

Earth Syst. Sci. Data Discuss., author comment AC2
<https://doi.org/10.5194/essd-2021-415-AC2>, 2022
© Author(s) 2022. This work is distributed under
the Creative Commons Attribution 4.0 License.

Reply on RC1

Igor Volvenko

Author comment on "Data on zooplankton occurrence and abundance in the Far East seas and adjacent Pacific Ocean waters" by Igor Volvenko, Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-415-AC2>, 2022

Dear Professor Fleischer,

This manuscript has high similarity with an already rejected manuscript <https://essd.copernicus.org/preprints/essd-2021-29>, which received two positive reviews with a few remarks, but was not accepted for final publication. Despite the fact that all the corrections recommended by the reviewers were made to the improved version of the manuscript, it was rejected. To understand what was wrong with it, I showed the corrected manuscript to many colleagues from different countries, from whom I have received many recommendations for its further improvement.

Compared to my first submission, the following changes have been made to the manuscript <https://essd.copernicus.org/preprints/essd-2021-415/essd-2021-415.pdf> in accordance with the demands and wishes of numerous critics. The size of the manuscript has been reduced. Now the main text without Abstract and References has 2160 words, number of figures reduced to one, number of tables – to zero (they are all moved to the Supplement 1). Along with the reduction, the main text was rearranged. Now it only contains what relates to the description of the data being made open. All other information necessary for the correct understanding and use of this dataset has been moved to the Supplement. Many improvements have been made in the rest of the text.

Compared to my first submission, the following changes have been made in the dataset. For the convenience of users, it is divided into two parts – 1) plankton data and 2) GIS; and their descriptions have been updated and clarified. In the main plankton dataset <https://doi.pangaea.de/10.1594/PANGAEA.937751> in all csv files `;` replaced with `,` so that these files can be processed without problems by standard software. Once again, the species list has been corrected in accordance with modern taxonomy and accordingly some data are recalculated. The set of morphometric characteristics of each of the regions is supplemented by the coordinates of their centroids. Two variables have been added to the data of all region maps: X_coord - longitude of the centroid in decimal degrees, Y_coord - latitude of the centroid in decimal degrees. See the dbf and Read_me.txt files at <https://doi.pangaea.de/10.1594/PANGAEA.937752>.

Access to the old dataset <https://doi.org/10.5281/zenodo.4448646> has been terminated because the corresponding article has not been published. (It is available upon request,

though, and has been viewed by 293 users and has 141 downloads so far). According to the rules of PANGAEA, now access to two new datasets is temporarily provided to users, reviewers and editors by the login and password known to you. Full free access will be granted when they receive confirmation that the article has been accepted. If the manuscript is rejected, then access will be closed.

Based on Metrics, the preprint <https://essd.copernicus.org/preprints/essd-2021-29> has already been read by over 1,300 scholars and <https://essd.copernicus.org/preprints/essd-2021-415> by over 700, so there is reason to believe that the publication of the new manuscript will attract many ESSD readers. All such broad-scale and long-term zooplankton sampling efforts and datasets are very valuable. The surveyed region is currently critically under-covered by data available in online diversity repositories. I regret that the copyright holder strictly prohibits the publication of raw or less aggregated data. However, even the data opened in these two datasets were not available to a wide range of scientists, since they were previously published only on paper books (not in digital form), only in Russian, and in a very limited edition for restricted use. In addition, they contained the flaws described in this article, the main of which were fixed for the first time.

You believe that data of this kind are important to the evaluation of global change, but this requires the datasets not to be so aggregated. However, ecologists dealing with long-term changes in ecosystems most often deal with large marine ecosystems the size of an entire sea. In the datasets proposed for publication, the spatial resolution is one and a half orders of magnitude more accurate, since each body of water (the seas and the northwestern part of the Pacific Ocean) is divided into 15 homogeneous zones. This resolution is the same as in the previously published reference books on nekton published in 2003-2006 as tabular annexes to nekton atlases, directories on the pelagic trawl macrofauna published in 2012, and benthic macrofauna published in 2014 (which have received PICES POMA Award 2015 as TINRO-Centre Macrofauna Inventory Publication Series https://meetings.pices.int/awards/POMA_Award/POMA-recipients/2015-POMA). The mentioned books on the bottom and pelagic macrofauna are also published only in text form and only in Russian. Therefore, in the near future I was going to digitize them, translate them into English and, after verifying the species lists, make them more accessible to the world community. The availability of comparable data on mesofauna (zooplankton) and macrofauna would give a holistic view of the main components of ecosystems, and the substantial volume and high quality of the collated data will enable the next important steps to be taken to understand the Far Eastern seas and the Pacific – one of the most productive and economically important regions of the world ocean. The scope of application of this data is fundamental to the management of marine resources, aquaculture development, nature conservation, and assessment of the damage of various anthropogenic factors on nature. As far as I understand, you are trying to convince me to abandon these ideas as vain and useless to anyone by recommending the rejection of this manuscript.

Thank you for your time and assistance.

Kind regards

Igor V. Volvenko