

# MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

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## Wet and very windy

On the 1st an anticyclone moved away eastwards and a low-pressure area lay to the south-west of the British Isles. By the 2nd low pressure had developed over the Bay of Biscay and began to move northwards over England and Wales during the 2nd and 3rd, reaching southern Scotland on the 4th. On the 5th fronts associated with a deep depression centred to the south of Iceland approached western areas of the United Kingdom, crossing all parts on the 6th. By the 7th further active fronts affected south-western counties as a deepening Atlantic depression approached the British Isles. A complex area of low pressure extended from Iberia to Scandinavia on the 9th and 10th. During the 14th a deepening depression swung north-eastwards across central areas of Great Britain. On the 15th a further depression moved to the western approaches from the Bay of Biscay later in the day, deepening rapidly around midnight and turning northwards to cross England and Wales from south-west to north-east. Another depression moved northwards on the 17th and 18th along the western seaboard while its associated cold front became slow moving. During the 19th and 20th the cold front moved erratically eastwards, eventually clearing all areas on the 21st to be followed by a ridge of high pressure. On the 26th and 27th a slow-moving trough coupled with a depression moving northwards from Spain encroached on western areas of the United Kingdom. A further transient ridge of high pressure gave way to an unstable airstream at the end of the month.

### Weather

After a dry start to the month the weather became changeable with a great deal of rainfall in the first half of the month, bringing widespread flooding to the south and east. The storm on the 16th brought violent-storm-force winds and heavy rain to southern England causing chaos, with millions of trees uprooted or with branches broken off, many crashed into power lines, leaving a large number of homes without electricity, some for as long as a fortnight, and causing severe disruption to traffic. On the night of the 17th/18th there were strong winds and widespread flooding in western and northern areas of Wales; substantial amounts of rain fell in western parts of Wales. Flooding was worst around Carmarthen and the areas of the rivers Teifi and Tywi; one of the supports of the railway bridge over the River Tywi at Glanrhyd, near Llandeilo was damaged by flood-water and debris causing a Swansea to Shrewsbury train to plunge into the river with the loss of four lives. On the 20th torrential rain brought flooding to large areas of Northern Ireland with flood water nearly 3 m deep in the town of Strabane, Co. Londonderry and extensive flooding in Co. Tyrone and Co. Fermanagh. It remained unsettled for the last week or so, but with some fine and sunny interludes, but gradually becoming cooler. Thunder was heard over a very wide area on the 5th and in western areas around the 17th. Hailstones between 10 mm and 20 mm in diameter were reported at Slaidburn, Lancashire on the 8th.

### Wind

Winds became strong to gale force on the 7th and 8th and remained strong until the 11th. On the 16th, during the passage of a violent storm, several

gusts of more than 90 kn were recorded across the south-eastern corner of England. Mean winds at Shoreham-by-Sea, West Sussex exceeded hurricane force during the period beginning 0200 GMT, with mean hourly winds of 65 kn followed by 74 kn before the anemograph was stopped by a power failure sometime after 0400 GMT; two gusts of 98 kn were recorded, at 0310 GMT and 0330 GMT, and a gust of 100 kn was estimated from the wind chart some time during the power failure which lasted until 0740 GMT. There were further gales in western areas on the 17th and 18th. Wind directions were easterly for the first few days, but mainly southerly for the rest of the month.

### Temperature

October was a very cool month with mean temperatures below normal everywhere apart from one or two places in southern England and ranged from about 2 °C below normal in parts of central Scotland to near normal in parts of southern England. The highest temperature of the month was 22.1 °C at Aldenham School, Hertfordshire on the 4th, while the lowest was -7.0 °C at St Harmon, Powys on the 24th. Sheffield, Weston Park reported its lowest October day maximum air temperatures since 1975 and lowest mean temperature since October 1981.

### Rainfall

It was an exceptionally wet month; provisional figures suggest that it was the third wettest October in England and Wales since records began in 1727. Rainfall amounts ranged from about normal in north-west Scotland to three times the normal in parts of the south and east of England.

On the 9th torrential rain caused flooding and road accidents in south-eastern areas as gales swept the south coast; floods brought commuter traffic leaving London to a standstill, with road tunnels and underpasses, including the London (Heathrow) Airport access road, closed. Heavy rain caused severe flooding in many parts of the south-east on the 10th: in Essex some villages were almost cut off when the River Stour burst its banks after more than 50 mm of rain fell in less than

24 hours. Flooding to a depth of 4 metres was reported near Colchester. On the 17th and 18th substantial amounts of rain fell in western parts of Wales. Treacastle, Powys recorded 222 mm of rain over the five days from the 14th to 18th, 77 mm more than the monthly normal. Among heavy falls recorded were 66 mm at Plumpton, East Sussex on the 7th, 73 mm at Liphook, Hampshire on the 9th, 69 mm at Trawsfynydd, Gwynedd on the 16th, 62 mm at Camps Reservoir, Strathclyde and Bronydd Mawr, Powys on the 18th; Parkmore Forest, Co. Antrim measured 80 mm on the 21st. Hampstead, Greater London reported the wettest October since records began there in 1903.

### Snow

Snow was reported on a number of days in October, falling mainly in northern areas of Scotland. Fresh snow fell at Alwen, Clwyd (335 m a.m.s.l.) on the 9th, and there were reports of sleet showers on the higher parts of Dartmoor, near Okehampton, Devon on the 10th and 13th.

### Sunshine

Sunshine amounts were above normal in most areas, the notable exceptions being parts of the south coast of England, and northern England and eastern areas of Scotland where it was rather dull overall; amounts ranged from 80 per cent of average in the Isle of Wight to more than 150 per cent in the Western Isles of Scotland. The highest amount of sunshine in a day was 10.0 hours at Ryde, Isle of Wight and Jersey, Channel Islands on the 1st. The highest monthly sunshine total was 135.7 hours at Faversham, Kent.

### Fog

There were some overnight fog patches in places in southern England during the first five days. Patchy overnight fog occurred frequently in many parts of England from the 23rd to the end of the month. Hill fog occurred on the 26th and 31st, mainly in south-west England and there was fog on southern and western coasts on the 31st.

### Miscellaneous Phenomena

Dust-laden rain was reported over southern England on the 27th.

**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	17.8	−5.5	−1.0	−1.7	−1.3	−1.0	+1	90	117
1 Scotland E	17.2	−4.2	−1.7	−1.8	−1.8	−0.9	+1	132	90
2 England E & NE	19.0	−3.3	−1.2	−1.0	−1.1	−0.6	+4	178	101
3 East Anglia	20.0	−2.4	−0.3	−0.3	−0.3	+0.1	+4	253	111
4 Midland Counties	20.0	−5.1	−0.7	−0.8	−0.8	−0.5	+7	207	108
5 England SE & Central S	20.5	−0.5	−0.1	−0.1	−0.1	0.0	+7	266	104
6 Scotland W	16.3	−5.6	−1.5	−1.9	−1.7	−0.4	+3	121	105
7 England NW & Wales N	18.3	−1.2	−1.2	−0.6	−1.1	−0.3	+6	170	102
8 England SW & Wales S	19.8	−2.8	−0.7	−0.7	−0.8	−0.4	+7	206	103
N Ireland	17.1	−3.3	−1.5	−2.3	−1.9	−1.1	+1	132	142
Scotland	17.8	−5.6	−1.4	−1.8	−1.6	−0.8	+2	111	104
England & Wales	20.5	−5.1	−0.7	−0.6	−0.7	−0.3	+6	206	105

\* Highest maximum and lowest minimum of District Value Stations