

Geosciences 211, Physical Geology

Homework Questions: The Indian Ocean Tsunami
Due February 24, 2005

Please answer the following questions after reading:

- Atwater and others, 1999, *Surviving a Tsunami - Lessons from Chile, Hawaii and Japan*, USGS Circular 1187, 24.pp.
 - Information on the United States Geological Survey web page devoted to this earthquake and the ensuing tsunami. http://neic.usgs.gov/neis/bulletin/neic_slav.html
1. Other than being larger, tsunami waves differ from regular water waves in several important ways. List several of these differences.
 2. Geologists think that destructive tsunami events periodically visit the Oregon - Washington coast, including Puget Sound.
 - a. What is this evidence?
 - b. Why does this region experience tsunami?
 - c. What concerns do you think policy makers in Seattle, Tacoma and Olympia should consider when evaluating potential tsunami risk?
 3. Early one morning, your vacation on the Fiji islands is interrupted by a powerful earthquake. You join a number of dazed tourists by the shore and are puzzled to note that the coral reef is no longer covered by water.
 - a. Describe what you are observing.
 - b. Describe three actions that you can engage instantly to reduce your hazard of becoming a victim of a tsunami.