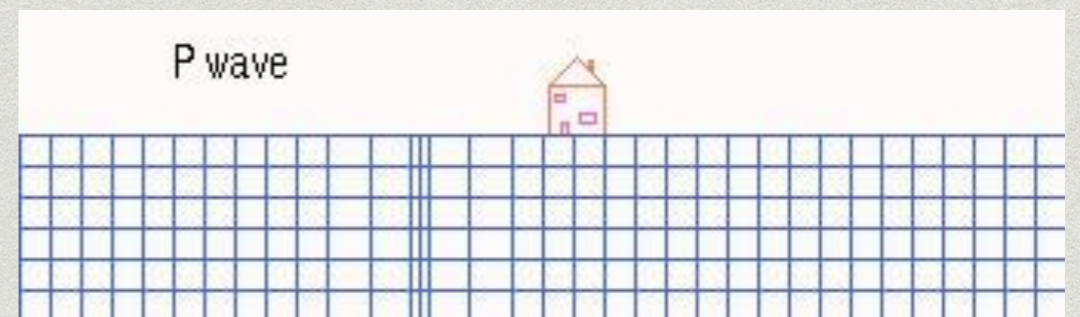


EARTHQUAKES

BY: DAKIYAH GREEN

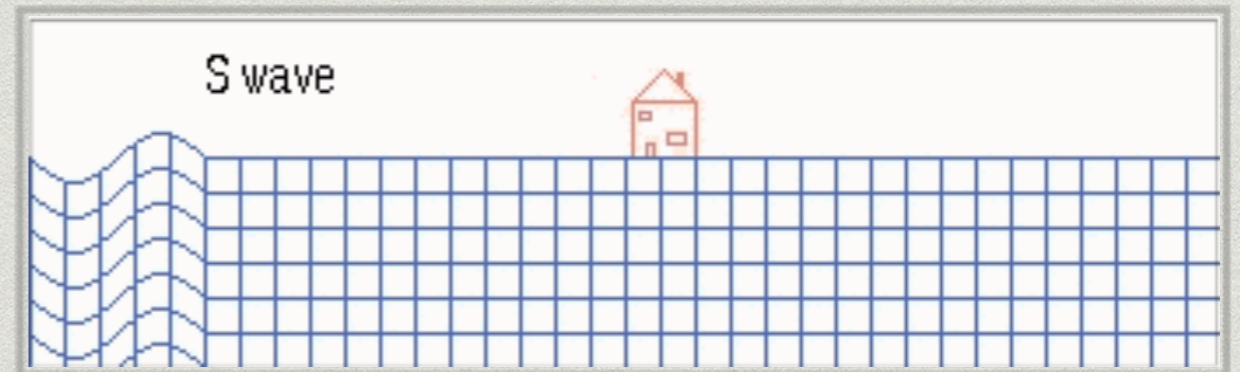
P Waves/"Longitude Waves"

- * Travel through fluids and solids
- * Travel through the body of a material in all directions
- * Compression wave, relies on compressional strength and elasticity of the material
- * Fastest seismic wave
- * Travel at about 6km/s in the crust



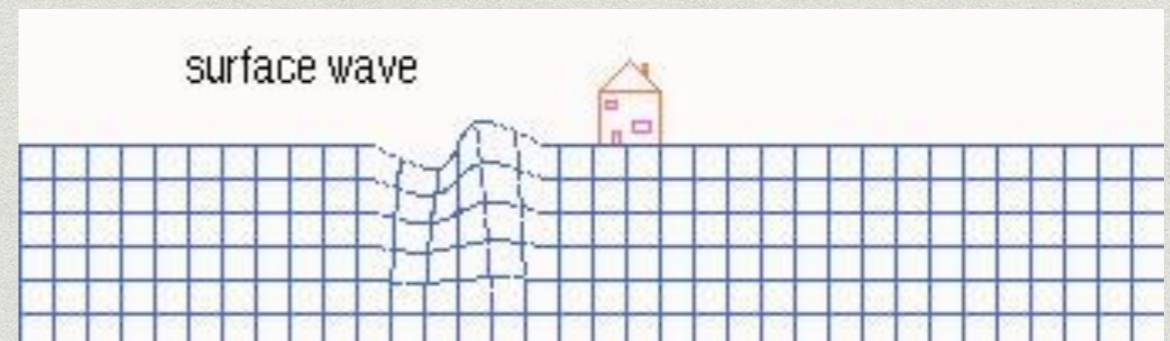
S Waves (Secondary)

- * Depend on the strength of the material
- * Velocity is about 3.5 km/s in the crust
- * A body wave (like P Waves)
- * Shakes the ground back and forth, the ground shakes perpendicular to the direction of the wave
- * The second wave you feel in an Earthquake
- * Only travel through solid rock



Surface Waves

- * Very similar to ocean waves
- * Only occur on the surface of the Earth (do not penetrate deeply)
- * Usually cause the most damage during an Earthquake
- * Velocity varies due to wavelength
- * Occur after body waves



Effects



Landslides



Liquefaction



Tsunamis



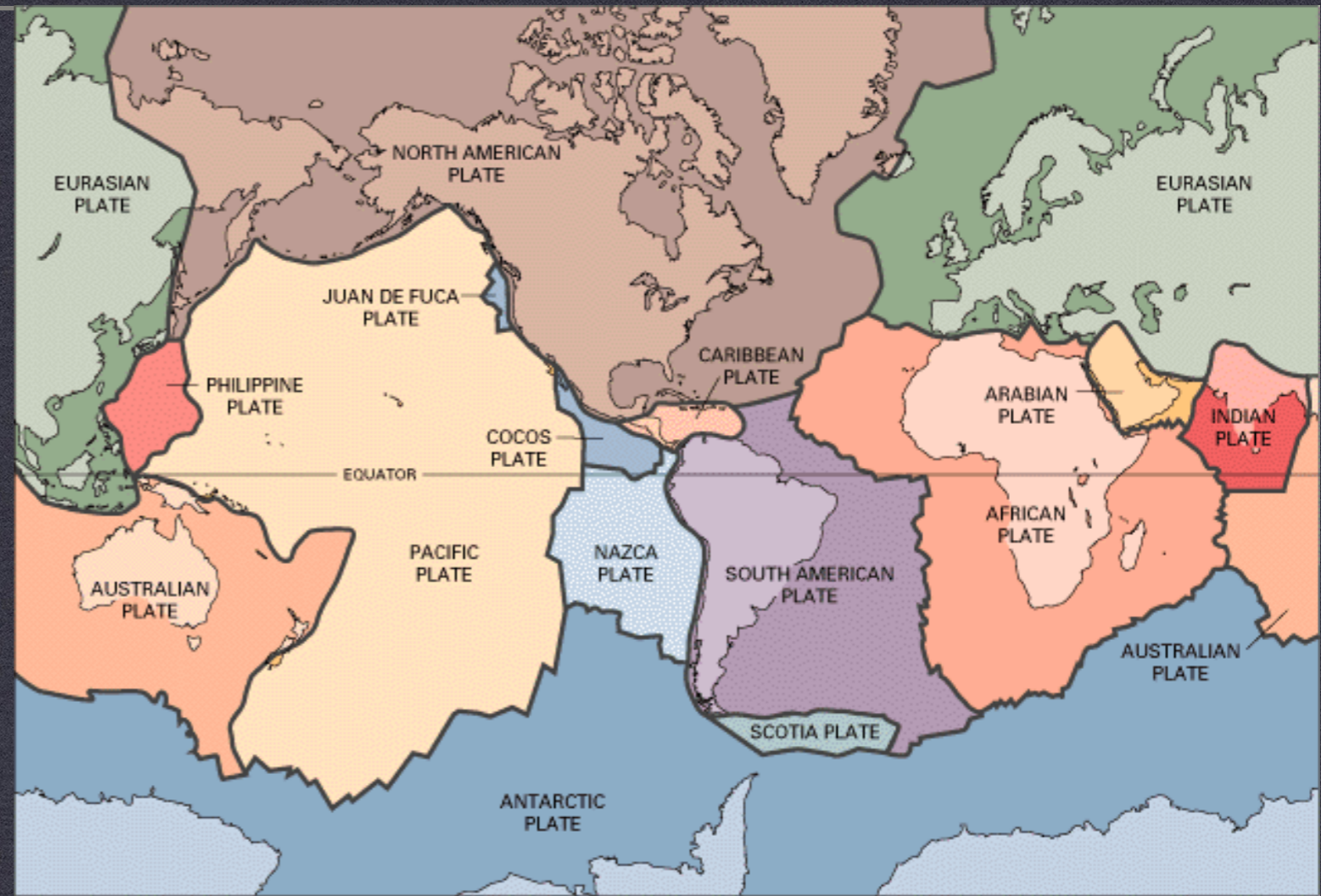
Ground Shaking



Faulting and Ground Rupture



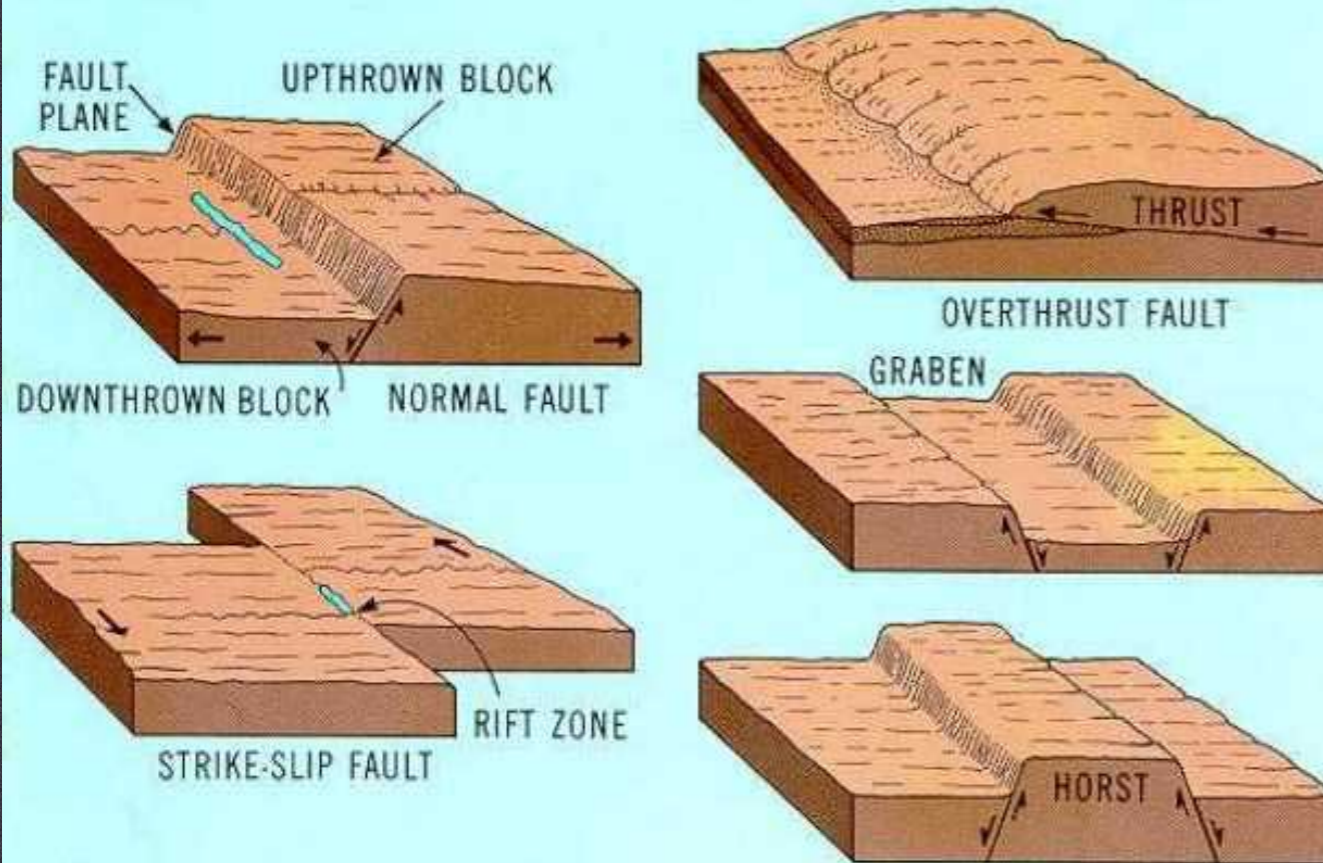
Building Damage & Collapse



WHERE THEY OCCUR

MOST EARTHQUAKES OCCUR
ALONG OCEANIC AND
CONTINENTAL PLATE EDGES

VARIETIES OF FAULTS



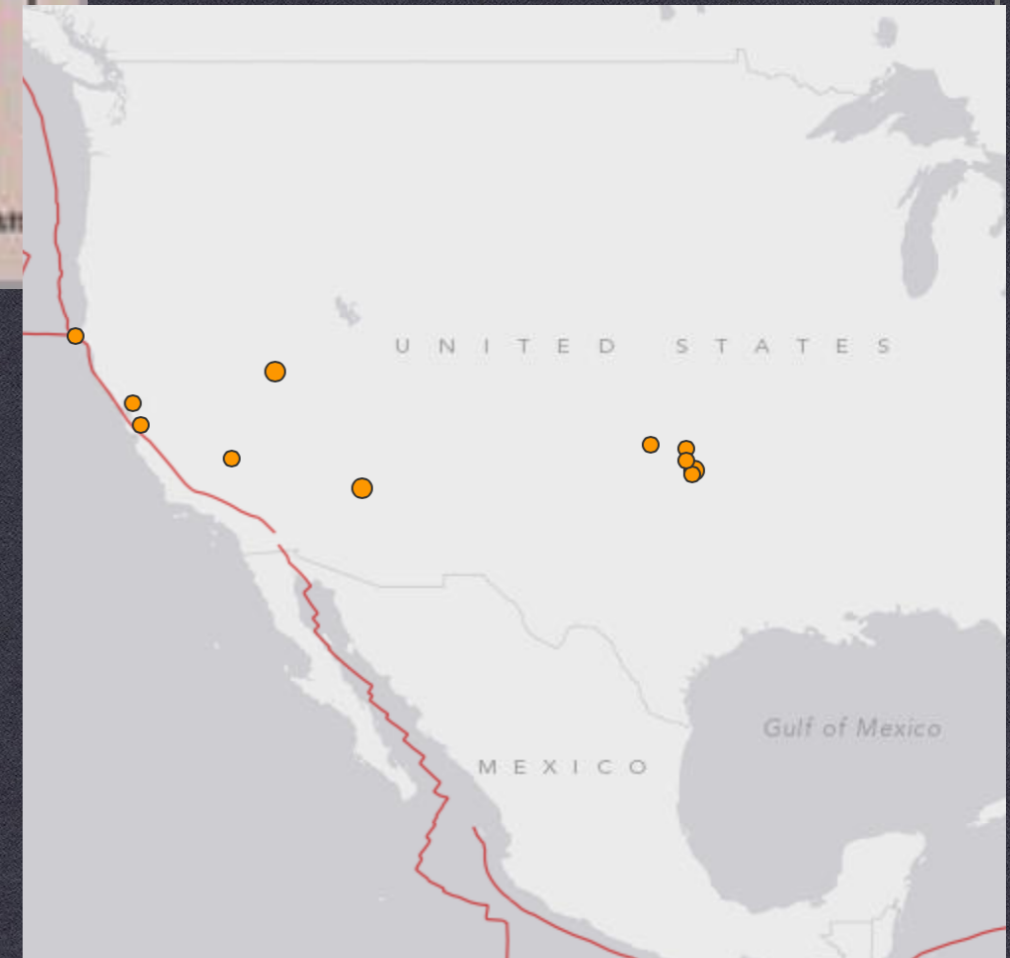
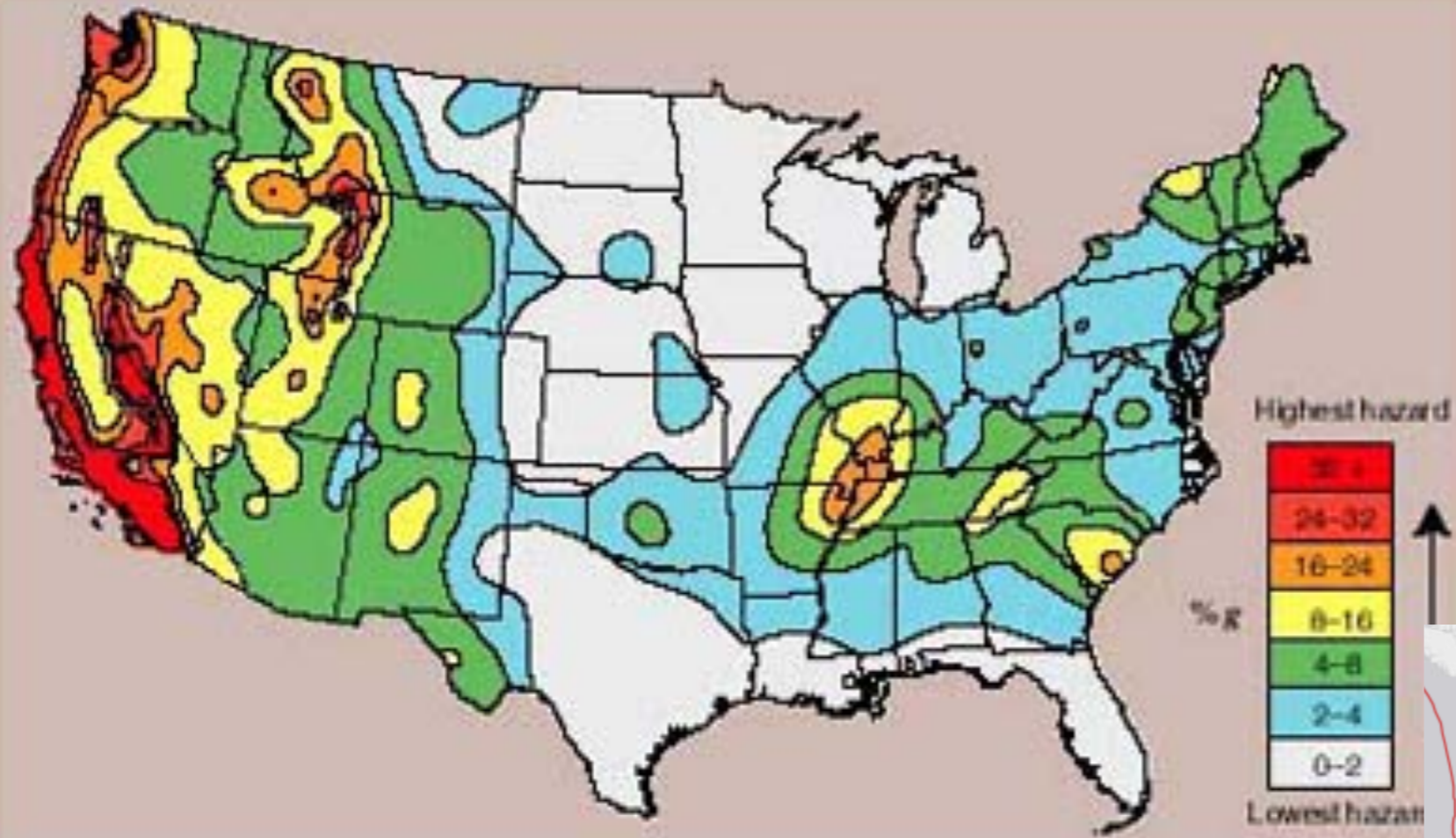
Edited by J. W. Straker, Ph.D.

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PRINT NO. 843-8190

WHERE THEY OCCUR

***SOME EARTHQUAKES HAPPEN ALONG FAULTS, FAR FROM PLATE EDGES**

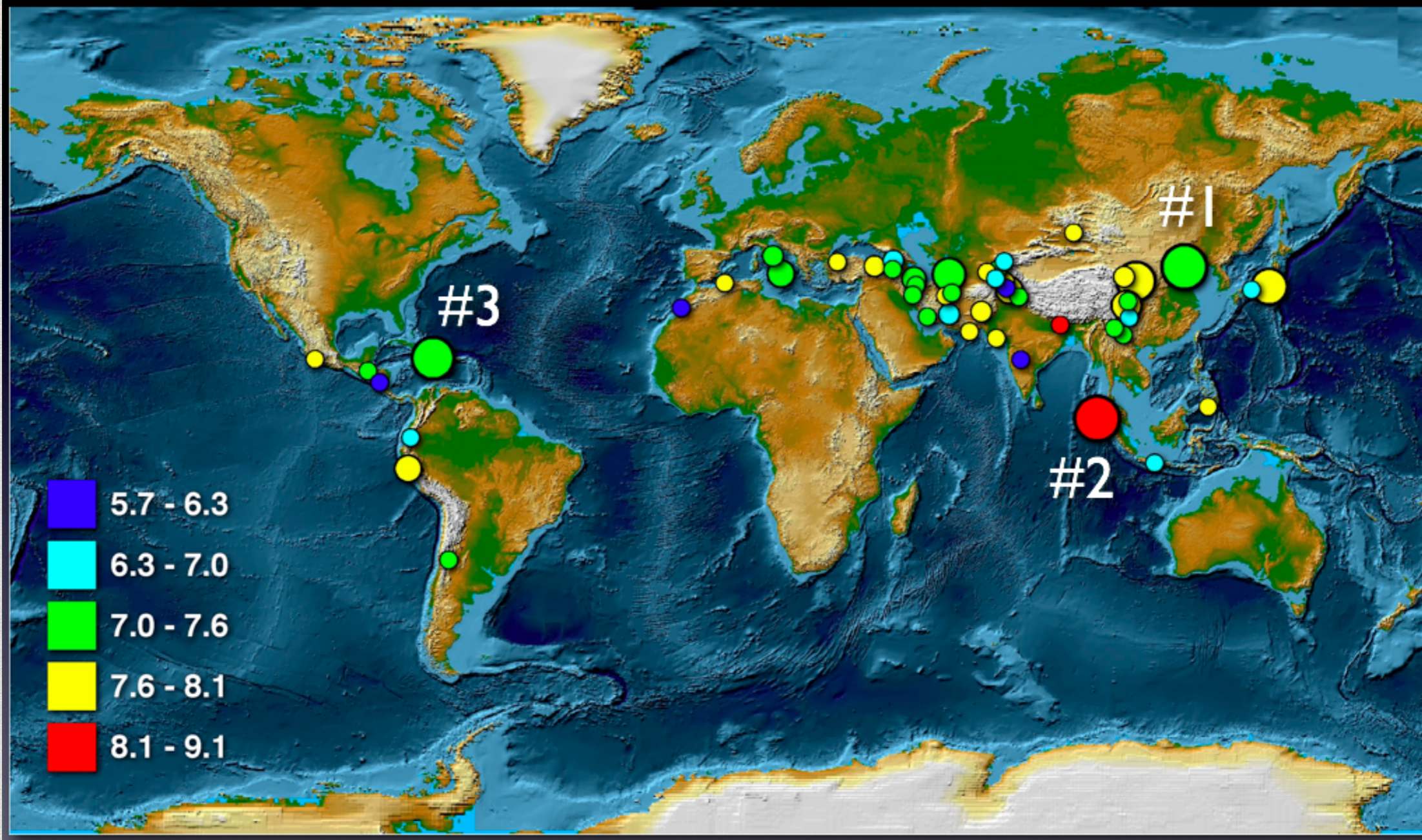
***THERE ARE DIFFERENT TYPES OF FAULTS: NORMAL FAULTS, REVERSE FAULTS, AND SLIP STRIKE FAULTS.**



Where They Happen

Where They Happen

The 50 Deadliest Earthquakes since 1900



SOURCES

P AND SURFACE WAVES

[HTTP://WWW-ROHAN.SDSU.EDU/~RMELLORS/LAB8/L8MAINEQ.HTM](http://www-rohan.sdsu.edu/~rmellors/lab8/l8maineq.htm)

P, S AND SURFACE WAVE PICTURES

[HTTP://WWW-ROHAN.SDSU.EDU/~RMELLORS/LAB8/L8MAINEQ.HTM](http://www-rohan.sdsu.edu/~rmellors/lab8/l8maineq.htm)

S WAVE

[EARTHQUAKE.USGS.GOV/LEARN/GLOSSARY/?TERM=S%20WAVE](http://earthquake.usgs.gov/learn/glossary/?term=s%20wave)

EFFECTS OF EARTHQUAKES

[HTTP://EQSEIS.GEOSC.PSU.EDU/~CAMMON/HTML/CLASSES/INTROQUAKES/NOTES/EARTHQUAKE_EFFECTS.HTML](http://eqseis.geosc.psu.edu/~cammon/html/classes/introquakes/notes/earthquake_effects.html)

OCCURRENCE MAP

[HTTP://WWW.THE-SCIENCE-SITE.COM/IMAGES/EQ1-EARTHQUAKE-HAZARD-MAP.JPG](http://www.the-science-site.com/images/eq1-earthquake-hazard-map.jpg)

WHERE THEY HAPPEN PICTURE

[HTTP://EARTHQUAKE.USGS.GOV/EARTHQUAKES/MAP/](http://earthquake.usgs.gov/earthquakes/map/)

50 DEADLIEST MAP

[HTTP://WWW.GEO.CORNELL.EDU/GEOLOGY/FACULTY/RWA/RESEARCH/CURRENT_RESEARCH/CHILE-M-88-EARTHQUAKE-PAGE/THE-DEADLIEST-EARTHQUAKES.HTML](http://www.geo.cornell.edu/geology/faculty/rwa/research/current_research/chile-m-88-earthquake-page/the-deadliest-earthquakes.html)

WHERE THE HAPPEN (INCLUDING PICTURES)

[HTTP://WWW.GEO.MTU.EDU/UPSEIS/WHERE.HTML](http://www.geo.mtu.edu/upseis/where.html)

P AND SURFACE WAVES