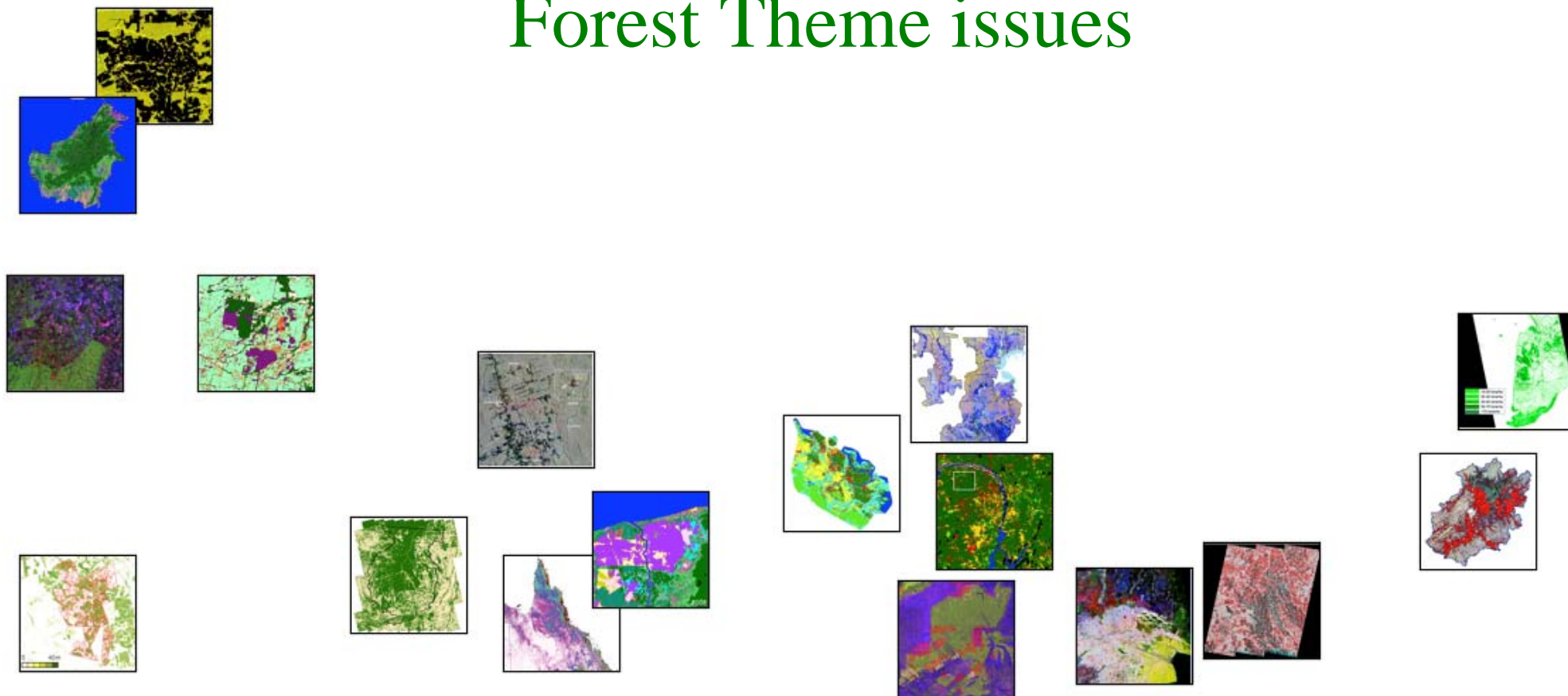


## Forest Theme issues



## Topics

- K&C Journal Special Issue
- PALSAR book chapter
- DLR proposal to JAXA and K&C members:  
TanDEM-X/PALSAR synergy
- Procedures for member contributions to the EORC  
FNF mapping effort
- K&C Mosaic Homepage: complete 50 m mosaics on-  
line
- AOB

## Journal of Forest Ecology & Management Special Issue

- Richard is in discussion with ~~GCB-RSE~~ Editor for a K&C Special Issue
- Both Forest and Wetlands Theme
  - Lucas et al: *Recent response of mangroves to climatic and sea level change, Gulf of Carpentaria, Australia [ready by September]*
  - Lucas et al: *The potential for recovery off carbon stocks and biodiversity in the Brigalow Belt Bioregion, Queensland, Australia [ready by September]*
  - Rebelo, Seyoum, El Mograhby: *Future changes to the Sudd wetland: the potential impacts of upstream interventions [ready by September]*
  - Longépé, Shimada, Rakwatin, Isoguchi, Uryu: *Decadal change of forests in Sumatra [ready by Sept/Oct]*
  - Humberto de Mesquita: *Proposition of ScanSAR data near real-time monitoring tropical deforestation in Brazil [ready by November]*
  - Hoekman: *Consistent annual forest change monitoring in Borneo (by Nov.)*

- Maycira: Spatial distribution of geochemically different lakes in the Pantanal (by end of 2010)
- Maycira 2: Climatic driven spatio-temporal variability of aquatic vegetation in the lower Amazon floodplain (late 2010)
- Silvana: ALOS PALSAR ScanSAR data in the Brazilian Amazon Forest Monitoring System
- Bill Salas: Methane inventory for California using PASAR and MODIS [ready within 2 months)
- Bill: Java avian influenza risk mapping with PALSAR [by Nov]
- John Lowry: Wetlands health of the Alligator rivers region [by Jan/Feb 2011]
- Shimada + Hokudai + JFRC: Estimation of GHG emissions in central Kalimantan caused by peatland subsidence by InSAR [By Jan 2011]
- Shaun Quegan: Deforestation monitoring in central Sumatra
- Chapman: Orthorectification and calibration of ALOS K&C PALSAR mosaic data (end Nov.)
- Kevin Telmer: (end 2010)
- Ake: K&C intro paper (and 2010)
- Philippe: A new river somewhere... (end of 2010)

## ALOS book chapter in *Global Forest Monitoring from Earth Observation*

- New book series new series of books on Earth Observation and Global Change, by Taylor & Francis Publishing group.
- Special issue edited by Frederic Achard (JRC) and Matt Hansen (U. South Dakota)
- Invitation to K&C to contribute to one chapter on “the ALOS PALSAR data set”
- Submission deadline: Nov 30, 2011
- Publication in late 2012

## **Tentative list of Chapters and contributors**

### **I. Introduction**

**I.1 Forest ecosystem services: Biodiversity, water resources, livelihoods ...** Ruth DeFries, Colombia University, USA (agreed)

**I.2 Role of forests and impact of deforestation in the global carbon cycle** Richard Houghton, Woods Hole Research Centre, USA (agreed)

### **II. Scope of the book**

**II. 1 Use of Earth Observation technology to monitor Forests over the Globe** (*including Data availability and policy*)  
Frédéric Achard, Matt Hansen, *et al.*

**II.2 Data availability from US satellites: The Landsat Global Land Survey and MODIS databases**  
Matt Hansen, SDSU, Tom Loveland, USGS, USA

**II.3 Sampling strategies for forest monitoring from global to national levels**  
Steve Stehman, New York University, USA (agreed, *with potential co-authors*)

**III. Monitoring of forest cover: operational examples at global to national scales with satellite imagery from optical sensors**

## Tentative list of Chapters and contributors

### **III.1 Use of coarse resolution imagery to identify hot spots of forest loss at global scale**

Matt Hansen et al., SDSU, *et al.*

### **III.2 Use of a systematic statistical sample with moderate resolution imagery to assess forest cover changes at tropical to global scale**

JRC (Frédéric Achard *et al.*) and FAO (A. Gerrand *et al.*)

### **III.3 Use of wall to wall moderate resolution imagery to monitor forest cover loss from global level to regional levels** (*from mapping of “intact forest landscapes” at global level to examples of regional monitoring*)

Peter Potapov, Matt Hansen, SDSU, USA

### **III.4 The Brazilian Amazon monitoring programme: PRODES and DETER projects**

Yosio Shimabukuro, INPE, Brazil (agreed)

### **III.5 Monitoring of forest degradation** (*A review of methods in the Amazon basin*)

Carlos Souza, IMAZON, Brazil (agreed)

### **III.6 Use of wall to wall moderate resolution satellite imagery to monitor forest cover over Europe**

Jesús San-Miguel *et al.*, JRC, EU (agreed – *template requested*)

## **Tentative list of Chapters and contributors**

### **III.7 US forest monitoring: sampling and wall-to-wall (disturbances) approaches with Landsat imagery**

Jeff Masek, NASA, USA (agreed)

### **III.8 Monitoring Australia's forests with Landsat imagery**

Peter Caccetta, CSIRO, Australia (agreed)

### **III.9 Forest burnt area mapping and characterisation over Russia using a combination of MODIS and Landsat data**

Sergey Bartalev *et al*, IKI, Russian Federation (agreed)

## **IV. Monitoring of forest cover with emerging technologies (radar data)**

### **IV.1 The ALOS PALSAR dataset**

*Ake Rosenqvist and members from the K&C science team (agreed)*

### **IV.2 Monitoring of forests at regional scales: examples in the Amazon Basin and Borneo**

Josef Kellndorfer, Woods Hole Research Centre, USA (agreed, *focus on Amazon Basin – other co-authors to be involved for Borneo?*)

## **V. Future perspectives (way forward)**

John Townshend, Maryland University, USA (agreed)



## DLR proposal to JAXA and K&C members: TanDEM-X/ PALSAR synergy

- Open to K&C members who are interested to assess TanDEM-X + PALSAR synergy
- Provide during this meeting – or send by email within October – lat/long for ONE study site each
- Will be provided to Kostas P./DLR for assessment

## Validation and improvement of EORC forest/non-forest maps

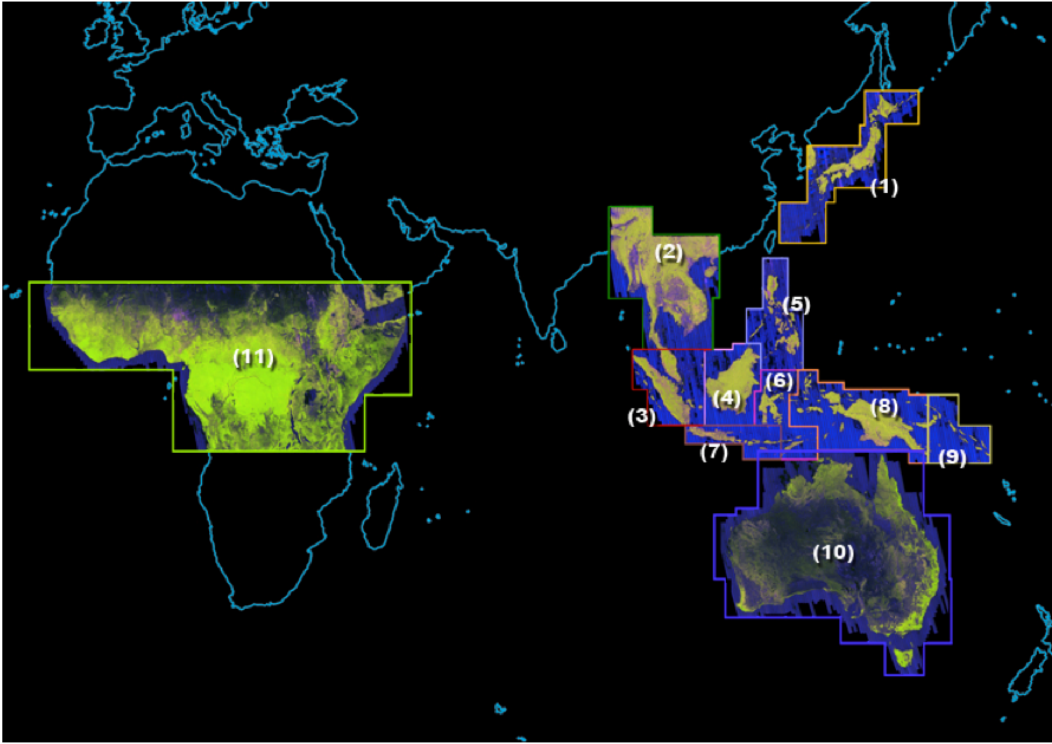
- JAXA will provide (according to the agreement) tiles of the FNF map to K&C science team members for assessment
- First version of the mosaic does not need "formal" validation, as revision is now on-going
  - JAXA will continue the use of eCog-based thresholding
  - KC member indicate in images inconsistencies, whereas JAXA makes initial (regional) adjustment of the algorithm
- "Formal" validation of v.2 of the FNF map

# ALOS

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 jump to downloadpage.



(1) Japan  
(2) Indochina  
(3) Sumatra  
(4) Borneo/Kalimantan

## JAXA EORC K&C Mosaic Homepage

Need to update homepage with  
rest of global 50 m mosaics