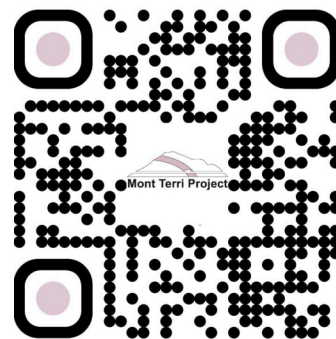


# Mont Terri Project Underground Rock Laboratory

Report period: July 7–13, 2025

Assembled and edited by swisstopo, St-Ursanne



**Spotlight of the week:** After more than 19 years, Thierry Theurillat had his last day as Site Manager of the Mont Terri Project and will now enjoy a new chapter in his life - retirement! Senecio Schefer is now taking the position of Site Manager to ensure a frictionless continuation in the lab. We thank you Thierry very much for all your contributions to the Mont Terri Project and hope to see you soon! (Figure and cake design: M. Rohrer, swisstopo).

## Important note

- This is the last weekly report before the summer break (14.7.-10.8.2025). We will be back in the lab on August 11, 2025. See you soon!

## **BIM (Mont Terri Building Information Modeling) experiment**

- From Monday to Wednesday, July 7–9, P. Mosler and B. Broich (TU Darmstadt) continued and finalized their work on augmented reality simulation of the lab. The tests focused on navigation, multi-user operation, virtual drawing, displaying information about tracer experiments, and testing the integration of different data types and url-linking. The Mont Terri team explored the AR applications.

## **DR-E (Long-Term Diffusion Experiment in the Main Fault-Zone) experiment**

- On Wednesday, July 9, S. Schefer (swisstopo) restarted the circulation pumps for BDR-E1 (7 ml/min) and BDR-E2 (6.2 ml/min).

## **FS-B (Imaging the Long-Term Loss of Faulted Host Rock Integrity) experiment**

- From Monday to Tuesday, July 7–8, A. Eul and S. Braunschweig (Eul GmbH) continued drilling BFS-B17 down to its final depth of 76.8 m.
- On Tuesday, July 8, D. Fischer (Terratec) performed logging inside BFS-B17 (OBI, DIL, SGR).
- From Wednesday to Thursday, July 9–10, J. Gisiger, A. Ammon and H. Geisser (Solexperts) installed a PVC casing with SMF and MMF cables and ERT and SP electrodes into the 76.8 m borehole BFS-B17. On Thursday, the borehole was grouted behind the casing with a cement/pumice mixture. At a depth of about 30 m below the surface, a pressure increase was observed, which later led to the breaking of the topmost casing. The buoyancy protection became ineffective, and about 20 m of casing were pushed out of the borehole. The grout injection was then continued with the casing reaching a depth of about 57 m.
- On Wednesday, July 9, A. Eul and S. Braunschweig (Eul GmbH) removed the rig and cleaned up the drill site.

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

- On Thursday, July 10, J. Gisiger (Solexperts) increased the pressure of the helium tank and continued the constant head injection at 1980 kPa.

## **PF-A (Progressive Evolution of Structurally-Controlled Overbreaks: Long-term monitoring, hydromechanical simulation and rock testing) experiment**

- On Monday, July 7, A. Rinaldi (ETHZ) and S. Schefer (swisstopo) controlled the state of the fiber optic cables.

## **SI-C (Seismic Imaging of the Mont Terri Anticline) experiment**

- From Wednesday to Thursday, July 9–10, S. Lüth and K. Bauer (GFZ Potsdam) were on the site and in the area around St-Ursanne in order to find appropriate driving paths for the planned operation of a vibration source for the seismic imaging of the Mont Terri Anticline. They had some short and pleasant walks in the forest and identified a couple of access roads to future vibro points (**Figure 1**).

## **SM-C (Permanent Nanoseismic Monitoring) experiment**

- On Wednesday, July 9, S. Schefer (swisstopo) reinstalled the DAS for the HLS and added a 24 V supply.

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

- On Thursday, July 10, S. Schefer (swisstopo) refilled the HPT of shaft 1.

## **Visits**

Day	Date	Group Name	Group Size	Visitors Guide
Thu	10.7.2025	Louis Lang SA, Apprentis	14	J.-P. Meusy (freelance)
Thu	10.7.2025	King Fahd University Of Petroleum And Minerals, Saudi Arabia	16	M. Ziegler (swisstopo)



## Figures



Figure 1: SI-C: One of the possible streets for the seismic campaign (K. Bauer, GFZ Potsdam).