



Call for proposals to host the International Project Office of CORDEX

The World Climate Research Programme (WCRP) is opening a call for proposals to host the International project office of CORDEX.

The CORDEX IPO is currently and since 10 years hosted by the Swedish Meteorological and Hydrological Institute (SMHI) in Norrköping, Sweden and it is now time for someone else to take on this important role. WCRP is seeking applications from institutions willing to host the CORDEX IPO from mid 2025 onward.

The deadline for proposals is **28 February 2025**.

All communications and enquiries regarding this call should be directed in English to Maureen Wanzala (mwanzala@wmo.int) in the WCRP Secretariat.

The Flagship Pilot Study: Extreme precipitation events in Southeastern South America (SESA) meeting

During the Pan American Meteorological Conference (CPAM 2024) at the University of São Paulo in Brazil in August the FPS-SESA had a parallel two-days meeting. The aim of the activity was to follow up on the FPS-SESA studies and to keep the work dynamics and collaboration network active.



[More information about the call can be found at the WCRP website.](#)

The Host Institution will significantly benefit from hosting the CORDEX IPO by having a close interaction with this critical domain of research in support of regional downscaling experiments. It will serve as a great opportunity for the host to help deliver the exciting new goals of CORDEX to the international community.



[Read more about the discussions and the main outcomes here.](#)



CORDEX Australasia and CORDEX South Asia domains

Activity in the **CORDEX Australasia** domain has grown rapidly over the last 15 years, and the increased level of coordination/collaboration has been transformative for regional climate modelling efforts in the region. Already at least 6 modelling groups

have contributed simulations to CORDEX-CMIP6 for the Australasia domain. We also see potential for further growth in the Western Pacific. CORDEX Australasia has access to a variety of models and approaches, which has greatly strengthened the robustness of its regional climate projections. Various advancements in the modelling efforts are being pursued on the path to regional earth system modelling. A particularly exciting development is the emergence of machine learning methods, with generative adversarial methods being developed.

The Australasian community relies on CORDEX as a demonstration of international best practice when undertaking climate downscaling for regional projections. For example, archiving standards defined by CORDEX have been adopted by all major modelling activities in the region (which was not the case in the past). This has facilitated a much greater exchange of information between researchers and has directly encouraged a multi-model 'sparse matrix' approach to regional climate projections in the region. In the case of Australia, the National Partnership for Climate Projections (NPCP) was established by the Federal Department of Climate Change, Energy, the Environment and Water to further grow the opportunities by such collaboration including for scientific advancement, computing infrastructure and for climate services. This work is also beginning to bridge international borders and should further enhance regional climate modelling for CORDEX in the region. The Australian Meteorological and Oceanographic Society (AMOS) has also supported annual workshops for CORDEX Australasia, encouraging new researchers to take advantage of the regional climate projections provided.

It is worth noting that the number of submissions to CORDEX has doubled between CORDEX-CMIP5 and CORDEX-CMIP6, signifying the rapid growth in regional climate modelling in the region. Initiatives for better collaboration between atmospheric and coastal modelling is underway, as well as advancing bias correction methods to further improve the utility of projections for climate services. Extreme weather projections are a strong focus of current and future modelling activities, with new convective scale simulations in the region. Combined with machine learning approaches, we hope to see a further step change in projection capabilities within the next generation of regional climate models.

South Asia is extremely vulnerable to climate disasters. Climate services play an important role in managing present and future climate risks. In the last 15 years a number of activities have been conducted by the **CORDEX South Asia** domain.

In 2012, the Centre for Climate Research (CCCR) at the Indian Institute of Tropical Meteorology (IITM) hosted the first CORDEX South Asia Training Workshop in Pune. This training workshop was organized by the WCRP in partnership with START, and in collaboration with ICTP, CSAG, SMHI and ICSU-ROAP.

In 2013, the CORDEX South-Asia 2nd Science and Training Workshop was hosted by the International Centre for Integrated Mountain Development (ICIMOD) in Kathmandu.

From 2019 to 2024 Institutional capacity building in CORDEX data access and use was held as part of the Asia Regional Resilience to a Changing Climate (ARRCC) programme funded by the UK's Foreign, Commonwealth & Development Office (FCDO). A series of training workshops, focussed on the analysis, use and communication of future climate projections, have been led by ICIMOD, in partnership with the Met Office and organisations involved in the CORDEX South Asia initiative, including the World Climate Research Programme (WCRP), the Swedish Meteorological and Hydrological Institute (SMHI) and Indian Institute of Tropical Meteorology (IITM)-Pune. The capacity building has targeted NMHSs and other organisations working to deliver climate services to government, communities, and industrial sectors.

Regional trainings: [Climate change analysis using CORDEX regional climate models over South Asia \(October 2020\)](#) and [Spatial and temporal analysis of climate change indices \(June 2022\)](#)

National trainings: Spatial and temporal climate change analysis using CORDEX regional climate projections for Nepal (June 2021), Bangladesh (December 2021, March 2022), [Bhutan \(December 2022\)](#). Trainings workshops were held virtually and in person over 5 days and attended by participants from the Nepal Department of Hydrology and Meteorology (DHM) and climate research organisations in Nepal (June 2021), Bangladesh University of Engineering and Technology (BUET) (December 2021), and Bangladesh Meteorological Department (BMD), Institute of Water Modelling in Bangladesh (March 2022) and National Centre for Hydrology and Meteorology

(NCHM) and Royal University of Bhutan. They built on the content from part 1, refreshing participant skills in how to access and download CORDEX data, but focused on how to apply bias calculations in CORDEX data against reference historical data sets, and more specific analysis of model simulations for user-specified locations. The training provided experience of using R-based tools to generate annual and monthly data plots using CORDEX and APHRODITE data, visualisation of climate change projections over different space and timescales, and the interpretation of uncertainty in model results.

Impact

Overall, the training workshops reached approximately 80 participants 33% of which are women from across the region, with many of those attending multiple training workshops and some who were able to attend the whole series. These workshops have helped to increase the capacity of people from a range of climate services organisations to access, use and generate new information from climate model data, which can be used to support their work on climate resilience in vulnerable sectors. These events have supported the CORDEX initiative ambitions to increase the usage of CORDEX data in climate change applications and strengthened collaboration between the partner organisations involved in training development and delivery.

Scoping Workshop on developing a Strategy for Future Climate Projections in South Asia was held in Dhulikhel, Nepal with key stakeholders in Nepal in December 2023. The workshop discussed the development on access and use of CORDEX South Asia datasets and other relevant future climate projections. It also aimed at identifying gaps and opportunities and contribute to the development of a strategy.

ICIMOD was engaged to co-organize the **WCRP's First Climate Research Forum: Southern Asia Climate research priorities for the next decade** held online in November 2021. Climate Research Forums are a series of regionally-based online Forums whose purpose is to exchange ideas, discuss new activities and opportunities of WCRP, as well as support other WCRP activities to strengthen our engagement in the regions around the world. And a presentation was made on CORDEX South Asia and Interaction with Society at the **WCRP Open Science Conference** in Kigali, Rwanda in October 2023.

The **International Conference on Regional Climate (ICRC CORDEX 2023)** was held in September at the IITM in Pune. As the **India Hub**, the conference served as a nexus for the global regional climate research community, focusing on high-resolution climate information and its practical applications in vulnerability assessment, impact analysis, and adaptation strategies. One of the key discussions revolved around the increasing demand for reliable regional climate information that is not only scientifically rigorous but also effectively communicated to diverse end users.

The current Points of Contact in these domains are:

CORDEX Australasia: Jason Evans and Marcus Thatcher

CORDEX South Asia: Sanjay Jayanarayanan, Mandira Shrestha, Lalu Das and Koji Dairaku

More information on activities can be found at the CORDEX website under [Domain activities](#)



Group photo from the ICRC CORDEX 2023 India hub



Group photo of participants and resource persons at the part 3 regional (Photo: ICIMOD)



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The International Project Office for CORDEX is hosted by Swedish Meteorological and Hydrological Institute (SMHI), Folkborgsvägen 17, 601 76 Norrköping, Sweden

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