## June 20, 2011 11am PDT

## **BioEarth Working Group #I Meeting (Cyberinfrastructure and Modeling Working Group)**

Location: Sloan 146

**Primary Option:** teleconferencing at 509-335-4700, Meeting ID # 2863

Back-Up Plan #1: Skype (with Video if you have a camera). My skype name is jennifer.c.adam

If we need to share a screen we will go with this (let me know if anybody has a document that will need to be seen by all during the meeting): <a href="http://tinyurl.com/BioEarthVRoom">http://tinyurl.com/BioEarthVRoom</a>

**People involved in WG #1:** Adam, Chung, Evans, Guenther, Harrison, Ananth K., Lamb, R.Leung, Stockle, Tague, Vaughan (all faculty, postdocs, students invited as well; students involved in modeling/cyberinfrastructure are strongly encouraged to attend)

## Agenda:

- 1. Announcements and reminders
- 2. Go over meetings notes and milestones from June 6 meeting
- 3. Updates from individuals on any progress or decisions made since kick-off
- 4. Continue discussion on cyberinfrastructure items, including an update on details from the WSU HPC central cluster (Ananth)
- 5. Item regarding econ/biophysical integration (spatial/temporal integration) (Mike Brady)
- 6. Continue discussion on first year milestones

## **Notes from Meeting:**

Participants: Adam, Ananth, Vaughan, Harrison, Tague, Allen

- 1. Announcements and reminders:
  - a. Upcoming Meetings
    - i. Steering Committee Meeting (Jun 27 at 11am)
    - ii. WG I meeting (July 11, 11am)
  - b. All subawards should have gone out last week.
  - c. Reminder about stand alone model web material and bioearth-relevant publications
  - d. Within a week or two, Liz Allen will be setting up interviews with PIs individually. Please respond to her quickly. She would like a 1-hour interview with each PI sometime between the dates of July 7 and Aug 10. She will travel to locations that are closer and skype with individuals that are further away.
- 2. Discussion focused on cyberinfrastructure

- a. Large data sharing? Can we use a cloud system or give key PIs access to a drive on the cluster for scp? **Action Item**: Investigate possibilities.
- b. Ananth reports on the central cluster (see attached documentation from Ananth). It seems that (if while not spending the money) there are no limitations to us going forward with setting up the sequential runs on the central cluster at this point in time. The compute nodes are about 10 times that of Aeolus and are mostly unused. There are 31 TB and 38 TB of non-local scratch and permanent storage space, respectively. Eventually, we may decide to use some of the \$60k towards making local scratch space to speed compute time (particularly if I/O intensive processes). Also, the central cluster IT support guy seems willing to work with us, including giving Jim Kusznir root access when necessary. Decision made: We will go forward with setting up the sequential runs on the central cluster at this point in time. When we reach a time at which the central cluster resources are limiting our ability to move forward with BioEarth development, we will resume this conversation and make a decision on how to use the \$60k. In the meantime, we will learn quite a bit about the feasibility of using the central cluster for BioEarth. Action Item: Joe will talk to Serena about CMAQ needs and also do an offline CMAQ simulation on the central cluster to see any limitations of central cluster.
- c. Question about NEWS: Will it be set up on the cluster as part of the sequential set of simulations? John says that it currently can be run using python. **Action Item:** Therefore, we will look into the possibility of adding it to the sequential simulation framework on the cluster.
- 3. Offline conversation between Jenny and Christina on VIC/RHESSys integration strategies.