

Civil Report Card On GPS Performance

September 2011

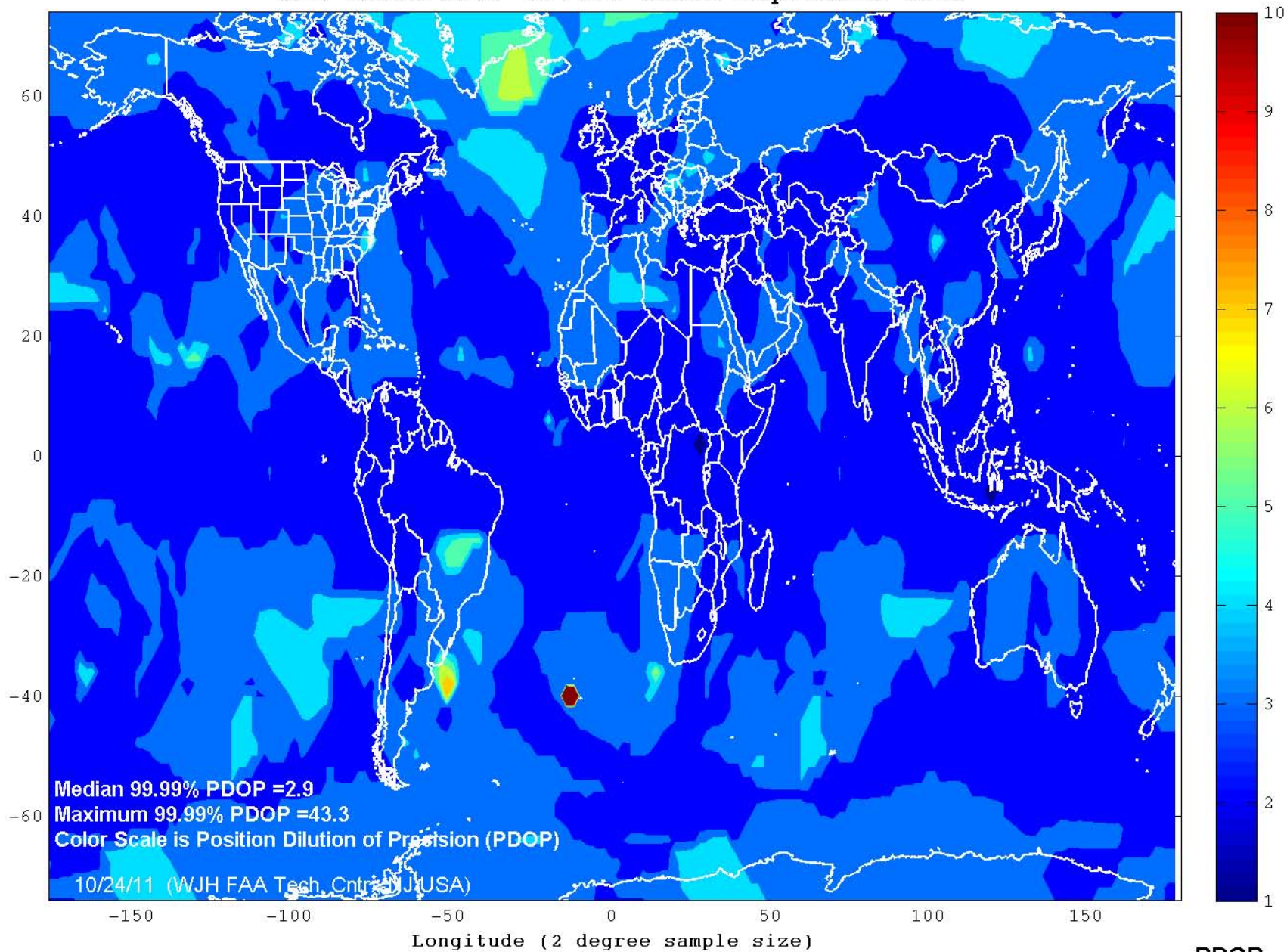
Operational Performance Parameter	CY 2010	August 2011	Sept 2011	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.90	30.34	30.76	↓	↑
<i>Average number of satellites usable in primary slots</i>	23.92 (99.68%)	23.66 (98.56%)	23.98 (99.91%)	↑	↑
<i>Average availability of 6 satellites in view</i>	99.99%	100%	99.99%	→	↓
99.99% Horizontal DOP					
<i>Area Median</i>	1.7	1.5	1.4	↑↓	↓
<i>Worst Site</i>	7.9	3.8	10.7	↓	↓
99.99% Vertical DOP					
<i>Area Median</i>	3.1	2.7	2.6	↑↓	↑↓
<i>Worst Site</i>	18.1	9.0	42.0	↑↓	↑↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.4	3.0	2.9	↑↓	↑↓
<i>Worst Site</i>	19.1	9.7	43.3	↓	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.63	1.59	2.03	↓	↓
<i>Worst Satellite</i>	2.11	2.11	2.42	↓	↓
95% Horizontal Error					
<i>Area Median</i>	2.23	2.36	2.72	↓	↓
<i>Worst Site</i>	4.51	4.25	6.61	↓	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.71%	99.60%	99.47%	↓	↓
95% Vertical Error					
<i>Area Median</i>	3.93	3.62	5.31	↓	↓
<i>Worst Site</i>	5.35	5.54	7.26	↓	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.96%	99.93%	98.52%	↓	↓

Key: ↑ improving ↓ worsening → no significant change

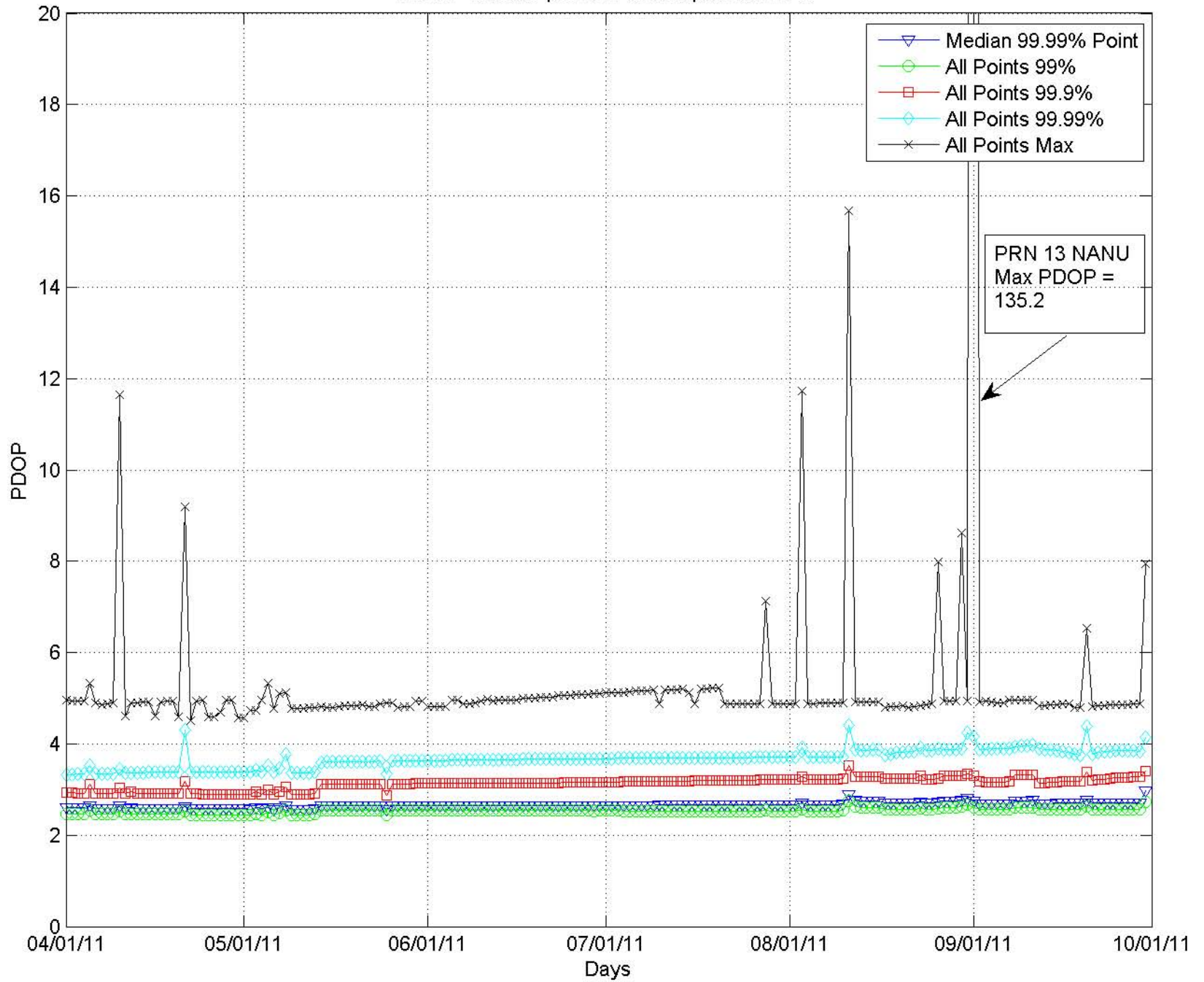
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

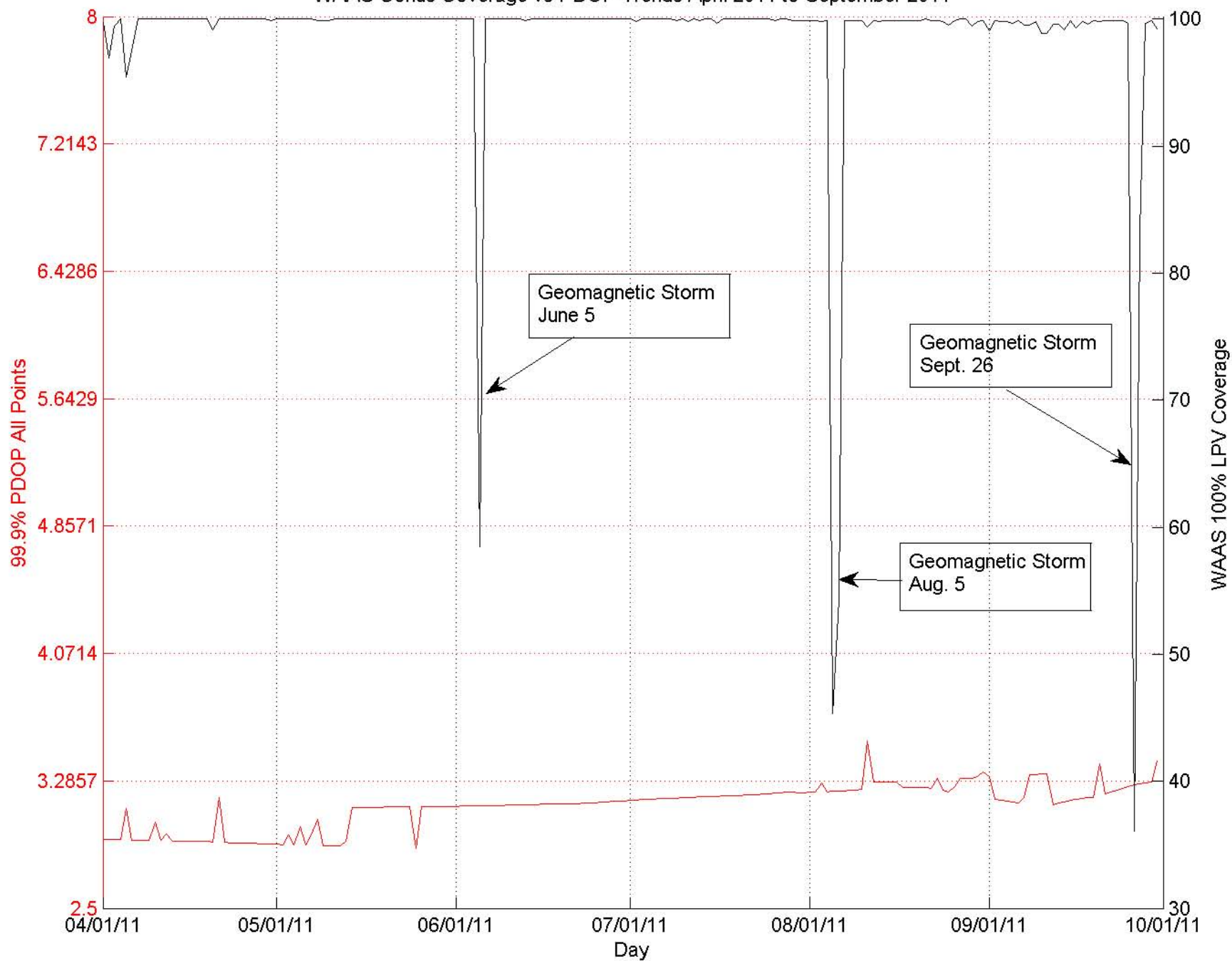
GPS World PDOP 99.99% Index September 2011



PDOP Trends April 2011 thru September 2011



WAAS Conus Coverage vs PDOP Trends April 2011 to September 2011



Six Satellite Availability Trends April 2011 thru September 2011

