

Interactive comment on “CAELIS: Software for assimilation, management and processing data of an atmospheric measurement network” by David Fuertes et al.

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About the general comments:

We thank the reviewer for the constructive comments. Concerning the general comment, we want to emphasize that the work of the AERONET calibration facility at Valladolid has greatly benefited from CAELIS software. The idea to develop it was to provide tools that facilitate the management of data and instruments, and assist the calibration process, the data quality control and the network management. There was no predecessor software at Valladolid and these tasks were done manually before CAELIS. It is also important to mention that we took ideas from the management and

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data control carried out in the other two AERONET calibration centers at NASA and University of Lille. We have included a sentence in the text to clarify this. We have also revised use of the English language.

About the specific comments ([answers in blue](#)):

- Page 1, L13: It is widely agreed that the overall effect of aerosols is to cool the climate. However, aerosols can also warm up the atmosphere depending on the type of aerosol, height above the surface and timescale under consideration. Please, reword this sentence.

+ [Done](#)

- Page 1, L13: Remove directly.

+ [Done](#).

- Page 1, L17: Ground-based and orbital instruments have been applied...

+ [Done](#).

- Page 2, L4 and L5: 340 nm ... 1640 nm. Check throughout the manuscript.

+ [Done](#).

- Page 3, L30: Approaches to ...?

+ [It refers to technical approaches and models for database design. We have clarified this in the text.](#)

- Page 4, L35: Here 'aerosol optical depth' is not capitalized (see page 2, L6).

+ [We have removed capital letters in page 2, L6, and added the acronym AOD for clarification. Now it is consistent throughout the text.](#)

- Page 5, L4: by Dubovik and King (2000) and Nakajima et al. (1996).

+ [Done](#).

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- Page 5, L11: I suggest deleting "As it is explained in previous section".
+ [Removed.](#)
- Page 5, L16: I suggest deleting "in detail".
+ [Removed.](#)
- Page 5, L19: I suggest deleting "really".
+ [Removed.](#)
- Page 8, L20: I suggest rewriting "huge websites".
+ [Rephrased to "popular websites".](#)
- Page 8, L26 and L31: I suggest replacing "popular" by "widely used".
+ [Done.](#)
- Page 9, L7: I suggest deleting "really".
+ [Done.](#)
- Page 9: I suggest replacing the title of the section "Examples" by "Performance of Caelis" (or something similar).
+ [We have changed it to "Examples of application".](#)
- Page 10, L4: I suggest adding "Spain" after Madrid (as in caption of Fig. 12). Same when other locations are mentioned.
+ [Done.](#)
- Page 11, L1-4: I suggest removing these lines.
+ [Suggestion accepted.](#)
- Figure 2, caption: I suggest removing (Chen, 1976) to avoid confusion.

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+ [We have moved the reference to the text.](#)

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