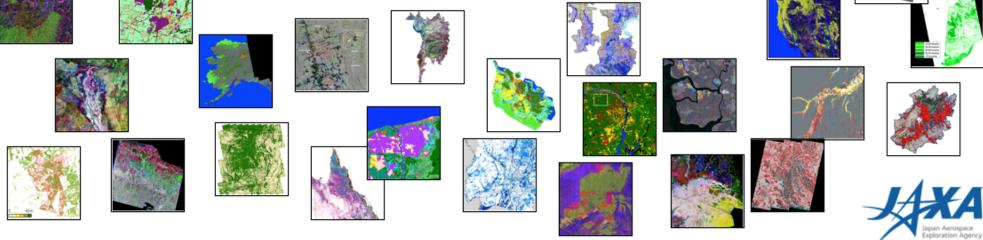


ALOS Kyoto & Carbon Initiative Phase 4

Ake Rosenqvist K&C Science Coordinator



KC#21 - Kyoto, December 3-5, 2014

Kyoto & Carbon Initiative – Phase 4

K&C objective: The lead the development of advanced L-band SAR applications in support of information needs posed by the "4 C's":

- Terrestrial Carbon cycle science;
- Multinational Environmental Conventions:
- Environmental Conservation
- Climate Change [New!]
- 3 Thematic focus areas:
- Forestry
- Wetlands
- Ice



ALOS An international science collaboration led by JAXA

K&C Phase 4

- K&C Phase 4 approved by JAXA management on October 17.
- Project duration: 3.5 years (Oct 2014 March 2018)
- Simplified agreement procedure to speed up contract establishment between JAXA and team members
- Science Team meetings: annual frequency <discussion point>



K&C Phase 4 – Science Team (1/2) 32 members from 19 countries

	Name	Surname	Institution	Country
F1	John	Armston	University of Queensland	Australia
F2	Bruce	Chapman	Jet Propulsion Laboratory	USA
F3	Humberto	de Mesquita	Brazilian Forest Service	Brazil
F4	Trix	Estomata	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	Philippines
F5	Wolf	Forstreuter	Secretariat of the Pacific Community	Fiji
F6	Johan	Fransson	Univ. of Agricultural Sciences	Sweden
F7	Dirk	Hoekman	Wageningen University	Netherlands
F8	Francesco	Holecz	sarmap	Switzerland



K&C Phase 4 – Science Team (1/2) 32 members from 19 countries

	Name	Surname	Institution	Country
F9	Josef	Kellndorfer	Woods Hole Research Center	USA
F10	Thuy	Le Toan	Centre d'Etudes Spatiales de la Biosphère (CESBIO)	France
F11	Joaquim	Macuacua	National Directorate of Lands and Forestry	Mozambique
F12	Renaud	Mathieu	Council for Scientific and Industrial Research (CSIR)	South Africa
F13	Anthony	Milne	Horizon Geoscience	Australia
F14	Anthea	Mitchell	University of New South Wales	Australia
F15	Hamdan	Omar	Forest Research Institute Malaysia (FRIM)	Malaysia
F16	Kostas	Papathanassiou	German Aerospace Centre (DLR)	Germany



K&C Phase 4 – Science Team (1/2) 32 members from 19 countries

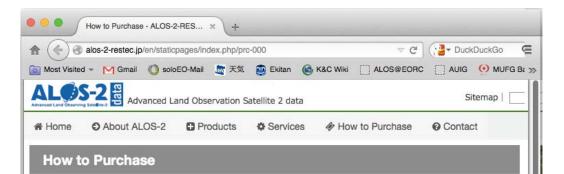
	Name	Surname	Institution	Country
F17	João	Carreiras	University of Sheffield	U.K.
F18	Orbita	Roswintiarti	LAPAN	Indonesia
F19	Bill	Salas	Applied Geosolutions, LLC	USA
F20	Edson	Sano	IBAMA	Brazil
F21	Maurizio	Santoro	Gamma Remote Sensing	Switzerland
F22	Paul	Siqueira	Univ. Massachusetts	USA
F23	Michael	Stuewe	WWF-US	USA
F24	Christian	Thiel	Friedrich-Schiller-University Jena	Germany



K&C Phase 4 – Science Team (1/2) Forestry: 24 Wetlands: 7 Ice: 1

	Name	Surname	Institution	Country
W1	Lisa	Rebelo	International Water Management Institute	Laos
W2	Richard	Lucas	University of New South Wales	Australia
W3	Kyle	McDonald	City College of New York	USA
W4	Thiago	Silva	University of Sao Paulo (UNESP)	Brazil
W5	Maycira	Costa	University of Victoria	Canada
W6	Carlos	Pedraza	The Nature Conservancy	Colombia
W7	Shin-ichi	Sobue	RESTEC	Japan
G1	Bernd	Scheuchl	University of California, Irvine	USA





ALOS-2 Prices

Archive prices

ALOS

Observation Mode	Price per Scene
Spotlight	¥500,000
Ultra-Fine	¥300,000
High-sensitive	¥300,000
Fine	¥300,000
High-sensitive(Full Polarimetry)	¥300,000
Fine(Full Polarimetry)	¥300,000
ScanSAR nominal(20Mhz)	¥150,000
ScanSAR nominal(14Mhz)	¥150,000
ScanSAR wide(490km)	¥150,000

New Acquistion Price

New Acquisitions are available for the specified observation mode with additional ¥150,000 per scene.

- Prices listed above are Japanese Yen.
- Prices listed above apply to a single user license.
- Prices listed above apply to on-line delivery only.
- Please contact to ALOS-2 Data Provider's Team if different delivery media is required other than downloading.
- Prices listed above exclude any taxes (withholding taxes, VAT, GST or similar taxes), duties, stamps, surcharges, clearance costs and other fees.

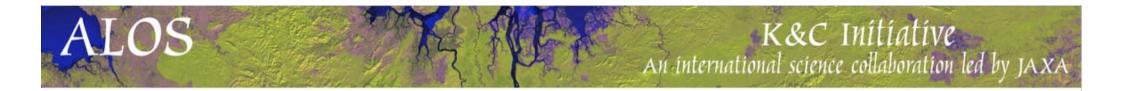
ALOS-2 is a commercial system.

K&C Initiative

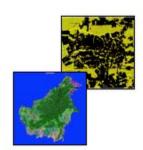
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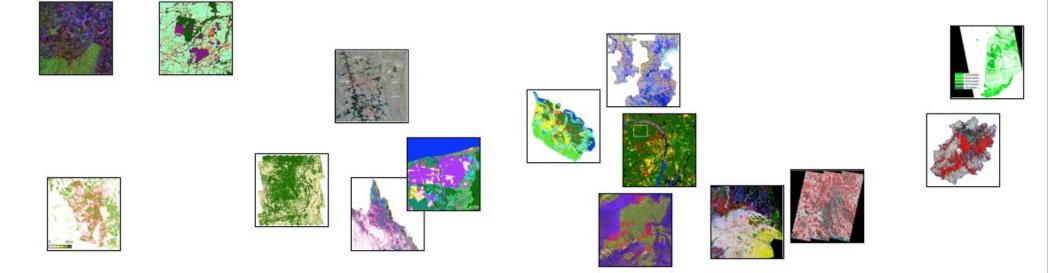
← Important to keep in mind:

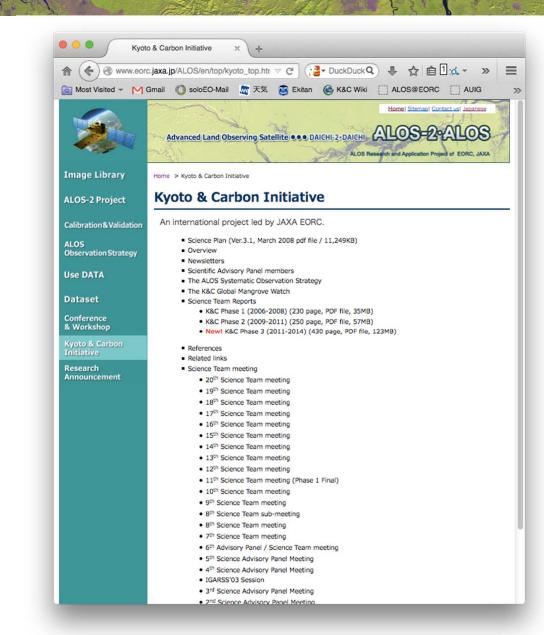
K&C must not be seen as a free data opportunity (type AO), but a scientific collaboration - with active participation at science meetings, publications (*with acknowledgements*), provision of reports, etc.



Project information resources (public access)







ALOS

JAXA EORC K&C Homepage

K&C Initiative

An international science collaboration led by JAXA

- K&C background information
- Agendas and presentation material available from all previous K&C Science Team meetings (KC#1 – KC#20)
- PALSAR and PALSAR-2 systematic observation strategy (BOS)
- JAXA 25m mosaics and FNF classifications

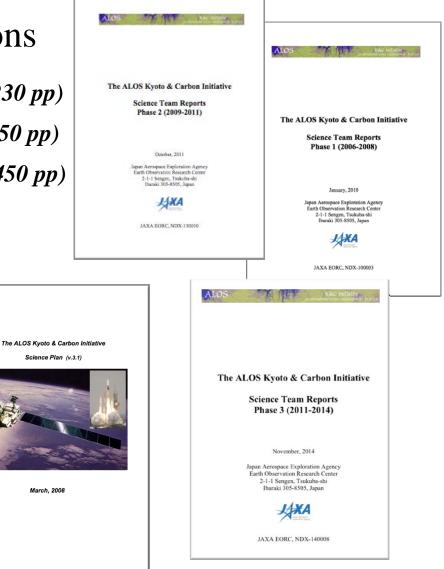
http://www.eorc.jaxa.jp/ALOS/ en/top/kyoto_top.htm

K&C Initiative An international science collaboration led by JAXA

Links to Reports and publications

K&C Science Team Reports Phase 1 (Jan 2010, 230 pp) K&C Science Team Reports Phase 2 (Oct 2011, 250 pp) K&C Science Team Reports Phase 3 (Nov 2014, 450 pp) K&C Booklet







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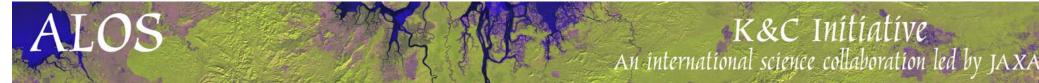


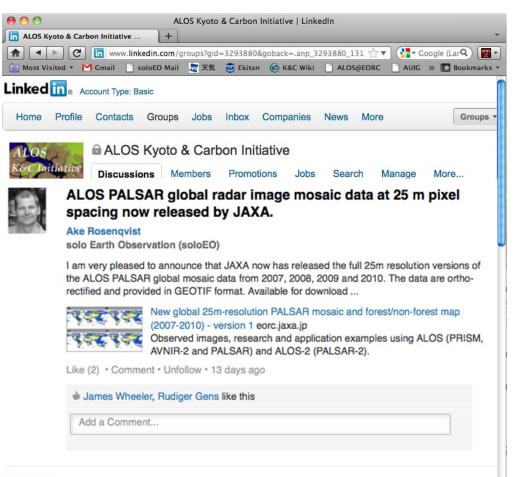
JAXA EORC Mosaic Homepage

PALSAR 25 m resolution Global mosaics online

- 2007 2010
- FBD image data
- Forest/Non-Forest maps

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







Recent paper on (PALSAR supported) mapping of forest change on Borneo...

Niels Wielaard

Expert satellite-based forest, agriculture, carbon and water monitoring solutions at SarVision



Interest group on the <u>LinkedIn</u>

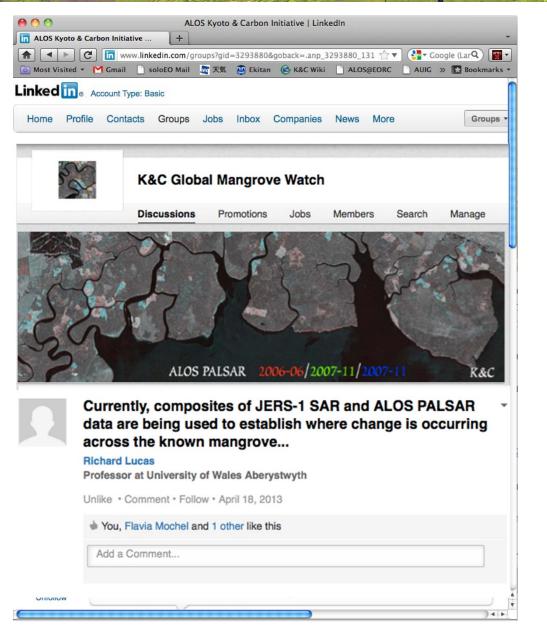
network with news on publications and other events.

Aim to disseminate K&C info to broader community. 241 members thus!

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





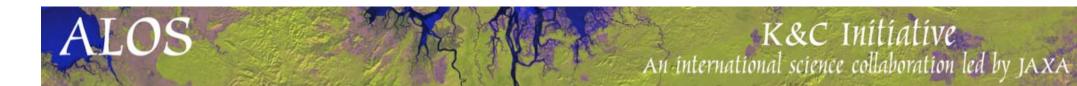
An international science collaboration led by JAXA

Upstart of new group

Group name: K&C Global Mangrove Watch

Primarily for GMW project related information, but increasing interest from the public.

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)



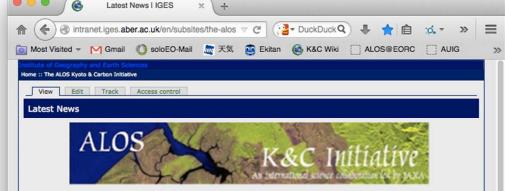












K&C Bulletin Board

Science Team meeting KC#21 [NEW] [Updated 2014/11/29]

K&C Phase 4 approved on Oct. 17, 2014! [Updated 2014/10/17]

Science Team Phase-3 Report Full Phase-3 Compilation Report (436pp, 130 MB) available HERE [Updated 2014/12/01]

> K&C Paper Reference Library [Under development 2014/11/24]

> > K&C Global Mangrove Watch

Remote Sensing of the Environment - K&C Special Issue Published! (RSE Vol 155, 2014)

> Science Team meeting KC#20 Science Team meeting KC#19

nolated Published as LISTARS Vol 3 No.4 Dec 2010

Project info resources

The K&C Wiki Hosted by Aberystwyth Univ.

Main place for sharing of info from the K&C secretariat. Keep an eye on it!

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

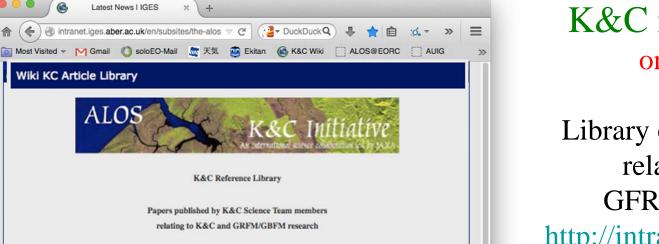
> Log in ID: ALOS-KC Passwd: ALOS-KC



Latest News I IGES

ALOS

Wiki KC Article Library



List of Publications from K&C, GRFM and GBFM science teams

2015

Hoekman D. and Reiche, J. Multi-model radiometric slope correction of SAR images of complex terrain using a two-stage semi-empirical approach . Remote Sensing of Environment, 2015, Vol. 156, pp. 1-10.

2014

Atwood, D., Andersen, H-E., Matthiss, B. and Holecz, F. Impact of Topographic Correction on Estimation of Aboveground Boreal Biomass Using Multi-temporal L-Band Backscatter. Selected Topics in Applied Earth Observations and Remote Sensing, IEEE Journal, Jul. 2014, vol. 7, no. 8, pp 3262 - 3273.

Lucas, R., Rebelo, L-M., Fatoyinbo, C., Rosenqvist, A., Itoh, T., Shimada, M., F, Simard, M., et al., Contribution of L-band SAR to systematic global mangrove monitoring. Marine and Freshwater Research, 2014, 65, pp 589 - 603.

Rosengvist, A., Shimada, M., Tadono, T., Watanabe, M., Tsuzuku, K., Acki, E. and Ohgushi, F. Operational performance of the ALOS global systematic acquisition strategy and observation plans for ALOS-2 PALSAR-2. Remote Sensing of Environment, 2014, Vol. 155, pp. 3-12.

Thiel, C., Schmullius, C. Impact of Tree Species on Magnitude of PALSAR Interferometric Coherence over Siberian Forest at Frozen and Unfrozen Conditions, Journal of the Multidisciplinary Digital Publishing Institute, Jan. 2014, 6, pp 1124 - 1136.

K&C reference Library on the K&C Wiki

K&C Initiative

An international science collaboration led by JAXA

Library of references to papers relating to K&C and **GFRM/GBFM** research http://intranet.iges.aber.ac.uk/en/s ubsites/alos-kyoto-amp-carboninitiative/wiki-kc-paper-library

100+ references & PDFs from Science Team 1996–2015

Please provide more!

Link to PDF?