

MONTHLY WEATHER REPORT

AUGUST 1991

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

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Generally warm, dry and sunny

A shallow depression lay between Scotland and Northern Ireland on the 1st, while pressure was high over England and Wales. Fronts crossed all areas of the United Kingdom on the 2nd and 3rd, finally clearing the east coast early on the 4th. Later that day further fronts approached the far south-west, but by evening on the 5th they had weakened and become slow moving over central areas. Pressure was again high over the United Kingdom on the 7th. Overnight on the 8th/9th a frontal system crossed western areas; the leading front moved away over the Low Countries later on the 9th, while the following front trailed back along the Anglo-Scottish border, before advancing once more as a cold front later on the 10th. After this front cleared southern England late on the 11th, pressure rose again in all areas. Early on the 13th fronts crossed Scotland in rapid succession, while southern parts of England were affected by a shallow depression; its associated fronts became slow moving over southern counties by midnight on the 14th, giving way later as high pressure spread once more from the west. Between the 15th and 17th further fronts crossed all areas, following which high pressure temporarily became established over all areas. The next frontal system edged into western areas late on the 18th, the warm front crossing northern areas, while the cold front weakened and moved slowly south-eastwards during the 19th. A succession of fronts moved north-eastwards across northern England during the next few days. An anticyclone became established over the British Isles during the 24th, and persisted for the next few days. A weak cold front began to cross north-west Scotland on the 26th and became slow moving over the north Midlands, before splitting and moving away later on the 28th. Further weak fronts approaching north-west Scotland were blocked by high pressure and dispersed. Pressure became high in all areas, but early on the 31st a frontal trough moved over south-west England.

Weather

Persistent cloud and mist kept sunshine amounts as well as temperatures low in some places in the west. Fronts, although they crossed all areas, soon weakened as they moved south-eastwards, giving negligible amounts of rain in the east. However, thundery showers produced localized heavy rainfall. One of these thunderstorms occurred on the 1st over East Anglia and south-east England causing flooding and disrupting traffic; lightning killed one person in Kent and injured two in Essex, and caused structural damage in south-east London. Late on the 6th thunder was reported in north-east England. A hail shower was reported over East Sussex on the 11th. Thunder occurred over north-west England on the 16th and over Scotland and north-east England on the 17th. Isolated thunderstorms occurred on the 21st. Thunder occurred at midday on the 22nd over southern Scotland, and over Wales and south-west England during 22nd and 23rd. Late on the 30th lightning was observed over Cornwall and the Channel Islands and some thunderstorms drifted northwards over the English Channel. On the 31st thunderstorms occurred over Cornwall and South Wales.

Wind

August was generally a quiet month, although winds were strong in places on the 9th: a gust of 53 kn was measured at Edinburgh Royal Observatory. The 23rd was a windy day over Wales and much of England, with a gust to 55 kn at Cudrose, Cornwall. A gust of 53 kn was measured at Camborne, Cornwall on the 30th. Directions were generally westerly or south-westerly, but became easterly on the 27th.

Temperature

Mean monthly temperatures were above normal everywhere, ranging from 0.2 °C above normal in the Isles of Scilly to 2.6 °C above normal at Stanstead Abbots, Hertfordshire.

On the 7th, maximum temperatures were between 18 °C and 20 °C, with values on the 23rd similar or slightly lower, but on all other days maximum temperatures exceeded 20 °C somewhere, with values between 25 °C and 27 °C common over England and Wales between the 1st and 6th, on the 10th, when the temperature at Southampton reached 28 °C, between the 19th and 22nd, and during the last week of the month, when temperatures also rose over Wales. Lowest temperatures were below 10 °C in a number of rural locations during the second half of the month. The highest temperature during the month was 31.6 °C at East Bergholt, Suffolk on the 20th and the lowest was 0.7 °C at Alwen, Clwyd on the 23rd.

Rainfall

Monthly rainfall amounts were below normal nearly everywhere, ranging from 112% at Stornoway, Western Isles to 5% at Hastings, East Sussex where only 3 mm was measured. This was generally the driest August since that of 1976. Localized thunderstorms gave a fall of 24.9 mm of rain in 15 minutes (from 18 GMT) on the 1st at Wye College, Kent and 23.6 mm on the afternoon of the 7th at St James's Park, Greater London. The night of the 8th/9th was particularly wet in the Welsh mountains, the Lake District and parts of central Scotland; Trawsfynydd, Gwynedd had 72 mm of

rain in the 48 hours ending at 09 GMT on the 11th. Except for parts of Scotland and northern England, most places had no rain after the 23rd. August was the driest at Valley, Gwynedd since 1976, at Coventry, Warwickshire since 1947, and over Northern Ireland since 1983. Heavy falls of 88 mm and 60 mm were measured at Machynlleth and Moel Cynnedd, both in Powys, on the 9th.

Sunshine

Monthly sunshine amounts were above average nearly everywhere and ranged from 153% at Wye, Kent to 82% at Benbecula, Western Isles.

Sunshine amounts were generally higher than those of August 1990 in north-western areas, although not reaching the high values of July 1991. Northern Ireland had its sunniest August since 1977. The most sunshine in a day was 14.4 hours at Scarborough, North Yorkshire on the 26th and the most in a month was 300 hours at Eastbourne and Hastings, both East Sussex.

Fog

Fog formed overnight over southern England on the 1st, 4th, 12th, 15th, 18th, 21st, 25th and 29th, parts of northern England on the 7th, England and Wales on the 26th and 27th, England and Scotland on the 2nd and 28th, southern Scotland and Northern Ireland on the 7th and 30th and Scotland on the 31st, and was dense in parts of East Anglia on the 30th. Patchy fog occurred over western and southern coasts on the 2nd, 5th, 6th, 14th, 15th and over northern and eastern coasts on the 22nd, 23rd and 31st. Sea fog patches were reported in the English Channel on the 16th. Fog occurred widely on coasts and hills on the 1st, 3rd, 10th, 11th and 20th.

Miscellaneous Phenomena

Towy Castle, Dyfed reported that brownish-yellow dust was deposited on cars, Stevenson screen and windows, with slight discoloration in the rain-gauge during showery weather on the evening of the 21st.

Table 1 District values

District	Air temperature °C					Mean 30 cm soil temp °C	Rain-days	Rainfall	Sunshine
	Highest Max*	Lowest Min*	Max.	Min.	Mean				
	Difference from average					% of average			
0 Scotland N	28.4	1.9	+1.6	+1.3	+1.5	+1.1	-1	64	107
1 Scotland E	25.2	3.3	+2.1	+1.4	+1.8	+1.6	-7	36	111
2 England E & NE	27.1	4.1	+2.4	+1.2	+1.7	+1.7	-6	32	125
3 East Anglia	28.5	4.6	+2.6	+1.2	+1.9	+1.5	-7	36	134
4 Midland Counties	28.1	5.2	+2.3	+0.6	+1.5	+1.2	-8	24	130
5 England SE & Central S	27.9	6.7	+2.1	+1.3	+1.7	+1.5	-8	24	140
6 Scotland W	25.6	4.0	+0.9	+1.6	+1.3	+1.2	0	62	99
7 England NW & Wales N	27.4	3.8	+1.3	+0.9	+1.1	+0.9	-3	57	102
8 England SW & Wales S	26.9	4.9	+1.2	+0.9	+1.0	+0.7	-3	38	114
N Ireland	25.7	4.5	+1.4	+1.6	+1.5	+1.0	-2	41	114
Scotland	28.4	1.9	+1.5	+1.4	+1.5	+1.3	-3	56	106
England & Wales	28.5	3.8	+2.0	+1.0	+1.5	+1.3	-6	36	124

* Highest maximum and lowest minimum of District Value Stations