

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

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

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MAY, 1924: WET AND THUNDERY. DULL GENERALLY.

General.—At the beginning of the month a trough of low pressure extended over the British Isles. On the morning of the 3rd a depression was centred over the North Sea. Rain fell over a wide area and thunderstorms occurred locally, and at one or two places, notably at Bristol and the village of Stansted, Essex, the storms though of short duration were of exceptional severity. In the rear of this depression temperature fell on the 4th. In the north of England and in Scotland sleet and snow occurred locally, while thunderstorms were reported from places in eastern England.

Associated with low pressure systems, dull, cold, and showery weather with occasional intervals of brightness prevailed over the British Isles up to the 9th. For the next few days fair weather alternated with dull and rainy weather owing to the passage of secondaries across the British Isles. On the morning of the 14th a secondary disturbance which moved northward from the Bay of Biscay was accompanied by thunderstorms in many parts of south-east England. During the day, however, conditions improved and for the first time in the month temperatures exceeded 70°F. locally. On the morning of the 17th an anticyclone was centred near the Straits of Dover, and the weather over the southern part of the British Isles was fine, but, under the influence of a depression westwards of Ireland, this fine weather did not persist very long and unsettled conditions were renewed. As the result of the advance eastwards from the Atlantic of a wedge of high pressure the weather was fairer from the 25th to the 28th, and on the latter date temperature reached 70°F. or more in many parts of south-east England. A well developed line squall accompanied by widespread thunderstorms and darkness was associated with the passage of a secondary depression across southern England on the evening of May 29th. Very heavy rain and local thunderstorms were associated with the depression which crossed the British Isles on the 31st.

The general character of the month is illustrated by the following remarks taken from Observers' notes:—Branxholme (Roxburgh),—Cold and wet month. Vegetation backward. Aberdeen,—The cloudiest May on record. Perth,—The wettest May on record. Blundellsands (Lancs.),—The wettest May since readings were commenced in this district 48 years ago. Walton-on-Naze,—The thunderstorm of the 18th was the heaviest for 20 years. The month was wet and thundery with freakish temperatures. Most of the rain fell at night so that work in agriculture was only slightly hindered. Ipswich,—The wettest month recorded at this station. Skegness,—The wettest and dullest May since 1912. Torquay,—The heaviest rainfall recorded for the month of May during the past 48 years. Totland Bay,—With the exception of May, 1898, this month has been the wettest May during the past 28 years. Morwenstow (Cornwall),—A very cold month. Very heavy rain and much fog. The most sunless May I can remember. Cheltenham,—Rainfall the heaviest ever recorded during the 58 years records have been kept.

Pressure and Winds.—The mean pressure was below normal everywhere. The defect of monthly means of pressure at fixed hours from the normal varied from 2.3mb. at Southampton to 7.1mb. at Malin Head. Pressure distribution was mainly cyclonic with winds curving round an area of low pressure situated off the north-west of Ireland. The month was notable for the large number of depressions and secondaries which traversed the British Isles. Gales occurred on two days at Lerwick on the 8th and 10th and at Nairn on the 8th. Strong winds to gales at several stations were associated with the passage of a deep secondary across southern England on the 24th.

Temperature.—The mean temperature of Districts 1 to 10 was 51°F. Although low day-temperatures occurred frequently, night-temperatures during the second half of the month were generally well above the average for the time of the year, so that except in Scotland and Ireland N., the mean temperature for the month was above normal, the largest excess 2.7°F. being experienced in England E. (Mean Temperature 54°F.). The mean temperature for the week ending May 10th was below normal in every district. The mean temperature for each of the remaining weeks was above normal except in England N.W. and S.W., Scotland W. and Ireland for the week ending May 17th, where it was slightly below normal, and in Scotland for the week ending May 31st.

In Scotland the lowest readings occurred on the 4th, 5th or 9th, and the highest readings on 22nd, 27th or 29th. Only in the south of Scotland did temperature exceed 70°F.

Ground frost occurred in all parts of the country, notably in Scotland and England N.E., where the number of days of ground frost in certain places exceeded ten. At Renfrew on the 9th the grass temperature was as low as 18°F.

The extreme screen temperatures for the month were:—(England and Wales) 79°F. at Greenwich, Southend-on-Sea and Sheerness on the 19th, 29°F. at Leyland on the 29th; (Scotland) 72°F. at Dumfries, Ruthwell and Cargen on the 29th, 24°F. at Ford on the 9th; (Ireland) 72°F. at Mountmellick, Foynes and Birr Castle on the 29th, 27°F. at Markee Castle on the 4th.

Precipitation.—In all districts rainfall was above normal. The general precipitation of the British Isles expressed as a percentage of the normal was 189; the values for the several countries were:—England and Wales 214, Scotland 161, Ireland 159. Heavy falls of rain associated with thunderstorms formed the most noteworthy feature of the month. The excess over normal was greatest in two small areas, the Severn Valley and part of Kent, where the rainfall was more than three times the normal. The least rainfall occurred in the extreme north-west of Scotland. Thunder was heard on over twenty days. Thunderstorms occurred in London and neighbouring counties in the early hours of the 14th, and were general in southern England and the Midlands on the 18th, 19th and 20th. Those which occurred on the 19th and 20th were accompanied in some cases by sudden short heavy falls of rain which caused considerable flooding and damage to crops in Bedfordshire, Hertfordshire, Buckinghamshire, Essex, and Suffolk. At Berkhamstead 34mm. fell in 35 mins. on the 19th. The observer reports that the hail which accompanied the storm was about the size of marbles. Some of the hailstones had the appearance of an elongated acid drop with an extra marble shaped stone attached and measured three quarters of an inch in length.

At Stroud 36mm. fell between noon and 6 p.m. and at Cheltenham 35mm. between 4 and 5 p.m. On the 20th the heaviest falls were reported from Woburn (Bedfordshire) and Benson, 27mm. being recorded in 20 mins. and 18 mins. respectively.

Damage by lightning during the storms occurred in many parts of the country. The heaviest rainfall of the month occurred on the 31st. Floods occurred in Worcestershire, Shropshire, Herefordshire and round Sunderland. The most remarkable fall occurred at Humber Rectory, Leominster, where 76mm. out of a total amount of 95mm. were experienced in 1½ hours. At Durham the amount for the 31st, 70mm., has only been exceeded there once (on November 13th, 1901) in 83 years. At Ludlow 123mm. fell in 24 hours.

These heavy falls brought the totals for the month far beyond the average. At Seathwaite the total was over 400mm. and at Talymaes (Brecon) over 250mm., while at Cheltenham, Blundellsands (Lancaster) and Ross-on-Wye the totals 179mm., 140mm. and 123mm. were the largest May rainfalls at these places since 1866, 1876 and 1886 respectively.

Sunshine.—The duration of sunshine was below normal in all districts except in England S.E., where it was slightly (0.07 hrs.) above the normal. The greatest mean daily deficiency occurred in Scotland West (2.03 hrs.), which had only 26% of the possible duration. There were, however, occasional bright periods, when sunshine records exceeding 14 hrs. were obtained at several stations, notably on the 16th and 28th. The week ending May 17th was the sunniest week of the month.

Fog.—The number of days of fog during the month was small. Fog was reported on two or three days at several coastal stations. The greatest number of days of fog (10) was reported from Southampton.

Miscellaneous Phenomena.—Solar and lunar halos were reported from several stations. The Zodiacal Light was seen at Deerness on the 1st, 2nd and 3rd, at Wadhurst (Sussex) on the 5th and 7th and at Gorleston on the 24th. A parhelion was observed at Oxford on the 8th. Sun Pillars were observed at Oxford on the 8th and 9th, at Newquay and Morwenstow on the 14th and at Ross-on-Wye and Morwenstow on the 17th. A mirage was seen in Whitehall (London) at about 15 hr. 30 min. on the 11th. The observer at Morwenstow reported a waterspout at sea on the 5th at 3 p.m. which lasted about 7 minutes.