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State of the UK Climate in 2024

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This report provides a summary of the state of the UK's climate in 2024.

Executive Summary

Observations show the UK's climate continuing to change.

Recent decades have been warmer, wetter and sunnier than the 20th Century.

The UK's warming is at a rate consistent with the observed change in global near-surface air temperature over land.

Temperature

The UK's climate has warmed steadily from the 1980s onwards.

The greatest implications are for the frequency and intensity of daily temperature extremes.

The last 3 years have been in the UK's top-five warmest on record.

2024 was the fourth warmest year in the series from 1884.

The Central England Temperature series shows that **recent warmth has far exceeded any observed temperatures in at least 300 years.**

Air and ground frost

Air and ground frosts have steadily declined from the 1980s onwards, reducing by around a quarter.

Indices for energy demand (heating and cooling) and plant growth

Heating degree days have steadily reduced from the 1980s onwards, and growing degree days have steadily increased.

Cooling degree days are more variable, but these too have increased from a low in the 1960s.

Near-coast sea-surface temperature (SST)

UK near **coastal waters have warmed steadily** from the 1980s onwards at a rate slightly lower than the warming rate over UK land.

Rainfall

The UK's **climate has become steadily wetter** since the 1980s, due to an increase in winter 'half-year' (October to March) rainfall.

Snow

The number and severity of **snow events in the UK have declined** since the 1960s.

Sunshine

The UK's **climate has become sunnier** since the 1980s, primarily **driven by increases in winter and spring sunshine**.

Wind

Observations do not currently suggest that the UK's climate is becoming windier or stormier.

Nine named storms hit the UK in the calendar year 2024. Red warnings were issued for *Isha* in January and *Darragh* in December.

Extremes and significant weather

Observations show that **extreme weather events are to be expected each year** as an integral part of the UK's climate. **As has been fairly typical in recent years, floods and storms brought the worst impacts in 2024.**

Sea-level rise

Sea level rise around the UK is accelerating.

Since 1901, the sea level around the UK has risen by about 19.5 cm, with two-thirds of this rise happening in just over the last three decades.

Phenology

Earlier springs are likely to be one of the most obvious responses of Nature to the changing climate. However, such responses can be complex, and short observational records can make detecting trends difficult.

Met Office: Annual climate stocktake shows weather records and extremes now the norm in UK Climate

The State of the UK Climate Report in 2024