

Interactive comment on “Understanding the kinetics of the ClO dimer cycle” by M. von Hobe et al.

Anonymous Referee #2

Received and published: 23 August 2006

This paper reviews the current understanding of Cl₂O₂ laboratory measurements and attempts to improve our understanding of the chemistry of the ClO dimer in the atmosphere by comparing model calculations with field measurements. However, the paper has failed in this respect. The paper provides a good review, along the lines of the JPL and IUPAC evaluations, with up to date reference material and analyses but does not provide much “new” and useful information. I highly recommend the paper to members of the evaluation committees but I am not convinced that it is publishable in ACP.

A few general comments:

What is the reason for developing a Cl₂O₂ UV absorption spectrum, MPIC? This spectrum is completely arbitrary and its only justification is that it draws the model and

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

observations into better agreement. Also, I question whether this spectrum is really a unique solution to the problem.

How reliable are the field measurements of Cl₂O₂?

The Pope et al. reference is not appropriate (a poster presentation) for use in this paper and all references to it and its content need to be deleted.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 7905, 2006.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper