

Supplementary Information

Discrete pulses of cooler deep water can decelerate coral bleaching during thermal stress: Implications for artificial upwelling during heat stress events

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Table S1: Results of statistical tests. Comparisons between treatments at the end of the experiment (day 20). Significant differences are highlighted in bold and italic.

One-way ANOVA	Montastrea			Porites			Pseudodiploria		
	Chlorophyll-a concentration	Zooxanthellae density	Net productivity	Chlorophyll-a concentration	Zooxanthellae density	Net productivity	Chlorophyll-a concentration	Zooxanthellae density	Net productivity
Degrees of Freedom	3	3	3	3	3	3	3	3	3
Sum of squares	13451	3.6×10^{12}	2101	858	4.1×10^{11}	1393	4332	1.7×10^{11}	540
F-value	18.657	8.978	9.733	3.283	4.129	1.664	0.779	0.399	1.947
p-value	0.0000	0.0012	0.0007	0.0622	0.0316	0.2234	0.5240	0.7558	0.1654
Tukey post hoc (p-value)									
Control vs. Heat	0.0000	0.0017	0.0010	0.0694	0.0545	0.2263	0.8847	0.7666	0.2829
Control vs. Heat + 50	0.0001	0.0030	0.0021	0.1194	0.0497	0.6683	0.7921	0.9767	0.9999
Control vs. Heat + 100	0.0010	0.0283	0.0985	0.5436	0.2390	0.9930	0.9648	1.0000	0.9842
Heat vs. Heat + 50	0.8963	0.9922	0.9838	0.9527	0.9978	0.7868	0.7921	0.9402	0.2989
Heat vs. Heat + 100	0.4803	0.6562	0.1374	0.4449	0.7367	0.3162	0.6631	0.8069	0.1934
Heat + 50 vs. Heat + 100	0.8493	0.8025	0.2467	0.6914	0.7968	0.8073	0.5528	0.9833	0.9791
Levene's Homogeneity test									
(p-value)	0.4857	0.0112	0.9472	0.2125	0.1834	0.6551	0.4685	0.9661	0.4888

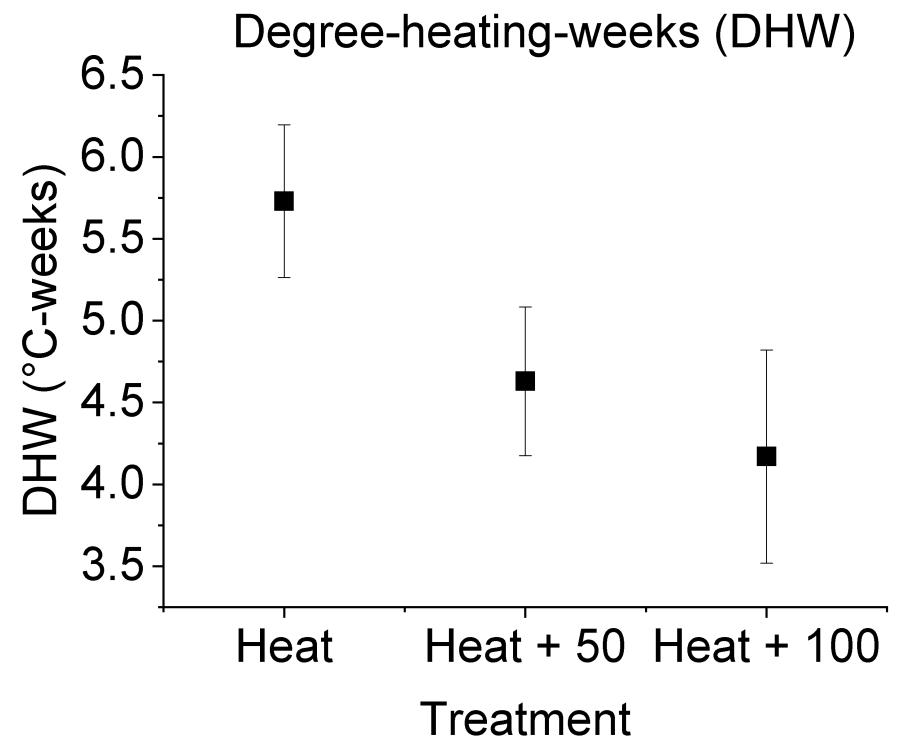


Fig. S1: Degree-heating-weeks (DHW) of *Heat*, *Heat+50* and *Heat+100* treatments.