

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

Anonymous Referee #3

Received and published: 2 November 2017

1. General Comments:

This manuscript gives a comprehensive introduction to the software tool CAELIS, including the goal, needs analysis, software design and application examples. The work is valuable, because the manuscript not only describes how to build such a data system, but also makes us understand more details about routine operation of AERONET (such as data management, calibration and data quality control). The reviewer thinks the manuscript falls into the scope of GI. It is believed that CAELIS actually makes an important role in its facility.

However, the common issues throughout the text should be considered.

C1

(1). AERONET defines data level (1.0, 1.5, 2.0) for AOD as well as skylight inversion products. CAELIS also defines the logic data levels (see Figure 3) in view of software. Are they quite different? The reviewer thinks it is wise to make them clear (not confused for readers).

(2). The parts of “Abstract” and “Summary and Conclusions” needs substantial conclusions to emphasize the benefits which CAELIS brings to the facility. For example, how long the software works, or how many instruments are under monitoring, or how quick response when malfunction happens.

2. Specific Comments:

Page 1, L2: focus on; remove “that:”

Page 1, L5: offers the scientific community a new tool

Page 1, L10: “global climate balance” means “global climate change” or “global energy balance”?

Page 2, L4: “340 nm”

Page 2, L6: “cloud-filtered” changes to “cloud screening”

Page 2, L29: “The motivation of the CAELIS . . .” is better?

Page 2, L31: “. And on the other hand” changes to “; on the other hand”

Page 3, L22: “CAELIS is composed of a database . . .”

Page 3, L30-Page 4, L12: I don’t think the concept of DBMS needs many words.

Page 4, L30: The sentence “The benefit of MySQL . . .” is too complicated. Rewrite concisely and clearly.

Page 5, L26: What are “hybrid” and “cross”?

Page 6, L10: responsible for organizing . . . and deciding

C2

Page 7, L32: CAELIS system offers users a web interface (www.caelis.uva.es) for interaction

Page 8, L20: I suggest the items such as PHP, Symfony, Javascript and JQuery and PDO can be described in shorter length.

Page 9, L27: I suggest the item “sunphotometer” or “photometer” should be internally consistent in full text.

Page 10, L20: What does “This view is highly configurable thanks to filters” mean?

Page 11, L14: AOD vs. AE

Page 12, L17: I suggest removing the sentence “This is a NASA . . .”

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss.,
<https://doi.org/10.5194/gi-2017-41>, 2017.