

Civil Report Card On GPS Performance

February 2011

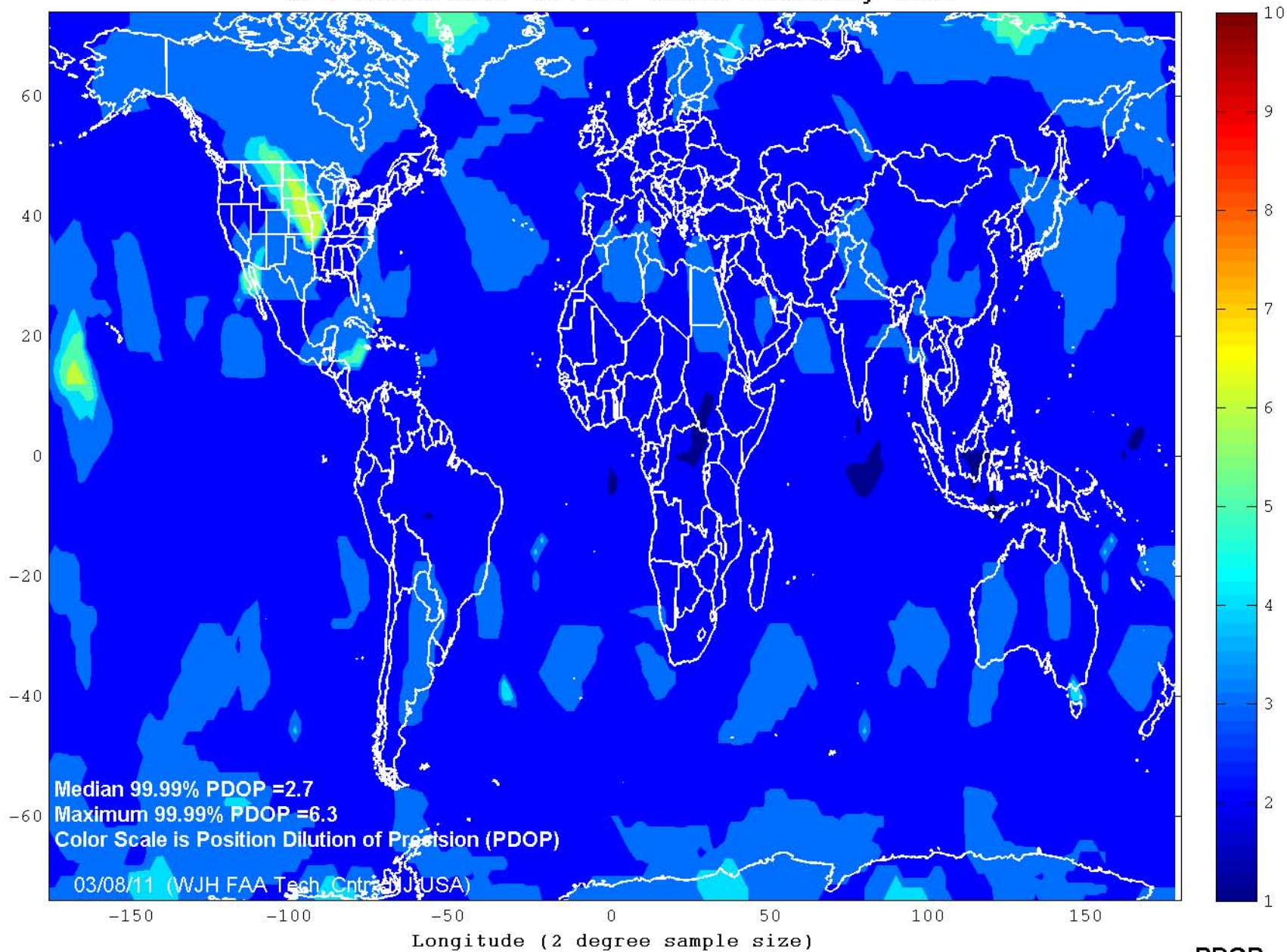
Operational Performance Parameter	CY 2010	Jan 2011	Feb 2011	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.90	30.95	30.97	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.92 (99.68%)	23.98 (99.90%)	23.99 (99.94%)	↑	↑
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	100%	↑	↑
99.99% Horizontal DOP					
<i>Area Median</i>	1.7	1.4	1.3	↑	↑
<i>Worst Site</i>	7.9	3.2	3.4	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	3.1	2.5	2.5	↑	→
<i>Worst Site</i>	18.1	11.7	5.9	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.4	2.8	2.7	↑	↑
<i>Worst Site</i>	19.1	12.1	6.3	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.63	1.70	1.92	↓	↓
<i>Worst Satellite</i>	2.11	2.35	2.61	↓	↓
95% Horizontal Error					
<i>Area Median</i>	2.23	2.21	2.16	↑	↑
<i>Worst Site</i>	4.51	3.85	4.95	↓	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.71%	99.92%	99.70%	↓	↓
95% Vertical Error					
<i>Area Median</i>	3.93	4.20	5.07	↓	↓
<i>Worst Site</i>	5.35	5.02	6.06	↓	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.96%	99.99%	99.98%	↑	↓

Key: ↑ improving ↓ worsening → no significant change

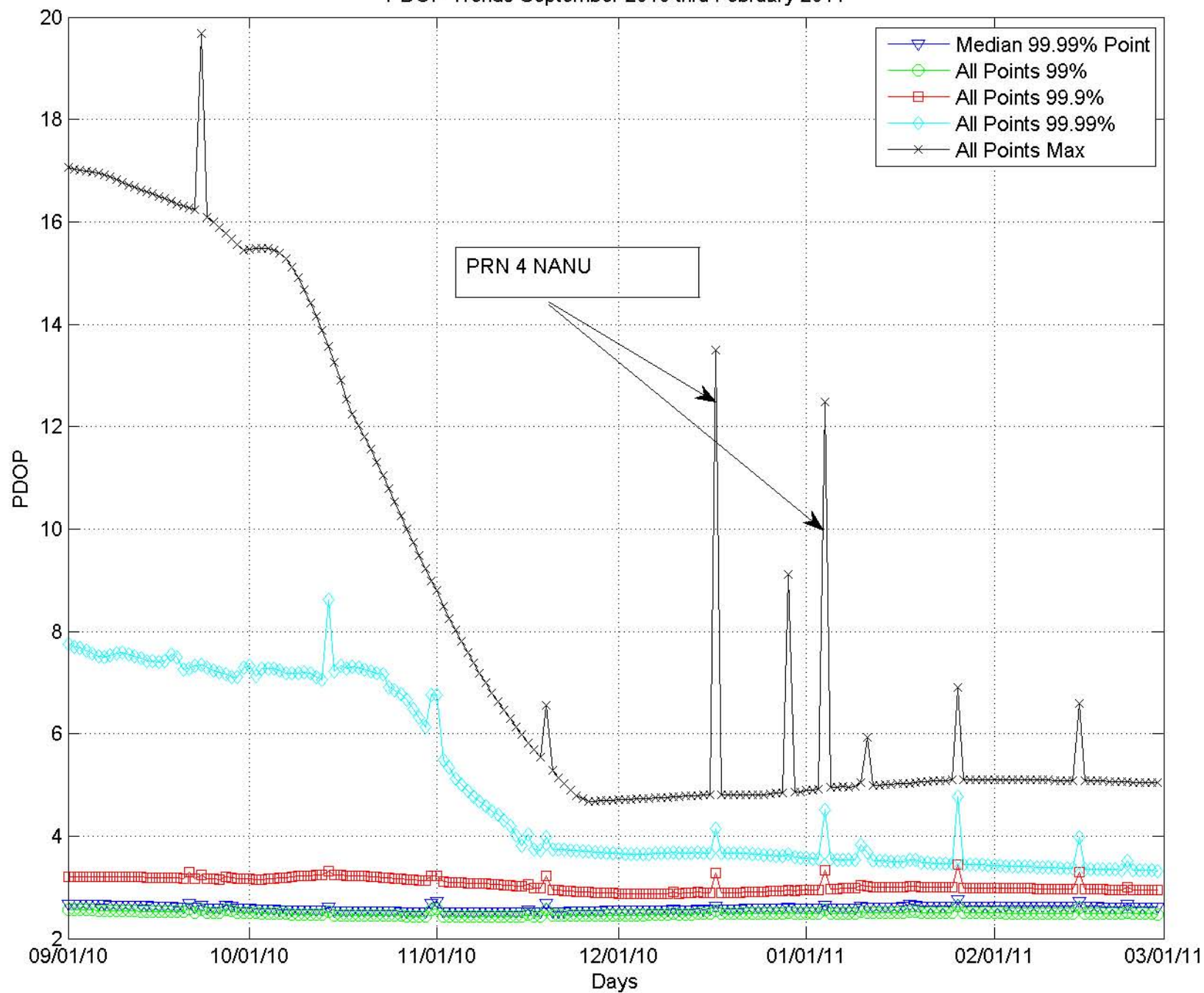
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

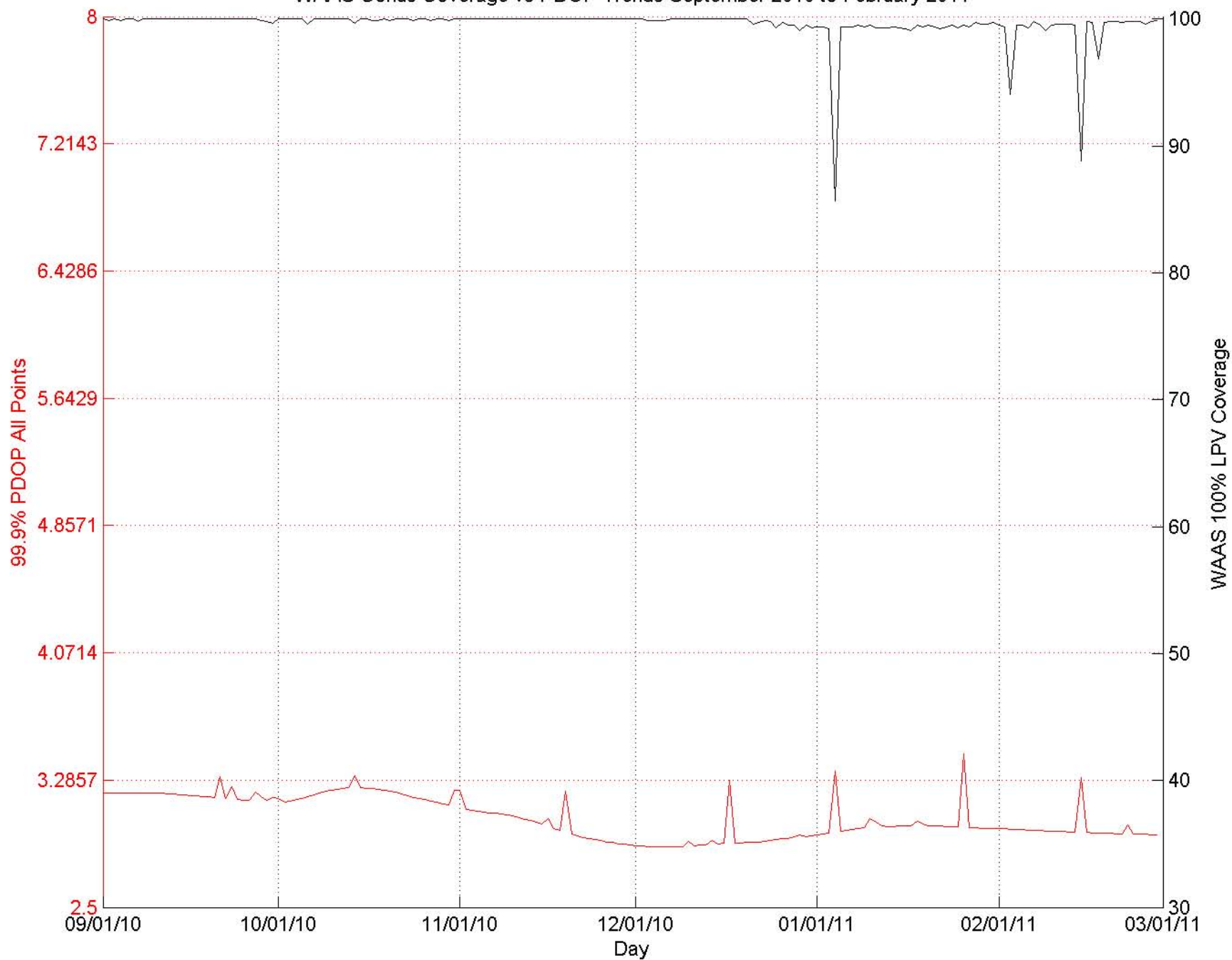
GPS World PDOP 99.99% Index February 2011



PDOP Trends September 2010 thru February 2011



WAAS Conus Coverage vs PDOP Trends September 2010 to February 2011



Six Satellite Availability Trends September 2010 thru February 2011

