**Table 1.** Description of dataset

|  |  |
| --- | --- |
| **Title of dataset** | Physico-chemical and morphometric data from the Stage de Limnologie at at the Station de Biologie des Laurentides (SBL), Université de Montréal |
| **Dataset identifier** | (DOI of Zenodo) |
| **Abstract** | Here we provide three datasets that combine profiles of oxygen, pH, conductivity, water temperature and light; the average concentrations of Chlorophyll a, Total Phosphorus (TP) and water color for each strata; basic morphometric features such as average depth, maximum depth, lake volume, lake area and watershed area for 6 lakes in the Laurentian region of Quebec in close proximity to, or at the Station de Biologie des Laurentides (SBL), the Université de Montréal field station. Original data come from samples collected during the undergraduate field course in limnology between 2016 and 2018 in late summers. |
| **Keywords** | Lake, chlorophyll a, water color, TP, morphometry, profiles |
| **Data curator** | Richard LaBrie |
| **Position of data author** | Course TA |
| **Address of data author** | 90 avenue Vincent d’Indy, Outremont, H2V 2S9 |
| **Email address of data author** | richard.labrie90@gmail.com |
| **Data contributors** | All undergraduate students, teacher assistants and profs that have taken the class in 2016, 2017 and 2018 |
| **ORCID** | 0000-0003-1681-4888 |
| **ORCID (all authors; seperate line)** |  |
| **Primary contact people for dataset** | Roxane Maranger and Jean-François Lapierre |
| **Position of primary contact people** | Professors, Scientific director of the Station de Biologie |
| **Address of primary contact person** | Same as above |
| **Email address of primary contact person** | [r.maranger@umontreal.ca](mailto:r.maranger@umontreal.ca) [jfrancoislapierre@gmail.com](mailto:jfrancoislapierre@gmail.com) |
| **Organization associated with the data** | SBL, UdeM |
| **Usage Rights** |  |
| **Geographic region** | Laurentian region of Quebec |
| **Geographic coverage** | Laurentian region of Quebec |
| **Lat, Long Northwest** |  |
| **Lat, Long Southeast** |  |
| **Temporal coverage - Begin date** | 2016 |
| **Temporal coverage - End date** | 2018 |
| **General study design** | Stage de limnologie is a class to show basic limnological techniques to undergraduate students |
| **Study extent** | 6 lakes sampled in the Laurentian region of QC |
| **Methods description** | Classic protocols used, protocol manual available upon request |
| **Laboratory, field, or other analytical methods** | Available above |
| **Quality control** | Good for teaching |
| **Additional information** |  |

**Table 2.** Description of the variables (i.e., columns) in dataset 1

|  |  |  |  |
| --- | --- | --- | --- |
| **Attributes Name** | **Attribute Label** | **Definition** | **Units** |
| date\_time | Lake | Date and time of the sampling, YYYY-MM-DD HH:mm | *N/A* |
| lat | Latitude | Latitude of sampling | Degrees North |
| lon | Longitude | Longitude of sampling | Degrees East |
| water\_body | Water body | Lake or stream | N/A |
| water\_body\_name | Water body name | Name of the lake or stream sampled | N/A |
| water\_temp | Water temperature | Water temperature | °C |
| conductivity | conductivity | Conductivity | µS cm-1 |
| oxygen\_conc | Oxygen concentration | Oxygen concentration | mg L-1 |
| oxygen\_perc | Oxygen percentage | Oxygen concentration in percentage | *%* |
| water\_pH | Water pH | Water pH | N/A |
| light\_io | Light io | Light at the surface of the water body | µmol Photon m-2s-1 |
| light\_iz | Light iz | Light at depth of the water body | µmol Photon m-2s-1 |
| water\_color | Water color | Absorbance at 440nm | nm-1 |
| TP | Total phosphorus | Total phosphorus concentration | µg L-1 |
| chla | Chlorophyll a | Chlorophyll a concentration | µg L-1 |
| strata | Water strata | Epi-, meta-, or hypolimnion | N/A |
| water\_zone | Pelagic/littoral | Where sampling was done | N/A |
| water\_depth | Water depth | Water depth of profiles | m |
| atm\_pressure | Atmospheric pressure | Atmospheric pressure | mmHg |
| lake\_area | Lake area | Lake area | km² |
| watershed\_area | Watershed area | Area of the lake’s watershed | km² |
| elevation | Elevation | Elevation of the waterbody as compared to sea level | m |
| lake\_volume | Lake volume | Lake volume | km³ |
| replicate | Replicate | Replicate number for TP, chlorophyll a and water color | N/A |