

## **BERMS Temporary Network (USDA)**

In coordination with the Canada Soil Moisture Experiment 2010 (CANEX-SM10), the BERMS Temporary Network consisted of 20 single stations, each with a Stevens Water Hydra Probe installed horizontally at 5 cm depth from the top of the mineral soil. This provides an approximate sensing volume that includes soil from 3 cm to 7 cm depth. This installation allows for soil water to flow vertically through the sensing tines. The placement of these sensors in the mineral soil is necessary to allow proper contact with the soil, and also to correspond with L-band satellite remote sensing depths, which can with accurate radiative transfer modeling pass through vegetation as well as organic layers on the forest floor. There is a considerable depth of organic material on the surface, frequently greater than 10 cm for BERMS region.

A calibration for the probes is calculated from physically collected soil samples with the hydra sensors during some intensive sampling events. A calibrated network average is provided in the file.

File: Final\_BERMS\_Temporary\_Network.xls

Sheets Name:

All\_Sites: all sites soil moisture VSM ( $\text{m}^3/\text{m}^3$ ) and soil temperature Temp ( $^{\circ}\text{C}$ ) data

Averages: A time series of the raw ( $\text{m}^3/\text{m}^3$ ) and calibrated ( $\text{m}^3/\text{m}^3$ ) soil moisture averages for the network

Tmp##\_##: Raw data files for each station, first number is the BERMS id, the second number is the logger id.

### **Science Contact for questions regarding data:**

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1-301-504-6461

\*\*\*A scientific reference for this data is under review and can be provided when accepted for publication.

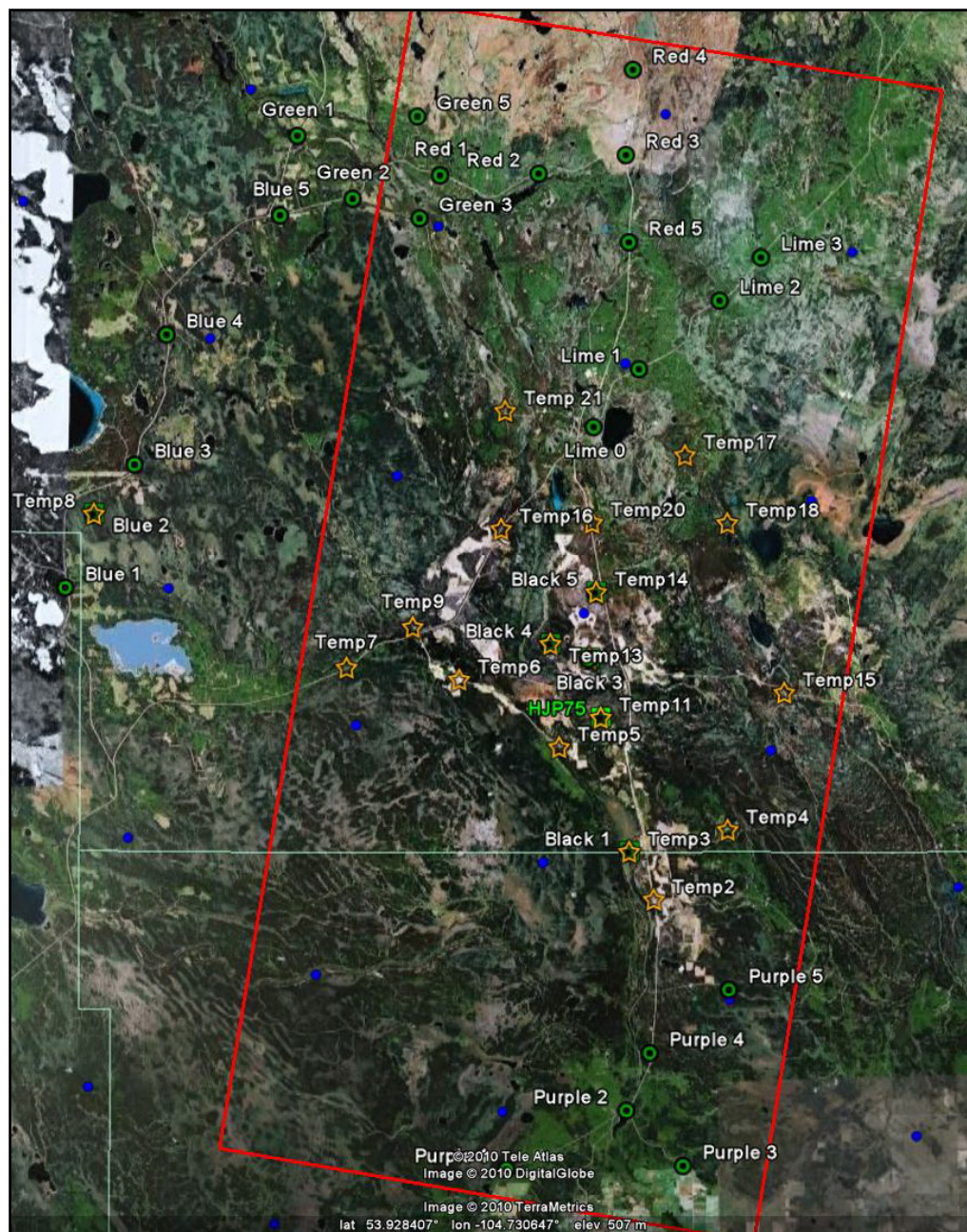


Figure 1: A map of the BERMS Temporary Network.

Table 1: Locations of the 20 BERMS Temporary Network Stations. Latitude and Longitude are in WGS84.

BTN_ID	Latitude	Longitude
Temp 1	53.75019	-104.73765
Temp 2	53.77664	-104.57436
Temp 3	53.80175	-104.61664
Temp 4	53.81389	-104.52961
Temp 5	53.84129	-104.64045
Temp 6	53.90536	-104.7481
Temp 7	53.90392	-104.88223
Temp 8	53.98731	-105.1177
Temp 9	53.9257	-104.81981
Temp 10	54.01657	-104.68665
Temp 11	53.87593	-104.64505
Temp 12	53.9082	-104.65607
Temp 13	53.91638	-104.69217
Temp 14	53.94474	-104.64957
Temp 15	53.88911	-104.47154
Temp 16	53.97913	-104.73696
Temp 17	54.02065	-104.56332
Temp 18	53.98303	-104.52583
Temp 20	53.98278	-104.65233
Temp 21	54.04424	-104.73364