

Interactive comment on “Frequency and intensity of palaeofloods at the interface of Atlantic and Mediterranean climate domains” by B. Wilhelm et al.

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The paper describes a flood activity record from a lake sequence in the South Western European Alps, over the last 1100 year, in the context of two other lake recorded palaeofloods in the region. The paper shows new insight to the interpretation of palaeoflood-climate relations during the Late Holocene, it is well written and provides new interesting discussion about flood patterns in the Mediterranean region. The paper deserves publication after some minor changes indicated in the specific comments.

Page 4944. Line 24. Please, update the cite Munich Re Group, 2003 to a more recent one. I would suggest Kundzewicz, Z.W. et al., 2014. Flood risk and climate change:

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global and regional perspectives published in JHS.

Page 4946. Line 17. Climate and historical floods (add s to flood)

Page 4949 line 5. I would suggest to change “to represent the river energy” as follow: “to be related with the stream flow energy of the river entering the lake”

Page 4952, line 10 the term “small gravel” is not correct. Use one of the follow scientific terms accordingly: granular gravel (2 to 4 mm) or pebble gravel (4 to 64 mm).

Page 4953. Line 24. “Relative Ca intensities are most of the time very low “ Is this sentence correct? shouldn't be "Relative Ca content. . ."

Page 4954. Line 4. I think that (Fig.4) should be (Fig. 3). Please, check.

Page 4956. In the sentence “during sliding of slope sediments and then deposited over the debrites” it took me some time to understand that slope sediments are indeed on slope within the lake bed. I don't know if you may say “slope sediments within the lake bed and then. . .”. Otherwise, leave as it is now.

Page 4962. Line 7 change to “summer-to-autumn flood events”

Page 4963. Line 13. Replace the reference Benito et al. 2008 to the latest one: Benito, G., Macklin, M.G., Zielhofer, C., Jones A., and Machado, M.J. (2015). Holocene flooding and climate change in the Mediterranean. *Catena* 130, 13-33.

Page 4963. Line 15. Delete “and contemporaneous intensification”

Page 4963. Line 20. The occurrence of a higher frequency of very large floods during the MCA in western Mediterranean is not new, and it was also described in other detail fluvial palaeoflood and historical records such as the Tagus river

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