A decline in bleaching suggests that depth can provide a refuge from global warming in most coral taxa

Andrew H. Baird*, Joshua S. Madin, Mariana Álvarez-Noriega, Luisa Fontoura, James T. Kerry, Chao-yang Kuo, Kristin Precoda, Damaris Torres-Pulliza, Rachael M. Woods, Kyle J. A. Zawada, Terry P. Hughes

*Corresponding author: andrew.baird@jcu.edu.au

Marine Ecology Progress Series 603: 257–264 (2018)

Table S1. Model selection for the effect of depth, depth squared and DHW. All models included site and genus as random effects. Depth variables were log10-tansformed. *AIC* and *BIC* are model selection information criterion. *R2m* and *R2c* are marginal and conditional r-squared values. Models 2 and 3 were similar in predictive capacity, model simplicity and variance explained; however, the interaction term in model 2 was only marginally significant (p-val = 0.0459) and so model 3 was selected as the best model because it was less than 2 AIC points greater, 3 BIC points better, and had identical marginal and conditional r-squared.

Model	AIC	BIC	R2m	R2c
1. [n bleached, n not bleached] \sim depth + depth ² + DHW + DHW:depth	6189.11	6230.12	0.17	0.46
2. [n bleached, n not bleached] ~ depth + DHW + DHW:depth	6189.73	6224.87	0.16	0.46
3. [n bleached, n not bleached] ~ depth + DHW	6191.71	6221.00	0.16	0.46
4. [n bleached, n not bleached] ~ depth	6197.89	6221.33	0.14	0.47
5. [n bleached, n not bleached] ~ DHW	7281.63	7305.06	0.03	0.40

Figure S1. Random intercepts for main model illustrating the genera and sites that experienced bleaching to a greater or lesser extent than explained by depth and Degree Heating Weeks.

