

In this response letter, our responses are labeled in blue. Revised sentences in the updated manuscript are shown in *italic purple text*. All line numbers correspond to the revised manuscript with tracked changes, where deletions are shown in red and additions are shown in blue.

2 very minor improvements are suggested before publication:

We thank Dr. Lin for the comments, which have further enhanced the clarity of our manuscript. We have revised the manuscript accordingly.

(1) Table 1: Please add a reference where more information concerning the Radiosonde data is described (Liu et al. (2024)).

In Table 1 (Line 90), we have added an additional sentence to the description of the radiosonde data: “*For more detailed information about the radiosonde sounding, refer to Liu et al. (2024).*”

(2) Line 126, "Figure S1": For better clarity, please add "(see Supplementary Information)".

We have added this clarification in Line 121.