



ALOS Kyoto & Carbon Initiative

Brief intro for new members

Ake Rosenqvist
K&C Science Coordinator



KC#17, March 27-29, 2012

Outline

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

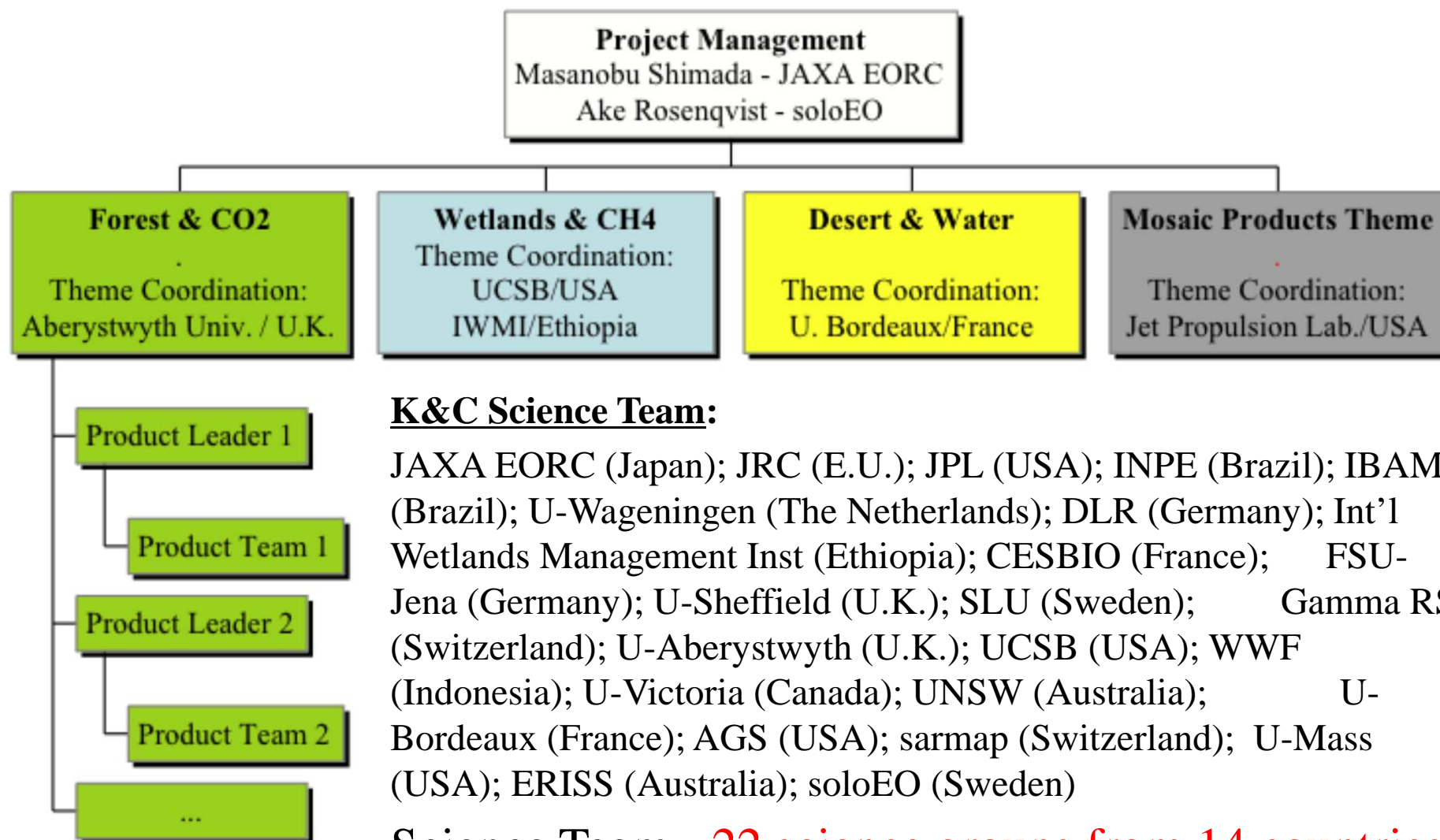
Heritage and objectives

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

Project phases

Phase 0 – K&C Science Advisory Panel – 2001-2005

- Scientific advise to JAXA during ALOS mission development
- Development of the ALOS systematic acquisition strategy (“BOS”)*
- Pre-launch research: Development of algorithms and methods using archived JERS-1 SAR;

Phase 1 & 2 – Regional “prototype” demonstration – 2006-2010

- Application demonstrations over large geographical regions - regional/semi-continental scale

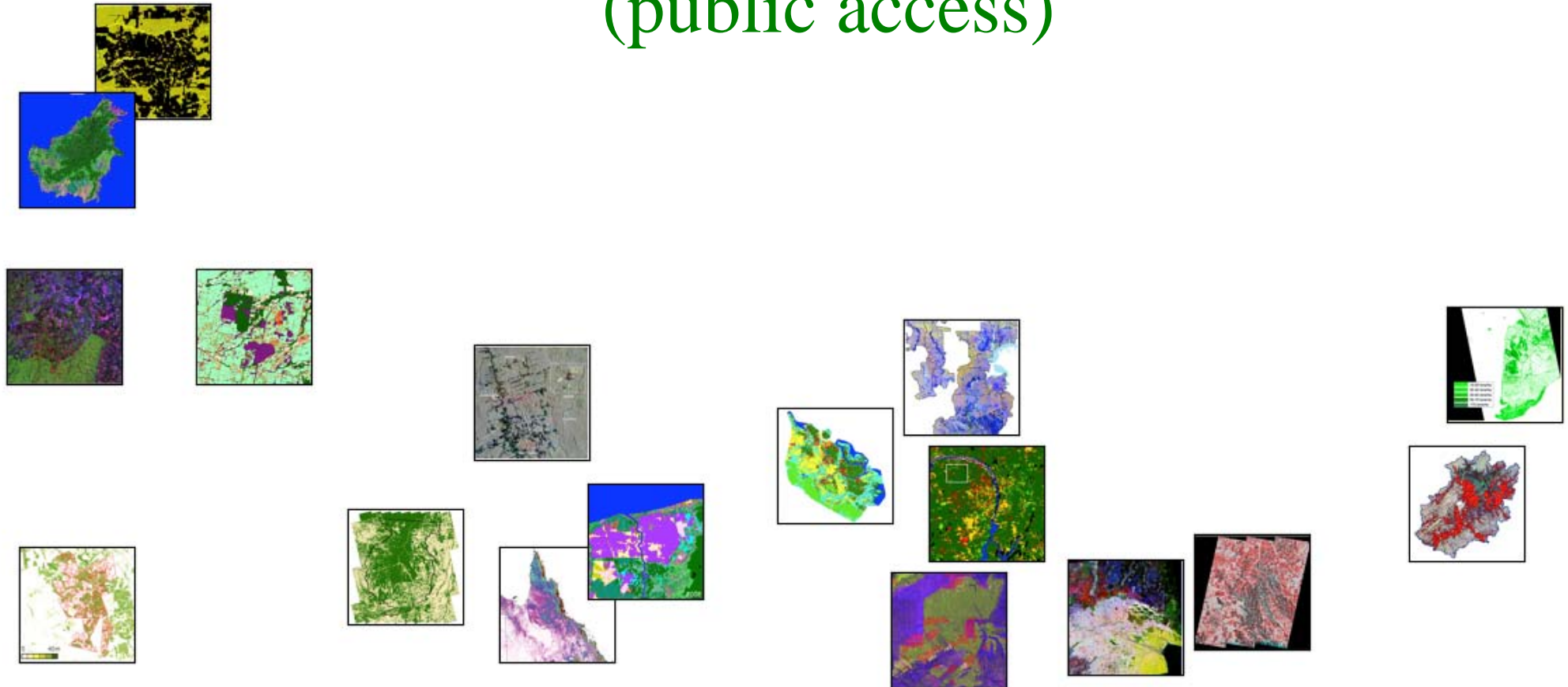
Phase 3 – K&C in the PPP era (2011 – 2014)

New focus areas:

- JAXA EORC global forest/non-forest map (validation and improvement)
- Development of methodology guidelines for forest/wetlands mapping by SAR
- K&C Global Mangrove Watch – global mangrove change mapping
- Ramsar Wetlands Convention (JAXA-Ramsar Sec MoU signed Oct.2010)

* *PALSAR “Basic Observation Scenario” implemented by JAXA from launch to assure continental-scale, repetitive & spatio-temporally consistent PALSAR data acquisitions over all land areas on the globe.*

Project information resources (public access)



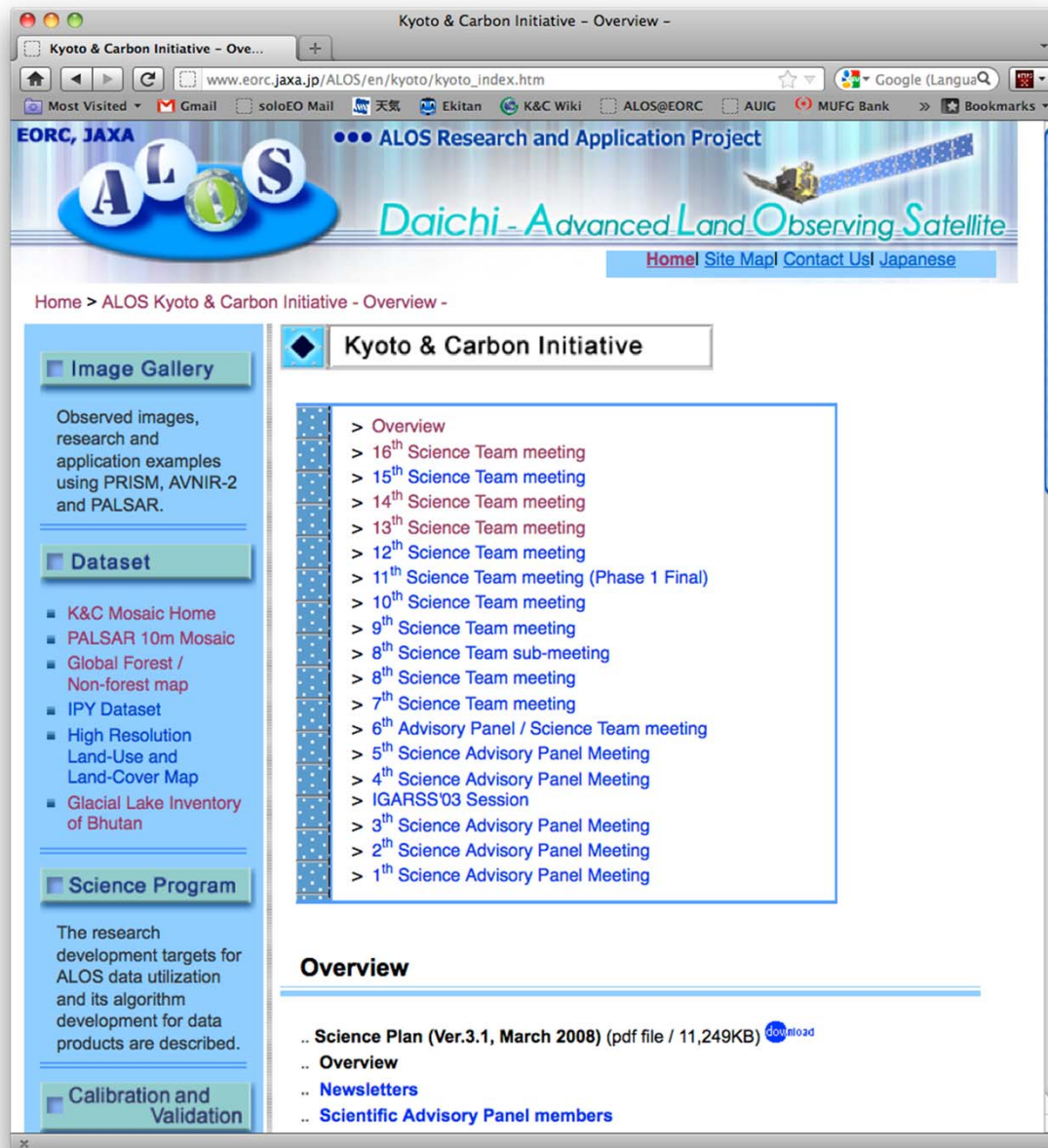
ALOS

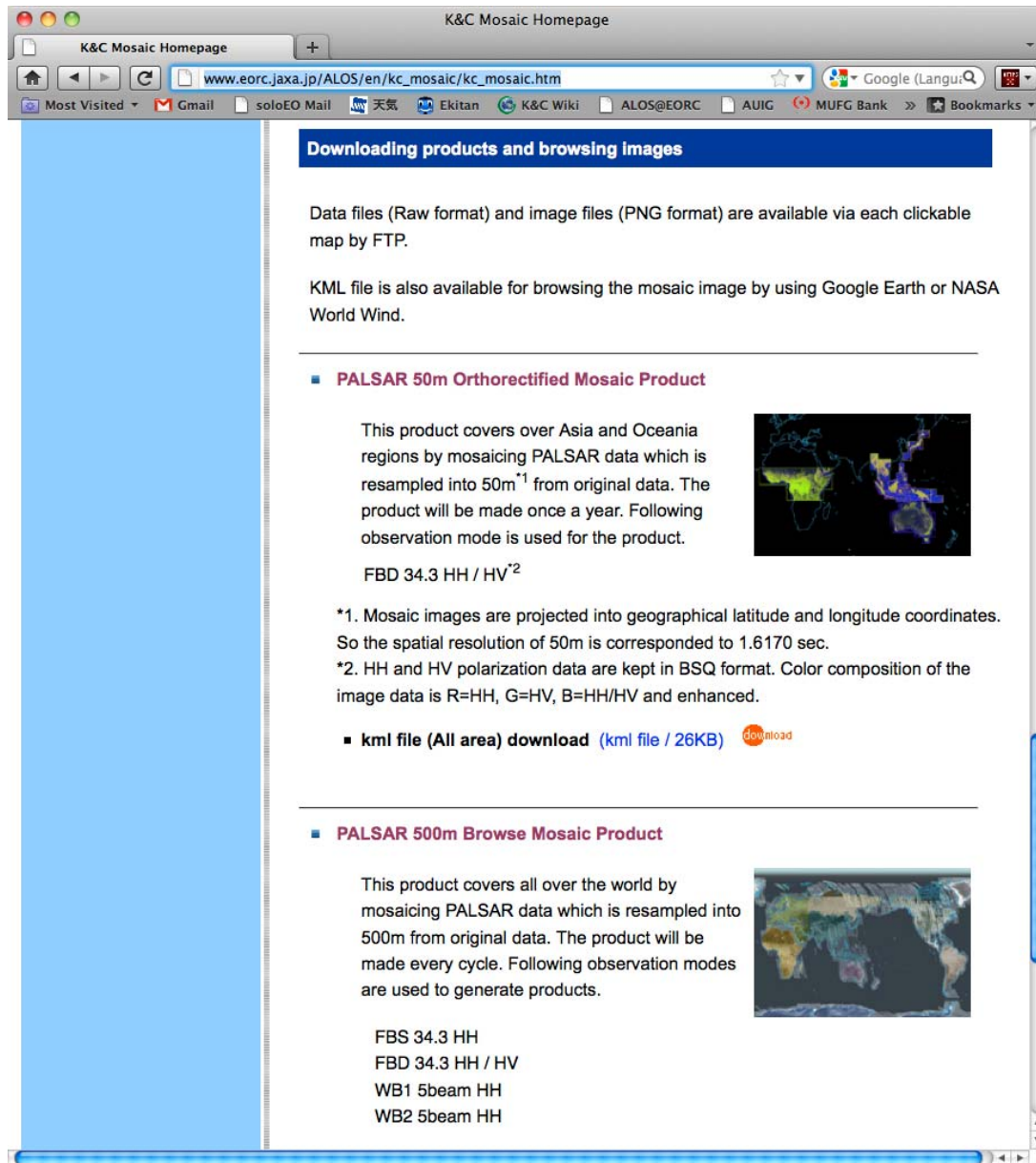
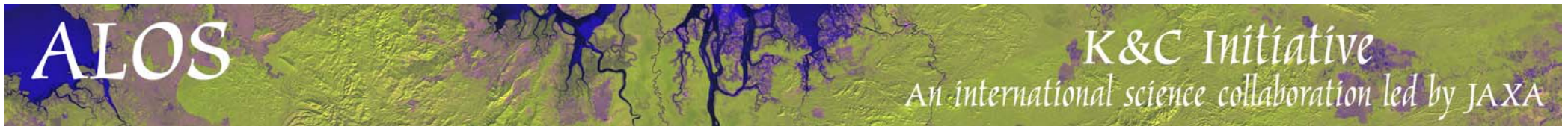
K&C Initiative
An international science collaboration led by JAXA

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#16)
- PALSAR systematic observation strategy (BOS)

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



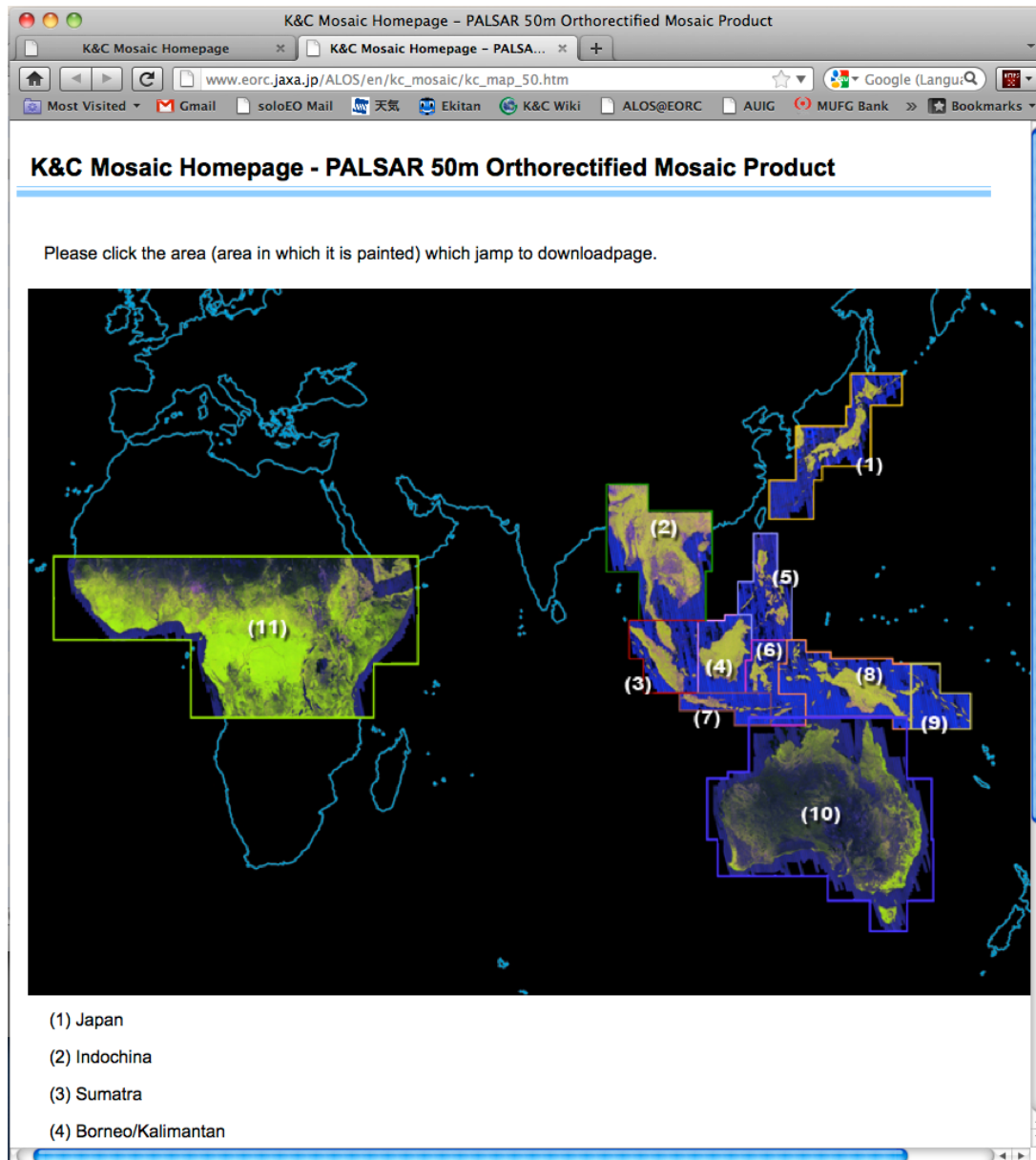
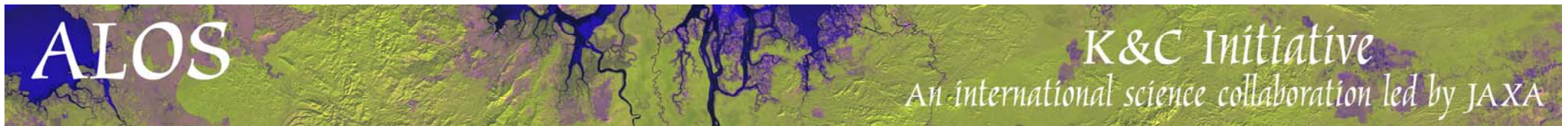


JAXA EORC K&C Mosaic Homepage

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

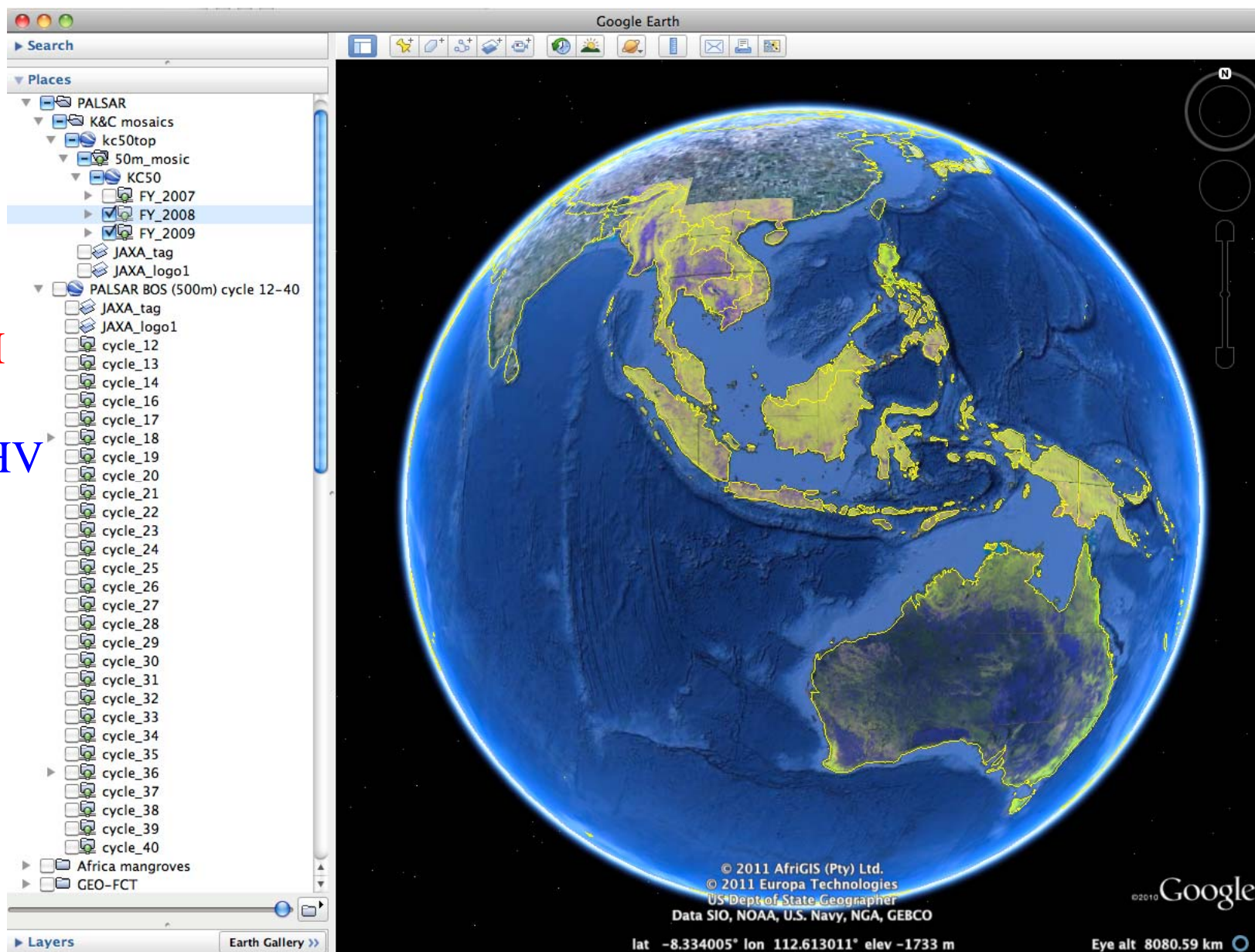
- 16 bit products
- kml files for Google Earth
- To be updated (currently only South-East Asia and Central Africa online)

http://www.eorc.jaxa.jp/ALOS/en/kc_mosaic/kc_mosaic.htm

ALOS

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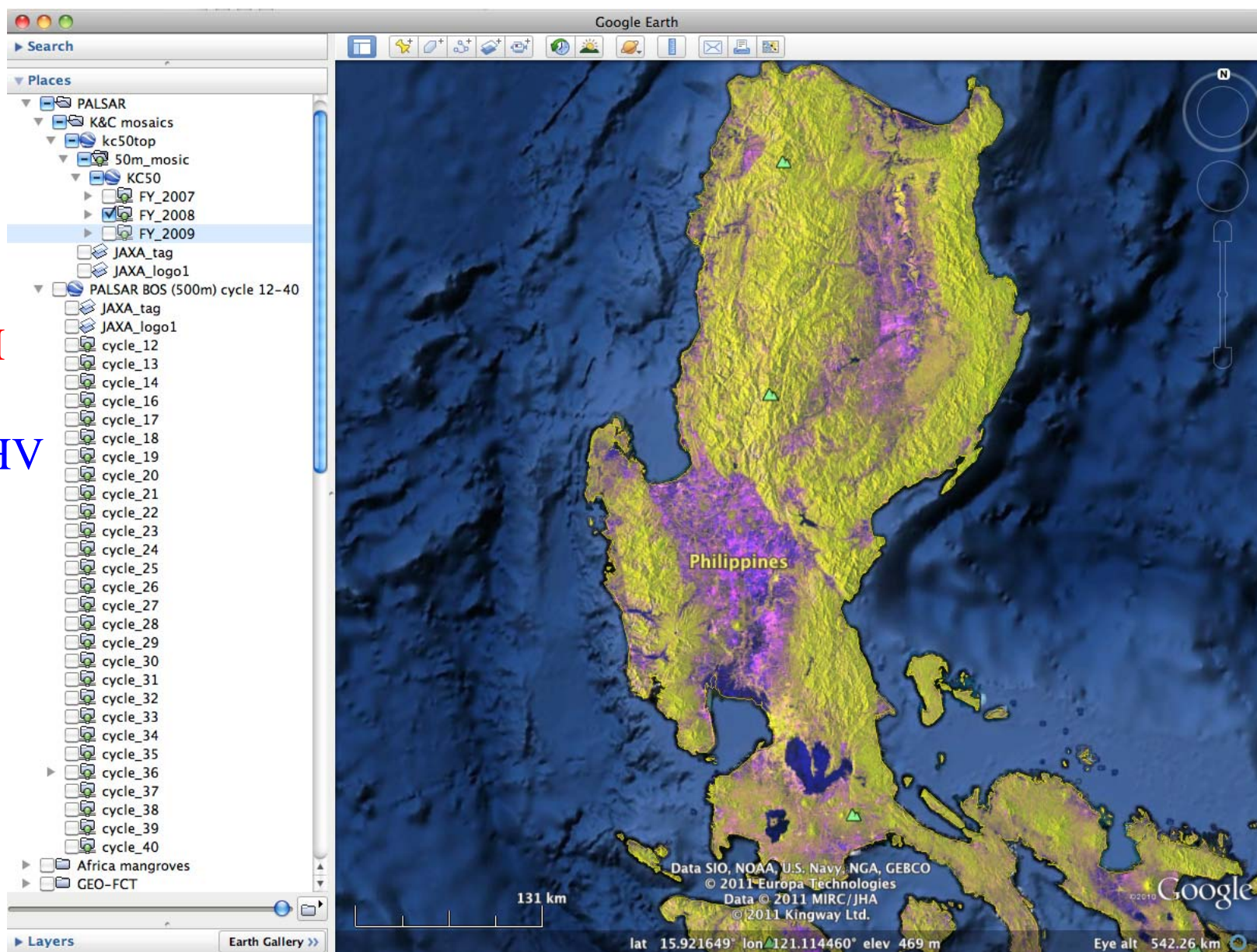
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G:HV
B: HH/HV



ALOS

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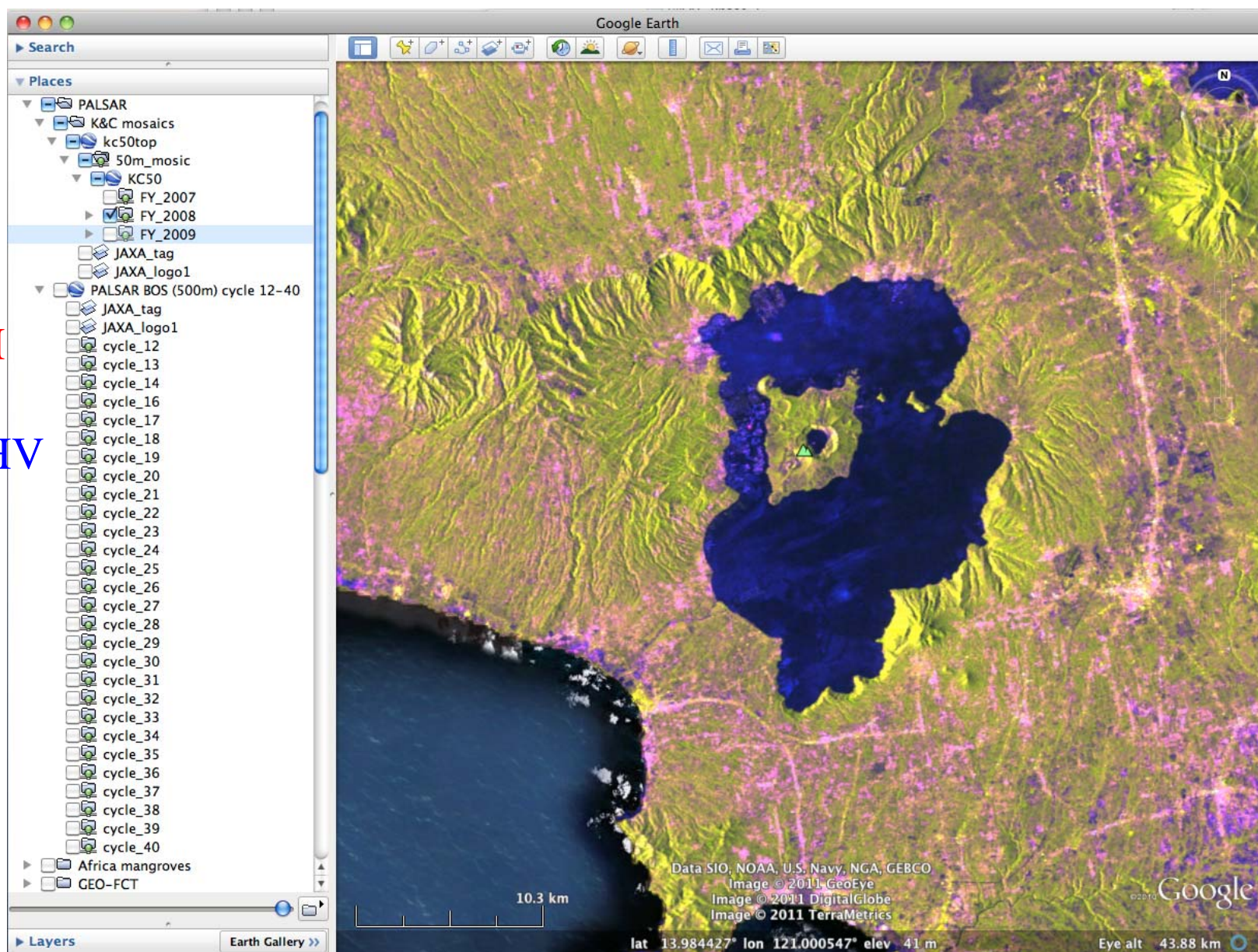
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ALOS

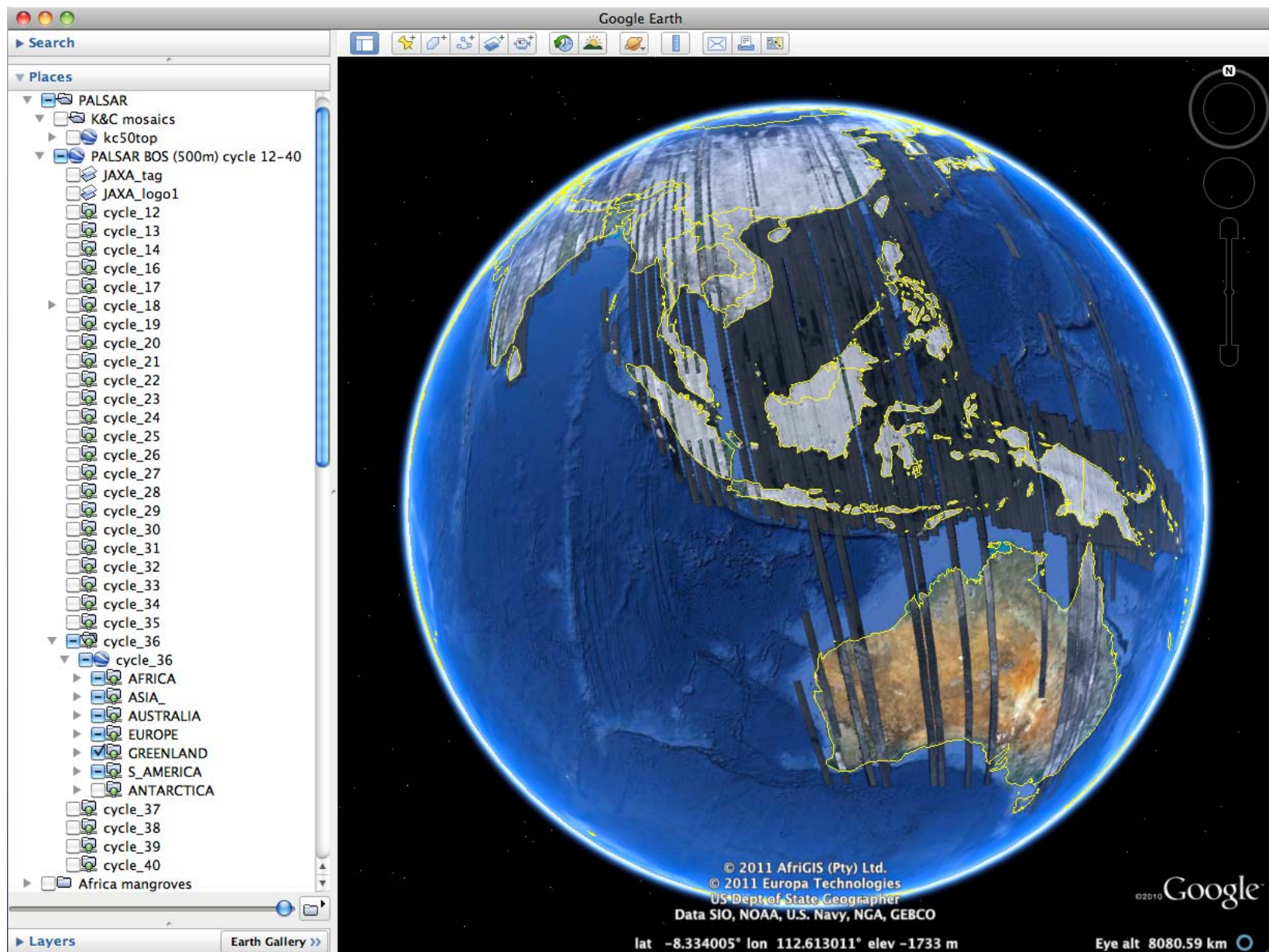
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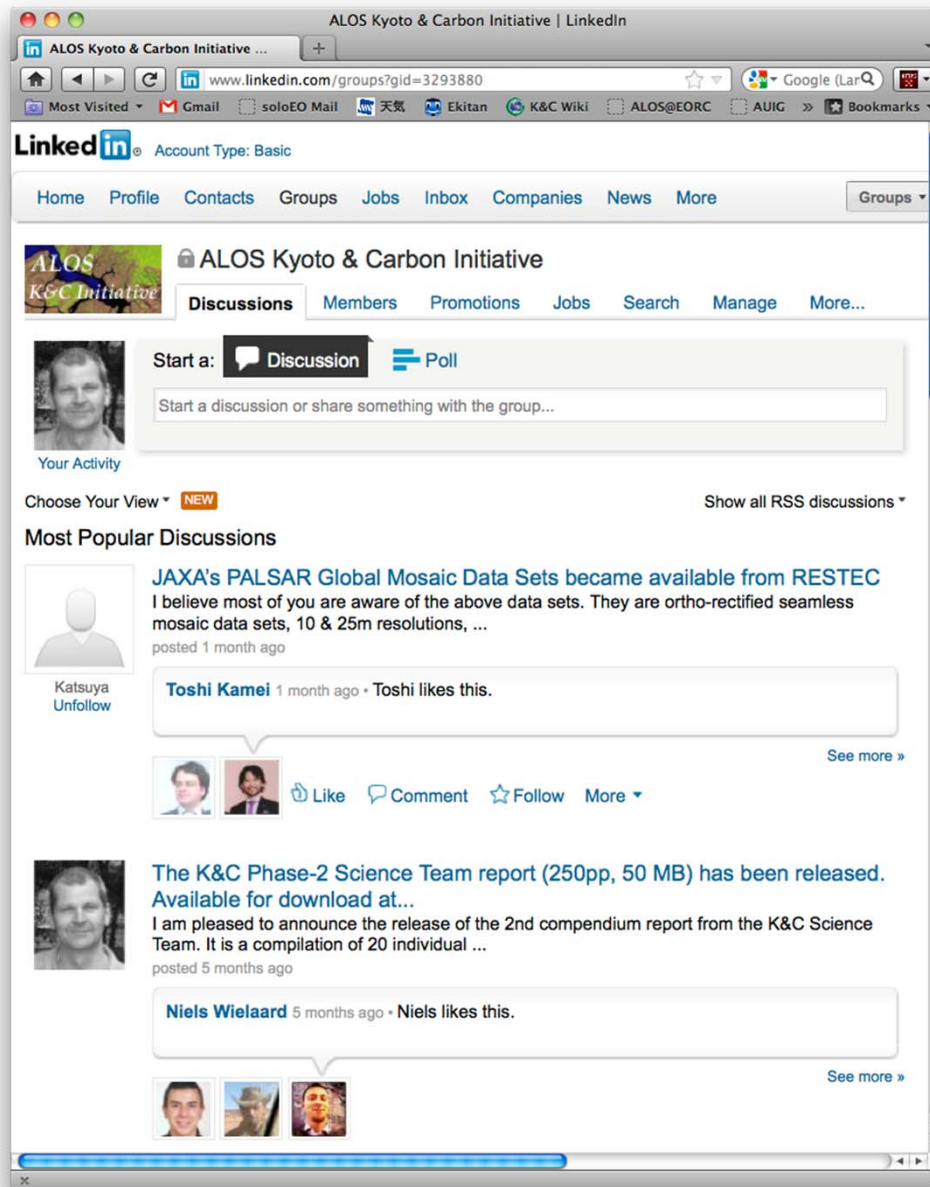
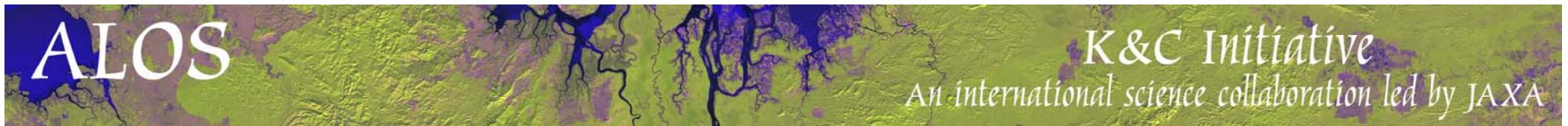
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G:HV
B: HH/HV



ALOS

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

Aim to disseminate K&C info to broader community.
115 members thus! (+35 since KC#16!)

Group name:
[ALOS Kyoto & Carbon Initiative](#)

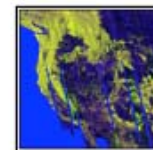
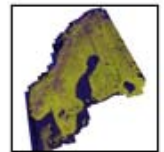
Request membership directly at group page at
<http://www.linkedin.com>
OR send email to
ake.rosenqvist@soloEO.com

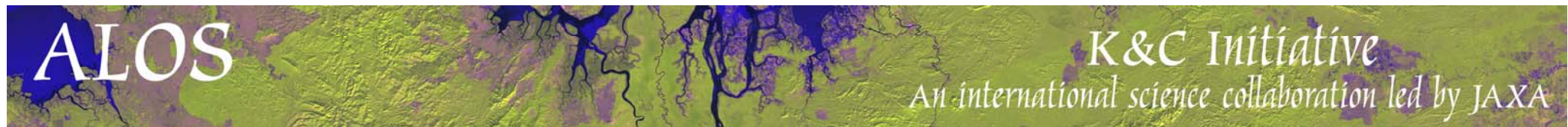
ALOS

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Project information resources (project team access)





Project info resources

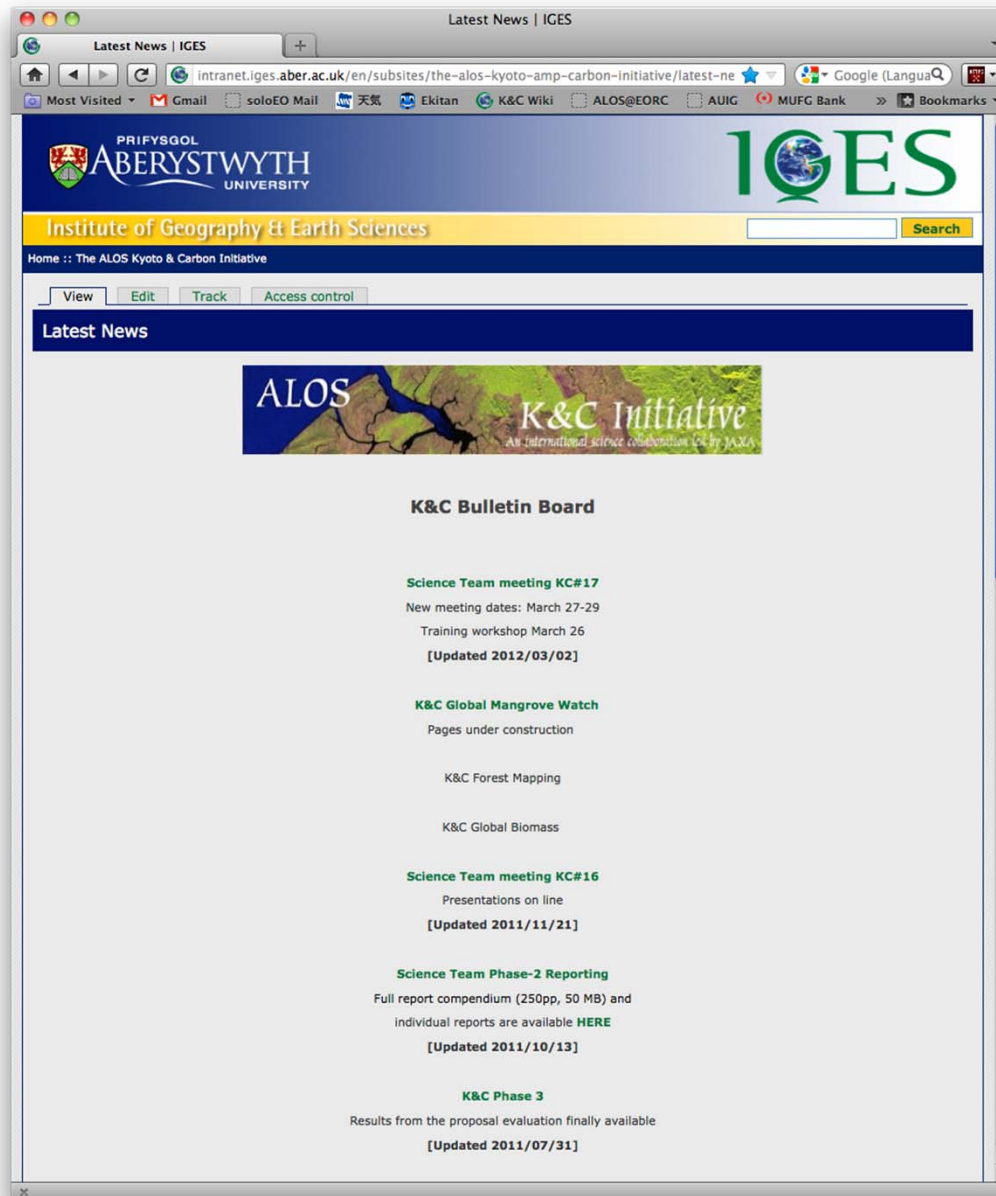
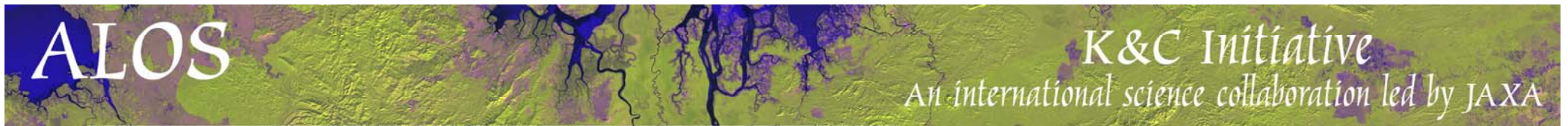
The K&C Wiki Site

Hosted by Aberystwyth Univ.

A place for exchange of project information and data. Improved usage during Phase 3

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

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



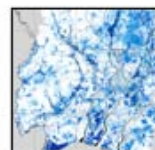
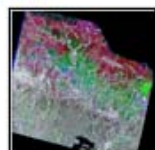
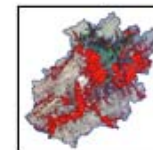
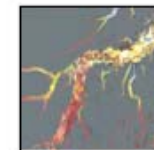
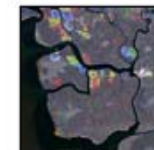
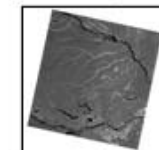
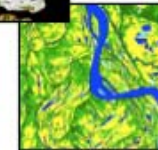
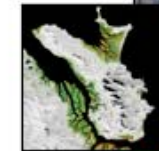
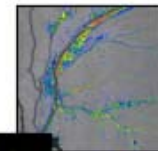
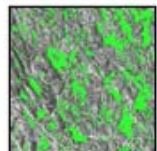
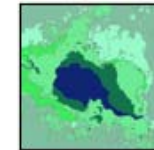
Project info resources

The K&C Wiki Site
Bulletin Board

Keep an eye on it!
Main place for sharing of info
from the K&C secretariat (=me)

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

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)*

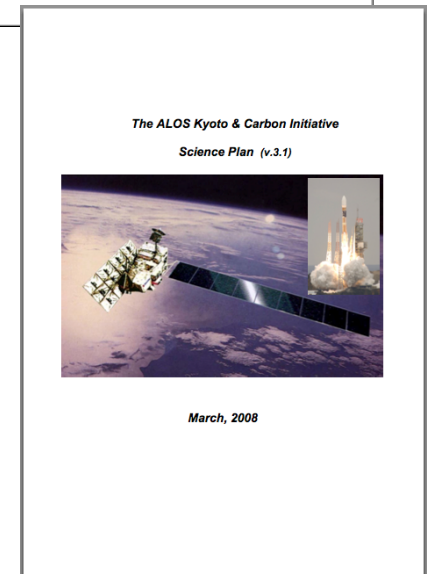
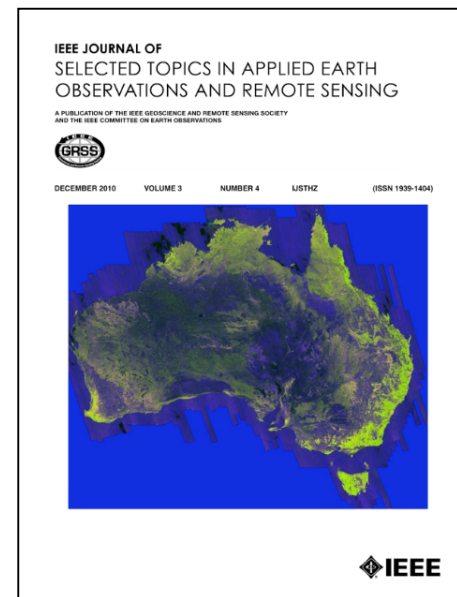
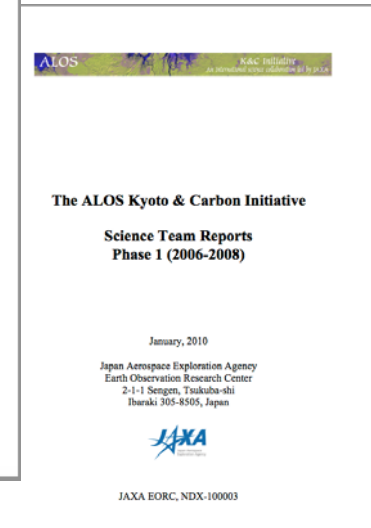
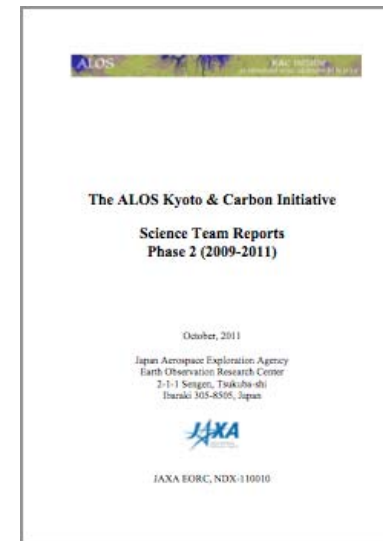
*K&C Science Team Reports **Phase 2** (Oct 2011, 250 pp)*

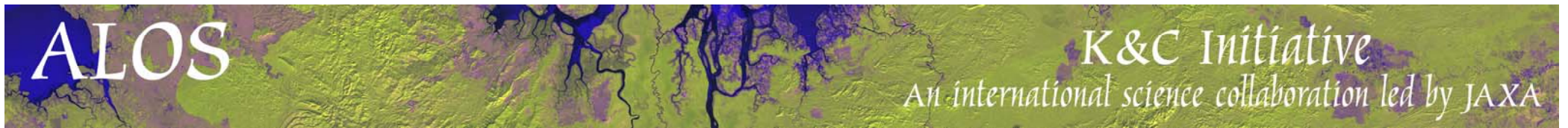
*IEEE Journal on Special Topics in Earth Observation
and remote Sensing (J-STARS)*

Vol. 3 No.4, Dec. 2010

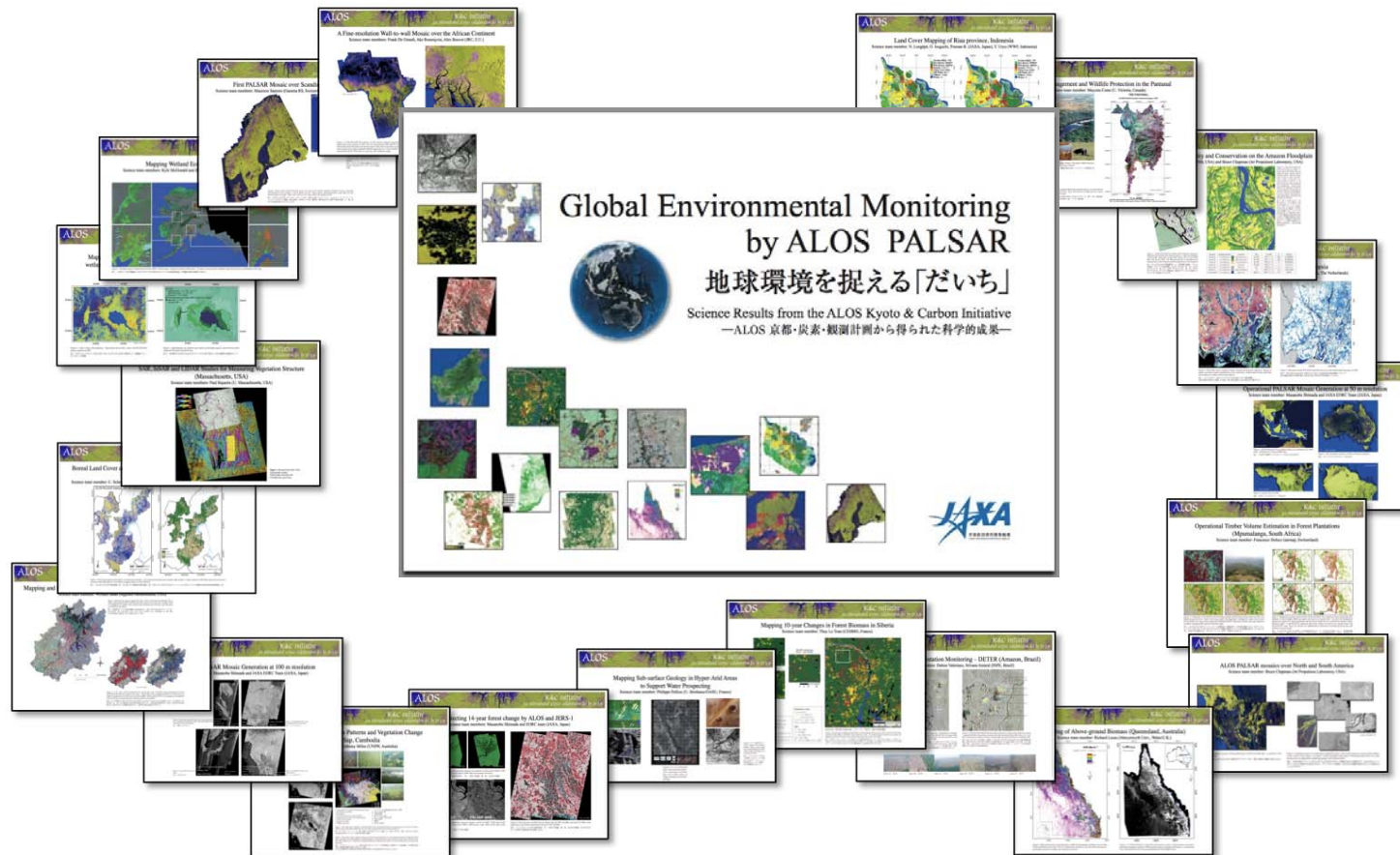
- Special Issue on K&C: Phase 1 results
- 10 papers from Forestry, Wetlands, Desert and Mosaic Themes

*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**