

SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS for the CALENDAR MONTH,

JANUARY 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & Co., 134, GRAFTON STREET, DUBLIN.

General Summary.—The month was, as a whole, quiet, foggy, and damp, but not rainy. Clouds were low and dense. The distribution of pressure was mainly anticyclonic, and the mean barometric readings were considerably in excess of the average.* Temperature was exceptionally high on the 8th and 9th, but towards the end of the month cold weather began to set in, and in many places snow fell.

Pressure.—*Mean for the month, at 8 a.m.*, ranged from 30·28 ins. at Jersey to 29·96 ins. at Sumburgh Head. It was in excess of that for December by 0·27 in. in Ireland, 0·37 in. in the south-east of England, and 0·42 in. in the north of Scotland. It exceeded the average* for January by 0·35 in. over the Shetland Isles and the south-west of Ireland, and by 0·25 in. over the south-east of England. *Highest* values recorded were 30·7 ins. and more, over the southern districts, on 9th and 10th, during the prevalence of a large anticyclone; in the North, they were highest between 14th and 16th, when the same anticyclone had reached the northern parts of our area. *Lowest* in the West and North on the 4th, but over Great Britain on the 31st, when the barometer fell below 29·2 ins. in many places.

Depressions.—Those passing near to our Islands were not large, and some were very small. The system No. V.† advanced suddenly, and gave very little indication of its approach.

Anticyclones were three in number; all were large; the first and second were very persistent. During the prevalence of the first system temperature was not so low as is usual during winter time, the air was damp, and the fogs were of a very wet class. All of the systems passed away from us in a westerly direction.

Wind was chiefly South-westerly, especially in the north and west. At the southern stations there was a considerable per-centage of Easterly wind, in the extreme north a still greater per-centage of wind from between WSW. and NNW. Wind-force was light, except in the extreme NW., and gales were few in number.

Temperature.—*Mean, at sea level.* For distribution see Map 3, Plate II.; for individual values not reduced to sea level, see Table II. The mean differed very little from the average,* being slightly in excess in some localities and in defect in others. *Highest* readings occurred generally on 8th or 9th, when values were exceptionally high—maximum at Durham was 63°. *Lowest* values occurred in Scotland, between 19th and 21st, in Ireland and England between 29th and 31st. *Range* was considerable, exceeding 40° in many parts of Great Britain. *Vapour Tension* was greatest in SE., least in NE., ranging from 0·27 in. at Scilly to 0·19 in. over our Midland Counties and the east of Scotland. *Relative Humidity* was high, ranging from 99 at Stonyhurst and 98 at Stornoway to 86 at Valencia.

Rainfall.—For distribution see Map 4, Plate II. *Aggregate* values were below the average* in all districts, especially over England, where many were but little more than half an inch. *Heaviest falls* occurred in Ireland and the west of Scotland on the 3rd or 4th; another heavy fall occurred in the north-west and north on the 24th and 25th. *Number of rainy days* was very small over England and the east of Ireland. On several days water, sufficient to be measured in an ordinary rain gauge, was deposited by the wet fogs.

Bright Sunshine was deficient, except in the east of Scotland. The per-centage recorded was 29 at Jersey, 27 at Churchstoke, 25 at Aberdeen, and between 20 and 25 at several of our north-eastern, eastern, and southern stations. At Stonyhurst and Blackpool it was only 8, and in London 9.

* The averages employed are—*Pressure* and *Temperature* for the 20 years, 1861–80; *Rainfall* for the 20 years, 1866–85.

† See Map 2, Plate i.

TABLE I.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
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 Latitude,

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.						
			Means of				Absolute Extremes.		
			At 8 a.m.	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.
O. SCOTLAND, N.	Sumburgh Head	ins. 29° 961	40° 5	36° 5	43° 6	40° 1	23	27th, 28th	50
	Wick	30° 020	38° 7	33° 7	43° 7	38° 7	22	20th	54
	Stornoway	29° 998	41° 8	36° 7	44° 7	40° 7	25	19th	52
1. SCOTLAND, E.	Nairn	30° 028	38° 0	33° 1	44° 3	38° 7	16	19th	56
	Aberdeen	30° 065	37° 1	32° 7	43° 1	37° 9	22	20th	56
	Leith	30° 099	40° 7	36° 6	45° 7	41° 2	25	19th, 20th	57
2. ENGLAND, N.E.	Shields	30° 130	39° 0	34° 4	43° 6	39° 0	25	20th, 21st, 30th	56
	York	30° 187	36° 6	32° 1	43° 1	37° 6	14	30th	55
	Spurn Head	30° 173	38° 0	34° 6	42° 6	38° 6	28	20th, 28th, 30th	54
3. ENGLAND, E.	Yarmouth	30° 200	37° 2	33° 5	41° 4	37° 5	26	30th, 31st	53
	Cambridge	30° 233	35° 6	30° 6	43° 2	36° 9	20	21st	58
4. MIDLAND COUNTIES	Loughborough	30° 217	35° 5	31° 8	42° 7	37° 3	18	30th, 31st	57
	Oxford	30° 248	35° 6	32° 1	41° 7	36° 9	21	30th, 31st	54
5. ENGLAND, S.	London	30° 244	36° 7	33° 5	43° 2	38° 4	24	1st, 2nd, 30th, 31st	51
	Dungeness	30° 225	37° 5	34° 2	42° 4	38° 3	22	31st	50
	Hurst Castle	30° 248	38° 2	33° 3	43° 3	38° 3	21	30th	51
6. SCOTLAND, W.	Ardrossan	30° 119	40° 6	36° 7	44° 5	40° 6	26	19th, 29th, 30th	52
7. ENGLAND, N.W.	Hawes Junction*	28° 894	34° 6	30° 1	39° 6	34° 9	18	19th	52
	Barrow-in-Furness	30° 158	38° 5	35° 6	42° 1	38° 9	29	19th, 20th, 29th	47
	Liverpool	30° 190	38° 4	35° 2	43° 1	39° 2	28	2nd	53
	Holyhead	30° 177	40° 7	38° 1	44° 7	41° 4	28	19th	51
8. ENGLAND, S.W.	Pembroke	30° 214	41° 1	38° 1	43° 9	41° 0	29	16th	49
	Prawle Point	30° 249	41° 3	36° 7	45° 9	41° 3	24	30th	55
9. IRELAND, N.	Malin Head	30° 092	41° 2	38° 2	44° 9	41° 6	29	31st	54
	Donaghadee	30° 141	41° 9	38° 3	45° 4	41° 9	30	29th, 30th	53
	Mullaghmore	30° 125	42° 2	38° 6	47° 4	43° 0	26	29th	59
	Belmullet	30° 126	42° 8	39° 6	46° 2	42° 9	27	29th	54
10. IRELAND, S.	Parsonstown	30° 181	40° 1	35° 4	46° 1	40° 8	18	30th	55
	Valencia	30° 175	45° 5	41° 5	49° 2	45° 4	28	16th	55
	Roche's Point	30° 192	43° 4	40° 5	46° 9	43° 7	30	30th	53
CHANNEL ISLANDS	Scilly (St. Mary's)	30° 207	45° 4	41° 6	47° 4	44° 5	33	30th	51
	Jersey (Noirmont)	30° 277	41° 4	37° 4	45° 3	41° 4	27	1st	51

* Hawes Junction is 1,135 feet above Mean Sea Level and the barometric

SUMMARY OF OBSERVATIONS, JANUARY 1888.

iii

REPORTING STATIONS in the BRITISH ISLANDS during the Month of JANUARY 1888.

Thunderstorms, and Gales are counted irrespective of the hour at which they occurred.

beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.		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 Observations of																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
									Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calms.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
ins.	%	ins.	in.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

observations at this station are not corrected for altitude.

A query (?) indicates uncertainty.

TABLE II.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT, during the Month of JANUARY 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Per-centage of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	*	*	*	*	*	*	*	*	*	*	*	25	11
LAIRG	30.5	40.9	35.7	12	19th	52	9th, 10th	17	2.15	0.59	25th	—	—
GLENCARRON	33.5	42.0	37.8	19	28th	54	4th	19	8.07	1.36	25th	—	—
FORT AUGUSTUS	32.5	43.4	38.0	16	19th	54	9th	19	4.26	0.97	25th	—	—
ABERDEEN	*	*	*	*	*	*	*	*	*	*	*	52	23
BRAEMAR	30.3	41.7	36.0	14	19th	55	9th, 10th	14	3.18	1.05	4th	48	21
MARCHMONT	32.9	42.6	37.8	20	19th	53	8th, 10th	16	2.00	0.36	25th	48	21
ALNWICK CASTLE	35.0	42.7	38.9	23	19th	58	9th	18	1.20	0.15	31st	—	—
DURHAM	32.6	42.8	37.7	20	30th	63	9th	17	0.74	0.09	27th	36	15
SCARBOROUGH	34.2	41.8	38.0	22	30th	54	8th	13	1.29	0.40	28th	34	14
YORK	*	*	*	*	*	*	*	*	*	*	*	25	10
HILLINGTON	31.1	41.0	36.1	10	29th	53	8th, 9th	12	1.12	0.30	28th	59	24
GELDESTON	33.1	42.6	37.9	16	30th	57	9th, 10th	9	1.14	0.42	28th	65	26
CAMBRIDGE	*	*	*	*	*	*	*	*	*	*	*	61	24
ROTHAMSTED	31.7	41.8	36.8	20	30th	59	9th	15	0.80	0.24	20th	—	—
INGATESTONE	32.9	42.1	37.5	24	1st, 30th	56	10th	11	0.92	0.32	2nd	54	22
BAWTRY	33.0	43.0	38.0	20	30th	57	8th	11	0.55	0.12	2nd	36	15
LEICESTER	32.7	41.9	37.3	20	30th	53	8th, 9th	12	0.81	0.25	20th	31	13
CHEADLE	31.8	40.7	36.3	24	13th	56	9th	14	1.29	0.30	25th	—	—
CHURCHSTOKE	31.6	42.4	37.0	19	30th	59	9th	10	0.74	0.15	20th	65	27
HEREFORD	31.5	43.4	37.5	18	30th	55	8th, 9th, 22nd	8	0.50	0.16	2nd	—	—
CIRENCESTER	31.3	41.3	36.3	16	30th	53	23rd	11	0.90	0.34	2nd	61	24
OXFORD	*	*	*	*	*	*	*	*	*	*	*	38	15
LONDON	*	*	*	*	*	*	*	*	*	*	*	23	9
STRATHFIELD TURGISSE	31.1	42.5	36.8	18	30th	52	8th, 9th, 10th	10	0.87	0.18	20th	—	—
HASTINGS	33.8	42.2	38.0	24	30th	50	23rd	15	1.64	0.42	31st	65	25
SOUTHAMPTON	33.3	43.2	38.3	22	30th	53	8th, 23rd	12	1.17	0.26	2nd, 20th	59	23
STOWELL	31.8	41.7	36.8	19	30th	52	8th	11	1.58	0.42	20th	39	15
LAUDALE	37.7	45.2	41.5	24	29th	55	9th	17	7.59	1.65	4th	—	—
GLASGOW	33.7	43.3	38.5	21	29th	52	9th	14	2.81	0.51	24th	31	13
GLENLEE	33.9	42.5	38.2	18	19th, 29th	51	8th, 22nd	17	6.28	2.08	3rd	—	—
DOUGLAS	37.9	44.4	41.2	27	29th	52	8th	14	1.99	0.52	20th	31	13
NEWTON REIGNY	31.8	42.7	37.3	18	20th	54	9th	16	1.84	0.66	25th	45	19
STONYHURST	33.8	41.3	37.6	25	20th	50	8th	15	2.28	0.53	20th	20	8
BLACKPOOL	33.3	41.9	38.6	?	?	47	8th, 9th, 10th, 13th.	16	1.50	0.31	20th	20	8
MANCHESTER	33.7	41.3	37.5	26	12th, 20th	51	8th	16	1.96	0.38	1st	—	—
LLANDUDNO	36.6	45.2	40.9	26	19th	57	9th	14	1.24	0.30	5th	53	22
LLANDOVERY	30.7	42.5	36.6	16	29th	51	23rd	18	2.28	0.45	20th	—	—
PEMBROKE	*	*	*	*	*	*	*	*	*	*	*	47	19
ARLINGTON	33.2	43.1	38.2	19	30th	54	9th	16	2.68	0.86	20th	—	—
CULLOMPTON	32.8	43.7	38.3	17	30th	54	23rd	13	1.42	0.33	20th	43	17
FALMOUTH	39.4	46.2	42.8	27	30th	55	8th	13	2.51	0.39	20th	45	17
PLYMOUTH	36.0	45.3	40.7	24	30th	52	21st, 22nd	15	2.29	0.61	20th	50	19
JERSEY	*	*	*	*	*	*	*	*	*	*	*	79	29
LONDONDERRY	37.1	45.5	41.3	26	28th, 29th	54	9th	13	2.63	0.56	4th	—	—
MARKREE CASTLE	35.6	45.1	40.4	17	29th	54	8th	16	3.34	1.50	4th	53	22
BROOKBOROUGH	35.2	45.0	40.1	16	29th	59	9th	12	2.74	1.04	4th	—	—
ARMAGH	35.9	46.3	41.1	22	28th	56	9th, 10th	11	1.77	0.52	3rd	39	16
EDGEWORTHSTOWN	35.5	44.7	40.1	20	29th	54	9th	12	2.41	0.70	4th	—	—
DUBLIN	37.9	46.3	42.1	26	29th	59	9th	9	1.25	0.35	1st, 3rd	56	23
PARSONSTOWN	*	*	*	*	*	*	*	*	*	*	*	59	24
KILKENNY CASTLE	35.6	45.7	40.7	21	29th, 30th	53	6th, 8th, 22nd, 23rd.	10	2.99	1.07	3rd	—	—
WATERFORD	36.7	46.1	41.4	22	30th	55	21st	15	3.61	1.14	3rd	—	—
VALENCIA	*	*	*	*	*	*	*	*	*	*	*	68	27
KILLARNEY	39.2	48.3	43.8	23	29th	58	9th	15	6.00	2.41	3rd	—	—
FOYNES	39.2	47.2	43.2	28	18th	58	20th	12	2.50	0.79	4th	—	—

* For information see Table I.

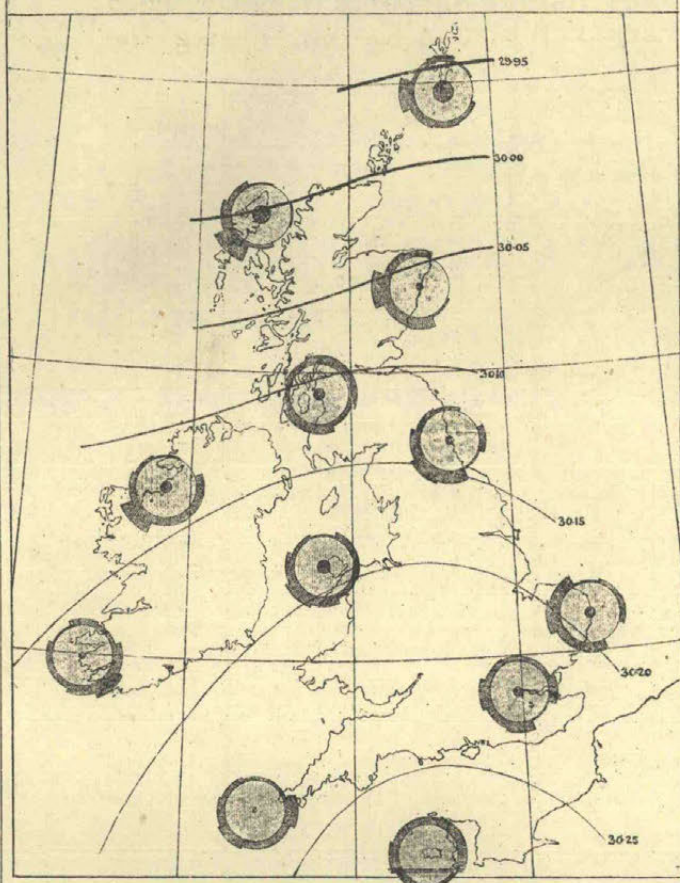
† The bright sunshine values given for Scarborough are recorded at Oswaldkirk, those for Bawtry are recorded at Worksop.

MONTHLY WEATHER CHART, JANUARY, 1888.

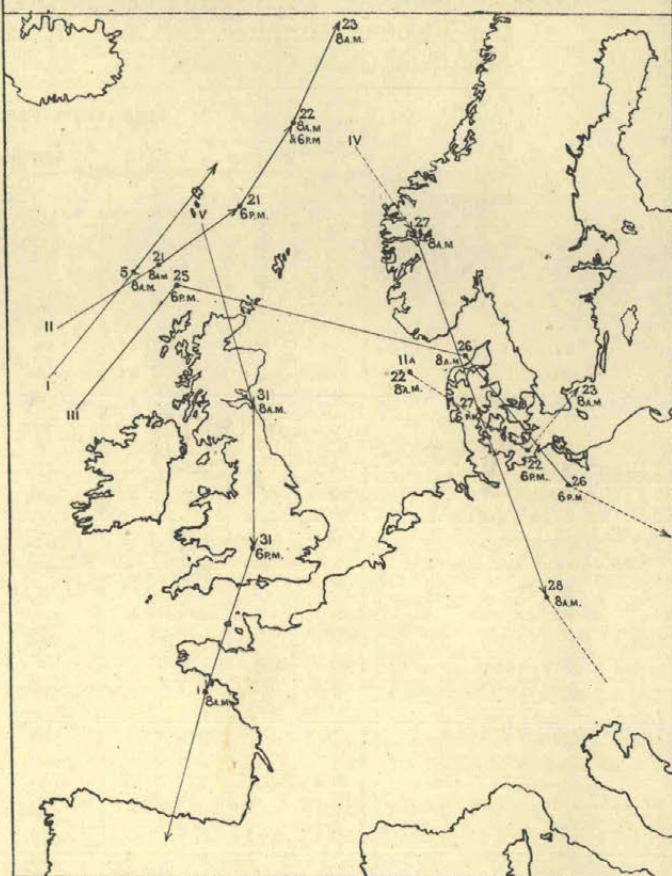
Monthly Summary.

Plate i.

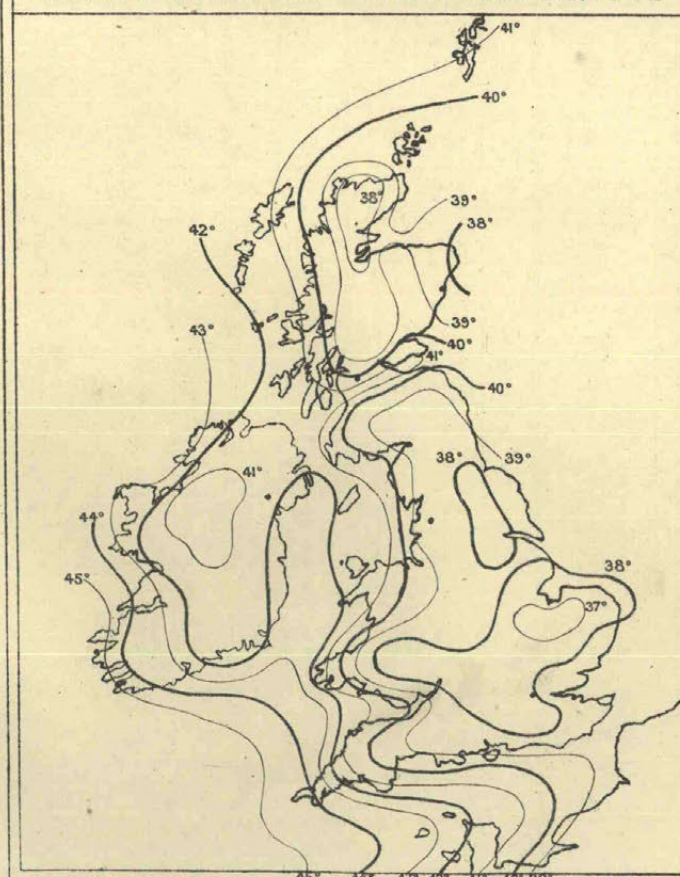
1. BAROMETER AND WIND.



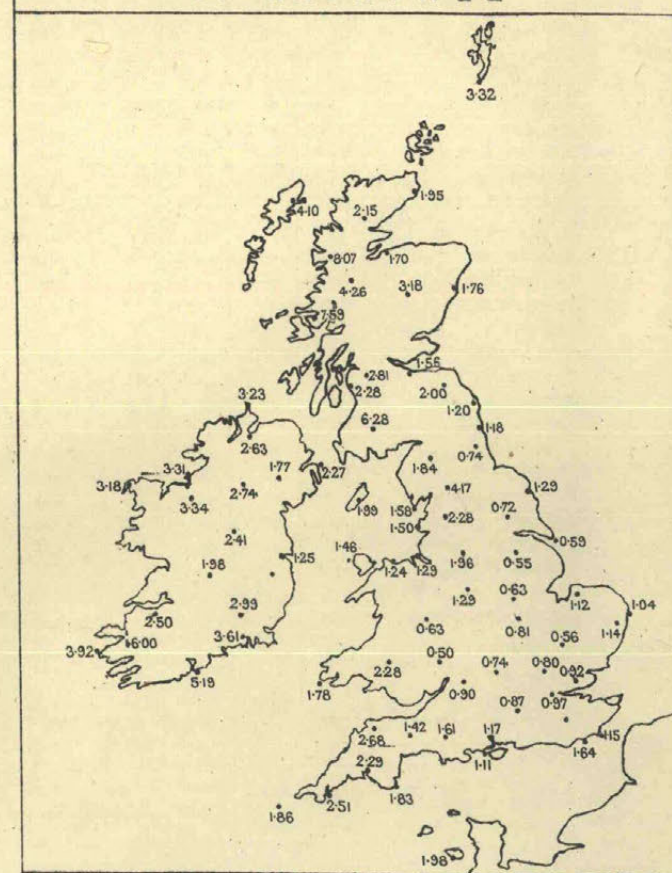
2. MOVEMENTS OF DEPRESSIONS.



3. DISTRIBUTION OF MEAN TEMPERATURE



4. RAINFALL



To face p. iv.

SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

FEBRUARY 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & Co., 104, GRAFTON STREET, DUBLIN.

General Summary.—The weather of February was dry and cold; the winds were mainly North-westerly to North-easterly and pressure was above the average value, except in the south-east of England. The depressions observed were neither large nor deep, and after the middle of the month they were confined to the more central and southern parts of the Continent.

Pressure.—*Mean for the month, at 8 a.m.,* varied from a little above 30·15 ins. over the extreme south-west of Ireland to 30·00 along a line passing from the Orkneys, down our north-east coast, through the south-east of Yorkshire and central England, to the neighbourhood of Portland, and to 29·25 ins. and rather less, over Norfolk, Suffolk, and the eastern parts of Kent and Sussex. It was above the average* for February, except in the south and south-east of England, the excess varying from a few hundredths of an inch in south-west of England to more than two tenths in the west of Ireland, and to nearly three tenths of an inch in the north of Scotland; in the south and east of England, however, it was a very few hundredths of an inch below the average.* *Highest* values recorded occurred very generally on the 28th and 29th, when the readings ranged from about 30·3 ins. in the south-east of England to 30·6 ins. in the north-west of Scotland. *Lowest* were recorded at the north-eastern stations on the 11th, and at the south-western stations on the 12th, when a depression in the north-east was spreading south-westwards over the kingdom. *Range* was moderate everywhere.

Depressions.†—These were not deep, nor were they numerous; before the 9th they passed from north-west to south-east over the north-eastern parts of our area; on the 13th one was developed over the south-east of Ireland, and travelled in an east-south-easterly direction across the south-west of England and the Channel to Belgium. After the 15th those observed appeared over central, south-eastern, or south-western Europe, and their secondaries moved westwards across North Germany and the north of France. The tracks of these cannot be drawn.

Anticyclones.—On February 1st an anticyclone of slight intensity appeared off our north-west coasts, then moved quickly to the south-eastward, and lay over France till the 4th, then moved westward to the Bay of Biscay and south-west of our Islands, and broke up after the 10th. A new high-pressure area appeared in the west on 14th and soon became united, by a col, to a second system over Northern Europe. From the 19th to end of the month high-pressure systems were continuously prevalent to the north-westward and north-eastward of our Islands.

Wind.—From the 1st to 13th Westerly and North-westerly winds were almost continuously prevalent, veering to North on the 14th, and to the North-eastward on the 19th; they continued North-easterly to Easterly during the remainder of the month. The North-westerly and Northerly winds were not strong, but those from North-east were, and caused gales frequently on our eastern and southern coasts.

Temperature.—*Mean, at Sea Level,* ranged from between 40° and 42° in the extreme west of Ireland, and from about 40° in the extreme south-west of England to rather below 34° over the inland parts of the north of Scotland, to rather below 35° over central Scotland, the eastern counties of England, Gloucestershire, and part of Wilts, and to a little below 37° over the inland counties of the northern half of Ireland. It was below the average* everywhere—by about four degrees in many places, but by five or six degrees over the southern and south-eastern counties of England and in the Channel Islands. *Lowest* readings occurred in most districts between 14th and 16th, but over the eastern, southern, and home counties on the 2nd or 3rd. Those in Scotland and the inland parts of Ireland North were very low. *Highest* occurred at most stations on the 5th or 6th, and in all places between the 4th and 9th, but were less high than such readings usually are in February. *Range* was very large in Scotland and North Ireland, small over the greater part of England. *Vapour Tension* varied from about 0·17 in. over the home and Midland Counties and over eastern and central Scotland to upwards of 0·20 in. in the Hebrides, the north and west of Ireland, the extreme south-west of England, and at Holyhead. *Relative Humidity* ranged from between 90 and 98 per cent. in the north and west of Scotland, and in the Hebrides, and from between 90 and 96 over the extreme north-west and south-east of England to less than 85 in the south-west of Ireland, and to between 85° and 90° over central England.

Rainfall was as slight as 0·26 in. at Roche's Point, 0·29 in. at Armagh, 0·49 in. at Braemar, and was less than an inch at Donaghadee, Glenlee, Llandudno, Parsonstown, and many other stations; it did not amount to quite 2·5 ins. at any station but Glencarron and Hastings. At the former station the fall was as much as 5·6 ins.; the fall at Hastings (2·9 ins.) was exceptional among those for the stations in that region, and was due to some heavy local falls of snow which occurred over the south of England on the 13th. Except in a very few isolated localities, the aggregate values were much below the average for February.

Bright Sunshine varied in amount from only 8 per cent. in London, from less than 20 per cent. of the possible duration over the south-eastern, eastern, and some parts of the Midland Counties of England, to more than 20 over our southern counties and the greater part of Ireland, as well as the eastern half of Scotland, and to 30 per cent. and more at several stations in the Irish Channel and the south-western parts of England and Ireland.

* The averages employed are—*Pressure and Temperature* for the 20 years, 1861–80; *Rainfall* for the 20 years, 1866–85.

† See Map 2, plate ii.

TABLE III.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC

Observations are

(The Stations are grouped in Districts, and then arranged in order of

NAMES OF DISTRICTS.	NAMES OF STATIONS.	Mean Height of Barometer (at 82° Fahrenheit and Mean Sea Level) from Observations made at 8 a.m.	AIR TEMPERATURE.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 29° 974	35° 1	30° 3	40° 0	35° 2	23	15th	47	5th, 6th
	Wick	30° 021	34° 7	28° 7	39° 5	34° 1	10	16th	50	6th
	Stornoway	30° 025	30° 5	31° 2	41° 7	36° 5	20	15th	50	4th, 5th, 6th
1. SCOTLAND, E.	Nairn	30° 029	33° 7	28° 5	40° 5	34° 5	9	16th	52	5th, 6th
	Aberdeen	30° 036	34° 0	30° 0	40° 2	35° 1	10	16th, 17th	54	5th
	Leith	30° 037	36° 0	32° 5	41° 7	37° 1	19	16th	52	5th, 8th
2. ENGLAND, N.E.	Shields	30° 006	36° 3	32° 6	40° 7	36° 7	24	12th	51	6th
	York	30° 010	34° 8	31° 4	41° 5	36° 5	20	14th	54	8th
	Spurn Head	29° 965	36° 4	33° 4	39° 5	36° 5	27	25th	46	5th, 6th
3. ENGLAND, E.	Yarmouth	29° 922	34° 7	31° 0	37° 6	34° 3	20	2nd	48	5th, 8th
	Cambridge	29° 968	34° 0	29° 3	40° 1	34° 7	16	2nd	53	8th
4. MIDLAND COUNTIES	Loughborough	30° 001	34° 5	31° 8	40° 6	36° 2	17	26th	51	6th
	Oxford	29° 995	33° 2	30° 3	39° 1	34° 7	18	25th	51	6th
5. ENGLAND, S.	London	29° 957	34° 3	31° 6	39° 8	35° 7	20	2nd, 3rd	52	6th
	Dungeness	29° 895	34° 9	31° 5	39° 6	35° 6	21	2nd, 3rd	51	4th
	Hurst Castle	29° 971	34° 9	30° 4	41° 2	35° 8	20	2nd, 3rd	53	6th, 7th
6. SCOTLAND, W.	Ardrossan	30° 064	36° 5	33° 0	41° 7	37° 4	21	16th	50	4th, 5th
7. ENGLAND, N.W.	Hawes Junction*	28° 740	30° 7	27° 2	35° 0	31° 1	14	14th	46	5th, 6th
	Barrow-in-Furness	30° 035	35° 6	32° 8	41° 0	36° 9	23	14th	46	4th, 5th, 6th, 7th.
	Liverpool	30° 044	35° 0	33° 1	39° 3	36° 2	26	14th, 15th	47	3rd, 4th
	Holyhead	30° 063	38° 1	36° 2	41° 9	39° 1	28	26th	49	3rd, 5th
8. ENGLAND, S.W.	Pembroke	30° 057	37° 4	35° 0	41° 0	38° 0	27	25th, 26th, 27th	48	5th, 6th
	Prawle Point	30° 015	34° 9	30° 8	41° 7	36° 3	21	25th	53	9th
9. IRELAND, N.	Malin Head	30° 092	38° 7	35° 8	41° 5	38° 7	28	13th	48	4th, 5th, 6th
	Donaghadee	30° 082	38° 2	35° 4	42° 2	38° 8	25	14th	52	4th, 5th
	Mullaghmore	30° 118	38° 7	35° 6	43° 1	39° 4	29	14th, 16th, 17th	51	4th
	Belmullet	30° 148	39° 6	36° 4	43° 6	40° 0	29	13th	50	3rd, 5th, 8th.
10. IRELAND, S.	Parsonstown	30° 135	35° 1	31° 7	42° 3	37° 0	20	16th, 17th	51	4th
	Valencia	30° 100	40° 3	38° 2	45° 7	42° 0	25	27th	51	3rd, 7th, 8th, 9th.
	Roche's Point	30° 110	37° 9	35° 0	43° 2	39° 1	28	27th	52	3rd
CHANNEL ISLANDS	Scilly (St. Mary's)	30° 032	40° 5	36° 9	43° 7	40° 3	29	25th	49	4th, 7th, 9th
	Jersey (Noirmont)	29° 974	38° 4	35° 2	41° 6	38° 4	21	25th	50	10th, 12th, 6th, 9th

* Hawes Junction is 1,135 feet above Mean Sea Level, and the

SUMMARY OF OBSERVATIONS, FEBRUARY 1888.

vii

REPORTING STATIONS in the BRITISH ISLANDS, during the Month of FEBRUARY 1888.

made at 8 a.m. daily.

Latitude, beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	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 Observations of								
						Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calm.
ins.	%		ins.	in.																	
0.181	88	7.4	2.94	0.54	4th	23	3	1	0	4	17	0	8	5	1	2	0	2	3	2	6
182	90	7.4	2.48	0.30	10th	21	7	0	0	2	13	4	3	3	2	3	1	3	3	10	1
210	98	8.1	2.46	0.29	2nd	21	3	0	0	2	19	6	2	7	2	1	0	6	2	4	5
167	86	5.7	1.28	0.17	13th	18	9	1	0	7	10	1	2	2	0	0	0	7	4	2	12
164	83	6.8	2.05	0.57	14th	22	10	1	0	5	11	1	5	1	4	3	0	0	7	9	0
189	89	6.6	1.15	0.28	13th	16	12	0	0	5	8	0	3	5	6	1	0	1	13	0	0
185	86	7.9	0.99	0.32	19th	15	13	6	0	2	14	1	1	9	4	0	0	2	10	3	0
177	90	7.0	1.65	0.58	19th	14	2	0	0	7	15	0	9	6	2	0	1	1	7	3	0
189	88	6.3	0.85	0.19	19th	10	6	0	0	0	4	6	5	9	3	0	0	2	7	3	0
180	89	7.1	1.96	0.49	14th	16	9	1	0	1	6	7	3	9	6	0	1	0	5	5	0
178	90	8.9	1.04	0.30	14th	12	9	0	0	2	23	2	8	8	1	0	0	4	5	3	0
174	86	8.2	1.26	0.26	7th, 19th	13	11	4	0	3	20	0	6	7	1	1	0	1	8	5	0
169	88	8.4	2.80	1.42	14th	15	14	1	0	2	19	0	4	11	1	0	0	3	7	3	0
170	85	8.7	0.95	0.24	13th	15	17	0	0	2	22	4	5	9	3	0	1	4	4	3	0
191	94	8.6	1.54	0.34	13th	15	10	1	0	1	18	3	2	8	5	1	0	1	6	6	0
185	91	6.1	0.95	0.36	13th	11	7	1	0	5	7	7	2	9	6	0	0	1	5	6	0
198	92	6.3	1.02	0.41	12th	10	6	0	0	9	14	0	4	10	3	0	0	1	5	5	1
164	96	8.0	1.11	0.25	19th	22	12	0	0	2	18	3	4	12	1	2	1	4	3	2	0
190	91	6.1	0.75	0.24	2nd	12	5	0	0	3	9	0	8	11	1	0	0	3	1	5	0
176	86	6.5	1.08	0.32	11th	16	2	1	0	8	13	1	5	8	2	0	0	3	9	2	0
202	88	7.3	0.65	0.19	2nd	18	6	0	1	1	9	1	3	8	5	0	0	2	6	5	0
196	88	5.8	0.69	0.16	2nd, 13th	14	7	0	0	7	7	1	4	12	1	0	1	0	7	4	0
167	82	6.6	0.94	0.37	11th	15	12	2	0	5	10	3	10	4	4	0	0	0	7	4	0
212	90	7.6	0.93	0.19	2nd	16	4	6	0	5	19	0	4	7	2	3	3	2	2	6	0
199	87	5.4	0.40	0.11	12th	12	2	0	0	5	3	3	0	11	5	0	0	0	9	4	0
204	87	7.5	1.64	0.38	2nd	15	5	4	0	4	14	6	3	5	6	1	1	4	6	2	1
209	86	8.2	2.34	0.50	12th	18	5	2	0	3	21	2	5	5	4	5	0	3	3	4	0
183	89	7.5	0.57	0.18	2nd	14	1	0	0	5	17	0	2	1	0	0	0	0	0	0	26
204	82	7.7	1.87	0.36	15th	18	2	3	0	2	17	1	5	9	3	1	0	2	4	4	1
198	87	4.1	0.26	0.10	2nd, 18th	8	4	0	0	8	5	2	7	8	3	0	0	0	6	5	0
218	87	8.6	1.07	0.23	13th	17	7	5	0	0	17	5	6	10	2	1	0	0	3	7	0
191	83	8.5	2.39	0.40	24th	18	10	8	0	1	20	10	6	10	3	0	0	0	4	6	0

barometric observations at this station are not corrected for altitude.

A query (?) indicates uncertainty.

TABLE IV.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT during the Month of FEBRUARY 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Percentage of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY -	*	*	*	*	*	*	*	*	*	*	*	66	25
LAIRG -	26'1	38'7	32'4	1	16th	51	6th	17	1'80	0'45	16th	—	—
GLENCARRON -	28'3	38'5	33'4	15	11th	48	5th, 6th	19	5'39	1'65	4th	—	—
FORT AUGUSTUS -	28'6	40'6	34'6	5	16th	51	5th	16	1'53	0'44	13th	—	—
ABERDEEN -	*	*	*	*	*	*	*	*	*	*	*	75	28
BRAEMAR -	26'4	38'0	32'2	4	16th	50	5th	13	0'49	0'25	18th	66	24
MARCHMONT -	30'6	39'2	34'9	22	17th	50	5th, 6th	18	2'04	0'37	20th	49	18
ALNWICK CASTLE -	33'4	39'7	36'6	25	16th	52	5th	16	1'29	0'30	19th	—	—
DURHAM -	31'2	39'6	35'4	20	12th, 14th	53	8th	20	1'24	0'23	18th	55	20
SCARBOROUGH -	32'4	39'7	36'1	22	12th, 14th	52	5th, 6th	15	1'85	0'45	14th	†31	11
YORK -	*	*	*	*	*	*	*	*	*	*	*	65	23
HILLINGTON -	29'1	38'5	33'8	10	2nd	51	8th	15	2'18	0'76	14th	55	20
GELDESTON -	30'2	38'7	34'5	10	2nd	52	8th	15	1'53	0'32	15th	33	12
CAMBRIDGE -	*	*	*	*	*	*	*	*	*	*	*	52	18
ROTHAMSTED -	29'5	38'7	34'1	15	2nd	51	4th, 6th	13	0'98	0'29	13th	—	—
INGATESTONE -	31'1	37'3	34'2	19	25th	49	4th, 5th, 6th, 7th.	12	1'20	0'25	15th	37	13
BAWTRY -	31'9	40'5	36'2	22	25th	52	6th	9	1'05	0'36	19th	†61	22
LEICESTER -	31'1	39'8	35'5	20	26th	51	5th, 6th	13	1'39	0'35	14th	49	17
CHEADLE -	29'6	37'8	33'7	22	17th, 25th, 26th	48	6th	17	0'87	0'17	19th	—	—
CHURCHSTOKE -	29'5	38'5	34'0	18	26th	49	4th, 6th	13	0'60	0'09	19th	50	18
HEREFORD -	30'7	40'9	35'8	20	2nd	54	3rd	13	0'07	0'19	13th	—	—
CIRENCESTER -	28'5	38'7	33'6	14	2nd	51	6th, 7th	10	1'87	0'92	13th	64	23
OXFORD -	*	*	*	*	*	*	*	*	*	*	*	41	14
LONDON -	*	*	*	*	*	*	*	*	*	*	*	24	8
STRATHFIELD TURGIS -	29'9	39'7	34'8	12	2nd	53	6th	11	1'52	0'42	13th	—	—
HASTINGS -	31'2	39'4	35'3	19	25th	51	9th	20	2'87	0'55	13th	49	17
SOUTHAMPTON -	31'5	41'3	36'4	20	2nd	54	6th	13	1'15	0'35	11th, 13th	65	23
STOWELL -	28'8	38'1	33'5	11	2nd	51	6th	12	1'25	0'41	13th	59	21
LAUDALE -	31'7	41'2	36'5	20	11th, 16th	54	6th	14	3'41	0'70	4th	—	—
GLASGOW -	32'7	41'1	36'9	20	16th	50	5th	13	0'71	0'16	12th, 16th	57	21
GLENLEE -	28'5	40'3	34'4	8	12th	51	5th	9	0'52	0'15	2nd, 9th	—	—
DOUGLAS -	33'8	41'5	37'7	21	14th	51	5th	10	0'78	0'22	2nd	104	37
NEWTON REIGNY -	27'5	39'5	33'5	8	14th	51	4th	17	1'37	0'50	13th	66	24
STONYHURST -	30'9	38'9	34'9	17	14th	48	6th	16	1'42	0'33	2nd	83	30
BLACKPOOL -	32'1	39'6	35'9	23	14th	44	4th, 5th, 6th, 7th, 8th, 9th.	18	0'73	0'17	12th	87	31
MANCHESTER -	32'1	38'5	35'3	24	14th	49	6th	17	0'96	0'22	2nd	—	—
LLANDUDNO -	34'4	41'0	37'7	26	17th	48	5th, 7th	11	0'44	0'12	16th	59	21
LLANDOVERY -	30'1	40'8	35'5	18	16th	50	4th, 5th, 10th	14	0'80	0'21	2nd	—	—
PEMBROKE -	*	*	*	*	*	*	*	*	*	*	*	83	29
ARLINGTON -	30'4	38'5	34'5	20	17th	48	4th	16	2'19	0'59	13th	—	—
CULLOMPTON -	30'6	40'5	35'6	13	2nd	52	4th	13	0'61	0'11	11th, 14th	70	24
FALMOUTH -	34'2	41'7	38'0	24	25th	52	4th	11	1'28	0'45	10th	103	36
PLYMOUTH -	32'6	41'8	37'2	23	25th	52	4th	10	0'80	0'25	13th	80	31
JERSEY -	*	*	*	*	*	*	*	*	*	*	*	37	13
LONDONDERRY -	33'7	43'0	38'4	22	16th	51	5th	18	1'53	0'23	10th	—	—
MAKREE CASTLE -	31'4	42'3	36'9	15	16th	51	5th	15	1'72	0'28	2nd, 12th	60	22
BROOKEBOROUGH -	29'8	42'0	35'9	8	16th	52	4th	13	1'54	0'43	10th	—	—
ARMAGH -	31'9	42'6	37'3	19	16th	53	5th	7	0'29	0'10	2nd	64	23
EDGEWORTHSTOWN -	31'3	41'7	36'5	19	16th	50	8th	11	0'80	0'29	2nd	—	—
DUBLIN -	34'8	42'3	38'6	25	14th, 16th	51	3rd, 5th	14	1'10	0'27	25th	61	22
PARSONSTOWN -	*	*	*	*	*	*	*	*	*	*	*	66	23
KILKENNY CASTLE -	32'3	41'4	36'9	18	16th	51	3rd	9	0'64	0'17	13th	—	—
WATERFORD -	32'2	42'8	37'5	19	16th	52	3rd, 4th	12	0'80	0'18	13th	—	—
VALENCIA -	*	*	*	*	*	*	*	*	*	*	*	92	32
KILLARNEY -	31'3	43'6	37'5	17	27th	53	4th	12	1'38	0'43	12th	—	—
FOYNES -	35'7	42'6	39'2	25	13th, 15th, 16th	50	3rd	12	1'40	0'50	12th	—	—

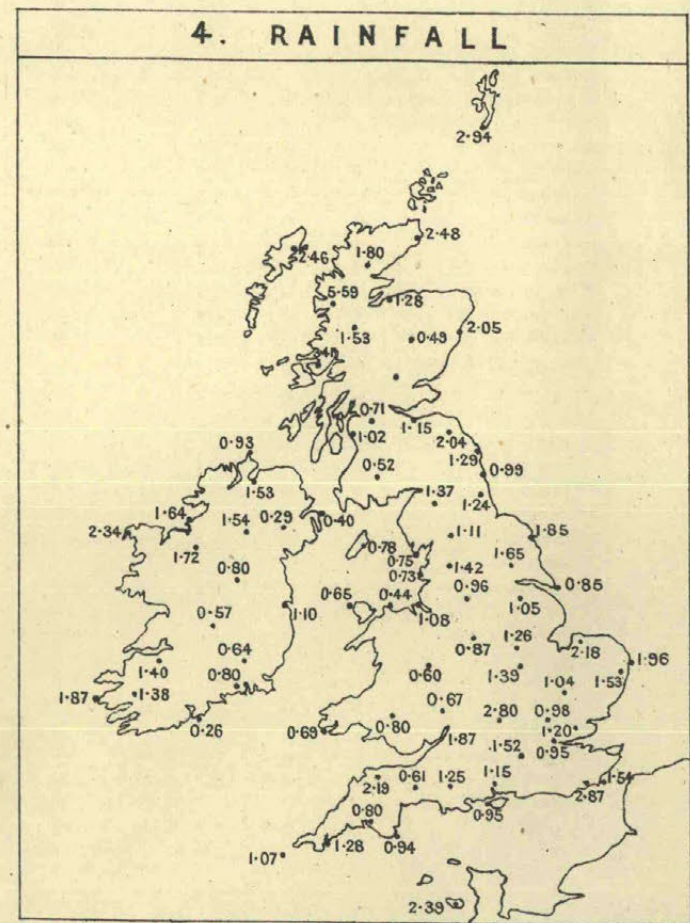
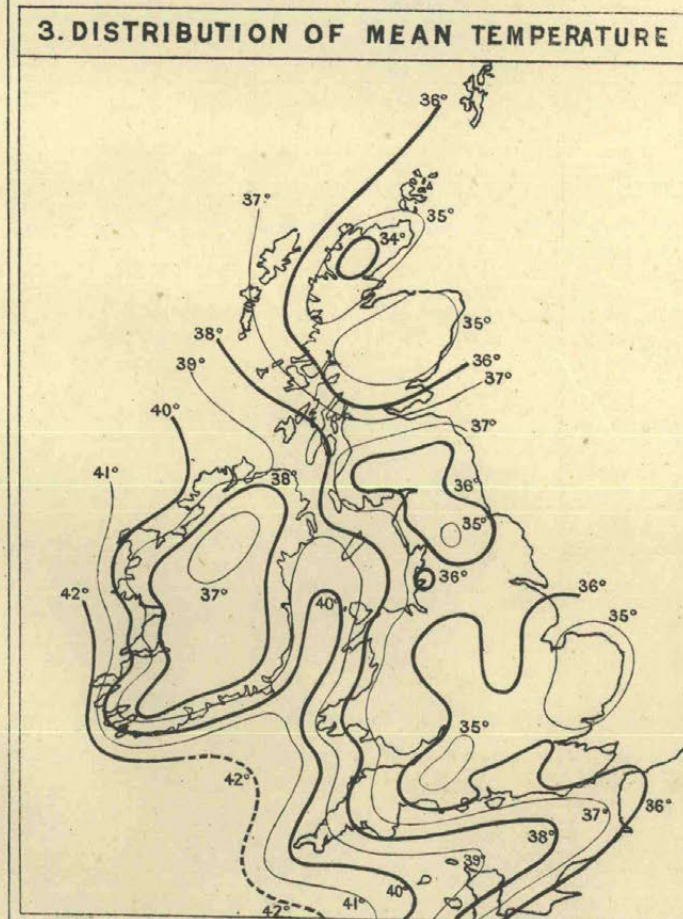
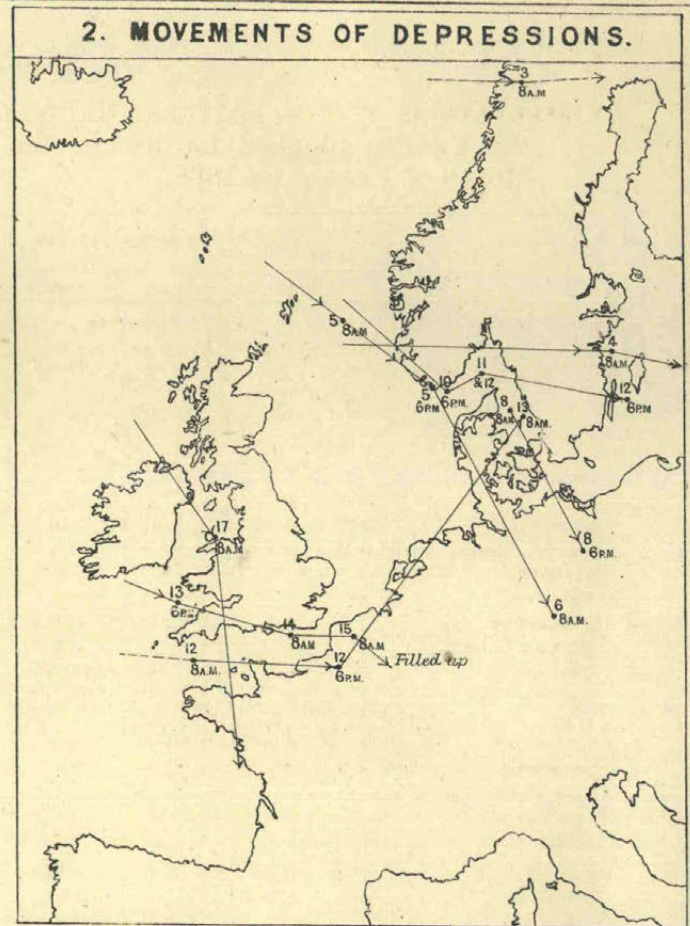
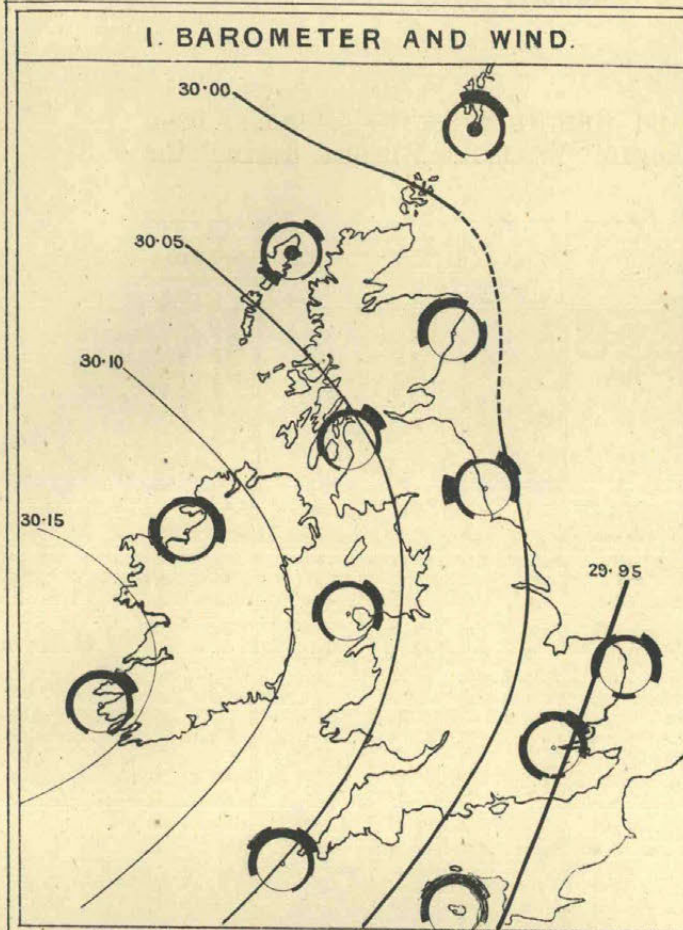
* For information see Table III.

† The bright sunshine values given for Scarborough are recorded at Oswaldkirk, and those for Bawtry at Worksop.

MONTHLY WEATHER CHART. FEBRUARY. 1888.

Monthly Summary.

Plate ii.



To face p. viii.

SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

MARCH 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & CO., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather of March was changeable, squally, and wet. Pressure was very low generally; several of the depressions were deep, advanced rapidly, and filled up quickly; Temperature was low,—very low on one occasion in Scotland East; Rainfall was excessive, especially in the north-east; the Winds were very variable, and gales frequent.

Pressure.—*Mean for the month, at 8 a.m.*—Was below 29·70 ins. everywhere and very uniform, ranging from 29·65 ins. and more in the Channel Islands, west of Ireland, Caithness, the Orkneys and Shetlands, to 29·60 ins. and less over the eastern counties of England. It was much below that of February in all districts, and below the average* for March by about three-tenths of an inch in the east and south of England, more than two-tenths in the west of Ireland, and from 0·10 to 0·15 in. in the extreme north of Scotland and the Orkneys. *Highest* readings occurred at the northern stations on the 1st, but in other regions very generally on or about the 19th. *Lowest* on the 11th or 28th, when deep depressions passed over the southern parts of our Islands; on the latter occasion the barometer fell to below 28·4 ins. on our extreme south-western coasts. *Range* large, especially in the extreme south-west, where it amounted to nearly two inches.

Depressions somewhat numerous; movements mainly from west to east, but varying greatly. Deepest were those of 10th—11th, and 28th—30th, when barometer fell very low. Between 22nd and 27th several minima were developed over our Islands and in their immediate neighbourhood, and moved so erratically that their tracks cannot be drawn on Map 2. Most of the systems filled up either over our Islands or over Europe.

Anticyclones.—Two such systems passed over our area during the month, one between the 1st and 5th, the other between the 17th and 21st. In both of them the height of the barometer near the centre of the system exceeded 30·5 ins.

Wind was extremely variable in direction—mainly South-westerly in the Channel and south-east of England; Westerly, Northerly and North-easterly in the Scilly Islands and at Yarmouth; chiefly North-easterly at the northern stations, but North-westerly at Aberdeen. Its force was moderate, as a whole, and the gales, though frequent, were not violent, except over the north-west of Ireland on the 28th.

Temperature.—*Mean, at Sea Level*, varied from about 43° in the Scilly Islands and 42° at Valencia and Jersey, to less than 38° over the inland parts of Ireland North, to about 36° at Yarmouth, Hawes Junction, and over the central and northern parts of Scotland. It was decidedly below the average* everywhere, the deficit amounting to between four or five degrees in most places. *Highest* readings occurred very generally between the 6th and 10th, but in some localities, chiefly in the west and north-west, there were higher readings between the 27th and 29th. *Lowest* readings occurred on very various dates, chiefly between the 1st and 3rd over England, on the 16th or 17th in Ireland and some parts of Scotland, and on the 27th or 28th at our north-eastern stations. *Range* was slight except in some localities in Scotland, where, the minimum on the 17th being exceptionally low, the range was large. *Vapour Tension* was less than 0·18 in. over central Ireland, the north-west of England, central Scotland, and the Shetland Isles, but exceeded 0·23 in. at Scilly. *Relative Humidity* exceeded 95 per cent., on our extreme northern coasts and over the north-west of England, and 90 per cent on our south-eastern coasts. In the south of Scotland, over central Ireland, and over the midland counties of England it was less than 90, and at Scilly and Jersey it was as low as 85.

Rainfall varied from less than 2 ins. at Sumburgh Head, Malin Head, and Leicester to more than 5 ins. at Belmullet, and to more than 6 ins. at Glencarron. It exceeded the average in all districts (excepting Sumburgh Head), and at some of our north-eastern stations the excess was very large, owing mainly to the heavy fall which occurred in those regions, with Easterly winds, on 28th and 29th.

Bright Sunshine was more than 40 per cent. of the possible duration at Valencia, and 30 per cent., or more, at Falmouth, Douglas (Isle of Man), and Stornoway. In all other places the per-centage was smaller, and was as low as 11 in London, 16 at Stowell, Ingatestone, and Braemar, 17 at Hastings, Leicester, and Armagh, 18 at Cirencester, and 19 at Geldeston and Cullompton. At Jersey the per-centage was 28.

* The averages employed are—*Pressure* and *Temperature* for the 20 years, 1861–80; *Rainfall* for the 20 years, 1866–85.

TABLE V.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
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.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 29° 655	34° 8	30° 5	39° 4	35° 0	25	3rd	45	20th
	Wick	29° 650	36° 0	31° 3	41° 0	36° 2	22	28th	50	9th
	Stornoway	29° 642	37° 1	32° 8	42° 3	37° 6	27	27th	49	6th, 8th
1. SCOTLAND, E.	Nairn	29° 643	33° 8	29° 3	41° 9	35° 6	19	17th	56	9th
	Aberdeen	29° 643	34° 5	30° 4	41° 5	36° 0	17	28th	54	7th
	Leith	29° 630	36° 3	32° 0	42° 9	37° 5	24	17th	56	8th
2. ENGLAND, N.E.	Shields	29° 608	36° 4	32° 2	41° 4	36° 8	26	14th	56	9th
	York	29° 613	35° 9	31° 7	43° 8	37° 8	26	2nd, 5th	58	9th
	Spurn Head	29° 579	36° 3	33° 2	41° 0	37° 1	29	17th	52	8th, 9th
3. ENGLAND, E.	Yarmouth	29° 578	36° 2	32° 3	40° 1	36° 2	27	1st	55	9th
	Cambridge	29° 608	36° 5	31° 3	45° 2	38° 3	23	2nd	56	9th, 10th, 29th
4. MIDLAND COUNTIES	Loughborough	29° 615	35° 6	32° 3	44° 3	38° 3	26	24th	56	8th, 9th
	Oxford	29° 620	36° 1	32° 7	43° 7	38° 2	21	2nd	54	9th
5. ENGLAND, S.	London	29° 610	37° 3	33° 7	44° 7	39° 2	25	2nd	56	10th
	Dungeness	29° 593	36° 3	32° 7	41° 7	37° 2	24	2nd, 5th, 6th	47	28th, 29th, 30th
	Hurst Castle	29° 626	37° 7	34° 7	43° 1	38° 9	24	2nd	50	6th
6. SCOTLAND, W.	Ardrossan	29° 632	36° 6	32° 1	41° 9	37° 0	25	5th, 17th	50	6th
7. ENGLAND, N.W.	Hawes Junction*	28° 358	30° 7	27° 2	36° 3	31° 8	20	2nd, 24th	46	8th, 9th, 21st
	Barrow-in-Furness	29° 611	35° 9	32° 9	42° 0	37° 5	28	13th, 17th	51	29th
	Liverpool	29° 617	36° 5	33° 7	42° 6	38° 2	28	2nd	55	9th
	Holyhead	29° 614	38° 4	35° 5	42° 9	39° 2	30	2nd	49	9th, 10th, 29th
8. ENGLAND, S.W.	Pembroke	29° 602	38° 9	35° 5	43° 1	39° 3	26	2nd	48	9th, 21st, 29th
	Prawle Point	29° 631	39° 0	31° 4	45° 3	38° 4	23	17th	52	21st
9. IRELAND, N.	Malin Head	29° 638	38° 0	34° 6	41° 9	38° 3	29	15th, 17th	51	8th
	Donaghadee	29° 635	38° 1	34° 8	44° 4	39° 6	29	5th	53	6th, 8th
	Mullaghmore	29° 638	38° 7	34° 6	44° 1	39° 4	29	2nd, 17th, 21st, 26th, 2nd	53	8th
	Belmullet	29° 652	39° 4	35° 8	44° 4	40° 1	27	2nd	51	6th
10. IRELAND, S.	Parsonstown	29° 654	35° 0	30° 6	45° 5	38° 1	22	2nd, 3rd, 19th, 20th, 19th	57	8th
	Valencia	29° 665	41° 7	36° 1	47° 9	42° 0	28	19th	54	10th
	Roche's Point	29° 638	39° 1	35° 3	46° 4	40° 9	30	1st, 2nd, 17th, 19th, 20th.	53	10th
CHANNEL ISLANDS	Scilly (St. Mary's)	29° 626	42° 8	38° 9	46° 2	42° 6	31	1st	54	10th
	Jersey (Noirmont)	29° 664	40° 9	36° 9	45° 6	41° 3	28	1st	52	10th, 28th

* Hawes Junction is 1,135 feet above Mean Sea Level, and the

SUMMARY OF OBSERVATIONS, MARCH 1888.

xi

REPORTING STATIONS in the BRITISH ISLANDS, during the Month of MARCH 1888.

Thunderstorms, and Gales are counted irrespective of the hour at which they occurred.

Latitude, beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	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 Observations of								
						Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calm.
ins.	%		ins.	in.																	
0.176	87	8.4	1.37	0.35	21st	23	13	1	0	2	20	0	8	4	2	7	3	1	1	1	4
203	96	7.9	2.82	0.35	23rd	26	7	1	0	2	18	5	6	2	4	5	4	2	4	4	0
217	98	8.2	3.97	0.74	7th	21	5	0	0	1	21	7	1	10	3	6	1	3	2	1	4
166	85	6.4	2.62	1.01	7th	19	10	0	0	8	12	1	4	1	4	2	0	6	1	3	10
174	86	7.6	3.37	0.54	10th	21	6	1	0	4	18	3	5	1	4	5	3	3	3	7	0
188	88	6.8	2.79	0.45	28th	19	11	0	0	5	11	0	1	1	8	2	1	3	9	5	1
193	90	8.2	4.22	1.37	29th	22	12	2	0	3	21	5	4	6	4	2	1	3	7	2	2
185	88	7.5	3.06	0.59	22nd	18	7	0	0	6	19	0	8	3	5	1	3	1	5	5	0
186	87	8.2	1.68	0.43	11th	18	9	0	1	1	17	8	5	6	3	2	2	5	4	4	0
193	90	6.8	3.36	0.67	11th	20	12	0	2	0	8	5	4	5	2	3	2	4	5	5	1
200	93	8.2	2.20	0.65	11th	20	13	1	0	5	22	0	10	3	0	4	4	4	2	3	1
181	86	8.4	2.17	0.27	11th, 24th	17	13	2	0	3	21	2	6	2	5	4	0	4	5	5	0
190	89	7.7	3.12	0.42	25th	20	12	1	0	4	17	0	6	5	0	2	3	6	5	3	1
192	87	8.7	2.75	0.34	13th	19	9	2	2	2	24	6	3	5	1	2	4	6	6	3	1
199	94	8.1	3.08	0.45	27th	23	8	0	0	0	13	5	5	6	0	1	3	6	6	4	0
210	93	7.0	2.89	0.51	10th	22	7	1	1	2	9	6	5	4	4	1	1	6	7	3	0
190	88	6.8	2.88	1.02	7th	15	6	0	0	7	15	5	5	10	4	0	3	1	2	6	0
167	97	7.0	4.30	0.90	8th	22	11	0	0	8	19	1	3	12	4	3	3	4	1	1	0
185	88	6.5	3.60	0.63	11th	17	6	1	0	3	14	3	6	11	3	1	3	2	0	5	0
180	83	7.1	2.05	0.34	11th	19	7	1	0	6	17	2	5	5	6	1	2	6	4	2	0
204	88	6.3	2.72	0.53	11th	21	8	1	0	4	7	3	3	9	5	1	2	5	4	1	1
210	89	6.3	2.74	0.60	13th	18	4	0	0	2	9	6	5	7	2	2	2	4	3	6	0
209	88	6.7	2.38	0.29	24th	20	5	1	0	6	15	2	7	4	2	2	1	5	6	4	0
199	87	7.6	1.86	0.50	10th	20	7	2	0	5	19	0	5	7	3	4	3	3	3	3	0
198	86	5.8	3.11	0.60	11th	22	3	0	0	7	10	3	1	8	9	2	0	4	4	3	0
204	87	6.6	3.75	1.42	11th	17	7	3	0	4	7	9	5	8	7	1	1	6	2	1	0
212	88	7.6	5.53	1.44	27th	24	5	3	0	5	20	5	4	3	9	3	2	3	3	4	0
180	88	7.5	3.02	0.68	10th	18	5	0	0	3	16	0	1	2	2	0	3	0	0	4	19
210	81	6.6	4.51	1.03	27th	23	1	1	1	5	11	3	7	4	4	1	3	3	3	3	3
204	85	5.8	4.08	1.05	10th	20	3	2	1	7	10	4	9	5	3	1	0	4	5	4	0
234	85	8.3	3.41	0.56	24th	22	2	1	0	0	14	7	5	6	2	0	2	5	6	5	0
216	85	6.6	4.20	0.42	10th	22	4	6	1	5	13	4	4	5	1	2	3	7	7	2	0

barometric observations at this station are not corrected for altitude.

TABLE VI.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT during the Month of MARCH 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Percentages of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	*	*	*	*	*	*	*	*	*	*	*	111	31
LAIRG	27°0	39°5	33°3	15	28th	-53	9th	19	3°93	0°70	24th	—	—
GLENCARRON	28°0	40°3	34°2	20	17th	50	10th	18	6°01	2°18	7th	—	—
FORT AUGUSTUS	29°6	41°6	35°6	12	17th	50	8th, 9th	15	2°91	1°02	7th	—	—
ABERDEEN	*	*	*	*	*	*	*	*	*	*	*	76	21
BRAEMAR	24°7	38°4	31°6	2	17th	50	9th	21	2°78	0°77	7th	59	16
MARCHMONT	30°8	40°2	35°5	24	28th	53	21st	23	3°87	0°88	28th	75	21
ALNWICK CASTLE	32°9	39°8	36°4	25	27th	54	8th, 9th	20	4°39	0°89	29th	—	—
DURHAM	31°4	40°8	36°1	25	26th	56	8th, 10th	22	4°07	1°41	29th	84	23
SCARBOROUGH	32°7	41°0	36°9	27	27th	56	9th	20	2°91	0°76	11th	†94	26
YORK	*	*	*	*	*	*	*	*	*	*	*	97	27
HILLINGTON	31°5	42°8	37°2	21	2nd	55	9th, 10th	24	2°62	0°55	25th	73	20
GELDESTON	32°7	42°6	37°7	24	2nd	57	10th	23	2°56	0°59	11th	68	19
CAMBRIDGE	*	*	*	*	*	*	*	*	*	*	*	78	21
ROTHAMSTED	32°1	42°6	37°4	26	4th, 22nd	54	10th	22	2°97	0°44	10th	—	—
INGATESTONE	32°3	43°1	37°7	24	2nd	56	10th	21	2°87	0°43	10th	57	16
BAWTRY	32°4	43°4	37°9	26	23rd	61	9th	16	2°30	0°40	11th	†72	20
LEICESTER	32°1	44°3	38°2	24	27th	56	9th, 10th	17	1°87	0°30	10th	63	17
CHEADLE	30°7	42°2	36°5	23	2nd	54	8th	22	2°86	0°38	13th	—	—
CHURCHSTOKE	30°1	43°2	36°7	18	2nd	56	8th	15	2°53	0°36	25th	80	22
HEREFORD	32°7	45°0	38°9	25	2nd, 26th	58	10th	19	2°99	0°67	24th	—	—
GIRENCESTER	31°3	42°5	36°9	19	2nd, 3rd	53	10th	21	3°59	0°42	8th	64	18
OXFORD	*	*	*	*	*	*	*	*	*	*	*	78	21
LONDON	*	*	*	*	*	*	*	*	*	*	*	40	11
STRATHFIELD TURGISS	32°8	45°2	39°0	20	2nd	56	10th	21	3°41	0°36	26th	—	—
HASTINGS	33°5	42°2	37°9	22	1st	49	6th, 8th	28	4°63	0°65	19th	62	17
SOUTHAMPTON	33°7	45°6	39°7	23	1st	55	10th	19	3°45	0°53	8th	73	20
STOWELL	32°3	43°3	37°8	21	2nd	53	10th	22	3°26	0°51	10th	59	16
LAUDALE	33°0	43°0	38°0	25	18th	59	8th	16	4°38	1°51	7th	—	—
GLASGOW	32°4	41°7	37°1	22	17th	53	8th	16	3°14	0°80	7th	89	25
GLENLEE	29°5	41°9	35°7	18	5th	52	9th	13	3°00	0°71	7th	—	—
DOUGLAS	33°6	42°7	38°2	25	17th	51	6th	17	3°51	1°14	11th	134	37
NEWTON REIGNY	29°2	40°7	35°0	16	26th	54	21st	21	2°38	0°46	9th	89	25
STONYHURST	31°8	41°2	36°5	25	1st	54	8th	19	3°54	0°88	9th	93	26
BLACKPOOL	32°7	42°0	37°4	27	13th	51	29th	20	2°48	0°32	8th	100	27
MANCHESTER	32°4	42°5	37°5	25	2nd	54	8th, 9th	20	2°25	0°47	9th	—	—
LLANDUDNO	34°0	43°2	38°6	26	2nd	56	8th	19	2°11	0°55	11th	100	27
LLANDOVERY	31°0	45°2	38°1	20	3rd	54	21st	19	4°99	1°04	8th	—	—
PEMBROKE	*	*	*	*	*	*	*	*	*	*	*	133	37
ARLINGTON	31°3	42°7	37°0	22	2nd, 27th	51	8th, 9th	20	5°36	0°71	8th	—	—
CULLOMPTON	33°3	45°7	39°5	23	2nd	56	9th	19	4°09	0°68	10th	68	19
FALMOUTH	36°1	45°4	40°8	27	2nd	52	8th, 9th, 10th, 13th, 6th	22	5°55	0°78	24th	111	30
PLYMOUTH	34°6	46°0	40°3	25	2nd	56	6th	19	4°71	0°64	31st	98	27
JERSEY	*	*	*	*	*	*	*	*	*	*	*	103	28
LONDONDERRY	33°2	44°8	39°0	26	20th	57	9th	21	3°10	0°69	11th	—	—
MARKREE CASTLE	30°9	44°2	37°6	19	20th	54	6th, 10th	19	3°74	0°74	11th	87	24
BROOKEBOROUGH	30°1	42°6	36°4	19	2nd, 20th	51	8th	16	3°81	1°03	11th	—	—
ARMAGH	31°1	43°6	37°4	20	26th	54	8th	16	3°03	0°96	11th	63	17
EDGEWORTHSTOWN	30°4	43°7	37°1	21	5th	54	8th, 22nd	15	3°80	0°63	11th	—	—
DUBLIN	34°6	45°0	39°8	27	17th	59	8th	18	3°75	1°01	11th	92	25
PARSONSTOWN	*	*	*	*	*	*	*	*	*	*	*	94	26
KILKENNY CASTLE	32°4	45°5	39°0	22	17th	57	10th	14	2°49	0°82	10th	—	—
WATERFORD	32°6	46°3	39°5	24	17th, 24th, 25th	54	10th	17	3°17	0°84	10th	—	—
VALENCIA	*	*	*	*	*	*	*	*	*	*	*	150	41
KILLARNEY	32°4	46°6	39°5	22	20th	54	6th, 9th, 10th	22	5°61	1°33	8th	—	—
FOYNES	36°3	46°6	41°5	27	19th	55	8th	17	3°12	0°81	10th	—	—

* For information see Table V.

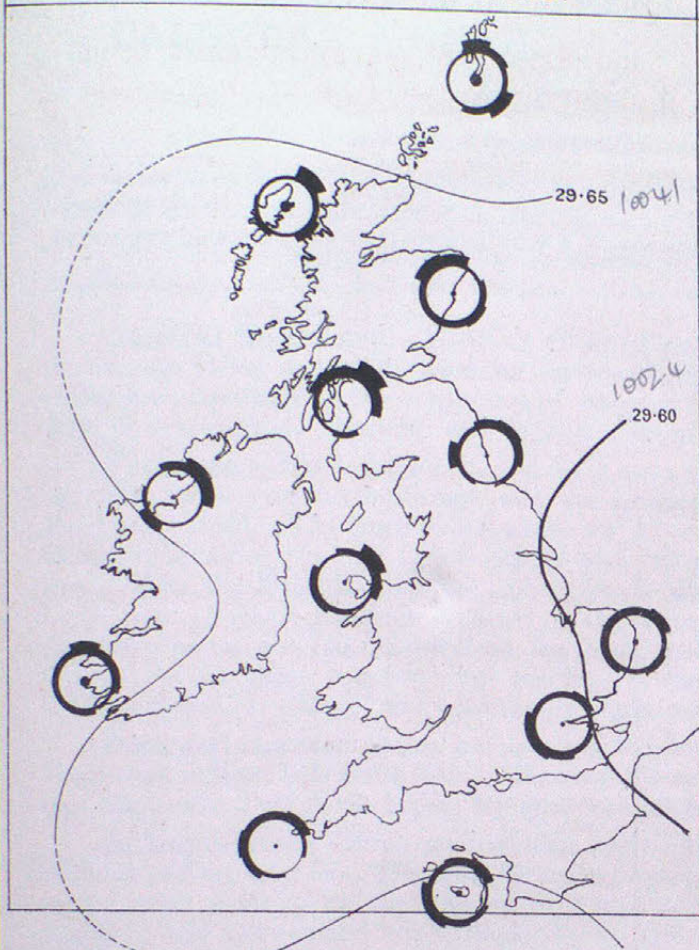
† The bright sunshine values given for Scarborough are recorded at Oswaldkirk, and those for Bawtry at Worksop.

MONTHLY WEATHER CHART. MARCH. 1888.

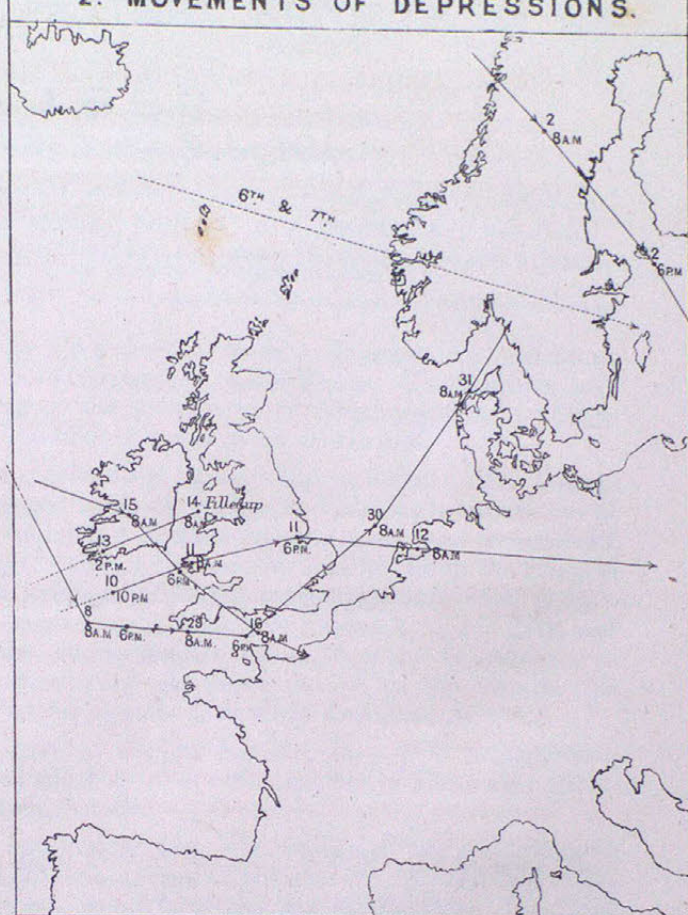
Monthly Summary

Plate III.

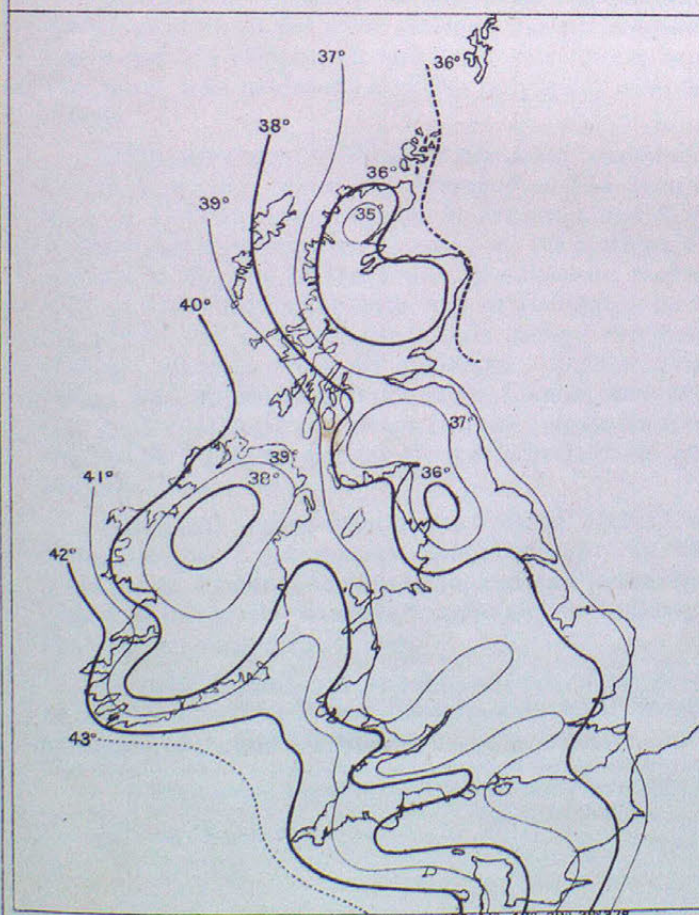
1. BAROMETER AND WIND.



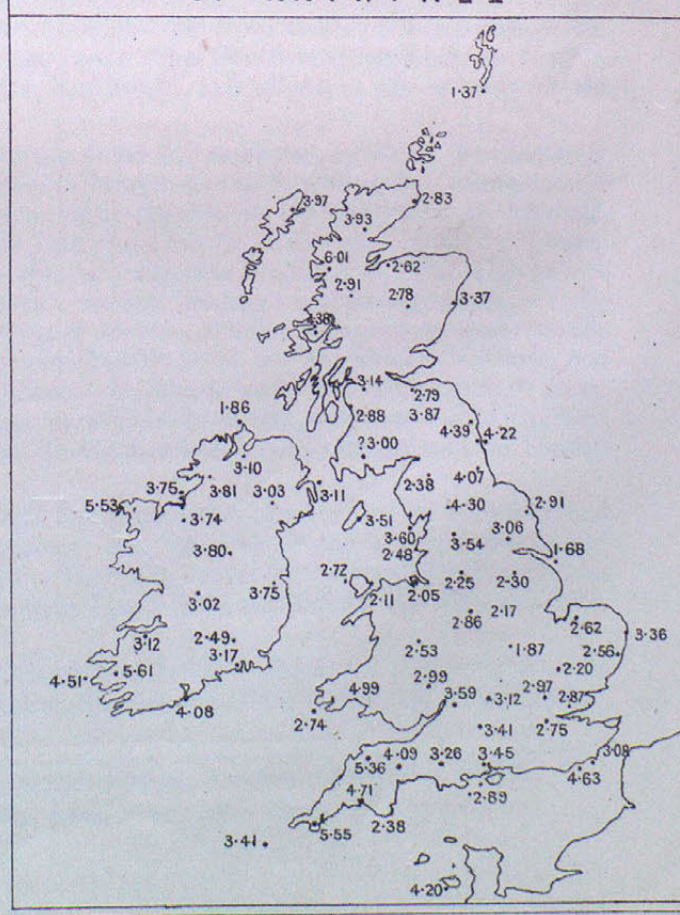
2. MOVEMENTS OF DEPRESSIONS.

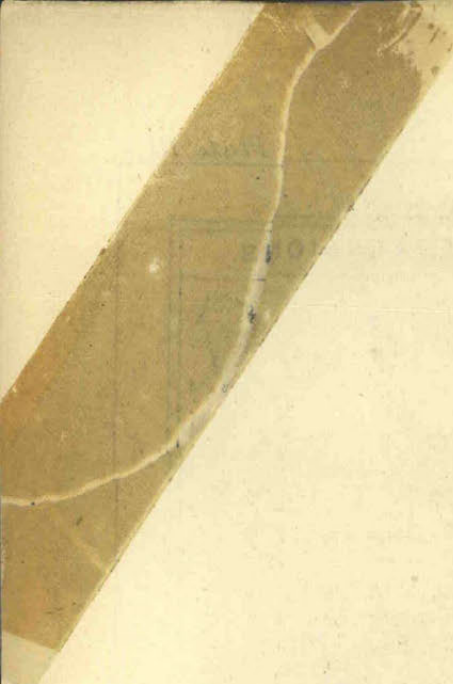


3. DISTRIBUTION OF MEAN TEMPERATURE

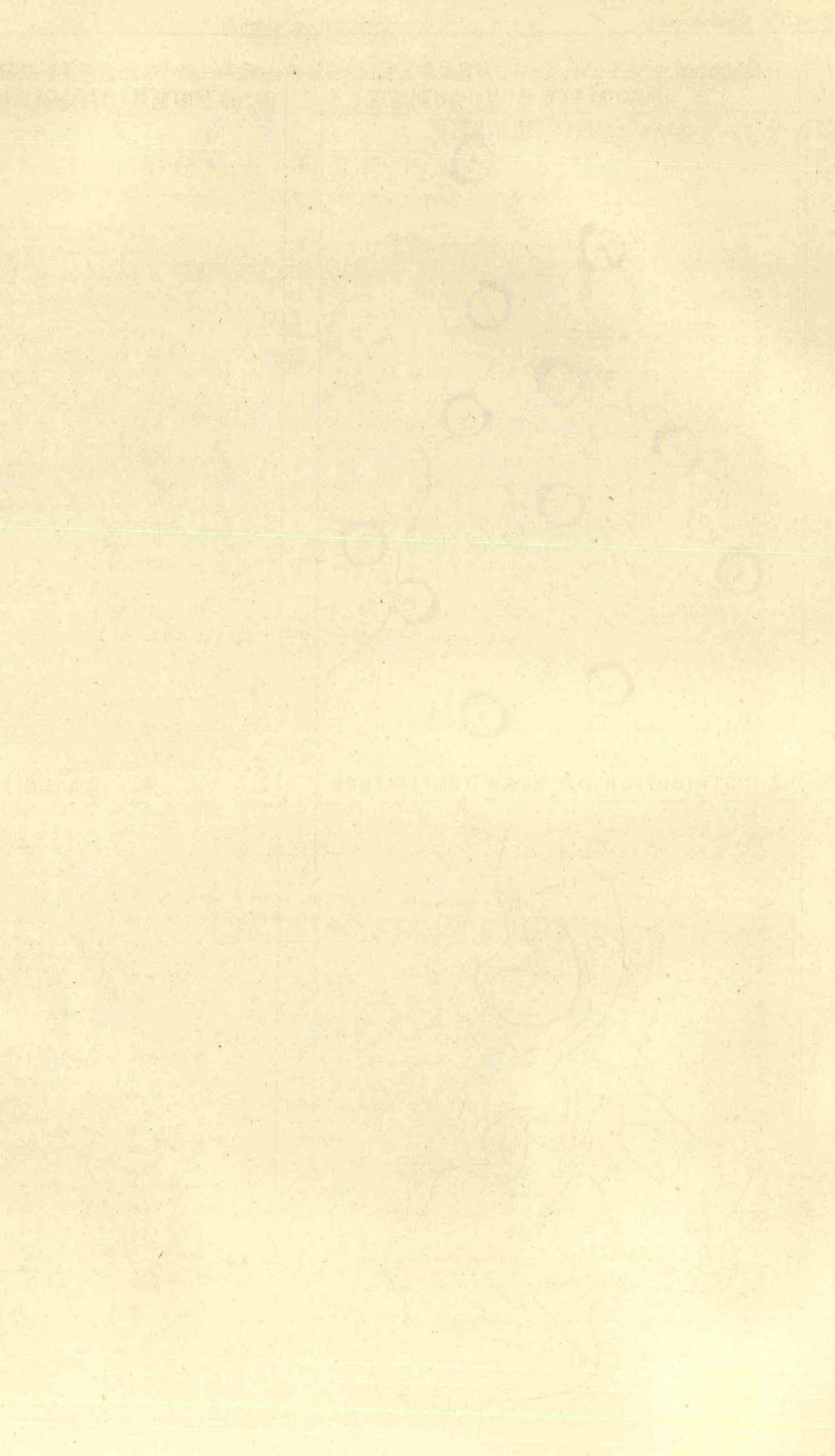


4. RAINFALL





MONITOR WEATHER CHART



D. 11

SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

APRIL 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & Co., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather of April was finer than that of March. Pressure was nearly at its average value, and there were no serious depressions or important anticyclones. Temperature was rather low, especially in the south-east of England, owing to the prevalence of Northerly winds. There were no severe gales. Rainfall was moderate, except in the Hebrides and West Highlands.

Pressure.—*Mean for the month, at 8 a.m.*—Was considerably higher than in March. The isobars ran from north-west to south-east, and the readings ranged from 29·96 ins. at Valencia to 29·83 ins. at Sumburgh Head. The mean values above 29·90 were confined to Ireland and the south-west of England. Generally speaking pressure agreed closely with its average* value, which ranges from 29·96 in the Channel to 29·85 in the Hebrides, but the isobars on the map of average values run from west-south-west to east-north-east. *Highest* readings occurred in the west of Ireland on the 26th, in Scotland on the 25th, and elsewhere about the 7th. *Lowest* on the 30th, when the barometer fell below 28·9 ins. at Valencia at 6 p.m. On no other occasion were readings below 29·3 recorded elsewhere, except on the 13th, in the north of Scotland. *Range* was accordingly slight owing to the absence of marked disturbances.

Depressions were rather numerous in the latter part of the month, but they were unimportant. None were noticed before the 10th. Three of the systems filled up over our area, two of these over south-east England. Two of the tracks lay quite outside the British Isles.

Anticyclones.—Three such systems made their appearance from the westward, but retired again without passing over us. The first, with readings above 30 inches, was noticed on the 1st and 2nd. The second, with readings at times above 30·3 ins. in the west, lasted from the 5th to the 7th. The third, similarly, did not extend over England; it was noticed from the 24th to the 28th, and during its continuance the highest reading for the month, 30·4 ins., was reported from Belmullet.

Wind was variable in direction. In the north and east of Scotland it was chiefly from North and North-east; at all the other stations, except Ardrossan and Mullaghmore, there was a predominance of the North-easterly component, but there was also a second maximum from South-west, especially in London. The force was moderate, and the only gales were from the Northward, and slight, at the opening of the month.

Temperature.—*Mean, at Sea Level*, varied from a little above 47° at Foynes to 40° in the Shetlands. It was decidedly below the average,* as had been the case in March, the deficit being two degrees in the west of Ireland, three degrees in Scotland, and as much as eight degrees in the south-east of England. *Highest* readings occurred at most of the stations on the 13th and 14th, but there was again some warm weather at the end of the month, the absolute maximum was 66°; this was recorded at Cambridge on the 15th, at Hereford on the 28th, and at Hillington on the 30th. *Lowest* readings occurred generally during the prevalence of Northerly winds during the first ten days of the month. *Range* was slight as the extreme readings were all moderate. *Vapour Tension* exceeded 0·26 in. at Stornoway, Valencia, and Scilly, and approached 0·21 in. in London and at Aberdeen. It varied between 0·23 in. and 0·25 in. over central Ireland and Great Britain. *Relative Humidity* exceeded 90 per cent. over south-west England and South Wales, as well as in the Lake District and the Hebrides, while it fell to 80 per cent. in London and Aberdeen.

Rainfall varied from about 0·86 at Hurst Castle and Dungeness, and about 1 inch at Hereford and Yarmouth, to 2·33 ins. at Loughborough. In the extreme west of Ireland the amount approached 3 inches, at Laudale it was 4·14, and at Glencarron 5·10. The total, except in the west of Scotland, was generally below the average,* especially in Ireland. The only heavy falls occurred on the 29th and 30th, but none amounted to an inch.

Bright Sunshine was 40 per cent. of its possible duration at Jersey. Falmouth and Douglas came next with 39. The lowest amounts were 20 at Worksop, 21 at Stowell and Churchstoke, and 22 in London, at Ingatestone, and Durham.

* The averages employed are—*Pressure* and *Temperature* for the 20 years, 1861–80; *Rainfall* for the 20 years, 1866–85.

TABLE VII.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
 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.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 29°834	39°5	35°0	43°5	39°3	29	7th	50	30th
	Wick	29°854	42°8	35°2	48°3	41°8	25	9th	53	16th, 28th
	Stornoway	29°885	43°0	38°1	47°8	43°0	30	6th	53	14th
1. SCOTLAND, E.	Nairn	29°860	41°1	35°3	49°4	42°4	26	9th	59	14th
	Aberdeen	29°864	41°6	36°5	48°6	42°6	30	8th	60	14th, 16th
	Leith	29°873	43°2	36°4	50°3	43°4	27	9th	62	14th
2. ENGLAND, N.E.	Shields	29°863	42°2	37°0	48°2	42°6	31	5th, 7th	60	14th, 28th
	York	29°882	42°3	36°9	50°3	43°6	28	7th, 10th	61	14th
	Spurn Head	29°867	41°7	37°4	47°0	42°2	31	10th	59	28th, 30th.
3. ENGLAND, E.	Yarmouth	29°869	41°8	36°9	46°3	41°6	30	4th	59	14th
	Cambridge	29°891	42°8	35°0	52°7	43°9	23	6th	66	15th
4. MIDLAND COUNTIES	Loughborough	29°894	41°5	36°9	51°1	44°0	25	6th	64	28th
	Oxford	29°908	41°2	36°8	50°1	43°5	26	6th	60	13th, 28th, 30th
5. ENGLAND, S.	London	29°804	42°9	37°6	51°5	44°6	29	4th	65	30th
	Dungeness	29°869	41°5	37°1	47°7	42°4	26	4th	56	30th
	Hurst Castle	29°909	41°8	39°1	48°9	44°0	30	6th	57	13th
6. SCOTLAND, W.	Ardrossan	29°874	43°5	38°1	48°9	43°5	30	9th	53	18th
7. ENGLAND, N.W.	Hawes Junction*	28°620	37°5	33°1	44°3	38°7	25	5th, 6th	51	14th, 15th
	Barrow-in-Furness	29°885	41°7	38°2	49°1	43°7	32	1st, 3rd, 5th, 7th.	53	15th, 16th, 20th, 25th.
	Liverpool	29°900	42°8	38°7	49°1	43°9	31	3rd	60	28th
	Holyhead	29°900	42°8	39°6	47°9	43°8	35	1st, 6th, 9th	54	13th
8. ENGLAND, S.W.	Pembroke	29°904	42°6	39°5	47°1	43°3	33	3rd, 6th, 9th	52	25th
	Prawle Point	29°919	43°2	36°5	48°5	42°5	29	4th, 5th, 6th	55	13th
9. IRELAND, N.	Malin Head	29°883	43°2	40°1	47°6	43°9	36	3rd, 9th, 22nd	57	16th
	Donaghadee	29°902	43°8	40°1	49°3	44°7	34	6th	59	28th
	Mullaghmore	29°910	44°9	40°1	49°8	45°0	31	1st	60	14th
	Belmullet	29°932	44°9	41°5	48°7	45°1	34	1st	54	14th
10. IRELAND, S.	Parsonstown	29°936	42°2	36°7	51°6	44°2	23	9th	62	14th
	Valencia	29°963	47°1	41°5	51°3	46°4	33	5th, 7th	57	11th
	Roche's Point	29°922	45°1	40°7	51°0	45°9	32	1st, 9th	57	13th
CHANNEL ISLANDS	Scilly (St. Mary's)	29°917	46°2	42°3	49°0	45°7	36	5th	55	6th, 17th, 18th
	Jersey (Noirmont)	29°920	45°2	40°8	50°2	45°5	34	9th	60	24th

* Hawes Junction is 1,135 feet above Mean Sea Level, and the

REPORTING STATIONS in the BRITISH ISLANDS, during the Month of APRIL 1888.

Thunderstorms, and Gales are counted irrespective of the hour at which they occurred.

Latitude, beginning in each case with the Station lying furthest North.)

STATION OF VAPOUR.	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 Observations of								
						Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calms.
ins. 0°207	86	7°5	ins. 2°34	in. 0°39	28th	21	3	0	0	3	14	3	6	5	2	4	2	2	0	2	7
253	92	6°5	2°78	0°40	15th	26	4	1	0	5	12	3	4	5	3	1	7	2	3	5	0
273	98	8°7	3°94	0°50	13th	25	4	1	0	1	21	8	4	6	2	2	2	6	0	2	6
220	85	6°1	1°17	0°13	9th, 12th	21	1	5	0	7	10	2	0	2	3	1	1	6	4	3	10
210	80	7°4	1°06	0°46	15th	21	0	0	1	2	12	5	6	5	2	0	3	5	0	9	0
221	79	6°5	1°09	0°24	19th	20	2	1	0	5	8	1	1	4	3	2	2	1	10	3	4
223	84	8°1	1°38	0°23	20th	21	6	2	0	1	13	2	10	6	0	2	1	4	4	2	1
220	82	7°5	2°04	0°43	19th	17	0	0	2	5	18	0	10	4	1	0	5	1	5	4	0
224	86	6°1	1°59	0°61	19th	18	2	0	1	3	6	2	5	7	2	0	3	5	4	4	0
222	84	6°4	1°06	0°17	9th, 15th	20	6	0	1	3	8	1	3	6	3	2	3	4	3	6	0
228	83	7°1	1°84	0°69	19th	17	4	4	0	5	15	0	7	7	0	1	2	7	2	4	0
222	85	8°2	2°33	0°63	19th	16	5	0	2	2	18	1	4	5	1	1	2	5	6	5	1
221	86	7°4	1°45	0°23	15th	16	5	1	0	5	16	0	4	7	1	1	1	9	3	3	1
218	80	7°7	1°86	0°64	23rd	13	4	4	2	3	16	0	3	6	3	1	0	7	6	4	0
226	87	7°3	0°86	0°20	22nd	13	5	1	0	1	9	0	4	5	4	1	0	4	7	4	1
245	93	6°6	0°87	0°18	15th	14	2	1	0	6	11	1	3	9	3	0	0	8	6	1	0
240	84	6°6	1°94	0°65	15th	14	0	1	0	5	11	2	2	4	4	3	2	3	5	5	2
212	95	8°8	3°48	0°95	29th	22	3	0	0	3	25	0	4	8	1	1	6	6	1	3	0
223	85	6°6	1°42	0°33	29th	13	0	0	0	7	16	3	9	6	3	3	2	4	1	2	0
217	79	7°2	1°09	0°28	20th	17	0	0	0	7	17	1	2	8	2	2	1	8	6	1	0
247	90	7°1	1°93	0°51	29th	18	0	0	0	6	15	2	2	8	2	1	4	5	4	3	1
251	92	6°5	1°29	0°25	29th	17	0	1	0	8	12	0	2	9	3	1	3	5	3	4	0
249	89	7°3	1°34	0°36	23rd	15	4	0	0	2	14	2	2	9	3	0	1	5	6	4	0
243	87	6°5	1°52	0°22	12th, 19th	22	0	0	0	8	14	0	6	5	2	2	4	4	3	4	0
242	84	5°6	1°32	0°37	30th	15	0	0	0	6	5	3	4	6	4	0	4	3	5	4	0
250	85	6°4	1°93	0°34	11th, 30th	16	0	1	0	4	6	14	5	3	5	1	4	5	3	3	1
252	85	8°1	2°69	0°42	11th	21	0	0	0	4	21	4	4	3	5	0	2	5	9	2	0
223	84	7°3	1°61	0°45	17th	17	0	0	0	4	15	0	3	4	0	1	3	2	3	2	12
263	82	6°8	2°96	0°81	30th	17	0	0	0	8	15	3	3	9	1	0	2	3	4	5	3
248	83	5°4	2°47	0°75	30th	15	0	0	0	7	7	4	9	6	2	0	1	4	5	3	0
265	86	8°3	1°36	0°21	4th	18	0	1	0	2	18	2	2	10	3	0	0	6	4	4	1
241	81	5°8	2°44	0°66	22nd	17	1	3	1	6	10	1	2	9	3	0	2	4	7	3	0

barometric observations at this station are not corrected for altitude.

TABLE VIII.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT during the Month of APRIL 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Percentage of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STONOWAY	*	*	*	*	*	*	*	*	*	*	*	112	26
LAIRG	33'1	47'8	40'5	26	5th, 6th, 27th	58	18th	22	2'28	0'32	27th	—	—
GLENCARRON	34'2	47'3	40'8	26	5th	56	17th	22	5'10	0'79	26th	—	—
FORT AUGUSTUS	34'7	48'4	41'6	24	9th	58	18th	23	2'04	0'38	12th	—	—
ABERDEEN	*	*	*	*	*	*	*	*	*	*	*	150	35
BRAEMAR	32'6	46'2	39'4	23	9th	55	14th	18	1'35	0'27	22nd	143	34
OCHTERTYRE	34'8	53'0	43'9	24	8th	61	14th	19	2'44	0'57	19th	—	—
MARCHEMONT	34'9	48'1	41'5	20	8th, 9th	59	14th	22	2'83	0'65	20th	112	27
ALNWICK CASTLE	36'9	46'3	41'6	29	6th	58	14th	22	2'43	0'58	20th	—	—
DURHAM	35'3	48'7	42'0	28	7th	62	14th	20	2'43	0'83	20th	97	23
SCARBOROUGH	36'7	48'0	42'4	30	4th, 5th, 7th	61	14th	21	1'90	0'37	20th	†92	23
YORK	*	*	*	*	*	*	*	*	*	*	*	97	23
HILLINGTON	35'8	50'5	43'2	22	6th	66	30th	18	1'70	0'30	23rd	130	31
GELDESTON	35'7	49'3	42'5	27	6th	63	30th	20	1'21	0'17	15th	131	32
CAMBRIDGE	*	*	*	*	*	*	*	*	*	*	*	117	28
ROTHAMSTED	35'6	50'0	42'8	25	6th	61	30th	19	2'03	0'33	20th	—	—
INGATESTONE	35'9	50'4	43'2	27	4th, 6th	65	30th	14	1'87	0'44	18th	91	22
BAWTRY	37'0	51'0	44'0	25	5th	64	28th	19	1'31	0'19	24th	†84	20
CHEADLE	35'9	48'5	42'2	27	6th	62	28th	15	1'46	0'33	17th	—	—
CHURCHSTOCK	35'4	49'8	42'6	23	6th	62	28th	16	1'80	0'31	19th	88	21
HERFORD	37'0	52'3	44'7	28	6th, 7th	66	28th	15	1'03	0'26	20th	—	—
CIRENCESTER	35'2	49'5	42'4	23	6th	63	14th	16	1'34	0'37	17th	100	24
OXFORD	*	*	*	*	*	*	*	*	*	*	*	107	26
LONDON	*	*	*	*	*	*	*	*	*	*	*	91	22
STRATHFIELD TURGIS	36'1	51'9	44'0	24	6th	62	13th, 30th	13	1'96	0'44	23rd	—	—
HASTINGS	37'5	48'3	42'9	29	4th	56	15th, 28th	17	1'15	0'26	23rd	123	30
SOUTHAMPTON	37'8	51'5	44'7	27	6th	61	13th	13	2'36	0'78	23rd	127	31
STOWELL	36'6	49'0	42'8	27	6th, 7th	57	28th	19	2'16	0'37	19th	85	21
LAUDALE	38'0	49'6	43'8	29	3rd	60	15th	20	4'14	0'65	26th	—	—
GLASGOW	37'1	49'2	43'2	29	9th	58	14th	16	2'01	0'44	15th, 18th	95	23
GLENLEE	35'3	49'1	42'2	25	1st, 9th	59	14th	15	2'82	0'65	15th	—	—
DOUGLAS	38'2	48'7	43'5	31	7th, 9th	55	14th	19	2'88	0'48	30th	164	39
NEWTON REIGNY	35'0	48'3	41'7	25	7th	59	14th	17	1'55	0'33	19th	97	23
STONTHURST	36'8	48'2	42'5	29	7th, 9th	57	14th	17	2'29	0'38	12th	104	25
BLACKPOOL	37'8	48'1	43'0	31	5th, 9th	58	14th	17	1'20	0'30	29th	109	26
MANCHESTER	37'1	48'8	43'0	29	1st, 6th	59	14th, 28th	18	1'58	0'22	12th	—	—
LLANDUDNO	39'6	48'0	43'8	32	6th	58	15th	19	1'97	0'59	29th	114	27
LLANDOVERY	37'0	51'5	44'3	23	1st	59	15th	19	2'17	0'39	17th	—	—
PEMBROKE	*	*	*	*	*	*	*	*	*	*	*	132	32
ARLINGTON	36'6	48'2	42'4	26	9th	56	16th	19	1'74	0'55	16th	—	—
CULLOMPTON	37'7	51'1	44'4	25	9th	61	28th	18	1'54	0'40	17th	112	27
FALMOUTH	40'3	49'3	44'8	30	9th	56	13th	17	1'74	0'43	16th	158	39
PLYMOUTH	39'9	51'7	45'8	31	9th	58	13th	11	1'12	0'42	16th	132	32
JERSEY	*	*	*	*	*	*	*	*	*	*	*	164	40
LONDONDERRY	38'3	50'9	44'6	30	3rd	61	14th	21	2'10	0'37	19th	—	—
MARRREE CASTLE	37'2	50'6	43'9	24	3rd	59	14th	18	2'01	0'51	11th	105	25
BROOKBOROUGH	35'7	51'0	43'4	24	3rd, 9th	60	14th	16	2'33	0'46	19th	—	—
ARMAGH	36'9	51'4	44'2	26	1st, 3rd	60	14th	17	1'36	0'25	18th	96	23
EDGEWORTHSTOWN	36'2	51'3	43'8	25	9th	60	14th	17	2'46	0'43	19th	—	—
DUBLIN	40'4	51'0	45'7	29	9th	61	14th	17	1'99	0'34	30th	125	30
PARSONSTOWN	*	*	*	*	*	*	*	*	*	*	*	110	27
KILKENNY CASTLE	38'2	51'6	44'9	23	9th	60	14th	17	1'85	0'43	30th	—	—
WATERFORD	35'4	51'9	45'2	24	9th	58	11th, 13th	13	1'60	0'47	30th	—	—
VALENCIA	*	*	*	*	*	*	*	*	*	*	*	136	33
KILLARNEY	38'5	51'1	44'8	25	1st, 2nd, 5th	58	14th	18	2'68	0'84	30th	—	—
FOYNES	43'2	51'1	47'2	34	1st, 4th	61	14th	13	1'25	0'23	11th	—	—

* For information see Table VII.

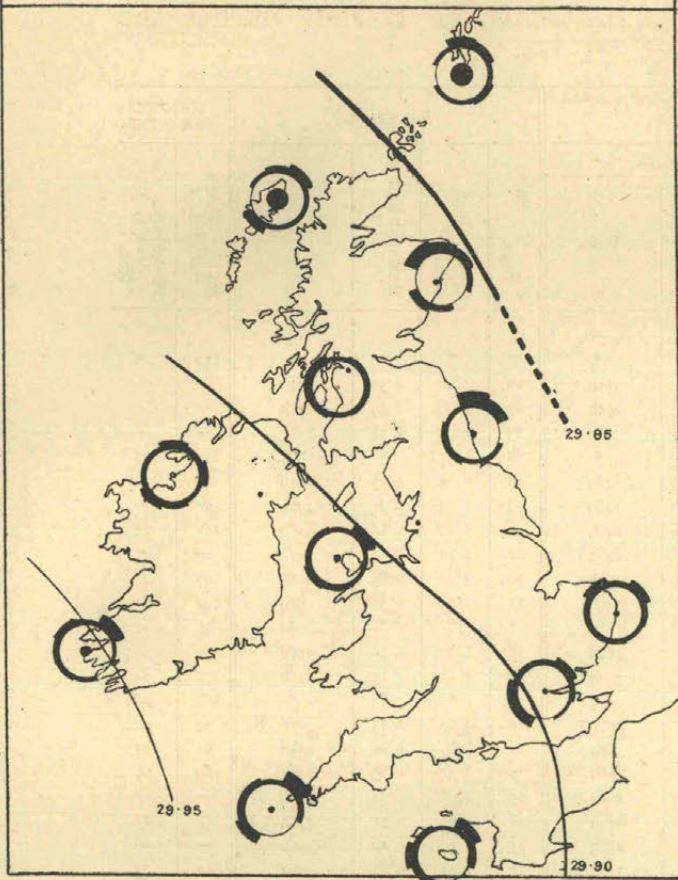
† The bright sunshine values given for Scarborough are recorded at Oswaldkirk, and those for Bawtry at Worksop.

MONTHLY WEATHER CHART APRIL 1888.

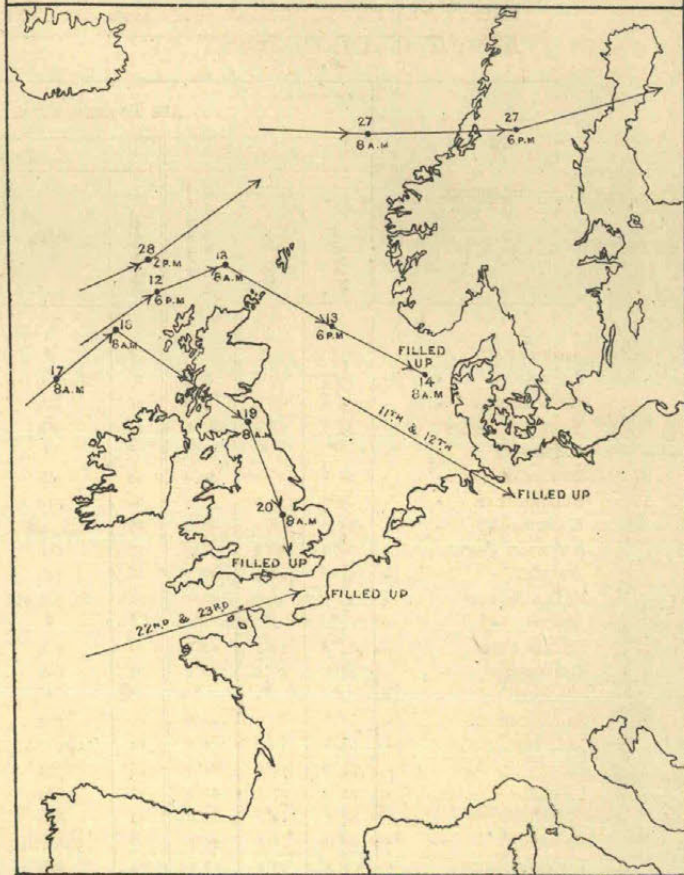
Monthly Summary

Plate IV.

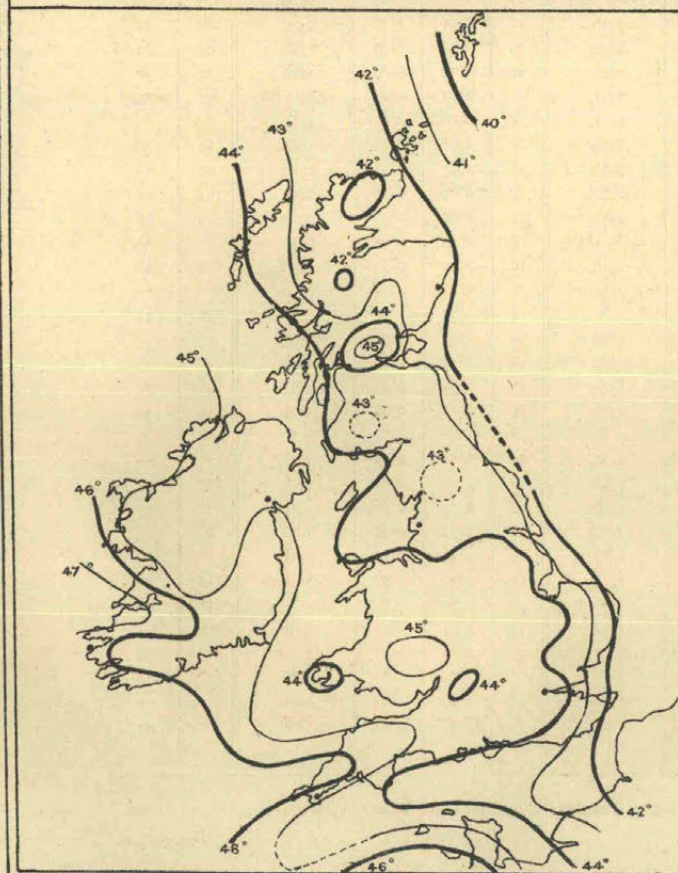
1. BAROMETER AND WIND.



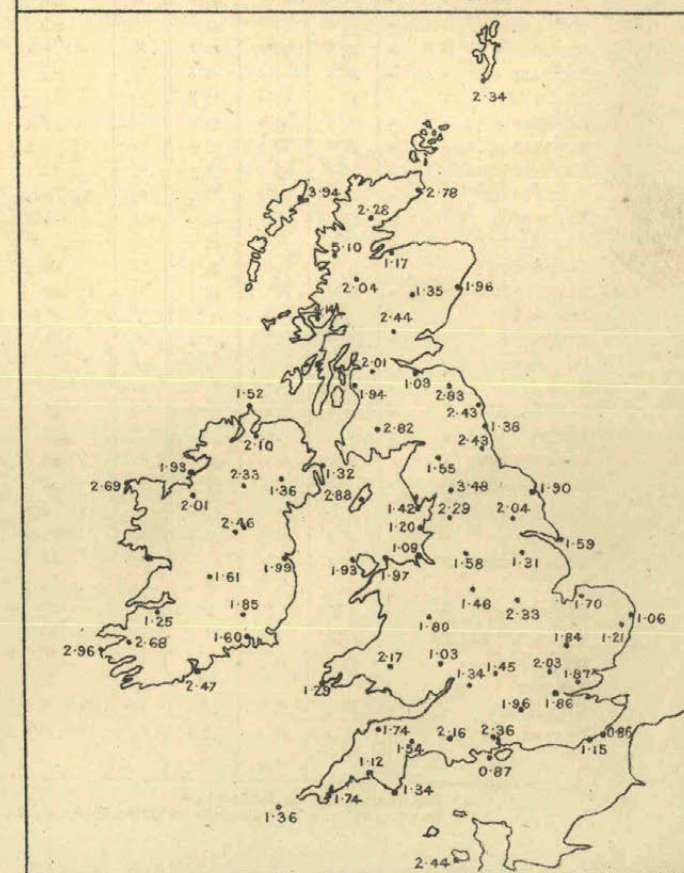
2. MOVEMENTS OF DEPRESSIONS.



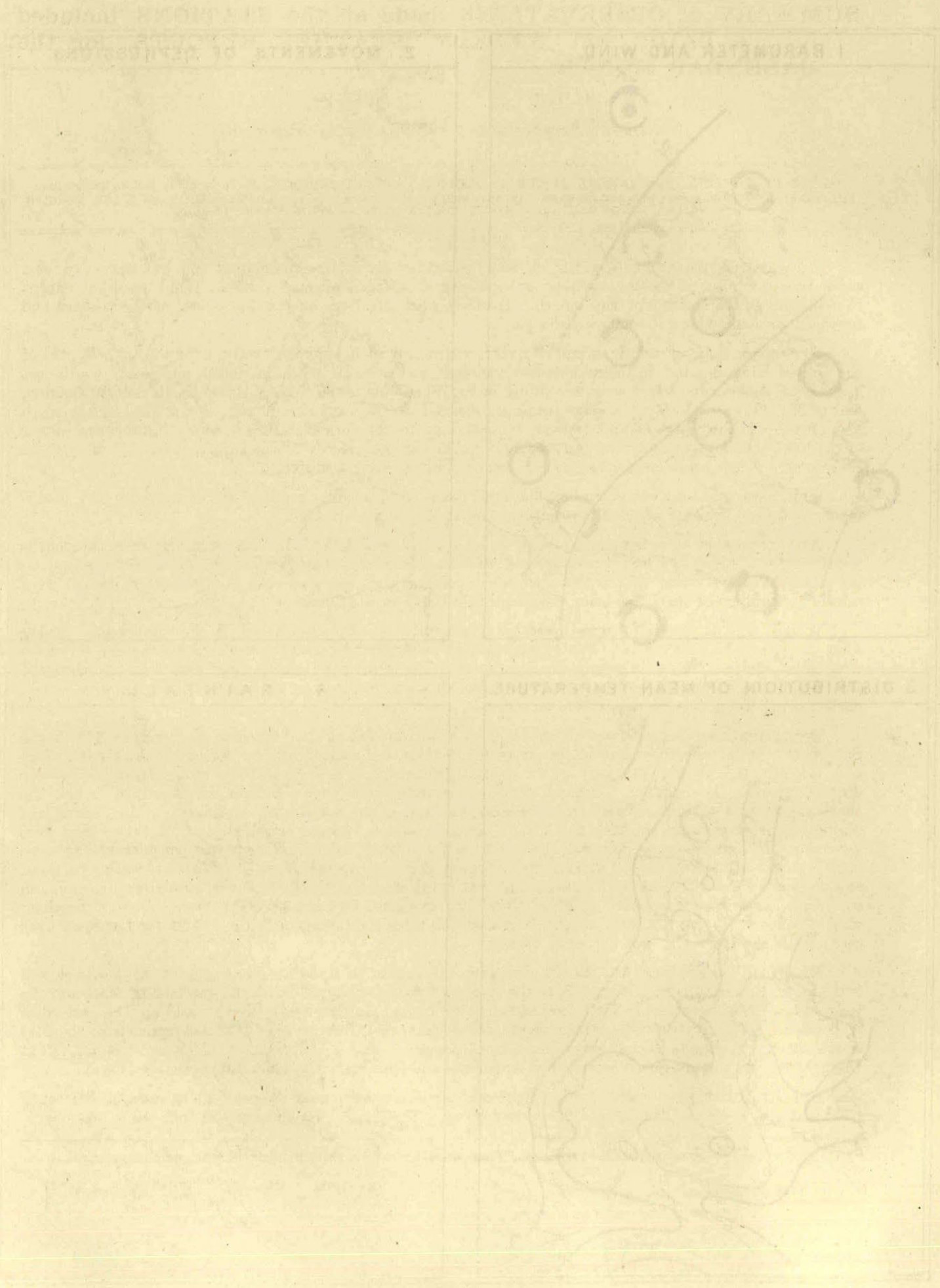
3. DISTRIBUTION OF MEAN TEMPERATURE.



4. RAINFALL.



MONTHLY WEATHER CHART APRIL 1888



OFFICIAL COPY.

SUMMARY of OBSERVATIONS made at the STATIONS included
in the DAILY and WEEKLY WEATHER REPORTS, for the
CALENDAR MONTH,

MAY 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 8, NORTH
BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & Co., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather of May was rainy at the beginning and end, but very dry for a week after the 20th. Pressure and temperature were about their average values. Wind was light, except in Scotland at the opening of the month. Rainfall was defective, except at several of the western and northern stations, where the falls were large.

Pressure.—*Mean for the Month at 8 a.m.* was nearly at its average* value over the greater part of the United Kingdom, but in the north and north-west was about 0·05 in. in defect, and in the south-east as much in excess. It ranged from 29·83 ins. in the Shetlands to 30·07 at Hurst Castle and in London, and to 30·09 ins. at Jersey. *Highest* readings exceeded 30·5 ins., and occurred on the 23rd in the north and on the 11th in England and Ireland, the maxima on the former occasion being slightly the higher of the two. *Lowest* on the 1st or 2nd; a reading of 28·88 occurred at Stornoway on the 2nd. *Range* was considerable in the north, amounting to 1·6 ins. or more, at several stations.

Depressions were not numerous, and their paths were entirely confined to the northern and north-western parts of the area, none of the centres crossing England or Ireland.

Anticyclones were two in number; the first, with readings of 30·5 ins., advanced from the south-westward on the 8th, and passed over Ireland, throwing an arm over England on the 11th. The second, on the 20th, advanced from the southward, was central over England on the 21st, and then increased in intensity, readings of 30·6 ins. being recorded in Scotland on the 23rd.

Wind was very variable, most points being nearly equally represented in the wind-roses. In the south of England and in the north-west there was an absence of Northerly winds. At Aberdeen the East wind was deficient, and at Yarmouth the South-east. The force was generally light, owing to the prevalent anticyclonic conditions, but strong gales from South-west and South were experienced in the north-west and north during the first three days of the month.

Temperature ranged from about 54° in the Channel Islands and south of England to 44° in the Shetlands. It did not differ much from its average* value, but was slightly in defect in the extreme north and down the east coast. The map shows isolated patches of rather high and low temperature irregularly distributed over the country. *Highest* readings occurred over Great Britain on the 19th, when the thermometer rose to 80°, or near it, at several stations in the north-west of England. In Ireland the highest occurred between the 20th and 25th. *Lowest* readings occurred principally on the 11th; they were generally above the freezing point at the coast stations lower inland. *Range* was considerable at some parts, and amounted to 51°·0 at Bawtry. *Vapour Tension* varied from 0·33 in. at Scilly, Valencia, and Pembroke, to 0·25 in. at Aberdeen and Sumburgh Head. It was about 0·30 in. over Ireland, and somewhat lower over England. *Relative Humidity* exceeded 90 per cent. on the west coast of Scotland and at Milford Haven. It was low over England, the value for Liverpool being 70 and for London 69 per cent., while that for Leith was not much higher.

Rainfall varied from 6·7 ins. in the west Highlands to 0·54 at Bawtry, 0·52 at Durham, and 0·39 in. at North Shields. It was above the average* in many parts of Ireland, the Isle of Man, and the west and north of Scotland, below it, to the extent of an inch, in England generally, and on the east coast of Scotland. The British Isles were almost rainless from the 10th to the 12th, and again from the 21st to the 26th. The greatest fall during the month was on the 29th, when as much as 1·84 ins. fell at Donaghadee, an amount nearly equalled at Ardrossan and Glenlee in the same districts.

Bright Sunshine varied from 61 per cent. in Jersey, and over 50 per cent. at most of the south coast stations, to 36 at Glasgow and 32 at Stornoway. The general per-centage was from 40 to 45.

* The averages employed are—*Pressure* and *Temperature*, for 29 years 1861–80; *Rainfall* for 20 years 1866–85.

TABLE IX.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
Observations are made at 8 a.m. daily, but the Number of Days of Rain, Snow, Hail,
(The Stations are grouped in Districts, and then arranged in order of Latitude,

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.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 29° 832	44° 7	38° 7	48° 5	43° 6	33	29th	58	23rd
	Wick	29° 875	47° 0	39° 0	52° 6	45° 8	29	29th	63	21st
	Stornoway	29° 866	47° 1	40° 2	51° 7	46° 0	32	10th	64	19th
1. SCOTLAND, E.	Nairn	29° 885	48° 0	39° 5	55° 7	47° 6	30	29th	78	19th
	Aberdeen	29° 907	48° 5	40° 5	55° 3	47° 9	30	28th	70	7th
	Leith	29° 928	51° 1	41° 6	57° 7	49° 7	34	11th, 12th, 29th	66	18th
2. ENGLAND, N.E.	Shields	29° 955	49° 1	42° 3	55° 4	48° 9	35	10th	66	7th, 18th
	York	29° 999	50° 7	42° 7	61° 3	52° 0	33	27th	78	19th
	Spurn Head	30° 007	49° 4	43° 8	54° 8	49° 3	38	11th	66	7th
3. ENGLAND, E.	Yarmouth	30° 040	50° 3	43° 6	56° 0	49° 8	37	10th, 11th	70	7th
	Cambridge	30° 053	53° 0	41° 3	63° 3	52° 3	30	11th	77	19th
4. MIDLAND COUNTIES	Loughborough	30° 035	51° 3	42° 7	62° 5	52° 6	33	12th	76	19th
	Oxford	30° 055	50° 3	43° 2	60° 7	52° 0	36	11th, 12th	74	19th
5. ENGLAND, S.	London	30° 067	52° 7	44° 3	62° 8	53° 6	34	12th	76	19th
	Dungeness	30° 057	49° 7	44° 1	55° 0	49° 6	32	12th	64	19th
	Hurst Castle	30° 074	51° 1	44° 4	57° 9	51° 2	34	12th	69	18th
6. SCOTLAND, W.	Ardrossan	29° 927	50° 2	43° 0	56° 1	49° 6	34	10th	70	19th, 23rd
7. ENGLAND, N.W.	Hawes Junction*	28° 734	45° 6	37° 8	53° 9	45° 9	28	10th	73	19th
	Barrow-in-Furness	29° 975	49° 2	44° 6	56° 0	50° 3	38	10th	73	19th
	Liverpool	30° 000	51° 5	45° 2	59° 5	52° 4	40	2nd, 4th, 10th, 15th, 4th	79	19th
	Holyhead	29° 985	50° 5	45° 2	55° 8	50° 5	40	4th	72	19th
8. ENGLAND, S.W.	Pembroke	30° 006	49° 7	45° 5	53° 7	49° 6	42	15th	68	24th
	Prawle Point	30° 060	50° 0	43° 6	54° 7	49° 2	37	3rd, 5th	65	22nd, 23rd
9. IRELAND, N.	Malin Head	29° 902	47° 8	44° 4	52° 9	48° 7	38	4th	65	19th
	Donaghadee	29° 954	49° 7	45° 5	57° 2	51° 4	35	4th	68	24th
	Mullaghmore	29° 929	50° 4	44° 5	57° 0	50° 8	37	4th, 9th	69	24th
	Belmullet	29° 933	51° 0	46° 2	54° 5	50° 4	39	9th, 11th	67	24th
10. IRELAND, S.	Parsonstown	29° 970	50° 9	43° 0	60° 5	51° 8	34	4th	72	24th, 25th
	Valencia	29° 988	54° 2	46° 7	58° 2	52° 5	40	4th, 12th	69	23rd, 24th, 25th
	Roche's Point	29° 982	51° 6	46° 1	55° 8	51° 0	40	11th	66	23rd
CHANNEL ISLANDS	Scilly (St Mary's)	30° 015	52° 2	46° 8	55° 5	51° 2	42	3rd, 15th, 19th	60	22nd, 24th
	Jersey	30° 086	53° 0	46° 8	59° 5	53° 2	39	15th	67	18th

* Hawes Junction is 1,135 feet above Mean Sea Level and the

REPORTING STATIONS in the BRITISH ISLANDS during the Month of MAY 1888.

Thunderstorms, and Gales are counted irrespective of the Hours at which they occurred.

beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	RELATIVE HUMIDITY.	AMOUNT OF CLOUD.	RAINFALL.			WEATHER, No. of Days of							WIND, No. of Observations of									
			Total Fall in the Month.	Maximum Fall in One Day.	Date.	Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calms.	
ins. 0.253	% 86	7.5	ins. 2.52	ins. 0.42	6th	23	1	1	0	3	14	1	5	3	2	3	2	1	8	5	2	
275	86	7.5	2.58	0.65	16th	28	2	2	1	2	14	7	3	3	1	2	7	4	3	8	0	
305	94	7.7	3.79	0.89	29th	21	0	1	1	3	20	4	1	3	6	3	4	2	4	6	2	
265	80	6.9	1.07	0.15	30th	21	0	0	1	3	13	0	0	2	4	2	2	4	8	2	7	
253	75	6.7	1.20	0.37	29th	12	0	0	1	4	9	6	5	2	1	3	5	4	4	7	0	
265	71	5.8	0.65	0.16	19th	12	0	0	1	6	2	1	1	4	2	4	5	1	11	3	0	
277	79	6.6	0.39	0.25	29th	5	0	0	0	7	12	3	4	3	2	3	5	5	6	3	0	
264	72	4.7	0.67	0.26	29th	7	0	1	1	11	7	1	7	2	1	0	11	2	6	2	0	
283	81	4.8	0.77	0.23	16th	10	0	0	0	9	3	3	7	3	1	2	4	7	3	4	0	
285	79	4.2	1.02	0.59	16th	9	0	0	0	11	1	1	7	4	1	1	4	4	8	2	0	
295	73	5.8	0.73	0.28	29th	8	0	1	0	8	10	0	9	2	2	0	5	10	3	0	0	
288	76	7.1	0.83	0.27	29th	7	0	1	0	1	10	3	3	3	2	3	5	5	6	4	0	
281	77	5.9	1.43	0.33	17th	10	0	0	1	11	12	1	2	8	1	3	6	5	4	2	0	
272	69	6.0	0.80	0.26	16th	4	0	0	0	8	9	3	1	6	4	2	4	5	7	1	1	
288	81	5.7	1.04	0.29	16th	7	0	0	1	8	9	1	1	5	6	0	3	5	9	1	1	
322	85	4.6	1.45	0.62	17th	8	0	1	0	11	4	5	1	7	6	2	3	7	5	0	0	
286	80	5.3	3.92	1.79	29th	16	0	1	0	14	14	3	0	3	4	2	5	3	9	3	2	
261	85	6.1	3.85	1.14	2nd	14	1	1	1	9	14	2	3	4	2	4	8	5	3	1	1	
278	79	5.7	1.15	0.31	29th	12	0	0	0	10	13	3	2	5	4	6	3	6	1	4	0	
265	70	6.4	0.56	0.22	3rd	7	0	0	1	5	10	2	0	1	4	9	3	5	6	3	0	
304	83	6.0	1.10	0.24	2nd, 29th	12	0	0	0	6	8	3	3	4	1	1	9	6	4	1	2	
328	92	5.4	1.10	0.29	29th	12	0	0	0	10	12	6	1	4	4	6	7	6	3	0	0	
309	86	6.6	1.41	0.33	17th	10	0	0	0	7	16	4	1	6	9	1	4	4	5	1	0	
290	88	6.7	2.57	0.53	29th	19	0	1	1	8	17	2	4	2	1	7	6	3	2	6	0	
300	84	5.1	2.89	1.84	29th	10	0	0	0	11	7	3	3	5	1	4	5	4	6	3	0	
296	82	5.6	2.18	0.41	29th	18	0	1	1	9	6	9	0	4	8	3	2	5	4	6	1	
297	79	6.1	3.03	0.47	1st	17	0	0	0	10	16	5	1	3	6	3	4	2	4	6	2	
298	80	6.0	2.04	0.68	29th	12	0	1	0	8	13	0	0	1	0	3	2	5	3	0	17	
325	77	6.1	3.71	0.89	29th	17	0	1	0	7	12	5	3	4	2	5	2	4	6	2	3	
323	84	6.1	3.64	0.85	29th	17	0	1	0	9	14	9	5	0	5	5	2	5	6	3	0	
325	83	7.1	1.16	0.26	29th	16	0	1	0	5	13	7	0	4	7	4	5	4	6	1	0	
315	78	5.1	1.39	0.38	16th	9	0	0	1	10	9	5	2	6	7	2	3	4	3	4	0	

barometrical observations at this station are not reduced for altitude.

TABLE X.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT during the Month of MAY 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Per-centages of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	*	*	*	*	*	*	*	*	*	*	*	161	32
LAIRG	38°0	54°5	46°3	27	28th	72	23rd	20	1°98	0°26	30th	—	—
GLENCARRON	39°7	54°4	47°1	32	10th	73	19th	21	6°70	1°07	7th	—	—
FORT AUGUSTUS	40°1	54°9	47°5	31	11th, 12th	77	19th	19	2°83	0°71	19th	—	—
ABERDEEN	*	*	*	*	*	*	*	*	*	*	*	211	42
BRAEMAR	37°3	55°3	46°3	27	29th	72	19th	14	3°38	1°02	29th	202	40
OCHTERTYRE	39°8	59°9	49°9	30	10th	74	21st	15	3°92	0°88	29th	—	—
MARCHMONT	39°9	56°3	48°1	31	29th	72	19th	12	0°83	0°14	16th, 29th	211	42
ALNWICK CASTLE	41°8	53°7	47°8	33	9th, 11th	65	18th	8	1°04	0°42	29th	—	—
DURHAM	40°2	58°9	49°6	30	10th	74	19th	7	0°52	0°30	29th	202	41
SCARBOROUGH	42°2	56°4	49°3	34	10th	69	7th	10	0°77	0°36	29th	†199	41
YORK	*	*	*	*	*	*	*	*	*	*	*	222	45
HILLINGTON	41°1	60°7	50°9	29	11th	77	19th	8	0°82	0°25	16th, 29th	225	46
GELDESTON	42°1	59°7	50°9	32	11th	73	19th	7	0°87	0°39	16th	243	50
CAMBRIDGE	*	*	*	*	*	*	*	*	*	*	*	209	43
ROTHAMSTED	41°3	60°4	50°9	31	11th	73	19th	7	1°21	0°40	17th	—	—
INGATESTONE	41°8	60°4	51°1	33	3rd	72	19th	6	0°86	0°27	16th	192	40
BAWTRY	39°8	62°7	51°3	29	10th	80	19th	7	0°54	0°26	29th	†201	41
CHEADLE	41°1	58°6	49°9	35	2nd	74	19th	8	0°77	0°27	29th	—	—
CHURCHSTOKE	39°5	59°8	49°7	32	13th	75	19th	7	0°92	0°32	29th	217	45
HEREFORD	42°3	63°4	52°9	33	11th	76	19th	9	0°80	0°25	29th	—	—
GIRENCESTER	40°4	60°3	50°4	32	13th, 15th	72	19th	7	2°20	0°45	17th	223	46
OXFORD	*	*	*	*	*	*	*	*	*	*	*	223	46
LONDON	*	*	*	*	*	*	*	*	*	*	*	211	44
SIRATHFIELD TURGISS	41°2	63°9	52°6	32	11th	75	19th	8	1°67	0°58	17th	—	—
HASTINGS	44°6	56°8	50°7	38	12th	69	18th	9	1°00	0°45	16th	257	54
SOUTHAMPTON	44°0	62°4	53°2	35	12th	72	8th, 24th	6	2°19	0°83	17th	240	50
STOWELL	42°3	59°7	51°0	34	12th	69	18th	12	1°42	0°53	17th	178	37
LAUDALE	43°5	55°7	49°6	33	10th	72	19th	20	6°73	1°31	2nd	—	—
GLASGOW	42°9	57°8	50°4	36	9th	70	23rd	14	3°19	0°76	19th	178	36
GLENLEE	39°2	59°3	49°3	28	10th	77	19th	15	5°32	1°28	29th	—	—
DOUGLAS	42°4	56°5	49°5	34	10th	71	23rd	12	2°10	0°70	29th	230	47
NEWTON REIGNY	39°3	57°8	48°6	29	10th	76	19th	12	2°57	0°91	2nd	208	42
STONYHURST	42°4	57°4	49°9	30	2nd, 10th, 12th, 14th, 10th	76	19th	11	0°93	0°19	2nd, 30th	180	37
BLACKPOOL	44°4	56°8	50°6	36	10th	79	19th	10	1°25	0°33	29th	203	41
MANCHESTER	42°8	59°0	50°9	35	9th, 10th	78	19th	10	1°01	0°28	3rd	—	—
LLANDUDNO	44°4	58°0	51°2	38	12th	77	19th	11	0°74	0°20	16th	207	43
LLANDOVERY	41°2	63°1	52°2	30	12th	73	19th	13	1°80	0°30	9th, 17th, 29th	—	—
PEMBROKE	*	*	*	*	*	*	*	*	*	*	*	232	48
ARLINGTON	42°5	58°0	50°3	31	15th	68	24th	14	1°59	0°29	17th	—	—
CULLOMPTON	41°9	61°6	51°8	32	15th	71	24th	8	1°84	0°62	17th	220	46
PALMOUTH	45°9	57°0	51°5	37	15th	65	23rd	12	1°53	0°33	17th	258	55
PLYMOUTH	46°7	61°3	54°0	38	5th, 15th	74	24th	11	2°20	0°52	16th	241	51
JERSEY	*	*	*	*	*	*	*	*	*	*	*	286	61
LONDONDERRY	42°7	59°6	51°2	35	11th	74	23rd, 24th, 25th	17	2°08	0°64	29th	—	—
MARKREE CASTLE	40°7	57°3	49°0	28	9th	73	24th	16	2°79	0°43	18th	204	42
BROOKBOROUGH	40°0	59°0	49°5	29	9th	73	25th	15	2°71	0°86	29th	—	—
ARMAGH	41°3	59°1	50°2	33	9th, 12th	70	23rd	14	2°37	0°82	29th	213	43
EDGEWORTHSTOWN	40°8	59°1	50°0	31	4th	72	25th	16	2°72	0°72	29th	—	—
DUBLIN	45°3	59°6	52°5	37	4th	69	7th	11	0°98	0°25	29th	238	49
PARSONSTOWN	*	*	*	*	*	*	*	*	*	*	*	209	43
KILKENNY CASTLE	42°7	59°9	51°3	32	4th	72	24th	11	2°95	1°18	29th	—	—
WATERFORD	42°9	60°0	51°5	34	12th	71	24th	11	2°42	0°75	29th	—	—
VALENCIA	*	*	*	*	*	*	*	*	*	*	*	233	48
KILLARNEY	43°8	59°9	51°9	35	12th, 13th	72	24th, 25th	15	3°84	0°95	18th	—	—
FOYNES	46°8	59°2	53°0	41	10th	73	24th	16	3°45	0°84	18th	—	—

* For information see Table IX.

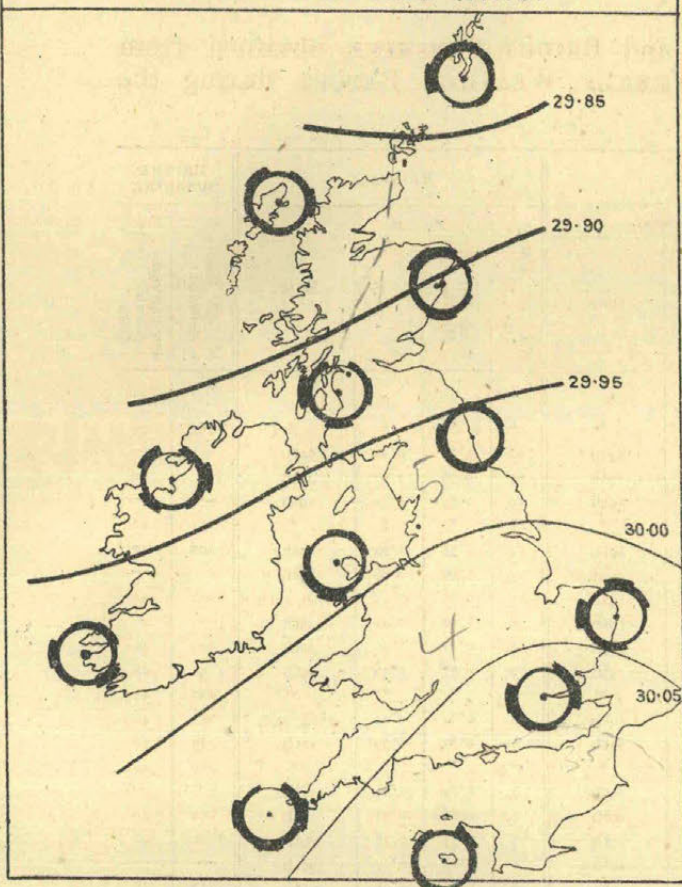
† The bright sunshine values given for Scarborough are recorded at Oswaldkirk and those for Bawtry at Worksop.

MONTHLY WEATHER CHART. MAY 1888.

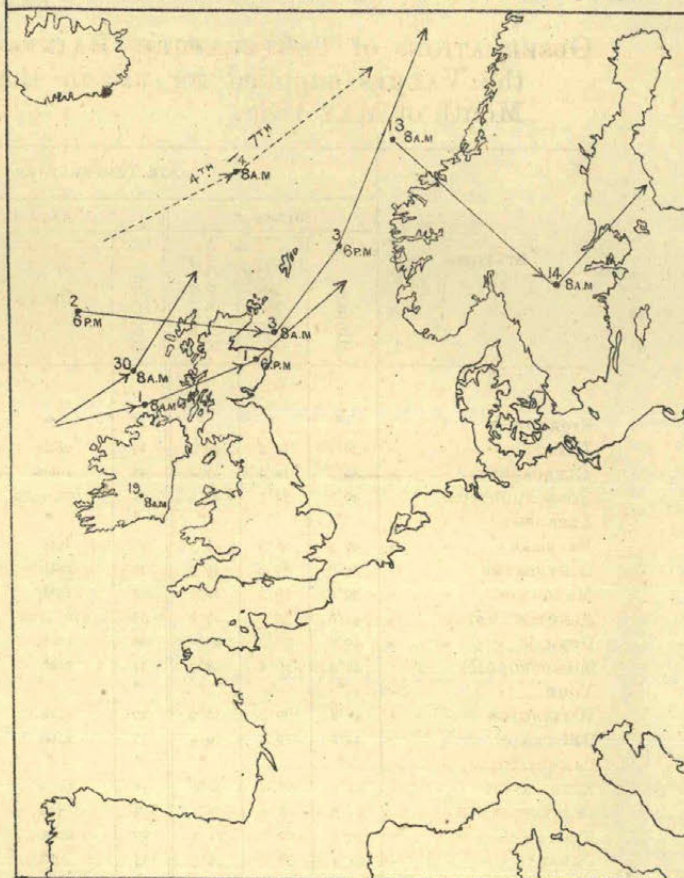
Monthly Summary.

Plate V.

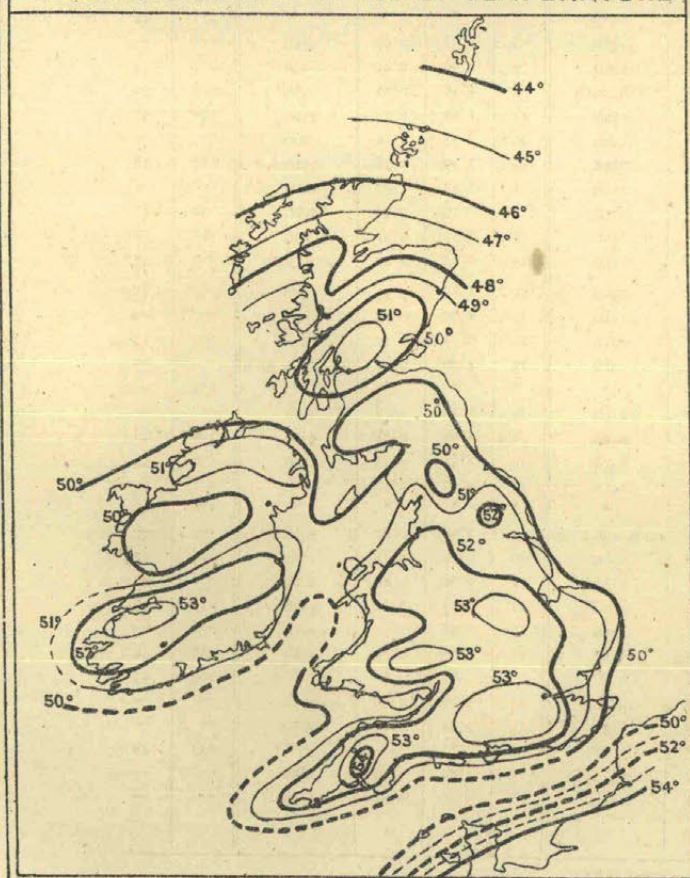
1 BAROMETER AND WIND.



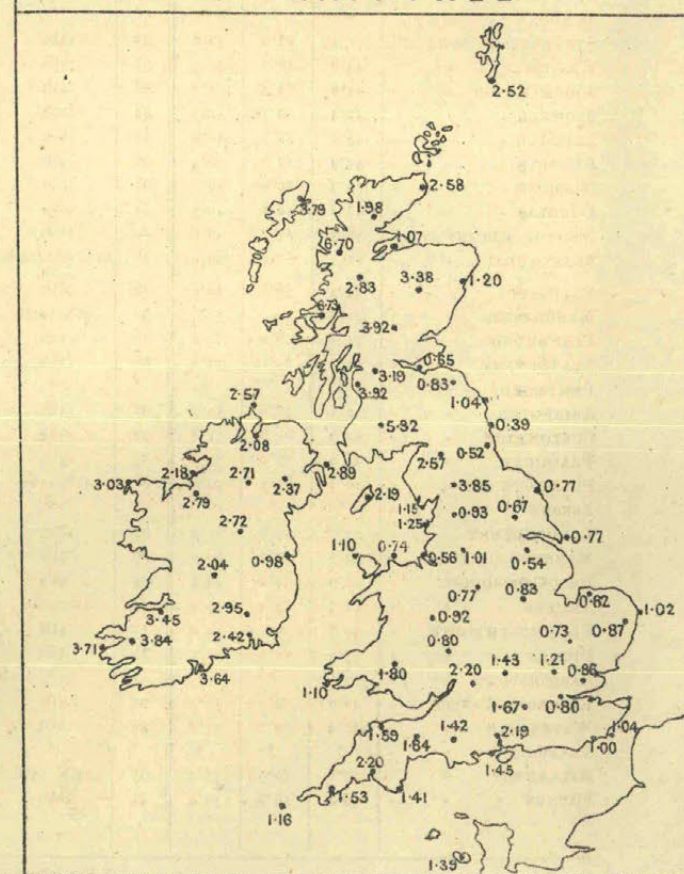
2. MOVEMENTS OF DEPRESSIONS.



3. DISTRIBUTION OF MEAN TEMPERATURE.



4 RAINFALL.



SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

JUNE 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & Co., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather of June was rather cold, especially along the eastern coast of Great Britain, owing to the prevalence in these regions of north-easterly winds. There were no serious depressions and the barometrical means were very uniform. Rainfall was below the average except in Ireland, where the amount was excessive, owing to several falls, exceeding an inch in a day, which were reported in the early and latter parts of the month.

Pressure.—*Mean for the month at 8 a.m.* was remarkably uniform, ranging between 29·90 ins. and 30·00 ins. It was 0·10 in. above the average* for June in north Scotland and 0·05 in. below the corresponding average in the south of England. *Highest* readings occurred generally between the 19th and 23rd, 30·4 ins. being reached in Scotland on both the days named. In the south of England, however, the barometer was highest on the 1st, when an anticyclone lay over France and the Channel. *Lowest* over our north-western districts on the 12th, when a depression passed outside the west of Scotland, but the barometer never fell below 29·3 ins. At Scilly a reading of 29·36 ins. was recorded on the 8th. *Range* was slight, barely exceeding an inch in the extreme north of Scotland, where both the highest and lowest readings were recorded.

Depressions were neither numerous nor important, as might be expected from the season. The tracks of most of them lay outside our western and northern coasts. A shallow elongated system passed from south to north over Great Britain on the 8th and 9th, and others appeared over northern England on the 28th, and southern Norway on the 29th.

Anticyclones.—None of these systems were well marked. On the 5th and 6th one, with readings above 30·2 ins. at the centre, passed over Scotland. From the 17th to the 25th the general conditions were anticyclonic, but the systems were not clearly defined.

Wind was variable. All down the east coast and at Holyhead North-easterly winds showed a decided maximum. At Valencia and Scilly this does not appear. In Jersey the maximum prevalence was from West. Hardly any gales were reported, the largest number at any station being 6, at Mullaghmore.

Temperature.—*Mean at Sea Level* varied from about 48° in Shetland to 59° in London, and about 57° in the south of Ireland. It was below the average* along the east coast to the extent of some five or six degrees, owing to the prevalence of North-easterly winds already mentioned. Elsewhere the deficit was not so serious, only reaching two or three degrees. *Highest* readings occurred generally on the 25th or 26th, during which interval 88° was registered at Cambridge, 85° at London; Londonderry, Nairn, and York, and 84° at Loughborough; 84° was recorded also on the 3rd at Geldeston. *Lowest* readings were registered at very various dates. Between the 2nd and 6th the shade temperatures fell below 32° at the northern Scottish stations, and at Newton Reigny. The absolute minima were as high as 45° at several of the western and southern coast stations. *Range* was considerable, exceeding 50° at Braemar, Nairn, and Newton Reigny, and attaining 40° at several other places. *Vapour Tension* exceeded 0·40 in. along the Channel coast. It was as low as 0·28 in. at Sumburgh Head, and was only 0·31 in. over the north of England. *Relative Humidity* was above 90 per cent. over the south-western counties of England, elsewhere it was generally about 80, except that a small area, with values below 75 per cent., appeared near Liverpool.

Rainfall varied from 5·66 ins. at Brookeborough, and 5·63 ins. at Mullaghmore to 0·87 in. at Yarmouth, and 0·91 in. at Geldeston. It exceeded the average* considerably in Ireland, owing to several falls exceeding an inch in the 24 hours. Of these, there were three at Edgeworthstown, and two each at Brookeborough, Mullaghmore, Parsonstown, and Roche's Point. Elsewhere the fall was nearly normal. The quantity recorded was, however, irregularly distributed. Some of it came down in thunderstorms. At Rothamsted, 3·24 ins. fell in 4 hours on the night of the 26th. Very little rain was recorded during the anticyclonic period succeeding the 20th.

Bright Sunshine was most abundant at Stornoway and Braemar, where the figure was 45 per cent. of its possible value. Next to these stations came Newton Reigny with 42, Aberdeen and Glasgow with 41, and Douglas with 40. At many English stations the amount was below 30, in London, at Llandudno, and at Stowell it was 26, and at Bawtry only 23.

* The averages employed are—*Pressure and Temperature* for the 20 years, 1861–80; *Rainfall* for the 20 years, 1866–85.

TABLE XI.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
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.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 29°996	46°8	42°1	51°4	46°8	33	2nd	58	23rd
	Wick	29°999	51°2	43°4	55°7	49°6	32	5th	68	17th
	Stornoway	29°957	51°6	42°7	56°5	49°6	31	2nd	75	26th
1. SCOTLAND, E.	Nairn	29°979	50°6	43°0	59°3	51°2	30	2nd	84	26th
	Aberdeen	29°994	50°5	43°6	57°5	50°6	30	4th	70	26th
	Leith	29°981	51°3	44°8	57°6	51°2	39	3rd, 5th	72	14th
2. ENGLAND, N.E.	Shields	29°955	50°2	45°2	56°0	50°6	40	3rd	67	12th
	York	29°956	53°3	46°1	63°2	54°7	36	5th	85	26th
	Spurn Head	29°940	52°4	48°2	57°3	52°8	43	5th	60	12th
3. ENGLAND, E.	Yarmouth	29°939	55°1	50°1	60°2	55°2	42	1st	81	3rd
	Cambridge	29°942	57°1	47°7	68°2	58°0	41	7th	88	25th
4. MIDLAND COUNTIES	Loughborough	29°954	54°2	47°9	66°2	57°1	39	18th	84	25th, 26th
	Oxford	29°949	54°5	49°2	64°6	56°9	39	18th	77	25th
5. ENGLAND, S.	London	29°948	57°0	50°4	67°0	58°7	45	18th	85	25th
	Dungeness	29°924	55°2	50°1	60°1	55°1	42	1st, 18th	75	25th
	Hurst Castle	29°944	55°9	51°1	62°6	56°9	42	18th	73	2nd, 25th
6. SCOTLAND, W.	Ardrossan	29°947	53°2	46°4	61°3	53°9	38	5th	80	26th
7. ENGLAND, N.W.	Hawes Junction*	28°716	49°9	43°3	58°3	50°8	35	5th	78	26th
	Barrow-in-Furness	29°934	54°3	49°7	62°1	55°9	40	17th	82	25th, 26th
	Liverpool	29°938	55°8	49°4	63°4	56°4	44	6th, 20th	82	25th
	Holyhead	29°925	54°2	49°6	59°7	54°7	45	6th	78	25th
8. ENGLAND, S.W.	Pembroke	29°917	54°2	50°7	59°4	55°1	38	6th	70	23rd, 25th
	Prawle Point	29°942	55°3	48°2	60°1	54°2	41	15th	71	23rd
9. IRELAND, N.	Malin Head	29°917	51°2	48°3	56°0	52°2	40	2nd	68	25th
	Donaghadee	29°943	52°8	48°5	60°1	54°3	44	1st	71	26th
	Mullaghmore	29°909	54°1	49°4	60°8	55°1	41	14th	76	25th
	Belmullet	29°908	55°2	50°6	60°4	55°5	44	4th	75	25th
10. IRELAND, S.	Parsonstown	29°918	55°1	49°1	64°4	56°8	39	14th	76	25th
	Valencia	29°909	58°5	51°9	62°9	57°4	45	10th, 14th	73	24th
	Roche's Point	29°907	56°5	51°2	61°3	56°3	45	14th	69	23rd, 30th
CHANNEL ISLANDS	Scilly (St. Mary's)	29°911	56°5	54°4	60°3	55°9	41	6th	66	27th
	Jersey (Noirmont)	29°965	57°0	52°1	63°2	57°7	45	22nd	78	24th

* Hawes Junction is 1,135 feet above Mean Sea Level, and the

SUMMARY OF OBSERVATIONS, JUNE 1888.

xxiii

REPORTING STATIONS in the BRITISH ISLANDS, during the Month of JUNE 1888.

Thunderstorms, and Gales are counted irrespective of the hour at which they occurred.

Latitude, beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	RELATIVE HUMIDITY.	AMOUNT OF CLOUD.	RAINFALL.		Date.	WEATHER. No. of Days of							WIND. No. of Observations of								
			Total Fall in the Month.	Maximum Fall in One Day.		Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calms.
ins. 0.277	% 87	7.6	ins. 1.80	in. 0.87	9th	9	0	0	0	5	16	1	5	12	1	4	2	0	1	4	1
*323	86	6.6	1.45	0.60	3rd	9	0	0	0	9	15	2	3	6	4	7	7	1	1	1	0
*335	88	5.8	1.83	0.42	3rd	11	0	0	0	8	13	7	1	3	12	4	1	2	0	2	5
*301	81	6.6	1.25	0.43	3rd	11	0	1	0	9	16	0	2	3	11	1	0	2	2	0	9
*290	79	7.1	2.57	1.01	3rd	10	0	0	1	5	17	1	7	5	4	4	3	2	2	2	1
*305	80	7.1	2.01	0.70	2nd	14	0	0	3	5	15	0	2	4	16	1	1	1	5	0	0
*312	86	8.1	1.74	0.54	2nd	13	0	0	1	4	19	0	13	4	4	1	2	2	3	1	0
*331	81	7.2	1.86	0.40	13th	15	0	0	2	6	15	0	8	3	5	2	2	2	5	3	0
*338	86	5.7	1.70	0.20	9th	17	0	0	1	4	4	2	5	7	3	3	1	3	5	3	0
*364	84	5.2	0.87	0.30	30th	18	0	0	2	5	3	0	4	8	2	1	4	3	4	4	0
*378	81	8.3	1.72	0.49	14th	15	0	3	6	2	20	0	9	1	2	0	7	7	2	2	0
*342	81	8.8	1.75	0.42	20th	15	0	0	5	0	21	1	6	7	3	4	1	1	5	2	1
*347	82	7.5	2.88	1.03	21st	17	0	2	4	3	16	0	2	9	1	2	5	3	5	3	0
*361	77	8.5	2.85	0.93	26th	18	0	0	4	0	19	0	1	7	4	2	5	3	5	3	0
*370	85	6.8	1.76	0.27	13th, 21st	18	0	0	2	2	8	0	3	6	3	0	4	4	7	3	0
*412	92	6.5	2.93	0.62	21st	18	0	1	2	2	5	1	3	4	3	1	4	7	7	0	1
*325	80	4.6	2.93	0.85	11th	12	0	0	0	15	11	2	1	13	5	0	2	2	1	3	3
*307	86	6.6	3.08	1.07	9th	15	0	0	1	7	16	0	3	7	9	2	5	2	1	0	1
*334	79	5.8	1.32	0.34	27th	13	0	0	1	7	11	1	4	12	1	6	1	3	0	3	0
*326	73	6.2	2.04	0.75	27th	20	0	0	2	8	13	0	2	6	7	7	1	1	5	1	0
*355	84	6.3	2.74	0.46	27th	19	0	0	1	6	11	0	2	7	5	2	6	3	2	2	1
*388	93	7.0	2.39	0.67	5th	18	0	0	0	5	15	1	2	3	5	6	4	6	2	2	0
*394	90	7.1	2.56	1.10	5th	15	0	0	1	4	14	0	0	6	5	1	3	5	6	3	1
*333	89	6.4	3.17	0.73	11th	15	0	0	1	8	15	0	2	2	6	10	3	0	2	5	0
*350	87	5.1	3.19	0.62	11th	17	0	0	3	12	10	2	6	8	4	4	3	2	1	2	0
*343	81	6.7	5.63	1.10	5th	14	0	1	1	6	12	6	3	2	11	3	1	3	3	3	1
*355	82	7.7	4.45	0.98	11th	14	0	0	1	6	21	0	2	3	10	4	1	3	4	3	0
*351	81	7.3	4.75	1.07	5th	17	0	0	1	5	17	0	3	3	1	1	1	4	1	1	15
*395	80	7.3	3.31	1.30	11th	19	0	0	1	3	17	1	3	4	1	5	2	3	5	3	4
*390	85	6.2	5.43	1.30	11th	16	0	0	0	6	11	0	3	2	5	6	3	3	3	5	0
*404	88	8.9	3.12	0.66	27th	17	0	0	1	0	20	3	3	1	5	3	4	5	3	5	1
*394	85	6.6	2.97	0.80	5th	15	0	1	3	6	13	2	1	5	3	4	1	4	9	2	1

barometric observations at this station are not corrected for altitude.

TABLE XII.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT during the Month of JUNE 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Percentages of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	*	*	*	*	*	*	*	*	*	*	*	238	45
LAIRG	40'5	59'9	50'2	28	5th	75	26th	12	2'95	0'90	3rd	—	—
GLENCARRON	42'5	61'7	52'1	33	2nd, 4th	82	26th	12	2'40	0'53	9th	—	—
FORT AUGUSTUS	44'8	59'5	52'2	32	5th	81	26th	11	1'17	0'34	9th	—	—
ABERDEEN	*	*	*	*	*	*	*	*	*	*	*	217	41
BRAEMAR	39'7	61'7	50'7	26	6th	77	25th, 26th	10	2'75	0'71	3rd	238	45
OCHTERTYRE	43'9	64'5	54'2	29	4th	78	17th, 26th	13	3'58	1'26	2nd	—	—
MARCHMONT	43'2	57'7	50'5	36	5th	75	26th	10	2'93	1'02	28th	185	35
ALNWICK CASTLE	45'4	54'9	50'2	40	2nd, 4th	63	11th, 12th, 13th, 26th.	13	2'59	1'00	2nd	—	—
DURHAM	44'7	59'2	52'0	38	5th	71	26th	15	1'60	0'26	2nd	140	27
SCARBOROUGH	46'4	57'6	52'0	43	2nd, 3rd, 5th, 6th.	69	3rd, 12th	17	2'54	0'48	2nd	140	28
YORK	*	*	*	*	*	*	*	*	*	*	*	141	28
HILLINGTON	47'9	66'2	57'1	38	14th, 15th	81	25th	15	1'74	0'78	28th	157	31
GELDESTON	49'0	65'1	57'1	41	1st	84	3rd	16	0'91	0'22	14th	178	36
CAMBRIDGE	*	*	*	*	*	*	*	*	*	*	*	133	27
ROTHAMSTED	48'2	65'3	56'8	41	7th	82	25th	18	4'74	3'24	26th	—	—
INGATESTONE	49'0	65'5	57'3	42	7th	81	3rd	16	2'93	0'81	25th	141	29
BAWTRY	47'2	64'6	55'9	38	17th	82	26th	16	2'25	0'72	9th	116	23
LEICESTER	*	*	*	*	*	*	*	*	*	*	*	*	*
CHEADLE	46'0	61'7	53'9	38	1st	79	25th	14	3'26	0'56	27th	—	—
CHURCHSTOKE	46'2	63'2	54'7	35	20th	78	25th	17	2'82	0'61	27th	138	28
HEREFORD	48'3	65'8	57'1	41	18th	80	25th	15	3'59	0'56	27th	—	—
CIRENCESTER	47'1	63'1	55'1	36	18th	76	25th	16	2'65	0'71	21st	144	29
OXFORD	*	*	*	*	*	*	*	*	*	*	*	131	27
LONDON	*	*	*	*	*	*	*	*	*	*	*	128	26
STRATHFIELD TURGISSE	48'6	67'3	58'0	37	18th	80	3rd	17	2'47	0'43	21st	—	—
HASTINGS	50'1	62'2	56'2	45	1st, 14th, 18th	80	25th	19	2'87	0'84	21st	162	33
SOUTHAMPTON	50'7	65'9	58'3	40	18th	79	25th	17	2'80	0'61	27th	154	32
STOWELL	47'0	63'2	55'6	39	18th	77	25th	17	3'17	0'52	5th	126	26
LAUDALE	47'5	63'6	55'6	38	5th	80	25th, 26th	10	5'02	2'26	11th	—	—
GLASGOW	46'2	61'9	54'1	38	5th	75	26th	13	2'42	0'76	2nd	213	41
GLENLEE	45'1	62'3	53'7	33	5th	81	25th, 26th	13	4'10	0'91	11th	—	—
DOUGLAS	48'6	61'2	54'9	42	1st, 14th	77	25th	17	2'42	0'36	6th	202	40
NEWTON REIGNY	43'6	62'1	52'9	30	5th	82	26th	12	1'23	0'21	2nd	214	42
STONYHURST	46'7	61'7	54'2	39	5th	81	26th	17	2'27	0'50	27th	170	34
BLACKPOOL	48'2	62'9	55'6	41	20th	83	26th	14	1'64	0'56	27th	148	29
MANCHESTER	47'2	62'2	54'7	40	1st	82	26th	18	3'38	0'82	27th	—	—
LLANDUDNO	49'8	61'1	55'5	43	14th	77	25th	18	2'51	0'79	27th	131	26
LLANDOVERY	47'8	66'5	57'2	36	30th	80	25th	21	4'29	1'05	5th	—	—
PEMBROKE	*	*	*	*	*	*	*	*	*	*	*	175	35
ARLINGTON	48'0	62'8	55'4	38	14th	76	25th	17	2'88	0'44	5th	—	—
CULLOMPTON	48'2	64'8	56'5	37	14th	77	25th	18	3'43	0'70	5th	130	27
FALMOUTH	50'5	61'8	56'2	44	14th	71	23rd	15	3'35	0'95	5th	177	37
PLYMOUTH	52'4	65'4	58'9	45	14th	77	2nd	16	2'74	0'39	5th, 7th	163	34
JERSEY	*	*	*	*	*	*	*	*	*	*	*	189	39
LONDONDERRY	48'1	65'4	56'8	39	5th	85	26th	15	3'61	1'00	11th	—	—
MARKREE CASTLE	47'3	62'6	55'0	35	14th	75	23rd	16	5'49	1'27	5th	178	35
BROOKEBOROUGH	47'3	62'2	54'8	37	14th	78	26th	15	5'66	1'47	27th	—	—
ARMAGH	46'8	62'2	54'5	41	1st, 5th, 14th, 17th, 30th.	76	25th, 26th	14	4'85	2'23	27th	188	37
EDGEWORTHSTOWN	47'1	62'7	54'9	38	14th	76	25th	14	5'01	1'30	11th	—	—
DUBLIN	50'4	61'9	56'2	43	14th	72	26th	18	3'05	0'95	27th	174	35
PARSONSTOWN	*	*	*	*	*	*	*	*	*	*	*	169	34
KILKENNY CASTLE	49'7	63'6	56'7	37	14th	73	23rd, 25th	17	4'84	1'46	5th	—	—
WATERFORD	49'8	64'5	57'2	38	14th	73	18th	16	4'61	1'60	5th	—	—
VALENCIA	*	*	*	*	*	*	*	*	*	*	*	166	34
KILLARNEY	48'9	64'6	56'8	40	10th	72	18th, 20th, 23rd, 24th, 25th.	13	3'34	1'27	11th	—	—
FOYNES	50'3	64'5	57'4	42	16th	73	23rd, 24th, 25th	17	3'63	1'15	11th	—	—

* For information see Table XI.

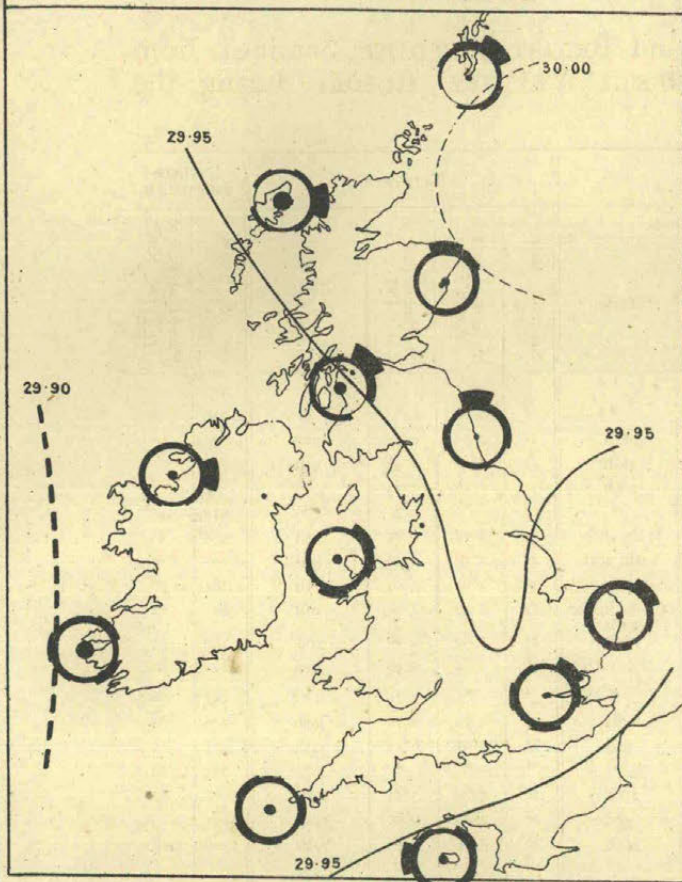
† The bright sunshine values given for Scarborough are recorded at Oswaldkirk, and those for Bawtry at Worksop.

MONTHLY WEATHER CHART JUNE 1888.

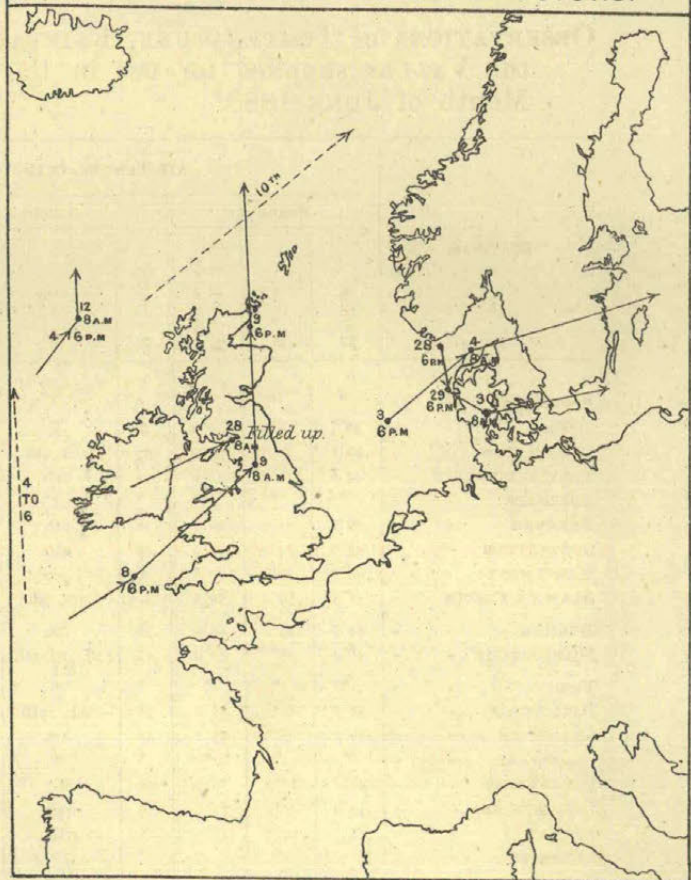
Monthly Summary.

Plate VI.

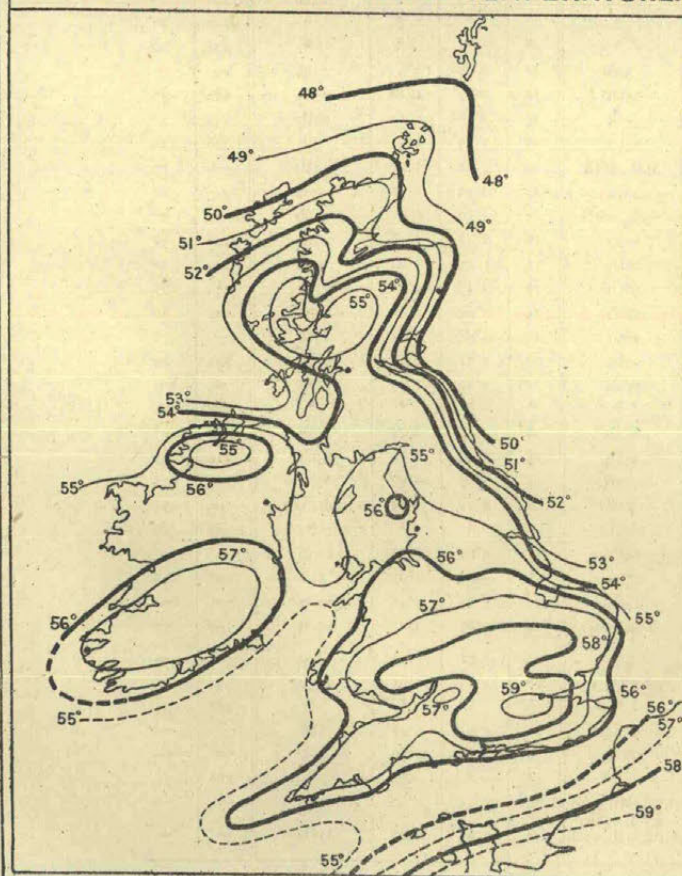
1. BAROMETER AND WIND.



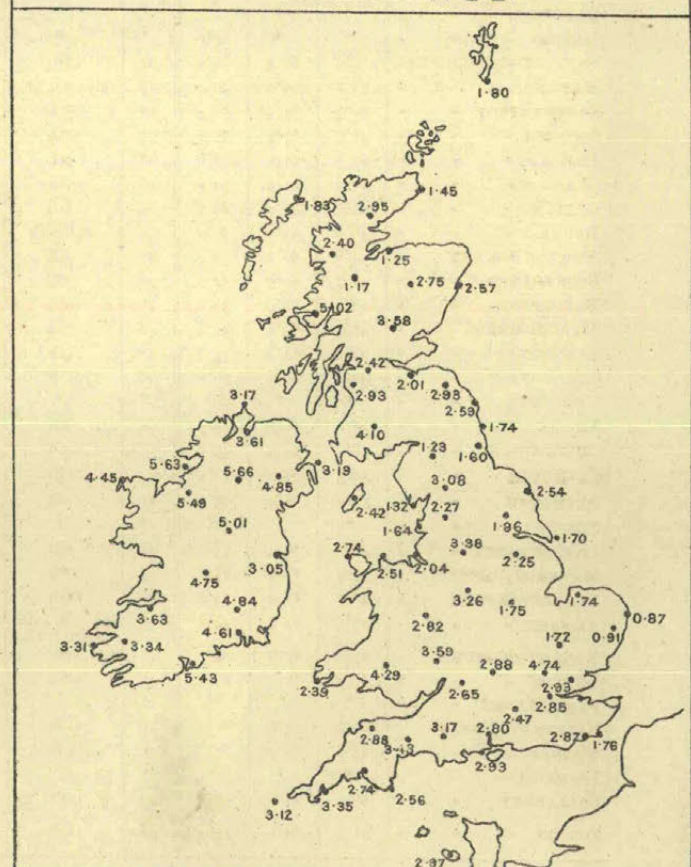
2. MOVEMENTS OF DEPRESSIONS.



3. DISTRIBUTION OF MEAN TEMPERATURE.



4. RAINFALL.



OFFICIAL COPY.

SUMMARY of the OBSERVATIONS made at the STATIONS included
in the DAILY and WEEKLY WEATHER REPORTS for the
CALENDAR MONTH,

JULY 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH
BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & CO., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather of July was most unseasonable, pressure was low, several depressions passed over England, producing very heavy and constant rains, with frequent thunderstorms. Temperature was much below its normal value, but the most remarkable feature of the season was the appearance of snow at many stations, and even in the Isle of Wight, on the 11th.

Pressure.—*Mean for the Month at 8 a.m.* ranged from 29·85 ins. at Jersey and from about 29·75 ins. off our north-east coasts, to about 29·72 ins. in the north of England. The values were considerably below the average* for the month—to the extent of nearly 0·2 in. over England and Ireland, and of 0·1 in. in the north. The defect over England arose from the unusual number of depressions which passed over the country. *Highest* readings occurred in the west (Valencia 30·28 ins., and Scilly 30·22 ins.) on the 12th, and Valencia (30·17 ins.) on the 17th. *Lowest* readings were recorded on the 3rd at North Shields (29·20 ins.) on the 23rd at Belmullet (29·28 ins.), and on the 27th at Scilly (29·29 ins.).

Depressions were very frequent for the time of year; the tracks of three passed across southern England. The deepest during the month was that which crossed the north of England between the 2nd and the 4th.

Anticyclones were very slightly developed. All that can be said is that an area of high pressure lay to the south-west of these Islands from the 10th to the 18th, and passed over Spain and France between the 20th and 22nd.

Wind at the southern stations was principally from the Westward, while in Scotland Northerly and North-easterly winds were most prevalent. At Holyhead the frequency was nearly equal all round the compass, while in the west of Ireland the wind was principally North-westerly. The force was strong for the season, but there were no serious storms. Slight gales were reported in Scotland from the northward on the 2nd and 9th, and gales of similar force from southward and along the Channel coast, and from north in Ireland, towards the end of the month.

Temperature.—*Mean at sea-level* varied from 50° in the Shetlands to 60° at Jersey, and 59° in the south of England, inland. It was much below the average* for the month—to the extent of nearly 6° in the south-east of England, and from 3° to 5° in Ireland and Scotland. *Highest* readings occurred generally on the 19th or 20th. The absolute maximum was 77°·0, at Lairg, and several other stations recorded readings above 70°, but it may be remembered that the maximum for June had been 88°·0, which makes the remarkable chilliness of July more apparent. *Lowest* readings were recorded at most stations about the 11th, when the thermometer fell below 40° at several places in England. In Scotland the coldest weather came earlier, and 32°·0 was actually recorded at Stornoway, on the 7th, in the dog-days! *Range* was greatest (over 40°) in Scotland and was as large as 44° at Lairg; it did not reach half that amount at several stations on the Channel coast (17°·0 at Scilly, 19° at Falmouth); in London it was about 30°. *Vapour Tension* was about 0·40 in. all over the south of England and Ireland (0·425 in. Hurst Castle). It was least (0·298 in.) at Sumburgh Head. *Relative Humidity* exceeded 90 per cent. over Devonshire, and also over the North Channel and along the west coast of Scotland. It was least (80 per cent.) along the east coast of Scotland, and in Ireland also it was low.

Rainfall was locally excessive, being generally about twice, and at St. Ann's Head nearly three times its average* amount. In Ireland the excess was less. In the extreme north of Scotland the conditions were reversed, as a deficit occurred—Stornoway only having one half its proper quantity. The total varied from 8·31 ins. at Stonyhurst, 8·19 ins. at Durham and Hawes Junction, and 7·85 ins. at Roche's Point, to 1·57 ins. at Stornoway, and 1·68 ins. at Sumburgh Head. The excessive amounts were principally caused by particularly heavy falls; the 2nd produced 2·48 ins. at Stonyhurst, and 2·19 ins. at Manchester, the 25th gave 3·18 ins. at Hawes Junction, and 2·25 ins. at Durham, and on the 31st 2·31 ins. fell at Hastings. The most remarkable fact in connection with precipitation was that early on the 11th snow showers occurred in many parts of the country, even as far south as the Isle of Wight. Thunderstorms were very prevalent, occurring on eight days in London, seven at Cambridge, and six at Yarmouth.

Bright Sunshine was not abundant. 34, the highest per-centage of possible duration recorded at any station, was reached at Falmouth, Jersey followed with 32, Plymouth with 31, and Valencia and Stornoway with 30. The least sunny station was Stowell (16), but Glasgow, Durham, Scarborough, and Bawtry did not fare much better.

* The averages employed are—*Pressure and Temperature* for 20 years, 1861–80; *Rainfall* for 20 years, 1866–85.

TABLE XIII.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
Observations are made at 8 a.m. daily, but the Number of Days of Rain, Snow, Hail,
(The Stations are grouped in Districts, and then arranged in order of Latitude,

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.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 29° 728	50° 0	44° 9	54° 3	49° 6	37	6th	67	18th
	Wick	29° 747	52° 7	45° 2	57° 1	51° 2	36	7th	75	19th
	Stornoway	29° 737	52° 3	45° 5	57° 1	51° 3	32	7th	68	19th, 20th
1. SCOTLAND, E.	Nairn	29° 733	53° 0	47° 1	59° 9	53° 5	40	7th	73	19th
	Aberdeen	29° 743	53° 2	47° 5	58° 7	53° 1	41	7th	71	19th, 20th
	Leith	29° 730	54° 8	48° 8	61° 0	54° 9	41	31st	72	12th
2. ENGLAND, N.E.	Shields	29° 718	53° 6	48° 5	59° 1	53° 8	41	7th	68	21st, 23rd
	York	29° 737	55° 2	48° 7	63° 1	55° 9	41	7th, 11th	74	19th
	Spurn Head	29° 731	55° 2	50° 6	59° 5	55° 1	44	11th	70	23rd
3. ENGLAND, E.	Yarmouth	29° 742	57° 2	51° 6	61° 8	56° 7	44	8th, 13th	68	21st, 22nd, 24th
	Cambridge	29° 760	57° 8	49° 8	66° 2	58° 0	42	11th	72	19th, 22nd
4. MIDLAND COUNTIES	Loughborough	29° 755	55° 9	50° 4	64° 5	57° 5	39	11th	76	19th
	Oxford	29° 744	56° 2	51° 0	63° 8	57° 4	41	11th	72	19th
5. ENGLAND, S.	London	29° 780	57° 8	52° 4	65° 5	59° 0	43	12th	72	22nd
	Dungeness	29° 777	56° 7	52° 8	62° 2	57° 5	41	11th	67	28th
	Hurst Castle	29° 802	57° 4	53° 5	63° 1	57° 3	43	11th	69	19th
6. SCOTLAND, W.	Ardrossan	29° 721	54° 4	49° 8	59° 8	54° 8	42	12th	70	18th, 19th
7. ENGLAND, N.W.	Hawes Junction*	28° 509	50° 8	45° 9	57° 3	51° 6	36	11th	68	19th
	Barrow-in-Furness	29° 727	54° 2	51° 5	60° 2	55° 9	44	1st, 11th	67	19th
	Liverpool	29° 739	55° 8	51° 9	62° 0	57° 0	45	11th	69	20th
	Holyhead	29° 731	55° 2	51° 4	60° 3	55° 9	43	11th	65	19th
8. ENGLAND S.W.	Pembroke	29° 757	55° 6	52° 9	59° 0	56° 0	45	11th	65	19th
	Prawle Point	29° 805	56° 7	50° 7	61° 1	55° 9	42	11th	66	10th, 12th
9. IRELAND, N.	Malin Head	29° 720	53° 2	50° 4	57° 1	53° 8	42	11th	67	22nd
	Donaghadee	29° 733	54° 4	50° 7	60° 0	55° 4	44	11th	66	25th
	Mullaghmore	29° 735	55° 7	51° 4	60° 8	56° 1	42	1st, 7th	67	19th
	Belmullet	29° 747	55° 9	52° 0	60° 1	56° 1	47	1st, 11th, 29th	65	14th, 22nd
10. IRELAND, S.	Parsonstown	29° 752	55° 9	49° 8	63° 9	56° 9	39	11th	71	19th
	Valencia	29° 773	58° 2	52° 3	62° 1	57° 2	48	1st, 5th, 11th	67	6th
	Roche's Point	29° 755	57° 5	52° 1	62° 2	57° 2	45	11th	66	12th
CHANNEL ISLANDS	Scilly (St. Mary's)	29° 784	58° 5	53° 7	61° 6	57° 7	49	11th	66	6th, 7th
	Jersey	29° 847	59° 0	54° 8	63° 7	59° 3	47	14th	69	15th

* Hawes Junction is 1,135 feet above Mean Sea Level and the barometrical

SUMMARY OF OBSERVATIONS, JULY 1888.

xxvii

REPORTING STATIONS in the BRITISH ISLANDS during the Month of JULY 1888.

Thunderstorms, and Gales are counted irrespective of the Hours at which they occurred.

beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	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 Observations of								
						Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calms.
ins. 0.298	% 83	7.6	ins. 1.68	in. 0.84	23rd	6	0	0	0	4	16	0	11	8	2	1	1	0	1	0	7
.351	88	8.6	2.16	0.43	23rd	15	0	0	1	1	22	3	4	7	7	4	2	0	1	5	1
.360	92	9.0	1.57	0.25	21st, 23rd	17	0	0	0	2	26	4	2	8	8	3	2	3	2	0	3
.347	86	7.4	3.27	0.70	2nd	20	0	0	1	4	16	0	4	3	8	1	0	2	5	1	7
.320	79	7.4	4.39	1.27	2nd	18	0	0	1	3	15	1	6	6	2	3	4	2	1	7	0
.349	81	7.9	4.42	0.72	2nd	21	0	0	4	4	18	0	0	5	11	1	1	0	6	7	0
.337	81	8.4	5.03	1.37	25th	20	0	0	2	2	21	1	8	4	3	0	3	3	6	3	1
.365	84	7.0	6.13	0.81	17th	22	0	0	1	7	15	0	6	5	4	1	3	3	5	4	0
.376	87	5.7	5.22	0.83	4th	22	0	1	2	3	4	4	8	5	2	1	3	7	2	3	0
.389	83	5.4	3.99	0.55	10th	19	0	1	6	7	2	0	5	2	1	3	2	4	7	6	1
.404	84	8.0	3.92	0.54	2nd, 23rd	23	0	0	7	0	15	0	9	1	1	2	4	11	0	0	3
.382	86	9.2	4.40	0.64	29th	22	0	0	4	0	24	2	4	5	2	3	2	5	6	3	1
.385	85	7.6	4.46	0.81	2nd	26	0	1	2	4	16	1	3	1	2	1	7	9	1	6	1
.387	81	8.3	5.94	1.05	6th	23	0	0	8	3	21	1	2	1	1	1	3	9	4	6	4
.393	85	7.5	3.05	0.81	27th	20	0	0	1	0	9	4	2	1	3	0	1	11	9	4	0
.425	91	7.0	3.34	0.86	2nd	23	0	0	2	2	8	9	2	2	3	1	2	10	7	4	0
.364	86	8.3	3.63	0.80	2nd	20	0	0	0	3	21	0	0	10	2	0	4	3	1	4	7
.333	89	8.2	8.25	3.18	25th	25	0	1	2	4	23	0	4	5	6	3	6	6	0	1	0
.372	89	8.5	6.99	1.24	2nd	23	0	0	0	1	22	4	4	7	1	5	3	6	1	4	0
.357	80	8.6	5.00	0.81	2nd	22	0	0	3	0	21	1	0	4	6	6	4	4	4	3	0
.384	88	7.3	3.74	0.81	2nd	22	0	0	2	3	12	1	3	4	3	1	6	6	2	3	3
.413	93	7.0	6.18	1.93	15th	21	0	0	1	2	11	2	4	1	1	4	7	5	2	7	0
.415	90	7.2	3.27	0.35	27th	22	0	0	3	3	13	2	1	1	3	2	6	7	5	5	1
.366	91	9.1	4.14	1.02	27th	23	0	0	2	1	26	0	5	1	5	5	4	1	6	4	0
.386	92	7.7	6.03	1.44	27th	24	0	0	1	2	17	2	2	7	5	5	4	4	4	0	0
.373	84	6.8	4.81	0.87	27th	23	0	0	2	1	5	2	3	2	5	2	3	5	4	5	2
.374	84	8.5	2.82	0.60	2nd	20	0	0	0	1	20	0	6	3	3	4	4	2	4	5	0
.367	81	7.1	4.37	1.01	27th	21	0	0	3	2	13	0	0	2	1	1	1	4	1	4	17
.404	83	8.5	4.00	0.60	8th	23	0	0	0	0	20	2	5	1	2	2	3	6	5	5	2
.388	82	5.0	7.85	1.25	4th	20	0	0	1	8	4	3	8	2	0	4	2	4	5	6	0
.417	85	7.8	3.41	0.63	26th	23	0	0	0	1	16	5	4	1	0	2	3	7	6	7	1
.416	84	7.1	5.54	1.13	15th	23	0	1	2	3	15	4	0	1	3	3	3	7	7	7	0

observations at this station are not reduced for altitude.

TABLE XIV.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT, during the Month of JULY 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Per-centages of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	*	*	*	*	*	*	*	*	*	*	*	160	30
LAIRG	44°0	60°6	52°3	33	7th	77	19th	18	1°87	0°24	11th	—	—
GLENCARRON	46°2	59°5	52°9	37	6th	73	19th, 20th	24	4°29	0°43	2nd	—	—
FORT AUGUSTUS	47°8	60°1	54°0	40	12th	76	19th	24	3°81	0°70	2nd	—	—
ABERDEEN	*	*	*	*	*	*	*	*	*	*	*	136	26
BRAEMAR	44°3	59°0	51°7	37	7th, 8th	71	20th	23	5°64	2°00	2nd	101	19
OCHTERTYRE	47°6	63°5	55°6	37	30th	77	19th	22	6°62	1°91	22nd	—	—
MARCHMONT	46°3	59°8	53°1	39	5th	73	20th	22	5°16	0°90	10th	105	20
ALNWICK CASTLE	48°3	58°2	53°8	39	6th	68	23rd	19	4°36	0°79	10th	—	—
DURHAM	47°4	61°8	54°6	38	7th	76	20th	21	8°25	2°25	25th	94	18
SCARBOROUGH	49°1	59°8	54°5	42	2nd, 7th	71	22nd	21	6°50	1°05	15th	† 90	18
YORK	*	*	*	*	*	*	*	*	*	*	*	105	21
HILLINGTON	49°5	64°1	57°8	38	13th	73	20th	23	6°07	0°99	4th	105	21
GELDESTON	50°5	64°7	57°6	39	2nd, 8th	73	20th	19	5°62	1°10	27th	118	24
CAMBRIDGE	*	*	*	*	*	*	*	*	*	*	*	107	22
ROTHAMSTED	50°4	63°8	57°1	41	1st, 11th	70	30th	24	3°59	0°46	2nd	—	—
INGATESTONE	50°8	64°4	57°6	42	11th	70	18th	20	4°94	1°79	30th	106	21
BAWTRY	48°4	63°6	56°0	39	1st	75	19th	24	5°04	0°62	17th	† 88	18
CHEADLE	48°5	61°2	54°9	38	11th	68	19th	22	5°28	0°74	2nd	—	—
CHURCHSTOKE	48°0	62°7	55°4	36	1st	73	19th	25	5°69	0°82	17th	100	20
HEREFORD	50°0	65°1	57°6	39	11th	74	1st, 13th	25	4°79	0°54	27th	—	—
CIRENCESTER	48°9	63°0	56°0	38	11th	69	13th, 17th	23	4°49	0°60	27th	106	21
OXFORD	*	*	*	*	*	*	*	*	*	*	*	103	21
LONDON	*	*	*	*	*	*	*	*	*	*	*	97	20
STRATHFIELD TURGISS	51°2	65°6	58°4	41	1st, 11th, 13th	73	19th	24	5°23	0°89	5th	—	—
HASTINGS	52°8	62°3	57°6	39	11th	69	16th	19	6°10	2°31	31st	117	24
SOUTHAMPTON	52°7	65°2	59°0	43	11th	73	13th	23	6°18	1°06	31st	116	24
STOWELL	50°8	62°4	56°6	41	11th	67	17th, 19th, 20th	27	6°68	1°11	30th	76	16
LAUDALE	49°6	60°0	54°8	39	1st	73	19th	24	4°36	0°95	15th	—	—
GLASGOW	49°3	61°3	55°3	41	31st	72	19th	22	4°98	0°80	2nd	94	18
GLENLEE	48°0	61°0	54°5	34	1st	72	19th	26	5°69	1°15	22nd	—	—
DOUGLAS	50°7	60°0	55°4	42	7th	67	17th	21	6°56	1°41	2nd	124	25
NEWTON REIGNY	46°6	61°1	53°9	34	1st	71	19th	21	5°70	0°62	2nd, 25th	110	21
STONYHURST	49°7	61°5	55°6	40	11th	72	19th	21	8°31	2°48	2nd	98	19
BLACKPOOL	51°2	61°5	56°4	43	11th	69	20th, 22nd	20	6°35	1°75	2nd	100	20
MANCHESTER	50°5	62°7	56°6	40	11th	71	19th	25	7°36	2°19	2nd	—	—
LLANDUDNO	51°8	61°5	56°7	42	11th	67	21st, 22nd	24	4°60	0°70	2nd	107	21
LLANDOVERY	50°4	65°2	57°8	35	12th	75	19th	28	6°26	0°85	25th	—	—
PEMBROKE	*	*	*	*	*	*	*	*	*	*	*	138	28
ARLINGTON	50°0	62°1	56°1	40	1st	69	19th	25	6°39	1°22	7th	—	—
CULLOMPTON	50°5	65°2	57°9	42	1st, 9th, 13th	71	17th, 20th	25	7°21	0°97	27th	94	19
FALMOUTH	52°8	62°0	57°4	47	11th, 14th	65	1st, 6th	25	5°96	1°24	15th	166	34
PLYMOUTH	53°8	65°2	59°5	47	11th	71	6th, 8th	24	5°21	0°81	27th	152	31
JERSEY	*	*	*	*	*	*	*	*	*	*	*	154	32
LONDONDERRY	49°5	63°3	56°4	40	1st	74	19th	24	5°99	1°75	27th	—	—
MARKREE CASTLE	48°7	61°3	55°0	34	7th	67	13th, 21st, 22nd	19	4°68	0°97	27th	100	20
BROOKEBOROUGH	48°3	61°9	55°1	35	7th	69	13th	22	5°78	1°45	27th	—	—
ARMAGH	48°9	62°2	55°6	39	1st	70	19th	22	4°48	1°83	27th	108	21
EDGEWORTHSTOWN	48°3	62°5	55°4	39	1st	69	21st	21	4°99	1°58	27th	—	—
DUBLIN	51°9	62°7	57°3	43	11th	69	21st	22	3°88	0°51	27th	120	26
PARSONSTOWN	*	*	*	*	*	*	*	*	*	*	*	127	25
KILKENNY CASTLE	49°9	63°5	56°7	41	11th	69	13th	21	4°56	1°01	27th	—	—
WATERFORD	49°9	65°3	57°6	41	1st	70	19th	19	5°24	1°04	1st	—	—
VALENCIA	*	*	*	*	*	*	*	*	*	*	*	148	30
KILLARNEY	48°6	62°8	55°7	36	11th	70	28th	21	4°46	0°55	23rd	—	—
FOYNES	50°7	63°2	57°0	43	10th	69	21st	24	6°16	1°62	27th	—	—

* For information see Table XIII.

† The bright sunshine values entered to Scarborough are recorded at Oswaldkirk, those entered to Bawtry at Worksop.

OFFICIAL COPY.

SUMMARY of the OBSERVATIONS made at the STATIONS included
in the DAILY and WEEKLY WEATHER REPORTS, for the
CALENDAR MONTH,

AUGUST 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH
BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & Co., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather of August was not so unseasonable as that of July had been, though the temperature still remained below its normal value. Several depressions passed over England, that of the 1st bringing very heavy rains and causing serious floods in the south-eastern counties. On the whole the rain was below the average. No serious gales were experienced.

Pressure.—*Mean for the Month* at 8 a.m. varied from about 30·05 ins. over the Channel to 29·81 ins. in the Hebrides. The total gradient for Westerly winds was therefore rather steep. The mean in England generally was considerably above the average,* for the isobar of 29·90 ins. passed through Ulster and the Lowlands of Scotland, or more than a degree to the northward of its usual position. In the extreme north the readings were very slightly below the average. *Highest* readings occurred at the end of the month, the maximum being 30·41 ins. at Valencia on the 31st; but readings about 0·1 in. lower were recorded in London on the 18th, and at Stornoway on the 16th. *Lowest* were reported on the 13th, when 29·33 ins. was the reading, and on the 23rd, when the absolute minimum, 29·04 ins., was registered at Belmullet. *Range* was not excessive for the month, amounting to 1·30 ins. at Belmullet and 1·20 ins. at Valencia. In Great Britain it was less.

Depressions were numerous, but not deep. Three passed over these Islands, viz., on the 4th and 5th, the 13th and 14th, and the 28th and 29th respectively. In addition to these, three passed from south-west to north-east outside our west coasts, and two others were noted over France.

Anticyclones.—The first of these lay either over the Bay of Biscay or south-western Europe from the 3rd to the 7th, when it moved eastwards to central Europe. On the 14th an area of high pressure moved northwards from the Bay of Biscay to our Islands, and on the 18th and 19th a new system moved eastwards and south-eastwards over the British Isles and France, and then passed southwards. At the close of the month the highest barometrical readings were obtained, when another anticyclone approached us from the westward. It was the persistence of anticyclonic conditions over the southern parts of our area which caused the mean pressure for the month to exceed the average over England.

Wind was very variable in direction. Southerly gales were felt in the west of Ireland on the 19th and again on the 23rd, when force 10 was reached at Mullaghmore. On the 28th and 29th a Westerly gale occurred in the Channel.

Temperature.—*Mean at Sea Level* varied from 60° in the south-east of England to 51° in Shetland. In the south of Ireland the mean was 58° and in central Scotland 57°. It was below the average,* but not to any very great extent, as the deficit did not exceed three degrees anywhere. *Highest* readings were recorded in England on the 9th or 10th and in the north of Ireland and in Scotland on the 25th. The absolute maximum was 85° in London and at Cambridge, but a reading of 84° was recorded at Hillington and Loughborough; at Sumburgh Head the maximum was below 60°. *Lowest* readings occurred at various dates. In the north of Scotland they were generally below 40°, and 32° was registered at Lairg on the 16th. At Scilly the minimum was 52°. *Range* was very variable, amounting to 48° at Hillington, while it was only 14°·0 at Scilly. *Vapour Tension* was highest, 0·442 in., at Hurst Castle, and exceeded 0·40 in. at all the southern coast stations of England and Ireland; it was least, 0·328 in., at Aberdeen. *Relative Humidity* was 91 at Malin Head, above 90 per cent. on the west coast of Scotland, and also at Hawes Junction. It was least, below 80 per cent., on the east coast of Scotland and in London.

Rainfall varied from 8·88 ins. at Glencarron and 8·76 ins. at Laudale to 1·22 ins. (only one third of its average* amount) at Ardrossan. The fall was generally below the average, but was very irregular. At Ingatstone the amount was 5·08 ins., of which 3·20 ins. fell on the 1st. Very heavy floods were occasioned in the south-east of England by this fall. At Llandoverly the total fall for the month was 6·64 ins., of which 2·33 ins. fell on the 28th; amounts exceeding an inch were recorded at 21 different stations.

Bright Sunshine was more abundant than in July. It attained 49 per cent. of its possible duration in Jersey, and amounts of 40 per cent. or upwards were registered at Churchstoke, Hastings, Falmouth, Pembroke, and Valencia. The lowest records were 21 per cent. at Glencarron and 23 at Scarborough.

* The averages employed are—*Pressure* and *Temperature* for 20 years, 1861–80; *Rainfall* for 20 years, 1866–85.

TABLE XV.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
Observations are made at 8 a.m. daily, but the Number of Days of Rain, Snow, Hail,
(The Stations are grouped in Districts, and then arranged in order of Latitude,

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.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 29°808	51°0	46°2	53°2	50°7	39	11th	59	2nd, 3rd, 25th, 26th.
	Wick	29°839	53°8	45°8	58°4	52°1	35	19th	66	7th, 25th, 26th
	Stornoway	29°801	53°7	45°9	58°0	52°0	33	15th	64	8th
1. SCOTLAND, E.	Nairn	29°833	54°5	48°7	63°1	55°9	38	19th	73	25th
	Aberdeen	29°880	53°9	47°4	60°2	53°8	35	19th	69	25th
	Leith	29°889	56°1	49°4	63°4	56°4	40	19th	70	12th, 25th
2. ENGLAND, N.E.	Shields	29°915	55°2	49°5	61°7	55°6	43	19th	71	7th
	York	29°957	55°3	48°8	64°9	56°9	41	19th	79	9th
	Spurn Head	29°956	56°6	52°2	63°3	57°8	47	19th	75	7th
3. ENGLAND, E.	Yarmouth	29°979	58°0	52°2	64°2	58°2	44	19th	79	10th
	Cambridge	29°997	58°4	49°8	68°4	59°1	40	15th, 16th	85	9th, 10th
4. MIDLAND COUNTIES	Loughborough	29°989	56°9	50°8	68°0	59°4	38	15th	84	9th, 10th
	Oxford	30°015	56°5	51°1	65°9	58°5	40	19th	80	9th, 10th
5. ENGLAND, S.	London	30°013	59°0	52°3	68°2	60°3	44	3rd	85	10th
	Dungeness	30°005	58°8	54°3	64°8	59°6	46	5th	71	10th
	Hurst Castle	30°034	59°1	54°7	65°2	60°0	48	31st	71	9th
6. SCOTLAND, W.	Ardrossan	29°890	55°6	51°1	60°7	55°9	42	1st, 2nd	70	22nd
7. ENGLAND, N.W.	Hawes Junction*	28°714	51°9	46°4	58°0	52°2	36	1st	72	9th
	Barrow-in-Furness	29°940	55°2	52°2	60°9	56°6	45	16th, 17th	69	10th
	Liverpool	29°962	57°0	51°7	63°7	57°7	46	16th, 17th, 19th, 30th, 18th	75	10th
	Holyhead	29°952	57°1	52°6	62°0	57°3	45		68	12th
8. ENGLAND, S.W.	Pembroke	29°986	56°7	54°1	60°6	57°4	47	18th	65	9th
	Prawle Point	30°035	57°3	50°5	61°5	56°0	43	21st	68	7th, 9th
9. IRELAND, N.	Malin Head	29°868	54°9	51°7	60°0	55°9	48	1st, 2nd	66	24th, 25th
	Donaghadee	29°924	55°5	51°7	62°0	56°9	45	15th, 18th	68	26th
	Mullaghmore	29°894	57°2	52°1	62°7	57°4	45	1st	70	20th
	Belmullet	29°899	57°7	53°0	61°6	57°3	42	1st	67	11th
10. IRELAND, S.	Parsonstown	29°943	55°6	50°2	64°5	57°4	37	18th	71	20th
	Valencia	29°956	59°7	52°8	64°2	58°5	43	2nd	69	16th
	Roche's Point	29°956	57°6	52°4	63°3	57°9	45	18th	74	6th
CHANNEL ISLANDS	Scilly (St. Mary's)	30°006	59°6	55°0	63°3	59°2	52	1st, 14th, 15th, 18th, 19th	66	3rd, 18th, 22nd, 24th, 27th, 9th
	Jersey	30°066	60°8	55°6	66°1	60°9	49		79	

* Hawes Junction is 1,135 feet above Mean Sea Level, and the

SUMMARY OF OBSERVATIONS, AUGUST 1888.

xxx

REPORTING STATIONS in the BRITISH ISLANDS during the Month of AUGUST 1888.

Thunderstorms, and Gales are counted irrespective of the Hours at which they occurred.
beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	RELATIVE HUMIDITY.	AMOUNT OF CLOUD.	RAINFALL.			WEATHER, No. of Days of							WIND, No. of Observations of								
			Total Fall in the Month.	Maximum Fall in One Day.	Date.	Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calms.
ins.	%		ins.	ins.																	
0.333	89	8.5	2.68	0.71	12th	22	0	0	0	2	21	0	5	0	2	3	5	3	3	5	5
*360	86	7.6	4.04	0.76	29th	20	0	1	1	3	16	1	7	2	0	2	11	2	3	4	0
*376	91	8.4	5.86	0.60	22nd, 29th	24	0	0	0	0	19	6	0	3	5	2	2	10	3	2	4
*344	81	6.0	1.49	0.31	7th	19	0	0	1	3	7	0	1	1	1	0	0	11	5	1	11
*328	79	6.5	2.09	0.41	22nd	20	0	1	3	5	9	2	2	0	1	4	9	3	3	9	0
*357	78	7.0	1.54	0.33	12th	19	0	0	1	5	12	0	0	2	3	5	2	4	10	3	2
*352	81	8.2	1.78	0.63	4th	13	0	1	1	0	13	1	3	3	0	2	4	10	7	1	1
*364	83	7.0	1.74	0.71	28th	17	0	0	0	6	15	0	4	1	4	2	9	1	9	1	0
*397	86	5.0	1.83	0.56	24th	15	0	0	3	6	4	1	5	1	2	2	6	7	6	2	0
*404	83	4.1	1.94	0.69	28th	19	0	0	4	9	1	2	2	2	1	1	3	7	7	6	2
*418	86	6.9	2.17	0.51	20th	13	0	0	3	6	15	0	5	2	0	2	11	7	3	0	1
*403	87	8.0	2.91	1.60	28th	10	0	0	2	0	16	1	2	3	2	1	3	6	10	2	2
*384	84	6.8	1.82	0.67	28th	13	0	0	1	7	14	0	2	3	1	1	6	11	3	4	0
*394	79	6.0	3.15	1.26	1st	11	0	0	1	9	12	2	1	5	0	2	5	7	9	2	2
*416	84	7.2	1.55	0.47	29th	14	0	0	0	2	10	2	2	2	1	2	3	8	8	4	1
*442	88	5.3	1.38	0.60	23th	14	0	0	0	7	5	4	3	6	1	0	2	8	7	3	1
*396	89	7.2	1.22	0.16	23rd	17	0	0	0	5	16	1	1	2	2	1	10	7	4	3	1
*349	91	7.9	5.73	1.46	4th	19	0	0	2	5	23	0	3	3	3	2	7	10	1	1	1
*384	88	7.2	4.23	0.88	4th	18	0	0	1	2	16	4	2	3	4	4	3	7	0	8	0
*367	79	7.2	2.83	0.72	28th	20	0	0	2	5	14	1	0	2	2	10	3	3	9	2	0
*407	87	6.4	2.20	0.48	4th	19	0	0	0	6	9	2	1	2	1	1	7	11	3	2	3
*406	88	6.4	3.19	1.43	28th	17	0	0	0	5	13	2	1	1	5	2	8	7	5	2	0
*416	88	6.3	1.62	0.46	20th	19	0	0	2	5	10	5	1	4	3	1	6	5	9	2	0
*390	91	6.9	4.10	0.59	3rd	20	0	0	0	7	17	2	1	1	1	3	9	8	5	3	2
*394	89	6.5	3.57	0.58	27th	22	0	0	1	5	11	3	2	3	3	3	3	10	6	1	0
*384	82	6.2	4.17	1.24	12th	23	0	0	0	7	9	7	2	1	4	4	4	8	5	4	1
*389	82	6.8	3.48	0.65	19th	22	0	0	0	8	16	3	2	0	2	4	5	4	12	2	0
*379	85	7.3	2.34	0.86	19th	16	0	0	0	3	15	0	0	0	1	10	3	7	1	4	5
*430	85	7.2	4.81	1.25	19th	22	0	0	1	3	15	7	1	0	0	6	3	8	5	3	5
*412	86	4.9	4.39	1.10	19th	17	0	0	1	11	7	2	7	0	2	2	4	6	7	3	0
*428	84	7.8	2.01	0.46	19th	20	0	1	1	2	17	2	2	1	4	2	4	8	7	2	1
*433	82	6.2	2.52	0.93	20th	11	0	0	1	5	10	1	1	5	1	3	3	6	11	3	0

barometrical observations at this station are not reduced for altitude.

TABLE XVI.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT during the Month of AUGUST 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Per-centages of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	*	*	*	*	*	*	*	*	*	*	*	151	32
LAIRG	45°0	60°3	52°7	32	16th	74	25th	20	1°71	0°20	4th, 24th	—	—
GLENCARRON	47°0	59°2	53°1	37	17th	68	19th	24	8°88	1°90	26th	99	21
FORT AUGUSTUS	48°2	61°3	54°8	37	2nd, 18th	69	25th	22	3°43	0°78	21st	—	—
ABERDEEN	*	*	*	*	*	*	*	*	*	*	*	144	31
BRAEMAR	44°1	59°5	51°8	33	16th	67	25th	25	2°01	0°42	1st	138	30
OGHTERTYRE	47°0	65°0	56°0	38	18th	72	25th	15	2°42	0°49	23rd	—	—
MARCHMONT	46°9	60°5	53°7	38	19th	67	19th	18	2°71	0°50	26th	126	27
ALSWICK CASTLE	49°7	59°7	54°7	42	18th	65	7th, 9th, 20th, 26th, 9th	20	2°14	0°38	4th	—	—
DURHAM	48°1	63°6	55°9	37	19th	75	9th	19	1°71	0°31	28th	129	28
SCARBOROUGH	49°9	61°8	55°9	43	19th	73	7th	22	2°91	0°88	28th	†105	23
YORK	*	*	*	*	*	*	*	*	*	*	*	125	28
HILLINGTON	49°2	66°3	57°8	36	19th	84	9th	13	3°92	1°27	28th	152	34
GELDESTON	50°4	66°5	58°5	39	19th	82	9th, 10th	16	1°89	0°74	28th	157	35
CAMBRIDGE	*	*	*	*	*	*	*	*	*	*	*	143	32
ROTHAMSTED	50°1	66°1	58°1	39	19th	83	10th	17	3°14	1°04	1st	—	—
INGATESTONE	50°6	66°4	58°5	43	15th, 16th	82	10th	13	5°08	3°20	1st	138	31
BAWTRY	48°5	66°4	57°5	38	14th	82	9th	16	1°95	1°06	28th	†133	30
CHEADLE	48°8	63°2	56°0	41	17th	78	10th	17	3°41	1°45	28th	—	—
CHURCHSTOCK	47°3	64°7	56°0	37	18th	80	9th	14	3°68	1°34	28th	180	40
HEREFORD	49°3	67°8	58°6	40	14th, 19th	82	9th, 10th	15	2°17	0°61	28th	—	—
CIRENCESTER	48°9	64°9	56°9	40	3rd, 18th	79	9th	14	2°15	0°71	28th	159	36
OXFORD	*	*	*	*	*	*	*	*	*	*	*	154	25
LONDON	*	*	*	*	*	*	*	*	*	*	*	147	33
STRATHFIELD TURGISSE	49°6	67°6	58°6	41	3rd, 19th	80	10th	16	1°76	0°59	1st	—	—
HASTINGS	53°5	64°6	59°1	48	6th, 14th, 17th, 18th, 14th, 31st	73	10th	15	1°62	0°46	1st	177	40
SOUTHAMPTON	52°3	66°9	59°6	46	14th, 31st	79	9th	14	2°52	0°92	28th	171	39
STOWELL	50°5	64°3	57°4	42	19th	75	7th, 9th	17	1°59	0°37	20th	171	39
LAUDALE	49°3	61°1	54°2	41	16th	67	25th	22	8°76	1°32	13th	—	—
GLASGOW	49°7	61°5	55°6	41	2nd	66	12th, 24th	20	2°26	0°32	19th	133	29
GLENLEE	46°9	61°8	54°4	33	1st	67	10th	25	4°72	0°65	12th	—	—
DOUGLAS	49°8	61°1	55°5	41	1st, 18th	68	10th	18	2°99	0°73	19th	166	37
NEWTON REIGNY	47°1	61°6	54°4	34	16th	69	10th	21	2°84	0°40	4th	144	31
STONYHURST	50°0	61°9	56°0	42	1st, 19th	74	9th	19	6°07	1°29	28th	132	29
BLACKPOOL	51°5	61°9	56°7	42	17th	69	10th	14	3°44	0°90	5th	157	35
MANCHESTER	49°9	63°5	56°7	43	16th, 18th	77	9th	20	4°13	0°78	28th	—	—
LLANDUDNO	51°7	63°4	57°6	44	1st, 2nd	70	7th	18	2°94	0°57	28th	174	39
LLANDOVERY	48°3	66°3	57°3	34	17th	79	9th	21	6°64	2°33	28th	—	—
PEMBROKE	*	*	*	*	*	*	*	*	*	*	*	183	41
ARLINGTON	49°9	62°9	56°4	41	3rd	74	9th	20	5°13	1°30	28th	—	—
CULLOMPTON	49°8	65°9	57°9	38	19th, 31st	77	7th	19	2°19	0°51	28th	165	37
FALMOUTH	53°2	63°1	58°2	49	3rd, 18th	67	9th	16	3°25	1°14	20th	182	41
PLYMOUTH	54°2	65°2	59°7	47	3rd, 19th	72	9th	17	3°25	0°93	20th	172	39
JERSEY	*	*	*	*	*	*	*	*	*	*	*	215	49
LONDONDERY	49°5	64°6	57°1	41	1st	72	16th	22	4°60	1°44	12th	—	—
MARKREE CASTLE	48°1	63°1	55°6	36	2nd	67	16th, 20th	22	4°30	1°21	12th	150	33
BROOKBOROUGH	47°0	63°3	55°2	36	1st	68	16th, 20th	20	3°60	0°44	12th	—	—
ARMAGH	48°3	63°5	55°9	37	17th	67	22nd	20	2°35	0°58	26th	122	27
EDGEWORTHSTOWN	47°7	63°8	55°8	37	18th	69	20th	20	3°89	0°80	20th	—	—
DUBLIN	52°0	64°3	58°2	42	18th	71	7th	12	1°27	0°23	19th, 21st	170	38
PARSONSTOWN	*	*	*	*	*	*	*	*	*	*	*	152	34
KILKENNY CASTLE	49°2	64°6	56°9	35	18th	72	8th	18	3°09	0°61	19th	—	—
WATERFORD	49°8	65°8	57°8	36	18th	74	6th	18	3°12	0°97	19th	—	—
VALENCIA	*	*	*	*	*	*	*	*	*	*	*	186	42
KILLARNEY	50°2	65°1	57°7	38	2nd	74	17th	20	4°51	0°71	19th	—	—
FOYNES	51°1	64°4	57°8	43	1st, 17th	69	11th, 20th	20	2°82	0°43	29th	—	—

* For information see Table XV.

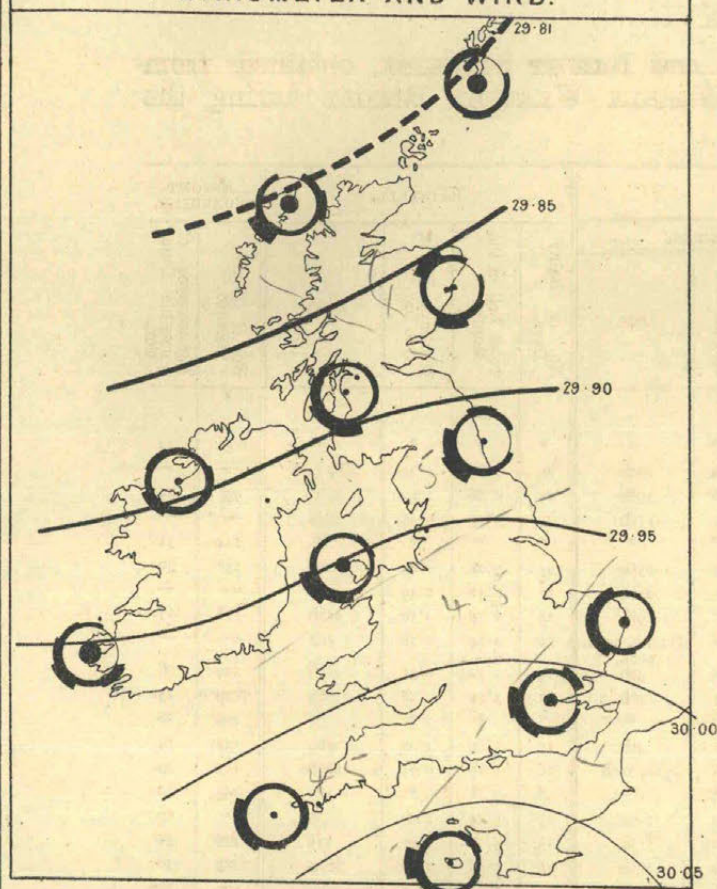
† The bright sunshine values given for Scarborough are recorded at Oswaldkirk and those for Bawtry at Worksop.

MONTHLY WEATHER CHART AUGUST, 1888.

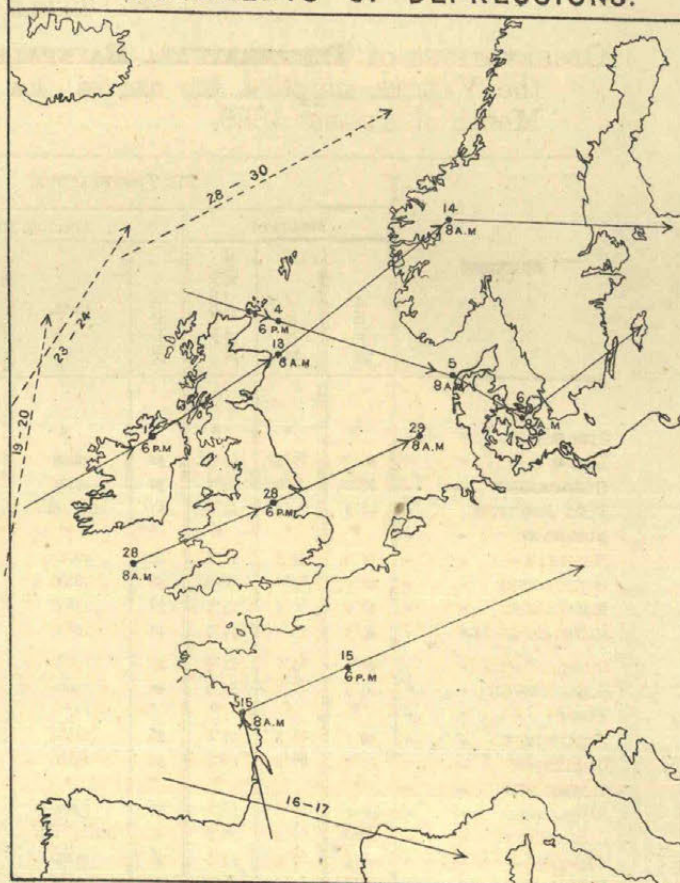
Monthly Summary.

Plate VIII.

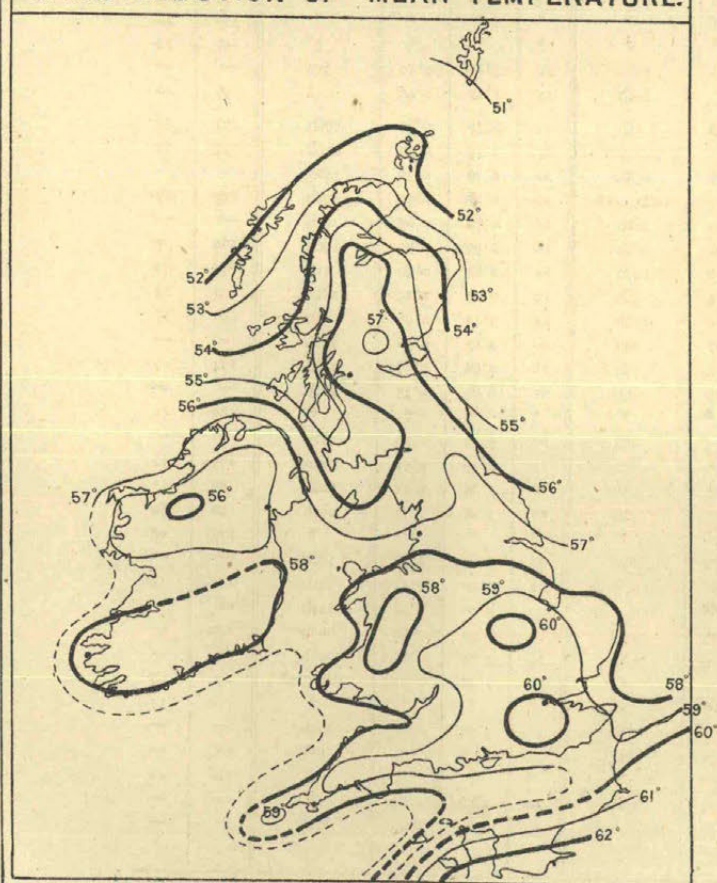
1. BAROMETER AND WIND.



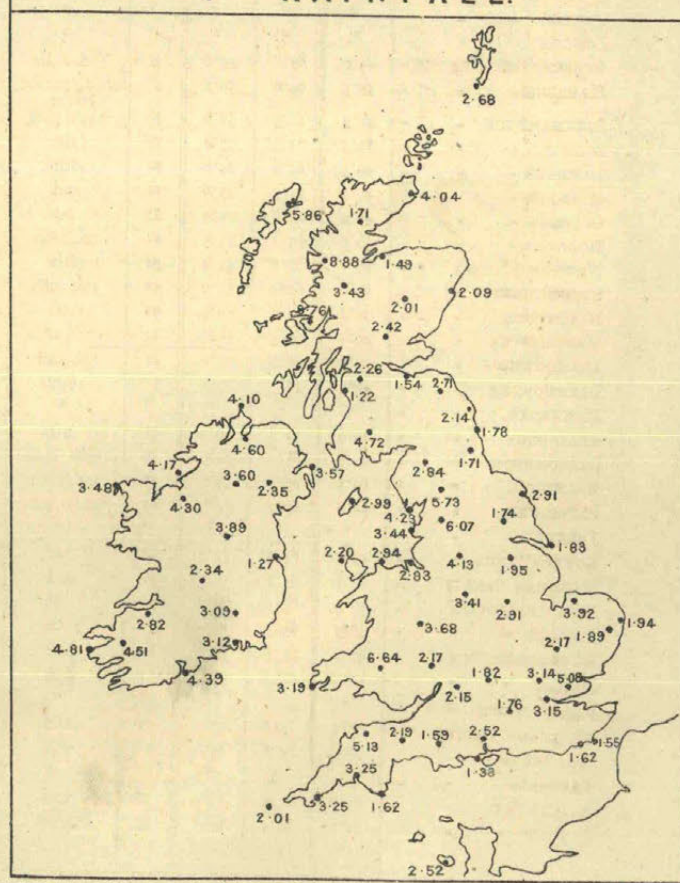
2. MOVEMENTS OF DEPRESSIONS.



3. DISTRIBUTION OF MEAN TEMPERATURE.



4. RAINFALL.



SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

SEPTEMBER 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & CO., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather of September was quiet and generally fine. Pressure was very high and steady. Temperature was not far from the average, but rather below it. Rainfall was slight, and in some places only half the ordinary amount fell. Winds were light on the whole.

Pressure.—*Mean for the month* at 8 a.m. was above 30·10 ins. except in the extreme north, and the isobar of 30·15 ins. enclosed all but the northern parts of England and Ireland, taking in the Channel Islands. The mean was as much as 0·3 in. above the average* in the north of Ireland as well as over the northern counties of England and the whole of Scotland. *Highest* readings occurred at the western and northern stations on the 8th, and in the east of England on the 13th. *Lowest* on the 6th on the western parts of Ireland and Scotland, and on the 30th on the east coast of England. *Range* was very moderate, the extreme difference over the entire kingdom barely exceeding 1·1 ins., the extreme readings being 30·56 ins. at Belmullet and 29·45 ins. at Stornoway.

Depressions scarcely visited us, the tracks lying quite outside our area, mostly to the northward even of Shetland. One on the 27th passed from south to north outside Ireland.

Anticyclones.—The chart shows a persistence of anticyclonic conditions for nearly the whole month. The first definite system of this character passed over us from the westward between the 6th and the 10th, another succeeded it on the 12th, and from that date till the end of the month the conditions were anticyclonic.

Wind was very light, as might be anticipated from the conditions of pressure. The southern stations showed a prevalence of North-east winds, while in the north and north-east the excess was from West and South-west; the other wind-roses do not exhibit any marked peculiarities.

Temperature.—*Mean at Sea Level* varied from 50° in the Shetlands to 58° in Kent, and to 61° at Jersey. It was on the whole somewhat below the average* except in the south of England, where the difference was in the other way. *Highest* values were recorded generally about the middle of the month, 74° at London, Strathfield Turgiss, and Southampton, but the absolute maximum was 75°, registered at Lairg on the 20th. *Lowest* were noted on various dates; at some Scotch stations, at Newton Reigny, and Bawtry, they were below 32° at the end of the month, at Donaghadee and Belmullet the absolute minimum was as high as 46°, and at Yarmouth, Hastings, Pembroke, and Holyhead only a degree lower. *Range* was not excessive, though at Lairg it reached 49°, the absolute extremes having been both noted at that station. *Vapour Tension* varied from 0·40 inch on the Channel coast to 0·32 inch at Stonyhurst and 0·307 inch at Aberdeen and Nairn. *Relative Humidity* reached 90 per cent. over the Midland Counties and Lancashire, the eastern part of the Channel, and the west of Scotland. In fact a ridge of high Relative Humidity stretched from N.N.W. to S.S.E. across our area.

Rainfall was much below the average,* many stations having only half the normal quantity. The least amounts were Churchstoke and Ardrossan, 0·33 inch; Kilkenny, 0·40 inch; and Hereford, 0·43 inch. The highest records were Glencarron, 3·44 ins., and Laudale, 3·10 ins. There were only two cases of falls exceeding an inch in one day, viz., Hawes Junction, 1·58 ins., and Stonyhurst, 1·48 ins., both on the 1st. There were seven days on which no rain fell at any of the stations.

Bright Sunshine showed a great improvement on preceding months. The highest record was at Jersey, 54 per cent. of the possible duration. Then came Hastings with 49 per cent., Plymouth with 46, and Pembroke with 44. The least amount of sun was recorded in the north of Scotland.

* The averages employed are—*Pressure* and *Temperature* for 20 years, 1861–80; *Rainfall* for the 20 years, 1866–85.

TABLE XVII.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
Observations are made at 8 a.m. daily, but the Number of Days of Rain, Snow, Hail,
(The Stations are grouped in Districts, and then arranged in order of Latitude ,

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.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 30°050	49°0	45°2	54°2	49°7	34	25th	60	23th
	Wick	30°080	51°5	44°9	58°4	51°7	35	11th	68	23rd
	Stornoway	30°061	51°6	45°1	56°6	50°9	33	26th	63	14th
1. SCOTLAND, E.	Nairn	30°091	50°0	43°4	60°6	52°0	28	26th	70	14th
	Aberdeen	30°132	50°0	44°4	58°2	51°3	37	9th, 30th	66	12th, 22nd
	Leith	30°137	51°2	45°1	60°5	52°8	39	19th	70	14th, 15th
2. ENGLAND, N.E.	Shields	30°138	50°7	45°8	58°6	52°2	38	30th	67	5th
	York	30°173	51°4	45°7	61°1	53°4	39	14th, 17th, 30th	70	13th
	Spurn Head	30°155	54°8	51°1	59°7	55°4	44	30th	67	5th
3. ENGLAND, E.	Yarmouth	30°140	56°2	52°3	60°8	56°6	45	1st, 30th	68	3rd
	Cambridge	30°166	54°0	46°9	64°6	55°8	39	1st	71	14th
4. MIDLAND COUNTIES	Loughborough	30°181	51°1	46°1	64°3	55°2	36	27th	72	14th, 17th, 20th
	Oxford	30°181	52°0	47°4	65°3	55°4	40	12th	71	15th
5. ENGLAND, S.	London	30°161	54°6	49°7	64°8	57°3	41	1st	74	15th
	Dungeness	30°125	56°1	51°0	63°4	57°2	40	12th	71	24th
	Hurst Castle	30°166	55°3	50°8	64°2	57°5	43	8th, 9th	68	15th, 24th
6. SCOTLAND, W.	Ardrossan	30°142	51°9	47°7	58°6	53°2	39	30th	67	14th
7. ENGLAND, N.W.	Hawes Junction*	28°917	48°1	42°4	56°4	49°4	33	30th	66	18th
	Barrow-in-Furness	30°156	54°4	49°7	59°6	54°7	40	30th	65	13th, 14th, 20th
	Liverpool	30°174	53°1	49°0	60°4	54°7	42	26th	67	13th, 14th
	Holyhead	30°160	54°5	50°7	60°4	55°6	45	9th	70	14th
8. ENGLAND, S.W.	Pembroke	30°163	54°6	51°4	59°7	55°6	45	9th	64	20th
	Prawle Point	30°170	56°0	49°5	61°5	55°5	40	9th	67	15th, 16th
9. IRELAND, N.	Malin Head	30°125	52°9	50°5	58°1	54°3	44	30th	66	14th
	Donaghadee	30°163	52°9	50°9	58°9	54°9	46	22nd	65	26th
	Mullaghmore	30°149	53°7	50°1	59°7	54°9	44	22nd	60	14th
	Belmullet	30°156	54°2	51°4	58°7	55°1	46	30th	67	14th
10. IRELAND, S.	Parsonstown	30°182	50°7	45°4	60°7	53°1	37	17th, 18th	69	14th
	Valencia	30°178	56°0	48°9	61°8	55°4	42	9th, 21st	67	21st
	Roche's Point	30°162	54°7	50°0	61°3	55°7	43	30th	65	5th, 7th
CHANNEL ISLANDS	Seilly (St. Mary's)	30°146	58°5	53°0	61°6	57°3	44	27th	64	4th, 5th, 11th, 12th, 13th, 17th, 18th, 28th, 15th
	Jersey	30°159	59°7	54°9	65°3	60°1	44	12th	72	

* Hawes Junction is 1,135 feet above mean sea level, and the

REPORTING STATIONS in the BRITISH ISLANDS during the Month of SEPTEMBER 1888.

Thunderstorms, and Gales are counted irrespective of the Hours at which they occurred.

beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	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 Observations of								
						Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calm.
ins.	%		ins.	ins.	1st	15	0	0	0	2	16	0	4	1	0	2	4	4	7	2	6
0.310	87	7.8	1.53	0.27	11th	13	0	0	0	7	14	1	2	0	1	2	6	4	4	5	6
334	88	6.7	1.45	0.45	2nd	18	0	0	0	0	23	8	2	2	1	0	1	15	3	1	5
348	91	9.2	2.69	0.37	15th	12	0	0	0	5	11	0	0	0	1	0	1	9	5	1	13
307	85	6.4	0.80	0.14	1st	14	1	1	0	6	10	1	3	0	0	1	9	1	10	6	0
307	85	6.1	1.86	0.35	15th	7	0	0	0	7	13	0	0	0	4	1	0	1	12	4	8
318	84	6.7	0.46	0.17	1st	11	0	0	0	2	19	0	2	3	1	1	3	12	7	1	0
321	87	8.5	1.20	0.38	1st	10	0	0	0	5	16	0	2	3	5	2	1	4	5	6	2
333	88	6.9	1.14	0.31	10th	11	0	0	0	6	5	2	4	4	6	1	0	5	5	3	2
370	86	5.4	2.26	0.54	24th	15	0	2	1	9	4	0	3	7	3	1	0	3	6	4	3
402	89	5.1	1.24	0.27	3rd	13	0	0	2	9	17	0	10	5	3	0	0	7	1	2	2
380	91	6.6	1.02	0.35	24th	11	0	1	1	3	17	0	2	6	5	1	0	3	4	4	5
347	92	7.9	0.78	0.33	24th	10	0	0	1	11	15	0	3	12	1	0	0	5	4	3	2
348	90	6.1	1.19	0.46	29th	14	0	0	0	6	17	0	1	7	6	1	0	5	5	4	1
375	88	7.3	1.03	0.28	25th	10	0	0	0	6	7	0	10	3	5	2	1	3	4	2	0
390	86	5.8	1.65	0.40	23rd	8	0	0	1	8	5	0	3	13	2	0	0	3	4	4	1
411	94	5.5	1.31	0.43	1st	9	0	0	0	7	17	0	1	8	5	0	2	3	3	4	4
352	91	7.0	0.33	0.13	1st	16	0	0	0	11	12	0	1	8	5	1	2	7	3	2	1
308	92	5.7	2.70	1.58	1st	10	0	0	0	6	10	2	3	13	4	2	0	5	0	3	0
348	88	5.9	1.34	0.75	1st	12	0	0	0	9	19	0	1	2	4	10	2	5	5	1	0
329	81	7.0	0.68	0.14	1st	13	0	0	0	9	7	0	2	3	5	2	2	4	3	3	6
371	88	5.3	1.17	0.43	27th	9	0	0	0	6	8	0	3	5	9	4	2	3	2	2	0
364	85	6.0	0.90	0.35	2nd	9	0	0	1	8	13	0	4	9	6	3	1	3	4	0	0
307	88	6.3	1.33	0.65	1st	16	0	1	0	3	19	0	4	0	1	5	8	3	6	3	0
346	86	7.6	1.62	0.59	6th	10	0	0	0	8	12	2	2	3	4	3	3	1	11	3	0
367	92	6.4	1.40	0.53	1st	12	0	0	0	3	7	4	1	1	7	3	3	7	3	3	2
346	84	6.9	1.75	0.54	1st	14	0	0	0	8	20	1	2	2	4	5	3	6	5	3	0
355	84	7.1	1.84	0.48	1st, 14th	10	0	0	0	4	20	0	1	2	0	5	0	4	0	2	16
329	89	7.9	0.67	0.15	14th	9	0	0	0	8	15	1	2	2	4	2	0	2	6	3	9
391	87	6.5	1.65	0.66	27th	6	0	0	0	11	5	1	8	1	4	5	1	1	5	5	0
369	87	5.3	1.16	0.70	28th	12	0	0	0	5	13	0	2	6	7	4	1	3	2	3	2
403	82	6.7	1.57	0.71	28th	10	0	0	0	11	7	0	2	11	5	1	0	2	4	4	1
424	83	4.4	1.13	0.33																	

barometrical observations at this station are not corrected for altitude.

TABLE XVIII.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT, during the Month of SEPTEMBER 1888.

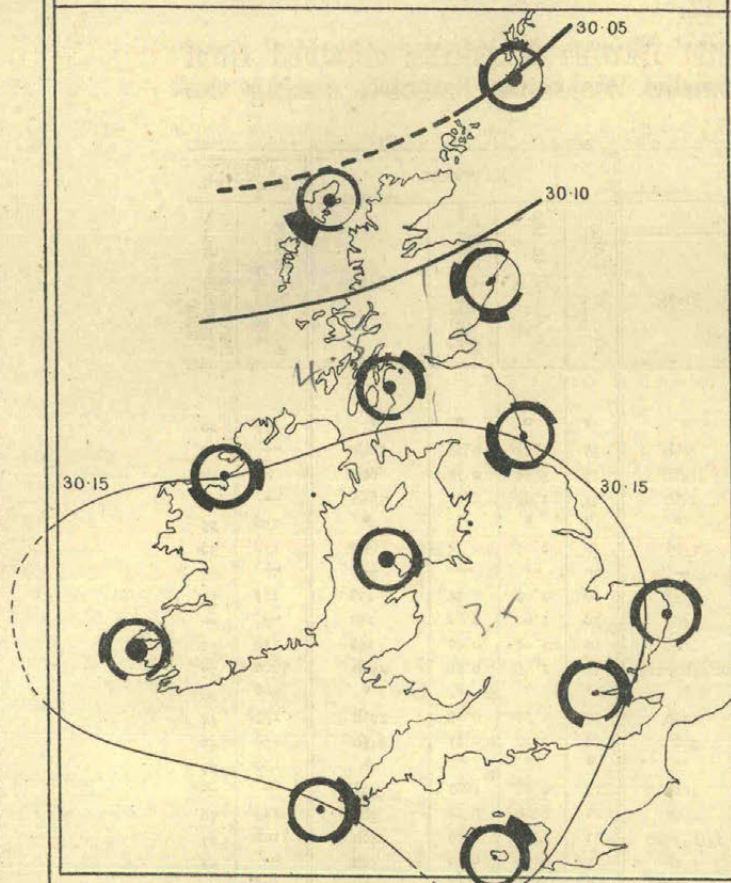
STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Percentages of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	*	*	*	*	*	*	*	*	*	*	*	77	20
LAIRG	42°6	60°1	51°4	26	26th	75	20th	17	1°31	0°23	11th	—	—
GLENCARRON	44°6	57°0	50°8	31	26th	73	14th	17	3°44	0°78	6th	80	21
FORT AUGUSTUS	43°3	59°0	51°2	27	26th	70	14th	13	1°33	0°41	6th	—	—
ABERDEEN	*	*	*	*	*	*	*	*	*	*	*	130	35
BRAEMAR	40°2	59°1	49°7	30	10th	71	23rd	10	1°04	0°32	6th	136	36
OCHTERTYRE†	—	—	—	—	—	—	—	—	—	—	—	—	—
MARCHMONT	43°1	59°2	51°2	36	30th	71	22nd	10	1°09	0°34	1st	124	33
ALNWICK CASTLE	44°8	56°5	50°7	36	30th	64	5th	10	1°60	0°60	1st	—	—
DURHAM	44°0	59°7	51°9	35	30th	68	2nd	12	1°28	0°46	1st	118	31
SCARBOROUGH	47°8	58°1	53°0	40	30th	66	2nd, 5th, 12th	13	2°35	0°55	29th	†102	27
YORK	*	*	*	*	*	*	*	*	*	*	*	106	28
HILLINGTON	47°8	61°0	54°9	39	1st	68	5th	13	1°35	0°29	10th	127	34
GELDESTON	49°1	62°8	56°0	38	30th	70	3rd	14	1°10	0°37	24th	158	42
CAMBRIDGE	*	*	*	*	*	*	*	*	*	*	*	139	37
ROTHAMSTED	47°2	62°4	54°8	35	30th	71	16th	13	0°86	0°27	3rd	—	—
INGATESTONE	49°1	65°1	56°1	42	12th, 13th, 30th	72	24th	10	0°86	0°52	9th	133	36
BAWTRY	44°4	61°8	53°1	31	30th	72	14th, 20th	11	1°01	0°39	24th	†101	27
CHEADLE	46°0	60°0	53°0	36	30th	67	14th	10	0°90	0°32	5th	—	—
CHURCHSTOKE	43°3	60°9	52°1	36	30th	68	2nd	8	0°33	0°15	5th	125	33
HEREFORD	44°4	63°2	53°8	37	12th, 13th	70	3rd, 12th	7	0°43	0°15	7th	—	—
CIRENCESTER	46°0	61°7	53°9	35	12th	70	15th	12	1°18	0°74	6th	125	33
OXFORD	*	*	*	*	*	*	*	*	*	*	*	142	38
LONDON	*	*	*	*	*	*	*	*	*	*	*	119	32
STRATHFIELD TURGIS	46°5	65°1	55°8	37	12th	74	15th	13	1°45	0°42	29th	—	—
HASTINGS	52°0	63°9	58°0	45	9th	70	23rd	11	1°11	0°41	29th	185	49
SOUTHAMPTON	49°3	66°1	57°7	40	12th	74	15th	13	1°08	0°28	2nd	161	43
STOWELL	47°4	62°0	54°7	38	12th	72	15th	12	1°38	0°37	2nd	133	36
LAUDALE	46°7	59°1	52°9	36	26th	69	1st	15	3°10	0°50	15th	—	—
GLASGOW	46°0	58°2	52°1	38	30th	65	14th	13	1°17	0°45	1st	90	24
GLENLEE	40°2	59°5	49°9	33	18th	68	21st	9	1°64	0°56	1st	—	—
DOUGLAS	46°8	59°2	53°0	39	17th, 18th, 22nd, 30th.	64	7th	10	1°14	0°37	1st	145	39
NEWTON REIGNY	40°5	59°5	50°0	30	26th	68	16th, 21st, 22nd	11	0°76	0°16	1st	142	38
STONYHURST	46°9	59°1	53°0	38	30th	65	13th	13	2°66	1°48	1st	132	35
BLACKPOOL	48°6	60°1	54°4	38	26th	68	13th, 14th	8	1°15	0°60	1st	137	37
MANCHESTER	46°6	60°4	53°5	38	30th	68	14th	10	1°62	0°54	1st	—	—
LLANDUDNO	49°1	61°4	55°3	41	26th	70	13th	12	1°01	0°29	1st	127	34
LLANDOVERY	43°4	65°3	54°4	32	22nd	71	15th, 17th, 18th	10	1°83	0°60	5th	—	—
PEMBROKE	*	*	*	*	*	*	*	*	*	*	*	165	44
ARLINGTON	47°0	62°0	54°5	39	12th	71	15th	12	2°99	0°81	2nd	—	—
CULLOMPTON	45°3	63°9	54°6	35	17th	70	15th	8	0°90	0°33	29th	143	38
FALMOUTH	51°2	60°7	56°0	44	30th	66	15th	11	1°37	0°55	27th	156	42
PLYMOUTH	50°4	63°8	57°1	42	12th	69	15th, 20th	9	1°02	0°35	2nd	172	46
JERSEY	*	*	*	*	*	*	*	*	*	*	*	202	54
LONDONDERRY	47°6	62°3	55°0	41	27th, 30th	71	19th	13	1°59	0°33	1st	—	—
MARKREE CASTLE	45°3	59°4	52°4	37	17th, 19th	67	14th	13	1°85	0°63	30th	74	20
BROOKBOROUGH	44°3	59°4	51°9	34	9th	69	14th	10	1°35	0°28	1st, 14th	—	—
ARMAGH	44°3	59°2	51°8	33	27th	65	14th	10	1°12	0°25	6th	101	27
EDGEWORTHSTOWN	44°8	58°9	51°9	37	30th	67	14th	9	1°39	0°43	6th	—	—
DUBLIN	48°7	60°1	54°4	39	30th	66	5th	10	0°73	0°23	6th	131	35
PARSONSTOWN	*	*	*	*	*	*	*	*	*	*	*	113	30
KILKENNY CASTLE	46°1	61°4	53°8	36	17th, 21st	65	13th, 14th, 17th, 18th, 20th, 25th.	4	0°40	0°20	27th	—	—
WATERFORD	45°8	63°2	54°5	36	17th, 18th	69	28th	5	0°75	0°60	27th	—	—
VALENCIA	*	*	*	*	*	*	*	*	*	*	*	154	41
KILLARNEY	45°6	61°5	53°6	35	9th, 30th	68	14th, 21st	10	0°86	0°23	27th	—	—
FOYNES	47°6	60°5	54°1	42	16th, 29th, 30th	68	14th	9	1°30	0°31	27th	—	—

* For information see Table XVII.

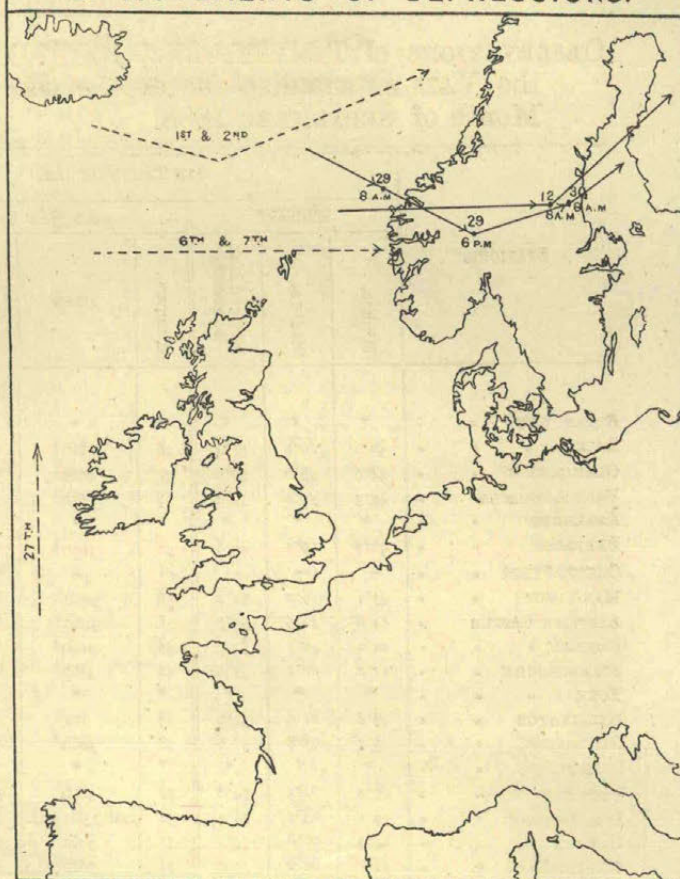
† The bright sunshine values entered to Scarborough are recorded at Oswaldkirk, those entered to Bawtry at Worksop.

‡ Information incomplete.

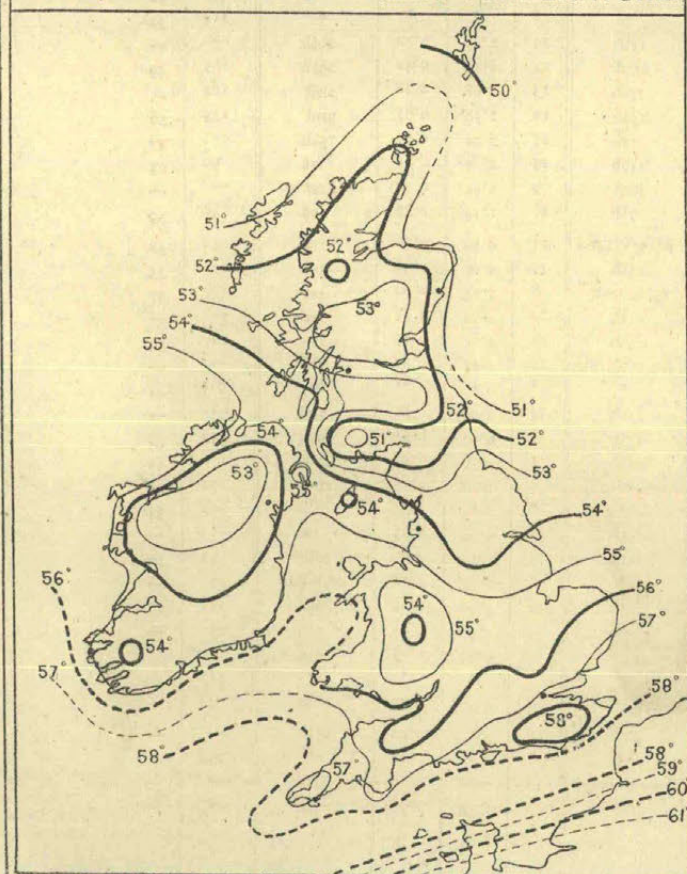
1 BAROMETER AND WIND.



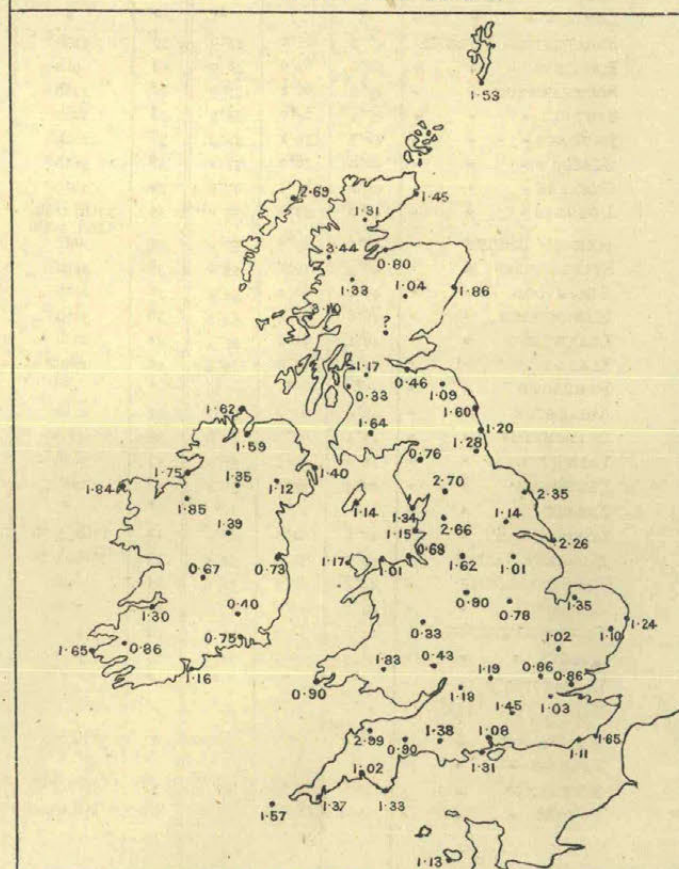
2. MOVEMENTS OF DEPRESSIONS.



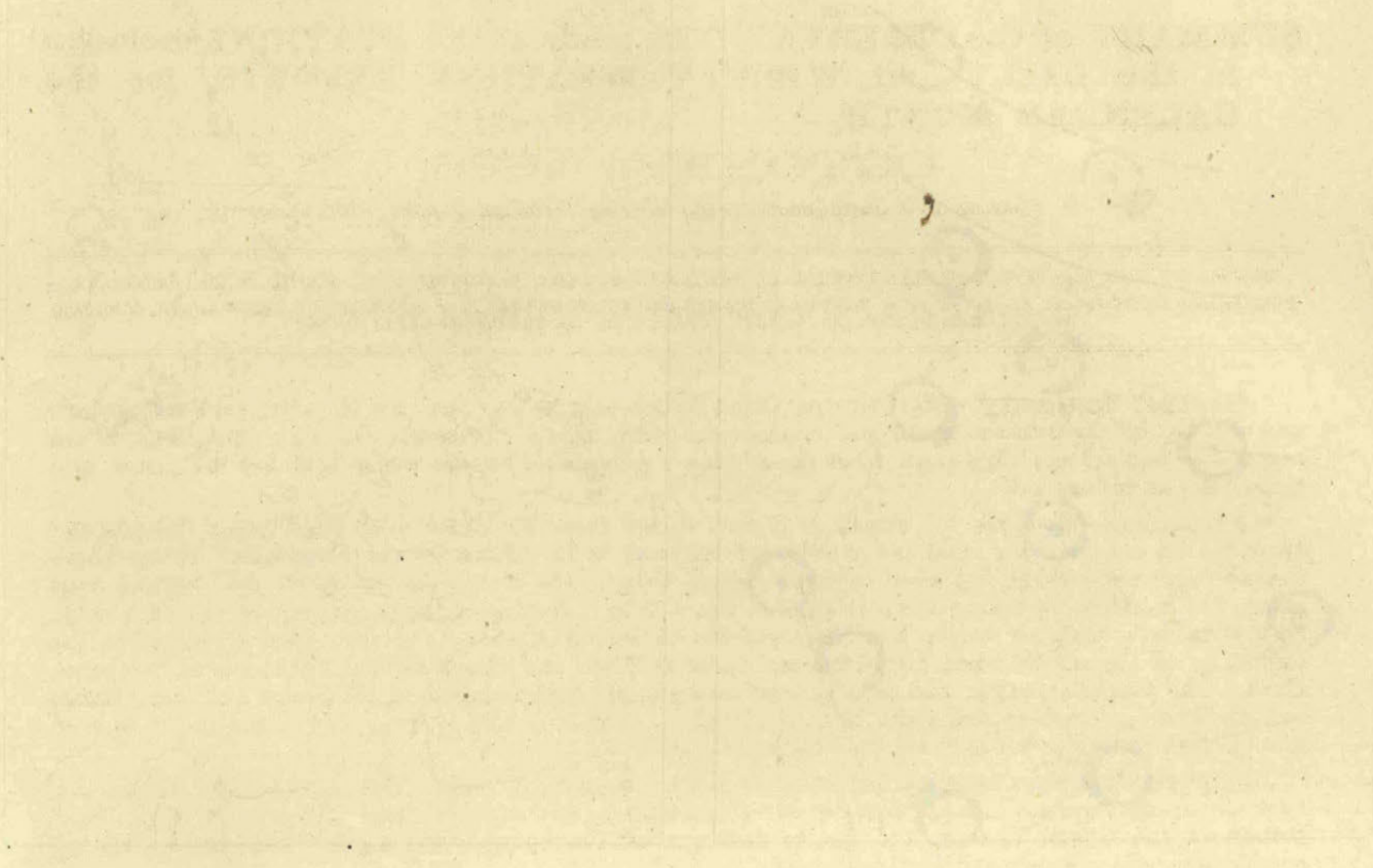
3. DISTRIBUTION OF MEAN TEMPERATURE.



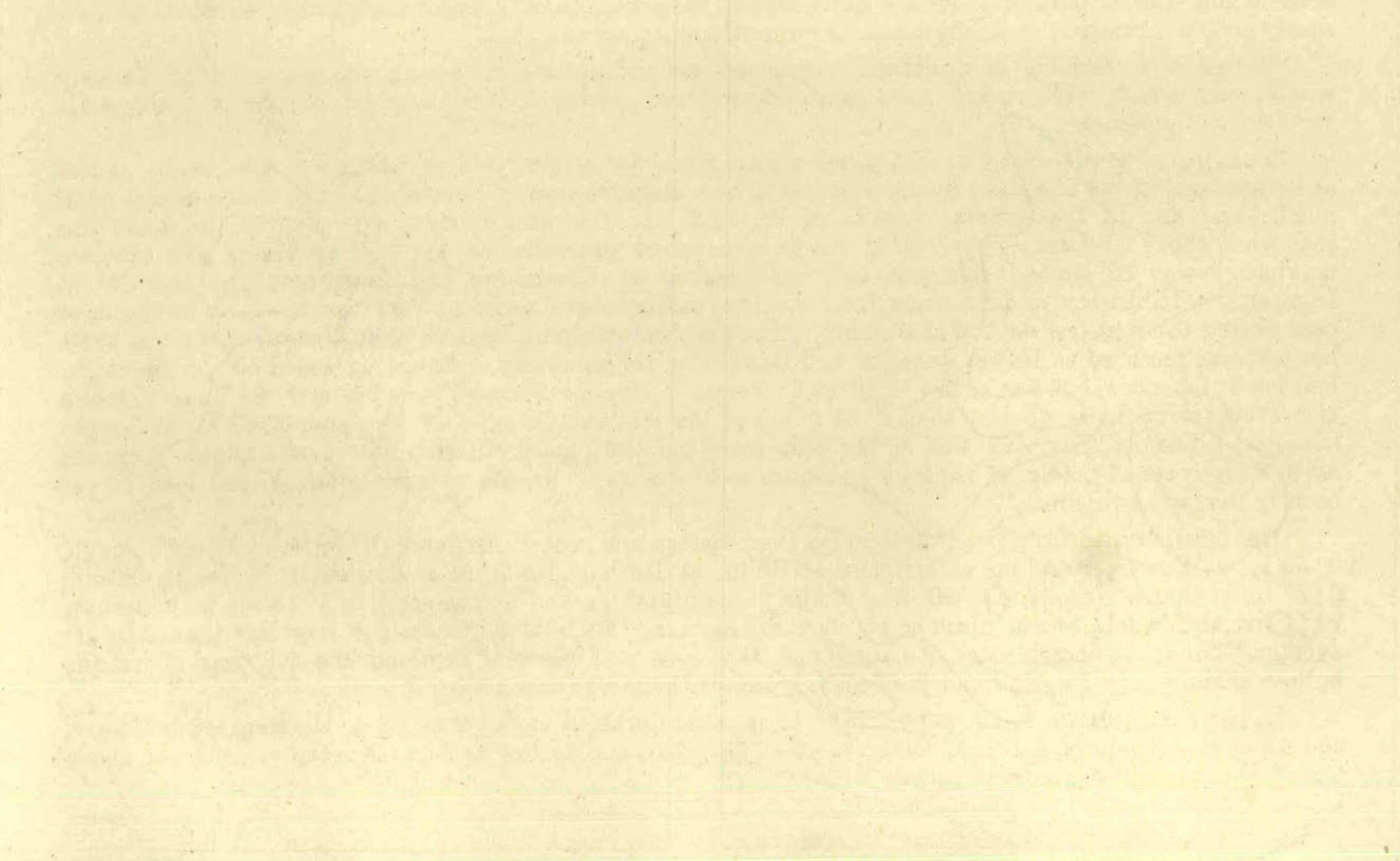
4 RAINFALL.



1. CLOUDS AND WIND



2. TEMPERATURE AND PRECIPITATION



OFFICIAL COPY.

SUMMARY of the OBSERVATIONS made at the STATIONS included
in the DAILY and WEEKLY WEATHER REPORTS, for the
CALENDAR MONTH,

OCTOBER 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH
BRIDGE, EDINBURGH; AND HODGES, PIGGIS, & Co., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather over Great Britain and Ireland was, for the most part, anticyclonic and dry, but in the extreme north the rainfall was very heavy. Pressure was high; temperature was rather low, but did not vary much from the average; winds were on the whole light for the season, and there were no serious gales.

Pressure.—*Mean for the month at 8 a.m.* varied from 30·10 ins. over the Channel Islands, and about 30·08 ins. over the southern counties of England, to 29·78 ins. in the Shetlands. It was above the average* everywhere, but more so in the south than in the north: the excess on the Channel coast being 0·3 in. while at the northern stations it was 0·2 in. *Highest* readings occurred on the 21st, when 30·54 ins. was recorded in the Shetlands and 30·53 ins. at Aberdeen. *Lowest* were registered at the beginning of the month, when 29·10 ins. was noted at Wick and Aberdeen, and 29·11 ins. at Sumburgh Head. The absolute maxima and minima were consequently both recorded at the Scotch stations. *Range* was therefore greatest in the north, and amounted to 1·43 ins. both at Sumburgh Head and Aberdeen. In the south of England it only attained half that amount.

Depressions were very few, and unimportant, for the time of year. One, between the 1st and 4th, took an unusual course in a southerly and south-westerly direction from central Sweden through Great Britain to the Bristol Channel and finally died out off Cherbourg. The tracks of the others all lay outside our north-western and northern coasts.

Anticyclones.—Between the 8th and the 11th a slight anticyclone lay outside our south-west coasts, its eastern side spreading in over our Islands and France; on the 13th another made its appearance off the west of Ireland, and for the next ten days we remained under its influence as it moved very slowly to the eastward; it finally passed off over Germany on the 23rd.

Wind was variable in direction. Along the east and north-east coasts a predominance of Westerly winds were noted. No severe gales were experienced, owing to the long prevalence of anticyclonic conditions of pressure.

Temperature.—*Mean at Sea Level* varied from 53° at Scilly to 44° at Sumburgh Head. It was at its average* value along the south-west coast, but elsewhere was generally below it, to the extent of 3° in Shetland and in the eastern counties of England. In the west of Scotland, however, the mean was somewhat above the average. *Highest* readings occurred generally on the 26th or 27th. The absolute maximum was 70° in London, but 69° was reached at Cambridge and Loughborough, and 68° at Ingatestone, Hillington, and Southampton. *Lowest* readings were noted at very various dates for the most part during the first few days of the month. The absolute minimum was 23°·0 at Llandovery on the 22nd but 24° was recorded at Hawes Junction and Bawtry on the same day. *Range* exceeded 40° in the neighbourhood of London, but was as low as 20° at Ardrossan. *Vapour Tension* varied from 0·34 in. at Valencia and 0·33 in. at Scilly, to less than 0·24 in. over the Midland Counties of England, 0·23 in. at Loughborough. *Relative Humidity* was 90 per cent. over the last-named district, but it was higher over the north-west coast of Scotland, being 95 per cent. at Stornoway. In the extreme south it was low, 79 per cent. in Jersey and Scilly.

Rainfall varied from less than an inch over eastern and central England, (0·39 in. at Loughborough, 0·54 in. at Bawtry, 0·56 in. at Hereford, 0·68 in. at Durham, 0·69 in. at Shields, 0·72 in. at Oxford, 0·77 in. at Spurn Head, and 0·80 in. at Hillington, Cambridge, and Cirencester), to 5·18 ins. at Killarney, 7·54 ins. at Laudale, and as much as 12·09 at Glencarron. In Ireland generally it was less than half its average,* but on the north coast of Ireland and the west and north of Scotland the fall was above the normal amount. In England and the Scotch lowlands the month was a very dry one.

Bright Sunshine.—The per-centages of possible duration varied from 48 at Hastings, 46 in Jersey, and 42 at Southampton, to 19 at Glasgow, 10 at Braemar, and as low as 7 at Glencarron, where, as above stated, the rainfall was over 12 inches.

* The averages employed are—*Pressure* and *Temperature* for the 20 years, 1861–80; *Rainfall* for the 20 years, 1866–85.

TABLE XIX.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
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 8 a.m.) Fahrenheit and Mean Sea Level from Observations made at 8 a.m.	AIR TEMPERATURE.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 29° 777	44° 0	38° 8	48° 2	43° 5	29	5th	54	27th, 28th
	Wick	29° 836	46° 7	41° 5	51° 5	46° 5	32	4th, 5th	63	27th
	Stornoway	29° 844	46° 5	41° 3	51° 5	46° 4	31	4th, 5th	59	27th
1. SCOTLAND, E.	Nairn	29° 864	46° 6	42° 4	53° 3	47° 9	32	5th, 6th	67	27th
	Aberdeen	29° 894	45° 8	42° 5	52° 6	47° 6	32	5th	64	27th
	Leith	29° 925	47° 8	42° 8	55° 7	49° 3	33	5th	65	26th, 27th
2. ENGLAND, N.E.	Shields	29° 958	46° 7	41° 3	54° 0	47° 7	30	2nd	65	26th, 27th
	York	30° 018	43° 5	37° 9	54° 0	46° 0	26	2nd	66	26th, 27th
	Spurn Head	30° 000	46° 4	43° 0	52° 0	47° 5	35	5th	63	26th, 27th
3. ENGLAND, E.	Yarmouth	30° 032	45° 6	40° 1	51° 9	46° 0	31	5th	64	27th
	Cambridge	30° 066	42° 7	35° 9	55° 9	45° 9	25	21st	69	27th
4. MIDLAND COUNTIES	Loughborough	30° 059	41° 1	35° 8	56° 1	46° 0	27	3rd	69	27th
	Oxford	30° 089	41° 6	37° 4	55° 5	46° 5	29	3rd	67	27th
5. ENGLAND, S.	London	30° 084	42° 5	37° 6	55° 9	46° 8	28	8th	70	27th
	Dungeness	30° 061	46° 4	41° 0	55° 0	48° 0	30	5th, 15th, 24th	62	27th
	Hurst Castle	30° 090	47° 2	42° 7	55° 9	49° 3	31	15th, 25th	63	28th
6. SCOTLAND, W.	Ardrossan	29° 943	48° 7	44° 5	53° 7	49° 1	37	5th	57	8th, 9th, 18th, 27th, 28th.
7. ENGLAND, N.W.	Hawes Junction*	28° 752	41° 5	37° 0	49° 1	43° 1	24	2nd	59	26th, 27th
	Barrow-in-Furness	29° 998	46° 7	43° 4	52° 5	48° 0	32	2nd	59	27th
	Liverpool	30° 030	46° 5	43° 1	53° 5	48° 3	33	23rd	65	26th, 27th
	Holyhead	30° 016	50° 0	47° 0	54° 8	50° 9	38	2nd	61	19th
8. ENGLAND, S.W.	Pembroke	30° 043	51° 0	46° 9	54° 1	50° 5	36	2nd	58	25th, 26th, 27th
	Prawle Point	30° 084	50° 5	44° 4	56° 3	50° 4	34	5th, 7th	60	13th, 17th, 28th
9. IRELAND, N.	Malin Head	29° 931	49° 2	46° 4	53° 3	49° 9	38	5th	64	27th
	Donaghadee	29° 985	47° 7	44° 3	53° 8	49° 1	37	5th	60	26th, 27th
	Mullaghmore	29° 967	49° 8	45° 4	55° 6	50° 5	38	2nd, 5th, 14th	64	27th
	Belmullet	29° 978	50° 2	46° 5	54° 5	50° 5	36	14th	60	27th
10. IRELAND, S.	Parsonstown	30° 020	45° 6	40° 3	55° 1	47° 7	27	2nd	63	26th
	Valencia	30° 025	52° 6	47° 3	57° 0	52° 2	36	14th	63	26th, 27th
	Roche's Point	30° 031	50° 5	46° 7	55° 6	51° 2	37	2nd	59	11th, 27th, 28th
CHANNEL ISLANDS	Scilly (St. Mary's)	30° 044	53° 6	49° 7	56° 6	53° 2	39	20th	62	27th
	Jersey	30° 102	50° 2	44° 7	58° 0	51° 4	35	15th	67	27th

* Hawes Junction is 1,135 feet above Mean Sea Level, and the

SUMMARY OF OBSERVATIONS, OCTOBER 1888.

xxxix

REPORTING STATIONS in the BRITISH ISLANDS, during the Month of OCTOBER 1888.

Thunderstorms, and Gales are counted irrespective of the hour at which they occurred.

Latitude, beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	RELATIVE HUMIDITY.	AMOUNT OF CLOUD.	RAINFALL.			WEATHER.							WIND.								
			No. of Days of			Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	No. of Observations of								
			Total Fall in the Month.	Maximum Fall in One Day.	Date.								North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calm.
ins.	°/100	ins.	ins.	ins.																	
0.257	89	8.4	5.87	0.84	25th	28	1	1	0	1	18	1	7	4	1	2	1	2	7	3	4
.288	91	8.2	3.95	0.87	19th	25	1	1	0	1	19	3	7	1	0	1	5	3	5	6	3
.302	95	9.2	7.08	1.00	25th	27	1	0	0	1	26	17	7	0	2	1	2	8	8	1	2
.279	88	6.4	2.29	0.49	31st	21	1	1	1	4	12	1	2	0	1	0	1	13	5	2	7
.265	86	7.3	1.68	0.29	1st	22	4	0	0	1	12	6	0	0	1	0	8	7	10	5	0
.277	84	6.3	1.00	0.38	30th	12	0	1	0	4	6	0	2	0	0	2	2	5	14	5	1
.268	85	7.3	0.69	0.24	30th	9	1	0	0	4	16	3	2	0	0	0	5	9	9	4	2
.247	87	6.5	0.81	0.17	28th	11	1	1	0	10	17	0	3	0	2	3	7	2	7	5	2
.273	87	5.6	0.77	0.22	4th	15	0	0	1	8	11	5	0	0	1	1	6	8	7	8	0
.265	87	4.0	1.85	0.45	6th	13	0	2	0	11	3	0	1	1	1	1	1	7	12	5	2
.239	87	6.2	0.80	0.27	28th	6	0	0	0	9	14	0	4	0	2	0	4	9	2	7	3
.232	90	7.4	0.39	0.18	28th	7	1	0	0	6	17	0	1	1	4	1	1	6	6	5	6
.239	92	6.3	0.72	0.24	28th	7	0	0	0	10	13	0	2	1	1	1	5	8	6	3	4
.242	89	6.4	1.32	0.43	29th	9	0	0	0	8	15	0	0	1	1	2	4	4	7	4	8
.264	84	5.5	3.44	1.20	3rd	12	0	0	0	5	4	1	8	1	3	2	1	4	4	7	1
.303	94	5.4	2.20	0.64	29th	18	0	0	0	8	3	4	7	6	5	1	0	4	4	3	1
.294	86	7.2	1.17	0.30	26th	9	0	0	0	5	18	4	3	3	3	0	5	5	3	8	1
.254	97	7.7	4.71	0.98	26th, 30th	14	2	2	0	4	19	0	1	5	4	2	3	9	3	3	1
.279	88	7.8	4.34	1.10	27th	17	0	1	0	2	19	2	3	8	3	5	3	4	0	5	0
.261	84	7.5	1.59	0.31	30th	17	0	3	0	4	20	1	1	2	1	9	6	3	6	3	0
.309	86	6.8	3.10	1.03	27th	18	0	2	0	4	10	4	3	1	1	2	5	6	4	6	3
.306	82	6.5	1.60	0.46	28th	17	0	0	0	1	10	3	3	6	4	3	6	1	4	4	0
.316	86	6.2	2.26	0.71	29th	17	0	1	1	5	9	1	6	3	7	1	3	3	5	5	0
.308	89	8.1	1.90	0.51	30th	18	1	5	0	4	22	3	6	1	1	1	8	5	1	8	0
.297	90	6.3	1.41	0.31	2nd	17	1	2	0	6	10	1	3	3	2	0	4	8	10	1	0
.300	84	7.2	3.36	0.72	31st	19	0	3	1	2	8	14	3	2	4	3	5	6	4	4	0
.317	88	8.3	4.03	0.53	1st	22	0	0	0	3	21	4	5	1	1	5	5	5	4	5	0
.265	88	7.2	1.35	0.28	27th	17	0	0	0	5	15	0	0	1	0	6	2	6	2	2	12
.336	85	8.2	2.94	0.41	2nd	25	0	0	0	3	22	6	3	1	1	7	3	3	4	4	5
.316	86	6.6	3.14	1.05	27th	16	0	0	0	5	11	4	7	1	1	3	4	6	5	4	0
.327	79	7.5	2.04	0.37	28th	19	0	0	0	3	14	6	6	1	5	5	4	3	1	4	2
.284	79	4.9	2.54	0.49	31st	15	0	1	0	9	6	1	3	4	4	3	2	3	3	7	2

barometric observations at this station are not corrected for altitude.

TABLE XX.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT during the Month of OCTOBER 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Percentages of possible Duration
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	.	.	.	.	.	.	.	.	.	.	.	56	18
LAIRG	40'1	51'6	45'9	29	4th	64	27th	27	4'59	0'78	2nd	—	—
GLENCARRON	40'9	50'8	45'9	29	4th	63	27th	27	12'09	1'46	26th	23	7
PORT AUGUSTUS	42'7	52'9	47'8	32	4th, 14th	62	27th, 28th	21	5'59	0'97	28th	—	—
ABERDEEN	.	.	.	.	.	.	.	.	.	.	.	86	27
BRAEMAR	40'2	50'4	45'3	29	4th, 5th	61	27th, 28th	23	3'02	0'95	28th	32	10
OGHTERTYRE	41'3	55'4	48'4	30	4th	64	10th	15	3'33	0'80	28th	—	—
MARCHMONT	39'9	52'7	46'3	29	2nd, 5th	60	27th	13	1'48	0'30	27th	70	22
ALNWICK CASTLE	42'7	51'9	47'3	31	1st	63	27th	11	0'96	0'21	2nd	—	—
DURHAM	39'4	53'8	46'6	27	2nd	64	27th, 28th	9	0'68	0'20	3rd	79	25
SCARBOROUGH	40'8	52'6	46'7	29	2nd	64	27th	13	1'23	0'39	3rd	96†	30
YORK	.	.	.	.	.	.	.	.	.	.	.	93	29
HILLINGTON	37'5	54'4	46'0	27	16th	68	27th	12	0'80	0'23	4th	116	36
GELDESTON	37'6	54'8	46'2	27	21st	67	27th	14	1'28	0'21	30th	131	40
CAMBRIDGE	.	.	.	.	.	.	.	.	.	.	.	125	39
ROTHAMSTED	36'2	54'4	45'3	26	3rd	66	27th	9	0'96	0'29	28th, 29th	—	—
INGATESTONE	38'3	54'2	46'3	26	23rd	68	27th	7	1'37	0'46	29th	114	35
BAWTRY	35'8	53'9	44'9	24	23rd	65	26th, 27th	8	0'54	0'25	1st	99†	31
CHEADLE	38'3	52'3	45'3	28	7th	62	27th	9	0'83	0'19	5th	—	—
CHURCHSTOKE	37'5	54'4	46'0	27	21st, 23rd	63	23rd	11	1'33	0'53	28th	122	38
HEREFORD	37'5	55'8	46'7	27	5th	67	27th	11	0'56	0'21	1st	—	—
CIRENCESTER	36'8	53'2	45'0	25	15th	65	28th	10	0'80	0'22	29th	121	37
OXFORD	.	.	.	.	.	.	.	.	.	.	.	121	37
LONDON	.	.	.	.	.	.	.	.	.	.	.	91	28
STRATHFIELD TURGISS	35'5	55'8	45'7	26	15th	67	27th, 28th	12	1'56	0'63	29th	—	—
HASTINGS	42'8	54'8	48'8	31	5th	62	27th	13	3'25	0'98	29th	155	48
SOUTHAMPTON	39'6	57'6	48'6	29	15th	68	27th	12	1'66	0'61	29th	137	42
STOWELL	39'0	53'9	46'5	28	14th, 15th	63	28th	13	1'67	0'73	29th	109	33
LAUDALR	44'6	53'5	49'1	34	4th	62	27th, 28th	27	7'54	1'44	26th	—	—
GLASGOW	43'0	53'0	48'0	33	4th, 5th	62	27th	11	1'69	0'39	28th	60	19
GLENLEE	38'2	52'2	45'2	26	2nd, 14th	59	26th, 27th, 28th	13	3'70	1'03	27th	—	—
DOUGLAS	42'2	53'1	47'7	31	2nd, 14th	58	8th	17	3'12	0'85	27th	83	26
NEWTON REIGNY	38'2	52'8	45'5	25	2nd	61	28th	15	2'84	1'10	27th	73	23
STONYHURST	40'2	51'6	45'9	27	2nd	63	27th	15	2'46	0'50	4th	75	23
BLACKPOOL	42'9	53'3	48'1	31	2nd	62	27th	13	2'99	0'75	31st	81	25
MANCHESTER	39'2	52'7	46'0	27	2nd	64	26th, 27th	14	1'87	0'35	4th	—	—
LLANDUDNO	44'4	56'0	50'2	33	2nd	66	27th, 28th	16	1'94	0'30	27th	86	27
LLANDOVERY	37'0	57'1	47'1	23	2nd	63	23rd, 27th	19	3'74	1'15	28th	—	—
PEMBROKE	.	.	.	.	.	.	.	.	.	.	.	113	35
ARLINGTON	41'7	54'4	48'1	30	15th	62	27th	16	2'72	0'57	28th	—	—
CULLOMPTON	38'9	56'5	47'7	26	15th	63	26th, 27th, 28th	11	1'37	0'60	29th	110	34
FALMOUTH	46'6	55'3	51'0	39	4th	62	27th	18	2'68	0'77	28th	123	38
PLYMOUTH	44'5	55'6	50'1	35	15th	60	12th, 26th, 27th, 28th.	14	1'99	0'68	29th	116	35
JERSEY	.	.	.	.	.	.	.	.	.	.	.	152	46
LONDONDERRY	42'8	54'8	48'8	35	4th	65	27th	21	2'46	0'31	27th	—	—
MARKREE CASTLE	40'5	54'6	47'6	28	14th	62	27th	20	2'95	0'53	27th	83	26
BROOKBOROUGH	39'6	54'1	46'9	28	14th	63	27th	16	1'61	0'33	27th	—	—
ARMAGH	40'9	54'3	47'6	30	2nd	64	27th	16	1'21	0'33	2nd	78	24
EDGEWORTHSTOWN	39'7	54'1	46'9	29	2nd, 15th	64	27th	19	1'75	0'27	27th	—	—
DUBLIN	43'4	54'8	49'1	33	2nd, 23rd	67	27th	16	1'23	0'33	27th	99	31
PARSONSTOWN	.	.	.	.	.	.	.	.	.	.	.	82	26
KILKENNY CASTLE	41'4	55'4	48'4	26	15th	62	27th	11	2'13	0'77	27th	—	—
WATERFORD	42'2	56'5	49'4	27	15th	59	15th, 18th, 20th, 26th, 27th.	13	2'43	1'20	27th	—	—
VALENCIA	.	.	.	.	.	.	.	.	.	.	.	92	28
KILLARNEY	43'3	56'1	49'7	27	2nd	63	26th	22	5'18	1'61	27th	—	—
POYNES	44'3	55'4	9'9	33	14th	64	26th, 27th	20	2'66	0'81	31st	—	—

* For information see Table XIX.

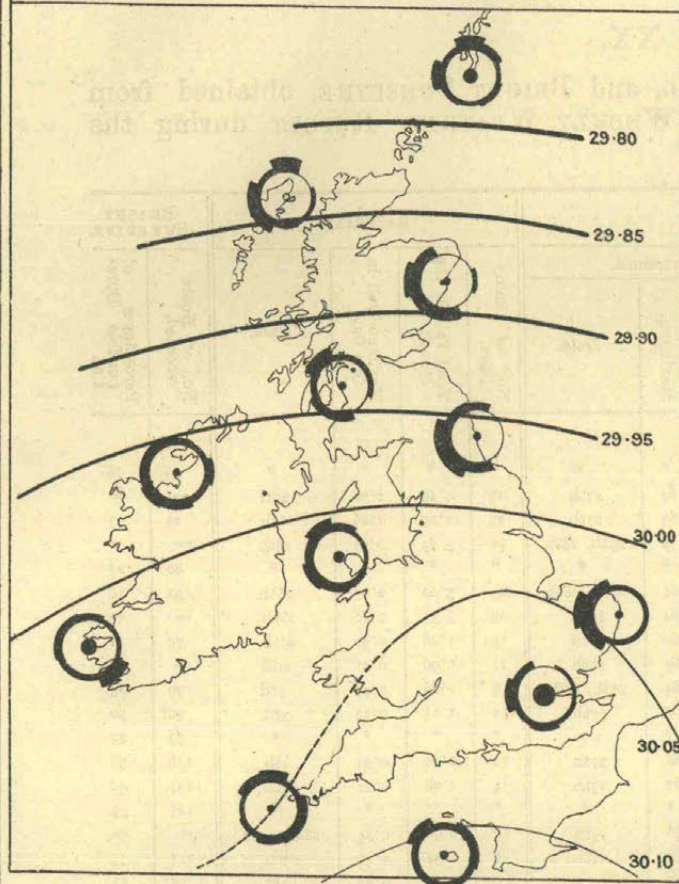
† The bright sunshine values entered to Scarborough are recorded at Oswaldkirk, those entered to Bawtry at Worksop.

MONTHLY WEATHER CHART. OCTOBER. 1888.

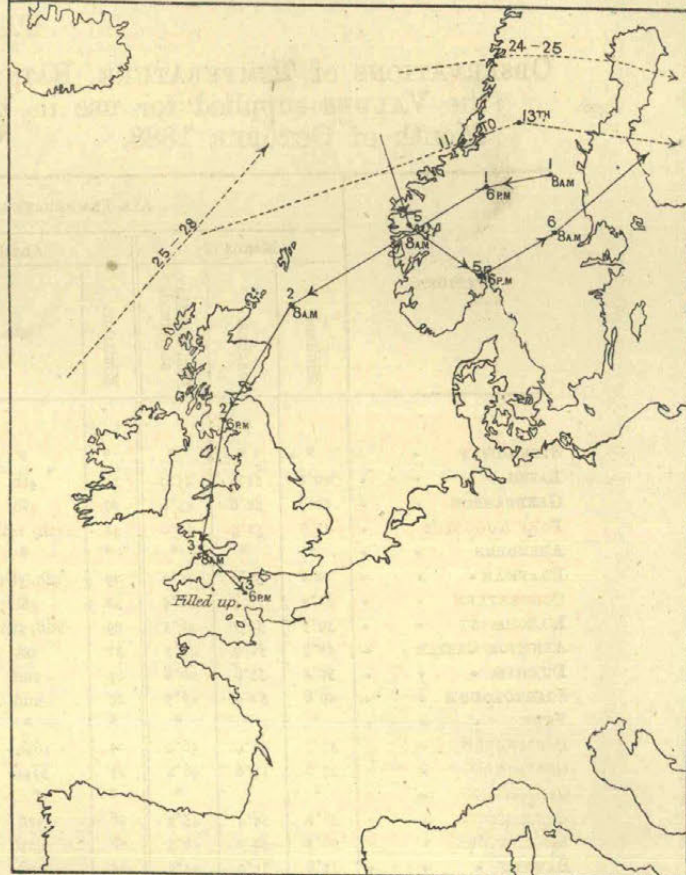
Monthly Summary

Plate X.

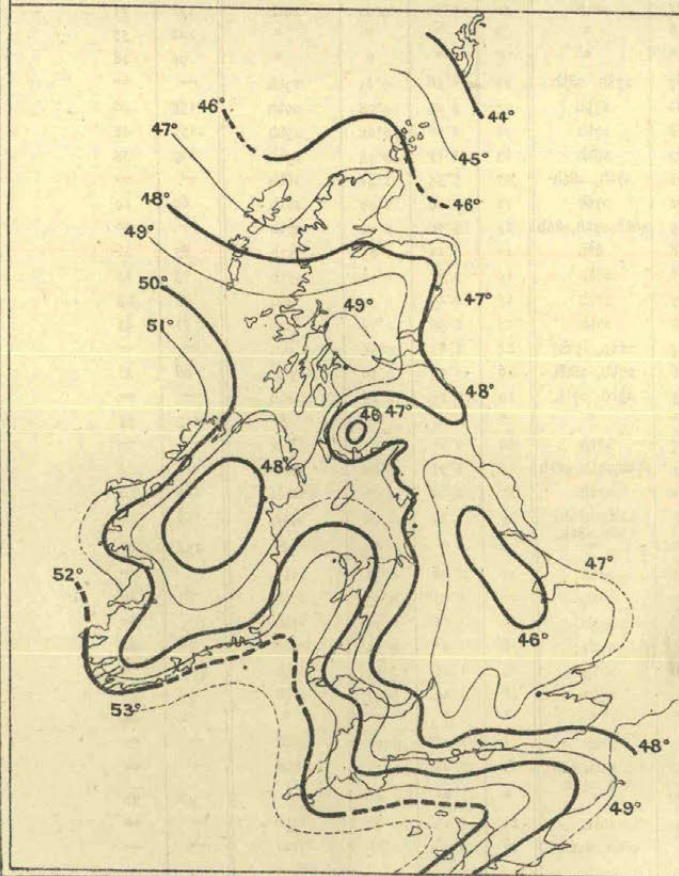
1. BAROMETER AND WIND.



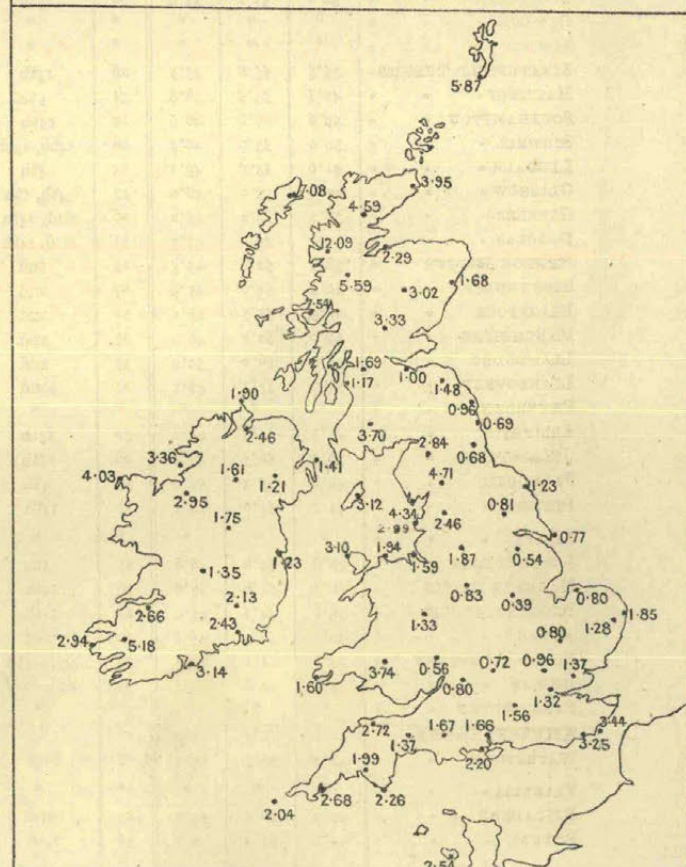
2. MOVEMENTS OF DEPRESSIONS.

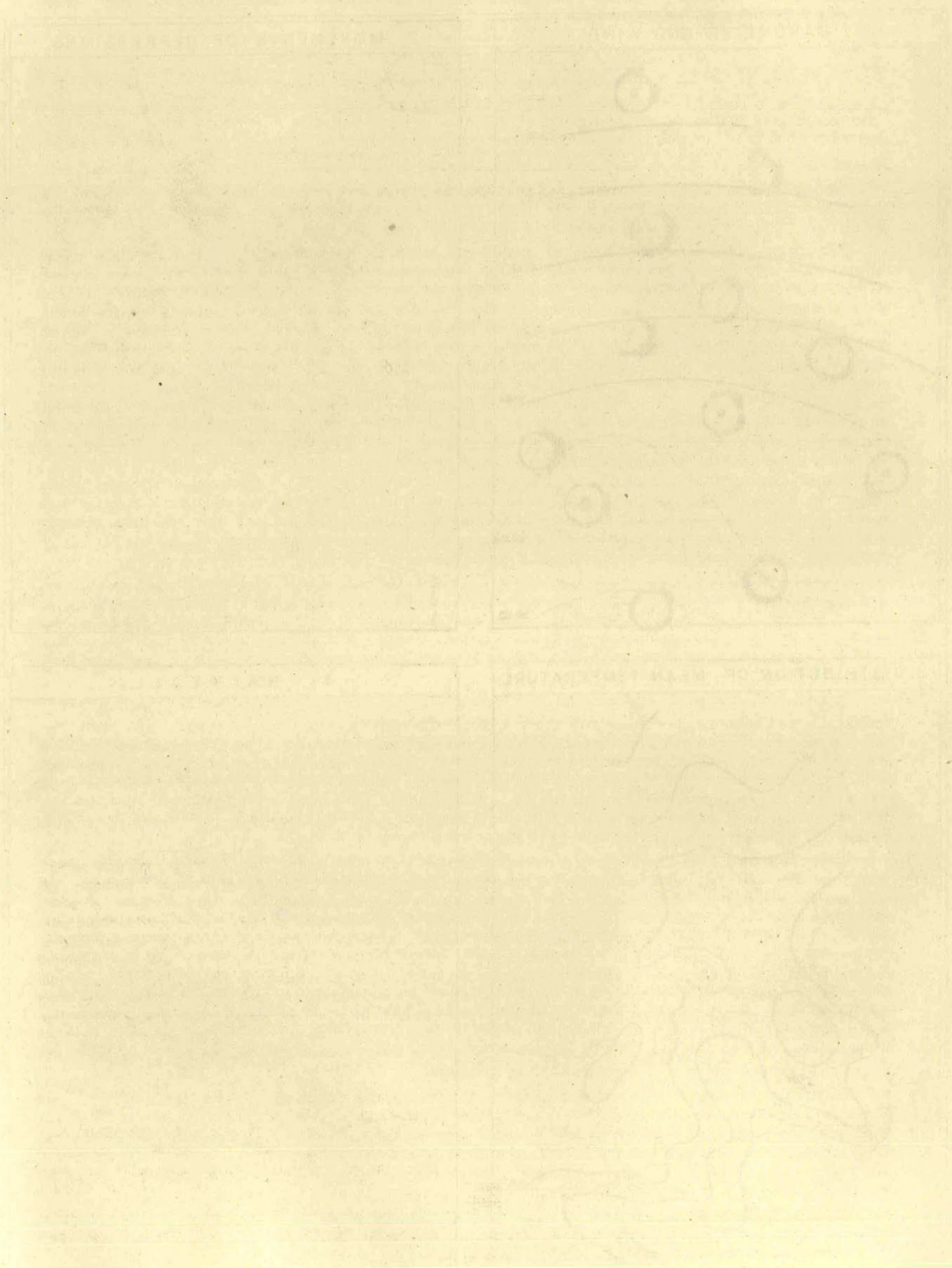


3. DISTRIBUTION OF MEAN TEMPERATURE.



4. RAINFALL.





SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

NOVEMBER 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & Co., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather of November was stormy and wet, the barometer was low, and the thermometer high generally. Rainfall was excessive at most stations, but the falls were very unequally distributed. Gales were frequent, especially in the extreme north and west.

Pressure.—*Mean for the Month at 8 a.m.* was below 29·90 ins. everywhere, and the distribution differed materially from the average* conditions, the isobars running from south-west to north-east, instead of from west to east. Readings ranged from 29·512 ins. at Stornoway to 29·849 in Jersey. It was about a quarter of an inch below the average in the Hebrides and in the west of Ireland, and the deficit gradually diminished in a southerly direction to less than 0·1 in. at the Channel stations. *Highest* readings occurred at the beginning of the month in the extreme north (30·24 ins. at Sumburgh Head on the 6th), later in the Channel (30·23 ins. at Prawle Point on the 16th, and 30·38 ins., the absolute maximum, at Scilly on the 23rd). *Lowest* at various dates. At Sumburgh Head 28·65 ins. was recorded on the 16th, 28·83 ins. on the 19th, and 28·40 on the 26th. At Spurn Head 28·87 ins. was registered on the 27th, while the lowest in Ireland was 29·10 ins. at Valencia on the 12th. *Range* was greatest in the north, nearly reaching 2 ins., owing to the low reading of 28·40 ins. reported from the Shetlands on the 26th. In the south the range did not much exceed an inch.

Depressions were numerous and some of them very erratic in their movements. Several passed outside the Shetland Islands towards and over Norway. One was formed over Belgium on the 1st, and travelled for two days *due westwards* along the Channel. Between the 5th and the 12th three separate systems travelled from south to north outside the south-west coast of Ireland, and finally, at the end of the month, one moved across northern England to the Baltic near Gothland.

Anticyclones—None of these systems were central over the United Kingdom during the month. Between the 3rd to the 16th a large one moved very slowly from the west coast of Norway over the Baltic to central and southern Europe, and on the 18th a new one appeared in the south-west and advanced over the Bay of Biscay, where readings at the centre reached 30·6 ins. at Rochefort on the 23rd. This system gradually retreated southwards, and during the last week no anticyclonic conditions appeared near these Islands.

Wind was variable in direction at most stations; there was a general absence of Northerly winds except in the Shetlands, the dominant winds were South-easterly and North-westerly. The force was great, gales being very numerous. In the Orkney Islands at Swanbister the extraordinary average velocity of 31 miles an hour was maintained *throughout the month*. In the first week or so the gales were Easterly, and drew into South-east along the east coast of Scotland, under the influence of the Scandinavian anticyclone, and to South at Belmullet on the 10th. A very heavy gale passed over the western and northern districts on the 16th, and another on the 20th, and force 10 was reached more than once during the month. Both at Spurn Head and at Mullaghmore gale force was reported on 22 days.

Temperature.—*Mean at sea level* varied from 52°·7 in Jersey to 41°·2 at Lairg. It was much above the average* generally, as much as 5° in the southern counties of England and 2° at Valencia. In southern Scotland the difference was about 4°, but in the Shetlands temperature was normal. *Highest* readings at almost all stations occurred on the 15th or 16th, 62°·0 was recorded at Gleddeston and Llandudno, and 61°·0 at York, Bawtry, Loughborough, and Cambridge. *Lowest* were noted at various dates, principally between the 26th and 29th, but in the south and south-east of England on the 7th or 8th. At most stations the temperature fell below the freezing point, and at Braemar the absolute minimum, 21°·0, occurred. *Range* was greatest in Scotland, where it exceeded 30° at several northern stations. It was less than half that amount (14°) at Scilly. *Vapour Tension* was high in the south, where 0·326 in. was the figure for Scilly and 0·337 for Hurst Castle, for Sumburgh Head it was only 0·220 in. *Relative Humidity* reached 99 per cent. at Hawes Junction, and 97 at Stornoway. Over southern and eastern England it exceeded 90. The lowest values were 84 at Valencia and 81 at Aberdeen.

Rainfall was most irregularly distributed. It was on the whole much above the average.* It varied from 12·00 ins. at Glencarron, 11·55 ins. at Hawes Junction, 10·18 ins. at Glenlee, and 10·09 ins. at Arlington Court, to 2·32 ins. at Parsonstown and 1·84 ins. at Spurn Head. Local differences were very remarkable. At Roche's Point over 9 ins. fell, more than double the average, while at Valencia the quantity was 2 ins. short, and at several other Irish stations there was a deficit. Falls of over an inch were frequent, and on the 12th an inch was exceeded at 14 stations!

Bright Sunshine was deficient, as might be expected. The greatest per-centages of possible duration attained were 27 at Stornoway and 24 at Falmouth. At 9 stations the amount did not reach 10 per cent. In London it was only 7, at Glasgow 6, and at Braemar 3.

* The averages employed are—*Pressure* and *Temperature* for 20 years, 1861–80; *Rainfall* for 20 years, 1866–85.

TABLE XXI.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
Observations are made at 8 a.m. daily, but the Number of Days of Rain, Snow, Hail,
(The Stations are grouped in Districts, and then arranged in order of Latitude,

NAMES OF DISTRICTS.	NAMES OF STATIONS.	Mean Height of Barometer (at 89° Fahrenheit and Mean Sea Level) from Observations made at 8 a.m.	AIR TEMPERATURE.						
			Means of				Absolute Extremes.		
			At 8 a.m.	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.
0. SCOTLAND, N.	Sumburgh Head	ins. 29°576	41°3	38°0	44°9	41°5	27	29th	51
	Wick	29°595	43°3	37°8	46°3	42°1	23	29th	52
	Stornoway	29°512	43°5	38°2	47°8	43°0	27	27th	54
1. SCOTLAND, E.	Nairn	29°591	42°4	36°9	48°1	42°5	25	27th	57
	Aberdeen	29°671	43°0	39°6	47°6	43°6	27	27th	58
	Leith	29°653	45°0	39°9	48°9	44°4	30	27th	58
2. ENGLAND, N.E.	Shields	29°705	45°9	40°1	49°8	45°0	33	21st	60
	York	29°747	45°1	40°9	50°6	45°8	33	28th, 29th	61
	Spurn Head	29°752	46°4	42°4	49°1	45°8	36	21st	59
3. ENGLAND, E.	Yarmouth	29°799	45°7	41°7	49°1	45°4	36	7th, 8th, 21st, 28th, 29th.	59
	Cambridge	29°797	45°9	40°7	51°6	46°2	31	28th	61
4. MIDLAND COUNTIES	Loughborough	29°769	45°2	41°6	50°7	46°2	30	28th, 29th	61
	Oxford	29°789	45°5	42°2	50°4	46°3	33	28th, 29th	59
5. ENGLAND, S.	London	29°802	46°7	43°5	51°5	47°5	32	8th	60
	Dungeness	29°811	48°5	45°7	52°0	48°9	32	7th	57
	Hurst Castle	29°803	49°6	46°5	53°3	49°9	36	7th, 8th	58
6. SCOTLAND, W.	Ardrossan	29°641	45°0	40°9	48°4	44°7	33	28th, 29th	53
7. ENGLAND, N.W.	Hawes Junction*	28°471	40°8	37°0	44°3	40°7	29	29th	54
	Barrow-in-Furness	29°693	45°7	42°5	49°0	45°8	33	28th, 29th	56
	Liverpool	29°717	46°0	42°8	50°3	46°6	35	7th	60
	Holyhead	29°691	47°5	44°6	50°9	47°8	36	28th, 29th	56
8. ENGLAND, S.W.	Pembroke	29°710	49°2	46°0	51°8	48°9	35	21st	55
	Prawle Point	29°789	49°9	45°4	53°0	49°2	36	7th	58
9. IRELAND, N.	Malin Head	29°578	45°1	41°4	48°3	44°9	32	29th	54
	Donaghadee	29°654	46°2	43°0	50°1	46°6	32	27th	56
	Mullaghmore	29°597	47°2	43°0	50°7	46°9	33	28th	58
	Belmullet	29°600	47°2	43°3	51°0	47°2	34	28th, 29th	56
10. IRELAND, S.	Parsonstown	29°655	45°5	41°1	49°8	45°5	26	28th	59
	Valencia	29°660	50°2	45°8	53°3	49°6	36	28th	58
	Roche's Point	29°667	48°8	45°2	52°8	49°0	33	30th	57
CHANNEL ISLANDS	Scilly (St. Mary's)	29°738	52°2	48°8	54°8	51°8	44	28th, 29th	58
	Jersey	29°849	51°2	48°1	55°4	51°8	41	3rd	60

* Hawes Junction is 1,135 feet above Mean Sea Level, and the barometrical

SUMMARY OF OBSERVATIONS, NOVEMBER 1888.

xliii

REPORTING STATIONS in the BRITISH ISLANDS during the Month of NOVEMBER 1888.

Thunderstorms, and Gales are counted irrespective of the Hours at which they occurred.

beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	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 Observations of																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
						Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calms.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
ins.	%		ins.	in.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</

observations at this station are not reduced for altitude.

TABLE XXII.

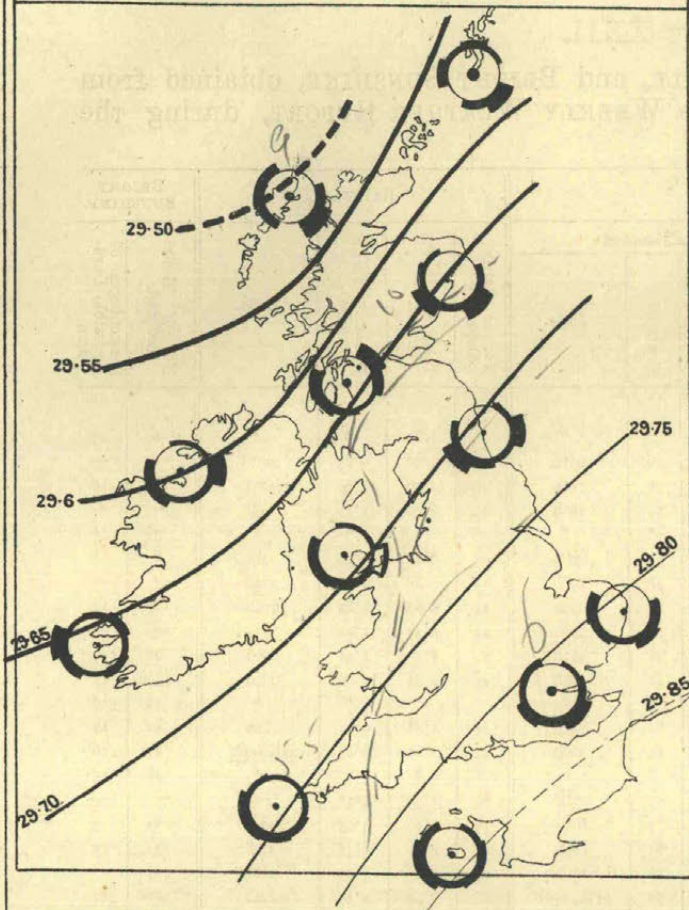
OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE, obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT, during the Month of NOVEMBER 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Percentage of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	.	.	.	.	.	.	.	.	.	.	.	62	27
LAIRG	34.9	44.4	39.7	22	29th	56	25th	19	4.78	0.85	22nd	—	—
GLENCARRON	36.2	46.5	41.4	25	27th	57	16th	19	12.00	3.80	21st	36	16
FORT AUGUSTUS	39.0	47.9	43.5	25	28th	59	16th	20	7.80	1.46	21st	—	—
ABERDEEN	.	.	.	.	.	.	.	.	.	.	.	37	16
BRAEMAR	35.5	44.5	40.0	21	27th	53	16th	25	6.45	0.86	21st	8	3
OGHTERTYRE	38.2	48.3	43.3	26	26th	58	19th	25	7.88	1.54	12th	—	—
MARCHMONT	37.5	45.7	41.6	28	27th	55	15th	24	7.27	1.82	27th	23	10
ALNWICK CASTLE	40.8	47.0	43.9	30	26th	56	15th	21	5.51	1.22	27th	—	—
DURHAM	39.9	48.5	44.2	33	20th, 28th	59	16th	20	4.10	1.44	2nd	38	16
SCARBOROUGH	41.9	49.3	45.6	36	20th, 27th, 28th	59	16th	24	3.53	0.86	2nd	†37	15
YORK	.	.	.	.	.	.	.	.	.	.	.	42	17
HILLINGTON	41.7	49.8	45.8	32	28th	60	16th	21	2.41	0.39	1st	44	17
GELDESTON	42.5	50.4	46.5	35	7th, 28th	62	16th	19	3.02	0.43	1st, 30th	40	16
CAMBRIDGE	.	.	.	.	.	.	.	.	.	.	.	38	15
ROTHAMSTED	41.7	50.5	46.1	29	28th	59	16th	22	4.34	1.16	2nd	—	—
INGATESTONE	41.8	49.6	45.7	34	7th, 8th, 29th	59	16th	19	4.16	1.15	2nd	24	9
BAWTRY	40.9	50.5	45.7	32	9th, 28th	61	16th	23	3.67	0.56	2nd	†31	12
CHEADLE	40.2	48.3	44.3	30	28th	57	16th	24	5.36	1.03	12th	—	—
CHURCHSTOKE	41.0	49.1	45.1	29	28th	59	15th, 16th	26	6.50	1.12	12th	28	11
HEREFORD	41.8	50.3	46.1	30	28th	59	16th	22	8.14	1.46	12th	—	—
CIRENCESTER	40.2	49.3	44.8	28	28th	57	16th	21	5.65	0.93	12th	25	10
OXFORD	.	.	.	.	.	.	.	.	.	.	.	31	12
LONDON	.	.	.	.	.	.	.	.	.	.	.	19	7
STRATHFIELD TURGISS	42.1	51.3	46.7	32	28th	58	15th, 16th	22	4.20	0.59	12th	—	—
HASTINGS	45.1	51.9	48.5	33	7th	57	14th, 16th	21	3.05	0.60	10th	36	14
SOUTHAMPTON	44.3	52.8	48.6	33	7th	59	14th	24	5.14	0.83	12th	31	12
STOWELL	42.1	50.9	46.5	31	7th	57	15th, 16th	30	7.54	2.20	12th	23	9
LAUDALE	39.9	49.5	44.7	32	27th	58	14th, 16th, 24th, 25th.	18	9.57	1.65	21st	—	—
GLASGOW	39.8	47.5	43.7	33	27th	56	16th	21	4.83	0.60	23rd	15	6
GLENLEE	38.1	48.0	43.1	28	28th	56	16th	25	10.19	1.19	10th	—	—
DOUGLAS	43.4	49.9	46.7	35	28th	55	14th, 15th, 16th, 19th.	22	6.41	1.13	12th	36	14
NEWTON REIGNY	38.4	47.4	42.9	25	28th	55	15th, 16th	22	6.41	0.97	27th	23	9
STONYHURST	41.1	48.8	45.0	31	28th	59	17th	24	5.78	0.62	12th	20	8
BLACKPOOL	41.9	49.3	45.6	32	28th, 29th	57	15th	22	4.46	0.51	12th	19	8
MANCHESTER	41.9	49.8	45.9	35	28th	58	16th	24	5.36	0.57	12th	—	—
LLANDUDNO	43.2	51.1	47.2	35	28th	62	16th	25	4.65	0.66	2nd	23	9
LLANDOVERY	40.7	51.2	46.0	30	27th	58	15th	29	8.02	1.12	12th	—	—
PEMBROKE	.	.	.	.	.	.	.	.	.	.	.	33	13
ARLINGTON	42.6	50.7	46.7	32	7th	56	15th	29	10.08	1.10	2nd	—	—
CULLOMPTON	42.4	52.6	47.5	31	28th	60	15th	27	8.68	2.29	12th	25	10
FALMOUTH	46.0	53.3	49.7	40	28th, 30th	57	15th, 16th	25	7.46	0.93	28th	64	24
PLYMOUTH	45.2	53.6	49.4	35	7th	57	15th, 16th, 18th	24	8.21	1.21	4th	44	16
JERSEY	.	.	.	.	.	.	.	.	.	.	.	51	19
LONDONDERRY	40.6	50.1	45.4	31	28th	59	16th	21	4.12	0.72	23rd	—	—
MARKREE CASTLE	41.1	49.8	45.5	23	28th	55	15th, 19th, 24th, 25th.	27	3.32	0.66	10th	46	18
BROOKBOROUGH	39.4	48.9	44.2	24	28th	57	16th	23	5.02	0.96	10th	—	—
ARMAGH	40.9	49.8	45.4	27	28th	56	15th, 16th, 24th	23	4.21	0.59	10th	36	14
EDGEWORTHSTOWN	39.5	49.7	44.6	23	28th	58	16th	25	3.47	0.65	10th	—	—
DUBLIN	43.8	51.2	47.5	31	28th	60	16th	26	6.55	1.52	28th	36	14
PARSONSTOWN	.	.	.	.	.	.	.	.	.	.	.	43	17
KILKENNY CASTLE	42.0	51.3	46.7	25	28th	58	15th	23	3.64	0.53	28th	—	—
WATERFORD	42.4	52.5	47.5	30	28th, 30th	58	19th	22	5.32	0.84	28th	—	—
VALENCIA	.	.	.	.	.	.	.	.	.	.	.	42	16
KILLARNEY	42.7	52.6	47.7	30	26th, 30th	59	15th, 16th	22	4.80	1.11	11th	—	—
FOYNES	43.4	51.3	47.4	32	27th	59	15th	25	4.34	0.58	11th	—	—

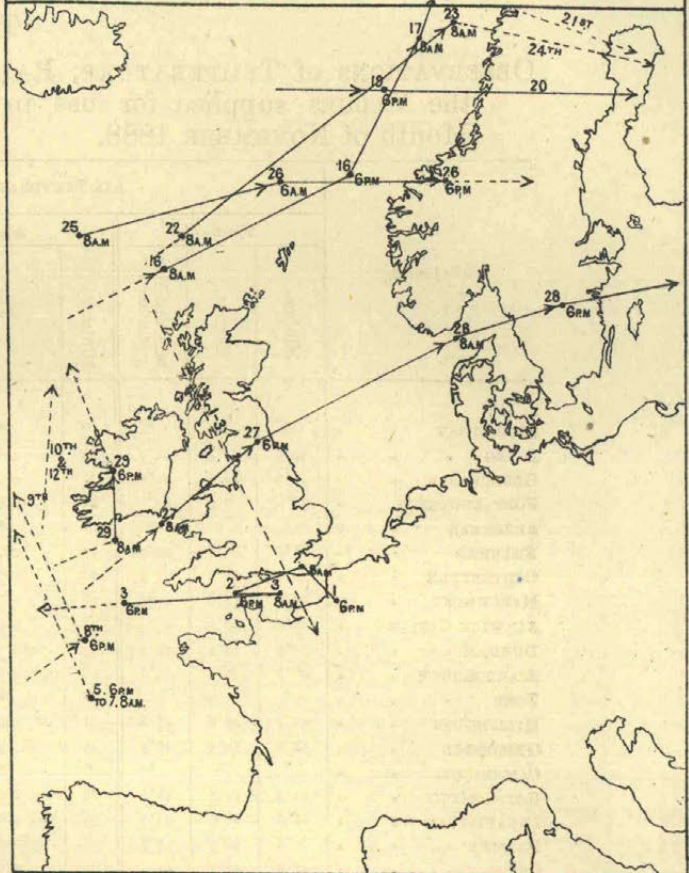
* For information see Table XXI.

† The bright sunshine values entered to Scarborough are recorded at Oswaldkirk, those entered to Bawtry at Worksop.

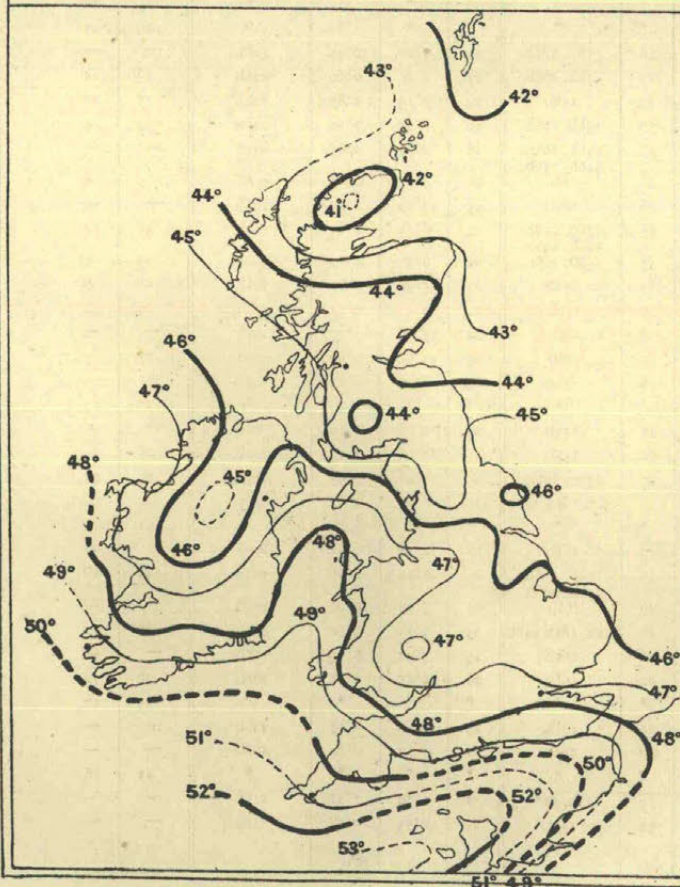
1. BAROMETER AND WIND.



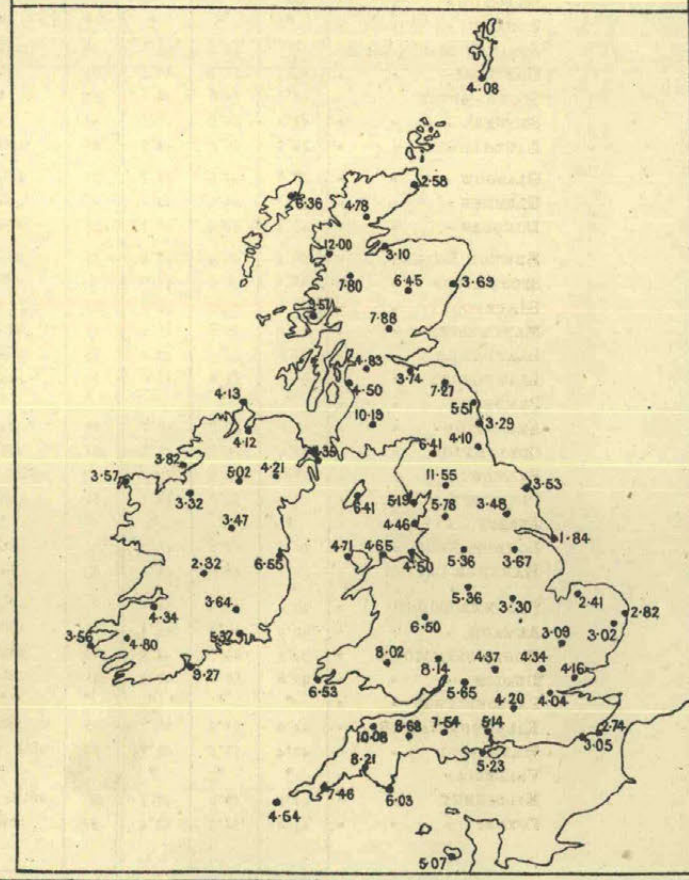
2. MOVEMENTS OF DEPRESSIONS.



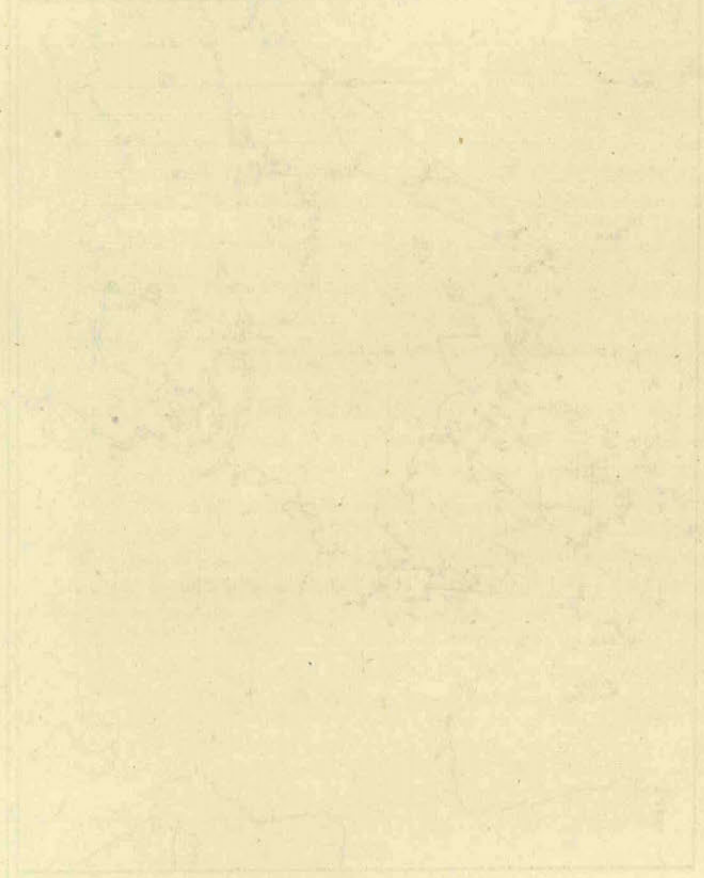
3. DISTRIBUTION OF MEAN TEMPERATURE.



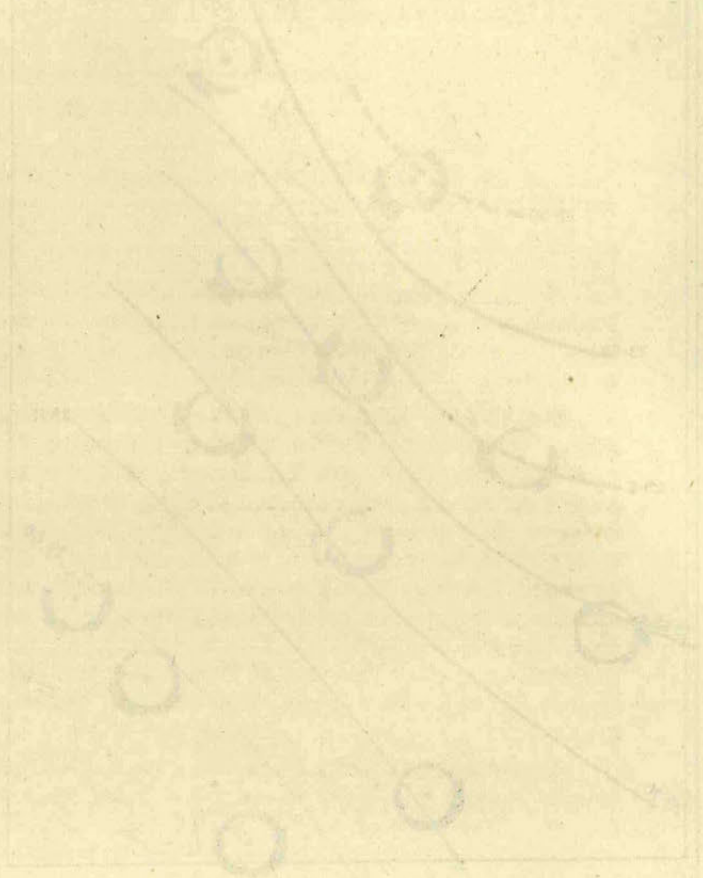
4. RAINFALL.



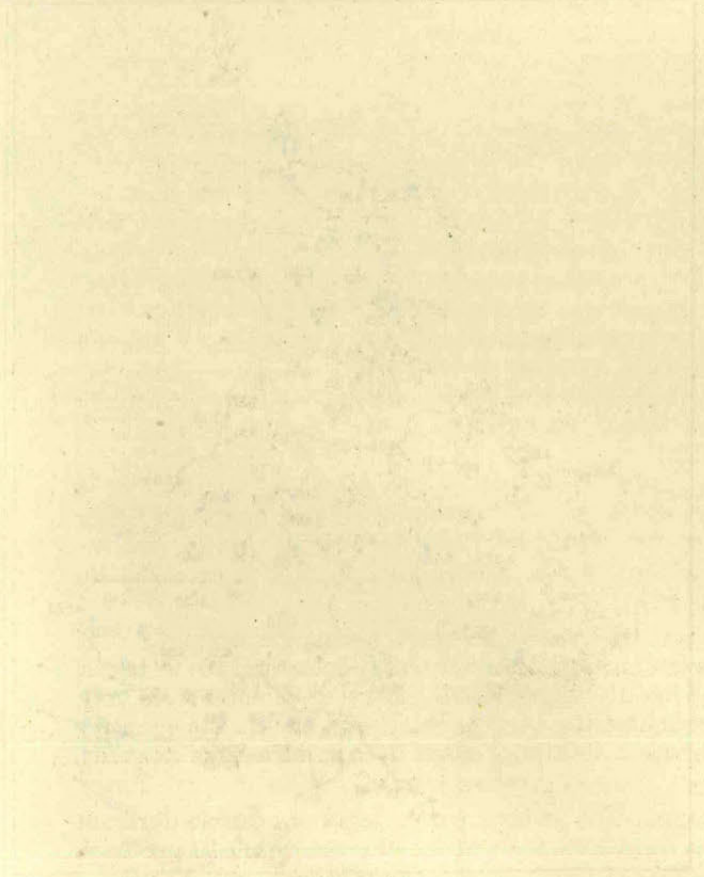
1. MOVEMENT OF DEPRESSIONS



2. BAROMETRIC AND WIND



3. RAINFALL



4. DISTRIBUTION OF MEAN TEMPERATURE



SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

DECEMBER 1888.

(Issued as a Supplement to the Weekly Weather Report, 1888.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & CO., 104, GRAFTON STREET, DUBLIN.

General Summary.—Weather of December was mild, and quiet except in the extreme west and north-west. There were few gales except on the west coast, and none of them severe. Pressure was not far from its average value. Temperature was high in England and Scotland, and about at its normal height in Ireland. At the very close of the month cold weather set in.

Pressure.—*Mean for the Month at 8 a.m.* varied from 30·029 ins. in London to 29·636 ins. at Stornoway. It nowhere differed much from the average.* In the south-east of England it was about 0·05 in. in excess; all along the east coast, from the Humber to Aberdeen, it was nearly normal; while it was in defect on the west coast, to the amount of about 0·05 in. in the Hebrides, and double that amount in the west of Ireland. The general gradient was slightly steeper than usual, and the course of the isobars was from south-west to north-east, instead of from west to east. *Highest* readings were noted on the 16th, when 30·57 ins. was reported from Valencia, and 30·56 ins. from Parsonstown. On the 10th, also, the mercury stood high, 30·37 ins. being registered at Loughborough. *Lowest* occurred on the 21st, when 28·40 ins. was recorded at Scilly and 28·47 ins. at Roche's Point, during the passage of the only depression whose path really crossed any part of the British Isles. *Range* was large in the south-west, as both the extremes were noted in that district. It exceeded 2 ins. both at Roche's Point, (elsewhere it was moderate for the time of the *and Tally* year.

Depressions were singularly rare for the season. The system above mentioned had a very erratic course, passing from Cork to central Ireland, and then, turning south-eastwards, it finally filled up near Bristol. The other systems, however, passed outside the Hebrides, but did not seriously affect our weather, except in causing much raw and South-westerly wind on our western and northern coasts; Stornoway reported 30 days of rain and 23 of gales.

Anticyclones.—Of these there were three. The first, with readings of 30·3 ins., passed over us between the 8th and 11th, and finally disappeared over Germany. This was succeeded by another, following nearly the same track between the 14th and 17th, in which the readings approached nearly to 30·60 ins. It was the influence of these two systems which caused the mean barometer in London to rise above the average. The third anticyclone appeared at the end of the month, but was of minor importance.

Wind was chiefly from the South-east or South at our south-western stations, South-westerly and Southerly elsewhere; at several stations no Easterly winds were reported. The only places where gales were frequent were on the west coast, from Scilly to Stornoway. Several of the inland stations reported none at all. The only strong gale was that accompanying the depression of the 21st above mentioned.

Temperature.—*Mean at Sea Level* varied from 49°·3 at Scilly to 40°·2 at Cambridge and 40°·6 at Aberdeen. It was about at its average* value over Ireland, but in Great Britain the month was somewhat warm, the difference being about 2° in England and nearly 4° in the north-east of Scotland. *Highest* readings occurred in the first week, generally on the 5th. The thermometer reached 60° at Dublin and Llandudno, and 59°·0 at Cambridge, Loughborough, and York. *Lowest* readings were registered at various dates, but principally on the 30th and 31st, when 16° was recorded at Lairg and Braemar, 18° at Glenlee and Churchstoke, and 19° at Llandovery and Glencarron. *Range* was considerable, as both extremes were rather excessive. It was 39° at Lairg and Glencarron, 28° at several other stations. The only place where it was less than 20° was Scilly. *Vapour Tension* varied from 0·304 in. at Scilly to 0·213 in. at Aberdeen and Nairn, and 0·214 in. at York and Cambridge. It was generally below 0·25 in. at all the inland stations of the three kingdoms. *Relative Humidity* varied from 96 per cent. at Ardrossan, 95 at Stornoway and Hawes Junction, and upwards of 90 at several other coast stations, to 84 at Nairn.

Rainfall varied from 11·68 ins. at Laudale, and 10·95 ins. at Killarney, to 0·60 inch at Nairn, 0·68 inch at Shields, 0·72 inch at Durham, 0·78 inch at Leith, and 0·94 inch at Cambridge and Yarmouth. At the last-named station rain was only recorded on 7 days, while 30 such days were reported from Stornoway. It was generally much less than the average,* except in Ireland. Falls exceeding an inch were reported from seven stations in the west and north-west of England on the 27th. The wettest day in west Scotland was the 3rd, and in the south of Ireland the 21st.

Bright Sunshine was deficient; at Glencarron only 2 per cent. of possible duration was recorded, and in London and Glasgow only 8 per cent. The sunniest stations were Hastings with 35, and Jersey with 30 per cent.

* The averages employed are—*Pressure* and *Temperature* for 20 years, 1861–80; *Rainfall* for the 20 years, 1866–85.

TABLE XXIII.—Giving a SUMMARY of the METEOROLOGICAL OBSERVATIONS made at TELEGRAPHIC
Observations are made at 8 a.m. daily, but the Number of Days of Rain, Snow, Hail,
(The Stations are grouped in Districts, and then arranged in order of Latitude,

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.							
			At 8 a.m.	Means of			Absolute Extremes.			
				Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.
0. SCOTLAND, N.	Sumburgh Head	ins. 29°677	42°3	39°2	45°2	42°2	31	31st	51	6th
	Wick	29°709	41°4	37°7	46°0	41°9	23	30th	53	3rd
	Stornoway	29°636	43°8	38°6	46°7	42°7	30	25th, 30th	52	3rd, 6th, 7th, 19th.
1. SCOTLAND, E.	Nairn	29°709	40°8	35°7	46°5	41°1	25	11th	57	5th
	Aberdeen	29°793	39°8	36°2	44°6	40°4	26	31st	54	3rd
	Leith	29°808	41°8	36°2	46°8	41°5	22	31st	58	3rd
2. ENGLAND, N.E.	Shields	29°863	39°6	35°7	45°1	40°4	26	14th	57	5th
	York	29°895	38°4	34°4	45°2	39°8	23	19th	59	5th
	Spurn Head	29°913	41°5	38°0	45°2	41°6	28	14th	55	4th, 6th
3. ENGLAND, E.	Yarmouth	29°976	40°2	36°0	44°1	40°1	24	18th	54	5th
	Cambridge	29°983	38°2	33°4	46°3	39°9	21	31st	59	4th
4. MIDLAND COUNTIES	Loughborough	29°944	38°3	34°7	46°2	40°5	21	31st	59	4th
	Oxford	29°973	39°2	35°9	45°3	40°6	25	11th, 12th, 31st	58	4th
5. ENGLAND, S.	London	30°029	39°8	36°3	46°5	41°4	25	13th	58	5th
	Dungeness	29°993	42°9	39°1	47°6	43°4	24	10th	53	2nd, 3rd, 4th, 5th, 6th, 6th
	Hurst Castle	29°977	44°6	41°1	49°0	45°1	32	15th, 16th, 31st	57	
6. SCOTLAND, W.	Ardrossan	29°795	42°8	39°0	46°8	42°9	27	30th	54	6th
7. ENGLAND, N.W.	Hawes Junction*	28°635	37°7	33°9	42°2	38°1	23	31st	53	5th
	Barrow-in-Furness	29°862	41°7	38°7	45°2	42°0	29	31st	52	3rd, 5th, 6th
	Liverpool	29°893	40°1	37°5	46°4	42°0	26	18th	58	5th
	Holyhead	29°850	45°7	42°7	49°0	45°9	33	31st	56	6th
8. ENGLAND, S.W.	Pembroke	29°869	46°1	42°9	49°3	46°1	34	31st	54	2nd, 3rd, 4th, 5th, 6th, 6th
	Prawle Point	29°940	45°9	40°7	49°7	45°2	31	31st	55	
9. IRELAND, N.	Malin Head	29°724	43°5	40°3	47°0	43°7	34	27th, 30th	54	3rd, 6th
	Donaghadee	29°811	42°0	37°2	47°1	42°2	30	27th, 30th, 31st	56	3rd
	Mullaghmore	29°732	45°2	39°4	49°5	44°5	32	30th, 31st	57	3rd, 6th
	Belmullet	29°729	44°7	41°0	48°9	45°0	33	9th, 30th	54	2nd, 6th
10. IRELAND, S.	Parsonstown	29°790	40°8	35°0	47°4	41°2	22	30th, 31st	56	6th
	Valencia	29°789	47°3	41°5	51°7	46°6	30	30th	57	3rd
	Roche's Point	29°811	46°3	41°3	50°4	45°9	32	30th	55	3rd
CHANNEL ISLANDS	Scilly (St. Mary's)	29°873	49°5	46°1	51°8	49°0	38	31st	55	2nd, 3rd, 4th, 5th, 6th, 7th, 19th, 5th
	Jersey	29°995	45°9	42°7	50°1	46°4	36	13th, 14th, 17th, 18th.	57	

* Hawes Junction is 1,135 feet above mean sea level, and the

REPORTING STATIONS in the BRITISH ISLANDS during the Month of DECEMBER 1888.

Thunderstorms, and Gales are counted irrespective of the Hours at which they occurred.

beginning in each case with the Station lying furthest North.)

TENSION OF VAPOUR.	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 Observations of								
						Rain.	Snow.	Hail.	Thunderstorms.	Clear Sky.	Overcast.	Gales.	North.	N.E.	East.	S.E.	South.	S.W.	West.	N.W.	Calms.
ins. 0.242	% 91	8.9	ins. 3.91	ins. 0.48	24th	25	2	0	0	2	24	1	4	0	0	3	10	2	6	2	4
238	91	6.5	1.73	0.35	25th	17	2	0	0	9	15	5	3	0	0	2	11	7	1	3	4
275	95	8.3	6.16	0.71	2nd	30	1	0	0	1	21	21	2	0	1	1	7	12	3	2	3
213	84	5.2	0.60	0.13	30th	14	0	0	0	8	8	0	0	0	1	1	0	11	5	0	13
213	88	6.3	1.60	0.33	2nd	17	0	0	0	6	13	5	0	0	0	5	12	9	3	2	0
223	84	6.6	0.87	0.34	11th	14	0	0	0	5	10	0	1	1	1	0	7	8	11	0	2
221	91	6.7	0.68	0.15	21st	10	1	0	0	4	7	0	0	0	0	2	7	14	5	1	2
214	93	6.5	1.72	0.86	27th	15	0	0	0	11	18	0	3	0	3	11	8	1	0	4	1
234	90	6.0	1.03	0.35	27th	15	0	0	0	8	11	8	2	0	0	3	12	7	5	2	0
228	92	6.0	0.94	0.37	24th	15	0	0	0	4	8	1	1	0	0	2	6	8	9	4	1
214	93	6.0	0.94	0.34	24th	7	0	0	0	10	13	0	2	0	0	4	10	6	1	2	6
217	94	7.9	1.88	0.99	27th	15	0	0	0	3	18	1	0	0	2	10	5	5	3	5	1
226	94	7.0	2.18	0.75	8th	12	0	0	0	8	17	0	3	0	0	5	11	2	3	1	6
224	92	7.5	1.04	0.22	24th	15	0	0	0	4	19	2	1	1	1	5	8	5	1	3	6
248	90	7.7	1.96	0.66	28th	15	0	0	0	1	12	5	5	3	0	2	7	9	5	2	0
282	94	6.7	1.75	0.28	27th	21	0	0	0	3	9	8	2	6	3	2	6	9	2	1	0
267	96	7.0	2.76	0.64	2nd	17	1	1	0	9	19	1	0	4	7	3	7	4	4	1	1
218	95	8.0	5.86	0.95	3rd	21	2	1	0	4	23	0	2	0	3	3	7	9	3	1	3
245	93	6.5	2.97	0.59	3rd	17	0	1	0	4	12	3	1	5	3	13	2	3	0	4	0
231	93	7.1	1.38	0.33	27th	18	0	0	0	7	18	0	1	1	1	14	3	5	2	4	0
266	87	7.1	3.30	0.49	27th	21	0	0	0	3	11	4	3	1	1	5	10	6	3	2	0
288	93	6.3	4.20	0.90	27th	22	0	0	0	4	8	9	3	3	2	6	10	3	3	1	0
277	91	6.8	2.01	0.40	8th, 22nd	17	0	0	0	3	8	5	5	4	3	2	8	4	3	1	1
258	91	6.2	2.99	0.33	2nd	25	0	2	0	11	18	3	2	0	0	3	15	4	2	5	0
249	94	5.3	2.79	0.64	11th	23	0	0	0	8	6	1	1	1	1	1	7	11	8	1	0
255	85	7.0	5.22	0.51	2nd	24	0	2	0	5	13	15	2	1	0	4	8	11	5	1	1
278	93	6.5	7.51	0.94	21st	24	0	1	0	6	15	8	5	1	0	7	5	6	4	3	0
229	91	7.3	3.51	0.58	2nd	20	0	0	0	5	18	0	0	1	0	10	2	4	1	1	12
280	87	7.9	9.18	1.21	6th	26	0	1	0	2	18	18	3	2	0	6	8	4	3	3	2
279	90	6.4	8.58	1.85	21st	19	0	0	0	7	12	10	4	1	0	1	9	8	3	5	0
304	87	8.3	5.79	0.48	27th	23	0	0	0	0	15	12	2	4	3	2	9	4	3	3	1
268	88	6.6	2.68	0.70	28th	17	1	1	0	6	15	4	1	4	5	9	6	3	2	1	0

barometrical observations at this station are not corrected for altitude.

TABLE XXIV.

OBSERVATIONS of TEMPERATURE, RAINFALL, and BRIGHT SUNSHINE obtained from the VALUES supplied for use in the WEEKLY WEATHER REPORT, during the Month of DECEMBER 1888.

STATIONS.	AIR TEMPERATURE.							RAINFALL.				BRIGHT SUNSHINE.	
	Means of			Absolute Extremes.				No. of Rainy Days.	Total Fall in the Month.	Maximum Fall in One Day.	Date.	No. of Hours recorded.	Percentages of possible Duration.
	Minima.	Maxima.	Min. and Max. combined.	Minimum.	Date.	Maximum.	Date.						
STORNOWAY	.	.	.	.	.	.	.	.	.	.	.	23	12
LAIRG	33'9	44'1	39'0	16	30th	55	3rd	18	1'28	0'45	29th	—	—
GLENCARRON	35'4	46'1	40'8	19	30th	58	7th	27	6'28	1'17	3rd	5	2
FORT AUGUSTUS	36'3	47'1	41'7	22	30th	56	5th, 6th	24	3'20	0'78	3rd	—	—
ABERDEEN	.	.	.	.	.	.	.	.	.	.	.	32	16
BRAEMAR	33'5	42'9	38'2	16	30th	54	3rd	18	2'95	0'78	21st	26	13
OCHTERTYRE	34'0	46'3	40'2	20	29th	55	3rd	17	4'39	1'19	2nd	—	—
MARCHMONT	32'8	43'2	38'0	24	30th	54	3rd	11	1'21	0'29	25th	25	12
ALNWICK CASTLE	36'0	43'5	39'8	26	10th	56	3rd	14	1'73	0'35	25th	—	—
DURHAM	34'3	44'5	39'4	23	18th	56	4th, 5th	14	0'72	0'16	25th	45	21
SCARBOROUGH	36'8	43'8	40'3	26	14th	55	4th, 5th	15	1'46	0'63	27th	†43	19
YORK	.	.	.	.	.	.	.	.	.	.	.	31	14
HILLINGTON	34'2	45'0	39'6	23	31st	56	4th, 22nd	13	1'44	0'46	8th	67	29
GELDESTON	35'7	45'9	40'8	24	18th	55	6th	11	1'05	0'36	24th	56	24
CAMBRIDGE	.	.	.	.	.	.	.	.	.	.	.	56	24
ROTHAMSTED	34'1	44'4	39'3	23	11th, 13th	57	4th	16	1'57	0'32	27th	—	—
INGATESTONE	33'9	45'1	39'5	25	19th	56	5th	12	1'20	0'39	24th	41	17
BAWTRY	34'3	44'8	39'6	23	17th	58	4th	11	1'79	1'15	27th	†43	19
CHREADLE	34'9	43'9	39'4	21	18th	55	4th, 5th	15	2'41	1'40	27th	—	—
CHURCHSTOCKE	33'6	45'7	39'7	18	18th	56	4th, 5th	12	2'98	1'50	27th	49	22
HEREFORD	34'4	45'9	40'2	23	31st	57	5th	16	2'79	1'17	27th	—	—
CIRENCESTER	34'5	45'8	40'2	24	10th, 18th	58	5th	16	3'24	1'15	27th	40	17
OXFORD	.	.	.	.	.	.	.	.	.	.	.	33	14
LONDON	.	.	.	.	.	.	.	.	.	.	.	19	8
STRATHFIELD TURGIS	34'1	45'7	39'9	23	13th	57	4th, 5th, 6th	14	1'63	0'42	25th	—	—
HASTINGS	40'0	47'3	43'7	32	17th	54	2nd, 6th	17	2'45	0'70	29th	83	35
SOUTHAMPTON	38'3	48'5	43'4	28	11th	58	5th	16	2'13	0'48	21st	58	24
STOWELL	35'8	46'5	41'2	23	17th	58	5th	19	3'17	0'57	27th	32	13
LAUDALE	40'0	48'1	44'1	27	30th	58	2nd	27	11'68	1'54	3rd	—	—
GLASGOW	38'1	45'7	41'9	24	30th	55	3rd	20	3'59	0'82	2nd	16	8
GLENLEE	35'0	45'1	40'1	18	30th	55	3rd	19	8'74	1'87	3rd	—	—
DOUGLAS	39'5	48'1	43'8	26	30th	54	3rd, 6th	19	5'28	0'87	11th	36	16
NEWTON REIGNY	34'2	44'6	39'4	20	30th	55	3rd	17	3'26	0'75	19th	35	16
STONYHURST	36'2	45'2	40'7	26	30th, 31st	56	5th	18	2'98	0'58	27th	27	12
BLACKPOOL	37'1	46'5	41'8	28	31st	57	5th	11	2'36	0'50	11th, 27th	27	12
MANCHESTER	36'8	45'7	41'3	26	31st	56	5th	19	2'47	1'00	27th	—	—
LLANDUDNO	39'7	49'6	44'7	30	18th, 31st	60	3rd	18	1'73	0'33	27th	40	17
LLANDOVERY	34'2	47'0	40'6	19	30th	57	6th	23	7'06	1'77	27th	—	—
PEMBROKE	.	.	.	.	.	.	.	.	.	.	.	42	18
ARLINGTON	36'9	47'8	42'4	24	31st	55	4th, 5th, 6th	20	4'82	0'85	27th	—	—
CULLOMPTON	35'9	48'0	42'0	25	11th	57	5th	19	3'32	0'60	27th	33	14
FALMOUTH	42'9	50'0	46'5	31	11th	56	4th, 6th	20	3'98	0'51	22nd	64	26
PLYMOUTH	39'7	49'9	44'8	29	31st	57	5th	19	3'43	0'38	27th	70	29
JERSEY	.	.	.	.	.	.	.	.	.	.	.	75	30
LONDONDERRY	37'5	46'5	42'0	28	10th, 30th	57	3rd	24	3'58	0'61	2nd	—	—
MARKREE CASTLE	34'9	40'3	40'6	23	30th	56	3rd	27	4'87	0'64	6th	39	17
BROOKBOROUGH	33'5	45'7	39'6	20	30th	55	3rd	22	4'55	0'56	2nd	—	—
ARMAGH	36'6	46'9	41'8	22	10th	57	3rd	18	2'57	0'46	2nd	41	18
EDGEWORTHSTOWN	34'4	46'1	40'3	21	30th	56	3rd	20	4'27	0'70	2nd	—	—
DUBLIN	38'9	48'2	43'6	25	30th	60	3rd, 5th	17	2'91	0'68	19th	53	23
PARSONSTOWN	.	.	.	.	.	.	.	.	.	.	.	49	21
KILKENNY CASTLE	34'3	47'5	40'9	21	31st	57	3rd	22	4'83	0'88	19th	—	—
WATERFORD	37'2	49'3	43'3	25	31st	55	2nd, 3rd	21	5'91	1'10	19th	—	—
VALENCIA	.	.	.	.	.	.	.	.	.	.	.	51	22
KILLARNEY	37'4	50'1	45'8	24	30th	57	3rd, 5th	24	10'95	1'80	21st	—	—
FOYNES	39'5	49'5	44'5	28	15th	58	2nd	22	4'32	1'30	21st	—	—

* For information see Table XXIII.

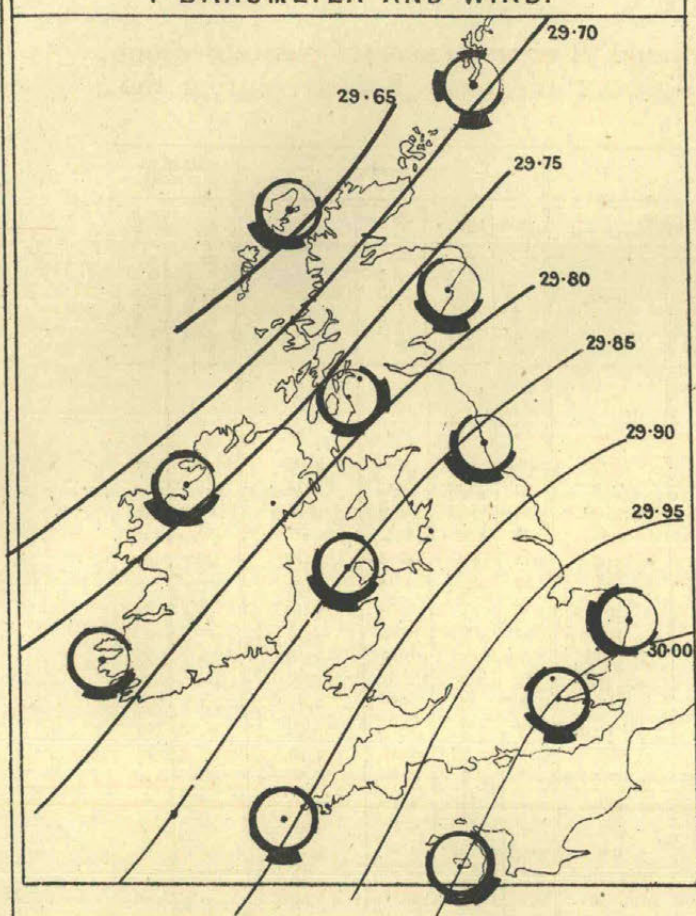
† The bright sunshine values entered to Scarborough are recorded at Oswaldkirk, those entered to Bawtry at Worksop.

MONTHLY WEATHER CHART. DECEMBER, 1888.

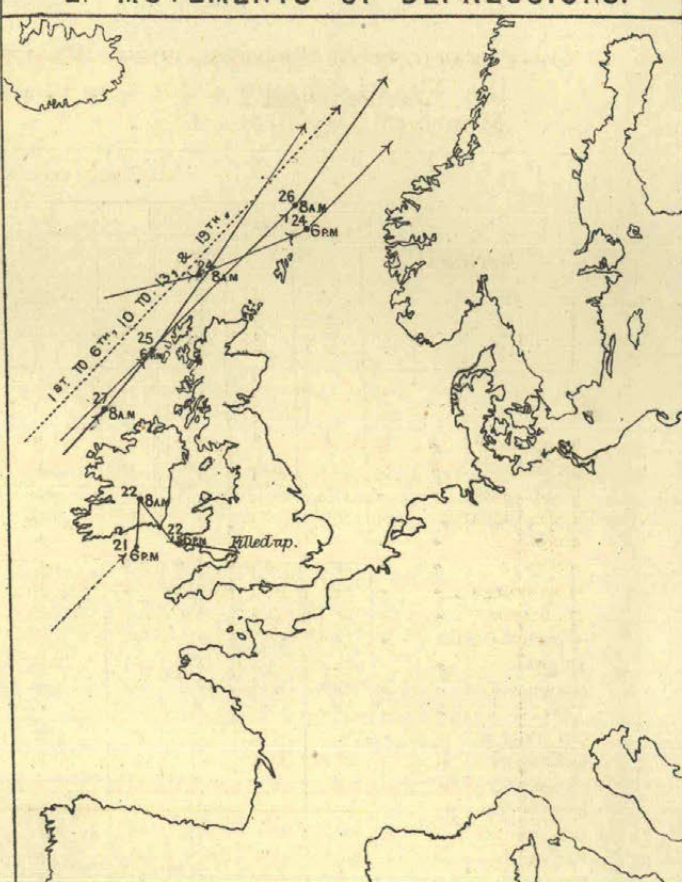
Monthly Summary.

Plate XII.

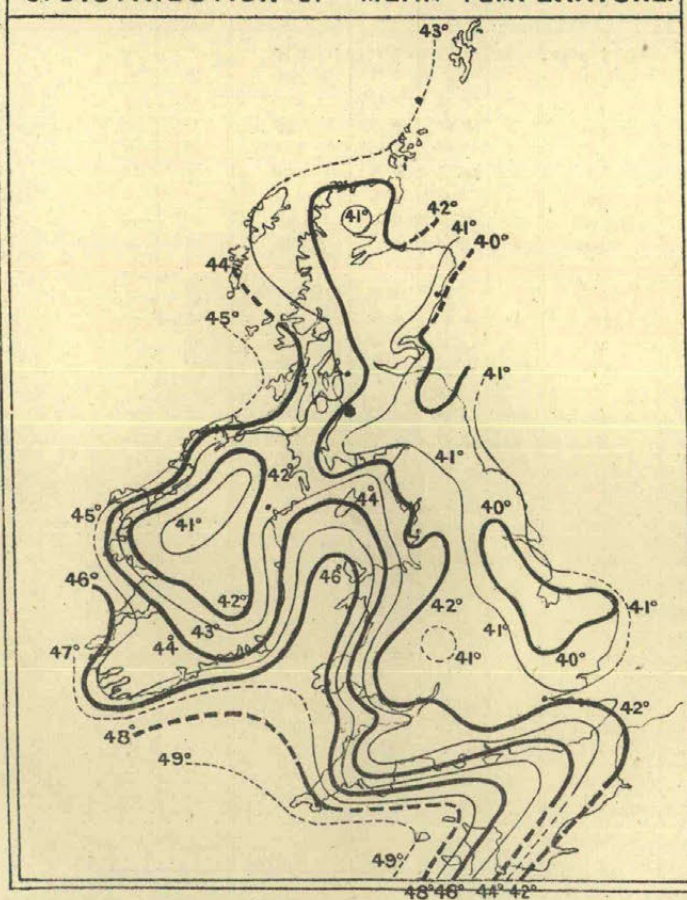
1 BAROMETER AND WIND.



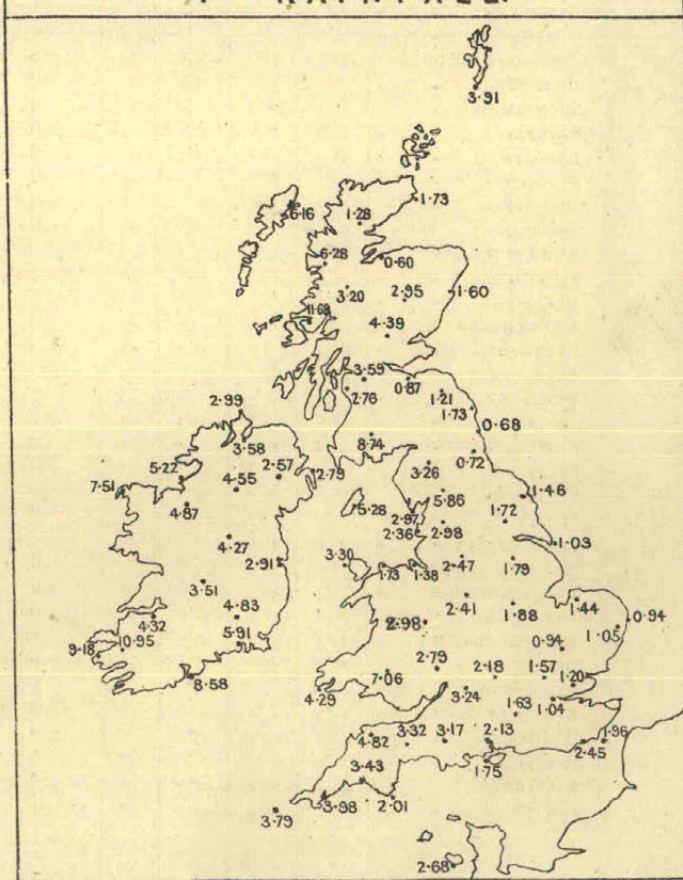
2. MOVEMENTS OF DEPRESSIONS.



3. DISTRIBUTION OF MEAN TEMPERATURE.



4 RAINFALL.



Scale of Miles 0 100 200 300 400 500 600 700 800 900 1000

