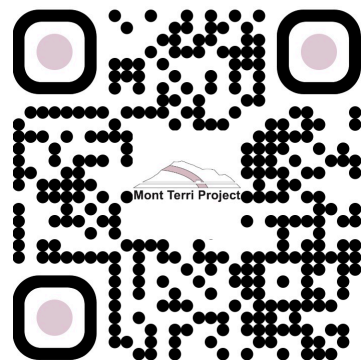


# Mont Terri Project Underground Rock Laboratory

Report period: September 30, 2024 – October 13, 2024

Assembled and edited by swisstopo, St-Ursanne



**Spotlight of the week:** On Thursday evening, October 11, the bi-annual fire drill was held in the Mont Terri underground laboratory. Jointly organised by the Mont Terri Project's safety officers and the fire services of Porrentruy and Delémont, the scenario for this exercise included a vehicle fire and the rescue of a person. In addition to the 22 firefighters involved, we were able to count on around ten observers who recorded and logged the intervention tactics used and the movement of the smoke. Setting up such a programme helps to train the fire brigade and get them used to working in this very special place, a real labyrinth for the uninitiated. The exercise proved to be a great success, with so much positive feedback. Many thanks to all those involved for their commitment, motivation and exemplary inter-service collaboration.

## FE-M (Long-Term Monitoring of the Full-Scale Emplacement Experiment) experiment

- On Wednesday, October 2, J. Gisiger (swisstopo) did the yearly maintenance work on the Solexperts DAS and the Solexperts TDR system.

## GT (Gas Transport Models and the Behavior of OPA to Gas Pressure) experiment

- On Friday, October 4, A. Rinaldi (ETHZ) re-installed the miniruedi for measuring Helium leakage at BGT-4, -6, -7, -8, and -9. The instrument is temporary and will be replaced in about two weeks.

## HT (Hydrogen Transfer in Opalinus Clay) experiment

- On Thursday, October 3, during the daily checks, T. Theurillat (swisstopo) emptied the 1 liter Tedlar bag as the scale shown 946 g.

## MA-A (Modular Platform for Microbial Studies) experiment

- On Thursday, October 3, C. Rolland and M. Abdelouhabi changed the N<sub>2</sub> stock for the glovebox, refilled the oil level of the pump and regenerated the catalyst overnight.
- On Thursday, October 3, C. Rolland (EPFL) removed the reactor out of the glovebox to bring it to the EML laboratory at EPFL (**Figure 1**).
- On Friday, October 4, T. Theurillat (swisstopo) stopped the regeneration cycle of the glovebox, following the instruction received the day before from C. Rolland (EPFL). He also replaced the empty gas bottles.

## MH (Long-Term Monitoring of Heaves and Displacement) experiment

- On Wednesday, October 9, H. Christ and G. Jeiziner (both swisstopo) replaced the old Leica 1220 GNSS receiver with a new Leica GR50 GNSS receiver. The new GNSS receiver now sends its Rinex data to the same SFTP server sftp.swipos.ch as all the other AGNES stations. It is therefore no longer an exception in terms of Rinex data flow. Furthermore, they cleaned the Leica antenna on the mast above the visitor center.

## SW-A (Large-Scale Sandwich Seal in Opalinus Clay) experiment

- On Monday, September 30, T. Theurillat (swisstopo) replaced the gas cylinder attached to the borehole BSW-A1.
- On Thursday, October 3, T. Theurillat (swisstopo) replaced the gas bottle attached to the pit of BSW-A2.
- On Friday, October 4, T. Theurillat (swisstopo) refilled the High Pressure Tank attached to the borehole BSW-A1.
- On Friday, October 11, T. Theurillat (swisstopo) replaced the gas bottle attached to the pit of BSW-A2.

## Visits

Day	Date	Group Name	Group Size	Visitors Guide
Mon	30.9.2024	Division Forestière Jura Bernois	11	J.-P. Meusy (freelance)
Wed	2.10.2024	Kantonsschule Zürcher Unterland	22	H. Hauser (freelance)
Thu	3.10.2024	Service Juridique Canton Jura	21	R. Nicol (swisstopo)
Fri	4.10.2024	Kantonsschule Zürcher Unterland	21	R. Nicol (swisstopo)
Thu	10.10.2024	Akademie Der Wissenschaften	11	R. Nicol (swisstopo)
Thu	10.10.2024	DACH-Treffen, Thomas Galfetti	14	D. Jaeggi (swisstopo)
Fri	11.10.2024	Behörde Laufen (BL)	11	H. Sager (Nagra)
Fri	11.10.2024	Groupe Christophe Bigler	10	J.-P. Meusy (freelance)
Sat	12.10.2024	Les Montgolfières Du Lomont	22	R. Nicol (swisstopo)

## Figures



**Figure 1: MA-A:** C. Rolland (EPFL) removing the reactor out of the glovebox. Camille will do microbiological and chemical analyses on sand-bentonite incubated during 3 months (M. Abdelouhabi, swisstopo).