

1. Change the title to: Tsunami Hazard Assessment of the Commonwealth of the Northern Mariana Islands

The title is changed to: "Tsunami Hazard Assessment of the Commonwealth of the Northern Mariana Islands"

2. Front Cover: spelling correction: Noember to November

N/A – publication date has changed

3. Inside Front Cover: Correct date August 2011 to final date

Changed to final date

4. List of Figures, page ii,

a. item 3.2: Change "island" to "islands"

b. item 3.3: Line 2: Should "2010" actually be "2011"? Delete one of the "at";
Line 3: Add "from Tohoku Japan tsunami" to the end of the sentence"

a. item 3.2: has been changed to "islands."

b. item 3.3: The first time series is the 2010 Chilean tsunami at Apra. First time series is from the 2010 and the other two are from 2011. Extra at is deleted

c. Line 3: 'Tohoku Japan Tsunami' has been added to the end of the sentence.

5. Abstract: first sentence of the abstract doesn't seem to be a complete sentence.

Sentence structure corrected and abstract replaced with Executive Summary

6. Page 5: "the tide gauge" is mentioned, but it is not clear what tide gauge this is.

Tide gauge identified as Apra Harbor, Guam. Text now appears on page 3 of final document.

7. Page 7: I personally would not use the term "methodology" as this is strictly speaking the study of methods, so not appropriate in this context.

Authors agree that the term 'methodology' is not appropriate in this usage so term has been replaced with "Method." Section 3 heading changed from 'Methodology' to 'Method.'

8. Page 8, line 4: P8 line 4 - should be 100km, not 10km?

Correction made

9. Page 9: p9 should be 7.5 not 7.6?

Earthquake magnitude of 7.6 was purposely chosen as a combined simultaneous rupture magnitude of segments 'a' and 'b.' After review, the magnitude was reconsidered and changed to 7.5 which refers to an individual segment magnitude.

10. Page 10: Tinian--OK; Saipan--Saipan should be a larger font; what is Tutturam? Should that be Kagman? What is the red star for? Include Kagman.

Rota--connect Songsong peninsula (wedding cake) to the main part of the island; need a color legend for elevations; clean up the figure caption.

Saipan font size has been increased. Tukuran has been deleted. Kagman is now included. Red star indicates Saipan as the regional capitol.

Songsong peninsula (wedding cake) is connected to the rest of Rota as requested. A color legend for elevations and another for bathymetry have been added

11. Page 11: (a) Apra Harbor: "2010" should be "2011"; make changes in the caption.

This plot is the 2010 Chilean tsunami at Apra. First time series is from the 2010 and the other two are from 2011. Extra 'at' has been deleted. 'Tohoku Japan Tsunami' has been added to the end of the sentence.

12. Page 12: Why is Saipan blank? Make the wave heights for Apra and Saipan the same units, either (M) or (cm); make speeds the same, knots or m/sec (not cm/sec)

The wave heights for Apra and Saipan have been changed to (m) and speeds have been changed to m/sec.

13. Page 14, maybe in useful to have all 3(4.2, 4.2, 4.4) at the same color scale

Color scales retained. Different color scales show more clearly the maximum computed wave height and speed than a single color map for all graphics would show.

14. Page 18: Is the Marianas 1993 quake supposed to be included?

The 1993 quake is an interesting scenario, but there are no records of the extents of the damage. The 1993 quake is much smaller in hazard and magnitude than the scenarios discussed in this report.

15. Pages 20, every time local location names are mentioned, need to have a map that shows where these are. Can you use shading of bathy relief to show depth (& roughness) of seafloor on these plots. E.g. show 2 data layers such as in (b) bathy & currents.

Rejected. We prefer not to have shading superimposed over a depth because amplitude would then over crowd the maximum amplitude and current plots so information would be difficult to read.

16. Pages 24, 25, 26, 27: Line 3 of captions: Add "locations" after "Tinian".

Page 24, would it be more informative to show actual current variations spatially rather than just max? or is this not resolvable? If not explain why

Captions have been edited.

Rejected. Spatial variations of each scenario would greatly increase the document print size and would not be meaningful without an animation of each scenario. Spatial variations could be provided as a media supplement upon request.

17. Pages 25 and 27: Line 2 of captions: Marianas" vice "Marians"

Captions have been corrected

18. Page 28, so what does this means? A conclusion is needed.

Conclusion has been extended

19. Pages 42 to 66: Check all currents and amplitudes for Saipan maps. Coordinates say "wave height (m)" for both (a) and (b). Also check captions. Check all legends and positioning/labeling.

All currents and amplitudes for Saipan maps were checked and all captions have been corrected.

20. Pages 69 to 93: Check all currents, wave speeds, legend/coordinate values and labels for Tinian. Check captions. These are mixed up.

For most Tinian maps:, maximum wave amplitude and currents, are maps mis-positioned?, are maps mislabeled?, are legends correct?

All currents and amplitudes for Saipan maps were checked and all captions have been corrected. In particular, Wave Height has been corrected to Wave Amplitude (m/s)

21. Pages 96 to 120: Check all currents, wave speeds, legend/coordinate values and labels for Rota. Check captions. These are mixed up.

All currents, wave speeds, legend/coordinate values and labels for Rota have been checked and corrected where necessary.

22. General reviewer comments:

“This is an appropriate technical report that clearly describes the methodology employed for conducting a hazard assessment for the Commonwealth of the Northern Mariana Islands of Saipan, Tinian, and Rota. Model development and scenario selection are presented along with an explanation of the method employed. Conclusions drawn are consistent with results presented in both graphical and textual form.”

“The hazard assessment report of the Commonwealth of the Marianas Islands of Saipan, Tinian, and Rota provides valuable information that should prove useful to a wide audience ranging from operationally driven Tsunami Warning Centers to community level emergency managers and city planners as well as to interested citizens.”