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April 27, 2018

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,

Please find the following biweekly report for the Georgia-Pacific (GP) Crossett Mill hydrogen sulfide (H_2S) and meteorological monitoring program covering the calendar period of April 4, 2018 through April 17, 2018.

Summary of Results

Included in this report are three plots presenting H_2S concentrations across different rolling average periods (30-minute, 8-hour, and 24-hour), daily 1-point quality control (QC) checks with precision and bias estimates and time series plots for all recorded meteorological (met) parameters for the two week period.

Data Quality

The Quality Assurance Project Plan (QAPP) establishes measurement quality objectives (MQOs) for H_2S regarding precision and bias expressed 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. Precision and bias calculations are presented on page six of this report.

The scheduled automated three-point calibration check on April 5th was interrupted due to a remote zero adjustment and subsequent calibration. Results for available automated daily 1-point QC checks were within the accuracy objective, ± 10%, indicating the H_2S monitor was operating in accordance with MQOs as stated in the QAPP.

During this reporting period one automated zero checks was performed. The result for this zero checks are presented below.

Date	Zero Check Response (ppb)
4/12/2018	-0.6

Data Capture

There were multiple occurrences of H_2S data loss this monitoring period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. As previously mentioned, a remote calibration was performed on April 5th, responsible for approximately four hours of data loss. A brief communication interruption was responsible for an additional ten minutes of lost H_2S data on April 5th. On Sunday April 8th, the TRC Logger Program experienced a failure, resulting in approximately 12 hours of lost H_2S data.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. A brief communication interruption was responsible for ten minutes of lost meteorological data (all parameters) on April 5th.

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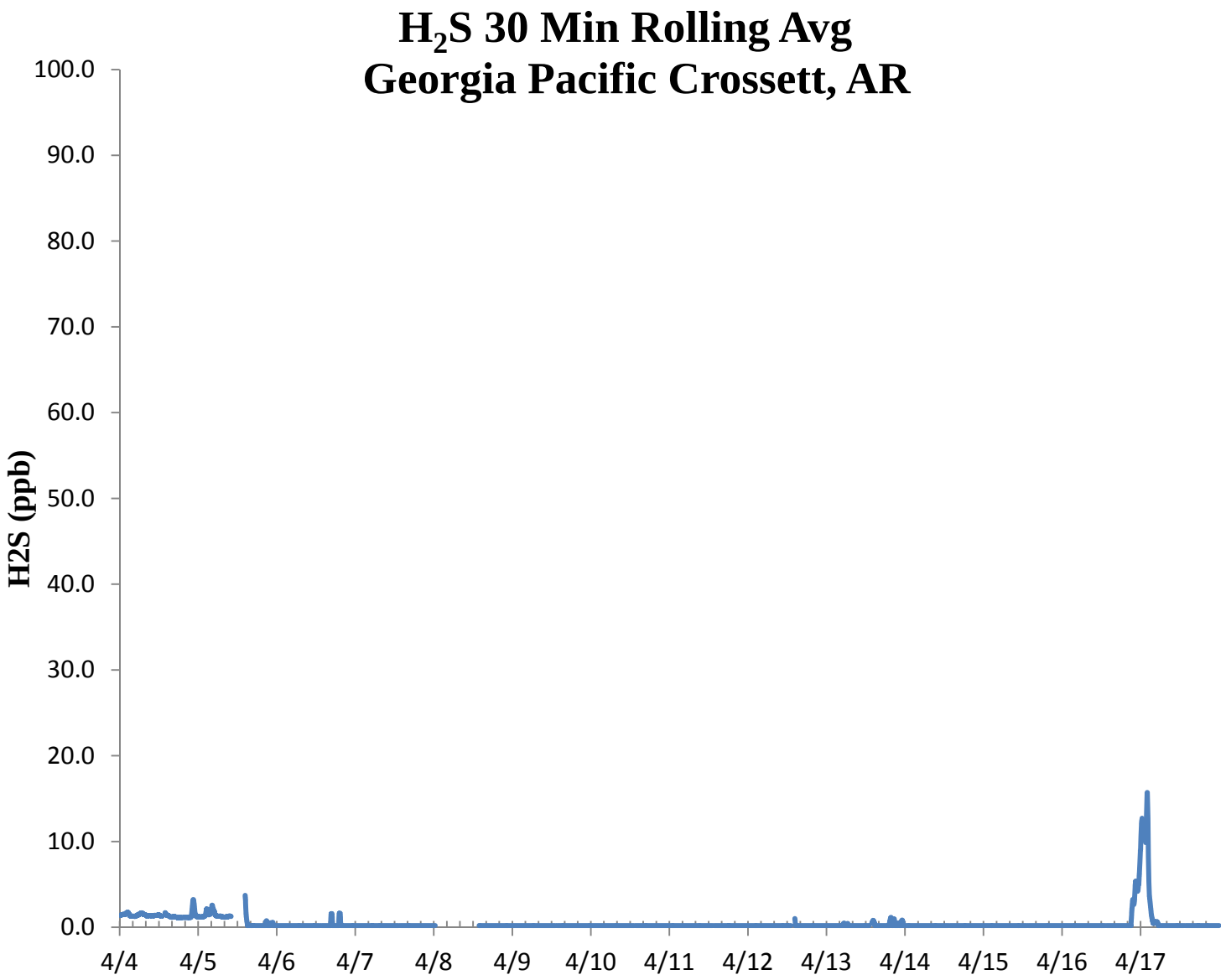
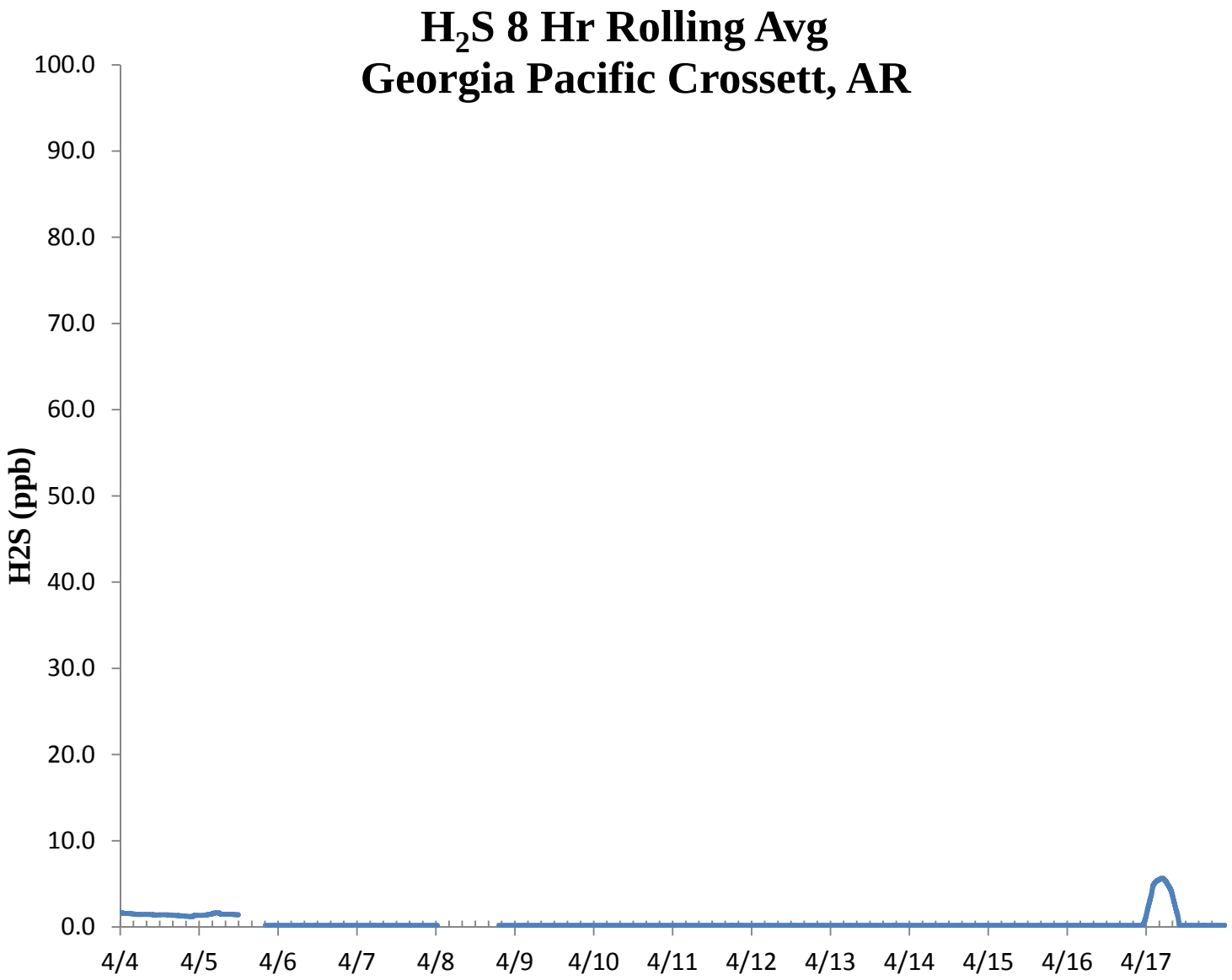
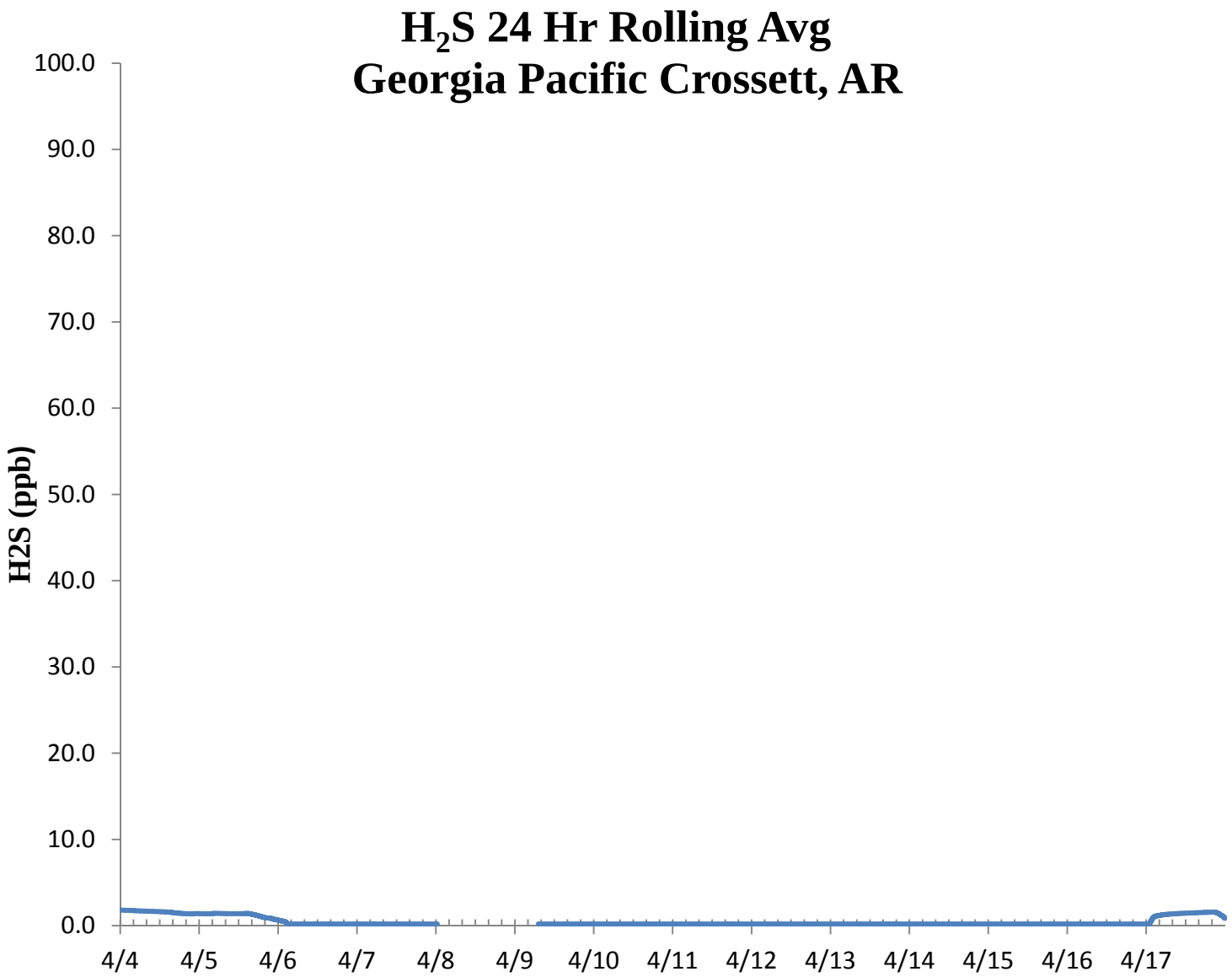
CC: Becky Keough, ADEQ Director via email: keogh@adeq.state.ar.us
Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.go

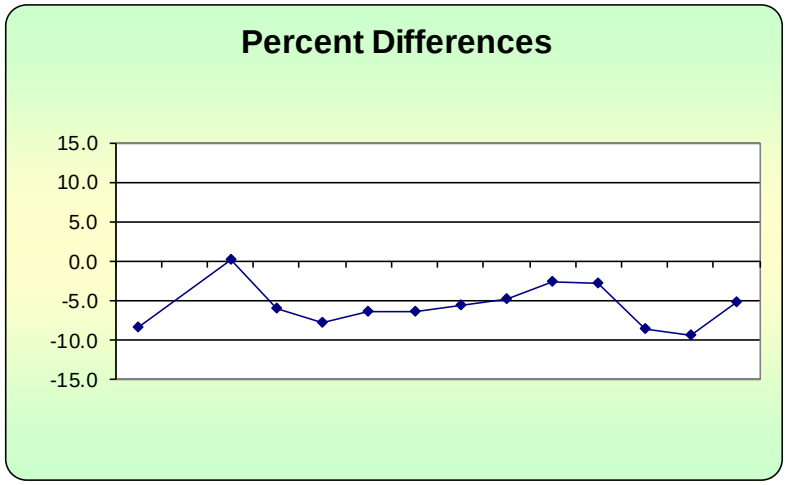

H2S 30 Min Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
4/4
4/5
4/6
4/7
4/8
4/9
4/10
4/11
4/12
4/13
4/14
4/15
4/16
4/17


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
4/4
4/5
4/6
4/7
4/8
4/9
4/10
4/11
4/12
4/13
4/14
4/15
4/16
4/17

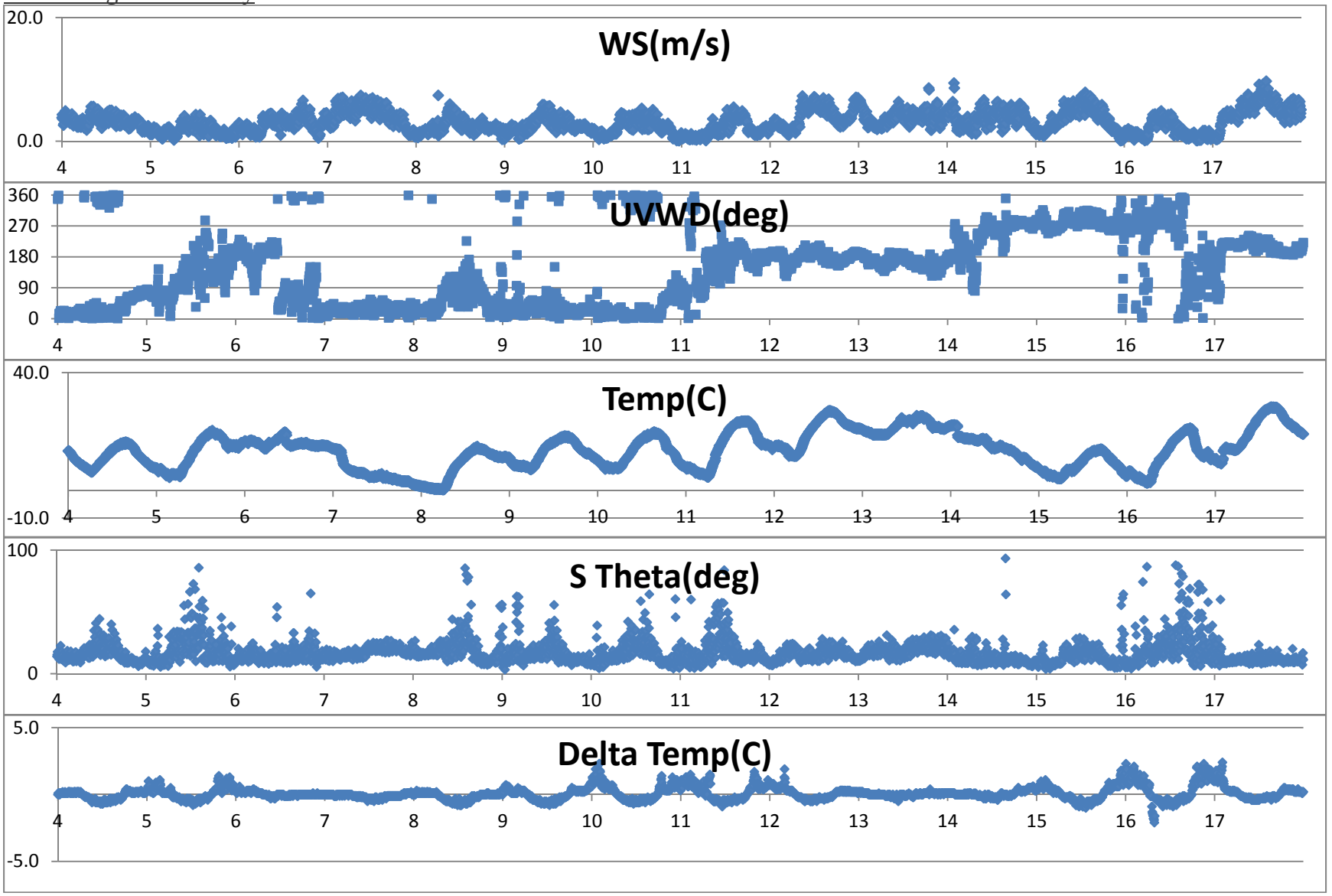

H2S 24 Hr Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
4/4
4/5
4/6
4/7
4/8
4/9
4/10
4/11
4/12
4/13
4/14
4/15
4/16
4/17

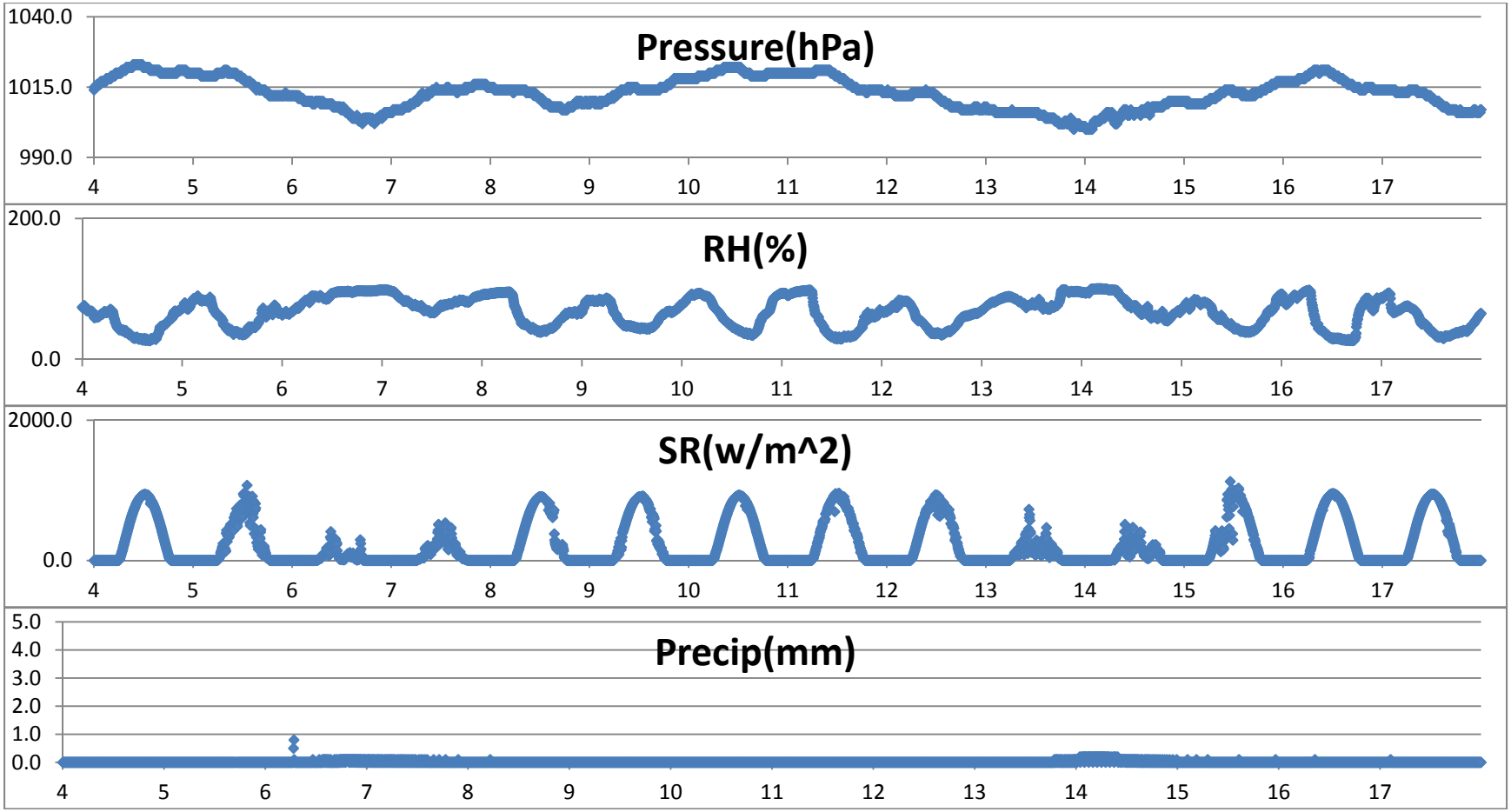
H_2S Assessment

GP - Crossett, AR			Compound of Interest: H_2S					CV_{ub} (%)		Bias (%)	
Date	Meas Val (Y)	Input Val (X)	d (Eqn. 1)	25th Percentile	d^2	|d|	$\|d\|^2$				
4/4/2018 13:00	64.2	70.0	-8.3	-7.714	68.653	8.286	68.653				
4/6/2018 13:00	70.1	70.0	0.1	75th Percentile	0.020	0.143	0.020	n	S_d	S_{d2}	$\sum\|d\|$	"AB" (Eqn 4)
4/7/2018 13:00	65.8	70.0	-6.0	-4.857	36.000	6.000	36.000	13	2.684	27.001	73.429	5.648
4/8/2018 13:00	64.6	70.0	-7.7		59.510	7.714	59.510	n-1	$\sum d$	$\sum d^2$	$\sum\|d\|^2$	"AS" (Eqn 5)
4/9/2018 13:00	65.6	70.0	-6.3		39.510	6.286	39.510	12	-73.143	497.959	497.959	2.633
4/10/2018 13:00	65.6	70.0	-6.3		39.510	6.286	39.510					
4/11/2018 13:00	66.1	70.0	-5.6		31.041	5.571	31.041			Bias (%) (Eqn 3)	Both Signs Positive	
4/12/2018 13:00	66.6	70.0	-4.9		23.592	4.857	23.592			6.95	FALSE	
4/13/2018 13:00	68.2	70.0	-2.6		6.612	2.571	6.612	CV (%) (Eqn 2)		Signed Bias (%)	Both Signs Negative	
4/14/2018 13:00	68.1	70.0	-2.7		7.367	2.714	7.367	3.7		-6.95	TRUE	
4/15/2018 13:00	64.0	70.0	-8.6		73.469	8.571	73.469					
4/16/2018 13:00	63.5	70.0	-9.3		86.224	9.286	86.224	Upper Probability Limit		Lower Probability Limit		
4/17/2018 13:00	66.4	70.0	-5.1		26.449	5.143	26.449	-0.37		-10.89		



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
4 5 6 7 8 9 10 11 12 13 14 15 16 17