

MONTHLY WEATHER REPORT

FEBRUARY 1983

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

VOLUME 100

NUMBER 2

Mainly cold and dry; frequent snow in north and east before mid-month

On the 1st an intense depression moved away from Scotland to southern Scandinavia. During the night of the 3rd/4th an intensifying anticyclone came south-eastwards across the United Kingdom, but within 24 hours fronts had crossed all parts, the associated low passing down the North Sea to central Europe during the 5th and 6th. Meanwhile, a large anticyclone became established to the west of the British Isles. Between the 9th and 11th a cold front moved southwards over all districts while on the 12th a warm front followed across Scotland and Northern Ireland.

The anticyclone now advanced and intensified to become almost stationary between Scotland and Norway until the 19th, then being replaced by a new high moving south-eastwards over the North Sea to Germany on the 21st. The high pressure over Europe began to give way on the 23rd allowing the encroachment, from the south-west, of fronts which had approached on the 20th. These fronts reached the north-east on the 26th. Next day the frontal system of a vigorous, north-eastward-moving depression near the north of Scotland crossed all districts. But the month ended with a developing ridge of high pressure following into the west.

Weather

After a stormy start to the month all districts were cold with frequent wintry precipitation and, in some northern and eastern areas, heavy snowfall. Towards mid-month, however, the weather became mainly dry and although sunny at times it remained generally very cold. Finally, during the last few days, milder weather with rain at times spread to all parts. Isolated thunderstorms were reported on several occasions, mainly early in the month and particularly on the 1st and 7th.

Wind

High winds moderated only slowly during the 1st; in the north there was a widespread severe gale with storm force winds in places for a time while in the south winds were generally strong or gale force. Extreme gusts reached 85 kn at Sumburgh, Shetland, 82 kn at Lynemouth, Northumberland and 106 kn on Lowther Hill, Dumfries and Galloway Region. At least six persons were killed and many more seriously injured, mostly by falling objects, while widespread structural damage was reported, vehicles blown over and several vessels stormbound in Liverpool docks. But, unlike the storm of 31 January 1953, which caused catastrophic flooding along the North Sea coast of England, there was sufficient offshore component to the winds for the very high spring tides not to test the sea defences too seriously, although the Thames barrier was raised for the first time. Some coastal flooding did, however, occur in places, in particular at Oban, Strathclyde Region and between Whitby, North Yorkshire and Great Yarmouth.

It continued to be windy at times until the 11th with further severe gales in places, mostly in the north and west. Subsequently, winds were much lighter generally, although they were strong at times in the south-west, and in most areas during the last two days of the month. Wind directions gradually veered over the month, being mainly from a westerly point until the 5th, northerly to the 12th, then from an easterly point until the westerlies returned on the 26th.

Temperature

Temperatures were below average for the month throughout the United Kingdom, ranging from rather more than 2 °C below in some central areas of England and Wales to less than 1 °C below in parts of Scotland, mainly in the north and west, and in Co. Antrim and Co. Londonderry.

For much of the month it was very cold, particularly between the 7th and 23rd, with severe frost in places, mainly in the north; for example the temperature fell to -14.2 °C at Lagganlia, Highland Region on the 19th. The night of the 3rd/4th was also very cold over much of Britain with minima below -7 °C while on the 24th -13.9 °C was recorded at Balmoral, Grampian Region. Only in parts of the south during the first few days, over Scotland around mid-month and more generally towards the end were temperatures above average with maxima of 11.9 °C at Plockton, Highland Region on the 25th and 13.6 °C at Faversham, Kent on the 26th.

Rainfall

It was very dry over much of the United Kingdom with less than half the month average rainfall being recorded at most places in the western half of England, central and north-western Scotland, in parts of Wales and Northern Ireland, and here and there in eastern Britain. Scotland had its first month with rainfall generally below average since July 1982. Rainfall was, however, above normal in scattered areas in the east of Britain, in particular in East Anglia, and locally in Jersey and Co. Antrim. More than 150 per cent of average fell at a few places in eastern Kent.

Precipitation, much of it wintry, was frequent during the first part of the month before a spell of mainly dry weather, lasting from around the 7th to the 22nd in the south-west and from around the 13th to the 25th elsewhere, was established. Rainfall was heavy over north-western areas on the 4th while all parts had some rain at times during the last four days.

Snow

Snow showers occurred in all districts, mainly during the first half of the month. They were particu-

larly frequent over high ground in northern Scotland at first and over eastern districts between the 7th and 9th, with heavy falls in some areas. A longer period of snow also moved southwards over much of Britain between the 9th and 11th. Among the heaviest accumulations of snow were 23 cm at Kielder Castle, Northumberland by the 8th, 30 cm at Folkestone, Kent by the 10th and 50 cm at Braemar, Grampian Region and 15 cm at Cranwell, Lincolnshire by the 11th. Many roads were blocked by drifts, much of eastern Kent twice being cut off, whilst many football matches were postponed on the 12th. Over most central and western areas snowfall was slight, although moderate accumulations were reported on the 20th in parts of south-western Wales.

Sunshine

Sunshine totals were above the monthly average over much of southern England, East Anglia, Wales and the western half of Scotland, in parts of Northern Ireland, north-east and east England, and in the Channel Islands. More than 150 per cent of average was recorded locally in south-east England. Elsewhere there was less sunshine than usual. Less than half the average occurred in Shetland with Lerwick having its dullest February since records began there in 1922.

The sunniest days generally were the 18th and 22nd, but at Poolewe, Highland Region 69.3 hours, on average of nearly six hours sunshine each day, were recorded between the 14th and 25th. In most parts the dullest period was from the 24th to the 27th.

Fog

Overnight fog patches formed occasionally, mainly over northern Britain around mid-month, although on the 2nd widespread freezing fog over Northern Ireland persisted until early afternoon. Hill fog formed from time to time, being widespread over northern areas on the 12th and 13th. Extensive fog, especially over the higher ground and coasts also affected many parts, except the north-west, between the 24th and 26th.

Miscellaneous Phenomena

None reported.

Table 1 District values

District	air temperature °C					mean 30-cm soil temp °C	rain days	rainfall	sunshine
	Highest Max*	Lowest Min*	max.	min.	mean				
	difference from average					% of average			
0 Scotland N	10.8	-9.5	-0.8	-0.9	-0.9	-0.4	-4	55	83
1 Scotland E	10.6	-13.5	-1.3	-1.1	-1.2	0.0	-2	69	89
2 England E & NE	10.5	-6.7	-1.9	-1.1	-1.5	-0.5	0	80	99
3 East Anglia	12.1	-7.8	-1.9	-1.0	-1.5	-0.1	-1	99	131
4 Midland Counties	12.1	-8.8	-2.3	-1.7	-2.0	-0.5	-2	56	90
5 England SE & Central S	12.8	-7.0	-1.7	-1.3	-1.6	-0.5	1	64	126
6 Scotland W	10.6	-10.6	-0.7	-1.3	-1.0	-0.5	-6	56	112
7 England NW & Wales N	12.6	-7.7	-1.5	-1.4	-1.5	-0.5	-4	56	100
8 England SW & Wales S	12.8	-5.5	-1.9	-1.5	-1.7	-0.8	-4	45	119
N Ireland	9.3	-6.0	-1.3	-0.9	-1.1	-0.5	-7	67	96
Scotland	10.8	-13.5	-0.9	-1.1	-1.0	-0.3	-4	60	95
England & Wales	12.8	-8.8	-1.9	-1.3	-1.6	-0.5	-2	67	111

* Highest maximum and lowest minimum of District Value Stations