

Combo Probe (Ultrasonic Anemometer / Hot Film Anemometer) data provided by the University of Notre Dame measured at the East Slope Tower ES2 site

CP-ES2

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1.0 Data Set Overview

1.1 Time period covered by the data

Data for 2012 October 5, 6, 7, 8, **9**, 16, 17, 18, **19**, 20, 21, 22, 23

Highlighted dates indicate observation periods that have been analyzed in detail.

1.2 Physical location (latitude, longitude, elevation)

40.095680, -113.23769, 1298

1.3 Instrument type

Combo Probe (RM Young 81000 Ultrasonic Anemometer with embedded multisensor hotfilm probe)

1.4 Data provider

University of Notre Dame

1.5 Web address references

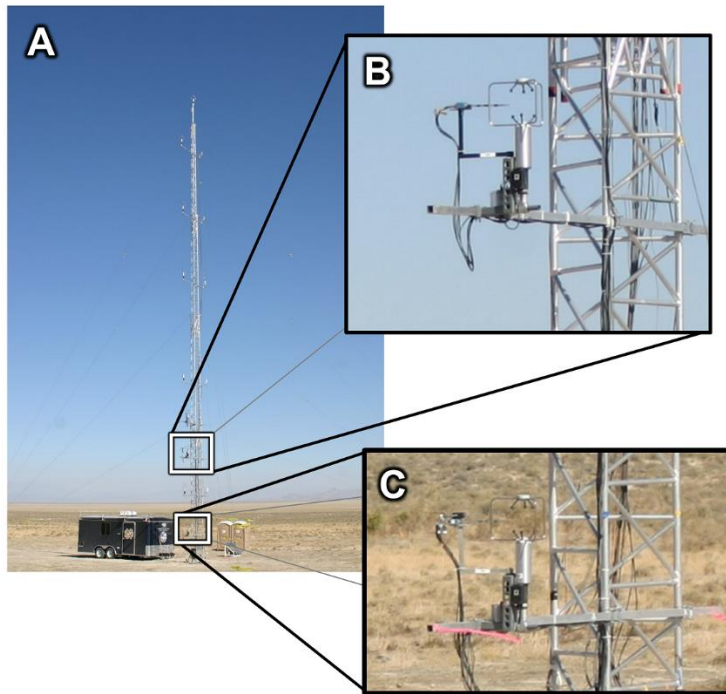
<http://www3.nd.edu/~dynamics/materhorn/>

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

2.0 Instrument Description

Combo probes mounted at 2 m (until October 18, 2012) and 6 m (2m added to the 6m level on October 18, 2012) above ground level during the Fall 2012 field campaign. The combo probe setup is capable of rotating the hotfilm probes over a 120 degree range. In order to capture the down valley and up valley flows the 2 m probe was relocated and mounted at the 6 m level to provide an additional combo probe

setup oriented in the opposite direction (see the added photograph presenting the setup used in the Spring 2013 experiment).



Fall 2012 Setup on the ES2 Tower (A) (before October 18, 2012), 6m Combo Probe (B), 2m Combo Probe (C)



*Note this is the configuration of two probes at the same level, however this photo was taken of the Spring 2013 setup

2.1 Instrument website

2.2 Table of specifications

Accuracy	Range	Frequency	Resolution
Contact P.I. regarding this information	Contact P.I. regarding this information	Contact P.I. regarding this information	Contact P.I. regarding this information

3.0 Data Collection and Processing

3.1 Description of data collection

3.2 Description of derived parameters and processing techniques used

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

4.2 File naming convention

4.3 Data format

4.4 Data layout

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

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

Not suitable for display

5.0 Data Remarks

5.1 PI's assessment of the data

This is a proprietary dataset, which requires interaction with the P.I. responsible for this dataset. Please direct any questions to the dataset P.I.

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. Kniewel, 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>.