

Civil Report Card On GPS Performance

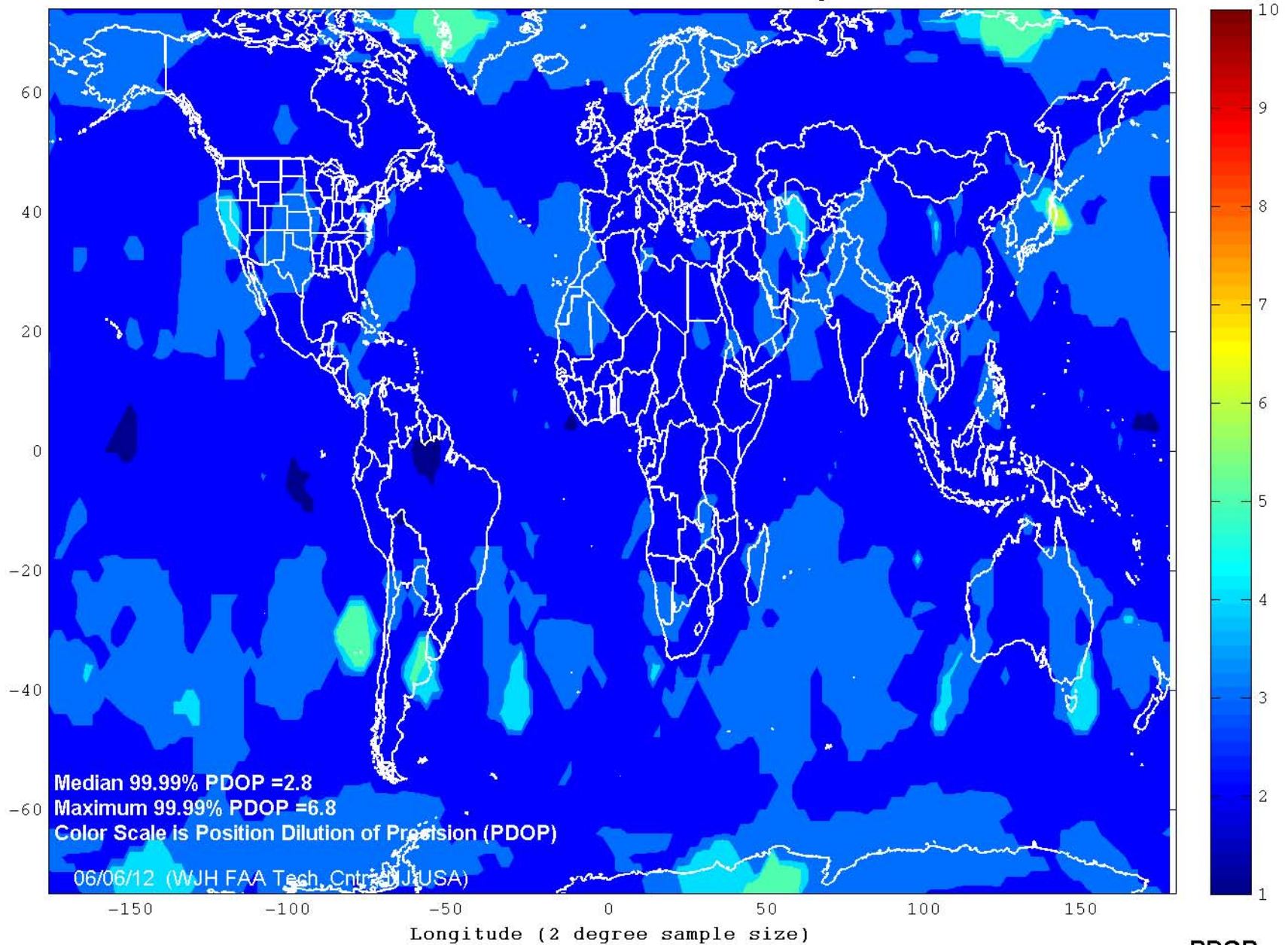
May 2012

Operational Performance Parameter	CY 2011	Apr 2012	May 2012	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.65	30.98	30.80	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.78 (99.10%)	23.98 (99.93%)	23.99 (99.96%)	↑	↑
<i>Average availability of 6 satellites in view</i>	99.99%	100%	100%	↑	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.5	1.4	1.4	↑	→
<i>Worst Site</i>	3.0	3.5	2.6	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.8	2.5	2.5	↑	→
<i>Worst Site</i>	5.8	7.3	6.4	↓	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.1	2.8	2.8	↑	→
<i>Worst Site</i>	6.5	7.8	6.8	↓	↑
99% RAIM Availability (HAL=100m)					
<i>NPA Service Area (NSA)</i>	-	98.42%	97.05%	-	↓
<i>World</i>	-	97.53%	96.64%	-	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.95	2.19	1.96	↓	↑
<i>Worst Satellite</i>	2.57	2.79	2.53	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.71	3.25	3.06	↓	↑
<i>Worst Site</i>	10.10	7.99	5.96	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.74%	99.24%	99.71%	↓	↑
95% Vertical Error					
<i>Area Median</i>	5.03	4.94	4.04	↑	↑
<i>Worst Site</i>	10.39	10.05	7.42	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.53%	99.82%	99.99%	↑	↑

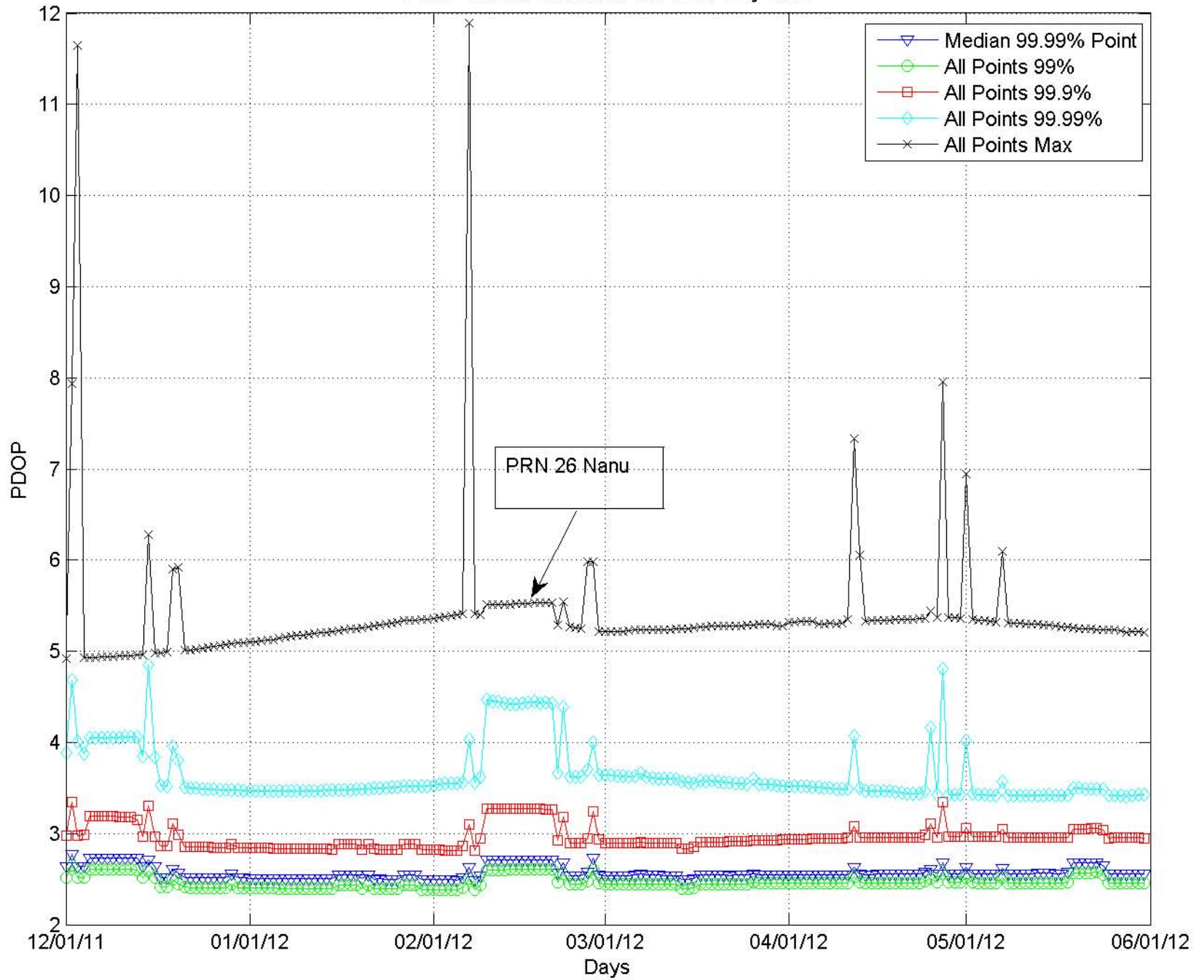
Key: ↑ improving ↓ worsening → no significant change

Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

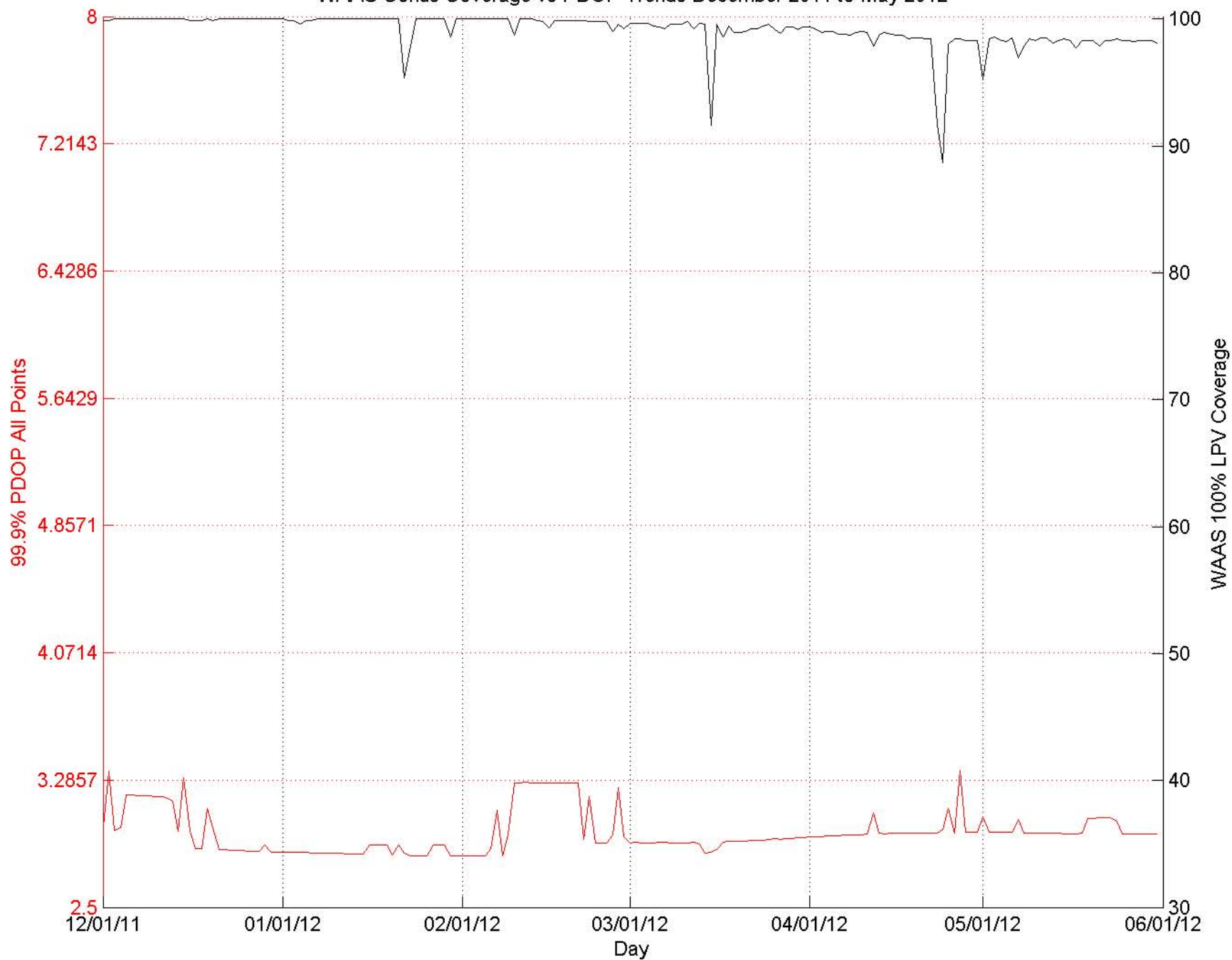
GPS World PDOP 99.99% Index May 2012



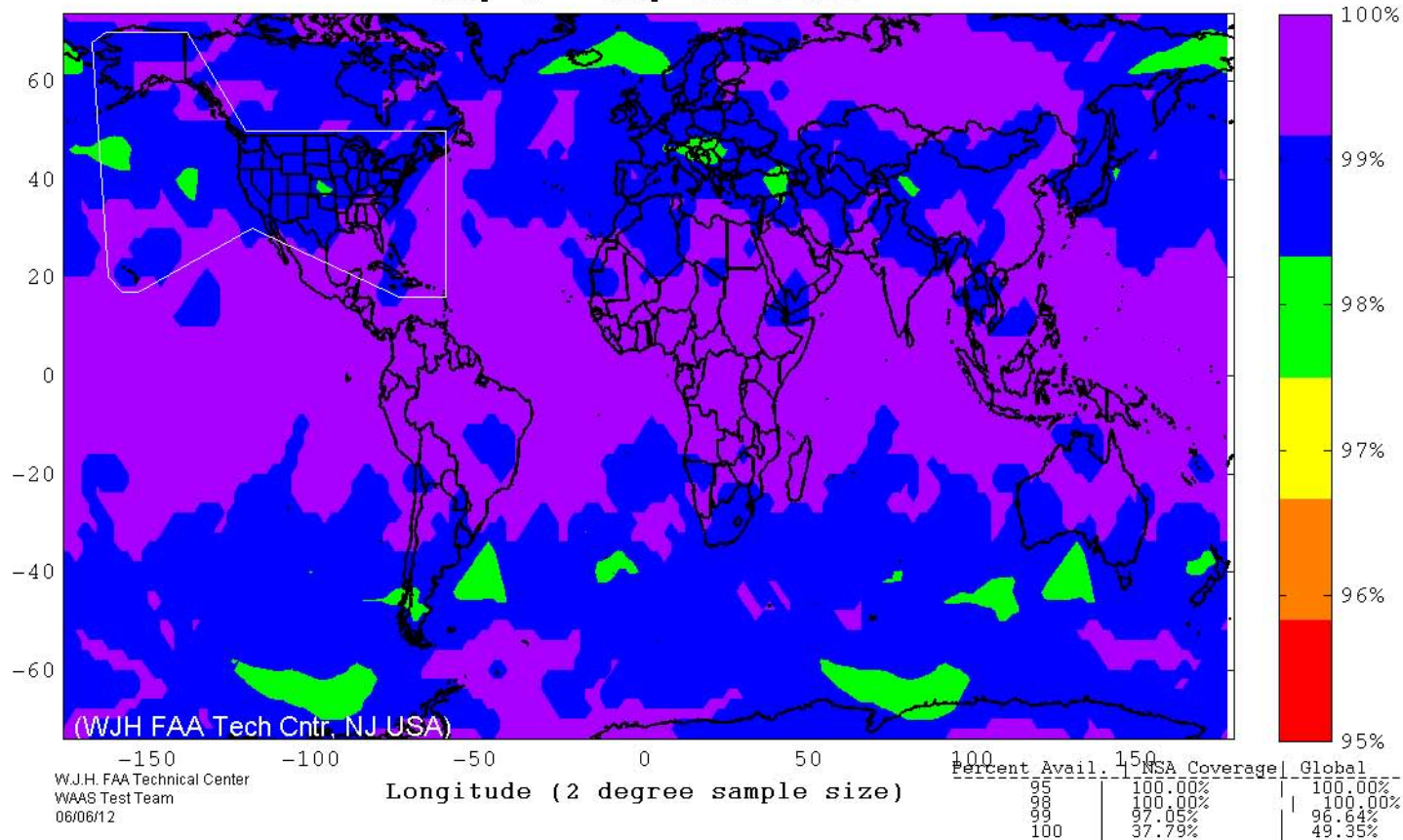
PDOP Trends December 2011 thru May 2012



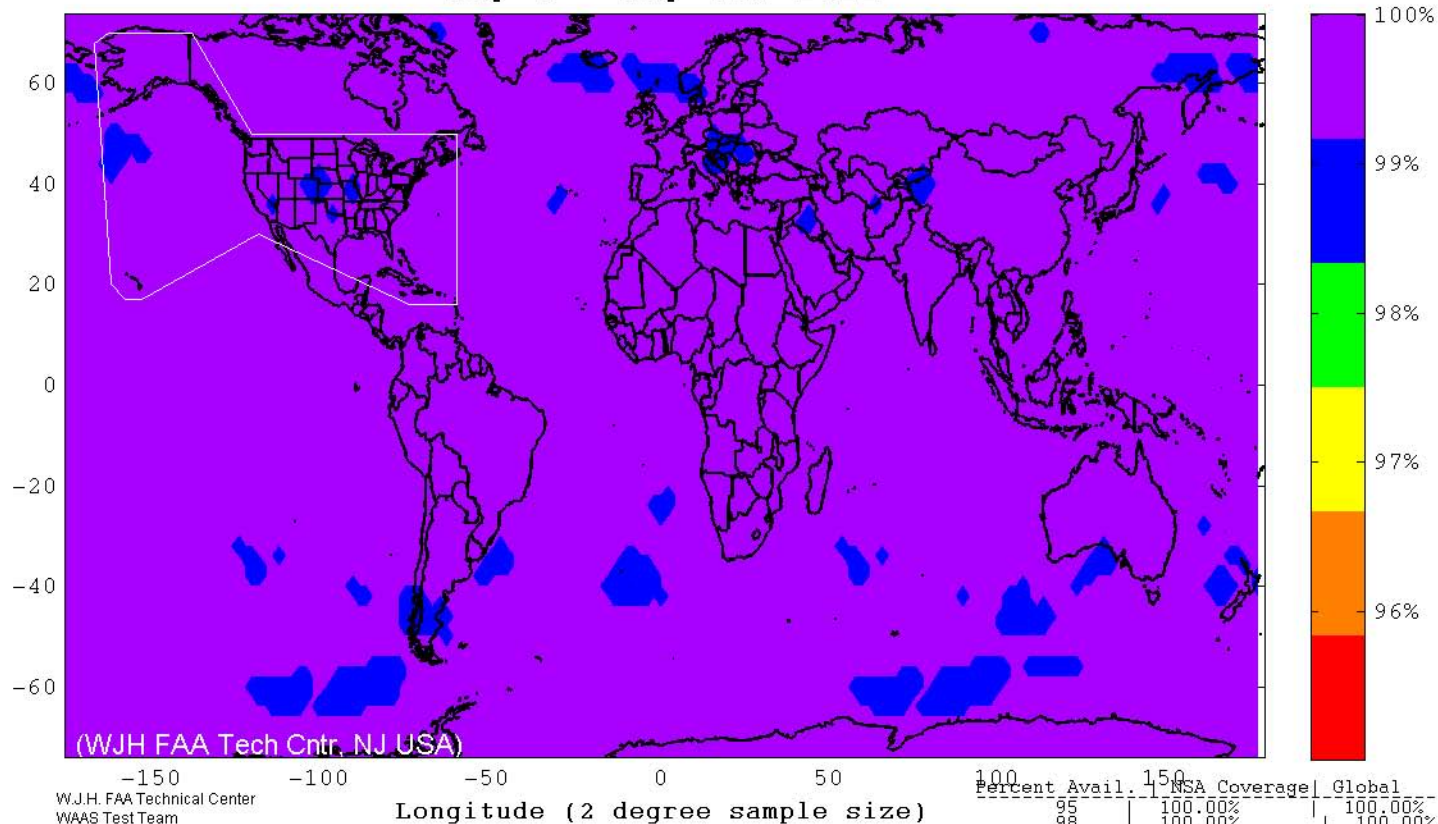
WAAS Conus Coverage vs PDOP Trends December 2011 to May 2012



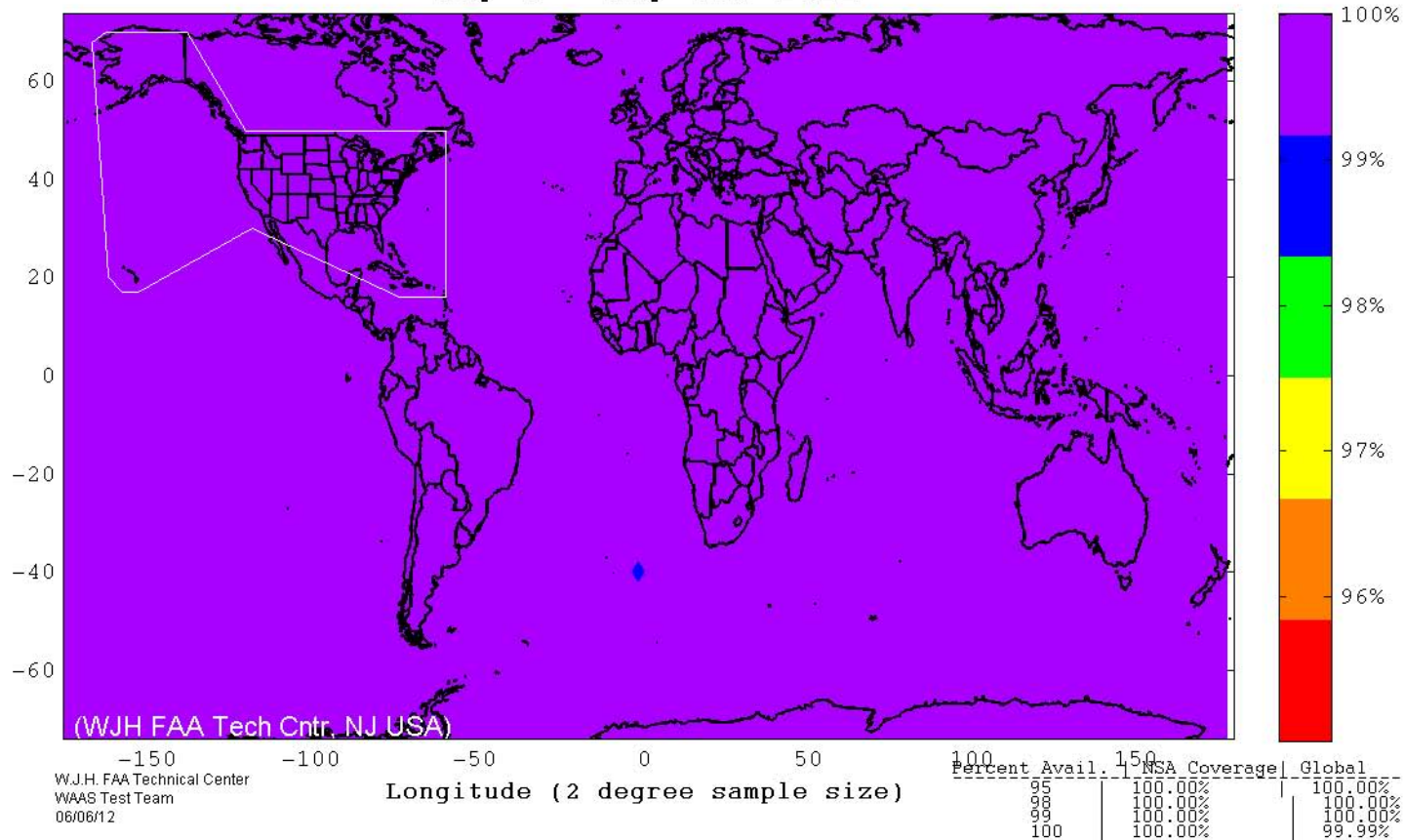
SPS RAIM (HAL=100m) Availability
 FD Only, SA Off, without Baro-Aiding
 May 1 - May 31, 2012



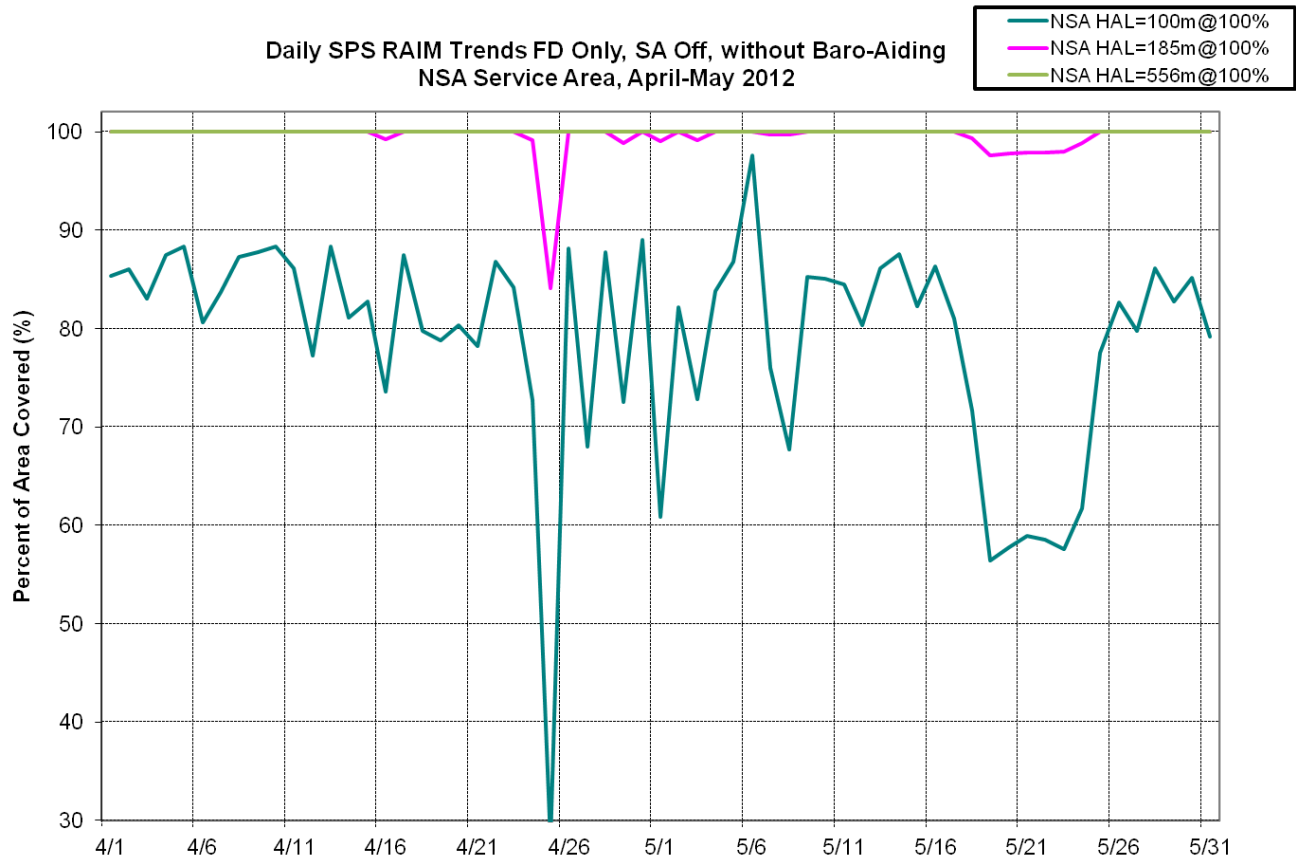
SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 May 1 - May 31, 2012



SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 May 1 - May 31, 2012



Daily SPS RAIM Trends FD Only, SA Off, without Baro-Aiding
NSA Service Area, April-May 2012



Daily SPS RAIM Trends FD Only, SA Off, without Baro-Aiding
World Service Area, April-May 2012

