**Atmospheric
Chemistry
and Physics
Discussions**

Interactive
Comment

Interactive comment on "Actinometric measurements of NO$_2$ photolysis frequencies in the atmosphere simulation chamber SAPHIR" *by* B. Bohn et al.

Anonymous Referee #2

Received and published: 14 January 2005

In a preceding article ('Model-aided radiometric determination of photolysis frequencies in a sunlit atmosphere simulation chamber') methods to calculate the solar spectral actinic flux and photolysis frequencies within a complex shadowing and reflecting environment were described. Consequently this paper is about a test of the model results under different atmospheric conditions and a determination of a calibration factor. As stated by the title, this is done by actinometric measurements of NO$_2$ photolysis frequencies under controlled conditions, which are compared with the modeled j-values.

Full Screen / Esc

Print Version

Interactive Discussion

Discussion Paper

EGU

Though lots of the results are valid for the SAPHIR chamber only but the proceeding is sound and straightforward so that benefit may be provided to broader community than just to scientists, planning to work with SAPHIR. This article should be published after few minor improvements:

1. Abbreviations like BOC or SOC should be introduced before of their first use.

2. Figure 8., the upper panel shows outside versus inside j-values. For summer many of this data points show a smaller photolysis frequency outside than inside. Please add a few words on this topic.

3. If available inside and outside measurements of actinic fluxes would be interesting.

Typo:
Page 8152, line 15: remove one 'is'

Interactive comment on Atmos. Chem. Phys. Discuss., 4, 8141, 2004.

Full Screen / Esc

Print Version

Interactive Discussion

Discussion Paper

EGU