Interactive comment on “A new method for the simulation of the Ring effect in observations of scattered sun light” by T. Wagner et al.

T. Wagner et al.

Received and published: 7 April 2009

First of all, we want to thank this reviewer for the positive assessment of our manuscript. Since this reviewer refers mainly to the comments made by reviewer #1, please have a look at our response to reviewer #1. There we explained in detail how we addressed the suggestions made by reviewer #1. In general, we changed the focus of the paper and give more attention to the 3 dimensional simulations as suggested.

The paper is fully appropriate for AMT, interesting and of good quality. No doubt that it deserves publication. However I share the reaction of referee #1 that most useful for the UV-Vis community and newest outcome, is the simulation of the 3D cloud effect and particularly the effect of shadowing. The description of the method applied for the calculation of the Ring effect is certainly required, the discussion of errors and the
comparison with other estimates are particularly appreciated and convincing. But the centre part of the paper seems to me the effect of 3D clouds since it is the most original piece of information relevant to the impact of Ring correction on atmospheric species retrievals. I fully support the suggestion made by ref#1 of giving more weight to the cloud impact on the Ring effect in the title and reorganising a little the paper in this direction.