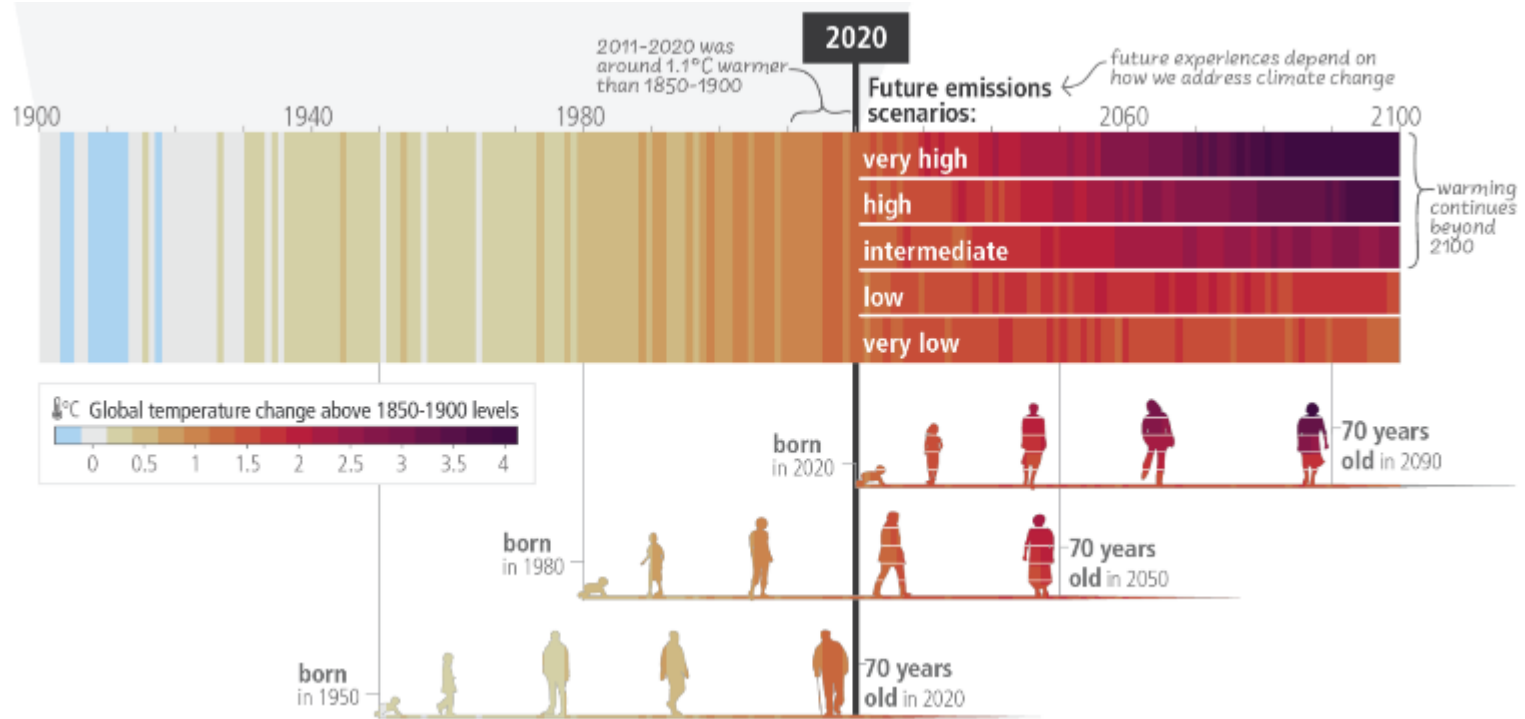


The challenges of a changing climate for national security

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23rd September 2026

Climate is changing in our lifetimes

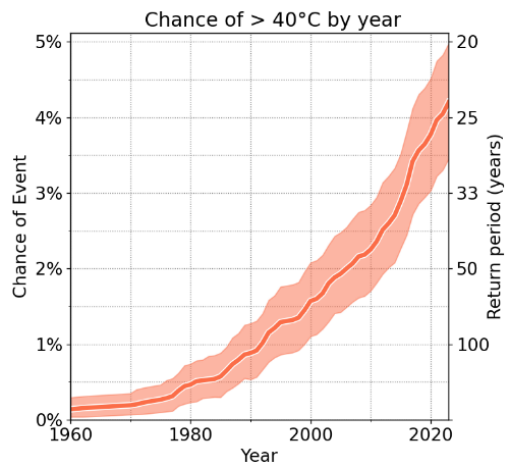


Climate change is already here

Our climate has already changed and climate-related risks impact national, international and human security around the globe, with implications for UK national interest.

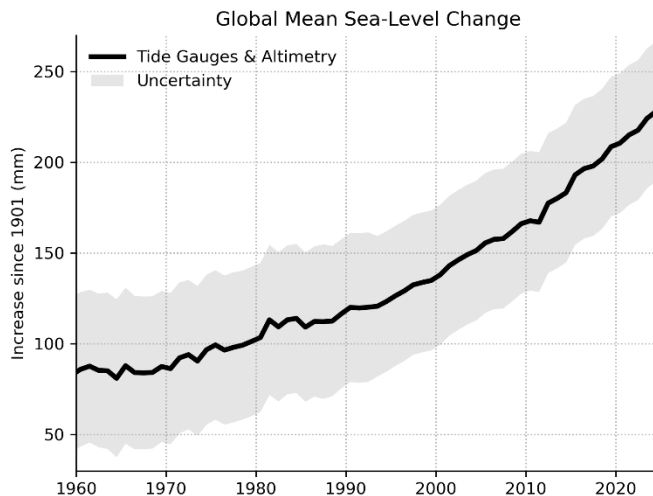


Key metrics show changes accelerating



The likelihood of 40°C exceedance has increased more than six-fold since the 1980s.

Source: Kay et al., 2025. Rapidly increasing chance of record UK summer temperatures



Source: Forster et al., 2025. Indicators of Global Climate Change 2024

Every 'fraction of a degree' of warming increases risk

- Climate in many regions is moving far outside the range of variability experienced in hundreds of thousands of years
- Many local hazards amplify the signal of global warming
- Many important impacts increase nonlinearly with local temperature, and some exhibit thresholds (e.g. corals, key crops, infrastructure, ...)
- Warming increases the possibility of crossing Earth System tipping points
- Many risks will cascade through complex systems, amplifying and spreading impact



Climate as a security problem

Weather and climate are rarely a direct cause of insecurity, but can be a contributory factor in disrupted or unmet human needs and insecurity



Weather and climate impacts can **cascade through complex systems** in unpredictable ways, both exacerbating existing security threats, and present new ones.

Climate is not the only change – biodiversity loss and other social, environmental, economic and political factors are changing too

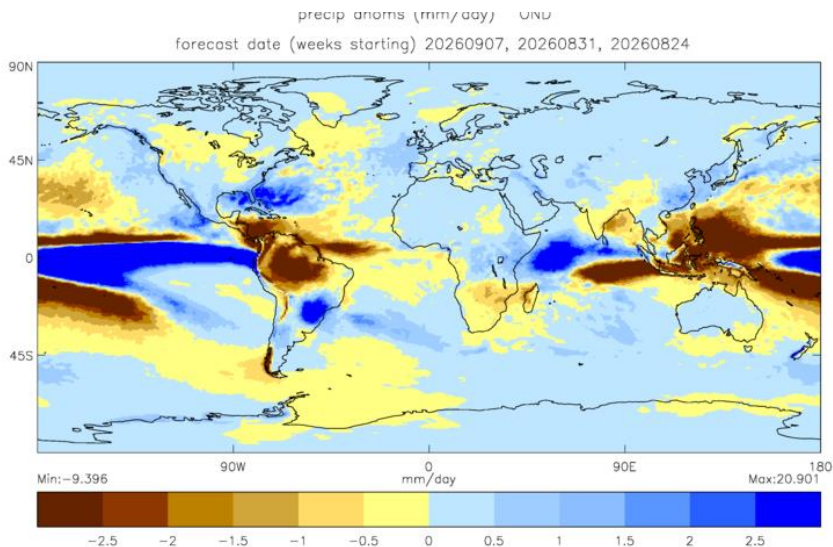


Change is chronic and acute, multi-variate, simultaneous, sequential and global
How far do our strategic resources & priorities stretch?

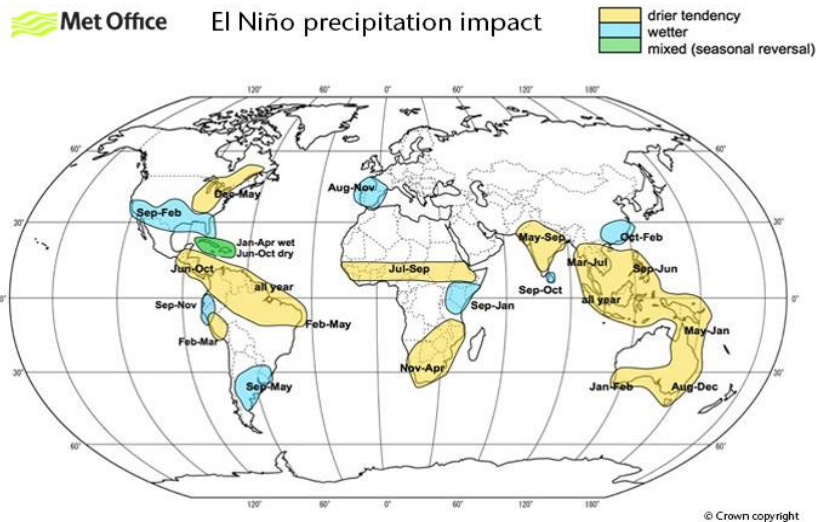


Near term climate - El Niño

Latest Seasonal Rainfall Forecast: Oct-Dec



Typical El Niño Rainfall Anomalies



- El Niño is a periodic, anomalous warming of tropical Pacific
- Current (2026-2027) El Niño is largest in recent historical record

Summary

- Climate has already changed
- Average climate conditions have shifted, but extremes are increasing at a much faster rate than averages
- Impacts change non-linearly with warming
- Climate risks are rarely isolated
- Climate projections provide information about what can happen
- Climate change means a changing 'normal' & multiple, simultaneous and sequential extreme weather events in different locations across the globe
- The current El Niño is of a larger magnitude than seen in the recent historical record and is unfolding against a backdrop of long-term global warming

Questions?

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