

## ***Interactive comment on “An integrated data compilation for the development of a marine protected area in the Weddell Sea” by Katharina Teschke et al.***

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Anonymous Referee #2 - <https://doi.org/10.5194/essd-2019-86-RC2>

Specific comments 1. "Include further description of Methods used to analyze each data set and to develop each map. This could potentially be done in the paper itself as an Annex or in the Supplement section (including the maps), within the metadata file (adding an easier crosslink to the paper), and/or as a footnote/bigger caption in each available map. CCAMLR Working Groups or Workshops papers such as those submitted to EMM/SAM/WS are not generally available for the general public (login is required) so further information included therein should be available elsewhere for the

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interested reader." From general comments: "However, in my view, some information is missing, in particular related to metadata and methods description."

a. We agree with the referee's statement that the methods used to analyse each data set and to develop each map should be available for the interested reader. Therefore, we will describe the methods in the "Supplement" section (including the maps).

2. "In the description of the Methods, it could be good to include how the methods in each case were chosen (e.g. agreed by international community, based on specific paper, etc.) so it adds to the openness and transparency of the process."

a. We agree that a sentence about how the methods were chosen in each case increases the openness and transparency of the MPA planning process. We will add this information to the methods in the "Supplement" section accordingly.

3. "It is not clear why only maps for 2.3 Environmental data are included at the end of the paper. I would suggest including maps (and methods) for 2.4 Biological data as well, for an easier and more comprehensive visualization."

a. We showed all described data for "2.4 Ecological data" (point data) in Figure 1 and mapped in Figure 2 the raster data for "2.3.1 IBCSO data", "2.3.2 AMSR-E sea ice maps" and "2.3.3 FESOM data". We have refrained from presenting the environmental variables, which have only been used as explanatory variables in species distribution models (despite the description of these variables in the text).

b. Furthermore, we will provide each data layer product as a map in the "Supplement" section in the revised version (see also remark #1a earlier in this reply).

4. "Avoid duplication of information in the text about data sources, references and cruise reports already included in the tables."

a. We will change text sections "2.3 Environmental data" and "2.4 Ecological data" by deleting e.g., references to publications and cruise reports, explicitly listed in the tables, too.

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5. "Most readers would probably be unfamiliar with CCAMLR. I would suggest adding a few general maps, including the CCAMLR Convention Area and the division in MPA Planning Domains (mentioned in the text) for contextualization."

a. We will follow the referee's suggestion by adding a map including the CCAMLR Convention Area and the MPA Planning Domains.

6. "In the 3. Outlook section, there is some mentioning to the development of a storage management system for this data. I would suggest also mentioning the CCAMLR MPA Information Repository (CMIR) that is under development by the CCAMLR Secretariat, as an additional suitable storage space."

a. We will add the information in "3 Outlook" that the CCAMLR MPA Information Repository (CMIR), currently being developed by the CCAMLR Secretariat, will also be available in the future as a suitable storage location for metadata.

#### Technical corrections

i. "Include CRS and projections information in each metadata file (common and thematic layers) for each shapefile and raster."

a. We will add CRS and projections information in the revised version under "2.2 Data availability".

b. Furthermore, CRS and projections information is supplied for each shape and raster file in "Source" under "Layer Properties" if you upload the file in GIS-software or open the ArcMAP packages.

c. In addition, projections information is named for each map in the legend (see folder "map\_png").

ii. "Provide clear cross-reference links between metadata description and available maps (names do not always coincide and it is hard to keep track to which description fits which map)."

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a. We follow the referee's suggestion by indicating for each metadata description (under "2.3 Environmental data" and "2.4 Ecological data"), which map was developed and under which file name the respective data layer is stored in PANGAEA.

iii. "If possible, allow for the zip data to keep a clear file name referenced to the data they contain for easier identification when downloaded in folders (in particular for the "Data shapefile raster")."

a. We have had the file names for zip data folders changed accordingly by the great support of the PANGAEA team. Because if a PANGAEA data entry is registered by a DOI, then - strictly speaking - nothing can be changed in the data publication anymore.

iv. "Map legends in Figure 3 are very hard to read – make sure high definition maps are provided in final draft or make maps bigger."

a. We agree that the map legends in Figure 3 are impossible to read. We change the maps accordingly.

v. "In section 2.2 Data availability, paragraph 10, there is the mention to five persistent identifiers. However, six of those are provided. Be aware that the same happens in the Abstract."

a. We change the text accordingly.

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