

# MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

# DECEMBER 1984

VOLUME 101

NUMBER 12

## Unsettled and mild; very dry in north-east England

During the 1st and 2nd there was a slow-moving depression over England and Wales. As this depression filled a frontal trough associated with a deeper depression in mid Atlantic moved across the British Isles on the 3rd, followed on the 4th by the frontal system associated with another depression off north-west Scotland. Subsequently a ridge of high pressure extended over southern parts of the British Isles from an anticyclone over France.

As pressure built over the Atlantic a slow-moving cold front edged south-eastwards to affect most of the United Kingdom on the 8th. An anticyclone became established over southern areas of the British Isles on the 9th, and remained there until a depression developed over western Ireland and moved eastwards on the 12th/13th. Low pressure predominated in all areas for the next 12 days until the 25th, when a frontal system crossed the whole of the United Kingdom and the low pressure was replaced by a ridge of high pressure extending from Norway southwards into the Bay of Biscay. For the rest of the month pressure remained high over northern France and depressions became slow moving near Scotland.

### Weather

The month began unsettled with rain in most places. From the 6th to 12th it became settled in the south with widespread fog and frost; Scotland remained unsettled until the 9th. For 12 days from the 12th unsettled weather persisted everywhere with precipitation over high ground becoming increasingly wintry. On the 17th snow was widely reported over the hills of northern England. In the south the mild weather continued until the 25th, when sleet and hail showers spread as far south as the Chilterns. After widespread fog and frost, milder weather with rain or drizzle moved quickly to all parts by the end of the month.

### Wind

After a quiet start to the month with mainly light or moderate breezes, winds were often fresh or strong with gales at times. Gales occurred mainly in exposed coastal districts, especially in the north and west. On the 24th fresh to strong southerly winds veered north-westerly and reached gale force at times; Gwennap Head, Cornwall reported a gust of 63 kn in the morning. On the 31st Kirkwall reported a gust of 66 kn. Wind directions were mainly southerly or westerly during the month.

### Temperature

The month was mild over the whole United Kingdom with temperatures above normal in all but a few places in the far west. Most of Scotland, the south coast of England and part of East Anglia had temperatures 1 °C above average.

Temperatures in Scotland between the 2nd and 7th rose to around 8 °C to 10 °C, 3 °C to 4 °C above the seasonal average. On the 12th, while temperatures in the Border Region were about 1 °C, those in the north-west of Scotland reached over 16 °C. Cape Wrath recorded 17.4 °C, the highest December temperature since 1972 and the second highest in 43 years. The cause of the exceptional mildness was a southerly föhn-type wind blowing from the

Highlands. The mildest day generally in Scotland was the 23rd with 13 °C to 14 °C in many places; some stations exceeded 15 °C. The maximum temperature in England and Wales was 15.4 °C on the 23rd at Melbury, Devon. A sudden drop in temperature by about 10 °C on the 26th caused icy conditions on many roads throughout Great Britain: the temperature at Glasgow Airport dropped to -9.4 °C on the morning of the 27th and only rose to -3.8 °C during the afternoon; on the south coast of England, however, the temperature rose to 9 °C on the 27th.

### Rainfall

Rainfall totals over most of England and Wales except for parts of central southern and south-east England, western Wales and north coasts of Devon and Cornwall were all below average. North-east England was very dry with less than half the average. However, parts of western and north-eastern Scotland, south-west Wales and East Sussex had over 150 per cent of average rainfall.

The month started rather wet over much of the United Kingdom with a succession of fronts bringing rain to all areas. From the 5th it became drier over England and Wales, but over Scotland it remained unsettled with heavy falls of rain: there were falls of 97 mm at Ardgour House, Highland Region on the 6th, 75 mm at Glencoe, Highland Region on the 7th, and on the 9th Cassley and Loch Carron, both in the Highland Region, had over 100 mm. On the 17th precipitation became more wintry over the higher ground, but elsewhere there were reports of prolonged heavy rain over northern Scotland. Fraserburgh, Grampian Region had 59 mm, Kirkwall, Orkney had 53 mm and Aberdeen, Grampian Region had 43 mm. For the rest of the month frontal systems brought rain interspersed with showery weather cold enough to give some wintry precipitation in most parts, with sleet and hail as far south as the Chilterns.

### Snow

Snow or sleet fell at many places in Scotland and northern England on the 17th and caused some considerable disruption to traffic over the Pennines.

Several main roads were closed as a result of lorries unable to get through and blocking traffic behind them. There were reports of up to 100 vehicles stranded in Durham; the depth of snow lying at Redmires, South Yorkshire was 8 cm. Generally, however, there was only a light covering of snow on higher ground. Snow and sleet occurred more generally late on the 25th in many parts of Great Britain as far south as the Chilterns. On the 26th Burrator, Devon and Hednesford, Shropshire had an accumulation of 5 cm of snow and Haweswater, Cumbria had 8 cm. On the 27th there was 6 cm at places in North Wales.

### Sunshine

Sunshine amounts were above the monthly normal everywhere except for parts of north-west England, Northern Ireland, North Wales and western and southern areas of Scotland, which had a rather dull month. Parts of central England and East Anglia, and northern Scotland, were very sunny and several places had over 150 per cent of average sunshine. The dullest day of the month was the 30th when there were only a few brief glimpses of the sun in south-west England and Northern Ireland. The maximum daily sunshine was 7.7 hours at Jersey Airport, Channel Islands on the 7th; on the 9th Tenby, Dyfed had 7.6 hours.

### Fog

Overnight fog occurred throughout the month. At times it was widespread and persistent, especially between the 11th and 15th and during the last week of the month. On the 11th in the early morning patches of thick fog were the cause of a multiple crash on the M25 motorway in Surrey. On the 27th there were patches of freezing fog in eastern and north-eastern areas of England and in the central Scottish Lowlands and they persisted for most of the day. Hill fog was frequent in the second half of the month in south-western and central southern areas of England and was widespread between the 28th and 31st. There was an increased frequency of coastal fog from the 20th, especially in the west.

### Miscellaneous Phenomena

None reported.

**Table 1 District values**

District	Air temperature °C					Mean 30 cm soil temp °C	Rain- days	Rainfall	Sun- shine
	Highest Max*	Lowest Min*	Max.	Min.	Mean				
			Difference from average					% of average	
0 Scotland N	17.4	−8.7	+1.3	+1.1	+1.2	+0.7	0	112	130
1 Scotland E	14.8	−8.6	+0.9	+1.0	+1.0	+1.5	0	97	110
2 England E & NE	14.5	−5.3	+0.7	+0.5	+0.6	+1.2	+1	60	103
3 East Anglia	14.1	−4.6	+0.9	+0.6	+0.7	+1.5	+2	79	129
4 Midland Counties	14.0	−4.6	+0.6	+0.2	+0.5	+1.0	+1	72	131
5 England SE & Central S	13.7	−3.6	+1.0	+0.6	+0.8	+1.4	+4	119	118
6 Scotland W	13.3	−9.9	+0.8	+1.2	+1.0	+1.2	+2	105	79
7 England NW & Wales N	13.6	−5.4	+0.5	+0.9	+0.7	+1.0	+2	89	106
8 England SW & Wales S	13.2	−3.6	+1.1	+0.3	+0.5	+0.8	+3	99	108
N Ireland	12.6	−4.7	+0.6	+0.2	+0.3	+0.8	+2	105	81
Scotland	17.4	−9.9	+1.0	+1.1	+1.1	+1.1	+1	106	106
England & Wales	14.5	−5.4	+0.8	+0.5	+0.6	+1.1	+2	86	116

\*Highest maximum and lowest minimum of District Value Stations