

## DISCOVER-AQ Daily Observational Status

**Date: 3 September 2013**

### **Status definitions:**

**Green = Full Capability (no comment required)**

**Yellow = Partial Capability (comment on specific instruments or variables compromised)**

**Red = Severe or Total Loss of Capability (comment on prognosis for recovery)**

P-3B	Status	Comment
LARGE (Anderson)		
NOxyO3 (Weinheimer)		
TD-LIF (Cohen)		HNO3 channel down (not critical)
DFGAS (Fried)		
DACOM (Diskin)		
DLH (Diskin)		
AVOCET (Yang)		
PTR-MS (Wisthaler)		
NOAA SO2 (Holloway)		
PDS (Barrick)		
REVEAL (VanGilst)		
B200	Status	Comment
HSRL-2 (Hostetler)		
ACAM (Janz)		
Ground	Status	Comment
Pandora (Herman)		Clinton not working (not critical), heat problems at West Houston
NATIVE (Thompson)		see attached report
UMBC (Hoff)		
Millersville (Clark)		
Aeronet (Holben)		
Aerodyne(Herndon)		
Cambridge (Mead)		All units in place
NOAA Lidar (Hardesty)		
NOAA Radiation (Lantz)		
Moody Tower (Lefer)		
EPA (Long/Szykman)		
TCEQ/City of Houston	Status	Comment
Channelview		
Conroe		
Deer Park		
Galveston		
Manvel Croix		
West Houston		

**Penn State/NATIVE  
DISCOVER-AQ Houston 2013**

**Smith Point, TX**

**Lat:** 29.54556  
**Lon:** -94.77991  
**Last Updated:** 3-Sep-2013  
**Contact:** Douglas Martins  
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Legend
Nominal
Data Suspect/Waiting
Not Recording

\* All Times in UTC (=CDT+5)

**Overall Status**

Instrument (Mfg/Model)	Status	Constituent
<b>Penn State</b>		
Ozone Analyzer (O3, TECO 49C)		O3
Sulfur Dioxide Analyzer (SO2, TECO 43C)	Adjusted PMT, Calibrated, nominal sampling	SO2
Carbon Monoxide Analyzer (CO, TECO 48C)		CO
Reactive Nitrogen Analyzer (NOy, TECO 42C-Y)	bad ozonator, ordering replacement	NO, NOy
Temperature Probe (R.M. Young 41382L-90C)		Temperature
Relative Humidity Probe (R.M. Young 41382L-90C)		Relative Humidity
Pressure (R.M. Young 61202)		Pressure
Mechanical Anemometer (R.M. Young 05103)		Wind Speed, Direction
J-NO2 Filter Radiometer (Met-Con)		NO2 Photolysis Rate
Spectral Pyranometer (Eppley PSP)		Total Irradiance
Sonic Anemometer (Applied Technologies K-Style)		u, v, w, temperature
PTR-MS (Ionicon)	Scanning key masses returns nominal results, sampling will start tomorrow	Speciated VOCS
VOC canisters	2 canister samples (17:07,19:39 UTC)	Speciated VOCS
Pandora	Not set up yet, low priority since NASA Goddard already has 2 pandoras in operation	Column NO2, O3
Ozone/Radiosondes (DMT, IMet-1)	1 sonde launch at today targeting Aura overpass	O3, Temperature, Pressure, Relative Humidity, Wind Speed, Wind Direction
Cavity Ring-Down Spectrometer (Picarro)		CO2, CH4, 13CO2, 13CH4
Measurement of Ozone Production Sensor (Penn State)	Delivery to Smith Point on Tue 9/3	O3 Chemical Production Rate
*Instrument statuses below are based on Penn State's assessment, true assessment provided by PI		
<b>NASA Goddard</b>		
Pandora	PAN 29 stopped working from ~16:45-18:30, now operating nominally	Column NO2, O3
<b>EPA/NASA Langley</b>		
CAPS NO2		NO2