Stephen R. Springston (srs@bnl.gov)

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Last Update: 4/21/2015

Data Acknowledgement:

See www.arm.gov/publications/procedures

All instruments and the platform were provided with funds from the American Recovery and Reinvestment Act.

Program: GoAmazon IOP which for MAOS was conducted at the T3 site near Manacapuru, Amazonia, Brazil beginning ~2/1/2014.

Platform: The MAOS-A (Mobile Aerosol Observing System-Aerosol).

These file(s) contain(s) the met data measured in MAOS-A (Mobile Aerosol Observing System-Aerosol). Data are reported at 1- resolution. All zero, calibration and non-operational periods have been removed (empty field or NAN).

Instrument: These files contain the meteorological measurements made with a Vaisala WXT-520 sensor.

The sensor is located on top of the aerosol inlet of MAOS-A at roughly 10-m AGL. The sensor was aligned to true north by the Operator during setup. The appropriate 0 offset was entered into the sensor EPROM

Note that during the campaign there were intermittent data dropouts of ~1-5 s. It is not clear if this was a failure of the borrowed sensor or overloading of the acquisition computer. The quality of the reported data does not seem affected.

File Structure:

As follows convention, data are reported as tab-delimited ASCII files. Files are formatted such that they are self documenting. For each data row:

Row 1: Filename

Row 4 (col 1 only): ARM Climate Research Facility

Row 5: SitePlatform

Row 7: Last revised date

Row 9: Instrument

Row 13: Instrument Mentor/Affiliation

Rows 14-19: Comments (operational conditions, calibrations, etc.)

Rows 21-24: Constants (usually defined in Comments)

Row 35: Column title

Row 36: Column units line 1

Row 37: Column units line 2

Row 40: First row of data

Time - Time is reported in UTC as set by an NTP server. Following convention, the time is the beginning of the period. The parameter reported at this time is the average of all points >= the time and < the next time. Data are reported at 1-s resolution. All non-operational periods have been removed (empty field or NAN).

Accuracy and Precision:

Wind Speed/Direction - Units: m/s, degrees from true N. Uncertainties expressed in terms of the E/N resolved wind speed. Precision: 0.1 m/s resolution @ 1s. Accuracy: greater of ±0.3 m/s or ±3%

Air Temp - Units: C, Precision: ±0.1 C (resolution @ 1s). Accuracy: ±0.2 to ±0.7oC @ -50..60oC

Baro - Units: hPa, Precision: 0.1 hPa (resolution @ 1s). Accuracy: ±0.5 hPa @ 0..30oC; ±1 hPa @ -52..60oC

Relative Humidity - Units: %, Precision: 0.1% RH (resolution @ 1s). Accuracy: ±3% @ 0..90%RH; ±5% @ 90..100%RH

Precipitation - Units: mm, Precision: 0.01 mm (resolution @ 1 s). Accuracy: ±5% weather dependent

Posting History

4/24/2014 Posting to: c1.xdc.arm.gov /incoming/AOS\_QC/GoAmazon/psap3w

mao\_ReadMe\_Met.txt (This file in ASCII)

mao\_ReadMe\_Met.docx (This file in Word)

Monthly files of 1-Hz data as a tab-delimited text file and associated processing log file(s)

maomaosas1.met.01s.00.20131201.000000.m02.tsv

maomaosas1.met.01s.00.20131201.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20131201.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20140101.000000.m02.tsv

maomaosas1.met.01s.00.20140101.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20140101.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20140201.000000.m02.tsv

maomaosas1.met.01s.00.20140201.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20140201.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20140301.000000.m02.tsv

maomaosas1.met.01s.00.20140301.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20140301.000000.m02.tsv.plots.pdf

4/28/2014 Corrected the program description in

mao\_ReadMe\_Met.txt (This file in ASCII)

mao\_ReadMe\_Met.docx (This file in Word)

10/16/2014 Posting to: c1.xdc.arm.gov /incoming/AOS\_QC/mao/met

mao\_ReadMe\_met\_20141016.txt (This file in ASCII)

mao\_ReadMe\_met\_20141016.docx (This file in Word)

maomaosas1.met.01s.00.20140401.000000.m02.tsv

maomaosas1.met.01s.00.20140401.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20140401.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20140501.000000.m02.tsv

maomaosas1.met.01s.00.20140501.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20140501.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20140601.000000.m02.tsv

maomaosas1.met.01s.00.20140601.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20140601.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20140701.000000.m02.tsv

maomaosas1.met.01s.00.20140701.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20140701.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20140801.000000.m02.tsv

maomaosas1.met.01s.00.20140801.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20140801.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20140901.000000.m02.tsv

maomaosas1.met.01s.00.20140901.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20140901.000000.m02.tsv.plots.pdf

11/13/2014 Posting to: c1.xdc.arm.gov /incoming/AOS\_QC/mao/met

mao\_ReadMe\_met\_20141113.docx (This file in Word)

mao\_ReadMe\_met\_20141113.txt (This file in ASCII)

maomaosas1.met.01s.00.20141001.000000.m02.tsv

maomaosas1.met.01s.00.20141001.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20141001.000000.m02.tsv.plots.pdf

1/18/2015 Posting to: c1.xdc.arm.gov /incoming/AOS\_QC/mao/met

mao\_ReadMe\_met\_20150118.docx (This file in Word)

mao\_ReadMe\_met\_20150118.txt (This file in ASCII)

Monthly files of 1-Hz data as a tab-delimited text file, text processing log file(s) and associated pdf time series plots.

maomaosas1.met.01s.00.20141101.000000.m02.tsv

maomaosas1.met.01s.00.20141101.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20141101.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20141201.000000.m02.tsv

maomaosas1.met.01s.00.20141201.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20141201.000000.m02.tsv.plots.pdf

3/2/2015 Posting to: c1.xdc.arm.gov /incoming/AOS\_QC/mao/met

mao\_ReadMe\_met\_20150302.docx (This file in Word)

mao\_ReadMe\_met\_20150302.txt (This file in ASCII)

Monthly files of 1-Hz data as a tab-delimited text file, text processing log file(s) and associated pdf time series plots.

maomaosas1.met.01s.00.20150101.000000.m02.tsv

maomaosas1.met.01s.00.20150101.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20150101.000000.m02.tsv.plots.pdf

maomaosas1.met.01s.00.20150201.000000.m02.tsv

maomaosas1.met.01s.00.20150201.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20150201.000000.m02.tsv.plots.pdf

4/21/2015 Posting to: c1.xdc.arm.gov /incoming/AOS\_QC/mao/met

mao\_ReadMe\_met\_20150421.docx (This file in Word)

mao\_ReadMe\_met\_20150421.txt (This file in ASCII)

Monthly files of 1-Hz data as a tab-delimited text file, text processing log file(s) and associated pdf time series plots.

maomaosas1.met.01s.00.20150301.000000.m02.tsv

maomaosas1.met.01s.00.20150301.000000.m02.tsv.log.txt

maomaosas1.met.01s.00.20150301.000000.m02.tsv.plots.pdf