

## Warming, but not enhanced CO<sub>2</sub> concentration, quantitatively and qualitatively affects phytoplankton biomass

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### Supplement.

**Table S1.** Measured DIC in  $\mu\text{mol kg}^{-1}$  in the mesocosms M1- M12 from Day -3 to Day 21.

day	Warm low CO <sub>2</sub>			Warm high CO <sub>2</sub>			Cold low CO <sub>2</sub>			Cold high CO <sub>2</sub>		
	M1	M2	M6	M3	M4	M5	M9	M10	M11	M7	M8	M12
-3	2051	2047							2048			2047
0	2035	2035	2025	2052	2079	2087	2047	2042	2045	2065	2091	2043
2	2007	2023	2019	2047	2072	2083	2038	2045	2046	2072	2092	2056
7	1995	1997	1981	2074	2107	2100	2090	2040	2030	2061	2127	2136
11	1927	1896	1921	2065	2051	2064	2028	1903	1929	2081	2134	2091
14	1969	1900	1954	2054	2049	2050	2032	1898	1935	2078	2117	2071
16	1969	1888	1943	2025	2028	2049	1994	1895	1925	2051	2101	2013
18	1927	1864	1951	2071	2089	2094	1977	1873	1901	2092	2120	2088
21	1903	1841	1922	2012	2020	2052	1964	1905	1915	2062	2084	2065

**Table S2.** Measured total alkalinity in  $\mu\text{mol kg}^{-1}$  in the mesocosms M1-M12 from Day -3 to Day 21.

day	Warm low CO <sub>2</sub>			Warm high CO <sub>2</sub>			Cold low CO <sub>2</sub>			Cold high CO <sub>2</sub>		
	M1	M2	M6	M3	M4	M5	M9	M10	M11	M7	M8	M12
-3	2100.4	2099.7							2096.9			2097.3
2	2087.3	2081.6	2083.3	2082.9	2085.5	2084.6	2088.4	2086.5	2085.7	2089.1	2087.1	2083.9
7	2092.4	2085.9	2087.4	2083.0	2084.9	2085.0	2087.3	2087.5	2088.0	2085.3	2086.4	2086.9
9	2089.2	2086.6	2086.3	2084.1	2091.3	2086.9	2089.3	2089.1	2089.9	2087.8	2085.5	2088.9
16	2093.0	2091.9	2082.1	2090.6	2090.8	2089.2	2084.2	2089.3	2091.5	2093.2	2092.1	2093.9
21	2095.9	2090.1	2080.9	2088.7	2085.8	2083.0	2092.7	2095.8	2092.5	2096.3	2096.2	2091.2

**Figure S1.** Time course of the dissolved inorganic nutrients A) nitrate/nitrite ( $\text{NO}_3^-/\text{NO}_2^-$  ( $\text{NO}_X$ ),  $\mu\text{mol L}^{-1}$ ), B) ammonium ( $\text{NH}_4^+$ ,  $\mu\text{mol L}^{-1}$ ), C) silicate ( $\text{SiO}_4$ ,  $\mu\text{mol L}^{-1}$ ), D) phosphate ( $\text{PO}_4$ ,  $\mu\text{mol L}^{-1}$ ). Vertical error bars denote standard error from triplicate samples. For symbols see key. The peaks of the phytoplankton blooms occurred between Days 12 and 18.

