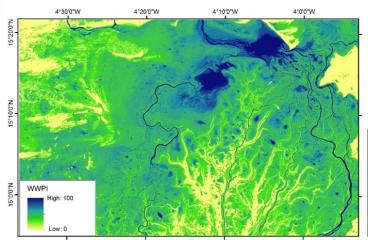
Water extent and dynamics mapping





- Users: Water planning agencies, Environmental agencies
- Challenge: Capturing the multiple dimensions of change from hydrological and biophysical processes related to water, and derive actionable information to protect ground water sources, support restoration efforts, quantify climate change impact, forecast food security issues, etc.
- Initiative: Provision of water and wetland dynamics based on time-series data of Landsat, Sentinel-2, and Sentinel-1 to detect changes and trends in wetland areas as well its dynamics
- **Results**: Highly automated wetland identification covering both seasonal changes of surface soil wetness and permanent water bodies as well as the detection of long-term developments under the changing climate. Mapping the extent of wetness areas including water bodies. Satellite-based timeseries information and associated statistics help identify trends over longer time periods and their dynamics. Presentation of result through a full SDG monitoring system by developing a plugin specifically for reporting on SDG 6.6.1 and web interface for dissemination.

Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.



Water and Wetness Probability Index (WWPI) Inner Niger Delta (2017 - 2018)





