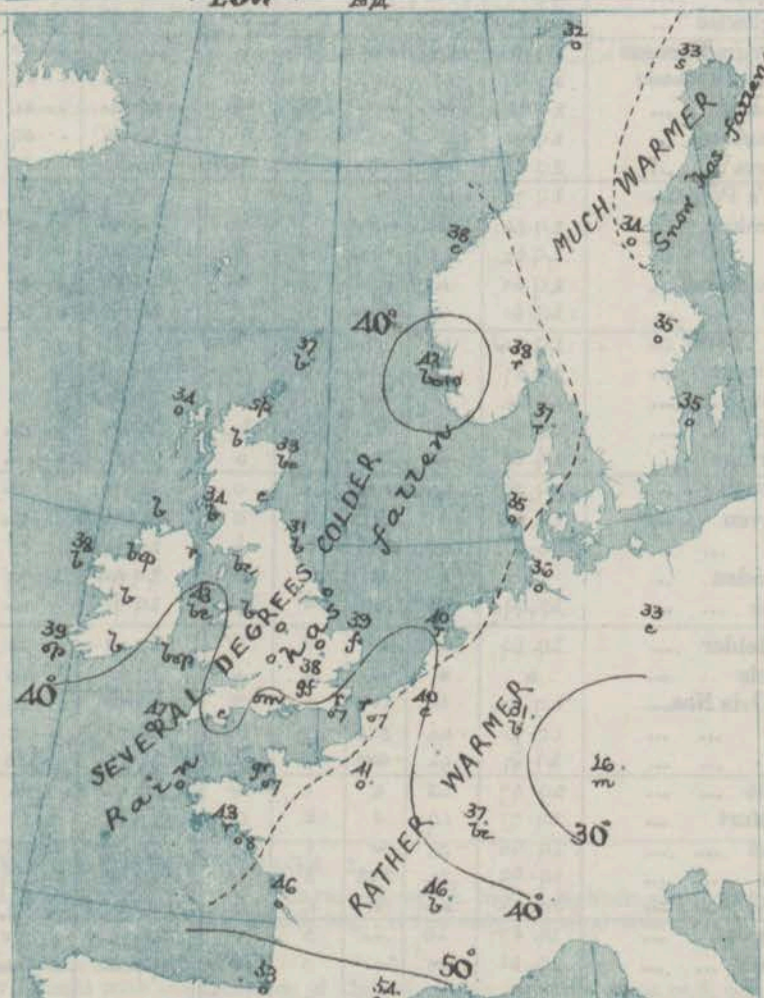
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches). |
|---------------|---------------|---------------|-----------|------|------------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | | |
| | | | Dry | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.0 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871 — 85, the Rainfall means are mainly those for the 20 years 1866 — 85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.1 ins. and upwards over the Baltic, and also in an anticyclone lying off the west of Ireland.
 Lowest, 29.6 ins. and less, in two shallow depressions lying respectively off the coast of Norway and over the northeast of Spain.
 Gradients slight and irregular. Barometers rising at all but the Swedish, German, and French stations, - most on our western and northern coasts.

TEMPERATURE

Highest, 54° at Lerpignan, 53° at Biarritz, 48° at Lisbon, 47° at Seilly, 46° at Rochefort and Lyons, and 45° at Jersey.
 Lowest, 26° at Munich, 30° at Parsonstown, 31° at Shields and Newcastle, 32° at Bodo and Loughboro', and 33° at Lapaeranda, Kain, Alsdan, Jort, Berlin.

WIND

Light from NW. in the north and east of our islands, moderate to fresh from the Nnd or NEnd on our western and southern coasts S or SE at most of the Continental stations; strong to a gale in force in some parts of Sweden and Denmark.

WEATHER

Fine over the greater part of the United Kingdom, but dull and foggy in the southeast of England, and showery at some of our western and northern stations.
 Cloudy on the Continent, with rain over the Netherlands and the north of France, as well as in the neighbourhood of the Skager Rack.
 Since yesterday rain has fallen generally, the largest amounts being 1.0 in. at Skudenæs, 0.8 in. at Lorient, and 0.7 in. at Jersey, Buzenness, C. G. K. and others.

SEA

Rather rough off the south of Norway, as well as at Lumburgh, Seilly, and Lisbon but moderate to slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone in the west will probably continue to spread eastwards, and fair cold weather is, therefore, likely to prevail for a time over the greater part of the United Kingdom.

FORECASTS

for the 24 hours ending at NOON on 30th DEC^r 1883.

DISTRICTS.

FORECASTS.

- | | | | |
|---|------------------|---|---|
| 0 | SCOTLAND NORTH | { | NW th winds, light; fair generally, but some snow showers. |
| 1 | SCOTLAND EAST | | |
| 2 | ENGLAND N.E. | { | NW th to N th winds, light; fair generally. |
| 3 | ENGLAND EAST | | |
| 4 | MIDLAND COUNTIES | { | N th and NE th winds, light or moderate; cloudy to fine. Some fog at night. |
| 5 | ENGLAND SOUTH | | |



DISTRICTS.

FORECASTS.

- | | | | |
|----|---------------|---|---|
| 6 | SCOTLAND WEST | { | N th winds, light; fair generally. |
| 7 | ENGLAND N.W. | | |
| 8 | ENGLAND S.W. | { | N th and NE th winds, moderate; fair generally. |
| 9 | IRELAND NORTH | | |
| 10 | IRELAND SOUTH | { | N th winds, backing later; fair generally. |
| | | | |

WARNINGS

The NORTH CONE has been lowered this morning in districts 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.

YESTERDAY'S 2 P.M. REPORTS.

| | Bar. | Dry. | Wet. | Wind. | Wav. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wav. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnaes ... | 29.44 | 44 | 43 | SSE 8 | 7 f | 6 | Holyhead ... | 29.51 | 44 | 43 | WNW 3 | 6 c | 4 |
| Samburgh Head ... | 29.29 | 38 | 37 | 20 0 | c | 4 | Valencia ... | 29.69 | 48 | 44 | N 5 | c p | 5 |
| Stornoway ... | 29.46 | 40 | 39 | N 4 | 20 | 4 | Scilly ... | 29.68 | 49 | 45 | NW 4 | c | 5 |
| Aberdeen ... | 29.36 | 39 | 37 | W 2 | 60 | 4 | Jersey ... | 29.56 | 48 | 47 | NW 3 | 7 | 3 |
| Shields ... | 29.40 | 42 | 40 | SW 2 | 0 | 2 | Dungeness ... | 29.55 | 48 | 46 | SSW 4 | 0 | 6 |
| Ardrossan ... | 29.44 | 44 | 42 | NW 2 | c | 1 | London ... | 29.55 | 46 | 45 | NW 3 | OT | * |
| Malin Head ... | 29.58 | 44 | 40 | NW 4 | c | 5 | Yarmouth ... | 29.51 | 46 | 45 | SSW 5 | OT | 5 |
| Mullaghmore ... | 29.62 | 45 | 43 | NNE 4 | c p | 3 | Rocheport ... | 29.74 | 49 | 48 | S 8 | 0 | 4 |
| Belmullet ... | 29.71 | 43 | 42 | NNE 5 | Op | * | | | | | | | |

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

The reports for yesterday morning showed that the high pressure area over Russia was moving in a southerly direction, but that reading over that country still varied from 30.3 ins. to 30.8 ins., while they decreased in value in an easterly direction to 29.2 ins. in the north of Scotland, and to 29.5 ins. over Devon and Cornwall. Still further to the westward pressure increased, and it was evident that a new high pressure area was advancing towards the western parts of the British Isles from the Atlantic. Southerly (SE to SW) winds were prevalent over the greater part of Europe, and blew with the force of a moderate gale in the southeast and east of England, and over some parts of the North Sea; they were accompanied by showery changeable weather, and over the North Sea coast and England temperature was high for the time of year. In Ireland, however, the weather was drier and colder. Temperature ranged from many degrees below zero (Fahrenheit) over Central Russia, and from rather below the freezing point over Germany and the east of France to upwards of 50° over the Bay of Biscay and the Mediterranean. The lowest individual values were -18° F. at Nijni Novgorod, -15° at Moscow, -6° at Kharkov, +6° at Nikolaioff, 8° at Kiev, 11° at Krasnoy, 12° at Uleaborg and Nijni Novgorod, 14° at Helsingfors, 25° at Clermont, 28° at Wiesbaden, 30° at Munich and Belfast, and 36° at Paris. The highest were 53° at Oren, 57° at Abalta and Brindisi, 55° at Riga, 54° at Barcelona, 52° at Palermo and Trent, and 47° at Scilly and in London.

During the day the new high pressure area in the west continued to spread eastwards, and the wind over Great Britain shifted to the northward, with a decided fall of temperature.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Sunday 30th DEC^r 1883.
Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| | | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------|--------------------------|------------------------------------|-----------------|--------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|--------|-------------------|----------|----------------|-------------|----------------|---------------------|--|
| STATIONS. | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 9.) | SHADE TEMP. | | | |
| | | | | Dirco. | 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. | Dirco. | Force. (0 to 12.) | | | Max. | Min. | Amount of Rainfall. | |
| SCANDINAVIA. | Haparanda .. | 29.95 | 32 | S | 4 | s | 29.97 | - .08 | 30 | 29 | - 3 | SW | 2 | 0 | * | 34 | 25 | 0.32 | |
| | Hernösand ... | 29.96 | 33 | S | 6 | s | 30.06 | + .11 | 29 | 28 | - 5 | Z | 0 | 0 | * | 36 | ? | 0.08 | |
| | Stockholm ... | 30.05 | 34 | SE | 2 | s | 30.08 | - .01 | 35 | 34 | - 0 | SSE | 2 | r | * | 37 | 32 | - | |
| | Wishby ... | 30.10 | 34 | SW | 2 | r | 30.13 | + .01 | 35 | 34 | - 0 | SSW | 4 | 0 | * | 37 | 30 | 0.04 | |
| | Bodö ... | 29.76 | 31 | ESE | 2 | bc | 29.92 | + .32 | 26 | 23 | - 6 | ESE | 2 | 0 | 1 | 32 | 23 | - | |
| | Christiansund... | 29.76 | 40 | WSW | 4 | r | 29.94 | + .38 | 37 | 36 | - 1 | ESE | 1 | 0 | 2 | 29 | 34 | 0.26 | |
| | Skudesnaes ... | 29.92 | 40 | NNW | 2 | bc | 30.02 | + .36 | 35 | 34 | - 8 | NNW | 2 | bc | 3 | 43 | 34 | - | |
| | Christiania Fjord (Færd) | 29.89 | 39 | N | 2 | f | 29.97 | + .21 | 36 | 34 | - 2 | N | 3 | f | 1 | 39 | 34 | - | |
| | Skagen (The Scar) | 29.90 | 37 | Z | 0 | f | 29.94 | + .19 | 37 | 37 | - 0 | Z | 0 | r | 1 | 37 | 36 | 0.24 | |
| | Fanö ... | | | | | | | | | | | | | | | | | | |
| BRITISH ISLANDS. | Sumburgh Head | 30.01 | 34 | N | 1 | b | 30.07 | + .31 | 33 | 33 | - 4 | Z | 0 | 0 | 0 | 38 | 32 | - | |
| | Stornoway .. | 30.07 | 33 | N | 2 | c | 30.06 | + .16 | 32 | 32 | - 2 | N | 2 | bc | 3 | 36 | 30 | 0.05 | |
| | Wick ... | 30.07 | 30 | N | 1 | b | 30.10 | + .22 | 26 | 25 | - 8 | Z | 0 | 0 | 0 | 41 | 23 | 0.04 | |
| | Nairn ... | 30.07 | 33 | W | 1 | b | 30.10 | + .21 | 28 | 27 | - 5 | W | 1 | 0 | 3 | 38 | 27 | - | |
| | Aberdeen... | 30.09 | 32 | WNW | 2 | b | 30.16 | + .25 | 27 | 26 | - 6 | W | 1 | bc | 3 | 37 | 27 | - | |
| | Leith ... | 30.10 | 32 | W | 1 | b | 30.17 | + .26 | 26 | 25 | - 10 | N | 1 | bc | * | 40 | 23 | - | |
| | Shields ... | 30.02 | 36 | NW | 2 | c | 30.16 | + .25 | 30 | 29 | - 1 | WNW | 2 | 0 | 2 | 40 | 29 | 0.06 | |
| | Spurn Head ... | 29.95 | 39 | N | 4 | r | 30.06 | + .23 | 39 | 37 | + 1 | N | 3 | bc | 3 | 42 | 37 | 0.03 | |
| | York ... | 29.99 | 35 | NW | 1 | bc | 30.10 | + .24 | 32 | 32 | - 1 | N | 1 | 0 | * | 38 | 31 | - | |
| | Loughborough | 30.01 | 37 | NNW | 2 | c | 30.12 | + .23 | 31 | 30 | - 1 | NW | 1 | 0 | * | 38 | 31 | - | |
| GERMANY. | Ardrossan ... | 30.10 | 36 | Z | 0 | b | 30.17 | + .23 | 28 | 28 | - 6 | ESE | 1 | bc | 1 | 42 | 27 | - | |
| | Malin Head ... | 30.13 | 40 | NW | 2 | b | 30.17 | + .17 | 35 | 34 | - 5 | S | 3 | 0 | 2 | 42 | 34 | 0.03 | |
| | Mullaghmore ... | 30.16 | 39 | NW | 2 | bc | 30.19 | + .15 | 33 | 32 | - 8 | SW | 1 | 0 | 2 | 46 | 32 | 0.03 | |
| | Belmullet ... | 30.21 | 37 | NNE | 3 | b | 30.19 | + .07 | 36 | 36 | - 2 | SSE | 3 | 0 | * | 43 | 33 | 0.08 | |
| | Donaghadee ... | 30.13 | 38 | WNW | 2 | bc | 30.19 | + .21 | 30 | 30 | - 5 | W | 2 | 0 | 1 | 43 | 30 | 0.06 | |
| | Barrow-in-Furness | 30.08 | 35 | NNE | 2 | b | 30.17 | + .28 | 31 | 30 | - 4 | N | 1 | 0 | * | 35 | 30 | - | |
| | Liverpool (Bidston) | 30.07 | 35 | N | 1 | b | 30.18 | + .25 | 32 | 30 | - 6 | NE | 1 | 0 | 2 | 39 | 31 | - | |
| | Holyhead ... | 30.08 | 42 | NNE | 5 | bc | 30.18 | + .24 | 36 | 35 | - 7 | NNE | 1 | 0 | 1 | 45 | 36 | - | |
| | Parsonstown ... | 30.19 | 33 | Z | 0 | b | 30.22 | + .17 | 28 | 28 | - 2 | Z | 0 | 0 | * | 39 | 22 | - | |
| | Valencia ... | 30.23 | 40 | N | 2 | cp | 30.23 | + .15 | 34 | 33 | - 5 | Z | 0 | c | 1 | 46 | 30 | 0.03 | |
| FRANCE & NETHERLANDS. | Roche's Point... | 30.17 | 40 | N | 4 | b | 30.21 | + .16 | 35 | 33 | - 3 | NW | 1 | 0 | 3 | 44 | 32 | - | |
| | Pembroke ... | 30.07 | 41 | N | 4 | r | 30.16 | + .22 | 36 | 35 | - 5 | NNE | 3 | 0 | 1 | 45 | 35 | 0.12 | |
| | Scilly ... | 29.99 | 46 | NNE | 6 | cp | 30.09 | + .18 | 43 | 40 | - 4 | NNE | 6 | 0 | 4 | 47 | 41 | 0.14 | |
| | Prawle Point ... | 29.99 | 37 | N | 4 | b | 30.07 | + .20 | 33 | 32 | - 5 | N | 3 | 0 | 2 | 41 | 32 | - | |
| | Jersey ... | 29.87 | 44 | NNE | 5 | rm | 29.96 | + .21 | 43 | 40 | - 2 | NE | 6 | ogm | 4 | 46 | 42 | 0.41 | |
| | Hurst Castle ... | 29.93 | 38 | NNE | 4 | m | 30.03 | + .21 | 36 | 35 | - 4 | NNE | 5 | bc | 4 | 44 | 35 | - | |
| | Dungeness ... | 29.83 | 42 | NE | 4 | r | 29.92 | + .18 | 42 | 40 | + 1 | NNE | 5 | r | 5 | 42 | 40 | 0.39 | |
| | London ... | 29.93 | 40 | NE | 2 | 0 | 30.06 | + .24 | 35 | 34 | - 3 | NE | 2 | af | * | 41 | 35 | 0.03 | |
| | Oxford ... | 30.01 | 36 | NW | 2 | 0 | 30.09 | + .22 | 32 | 31 | - 3 | N | 3 | 0 | * | 38 | 32 | - | |
| | Cambridge ... | 29.94 | 36 | N | 1 | c | 30.07 | + .21 | 32 | 32 | - 3 | N | 1 | 0 | * | 40 | 31 | - | |
| PENINSULA. | Yarmouth ... | 29.87 | 42 | NNE | 4 | od | 29.98 | + .19 | 44 | 39 | + 2 | N | 3 | bc | 4 | 44 | 37 | 0.12 | |
| | Cuxhaven ... | 29.92 | 37 | S | 1 | 0 | 29.92 | + .07 | 35 | 34 | - 1 | S | 1 | 0 | * | 37 | 33 | - | |
| | Berlin ... | 30.02 | 35 | SE | 3 | b | 30.02 | + .05 | 31 | 30 | - 2 | SE | 2 | 0 | * | 37 | 30 | - | |
| | Wiesbaden ... | * | * | * | * | * | 29.96 | + .02 | 35 | 33 | + 4 | Z | 0 | 0 | * | 37 | 31 | - | |
| | Munich ... | 30.00 | 28 | E | 4 | m | 29.98 | + .01 | 25 | 25 | - 1 | E | 5 | f | * | 30 | 25 | - | |
| | The Helder ... | 29.88 | 40 | E | 1 | r | 29.92 | + .14 | 40 | 39 | - 0 | NNE | 4 | r | 3 | 41 | 39 | 0.28 | |
| | Brussels ... | * | * | * | * | * | 29.84 | + .04 | 40 | 40 | - 0 | NE | 1 | r | * | 47 | 37 | 0.20 | |
| | Cape Gris Nez... | 29.82 | 43 | NE | 8 | r | 29.91 | + .18 | 42 | 42 | - 2 | NE | 8 | r | 6 | 46 | 41 | 0.63 | |
| | Paris ... | 29.79 | 43 | NNE | 1 | 0 | 29.82 | + .07 | 43 | 43 | + 2 | N | 1 | 0 | * | 47 | 40 | 0.24 | |
| | Brest ... | 29.96 | 43 | NNE | 3 | c | 30.04 | + .22 | 41 | 37 | - 3 | NNE | 5 | c | 4 | 50 | 36 | 0.08 | |
| PENINSULA. | Lorient ... | 29.80 | 42 | NNE | 8 | r | 29.84 | + .12 | 45 | 41 | + 2 | NNE | 8 | bc | 5 | 48 | 41 | 0.24 | |
| | Rochefort ... | 29.42 | 48 | E | 4 | 0 | 29.71 | + .02 | 48 | 47 | + 2 | E | 5 | 0 | 2 | 57 | 41 | 0.16 | |
| | Belfort ... | | | | | | | | | | | | | | | | | | |
| | Lyons ... | 29.84 | 46 | S | 1 | 0 | 29.84 | + .02 | 42 | 39 | - 4 | Z | 1 | 0 | * | 57 | 40 | - | |
| | Nice ... | | | | | | | | | | | | | | | | | | |
| PENINSULA. | Perpignan ... | 29.65 | 57 | S | 5 | r | 29.66 | - .08 | 51 | 48 | - 3 | E | 3 | 0 | * | 60 | 49 | 0.12 | |
| | Biarritz ... | 29.61 | 48 | ESE | 3 | f | 29.64 | + .04 | 50 | 46 | - 3 | W | 7 | af | 6 | 54 | 45 | 0.39 | |
| | Corunna ... | * | * | * | * | * | 30.04 | + .20 | 46 | 45 | - 2 | NNE | 11 | r | 6 | ? | 41 | 0.08 | |
| | Lisbon ... | 29.84 | 50 | NNW | 8 | b | 29.88 | + .06 | 46 | 42 | - 3 | N | 7 | 0 | ? | 52 | 45 | 0.04 | |

WEATHER CHARTS

for 8 a.m. on Sunday, 30th December

1888.

BAROMETER, WIND & 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 heads and feathers refer to force, thus —

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

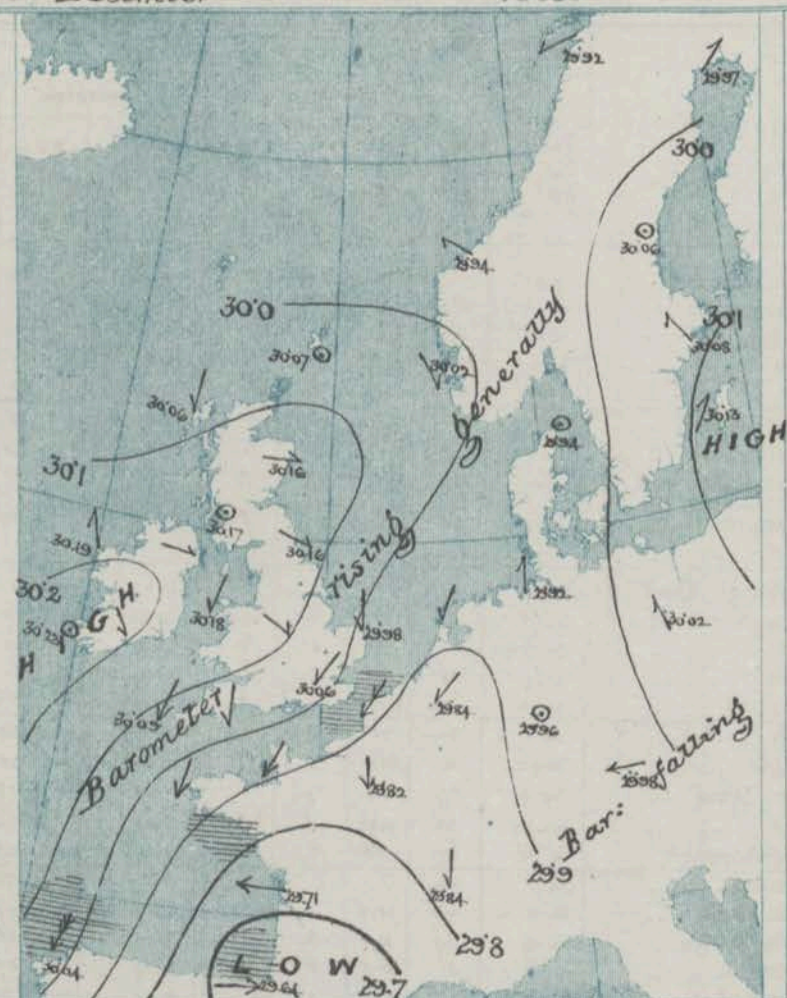
Sea Disturbance — where considerable is shown thus.

■ = Rough ■ = High.

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December
During the 15 Years 1871 — 1885.

| STATIONS. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.909 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

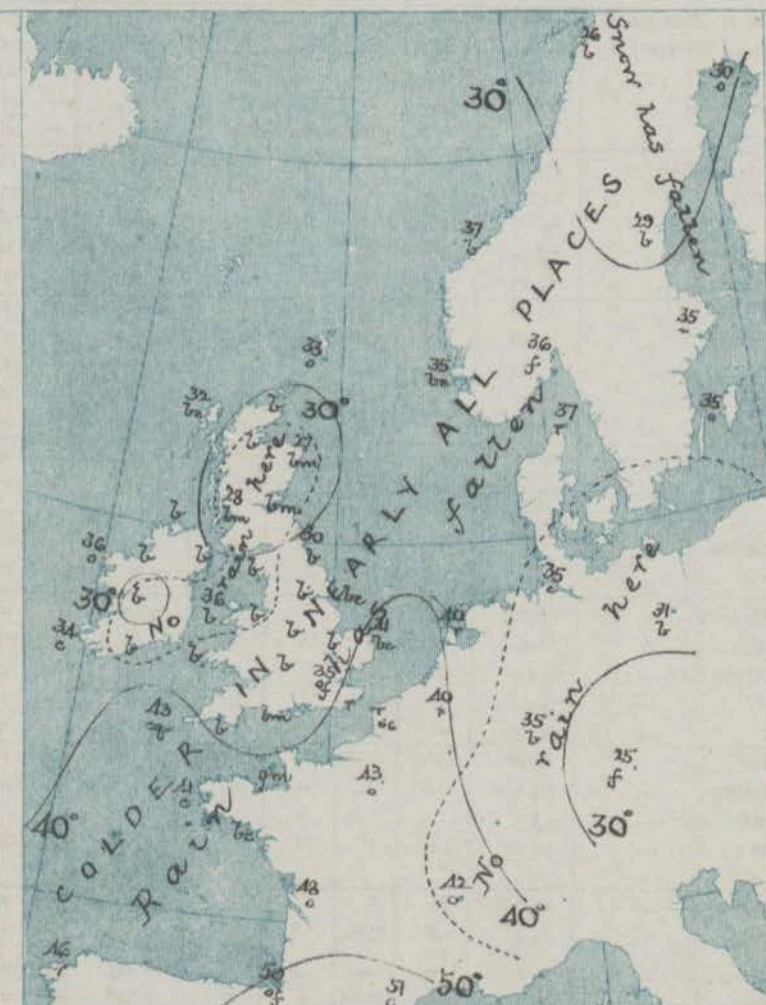
Rainfall A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December

| STATIONS | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|-------------------|------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. Dry. | Wet. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.0 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 38.5 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.0 | 2.13 |
| Cambridge | 43.5 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871 — 85, the Rainfall means are mainly those for the 20 years 1866 — 85



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.2 in: and upwards, over the south of Ireland; 30.1 in: and upwards over the Baltic.
 Lowest, 29.7 in: and less, in a large shallow depression lying over the southwest of France and the northeast of Spain.
 Gradients moderate over the Bay of Biscay, but slight elsewhere.
 Barometer rising at all but our extreme northern and northwestern stations.

TEMPERATURE

Highest, 51° at Rippon, 50° at Biarritz, 48° at Rochefort, 46° at Corunna and Lisbon, 45° at Lorient, and 43° at Dublin, Jersey and Paris.
 Lowest, 25° at Munich, 26° at Rodez, Wick and Leith, 27° at Aberdeen, and 28° at Saint, Anderson, and Parsonstown.
 Sharp frost occurred last night in most parts of Great Britain.

WIND

Light from the S.W. over the greater part of Scandinavia and Denmark, as well as in the north of Ireland.
 Light or moderate from N. over Great Britain, strong to gale from N.E. over the northern parts of France and Spain.
 Strong from W. at Biarritz; calm in the south of Ireland.

WEATHER

Dull over the Netherlands, France, and the north of Spain, with rain in many places.
 Fine in most other localities, but rainy at Stockholm and Hagen.
 Rain fell yesterday in several parts of Western Europe.

SEA

Rough at Corunna and Biarritz, and rather rough in the Straits of Dover, but slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The anticyclone over Ireland is moving eastwards, and the barometer is now beginning to fall on our extreme northwest coasts.
 The depression over the south of France is apparently filling up.

FORECASTS

For the 24 hours ending at NOON on 31st DEC^r 1888.

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.

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. | Dry. | Wet. | Wind. | Wca. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wca. | Sea. | |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|---|
| Skudesnaes ... | 29.80 | 41 | 40 | NNW | 2 | c | Holyhead ... | 30.01 | 43 | 40 | N | 4 | c | 4 |
| Samburgh Head ... | 29.92 | 37 | 33 | N | 2 | b | Valencia ... | 30.19 | 46 | 41 | NNE | 2 | bm | 3 |
| Sternoway ... | 30.01 | 36 | 36 | N | 2 | c | Scilly ... | 29.97 | 47 | 45 | N | 6 | c | 5 |
| Aberdeen ... | 30.02 | 36 | 34 | NNW | 3 | bc | Jersey ... | 29.83 | 43 | 42 | N | 4 | orm | 3 |
| Shields ... | 29.97 | 38 | 36 | NW | 2 | c | Dungeness ... | 29.79 | 42 | 41 | NE | 4 | r | 3 |
| Ardrossan ... | 30.05 | 41 | 39 | L | 0 | b | London ... | 29.89 | 41 | 39 | N | 3 | cd | * |
| Malin Head ... | 30.08 | 40 | 37 | N | 3 | b | Yarmouth ... | 29.84 | 44 | 43 | NNW | 2 | c | 2 |
| Mullaghmore ... | 30.02 | 42 | 39 | SW | 1 | bc | Rochefort ... | 29.72 | 51 | 49 | S | 4 | o | 2 |
| Belmullet ... | 30.17 | 43 | 41 | NNW | 3 | bc | | | | | | | | |

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

The reports for yesterday morning showed that pressure was highest 30.7 ins and upwards over Central Russia, but high 30.1 ins and upwards off the coast of Ireland. The lowest readings 29.6 ins and less, were found in two depressions, one lying off the coast of Norway and the other over the northeast of Spain. The wind was NW¹ in the north and east of the British Islands, and N or NW on our western and southern coasts. Over Central and Northern Europe, however, moderate S or SE² breezes were reported, while in the southern regions the wind was light and variable. The weather was fine in all the more western and northern parts of the United Kingdom, but cloudy elsewhere with rain over the Schager-Rack, the Netherlands, and the northern parts of France and Spain. Temperature had fallen several degrees in our Islands and slightly in some parts of Central and Southern Europe, but risen in most other localities; readings ranged from 55° and upwards at some of the Algerian stations and 50° and upwards over the extreme south of Europe to a little below zero over Central Russia. The highest individual readings were 58° at Sanguinac, Munsus and Algiers, 57° at Oran, 55° at LaFalle, and 54° at Perpignan, Cette, Croisette, and Cagliari; the lowest were -7° F. at Moscow, -2° at Charkov, +1° at Archangel, 4° at Nicolaieff, 6° at Odessa, 11° at Kiev, 17° at St Petersburg, 19° at Kuopio, and 24° at Riga.

In the course of the day the barometer rose over the whole of Western Europe, and the high pressure system to the westward of our Islands advanced slowly eastwards. Temperature fell generally, and a sharp frost was experienced over the United Kingdom at night.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Monday 31st DEC^r

1888.

Issued by the Meteorological Office, 116, Victoria Street, London. R. H. SCOTT, Secretary.

| STATIONS. | + YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-----------------------------|------------------------------------|-----------------|-------|-------------------|----------|----------------------------------|-----------------------------------|-------------|------|-----------------------------------|-------|-------------------|----------|----------------|-------------|----------------|---------------------|--|
| | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 3.) | SHADE TEMP. | | Amount of Rainfall. | |
| | | | 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. | | |
| SWEDEN. | | | | | | | | | | | | | | | | | | |
| Haparanda .. | | | | | | | | | | | | | | * | | | | |
| Härnösand .. | | | | | | | | | | | | | | * | | | | |
| Stockholm .. | | | | | | | | | | | | | | * | | | | |
| Wisby .. | | | | | | | | | | | | | | * | | | | |
| Bodö .. | 30.05 | 26 | ENE | 2 | b | 29.97 | + .05 | 27 | 27 | + 3 | ENE | 2 | b | 1 | ? | 21 | — | |
| Christiansund .. | 30.01 | 37 | SW | 3 | c | 29.89 | — .05 | 31 | 29 | — 6 | ESE | 2 | b | 2 | 37 | 28 | — | |
| Skudesnäs .. | 30.01 | 32 | Z | 0 | o | 29.97 | — .05 | 33 | 31 | — 2 | ESE | 4 | o | 3 | 36 | 30 | — | |
| Christiania Fjord (Hardest) | 29.89 | 38 | N | 4 | r | 29.80 | — .11 | 34 | 32 | — 2 | NNE | 5 | o | 1 | 26 | 28 | — | |
| Skagen (The Sea) | 29.80 | 35 | ENE | 2 | r | 29.82 | — .12 | 37 | 33 | 0 | N | 4 | o | 3 | 37 | 24 | 0.63 | |
| Århus .. | 29.92 | 37 | NW | 3 | r | 30.00 | | 35 | 34 | | NW | 4 | b | * | 37 | 34 | 0.32 | |
| IRELAND. | | | | | | | | | | | | | | | | | | |
| Burrough Head | 29.98 | 26 | SW | 1 | o | 29.72 | — .35 | 42 | 41 | + 9 | S | 2 | r | 3 | 42 | 31 | 0.05 | |
| Stornoway .. | 29.89 | 41 | SW | 5 | r | 29.63 | — .43 | 45 | 45 | + 13 | SW | 7 | r | 6 | 45 | 31 | 0.26 | |
| Wick .. | 29.98 | 33 | SW | 1 | bc | 29.40 | — .40 | 40 | 39 | + 14 | S | 3 | or | 1 | 42 | 26 | 0.26 | |
| Nairn .. | 30.00 | 34 | Z | 0 | b | 29.73 | — .37 | 41 | 40 | + 13 | WNW | 2 | o | 1 | 41 | 26 | 0.13 | |
| Aburdeen .. | 30.07 | 27 | SW | 1 | b | 29.84 | — .32 | 37 | 35 | + 10 | SSW | 2 | op | 3 | 37 | 26 | 0.02 | |
| Leith .. | 30.12 | 32 | N | 1 | b | 29.92 | — .25 | 41 | 38 | + 15 | W | 1 | c | * | 41 | 22 | — | |
| Shields .. | 30.13 | 34 | WNW | 1 | m | 30.03 | — .13 | 39 | 32 | + 3 | SW | 3 | c | 2 | 36 | 27 | — | |
| Spurn Head .. | 30.12 | 38 | NNE | 3 | bc | 30.11 | — .05 | 34 | 32 | — 5 | SSW | 1 | bc | 2 | 42 | 33 | 0.01 | |
| York .. | 30.14 | 30 | WNW | 1 | b | 30.07 | — .03 | 28 | 28 | — 4 | SE | 1 | f | * | 37 | 26 | — | |
| Loughborough | 30.18 | 31 | SW | 1 | b | 30.15 | + .03 | 21 | 21 | — 10 | ESE | 1 | f | * | 39 | 21 | — | |
| SCOTLAND. | | | | | | | | | | | | | | | | | | |
| Ardrossan .. | 30.08 | 42 | S | 3 | o | 29.92 | — .25 | 44 | 42 | + 16 | SSW | 4 | o | 3 | 44 | 28 | — | |
| Malin Head .. | 30.04 | 35 | SSW | 4 | bc | ? | ? | 38 | 38 | + 3 | S | 7 | our | 6 | 38 | 35 | 0.06 | |
| Mullaghmore .. | 30.06 | 39 | S | 5 | cpm | 29.80 | — .39 | 43 | 42 | + 10 | SSW | 7 | or | 4 | 43 | 32 | 0.06 | |
| Belmullet .. | 30.03 | 45 | SSW | 5 | ou | 29.75 | — .44 | 46 | 46 | + 10 | SSW | 7 | r | * | 46 | 36 | 0.39 | |
| Donaghadee .. | 30.15 | 32 | WSW | 2 | b | 29.95 | — .24 | 39 | 38 | + 9 | SW | 8 | c | 1 | 39 | 30 | — | |
| ENGLAND. | | | | | | | | | | | | | | | | | | |
| Darwin-in-Purcell | 30.16 | 34 | NNE | 2 | b | 30.07 | — .10 | 35 | 34 | + 4 | SE | 2 | bc | * | 37 | 29 | — | |
| Liverpool (Station) | 30.20 | 35 | NNE | 1 | b | 30.10 | — .08 | 29 | 28 | — 3 | SSE | 2 | b | 2 | 27 | 27 | — | |
| Holyhead .. | 30.18 | 37 | SSW | 1 | bm | 30.05 | — .13 | 41 | 39 | + 5 | SSW | 4 | cm | 4 | 42 | 33 | — | |
| Harroldstown .. | 30.16 | 30 | Z | 0 | b | 29.95 | — .27 | 37 | 34 | + 9 | SE | 1 | c | * | 38 | 22 | — | |
| Valencia .. | 30.16 | 40 | SSE | 2 | c | 29.92 | — .31 | 45 | 47 | + 14 | SSE | 6 | rm | 6 | 48 | 34 | 0.04 | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | |
| Roche's Point .. | 30.15 | 34 | NNE | 1 | b | 30.00 | — .21 | 45 | 42 | + 10 | SW | 4 | c | 4 | 45 | 33 | — | |
| Pembroke .. | 30.19 | 36 | NE | 3 | b | 30.09 | — .07 | 39 | 38 | + 3 | SSE | 4 | bc | 2 | 41 | 34 | — | |
| Scilly .. | 30.12 | 44 | NE | 6 | bc | 30.08 | — .01 | 41 | 39 | — 2 | Z | 0 | bc | 1 | 45 | 38 | — | |
| Prawle Point .. | 30.03 | 34 | N | 4 | b | 30.11 | + .04 | 37 | 37 | + 4 | NNE | 4 | o | 2 | 42 | 21 | — | |
| Jarney .. | 30.02 | 46 | NNE | 5 | o | 30.07 | + .11 | 45 | 44 | + 2 | ENE | 3 | om | 3 | 46 | 42 | 0.01 | |
| GERMANY. | | | | | | | | | | | | | | | | | | |
| Harst Castle .. | 30.11 | 38 | NNE | 4 | b | 30.14 | + .11 | 35 | 35 | — 1 | NE | 2 | c | 2 | 41 | 32 | — | |
| Dungannon .. | 30.01 | 43 | NE | 5 | c | 30.13 | + .21 | 41 | 38 | — 1 | SE | 4 | b | 3 | 44 | 40 | — | |
| London .. | 30.10 | 36 | NE | 2 | b | 30.16 | + .10 | 28 | 28 | — 7 | Z | 0 | f | * | 40 | 28 | — | |
| Oxford .. | 30.18 | 32 | N | 1 | b | 30.17 | + .08 | 26 | 26 | — 6 | Z | 0 | f | * | 40 | 25 | — | |
| Cambridge .. | 30.11 | 34 | Z | 0 | b | 30.16 | + .09 | 22 | 22 | — 10 | Z | 0 | b | * | 40 | 21 | — | |
| PORTUGAL. | | | | | | | | | | | | | | | | | | |
| Yarmouth .. | 30.08 | 41 | NNE | 5 | c | 30.14 | + .16 | 32 | 32 | — 9 | Z | 0 | bc | 3 | 42 | 30 | — | |
| Cuxhaven .. | 29.97 | 35 | NW | 4 | 5 | 30.05 | + .13 | 36 | 34 | + 1 | NW | 3 | c | * | 38 | 34 | 0.18 | |
| Berlin .. | 30.01 | 34 | SE | 4 | b | 30.04 | + .02 | 24 | 33 | + 3 | WNW | 3 | o | * | 37 | 30 | 0.16 | |
| Wiesbaden .. | * | * | * | * | * | 30.14 | + .18 | 33 | 32 | — 2 | Z | 0 | o | * | 37 | 30 | — | |
| Manich .. | 29.97 | 29 | SSW | 5 | m | 30.10 | + .12 | 25 | 25 | 0 | NE | 3 | f | * | 32 | 25 | — | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | |
| The Helder .. | 30.08 | 39 | NNE | 1 | b | 30.15 | + .23 | 35 | 34 | — 5 | WSW | 1 | bc | 1 | 41 | 34 | 0.16 | |
| Brussels .. | * | * | * | * | * | 30.17 | + .33 | 34 | 34 | — 6 | E | 1 | o | * | 41 | 34 | 0.08 | |
| Cape Gris Nez .. | 30.00 | 42 | NE | 8 | c | 30.12 | + .21 | 33 | 32 | — 9 | SSE | 3 | b | 2 | 46 | 33 | 0.16 | |
| Paris .. | 29.96 | 45 | NE | 1 | r | 30.08 | + .26 | 41 | 39 | — 2 | NE | 1 | o | * | 47 | 39 | 0.12 | |
| Brest .. | 30.07 | 45 | ENE | 5 | o | 30.08 | + .04 | 44 | 43 | + 3 | NNE | 1 | o | 2 | 50 | 36 | — | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | |
| Lorient .. | 29.90 | 45 | NNE | 8 | o | 30.02 | + .18 | 43 | 42 | — 2 | ENE | 5 | o | 2 | 45 | 41 | 0.04 | |
| Rocheport .. | 29.86 | 47 | E | 4 | b | 29.91 | + .20 | 44 | 43 | — 4 | ENE | 7 | b | 2 | 54 | 39 | — | |
| Belfort .. | 29.95 | 33 | NE | 1 | f | 30.04 | | 30 | 30 | | NE | 1 | f | * | 34 | 23 | — | |
| Lyons .. | 29.90 | 41 | N | 4 | c | 29.97 | + .12 | 32 | 31 | | WNW | 3 | c | * | 44 | 32 | — | |
| Nice .. | 29.93 | 55 | E | 7 | r | 29.93 | | 52 | 49 | | E | 8 | o | 6 | 55 | 48 | 0.08 | |
| FRANCE & NETHERLANDS. | | | | | | | | | | | | | | | | | | |
| Perpignan .. | 29.75 | 50 | Z | 0 | o | 29.73 | + .07 | 44 | 43 | — 7 | W | 3 | r | * | 52 | 43 | 0.95 | |
| Biarritz .. | 29.75 | 49 | WSW | 8 | r | 29.80 | + .16 | 48 | 46 | — 2 | ESE | 3 | m | 5 | 54 | 43 | — | |
| PORTUGAL. | | | | | | | | | | | | | | | | | | |
| Corunna .. | * | * | * | * | * | | | | | | | | | | | | | |
| Lisbon .. | 29.91 | 50 | N | 7 | b | 29.90 | + .02 | 44 | 41 | — 2 | N | 7 | b | 3 | 54 | 41 | — | |

WEATHER CHARTS

for 8 a.m. on Monday, 31st December.

1888.

BAROMETER, WIND & 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 the barbs and feathers refer to force, thus —

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

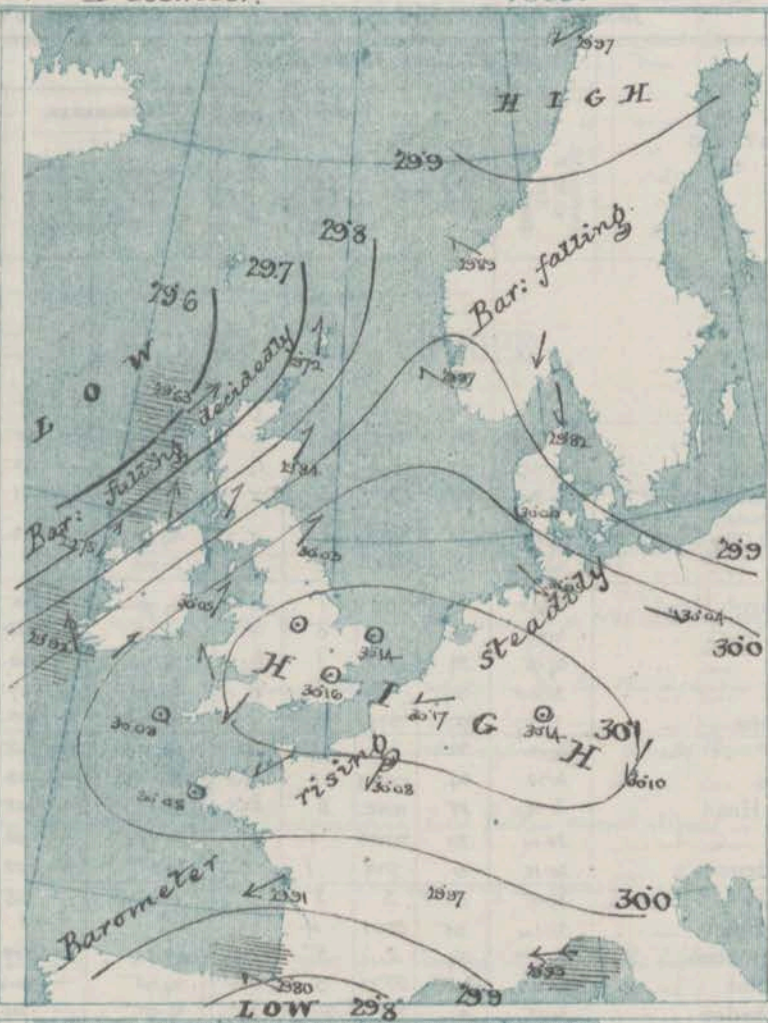
Sea Disturbance — where considerable is shown thus.

— Rough — High

MEAN HEIGHT of the BAROMETER

at 8 a.m. for the month of December.
During the 15 Years 1871—1885.

| STATION. | MEAN READINGS. |
|---------------|----------------|
| Sumburgh Head | 29.667 |
| Stornoway | 29.701 |
| Wick | 29.711 |
| Nairn | 29.739 |
| Aberdeen | 29.757 |
| Leith | 29.803 |
| Shields | 29.843 |
| York | 29.888 |
| Loughborough | 29.923 |
| Ardrossan | 29.819 |
| Donaghadee | 29.847 |
| Holyhead | 29.879 |
| Liverpool | 29.895 |
| Parsonstown | 29.900 |
| Valencia | 29.908 |
| Roche's Point | 29.915 |
| Pembroke | 29.918 |
| Scilly | 29.962 |
| Jersey | 29.985 |
| Hurst Castle | 29.959 |
| Dover | 29.957 |
| LONDON | 29.951 |
| Oxford | 29.954 |
| Cambridge | 29.938 |
| Yarmouth | 29.914 |



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.

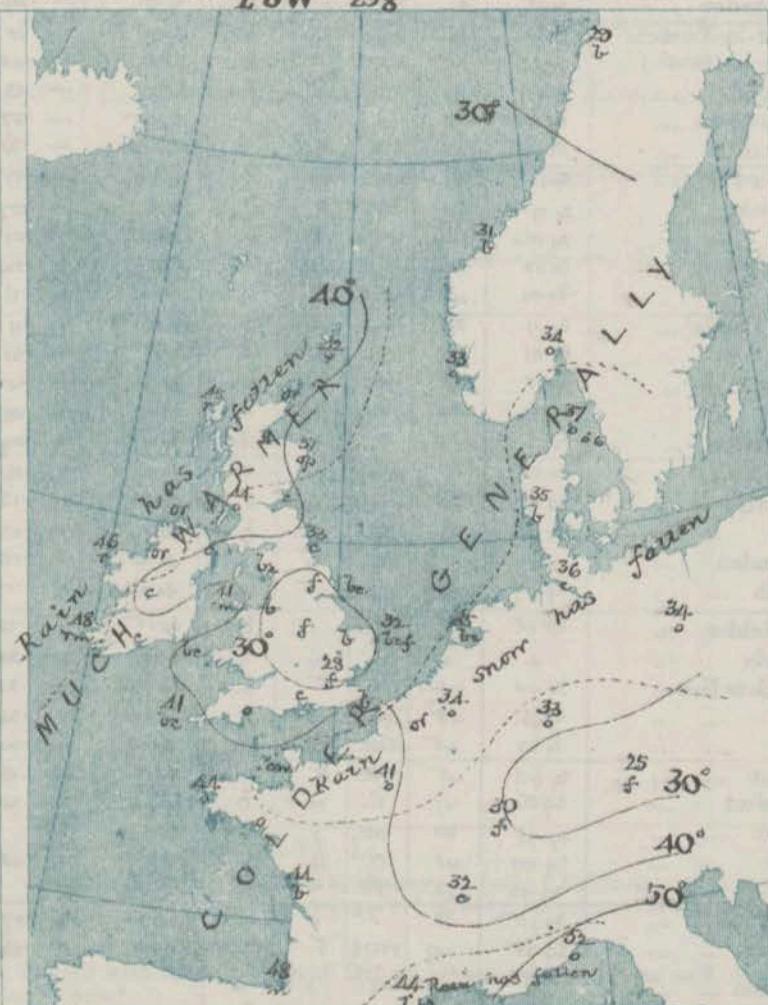
Rainfall — A dotted line separates the districts in which rain has fallen from those where there has been none. Falls of 0.5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE.

AND RAINFALL.
for the month of December.

| STATIONS. | TEMPERATURE. | | | | RAINFALL. (Inches) |
|---------------|---------------|---------------|-----------|-----------|-----------------------|
| | Daily Max. | Daily Min. | at 8 a.m. | at 8 a.m. | |
| Sumburgh Head | 42.5 | 35.0 | 39.5 | 37.9 | 4.33 |
| Stornoway | 44.4 | 33.9 | 39.2 | 38.2 | 5.66 |
| Wick | 42.1 | 32.6 | 38.0 | 36.6 | 3.18 |
| Nairn | 41.7 | 32.8 | 37.0 | 35.5 | 2.08 |
| Aberdeen | 42.0 | 32.5 | 36.9 | 35.3 | 3.34 |
| Leith | 44.2 | 33.7 | 38.6 | 37.0 | 2.01 |
| Shields | 43.1 | 34.3 | 38.5 | 37.2 | 2.74 |
| York | 42.7 | 32.4 | 36.8 | 35.7 | 2.45 |
| Loughborough | 43.1 | 32.9 | 36.9 | 35.9 | 2.36 |
| Ardrossan | 44.6 | 36.0 | 40.1 | 38.7 | 4.04 |
| Donaghadee | 46.1 | 36.2 | 40.2 | 39.2 | 2.84 |
| Holyhead | 46.7 | 39.3 | 43.0 | 41.4 | 3.84 |
| Liverpool | 43.8 | 36.0 | 39.3 | 37.6 | 2.70 |
| Parsonstown | 44.8 | 33.2 | 37.9 | 36.6 | 3.02 |
| Valencia | 50.0 | 40.0 | 44.6 | 42.3 | 5.82 |
| Roche's Point | 48.0 | 39.0 | 42.9 | 41.5 | 4.74 |
| Pembroke | 47.1 | 40.6 | 43.9 | 42.5 | 4.06 |
| Scilly | 49.8 | 43.8 | 47.1 | 45.4 | 4.10 |
| Jersey | 47.7 | 40.1 | 43.4 | 41.8 | 3.87 |
| Hurst Castle | 46.1 | 36.9 | 40.9 | 40.2 | 2.84 |
| Dover | 44.7 | 36.8 | 40.3 | 39.1 | 3.20 |
| LONDON | 44.7 | 34.6 | 38.5 | 37.4 | 2.14 |
| Oxford | 43.6 | 34.3 | 37.7 | 36.6 | 2.13 |
| Cambridge | 43.6 | 32.3 | 36.9 | 36.1 | 1.99 |
| Yarmouth | 42.4 | 34.2 | 38.3 | 37.5 | 2.95 |

NOTE — The Temperature means are for the 15 years 1871—85, the Rainfall means are mainly those for the 20 years 1866—85.



GENERAL SITUATION AT 8 A.M.

| | |
|-------------|---|
| PRESSURE | <i>Highest 30.10 ms. and more in an anticyclone, the central area of which covers England, the Netherlands and the NW of France. Lowest 29.6 ms. and less off our extreme northwest coast, 29.5 ms. and less over the north and east of Spain. Gradients rather steep in Ireland and Scotland, slight elsewhere; almost nil over England & the Netherlands. Barometer falling in the west and north, rising slightly in the east and south.</i> |
| TEMPERATURE | <i>Highest 52° at Arica, 48° at Biarritz and Valencia, 46° at Belmullet and 45° at Hornumay. Lowest 31° at Loughborough, 32° at Cambridge, 35° at Allunich, 38° in London and 39° at Paris. (The Swedish reports are 26° in S.) It has risen very quickly in the east and north, fallen over England during the past night.</i> |
| WIND | <i>N.E. and S.W. at our western and northern stations—blowing a moderate gale in the extreme W., and a moderate breeze elsewhere. Calms and variable airs prevail over England. Easterly winds over France and the Bay of Biscay.</i> |
| WEATHER | <i>Dull and cloudy in the west and north, with rain in several places. Very foggy over England and also in South Germany. Clear on our southeast coast. A slight shower fell at Jersey in the night.</i> |
| SEA | <i>Rough in the extreme west and northwest, moderate in St. George's Channel, slight or smooth elsewhere.</i> |

PROBABLE CHANGES IN SYSTEM NOW PREVALENT



It is at present somewhat doubtful whether the S.W. winds in Ireland and Scotland will spread with any great strength to the Central and eastern parts of England so as to clear away the fog. Should they fail to do so, a continuation of frosty, foggy weather in this country would ensue.

FORECASTS

for the 24 hours ending at NOON on 1ST JANUARY 1888.

| DISTRICTS. | FORECASTS. | DISTRICTS. | FORECASTS. |
|--------------------|--|------------------|--|
| 0 SCOTLAND NORTH | South Westerly winds, strong, perhaps a gale; rain at times, unsettled. | 6 SCOTLAND WEST | South Westerly and Southerly winds, increasing; fair to showery. |
| 1 SCOTLAND EAST | | 7 ENGLAND N.W. | |
| 2 ENGLAND N.E. | Calms and fogs; followed by South westerly breezes and probably clearer weather. | 8 ENGLAND S.W. | Same as N° 5. |
| 3 ENGLAND EAST | | 9 IRELAND NORTH | Southerly and South Westerly winds, strong, a gale in far west; showery. |
| 4 MIDLAND COUNTIES | | 10 IRELAND SOUTH | |
| 5 ENGLAND SOUTH | | | The South Cone was hoisted last evening in Districts 0, 6, 9 and parts of 1 and 10, and is still up. |

WARNINGS

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. | Dry. | Wet. | Wind. | Wes. | Sea. | | Bar. | Dry. | Wet. | Wind. | Wes. | Sea. |
|-------------------|-------|------|------|-------|------|------|---------------|-------|------|------|-------|------|------|
| Skudesnes ... | 30.01 | 36 | 2+ | NNW 2 | 6 | 3 | Holyhead ... | 30.19 | 40 | 38 | Z 0 | 3 | 5 |
| Sumburgh Head ... | | | | | | | Valencia ... | | | | | | |
| Stornoway ... | 29.98 | 40 | 40 | SW 4 | 0 | 4 | Scilly ... | | | | | | |
| Aberdeen ... | | | | | | | Jersey ... | 29.98 | 44 | 41 | NE 6 | 0 | 5 |
| Shields ... | | | | | | | Dungeness ... | 29.98 | 43 | 41 | NE 6 | 0 | 5 |
| Ardrossan ... | | | | | | | London ... | | | | | | * |
| Malin Head ... | 30.10 | 37 | 36 | S 4 | 0 | 3 | Yarmouth ... | | | | | | |
| Mullaghmore ... | | | | | | | Rochefort ... | 29.77 | 50 | 49 | SE 5 | 0 | 2 |
| Belmullet ... | 30.10 | 41 | 41 | SW 3 | 0 | * | | | | | | | |

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

The Continental Information has not yet arrived.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 23RD TO THE 29TH DECEMBER 1888.

The weather of the past week remained mild, and unsettled until the close of the period, when a decided change to colder and finer conditions was reported. During the greater part of the week, pressure was highest over Northern Europe, but relatively high over the Iberian Peninsula, and the prevailing winds were therefore S.W. Several depressions appeared in the neighbourhood of our Islands.

The first was identical with the deep disturbance which advanced to our southwest coasts at the close of the preceding week, but on the 24th the system filled up rapidly over Wales and the west of England.

The second, a large but somewhat shallow disturbance, skirted our N.W. and N.E. coasts on the night of the 23rd, and the morning of the 24th, and occasioned fresh S.W. gales at some of the Irish and Scotch stations.

The third, a somewhat deeper system, travelled in a similar direction on the 25th, and produced fresh S.W. to S.W. gales in many parts of the Kingdom.

The fourth, skirted our northwest coasts on the 27th, when slight gales were again experienced in the west and north generally.

Several secondary disturbances now advanced directly over the Kingdom from the westward, and on the evening or night of the 27th a fresh S.W. gale was experienced in the Channel. On the 28th, however, a brisk increase of pressure took place on our western coasts, and at the close of the week a decided anticyclone had appeared off the west of Ireland. The wind therefore veered to the northward generally, with a considerable fall of temperature, and some improvement in the weather.

During the first few days of the week temperature was decidedly in excess of the average, the maximum readings over our southern districts being a little above 50°. On Saturday, however, a rapid fall took place, and in the course of the ensuing night sharp frost was experienced in nearly all parts of the Kingdom.

EXPLANATION OF 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).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

CORRECTIONS AND ADDITIONS TO THE REPORTS FOR

DEC^R 1883

1. REPORTS RECEIVED TOO LATE FOR INSERTION DAILY.

| DATE. | STATIONS. | † YESTERDAY EVENING. | | | | | | 9 A.M. TO DAY. | | | | | | | | | | PAST 24 HOURS. | | |
|-------|---------------|---|--------------------|--------|----------------------|----------|---|----------------|------|---|--------|----------------------|----------|-------------------|-------------|------|----|---------------------------|--|--|
| | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | | Barometer. Reading at 32° F. and Sea Level. | SHADE TEMP. | | | WIND. | | | Sea. (0 to 9.) | SHADE TEMP. | | | Amount of Rainfall. | | |
| | | | | Direc. | Force. (0 to 12.) | Weather. | | Dry. | Wet. | Difference from 8 a.m. yesterday. | Direc. | Force. (0 to 12.) | Weather. | | Max. | Min. | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| 1 | Cape Gris Neg | 29.39 | 47 | W | 8 | C | 29.72 | + .49 | 47 | ? | + 1 | W | 4 | C | 3 | 55 | 45 | 0.04 | | |
| - | Corunna | * | * | * | * | * | 30.11 | + .40 | 44 | 42 | - 3 | SE | 3 | b | 4 | 57 | 41 | 0.08 | | |
| 3 | Cape Gris Neg | 30.12 | 50 | SW | 5 | C | 30.11 | + .04 | 44 | - | - 6 | SW | 7 | C | 6 | 54 | 45 | - | | |
| - | Corunna | * | * | * | * | * | 30.14 | + .02 | 54 | 50 | + 12 | SSE | 5 | C | 3 | 55 | ? | - | | |
| - | Lisbon | 30.26 | 49 | NW | 4 | b | 30.28 | + .05 | 41 | 39 | - 1 | N | 5 | b | 2 | 52 | 39 | - | | |
| 4 | Corunna | * | * | * | * | * | 30.12 | - .02 | 54 | 50 | 0 | S | 5 | b | 3 | 57 | 50 | 0.06 | | |
| - | Lisbon | 30.27 | 51 | NNE | 4 | C | 30.27 | - .01 | 46 | 46 | + 5 | NNE | 4 | O | 2 | 54 | ? | - | | |
| 5 | Cape Gris Neg | 30.18 | 47 | SSW | 7 | r | 30.25 | + .21 | 50 | - | + 3 | SSW | 5 | C | 4 | 50 | 46 | 0.04 | | |
| - | Corunna | * | * | * | * | * | 30.16 | + .04 | 56 | 54 | + 2 | S | 7 | r | 4 | 61 | ? | - | | |
| 6 | Corunna | * | * | * | * | * | 30.02 | - .14 | ? | 52 | ? | SW | 5 | C | 3 | 63 | 54 | 0.20 | | |
| 7 | Skudesnaes | 30.19 | 45 | SSE | 3 | O | 30.09 | + .06 | 46 | 46 | + 1 | SSE | 5 | O | 5 | ? | 45 | 0.12 | | |
| - | Corunna | * | * | * | * | * | 29.84 | - .18 | 58 | 53 | ? | SE | 5 | O | 3 | 61 | 52 | 0.16 | | |
| - | Lisbon | 29.96 | 59 | SSE | 5 | O | 29.88 | - .22 | 60 | 59 | + 12 | SSW | 8 | r | ? | 63 | ? | 0.04 | | |
| 8 | Corunna | * | * | * | * | * | 30.13 | + .29 | 56 | 55 | - 2 | W | 1 | m | 3 | 63 | 52 | 0.08 | | |
| 9 | Aradessa | - | - | - | - | - | 30.21 | + .16 | 41 | 41 | - 4 | W | 0 | b | 0 | 48 | 40 | 0.06 | | |
| 10 | Corunna | * | * | * | * | * | 30.16 | - .01 | 56 | 54 | + 1 | SE | 14 | O | 3 | 63 | 52 | - | | |
| 11 | Lyon | 30.21 | 44 | N | 1 | O | 30.26 | + .04 | 30 | 30 | - 7 | N | 1 | b | 4 | 50 | 34 | - | | |
| - | Corunna | * | * | * | * | * | 30.21 | + .05 | 54 | 53 | - 2 | SE | 3 | O | 3 | 64 | 50 | 0.06 | | |
| 12 | Corunna | * | * | * | * | * | 30.27 | + .06 | 44 | 44 | - 10 | ESE | 1 | b | 3 | 63 | 41 | 0.08 | | |
| 13 | Corunna | * | * | * | * | * | 29.96 | - .31 | 51 | ? | + 7 | SSE | 7 | b | 3 | 61 | ? | - | | |
| 14 | Corunna | * | * | * | * | * | 29.87 | - .09 | 49 | 48 | - 2 | SSE | ? | b | 0 | 63 | 45 | - | | |
| - | Lisbon | 29.73 | 56 | SE | 7 | r | 29.64 | - .38 | 50 | 50 | + 2 | ESE | 7 | r | ? | 59 | ? | 0.63 | | |
| 17 | Belfort | 30.82 | 28 | W | 3 | f | 30.34 | + .01 | 27 | 26 | + 1 | W | 1 | f | * | 29 | 22 | - | | |
| 18 | Corunna | * | * | * | * | * | 30.10 | + .06 | 49 | 47 | + 3 | ESE | 1 | b | 3 | 61 | 46 | - | | |
| 19 | Corunna | * | * | * | * | * | 29.89 | - .21 | 54 | 50 | + 5 | S | 7 | C | 4 | 64 | ? | - | | |
| 20 | Corunna | * | * | * | * | * | 29.55 | - .34 | 53 | 49 | - 1 | NNE | 4 | bc | 5 | 57 | 48 | 0.28 | | |
| 21 | Corunna | * | * | * | * | * | 29.25 | - .30 | 55 | 54 | + 2 | WSW | 8 | r | 6 | 55 | 48 | ? | | |
| 22 | Belfort | ? | 36 | W | 1 | O | 29.41 | - .35 | 82 | - | - 2 | SW | 1 | O | ? | 42 | ? | - | | |
| - | Corunna | * | * | * | * | * | 29.45 | + .25 | 45 | - | - 10 | NNE | 8 | r | 5 | 59 | 43 | 0.87 | | |
| 23 | Corunna | * | * | * | * | * | 29.86 | + .41 | 47 | - | + 2 | ESE | 4 | C | 8 | 54 | 41 | 0.16 | | |
| 24 | Corunna | * | * | * | * | * | 29.98 | + .12 | 54 | 52 | + 7 | SSW | 8 | O | 5 | 54 | 41 | 0.16 | | |
| 26 | The Helder | 29.54 | 41 | SSE | 3 | r | 29.65 | .00 | 43 | - | 0 | SW | 3 | C | 2 | 46 | 39 | 0.20 | | |
| - | Lyon | 30.04 | 46 | S | 3 | O | 29.98 | - .04 | 46 | - | + 4 | S | 4 | r | * | 53 | ? | 0.12 | | |
| - | Corunna | * | * | * | * | * | 30.16 | + .14 | ? | 60 | ? | N | 1 | O | 6 | 59 | 50 | 1.26 | | |
| - | Lisbon | 30.82 | 58 | SW | 5 | C | 30.27 | - .01 | 57 | 56 | + 1 | SW | 5 | O | ? | 59 | 55 | 0.08 | | |
| 27 | Corunna | * | * | * | * | * | 30.19 | + .03 | 46 | 45 | ? | SSW | 1 | bc | 4 | ? | ? | - | | |
| 28 | Corunna | * | * | * | * | * | 29.68 | - .51 | 53 | 51 | + 7 | SW | 3 | O | 4 | 57 | 45 | 0.32 | | |
| 29 | Corunna | * | * | * | * | * | 29.84 | + .16 | 48 | 47 | - 5 | N | 11 | r | 8 | 54 | 43 | 0.16 | | |
| 31 | Haparanda | 30.16 | 29 | Z | 0 | O | 30.25 | + .28 | 31 | 31 | + 1 | SE | 2 | O | * | 32 | 28 | 0.08 | | |
| - | Hornsand | 30.13 | 25 | Z | 0 | S | 30.10 | + .04 | 32 | 32 | + 3 | E | 6 | S | * | 34 | 19 | 0.39 | | |
| - | Stockholm | 30.05 | 33 | SE | 2 | O | 30.00 | - .08 | 31 | 30 | - 4 | ESE | 4 | S | * | 36 | ? | 0.12 | | |
| - | Corunna | * | * | * | * | * | 29.96 | - .08 | 53 | 51 | + 7 | NNE | 8 | O | 6 | 54 | 43 | - | | |

SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC REPORTING
Observations are made at 8 a.m. daily, but the numbers of days of Rain, Snow, Hail,
(The Stations are grouped in Districts, and then arranged in order of

| Names of Districts. | Names of Stations. | Mean height of Barometer (at 32° Fahrenheit and Mean Sea Level) from observations made at 8 a.m. | Air Temperature. | | | | | | | | Tension of Vapour |
|--|--|---|------------------|----------|--------|---------------------------|--------------------|---|---------|---|-------------------|
| | | | At 8 a.m. | Means of | | | Absolute Extremes. | | | | |
| | | | | Minima | Maxima | Min. and Max. combined | Minimum | Date | Maximum | Date | |
| | | ins. | ° | ° | ° | ° | ° | | ° | | ins. |
| 0. SCOTLAND, N. | { Sumburgh Head ... | 29.677 | 42.3 | 39.2 | 45.2 | 42.2 | 31 | 31 st | 57 | 6 th | 0.242 |
| | { Wick ... | 29.709 | 41.4 | 37.7 | 46.0 | 41.9 | 23 | 30 th | 53 | 3 rd | .238 |
| | { Stornoway ... | 29.669 | 43.8 | 38.6 | 46.7 | 42.7 | 30 | 25 th + 30 th | 52 | 3 rd 6 th 7 th 4 th 9 th | .276 |
| 1. SCOTLAND, E. | { Nairn ... | 29.709 | 40.8 | 35.7 | 46.5 | 41.1 | 25 | 11 th | 57 | 5 th | .213 |
| | { Aberdeen ... | 29.798 | 39.8 | 36.2 | 44.6 | 40.4 | 26 | 31 st | 54 | 3 rd | .213 |
| | { Leith ... | 29.808 | 41.8 | 36.2 | 46.8 | 41.5 | 22 | 31 st | 58 | 3 rd | .223 |
| 2. ENGLAND, N.E. | { Shields ... | 29.863 | 39.6 | 35.7 | 45.1 | 40.4 | 26 | 14 th | 57 | 5 th | .221 |
| | { York ... | 29.895 | 38.4 | 34.4 | 45.2 | 39.8 | 23 | 19 th | 59 | 5 th | .214 |
| | { Spurn Head ... | 29.913 | 41.5 | 38.0 | 45.2 | 41.6 | 28 | 14 th | 55 | 4 th + 6 th | .234 |
| 3. ENGLAND, E. | { Yarmouth ... | 29.976 | 40.2 | 36.0 | 44.1 | 40.1 | 24 | 18 th | 54 | 5 th | .228 |
| | { Cambridge ... | 29.983 | 38.2 | 33.4 | 46.3 | 39.9 | 21 | 31 st | 59 | 4 th | .214 |
| 4. MIDLAND COUNTIES. | { Loughborough ... | 29.944 | 38.3 | 34.7 | 46.2 | 40.5 | 21 | 31 st | 59 | 4 th | .217 |
| | { Oxford ... | 29.973 | 39.2 | 35.9 | 45.3 | 40.6 | 25 | 11 th , 12 th + 31 st | 58 | 4 th | .226 |
| 5. ENGLAND, S. | { London ... | 30.019 | 39.8 | 36.3 | 46.5 | 41.4 | 25 | 13 th | 58 | 5 th | .224 |
| | { Dungeness ... | 29.993 | 42.9 | 37.1 | 47.6 | 43.4 | 24 | 10 th | 53 | 2 nd 3 rd 4 th 5 th 16 th | .248 |
| | { Hurst Castle ... | 29.977 | 44.6 | 41.1 | 49.0 | 45.1 | 32 | 15 th , 16 th + 31 st | 57 | 6 th | .282 |
| 6. SCOTLAND, W. | Ardrossan ... | 29.795 | 42.8 | 39.0 | 46.8 | 42.9 | 27 | 30 th | 54 | 6 th | .267 |
| 7. ENGLAND, N.W. | { *Hawes Junction ... | 28.635 | 37.7 | 33.9 | 42.2 | 38.1 | 23 | 31 st | 53 | 5 th | .218 |
| | { Barrow-in-Furness ... | 29.862 | 41.7 | 38.7 | 45.2 | 42.0 | 29 | 31 st | 52 | 3 rd 5 th + 16 th | .245 |
| | { Liverpool Obs ^y . (Bidston) | 29.893 | 40.1 | 37.5 | 46.4 | 42.0 | 26 | 18 th | 58 | 5 th | .231 |
| | { Holyhead ... | 29.850 | 45.7 | 42.7 | 49.0 | 45.9 | 33 | 31 st | 56 | 6 th | .266 |
| 8. ENGLAND, S.W. | { Pembroke ... | 29.869 | 46.1 | 42.9 | 49.3 | 46.1 | 34 | 31 st | 54 | 2 nd 3 rd 4 th 5 th 6 th | .288 |
| | { Prawle Point ... | 29.940 | 45.9 | 40.7 | 49.7 | 45.2 | 31 | 31 st | 55 | 6 th | .277 |
| 9. IRELAND, N. | { Malin Head ... | 29.724 | 43.5 | 40.3 | 47.0 | 43.7 | 34 | 27 th + 30 th | 54 | 3 rd + 16 th | .258 |
| | { Donaghadee ... | 29.811 | 42.0 | 37.2 | 47.1 | 42.2 | 30 | 27 th 30 th + 31 st | 56 | 8 th | .249 |
| | { Mullaghmore ... | 29.732 | 45.2 | 39.4 | 49.5 | 44.5 | 32 | 30 th + 31 st | 57 | 3 rd + 16 th | .255 |
| | { Belmullet ... | 29.719 | 44.7 | 41.0 | 48.9 | 45.0 | 33 | 9 th + 30 th | 54 | 2 nd + 16 th | .278 |
| 10. IRELAND, S. | { Parsonstown ... | 29.790 | 40.8 | 35.0 | 47.4 | 41.2 | 22 | 30 th + 31 st | 56 | 6 th | .229 |
| | { Valencia ... | 29.789 | 47.3 | 41.5 | 51.7 | 46.6 | 30 | 30 th | 57 | 3 rd | .280 |
| | { Roche's Point ... | 29.871 | 46.3 | 41.3 | 50.4 | 45.9 | 32 | 30 th | 55 | 3 rd | .279 |
| CHANNEL ISLANDS. | { Scilly (St. Mary's) .. | 29.873 | 49.5 | 46.1 | 51.8 | 49.0 | 38 | 31 st | 55 | 2 nd 3 rd 4 th 5 th 6 th 7 th 19 th | .304 |
| | { Jersey (Noirmont) ... | 29.995 | 45.9 | 42.7 | 50.1 | 46.4 | 36 | 13 th , 14 th , 17 th , 18 th | 57 | 5 th | .268 |
| * Hawes Junction is 1135 feet above mean Sea Level and the | | | | | | | | | | | |

* Hawes Junction is 1185 feet above mean Sea Level and the

STATIONS in the BRITISH ISLANDS during the Month of DECEMBER 1888.
 Thunderstorms and Gales are counted irrespective of the hours at which they occurred.
 Latitude, beginning in each case with the Station lying furthest North.)

| Relative Humidity | Amount of Cloud | Rainfall. | | | Weather | | | | | | | Wind | | | | | | | | |
|-------------------|-----------------|-------------------------|-------------------------|------------------------------------|----------------|------|------|---------------|-----------|----------|-------|-----------------------|------|------|------|-------|------|------|------|-------|
| | | Total Fall in the month | Maximum Fall in one day | Date | No. of Days of | | | | | | | No. of Observation of | | | | | | | | |
| | | ins. | in. | | Rain | Snow | Hail | Thunderstorms | Clear Sky | Overcast | Gales | North | N.E. | East | S.E. | South | S.W. | West | N.W. | Calms |
| % | | | | | | | | | | | | | | | | | | | | |
| 91 | 8.9 | 3.91 | 0.48 | 24 th | 25 | 2 | 0 | 0 | 2 | 24 | 1 | 4 | 0 | 0 | 3 | 10 | 2 | 6 | 2 | 4 |
| 91 | 6.5 | 1.73 | 0.35 | 28 th | 17 | 2 | 0 | 0 | 9 | 15 | 5 | 3 | 0 | 0 | 2 | 11 | 7 | 1 | 3 | 4 |
| 95 | 8.3 | 6.16 | 0.71 | 2 nd | 30 | 1 | 0 | 0 | 1 | 21 | 21 | 2 | 0 | 1 | 1 | 7 | 12 | 3 | 2 | 3 |
| 84 | 5.2 | 0.60 | 0.13 | 30 th | 14 | 0 | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 1 | 1 | 0 | 11 | 5 | 0 | 13 |
| 88 | 6.3 | 1.60 | 0.33 | 2 nd | 17 | 0 | 0 | 0 | 6 | 13 | 5 | 0 | 0 | 0 | 5 | 12 | 9 | 3 | 2 | 0 |
| 84 | 6.6 | 0.87 | 0.34 | 11 th | 14 | 0 | 0 | 0 | 5 | 10 | 0 | 1 | 1 | 1 | 0 | 7 | 8 | 11 | 0 | 2 |
| 91 | 6.7 | 0.68 | 0.15 | 21 st | 10 | 1 | 0 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 2 | 7 | 14 | 5 | 1 | 2 |
| 93 | 6.5 | 1.72 | 0.86 | 27 th | 15 | 0 | 0 | 0 | 11 | 18 | 0 | 3 | 0 | 3 | 11 | 8 | 1 | 0 | 4 | 1 |
| 90 | 6.0 | 1.03 | 0.35 | 27 th | 15 | 0 | 0 | 0 | 8 | 11 | 8 | 2 | 0 | 0 | 3 | 12 | 7 | 5 | 2 | 0 |
| 92 | 6.0 | 0.94 | 0.37 | 24 th | 15 | 0 | 0 | 0 | 4 | 8 | 1 | 1 | 0 | 0 | 2 | 6 | 8 | 9 | 4 | 1 |
| 93 | 6.0 | 0.94 | 0.34 | 24 th | 7 | 0 | 0 | 0 | 10 | 13 | 0 | 2 | 0 | 0 | 4 | 10 | 6 | 1 | 2 | 6 |
| 94 | 7.9 | 1.88 | 0.99 | 27 th | 15 | 0 | 0 | 0 | 3 | 18 | 1 | 0 | 0 | 2 | 10 | 5 | 5 | 3 | 5 | 1 |
| 94 | 7.0 | 2.18 | 0.75 | 8 th | 12 | 0 | 0 | 0 | 8 | 17 | 0 | 3 | 0 | 0 | 5 | 11 | 2 | 3 | 1 | 6 |
| 92 | 7.5 | 1.04 | 0.22 | 24 th | 15 | 0 | 0 | 0 | 4 | 19 | 2 | 1 | 1 | 1 | 5 | 8 | 5 | 1 | 3 | 6 |
| 90 | 7.7 | 1.96 | 0.66 | 28 th | 15 | 0 | 0 | 0 | 1 | 12 | 5 | 5 | 3 | 0 | 2 | 7 | 9 | 3 | 2 | 0 |
| 94 | 6.7 | 1.45 | 0.28 | 27 th | 21 | 0 | 0 | 0 | 3 | 9 | 8 | 2 | 6 | 3 | 2 | 6 | 9 | 2 | 1 | 0 |
| 96 | 7.0 | 2.76 | 0.64 | 2 nd | 17 | 1 | 1 | 0 | 9 | 19 | 1 | 0 | 4 | 7 | 3 | 7 | 4 | 4 | 1 | 1 |
| 95 | 8.0 | 5.86 | 0.95 | 3 rd | 21 | 2 | 1 | 0 | 4 | 23 | 0 | 2 | 0 | 3 | 3 | 7 | 9 | 3 | 1 | 3 |
| 93 | 6.5 | 2.07 | 0.59 | 3 rd | 17 | 0 | 1 | 0 | 4 | 12 | 3 | 1 | 5 | 8 | 13 | 2 | 3 | 0 | 4 | 0 |
| 95 | 7.1 | 1.38 | 0.33 | 27 th | 18 | 0 | 0 | 0 | 7 | 18 | 0 | 1 | 1 | 1 | 14 | 3 | 5 | 2 | 4 | 0 |
| 87 | 7.1 | 3.30 | 0.49 | 27 th | 21 | 0 | 0 | 0 | 3 | 11 | 4 | 3 | 1 | 1 | 5 | 10 | 6 | 3 | 2 | 0 |
| 93 | 6.3 | 4.29 | 0.90 | 27 th | 22 | 0 | 0 | 0 | 4 | 8 | 9 | 3 | 3 | 2 | 6 | 10 | 3 | 3 | 1 | 0 |
| 91 | 6.8 | 2.01 | 0.40 | 8 th + 22 nd | 17 | 0 | 0 | 0 | 3 | 8 | 5 | 5 | 4 | 3 | 2 | 8 | 4 | 3 | 1 | 1 |
| 91 | 6.2 | 2.99 | 0.33 | 2 nd | 25 | 0 | 2 | 0 | 11 | 18 | 3 | 2 | 0 | 0 | 3 | 15 | 4 | 2 | 5 | 0 |
| 94 | 5.3 | 2.59 | 0.64 | 11 th | 23 | 0 | 0 | 0 | 8 | 6 | 1 | 1 | 1 | 1 | 1 | 7 | 11 | 8 | 1 | 0 |
| 85 | 7.0 | 5.22 | 0.57 | 2 nd | 24 | 0 | 2 | 0 | 5 | 13 | 15 | 2 | 1 | 0 | 4 | 8 | 11 | 3 | 1 | 1 |
| 93 | 6.5 | 7.57 | 0.94 | 21 st | 24 | 0 | 1 | 0 | 6 | 15 | 8 | 5 | 1 | 0 | 7 | 5 | 6 | 4 | 3 | 0 |
| 91 | 7.3 | 3.51 | 0.58 | 2 nd | 20 | 0 | 0 | 0 | 5 | 18 | 0 | 0 | 1 | 0 | 10 | 2 | 4 | 1 | 1 | 12 |
| 87 | 7.9 | 9.18 | 1.21 | 6 th | 26 | 0 | 1 | 0 | 2 | 18 | 18 | 3 | 2 | 0 | 6 | 8 | 4 | 3 | 3 | 2 |
| 90 | 6.4 | 8.58 | 1.85 | 21 st | 19 | 0 | 0 | 0 | 7 | 12 | 10 | 4 | 1 | 0 | 1 | 9 | 8 | 3 | 5 | 0 |
| 87 | 8.3 | 3.79 | 0.48 | 27 th | 23 | 0 | 0 | 0 | 0 | 15 | 12 | 2 | 4 | 3 | 2 | 9 | 4 | 3 | 3 | 1 |
| 88 | 6.6 | 2.68 | 0.70 | 28 th | 17 | 1 | 1 | 0 | 6 | 15 | 4 | 1 | 4 | 5 | 9 | 6 | 3 | 2 | 1 | 0 |

Barometric Observations at this Station are not corrected for altitude.

2. CORRECTIONS.

| DATE. | STATIONS. | † YESTERDAY EVENING. | | | | | 8 A.M. TO DAY. | | | | | | | | PAST 24 HOURS. | | | |
|-------|----------------|---|--------------------|--------|----------------------|----------|---|---|-------------|------|---|--------|----------------------|----------|-------------------|-------------|------|---------------------------|
| | | Barometer at 32° F. and Sea Level. | Temp. in Shade. | WIND. | | Weather. | BAROMETER. | | SHADE TEMP. | | | WIND. | | Weather. | Sea. (0 to 8.) | SHADE TEMP. | | Amount of Rainfall. |
| | | | | Direc. | 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. | Direc. | Force. (0 to 12.) | | | Max. | Min. | |
| 1 | Malin Head 2pm | - | - | - | - | - | - | - | - | - | - | - | SSW | - | - | - | - | - |
| 3 | Belmullet 2pm | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | Malin Head | 29.35 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | Parsonstown | - | - | - | - | - | 29.81 | + .40 | - | - | - | - | - | - | - | - | - | - |
| 5 | Sumburgh Hd | - | - | - | - | - | 29.81 | + .22 | - | - | - | - | - | - | - | - | - | - |
| 6 | Parsonstown | 29.88 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | York | - | - | - | - | - | 29.98 | - .14 | - | - | - | - | - | - | - | - | - | - |
| - | Donaghadee | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 |
| - | Brante Point. | - | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | Donaghadee | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.02 |
| - | Maleneia | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.08 |
| 9 | Shields | - | - | - | - | - | 29.15 | + .12 | - | - | - | - | - | - | - | - | - | - |
| 11 | Malin Head | - | - | - | - | - | 29.96 | - | - | - | - | - | - | - | - | - | - | - |
| - | Seilly | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 52 | - | - |
| 13 | Loughborough | 30.35 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 14 | York | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 36 | - | - |
| 16 | Parsonstown | - | - | - | - | - | - | - | - | 26 | - | - | - | - | - | - | - | - |
| 17 | Sumburgh Hd | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.18 |
| 18 | Malin Hd | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 38 | - |
| 19 | Jersey | - | - | - | - | - | 30.00 | - | - | - | - | - | - | - | - | - | - | - |
| 20 | Sumburgh Hd | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 43 | - |
| 21 | Spurn Hd | - | - | - | - | - | 29.30 | - | - | - | - | - | - | - | - | - | - | - |
| - | York | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 46 | - | - |
| 22 | York | - | - | - | - | - | 29.02 | - | - | - | - | - | - | - | - | - | - | - |
| - | Dungess | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.04 |
| 23 | Liverpool | - | - | - | - | - | 29.43 | - | - | - | - | - | - | - | - | - | - | - |
| - | Holyhead | - | - | - | - | - | 29.40 | - | - | - | - | - | - | - | - | - | - | - |
| - | Parsonstown | - | - | - | - | - | 29.51 | - | - | - | - | - | - | - | - | - | - | - |
| - | Pembroke | - | - | - | - | - | 29.39 | - | - | - | - | - | - | - | - | - | - | - |
| 26 | Belmullet | - | - | - | ? with | - | - | - | - | - | - | - | - | - | - | - | - | - |