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
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

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Take home message!


Thank you for your attention!