Table S3: Detrended Correspondence Analysis (DCA) of   
18 rRNA gene dataset with environmental parameters.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | DCA1 | DCA2 | r2 | Pr | Significance |
| LAT -0.83354  0.55246 0.0793 0.667333 | | | | | |
| LONG -0.54720  0.83700 0.3783 0.089910 | | | | | |
| NOX    -0.33778 -0.94122 0.3392 0.100899 | | | | | |
| NO3    -0.34040 -0.94028 0.3543 0.093906 | | | | | |
| NO2    -0.31782 -0.94815 0.2410 0.212787 | | | | | |
| NH4     0.38313 -0.92370 0.1211 0.510490 | | | | | |
| TN     -0.34662 -0.93800 0.3300 0.129870 | | | | | |
| DIN     0.00204 -1.00000 0.1956 0.316683 | | | | | |
| TON    -0.38598 -0.92251 0.3455 0.125874 | | | | | |
| TP      0.28141 -0.95959 0.3404 0.133866 | | | | | |
| SRP    -0.78145  0.62396 0.1621 0.402597 | | | | | |
| CHLA    0.67173 -0.74080 0.2079 0.285714 | | | | | |
| **TOC    -0.59761 -0.80179 0.6532 0.000999 High** | | | | | |
| SiO2   -0.87916 -0.47653 0.1808 0.379620 | | | | | |
| TURB    0.29715 -0.95483 0.2618 0.193806 | | | | | |
| SAL    -0.00715  0.99997 0.3202 0.132867 | | | | | |
| **TEMP   -0.25898  0.96588 0.4617 0.047952 Moderate** | | | | | |
| **DO      0.21156 -0.97736 0.5536 0.016983 Moderate** | | | | | |
| Kd     -0.02802 -0.99961 0.2514 0.224775 | | | | | |
| TN.TP  -0.99290  0.11896 0.2991 0.179820 | | | | | |
| N.P    -0.92224 -0.38661 0.2679 0.188811 | | | | | |
| DIN.TP -0.51569 -0.85677 0.1961 0.303696 | | | | | |
| Si.DIN -0.43706  0.89943 0.0470 0.776224 | | | | | |
| DSIGT   0.91928  0.39361 0.2021 0.315684 | | | | | |
| Depth   0.94645  0.32286 0.3337 0.14285 | | | | |  |