Geophysical Research Abstracts
Vol. 14, EGU2012-8016, 2012
EGU General Assembly 2012

Exploring the CMIP5 multi-model archive with structured meta-data

M. Juckes (1), C. Pascoe (1), E. Guilyardi (2), B.N. Lawrence (3), and E. Da Costa (1)

(1) BADC, RAL Space, Rutherford Appleton Laboratory, Oxon, UK (martin.juckes@stfc.ac.uk), (2) LOCEAN, IPSL, 4 place Jussieu, 75252 Paris, France, (3) NCAS, Dept. of Meteorology, University of Reading, Reading, UK

The climate model archive of the Climate Model Inter-comparison Project, Phase 5 (CMIP5), contains results from a broad range of models. At time of submission of this abstract, simulations of the 20th century from 26 models have been delivered. Some of these models have been run both in "atmosphere-ocean" mode, with prescribed atmospheric concentrations of greenhouse gases and in "Earth-system" mode, with prescribed emissions of greenhouse gases. Resolutions of models also vary from close to half a degree to 3 degrees. Not all models are independent, with some modeling groups submitting results from a range of models with varying degrees of complexity or from a model with a range of different parameterisation options. Fortunately, this vast and complex archive is provided with a repository of structured meta-data exploiting the METAFOR Common Information Model. This presentation will exploit this structured meta-data in an exploration of the CMIP5 archive, analysing the dependency of a range of indices and climatologies (both of model fields and derived fields, such as the consecutive dry day index) on the details of model architecture held in the METAFOR repository.