

K&C Phase 3 – Brief project essentials

K&C Phase 3:

Characterization of wetlands in the Nile and Zambezi Basins

Lisa-Maria Rebelo

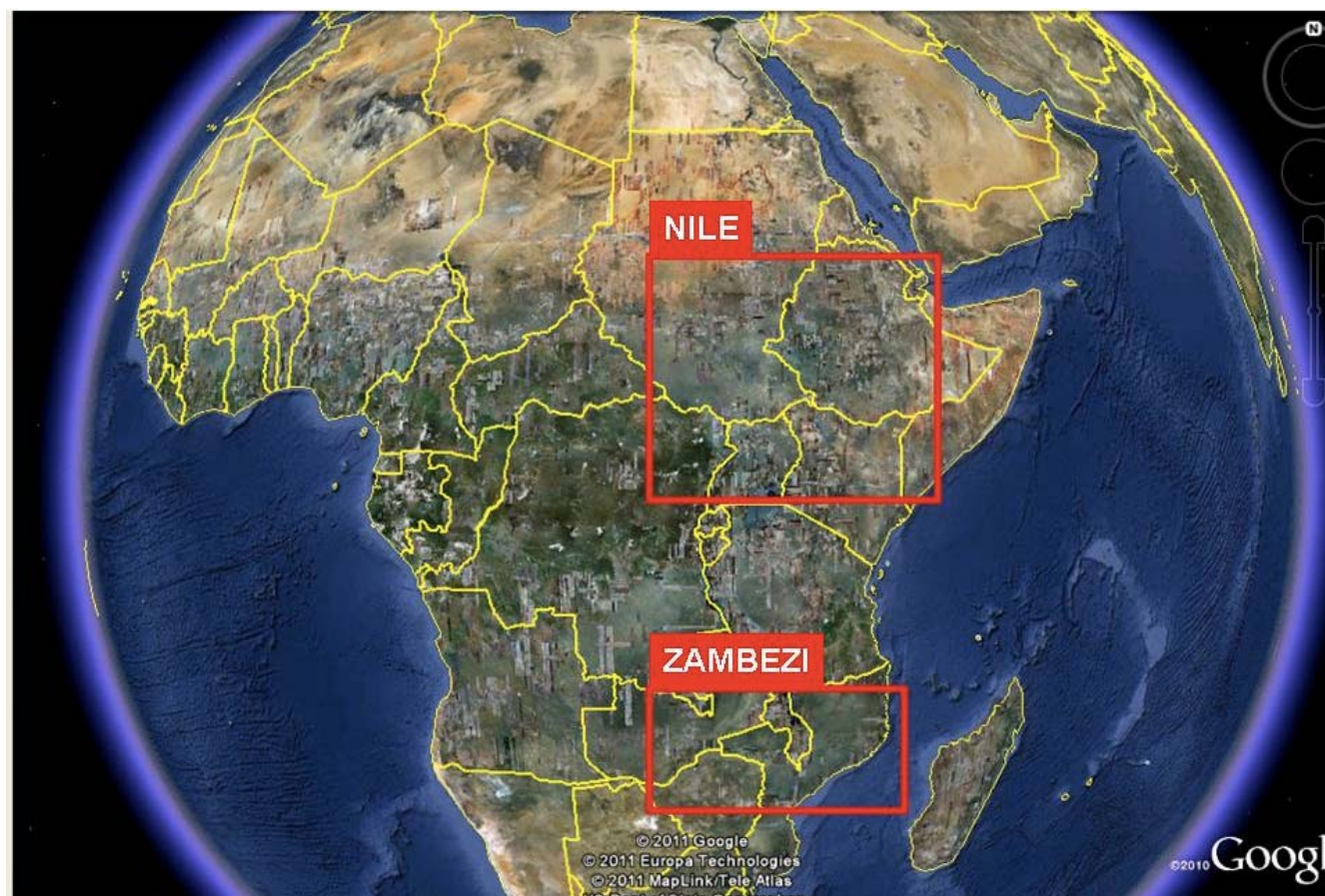
*International Water Management Institute (IWMI)
Regional office for South East Asia and the Mekong
Vientiane, LAOS*

Science Team meeting #16 – Phase 3 Kick-off
JAXA TKSC/RESTEC HQ, Tsukuba/Tokyo, October 17-21, 2011

ALOS

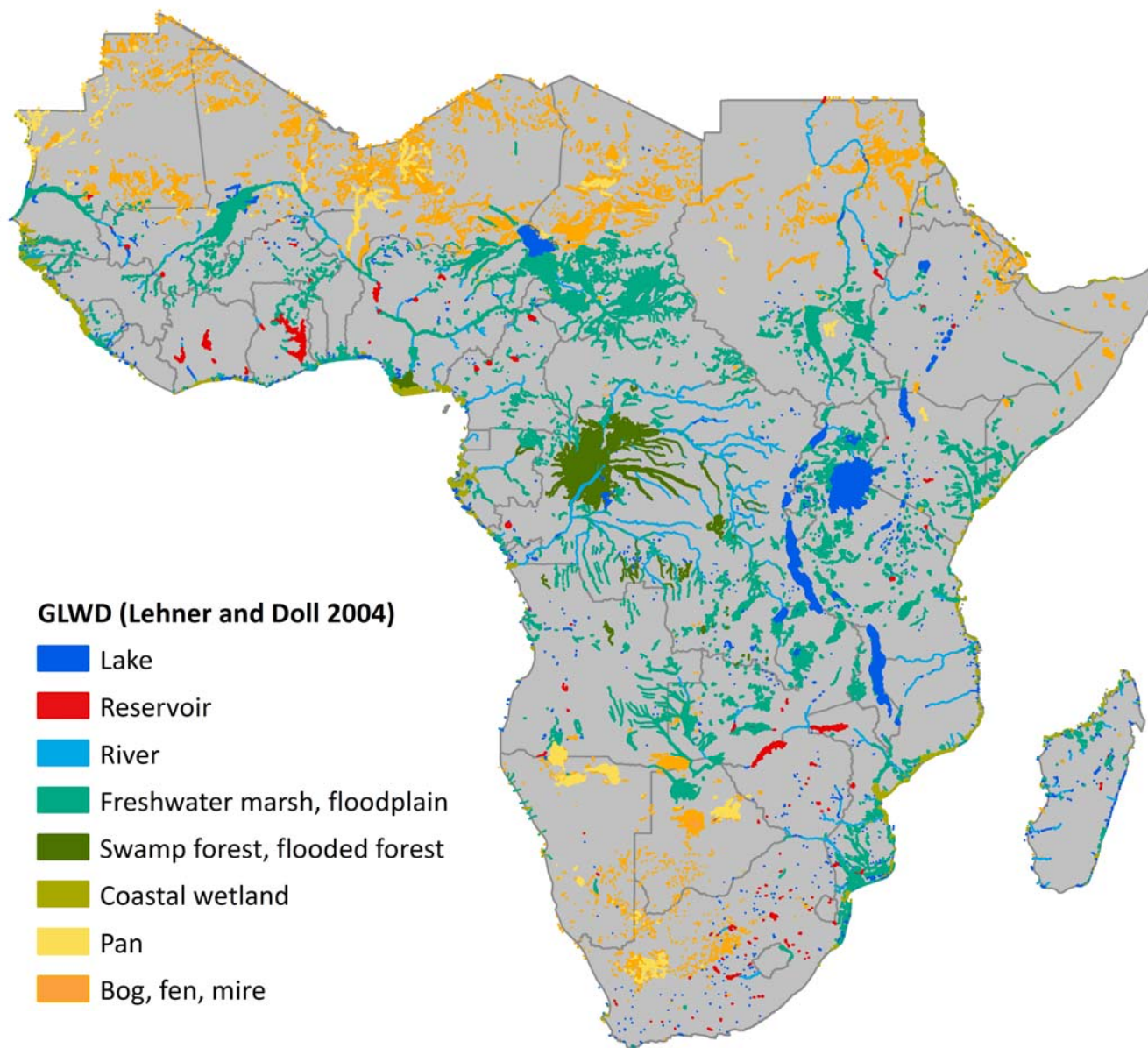
K&C Initiative
An international science collaboration led by JAXA

Project areas



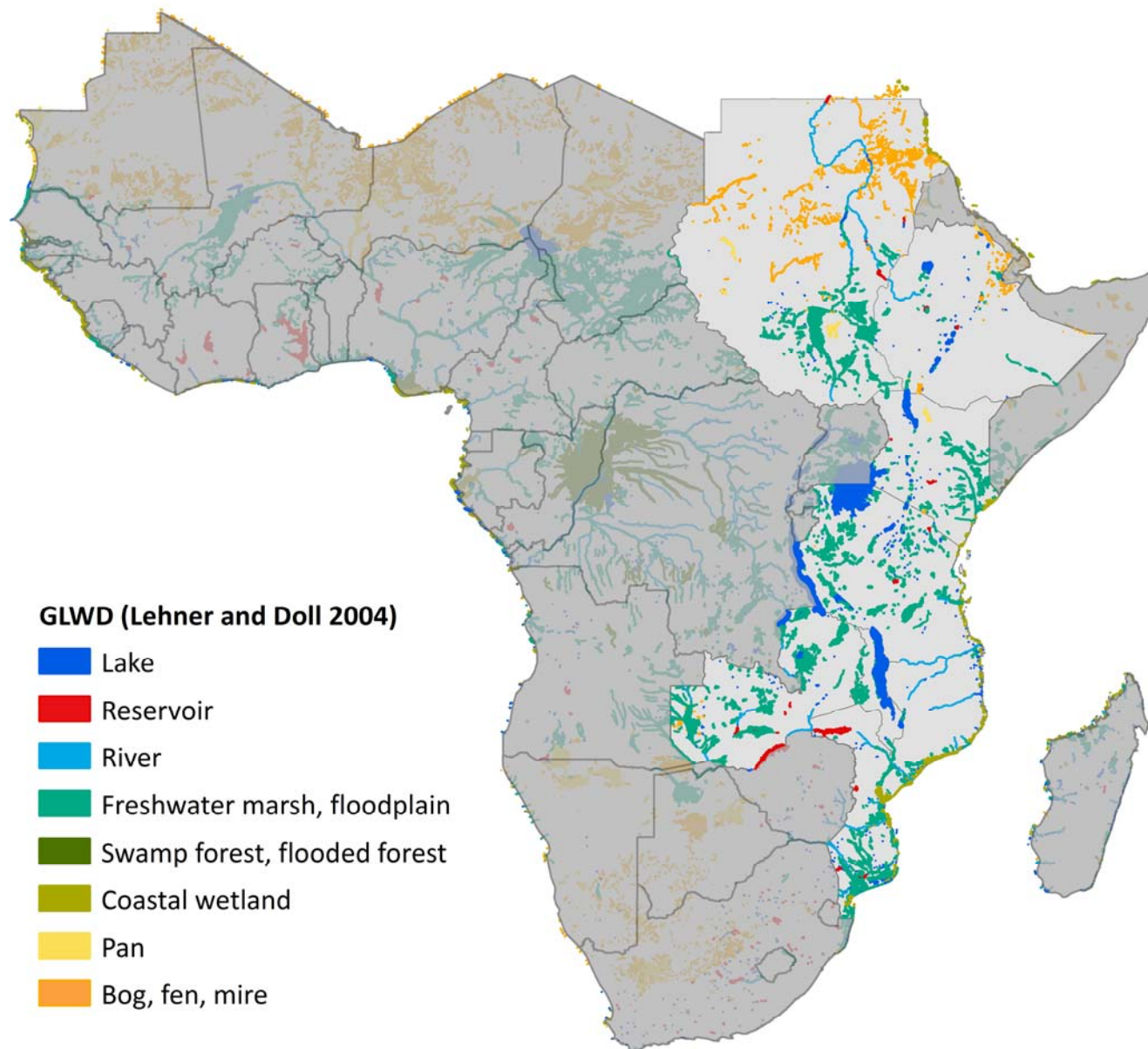
ALOS

K&C Initiative
An international science collaboration led by JAXA



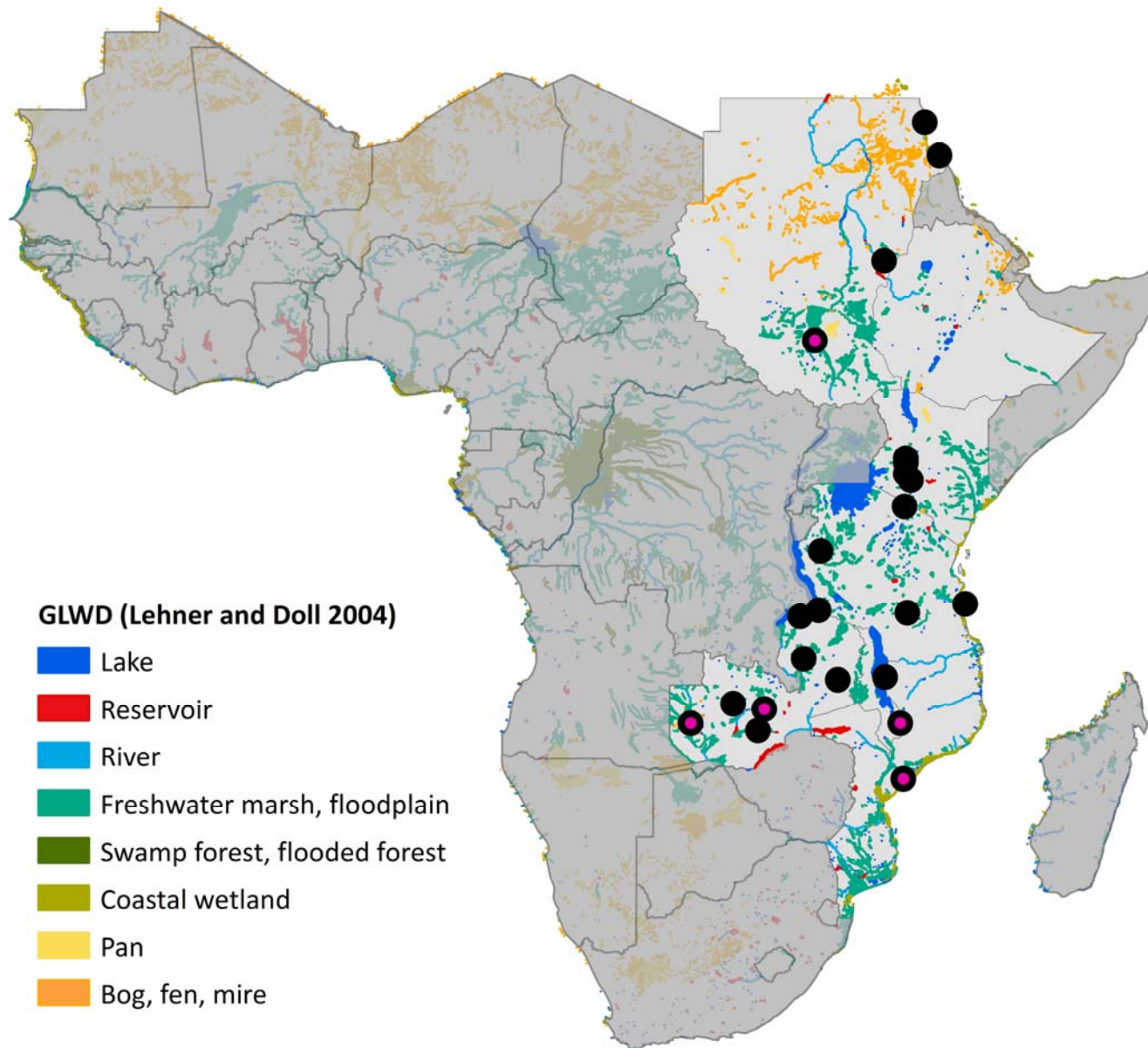
ALOS

K&C Initiative
An international science collaboration led by JAXA



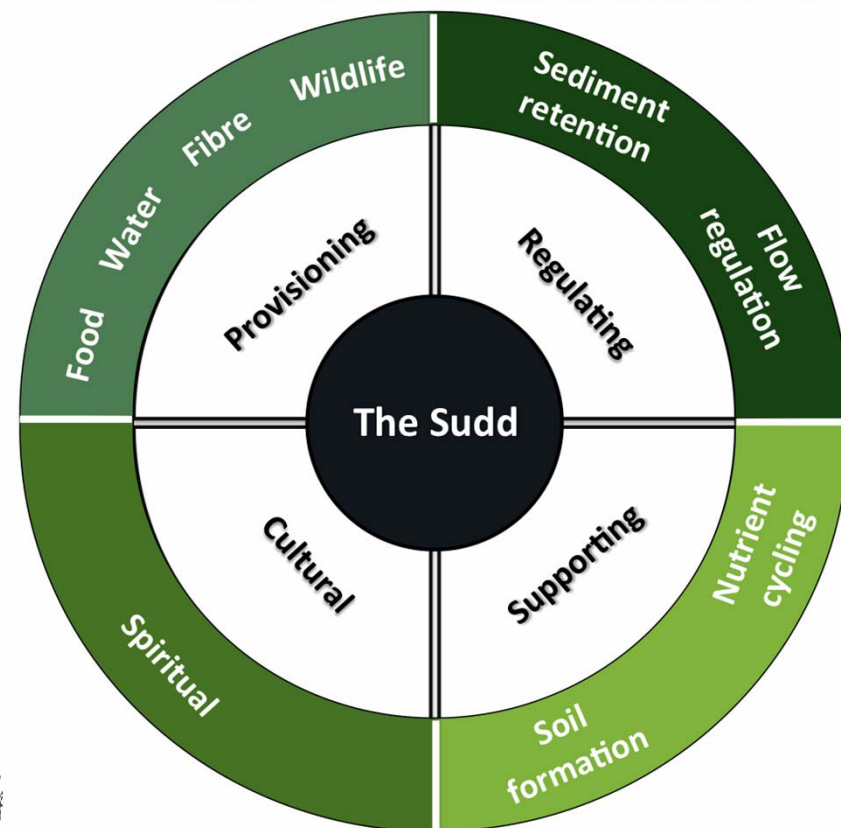
ALOS

K&C Initiative
An international science collaboration led by JAXA



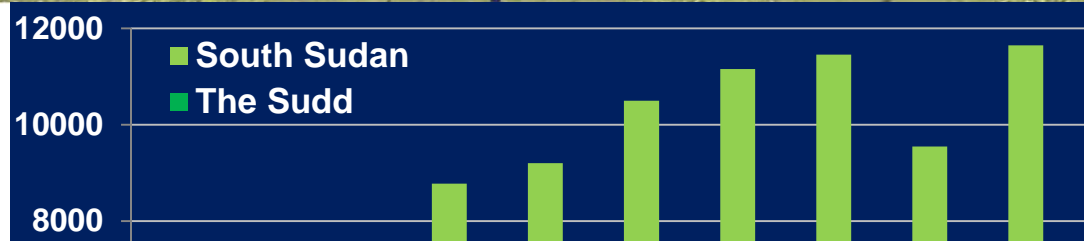
ALOS

K&C Initiative
An international science collaboration led by JAXA

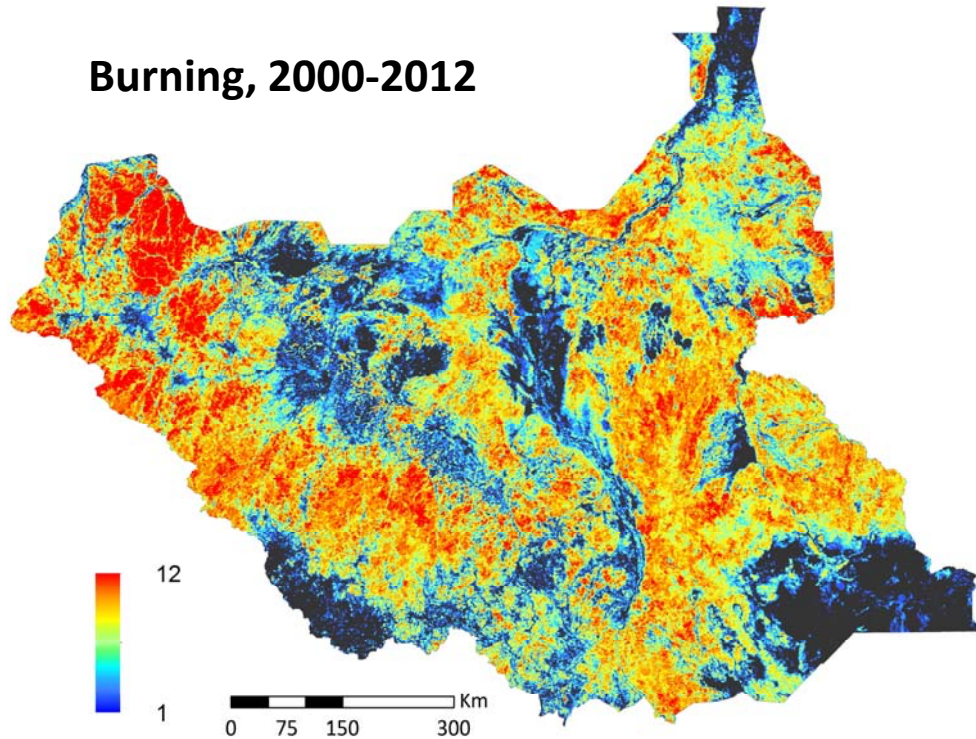


ALOS

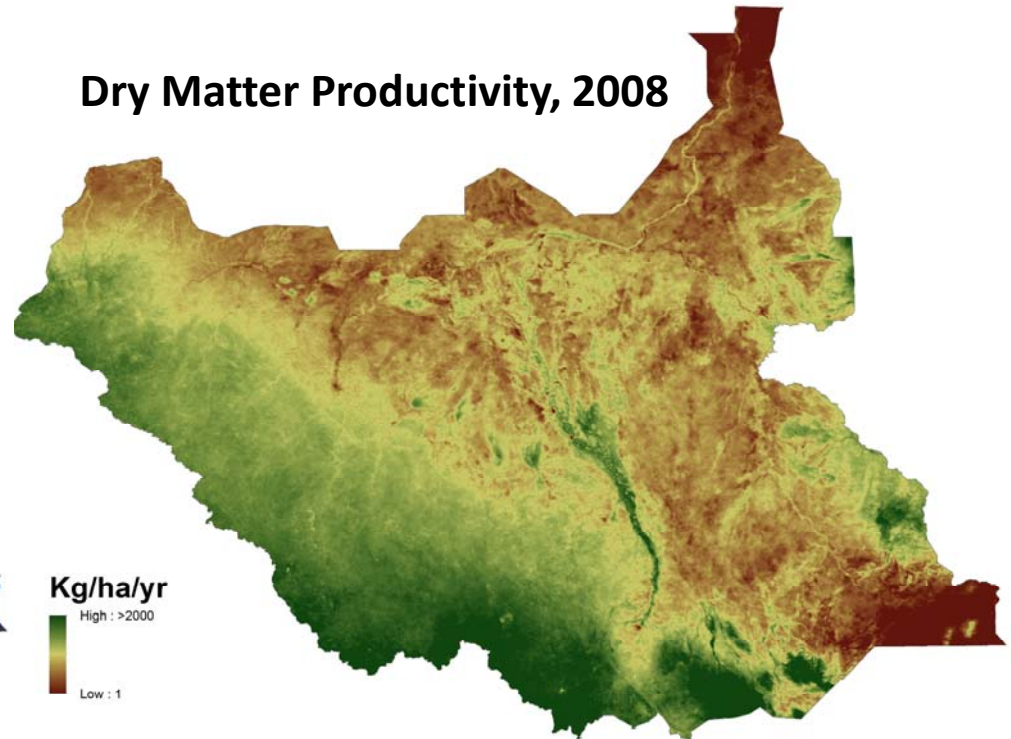
K&C Initiative
An international science collaboration led by JAXA



Burning, 2000-2012

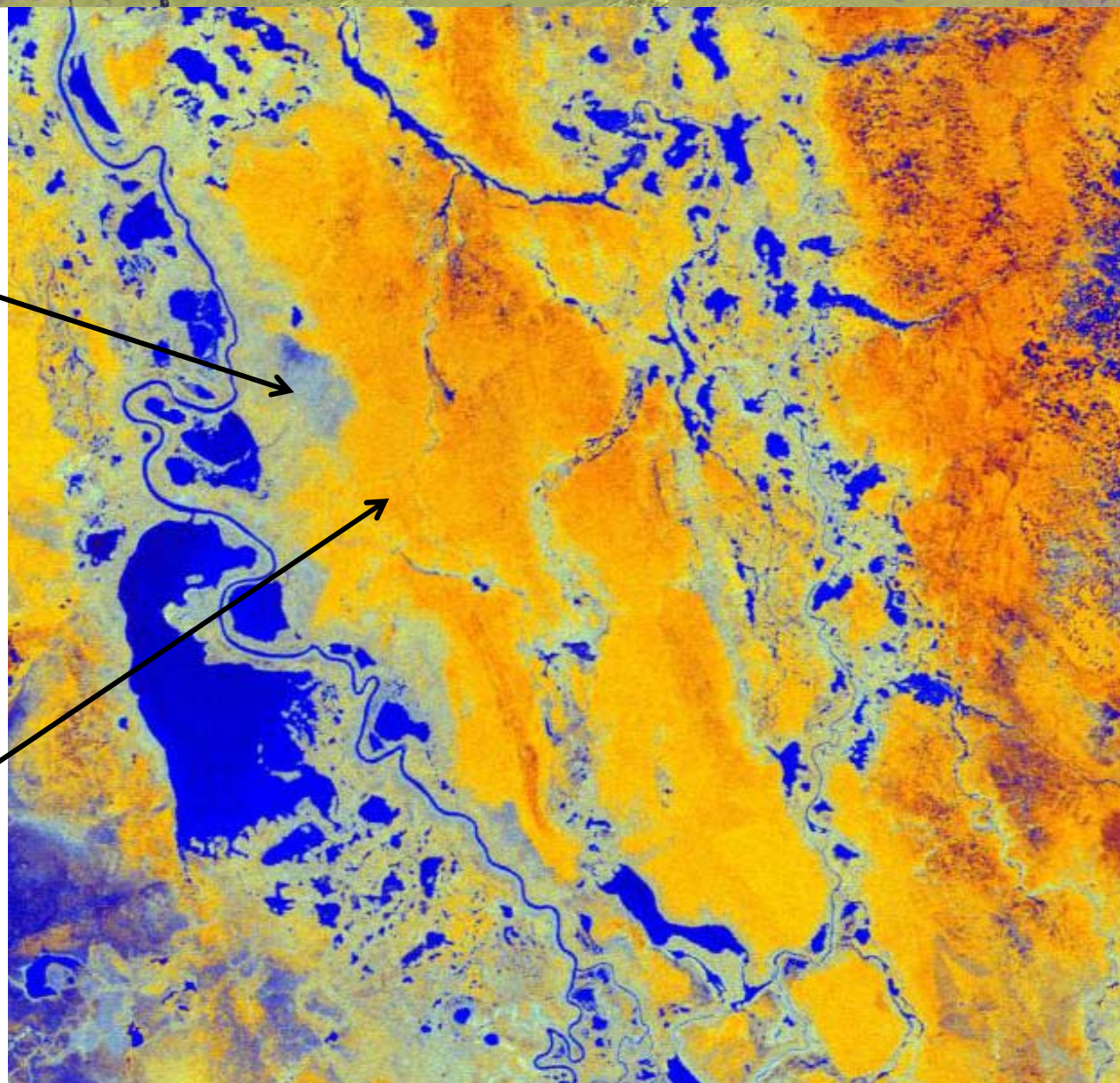


Dry Matter Productivity, 2008



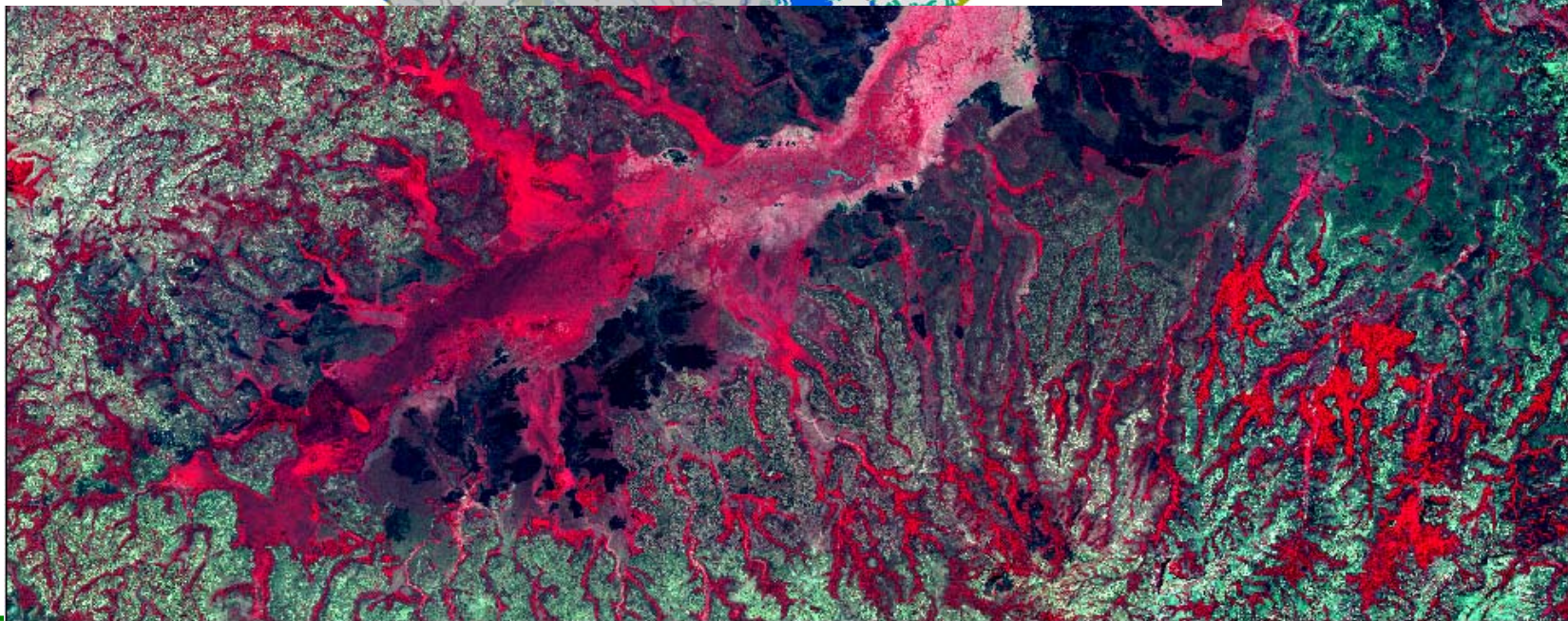
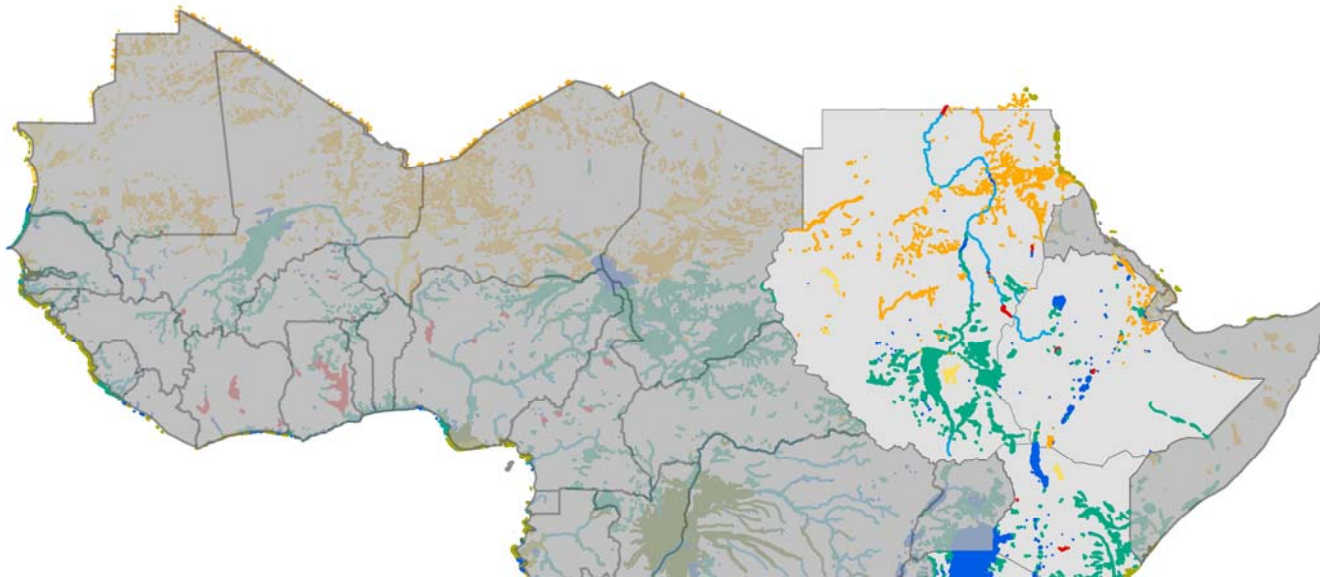
ALOS

K&C Initiative
An international science collaboration led by JAXA



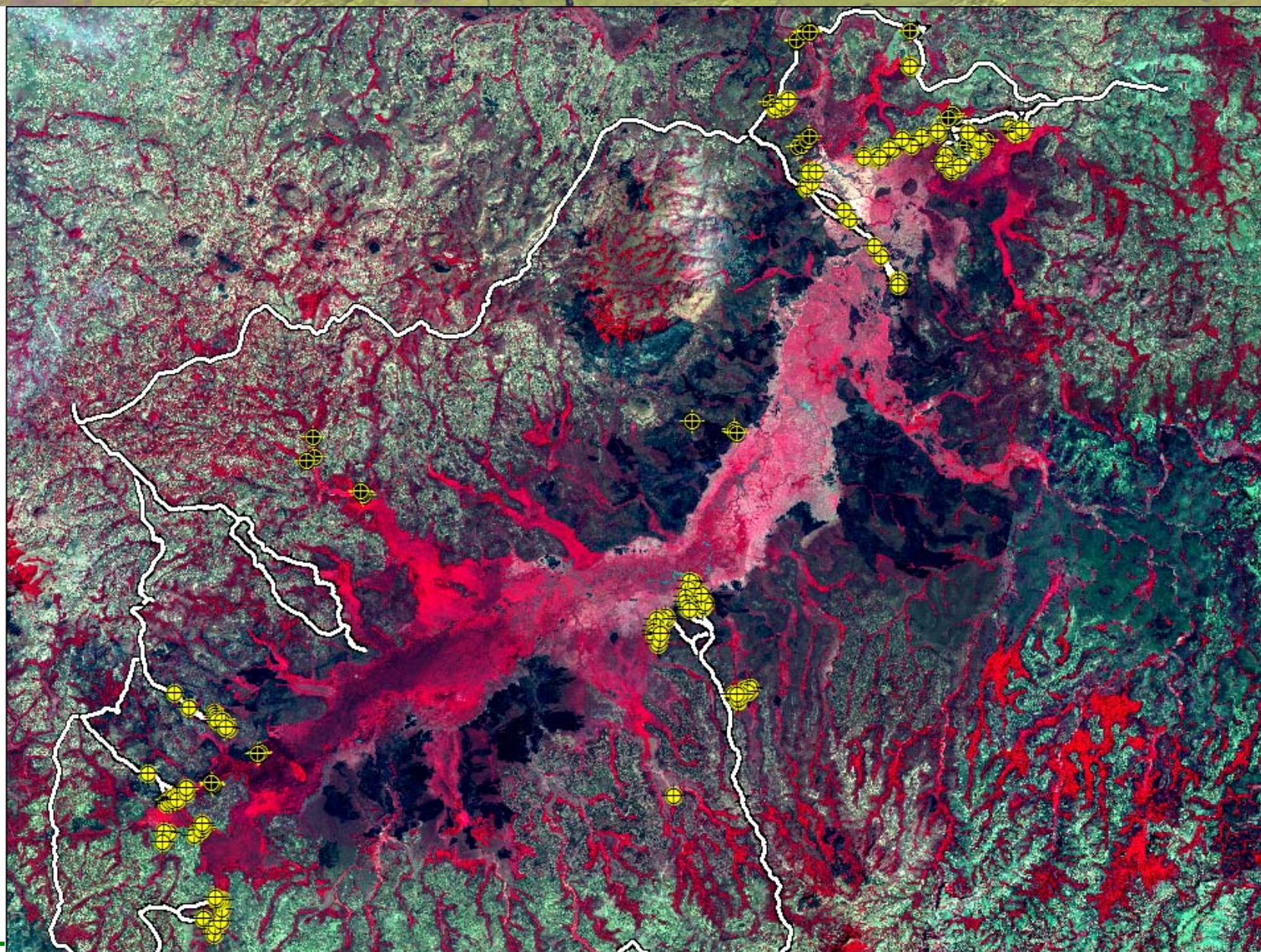
ALOS

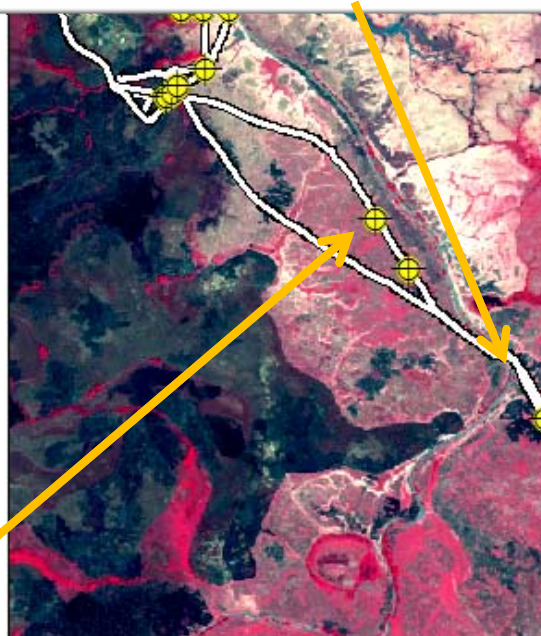
K&C Initiative
An international science collaboration led by JAXA



ALOS

K&C Initiative
An international science collaboration led by JAXA





ALOS

K&C Initiative
An international science collaboration led by JAXA

- *Balaeniceps rex* is very locally distributed in the large swamps from South Sudan to Zambia



- **South Sudan:** c. 5,000 (50-80% of the total population)
- The population is undergoing a continuing decline owing to hunting, nesting disturbance and the modification and burning of its habitat
- species to which the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) applies



ALOS

K&C Initiative
An international science collaboration led by JAXA



Project objectives

Project objectives:

- Mapping regional scale patterns of flooding and inundation within the Nile and Zambezi Basins
- Characterization of individual wetland ecosystems within the Nile and Zambezi Basins

Relevance to the K&C objectives:

- Activities are of direct relevance to the Ramsar **Convention** on wetlands of international importance, and demonstrate the application of L-band SAR for wetland assessment, inventory and monitoring
- The deliverables will provide information required for **conservation** of wetlands in the Nile and Zambezi basins

Project deliverables and milestones:

- Maps of
 - Minimum water extent (open water, flooded vegetation)
 - Maximum water extent (open water, flooded vegetation)
 - Seasonal variations in inundation

Support to JAXA's global forest mapping effort:

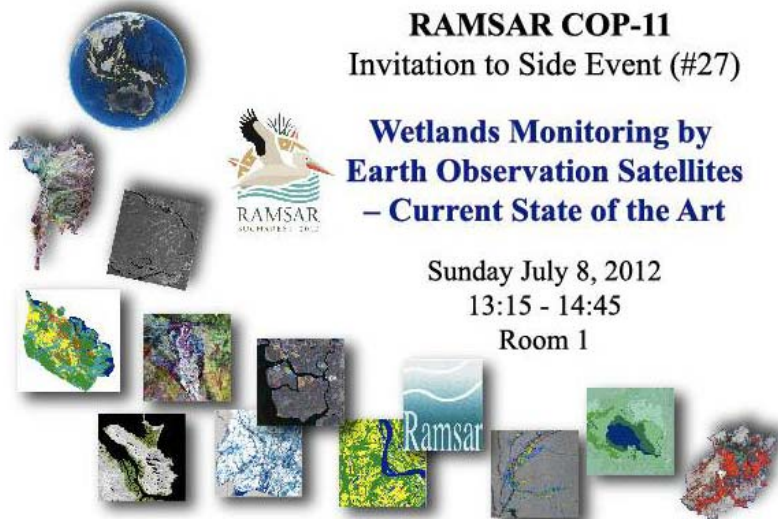
- Geographical region: Nile and Zambezi basins, East Africa
- Land cover data from field study sites
 - Vegetation type
 - Inundation status
- Geocoded photographs from field study sites

Other activities in support of the K&C Phase 3 goals:

- Contribution to the “Mangrove Watch” including linking of K&C team to national institutions working on mangroves in order to support product validation
- Liaison, co-ordination and collaboration with the Ramsar Convention on wetlands of international importance through the Scientific and Technical Review Panel, in support of the JAXA/Ramsar MoU (signed in 2010)

ALOS

K&C Initiative
An international science collaboration led by JAXA



RAMSAR COP-11 Invitation to Side Event (#27)

Wetlands Monitoring by Earth Observation Satellites – Current State of the Art

Sunday July 8, 2012
13:15 - 14:45
Room 1

For further information, please contact:

Osamu Ochiai
JAXA Satellite Appl. and Promotion
Email: ochiai.osamu@jaxa.jp

Ake Rosenqvist
JAXA Kyoto & Carbon Initiative
Email: ake.rosenqvist@soloEO.com

Japan Aerospace Exploration Agency
Tsukuba Space Center
Sengen 2-1-1, Tsukuba City
Ibaraki 350-8505
JAPAN

Lisa-Maria Rebelo
Email: l.rebelo@cgiar.org

**International Water
Management Institute**
P.O. Box 4199
Ban Nongviengkham
Saysetha District
Vientiane
LAO PDR

Marc Paganini
ESA GlobWetland II
Email: marc.paganini@esa.int

European Space Agency
ESRIN
Via Galileo Galilei
Casella Postale 64
00044 Frascati
ITALY



Pointe Behague, French Guyana
Photo courtesy: C. Proisy

A' 148.5mm

B' 148.5mm

Wetlands Monitoring by Earth Observation Satellites – Current State of the Art

Sunday 8 July 2012. 13:15–14:45.
Palace of Parliament, Room 1

Side Event hosted by the Japan Aerospace Exploration Agency (JAXA),
in collaboration with the European Space Agency (ESA)
and the International Water Management Institute (IWMI).

Side Event objectives:

1. to provide an update of the state of the art of wetlands mapping and monitoring by satellite remote sensing, and
2. to stimulate an open floor discussion regarding how Earth observation technology can contribute to both national monitoring needs as well as to the development and operations of the Ramsar Global Wetlands Observing System (GWOS).

SESSION 1: Satellite technologies available for wetland inventory, assessment and monitoring. Relevant demonstration projects.

- JAXA introduction and Wetlands Theme activities within the ALOS Kyoto & Carbon Initiative.
Speakers: Osamu Ochiai/JAXA and Lisa-Maria Rebelo/IWMI)
- Global Mangrove Watch – a new initiative for annual mapping of the status and changes of the world's mangrove areas.
Speaker: Ake Rosenqvist/JAXA
- GlobWetland II, a regional pilot project of the future Global Wetlands Observing System.
Speaker: Marc Paganini/ESA

SESSION 2: Linking Earth Observation technology to national needs and the Global Wetlands Observing System.

- Questions & Answers
- Open floor discussions

Lunch will be provided.

Welcome!

Matang mangrove reserve, Malaysia
ALOS K&C © JAXA/METI



ALOS

K&C Initiative
An international science collaboration led by JAXA

Thank you!