

# Fault, Seismic intensity map.

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## I stick-slip vs. creep

- Stick-slip: (Fault behavior comprising) alteration of strain accumulation (no slip) and strain release (earthquakes).
- Creep: Very slow deformation/failure of rock under shear stress.

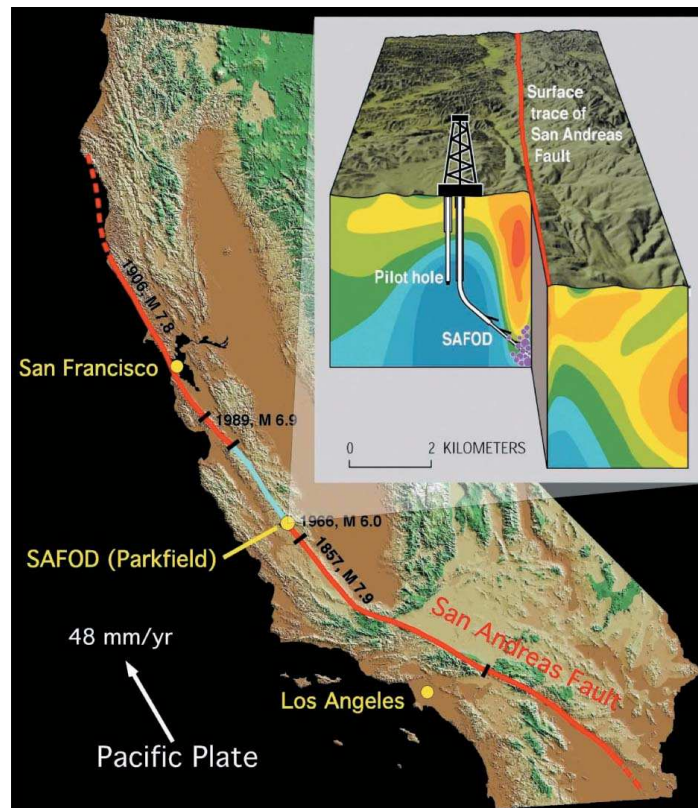


Figure 1: Blue line: creeping section; Red line: locked section(stick-slip)

## II Three types of fault

Hanging wall: The block lie above fault surface.

Footwall: The block lie below fault surface.

### A Normal fault

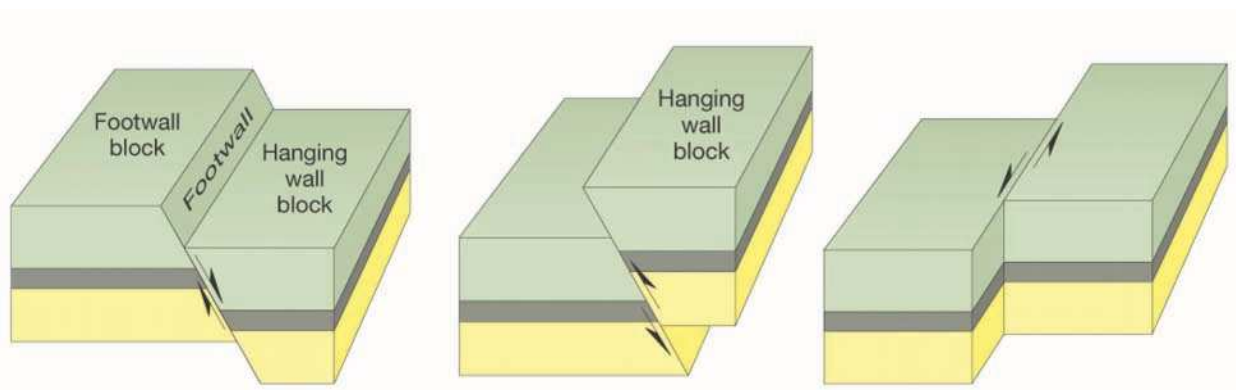
Hanging wall move down.

### B Reverse fault/Thrust fault

Hanging wall move up.

### C "Left lateral" or "right lateral" Strike-slip fault

Plates slide pass one another. Fault plane is usually vertical.



Type of Fault	Type of Stress	Example	Surface area	Boundary Type
<b>Normal fault</b>	Tension	<b>Rift zones</b>	Lengthened	<b>Divergent</b>
<b>Reverse fault</b>	Compression	<b>Sumatra</b>	Shortened	<b>Convergent</b>
<b>Strike-slip fault</b>	Shear	San Andreas Fault	No change	<b>Transform fault</b>

## Question Set

Do all questions of each question set. Words in parentheses are hints. Show the calculation processes or you get zero point.

### Question to skip. question 5 on p. 76

- **Part B** (P. 73) Question 1-4, 6-9.
- **Part C** (P. 96) Question 1-4. When you have finished 1, let me know.