

Interactive comment on “Water quality, isoscapes and stoichioscapes of seagrasses indicate general P limitation and unique N cycling in shallow water benthos of Bermuda” by J. W. Fourqurean et al.

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This reviewer agreed with reviewer #1 that the text could be shortened by moving some of the material to a supplemental material file, and we have done so. The supplemental materials now contains the methods for the water quality data collections and a table that characterizes the distributions of those data. This shortened the ms by 2 pages.

The reviewer also pointed out that color schemes in the isopleth maps made them difficult to interpret; we have redrawn those maps using a color for land that that does not detract from the data, and isopleth colors that don't obscure the station location symbols.

C6259

The isopleth maps are drawn so that they match the input data from the sample sites perfectly. Testing the isopleth predictions from locations from which we do not have data is not possible because of the lack of such data and the relatively small number of data points ($n=17$) in the area. Using a leave-one-out cross-validation of the mapping exercise did not produce any meaningful tests of the isopleth predictions since the sparse data away from shore have very strong leverage on the resulting map data.

We did specifically test the assumption of no monotonic linear trend in the water quality data with linear regression, and we found no trends in the important variables that would invalidate our approach of using the time-series average water quality as predictors of the biogeochemical composition of the seagrasses. We have added these methods and a brief statement of lack of trends to the manuscript.

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/12/C6259/2015/bgd-12-C6259-2015-supplement.pdf>

Interactive comment on Biogeosciences Discuss., 12, 9751, 2015.

C6260

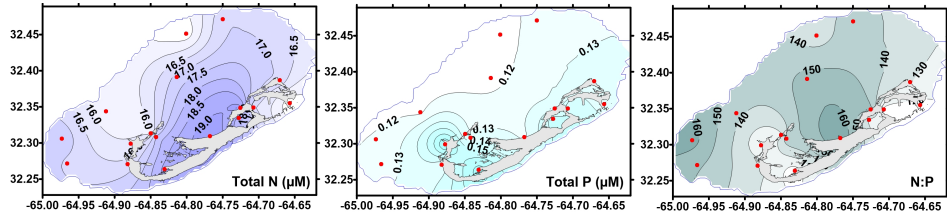


Fig. 1.

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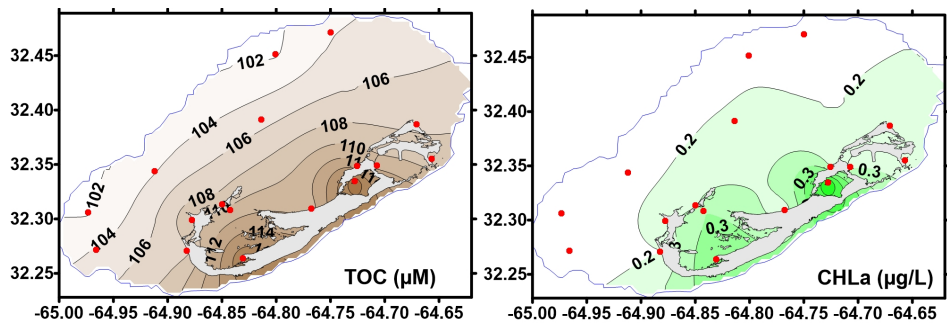


Fig. 2.

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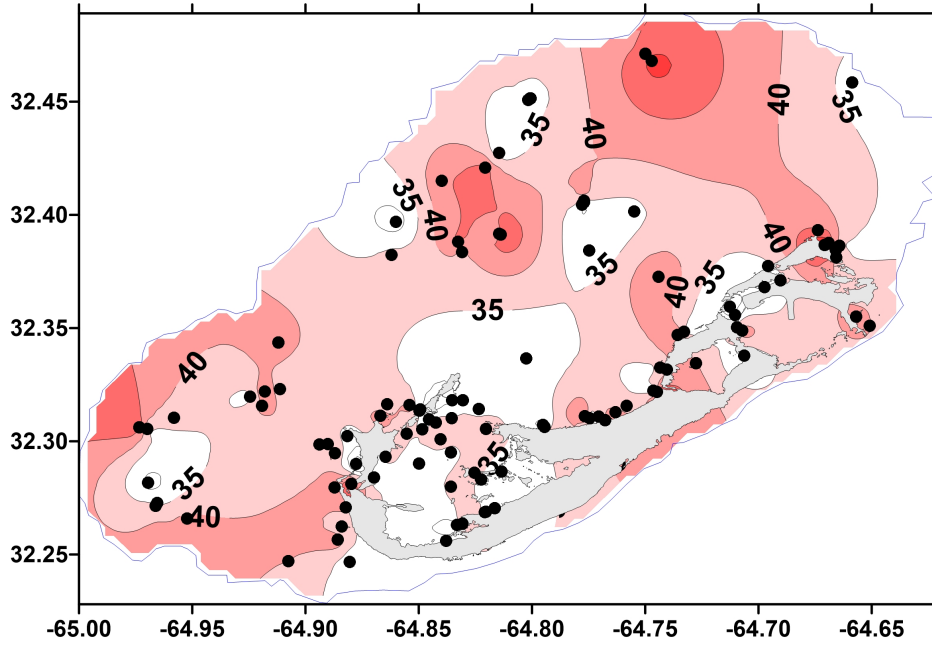


Fig. 3.

C6263

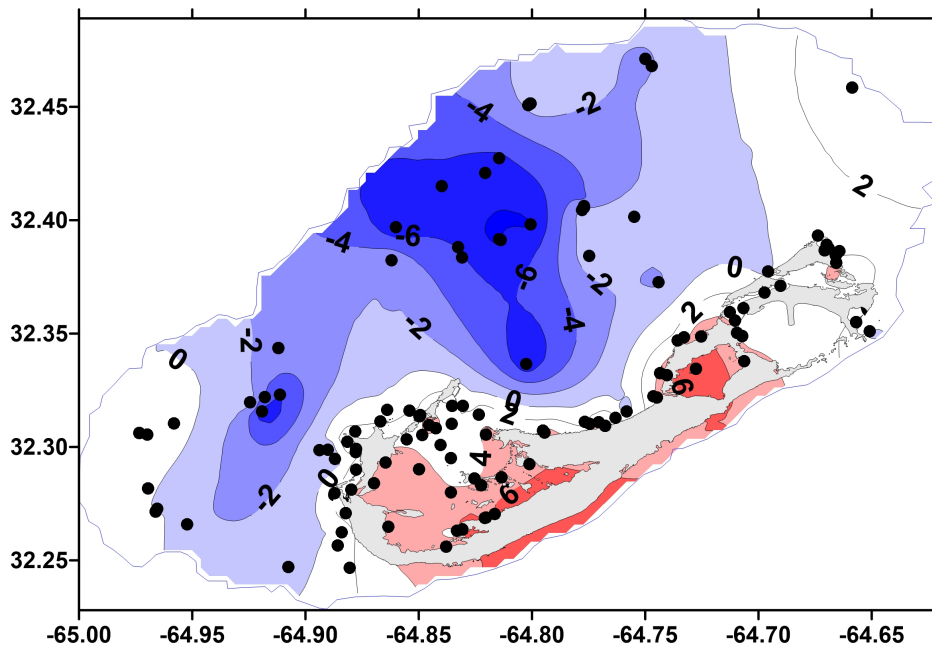


Fig. 4.

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