

# Final details “Stratospheric ozone loss in the Arctic ...”

BY GRIFFIN ET AL.

## General remarks

In my opinion the authors have done a very good job in responding to the remaining comments and (subject to a few technical issues) I recommend now acceptance of the paper.

I apologise for perhaps appearing a bit difficult on some issues but I believe that the authors have now presented a very good, balanced study on polar ozone loss estimates; the particular strength of the paper being the application of different methods to the same data set (ACE-FTS).

## Technical comments

All comments refer to the “track-changes” version of the manuscript.

In the paper there is some discussion on the PSC results from the CALIOP instrument; while I am not pushing a particular citation, I’d like to note that there is a recent publication on the subject (Pitts et al., 2018).

- p 2., l 21: “ the analysis of ozone loss”
- p. 3., l. 34: “than *in* in the Antarctic”
- p. 7, l. 27: Mueller et al (2007) is only for one particular year, so I suggest formulating: “ In a case study for the year XX, Muller et al. (2007) showed ...”
- p. 19., l 25: replace “popular” by “well established”
- References: check consistency with ACP style throughout; some clean-up could be done: page numbers like ‘ACH6-1,SOL18-1’ should be dropped and replaced by a electronic id (eid in bibtex), p. 29, l. 7: replace ‘Ra’ by ‘Res’, p 29. l. 23: update ACPD, p. 30, l. 9: ‘Günther’, p. 30., l. 26: Fast-Track ?

## References

Pitts, M. C., Poole, L. R., and Gonzalez, R.: Polar stratospheric cloud climatology based on CALIPSO spaceborne lidar measurements from 2006 to 2017, *Atmos. Chem. Phys.*, 18, 10 881–10 913, doi:10.5194/acp-18-10881-2018, URL <https://www.atmos-chem-phys.net/18/10881/2018/>, 2018.