

# ***Interactive comment on “Amplification of global warming through pH-dependence of DMS-production simulated with a fully coupled Earth system model” by Jörg Schwinger et al.***

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This paper extends previous modeling simulations of the effect of changes in DMS production by phytoplankton caused by ocean acidification, and how these might or might not feed back to climate and further alter DMS production. A previous study had simulated the impact on DMS production in an off-line sense, with no mechanism for the feedback. I guess it's not a huge surprise that the climate impact of the DMS changes do not further derail DMS production very much (with exceptions noted in the paper). But the result is still useful as a mostly negative result, especially since it's documented well and estimated with state-of-the-art models. The presentation is very clear and polished; especially nice are the discussion of the CLAW hypothesis, and the

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clear admission of the small scale of the feedbacks, rather than trying to spin them as positive to make them seem more exciting.

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