

Civil Report Card On GPS Performance

March 2011

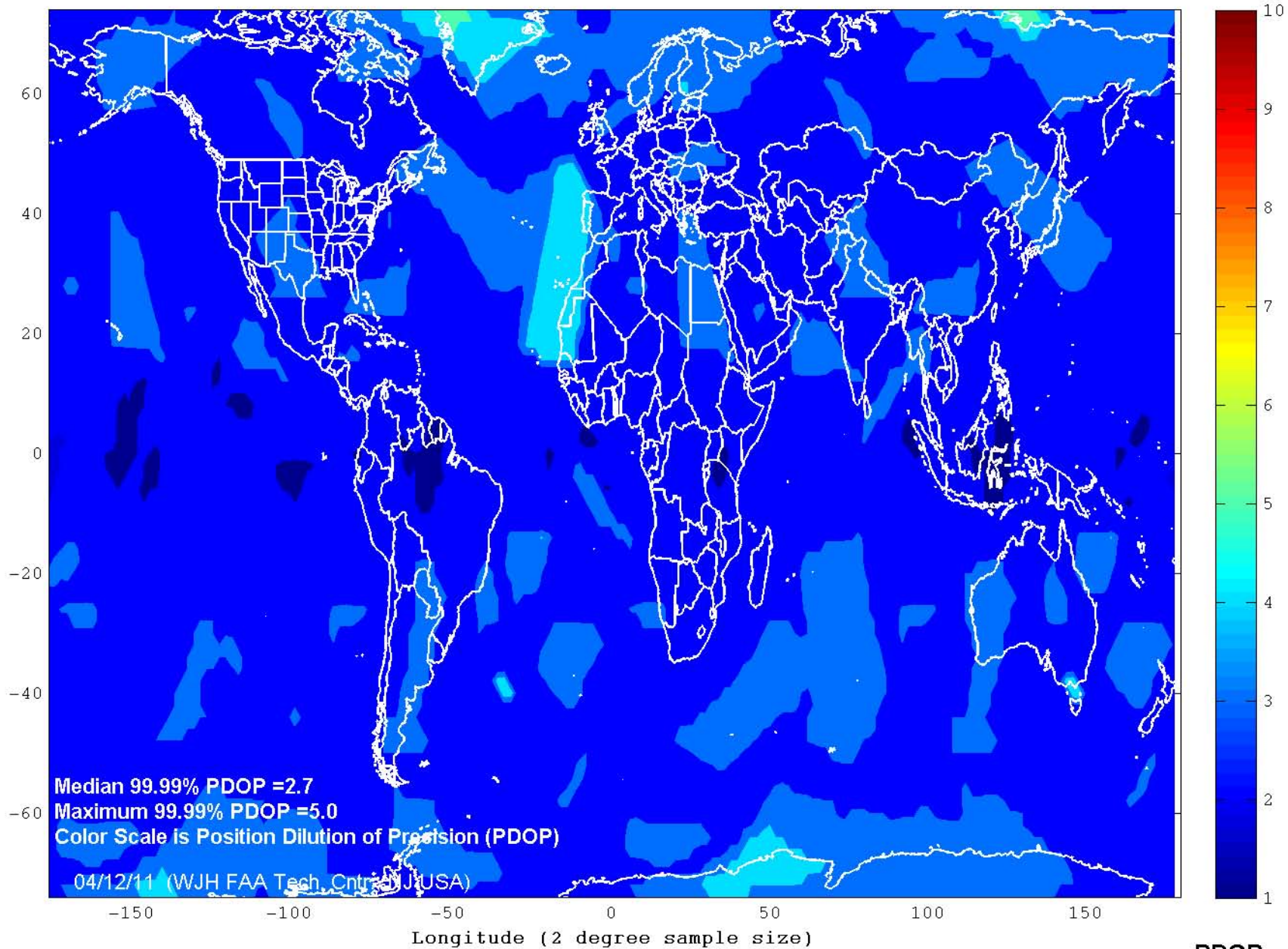
Operational Performance Parameter	CY 2010	Feb 2011	Mar 2011	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.90	30.97	30.98	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.92 (99.68%)	23.99 (99.94%)	23.98 (99.92%)	↑	↓
<i>Average availability of 6 satellites in view</i>	99.99%	100%	99.99%	→	↓
99.99% Horizontal DOP					
<i>Area Median</i>	1.7	1.3	1.3	↑	→
<i>Worst Site</i>	7.9	3.4	2.5	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	3.1	2.5	2.4	↑	↑
<i>Worst Site</i>	18.1	5.9	4.8	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.4	2.7	2.7	↑	→
<i>Worst Site</i>	19.1	6.3	5.0	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.63	1.92	2.10	↓	↓
<i>Worst Satellite</i>	2.11	2.61	2.75	↓	↓
95% Horizontal Error					
<i>Area Median</i>	2.23	2.16	2.55	↓	↓
<i>Worst Site</i>	4.51	4.95	6.58	↓	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.71%	99.70%	98.85%	↓	↓
95% Vertical Error					
<i>Area Median</i>	3.93	5.07	5.29	↓	↓
<i>Worst Site</i>	5.35	6.06	6.14	↓	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.96%	99.98%	99.87%	↓	↓

Key: ↑ improving ↓ worsening → no significant change

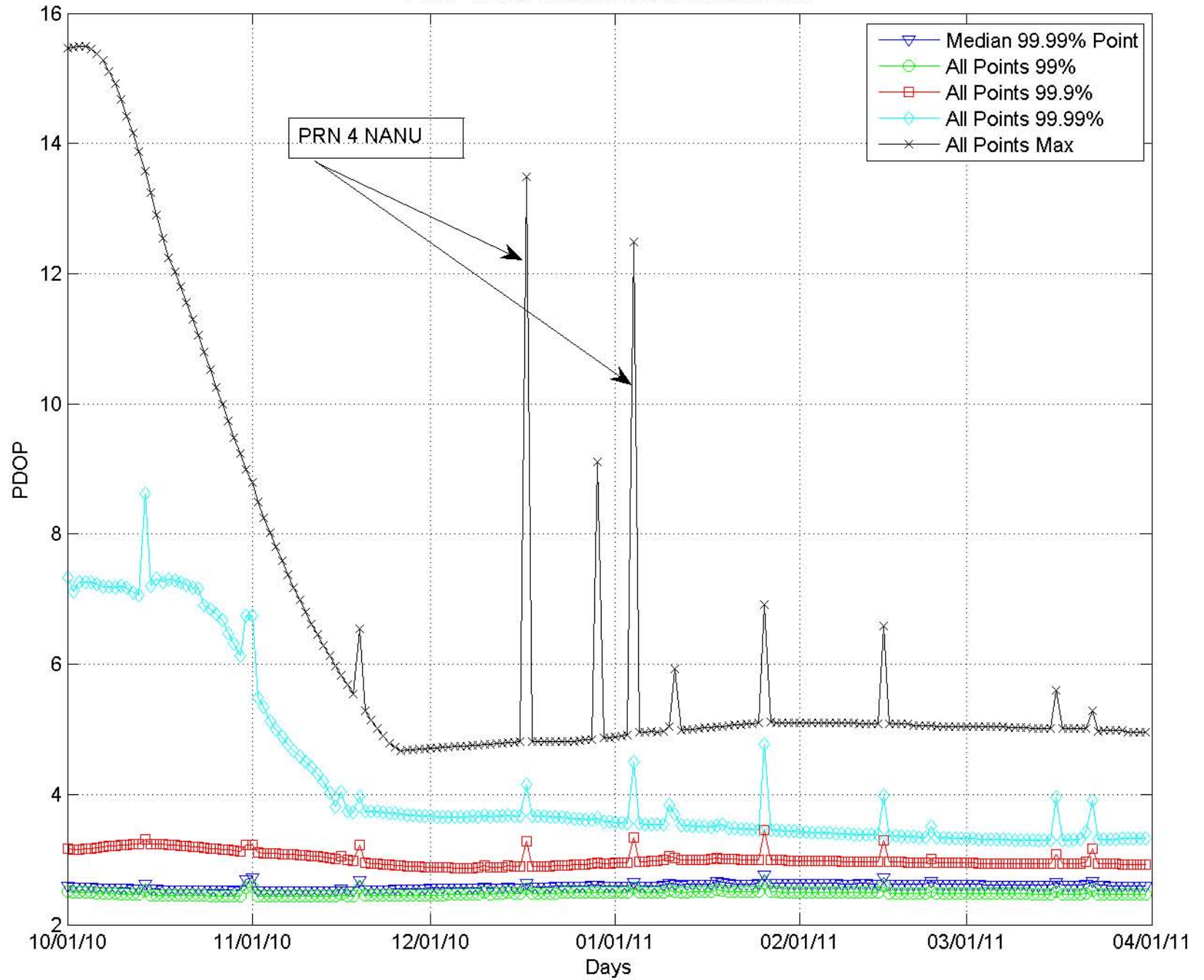
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

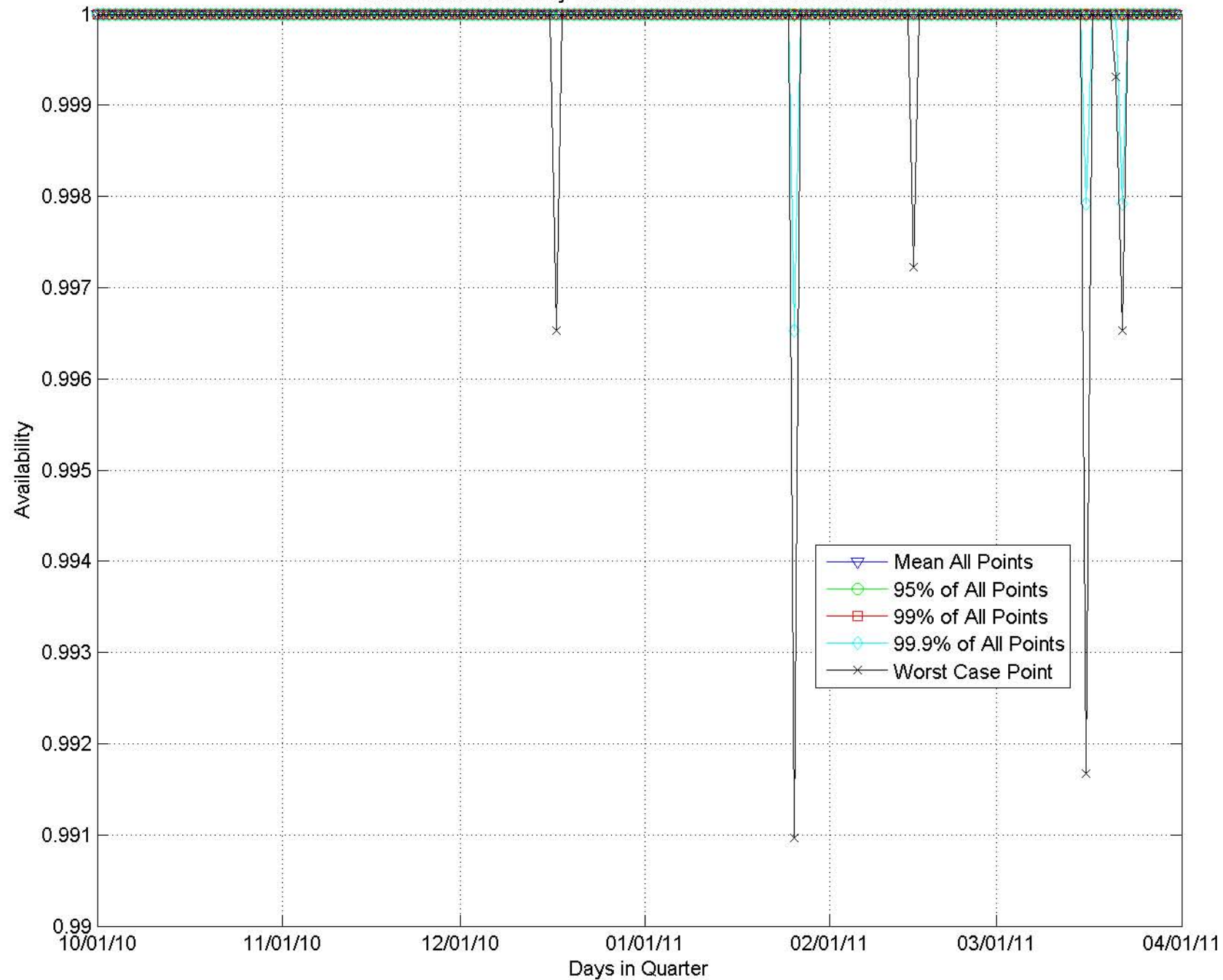
GPS World PDOP 99.99% Index March 2011



PDOP Trends October 2010 thru March 2011



Six Satellite Availability Trends October 2010 thru March 2011



WAAS Conus Coverage vs PDOP Trends October 2010 to March 2011

