

# Lunch Break event at 9th European Ramsar Meeting

Satellite based Wetland Observation –  
SWOS services, the wetland community Portal and  
free available tools for wetland monitoring,  
Ramsar / SDG reporting and wetland management  
guidance



**SWOS**  
Satellite-based Wetland  
Observation Service



This project has received funding from the  
European Union's Horizon 2020 research and  
innovation programme under grant agreement  
No 642088



Melting Process, The Nenets Autonomous Okrug / Komi Republic,  
Sentinel-1A, descending orbit, VV polarization,  
R: 27-05-2017, G: 08-06-2017, B: 20-06-2017  
(©Contains modified Copernicus Sentinel-1 data 2017)

0 10 20 km

Thursday, 22<sup>nd</sup> March  
from 13:30 -14:00 at Meeting Room  
and 20:00 at Public Evening

## Abstract

Wetlands including peatlands are one of the fastest declining ecosystems, while they are hot spots of biodiversity and provide valuable ecosystem services.

The H2020 EU project "Satellite based Wetland Observation Service (SWOS)" provides services and free available tools for a local to global satellite based monitoring of wetlands.

Free available satellite data are an excellent basis for wetland inventory and delineation, to map dynamics in wetland ecosystems, to derive information on the ecological status and trends in wetlands and to monitor restoring measures and long and short term changes.

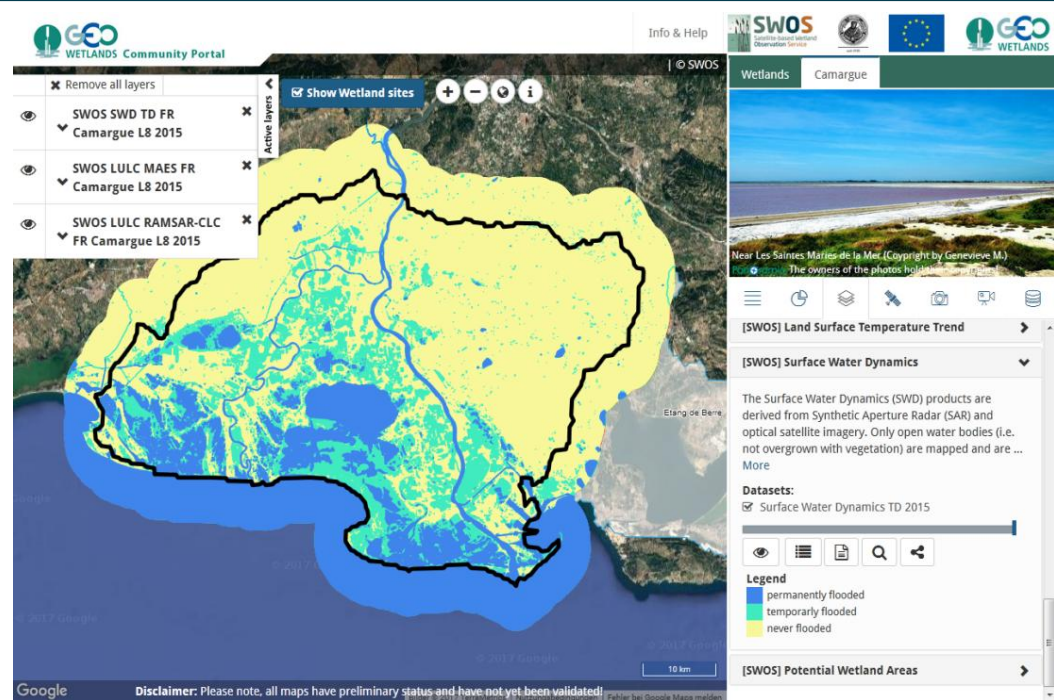
The side event will introduce the satellite based wetland observation services with its free tools and portals for wetland monitoring including indicator calculation and present how SWOS services support reporting obligations for SDG 6.6.1 and Ramsar.

Link:

<http://swos-service.eu>

Short-term changes in Tver Region,  
Sentinel-1A, descending orbit, VV polarization,  
R: 2017-01-09, G: 2017-03-10, B: 2017-04-15  
(©Contains modified Copernicus Sentinel-1 data 2017)

0 5 10 km



<http://swos-service.eu/swos-portal/>

[http://swos-service.eu/documents\\_mapping-software/](http://swos-service.eu/documents_mapping-software/)

### Functions

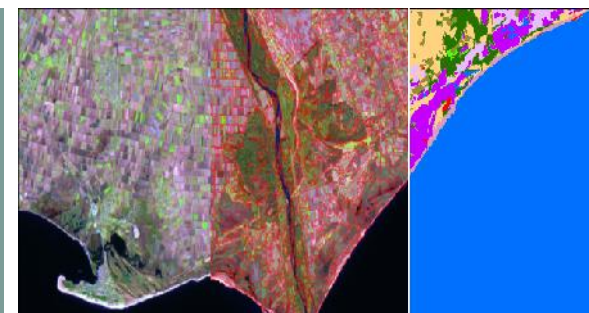
- EO data processing (Optical + SAR)
- Map product generation
- Indicator calculation

### Easy integration of

- Local knowledge for supervised classification and interpretation
- Standardized nomenclatures

### Available as

- Standalone version (GUI & command line)
- Integrated in external software e.g. ArcGIS, Interaction of external tools
- **GEOclassifier** Cloud processing



Free available  
toolbox for wetland  
mapping