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January 10, 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 December 13, 2017 through December 26, 2017.

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)
12/14/2017	0.1
12/21/2017	0.6

On December 26th, TRC personnel observed negative drift while reviewing incoming data. TRC remotely accessed the H_2S analyzer to perform a zero adjustment followed by a three point calibration check.

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. A server error on December 24th was responsible for the loss of approximately four hours of data in the morning. On December 26th, TRC personnel performed a remote zero adjustment and calibration check resulting in approximately four hours of invalid H_2S data. The activity on the 26th interrupted the scheduled automated calibration check on that day.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. There was a single occurrence of met data loss during this monitoring period. On December 24th all met parameters were lost for nearly five and a half hours on account of a server error.

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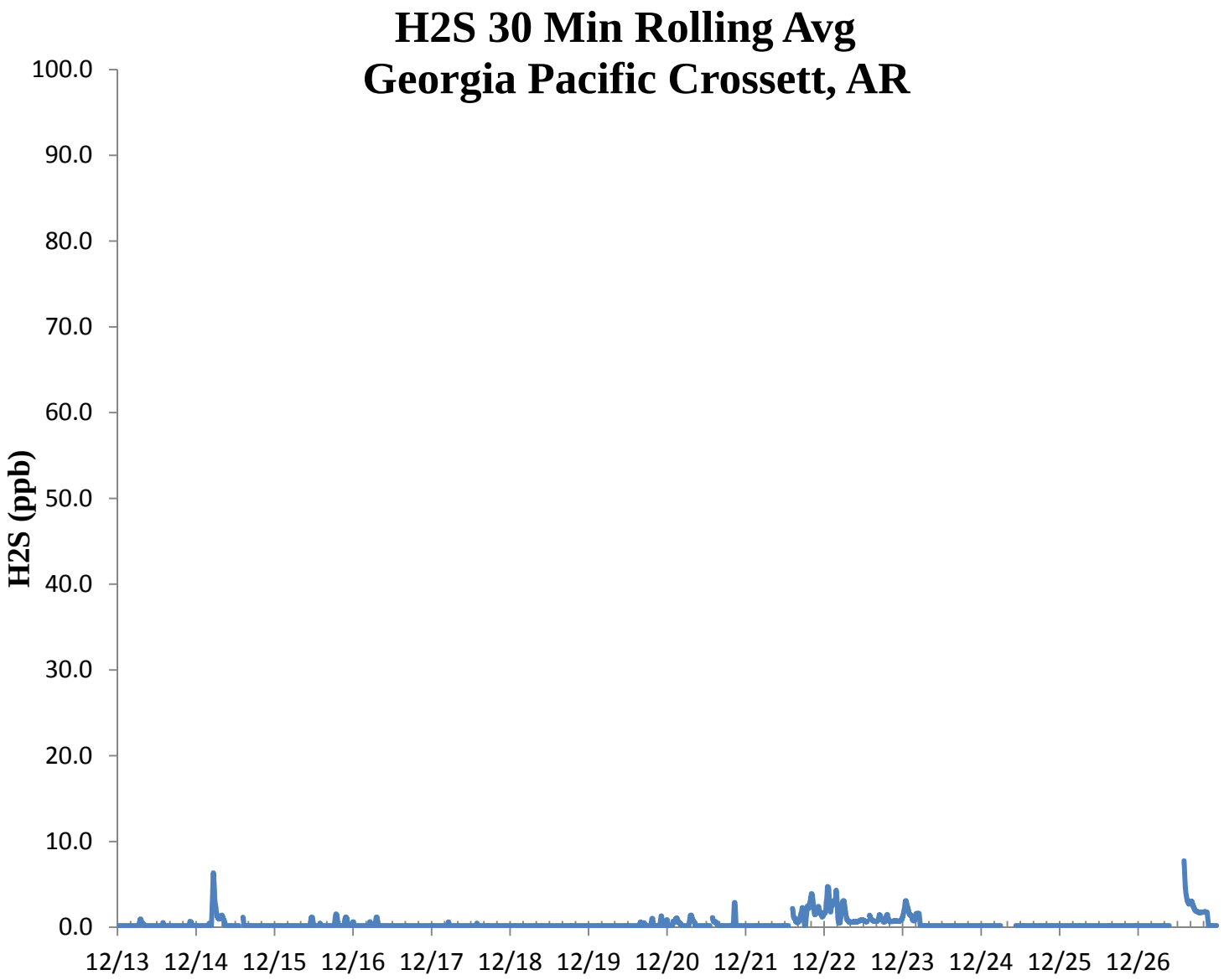
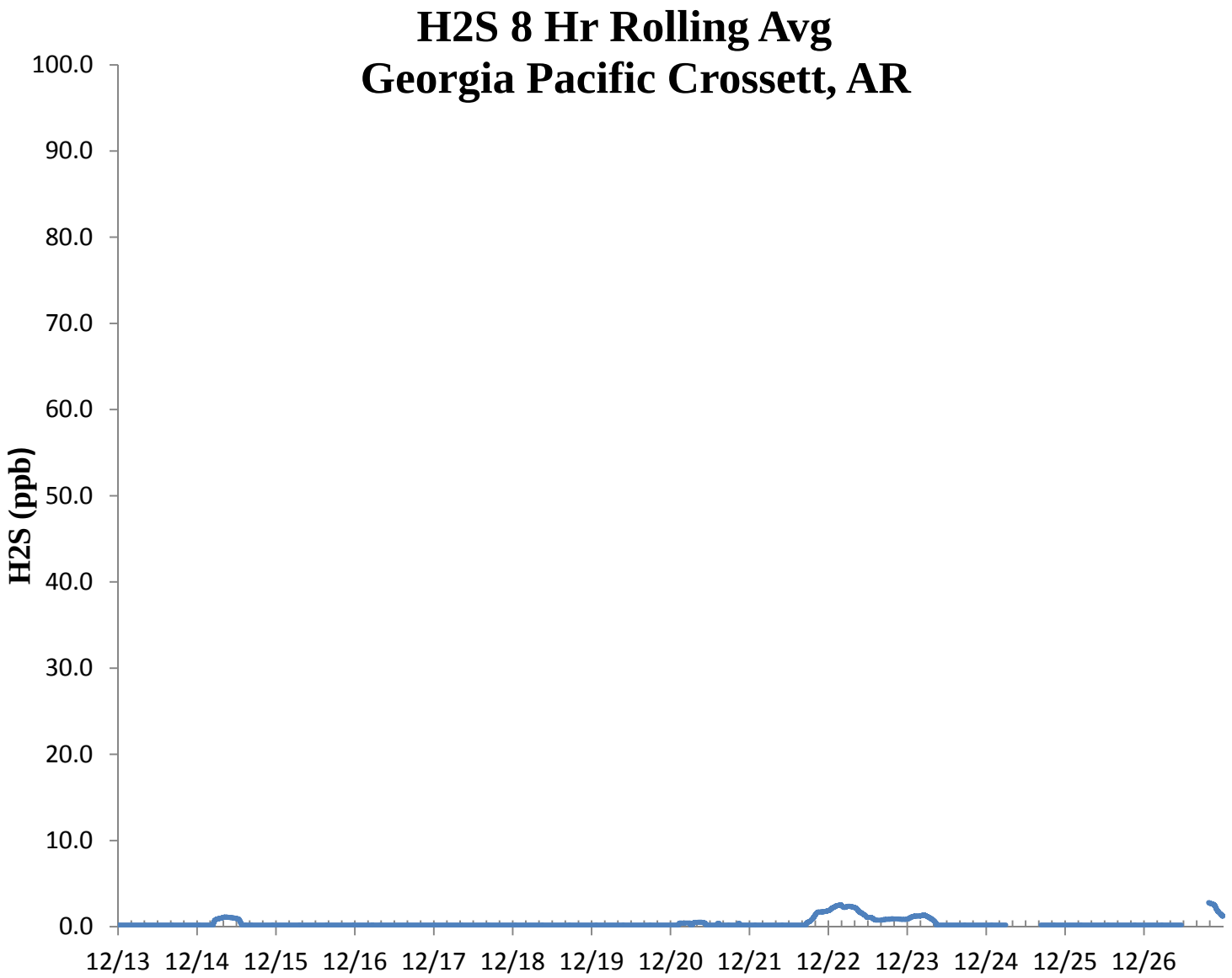
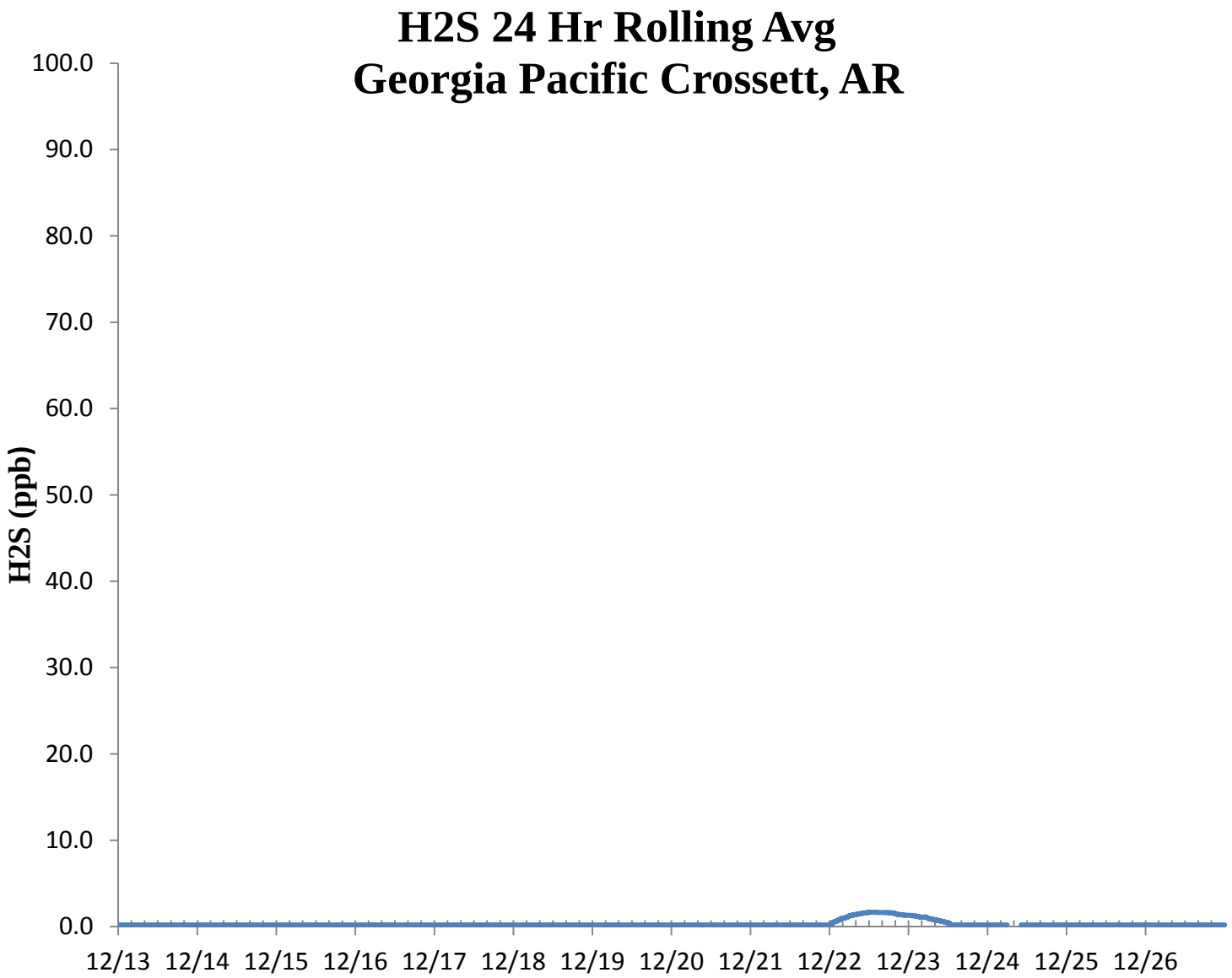
Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.gov

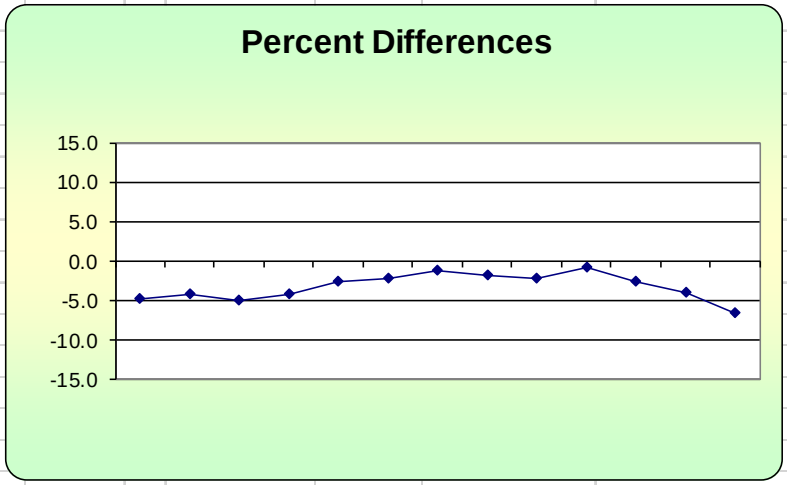

H2S 30 Min Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
12/13
12/14
12/15
12/16
12/17
12/18
12/19
12/20
12/21
12/22
12/23
12/24
12/25
12/26


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
12/13
12/14
12/15
12/16
12/17
12/18
12/19
12/20
12/21
12/22
12/23
12/24
12/25
12/26

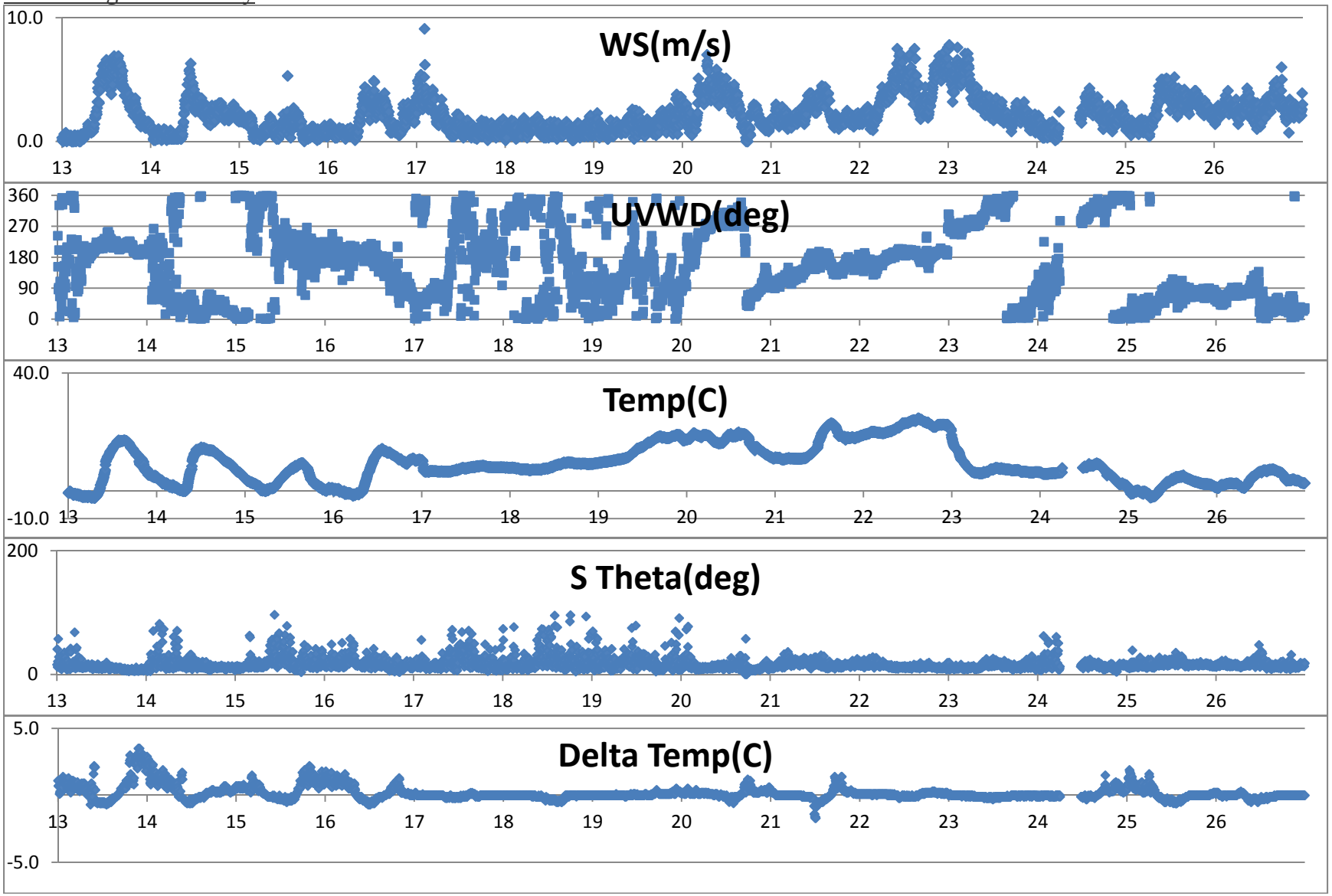

H2S 24 Hr Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
12/13
12/14
12/15
12/16
12/17
12/18
12/19
12/20
12/21
12/22
12/23
12/24
12/25
12/26

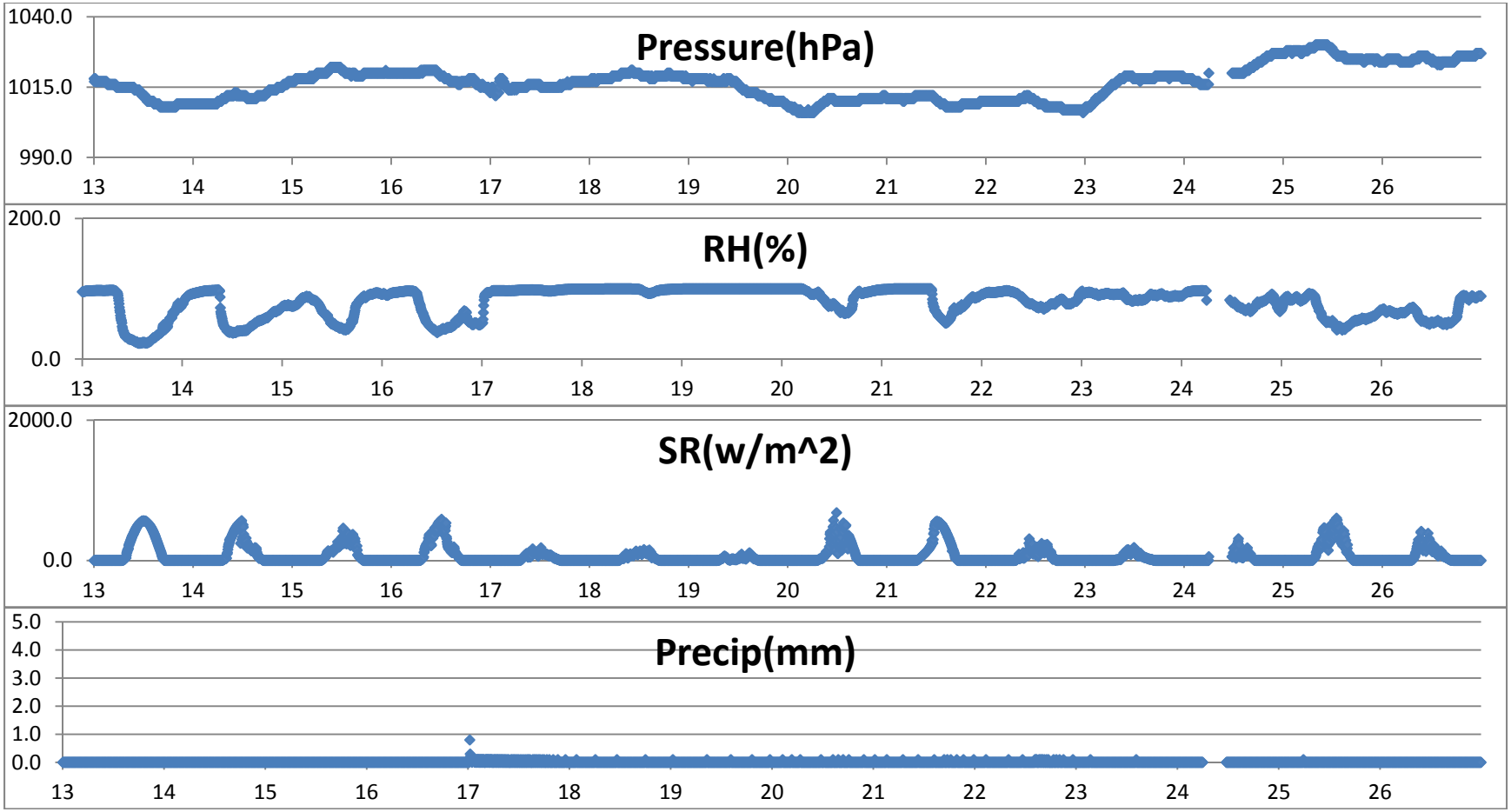
H_2S Assessment

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|	$\|d\|^2$						
12/13/2017 13:00	66.7	70.0	-4.7	-4.143	22.224	4.714	22.224						
12/14/2017 13:00	67.1	70.0	-4.1	75th Percentile	17.163	4.143	17.163	n	S_d	S_{d2}	$\sum\|d\|$		"AB" (Eqn 4)
12/15/2017 13:00	66.5	70.0	-5.0	-2.286	25.000	5.000	25.000	13	1.661	12.134	42.143		3.242
12/16/2017 13:00	67.1	70.0	-4.1		17.163	4.143	17.163	n-1	$\sum d$	$\sum d^2$	$\sum\|d\|^2$		"AS" (Eqn 5)
12/17/2017 13:00	68.2	70.0	-2.6		6.612	2.571	6.612	12	-42.143	169.735	169.735		1.661
12/18/2017 13:00	68.4	70.0	-2.3		5.224	2.286	5.224						
12/19/2017 13:00	69.1	70.0	-1.3		1.653	1.286	1.653				Bias (%) (Eqn 3)		Both Signs Positive
12/20/2017 13:00	68.8	70.0	-1.7		2.939	1.714	2.939				4.06		FALSE
12/21/2017 13:00	68.4	70.0	-2.3		5.224	2.286	5.224		CV (%) (Eqn 2)		Signed Bias (%)		Both Signs Negative
12/22/2017 13:00	69.4	70.0	-0.9		0.735	0.857	0.735		2.29		-4.06		TRUE
12/23/2017 13:00	68.2	70.0	-2.6		6.612	2.571	6.612						
12/24/2017 13:00	67.2	70.0	-4.0		16.000	4.000	16.000		Upper Probability Limit		Lower Probability Limit		
12/25/2017 13:00	65.4	70.0	-6.6		43.184	6.571	43.184		0.01		-6.5		



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
13
14
15
16
17
18
19
20
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22
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26