Interactive comment on “The VAMOS Ocean-Cloud-Atmosphere-Land Study Regional Experiment (VOCALS-REx): goals, platforms, and field operations” by R. Wood et al.

W. Robinson (Referee)
walter_robinson@ncsu.edu

Received and published: 12 September 2010

VOCALS REx was a very successful field project; there will be many papers published over the next several years that analyze or draw upon its results. It will be useful for the authors of these papers to have a single citable source that provides a succinct description of the experiment, both what was done and why. This paper ably meets this need. Moreover, readers of those other papers, who turn to this one, will find a compact description of the data available from REx, and this may motivate them to seek out these data for their own investigations - for this purpose it may turn out that the tables are of greater importance than the text. Overall, I suspect that this paper
may be more cited than read, and it may be the tables, rather than the text, that receive the greatest attention, but this in no way diminishes its value.

That said, there are three ways in which the paper could be improved.

1) Except for the Flexpart activity, the paper makes little to no mention of modeling activities. VOCALS-Mod is a separate and ongoing activity, but given the great effort to coordinate REx and Mod, I think it would be worth a paragraph to describe this coordination, discuss its influence on field activities, and perhaps to mention the very interesting Pre-VOCA activity.

2) Sampling strategies from the different platforms necessarily represented compromises among the requirements and desires of posed by different types of measurements (I was present during some of those discussions for the C-130 - presumably similar conversations took place for the other platforms). It would be worthwhile to provide a sentence or two explaining the sampling strategies (e.g. aircraft times spent at different altitudes) for each of the major platforms, and the compromises these strategies represented.

3) While I understand that this paper is NOT intended to discuss preliminary scientific results (and that to do so could diminish its archival value, to the extent that preliminary conclusions may prove false), but I think it would be valuable, and interesting, to discuss what, if any, modifications to field activities were made based on what was observed early on. In particular, I do not believe the paper mentions the mid-experiment all-hands meeting in Arica, and how discussions during that meeting shaped field operations during the latter half or REx.

The paper is written clearly. The writing sort of falls apart, however, in the last paragraph on page 20774 - it reads as if it were caught in mid-edit. On page 20777, the text should be reviewed for consistency of tenses.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 20769, 2010.