Interactive comment on “Automated sequence analysis of atmospheric oxidation pathways: version 1.0” by T. M. Butler

Anonymous Referee #1
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In this manuscript, the author describes an algorithm that can, by following reaction pathways, determine from the output of a complex chemical model the overall effect of the oxidation of a specified chemical species. In general, I think this is a useful tool, and publication in GMD thus seems appropriate. The paper is well written, and the use of examples of increasing complexity is a nice way of demonstrating both the validity and utility of the algorithm.

As the author is clearly aware, and as is clearly stated in the manuscript, the contribution of HO2 to the NO2 / O3 production is not being counted in the present analysis. Thus, I wonder if presenting HO2 yields (along with the currently presented NO2 yields) might be worthwhile? Either way, I look forward to seeing the follow-up manuscript in which the ozone production potential of the various VOC is studied in more detail.

One minor comment – The ‘ethyl glyoxal’ referred to on pg. 1011 should be ethylene glycol, I think.

Interactive comment on Geosci. Model Dev. Discuss., 2, 1001, 2009.