

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

DECEMBER 1894.

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General Summary.—The weather of December was extremely unsettled, with frequent rain in most districts, and with snow towards the end of the month. A gale of unusual severity was experienced over the northern half of the kingdom on the 22nd. Pressure was above the average excepting in the extreme north; temperature was high, especially over Ireland and England; the winds were chiefly Westerly, with frequent gales in the west and north; rainfall was generally rather deficient; and bright sunshine was in excess of the normal at all but a few of our western and extreme northern stations.

Pressure.—*Mean at 8 a.m.* ranged from 30·10 ins. and upwards in the Channel Islands and 30·05 ins. and upwards on our extreme south-west coasts generally to 29·65 ins. and less in the Shetlands. The actual values were above the average in all districts excepting the north of Scotland, and as the excess was greatest (0·12 in. to 0·15 in.) in the south-west, the gradient over our Islands was steeper than usual. *Highest* readings were observed on the 27th, when the barometer ranged from 30·5 ins. and upwards on the north and east coasts of Great Britain to between 30·8 ins. and 30·9 ins. over the greater part of Ireland. The reading of 30·93 ins. registered at Valencia at noon on this day was with one exception (in January 1891) the highest on record for that station. *Lowest* readings were recorded on the 22nd, when the barometer fell to 28·2 ins. and less in the north-east of Scotland and to 28·5 ins. and less over the northern parts of the kingdom generally. In the extreme south of England, however, the mercury did not fall below 29·5 ins. *Range* was consequently small in the south, but large in the north, and especially so in the north of Ireland, where it amounted to nearly two and a half inches.

Depressions.—During the earlier part of the month the depressions observed in the neighbourhood of our islands were of little importance, and as a rule their centres passed well outside our north-western or northern coasts. On the 21st–22nd, however, a system of unusual depth travelled eastwards across Scotland and the North Sea, while on the 28th–29th a disturbance of less intensity, but of wider extent, spread over us from the northward, its centre eventually moving southwards across Scandinavia and Denmark. The barometric changes observed in Scotland during the progress of the former disturbance were of exceptional rapidity.

Anticyclones.—The only anticyclone of any importance observed over the United Kingdom was a large system of great height which extended from the southward on the 23rd and which remained with us until the night of the 27th, when it passed away rapidly in a south-westerly direction.

Winds, although rather variable on our south-west coasts, were chiefly from the Westward, and frequently attained the force of a gale, especially in the west and north. The Westerly to North-westerly gale which accompanied the deep depression of the 21st–22nd was exceptionally severe over the northern parts of England and Ireland; at Fleetwood the wind blew with a velocity exceeding 100 miles per hour for four consecutive hours, the maximum of 107 miles in 60 minutes registered at 9 a.m. on the 22nd being the highest on record for these Islands.

Temperature.—*Mean at Sea Level* ranged from 48°·7 at Scilly and from 46° and upwards on our extreme south-west coasts generally to 41° and less in most of the northern and eastern parts of Great Britain, and to 39° and less, over Central Scotland. The general distribution was fairly normal, but the actual values were above the average,* the excess being considerable (three to four degrees) at many of the English and Irish stations. *Highest* readings were recorded between the 11th and 13th, when the thermometer rose to 55° and upwards in most districts, the highest values of all being 62° at Plymouth and 60° at Glenlee. *Lowest* readings were observed either during the first week or at the extreme end of the month, when sharp frost was experienced in most places; at Braemar the sheltered thermometer fell to 16°, and at Fort Augustus, Nairn, and Hawes Junction to 20°. *Range* was moderate for the time of the year. *Vapour Tension* ranged from between 0·28 in. and 0·30 in. on our south-west coasts to 0·22 in. and less at several of the northern and central stations in Great Britain. *Relative Humidity* exceeded 90 per cent. in many places, the highest value of all being 94 per cent. at Stornoway, Donaghadee, and Dungeness. The lowest per-centages were 82 at Jersey and 84 at Valencia.

Rainfall varied greatly in different localities, but was upon the whole rather deficient, the only regions in which any general excess was shown being the north-western parts of Ireland and Scotland. The largest aggregates reported were 13·0 ins. at Glencarron, 8·7 ins. at Fort William, and 7·7 ins. at Laudale; the smallest were 1·1 ins. at Shields, 1·2 ins. at the North Foreland, and 1·3 ins. at Durham, York, Bawtry, Cambridge, and Dungeness. The number of rainy days was large in all districts excepting the eastern, central, and southern parts of England. At Belmullet there were as many as 29 days, and at Sunburgh Head and Valencia 27 days with rain.

Bright Sunshine was in excess of the average at all but a few of our western and extreme northern stations. The per-centage of the possible duration ranged from between 25 and 27 on the south coasts of England to 10 or less in many parts of Scotland. The smallest per-centages were 6 at Fort Augustus and Manchester (Oldham Road) and 8 at Fort William and Edinburgh.

* The averages employed are—*Pressure and Temperature* for the 20 years, 1871–90; *Rainfall* for the 25 years, 1866–90; and *Bright Sunshine* for the 10 years, 1881–90.