

JAXA K&C Initiative Forest Theme

Forest Change

Deforestation

- Identification, particularly in areas of persistent cloud cover
- Provision of near real time detection
- Differentiation of old and new deforestation and clearing mechanisms and drivers of change (logging, agriculture)

Forest Regeneration

- Mapping of forest regeneration extent and stage
- Updating deforestation maps to include regeneration

Carbon Cycle

- Biomass estimation
 - Lower biomass forests (below saturation)
 - Direct or inferred

Higher biomass forests

• Mangroves

Biomass change

- Changes in land cover
- Regeneration stage
- Forest disturbance



Forest type mapping

- Forest type
 - Peat swamp forests
 - Mangroves
 - Tropical rainforest
 - Boreal forest
 - Wooded savannas
 - Temperate forests
- Structural classifications
 - Integration of data from other sources
 - Height retrieval



Within K&C Collaboration

• High impact Special Issue

- 8-10 high impact articles outlining key findings from K&C Project
 - Scientific and political significance
 - Global Change Biology
 - Contact Editor following provision of titles
 - Establishment of working papers on wiki
 - Abstracts and/or draft papers by K&C Meeting in June.

Collaborative studies

- Forest height retrieval
 - ALOS and ground truth dataset provision to Paul Sequeira

- Biomass retrieval

- ALOS and ground truth dataset provision to Thuy Le Toan
- Simulatino modelling within ESA project

Processing support



Within K&C Collaboration

- Supporting design of follow on missions
 - wetlands and biomass mapping as a function of incidence angle.
 - Detecting forest degradation (selective logging, dieback)
 - Differences between open and closed forests
 - Additional benefits of polarimetric data



Standardisation of Products

- Final products able to be reconstituted to form broad classes that are globally consistent.
 - Identify classification system (based on LCCS; FAO)
 - Generate own classes (although biomass needs to be in consistent intervals) and methods for reconstituing if needed.
 - Link with the wetlands theme classification

Inform of and cross check algorithms

- Biomass retrieval
- Regeneration mapping
- Deforestation
- Establish discussion/information panel on wik

• Links with other organisations/programs

- UNEP WCMC
- MEASUREs



Updating of Project Reports

- Establishment of document folder on wiki
 - Regular updating of project reports
 - Highlighting and informing of key results
- Provision of existing and new publications on wiki
 - Send publications (digital versions)
 - Check copyright issues



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Public dissemination

- Work with national and international agencies such that products are integrated before or following provision of final datasets.
- Enhance links with climate modellers
 Establish input requirements and role of SAR
- Ensure inclusion of SAR within GOFC publications/initiatives
 - Provision of case studies utilising ALOS PALSAR and associated datasets.
- Submission of papers to conferences and scientiic publications
- Regular attendance at conferences
- Key involvement in processes such as REDD