

## ***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.***

**Anonymous Referee #2**

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bg-2013-584 Referee's comments

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, J. Gutt, D. Piepenburg, M. Schröder, and J.-E. Arndt

General comments

The authors describe the geomorphology as well as epibenthic communities of a newly

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discovered seabed structure in the North-western Weddell Sea The manuscript represents an interesting and very relevant study for both ecological and evolutionary reasons, in that it can provide valuable insights into the processes controlling faunal distributions in an area of ongoing regional warming. Overall the paper is well laid out, very detailed, though rather descriptive; especially the discussion represents largely a repetition of results rather than putting those into a greater context. In fact, 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, 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.

Specific comments Page 1650; line 7 ff.: a third possibility for the absence of the two hydrozoan and octocoral species might be chance dispersal 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. 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.

Technical corrections Page 1636, line 20, 400% (without a gap), also check in the following Page 1638, line 13, slope calculation was performed 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.)

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