

# MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

**JANUARY 1993**

VOLUME 110

NUMBER 1

## Mostly warm, but dull, very wet and windy

January started with a ridge over south-eastern Britain. A cold front approached the north-west on the 1st, returning northwards on the 2nd. By the 3rd, the ridge was declining and a deep Icelandic low carried fronts across Scotland and Northern Ireland. The fronts had cleared by midday on the 4th, but further systems were into western parts by midnight, crossing all areas during the 5th as the low became centred off Scotland. A secondary low formed south of Ireland delaying the clearance of the cold front. This front persisted through the Midlands and south-east England during the 6th, finally clearing by midnight. A very deep low south of Ireland rushed fronts across all areas on the 7th, but a lull ensued on the 8th as a ridge covered southern districts. By midnight, an exceptionally deep low off Northern Ireland was pushing fronts across the country; this theme continued over the next two days as the low tracked north-eastwards. Another depression raced across central areas on the 13th, clearing by 1800, followed on the 14th by further troughs after a short-lived ridge. Systems crossed during the 15th and 16th as a deep low formed off north-west Scotland. These cleared during the 17th, allowing a ridge to form on the 18th. Meanwhile a depression formed off south-west Ireland and moved across Scotland, weakening the ridge. An occlusion cleared south-eastwards by 0600 on the 19th, allowing another ridge to form, followed by troughs from the west as a low formed north-west of Scotland. Over the next four days, many systems crossed all areas, controlled by lows passing to the north of Scotland, but by midnight on the 24th, pressure was rising over the Atlantic. On the 25th, south-west Britain was under the influence of high pressure, although troughs still affected north-western Scotland. The high slipped south-westwards during the 26th, allowing fronts to swing south-eastwards across most areas. A new low formed west of Ireland on the 27th, and further troughs crossed all areas, becoming virtually stationary over southern Scotland and northern England on the 28th. On the 29th, a front moved south-westwards to affect eastern Britain, whilst a cold front affected Scotland. By the 30th, a Scandinavian high had moved to central Europe, and another high was building in the Atlantic. A slow-moving front over central parts was the boundary between the highs.

### Weather

It was an extremely unsettled month, one of the stormiest ever in Scotland, which was attacked by twenty depressions. After a cold foggy start in England and Wales, things soon became very disturbed as successive depressions sent bands of heavy rain and gales across the whole country. One low, on the 10th, had a central pressure of 914 mb, believed to be the lowest this century. Snow and freezing conditions on the 11th, especially in Scotland, were followed quickly by much higher temperatures melting the snow and causing floods. Over the last few days the weather tempered as pressure rose. Thunder was heard around western Scottish coasts on the 11th, 12th, 14th, 15th and 17th, at Tiree on the 20th and 21st, and over Ulster and western Scotland on the 22nd.

### Wind

Gusts to 70 knots or higher were reported from Scotland every day up to the 25th. On the 5th, south-westerly gales drove the oil-tanker *Braer* onto rocks in the Shetlands, and subsequent gales destroyed the vessel, causing widespread pollution. On the 10th, high tides and gales caused serious flooding and the death of a canoeist in Strathclyde Region. Severe gales hit England and Wales that day and the 13th, causing many fallen trees and power losses. The 13th claimed six lives - two in a plane crash in Cumbria, one drowning off The Scillies, one following an accident in Northumberland, and two in an accident in Surrey. Six people died on the 15th in accidents in Cumbria, Shropshire, Oxfordshire and Edinburgh. Power lines were brought down in the Highlands on the 18th, and extensive property damage occurred in north Wales and County Durham. On the 17th and 21st, gusts of 125 and 147 knots respectively were recorded at Cairngorm summit, the latter almost a British record. That day, the gusts of 77 and 72 knots at Glasgow and Edinburgh Airports respectively were the highest for 25 years, causing three deaths. On the 24th, a man died in Portland Harbour, Dorset, when his dinghy capsized in gales, and further property damage occurred, especially in Shropshire, Merseyside, the Isle of Wight and Yorkshire. An 82 knot gust was recorded at Leeds Weather Centre, and many of these areas had had their second successive day with these conditions.

### Temperature

In the 5th equal warmest January this century, only extreme north-west Scotland was colder than average. Much of England and Wales was over 2.0 °C above average, with the greatest anomaly of 3.0 °C above average recorded at three stations - Christchurch, Dorset, Marlborough, Wiltshire and Nettlecombe, Somerset. Scotland was generally 1 to 2 °C above average, but Cape Wrath, Highland Region, was 0.4 °C below average. The highest temperature was 15.2 °C at Boulmer, Northumberland, on the 16th, whilst the lowest was -11.0 °C at Moel Cynydd, Powys, on the 3rd, and at Writtle, Essex, on the 11th.

### Rainfall

Much of England and Wales had above average rainfall, whilst parts of Scotland had over twice, and in some cases, three times the average. The highest percentage was 324% of average at Strathallan School, Tayside Region, whilst the lowest was 64% of average at L'Ancrese, Guernsey. The highest daily total was 87 mm at Cwmystwyth, Dyfed, on the 26th, and other significant falls were 74 mm at Kinlochewe, Highland Region, on the 16th, and 66 mm at Tyndrum, Central Region, on the 14th and the 21st. Glasgow had its wettest January for 65 years, and stations as distant as Leuchars and Stornoway reported records. On the 10th, torrential rain, gales and high tides led to serious flooding at many southern resorts. Flooding also occurred in Merseyside, Cumbria, Lancashire, Surrey, Berkshire and parts of Wales. Heavy rain plus snowmelt on the 17th led to Perth's highest flood since 1814; large areas of Tayside and also Fife and Central Regions were flooded.

### Snow

Snow fell in eastern Scotland on the 3rd, and a band of rain, sleet and snow moved eastwards over Britain on the 4th, with some 30 cm reported from parts of the Pennines. Snow and hail showers affected Scotland on the 8th and 9th, and blustery wintry showers were widespread in Northern Ireland and Scotland on the 10th, bringing power cables down in Lothian Region. The 11th was one of the most wintry days in Scotland for twenty years. Heavy wintry showers brought severe conditions to many regions, including low-lying areas. Many roads were blocked, marooning drivers, rail travel was impossible, and there were similar problems in Northern Ireland. This weather later moved southwards to affect the Pennines, and blizzard conditions continued into the 12th. By then, 40 cm of snow were lying in places, and snow was reported as far south as the Cotswolds and Chilterns. Further snow fell in Scotland over the next few days, but by the 17th, snowmelt was causing major flooding problems in Tayside Region. Wintry showers continued over high ground in Scotland over the next few days, and the 23rd saw widespread snow showers in the Northern Isles. Blustery wintry showers broke out north of the Midlands on the 24th, spreading to many southern parts on the 25th. Sleet or snow occurred over the next few days in northern areas.

### Sunshine

January was dull, few places reaching their average. The England & Wales general value of 1.25 hours represents 76% of the 1961-1990 average, the dullest January since 1975. Anomalies ranged from 124% of average at Buxton, Derbyshire, to 22% of average at Poolewe, Highland Region. The highest daily total was 7.7 hours at Drummond Castle, Tayside, on the 31st, whilst the highest monthly total was 67.6 hours at Sunderland Polytechnic, Tyne & Wear.

### Fog

Dense freezing fog was widespread over central and southern parts on the 1st and 2nd, and a woman died in Kent on the 1st in one of numerous accidents. The fog persisted in some areas until the morning of the 3rd, returning widely on the afternoon of the 4th. During the next few days, many coastal and some hilly inland areas were affected by fog. Further fog formed over central and southern England early on the 7th, but no further fog was reported until a few coastal patches in Kent on the morning of the 20th. Hill or coastal patches formed in central England, East Anglia, the south-east and Wales on the 27th, lingering into the 28th. Patches formed in the Scottish Highlands on the 29th, as they did in a few other places. Dense fog affected the south-west, parts of the West Midlands and the north early on the 30th, and also the Suffolk coast that evening, spreading to Norfolk on the 31st.

### Miscellaneous phenomena

Whirlwinds were reported at Congresbury, Avon, on the 12th, and Kirton, Lincolnshire, on the 13th.