

October 20, 2014

Al Kellie, Director
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National Center for Atmospheric Research (NCAR)
Boulder, CO 80307-3000

Dear Al:

This is the customary report to you as CISL Director, summarizing the meeting on October 16, 2014 at NCAR of the CISL High-performance computing Allocation Panel (CHAP). The meeting began with a working breakfast at 8 AM and lasted until 7 PM, with a working dinner at 5 PM. We heard a presentation after a lunch break by Dave Hart about allocations on and usage of the Yellowstone computing system at the NCAR-Wyoming Supercomputing Center (NWSC). Dave also previewed a new electronic system to facilitate future CHAP reviewing. We heard a presentation during the working dinner by Anke Kamrath on progress toward an eventual replacement system at the NWSC when the Yellowstone supercomputer approaches the end of its reliability. The new system will overlap one year with Yellowstone and have necessary enhanced computing capacity. Sarah Ruth was attending the meeting as the NSF overseer; and NCAR Director Jim Hurrell was able to attend the working dinner.

A new feature of the meeting was a morning session in which the CHAP reviewed a massive computing request for multifaceted usage organized around the Community Earth System Model (CESM). The request was for Climate Simulation Laboratory (CSL) resources; and prior CESM computing requests had been reviewed by the now-dissolved CSL Allocation Panel. Six CHAP reviewers prepared written comments in advance, which formed the basis for discussion among them and the other CHAP panelists having no conflicts of interest with the CESM request. A detailed written summary of the consensus recommendations of those panelists, as well as the six individual reviews, will be provided anonymously to the CESM Chief Scientist, Jean-Francois Lamarque, for him to consider and to discuss with the CESM Scientific Steering Committee (SSC) and the CESM Advisory Board (CAB). It suffices in the present context to indicate that the CESM is very highly regarded and was recommended for almost complete support of its entire two-year request via the portion of CSL resources available to it. Some reviewer concerns about the way the CESM computing request had been prepared will be noted in the recommendations, mainly in regard to how priorities of tasks and their resource amounts, both within and across CESM Working Groups, are determined and whether there is a need in the future for more coordination with the CESM leadership of the SSC and the CAB when the computing request is formulated.

The afternoon and after-dinner CHAP sessions were devoted to reviewing 45 computing requests from the University Community by individuals supported via National Science Foundation (NSF) grants for research in the atmospheric and closely related sciences. Although the 45 requests were for 366% of the available resources, a final total of 103% of the available resources was able to be recommended for support by virtue of (i) suggesting at least one-year partial awards to some of the largest requests, (ii) suggesting consideration in the Spring 2015 CHAP meeting of an increased award to use some of the University portion of CSL resources, and (iii) suggesting small amounts of computing time for some requesting scientists, in order for them to prepare more detailed computing requests, to be acted upon during the Spring 2015 CHAP meeting.

The next meeting of the CHAP will be on April 30, 2015. New CHAP members will be appointed in the meantime to replace panelists presently at the end of their terms; and a new CHAP Chair has already become fully prepared to take on the duties of the job.

Respectfully submitted,
Bert Semtner
Outgoing CHAP Chair

cc: Anke Kamrath, Sarah Ruth, Dave Hart, Jim Hurrell, CHAP panelists