

Civil Report Card On GPS Performance

June 2011

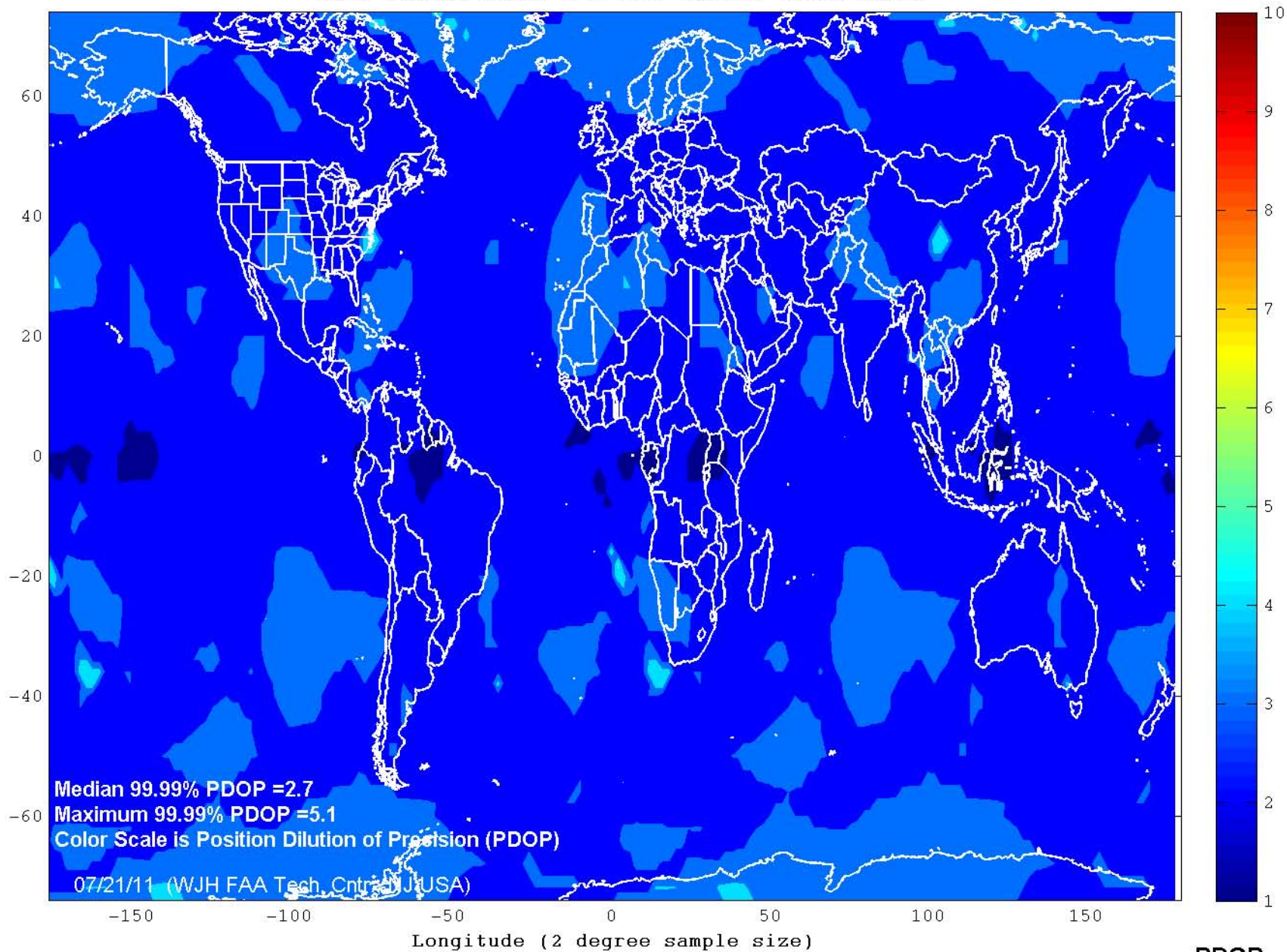
Operational Performance Parameter	CY 2010	May 2011	June 2011	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.90	30.30	30.00	↓	↓
<i>Average number of satellites usable in primary slots</i>	23.92 (99.68%)	23.98 (99.93%)	23.00 (95.83%)	↓	↓
<i>Average availability of 6 satellites in view</i>	99.99%	100%	100%	↑	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.7	1.4	1.4	↑	→
<i>Worst Site</i>	7.9	2.7	2.2	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	3.1	2.5	2.4	↑	↑
<i>Worst Site</i>	18.1	4.9	5.0	↑	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.4	2.7	2.7	↑	→
<i>Worst Site</i>	19.1	5.3	5.1	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.63	1.80	1.53	↑	↑
<i>Worst Satellite</i>	2.11	2.26	1.97	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.23	2.90	2.34	↓	↑
<i>Worst Site</i>	4.51	5.40	3.67	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.71%	98.96%	99.91%	↑	↑
95% Vertical Error					
<i>Area Median</i>	3.93	3.94	3.70	↑	↑
<i>Worst Site</i>	5.35	6.60	4.87	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.96%	99.90%	99.98%	↑	↑

Key: ↑ improving ↓ worsening → no significant change

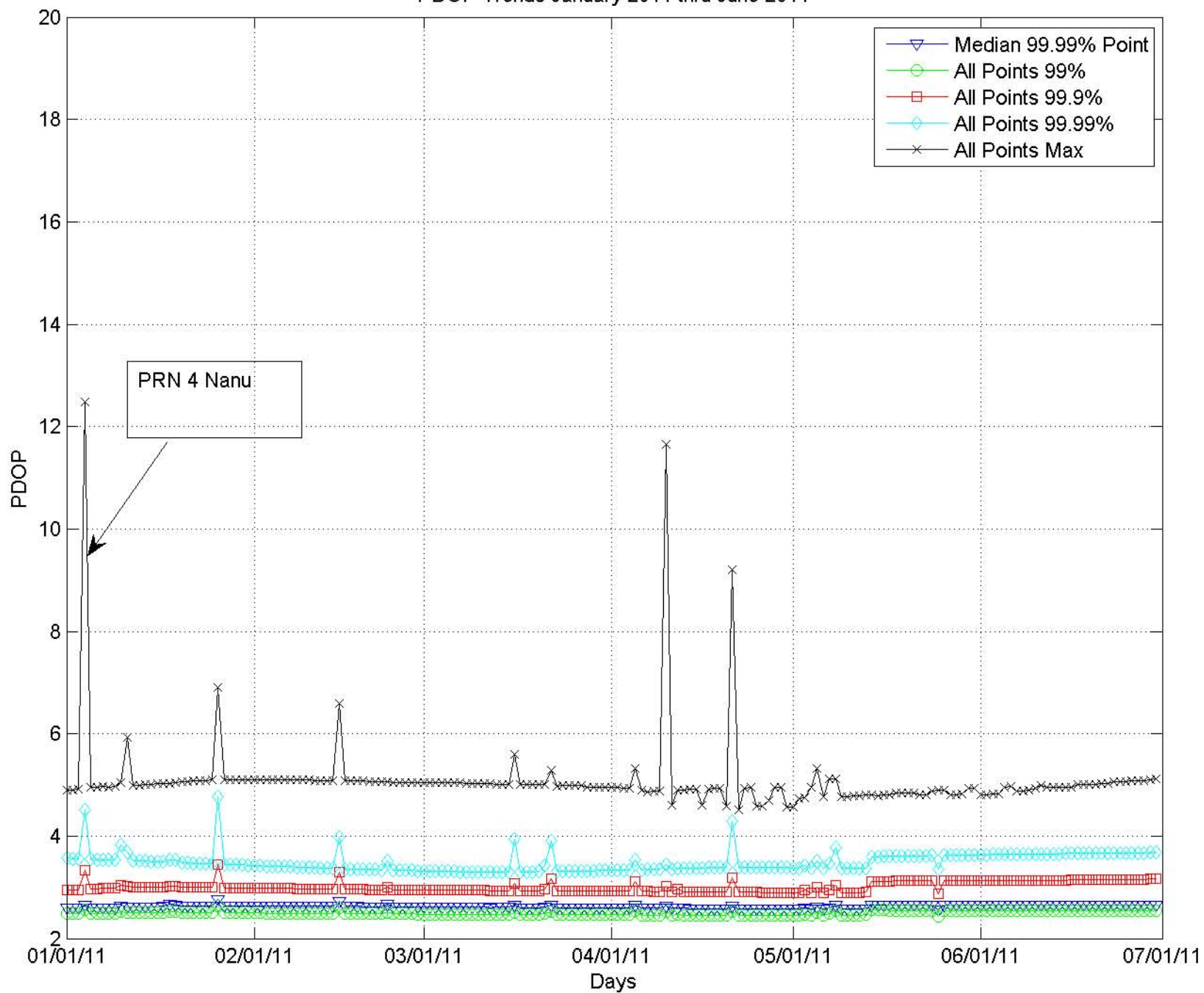
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

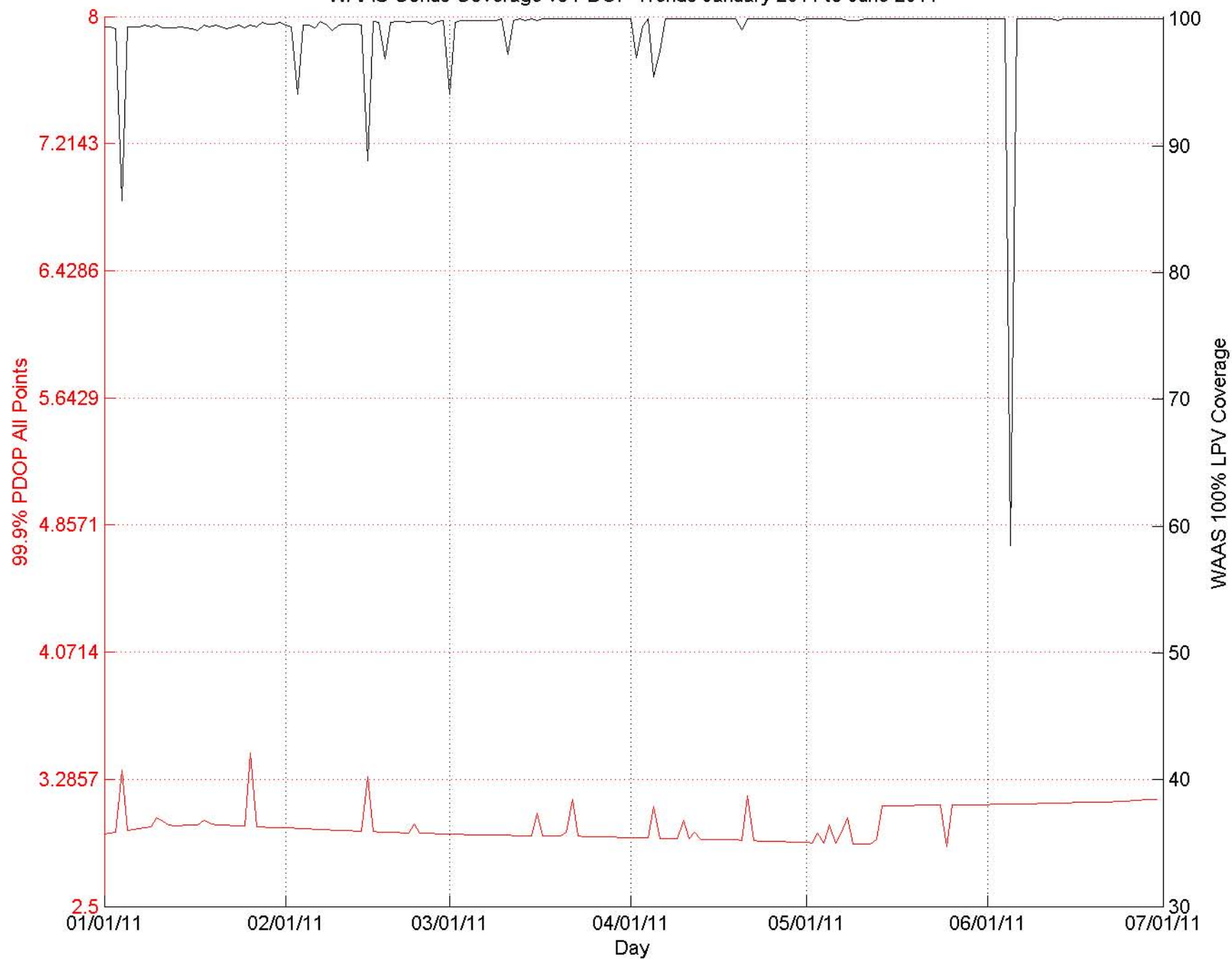
GPS World PDOP 99.99% Index June 2011



PDOP Trends January 2011 thru June 2011



WAAS Conus Coverage vs PDOP Trends January 2011 to June 2011



Six Satellite Availability Trends January 2011 thru June 2011

