EUROSENSE- Forest monitoring



Forest mask (right) delineation on a cut-out of 5 m. resolution satellite image acquired in 2012 (left).

Forest (green), Non-forest (yellow), no data (cross-hatched)



Deforestation (below) delineation on a cut-out of 5 m. resolution satellite image acquired in 2013 (above).



Forest (green), Non-forest (yellow), no data (cross-hatched), deforestation 2012-2013 (red)



Degradation (right) delineation on a cut-out of 5 m. resolution satellite image acquired in 2013 (left).

Forest (green), Non-forest (yellow), no data (cross-hatched), degradation 2012-2013 (orange)

How satellite data are utilized

Satellite data are an essential input for reliable and timely forest monitoring. Different spatial and spectral resolutions allow tailoring applications to various needs, from global deforestation monitoring at continental scale to local detailed estimation of forest degradation. The availability of different sensors guarantees regular revisiting times and allows handling each case at its appropriate scale, going from regional to detailed maps.

Summary:

Forest ecosystems provide people with a large range of goods and services, including timber and non timber products, watersheds regulation, biodiversity conservation and climate change mitigation and adaptation. As deforestation and forest degradation keep running at an alarming rate, especially in the tropics, monitoring forest cover changes can play a crucial role in preserving worldwide forests and the goods and services they provide at local and global scales.



Best practises of data utilization in Europe, February 2014