SoilTrends-project

Comparison of Lucas and national soil monitoring

Objectives:
2. To explore the temporal variability in the measurements
National


Number of sampling plots 620

Size of the sampling plot 10m*10m

>10 subsamples

Samples taken with soil corer

Sampling depth 15 cm

Lucas

Sampling in **2009**, 2015 and **2018** (2022)

Number of sampling plots 134 (cropland)

Diameter of sampling plot 4 m

5 subsamples

Samples taken with spade

Sampling depth 20 cm
Why there is more scatter in Lucas than in national data?

- Location accuracy
- Sampling protocol
- Analysis
- Intra annual variation
Lucas has more scatter in the data + Lower number of sampling plots

->Wider confidence intervals
Mineral soils

OC (g kg\(^{-1}\))

2010 2015 2020

pH

2010 2015 2020

P (mg kg\(^{-1}\))

2010 2015 2020

K (mg kg\(^{-1}\))

2010 2015 2020

Organic soils

OC (g kg\(^{-1}\))

2010 2015 2020

pH

2010 2015 2020

P (mg kg\(^{-1}\))

2010 2015 2020

K (mg kg\(^{-1}\))

2010 2015 2020

Legend:
- National
- LUCAS