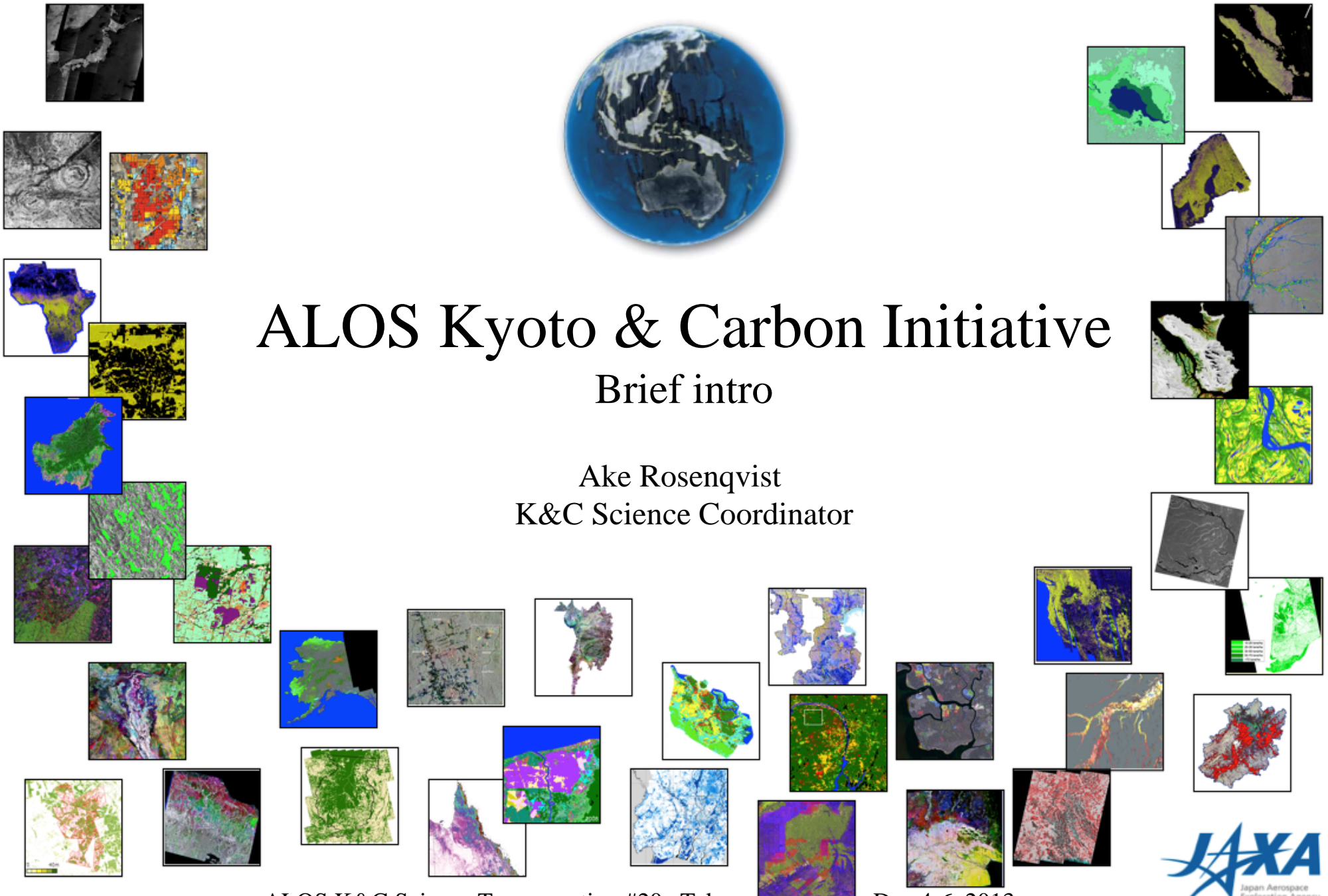




ALOS Kyoto & Carbon Initiative

Brief intro

Ake Rosenqvist
K&C Science Coordinator



ALOS K&C Science Team meeting #20, Tokyo

Dec 4-6, 2013



Outline

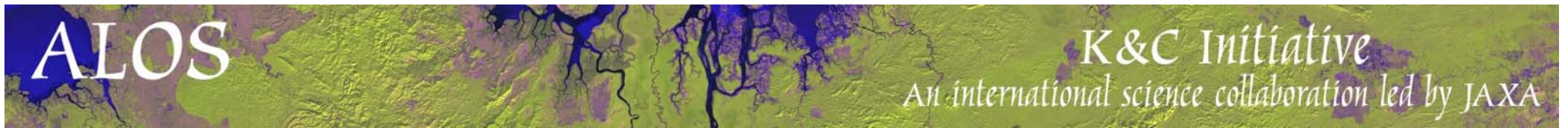
1. Heritage and objectives
2. Project organization
3. Data- and information requirements
4. Misc project information

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**



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)



Background

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.

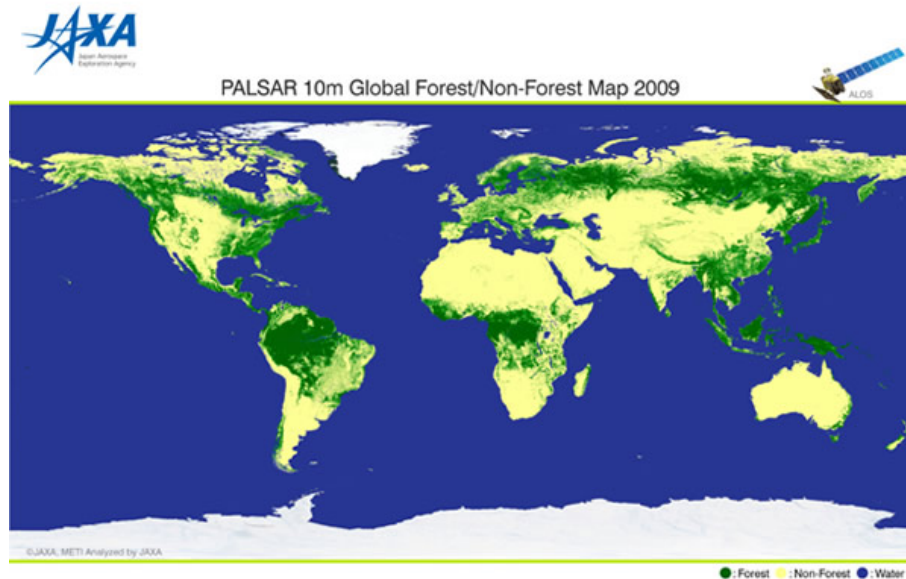
Despite the PPP shift, JAXA management approved K&C Phase 3 – with a modified structure and new key objectives that are in line with the PPP changes at JAXA.

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.

K&C 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.

K&C goals

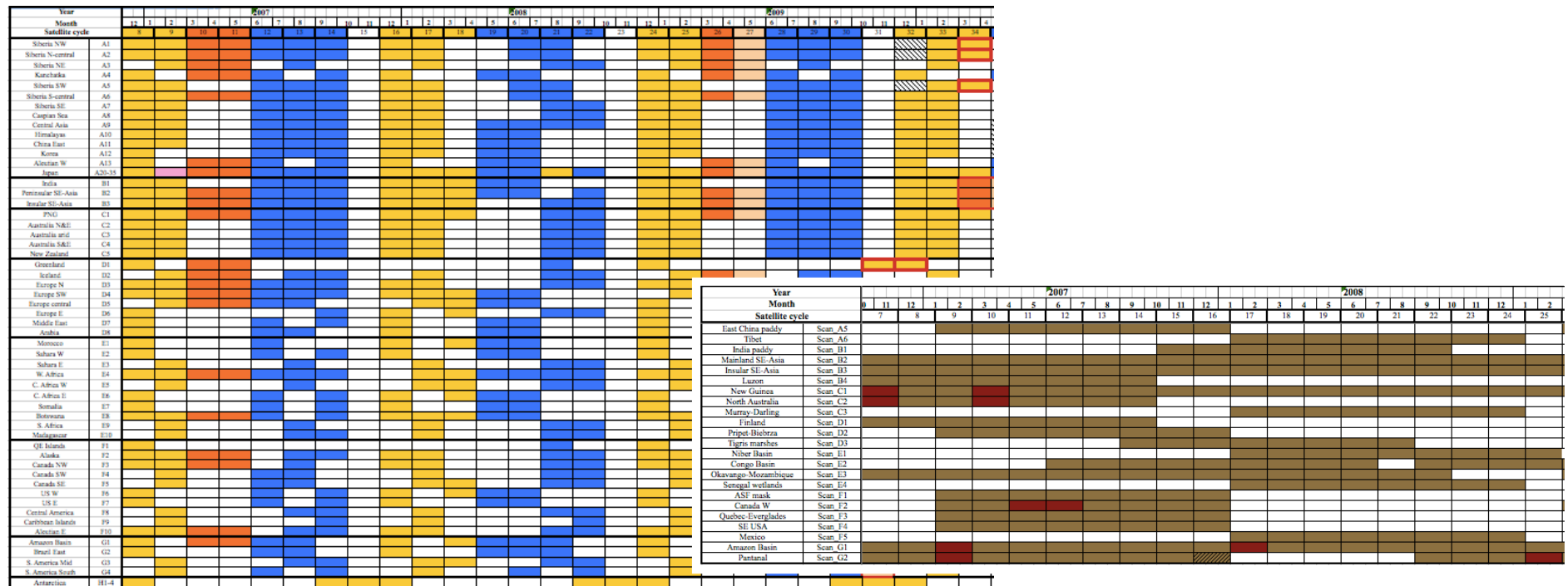
K&C Mangrove Watch

- Use of ALOS PALSAR data for mapping the extent and annual changes in global 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

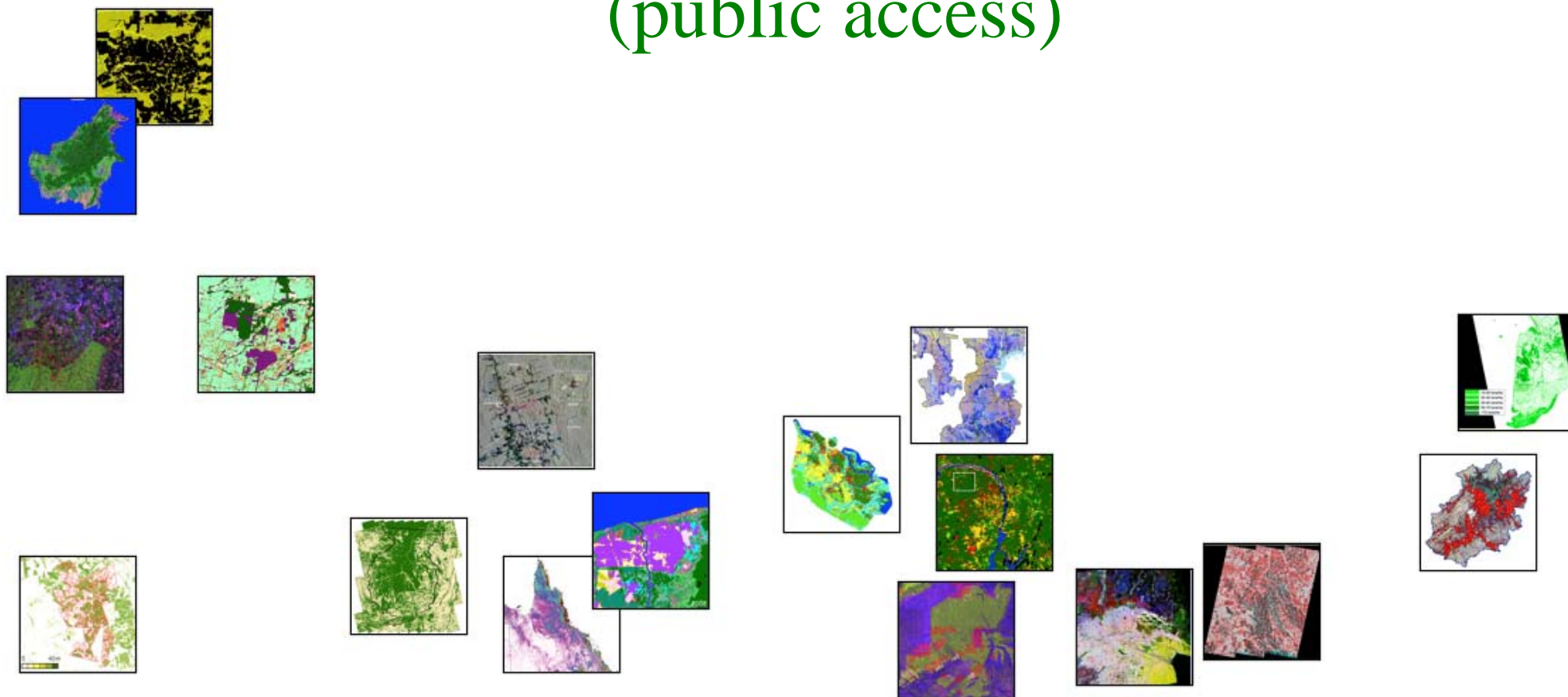
K&C goals

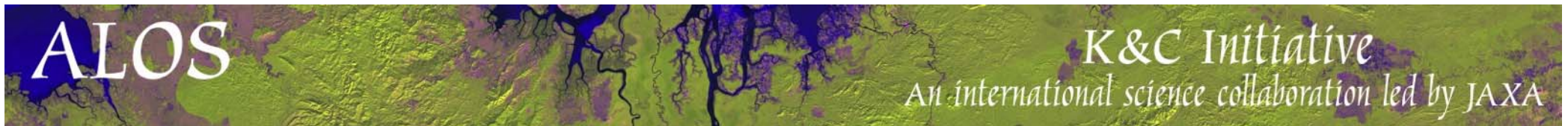
- support to ALOS-2 mission development

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)



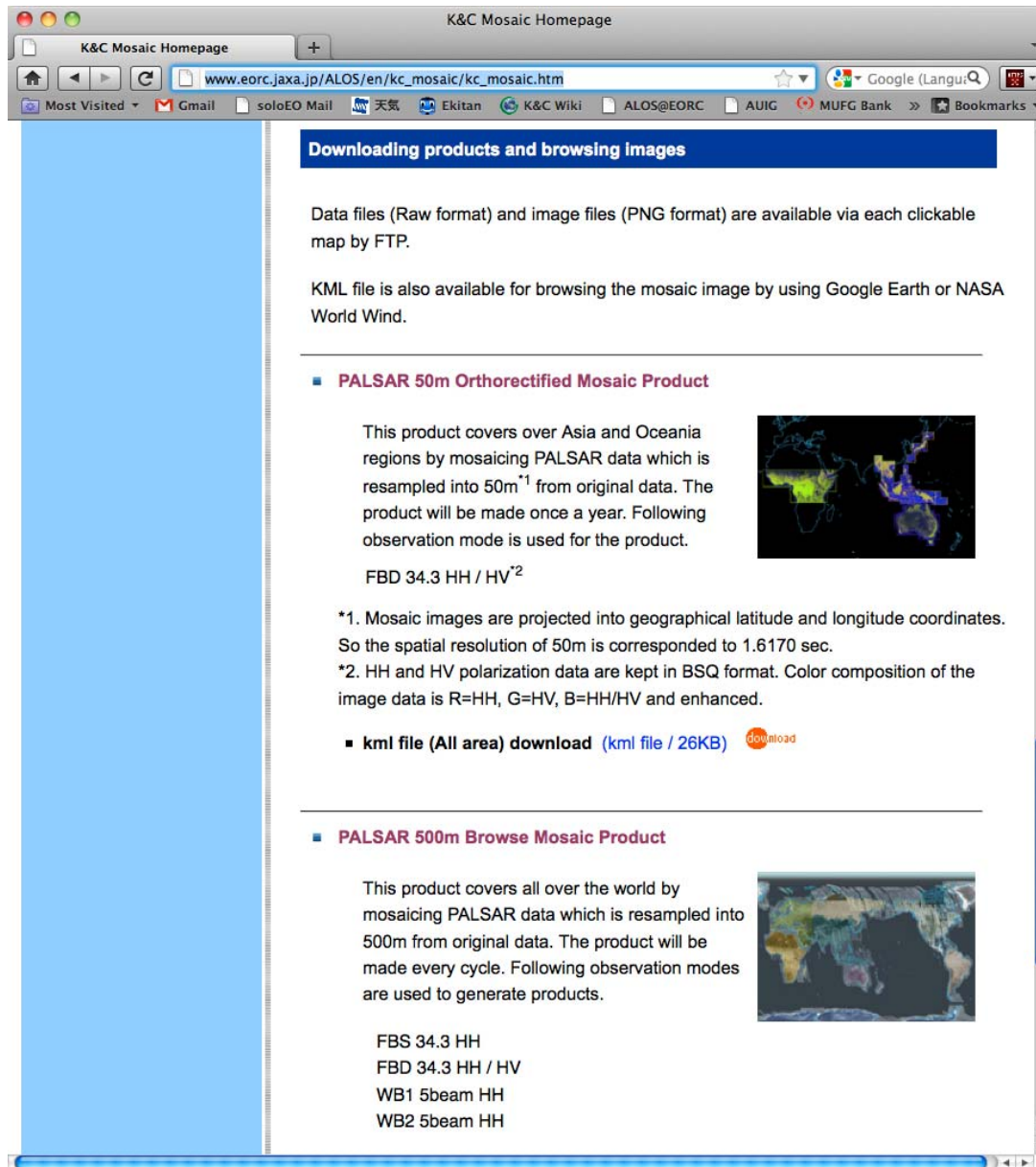


JAXA EORC K&C Homepage



- K&C background information
- Agendas and **presentation material** available from all previous K&C Science Team meetings (KC#1 – KC#19)
- PALSAR systematic observation strategy (BOS)

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

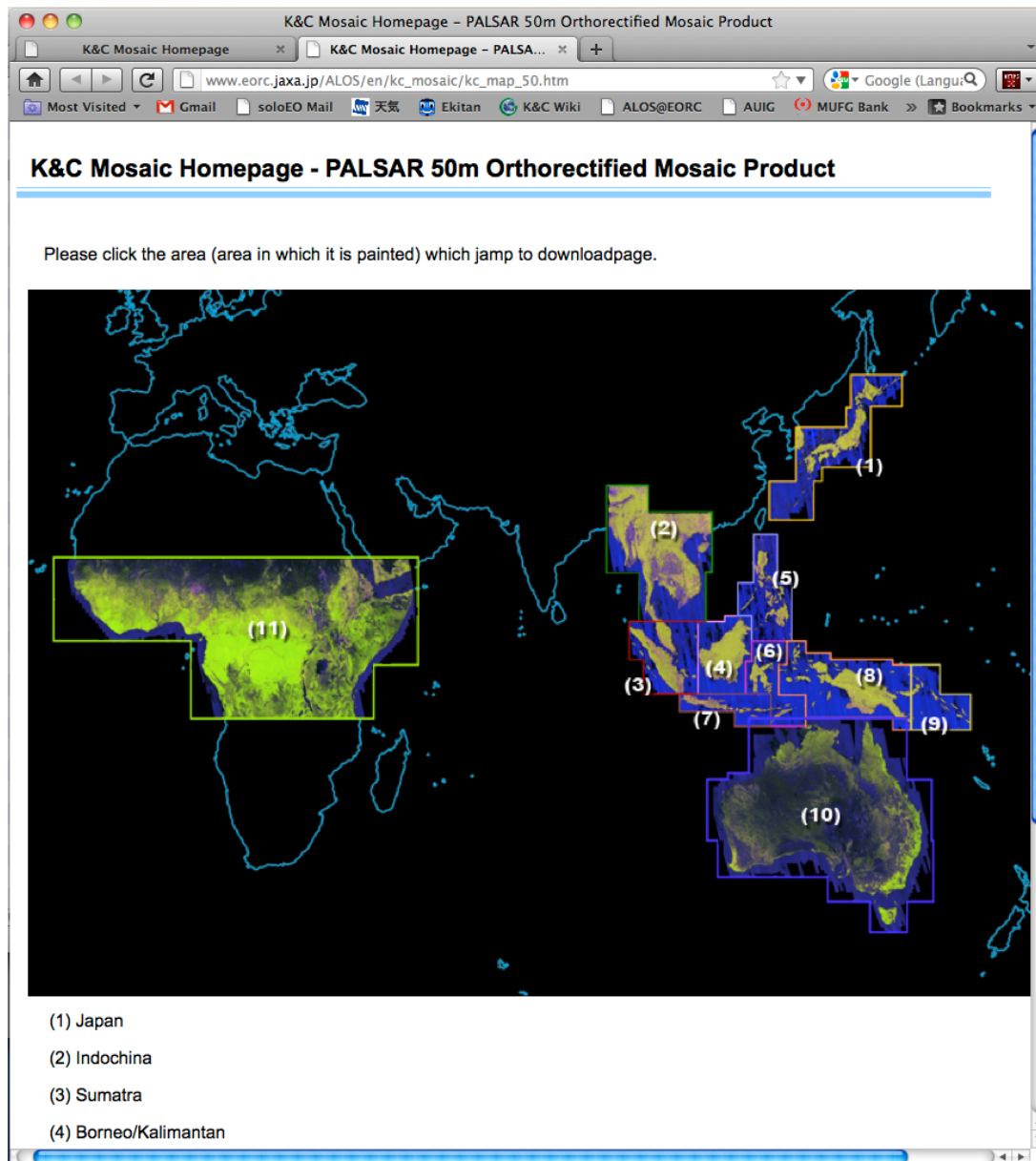


JAXA EORC K&C Mosaic Homepage

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/en/kc_mosaic/kc_mosaic.htm



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/en/kc_mosaic/kc_mosaic.htm

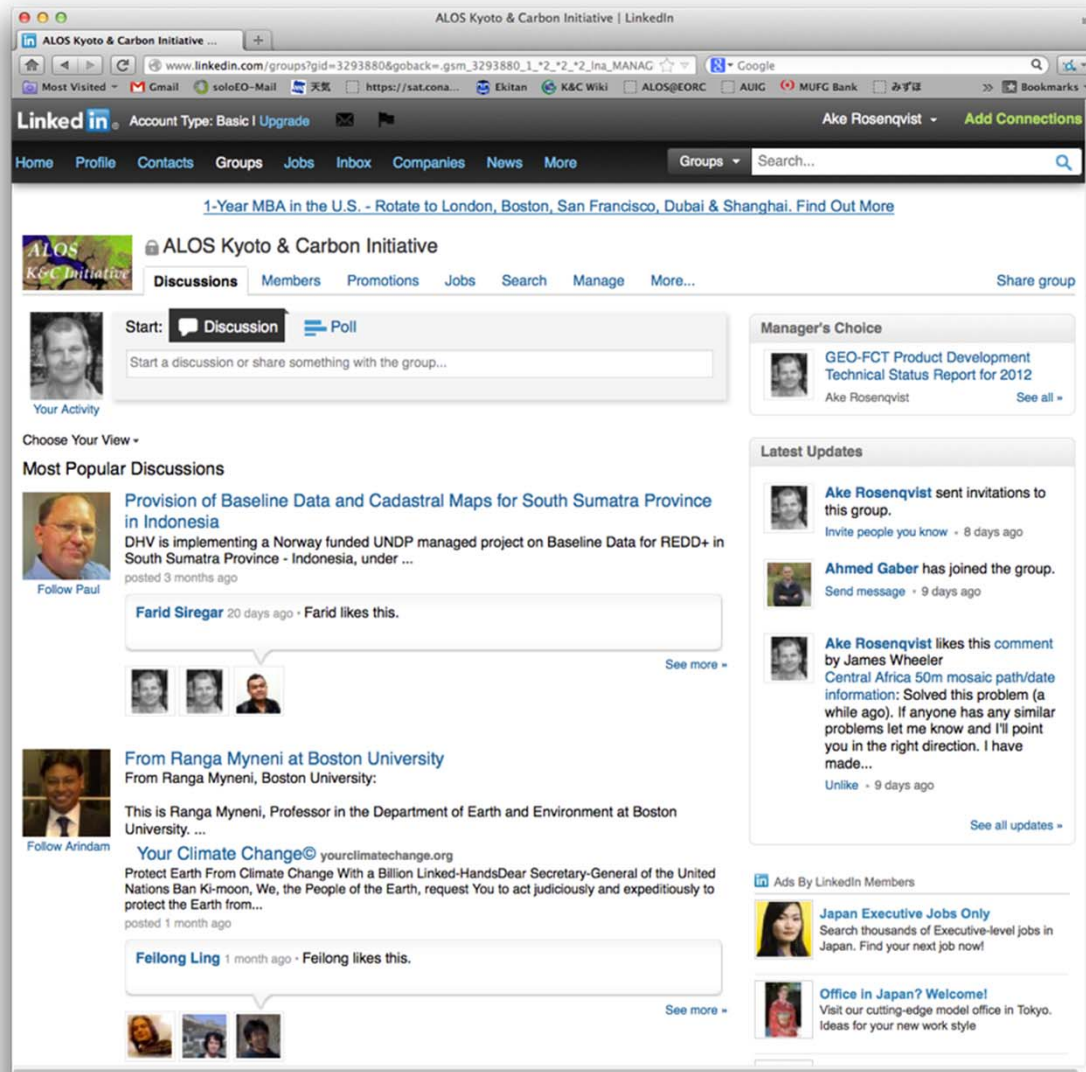


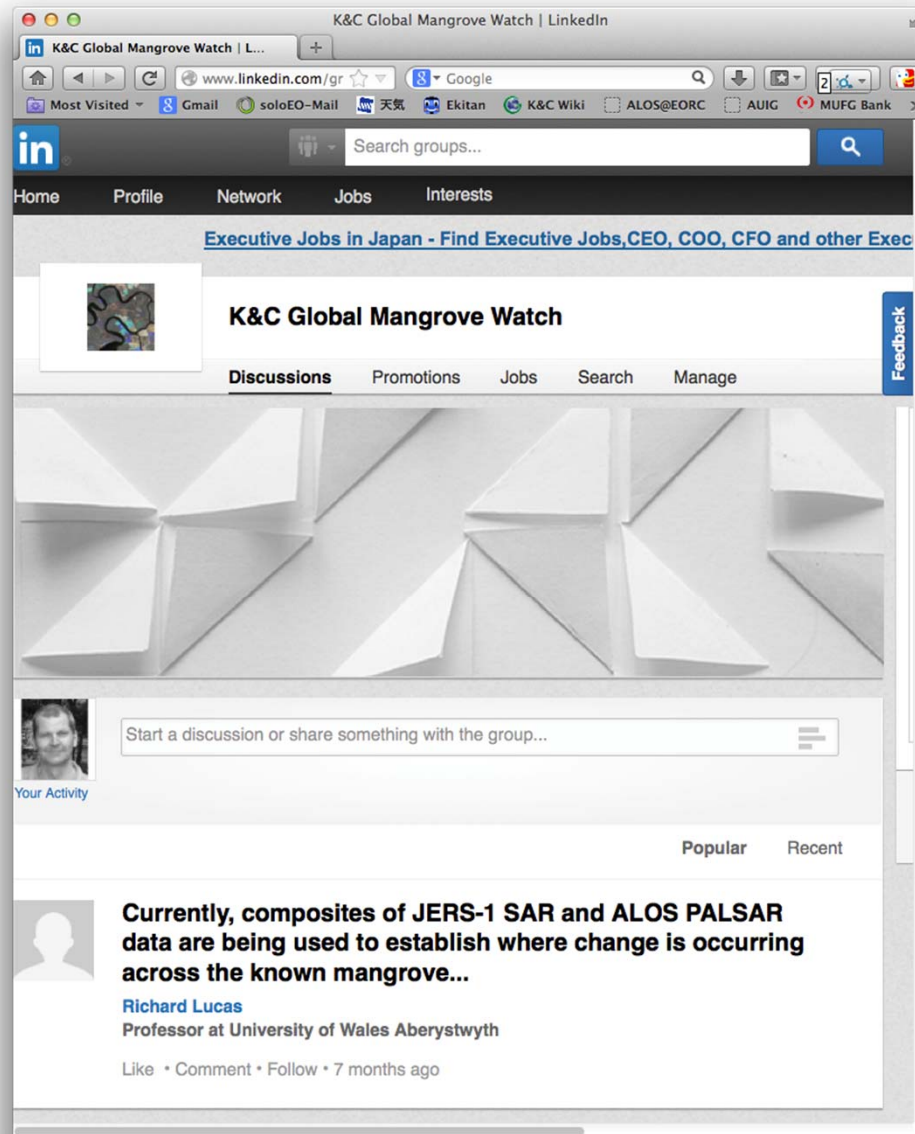
Interest group on the [LinkedIn](#) network with news on publications and other events.

Aim to disseminate K&C info to broader community.
204 members thus! (+29 since KC#19!)

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





New LinkedIn group:

Group name:
K&C Mangrove Watch

Objective:
Internal project site for K&C
GMW members.

16 members at present

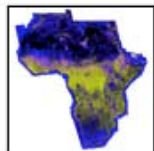
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group page at

<http://www.linkedin.com>

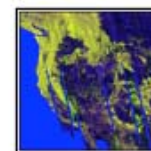
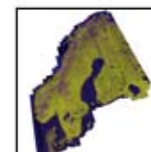
OR send email to
ake.rosenqvist@soloEO.com

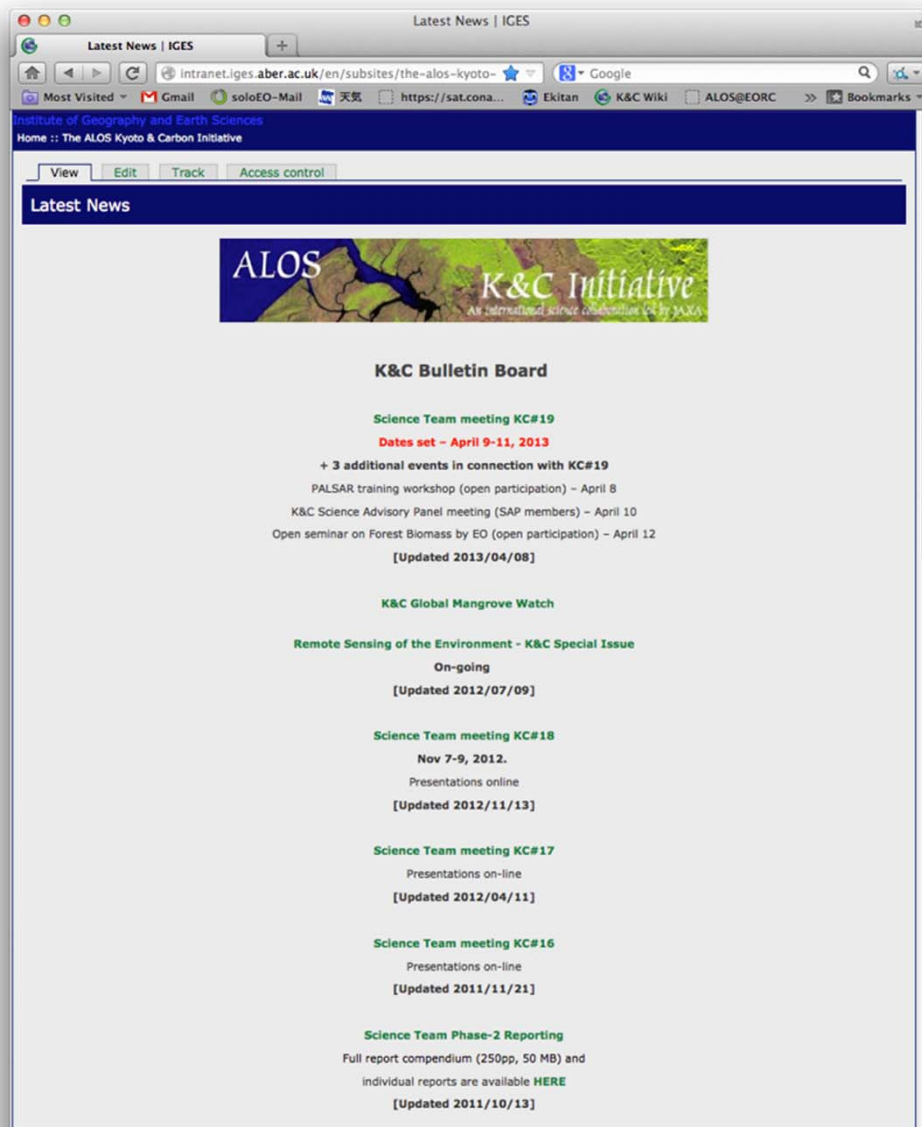
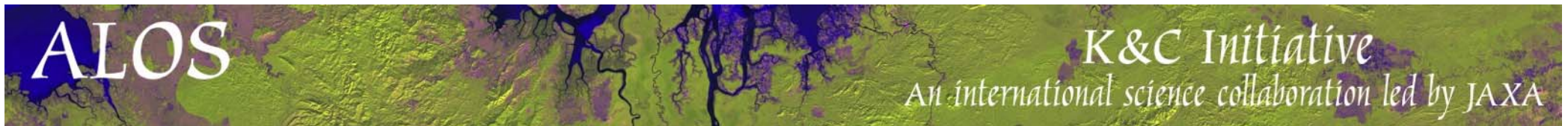
ALOS

K&C Initiative
An international science collaboration led by JAXA



Project information resources (project team access)





Project info resources

The K&C Wiki Site

Hosted by Aberystwyth Univ.

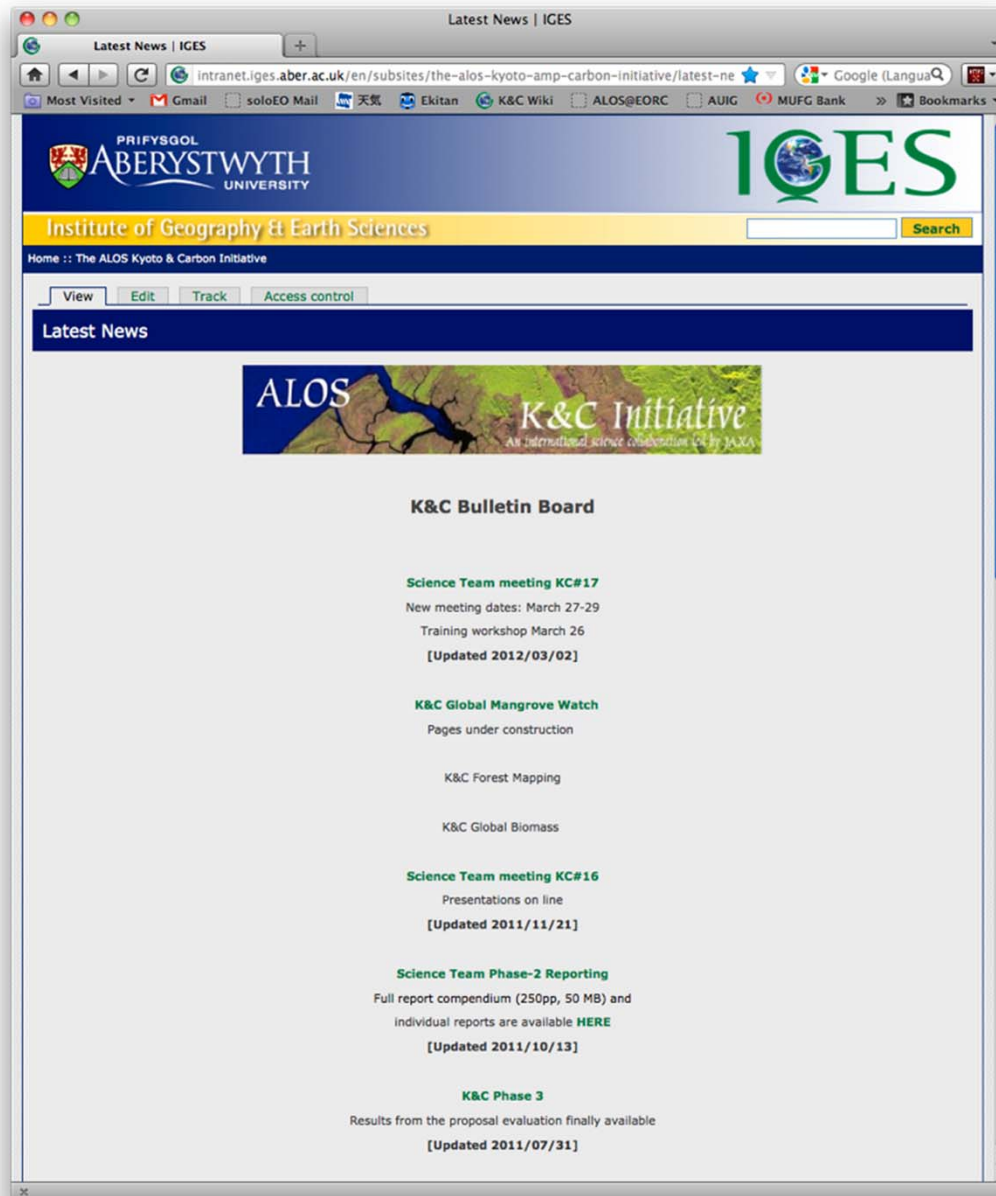
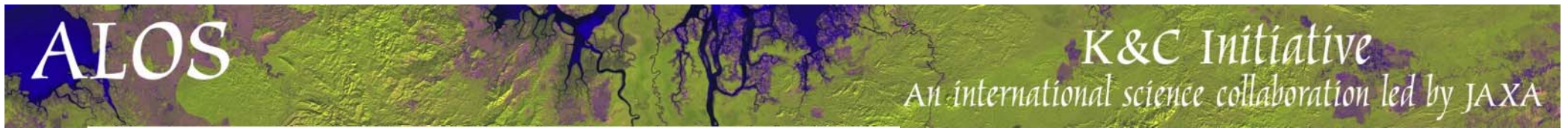
A place for exchange of project information and data.

Keep an eye on it!

<http://intranet.iges.aber.ac.uk/en/subsites/the-alos-kyoto-amp-carbon-initiative/latest-news>

Log in ID: **ALOS-KC**

Passwd: **ALOS-KC**

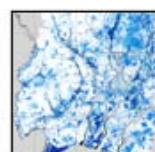
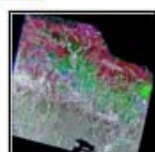
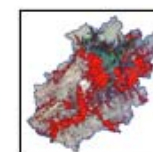
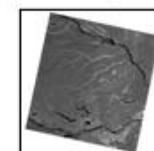
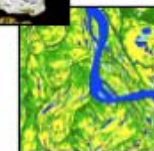
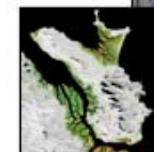
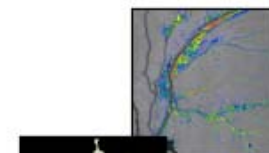
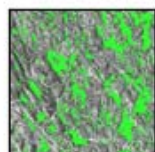
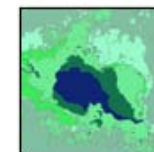


Establishment of **K&C library** on the K&C Wiki

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



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)*

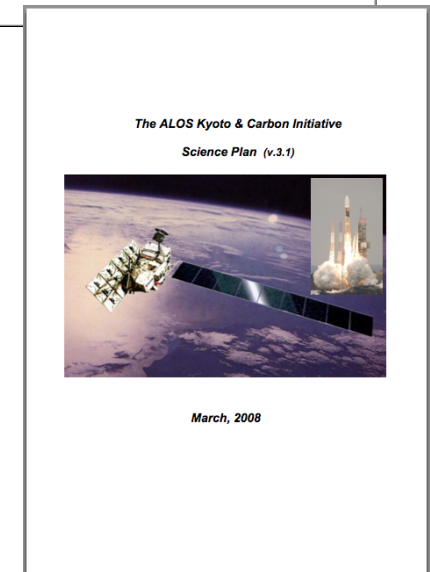
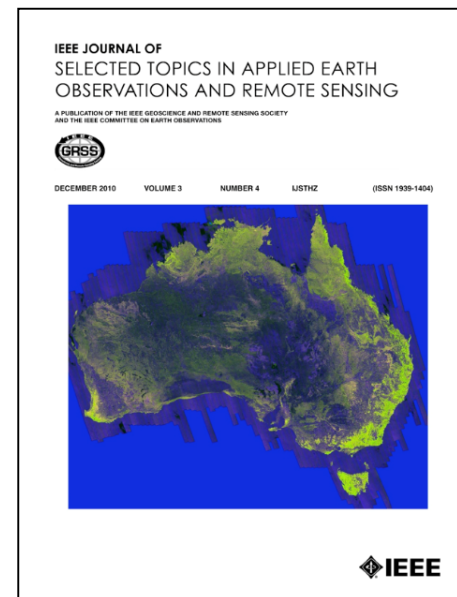
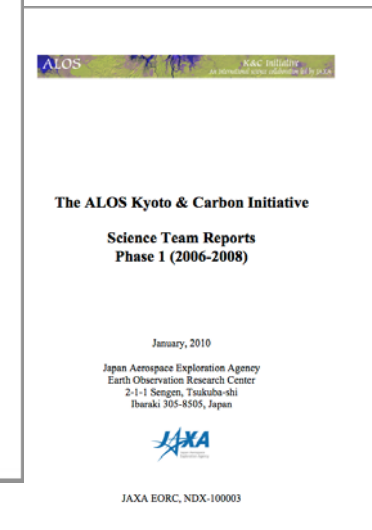
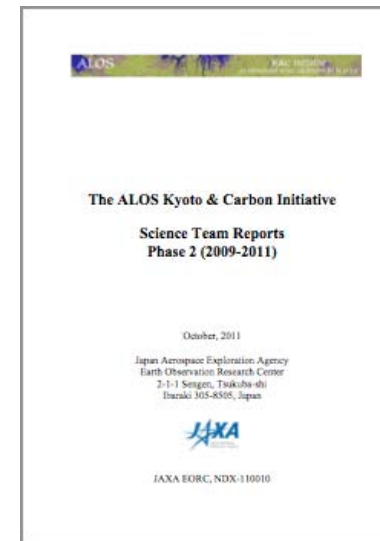
*K&C Science Team Reports **Phase 2** (Oct 2011, 250 pp)*

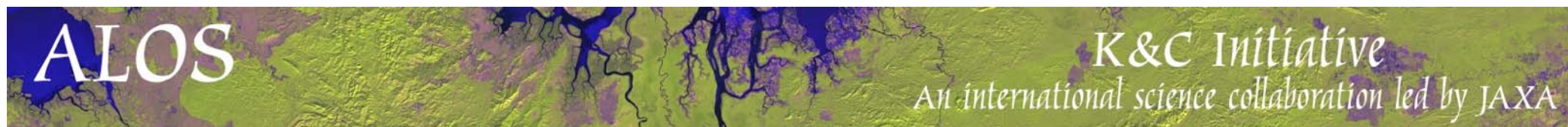
*IEEE Journal on Special Topics in Earth Observation
and remote Sensing (J-STARS)*

Vol. 3 No.4, Dec. 2010

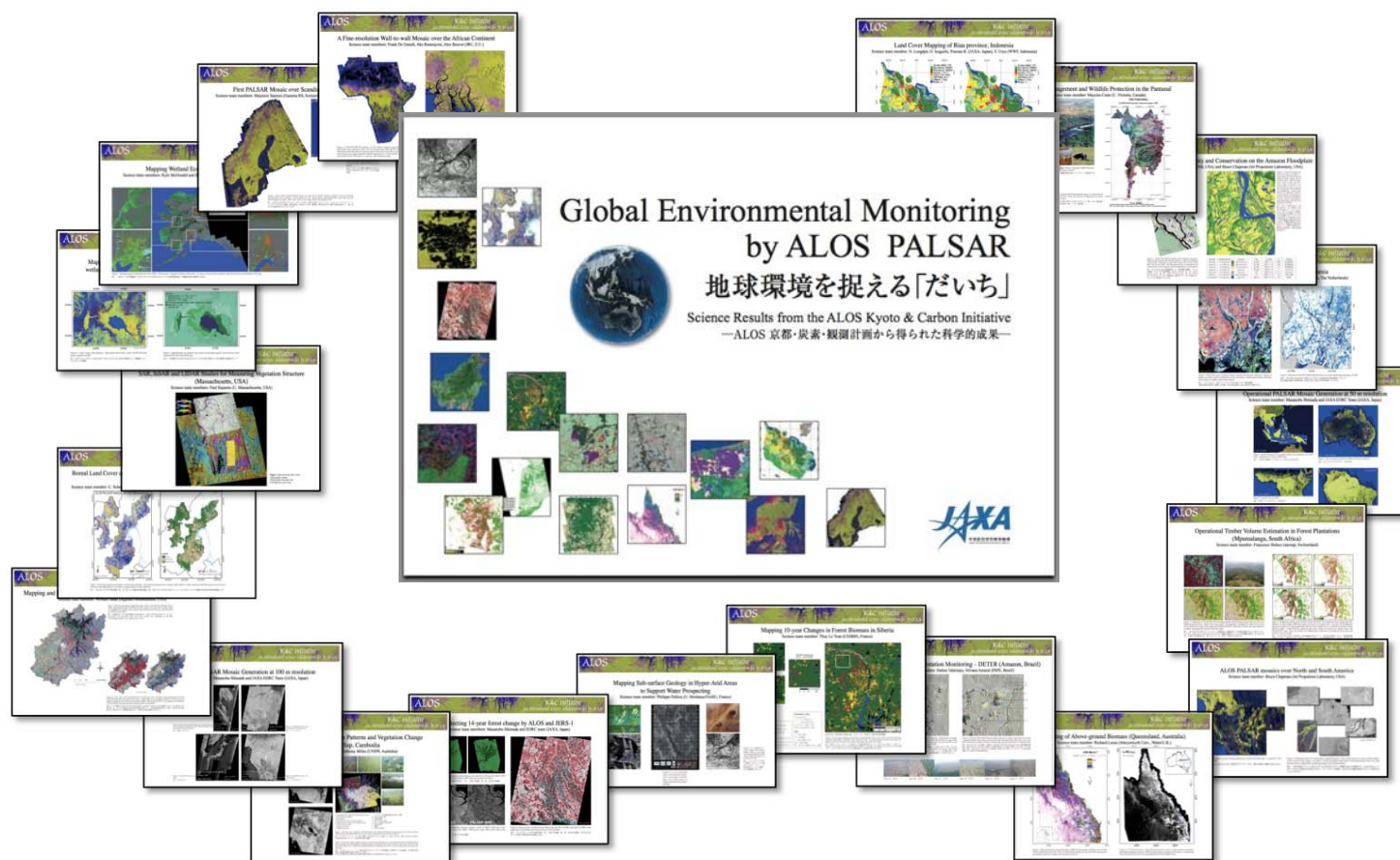
- Special Issue on K&C: Phase 1 results
- 10 papers from Forestry, Wetlands, Desert and Mosaic Themes

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





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**