

K&C Product Delivery Report and Schedule for 2010

Richard Lucas Institute of Geography and Earth Sciences, Aberystwyth University

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

K&C deliverables

K&C Initiative

An international science collaboration led by JA

Papers and Reports

1. Published

- Lucas, R.M., (2009). Characterisation and monitoring of mangroves using ALOS PALSAR data. K&C Phase-1 report
- Lucas, R.M., Carreiras, J.M.B., Proisy, C. and Bunting, P.F. (2008). ALOS PALSAR applications in the tropics and subtropics: characterising, mapping and detecting change in forests and coastal wetlands. Proceedings, 2nd Joint PI Symposium of ALOS data notes for ALOS Science Program, Rhodes (Greece), 3-7 November, 2008.
- Lucas, R.M., Carreiras, J.M.B., Bunting, P.J. and Armston, J. (2007). Pre-processing and geocoding of ALOS PALSAR data over Queensland, Australia. Proceedings, ALOS PI Workshop, Kyoto, Japan, November, 2007.
- Lucas, R.M., Mitchell, A.L., Rosenqvist, A., Proisy, C., Melius, A. and Ticehurst, C. (2007) The potential of L-band SAR for quantifying mangrove characteristics and change. Case studies from the tropics and subtropics. *Aquatic conservation: marine and freshwater ecosystems* - Special Issue: Radar Applications for Wetlands Management, 17, 245-264.

K&C deliverables

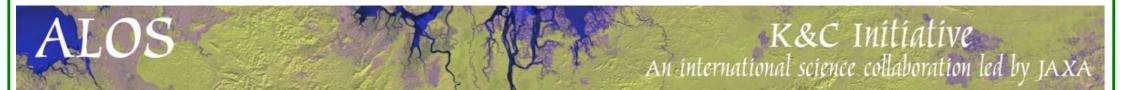
K&C Initiative

An international science collaboration led by IA

Papers and Reports

2. In preparation

- Lucas, R.M. et al. (2010). Application of ALOS PALSAR data for regional detection of change in mangrove associated with natural events and processes and anthropogenic activity (in prep.)
- Lucas, R.M. and Ticehurst, C. (2010). Recent response of mangroves to change in the Gulf of Carpentaria, northern Australia, based on time-series analysis of ALOS PALSAR, Landsat sensor and MODIS data (in prep).
- Lucas, R.M., Accad, A., Wilson, B and Li, J. (2010). ALOS PALSAR data for characterising and mapping wetlands: Case studies from Queensland, Australia (in prep).
- Other region-specific studies.



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)

- A standardized object-orientated method for characterising mangroves and detecting change.
- Mangrove structural classification and change map (Australia) undervalidation and to be revised using finer resolution DEMs (for 2007)
- Mangrove structural classification and change map (Belize) under validation (for 2007)
- Mangrove change map (Amazon-influenced coast) under validation

ALOS An international science collaboration led by JAXA

K&C deliverables

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

3. To be completed during 2010

- Mangrove structural classification and change map (2007-2009) (Australia)
- *Mangrove change map (2007-2009; Belize)*
- Mangrove change map (2007-2009; parts of SE Asia)
- Mangrove change map (2007-2009; Brazil, Amazoninfluenced coast).
- Map identifying hotspots of change
- Recommended protocol for structural classification and change detection at a global level using ALOS PALSAR data mosaics.