

The drought working group met on Tuesday (July 24) evening (6:00-8:00pm).

The following summarizes the main discussion and action items.

### **1) Update on drought index - Dave G.**

Randy gave a brief overview of his drought index work and outlined some additional work he is doing – he plans to write this up for publication shortly. He also mentioned some additional related analysis that Dennis Lettenmaier is doing that uses information about the PDFs of soil moisture (hope to hear about that at the next wg telecon).

There was some discussion of how to define the onset of drought – seems difficult to do in real time – though that is a key requirement for applications and decision making. Dave also discussed the need to do some parallel analysis based on more traditional indices such as the PDSI and SPI.

#### *Action items:*

- a) Encourage Randy to continue working on this problem – everyone!
- b) Follow up with Roger Pulwarty on drought index work and link to NIDIS – Dave/Randy
- c) Further work needed to compare with other indices and to define the onset and demise of droughts – Dave?
- d) Ask Dennis L. to give us an update on his work at the next WG telecon -Siegfried

### **2) Update on model experiments - Siegfried S.**

—a) NASA - Siegfried S. Completed the main experiments with the three annual SST REOFS (Pacific, Atlantic and trend). Complete the experiments with the low frequency and ENSO REOFS.

—b) GFDL - Tom D. – have approximately 12 experiments running

—c) NCEP - Kingtse M./Jae S. – SST are ready and about to start runs

d) Lamont group (CCM3) – email from Richard S. – “have the model compiled on Condor and the Condor software working and the runs are about to go. Results should begin coming in in a month or two.”

—d) NCAR (CAM3.5) – some question about who will do the runs. Marty/Siegfried will discuss with Mike A. and Clara D. Marty also suggested that his group may be able to do the runs with CAM 3.0

—E) Possible coupled model simulations - Ben Kirtman described an interesting approach to “bias” the coupled model with a specified SST forcing pattern. Basically doing the equivalent of an AMIP with the coupled model – but allowing for feedbacks. He plans to do these runs with CCSM3.0. Would be very useful to have companion runs with CAM3.0

Marty plans to do an analysis of drought in the AR4 models (part of DRICOMP work). He plans to repeat the SST analysis that was done for the observations using the output from the various coupled models– and do similar drought composites.

Model validation will be an issue. Hope to hear from Sumant about that next time. Marty suggested computing the PDSI from the available AMIP runs done with the various models and comparing with the PDSI observations.

The question was raised about whether all the data will be made available to the community. It was emphasized that each group should be given time to analyze their own results. It was suggested that we might consider having diagnostic subgroups. There is also the important issue about how we make the data available. Perhaps through PCMDI? Involves considerable work/resources to provide the data in the correct format, etc.

*Action items:*

- a) add Ben and Duane to mailing list (Siegfried - done)
- b) ask David Rind if he is planning to do these runs (Siegfried)
- c) ask Sumant to discuss key observational analyses and model validation at the next telecon (Siegfried)
- d) Revisit the data distribution issue at the next telecon (Siegfried)

### **3) Planning for next year's drought workshop/with DRICOMP.**

Howard Cattle suggested that we coordinate the workshop with international efforts on drought– in particular the WCRP crosscutting activity on climate extremes. We will have to work out exactly how to do that. Perhaps further advertise our activities, and become more informed about what is being done internationally.

The consensus was to have the meeting somewhere in the west (an area that has been under drought conditions for several years now) sometime in the fall of 2008.

*Action items:*

- a) form a small group of interested people to begin planning for the workshop (Siegfried/Dave)
- b) Review our international participation (Siegfried)
- c) Consider having an interim meeting on model results – perhaps a special session at the spring AGU (Dave/Siegfried).

### **4) Link to NIDIS**

Possible avenues for connecting with the NIDIS implementation plan:

- Coordination with NPO/agencies on interdisciplinary research goals
- Establish NIDIS Interdisciplinary research coordination board
- Contributions to drought portal – e.g., Randy’s drought index work
- Contributions to Pilot studies

*Action items:*

- a) Marty will discuss and get update from Roger
- b) Hope to have Roger give us an update at our next telecon