



Regional application

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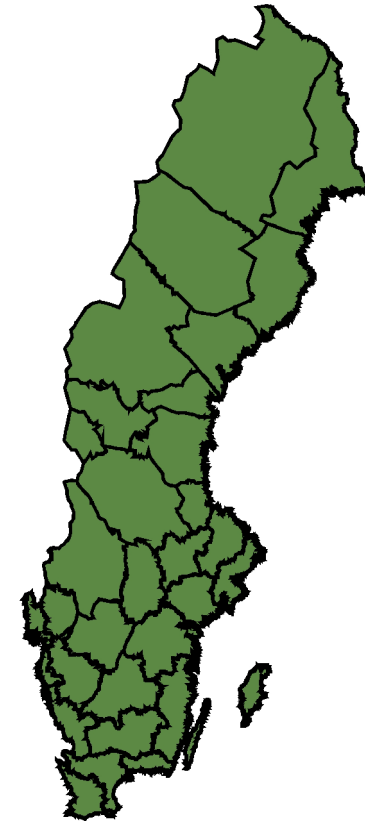


Objectives

Enable integrated analyses of the development of the forest ecosystem (100 years).

Output: Supply of many different utilities at the regional level.

Results will be used as decision support for users





Users

- Authorities
- Forest companies
- Organisations





Properties

- Large geographical areas – municipalities, regions, wood procurement areas, etc
- All forest owners – NIPF, Companies, State, Church and others
- Many utilities – Timber, Forest bio fuel, Biodiversity, Carbon, Recreation, etc
- Replace the current system (Hugin)



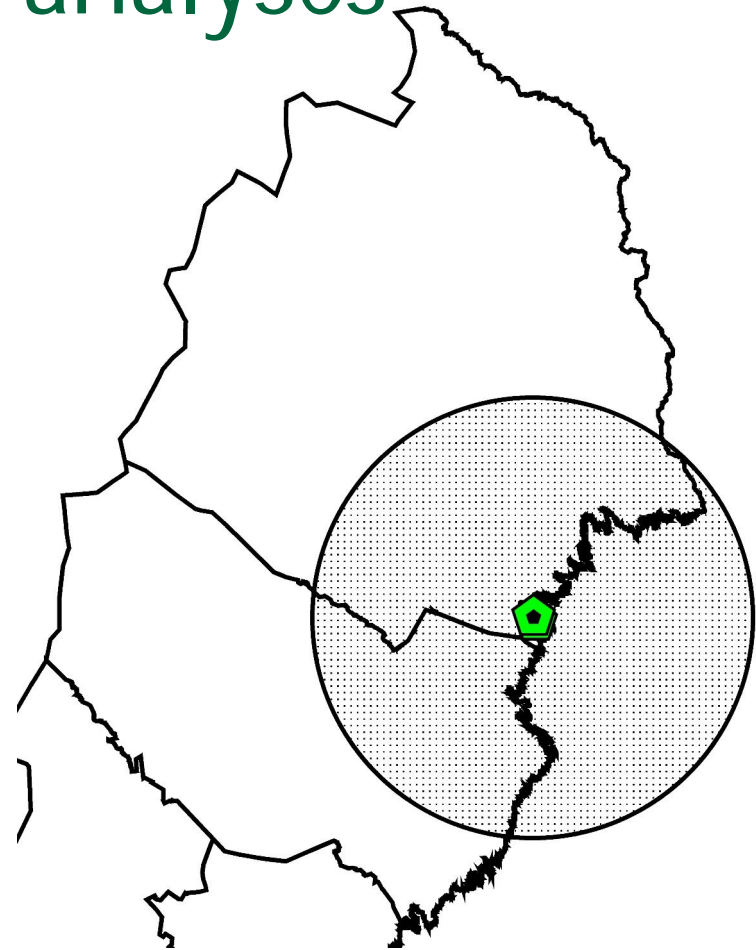
Examples of analyses

Analyses for a wood procurement area around an industry:

1. Potential future supply of timber.
2. Future supply of forest bio fuel
3. Results for other utilities such as biodiversity

Scenarios – assumptions :

1. Forestry as today
2. Intensified forestry (fertilisation, ditching, genetic improved plants, etc)
3. Extensive forestry (no fertilisation, less planting, less cleaning and thinning, etc)

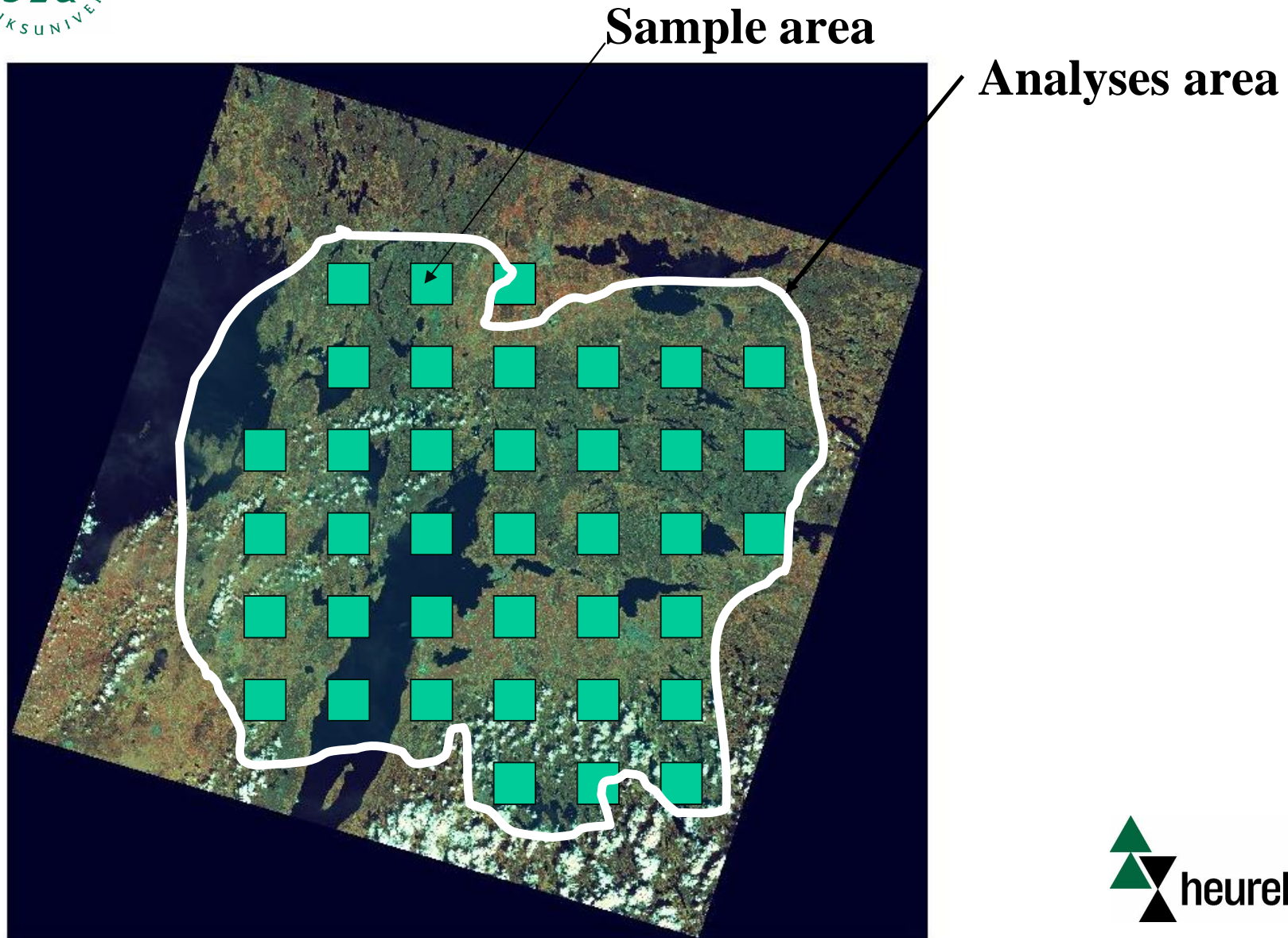




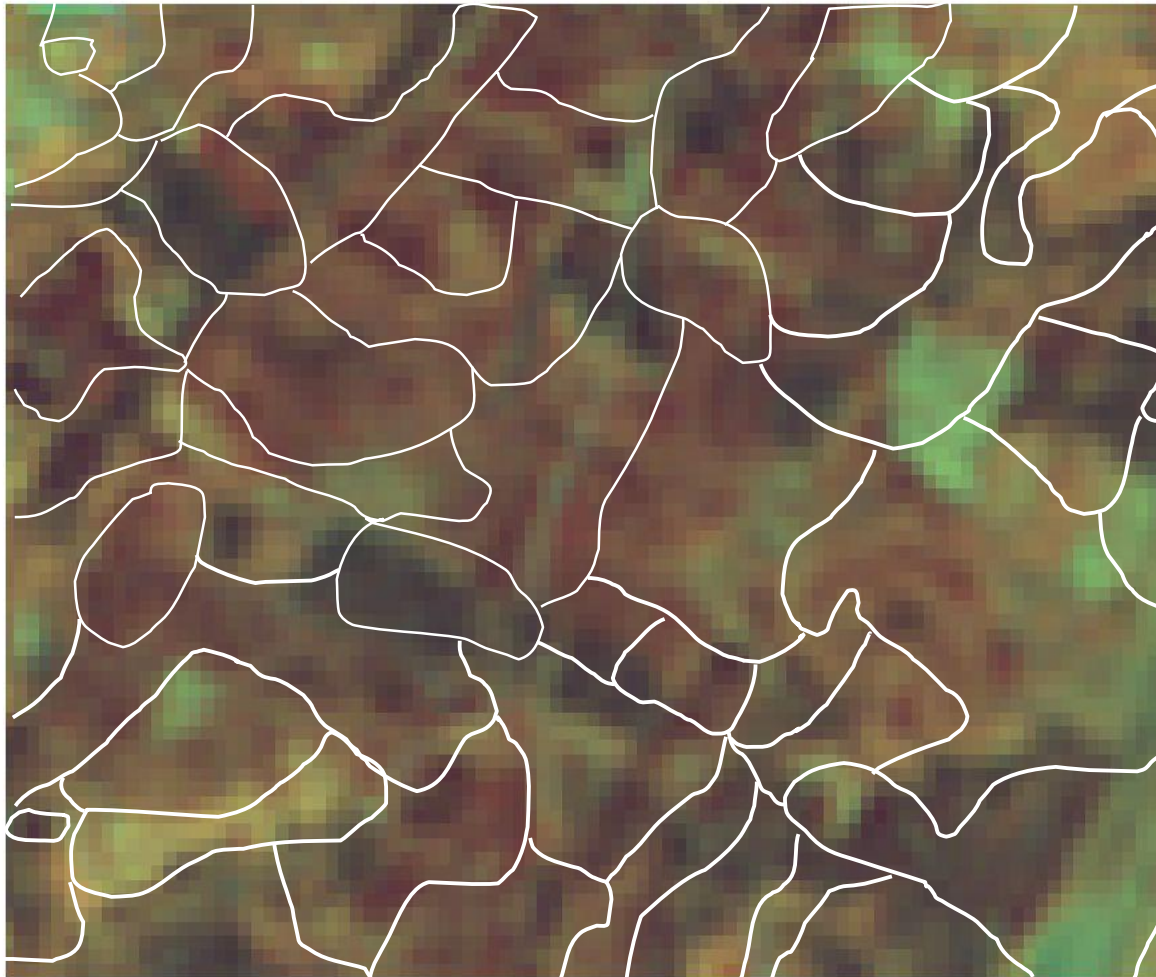
Simulation of treatments with forest owner behaviour models

1. Probability for a measure = f (Forest owner data, estate data)
2. Extent of measure = f (Forest owner data, estate data)
3. Measure at stand level in the prognoses with consideration to estate level

Wall-to-wall data



Wall-to-wall data — a sample area

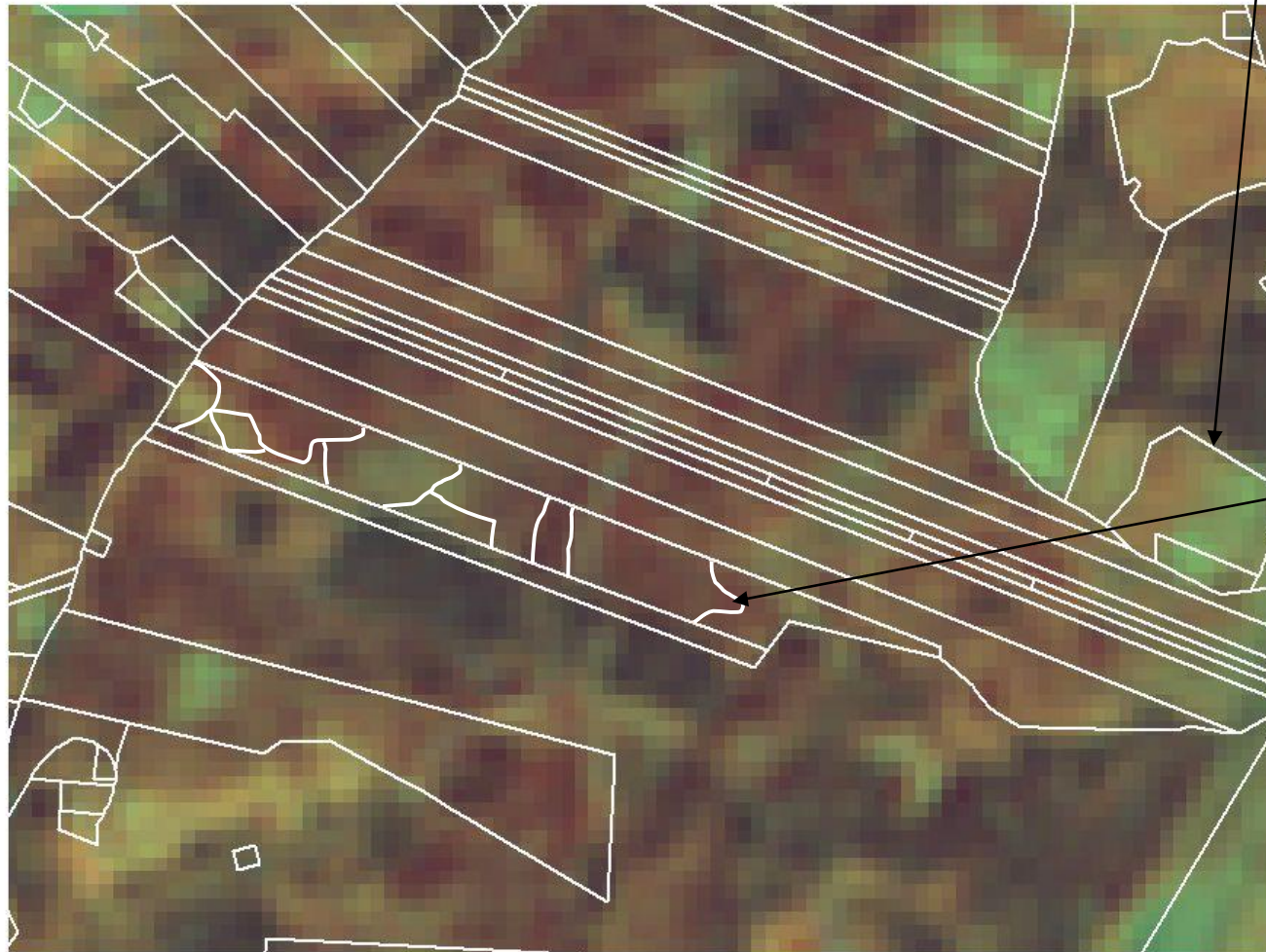


0 0.5 1 Kilometers

- NFI plots associated to each pixel with kNN
- Automatic segmentation into stands



Wall-to-wall data with forest estate information



Forest estate border

Owner:

Man 50 years old
Area 40 ha
Owned since: 1985
Resident: On estate
Area of young forest:
20 %
...
...

Stands

Owner:

Women 36 years
Area 40 ha
Owned since: 2004
Resident: Not on estate
Areal unskog: 20 %
...
...

reka!