

# AARHUS WORKBENCH

AGS  Aarhus GeoSoftware

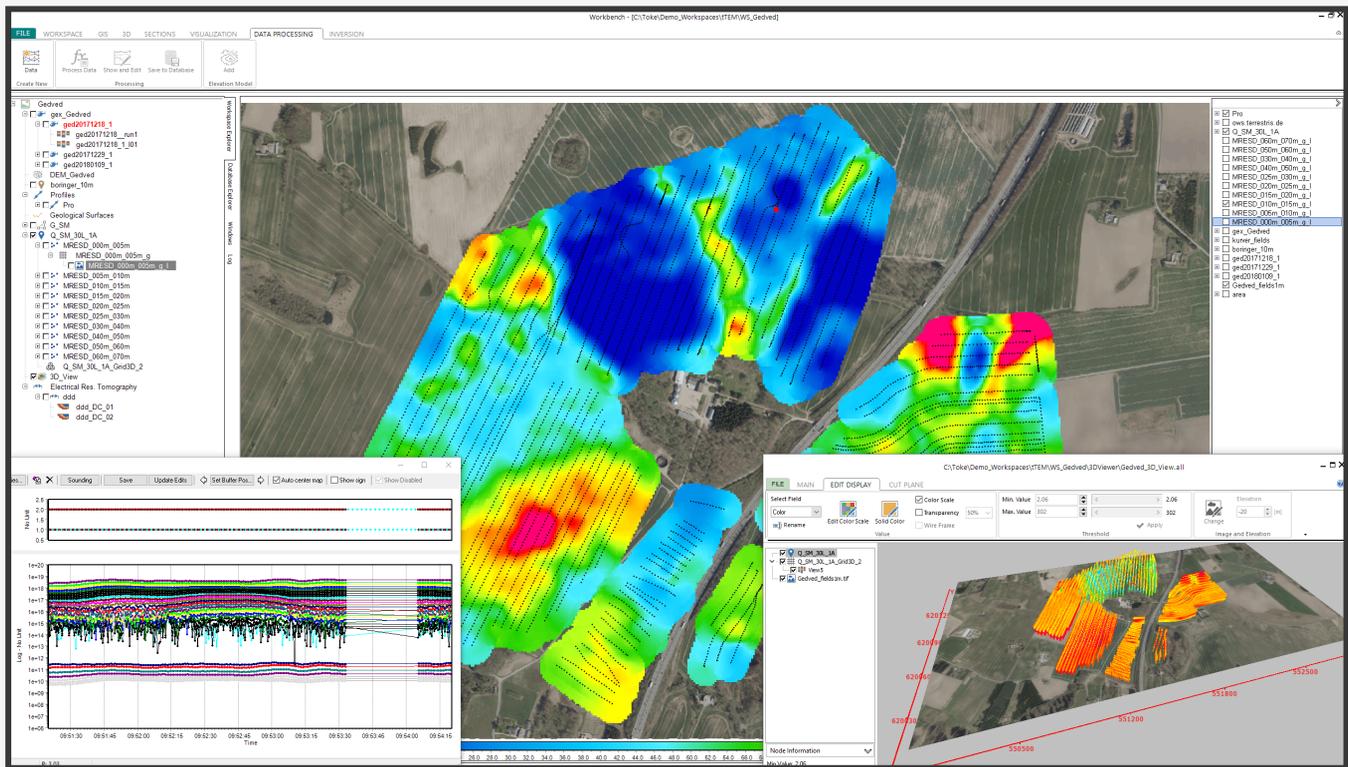
## OVERVIEW

Aarhus Workbench is a comprehensive software package for processing, inversion and visualization of geophysical and geological data. The package integrates all workflow steps from processing the raw data to the final visualization and interpretation of the inversion models.

The Aarhus Workbench package is based on a GIS interface and includes dedicated data processing modules for a variety of geophysical data types. Aarhus Workbench uses the robust and fast AarhusInv inversion code.



# AARHUS WORKBENCH



## Key features

- Import, process and invert data from airborne and ground based geophysical EM and ERT systems.
- Fully developed processing tools and filters.
- Import of DEM maps and use elevation in the inversion
- Import of borehole lithology and geophysical logs.
- Integrated GIS interface.
- Visualization of data on GIS interface, themes, profiles, 3D viewer and PDF reports.
- QC visualization tool for evaluation of inversion results
- LCI, SCI, Cole-Cole, CPA & MPA inversion with AarhusInv inversion code.
- Aarhus Batch Inversion - use servers for inversion jobs.

## Modules

**Essentials** // Basic module for Aarhus Workbench with GIS interface, which includes import of borehole and geophysical logs, visualization, QC, 3D viewer, PDF report tool and SCI inversion and visualization of SPIA TEM data.

**Airborne TEM** // Support several airborne TEM systems. E.g. SkyTEM, VTEM, AEROTEM, SPECTRUM, TEMPEST etc.

**Airborne HEM** // Supports all coil configurations for airborne HEM systems such as the Resolve system.

**GCM** // Supports all coil configurations for GCM instruments such as DUALEM, GEM2, CMD Explorer and EM31.

**DC/IP** // Full developed processing tool with 1D/2D ERT/IP Cole-Cole, CPA and MPA inversion methods.

**Groundbased TEM** // For towed TEM systems such as the tTEM system.

**Streamed ERT** // For waterborne ERT survey. Include water resistivity and depth as inversion parameters.

## Visualization and interpretation

Visualization, QC evaluation and geological interpretation of inversion results is done using the GIS interface and is integrated with the processing tool, cross sections, PDF report tool and 3D viewer with thresholding, volume cutting and video recorder.

## GIS themes

- Geophysical theme maps, e.g. mean resistivity, elevation of geological interfaces, etc.
- Gridding of themes using Kriging or inverse distance interpolation, including semi-variogram analysis.
- Visualization of theme maps as colored points or grid images.
- Quality check of inversion results with model quality tool.

## Cross sections

- Create sections by drawing directly in the GIS-map or based on survey flight lines.
- Resistivity models displayed as bars or interpolated filled sections, combined with depth of investigation (DOI) information.
- Borehole lithology as bars and geophysical logs for easy correlation.
- Digitization of layer interfaces for geological interpretation.
- Extended label options for resistivity bars and boreholes. E.g. projection distances, lithology etc.

