# Data Quality Reports for Session: 163590 User: opersson1 Completed: 11/10/2014

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#### **DQRID: D090331.2**

Start Date	Start Time	End Date	<b>End Time</b>
09/18/2008	0000	09/20/2008	2359

Subject:	NSA/MET/C1 - Temp/RH/wind data questionable	
DataStreams:	nsametC1.b1, nsatwrC1.b1	
<b>Description:</b>	New wind sensors and new T/RH probes were being installed during this time period. The	
	tower booms were lowered and much of the data collected were not at listed heights nor were	
	the data accurate due to configurations during install.	

#### Measurements: nsametC1.b1:

- qc\_wspd\_arith\_mean
- qc\_rh\_mean
- qc\_wspd\_vec\_mean
- vapor\_pressure\_std
- Wind speed vector mean(wspd\_vec\_mean)
- temp\_std
- qc\_temp\_mean
- Humidity, relative, at 2-m height, 1-min avg(rh\_mean)
- dew\_point\_mean
- Wind speed, lower, 1-min avg(wspd\_arith\_mean)
- Wind direction, vector, lower, 1-min avg(wdir\_vec\_mean)
- Mean Air Temperature or Hardware Error(temp\_mean)
- qc\_wdir\_vec\_mean
- vapor\_pressure\_mean
- wdir\_vec\_std
- qc\_vapor\_pressure\_mean
- qc\_dew\_point\_mean
- trh\_err\_code
- dew\_point\_std
- rh std

#### nsatwrC1.b1:

- wdir\_vec\_std
- qc\_wspd\_arith\_mean
- qc\_temp\_mean
- trh err code
- Wind speed, lower, 1-min avg(wspd\_arith\_mean)
- qc\_wdir\_vec\_mean
- dew\_point\_mean
- Mean Air Temperature or Hardware Error(temp mean)
- temp\_std
- Wind speed vector mean(wspd\_vec\_mean)
- Humidity, relative, at 2-m height, 1-min avg(rh\_mean)
- dew\_point\_std
- rh std
- qc\_rh\_mean
- Wind direction, vector, lower, 1-min avg(wdir\_vec\_mean)
- vapor\_pressure\_mean
- vapor\_pressure\_std
- qc\_wspd\_vec\_mean
- qc\_dew\_point\_mean
- qc\_vapor\_pressure\_mean

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#### **DORID:** D090331.3

<b>Start Date</b>	Start Time	End Date	<b>End Time</b>
10/10/2008	1220	10/10/2008	1750

10/11/2008	0700	10/11/2008	1100
11/07/2008	0652	11/08/2008	1903
11/22/2008	1400	11/24/2008	0310
11/25/2008	1900	11/27/2008	0300
02/13/2009	1450	02/18/2009	1800

Subject:	NSA/MET/C1 - PWS data missing due to snow impaction
DataStreams:	nsametC1.b1
Description:	Blizzard conditions caused the optics to become impacted with snow and ice rendering the Present Weather Detector inoperative.
Measurements:	nsametC1.b1:  • qc_pws_cumul_snow • qc_pws_pw_code_15min • qc_pws_precip_rate_mean_1min • PWS 10 minute mean visibility(pws_vis_mean_10min) • qc_pws_cumul_rain • pws_err_code • qc_pws_vis_mean_1min • pws_cumul_rain • pws_cumul_rain • pws_pw_code_1hr • pws_cumul_snow

• Rain, surface, 1-min avg(pws\_precip\_rate\_mean\_1min)

qc\_pws\_vis\_mean\_10min
PWS 1 minute mean visibility(pws\_vis\_mean\_1min)

pws\_pw\_code\_15min
qc\_pws\_pw\_code\_inst
pws\_pw\_code\_inst
qc\_pws\_pw\_code\_1hr
qc\_pws\_err\_code

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### DQRID: D090331.4 Start Date Start Time End Date End Time

Start Date Star	It Time End Date End Time	
11/01/2008	0000   12/18/2008   2100	
Subject:	NSA/MET/C1 - Wind data intermittent	
DataStreams:	nsametC1.b1, nsatwrC1.b1	
Description:	There was a loose wire on the serial data multiplexer causing the wind data to become missing during high wind situations. The high winds caused the enclosure to vibrate making the connection intermittent.	
Measurements	<ul> <li>wind speed, lower, 1-min avg(wspd_arith_mean)</li> <li>qc_wspd_arith_mean</li> <li>qc_wspd_vec_mean</li> <li>Wind direction, vector, lower, 1-min avg(wdir_vec_mean)</li> <li>qc_wdir_vec_mean</li> <li>Wind speed vector mean(wspd_vec_mean)</li> <li>wdir_vec_std</li> </ul>	

#### nsatwrC1.b1:

- wdir\_vec\_std
- qc\_wspd\_arith\_mean
- Wind direction, vector, lower, 1-min avg(wdir\_vec\_mean)
- qc\_wspd\_vec\_mean
- Wind speed, lower, 1-min avg(wspd\_arith\_mean)
- qc\_wdir\_vec\_mean
- Wind speed vector mean(wspd\_vec\_mean)

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### **DQRID: D090331.5**

<b>Start Date</b>	Start Time	End Date	<b>End Time</b>
11/29/2008	1800	11/30/2008	1730
12/29/2008	1500	12/30/2008	0800
01/01/2009	0138	01/02/2009	0447
01/04/2009	0624	01/06/2009	1428
01/07/2009	1740	01/08/2009	1720
01/14/2009	0930	01/14/2009	2103

Subject:	NSA/MET/C1 - CMH data missing
<b>DataStreams:</b>	nsametC1.b1
Description.	The data from the CMH was missing during these times due to a failing logic board. The board was replaced.
Measurements:	

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#### DQRID: D090630.1

Start Date	Start Time	End Date	<b>End Time</b>
06/08/2009	2244	06/11/2009	2037

Subject:	NSA/MET/C1 - Met data incorrect during calibration
<b>DataStreams:</b>	nsametC1.b1, nsatwrC1.b1
Description.	All met data from the tower booms (temp, RH, winds and derived variables) were incorrect due to the booms being lowered from their measurement heights. Additionally, the scaffolding was located directly adjacent to the booms affecting the wind field and

the Temp/RH data.

#### Measurements: nsametC1.b1:

- qc\_wspd\_arith\_mean
- qc\_rh\_mean
- qc\_wspd\_vec\_mean
- vapor\_pressure\_std
- Wind speed vector mean(wspd\_vec\_mean)
- qc\_temp\_mean
- temp\_std
- qc\_time
- Humidity, relative, at 2-m height, 1-min avg(rh\_mean)
- dew\_point\_mean
- Wind speed, lower, 1-min avg(wspd\_arith\_mean)
- Wind direction, vector, lower, 1-min avg(wdir\_vec\_mean)
- Mean Air Temperature or Hardware Error(temp\_mean)
- qc\_wdir\_vec\_mean
- vapor\_pressure\_mean
- wdir\_vec\_std
- qc\_vapor\_pressure\_mean
- qc\_dew\_point\_mean
- trh\_err\_code
- dew\_point\_std
- rh\_std

#### nsatwrC1.b1:

- wdir vec std
- qc\_wspd\_arith\_mean
- qc\_temp\_mean
- trh\_err\_code
- Wind speed, lower, 1-min avg(wspd\_arith\_mean)
- qc\_wdir\_vec\_mean
- dew\_point\_mean
- Mean Air Temperature or Hardware Error(temp\_mean)
- temp\_std
- Wind speed vector mean(wspd\_vec\_mean)
- Humidity, relative, at 2-m height, 1-min avg(rh\_mean)
- dew point std
- rh\_std
- qc\_rh\_mean
- Wind direction, vector, lower, 1-min avg(wdir\_vec\_mean)
- vapor\_pressure\_mean
- vapor\_pressure\_std
- qc\_wspd\_vec\_mean
- qc\_dew\_point\_mean
- qc\_vapor\_pressure\_mean

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**DQRID: D090630.2** 

06/10/2009	0014 06/10/2009 0130
Subject:	NSA/MET/C1 - PWS calibration
DataStreams:	nsametC1.b1
Description:	The PWS was undergoing calibration. Any data collected during this time is not representative of the atmospheric state.
Measurements	<ul> <li>qc_pws_cumul_snow</li> <li>qc_pws_pw_code_15min</li> <li>qc_pws_precip_rate_mean_1min</li> <li>PWS 10 minute mean visibility(pws_vis_mean_10min)</li> <li>qc_pws_cumul_rain</li> <li>pws_err_code</li> <li>qc_pws_vis_mean_1min</li> <li>pws_cumul_rain</li> <li>pws_pw_code_1hr</li> <li>pws_cumul_snow</li> <li>Rain, surface, 1-min avg(pws_precip_rate_mean_1min)</li> <li>pws_pw_code_15min</li> <li>qc_pws_pw_code_inst</li> <li>pws_pw_code_inst</li> <li>qc_pws_pw_code_1hr</li> <li>qc_pws_pw_code_1hr</li> <li>qc_pws_err_code</li> <li>qc_pws_vis_mean_10min</li> <li>PWS 1 minute mean visibility(pws_vis_mean_1min)</li> </ul>

## DQRID: D090630.3 Start Date Start Time End Date End Time

Start Date Start	t Time End Date End Time
06/10/2009 01	0159 06/10/2009 1940
Subject:	NSA/MET/C1 - CMH calibration
DataStreams:	nsametC1.b1
<b>Description:</b>	CMH data missing due to removal of the sensor for annual calibration.
Measurements:	<ul> <li>nsametC1.b1:</li> <li>cmh_dew_point</li> <li>qc_cmh_dew_point</li> <li>qc_cmh_rh</li> <li>cmh_temp</li> <li>cmh_vapor_pressure</li> <li>qc_cmh_vapor_pressure</li> <li>qc_cmh_sat_vapor_pressure</li> <li>qc_cmh_temp</li> <li>cmh_sat_vapor_pressure</li> <li>cmh_rh</li> </ul>

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#### **DQRID: D090710.1**

Start Date Star	t Time End Date End Time		
06/13/2009 2	215 07/08/2009 2250		
Subject:	NSA/MET/C1 - 2m RH values incorrect		
DataStreams:	nsametC1.b1, nsatwrC1.b1		
Description:	The new t/rh probe installed during annual calibrations and checks began to exhibit readings that were biased high compared to the Chilled Mirror Hygrometer. In high RH conditions the sensor would consistently report RH values in excess of 105%. Comparisons to the other tower levels also suggested that the 2m level RH data is suspect.		
Measurements:	<ul> <li>dew_point_mean</li> <li>Humidity, relative, at 2-m height, 1-min avg(rh_mean)</li> <li>qc_rh_mean</li> <li>vapor_pressure_std</li> <li>vapor_pressure_mean</li> <li>qc_dew_point_mean</li> <li>dew_point_std</li> <li>rh_std</li> </ul>		
	<ul> <li>nsatwrC1.b1:</li> <li>rh_std</li> <li>qc_rh_mean</li> <li>vapor_pressure_mean</li> <li>vapor_pressure_std</li> <li>dew_point_mean</li> <li>qc_dew_point_mean</li> <li>Humidity, relative, at 2-m height, 1-min avg(rh_mean)</li> <li>dew_point_std</li> <li>qc_vapor_pressure_mean</li> </ul>		

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## DQRID: D100208.13 Start Date Start Time End Date End Time

Start Date Start	t Thie Blu Date Blu Thie				
01/23/2010 05	513 02/05/2010 2100				
Subject:	NSA/MET/C1 - CMH and 10m winds failure				
<b>DataStreams:</b>	nsametC1.b1				
Description:	At 0513GMT on 1/23 the atmos_pressure and CMH - temp, RH, DP & Sat. VP changed abruptly to unlikely values. The 10m winds failed at 1420GMT.  The CMH was repaired on 02/04/2010 at 2254GMT and the 10m winds sensor was replaced on 02/05/2010 at 2100GMT.				
Measurements:	<ul> <li>nsametC1.b1:</li> <li>cmh_dew_point</li> <li>Wind speed, lower, 1-min avg(wspd_arith_mean)</li> <li>qc_wspd_arith_mean</li> </ul>				

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### DQRID: D100504.1 Start Date Start Time End Date End Time

310121 2 001	<u> </u>			
04/23/2010 19	943 04/26/2010 1903			
Subject:	NSA/MET/C1 - CMH Data Missing			
<b>DataStreams:</b>	nsametC1.b1			
	The GFCI had tripped causing the CMH to lose power. All CMH variables are missing except CMHRH which reports 100% for the entire time.			
Measurements:	nsametC1.b1:  cmh_dew_point qc_cmh_dew_point qc_cmh_rh cmh_temp cmh_vapor_pressure qc_cmh_vapor_pressure qc_cmh_sat_vapor_pressure qc_cmh_temp cmh_sat_vapor_pressure cmh_rh			

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Start Date Start Time End Date End Time

#### **DQRID:** D100709.1

05/25/2010 1	730 07/07/2010 2200		
Subject:	NSA/MET/C1 - CMH Sent to Vendor for Repair		
DataStreams:	nsametC1.b1		
Description:	Description: CMH connector on the transmitter enclosure that goes to the head unit degraded and failed.  System was removed and sent to the manufacturer for repair.		
<b>Measurements:</b>	Measurements: nsametC1.b1:		

cmh_dew_point  qc_cmh_dew_point  qc_cmh_rh  cmh_temp  cmh_vapor_pressure  qc_cmh_vapor_pressure  qc_cmh_sat_vapor_pressure  qc_cmh_temp  cmh_sat_vapor_pressure  cmh_rh	
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#### **DQRID:** D101215.2

Start Date S	tart Time	End Date	End Time	
12/01/2010	1208	12/09/2010	2259	
Subject:	NSA/MI	ET/C1 - CMI	H offline	
DataStreams	s: nsame	tC1.b1		
<b>Description:</b>	CMH re	emoved for	repair.	
Measuremen	nts: nsamet	C1.b1:		
		qc_cmh_sat_ qc_cmh_tem	v_point  pressure  oor_pressure _vapor_pressu	re

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#### **DQRID:** D101220.3

Start Date Start Time End Date End Time				
10/23/2010 1	543 11/05/2010 0716			
Subject:	NSA/MET/C1 - 10m wind sensor offline			
DataStreams:	nsametC1.b1			
<b>Description:</b>	The 10m wind sensor values were 0 m/s and 000 for wind direction. The sensor lost communications.			
Measurements:	Measurements:  o qc_wdir_vec_mean  o Wind speed, lower, 1-min avg(wspd_arith_mean)  o Wind speed vector mean(wspd_vec_mean)  o qc_wspd_arith_mean  o wdir_vec_std  o qc_wspd_vec_mean			

Start Date Start Time End Date End Time

• Wind direction, vector, lower, 1-min avg(wdir\_vec\_mean)

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#### **DQRID:** D110217.1

Start Bate Star	t Time Bita Bate		
01/24/2011 1	800 02/10/2011	2300	
Subject:	NSA/MET/C1 - CM	H offline	
DataStreams:	nsametC1.b1		
Description:	dewpoint		CMH went offline resulting in missing temperature and s vapor pressure, saturation vapor pressure, and RH

Problem fixed with a power cycle.

Measurements: nsametC1.b1:

• cmh\_dew\_point

• cmh\_temp

• cmh\_vapor\_pressure

• cmh\_sat\_vapor\_pressure

• cmh\_rh

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### DQRID: D110602.2 Start Date Start Time End Date End Time

Start Date Start Time Dist Date Dist Time			
05/15/2011 0	900 05/28/2011 0010		
Subject:	NSA/MET/C1 - CMH Failure		
DataStreams:	nsametC1.b1		
<b>Description:</b>	The Chilled Mirror Hydrometer (CMH) developed a short in the wiring harness. All CMH data missing or incorrect during the period listed.		
Measurements:	<ul> <li>nsametC1.b1:</li> <li>cmh_dew_point</li> <li>qc_cmh_dew_point</li> <li>qc_cmh_rh</li> <li>cmh_temp</li> <li>cmh_vapor_pressure</li> <li>qc_cmh_vapor_pressure</li> <li>qc_cmh_sat_vapor_pressure</li> <li>qc_cmh_temp</li> <li>cmh_sat_vapor_pressure</li> <li>qc_cmh_temp</li> <li>cmh_sat_vapor_pressure</li> </ul>		

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#### **DQRID:** D110722.2

Start Date Start Time End Date End Time

• cmh\_rh

05/17/2011 0	200 07/20/2011 1823			
Subject:	NSA/MET/C1 - Wind sensor data missing			
DataStreams:	nsametC1.b1, nsatwrC1.b1			
Description:	2m, 10m, 20m wind sensors went off-line 5/17 due to GFCI tripping caused by failing CMH. The 2m and 20m data wind sensor returned 6/6, but the 10m remained offline until 7/20 as the sensor was damaged.			
Measurements:	<ul> <li>wind speed, lower, 1-min avg(wspd_arith_mean)</li> <li>Wind speed vector mean(wspd_vec_mean)</li> <li>wdir_vec_std</li> <li>Wind direction, vector, lower, 1-min avg(wdir_vec_mean)</li> </ul>			
	<ul> <li>wdir_vec_std</li> <li>Wind speed, lower, 1-min avg(wspd_arith_mean)</li> <li>Wind direction, vector, lower, 1-min avg(wdir_vec_mean)</li> <li>Wind speed vector mean(wspd_vec_mean)</li> </ul>			

#### **DQRID:** D111129.1

Start Date Star	t Time End Date End Time		
11/06/2011 0	758 11/19/2011 0800		
Subject:	NSA/MET/C1 - CMH communication failure		
<b>DataStreams:</b>	nsametC1.b1		
Description:	CMH lost communication with datalogger. All values from CMH were -6999 during this time resulting in the CMHRH flatlining at 100%. Communications was intermittent during entire time period.		
Measurements:  - cmh_dew_point - cmh_temp - cmh_vapor_pressure - cmh_sat_vapor_pressure - cmh_rh			

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### **DQRID:** D120105.2

DQMD . D120	100.2
Start Date Star	t Time End Date End Time
11/08/2011 0	0000 02/22/2013 2035
Subject:	NSA/MET/C1 - Frosting/Condensation
DataStreams:	nsametC1.b1
<b>Description:</b>	Beginning 20111108, the PWD began occasionally frosting over, signaling an alarm code and

sometimes causing the PWD to stop reporting. A new PWD with hood heater attachment was installed 20130222.

#### Measurements: nsametC1.b1:

- Rain, surface, 1-min avg(pws\_precip\_rate\_mean\_1min)
- pws\_cumul\_snow
- pws\_pw\_code\_15min
- PWS 10 minute mean visibility(pws\_vis\_mean\_10min)
- pws\_pw\_code\_inst
- pws\_err\_code
- pws\_cumul\_rain
- PWS 1 minute mean visibility(pws\_vis\_mean\_1min)
- pws\_pw\_code\_1hr

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#### **DQRID:** D120423.1

Start Date	Start Time	End Date	<b>End Time</b>
12/07/2011	2215	12/07/2011	2330
12/08/2011	0145	12/08/2011	1345
12/25/2011	0300	12/25/2011	0630
01/02/2012	1600	01/03/2012	1900
01/05/2012	0330	01/06/2012	0030
01/07/2012	1130	01/08/2012	0100
01/08/2012	0730	01/08/2012	0800
01/08/2012	1130	01/09/2012	0000
01/14/2012	0800	01/14/2012	1545
01/16/2012	1945	01/17/2012	1945
01/18/2012	1800	01/18/2012	1900
03/04/2012	0000	03/04/2012	0200
12/04/2011	1300	12/04/2011	1730
12/05/2011	0000	12/05/2011	2100
12/05/2011	2130	12/07/2011	0645

Subject:	NSA/MET/C1 - CMH failure
DataStreams:	nsametC1.b1
<b>Description:</b>	Starting $14:17$ GMT on $12/4/2011$ the CMH Dew Point began reporting missing value, CMH
	relative humidity was flat-lining at 100% and CMH saturated vapor pressure was flat-lined at a high value. This condition continued very intermittently for several months. Issue was frosting and a failed ventilation fan.
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#### Measurements: nsametC1.b1:

- cmh\_dew\_point
- cmh\_temp
- cmh\_vapor\_pressure
- cmh\_rh
- cmh\_sat\_vapor\_pressure

### DQRID: D121108.1

Start Date Star	t Time End Date End Time		
09/26/2012 2	000 10/03/2012 2330		
Subject:	NSA/MET/C1 - 10m wind data not reporting		
<b>DataStreams:</b>	nsametC1.b1, nsatwrC1.b1		
<b>Description:</b>	10 meter wind speed and direction data were not reporting after a scheduled power outage took place. Sensor was replaced.		
Measurements:	<ul> <li>wind speed, lower, 1-min avg(wspd_arith_mean)</li> <li>Wind speed vector mean(wspd_vec_mean)</li> <li>wdir_vec_std</li> <li>Wind direction, vector, lower, 1-min avg(wdir_vec_mean)</li> </ul> nsatwrC1.b1: <ul> <li>wdir_vec_std</li> <li>Wind speed, lower, 1-min avg(wspd_arith_mean)</li> <li>Wind direction, vector, lower, 1-min avg(wdir_vec_mean)</li> <li>Wind speed vector mean(wspd_vec_mean)</li> </ul>		

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#### **DQRID: D121128.1**

Start Date Start	t Time End Date End Time		
02/04/2012 10	029 02/13/2012 0223		
Subject:	Subject: NSA/MET/C1 - Incorrect liquid precipitation accumulation		
DataStreams:	nsametC1.b1		
<b>Description:</b>	A problem with the present weather detector's firmware caused negative precipitation		
	accumulation to be recorded. The problem was fixed with a sensor swap.		
Measurements: nsametC1.b1:			
• pws_cumul_rain			

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#### **DQRID: D130405.1**

Start Date Star	t Time End Date End Time
04/04/2013 1	820 04/04/2013 2320
Subject:	NSA/MET/C1 - Present Weather Detector testing
DataStreams:	nsametC1.b1
Description.	The present weather detector was undergoing testing during this time. The data is not representative of true conditions.
Measurements:	

- Rain, surface, 1-min avg(pws\_precip\_rate\_mean\_1min)
- pws\_cumul\_snow
- pws\_pw\_code\_15min
- PWS 10 minute mean visibility(pws\_vis\_mean\_10min)
- pws\_pw\_code\_inst
- pws\_err\_code
- pws\_cumul\_rain
- PWS 1 minute mean visibility(pws\_vis\_mean\_1min)
- pws\_pw\_code\_1hr

### **DQRID:** D130621.2

02/22/2013 2035 06/04/2013 2200  Subject: NSA/MET/C1 - PWD failure  DataStreams: nsametC1.b1  Description: The PWD erroneously reported constant precipitation during the specified period	
DataStreams: nsametC1.b1	
<b>Description:</b> The PWD erroneously reported constant precipitation during the specified period	
easurements:    pwd_precip_rate_mean_1min	

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#### **DQRID: D140121.4**

<b>Start Date</b>	Start Time	End Date	End Time
11/03/2013	0041	11/03/2013	1934
11/13/2013	0756	11/14/2013	0812
11/22/2013	2223	11/25/2013	1754
12/01/2013	0002	12/01/2013	0541
12/07/2013	2139	12/07/2013	2251
12/08/2013	0047	12/08/2013	0233
12/13/2013	0731	12/13/2013	0906
12/13/2013	1650	12/14/2013	2048
12/15/2013	0456	12/15/2013	0701
12/20/2013	0843	12/21/2013	1329
12/22/2013	0015	12/23/2013	0343
12/27/2013	1624	12/30/2013	0809
01/01/2014	0529	01/01/2014	1217

01/04/2014	0802	01/04/2014	1203
01/04/2014		01/04/2014	1845
01/04/2014		01/04/2014	1314
01/03/2014		01/06/2014	2350
01/00/2014		01/00/2014	1645
01/13/2014		01/15/2014	1146
01/14/2014	0642	01/20/2014	1618
01/18/2014		01/20/2014	1018
02/10/2014		02/11/2014	0455
02/16/2014	2203	02/11/2014	1934
			1348
02/20/2014		02/20/2014	
02/23/2014		02/24/2014	1657
02/25/2014	0046	02/27/2014	2325
03/01/2014		03/01/2014	0444
03/01/2014		03/02/2014	0631
03/04/2014		03/05/2014	0254
03/08/2014	2041	03/09/2014	0210
03/09/2014	1847	03/09/2014	1939
03/09/2014	2059	03/09/2014	2333
03/10/2014		03/11/2014	0138
03/11/2014	1956	03/13/2014	0400
03/13/2014		03/15/2014	0416
03/19/2014	2148	03/20/2014	0421
03/21/2014		03/21/2014	0250
03/21/2014		03/21/2014	1239
03/23/2014	0140	03/23/2014	0307
03/23/2014		03/24/2014	0119
03/24/2014		03/25/2014	0052
03/27/2014		03/28/2014	0109
03/28/2014	2139	03/29/2014	0213
03/30/2014	0040	03/30/2014	0254
03/31/2014		03/31/2014	0427
04/01/2014	0007	04/01/2014	0404
04/04/2014		04/05/2014	0228
04/05/2014	2146	04/06/2014	0407
04/06/2014	2054	04/07/2014	0347
04/07/2014	1723	04/07/2014	2137
04/09/2014	0025	04/09/2014	0358
04/09/2014	2154	04/10/2014	0440
04/10/2014	1947	04/10/2014	2201
04/18/2014	2216	04/19/2014	0006
Subject:	NC 7 /N	IET/C1 - CMI	I foilum

Subject:	NSA/MET/C1 - CMH failure due to icing
<b>DataStreams:</b>	nsametC1.b1
<b>Description:</b>	Snow/ice pack on the CMH causes instrument failure in adverse conditions.
	Use temp_mean, rh_mean, and vapor_pressure_mean from this datastream as a substitute.

Measurements: nsametC1.b1: • cmh\_dew\_point • cmh\_temp • cmh\_vapor\_pressure • cmh\_sat\_vapor\_pressure • cmh\_rh

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<b>DQRID</b> : <b>D1402</b>	213.3			
Start Date Start	t Time	End Date	End Time	
02/06/2014 13	317	02/06/2014	1404	
Subject:	NSA/ME	ET/C1 - Por	wer outage	2
DataStreams:	nsamet	C1.b1, nsat	wrC1.b1	
<b>Description:</b>	Incorr	ect data	due to pov	ver outage.
<ul> <li>Measurements:</li> <li>cmh_dew_point</li> <li>Wind speed, lower, 1-min avg(wspd_arith_mean)</li> <li>Wind direction, vector, lower, 1-min avg(wdir_vec_mea</li> <li>cmh_vapor_pressure</li> <li>vapor_pressure_std</li> <li>cmh_sat_vapor_pressure</li> <li>vapor_pressure_mean</li> <li>Wind speed vector mean(wspd_vec_mean)</li> <li>wdir_vec_std</li> <li>cmh_temp</li> <li>cmh_rh</li> </ul>				
	<ul> <li>wdir_vec_std</li> <li>Wind direction, vector, lower, 1-min avg(wdir_vec_mean)</li> <li>vapor_pressure_mean</li> <li>vapor_pressure_std</li> </ul>			
	• 7	Wind speed,	lower, 1-m	nin avg(wspd_arith_mean) n(wspd_vec_mean)

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### **DQRID:** D141006.3 Start Date Start Time End Date End Time

09/25/2014 0	<u>500   09/25/2014   1800  </u>
Subject:	NSA/MET/C1 - CMH humidity measurements suspect
DataStreams:	nsametC1.b1
Beset Iption.	During this time, the chilled mirror dew point, relative humidity, and vapor pressure data become stagnant following a period of high variability. Data begin to compare well

	with co-located sensors without interference.
Measurements:	nsametC1.b1:

### DQRID: D141006.4

Start Date S	tart Time	End Date	End Time		
10/01/2014	2215	10/04/2014	0056		
Subject:	NSA/ME	NSA/MET/C1 - Temp/RH instrument offline			
DataStreams	s: nsame	nsametC1.b1			
<b>Description:</b>					
Measuremen	• 1	<ul> <li>nsametC1.b1:</li> <li>Mean Air Temperature or Hardware Error(temp_mean)</li> <li>Humidity, relative, at 2-m height, 1-min avg(rh_mean)</li> <li>dew_point_mean</li> <li>vapor_pressure_mean</li> <li>trh_err_code</li> </ul>			

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## DQRID : D141106.1 Start Date Start Time End Date End Time

Start Date Start Time End Date End Time					
09/05/2014 2	100 11/06/2014 2052				
Subject:	NSA/MET/C1 - Reprocess: Wind direction off by +30 degrees				
DataStreams:	nsametC1.b1, nsatwrC1.b1				
Description:	The wind direction data are 30 degrees too high due to an alignment/offset problem during this time. Problem affects all 4 tower levels in the nsatwrC1.b1 datastream, as well as the wind direction data in the nsametC1.b1 datastream. Data will be reprocessed for correction.				
Measurements:	• Wind direction, vector, lower, 1-min avg(wdir_vec_mean)    nsatwrC1.b1:   e measurements contained in this datastream are unknown   e measurements contained in this datastream are unk				

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DQRs for Session: 163590 User:opersson1Completed: 11-10-2014

#### **END OF DATA**