## remote sensing

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Supplementary Information

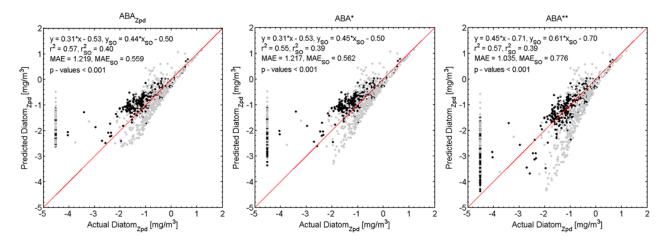
## Global Retrieval of Diatom Abundance Based on Phytoplankton Pigments and Satellite Data. *Remote Sensing*, 2014, *10*, 10089–10106

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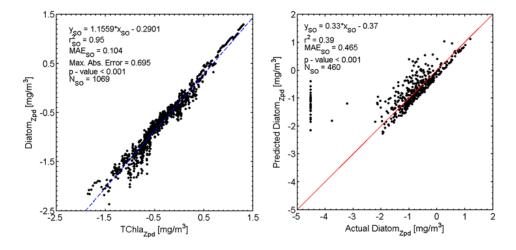
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**Figure S1.** Scatterplot of the validation for the global  $DP_{Zpd}$  data set (N = 1182) (a) new model (ABA<sub>Zpd</sub>), (b) model of Hirata *et al.* [1] parameterized with the  $DP_{Zpd}$  data set (ABA\*) and (c) original model and fitting parameters of Hirata *et al.* [1] (ABA\*\*). The samples located in the SO are presented in grey (N = 460), together with the statistics of the validation. The red line represents the 1:1 line. The statistics were calculated with  $log_{10}$  transformed data (e.g.,  $log_{10}(y + 0.00003)$ ).

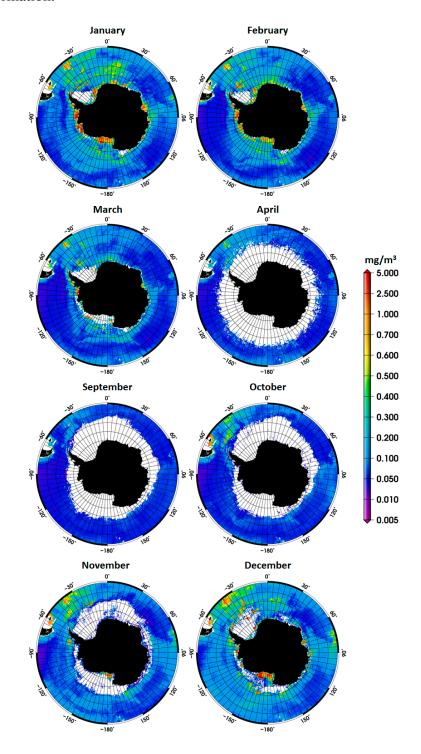


**Figure S2.** On the left: relationship between TChla<sub>Zpd</sub> and Diatom<sub>Zpd</sub> in the SO with the fit function plotted in blue ( $log_{10}$  transformed data). On the right: validation calculated with both  $log_{10}$  transformed data (e.g.,  $log_{10}(y + 0.00003)$ ). The red line represents the 1:1 line.



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**Figure S3.** Climatology of TChla<sub>Zpd</sub> of diatoms (mg/m³) using the regional algorithm for the SO based on 2003–2013 period. The austral winter months of May, June, July and August are not presented due to too few number observations available in these months. White areas correspond to waters with depths shallower than 200 m or without satellite information.



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