

SUMMARY OF OBSERVATIONS.

JUNE, 1905.

General Summary.—The weather experienced over our islands during the period under review presented a remarkable resemblance to that of the corresponding month in 1903. The drougthy conditions of May were maintained over all our northern and western districts through the first half of June, while in the early days of the month, due to the formation of shallow disturbances on the Continental side of the Channel, a very wet North-Easterly type was established over the south-east quarter of England, lasting about a fortnight. Then the conditions were reversed, Atlantic disturbances skirting the western and northern coasts producing copious rains in the west and north for nearly a week, the south-eastern districts having a spell of comparative dryness. Towards the close there came another change, rain falling heavily at many southern and south-eastern stations, the far west and north being again very dry. Singularly striking differences are consequently seen in the rainfall statistics, the percentage of the average quantity being 37 at Shields, 39 at Nairn, 52 at Harrogate, 57 at Birr Castle and 59 at Sumburgh Head, while London had 239 and Dungeness 442. Thunderstorms visited most parts of the country, but they were of a sporadic character, and as a rule were not of exceptional severity. The second week was distinctly cool, there being very few instances of afternoon maximum temperatures as high as 70°, and only one station, Southampton, touched 72°. Taking the month as a whole pressure was in excess of the normal over North Britain and in defect elsewhere; the winds varied considerably in direction, a large proportion being North-Easterly, light or moderate in force most of the time, and rarely exceeding a strong breeze; temperature was generally in excess; rainfall was largely in excess over the south-eastern districts, mainly in defect in other regions; and bright sunshine was very abundant in the dry regions, very deficient in the wet.

Pressure.—*Mean at 8 a.m.* ranged from 29·91 ins. at Valencia and Blacksod Point, and 29·93 ins. at Yarmouth to between 29·95 ins. and nearly 30 ins. in a belt extending from the Shetlands to the Channel Islands. The values were above the average* over Scotland and the north of England, by more than 0·06 in. at Sumburgh Head, other parts of the country showing a deficiency, of more than 0·07 in. at Scilly and Valencia. The distribution of mean pressure differed entirely from the normal, being low to the westward and south-eastward, instead of, as usual, to the far north-westward. *Highest* readings were recorded on the 22nd or 23rd, when 30·44 ins. was reached at Aberdeen, and between this and 30·4 ins. at many other stations, all exceeding 30·3 ins. *Lowest* readings occurred on the 2nd in Scotland, 29·39 ins. at Stornoway, and on the 17th to the 20th, and the 28th to the 30th elsewhere, 29·42 ins. at Malin Head on the 20th, and 29·51 ins. at Scilly on the 29th. *Range* was everywhere small, between 0·7 in. over the southern portion of England and an inch in the Shetlands.

Depressions.—The centres of the depressions were in nearly every instance outside our coasts, either on the Atlantic to west and north, or on the Continent, between France and Scandinavia. They were of no great depth, and seldom occasioned an increase of wind to gale force, but, as already shown above, they had a most important influence on the character of the weather in their immediate neighbourhood, the heavy rains in the south-east being with the North-Easterly winds of the Continental disturbances and the rains in the west and north being with the South-Westerly current of the Ocean systems.

Anticyclones.—A high pressure area which appeared off the west of Ireland on the 5th moved north-eastward, and until the 11th it covered our northern districts and Scandinavia, the barometer rising to 30·3 ins. in the north of Scotland on the 8th. An anticyclone which had moved north-eastward across Spain to the western half of the Continent was on the 22nd transferred to our islands, and on the 25th it passed on to Scandinavia, having produced the highest pressure of the month.

Winds.—As at different times during the month high or low pressure areas were found all round our islands the winds were, naturally, very variable in direction, a large proportion being from Easterly points. Gale force was reached on three days at Blacksod Point, and on two days at Dublin, Holyhead, Pembroke and Spurn Head.

Temperature.—*Mean at sea level* ranged from slightly above 61° in the Thames Valley region, 60° in the inland part of the south of Ireland, and 59° in the west of Scotland to 54° and under in the extreme north-east of Scotland, 51° at Sumburgh Head. The general distribution did not differ to any important extent from the normal, but the actual values were in nearly every instance above the average*, the excess amounting to as much as 3° or more at Markree Castle, Stornoway, Laudale and Lairg. *Highest* readings occurred between the 22nd and 27th, when maxima of 80° and upwards were registered in many localities, 83° at Fort Augustus and Clathick, 84° at Maidenhead, and 85° at Lairg and Leith. *Lowest* values were recorded between the 5th and 11th, Crathes returning a minimum of 31°, Newton Rigg 32°, Braemar, Clathick and Garforth 34°, and Llangammarch Wells 35°. *Range* was generally large, exceeding 40° in many districts, amounting to 45° at Bettws-y-Coed, 46° at Fort Augustus, Crathes and Braemar, 47° at Newton Rigg, and 49° at Clathick and Lairg. On the other hand Folkestone had only 23°, Scilly 22°, Dungeness 21°, and Deerness 16°. *Vapour Pressure* ranged from 0·42 in. at Clacton-on-Sea and Dungeness, to 0·33 in. at Wick and Sumburgh Head. *Relative Humidity* ranged from 88 per cent. at Portland Bill and 87 per cent. at Sumburgh Head and Spurn Head to 77 per cent. at Leith and 72 per cent. at Liverpool.

Rainfall.—The month was exceedingly wet over the south and east of England, as far north as York, the excess above the average* increasing from north to south and west to east, so that London had an excess of 2·8 ins., Swarraton 3 ins., and Dungeness 4·6 ins. Total falls of 3 ins. and upwards were numerous within the wet area, ranging up to 4·9 ins. at Epsom, 5 ins. at Swarraton and 5·9 ins. at Dungeness. Over the rest of the kingdom the rainfall was nearly everywhere in defect, Laudale showing a loss of 2 ins., Glasgow and Marchmont 2·2 ins., and Glencarron 2·6 ins. Very few stations in Scotland and Ireland received as much as 2 ins. in all. The number of rainy days ranged from 4 at Cockle Park and Marchmont and 5 at Alnwick Castle and Shields, to 20 at Cullompton and 21 at Arlington. No station in Ireland registered an inch of rain in a day, and Strathpeffer, with 1·1 in. on the 24th, was the only station in Scotland, while in the rainy portion of England there were many instances, mainly on the 5th, when Ventnor Hospital and Swarraton measured 1·9 in., Dungeness 2 ins. and Southampton 2·5 ins.

Bright Sunshine.—Generally speaking the dry regions had abnormally fine weather, the bright sunshine records being well above the average,* the excess being 73 hours at Blackpool, 74 hours at Edinburgh, 76 hours at Stornoway and 80 hours at Glasgow. In the wet area the absence of sunshine was just as marked, Marlborough losing 63 hours, Falmouth 68 hours and Torquay 71 hours. The percentage of possible duration ranged from 26 at Marlborough, 29 at Oxford, and 31 at Wisley and in London to upwards of 50 at some northern stations, and 57 at Aspatia.

* 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.