High-resolution hydrometeorological data from seven small coastal watersheds, British Columbia, Canada, 2013-2019

This data set contains the first five water years (Oct 1, 2013 – Sep 30, 2019) of continuous stream discharge, rain, total precipitation, snow depth, air temperature, wind, relative humidity and solar radiation records from seven hydrometric and fourteen meteorological stations for seven small watersheds at Calvert and Hecate Islands, British Columbia, Canada. Hydrometric stations are installed near the outlet and meteorological stations are installed in a tight network spanning the entire elevation gradient. The stations are connected to a telemetry network facilitating online data storage to overcome accessibility issues related to the observatory's remote setting. Streamflow was measured using a novel automated method, and quantitative uncertainty estimations are provided with the streamflow data. All data are provided at the hourly and 5-minute timestep except for snow depth which is only presented in hourly due to the high degree of noise at the 5-minute level. High data quality is assured through systematic and thorough quality control methods. This dataset was prepared for publishing in the companion ESSD journal article.

This package contains the following data .csv files:

- *2013-2019_Rad_5min*
- *2013-2019_Rad_Hourly*
- *2013-2019_Rain_5min*
- *2013-2019_Rain_Hourly*
- *2013-2019_RH_5min*
- *2013-2019_RH_Hourly*
- *2013-2019_Ta_5min*
- *2013-2019_Ta_Hourly*
- *2013-2019_WindSpd_5min*
- *2013-2019_WindSpd_Hourly*
- *2013-2019_WindDir_5min*
- *2013-2019_WinDir_Hourly*
- *Q_5min_626*
- *Q_5min_693*
- *Q_5min_703*
- *Q_5min_708*
- *Q_5min_819*
- *Q_5min_844*
- *Q_5min_1015*
- *Q_Hourly*
- *2013-2019_SnowDepth_Hourly*

For details on the methodology used, a selection of descriptive results and a description of the study area and general limitations, please see the respective README documents found within this package. Creating data packages requires many scientists and data managers involved with science coordination, data aggregation, quality control, and data management. In light of the effort required to create data packages, we request that in addition to following the CC-BY license terms, that users 1) respect the data providers, and provide helpful feedback on data quality, and 2) communicate and/or collaborate with Hakai researchers if you are considering using this dataset for manuscripts or other forms of reporting. Please contact emily.haughton@hakai.org for any questions.