

## ***Interactive comment on “Structural and functional study of the nematode community from the Indian western continental margin with reference to habitat heterogeneity and oxygen minimum zone” by R. Singh and B. S. Ingole***

**Anonymous Referee #1**

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Review of “Structural and functional study of the nematode community from the Indian western continental margin with reference to habitats heterogeneity and oxygen minimum zone” by R. Singh and BS Ingole.

The authors present an interesting manuscript with detailed analyses of nematode structural and functional community characteristics in relation with three different zones (shelf, slope, basin), and environmental variables, across a depth transect on the Indian margin. The manuscript reads relatively well but there is improvement possible in the language used, as well as in the structuring and flow of the paragraphs and sections.

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The manuscript sometimes suffers from very descriptive sections in the discussion. If the authors could limit themselves to discussing the ecological processes, functions, adaptations, and their applicability to OMZs in general and the Arabian Sea, readability and attractiveness would be substantially improved in my opinion. In essence, avoid listing species and studies where the same patterns have been observed. Rather, refer to tables for lists of species and include the references in more generally applicable sentences when talking about trends and potential explanations for them using ecological theory and observations.

Whilst the strategy of the analyses has been explained, I have some questions regarding the tests that have been performed. There seems to be some redundancy (I have explained this in my in-text comments) and the BEST/BIOENV/DistLM analyses could be simplified I think. That being said, the authors have performed a substantial and deep-community analysis using the latest statistical procedures which is laudable.

Sometimes the text in the different sections could be organised better so to increase flow and make the whole more easily readable. I think this can be achieved with relatively little effort.

The schematic figure that is the real product of the manuscript does not get enough attention in my opinion. Many if the findings make their way into the figure but with little discussion. This scheme could attract quite a bit of attention, but is not as well presented as it could/should. The authors could dedicate more text to the reasoning behind it, what it tells us, and what the more general implications of it are. I would also work on how it looks at the moment, has much more potential to be an important figure in meiofauna OMZ and deep-sea ecology.

One last general comment I have is that the authors should come up with some clear hypothesis and questions from the start, which they then could answer in a logical sequence in the results and discussion. At the moment, it seems like the MS is a very descriptive piece of work and reads as if the authors have unleashed a suite

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of analyses without targeting specific research questions. The underlying strategy is there, the authors have identified that environmental variation (associated with different margin zones and the OMZ) could be the basis of structural and functional nematode community characteristics and they then go further to identify some specific structural and functional traits associated with OMZ presence and granulometry and food availability. . . These findings can be addressed by formulating a good set of questions. In my opinion, this may help the MS.

Please find my other general and specific comment in the attached pdf as in-text comments and corrections

In summary, I should think this manuscript will be well received by the marine ecology community and in particular by meiofauna ecologists and recommend acceptance pending on a moderate revision.

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/12/C4083/2015/bgd-12-C4083-2015-supplement.pdf>

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Interactive comment on Biogeosciences Discuss., 12, 11537, 2015.

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