

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

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

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FEBRUARY, 1927: MAINLY COLD, DRY AND FOGGY TO 19th, THEREAFTER MILD AND UNSETTLED. WET IN THE SOUTH.

General.—February 1927 was chiefly remarkable for an unusual prevalence of fog. Anticyclonic weather prevailed generally up to the 18th with low temperatures from about the 8th to the 13th; from the 19th onwards conditions were mild and unsettled with considerable precipitation in England and Wales.

Cloudy conditions generally with some rain at a few places and showers of sleet in some northerly districts characterised the weather of the opening day of the month. On the night of the 1st to the 2nd, associated with the passage across Southern England of a secondary depression, heavy rain, sleet or snow occurred in southern districts, 41mm. (1.61 in.) being measured at Folkestone and 31mm. (1.22 in.) at Cullompton on the morning of the 2nd. Snow lay on the ground in many parts of the country, the average depth at Biggin Hill being 8 in., and at Oxford, Hampstead and Rothamsted about 3 in. on the 2nd. Fresh to strong south-westerly winds veering to the north-west with cloudy weather and some rain or showers prevailed on the 3rd and 4th. On the 5th a ridge of high pressure began to extend northwards across the British Isles and from the 6th until about the 19th anticyclonic conditions persisted over the greater part of the country. During this period much mist or fog prevailed, particularly from the 11th to 17th, and was especially persistent in the eastern districts of England and in the English Channel. Little or no rain occurred from the 7th to 19th except in the western and north-western districts which came occasionally under the influence of the depression centred near Iceland. Temperature was low from the 8th to 13th; on the 12th the maximum at Leafield was as low as 27°F. and at Birmingham, Hereford and Oundle, as low as 29°F., while screen minima below 20°F. were registered at a few places, the lowest, 12°F. occurring at Wellington (Roden) on the 11th.

From the 19th onwards, conditions became mild and unsettled with rain at times but with some fair colder periods. Hail was reported at several places on the 23rd and snow occurred at Shaftesbury (Dorset) on the 23rd and 24th. The rainfall was heavy locally, 68mm. (2.67 in.) being recorded at Carnarvon on the 27th. On the 22nd a depression centred off the west of Ireland caused strong winds and gales in the western part of the English Channel. Gales were also experienced in the southern part of the country from the 26th to 28th.

The general character of the month is illustrated by the following remarks taken from observers' notes:—Huddersfield—A mild and dry month with mainly light winds. Southport—A very calm and humid south-easterly month with much mist and haze. Second week cold but several days in later part of month unseasonably warm. Copdock—An unpleasant month, wet, foggy and sunless. Berkhamsted—February was very wet, especially during the later part of month. An excessive and unusual number of fog-days. Halstead—The month was remarkable for an exceptional spell of foggy weather from the 11th to the 17th and for its high rainfall, most of which occurred during the last ten days. The total fall for the month has been exceeded on only three occasions in February during the last 34 years. Newport (Isle of Wight)—A dull, quiet and very foggy month. Teignmouth—Dry and cold to the 19th, then mild stormy and wet. Dublin (City)—A month of mean temperature, sharply divided into two periods of widely different types of weather. Quiet anti-cyclonic weather with little rain, low night screen temperatures often rising many degrees in the day-time and much fog prevailed until the 19th, after which rain fell daily. Cork—Cold and cloudy with light winds principally between south-east and west. Relatively dry to the 17th, but latter part of month wet.

Pressure and Winds.—The distribution of the mean pressure for the month, was largely influenced by the anticyclonic conditions which prevailed during the greater part of the first three weeks of the month. The mean sea level pressure at 7h. ranged from 1011 mb. on the western side of the British Isles to 1018 mb. in the south-east of England, and was above the normal in practically all districts. The prevailing winds were southerly and light to moderate. Gales occurred in Shetland on the 3rd and at exposed places in the south of England on the 22nd and from the 26th to the 28th. A gust of 74 mi/hr., the highest recorded at an anemograph station during the month, was recorded at Pendennis Castle (near Falmouth) in the early morning of the 27th.

Temperature.—The mean temperature for Districts 1–10 was 40.7°F. and was 0.9°F. above the normal. On the 8th a fall in temperature was associated with cold winds off the continent, and up to the 13th low temperatures prevailed widely; thereafter conditions were generally mild and for the month as a whole, the mean temperature was above the normal in all Districts. The largest excess 2.8°F. occurred in Scotland N. (mean temperature 40.7°F.) and the smallest excess 0.1°F. in the Midland Counties (mean temperature 38.9°F.). The warmest periods were the 3rd, round about the 16th, and from the 26th to the 28th. Ground frosts occurred frequently during the month.

The extreme temperatures for the month were:—(England and Wales) 61°F. at York and Wakefield on the 16th, 12°F. at Roden on the 11th; (Scotland) 61°F. at Arbroath on the 16th, 14°F. at Eskdalemuir on the 11th and at Braemar on the 12th; (Ireland) 62°F. at Dublin (Phoenix Park) and at Newcastle (Wicklow) on the 15th, 20°F. at Dublin (Phoenix Park) on the 13th.

Precipitation.—Except in the northern districts and in Cornwall precipitation was above the normal in England and Wales, the largest excesses occurring in central and south-eastern England. More than twice the normal precipitation was recorded in the London area and rather more than two and a half times the normal at Oxford and High Wycombe (Buckinghamshire). On the other hand, less than half the normal precipitation was recorded at Newcastle (Northumberland) and at Middlesbrough (Yorks).

In Scotland rainfall approached or slightly exceeded the normal in the Loch Fyne area, but in most districts monthly totals were decidedly deficient and in some areas they represented less than half the normal. Less than ten days with precipitation amounting to 1mm. or more occurred at several stations in eastern Scotland; at Braemar the number was five.

Except in some central and eastern districts, precipitation was below the normal generally in Ireland.

The general precipitation of the British Isles expressed as a percentage of the normal was 108: the values for the constituent countries were:—England and Wales 134, Scotland 67, Ireland 88.

There were occasional thunderstorms and hail. Snow fell in many parts of the south of England on the 2nd, and at one or two places on the 23rd and 24th. In Scotland no snow of any importance fell though there were trifling falls here and there early in the month.

Sunshine.—The mean daily duration of sunshine was above the normal in Scotland N. (notably in the Moray Firth area), Scotland E., England N.W., Ireland and the Channel Isles and below the normal in the remaining districts. The largest mean daily excess was 0.42 hr. in Scotland N. (mean daily duration 2.31 hrs.) and the largest deficit 0.81 hr. in England E. (mean daily duration 1.85 hr.). Most of the month's sunshine was recorded during the first 10 days or so; the second half of the month was generally dull, the 24th being the only outstanding sunny day when sunshine values between 8 hours and 9½ hours were recorded at several places in western and south-western districts.

Fog.—A notable feature of the weather of the month was the unusual prevalence of fog. The foggiest period extended from the 11th to the 17th, the area which was most affected being the east and south-east of England and the eastern English Channel. Except during brief periods on the 12th and 14th, fog was continuous at Southend from the 11th to the 15th inclusive. Amongst the stations which reported persistent fog throughout the day were Felixstowe on the 11th, 13th and 15th, Stroud Green on the 11th, 12th and 13th, Hampstead on the 11th and 12th and Totland Bay (Isle of Wight) on the 12th, 14th and 15th.

Miscellaneous Phenomena.—Halo phenomena were observed on various days at several places. Aurora was observed at Baltasound on the 2nd, 4th, 18th and 25th, at Gordon Castle on the 1st and 24th, at Armagh and Cogle Park on the 24th, at Fort Augustus on the 25th and at one or two places on the 8th. "Auroral glows" were noted at Lerwick on the 1st, 3rd, 4th, 25th, 26th and 27th.