

Interactive comment on “Stratigraphy and paleoenvironments of the early to middle Holocene Chipalamawamba Beds (Malawi Basin, Africa)” by B. Van Bocxlaer et al.

Anonymous Referee #4

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This paper represents a carefully carried out study of Holocene mollusk-bearing deposits at the southern end of Lake Malawi, a lake of global importance in evolutionary biology and climate reconstruction.

Lake Malawi has been known mainly because of older fossil-bearing sites, particularly in the north. A highly resolved modern analysis of mostly mollusk fossil sites is missing to date. The study of Van Bocxlaer et al. fills this gap in providing a detailed stratigraphy and paleoenvironmental reconstruction from Holocene beds.

Contribution to the discussion of lake level fluctuations in the Holocene are particularly important. They add significantly to the upcoming discussion on invertebrate diversifi-

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cation processes in Lake Malawi and the role such environmental perturbation might have played. It is the first time that such data in a more recent timeframe can be used in interpreting patterns seen in modern benthic invertebrate organisms.

I feel that part 4.4. on the paleobiological relevance could be slightly expanded in looking in more detail into comparisons of modern faunas and lacustrine/fluviatile settings of the Holocene beds and modern analogs. Also the outlined potential of such analyses could profit from a couple of more sentences on that topic.

The records have been studied in great detail in the field and high temporal precision is achieved. The data presented and figures provided are of high quality as is the structure of the paper and the way the discussion goes.

I thus fully support publication as a regular paper in BIOGEOSCIENCES.

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