

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

DECEMBER 1896.

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General Summary.—The weather of December was extremely changeable, with frequent falls of rain in the earlier half of month, and with snow showers in many places between the 14th and 22nd. Early on the 17th a distinct earthquake shock was experienced over nearly the whole of England and Wales—rather severely in the western counties. Pressure was low; temperature was above the average, excepting in the west; the winds varied greatly in direction; rainfall was largely in excess of the normal; bright sunshine was deficient over Great Britain as a whole, but fairly abundant in Ireland.

Pressure.—*Mean at 8 a.m.* ranged from 29·8 ins. and upwards over the eastern and central parts of the English Channel to 29·65 ins. and less in the extreme north and north-west of our islands generally, and to very little above 29·6 ins. in the Hebrides. The actual values were below the average* at all stations excepting Sumburgh Head, the deficit being greatest on our south-west coasts, where it amounted to about 0·2 in. *Highest* readings were recorded on the 23rd, when the barometer rose to 30·1 ins. and upwards in Scotland, and to 30·2 ins. and upwards in most parts of Ireland and England. *Lowest* readings occurred between the 4th and 6th, when the barometer fell below 28·8 ins. very generally and below 28·5 ins. at several of the English Channel stations. The reading of 28·32 ins. registered at St. Aubin's, Jersey, at 7 p.m., on the 4th, was apparently the lowest recorded in that locality for very many years. *Range* was large in the south, but moderate elsewhere.

Depressions were numerous, especially in the early part of the month, when their centres travelled in many cases directly over the United Kingdom. Later on the systems passed in a north-easterly direction outside our north-western and northern coasts, one of the larger disturbances being, however, accompanied on the 28th by a well marked secondary depression which advanced eastwards across the northern parts of Ireland and England.

Anticyclones were rarely observed in our own immediate neighbourhood, the highest pressures being located as a rule over Russia and Scandinavia. On the 20th, however, an anticyclone from those regions spread temporarily over our islands, while on the 22nd and 23rd a system of moderate intensity was developed immediately over us, the latter soon passing away, however, to the eastward. During the closing week the northern anticyclone gave way, and pressure became highest over southern Europe.

Winds.—During the earlier half of the month the winds varied greatly in direction, but towards its close they were chiefly South-westerly. Gales were comparatively rare in the south-east, but were frequent in the west and north, the number of days being as large as 16 at Aberdeen, 15 at Wick, and 14 at Scilly. The gales accompanying the depression of the 4th–5th were of considerable severity,—(1) from the Southward in the eastern part of the English Channel; (2) from the Northward and North-eastward in the Scilly Islands; and (3) from the Eastward and South-eastward in the east of Scotland.

Temperature.—*Mean at Sea Level* ranged from 47° in the Scilly Islands, and 43° and upwards on our extreme south-west coasts generally, to 39° and less in the more central parts of the kingdom, and to 38° and less at several inland stations in the northern parts of Ireland and Scotland. At most of our western stations, and especially at those on the coast, the actual values were slightly below the average,* but in other parts of the kingdom there was an excess of warmth. *Highest* readings were observed mainly about the 26th, when the thermometer reached 55° or more at several stations; at Leith, on the 25th, it rose as high as 60°. *Lowest* readings occurred at various times in the different districts, but mostly on the 1st or between the 17th and 24th; at several inland stations in the more northern parts of the kingdom the thermometer on one or other of these dates fell below 20°, the lowest readings of all being 9° at Braemar on the 23rd, and 13° at Lairg and 14° at Edenfel, both on the 20th. *Vapour Tension* ranged from 0·29 inch at Scilly, and 0·24 inch or more on our extreme western and southern coasts generally, to 0·21 inch or less at several stations in the northern and central parts of the kingdom. *Relative Humidity* exceeded 90 per cent. over a considerable portion of our islands, and was as high as 99 per cent. at Ardrossan; at Valencia, however, the per-centage value was only 82.

Rainfall was in excess of the average* in all localities excepting the Shetlands, the north west of Scotland, and isolated portions of the east and south-east coasts of England. As a rule the excess was considerable, and especially so in the north-eastern and south-western parts of Great Britain, where the fall was in some cases more than twice as much as the average. The largest aggregates recorded were 10·7 ins. at Falmouth, 8·7 ins. at Valencia, and 8·6 ins. at Fort William; the smallest being 2·4 ins. at Bawtry, 2·5 ins. at Leith, Cambridge, and Yarmouth, and 2·6 ins. at Nairn. The number of rainy days was also very large, more than 25 being recorded at many western and northern stations, and as many as 29 at Sumburgh Head, Marchmont, Stamford, and Scilly. Falls exceeding an inch in 24 hours were experienced on various occasions, the heaviest of all being 2·0 ins. at Falmouth on the 14th, and 1·9 ins. at Fort William on the 25th.

Bright Sunshine.—The amount was in excess of the average* at most of the stations in Ireland and Cornwall, as well as at Douglas, Fort Augustus, and Fort William. Elsewhere, however, there was a deficiency. The per-centage of the possible duration ranged from 28 at Falmouth to 6 in London and at Fort Augustus, 4 at Edinburgh, 3 at Prestwich, and to only 1 at Manchester (Oldham Road).

* The averages employed are—*Pressure* and *Temperature* for the 25 years, 1871–95; *Rainfall* for the 30 years, 1866–95; and *Bright Sunshine* for the 15 years, 1881–95.