

Civil Report Card On GPS Performance

February 2012

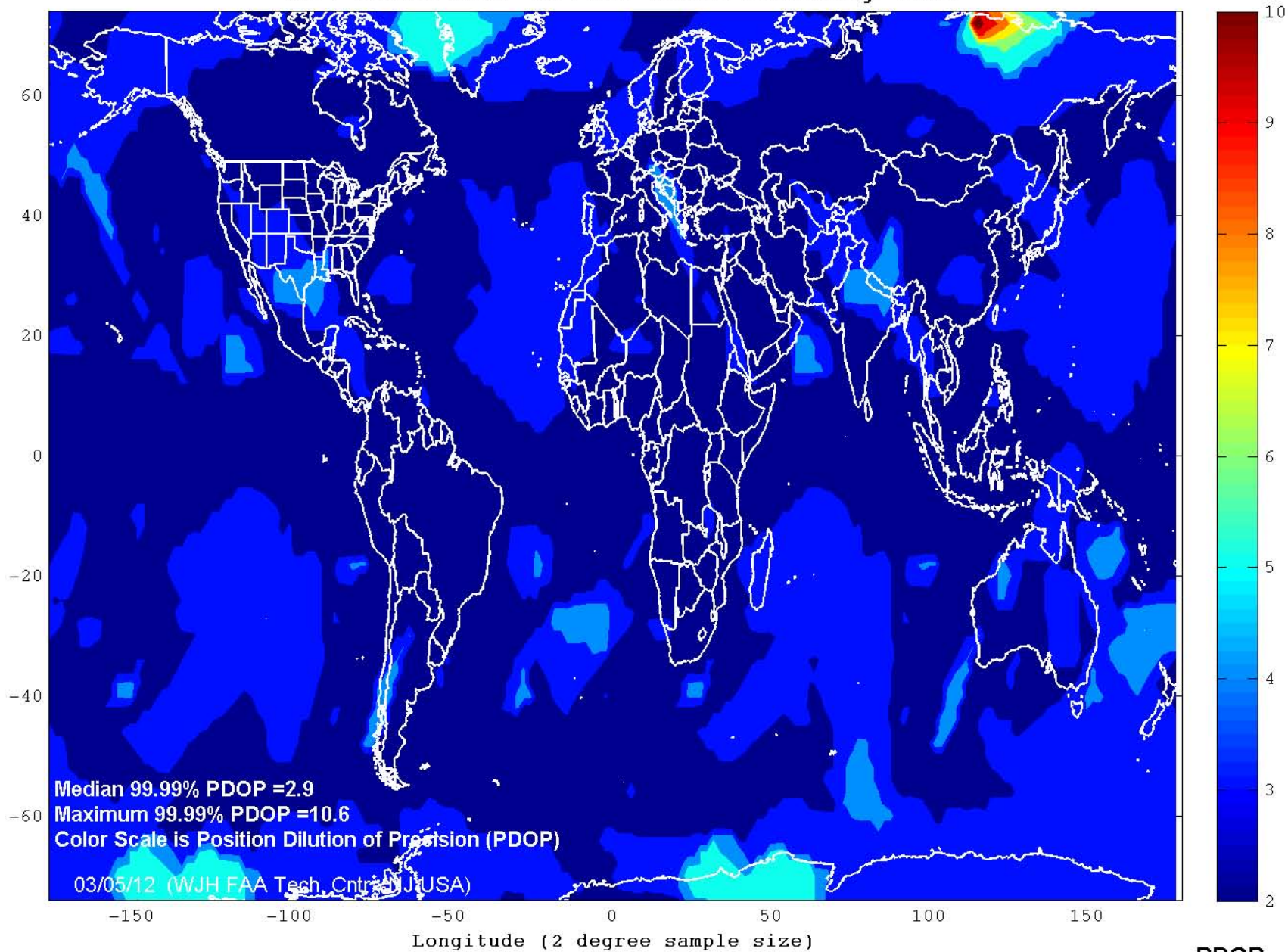
Operational Performance Parameter	CY 2011	Jan 2012	Feb 2012	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.65	30.99%	30.50%	↓	↓
<i>Average number of satellites usable in primary slots</i>	23.78 (99.10%)	23.99% (99.99%)	23.96% (99.83%)	↑	↓
<i>Average availability of 6 satellites in view</i>	99.99%	100%	99.99%	→	↓
99.99% Horizontal DOP					
<i>Area Median</i>	1.5	1.3	1.5	→	↓
<i>Worst Site</i>	3.0	2.5	4.0	↓	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.8	2.3	2.6	↑	↓
<i>Worst Site</i>	5.8	5.0	9.8	↓	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.1	2.6	2.9	↑	↓
<i>Worst Site</i>	6.5	5.3	10.6	↓	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.95	2.01	1.80	↑	↑
<i>Worst Satellite</i>	2.57	2.96	2.32	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.71	2.50	2.50	↑	→
<i>Worst Site</i>	10.10	6.88	7.29	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.74%	98.76%	98.54%	↓	↓
95% Vertical Error					
<i>Area Median</i>	5.03	5.45	4.22	↑	↑
<i>Worst Site</i>	10.39	7.49	9.66	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.53%	99.79%	99.69%	↑	↓

Key: ↑ improving ↓ worsening → no significant change

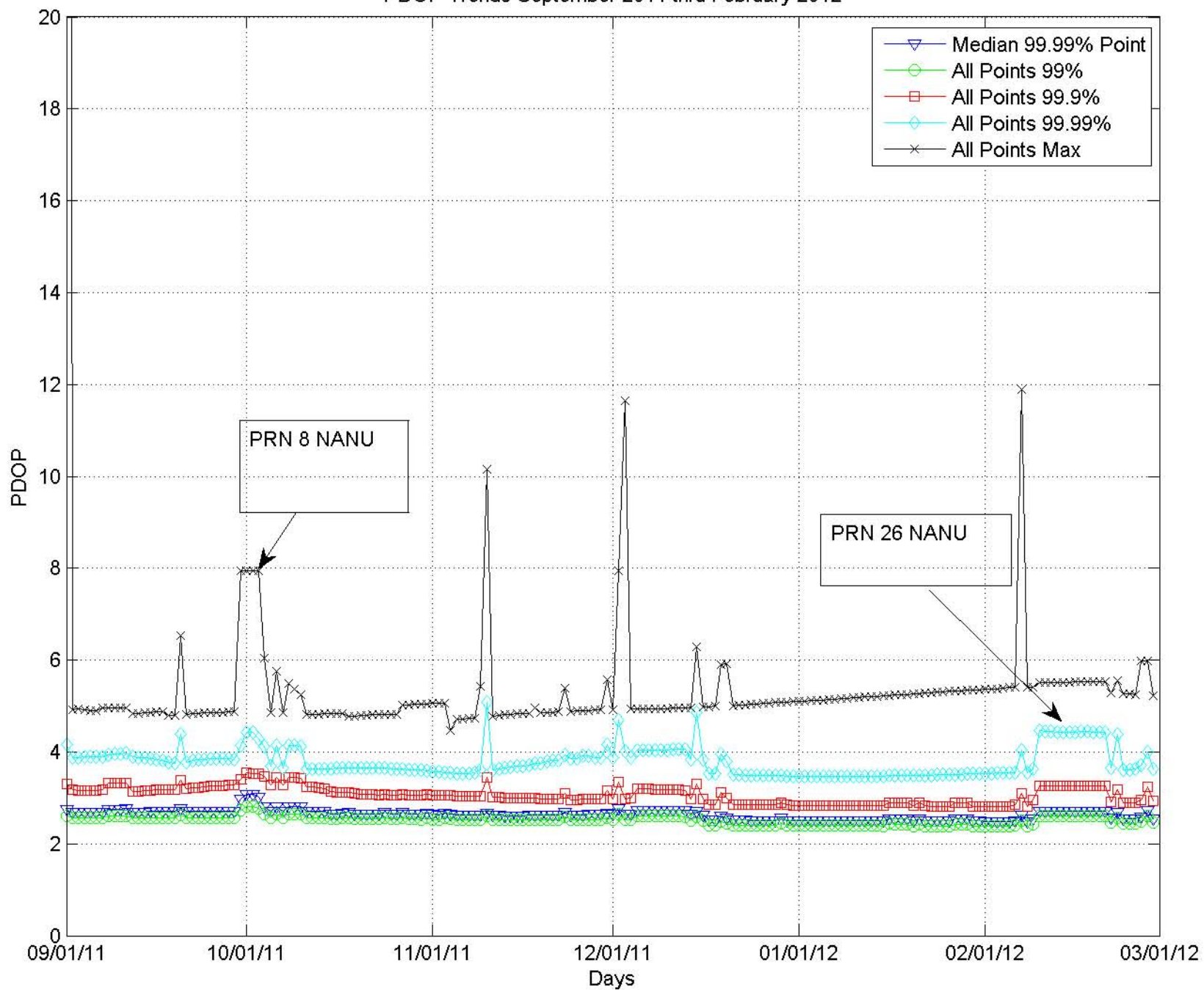
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

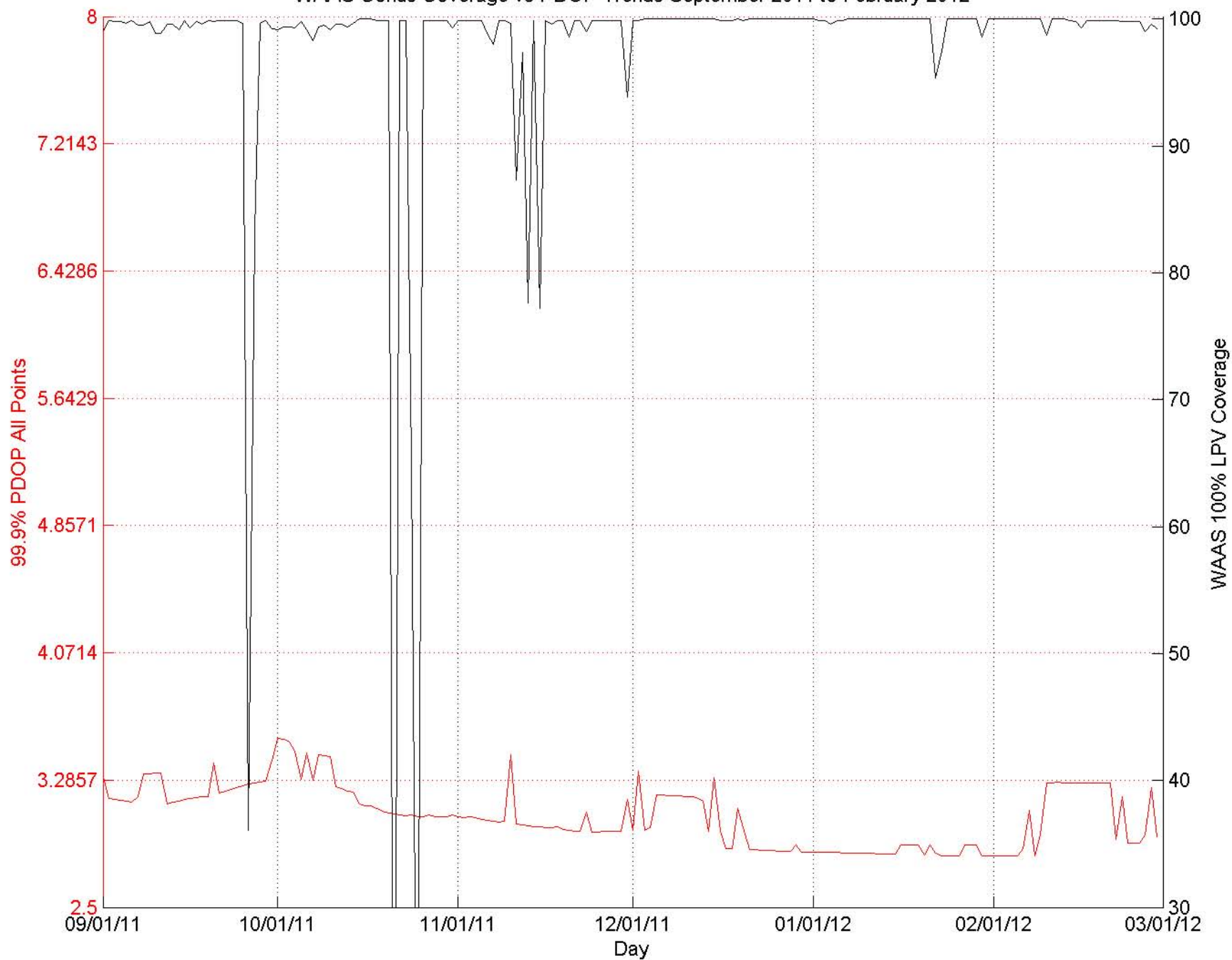
GPS World PDOP 99.99% Index February 2012



PDOP Trends September 2011 thru February 2012



WAAS Conus Coverage vs PDOP Trends September 2011 to February 2012



Six Satellite Availability Trends September 2011 thru February 2012

