

Rev. #3 Anonymous

In general the authors give a good review (and extensive references) of the processes leading to hypoxia or even anoxia in coastal areas as well as a brief overview of other hypoxic zones in the ocean such as eastern boundary upwelling areas, deep basins and OMZs. I definitely recommend publishing the manuscript.

Some general recommendations or comments:

1) Although most of the human-induced hypoxia occurs in the northern hemisphere (as seen in fig. 1) I would have welcomed the addition of some case studies from the southern hemisphere e.g. from the South-American east coast or Australia.

Reply: We do agree with this, but until more information comes out of the southern hemisphere it will be difficult to add in-depth case studies.

2) It is a lengthy review paper and thus it may be helpful to shorten it somewhat by consolidating the separate case studies for the same geographical area into one case study block rather than repeated looks at the same geographically situated areas under each subsection of the paper.

Reply: The treatment of both natural and human-related hypoxia combines a very large literature. We tried to provide enough information so an interested reader could follow up on all the concepts. It would be difficult to reduce our text significantly. We received other recommendations to reorganize according to time lines and processes. We chose this type of reorganization as opposed to geographic treatments.

3) The number of figures could also be reduced by cutting out some of the figures and/or by combining similar data from different geographic regions into a single figure such as was done for Fig. 20. In this way the reader has a better overview and comparison of the various coastal hypoxia regions.

Reply: We agree, several figures were removed. Fig 20 has Cloern and Turner decline in O₂ values, but is removed because the text can provide the idea without the figure.

Minor detail:

P.9377 l.5: The Monteiro reference does not appear in the reference list. However, the authors could quote the old review paper by Chapman & Shannon (1985) or the later review report by Monteiro et al (2004) for the Benguela system.

Reply: These references were included and the information on the Benguela system expanded.