

# MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

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## Snowy and very cold at times; some mild spells.

A deep depression crossed England and Wales on the 1st, to be followed firstly by a northerly flow and then by a ridge from an anticyclone to the south-west. Fronts crossed all districts from the north-west between the 4th and the 6th and further fronts moved south across all parts on the 9th. A complex area of low pressure to the east extended westwards on the 11th and the gradient became slack for a time, but between the 13th and the 15th a depression with associated fronts approached south-west England and crossed southern districts. The northerly airstream which followed was succeeded by a ridge of high pressure. During the period from the 18th until the last few days of the month a succession of frontal systems from the Atlantic crossed all areas, mostly moving from south-west to north-east. A small anticyclone which developed off north-west Scotland on the 28th moved to southern England on the 30th, and was followed by further troughs of low pressure.

### Weather

Rain and wintry showers fell in places during the first few days and it then became rather mild. Scattered showers and outbreaks of rain continued to occur, but from the 10th it became very cold with heavy falls of snow from time to time until the 19th. It then became milder again with further rain and showers, but colder weather and wintry showers returned by the 27th, although southern districts were sometimes mild. There were sunny spells during the month, but fog was sometimes persistent. Gales were severe at times on coasts.

### Wind

Winds were fresh or strong in exposed places for much of the month and not infrequently reached gale force. The gales were severe at times, particularly in southern England on the evening of the 25th, when gusts exceeding 70 kt were recorded at several places along the Channel coast. Fallen trees blocked roads in adjacent counties and a motorist was killed by one in Surrey. In the early hours of the 26th a gust of 88 kt was recorded at High Bradfield (405m) in South Yorkshire. Wind directions during the month were cyclonic at times, but were broadly between north-west and south-west until the 9th and between north-west and north-east from the 10th to the 17th. South-easterly to southerly winds then prevailed until the 26th, after which directions became variable.

### Temperature

Monthly mean temperatures were between 1 and 2 °C below normal in parts of Northern Ireland, southern Scotland and extreme northern England. Because mild spells alternated with colder weather, however, values elsewhere were generally not more than 1 °C below average and were even a little above average in parts of south-east England and northernmost Scotland. Temperatures were rather variable during the first week; there were some cold nights, but it was mild in many places after the first few days. In Scotland and extreme northern England monthly maxima were mostly recorded on the 4th or the 5th: at Craighdarroch (Highland Region) the temperature rose to 12.7 °C on the 4th. It became very cold in

most districts between the 10th and the 18th and the temperature of -17.8 °C at Braemar (Grampian Region) on the night of the 17th/18th was the lowest recorded there in January since 1963. The weather then became much milder, and over most of England and Wales maximum temperatures for the month occurred on the 25th, when Innsforth (Gloucestershire) recorded 13.6 °C, but cold conditions returned to most districts towards the end of the month.

### Rainfall (including melted snow)

Monthly rainfall totals were above normal almost everywhere in England, except in the north-west, with values exceeding 150 per cent in places on the eastern side. In Northern Ireland eastern counties also had the higher percentages, but there was no clear pattern in Wales. Rainfall in Scotland was generally below average in inland areas and above average in the north-west, the south-west and the east. Totals in the south-east exceeded 150 per cent of average in places and Whitcheater (Borders Region) recorded twice its normal amount of rain for January. In marked contrast, some places in and around the Great Glen had less than half their usual rainfall. Much of the precipitation during the month was of a wintry character, particularly in the north, but most districts also had showers or longer periods of rain and there were some thunderstorms. Daily rainfalls exceeding 50 mm mostly occurred in northern areas: at Stonethwaite (Cumbria) 73.2 mm fell between 1034 GMT on the 30th and 0200 GMT on the 31st.

### Snow

Snow and sleet fell in some districts at the beginning and end of the month, but the heaviest snowfalls occurred between the 10th and the 19th. Deep drifts made roads impassable in northern areas and in the north Midlands, where several people died when their cars were stranded. Undrifted snow

lay to depths of at least 20 cm in the Scottish mountains and in the Pennines, exceeding 40 cm in places around mid-month and in the third week. Measurements of 10 to 14 cm were made in level snow in south-east England on the 12th and 13th (a depth of 25 to 30 cm was reported on the 12th near Ashford in Kent). In the south-west and in the Welsh mountains between the 13th and the 18th depths ranged from about 20 to 25 cm, with drifting in places.

### Sunshine

Sunshine was above average in Devon and Cornwall, along the south coast of England and in most districts north of a line from the Wash, through the central Midlands, to North Wales. Monthly totals were well above normal in places, exceeding 150 per cent in the Torbay (Devon) area, around Glasgow and in Shetland, where Baltasound, with 164 per cent of average, had its sunniest January since 1960. Wales and remaining areas of England had less sunshine than is usual for the month and the dullest places were in the Salisbury Plain area.

### Fog

Patches of overnight fog formed fairly frequently during the month and affected most districts. The fog was often dense and slow to clear and was sometimes freezing. It was particularly persistent in parts of south-east England and East Anglia on the 30th and in the Belfast and Glasgow areas on the 31st. Hill fog associated with precipitation was sometimes widespread. Fog also formed along coasts from time to time.

### Miscellaneous Phenomena

On the morning of the 25th an unusually sharp fall of pressure occurred in a short period over many parts of southern England: at Kew Observatory (Greater London) the fall equalled 6 mb in 10 minutes. The aurora was observed in Scotland on one night.

Table 1 District values

| District                 | air temperature °C |              |                         |      |      | mean 30-cm earth temp °C | rain-days | rainfall | sun-shine |
|--------------------------|--------------------|--------------|-------------------------|------|------|--------------------------|-----------|----------|-----------|
|                          | Highest Max.*      | Lowest Min.* | max.                    | min. | mean |                          |           |          |           |
|                          |                    |              | difference from average |      |      |                          |           |          |           |
| 0 Scotland N             | 11.5               | -8.0         | -0.6                    | -0.3 | -0.5 | -0.3                     | 0         | 76       | 125       |
| 1 Scotland E             | 11.7               | -17.8        | -0.8                    | -0.6 | -0.7 | -0.1                     | -1        | 117      | 116       |
| 2 England E & NE         | 12.4               | -9.8         | -0.8                    | -0.6 | -0.7 | -0.6                     | +2        | 139      | 116       |
| 3 East Anglia            | 12.1               | -5.9         | -0.6                    | 0.0  | -0.3 | -0.3                     | +4        | 125      | 94        |
| 4 Midland Counties       | 13.0               | -9.0         | -0.8                    | -0.6 | -0.7 | -0.9                     | +1        | 127      | 97        |
| 5 England SE & Central S | 12.4               | -6.0         | -0.3                    | +0.2 | -0.1 | -0.4                     | +3        | 122      | 90        |
| 6 Scotland W             | 10.4               | -13.0        | -0.9                    | -1.0 | -0.9 | -0.8                     | -1        | 74       | 130       |
| 7 England NW & Wales N   | 12.0               | -12.8        | -1.0                    | -0.6 | -0.8 | -0.6                     | +2        | 98       | 98        |
| 8 England SW & Wales S   | 13.0               | -5.5         | -0.7                    | -0.7 | -0.7 | -1.1                     | +3        | 109      | 98        |
| N Ireland                | 11.2               | -7.9         | -1.0                    | -1.3 | -1.1 | -0.6                     | -1        | 105      | 110       |
| Scotland                 | 11.7               | -17.8        | -0.8                    | -0.6 | -0.7 | -0.4                     | -1        | 89       | 124       |
| England & Wales          | 13.0               | -12.8        | -0.7                    | -0.4 | -0.5 | -0.7                     | +3        | 120      | 99        |

\*Highest maximum and lowest minimum of District Value Stations.