

Advancing load-dependent emission factors for ships: Integrating alternative fuels, biofuels, and control technologies

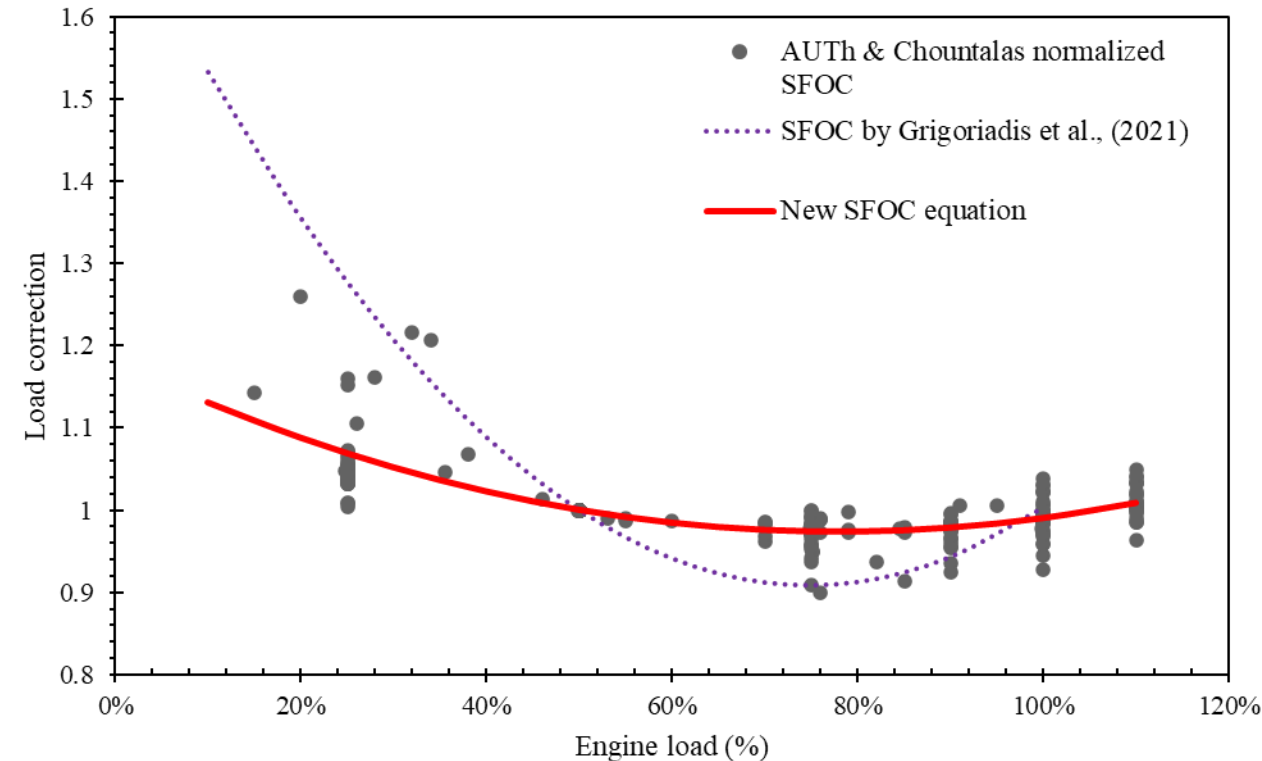
A. Grigoriadis¹, T. Chountalas², E. Fragkou¹, D. Chountalas², L. Ntziachristos¹

¹AUTH, ²NTUA



Paper highlights:

- The new Specific Fuel Oil Consumption (SFOC) load dependency addresses the overestimation at low loads compared to the existing one*.
- Biofuels increase SFOC by 1% & 2,5% for 2- & 4-stroke engines, NO_x by 10%, and reduce PM compared to traditional marine fuels.
- LNG and methanol reduce NO_x and PM compared to traditional fuels.
- Emission control technologies target specific pollutants, e.g scrubbers for SO_x reduction, but can have secondary effects on other pollutants.



Contribution: Models improvement & better description of shipping in inventories



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