



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration/OAR
GEOPHYSICAL FLUID DYNAMICS LABORATORY
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April 17, 2017

Dean N. Williams
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Mr. Williams,

The Geophysical Fluid Dynamics Laboratory (GFDL) supports the efforts of Earth System Grid Federation (ESGF) and their role in the coupled inter-comparison model project (CMIP).

The CMIP activity is an organized effort by the world's climate modeling community to freely provide climate information to other scientists and anybody who is able to download and process the data. These data sets are being used for analysis and increased scientific understanding. They provide the scientific basis for many of the international climate reports, including the released Intergovernmental Panel on Climate Change (IPCC) 3rd and 5th Assessment reports. The scientific findings in the IPCC reports provide input to climate policy negotiations between and among countries. The CMIP database is therefore of extremely high value to society both inside the U.S. and the world.

The total amount of data under CMIP Panel oversight is about 5 PB and is one of the larger databases in the world. This data does not reside on any one server but is distributed around the world across 10's of data servers. ESGF provides the infrastructure which allows the data to be useful to those who try to obtain data from the CMIP database. This software is extremely complex as it involves allowing various servers to access information on each other across the internet and the security issues associated with that process.

There is an urgent need for more funding support for the ESGF activity. Without the support, it is possible that serving the CMIP database as outlined above will no longer be possible which will greatly hinder the advancement of climate science.

Therefore, I strongly support the ESGF proposal.

Whit Anderson
Deputy Director, Geophysical Fluid Dynamics Laboratory
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