Below is a draft figure that will replace fig. 16. The figure has been redrawn for clarity at the request of reviewer 1. We will move the number flux figure to the Appendix.

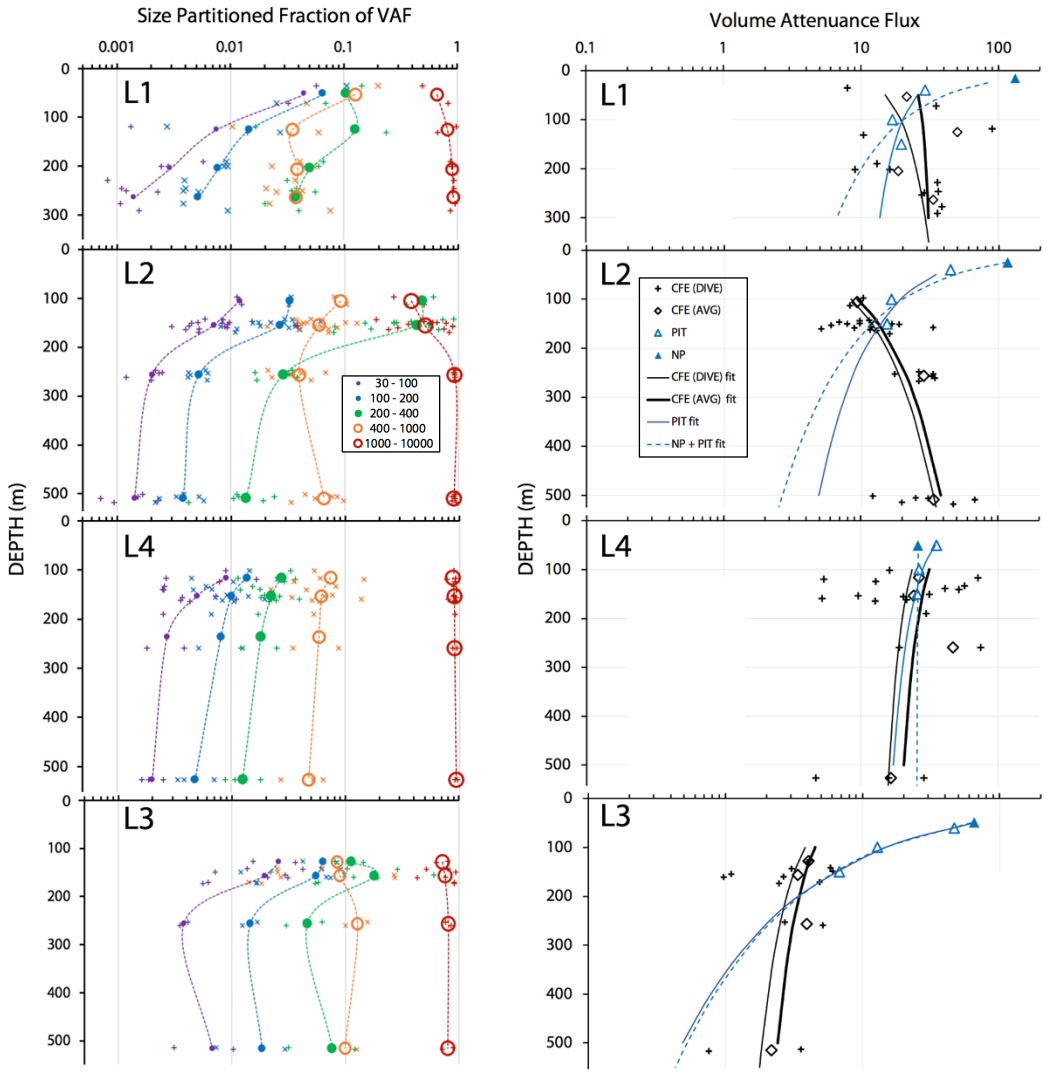

Figure 16. Left: Fraction of volume attenuance flux assigned to 30-100, 100-200, 200-400, 400-1000, and >1000 µm size fractions. Dashed lines connect averages of pooled data at 4 depths, small points correspond to individual dives. >1000 µm aggregates dominated flux in all regimes with the exception of the 100 m data at L2. Right: Comparison of CFE, PIT and NP data at the three filament locations L1, L2 and L4 and at the offshore location L3. The thin and heavy black lines are the "Martin" curve fit for individual CFE dives (data shown by +) and for pooled time-averaged data (diamonds), respectively. The solid and dashed blue lines denote Martin curves based on fits to PIT (Particle Interceptor Trap, open triangles) results and to combined PIT result and new production (NP, solid triangle) data. At L1, the blue curves underestimate fluxes 250 m by a factor of 2; At L2 blue curves, underestimate flux by a factor of 6 at 500 m. At L4, there was close agreement among methods. At L3, (with sparse data), fluxes were underestimated by a factor of ~2 at 500 m. Units of Volume attenuance Flux (VAF) are mATN cm^2 cm^{-2} d^{-1}, one VAF unit = 1 mmol C m^{-2} d^{-1}