



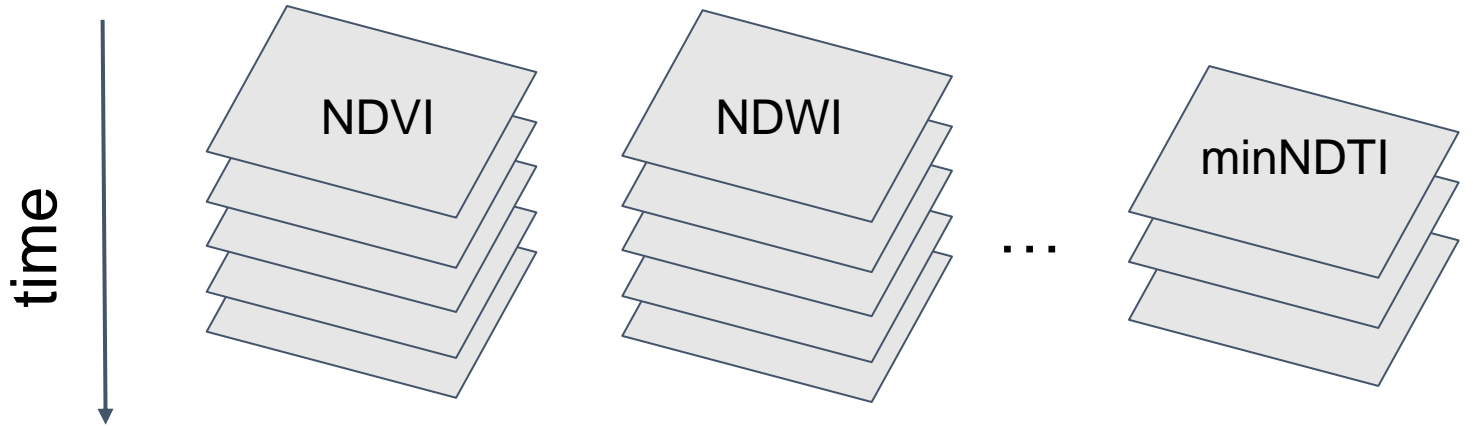
## Satellite-derived pan-European Soil Health Data Cube at 30m for 2000-2022

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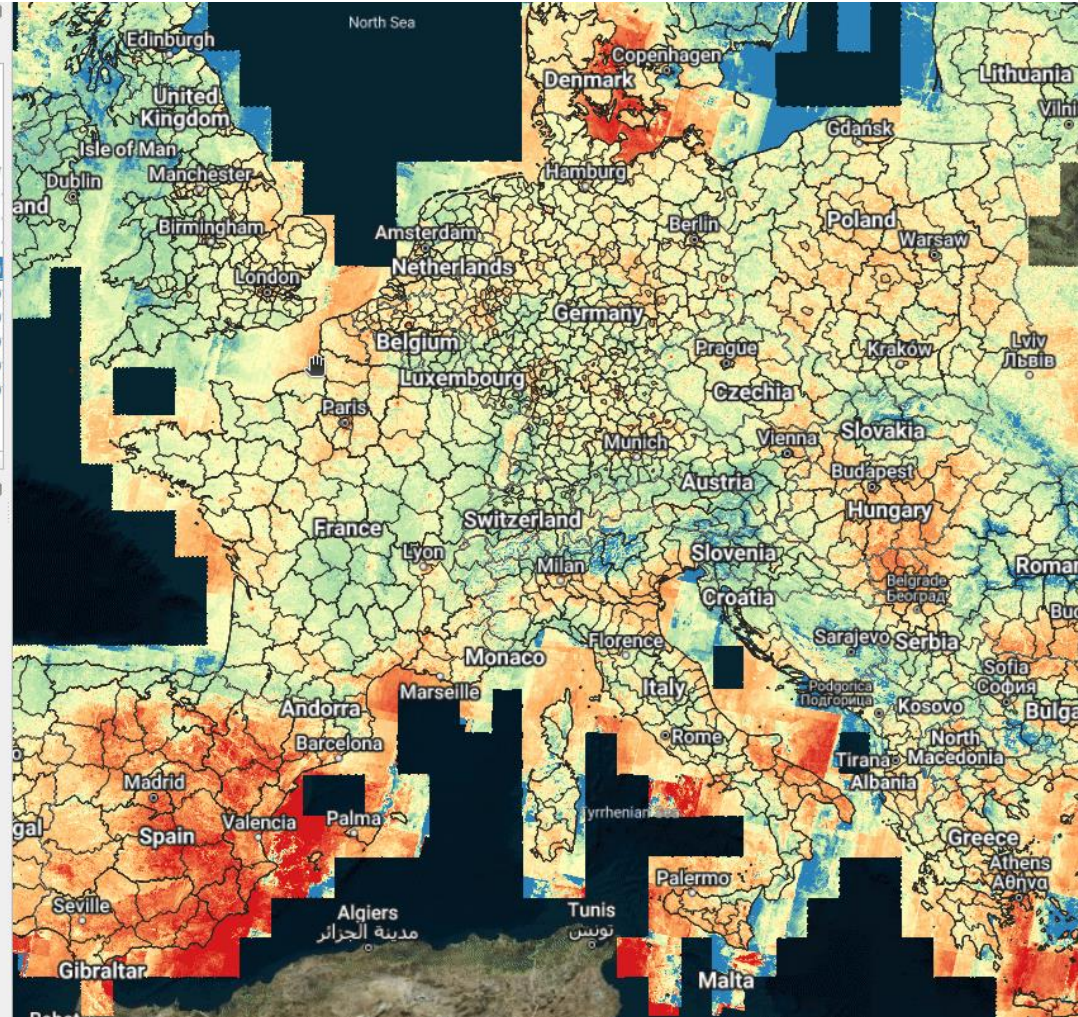
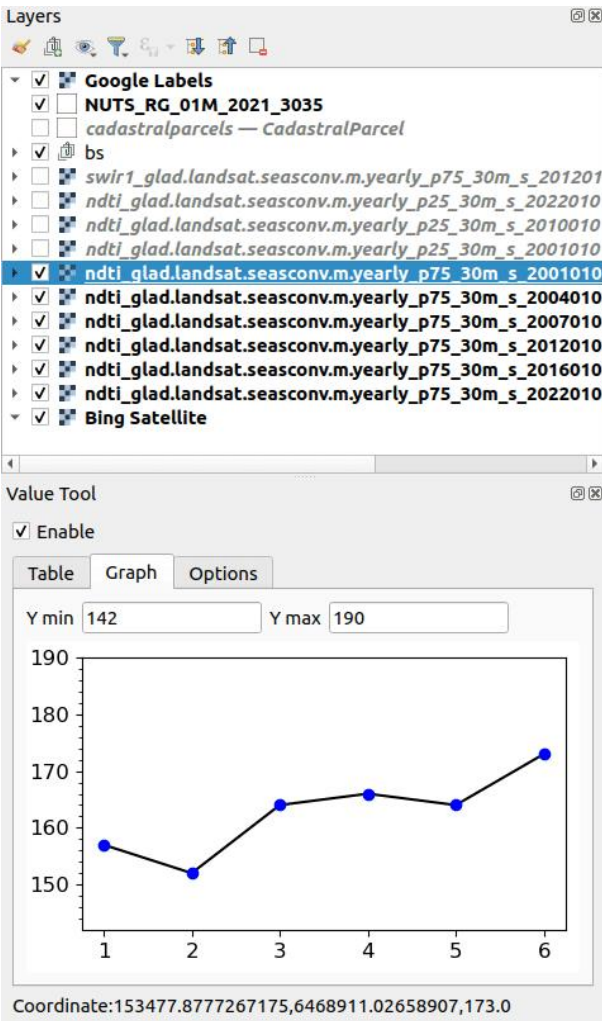
## ESA Symposium on Earth Observation for Soil Protection and Restoration

# What is it?



- Stacks of spectral indices map layers
- Analysis-Ready Cloud-Optimized

# What are the features?

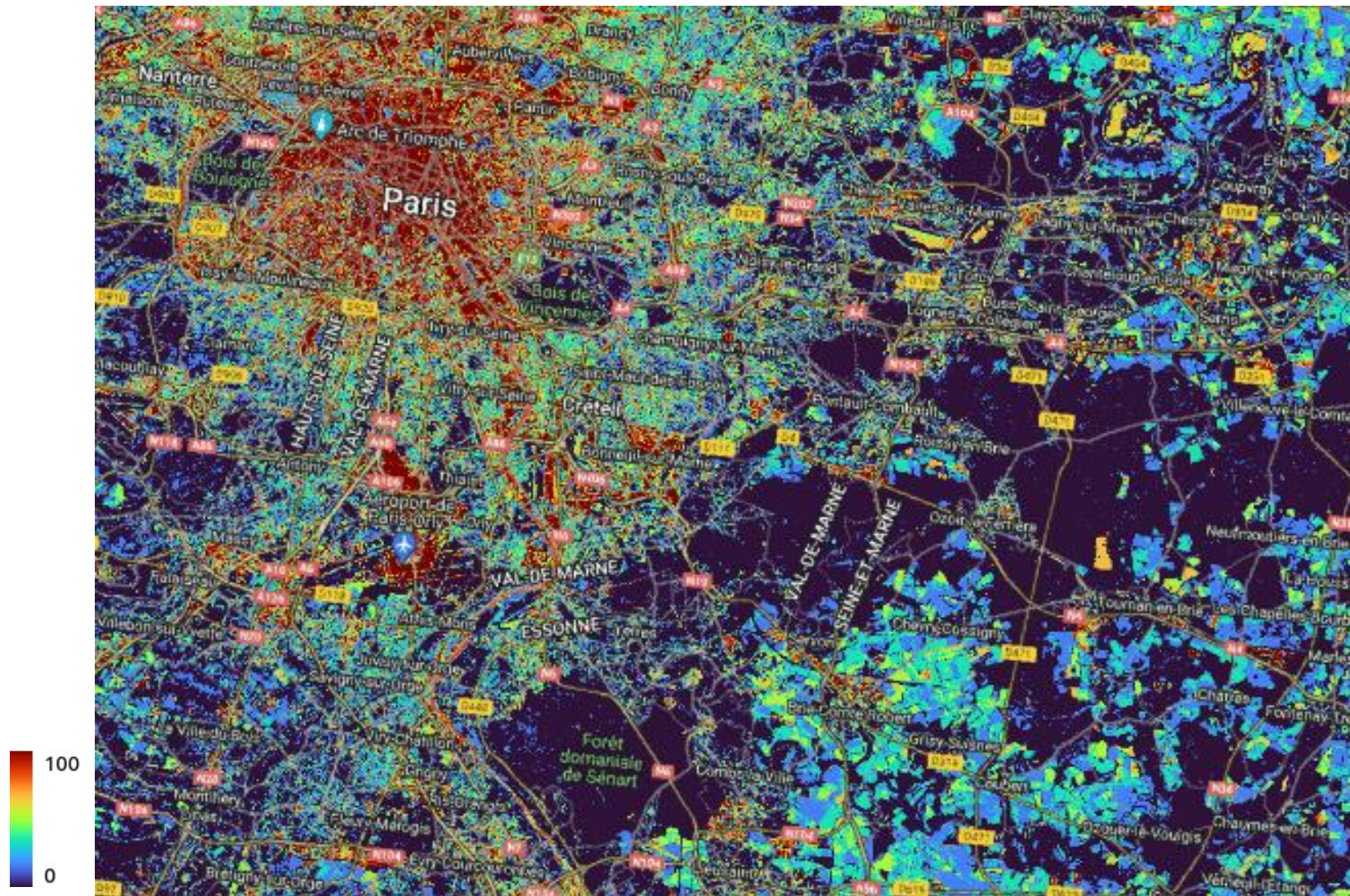


- Pan-Europe
- 30m spatial resolution
- 2000-2022
- Multiple temporal resolution
  - Bimonthly
  - Annual aggregation
  - Long term trend
- Multi-dimension: vegetation, crop, soil exposure and tillage

# What are the applications?

## BSF - Bare Soil Fraction

Identify “bare soil area”

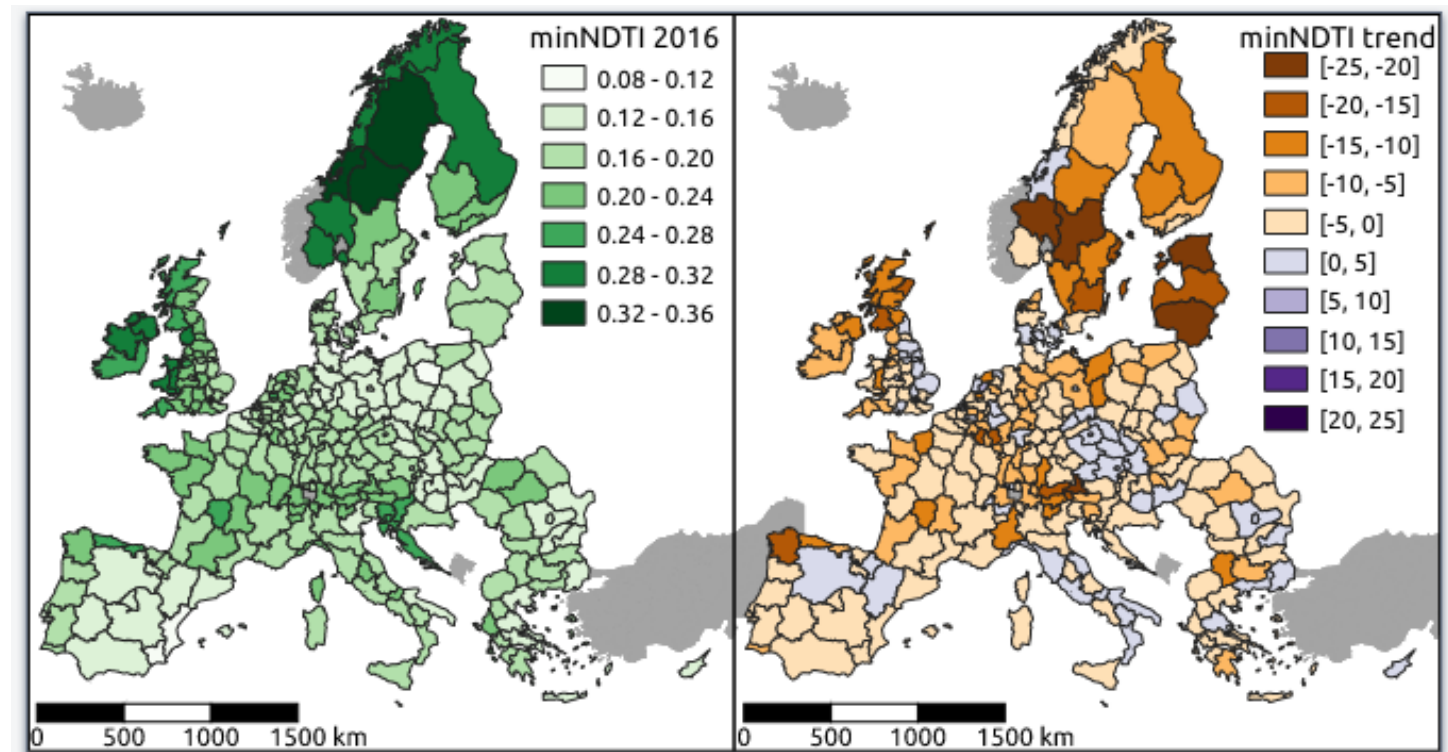


# What are the applications?

## minNDTI

-  
**minimum Normalized  
Difference Tillage Index**

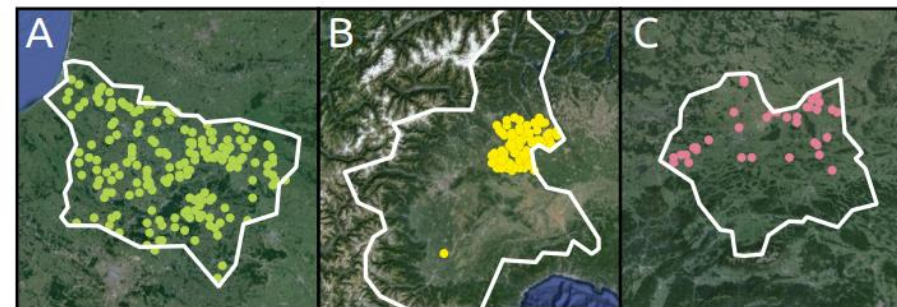
Estimate crop residue cover  
(CRC), detect tillage  
practices



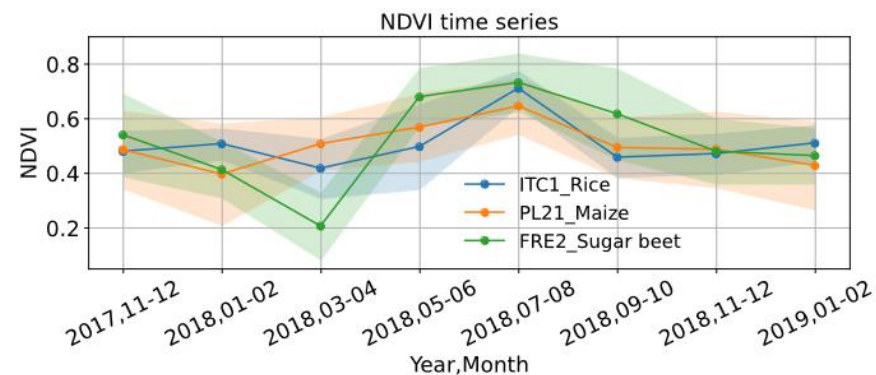
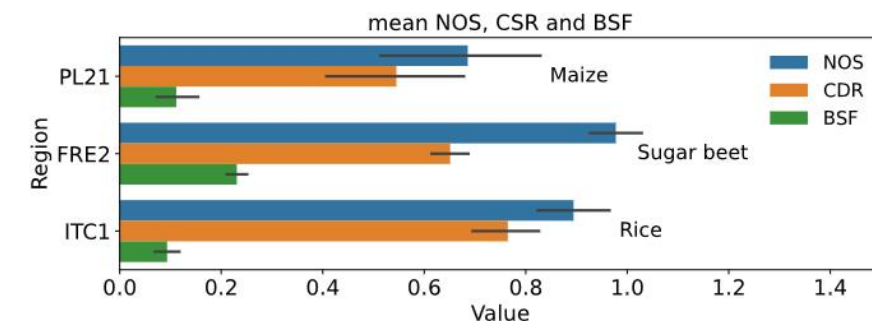
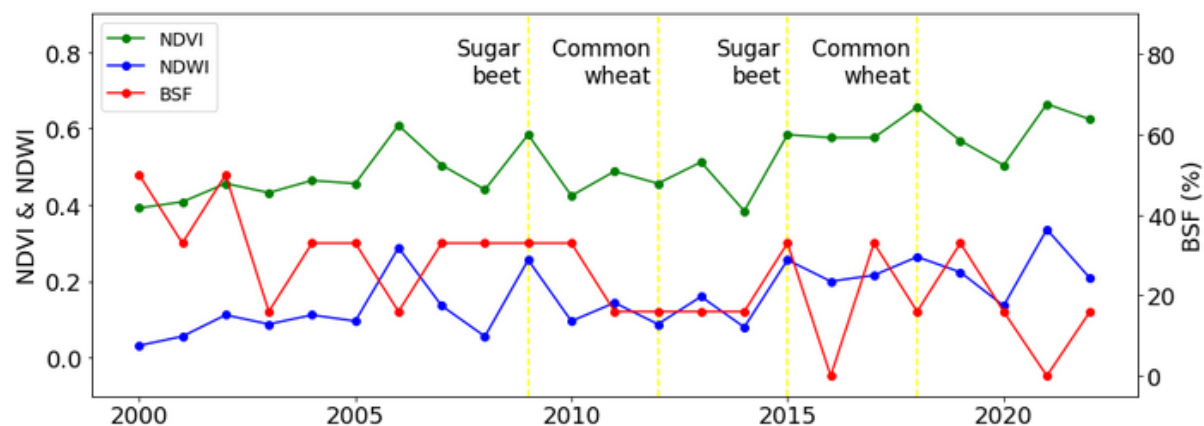
# What are the applications?

**NOS - Number of Seasons**  
**CDR - Crop Duration Ratio**

Differentiate crop types, identify crop rotation systems



● FRE2-Sugar beet ● ITC1-Rice ● PL21-Maize





Take home message!

Data accessible at: [10.5281/zenodo.10776891](https://doi.org/10.5281/zenodo.10776891)

Thank you for your attention!