

Response to reviewers

Anonymous Referee 1

We appreciate the Reviewer's positive words about the summary and their comment about committed warming. In our revised manuscript, we will remove the statement about committed warming and replace it with, "Assuming CO₂ emissions reach net zero, climate models indicate that global warming might still further increase or decrease during subsequent centuries (MacDougall et al., 2020)". As suggested by the Reviewer, we will add the new temperature reconstruction by Osman et al. (2021) to the text and to the figure, and will make the other minor changes in wording suggested by the Reviewer.

Referee 2 (Lunt)

We appreciate the Reviewer's insightful suggestions. Regarding the two main comments: (1) We will revise the wording in the Abstract and on line 22 to be more explicit about future warming. (2) We will add additional details about the specific individual papers that underlie the AR6 assessed temperature for the mid-Holocene. This will explain why the value is narrower than the 5-95% range of the ensemble reconstruction shown in Fig. 1B. We will also explain the rationale behind the assessed dates of 100,000 years and 125,000 years. Regarding the additional three points: (a) We will mention that paleoclimate topics are integrated across AR6. (b) We prefer to not specify the temperature values in the Abstract because each of values is associated with some caveats, which we hesitate to oversimplify. (c) We will remove the statement about committed warming as explained in our reply to Referee RC1.