

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

APRIL 1889.

(Issued as a Supplement to the Weekly Weather Report, 1889.)

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 April was rather changeable, but free from any great extremes, except in the matter of rainfall over our west Midland counties on the 7th. Pressure was low, and its distribution abnormal; Temperature was rather low; the Wind was variable, but not strong, the gales, where they occurred, were moderate; Rainfall varied greatly in amount locally, and Bright Sunshine was deficient, except in the south-west and extreme north-west.

Pressure.—*Mean for the month, at 8 a.m.*, was unusually uniform and of an exceptional type; it ranged from a little above 29·75 ins. over the southern half of Ireland and the extreme southern counties of England, as well as in the east of Scotland, to very little below that value over the other parts of Great Britain, and to about 29·7 ins. off our extreme north-western coasts. It was lower than that for March in all districts, but especially in the south-west and south; and was below the average* for the time of year by more than 0·10 in. in the north-east of Scotland, by about 0·13 in. in the south-west of Ireland, and by 0·21 in. over our southern and south-eastern counties. *Highest* values were recorded very generally between the 15th and 19th, when an anticyclone of moderate intensity moved from our north-western coasts to France. *Lowest* occurred on the 4th, when a rather deep disturbance advanced from the north-westward directly across the centre of our Islands. *Range* was small—less than an inch in many districts.

Depressions were not very numerous, nor were they deep. Those which came actually over our area moved mainly from north-west to south-east, and filled up before passing outside the area of observation. Between 22nd and 28th, however, some systems moved north-eastwards outside our extreme north-western coasts, and some minor disturbances passed eastwards over the Mediterranean and southern Europe at various dates.

Anticyclones.—No such system passed directly over our Islands during the month, the one which came nearest being that which reached our north-western coasts about the middle of the month. From the 1st to the 13th there were two high-pressure systems prevalent—one over north-eastern the other over south-western Europe, the two being separated by a broad low-pressure band, into which depressions advanced at intervals from the Atlantic, and in which others were formed temporarily. This distribution gave way after the 13th, but, after a brief interval of north-westerly and westerly gradients, was restored on the 23rd, and continued till the end of the month.

Wind was very variable; mainly Easterly to South-easterly at the northern and north-eastern stations, and chiefly North-westerly in the extreme west, south-west, and south. Gales were somewhat frequent from the former direction in the east of Scotland and from the latter on our south-western coasts; they were not strong, however, and in our other districts there were scarcely any reported.

Temperature.—*Mean, at sea level*, ranged from rather above 49° at Jersey, and 48° at Scilly, and from 47° at Roches Point and Valencia, to less than 45° over the inland parts of Ireland North and the north and north-west of England, to between 42° and 43° in the north of Scotland, and to 41°·5 at Sumburgh Head. It was higher than that of March by four or five degrees in the south of England (where the winter type of distribution began to give way) and by three degrees in Scotland, but by a smaller amount in Ireland. It was, however, below the average* for April everywhere, the difference varying a good deal locally, but being, as a whole, about 2°. *Highest* values were recorded over the kingdom generally between the 17th and 20th, but in the western and north-western parts similar values occurred between the 25th and 28th. *Lowest* values occurred on very various dates:—on the 2nd or 3rd in the north, on the 10th or 11th in the south-west and west, and on the 15th in many parts of England; they were, however, several other days on which decided minima occurred locally—for which see Tables VII. and VIII. None of the maxima exceeded 68°, and even this value was recorded at one station only (Cullompton). *Range* was moderate, being less than 40° everywhere; at Scilly it was 17°. *Vapour Tension* was lowest (0·22 in.) at Hawes Junction, and was below 0·24 in. over Scotland, the north of England, and our west Midland counties, as well as over central Ireland. It exceeded 0·26 in. in the west of Ireland as well as on the south-western and southern coasts of England, and was as high as 0·28 in. at Scilly. *Relative Humidity* was lowest (80%, and less) at Leith, Bidston, and Jersey, but was as high as 90, and above it, in the Hebrides and on the south-west, south-east, and east coasts of England.

Rainfall, owing to the fact that the falls were mainly due to thunderstorms, varied greatly. It was as low as 1·0 ins. at Sumburgh Head, 1·2 ins. at Prawle Point, 1·4 ins. at Pembroke, Dungeness, and Spurn Head, 1·6 ins. at York, Scilly, and Jersey, and less than 2·0 ins. at several other stations. At Hereford, however, it was 5·5 ins., and at Churchstoke 6·4 ins.—these being the largest aggregates reported. Compared with the averages* the results vary greatly in different localities, a large excess being shown over the west Midlands, a small excess in several other localities, and a slight deficit in others. The great excess in the west Midlands was due mainly to the large falls which occurred in those regions on the 7th.

Bright Sunshine was, as a whole, very deficient except on the south-western coasts and at Stornoway. Falmouth was the only station at which more than 40 per cent. of the possible duration was recorded; Valencia, Pembroke, Plymouth, and Jersey had from 37 to 39 per cent., Stornoway 35, Hastings 32, Parsonstown 31, and Douglas (Isle of Man) 30. All the others had much less, and at London, Durham, and Glencarron the per-centage was only 19.

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