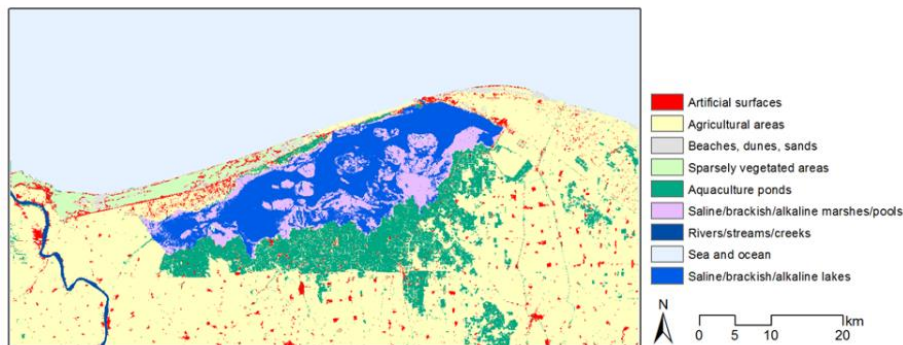


Wetland Habitat Mapping



Description: The wetland habitat mapping workflows provide the needed functionality to perform a detailed classification of land cover and land use in and around a wetland site. The map is derived using a Random Forest (RF) classification of multi-spectral satellite imagery. The RF classifier is a supervised algorithm that takes a set of training data to establish the relationship between the response variable (i.e. the land cover/use classes) and the explanatory variables (cf. the satellite imagery). Training data can be gathered in the field (in-situ data) or collected using secondary sources including High-Resolution satellite imagery, aerial photographs, or if no other option exists the input imagery itself. Multi-date imagery can be used as input for the classification, as accuracies tend to improve when using imagery that captures different stages of the vegetation/water cycle. Different water body types can be further distinguished using geometrical and contextual features extracted based on segmentation. For historical mapping, a change mask is generated using Multivariate Alteration Detection (MAD) transformation and Maximum Autocorrelation Factor (MAF) post-processing with multispectral, bi-temporal image data. The change mask is used to mask out the no-change background between two time points so that RF classification will only be applied in areas of change.



Product : Wetland habitat mapping

Location: Lake Burullus, Egypt

Input imagery: Sentinel-2

Time period: 2016

Spatial resolution: 10 meters

Accuracy: +85% overall and individual class accuracy

