

Multi-year forecasting at the Met Office Hadley Centre

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The Met Office Hadley Centre was the first centre in the world to issue an initialised GCM-based forecast of climate for the coming decade (Smith et al 2007). It has continued to lead in this area through the development of its forecast techniques alongside wide-ranging studies of the predictability of many key climate variables. Furthermore, it has coordinated an exchange of decadal climate predictions organised through WCRP, which has further been formalised by its recognition as the WMO Lead Centre for Annual-to-Decadal Climate Prediction. In this role, it collects hindcasts and forecasts from a number of Global Producing Centres for Annual-to-Decadal Climate Prediction and other contributing centres, and publishes a range of single- and multi-model forecast products as well as verification statistics. An important component of the role of the Lead Centre is to produce regular Decadal Climate Updates, which detail the current state of decadal climate as well as its prospects 1 and 5 years ahead. While a first step on the path towards offering user-relevant decadal climate services, it is the intention of WMO that these updates should help inform its member states by cascading through its Regional Climate Centres to National Meteorological and Hydrological Services. This talk will outline the Met Office Hadley Centre's current activities in the production, exploitation and dissemination of annual to decadal climate predictions, as well as planned investigations into more applied, sector-specific annual to decadal climate services.