"The Long-term Transport and Radiative Impacts of the 2017 British Columbia Pyrocumulonimbus Smoke Aerosols in the Stratosphere" by Das et al.

Dear Editor,

We thank you for your careful reading of our revised manuscript and nice suggestions. Both, your and reviewer comments, have strengthened this work and we greatly appreciate your time and effort in doing so. We have made the recommended changes as described below:

Editor comment: The authors state in abstract "The plumes resided in the lower stratosphere for about 8-10 months following the fire injections." Based on Figure 11 and discussion in text - I suggest modifying this to "Plumes were observed in the lower stratosphere for 8-10 months and simulated by model with a stratospheric e-folding time of about 5 months" to be accurate. Also, I would like a clear explanation of the structure Figure 11 - the initial rapid rise from direct (injection) followed by a steep fall (?) followed by a gradual rise and then a steady decay over 140 days. Also, it would be valuable to see data overlaid on Figure 11.

Author response:

1. Abstract *lines 13-15* have been changed to include the e-folding time.
2. Fig. 11 has been appropriately modified to overlay the OMPS-LP data. The figure now shows model mass on primary y-axis (as before) and OMPS-LP retrieved AOD on secondary y-axis, along with their respective e-folding times.
3. The initial abrupt period in the model mass curve has been explained in *lines 495-510* of section 3.7, where the figure belonged.

Apart from the suggested revisions, we modified the Acknowledgement section to reflect our appreciation for the editor and the reviewers' contribution.

Thanks!

Sampa Das and co-authors