

CORDEX-FPS-SA: “Extreme precipitation events in Southeastern South America: a proposal for a better understanding and modeling”

Short Report - 6 June 2017

The main aim of the CORDEX-Flagship Pilot Study in South America is to investigate multi-scale aspects, processes and interactions that result in extreme precipitation events by using dynamical models (high resolution, convection permitting and coupled models) and statistical models. To this end, this initiative also seeks to promote inter-institutional collaboration and further networking in the South America domain.

- During 2016 a series of teleconferences and one small meeting in November 2016 in Buenos Aires have been carried out in order to start organizing activities and arranging our first meeting as a project.
- The 1st Workshop on CORDEX-FPS-South America was held at INPE Sao José dos Campos, Brazil on 23 March 2017 (see Picture). During the workshop a research agenda has been designed and a timeline has been agreed. Also the design of common experiments in the framework of the FPS has been discussed. Funding opportunities for supporting experiments and/or FPS meetings have been explored.
- An ICTP Activity Proposal was submitted for a workshop on Regional climate modeling and extreme events in South America to be held at the ICTP-SAIIR somewhere in March-April-May 2018. Title: “Second Advanced School on Regional Climate Modeling and Extreme Events over South America”. The main motivation of the proposed activity was the application of different dynamical (RegCM4) and statistical tools for the generation of high resolution climate experiments in the framework of the CORDEX-FPS in Southeastern South America (SESA). Proposal under evaluation.
- Funding opportunities: Some difficulties in accessing funding for supporting the entire project were identified. Therefore, it was agreed to take advantage of the possibilities of national and bilateral financial agencies for funding projects that could partially cover the objectives of the proposal as well as funding for mobility. In this context:
 - A proposal was submitted and approved by the Czech Republic government which supports Czech participation in international institutions and projects. Responsible: Radan Huth.
 - A proposal for high resolution modeling with RegCM4 was submitted in April 2017 to the Sao Paulo Research Foundation (FAPESP). PI: Marta Llopart.
 - A proposal for dynamical and statistical high resolution modeling of extreme precipitation in SESA will be submitted in June 2017 to be funded by the University of Buenos Aires. This proposal will be conducted in collaboration with the Argentine Meteorological Weather Service to evaluate the hydrological impact of extreme rainfall in the Uruguay River basin. PI: Silvina Solman.
- An abstract on the FPS was submitted and accepted for the EMS Annual Meeting: European Conference for Applied Meteorology and Climatology 2017, 4–8 September 2017, Dublin, Ireland.



1st CORDEX-FPS-South America Workshop, 23 March 2017, CPTEC, INPE, Brazil. L-R: Sin Chan Chou, Santiago Vianna Cuadra, Radan Huth, Christopher Castro, Moira Doyle, Rosmeri Porfirio da Rocha, Silvina Solman, Carlos Ochoa, Carla Vivacqua, Ariane Frassoni, Marta Llopart, Maria Laura Bettolli, Luiz Augusto Toledo Machado.

Maria Laura Bettolli

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