



GlobWetland Africa: Implementing Sustainable Earth Observation Based Wetland Monitoring Capacity in Africa and Beyond

Tottrup, Christian; Riffler, Michael; Wang, Tiejun; Stelzer, Kerstin; Bauer-Gottwein, Peter; Paganini, Marc

Publication date:
2016

Document Version
Peer reviewed version

[Link back to DTU Orbit](#)

Citation (APA):

Tottrup, C., Riffler, M., Wang, T., Stelzer, K., Bauer-Gottwein, P., & Paganini, M. (2016). *GlobWetland Africa: Implementing Sustainable Earth Observation Based Wetland Monitoring Capacity in Africa and Beyond*. Abstract from ESA Living Planet Symposium 2016, Prague, Czech Republic.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

-
-

[\[Authors\]](#) [\[Overview programme\]](#) [\[Keywords\]](#)

- *Paper 351 - Session title: Wetlands*

14:10 GlobWetland Africa: Implementing Sustainable Earth Observation Based Wetland Monitoring Capacity in Africa and Beyond

Tottrup, Christian (1); Riffler, Michael (2); Wang, Tiejun (3); Stelzer, Kerstin (4); Bauer-Gottwein, Peter (5); Paganini, Marc (6) 1: *DHI GRAS, Denmark*; 2: *GeoVille, Austria*; 3: *ITC, Netherlands*; 4: *Brockmann Consult, Germany*; 5: *DTU-ENV, Denmark*; 6: *European Space Agency*

[Hide abstract](#)

Lack of data, appropriate information and challenges in human and institutional capacity put a serious constraint on effective monitoring and management of wetlands in Africa. Conventional data are often lacking in time or space, of poor quality or available at locations that are not necessarily representative for wetlands. Therefore, the Ramsar secretariat, the global coordinating body of the Ramsar Convention on Wetlands, has long recommended making more use of new and innovative technologies, such as those offered by remote sensing. Yet, access to suitable remote sensing data for monitoring wetlands in Africa has also traditionally been constrained either because of high costs or, especially in Equatorial Africa, owing to frequent cloud cover. To meet these challenges the European Space Agency has launched GlobWetland Africa as a major initiative to facilitate the exploitation of satellite observations for the conservation, wiseuse and effective management of wetlands in Africa and to provide African stakeholders with the necessary EO methods and tools to better fulfil their commitments and obligations towards the Ramsar Convention on Wetlands.

The main objective of GlobWetland Africa (GW-A) is to provide the major actors involved in the implementation of the Ramsar Convention of Wetlands in Africa with EO methods and tools to better assess the conditions of wetlands under their areas of jurisdiction/study, and to better monitor their trends over time. To this end, an open source wetland observing system, referred to as the GW-A Toolbox, will be developed, implemented and validated for a series of geo-information products over a number of representative pilot sites in North, West, Central and East Africa. The GW-A toolbox unifies proven and stable open source software into a single graphical user interface that will enable the users to: [i] access and exploit Sentinel data and other relevant contributing missions e.g. ERS, ENVISAT, Landsat and ALOS; [ii] operationally map, assess and inventorize wetlands through a number of dedicated wetland information products and indicators needed for effective wetland management and decision support, [iii] receive a freely available, open, flexible and modifiable framework for easy establishment of new wetland observatories, for easy integration in existing observatory infrastructures and for easy adaptation to new requirements, e.g. changes in management processes.