Mont Terri Rock Laboratory

Field report: August 29–September 4, 2022 (Phase 28)

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

- On Monday, S. Condamin taught P. Maeder, R. Meier, T. Meister, N. Tester and S. Schefer (all swisstopo) how to do the levelling measurements of the Twin Niches (Figures 1&2). They measured the base line for the heaves inside the Twin Niches so we can have a third independent measurement to compare to the laser scans and the 3D-convergences.
- On Tuesday, S. Condamin together with R. Meier and N. Tester (swisstopo) did the second base measurement of the levelling points inside the Twin Niches. The two base measurements fit very well within some tenths of a millimetre.

DR-B (Long-Term Diffusion) experiment

- The entire week, the scanning of BDR-B8 was running smoothly. Normally this would be no news, but this time, after so many problems, it is great news! 😊

MA-A (Modular Platform for Microbial Studies) experiment

- On Thursday, C. Rolland (EPFL) came on site to exchange the repaired vacuum pump and do some modifications on the glovebox.

PF (Progressive Rock Mass Failure and Overbreak Sealing) experiment

- On Thursday, the PI M. Ziegler and T. Meister (swisstopo) adjusted the step motor and the rails for the photogrammetry inside BPF-7.

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

- On Monday and Thursday, S. Schefer refilled the high pressure tank.
- On Thursday, D. Jaeggi and S. Schefer installed the protective railing around shaft 2.

TS (Testing Different Tunnelling Support in Sandy Facies) experiment

- On Monday, M. Disch (Marmota) measured the fibre-optics in the three sections TS1, TS2 and TS3 in Ga18 (Figure 3).

Varia

- On Friday, the swisstopo team was on their yearly formation with the Swiss Geological Service. They visited the glacier garden in Lucerne (Figure 4) and in the evening celebrated the retirement of Olivier Lateltin (head of Swiss Geological Survey) with a farewell ceremony.

Visits

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<tr>
<th>Date</th>
<th>Event</th>
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<tr>
<td>Tue 30.08.2022</td>
<td>Studierenden-Exkursionsgruppe MLU Halle</td>
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Figure 1: **CD-A**: Levelling formation inside Open Twin under the watchful eyes of the professional (Photo: T. Meister, swisstopo).

Figure 2: **CD-A**: Levelling inside the Closed Niche (Photo: S. Schefer, swisstopo).
Figure 3: **TS:** M. Disch during the fiber-optic measurements (Photo: S. Schefer, swisstopo).

Figure 4: **Varia:** The team from the Swiss Geological Survey in the glacier garden (Photo: S. Volken, swisstopo).