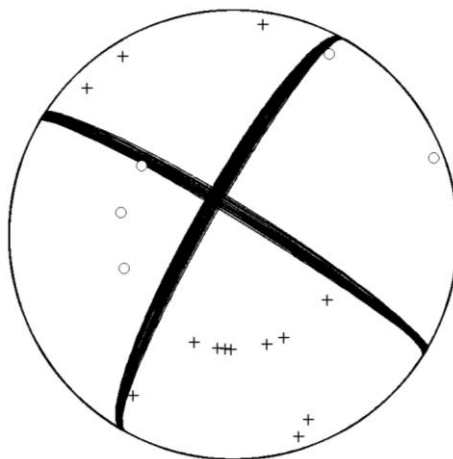


Fault mechanisms determined for geothermal exploration

Q-con successfully completed an analysis of fault mechanisms of natural earthquakes occurring in the Upper Rhine Graben area, Germany.

In the vicinity of a geothermal license field, fault mechanisms for 25 natural earthquakes were computed by combining waveform data of different national services. The resulting fault plane solutions are extremely well constrained within a few degrees uncertainty only (see figure). For geothermal exploration, fault mechanisms provide important information on the local stress-field thus constraining geo-mechanical reservoir models prior to drilling the first well.



Fault plane solution for a natural earthquake in the Upper Rhine Graben, Germany. Positive onsets of P-waves are indicated by + signs, negative onsets by circles. The solution is well constrained within $\pm 1^\circ$ for strike and $\pm 3^\circ$ for dip and rake, respectively.