

Biomass mapping

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Product Team (confirmed members only):

- Chris Schmallius (U. Jena, Germany)
- Shaun Quegan (U. Sheffield, UK)
- Martti Hallikainen (HUT, Finland)
- Urs Wegmueller (Gamma, Switzerland)
- Frank de Grandi (JRC, Italy)

Agreement status: Waiting to sign

Preferred agreement type (individual/institutional):

Individual

Biomass mapping

Project objective(s):

- Develop methodology for biomass mapping a) in boreal regions using repeat pass interferometry and b) in temperate regions using dual-pol PALSAR data, non-mosaicked path images.
 - Develop methodology on selected sites in Area A2 (& part of A5) and D4 (& D3) in 2005-2006,
 - Coordinate methodology development with other regional team members (to be discussed during this meeting)
 - . Procedures of in-situ biomass assessment
 - . SAR data methodology
- Application of the methodology for biomass mapping in Siberia (Prototype Area 2 (& A5)) in 2006-2007.
- Application of the methodology for biomass mapping in Europe (prototype Area D4 & D3) in 2006-2007

Biomass mapping Boreal forests

Prototype Area 1: Siberia

Corresponding observation plan polygon(s): A2& A5 (part)
(80-120° E & 53-
70° N)

No. PALSAR paths/coverage: ~30 passes of 70 kmx2000 km, which
cover parts of A2 & A5

PALSAR request (Year 1-3): 120 passes (2 in Winter year 1&2)
60 in Summer (year 1 &2)

Input data (EORC products):

PALSAR level 1.1 for InSAR (R&D on test sites)

PALSAR coherence mosaic

PALSAR Path images(HH+HV), orthorectified

Ancillary data requests:

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Prototype Area 2: Scandinavia

Corresponding observation plan polygon(s): D3 (part)

No. PALSAR paths/coverage: ~ 4 passes

PALSAR request (Year 1-3): 32 passes(6 coverage in AP, 2 polarimetric mode)

Input data (EORC products):

ALSAR path image (HH&HV, slant range, 50m)

Polarimetric data

Ancillary data requests:

Biomass mapping Temperate forests

Prototype Area 2: France & UK (part)

Corresponding observation plan polygon(s): D4 (part)

No. PALSAR paths/coverage: ~ 6 passes

PALSAR request (Year 1-3):

30 passes(3 coverages in 34° , 2 in 43°)

Input data (EORC products):

PALSAR swath image (HH+HV, slant range, 70m x 52m)

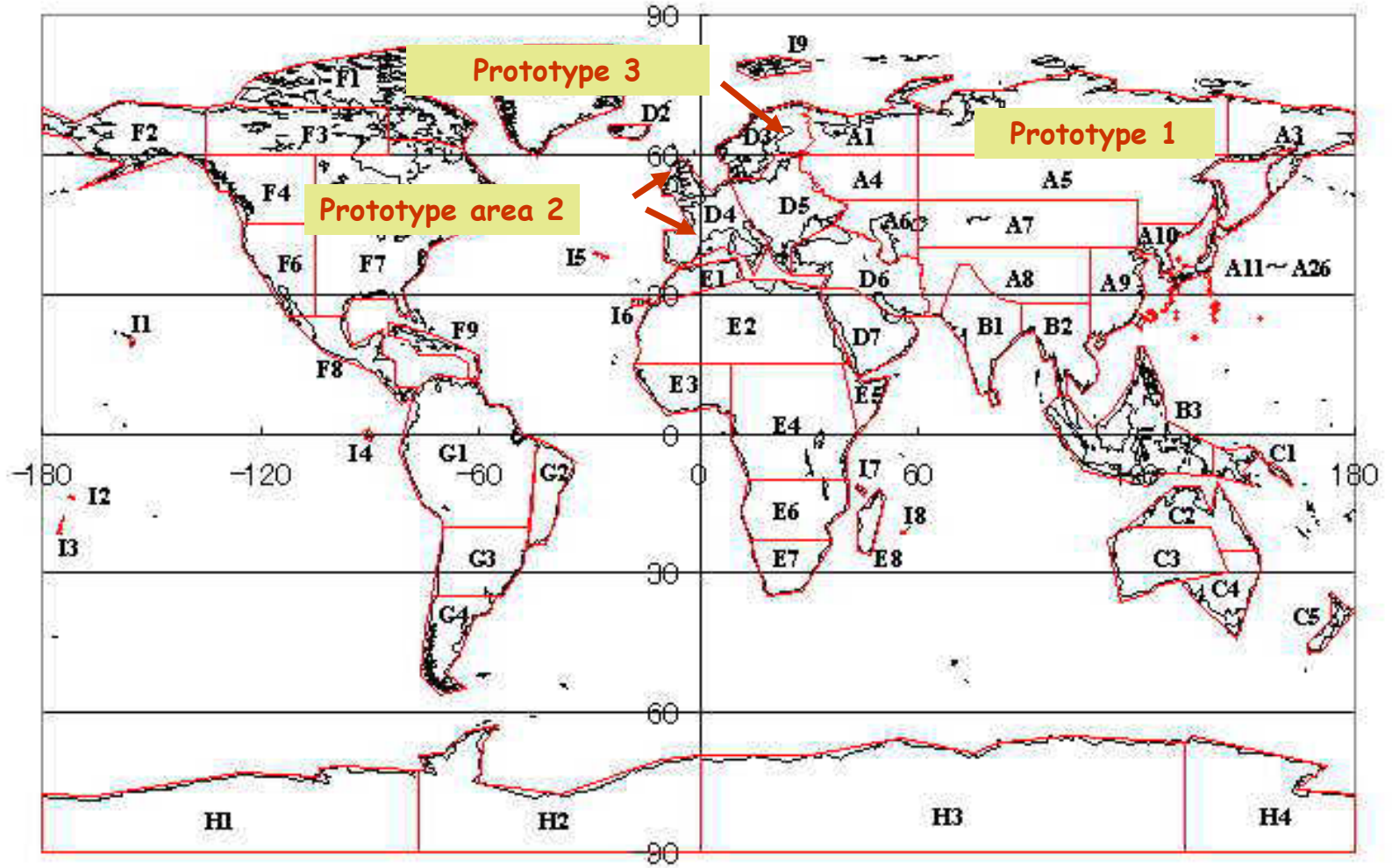
Ancillary data requests:

Biomass mapping

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

- Methodology for biomass mapping using ALOS in boreal and temperate regions.
- Biomass map in part of Siberia (assuming good method assessment in phase research)
- Biomass map in N.UK and S France (assuming good method assessment in research phase)

Biomass mapping in boreal and temperate forests



Location of Prototype Areas