Supplementary Material

1 Supplementary Tables

Table S1: Fit parameters and correlation coefficients for the linear regressions shown in **Figures 2**, **3**, **4** and **5**. Asterisks depict significant correlations (p-value < 0.05).

Dataset		Slope	Intercept	R^2	p-value
$\sum POC_{ST}$ vs. $\sum PP$ (Figure 2e)	singular	0.28	13.75	0.91	* 0.04
	recurring	0.21	20.98	0.88	0.06
POC_{ST}:PON_{ST} vs. N addition (Figure 3b)	singular	0.27	9.24	0.84	* 0.03
	recurring	0.17	8.83	0.59	0.13
C_{remin} vs. N addition (Figure 5a)	singular	0.0054	0.085	0.64	0.11
	recurring	0.0076	0.079	0.84	* 0.03
SV vs. N addition (Figure 5b)	singular	-1.40	37.34	0.72	0.07
	recurring	-0.60	39.92	0.5	0.18
RLS vs. N addition (Figure 5c)	singular	-37.22	515.4	0.78	* 0.05
	recurring	-34.85	534.9	0.68	0.08
PHP vs. N addition (Figure 5d)	singular	0.27	1.79	0.86	* 0.02
	recurring	0.43	1.47	0.9	* 0.01

2 Supplementary Figures

Figure S1: Dissolved inorganic nutrient concentrations in µmol L^{-1} during the 39 day experiment. Displayed are nitrate (**A**), phosphate (**B**), nitrite (**C**), silicate (**D**) and ammonium (**E**). The vertical lines indicate the deep water additions with the dashed one on the left representing the one for the singular and recurring treatment, the dotted ones being the following recurring additions.

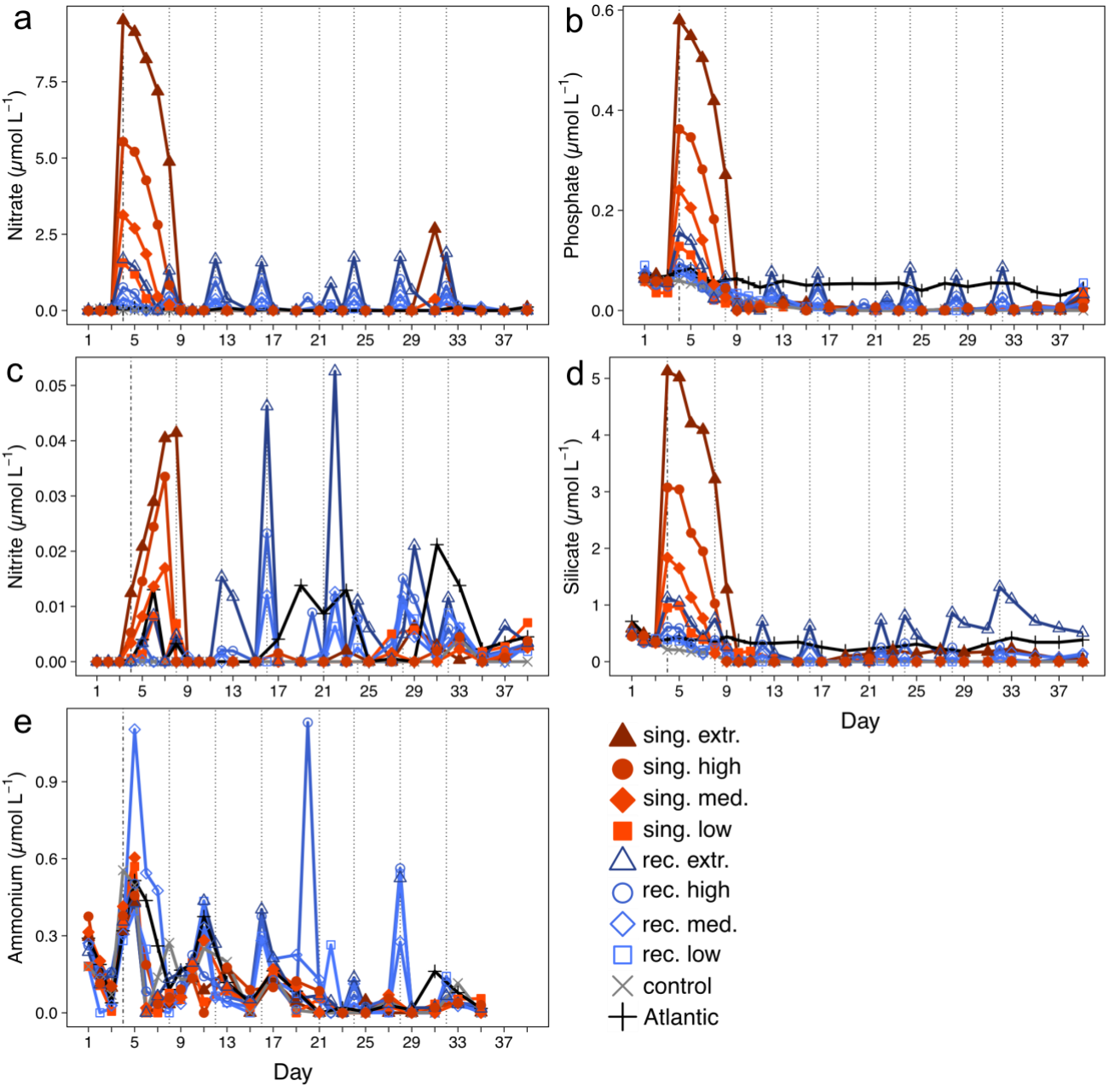
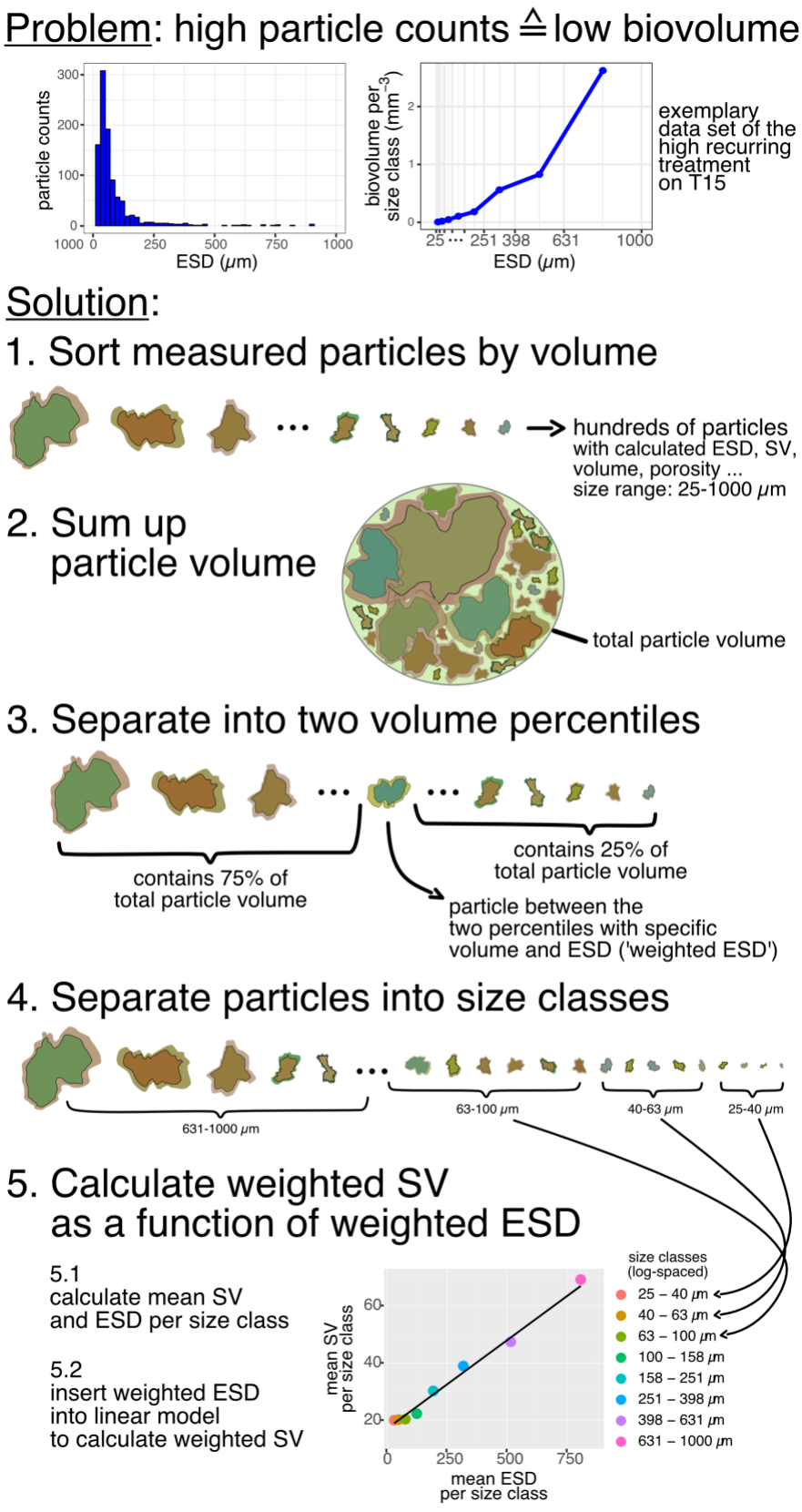
Figure S2: Illustration of the calculation of the weighted sinking velocity. It supports the description of the weighted SV calculation in Section 2.3.3.