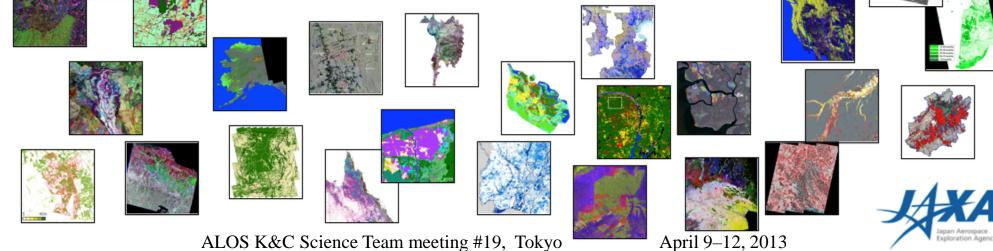
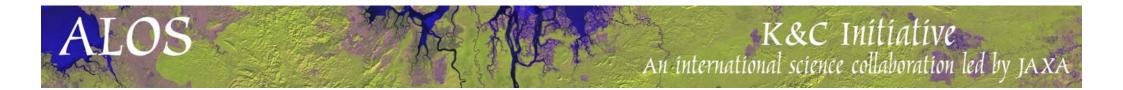


ALOS Kyoto & Carbon Initiative Brief intro

Ake Rosenqvist K&C Science Coordinator





Outline

- 1. Heritage and objectives
- 2. Project organization
- 3. Data- and information requirements
- 4. Misc project information



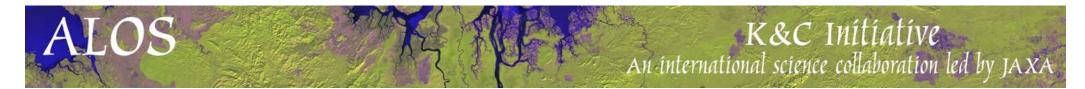
Heritage and objectives

The ALOS Kyoto & Carbon Initiative is an international collaborative project forming the continuation and extension of the JERS-1 SAR GRFM/GBFM project into the era of ALOS and ALOS-2.

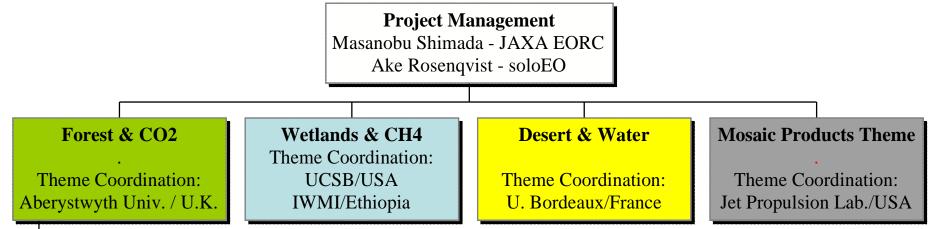
Aims to support information needs posed by the "3 C's":

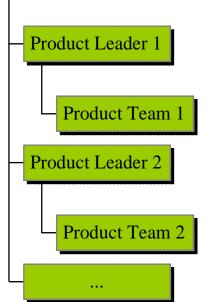
- The terrestrial Carbon cycle science community (CO2 & CH4 sources and sinks);
- Multinational Environmental Conventions:
 - UNFCCC Kyoto Protocol and REDD+ (Forest and Land Cover Change);
 - Ramsar Convention (wetland characteristics and disturbances);
- Environmental Conservation





Phase 1 and Phase 2 - K&C Project organization





K&C Science Team:

JAXA EORC (Japan); JRC (E.U.); JPL (USA); INPE (Brazil); IBAMA (Brazil); U-Wageningen (The Netherlands); DLR (Germany); Int'l Wetlands Management Inst (Ethiopia); CESBIO (France); FSU-Jena (Germany); U-Sheffield (U.K.); SLU (Sweden); Gamma RS (Switzerland); U-Aberystwyth (U.K.); UCSB (USA); WWF (Indonesia); U-Victoria (Canada); UNSW (Australia); U-Bordeaux (France); AGS (USA); sarmap (Switzerland); U-Mass (USA); ERISS (Australia); soloEO (Sweden)

Science Team - 22 science groups from 14 countries

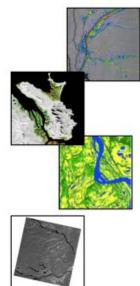


K&C Initiative An international science collaboration led by JAXA



K&C Phase 3 (2011 – March 2014)















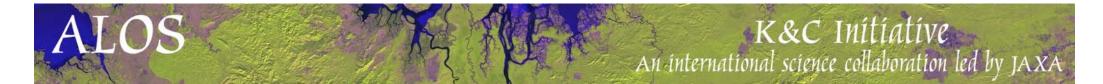












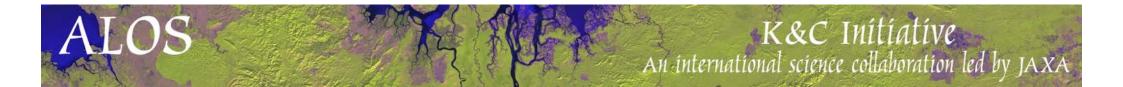
K&C Science Team Phase 3

32 members from 16 countries

Research institutes (5); Universities (10) National agencies for space/geo-spatial info (5) National forest mapping agencies (6) NGO's (4); Private companies (3)







Phase 3 – Background

ALOS 2011: ALOS subject to a Public-Private Partnership (PPP) since April 2011. Stricter rules on PALSAR data distribution – data should primarily be made available through commercial channels.

Despite the PPP shift, JAXA management approved K&C Phase 3 – with a modified structure and new key objectives that are in line with the PPP changes at JAXA.

Some points to keep in mind...

• K&C Initiative is not an AO programme or a data opportunity, but a scientific collaboration between JAXA and the K&C science teams (=you!).

• Sharing of satellite and in-situ data between JAXA and the K&C teams is of key importance. There should be a balance between amount of data provided by JAXA and the contribution by the K&C team.

• To justify its existence, we must assure that K&C provides feed-back to JAXA and provides results on a continuous basis. Visibility is important for both the K&C and for JAXA.

Phase 3 objectives – K&C continuation

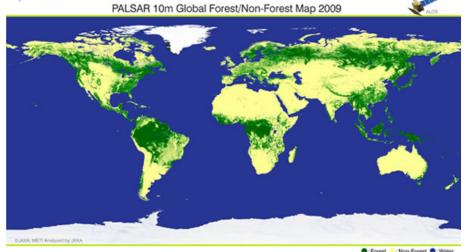
The continuation – and new establishment – of projects by the K&C Science Team is a natural component of K&C Phase 3.

As before, the individual K&C projects should comply with the original objectives of the K&C:

- development of regional-scale applications as far as possible based on 25m multi-annual mosaics
- support to the 3 C's Carbon, Conventions and Conservation

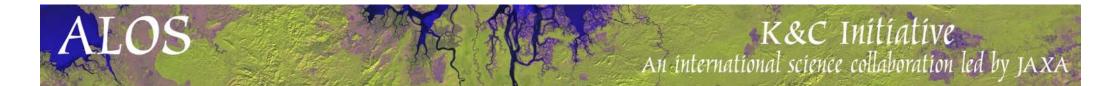
Phase 3 goals – support to the PALSAR global mapping effort





First version global FNF map, derived using decision tree classifier with -14 dB threshold (eCog).

KC Team to support EORC with refinement of methodology and adaption to regional forest types and definitions. Validation through the use of K&C member local knowledge and in-situ information. Generation of "K&C certified" global forest cover and stratified biomass maps.

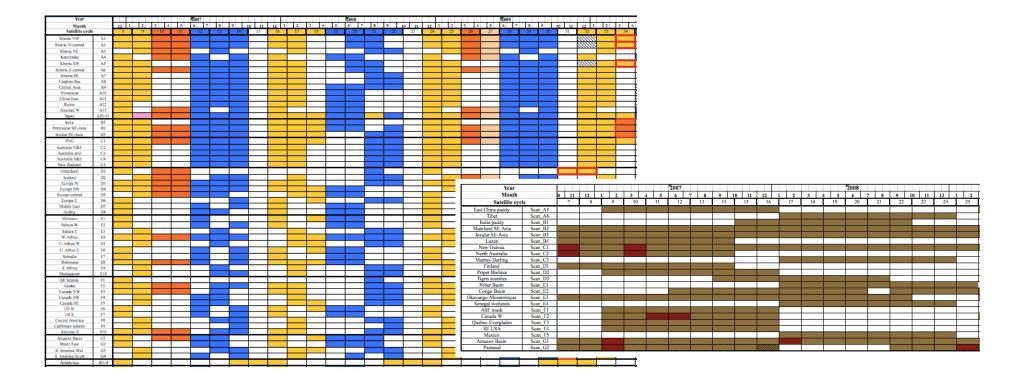


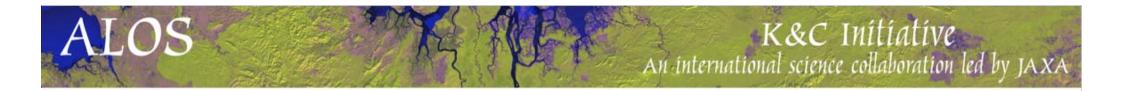
Phase 3 goals K&C Mangrove Watch

- Use of ALOS PALSAR data for mapping the extent and annual changes inglobal mangrove cover.
- Feeds directly in to the EORC Forest/Non-forest mapping effort.
- Support to the Ramsar Convention "Global Wetlands Observation System" (GWOS)
- K&C Mangrove Watch special session on Thursday

Phase 3 goals – support to ALOS-2 mission development

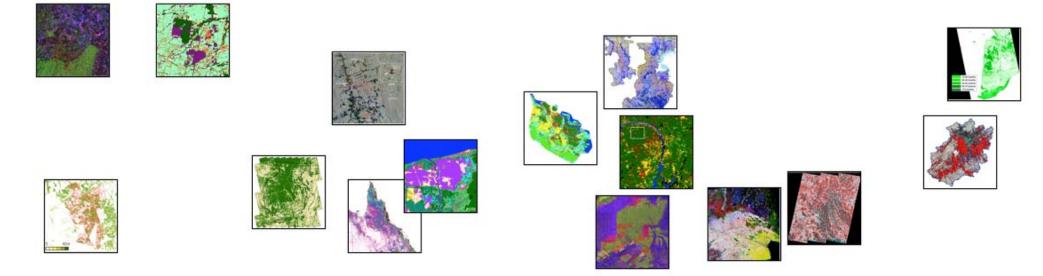
K&C Science Advisory Panel (SAP) tasked to provide scientific support for the definition of the ALOS-2 systematic acquisition scenario (BOS).

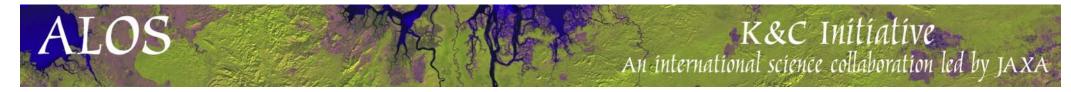




Project information resources (public access)









JAXA EORC K&C Homepage

- K&C background information
- Agendas and presentation material available from all previous K&C Science Team meetings (KC#1 – KC#18)
- PALSAR systematic observation strategy (BOS)

http://www.eorc.jaxa.jp/ALOS/ en/kyoto/kyoto_index.htm



K&C Mosaic Homepage

K&C Mosaic Homepage + 🔺 🔺 🕨 🖸 🗋 www.eorc.jaxa.jp/ALOS/en/kc_mosaic/kc_mosaic.htm 🗇 🔻 🥵 🕶 Google (Langu: 🍳 🕎 🔻 Most Visited 🔻 🎽 Gmail 📄 soloEO Mail 📓 天気 📮 Ekitan 🙆 K&C Wiki 📄 ALOS@EORC 📄 AUIG 😣 MUFG Bank 🚿 🔀 Bookmarks 🔻 Downloading products and browsing images

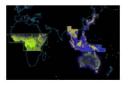
Data files (Raw format) and image files (PNG format) are available via each clickable map by FTP.

KML file is also available for browsing the mosaic image by using Google Earth or NASA World Wind.

PALSAR 50m Orthorectified Mosaic Product

FBD 34.3 HH / HV*2

This product covers over Asia and Oceania regions by mosaicing PALSAR data which is resampled into 50m^{*1} from original data. The product will be made once a year. Following observation mode is used for the product.



*1. Mosaic images are projected into geographical latitude and longitude coordinates. So the spatial resolution of 50m is corresponded to 1.6170 sec. *2. HH and HV polarization data are kept in BSQ format. Color composition of the image data is R=HH, G=HV, B=HH/HV and enhanced.

kml file (All area) download (kml file / 26KB)

PALSAR 500m Browse Mosaic Product

This product covers all over the world by mosaicing PALSAR data which is resampled into 500m from original data. The product will be made every cycle. Following observation modes are used to generate products.



FBS 34.3 HH FBD 34.3 HH / HV WB1 5beam HH WB2 5beam HH

JAXA EORC K&C Mosaic Homepage

K&C Initiative

An international science collaboration led by JAXA

K&C 50 m and 500 m resolution mosaic products online

- 50 m FBD and FBS mosaics
- 500 m browse mosaics (each
 - 46-day cycle)
 - FBD/FBS
 - ScanSAR

http://www.eorc.jaxa.jp/ALOS/e n/kc mosaic/kc mosaic.htm



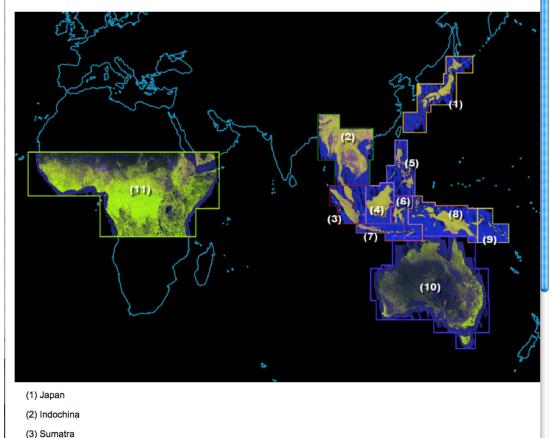
(4) Borneo/Kalimantan

K&C Initiative An international science collaboration led by JAXA



K&C Mosaic Homepage - PALSAR 50m Orthorectified Mosaic Product

Please click the area (area in which it is painted) which jamp to downloadpage.



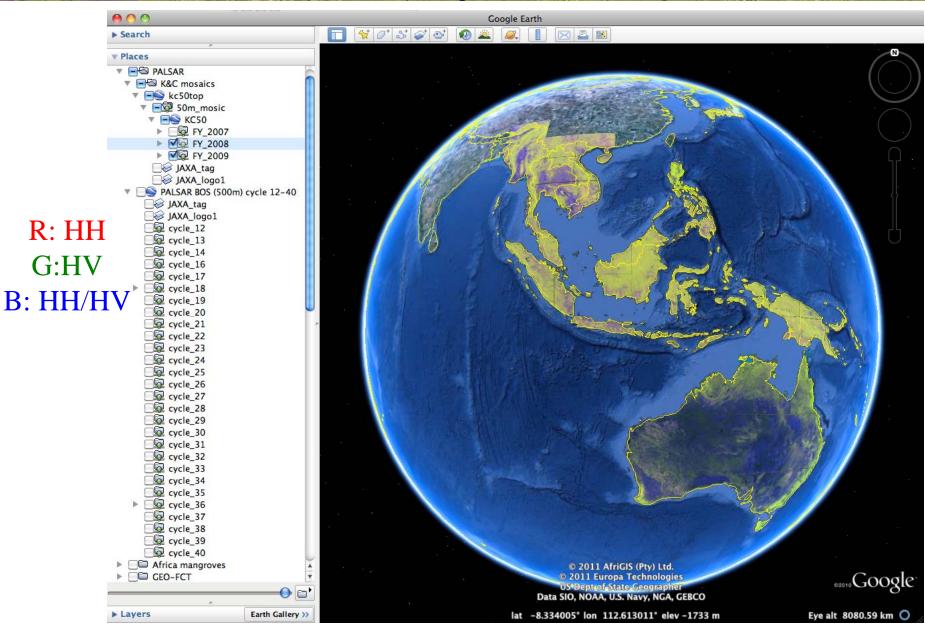
JAXA EORC K&C Mosaic Homepage

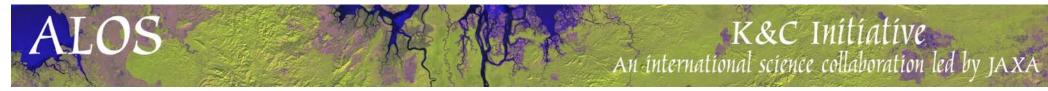
K&C 50 m orthorectified and 500 m resolution browse mosaic products online

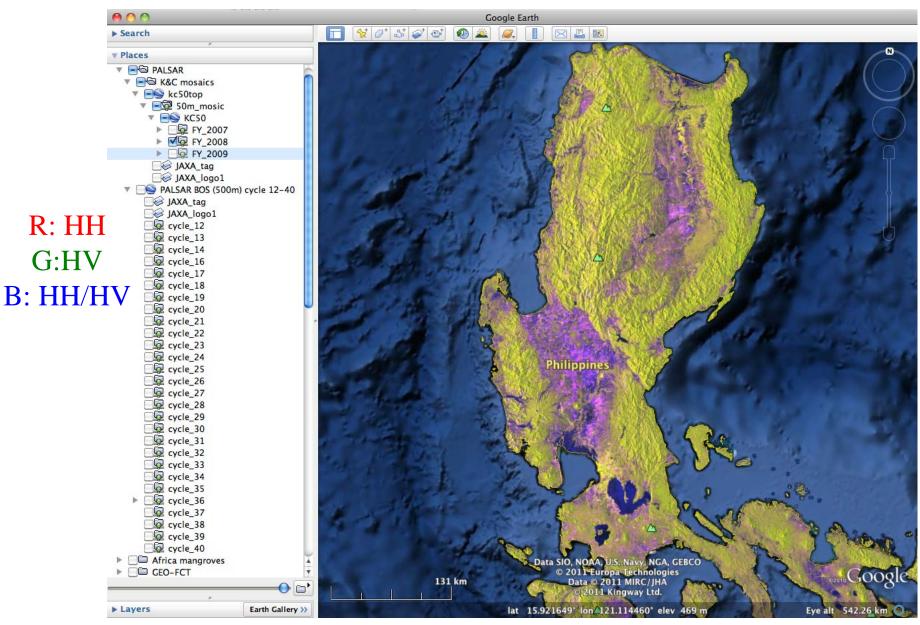
16 bit products kml files for Google Earth

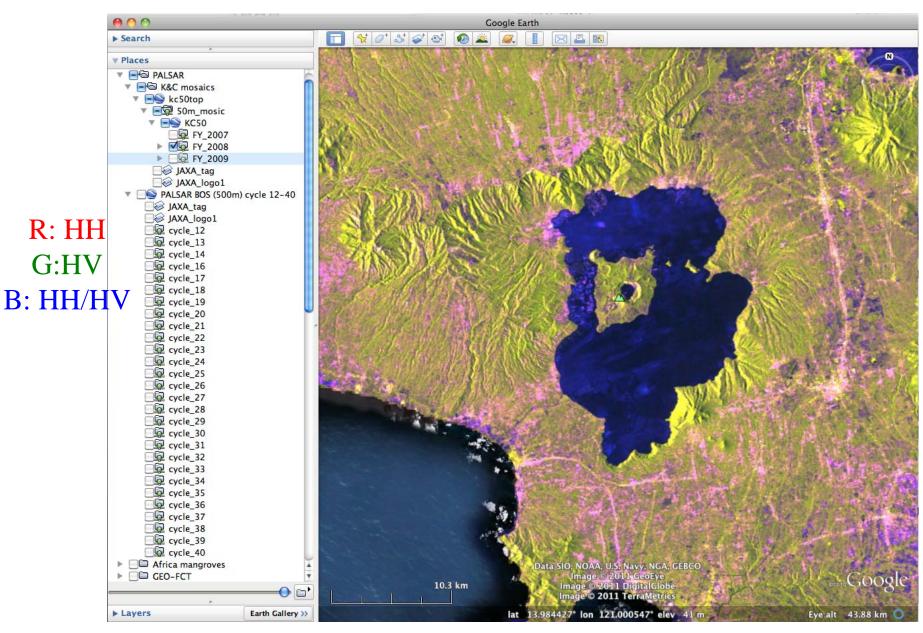
• To be updated (currently only South-East Asia and Central Africa online)

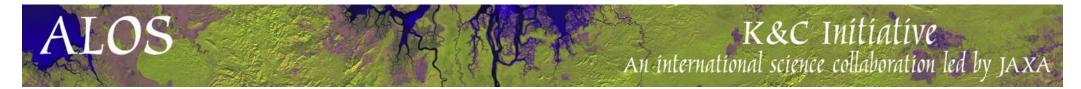
http://www.eorc.jaxa.jp/ALOS/e n/kc_mosaic/kc_mosaic.htm











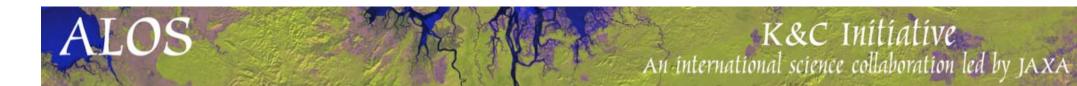
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& Chiliati	Discussions Members Promotions Jobs Search Manage More	Share group
	Start: Discussion Poll	Manager's Choice
	Start a discussion or share something with the group	GEO-FCT Product Development Technical Status Report for 2012
Your Activity		Ake Rosenqvist See all -
oose Your Vie	w •	Latest Updates
ost Popula	r Discussions	
Follow Paul	Provision of Baseline Data and Cadastral Maps for South Sumatra Province in Indonesia DHV is implementing a Norway funded UNDP managed project on Baseline Data for REDD+ in South Sumatra Province - Indonesia, under posted 3 months ago	Ake Rosenqvist sent invitations to this group. Invite people you know - 8 days ago Ahmed Gaber has joined the group.
	Farid Siregar 20 days ago - Farid likes this.	Send message • 9 days ago
		Ake Rosenqvist likes this comment
	See more -	by James Wheeler Central Africa 50m mosaic path/date information: Solved this problem (a while ago). If anyone has any similar problems let me know and I'll point you in the right direction. I have made
	From Ranga Myneni, Boston University:	Unlike - 9 days ago
	This is Ranga Myneni, Professor in the Department of Earth and Environment at Boston University	See all updates »
	Your Climate Change© yourclimatechange.org	
	Protect Earth From Climate Change With a Billion Linked-HandsDear Secretary-General of the United Nations Ban Ki-moon, We, the People of the Earth, request You to act judiciously and expeditiously to exclude the Cath form	Ads By LinkedIn Members
	protect the Earth from posted 1 month ago	Japan Executive Jobs Only Search thousands of Executive-level jobs in
	Fellong Ling 1 month ago - Fellong likes this.	Japan. Find your next job now!
	See more -	Office in Japan? Welcome! Visit our cutting-edge model office in Tokyo.
	Provide Party Part	Ideas for your new work style

Interest group on the <u>LinkedIn</u> network with news on publications and other events.

Aim to disseminate K&C info to broader community. 175 members thus! (+27 since KC#18!)

Group name: ALOS Kyoto & Carbon Initiative

Request membership directly at group page at http://www.linkedin.com OR send email to ake.rosenqvist@soloEO.com







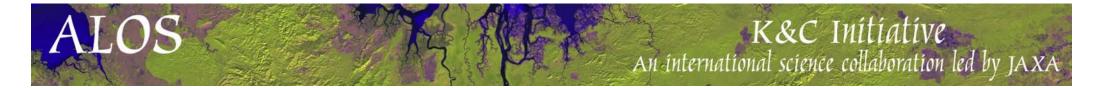
Project information resources (project team access)













Science Team meeting KC#19 Dates set - April 9-11, 2013

+ 3 additional events in connection with KC#19 PALSAR training workshop (open participation) - April 8 K&C Science Advisory Panel meeting (SAP members) - April 10 Open seminar on Forest Biomass by EO (open participation) - April 12 [Updated 2013/04/08]

K&C Global Manorove Watch

Remote Sensing of the Environment - K&C Special Issue

On-going [Updated 2012/07/09]

Science Team meeting KC#18

Nov 7-9, 2012. Presentations online [Updated 2012/11/13]

Science Team meeting KC#17 Presentations on-line [Updated 2012/04/11]

Science Team meeting KC#16 Presentations on-line [Updated 2011/11/21]

Science Team Phase-2 Reporting Full report compendium (250pp, 50 MB) and individual reports are available HERE [Updated 2011/10/13]

Project info resources

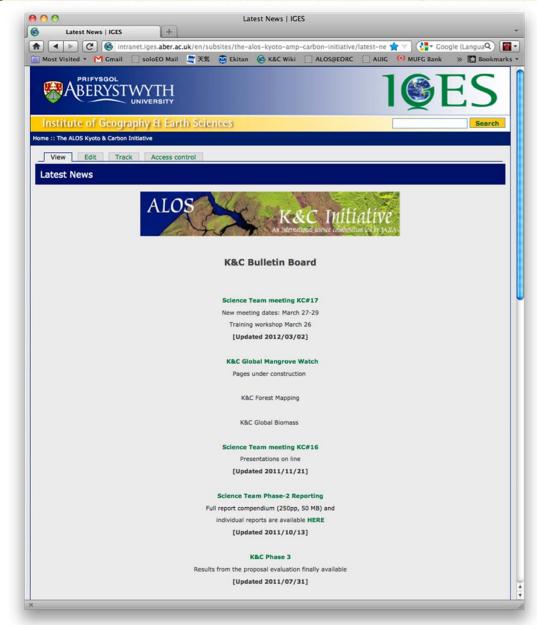
The K&C Wiki Site Hosted by Aberystwyth Univ.

A place for exchange of project information and data. Keep an eye on it!

http://intranet.iges.aber.ac.uk/en/s ubsites/the-alos-kyoto-ampcarbon-initiative/latest-news

> Log in ID: ALOS-KC Passwd: ALOS-KC

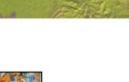




Establishment of K&C library on the K&C Wiki

Please provide PDF copies of your published papers that are based on ALOS data obtained through the K&C

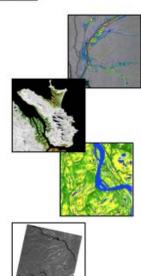
During KC#19: please provide directly to Ake. Or by email by April 30.

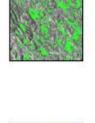






Reports and Publications





ALOS



















Reports and publications

K&C Science Plan, *v.3.1* (*March 2008*, *105 pp*) K&C Science Team Reports Phase 1 (Jan 2010, 230 pp) K&C Science Team Reports Phase 2 (Oct 2011, 250 pp)

IEEE Journal on Special Topics in Earth Observation and remote Sensing (J-STARS) IEEE JOURNAL OF Vol. 3 No.4, Dec. 2010

GRSS

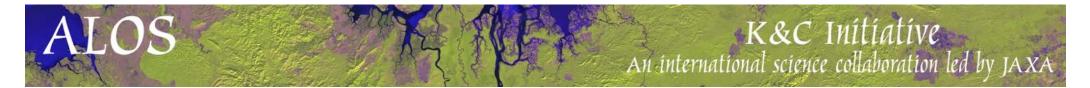
- Special Issue on K&C: Phase 1 results
- 10 papers from Forestry, Wetlands, **Desert and Mosaic Themes**

ALOS

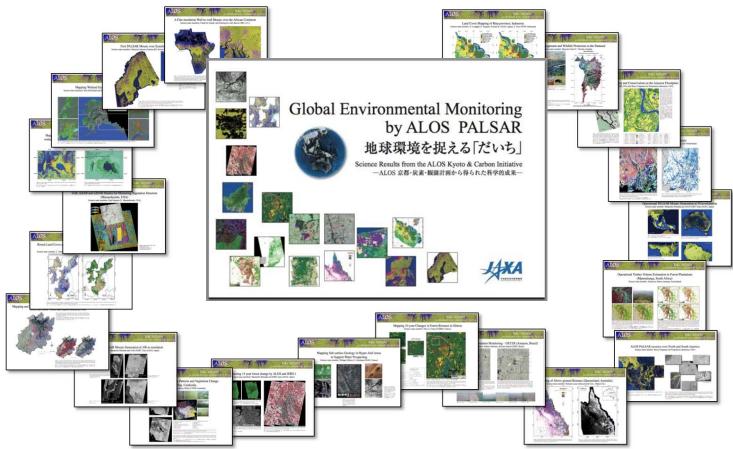
All reports and individual papers available on the EORC K&C Homepage and the K&C Wiki



K&C Initiative An international science collaboration led by JAXA



Illustrated K&C Booklet (85 pp) published Sept. 2010 35+ project descriptions in English and Japanese



Digital copy (PDF) available at K&C Homepage and K&C Wiki