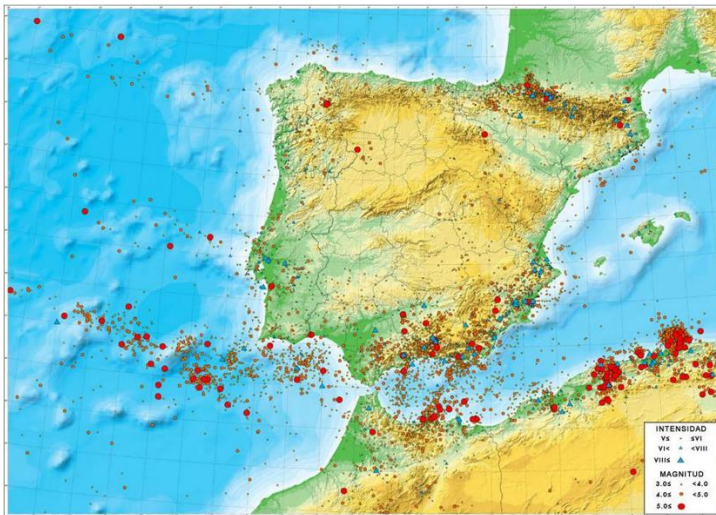


After analyzing all the considerations of the reviewers we accept practically all of them, especially the most concrete ones that will undoubtedly improve the manuscript. In relation to the more general comments we want to express the following considerations:

We agree with the referees that it is essential to improve the geographic and geological framework in which the analyzed deposits are located. Very probably the current wording does not allow to correctly understand its situation to readers not familiar with the island of Menorca. Therefore, we propose to better describe the situation of the places where the studied boulders are located. We will include information about the geological structure, lithology and also the maritime climate (tidal-range, which is negligible in the Balearic Islands, and wave regime).

Another comment by the two reviewers refers to the seismicity of the western Mediterranean that allows understanding the relationship between tsunami-generating earthquakes and the position of the studied boulders. For this we propose to incorporate an illustrative map of the situation of the earthquakes and a list of historical tsunamis in the western Mediterranean in order to relate the tsunamis with the boulders emplacement.



Related to this point, we exclude Iberian earthquakes from tsunamigenic sources because the imbricate boulders we have found in Minorca, but also in Mallorca, Ibiza and Formentera (the rest of the Balearic Islands), are located at the south, south-east of these Islands. Only in Minorca we have found boulders in the N and W, but these places are coincident with places where refracted tsunami waves hit the coast at the numerical models simulations from earthquakes at N-Africa.

A third comment from both reviewers refers to the fact that both, the position of the boulders and the results of the hydrodynamic equations, require run-ups of the tsunami wave that multiply, between two and ten times, the models forecast heights of tsunami waves in the open sea. First of all, the run-up of tsunamis on vertical cliffs is several times higher than that occurring on low coastal areas (Bryant, 2014). Run-up is also enhanced due to several factors (Lekkas et al., 2011): 1) by the distance from the tsunami generation area (of only 300 km in our case), 2) by the narrowness of the continental shelf (as in Minorca), 3) by the fact that the tsunami propagation vector is almost perpendicular to the main shoreline direction, and 4) land morphology, characterized by vertical cliffs with entrances (calas). For these reasons we think that run-up heights in Minorca are several times higher than tsunami wave heights.

Finally, the reviewers raise the problem of the dating of the quarry and transport of the boulders. Although only two blocks with embedded marine fauna, have been radiocarbon dated, such dates serve as a reference to the second dating method used. It is true that the results of the C14 dates have been incorrectly stated in the article. After reviewing the reports corresponding to these dates can only be stated in a case that it is a block moved younger than 1720 AD, and in the other case that was transported after 1964.

The second dating method used -complementary to the previous one- is an approximation based on an average dissolution rate of dissolution pans (karstic depressions *kamenitza* type). This requires to identify post-depositional dissolution pans, that is, that have been formed after the movement of the boulders. They can be formed on the same boulder once transported or on the denudation surface that results from the quarry of the boulder. A margin of error can be established based on the variability of the dissolution speed, which is not very high because the boulders are located away from the cliff edge, where dissolution speed is much higher. However in no case the resulting values (age values) can be compatible with marine levels different from the current one. Other similar boulders dated by Kelletat (2005) in the neighboring island of Mallorca, corresponds to ages between 565 AD and 1508 AD. Thus, we think the boulders we are dealing were transported in the last centuries, with a marine level equal to the present one.

As a general comment we want to say that these article has its origin in the PhD Thesis of Roig-Munar (2016), which is unpublished.

Referring to the specific comments, we accept all of them and we will try to better explain what we were trying to explain in the former paper. And of course, we will include a revision of the written English.

As an anecdote, during the period in which the article was under review, a severe storm, in November of 2017, has caused waves of up to 11 meters in the north of the island of Minorca. We have made a field campaign days after the storm and all the blocks we had marked in advance (even in the ones which are only 1 m above sea level) have not moved, neither new blocks have been created. In the other hand, the tsunami that took place on May 21, 2003, generating 3m high waves, affecting the Balearic Islands, caused flooding in several *calas* (small beaches) in the east of Minorca (as stated by local newspapers), finding fishes hundreds of meters inland. Unfortunately, we did not study the blocks at that time.

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