**Table S2.** Univariate PERMANOVA and pairwise comparison results for symbiont and chlorophyll metrics in the ex situ experiment. Variables tested included symbiont density (zoox cm-2), areal chlorophyll a (chl a cm-2), areal chlorophyll c2 (chl c2 cm-2), ratio of chlorophyll a to c2 (chl a:c2), cellular chlorophyll a (chl a cell-1), and cellular chlorophyll c2 (chl c2 cell-1). Insignificant p values are shown as ns, \* denotes marginal significance, and † indicates significant interaction terms despite one of the model factors not being significant.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test** | **Comparison** | **zoox\_cm** | **chla\_cm** | **chlc\_cm** | **chl\_ac** | **chla\_cell** | **chlc\_cell** |
| PERMANOVA | genotype | 0.0001 | 0.0001 | 0.0001 | 0.0068 | 0.0401 | 0.0145 |
| temp | 0.0001 | 0.0001 | 0.0001 | 0.0197 | ns | ns |
| water | ns | 0.0612\* | ns | ns | ns | ns |
| genotype:temp | ns | ns | ns | ns | ns | ns |
| genotype:water | ns | ns | ns | ns | 0.0067† | 0.0011† |
| temp:water | ns | ns | ns | ns | ns | ns |
| genotype:temp:water | ns | ns | ns | ns | ns | ns |
| Treatment Comparisons | control.offshore-control.discharge | ns | ns | ns | ns | ns | ns |
| control.offshore-elevated.offshore | 3.5E-10 | 1.2E-10 | 2.2E-11 | ns | ns | ns |
| control.offshore-elevated.discharge | 2.4E-09 | 7.6E-07 | 3.0E-08 | ns | ns | ns |
| control.discharge-elevated.offshore | 5.8E-11 | 2.0E-10 | 1.9E-11 | ns | ns | ns |
| control.discharge-elevated.discharge | 5.2E-10 | 2.7E-07 | 4.3E-08 | ns | ns | ns |
| elevated.offshore-elevated.discharge | ns | ns | ns | ns | ns | ns |