

DEVELOPMENT TEAM



DHI GRAS, Denmark (PRIME)



GeoVille Information Systems GmbH, Austria



ITC Faculty of Geo-Information Science and Earth Observation, University of Twente, The Netherlands



Brockmann Consult GmbH, Germany

SCIENTIFIC PARTNERS



Department of Environmental Engineering, Technical University of Denmark, Denmark



Institute of Photogrammetry & Remote Sensing, Vienna University of Technology, Austria



Project Team



↑ Oblique aerial view of the Okavango Delta in Botswana, where flooding peaks during the dry months from June to August. In an otherwise dry period the delta represent a strong natural safeguard against drought, helping people to sustain their livelihoods and attracting animals to create one of Africa's greatest concentrations of wildlife. The GlobWetland Africa toolbox can be used to monitor and model the hydrology over this inland delta to assess the impact of climate change and/or human activities.

Project in a Nutshell

GlobWetland Africa is a project funded by the European Space Agency (ESA) in partnership with the Africa Team of the Ramsar Convention on Wetlands.



Project Key Facts:

- 1.500.000 EUR budget
- 3 years duration (starting from 1. November 2015)
- More than 25 African and international partners
- Free and open data policy
- Provision of free of charge and open source EO toolbox

For more information please visit www.globwetland-africa.org or contact info@globwetland-africa.org

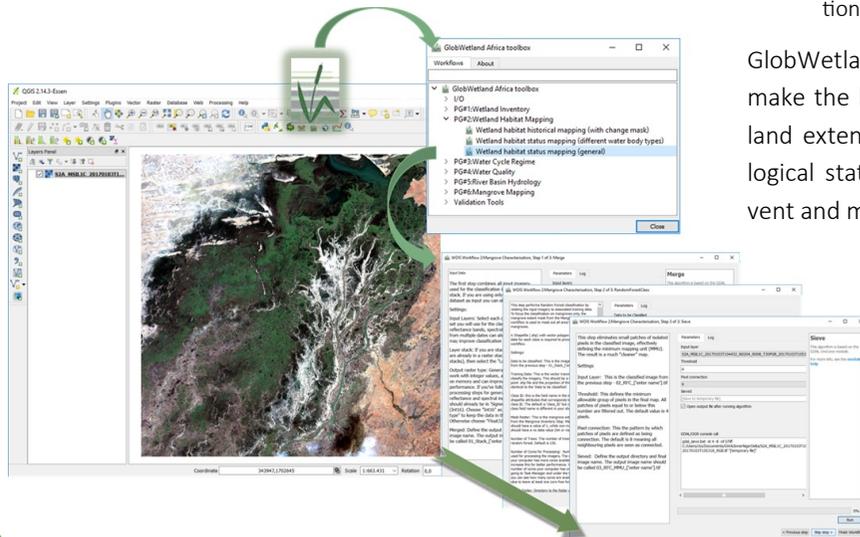


Towards Earth Observation based Wetland Monitoring in Africa

Background

GlobWetland Africa is a large Earth Observation application project initiated to facilitate the exploitation of satellite observations for the conservation, wise-use and effective management of wetlands in Africa and to provide African stakeholders with the necessary Earth Observation (EO) methods and tools to better fulfil their commitments and obligations towards the Ramsar Convention on Wetlands.

As a principal objective GlobWetland Africa is developing and demonstrating an open source and free-of-charge software toolbox for the end-to-end processing of a large portfolio of EO products and the subsequent derivation of spatial and temporal indicators on wetland status and trends, from local to basin scales.



Project Partners

GlobWetland Africa is being implemented in close partnership with an extensive number of partner organizations involved in the implementation of the Ramsar Convention of Wetlands in Africa, including:

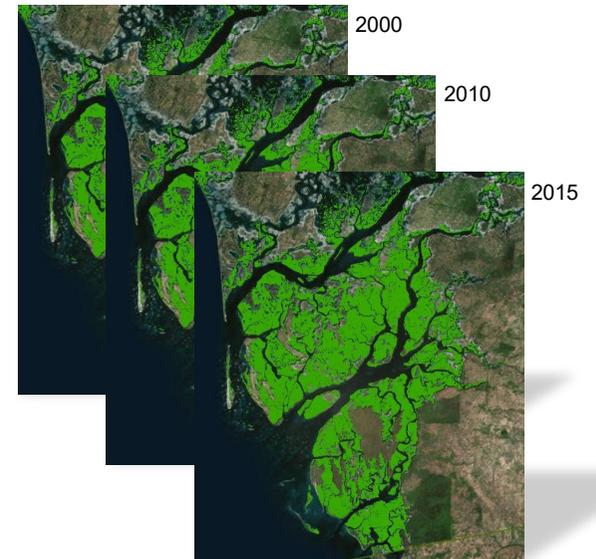
- The Secretariats of the Ramsar regional initiatives in Africa, their wetland observatories and their scientific partners;
- National Focal Points from the network of African Ramsar Contracting Parties and their national initiatives (i.e. environmental conservation agencies, wetlands managers, and their technical and scientific advisors);
- Selected African River Basin Authorities;
- International environmental and conservation organisations or partnerships active on the African continent.

GlobWetland Africa will help partner organizations to make the best use of satellite-based information on wetland extent and condition for better measuring the ecological state of wetlands including their capacity to prevent and mitigate natural disasters.

← The GlobWetland Africa toolbox provides users with all the necessary functionality to monitor, assess and inventory wetlands and their adjacent uplands. This includes end-to-end processing workflows for wetland delineation, wetland habitat mapping, monitoring of inundation regimes and water quality and for river basin hydrology assessments.

Supporting disaster risk reduction

Wetlands are buffers against disasters. Along the coastline, wetlands act as a natural bio-shield against tropical hurricanes. Inland, wetlands act as a sponge, absorbing and storing excess water to reduce floods and slowly releasing water during dry spells to delay the onset of droughts.



↑ The coastal wetlands in Delta du Saloum (Senegal) provide many benefits including coastal protection, flooding control and provision of fresh water. Still, the delta has been heavily degraded and since the 1950s 30% of the mangroves has been lost. The GlobWetland Africa toolbox can assist wetland conservation and restoration planning in the Saloum delta by delivering monitoring information on e.g. the extent, state and evolution of Mangrove forest.