|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | S ~ Complexity | | S ~ Complexity + Environment | | S ~ Complexity + Environment + (1|Site) | |
| Rhodolith complexity (PC1) | **2.42 \*** | **(0.97)** | -0.47 | (1.05) | 1.71 | (1.60) |
| Bed complexity (PC2) | **10.74 \*\*\*** | **(0.93)** | **4.41 \*\*** | **(1.36)** | 3.06 | (1.70) |
| PC1:PC2 | -1.01 | (1.00) | -1.08 | (0.96) | 1.96 | (1.34) |
| Depth |  |  | **-5.56 \*\*\*** | **(1.27)** | -2.77 | (2.58) |
| Exposure |  |  | **-2.97 \*** | **(1.42)** | -1.73 | (3.18) |
| Mean bottom temperature |  |  | **1.97 \*** | **(0.90)** | 1.39 | (0.87) |
| Organic Matter % |  |  | **3.09 \*** | **(1.25)** | **3.98 \*\*** | **(1.25)** |
| Year |  |  | 1.68 | (0.88) | **1.76 \*** | **(0.84)** |
| N | 348 |  | 348 |  | 348 |  |
| DF | 344.00 |  | 339.00 |  | 337.00 |  |
| AIC | 2973.86 |  | 2909.46 |  | 2877.62 |  |
| BIC | 2993.12 |  | 2947.98 |  | 2920.00 |  |
| Marginal R2 |  |  |  |  | 0.27 |  |
| Conditional R2 | 0.29 |  | 0.43 |  | 0.44 |  |
| Adjusted R2 | 0.29 |  | 0.42 |  |  |  |
| F | 47.43 |  | 31.81 |  |  |  |
| p-value | 0.00 |  | 0.00 |  |  |  |
| All continuous predictors are mean-centered and scaled by 1 standard deviation. \*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05. | | | | | | |