

SUMMARY OF OBSERVATIONS.

AUGUST, 1904.

General Summary.—The weather of August was of a very variable nature. At the commencement and end of the month the conditions were fine and warm (the highest temperatures of all being registered on the 3rd or 4th), but at other times the weather was distinctly cool, with frequent rain, and occasional thunderstorms in most districts. A dust storm occurred in some parts of Lincolnshire on the afternoon of the 4th. Pressure was slightly above the normal, but temperature was in most instances below the average; the winds were chiefly from between South and West; rainfall differed greatly in amount in various parts of the kingdom, but was generally in excess of the mean; bright sunshine also showed an excess in most districts.

Pressure.—*Mean at 8 a.m.* ranged from 30·05 ins. and upwards over the southern part of the English Channel to 29·85 ins. and less in the north of Scotland. The general distribution over our islands, and the barometric gradient, agreed very closely with the normal, but the actual values were slightly above the average,* the excess being as a rule rather more than 0·05 inch, but a little below that value at some of our extreme northern and north-western stations. *Highest* readings were recorded either on the 8th or on the 23rd or 24th, the barometer rising on each occasion to 30·1 ins. and upwards in all parts of the kingdom, and to 30·2 ins. and upwards in most of our western and south-western districts. *Lowest* readings occurred during the passage of a rather deep depression on the 14th, the barometer falling below 29·2 ins. at most of our northern stations, and below 29·7 ins. on all but our extreme southern coasts. *Range* was small, especially in our eastern and southern districts where it amounted to less than half-an-inch.

Depressions.—These were rather numerous for the time of year, and in many cases their centres travelled eastward directly across the United Kingdom. The disturbances of the 6th and of the 14th–15th were of sufficient intensity to cause gales from the South-Westward and Westward on many parts of our western coasts.

Anticyclones.—In the intervals between the passage of the various depressions, areas of high pressure frequently extended over the country from the southward or south-westward, their presence in our neighbourhood being, however, as a rule very brief. At the commencement of the month a large anticyclone spread temporarily over England from the Continent, while between the 20th and the 23rd two such systems came in from the Atlantic, the first one dispersing quickly on the 21st, while the second moved away to the southward on the 25th.

Winds.—With the exception of a North-Westerly current in the eastern parts of Scotland there was a decided prevalence of Southerly to Westerly breezes during the month. At the majority of stations gale force was not attained on any day, but at Blacksod Point it was experienced on 10 days, at Malin Head on 7 days, and at Pembroke on 5 days.

Temperature.—*Mean at sea level* ranged from a little above 63° at Margate and in London, and above 60° over the southern, south-eastern, and central parts of England to below 56° in the west and north of Scotland, and under 53° at Sumburgh Head. The general distribution was similar to the normal. The mean values were below the average* at the great majority of stations, but as a rule the variations were small, few of the differences amounting to 1°, although Bath, Hereford and Valencia show a deficiency of 2°. *Highest* readings were recorded on the 3rd or 4th, London and Maidenhead touching 91°, Margate 90°, and many other English stations 80° and upwards, but there was no record above 78° in Ireland and Scotland. About the 30th there were several maxima from 80° to 84° in various parts of England. *Lowest* values occurred mainly between the 20th and 25th, but they were rarely below 40°. Wokingham, Braemar and Fort Augustus touched 34°, Nairn 33°, and Lairg 32°. Falmouth did not pass below 50°, Guernsey 51° and Scilly 54°. *Range* generally was greater than usual, being 40° and upwards at a large number of stations, mainly inland ones. At Rauceby it amounted to 51°, at Maidenhead to 52°, and at Wokingham to 53°. On the other hand it was only 22° at Falmouth, 21° at Deerness, Pembroke and Portland Bill, and 15° at Scilly. *Vapour Pressure* ranged from 0·45 in. at Jersey and Scilly and 0·43 in. at Holyhead to 0·35 in. at Nairn and 0·34 in. at Sumburgh Head. *Relative Humidity* was as high as 93 per cent. at Donaghadee, and 90 per cent. at Stornoway, against 76 per cent. at Clacton-on-Sea and Yarmouth, and 75 per cent. in London.

Rainfall was rather unequally distributed, but at the majority of stations it was in excess of the average.* Only at a few stations, however, was there a difference of more than an inch, although at Armagh the excess amounted to 2·2 ins., at Malin Head to 2·4 ins., and at Glencarron to 2·6 ins. The largest aggregate totals for the month were 9·3 ins. at Glencarron, 7·2 ins. at Laudale, 6·9 ins. at Fort William, 6·2 ins. at Port Talbot, and 6·1 ins. at Markree Castle; the smallest 1·5 in. at Broadstairs and Margate, 1·4 in. at Dungeness, 1·2 in. at Clacton-on-Sea and Littlestone-on-Sea, and 1·0 in. at Felixstowe. Falls exceeding an inch in a day were not of frequent occurrence, and only a small proportion of the stations recorded them. One of these heavy falls affected a considerable portion of northern England on the 17th. The largest of the daily amounts were 1·6 in. at Aberystwyth and Ampleforth, 1·8 in. at Markree Castle, and 1·9 in. at Cheadle. There was great variation in the number of days on which any precipitation was measured, Blacksod Point reporting 29 days, Glencarron, Wick, and Stornoway 28, and Lairg 27, while Clacton-on-Sea, Oxford, Reading and Wokingham had 9, Felixstowe and Shoeburyness 8, and Oundle, Margate and Broadstairs 7.

Bright Sunshine was above the average* except at a few places in Scotland and the Channel Islands, the excess amounting to more than 50 hours at Cambridge, Thurcaston, London and Rothamsted. The percentage of the possible duration was as high as 59 at Bognor (where a photographic recorder is in use), 58 at Tunbridge Wells, 57 at Southampton, and above 50 at numerous other stations. Fort William had 27 per cent., Strathpeffer 26, and Deerness and Fort Augustus 24.

* The averages employed are—*Pressure and Temperature* for the 30 years 1871–1900; *Rainfall* for the 35 years 1866–1900; and *Bright Sunshine* for the 20 years 1881–1900. See Appendix III, "Weekly Weather Report," 1901.