

Referee #2

The climatology described in this paper based on MEERA-2 data is much more complete than a purely data based climatology since observations rarely produce complete sampling. It produces full latitude/longitude coverage. Both total ozone dependent and tropopause dependent versions are created. The negative of course is that it can only be as accurate as the underlying MEERA-2 model. Nevertheless, this climatology is a useful addition for use in remote sensing algorithms. I recommend publication.

We would like to thank Referee #2 for the positive comments. We are mindful of the deficiencies in the MERRA-2 O₃ data, and have conducted various profile and column comparisons to validate the new climatologies and to characterize their uncertainties. We will demonstrate improved O₃ retrieval accuracy from many satellite observations using the new climatologies.