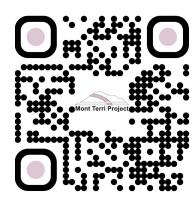
Mont Terri Project Underground Rock Laboratory

Report period: October 14-27, 2024

Assembled and edited by swisstopo, St-Ursanne





WWW.ZDF.DE

... und was vom Atomausstieg übrig bleibt

Spotlight of the week: The German ZDF television report "TerraX with Harald Lesch", partly shot at the rock laboratory, is now available online (in German only). Although focused on the German situation, part of the report explains the Swiss waste management concept and the choice of Opalinus Clay as the host rock for radioactive waste storage. In his conclusion, Harald Lesch, a respected science journalist in Germany, takes a very clear stand in favour of the rapid construction of a deep repository for radioactive waste in Germany. In his view, it's time for Germany to take matters into its own hands and decide on this important issue. https://www.zdf.de/dokumentation/terra-x-harald-lesch/und-was-vom-atomausstieg-bleibt-102.html.

DR-C (Diffusion in a Thermal Gradient) experiment

- On Tuesday, October 22, Y. Lettry (Solexperts) started a HI-test in BDR-C6, interval 2. He also increased the circulation temperature of BDR-C1 to 45.5 °C.
- On Friday, October 25, the WCFM column has been refilled this morning at 07:54 by T. Theurillat (swisstopo) regarding the instruction received from Y. Lettry (Solexperts).

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

- On Tuesday, October 22, U. M\u00e4der (RWI) sampled both circulation systems prior to injection for chemical and isotopic analysis, and measured pH. Vials with tracer cocktails (3-H, 36-Cl, chemical iodide) were prepared at PSI, transported to FMT, installed in the circulation cabinets, and switched in-line for injection at 11:18 (DR-E2) and 11:28 (DR-E1). People present during the injection were R. W\u00fcst (Nagra, PI), U. M\u00e4der (RWC), M. Heule, M. Glaus, S. Bauer, P. Bubis (PSI), A. Martin (Nagra, RPO) and S. Schefer (swisstopo). The injection went very and all radiation measurements were below background. The tracer will circulate for at least two years and samples will be taken on a regular basis and analysed at PSI
- On Wednesday, October 23, R. Wüst (Nagra) took the first two samples from the injection fluid on both boreholes BDR-E1 and BDR-E2.
- On Thursday, October 24, S. Schefer (swisstopo) took samples #2 from the injection fluid on both boreholes BDR-E1 and BDR-E2.
- On Friday, October 25, S. Schefer (swisstopo) took samples #3 from the injection fluid on both boreholes BDR-E1 and BDR-E2.

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

• On Tuesday, October 15, M. Nuus (ETHZ) unscrewed the miniRuedi from the liners placed in various boreholes and took it back to ETHZ.

HS (Hydrogeological Survey of the Mont Terri Anticline) experiment

• From Thursday to Friday, October 17–18, M. Reich and A. Novak (GFZ Potsdam) performed an absolute gravity measurement in Niche HE on the METAS point with an Absolute Quantum Gravimeter (AQG). Additionally, the two CG-6 relative gravimeters measuring since 3 months in Niche Passwang are deinstalled and taken back to Potsdam. The gPhone at Niche Passwang is continuing to record data successfully (Figure 1).

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

- On Friday, October 18, T. Theurillat (swisstopo) refilled the HPT of shaft 1.
- On Tuesday, October 22, S. Schefer (swisstopo) checked both gas injection systems (SW-A1 and SW-A2) for leaks and tightened several leaking connections mainly outside the cabinet. Nitrogen use was way too high for the present injection rates and should now decrease.
- On Friday, October 25, T. Theurillat (swisstopo) refilled the HPT attached to the borehole BSW-A1.

Varia

• On Monday, October 21, From 12:00 to 12:42 the electricity had to be interrupted due to a change in the installation of the new Core Storage Facility. All the server infrastructure was not interrupted due to the UPS. With these modifications, the server infrastructure is now able to use the new photovoltaic installation with its integrated battery giving us even more time during electrical power outages.

Visits

Day	Date	Group Name	Group Size	Visitors Guide
Mon	14.10.2024	Nukleartechnikerschule Baden	12	R. Nicol (swisstopo)
Wed	16.10.2024	Shin Sato, Japan	2	O. Moser (Nagra)
Fri	18.10.2024	Radio-Onkologiezentrum Biel-Seeland-Berner Jura	13	R. Nicol (swisstopo)
Sat	19.10.2024	OST Studierende, Thomas Kämpfer	18	O. Leupin (Nagra)

Wed	23.10.2024	Nuclear Engineering Master Students, PSI	17	H. Sager (Nagra)
Wed	23.10.2024	Obayashi Corporation	3	H. Sager (Nagra)
Thu	24.10.2024	Groupe Philippe Viénat	19	R. Nicol (swisstopo)
Thu	24.10.2024	Gruppe Strahlenschutz Und Mobile Messmittel, Labor Spiez	5	S. Schefer (swisstopo)
Thu	24.10.2024	Université De Franche-Comté	19	M. Abdelouhabi (swisstopo)
Fri	25.10.2024	Korad, Korea	2	H. Sager (Nagra)
Sat	26.10.2024	Feuerwehrverein Oberwil	13	O. Moser (Nagra)

Figures



Figure 1: HS: Calibrating the gravimeter for the new measurements in Ga98 (M. Richard (swisstopo)).