Ocean Sci. Discuss.,
doi:10.5194/os-2016-22-AC2, 2016

Ocean Science Discussions
Open Access
EGU

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

Stefan Garthe et al.

garthe@ftz-west.uni-kiel.de

Received and published: 16 December 2016

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

REVIEWER: This brief manuscript presents some results from one season of tracking of Northern Gannets at a German colony. These results are interesting and nicely presented.

AUTHORS: Thank you.

REVIEWER: However, I'm not sure I fully understand exactly what the authors are trying to do here – what is the aim of the manuscript, and which questions are the authors trying to answer? The manuscript seems to simply be a case study of what

Printer-friendly version

Discussion paper

can be learned about seabird foraging behavior through biologging. I guess the lack of a broader context and clear aims is related to the fact that the manuscript forms part of a special issue, and that the authors are trying to show how seabirds can play a part in an ocean observation network. However, in my opinion the manuscript should also be accessible and interesting to readers who're unfamiliar with COSYNA, and this will require a bit more context, more clearly defined aims, and a discussion of the pros and cons of the chosen approach in terms of reaching those aims.

AUTHORS: This is a good point that we fully understand. Therefore, a link to other COSYNA components has been established so that this manuscript is better integrated into this special issue.

REVIEWER: It is difficult to come up with more specific comments. The examples chosen are neatly presented, and the methodology appears to be up to date, although perhaps not innovative. The authors could without doubt have chosen to present other interesting results, I imagine some of these will be presented in other contexts.

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 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.

REVIEWER: The results on dive behavior are based on a minuscule sample size (4 individuals), and this should be kept in mind when interpreting the results (e.g. differences in dive depth relative to other studies).

AUTHORS: We fully agree that data have to be interpreted with caution. However, the

Printer-friendly version

Discussion paper

consistently shallow dives are different from all the other gannet diving studies that we carried out in eastern Canada, even if subsampling small data sets. This has been written out explicitly in the manuscript.

REVIEWER: Minor comments: - P- 2, l. 15: ‘have a strong influence on : : :’ or similar.

AUTHORS: Reworded.

REVIEWER: - P. 3, l. 28: perhaps more informative to say ‘central’ tail feathers.

AUTHORS: Corrected.

REVIEWER: - P. 6, l. 21: the reference here should be to Fig. 7.

AUTHORS: Yes; corrected.

REVIEWER: - Fig. 7: please add at least a time axis. I guess the acceleration axis is difficult to label informatively.

AUTHORS: Yes. The time axis has been added.

Interactive comment on Ocean Sci. Discuss., doi:10.5194/os-2016-22, 2016.

Printer-friendly version

Discussion paper