Table 2: Results from adonis relating environmental variables and different components of phylogenetic beta diversity.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Phylogenetic | | | | | | | | |
|  | Total | | | Turnover | | | Nestedness | | |
| Environmental variables | Df | R2 | P value | Df | R2 | P value | Df | R2 | P value |
| Turbidity | 1 | 0.029 | 0.463 | 1 | 0.054 | 0.182 | 1 | -0.006 | 0.974 |
| pH | **1** | **0.108** | **0.009** | 1 | 0.034 | 0.366 | **1** | **0.306** | **0.002** |
| Conductivity | 1 | 0.045 | 0.220 | 1 | 0.080 | 0.083 | 1 | 0.012 | 0.486 |
| Dissolved O2 | 1 | 0.032 | 0.418 | 1 | 0.063 | 0.139 | 1 | -0.008 | 0.987 |
| Altitude | 1 | 0.060 | 0.112 | 1 | 0.051 | 0.219 | 1 | 0.083 | 0.064 |
| Temperature | 1 | 0.051 | 0.148 | 1 | 0.074 | 0.087 | 1 | 0.014 | 0.474 |
| Depth | 1 | 0.041 | 0.261 | 1 | 0.077 | 0.099 | 1 | -0.008 | 0.984 |
| Water velocity | 1 | 0.062 | 0.098 | **1** | **0.125** | **0.017** | 1 | 0.011 | 0.552 |
| Basins | 1 | 0.045 | 0.220 | **1** | **0.086** | **0.072** | 1 | -0.005 | 0.972 |
| Residual | 10 | 0.314 |  | 10 | 0.300 |  | 10 | 0.207 |  |
| Total | 19 | 1 |  | 19 | 1 |  | 19 | 1 |  |