

		ROMS-BEC (data)		
		30–90° S	40–60° S	60–90° S
Surface chlorophyll biomass	Total annual mean (Gg Chl)	48.98 (34.52)	19.70 (17.14)	24.54 (9.49)
Coccolithophore carbon biomass	0–200 m, annual mean (Pg C)	0.013 (global*: 0.001–0.03)	0.006	0.001
Diatom carbon biomass	0–200 m, annual mean (Pg C)	0.079 (global*: 0.10–0.94)	0.042	0.029
NPP	Pg C yr ⁻¹	16.9 (12.1–12.5)	8.8 (5.8–6.2)	2.9 (0.68–1.7)
	Coccolithophores (%)	16.5	12.1	0.7
	Diatoms (%)	62.2	74.2	87.0
	SP (%)	20.3	13.5	12.3
Calcification	Pg C yr ⁻¹	0.56 (0.79)	0.21 (0.45)	0.004 (0.15)
POC export at 100 m	Pg C yr ⁻¹	3.08 (2.3–2.96)	1.78 (1.18–1.98)	0.63 (0.21–0.24)
PIC export at 100 m	Pg C yr ⁻¹	0.16 (0.52)	0.06 (0.28)	0.001 (0.10)
PIC : POC export ratio at 100 m	–	0.05	0.03	0.002