

Second Workshop on Regional Climate Modeling and Extreme Events over South America



5 - 9 November 2018
University of São Paulo, Brazil

Further information:
<http://indico.ictp.it/event/8636/>
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The focus of this workshop will be on the application of dynamical (RegCM4) and statistical tools for the generation of high resolution climate experiments, in particular within the framework of the CORDEX-SESA Flagship Pilot Study. Lectures and hands-on sessions on these tools applied to climate change studies will provide a background for regional climate modelling focused on the South America region (SA).

Description:

The need for producing climate information at the regional level to assess the impacts of climate change is one of the main motivations for developing Regional Climate Models (RCMs) and statistical downscaling models (ESD). There is increasing evidence that climate is changing over Southeastern South America (SESA), where extreme events are becoming more frequent and more intense. Extreme precipitation in SESA usually comes from mesoscale convective complexes during the warm season, which account for a large part of the total annual precipitation; cyclogenesis particularly during the transition seasons; and extratropical synoptic activity during the cold season. In this context, one of the objectives of the SESA-Flagship Pilot Study of the Coordinated Regional Downscaling Experiment (CORDEX) is to investigate multi-scale aspects, processes and interactions that result in extreme precipitation events using dynamical models (high resolution, convection permitting and coupled models) and statistical models and to compare and validate ESD and RCM products exploring the added value of downscaling. Therefore the main purpose of the workshop will be to make the participants aware of the available climate data in South America, and to train them to analyze and downscale these data to an adequate resolution needed to reproduce a particular phenomenon of interest. The application of different dynamical (RegCM4) and ESD for the generation of high resolution climate experiments in the framework of the CORDEX-FPS in SESA is the main motivation of the proposed workshop.

Topics:

- Added Value of dynamical and statistical downscaling;
- Climate change at global and regional scales;
- Climate variability at regional scale influenced by local and remote forcings;
- Uncertainties in global and regional climate change projections

How to apply:

Online application:
<http://indico.ictp.it/event/8636/>

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from Central and South American countries. There is no registration fee.

Directors:

Erika Coppola, ICTP, Italy
Rosmeri P. da Rocha, USP, Brazil
Marta Llopart, UNESP, Brazil
Silvina Solman, CIMA-CONICET, Argentina
Maria Laura Bettolli, UBA-CONICET, Argentina
Marcelo Barreiro, University of the Republic, Uruguay
Tercio Ambrizzi, USP, Brazil

Speakers:

Sin Chan Chou, CPTEC/INPE, Brazil
Moira Evelina Doyle, UBA/CONICET, Argentina
Santiago Vianna Cuadra, EMBRAPA, Brazil
Graziano Giuliani, ICTP, Italy
Francesca Raffaele, ICTP, Italy
Michelle Reboita, UNIFEI, Brazil
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José Manuel Gutierrez, CSIC/University of Cantabria, Spain
Radan Huth, Charles University in Prague, Czech Republic

Deadline:

8 September 2018



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