

MONTHLY WEATHER REPORT

JULY 1979

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

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Generally dry, but wet in north-west Scotland: warm at times.

The dominant feature of the synoptic pattern during the month was the position and intensity of the Azores anticyclone. On the 1st the anticyclone was centred to the south-west of Ireland and during the next few days the centre of high pressure moved slowly north-eastwards over the British Isles. Between the 6th and 9th the anticyclone retreated towards the south-west and declined a little as fronts crossed all districts from the north-west. During the following week pressure remained high to the south-west with a ridge extending towards, and occasionally over, the British Isles, whilst fronts moving from the Atlantic continued to affect northern areas.

On the 17th the high pressure receded south-westwards as a depression to the north-west of Scotland moved eastwards, its associated fronts crossing all districts on the 18th. A west to north-westerly airflow was then maintained over the British Isles for several days with further fronts moving across all areas from the Atlantic. Pressure rose steadily to the south-west until, by the 24th, an anticyclone was centred off south-west England. Southern parts of the British Isles remained under the influence of this centre of high pressure until the 28th, when frontal systems moved into western areas from the Atlantic. Until the end of the month pressure then remained generally low over Scotland with further troughs crossing all districts from the west.

Weather

Many areas were dry for most of the first week, although a little rain or drizzle fell in northern and western Scotland and there were a few isolated showers elsewhere. Between the 6th and 9th the weather became more unsettled as frontal troughs crossed all areas from the north-west, but rainfall amounts in most southern areas were very small and some places remained dry. During the next two or three days many areas became warm, but changeable weather returned to Scotland by the 13th.

Between the 13th and 28th southern parts of the United Kingdom remained generally dry, but in the north the weather was mostly rather unsettled with rain at times. Many areas in England, Wales and Northern Ireland became warm between the 25th and 28th, but during the 28th and 29th troughs moving across the British Isles from the west brought unsettled weather to all districts. Rainfall was heavy in parts of north-western Scotland on the 28th and on the following day severe thunderstorms occurred in parts of England. The weather then continued to be changeable until the end of the month with further thunderstorms in places on the 31st.

Wind

Winds over the United Kingdom were only light or moderate for much of the month, although fresh or strong winds occasionally affected exposed coastal areas, particularly in the north and north-west of Scotland. Directions were generally between south-west and north-west, but were often variable with sea-breezes in many coastal areas.

Temperature

Monthly mean temperatures were within 1 °C of average almost everywhere. Values were below the normal in northern and western Scotland, north-

west England and the Isle of Man, much of North Wales, and in a few widely scattered districts elsewhere in England and the Channel Islands. In all other areas values were about or a little above the normal.

The month started with a rather cool day in most places on the 1st, but daytime temperatures rose steadily during the next few days and many inland districts became warm. Warm spells then alternated with somewhat cooler weather during the rest of the month. Many places in Scotland recorded their highest temperature of the month on the 12th, but in England, Wales and parts of Northern Ireland monthly maxima mostly occurred on the 27th, when temperatures of at least 30 °C were recorded at several places in southern England.

Rainfall

Rainfall totals were below average in Northern Ireland, most of England and Wales, and also in central and southern parts of Scotland. Above-average rainfall was recorded in remaining districts of Scotland and also in a few isolated areas in southern and eastern England. Some places in north-western Scotland recorded more than 160 per cent of their normal for the month and in a small area of Hampshire and Wiltshire more than 130 per cent was measured. In contrast, however, less than 50 per cent of normal fell in many areas with below 20 per cent in a few places in Wales and East Anglia.

There were periods of rain or showers at times throughout the month in north-west Scotland. Away from the north-west, however, the frequency of rainfall decreased markedly and in some places along the south coast of England there was no measurable rainfall until the 28th. Rain and thunderstorms spread to many parts of the United Kingdom on the 28th and 29th. There were very heavy falls in some areas, particularly on the 29th, when 58.6 mm fell in 2 hours from 1400 GMT at Bramdean Woodcote (Hampshire) and 45.7 mm in 42 minutes from 1518 GMT at Bradwell Abbey (Buckinghamshire); at Skegness (Lincolnshire) lightning struck a group of people on the beach, killing a six-year-old child.

Sunshine

Sunshine totals were below average over Northern Ireland and much of Scotland, except in south-eastern districts. The Western Isles, Inner Hebrides and western parts of the Scottish mainland were particularly dull with less than 50 per cent of the normal sunshine for the month. At Tiree in the Inner Hebrides, where only 62.9 hours of sunshine were recorded, it was the dullest July since records began there in 1927. North-west England and the Isle of Man, North Wales, north-western parts of the Midlands, East Anglia and south-east England also had below average sunshine with values mostly between 75 and 100 per cent of normal. Sunshine totals were a little above average in all remaining parts of the United Kingdom but with values exceeding 120 per cent of normal only in Avon.

The first week of the month was quite sunny in many parts of England and Wales, and also in some south-eastern districts of Scotland, but north-western Scotland and Northern Ireland were generally cloudier. Amounts of sunshine were more variable in the second week, although the 12th was a sunny day over most of the United Kingdom, except in extreme north-western districts. In most areas the second half of the month was generally less sunny than the first, but on the 27th many southern parts of England and Wales had a fine, sunny day.

Fog

Patches of overnight fog in inland areas were reported on only a few occasions during the month. However, on the night of the 3rd/4th there was thick fog for a time in north-east England and southern Scotland, but this cleared quickly during the morning.

Hill and coastal fog occurred frequently throughout the month. The areas most affected were coastal districts in north and north-west Scotland, but west Wales and areas around the English Channel coasts were also affected from time to time.

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	24.0	3.3	-0.8	-0.5	-0.6	-0.8	+4	105	62
1 Scotland E	24.5	2.3	+0.3	+0.2	+0.3	+0.1	+3	81	98
2 England E & NE	27.1	3.4	+0.4	-0.4	0.0	+0.2	-6	48	103
3 East Anglia	28.5	5.3	+0.4	-0.2	+0.1	-0.3	-5	32	95
4 Midland Counties	29.5	5.1	+0.6	+0.1	+0.3	-0.1	-8	38	96
5 England SE & Central S	30.3	5.7	+0.5	+0.3	+0.4	-0.1	-6	63	99
6 Scotland W	23.8	2.3	-0.8	-0.1	-0.4	-0.6	+2	91	66
7 England NW & Wales N	27.5	5.4	-0.2	+0.1	0.0	-0.7	-4	41	87
8 England SW & Wales S	27.5	6.1	+0.5	-0.1	+0.2	+0.3	-6	52	107
N Ireland	23.7	4.5	+0.3	+0.4	+0.3	+0.1	-3	51	73
Scotland	24.5	2.3	-0.4	-0.1	-0.2	-0.4	+3	92	75
England & Wales	30.3	3.4	+0.4	0.0	+0.2	-0.1	-6	46	98

*Highest maximum and lowest minimum of District Value Stations