

Clim. Past Discuss., author comment AC2
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Reply on RC2

Dipayan Choudhury et al.

Author comment on "Marine carbon cycle response to a warmer Southern Ocean: the case of the last interglacial" by Dipayan Choudhury et al., Clim. Past Discuss.,
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We thank the Reviewer for their constructive comments, which have helped improve the quality of the manuscript. Please find detailed responses to the comments raised along with excerpts from the revised manuscript given in boxes in the attached document.

We have worked in particular on emphasizing the differences between changes expected in the future and the changes we analyse here based on our Last Interglacial simulation. We have also added relevant information on the model evaluation and on how the model biases can impact our results. Additionally, we have performed offline calculations to better ascertain the impact of sea ice changes on the air-sea gas exchange.

Please also note the supplement to this comment:

<https://cp.copernicus.org/preprints/cp-2021-98/cp-2021-98-AC2-supplement.pdf>