

Review of Ma et al. (revised version)

In my view the authors did a great job to address the concerns raised by both Reviewers. In particular they now more clearly discuss the uncertainties of their Cd_w record and the potentially varying influence of primary surface productivity and intermediate water properties. Hence, I suggest acceptance of the manuscript pending very minor revisions, which basically regard typos and ambiguous wording.

In particular the abstract would benefit from more explicitly writing which factors are driving the Cd_w record during which time period. The authors all state this in the abstract but it reads rather indirect. Below a recommendation for rephrasing (lines 22-29), please feel free to adopt or dismiss these suggestions.

“These results suggest that during the last deglaciation Cd_w variability was primarily driven changes in intermediate water properties, indicating an enhanced ventilation of intermediate-bottom water masses during both Heinrich Stadial 1 and Younger Dryas (HS1 and YD, respectively). During the Holocene, however, surface primary productivity appeared to have influenced Cd_w more than intermediate water mass properties. This is evident during the early Holocene (from 10 to 6 cal kyr BP) when benthic foraminiferal assemblages indicate that surface primary productivity was low, resulting in low intermediate water Cd_w at both sites. Then, from ~ 5.2 to 2.4 cal kyr BP, surface productivity increased markedly, causing a significant increase in the intermediate water Cd_w in the southeastern Arabian Sea and the northeastern BoB. “

L. 48: “contribute to up to..:”

L. 86: “only few works indicate the” – do you mean “investigate”?

L. 114: avoid using “.” as multiplier

L. 142: “linked to increased primary productivity”

L. 148: what do you mean by “species level differences”? Inter-species offsets?

L. 335: “which is characterized by the well-ventilated and depleted nutrient” – something is missing here

L. 340: “Benthic foraminifera” - no capital

L. 357: “in the bottom water”

L. 359: “Assemblage 1” – no capital

L. 361: *Globigerina* can be abbreviated

L. 375: “little discrepancies” – better use “small-scale” instead of little. However, I think the discrepancies are not so small, although I agree that the long-term trend is similar.

L. 423: “from the deep layer” – please also specify which deep layer you mean. Intermediate waters? Thermocline waters?

L. 480-481: “another evidence for the influence of changes in water masses and/or ventilation during the HS1 and YD, as already demonstrated by” – this sentence might be rephrased as it undersells the results; especially “another evidence” and “as already” sounds like the data adds nothing new to the

existing records which is not the case). I would suggest to write “... ~~another~~ evidence for the influence of changes in water masses and/or ventilation during the HS1 and YD, in line with...”

L. 498-499: “enhanced northward flow of southern sourced intermediate water mass AAIW” – there is something missing here