

## ***Interactive comment on “Extreme storms during the last 6,500 years from lagoonal sedimentary archives in Mar Menor (SE SPAIN)” by L. Dezileau et al.***

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General comments From one sequence in a Spanish coastal lagoon, the frequency of storms has been reconstructed and linked to cold climatic periods in Europe over the last 6500 years. Although I generally agree with the interpretation, we have to remain cautious as only one sequence was studied. Results supported by a core transect would be more robust.

More details are necessary for section 3.3 macro-fauna: samples of which volumes were taken, was it a fixed volume? If not, were the counts reduced to a common volume and which was it? This links to the caption of the axes of figure 5: number of individuals per g, per ml, per 10 g, 50 ml?

Section 4.2: you have analysed surface samples across the lagoon. Their results are extremely relevant to your interpretation. Hence I strongly suggest that you include them in this manuscript. We need to know where the samples were taken, and what are the detailed results.

Points of details Use BP, everywhere, avoid B.P Use ca or c., but not ca. Use palaeo, not a mix of palaeo and paleo 52: replace hazards by disasters. 60: expected 61: areas 62: Mediterranean 63: sources, earthquakes . . . margins, are 64: large tsunamis 74: This lowland Mediterranean coast is sensitive to risks 81: lagoon on the 88: Sea 90: Quaternary 90-92: make a sentence 111: 0 to 2 m [apply to rest of the sentence] 122: core-scanner 166: colour 179, 204, 205, . . . : from bottom to top. [this comment is valid for the rest of the manuscript, and also includes dates from the oldest to the most recent] 192, 284, 328: 2.5 [correct elsewhere too] 202: ranges 207: takes 209: Mediterranean Sea, . . . peaks 213, 215, 224, . . . : italics 216: appear in 47 217: constituting 61 [also 219] 218, 223, 666, 677, 678: species [singular has a s] 218: delete [By its part,] 219: appears 220: characterizes 232: samples 260: Lambeck 277: barrier 280: mean no surge 286: highlighted 287: periods 299-300: ships sank. In 302: paralyzing it for 333: not affect significantly La 336: no tsunamis 373-374: six cycles appear 387: intermediate 389-390: presumed to be derived 411: you do not identify periods but single storms 593: Solomina

Figure 2: I would add an arrow towards the top. Figure 5: why is the red curve first continuous, then dashed? Define N and S in the caption, add the units

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