

Mainly mild; a record high temperature on the 10th

In general the first half of the month was anti-cyclonic in character, except from the 6th to 9th. The remainder of the month was dominated by depressions and troughs of low pressure.

Weather

After a cold and mainly dry first week the weather became milder and more changeable. During the second week a number of places in the north and west, some of them long-established, had their mildest January day on record and a new extreme maximum temperature for the United Kingdom occurred in north Wales (see below). The month was unusually free of snow.

Wind

From the 6th to 10th gales occurred at times in the north and west of the country, and winds reached severe gale force in a number of places in Scotland on the 9th; gusts of 68 kt were recorded at Benbecula (Inverness-shire) and Turnhouse (Midlothian). The period 23rd to 25th was very windy in many areas. Overnight on the 23rd/24th high winds caused local damage in southern England, and on the 24th a gust of 70 kt was recorded at Durham. On the next day a gust of 78 kt was reported at Hartland Point (Devon).

Temperature

Monthly mean temperature was above average everywhere, especially in north and east Scotland where it reached about 2 degC above average in a few places. It was colder than average for much of the first week and widespread air frost, severe in places at night, sometimes persisted throughout the day in parts of central, southern and eastern England. On the 6th mild weather spread north-eastwards across all districts and during the next 3 weeks temperatures were mostly above average. It was unusually mild from the 7th to 10th especially in the west and north, and on the 9th and 10th exceptionally high temperatures occurred in these regions. On the 9th Lairg (Sutherland) with 16.7°C equalled the highest air temperature recorded in Scotland since 1889, and 16.0°C occurred at Glenmore Lodge (Inverness-shire), height 341 metres. On the 10th the föhn effect of the Welsh mountains contributed to temperatures above 17°C along the coast of north Wales and 18.3°C was recorded at Aber (Caernarvonshire); this is the highest known air temperature recorded in the United Kingdom in January. On the same day a practically identical temperature occurred at Llandudno in the same county, and it was the mildest January day in central Manchester since records became available in 1877. Some old-es-

tablished stations had new January extreme temperature maxima on the 10th; these included 17.7°C at Rhyl (Flintshire) and 14.6°C at Bradford (West Riding of Yorkshire) where records began in 1905 and 1908 respectively. Cold weather returned on the last 4 days and air frost persisted all day in a few places in Scotland on the 30th and 31st.

Rainfall

The first 2 weeks were much drier than average in most districts but by the end of the month rainfall (including melted snow) was above average over most of the southern half of England and Wales, and also in parts of north-west and east Scotland. Although it was the wettest January since 1961 over England and Wales as a whole, most of northern England was drier than average. Northern Ireland and a large part of Scotland also had below average rainfall and less than half the average occurred in a few small areas. On the 5th and 6th heavy rain fell in the west and north; over 88 mm of rain were recorded at Waen Sychlwch (Carmarthen-shire) in the 24 hours commencing 09 GMT on the 6th. Further heavy rain occurred in these areas on the 8th and 9th including 80 mm at Blackwater Dam (Argyll) on the 9th. The 21st to 26th was generally a wet period in the west and south of the country and rainfall was sometimes accompanied by thunder; during this period swollen rivers caused local flooding in parts of southern England.

Snow

It was an unusually snow-free January. A little snow or sleet (rain or drizzle and snow) occurred in places on the first few days and the snowfall of late December persisted on the ground in southern England until about the 6th. During the subsequent mild spell, much of the lying

snow melted, even in the Scottish Highlands, and by the 10th the Cairngorms were reported to be virtually free of snow. However, snow occurred on high ground in northern Britain around the 17th and 23rd. A brief but heavy snowfall in parts of Wales and the West Country on the 31st led to snow depths of 10-15 cm in places for a short time in the afternoon. This snow soon melted and contributed to local flooding.

Sunshine

Amounts of sunshine were below average nearly everywhere. The exceptions were Northern Ireland, the north Wales coast, and a few isolated areas in England. Ross-on-Wye (Herefordshire) and Craibstone (Aberdeenshire) had their dullest January since records began in 1915 and 1925 respectively.

Fog

Overnight freezing fog occurred widely during the first 5 days; it was slow to clear and occasionally it persisted all day in places, especially in the east on the 3rd and 4th. From the 6th to 17th it was generally misty and hill fog occurred in the west.

Miscellaneous phenomena

On the 25th a number of whirlwinds were reported in south-east England and a waterspout was observed near the Isle of Wight. Violent winds associated with these phenomena caused local damage on the Isle of Wight and more widespread damage in parts of east London and the adjacent areas of Kent and Essex. At Welling (Kent) buildings were damaged, trees were uprooted and cars were overturned. The aurora was seen by observers in Scotland on 10 nights.

Table 1 District Values

January, 1971

District	air temperature °C					mean 30 cm earth temp °C	rain days	rain- fall	sun- shine
	High Max. °	Lowest Min. °	max.	min.	mean				
			difference from average						
0 Scotland N	13.9	-4.4	+1.1	+1.3	+1.2	---	-3	86	64
1 Scotland E	14.6	-3.8	+1.0	+1.8	+1.4	+1.2	+1	87	52
2 England N E	13.9	-6.1	+0.5	+0.9	+0.7	+0.9	-1	93	65
3 England E	12.8	-6.6	+0.7	+1.0	+0.9	+0.7	+1	128	76
4 Midlands	14.6	-6.7	+0.7	+1.3	+0.9	+0.5	+1	125	90
5 England S E	12.9	-8.6	+0.8	+1.3	+1.1	+0.2	+1	133	82
6 Scotland W	14.3	-10.3	+1.1	+1.5	+1.3	+0.7	-1	68	70
7 Eng NW - Wales N	15.1	-9.1	+0.9	+1.1	+1.0	+0.7	-2	78	97
8 Eng SW - Wales S	14.0	-11.0	+0.4	+1.2	+0.8	+0.2	+3	154	62
N Ireland	13.2	-5.1	+1.1	+1.0	+1.0	—	-2	71	115
Scotland	14.6	-10.3	+1.1	+1.5	+1.3	—	-1	80	62
Eng - Wales	15.1	-11.0	+0.7	+1.1	+0.9	—	+1	119	79

* Highest max. and lowest min. of the District Value Stations.