

**FIRST ANNOUNCEMENT: Invitation to participate to the
SPARC Dynamical Variability (DynVar) Workshop 2**

3-5 November 2010, Boulder, Colorado, USA

The SPARC DynVar Activity will hold its 2nd workshop in Boulder, Colorado, USA, 3-5 November 2010. The 3-day workshop will consist of presentations (oral and posters) and open discussions. NOAA Earth Research Laboratory's Physical Sciences Division will host the workshop.

The SPARC DynVar Activity is part of the Stratospheric Process and their Role in Climate Project (SPARC). SPARC is a core project of the World Climate Research Program (WCRP).

The SPARC DynVar Activity long-term goals are to determine the dependence of the mean climate, climate variability, and climate change on stratospheric dynamics as represented in Climate Models. Since the planning of the DynVar Workshop 1 (held in Toronto, Canada, 27-28 March 2008), a number of new works have appeared in the literature contributing to our knowledge on how stratospheric representation operates in climate models. In part because of these advancements, a few climate modeling groups are now planning to undertake the *Coupled Model Intercomparison Project Phase 5* (CMIP5) experiments with models that include a well-resolved stratosphere. Interest in models with a well-resolved stratosphere has also led to the *Stratosphere resolving Historical Forecast Project* (SHFP), part of WCRP's Climate Variability and Predictability Project (CLIVAR), aimed at quantify improvements in actual predictability by initialising and resolving the stratosphere in seasonal forecast systems.

The aim of the **SPARC DynVar Workshop 2** is to provide a forum for discussing the scientific advancements in the key areas central to the Activity and for planning on how best the Activity can continue to advance the inclusion of a well-resolved dynamical stratosphere in Climate Models (coupled atmosphere ocean-seaice models) and Earth System Models (including also atmospheric chemistry and/or biogeochemical cycles).

Presentations are called for (but not restricted to) the following highlighted key areas:

- Influence of the stratosphere on the tropospheric circulation, on the ocean circulation via air-sea interactions, and on the cryosphere (in particular the sea ice field);
- Role of the stratosphere in the tropospheric circulation response to climate change, and the implications of this for oceanic and cryospheric climate change responses;
- Mechanisms of two-way stratosphere-troposphere coupling in climate models, to understand why the behaviors of models differ between each other.

Participation from modeling groups is called for:

- Presentation of the status of the CMIP5 runs with models with a well-resolved stratosphere;
- Discussion on how to best analyze, make full use, and exchange knowledge from the ensembles of CMIP5 runs, with the role of the stratosphere in focus;
- Discussion how to best analyze CLIVAR's SHFP runs;
- New results and reports on experience gained from the analysis of the SPARC Chemistry-Climate Model Validation Activity (CCMVal)-2 simulations.

Expected achievements of the DynVar Workshop 2 are the revision of the DynVar simulation set previously planned in light of the mentioned recent developments, the fostering of standard diagnostics focused on stratosphere-troposphere connections among international projects, and a

preliminary plan to establish a SPARC-CLIVAR connection focused on the role of the stratosphere on weather and climate predictability.

Attendance to the SPARC DynVar Workshop 2 is open, but total number of participants is limited. Please email to elisa.manzini@cmcc.it and judith.perlwitz@noaa.gov your expression of interest as soon as possible.

Registration Deadline: 30 September 2010

Dynvar Committee

Elisa Manzini (Coordinator), Marco A. Giorgetta, Judith Perlwitz, Lorenzo M. Polvani, Fabrizio Sassi, and Adam Scaife.

Local Organization

Judith Perlwitz and Elisa Manzini

For further information on the SPARC DynVar Activity: <http://www.sparcdynvar.org/>

The SPARC DynVar Workshop 2 is organized in collaboration with the COMBINE EU project: <http://www.combine-project.eu/>.

A Second Announcement will follow, including details on Registration and Accommodation.

IMPORTANT INFORMATION FOR NON-US TRAVELERS

Foreign travelers intending to use the Visa Waiver Program must use the online Electronic System for Travel Authorization. You must complete an application online for authorization to travel to the U.S. (ESTA)

Please see the ESTA website: http://www.cbp.gov/xp/cgov/travel/id_vis/esta/ to log in to obtain authorization.