Interactive comment on “An overview of the SCOUT-AMMA stratospheric aircraft, balloons and sondes campaign in West Africa, August 2006: rationale, roadmap and highlights” by F. Cairo et al.

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We thank the reviewer for his comments, which will be taken into account for a possible resubmission to a different journal, if the review process will end with the rejection of the manuscript. While waiting for the other reviewer’s comments for a comprehensive and detailed examinations of these remarks, we would like to state at this stage that we do not agree with the reviewer’s opinion that the paper in the present form is unsuitable for ACP, since it is not presenting any original result.

Of course the effort of our paper is more focussed on a description of the general state of the atmosphere during a field campaign, which has been addressed either in general and in greater detail for each experimental activity that went on.

The meteorological context of the monsoon, required for understanding all further papers, will be asked by all reviewers (it is has already been the case, and the answer was that such kind of analysis would have been provided by the overview). It has already been an useful paper for the authors of other more focussed papers, and it might be so for their future readers. Moreover, such description has in itself elements of novelty, as the analysis of the wave activity in the stratosphere, either from ECMWF or from radiosoundings showing discrepancies in the amplitude of the waves, or as in the analysis of the diurnal cycle in the LS temperature.

We agree that the acronyms might be too many for somebody not aware of African monsoon details, and that a schematic diagram would greatly improve the reading. Anyway we think that a general overview of the monsoon is definitely needed.

It should also be taken into account that the SCOUT-AMMA campaign has been a common effort that has brought to interact two different and large scientific communities; so not a secondary aim of our paper - intended to be part of both the AMMA and the SCOUT-O3 special issues - was to provide to each of these communities a guideline to browse and interpret the database currently available, thus bridging any gap between them and stimulating additional investigations and synergies. This explain the large space given to instrumentation descriptions and measurement strategies. But the reviewer is right: we could summarize these in one or two tables (aircraft and balloons) as done in the overview paper of Solve-Theseo campaign (Newman et al., J. Geophys. Res., 107(0), 2002) which is the most cited paper of that campaign.

Also for the lenght of flight descriptions, the reviewer may be right: perhaps too much details. We could look carefully at what will be included in specific papers and could be removed from the overview. Generally, we tried to find a balance between being not
very informative or to put too much details. Overview publications are always difficult, even if in introduction to special issues, on the same grounds put forward by the reviewer. There is already one accepted present in this same SCOUT-O3 special issue. So we do not think the reviewer arguments are definitively settled. However, while waiting for the other reviewer’s comments to withdraw or eventually reshape the manuscript according to their, and to the present reviewer’s suggestions, we want to address one of his criticism, stating that an overview paper can not be written - or maybe published - before the appearance of papers presenting the measurements.

It was indeed difficult to write a paragraph about results before knowing exactly what was going to be available. The reviewer is right, We cannot refer to papers in preparation. But this was inevitable when we wrote the paper. This has to be updated and it needs to be kept short.

The manuscript quotes thirteen papers as "in preparation". The presentation of our paper has been delayed until all of these other papers were in a mature stage. Since the initial submission of our manuscript,

Lebel et al. has appeared in QJRMS (Lebel et al., QJRMS October 2009, DOI: 10.1002/qj.486)

Schiller et al. and Laube et al., have been put in open review in ACPD (Atmos. Chem. Phys. Discuss., 9, 17495-17529, 2009; Atmos. Chem. Phys. Discuss., 9, 20283-20307, 2009) as Gostlow et al. which is now in open review in AMTD (Atmos. Meas. Tech. Discuss., 2, 2123–2159, 2009)

Borrmann et al., and Homan et al. have been submitted to ACPD and are in the course of publication.

According to their first authors claims, Fierli et al., Law et al. and Liu et al., will be submitted to ACPD in the next days.

Berthelier et al. and berthelier et al. Engelsen et al., Reeves et al., are still in the preparatory phase.

Finally: concision. Indeed we think we need to screen carefully what is needed and what could be cut.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 19713, 2009.