Nat. Hazards Earth Syst. Sci. Discuss., 3, C1373–C1376, 2015 www.nat-hazards-earth-syst-sci-discuss.net/3/C1373/2015/

© Author(s) 2015. This work is distributed under the Creative Commons Attribute 3.0 License.



NHESSD

3, C1373-C1376, 2015

Interactive Comment

Interactive comment on "Appraising the Early-est earthquake monitoring system for tsunami alerting at the Italian candidate Tsunami Service Provider" by F. Bernardi et al.

F. Bernardi et al.

fabrizio.bernardi@ingv.it

Received and published: 27 July 2015

After applying the suggested corrections, we reworded and correct the text.

Abstract Ok We did go through the abstract. We reduced details about the method and we removed distracting values. We also better point out the most relevant conclusions.

Introduction

P2915, I9: Ok. We modified 'sea' with 'ocean' in the text, with except when 'sea' is a part of a geographic name (e.g.: Mediterranean sea)

Full Screen / Esc

Printer-friendly Version

Interactive Discussion



P2916, I3: Ok. See text

P2917, I12: Ok.

P2917, I18-19: Ok, See text

Early-est algorithm description:

P2920, I5-19: Ok, we shortened the text in this section.

Dataset:

p2921, I2: Yes. We meant "events from around the globe recorded at regional and teleseismic distances". See text.

p2921, I13ff: We provided to add references to pubblication where available, or the links to the catalogs.

p2921, I19-20: Ok

Epicenter:

p2922: - Title changed

- In this work we didn't use the CMT centroid location but only the magnitude Mw.
- ok, uncertainty is modified in difference
- The used catalogs do not include errors and uncertainties for each location.
- ok, short summary added at the end of the section

Hypocenter Depth:

- ok, short summary added at the end of the section We did not any particularly significant and systematic geographic dependency of the depth difference.
- As expected the depth difference distribution for shallow earthquakes is generally smaller than for the deep earthquakes.

NHESSD

3, C1373-C1376, 2015

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion



Magnitude:

p2923: ok

P2924, I2: The EMSC reports Mw for the larger events but they don't calculate Mw. Thus we decided not to show the overall Cc<->Nc comparison.

P2925, I13-14: We did not observe any significant depth dependence of the magnitude mb.

P2927, 5ff: The tsunami warning alter message are compiled following the ICG/NEAMTWS guidelines. Those actual guidelines do include errors in the earth-quake source parameters and the tsunami warning alerts levels are based on fix magnitude intervals. For these reasons it is important to have an accurate magnitude estimation, in order to disseminate a message with the most accurate warning level.

17: Ok.

121: Yes, "stable" values is more appropriate

P2928, I11-13: Ok

P2928, I24-28: We reword the paragraphs.

p2929, I5: We add a couple of sentence to explain how and how fast the message are delivered to the authorities.

Discussion and final remarks:

P2929, I14-15: ok, we reword the sentences.

p2930, I12-13: Ok we reword the sentence.

p2931, I14: Ok. We moved the paragraph at the begin of the discussion

Appendix: We shortened the paragraph about the Oct-tree in the body of the MS.

Table1: We add the maximum 68% confidence error in xyz-space in Kilometers of the C1375

NHESSD

3, C1373-C1376, 2015

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion



location provided by EE.

Figure 1: We modified the SS network with CH network code

Figure 3: See comment on Hypocenter Depth.

Figure 4: See comment on P2924, I2

Supplement: We applied the text corrections listed in the supplement.

Please also note the supplement to this comment: http://www.nat-hazards-earth-syst-sci-discuss.net/3/C1373/2015/nhessd-3-C1373-2015-supplement.pdf

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 2913, 2015.

NHESSD

3, C1373-C1376, 2015

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

