# Class 6b: Earthquakes

### Earthquake basics

- Stress relief via crust movement
- 500,000 per year; 800 felt

# Earthquake basics

• Hypocenter:

• Epicenter:

# Earthquake energy

- Waves of energy traveling through the earth
- Primary or *P-wave*

# Earthquake energy

• Secondary or *S-wave* 

#### Richter scale

• Measures magnitude via amplitude (height) of the seismic waves

# World's largest quakes

Always at subduction zones

# California's largest quakes

### We're overdue!

• Can't yet predict quakes, but...

# Earthquake effects

• "Earthquakes don't kill people, buildings do"

#### **Tsunamis**

• Land displaced underwater (quake or slide)

# Tsunami: Sumatra

# Tsunami: Sumatra

### Tsunamis in the U.S.?