

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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AUGUST, 1942.—Dull and mainly unsettled; unusually warm 27th-29th.

The month was distinguished by a general deficiency of sunshine which was particularly marked in the northern half of the country. Rainfall was variable but exceeded the average on the whole and an unusually warm spell occurred from the 27th-29th.

During the opening days of the month a shallow depression, centred westward of Ireland on the 1st, moved slowly east; weather was rather unsettled for the first three days with rain at times, and widespread thunderstorms on the 2nd, but there was not much rain in Scotland. From the 3rd-6th an anticyclone moved south-south-east from Iceland to the Bay of Biscay; cool weather with little or no rain prevailed over the British Isles. On the 6th and 7th a wedge of high pressure moved east over this country while an Atlantic depression approached south-west Iceland and associated troughs moved eastward over the British Isles. There was rain in the north and west on the 6th and more generally on the 7th and 8th; rainfall was heavy in some areas in the west and north on the 7th and 8th. Showery weather, with local thunderstorms in the south-east, prevailed on the 9th but sunshine records were also good. A new, deep depression, centred west of Iceland on the 10th moved east-north-east to the west of Norway by the 12th; unsettled weather persisted, with rain at times, heavy in north-west Scotland on the 11th; local thunderstorms were reported on the 11th. Rain on the 15th was associated with troughs of low pressure crossing the British Isles. On the 17th a small disturbance moved quickly eastward from mid-Atlantic and subsequently remained almost stationary for some days off the Hebrides. Meanwhile a trough of low pressure moved slowly eastward over Ireland and England. Rain fell in the west and north on the 17th and 18th and temperature rose, 80°F. being exceeded locally in the south-east. On the 19th the trough crossed England and was followed by another on the 20th; weather continued somewhat unsettled but with bright periods. Subsequently a further complex disturbance approached from the Atlantic and moved across the British Isles; rainfall was almost general on the 21st and more scattered on the 22nd. Thereafter yet another complex Atlantic disturbance moved in over Ireland and filled up; general rain was again experienced on the 25th and scattered showers, with local thunderstorms in the south-east, on the 26th.

There followed a spell of unusual warmth, with pressure high in a belt from the Baltic to Ireland and low over the Bay of Biscay. Weather was mainly fair, apart from rain at a few places, and temperature rose to 90°F. at numerous stations in England on the 28th. On the 29th the depression over the Bay of Biscay spread north, while an anticyclone centred near the Faeroes moved east-south-east and later east. Temperature fell considerably in the north on the 29th and in the south on the 30th. Thunderstorms were widespread and heavy locally in England, Wales and Ireland on the 29th. During the closing days the depression off our south-west coasts moved northward over Ireland and weather was unsettled generally.

Pressure and Wind.—Pressure slightly exceeded the average locally on the east coast of Britain and was somewhat below the average elsewhere. The deviation at 7h. ranged from -1.7 mb. at Tiree to +1.1 mb. at Lympne. Winds from between south and west predominated; a gale was recorded at Holyhead (Valley) on the 10th and in exposed situations in Scotland on each day from the 15th-18th and on the 20th. Among the highest speeds registered in gusts were 64 m.p.h. at Stornoway on the 16th, 56 m.p.h. at Eskdalemuir and 54 m.p.h. at Edinburgh on the 8th, and at St. Ann's Hd. on the 10th.

Temperature.—Mean temperature exceeded the average except at a few places in Devon and Cornwall. The deviations for the districts ranged from +0.6°F. in Northern Ireland to +1.9°F. in England, N.W. Except on the 1st and around the 18th and 19th there were many cool days during the first three and a half weeks. A spell of unusual warmth occurred between the 27th and 29th. Temperature reached 90°F. at numerous places in England on the

28th and at a few in East Anglia on the 27th and in Scotland temperatures of 80°F. to 82°F. were registered at a few places in the Borders on the 28th. High night minimum temperatures were recorded in England from the 26th onwards and very mild nights also included the 8th, 16th and 19th. Some low night temperatures were registered from the 4th-6th.

The extremes for the month were:—(England and Wales) 93°F. at Sprowston on the 27th, 31°F. at Newport (Salop) on the 5th; (Scotland) 82°F. at Ruthwell on the 28th, 36°F. at Balfron and Glenbranter on the 4th; (Northern Ireland) 75°F. at Armagh on the 27th and 28th, 41°F. at Aldergrove on the 4th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881-1915 was 107 over England and Wales, 113 over Scotland and 134 over Northern Ireland. In Scotland, broadly speaking less than the average rainfall occurred over most of the eastern half of the country and more than the average in the western half; rainfall was heaviest in Argyll and the western Highlands. At Fort William, the total 9.08 in., was the largest for August since 1907. In Northern Ireland the excess was general and percentages of the average at individual stations ranged from 115 at Newtownbutler to 151 at Ballymena. In England and Wales the distribution was very variable, partly owing to local heavy falls in thunderstorms. More than the average occurred over a large, roughly triangular area in the south, the base of which extended over nearly the whole of the south coast, while the height stretched northward from Dorset to Warwickshire; the area included a part of south Wales and the whole of the Cotswolds. Another large area which received more than the average covered much of north-west England and the northern Midlands and there were also other small isolated areas with an excess. On the other hand, over most of a coastal strip of north-east England and over much of a belt extending across Wales to East Anglia less than the average occurred.

Thunderstorms occurred locally at times, mainly on the 1st-3rd, 7th, 9th, 11th, 26th and 29th-30th. They were widespread and severe locally on the 2nd and 29th; in particular, the storm on the 29th was severe with heavy rain.

Among the heavier falls in 24 hours were:—

2nd ..	2.73 in. at Whitworth Park, Manchester.
10th ..	2.51 in. at Borrowdale (Cumberland).
11th ..	3.20 in. at Glenmoidart (Inverness-shire), 3.09 in. at Kinlochorn (Inverness-shire) and 2.75 in. at Loch Duich (Ross and Cromarty).
16th ..	2.60 in. at Ardgour (Argyll) and 2.55 in. at Kingairloch (Argyll).
17th ..	2.42 in. at Ardgour.
18th ..	2.65 in. at Glendessary (Inverness-shire).
21st ..	2.47 in. at Kingairloch.
29th ..	3.55 in. at Burnham-on-Sea (Somerset), 2.31 in. at Frampton Cotterell (Glos.), 2.30 in. at Crickhowell and at Abergavenny.

Sunshine.—Sunshine was generally deficient, notably so in the northern half of the country. The percentages of the average were only 61 in Scotland and Northern Ireland and 76 in England and Wales. At Stornoway the total 65 hours were the lowest for August in a long record back to 1881; at Eskdalemuir it was the dullest August since 1912 and at Aldergrove the dullest since records were started in 1927. It was only at Bude on the north coast of Cornwall and at St. Mary's, Scilly that the total very slightly exceeded the average.

Fog.—Fog occurred at times, mainly from the 1st-3rd, 7th, 12th (north-east Scotland), 14-15th and 24th-31st.

Miscellaneous Phenomena.—The aurora was observed from Skye on the evening of the 14th and from Perth and Abbotsinch on the 16th. Solar halos were noted at Oxford on 12 days.