

Metadata

Standardized Instrument Name	METEOROLOGICAL STATIONS
Scheme URI	http://vocab.nerc.ac.uk/collection/P19/current/PLSR0226/
Term URI	SDN:P19::PLSR0226
Instrument DOI	
Instrument Unique ID	300534063017060
ID Type	Serial Number
Model No.	H22-E14, SOH118303
Instrument Type	Baseline
Description	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 4
Manufacturer	Hoskin Scientific Limited
Manufacturer type	Organizational
Notes	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). Previously it was occupied by a different weather station setup, which was decommissioned due to sensor failures, and recommissioned at a new location with new sensors. Read deployment details for more information. Calibration certificates stored in Lab Collector. They can be provided upon request.
Sensor Details	
Sensor Details 1	
Instrument Sensor Name	Temperature and Relative Humidity
Instrument Sensor Serial No.	21238286
Sensor Range	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° to 50°C ($\pm 0.38^{\circ}\text{F}$ from 32° to 122°F); RH: $\pm 2.5\%$ from 10% to 90% RH typical to a maximum of $\pm 3.5\%$ including hysteresis at 25°C (77°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. 21181960

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°C ($0.42 \mu\text{mol}/\text{m}^2/\text{sec}/^{\circ}\text{F}$ from 77°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. 20812849

Sensor Range Rated for -40°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°C (77°F); maximum error of $\pm 5.0 \text{ mbar}$ (0.148 in. Hg) over -40° to 70°C (-40° to 158°F)

Sensor Units mbar

Last Calibration Date

Sensor Details 4

Instrument Sensor Name Wind sensor/monitor

Instrument Sensor Serial No. 21292310

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

Instrument Sensor Name	Rain Gauge
Instrument Sensor Serial No.	21201869
Sensor Range	0 to 12.7 cm (0 to 5 in.) per hour, maximum 4000 tips per logging interval
Sensor Sensitivity	0.01 in. (S-RGA-M002) or 0.2 mm (S-RGB-M002)
Sensor Units	mm
Last Calibration Date	

Related Datasets

Title	St Laurent Li Taan Aen Staansyoon_17060
URL	https://canwin-datahub.ad.umanitoba.ca/data/fr/dataset/stlaurent-metdata_17060

Deployment details

Title	St Laurent Li Taan Aen Staansyoon_17060
URL	https://canwin-datahub.ad.umanitoba.ca/data/fr/deployment_details/st-laur-17060-deploy