

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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JANUARY, 1933.—Mild, then mainly cold; sunny in most places

An exceptionally deep depression centred near Iceland (927.2 mb. at Reykjavik at 7 h. on 3rd) dominated the weather over the British Isles during the first six days of January. Widespread strong winds and gales from south or south-west occurred on the 2nd and 3rd, while heavy rain fell at times in western and northern districts. Snow or sleet was noted between the 3rd and 6th and thunderstorms were reported locally (mainly in the west and north-west) between the 2nd and 7th. Temperature was high for the time of year.

Thereafter from the 11th–16th a series of troughs of low pressure passed eastward over these Islands and from the 17th–19th a shallow depression over England moved north-east to the North Sea and filled up. During this period temperature was rather low and weather unsettled but a wedge of high pressure moving south-east caused some fairly good records of sunshine in Scotland and Ireland on the 11th and in England on the 12th. Snow was rather widespread from the 16th–18th and gales were experienced in the west and north on the 14th.

A change occurred on the 20th when the Russian anticyclone began to spread westward and a period of dry, cold weather ensued with easterly winds in the south and southerly to south-westerly in the north. Records of bright sunshine were good at times, particularly from the 25th–28th. This dry spell was broken on the 29th by a depression over the Bay of Biscay moving north-east and another centred north-west of Iceland moving south-east or east. Snow or sleet fell in many places on the 30th and snow lay to a depth of from 6 to 9 inches for a short time in the Glasgow area. Glazed frost occurred in the neighbourhood of Bristol on the night of the 30th and caused many accidents. Gales were reported in the west and north on the 31st and heavy rain fell in parts of Scotland, Ireland and Northern England during the night of January 31st to February 1st.

Pressure and Wind.—Owing to the anticyclonic distribution from the 20th–29th, pressure was everywhere above the normal, the excess ranging from 4.4 mb. at Lerwick, Aberdeen and Yarmouth to 2.1 mb. at Valentia. Widespread southerly or south-westerly gales occurred around the 2nd and 3rd and, in the west and north, strong winds and gales were fairly widespread also on the 14th and 31st. Outside these periods gales were more local. On the 2nd gusts of 70 m.p.h. or above were recorded widely in Scotland, while 80 m.p.h. and 79 m.p.h. were registered at Butt of Lewis and Lerwick respectively. On the 4th a gust of 77 m.p.h. was recorded at Scilly and one of 75 m.p.h. at Pendennis. On the 8th 77 m.p.h. was recorded in a gust at Dunfanaghy Road.

Easterly winds were very prevalent in southern districts from the 20th–29th.

Temperature.—South-westerly air was responsible for the mainly mild period during the first nine or ten days when temperature rose above 50° F. at times, particularly on the 2nd, 3rd and 8th. On the 2nd, 55° F. was reached or exceeded at many places and 60° F. was registered at Llandudno, 59° F. at Trinity College, Dublin, and 58° F. at Hawarden Bridge, Foynes, Glasneven (Dublin) and Hazelhatch. An interesting cold spell occurred during the anticyclonic regime from the 20th–29th, the coldest period centring round the 24th. On that day temperature failed to reach 32° F. at many stations while a maximum of 29° F. was recorded at Bristol, Lympne, Upper Heyford and Boscombe Down. Other noteworthy low maxima were 26° F. at Renfrew on the 28th and 28° F. at the same station on the 24th and 25th, but almost continuous fog was partly responsible for these low readings. Notable minima were 4° F., 6° F. and 9° F. at Logie Coldstone, Braemar and Balmoral respectively on the 19th and 9° F., 10° F. and 10° F. at the same three stations on the 20th. The reading, 23° F., on the 25th at Valentia Observatory is the lowest night minimum there in January

since 1907. Low grass minima include –1° F. at Braemar, 1° F. at Balmoral and 3° F. at Logie Coldstone on the 19th. Outdoor skating became general for the first time since the cold spell of February to March, 1929, and lasted until the 29th. After the 25th the cold air from Russia was diverted and temperature gradually rose.

The extremes for the month were:—(England and Wales) 60° F. at Llandudno on the 2nd, 11° F. at Rickmansworth on the 23rd. (Scotland) 57° F. at Fort William on the 2nd and at Dunbar on the 8th, 4° F. at Logie Coldstone on the 19th. (Ireland) 59° F. at Trinity College, Dublin, on the 2nd, 18° F. at Kilkenny on the 26th.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the normal for the period 1881–1915 was 95; the values for the constituent countries were:—England and Wales 93, Scotland 103, Ireland 90.

Rainfall was rather variable, but roughly speaking totals were below the average along the east coast of Britain and above the average in the western districts of Wales, in Cumberland and most of the west and south of Scotland. At Ettrick Manse in Selkirk, more than twice the normal was recorded. In Ireland rainfall was on the whole below the normal in the south and east and slightly above in the west and north. The heaviest falls occurred during the opening days of the month (particularly on the 2nd) and on the 31st. In some districts heavy rain fell on the 15th.

The following falls in 24 hours or less are noteworthy:—

2nd. Borrowdale 79 mm., Princetown 73 mm., Holne (S. Devon) 65 mm. and Llyn Fawr Reservoir, Glamorgan, 65 mm.

31st. (Mainly during the night of January 31st to February 1st) Burn Banks (Haweswater) 148 mm., Watendlath Farm (Borrowdale) 140 mm., Walmhow 126 mm., Ambleside 99 mm., Tyndrum 97 mm., Dale Head (Thirlmere) 87 mm., Kinlochquoick 84 mm. and Evan Water 80 mm.

A dry period occurred from the 20th to 28th inclusive. Snow or sleet fell between the 3rd and 6th and again between the 15th and the end of the month; it was widespread from the 16th–18th. The heaviest fall was probably that of the 30th. Thunderstorms occurred locally between the 2nd and 7th.

Sunshine.—One of the outstanding features of the month was the excess of sunshine (see Table I). The districts Ireland N., England N.W. and England S.W. were particularly fortunate in this respect. At Birmingham, Holyhead and Ross-on-Wye it was the sunniest January since records began in 1887, 1914 and 1915 respectively and at Holyhead and Ross-on-Wye more than twice the normal was recorded. At some isolated stations, however, there was a decided deficiency. At Fort Augustus only 36 per cent. of the normal was registered and at Scarborough and Harrogate only 74 per cent. and 78 per cent. respectively. At Wakefield it was the dullest January in 34 years records apart from 1929 and 1917. A very bright period in eastern England occurred from 25th–29th inclusive.

Fog.—Fog occurred frequently in England after the 6th and in Scotland after the 9th. It was thick locally on the 10th, 13th, 14th and from the 16th to the 20th. Fog was also thick at times at Renfrew on the 25th and 28th, while almost continuous fog prevailed at Renfrew from the 16th–18th.

Miscellaneous Phenomena.—Aurora was observed in Scotland on nine occasions. At Oxford, solar haloes were noted on ten days and the Zodiacal Light was observed on the 22nd.