

Discoverability of Open Agriculture Data Workshop on Geodata Discoverability

Maja Schneider maja.schneider@tum.de

28th of April 2022

Chair of Remote Sensing Technology TUM School of Engineering and Design Technical University of Munich



Agenda

- 1. Open Agriculture Data
- 2. Availability andDiscoverability ofCrop Data
- 3. EuroCrops







Farmers

- grow various crops
- have several crop fields
- take note of their cultivations

• rely on **subsidies**



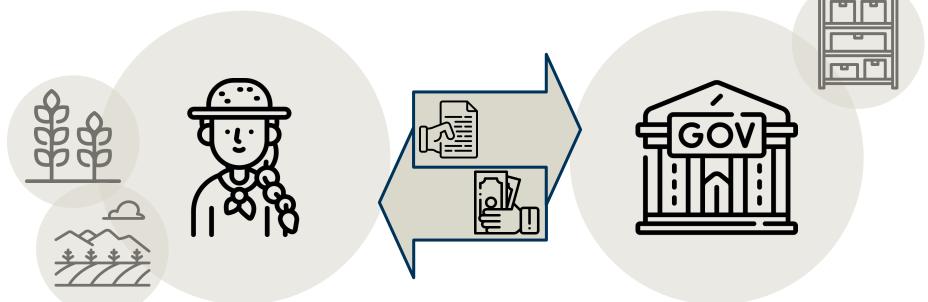
European Union

- has interest in certain crops being cultivated
- keeps track of agricultural activity

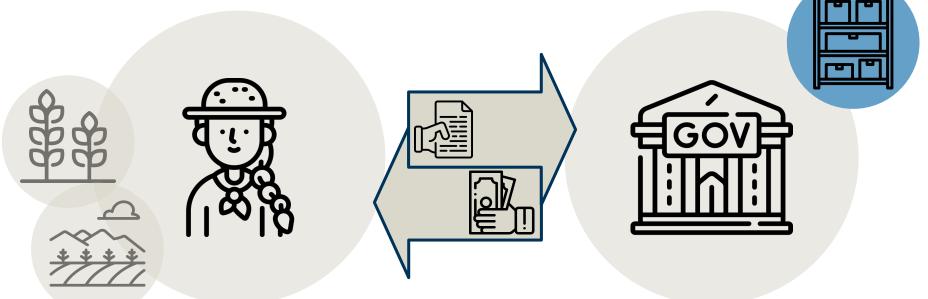
collects data from the farmers



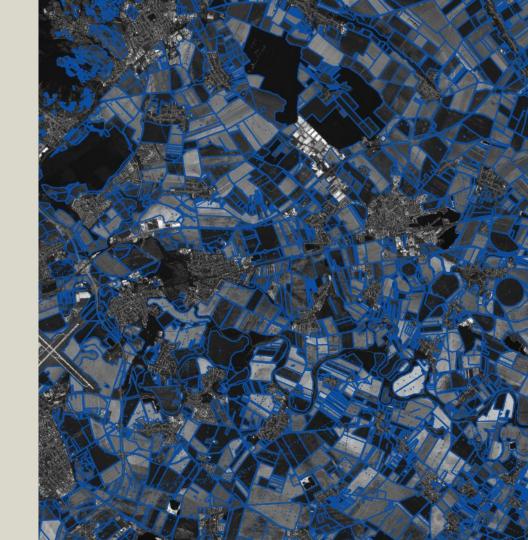








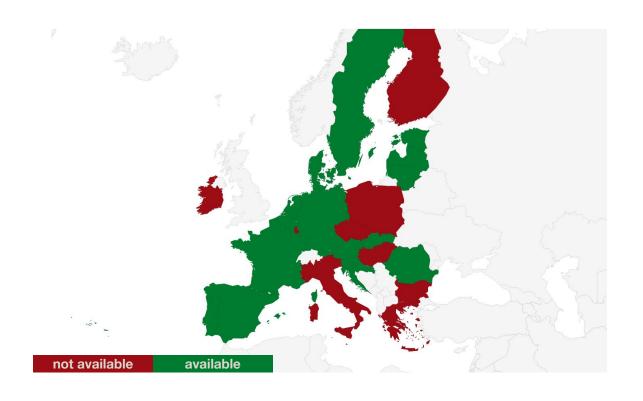
- Farmers' self-declarations reliably collected in the course of EU subsidy control
- Shapefiles (or similar) including the geo-referenced crop field polygon and at least one crop ("label") growing there during a given year





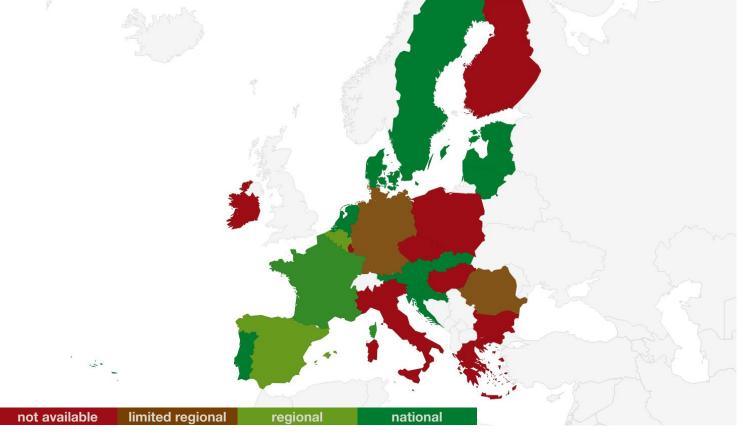
Availability and Discoverability of Crop Data





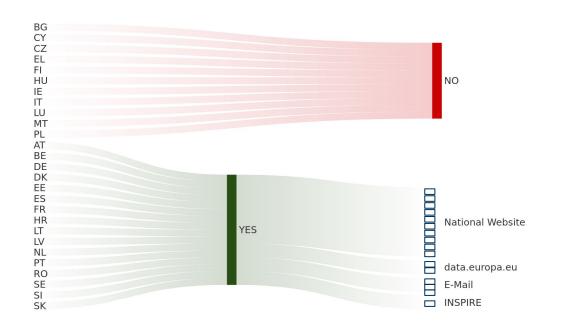
Public available crop data in the European Union.





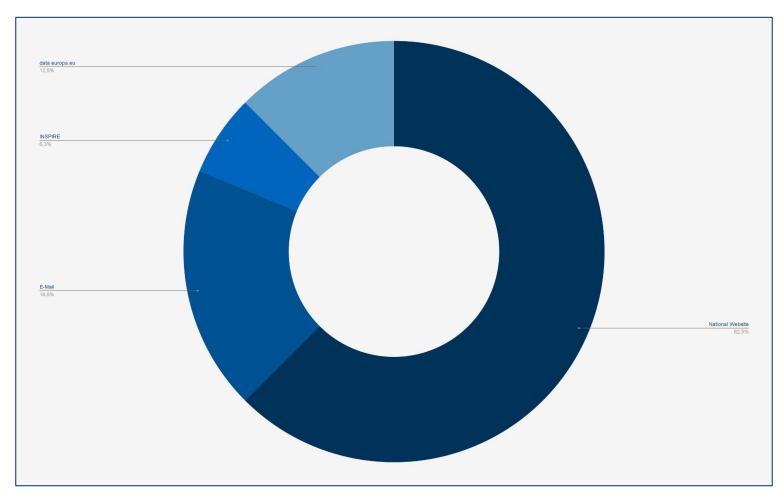
Data accessibility on national or regional levels.



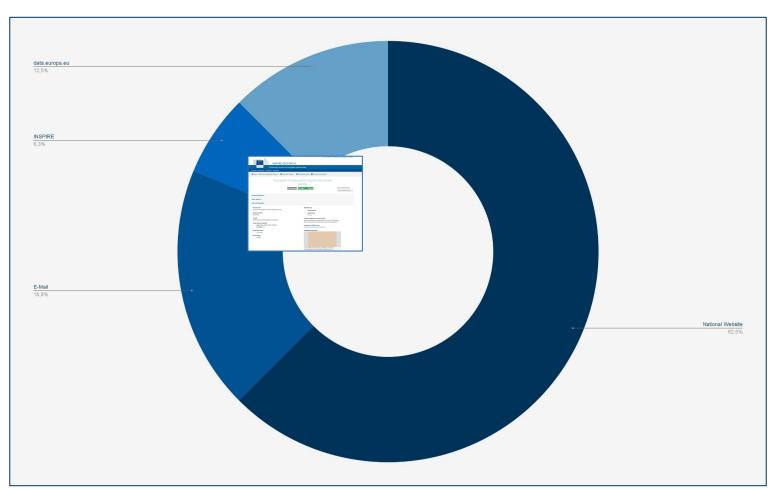


Access means to public available crop data in the European Union.



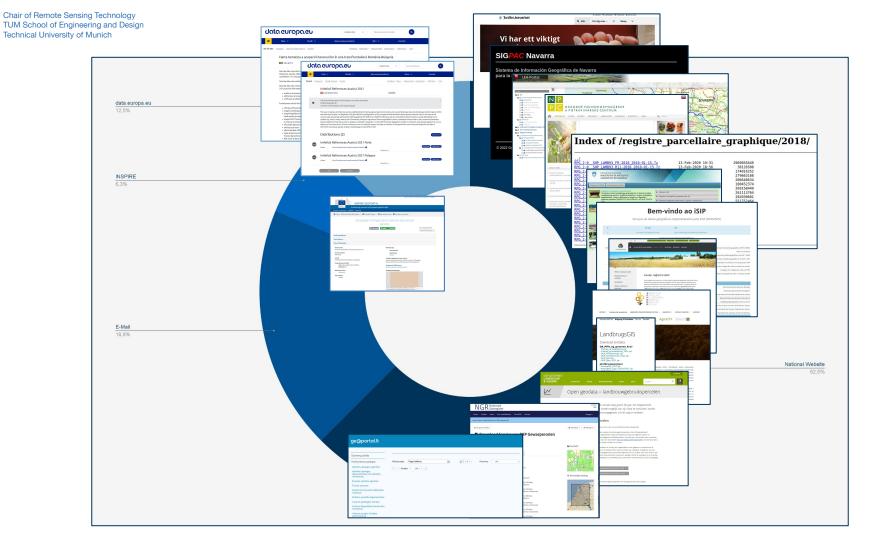






Chair of Remote Sensing Technology TUM School of Engineering and Design data.europa.eu Technical University of Munich data.europa.eu 0 InVeKoS References Austria 2021 data.europa.eu Distributions (2) ● InVeKoS References Austria 2021 Point (married) (stations) ● InVeKoS References Austria 2021 Polygon A44 M450 INSPIRE E-Mail National Website









Cool! - Data!

...or?



Excerpt from Lithuanian Data 2021

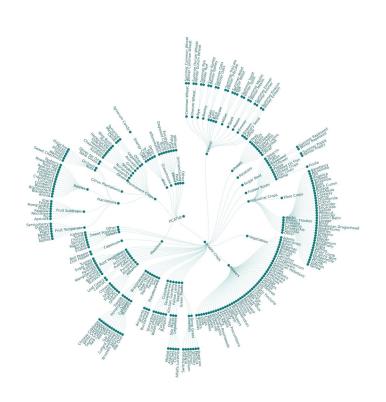
KZS_NR	DKL_PLOTAS	GRUPE	NMA_ID	Shape_Leng	Shape_Area
220411-0109	1.94	Ganyklos-pievos virð 5m.	2004877	680.729.432.590.519	194.348.746.773.815
219412-0502	0.5	Grikiai	2004877	282.444.256.686.979	500.052.770.288.036
127372-9074	02.09	Ankõtiniai javai	2001917	741.404.924.189.579	20.924.288.068.915
127372-2411	01.03	Darþovës	2001917	495.818.636.755.237	10374.5
077520-0864	8.48	Ganyklos-pievos virð 5m.	1978317	161.989.021.303.889	848.343.022.394.595
048513-9660	6.28	Ganyklos-pievos virð 5m.	1978317	112.955.373.226.882	628.495.009.120.411
229360-7056	0.93	Aviþos	2006693	478.759.049.745.889	935.027.513.417.375

???



Hierarchical Crop and Agriculture Taxonomy (HCAT)

- Based on
 - EU regulations
 - EAGLE matrix (European Environment Agency)
- 6-level hierarchy
- Any granularity can be reflected and stored





Harmonised Lithuanian Data 2021

original_name	translated_name	HCAT2_Code	HCAT2_name
Ganyklos-pievos virð 5m.	Pastures-meadows over 5m.	3302000000	pasture_meadow_grassland_grass
Þieminiai javai	Winter cereals	3301011501	winter_unspecified_cereals
Ganyklos-pievos iki 5m.	Pastures-meadows up to 5m.	3302000000	pasture_meadow_grassland_grass
Vasariniai javai	Spring cereals	3301011502	spring_unspecified_cereals
Kita ariama þemë	Other arable land	3301990000	other_arable_land_crops
Rapsai	Rape	3301060400	rapeseed_rape



EuroCrops







EuroCrops

- Collection and harmonisation including
 16 countries
- For now only **one year** per country
- Recent publication of vector data over
 GitHub
- Already 50GB of reference data





Time for Questions!

WEB: www.eurocrops.tum.de

https://qithub.com/maja601/EuroCrops

MAIL: <u>maja.schneider@tum.de</u>

TUM: www.asg.ed.tum.de/lmf/schneider/

LinkedIn: www.linkedin.com/in/maja-schneider/

Twitter: twitter.com/Maja4E0