

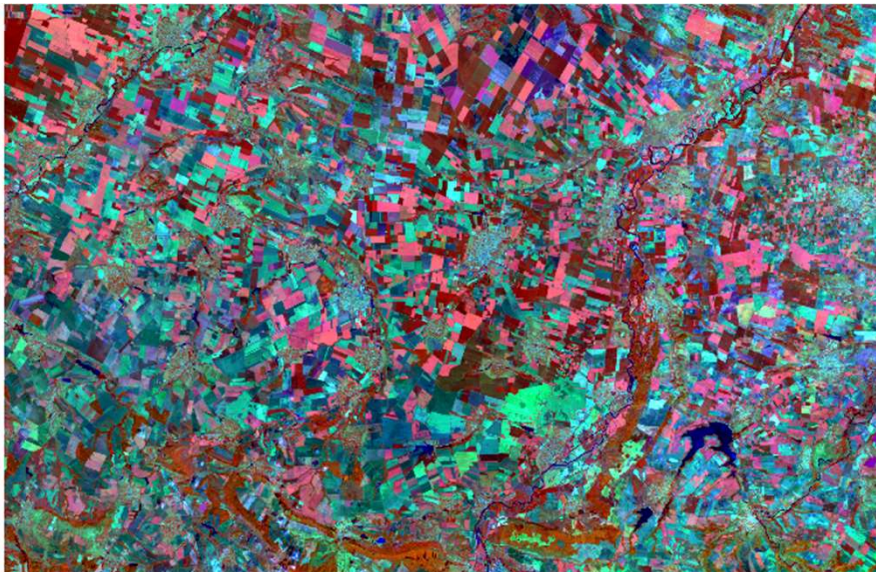
Generating Sentinel-2 Crop Maps on Test Areas in Bulgaria using Google Earth Engine

Filchev, L.* , P. Dimitrov, and G. Jelev (SRTI-BAS)

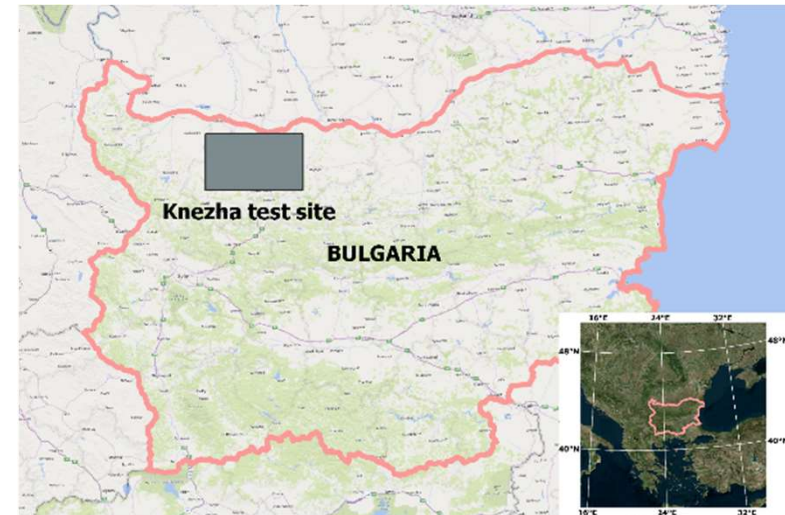
Study area and methods

Knezha test site (50 × 80 km), Bulgaria

Reference data - IACS 2018 + image interpretation



Composit image June-July 2018 RGB=B08;B11;B03



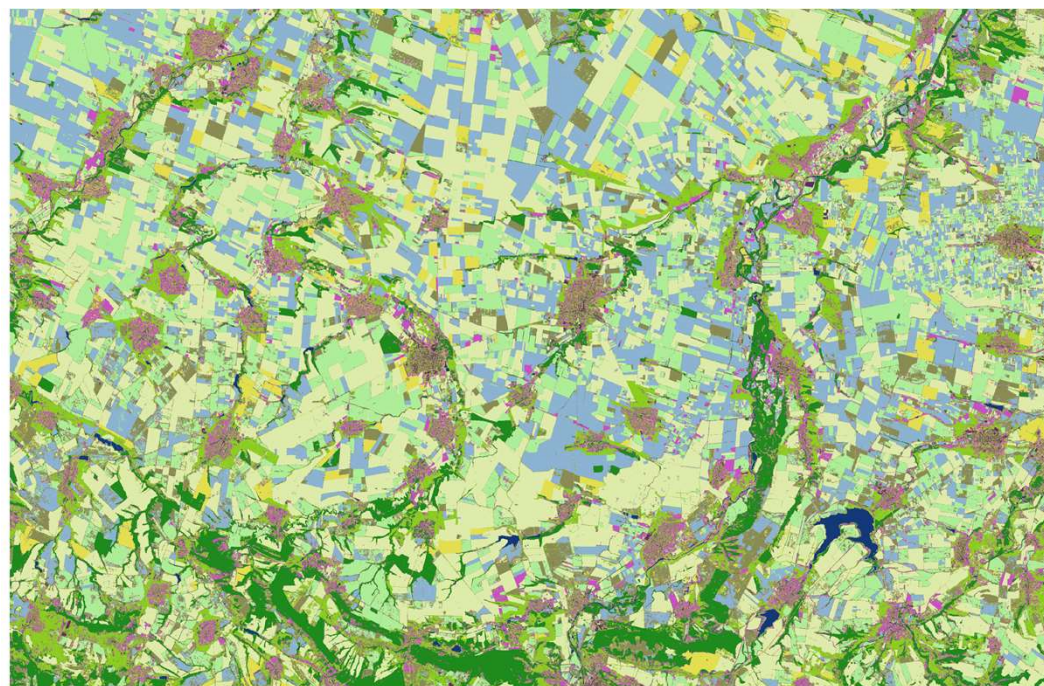
Sentinel-2 preprocessing in GEE:

- Filter by cloud coverage (less than 10%)
- Cloud masking
- Temporal compositing using median rule
- Three composite periods: October-November 2017, April-May 2018, and June-July 2018
- Bands B02, B03, B04, B05, B06, B07, B08, B11, B12

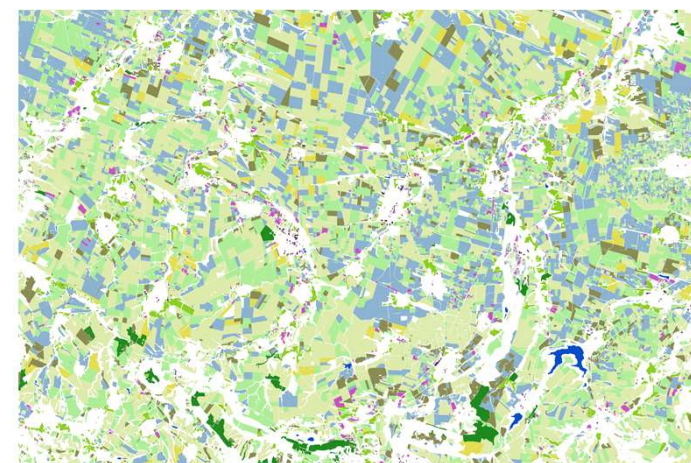
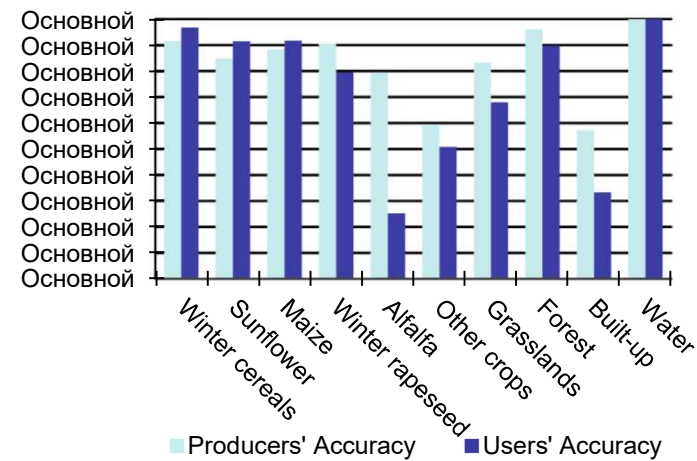
Method:

Random forest classifier in GEE

Results Overall accuracy **86.6%**, Kappa **0.82**



Crop type map of 2018



Reference dataset (IACS)