

Interactive comment on “Winter measurements of biogeochemical parameters in the Rockall Trough (2009–2012)” by T. McGrath et al.

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Firstly I would like to thank the Referee for his/her suggestions on the paper. I have addressed each of the comments, see below.

As suggested I have given more information on the methods and analysis of dissolved inorganic nutrients (Section 3.3.2), with better reference to earlier methods and handbooks. I have also included a table (Table 4) outlining the limits of detection, limits of quantification and uncertainty of measurement for each of the nutrient parameters.

With regard to Nutrient Quality Control (Section 3.3.3 Page 11) I have kept the Quasimeme results presented as z-scores (Figure 4, Page 12) rather than concentrations (assigned-measured), as the z-score calculation takes into account constant

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and proportional errors of the different samples. Most of the Quasimeme samples are in fact within the range of oceanic values measured in the Rockall Trough.

In Section 3.2.3 I have discussed the larger offset in TA of Batch #102. I compared vertical profiles of TA results from different batches and different surveys to ensure there were no problems with this batch.

The oxygen sensor data from CE10002 is now calibrated with the oxygen Winkler results and the updated bottle file and CTD data have been sent to CDIAC and CCHDO.

The title was updated to reflect that it is ocean data.

More information was given about the calibration of the salinity sensor data (Section 3.4), outlining the comparison between salinity sensor data and laboratory results.

It is outlined in the text (Section 3.2.1) that mercuric chloride waste is disposed of appropriately by a chemical disposal company.

It is outlined that oxygen bottles volumes are calibrated individually and whole bottle titrations are carried out in analysis.

Please also note the supplement to this comment:

<http://www.earth-syst-sci-data-discuss.net/6/C112/2013/essdd-6-C112-2013-supplement.pdf>

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