Reviewer Comment 1

Suggestions for revision or reasons for rejection (will be published if the paper is accepted for final publication)

This paper is substantially improved and I recommend publication. I did not read the supplement and I imagine that it could be entirely omitted without any loss to the reader.

- 1. a minor note, I suggest that line 1 page 4 refer to anticipated publications since the full suite of papers do not yet exist.
- 1. The revised text is updated as suggested by the reviewer.

Reviewer Comment 2

Suggestions for revision or reasons for rejection (will be published if the paper is accepted for final publication)

Scientific significance - Introduction paper meant for background.

- 1. Geographical references should be added to all the maps ie lat/longs at the very least at the map edges.
- 2. Fig 4. Radiosonde data is there a reference to provide information on how this data is treated considering the data are available only four times/day yet the plot shows continuous data.
- 1. In the last revision, a sentence was added to the caption of Figure 1 about latitude and longitude. We think that this update is sufficient because the inset shows the scale of South America. The relationship of the other figures to the first figure is apparent to the eye. Our small resistance to adding the latitude and longitude information directly into the figures is that the centerpiece image of the figure is then necessarily smaller in the final PDF of the published article. We prefer to keep the centerpiece image as large as possible since it has the most information. We understand the reviewer's point of view, and we hope that our preference can be seen as a difference of opinion among reasonable colleagues.
- 2. The sounding data were interpolated between the four per day launches to create a continuous time series of wind and relative humidity profiles. The caption is updated. This type of interpolated plot is standard practice for radiosonde observations.

Editor Comment 1

Editor Decision: Publish subject to technical corrections (05 Apr 2016) by James Allan

Comments to the Author:

See suggestions for technical corrections from the reviewers.

While the reviewers are widely satisfied with the comments, I would observe that the rationale for the design of the experiment still isn't explicitly stated, which was something that was requested. Note that this is not the same as the motivation for the experiment, but more to do with why it was executed in the way it was. While this may seem obvious given the precedent in previous multi-platform studies (e.g MILAGRO), I feel that the manuscript would benefit enormously from the simple inclusion of this this being stated explictly in the first paragraph of section 2 (it's kind of inferred in section 1, but only very loosely). This doesn't have to be anything too big, just a statement to the effect of "the guiding principle for the use of the multiple platforms was to characterise the Amazonian atmosphere under varying degrees of urban influence and photochemical ageing..." or something.

While this may seem like pointing out the obvious, such a statement would help provide the frame of reference for the subsequent publications that I would regard as part of the function of an introduction paper. Note that it is not necessary to state whether the measurements were successful in this regard; this will be up to the individual papers and/or a subsequent overview paper.

The text is revised according to the Editor's suggestion. The following sentence is added to the first paragraph of section 2: "The rationale for the use of the multiple platforms was to characterize the Amazonian atmosphere under varying degrees of urban influence and photochemical processing."