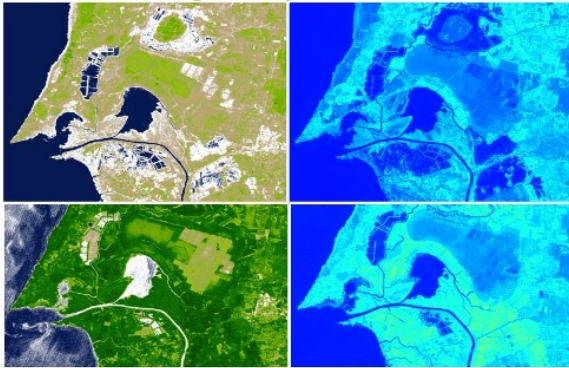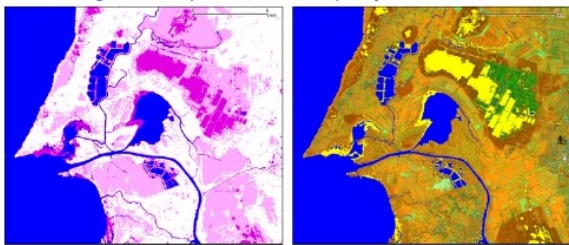# GIO water and wetlands

Earth Observation Support to Global Monitoring of Water Resources

Biophysical parameters in a time-series of satellite images indicate permanent and temporary water and wetlands

Classification of permanent water (blue) and wetlands (dark magenta) layers on top of a high resolution satellite image

Users: Regional and national authorities

Need: Water resources affected by climate change, yet critical to survival of ecosystems and human societies

Challenge: Spatial dynamics of water bodies and structural / seasonal diversity of wetlands

Initiative: Automated processing of a large archive of multi-temporal High Resolution satellite imagery, statistical analysis and filtering, based on threshold values, combined with object-based classification of biohysial parameters, reflecting climatic conditions of the environment throughout the vegetation season.

Results: Identification and mapping of permanent water bodies and wetlands across the whole area of EU and beyond – starting point of a long-term monitoring.

Service provider: GEOMATRIX UAB (www.geomatrix.lt)