

Interactive comment on “Seabirds as samplers of the marine environment – a case study in Northern Gannets” by Stefan Garthe et al.

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AUTHORS: Thank you very much for your time and your valuable suggestions that helped us improving our manuscript.

EDITOR: In addition to the very helpful comments by the two reviewers I would like to encourage the authors to see to the following points: - the quantitative results of this manuscript should be backed up by statistical analyses of the data used. So far it reads more like a collection of case studies. It would also be nice to see statistically based error estimates where feasible.

AUTHORS: We understand this comment very well. While one paper focusing on gannets and wind farms near Helgoland – using data from 2014 – has just been published (and is referred to, now), several other papers focusing on specific aspects are under

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preparation. To nonetheless address your comment, we have created a whole new section, chapter 3.3, habitat analyses, for which we have comprehensively analysed the dive data shown in chapter 3.2 in relation to habitat variables. This does not only include means + standard errors for the data, but also a mixed model analysing habitat variables. Apart from the text addressing this topic, we have also created a new figure (containing three maps) and a table.

EDITOR: - the manuscript does not reference “outside” data, nor does it provide a comparison with other studies either on the same species or location.

AUTHORS: We have inserted several references to studies on this species from other locations, enabling some comparisons. With regard to Helgoland, we have not been able to study any other species on Helgoland with the same technology until spring 2016. Now, we have started to investigate two further species, but data have not been published yet (nor will be within the next few months).

EDITOR: - no use is made of the data sets available in COSYNA or, for instance, through the Helgoland Roads time-series station. As this paper is part of the COSYNA special issue the link to and synergies with the other components of COSYNA should be discussed, for the past as well as with regard to a future potential for cooperation.

AUTHORS: A time-series analyses is not yet possible on our data set as we could not track gannets in sufficient years. However, a link to other COSYNA components has been established so that this manuscript is better integrated into this special issue.

EDITOR: Some minor comments are to be found in the annotated manuscript.

AUTHORS: We have incorporated your comments into the text.

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