

## Agenda for October 19<sup>th</sup>, 2016

*Location: 1800 G St. Ste 9100, NW, Washington DC 20006.; Conference Room: B  
(please give yourself an extra 5-10 minutes to go through security)*

Dial in information Dial: 877.423.6338; Access Code: 527651

Web Link: <https://icf.globalmeet.com/IGIM>

1. SGCR updates meetings	Gary Geernaert	10:00 - 10:15 AM
2. <a href="#">USCMS-2 update and plans for the next meeting and workshop</a>	V Ramaswamy	10:15 - 11:00 AM
3. Discussion about future GCRP priorities	Gary Geernaert	11:00 - 11:15 AM
4. Roundtable updates	All	11:15 - 11:30 AM
5. <a href="#">Gaining Insights into Dynamical Cores and their Physics-Dynamics Coupling via DCMIP Test Suites</a>	Christiane Jablonowski	11:30 AM - 12:00 PM

### **Gaining Insights into Dynamical Cores and their Physics-Dynamics Coupling via DCMIP Test Suites**

Christiane Jablonowski, Paul Ullrich, Colin Zarzycki, Kevin Reed, James Kent, Peter Lauritzen and Ram Nair

The Dynamical Core Model Intercomparison Project (DCMIP) pursues a science and educational mission, and has been conducted at NCAR in 2008, 2012 and 2016. It combines a two-week summer school with a community-driven dynamical core intercomparison that has received broad inter-agency support. DCMIP employs idealized test cases to shed light on the scientific characteristics of current and emerging dynamical cores. This is done in close collaboration with the model developers.

In 2016, DCMIP-2016 put special emphasis on pairing the newest generation of GCM dynamical cores with simplified moisture processes to gain insight into the physics-dynamics coupling from an idealized viewpoint. In particular, the test cases incorporated a moist baroclinic wave, a tropical cyclone and a supercell. Twelve non-hydrostatic dynamical core modeling groups participated in DCMIP-2016 which provides a rich data base for model intercomparisons. The talk will present the ideas behind DCMIP, showcase examples from the DCMIP-2016 and DCMIP-2012 model ensembles and will highlight the lessons-learned from the idealized test suites. This includes a brief discussion of the physics-dynamics coupling strategies.