The manuscript introduces a multi-temporal China annual river extraction framework, which includes a multi-data source-based water extraction module and an object-based hierarchical decision tree river extraction algorithm, and produces annual China river extent maps (CRED) from 2016 to 2023. However, the paper needs further improvement in terms of its structure and readiness for publication. The motivation and innovation of the research should be clarified.

Some major comments are as follows.

(1) The motivation for using multisource datasets for water extraction should be better explained. The authors state that the choice of data sources (DW, EGLC, and Sentinel-2) is based on their availability, in that order. However, the river mapping results for China in 2016, primarily using Sentinel-2, show no significant differences compared to other years. Is the proposed method aimed at achieving higher extraction efficiency, or is it designed to enhance accuracy?

(2) In the proposed approach, the geometric rules for river extraction were based on the 2020 CNLUCC map. As shown in Fig. 8, the extraction results from CRED exhibit significantly higher spatial consistency with the CNLUCC map compared to the other two comparison datasets. Did the authors consider using different datasets during the geometric rule extraction or the result comparison process?

(3) In the statistical results for river areas from 2016 to 2023, the river area in 2016 was noticeably smaller than in other years. Was this phenomenon also observed in non-river water bodies? It would be helpful to include the accuracy of water extraction for each year.

More specific comments are as follows.

(1) Sensitivity analysis is required to validate the feasibility of the proposed method for extracting water body extents using different data sources across different tiles/periods.

(2) The water extraction section in Figure 2 could be clearer. Presenting data for all years together to generate the water time series may cause confusion and fails to adequately convey the meaning of "For areas where DW observations were missing" in line 92.

(3) In line 199, please clarify what "the rivers from 2020" refers to. If it refers to the extraction results from this study for 2020, please clarify the potential impact of generating validation samples based on extraction results on the randomness and representativeness of the samples.

(4) The sample size for validation is unclear. Please provide details on the distribution and quantity of the validation samples in Section 4.1.

(5) The resolutions of the three existing products used for comparing river extraction results are not exactly the same. Did the authors perform any resampling or other processing when comparing river areas to eliminate the area differences caused by resolution?

(6) In line 270, it is mentioned that the CRED dataset outperforms the existing most accurate products in extracting narrow rivers in mountainous areas. Did the authors consider providing a more precise definition of narrow rivers to highlight the advantages of this product?

(7) The area difference mentioned in line 273 between the river areas of CWaC and the CRED in 2020 is inconsistent with the visualization results in Fig. 8. Please provide more detailed comparisons of the water bodies extracted result.