

***Interactive comment on “Photoinduced oxidation of sea salt halides by aromatic ketones: a source of halogenated radicals” by A. Jammoul et al.***

**Anonymous Referee #3**

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General This is an interesting and sound study on how benzophenone in its triplet state could oxidise halides to halogen atoms. Such photochemistry could have far-reaching consequences for atmosphere-ocean interactions.

I do find the  $E^\circ$  for (Cl/Cl<sup>-</sup>) of 2.6 V as given in Table 1 too high. There are lower values frequently used in literature - See the Stanbury-review. Why do the authors cite only one value which is at the very upper end of all published data ?

The section 3.4. on page 7692 is not fully clear to me. What is the bottomline of the studies on gas phase products ? Could that be important ? Are further experiments required ? Which ones ?

C886

Acceptance after revision is suggested.

Details: Abstract, line 2: benzophenone (triplet state) or triplet state benzophenone

Page 7692, line 2 (?): rephrase "with salts"

Page 7683, line 29: Rephrase

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Interactive comment on Atmos. Chem. Phys. Discuss., 9, 7681, 2009.

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