Mont Terri Rock Laboratory

Field report: February 7–13, 2022 (Phase 27)

CD-A (Influence of Humidity on Cyclic and Long-Term Deformations) experiment
• On Thursday, T. Theurillat and S. Schefer (swisstopo) with remote assistance from S. Tunon (Amberg) replaced the converter on the acquisition computer. The configuration of the new adaptor is still on-going.

CS-E (Mini-Fracturing and Sealing) experiment
• On Thursday, A. Rinaldi (ETHZ) and M. Facchini (Iridis Solutions GmbH) were on site to discuss the next phase of on-site work and to inspect the installation of the fibre-optic cables.

FE-M (Long-Term Monitoring of the Full-Scale Emplacement) experiment
• On Wednesday, R. Belli, F. Zanoni and A. Belioni (Smartec) performed maintenance on the heater transformer for the FO-cables (Figure 1).

HT (Hydrogen Transfer in Opalinus Clay) experiment
• On Monday, T. Theurillat (swisstopo) took two water samples for gas analysis and sent the entire box with samples of the last months to BGR Hannover where they'll be analysed. These were the last samples of this measuring campaign.

MA-A (Modular Platform for Microbial Studies) experiment
• On Friday, N. Burzan and C. Rolland (EPFL) performed several tests on the system inside the glovebox (Figure 2).

PF (Progressive Rock Mass Failure and Overbreak Sealing) experiment
• On Monday, S. Schefer and T. Steffen (swisstopo) installed and measured 8 fixpoints in Niche MI for the upcoming survey next week.
• On Thursday and Friday, M. Ziegler, T. Steffen, T. Theurillat and S. Schefer (swisstopo) prepared and installed the targets inside BPF-7 for the precise geodetic measurements (Figure 3).

TS (Testing Different Tunneling Support in Sandy Facies) experiment
• On Wednesday, M. Disch and M. Gübeli (marmota) measured the fibre-optic cables in the different TS-sections in Ga18 (Figure 4).
• On Friday, A. Arnosti (GeoTeam AG) measured the convergences in the three TS-sections in Ga18.

Visits
• Good news: Visits to the rock lab are again possible starting next week! We are happy to welcome all visitors!

D. Jaeggi and S. Schefer, February 13, 2022
Figure 1: **FE-M**: The smartec-team during maintenance work on the fibre-optic cables (Photo: T. Steffen, swisstopo).

Figure 2: **MA-A**: C. Rolland and N. Burzan are busy at the glove-box (Photo: S. Schefer, swisstopo).
Figure 3: PF: M. Ziegler and T. Steffen during the final preparation for the high precision geodetic survey next Monday (Photo: S. Schefer, swisstopo).

Figure 4: TS: M. Gübeli during the measurements on the fibre-optic interrogator (Photo: T. Steffen, swisstopo).