

Civil Report Card On GPS Performance

March 2012

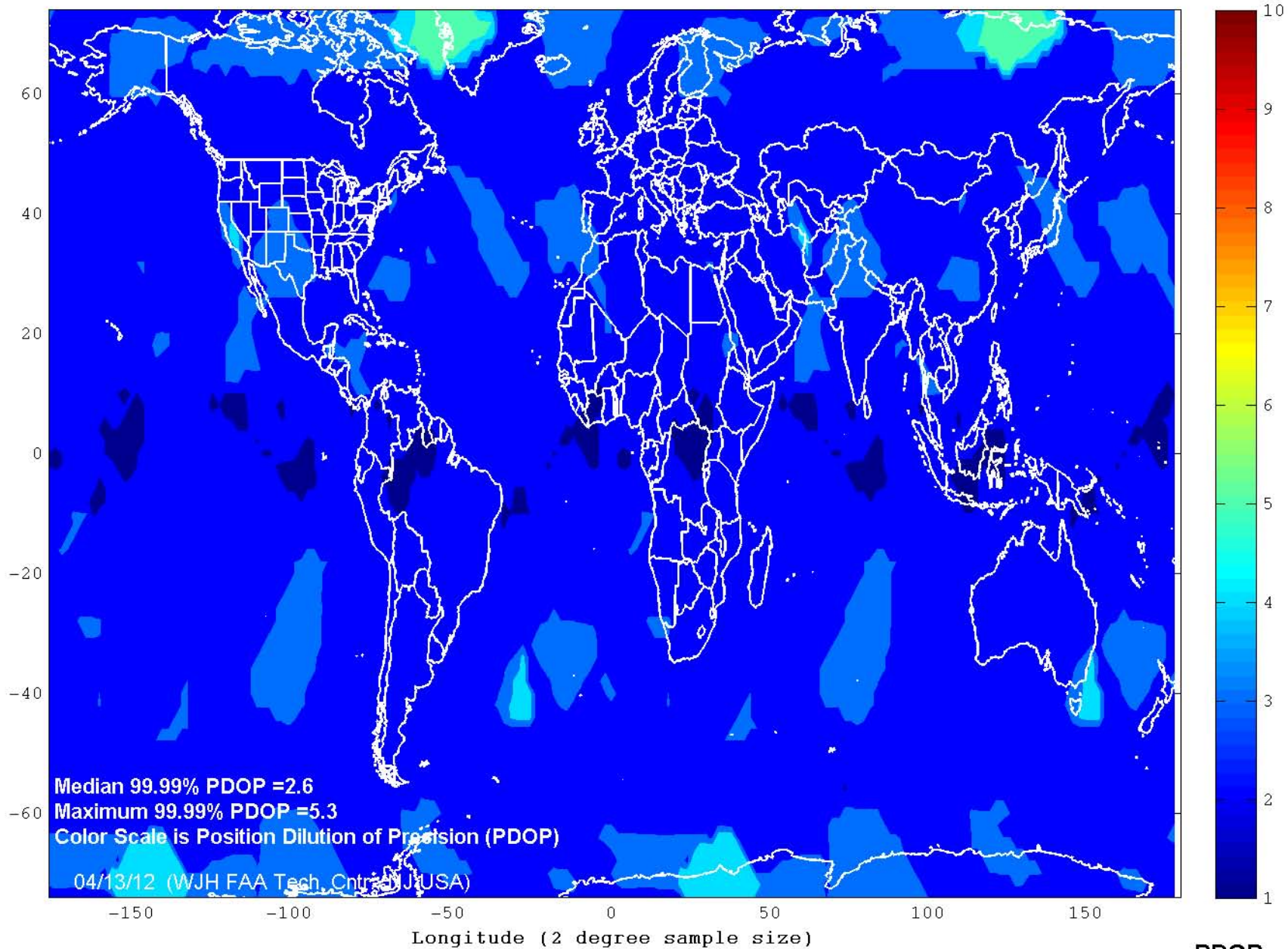
Operational Performance Parameter	CY 2011	Feb 2012	Mar 2012	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.65	30.50	30.99	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.78 (99.10%)	23.96 (99.83%)	23.99 (99.96%)	↑	↑
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	100%	↑	↑
99.99% Horizontal DOP					
<i>Area Median</i>	1.5	1.5	1.3	↑	↑
<i>Worst Site</i>	3.0	4.0	2.5	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.8	2.6	2.3	↑	↑
<i>Worst Site</i>	5.8	9.8	4.9	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.1	2.9	2.6	↑	↑
<i>Worst Site</i>	6.5	10.6	5.3	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.95	1.80	2.13	↓	↓
<i>Worst Satellite</i>	2.57	2.32	2.64	↓	↓
95% Horizontal Error					
<i>Area Median</i>	2.71	2.50	2.81	↓	↓
<i>Worst Site</i>	10.10	7.29	7.30	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.74%	98.54%	99.61%	↑	↑
95% Vertical Error					
<i>Area Median</i>	5.03	4.22	5.94	↓	↓
<i>Worst Site</i>	10.39	9.66	9.95	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.53%	99.69%	99.40%	↓	↓

Key: ↑ improving ↓ worsening → no significant change

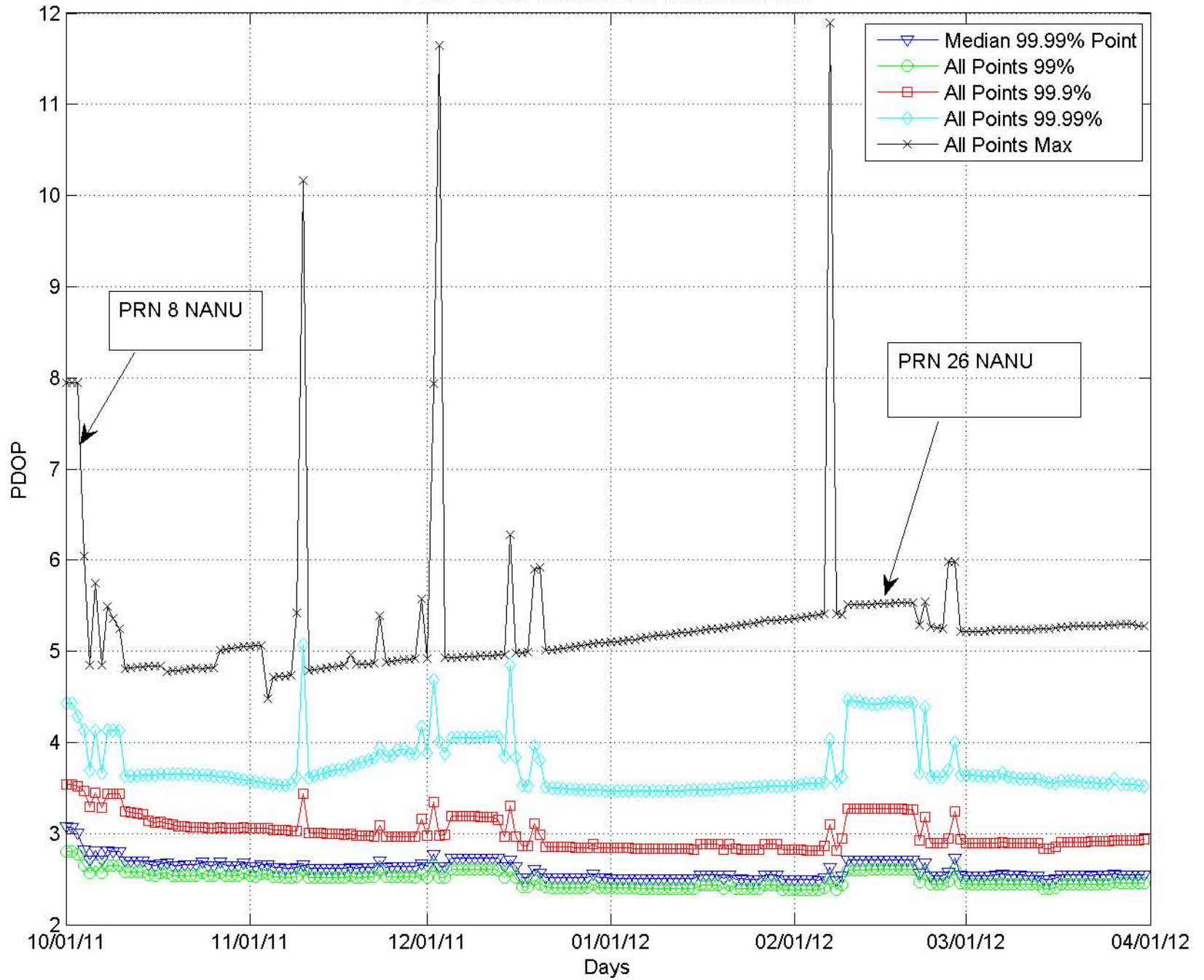
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

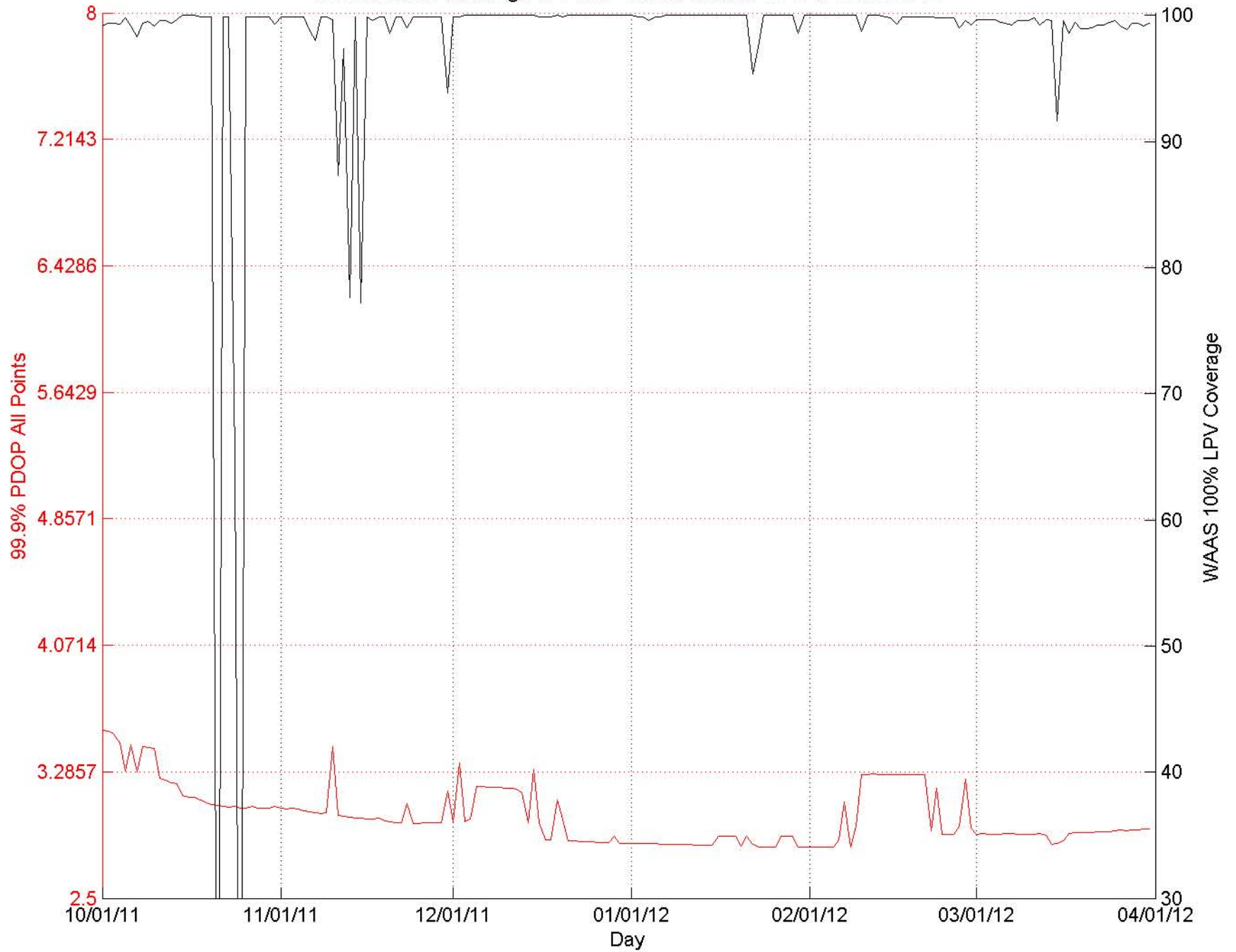
GPS World PDOP 99.99% Index March 2012



PDOP Trends October 2011 thru March 2012



WAAS Conus Coverage vs PDOP Trends October 2011 to March 2012



Six Satellite Availability Trends October 2011 thru March 2012

