

Interactive comment on “Digitizing scanning lidar measurement campaign planning” by Nikola Vasiljević et al.

Nikola Vasiljević et al.

niva@dtu.dk

Received and published: 12 July 2019

General comments

The manuscript “Digitizing scanning lidar measurement campaign planning” by Vasiljevic et al. introduces and describes a planning tool for finding the optimal device position for dual-Doppler lidar setups. Though I believe that this is a very relevant tool, corresponding to a major contribution by the authors, its presentation in the manuscript is not adequate for a scientific article. In many sections the text is written rather in the style of a manual than that of a paper. I strongly recommend to rearrange the manuscript, publish some of the contents in a manual-style technical report and focus in the paper on the research questions and the answers to these.

C1

Dear Referee,

we would like to thank you for your time and for your insightful comments which were used to revise and improve our manuscript. The revised manuscript follows a classical IMRAD structure and it has now been oriented on addressing research questions instead of the description of the tool. Also, we have made a change of the title from "Digitizing scanning lidar measurement campaign planning" to "Digitalization of scanning lidar measurement campaign planning", since the term 'digitalization' better suits the work we have done. Find our detailed responses below which are provided in the italic text formatting.

Specific comments

Page 2, line 1 – I would like to suggest to add reanalysis date here, as a quite common option for a long-term correlation.

Has been added

p. 2, l. 23 - Something wrong with the sentence “This impacts the positioning of scanning lidars can be placed...”

This sentence has been rewritten to: “This impacts the positioning of scanning lidars since we need an unobstructed passage of the beams towards measurement points...”

p. 3 l. 4 – The reference with the information in parentheses is too detailed here.

Details have been removed.

p. 3 ll. 8 – There should be no empty space in between two headings. Same for p. 9 ll. 26.

This is due to the LaTeX config documentclass[wes, paper]{copernicus}, which is

C2

requested to be used while paper is in the review process. If we run our LaTeX file in documentclass[wes, paper]{copernicus}, i.e. configuration once the paper is approved for publication, the blank lines disappear.

p. 3 ll. 12 – I would suggest to refer to the respective subsections within this listing.

The whole Section 2 in the revised manuscript has been rewritten.

p. 3 l. 17 – I think for a scientific paper it is not relevant that the algorithms have been developed in Python. (This really sounds as in a manual. . .)

It is important to point out that it is developed in Python, since Python is open source, and thus to use the CPT there is no investment needed (which would be the case if the tool was developed in MatLab for instance).

p. 3 l. 17 – Here it should be briefly specified what kinds of “public databases” it is referred to.

The whole Section 2 in the revised manuscript has been rewritten.

p. 3 ll. 25 – I am missing a verb in the sentence “The approach we have used to. . .”

The whole Section 2 in the revised manuscript has been rewritten.

p. 4 subsection 2.3 – It is only introduced in l. 27 that a dual-Doppler setup consists of “two scanning lidars”. But already in l. 21 it is referred to “one of the two lidars”. Check the order of information.

Dual-Doppler setups are introduced in page 2 line 17 in the reviewed manuscript.

p. 11 Figure 3 – I am wondering why there is so much empty space in the graphic. Is this figure really relevant, or couldn't it be combined with Figure 5.

C3

Figure 3 has been removed in the revised manuscript

p. 12 Figure 4 – It is rather difficult to interpret these plots, amongst others because red and white is used for two different things each.

Red circles are used to indicate measurement point, where the addition of symbol x indicated that they are reachable by two measurement points.

p. 14 Table 1 and following tables – Not sure if so many details are needed for a scientific publication (I would say rather not).

In the revised manuscript we have removed tables, nevertheless data which was in tables are now provided as a supplementary material.

Interactive comment on Wind Energ. Sci. Discuss., <https://doi.org/10.5194/wes-2019-13>, 2019.

C4