

SUMMARY OF OBSERVATIONS.

APRIL, 1905.

General Summary.—Although not of a stormy character the month of April was marked by a considerable number of disturbances in the neighbourhood of our islands, the weather generally being changeable, unsettled, and exceptionally dull, with frequent, but as a rule not heavy, showers of rain and hail in most localities, of sleet or snow in the northern districts, and on the 6th slight snow extended to the southern counties of England. Thunderstorms occurred on the 4th in Scotland, and on the 14th, 15th, and 16th in various parts of England and Wales, thunder or lightning alone being reported by a few observers on the 1st and 23rd. The thunderstorm of the 16th originated near Tunbridge Wells about 2 p.m., and travelling westward it passed over London, South Bucks, Oxford, Hereford, and thence to Pembroke by 6.15 p.m., at an average rate of over 50 miles an hour. At about 1.35 a.m. on the 23rd, Easter Sunday, slight earthquake shocks were experienced in many localities in the northern half of England. About this date destructive earthquakes occurred in India and Persia, and others of slight intensity in France and Switzerland. For the month as a whole pressure was everywhere a little in defect; temperature was deficient in most places; the winds were very variable in direction and of little strength; rainfall showed a moderate excess at the majority of stations; and bright sunshine was generally considerably less than usual.

Pressure.—*Mean at 8 a.m.* ranged from 29.90 ins. at Jersey to below 29.8 ins. in the far west and north, and 29.76 ins. at Sumburgh Head. Pressure was thus fairly uniformly distributed, and accorded somewhat with the normal. The values were, however, everywhere rather below the average,* by 0.01 in. at Jersey and 0.09 in. at Valencia and Wick. *Highest* readings occurred on the 1st over England, when 30.36 ins. was recorded at Jersey, and between the 17th and 22nd in Ireland and Scotland, 30.40 ins. being reached at Stornoway and 30.43 ins. at Sumburgh Head. *Lowest* readings were reported on the 30th, below 29 ins. at several of the western and south-western stations, and as low as 28.81 ins. at Roche's Point. On other dates there were very few instances of values as low as 29.2 ins. *Range* was moderate, from 0.9 in. in the extreme east of England to 1.5 in. in the south of Ireland.

Depressions.—As will be gathered from Map 2, Plate IV., the depressions which visited our islands and Western Europe during the month were numerous, but as a rule they were of no great depth. The paths followed by the central spaces of the systems were very varied, and in one instance quite exceptional. A disturbance which appeared near Bornholm, in the Baltic, on the morning of the 6th, subsequently moved round by Western Russia, Finland, and Lapland, thence westward across Northern Scandinavia to the ocean, and on the 9th and 10th took a south-westerly course down the Norwegian coast and through the Farö Channel. There were also two cases of disturbances originating about the Western Mediterranean travelling round by Austria and Poland to the Norwegian region.

Anticyclones.—Our islands were not visited by the central portion of any system of high pressure, but the conditions were under the influence of anticyclones centred to the south-westward or southward on the 1st, 6th, and 8th, and between the 16th and 24th the centre of one which had previously occupied Northern Europe moved slowly round outside our northern and western coasts down to the Bay of Biscay and across to the Western Mediterranean. It was during the progress of this system that the highest barometer readings of the month occurred—in the north of Scotland.

Winds.—Owing to the very varied paths followed by both the high and the low pressure areas the winds were distributed through all quarters of the compass, the variable results being well illustrated in the wind-roses on Map 1, Plate IV. Light or moderate breezes prevailed most of the time, forces exceeding that of a strong breeze being rarely experienced, but a fresh or strong gale was felt along the south-western coasts of England on the evening of the 30th. Gale force was attained on 7 days at Deerness and on 5 days at Scilly, while the great majority of stations escaped entirely.

Temperature.—*Mean at sea level* ranged from above 49° at the Cornish and Channel Island stations to 40° in the extreme north of Scotland and to below 39° at Sumburgh Head. The general distribution was in fair agreement with the normal, but with the exception of a slight excess at a few stations in the south-west of England and south of Ireland the mean values were below the average,* the deficiency being small as a rule, but in many parts of Scotland exceeding 2°, and at Sumburgh Head and Wick exceeding 3°. *Highest* readings occurred in most localities between the 13th and 16th, but maxima above 60° were rare. On the 13th Epsom reported 66° and Brixton 65°, and on the following day York, Cromer, and Margate 64°. Pembroke did not exceed 52°, Deerness 50°, and Sumburgh Head 48°. *Lowest* readings were registered generally between the 7th and 10th, but many districts had no frost in the shade. On the 7th Wick reported 20°, and on the 8th Cally and Newton Rigg had 19°, Garforth 20°, and Braemar 21°. The month's minimum at Scilly was 40°. *Range* varied from 44° at Cally, 41° at Garforth, and 39° at Newton Rigg, to 20° at Guernsey, 18° at Pembroke, and 17° at Scilly. *Vapour Pressure* ranged from 0.29 in. at Roche's Point and Scilly, to 0.20 in. at Sumburgh Head. *Relative Humidity* at 8 a.m. ranged from 92 per cent. at Pembroke and 91 per cent. at Roche's Point, to 80 per cent. at Malin Head and Liverpool, and 78 per cent. at Leith.

Rainfall.—The month's precipitation was of a moderate character, being above the average* at the great majority of stations, but the excess at nearly all of them was not large, only six showing more than an inch above the usual quantity. At Llangammarch Wells the aggregate total was 5.5 ins., and the only other stations receiving more than 4 ins. were Waterford, Killarney, Laudale, Glencarron, and Valencia. Very heavy falls were all but unknown, the only ones of an inch or more in a day being 1.1 in. at Margate on the 10th, 1.1 in. at Killarney and 1.3 in. at Valencia on the 24th, 1.1 in. at Marchmont on the 28th, and 1 in. at Bettws-y-Coed and 1.2 at Llangammarch Wells on the 30th. The number of days on which precipitation was measured ranged from 27 at Sumburgh Head, Dublin (Phoenix Park), Valencia, and Cromer, and 26 at Lairg, to 14 at Clacton-on-Sea and Reading, and 13 at Eastbourne.

Bright Sunshine.—At every station there was a deficiency of sunshine, and this was more particularly noticeable over the south-western portion of the Kingdom, where the month's totals were considerably less than for any previous April since the commencement of sunshine records, in 1881, the aggregate duration being below the average* to the extent of 74 hours at Jersey, 80 hours at Pembroke, 81 hours at Ventnor Hospital, 89 hours at Valencia, and 95 hours at Tenby. The percentage of possible duration ranged from 37 at Stornoway and 35 at Blackpool, to 18 at Valencia, 17 at Llangammarch Wells, 16 at Newcastle, and 14 at Birmingham.

* 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.