

MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

DECEMBER 1974

VOLUME 91

NUMBER 12

Windy and very mild.

Throughout the month fronts repeatedly crossed the United Kingdom from the Atlantic. However, for most of the first three weeks and again during the last few days, pressure was unusually high immediately to the south or south-west of the country and frontal activity was sometimes very weak, especially in southern and eastern districts.

Weather

Exceptionally mild, windy weather predominated. Showers or periods of rain occurred frequently and there were scattered outbreaks of hail and thunder but amounts of rainfall were often small in eastern and southern districts. Snow or sleet (snow mixed with rain or drizzle) fell at times, chiefly in Scotland and over high ground in northern England and North Wales. Fog often enshrouded coastal districts and high ground in the west but it was too windy for fog to occur inland on lower ground on more than one or two nights.

Wind

Frequent fresh or strong winds blew mostly from a southerly or westerly point. Gales were often reported and occurred widely at times but Northern Ireland, western and northern Scotland and northern and western districts of England and Wales were the most affected. On the morning of the 11th, thundery squalls accompanied the rapid passage of a shallow wave depression across England and Wales and there were gusts of 60 kt or more in a number of places; a gust of 78 kt at Kew (Greater London) was probably the highest wind speed recorded there since records began in 1871. On the same day reports in the Press spoke of an incident at London/Heathrow Airport in which one large aircraft was lifted by a particularly fierce gust and was blown into another which was parked nearby. Gales on the 17th were severe on coasts and over high ground and strong cross-winds made driving hazardous on the more exposed sections of motorways. Several roads in East Anglia were blocked by fallen trees. Among noteworthy gusts of 70 kt or more recorded during the last week was one of 74 kt at the Lizard (Cornwall) on the 27th and one of 83 kt at South Gare near Middlesbrough (Cleveland) on the 28th; the mean hourly wind speed at the time of the latter gust was 56 kt. On the 29th Eskdalemuir (Dumfriesshire) had a gust of 83 kt.

Temperature

Monthly mean temperatures were as much as 2 to 4 degC above average in most districts, but in parts of northern and western Scotland, south-western Wales and south-western England they ranged from 0 to 2 degC above average. The warmth of December 1974 contrasted strikingly with the cold of October 1974 so much so that over England and Wales as a whole the mean temperatures for the two months were almost the same. Taking England, Wales and Northern Ireland together, this was probably the mildest December since 1934;

plant growth hardly ever ceased and in many places roses were still blooming over Christmas. Generally, the mildest weather of the month was experienced during the first week and again from the 20th to 31st. During the latter period a number of widely separated stations had maxima of 15°C or more. On the 23rd the temperature reached 15.8°C at Inverpolly (Ross and Cromarty) and on the 28th Elmstone (Kent) had a maximum of 16.2°C. On the same day the temperature rose to 15.2°C at Edgbaston, Birmingham, the highest December temperature measured there since records began in 1885. The middle part of the month was a little colder and frosts occurred widely in Scotland.

Rainfall (including melted snow)

Monthly rainfall totals were above average in parts of north-western and south-western England and in most of Northern Ireland, Wales and Scotland. In the north-western Highlands some stations had more than twice their normal rainfall for the month. Elsewhere it was drier than average and in small areas of eastern Scotland, eastern and southern England and the Midlands rainfall was less than half of average. Showers or periods of rain occurred frequently throughout the month but amounts of rain were often small in eastern and southern districts. Some of the showers were of hail and there were scattered thunderstorms on a few days. On the 11th three people were reported to have been injured when the roof of a house in Ramsgate (Kent) collapsed after being struck by lightning. Parts of northern Scotland had heavy rainfall towards the end of the first week but the wettest periods in Scotland as a whole and, indeed, in most of the other districts of the United Kingdom, occurred during the second half of the month. Among the larger falls recorded in a 'rainfall day' (the 24-hour period from 09 GMT on the date stated) were: 74.4 mm at Camusrorry (Inverness-shire) on the 6th, 83.8 mm at Lluest Wen Filters (Mid Glamorgan) on the 21st, 77.1 mm at The Nook, Thirlmere (Cumbria) on Christmas Day and 92.1 mm at Honister House, Borrowdale (Cumbria) on the 28th.

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	14.0	—4.6	+1.3	+0.8	+1.1	+0.5	+5	209	69
1 Scotland E	14.0	—2.6	+2.2	+2.1	+2.2	+1.4	+2	122	129
2 England E & NE	14.2	—2.5	+3.3	+3.1	+3.2	+1.3	—1	81	128
3 East Anglia	15.8	—0.7	+3.2	+3.6	+3.4	+1.7	—4	59	105
4 Midland Counties	15.7	—1.9	+3.6	+3.7	+3.7	+1.6	—1	74	125
5 England SE & Central S	15.5	—1.5	+2.7	+3.4	+3.1	+1.7	—3	67	107
6 Scotland W	12.9	—3.2	+2.1	+2.8	+2.5	+1.1	+9	154	82
7 England NW & Wales N	14.2	—2.5	+2.6	+3.3	+3.0	+1.6	+6	111	73
8 England SW & Wales S	14.8	0.7	+2.4	+3.4	+2.9	+1.5	+2	88	83
N Ireland	13.6	—0.6	+2.3	+2.4	+2.4	+0.7	+5	97	80
Scotland	14.0	—4.6	+1.9	+1.9	+1.9	+1.0	+5	162	93
England & Wales	15.8	—2.5	+3.0	+3.4	+3.2	+1.6	0	80	103

*Highest maximum and lowest minimum of District Value Stations.

Snow

Falls of snow or sleet were mostly confined to northern Scotland and to high ground in central and southern Scotland, northern England and North Wales. The snow did not lie for long except at times during the second and third weeks when there were some prolonged falls. Depths of 5 to 10 cm of undrifted snow were measured at places on lower ground and 10 to 20 cm or more accumulated on some of the higher slopes and persisted for a few days. On the 11th an undrifted depth of 27 cm was recorded at Leadhills (Lanarkshire) (387 m). Strong or gale-force winds caused drifting at times and there were reports in the Press of snowdrifts sufficiently deep to block several mountain roads in Scotland on the 17th.

Sunshine

In Northern Ireland and in most western districts of Great Britain sunshine totals ranged from 60 to 80 per cent of average. However, a few stations in the Scottish Highlands, in central Wales and also in south-western England had 50 per cent or less of average. By contrast, eastern and central districts of England and Scotland were sunnier than normal particularly in a small area in the Midlands and also at a few stations on eastern coasts where sunshine totals were 150 per cent or more of average. Stonehaven (Kincardineshire) had 78 hours of sunshine which represents 176 per cent of average and it is likely that this total was the highest recorded at Stonehaven in any December since 1931.

Fog

Short-lived patches of fog developed inland on lower ground on one or two nights, but hill fog and coastal fog occurred much more often, especially in western districts of Scotland, Wales and England. The hill fog was occasionally more widespread in heavier precipitation.

Miscellaneous Phenomena

The Aurora was observed in Scotland on 11 nights.