

MONTHLY WEATHER REPORT

OCTOBER 1990

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

VOLUME 107

NUMBER 10

A changeable month: generally wet and warm with variable sunshine

Pressure was high over most of the United Kingdom on the 1st. During the night of the 2nd/3rd a cold front crossed all districts, clearing the south-east later on the 3rd. Further fronts crossed the United Kingdom on the 5th and on the 6th a deepening depression moved across southern Scotland to the North Sea, the associated cold front moving rapidly across England and Wales. Over the next day or two the Azores anticyclone gradually extended north-eastwards across southern parts of Great Britain, although frontal activity continued over northern Scotland. A trailing front crossed northern areas in the course of the 9th and became slow moving across central areas. Early on the 11th a disturbance moved along the front; later that day the front moved away northwards. A cold front approaching from the south-west crossed all areas overnight on the 13th/14th. Early on the 15th a warm front moved northwards across southern areas, while the cold front crossed all areas later in the day. A transient ridge of high pressure affected most areas on the 16th, before a shallow depression edged northwards early on the 17th. During the 18th the depression became part of a complex low-pressure area covering southern parts of Great Britain and the near Continent. The associated front became slow moving across northern England and Wales on the 19th and northern areas came increasingly under the influence of an anticyclone centred between Iceland and Norway. On the 21st the anticyclone now centred over Scandinavia intensified, effectively blocking the advance of further Atlantic frontal systems. As the anticyclone drifted away south-eastwards on the 23rd and declined, weak fronts began to push north-eastwards over southern areas. During the 24th and 25th fronts associated with a now complex low pressure area to the west of the British Isles moved north-eastwards across all areas. A subsidiary centre deepened and became the main centre during the night of the 27th/28th as it crossed northern areas to the North Sea; it then rounded the north of Scotland and moved away towards Iceland by the 30th, before again crossing the United Kingdom to the North Sea on the 31st.

Weather

The weather was changeable over the month as a whole, being generally unsettled with one or two brighter interludes. In the south-east a thunderstorm on the 15th ended a very warm spell with a dramatic display of lightning reported at Colchester, Essex. Other thundery outbreaks occurred over South Wales on the 3rd, Scotland on the 16th, and mainly eastern areas of England and Wales between the 17th and 19th, and more widely spread between the 25th and 27th, sometimes accompanied by hail. During the 28th scattered thundery activity continued in southern England and South Wales, and isolated thunderstorms with hail occurred in the north-west; thunder was reported along the south coast on the 31st.

Wind

The month was rather windy with strong to gale force winds on eight days. On the 2nd winds reached gale force on exposed coasts and hills over western Scotland and around the Irish Sea;

Greenock, Strathclyde Region measured a mean wind of 40 kn with a gust to 65 kn. On the 6th gales were reported around southern and western coasts, with a gust to 62 kn at Solent MRSC, Hampshire and in north-east England, with a gust to 64 kn at Boulmer, Northumberland. On the 28th strong winds were widespread, with gusts of 63 kn measured at Fair Isle, Lerwick and Sella Ness, Shetland; gusts of more than 50 kn were measured in many parts of the United Kingdom. The highest gust was 86 kn, measured at Herstmonceux, East Sussex early on the 28th in a squall during the passage of two fronts in quick succession. Directions were mainly south-westerly.

Temperature

Mean monthly temperatures were above normal everywhere, ranging from near normal at Benbecula, Western Isles to nearly 2 °C above normal at Gatwick, West Sussex.

The temperatures of 24.3 °C at Valley, Gwynedd and 22.3 °C at Kinloss, Grampian Region were the highest in the respective localities since 1959. In contrast the 30th was a particularly cold day in parts of Scotland, with the temperature at Tummel Bridge, Tayside Region only reaching 3 °C during the afternoon. Provisional figures suggest that October was the warmest for 20 years. The highest temperature of the month in the United Kingdom was 24.8 °C at Enfield, Greater London on the 12th, and Waltham Cross, Greater London and Pen-y-Ffridd, Gwynedd on the 13th. The lowest temperature during the month was -4.9 °C at Grantown-on-Spey, Highland Region on the 30th.

Rainfall

Monthly rainfall amounts were above normal in many areas although some central and southern areas ended the month with less rainfall than normal. Amounts ranged from 219% at Edinburgh, Lothian Region to only 61% at Stansted, Essex.

During the first six days rain came to all areas, heavy in places, particularly in the west. Heavy rain fell in many places on the 17th and 18th, mainly in northern areas, and there was a report of a fall of 78.5 mm at Inkersall, near Chesterfield, Derbyshire

on the 17th. Sheffield, South Yorkshire measured 45 mm on the 17th, the wettest day there since 1933. Among heavy falls were 88 mm at Rothes, Grampian Region on the 27th, 81 mm at Dinorwic, Gwynedd on the 2nd, 75 mm at Parkmore Forest, Co. Antrim on the 27th, 74 mm at Carlton-in-Lindrick and 73 mm at Warsop, both Nottinghamshire on the 17th, and 73 mm at Penicuik, Lothian Region on the 6th.

Snow

On the 7th showers turned to snow for a while on Fair Isle, Shetland. On the 30th and 31st snow over the southern Highlands was lying at lower levels; Balquhider, north of the Trossachs, reporting 2 cm of lying snow on the 31st.

Sunshine

Sunshine amounts were about average over the whole of the United Kingdom, although some places were generally rather dull, and ranged from 130% over East Anglia to as little as 63% at Eskdalemuir, Dumfries and Galloway.

Most sunshine in a day was 10.8 hours measured at Plumpton, East Sussex on the 8th and the highest monthly total was 143.1 hours at Folkestone, Kent and Levington, Suffolk.

Fog

By dawn on the 13th fog and low cloud became extensive over both the south-west and north-east of England, clearing from most places during the morning. The 19th started very foggy in parts of southern England. Fog, dense in places, affected much of eastern and southern England on the 20th; during the day the fog slowly cleared but re-formed in the south-east in the evening. Fog patches formed over East Anglia and north-east England on the 24th and 25th, over Cumbria and southern Scotland on the 27th and over Northern Ireland overnight on 27th/28th. Coastal fog affected Norfolk on the 16th. Hill fog occurred on the 17th and there was hill and coastal fog on the 18th.

Miscellaneous Phenomena

None reported.

Table 1 District values

District	Air temperature °C					Mean 30 cm soil temp °C	Rain-days	Rainfall	Sunshine
	Highest Max*	Lowest Min*	Max.	Min.	Mean				
	Difference from average					% of average			
0 Scotland N	21.0	-4.9	+0.2	+0.6	+0.5	+0.1	-1	118	107
1 Scotland E	22.3	-4.5	+0.1	+1.1	+0.6	+0.7	+3	165	91
2 England E & NE	22.9	-1.3	+0.7	+1.9	+1.3	+1.1	+2	124	87
3 East Anglia	24.5	-0.3	+1.5	+2.1	+1.7	+1.0	-1	98	118
4 Midland Counties	24.0	-0.9	+1.3	+2.1	+1.7	+1.1	+1	142	104
5 England SE & Central S	24.2	0.3	+1.3	+1.9	+1.6	+1.0	+1	122	108
6 Scotland W	21.7	-2.0	+0.2	+1.2	+0.7	+0.7	+3	165	77
7 England NW & Wales N	24.3	-1.2	+0.6	+1.8	+1.1	+1.3	+3	143	91
8 England SW & Wales S	22.0	0.0	+0.9	+2.0	+1.3	+1.2	+3	118	90
N Ireland	19.9	0.5	+0.2	+1.2	+0.7	+0.6	+4	199	87
Scotland	22.3	-4.9	+0.2	+1.0	+0.6	+0.5	+2	147	92
England & Wales	24.5	-1.3	+1.1	+2.0	+1.5	+1.1	+1	128	100

* Highest maximum and lowest minimum of District Value Stations