

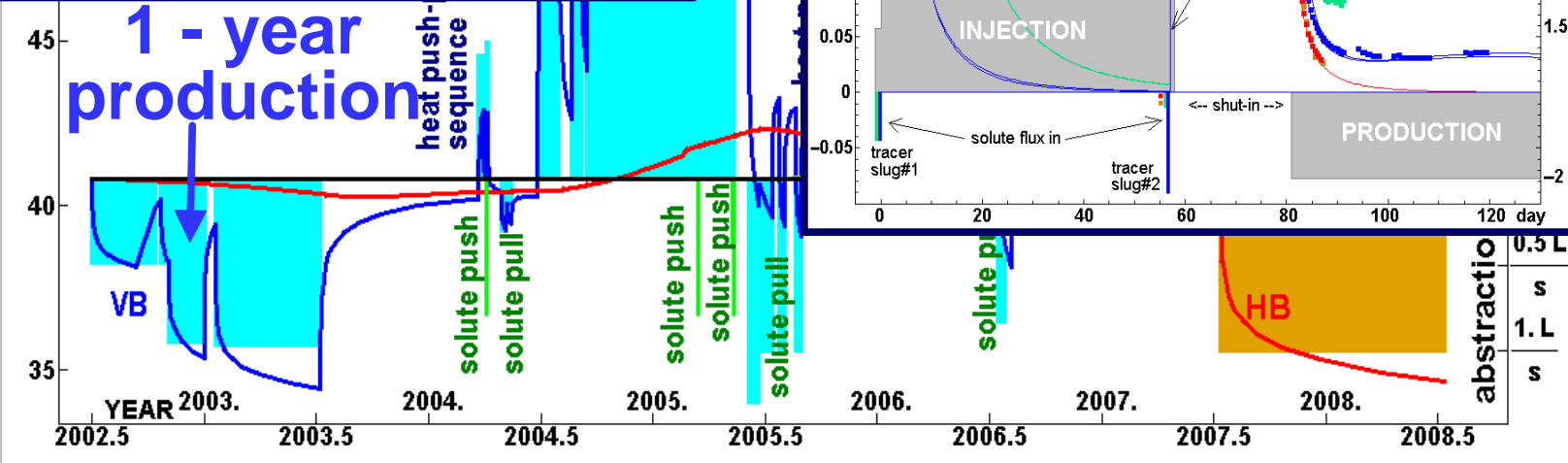
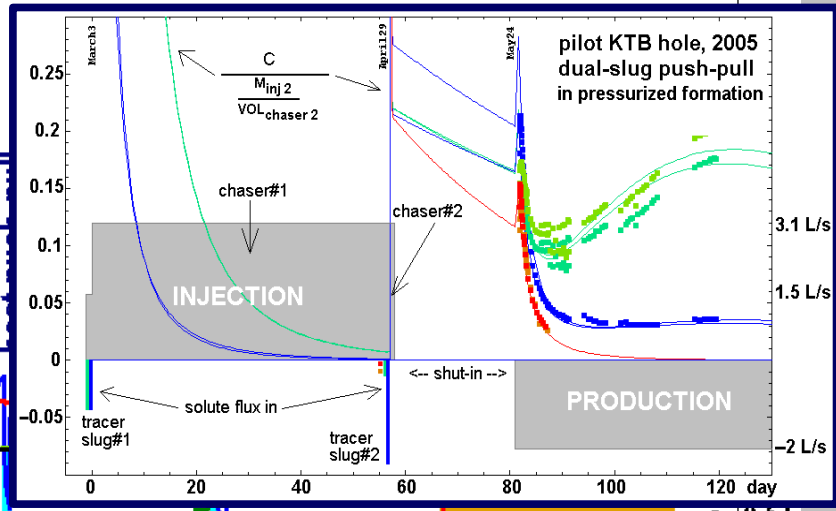
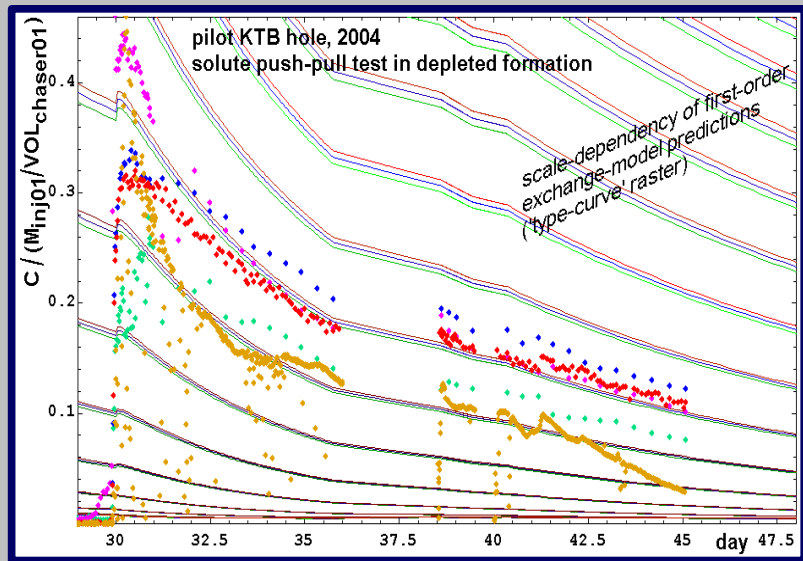
Hydraulic stimulation in the light of tracer tests

some comments on tracer tests results and
the presuppositions of their interpretation

I. Ghergut

(Deep Continental Drilling, Germany)

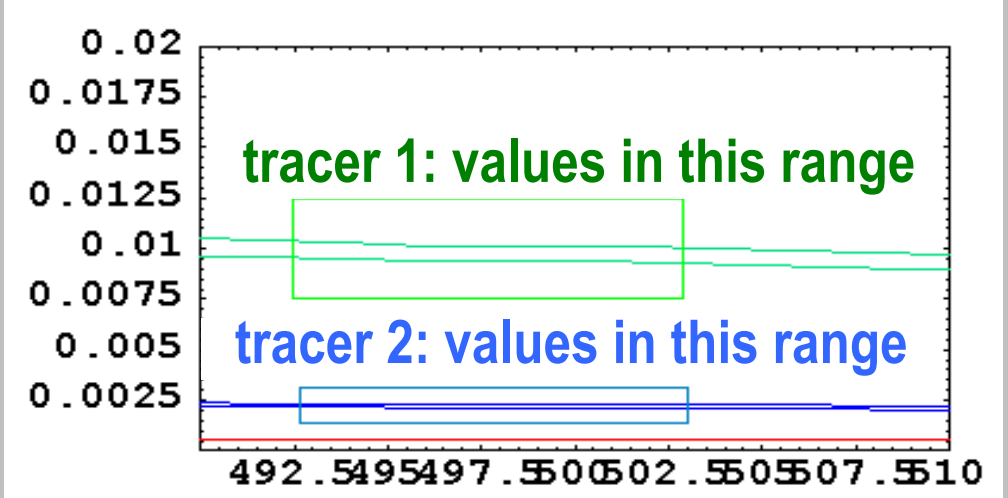
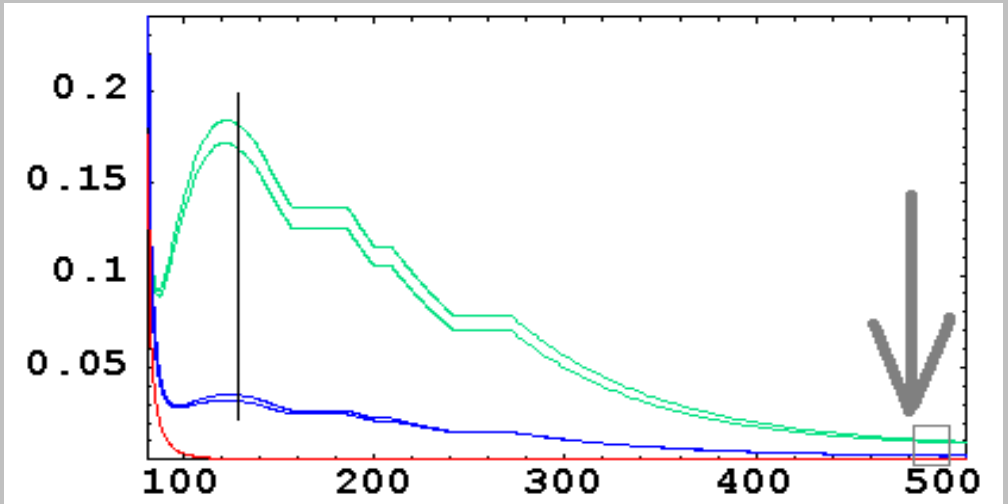
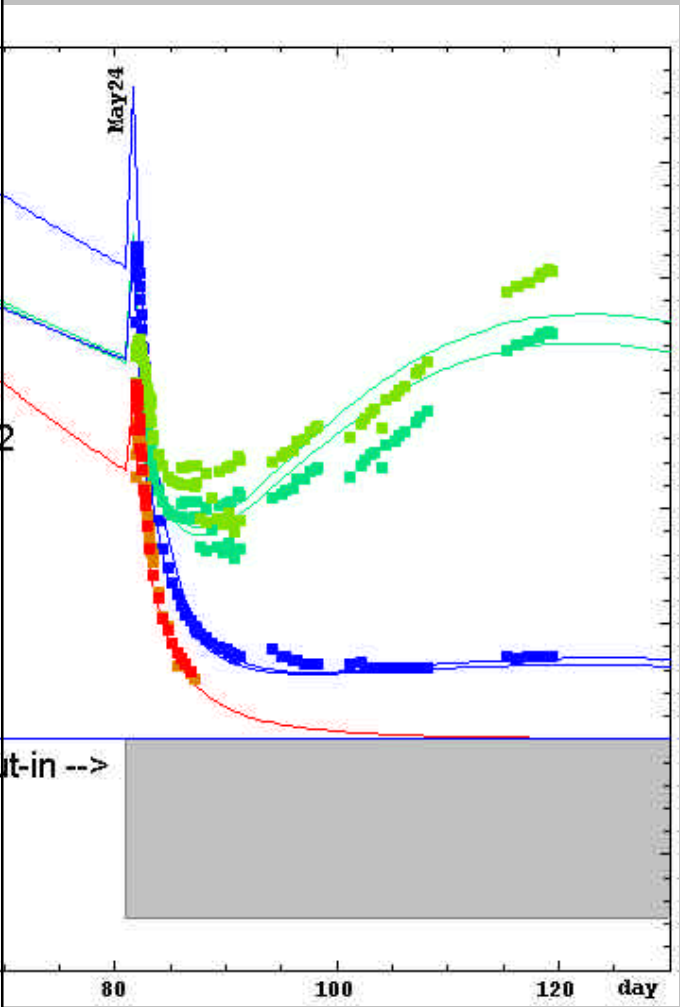
t.t.: depleted, stimulated, post-stimulation state



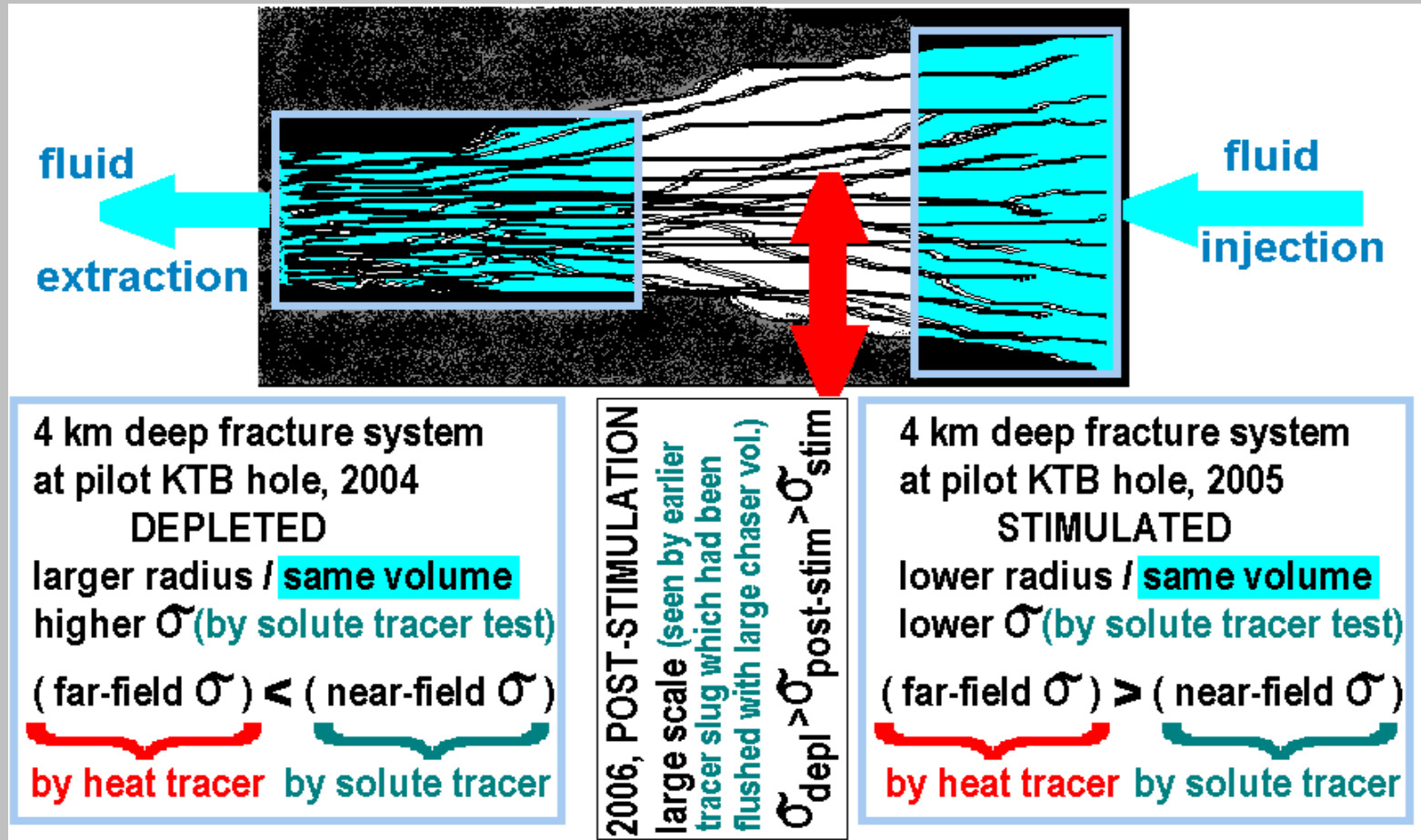
3. L
s

0.5 L
s
1. L
s

(Deep Continental Drilling, Germany) use different tracers, and rely on them!

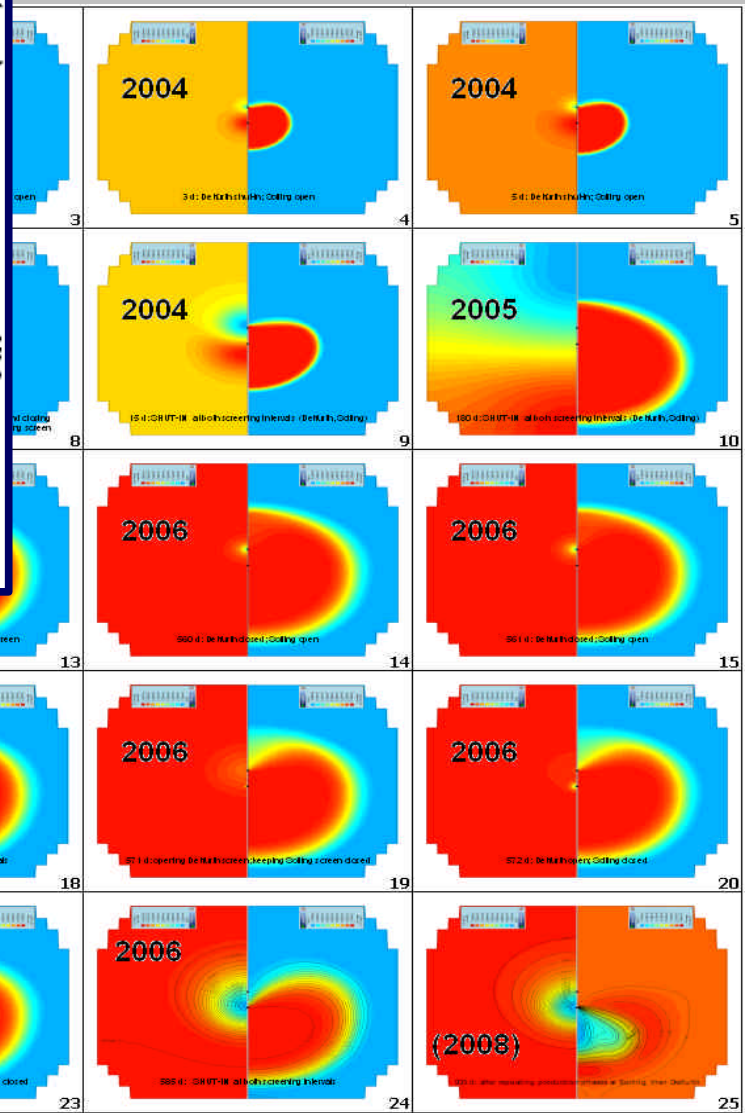
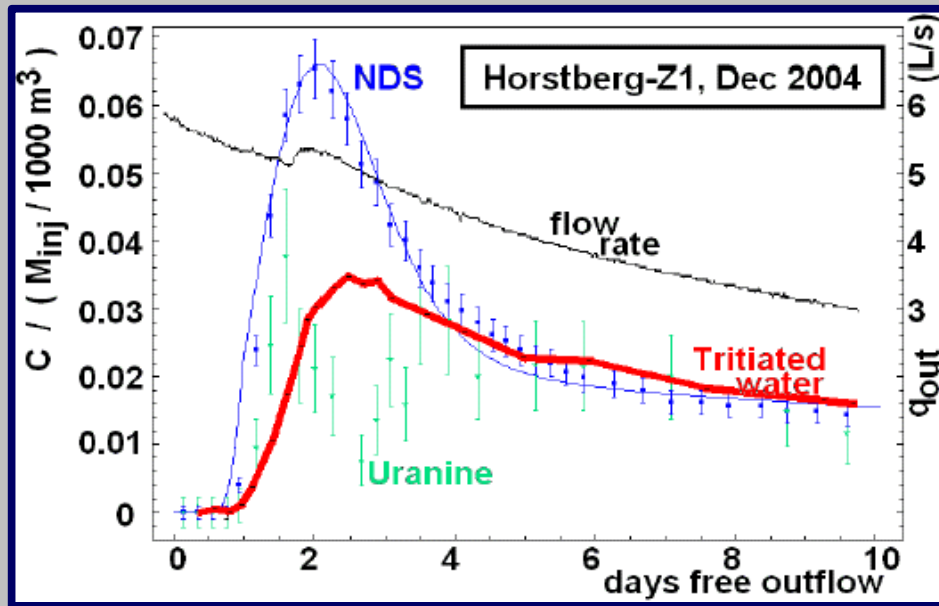


(Deep Continental Drilling, Germany)
interpretation is only as good as the assumptions made on tracer behaviour!

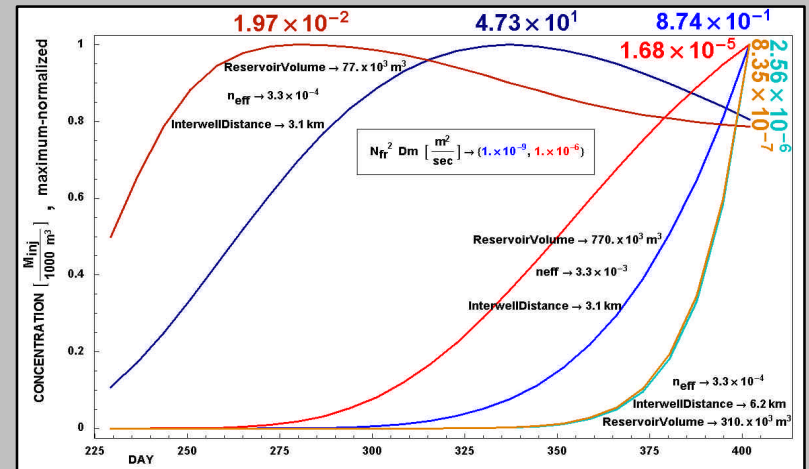
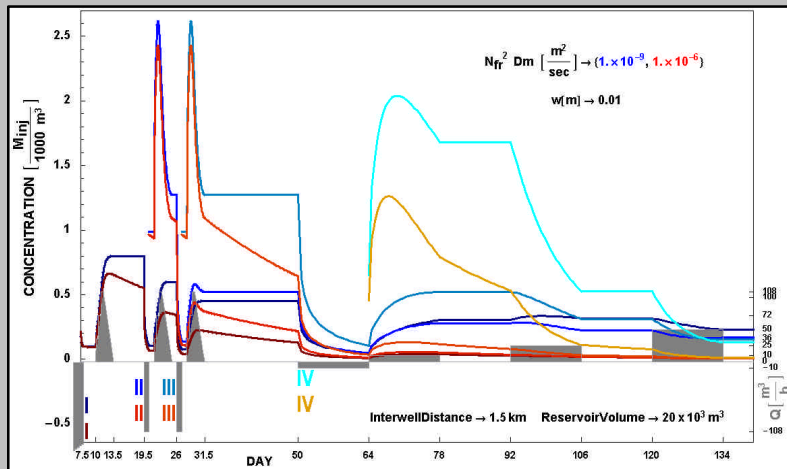
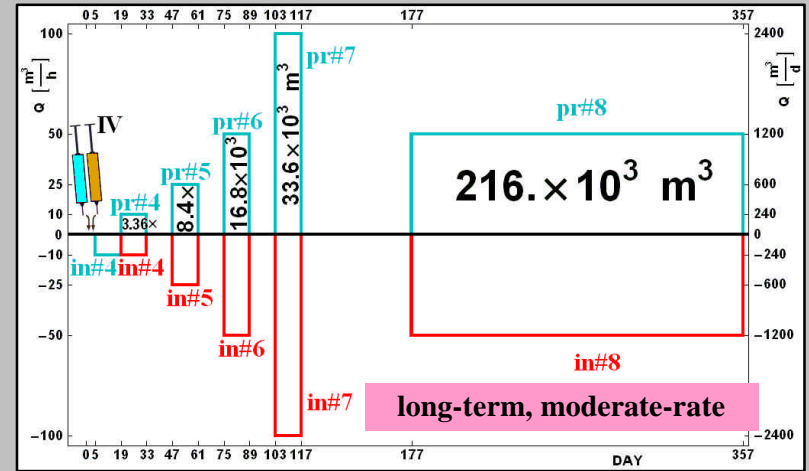
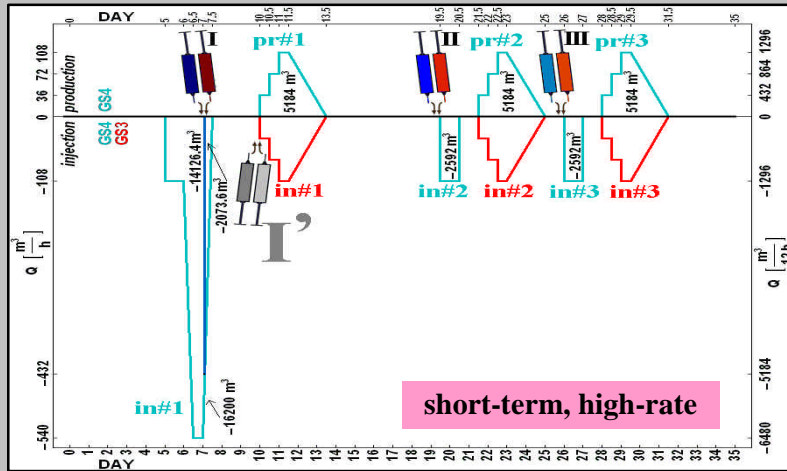


(Hydro-frac tracing in 4-km deep sedimentary)

2 organic tracers, very different behaviour!



(GroßSchönebeck: multi-tracer tests, forthcoming) want to be able to rely on various organic tracers!



spend more effort to:

- improve tracer analytics in saturated brine***
- understand physicochemical behaviour of tracers in situ***