

Civil Report Card On GPS Performance

November 2011

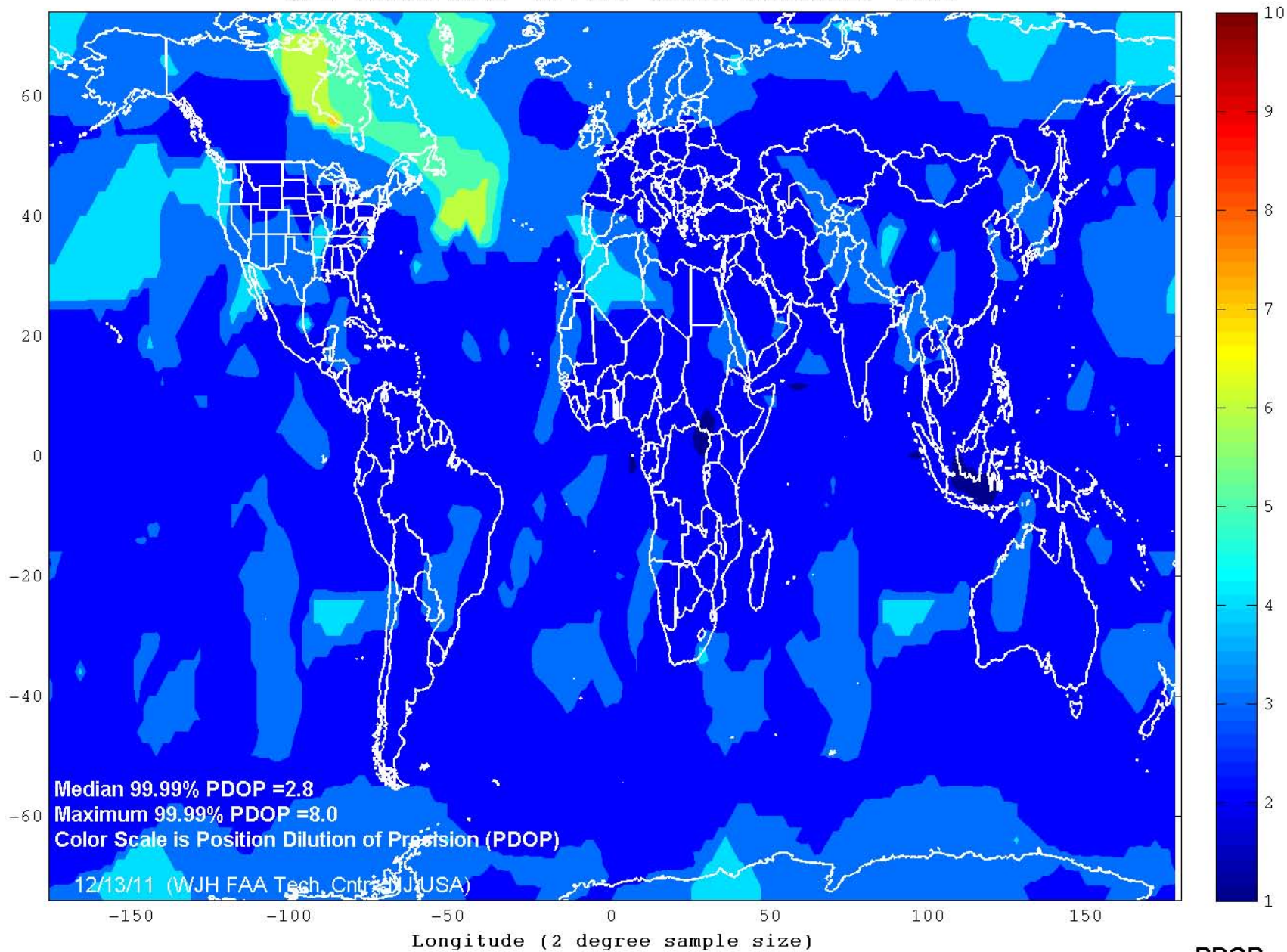
Operational Performance Parameter	CY 2010	Oct 2011	Nov 2011	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.90	30.91	30.96	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.92 (99.68%)	23.91 (99.62%)	23.97 (99.90%)	↑	↑
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	99.99%	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.7	1.5	1.4	↑	↑
<i>Worst Site</i>	7.9	3.5	3.4	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	3.1	2.7	2.5	↑	↑
<i>Worst Site</i>	18.1	7.3	7.3	↑	→
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.4	3.1	2.8	↑	↑
<i>Worst Site</i>	19.1	7.9	8.0	↑	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.63	2.34	2.67	↓	↓
<i>Worst Satellite</i>	2.11	3.30	3.87	↓	↓
95% Horizontal Error					
<i>Area Median</i>	2.23	2.64	3.22	↓	↓
<i>Worst Site</i>	4.51	9.64	11.04	↓	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.71%	99.43%	99.34%	↓	↓
95% Vertical Error					
<i>Area Median</i>	3.93	5.23	7.79	↓	↓
<i>Worst Site</i>	5.35	9.46	11.59	↓	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.96%	99.71%	97.47%	↓	↓

Key: ↑ improving ↓ worsening → no significant change

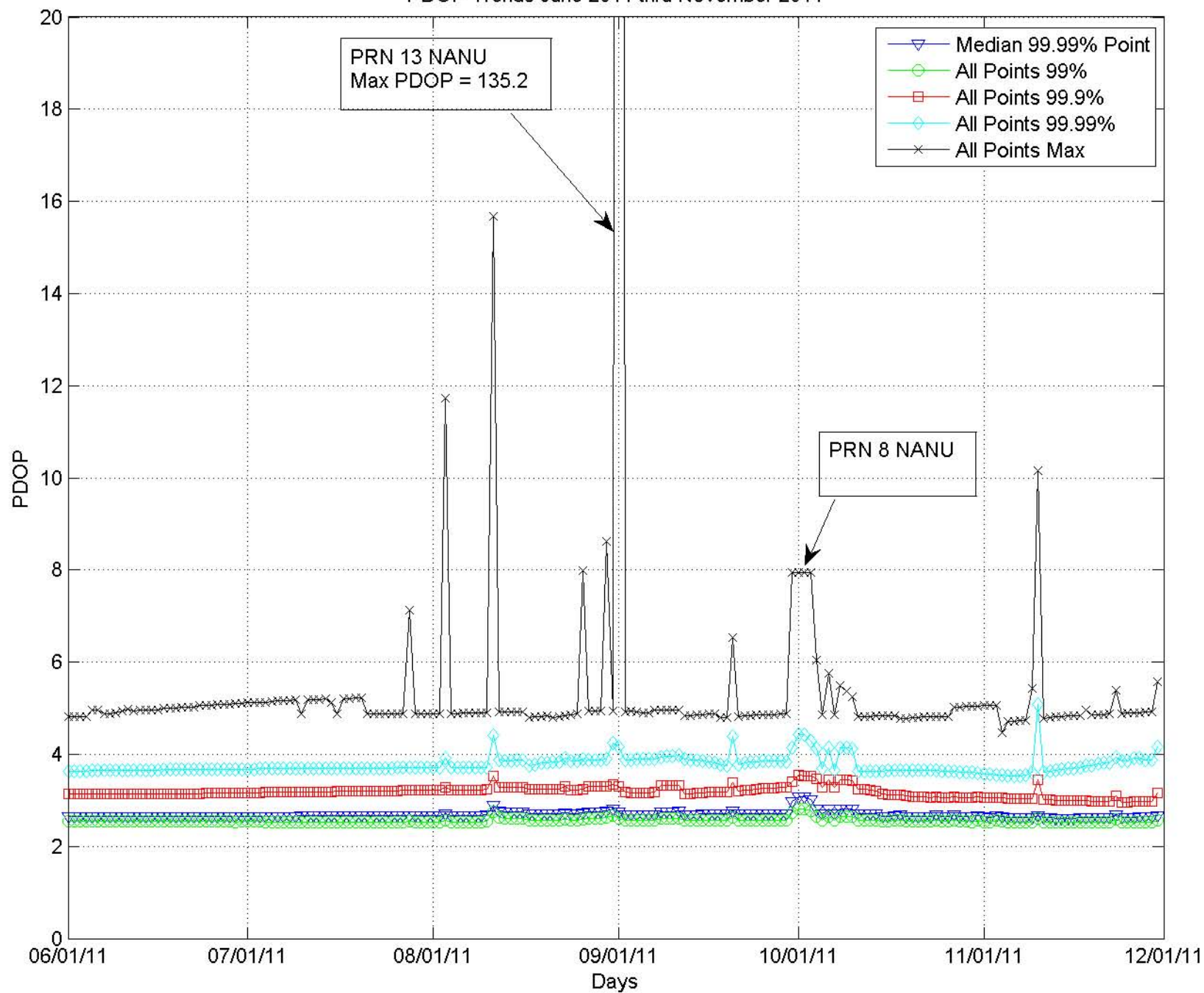
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

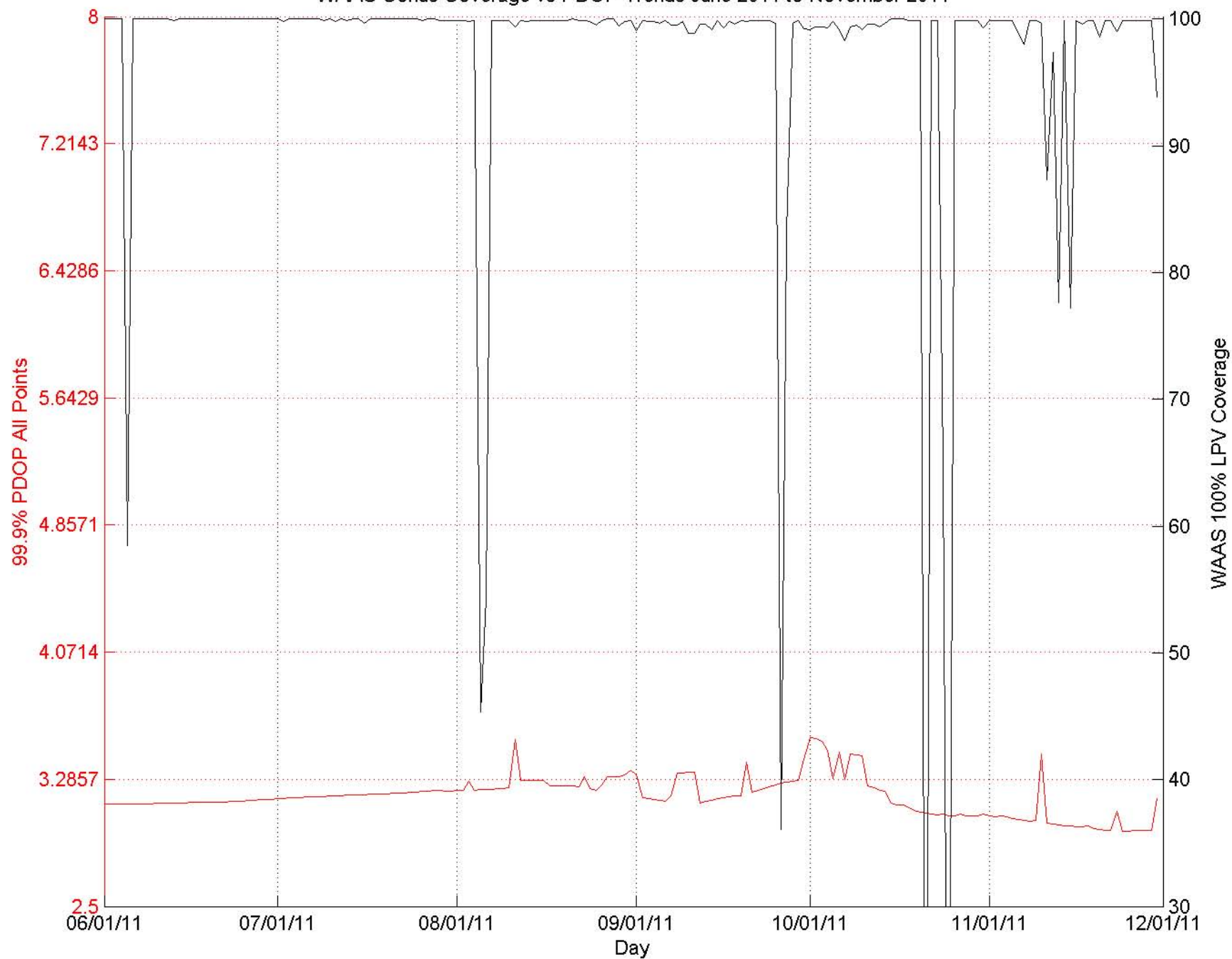
GPS World PDOP 99.99% Index November 2011



PDOP Trends June 2011 thru November 2011



WAAS Conus Coverage vs PDOP Trends June 2011 to November 2011



Six Satellite Availability Trends June 2011 thru November 2011

