

Civil Report Card On GPS Performance

October 2011

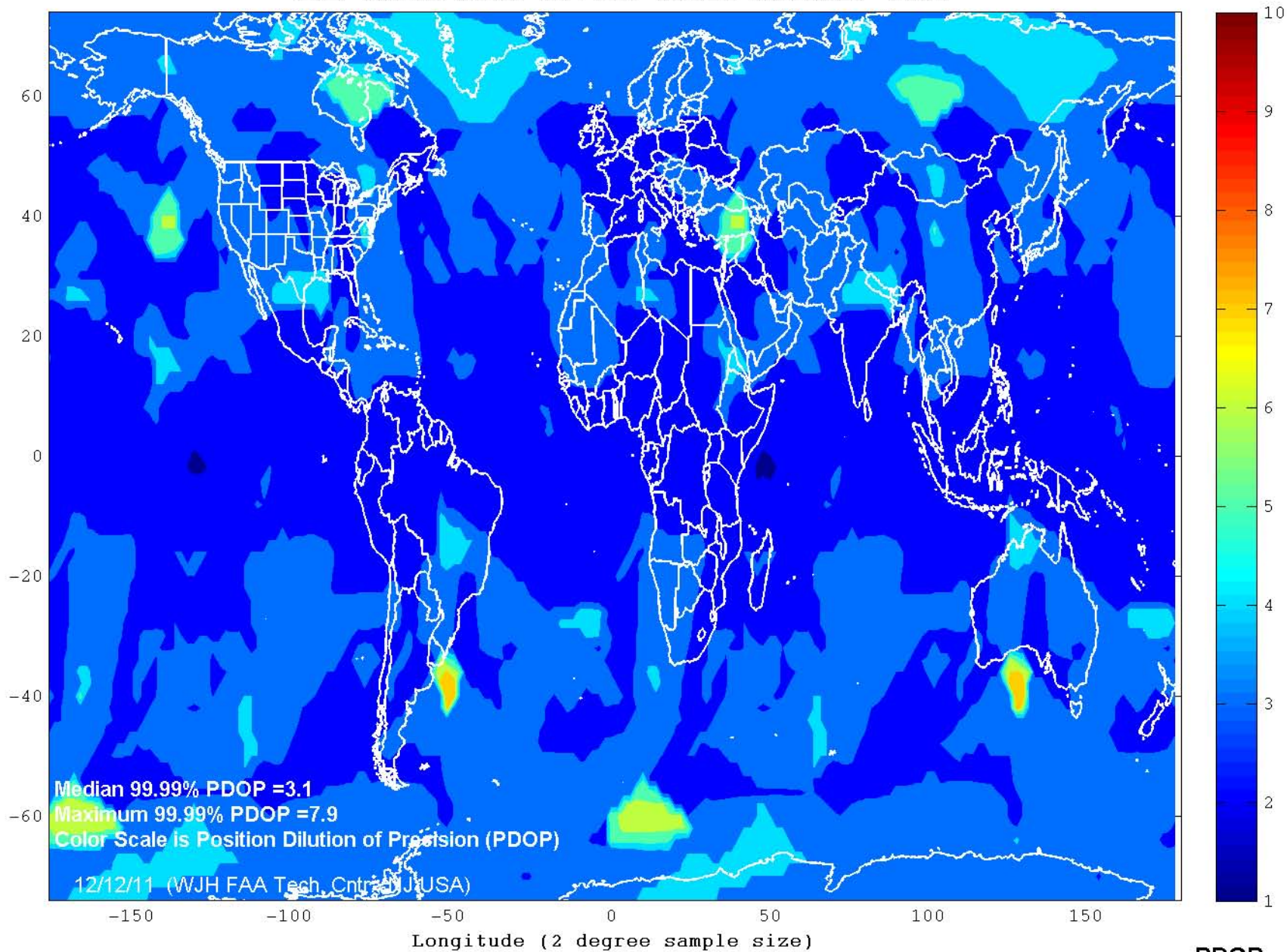
Operational Performance Parameter	CY 2010	Sept 2011	Oct 2011	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.90	30.76	30.91	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.92 (99.68%)	23.98 (99.91%)	23.91 (99.62%)	↓	↓
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	99.99%	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.7	1.4	1.5	↑	↓
<i>Worst Site</i>	7.9	10.7	3.5	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	3.1	2.6	2.7	↑	↓
<i>Worst Site</i>	18.1	42.0	7.3	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.4	2.9	3.1	↑	↓
<i>Worst Site</i>	19.1	43.3	7.9	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.63	2.03	2.34	↓	↓
<i>Worst Satellite</i>	2.11	2.42	3.30	↓	↓
95% Horizontal Error					
<i>Area Median</i>	2.23	2.72	2.64	↓	↑
<i>Worst Site</i>	4.51	6.61	9.64	↓	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.71%	99.47%	99.43%	↓	↓
95% Vertical Error					
<i>Area Median</i>	3.93	5.31	5.23	↓	↑
<i>Worst Site</i>	5.35	7.26	9.46	↓	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.96%	98.52%	99.71%	↓	↑

Key: ↑ improving ↓ worsening → no significant change

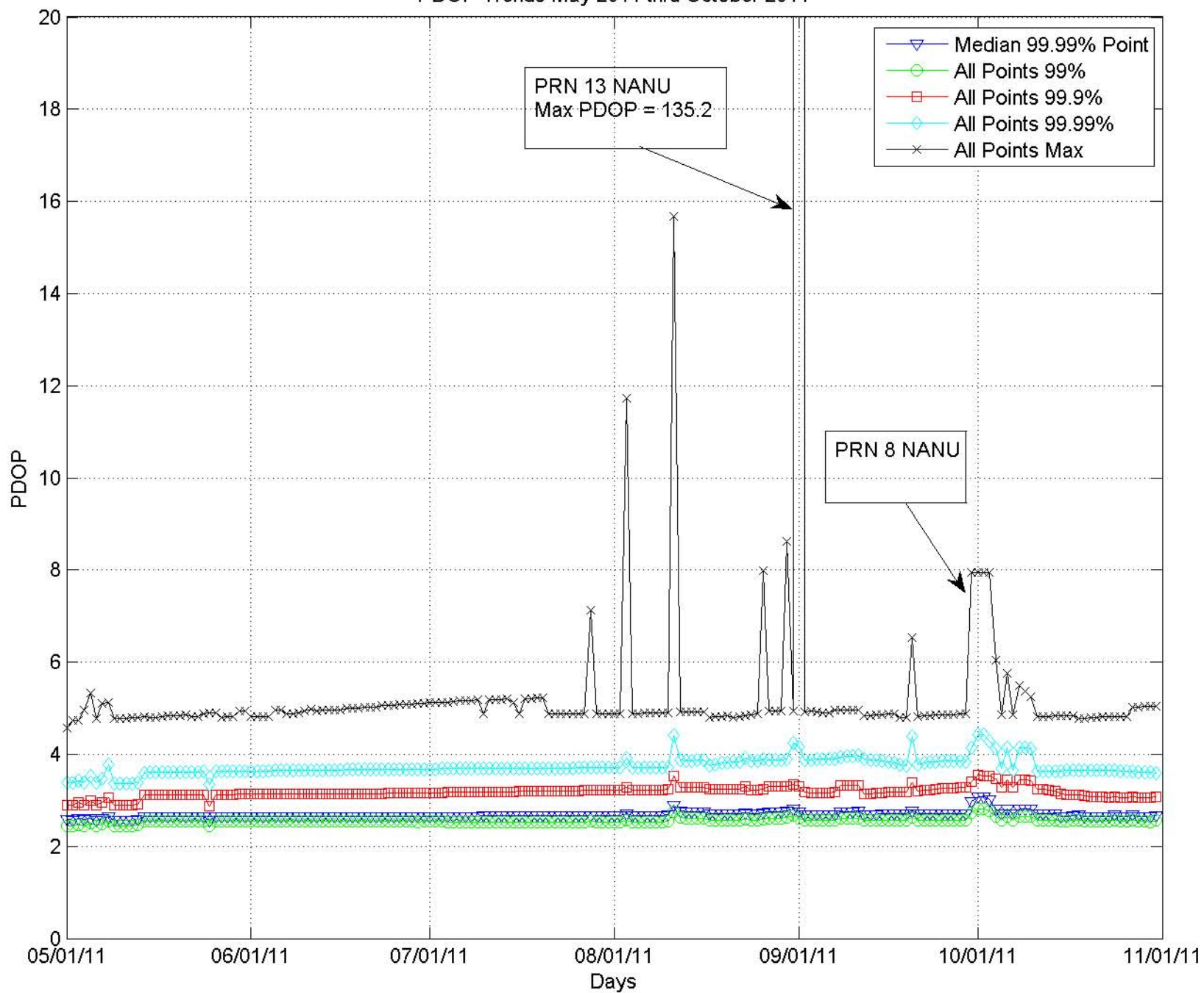
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

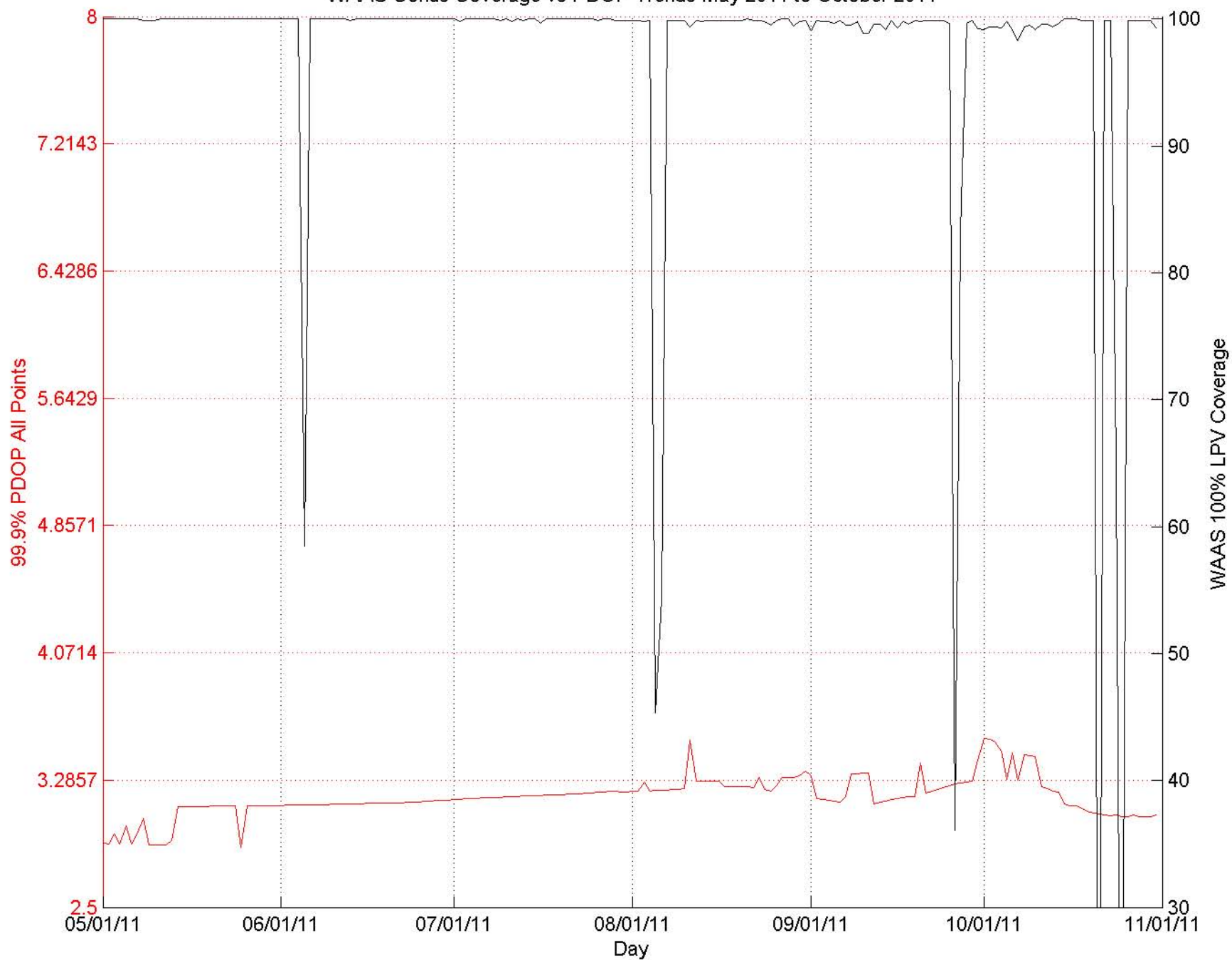
GPS World PDOP 99.99% Index October 2011



PDOP Trends May 2011 thru October 2011



WAAS Conus Coverage vs PDOP Trends May 2011 to October 2011



Six Satellite Availability Trends May 2011 thru October 2011

