

## 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; YORK STREET, MANCHESTER; 1, ST. ANDREW'S CRESCENT, CARDIFF; 15, DONEGALL SQUARE WEST, BELFAST; or through any Bookseller.

VOL. 45. No. 1.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

Price 9d. net, Post free, 10d.  
 Annual Subscription, including  
 Annual Summary and Introduction,  
 10s. post free.

## JANUARY, 1928: Mild, stormy and extremely wet.

The outstanding feature of the weather of January, 1928, was its persistent and marked wetness, the general rainfall of the British Isles representing 202 per cent. of the normal for the period 1881-1915, which is the highest percentage value on record for January since at least 1870. The month on the whole was mild; in Scotland the month was the sixth mild January in succession, while in England and Wales and Ireland the mean temperature in January has not been appreciably below the normal since January, 1919.

In the central and eastern districts of Great Britain, temperature remained low on the 1st, severe frost occurring in several places during the night of December 31st-January 1st; amongst the low screen minimum temperatures recorded on the morning of the 1st, were 11° F. at Eskdalemuir and Chelmsford and 17° F. at Ross-on-Wye. On the 2nd, the mild conditions which had set in in the western and south-western districts on December 31st, spread gradually eastwards and by about the 5th had become general. The return to mild conditions was accompanied by heavy rain and strong winds and gales in southern England on the 1st (54 mm. at Dean Prior, Devon) and 2nd and widespread rain on the night of the 3rd-4th and on the 4th. Heavy rain in northern districts during the night of the 5th to 6th was associated with the passage of a deep depression across northern Scotland and in the rear of this depression, westerly to north-westerly gales occurred widely on the 6th, the wind in the afternoon of the 6th attaining in a gust a velocity of 84 m.p.h. at Spurn Head, 83 m.p.h. at Southport and 82 m.p.h. at Fleetwood. Shortly after midnight on January 7th, an abnormal rise of the Thames occurred, the tidal reaches of the river attaining their highest level for at least fifty years. Serious flooding resulted in the City, Southwark, Westminster, and as far west as Putney and Hammer-smith. In the low-lying areas fourteen people lost their lives, through being trapped in basements, and a very large amount of material damage was done by the water. The Thames was already in a swollen condition owing to the thaw which set in on January 1st and to the subsequent heavy rain, but the severity of the flood in London appears to have been due more to the circumstance that a spring tide coincided with high winds from the north-west in the North Sea than to the flood water of the river itself.

During the remainder of the month the frequent passage of depression across or in the neighbourhood of the British Isles maintained unsettled weather, with frequent rain and high winds and gales, very disturbed weather occurring from the 10th to the 12th and from the 23rd to the 26th. During the severe gales on the 10th, which were associated with an intense secondary depression off the Hebrides, the wind momentarily exceeded 70 m.p.h. at exposed stations in Scotland, a gust of 78 m.p.h. being recorded at Paisley on that date. On the 24th a very deep depression centred to the north of the Faroes, with a secondary trough extending southwards over Ireland and moving eastwards gave rise to widespread gales, the wind in a gust attaining a velocity of 87 m.p.h. at Lerwick. There were brief intervals of showery and sunny weather between the depression, notably on the 3rd, 5th, 8th-9th, 11th, 13th, about the 15th and on the 19th, 22nd and during the last week of the month.

**Pressure and Winds.**—The frequency with which depressions passed across or near the British Isles resulted in the monthly means of pressure being markedly below normal in all districts, the deficiency ranging from 13 millibars at Stornoway to 2 millibars at Scilly. The mean isobars trended from west-south-west to east-north-east, the prevailing winds being south-westerly. High winds and gales occurred frequently during the month, the gales on the 6th, about the 10th and on the 24th and 25th being notably severe in northern districts; at Lerwick on the morning of the 24th the wind attained in a gust a velocity of 87 m.p.h. At Fleetwood, on the afternoon of the 6th, the wind attained a mean hourly velocity of 60 m.p.h. and in a gust touched 82 m.p.h.

**Temperature.**—January, 1928, was almost throughout mild, and in all districts the mean temperature was above the normal, the deviations from normal ranging from 3.4° F. in the Midland Counties to 1.1° F. in Scotland N. At no time during the month was there a spell of really cold weather, although in the fair intervals between the depressions, frost in the screen, which was seldom severe, occurred at night. The coldest nights occurred generally in the 1st, 17th, 18th, 27th and 28th. There were frequent occurrences of ground frost and some low readings were recorded, e.g., 13° F. at Wisley on the 18th and at Hampstead (London) on the 28th.

The extreme temperatures for the month were:—(England and Wales) 59° F. at Wisley on the 6th and 11° F. at Chelmsford (Good Easter) on the 1st. (Scotland) 59° F. at Turnberry on the 5th and 8° F. at Braemar on the 1st. (Ireland) 60° F. at Dublin (Trinity College) on the 21st and 19° F. at Markree Castle, Sligo, on the 1st.

**Precipitation.**—The general precipitation of the British Isles expressed as a percentage of the normal for the period 1881-1915 was 202, the largest percentage value since 1870; the values for the constituent countries were:—England and Wales, 210; Scotland, 214; and Ireland, 166. The values for England and Wales and Scotland are the highest on record since comparable statistics first became available in 1870, but the value for Ireland has been exceeded in January on five occasions, including January, 1926.

Not only were totals for the month well in excess of the normal, but the number of days on which there was measurable precipitation was decidedly above the normal, and in general the month's precipitation was more remarkable for its persistency than for any very heavy daily falls; at the following widely distributed stations in the western districts of Great Britain and in Ireland there were 31 days of 0.2 mm. or more precipitation: Stornoway, Thornton Hall, Keswick, Rhayader, Dean Prior, Mallaranny, Foynes and Cahirciveen. There were several stations in Scotland with 30 days of 0.2 mm. or more precipitation.

Over the greater part of England and Wales there was more than twice the normal precipitation; over Cumberland, Westmorland, Lancashire, Snowdonia and the Peak district of Derbyshire, precipitation exceeded two and a half times the normal, while the month's totals just exceeded three times the normal at Manchester. January, 1928, was the wettest in records covering 135 years at least at Manchester, 97 years at Bolton, 81 years at Stonyhurst, and 57 years at Southport. At Ross-on-Wye there have been only two Januarys since 1818 with larger monthly totals, viz., 1869 (16.16 in.) and 1886 (5.10 in.). At Huddersfield it was the wettest January on record for over half a century. In the English Lake district and in Snowdonia more than 25 in. was measured, as much as London receives on the average in the course of a year.

Rainfall was everywhere excessive in Scotland and wide areas had considerably more than twice the normal. At Cargen, near Dumfries, the total was the heaviest recorded in any month since observations commenced there in 1860; at Greenock the month was much the wettest January for at least 60 years; and at Edinburgh it was the wettest January since 1877. In Central Perthshire, West Inverness-shire and Argyllshire, considerable areas had more than 20 in., with as much as 26.15 in. at Achaidh Burn in the Loch Katrine area, and 25.05 in. at Ardtornish on the Sound of Mull. Many places had rain on every day, and wide areas only one or two rainless days. The wettest periods were around 5th, from 9th to 12th, around 18th, and from 23rd to 27th. Falls of about 2 in. occurred at Ardtornish on 1st and at Kinlochquoich on 11th and 12th.

In Ireland, monthly totals exceeded twice the normal in the extreme north of Ireland, and were everywhere above the normal except in the Dublin district where, although rain fell on as many as 25 days, the total for the month was slightly below the normal.

Owing to the melting of the snow at the beginning of the month and the subsequent frequent rains, much flooding occurred in many districts; in Scotland, serious damage was caused by floods around the 22nd, notably in the Blairgowrie district and at Ballater, where the Dee burst its bank. Flooding was widespread in the Thames Valley in the early part of the month. Reference has already been made to the disastrous floods in London on the 7th.

Showers of hail and sleet or snow occurred on several occasions, while thunderstorms were experienced locally on various dates.

**Sunshine.**—Although the number of days of precipitation exceeded the normal in all districts, some sunshine was recorded on most days, there being seldom more than two consecutive days without bright sunshine in any district, while good records were obtained on several days, including the 3rd (e.g., 6.7 hr. at Ross-on-Wye and Weymouth, 6.5 hr. at Bath), 11th (7.0 hr. at Ross-on-Wye), 15th (7.0 hr. at Southsea and Brighton), 17th (7.5 hr. at Malvern), 19th (7.9 hr. at Southend) and 27th (8.1 hr. at Torquay). As a result monthly aggregates of bright sunshine were mostly about or above the normal; the general mean aggregate for a District expressed as a percentage of the normal ranging from 90 in Scotland N. to 146 in Ireland N. At Ross-on-Wye it was the sunniest January since records began 14 years ago, and at Totland Bay the sunniest January since 1908.

**Fog.**—Fog occurred locally mostly in districts in central, southern and eastern England during the first three days, on the 7th, 14th, round about the 18th, on the 20th, 23rd, 24th and 29th.

**Miscellaneous Phenomena.**—Halo phenomena were observed on various dates in many districts; paraselenae were observed at Durham Observatory on the evening of the 8th. The Zodiacal Light was observed at Oxford on the 16th, 17th, 19th, 22nd and 24th. Aurora was observed in Shetland on the 8th, 22nd, 26th, 27th and 28th, and at Aberdeen on the 26th and 27th.