



Droughts in the Americas: regional priorities, early warning systems, and sustainable development

Wednesday 28 May 2025

Side event: 1:30 pm to 5:00 pm (hybrid)

Poster session and networking: 5:00-6:00pm (in person)

Hotel Crowne Plaza, Asunción, Paraguay

Concept Note

Droughts are severe, prolonged climate extremes with profound cross-sectoral impacts (agriculture, energy, transportation), affecting ecosystems, livelihoods, and accelerating desertification. This necessitates a coordinated, multi-stakeholder response, particularly concerning productive sectors vital to Paraguay and the La Plata Basin, to enhance regional climate resilience.

Effective drought management relies on robust Early Warning Systems (EWS), which provide critical foresight to mitigate impacts, save lives, protect livelihoods, reduce social and economic losses and damages, and support multiple sustainable development goals (SDGs). This event aligns with the UN's Early Warnings for All (EW4All) initiative, aiming for universal EWS protection by 2027. EW4All promotes multi-stakeholder collaboration for people-centered EWS, integrating ecosystem and human health to address interconnected challenges across sectors. Transdisciplinary research approaches are needed to inform the design, implementation and monitoring of EWSs. The IAI CoP-33 is a key opportunity to bolster regional collaboration on EWSs for drought and climate resilience.

The Research Center for Global Change (CICAG) of the National University of Asunción, the National Council of Science and Technology of Paraguay (CONACYT), the World Meteorological Organization (WMO) Regional Office for the Americas, the United Nations Convention to Combat Desertification (UNCCD), and the Inter-American Institute for Global Change Research (IAI) **will host a side event in Asunción, Paraguay on the margins of the IAI's CoP-33.**

The event brings together experts, decision-makers, private sector, funders, and civil society representatives to formulate concrete recommendations on droughts, including the effective implementation of EWSs and the needs of vulnerable productive sectors in Paraguay and the Americas. This event provides a valuable opportunity to strengthen science-policy collaborative networks, identify effective strategies, and enhance climate governance and science diplomacy at the regional level.



The event aims to:

1. **Identify key challenges and opportunities** for implementing and sustaining EWS for droughts in the Americas, focusing on vulnerable productive sectors (agriculture, energy, transportation).
2. **Facilitate the exchange of best practices**, lessons learned, and innovative tools in developing and applying EWS for droughts and managing their cross-sectoral impacts.
3. **Propose mechanisms for regional collaboration** and climate governance (leveraging IAI, WMO, UNCCD networks) to strengthen capacities in drought risk management and EW4All implementation.
4. **Outline key commitments and recommendations** for a joint declaration on droughts and extreme climate events, for presentation at international fora such as the IAI's CoP-33 and meetings of the UN Framework Convention on Climate Change, the Convention on Biological Diversity, and the Convention to Combat Desertification.

The event will contribute to a Declaration presented at the IAI's CoP-33 and other international fora such as the UNFCCC CoP-30, outlining commitments to strengthen regional cooperation on early warning systems for droughts and other extreme climate events. The Declaration will emphasize an inclusive approach that acknowledges the importance of science and science diplomacy to address the interconnected challenges of global environmental change and the need for coordinated and resilient adaptation and mitigation strategies.

Spotlight on Youth in Global Environmental Change Science in Paraguay

Following the side event, in-person participants will have the opportunity to attend a poster session and networking event with the Paraguayan Space Agency (AEP) and the Network for Earth Observation Laboratories (RedLabot) in the same location from 5:00 to 6:00 p.m.

Red LabOT uses territorial intelligence to address disaster risk reduction, climate change adaptation, and other community-driven sustainable development priorities. AEP, one of the founding members of Red LabOT, has invited four students, two high school and two university students who are part of AEP's GEOLab capacity building program and RedLabot, to present posters on projects related to: analysis of fire damage in protected wilderness areas, flood monitoring, and agricultural monitoring using satellite data. This session aims to hear from and support the next generation of scientific leaders seeking the latest solutions.

