

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

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

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April, 1930. Dull. Preponderance of Northerly Winds. Wet in England and Wales.

The outstanding feature of the weather of April was the lack of sunshine. In spite of cool northerly or easterly winds and wintry precipitation from the 3rd to the 7th and from the 12th to the 21st, the mean temperature for the month exceeded the normal in almost all districts, largely due to mild nights and a spell of warm weather during the last six days. Precipitation exceeded the normal in most parts of England and Wales and was deficient in Scotland and Ireland.

The month opened with mild unsettled weather and southerly winds. A deep depression was situated off our western seaboard, and on the 3rd a separate centre developed over the mouth of the Channel and deepened, giving dull weather with local rain, chiefly in the southern half of the country. Amongst the heavy falls were 45 mm. at New Cumnock (Ayrshire), 29 mm. at Aldergrove on the 3rd, 23 mm. at Ross-on-Wye on the 4th and 38 mm. at Guernsey on the 5th. Good sunshine records were obtained in the north and north-west on the 5th (12·6 hours at Tiree and 11·2 hours at Malin Head) and in the west and south-west on the 6th and 7th (12·7 hours at Tiree on the 6th and 12·2 hours at Scilly and 11·7 hours at Holyhead and Falmouth on the 7th). From the 3rd to the 7th, cold easterly and north-easterly winds prevailed with snow, sleet or hail in several districts. On the 8th and 9th a depression to the south-west of Iceland brought mild wet weather to the western districts; 10 mm. rain fell at Stornoway on the 8th and 15 mm. at Sealand on the 9th. In all districts there was little sunshine. On the 10th, the Azores anticyclone extended north-eastwards to the west of Ireland and over 10 hours sunshine was recorded widely on the 10th and in the south-east on the 11th. On the 12th the weather deteriorated as a depression moved eastwards between Scotland and Iceland. Rain fell widely on the 12th, but amounts were generally moderate. In the rear of the depression cold north-westerly winds were experienced with local rain or showers, accompanied by thunder on the 13th and 14th. Pressure became high over the Atlantic and low over the continent and cold northerly winds were widely experienced up to the 22nd with occasional falls of snow sleet or hail. Over the greater part of England rather dull weather prevailed, but in Ireland and the west of Scotland abundant sunshine was recorded. More than 12 hours sunshine was recorded at Birr Castle and Aldergrove on the 18th.

From the 22nd to the 27th shallow depressions lay over the British Isles. More than 12 hours sunshine was recorded in several parts of England on the 22nd, and in the east of England on the 25th and 27th. The weather became considerably warmer the temperature rising to over 70° F. in a few places in the east of England on the 25th. The last few days were warm, dry and very sunny. Many places, particularly in England, enjoyed more than 12 hours sunshine on the 29th and 30th.

Pressure and Winds.—During the early part of the month depressions passed to the north or south of the British Isles. From about the 10th onwards the main feature of the pressure distribution was an area of high pressure to the west of Ireland, notably between the 15th and 22nd, while over the continent pressure was relatively low. Numerous secondaries passed towards the south or south-west, between Iceland and Scotland and in the Southern North Sea. Monthly mean pressures were everywhere below the normal except in Shetland, the deviations from the normal at 7h. G.M.T. ranging from +0·4 mb. at Lerwick to -5·8 mb. at Portland Bill. There was a marked prevalence of northerly and easterly winds. At Southport northerly winds were more frequent than in any April since 1884. Gales occurred in exposed places in many parts of the country during the first four days and on the 19th.

Temperature.—In spite of rather cold weather from about the 3rd to the 7th and again from about the 12th to the 21st, monthly mean temperatures exceeded the normal generally, largely due to mild weather at the beginning of the month and about the 10th, and to a spell of warm weather towards the end of the month, combined with the prevalence of mild cloudy nights. The coldest weather lasted from the 18th to the 21st and coincided with the Easter holiday period. The observer at Copdock reports that the daily maximum temperatures from the 16th to the 21st inclusive were lower than for the six days at Christmas from December 24th to 29th, 1929. At Richmond (Kew Observatory) the maximum temperature on the 20th (Easter Sunday), 46° F., was 11° F. below the normal maximum temperature for that time of year. Subsequently there was a rapid recovery in temperature, and from the 24th to the end of the month day temperatures were well above the normal. The highest temperatures of the month were recorded during this period; 72° F. was recorded at Bungay (Flixton) and 71° F. at Norwich on the 25th, and 69° F. at Fort Augustus on the 29th. The coldest nights occurred generally during the periods 8th to 14th and 18th to 22nd. Screen

frosts were rare, but ground frost was fairly frequent and widespread, and in many places was severe on the mornings of the 5th, 6th, 7th, 10th, 14th, 21st, 22nd and 23rd. A grass minimum of 16° F. was registered at Renfrew on the 6th.

The extreme temperatures for the month were:—(England and Wales) 72° F. at Bungay on the 25th, and 26° F. at Rickmansworth on the 13th and 21st, and at Mayfield and Roden on the 22nd; (Scotland) 69° F. at Fort Augustus on the 30th, and 24° F. at Kilmarnock on the 6th; (Ireland) 68° F. at Kilkenny on the 29th and 30th, and 23° F. at Markree Castle on the 6th.

Precipitation.—The general precipitation over the British Isles, expressed as a percentage of the normal for the period 1881–1915, amounted to 112: the corresponding percentages for the constituent countries were:—England and Wales, 139, Scotland 85, Ireland 75. Precipitation occurred frequently during the month and was in general heaviest during the first five days and about the 12th, 19th and 24th. By far the greater part of England and Wales had a pronounced excess of precipitation; several districts had more than one and a half times the normal while in some central districts and locally in Yorkshire and Lincolnshire, monthly totals of rainfall exceeded twice the normal. A notable exception to the general excess occurred in the north-west where there was an appreciable deficiency. Thus, monthly totals expressed as a percentage of the normal for the period 1881–1915 amounted to 66 at Aspatria and 80 at Stonyhurst.

Over the greater part of Scotland there was a deficiency of rainfall amounting locally to as much as 50 per cent. of the normal, particularly north of the Caledonian Canal and in Lanarkshire. Over most of Aberdeenshire, Kincardineshire and Angus, together with eastern Caithness, the Orkneys, Berwickshire, and a small area in the vicinity of Rothesay, there was a slight excess. The largest falls occurred generally on the 1st when 45 mm. fell at New Cumnock (Ayrshire), and 37 mm. at Lochgoilhead. On the 6th 26 mm. fell at Findhorn (Elginshire), where the total for the month amounted to 36 mm.

In a thunderstorm on the 25th, 30 mm. of rain and hail fell at Ilkley (Yorks).

Although precipitation occurred frequently, monthly totals of precipitation were appreciably below the normal in Ireland with only a few exceptions in the south-east.

Snow, sleet or hail occurred fairly widely in the cold northerly or easterly air currents between the 3rd and 6th and the 12th and 22nd. No heavy falls of snow, however, were reported.

Sunshine.—A conspicuous feature of the weather of the month was the deficiency of sunshine in Great Britain. In the extreme north-west of Scotland, particularly in the Outer Islands, there was however a well-defined excess of sunshine, whilst a moderate excess occurred locally in Ireland and the extreme south-west of England. Elsewhere, sunshine aggregates were decidedly below the normal. Representative sunshine totals for districts, expressed as a percentage of the normal for the period 1881–1915, ranged from 58 per cent. in England N.E. to 99 per cent. in Ireland N. and 101 per cent. in Scotland W.

At Tiree (Argyllshire) there were 214 hours of bright sunshine, while at Aberdeen there were only 100 hours, and at Edinburgh 106. At Marchmont, where there were only 101 hours there have only been on two occasions since 1881 a lower total in April, namely, 1889 (87 hours) and 1908 (91 hours). Nottingham with 84 hours and Scarborough with 74 hours receives less than half the normal sunshine aggregate for April.

Noteworthy daily records included 13·9 hours at Cardington and at Clacton-on-Sea and 13·6 hours at Rothamsted on the 30th; 12·9 hours at Plymouth on the 22nd; 12·7 hours at Tiree on the 6th and at Gorleston on the 25th, and 12·8 hours at Tiree on the 5th.

Fog.—Fog occurred locally from the 1st to the 4th, about the 10th to 22nd and during the last week of the month. Particularly dense fog occurred in the Firth of Forth and adjacent areas between the 25th and 27th.

Miscellaneous Phenomena.—It was reported that a funnel shaped tornado cloud was observed in the neighbourhood of Oundle on the afternoon of the 26th. Aurora was observed in Scotland on eight nights, the 6th, 16th, 17th, 19th, 20th, 21st, 23rd and 30th.