AARHUS WORKBENCH

AGS Aarhus GeoSoftware

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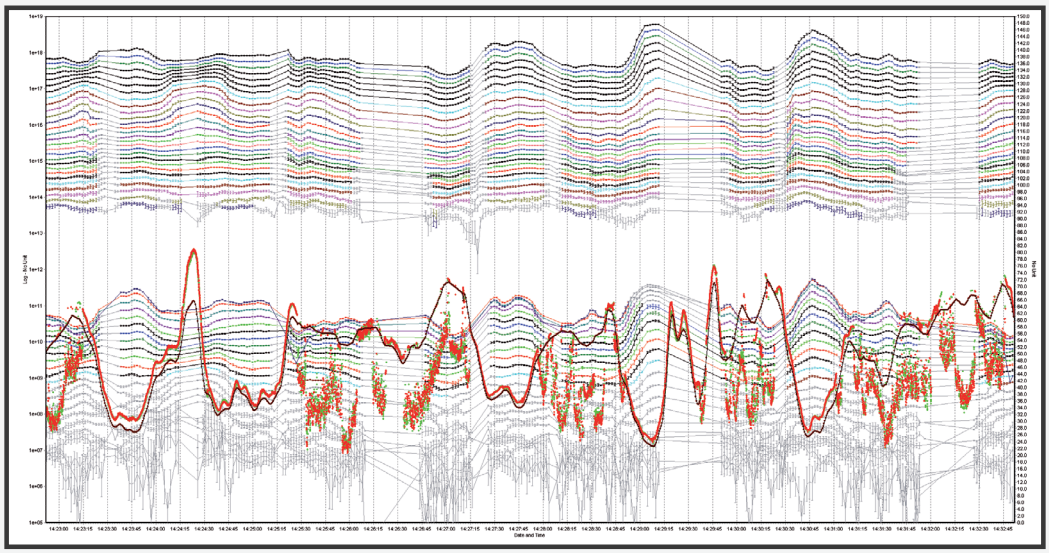
OVERVIEW

Aarhus Workbench is a unique and comprehensive software package for processing, inversion, and visualization of geophysical and geological data. The package integrates all steps in the workflow from handling the raw data to the final visualization and interpretation of the inversion models. The Aarhus Workbench package includes dedicated data processing modules for many geophysical data types, an integrated GIS platform. It uses the robust and fast inversion code AarhusInv.



Key features

- Supports data from many different airborne and ground based systems
- Fully developed processing tools and filters
- Import DEM maps and use elevation for inversion
- Import of borehole data
- Integrated GIS interface
- Visualization of data in themes and profiles
- QC visualization tool
- 1D LCI and 2D SCI inversion with AarhusInv inversion code

Modules

Essentials // Basic module for Aarhus Workbench which includes import of borehole information and visualization of inversion results.
Airborne TEM // Support several airborne TEM systems. E.g. SkyTEM, VTEM, TEMPEST etc.
Airborne HEM Supports all coil configurations for airborne HEM systems
GCM // Supports all coil configurations and all GCM instruments
DC/IP // Full developed processing tool and 1D/2D DC/IP inversion
Groundbased TEM // For towed TEM systems

Visualization and interpretation

Visualization, evaluation, and geological interpretation of the inversion results is done with the GIS interface, which is integrated with the processing tool and cross sections. Aarhus Workbench is fully compatible with the MapInfo (tab-files), ArcGIS formats (GeoTiff, Shape-files) and Surfer grid file format.

GIS themes

- Generating geophysical theme maps, e.g. mean resistivity, elevation of geological interfaces, etc.
- Batch gridding of themes using Kriging or inverse distance interpolation, including semi-variogram analysis.
- Visualization of theme maps as colorized points or grid images.
- Quality check of inversion results with model quality tool.
- Borehole locations with easy access to detailed borehole reports.
- External GIS themes in MapInfo (tab-files) or ArcGIS formats (GeoTiff, Shape-files).

Cross sections

- Section location 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.
- Boreholes as bars with easy access to detailed borehole reports.
- Digitization of layer interfaces for easy geological interpretation.
- Sections combined with intersections in a grid displayed as lines.
- Extended label options for resistivity bars and boreholes. E.g. projection distances, lithology etc.