

CESM Societal Dimensions Working Group Meeting
4 – 5 March 2015
National Center for Atmospheric Research – Boulder, Colorado
Mesa Lab – Main Seminar Room

>>>> Webcast: www.fin.ucar.edu/it/mms/ml-live.htm <<<<<

WEDNESDAY, 4 March

Joint Land Model and Societal Dimensions Working Groups

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|------|---|----------------------------|
| 1:10 | SDWG Meeting Start - Joint SDWG/LMWG session | |
| 1:30 | Attribution of the biogeochemical and biogeophysical impacts of CMIP5 | Peter Lawrence, NCAR |
| 1:50 | The effects of land unit boundaries on GCAM land use and cover | Alan Di Vittorio, LBNL |
| 2:10 | Exploring the climatic impacts of fulfilling the global biofuel potential | Candida Dewes, U. Virginia |
| 2:30 | Using landscape typologies to model socioecological systems | Anthony King, ORNL |
| 2:50 | <i>Break</i> | |
| 3:20 | Impacts of climate and human-induced changes on stream temperature in large river systems: An Earth system modeling perspective | Hong-Yi Li, PNNL |
| 3:40 | The effects of groundwater and return flow on future water deficits in the U.S.: A one-way coupling of GCAM and CLM | M. Hejazi, JGCRI / PNNL |

CMIP6 Plans

- | | | |
|------|--|------------------------------|
| 4:00 | ScenarioMIP | Brian O'Neill, NCAR |
| 4:20 | LUMIP | Dave Lawrence, NCAR |
| 4:40 | AerChemMIP | Jean Francois Lamarque, NCAR |
| 5:00 | Discussion: Relevance of CMIP6 to SDWG/LMWG | |
| 5:30 | <i>Working Group Information Exchange (LMWG and SDWG) – Damon Room</i> | |

THURSDAY, 5 March

SDWG Science Session I

8:30 *Coffee*

SDWG Computing Session

9:00 Overview of previous and current computing projects

Lawrence Buja, NCAR

Report on previous computing projects

9:20 Peter Lawrence, NCAR

9:35 Martyn Clark, NCAR

9:50 Additional project ?

10:05 *Break*

Overview of current computing projects

10:20 1. THESIS Development

10:25 2. IESM: Historical land use uncertainty

10:30 3. Hydrologic impacts uncertainty and downscaling

10:35 4. Output processing tool

10:40 5. Carbon cycle disturbance and mitigation

10:45 6. Ensemble for hydrologic cycle

10:50 7. Overshoot / geoengineering

10:55 8. ScenarioMIP / LUMIP guidance

11:00 9. VHR reference data

11:05 10. Discussion

11:25 *Lunch (on your own)*

SDWG Science Session II

BRACE Project Session

1:00 Introduction: The Benefits of Reduced Anthropogenic Climate change (BRACE) Brian O'Neill, NCAR

1:10 A new large CESM initial condition ensemble to assess avoided impacts in a climate mitigation scenario Ben Sanderson, NCAR

1:30 Avoided extreme heat-related health impacts in U.S. cities Brooke Anderson, CSU

1:50 Avoided economic impacts of climate change on agriculture Xiaolin Ren, NCAR

2:10 Estimating avoided tropical cyclone impacts with an index of damage potential James Done, NCAR

2:30 *Break*

CESM applications

3:00 High-resolution CESM simulations of the Lake Tanganyika watershed Anton Seimon,
Appal. St. University
Yangyang Xu, NCAR

3:20 Model projection of 21st century heat extremes depend on scenarios of GHG and air pollution

3:40 Terrestrial feedbacks influence land use, crop price, emissions, and carbon Alan DiVittorio, LBNL

4:00 New time-domain diagnostics and verification tools for climate models Caspar Ammann, NCAR

4:20 SDWG policy for development of CESM linkage code Brian O'Neill, NCAR

4:40 Discussion

5:00 Wrap-up discussion

5:10 *Adjourn*