

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE. To be purchased directly from H.M. STATIONERY OFFICE at the following addresses: YORK HOUSE, KINGSWAY, LONDON, W.C.2; 120 GEORGE STREET, EDINBURGH 2; 26 YORK STREET, MANCHESTER 1; 1 ST. ANDREW'S CRESCENT, CARDIFF; 80 CHICHESTER STREET, BELFAST; or through any bookseller.

VOL. 56. No. 10.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE

Price 1s. 0d. net, Post-free 1s. 1d.

Annual Subscription, including Annual Summary and Introduction, 15s. 0d. post free.

OCTOBER, 1939.—Rather cold; excessively wet in the south-east; sunny in the north and west.

The month was distinguished by a marked excess of rain in south-eastern districts; in the western half of the country, however, rainfall was deficient. It was rather cold, particularly during the latter half of the month and sunshine was excessive in the west and north. Northerly and easterly winds were unusually prevalent.

During the opening days an anticyclone moved south-east from Iceland to the British Isles and, subsequently, eastward to Scandinavia. Some rain fell in Scotland, north Ireland and north and east England on the 1st. Fair weather, with good sunshine records, prevailed in most parts on the 2nd and 3rd but rain was recorded in east and south-east England. From the 4th–6th a depression moved from south-west of Scilly to north Ireland; rain fell fairly generally and there were local thunderstorms. A new Atlantic disturbance approached the west coasts on the 8th and from the 9th–12th remained centred off north-west Ireland; rain was almost general and heavy locally. On the 13th a depression developed west of Brittany and moved rapidly north-east to Denmark; it was followed by another disturbance on the 15th. Further rain occurred, which was heavy at times in southern England.

On the 16th a ridge of high pressure developed over the British Isles and, later, pressure was high northward of Scotland, while a depression moved from Spain to north-east France. Thunderstorms and heavy rain were experienced locally in England on the 17th and heavy local rain in east and south-east England on the 19th. From the 20th–23rd a deep depression over southern Greenland moved slowly east and then north-east, while pressure was high in a belt from the Azores across the British Isles. The 20th was a fair day nearly everywhere and fair weather persisted over a large part of England on the 21st and 22nd, while rain occurred at times in Scotland and Ireland. Subsequently pressure was high to the west and low to the east of the British Isles; rather cold, unsettled weather prevailed with winds from some northerly point and occasional rain, hail, sleet and snow. Thunder occurred locally on the 25th, 26th and 27th. Thereafter pressure became high to the north of the British Isles while depressions moved westward over France. Easterly winds prevailed with occasional rain, heavy at times in the south, and local thunderstorms in England between the 28th and 30th.

Pressure and Wind.—Mean pressure for the month exceeded the average in the north and was below the average in the south, the deviation at 7h. ranging from +9.2 mb. at Lerwick to -2.7 mb. at Kew Observatory. The average pressure distribution was thus practically reversed and winds from north and east were unusually prevalent. Gales were reported daily from the 4th–11th, chiefly in Scotland, and at Wick a continuous gale of 65 hours was reported, beginning on the evening of the 4th. Gales were also recorded at St. Abb's Head on the 26th, at Yarmouth on the 28th and in the Irish Sea on the 31st.

Among the highest speeds recorded in gusts were 66 m.p.h. at St. Marys, Scilly and 61 m.p.h. at Plymouth on the 5th, 64 m.p.h. at the Lizard on the 6th, 63 m.p.h. at Valentia Observatory on the 8th, 60 m.p.h. at Point of Ayre on the 9th and 77 m.p.h. at Bell Rock on the 10th and 67 m.p.h. at Bell Rock on the 26th.

Temperature.—Mean temperature was, for the most part, appreciably below the average, the deviation for the districts ranging from -0.9°F. in Scotland, N. to -3.0°F. in England, N.W. At Ross-on-Wye the mean temperature, 46.9°F., equalled that of October 1926 and apart from this was the lowest for October since 1919. At Wakefield the mean temperature was the lowest for October since 1926. On the whole the latter half of the month was the colder. The extremes for the month were:—(England and Wales)

69°F. at Hastings on the 11th, 21°F. at Appleby on the 26th and 27th, (Scotland) 65°F. at Kilmarnock on the 7th, 20°F. at Braemar on the 18th; (Ireland) 66°F. at Glesnevin, Dublin, on the 4th and 5th and 23°F. at Birr Castle on the 28th and 29th.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the average for the period 1881–1915 was 101, the values for the constituent countries being England and Wales 120, Scotland 79 and Ireland 80. In England and Wales less than the average occurred over practically the whole of Wales and north-west England, a large part of Yorkshire and part of south-west England. Elsewhere there was generally an excess, which was very marked in east and south-east England; in the neighbourhood of the Thames Estuary more than three times the average occurred and at Clacton 438 per cent. was registered. At Eastbourne it was the wettest October since records were first taken in 1888 and at Halstead the total rainfall was the highest for any month in 47 years' records. In Scotland, more than the average occurred over large areas in the east, while less than the average was registered in the west and north. The deficiency was marked locally in the west and north-west, less than 25 per cent. of the average being received in parts of Inverness-shire. Some new records of low rainfall were established in the west for the three months August to October; Fort William had only 8.81 in. of rain in the quarter, the previous lowest total for this period being 8.88 in. in 1915. In Ireland, the deficiency was fairly general but an excess was registered in some scattered areas; less than 40 per cent. occurred in a small inland area in the south.

Among the heaviest falls of rain in 24 hours were:—

7th 2.90 in. at Kingairloch (Argyllshire).

9th 2.85 in. at Ardvorlich (Perthshire) and 2.70 in. at Edinchip (Perthshire).

10th 2.70 in. at Glenbranter and at Forrest Lodge, Dalry.

17th 3.09 in. at Blisworth (Northants), 3.06 in. at Rugby and more than 2 in. at numerous other stations in England.

27th 2.72 in. at Folkestone.

Thunder occurred frequently for the time of year; it was reported on 6 days at Portsmouth and on 4 days at Tynemouth, London (Greenwich and Kensington), Dover, Dungeness, Lympne and Newport, Isle of Wight. Thunderstorms occurred locally from the 4th–7th, 11th–12th, 16th–18th, 21st and 25th–31st.

Sleet or snow occurred locally at times between the 25th and 27th. Snow was reported from high level stations in Scotland on 11 days.

Sunshine.—A marked feature of the weather of the month was the excessive sunshine enjoyed in the north and west. Over most of the eastern and south-eastern districts of England, as well as locally in east Scotland and around Dublin, sunshine was deficient. The percentages of the average for the districts ranged from 83 in England, E. to 142 in Scotland, W. The excess at individual stations was very pronounced; for example, the percentage of the average was 214 at Onich, 181 at Oban, 175 at Stornoway and 170 at Kilmarnock.

Fog.—Fog occurred at times, chiefly on the 7th, 12th, 13th and 16th–23rd. Fog occurred frequently in the Clyde area.

Miscellaneous Phenomena.—The aurora was observed in Scotland on 18 nights. There was an outstanding display on the 3rd, which was seen also at many places in the south of Scotland and at Foynes, County Limerick. Of this display Mr. Seton Gordon of Duntulm, Isle of Skye, writes: "The whole of the heavens from horizon to horizon seemed to be in motion and alive, and the light of the moon failed to diminish the grandeur of this spectacle." Another fine display, which was also seen at Foynes, occurred on the 13th. Solar halos were noted at Oxford on 13 days.