**Slip tendency and fault reactivation potential in geothermal reservoir**

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**Abstract**

**Slip tendency analysis is a method to assess the stress states and fault reactivation potential. The reservoir rocks, composed of Lower Permian sandstones and volcanic rocks, were stimulated by hydraulic fracturing. But large-scale fluid injection as applied in geothermal reservoirs can also induce seismicity and fault reactivation depending on the reservoir geomechanics and stress regime. A surprisingly low microseismic activity was recorded with moment magnitudes MW ranging from -1.0 to -1.8. In this study from the Northeast German Basin, the authors applied the slip tendency method to characterize fault slip likelihood and slip directions in a geothermal reservoir in which a transitional stress regime is associated with both normal and strike-slip faulting. This study demonstrates that the slip tendency analysis, provides an appropriate method to investigate, characterize, and understand the faulting behavior in Enhanced Geothermal Systems.**

**References**

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