

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

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August 1947—An exceptionally hot, dry and sunny month.

The weather of the month was exceptionally hot and dry, with abundant sunshine. From the 7th onwards conditions were almost wholly anticyclonic and the month was unusually quiet, with easterly winds predominating.

During the opening days an anticyclone was centred over the North Sea while a depression off our south-west coasts moved slowly north-north-east and associated troughs moved north-east over the British Isles. Rain fell at times in most parts of England and Wales and Ireland and locally in Scotland. On the 4th a new depression south of Ireland moved north-north-east and an associated trough north-east causing fairly heavy rain locally in the south of England. Thunder was reported locally on 1st, 2nd, 4th and 5th, particularly on the 2nd.

By the 6th an intensifying wedge of high pressure on the Atlantic was approaching our western seaboard. The wedge moved slowly eastward over the British Isles and subsequently an anticyclone became established over Scandinavia with a ridge over the British Isles connecting with an anticyclone in the Azores region. These conditions lasted until about the 12th, maintaining fair weather apart from some local rain in the Hebrides and on the west coasts of Ireland. On the 12th an anticyclone was centred over the British Isles and, during that day, it moved east to the North Sea and thereafter north-east to Scandinavia; fair, hot weather prevailed. From the 17th–20th shallow depressions were situated east of the Azores and over France; on the 20th they moved north-east and later, east. Weather continued fair and warm over most of the country but slight local thunderstorms occurred in the south; thunder was heard also at Turnberry on the 19th and Elphin on the 20th. On the 23rd, heavy rain fell locally during thunderstorms in the London area, while some rain on the north-west seaboard was associated with a weak trough of low pressure which moved away north-east.

From the 24th onwards a belt of high pressure covered the British Isles and maintained fair, warm, sunny weather apart from mist or fog mainly during the night and early morning.

Pressure and Wind.—Mean pressure exceeded the average throughout the country, the excess being greatest in the north-east; at 9h. the deviation from the average ranged from +13.2 mb. at Lerwick to +3.3 mb. at Scilly. The pressure distribution was quite different from the average, the highest pressure being situated off east Scotland and the lowest off our south-west coasts. In northern districts mean pressure was exceptionally high for August; for example, at Southport it was the highest for August in a record going back to 1871. Pressure was also remarkably steady, an anticyclone being situated north-east of the country during the last three weeks. Northerly and easterly winds predominated; over Scotland there was a six days excess of north-east and east winds and at Southport the number of due easterly winds was phenomenal for August. The month was quiet; no gales were reported except for a short time at St. Ann's Head on the 2nd, while the total run of the wind was considerably below the average except locally in the south. Among the highest speeds registered in gusts at anemometer stations were 55 m.p.h. at St. Ann's Head, 47 m.p.h. at Lympne and Ringway and 46 m.p.h. at Shobern on the 2nd and 52 m.p.h. at the Lizard on the 20th.

Temperature.—Mean temperature was exceptionally high, the excess above the average over the country as a whole being 5.1°F. The deviations for the districts ranged from +4.2°F. in England NE. to +5.9°F. in Scotland, W. As far as can be estimated it was probably the warmest August over the country as a whole since before 1881. It ranked with the hot Augusts of 1899 and 1911; at some stations in England and Wales mean temperature was higher in 1899 and at others in 1911. On the other hand at Oxford, Southport, Sheffield and Wakefield the mean tem-

peratures were the highest since records began in 1815, 1871, 1883 and 1888 respectively. Other records broken included the maximum temperature, 93°F., at Bournemouth on the 16th and the number of days in succession when temperature rose above 80°F. at Oxford, namely 11 from the 12th–22nd inclusive. A rather cool spell occurred roughly from the 5th–8th; subsequently temperature rose and warm weather prevailed for the remainder of the month, the peak occurring roughly from the 13th to 18th or 20th.

The extremes for the month were:—(England and Wales) 93°F. at Bournemouth on the 16th and at Southampton on the 16th and 17th, 38°F. at Rhayader on the 8th; (Scotland) 87°F. at Kilmarnock on the 16th, 36°F. at Dalwhinnie on the 8th; (Northern Ireland) 83°F. at Lisburn and Castle Archdale on the 16th and 45°F. at Armagh on the 25th and 27th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881–1915 was 16 over England and Wales, 4 over Scotland and 14 over Northern Ireland. In Scotland it was not only the driest August but the driest month of any name since records are available, namely since 1869. In England and Wales it was the driest August on record, that is since 1869, but not the driest month; the previous driest August in England and Wales was in 1940, with 19 per cent. of the average. In small scattered areas, chiefly in the west and south of Scotland but also locally elsewhere, no measurable rain fell at all. More than 25 per cent. of the average occurred in the neighbourhood of Balmoral, at Newtownbutler, county Fermanagh, over part of the western Midlands of England, on the south-west coast of Pembrokeshire, in a fairly large area in the south-west and south of England, locally on the coast of Suffolk and Essex and in the vicinity of Oxford. More than 50 per cent. of the average was received locally on the south coast from Teignmouth to Totland Bay, Isle of Wight and at St. Eval on the north coast of Cornwall.

Among the heavier falls in 24 hours were:—

3rd 1.44 in. at Sidmouth, 1.19 in. at Newton Abbot, 1.18 in. at Parkend and 1.15 in. at Totnes.

4th 1.04 in. at Totland Bay and .99 in. at Newport, Isle of Wight.

23rd 3.32 in. at Sudbury, Middlesex.

Thunder was reported locally at times, mainly on the 1st, 2nd, 4th, 5th, 17th–23rd and 31st. During a thunderstorm in the London area on the 23rd, 3.32 in. fell in approximately 90 minutes from 4.30 to 6 p.m. G.M.T. at Sudbury, Middlesex, a "very rare" fall; the heavy rain was very local.

Sunshine.—The month was almost as noteworthy for abundant sunshine as for lack of rainfall, the percentage of the average being 156 over England and Wales, 179 over Scotland and 187 over Northern Ireland (See Table I). August 1899 was probably somewhat sunnier on the whole but at a number of widely distributed stations with long records, the total for 1947 was even higher than in 1899; for example, at Oxford, Sheffield, Douglas (Isle of Man) and Aberdeen. The mean daily duration amounted to 10 hours or more at some stations. The mean cloud amount was also exceptionally low; at Oxford it was the lowest on record for August, and at Southport the lowest for any month.

Fog.—Fog developed very frequently during the night or early morning, particularly from the 3rd–5th, 9th–21st, 23rd–25th and 27th–31st. It was more persistent at times locally on the coasts of north-east England and east and north Scotland.

Miscellaneous Phenomena.—The aurora was observed locally in Scotland on five nights. Solar halos were noted at Oxford on six days.