

Dear authors,

Please find below my comments for your revised manuscript entitled " Resemblance of the global depth-distribution of internal-tide generation and cold-water Coral occurrences" submitted to EGU sphere.

Thank you for addressing the comments raised in the first review of the paper. The paper now reads more coherently and the results and discussion are improved with wider literature review and the recognition of data limitations and distinguishing global from regional interpretations of findings.

Line – 25 – ‘In 66.9% of all cases, cold-water corals occurred on a topography that is supercritical to the M2 tide, whereas globally only 9.4% of all topography is supercritical.’

Could this be changed to ‘in our study....66.9% of all cases, cold-water corals occurred on a topography that is supercritical to the M2 tide, whereas globally only 9.4% of all topography is supercritical.’ Or clearly express that this value is expected based on the percentage of all transects.

Line 50 – I would suggest changing ‘deeper layers’ to ‘greater water depths’.

Line 51 – I would suggest changing ‘stimulate’ to ‘facilitate’.

Line 53 – I would suggest changing CWC back to Cold-water coral when it is at the start of a sentence. Same throughout manuscript.

Figures (ALL). Can resolution be improved? Currently, it is not possible to review these figures and their updates.

Line 151 – The authors describe that *Bathelia candida* was omitted due to few and not in corresponding bathymetry. Since the authors refer to selecting all main reef forming CWCs, and yet make no mention of this prominent reef former of the SW Atlantic they should make a mention of it here to demonstrate that they have considered it and explain why it was omitted or that it may have been included under ICES VME category as they have done in their response.

Line 753 – Should ‘cold-water occurrences’ by ‘CWC occurrences’?

Line 176 – Would it read better as ‘Consequently in our analysis’?

Line – 361 – The first section of the results under ‘Critical reflection and trapped internal tide’ includes introductory sentences on internal tide behaviour – this information could be better placed in the introduction than the results section.

Line 432 – ‘might cause some deviations our calculations of the proportions of slope criticality with high-resolution bathymetry’. Suggest ‘might cause some deviations from our calculations of the proportions of slope criticality with high-resolution bathymetry’.

Line 482- The authors state 'CWCs further often occur in deep canyons (e.g., Pearman et al., 2020; Gori et al., 2013; Price et al., 2021) that can be a sink of particulate organic matter by focussing internal tides. (Allen and Durrieu de Madron, 2009; Wilson et al., 2015)' The authors could further exemplify that these features will have been 'smoothed out' from the bathymetry so the reader understand the link.

Line 505 – If linking to the sentence above this sentence could benefit from beginning as 'For example,'

Line 516 – This sentence is unclear.

520 – 'meter' to 'meters'

522- 'might be several hundred meters higher than the depth at which they initially settled.'
Do you mean 'might be several hundred meters higher than the depth at which the mound initially established'?

Line 545 – rather than 'relax' it is likely that it makes the relationship more complex?

Line 547 – Add reefs as well as mounds?

Please check the consistency of the use of the term Northern Hemisphere and its acronym NH throughout the text.