

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

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September, 1948—Wet and dull in the west and north-west.

Unsettled weather prevailed for the first half of the month. Subsequently anticyclonic conditions were established over southern England and continued until the end of the month, apart from a break on the 27th–28th. Unsettled weather persisted, however, in the west and north. It is significant that at some stations in north-west Scotland measurable rain occurred on every day except one while at some places in the south of England there were only six such days.

In the opening days a depression in mid Atlantic moved eastwards across northern England to the North Sea and filled. Heavy rain occurred in western districts on the 1st and more generally on the 2nd, with local thunderstorms in the west. Widespread thunderstorms prevailed on the 3rd and scattered thunderstorms on the 4th, while gales were recorded locally in the west on the 2nd and 3rd. On the 5th a ridge of high pressure moved south-east over England and Wales and was followed by a trough of low pressure; slight rain fell in most areas. On the 7th and 8th an anticyclone over the Bay of Biscay moved north-east while a deep depression westward of Scotland moved rather quickly north-east to the north of Norway. Strong winds occurred in the north reaching gale force locally and rain fell at times, particularly in the west on the 7th and in the neighbourhood of a slow-moving front stretching from north-east England to south Wales on the 8th. Temperature rose and the maximum exceeded 75°F. at numerous stations in England on the 9th and 10th. On the 12th a small depression moving east-north-east across southern England was associated with heavy rain in England and Wales, while on the 14th and 15th another small disturbance moved very rapidly from mid-Atlantic across southern Scotland to the North Sea, giving rain, heavy in places, in the northern half of the country. Gales were recorded locally on the 12th, 13th and 15th.

Subsequently an anticyclone became established off our south-west coasts and dominated conditions over most of England. Meanwhile depressions, northward of Scotland, moving east were associated with gales in northern districts from the 17th–19th; rain occurred locally in the north and west. Thereafter another anticyclone situated south-east of Greenland moved rather rapidly south-east; cool weather prevailed, with scattered rain chiefly in the west and north. Screen frost occurred locally on the 21st–23rd, with ground frost in many places. Low day temperatures were registered also during this period. By the 24th the highest pressure was situated over central Europe and a wedge extended westward over southern England. Meanwhile the north-east Atlantic was covered by a complex area of low pressure and the air supply over the British Isles was drawn from the south; temperature rose appreciably and approached 80°F. in parts of London on the 26th. From the 26th–28th vigorous depressions moved north-east along our north-west seaboard; gales occurred in the north-west and north and considerable rain fell in Scotland and north Ireland on the 26th. Rain fell in most places, including the south of England, on the 27th and 28th. Apart from slight showers in the north-west and north fair weather prevailed during the closing days but a trough of low pressure moving north-east over north-west Scotland brought further rain to the north-west late on the 30th.

Pressure and Wind.—Mean pressure was below the average except in the extreme south of England, the deviation at 9h. ranging from –6.9 mb. at Lerwick to +1.3 mb. at Plymouth. The gradient for westerly winds was thus increased, winds from between south and west predominated and the total run of the wind was appreciably above the average. At Southport the frequency of south-westerly winds was higher than in any September since 1907. Gales occurred fairly frequently at exposed stations in Scotland. Local gales were recorded on the 2nd, 3rd, 7th, 8th, 12th, 13th, 15th–19th and 26th–28th. Among the highest speeds registered in gusts were 74 m.p.h. at Lerwick and Stornoway and 68 m.p.h. at Paisley on the 17th and 69 m.p.h. at Eskdalemuir on the 27th.

Temperature.—Mean temperature exceeded the average by 0.9°F. in England and Wales, 0.7°F. in Scotland and 1.2°F. in Northern Ireland. Warm spells occurred around the 9th and 10th and during the last week. A cool spell occurred from about the 20th–23rd; screen minima of 32°F. or below occurred in many places in Britain on the 21st, 22nd and 23rd and ground frost was widespread. Day temperatures were also low during this spell; at Wakefield, for example, the maximum on the 22nd, 47°F., was the lowest in September there in a record of 60 years.

The extremes for the month were:—(England and Wales) 79°F. at Camden Square and Greenwich on the 9th, Cromer and Wye (Kent) on the 10th and Greenwich and Kensington on the 26th, 27°F. at Milford on the 22nd; (Scotland) 70°F. at Gordon Castle and Lossiemouth on the 10th, 21°F. at Glenlivet on the 23rd; (Northern Ireland) 70°F. at Ballykelly on the 7th and 33°F. at Hillsborough on the 21st.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881–1915 was 113 over England and Wales, 156 over Scotland and 146 over Northern Ireland. In Scotland less than the average occurred in the east from the Banffshire coast to Angus and in a small area around Inverness. Elsewhere there was a large excess, more than 200 per cent. being received over a large part of the mainland in the west. At Glenquoich it was the wettest September for at least 30 years and at Fort William for 56 years. In England and Wales less than the average occurred in an area covering most of Yorkshire and extending westward to the Wirral, over most of East Anglia and south-east England and in Cornwall and most of Devon. Rainfall exceeded the average elsewhere and was approximately twice the average in Snowdonia and in the mountains of south Wales. In Northern Ireland the percentage ranged from less than 125 in the south to more than 175 in the Londonderry area. Heavy rain fell on the 2nd, while the 12th was very wet in England and the 14th and 24th–26th in Scotland.

Among the heavier falls in 24 hours were:—

2nd	2.65 in.	at Rhondda Water Works (Glamorgan).
3rd	2.59 in.	at Houghall (Durham).
7th	3.13 in.	at Blaenau Festiniog (Merioneth).
24th	2.76 in.	at Ardgour (Argyllshire).
26th	2.98 in.	at Kinlochquoich (Inverness-shire).
27th	2.50 in.	at Blaenau Festiniog.

Thunderstorms occurred locally at times; for example on the 1st–4th, 9th, 10th, 14th–16th, 19th, 25th and 28th. They were most widespread on the 2nd and 3rd.

Snow showers occurred locally in the north of Scotland on the 20th and 21st.

Sunshine.—The duration of bright sunshine expressed as a percentage of the average for the period 1906–35 was 87 over England and Wales, 93 over Scotland and 80 over Northern Ireland. The percentages for the district ranged from 60 in England, N.W. to 107 in Scotland, E. At Southport it was the dullest September since records were first taken in 1896; the number of sunless days, 8, was a record high number for the month. At West Kirby, too, it was the dullest September in their record. In east Scotland the sunshine exceeded the average almost everywhere and an excess occurred also at numerous stations in the southern half of England.

Fog.—Fog, mainly night and morning, occurred locally at times, chiefly on the 2nd–5th, 9th–10th, 13th–15th, 17th, 19th–20th, 23rd–28th and 30th.

Miscellaneous Phenomena.—The aurora was observed at northern Stations in Scotland on six nights. Solar halos were noted at Oxford on 13 days.