

National Centre for Livestock and the Environment Weather Station

Station description:

The weather station is situated in the centre of an experimental field (49.64°N, 97.16°W; 235 m a.s.l.) at the University of Manitoba Glenlea Research Station, approximately 20 km south of Winnipeg, MB, on the Red River Valley floodplain. The weather station was installed in August 2005 and is located on an undisturbed, grassed area. The station was purchased with CFI funds and is operated and maintained by the Department of Soil Science and the Soil Ecology Laboratory.

Variables in Daily Data file (instrument model and manufacturer in brackets):

All missing data is denoted NaN for Not a Number

Timestamp – date as day/month/year

Year – Year

DOY – Day of Year

AirT_Avg - average air temperature, 2 m above surface (HMP45C, Vaisala Inc.)

AirT_Max - maximum air temperature, 2 m above surface (HMP45C, Vaisala Inc.)

AirT_Min - minimum air temperature, 2 m above surface (HMP45C, Vaisala Inc.)

SoilT_2cm through SoilT_100cm - average soil temperatures at specified depths (107B Soil/Water Temperature Probe, Campbell Scientific Inc.)

Solar_Total - total incoming solar radiation, 2.25 m above surface (SP-LITE Silicon Pyranometer, Kipp & Zonen)

WindSpeed - average horizontal wind velocity, 3 m above surface (05103-10 Wind Monitor, R.M. Young Company)

Precipitation - total precipitation (T-200B Series Precipitation Gauge, Geonor Inc.)

VMC_10cm and VMC_30cm - average volumetric soil moisture content at specified depths (EC-10 ECH₂O Dielectric Aquameter, Decagon Devices Inc.)