Supporting Information for

The changing composition of the Gulf of St. Lawrence inflow waters observed from transient tracer measurements

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Supplementary Materials

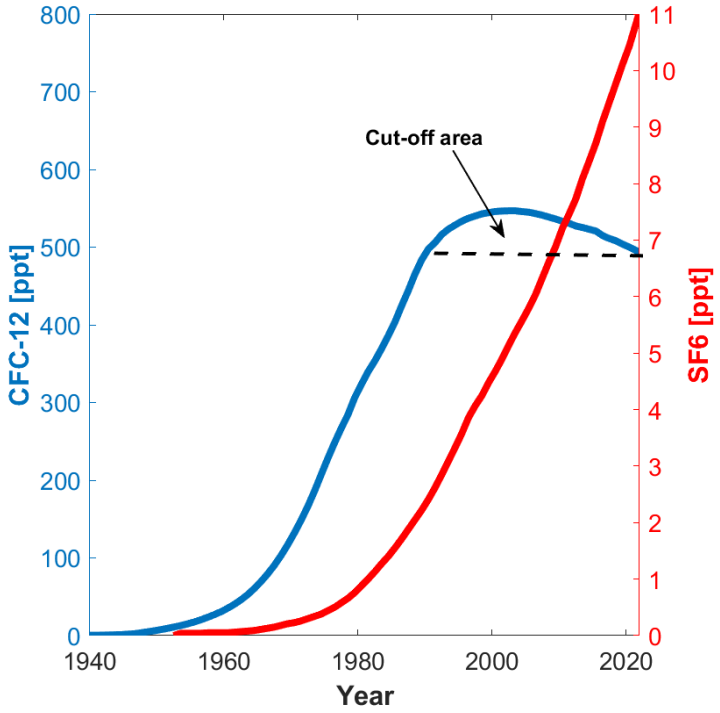

Figure S1: Atmospheric concentrations of the two transient tracers used in this study. CFC-12 (blue) with its by now decreasing atmospheric concentration and SF_6 (red) with steadily increasing concentrations since 1960. Both tracer concentrations are represented in ppt (parts per trillion) here.

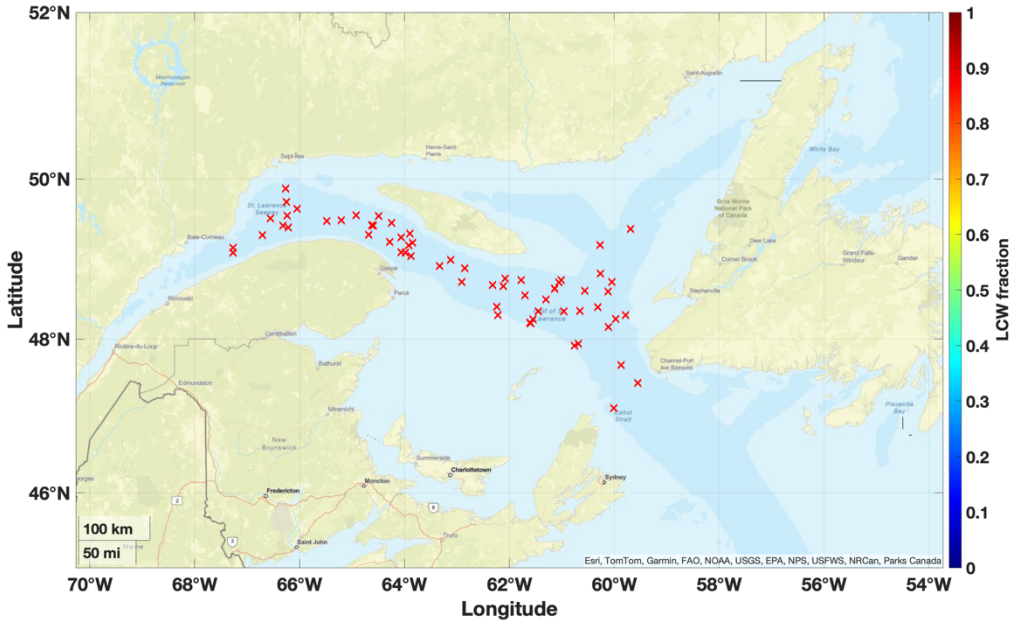

Figure S2: LCW fraction on the σ_Θ = 27.26 kg/m^3 isopycnal deep water in the Laurentian Channel from θ and S_p observations plotted in a map. The red x's representing 0 % LCW fraction.

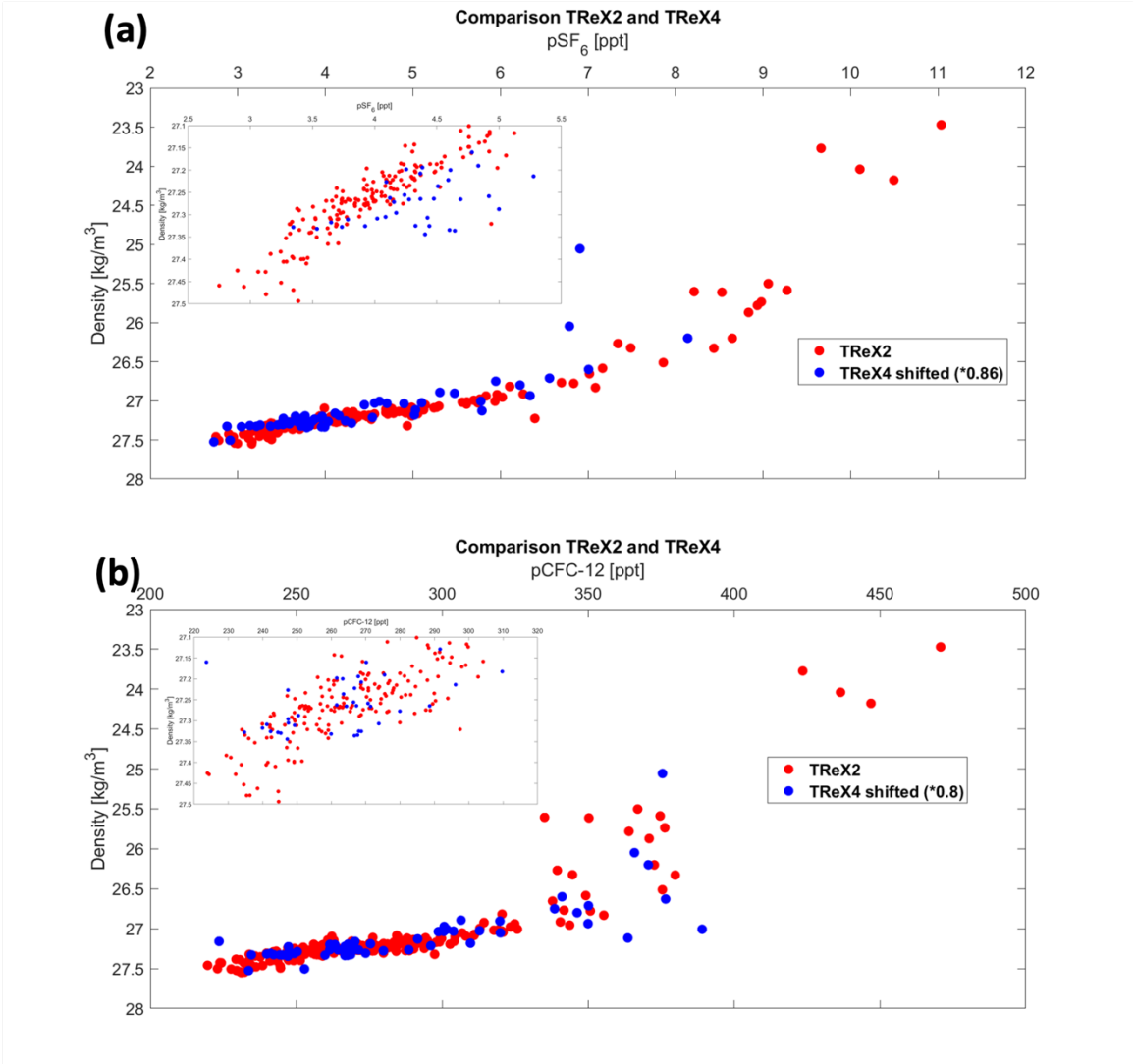

Figure S3: Display of the TreX 2 and shifted TreX4 data of (a) CFC-12 concentrations and (b) SF_6 concentrations. Each with a zoom into the area around the σ_Θ=27.26 kg/m^3 isopycnal, showing a large amount of comparable datapoints.

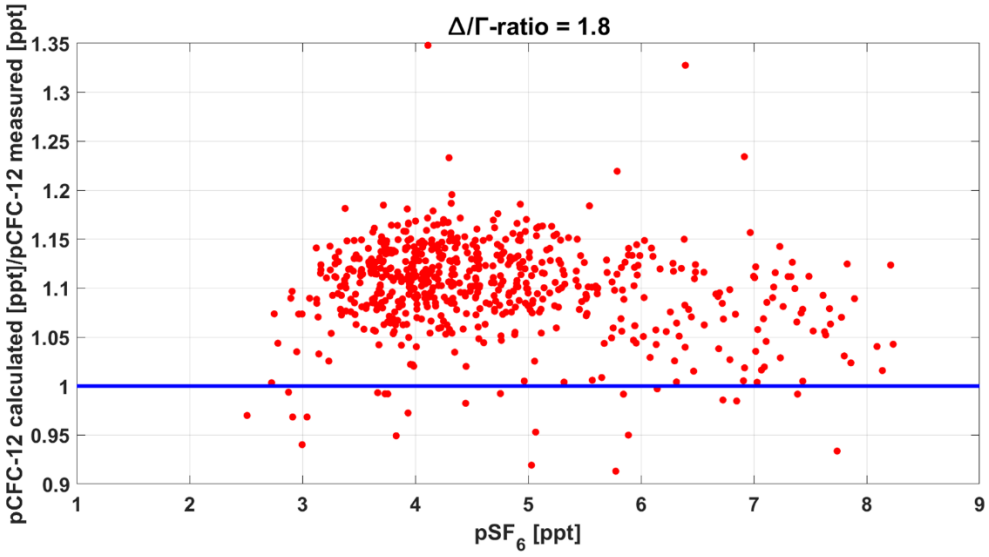

Figure S4: Display of the relationship between calculated and measured CFC-12 against PSF_6 concentrations using a ratio of Δ/Γ=1.8 for the calculation of the CFC-12 concentrations.

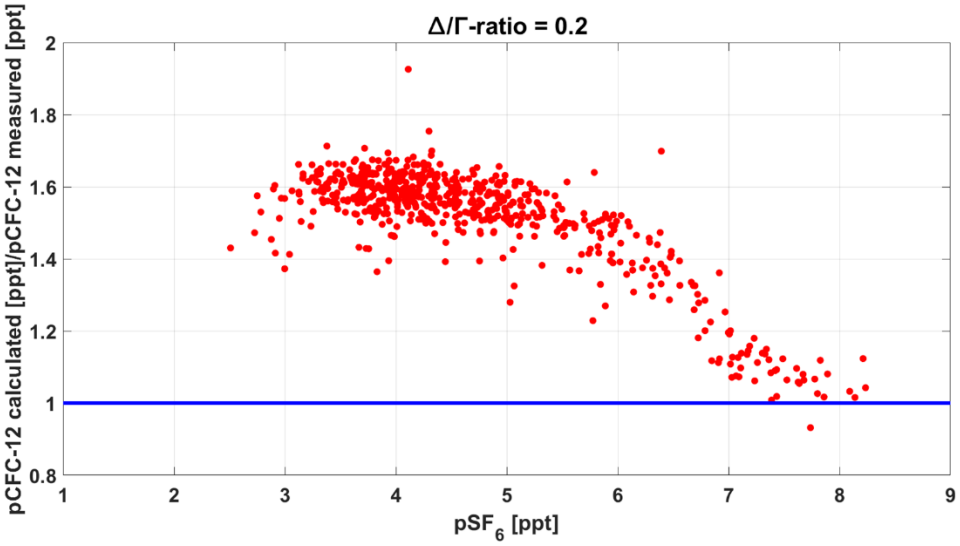

Figure S5: Display of the relationship between calculated and measured CFC-12 against PSF_6 concentrations using a ratio of Δ/Γ=0.2 for the calculation of the CFC-12 concentrations.