

OCTOBER 2018 SULAWESI EARTHQUAKE AND TSUNAMI ARTICLE READINGS

GENERAL INSTRUCTIONS

Study the section on Tsunamis in your textbook (Chapetr 8, pages 253 to 261)

Then, read the two articles:

“Catastrophic Indonesia tsunami shows critical blind spot in warning system for California and beyond” and

“Indonesia Tsunami’s Power After Earthquake Surprises Scientists”
in the handout I prepared.

Finally, using both your book and the articles, including the figures, answer the questions below, using the following formatting rules for full credit

This assignment is due at the start of class on Thursday, November 29, 2018, NO EXCEPTIONS

FORMATTING INSTRUCTIONS

Name and title

Your name, the course name, professor’s name and the due date must be placed at the upper left hand corner of the first page. Below that should be your title, centered.

Text

- 1. Use the standard margins of 1" on the top and bottom margins and 1.25" on the left and right margins.*
- 2. Text should be double spaced. Text could be either left-aligned or justified.*
- 3. Use a standard font such as "Times New Roman" size 12.*
- 4. Print your summary on only one side of paper.*
- 5. Use standard white paper (8.5" X 11").*
- 6. Identify paragraphs by an indentation of five spaces (a tab), do not make extra spaces between paragraphs.*

Page Numbers

The first page of your text is page 1 and may be numbered at the bottom center, in the upper right hand corner, or left unnumbered. Number subsequent pages in the upper right hand corner of each page. Page numbers should be numbers only.

QUESTIONS

1. Define what a tsunami is
2. This tsunami was triggered by an earthquake that occurred when a rupture occurred along a fault. What kind of fault was that? Is that the kind of fault you would normally expect to rupture when a tsunami is generated?
3. Briefly describe the progression of wave height in Palu Bay, and why there was so much destruction in the city of Palu
4. The neighborhoods of Balaroa and Petobo were also affected by liquefaction. Can you explain what that is and why it is so dangerous?

5. How are tsunamis detected in the open sea?
6. Was the Sulawesi tsunami a local tsunami, or a distant tsunami?
7. Did the tsunami detection network work or not for this event? Was it effective?

8. What is the implication for our coasts in the article about the Los Angeles area?

9. What are two warnings from nature that a tsunami may be coming?
10. What should you do if a tsunami warning is issued?
11. What should you do if you are at the beach, and feel an earthquake, but no tsunami alarm is issued?
12. What is the role of education in minimizing the consequences of a tsunami? Should you be talking about what to do with your family, friends, and neighbors?