

Wet Simulation 4

"Wet" simulation with a fluid production rate $S_0 = 10^{-10} \text{ s}^{-1}$, and a maximal fault permeability $K_{max} = 10^{-8} \text{ m}^2$. This simulation was performed with an initial stress defined as $\sigma_1 = \frac{3}{2} \sigma_3$, and we have **omitted the poroelastic effects**.

Data in Folder "Wet Simulation 4":

- **Shear_stress**: tangential stress " τ " (Pa) fluctuation along the fault during the seismic cycles.
- **Fault_velocity**: fault velocity " V_f " (m/s) fluctuation along the fault during the seismic cycles.
- **Slip**: slip (m) along the fault during the seismic cycles.
- **Fluid_overpressure**: Fluid overpressure " P_e " (Pa) fluctuation along the fault during the seismic cycles.
- **Pore_Fluid_Factor**: Pore-fluid factor " λ " fluctuation along the fault during the seismic cycles. This variable is defined as the ratio of the fluid pressure to the vertical stress.
- **Time**: Time variable (yrs).
- **Fault_depth**: Depth of the fault nodes (m).
- **Fault_depth_FLUID**: Depth of the fault nodes (m) for the fluids data (i.e., Pore_Fluid_Factor and Fluid_overpressure).