

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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MAY, 1935.—Dry; sunny, except in southern England; exceptionally cold from the 12th to 19th.

The weather of the month was remarkable for the exceptionally cold, wintry spell from the 12th to 19th, the phenomenal duration of bright sunshine in western Scotland and in north-west England and the deficiency of rainfall, except in some parts of the southern half of England.

On the 1st an anticyclone lay over the North Sea and southern Scandinavia and a depression was situated on the Atlantic. Subsequently, the anticyclone moved south-east while the Atlantic depression spread east or south-east causing some rain, mainly in the west and south-west. Pressure became very uniform over the British Isles on the 5th and, on the 6th, an anticyclone covered most of the country, giving a warm, sunny day. The anticyclone increased in intensity and became centred over Scotland and ultimately moved north-westward to the neighbourhood of Iceland. There was little or no rainfall from the 5th to 11th and sunshine records were very good, particularly in the north and west.

By the 12th, with pressure low over N. Russia and Germany and high over Iceland, the British Isles lay in the track of a broad belt of polar air; temperature fell rapidly and a spell of exceptionally cold weather ensued until the 19th. Secondary depressions moving south in the northerly current caused widespread hail, sleet and snow between the 13th and 18th. The very cold air was eventually cut off by a depression moving south-south-eastward from Iceland to the Bay of Biscay.

Anticyclonic conditions were re-established in Scotland on the 21st and persisted in northern districts until the end of the month. Depressions to the south and south-east of the British Isles, however, caused the north-easterly winds to be fresh or strong at times in England. Local rain occurred occasionally in south and south-east England after the 22nd, with thunderstorms in places from the 27th to 30th. Thunderstorms were also reported in parts of Ireland on the 29th and 30th.

Pressure and Wind.—Pressure everywhere exceeded the average, the excess being greatest in the north and least in the south. The deviation at 7 h. varied from +9.6 mb. at Lerwick to +2.8 mb. at Portland Bill.

Winds from between north and east were unusually persistent. Northerly gales occurred over a wide area at exposed places on one or other of the days between the 14th and 17th, the most notable being that at the Scilly Isles on the 17th. The anemogram shows a mean hourly speed of more than 38 m.p.h. for ten consecutive hours, with a mean speed of 64 m.p.h. for the hour ended at 20 h. and a highest gust of 90 m.p.h. Strong north-easterly winds occurred at times locally in England between the 22nd and 25th and high speeds were reached in gusts: for example, 53 m.p.h. at Dover on the 22nd and 54 m.p.h. at Lympne and 53 m.p.h. at Felixstowe on the 23rd.

Temperature.—Mean temperature fell below the average for the month in all districts except Ireland and Scotland, W., the deviation varying from -2.7°F. in England, S.E. to +0.5°F. in Ireland, N. (see Table I).

It was a month of marked temperature contrasts. The first eleven days were generally rather warm, though easterly winds caused cooler conditions in southern and eastern England from the 7th to 9th. On the 6th, maxima of 75°F. or above were registered at numerous stations in England and 79°F. was touched in parts of London. Mild weather was again experienced during the latter part of the month, except on the east coasts of Britain.

The wintry spell from the 12th to 19th was very exceptional and much damage was done to trees, fruit and early vegetables by the widespread severe frost and snow. (See *Meteorological Magazine*, Vol. 70, pp. 105-109). Screen minima of 25°F. or below were recorded at numerous stations, while 21°F. was registered at Dalwhinnie on the 13th, 21°F. at Eskdalemuir and 22°F. at Wolfelee on the 15th

and 17°F. at Rickmansworth, 20°F. at Cantref, 21°F. at Dalwhinnie and 22°F. at Usk on the 17th. Temperature on the grass fell to 10°F. at Rickmansworth and 13°F. at S. Farnborough on the 17th. Day temperatures were also unusually low: for example, the maximum 41°F. at Giggleswick on the 17th is the lowest ever recorded there in May.

The extremes for the month were:—(England and Wales) 79°F. at Camden Square and Stroud Green on the 6th, 17°F. at Rickmansworth on the 17th; (Scotland) 72°F. at Ruthwell on the 11th, at Ardtornish on the 7th, 11th and 31st, at Colmonell on the 28th and at Achnashellach on the 30th, 21°F. at Dalwhinnie on the 13th and 17th and at Eskdalemuir on the 15th; (Ireland) 73°F. at Mallarany and Foynes on the 28th, 28°F. at Newtownforbes and Birr Castle on the 15th and at Hazelhatch on the 18th.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the average for the period 1881-1915 was 55, the values for the constituent countries being, England and Wales 60, Scotland 48 and Ireland 46. It was only at some stations in the southern half of England that an excess was recorded. In some localities the month was notably dry: less than 20 per cent. was recorded locally in Lincolnshire, the West Riding of Yorkshire, Cumberland and central and west Scotland. At Nottingham, it was the driest May since readings were first taken in 1867, while in parts of Perthshire (with the exception of 1876) and in parts of Invernessshire (with the exception of 1928) there is no drier May on record. The air was exceptionally dry in some places: the mean relative humidity at Southport at 9 h. (62 per cent.) is the lowest for any month since records began in 1871.

The snowfall from the 13th-17th was exceptional for May. In Scotland it was general and particularly heavy in north-east districts: by the 17th most of the country was covered and at Wolfelee it lay to a depth of six inches. The storm of the 16th and 17th was widespread in England and Ireland and unusually heavy. On the 17th, a depth of 6 inches was reported at Giggleswick, 5 inches at Harrogate and 4½ inches at Cockle Park. In western districts snow is very rare in May: for instance, at Lancaster and Southport the snow around the 17th was the first snow in May since 1891 and the sleet at Newquay was the first on record in May. Several stations in north-west England recorded two or three inches of snow on the 17th and at Tiverton, S. Devon, 4½ inches were registered.

Local thunder occurred in England from the 18th-20th and 27th-30th, in parts of Ireland on the 29th and 30th and it was reported from Braemar on the 5th and Gordon Castle on the 13th.

Sunshine.—The district values exceeded the average in all districts except England, S.E. and S.W., and the Channel Islands. The most striking feature of the distribution was the remarkable excess enjoyed in west Scotland, north-west England and north Ireland. Turnberry recorded 307 hours and Tiree 305 hours. The total at Eskdalemuir, 268 hours, is the largest recorded in any month since records began in 1909 and that at Stonyhurst, 281 hours, exceeds the previous record in any month in observations from 1881. In strong contrast is the total at Guernsey, 167 hours (70 per cent. of the average).

Fog.—Local fog occurred at times mainly between the 2nd and 7th and 27th and 30th. Thick fog was reported in extreme north-east Scotland on the 10th and 24th.

Miscellaneous Phenomena.—Unusual halo phenomena were observed at Ambleside and Keswick on the 8th and at Sealand on the 3rd and 4th. A short sun pillar was noted at Oxford and a moon pillar at Bognor Regis on the 15th. The green flash was seen at Crinan on the 27th. A waterspout was seen at Teignmouth on the 17th.