Mavi

AGENCY FOR RURAL AFFAIRS

Control With Remote Sensing in Finland

Anders Munck / Agency for Rural Affairs

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Agency for Rural Affairs (Mavi)

- Mavi is responsible for the use of funds of the European Agricultural Guarantee Fund and the European Agricultural Fund for Rural Development in Finland.
- Acts as the paying agency in Finland administering the payment of appr. 2,5 billion €.
- Administers IT-systems for farmers aid applications and develops e-services
- Agency founded in spring 2007 in Helsinki, headquarters in Seinäjoki.

Mavi data

IACS	• Integrated Administration and Control System • Farmers aid applications
LPIS	• Main subsystem of IACS • Identification system for agricultural parcels (GIS)
REFERENCE PARCEL	• Area measurement → base for area based subsidies (€1.8 B)
CROSS CHECK	• Controls required

Finnish LPIS - Facts

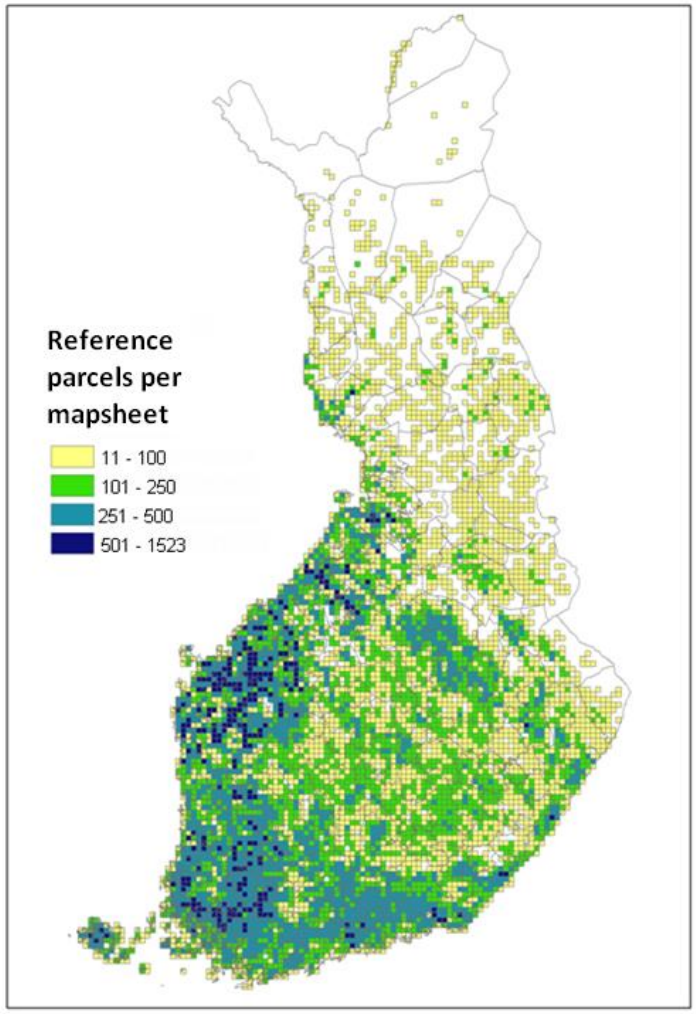
50 000 farms

1 M reference parcels

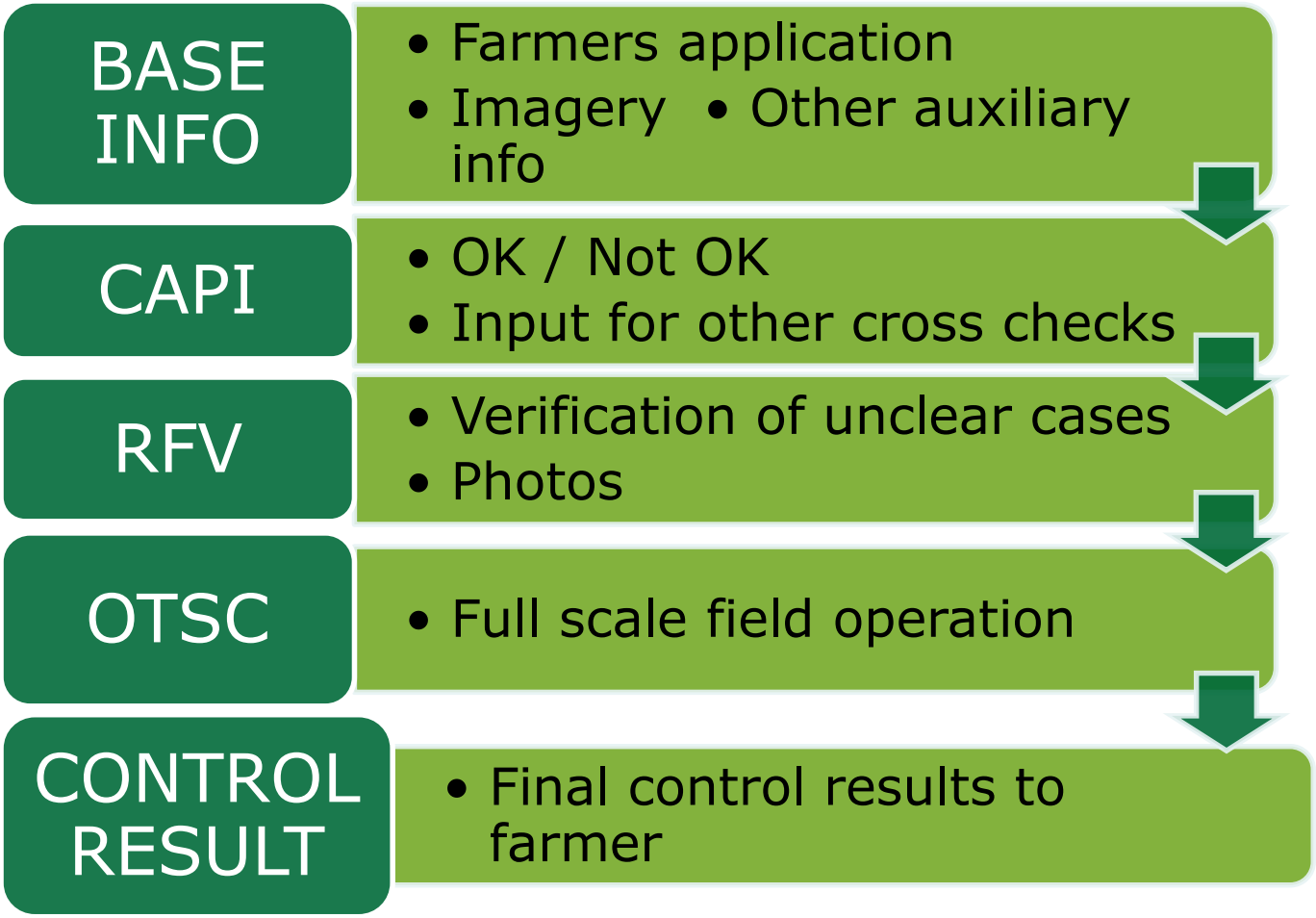
- Farmers block
- 2.3 M hectares

Aerial orthoimagery (CIR)

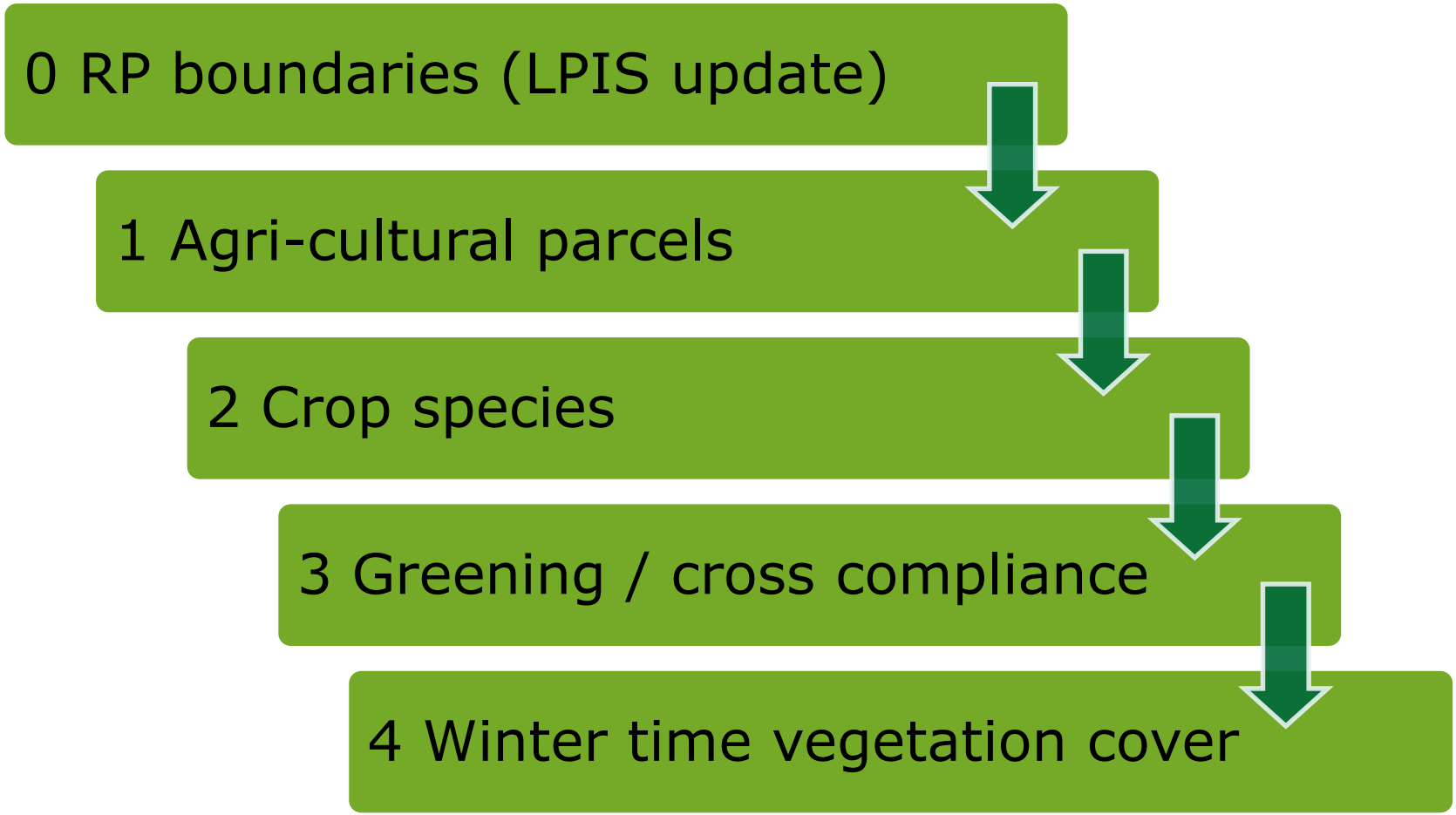
- 0.5 m pixel size
- 60 000 images



CWRS – Proposed process I



CWRS – CAPI

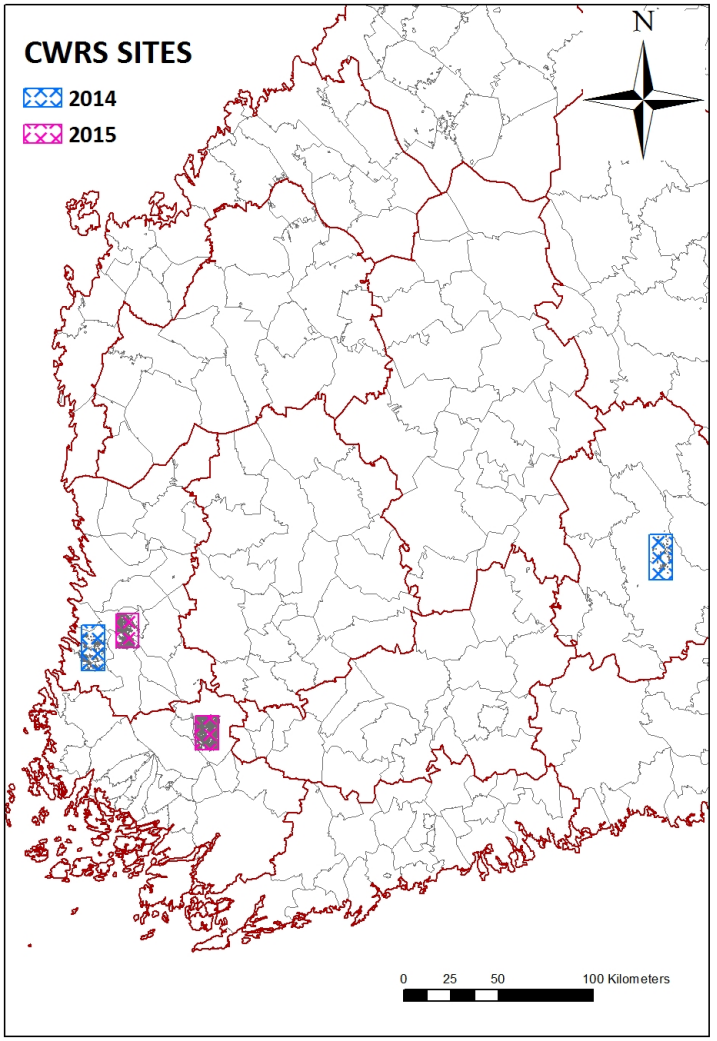

0 RP boundaries (LPIS update)
1 Agri-cultural parcels
2 Crop species
3 Greening / cross compliance
4 Winter time vegetation cover

Pilot projects

2013
- One site
- 20 farms

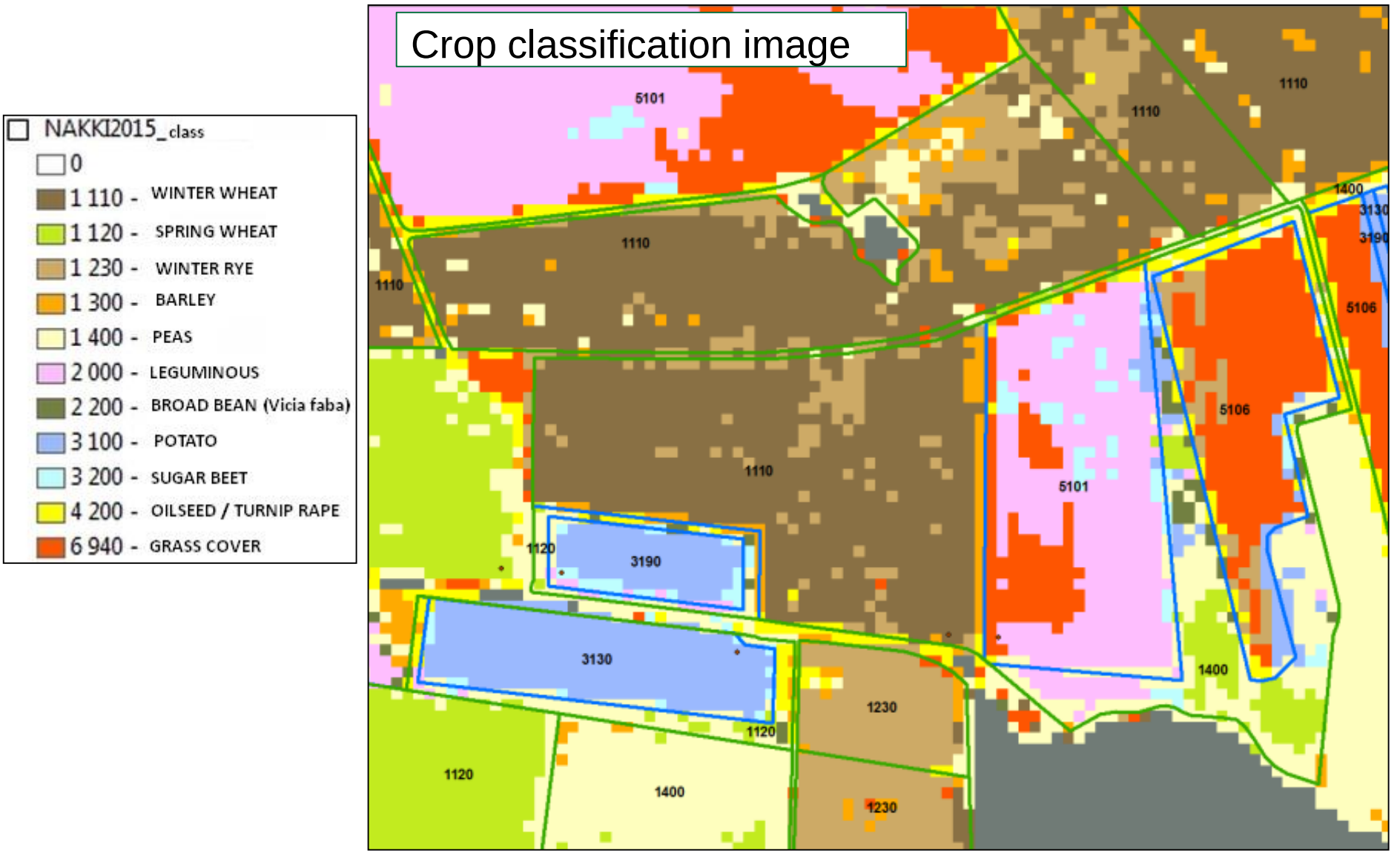
2014
- Two sites (12x24 km)
- 100 farms (50 + 50)

2015
- Two sites (12x24 km)
- 100 farms (40 + 60)



CwRS – imagery I

CwRS – imagery II



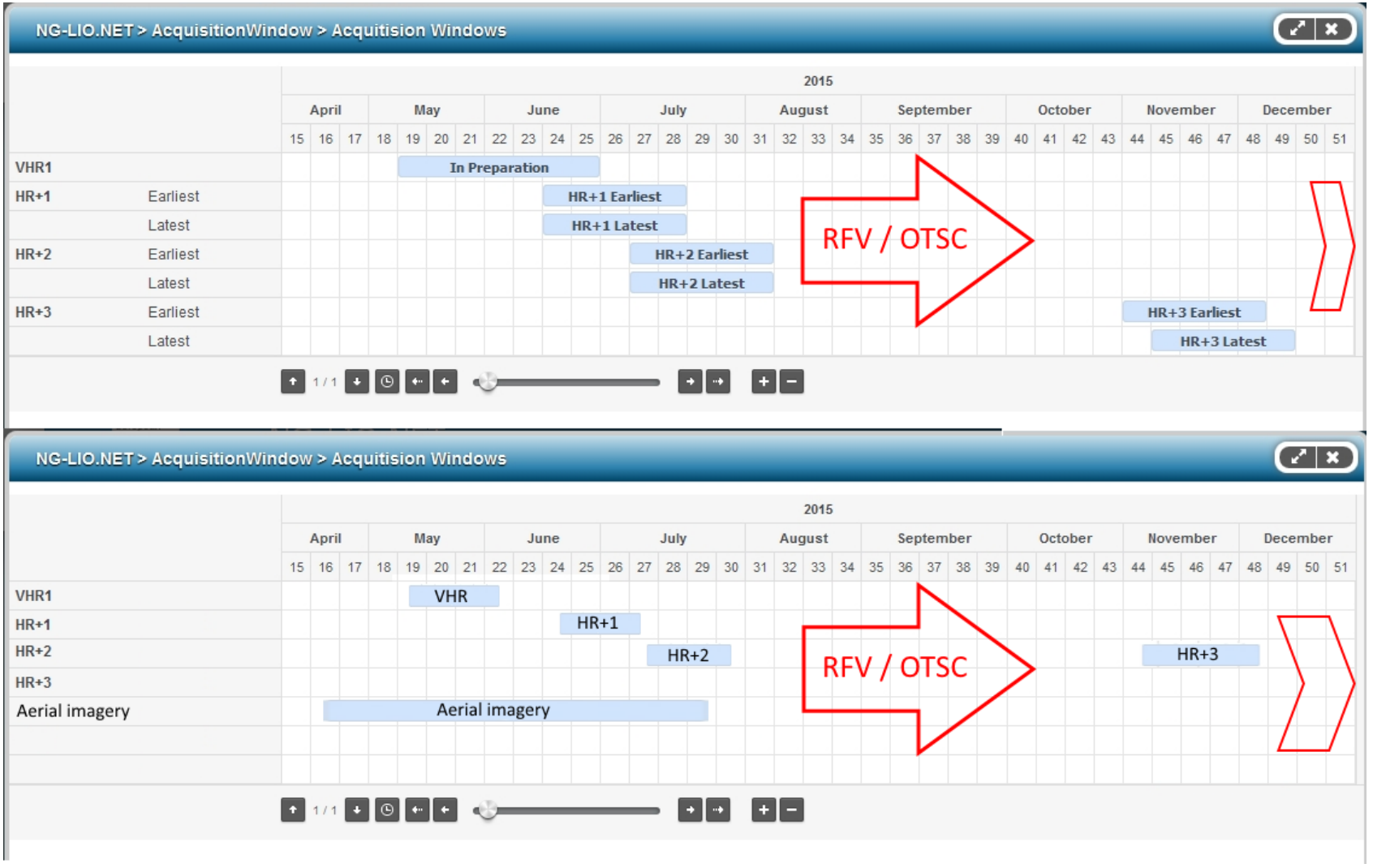
Success

IMAGERY	• Basic processing • Crop classification image (+/-)
AGRICULTURAL PARCEL	• Delineation • Crop classification
TIME & QUALITY	• Controller time saved • Centralised work
FARMER	• Less time required from the farmer

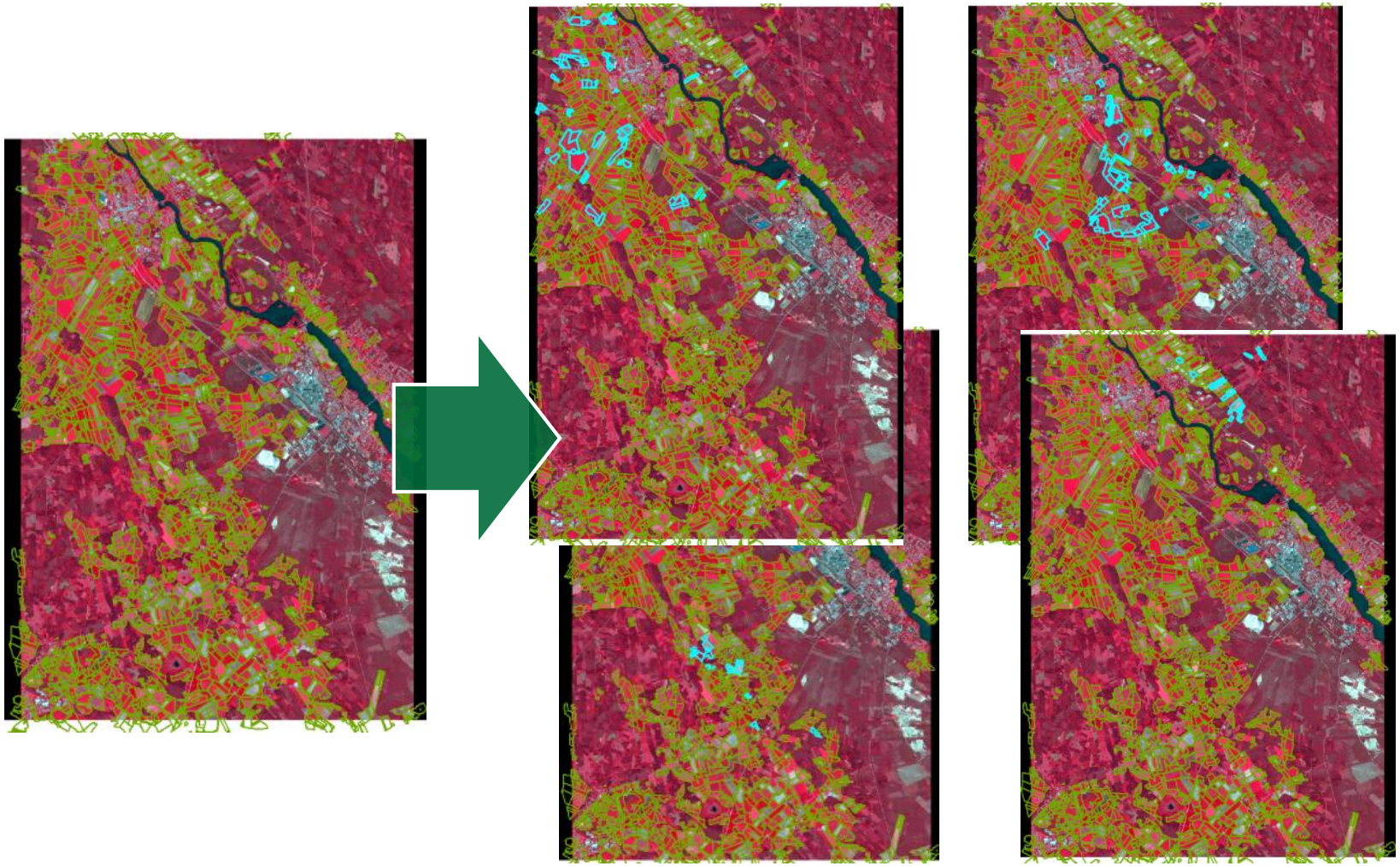
Challenges

IMAGERY	• Acquisition windows • Processing
FEATURES	• Interpretation of complex or combined features
APPLICANTS	• Farm structure • Application data quality
PROCESS	• Timetable

Image acquisition



CWRS – Farm structure



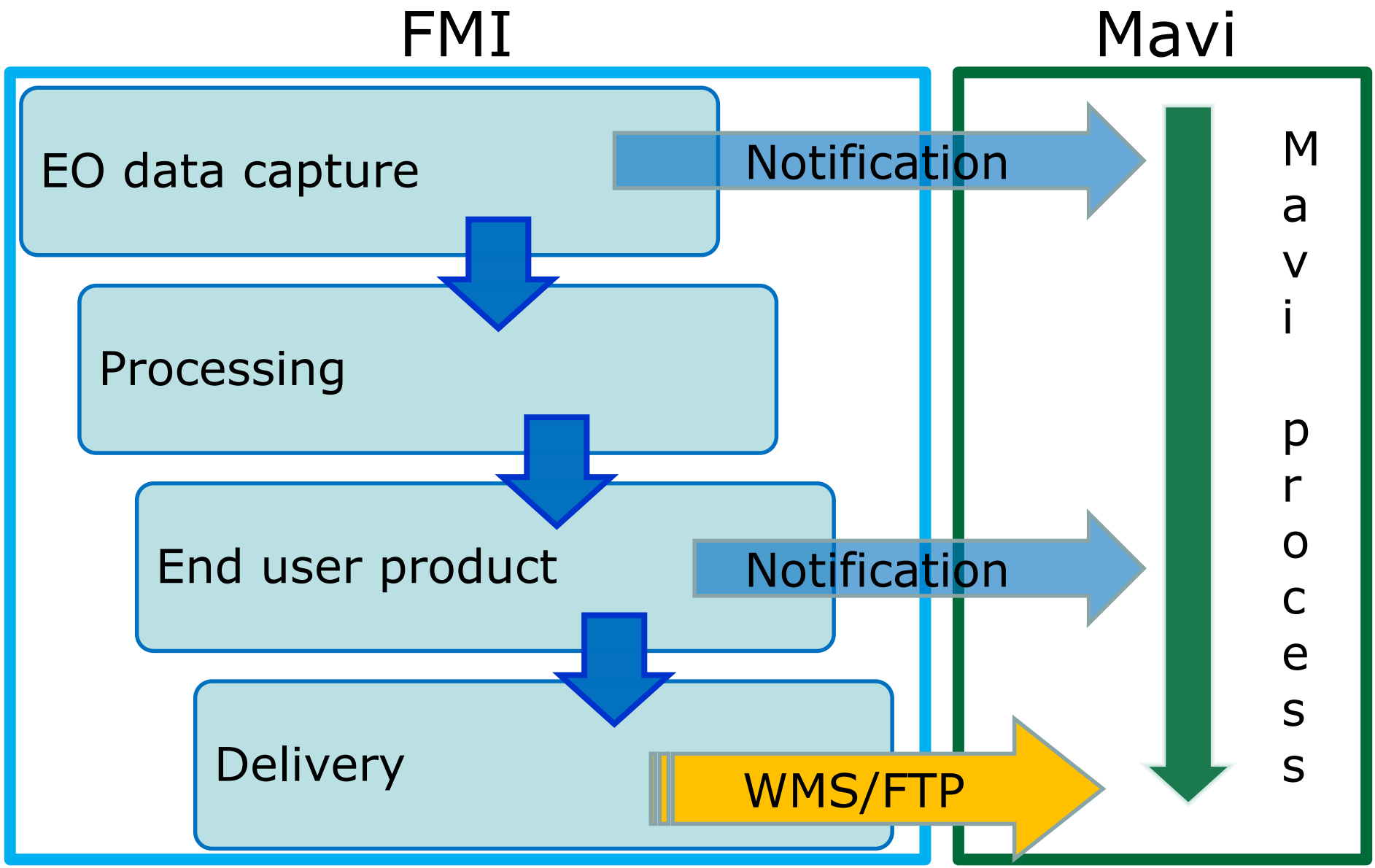
What have we learnt?

- Imagery is key – in all aspects
- Timetable is crucial – in all stages
- Focus – the features are there
- e-Controls – 100 %
- Process, process, process

What do we need?

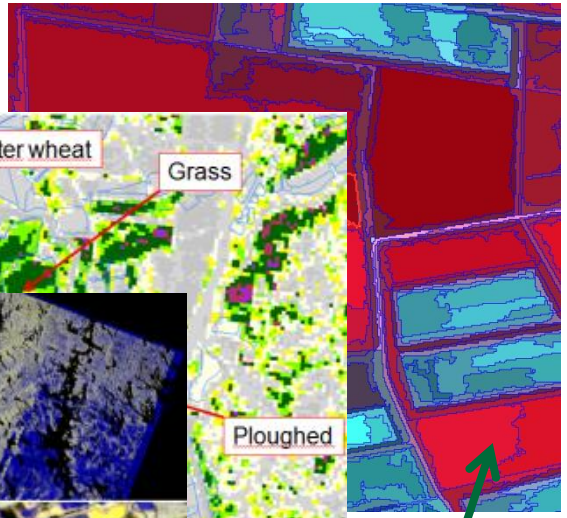
IMAGERY	• Multiple /flow of ready-to-use products • Quality
TIMETABLE	• Quick & reliable delivery
PROCESS	• Data transition / migration • e-Process

The ideal data delivery case…?

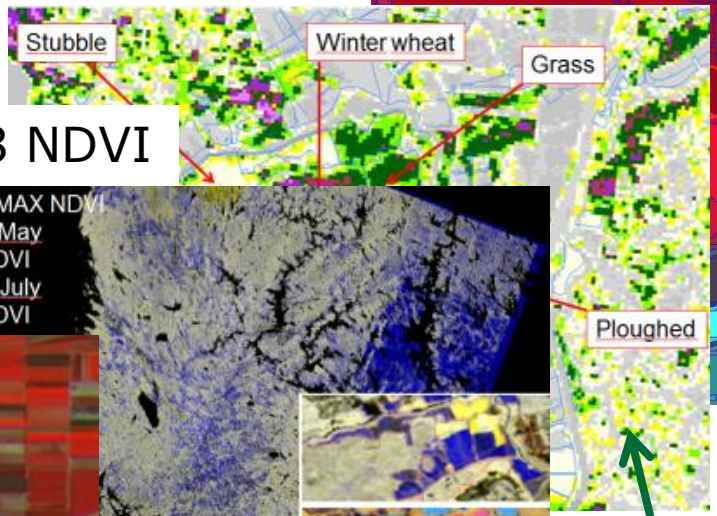


What´s next…?

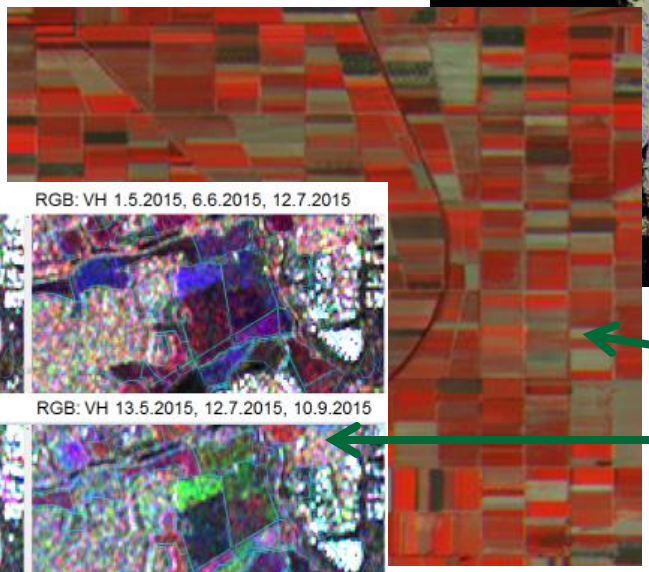
Segmentation



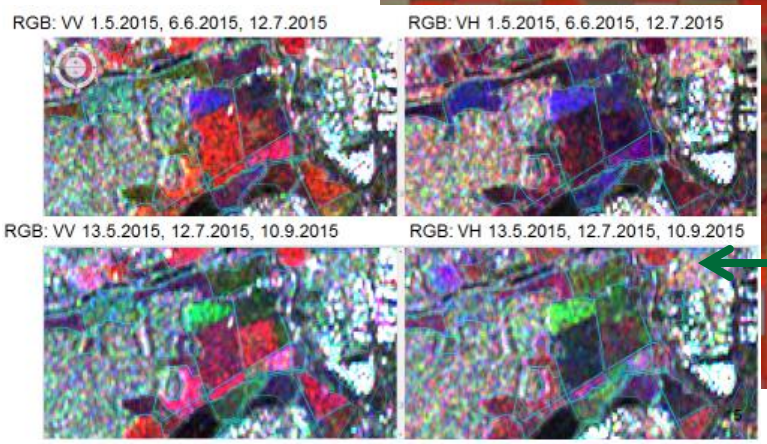
LS8 NDVI



Sentinel-2



Sentinel-1



ALL TOGETHER ?

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Thank You!

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