ANTARCTIC LAKES: THE HYDROMETEOROLOGICAL DATA COLLECTED DURING TWO SUMMERS IN THE SCHIRMACHER AND THALLA HILLS OASES.

Shevnina Elena ¹, Gaidashov Alexey ², Baikov Sergey ³
¹ Finnish Meteorological Institute, ² Belarussian Antarctic expedition, ³ Belarussian Academy of Science.

Summary. Data is among other parts of a scientific investigation. In this case, the data are the numbers and information gathered with experimentation, it can be further analyzed with scientific methods. The results of the analysis and conclusions are published as scientific papers, and some of them lead to messages to a community. Thus, the data of various sorts/ kinds/types are included into each stage of a scientific investigation. In this context, the data management is important step to plan a successful study. The poster presents the data obtained specifically to study a water balance and thermal regime of the lakes in the Antarctic oases. We focused on the data collected in the field with different measurement methods and tools. The data collections need to contain enough descriptions (metadata) allowing further "re-use" data for other scientific studies. The aim of the poster to rise discussions on (a) a content of the metadata should accompanied the data of the field experiments, (b) platforms available to publish the data, (c) a type of access for these data. The poster shows one example of sharing and publication of the meteorological and hydrological data collected during season 2017-2018 in the Schirmacher and season 2018-2019 Thalla Hills oases.

2017 – 2019:

Metadata.
Period of observation, Instrument name/producer, Serial number, Latest calibration report, Deploying report, Location, Date (UTC zone), Value.

2019 – 2020:

SA: 2 data sets published in Zenodo platform.


Observations on the hydrometeorological variables near the station Gora Vechernyya are available on request. The data set include the instrumental and visual observation on the air temperature, atmospheric pressure, wind speed and direction, water level of the lakes Verhnee and Nignee, ice cover phases on lakes. The observational period cover the period of January, 2018 – March, 2019.
Contact: Alexey Gaidashov, alexis_33@inbox.ru

2019 – 2020:


Lake physiography (WG1)
Surface area (Fig. 4), location, depth, volume, level stage.

Thermal regime (WG2)
Lakes' water temperature, ice cover phase, ice thickness

Water balance (WG3), snow cover properties
Snow et (SE): GPS surveys + Unmanned air crafts (Fig. 4)
Snow depth (SD): sticks, echo sounding.
Snow density (SDn): snow tube + density profiles.

Chemistry and biota (WG4)
Lakes' water samples, snow/soil samples.

Acknowledgments. The study is supported by Academy of Finland (contract number 304345) with logistic by the Finnish Antarctic Research, the Russian Antarctic Expedition and the Belarussian Antarctic expedition.