Supplementary Information

Quantification of anthropogenic and marine sources to atmospheric mercury over the marginal seas of China and impact assessment on the sea-air exchange of mercury

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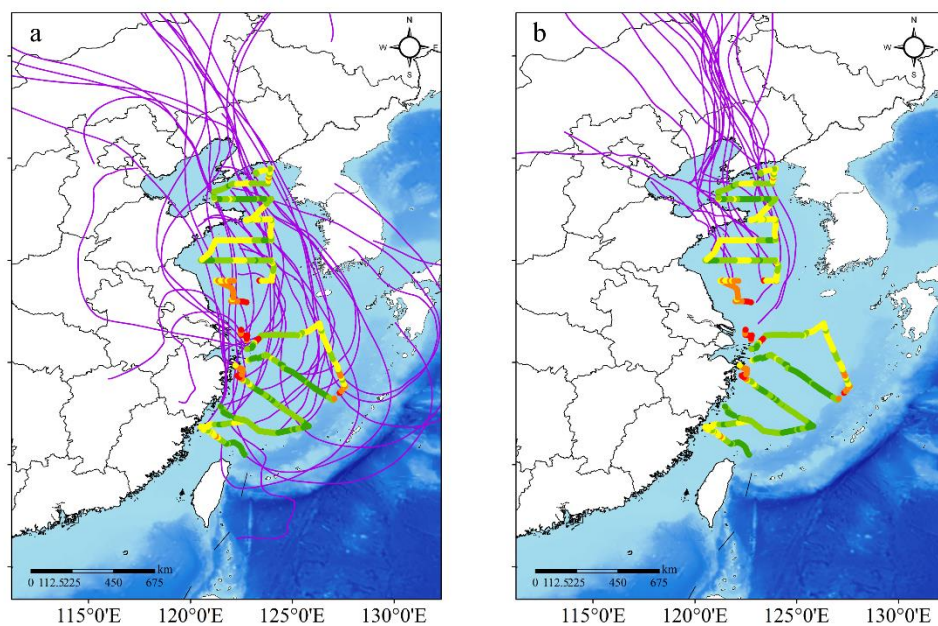Correspondence: huangkan@fudan.edu.cn; doctorzys@163.com

Figure S1. 72 hours backward trajectories along the cruise routes in the oceanic region of ECS (a) and YS (b).
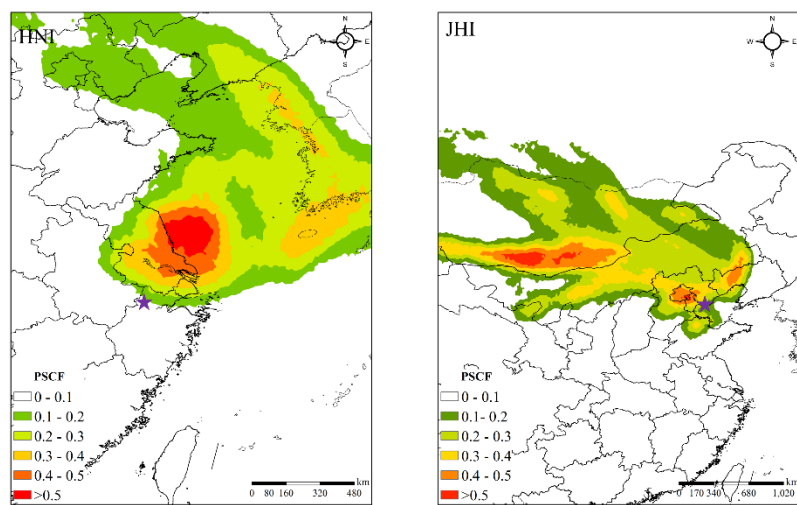
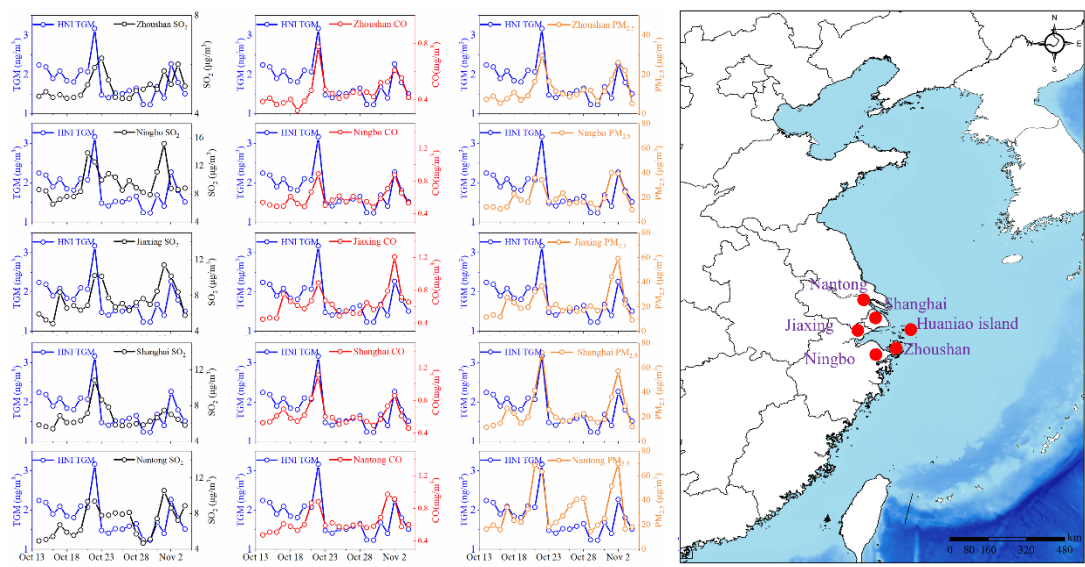Figure S2. Potential source regions of TGM at HNI and JHI.

Figure S3. Time-series of TGM at HNI and SO₂, CO, and PM₂.₅ at surrounding land cities (i.e., Zhoushan, Ningbo, Jiaxing, Shanghai, and Nantong). The locations of these cities are marked in the right panel of the figure.
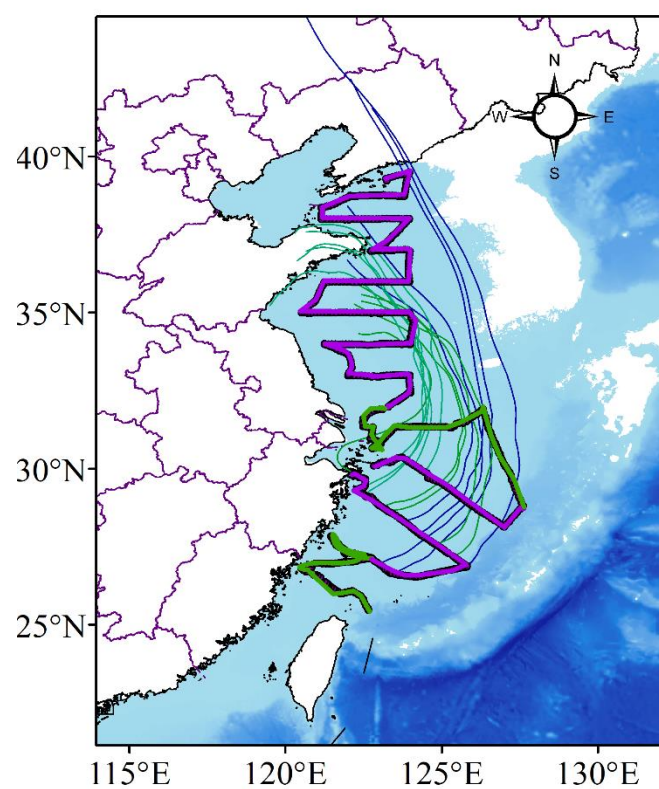
Figure S4. The oceanic regions that applied the formulas for calculating the anthropogenic vs. marine contributions of TGM along the cruise routes. The purple segments utilized the JHI-derived formula, and the green segments utilized the DSL-derived formula.
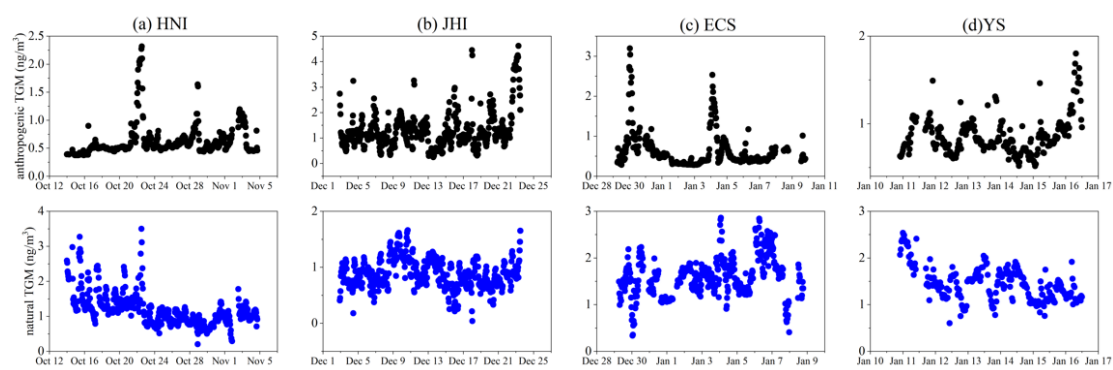
Figure S5. Time-series of mass concentrations of anthropogenic TGM and natural TGM at (a) HNI, (b) JHI, (c) ECS, and (d) YS, respectively.
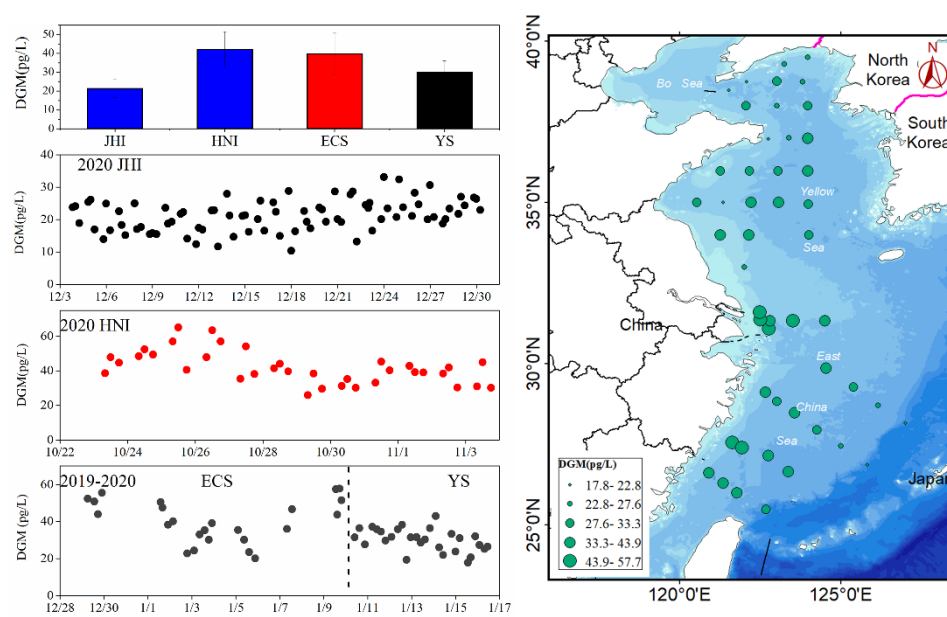
Figure S6. DGM concentrations at JHI, HNI, and ECS/YS.