

This paper documents aerosol data and observations from the 2019 ONR PISTON cruise and NASA CAMP2Ex flights performed over the north-western part of the Maritime continent on South-East Asia. The manuscript is rather large and highly descriptive of the multiple aerosol processes going on the Northwest Tropical Pacific's (NWTP) monsoon environment when multiple meteorological conditions are present during the observation period. The manuscript does an excellent job in advancing our current understanding of the interactions between meteorology, aerosols, and clouds on clean and polluted environments from a double perspective provided by aircraft and cruise measurements. This publication indeed does move the research frontier forward by providing a highly detailed description not only of the data itself but of the physics behind these multiple processes observed. Vertical and long-range transport of aerosol species and its presence over long distances and periods of time has been one of the areas for which very little measurements exist or none, let alone knowledge of its impact and implications for the Maritime continent regional environment. In addition, sections 4.4 and 5.2.4 relating the role of cold pools to particle lofting is, in my view, the biggest take home message and a very significant contribution to our understanding of aerosol lofting across this region. In essence, this work provides a fundamental baseline for future observations over the maritime region. I whole heartily recommend this article to be published and I would suggest to the authors to make a full review of the paper and identify areas to be condensed if possible.

A couple of issues to note as shown below.

Line 550: "We surmise that these features..." I would guess the authors means "We assume ..." or something along those lines.

Line 564: Table 2 is missing from the manuscript (there are other places in which Table 2 is mentioned)

Line 590: "We initially surmised that the smoke..." Same typo as in Line 550 above.

Line 940: Closing parenthesis is missing at the end of the paragraph.