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April 4, 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 March 7, 2018 through March 20, 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.

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.

Additionally, weekly automated zero adjustments were implemented starting February 1, 2017. During this reporting period two automated zero checks were performed; within the acceptable range

of ± 1.5 ppb, as defined in the QAPP. The result for these zero checks are presented below.

Date	Zero Check Response (ppb)
3/8/2018	1.2
3/15/2018	1.1

Data Capture

There was a single significant occurrence of H_2S data loss this monitoring period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. The logging program experienced a failure overnight on March 9th; responsible for approximately seven and a half hours of lost H_2S data. The logger was reset around 9:00 AM on March 9th. The TRC logger program has since been updated in an attempt to minimize future data loss. These programming updates were responsible for minor losses pf H_2S data on March 12th and 19th (< 30 minutes each).

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. A total of ten minutes of met data was lost during this biweekly period on account of communication interruptions.

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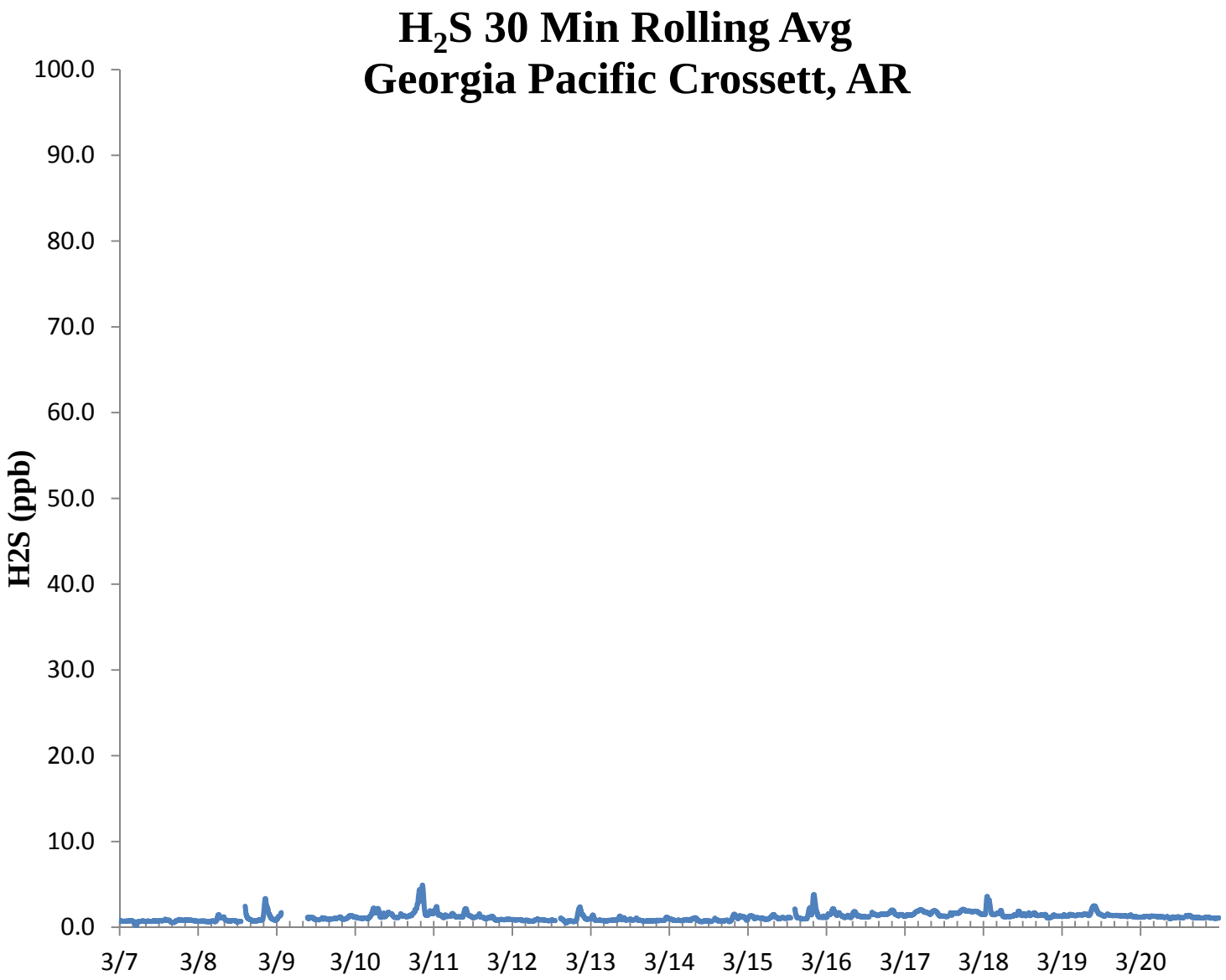
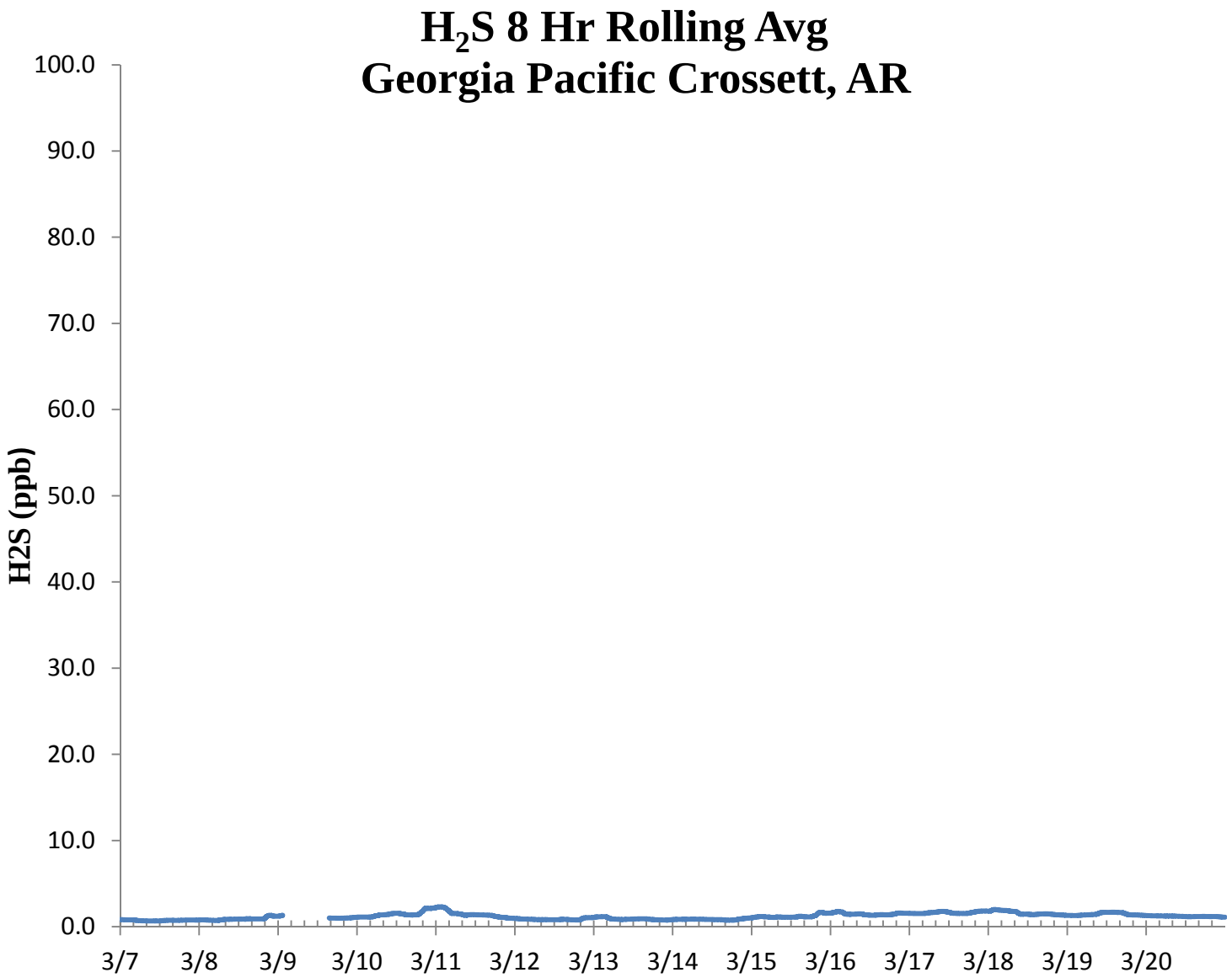
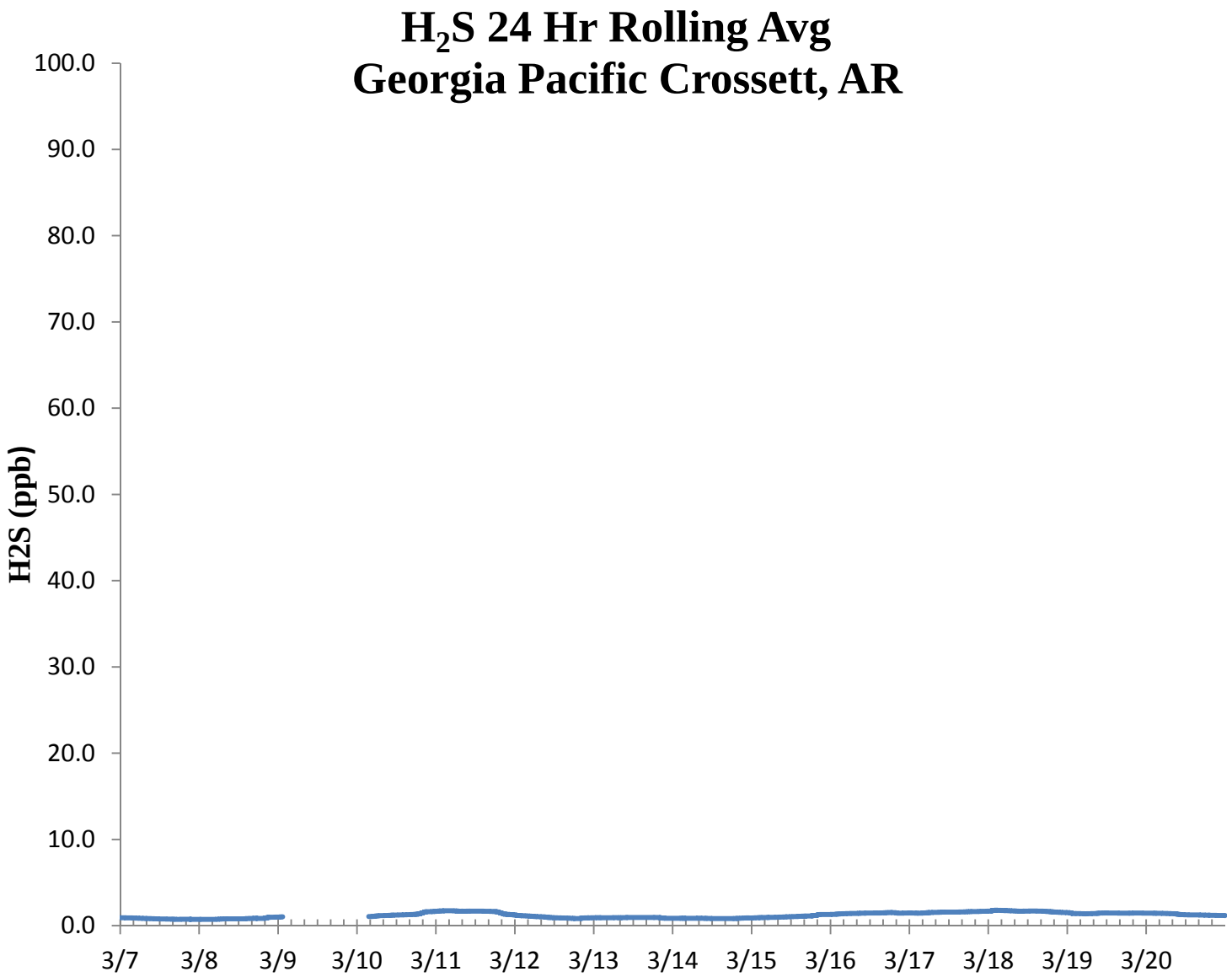
CC: Becky Keough, ADEQ Director via email: keogh@adeq.state.ar.us
Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.gov

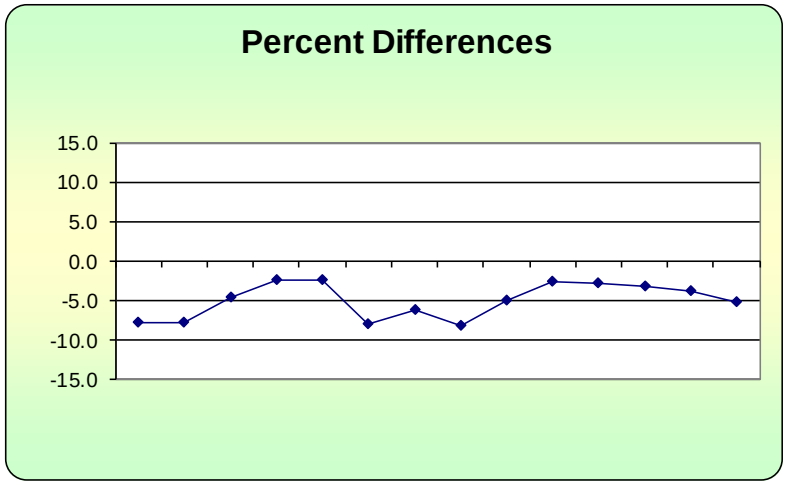

H2S 30 Min Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
3/7
3/8
3/9
3/10
3/11
3/12
3/13
3/14
3/15
3/16
3/17
3/18
3/19
3/20


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
3/7
3/8
3/9
3/10
3/11
3/12
3/13
3/14
3/15
3/16
3/17
3/18
3/19
3/20

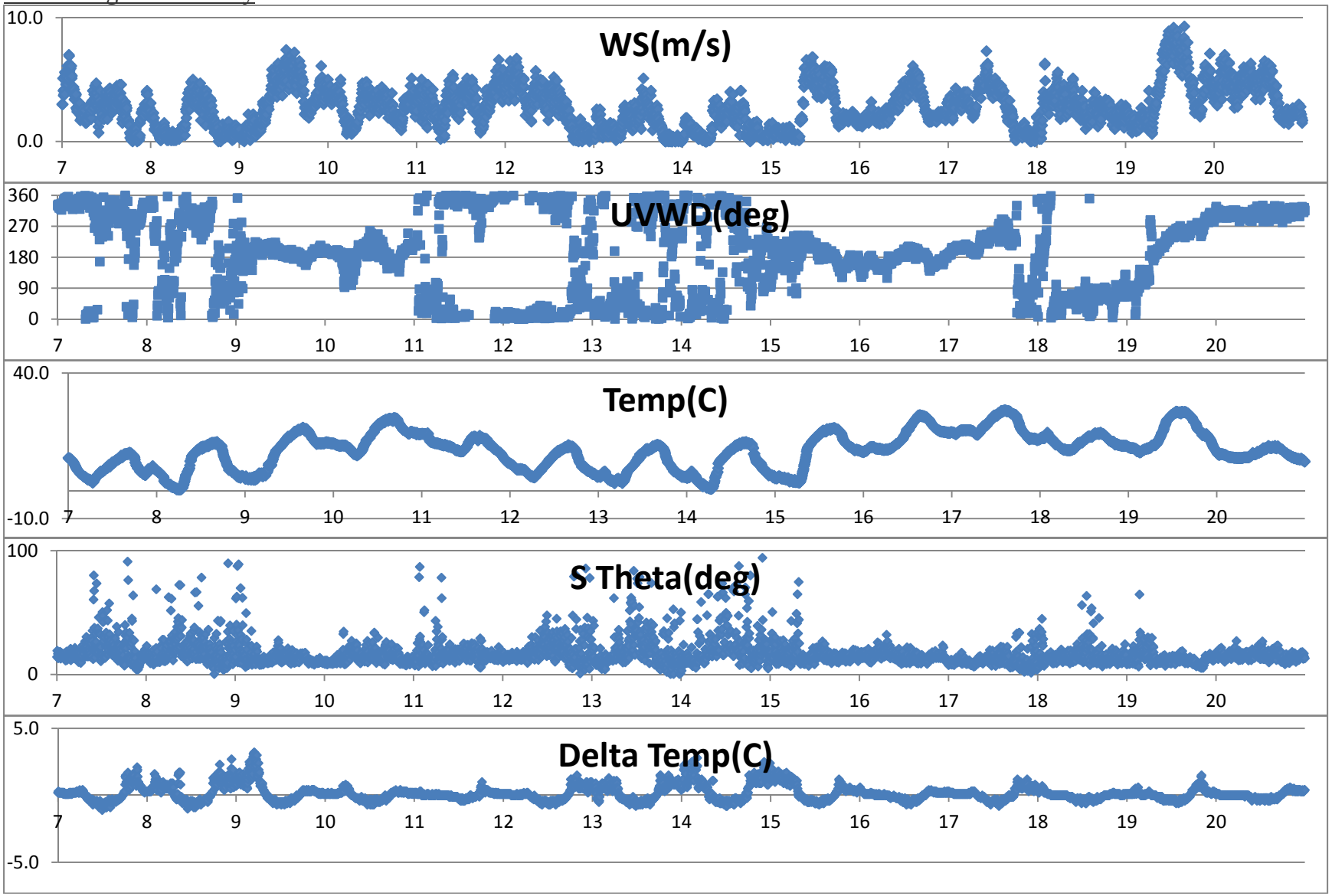

H2S 24 Hr Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
3/7
3/8
3/9
3/10
3/11
3/12
3/13
3/14
3/15
3/16
3/17
3/18
3/19
3/20

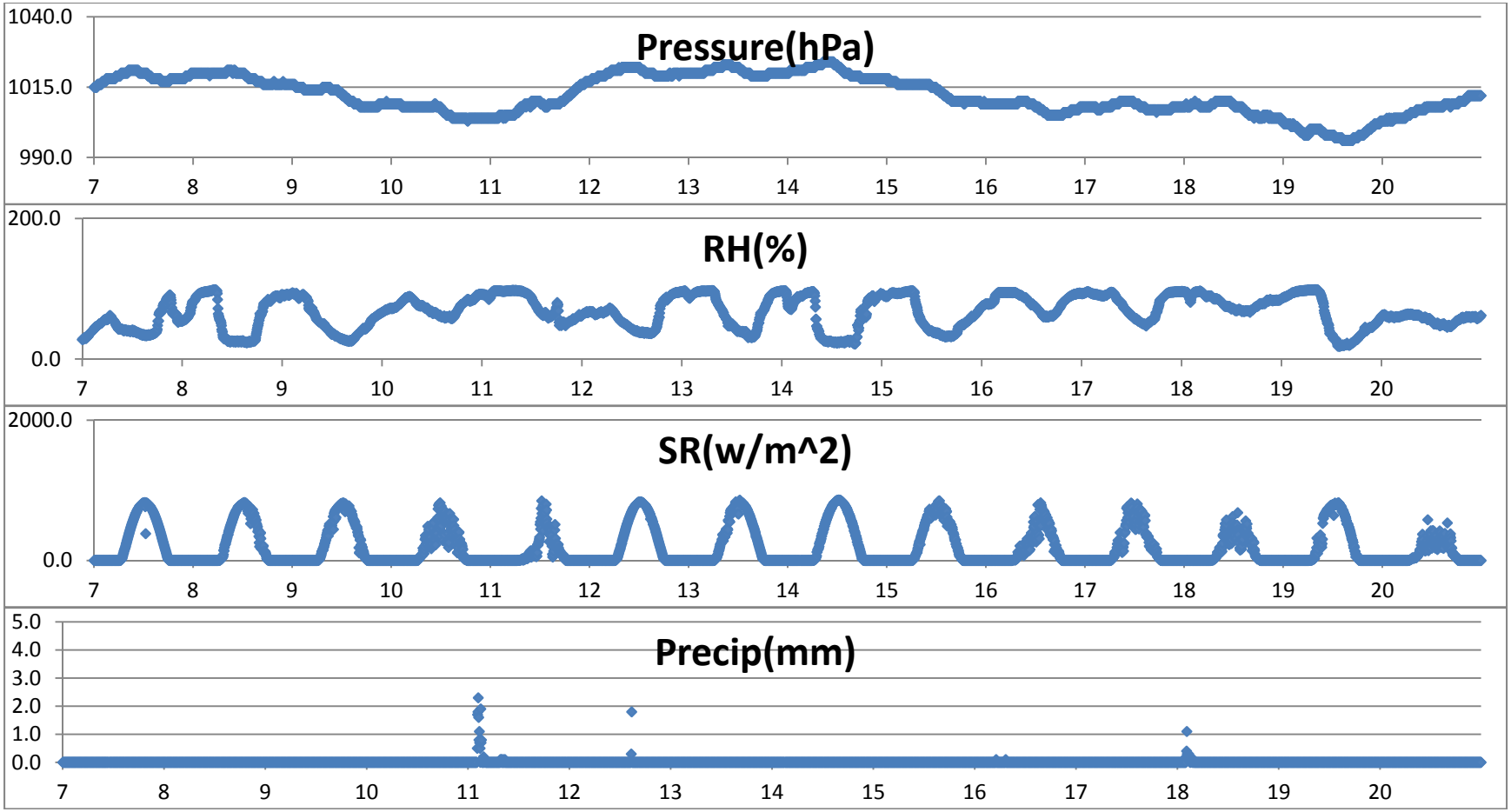
H_2S Assessment

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|	$\|d\|^2$				
3/7/2018 13:00	64.5	70.0	-7.9	-7.321	61.735	7.857	61.735				
3/8/2018 13:00	64.6	70.0	-7.7	75th Percentile	59.510	7.714	59.510	n	S_d	S_{d2}	$\sum\|d\|$	"AB" (Eqn 4)
3/9/2018 13:00	66.8	70.0	-4.6	-2.929	20.898	4.571	20.898	14	2.231	23.828	69.714	4.980
3/10/2018 13:00	68.3	70.0	-2.4		5.898	2.429	5.898	n-1	$\sum d$	$\sum d^2$	$\sum\|d\|^2$	"AS" (Eqn 5)
3/11/2018 13:00	68.3	70.0	-2.4		5.898	2.429	5.898	13	-69.714	411.878	411.878	2.231
3/12/2018 13:00	64.4	70.0	-8.0		64.000	8.000	64.000					
3/13/2018 13:00	65.7	70.0	-6.1		37.735	6.143	37.735			Bias (%) (Eqn 3)	Both Signs Positive
3/14/2018 13:00	64.3	70.0	-8.1		66.306	8.143	66.306			6.04	FALSE
3/15/2018 13:00	66.5	70.0	-5.0		25.000	5.000	25.000	CV (%) (Eqn 2)		Signed Bias (%)	Both Signs Negative
3/16/2018 13:00	68.2	70.0	-2.6		6.612	2.571	6.612	3.03		-6.04	TRUE
3/17/2018 13:00	68.0	70.0	-2.9		8.163	2.857	8.163				
3/18/2018 13:00	67.8	70.0	-3.1		9.878	3.143	9.878	Upper Probability Limit		Lower Probability Limit	
3/19/2018 13:00	67.4	70.0	-3.7		13.796	3.714	13.796	-0.61		-9.35	
3/20/2018 13:00	66.4	70.0	-5.1		26.449	5.143	26.449				



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
7
8
9
10
11
12
13
14
15
16
17
18
19
20