Methods

The incident solar radiation was continuously monitored using an Eldonet broadband filter radiometer (Eldonet XP, Real Time Computer, Germany) that was fixed at the top of the ship. It measured every second and recorded the means over each minute.

Table S1 The daytime (12 h) mean solar radiation (PAR, μmol photons m^{-2} s^{-1}) during incubation.

SEATS		D001	
Date	Solar radiation	Date	Solar radiation
03/08/2012[a]	1454	14/08/2012[a]	1512
04/08/2012	1304	15/08/2012	1480
05/08/2012	1146	16/08/2012	400
06/08/2012	1113	17/08/2012	111
07/08/2012	927	18/08/2012	1520
08/08/2012	1592	19/08/2012	1583
09/08/2012	1582	20/08/2012[b]	1346
10/08/2012[b]	1381	Mean[c]	1136
Mean[c]	1312		

[a]The dates for measurements of photosynthetic carbon fixation in situ. [b]The dates for measurements of photosynthetic carbon fixation experiencing temperature and pCO_2 treatments. [c]Mean represents the average of daytime mean solar radiation over seven or six days microcosm incubation.