

Monthly Weather Report

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OF THE METEOROLOGICAL OFFICE

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

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July 1964 — Dry: warm later in England and Wales.

Weather was predominantly anticyclonic in character, more especially over the southern part of the country on the 1st-6th, 15th, 16th and 19th-31st. The intervening periods were mainly cyclonic as were also some days in Scotland during the last week.

An anticyclone centred to the west of the British Isles maintained the generally dry sunny weather of the end of June until 6th July. Torquay recorded more than 12 hours of sunshine on each of the first five days of the month. Afternoon temperatures reached 25°C locally in the south-east on the 2nd, but following a little frontal rain on the 3rd freshening north-westerly winds kept temperatures well below average, especially in eastern districts where the 4th-6th were among the coolest days of the month.

On the 7th and 8th a deepening depression moving east near Scotland gave record low pressure readings for July and widespread gales. Troughs associated with the depression brought an end to the dry period with about 24 hours of rain in most places (over 1 inch was recorded in parts of north-west England and western Scotland.) After two or three showery days with broken sunshine, rain from another Atlantic depression reached western districts late on the 10th and spread to the remainder of the country during the night. A secondary depression gave over an inch of rain in parts of South Wales on the 11th; it was not until the afternoon of the 12th that the rain finally cleared south-east England. On the 13th, a dry sunny day over most of the British Isles, an anticyclone formed over Scandinavia; and the next depression approached Ireland from mid-Atlantic turned northwards towards Iceland in the southerly air stream on the western flank of the anticyclone. Rain from associated slow-moving cold fronts was heavy locally in some western districts on the 14th, but with rising pressure in southern England the fronts gave little or no rain as they cleared south-east districts about noon on the 15th.

For most of the third week pressure was rather uniform over the British Isles and weather warm and thundery. During the first two or three days afternoon temperatures over much of England and Wales progressively increased, the 17th being the warmest day of the month in many places. On the 18th, however, a small depression deepened slowly as it moved north-east across England and Wales. Thunderstorms with heavy rain or hail broke out at a number of places. Lancashire and the West Riding of Yorkshire reported widespread flooding; at Bolton about 3 inches of rain fell in half an hour while further east a large area of moorland around Pateley Bridge became white with hailstones, the ground being covered to a depth of 6 inches in places. The second half of the week was rather more cloudy and a little cooler than the beginning with scattered thunderstorms on the 19th and 21st.

On the 22nd a ridge of high pressure extended from the Azores over the British Isles, but it subsequently drifted slowly south giving place over Scotland to a generally westerly airstream. In the north weather was changeable and cool for most of the remainder of the month, but in south-east England it became sunny and very warm again with afternoon temperatures exceeding 28°C at a number of places on the 25th and 26th. A moist airstream from the Atlantic brought occasional drizzle to most districts on the 29th, but weather was sunny and warm in the south-east during the last two days of the month.

Pressure and Wind — Surface pressure was generally above the 1921-50 average except in the extreme north, the deviation at 9h G.M.T. ranging from -2.4 mb at Lerwick to +4.0 mb at Scilly. Pressure at mean sea level at Sule Skerry fell to 967.9 mb at about 0600 G.M.T. on the 8th, a new record low for the British Isles for July. Surface winds were mainly north-westerly at first becoming westerly on the 10th-12th and southerly on the 13th and 14th after which winds were light and variable over much of the country until the end of the month but mainly westerly in the north from the 23rd. Winds reached gale force in Scotland on 14 days and in England and Wales on the 7th, 9th, 11th, 12th and 18th (6 days). Gales were widespread on the 7th and 8th, many places in the north and north-west registering their highest gust and highest hourly wind ever recorded in July; a gust of 57 kt at Paisley on the 7th was the highest for the month in 51 years of records.

Temperature — Day temperatures were below average during the first ten days, but above average during the third week, the difference from average decreasing northwards. From the 23rd temperatures were above average in south-east England but below average in Scotland.

Extremes included: (England and Wales) 28.9°C at a number of places in the south-east on the 17th, 0.0°C at Lincoln on the 6th, (Scotland) 26.3°C at Dyce on the 30th, -0.6°C at Balmoral and at Strachan on the 6th; (Northern Ireland) 23.4°C at Moneydig on the 30th, 2.2°C at Pubble Forest on the 26th.

Precipitation — In Scotland most eastern districts had less than half their average rainfall, Kelso having its driest July since records began in 1888; while in the west rainfall was above average, totals in parts of the Highlands approaching double the usual amount. In England and Wales rainfall was generally 80-100 per cent of the average in the west but less than half the average in many eastern, central and southern districts; heavy localised thundery rain, however, brought amounts up to twice the average in parts of Buckingham and Lancashire.

Thunder was heard in Scotland on 6 days, an unusually low frequency for July. In England and Wales it was reported on the 3rd, 8th, 9th, 11th, 12th, 14th, 16th, 17th-19th, 21st and 22nd (12 days). Thunderstorms were widespread on the 17th, 18th and 21st.

Sunshine — Sunshine was generally above the average in the east and south but below in the north-west and north, amounts varying from 126 per cent (at North Berwick) of the local average to 69 per cent (at Ballykelly). The week ending the 18th was the sunniest, amounts being above average nearly everywhere.

Visibility — Fog was observed at 9h at one place or another on 11 days in Scotland and 18 days in England and Wales. Few places reported fog on more than one morning except in north-west England where a number of stations had two days of morning fog.

Miscellaneous Phenomena — The aurora was not seen in July.

TABLE 1—DISTRICT VALUES— JULY

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
						Difference from Average				
0 SCOTLAND, N.	23.9	-0.6	-0.7	-0.8	-0.7	-	-	0	98	101
1 SCOTLAND, E.	26.3	-0.6	-0.1	-0.3	-0.2	-	-	-5	34	116
2 ENGLAND, N.E.	26.2	0.0	-0.3	-0.3	-0.3	-0.7	0.0	-5	44	106
3 ENGLAND, E.	28.9	0.6	+0.2	-0.1	0.0	0.0	+0.3	-4	51	105
4 MIDLANDS	27.8	2.8	-0.3	-0.1	-0.2	0.0	+0.2	-4	53	107
5 ENGLAND, S.E.	28.9	3.3	+0.6	+0.2	+0.4	+0.4	+0.4	-4	41	105
6 SCOTLAND, W.	24.4	2.2	-1.1	-0.3	-0.7	-0.3	-0.5	-2	70	91

1964 (1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
			Difference from Average							
7 ENGLAND, N.W. and N. Wales	28.3	0.6	-1.0	+0.2	-0.4	-1.3	-0.8	-2	90	93
8 ENGLAND, S.W. and S. Wales	27.2	1.1	0.0	0.0	0.0	+0.3	+0.4	-4	6	102
N. IRELAND	23.4	2.2	-0.2	-0.2	-0.2	-	-	-2	56	77
SCOTLAND	26.3	-0.6	-0.6	-0.5	-0.5	-	-	-2	79	103
ENG. and WALES	28.9	0.0	-0.1	0.0	-0.1	-	-	-4	63	103