

Simulation with a basal fluid source ($1.9 \times 10^{-9} \text{ m/s}$), performed with an initial stress defined as $\sigma_1 = \sigma_3$, a fault permeability equal to 10^9 m^2 , and $\Delta = 0.7 \text{ MPa/}^\circ\text{C}$.

Data in Folder “q0_1.9”:

- **Fault_velocity:** fault velocity “Vf” (m/s) fluctuation along the fault during the seismic cycles. (*Data used for Figure 6.c*)
- **Thermal:** Thermal anomalies ($^\circ\text{C}$) fluctuation along the fault during the seismic cycle
- **Time:** Time variable (yrs). Data was printed every 0.1 second during the coseismic period, and every 1 year during the interseismic period.
- **Depth:** Depth of the fault nodes (m).

- **velocity:** fault velocity “Vf” (m/s) fluctuation at 12.75 km depth on the fault during the seismic cycle
- **Anomaly_temperature:** Thermal anomalies ($^\circ\text{C}$) fluctuation at 12.75 km depth on the fault during the seismic cycle
- **Pore_fluid:** Pore-fluid factor (λ) fluctuation at 12.75 km depth on the fault during the seismic cycle
- **Apparent_friction:** apparent friction coefficient fluctuation at 12.75 km depth on the fault during the seismic cycle
- **mean_slip:** mean slip along the fault during the seismic cycles.
- **Time2:** Time variable (yrs) for **Mean_shearStress, velocity, Anomaly_temperature, Pore_fluid, Apparent_friction and Mean_slip** data. Data was printed every 0.1 second during the coseismic period, and every 1 year during the interseismic period.
