

# ***Interactive comment on “Water-balance and hydrology research in a mountainous permafrost watershed in upland streams of the Kolyma River, Russia: a database from the Kolyma Water-Balance Station, 1948–1997” by Olga Makarieva et al.***

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The paper gives a concise overview of the data that were collected at the KWBS during the period 1948–1997 (partly later too). It also gives some insight into the difficult and harsh conditions that the observers and scientists were facing. Considering that conditions and the comprehensive instrumentation, the data collection is a remarkable piece of work, which deserves both attention and willingness to follow up. In this

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way a first important step has been made; the digitizing, organizing and publication of the data. The possibility for free access will give other scientists the opportunity to conduct new studies, test their models and so on. The impressive density of precipitation gauges within the catchment for instance, would be a very good basis to study precipitation distribution and gradients. The historical data, together with the resumption of the data collection at the KWBS would after some years give an unique possibility to compare climate model results with real measurements in a high arctic permafrost region. In general, not many data series with such a long duration and for such a wide variation of hydrometeorological variables are available. As a hydrologist, I really would like to see that the authorities, or other interest groups, would acknowledge the importance of such hydrological data, especially considering how spares data in that region of the earth are. Of course there will be the need to invest some money, but I think that money would give valuable payback in form of gained knowledge, better understanding and hopefully better preparedness for the ongoing and coming changes in the climate. The estimation of the value of hydrological data has always been, and will further be an issue. Of course approaches have been made (there is a number of publications on that topic), but I am not sure if the message is reaching the right people. In this sense it is up to us hydrologists to spread the message, and this is what the authors of the paper are doing in their approach to initiate the resumption of the KWBS. I have not been looking closely at the data, but at glance, I see that there is some short data description, following the data. Further use of the data might lead to the need for a more detailed description of the data quality. That could be implemented in the database. I also have some small comments and suggestions considering the text in the paper. I will send these comments directly to the corresponding author. I wish the authors and other involved parties good luck with their further work and hope they will succeed.

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