

Review of “Aerosol Scattering Effects on Water Vapor Retrievals over the Los Angeles Basin”
by Zeng et al.

The authors have made a strong effort to add to the paper in response to the suggestions of my 2nd review. Figure 8 of the revised paper addresses the major portion of the previous suggestions. The new lines added to the text, e.g. lines 1-8 on page 11, nicely bring a sense of closure to the paper. The paper can now be published subject to minor revisions.

Minor comments

Page 3, lines 5-7 This sentence needs to be revised i.e. “The CLARS measurement technique from Mt. Wilson mimics geostationary satellite observations of reflected sunlight, which are governed by a sun to surface and surface to instrument optical path geometry. The geostationary observations can be used to retrieve GHG mixing ratios (Xi et al., 2015).”

Page 3, line 23. “efficiency of band channels” is an odd phrase to use. Perhaps revise to “is a powerful tool which can be used in the channel selection process”

Page 5, lines 17-19. The sentence needs to be rewritten i.e. “Furthermore, aerosol optical path (AOP) values are calculated by multiplying the vertical path AOD data by air mass factors, which are derived from the SZA and viewing zenith angle of CLARS at West Pasadena (83.1°).”

Pages 8 and 9. When I read these pages I naturally searched for a way to make sense of the writing. The current text has run-on paragraphs. The pages should be broken up into coherent paragraphs. Once I did this, the writing was easier to assimilate. Suggested paragraph breaks:

Page 8, line 6 “We perform three experiments..”

Page 8, line 14. “The results for simulated H₂O..”

Page 8, line 24. “Further confirmation of this ...”

Page 9, line 14. “The result is shown in..”

Page 9, line 22. “Similar control experiments..”

Page 10, line 12. Delete “for the purpose of providing comparable results for future satellite study” or revise. The phrase “comparable results” is not clear.