

## ***Interactive comment on “On-flight intercomparison of three miniature aerosol absorption sensors using Unmanned Aerial Systems (UAS)” by Michael Pikridas et al.***

### **Anonymous Referee #1**

Received and published: 22 July 2019

This is a very interesting and important manuscript that describes an intercomparison of aerosol light absorption coefficient measurements taken with three miniature instruments for UAS deployment and two “reference” ground-based instruments. While I think that this manuscript describes very high quality and important work, the same cannot be said about the writing style, which could greatly benefit from extensive editing.

Just a few minor comments: this could go on and on:

Lines 85-87: “In fact, the reduced size, weight, and power needs of these systems, along with the reduced cost of the platforms and instrumentation, make them suit-

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able for these operations with huge potentials currently poorly demonstrated.” This statement would benefit from some references.

Lines 87-94: Comments on “endurance and not risking the lives of crew” should be added.

Lines 94-96: “They have also the potential (yet not demonstrated) of the ground-based monitoring networks capabilities in providing long-term atmospheric observations.” This is unclear to me, please reword.

Lines 97-100: How was the “vertical distribution of aerosol absorption” performed???

Lines 347 & 359: “Angstrom” or “angstrom”? How about “Ångström”?

Line 515: “agreement” or should this read “correlation”?

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