JRC EUROPEAN COMMISSION

Global activities of the Joint Research Centre (within its Framework Programme) in support to FRA 2010 Global Remote Sensing Survey

1. Geographical and temporal focus
2. Objectives and methodological approach
3. Outputs

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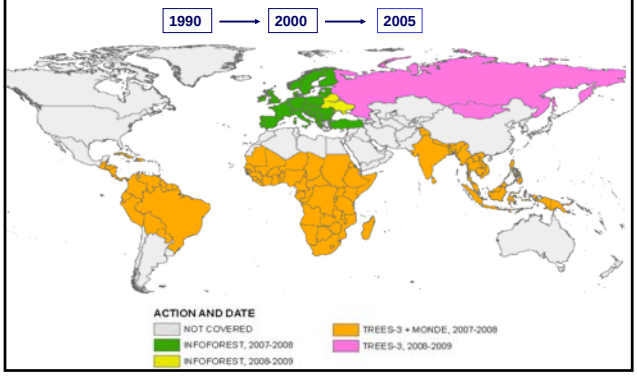
Geographical and temporal focus



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Objectives

- To produce estimates by region & biome of
  - Tree cover
  - Tree cover change with change matrix
- Not a national monitoring – but can link to the national level or be intensified
- Method
  A sample of sites across the globe for which satellite data are collected

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Systematic geographical grid for Tropics & Eurasia

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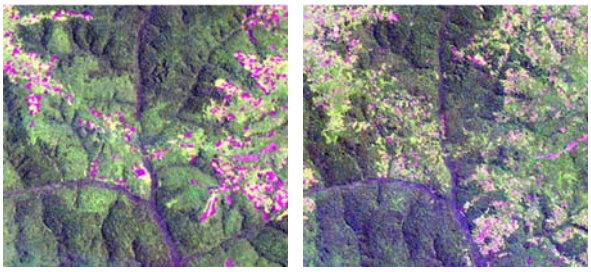
Satellite data for each sample site (20 km x 20 km)



1990 **2000**

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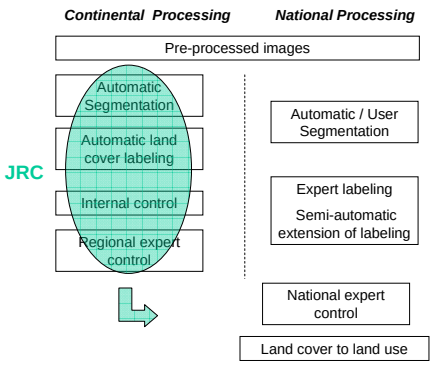
Methodological chart

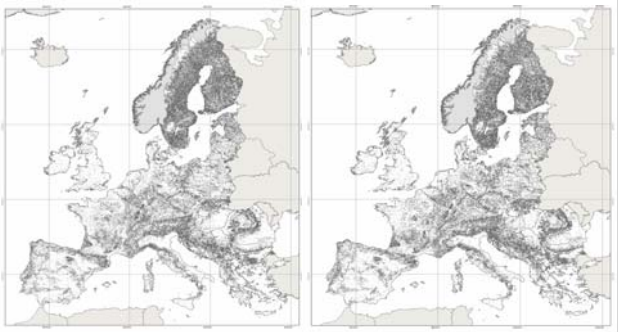


What has been achieved so far

- Produced image data base and Forest Cover maps for European Union territory (1990 & 2000)
- Tested the methods over the Congo basin to produce Land Cover change statistics from 1990 to 2000
- Tested the sampling scheme with respect to full coverage as provided by INPE
- Tested an intensified sampling scheme with respect to a classical forest inventory (French Guiana)
- Created an image data base and screened the images for the Tropics

Results over EU-27 for years 1990 and 2000

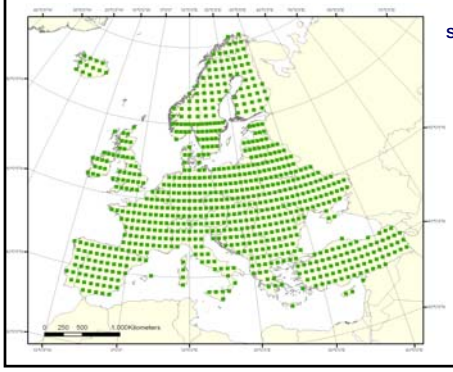
'Forest Cover' map 1990 **'Forest Cover' map 2000**



http://forest.jrc.it/ForestMap/

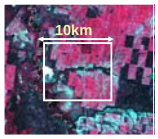
Example of sample result (49 N 14 E)

Systematic geographical grid for EU territory

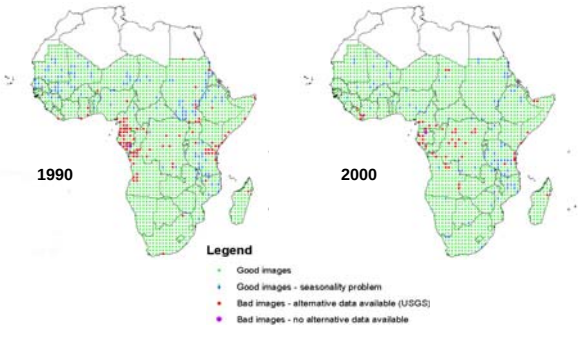


Systematic Samples with units at 1° x 1° lat/long

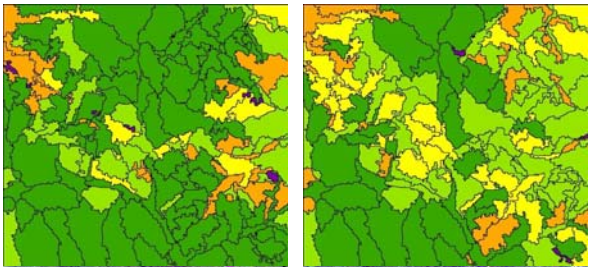
above 60 ° every 2 °



Data selection: Africa



Land Cover maps for each sample site (20 km x 20 km)



1990 **2000**

Outputs for FAO and partners

1. Screened preprocessed image dataset
2. Processed imagery
   - 2- levels segmentation
   - Preliminary Land Cover class labels
   - Change layer
3. Visually validated Land Cover products