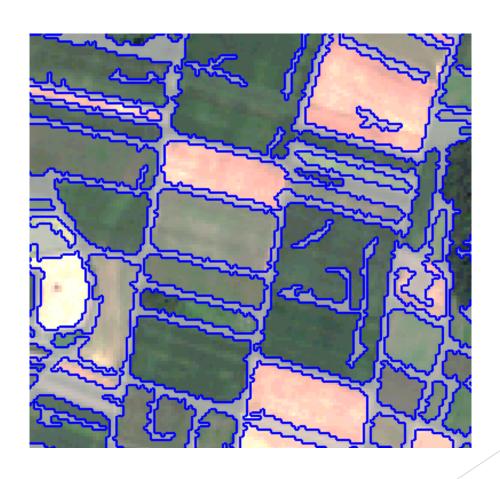
Field boundary delineation

A knowledge-based, transferable approach for field demarcation based on Sentinel-2





Idea & Aim

- semi-automated, supervised delineation based on a few training samples
- transparent, knowledge-based approach
- high degree of transferability independent of AoI & structure of fields
- ready-to-use tool

References



Data & Software

- S2 scenes during a vegetation period
- python script for retrieving S2 L3 sample data for Germany
- eCognition Developer & Architect



Workflow

- I. Field delineation
- canny-edge filtering & averaging
- watershed segmentation with optimal parametrisation based on user selected samples
- noise removal & merging/resizing of smaller objects
- II. Field extraction & masking of non-agricultural land
- knowledge-based temporal NDVI thresholding
- sample-based classification approach







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Automating field boundary delineation with multi-temporal Sentinel-2 imagery



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