



# **Conference on Regional Climate Modeling and Extreme Events over South America: results from the CORDEX-Flagship Pilot Study**

**4-6 September 2022 - Buenos Aires, Argentina**

**&**

## **Parallel CORDEX CAM/SAM lab-training activity\***

**4-6 September 2022 - Buenos Aires, Argentina**

### **Objectives of the Conference**

The South America-Flagship Pilot Study Initiative (FPS-SESA) endorsed by the Coordinated Regional Downscaling Experiment (CORDEX) 'Extreme precipitation events in Southeastern South America: a proposal for a better understanding and modeling' aims 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. With focus on extreme events, the added value of dynamical (RCM) and statistical (ESD) downscaling is also explored. In this context, the main objective of the proposed conference is to share and discuss results from this initiative with the South and Central America (SAM/CAM) regional modeling community.

The Conference will have presentations of recent results of the FPS-SESA, FPS-Mediterranean and discussions on ongoing research activities related to regional climate modeling, including results from previous training activities developed in the CAM/SAM regions.

### **\*Parallel CORDEX CAM/SAM lab-training activity**

A capacity building activity during the afternoons, with focus on regional climate modeling and the 5th generation version of the model RegCM5, which includes a new non-hydrostatic dynamical core, will be combined and coordinated with the conference topics. The activity may be taken by participants of the conference or by other scientists from CAM/SAM.

### **Information**

Latest information and update on this activity will be available at

<https://indico.ictp.it/event/9835/>

## **Topics**

The Conference will have presentations of recent results of the FPS-SESA and discussions on ongoing research activities covering the following topics:

- \* Analysis of dynamical and statistical model results in the South America domain based on convective permitting model simulations and on several ESD models;
- \* Added Value of dynamical and statistical downscaling in simulating precipitation extremes in southeastern South America;
- \* Lessons learned from the CORDEX FPS over Europe and the Mediterranean;
- \* Climate variability in South America at regional scale influenced by local and remote forcings;
- \* Applications in hydrological and crop models;
- \* The FPS-SESA collaborative experience: future collaborative research and coordinated activities with focus on relevant climate phenomena in South America

## **Target Audience**

The Conference is intended not only for researchers actively involved in the FPS-SESA, but also for early career scientists and researchers of CAM/SAM in the field of regional climate modeling and statistical downscaling and related applications

## **Format of the Conference and Lab training**

The activity is proposed in a hybrid format, allowing in-person and online participation through the Zoom platform.

## **Venue**

0+Infinity Building, Faculty of Exact and Natural Sciences, University of Buenos Aires.  
Buenos Aires, Argentina

## **Applications and financial support**

Considering the characteristics of the workshop, there will be a limited number of participants. A limited number of grants are available to support the attendance of participants, with priority given to participants from CAM/SAM countries. There is no registration fee.

Online Applications will be available at the ICTP portal **until 15 July 2022**:

<https://indico.ictp.it/event/9835/>

## **Organizers:**

Silvina Solman (CIMA-CONICET/UBA, Argentina)

Rosmeri Porfirio da Rocha (USP, Brazil)

Tereza Cavazos (CICESE, Mexico)

Erika Coppola (ICTP, Italy)

Marcelo Barreiro (University of the Republic of Uruguay, Uruguay)

Marta Llopart (UNESP, Brazil)

Maria Laura Bettolli (UBA-CONICET, Argentina)