

CLOUD-BASED SAMPLING DESIGN

Free accessible geospatial data

Dynamic web app for clustering and stratification

Open source stratification and sampling design

Using a priori knowledge of regional drivers of soil carbon, we can use freely available geospatial data to stratify study sites into clusters of similar variation. This allows us to increase our sampling efficiency, decrease sampling effort, and increase inventory accuracy.

IN-FIELD SOIL SPECTRAL READINGS

1. Extract Sample
2. Pin
3. Dry
4. Scan

Simple, efficient field work

With an integrated mobile application, data collection with Quick Carbon is seamless, taking less than 5 minutes to extract cores, dry samples, collect ancillary site data and scan soil for percent carbon.

5. Lab -- <20% of samples sent to lab in year 1. This is reduced to near 0% in subsequent visits to sites within a given region.

CLOUD-BASED MACHINE LEARNING

In-field Spectral Data

+

Geospatial Covariates

Accurate, precise soil carbon values

High resolution maps of soil carbon

Mission --- Quick Carbon's goal is to create an accessible measurement system that empowers individuals to generate reliable soil carbon data for ecological understanding, decision making, and markets.

Applications --- Monitoring, reporting, verification (MRV) for carbon markets | Carbon inventory | Farm/Ranch Planning