

Interactive comment on "The Global Streamflow Indices and Metadata Archive (GSIM) – Part 1: The production of daily streamflow archive and metadata" by Hong Xuan Do et al.

Hong Xuan Do et al.

hong.do@adelaide.edu.au

Received and published: 12 January 2018

We thank the colleagues who have taken their time to provide us suggestions to improve the quality of the metadata products. The full-text of the comments have been included below as *italic text*, followed by our response as normal, indented text.

Great data set! Will be very useful. Would be great if the underlying daily time-series data can also be made available via an online repository? Looking at the contents of file GSIM_metadata.csv, I think that the units for the attribute "altitude" are in *feet* for USGS gauges? E.g. gauge US_0006679 has an altitude value of 10520. Would be better to correct this to meters, so it is consistent with the altitude of gauges from other

C1

sources (e.g. GRDC). I have not checked the attribute "area" of USGS gauges. Please ensure it is in km^2 .

Thank you very much for picking out this bug in the metadata (e.g. the altitude of US stations), which have been fixed in the revision. Regarding to the attribute "area" of USGS gauges, the unit of this attribute has been converted into km^2 as part of the catchment delineation process (for comparison purpose).

I also noticed that at least one gauge has impossible lat/lon coordinates: KG_0000003 (lat/lon: 90/180) If location is unknown would be better to assign NA value. I have not checked if the same applies to many other gauges with unknown location.

As mentioned in the manuscript, there are 24 "suspect-stations" with unreasonable geographical coordinates (including KG_0000003), which have been removed from the catchment delineation process (see section 5.1). However, we still keep the coordinates in the metadata to reflect original information provided by data-providers.

Nevertheless, we also see that this may made some confusion to GSIM users, and thus have provided a list of all stations with "suspect geographical coordinates", including station KG_0000003, as an additional file in the published data. This information has also been included into the readme file.

In file GSIM_metadata.csv the ID number for all Japanese gauges is always "3.04E+14". Probably a formatting issue, which should be corrected. I came across this by chance. I suggest that the authors thoroughly check all their attributes before final publication of the data.

Thank you for informing us about this bug in the metadata, which has been fixed in the revision. We have thoroughly check all attributes in the latest version of the metadata.

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2017-103, 2017.

СЗ