

# MONTHLY WEATHER REPORT

# OCTOBER

# 1978

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

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## Warm and dry, except in extreme north.

A northerly airstream was replaced on the 1st by a ridge of high pressure and this was followed by an unsettled westerly spell. Southern areas came within the influence of an anticyclone which moved from Biscay to Germany between the 4th and the 6th. A southerly airflow developed on the 7th, but complex low-pressure systems affected many areas during the next few days. With pressure rising over central Europe, however, a warm southerly flow became re-established by the 11th. A depression off south-west Ireland moved north-east on the 15th and a north-westerly airstream then developed and persisted for a few days. An anticyclone became stationary to the south-west of the British Isles between the 19th and the 25th, while fronts crossed many areas, but mostly affected the north. A strong ridge then moved eastwards across Britain, allowing fronts from the north-west to cross most parts on the 31st.

### Weather

The weather was generally unsettled at the beginning of the month, but after the first few days rain or showers were mostly confined to the north, and the 7th was a dry day everywhere. Scattered outbreaks of rain or showers occurred between the 8th and 11th, but it then became mainly dry until mid-month. It was also very warm, although overnight fog became dense in places, particularly in England and Wales. Rain reached most parts on the 15th and the weather was then cooler and less settled until the 23rd. Isolated thunderstorms occurred during the middle two weeks of the month and wintry showers fell in the north during the third week. The changeable weather continued in some northern areas until the end of the month, while remaining districts became drier and warmer, but a belt of rain spread to most parts on the 31st.

### Wind

Except for a few days towards the end of the second week, when speeds were light in most areas, winds were frequently fresh or strong in exposed places in the north. Speeds there occasionally reached gale force, and a gust of 81 kt was recorded at Cairngorm on the 5th. Winds were also fresh or strong along western coasts of England and Wales from time to time. Directions were mainly between south-west and north-west, except between the 7th and the 12th, when south to south-east winds predominated.

### Temperature

Monthly mean temperatures were above average in all areas, except in Shetland. Values were between 0 and 1 °C above the normal in north-west Scotland, over most of south-east England, and in parts of south-west England, South Wales and East Anglia, but were between 1 and 2 °C above average in almost all remaining districts. After the first few days, it became warm in many areas, particularly during the second week. Most places in Great Britain recorded their monthly maximum on the 11th or 12th, temperatures of at least 25 °C occurring in places in East Anglia, the south Midlands and southern England. In London, where the temperature rose to 25.2 °C on the 11th, this was the warmest October day since 1959, and Exeter Airport, with a maximum of 23.7 °C on the 12th, had its highest October temperature since records began there in 1942.

Temperatures returned to nearer the normal by mid-month, but there was another warm spell during the last week.

### Rainfall

Rainfall exceeded the average only in north-western Scotland, where twice the normal amount for the month fell at Cape Wrath. The 5th was a very wet day in this area, values exceeding 100 mm at one or two places in the 24 hours starting at 09 GMT. All other parts of the United Kingdom had less than their usual rainfall for October and in most places totals were well below the normal. Less than 25 per cent of the average fell in parts of eastern Scotland and also south of a line from the Humber to Cardigan Bay. Within this latter area, the Channel Islands, most of south-east and central southern England and parts of East Anglia and south Devon had less than 10 per cent of their normal rainfall. Totals for the month at a number of places in these areas were below 5 mm and only 0.1 mm was recorded at Gravesend in Kent. Over England and Wales, taken together, there have probably been only 4 drier Octobers since the record began in 1727, and in Northern Ireland, where rainfall was below 50 per cent of the normal over the Province as a whole, it was the driest October this century in the Belfast area.

### Snow

Snow showers occurred in Shetland on the 20th and 24th, but snow was otherwise only observed at times on the upland slopes of some of the Scottish mountains. Wintry showers of sleet or hail were occasionally reported in the Northern Isles and in mainland Scotland during the first week, and also between the 16th and the 24th. Isolated sleet and hail showers occurred in northern England and in North Wales at the beginning of the third week.

### Sunshine

Sunshine was between 100 and 120 per cent of average in Shetland, over most of south-east England and central and south-west Scotland, and along much of the eastern coastal strip of Scotland and England north of the Humber. Totals were slightly above average in places in central southern and south-west England, South Wales and the Isle of Man, but remaining parts of Great Britain had less than their normal sunshine for the month. In Northern Ireland, however, it was the sunniest October since 1959, and totals were highest in Co. Down, where Hillsborough recorded 142 per cent of its average. Sunny intervals occurred from time to time throughout the month in central and southern districts, but in northern areas the first half of October was generally the sunnier.

### Fog

Overnight fog patches occasionally formed in inland areas during the first week, but occurred more frequently during the second week. The fog chiefly affected south-eastern and central southern England, the Midlands and East Anglia. It became widespread and dense over much of England and Wales on the night of the 12th/13th, persisted all the following day in places, and returned to many parts on the night of the 13th/14th, when the Central Lowlands of Scotland were also affected. Several people were killed in road accidents and flights were seriously delayed at airports. Dense fog also developed overnight, mostly in the south-east and the Midlands, between the 27th and the 29th. Fog along coasts and on hills occurred during similar periods and also between the 21st and the 24th. Coastal fog most frequently affected the north and west and Shetland had fog for much of the day on the 9th and the 11th.

### Miscellaneous Phenomena

None reported.

**Table 1 District values**

District	air temperature °C					mean 30-cm earth temp °C	rain-days	rainfall	sunshine
	Highest Max*	Lowest Min*	max.	min.	mean				
	difference from average								
0 Scotland N	20.1	0.5	+0.4	+0.5	+0.4	+0.1	+3	87	88
1 Scotland E	20.5	-2.0	+1.1	+1.9	+1.5	+1.2	-3	37	96
2 England E & NE	24.6	-2.4	+1.2	+1.3	+1.3	+0.8	-5	32	92
3 East Anglia	24.9	0.5	+1.0	+1.0	+1.0	+0.4	-5	11	89
4 Midland Counties	24.9	-0.3	+1.4	+1.3	+1.3	+0.7	-8	20	87
5 England SE & Central S	24.6	-0.4	+1.2	+0.6	+0.9	+0.2	-7	9	97
6 Scotland W	19.6	-2.0	+0.9	+1.8	+1.4	+1.1	+1	60	88
7 England NW & Wales N	22.4	1.0	+1.0	+1.9	+1.5	+0.7	-3	42	90
8 England SW & Wales S	24.0	0.3	+1.2	+1.1	+1.2	+0.8	-8	13	92
N Ireland	19.2	4.0	+1.1	+2.1	+1.5	+1.5	-1	46	112
Scotland	20.5	-2.0	+0.8	+1.4	+1.1	+0.8	0	61	91
England & Wales	24.9	-2.4	+1.2	+1.2	+1.2	+0.6	-6	21	91

\* Highest maximum and lowest minimum of District Value Stations