

# MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

# JULY

# 1978

VOLUME 95

NUMBER 7

## Mostly cool and changeable .

A depression to the south of Iceland moved to the northern North Sea between the 1st and the 3rd, its associated fronts crossing the British Isles. A north to north-westerly airstream then covered Britain, and fronts from the Atlantic crossed all areas after the 6th. A ridge from an anticyclone over the Norwegian Sea extended southwards over eastern districts on the 10th, and as the anticyclone gradually moved south-westwards to the Atlantic the whole of the British Isles came within its influence. The high pressure declined by the 18th and frontal systems associated with Atlantic depressions crossed all areas between the 22nd and the 28th. A weak ridge extended across Britain on the 29th, but fronts returned from the east on the 30th and a thundery depression moved from the continent to the English Channel area on the 31st.

### Weather

The early part of the month was mostly cool and unsettled, but temperatures rose during the second week and most areas had a spell of mainly dry and sunny weather until around mid-month. Cooler, changeable conditions returned, however, and outbreaks of rain became increasingly frequent after the 21st. There were thunderstorms at times during the last week and occasional gales in the north and west, but a brief warm spell also occurred. Fog patches affected northern and western coasts at times throughout the month and overnight fog occasionally developed in inland areas. Climbers on Ben Avon, in the eastern Grampians, reported a fall of snow at 900 m on the 6th and large patches of snow were still visible on the upper slopes of the Cairngorm mountains at the end of the month.

### Wind

Winds were fresh or strong on exposed northern and western coasts until the 9th, reaching gale force locally. Speeds then became light generally until around mid-month, although there were onshore breezes at times. Winds were occasionally fresh or strong on northern coasts during the third week, but such occurrences became more frequent after the 21st and there were gales at times in the north and west. South to south-west winds at the beginning of the month became northerly, then north-westerly, between the 3rd and the 9th. Directions were often variable between the 10th and the 17th, but were mainly west to north-west from the 18th to the 21st. South to south-west winds then predominated until the last few days, when directions became rather variable.

### Temperature

Monthly mean temperatures were below normal in all areas. Values were between 1.0 and 1.5 °C below average over most of England and Wales, although departures from the normal were greater than 1.5 °C in a few places, mostly in eastern England, and less than 1.0 °C in parts of southern and north-western England. In Northern Ireland and in Scotland, except in parts of the north and east, where values were between 1.0 and 1.5 °C below average, mean temperatures were generally between 0 and 1 °C below normal. Although the month was generally

cool, it became warm in many parts between the 9th and the 17th, and there was a short warm spell towards the end of the month. Most places recorded their highest temperature during one or other of these periods: in Scotland the temperature rose to 25.5 °C on the 11th at the western end of the Great Glen and on the 28th Gillingham (Kent) recorded a maximum of 27.6 °C.

### Rainfall

Rainfall was generally below average in Northern Ireland and also over most of Scotland, although totals were well above average in parts of north-east Scotland, where about 150 per cent of the normal fell in places. Parts of Shetland and southern Scotland also had above-average rainfall. Distribution was rather variable over England and Wales, but most areas, except north-western England, parts of East Anglia and south-eastern England, and a few places in Cornwall and North Wales, had more than their usual July rainfall. Over twice the average fell in parts of Dorset and the south-west Midlands, and also near York. Outbreaks of rain during the early part of the month were accompanied by thunder and hail in places, but it was mostly dry between the 10th and the 17th. The changeable weather then returned and periods of rain were frequent after the 21st. A number of places recorded daily rainfalls exceeding 50 mm and there were some heavy falls in shorter periods. About 70 mm were recorded at Spelga Dam (Co Down) between 13 GMT on the 25th and 02 GMT on the 26th, and 71.4 mm fell at Winfrith (Dorset) in 13 hours from 0325 GMT on the 31st. Thunderstorms occurred in many parts of England towards the end of the month and hailstones measuring 2 cm in diameter were reported at Coltishall (Norfolk) on the 30th.

### Sunshine

Sunshine totals were below normal almost everywhere in England and Wales. Monthly values were between 50 and 75 per cent of

average in parts of Lincolnshire, East Anglia and South Wales, and in all southern counties of England, except Cornwall. Southampton had its dullest July since 1944. Totals in remaining districts of England and Wales were between 75 and 100 per cent of average and were nearest to the normal in the north Midlands and north-west England. Sunshine was generally below average in Northern Ireland, except in the south-east. In Scotland totals were mostly between 70 and 100 per cent of average in the east and north, but in Shetland, Baltasound, with only 49 per cent of average (66.5 hours), had its dullest July since records began in 1906. Some western parts of Scotland had above-average sunshine, however, with about 115 per cent of the normal in places. Most of the month's sunshine was recorded between the 9th and the 17th and at times during the last week.

### Fog

Fog patches occurred fairly frequently along the coasts of northern Scotland, south-west England and the Channel Islands. Fog also formed along the Welsh coast from time to time and affected the coasts of north-eastern England and eastern Scotland during the last few days of the month. Hill fog occurred occasionally and this was extensive in western areas on the 27th. Patches of overnight fog developed in inland areas between the 10th and the 14th and also towards the end of the month. Except during the second week, much of the fog which occurred around northern coasts, and in England and Wales during the month, was associated with precipitation.

### Miscellaneous Phenomena

A funnel cloud was reported over the sea to the north of Manston (Kent) on the evening of the 20th, and on the 30th funnel clouds over the North Downs were observed from Gatwick Airport (West Sussex) in the early afternoon.

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	25.5	2.5	-1.2	-0.9	-1.1	-0.9	-1	68	76
1 Scotland E	23.0	2.1	-1.2	-0.6	-0.9	-0.5	-1	92	90
2 England E & NE	25.1	3.9	-1.7	-1.1	-1.4	-0.6	+3	119	81
3 East Anglia	25.7	5.0	-1.9	-0.8	-1.4	-1.3	+2	98	73
4 Midland Counties	26.0	4.8	-1.5	-0.8	-1.2	-1.2	+1	128	83
5 England SE & Central S	26.6	5.3	-1.7	-0.5	-1.1	-1.5	+1	133	69
6 Scotland W	25.5	2.1	-0.6	-1.0	-0.8	-0.7	-3	79	102
7 England NW & Wales N	23.9	5.5	-1.3	-0.9	-1.1	-1.2	-1	106	94
8 England SW & Wales S	27.0	5.7	-1.7	-0.6	-1.1	-0.9	+1	139	73
N Ireland	23.6	2.6	-0.8	-0.4	-0.6	-0.7	-1	80	93
Scotland	25.5	2.1	-1.0	-0.8	-0.9	-0.7	-2	80	89
England & Wales	27.0	3.9	-1.6	-0.8	-1.2	-1.1	+1	121	79

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