MS monitoring of CNL's (formerly AECL) mine-by experiment - locations

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Microseismic Geomechanics: Increased understanding; reduced risk

InSite Lite

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- InSite™ Lite is the free version of Itasca Consulting Ltd.'s InSite Seismic Processing software suite, provided with limited functionality and features.
- The examples shown here are taken from ICL and its partners projects.
- InSite's proprietary project (*.pcf) files contain all the configuration, event information and links to waveforms necessary to run a project in InSite. Double-clicking on the .pcf project file launches the InSite software application.
- The InSite project waveform data (*.esf) files include the results from the data processing. These files are imported for the project (.pcf file) through the data import management tool in InSite. Please note that not all of the available example projects are provided with example waveform data.
- For information on the operation of the InSite software, please refer to the product help files.
- For information on purchasing the full version of the InSite software, please contact us at support@itasca.co.uk

Example Features

- These two examples use Microseismic data recorded following the excavation of the Mine-by gallery at CNL's (formerly AECL) Underground Research Laboratory.
- Mineby_Waveforms includes MS waveform data recorded using 16 triaxial receivers surrounding the excavated volume.
- The example allows having an overview of the Waveform visualiser and the different views (event, instrument, channel)
- The following slides give you some options to try in the software.

It's a good idea to …

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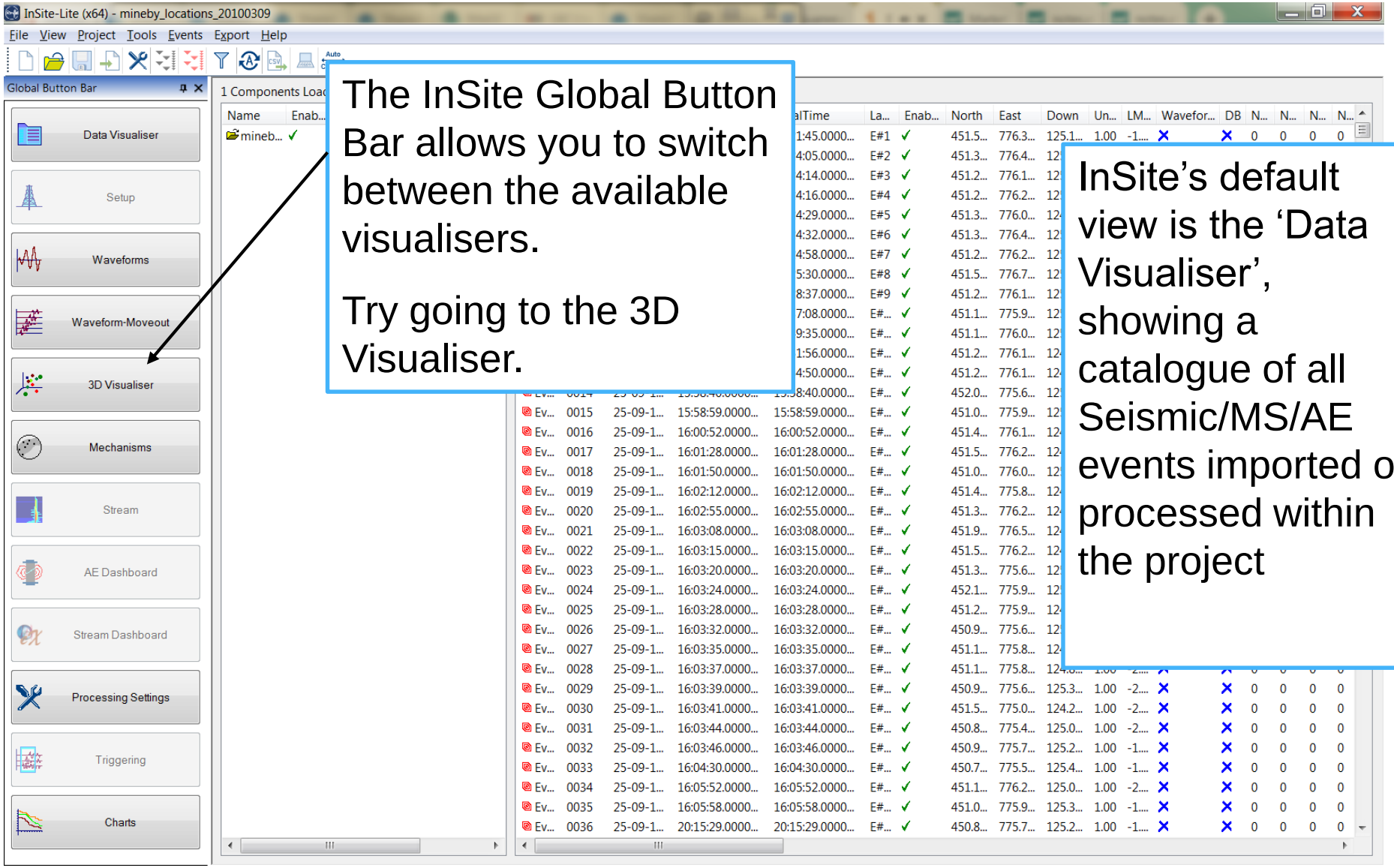
…run through the "SKB Prototype" demo presentation first as this gives a more thorough overview of the Location Visualiser.

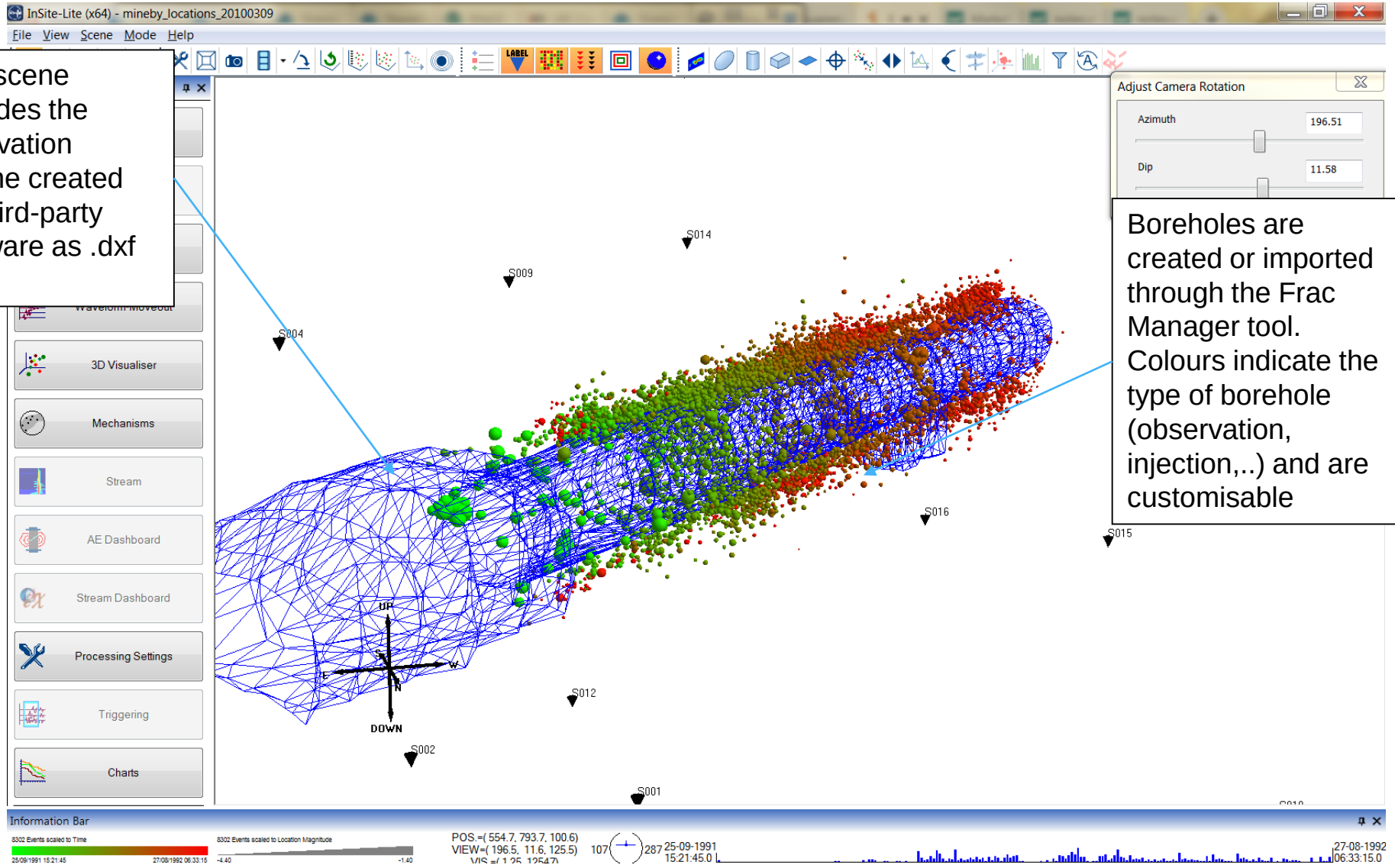
… run through the "TSX Cluster" demo presentation first as this gives a more thorough overview of the Waveform Visualiser.

Navigation: Data Visualiser



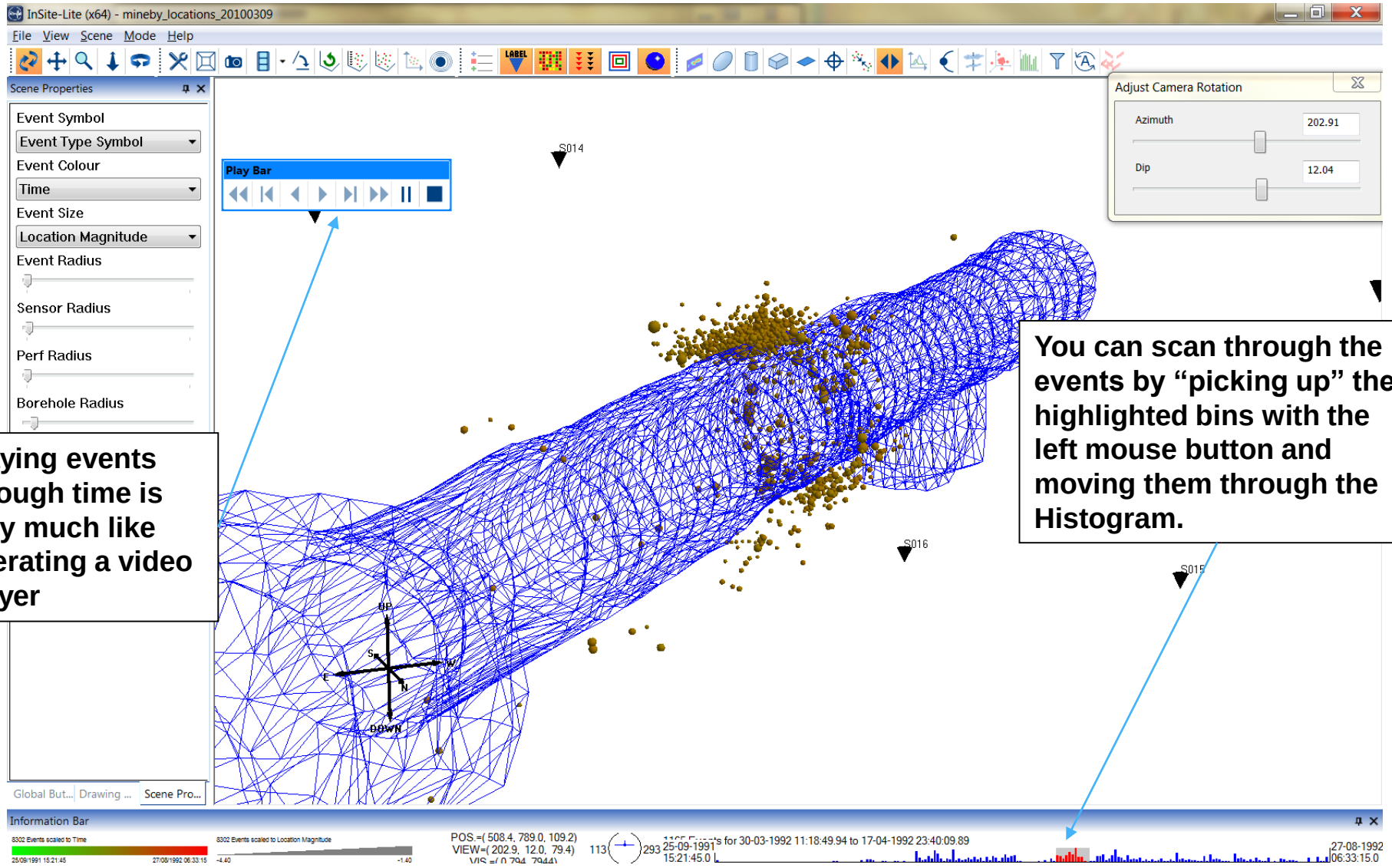
3D Visualiser I

The scene includes the excavation outline created by third-party software as .dxf files



Boreholes are created or imported through the Frac Manager tool. Colours indicate the type of borehole (observation, injection,..) and are customisable

3D Visualiser II: Playing events in time



Playing events through time is very much like operating a video player

You can scan through the events by "picking up" the highlighted bins with the left mouse button and moving them through the Histogram.

3D Visualiser III: Scene properties

Scene Properties:

This allows you to set some configuration parameters.

Play with some of these if you like.

For example, your histogram functions depend on the bins set up here.