

Interactive comment on “Characterisation and improvement of $j(\text{O}^1\text{D})$ filter radiometers” by Birger Bohn et al.

Anonymous Referee #2

Received and published: 3 June 2016

General comments. This work presents a study to characterize several filter radiometers which are used to measured $j(\text{O}^1\text{D})$. After a characterization in the laboratory and the obtaining of correction factors, measurements from an experimental field have been reevaluated. The paper is well written and structured. A sufficient number of references is cited. I suggest to the authors to clarify the goal of this paper. When you read the Introduction and Experimental sections, for me is not clear the objective. It has been necessary to read all the paper to understand the scientific interest. For example you can say: “The goal of this work is to perform a characterization of the several filter radiometers in the laboratory, definition of correction factors and their application, in order to reevaluate the experimental data obtained in a field campaign”.

Specific comments

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Pag. 2. Lines 29-30. “These absolute techniques require complex instrumentation and are therefore not maintained by many groups”. I suggest to the authors to remove this sentence.

Pag. 2. Lines 30. “. . .that utilize PDA or CCD. . .”. Maybe, you can change this sentence as “. . .that utilize photodiode arrays (PDA) or charge coupled devices (CCD). . .”.

Pag. 3. Lines 16. “. . .European project ACCENT. . .”. Meaning of ACCENT??

Pag. 3. Lines 28-32. I suggest to say in a line and clearly the goal of this work.

Pag. 4. Line 15. “Photograph”. Image??

Pag. 4. Line 19. “. . .previously (Hofzumahaus et al., 1999; Bohn et al., 2008)”. I suggest “. . .previously by Hofzumahaus et al. (1999) and Bohn et al. (2008)”.

Pag. 5. Line 6. “A high-pressure Xe arc lamp was used as a light source”. What about the characteristics of Xe lamp?

Pag. 5. “Section 3.1. Spectral sensitivities”. What temperature was the laboratory during the characterization? You do comments in Pag. 6, lines 32-33.

Pag. 9. Lines 30-34 and Pag. 10. Lines 1-2. I look very interesting the recommendations performed by the authors about the maintenance of the filters radiometers for long-term measurement periods.

Pag. 10. “Conclusions section”. In my opinion, more conclusions should be added. This section is very short, only a paragraph.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2016-80, 2016.

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