

## **Wither Radar Global Mapping of the Tropical Forest: new avenues from the TREES ERS-1 Central Africa Mosaic.**

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The TREES ERS-1 Central Africa mosaic project CAMP has set the ground for an entirely new perspective in radar remote sensing for the study of large scale problems of the earth ecosystem. It was indeed the first attempt in the context of tropical forest monitoring to bring a high resolution microwave sensor from the role of gap filler or spatially limited hot spot analysis to the role of global mapping of an entire bio-geographical domain.

The project was started in 1995 by the MTV unit (Monitoring Tropical Vegetation) of the European Commission DG JRC Space Applications Institute; the core of the activity consists of the assemblage of more than 400 ERS-1 images covering the whole Central African tropical belt. So far the potential of this approach was demonstrated unequivocally in terms of thematic information content, and the capability of mapping in a short time, on demand and in all weather conditions a continental scale geographical domain.

The CAMP success has also been the seed for many new initiatives within the TREES project R/D framework and at the international level. In this paper we will briefly summarize the main CAMP characteristics, highlighting some technical aspects related to radar science, and present some thematic results obtained so far in a number of studies which hinge around CAMP.

Finally an overview of the evolution of the project and of the new perspectives opened up by this approach will be given. This will entail initiatives closely coupled with the existing data set, such as the set up of a network of investigators to pursue thematic studies coordinated by the SAI MTV; and derivatives and expansions of the project, such as the introduction of multi-sensors and change analysis using new global data acquisitions over Central Africa, and threading of the project to other international initiatives, such as the NASDA Global Rain Forest Monitoring GRFM program.

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