I enjoyed your paper and your methods were quite interesting. I just have a few suggestions for making it more readable:

We thank you very much for the constructive comments. We plan to take them fully into account in a revised version of this manuscript. We answer briefly to the specific points raised in the following:

1. Elaborate on the wavenumber decomposition section. In particular, I was confused by your discussion of the k=0 correction. It was difficult to find an explanation even after tracing through your citations.

Thank you for the comment. Indeed, this point was raised by Reviewer 1 and calls for additional effort to clarify the methodology, that was briefly mentioned with a reference to previous work. We plan to revisit the manuscript accordingly.

2. Elaborate on the selection of meridional heat transport (MHT) extremes. In particular, the processes of declustering using an "extremal index" and determining thresholds by latitude band using "[An] EVT_based convergence algorithm."

Thank you again for the comment. This is related to my previous reply. The methodology was extensively described in previous work but a revised manuscript needs to take these aspects into account in a more detailed way.

3. Elaborate on how you calculated the anomalous MHT. It would be nice to have a short description on your process (e.g. whether you de-seasonalized) and a statement spelling out how a negative anomalous MHT translates to a weak (less positive or slightly negative) actual MHT.

Same as above. We will revise the manuscript in order to clarify these aspects of the methodology in a more extensive way.