

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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MAY, 1943.—A month of extremes.

The month was distinguished by large variations of pressure and temperature, long sunny periods and alternating dry and wet spells. Temperature, rainfall and sunshine all exceeded the average on the whole.

A large anticyclone centred off south-west Ireland dominated conditions over much of the British Isles during the opening days, though a trough of low pressure over the North Sea moving south-west caused rain in the east and south of England on the 1st and weak troughs of low pressure were associated with some rain in Scotland and Ireland on the 2nd and in the extreme north-west of the British Isles on the 4th. On the 5th and 6th troughs of low pressure moved south-east over the country; there was rain in Scotland and Ireland but little or none in England. Subsequently a depression developed on the Atlantic westward of Ireland; thence it moved south-east to St. George's Channel and then slowly north-east across England. This disturbance became exceptionally deep, pressure at the centre over north Wales falling to 968 mb. on the 8th. Widespread gales occurred and heavy rainfall, and snow or sleet in northern districts. On the 9th another deep depression developed on the Atlantic and approached south-west Ireland; this disturbance moved rapidly north-east across England on the 10th and was associated with further gales, particularly in the southern half of England. Rainfall was heavy in England and there was somewhat widespread snow or sleet on the northern side of the track of the disturbance. Temperature was low from the 7th-11th. On the 11th and 12th depressions moved north-east along our western seaboard and were associated with rain in the west and north, while on the 13th a depression south of Iceland and an associated secondary south-westward of Ireland moved north-east giving rain in Scotland and Ireland and slight rain at a few scattered places in England.

Subsequently an anticyclone off south-west Ireland moved slowly north-eastward across the British Isles and became exceptionally intense; on the morning of the 16th pressure rose to 1042 mb. at Dublin and values nearly as high were registered over much of England and Wales. A period of mainly dry, sunny, warm weather prevailed from the 14th-20th.

Unsettled conditions were renewed on the 22nd and lasted over the 26th. On the 22nd and 23rd a depression off the west of Ireland moved north-east and caused rain in most places on the 22nd and in northern districts also on the 23rd and 24th. Meanwhile a new depression approached south-west England and moved north-east; general rain occurred in southern England on the 23rd and 24th. On the 26th a disturbance off north-west Ireland, moving north-east, was associated with some rain in the west and north.

In the rear of this depression an anticyclone developed over the British Isles and a spell of fine, warm weather was experienced generally, but widespread scattered thunderstorms developed on the night of the 29th-30th. The closing days were unsettled with rain in most places.

Pressure and Wind.—Mean pressure slightly exceeded the average except in the Shetland Islands. The deviation at 7h. ranged from -0.5 mb. at Sumburgh to +3.4 mb. at Plymouth. The extremes of pressure were exceptional for May. On the 8th pressure at mean sea level fell to 968 mb. over north Wales and on the 16th it rose to 1042 mb. at Dublin and values nearly as high were registered over much of England and Wales. As far as can be ascertained these values are records for more than 50 years for both low and high pressure in May in the British Isles and they are still more remarkable since they occur in the same month within eight days of each other. Equally high pressures were registered in May 1881, when values of approximately 1042 mb. were reported at Aberdeen, Glasgow and Armagh.

The most widespread gales occurred from the 8th-10th. Mean hourly velocities of 63 m.p.h. and 53 m.p.h. were registered at Bell Rock and Fleetwood respectively on the 9th and 52 m.p.h. at Pendennis on the 7th. Among the highest speeds recorded in gusts were 85 m.p.h., 76 m.p.h. and 73 m.p.h. at Bell Rock, Holyhead and St. Ann's Head respectively on the 9th and 72 m.p.h. at Lympne on the 8th.

Temperature.—Mean temperature slightly exceeded the average on the whole the deviations for the districts ranging from +0.1°F. in Scotland, W. to +2.3°F. in England, E. Broadly speaking the first 11 days were cool and the remainder of the month was warm. In particular, the period 7th-11th was cold and it was very warm in most of England on the 14th and in Scotland on the 18th-19th; for example, at Croydon the maximum temperature on the 10th was 51°F., while on the 14th, only four days later, it was 85°F., a difference of 34°F. Similar differences were registered at numerous stations in Great Britain. Ground frosts occurred rather frequently for the season.

The extremes for the month were:—(England and Wales) 86°F. at Bromley on the 14th, 27°F. at Castleton on the 3rd, Houghall on the 4th and Welshpool on the 5th; (Scotland) 78°F. at Kilmarnock on the 18th, 23°F. at Dalwhinnie on the 10th; (Northern Ireland) 72°F. at Armagh on the 17th, and at Castlerock and Garvagh on the 18th and 31°F. at Garvagh, Hillsborough and Armagh on the 10th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881-1915 was 142 over England and Wales, 139 over Scotland and 149 over Northern Ireland. In Scotland, less than the average occurred over a small area in the extreme north-west and at a few widely separated stations in the west. More than twice the average was received locally in the south-east. In England and Wales less than the average was registered over much of East Anglia and the neighbouring part of the east Midlands, the extreme east of Kent and at one or two isolated stations elsewhere. In most other districts the excess was considerable and more than twice the average occurred locally in Devon and Cornwall. In Northern Ireland the excess was general. Generally speaking, the wettest periods were the 6th-13th, 22nd-26th and 29th-31st.

Among the heaviest falls in 24 hours were:—

8th 3.00 in. at Drummur Castle (Banff-shire) and 2.98 in. at Fettercairn (Kincardine-shire).

9th 2.37 in. at Llanddeusant (Carmarthen).

23rd 2.27 in. at Gula, Skye.

There was a good deal of snow from the 8th-10th; it was widespread in Scotland and occurred as far south as central Ireland, Yorkshire and the Pennines. Snow was 6 inches deep at Douglas, Isle of Man and 3 inches deep at Duntuil, Skye on the 9th and 4 inches at Newton Rigg on the 10th. The storm was particularly severe in Aberdeenshire, snow to a depth of 7 feet blocked the Braemar-Perth road at Cluny Lodge.

Thunderstorms were reported at times, for example on the 1st, 6th-9th, 22nd-25th and 29th-30th.

Sunshine.—Excessive sunshine was a marked feature of the weather of the month. Less than the average occurred only at some stations in the extreme west and north of Scotland, and the percentages for the districts ranged from 100 in Scotland, N. to 137 in England, N.E.

Fog.—On the whole there was not a great deal of fog, but it occurred most frequently on the south-west coasts and in north-east districts of Britain. It occurred mainly on the 5th, 12th-14th, 18th-22nd, 26th, and 31st.

Miscellaneous Phenomena.—The aurora was observed in Scotland on six nights. Solar halos were noted at Oxford on 13 days.