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Interactive Comment

Interactive comment on "Episode of unusual high solar ultraviolet radiation in central Europe due to dynamical reduced stratospheric ozone in May 2005" by C. Stick et al.

C. Stick et al.

Received and published: 13 January 2006

We want to thank you for your comments and suggestions concerning our paper, that helped us to clarify our manuscript. Relevant literature and synoptic maps have been carefully chosen and added as described in detail in the review answer to referee #2.

Concerning the "major points" we wish to address the following points in more detail:

1.) We added the UV Index to the values of Eer, also included now in Figure 1, to point out the "potential for skin damage" (ICNIRP, 1995; WHO, 2002). For this unusual event the UVI reaches values of 8 "very high" instead of the longer term mean of 6 "high" in Westerland.

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2.) We have cut out phrases like "people exposes themselves unprotected to the sun..."

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- 3.) As you proposed, we left out the second event, as it cannot be directly compared to this "interseasonal ozone event".
- 4.) The uniqueness of this very high UVI event over Westerland accompanied by an unusual late spring ozone mini-hole over central Europe is now pointed out in more detail in the introduction, synoptic situation and in the conclusions according to the reviewers suggestions.

"Serious mistakes":

- 1.) We have changed the abstract according to your suggestion: "The measured low ozone values occurred during high pressure induced clear sky conditions" to point out, that clouds didn't have any effect on the irradiance on this day, and we entered "central Europe" instead of "Europe".
- 2.) Thanks for the Spell-checking: 188 mW/m² is the right value.

Interactive comment on Atmos. Chem. Phys. Discuss., 5, 10409, 2005.

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