DISCOVER-AQ Daily Observational Status

Date: 1 February 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)

<table>
<thead>
<tr>
<th>P-3B</th>
<th>Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARGE (Anderson)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOxyO3 (Weinheimer)</td>
<td></td>
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<tr>
<td>TD-LIF (Cohen)</td>
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<tr>
<td>DFGAS (Fried)</td>
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<tr>
<td>DACOM (Diskin)</td>
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<tr>
<td>DLH (Diskin)</td>
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<tr>
<td>AVO CET (Yang)</td>
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<tr>
<td>PTR-MS (Wisthaler)</td>
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<tr>
<td>NOAA NH3 (Nowak)</td>
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<tr>
<td>PDS (Barrick)</td>
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<tr>
<td>REVEAL (VanGilst)</td>
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<table>
<thead>
<tr>
<th>B200</th>
<th>Status</th>
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<table>
<thead>
<tr>
<th>Ground</th>
<th>Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pandora (Herman)</td>
<td></td>
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<tr>
<td>NATIVE (Thompson)</td>
<td></td>
<td>(see detailed report on next page)</td>
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<tr>
<td>UMBC (Hoff)</td>
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<td></td>
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<tr>
<td>Millersville (Clark)</td>
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<tr>
<td>Aeronet (Holben)</td>
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<tr>
<td>UC-Davis (Zhang/Cappa)</td>
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<tr>
<td>UC-Davis (VanCuren)</td>
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</tr>
<tr>
<td>UC-Santa Barbara (Leifer)</td>
<td></td>
<td>Not deployed yet (collaboration; not mission critical)</td>
</tr>
<tr>
<td>UC-Irvine (Kim/Blake)</td>
<td></td>
<td></td>
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<tr>
<td>EPA (Long/Szykman)</td>
<td></td>
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<tr>
<td>NOAA (Michalsky/Lantz)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>ARB/SJV APCD Sites</th>
<th>Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield Airport</td>
<td></td>
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<tr>
<td>Fresno-Garland</td>
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<tr>
<td>Hanford</td>
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<tr>
<td>Huron</td>
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<tr>
<td>Oildale</td>
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<tr>
<td>Porterville</td>
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<tr>
<td>Tranquility</td>
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**Overall Status**

<table>
<thead>
<tr>
<th>Instrument (Mfg/Model)</th>
<th>Status</th>
<th>Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Penn State</strong></td>
<td></td>
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<tr>
<td>Ozone Analyzer (O3, TECO 49C)</td>
<td>Nominal</td>
<td>O3</td>
</tr>
<tr>
<td>Sulfur Dioxide Analyzer (SO2, TECO 43C)</td>
<td>Nominal</td>
<td>SO2</td>
</tr>
<tr>
<td>Carbon Monoxide Analyzer (CO, TECO 48C)</td>
<td>Nominal</td>
<td>CO</td>
</tr>
<tr>
<td>Reactive NitrogenAnalyzer (NOy, TECO 42C-Y)</td>
<td>Nominal</td>
<td>NO, NOy</td>
</tr>
<tr>
<td>Temperature Probe (R.M. Young 41382L-90C)</td>
<td>Nominal</td>
<td>Temperature</td>
</tr>
<tr>
<td>Relative Humidity Probe (R.M. Young 41382L-90C)</td>
<td>Nominal</td>
<td>Relative Humidity</td>
</tr>
<tr>
<td>Pressure (R.M. Young 61202)</td>
<td>Nominal</td>
<td>Pressure</td>
</tr>
<tr>
<td>Mechanical Anemometer (R.M. Young 05103)</td>
<td>Nominal</td>
<td>Wind Speed, Direction</td>
</tr>
<tr>
<td>J-NO2 Filter Radiometer (Met-Con)</td>
<td>Nominal</td>
<td>NO2 Photolysis Rate</td>
</tr>
<tr>
<td>Spectral Pyranometer (Eppley PSP)</td>
<td>Nominal</td>
<td>Total Irradiance</td>
</tr>
<tr>
<td>Sonic Anemometer (Applied Technologies K-Style)</td>
<td>Nominal</td>
<td>u, v, w, temperature</td>
</tr>
<tr>
<td>PTR-MS (Ionicon)</td>
<td>Nominal</td>
<td>Speciated VOCS</td>
</tr>
<tr>
<td>VOC canisters</td>
<td>Data suspect/waiting</td>
<td>Speciated VOCS</td>
</tr>
<tr>
<td>3 UCI canisters, 4 x 1-hr Penn State canisters</td>
<td>Data suspect/waiting</td>
<td>Speciated VOCS</td>
</tr>
<tr>
<td>Pandora</td>
<td>Data suspect/waiting</td>
<td>Column NO2, O3</td>
</tr>
<tr>
<td>Ozone/Radiosondes (DMT, IMet-1)</td>
<td>Data suspect/waiting</td>
<td>Relative Humidity, Wind Speed, Wind Direction</td>
</tr>
<tr>
<td>Fast Mobility Particle Sizer</td>
<td>Data suspect/waiting</td>
<td>Particles</td>
</tr>
<tr>
<td>NOx Analyzer (Ecophysics CLD 60)</td>
<td>Instrument not working properly</td>
<td>NO, NO2, Nox</td>
</tr>
<tr>
<td>Cavity Ring-Down Spectrometer</td>
<td>Not recording</td>
<td>CO2, CH4, 13CO2, 13CH4</td>
</tr>
</tbody>
</table>

*Instrument statuses below are based on Penn State’s assessment, true assessment provided by PI*

**UMBC**
- Nephelometer
- Micro-pulse lidar
- Pandora

**NASA Goddard**
- Cimel sun photometer

**EPA/NASA Langley**
- CAPS NO2