

MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

FEBRUARY**1979**

VOLUME 96

NUMBER 2

Mostly cold and snowy, but milder later.

A depression crossing southern districts on the 1st was succeeded by a ridge of high pressure, while a deepening depression affected the far north. Fronts approaching from the Atlantic then became almost stationary over south-western Britain as an anticyclone moved from north-west Scotland to the Low Countries on the 5th and 6th. A depression crossed southern areas on the 7th, but a ridge from another anticyclone to the north then extended south-eastwards over the North Sea, while further fronts became slow-moving over south-western districts. The ridge receded northwards, allowing frontal systems to affect southern areas. A strong east to north-easterly flow was maintained as pressure rose to the north and north-east on the 15th.

The Scandinavian anticyclone intensified, but began to move away eastwards on the 17th. Atlantic fronts moved slowly into western Britain on the 18th and a cold front crossed all areas on the 22nd. A developing anticyclone to the south-west of the British Isles then drifted north-eastwards and pressure reached 1045 mb over the south Midlands on the 25th. This is the highest mean-sea-level pressure recorded in England since December 1970. The anticyclone then moved away south-eastwards and fronts from the north-west crossed all areas.

Weather

This was another cold month, although it became milder during the last week. Snowfall was prolonged and heavy in some districts, particularly in eastern England. The fresh snow added to the depths which had already accumulated over high ground in January. Considerable drifting occurred in the strong easterly winds which persisted during the middle part of the month, and the inclement weather caused severe hardship and some loss of life. Many northern areas were much drier than usual, however, and it was quite sunny in Scotland. Freezing fog was occasionally reported, and hill fog formed extensively at times in England and Wales.

Wind

Winds were fresh or strong in the north and west at the beginning of the month and gales occurred in the far north of Scotland on the 3rd. Wind directions were variable at first, but then became mainly south-easterly until the 7th. Fresh or strong east to north-east winds prevailed between the 8th and the 16th, with gales in some coastal areas and over high ground. Directions became south-easterly again during the third week, but were mostly between south-west and north-west after the 21st. Gales occasionally affected exposed places in the north during the second half of the month and winds freshened in western and southern districts on the 27th.

Temperature

Monthly mean temperatures were below average everywhere, with departures from the normal between 2 and 3 °C over most of England and Wales, and also in parts of central and south-west Scotland. Mean values were mainly between 1 and 2 °C below average elsewhere.

Although it was occasionally mild in south-west England and the Channel Islands, most areas were cold until the early part of the third week. There were some very cold nights in the north, the temperature

falling to -16.4 °C at Lagganlia in the Scottish Highlands on the night of the 8th/9th, and it was very cold generally around mid-month, with temperatures remaining below 0 °C all day in many parts on the 15th. Northern and western coastal districts gradually became milder, and on the 20th Poolewe and Diabaig, both in north-western Scotland, recorded maxima of 12.9 and 12.5 °C respectively. Daytime temperatures were mostly near the normal after the 21st, but it was cold along the east coast of England and night frosts continued to occur in inland areas.

Rainfall

Rainfall totals ranged from over 200 per cent of average in parts of south-west England to less than 10 per cent of the normal in places along the coast of eastern Scotland. Monthly totals were generally above average east and south of a line from Humberside to Dorset, and also in the Channel Islands, the Isles of Scilly, Cornwall, south Devon and in parts of Pembrokeshire. Rainfall was well below average in most other areas and less than half the normal fell in northernmost countries of England and over most of Northern Ireland and Scotland. Many eastern parts of Scotland had less than 25 per cent of the average, and at Arbroath (Tayside), the total of 2 mm was the lowest recorded there in any month since February 1934. Much of the month's precipitation was of a wintry nature, although heavy rain fell at times and isolated thunderstorms occurred during the last week.

Snow

Wintry showers or periods of snow occurred in most areas until about the 17th. The snow was heavy at times, particularly in the Northern Isles at the beginning of the month, in south-west England and South Wales on the 9th/10th and in many districts between the 14th and the 16th. Snowfall was prolonged during the last of these periods, the heaviest falls occurring from the Borders southwards to the north Midlands. Accumulated depths in level snow exceeded 50 cm over the Pennines, but the strong winds caused deep drifts. At lower levels the greatest

depths were mostly recorded in East Anglia, where undrifted depths of between 20 and 30 cm were measured at several places around mid-month. Falls of snow or sleet became less frequent after the 18th, occurring mainly on the 22nd and the 28th. Snow lay throughout the month over high ground in northern areas and also in the Peak District and North Wales, but in general the snow-line receded slightly during the last 10 days.

Sunshine

With the exception of the eastern coastal strip from Fraserburgh southwards, this was a sunny month in Scotland, with totals exceeding 130 per cent of the average in the Outer Hebrides and in parts of the Highland Region. Sunshine was also above average in north-western England, the north and west Midlands, North Wales and in parts of Northern Ireland. Most remaining areas had less than their normal sunshine for the month and only about 65 per cent of the average was recorded in Kent and in parts of East Anglia. Sunny intervals occurred in northern and some western districts from time to time throughout the month, but it was often dull in southern and eastern England during the first three weeks.

Fog

Hill fog formed extensively from time to time over England and Wales until the 20th. Occurrences of overnight fog on lower ground were less frequent, but fog developed widely over the Midlands and parts of eastern England on the 6th, when freezing fog persisted until the afternoon in places. Overnight fog patches also formed over low ground in southern and central England between the 19th and the 22nd, and south-eastern counties were affected by fog, which was slow to clear in places, on the 26th. Coastal fog occasionally developed during the first half of the month, and both hill and coastal fog were sometimes associated with precipitation.

Miscellaneous Phenomena

None reported.

Table 1 District values

District	air temperature °C					mean 30-cm earth temp °C	rain-days	rainfall	sunshine
	Highest Max*	Lowest Min*	max.	min.	mean				
			difference from average						
0 Scotland N	12.0	-9.2	-1.7	-1.6	-1.7	-1.6	-6	51	127
1 Scotland E	10.3	-15.1	-2.1	-1.6	-1.9	-1.5	-7	21	111
2 England E & NE	8.2	-6.5	-2.8	-1.7	-2.2	-1.7	-2	101	84
3 East Anglia	8.6	-6.5	-3.1	-1.6	-2.3	-1.7	-2	137	74
4 Midland Counties	10.1	-6.7	-3.2	-2.1	-2.6	-1.9	-1	107	96
5 England SE & Central S	10.1	-6.4	-2.5	-1.8	-2.1	-1.7	-1	114	71
6 Scotland W	10.5	-11.0	-1.9	-1.8	-1.9	-1.9	-6	37	121
7 England NW & Wales N	10.1	-8.3	-2.6	-1.7	-2.1	-1.8	-5	55	106
8 England SW & Wales S	11.6	-7.0	-2.4	-2.0	-2.2	-1.7	0	120	85
N Ireland	10.2	-6.7	-2.0	-1.4	-1.7	-1.7	-6	38	103
Scotland	12.0	-15.1	-1.9	-1.7	-1.8	-1.7	-6	36	120
England & Wales	11.6	-8.3	-2.8	-1.8	-2.3	-1.7	-2	106	86

* Highest maximum and lowest minimum of District Value Stations