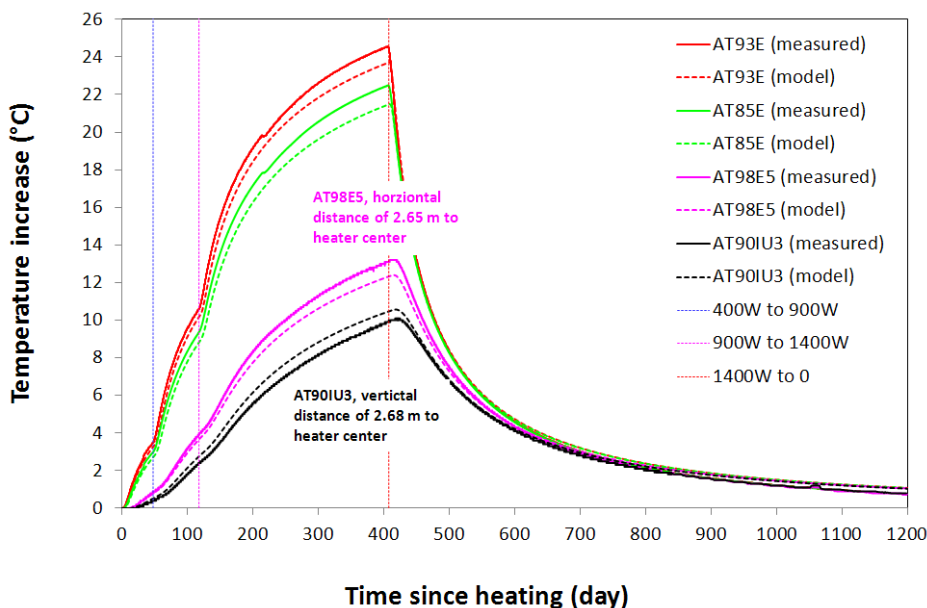
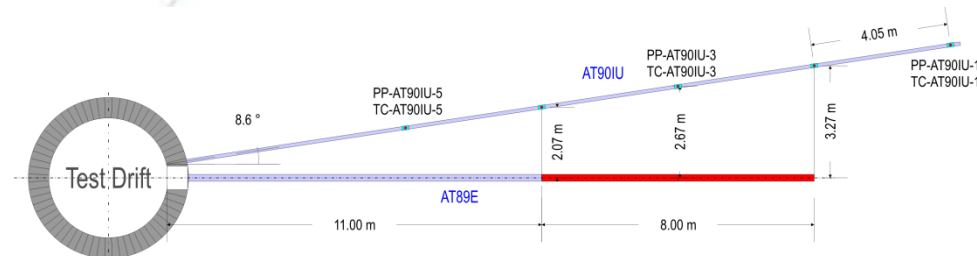
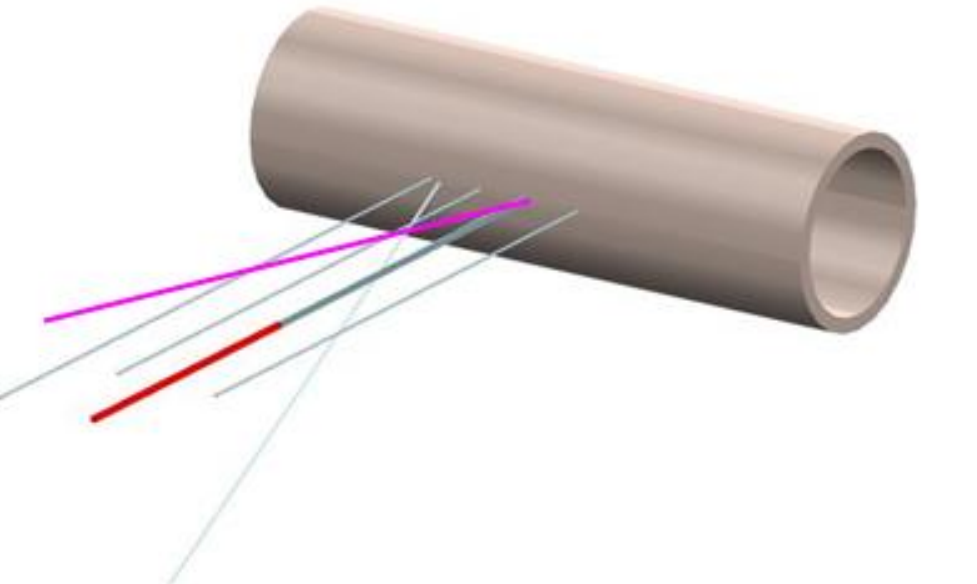
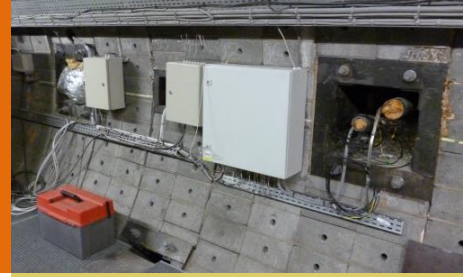




Experimental setup and main results

GOAL

Small-scale study of heat-impact on the thermo-hydro-mechanical properties of Boom Clay

1992: installation of heating tube (AT89E) and instrumented boreholes (AT85E & AT93E)

1993 - 1996: ATLAS I

1996 - 1997: ATLAS II

2006: installation of instrumented boreholes AT97E en AT98E

2007 - 2008: ATLAS III

2010: installation of additional instrumented borehole AT90IU

2011 - 2012: ATLAS IV

- T and PWP evolution (ATLAS III vs. ATLAS IV)
- comparison of measured values (T, PWP)
- Anisotropic THM-behavior of the Boom Clay

ATLAS I-IV

Admissible Thermal Loading for Argillaceous Storage

1992 - 2012



GOAL
Small-scale study of heat-impact on the thermo-hydro-mechanical properties of Boom Clay.

- 1992**
Installation of heating tube (TD-89E) and instrumented boreholes (TD-85E & TD-93E)
- 1993 - 1996: ATLAS I heating phase**
- 1996 - 1997: ATLAS II heating phase**
- 2006**
Installation of instrumented boreholes TD-97iD en TD-98E
- 2007 - 2008: ATLAS III heating phase**
- 2010**
Installation of additional instrumented borehole TD-90iU
- 2011 - 2012: ATLAS IV heating phase**

COMPARISON OF MEASURED AND MODELLED VALUES OF T AND PWP (ATLAS III & IV) REVEALED THE ANISOTROPIC THM PROPERTIES AND COUPLED BEHAVIOUR OF THE BOOM CLAY.

