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Interactive comment on "Boulder accumulations related to extreme wave events on the eastern coast of Malta" by S. Biolchi et al.

S. Biolchi et al.

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Dear Editor, following the comments and suggestions from the Reviewers, we reconsidered our work and decided to improve it with new data and some modifications in order to clarify each single question and make the overall meaning more clear. We corrected all errors identified by the Reviewers and followed most of their suggestions, apart for some points well specified in the following letters. We don't agree with the first observation provided by the Reviewer#1, since his suggested theoretical approach derived by flume's experiments is not applicable to the local deterministic situation. We improved the paper by providing more data concerning storm waves in the Maltese Archipelago (Drago et al., 2013) and direct witnesses of tsunami events, such as those relative to the 1908 earthquake (Guidoboni & Mariotti, 2008; Pino et al., 2008). We improved the

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Discussion in order to clarify that we assume the very frequent strong storms as the key agent responsible for the accumulation of these large boulders. At the same time, we do not exclude the possibility that one or more tsunami events moved at least some of the blocks. 14C datings seem to refer to past events occurred in the Mediterranean or Aegean Sea, not far from Malta. We corrected some errors in the Table 3 (Zonqor site) and we improved it by adding a new column with mass values for each boulder. Moreover, if the Editor agrees, we would like to add a new Figure 7, which displays the relations between mass and distance from the coastline for each boulder at each site. This improvement was suggested by Reviewer#2, who asked for some correlations with the weight of boulders. This could be new Figure 7 and the past Figure 7 could become Figure 8.

Hoping that our corrections improved the article, making it more understandable, readable and clear, we send our best regards.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 5977, 2015.

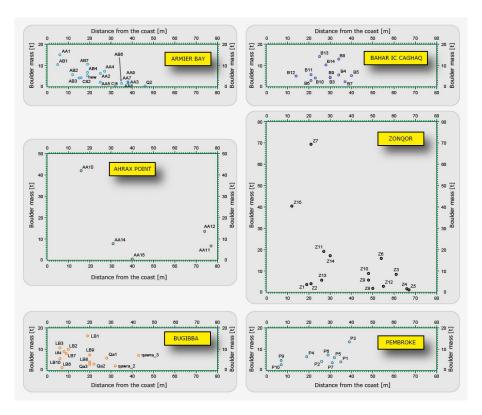


Fig. 1. Figure 7. Relationship between distance from the coast (x) and boulder mass (y)