

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

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

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SEPTEMBER, 1928: Sunny generally. Dry in England and Wales and in eastern and central Ireland.

Outstanding features of September were the excess of sunshine recorded in all districts and the marked deficiency of rainfall in England and Wales and in eastern and central Ireland.

The month opened with quiet anticyclonic weather over the whole country, from 10 to 12 hours' sunshine being recorded widely on the 1st and 2nd. In the east and south-east of England fine settled weather, with only occasional trifling falls of rain, continued until the 9th, while day temperatures exceeding 75°F. were recorded on the 4th, 5th and 8th (85°F. in London, Camden Square, and 83°F. at Tottenham on the 8th and 82°F. at Hull on the 5th). Meanwhile, associated with secondaries to a main depression over Iceland rain commenced in the west of Ireland and Scotland on the 2nd, and by the 5th had extended to most districts except those in the east and south-east of England; 45 mm. fell at Mallaranny on the 3rd and 28 mm. at Inverness and 20 mm. at Aberystwyth on the 5th. A ridge of high pressure moving eastwards across the British Isles caused a temporary improvement on the 6th, but on the 7th a very deep depression in the north-east Atlantic caused a renewal of unsettled weather with strong winds in western districts. The low pressure extended to the whole country thus temporarily interrupting the fine weather in the south and east of England; thunderstorms, accompanied by moderately heavy rain, occurred widely on the 9th.

Subsequently pressure became high and a period of anticyclonic weather with much sunshine and high temperatures was widely experienced in most districts. In Scotland the highest temperatures of the month were generally recorded on the 13th. These settled conditions persisted in the south and east with little change until the 19th, when the anticyclone withdrew northwards and temperature fell, although the weather continued generally fair and sunny until the 27th. There were some rather heavy falls in Irish districts on the 14th, and in Scotland and Ireland between the 16th and 19th. Moderate rain occurred in many districts on the 23rd, 24th and 27th. On the evening of the 27th and on the 28th much rain was experienced in most parts of England and Ireland. On the 30th an anticyclone to the west of Ireland extended its influence over the country, and, apart from trifling falls at some eastern coastal stations, the weather was generally dry and sunny.

Pressure and Winds.—Over the greater part of England and Wales, conditions were mostly anticyclonic, these conditions extending to most of the British Isles at the beginning of the month, from the 12th to the 16th, about the 22nd and at the end of the month. Monthly means of pressure were above the normal at all stations. Winds were mostly between south and west over Ireland, the greater part of Scotland and the north of England; elsewhere winds were variable. Except in coastal districts where strong winds were recorded on many days, wind force was usually light to moderate. Gales of brief duration were recorded by anemometers at Tiree on the 17th and at Kingstown on the 28th. The highest velocity attained in a gust was 56 mi/hr at Tiree in the afternoon of the 17th. Owing to persistent strong northerly or north-easterly winds at the end of the month high seas were running along the eastern coasts of Great Britain.

Temperature.—Day temperatures as a rule were above the normal during the first half of the month, the highest readings being recorded on the 4th and 5th in England and Wales, widely on the 8th and 9th, and in Scotland on the 13th. Subsequently temperature reached an unusually low level for the time of year, notably about the 23rd and during the last few days of the month. The nights were frequently cool, and during the last ten days of the month minimum temperatures well below the normal were recorded. At Edinburgh the mean temperature of the last week was nearly 10°F. below that of the first week. For the month as a whole the mean temperature was generally below the normal, although the deficit was not large, and in a few districts, mostly in the north-east of England and in the Channel Isles, there was even a small excess. Ground frost occurred on several days during the second half of the month.

The extreme temperatures for the month were:—England and Wales: 85°F. in London (Camden Square) on the 8th, and 27°F. at Roden (Shropshire) on the 30th. Scotland: 73°F. at Liberton (Edinburgh) on the 13th and 23°F. at Braemar on the 30th. Ireland: 75°F. at Dublin (Trinity College) on the 4th; and 29°F. at Markree Castle (Sligo) on the 23rd and 26th.

Precipitation.—The general precipitation for the British Isles expressed as a percentage of the normal for the period 1881–1915 was 73; the values for the constituent countries were England and Wales, 47; Scotland, 110; Ireland, 92. Thus, the general rainfall over England and Wales amounted to less than half the normal, and is the smallest value recorded for September since 1910, when the general rainfall amounted to only 25 per cent. of the normal. September, 1928, shows a marked contrast with September, 1927, when the general precipitation over England and Wales amounted to 233 per cent. of the normal and over the British Isles to 209 per cent.

In England and Wales monthly totals were everywhere below the normal, and in only a few districts, mostly in the south and extreme south-west of England, exceeded three-quarters of the normal. In many eastern districts, notably in the north-east, less than one-quarter of the normal was recorded; Spurn Head had 11 per cent. of the normal, Lincoln and Worksop 13 per cent., Meltham (Yorkshire, West Riding) 14 per cent., and Dungeness 15 per cent. At Copdock the month's total was the smallest recorded since observations commenced in 1913. Precipitation was either absent or slight on most days, the only rains of importance occurring on the 8th, 9th, 24th and 28th.

In Scotland precipitation was below the normal in the extreme north-western and northern districts, but in general there was an excess, moderate as a rule but exceeding 50 per cent. at, e.g., Blair Atholl and Grantown-on-Spey. Rain commenced in the west on the 2nd and gradually spread to all districts with an almost continuous fall in some areas on the 4th and 5th. Heavy falls occurred from the 7th to 9th or 10th and in western districts between 16th and 19th. From the 20th onwards some districts were rainless or nearly so, but in others moderate rain occurred on the 23rd and 24th and on the 27th.

In Ireland rainfall totals were above the normal in the north and west and below the normal in the south and east. The greatest deficiency occurred in eastern coastal areas where locally less than half the normal was recorded. The greatest excess occurred in the north-west of Ireland, where more than one and a-half times the normal was recorded. Heavy falls occurred on the 4th, 5th, 7th, 14th and 28th. In most districts the period 20th to 26th was rainless.

Thunderstorms were fairly general on the 9th. On the 28th snow fell on the Cairngorms and other northern mountains.

Sunshine.—A prominent feature of the weather of the month was the excess of sunshine recorded in all districts, particularly in those in the east and south-east of England. Representative aggregates for Districts, expressed as a percentage of the normal for the period 1881–1915, ranged from 146 in England S.E. to 112 in England N.E. and England S.W. At several stations in the east and south-east of England aggregates exceeded those normally recorded in the sunniest months of the year in these districts, viz., June or July. At Margate and Ventnor the excess over the normal amounted on the average to just over 3 hours per day. At Edinburgh the month was the sunniest September since 1906. At Richmond (Kew Observatory) the month's aggregate was the largest recorded there since 1911. The sunniest periods occurred generally on the 1st and 2nd, from the 3rd to the 6th in central and southern England, on the 7th and 8th in south-eastern England, on the 11th and 12th over the greater part of England, widely on the 13th and 14th, in various districts from the 18th to the 22nd and widely on the 30th.

Fog.—Fog occurred at night or in the early morning fairly frequently during the month, mostly during the first few days of the month, from the 12th to the 16th, about the 22nd and at the end of the month. Dense fog occurred in the Firth of Clyde on the 22nd and 23rd.

Miscellaneous Phenomena.—A brilliant display of aurora was observed over a wide area in Scotland on the 19th; at Aberdeen on the 7th, 8th, 20th, 21st and 23rd, at Armagh on the 7th, at Deerness on the 8th, and at Baltasound on the 9th. The Zodiacal Light was observed at Deerness on the 8th. Halo phenomena were observed at a number of stations.