

BLOCK A (9:00-10:45)

Remote and proxy-sensing for the mapping of soil surface properties: how accurate or uncertain they are.

Involved projects: STEROPES, ProbeField, Sensres

Conveners: Emmanuelle Vaudour (INRAE), Johanna Wetterlind (SLU), Luboš Borůvka (CZU)

The session will consider communications dealing with i) how accurate spectral approaches can be from varied observational scales: lab, field, airborne and/or spaceborne sensors, be they multispectral or hyperspectral, point or imaging measurements ; ii) to what extent a sensed soil property can be either mapped, or timely monitored or even spatially timely monitored. Special consideration will be given to soil organic carbon and stocks and in how degree to the disturbing factors (atmospheric conditions, soil moisture, texture...) intervene in such approach for diverse agroclimatic zones and agroecosystems. The session raises the accuracy that can be reached spectrally according to diverse ancillary factors, algorithms, spatial scales and time scales and the various sources of uncertainty that spectral approaches accordingly underlie. It will also consider the use of soil spectral libraries in combination or not with remotely sensed images.