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NOAA Broadband Radiation Downwelling

Line ID	Year	DOY	Time [HHMM]	CR10X Battery Voltage	CR10X Battery Temp [degC]	Downwelling Shortwave Total 15952 [mV]	Downwelling Shortwave Total 15952 std [mV]	Downwelling Shortwave Total 15953 [mV]	Downwelling Shortwave Total 15953 std [mV]	Downwelling Shortwave Total 36763F3 [mV]	Downwelling Shortwave Total 36763F3 std [mV]	Downwelling Shortwave Total 060130 [mV]	Downwelling Shortwave Total 060130 std [mV]	Downwelling Shortwave Total 040101 [mV]	Downwelling Shortwave Total 040101 std [mV]	Downwelling Longwave Total 34309F3 [mV]	Downwelling Longwave Total 34309F3 std [mV]	Downwelling Longwave Total 34309F3 dome temp [mV]	Downwelling Longwave Total 34309F3 dome temp std [mV]	Downwelling Longwave Total 34309F3 case temp [mV]	Downwelling Longwave Total 34309F3 case temp std [mV]
101	2014	42	26	13.95	2.509	0.00639	0.00771	0.20151	0.00678	0.08829	0.01251	0.00456	0.00152	0.0069	0.0027	0.29351	0.00363	1312.5	1.9007	1313.0	2.1761

LineID	Year	DOY	Time [HHMM]	Outside temp [degC]	Downwelling Shortwave Total 040101 Air Temp [degC]	Downwelling Shortwave Total 15953 Air Temp [degC]
202	2014	42	26	7.94	1.271	17.64



Instrument Details						
Specifications	6	5	4	3	2	1
Measurement	Downwelling Shortwave Total	Downwelling Shortwave Total	Downwelling Shortwave Total	Downwelling Longwave Total	Downwelling Shortwave Total	Downwelling Shortwave Total
Serial #	040101	060130	36763F3	34309F3	15953	15952
Instrument Manufacturer	Kipp&Zonen CM22	Kipp&Zonen CM22	Eppley PSP	Eppley PIR	Eppley PSP	Eppley PSP
Type	Pyranometer (PSP)	Pyranometer (PSP)	Pyranometer (PSP)	Pyrgeometer (PIR)	Pyranometer (PSP)	Pyranometer (PSP)
Fan Included (y/n) If Yes, specify AC/DC fan	no	Yes; DC	Yes; AC	Yes; DC	no	Yes; DC
Blower (y/n)	Yes; AC	no	no	no	Yes; AC	no
Flow Rate	130 CFM	100 CFM	34 CFM	164 CFM	130 CFM	164 CFM
Case and Dome temps both measured (no/both/case/dome)	no	no	no	Case, Dome (**NOTE: case/dome data only valid after 12/8/2014)	no	no
Dome Correction Factor? (value/Not Applicable)	n/a	n/a	n/a	3.867	n/a	n/a
Heated (y/n)	no	Yes; 38.4Watts	no	no	Yes; 50Watts	Yes; 50Watts
Spray Nozzle (y/n)	no	Yes	Yes	Yes	no	no
Spray Distribution Angle (degrees/Not Applicable)	n/a	Vertical 25 degrees	Vertical 45 degrees	Vertical 60 degrees	n/a	n/a
Is dome facing upward or downward?	Upward	Upward	Upward	Upward	Upward	Upward
Radiation measurement upwelling or downwelling?	Downwelling	Downwelling	Downwelling	Downwelling	Downwelling	Downwelling
Calibration factors	8.51 microVolts/W/m ²	9.42 microVolts/W/m ²	8.9418 microVolts/W/m ²	295.858 W/mV/m ²	9.640 microVolts/W/m ²	8.603 microVolts/W/m ²
Calibration **NOTE**	**NOTE: The calibration values listed above are not authorized calibrations, but are instead calibration values that were determined by the technician in the field. After the campaign, these instruments will be properly calibrated and the data re-processed to reflect the proper calibration values.					

SPL Data Center

NOAA

FTP File locations at NOAA:

From SPL Data Center then transferred to:
 ftp://ftp.etl.noaa.gov/psd3/spl/raw/

File name: (as of 1/23/15) YYYY-MM-DD_StormRad.dat

Quicklooks

Processing

Historical Calibration Values:

**NOTE: The calibration values listed below with dates “1/1/2014 – present” are not authorized calibrations, but are instead calibration values that were determined by the technician in the field. After the campaign, these instruments will be properly calibrated and the data re-processed to reflect the proper calibration values.

- Downwelling Shortwave Total (Eppley PSP: 15952)
 8.603 microVolts/W/m² 1/1/2014 - present
 8.54 microVolts/W/m² 6/2/2007 – 12/31/2013
 9.07 microVolts/W/m² 6/16/2001 – 6/1/2007
 9.61 microVolts/W/m² 1/28/1998 – 6/15/2001
 9.65 microVolts/W/m² 4/10/1996 – 1/27/1998
 9.31 microVolts/W/m² 1/1/1995 – 4/9/1996

- Downwelling Shortwave Total (Eppley PSP: 15953)
 9.640 microVolts/W/m² 1/1/2014 - present
 8.79 microVolts/W/m² 6/2/2007 – 12/31/2013
 9.63 microVolts/W/m² 10/4/1999 – 6/1/2007
 10.01 microVolts/W/m² 5/1/1997 – 10/3/1999
 10.04 microVolts/W/m² 3/21/1996 – 4/30/1997
 9.40 microVolts/W/m² 1/1/1995 – 3/20/1996

- Downwelling Longwave Total (Eppley PIR: 34309F3)
 295.858 W/mV/m², Dome = 3.867 1/1/2014 – present
 287.770 W/mV/m², Dome = 3.50 7/13/2007 – 12/31/2013
 **NOTE: Data Columns (19-22) with Dome and Case temperature data, is not valid preceding December 8th, 2014.

- Downwelling Shortwave Total Eppley PSP: 36763F3)
 8.9418 microVolts/W/m² 1/1/2014 – present

- Downwelling Shortwave Total (K&Z CM22: 060130)
 9.42 microVolts/W/m² 1/1/2014 – present

- Downwelling Shortwave Total (K&Z CM22:040101)
 8.51 microVolts/W/m² 1/1/2014 – present

Example Plots:

Product

Example Product File: