



# **S**YTMIS software suite for seismic monitoring of underground operations and geostructures

**S**YTMIS is a suite of software to build the best cost effective seismic monitoring solution, whether in a stand-alone mode or in multi-scale arrays and multi-users environment.

**S**YTMIScop turns your PC windows-based computer into a powerful flexible seismic recording system. It offers numerous options, including an advanced dual continuous and triggering acquisition mode with different sampling frequencies and a LAN collecting scheme for multiple SYTGEM units.

**S**YTMISview is used to visualize seismic waveforms, to check automatic processing and to enhance data analysis on an interactive mode.

**S**YTMISauto is used to process in real-time seismic files and includes many parametrable routines ranging from file association, instrumental correction, 3D ray tracing in complex velocity models, location, source parameters and active direct access to a data base management system.

## Highlights

**Routine processing**

**In-depth analysis**

**Easily scalable solution**

**Multi-arrays management**

## Field of applications

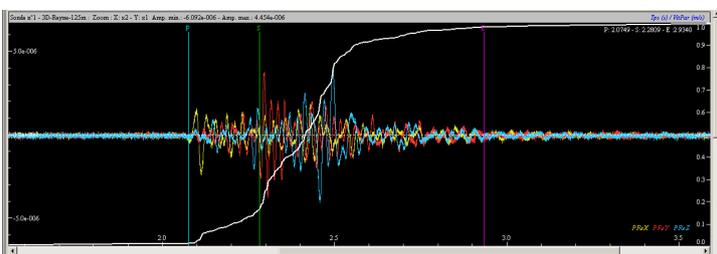
**Mines and quarries**

**Geological storage**

**Reservoirs**

**Geothermal systems**

**Dams**

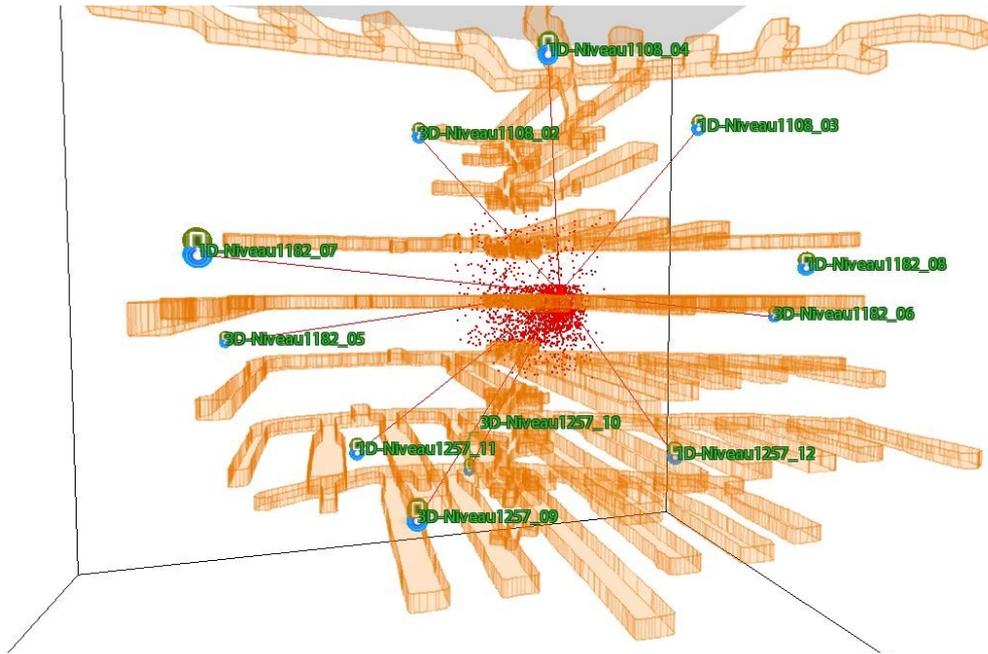


# INERIS

controlling risks |  
for sustainable development |

# SYTMIS software suite for seismic monitoring of underground operations and geostructures

**S**YTMIS4D is used to analyze the space-time distribution of seismicity in a 3D geostructure, with options to visualize superimposed modelled objects, ray tracing, density probability functions, and time lapse seismic activity for enhanced expertise of seismic hazard.



*3D perspective of a 300x300x300m mine layout and its local seismic network, showing ray tracing, source location and density probability function related to a significant event.*

**S**YAlarm connects SYTMIS to ALERT® software to automatically manage warning messages to on call duty staff.

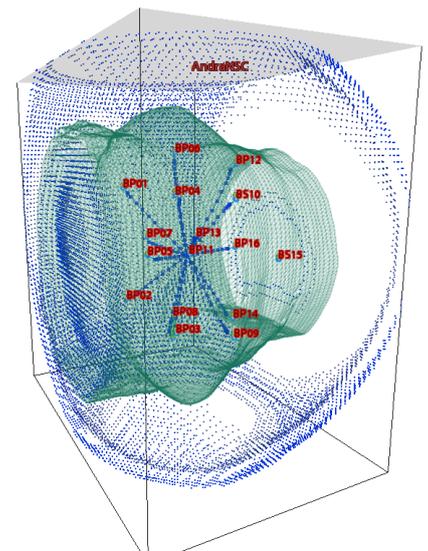
**S**YTMIS is used extensively in INERIS operations, through its research projects and operational services. It offers a unique integration level with the **e.cenaris** web infrastructure for remote administration of seismic systems as well as premium management, quality control, data sharing and reporting. SYTMIS suite is available as a component of a complete monitoring solution including hardware and services.

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*ALERT® is a registered trademark of MICROMEDIA International.*

*Specifications subject to change without notice.*

*For more information and custom applications, please contact us: [cenaris@ineris.fr](mailto:cenaris@ineris.fr)*



*3D perspective of an acoustic array encased in an engineered concrete bulkhead to seal a deep tunnel.*