

Interactive comment on “Ozone monitoring with the GOMOS-ENVISAT experiment version 5” by P. Keckhut et al.

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General comments: The focus of the paper has been clarified and the title changed to Global scale ozone monitoring with the GOMOS-ENVISAT experiment version 5. Introduction and conclusion has been reworked. A limited data set has been used because more extensive comparisons have been performed in the same issue (van Gijssel et al). The objective of this publication is focus on the effect of noise extraction on the long-term continuity. Comparisons have been proposed to illustrate how this effect impacts the long-term continuity of the data series.

Major comments: Many English corrections have been proposed by the referees and other sentences have been rewritten. The paper structure was not changed because the main results come from the sensitivity tests using the both algorithms more than

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comparisons than are proposed to support the noise issue.

Minor comments: All proposed corrections have been performed P14717, line 13 : Terms associated with star temperature and magnitude have been explained. : The magnitude defines the brightness of the star while the temperature is associated with the shape of the spectrum. If the star emission spectrum can be assimilated to the thermal emission of a black body at a given temperature, the wavelength of the maximum of emission is linked with this temperature. A high temperature is related to shorter wavelengths and larger UV emission while colder stars emit more IR. Because of the ozone absorption spectrum, the hot and bright stars provide the most favourable conditions for ozone retrieval. Because ozone in the lower stratosphere is very variable (several tenth of %) due to large latitudinal gradients and large-scale filamentary structures extended over continental scales, the collocation is always an issue.

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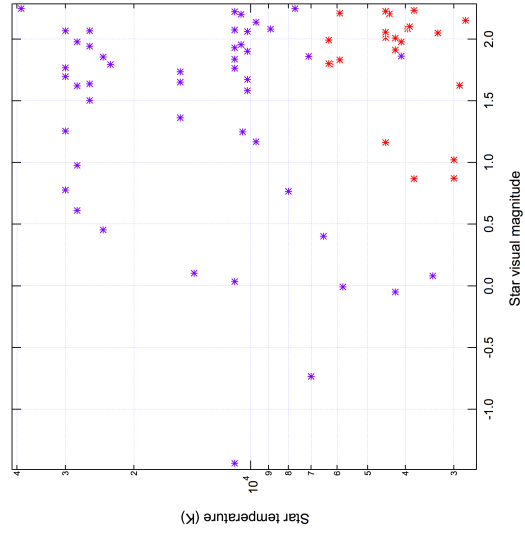


Fig. 1.

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