Date: 12 July 2017

Dear authors,

I urge you to read the comments from the reviewer and my messages more carefully.

- 1. I asked you to respond to all remaining comments from the reviewer one-by-one. You only responded to the 2<sup>nd</sup> comment from the reviewer. The reviewer had 4 comments.
- 2. Wrt. your reply on the 2<sup>nd</sup> comment your reply is still not satisfying. It is clear that scaling is meant to weigh the relative contribution from the troposphere and the stratosphere. But the point is to what extent does this influence/determine the results and thereby the conclusions? So I can only repeat the question as posed in my previous editorial comment: 'To what extent can you exclude that the latitudinal dependent bias is not caused by the scaling approach you take (which can introduce latitudinal and seasonal variations and thus the observed bias)?' The simulations you refered to in your reply only look at variations in trop.height. That is –I expect- a much smaller effect.
- 3. The updated manuscript contains all the track changes from the previous revision. Please accept all changes made before, I only want to see the delta changes to the previous version.

Best regards, Ilse Aben