

Table 1. Uncertainty (standard deviation) in nitrogen isotope analyses of nitrite plus nitrate in seawater samples. The number of replicates (n) represent paired analyses of USGS/NIST reference materials and the laboratory reference solution analyzed with batches of samples. A single batch of analyses containing 20 samples normally included 1-4 duplicate analyses of selected samples, in addition to duplicate analyses of 5 standard or reference materials for a total of 30 assays per batch.

Sample/Reference Material	n	$\delta^{15}\text{N}$ , ‰	Atom % $^{15}\text{N}$
USGS/NIST	142	±0.53	±0.00019
Laboratory nitrate solution	48	±0.56	±0.00020
Duplicate Analyses of samples	57	±0.36	±0.00013
<b>Biological Replicates</b>			
$^{15}\text{N}$ ammonium	105	±2.30	±0.00084
$^{15}\text{N}$ urea	117	±1.60	±0.00058
$^{15}\text{N}$ putrescine	39	±0.89	±0.00032
$^{15}\text{N}$ nitrite	64	±5.23	±0.00191