

# MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

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## Very dry; temperature and sunshine about average

A cold front became slow moving on the 1st over southern Scotland. Early on the 2nd an anticyclone over the Continent began to intensify; the high pressure blocked the eastward movement of further fronts until after the 11th, when pressure began to fall. Meanwhile, weak frontal activity affected northern and western parts of Scotland and northern England. During the 16th a frontal trough crossed mainly southern parts of England and Wales. A succession of fronts moved rapidly across all areas of the United Kingdom, finally clearing eastern England early on the 18th. Later that day a warm front advancing from the west crossed all parts, with the cold front clearing Kent late on the 19th. Later on the 20th a warm front crossed south-west England and South Wales and moved north-eastwards before becoming slow moving from south-west Scotland to Humberside on the 21st. On the 22nd a cold front crossed Scotland, continuing southwards on the 23rd to clear south-east England during the afternoon. All areas then came under the influence of an anticyclone centred to the south-west of the British Isles and drifting slowly eastwards. On the 25th and 26th fronts moving to the north of the centre of the high crossed all areas, clearing southern England by late afternoon on the 26th. On the 27th a further eastward-drifting anticyclone extended its influence to all parts of the United Kingdom. During the 28th the high centre transferred eastwards and a frontal system crossed Scotland, continuing southwards during the 29th. However, pressure again began to rise and the fronts were pushed away to the north-east during the 30th. Early on the 31st, as the anticyclone drifted southwards and began to decline, vigorous fronts moved across all areas, crossing all but the southernmost counties.

### Weather

Most parts of the United Kingdom had dry weather during the first two weeks. Over England and parts of southern and central Scotland a combination of very light winds and clear skies overnight produced some severe frosts between the 11th and 16th. The cold weather gave way gradually on the 16th and 17th to mild moist Atlantic air, bringing rain to many places; a thunderstorm was reported at Prestwick, Strathclyde Region and hail showers were reported in south-west England and South Wales on the 20th. Heavy rain on the 21st accompanied by gale force winds washed away bridges, flooded roads and blocked railways, particularly in the areas of Sheffield, Manchester, the Severn Valley and the Welsh Marches; during the next 36 hours occasional rain continued to affect many areas, often accompanied by strong winds. It continued unsettled for the next few days as very disturbed and windy weather with bands of rain advancing from the west alternated with sunshine and showers until the 24th, when settled weather returned to much of the United Kingdom. Many parts became unsettled once more on the 31st.

### Wind

The 23rd was a very windy day, with gusts of over 50 kn to 60 kn in places from west Wales to Kent; a squall line brought down power lines in

several parts of Shropshire. On the 31st winds were very strong over northern parts of the United Kingdom and several places in northern Scotland recorded gusts over 60 kn: at Butt of Lewis, Western Isles a gust of 96 kn was recorded during the late evening, equalling the record for December set at Stornoway and Benbecula, Western Isles in 1956 and at St Mary's, Isles of Scilly in 1935. Wind directions were mainly variable or easterly until the 12th, then became mainly southerly, becoming mainly westerly from the 18th onwards, before backing once more to southerly at the end of the month.

### Temperature

Mean monthly temperatures were generally below normal in southern and eastern areas but above normal elsewhere, ranging from about 1.5 °C above normal in north-west Scotland to 1 °C below normal in East Sussex. On the 11th temperatures stayed at or below freezing throughout the day over much of England and Wales. The highest temperature of the month was 15.6 °C at Elmstone, Kent on the 22nd and the lowest was -13.3 °C at Grendon Underwood, Buckinghamshire on the 12th.

### Rainfall

Monthly rainfall amounts were below normal over the United Kingdom as a whole, and much of southern England and South Wales had less than half the normal rainfall amount, with as little as 14% of average falling at Odiham, Hampshire. In contrast, 144% of average rainfall fell at Holme Moss, West Yorkshire.

The provisional rainfall value for England and Wales for the month makes it the driest December since 1988. Northern Ireland had the wettest December since 1986, ending a sequence of five dry Decembers. Rain came to many places during the 16th and 17th, with much of England and Wales having the first significant rainfall of the month. Among heavy falls were 116 mm at Holme Moss, West Yorkshire, 80 mm at Malham Tarn, North Yorkshire, 78 mm at Moel Cynnedd, Powys, 68 mm at Clatteringshaws, Dumfries and Galloway and 67 mm at Slaidburn, Lancashire on the 21st, 62 mm

at Widdybank Fell, Co. Durham on the 20th and 58 mm at Loch Bradan, Co. Tyrone on the 18th.

### Snow

On the 20th snow fell as far south as Cambridgeshire and sleet was reported in southern Hampshire on the 20th. Further falls of snow were reported, mainly over high ground in Scotland on the 21st, and sleet was reported as far south as the Midlands. Reports of snow falling in the north, especially over the hills, continued up until the 24th.

### Sunshine

Monthly sunshine amounts were above average in many eastern areas, but generally dull in northern and western areas, exceeding 140% of average in the London area and around Tyneside, but with less than 40% of the average sunshine in much of the Scottish Highlands.

It was dull in the south for the first few days, then sunny on the 6th over England and Wales. Northern Ireland reported the dulllest December, together with December 1981, since 1977. Most sunshine in a day was 7.2 hours at Jersey Airport on the 1st and Rustington, West Sussex on the 6th and the most in the month was 80.8 hours at Jersey, St Helier.

### Fog

Fog formed frequently overnight until the 17th. Fog was widespread on the 7th and from the 15th to 17th, and persistent on the 9th, 11th and 16th. Fog was dense for a time on the 10th, 14th and 15th and thick for a while on the 16th. Hill fog occurred in the north on the 2nd and 3rd. Between the 8th and 16th patches were of freezing fog and these failed to clear from some places during the day with temperatures staying below freezing; the Midlands and north were particularly badly affected and on the 11th temperatures stayed at or below the freezing point over much of England and Wales throughout the day.

### 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	13.2	−9.6	+1.3	+0.7	+1.0	+0.7	−5	87	59
1 Scotland E	14.2	−8.1	+1.0	−0.3	+0.4	+0.5	−8	67	93
2 England E & NE	15.1	−9.8	+0.7	−0.3	+0.2	+0.2	−9	73	109
3 East Anglia	14.9	−10.2	+0.2	−0.5	−0.2	+0.3	−8	39	109
4 Midland Counties	15.0	−10.1	0.0	−0.4	−0.2	+0.5	−9	49	77
5 England SE & Central S	14.3	−9.2	+0.2	−0.3	−0.1	+0.2	−9	26	121
6 Scotland W	12.8	−10.2	+0.8	+0.6	+0.7	+0.7	−5	109	61
7 England NW & Wales N	14.6	−7.2	+0.5	+0.6	+0.6	+0.9	−8	82	97
8 England SW & Wales S	14.5	−9.2	−0.1	+0.4	−0.1	+0.2	−10	38	80
N Ireland	14.4	−4.6	+1.1	+1.3	+1.2	+1.2	−7	109	72
Scotland	14.2	−10.2	+1.0	+0.3	+0.7	+0.6	−6	90	71
England & Wales	15.1	−10.2	+0.3	−0.1	0.0	+0.4	−9	53	99

\* Highest maximum and lowest minimum of District Value Stations