Mont Terri Rock Laboratory

Field report: May 18 to May 31, 2020 (Phase 25)

Distribution

Authorities

Swisstopo: P. Bossart, O. Lateltin
BfE (CH): M. Stauffer, Ph. Schaub
EC: Ch. Davies

Delegates of the Project Partners

ANDRA: E. Huret
BASE: A. Liebscher
BGR: D. Rebscher
CHEVRON: R. Ewy
CRIEPI: S. Yokoyama
DOE: P. Nair, J. Birkholzer
ENRESA: J.C. Mayor
ENSI: M. Herfort
ETH: R. Kipfer
FANC: F. Bernier
GRS: K. Wieczorek
Helmholtz: M. Kühn
IRSN: J.-M. Matray
NAGRA: O. Leupin
NWMO: L. Kennell-Morisson
JAEA: Y. Sugita
Obayashi: T. Shimura
RWM: S. Thompson
SCK•CEN: A. Brisset
Swisstopo: A. Möri
TOTAL: A. Brisset

Principal Investigators and Experiment Delegates of Phase 25 experiments


Supporting Research Organisations

Paul Scherrer Institute PSI: S. Churakov, Th. Gimmi, M. Glaus, L. van Loon
EPFL: L. Laloui, R. Bernier-Latmani, B. Lechampion, M. Violy
SHELL: N. Kampman, K. Bisdom

Project Management

Swisstopo: C. Nussbaum (Project Manager), T. Theurillat (Site Manager), S. Schefer (Dep. Site Manager), D. Jaeggi (Research Associate)
GGT: F. Burrus (Project Engineer), Th. Küttel, R. Daneluzzi
COVID-19 pandemic: a short update
- Since Monday, May 11, the rock laboratory is again open to all scientific activity. Partners and contractors are demanded to respect the social distancing and the rules concerning hygiene. If distancing is not possible, everyone is requested to wear a mask. Swisstopo does not provide masks, you must bring your own. The safety concept for people working in the lab is available in three languages on the Mont Terri extranet.
- The Visitor Center will be open for the public starting June 8! Special safety measurements will be implemented. More information will be available soon. We are very happy to be able to show our lab to the public again!

CS-D (CO₂: Studying Caprock and Fault Sealing Integrity) experiment
- On Monday and Tuesday, Q. Wenning (ETHZ) performed MiniRuedi measurements and took fluid sample (Figure 1). He also installed a new fluid sampling system in intervals 3-6 (BCS-D2).

PF (Progressive Rock Mass Failure and Overbreak Sealing) experiment
- On Monday, H. Gutgesell and H. Banek (Schützeichel) installed the drill rig for borehole BPF-4. The drilling started on Tuesday and by Thursday morning the final depth of 14 m was reached.
- M. Ziegler, M. Luković and J. Rothe (ETHZ) did the core documentation and sampling and on Thursday installed the casing.
- On Friday, J. Gisiger and L. Schwab (Solexperts) did the resin injection behind casing of BPF-4 and BPF-5 (drilled last week) and installed three temperature sensors.

SW-A (Large Scale Sandwich Seal in Opalinus Clay) experiment
- From Monday to Wednesday, T. Kostrewa and W. Wotschal (Glötzl GmbH) injected resin into the three stress monitoring boreholes to fill the void between the stress cells and the rock formation (Figure 2).

Varia
- From Wednesday to Friday, P. Giardino and A. Wartmann (Simon Protec Systems) installed the four smoke protection curtains inside the lab. S. Lenzi and A. Flueckiger (Inelectro SA) connected the curtains to the power supply (Figure 3).
- On Monday we welcomed Louis Honegger, our new civil servant. He will stay here for three months (Figure 4). He finished his PhD in Geology at the University of Geneva last week – congratulations!
- On Monday, June 1st, the laboratory will remain closed due to the Swiss holiday Pentecost. We will all be back on Tuesday.

C. Nussbaum and S. Schefer, May 30, 2020
Figure 1: **CS-D:** Q. Wenning (ETHZ) during the installation of the new fluid sampling system (Photo: S. Schefer, swisstopo)

Figure 2: **SW-A:** T. Kostrewa (Glötzl GmbH) injecting resin into one of the three stress monitoring boreholes (Photo: S. Schefer, swisstopo)
Figure 3: **Varia:** The team from Inelectro SA during the electric installation for the smoke protection curtains (Photo: S. Schefer, swisstopo)

Figure 4: **Varia:** L. Honegger, our new civil servant for the next three months (Photo: S. Schefer, swisstopo)