Reviewer #3

We thank reviewer 3 for their suggestions and feedback.

The Authors present an approach to derive atmospheric and ocean color products using MISR in optically complex environments. Overall, I found the manuscript to be well written and compelling. The work builds on the Authors' previous studies, but in a meaningful way – that is, it provides a solid next step and advances the field. This manuscript meets the significance and scientific / presentation quality criteria to be published in the AMT discussion forum.

Several minor issues caught my eye while reading the manuscript. While not required for this initial review, these issues are provided below in case the Authors wish to get feedback.

Specific comments:

Page 2, Lines 1-3: Recommend adding a transition statement between the first two sentences. Not all readers will understand the second and third sentences without some context regarding the use of ocean color satellite instruments to study ocean productivity.
We don't quite understand what the reviewer means by this.

Page 2, Line 11: "local" 10:30 AM equator crossing time
Added, thank you.

Page 2, Lines 18-19: How do cameras with different viewing geometries all maintain a 275 m pixel size (I would expect nadir = 275 m, but off nadir > 275 m).
Added that MISR uses different focal lengths for each camera.

Page 2, Lines 27-28: "can be directly measured in the field by pointing a spectroradiometer (or sun-photometer) at the ocean and dividing by the measured incident irradiance" is not correct. Deriving Rrs from above-water instrumentation also requires measuring sky radiance in the same plane as water-leaving radiance, plus making an estimate of surface reflection. The statement is true for in-water measurements that profile from depth to the surface to derive upwelling radiance.
Changed the statement to read: "R_{rs} is widely used in the ocean color community because it can be directly related to near-surface biological proxies (measured in-situ; such as Chlorophyll-a), and can be estimated in the field from surface remote-sensing observations as described in *Mobley* [1999]."

Page 2, Lines 30-31: FWIW, the classic and most widely recognized reference for empirical ocean color algorithms is O'Reilly et al. 1998 in J. Geophys. Res. Oceans.
Thank you, added.

Page 2, Lines 31-32: FWIW, the only references in this sentence the appropriately support the statement

are Maritorena 2002 and Werdell 2013 (e.g., Lee 2002 does not retrieve Chl).
This was meant to be understood as Lee 2002 retrieving "other" parameters, but we have removed the citation to prevent confusion.

Page 4, Line 24: Any sense of the sensitivity of the retrievals that results from use of a fixed surface pressure vs. a dynamic one?
Over ocean we would expect negligible impacts on retrieved aerosol, over elevated inland lakes, there probably will be an impact.

Page 6, Line 11: Is there a reference for this?
I don't think there is a great estimate of *true* measurement uncertainty out there, although there are plenty of educated guesses.

Figure 4 and caption: The circles represent in situ measurements from a hand-held sun photometer, not AERONET, correct? If not, please describe how the AERONET instrumentation moved throughout the scene.
We have added that these circles represent AERONET retrievals during the southeast Asia leg of the DRAGON campaign (many AERONET CIMEL sun-photometers, not hand-held ones).