GlobWetland II

A regional pilot project of the Ramsar Convention on Wetlands.

The overall objective of the Ramsar Convention is the conservation and wise use of wetlands by national actions and international cooperation as a means to achieving sustainable development. Up to now the number of contracting Parties to the Ramsar Convention on Wetlands is 163. This complex and challenging task of Ramsar requires national, local and international bodies involved in the implementation of the convention to rely on suitable geo-information - to better understand wetland areas, complete national inventories, perform monitoring activities, carry out assessments and put in practice suitable management plans based on up to date and reliable information.

In this context, the European Space Agency (ESA) in collaboration with the Ramsar Secretariat launched in 2003 the GlobWetland I project in order to demonstrate the current capabilities of EO applications to support inventorying, monitoring, assessment of wetlands eco-systems.

GlobWetland II, led by Jena-Optronik, was launched in January 2010. The overarching objective of the GlobWetland II project is to contribute to the setup of a Global Wetlands Observing System (G-WOS) as per the strategy 1.2 of the Ramsar Strategic Plan 2009-2015, Resolution X.1, adopted at the 10th meeting of the Conference of the Parties (COP-10) of the Ramsar Convention on Wetlands, in Changwon, South Korea.

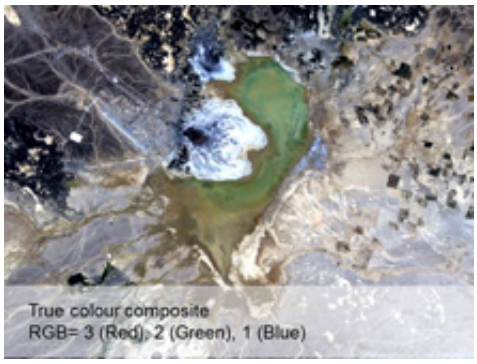
The GlobWetland II information system includes maps and system software. The GlobWetland II system software is available as an ArcGIS toolbox and consists of a

remote sensing and a GIS component for tasks like satellite image pre-processing, Land Use/Land Cover classification, change detection and for the indicator computation.

The system software capability is demonstrated through the production of a number of wetland related geo-information maps and indicators, over 200 wetland sites and surrounding areas, which are selected over the coastal catchments areas of the Southern and Eastern part of the Mediterranean basin. The coastal catchment basins of these countries are of particular interest for biodiversity because several endemic species are listed as critically endangered or extirpated in certain areas.

The satellite based methodology for wetland mapping developed by GlobWetland II is recommended by the Mediterranean Wetland organization (MedWet) and underlined at its 20ies anniversary symposium Grado+20 in Agadir (Morocco) in February 2012 as well as it is proposed in the resolutions of the latest Ramsar COP-11 that took place in Rumania in July 2012.

Future free available Sentinel-2 data will provide completely new perspectives for the wetland mapping. The high ground resolution, the large swath with and in particular the high repetition rate will provide new opportunities for methods based on inter-annual changes and will deliver more precise results in a higher resolution.



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