

Vaisala DigiCORA tethered sonde system from the University of Notre Dame measured at the Sage Brush Site

TB-SB

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1.0 Data Set Overview

1.1 Time period covered by the data

September 25, 2012
September 26, 2012
September 28, 2012
September 29, 2012
October 1, 2012
October 2, 2012
October 3, 2012
October 6, 2012
October 7, 2012
October 9, 2012
October 10, 2012
October 14, 2012
October 15, 2012
October 18, 2012
October 19, 2012
October 20, 2012
October 21, 2012

May 2, 2013

May 5, 2013

May 11, 2013

May 21, 2012

May 23, 2013

May 26, 2013

May 31, 2013

1.2 Physical location (latitude, longitude, elevation)

40.121360, -113.12907, 1316.4480940000001

1.3 Instrument type

Tethersonde

1.4 Data provider

University of Notre Dame

1.5 Web address references

<http://www3.nd.edu/~dynamics/materhorn/>

https://www.eol.ucar.edu/field_projects/materhorn-x

2.0 Instrument Description

Vaisala DigiCORA tethered balloon system used to make profiles from the surface to 400m above ground level over a 20minute period (approximately 2 per hour during IOPs)



2.1 Instrument website

http://www.vaisala.com/Vaisala%20Documents/Vaisala%20News%20Articles/VN161/VN161_Vaisala_Launches_the_DigiCORA_Tethersonde_System.pdf

2.2 Table of specifications

Accuracy	Range	Frequency	Resolution
See individual instrument websites	See individual instrument websites	See individual instrument websites	See individual instrument websites

3.0 Data Collection and Processing

3.1 Description of data collection

3.2 Description of derived parameters and processing techniques used

Original data files are provided.

3.3 Description of quality assurance and control procedures

This dataset was not subject to any quality control or processing it has been provided in its original form.

3.4 Data intercomparisons

4.0 Data Format

4.1 Data file structure

ASCII tab separated, the exact structure provided by the file description.

4.2 File naming convention

dataProvider_instrument_instrumentType_startDateAndTime_endDateAndTime.extension

4.3 Data format

tab delimited ASCII

4.4 Data layout

A separate file for each release and release log in a separate file.

4.5 List of parameters with units, sampling intervals, frequency, range

Consult individual file headers and log files.

4.6 Data version number and date

raw, v1.0, October 2016

4.7 Description of flags, codes used in the data, and definitions

4.8 Data sample

Time	Press	Temp	Rh	Alt	Speed	Dir	Batt	P.Temp	Dew
S.H.	M.R.	Et	Ozone	O3Curr	O3Temp	AD1	AD2	AD3	AD4
AD5	AD6								
		hPa	°C	%	m	mps	deg	v	°C
		ppb	µA	°C	v	v	v	v	v
g/kg	s								
v									

14:14:51	869.76	15.4	44.7	1302	1.6	274	7.5	27.1	3.4
0.85	5.65	2.0	0.00	0.00	0.0	0.001	0.002	0.002	0.001
0.000	0.001								
14:14:53	869.62	14.7	45.0	1303	1.7	274	7.5	26.4	2.9
0.84	5.43	4.0	0.00	0.00	0.0	0.001	0.002	0.002	0.001
0.000	0.001								
14:14:54	869.60	15.5	46.0	1304	1.7	274	7.5	27.2	3.9
0.85	5.84	5.0	0.00	0.00	0.0	0.001	0.002	0.002	0.001
0.000	0.001								
14:14:55	869.87	15.0	46.1	1301	1.6	274	7.5	26.7	3.5
0.85	5.67	6.0	0.00	0.00	0.0	0.001	0.002	0.002	0.001
0.000	0.001								
14:14:56	869.82	15.4	48.0	1302	1.6	274	7.5	27.1	4.5
0.86	6.07	7.0	0.00	0.00	0.0	0.001	0.002	0.002	0.001
0.000	0.001								

5.0 Data Remarks

5.1 PI's assessment of the data

5.2 Missing data periods

5.3 Software compatibility

6.0 References

- [1] Fernando, H. J. S., E. R. Pardyjak, S. Di Sabatino, F. K. Chow, S. F. J. DeWekker, S. W. Hoch, J. Hacker, J. C. Pace, T. Pratt, Z. Pu, J. W. Steenburgh, C. D. Whiteman, Y. Wang, D. Zajic, B. Balsley, R. Dimitrova, G. D. Emmitt, C. W. Higgins, J. C. R. Hunt, J. G. Kniervel, D. Lawrence, Y. Liu, D. F. Nadeau, E. Kit, B. W. Blomquist, P. Conry, R. S. Coppersmith, E. Creegan, M. Felton, A. Grachev, N. Gunawardena, C. Hang, C. M. Hocut, G. Huynh, M. E. Jeglum, D. Jensen, V. Kulandaivelu, M. Lehner, L. S. Leo, D. Liberzon, J. D. Massey, K. McEnerney, S. Pal, T. Price, M. Sghiatti, Z. Silver, M. Thompson, H. Zhang, T. Zsedrovits, 2015: The MATERHORN – Unraveling the Intricacies of Mountain Weather, BAMS, doi: <http://dx.doi.org/10.1175/BAMS-D-13-00131.1>.