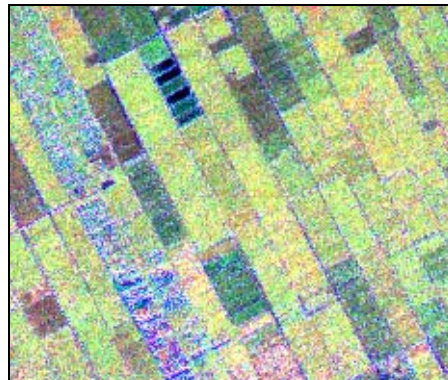


## Classification of tropical forests & cultivated areas. Synergy of space-borne survey data.

Discrimination and classification of tropical forest types and agricultural crops over extensive areas are cost-effectively carried out from space

With optic - and radar satellite images and a range of keen digital techniques at our disposal, we make beautiful maps in support of forest management. Foresters want to know what they are talking about. Decision makers want to know what foresters are talking about. That's why.

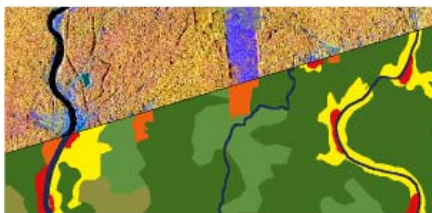
- Tropical forest classification traditionally is carried out on the basis of extensive fieldwork, by parties of tree experts cutting their way through dense vegetation, often to return to their base after no less than several months. Today, spaceborne digital earth observation, while requiring far less manpower, offers cost-effective solutions, in a shorter period of time, whereas the classification results, instead of being liable to many a different interpretation by individual experts, are *unevoquably transparent*.



*Guyana's coastal plain. A colour composite made from multi-resolution airborne C-SAR images. Rice fields in successive developmental stages. Scale 1:200.000. Raw CCRS images courtesy ESA.*

- Best of all, maybe, is the *repeatability* of a spaceborne survey, such that it may serve in the context of an eventually following change detection - or monitoring procedure.

- Digital forest maps are geocoded and GIS-compatible, allowing GPS-located phenomena, i.e. fieldwork data to be introduced.



*The Niger delta. The upper-left colour composite, made from Landsat channels 4,5 and airborne X-SAR, served to produce the bottom-right forest classification map. Forest types in shades of green; agricultural plots in yellow and orange; villages in red. Scale 1: 140.000.*

- Discrimination and mapping of cultivated areas is carried out similarly, using related techniques.

- The forest maps can be combined with any other cartographic data - if supplied in a current Map Projection, e.g. transverse Mercator – like roadmaps, hydrologic maps, landuse maps, timber volume maps, or Digital Elevation Models (DEM's).

### References

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Geosat International, 1996. *Land cover mapping Yenegoa, Nigeria*. Commercial Report.  
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