Validation of formaldehyde products from three satellite retrievals (OMI SAO, OMPS-NPP SAO, and OMI BIRA) in the marine atmosphere with four seasons of ATom aircraft observations

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Short Summary

Validation of satellite HCHO over the remote marine regions is relatively few and modeled HCHO in these regions is usually added as a global satellite HCHO background. This paper intercompares three satellite HCHO retrievals and validates them against in situ observations from the NASA ATom mission. All retrievals are correlated with ATom integrated columns over remote oceans, with OMI SAO (v004) showing the best agreement. A persistent low bias is found in all retrievals at high latitudes.