

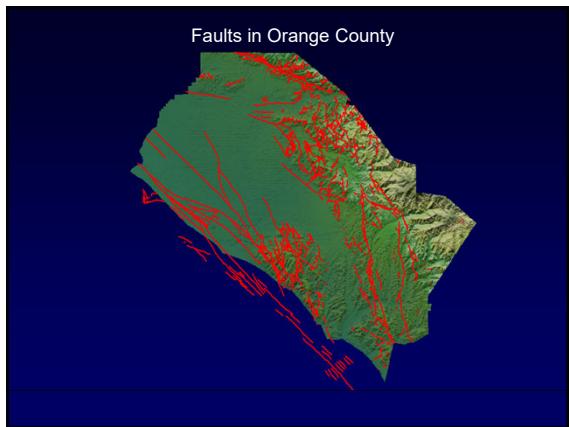
Measuring the Size of an Earthquake

For local magnitude (Richter): measure S-wave amplitude

The graph plots Maximum S-Wave Amplitude (mm) on the y-axis (0 to 800) against Distance (km) on the x-axis (0 to 100). Three data series are shown:

- WUSA:** A red line starting at (0, 500) and decreasing to (100, 0).
- ISCO:** A green line starting at (0, 400) and decreasing to (100, 0.1).
- DUG:** A blue line starting at (0, 60) and increasing to (100, 8.0).

There are other ways we measure the size of an earthquake



Predict what destruction arises from ground motion during an earthquake

Rupture

Landslide

Structural damage

Tsunami

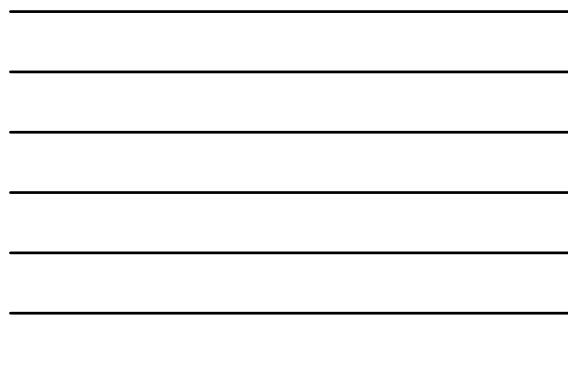
Bridge failure on weak materials

Worse if poor construction

Aftershocks cause further damage

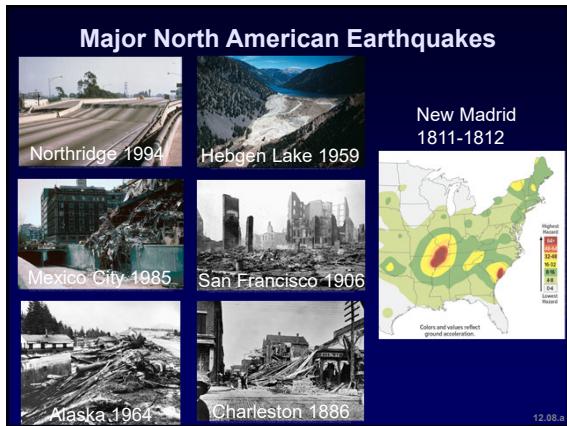
Liquefaction of fill

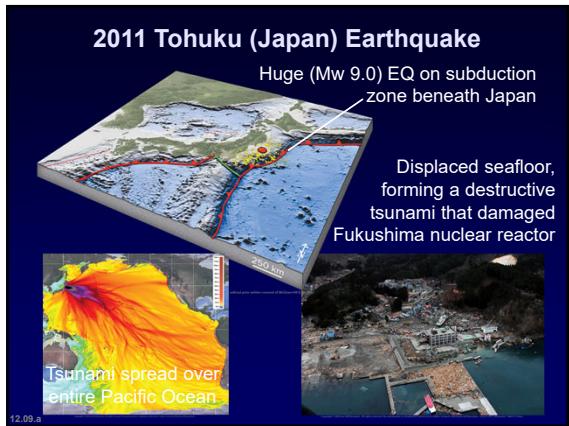
Loma Prieta

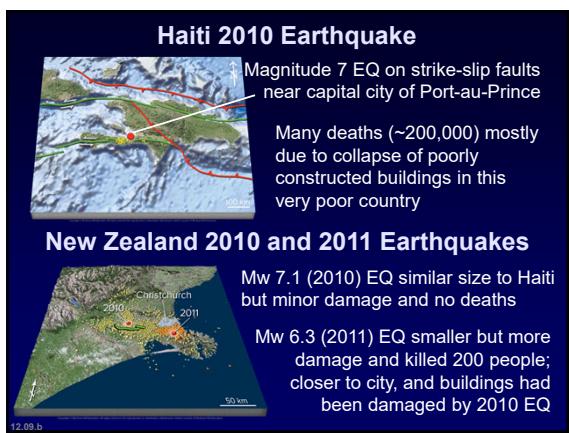


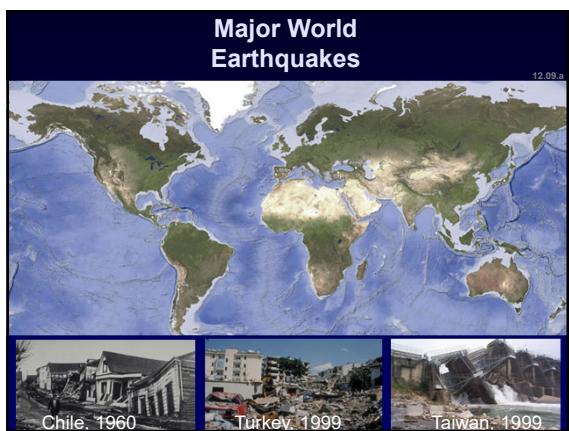


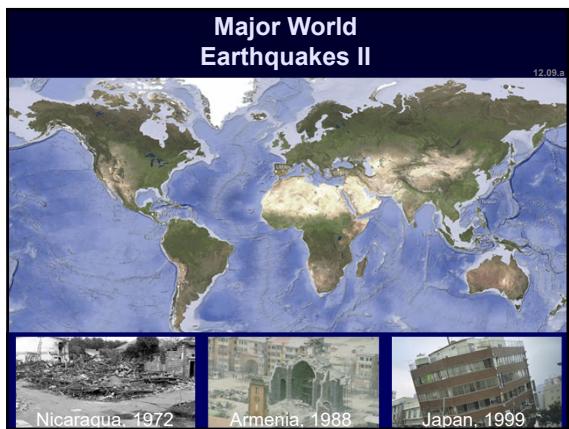


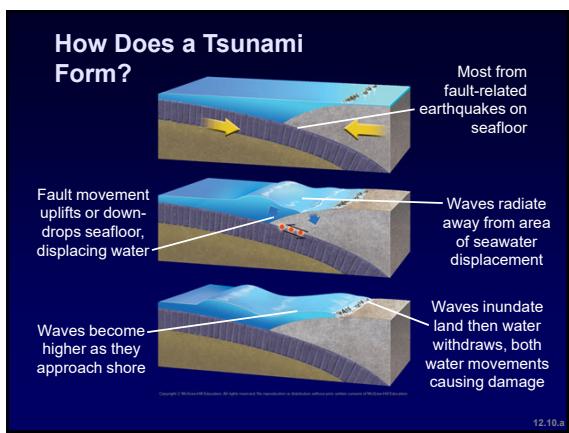


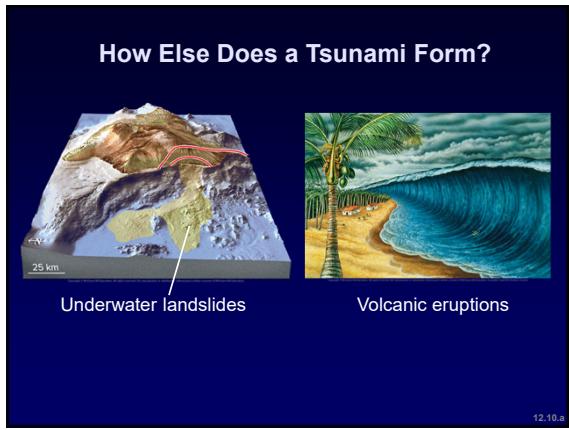


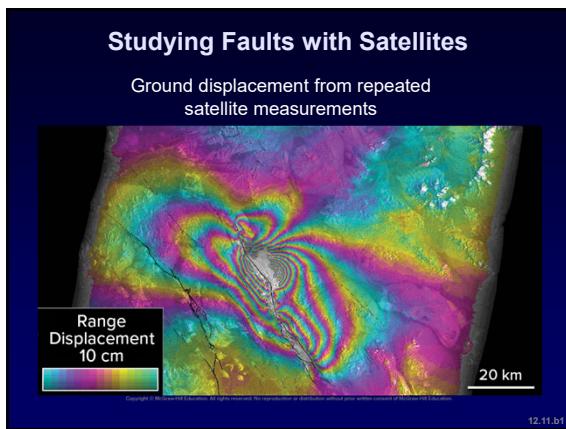
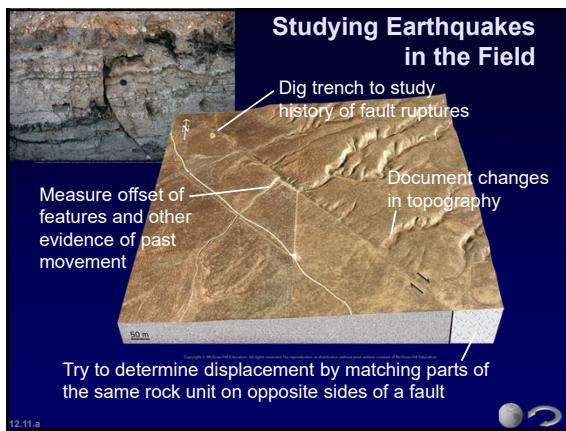


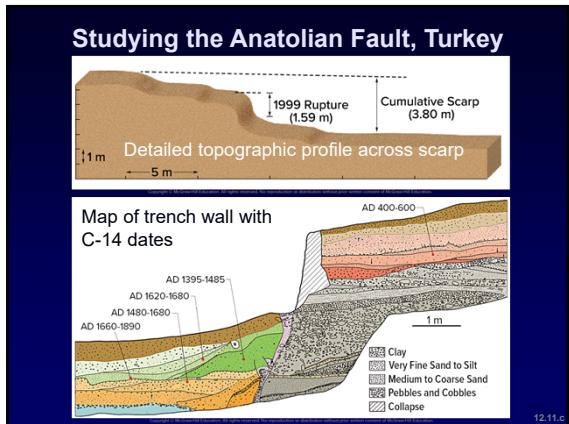




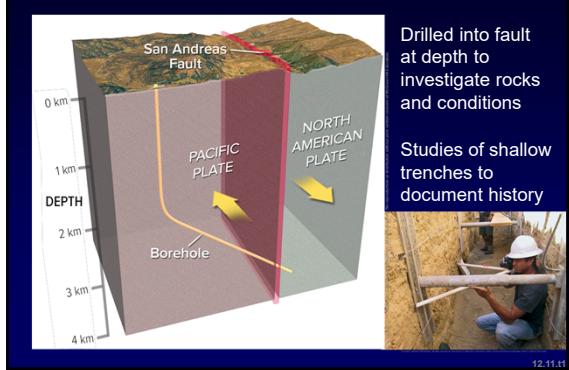








Studying the San Andreas Fault



What areas are most likely to experience earthquakes?

