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HYDROSPACE-GEOGLOWS 2021

7-11 June 2021 | ESA-ESRIN | Frascati (Rome), Italy

BACKGROUND

Earth Observations, both from satellite and in situ monitoring, are vital for inventory and better water resources management. These elements, combined with modeling, provide actionable information for informed decisions in allocating water resources around human activities and support to environmental and natural ecosystem sustainability. Because of the vast amount of data, it is imperative to work towards "analysis-ready" and develop the technical skills of interpretation and translation to produce meaningful information that conforms to essential accuracy and utility requirements, and support decision-making, policies, and observation programmes around the globe.

While in situ observations remain a "gold standard," their collection is limited because it is expensive to obtain and

manage, subject to vandalism and rapid disrepair. Even the limited in situ data is not widely shared because of technological, policy, or cultural barriers. On the other hand, satellite monitoring of water level of lakes, reservoirs, rivers, and floodplains provides an alternative made possible thanks to the constant efforts and dedicated programmes set up by space agencies. The current and future generations of higherresolution altimetry instruments, such as along-track Delay-Doppler (SAR), laser altimetry and 2D interferometry (SWOT), but also variable gravity, are transforming the monitoring of hydrological parameters, which includes a new generation of imaging instruments of higher resolution, requiring the development of new algorithms and the training of a new generation of scientists.

OBJECTIVES

The main workshop objective is to provide a multidisciplinary environment to strengthen the collaboration among scientists and non-scientist users of in situ, modeling, and space observation data. Can we collectively do better? What are the new capabilities of space-based data for the application community? How do we fill the gap between Research and Development and Operational Use of remote sensing information in hydrological applications, operational forecasting systems, and water resources management? What are the scientific and technological challenges for "analysis-ready data", and what opportunities can the community take to address them.

The workshop's expected outcome is to define an action plan for the future and converge on recommendations from the Scientific and Operational Communities. A round table discussion is planned to cover the seed-questions mentioned above.

WORLD BANK GROUP



DEADLINES

Call for Abstracts	15 January 2021
Abstract Submission closing	14 March 2021
Notification of Acceptance	29 March 2021
Issue of Preliminary Programme	29 March 2021
Registration (free) deadline	5 April 2021
Release of Final Programme	at the workshop

PARTICIPATION

The workshop is open to all interested parties, from scientists to operational users in water management. Scientists from different fields including remote sensing experts, modellers in hydrology and in situ observers as well as users are most welcome.

VENUE

ESA's Centre for Earth Observation (ESRIN) will host the Workshop: ESA-ESRIN, Largo Galileo Galilei, 1, I-00044, Frascati (Rome), Italy. On-line participation will be considered, upon request, after registration.



ORGANISING COMMITTEE

Alice Andral, CNES | Paul Bates, U. Bristol | Peter Bauer-Gottwein, DTU | Jérôme Benveniste, ESA-ESRIN | Christophe Brachet, International Office for Water (OIEau) | Jean-François Crétaux, LEGOS | Cesar Ignacio Garay Bohórquez, U. Javeriana - GEOGLOWS | Angelica Gutierrez, NOAA/NWS - GEOGLOWS | Philippe Maisongrande, CNES | Rodrigo Cauduro Dias de Paiva, U. Federal do Rio Grande do Sul | Tidiane Ouattara, African Union Commission | Valeria Rosicarelli, ESA Conference Bureau - Nikal Solutions | Sushel Unninayar, NASA/GSFC & GESTAR/MSU

SCIENTIFIC COMMITTEE

The Scientific Committee Members can be found on the workshop website.



CONTACTS

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For further information please visit the website at: **www.hydrospace2021.org**