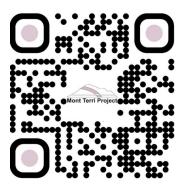
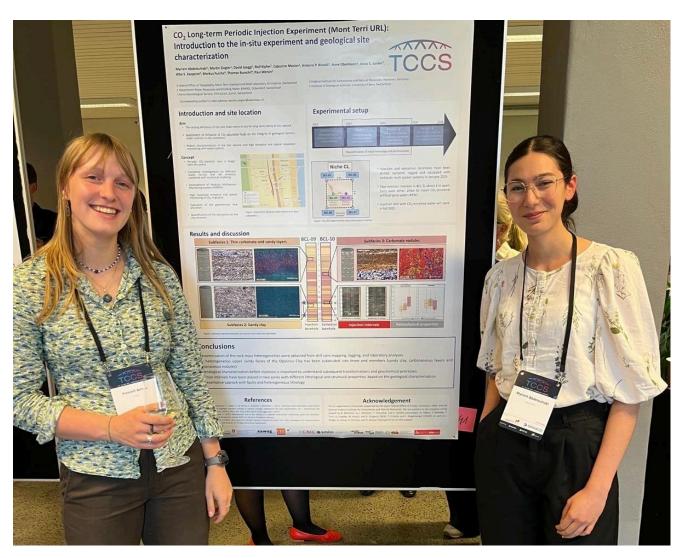
# Mont Terri Project Underground Rock Laboratory

Report period: June 16-22, 2025

Assembled and edited by swisstopo, St-Ursanne





Spotlight of the week: This week, C. Nussbaum, M. Abdelouhabi (swisstopo) and P. Annan (ETHZ) were attending the Trondheim CCS Conference in Norway. They used this opportunity to present the latest results from Mont Terri  $CO_2$  experiments FS-B,  $CO_2$ LPIE and CS-E with talks and posters and to discuss with the international CCS community on past and upcoming reasearch topics (Figure C. Nussbaum, swisstopo).

#### BN (Bitumen-Nitrate-Clay Interaction) experiment

• On Monday, June 16, T. Theurillat (swisstopo) took sample #2 from interval 1 and stored it in the fridge.

#### CD-A (Influence of Humidity on Cyclic and Long-Term Deformations) experiment

• From Tuesday to Thursday, June 17–19, S. Tuñon and M. Martinez (Amphos21) recovered the psychrometer system and tested a different device with the same results as the old system. Additionally, sensor #3 could be recovered.

#### CL (CO2LPIE-CO2 Long-Term Periodic Injection) experiment

- On Tuesday, June 17, S. Schefer (swisstopo) marked the position and orientation of BCL-11. this borehole is the replacement for BCL-10 and drilling will start next week. The drill rig will have to be precisely oriented since this borehole has to be parallel to the injection borehole BCL-9.
- On Wednesday, June 18, J. Gisiger, A. Jakupi and A. Scholl (Solexperts) filled the abandoned borehole BCL-B10 with resin.

#### FE-G (Monitoring the Gas Composition within the FE Experiment) experiment

• On Monday, June 16, T. Theurillat (swisstopo) restarted the Raspberry Pi's UPS on behalf of Y. Tomonaga (Entracer).

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

- On Monday, June 16, S. Schefer (swisstopo) restarted the GmuG computer for the seismic measurements.
- From Wednesday to Thursday, June 18–19, S. Tuñon, M. Martinez and B. Villasante (Amphos21) performed the annual maintenance, exchanged the UPS for the DAS and reconfigured the PID controller of resistor 2 of heater 3. They removed the broken PC2 and took it for repair.
- On Thursday, June 19, J. Gisiger (Solexperts) removed the damaged GeoMonitor DAS and brought it back to the Solexperts workshop for repair.

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

- On Monday, June 16, S. Schefer (swisstopo) marked the position and orientation of BFS-B17 and S. Braunschweig and F. Durulan installed the drill rig. This borehole will have a depth of 78 m and I situated below the Main Fault.
- From Monday to Tuesday, June 16–17, S. Braunschweig and F. Durulan (Eul GmbH) started drilling BFS-B17 and reached a depth of 13 m.
- On Monday, June 16, M. Frädrich (Terratec) measured OBI, DIL and spectral gamma inside BFS-B14b.
- From Tuesday to Wednesday, June 17–18, J. Gisiger, A. Jakupi and A. Scholl (Solexperts) installed a PVC casing with SMF and MMF cables and ERT and SP electrodes into the 71.5 m borehole BFS-B14b. On Wednesday the borehole was grouted behind the casing with a cement/pumice mixture (**Figure 1**).

### HE-E (In-Situ Heater Test in VE-Micro-Tunnel) experiment

 From Tuesday to Wednesday, June 17–18, S. Tuñon, M. Martinez and B. Villasante (Amphos21) performed the annual maintenance of the heaters and the DAS.

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

• On Thursday, June 19, S. Tuñon, M. Martìnez and B. Villasante (Amphos21) performed the annual maintenance of the shafts and the wireless transmitting sensors and installed the pore pressure boxes.

#### **Visits**

Day	Date	Group Name	Group Size	Visitors Guide
Tue	17.6.2025	Kantonsschule Stadelhofen	21	H. Hauser (freelance)
Wed	18.6.2025	Kantonsschule Stadelhofen	27	H. Sager (Nagra) R. Nicol (swisstopo)

## **Figures**



**Figure 1: FS-B:** The Solexperts team is installing the fibers behind casing (S. Schefer, swisstopo).