

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

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

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OCTOBER, 1928. Mild and wet but with considerable fair periods. Frequent strong winds and gales during second half of month.

Apart from rather cold weather at the beginning and end of the month and about the 11th, 13th and 22nd, October was mild. Rain fell frequently and monthly totals were decidedly above the normal, except in some extreme northern and eastern districts of Great Britain where there was a deficiency. There were, however, considerable bright periods and in most districts in England monthly aggregates of bright sunshine exceeded the normal.

During the first few days of the month, mainly fair anticyclonic conditions prevailed generally, 10 hours sunshine being recorded at stations in the south and east of England on the 1st, and between 9 hours and 10 hours sunshine in many parts of the country on the 4th. The last few days of September had been unseasonably cold and very low temperatures were recorded in the screen on the morning of the 1st (21°F. at Eskdalemuir and West Linton).

Associated with a depression centred off north-west Ireland, rain commenced to fall in the western districts of Ireland on the 4th and by the 5th had extended to the whole country. Temperature had risen and for a week the weather continued mild and unsettled. The highest temperature of the month in all districts was recorded during this period: at Shoeburyness the temperature on the 8th reached 69°F. There were frequent heavy falls of rain with intervening bright periods; 44 mm. fell at Eskdalemuir during the 24 hrs. commencing at 7h. on the 6th. Heavy rain fell in Ireland and in the south and west of England and Wales during the night of the 10-11th, widely on the 11th and in the south of England on the 12th. Much rain fell in Ireland and in the western district of Great Britain on the 14th, the rain spreading to the eastern districts during the night of the 14th-15th (15 mm. were measured on the morning of the 15th at Kew Observatory and Croydon). Thunderstorms occurred locally on several days.

In Scotland, associated with northerly to easterly winds, the days became somewhat cold after the 9th, and from the 10th to the 14th low minimum temperatures were recorded in the screen in eastern districts. This temporary interruption of the mild weather extended to nearly all districts on the 13th and during the nights of the 12th-13th and 13th-14th minimum temperatures in the screen were low for the time of year while severe ground frost occurred widely. Sunny periods, however, occurred in many districts between the 10th and 15th.

Mild and unsettled conditions with fair periods were renewed in the west on the 14th and, apart from generally fair weather on the 28th, persisted until the end of the month. Strong winds and local gales were frequent and some very heavy local rain occurred at times, notably on the 26th. Heavy rain and strong winds, reaching gale force in many places, occurred from the 18th to the 20th, 23rd to 24th and on the 26th.

Pressure and Wind.—Conditions during the month were mostly cyclonic, high pressure occurring chiefly during the first few days and on the 13th. Monthly means of atmospheric pressure were below the normal and at Stornoway the mean monthly pressure at 7h. G.M.T. was as much as 7 millibars below the normal. Winds were mostly between south and south-west and frequently strong in force. Gales occurred in exposed situations in Ireland and the western coastal districts of Great Britain on the 18th-19th and 19th-20th, in the south-west of England on the 24th and 26th and in Northern Ireland and north-west England on the 31st. Gusts exceeding 70 m.p.h. were recorded at Cahirciveen on the 19th (85 mi/hr.), at Dunfanaghy (76 mi/hr.), Aldergrove (73 mi/hr.), and Holyhead (81 mi/hr) on the 20th and at Tiree (74 mi/hr) on the 31st. A small secondary depression which moved across southern England on the 22nd was accompanied in its passage by heavy rain and local destructive squalls of wind. Between 18h. and 21h. rain fell heavily in London while locally in the west-end the wind attained destructive force, a sudden squall, reported to have lasted no longer than 30 seconds, causing structural damage estimated at upwards of £15,000.

Temperature.—October 1928 was on the whole mild. Rather low temperatures were recorded generally at the commencement and end of the month and about the 13th, and in northern districts about the 11th and 22nd, but during the greater part of the month temperature both by day and by night exceeded the normal for the time of year. In most places the mean temperature for the month was above the normal, but in Scotland and in the north of England and Wales the excess in general was slight. The mildest days occurred during the period 5th to 8th and on the 16th and 17th. Low minimum temperatures in the screen and severe ground frost were recorded in many places on the mornings of the 1st, 12th, 13th, 22nd and 29th (23°F. in the screen and 17°F. on the grass at Renfrew and 29°F. in the screen and 17°F. on the grass at S. Farnborough on the 1st, 30°F. in the screen and 21°F. on the grass at Aberdeen on the 22nd and 33°F. in the screen and 25°F. on the grass at Winchester and S. Farnborough on the 29th.

The extreme temperatures for the month were:—(England and Wales) 69°F. at Selsey Bill on the 7th and at Shoeburyness on the 8th, and 22°F. at Mayfield (Staffs.) on the 1st. Scotland, 67°F. at Smeaton (Haddington) on the 8th and 21°F. at West Linton (Peebles) and Eskdalemuir (Dumfries) on the 1st. Ireland 68°F. at Belfast on the 5th and 28°F. at Dublin (Phoenix Park) and Mountmellick (Queen's Co.) on the 1st.

Precipitation.—October 1928 was predominantly wet, and, except in some north-eastern and extreme northern districts of Scotland and in some north-eastern and eastern districts of England, monthly totals of precipitation exceeded the normal. The general precipitation of the British Isles expressed as a percentage of the normal for the period 1881-1915 was 150; the values for the constituent countries were:—England and Wales 147, Scotland 145, Ireland 165.

In a few districts in the north-east and east of England precipitation was below the normal, but elsewhere in England and Wales there was a decided excess, more than one and a half times the normal being recorded in several districts and in the south of England more than twice the normal. At Eastbourne the month's total of 201 mm. has been exceeded in only two previous months, October, 1889 (207 mm.) and December 1915 (213 mm.). At Tenbury the month was the wettest October since 1907. The month's total at Shanklin (Isle of Wight) was the highest recorded in any month since observations commenced there in January, 1906. Amongst some notably heavy falls recorded during the month were 61 mm. at Petersfield, 56 mm. at Guernsey (St. Peters Port) 50 mm. at Holton Heath on the 26th and 45 mm. at Ashburton and 4 mm. at Dean Prior on the 19th.

In Scotland precipitation in general was in excess except in some north-eastern and extreme northern districts where there was a deficiency. In the south and west the excess was pronounced, some areas having appreciably more than twice the normal. At Rothesay the total of 262 mm. was the largest total in any month since December 1919 (282 mm.) and during the last 120 years a larger total has been recorded in October only in 1917 (267 mm.). After some fine days, rain was general from 5th to 10th or 11th with some heavy falls, chiefly in southern districts, on 7th, 9th, and 11th (65 mm. at Monreith in Wigtownshire on the 11th). On 16th heavy rain commenced in the west, and on 18th and 19th very heavy falls were widespread, with a two days' aggregate exceeding 75 mm. over wide areas; at Kinlochquoich as much as 76 mm. on 18th followed by 38 mm. on 19th; and at Corrie, Arran, 64 mm. on 19th. There were further rather heavy falls on 20th and 21st, whilst the period from 23rd to 30th was almost continuously wet in some western districts, with many daily falls exceeding 25 mm. and at Glenquoich as much as 55 mm. on 24th. Northern and eastern coastal districts were relatively free from really heavy falls.

Except in the neighbourhood of Dublin, where precipitation was about normal, monthly totals in Ireland greatly exceeded the normal in all districts and in a few reached or exceeded twice the normal. Amongst some notable heavy daily falls were 33 mm. at Waterford on the 7th and 31 mm. at Blacksod Point on the 7th and at Markree on the 10th.

Sunshine.—Bright intervals occurred frequently during the month and in most districts of England monthly aggregates of bright sunshine were above the normal. Representative aggregates for districts ranged from 123 per cent. of the normal in the Channel Isles and 112 per cent. in England S.W. to 89 per cent. in Scotland W. and 81 per cent. in Ireland N. Abundant sunshine was recorded in many districts on the 1st, 3rd, 4th, about the 13th, on the 25th and 28th; outstanding daily records were 10.4 hr. at Calshot and 10.2 hr. at Clacton and Lympne on the 1st, 9.5 hr. at Cahirciveen on the 3rd, 10.1 hr. at Lympne on the 4th, 9.1 hr. at Tiree and 9.3 hr. at Nairn on the 12th, 10.0 hr. at Scilly on the 13th, 9.1 hr. at Felixstowe on the 14th, 8.4 hr. at Liverpool on the 25th and 7.8 hr. at Cattewater on the 28th.

Fog.—The mild cyclonic conditions accompanied by much wind which prevailed during the greater part of the month were in general unfavourable to the development of fog; it occurred, however, in many districts, mostly during the first three days and from about the 13th to the 16th.

Miscellaneous Phenomena.—Observations of solar halos of 22° with parhelia were made at a few places during the month. A portion of the halo of 46° was observed at Oxford on the 19th. A lunar cross was seen at Woking on the night of 25-26th. Aurora was observed at Lerwick on as many as 14 occasions. A display on the 25th was fairly widely observed and others on 18th and 20th were seen as far south as Durham on the former date and as far south as Eskdalemuir on the latter date. Ball lightning is reported to have been observed at Smallfield, Horley (Surrey) on the afternoon of October, 25th.