



Paleo-Constraints In Ensemble Climate Modeling

H. Muri (1), M. Allen (1), H. Yamazaki (1), G. Henderson (1), P. Valdes (2)

1. University of Oxford, UK, (2) University of Bristol, UK (muri@atm.ox.ac.uk / Fax: +44 1865 272923 / Phone: +44 1865 272920)

The aim of this study is to place a paleo-constraint on climate sensitivity in the *climateprediction.net* ensemble. Some of the *climateprediction.net* models have shown a large sensitivity and by applying these models to past climates, we are testing if these models and their corresponding sensitivity are realistic. The general circulation model results are compared to paleo-observations.

The period of focus is the mid-Holocene, i.e. ~6000 years before present (6kyBP), when the climate was stable and the forcing on the climate well known. Paleo-observations supply information on the 6kyBP climate. We are aiming to provide a framework for the evaluation of the climate models to see if they are able to simulate climates that were different from today. This will improve our confidence in the models projections for future climates.