

Monthly Weather Report

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August, 1948—Unsettled, dull and wet, with heavy local rainstorms.

The weather of August was cool, dull and wet on the whole, with heavy rainstorms causing serious floods in some areas.

The warm weather experienced at the end of July continued over August 1st, the thunderstorm area generally shifting north. On the 2nd a shallow trough of low pressure stretching from Denmark to France extended its influence over England giving widespread thunderstorms with heavy local rain. Meanwhile a current of polar air moving south brought a fall of temperature, first to the north and, by the 3rd, over the whole country. From the 4th–6th troughs of low pressure associated with depressions off south-west Ireland moved north-east over England giving considerable rain in most areas except the north of Scotland. On the 7th a vigorous depression approached the mouth of the English Channel and subsequently moved north-east across southern England to the south of Norway. Gales occurred in the Channel and along the south coast on the night of the 7th–8th and rainfall was fairly heavy except in the north of Scotland. On the 10th a shallow depression on the Atlantic moved east-south-east to the Bristol Channel and later turned north-east across England to the southern North Sea. Heavy thundery rains occurred in the Midlands and north-east England on the 11th and in Northumberland and the Border counties on the 12th; these rains caused exceptionally severe floods in Roxburgh. On the 15th and 16th another disturbance moved slowly east across the north of Ireland and south Scotland to the North Sea, where it remained for a time becoming less deep. Considerable rain fell in the north with scattered thunderstorms on the 15th and 16th but there was little or no rainfall in the south. Showery conditions, with local thunder, prevailed on the 17th and 18th. On the 19th a secondary depression moved east-north-east across France and Germany and some rain and local thunderstorms occurred in southern England. On the 21st a depression off south-west Ireland moved north and during the following days it passed slowly east off the north of Scotland to southern Scandinavia, where it filled. There were local gales in the west and north of the British Isles and further rain occurred. On the 25th a new, deep depression moved rather quickly east across Scotland and was associated with local gales on its southern side and appreciable rain locally in the north and west.

In the rear of this disturbance a ridge of high pressure moved in over the British Isles from the west and intensified. Later it continued its movement eastward and on the 29th was reinforced by another small anticyclone which moved north-east from a position off our south-west coasts. Mainly fair weather prevailed generally on the 26th and 27th and conditions continued fair in England until the 30th. On the 28th and 29th a trough of low pressure moving east over the north-west districts caused some rain in Scotland and north Ireland and during the closing days of the month a trough moving east over the British Isles was associated with rain in the west and north on the 30th and more generally on the 31st.

Pressure and Wind.—Mean pressure was somewhat below the average except in the Shetland Islands, the deviation from the average ranging from +0.2 mb. at Lerwick to -2.8 mb. at Eskdalemuir. A gale was recorded at many coastal stations in the south of England on the 7th–8th. A period of strong winds and local gales occurred from the 21st–26th. Among the highest speeds registered in gusts were 61 m.p.h. at Lympne on the 8th, 72 m.p.h. at Bell Rock and 61 m.p.h. at Stornoway on the 23rd and 63 m.p.h. at Bidston on the 26th.

Temperature.—Mean temperature was 0.9°F. below the average in England and Wales, 1.1°F. below in Scotland and 0.2°F. below in Northern Ireland.

After the opening days, temperature during the day was generally

rather low, particularly in the fortnight ending on the 21st. At Wakefield the mean maximum temperature for the month was the lowest for August since 1931, while at both Ross-on-Wye and Wakefield the highest maximum temperature was the lowest for August since 1922. Relatively low minimum temperatures were registered locally on the 11th, 18th–23rd, 27th and 28th.

The extremes for the month were:—(England and Wales) 83°F. at Bungay, Maldon and Greenwich on the 1st, 37°F. at Totnes on the 18th, Llandrindod Wells and Rhayader on the 19th, Buxton and Hawarden on the 20th and Thetford on the 28th; (Scotland) 78°F. at Leuchars and Falkirk on the 1st, 29°F. at Dalwhinnie on the 21st; (Northern Ireland) 73°F. at Castlerock on the 29th, 38°F. at Ballykelly on the 20th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881–1915 was 134 over England and Wales, 159 over Scotland and 96 over Northern Ireland. It was the wettest August over Scotland as a whole since 1930. In Scotland less than the average was practically confined to the Shetland Isles and a coastal fringe in the north-west and the extreme south-west. More than twice the average occurred in the Moray Firth district and in the south-east, while more than three times the average was registered in the lower Tweed Valley. Edinburgh's total, 9.40 in., has only been exceeded once there in any month, namely in September 1785, in records going back to 1770. In England and Wales less than the average occurred locally on the north-west coast and in quite small areas scattered over the country. Elsewhere there was an excess and more than 300 per cent. of the average was received in the north of Northumberland. In Northern Ireland somewhat more than the average was confined to the extreme north-west and south-west of the Province.

Falls of more than two inches in 24 hours were very numerous. Among the heaviest falls were:—

- 2nd 3.94 in. at Bedford (Selsoe), 3.44 in. at Cranham (Glos) and 3.27 in. at Cranfield (Bedford).
- 7th 3.58 in. at Colinton and 3.49 in. at Fairmilehead (Midlothian).
- 11th 3.41 in. at Hanley (Staffs).
- 12th 6.21 in. at Kelso (Roxburgh), 5.55 in. at Tweedhill and 5.48 in. at Kingside, in Lammermuir.

The heavy rainfall in the Tweed valley caused destructive flooding and heavy damage to crops, farms and villages. Railway bridges north of Berwick were washed away and at Kelso the river Tweed rose 6½ inches higher than in the previous highest flood of 1831.

Thunderstorms were recorded locally, mainly on the 1st, 2nd, 5th–12th, 15th–19th, 22nd, 23rd and 25th.

Sunshine.—The almost general and substantial deficiency of bright sunshine was a feature of the weather of the month. The only places with a slight excess were in the extreme south of Cornwall and the mean daily duration ranged from less than 3 hours over much of Scotland and part of north-west England to 7 hours at the Lizard. At Southport and Wakefield it was the dullest August on record.

Fog.—Fog, mainly early morning, occurred locally at times, chiefly on the 1st, 2nd, 6th–8th, 14th, 15th, 18th, 19th, 21st, 24th, 25th, 27th and 29th–31st. It was rather widespread in Scotland on the 1st, in the eastern half of England on the 21st and in England and Ireland on the 27th.

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