

Interactive comment on “Influence of physical and biological processes on the seasonal cycle of biogenic flux in the equatorial Indian Ocean” by P. J. Vidya et al.

Anonymous Referee #1

Received and published: 27 March 2013

This paper provides an analysis of a set of long-term flux and productivity data in the Indian Ocean. I found the paper in its current form was hard to get grips with. This was largely because of the organization of the paper combined with problems with the English in the paper. My two largest comments are that the authors should think seriously about re-writing the paper with a clearer organization of ideas (e.g. much of the introduction is confused and jumps around from one idea to the next, similarly with the discussion) and have a native English speaker check the writing for language usage.

Some detailed comments:

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The paper analyzes long term time series data and it would be very helpful to actually have plots of the original time series rather than just the climatologies.

In the discussion, the authors refer to changes in the micro-zooplankton populations and yet data are only shown for only one time (August 2006). It's difficult to infer trophic dynamics and their impact on biogeochemical cycling over a long period from a single snap-shot. Indeed, there appears to be a significant mismatch in flux time series – one lasts 10 years and the other lasts only 1 year. So I'm rather confused about the robustness of the comparisons between the sites. Perhaps I missed something in the methods description.

Figure 13 needs to be re-thought. Pie charts are generally not the best form of visualization to use, and this is demonstrated by the authors in that actual numerical values are also given with each chart which creates a redundancy of information.

Interactive comment on Biogeosciences Discuss., 10, 2889, 2013.

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