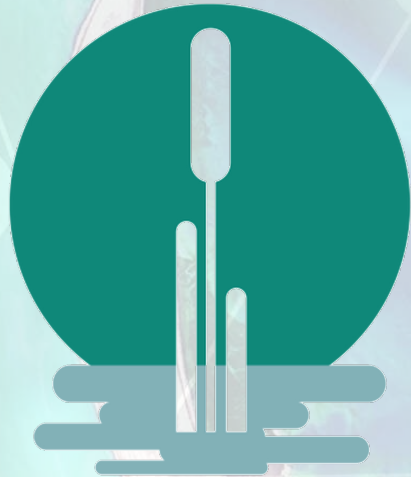


ESA Living Planet Symposium 2022



The GEO-Wetlands Initiative

25 May 2022

Adrian Strauch (University of Bonn)
Marc Paganini (European Space Agency)
Lammert Hilarides (Wetlands International)

History of GEO-Wetlands



- 2007: Ramsar Convention → Global Wetlands Observing System (GWOS)
- 2011: task taken up by GEO BON
- 2016: proposed as GEO Initiative
- Since 2017: project driven development
 - Global Mangrove Watch (JAXA)
 - Satellite-based Wetland Observation Service (European Commission)
 - GlobWetland-Africa (ESA)
 - DeMo-Wetlands (DLR)

Mission and Goals



The GEO Wetlands Mission:

Develop sustained global EO approaches to wetland inventory, mapping, monitoring & assessment

Objectives:

- Collaborative framework for international cooperation
- Co-design of a Global Wetland Observation System (GWOS)
- Build a community of practice on wetland mapping and monitoring
- Build on existing efforts and partnerships



Who is the target audience?



Global

e.g. International Conventions and MEAs, Partnerships and Frameworks

Global Statistics / indicators

Global Maps and Products



Regional / National

e.g. River Basin Authorities, Regional Networks Government Ministries and Agencies

Wetland Inventories, Hotspots

National Statistics / indicators

Methods and Guidance



Local

e.g. Wetland Managers, NGOs, Wetland Practitioners, Protected Areas

High resolution products

Habitat mapping, inundation regimes, WQ

Methods and Guidance

What has GEO-Wetlands already achieved?



www.geowetlands.org

Knowledge Base
Geospatial Data Portal

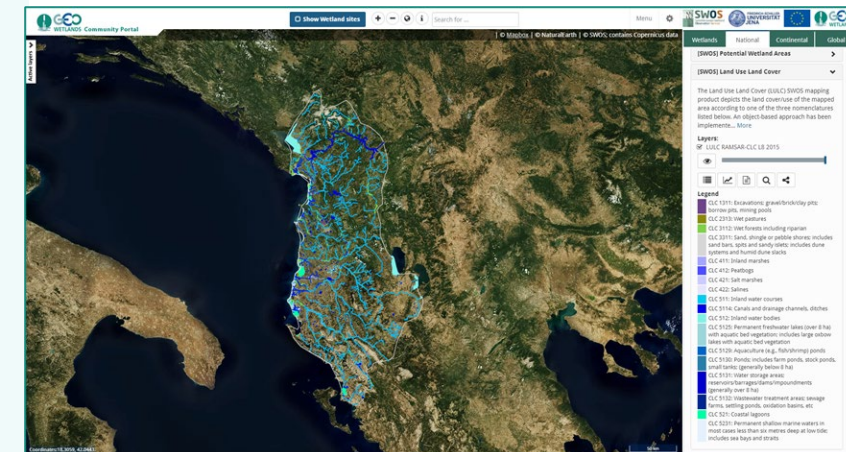
Search for datasets, methodologies, case studies etc... Search →

[Home](#) > [Knowledge Base](#)

Knowledge Base

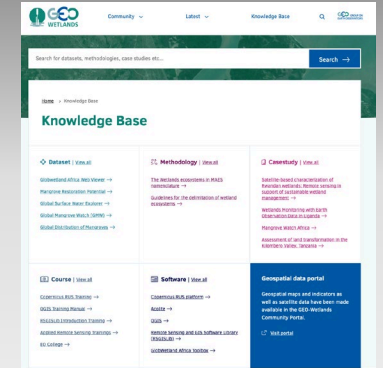
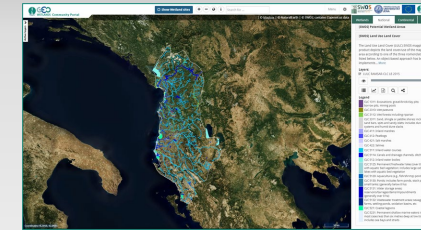
<p>Dataset View all</p> <ul style="list-style-type: none">Globwetland Africa Web Viewer →Mangrove Restoration Potential →Global Surface Water Explorer →Global Mangrove Watch (GMW) →Global Distribution of Mangroves →	<p>Methodology View all</p> <ul style="list-style-type: none">The Wetlands ecosystems in MAES nomenclature →Guidelines for the delimitation of wetland ecosystems →	<p>Casestudy View all</p> <ul style="list-style-type: none">Satellite-based characterization of Rwandan wetlands: Remote sensing in support of sustainable wetland management →Wetlands Monitoring with Earth Observation Data in Uganda →Mangrove Watch Africa →Assessment of land transformation in the Kilombero Valley, Tanzania →
<p>Course View all</p> <ul style="list-style-type: none">Copernicus RUS Training →QGIS Training Manual →RSGISLib Introduction Training →Applied Remote Sensing Trainings →EO College →	<p>Software View all</p> <ul style="list-style-type: none">Copernicus RUS platform →Acolite →QGIS →Remote Sensing and GIS Software Library (RSGISLib) →GlobWetland Africa Toolbox →	<p>Geospatial data portal</p> <p>Geospatial maps and indicators as well as satellite data have been made available in the GEO-Wetlands Community Portal.</p> <p>Visit portal</p>

Several components of the envisioned toolkit are already existing in a prototype or pilot stage.



What has GEO-Wetlands already achieved?

TOOLS

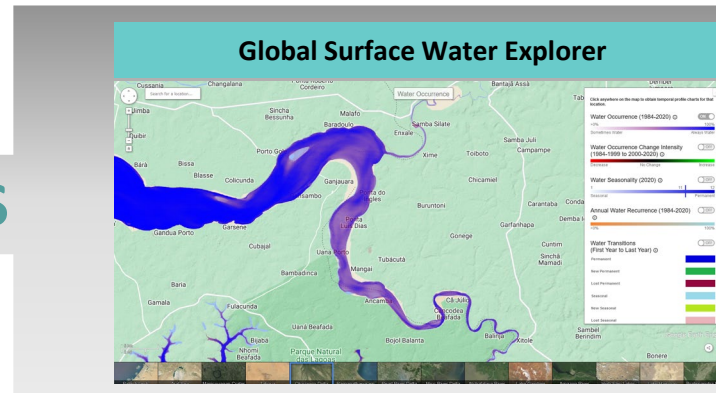


Many other relevant resources (methodological guidelines, case studies, training courses, etc.)

www.geowetlands.org

Knowledge Base
Geospatial Data Portal

DATASETS

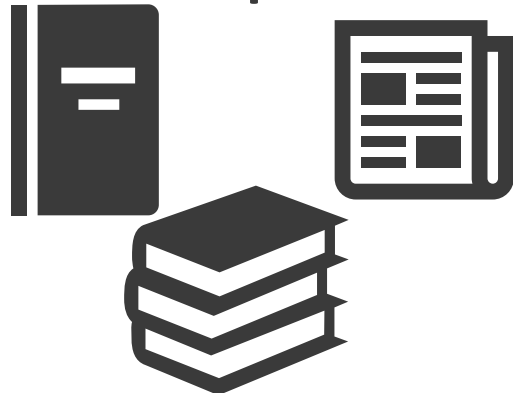


Vision: GEO-Wetlands Toolkit

Communication & Cooperation



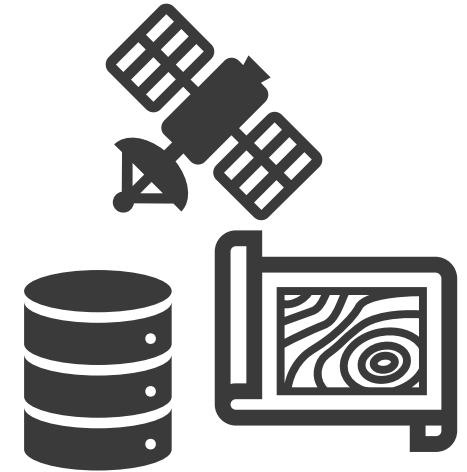
Case Studies, Articles & Reports



Education & Capacity Building



Data & Maps



Analysis & Statistics

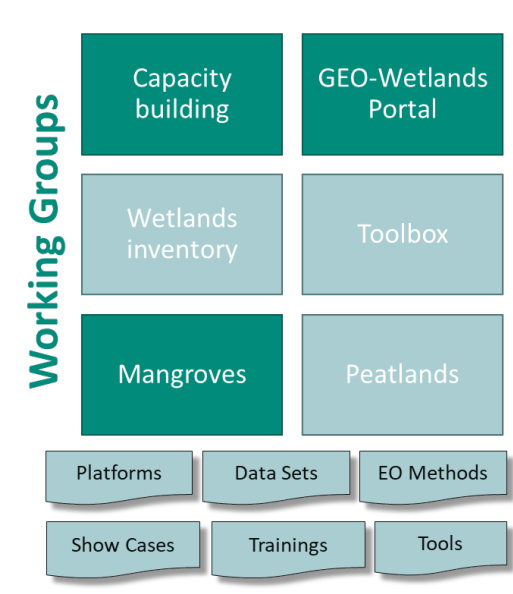


What's needed now?



The way forward

- Updated implementation plan 2023 - 2025
 - Mission, Goals, Objectives, Deliverables
- Global participation and collaboration
- Resources



We need your ideas, inputs, participation and contributions!