

Interactive comment on “Atmospheric observations made at Oliktok Point, Alaska as part of the Profiling at Oliktok Point to Enhance YOPP Experiments (POPEYE) campaign” by Gijs de Boer et al.

Anonymous Referee #2

Received and published: 22 May 2019

The authors describe measurements and provide sound and unique dataset of the lower Arctic atmosphere obtained at Oliktok Point, Alaska using tethered balloons, unmanned aircraft and radiosondes. Personally, I am not a big fan of do-it-yourself science on the base of provided data sets, but I understand somebody might be. The manuscript reads well and fulfils the requirements of the journal. Also data sets are accessible via ARM Data Management Facility as guided in manuscript and obey common standards. I have not found any flaws in presentation quality of the manuscript. I have only minor comments to current version of the manuscript, please see below.

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1. Introduction, p3, l89, the following sentence is bit confusing, “. . . and one additional radiosonde per day (three launches daily). . .”. Does it mean at least one per day and/or up to three per day?

2.2 DataHawk2 sUAS, p6, l225, How authors determined the cloud base altitude and how close they operated their sUAS to cloud base, could they be more specific?

2.5. Overview of completed flights and radiosonde launches, p7, l280. This is very interesting reading, could authors be bit specific about the distance of take-off area to radar station? Maybe also radar frequency and its power? I understand if authors do not want to share those details, I am just curious.

3. Data processing and quality control, p9, l359. Authors describe quality control of POPS instrument; however nothing is mentioned about TSI 3007 total aerosol sensor. Also by “flow correction”, p9, l365, do authors mean flow correction for the height or routine flow calibration at ground level?

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2019-46>, 2019.

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