

Civil Report Card On GPS Performance

March 2010

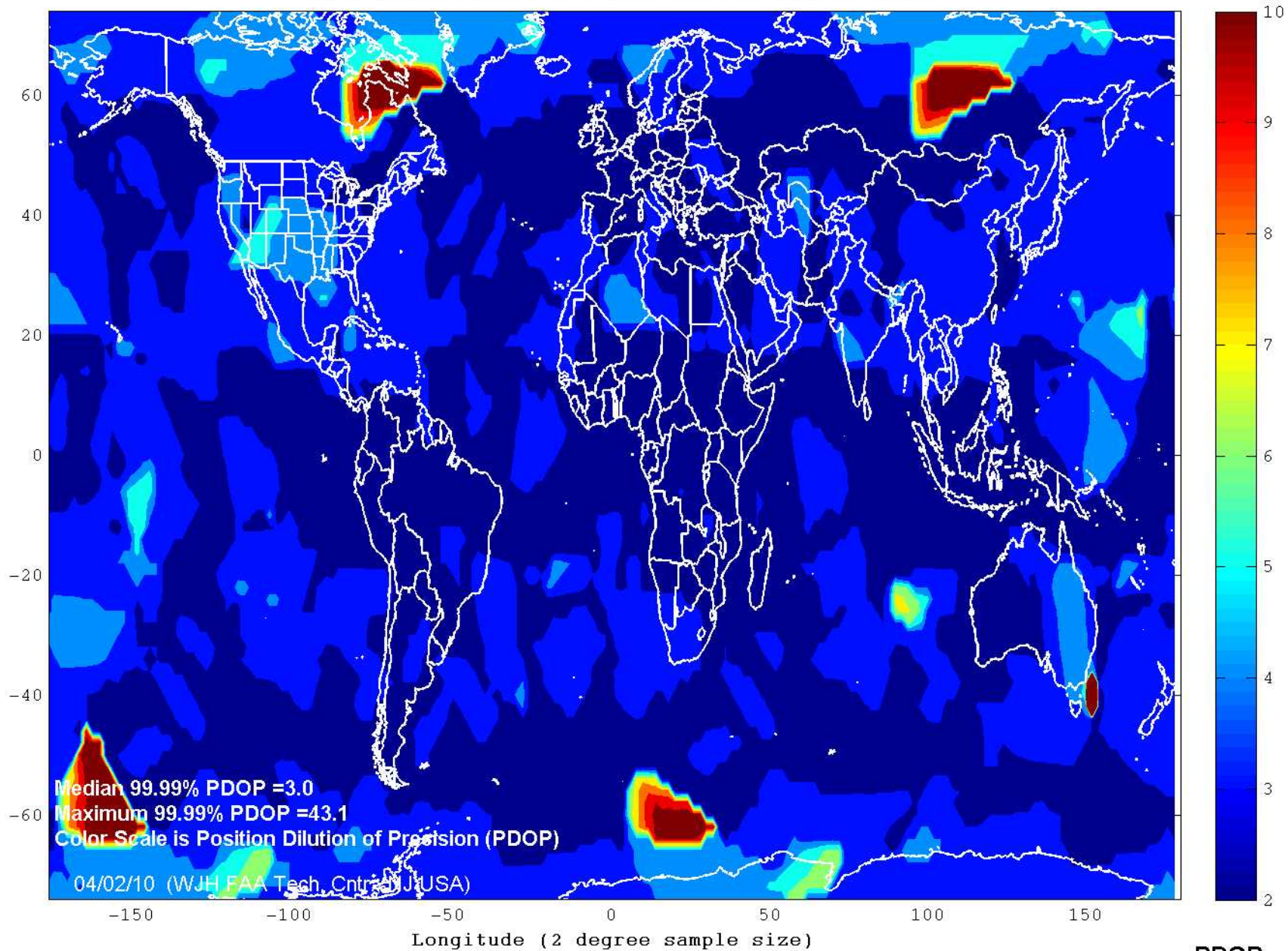
Operational Performance Parameter	CY 2009	Feb 2010	March 2010	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.85	30.74	30.98	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.90 (99.59%)	23.76 (98.98%)	23.99 (99.95%)	↑	↑
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	99.99%	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.7	1.7	1.5	↑	↑
<i>Worst Site</i>	4.8	10.6	13.4	↓	↓
99.99% Vertical DOP					
<i>Area Median</i>	3.1	3.0	2.7	↑	↑
<i>Worst Site</i>	12.0	12.1	41.0	↓	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.5	3.3	3.0	↑	↑
<i>Worst Site</i>	12.8	16.0	43.1	↓	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.67	1.78	1.68	→	↑
<i>Worst Satellite</i>	2.26	2.45	2.15	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.10	2.20	2.24	↓	↓
<i>Worst Site</i>	3.95	4.42	4.75	↓	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.80%	99.72%	99.48%	↓	↓
95% Vertical Error					
<i>Area Median</i>	4.11	4.44	3.96	↑	↑
<i>Worst Site</i>	5.97	5.19	5.33	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.98%	99.89%	99.98%	→	↑

Key: ↑ improving ↓ worsening → no significant change

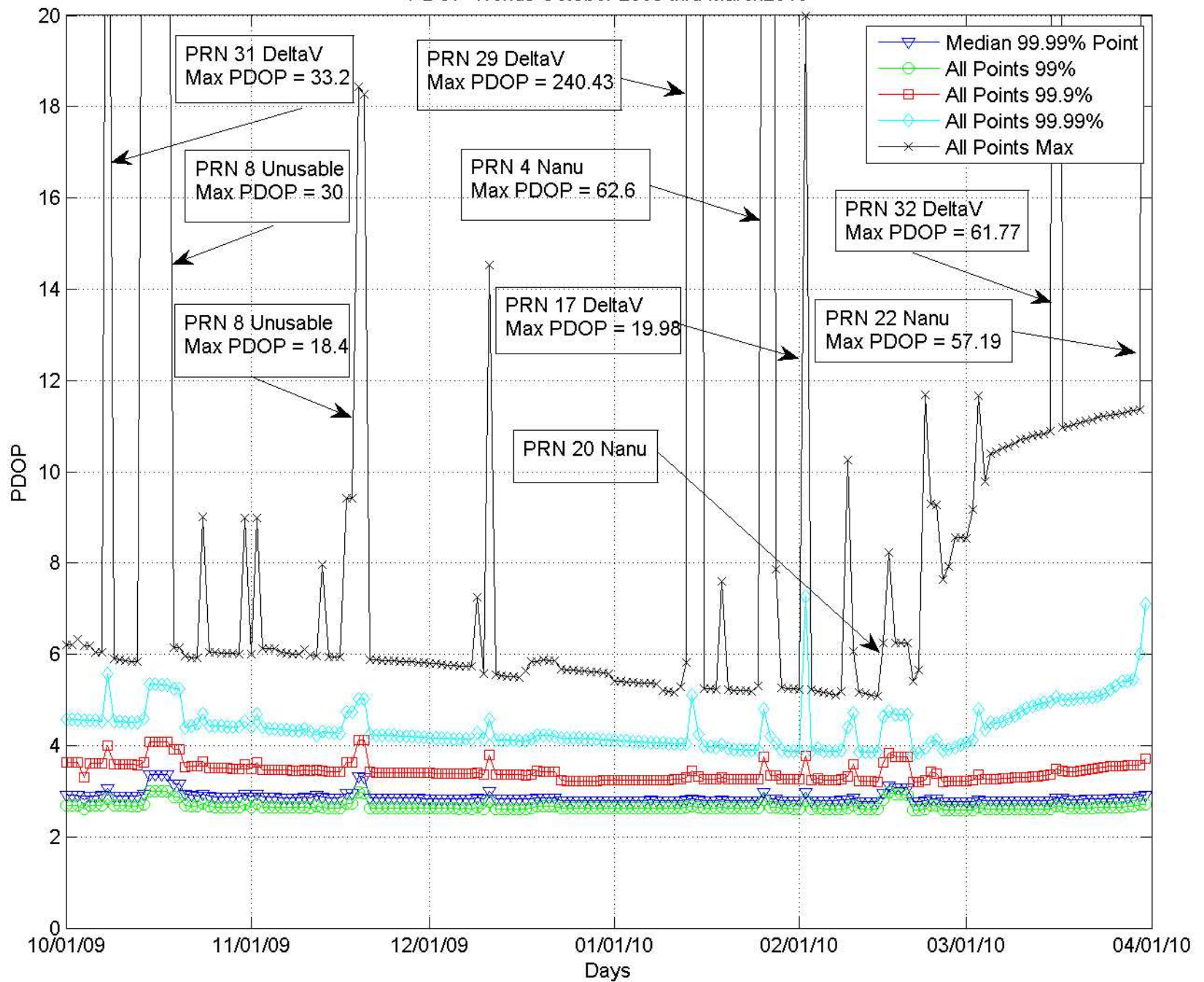
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

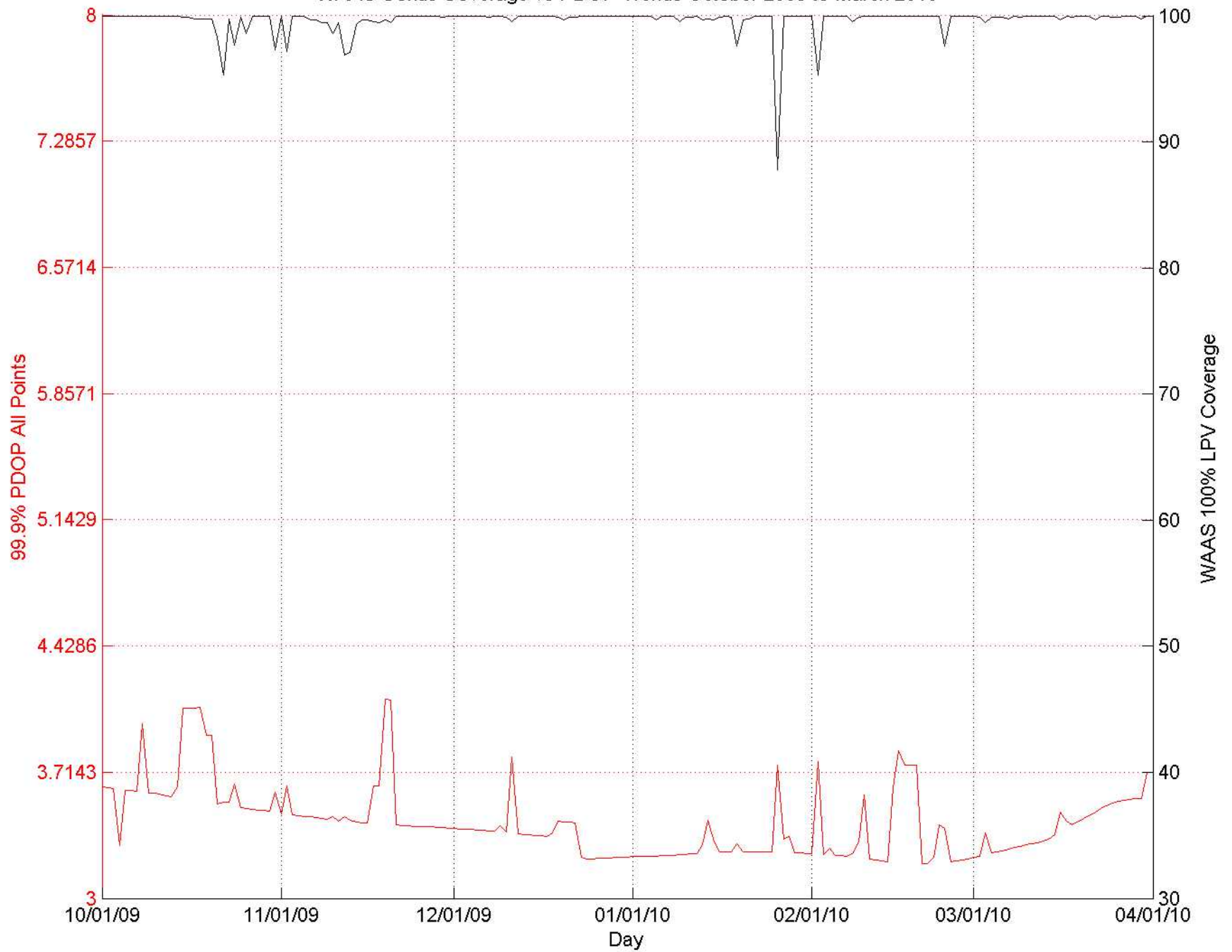
GPS World PDOP 99.99% Index March 2010



PDOP Trends October 2009 thru March2010



WAAS Conus Coverage vs PDOP Trends October 2009 to March 2010



Six Satellite Availability Trends Oct 2009 thru Mar 2010

