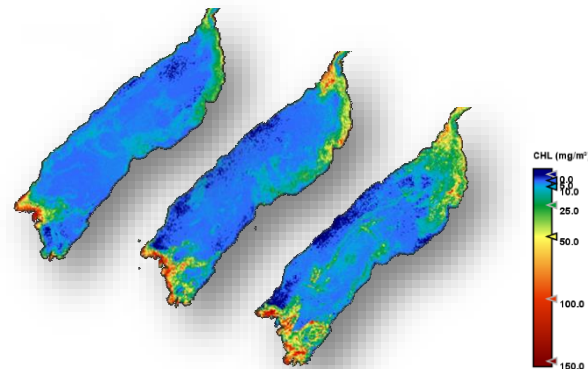


# Water Quality



**Description:** Inland water quality products provide information such as the chlorophyll concentration or suspended sediment concentration in the water. Together with the turbidity they provide important parameters for the assessment of the water quality, such as occurrence of algal blooms or even floating vegetation. The inland water quality products are generated by a sequence of different processing steps which comprise the pre-processing, atmospheric correction, in-water retrieval and finally aggregation of information. The atmospheric correction, which is the most critical prerequisite for appropriate water constituent retrieval, includes beside the removal of the atmospheric signal also the glint correction and adjacency correction. Either subsequently, or coupled with the previous step, the in-water retrieval calculates the water quality parameters from reflectance. Different algorithms are provided, which are valid for different concentration ranges of the water constituents and thus suitable for usage with specific (ecological) types of water. An optical water type classification helps to identify these water types and provides information for the selection of algorithms. As a post-processing step, all relevant bands are compiled in one single output product.



**Product :** Chlorophyll concentration

**Location:** Lake Albert, Uganda

**Input imagery:** MERIS FR

**Time period:** 2002-2012 (monthly updates)

**Spatial resolution:** 300m

**Accuracy:** Not accessed due to lack of in-situ data but spatio-temporal variations in accordance with expected patterns and absolute values reside within range of published numbers

