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Climate of the Past Discussions

Interactive comment on "Holocene hydrological changes of the Rhone River (NW Mediterranean) as recorded in the marine mud belt" *by* M. A. Bassetti et al.

Anonymous Referee #1

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This paper is an excellent example of integrated high resolution sedimentological and geochemical study feeding the data bank with valuable paleoclimatic / paleohydrological proxies established on a precise and reliable time scale fixed on highly accurate calibrated C-14 ages. The sediment column and the data obtained are of exceptional quality and the interpretation is well detailed and thoroughly presented. I recommend publication without significant corrections. Few comment however: - When citing many successive refs (frequent in this paper) you should avoid redundant authors citations (cite for example the princeps, or the most significant) or develop in order to distinguish their respective contributions. Many parts of this paper heavily suffer from this default. The refs list is therefore far too long. Counter examples : only one ref for the 8.2 ka cold

event and this is not the princeps one. No citation of the African humid period in the introduction (lines 40 ...) while the discussion obviously evokes this major Holocene regional climate trend.

In section 4, present first the seismic profile (figure 2) and then the age model (figure 3)... lines 295-307 should be displaced at line 280. Note that the age model is presented twice at few line differences: end of methods beginning of results ...

details: lines 235-236: precise the concept: relatively coarse grain fraction of fine grained sediment... ? relativist but not such obvious ! Avoid S.R for sedimentation rate : you use it once: useless!

section 5 should be named: interpretation and discussion.

Interactive comment on Clim. Past Discuss., doi:10.5194/cp-2016-8, 2016.