Interactive comment on “Software and database structure to analyze the relationship between aerosol, clouds and precipitation: SAMAC” by S. Gagné et al.

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Received and published: 8 May 2014

There is a clear need for analysis programs of the type discussed in this paper and AMT is a logical journal to describe such software. That being said, the manner in which the SAMAC software package is presented here does not seem to me appropriate for a technical journal with its roots in scientific dialog. The manuscript is written too much like a user’s guide rather than a concise technical description that highlights the important aspects with scientific examples.

In addition, there are many other packages that are in use that are similar to SAMAC
but have not been published in the peer review literature. The authors should do their homework and provide a review of at least the ones that are the most known. For example NCAR/UCAR through Unidata provides extensive tools similar to SAMAC and I am fairly certain if they visit other research sites at EUFAR, University of North Dakota, etc. they will find others that do not differ that much from SAMAC. Perhaps it seems unfair to make this request, but I would assume that these other software packages are described in technical reports that are referenceable.

My more detailed comments are found in the annotated manuscript that I include as a supplement; however, my general recommendation is the following:

1) Do a better review of other similar software packages.

2) Expand upon the need for integrating data sets with more than the simple example of liquid water path.

3) Highlight the principal features by posing a scientific question or hypothesis that you would like to address with a specific data set and walk the reader through these features as you demonstrate them with the software package.

All the details of the package should go either in an appendix or a supplement.

Please also note the supplement to this comment: http://www.atmos-meas-tech-discuss.net/7/C869/2014/amtd-7-C869-2014-supplement.pdf