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## **ACPD**

8, S2545-S2546, 2008

Interactive Comment

## Interactive comment on "Study of suitability of cheap AvaSpec array spectrometer for solar UV field measurements" by I. Ansko et al.

## I. Ansko et al.

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The authors thank for all suggestions for the improvement of text. All the proposals about improvement the language have been accepted. Below the questions concerning the content are replied.

- 4. The cosine response is rather of moderate quality, not too poor. The major reason restricting the improvement is the relatively low sensitivity of the array. For this reason a thin teflon was used for making the diffuser. The thicker diffusers allow achieve the better agreement with the cosine law. For the bright period of year a better and thicker diffuser has been made.
- 6. Change of the sensitivity has been calculated as follows. For each spectrum the nearest calibrations before and after the recording date have been searched from the

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calibration database. The sensitivity is interpolated then linearly for each pixel separately.

- 7. During the first year the spectrometer module of instrument was not opened. After that it has been done and found that the edges of collimating mirror were partly damaged probably due to the influence of condensed water. The reflectivity of these parts of the mirror has decreased. The danger of water condensation is higher for the cooler parts within the spectrometer. The electronic unit produces enough heat to keep itself and the closest surrounding dry. Some measures have been applied to avoid the further water condensation. Such kind of additional work is commonly accompanying the use of non-expensive instruments.
- 9. The ratio of noncorrected to corrected now is presented in Fig. 4.

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 4199, 2008.

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