

EO data in Swedish forest monitoring

Rotterdam 26 May 2016

Erik Willén and

Anders Persson (Swedish Forest Agency)



SKOGFORSK

average

~ 5 ha/object

190 m³/ha

The Nordic forestry cycle



Establishment
planting, sowing,
natural regeneration

Final felling

1 - 15 ha/object

300 - 1000 stems/ha

100 - 600 m³/ha

Fertilization

60 - 140 years

(0) 1 - 4 thinnings

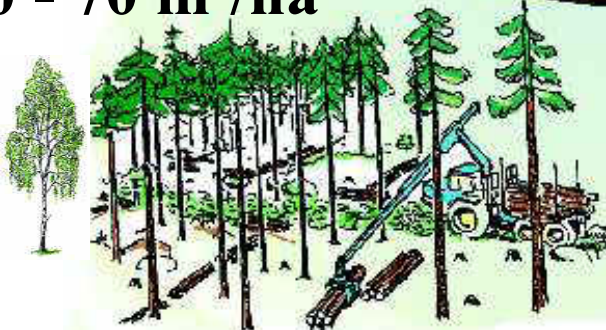
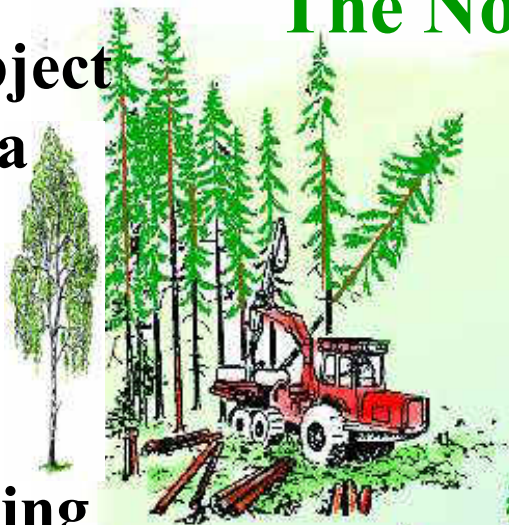
each 30 - 70 m³/ha

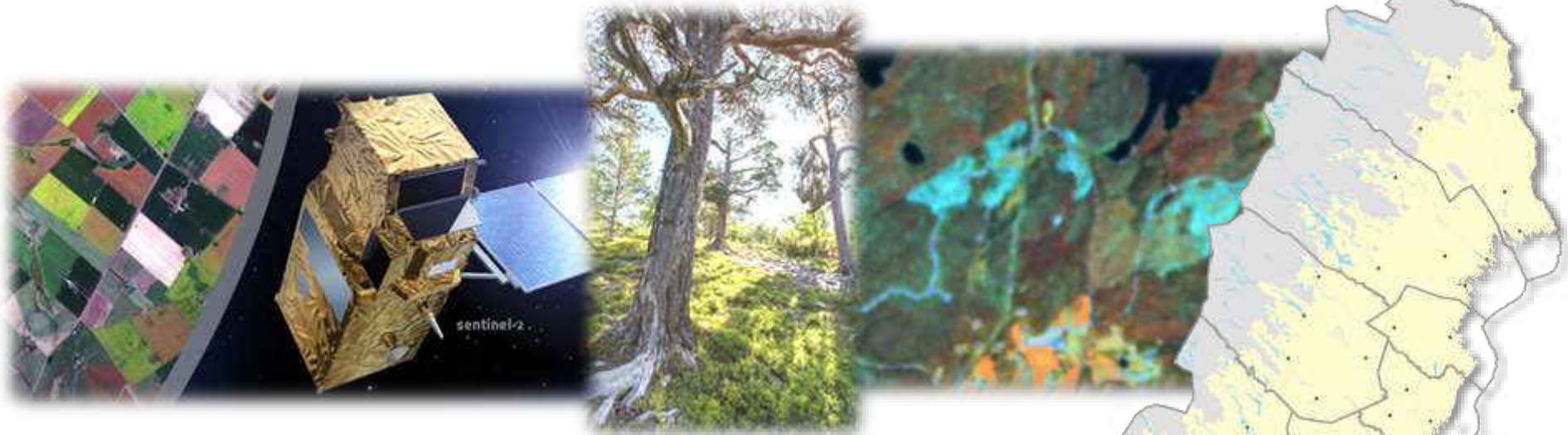
Cleaning

1.5 - 5 m height

average 50 m³/ha

1200 - 3000 stems/ha





Swedish Forest Agency

Remote sensing is vital to Swedish forestry!



Yearly coverage

Satellite data



1999



2000



2001



2002



2003



2004



2005



2006



2007



2008



2009



2010



2011

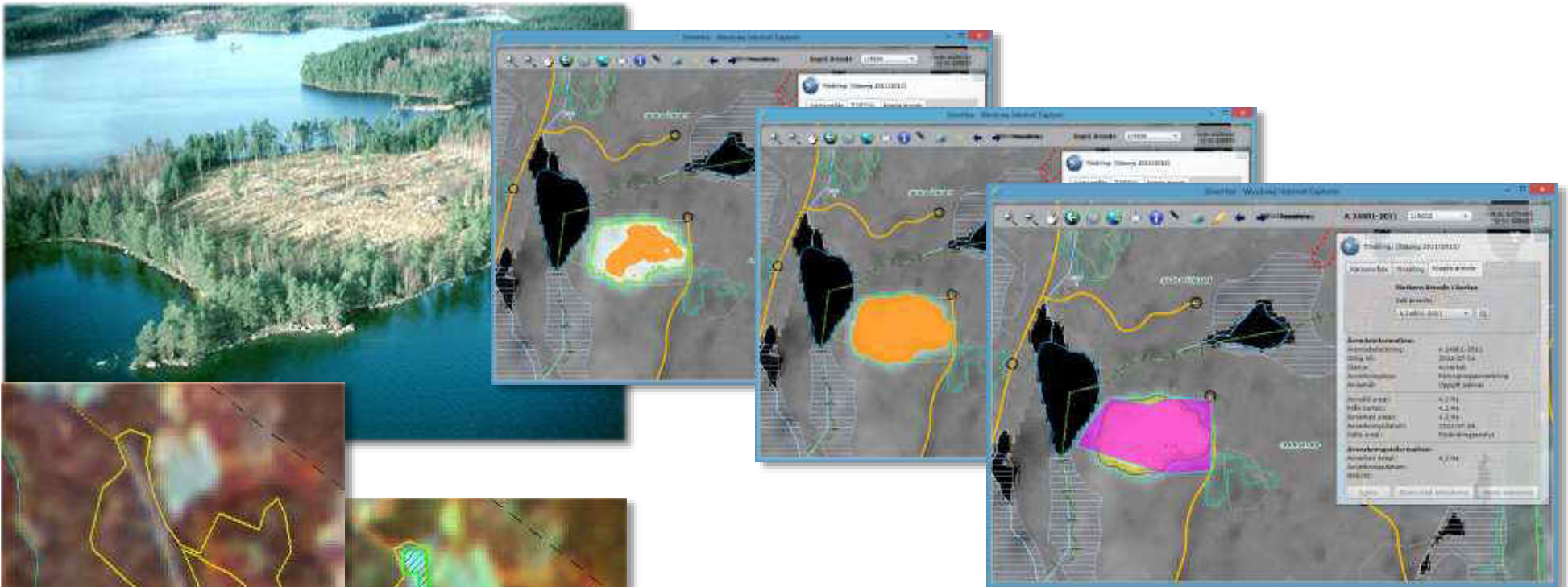


2012



2013

What has been cut?



Forest owners
Notification in yellow

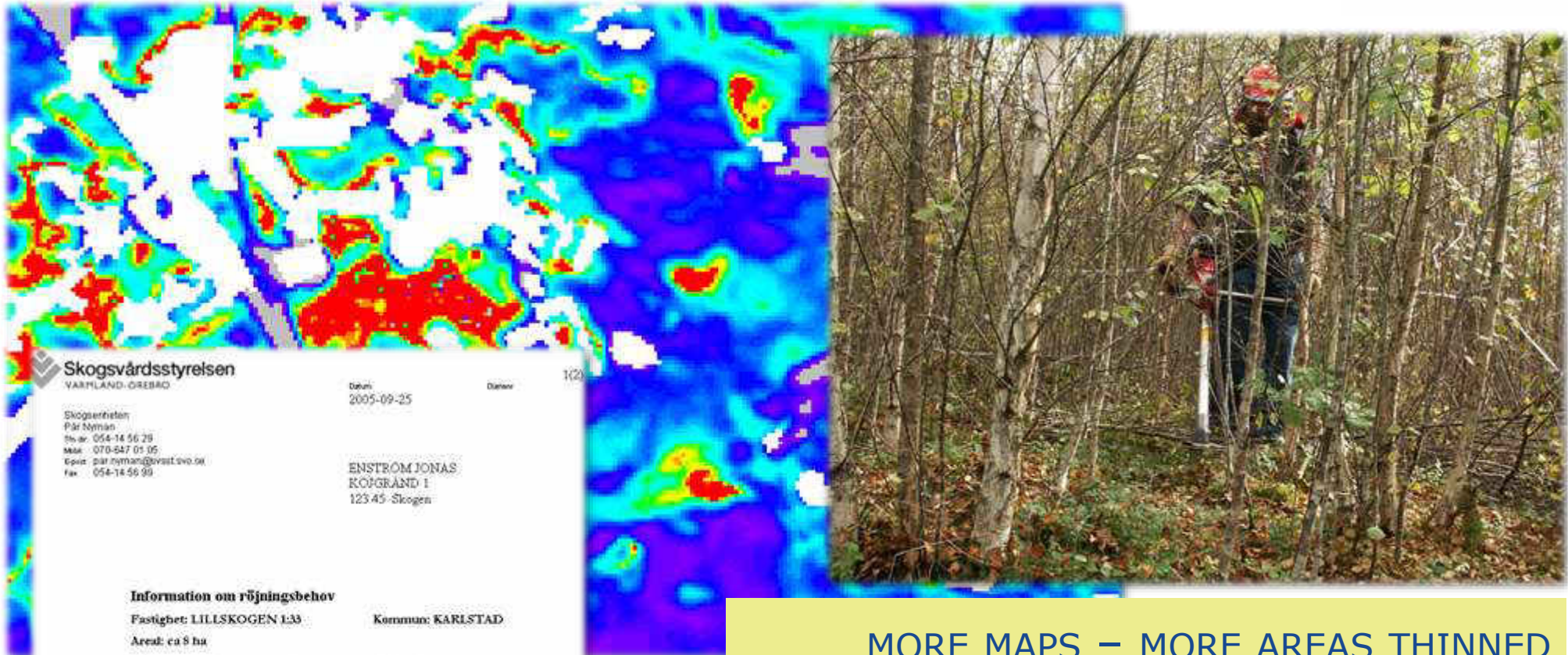
Result from change detection
analysis in green

BETTER PLANNING - BETTER REGROWTH

250 000 hectares – (55 000 clear-cuts)
 Covering the whole country – every year
 Operational since 2003
 Done by local staff



May we help you?



MORE MAPS – MORE AREAS THINNED

1.3 million hectares of young forest needs thinning

The Agency is coaching the forest owners

Maps are made from satellite data



Skogsvårdsstyrelsen
VÄRMLAND-ÖREBRO

Datum: 2005-09-25

Skogserheten
Pär Nyman
Tel nr: 054-14 56 29
Mob: 070-547 01 05
Epost: par.nyman@svst.svo.se
Fax: 054-14 56 99

ENSTRÖM JONAS
KOPGRÄND 1
123 45 Skogen

Information om röjningsbehov
Fastighet: LILLSKOGEN 1:33 Kommun: KARLSTAD
Areal: ca 8 ha

På kartans markerade område kan röjningsbehov finnas:



Röjningsinsatserna under senare år har sporat oroväckande vilket tyvärr kan leda till
mer skogsområden i behov av röjningsinsatser. Detta kan dröjas för att öka

What are the benefits?

By knowing:

- Where & When

We can:

- Focus systematically our efforts on cuttings that need our attention (legally, biologically or for environmental reasons)
- Support the establishment of new forest more efficient

