

Interactive comment on “Technical Note: An open source library for processing weather radar data (*wradlib*)” by M. Heistermann et al.

Anonymous Referee #2

Received and published: 31 December 2012

General summary: This technical note presents the open source library *wradlib*, which is able to analyze volumetric weather radar data within Python. The library is setup in such a way, it becomes relatively easy for users to process raw radar data, by performing proper geo-referencing, error correction and radar rainfall adjustments by precipitation measurements. Since *wradlib* is open source, users are able to add their own libraries and extend the overall capabilities of *wradlib*.

Overall quality: This paper presents an important issue for many users of weather radar data, how to effectively process the data within a short amount of time, without having to write lots of your own numerical codes. The open source library *wradlib*, could provide these capabilities for many users. As such, this technical note is interesting

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and well written paper. However, the current manuscript doesn't provide much detail on a number of issues. These need to be addressed before I believe it can be accepted for publication in Hydrology and Earth System Science.

Major comments: In order to understand which specific routines have been implemented in *wradlib* and what specific implementation was used, would it be an option to provide a bit more details in Table 1. More specifically, it would be nice to add the publications of the original processing algorithms, so far implemented in *wradlib*. For the reader that is used to work with volumetric weather radar data at a regular basis, this will give insight in the capabilities but also limitation of *wradlib*, while for new users further reference is provided.

In Chapter 3 the author provides a number of features to process radar data, including the numerical code used to call the specific library routine. In the current manuscript, for each of these features, a different example/figure is provided. However, except for Figure 5 and 6 for a synthetic case, these are stand alone examples. It would be nice if the authors could provide one specific case study, using actual weather radar and rain gauge observations to show the processing capabilities of *wradlib*, in a step by step manner. Especially for readers, not used to the processing of radar data at a regular basis, such an example could show the benefit/usability of *wradlib*.

Since, the processing of radar data comprises the analysis of large three dimensional arrays, which are updated every 5-10 minutes, processing these data can take considerable amount of time. To gain a better understanding on its hydrological potential, it would be good to provide some specific details on the computational speed of *wradlib*, especially with respect to analyzing volumetric data for one or multiple radars.

The authors mention that *wradlib* is an open source library, which enables users to add numerical routines themselves. However, in order to ensure that within a few years many versions of *wradlib* are used all with different capabilities, depending on the users capabilities to add additional routines, how are the authors going to add the

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user provided additions, to the latest version of wradlib.

Minor comments: Page 12338, line 26 – 'sontrol' should be 'control'

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 12333, 2012.

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