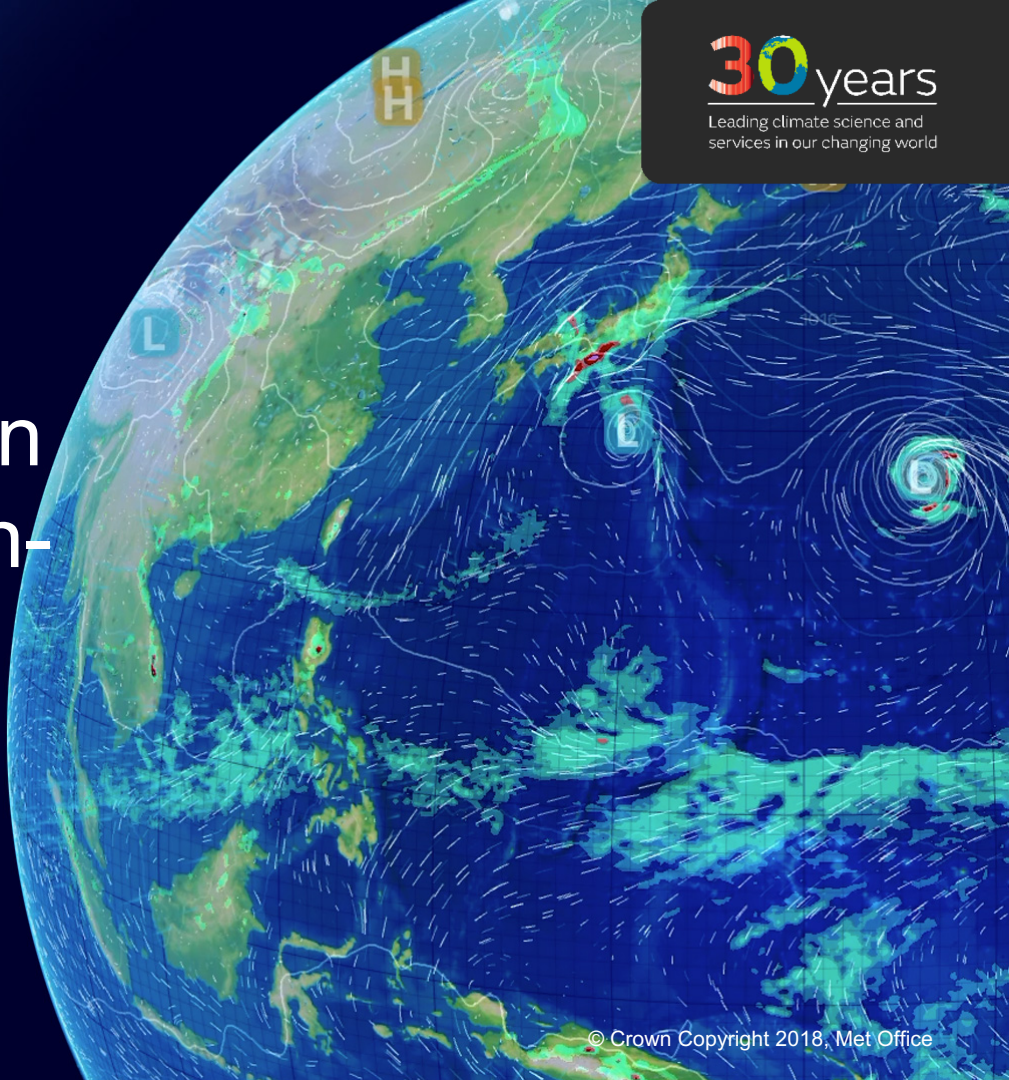


UKCP: Understanding uncertainty in future changes in precipitation extremes at convection- permitting scale

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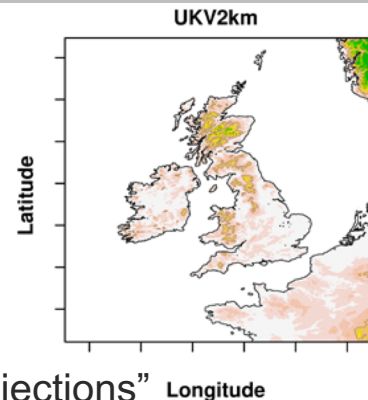


Main findings

- Convection-permitting model ensemble projects an intensification above the Clausius-Clapeyron relation for extreme precipitation
- Climate change signal for extreme precipitation appears to converge in the CPM ensemble, with uncertainty dominated by natural variability
- The correct representation of convection may lead to reduced model uncertainties in future changes in extreme precipitation

UKCP 2.2km ensemble

- 2.2km resolution for UK
- 12 members
- Driven by 12km RCM over Europe
- High emissions scenario RCP8.5



Paper under review on GRL journal with the title:

“Convection-permitting Models Offer Promise Of More Certain Extreme Rainfall Projections”

First national climate scenarios at convection-permitting scale