



## **The parameterization of ozone deposition to the ocean**

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Dry deposition to the ocean is a considerable loss mechanism for tropospheric ozone that involves complex physical, chemical and biological processes.

When compared to observation, existing models underestimate ozone deposition, especially in regions of high wind speeds and high concentrations of ocean-side ozone-depleting agents. Also, the biological impacts on oceanic ozone deposition is relatively uncharted territory in ozone deposition schemes.

Fairall et al's 2007 explicit deposition scheme 2007 accounts for increased ozone deposition in turbulent conditions and allows for chemical enhancement of ozone deposition by way of a reaction timescale factor. This is very significant for a highly-reactive gas such as ozone.

Thus far, the scheme has been modified to account for enhancement of ozone deposition in regions of high iodide concentration and in regions of high biological activity.

Presented here are results following the implementation of this new ozone deposition scheme in regional climate model, REMOTE.