

Concerted forest management at landscape scale



Christophe Chauvin

January 29, 2016



The projects of the programme Pour et Sur le Développement Régional (PSDR4 Rhône-Alpes) receive fundings from INRA, Rhône-Alpes Region, Irstea and the European Union through the FEADER as part of the Européen Partnership for Innovation (IEP-AGRI).

Meso-scale forest management

Landscape, Territory, (Region)

Multifunctionality:

- Multiple stakes
- Multiple stakeholders
- Multiple actors

➤ **Knowledge tools** at medium scale needed for:

- Resource identification (ecosystems characterisation)
- Resource activation (ecosystem services)

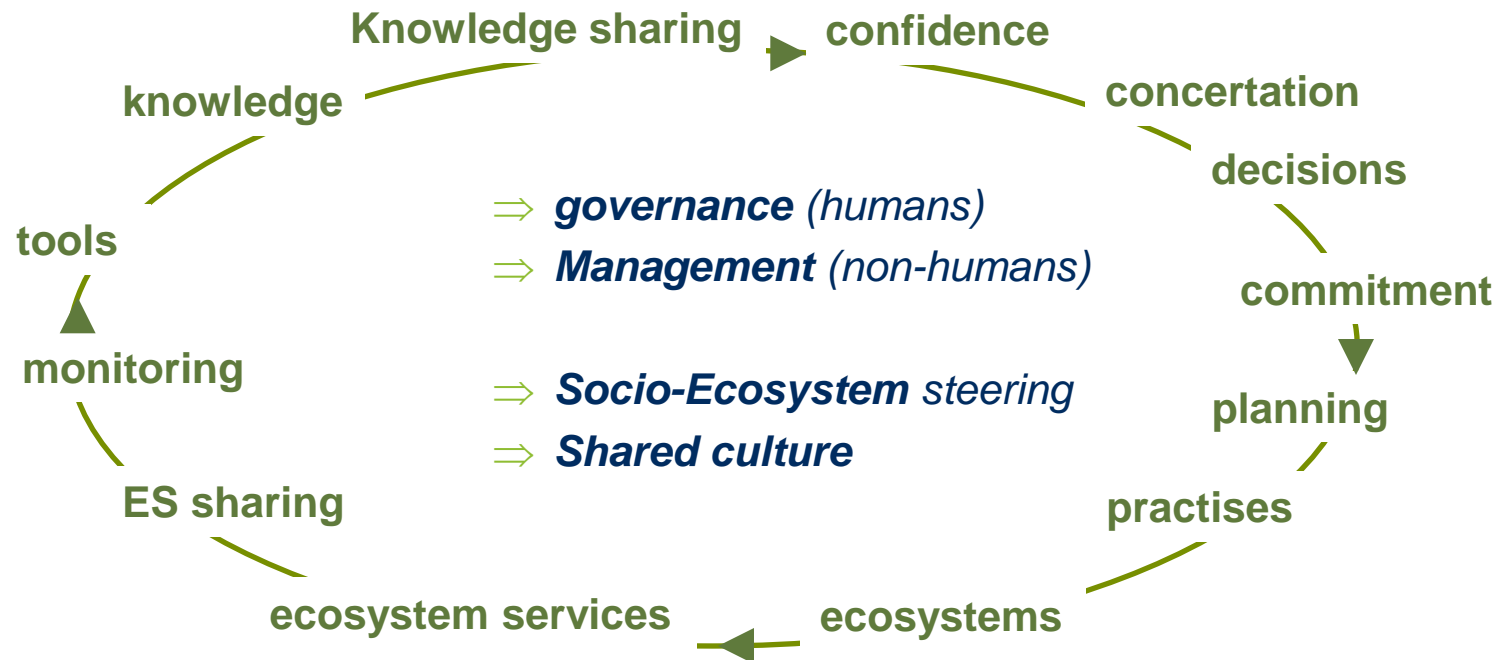
➤ **Governance** needed for:

- Knowledge acquisition
- Knowledge sharing
- Resource sharing

Meso-scale forest management

Landscape, Territory, (Region)

⇒ ***Joint continuous improvement of***





Innovative tools (1)

On 3 regional parks (Chartreuse, Bauges, Pilat)

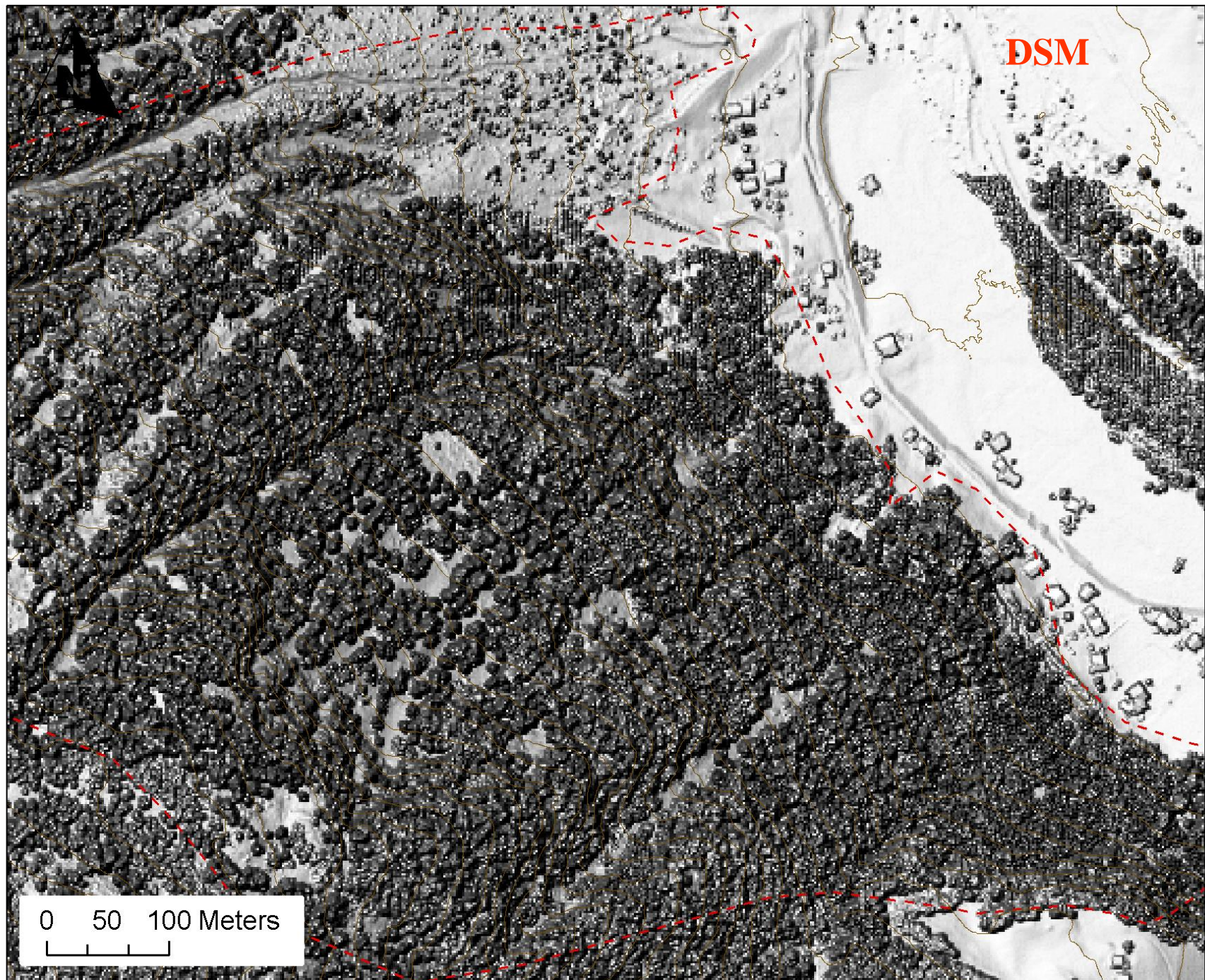
Resource detection : Lidar and multi-spectral views, measure plots

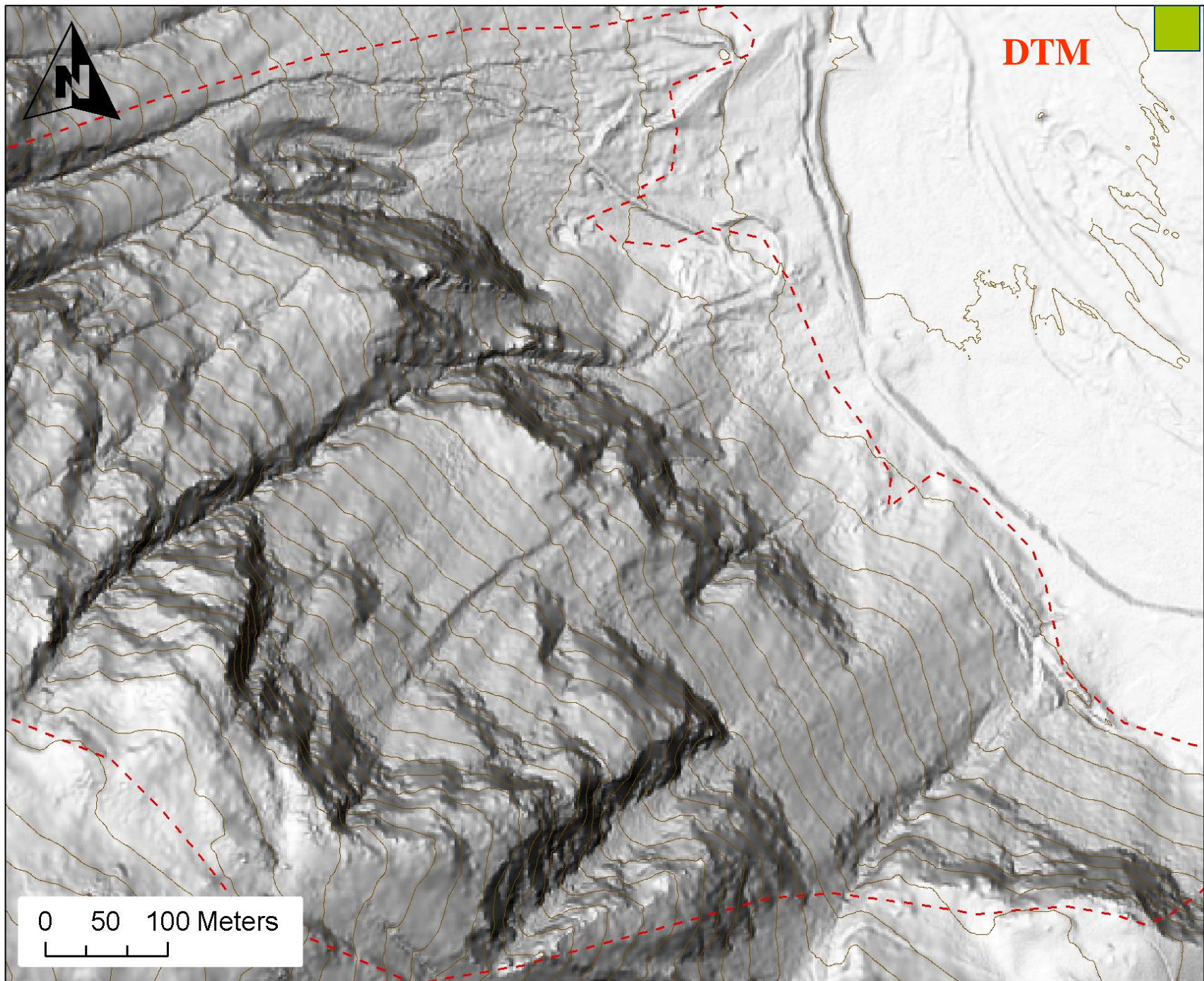
Stands mapping and characterisation

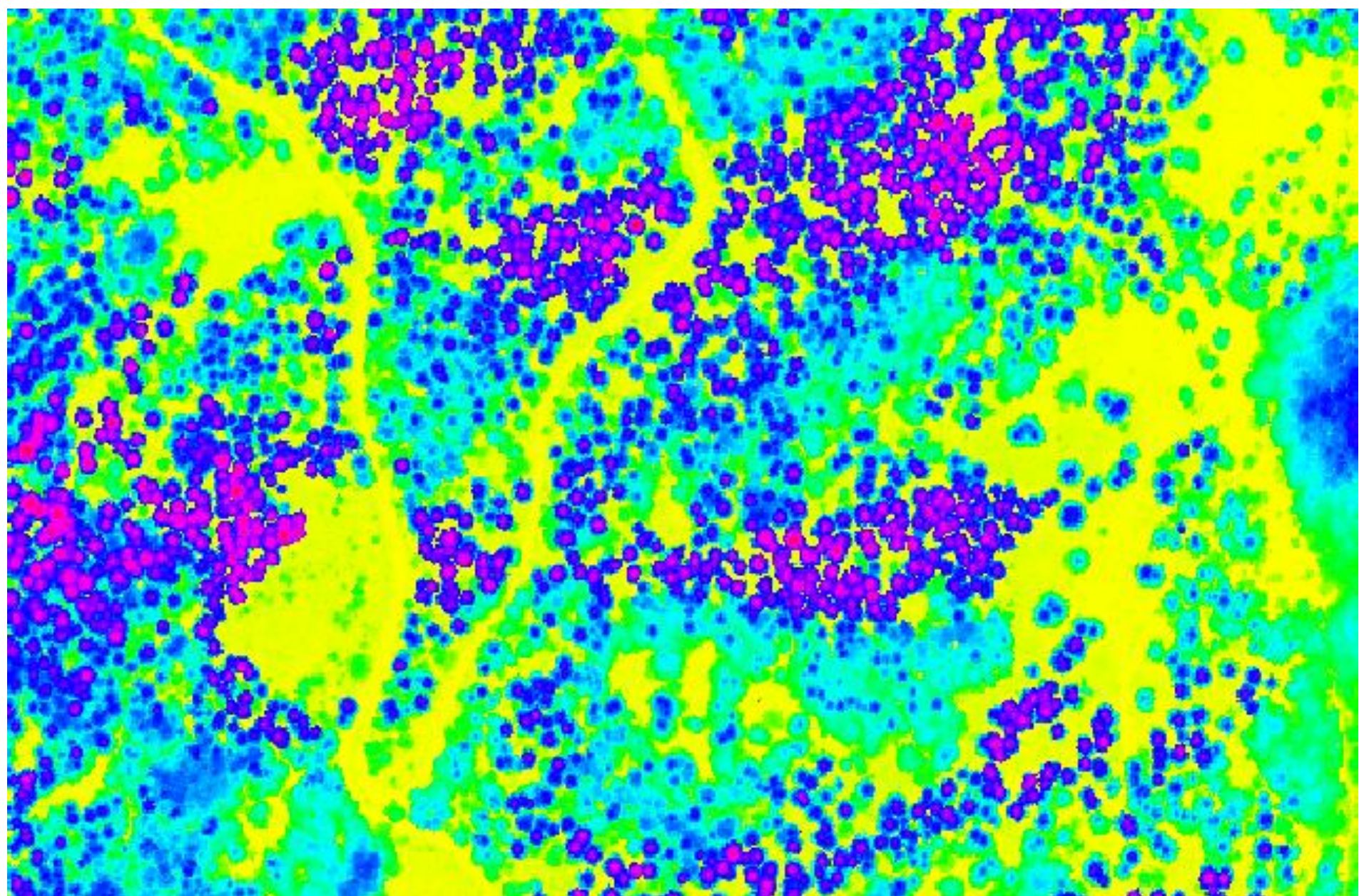
- ⇒ Standing volume
- ⇒ Mature trees
- ⇒ Sensitivity to climate change

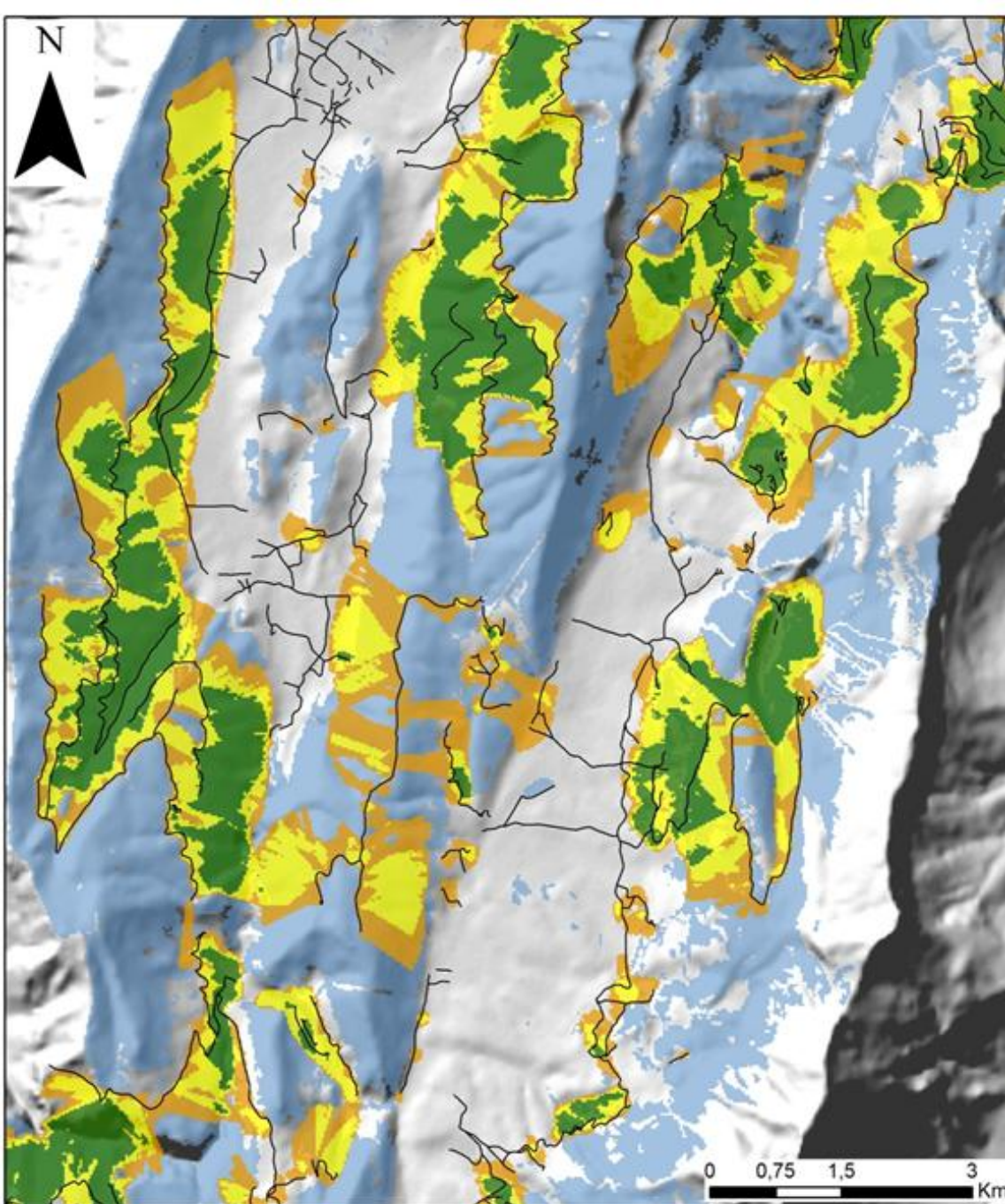
Potential ecosystem-services mapping

- ⇒ Protection against avalanches, rockfalls
- ⇒ Production : potential harvest, accessibility => potentials flows & costs, planning scenarios





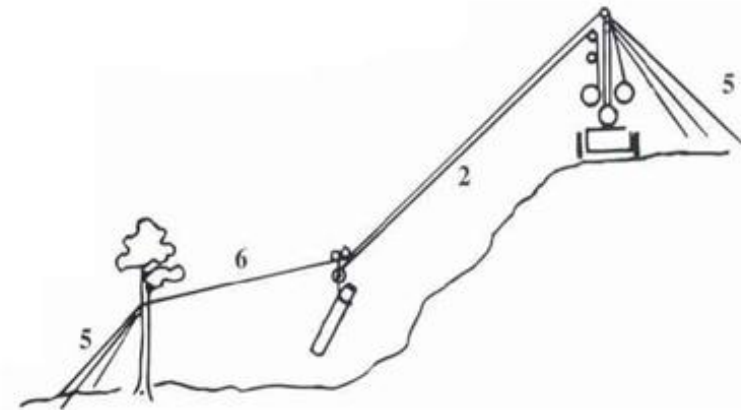




Forêts accessibles par câble mât machine en haut

- Difficilement accessible
- Moyennement accessible
- Normalement accessible
- Routes forestières
- Forêts non accessibles

Schéma de fonctionnement du câble mât machine en haut



- 2) Câble de traction
- 5) Haubans
- 6) Câble porteur fixe

Source : ONF, FCBA

Réalisation :
Sylvain DUPIRE – Juin 2012
Irstea - EMGR

Pour mieux
affirmer
ses missions,
le Cemagref
devient Irstea





Innovative tools (2)

Resource activation

Wood flows

Willingness-to-cut mapping: volumes assessment from

- ⇒ stand data (incl access)
- ⇒ cadaster and owner data (correlations from a local inquiry)

Wood flows: assessments from

- ⇒ National wood-trading institutional inquiry (county scale)
- ⇒ Local wood-trading specific inquiries (territory scale)



Innovative tools (3)

Resource activation

Wood circuits

Proximity chains (circuits) analysis:

- ⇒ Functionment, value chain, sustainability,
- ⇒ Life Cycle Assessments

Quality of logging operations

- ⇒ A multifunctional field assessment grid
- ⇒ A participative, pedagogic use

Demand analysis: assessments from

- ⇒ National wood-trading institutional inquiry (county scale)
- ⇒ Local wood-trading specific inquiries (territory scale)



Innovative tools (4)

Integration & governance

Integration

- ⇒ (social) Stakeholder identification and concertation
- ⇒ (sectoral) Data management: territorial information system, metadata basis
- ⇒ (spatial) Planification tools: territorial supply plan

Governance

- ⇒ *In itinere* follow-up: balance of power, actors games
- ⇒ *Ex post* inquiry



Innovation

Institutional: PSDR programme

- Shared fundings research institutes/region/EU
- Partnership Researchers/actors
- Association social and bio-technical sciences

Technical: a project based on technical innovation

- Innovative tools appropriation, improvement and integration

Organisational: creating a local<=>regional innovation system

- Continuous interaction between actors around innovative tools
- Reflexivity
- Pedagogy through examples, creating commitment, local common forest culture to « move the lines »



Added value for EU

Cross-border dimension

Genericity:

- Generic tools, tested in hard context of mountain regions
- Generic methods for shared appropriation and improvement

Cooperation

- Interreg projects : NEWFOR, MANFRED
- FP7-KBBE : ARANGE
- H2020?
- LIFE? Formerly (1996) “Tools or a sustainable multifunctional management of mountain forests”

Dissemination

- International seminars, conferences, workshops...
- Scientific papers
- Technical disseminations by scientific partners in other countries



Opportunities

Environment, Energy, => cross sectoral, cross-border tools

- LIFE ?
- SmartEnergyMaps (renewable energy potential mapping)
- COST actions ?
- Aarhus, INSPIRE, open data,