| Sta. | Depth (m) | $[N_2O]$ (nM) | $[NO_2^-]$ (µM) | R* (nM/d) | P* (nM/d) | Net (nM/d) | Turnover (d) |
|---|---|---|---|---|---|---|---|
| 1 | 25 | 86.1 | 0.64 | 2.6 | 9.3 | 6.8 | 11.9 |
| | 40 | 24.7 | 5.91 | 35.2 | 34.9 | –0.4 | 0.9 |
| | 50 | 12.8 | 3.12 | 23.4 | 22.5 | –0.8 | 0.7 |
| | 60 | 18.9 | 6.78 | 6.1 | 6.4 | 0.3 | 3.8 |
| | 100 | 19.4 | 7.46 | 4.2 | 4.3 | 0.1 | 5.8 |
| | 150 | 19.3 | 4.96 | 4.9 | 5.3 | 0.4 | 4.7 |
| | 250 | 15.7 | 2.66 | 3.5 | 3.5 | 0.0 | 5.7 |
| | 500 | 16.2 | 0.00 | 3.5 | 3.2 | –0.2 | 6.0 |
| 2 | 85 | 96.2 | 0.14 | 1.0 | 5.5 | 4.4 | 27.2 |
| | 100 | 61.1 | 0.11 | 1.6 | 4.0 | 2.5 | 23.5 |
| | 115 | 30.0 | 0.88 | 2.1 | 2.1 | 0.0 | 19.9 |
| | 125 | 13.6 | 2.68 | 2.6 | 2.6 | 0.0 | 6.9 |
| | 140 | 56.0 | 3.89 | 2.7 | 6.8 | 4.1 | 10.2 |
| | 150 | 34.1 | 6.11 | 1.5 | 4.1 | 2.7 | 12.9 |
| | 250 | 6.8 | 3.03 | 1.4 | 1.4 | 0.0 | 18.5 |
| | 500 | 17.9 | 0.50 | 1.6 | 1.6 | 0.0 | 11.7 |
| 3 | 95 | 107.0 | 0.00 | 1.4 | 4.5 | 3.5 | 36.1 |
| | 100 | 86.4 | 0.00 | 1.6 | 1.6 | 0.0 | 64.6 |
| | 115 | 24.6 | 1.16 | 1.6 | 0.4 | –1.6 | 18.1 |
| | 125 | 14.6 | 2.05 | 2.7 | 2.1 | –0.5 | 8.5 |
| | 140 | 14.8 | 3.07 | 2.8 | 2.7 | 0.0 | 8.2 |
| | 150 | 14.2 | 3.91 | 2.8 | 1.4 | 0.0 | 14.8 |
| | 200 | 13.9 | 2.99 | 1.7 | 1.0 | –0.4 | 15.1 |
| | 250 | 46.1 | 2.65 | 1.8 | 2.4 | 0.8 | 30.5 |

**Table S3. Biogeochemical measurements in the ETNP**

Concentration and reduction rate (R) measurements from the 3 stations in the ETNP. Calculated production rates (P) and the net (P – R) are included. The turnover time is calculated as the $N_2O$ concentration divided by the reduction rate if net $N_2O$ sink or by the production rate if net source.