

**Title:** VORTEX-SE 2018 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 raingauges:

- 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/m<sup>2</sup>)
  - 13 -> Rain Guage 1 (mm)
  - 14 -> Temperature (F) (.5m)
  - 15 -> Temperature (F) (1m)