

Title: VORTEX-SE 2017 UAH RaDAPS Ceilometer Dataset

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1.0 Dataset Overview

UAH has 2 Vaisala CL51 ceilometers that are mounted on two different mobile platforms. One ceilometer is mounted on the MIPS and one is mounted on the RaDAPS platform.

2.0 Instrument Description

UAH Utilizes Vaisala CL51. Measurements are made every 15 seconds with 30 m gate spacing. The ceilometer is a pulsed laser that operates at 0.905 um. The range is from 0 to 15 km, vertical resolution is 10 m and time resolution is 15 s.

3.0 Data Collection and Processing

Data is collected every 15 seconds. No processing has been completed.

4.0 Data Format

The file naming convention is: AYMMDDHH.dat where:

A -> Program constant

Y -> Last digit of Year

MM -> Month

HH -> Hour

.txt -> File Extension

The data is provided as a txt file that is comma separated which can easily be read in through Microsoft Excel. The header descriptions are:

Column 1: Date

Column 2: Time

Column 3: Status of detection

Column 4-6: Cloud Heights (ft)

Column 7: Signal Sum (for testing purposes)

Column 8+: Backscatter profile