

April 30, 2021

Dear Editor Prof. Jayanarayanan Kuttippurath,

We are pleased to hear, that our manuscript is accepted for publication and we gratefully acknowledge your support during the review process.

During the preparation of production files we found the following items, which we ask for permission to amend before the official publication and before we upload the production files. These changes are not critical to the outcome, and the conclusions of the manuscript remain unchanged. Please find the items we would like to change, listed below (the numbers of pages and lines refer to the attached file: *diff_to_acp-2020-529-froemming_revised.pdf*):

1. Include one reference, which was published in the meantime (Page 3, Line 69 and Line 83).
2. Shorten one very long sentence (Page 8, Line 227).
3. Add and sharpen a few sentences in the model description (Page 9, Line 237-253).
4. Update of the constant conversion factor for contrail CCFs in Figure 7 (Page 15, Figure 7) and in Figures S1-S8 in the supplementary material.
5. Update of the Units in Figures 8 and 11 (the Unit is [K/kg(NO₂)] instead of [K/kg(N)]) (Page 16, Figure 8 and Page 20, Figure 11) and in Figures S9-S16 in the supplementary material.
6. Update of Figure 16 due to updated constant conversion factor of contrail CCFs (see Point 4 above). We propose to show weather situation S2 instead of W4 as it better illustrates the dipole structure with warming and cooling regions. The text remains with only slight modifications. (Page 25, Line 565 and Lines 559f; Page 26, Figure 16).
7. Acknowledge helpful discussions with a colleague (Page 29, Line 672).

Please accept our apologies for these late changes and any inconveniences these may cause. All the amendments we suggest are not critical to the main points, results and consequences of the manuscript therefore we hope for your authorization.

Thank you for your time and consideration,

Dr. Christine Frömming (on behalf of all co-authors)