

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

SUMMARY OF OBSERVATIONS COMPILED FROM RETURNS OF OFFICIAL STATIONS AND VOLUNTEER OBSERVERS IN THE UNITED KINGDOM, AND AT GIBRALTAR AND MALTA, WITH A CHART OF RAINFALL CONTRIBUTED BY THE BRITISH RAINFALL ORGANIZATION.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

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Many Hot Days; Rainfall Moderate; Sunshine Abundant.

The first three days of the month were dull, unsettled and showery, the temperature during these opening days being only moderate, conditions which at some of the coastal stations were associated with much mist and fog. Thereafter until about the 19th the atmospheric pressure was highest over the Bay of Biscay and France, and lowest in the Icelandic region and the upper parts of the North Sea, the type of weather during this period over the greater portion of the British Isles being distinctly anticyclonic. As a result the weather for about two weeks was continuously fine, sunny, and warm, the conditions in the South and East of England being especially brilliant. Between the 8th and 13th shade temperatures of 300a and above were quite common. By about the 20th, however, the depressions commenced to take a more southerly course, and thereafter until the close of the month the weather very generally was unsettled, cool, and rainy. A conspicuous feature of the month was the scarcity of thunderstorms, quite a number of stations reporting none, while many others had only one. As a rule the storms occurred on the 15th or 16th, or round about the 28th. Gales also were rare, none of those reported being of a general character.

In Scotland the temperature was at first moderate, but between the 4th and 17th there were some very warm days (as high as 301a at Crathes on the 12th) and from the 11th to 13th the nights also were unusually warm. The last week of the month was very cold, with a mean temperature in some districts as much as 5·6a below that of the week ended on the 16th.

The following notes supplied by observers illustrate the general character of the month:—*Copdock, Ipswich.*—A brilliant spell of weather from the 6th to the 18th raised the character of the month above what the final figures indicate as its true value, the concluding 13 days being so bad as to bring the general results down to something very near the normal. During the night of the 18th the minimum temperature did not fall below 291a, the previous highest minimum at this station being 290a in the night of July 29th, 1911. *Meltham, Yorks.*—The maximum temperature on the 28th (282a) was 1·7a lower than on any other day in August for at least 41 years, the mean temperature for this day (280a) being also the lowest in the same period. *Weston Turville, Bucks.*—The month was dry and warm until the final week, when the harvest was greatly interrupted by continual rain. *Tenbury, Worcester.*—Very fine, hot, and dry during the first part of the month, which was the hottest for August since 1911, and very wet and unsettled in the second part. Pasture was much scorched, but the later rains have produced a great change for the better, root crops are saved, and grass wonderfully freshened. *Ross, Hereford.*—The river Wye was at its lowest level for a great number of years, and during the second week of the month some anxiety was felt as to the town water supply. The maximum temperature of 284a on the 29th is the lowest recorded here in August. *Leyland, Lancs.*—The 28th (maximum 283a) was the coldest August day yet recorded at this station, and the 31st (minimum 275a) was the coldest August night. *Southport, Lancs.*—There was a remarkable continuation of the great excess of winds from a mean direction somewhat North of West, which had characterised June and July. There was also an equally striking absence of thunderstorms. The rate, or intensity, of the rainfall was considerably below the normal. *Redruth, Cornwall.*—Minimum temperatures above 289a were recorded here on four consecutive days (16th-19th), the reading on the 19th (291a) being the highest for August since 1900. *Dublin (Fitzwilliam Square).*—A fine and generally summer-like month which, had it not been for a decided cold snap in the last week or 10 days, when also rain fell heavily, would have established a record for warmth and dryness. The mean temperature of the week ended on the 16th was as high as 291·1a, but that of the week ended on the 30th fell away to 285·2a. *Hurdlestown, Co. Clare.*—The first half of the month was fine and warm, and the last half wet. The hay crop is 50 per cent. greater than in 1918, corn is a fine crop and potatoes have not been so good for many years. A great year for the Irish farmers.

Air Pressure.—As shown by the map on p. 87, the mean monthly trend of the isobars was a little to the North of West, instead of to the South of West as is customary in August, the gradient being steeper than usual. The following are some of the prominent incidents connected with the movements of the anticyclones and depressions of the month. On the 1st a large depression was extended between Iceland and Spitzbergen, the air pressure increasing south-westwards to an anticyclone over the Azores, conditions which proved favourable for westerly and south-westerly winds all over the British Isles, the force being moderate to fresh. By the next day the wind had increased in strength, gales being reported from Houton Bay (Orkney) and Nairn. On the morning of the 5th an anticyclone was beginning to spread from

the Azores to the South-West of England, and the winds very generally became westerly or north-westerly and were accompanied in many districts by light showers of rain. At 7h. on the 12th, under the influence of a decrease of pressure in the North, an anticyclone, which had been lying over England during several days, tended to form a ridge of high pressure stretching from Ireland to France, conditions which gave rise to much local haze and mist. The following morning an increase of pressure occurred, and thereafter until the 15th the distribution of pressure over the southern half of England was mainly anticyclonic. On the 14th, however, line squalls were experienced at Norwich and Worksop. At 7h. on the 16th a depression was centred near the Hebrides, and caused a decrease in pressure over the British Isles generally, a decrease which in several localities was accompanied by thunderstorms. By 7h. the next morning this depression had travelled to Denmark and was the cause of much thunderstorm activity along the East Coast of England. The weather map for the 17th also showed another depression over the north-eastern parts of the Atlantic, which gave rise to small secondaries, with dull and rainy weather in nearly all parts of Britain. Gales also were reported by some of the western stations and at Blacksod Point at 21h. on the 17th there was a line squall. At many stations an unusually warm night followed, the minimum at Copdock (Ipswich), for instance, being only 291a, and that at Kew Observatory not falling below 292a. Secondaries also were well shown on the weather maps of the next few days, and very generally the weather was rainy and unsettled. The most important depression of the month was centred off the North-West of Ireland on the 25th (track D), and moving slowly it reached Glasgow the following morning and brought heavy rain to some of the northern stations, with gales in places. A well-marked col was shown on the map on the 28th, which lay between a depression over the North Sea and another over the South-West of England (track E). The day temperature on this and the following day at many stations was unseasonably low, the maximum at Liverpool and Tynemouth on the 28th being as low as 283a, and only 282a at Buxton on the 29th. On the last day of the month the British Isles were in the northerly current at the rear of a depression centred over Scandinavia, and at most British stations the temperatures recorded on this day were the lowest for the month.

Temperature.—Some warm days during the first part of the month were nearly balanced by some cold ones during the latter part, so that the mean for the month in most districts did not differ very largely from the normal. In Scotland North there was a deficiency of warmth of 0·3a, but in all other districts there was an excess ranging from 1·2a in Ireland South to 0·1a in Scotland West. At the individual stations the highest daily reading recorded was 304a at Woking on the 9th and 10th, and the lowest 271a at Balmoral on the 25th. At Baltasound (Shetland) and at Castlebay (Hebrides) the maximum did not rise above 289a, while at Portland Bill the minimum did not fall below 284a. It is noteworthy that on the usually bracing East Coast the maximum at Yarmouth went as high as 302a, but in the West at Aberystwyth and Pembroke it did not go above 295a.

Precipitation.—Very generally the month's total rainfall was largely accounted for by the last ten days, during which period many stations recorded more than 25 mm. in a day, some of the falls in Scotland being of great intensity. Thus on the 26th no less than 98 mm. fell at Kirkwall, 92 mm. at Deerness, and 73 mm. at Houton Bay, it being the wettest August in the Orkneys for at least 80 years. As a whole, however, the aggregates in the British Isles were very varied, the departures from the normal ranging from an excess of 12 mm. in the English Channel to a deficiency of 26 mm. in Scotland East.

Sunshine.—The mean daily amount of sunshine was above the normal in all districts, the excess varying between 1·22 hr. in England South-East to 0·09 hr. in England North-West. The sunniest district was England South-East (7·70 hr.), and the least sunny Scotland North (3·84 hr.). At Edinburgh (6·52 hr.) it was the sunniest August for at least thirty years.

Optical Phenomena.—Solar halos were frequently seen at many stations, but lunar halos were very rare. On the 25th a sun-pillar was seen at Seskin (Carrick-on Suir).

Aurora was observed at Deerness on the 8th and 14th, and at Baltasound on the 28th and 30th.

