



Tuesday
28 August 2018
12.00-12.45

Room: FH Cabaret

Monitoring water quality using EO: UNESCO World Water Quality Portal

UNESCO International Hydrological Programme / Group on Earth Observations / European Space Agency / INBO & CNES

Reliable data on water quality is scarce at the global, regional and national levels, especially in developing countries where monitoring networks and capacity are lacking. The use of innovative approaches such as Earth Observation (EO) can greatly enhance water quality data. The UNESCO World Water Quality Portal, developed by UNESCO-IHP International Initiative on Water Quality (IIWQ), is a pioneering tool to monitor freshwater quality using satellite data. The Portal provides data on five water quality indicators: turbidity, chlorophyll-a, Harmful Algal Blooms (HAB), organic absorption and surface temperature, which are essential for understanding the impact of climate and anthropogenic changes. Hence, it supports science-based policy-making. The session showcases the use of UNESCO World Water Quality Portal for water quality monitoring in demonstration basins, along with other examples from ESA and GEOSS on the use of EO for water management. It provides a platform for discussion on the role of EO in the SDG monitoring.

Programme

Moderator: Sarantuyaa Zandaryaa, UNESCO

Opening remarks

Thierno Hamet Baba LY, Chairperson, Intergovernmental Council of the International Hydrological Programme of UNESCO, and Secretary-General, Ministry of Water and Sanitation, Senegal

Monitoring water quality using Earth Observations: Demonstrations of innovative tools and technologies

- The UNESCO World Water Quality Portal: A pioneering tool to monitor water quality using satellite data
Sarantuyaa Zandaryaa, International Hydrological Programme (IHP), UNESCO
- Earth Observations in support of the SDG water monitoring
Douglas Cripe, The GEOSS Secretariat
- Using Earth Observations to monitor water resources
Benjamin Koetz, European Space Agency (ESA)
- Monitoring water quality of lakes and rivers from space: Toward an operational service in THEIA Land Data Centre
Edouard Boinet, Eric Tardieu - INBO; **Selma Cherchali, Alice Andral, Arnaud Selle** - CNES, France

Discussion: The use of EO in water management and the SDGs implementation and monitoring

Closure: Summary and key messages