

The Matra Project

Preparation for seismic studies

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Outline

- Location of the mine
- Neighborhood
- Previous efforts
- Present activity
- Device
- Planned schedule



Location

- 1 hour drive from Budapest
- Nearest town is **Gyöngyös** accommodation, conference center
- **Piszkéstető** nearest seismic station



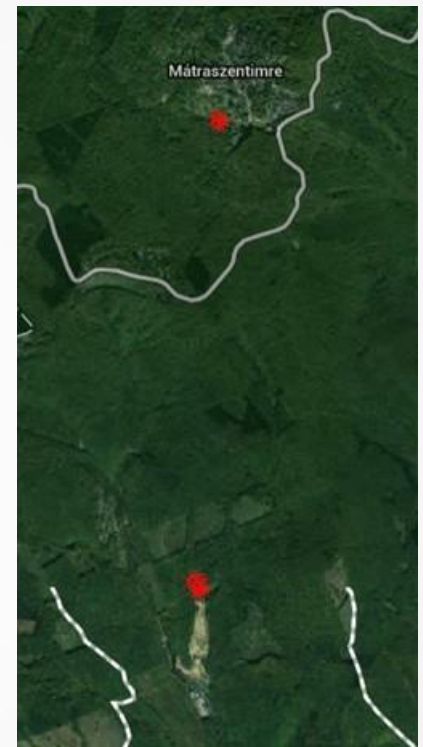
About the mine

- Humidity level is high
- Oozing acid water on the walls
- Even spiders !!



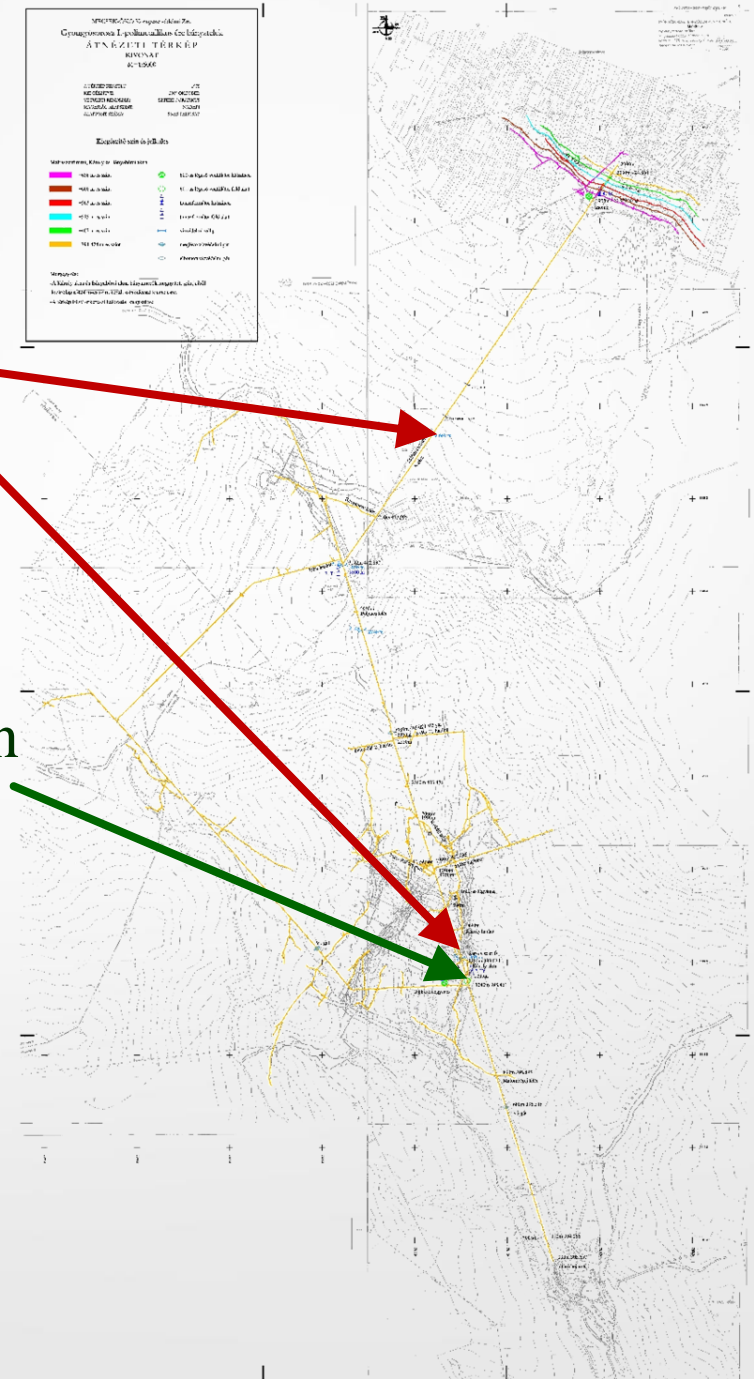
Previous measurements

- Among the 11 candidate sites investigated
- 2-5 April, 2010
short term seismic studies with the help of Nikhef colleagues, Trillium 240



Seismic station

- Original measurements
 - 1.4 and 3.8 km from the entrance
 - 70 and 400 m below surface
- Final decision on the location
 - dedicated room for all the necessary devices



Online data taking and analysis

- Guralp CMG-DM24S3EAM
broadband sensor
 - Three-axis seismometer
 - Full remote control
- GPS time from internet



Online data taking and analysis

- Connected with glass fiber
- Online monitoring



Operated by

- The Hungarian Einstein Telescope Consortium
 - Wigner RCP
 - University of **Miskolc**
 - Geodetic and Geophysical Institute of the Research Centre for Astronomy and Earth Sciences of HAS, **Sopron**
 - MTA CSFK GGI Kövesligethy Radio Seismological Observatory, **Budapest**



Schedule

- Planned installation steps

	2014	2015			
	October	January	February	March	April
Setting up the seismometer at Wigner					
Completion of the seismic station					
Cabling, installation of the seismometer on site					
Start of data taking					

Summary

- Well prepared for long term seismic studies
- Collaboration between different Institutions
plans for extension after the start of data taking
- Preparations and installations are going steadily

Thank you for your attention !