

Earth Syst. Sci. Data Discuss., author comment AC2  
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## Reply on RC1

Giuseppe Amatulli et al.

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Author comment on "Hydrography90m: a new high-resolution global hydrographic dataset" by Giuseppe Amatulli et al., Earth Syst. Sci. Data Discuss.,  
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Reviewer #1:

*Please, find our replay in Italic font.*

This is a very well written paper, that describes the data science techniques to create a huge data set, as well as the characteristics of the many layers in the data set. It will be of interest to a huge number of users. My only qualm is that it is a feast of data, or perhaps trying to absorb the data through a fire hose, and the paper does not provide a lot of help on how to get started with the data for many potential users who will not be acquainted with the technical literature. I would hope the authors can create an introduction on how to get started using the data, and some practical suggestions on which versions to use (e.g. for all the different stream ordering algorithms).

- Is the article itself appropriate to support the publication of a data set? Yes, it describes a new data set.
- Is the data set significant – unique, useful, and complete? Yes, it includes just about everything you could want for drainage networks at 90 m scale, and they point to way to future improvements under way.
- Is the data set itself of high quality? Yes, based on an initial analysis.
- Is the data set publication, as submitted, of high quality? Yes
- By reading the article and downloading the data set, would you be able to understand and (re-)use the data set in the future? Yes, but I would like to see the authors make a "Hydrography90m for dummies" cheat sheet or cook book to help novice users get started on the data. It might not be appropriate for the journal, but could go on a web page, or at the data download site. While the U-Tube video is helpful, it is not what I would like to see.

*We thank the reviewer for his/her very constructive comments. We have now added more details and explanations regarding data download and usage. We like the idea of the cheat sheet and have included one workflow example using GDAL and GRASS-GIS, and another one using R. We hope that this will help users to get started with the data.*

There are three minor comments in the attached PDF:

Fig. 3: Many of the tile names are impossible to read. Make the colors of the basins pale so the labels stand out.

*Thank you, we have addressed this issue by removing the blak-basins border. Now the tile labels are more readable.*

*In addition, and in line with the journal request to account for color blindness, we have adapted the palette "viridis" following the recommendations by Stoelzle & Stein (2021; <https://hess.copernicus.org/articles/25/4549/2021/>).*

I went to the website to download, and the tiling scheme was not obvious.

*We have now added a clickable map on the <https://hydrography.org/> website such that users can click on a given tile and receive the download links immediately. The current repository was in place as long as the website was not online yet.*

*We have also facilitated the usage of the vector data by splitting the line segments and outlet points in separate gpkg files. The reduced file size is better manageable for standard GIS applications.*

Table 2: Commas to make the numbers easier to read.

*Done.*

Line 463: add ")"

*Done.*