

## ***Interactive comment on “Temporal and spatial distribution of the meiobenthic community in Daya Bay, South China Sea” by L. Tang et al.***

**Anonymous Referee #1**

Received and published: 21 May 2012

This manuscript describes the first results of research aimed at investigating spatial and temporal aspects of meiobenthic communities in South China. While these data are important background data for the area considered, it must be acknowledged that similar studies have been conducted in other parts of the world, on a more detailed level (e.g. on the species level). As such, this manuscript does not greatly improve the knowledge on spatio-temporal aspects of meiofaunal organisms. This is partly caused by the fact that the manuscript lacks clear hypotheses, which results in a very descriptive paper. I doubt whether this manuscript, in its present form, will raise the interest of the global marine research community. However, and as the data are certainly valuable, the authors could consider to restructure their manuscript, in such a way that testing clear hypotheses results in improved general knowledge. I also encourage the authors to increase the detail of research, as the higher taxon level used now, is

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really not adequate enough to reveal the actual dynamics of the benthic ecosystem, and to assess the importance of several possible drivers for these dynamics. Below I list some detailed comments: Introduction, line 14-28: rather a description of the study area, than an introduction to the paper. Use the introduction to introduce the scientific problem, its relevance, and the hypothesis to be tested. Line 14-28 can be shortened, and added to the Material and Methods section. Statistics, line 3: how did you measure meiofaunal dry weight? Statistics line 25: 2-dimensional MDS should be “non metric MDS” (MDS is dimensionless) Statistics line 28: the vertical distribution cannot be evaluated using traditional ANOVA approaches, because the assumption of independency of data is violated (data are partly obtained from the same core). Techniques to overcome this problem are the use of split-plot anova, or the non-parameteric alternative PERMANOVA. The latter technique seems to be strong, as it allows for detailed pairwise testing of significant terms. Using these techniques would allow for a sound testing of detailed hypotheses, and a corresponding discussion that is interesting for a wide scientific community.

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Interactive comment on Ocean Sci. Discuss., 9, 1853, 2012.