

3rd US Climate Modeling Summit NASA Headquarters, DC [June 27, 2017]

USCMS Chair Briefing

V. Ramaswamy
NOAA/ GFDL



Overarching Goal for CMS

- To enhance coordination and collaboration toward a common national climate modeling strategy and communication with the broader modeling community.
- The CMS is an annual opportunity for:
 - ✓ Modeling center leaders to engage in discussion on major objectives and difficulties
 - ✓ Agency representatives to present relevant current priorities, directions, issues
 - ✓ Dialogue regarding whether and how we might improve strategies to further U.S. climate science and mission objectives



Following on from USCMS2

- HPC concerns, future computational issues
- CMIP6 and US modeling institutions
- Scenario-MIP / US-centric “MIP”
- High-resolution modeling
- Subseasonal/ seasonal prediction
- Land, and Earth System, Modeling
- Communications: US Centers & GCRP
- Feedbacks from CMS to GCRP



Action Items from USCMS2...(1)

- Provide POCs for the major topical areas being pursued at the Center. [*Nearly Done*]
- Centers provide summary paras. of their activities. [*Compiled*]
- HPC follow-up [*This Summit*]
- Model tuning paper [*Submitted, in review*]
- MIPs coordination. [*e.g., RFMIP*]



Action Items from USCMS2...(2)

- US relevant scenarios. [*This Summit*]
- Subseasonal/ seasonal predictability. [*This Summit*]
- Water/ Carbon cycle issues [*This Summit*]
- Communications, including feedbacks to GCRP [*Begun*]



Workshop on Modeling the Arctic

All 6 Centers are interested in the subject, but area and depth of interest varies:

- Seasonal to decadal variations/trends.
- Processes: chemistry, aerosols, clouds, radiation, sea-ice.
- Role of atmosphere and oceans.
- Subseasonal-to-seasonal predictions e.g., sea-ice extent, thickness.
- Linkages to midlatitude weather; other connections.
- Detection and attribution.



Workshop and Summit

- All Centers indicated their ability to participate in the Workshop and Summit.
- Subgroups for Workshop and Summit assembled to draw up agenda, with topics, speakers, panel discussants.
- Ramaswamy, as Chair, and Hendrik Tolman, as Co-Chair, along with the Center representatives, and IGIM/ GCRP Staff, steered the effort.



This Summit

- Workshop & 3rd Summit (March 14-15, 2017).....re-scheduled to June 26-27, 2017)
- 1-day Workshop preceding the Summit:
 - Arctic (selected topic)
- Agenda for the Summit (major topics):
 - Center reports
 - Discussion on the Workshop
 - Climate and Natl. Security WG Report
 - Subseasonal-to-seasonal-to-decadal predictability
 - HPC/ Exascale computing
 - MIPs (RFMIP, AeroMIP,.....). A US-centric project?
 - VIACS [WCRP/CMIP6]
 - Land issues (Irrigation, water, and carbon cycles)
- ❖ Organizational matters to conclude this CMS



For the concluding session

In reference to the opportunities/actions arising, centers to discuss organizational arrangements for the coming year.

- Recap of actions, POCs and timing.
- Nominate USCMS Chair and Co-Chair for the year (rotating yearly among the Center Directors) and define logistical support (+1 from center).
- Discuss communication needs/plans for the year (e.g. for input to 2018 USCMS organization and actions implementation)
- Identify topics of interest for future meetings
- Identify workshop topics and workshop chair for 2018

