

Civil Report Card On GPS Performance

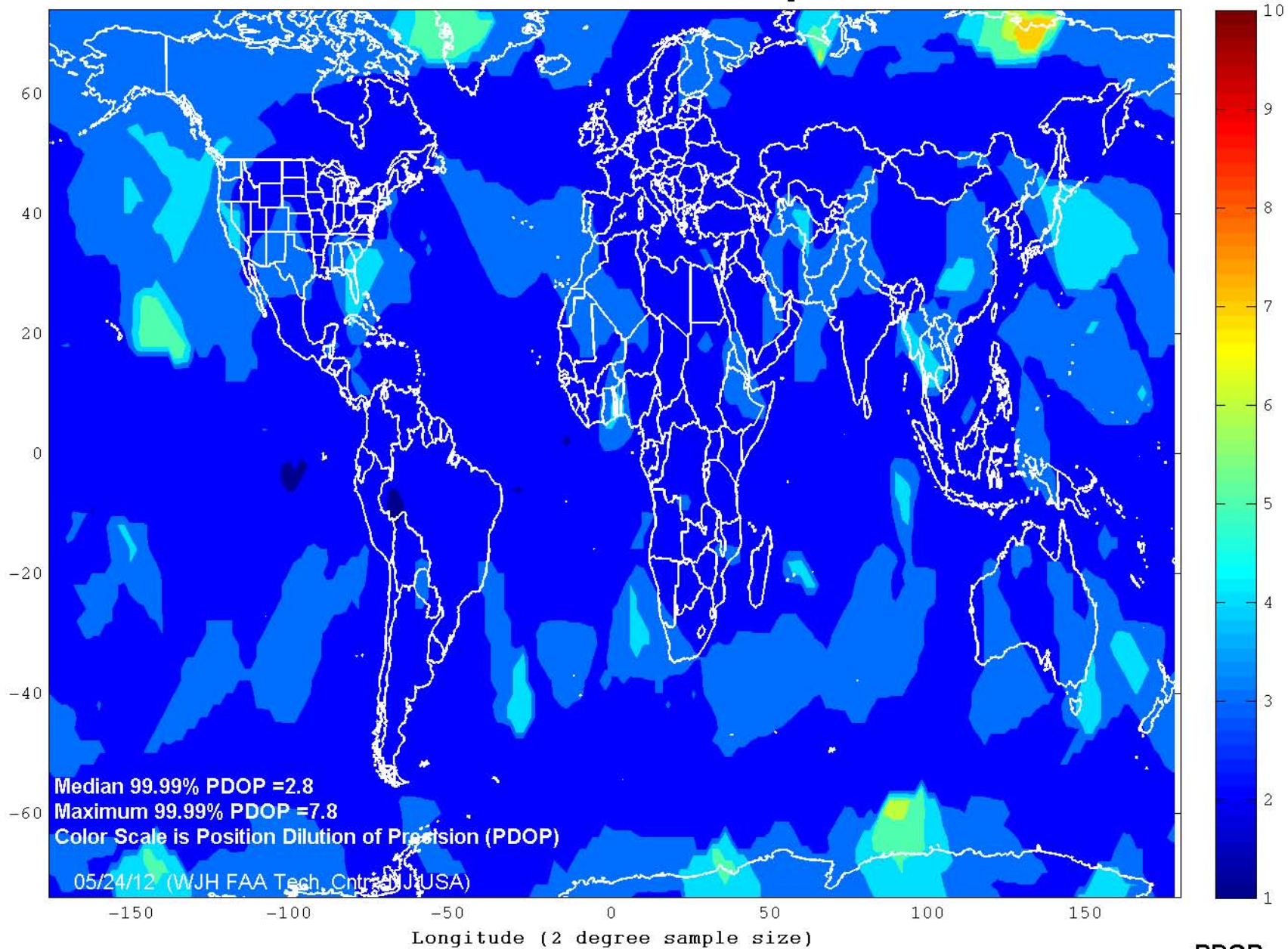
April 2012

Operational Performance Parameter	CY 2011	Mar 2012	Apr 2012	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.65	30.99	30.98	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.78 (99.10%)	23.99 (99.96%)	23.98 (99.93%)	↑	↓
<i>Average availability of 6 satellites in view</i>	99.99%	100%	99.99%	→	↓
99.99% Horizontal DOP					
<i>Area Median</i>	1.5	1.3	1.4	↑↓	↓
<i>Worst Site</i>	3.0	2.5	3.5	↓	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.8	2.3	2.5	↑↓	↓
<i>Worst Site</i>	5.8	4.9	7.3	↑↓	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.1	2.6	2.8	↑↓	↓
<i>Worst Site</i>	6.5	5.3	7.8	↓	↓
99% RAIM Availability (HAL=100m)					
<i>NPA Service Area (NSA)</i>	N/A	N/A	98.42%	-	-
<i>World</i>	N/A	N/A	97.53%	-	-
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.95	2.13	2.19	↓	↓
<i>Worst Satellite</i>	2.57	2.64	2.79	↓	↓
95% Horizontal Error					
<i>Area Median</i>	2.71	2.81	3.25	↓	↓
<i>Worst Site</i>	10.10	7.30	7.99	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.74%	99.61%	99.24%	↑	↓
95% Vertical Error					
<i>Area Median</i>	5.03	5.94	4.94	↑	↑
<i>Worst Site</i>	10.39	9.95	10.05	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.53%	99.40%	99.82%	↑	↑

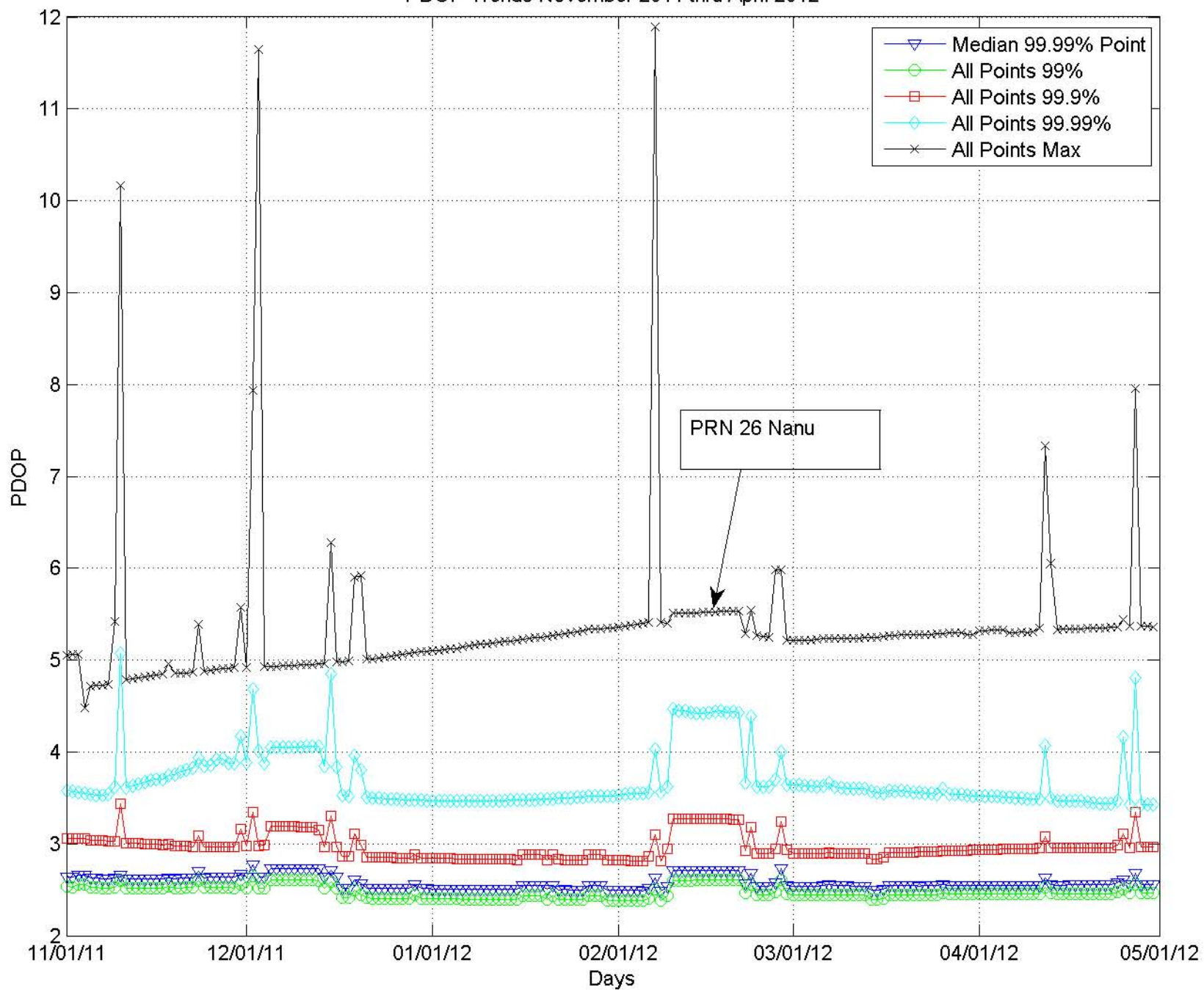
Key: ↑ improving ↓ worsening → no significant change

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

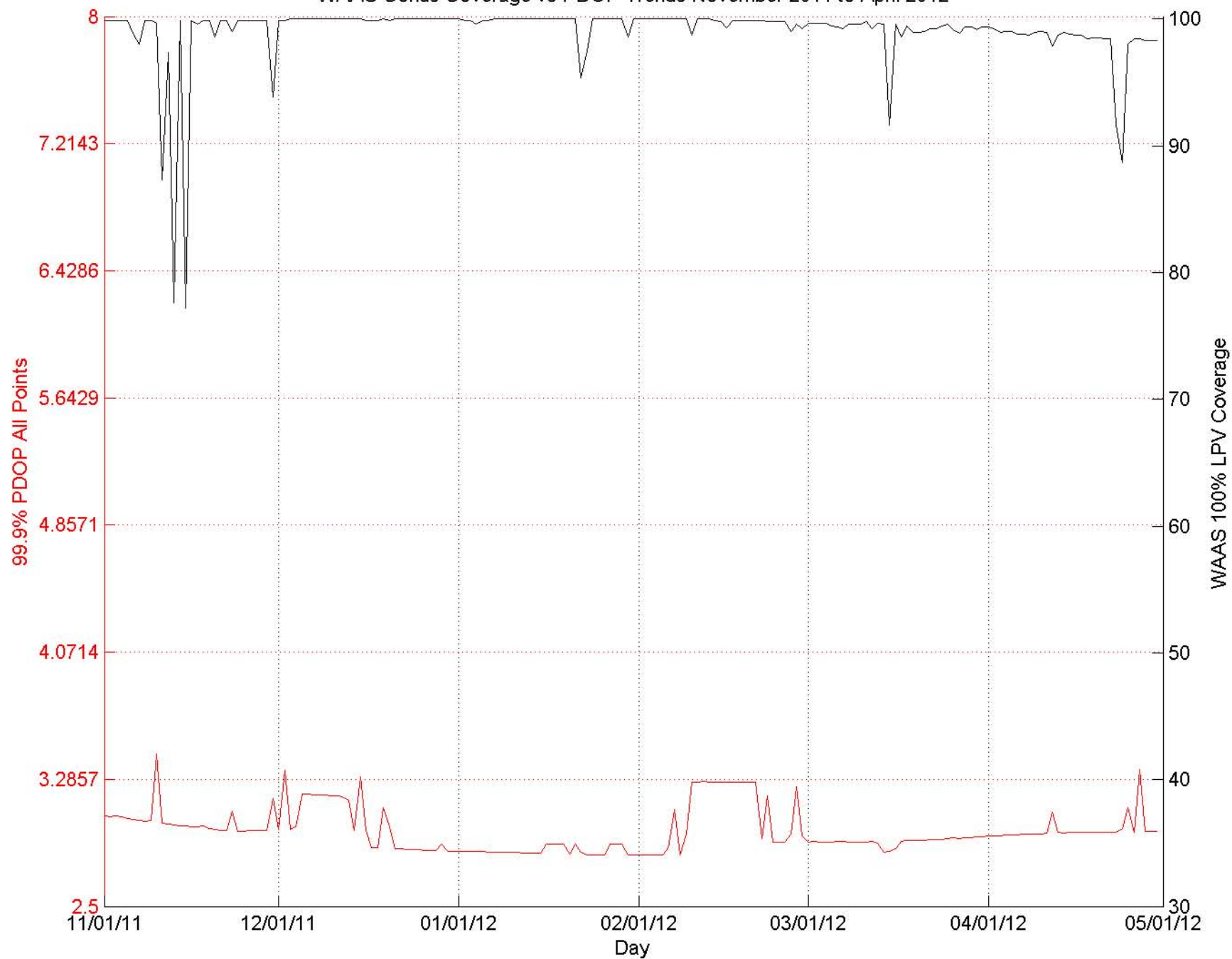
GPS World PDOP 99.99% Index April 2012



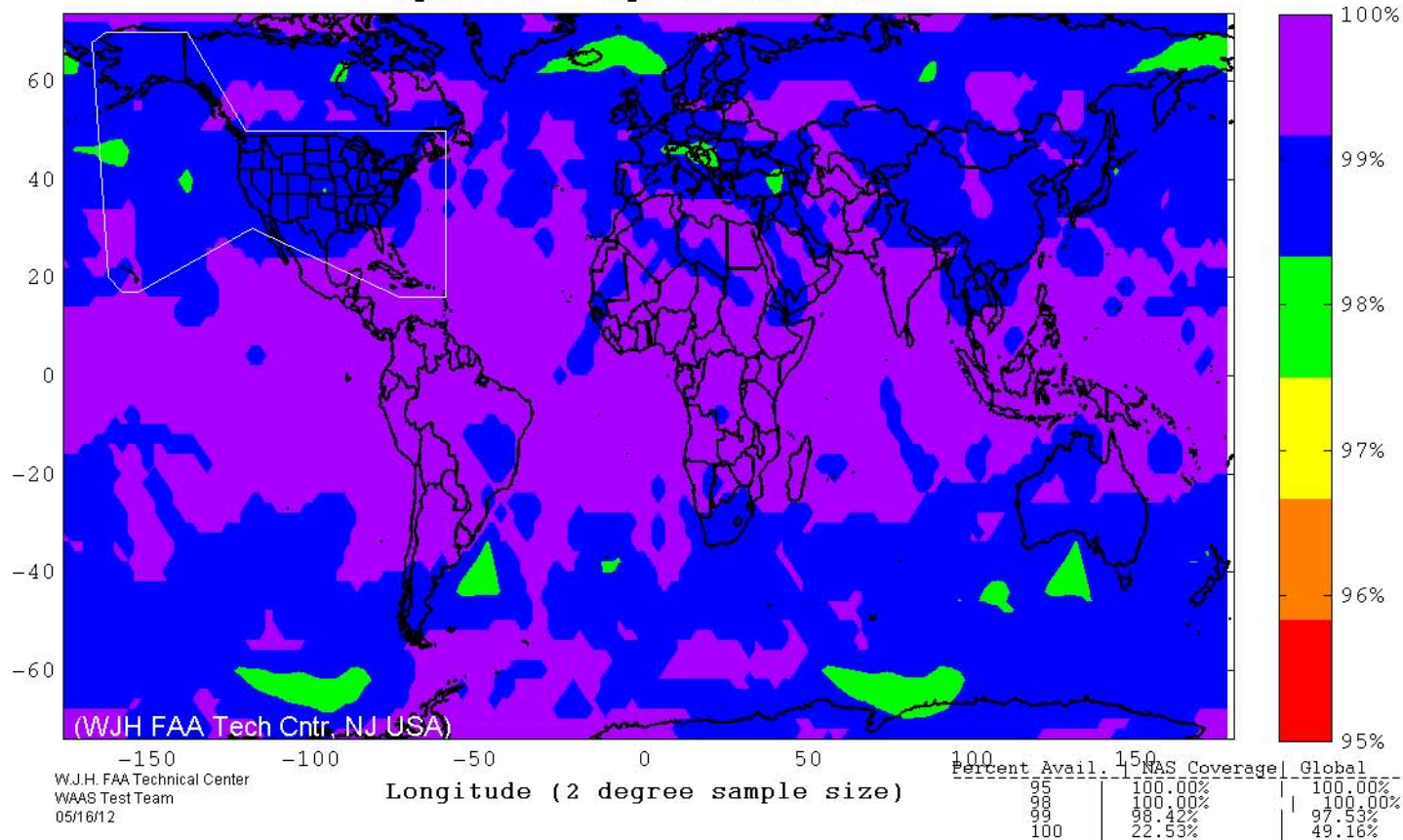
PDOP Trends November 2011 thru April 2012



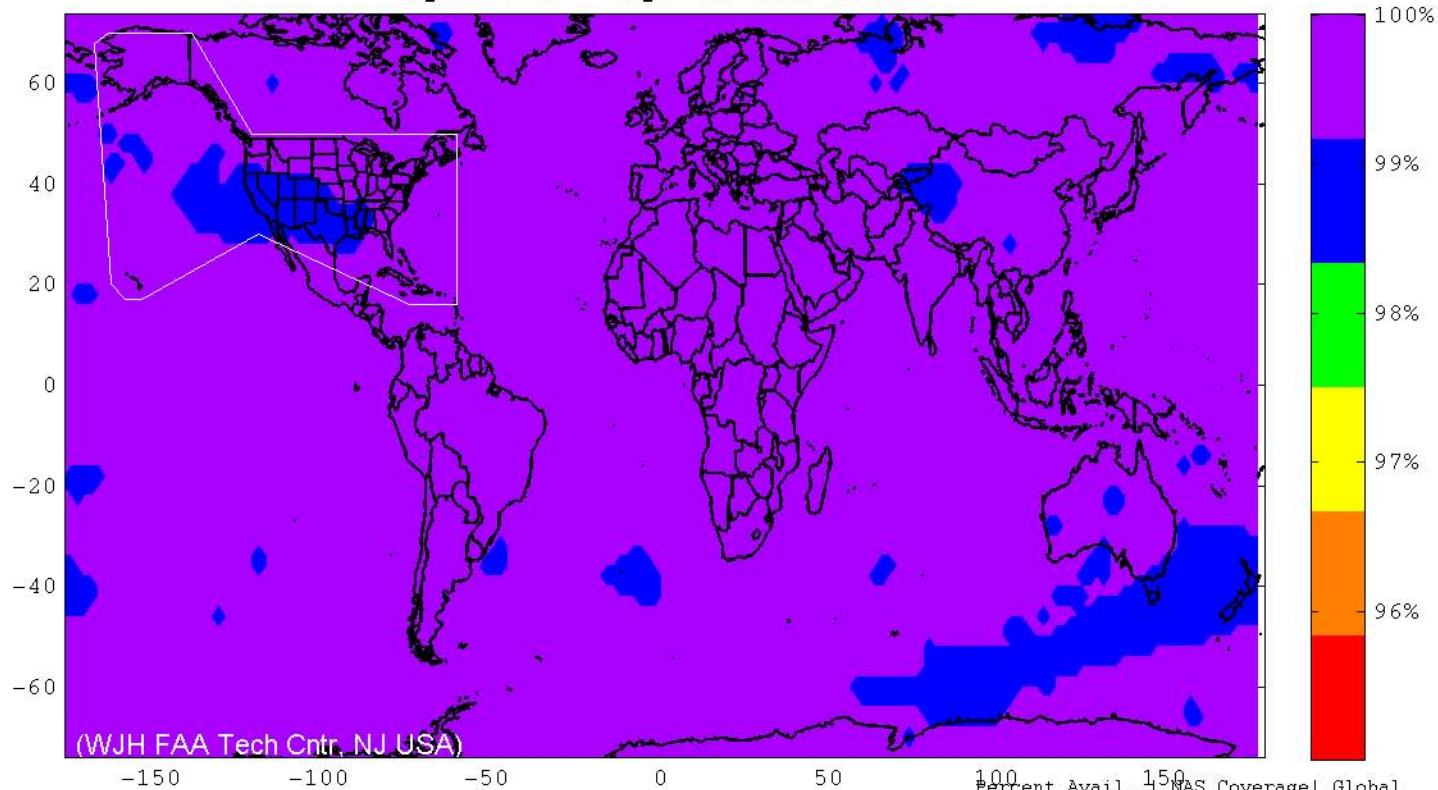
WAAS Conus Coverage vs PDOP Trends November 2011 to April 2012



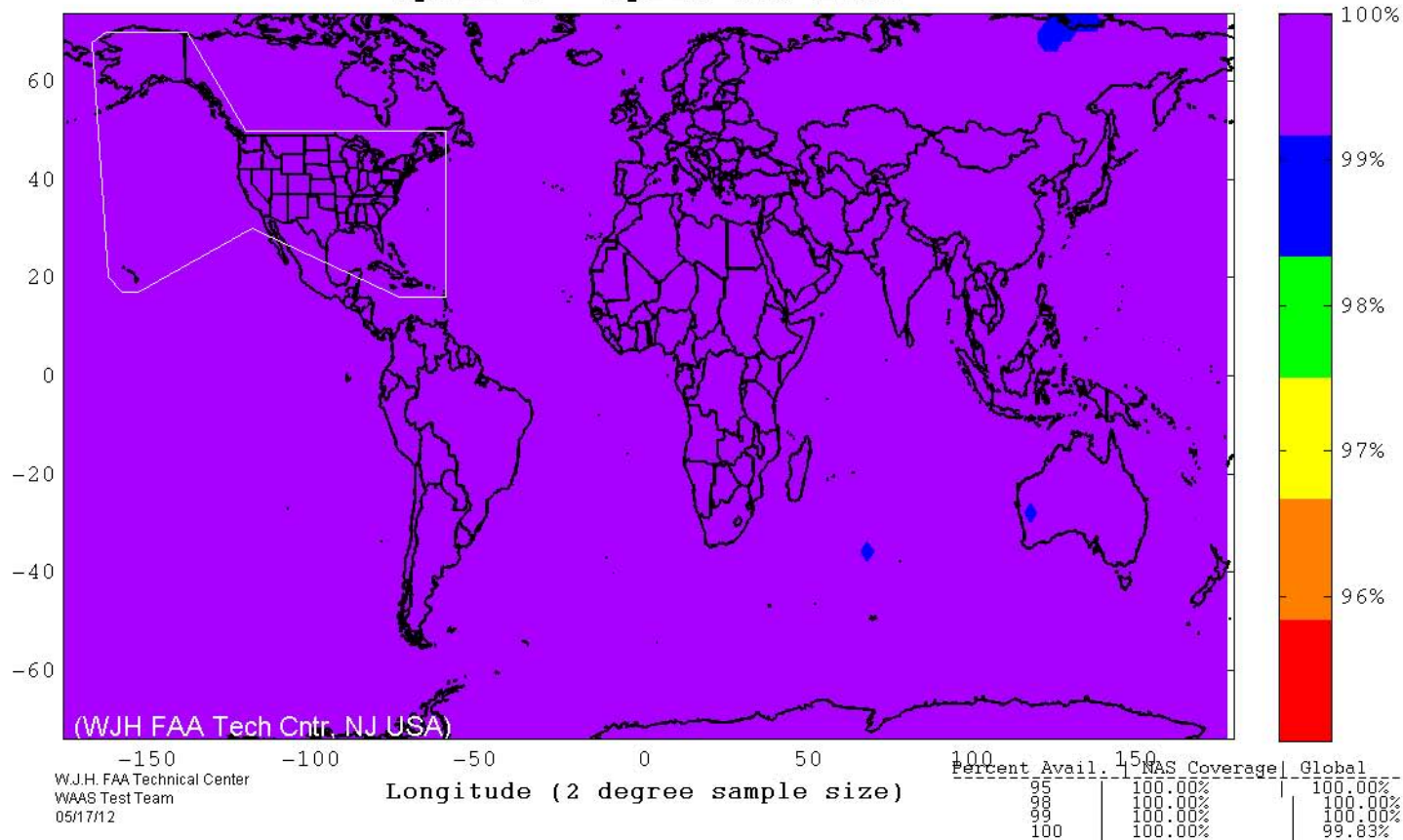
SPS RAIM NPA (HAL = 100m) Availability
 FD Only, SA Off, without Baro-Aiding
 April 1 - April 30, 2012



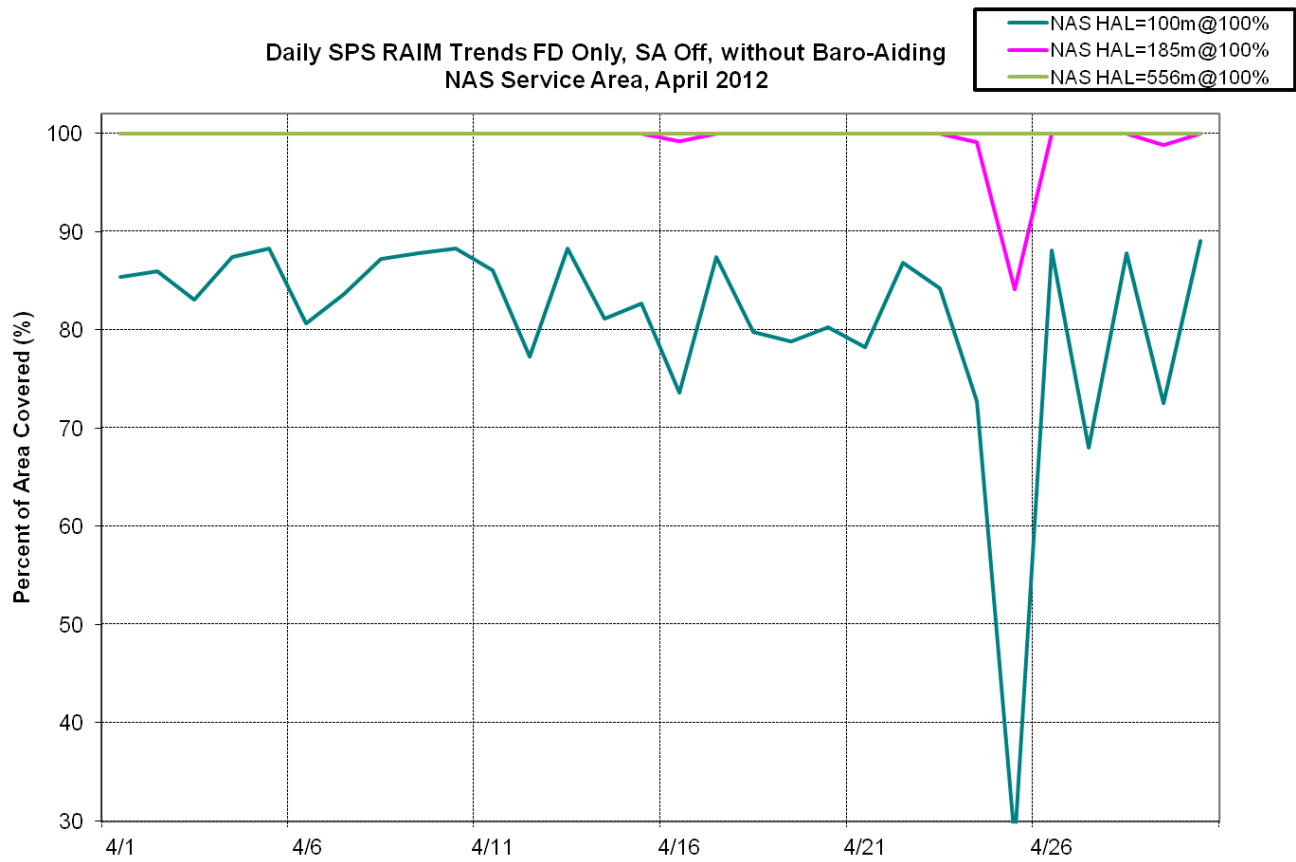
SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 April 1 - April 30, 2012



SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 April 1 - April 30, 2012



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



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

