Geophysical Research Abstracts Vol. 14, EGU2012-11176, 2012 EGU General Assembly 2012 © Author(s) 2012



Decadal forecasts with CNRM-CM5. Sensitivity to the inclusion of the stratosphere

J.-F. Guérémy and N. Laanaia Météo-France, CNRM, Toulouse, France (jean-francois.gueremy@meteo.fr)

In the framework of the French research project EPIDOM were conducted decadal predictions with the CNRM-CM5 coupled model (used for the CMIP5 simulations). The objective of the work in this project is to determine the sensitivity of predictability to the consideration of the stratosphere. To do this, it was chosen to retain a less expensive model geometry (Tl63) than the one used for the CMIP5 decadal forecasts (Tl127). A vertical resolution of 91 levels covering the stratosphere up to 0.01 hPa, and a resolution of 62 identical levels in the troposphere, but stopping at 5 hPa, were chosen. Six departure dates (January of 1981, 1986, 1991, 1996, 2001, 2006) were treated considering ensembles of 10 members over 10 years. The first results of these high and low top predictions will be discussed.