

Baltic Sea diazotrophic cyanobacterium is negatively affected by acidification and warming

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Table S1: Overview of experiment manipulations and sampling during the 28 day study period. ‘CO₂-add.’ refers to the addition of CO₂-enriched seawater to manipulate the pCO₂ in the mesocosms. The shaded boxes indicate the days when sampling or addition of CO₂-enriched seawater took place.

Date	Day of experiment	Sampling	CO ₂ -add.	Additional activities
13.08.2013	<i>t</i> -3			<i>Mesocosm filling</i>
14.08.2013	<i>t</i> -2	■	■	<i>Addition of Nodularia culture to mesocosms</i>
15.08.2013	<i>t</i> -1			<i>Addition of collected mesozooplankton to mesocosms</i>
16.08.2013	<i>t</i> 0	■	■	
17.08.2013	<i>t</i> 1			
18.08.2013	<i>t</i> 2			
19.08.2013	<i>t</i> 3	■	■	
20.08.2013	<i>t</i> 4			
21.08.2013	<i>t</i> 5	■	■	
22.08.2013	<i>t</i> 6			
23.08.2013	<i>t</i> 7	■	■	
24.08.2013	<i>t</i> 8			
25.08.2013	<i>t</i> 9			
26.08.2013	<i>t</i> 10	■	■	<i>Increased frequency of CO₂-enriched seawater addition</i>
27.08.2013	<i>t</i> 11		■	
28.08.2013	<i>t</i> 12	■	■	
29.08.2013	<i>t</i> 13		■	
30.08.2013	<i>t</i> 14	■	■	
31.08.2013	<i>t</i> 15		■	
01.09.2013	<i>t</i> 16			
02.09.2013	<i>t</i> 17	■	■	
03.09.2013	<i>t</i> 18		■	
04.09.2013	<i>t</i> 19	■	■	
05.09.2013	<i>t</i> 20		■	
06.09.2013	<i>t</i> 21	■	■	
07.09.2013	<i>t</i> 22		■	
08.09.2013	<i>t</i> 23			
09.09.2013	<i>t</i> 24	■	■	
10.09.2013	<i>t</i> 25		■	
11.09.2013	<i>t</i> 26	■	■	
12.09.2013	<i>t</i> 27		■	
13.09.2013	<i>t</i> 28	■		<i>Last sampling day</i>

Table S2: Summary of total CO₂-enriched water added to each mesocosm during the study period. The numbers refer to absolute volumes and the percentages refer to the percent of mesocosm volume remaining on *t28*.

Temperature treatment	<i>p</i> CO ₂ range					
	360 – 420 μ atm	815 – 865 μ atm	1055 – 1125 μ atm	1465 – 1495 μ atm	1625 – 1780 μ atm	1760 – 2030 μ atm
<i>Warm</i>	0 L (0%)	21.99 L (1.67%)	33.94 L (2.44%)	33.06 L (2.60%)	53.07 L (3.94%)	59.62 L (4.75%)
<i>Cold</i>	0 L (0%)	17.77 L (1.42%)	27.15 L (2.03%)	30.86 L (2.43%)	44.51 L (3.32%)	49.06 L (3.97%)

Figure S1: Distribution of six CO₂ treatments between the four climate-controlled rooms and two different temperature treatments (warm = 22.5°C, cold = 16.5°C). The circle colour around each mesocosm refers to the colour code used in figures.

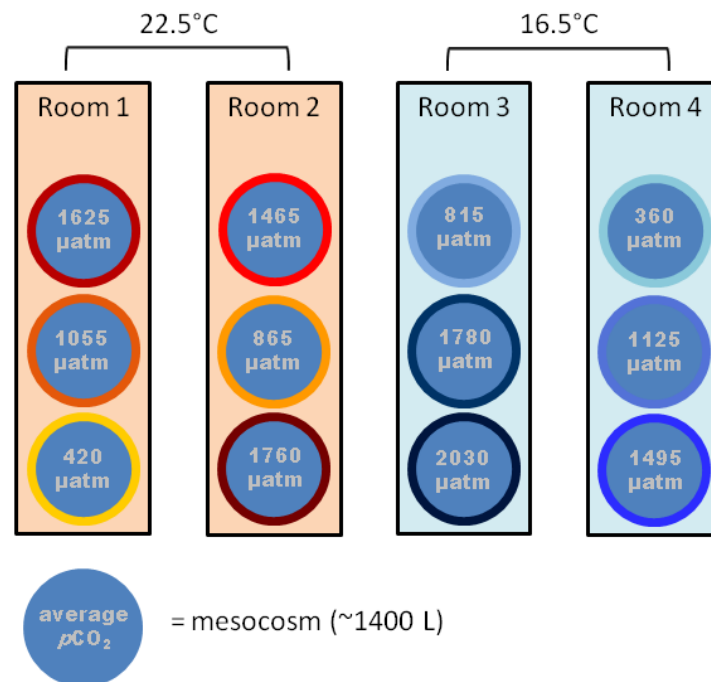


Figure S2: Photo showing mesocosm set-up in one of the climate-controlled rooms (Room 1).

