

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

Anonymous Referee #2

Received and published: 6 September 2017

1. General Comments The authors present and describe new software (Caelis) developed to assimilate, manage and process aerosols-related data recorded by the Aerosol Robotic Network. Although the description and performance of Caelis is explained with sufficient detail, this reviewer thinks that that the manuscript could and should greatly benefit from showing how specifically Caelis improves its predecessor software. Also, the use of English language must be substantially improved. This reviewer's recommendation is that the paper may be accepted for publication after both aspects and few minor issues listed below are addressed.

2. Specific Comments

C1

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.

Page 1, L13: Remove directly.

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

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

Page 3, L30: Approaches to ...?

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

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

Page 5, L11: I suggest deleting "As it is explained in previous section".

Page 5, L16: I suggest deleting "in detail".

Page 5, L19: I suggest deleting "really".

Page 8, L20: I suggest rewriting "huge websites".

Page 8, L26 and L31: I suggest replacing "popular" by "widely used".

Page 9, L7: I suggest deleting "really".

Page 9: I suggest replacing the title of the section "Examples" by "Performance of Caelis" (or something similar).

Page 10, L4: I suggest adding "Spain" after Madrid (as in caption of Fig. 12). Same when other locations are mentioned.

Page 11, L1-4: I suggest removing these lines.

Figure 2, caption: I suggest removing (Chen, 1976) to avoid confusion.

C2

