

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: ADASTRAL HOUSE, KINGSWAY, LONDON W.C.2; 120 GEORGE STREET, EDINBURGH 2; YORK STREET, MANCHESTER 1; 1 ST. ANDREW'S CRESCENT, CARDIFF; 80 CHICHESTER STREET, BELFAST; or through any Bookseller.

VOL. 52. No. 12.

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.

DECEMBER, 1935.—Notably cold from the 17th to 24th; widespread floods in England towards the end of the month.

The month was remarkable for an extremely cold spell from the 17th-24th, excessive sunshine except in south-eastern districts, much fog from the 6th-8th and 17th-24th, and widespread flooding in England in the last week.

During the opening days of the month a very deep depression was centred off south-west Norway and north-westerly winds prevailed over the British Isles, with some precipitation on most days, and snow or sleet at times, mainly in the north. Gales were rather widespread on the 1st and 2nd. Subsequently the main depression became less deep and secondaries moved round it in an anti-clockwise direction. Between the 6th and 8th, shallow depressions passed eastward across our northern seaboard, while associated troughs crossed the British Isles, and weather continued rather unsettled generally. An anticyclone, which was centred off the west coast of Scotland on the 9th, moved eastward to southern Scandinavia and maintained anticyclonic conditions over the United Kingdom for some days. Unsettled weather was re-established on the 14th, by a depression centred over eastern Iceland. This system moved slowly south-east to the Netherlands, causing local gales in the west and north. Heavy rain fell locally in the west of Scotland on the 14th.

Subsequently from the 19th to 24th, a belt of high pressure extended across the British Isles between depressions situated over Scandinavia and off our south-west coasts. This was a period of intense frost, much fog and some snow.

On the 24th and following days a deep Atlantic depression approached our western coasts and secondary depressions crossed the British Isles. There was a rapid rise of temperature and much rain fell in England. A new deep depression approached S.W. Ireland on the 30th.

Pressure and Wind.—Monthly mean pressure was below the average in all districts, the deficiency being greatest in the south. At 7h. the deviation from the average varied from -3.6 mb. at Lerwick to -10.1 mb. at Kew Observatory.

On the whole, the month was not a windy one for the time of year. Gales were rather widespread on the 1st and 2nd and occurred at a few isolated stations between the 3rd and 6th. Gales were reported locally in south-east England round the 10th and 11th, in the north of Scotland and north-west of England between the 14th and 16th, at a few stations in the west and north between the 24th and 26th and in the south-west from the 29th-31st. Among the highest speeds recorded in gusts were 84 m.p.h. at the Lizard on the 2nd, and 80 m.p.h. at Bidston Observatory and 76 m.p.h. at Fleetwood on the 1st.

Temperature.—Mean temperature was well below the average, the deviation varying from -1.1°F. in the Channel Islands to -4.2°F. in Scotland, W. (See Table I).

The spell from the 17th to 24th was exceptionally severe. Some notably low minima were registered in the screen, readings below 15°F. being registered at numerous stations, while 4°F. was recorded at Braemar, 7°F. at Balmoral, Mayfield and Rickmansworth, and 8°F. at Peebles on the 24th, and 8°F. at Appleby, Buxton, West Linton and Peebles on the 23rd. The days, as well as the nights, were cold, particularly at places with persistent fog, and maximum temperatures below 30°F. were widespread. Among the lowest maxima recorded were 18°F. at Abbotsinch, 24°F. at Attenborough and Eskdalemuir and 25°F. at Newton Rigg, Ross-on-Wye and Cambridge on the 23rd, and 25°F. at Stonyhurst on the 20th.

Temperature rose rapidly during the 24th and the last week was mainly mild. Some fairly high day temperatures were also recorded locally on the 1st, 3rd and between the 8th and 10th.

The extremes for the month were:—(England and Wales) 55°F. at Dungeness on the 28th; 7°F. at Rickmansworth and Mayfield on the 24th; (Scotland) 51°F. at Achnashellach on the 3rd, 4°F. at Braemar on the 24th; (Ireland) 53°F. at Dublin City and Hazel-hatch on the 26th and 12°F. at Markree Castle on the 23rd.,

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the average for the period 1881-1915 was 88, the values for the constituent countries being England and Wales 100, Scotland 72 and Ireland 72.

More than 100 per cent of the average fell in the English Midlands, in southern England (except the extreme south-west) and part of eastern England, but there was a considerable deficiency in Wales and north-west England. In Scotland, an excess was confined to one or two places in the north-east and in Wigtownshire, while less than half the average amount was recorded at many places in central, north-west and south-east districts. In Ireland, the deficiency was general except locally in County Down and less than half the average was registered in some central areas. In England, the total rainfall of the last week was heavy, and widespread and destructive floods were reported in many districts.

Thunderstorms were rather widespread on the 1st and 2nd. They were reported in south-west Scotland also on the 7th and 8th, and at one or two places in England on the 15th. Some sleet or snow occurred rather frequently during the first 25 days, particularly between the 1st and 6th, on the 10th and from the 14th to 25th. At Braemar the depth lying was 6 in. on the 1st, and at Balmoral 4 in. on the 1st and 2 in. from the 17th to 25th. Newcastleton (Roxburghshire) had 6 in. to 8 in. lying on the 4th, West Linton 4 in. from the 16th to 19th and 3 in. from the 20th to 23rd and Achnashellach 4 in. on the 21st and 8 in. from the 22nd to 24th.

Sunshine.—A large excess of bright sunshine was enjoyed over the greater part of the country, the percentage of the average for districts 1-10 being 123. The largest excess was registered in Scotland, N. and Scotland, W.: at Stornoway, the total for the month, 54 hours, is the highest recorded in December since records were started in 1881. In England, S.E., England, E. and the Channel Islands, less than the average was recorded (See Table I). Although, in general, there was a marked excess of sunshine, large variations occurred in some districts. For example, in England, N.E., York had 193 per cent. of the average, while Cranwell had only 65 per cent. In England, E., Rothamsted had 109 per cent and Cambridge 61 per cent and in England, S.E., Hastings had 111 per cent and Margate 64 per cent.

Fog.—Fog occurred very frequently: it was reported at the morning observation on 25 days at Nottingham and on 24 at Glasgow. The most noteworthy fogs occurred from the 5th-7th and between the 18th and 23rd, but fog was also recorded locally, daily from the 24th-31st. The observer at Ipswich remarks that "the fogs in Ipswich on the evening of the 6th and outside the town on the afternoon of the 7th were, I think, the thickest that I ever remember hereabouts." During a thick fog on the 20th, four men fell into the harbour at Bristol, and the greatest atmospheric pollution for nearly 11 years was reported at Kew Observatory on the 23rd.

Miscellaneous Phenomena.—The aurora was seen in the north of Scotland on the 4th, 5th, 9th, 14th, 16th and 28th. Solar halos were noted at Oxford on ten days. A waterspout was observed off Ferring, near Worthing, on the 28th.