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 | 0.028 | 0.468 | 1 | 0.047 | 0.28 | 1 | -0.007 | 0.996 |
| pH | **1** | **0.115** | **0.004** | 1 | 0.033 | 0.427 | **1** | **0.318** | **0.005** |
| Conductivity | 1 | 0.044 | 0.221 | 1 | 0.079 | 0.092 | 1 | 0.015 | 0.472 |
| Dissolved O2 | 1 | 0.033 | 0.418 | 1 | 0.072 | 0.141 | 1 | -0.009 | 0.981 |
| Altitude | 1 | 0.058 | 0.104 | 1 | 0.036 | 0.4 | 1 | 0.091 | 0.067 |
| Temperature | 1 | 0.051 | 0.168 | 1 | 0.069 | 0.148 | 1 | 0.020 | 0.402 |
| Depth | 1 | 0.036 | 0.354 | 1 | 0.070 | 0.142 | 1 | -0.009 | 0.99 |
| Water velocity | 1 | 0.063 | 0.088 | **1** | **0.146** | **0.021** | 1 | 0.005 | 0.707 |
| Basins | 1 | 0.052 | 0.164 | **1** | **0.103** | **0.048** | 1 | -0.008 | 0.98 |
| Residual | 10 | 0.315 |  | 10 | 0.300 |  | 10 | 0.223 |  |
| Total | 19 | 1 |  | 19 | 1 |  | 19 | 1 |  |