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

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Bachem et al presented new Uk37-based SST data from the Norwegian Sea site ODP 642 between 5.32 to 3.14 Ma to examine regional climate change. Alkenone C37:4 and IRD data nicely complement the SST data and provided additional support to the temperature record. To explain the observed SST variations, global and regional factors were considered and discussed. The data are new and interesting, and the presentation is clear and precise. I only have a few minor comments. I recommend publishing this manuscript after minor revisions.

Pg 1 Ln 30: "Reviewed"

Pg 9 Ln 20-27: 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.

Pg 11 Ln 1: Remove the comma after "identified".