

## SUPPLEMENTARY INFORMATION

### The distribution of iodide at the sea surface

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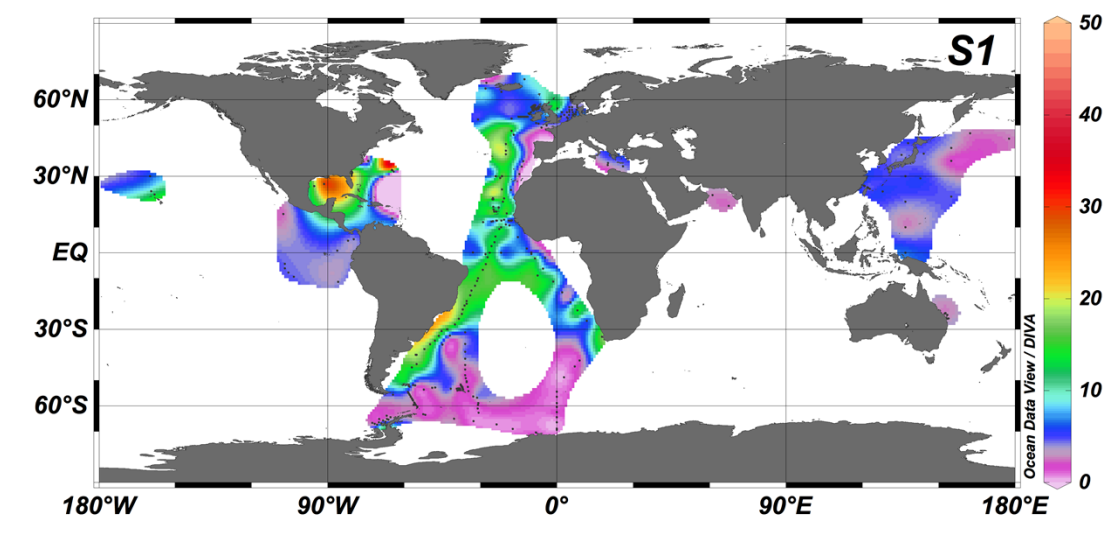
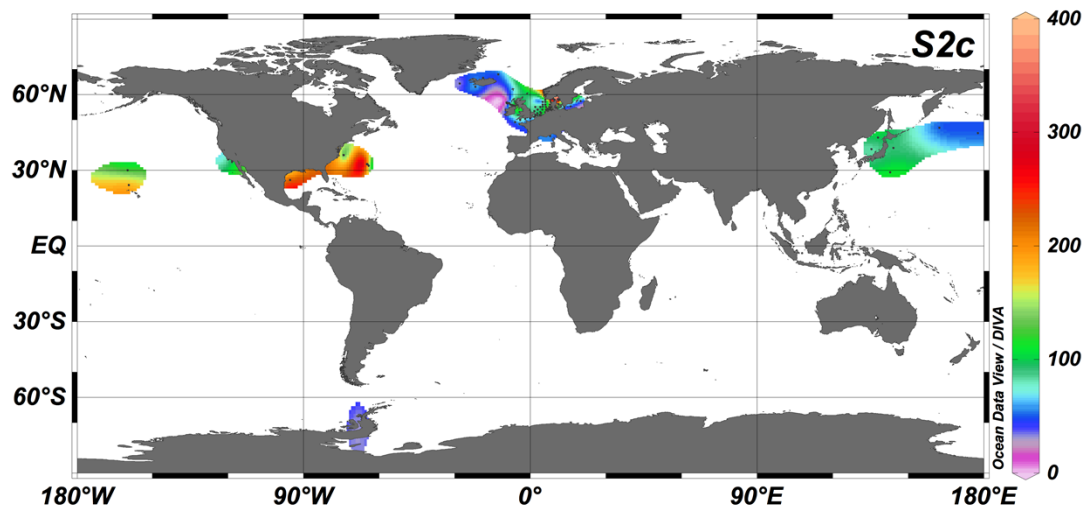
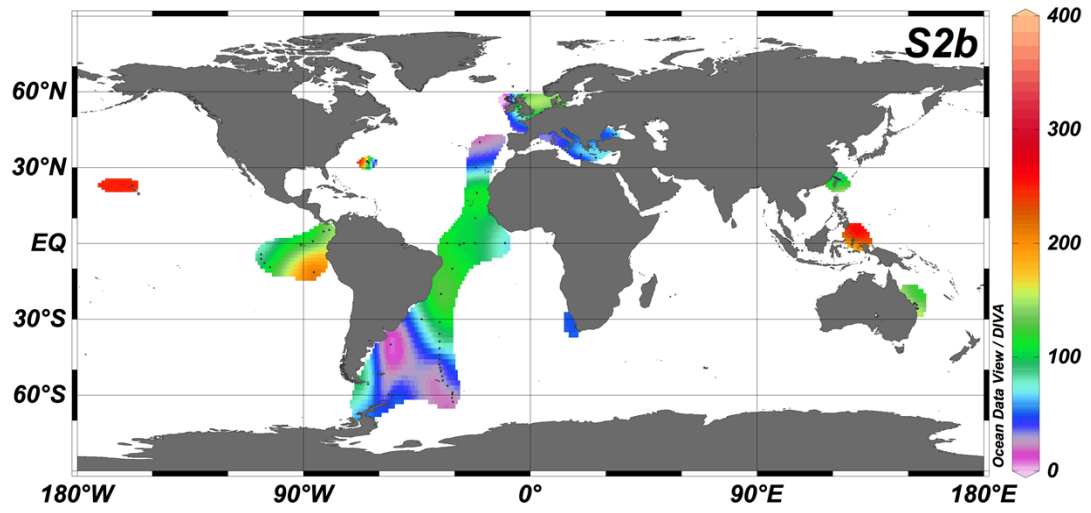
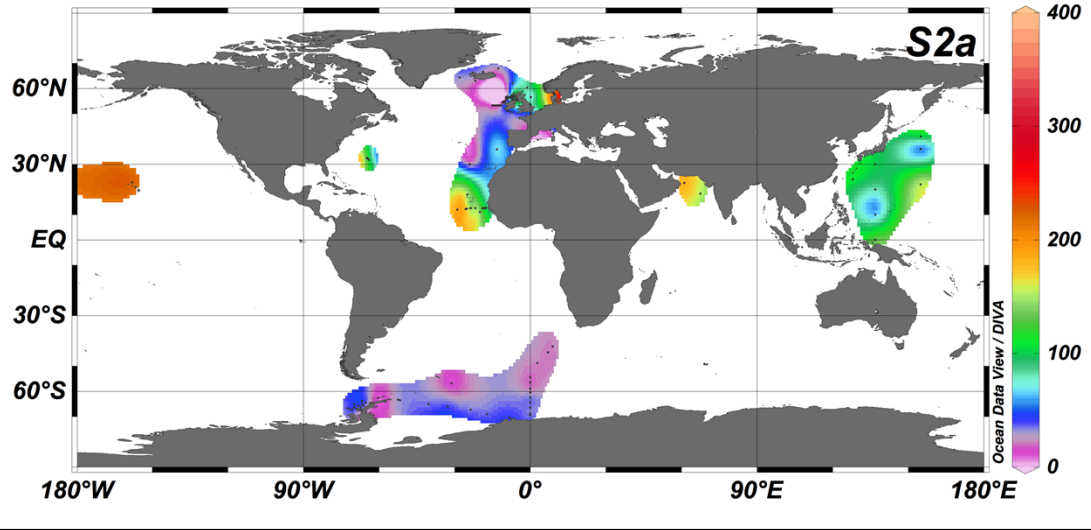


Figure S1. Estimated precision (in nM) of sea surface iodide concentrations, based on percentage relative standard deviation of replicate samples or standards quoted in the originating manuscripts.



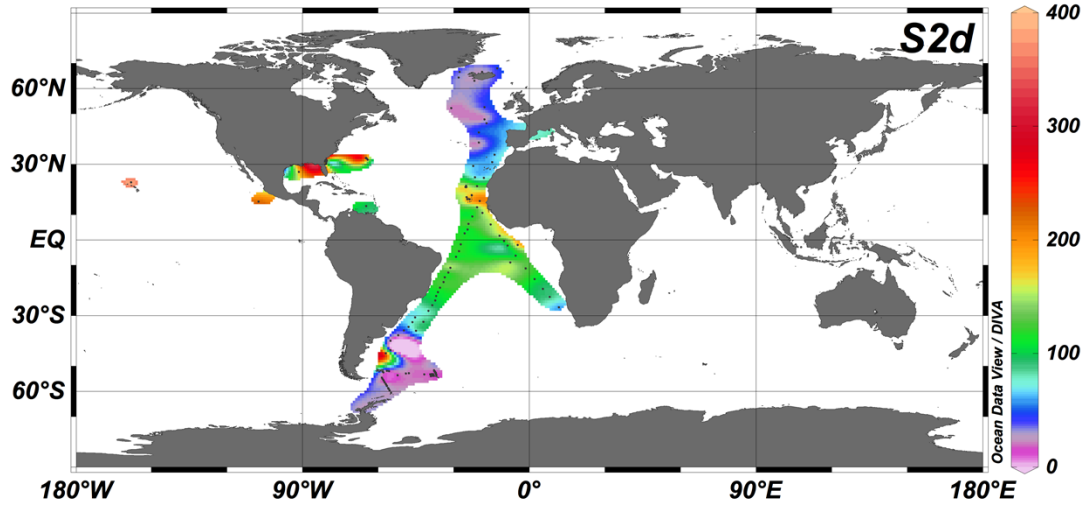


Figure S2. Sea surface iodide concentrations (nM) for January to March (S2a), April to June (S2b), July to September (S2c) and October to December (S2d) inclusive. Data plotted and interpolated using Ocean Data View (75) with DIVA gridding at 10% x and y scale length, bad estimates hidden at quality limit of 3.0.

Table 1. Linear relationships between Ln[iodide] and cruise variables.

	<b>m</b>	<b>c</b>	<b>R<sup>2</sup></b>
Ln [I <sup>-</sup> ] vs. SST	0.061	3.30	0.51
Ln[I <sup>-</sup> ] vs. NO <sub>3</sub> <sup>-</sup>	-0.069	4.56	0.43
Ln[I <sup>-</sup> ] vs Salinity (S>30)	0.389	-9.29	0.33
Ln[I <sup>-</sup> ] vs Chlorophyll-a	-0.045	4.23	0.12

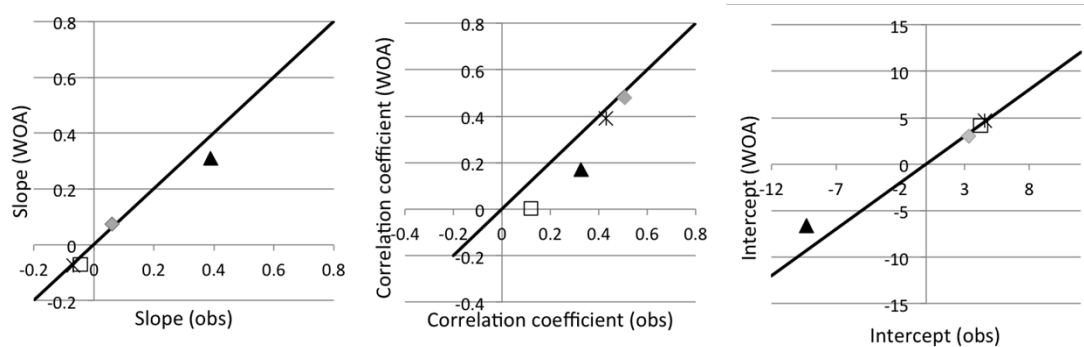


Figure S3. Comparison of regression parameters (slope, correlation coefficient, intercept) for regression of Ln[iodide] against observed and World Ocean Atlas values of sea surface temperature (grey diamonds), nitrate concentration (stars), salinity (black triangle) and chlorophyll-a (hollow squares). Solid line shows the 1:1 relationship.