

Incorporation of Non-Linear Cross-Section Parameterizations into a Fast Photolysis Computation Code (Fast-J)

Cameron-Smith, P. J.

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Abstract

We have investigated several methods of incorporating laboratory measurements of effective cross-sections that are non-linear functions of temperature, pressure, and wavelength, into the Fast-J photolysis code of Wild *et al.* (submitted *J. Atmos. Chem.*, 1999). The best method was found to be parameterization of the solar weighted effective cross-section using the form of the effective cross-section, with numerical fitting of the parameterization constants. Using this technique on the acetone data of Gierczak *et al.* (*Chemical Physics*, 231, 1998) produces a parameterization which fits all points to within 1%.

The full text of this paper is available as a [postscript file](#).