TRC
Results you can rely on

6312 NW 18th Drive
Suite 100
Gainesville, FL 32653

352.378.0332 PHONE
352.378.0354 FAX

www.TRCsolutions.com

July 29, 2016

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 29th through July 12th.

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, observed H_2S concentrations were elevated on July 1st. The highest recorded 30-min and 8-hour rolling average concentrations on the 1st were 118.4 ppb and 56.3 ppb, respectively.

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.

There were two minor occurrences of data loss during this two week period, other than those resulting from automated daily 1-point QC and weekly calibration checks. On the afternoon of June 29th, the calibration gas cylinder was replaced, followed by a manual calibration check, lasting approximately 30 minutes. On the afternoon of June 30th, a complete calibration was performed, interrupting the scheduled automated QC check, and resulting in loss of data for approximately one hour. Results for all 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 have 100% data capture for this report period.

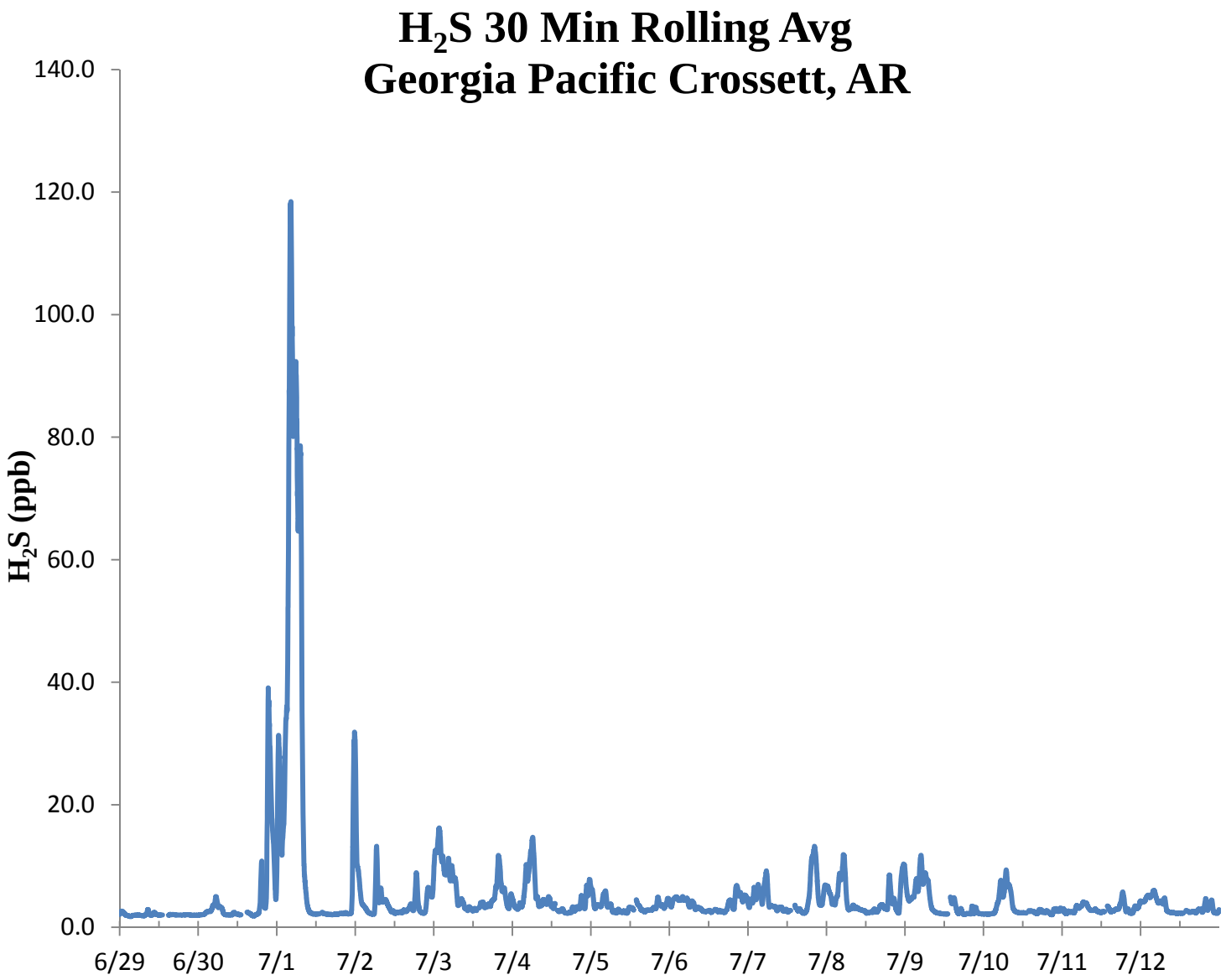
Please feel free to contact me if you have any questions or need any additional data.

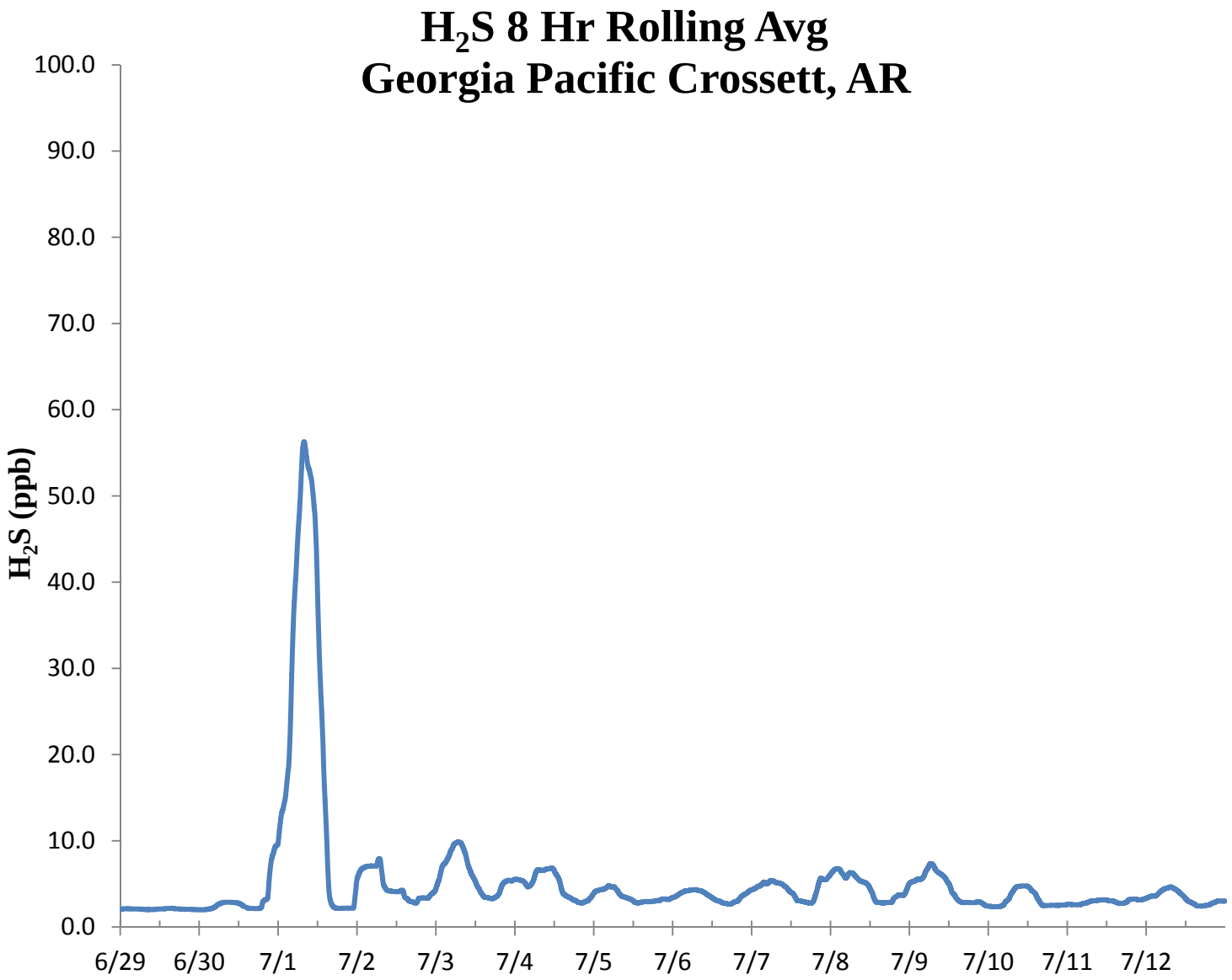
Sincerely,

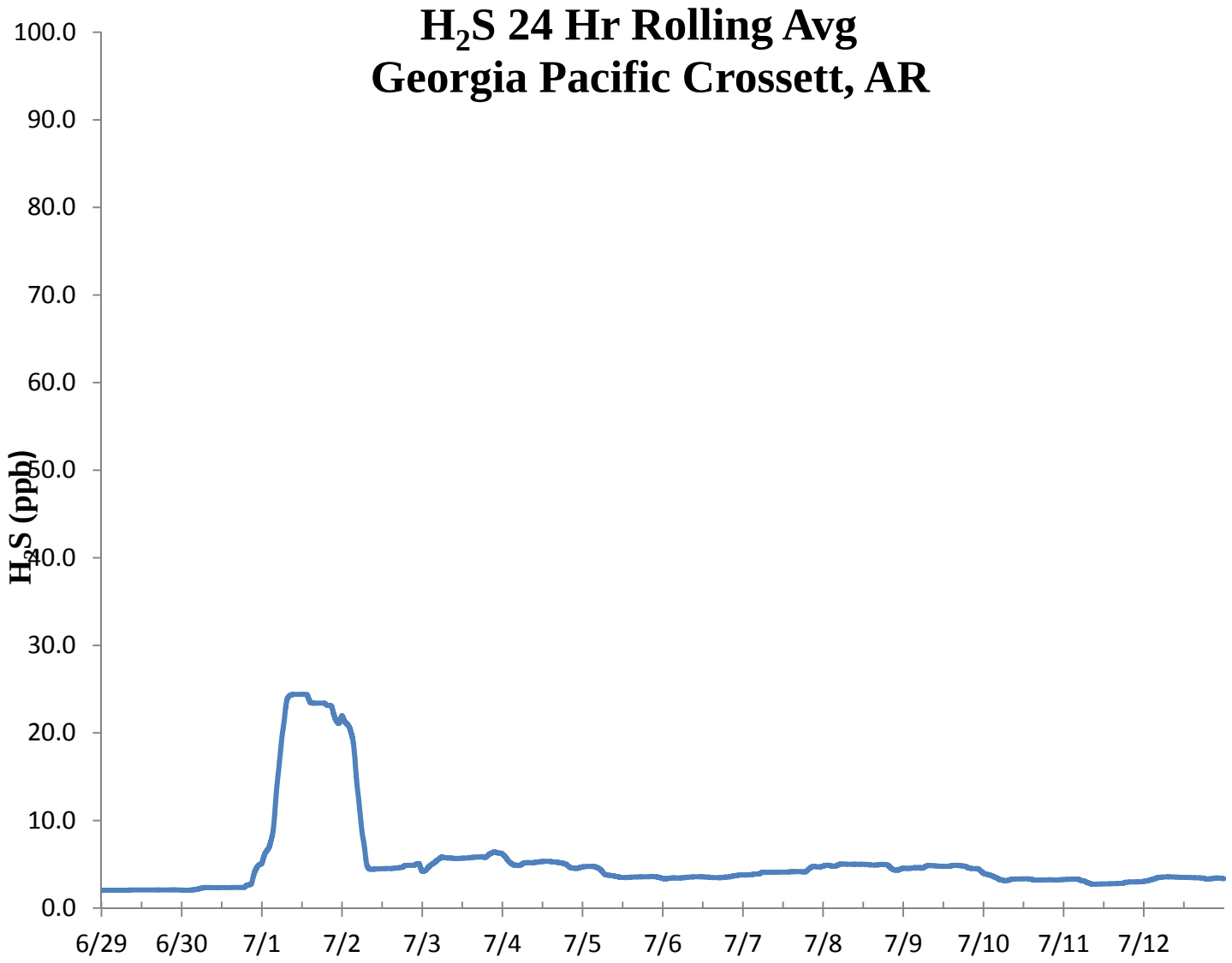
Jonathan Bowser
Manager, Air Quality and Meteorological Monitoring

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)
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
6/29
6/30
7/1
7/2
7/3
7/4
7/5
7/6
7/7
7/8
7/9
7/10
7/11
7/12


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
6/29
6/30
7/1
7/2
7/3
7/4
7/5
7/6
7/7
7/8
7/9
7/10
7/11
7/12


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
6/29
6/30
7/1
7/2
7/3
7/4
7/5
7/6
7/7
7/8
7/9
7/10
7/11
7/12

H_2S Assessment

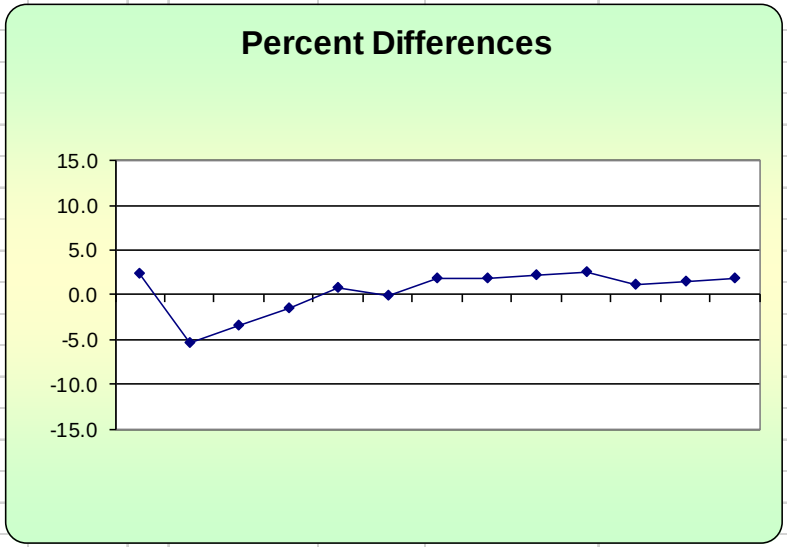
GP - Crossett, AR			Constituent type: H_2S					CV_{ub} (%)		Bias (%)	
Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d^2	|d|	$\|d\|^2$				
6/29/2016 13:00	71.6	70.0	2.3	-0.143	5.224	2.286	5.224				
7/1/2016 13:00	66.3	70.0	-5.3	75th Percentile	27.939	5.286	27.939	n	S_d	S_{d2}	$\sum\|d\|$
7/2/2016 13:00	67.6	70.0	-3.4	1.857	11.755	3.429	11.755	13	2.420	7.365	26.286
7/3/2016 13:00	69.0	70.0	-1.4		2.041	1.429	2.041	n-1	$\sum d$	$\sum d^2$	$\sum\|d\|^2$
7/4/2016 13:00	70.5	70.0	0.7		0.510	0.714	0.510	12	5.714	72.816	72.816
7/5/2016 13:00	69.9	70.0	-0.1		0.020	0.143	0.020				
7/6/2016 13:00	71.3	70.0	1.9		3.449	1.857	3.449				
7/7/2016 13:00	71.3	70.0	1.9		3.449	1.857	3.449				
7/8/2016 13:00	71.5	70.0	2.1		4.592	2.143	4.592				
7/9/2016 13:00	71.8	70.0	2.6		6.612	2.571	6.612				
7/10/2016 13:00	70.8	70.0	1.1		1.306	1.143	1.306				
7/11/2016 13:00	71.1	70.0	1.6		2.469	1.571	2.469				
7/12/2016 13:00	71.3	70.0	1.9		3.449	1.857	3.449				

"AB" (Eqn 4)	
2.022	
"AS" (Eqn 5)	
1.280	

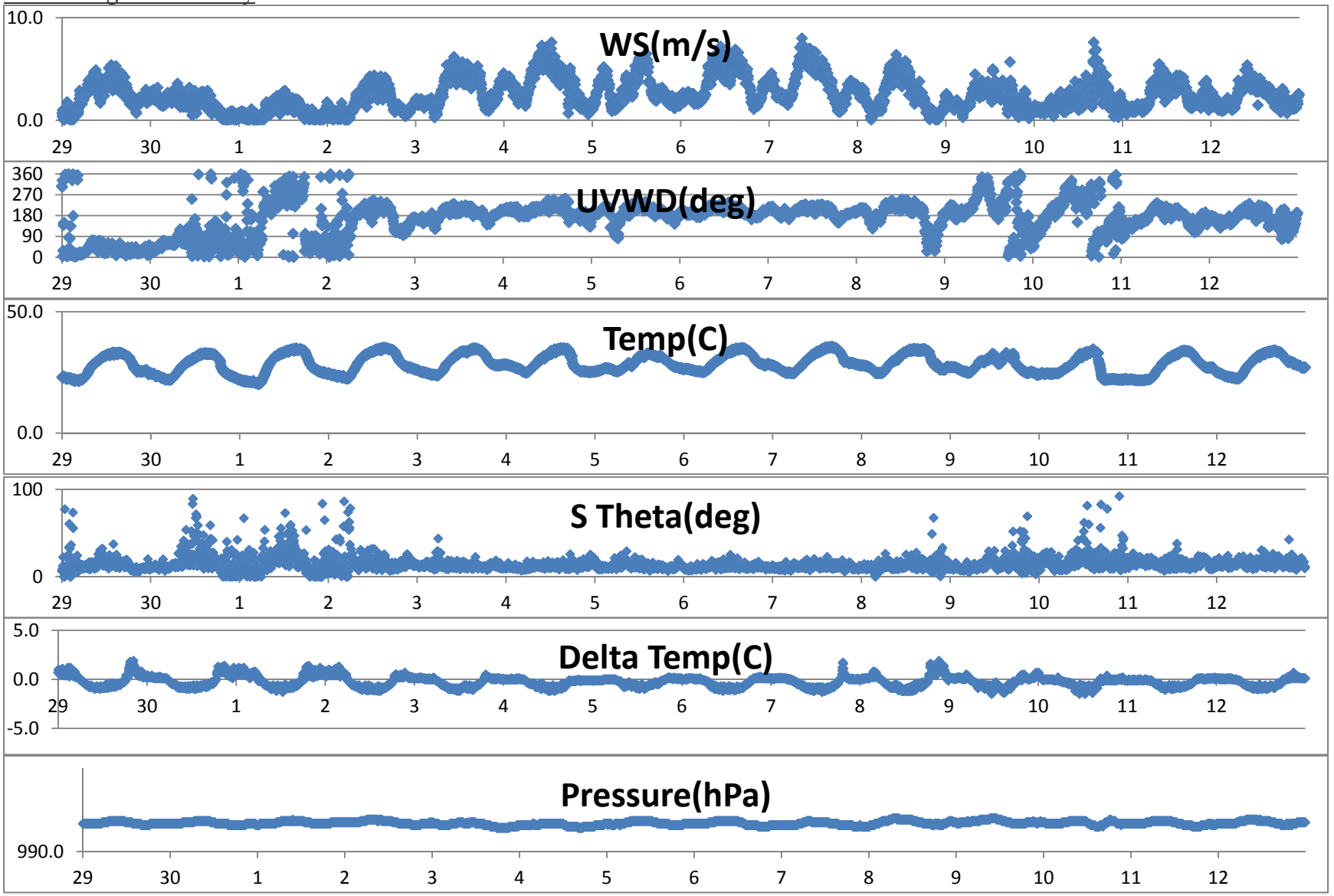
Bias (%) (Eqn 3)	
2.65	FALSE
Signed Bias (%)	Both Signs Positive
+/-2.65	FALSE

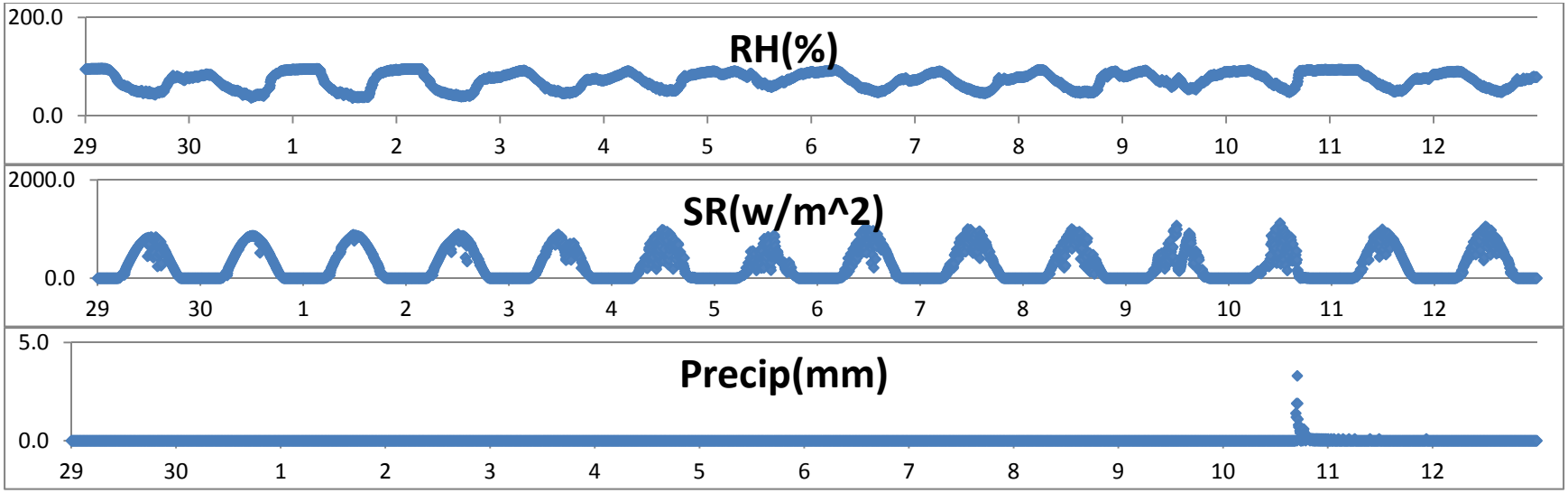
CV (%) (Eqn 2)
3.34

Upper Probability Limit	Lower Probability Limit
5.18	-4.3



Meteorological Summary




RH(%)
200.0
0.0
29 30 1 2 3 4 5 6 7 8 9 10 11 12
SR(w/m^2)
2000.0
0.0
29 30 1 2 3 4 5 6 7 8 9 10 11 12
Precip(mm)
5.0
0.0
29 30 1 2 3 4 5 6 7 8 9 10 11 12