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Interactive Comment

Interactive comment on "Sensitivity of polar stratospheric ozone loss to uncertainties in chemical reaction kinetics" *by* S. R. Kawa et al.

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This reviewer has been a member of the NASA/JPL Panel since inception and has seen the difficulty of first deciding on a specific recommendation and the even greater difficulty in deciding on appropriate error limits given the inevitable lack of sufficient data upon which to perform anything like a statistical analysis. This paper does and excellent job of describing the real consequences of the JPL reports. At a meeting of the Panel in December 2008, the first author of this paper presented these results and inspired the re-evaluation of processes listed in Table 1. A report on these re-evaluations is about to be completed. There have been changes from JPL2006, but I don't think they change any conclusion in this paper. The largest source of uncertainty is from the Pope et al photolysis rate and the Panel elected not to change values of



this quantity pending results from many ongoing laboratory studies. However the Panel feels that the uncertainty factor in JPL2006 can be considerably diminished in line with the value of 1.5 tried in this paper. Also error limits on some of the rate constants have been diminished as well.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 13327, 2009.

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