

Comments to the author:

Dear Authors

Thank you for your replies to the reviewers, for the throughout revision of your manuscript and dataset and sorry for the delay in our editorial feedback. We are pleased to tell you that your publication is accepted for publication in ESSD with some minor revisions.

Thank you for your careful review of the manuscript, we agree with all your suggestions and have edited the manuscript accordingly.

The referees asked for overview on data sources and the variables in the lake summary. In your manuscript text it is indicated that this information is part of the supplementary datasets (it is not a supplementary information attached to the ESSD manuscript because this is all metadata linked to the data and an integral part of the dataset publication).

We agree that the locations of the data sources are not clear, this information has been added to the manuscript as suggested below:

Your data publication is very well organised and datasets are userfriendly, the dataset history and data sources and licences are well documented.

Here, readers of the ESSD manuscript would need partly more information on the data sources and data content provided in the manuscript text without that they would need to organise it separately via data download. We readers will appreciate to have this information as overview available in the manuscript:

i) a table with a list of sources for Chl-a in the selected lakes, e.g. it exists already in the README in table format. You could cite it in chapter 2.1.1 and add it in the ESSD manuscript appendix

We have added a table summarizing the sources for the lake data (Table A1), and referred the readers to the table in chapter 2.1.1 (lines 131-132 and 137)

ii) a table with a list of sources for SSR, you could cite it in chapter 2.1.2

We have added a table with this information to the appendix (Table A2) and cited it in the main text (lines 137 and 164).

iii) a table overview of the variables of the associated lake data (e.g., lake depth, surface area, volume, climate zone) with data sources, also as table in the appendix. you could cite it in chapter 2.1.3,

you can also indicate that these metadata collection is published as part of your data publication (Adams et al., 2021) instead of the sentence in the manuscript 'The reader is referred to the "lake summary" file in the supplementary information for details on the lake characteristics.' that sounds misleading

We replaced the sentence with a new one indicating that the metadata can be found along with the published data (lines 180-181). We have also added a table summarizing the associated lake data to the appendix (Table A4) and cited it in chapter 2.1.3 (lines 181-182). We also included a table summarizing the databases we used as sources for these data in the appendix (Table A3).

chapter 2 data and methods: lake name - in the dataset publication you describe it as reformatted from original file - how did you standardise, / agreed on the lake name? could you add there a sentence in the text.

We added a sentence to the text, clarifying how the lake names were standardized (lines 157-158).

Many thanks and we look forward to your final manuscript,
Best wishes, Birgit Heim