



South America Water from Space Conference

26-28 March, Santiago, Chile

Climate, weather, and human life are profoundly affected by changes in Earth's continuous, interconnected 'water cycle'. Observing and monitoring the key variables governing the global water cycle is essential to our understanding of the Earth's climate, forecasting weather, predicting floods and droughts, and improving water management for human use. The progress of Earth Observation Satellite Technologies (EO) has made it possible since at least the last 40 years to survey several of these key water variables from space. In the coming years, an increasing number of EO missions will offer an unprecedented capacity to observe the Earth's surface, its interior and the atmosphere, ushering in a new era in the science of the Earth environment and the water cycle.

To discuss the challenges and opportunities resulting from this coming increasing capacity, we invite you to attend the "South America Water from Space Conference" to be held in Santiago, Chile, from the 26th to 28th of March 2018. We will describe and assess the state-of-the-art instruments and scientific developments used to characterize the global water cycle and its variability. In addition, we will identify the primary needs in modeling and data assimilation to improve our knowledge of water cycle science and our ability to quantify future changes in water cycle variables.

We welcome presentations focusing on applications of remote sensing techniques to investigate scientific and management water issues, including: liquid and solid contaminants discharge in rivers, hydrometeorological risks, precipitation, cryosphere (snow, glaciers), water levels and surface waters, lakes, rivers and

wetland, interaction between rivers and estuaries, turbulent energy fluxes and evapotranspiration, irrigation, floods and droughts, modeling the water cycle, soil moisture, and calibration and validation of satellite-derived data, among others. Special contributions dealing with South American regional thematic (rivers such as the Amazon, the Orinoco, La Plata, Biobio, etc...) are a plus, but contributions dealing with tropical large river basins, in general, are most welcome.

One part of the conference will be devoted specifically to the advent of the new capabilities of the Surface Water Ocean Topography (SWOT) Mission (NASA, CNES, CSA, and UKSA). The objectives of the upcoming mission, to be launched in April 2021, are to make the first global survey of the Earth's surface water at an unprecedentedly fine-spatial resolution for both water surface elevation and extent and to observe changes in terrestrial surface water bodies over time. Thus, presentations that show the benefits of high spatial resolutions around the globe, and that could serve as inspiration for South American research teams and/or operational institutions, or even upstream work, showing SWOT capabilities are particularly welcome.

This conference is jointly organized by Universidad de Concepcion (UDEC) and INACAP in Chile, also jointly with CNES (Centre National d'Etudes Spatiales, France), NASA-JPL (Jet Propulsion Laboratory, USA), UNC (University of North Carolina, USA), CIRES (Cooperative Institute for Research in Environmental Sciences, USA), IRD (Institut de Recherche pour le développement, France), CNRS (Centre National de la Recherche Scientifique, France).

It is sponsored by UDEC, Conicyt (Chile), Ambassade de France in Chile, CNES, CNRS and ONRG (USA). Participation in the meeting will be free of charge. Interest in Oral or Poster presentations (with a summary of no more than 300 words, the "presenting author" listed on the abstract) should be sent to the following email address: southamericawaterfromspaceconf@gmail.com. Accurate information about the meeting place (INACAP Santiago Sur) in Santiago will be provided later.





Organizing Committee:



Rodrigo Abarca del Rio, UDEC, Chile.

Patricio Rodriguez and Cristina Castillo, INACAP, Chile.

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Fabrice Papa, IRD, France.

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Scientific Committee:



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