Atmos. Chem. Phys. Discuss., 10, C2247–C2248, 2010
www.atmos-chem-phys-discuss.net/10/C2247/2010/

Atmospheric Chemistry and Physics Discussions

Interactive comment on "Comparison of UV irradiances from Aura/Ozone Monitoring Instrument (OMI) with Brewer measurements at El Arenosillo (Spain) – Part 1: Analysis of parameter influence" *by* M. Antón et al.

Anonymous Referee #2

Received and published: 29 April 2010

Review Paper acp-2010-103

Comparisons of UV irradiances from Aura/OMI with Brewer. . . By M.Anton et al.

The paper compares the UV irradiance at 305, 310, and 324 nm, and the erythemal irradiance UVER, given by OMI instrument on board AURA satellite during 4 years, with the irradiances measured by a Brewer spectroradiometer at El Arenosillo in Spain. Although this is not a very original work, good reference is given to previous similar comparisons. The writing is clear and concise; this is a quality, however some more

details concerning the data and the methodology would be welcome. The number of days in each dataset, are listed in table 2, they should be discussed in the text; their differences can introduce a bias in the results. The main objective is to analyze the cloud and aerosol influence. The influence of ozone and solar elevation is wrongly mentionned on the same level in the abstract. For cloudiness, the proxi used is the LER value given by OMI. Why not using the local observations ? Figure 2 seems at least strange !! The authors do not provide a satisfactory explanation. The analysis of aerosol impact is limited, because a companion paper on absorbing aerosols is announced; this is somewhat frustrating.

Details: some sentences need clarifications. It seems that different authors do not have well coordinated their contributions. Check that all papers in the reference list are quoted in the text, and inversely.

Conclusion: the paper is worth publishing, but needs some improvement.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 6797, 2010.