

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers.

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January 1970 — *Very dull; cold at first then mild*

During the first week high pressure to the north-west and low pressure to the north-east resulted in a cold northerly airstream over all districts. Thereafter, low pressure became established in the eastern Atlantic and affected all areas of the British Isles at times with south or south-west winds predominating.

Weather — The first week was bright and cold with some heavy snowfall in the north. Frost was sometimes severe and on the 6th ice formed in the sea at Pegwell Bay (Kent). After the 9th the weather was changeable, dull and often wet and it was also very mild at times. These very mild periods melted the low-lying snow and an avalanche, in which three people were killed, occurred in west Scotland on the 18th.

Wind — Although winds were often strong the frequency of gales was about average. Gales were reported on 17 days in Scotland, 15 days in England (mostly in the south-west), 11 days in Northern Ireland and 10 days in Wales. They occurred mainly on coasts and were usually not widespread. However, gales occurred in many areas on the 8th and they were severe in the south and west; a gust of 66 kt was recorded at Ballypatrick Forest (Co. Antrim). On the same day many resorts in south-west England were flooded by sea-water blown over sea-walls by a south-easterly gale. It was very windy from the 14th to 21st and during this period coastal waters were rough; on the 21st the Fraserburgh (Aberdeenshire) lifeboat capsized in heavy seas and five members of the crew were drowned. The 23rd was windy everywhere and strong gusts which occurred in the south-west included 71 kt at Scilly.

Temperature — Monthly mean temperature was within 0.5 degC of average in most areas. During the first week or so frost occurred nightly in many areas and it was often severe, especially in the north. On the morning of the 7th very low temperatures occurred in most places and Newton Rigg (Cumberland) recorded its lowest January temperature since 1940. Except in Devon and Cornwall, day-time temperatures also were well below average and frost persisted throughout the day in some areas. Temperatures were a little below average again around mid-month in the north and on the last few days in many areas. Among minimum temperatures recorded were the following which occurred on the 7th: -21.1°C at Carnwath (Lanarkshire) and West Linton (Peeblesshire); -16.7°C at Newton Rigg and Alwen (Denbighshire); -11.6°C at Loughermore Forest (Co. Londonderry) and Knockmany Forest (Co. Tyrone). On the 8th, -11.6°C occurred again at Knockmany Forest.

After the 9th many places sometimes had above average temperatures both by day and by night. Maxima included the following on the 20th: 13.9°C at Rhyl (Flintshire), 13.8°C at Exeter (Devon); 13.3°C at Poolewe and Achnashellach (both in Ross and Cromarty). On the 21st, 12.8°C occurred at Hillsborough (Co. Down).

Rainfall — Parts of east Scotland were unusually wet and it was the wettest January at Montrose (Angus) since 1869. At Bridge of Dye (Kincardineshire) more than three times the average rainfall (including melted snow) was recorded of which a total of 163 mm fell during the period 14th to 17th. Over twice the average rainfall occurred in a small area of south Yorkshire, parts of Monmouthshire and on the south coast of Devon where Plymouth Hoe had its wettest January since records began in 1893. In contrast to these areas, rainfall was below half the average over large areas in north-west Scotland where Garthbeg (Inverness-shire) had its driest January since 1940. Less than a quarter of average rainfall occurred in a small area in Sutherland.

From the 9th, frequent belts of rain crossed most areas and some heavy falls occurred in western districts. Over 53 mm of rain were recorded at Seathwaite (Cumberland) in the 24 hours ending 0900

GMT on the 10th. 'Daily' falls in excess of 50 mm occurred in Wales on the 15th and nearly 64 mm of rain fell at Tollymore Park (Co. Down) on the 17th. Heavy rain fell in north-west England on the 19th and again on the 21st when more than 56 mm were recorded at Great Langdale (Westmorland). On the 24th rain fell in many areas especially in Northern Ireland, and on the 29th there was heavy rain in the south and west.

Thunder occurred locally on 3 days in Scotland and on 2 days in the London area and in Cornwall.

Snow — Snow showers were frequent in Scotland during the first week and they occurred also in northern England and Northern Ireland. There were some heavy falls in the mountains above 200 m and drifting occurred. On the 8th snow spread quickly from south-west England across all districts. Amounts of snow were generally less than 5 cm and a rapid thaw on low ground soon followed. Over the next week much of the snow lying on high ground gradually melted except at the highest levels in the north. On the 16th rain in eastern Scotland turned to snow and spread to northern England. During the next day or two further snow fell in these areas especially in the mountains where there was much drifting while the Northern Isles had snow showers. On the last few days small amounts of snow were reported in Wales, northern England and southern Scotland.

Sunshine — Amounts of sunshine were below average in most areas. The month was mostly dull after the first week. During the period 9th to 25th there was very little sunshine anywhere and a number of places in the west Midlands were completely sunless from the 7th to 21st. It was the dullest January at Cranwell (Lincolnshire) and Sutton Bonington (Nottinghamshire) since records began in 1921 and 1925 respectively.

Fog — On the 5th and 7th freezing fog occurred in many parts of the Midlands, northern England and southern Scotland; it was persistent in industrial areas and caused the closure of Liverpool Airport (Speke) for some hours on the 7th. During the last three weeks hill and coastal fog often affected many areas, occasionally disrupting air and sea traffic for short periods. Fog was particularly widespread in eastern and central England on the 25th and 28th.

Miscellaneous Phenomena — An avalanche occurred on Ben Nevis on the 18th and caused the deaths of three persons. The aurora was seen on 6 nights in Scotland.

TABLE I—DISTRICT VALUES, January 1970

DISTRICTS	AIR TEMPERATURE °C					EARTH TEMP. °C		RAIN DAYS	RAIN-FALL	SUNSHINE
	*Highest Max.	*Lowest Min.	Max.	Min.	Mean	Mean 30 cm.	Mean 122 cm			
0 SCOTLAND, N.	12.8	-9.4	-0.3	+0.2	-0.1	+0.1	+0.3	-3	68	67
1 SCOTLAND, E.	11.1	-10.6	-0.4	+0.3	0.0	+0.1	-0.3	+4	125	72
2 ENGLAND, N.E.	10.6	-10.6	-0.8	0.0	-0.4	+0.1	+0.1	+5	129	70
3 ENGLAND, E.	9.6	-10.0	-0.3	+0.3	0.0	+0.4	0.0	+4	101	56
4 MIDLANDS	10.7	-10.0	+0.1	+0.4	+0.2	+0.2	-0.3	+3	131	72
5 ENGLAND, S.E.	11.1	-9.4	+0.3	+0.9	+0.6	+0.2	-0.2	+4	130	62
6 SCOTLAND, W.	11.4	-17.4	-0.2	+0.1	-0.1	-0.3	-0.7	-1	80	70
7 ENGLAND, N.W. and N. Wales	11.6	-16.7	+0.1	+0.1	+0.1	+0.4	-0.1	+2	84	75
8 ENGLAND, S.W. and S. Wales	12.8	-11.1	+0.4	+0.3	+0.4	+0.1	-0.4	+3	141	76
N. IRELAND	12.2	-8.4	-0.1	-0.1	-0.1	—	—	+1	100	67
SCOTLAND	12.8	-17.4	-0.3	+0.2	-0.1	—	—	0	77	70
ENG. and WALES	12.8	-16.7	0.0	+0.3	+0.1	—	—	+3	118	66

*Highest Max. and Lowest Min. of the District Value Stations.