

Interactive comment on “Italian Tsunami Effects Database (ITED): the first database of tsunami effects observed along the Italian coasts” by Alessandra Maramai et al.

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Dear Editor,

Please find below my comments concerning the paper of Maramai et al. entitled “Italian tsunami effects database (ITED): the first database of tsunami effects observed along the Italian coasts”.

Most of the available global tsunami catalogues provide tsunami information about the source of the tsunamis (earthquake, landslide, volcanic eruption, etc.), date and time of occurrence, adding, when it is possible, data concerning their maximum run-up height,

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period, etc. But most of the time there is a lack of detailed information concerning the different localities where the tsunami has been reported and there is no mean to visualize directly on maps the width of the impacted region.

The paper of Maramai et al. describes a new interesting way to provide tsunami data to end users called ITED (for Italian Tsunami Effects Database). This database linked to the CPT115 seismic database provides 300 tsunami observations at 225 different observation points located along the Italian coastline. In order to represent quickly and easily the different available layers of data (5 layers are available and described within the paper), an easy-to-use WebApp has also been developed; it is also presented in the paper. This WebApp allows the user to visualize and extract data in a specific area : for example, it is possible to ask for the list of events having impacted Messina over the past centuries, each event being assigned an intensity and other information like date, time reliability, etc. In addition, this study allows the authors to add 2 new events to the Italian catalogue of tsunami. The explanation of the methodology applied to prepare the database as well as the use of the WebApp are well explained and sufficient examples are provided to understand everything.

Anyway, I would recommend considering the following comments before the publication of the paper in NHES.

1) They are three things I would like to access in this database and the first one concerns meteotsunamis. In fact, the Adriatic Sea is well known for this frequent phenomenon (e.g. Orlic, 2015) but other places have also been concerned by the “Marrobbio” and there are several examples on the Italian coast, especially in the South (e.g. Candela et al., 1999 ; Sepic et al., 2018).

2) There is also a lack of data about tsunamis generated outside the Italian area but the authors indicate clearly in the conclusion that the distant sources would be integrated into ITED in the future. Anyway, it would be of great interest to indicate in this paper the percentage of tsunamis triggered by distant sources reported or recorded in Italia

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in comparison to local ones. The same way, it would be interesting to have an idea of the amplitudes of those tsunamis because, in hazard mapping, it is of great concern to consider all the tsunamis being able to impact a specific coastline and not only the local ones.

3) Finally, I would like to access to an additional layer within the WebApp locating the tsunami sources linked to the reported tsunamis (with information about the earthquake magnitude for example) and not only the impacted zones.

4) Additional comments:

I have listed below several comments concerning mistakes in the paper: - P. 3, line 29: I would write "fills in" instead of "populates" - P. 3, line 35: change the "-" after "ASMI" → "," - P. 4, line 2: change the "-" after "DMBI" → "," - P. 4, line 24: "7 tsunamis, most of which" → please remove "most of which" as you only have 4 tsunamis left. . . - P. 4, line 27: please correct "The February 6, 1783" - P. 5, line 3: please add "," after "Catania" - P. 5, line 6: please change "Fig. 7" to "Fig. 6" - P. 5, line 12: please correct "January 11, 1693" - P. 5, line 15: add a space between "1" and "m" - P. 6, line 12: remove space after website address - P. 6, line 17: please correct "the metric and iii) the EMTC2.0" - P. 6, line 19: change "the layers available on the screen" - P. 6, line 26: correct "ITED_Place_Name layer" - P. 7, line 4: please correct "which kind of information" - P. 7, line 24: "are exposed to tsunami attack." → remove "attack" - P. 8, add a blank line between first and second references (line 8 and 9)

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