

**Reply to the editor:**

Thanks for these corrections. The editor's comments are reported in italics before each authors' reply.

*L90: Fig.5 --> Fig. 5*

Done

*L153: pT retrieval, suggest to write p,T in italics to highlight that these are physical symbols*

Done

*L184-185: makes more critical the interference --> word order is a bit awkward. How about: 'makes the interference ... gases more critical'*

Done

*L308: suggest to write 'we refer' rather than 'please refer'*

Done

*L323: 50pptv --> 50 pptv*

Actually, I have found '50 pptv .' I have corrected it in '50 pptv.'

*L379: one too many bracket after NH3?*

No, the first bracket is for defining the two references of the GEOS-Chem model profiles, the second bracket is for defining the second reference (Shepard, private communication). I have changed the position of 'for NH3' to make the text clearer:

... GEOS-Chem model profiles (Bey et al. (2001) and, for NH<sub>3</sub>, Shepard (private communication))

*L412, 427-428: please write 10:00 and 22:00 to stay consistent with your time indication throughout the manuscript.*

Thanks for spotting these inconsistencies. I have preferred to use the 10 am/pm time indication throughout the manuscript.

*L429: after 90 there should be a degree symbol I guess*

Ok, added

*L486: why nw/(cm<sup>2</sup> sr cm<sup>-1</sup>) is printed in italics?*

Corrected