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Geoscientific Instrumentation Methods and Data Systems Discussions

Interactive comment on "Data flow of spectral UV measurements at Sodankylä and Jokioinen" *by* J. S. Mäkelä et al.

Anonymous Referee #2

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This paper does not provide any scientifically sound results. It contains a pure outline of the procedures followed for the UV measurements at the two FMI stations but it does not contain any details of the methods or algorithms used in these procedures, or any data. In its present form, it can serve only as a source of general information, like a web site. It is true that detailed descriptions of sites and procedures and different steps in the data processing chain have been published elsewhere, but just a listing of procedures and referencing other papers cannot justify the publication of the manuscript. I think it must be further expanded and structured in a way that could be useful and applicable to other, for example newly established, stations. Furthermore, I think that it could be useful to show at least some sort of time series with measurements at the two sites.

Specific comments

59-68: Are these statements supported only by "Groebner personal communication"? There have not been published elsewhere?

131: Is there any reference where the cosine correction procedure is described?

131: AWS sampling is ten minutes but the flowchart in Figure 4 sates 5 min. Which of the two is correct?

136: Similarly, any reference that describes the use of SL-501 for Brewer QA? Otherwise some more information should be added.

151 The paper is about UV measurements. The discussion here and Figure 5 are for total ozone. I suggest to remove both.

151-157: The stability of the UV measurements should be mainly assessed by the 1kW calibration lamps which are not mentioned here, and the 50 W lamps are mainly supporting the assessment of shorter term variations.

183: Most spectral quantities extend beyond the spectral range of the measurements. How is this taken into account and what are the uncertainties involved?

185-195: The list of different quantities could be supported by a figure with action spectra and a description of how these effective does are calculated. Of course all these are already published elsewhere, but for the completeness of the presentation it would be useful to be included.

220-221: Again the paper is focused on UV measurements. It could discuss briefly ozone, but showing a figure for ozone (Figure 8) is too much. I suggest removing this figure.

369: The quality of the flow chart could be improved

386: The quality of the flow chart is very poor.

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