



Short Course organised by Fennoscandian Exploration and Mining Conference (FEM): Geophysics applied to targeting

Day 1: Special Session: Drone applications and data integration using self-organizing maps

Date and time: Monday 27, October 2025 at 11.30–18.00 Location: Hotel Hullu Poro, Levi For: FEM 2025 geophysics short course participants

Welcome to learn new about drone applications and data integration using self-organizing maps!

In this session, you will get familiar with building magnetic and electromagnetic models. In addition to a short introduction to theoretics about geophysics and mineral prospective modelling (MPM), you will learn through data integration **demonstrations** and **hands-on exercises** using a modelling software (to be downloaded on your personal computer beforehand – instructions will be sent to participants closer to the event).

You will walk out with:

- deepened understanding of the methods tools used for mineral prospective modelling and interpretation
- new skills on the modelling softwares
- information about drone applications and services for mining exploration

Level of the session is intermediate: the participants are expected to have some knowledge on geophysical data integration and geographic information systems (GIS).

The session is run by the DroneSOM project which focuses on utilizing drones and machine learning to enhance current methods of mineral exploration. The project partners aim to launch a comprehensive set of new machine learning tools and methodologies for commercialization in 2025. Read more at <u>www.dronesom.com</u>.

The session is part of the short course on geophysics organised by FEM. The topics of the day 2 program focus on common ground and airborne geophysical methods used in targeting mineral deposits.

Participants need to register to the full short course via FEM website: www.femconference.fi/fem-2025-short-courses



