Geophysical Research Abstracts,
Vol. 10, EGU2008-A-06915, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-06915
EGU General Assembly 2008

New Concepts for Data and Metadata at the World Data Center for Climate

F. Toussaint, M. Lautenschlager

Max Planck Institute for Meteorology, Hamburg (Frank.Toussaint@zmaw.de)

The computing capabilities for production of Earth System model data are growing faster than the prices for mass storage media sink. This enforces a new archive philosophy for the next generation of compute servers. At WDC-Climate and DKRZ (German Climate Computing Centre) a new concept for long-term archiving has been developed which addresses this problem and improves the overall confidence in the long-term archive. The new archive concept separates the storage of expiring data at the scientific project level from data for the documented long-term archive. The transition process to the new archive concept already started and at the end we expect to have a well documented archive at reasonable costs.

In addition, WDC-Climate works in an international collaboration on a new semantic metadata concept. Within the frame of the NetCDF based CF (Climate&Forecast) description of physical parameters, several semantic domains ("namespaces") will be linked by defining universal resource names. These persistent URNs should refer to exact CF specifications of a topic by a mapping which will be available from a central server. Different names of the same variable may point to the same URN whereas identical names may point to differing URNs, proveded these names belong to different namespaces.