



EMVIS S.A.



National Research
Council of Italy



Swedish
Meteorological and
Hydrological
Institute



EOMAP GmbH &
Co.KG



International
Water Association



Burgundy School
of Business



Ente Acque della
Sardegna



US Environmental
Protection Agency



Commonwealth
Scientific and
Industrial Research
Organization



Melbourne Water



SatDek

Day 4 - 18 November '21

ENERGY

PrimeWater Multi-User Panel Stakeholders week (15-19 Nov)

How to repurpose satellite-derived water quality data and forecasts into water industry intelligent services.

ABOUT THE MULTI-USER PANEL

The purpose of the MUP is to serve as an international panel of users providing expert feedback on Earth Observation (EO)-enabled services developed or extended in the context of PrimeWater and participate in the co-generation process itself through dialogue.

THE OBJECTIVES OF THE MUP STAKEHOLDERS WEEK

The main objectives of this workshop will be: (a) to provide an overview and update on the services that PrimeWater can offer to participants; (b) to understand how different sectors are using EO service to address issues such as Extreme hydrological events (EHEs) and harmful algal bloom (HAB) events and (c) to discuss the added value of PrimeWater products when addressing these issues.

Useful links for Day 4

- 'Call for Water' serious game - access the serious game [here](#)
- User preferences for Earth Observation services – access the survey [here](#)

AGENDA

SESSION 1

18 November, 08:00 – 08:45 GMT

- Welcome and introduction – *Samuela Guida, IWA*
- State of the art hydrological forecasting for the hydropower sector, *Ilias Pechlivanidis, SMHI*
- Short to medium term forecasting of water quality for operational applications: opportunities and limitations - *Evangelos Romas, EMVIS*
- Q&A with audience – *all*

SESSION 2

18 November, 08:45 – 09:25 GMT

Moderator: **Katharine Cross**, IWA

Presentation:

- *What are the current gaps in hydropower services?* **Cristina Diez Santos**, Open Hydro

Moderated Panel discussion:

- **Cristina Diez Santos**, Open Hydro
- **Ilias Pechlivanidis**, SMHI

Q&A with the audience

Mini-break

SESSION 3

18 November, 09:30 – 10:35 GMT

How does forecast performance influence decision-making?
Play online the “Call4Water” serious game

Closing Remarks

SPEAKER BIO



Cristina Diez Santos, Open Hydro

Cristina Diez is a water resource and hydropower specialist with over seven years of experience in international guidelines for sustainable development, project management and climate change knowledge. Her interest lies at the interface between academia and industry by building and sharing knowledge to develop water infrastructures worldwide. Cristina counts with extensive international experience within hydropower development, both in developing good practices with Multilateral Development Banks and advising international organisations on issues related to water and the hydropower sector. Her work influenced practice and policy and supported the development of a sustainable hydropower sector. Cristina has a Master's Degree in Civil Engineering specialising in hydraulics and the environment from Spain and a Master of Advanced Studies in Sustainable Water Resources from ETH Zurich, Switzerland.

Presenters from PrimeWater Consortium



Katharine Cross, IWA

Katharine has extensive experience in the water sector from global to local scale with a focus on climate resilience and adaptation, nature-based solutions, water-energy-food nexus, water governance and the digitalisation of the water sector. She has worked in Asia, Africa, Europe, North America, and South America with NGOs, government, and the private sector. She previously worked for the International Water Association developing and managing strategic programmes. Katharine is currently working for a number of organisations including IWA on climate-smart utilities, water wise cities and digital water, as a senior advisor for Water-Cities supporting the transition of cities towards sustainable water management, and as the Mekong Coordinator for the Australian Water Partnership.



Samuela Guida, IWA

Dr Samuela Guida is the IWA Strategic Programmes and Engagement Manager. She is responsible for coordinating IWA Strategic Programmes as well as projects, initiatives, and Communities of Practice related to the programmes. She is also responsible for the identification of and engagement with key global and regional partners who are aligned with IWA's strategic goals and for coordinating and supporting the functioning of IWA members' groups – working closely with member engagement team, regional offices, communications team, and other key staff at IWA. She has an academic background in Industrial Biotechnology and a Master's Degree from the University of Padova in Italy. In 2020, she obtained her PhD from Cranfield University (Water Science Institute, UK) with a Thesis on the removal and recovery of nutrients (ammonium and phosphorus) from wastewater through the ion exchange (IEX) process at demonstration scale.



Ilias Pechlivanidis (SMHI)

Dr Ilias Pechlivanidis is a Senior Researcher in hydrology and water resources at SMHI and the Project Manager of the Dissemination Centre for the Copernicus European Flood Awareness System. He has been the principal investigator focusing on hydrometeorological forecasting, environmental change impacts, science communication, cross-cutting applications of earth observations, early warning and user-tailored water and climate services. He has been coordinating operational (sub-)seasonal forecasting services over Europe and the globe. He is a Member of the World Meteorological Organization (WMO) Research Board, the Co-Chair of the Hydrologic Ensemble Prediction Experiment (HEPEX) scientific initiative, the Chair of the EGU Hydrological Forecasting sub-division, a Reference Member at the Centre of Natural Hazards and Disaster Science (CNDS), and the first Earth Observation Evangelist for the agriculture sector of the FIRE forum.



Apostolos Tzimas, EMVIS

Apostolos Tzimas is the Managing Director of EMVIS SA (<http://emvis.gr/>). He has a deep knowledge of the water sector with particular focus on water infrastructure planning, development and management, working closely with public and private sector water bodies. In the field of water resources management, he provides specialized consultancy services and advisory work to competent central and regional authorities for issues related to the implementation of EU water related legislation. He is acting as technology purveyor in digital transformation projects in the water sector. He has co-ordinated the EU funded Research & Innovation project SPACE-O (<http://www.space-o.eu/>). Currently he is the co-ordinator of the EU flagship project for international cooperation of EU Copernicus Program PRIMEWATER (<https://www.primewater.eu/>) and IFOS Project (<http://emvis.gr/index.php/ifos>) funded by Innovation Norway. He is active member of authoritative professional associations (IWA, CIWEM, ISWA, IEMSS) and Technology Platforms (Water Europe).



Evangelos Romas, EMVIS

Evangelos Romas is a researcher in the field of hydraulic and hydroecological modelling. He is Head of the Research and Development unit of EMVIS SA with significant experience in 3D hydrodynamic and water quality models for surface water bodies, process simulation, automated calibration and data assimilation techniques, using satellite imagery and in-situ monitoring datasets. He has deep knowledge of major programming stacks and database systems, and professional experience in developing and applying customized ICT solutions in the field of water resources for the implementation of Environmental and Water related Directives. In recent EU-funded collaborative projects (SPACE-O, PrimeWater, IFOS), he has coordinated the architectural design and development of an operational platform for real-time forecasting of water quality characteristics in inland and coastal water bodies.