

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

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

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OCTOBER, 1924: Warm. Sunshine deficient except in the North. Wet in the East and South.

General.—Unsettled rainy conditions prevailed generally throughout the month except for a few periods of finer drier weather. During the first days most of the rainfall occurred in the west, and fine sunny weather with early morning mist or fog was experienced in the eastern counties. On the 4th, however, a depression over the Bay of Biscay began to move northwards and rain became general over the whole country. On the 7th a depression moving eastwards up the English Channel caused high winds and gales with much heavy rain in south-western England. The weather remained unsettled for a few days after this, but by the 12th the anticyclone over Central Europe spread across Great Britain and fairer, drier conditions set in generally for about a week. Sunshine reports of over 9 hours duration were registered on several days, notably on the 13th and 14th, when the temperature rose above 70°F. at many places. During this period mist and fog occurred locally at night and in the early morning. On the 18th, the approach of another depression from the Atlantic caused a renewal of unsettled weather over the whole country with heavy rain in the west. This spread also to the east of the country on the 21st. On the morning of the 22nd, high winds and gales were experienced along the south-eastern coasts. After this, anticyclonic conditions prevailed for a few days, during which time the lowest temperatures for the month were registered. During the last few days of the month there was a renewal of mild unsettled weather with further heavy rain at times.

The general character of the month is illustrated by the following remarks taken from observers' notes:—Copdock (Suffolk).—A very wet and sunless October. Temperature slightly above normal. Eye (Northants).—Very wet; one of the wettest Octobers since 1881. Gorleston-on-Sea.—The early part of month was mainly fine. The absence of fog was very marked. Isleworth.—Heavy rainfall, otherwise an average October. Leyland (Lancs.).—A wet month. Newport (I. of W.).—A wet month, quite free from frosts. Skegness.—Wettest October since 1907. Dull month with light winds at first, increasing towards the end. Walton-on-Naze.—Precipitation in heavier falls than usual in October. A notable absence of gales. Welshpool.—Another wet month. Severn out in flood on several occasions. Berwick-on-Tweed.—A remarkably calm month with a large share of fog. Branxholme (Hawick).—Showery days but a good October on the whole. Fort William (Inverness-shire).—A fairly good October on the whole. Laggan (Inverness-shire).—Mild temperature and high humidity. Practically no frost during the month. University College, Cork.—A wet month with a high relative humidity and temperature above normal. Dublin City.—A month of average mean temperature and of frequent but not heavy rainfall.

Pressure and Winds.—The mean pressure was below normal generally except in parts of eastern and southern England. The deviation of monthly means of pressure at fixed hours from the normal varied from +0.6mb. at Yarmouth to -3.2mb. at Cahirciveen. The prevailing winds were south-westerly, the isobars of mean pressure trending from S.S.W. to N.N.E. except over eastern England.

The tracks of six primary depressions and one secondary crossed or touched the British Isles. Of these, two primary depressions (Tracks G and M) passed up the English Channel and another (Track L) pursued a course over the extreme south of England. Two unusual tracks may be seen on the chart; C, which came northward out of Germany on the 1st and 2nd, ending near Orkney on the 4th, and D, which came from the Atlantic south-west of Ireland, slowly traced a loop over the extreme north of the Bay of Biscay on the 3rd to 4th, and then travelled northwards over the British Isles and finally north-westwards to a point south of Iceland on the 7th. Anti-cyclonic conditions prevailed at the middle of the month and for a few days near the end of the month. The highest recorded pressure was 1033mb. at Harrogate and Spurn Head on the 14th, and the lowest was 982mb. at Blacksod on the 30th.

The mean speed of the wind exceeded 38 m.p.h. for a period of not less than an hour on 3 days at St. Mary's, Scilly, but on the whole the month was not a windy one. On the 8th, a gale associated with the depression (Track G) was the most severe one experienced in the Channel Isles for many years and serious damage was done to property and crops. A gust of 62 m.p.h. was experienced at Fleetwood on the 7th and gusts of 61 m.p.h. were recorded at Southport on the 7th, Scilly on the 8th and Gorleston on the 22nd.

Temperature.—The mean temperature of Districts 1-10 was 50°F. That of each District was above normal, the largest excess, 2.4°F., being experienced in England E. (mean temperature 52°F.) and the smallest excess, 0.3°F., in Scotland E. (mean temperature 47°F.). The weeks 12th to 18th and 26th to November 1st were the warmest.

The extreme screen temperatures for the month were:—(England and Wales) 73°F. at Colwyn Bay and Weston-super-Mare on the 13th, 22°F. at Garforth on the 24th; (Scotland) 72°F. at Kilmarnock on the 14th, 21°F. at Braemar on the 22nd; (Ireland) 73°F. at Clongowes Wood on the 14th, 31°F. at Markree Castle on the 3rd and 4th.

A number of ground frosts were experienced throughout the month, the lowest temperatures being reached in the period 19th to 25th. A few stations reported as many as 11 ground frosts. 17°F. was recorded at Achnaschellach on the 22nd, 19°F. at Inverness on the 22nd and Wisley on the 24th, and 20°F. at Balmoral on the 22nd. These temperatures were low for the time of year.

Precipitation.—Precipitation was above normal in seven Districts. In the other Districts, England N.W., Scotland N. and W., Ireland N. and S. it was deficient. Isolated areas in Scotland and Ireland experienced rainfall less than 75 per cent. of the normal; that at Colmonell (Ayrshire) was only 48 per cent. Regions with over 100 per cent. comprised the greater part of England and Wales, most of the eastern Scottish coast and much of the western and central Ireland. Several areas of considerable size in southern and eastern England and in the midlands had rainfall greater than 150 per cent. of the normal, as also was the case with the neighbourhood of Dundee. At this town the fall was 177 per cent. of normal. The general precipitation of the British Isles expressed as a percentage of the normal was 115; the values for the several countries were:—England and Wales 132, Scotland 97, Ireland 97.

The week 5th to 11th showed an excess in all Districts save Ireland S. The last week of the month was very wet in all Districts, and England S.W. had three times the normal fall. The week 12th to 18th was the driest and rainfall was markedly deficient in some Districts.

Associated with the depression (Track G) which passed up the English Channel on the 7th to 8th more than 25mm. fell on the 7th over a broad belt extending from Land's End to Worcestershire and Warwickshire. Over the greater part of Cornwall the fall exceeded 50mm. and serious floods ensued in some places. The largest daily fall ever recorded at Falmouth, 83mm., occurred on the 7th; Penzance had 82mm. At Newquay on the same day 65mm. were recorded, this being the largest daily fall experienced since observations began in January, 1893. At St. Austell (Cornwall) the day was the wettest on record since 1865; the fall was 88mm. Among other heavy falls, 64mm. at Berwick-on-Tweed and 58mm. at Arbroath on the 5th may be mentioned. At Skegness, 25mm. were recorded on the 21st, the greatest daily fall in October since 1899.

Snow fell on the Cairngorms on the 5th, 6th and 21st, and at Baltasound (Shetland) on the 20th and 21st.

Thunderstorms occurred at some Scottish stations on the 6th and at some Irish stations on the 12th and 13th. A thunderstorm accompanied by hail occurred in south-eastern England on the 30th. Thunder was most frequent in eastern England and the midland counties; Cambridge had as many as 3 days of thunder.

Sunshine.—Sunshine duration exceeding the normal was recorded in England N.E. and N.W. and Scotland N. and E. All other districts experienced a deficiency save Ireland N., where the duration was normal. The largest mean daily excess (0.40 hr.) occurred in Scotland N. and the largest deficiency (1.24 hrs.) in the Channel Isles and Scilly. England N.E. had 31 per cent. of possible duration, while England S.W. had only 23 per cent. The week 12th to 18th was the brightest, and every District except the Midland Counties had an excess of sunshine. Daily durations exceeding 9 hours were recorded during this period, notably on the 13th and 14th. The largest mean daily duration was 3.75 hrs. at Lowestoft. At Totland Bay the total of 75.6 hrs. was the lowest experienced in October in the last 24 years; 76.3 hrs. were recorded in October, 1910, and 181.1 hrs. in October, 1919.

Fog.—The amount of fog varied considerably at different stations. Many reported none, while at others the number of days of fog was as large as 7 to 13. Stirling had 14. Fog was of rather frequent occurrence in Scotland, especially near the middle of the month and it was very dense in the Firths of Forth and Tay from the 13th to the 16th.

Miscellaneous Phenomena.—Halos were again of frequent occurrence. A lunar rainbow was seen at Elstree (Herts.) on the 5th. Aurora was observed at Gordon Castle (Elgin), Wick, Malin Head and in Orkney and Shetland on the 23rd, at Roshven (Inverness-shire) and Wick on the 25th and at Baltasound (Shetland) on the 31st. The Zodiacal Band and Counterglow were seen at Wadhurst (Sussex) on the 5th, 22nd and 23rd.