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Review of: Frequent ozone depletion resulting from impacts of asteroids and comets

By: J. W. Birks, P. J. Crutzen, R. G. Roble

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This is a well written and interesting paper that explores the effects of relatively small impacts on atmospheric chemistry. It is new, interesting, and seems to be at the cutting edge of research in this area. It should be published nearly unchanged. I have only a few suggestions/requests that will readers understand the paper better. Otherwise, it is a fine piece of work!

In the introduction, the Cretaceous-Tertiary extinction is referred to as the "C-T" extinction. Normal geological usage represents this as the "K-T" extinction (K for Kalk—the German designation for this era) to avoid confusion with the Carboniferous era (UK usage) or Cambrian.

Equation E1 is garbled in both versions of the paper that I have, but I believe that it lacks a rho for density.

The word "incipient" is consistently misspelled as "insipient" (dictionary: dull because of lacking in character).

Last sentence of section 3.4. Should 'lifetime by about and order of magnitude" be "lifetime by about an order of magnitude"?

Finally, the captions of Figs. 2-6 are inadequate and must be augmented. None of these figures has a key to the meaning of the various colors. Most figures have numbered contours in addition (which are really hard to read on my copy), but the meaning of the numbers is not explained in any figure. In Figure 3 I cannot understand what is plotted in the left column. The figure lists it as LN(P0/P), but I do not know what this means, since altitudes are already listed in a double y axis as both height and pressure. The right column seems to be temperature in, I suppose, K, but this is not stated explicitly.

With these small corrections/clarifications, the paper is ready for publication.

I have no objection to the authors knowing my identity.

H. J. Melosh
Lunar and Planetary Lab
University of Arizona
Tucson, AZ 85721-0092
USA