Combining optical remote sensing, agricultural statistics and field observations for culture recognition over a peri-urban region

Field observations

Landsat images

National Land Parcel Identification System (LPIS)

For some LPIS fields, NDVI profiles are not respecting the typical profiles → no decision. Hypothesis: several crops co-existing, need for spatial clustering within field.

Example of result: distinguishing the spring barley from the winter barley, within the stands declared as barley.

Perspective: sub-stand crop delineation

Long term objective: input to crop models for soil organic carbon modelling

Framework: map soil organic carbon content, using remote sensing, ground and laboratory measurements, modelling. Project SURFAC_EGC_SENTINEL_PLEIADES_CO, financed by CNES (French National Space Agency).

Objectives of this work: use seasonal variations in NDVI to complement information from the national Land Parcel Identification System.

