

The logo for the Advanced Land Observing Satellite (ALOS) program, featuring the letters 'ALOS' in a white, serif font against a dark blue background.A banner for the K&C Initiative, featuring a satellite image of a river delta in shades of green and blue. The text 'K&C Initiative' is in a white, serif font, and 'An international science collaboration led by JAXA' is in a smaller, white, serif font below it.

K&C Initiative
An international science collaboration led by JAXA

K&C Product Delivery Report and Schedule for 2010

Shaun Quegan
University of Sheffield

Science Team meeting #13
JAXA TKSC/RESTEC HQ, Tsukuba/Tokyo, January 18-22, 2010

K&C deliverables

Papers and Reports

1. Published (please provide PDF file)

- K&C Phase-1 report
- Mitchard et al., (2009) Using satellite radar backscatter to predict above-ground woody biomass: a consistent relationship across four different African landscapes, GRL vol. 36, doi:10.1029/2009GL040692

2. Submitted/in preparation

- Detection of deforestation by multi-temporal SAR (Remote Sensing of Environment; expect to submit before end of July)

ALOS Biomass mapping African biomes

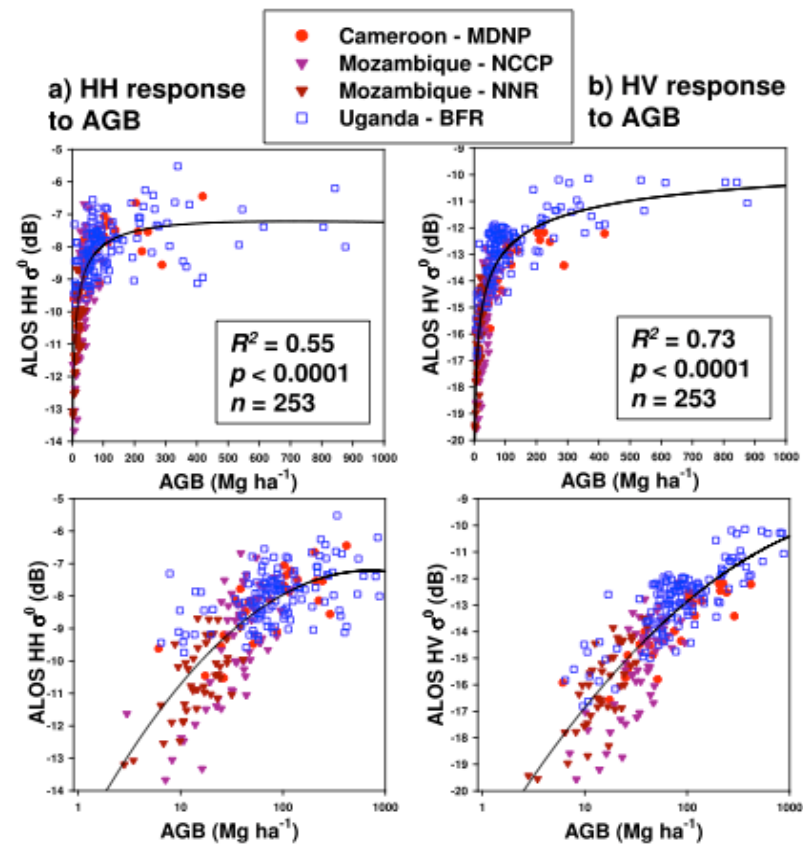


Figure 2. ALOS PALSAR (a) HH and (b) HV backscatter (σ^0) are plotted against field-measured AGB (Mg ha^{-1}) for all four sites combined, with the x-axes shown with conventional and \log_{10} scales. Second order log regression lines are fitted.

K&C deliverables

Data sets and Thematic products (mosaics, classification maps etc.)

1. Completed and Delivered to JAXA

2. Completed, but not yet delivered (please deliver ASAP)

- *Methods for rapid analysis of ScanSAR time-series and calculation of both detection and false alarm probabilities for deforestation*
- *Maps of new forest disturbance and its onset date, within the limitations of ScanSAR detection probability, for the period over which ScanSAR data are available, for large regions in Sumatra*

K&C deliverables

Data sets and Thematic products (mosaics, classification maps etc.)

3. To be completed during 2010

- *K&C Booklet contribution with latest results (during KC#13)*
- *Methodology to combine ScanSAR time-series with FBD data to produce deforestation maps and estimates of onset of deforestation events*
- *Best possible deforestation maps for central Sumatra by using these methods*