

# MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

**DECEMBER 1979**

VOLUME 96

NUMBER 12

## Wet and windy; mild first half of month.

Until just after mid-month a series of depressions and their associated frontal systems affected the British Isles. On the 1st a deep depression moved north-eastwards across Iceland with fronts crossing all parts of the United Kingdom during the next few days. On the 4th a deep depression passed near to north-west Scotland, moving from mid-Atlantic to northern Scandinavia. During the 6th and 7th a shallow depression moved northwards over western Ireland followed on the 8th and 9th by another depression which approached western Scotland and then turned northwards towards Iceland. During the 10th and 11th a depression crossed central England from the west followed on the 12th by a further deep depression which moved north-eastwards near to north-west Scotland before turning northwards. Between the 13th and 15th two low-pressure centres moved north-eastwards across England followed by the last of the series of depressions which crossed Scotland from the west on the 17th.

For a few days from the 18th the British Isles came within the circulation of an anticyclone centred to the south-west and on the 21st and 22nd, while this centre of high pressure receded towards the Azores, a declining ridge from another anticyclone over northern Europe remained over the United Kingdom. However, from the 23rd until the end of the month low-pressure systems and their associated fronts once again affected the British Isles.

### Weather

Unsettled weather, with winds often reaching gale force, affected all parts of the United Kingdom throughout the month. The first two weeks were generally mild, but colder weather then spread to all districts. Showers or periods of rain occurred frequently, showers being mostly of rain early in the month but later becoming wintry with hail, sleet or snow at times, particularly after mid-month. Rainfall was occasionally heavy and there was widespread flooding in south-west England and South Wales during the last week.

### Wind

Except for a few days around the end of the first week and again during the early part of the third week, winds were fresh or strong in all areas with severe gales at times. On the 4th, during widespread gales over Scotland, north-west England and North Wales, a gust of 96 kt was recorded at the Royal Observatory in Edinburgh. There were severe gales in the southern half of Britain on the 11th, and on the 15th exceptionally severe gales occurred over south-west England where a gust of 103 kt was recorded at Gwennap Head; at least 1000 trees were reported to have been blown down in Cornwall and shipping in the Channel was seriously affected. Most areas away from the south-east had severe gales on the 17th; two women died in accidents caused by the gale in Strathclyde and several people were rescued from ships in distress around the coasts; at Droitwich (Hereford and Worcester) a BBC radio transmitter mast collapsed in the high winds. On the 27th gales and flooding following heavy rain led to a number of deaths in southern England and South Wales.

The wind direction during the month was most frequently between south-west and north-west, although at times east or south-easterly winds affected

northern areas, particularly as depressions crossed the British Isles. On the 19th and 20th winds were northerly over all areas and during the next two days north to north-easterly winds continued to blow over southern areas.

### Temperature

Over England, Wales and much of southern and eastern Scotland monthly mean temperatures were above average, with values in many parts of England and Wales exceeding the average by between 1 and 2 °C. Elsewhere in Scotland and over most of Northern Ireland mean temperatures were a little below average.

The first half of the month was generally mild and during the first week maxima of at least 16 °C were recorded at several places in Gwent and south-west England. The second half of the month was colder with widespread night frost at times, particularly between the 22nd and 25th and again in northern districts during the last few days of the month, the temperature falling to -10.7 °C on the night of 29th/30th at Lagganlia (Highland Region).

### Rainfall

Monthly rainfall totals were well above average almost everywhere in the United Kingdom, with more than twice the average being recorded in many parts of England and Wales. Only at a few isolated places in the Isle of Wight, Northern Ireland, the Highland Region of Scotland and the Shetlands were totals a little below average.

Showers or longer periods of rain affected all areas at times throughout the month and scattered thunderstorms were reported during the first three weeks. Rainfall was occasionally heavy, particularly on the 4th and 8th over parts of Wales and north-west England and also on the 7th over southern, central and eastern Scotland. On the 26th and 27th rainfall was very heavy over much of England, Wales and southern Scotland leading to extensive flooding, particularly in parts of south-west England and South Wales. At Venford Reservoir on Dartmoor 223.4 mm of rain was recorded in the 48 hours from 09 GMT on the 26th.

### Snow

Until mid-month reports of sleet or snow were restricted

**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						
0 Scotland N	14.4	-3.4	-0.3	0.0	-0.2	+0.1	+3	129	98
1 Scotland E	14.6	-8.5	0.0	+0.6	+0.3	+1.0	+1	154	106
2 England E & NE	14.5	-3.6	+0.8	+1.2	+1.0	+1.1	+6	209	122
3 East Anglia	15.6	-4.3	+1.1	+1.7	+1.4	+1.5	+4	178	117
4 Midland Counties	15.0	-7.2	+1.3	+1.3	+1.3	+1.2	+4	189	120
5 England SE & Central S	15.5	-7.0	+1.4	+1.8	+1.6	+1.5	+2	169	119
6 Scotland W	13.5	-8.5	0.0	+0.3	+0.1	+0.8	+1	130	114
7 England NW & Wales N	15.4	-5.5	+0.6	+1.0	+0.8	+0.9	+4	184	106
8 England SW & Wales S	16.6	-5.4	+0.9	+1.0	+1.0	+0.9	+3	169	99
N Ireland	13.4	-3.6	-0.1	-0.2	-0.1	+0.4	+1	108	108
Scotland	14.6	-8.5	-0.1	+0.3	+0.1	+0.6	+2	138	106
England & Wales	16.6	-7.2	+1.0	+1.3	+1.2	+1.2	+4	183	114

\*Highest maximum and lowest minimum of District Value Stations

to the high ground in Scotland, but on the 14th and 15th snowfall occurred at many places in Scotland and northern England. There were further reports of sleet or snow at times throughout the second half of the month, particularly between the 18th and 21st and again from the 26th until the end of the month.

The higher summits of the Scottish mountains were snow covered all month, but on low ground throughout the United Kingdom snow lay on only a few occasions and at many places in England and Wales snow did not lie at all.

### Sunshine

Monthly sunshine totals were mostly between 75 and 100 per cent of average in the Channel Islands and south-west England, in western parts of Wales and in much of the Grampian and Highland Regions of Scotland. Western parts of Northern Ireland and a few other well-scattered places in England also had less than average sunshine for the month. Elsewhere in the United Kingdom sunshine totals were above average, a few places in England and southern Scotland recording more than 140 per cent of their normal for the month.

Most places enjoyed sunny days at times, especially during the second half of the month; the 24th over Northern Ireland, the 25th over much of England and Wales and the 31st over southern parts of Scotland were all particularly sunny. However, during the first half of the month there were many days with little or no sunshine over large areas of the United Kingdom.

### Fog

For much of the month winds were too strong for the widespread formation of fog, although isolated patches were reported on a few occasions. On the 24th freezing fog persisted all day in parts of Scotland, particularly in the Glasgow area, and on the 25th fog was slow to clear in a few places in central and eastern England.

### Miscellaneous Phenomena

A small tornado was reported near Garstang (Lancashire) at 1730 GMT on the 3rd. Some structural damage occurred at a mill and several trees were uprooted.