

REPLAY to:

Anonymous Referee #1

Received and published: 22 March 2016

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.

The reference list has been reduced, the less significant references have been removed.

No citation of the African humid period in the introduction (lines 40 ...) while the discussion obviously evokes this major Holocene regional climate trend.

The reference to AHP was removed, according the suggestion given by Referee 2

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 ...

This is corrected in the revised version

details: lines 235-236: precise the concept: relatively coarse grain fraction of fine grained sediment... ? relativist but not such obvious !

Corrected in the revised version

Avoid S.R for sedimentation rate : you use it once: useless!

Actually, we have used the SR for "sedimentation rate" all along the manuscript. I take the freedom to not change it.

section 5 should be named: interpretation and discussion.

Corrected