

Lifewatch-WB : What's up on the land ?

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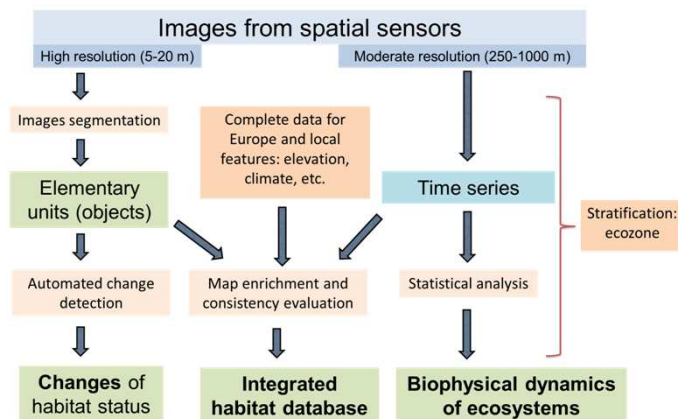
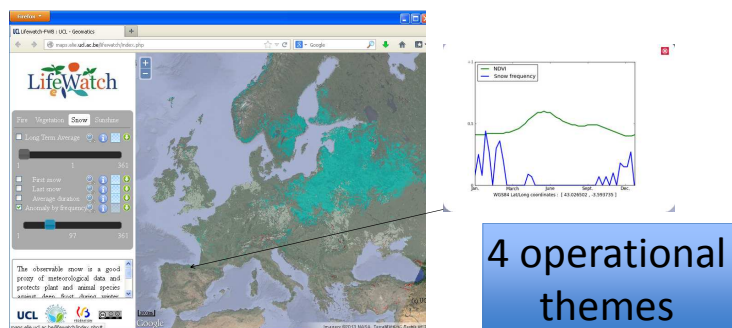
Objective

To provide pan-european geographic information for biodiversity research based on GIS analysis of 13 years of remote sensing products and classification of up-to-date remote sensing data.

Perspectives

Higher resolution images are being processed for an object-based geographic database oriented towards the description of natural habitats. On the other hand, time series analysis will be continued with new higher resolution sensors and new themes (e.g. water)

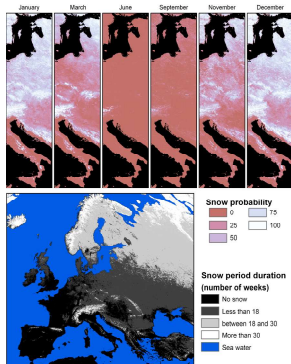
WebGIS for near real time anomalies



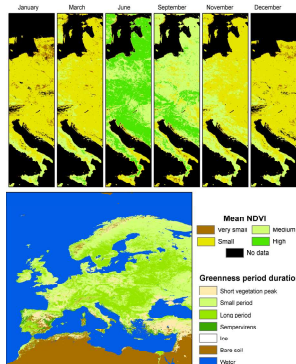
Snow periodicity

The observable snow summarizes several meteorological data and protects plant and animal species against deep frost during winter. Temporal indices and snow anomalies are extracted from filtered and averaged MODIS 500 m products.

Snow time series



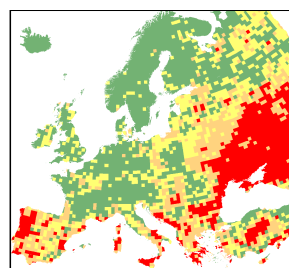
Vegetation time series



Fire events

Though fires are a necessary component of some ecosystems dynamic, they most of the time induce a major perturbation of the natural habitats. Our fire products are created by the aggregation of MODIS products on the EBCC grid.

Yearly burnt area



Average weekly sunshine



Vegetation phenology

The vegetation cycle has been characterized by a set of temporal metrics. It is described here using a standard vegetation index, the NDVI, measured from weekly composites of the SPOT-VGT satellite (1000 m).

Weekly sunshine at 90 m

The solar energy is converted by the vegetation or dissipates as heat. Because of the orientation of the terrain, it may vary locally and hence create micro-climatic conditions. Weekly sunshine data have been produced using an astronomical model (90 m) combined with snow and clouds observations.