Interactive comment on “Exploring the potential of the RPA system SUMO for multi-purpose boundary layer missions during the BLLAST campaign” by Joachim Reuder et al.

Anonymous Referee #2

Received and published: 7 February 2016

General Comments: This manuscript provides an overview of current efforts to make atmospheric measurements using the UAS SUMO. This is an excellent fit for AMT, as it provides insight into novel technology for performing atmospheric research. In general, the manuscript is well-written, clear, and informative. Figures are readable and clear, and it is obvious that the authors have spent a good amount of time to prepare this paper. I have very few criticisms of the work, and therefore suggest that the paper be published with minor revisions.

Specific comments:

- Line 60: This should say “University of Colorado – Boulder (CU)”. Note that the correct abbreviation is CU, not UC (don’t ask me why...)

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- Line 147: Can you provide some additional information on the IR sensor? What is the technology? How big is it?

- Line 184: Recommend replacing “has been” with “was”

- At some points, there may be a bit too much detail. For example, while the paragraph form lines 199-209 is very interesting, I think that the authors should consider whether all of these details are necessary here (I recommend reading through the manuscript one more time to assess whether the level of detail is appropriate, keeping in mind that the readership is likely looking for information on sensors and measurements, and perhaps are less interested in the fine details of operations).

- Lines 245-246: Has there been any consideration for performing corrections similar to those applied for radiosondes (e.g. Miloshevich et al., 2004)

- Line 266: how were the turbulence legs oriented to the prevailing wind?

- Line 408: Pre-processing? Or post-processing?