



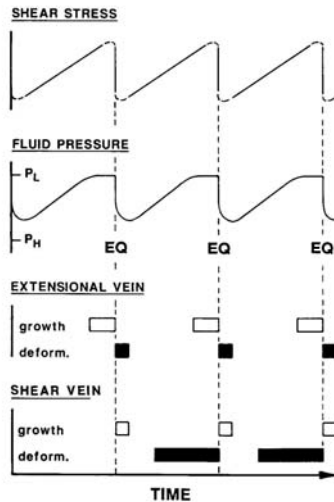
Naturally Mineralized Systems and Mineralisations, a natural analogue of Enhanced Geothermal Systems (EGS)?

LEDRU Patrick, BOUCHOT Vincent, GENTER Albert

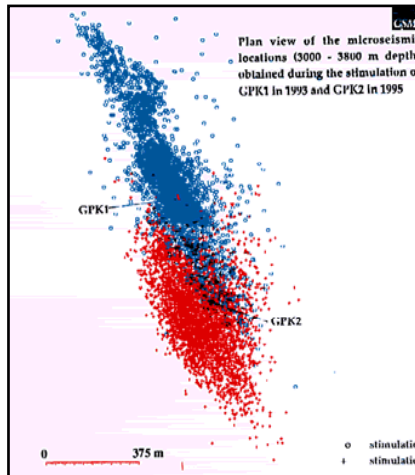
ENGINE Workshop “Defining, exploring, imaging and assessing reservoirs
for potential heat exchange”, GFZ Potsdam (Germany), 6-7 November 2006



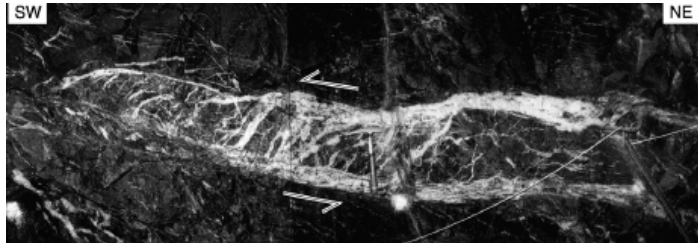
NMS versus EGS



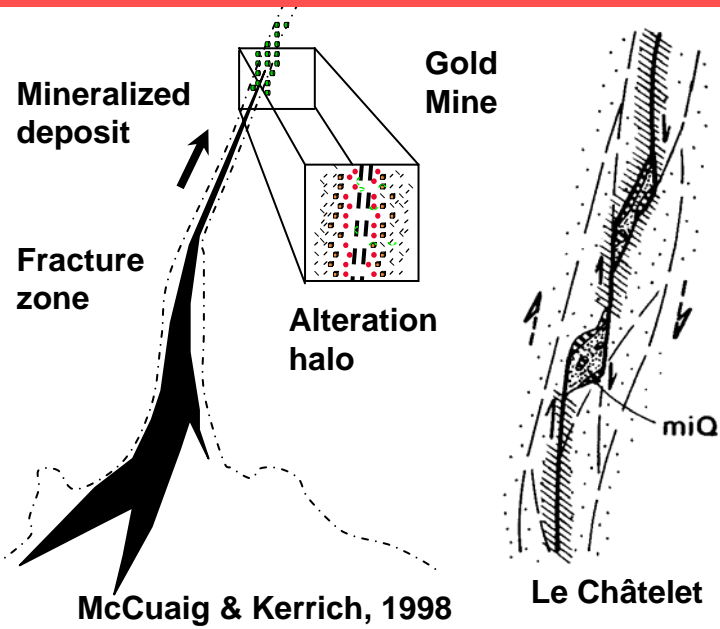
- > Naturally Mineralized Systems (NMS)
- > Fault/fracture mechanism in the crust
- > Gold-vein deposits (Australia, Canada, France, ...): natural analogues
- > Enhanced Geothermal Systems (EGS)
- > Reservoir Stimulations
- > Induced Seismic activity and Permeability
- > Natural fracture and present-day stress field



Fracture zone architecture



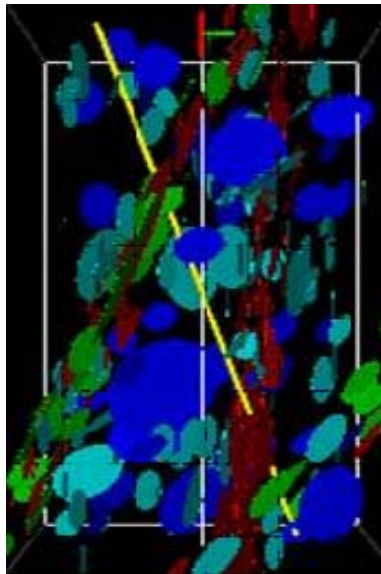
Quartz veins, Millier & Wilson (2004)



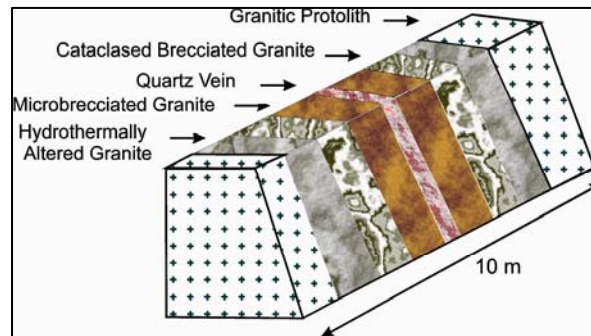
McCuaig & Kerrich, 1998

Le Châtelet

ANALOGUE



3D Fracture distribution at Soultz based on borehole data



Fracture zone organisation at Soultz Genter et al., 2000