

Grawmet Radiosonde System data provided by the University of Utah from the Playa launch site

RS-PL

Author(s):	Regarding data questions contact:
Sebastian W. Hoch Mailing address: 135 S 1460 E, Room 819 William Browning Bldg, Salt Lake City, UT, USA, 84112 Tel./Fax.: 801-581-7094/ , E-mail and web: sebastian.hoch@utah.edu, https://faculty.utah.edu/u0546592-Sebastian_W._Hoch	Mailing address: Tel./Fax.: / E-mail and web: ,

1.0 Data Set Overview

1.1 Time period covered by the data

Approximately September - October 2012 and May 2013. For specific times please refer to individual file names.

1.2 Physical location (latitude, longitude, elevation)

See 7th column of the data files., See 8th column of the data files., See 9th column of the data files.

1.3 Instrument type

Radiosonde

1.4 Data provider

University of Utah

1.5 Web address references

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

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

2.0 Instrument Description

Graw free flight radiosonde release location (approximately every 3 hours during IOP periods)



2.1 Instrument website

<http://www.graw.de/home/products2/Grawsoftware0/>

2.2 Table of specifications

Accuracy	Range	Frequency	Resolution
Wind speed accuracy < 0.2 m/s, Accuracy horizontal position < 5 m	Consult the manufacturer specifications.	Transmission- rate 1s	Temperature resolution 0.1 °C

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 were reprocessed with surface station weather data

3.3 Description of quality assurance and control procedures

Dataset was recalibrated in post-processing using service measurement stations near the release location

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.

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

Consult individual file headers.

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 [sec]	P [h Pa]	T [°C]	U [%]	Wsp [m/s]	Wdir [°]	Lon [°]
Lat [°]	Altitude [m]	Geo Pot [m']	MRI	RI	Dew	
[°C]	Vi Te [°C]	Rs [m/s]	D [kg/m3]	Azimuth [°]	Elevation	[°]
Range [m]						
0	898.0	19.60	17	3.0	315	-
112.324800	40.515700	0.0		0.0		238.8
	238.8 -6.0	20.1	0.0		1.068803	180
	41	0				
1	897.4	19.45	17	3.0	316	-
112.376487	40.490161	5.9		5.9		239.7
	238.8 -5.9	19.9	5.9		1.068619	57
	0	5220				
2	896.7	19.29	18	3.1	317	-
112.428175	40.464621	11.8		11.8		240.6
	238.7 -5.7	19.8	5.9		1.068436	57
	0	10442				

5.0 Data Remarks

5.1 PI's assessment of the data

The original land based measurements were not properly configured and were re-processed with Playa station data following the completion of the field campaign.

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. Knievel, 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>.