

Quantities integrated over top 100 m of the box region (Fig. 2b)	Normal years (except 2010)	NO_ADV	2010 post-El Niño
NO ₃ ($\times 10^9$ mol)	11.3	8.96 (−20.7 %)	10.71 (−5.2 %)
NH ₄ ($\times 10^9$ mol)	1.52	1.48 (−2.6 %)	1.51 (−0.7 %)
DOC ($\times 10^9$ mol C)	234	227 (−3.0 %)	236 (+0.9 %)
Particulate organic carbon ($\times 10^9$ mol C)	22.7	22.4 (−1.3 %)	19.9 (−12.3 %)
NPP ($\text{mmol N m}^{-2} \text{ day}^{-1}$)	4.65	3.92 (−15.7 %)	3.57 (−23.2 %)
New production plus regeneration production ($\text{mmol N m}^{-2} \text{ day}^{-1}$)	2.83 + 1.82	2.21 + 1.71 (−21.9 %, −6.0 %)	1.82 + 1.75 (−35.7 %, −3.8 %)
Fluxes			
Vertical NO ₃ flux across 100 m level ($\times 10^9$ mol day ^{−1} , positive upward)	0.2454	0.1313 (−46.5 %)	0.0011 (−99.6 %)
Top 100 m integrated zonal NO ₃ flux across 109° E section* ($\times 10^9$ mol day ^{−1} , positive westward)	0.4156	0.2652 (−36.2 %)	0.2013 (−51.6 %)
Vertical volume flux across 100 m level (Sv, positive upward)	0.22	0.14 (−36.4 %)	0.04 (−81.8 %)
Top 100 m integrated zonal volume flux across 109° E section* (Sv, positive westward)	0.44	0.01 (−97.7 %)	0.28 (−36.4 %)