

MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

FEBRUARY 1993

VOLUME 110

NUMBER 2

Mild and dull, but very dry.

The month began with a large area of high pressure covering most of Europe, and a weak warm front lying across central parts of Britain. Between the 2nd and the 4th, the high remained virtually stationary whilst fronts moved eastwards across the Western and Northern Isles. High pressure remained firmly in control until the 10th, restricting frontal activity merely to the southwards movement of a weak system on the 6th. The anticyclone remained over Eastern Europe for several days, feeding moist southerly or south-easterly winds over the country. By the 14th, a cold front was progressing slowly south-eastwards over Scotland, and a shallow depression had formed to the west of Biscay. The front continued its progress throughout the 15th, and further fronts followed similar tracks on the 16th as an anticyclone built off the west coast of Ireland and a depression travelled from Iceland to Denmark. On the 17th, the westward progress of a weak front over the North Sea was limited to the south-east of England. However, on the 18th, a more active front moved south-eastwards across all areas, introducing a showery north-westerly flow. The area of high pressure in the Atlantic had meanwhile moved only very little, but on the 20th a cold front associated with a deep low over Scandinavia moved quickly southwards across the country. On the 21st, the cold northerly flow persisted, but by the 22nd the high, although declining, was pushing steadily eastwards, killing the weak front that had become established on its eastern flank. By the 23rd, the high covered most of the country, although by midnight, north-westerly winds had become established over northern districts, spreading to most areas over the following 24 hours as fronts approached from the Atlantic. Several fronts crossed the country during the 25th, associated with a low to the east of Iceland. During the 26th, a small area of low pressure moved quickly across Ireland and the extreme south-west of England, but high pressure was reforming in the Atlantic on the 27th. By then, pressure was low over Denmark, feeding a northerly airstream over the country. Later that day, a showery trough passed southwards across all areas. On the 28th, the low moved westwards to affect south-eastern parts of England, and the high retreated northwards.

Weather

February's weather was in marked contrast to that of January, being an exceptionally dry month with generally settled conditions, even in the north. Indeed, the mean pressure at Aberdeen and Glasgow for February was 22 Hpa higher than that for January. It was mild everywhere, and only in the last few days was a significantly wintry note sounded. One or two disturbances did occur, notably wet and windy weather in north-western Scotland from the 2nd to the 5th, and strong winds and wintry showers affecting north-eastern parts following the south-eastwards passage of a cold front on the 18th. After a further mild interlude, the 25th saw a reversion to wintry weather, especially in the north-east, whilst the south-west of England had some rather heavy rain. Sharp frosts affected the snowbound areas of Scotland until the end of the month, and there were just two occurrences of thunder this month - at Duartmore Bridge, Highland

Region, on the 18th, and at Culdrose, Cornwall, on the 27th.

Wind

Although February was generally a much quieter month than January, there were still several noteworthy events. Gusts of 60 kn or more were reported from Scotland on the 3rd and 4th, and, also in Scotland, gusts in excess of 75 kn were widespread on the 18th. The Northern Isles experienced gusts up to 80 kn on the 19th-20th. Also on the 20th, many parts of northern and eastern Britain had gusts over 50 kn, including one of 76 kn at Great Dun Fell, Cumbria. 500 North Sea oil workers had to be evacuated when their rig broke anchor in heavy seas 120 miles off Aberdeen, and a combination of strong winds and a very high tide caused many people to abandon their homes in East Anglia and Kent. Also on that day, the surge backed by strong winds was so powerful that the tide did not go out at Southend for 24 hours. Northerly gales occurred in some exposed parts of the extreme north on the 26th, and on the 28th the Hartlepool lifeboat capsized in treacherous seas whilst attending to a stricken tanker, but there were no serious injuries. Directions were westerly for the first 6 days, then light and variable or light south-easterly to the 12th, veering to light south-westerly on the 14th. North-westerlies became established by the 16th, veering northerly by the 21st.

Temperature

It was mostly a very mild month, with many parts of Scotland having a mean monthly temperature well over 3°C above average. Braemar, Grampian Region, had an anomaly of +4.0°C, its second warmest February for over a hundred years. Northern Ireland enjoyed its mildest February since 1961, and also its second mildest since the War. Some parts of the Province also had their warmest February night-time temperatures on record. The Channel Islands and the south-east of England were the coldest areas, with St. Helier, Jersey, and Hastings, East Sussex having a mean monthly temperature of 0.5°C below average. The highest temperature during this month was 16.8°C at Durham on the 7th, whilst the lowest recorded was -7.8°C at Cairngorm Chairlift on the 27th. Eskdalemuir, Dumfries & Galloway, recorded its highest February temperature ever on the 7th (14.0°C), whilst Aberdeen's value of 15.7°C on the same day was only just short of that station's highest.

Rainfall

February was basically a very dry month. Only a few places in parts of north-west Scotland reached or exceeded their monthly average totals. Percentages of average in England and Wales were very low, indeed some parts of the south-west had less than 10% of average, as did the area between the Forth and Tay rivers in Scotland. Anomalies ranged from 154% of average at Cape Wrath, Highland Region, to just 4% of average at Porthcawl, Mid Glamorgan. Both England & Wales and Northern Ireland had their driest Februarys since 1986. Leuchars, Fife Region, recorded a monthly total of 3.8 mm, its third lowest February total since records began in

1922. In such a dry month, there were only two significant rainfall events, both on the 5th. These were 48 mm at Inverailort, Highland Region, and 45 mm at Lochgilphead, Strathclyde Region.

Snow

Heavy wintry showers fell in northern Scotland on the 18th, continuing over the higher ground on the 19th and 20th. On the 21st and 22nd, scattered wintry showers fell in some eastern coastal areas of Britain as far south as Essex. Over the next two days, snow showers continued to affect parts of the extreme south-east. On the 26th, wintry showers affected many places, especially the north-east of Scotland. By the 27th, the Aberdeen area had more than 10 cm of snow, and many roads in Grampian were blocked. Also on the 27th, snow was reported from the Channel Islands. Snow showers continued in many areas on the 28th, by when Aberdeen had 19 cm of snow lying.

Sunshine

It was a very dull month, with only a handful of places reaching their monthly averages. Scotland and Northern Ireland were exceptionally dull, the latter having its dulllest February on record. Armagh had its lowest February sunshine total since records began in 1880. Stornoway (Western Isles) had its second dulllest February on record (1881), and even the "sunnier" parts of eastern Scotland had typically only 70% of average. Glasgow airport reported 11 successive days without sun from the 4th. Over England and Wales generally, it was the dulllest February since 1980. The lowest monthly percentage of average was 31%, recorded at three Highland Region locations - Rhum, Poolewe and Cape Wrath, and also at Banagher, County Londonderry. The highest percentage was 103% of average at Cockle Park, Northumberland. The highest daily total was 10.1 hours at Hayling Island, Hampshire, on the 27th, whilst the highest monthly total was 79.0 hours at Boulmer, Northumberland.

Fog

On the 1st, patchy fog affected the Manchester area for a time, and widespread fog covered much of southern England and Wales overnight on the 2nd-3rd. This failed to clear in parts of the south-east during the 3rd, reformed extensively that night, and again persisted in many areas throughout the 4th. Fog continued to affect many parts for several days, especially hilly and coastal areas, and flights were severely disrupted at Edinburgh Airport on the 9th as thick fog blanketed central Scotland. Fog was widespread over the southern half of the country on the 11th, and also the 12th, when Guernsey recorded its "worst ever fog", closing the airport for several hours. The foggy pattern continued during the 13th, 14th and 15th, although most had cleared by the end of the 15th. Dense smoke fog affected parts of Northern Ireland on the 22nd, and at first on the 23rd.

Miscellaneous phenomena

None reported.