

Civil Report Card On GPS Performance

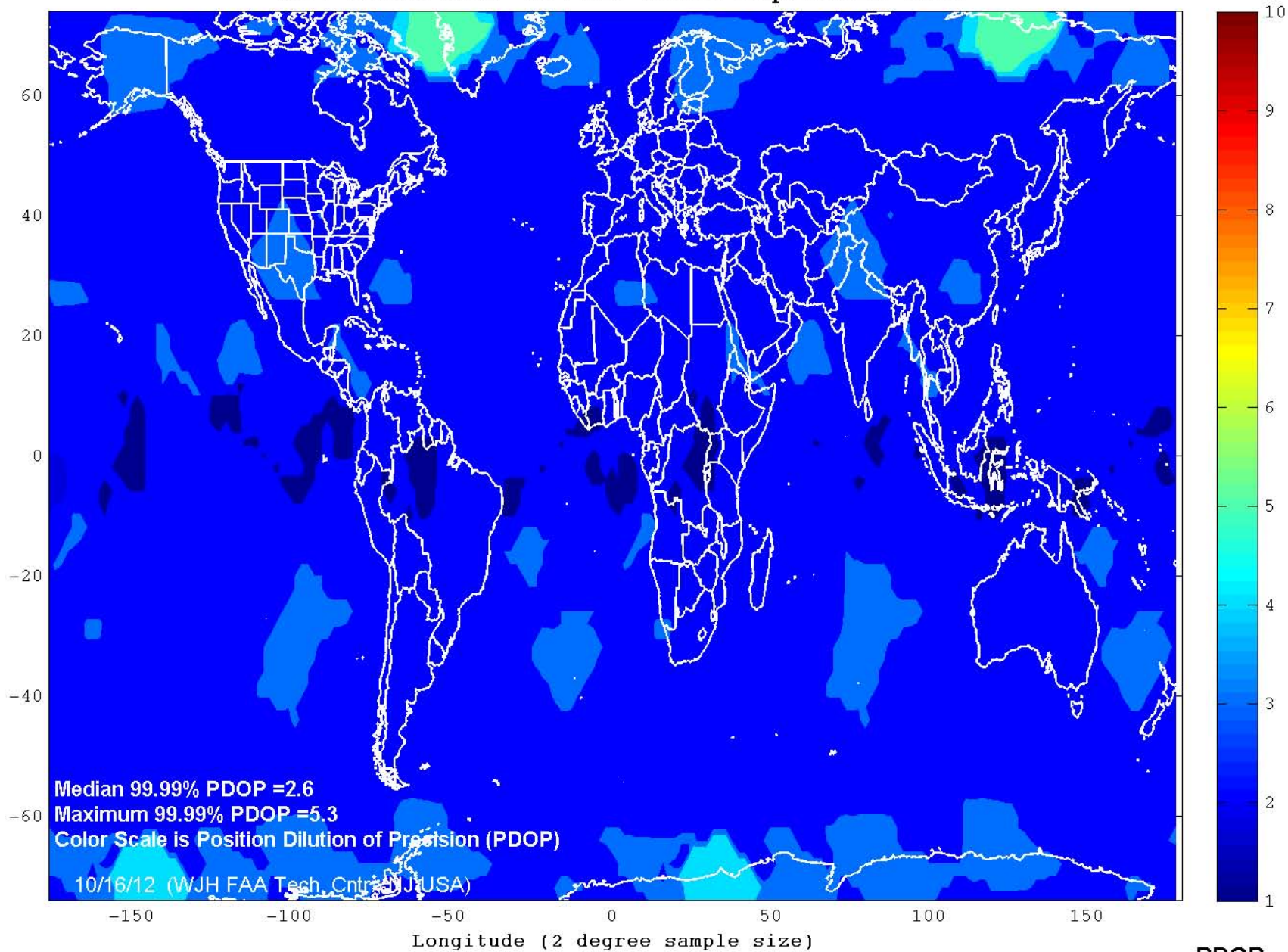
September 2012

Operational Performance Parameter	CY 2011	Aug 2012	Sep 2012	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.65	30.99	30.86	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.78 (99.10%)	23.99 (99.94%)	23.98 (99.91%)	↑	↓
<i>Average availability of 6 satellites in view</i>	99.99%	100%	99.99%	→	↓
99.99% Horizontal DOP					
<i>Area Median</i>	1.5	1.4	1.4	↑	→
<i>Worst Site</i>	3.0	3.7	3.1	↓	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.8	2.4	2.5	↑	↓
<i>Worst Site</i>	5.8	6.6	10.2	↓	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.1	2.7	2.8	↑	↓
<i>Worst Site</i>	6.5	7.2	10.6	↓	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	-	92.21%	86.00%	-	↓
<i>World</i>	-	94.06%	94.34%	-	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.95	1.81	2.02	↓	↓
<i>Worst Satellite</i>	2.57	2.21	2.52	↑	↓
95% Horizontal Error					
<i>Area Median</i>	2.71	2.68	2.97	↓	↓
<i>Worst Site</i>	10.10	5.32	8.16	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.74%	99.94%	99.91%	↑	↓
95% Vertical Error					
<i>Area Median</i>	5.03	3.90	4.50	↑	↓
<i>Worst Site</i>	10.39	7.82	11.16	↓	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.53%	99.99%	99.99%	↑	→

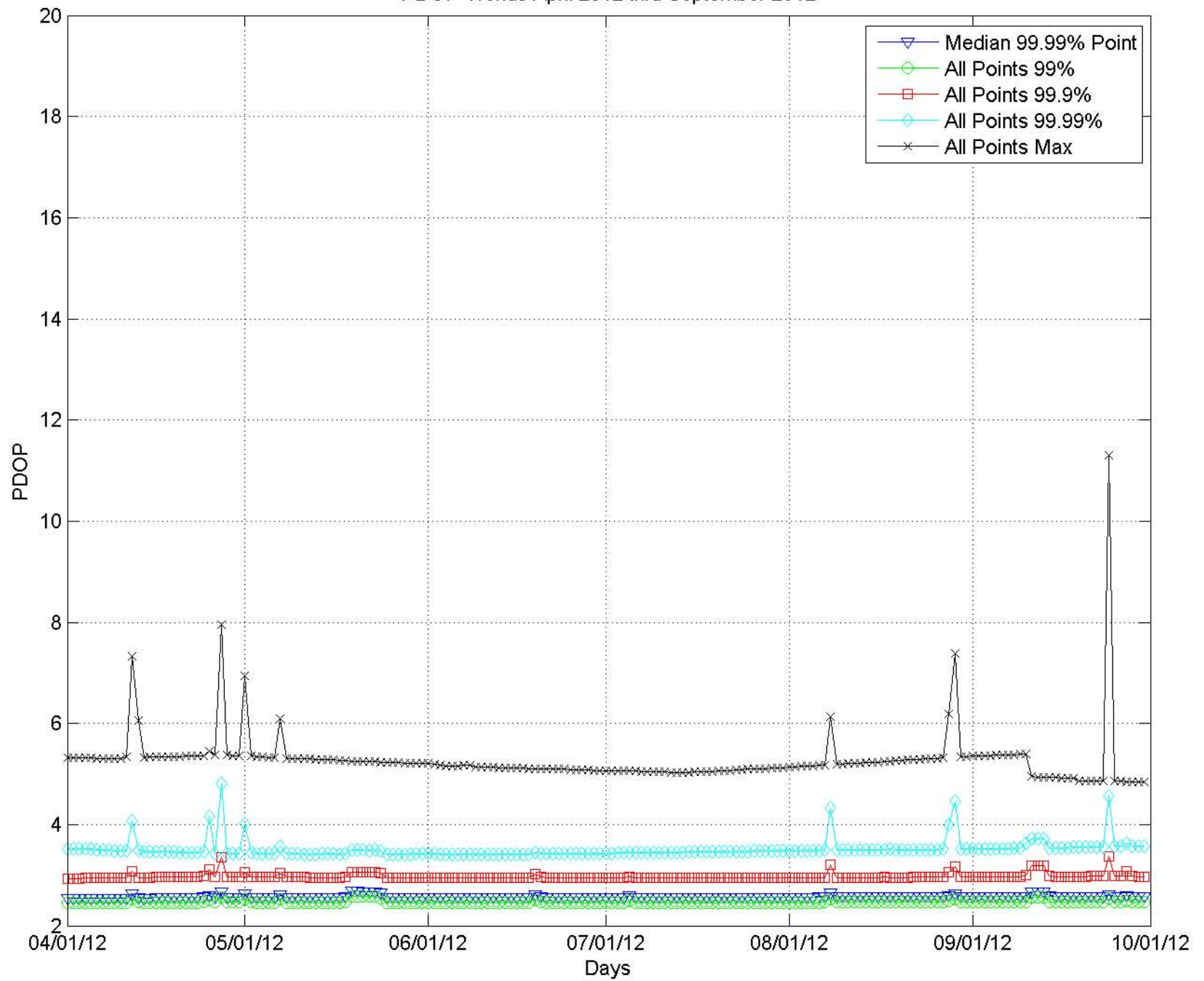
Key: ↑ improving ↓ worsening → no significant change

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

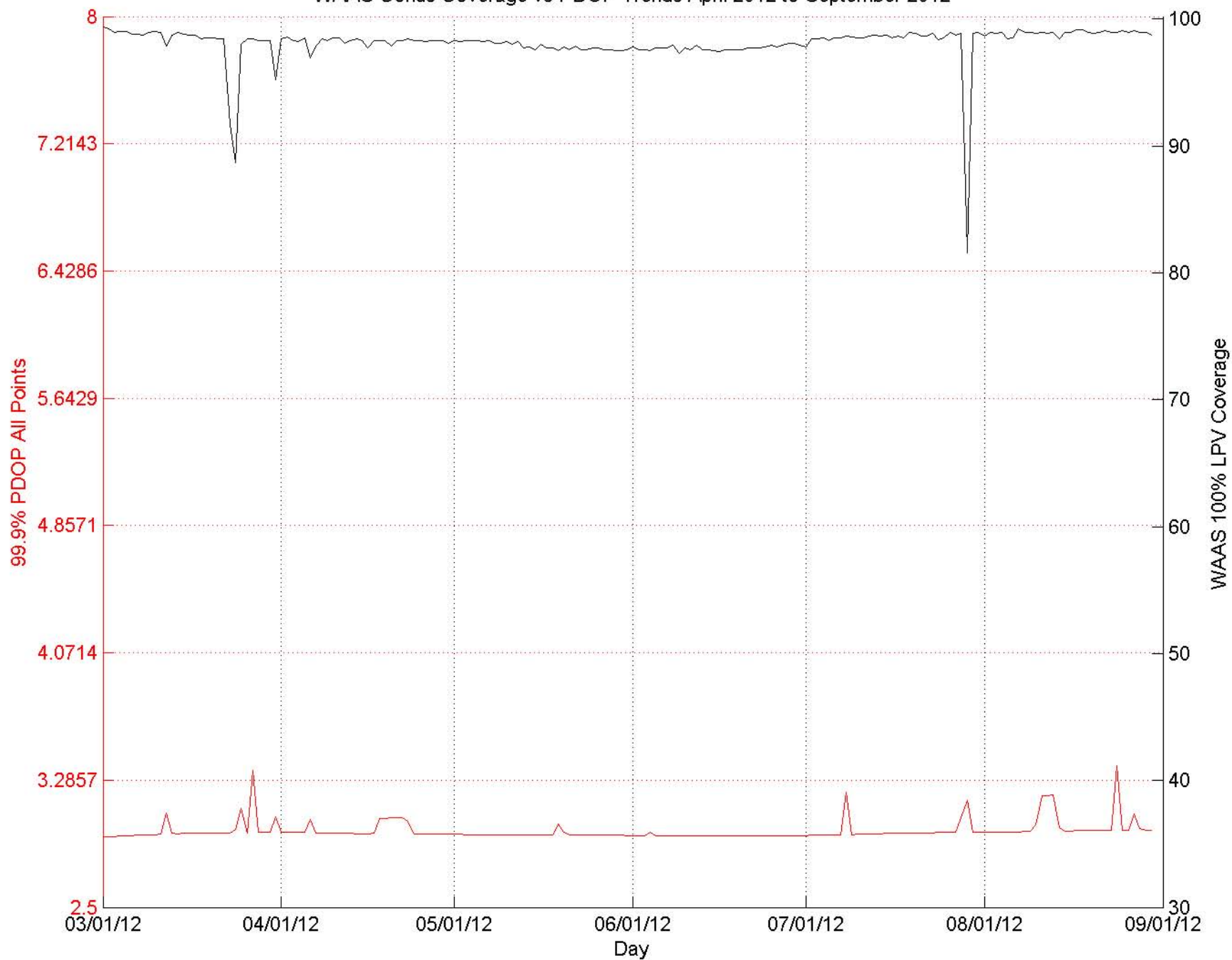
GPS World PDOP 99.99% Index September 2012



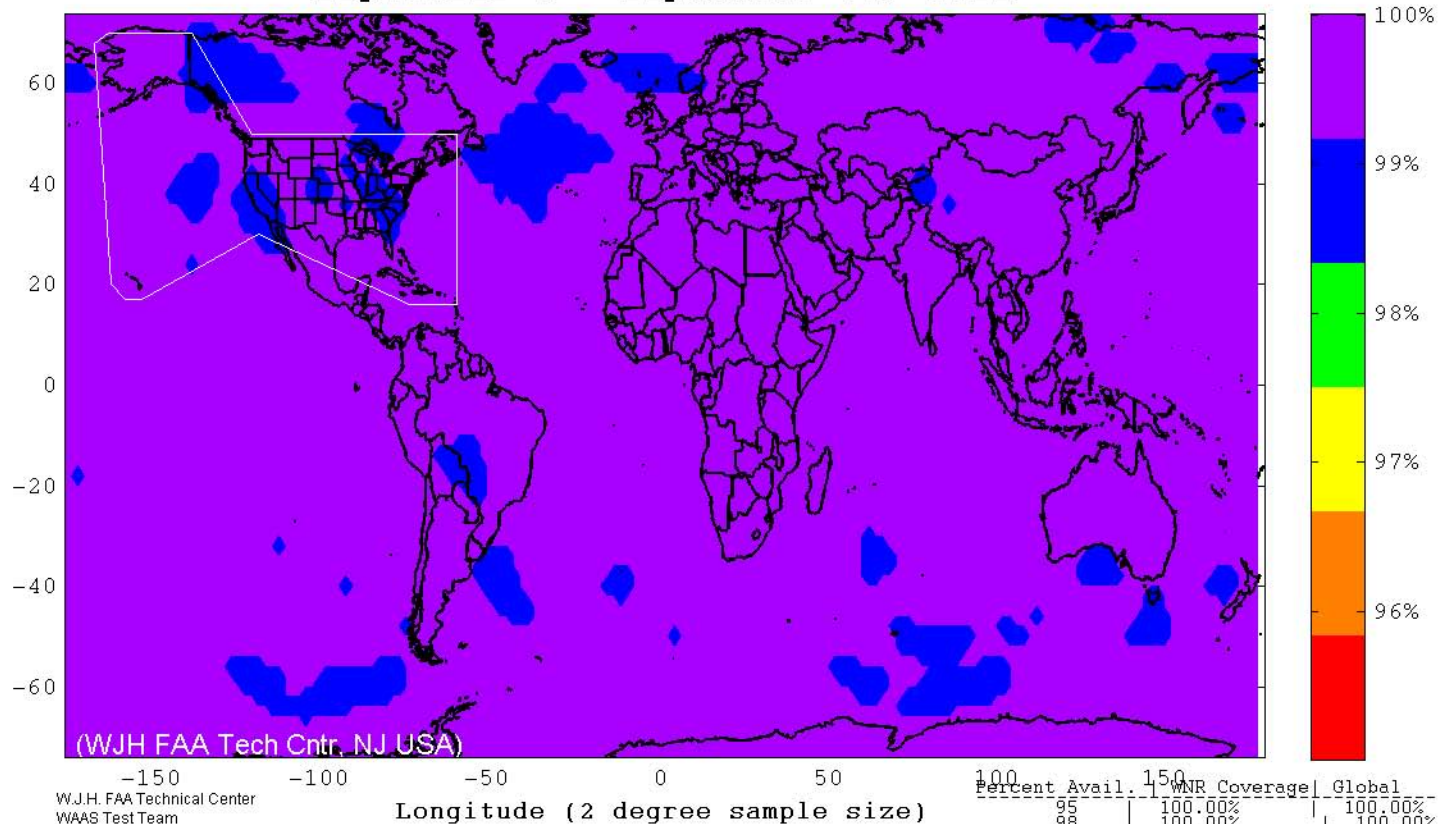
PDOP Trends April 2012 thru September 2012



WAAS Conus Coverage vs PDOP Trends April 2012 to September 2012



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



W.J.H. FAA Technical Center
 WAAS Test Team
 10/17/12

Percent Avail.	WNR Coverage	Global
95	100.00%	100.00%
98	100.00%	100.00%
99	100.00%	100.00%
100	86.00%	94.34%

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

