Dear Andreas Hofzumahaus,

We would like to thank you for your constructive comments and we have taken all of them into account. We have corrected the following points:

- When it was relevant, we have replaced “photolysis rates” by “photolysis frequencies”. We agree that it was improperly used in some cases.
- We have replaced “J” by “j” to express the photolysis frequency.
- The specific atmospheric conditions used to calculate the atmospheric photolysis frequency (albedo and total ozone column) were indeed not indicated in the abstract, although they were given in the section 3.3. So we have added them in the abstract. We have also given the aerosol and cloud optical depth which were 0.235 and 0, respectively (values proposed by default values in TUV model).

Best Regards.

Bénédicte Picquet-Varrault