

## **K&C Product Delivery Report and Schedule for 2010**

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## K&C deliverables

### Papers and Reports

#### 1. Published

- K&C Phase-1 report
- “Significant finding” on K&C Wiki
- L. Hess, K. McDonald, A. Rosenqvist, and M. Shimada, 2006. The ALOS Kyoto & Carbon Initiative Wetlands Products: New Datasets for Wetlands Mapping and Monitoring (Poster). American Geophysical Union Fall Meeting, Dec. 2006, San Francisco.
- ALOS PI Meeting, Kyoto (2 talks)
- L. Hess, E. Arraut, A. Affonso, and E. Novo, 2008. Mapeamento da Dinâmica Sazonal de Inundação e das Propriedades da Água com Dados de Radar e de Sensores Ópticos. Seminário Anual de Pesquisas do Instituto Mamirauá (SAP V), 8-10 July 2008, Tefé, Brazil.
- L. Hess, A. Rosenqvist, J. Lowry, B. Chapman, M. Costa, D. Hoekman, T. Le Toan, R. Lucas, K. McDonald, A.K. Milne, M. Quinones, L. Rebelo, W. Salas, and K. Telmer, 2008. The ALOS Kyoto & Carbon Initiative Wetlands Products: New Global-Scale Datasets in Support of Carbon Cycle Science, International Environmental Conventions, and Conservation for Wetlands. 8th Intecol International Wetlands Conference, 20-25 July 2008, Cuiabá, Brazil.

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### Papers and Reports

- L. Hess and L. Durieux, 2008. Object-oriented Classification of Multi-temporal SAR Images for Várzea Habitat Mapping. Surveillance de l'Environnement Amazonien par Satellite (SEAS) Satellite Receiving Station Laboratory, 16 Sept. 2008, Cayenne, French Guiana.
- L. Hess, 2008. Where Optical Sensors Cannot See: How ALOS PALSAR Is Monitoring Deforestation and Wetlands on a Global Scale. Universidade de Campinas (UNICAMP), 19 Sept. 2008, Campinas, Brazil.
- L. Hess, E. Novo, L. Durieux, A. Affonso, and E. Arraut, 2008. Mapping Várzea Ecosystems with Combined Radar and Optical Datasets: A Framework for Sampling and Modeling Aquatic Biodiversity, Conferencia LBA/GEOMA/PPBio, 17-21 Nov. 2008, Manaus, Brazil.
- L. Hess, 2008. Mapping floodplain habitats and hydroperiod at the Mamirauá and Piagaçu Reserves with ALOS PALSAR. Seminário da Amazônia, Instituto Nacional de Pesquisas de Amazonas (INPA), 9 Sept. 2008, Manaus, Brazil.
- L. Hess, E. Novo, L. Durieux, and B. Chapman, 2009. A New View of Amazonian Wetlands Using Combined ALOS PALSAR and Optical Datasets. XIV Simpósio Brasileiro de Sensoriamento Remoto, 29 April 2009, Natal, Brazil.

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### Papers and Reports

- L. Hess, M. Costa, D. Hoekman, J. Lowry, R. Lucas, K. McDonald, A.K. Milne, M. Quinones, L. Rebelo, A. Rosenqvist, W. Salas, and K. Telmer, 2009. Inundation Mapping for Global Wetland Regions: The ALOS Kyoto & Carbon Initiative Wetlands Products. IGARSS, July 2009, Cape Town, South Africa.
- B. Chapman, L. Hess, L. Durieux, E. Arraut, B. Marshall, and K. McDonald, 2009. Mapping central Amazon wetland dynamics with seasonal ALOS ScanSAR imagery: prototype IW-ESDR products. American Geophysical Union Fall Meeting, Dec. 2009, San Francisco.
- Short Courses Featuring PALSAR Datasets (“Radar Remote Sensing: Basic Characteristics and Earth Resources Applications”)
  - Universidade de Campinas (UNICAMP), 2-4 March 2009
  - Universidade Estadual de São Paulo (UNESP – Rio Claro), 23-27 March 2009



## K&C deliverables

### Papers and Reports

#### 2. Submitted/in preparation

- Special session on remote sensing of inundation will take place at Flood Pulsed Wetlands Symposium, Maun, Botswana, February 2010 (L. Hess and L. Rebelo, co-chairs)
- L. Hess, E. Novo, L. Durieux. Seasonal inundation patterns of central Amazon wetlands with ALOS PALSAR. Flood Pulsed Wetlands Symposium, Maun, Botswana, February 2010
- L. Durieux, L. Hess, B. Chapman, and K. McDonald. Generation of standard regional wetland mapping products based on seasonal ALOS Scansar imagery using object-based image analysis. GEOBIA, July 2010.
- L. Hess. To be submitted 2010. L-band backscattering from woody vegetation of Amazonian wetlands.(RSE? IJRS? JSTARS?)
- L. Hess, E. Novo, L. Durieux, A. Affonso, and E. Arraut. To be submitted 2010. Mapping of Amazonian várzea habitats using combined ALOS PALSAR and optical datasets. (RSE?)
- L. Hess, L. Durieux, E. Novo, B. Chapman. To be submitted 2010\*. Seasonal variability of central Amazonian wetland inundation
- TBD (with MEASURES co-Is) : Comparison of active and passive inundation estimates
- L. Hess, F. Seyler, +?. To be submitted 2011. Relating satellite-measured variability of surface water extent and height in Amazonian wetlands to hydrologic parameters. (Hydrology journal, Earth Interactions, ?)

## **K&C deliverables**

### **Data sets and Thematic products (mosaics, classification maps etc.)**

#### 2. Completed, but not yet delivered

- Várzea habitat mapping, Mamirauá (not yet validated):  
next two weeks (validation results in March)

## **K&C deliverables**

### **Data sets and Thematic products (mosaics, classification maps etc.)**

#### 3. To be completed during 2010

- Várzea habitat mapping, Piagaçu and Curuai sites: March-April
- Negro interfluvial swamp habitat mapping: May
- Central Amazon regional ScanSAR mapping (11/2006-10/2008): June
- G1 ScanSAR mapping: Jan 2011