

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; 13A CASTLE STREET, EDINBURGH 2; 39-41 KING STREET, MANCHESTER 2; 1 ST. ANDREW'S CRESCENT, CARDIFF; 80 CHICHESTER STREET, BELFAST; or through any bookseller.

VOL. 62. 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, 1945.—Changeable; very unsettled from the 16th to 29th.

The first week was unsettled with depressions moving north or north-east along our north-west seaboard and associated troughs crossing the British Isles. There were alternating periods of rain and sunshine and winds were often strong and reached gale force at times at exposed places in the west and north, particularly on the 2nd and 4th. Thunderstorms were reported in the south-west on the 2nd and 3rd. On the 7th a large anticyclone centred over Finland spread south-west to eastern England, while a trough of low pressure moved in over our western districts and became almost stationary. Dry, cold weather prevailed in eastern districts of England, while rain occurred in the west and north of the British Isles. On the 9th a depression in the far north moved east and deepened and an associated trough moved south-east over the British Isles. Slight, scattered rain occurred except in south-east and east England. Subsequently an anticyclone was established westward of Ireland and anticyclonic conditions prevailed over most of the country until the 12th. On the 12th, a depression near Iceland moved east to southern Scandinavia and on the 13th, north-westerly winds prevailed over Britain with local rain or showers. Gales were recorded in north and east Scotland on the 12th and 13th. In the rear of this depression a wedge moved east over the British Isles and a short period of mainly fair weather occurred in the east. Weak troughs of low pressure moving north-east were associated with rain on the 15th.

A period of very unsettled, mild and stormy weather ensued, which lasted for the most part until the 29th. On the 17th an intense depression centred on the Atlantic west of Ireland moved east-north-east and by the 18th the centre had reached Ireland and pressure had fallen below 950 mb. There were widespread gales and the gale was severe in exposed places. Rain occurred, and there were local thunderstorms in the west on the 17th. The depression moved away north and turned west and by the 19th, pressure on the Atlantic southward of Iceland fell to the exceedingly low level of 928 mb. Subsequently pressure remained very low on the Atlantic, while troughs moved north-east over the British Isles. Rain occurred daily and was heavy locally and gales were reported on the south-west coasts on the 21st and 22nd and locally in the north of Scotland on the 22nd. On the 24th and 25th a depression moved from the west of Ireland to south-east Scotland. There were fairly widespread gales and heavy rain on the 24th and scattered rain on the 25th. On the 26th a trough of low pressure associated with a deep depression south-west of Iceland moved east across the British Isles giving rather heavy rain. Subsequently on the 27th and 28th a secondary depression moved rapidly across southern England from north-east of the Azores to North Germany; heavy rain and local gales occurred in the southern half of the country. During the closing days a ridge of high pressure moved east over the British Isles and became more intense over southern Scandinavia, while a trough approached our western seaboard. There was considerable fog, but good sunshine records were obtained locally; some rain was registered in the west.

Pressure and Wind.—Mean pressure was below the average except in the Shetland Isles, the deviation from the average at 9 h. ranging from +0.7 mb. at Lerwick to -4.8 mb. at Scilly.

In Scotland winds from between east and south were more frequent than usual. Gales were reported fairly frequently, mainly on the 1st-2nd, 4th-5th, 7th-8th, 12th-13th, 17th-18th, 21st-22nd,

24th and 28th-29th. Among the highest speeds registered in gusts were 77 m.p.h. at Stornoway on the 2nd, 76 m.p.h. at Lerwick on the 13th, 74 m.p.h. at St. Ann's Head on the 17th, 81 m.p.h. at Pendennis on the 18th and 73 m.p.h. at Scilly on the 24th. A mean hourly velocity of 57 m.p.h. was registered at Pendennis on the 18th.

Temperature.—Mean temperature exceeded the average by 1.1°F. over England and Wales, 1.4°F. over Scotland and 2.8°F. over Northern Ireland. It was rather cold from the 6th-14th and 29th-31st and some low minima were registered in Scotland on the 21st. Among the warmest days were the 1st, 2nd and 15th-17th.

The extremes for the month were:—(England and Wales) 61°F. at Aber on the 16th, 17°F. at Santon Downham on the 9th; (Scotland) 57°F. at Fort William, Onich and Marchmont on the 1st, 17°F. at Eskdalemuir on the 14th; (Northern Ireland) 57°F. at Lisburn on the 4th; 25°F. at Garvagh on the 29th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881-1915 was 105 over England and Wales, 99 over Scotland and 94 over Northern Ireland. More than the average occurred over the eastern half of Scotland from Caithness to the Tay, over most of Wales and the southern half of England and over County Down and at one or two isolated stations in the west of Scotland. More than 175 per cent. of the average occurred over much of Aberdeenshire and more than 200 per cent. at Braemar and Dundee. Less than 50 per cent. of the average was received over a fairly large, mainly inland area in the north of England.

Among the heavier falls in 24 hours were:—

18th	1.89 in. at Holne, S. Devon.
23rd	1.80 in. at Swansea.
24th	2.15 in. at Clachglas, near Blair Athol, 2.07 in. at Auchintoul, Banffshire and 2.01 in. at Dundee.

Local thunderstorms were reported rather frequently for the time of year; for example, on the 2nd-3rd, 17th, 18th, 23rd, 24th, 25th and 27th-29th.

In Scotland, no general fall of snow took place during the month, but isolated snow or sleet showers were recorded on 9 days. Snow or sleet occurred locally in the south of England on the 28th, particularly on high ground; 2-3 inches were reported from Little Rissington, in the Cotswolds and Dunstable, in the Chilterns.

Sunshine.—Broadly speaking sunshine was below the average in north and east Scotland and south-west England and above the average in West Scotland, Northern Ireland and south-east England but the distribution was rather variable.

Fog.—Fog developed frequently especially in inland towns; it was reported at 9 h. on 20 days at Nelson (Lancs.), 17 days at Mansfield and Nottingham and 15 days at Huddersfield. The chief periods were the 1st, 7th, 10th-12th, 14th-16th, 20th-21st, 26th and 28th-31st.

Miscellaneous Phenomena.—The aurora was observed at northern stations in Scotland on 11 nights; on the 13th a display was seen as far south as West Linton. Solar halos were noted at Oxford on 17 days. There was a heavy hail shower at Clachan, Kintyre on the 27th, with hailstones the size of peas.