Interactive comment on “Does $\delta^{18}O$ of $O_2$ record meridional shifts in tropical rainfall?” by Alan M. Seltzer et al.

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We thank the reviewer for his or her positive feedback and constructive advice. Based on these comments, we plan to improve the clarity of our introduction, abstract and discussion sections by using simpler terminology and being more specific where needed. In particular, we realize that the comparison of local maxima in CH$_4$ and $\Delta\epsilon_{LAND}$ could be confusing as presently worded. We thank the reviewer for bringing this to our attention. In its present form, the abstract states that “maxima in $\Delta\epsilon_{LAND}$ are synchronous with or shortly follow WD CH$_4$ peaks assumed to mark abrupt climate responses to Heinrich events.” In our revised paper, we will clarify in the abstract and main text that these “WD CH$_4$ peaks” refer to small amplitude (tens of ppb) local maxima in CH$_4$ within Heinrich Stadials 1,2, 4 and 5. They do not refer to the much larger amplitude (100s of...
ppb) millennial-scale local maxima associated with Dansgaard-Oeschger events.