

Civil Report Card On GPS Performance

January 2012

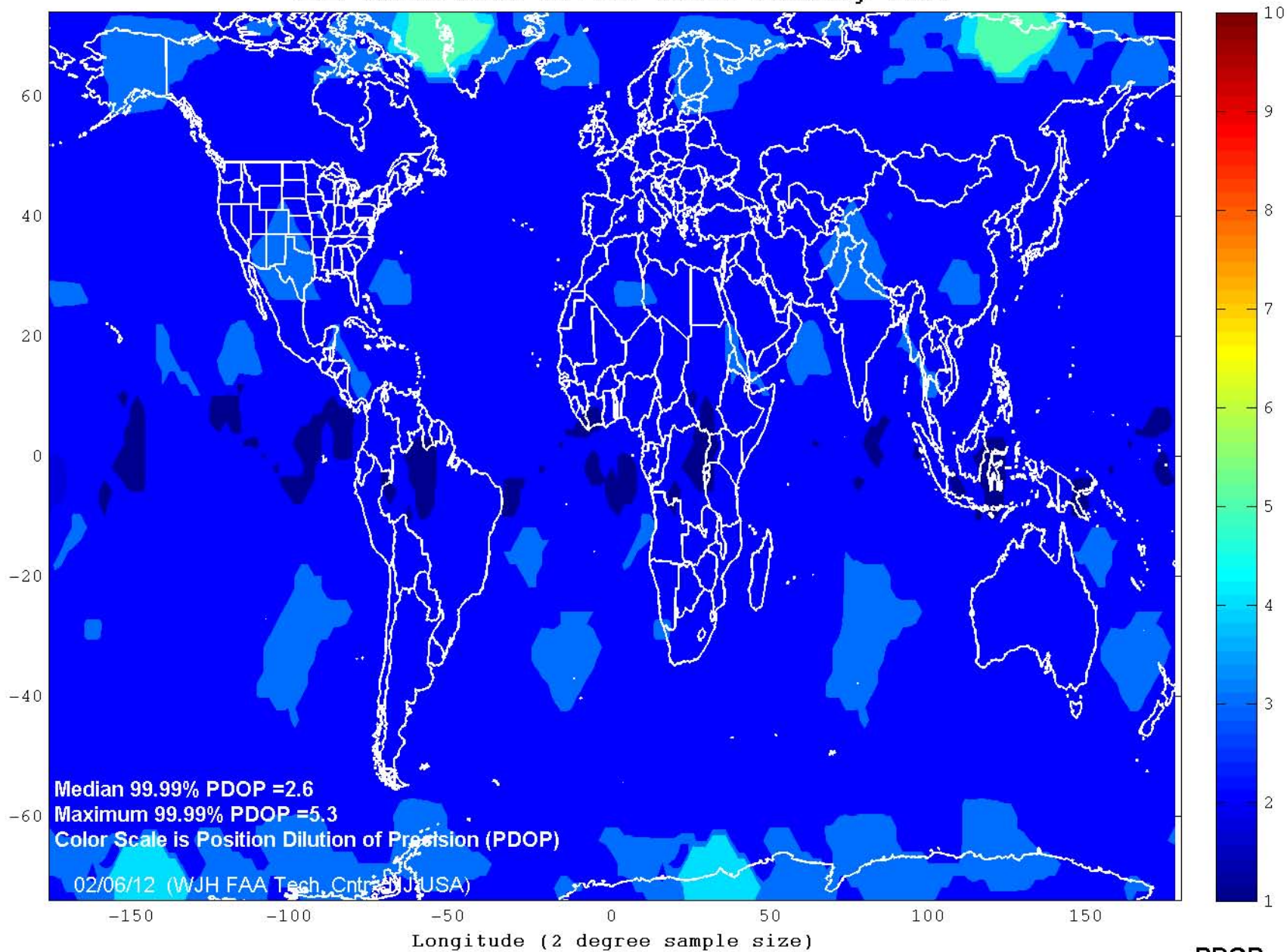
Operational Performance Parameter	CY 2011	Dec 2011	Jan 2012	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.65	30.67	30.99%	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.78 (99.10%)	23.96 (99.85%)	23.99%	↑	↑
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	100%	↑	↑
99.99% Horizontal DOP					
<i>Area Median</i>	1.5	1.4	1.3	↑	↑
<i>Worst Site</i>	3.0	3.5	2.5	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.8	2.6	2.3	↑	↑
<i>Worst Site</i>	5.8	6.2	5.0	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.1	2.9	2.6	↑	↑
<i>Worst Site</i>	6.5	6.5	5.3	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.95	2.36	2.01	↓	↑
<i>Worst Satellite</i>	2.57	3.79	2.96	↓	↑
95% Horizontal Error					
<i>Area Median</i>	2.71	2.84	2.50	↑	↑
<i>Worst Site</i>	10.10	9.02	6.88	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.74%	99.69%	98.76%	↑	↓
95% Vertical Error					
<i>Area Median</i>	5.03	7.04	5.45	↓	↑
<i>Worst Site</i>	10.39	9.02	7.49	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.53%	98.87%	99.79%	↑	↓

Key: ↑ improving ↓ worsening → no significant change

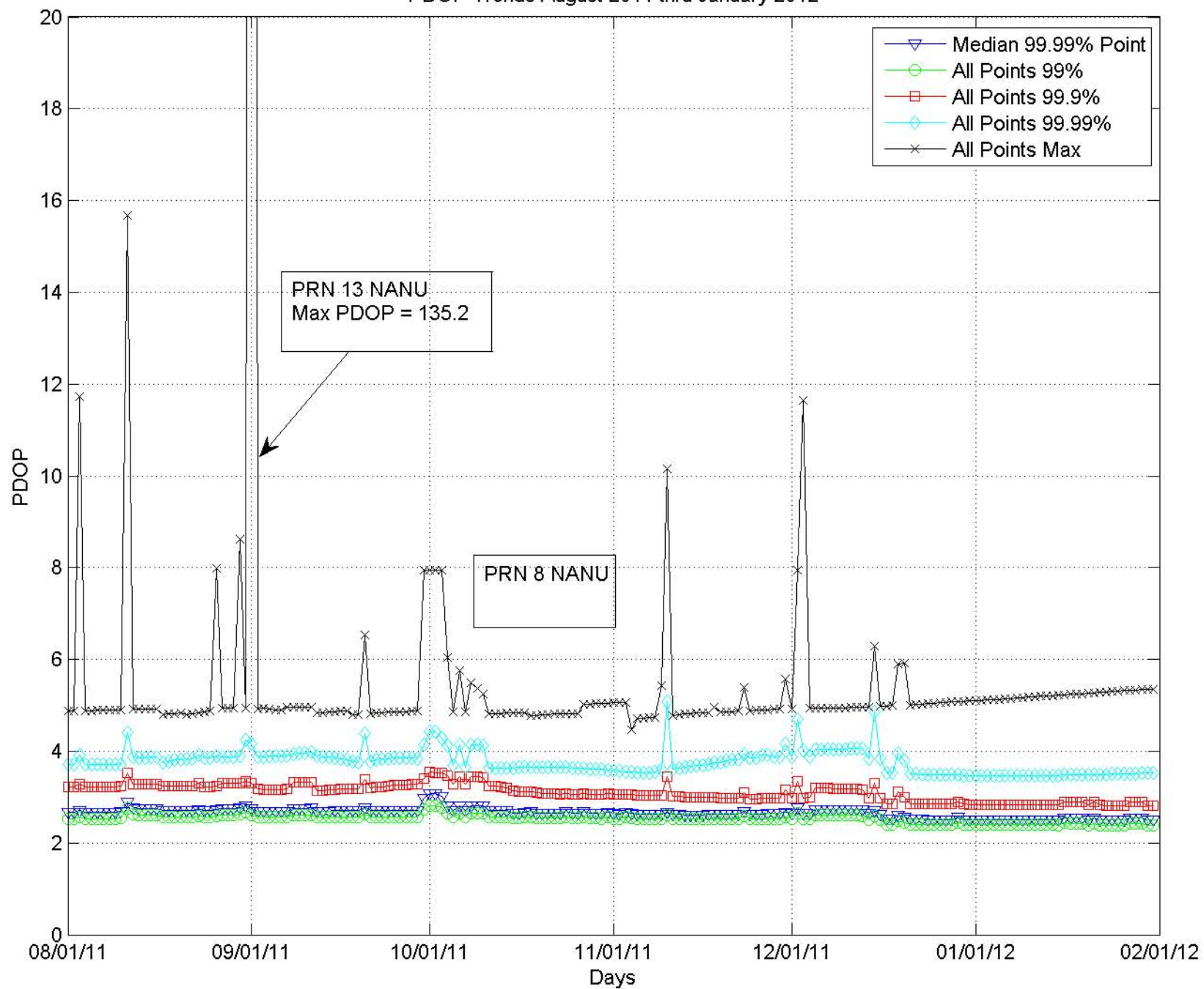
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

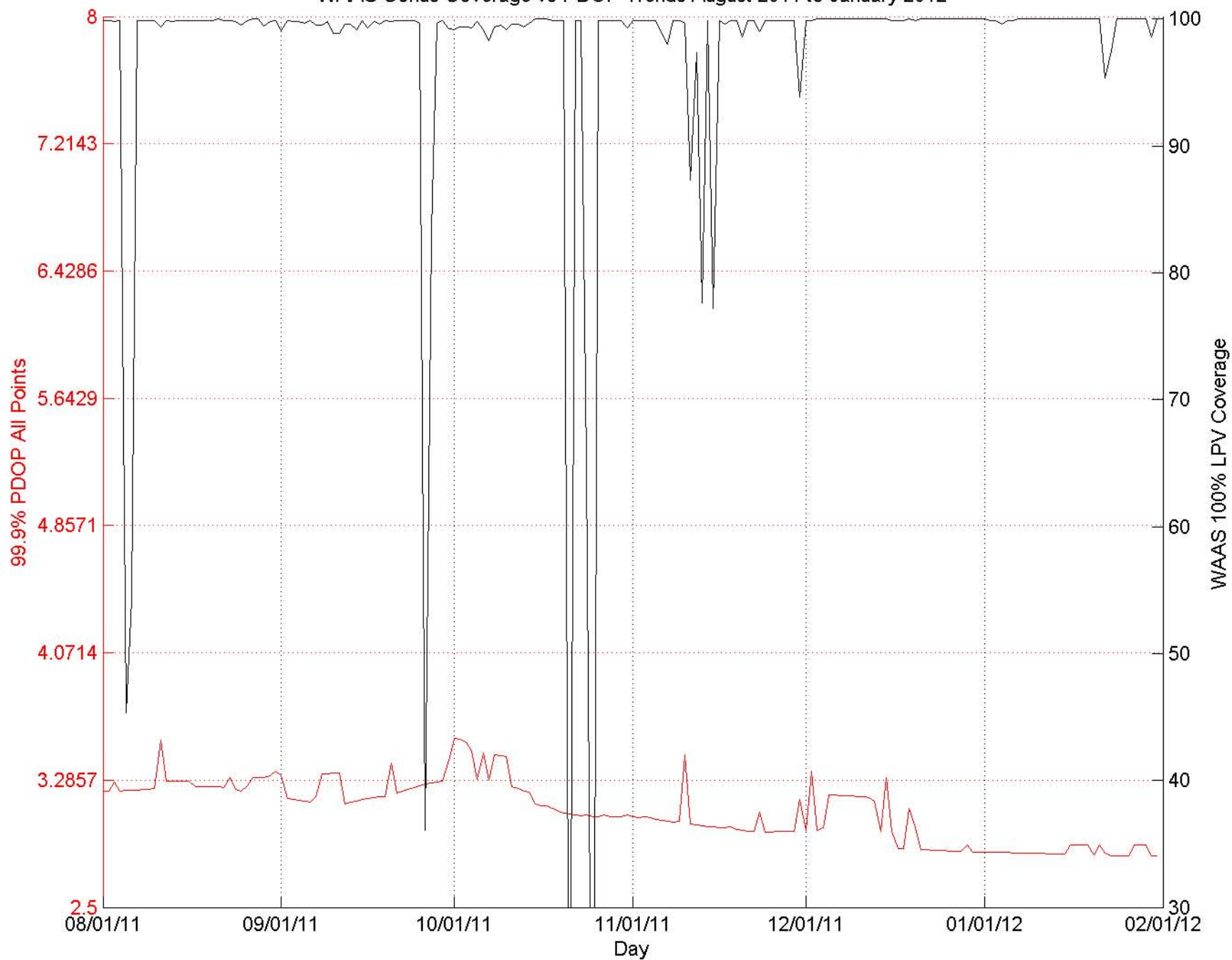
GPS World PDOP 99.99% Index January 2012



PDOP Trends August 2011 thru January 2012



WAAS Conus Coverage vs PDOP Trends August 2011 to January 2012



Six Satellite Availability Trends August 2011 thru January 2012

