

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

SUMMARY OF OBSERVATIONS COMPILED FROM RETURNS OF OFFICIAL STATIONS AND VOLUNTEER OBSERVERS

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

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AUGUST, 1937.—Warm; dry on the whole, particularly in England and Wales.

The weather of the month was warm and dry on the whole but rainfall was variable owing to heavy local falls during occasional thunderstorms. In England and Wales the month was notably dry in many places, absolute droughts occurring during the end of July and beginning of August and again in the last half of August.

The anticyclonic conditions experienced at the end of July were maintained during the opening days of August. A trough of low pressure west of Ireland moving east caused rain and local thunderstorms in many parts on the 4th and some scattered rain on the 5th. On the 6th, a depression south-west of Iceland and an associated trough west of Ireland, moved east; rain fell in Ireland, Scotland and parts of northern England, while thunderstorms were reported in northern England and southern Scotland. The 7th was a fair day on the whole, but a deep depression near the Faeroes and later, a shallow depression which moved from the north-west of Ireland across southern Scotland, caused further rain in the west and north on the 8th and over a somewhat wider area on the 9th. A shallow depression skirted the north-west coasts on the 11th and from the 12th-14th a shallow trough of low pressure initially situated over the Bay of Biscay and western France moved north-east. Scattered rain was reported on the 11th and the period 12th-14th was generally unsettled with severe thunderstorms and heavy rain at times. Subsequently, on the 16th and 17th a depression moved east over the British Isles and on the 18th another crossed the north of Scotland; rain fell generally on the 16th and at times in the north and west on the 17th and 18th.

The Azores anticyclone spread north-east on the 19th and thereafter anticyclonic conditions prevailed for the most part, particularly in England. Over large areas in the southern half of England and the Midlands an absolute drought was experienced from the 17th-31st. On the 24th and 25th a depression south of Iceland and an associated trough moved north-east and caused some rain in the west and north, and a shallow trough of low pressure moving slowly south-east over the British Isles caused further local rain from the 28th-30th and rather widespread thunderstorms in England on the 30th. On the last day a deep depression approached from the Atlantic and rain fell generally in the west and north.

Pressure and Wind.—Mean pressure exceeded the average throughout the British Isles, the excess at 7h. varying from 6.9 mb. at Lerwick to 3.2 mb. at Kew Observatory. In consequence the pressure gradient was less steep than usual and the month was rather quiet on the whole; at Southport, the mean daily run of the wind was less than in any other August (apart from August, 1932) since the anemograph station was established in 1898. A mean hourly velocity of more than 38 m.p.h. was registered at Lerwick for 1 hour on the 8th and at Stornoway during 10 hours on the 24th. Among the highest speeds recorded in gusts were 60 m.p.h. at Lerwick and 52 m.p.h. at Kirkwall on the 8th, 57 m.p.h. at Stornoway on the 24th and 52 m.p.h. at Bidston on the 18th.

Temperature.—Mean temperature exceeded the average generally, the excess in the districts varying from 1.2°F. in Scotland, N. to 2.6°F. in the Midlands. It was very warm at times during the first 12 or 13 days; 90°F. was reached in London (Camden Square) on the 6th and exceeded locally in south-east England on the 7th. In Scotland, 80°F. was approached or somewhat exceeded at numerous stations on one or other of the first three days and in Ireland, 82°F. was registered at Hazelhatch on the 2nd and 79°F. at a number of places on the 1st, at Phoenix Park, Dublin on the 2nd and at Glasnevin, Dublin, on the 6th. The coolest spell occurred on the

whole during the third week but some low minimum temperatures were registered on the mornings of the 26th and 27th.

The extremes for the month registered in standard screens were:—(England and Wales), 92°F. at Canterbury and Tunbridge Wells on the 7th, 35°F. at Bellingham, Newton Rigg and Appleby on the 27th; (Scotland) 84°F. at Ruthwell on the 1st, 34°F. at Logie Coldstone, West Linton, Wolfelee and Eskdalemuir on the 27th; (Ireland) 82°F. at Hazelhatch on the 2nd and 36°F. at Markree Castle on the 26th.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the average for the period 1881-1915 was 63, the values for the constituent countries being England and Wales 46, Scotland 91 and Ireland 76. Owing to heavy local rain in thunderstorms the rainfall distribution was variable. In Scotland, more than the average occurred at a number of places in the north and east and at a few isolated stations in the west. More than twice the average fell at some places bordering the Moray Firth. In Ireland the deficiency was fairly general but again somewhat more than the average was registered at a few isolated stations. The deficiency was marked in England and Wales, more than the average being confined to stations where heavy thundery rains occurred. It was the driest August on record at a number of stations; for example, at Worksop since before 1875 and at Gorleston since before 1871. At Oxford, in a record which goes back to 1815, it was the driest August since 1822 i.e. for 115 years. An absolute drought was established during the last 15 days over considerable areas in southern England, south Wales and the Midlands. Many places in England also recorded an absolute drought during the latter part of July and the first 11 days of August.

There were, however, sharp falls of rain during thunderstorms when considerable damage and serious flooding were reported locally. Thunderstorms occurred chiefly on the 4th, 6th, 11th-14th and on the 30th; they were widespread from the 12th-14th and were severe over an unusually wide area on the 13th. Heavy hail was recorded locally on the 12th and 30th.

Among heavy falls in 24 hours or less may be mentioned:—

- 4th 1.18 in. in 40 minutes at Hornsey (London).
- 12th 3.39 in. at Montrose, 2.21 in. in rather less than 2 hours at Oughtershaw (Yorkshire), 2.56 in. at Portland Bill.
- 13th 3.31 in. at Inverness, 3.16 in. at Warrington, 3.13 in. at Nairn, 2.14 in. at Kew Observatory, 2.12 in. at Leyburn and 2.10 in. at Garvagh (Londonderry) and at Llangynhafal (Denbigh).
- 14th 2.30 in. at Cirencester and 2.04 in. at Diss (Norfolk).
- 30th 1.65 in. in a little over 60 minutes at Bromley.

Sunshine.—Sunshine exceeded the average over the country as a whole, the percentage of the average for districts 1-10 being 108 (see Table I). There was a deficiency along the east coast of Scotland from Aberdeen to Dunbar, in England, N.E., England, E. and locally elsewhere. There was a marked excess at some places in the west and north; for example, the percentage of the average was 139 at Whitworth Park, Manchester, 137 at Ilfracombe, 136 at Ruthwell, 135 at Stonyhurst and Swansea and 131 at Bolton and Darwen.

Fog.—Fog occurred rather frequently, particularly from the 1st-6th, 10th-14th, and 22nd-31st. It was recorded at the morning observation hour on 13 days at Barton, Manchester, 12 days at Attenborough and 9 days at Birmingham, Ross-on-Wye and Waterford.

Miscellaneous Phenomena.—Solar halos were noted at Oxford on 12 days.