

Snow Survey Radar

Product Sheet

The Snow Survey radar is used to map snow properties (depth, density and snow water equivalent) across target areas for more precise and detailed snow measurements. The data collected during the survey is processed by the Mitta team and a spatial visualization of the snow and its properties is created.

The Snow Survey radar continuously measurements the snowpack and offers a detailed map of the snow that reflects the topography. Measuring continuous changes in snow depth, density and snow water equivalent across a surveyed area gives a more accurate picture than manual measurements alone.

The snow properties measured are tied to real probing measurements which yields a depth and density model rooted in actual field observations. The GPR is housed inside a fiberglass sled fitted with a hard top cover. The electronics inside consist of a mini laptop computer, a lightweight battery, a power bank and a GPS. The sled is best used attached to a snow-mobile, going at speeds up to 25km/h.



Specifications

- Dimensions: 137cm x 64 X 42 cm
- Weight: 20kgs
- Durable and insulated for all terrain

Features

- Radar continuously collects snow depth and snow density every cm
- Data processing allowing for spatial visualization of snow properties across target area
- CSV of all snow properties
- Histograms of SWE and depth over an entire area

Applications

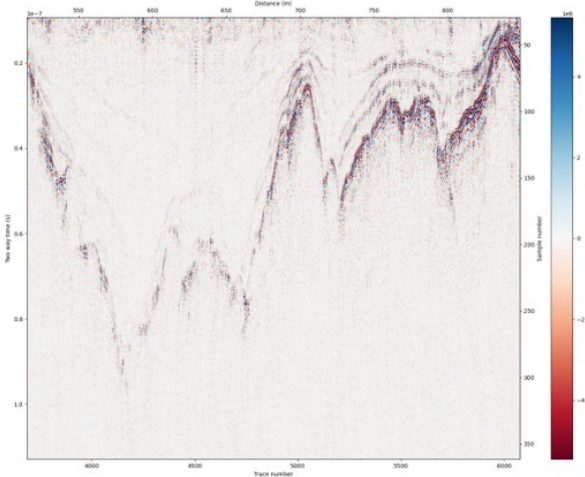
- Optimized operation of hydro-power plants enabled by accurate predictions
- Scientific research
- Flood and river level estimations



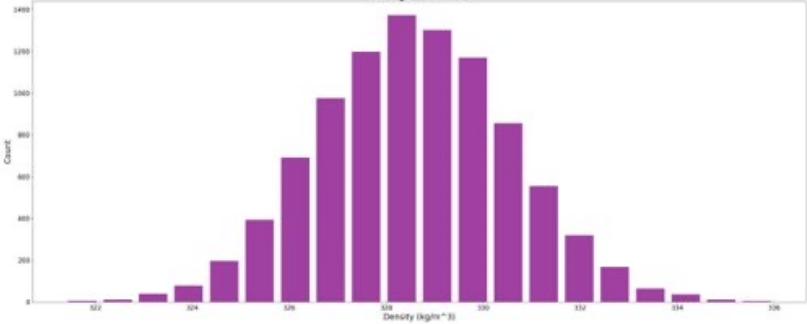
Snow Survey Radar

Example Data

Mapped snow depth across survey area



Snow Density Distribution



Snow Depth Distribution

