

EENS 3050	Natural Disasters
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Earthquake Case Histories	

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Earthquake Case Histories

For this lecture we will watch a video entitled "*Deadliest Earthquakes, Haiti and Chile*", produced by the Public Broadcasting System for their series, "Nova". The video discusses earthquakes that occurred in 2010 in Haiti and Chile and discusses what causes earthquakes. It then goes into extensive detail about the current state of the science of earthquake prediction. Overall, it is a good summary of things we have talked about in our discussions of earthquakes and provides some new insights into earthquakes that we did not discuss in class. The web site for this program can be found at <http://www.pbs.org/wgbh/nova/earth/deadliest-earthquakes.html>.

Questions on this material that could be asked on an exam

Note that answers to some of these questions will come from the video

1. What is a megathrust earthquake? What plate tectonic setting do they occur in, and what areas of the United States are most susceptible to megathrust earthquakes?
2. What is the concept of slow slip on subduction zones? How might awareness of slow slip be useful in predicting earthquakes?
3. What is the concept of "Shake Alert"? How much warning could the Shake Alert system provide for areas right at the epicenter of an earthquake? Despite the limitations, could Shake Alert save lives? Could it reduce damage caused by an earthquake?
4. What are some potential secondary disasters that could occur as the result of a major earthquake?

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