

***Interactive comment on* “What can we learn about ship emission inventories from measurements of air pollutants over the Mediterranean Sea?” by E. Marmer et al.**

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In the manuscript "What can we learn about ship emission inventories from measurements of air pollutants over the Mediterranean Sea?", Marmer et al. report on an interesting study evaluating the consistency of different inventories of shipping emissions with a range of measurement data over the Mediterranean. These data include OMI satellite measurements of NO₂ and in the paper it is stated, that "observations obtained from the OMI satellite over this area are for the first time used to constrain ship emissions".

While this statement is correct, I'm still surprised that no reference is made to the

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fact that satellite measurements from GOME, SCIAMACHY and OMI have been used to constrain shipping emissions in previous publications over other regions. In these papers, there can also be found more discussion on the uncertainties involved in the satellite products which in my opinion is treated rather superficially in this manuscript.

I hope that this can be improved for the final version of this paper.

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References:

Beirle, S., U. Platt, R. von Glasow, M. Wenig, and T. Wagner, Estimate of nitrogen oxide emissions from shipping by satellite remote sensing, *Geophys. Res. Lett.*, 31, L18102, doi:10.1029/2004GL020312, 2004.

Richter, A., V. Eyring, J. P. Burrows, H. Bovensmann, A. Lauer, B. Sierk, and P. J. Crutzen, Satellite Measurements of NO₂ from International Shipping Emissions, *Geophys. Res. Lett.*, 31, L23110, doi:10.1029/2004GL020822, 2004.

Franke, K., Richter, A., Bovensmann, H., Eyring, V., Jöckel, P., and J. P. Burrows, Ship emitted NO₂ in the Indian Ocean: comparison of model results with satellite data, *Atmos. Chem. Phys. Disc.*, 8, 15997-16025, 2008.

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