

# MONTHLY WEATHER REPORT

# MARCH

# 1977

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## Mostly mild, but cold in the last week, with some snow.

Pressure was low to the west of the British Isles until the 18th and a succession of fronts crossed all areas. A depression from the north-west then moved south-south-east across the United Kingdom to reach northern France on the 20th. High pressure developed between Iceland and Scandinavia from the 20th to the 23rd, while troughs of low pressure from the east mainly affected southern England. An occlusion from the Atlantic moved north-eastwards into western districts, but returned southwards on the 27th, followed by a cold front from the north. An anti-cyclone centred over Iceland then moved southwards to Biscay during the next few days and fronts from the west crossed all districts at the end of the month.

### Weather

The weather was mostly mild until the 19th, with periods of rain and drizzle, some thunder and hail, and fairly frequent gales on exposed northern and western coasts. Hill and coastal fog developed at times, mainly during the first week. Colder conditions gradually reached all areas after the 19th and there were showers or outbreaks of rain in many districts. Hail, sleet and snow fell at times in the north and spread southwards on the 27th. Wintry showers occurred widely on the 28th. Milder weather, with rain or showers, reached most districts at the end of the month and there were further gales on exposed coasts.

### Wind

Winds blew mainly from points between south-east and south-west until the 18th and were frequently fresh or strong on western and northern coasts during this period, reaching gale force in exposed places on a number of days. The gales were severe at times, and on the 15th the wind gusted to 97 kt at the high-level station at Snaefell (Isle of Man). Directions began to change on the 19th and were mainly between east and north from the 20th to the 28th. Winds were still fresh or strong in places, with occasional gales. Between the 29th and the 31st southerly or south-westerly winds gradually reached all districts and speeds increased to gale force in places. The gales were severe in exposed places on the 31st.

### Temperature

Monthly mean temperatures were above average everywhere, the difference from normal ranging from about +0.5°C in some western parts to around +1.5°C in many other districts. Values were about 2.0°C above the normal in some places along the coasts of south-east England and East Anglia. The month started with a cold night in Scotland and northern England, with temperatures falling to around -7°C at a few places. Mild weather spread to all areas by the 2nd, however, and maximum temperatures for the month south of a line from the Wash to Cardigan Bay were widely recorded on this date, when temperatures exceeded 18°C at many places in East Anglia and southern England: Exeter Airport, with a maximum of 20.2°C, had its warmest March day since at least 1944. The mild conditions lasted until about the 19th, after which the weather became colder. Most districts had a cold spell from the 27th, but milder weather reached western and northern areas

on the 30th and spread to most districts on the 31st.

### Rainfall (including melted snow)

Although monthly rainfall totals were below average in parts of northern Scotland, in a few places in eastern Scotland and northern England, along the west coast of Wales, and in parts of North Wales, the north Midlands, Lincolnshire and East Anglia, rainfall was above average almost everywhere else. Values were between 150 and 200 per cent of the normal over high ground in Wales, on the North Yorkshire Moors and in parts of southern England, and more than twice the normal amount of rain fell at Cheltenham (Gloucestershire). In Scotland, where rainfall exceeded 150 per cent of average over large areas away from the east coast and northernmost parts, some places in the Western Isles and in the Grampians and Southern Uplands had more than twice their normal rainfall for March. On the 'rainfall day' of the 30th (the 24 hours from 09 GMT) falls exceeding 70 mm were recorded at several places in western Scotland and 94.0 mm fell at Fasnacloch (Strathclyde). Thunderstorms occurred mainly around mid-month and in the third week.

### Snow

A little snow or sleet fell during the first week, mostly in northern areas, and also around mid-month in Wales and south-west England. Sleet was occasionally reported in Scotland from about the 22nd, but most areas had showers of snow or sleet from the 27th onwards, and sleet was reported as far south as Guernsey on the 28th. Snow depths were minimal in southern areas throughout the month, but undrifted depths of about 8 cm were recorded in Scotland during the last

few days. Snow lay throughout the month on the slopes of the higher Scottish mountains and in places in the northern Pennines.

### Sunshine

Except in a few places on the coasts of south-east England and East Anglia, in the Isles of Scilly, and in one or two isolated spots elsewhere, monthly sunshine totals were below average in all areas. Values were broadly between 75 and 100 per cent of the normal over most of eastern England, much of eastern and parts of central and northern Scotland, and also in Northern Ireland, Cornwall and in most of the islands to the north and west of Great Britain. Totals were between 55 and 75 per cent of average in remaining areas, and at Eskdalemuir (Dumfries and Galloway Region) and at Llety-Evan-Hen (Dyfed), both with only 56 per cent of their normal sunshine for the month, it was the dullest March since 1936 and 1947 respectively. Long sunny periods occasionally occurred, however, particularly in coastal districts.

### Fog

Widespread fog developed on coasts and hills at times during the first week, and sea and coastal fog affected parts of eastern Scotland and north-east England on the 19th and 20th. Overnight fog patches occurred in inland areas from time to time during the month, mostly in the first and fourth weeks. The fog was occasionally dense, but generally cleared fairly quickly.

### Miscellaneous Phenomena

In Scotland the aurora was observed on 6 nights.

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	16.3	-5.6	+0.6	+0.9	+0.8	+0.5	+3	135	81
1 Scotland E	16.0	-7.3	+0.7	+1.4	+1.0	+0.8	+7	146	78
2 England E & NE	16.5	-4.1	+1.1	+1.4	+1.3	+1.3	+4	125	88
3 East Anglia	17.7	-5.1	+1.2	+1.9	+1.6	+1.5	+5	110	91
4 Midland Counties	17.5	-4.9	+0.7	+1.7	+1.2	+1.1	+6	120	75
5 England SE & Central S	18.9	-4.2	+0.9	+1.9	+1.4	+1.6	+6	152	91
6 Scotland W	13.4	-7.3	+0.5	+1.2	+0.9	+0.5	+7	149	68
7 England NW & Wales N	17.2	-3.8	+0.6	+1.6	+1.1	+0.6	+5	121	69
8 England SW & Wales S	18.1	-2.7	+0.7	+1.6	+1.1	+1.3	+7	140	74
N Ireland	14.4	-3.6	+0.4	+1.3	+0.8	+0.7	+4	129	83
Scotland	16.3	-7.3	+0.6	+1.2	+0.9	+0.6	+6	143	76
England & Wales	18.9	-5.1	+0.9	+1.7	+1.3	+1.2	+5	128	81

\*Highest maximum and lowest minimum of District Value Stations.