



CLIMES-SYMPOSIUM

Remote sensing in the mapping of biodiversity, habitats and ecosystem services

6.-7. SEPTEMBER 2012

UPDATED
PROGRAMME
25.8.2012

Place: Finnish Environment Institute (SYKE)
Mechelininkatu 34a, Helsinki

Organizers: SYKE and Metsähallitus

DAY I (AUDITORIUM)

8:30–9:00 Registration and COFFEE

9:00–9:15 Welcome and opening
(Martin Forsius, SYKE)

9:15–9:30 Introduction to the theme
(Petteri Vihervaara, SYKE)

PART I: BIODIVERSITY AND HABITATS

9:30–10:30 Key note: Assessing, monitoring and forecasting biodiversity in Africa from space – The JRC approach. (Andreas Brink & Gregoire Dubois, European Commission Joint Research Centre)

10:30–10:50 Finnish Habitats surveys – classifications and indicators (Anne Raunio, SYKE)

10:50–11:10 Biodiversity inventories in nature protection areas – terrestrial habitats (Elisa Pääkkö Metsähallitus)

11:10–11:30 Modelling biodiversity - from grasslands (habitats) to butterflies and bumble bees (species) (Mikko Kuussaari, SYKE)

11:30–12:30 LUNCH

PART II: USE OF REMOTE SENSING IN CASE STUDIES

12:30–13:30 Key note: Monitoring biodiversity from space: a wealth of opportunities (Nathalie Pettorelli, Institute of Zoology, Zoological Society of London)

13:30–13:50 LiDAR based mapping of forest biodiversity (Matti Maltamo, University of Eastern Finland)

13:50–14:10 VELMU results: Possibilities of LiDAR in shallow waters of Baltic Sea and it's applications for habitat modeling (Michael Haldin, Metsähallitus & Markku Viitasalo, SYKE)

14:10–14:30 Aerial photograph time series as a proxy of vegetation change in boreal peatlands (Timo Kumpula & Teemu Tahvanainen, University of Eastern Finland)

14:30–14:50 CLIMES – Modeling ecosystem functions in Lake Vanaja watershed: What data is available? What data is needed for the used models (Yasso, JS-BACH, INCA, habitats)? (Katri Rankinen & Jari Liski ym., SYKE)

14:50–15:10 Mapping threatened snowbed and snow patch habitats in Northern Finland using Landsat data (Sonja Kivinen, University of Oulu)

15:10–15:30 COFFEE

15:30–17:00 Brainstorming in small groups (Auditorium, Muuttohaukka and Tervapääsky)

17:00–18:00 Summary of Day 1

18:00– SNACK and SAUNA (Tervapääsky)

DAY 2 (AUDITORIUM)

PART III: MANAGEMENT AND PRACTICAL SOLUTIONS

- 9:00–10:00 **Key note speaker: Remote sensing in habitat monitoring and management** (Alan Brown, ENCA & Countryside Council for Wales)
- 10:00–10:20 **CORINE update - user perspective** (Elise Järvenpää & Pekka Härmä, SYKE)
- 10:20–10:40 **Zonation as ecological decision support tool in protecting habitat networks** (Joonas Lehtomäki, SYKE & University of Helsinki)
- 10:40–11:00 **Linking National Forest Inventory measurements with land cover and habitat datasets to quantify carbon sequestration in Finnish Forest Lapland** (Laura Mononen, University of Eastern Finland)
- 11:00–11:20 **GMES Land products (GEOLAND2, GIO HRLs)** (Markus Törmä, SYKE)
- 11:20–11:40 **LifeWatch/FinLTSER – possibilities of research infrastructure for future cooperation** (Martin Forsius, SYKE)
- 11:40–12:00 **Summarizing and closing the symposium** (Petteri & Martin)
- 12:00– **LUNCH**

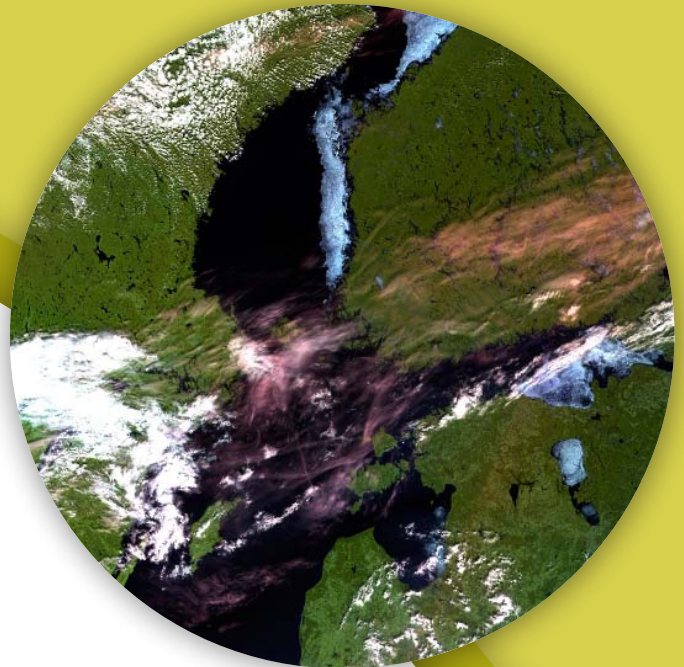


Photo: Markus Törmä / SYKE

Questions to think and discuss in brainstorming sessions:

1. *What are the most urgent needs of BD & Habitat mapping from RS?*
2. *How far it is realistic to go with RS: Main biomes? EUNIS classes? Habitats? Species, what taxons? How to optimize field work and RS use? Stratified sampling?*
3. *What is the optimal scale to use RS in habitat surveys? Limitation of data processing (e.g. PC capacity)? Extrapolation for landscape, national scale?*
4. *What kind of technical support, new data layers (VHRS) is needed? Needs for automated data collections? Gaps in data – and possibilities/suggestions how to fill them?*
5. *How quantification of ecosystems processes (flows of C, nutrients, H₂O) could benefit from RS? What RS data is needed for models?*
6. *What kind of cooperation is needed to push forward? International? National?*

Further information:

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