

# Metadata

|                                     |  |
|-------------------------------------|--|
| <b>Standardized Instrument Name</b> | METEOROLOGICAL STATIONS  |
| <b>Scheme URI</b>                   | <a href="http://vocab.nerc.ac.uk/collection/P19/current/PLSR0226/">http://vocab.nerc.ac.uk/collection/P19/current/PLSR0226/</a>  |
| <b>Term URI</b>                     | SDN:P19::PLSR0226  |
| <b>Instrument DOI</b>               |  |
| <b>Instrument Unique ID</b>         | 30023406813390   |
| <b>ID Type</b>                      | Serial Number  |
| <b>Model No.</b>                    | H22-E14, SOH118303   |
| <b>Instrument Type</b>              | Baseline   |
| <b>Description</b>                  | Made up of multiple components listed below. Serial number is Iridium Weather station IMEI Equipment cost: \$9,904.50 + Iridium satellite Premium Plan: \$1,350 Sensor details found in attachment - Instrument Details - HOBO MMF Weather Station 1   |
| <b>Manufacturer</b>                 | Hoskin Scientific Limited  |
| <b>Manufacturer type</b>            | Organizational   |
| <b>Notes</b>                        | HOBO brand field gear that includes various sensors attached to tripod outfitted with solar panel and battery located in housing box. This meteorological station is located in St. Laurent and is owned by the Manitoba Métis Federation (MMF). Calibration certificates stored in Lab Collector. They can be provided upon request. Site is currently decommissioned due to sensor and battery failure. Archived data collected prior to decommissioning will be made available. When active again, link to dataset page of station will be placed here. |
| <b>Sensor Details</b>               |  |
| <b>Sensor Details 1</b>             |  |
| <b>Instrument Sensor Name</b>       | Temperature and Relative Humidity  |
| <b>Instrument Sensor Serial No.</b> | 21048243   |
| <b>Sensor Range</b>                 | Temperature: -40°C to 75°C (-40°F to 167°F); RH: 0-100% RH at -40° to 75°C (-40° to 167°F); exposure to conditions below -20°C (-4°F) or above 95% RH may temporarily increase the maximum RH sensor error by an additional 1%   |

**Sensor Sensitivity** Temperature:  $\pm 0.21^{\circ}\text{C}$  from  $0^{\circ}$  to  $50^{\circ}\text{C}$  ( $\pm 0.38^{\circ}\text{F}$  from  $32^{\circ}$  to  $122^{\circ}\text{F}$ ); RH:  $\pm 2.5\%$  from 10% to 90% RH typical to a maximum of  $\pm 3.5\%$  including hysteresis at  $25^{\circ}\text{C}$  ( $77^{\circ}\text{F}$ ); below 10% and above 90%  $\pm 5\%$  typical

**Sensor Units**  $^{\circ}\text{C}$  and %

**Last Calibration Date**

## Sensor Details 2

**Instrument Sensor Name** Photosynthetically Active Radiation (PAR)

**Instrument Sensor Serial No.** 21040570

**Sensor Range** 0 to 2500  $\mu\text{mol}/\text{m}^2/\text{sec}$ , wavelengths 400 to 700 nm

**Sensor Sensitivity**  $\pm 5 \mu\text{mol}/\text{m}^2/\text{sec}$  or  $\pm 5\%$ , whichever is greater in sunlight; additional temperature induced error  $\pm 0.75 \mu\text{mol}/\text{m}^2/\text{sec}/^{\circ}\text{C}$  from  $25^{\circ}\text{C}$  ( $0.42 \mu\text{mol}/\text{m}^2/\text{sec}/^{\circ}\text{F}$  from  $77^{\circ}\text{F}$ )

**Sensor Units**  $\mu\text{mol}/\text{m}^2/\text{sec}$

**Last Calibration Date**

## Sensor Details 3

**Instrument Sensor Name** Barometric Pressure

**Instrument Sensor Serial No.** 20812842

**Sensor Range** Rated for  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ , must be used inside logger case, w/ 10 cm cable

**Sensor Sensitivity**  $\pm 3.0 \text{ mbar}$  (0.088 in. Hg) over full pressure range at  $25^{\circ}\text{C}$  ( $77^{\circ}\text{F}$ ); maximum error of  $\pm 5.0 \text{ mbar}$  (0.148 in. Hg) over  $-40^{\circ}$  to  $70^{\circ}\text{C}$  ( $-40^{\circ}$  to  $158^{\circ}\text{F}$ )

**Sensor Units** mbar

**Last Calibration Date**

## Sensor Details 4

**Instrument Sensor Name** Wind sensor/monitor

**Instrument Sensor Serial No.** 21055171

**Sensor Range** S-WCB-M003: 0 to 50 m/s (0 to 112 mph)

**Sensor Sensitivity** 0.20 m/s (0.46 mph) and 1.4 degrees

**Sensor Units** m/s and degrees

**Last Calibration Date**

## Sensor Details 5

|   |  |
|---|--|
| <b>Instrument<br/>Sensor Name</b>           | Rain Gauge   |
| <b>Instrument<br/>Sensor Serial<br/>No.</b> | 21050257   |
| <b>Sensor Range</b>                         | 0 to 12.7 cm (0 to 5 in.) per hour, maximum 4000 tips per logging interval |
| <b>Sensor<br/>Sensitivity</b>               | 0.01 in. (S-RGA-M002) or 0.2 mm (S-RGB-M002)                               |
| <b>Sensor Units</b>                         | mm   |
| <b>Last Calibration<br/>Date</b>            |  |

## Related Datasets

|              |   |
|--------------|---|
| <b>Title</b> | St Laurent Li Taan Aen Staansyoon_17060   |
| <b>URL</b>   | <a href="https://canwin-datahub.ad.umanitoba.ca/data/fr/dataset/stlaurent-metdata_17060">https://canwin-datahub.ad.umanitoba.ca/data/fr/dataset/stlaurent-metdata_17060</a> |