

Table 2 | Viral and non-viral components of DOP in marine surface waters

Data set	Site information (for virus survey)	Virus abundance (virus particles per litre)	Estimated DOP in virus particles (nM)*	Total DOP in surface waters (nM)	Estimated % of total DOP bound in virus particles [‡]	Refs
Marine virus surveys		10 ⁹ –10 ¹¹	<0.01–24			5,35–37
Marine DOP surveys				30–300		39–48
Atlantic Subtropical Gyre (BATS)	Late summer 2000–2009; depth: 60–100 m	6–12 × 10 ⁹	0.48–2.9	58 ± 22 (station average)	0.61–8.0%	43,50,51
	Stratified summer 2000–2009; depth: 0–20 m	1–3 × 10 ⁹	0.081–0.72	58 ± 22 (station average)	0.10–2.0%	43,50,51
North Pacific Subtropical Gyre (HOT), open-ocean site	September 1998; depth: 0–100 m	4.5–5.5 × 10 ⁹	0.36–1.3	230 ± 20 (concurrent)	0.15–0.63%	52,53
	December 2002; depth: 0–100 m	8–11.3 × 10 ⁹	0.65–2.7	224 ± 46 (station average)	0.24–1.5%	52,54
South Pacific Ocean and Southern Ocean (including open ocean and near-coastal sites)	South West New Zealand, Coastal; Sep–Oct 2008; depth: ~5 m	17–120 × 10 ⁹	1.4–29	150–225 [§]	0.61–19%	42,55
	Australian Southern Ocean; Jan–Feb 2007; depth: 0–40 m	6.1–26 × 10 ⁹	0.49–6.2	150–225 [§]	0.22–4.1%	42,58
	Drake Passage, Greenwich Meridian and Weddell Sea; Feb–Apr 2008; depth: 0–100 m	0.1–7.6 × 10 ⁹	<0.01–1.8	150–225 [§]	<0.01–1.2%	42,57

BATS, Bermuda Atlantic Time-series Study; DOP, dissolved organic phosphorus; HOT, Hawaii Ocean Time-series. *The range of estimated DOP in virus particles was inferred by multiplying virus abundance by the phosphorus content per particle, using 50 nm head diameter for the lower range and 70 nm head diameter for the upper range (that is, 0.0025 fg and 0.0074 fg, respectively). [‡]The percentage range of DOP bound in virus particles was estimated by dividing (lower/upper) DOP in virus particles by total DOP (upper/lower). [§]Comparison site of DOP measurements was separate from virus measurements (54° 0' S, 176° 0' W).

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