

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

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August 1958—Generally dull and unsettled

The disturbed cyclonic weather of late July continued throughout August, with a good deal of cloud and rain, although weak ridges of high pressure gave some finer periods around the 17th and 26th.

Thunderstorms were widespread on the 1st and 2nd as a trough at 500 mb. moved eastward across the British Isles. The following day upper lows were situated near Iceland and Scandinavia, and a surface trough, moving eastward from the Atlantic, brought slight rain or drizzle to most of the country. The upper low near Iceland moved south-east on the 4th, while a vigorous Atlantic depression deepened, as it passed north-east between Scotland and Iceland, giving widespread rain and drizzle, which was heavy locally in the north, although in south-east England weather was dry during the afternoon with good sunny periods. This depression developed a circulation in depth and remained quasi-stationary near the Shetlands during the next three days: slow moving fronts over southern England gave thundery rain and thunderstorms on the 5th, and small secondary depressions moving eastward along the English Channel brought heavy rain to central and southern England on the 7th.

A deep and slow moving depression, with an associated low at 500 mb., was situated in the eastern Atlantic on 8th–10th while a developing upper ridge moved slowly eastward across the British Isles. A warm southerly airstream, accompanied by some coastal and hill fog and local drizzle, spread slowly over the country; temperatures rose progressively and on the 10th there were sunny periods and 80°F. was exceeded locally in central and eastern England. Later in the day violent thunderstorms caused damage and flooding in parts of Scotland and north-west England; at Liverpool more than $\frac{1}{2}$ in. of rain fell in an hour during one of these storms. Thunderstorms were also reported on the 11th and 12th as an upper trough moved from our western districts to the North Sea and the Atlantic depression moved north-east and filled. During the next three days there was a good deal of fog in the English Channel, but vigorous depressions moving in the general westerly airstream in middle latitudes, which now extended from America to Europe (with a weak block over Europe), crossed Scotland on the 13th and 15th giving widespread and locally heavy rain.

Apart from a few light showers, weather was fine on the 16th and 17th as a weak ridge of high pressure moved slowly eastward across the country to the North Sea; Dishforth registered more than 23 hr. of bright sunshine during these two days.

During the next week or so unusually heavy falls of rain occurred. In association with a deepening surface depression to the south-west of Ireland an upper trough moved east to lie over the British Isles on the 19th. Another depression moved south-east over the Atlantic reaching our South-west Approaches on the 20th, whence it moved east, reaching northern Germany on the 22nd; the main upper trough during this time remained over the British Isles. Heavy thunderstorms were widespread from 19th to 22nd and there were floods in many areas, especially in Devon, Cornwall and Yorkshire. A vigorous depression from the Atlantic brought gales to our south-west coasts on the 24th, and prolonged and often heavy rain to most districts, as it moved eastward to the North Sea.

Weather was mainly dry with good sunny periods on the 26th as a ridge of high pressure, associated with an anticyclone over France, moved slowly eastward across the British Isles, but on the 27th slow moving troughs from the Atlantic gave rain in western districts although eastern England remained dry with over 12 hr. sunshine in many places.

On the 28th strong southerly upper winds developed over the country, winds between 300 and 250 mb. sometimes exceeding 100 kt.; heavy

thunderstorms broke out in association with a trough over south-east England and there was flooding and lightning damage in many places. During the last two days of the month a quasi-stationary front over western districts and a thundery trough over France resulted in outbreaks of rain in the west and south-east, while central districts remained dry.

Pressure and wind. Pressure was everywhere below the average, the deficit at 9 h. ranging from 3.1 mb. at Lerwick to 5.1 mb. at Aldergrove. Winds were mainly between west and south-west until the 16th except on the 9th and 10th when they were mainly southerly. Winds were variable from 17th to 25th and afterwards predominantly southerly until the end of the month. Gales were reported on the 5th, 6th, and 29th in Scotland, the 2nd, 3rd, and 4th in the Midlands and the 23rd and 24th in south-west England. A gust of 51 kt. was recorded at Eskdalemuir on the 4th and one of 55 kt. at Lerwick on the 5th.

Temperature. Mean temperature differed from the 1921–50 average by -0.1°F. in England and Wales, $+0.3^{\circ}\text{F.}$ in Scotland and $+0.1^{\circ}\text{F.}$ in Northern Ireland. The warmest day of the month was the 10th, when temperature reached 80°F. at many places in the Midlands and eastern England and the upper seventies in Scotland. Slight ground frost occurred in the highlands of Scotland on one or two nights; on the 26th ground temperature at Cannich fell to 22°F.

Extreme temperatures included:— (England and Wales) 84°F. at Herne Bay on the 10th, 35°F. at Alwen on the 24th; (Scotland) 77°F. at Elgin on the 10th, 34°F. at Glenlivet on the 9th; (Northern Ireland) 70°F. at Ballykelly and Garvagh on several dates, 39°F. at Garvagh on the 24th.

Precipitation. The general precipitation expressed as a percentage of the 1916–50 average was 123 in England and Wales and in Northern Ireland, and 112 in Scotland. There was less than average rainfall over north-west Scotland, in narrow belts across the country from Northumberland to north Lancashire and from the East Riding of Yorkshire across the east Midlands to Somerset, over most of Wales and locally around the Wash. Much of south-west and south-east England had more than 175 per cent. of the average and twice the average was exceeded locally in Cornwall, the Isle of Wight, Sussex, Essex and Buckinghamshire.

Among the intense falls reported during the month were:—

- 10th at Waddington, Lincolnshire, 1.26 in. in 38 min.
- 20th at Bradwell-on-sea, Essex, 1.44 in. in 60 min. (app.)
- 22nd at Manchester Airport, Cheshire, 1.00 in. in 39 min.
- 22nd at Golder's Green, Middlesex, 1.48 in. in 60 min.

Thunderstorms were frequent and widespread and occurred at one place or another on 18 days of the month. Many places reported thunder on five days or more and at some places in south-east England it was heard on 9 days.

Sunshine. The general sunshine expressed as a percentage of the 1921–50 average was 74 in England and Wales, 88 in Scotland and 80 in Northern Ireland. A few places in Scotland had more than average sunshine, but mostly sunshine was markedly below the average; some places in south-west England had little more than half their average amount; at Plymouth it was the dullest August since 1922.

Fog. Early morning fog was reported from some place or other on every day during the month except 1st, 2nd, 16th, and 27th. It was most widespread in Scotland around the 20th to 23rd and on the south-west coasts of England on the 13th–15th. Princetown, Devon, had fog on 14 days.

Miscellaneous Phenomena. The aurora was seen in Scotland every night from 14th to 24th except the 19th, 20th, and 22nd.