

Title: Meso 18-19 UAH Berm Surface Dataset

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1.0 Dataset Overview

The UAH berm surface data is collected 24/7/365. 24 hours of data is provided within each file.

2.0 Instrument Description

The UAH berm is located at the SWIRLL building on the UAH campus. The berm has 6 main instrum AGL.

- RM Young wind monitor
- Epply pyranometer
- Vaisala BPTB210 barometer with static pressure head
- Vaisala platinum resistance temperature detector, and Vaisala Humicap 180 capacitive relative humidity sensor

Texas Electronics rain gauges:

- gauge 1 - model TR-525I (154mm funnel diam.) - 0.01 inches (0.254 mm) resolution

Live and archived data can be found at <https://www.nsstc.uah.edu/mips/data/current/surface/>

3.0 Data Collection and Processing

Data is collected at 5 sec intervals. No data processing has been completed.

4.0 Data Format

The UAH BERM surface station data files are named brm_YYYYMMDD_sfc.dat, where:

YYYY -> year

MM -> month

DD -> day

sfc.dat -> sfc station data

A sample data line is given below:

(Column #) | 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

|
101,2006,208,1731,40.5,995.68,87.258,57.475,70.089,85.156,3.8024,232.09,498.77,0,86.122,8
4.267

The data file records, column by column, are:

COLUMN VARIABLE

- 0 -> Program Constant
- 1 -> Year
- 2 -> Julian Day
- 3-4 -> Hour & minute, Second.fraction-of-second (UTC)
- 5 -> Pressure - (mb)
- 6 -> Temperature (F) (2m)
- 7 -> Dewpoint (F) (2m)
- 8 -> RH (%) (2m)
- 9 -> Temperture (F) (tower) (10m)
- 10 -> Wind Speed at 10m (tower) (m/s)
- 11 -> Wind Direction at 10m (tower) (deg)
- 12 -> Pyranometer (W/m²)
- 13 -> Rain Guage 1 (mm)
- 14 -> Temperature (F) (.5m)
- 15 -> Temperature (F) (1m)