

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers

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June 1957—*Unusually sunny and warm*

At the beginning of the month an upper air blocking pattern had already existed over the north-eastern Atlantic and western Europe for about a week, and blocking patterns remained in these sectors for most of June. Surface pressure features were somewhat indefinite, but the broad pattern was weakly cyclonic with changeable rather cool weather during the first ten days, and anticyclonic with exceptionally warm, sunny weather for the next fortnight. A southerly airstream brought hot, thundery weather from France towards the end of the month.

Although there was some rain in Scotland, the first two days of June were sunny and dry generally in England and Wales, with afternoon temperatures reaching the seventies. Many places had their first rain for ten days when thunderstorms developed over a wide area in south-east England on the 3rd, and that night and the following day there was fairly general rain over the British Isles as a deepening depression moved east across Scotland. Cool north-westerly winds spread across the country in the rear of the depression on the 5th, bringing occasional showers to most places and some local ground frost at night. A frontal system to a depression about 600 miles to the west of Ireland reached our south-western seaboard on the 6th and as it moved slowly across the country during the next 48 hours there were showers and occasional rain in many places. As the depression associated with these fronts entered our south-west approaches on the 8th a pronounced trough developed north-eastward from it across the country to the North Sea. The depression had been accompanied across the Atlantic by an upper air low which approached the British Isles from the south-west on the 8th and then linked north-eastwards with an upper trough in the Norwegian Sea. From the 8th to the 10th there were outbreaks of thundery rain and thunderstorms with unusually heavy rain in places; 7.06 in. of rain occurred at Camelford, Cornwall, in 12 hr., 5.48 in. of which fell between 13 h. and 16 h. on the 8th.

The trough moved eastwards to the North Sea on the 10th, and pressure over the country rose quickly in the cool northerly airstream which developed behind it. By the 12th a new and more vigorous blocking pattern had formed at 500 mb. with its warm ridge right across the British Isles; at the surface an anticyclone was centred over southern England, and this intensified and moved slowly north giving about ten days of brilliantly fine weather. The highest pressure recorded in the British Isles for nearly 80 years during June was reported from central Wales on the 13th. During this fine period a number of places registered more than 16 hr. sunshine on several successive days and by the 14th afternoon temperatures exceeded 80°F. fairly extensively in the south of England and reached 87°F. at both London Airport and Hurn on the 17th and 18th. On the 18th thunderstorms again broke out in southern England—1.68 in. of rain fell in 2 hr. during a storm at Andover—but although the following day temperatures were about 10°F. lower in many places there was no general break in the fine weather until the 22nd when a cool northerly airstream brought renewed thundery outbreaks to many areas and temperatures to near or below the normal for the time of year; widespread ground frost occurred at night, particularly in the north.

The blocking high from Europe moved westwards to Greenland on the 25th, and the next day an anticyclone over the Bay of Biscay intensified as it moved north-eastward over France bringing warm air of tropical origin over the British Isles. The last three days of the month were hot in many districts. Temperatures rose to the upper eighties in many Midland and eastern districts, reaching 89°F. at Derby and 88°F. at Northwich and Hull on the 28th, and to 90°F. or more over much of south-east England on the 29th and 30th.

Pressure and Wind. Pressure at 9 h. was everywhere above the average,

the excess ranging from 4.1 mb. at Stornoway to 0.5 mb. at Scilly. Rhayader in central Wales recorded a pressure of 1037.4 mb. on the 13th, 0.9 mb. more than the highest pressure previously recorded during June in the British Isles, which was 1036.5 mb. at Valentia on 6th June, 1870. Winds were mainly south-westerly during the first three days and on the 7th and 8th, otherwise north-westerly winds predominated until the 11th, but they became light and variable on the 12th and 13th. Winds were generally between north-east and east from 14th to 21st, north-west and west from 22nd to 24th and became light and variable again on the 25th. During the last five days of the month winds were mainly between south and south-west. Winds reached gale force locally on the 5th; the highest gusts reported during the month were 44 kt. at Stornoway and Millport on the 4th.

Temperature. Mean temperature exceeded the 1921–50 average by 1.6°F. in England and Wales, 1.0°F. in Scotland and 0.9°F. in Northern Ireland. Temperature exceeded 80°F. every day from 12th to 20th at both Hurn and London Airport. 96°F. was reached at Camden Square, London on the 29th, the highest temperature recorded in June in the British Isles since at least 1858. The coldest nights occurred around the 12th and 24th, on the latter date temperature at Dalwhinnie fell to 26°F. in the screen and 15°F. on the grass.

Extreme temperatures for the month included:—(England and Wales) 96°F. at Camden Square, London on the 29th, 26°F. at Moor House on the 24th; (Scotland) 87°F. at Ruthwell on the 16th, 26°F. at Dalwhinnie on the 24th; (Northern Ireland) 82°F. at Armagh on the 21st, 32°F. at Aldergrove on the 7th and 24th.

Precipitation. The general precipitation expressed as a percentage of the 1881–1915 average was 79 over England and Wales, 100 over Scotland and 73 over Northern Ireland. Less than half the average occurred around London, in the eastern parts of Kent and Co. Down and locally in South Wales. More than the average occurred over much of the east coast from Flamborough Head to Lowestoft, the west country and south-west Wales, north Scotland and locally in south Scotland and Co. Antrim. Twice the average was exceeded in Somerset and north Cornwall. The rain at Camelford on the 8th was the heaviest ever recorded in Cornwall.

Among the heavier falls in 24 hr. were:

8th 7.09 in. at Camelford (Roughtor View) and 6.33 in. at Camelford (Advent), Cornwall; 4.45 in. at Nantcwnlle (Bwlchyllan), Cardiganshire.

30th 2.01 in. at Osmotherley (Filter Station), Yorkshire (N.R.).

Thunder occurred on 13 days in Scotland and 15 days in England and Wales. Thunderstorms were reported over a wide area on the 8th, 9th, 29th and 30th, and occurred at a number of places on 7 days during the month.

Snow and sleet showers occurred locally in Scotland.

Sunshine. The general sunshine expressed as a percentage of the 1921–50 average was 143 over England and Wales, 134 over Scotland and 155 over Northern Ireland. At many places it was the sunniest June since the records began, even surpassing the fine June weather of 1940 and 1949. At Glasgow and Kew it was the sunniest June for more than 75 years. Several places in the south of England recorded an average of more than 11 hr. sunshine per day.

Fog. Fog was infrequent. Early morning fog patches were reported from one place or other on 14 days.

Miscellaneous Phenomena. There were no reports of aurora during the month.