

Dear Editors:

We are pleased to submit our revised manuscript for our submission amt-2023-198 (Chiu et al., Intercomparison of Fast airborne Ozone Instruments to measure Eddy Covariance Fluxes: Spatial variability in deposition at the ocean surface and evidence for cloud processing). In response to reviewer input, the following significant changes have been made to the manuscript:

- 1) Concerning possible water vapor interference, Figure S2 has been added to the SI showing that Fast O3 and FAIRO instrument comparisons are independent of changes in water vapor.
- 2) Discussion of Fast O3 and FAIRO frequency response has been added to Section 3.2.
- 3) Figure S3 has been added to the SI in support of the revised Section 3.2.
- 4) Concerning the ozone flux frequency response, Figure S4 has been added to the SI showing cumulative frequency graphs.
- 5) Discussion of entrainment velocity has been added to Section 3.5 in support of the cloud ozone sink argument.
- 6) Figure 4 has been modified to include ozone profiles and ascent/descent markers.
- 7) Figure 6 has been modified with meteorological details (MBL height, cloud layers, and wind barbs) to aid flux interpretations.

In addition, minor grammatical and formatting changes have been made, e.g. introducing figures in order in the text, removing extraneous commas, etc.

Sincerely,

Randall Chiu