



## **Low frequency variability in ERA-20C**

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Within the ERA-CLIM suite of reanalyses, ERA-20C uses a state of the art 4D-VAR analysis system to assimilate observations of surface pressure and marine winds for the whole of the 20th century. ERA-20C consists of an ensemble of reanalyses, providing a relatively novel means of investigating the temporal variability of atmospheric variables over this period, with greater scope for addressing uncertainty. In this presentation we discuss the low frequency variability of temperature and humidity in the atmosphere. Where feasible, comparison is made with the 20-CR 20th century reanalysis from NOAA/CIRES.