National Aeronautics and Space Administration Goddard Space Flight Center Greenbelt, MD 20771



March 7, 2013

Reply to Attn of:

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R&D 100 Awards 100 Enterprise Drive Suite 600, Box 912 Rockaway, NJ 07866-0912

Re: Support Letter for ESGF to Receive R&D 100 Awards

To Whom It May Concern:

It is with great pleasure and enthusiasm that we write this letter of recommendation and support for the Earth System Grid Federation (ESGF) to receive an R&D 100 Award. As members of the international observational and re-analysis data prepared working groups, we can attest to the critical importance of validating observational and re-analysis data against climate model simulations. Today, links between observational data experts and model developers/analysts are weak, and as a result, valuable data resources in understanding predictive climate change are underutilized and poorly understood.

As a result of this underutilization, two pilot projects have emerged to help bridge the gaps between the communities in order to better the model evaluation process: observation for Model Intercomparison Projects (obs4MIPs); and re-analysis for Model Intercomaprison Projects (ana4MIPs). These pilot projects aim to apply their observational and re-forecast data sets to the Coupled Model Intercomparison Project (CMIP) process for simulation data verification and validation. It is through the ESGF infrastructure that the co-mingling of data products can exist. At NASA, ESGF is one of the primary conduits in which we distribute NASA climate model output, observations, and re-analysis data to the climate change community. Conversely, it is the primary conduit in which we ascertain and access climate simulation and other related data products.

For the first time ever, ESGF is making it possible for disparate data and resources to be joined together under one knowledge discovery system, across different U.S. federal agencies (DOE, NOAA, NASA, NSF) and international borders. Without ESGF, it would be difficult to generate reports such as the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (ARS), due out at the end of 2013.

We have been pleased to be part of this ongoing ESGF effort and hope that the team will

be recognized for their outstanding contribution to climate change science and other scientific domains.

Sincerely,

Dr. W. Phillip Webster

Chief, Computational and Information Sciences and Technology Office, NASA Goddard

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Dr. Tsengdar Lee

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