

## Innovative techniques to monitor SOC stocks and soil degradation/restoration changes in the EU, using spectral systems/ NIRS/ MIRS and other proximal sensing tools (DATA1)

### Conveners

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### Programme outline (tentative)

Introduction of topic and perspectives from WP6	10'
<b>Short presentations</b> (5-10' each depending on number of presenters)	50'
Discussion	25'
Conclusion and wrapping up	5'

### Description

Traditional soil mapping and monitoring methods are expensive and time consuming. Much faster and high throughput methodologies of soil characterization are needed to meet the needs of soil policies and sustainable agriculture, such as assessing changes and spatial variability in soil condition, SOC stocks and erosion rates under agricultural management or assessing precise soil nutrient status and fertilisation needs. The use of soil spectroscopy has increased during the last 10 years and various proximal sensing techniques offer promising technologies to speed up and reduce the costs of the soil surveying activity.

In the session we aim to discuss current understanding, available tools and knowledge gaps around the possibilities of using proximal sensors for improved soil mapping and monitoring.

### Instructions for participants

We welcome short contributions from partners interested in working on the DATA1 topic. Participants are invited to report on past, ongoing and planned studies related to the session topic. Suggestions for research projects are especially welcomed. Please send one-paragraph abstracts.