



**Supplementary figure S2.** Box-and-whiskers plot of the prokaryotic heterotrophic production (PHP) rates and the inverse absolute temperature ( $1/T$ ) in the a) epipelagic, b) mesopelagic and c) bathypelagic layers for the major datasets included in the manuscript. Fifty percent of the data are included within the limit of the boxes, and the error bars represent the 10th and 90th percentiles. Solid lines represent the median. Note the logarithmic scale of the PHP rates. Areas correspond to; 1: Arabian Sea; 2: Arctic Ocean; 3: Atlantic Ocean; 4: Cariaco Basin; 5: Mediterranean Sea; 6: Pacific Ocean; 7: Ross Sea; 8: Malaspina 2010 Expedition. Note that the number of data points included from each region is highly variable especially for the mesopelagic and bathypelagic layers. Furthermore are data for the bathypelagic layers only available for some of the studies.