wageningen soil conference

MASTERCLASS

M31: Accessing WoSIS soil data using the GraphQL API

Name main contact: Luis Calisto

Institution: ISRIC - World Soil Information

Names of Co-organisers: Niels Batjes; Luis de Sousa

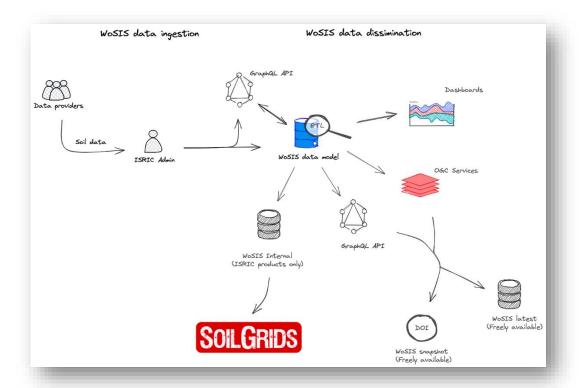
Short description:

The goal of this workshop is to demonstrate the exploration, use and integration of WoSIS through its GraphQL API. WoSIS (World Soil Information Service) is a large PostgreSQL database developed and maintained by ISRIC (WDC-Soils) that draws on contributions by a wide range of organisations. It provides a growing collection of quality-assessed and standardised soil profile data for the world that can be used for a wide variety of applications (see https://www.isric.org/explore/wosis/faq-wosis). We will:

- Explain what WoSIS is and how standardised data are distributed;
- Explore WoSIS via the GraphQL API;
- Use the API to filter and retrieve WoSIS soil data;
- Integrate WoSIS data into a simple coding project (e.g., R or Python).

This workshop will be hosted in GitHub and is public access. Using guided steps, we will start by exploring the basics of WoSIS and GraphQL via a graphical interface. Then, we will move into a coding platform and create a simple project that uses soil data. From that point onwards we will slowly increase complexity and use WoSIS data in different scenarios.

The workshop requires no previous knowledge of WoSIS or GraphQL. However, it is advisable to have basic coding knowledge on the Python or R languages.



Theme: Mapping and evaluation of soil functions across scales

Keywords: WoSIS; Soil data; ISRIC; GraphQL

Type of masterclass: Tutorial

Maximum number of participants: 25



