## **ECCC Lake Winnipeg data QA/QC log file**

There have been some changes in the processing of the buoy data over the years. In particular, there has been a change in the communication network with most of the buoys. The goal is for all buoys to be transferred over to this communication network in the coming years.

As such, there are currently two feeds of data:

1. The older data stream, i.e., buoys still reporting in the **old communication network**
* This data are updated on DFO web site:  [Wave data available on-line](https://meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/waves-vagues/data-donnees/index-eng.asp)
* It can be streamed from the CIOOS ERDDAP: [ERDDAP - Realtime data from Environment and Climate Change Canada buoys - Data Access Form](https://data.cioospacific.ca/erddap/tabledap/DFO_MEDS_BUOYS.html#_gl=1*1am31im*_ga*NjUwMzAzNTcuMTczMTA3NzEyMA..*_ga_B7XMBXNSYV*MTczMTA3NzEyMC4xLjAuMTczMTA3NzEyMC4wLjAuMA..)
* Format and descriptions of the variables for data on DFO web site: <https://meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/waves-vagues/formats-eng.html>
* Additional information on the status of the buoys, including instrument status, are available from the buoy status reports at <https://meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/waves-vagues/msc-smc/index-eng.html>
1. Current data from the **new communication network** (all Lake Winnipeg buoys have been transferred over to this network, since 2021-09 or 2022-06)
* The CIOOS ERDDAP stream can be found here: [ERDDAP - Realtime data from Environment and Climate Change Canada buoys (Meteorological Service of Canada) - Data Access Form](https://data.cioospacific.ca/erddap/tabledap/ECCC_MSC_BUOYS.html#_gl=1*138alek*_ga*MTI2MDIyNjI4Mi4xNzI4Mzk2MDk1*_ga_B7XMBXNSYV*MTczMDgyMDMzNS4xMS4xLjE3MzA4MjE5MTguMC4wLjA.)
* Documentation can be found here: <https://collaboration.cmc.ec.gc.ca/cmc/cmos/public_doc/msc-data/obs_station/SWOB-ML_Product_User_Guide_e.pdf>

**QA/QC Notes**

* The north basin buoy C45144 was removed September 26th, 2019 and was not deployed again until June 16th, 2022. The retrieval date was September 23, 2022. Any data during 2021 should be disregarded, as well as data over the winter. This data was the result of continued transmission while the buoy was in storage.
* Buoy C45145 should be named Lake Winnipeg Narrows, instead of Lake Winnipeg North.
* Buoys might have more than one sensor per measured variable (eg. Anemometers, atmospheric pressure). Normally the first available value will be the “official” value.
* Refer to different buoy status reports to validate which instruments are valid or not for period of time:  <https://meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/waves-vagues/msc-smc/index-eng.html>
* Data received from the buoys are near-real-time, and are not fully quality-controlled. Buoy positions are checked, however, and assigned a quality control flag of 7 if the buoy is significantly off-position.
* Buoys might have been deployed in different locations over the years.