

Operational Remote Sensing Products of Finnish Environment Institute SYKE

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The Finnish Environment Institute SYKE is both a research institute, and a centre for environmental expertise. SYKE's research focuses on changes in the environment, and seeks ways to control these changes. The Geoinformatics Unit GEO is responsible for the Finnish Environmental Administration's geographical information systems and remote sensing data. GEO develops and updates environmental geographical and earth observation information systems. In addition the unit is responsible for operational environmental monitoring using remote sensing techniques and research on and based on geoinformatics. Customers are researchers in environmental administration, governmental and municipal authorities as well as common citizens.

The operational products are:

- Fraction of snow covered area (EOS MODIS)
- Snow coverage on lakes (EOS MODIS)
- Snow water equivalence (AMSR-E)
- Water surface temperature for sea and large lakes (NOAA AVHRR)
- Surface algae intensity (Envisat MERIS)
- Water turbidity (Envisat MERIS)
- Water chlorophyll-a concentration (Envisat MERIS)
- Monitoring of land cover

Most of the products are based on daily images but the products can be e.g. weekly composites. Spatial resolution and covered area varies, and different products can have different resolutions for Finland and larger areas. Snow products are made in co-operation with Finnish Meteorological Institute. Data distribution is made using text files, georeferenced raster images or map services of environmental administration. Common citizens can access products using [www-page http://www.i4.ymparisto.fi/i4/eng/products/satellite_images.html](http://www.i4.ymparisto.fi/i4/eng/products/satellite_images.html).

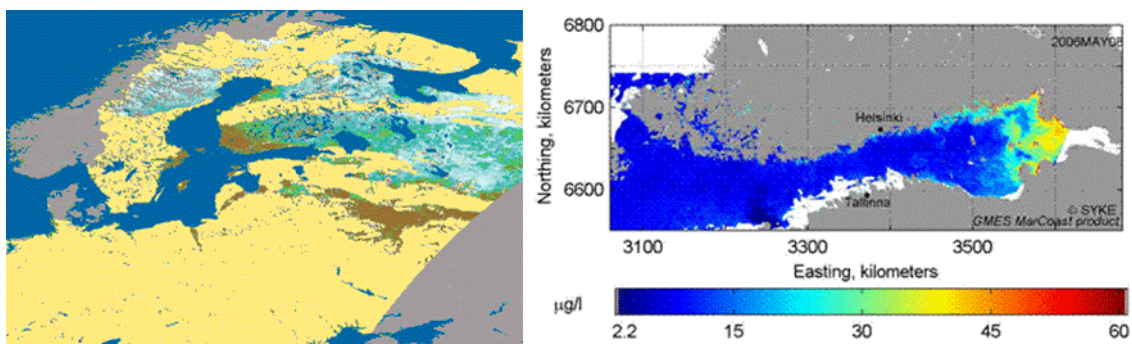


Figure 1. Snow Covered Area over Europe (2nd April 2008) on left and Chlorophyll-a on the Gulf of Finland (8th May 2006) on right.