

Interactive comment on "Highly variable Pliocene sea surface conditions in the Norwegian Sea" *by* Paul E. Bachem et al.

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Received and published: 5 May 2017

Comments by Yige Zhang

Is there any Sr or Nd isotope data from these IRD that could be used to pin down the source of their detritus material? If not, maybe just point to the fact that they can be used in the future.

Response: There are no Sr or ND isotope datasets for ODP Site 642B that we are aware of. Provenance analysis of the IRD material that we identified for this study is challenging because it consists mainly of quartz grains. Cathodoluminescence analysis could theoretically provide provenance information for quartz, however similar geological history of Norway and Greenland may complicate this. We will mention the difficulty of IRD provenance analysis at an appropriate place in the manuscript.

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We will also fix the noted grammatical mistakes.

Interactive comment on Clim. Past Discuss., doi:10.5194/cp-2016-131, 2016.