

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

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

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**OCTOBER, 1927: First half mainly fine and dry; second half unsettled.
Last week abnormally mild with destructive gales, 28th-29th.**

General.—Apart from heavy rain on the first two days, mainly fine dry anticyclonic weather with much local fog in the mornings and evenings prevailed generally up to the 12th. Conditions then became less settled and from the 21st to the end of the month unsettled weather with frequent rain prevailed in all districts, the last week being unusually mild with violent gales on the 28th-29th.

During the first two days of October, unsettled stormy weather prevailed generally with heavy falls of rain in Scotland and the north-west of England. On the 3rd an anticyclone spread in from the Atlantic and fine quiet dry weather prevailed generally up to the 13th, the dry spell continuing almost unbroken in some districts up to the 20th. Much fog developed locally at night or in the early morning between the 4th and the 12th and in a few places persisted upon some occasions during the day time. In many districts, however, the weather was very fine and warm, notably on the 7th when temperatures of 70°F. and over were recorded in a few places. Cold nights with frost in the screen and severe ground frost occurred frequently in inland districts during the period 3rd to the 10th.

About the 12th the anticyclone was withdrawing westwards to the Atlantic and conditions began to deteriorate and during the next few days winds were northerly to north-easterly with much cloud, lower day temperatures and frequent light rain, showers or drizzle. After the 15th milder weather was associated with westerly winds.

Unsettled conditions became general when a depression moving eastwards across the British Isles caused heavy rain in all districts on the 21st and 22nd. Warm currents of equatorial air caused temperature to rise above 60°F. repeatedly after the 25th and some remarkably warm nights, notably the night of the 26th-27th., were experienced. The last week of the month was abnormally mild with frequent rain and severe gales on the 28th-29th.

The following remarks taken from Observer's notes illustrate the general character of the month:—Southport—Earlier half of month mainly exceptionally dry, sunny and calm; latter half extremely unsettled. Great gale on 28th and 29th not surpassed since that of December 22nd, 1894. Huddersfield (Oakes)—A mild month with average rainfall; mainly unsettled after the 12th. Copdock—The first twenty days of the month were nearly rainless although conditions were damp and after the 11th more or less sunless; from the 21st onwards the days were mostly wet but there were only two on which there was any considerable quantity of rain with the result that the month's total is for the first time since May, considerably below the average. The screen minima of 56°F. on the 26th and 31st and 57°F. on the 27th are far above any minima I have ever recorded after the middle of the month. Halstead (Essex)—A very mild month with an exceptional spell of almost unbroken fine weather from 2nd to 20th. Malvern—October has been an unusual month, noteworthy for amount of sunshine during first half of month, very little rain falling till the 21st. The last week was abnormally warm. Littlehampton—The month opened with unsettled weather, but improved on the 3rd and on the whole was very pleasant until the 24th, the weather during the last week being of an unsettled character. Temperature high for time of year. Teignmouth—Generally fine to the 18th, then unsettled, stormy and very mild. Dean Prior (Devon.)—Absolute drought 3rd-18th inclusive. Last fortnight very wet and almost summer warmth during last week. Woolacombe—The first half of month was extremely fine and dry enabling farmers to save their corn and potato crops. Much damage done by gales on night of the 28th to 29th. Cork—A comparatively mild month with much cloud and very high humidity. The period from the 6th to the 19th was without rain. Dublin—The first three weeks were chiefly fine and quiet with scanty rainfall, thence forward unsettled with frequent rain. Violent gale on the evening of the 28th.

Pressure and Winds.—The mean pressure for the month was above the normal in all districts. Over Scotland and the western districts of the British Isles winds were south-westerly to westerly; over the eastern districts there was a considerable frequency of northerly winds. Gales occurred on the 2nd, gusts exceeding 60 m.p.h. being recorded in many exposed places (e.g., 74 m.p.h. at South Shields). Widespread destructive gales, the severest experienced since the violent gales of January 28th, 1927, and accompanied by loss of life, notably in the western districts of Ireland, occurred on the 28th and 29th and were associated with the passage of the depression (Track Q). In the south-western districts of the British Isles gusts of 70 m.p.h. and over were recorded at exposed coastal stations in the afternoon and evening of the 28th, e.g., 77 m.p.h. at Scilly, 78 m.p.h. at Cahirciveen, 89 m.p.h. at Weaver Point and 85 m.p.h. at Quilty. At Southport the mean velocity for the hour 23h. 30m. on the 28th to 0h. 30m. on the 29th was 70 m.p.h. and in a gust the wind attained a velocity of 96 m.p.h. At Fleetwood a gust of 78 m.p.h. was recorded

in the early morning of the 29th and along the whole length of the Fylde coast the storm produced a sea of unparalleled height. About 2 square miles of low lying ground in the peninsula which forms the Urban District of Fleetwood was flooded by a volume of water estimated at nearly 4½ million tons. The gale was less severe on the east coast; South Shields recorded a gust of 74 m.p.h. on the morning of the 29th and Spurn Head a gust of 72 m.p.h.

Temperature.—The mean temperature of Districts 1-10 was 50.8°F. and was 1.8°F. above the normal. Day temperatures were mostly above the normal during the first half of the month, the highest day temperatures recorded during the month occurring on or about the 7th in most districts. Northerly winds during the third week of the month resulted in lower day temperatures with severe frost round about the 21st. Subsequently the influx of warm currents of equatorial air caused temperature to rise and from the 25th to the end of the month exceptionally mild conditions prevailed generally. Day temperatures exceeding 65°F. were recorded in many places (68°F. at Dublin on the 25th) while the nights were unusually warm, screen minima of 55°F. and above being recorded in several places, while at a few stations in the east and south-west of England the screen minimum temperature on the night of the 26th-27th did not fall below 60°F. In all Districts, the mean temperature for the week ending October 29th was markedly above the normal, the excess ranging from 3.2°F. in Scotland N. to 7.4°F. in England E.

The mean temperature for the month was above the normal in all Districts, the excess ranging from 0.2°F. in Scotland N. (mean temperature 46.6°F.) to 2.6°F. in Ireland S. (mean temperature 52.4°F.)

The extreme temperatures for the month were:—(England and Wales) 72°F. at Huddersfield on the 7th and at Lenton Fields on the 8th and 25°F. at Castleton on the 21st; (Scotland) 70°F. at Crieff and Perth on the 7th and 16°F. at Braemar on the 21st; (Ireland) 71°F. at Lisburn on 7th and 29°F. at Lisburn on the 20th.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the normal (1881-1915) was 90; the values for the constituent countries were:—England and Wales 69; Scotland 139; Ireland 94.

Apart from heavy rain on the 1st and 2nd, fine dry weather prevailed generally up to the 12th and in some districts the dry spell lasted almost unbroken up to the 20th, after which rain fell frequently, heavy falls being recorded locally. Amongst the largest daily measurements were 57mm. at Ford, 43mm. at Oban and Cardross on the 1st, 52mm. at Balbriggan and Newtown Barry and 45mm. at Greenock on the 21st, 31mm. at Mansfield and 28mm. at Cromer on the 22nd, 51mm. at Dean Prior on the 27th and 46mm. at Keswick on the 28th.

In England and Wales, rainfall totals were below the normal in all districts and in many parts of England did not greatly exceed 50 per cent.; in many districts less than 50 per cent. of the normal total for the month was recorded, particularly in the south-east of England.

In Scotland rainfall totals were below the normal in some Border districts and in Shetland but in general there was an excess and this was considerable in some northern areas and in Forfarshire. Flooding occurred in various districts on the 2nd, notably in the Greenock area, and towards the end of the month. Snow fell here and there in the south on the 2nd and about the 20th.

In Ireland monthly totals were mostly below the normal in the south and west of Ireland but exceeded the normal in some northern and eastern areas. Thus, Malin Head had 150 per cent. of the normal and Balbriggan (Ardgillan) 135 per cent.

Thunderstorms were infrequent but occurred on one or two occasions in some districts.

Sunshine.—Monthly aggregates of bright sunshine were generally above the normal in the western districts of England and Wales and the Channel Isles and below the normal in the central districts of England and in the London area; elsewhere they approximated to the normal.

Abundant sunshine was recorded on several days in most districts during the period of fine anticyclonic weather which set in on October 3rd. Good sunshine records were obtained on a few days, during the second half of the month notably on the 26th, the 29th and 31st.

Fog.—The quiet anticyclonic weather between the 3rd and the 12th favoured the development of fog. Many places reported fog in the morning or at night and in a few places the fog on some occasions persisted throughout the day.

Miscellaneous Phenomena.—Halos of 22°F. were observed on various dates. A brilliant parhelion was seen at Aberdeen on the 29th. Aurora was observed at Lerwick on the 2nd, 19th, 20th, 22nd, 23rd and 27th; at Baltasound (Shetland) on the 29th; in Orkney on the 1st, 7th and 8th; at Aberdeen on the 16th, and here and there on the mainland of Scotland on some of these dates.