Flux calculations were performed following the approach of Soerensen et al. (2010) and Mason et al. (2017). The $Hg°$ flux (F, reported in units of pmol m^{-2} h^{-1}) is defined as follows:

$$F = k_W \left([Hg°_{diss}] - [Hg°_{atmos}]/ k_H \right)$$

where k_W (m h^{-1}) is the water side mass transfer coefficient (gas-transfer velocity), $[Hg°_{diss}]$ (ng m^{-3}) is the concentration of $Hg°$ in water, and $[Hg°_{atmos}]$ (ng m^{-3}) is the concentration of $Hg°$ in air (DiMento et al., 2018). The mass transfer coefficient (k_W) is calculated from the wind speed and Schmidt number for Hg and CO_2, which is equal to the ratio between the kinematic viscosity of the water and the aqueous diffusivity of Hg (Andersson et al., 2008). Positive fluxes represent evasion out of the ocean to the atmosphere, while negative fluxes are into the ocean.