

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

Anonymous Referee #1

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This paper provides an introduction to the GoAMAZON experiment. Before publication a substantial revision is needed.

The paper is written for an audience in the know and needs to be reviewed again by the authors for effectiveness at teaching someone who knows nothing about the experiment key things they need to know.

There are too many figures and many of them are too small to be useful and/or they don't teach very much. In general, the figures are poorly labeled, and as a result, will only be useful to the science team and not the general readership of ACP. Changes to the figures should include latitude and longitude labels at the edges of all Google Earth images and other maps. To the extent possible these images should be scaled identically and some should be combined. For example, figures 3 and 5 can be combined.

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Figure 6 doesn't say much and could be deleted. Figure 7 is too small to be useful and can be deleted without loss to the reader. Figures 9, 10 and 11 have too many panels that seem to be redundant. As a result the figures are too small to be readable and all the panels look the same. Each of these figures should be limited to no more than 2 panels. Figure 8 seems to be mislabeled. Perhaps b1 should be a2? It is not clear that the anomaly adds much for the reader. My attempt to read them suggests the variation is of order 20-30%, an amount that doesn't seem surprising for a 2 month window or likely to have any effect on the interpretation of the gas or aerosol measurements. I suggest the authors clarify what is unusual about the anomaly and how it might affect interpretation of data that will appear in many of the GoAmazon papers or delete those panels.

I recognize that overview papers are not the place for new science, however, as this paper describes the experimental design of GoAmazon, some reflection on the success of the overall experimental design is appropriate. For example, similar objectives guided the southeast US experiments in 2013. This experiment had many of the same elements but attempted to link ground sites in a Lagrangian manner. Was that large scale design element effective? The paper should provide guidance to others thinking about large scale experiments.

The acronyms ALC, CLC, CAPI and TES are not necessary to the paper and are a distraction to the reader outside of the GoAmazon community and should be simply spelled out.

It is essential that the authors describe the measurements needed to accomplish the larger goals outlined in the paper and indicate which sites were instrumented to accomplish which goals. A list of instruments at each site is needed. The paper's description of instruments and measurements by facility name (e.g. AMF-1 or MAOS) are not useful. The sentence "Four additional containers of guest instrumentation . . ." is also not useful. What did the "guests" measure? Why are some participants in the experiment "guests" and others presumably some other status, perhaps "hosts"? Does that des-

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ignation affect the science goals or the functioning of the science team? What will it mean to a reader 10 years from now?

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