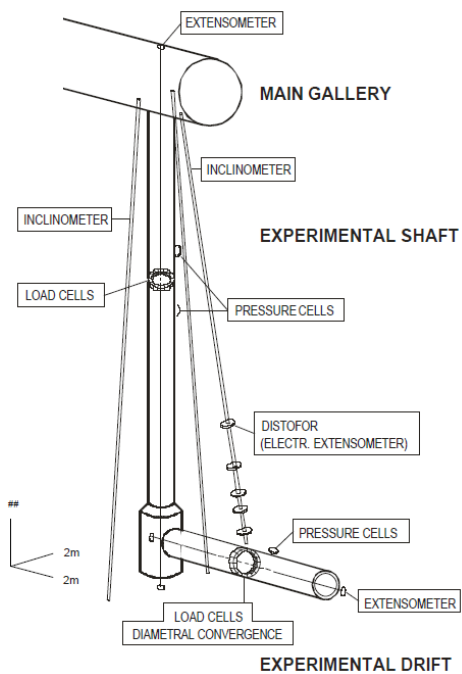


GOAL: demonstration of tunnelling techniques in non-frozen clay and monitoring of the hydro-mechanical effect of excavation on Boom Clay



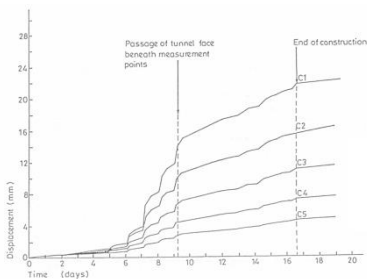
Experimental set-up

Phase 1

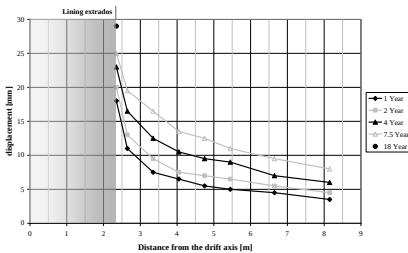


Experimental results

Phase 1: Host rock displacement (DISTOFOR)



Phase 2: Diameter reduction (DISTOFOR & lining measurements)



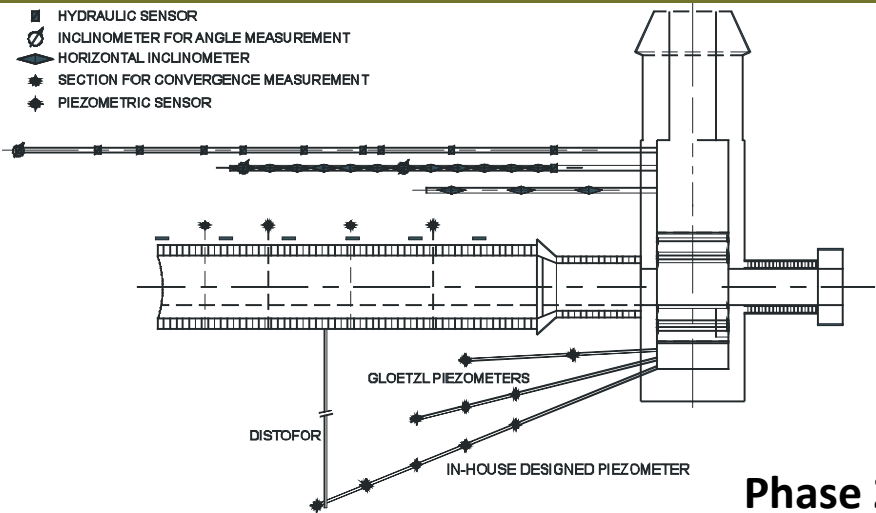
This test comprises several excavations in non-frozen clay. The surrounding host-rock was instrumented in advance of the excavation, allowing to monitor the hydro-mechanical behaviour of Boom Clay before, during and after excavation.

Phase 1: 1984

Construction of the experimental shaft (20 m length, 2 m external diameter) and gallery (7 m length and 2 m external diameter) in unfrozen clay

Phase 2: 1987

Construction of the test drift (42 m length, 4,7 m external diameter) and a Andra gallery with sliding ribs (12 m length and 4,4 m external diameter)



Phase 2

ACHIEVEMENTS:
Successful demonstration of constructability in non frozen clay & gathering of valuable in-situ data