Review of E. Johansson et al. article and dataset "Hydrological and meteorological investigations in a periglacial lake catchment near Kangerlussuaq, west Greenland – presentation of a new multi-parameter dataset"

Presented for the review are the dataset and supplementary description article concerning the acquisition of diverse hydrometeorological data in a lake catchment in west Greenland between 2011 and 2013.

The data consists of various continuous and pointwise measurements, all set at different spatial and temporal scales, aimed at thorough description of water and heat flux in a periglacial environment. Continuous time-series data were collected by the automatic weather station (AWS) and several data loggers installed at site and several field campaigns were carried out to collect sample data.

It is stated in the article, that there are quite few hydrological studies were carried out in Greenland not taking subglacial flow measurements into consideration. This statement may be extended to most of the glacial islands in the Northern hemisphere, although several research facilities were established on the archipelagos in the Arctic Ocean by the Russian Arctic and Antarctic Research Institute during the XX century (mainly Novaya Zemlya and Severnaya Zemlya). Yet, none of these data are freely available for download. Hence, the dataset under consideration is unique, profound and useful for future utilization.

Technically, the dataset is divided into two parts – time series data and sample data, conveniently arranged in separate folders and spreadsheets. Each part is supplemented with a readme file, in which the data files are described, sample point locations are listed and some additional comments are given (e.g. all limitations and missing data are explained).

What makes this dataset even more unique is a time-lapse film, which was constructed from photographs taken every 2 hours by three cameras installed at site. This is a very convenient supplement to the collected data, as it gives a good overview of the test site along with the opportunity to correct some of the probable faults in the data simply by visualizing the environs.

The presented dataset provides excellent material for macro-scale hydrological modelling, e.g. soil moisture modelling in permafrost environment. The supplementary article gives a comprehensive explanation of the dataset, the materials and methods used for its collection and preliminary results overview.

The dataset is suitable for publication with minor corrections listed below.

Special suggestions:

- Vegetation height measurements made by the AWS require an additional explanation, as it is unclear from the text how this data can be treated and told apart from snow height
- A GIS layer comprising all location points and transects could be an unobligatory but useful supplement
- The basin topography and lake bathymetry data, mentioned in the article, are necessary to include in the dataset

Technical corrections:

- On line 1 of page 718 of the article there are two spelling mistakes in the words "measurements" and "echo sounding"