

Interactive comment on “Multiple-sulfur isotope effects during photolysis of carbonyl sulfide” by Y. Lin et al.

S. Danielache (Referee)

sebastian.d.aa@m.titech.ac.jp

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general comments Lin et al., have conducted an experiment that looks into the isotopic fractionation during OCS photolysis. The experimental devise and experimental technique follows the one presented by J. farquhar (Farquhar et al., 2001). The analytical method of recovered sulfur samples are also standard. In other to bring their results to the implication for the atmospheric fate of OCS the authors, through a detailed discussion, compare their results with all available literature. The limitations of the experiment makes it difficult a direct comparison with atmospheric behavior but in my opinion this result should be considered in separated model study.

specific comments The use of scale parameters for theoretically calculated frequencies is common place yet I haven't seen any study that address the question if this parame-
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ters as they are can be applied to isotopologues, in my understanding this remains an open question.

How the photodissociation of Sn species is approached?

Best Regards Sebastian

References Farquhar et al., JGR, 106, 32829-32839, 2001

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 14233, 2011.