# Programme Earth Observation Day

Held in association with the 27<sup>th</sup> Meeting of the Scientific and Technical Review Panel (STRP27) of the Convention on Wetlands.

# Objective

The one-day event, organised back-to-back with the 27<sup>th</sup> meeting of the Scientific and Technical Review Panel (STRP27) of the Convention on Wetlands, is a key component of the ongoing consultation on the use of Earth observations (EO) for wetland inventory, monitoring, assessment, and management.

More information on the consultation can be found Earth Observation Consultation Note.

# Programme

- 08:30 09:00: Registration
- 09:00 09:15: Opening Remarks
  - **Speakers:** Dr. Hugh Robertson, Chair of the Scientific and Technical Review Panel (STRP), and Jerker Tamelander, Director of Science and Policy, Secretariat of the Convention on Wetlands.

## 09:15 – 9:45: Setting the stage and introduction to the EO day

**Presentation**: Insights from ongoing work on National Wetland Inventory under the convention and initial findings from the consultation with the EO community: identified needs and priorities.

• **Speakers:** Flore Lafaye De Micheaux, Senior Advisor (Europe), and Filip Aggestam, Scientific & Technical Officer, Secretariat of the Convention on Wetlands.

## 9:45 – 12:00: EO technology, tools and new initiatives

**Presentation:** EO for Wetland Inventory, Assessment and Monitoring: Opportunities and challenges.

- **Speaker:** Marc Paganini Directorate of Earth Observation Programmes Climate Action, Sustainability and Science Department, European Space Agency (ESA).
- **Outline**: The presentation will provide an overview of the latest advances in the use of Earth observations for wetland inventory, assessment and monitoring, highlight emerging tools and methodologies, and discuss the way forward for mainstreaming EO into sustainable management of wetland ecosystems.

**Presentation:** The Role of Spaceborne Radar for mapping of Wetland Ecosystem Extent and Changes.

- **Speaker:** Ake Rosenqvist, Senior Advisor to the Japan Aerospace Exploration Agency (JAXA).
- **Outline**: Optical and radar satellite sensors provide complementary information, and are both vital for mapping and monitoring of wetland ecosystems. This presentation highlights some of the unique characteristics of spaceborne radar, with examples from the Global Mangrove Watch and the Regional Inundation Extent mapping projects.

#### 10:45 – 11:15: Coffee break and networking

**Presentation:** Global Wetland Watch: Towards a global high-resolution inventory of wetland typologies.

- **Speakers:** Christian Toettrup, Senior Advisor and Project Manager at DHI A/S, and Stuart Crane, Global Programme Coordinator on SDG6, at UNEP.
- **Outline**: Wetlands are vital ecosystems, yet they are poorly mapped and characterized, creating a significant information gap. To address this, DHI, in collaboration with UNEP and funded by Google.org, is developing the Global Wetland Watch (GWW). Utilizing Google Earth Engine, the GWW system combines satellite time series data with mechanistic models and machine learning/AI classification methods to improve global wetland information. This data is vital for efforts in conservation, sustainable development, biodiversity, and climate change mitigation.

**Presentation**: EU COPERNICUS Earth Observation and Monitoring Program: State of Play and Opportunities

- **Speaker**: Michel Massart of the Joint Research Center, Copernicus Land Service, European Commission (EU-JRC)
- **Outline**: The EO COPERNICUS program has been launched more than 10 years ago to provide EO operational services to support EU policies and International Conventions. The presentation will provide the state of play of the program, on the satellite and service sides, and will present opportunities for collaboration on the eve of a new financial cycle for the European Commission.

12:00 – 13:00: Lunch Break

## 13:00 - 13:40: Regional experiences, gaps and needs

**Presentation:** EO tools to monitor Mediterranean Wetlands: Lessons learned from the MWO.

- **Speaker:** Anis Guelmami, Coordinator of the Mediterranean Wetlands Observatory.
- After 16 years of implementation, the MWO has tested and validated numerous approaches to monitoring wetland ecosystems based on Earth Observation, with the support, in particular, of many major projects such as GlobWetland-II, GlobWetland-Africa, and the Satellite-based Wetlands Observation Service (SWOS). Many of these approaches have led to significant knowledge

improvements regarding these ecosystems and have even supported many MedWet countries in implementing the Convention on Wetlands (setting up monitoring programmes, providing support for national inventories, etc.). The aim of this presentation is to provide quick feedback on this regional experience, looking at what has worked well, as well as the limitations and main obstacles encountered.

# Presentation: Digital Earth Africa.

- **Speaker:** Lisa-Maria Rebelo, Lead Scientist, and Mpho Sadiki, EO Data Scientist, for Digital Earth Africa.
- Digital Earth Africa leverages advanced Earth Observation (EO) technologies to monitor and assess the health and status of Africa's diverse wetland ecosystems. This presentation will dive into how Digital Earth Africa supports sustainable development and climate resilience across the continent by providing accessible, high-resolution EO data.

# 13:40 – 15:00: Panel Discussion: Addressing gaps and needs for wetland inventory, monitoring, assessment, and management using Earth Observations

• **Objective:** This session brings together experts to discuss gaps, needs and possible responses to support development and use of National Wetland Inventories using Earth Observations.

## 15:00 – 15:30: Concluding Session

- **Objective:** Summarise key insights, recommendations and next steps.
- Closing Remarks