## **STATE OF THE UK CLIMATE IN 2024**

The latest UK climate assessment reveals shifting baselines, more frequent records, with temperature and rainfall extremes becoming the norm, highlighting the nation's evolving climate.

The report attributes the increased frequency and intensity of weather extremes to human-induced greenhouse gas emissions, emphasizing the need for adaptation to cope with ongoing climate changes.





*Warming Trend*: The UK's climate has warmed steadily since the 1980s at a rate of 0.25°C per decade, with the most recent decade (2015–2024) being 1.24°C warmer than 1961–1990.

*Record-Breaking Temperatures*: The last three years are among the UK's top five warmest since 1884, with 2024 being the fourth warmest year, featuring the second warmest February, warmest May, fifth warmest December, fifth warmest winter, and warmest spring.

Increased Temperature Extremes: Days with temperatures 5°C, 8°C, and 10°C above the 1961–1990 average have doubled, tripled, and quadrupled, respectively, in 2015–2024 compared to 1961–1990. Hottest summer days and coldest winter nights have warmed twice as much as average days/nights in some areas.

*Reduced Cold Extremes:* The frequency of the coldest nights has dropped significantly, and air/ground frosts have declined, with over two weeks fewer air frosts in 2015–2024 compared to 1931–1990.

*Increased Rainfall Extremes*: Months with county rainfall totals at least twice the 1991–2020 average increased by over 50% in 2015–2024 compared to 1961–1990. The winter half-year (October–March) is 16% wetter in 2015–2024 than 1961–1990.

*Record Wet Winter*: October 2023–March 2024 was the wettest winter half-year for England and Wales in over 250 years, causing widespread flooding in areas like eastern Scotland, Derbyshire, Nottinghamshire, and the West Midlands.

*Extreme Rainfall Events*: Late September 2024 saw extreme rainfall in central England, with Oxford Radcliffe Observatory recording its wettest 2-day period in 200 years and wettest month since 1774. Storm Bert in November 2024 caused severe flooding in South Wales

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Storms and Floods: 2024 saw severe impacts from storms (e.g., Babet, Ciarán, Isha, Darragh), with red warnings for storms Isha and Darragh. No evidence suggests the UK is becoming windier/stormier.

Decline in Snow and Increase in Sunshine: Snow events have decreased since the 1960s, and the UK has become sunnier since the 1980s, driven by more winter and spring sunshine

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