

## **Use of seamless prediction techniques to estimate and reduce uncertainties in multi-decadal corecasts of Climate change**

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Seamless prediction techniques to estimate and reduce uncertainty in multi-decadal predictions of climate change, based on output from short and medium-range weather and seasonal forecasts, are reviewed. These include the use of analysis increments for parameter estimation, stochastic parametrisation as a novel means to represent model uncertainty, and use of reliability diagrams in seasonal prediction studies to quantify the reliability of multi-model ensemble techniques. Finally, some results indicating the importance of high resolution models, as used in NWP, for multi-decadal prediction, will be discussed.