



VI Convection-Permitting Climate Modeling Workshop

7-9 September 2022, C. A. Buenos Aires, Argentina

<http://www.cima.fcen.uba.ar/cpcm2022/index.php>

contact: vi.cpcm2022@cima.fcen.uba.ar

The series of workshops ‘*Convection-Permitting Climate Modeling*’ is devoted to all climate modeling activities at the convection-permitting resolution. This is the resolution where there is no need to parametrize convection and it is solved directly by the dynamics of the atmosphere (namely below 5 km). Workshop covers global and regional climate modeling from model development to state-of-the-art climatological studies performed at this resolution.

The use of a horizontal resolution fine enough to explicitly solve convection is expected to provide a better representation of multiple aspects of the climate such as extreme precipitation phenomena, land-atmosphere interaction, topography effects among others.

The workshop is an open forum to discuss about the newest trends in model development, such as: use of new HPC paradigms as GPU/ARM processors, new coding methodologies and languages, model construction strategies and hardware requirements. It also encompasses discussions around the benefits and added value of using the convection-permitting resolution for climate studies using multiple approaches such as: climate services, story lines, case-studies among others.

In this edition, we aim to strengthen the presence of members of the scientific community of impact studies, policy makers and decision makers in aspects related to the adaptation to the projected changes in climate. As well as, be an opportunity to discuss the last advances and newest techniques being used in the area worldwide, with special focus on South America research activities.

Conferece will be on hybrid mode, presential and virtual assistance.

Main topics

- The added value of convection-permitting climate simulations
- Mechanisms of extreme events by using very high resolution model
- Event-based storyline approaches to climate change
- South American high resolution modeling research activities
- Towards global convection-permitting modeling
- Co-production of climate impact information based on convective permitting models and observations
- Relation between climate modeling – impact studies - policy makers communities
- Benefits of convection-permitting climate modeled data for impacts assessments and policy making

Importan dates

Call for abstracts:	2022 February the 1st
Deadline for abstract submission:	2022 April the 30th
Notification of acceptance and format of the abstract:	2022 May 31th
In person registration period:	2022 May 24th-5th August
Virtual registration period:	2022 May 24th-6th September

Venue

The conference will take place at the room 1401 of the '*0+infinito*' located at the campus '*Ciudad Universitaria*' of the Universidad de Buenos Aires in Buenos Aires City (located by the La Plata estuary at the North end of the city).

Workshop will take place at the ground floor of the building. Coffee breaks and lunch are covered by the registration fee and will be provided in the same building at the poster hall and the spaces around.

Scientific documentation

Regarding the scientific content of the conference, two main documents have been produced:

- [Provisional program](#)
- [Provisional Book of abstracts](#)

Organizing Committee

- Roy Rasmussen, NCAR (USA)
- Andreas Prein, NCAR (USA)

Local Committee:

- Lluís Fita, UBA, CIMA, CNRS IRL 3351 IFAECI, IRD (Argentina)
- Maria Laura Bettolli, UBA, DCAO, CNRS IRL 3351 IFAECI, IRD (Argentina)
- Rocío Balmaceda, UBA, DCAO, CNRS IRL 3351 IFAECI, IRD (Argentina)
- Lucía Cappelletti, UBA, CIMA, CNRS IRL 3351 IFAECI, IRD (Argentina)
- Solange Luque, UBA, CIMA, CNRS IRL 3351 IFAECI, IRD (Argentina)
- Matías Olmo, UBA, DCAO, CNRS IRL 3351 IFAECI, IRD (Argentina)

We are very excited to host the edition. We hope that this edition will serve as a turning point for the community in terms of engagement and networking as being the first one to be in-person after two years of virtual editions. Conference will also provide the technical resources to allow remote assistance.

Official language of the workshop will be English.

The directorate of the '*Facultad de Ciencias Exactas y Naturales*' (FCEyN) of the '*Universidad de Buenos Aires*' (UBA) declared the workshop as of '*interés*' for the faculty (res. RESCD-2022-1240)

Assistance numbers

On 2nd August this is the expected assistance:

- **In person attendees:** 48
- **Remote attendees:** 19
- **Keynote/panel talks:** 7
- **Works as Oral presentations:** 17
- **Works in Poster form:** 41

Previous editions

- 2016: <https://ral.ucar.edu/events/2016/gewex-convection-permitting-climate-modeling-workshop>
- 2018: <https://ral.ucar.edu/events/2018/cpcm>
- 2019: <https://latsis-symposium.ethz.ch/past-events/latsis-symposium-2019.html>
- 2020: <http://www.jmbosc.or.jp/tougou/EN/ws2020.html>
- 2021: https://www.pco-prime.com/tougou2021_ws/index.html

Sponsors

The main sponsors of the workshop are:



'Centro de Investigaciones del Mar y la Atmósfera' (CIMA)



'Departamento de Ciencias de la Atmósfera y los Océanos' (DCAO)



'Universidad de Buenos Aires' (UBA)



'Instituto Franco-Argentino sobre Estudios de Clima y sus Impactos. CNRS - IRD - CONICET - UBA' (IRL 3351 IFAECI)



'Consejo Nacional de Investigaciones Científicas y Técnicas' (CONICET)



'Instituto Panamericano de Geografía e Historia' (IPGH)



'National Center for Atmospheric Research' (NCAR)



'The Global Energy and Water Exchanges', (GEWEX)



'Consejo Nacional de Investigaciones Científicas y Técnicas' (CONICET)



'Servicio Meteorológico Nacional' (SMN)