



## SOIL AND PRECISION MANAGEMENT

In the field of precision farming, a major direction of agricultural innovation, we assist industrial actors by surveying and mapping the natural resources that underpin agriculture, including the use of GIS and remote sensing devices.



### SERVICES

- Soil science, soil genetics consulting
- Soil mapping supporting precision farming
- Development of monitoring systems supporting agricultural production and processing of data of monitoring systems
- Environmental impact assessment in the design of irrigation districts
- Development of water management frameworks and strategies for the implementation of sustainable irrigation development
- Development of agricultural GIS systems and files
- Digital terrain modelling procedures for the characterisation of surface and groundwater, as well as the distribution of moisture within plots and areas
- Farmer and user-specific soil and GIS education for farmers and advisory systems



### TOOLS

- ArcGIS
- CitiEngine
- ENVI
- ENVI SARscape module
- RTK GPS
- Meteorological stations
- 21 soil moisture meters (1 metre deep) and loggers
- Field equipment
- Conductivity, dielectric constant, oxygen diffusion and rH, tensiometer set
- Mechanical undisturbed soil sampler
- Drone technology with wide sensor set



### REFERENCES

- KITE Zrt. - Cooperation in the development of soil mapping and precision zone systems
- Further training of Accredited Consultants in the field of precision soil mapping, accredited by the Ministry of Agriculture
- INNOVATION - Innovative solutions for the sustainable use of groundwater resources
- GROW Observatory, H2020 project, development of a community-based soil moisture monitoring system