

### Status of NDGD Elements as of July 10, 2012

<b>GFS MOS</b>	<b>CONUS</b>	<b>Puerto Rico</b>	<b>Hawaii</b>	<b>Guam</b>	<b>Alaska</b>
<b>Maximum Temperature</b>	<b>Operational</b> since 8/15/2006	Not available	<b>Experimental</b> since 11/9/2010	Not available	<b>Experimental</b> since 6/10/2008
<b>Minimum Temperature</b>	<b>Operational</b> since 8/15/2006	Not available	<b>Experimental</b> since 11/9/2010	Not available	<b>Experimental</b> since 6/10/2008
<b>Temperature</b>	<b>Operational</b> since 8/15/2006	Not available	<b>Experimental</b> since 11/9/2010	Not available	<b>Experimental</b> since 6/10/2008
<b>Dewpoint</b>	<b>Operational</b> since 8/15/2006	Not available	<b>Experimental</b> since 11/9/2010	Not available	<b>Experimental</b> since 6/10/2008
<b>Relative Humidity</b>	<b>Operational</b> since 8/15/2006	Not available	<b>Experimental</b> since 11/9/2010	Not available	<b>Experimental</b> since 6/10/2008
<b>Wind Direction and Speed</b>	<b>Operational</b> since 8/15/2006	Not available	<b>Experimental</b> since 11/9/2010	Not available	<b>Experimental</b> since 12/16/2008
<b>6-hour Probability of Precipitation</b>	<b>Operational</b> since 8/15/2006	Not available	<b>Experimental</b> since 11/9/2010	Not available	<b>Experimental</b> since 12/16/2008
<b>12-hour Probability of Precipitation</b>	<b>Operational</b> since 8/15/2006	Not available	<b>Experimental</b> since 11/9/2010	Not available	<b>Experimental</b> since 12/16/2008
<b>3-hour Probability of Thunderstorms</b>	<b>Operational</b> since 8/15/2006	Not available	Not available	Not available	<b>Experimental</b> since 6/10/2008
<b>6-hour Probability of Thunderstorms</b>	<b>Operational</b> since 8/15/2006	Not available	Not available	Not available	<b>Experimental</b> since 6/10/2008
<b>12-hour Probability of Thunderstorms</b>	<b>Operational</b> since 8/15/2006	Not available	Not available	Not available	<b>Experimental</b> since 6/10/2008
<b>Wind Gust</b>	<b>Operational</b> since 6/5/2007	Not available	<b>Experimental</b> since 11/9/2010	Not available	<b>Experimental</b> since 12/16/2008
<b>Sky Cover</b>	<b>Operational</b> since 6/5/2007	Not available	<b>Under development</b>	Not available	<b>Experimental</b> since 12/16/2008
<b>6-hour Quantitative Precipitation Forecast</b>	<b>Operational</b> since 6/5/2007	Not available	<b>Under development</b>	Not available	<b>Experimental</b> since 1/12/2010
<b>12-hour Quantitative Precipitation Forecast</b>	<b>Operational</b> since 6/5/2007	Not available	<b>Under development</b>	Not available	<b>Experimental</b> since 1/12/2010
<b>24-hour Snowfall Amount</b>	<b>Operational</b> since 6/5/2007	Not available	Not available	Not available	<b>Experimental</b> since 1/12/2010
<b>Weather</b>	<b>Under development</b>	Not available	Not available	Not available	<b>Under development</b>
<b>Probability of Frozen Precip</b>	<b>Under development</b>	Not available	Not available	Not available	<b>Under development</b>
<b>Probability of Freezing Precip</b>	<b>Under development</b>	Not available	Not available	Not available	<b>Under development</b>

<b>LAMP</b>	<b>CONUS</b>	<b>Puerto Rico</b>	<b>Hawaii</b>	<b>Guam</b>	<b>Alaska</b>
<b>2-hour Probability of Thunderstorms</b>	<b>Operational</b> since 7/25/2006	Not available	Not available	Not available	Not available
<b>2-hour Thunderstorm Best Category</b>	<b>Operational</b> since 7/25/2006	Not available	Not available	Not available	Not available
<b>Temperature</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available
<b>Dewpoint</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available
<b>Ceiling Height</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available
<b>Visibility</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available
<b>LAMP Analysis</b>	<b>CONUS</b>	<b>Puerto Rico</b>	<b>Hawaii</b>	<b>Guam</b>	<b>Alaska</b>
<b>Temperature</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available
<b>Dewpoint</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available
<b>Ceiling Height</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available
<b>Visibility</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available
<b>Temperature Uncertainty</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available
<b>Dewpoint Uncertainty</b>	<b>Experimental</b> since 9/28/2010	Not available	Not available	Not available	Not available

<b>Air Quality</b>	<b>CONUS</b>	<b>Puerto Rico</b>	<b>Hawaii</b>	<b>Guam</b>	<b>Alaska</b>
<b>1-hour Average Ozone Concentration</b>	<b>Operational</b> since 8/31/2005	Not available	<b>Operational</b> since 9/21/2010	Not available	<b>Operational</b> since 9/21/2010
<b>8-hour Average Ozone Concentration</b>	<b>Operational</b> since 8/31/2005	Not available	<b>Operational</b> since 9/21/2010	Not available	<b>Operational</b> since 9/21/2010
<b>1-hour Average Surface Smoke</b>	<b>Operational</b> since 2/28/2007	Not available	<b>Operational</b> since 2/23/2010	Not available	<b>Operational</b> since 9/29/2009
<b>1-hour Average Vertical Smoke Integration</b>	<b>Operational</b> since 2/28/2007	Not available	<b>Operational</b> since 2/23/2010	Not available	<b>Operational</b> since 9/29/2009
<b>Daily Maximum 1-hour Average Ozone Concentration</b>	<b>Operational</b> since 11/19/2009	Not available	<b>Operational</b> since 9/21/2010	Not available	<b>Operational</b> since 9/21/2010
<b>Daily Maximum 8-hour Average Ozone Concentration</b>	<b>Operational</b> since 11/19/2009	Not available	<b>Operational</b> since 9/21/2010	Not available	<b>Operational</b> since 9/21/2010
<b>1-hour Average Surface Dust Concentration</b>	<b>Operational</b> since 1/31/2012	Not available	Not available	Not available	Not available
<b>8-hour Average Vertical Dust Concentration</b>	<b>Operational</b> since 1/31/2012	Not available	Not available	Not available	Not available
<b>RTMA</b>	<b>CONUS</b>	<b>Puerto Rico</b>	<b>Hawaii</b>	<b>Guam</b>	<b>Alaska</b>
<b>Temperature</b>	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011
<b>Dewpoint</b>	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011
<b>Sky Cover</b>	<b>Operational</b> since 10/11/2011	Not available	Not available	Not available	Not available
<b>Wind Direction and Speed</b>	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011
<b>1-hour Precipitation Amount</b>	<b>Operational</b> since 10/11/2011	Not available	Not available	Not available	Not available
<b>Surface Pressure</b>	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011
<b>Temperature Uncertainty</b>	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011
<b>Dewpoint Uncertainty</b>	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011
<b>Wind Direction and Speed Uncertainty</b>	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011
<b>Surface Pressure Uncertainty</b>	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011
<b>Model Terrain Height</b>	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011	<b>Operational</b> since 10/11/2011



<b>Ensemble Kernel Density MOS</b>	<b>CONUS</b>	<b>Puerto Rico</b>	<b>Hawaii</b>	<b>Guam</b>	<b>Alaska</b>
<b>Maximum Temperature</b> <ul style="list-style-type: none"> <li>▪ CDF05</li> <li>▪ CDF10</li> <li>▪ CDF20</li> <li>▪ CDF30</li> <li>▪ CDF40</li> <li>▪ CDF50</li> <li>▪ CDF60</li> <li>▪ CDF70</li> <li>▪ CDF80</li> <li>▪ CDF90</li> <li>▪ CDF95</li> <li>▪ Mean</li> </ul>	<b>Experimental</b> since 3/31/2012	Not available	<b>Under development</b>	Not available	<b>Experimental</b> since 3/31/2012
<b>Minimum Temperature</b> <ul style="list-style-type: none"> <li>▪ CDF05</li> <li>▪ CDF10</li> <li>▪ CDF20</li> <li>▪ CDF30</li> <li>▪ CDF40</li> <li>▪ CDF50</li> <li>▪ CDF60</li> <li>▪ CDF70</li> <li>▪ CDF80</li> <li>▪ CDF90</li> <li>▪ CDF95</li> <li>▪ Mean</li> </ul>	<b>Experimental</b> since 3/31/2012	Not available	<b>Under development</b>	Not available	<b>Experimental</b> since 3/31/2012
<b>Temperature</b> <ul style="list-style-type: none"> <li>▪ CDF05</li> <li>▪ CDF10</li> <li>▪ CDF20</li> <li>▪ CDF30</li> <li>▪ CDF40</li> <li>▪ CDF50</li> <li>▪ CDF60</li> <li>▪ CDF70</li> <li>▪ CDF80</li> <li>▪ CDF90</li> <li>▪ CDF95</li> <li>▪ Mean</li> </ul>	<b>Experimental</b> since 3/31/2012	Not available	<b>Under development</b>	Not available	<b>Experimental</b> since 3/31/2012
<b>Dewpoint</b> <ul style="list-style-type: none"> <li>▪ CDF05</li> <li>▪ CDF10</li> <li>▪ CDF20</li> <li>▪ CDF30</li> <li>▪ CDF40</li> <li>▪ CDF50</li> <li>▪ CDF60</li> <li>▪ CDF70</li> <li>▪ CDF80</li> <li>▪ CDF90</li> </ul>	<b>Experimental</b> since 3/31/2012	Not available	<b>Under development</b>	Not available	<b>Experimental</b> since 3/31/2012

<ul style="list-style-type: none"> <li>▪ CDF95</li> <li>▪ Mean</li> </ul>					
<b>6-hour Quantitative Precipitation Forecast</b> <ul style="list-style-type: none"> <li>▪ Pr&gt;=0.05''</li> <li>▪ Pr&gt;=0.10''</li> <li>▪ Pr&gt;=0.20''</li> <li>▪ Pr&gt;=0.25''</li> <li>▪ Pr&gt;=0.30''</li> <li>▪ Pr&gt;=0.40''</li> <li>▪ Pr&gt;=0.50''</li> <li>▪ Pr&gt;=0.75''</li> <li>▪ Pr&gt;=1.00''</li> <li>▪ Pr&gt;=1.50''</li> <li>▪ Mean</li> </ul>	<b>Under development</b>	Not available	<b>Under development</b>	Not available	<b>Under development</b>
<b>Downscaled Numerical Guidance</b>					
	<b>CONUS</b>	<b>Puerto Rico</b>	<b>Hawaii</b>	<b>Guam</b>	<b>Alaska</b>
<b>1-hour UV Index</b>	<b>Operational</b> since 7/10/2012	Not available	Not available	Not available	Not available
<b>Daily Maximum UV Index</b>	<b>Operational</b> since 7/10/2012	Not available	Not available	Not available	Not available
<b>Down-welling shortwave radiation flux</b>	<b>Operational</b> since 7/10/2012	Not available	Not available	Not available	Not available
<b>Haines Index</b> <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<b>Under development</b>	Not available	Not available	Not available	Not available
<b>Mixing Height</b>	<b>Under development</b>	Not available	Not available	Not available	Not available
<b>Transport Wind Direction and Speed</b>	<b>Under development</b>	Not available	Not available	Not available	Not available
<b>Ventilation Rate</b>	<b>Under development</b>	Not available	Not available	Not available	Not available