

Interactive comment on “The influence of the geo-morphological and sedimentological settings on the distribution of epibenthic assemblages on a flat topped hill on the over-deepened shelf of the Western Weddell Sea” by B. Dorschel et al.

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Dear Editor, dear Referee #2, thank you very much for your comments on our manuscript. In the following we will address the comments and update our manuscript accordingly. Most specific comments (e.g. missing references) will be followed and only the more relevant comments are addressed in the following.

Comment Reviewer #2: ... there are hardly any citations referred to in the discussion and it might be useful to link their results to studies by e.g. Bowden et al 2011 (DSR II,

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58, 1-2, 119–127) and Brandt et al. 2011 (DSR II, 58, 1962–1982) and others for further comparison of Nachtigaller Hill with assemblages elsewhere in the Southern Ocean. Reply: As also mentioned in the replies to Reviewer #1, references to Bowden et al 2011 will be included in the introduction and discussion. Brandt et al. 2011 however describe a very different habitat that is, to our understanding, not directly relevant for this study.

Comment Page 1650 Line 7 ff: a third possibility for the absence of the two hydrozoan and octocoral species might be chance dispersal. Reply: Chance dispersal as reason for the absence of the two cnidarian species cannot be ruled out. But if chance would be the reason for their absence, then with the same likelihood they could have colonised Nachtigaller Hill. Especially as these species occur relatively nearby at the Antarctic Peninsula. We therefor ruled out chance dispersal in this context.

Comment Page 1651, Line 2: the authors should consider to use indirect measures e.g. from seaweeds; though having said this, the scale might be too coarse to estimate productivity for a small feature such as Nachtigaller Hill. Reply: The resolution of the seaweeds data limits indeed their use for this study. With a footprint of approximately 81 km² local effect in the water column above Nachtigaller Hill cannot be resolved.

Comment Page 1658; line 4 ff.: No. 4 seems to be a repetition of No. 1 and should be considered to be combined with the first. Reply: The first sentence from the conclusions will be deleted to avoid repetition.

Comment Page 1640, line 1-2 (and throughout the text): terms “north-eastern” etc. need more consistency (e.g. the following possibilities are used: North-west, North-Western, Southeast etc.) Reply: In the manuscript ‘northwest, northeast, southwest and southeast will be used and the text checked for consistency.

Interactive comment on Biogeosciences Discuss., 11, 1631, 2014.

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