

Interactive comment on “Introduction: Observations and Modeling of the Green Ocean Amazon (GoAmazon2014/5)” by S. T. Martin et al.

Anonymous Referee #3

Received and published: 17 February 2016

GENERAL REMARKS

The manuscript provides an overview of the GO/Amazon2014/5 experiment with the intention to introduce the Special Issue in ACP on this integrated multi-platform experiment. The paper aims to providing fundamental information on the design of the experiment, deployed platforms, source regions of anthropogenic pollution and biomass burning relevant to the target area, and meteorological conditions during the intensive operating periods, and thus setting the frame for the detailed scientific publications to come.

In its current version, the paper does not meet the requirements for an introduction paper to such a complex experiment. In general terms, it is well written, but the readability would largely benefit from restructuring the presentation of the material and critically

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revisiting the presented figures. Specific comments are given below. In summary, major revisions are required prior to acceptance for publication in ACP.

SPECIFIC COMMENTS

1| The introduction paper to a Special Issue of such a complex, integrated, multi-platform experiment should present the overarching ideas and scientific objectives of such a study, participating partners, role of partners, measurement concepts and study design. Since this is not the first integrated experiment of this kind, the specific study design and approaches should be reflected in the light of experience made during previous large-scale experiments of similar kind. I consider this an essential piece of information required for the justification of the approaches chosen for GoAmazon2014/5. It would also highlight potential new approaches developed for this study.

2| The introduction section would benefit from a more clear structure which may be achieved by introducing subheadings. The section contains information about previous knowledge and motivation, study design, and structuring of the ACP Special Issue. At least, these different parts of the introduction should be separated by subheadings.

3| Many figures require redesign and also merging into a single figure. Reviewers #1 and #2 have commented this aspect in detail, so that I can focus on the most important issues.

Figures 3 and 5 may be merged and presented as traditional maps instead of using Google Earth. This would enhance the information content because populated areas are easier to distinguish from the surrounding forest and farm lands. Furthermore, major roads are easier to identify.

Figure 4 can be removed completely. The information is already contained in Fig. 1.

Figures 7 and 8 have to be enlarged and require larger axis labels, otherwise the given information is lost.

Figures 9 to 11 require re-arrangement. Why not selecting few demonstration cases

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and combine fire detection from Figs. 9 and 10 with the respective MODIS AOD in a single multi-panel figure? The other periods may be shown in the Supporting Information. In the current form, these figures are almost useless.

MINOR REMARKS

Page 30177, last line: This sentence should be moved to the end of the abstract.

Page 30178, line 10: Doesn't Amazonia also influence global climate?

Page 30179, line 3: Suggested rephrasing: "... are not fully understood."

Page 30188, last line: The sentence starting with "Importantly ..." seems to be incomplete.

Page 30190, line 24: I suggest starting a new section here.

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 30175, 2015.