

# Title: Tropical Forest & LCC monitoring

Product Leader: Dirk Hoekman

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Product Team (confirmed members only):

- Academic staff BOSF, WU

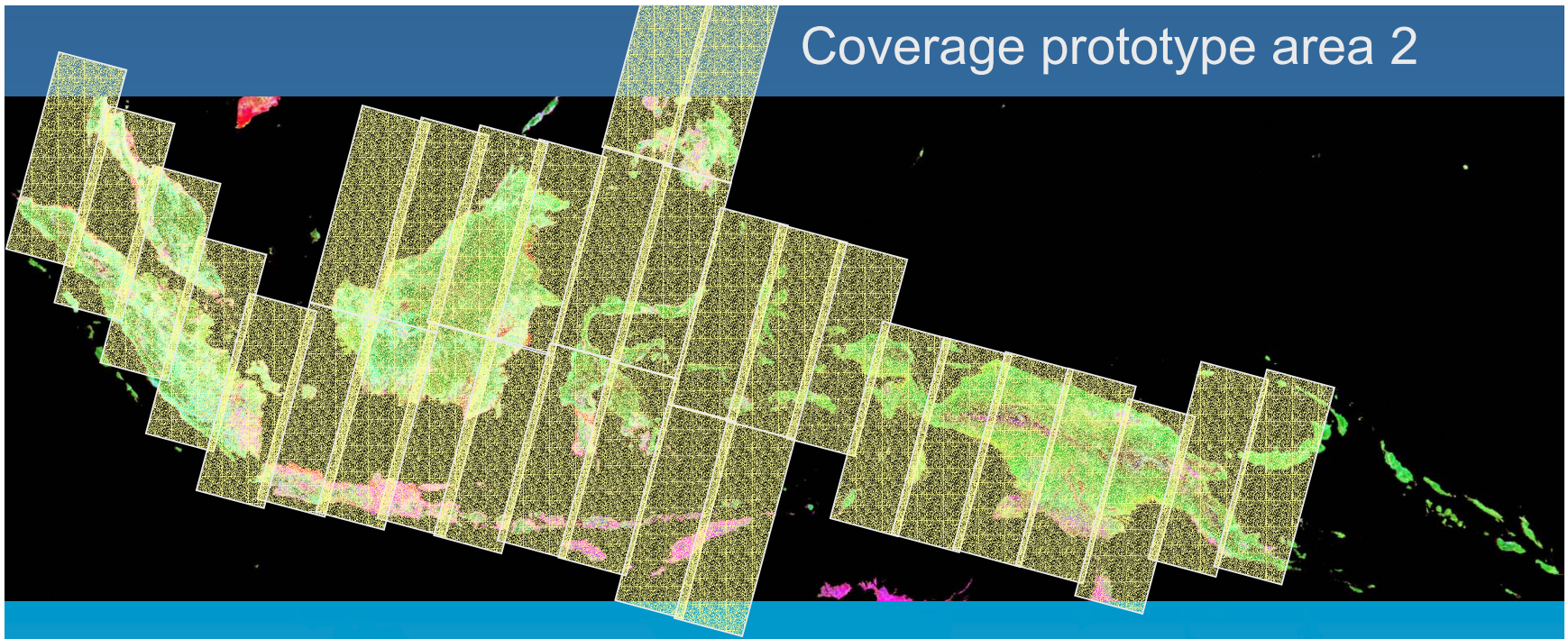
Agreement status: Ready to sign!

Preferred agreement type (individual/institutional): Institutional (BOSF)

Project objective(s):

- Develop methodology for (i) monitoring forest cover and other land cover change over Kalimantan (Prototype Area 1), using dual- and single-pol PALSAR data, non-mosaicked path images as a primary data source.
- Develop methodology for integration with aux data sources (GLI, ENVISAT GM, SRTM, maps, etc.), historical data sources (JERS-1, maps, etc.), LCC models, using time series analysis.
- Fast and frequent delivery of updated maps, public access through internet (time series at  $\leq 250$  m pixel size), providing transparency
- Application of the methodology for insular South-East Asia & PNG (Prototype Area 2), on a 3-monthly basis, using 50 m resolution PALSAR mosaics, and aux data sources

# Coverage prototype area 2



Sumatra-Peninsular Malaysia 5  
Borneo-Java 8  
Sulawesi-Mindanao-Nusa Tenggara 6  
Maluku-Timor 4  
Guinea 8

**Total: 31**

2002-09 SPOT Veg  
7600x2460 pix ~ km  
15°



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## Prototype Area 1: Kalimantan

Corresponding observation plan polygon(s): B3 (part);

No. PALSAR paths/coverage: ~35 passes

PALSAR request (Year 1-3): ~210 passes (all (6) coverages)

Input data (EORC products): PALSAR path images (Sigma-0, 50m)

Ancillary data requests: ~ 35 passes JERS-1 SAR path images 1992-1997 (11? coverages) (already requested for wetlands product), GLI monthly aggregates

## Prototype Area 2: Indonesia, Malaysia, Mindanao, PNG

Corresponding observation plan polygon(s): B3 (almost all); C1 (all)

No. PALSAR paths/coverage: ~155 passes

PALSAR request (Year 1-3): 6 full coverages

Input data (EORC products): PALSAR image mosaics (Sigma-0, SRTM corr., 50m)

Ancillary data requests: JERS-1 SAR, GLI monthly aggregates

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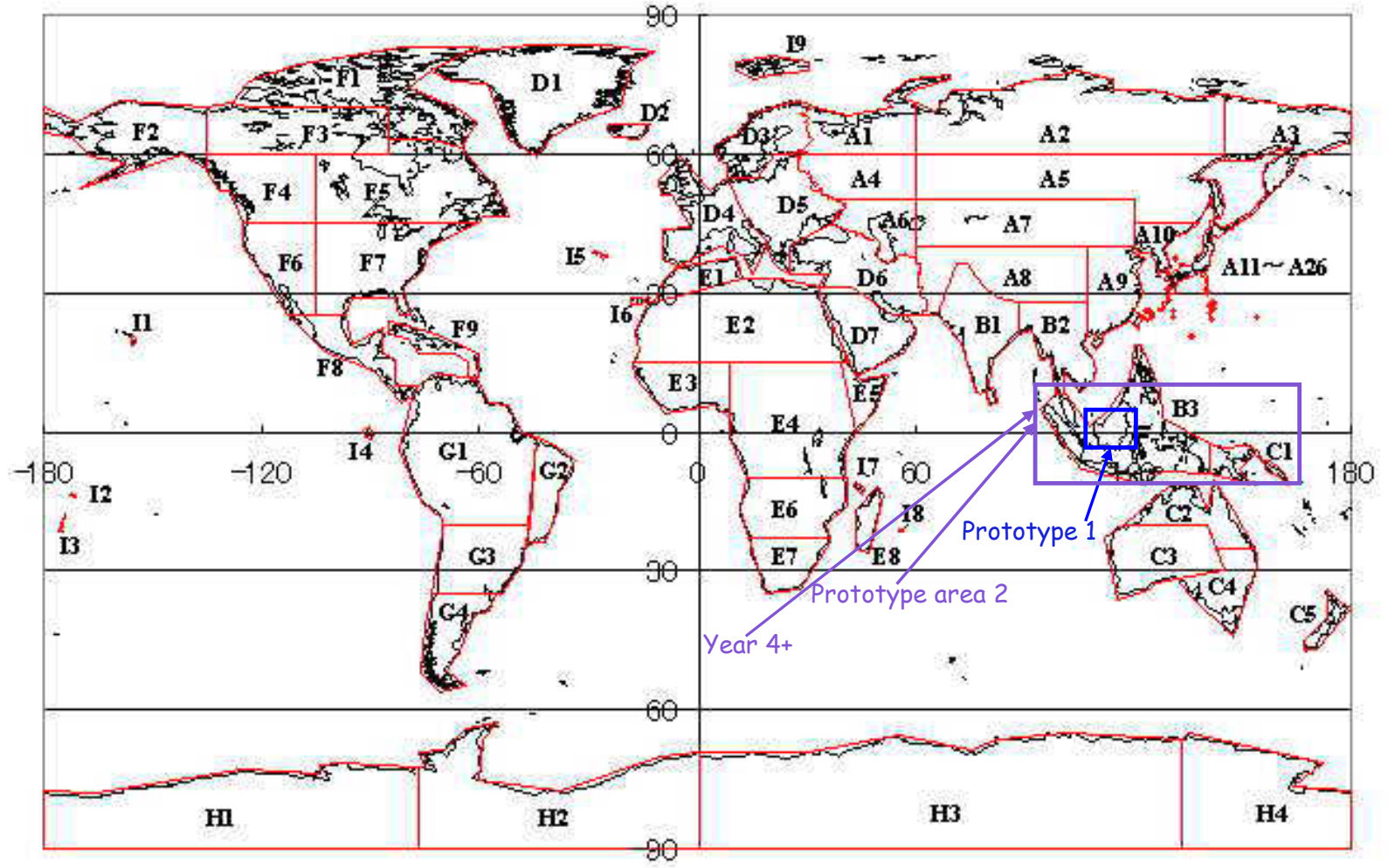
## K&C Product Deliverables (before end of Year 3):

- 2 Forest change maps over insular SE-Asia & PNG (2005-2006) & (2006-2007)
- 10-year Forest change map over insular SE-Asia & PNG (JERS-PALSAR)
- t.b.d.: Support to projects in Congo (E4) and Amazon (G1) basins

## Prospects for Years 4-6 (assuming agreement extension)

- 3 Forest change map updates (for Years 4, 5, 6)
- t.b.d.: Support to projects in Congo (E4) and Amazon (G1) basins

# Tropical Forest / LCC monitoring in insular SE Asia & PNG



Location of Prototype Areas