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6312 NW 18th Drive
Suite 100
Gainesville, FL 32653

352.378.0332 PHONE
352.378.0354 FAX

www.TRCsolutions.com

July 13, 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 June 14, 2017 through June 27, 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).

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 adjustments have been put in place beginning February 1, 2017, so as to limit the effect of the analyzer's zero drift. During this reporting period there were a total of 13 zero checks performed; all within the acceptable range of ± 1.5 ppb, as defined in the QAPP. Results for these zero checks are presented below.

Date	Zero Check	Date	Zero Check
6/14/2017	0.1	6/21/2017	0.2
6/15/2017	0.3	6/22/2017	0.4
6/16/2017	0.2	6/23/2017	0.3
6/17/2017	0.1	6/24/2017	0.3
6/18/2017	-0.1	6/25/2017	0.4
6/19/2017	0.2	6/26/2017	0.3
6/20/2017	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. TRC has continued to perform manual multipoint checks (zero, ~70 ppb, and ~400 ppb) on a daily basis. The daily manual checks are responsible for approximately and hour and a half of data loss each day, from June 14th – June 26th. Results from the manual checks fall within the acceptable range, indicating the H_2S monitor was operating in accordance with the QAPP. These results were used in calculating the CV as shown in the table that follows. On July 27th TRC personnel were on site to perform maintenance and to troubleshoot calibration system, resulting in approximately four hours of data loss. Due to the maintenance performed on the 27th, there was not a calibration check on that day, however the check on the 28th was within the acceptance criteria.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. All met parameters have 100% data capture for this report period.

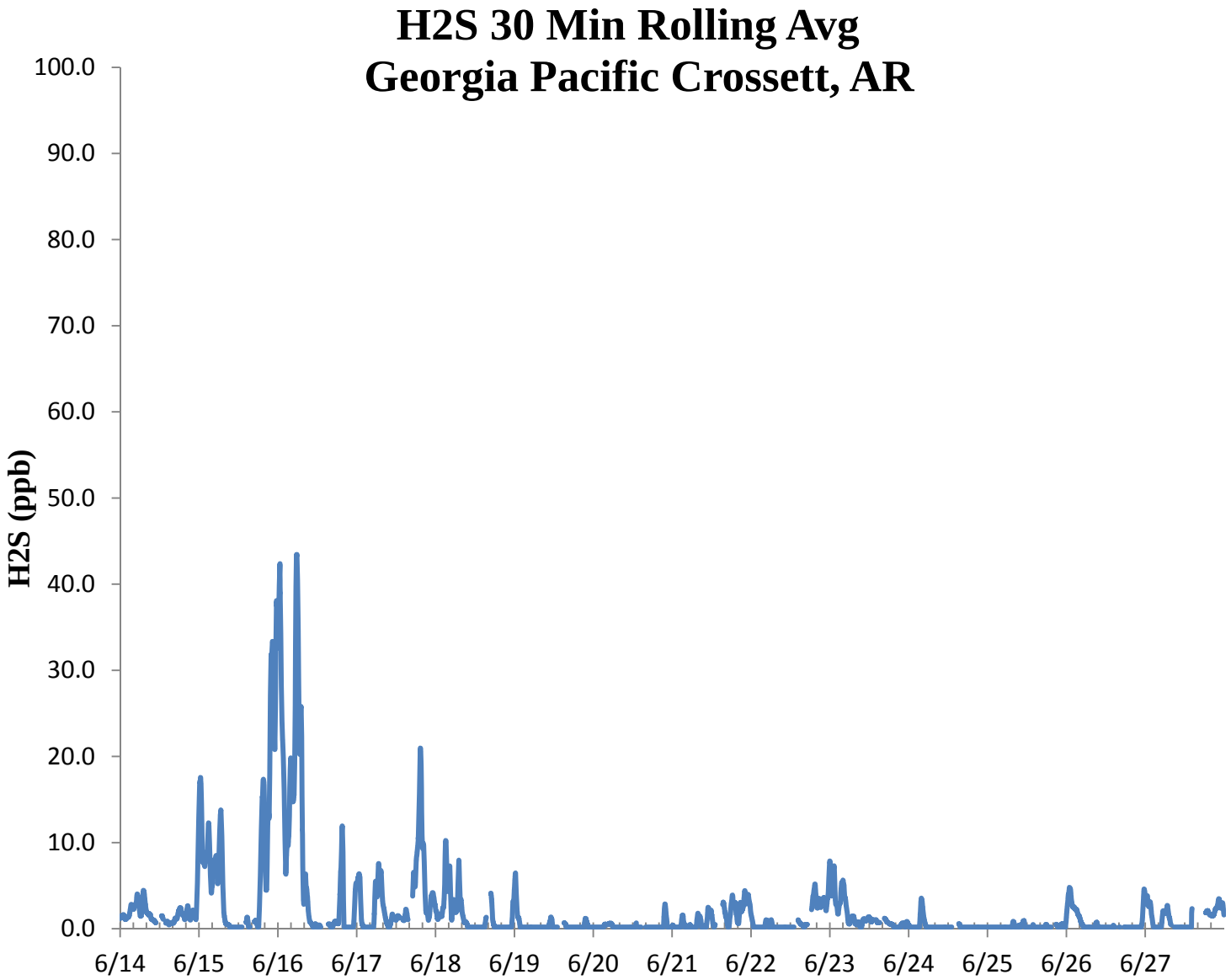
Please feel free to contact me if you have any questions or need any additional data.

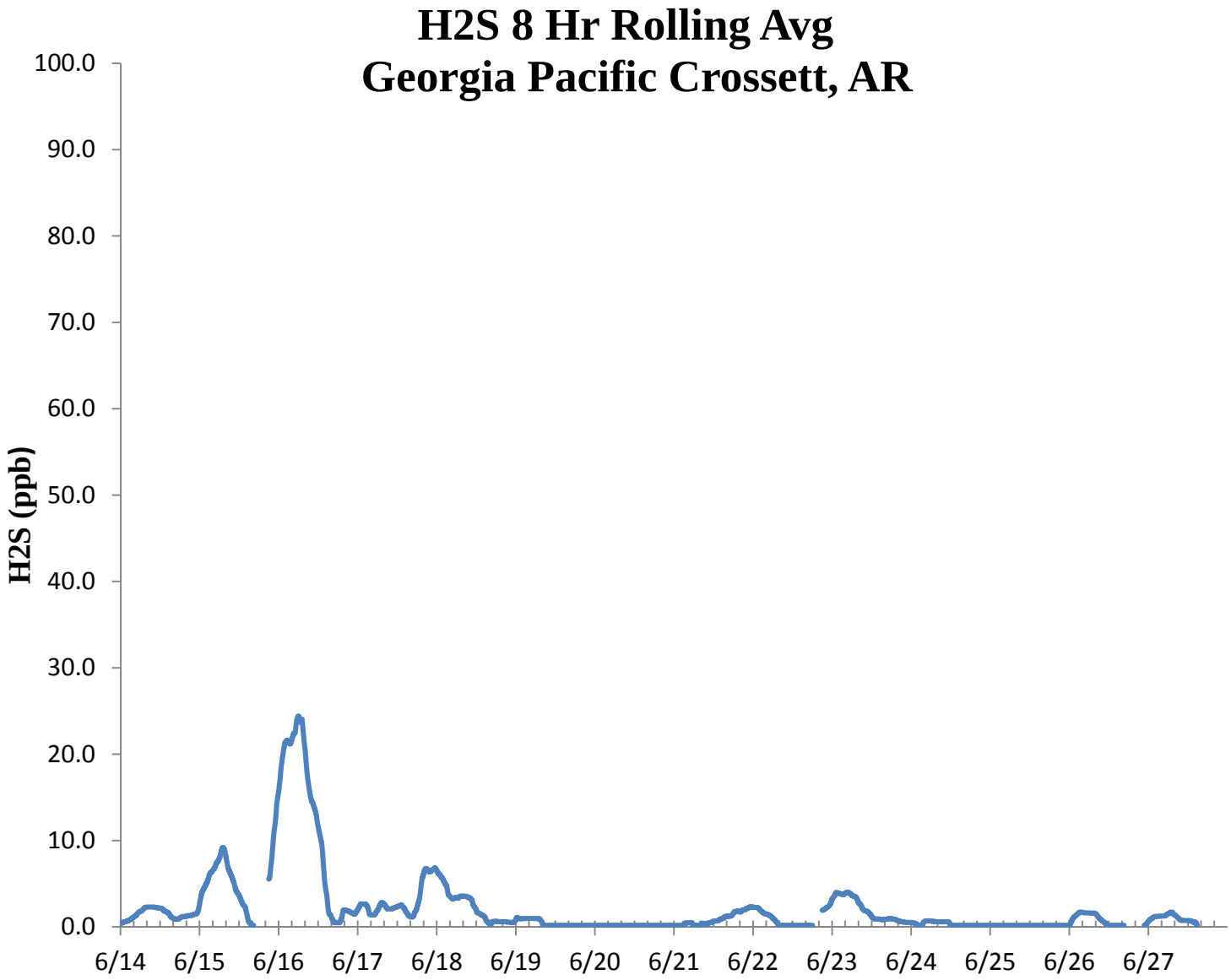
Sincerely,

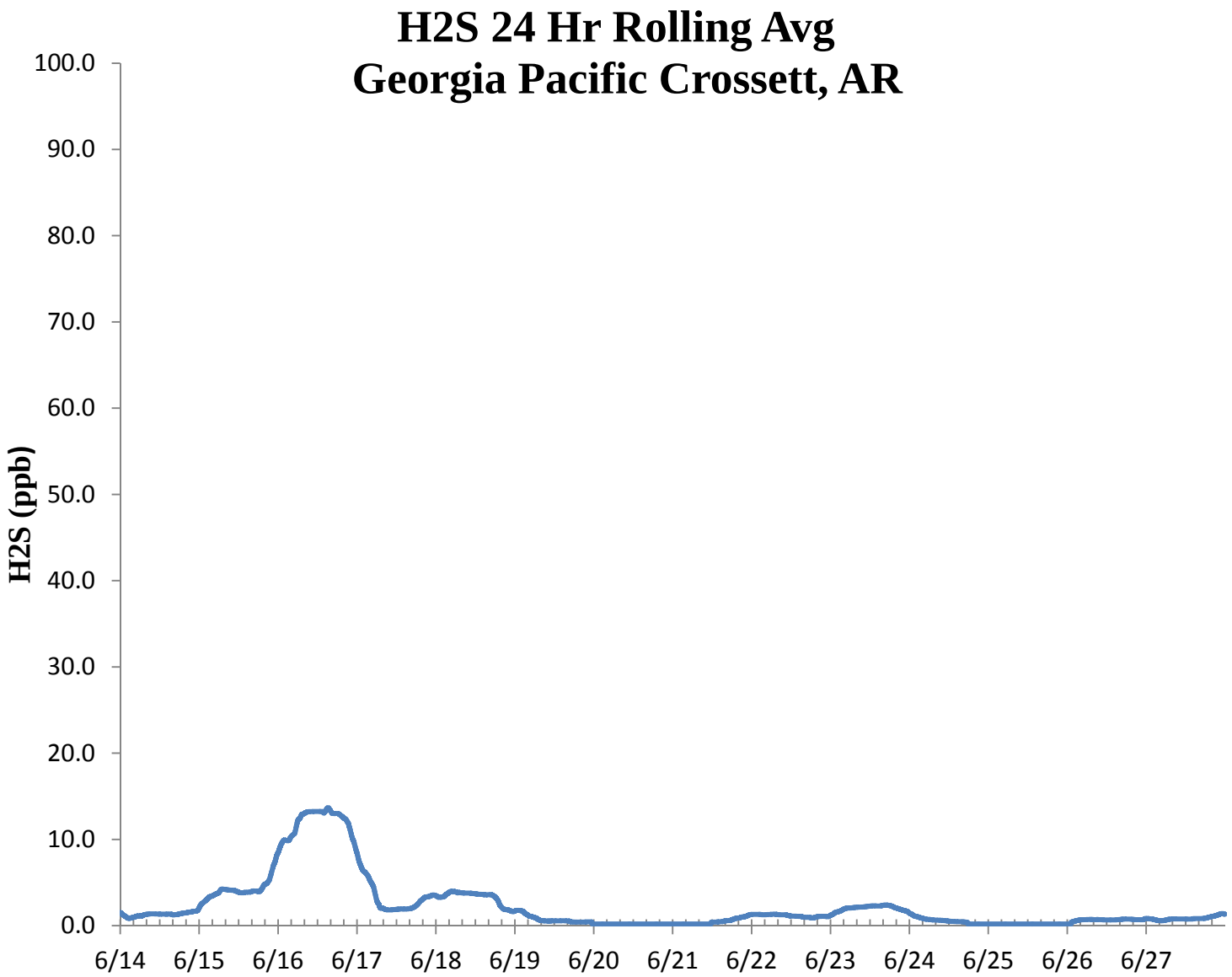
Jonathan Bowser
Manager, Air Quality and Meteorological Monitoring

Air Measurements – Gainesville Office
6312 NW 18th Drive, Suite 100
Gainesville, Florida 32653
(352) 260-1162
Email: jbowser@trcsolutions.com

CC: Becky Keough, ADEQ Director via email: keogh@adeq.state.ar.us
Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.gov


H2S 30 Min 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
6/14
6/15
6/16
6/17
6/18
6/19
6/20
6/21
6/22
6/23
6/24
6/25
6/26
6/27


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
6/14
6/15
6/16
6/17
6/18
6/19
6/20
6/21
6/22
6/23
6/24
6/25
6/26
6/27


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
6/14
6/15
6/16
6/17
6/18
6/19
6/20
6/21
6/22
6/23
6/24
6/25
6/26
6/27

H_2S Assessment

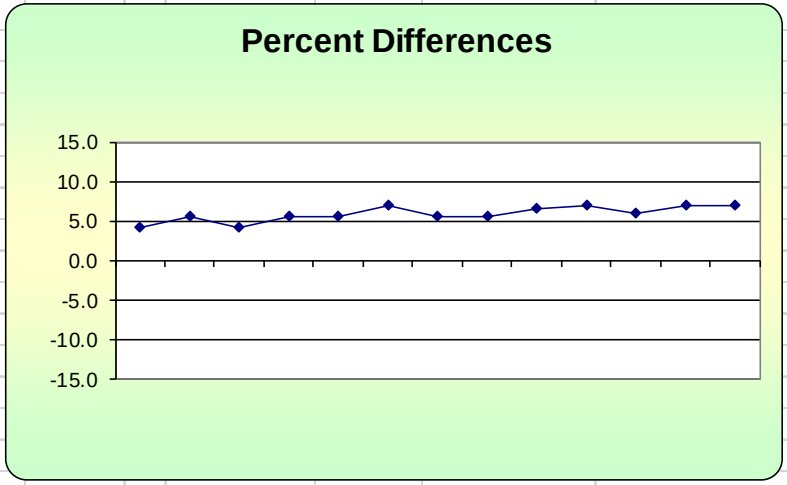
GP - Crossett, AR			Compound of Interest: H_2S					CV_{ub} (%)		Bias (%)	
Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d^2	|d|	$\|d\|^2$				
6/14/2017 13:00	74.0	71.0	4.2	5.634	17.854	4.225	17.854				
6/15/2017 13:00	75.0	71.0	5.6	75th Percentile	31.740	5.634	31.740	n	S_d	S_{d2}	$\sum\|d\|$
6/16/2017 13:00	74.0	71.0	4.2	7.042	17.854	4.225	17.854	13	0.986	11.364	77.324
6/17/2017 13:00	75.0	71.0	5.6		31.740	5.634	31.740	n-1	$\sum d$	$\sum d^2$	$\sum\|d\|^2$
6/18/2017 13:00	75.0	71.0	5.6		31.740	5.634	31.740	12	77.324	471.593	471.593
6/19/2017 13:00	76.0	71.0	7.0		49.593	7.042	49.593				
6/20/2017 13:00	75.0	71.0	5.6		31.740	5.634	31.740				
6/21/2017 13:00	75.0	71.0	5.6		31.740	5.634	31.740				
6/22/2017 13:00	75.7	71.0	6.6		43.821	6.620	43.821				
6/23/2017 13:00	76.0	71.0	7.0		49.593	7.042	49.593				
6/24/2017 13:00	75.2	71.0	5.9		34.993	5.915	34.993				
6/25/2017 13:00	76.0	71.0	7.0		49.593	7.042	49.593				
6/26/2017 13:00	76.0	71.0	7.0		49.593	7.042	49.593				

"AB" (Eqn 4)
5.948
"AS" (Eqn 5)
0.986

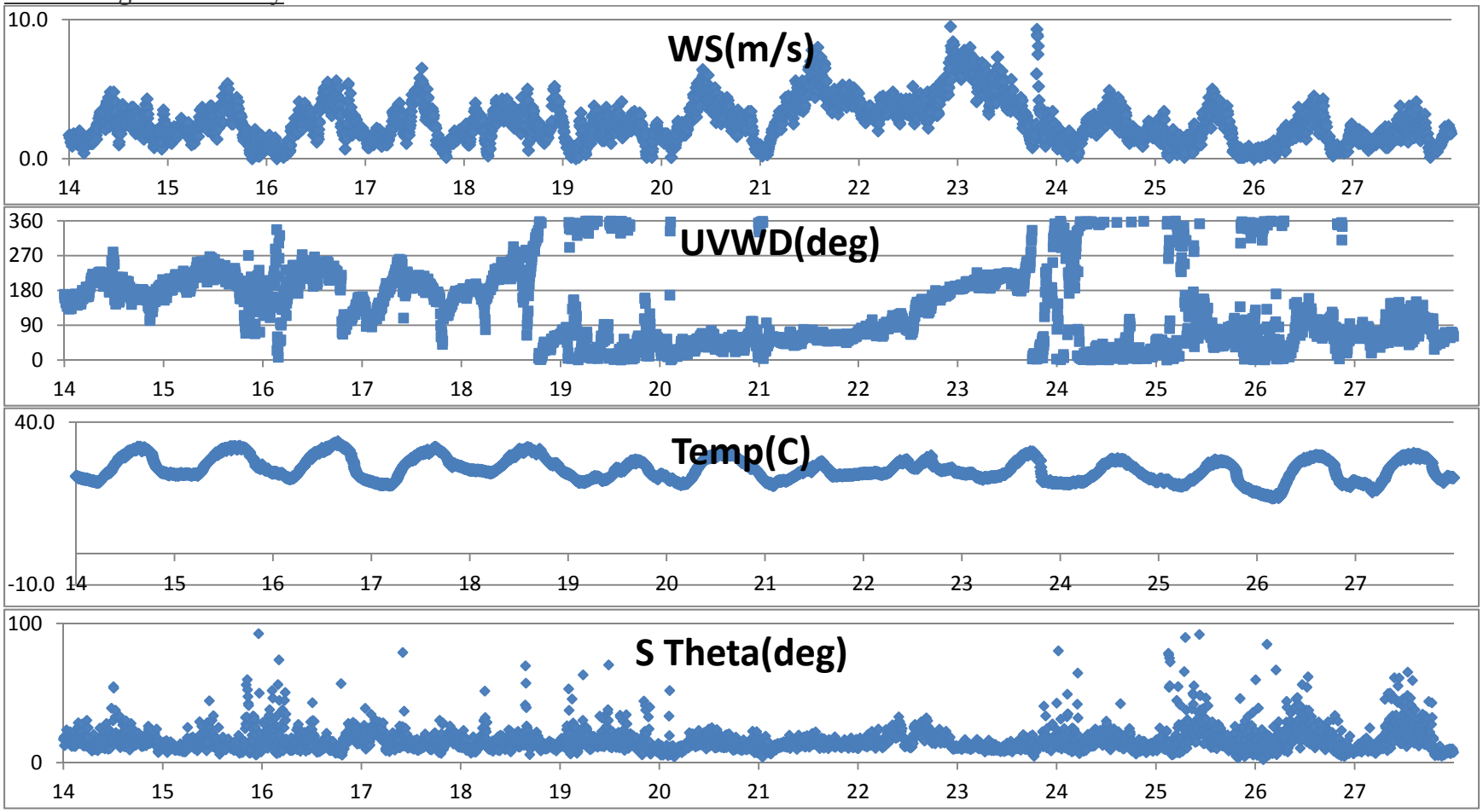
Bias (%) (Eqn 3)	
6.44	Both Signs Positive
Signed Bias (%)	Both Signs Negative
+6.44	FALSE

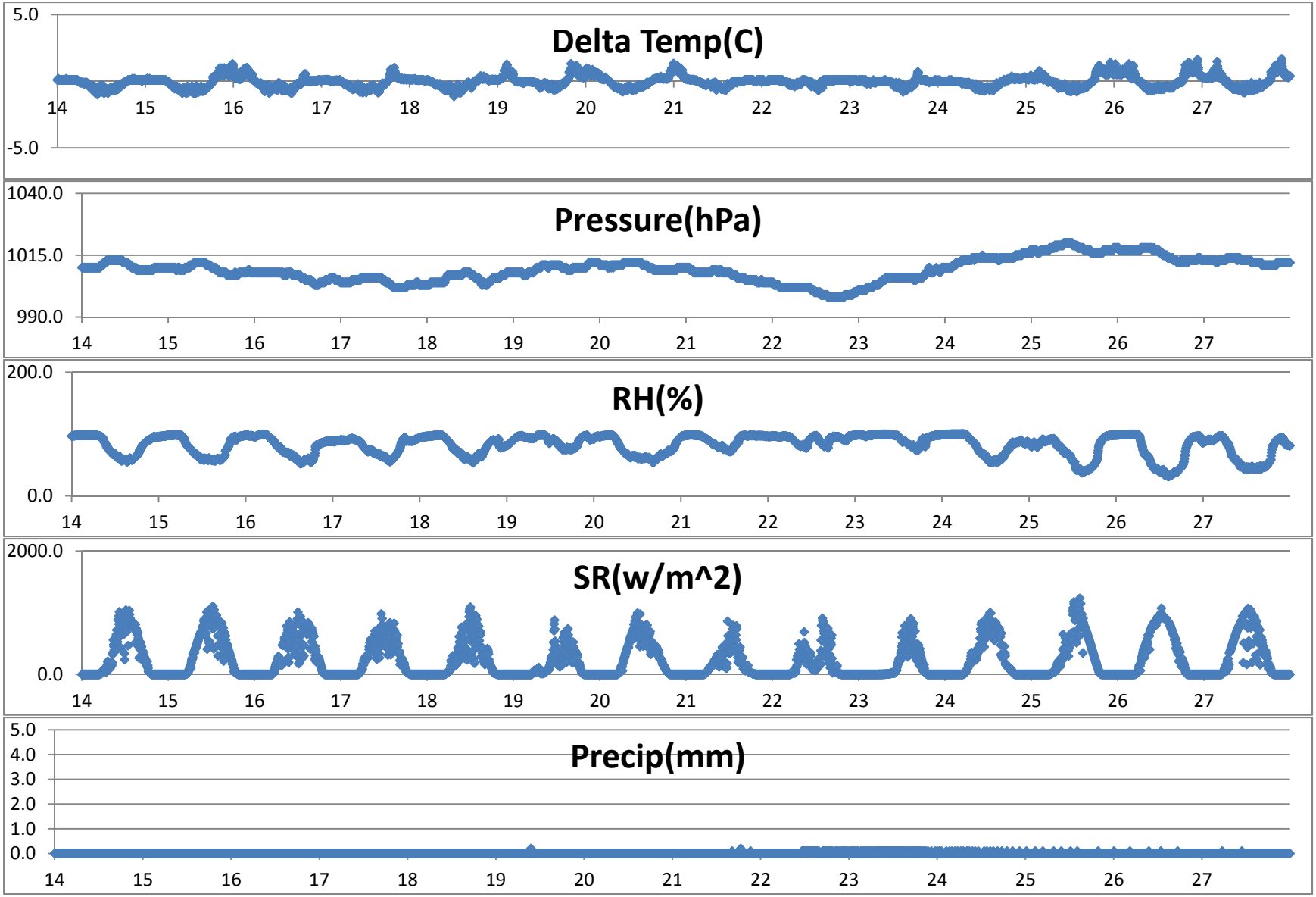
CV (%) (Eqn 2)
1.36

Upper Probability Limit	Lower Probability Limit
7.88	4.02



Meteorological Summary




Delta Temp(C)
5.0
-5.0
14 15 16 17 18 19 20 21 22 23 24 25 26 27
Pressure(hPa)
1040.0
1015.0
990.0
14 15 16 17 18 19 20 21 22 23 24 25 26 27
RH(%)
200.0
0.0
14 15 16 17 18 19 20 21 22 23 24 25 26 27
SR(w/m^2)
2000.0
0.0
14 15 16 17 18 19 20 21 22 23 24 25 26 27
Precip(mm)
5.0
4.0
3.0
2.0
1.0
0.0
14 15 16 17 18 19 20 21 22 23 24 25 26 27