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March 16, 2017

Ms. Lori Simmons
Arkansas Department of Health
4815 West Markham Street
Little Rock, Arkansas 72205
Via email Lori.Simmons@arkansas.gov

Re: Georgia-Pacific, Crossett Mill - Biweekly Air Monitoring Report for Hydrogen Sulfide

Dear Ms. Simmons,

Following is the biweekly data summary for the Georgia-Pacific (GP) hydrogen sulfide (H_2S) and meteorological monitoring program, at the GP Crossett mill, covering the calendar period of February 8, 2017 through February 21, 2017.

Summary of Results

Included in this report are three plots presenting H_2S concentrations calculated with varied rolling average periods (30-minute, 8-hour, and 24-hour). Please note, elevated H_2S concentrations were recorded on February 8th and 16th. The highest recorded 30-minute and 8-hour rolling averages are presented in the table below.

	Maximum Concentrations and Time Recorded	
Date	**30 minute**	**8 hour**
February 8, 2017	97.9 ppb at 00:14	67.1 ppb at 04:10 – 04:15
February 16, 2017	184.5 ppb at 08:18	55.3 ppb at 09:15 – 09:30

Also included in this report is a summary of results from the daily 1-point QC checks performed during this biweekly period. The QAPP establishes goals for precision and bias as a coefficient of variation (CV) <10% and ± 10%, respectively. Precision and bias are calculated in accordance with 40 CFR Part 58 Appendix A, Section 4.1.

Additionally, weekly automated zero adjustment shave been put in place beginning February 1, 2017, so as to limit the effect of the analyzer's zero drift. There were a total of two zero checks performed during this biweekly report period; both within the acceptable range of ± 1.5 ppb, as defined in the QAPP. Results for these zero checks are presented below.

Date	Zero Check
2/9/2017	-0.4
2/16/2017	0.2

There were multiple occurrences of data loss during this monitoring period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. On February 8th TRC personnel were on-site performing routine maintenance and quarterly calibrations, resulting in approximately 4 hours of data loss. There was a PC malfunction on February 19th responsible for approximately 2 hours of data loss, including the daily calibration check. Programming updates on February 20th and 21st caused minor data losses of less than 30 minutes each day. Results for available automated daily 1-point QC checks fall within the acceptable range, indicating the H_2S monitor was operating in accordance with the QAPP.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. All met parameters, with the exception of precipitation, have 100% data capture for this report period. On February 8th, the tipping bucket was cleaned and calibrated resulting in approximately two hours of missing precipitation data.

Please feel free to contact me if you have any questions or need any additional data.

Sincerely,

Jonathan Bowser
Manager, Air Quality and Meteorological Monitoring

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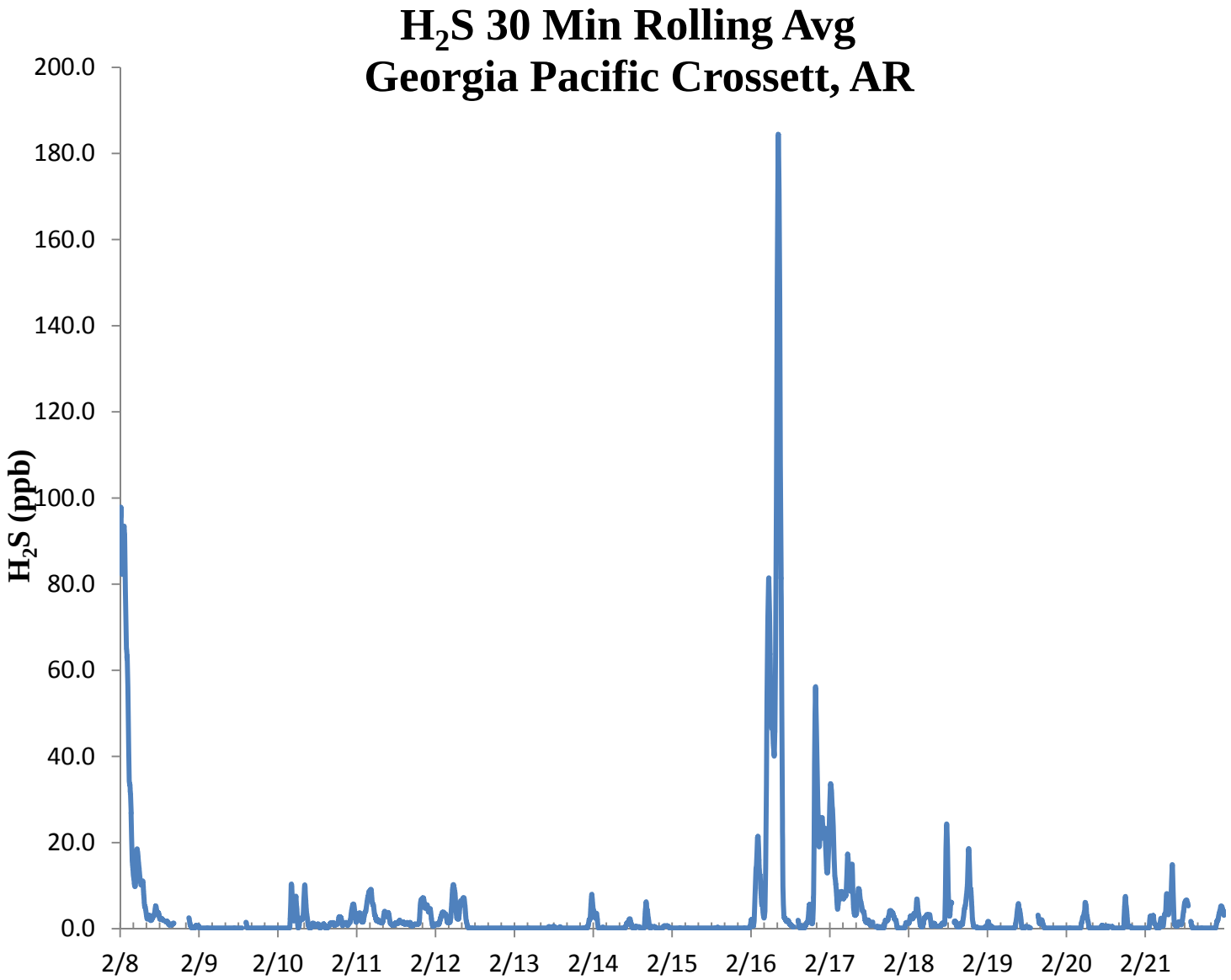
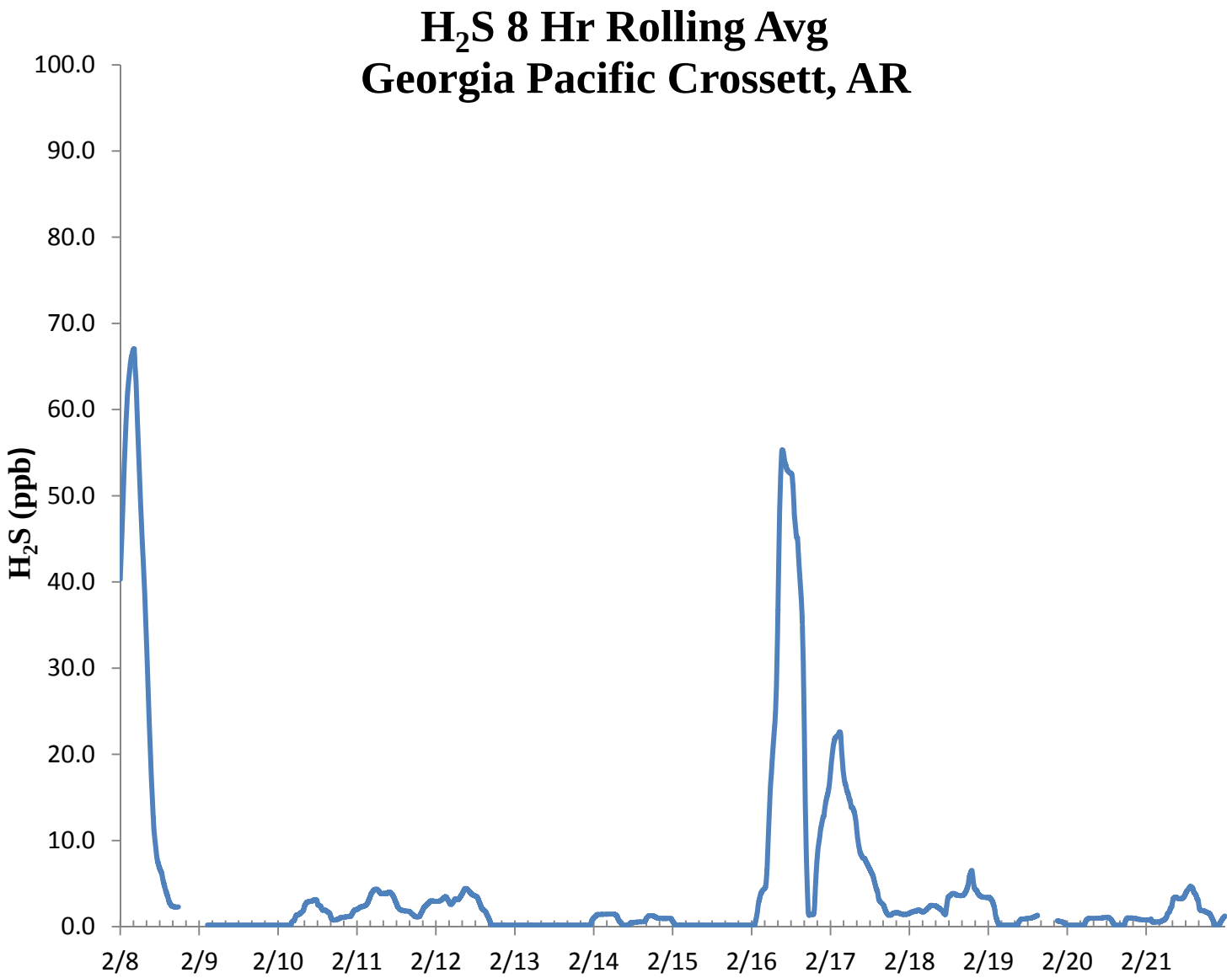
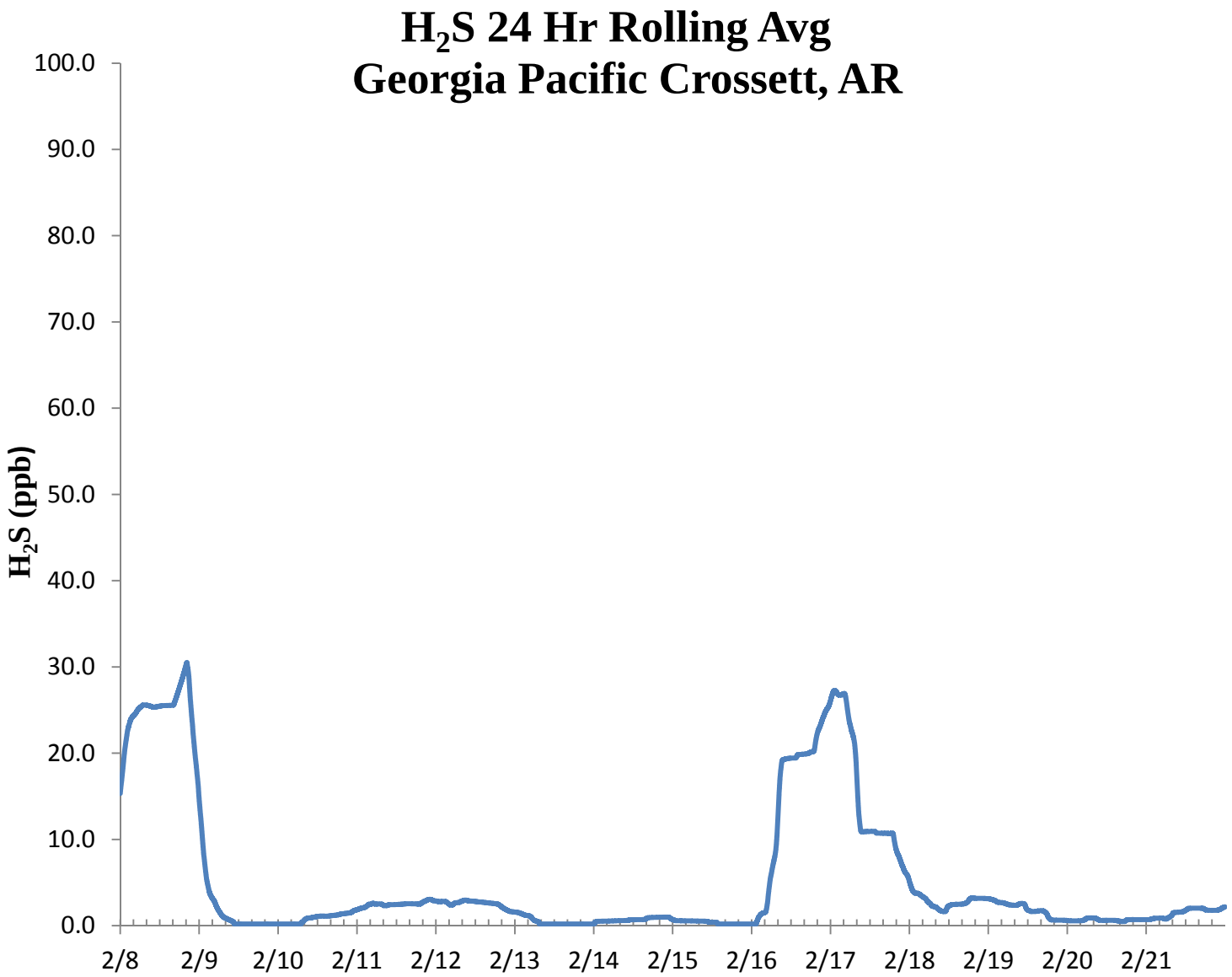
Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.gov


H2S 30 Min Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
200.0
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
2/8
2/9
2/10
2/11
2/12
2/13
2/14
2/15
2/16
2/17
2/18
2/19
2/20
2/21


H2S 8 Hr Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
2/8
2/9
2/10
2/11
2/12
2/13
2/14
2/15
2/16
2/17
2/18
2/19
2/20
2/21


H2S 24 Hr Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
2/8
2/9
2/10
2/11
2/12
2/13
2/14
2/15
2/16
2/17
2/18
2/19
2/20
2/21

H_2S Assessment

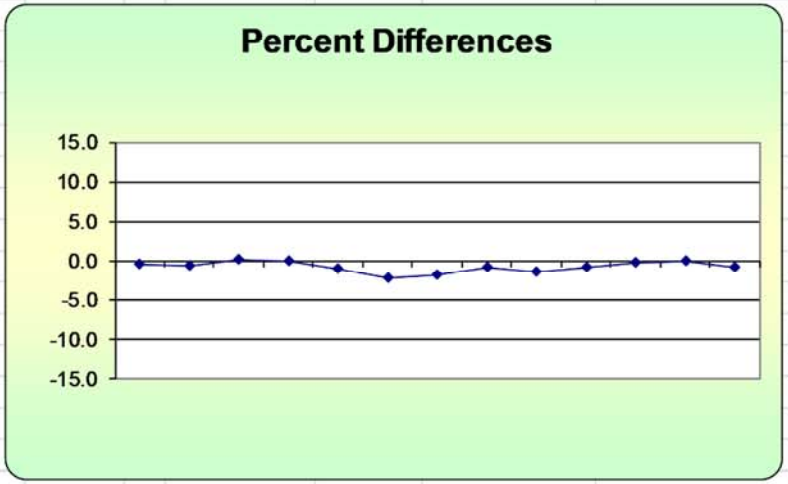
GP - Crossett, AR			Compound of Interest: H_2S					CV_{ub} (%)		Bias (%)	
Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d^2	|d|	$\|d\|^2$				
2/8/2017 13:00	69.7	70.0	-0.4	-1.000	0.184	0.429	0.184				
2/9/2017 13:00	69.6	70.0	-0.6	75th Percentile	0.327	0.571	0.327	n	S_d	S_{d2}	$\Sigma\|d\|$
2/10/2017 13:00	70.1	70.0	0.1	-0.286	0.020	0.143	0.020	13	0.689	1.380	10.286
2/11/2017 13:00	70.0	70.0	0.0		0.000	0.000	0.000	n-1	Σd	Σd^2	$\Sigma\|d\|^2$
2/12/2017 13:00	69.3	70.0	-1.0		1.000	1.000	1.000	12	-10.000	13.388	13.388
2/13/2017 13:00	68.5	70.0	-2.1		4.592	2.143	4.592				
2/14/2017 13:00	68.8	70.0	-1.7		2.939	1.714	2.939				
2/15/2017 13:00	69.4	70.0	-0.9		0.735	0.857	0.735				
2/16/2017 13:00	69.0	70.0	-1.4		2.041	1.429	2.041				
2/17/2017 13:00	69.4	70.0	-0.9		0.735	0.857	0.735				
2/18/2017 13:00	69.8	70.0	-0.3		0.082	0.286	0.082				
2/20/2017 13:00	70.0	70.0	0.0		0.000	0.000	0.000				
2/21/2017 13:00	69.4	70.0	-0.9		0.735	0.857	0.735				

"AB" (Eqn 4)
0.791
"AS" (Eqn 5)
0.661

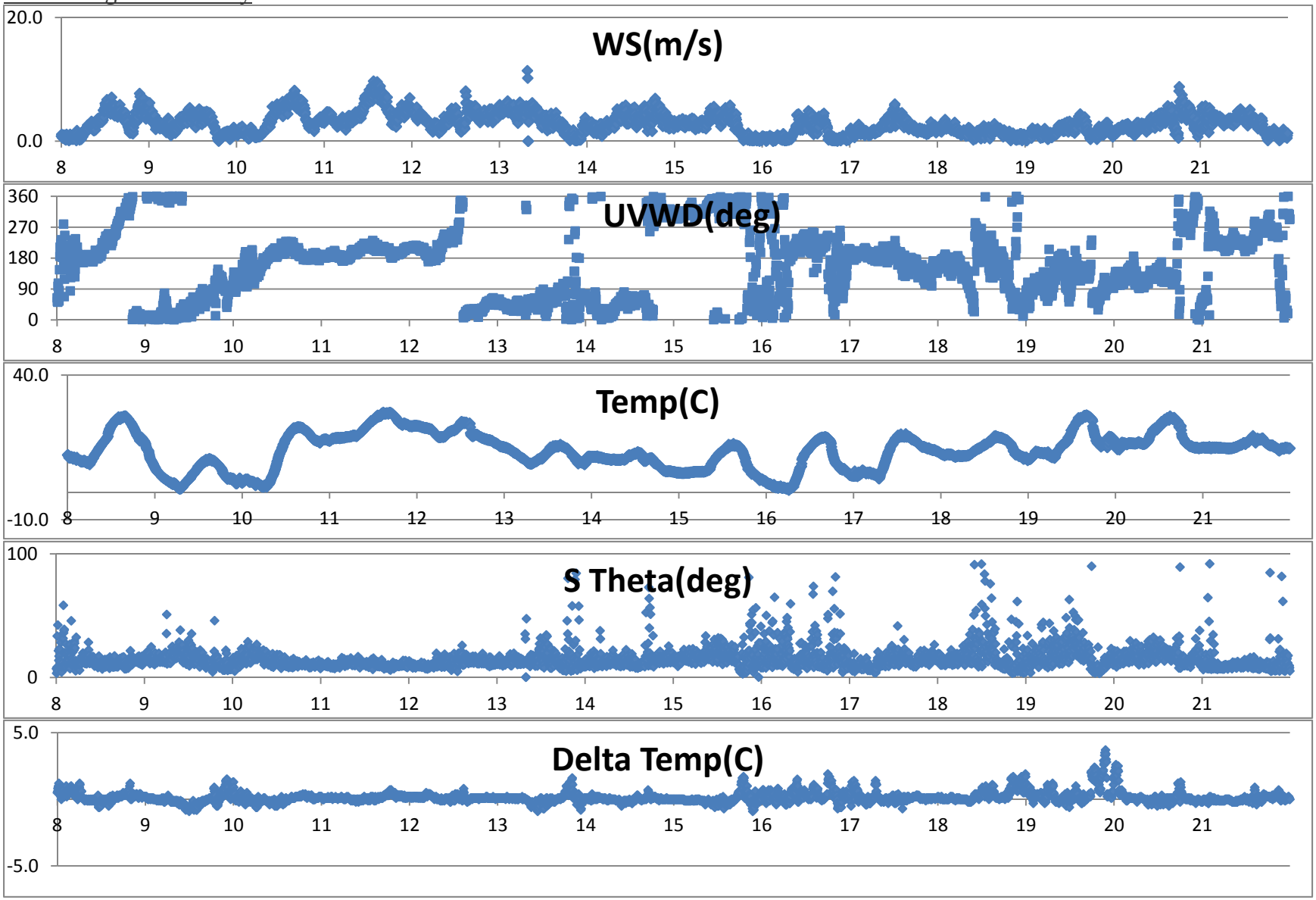
Bias (%) (Eqn 3)	Both Signs Positive
1.12	FALSE
Signed Bias (%)	Both Signs Negative
-1.12	TRUE

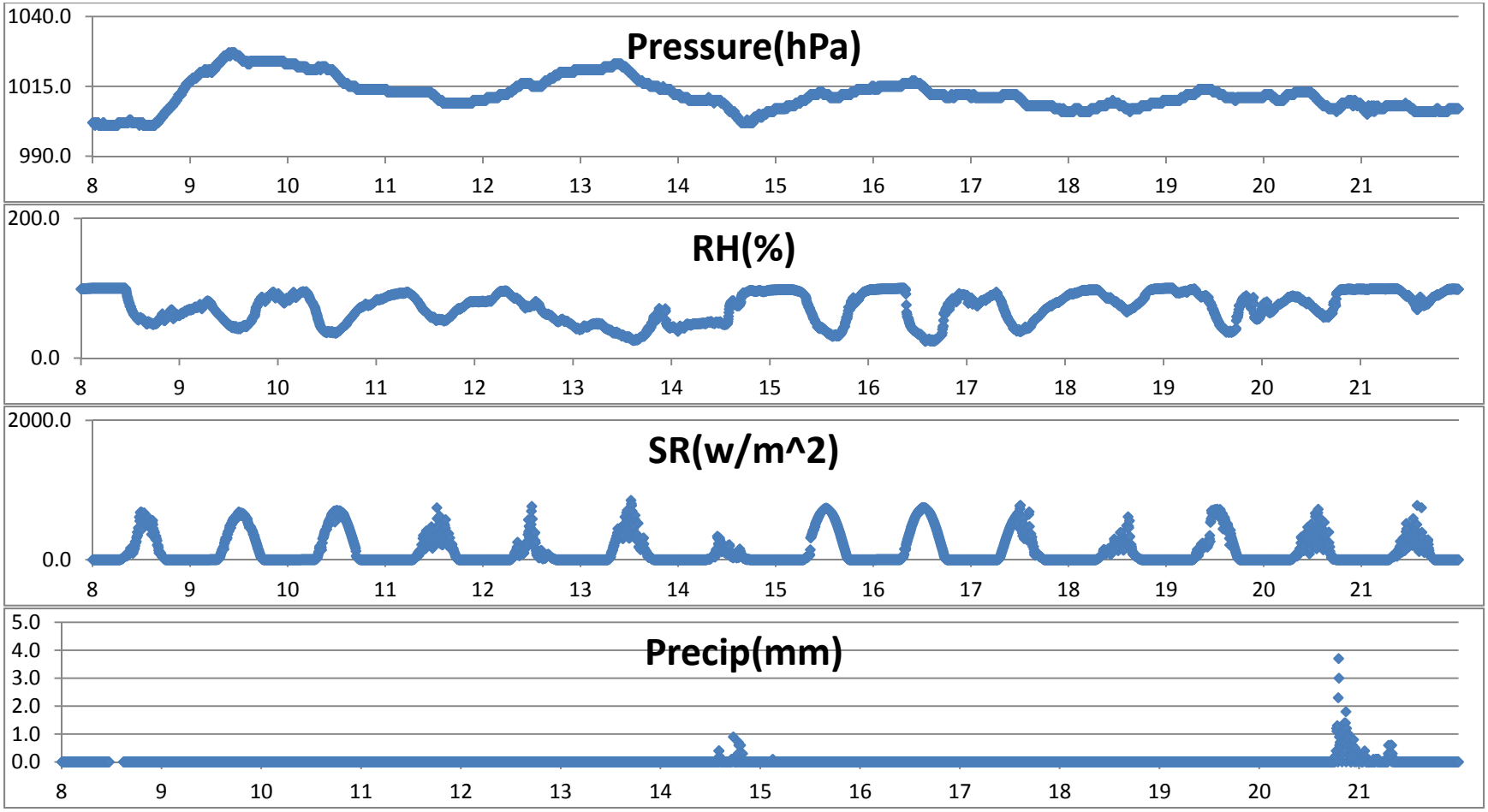
CV (%) (Eqn 2)
0.95

Upper Probability Limit	Lower Probability Limit
0.58	-2.12



Meteorological Summary




Pressure(hPa)
1040.0
1015.0
990.0
RH(%)
200.0
0.0
SR(w/m^2)
2000.0
0.0
Precip(mm)
5.0
4.0
3.0
2.0
1.0
0.0
8
9
10
11
12
13
14
15
16
17
18
19
20
21