

Civil Report Card On GPS Performance

December 2007

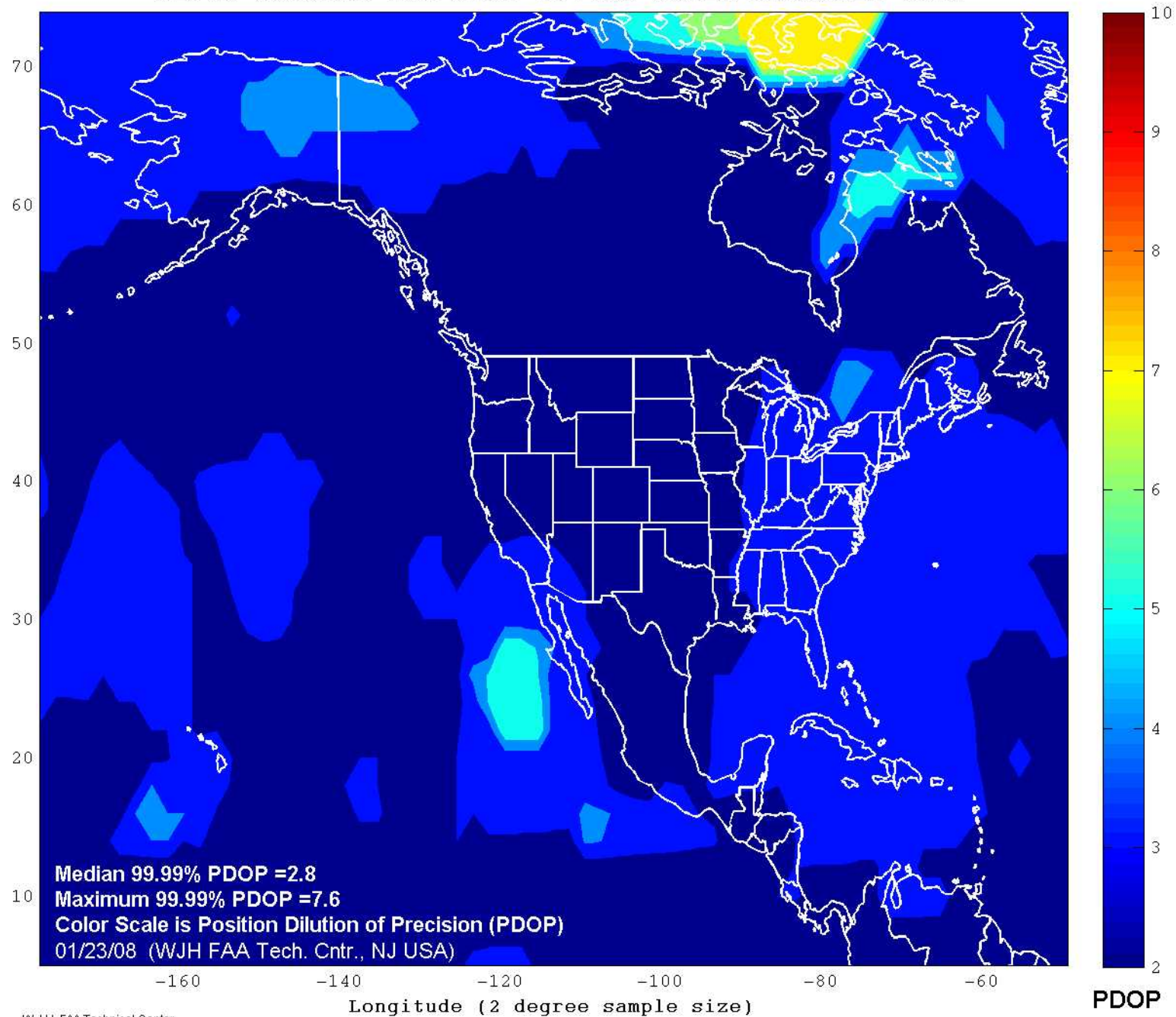
Operational Performance Parameter	CY 2006	Nov 2007	Dec 2007	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	28.53	29.97	30	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.47 (97.80%)	23.99 (99.97%)	24 (100%)	↑	↑
<i>Average availability of 6 satellites in view</i>	99.85%	99.99%	99.99%	↑	→
99.99% Horizontal DOP					
<i>Area Median</i>	2.0	1.5	1.5	↑	→
<i>Worst Site</i>	4.1	2.9	3.0	↑	→
99.99% Vertical DOP					
<i>Area Median</i>	3.7	2.5	2.5	↑	→
<i>Worst Site</i>	10.1	6.9	7.1	↑	→
99.99% Position DOP (PDOP)					
<i>Area Median</i>	4.1	2.8	2.8	↑	→
<i>Worst Site</i>	10.6	7.3	7.6	↑	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.81	1.92	1.91	→	→
<i>Worst Satellite</i>	2.21	2.89	2.71	↓	→
95% Horizontal Error					
<i>Area Median</i>	2.49	2.42	2.49	→	→
<i>Worst Site</i>	4.06	3.64	2.94	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.42%	99.88	99.18	→	↓
95% Vertical Error					
<i>Area Median</i>	4.52	4.96	4.95	↓	→
<i>Worst Site</i>	4.96	5.75	5.75	↓	→
<i>Availability (% < 9m (historical 3-sigma))</i>	99.89%	99.93	99.89	→	↓

Key: ↑ improving ↓ worsening → no significant change

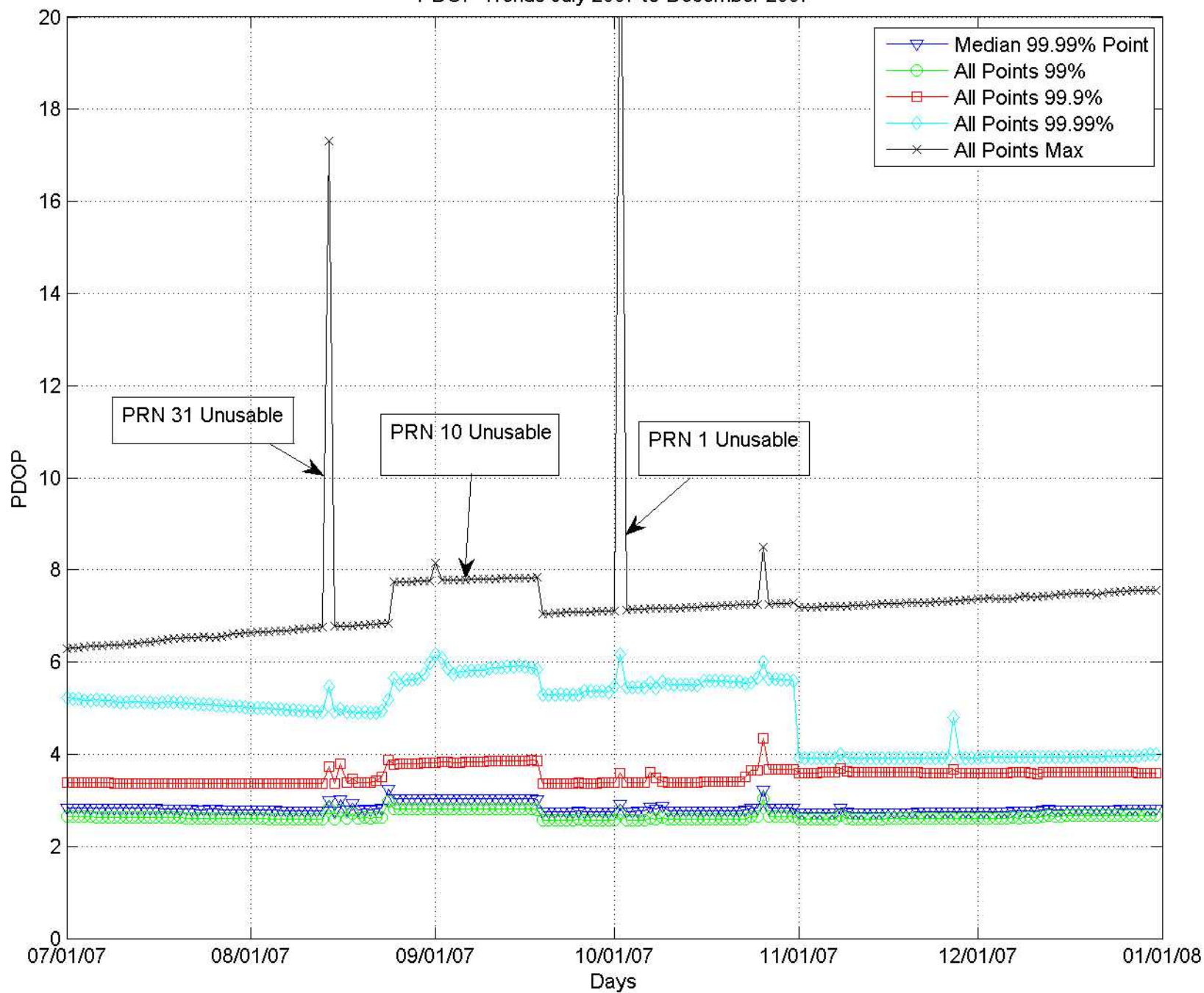
Long Term is current month vs. prior 24 months, Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

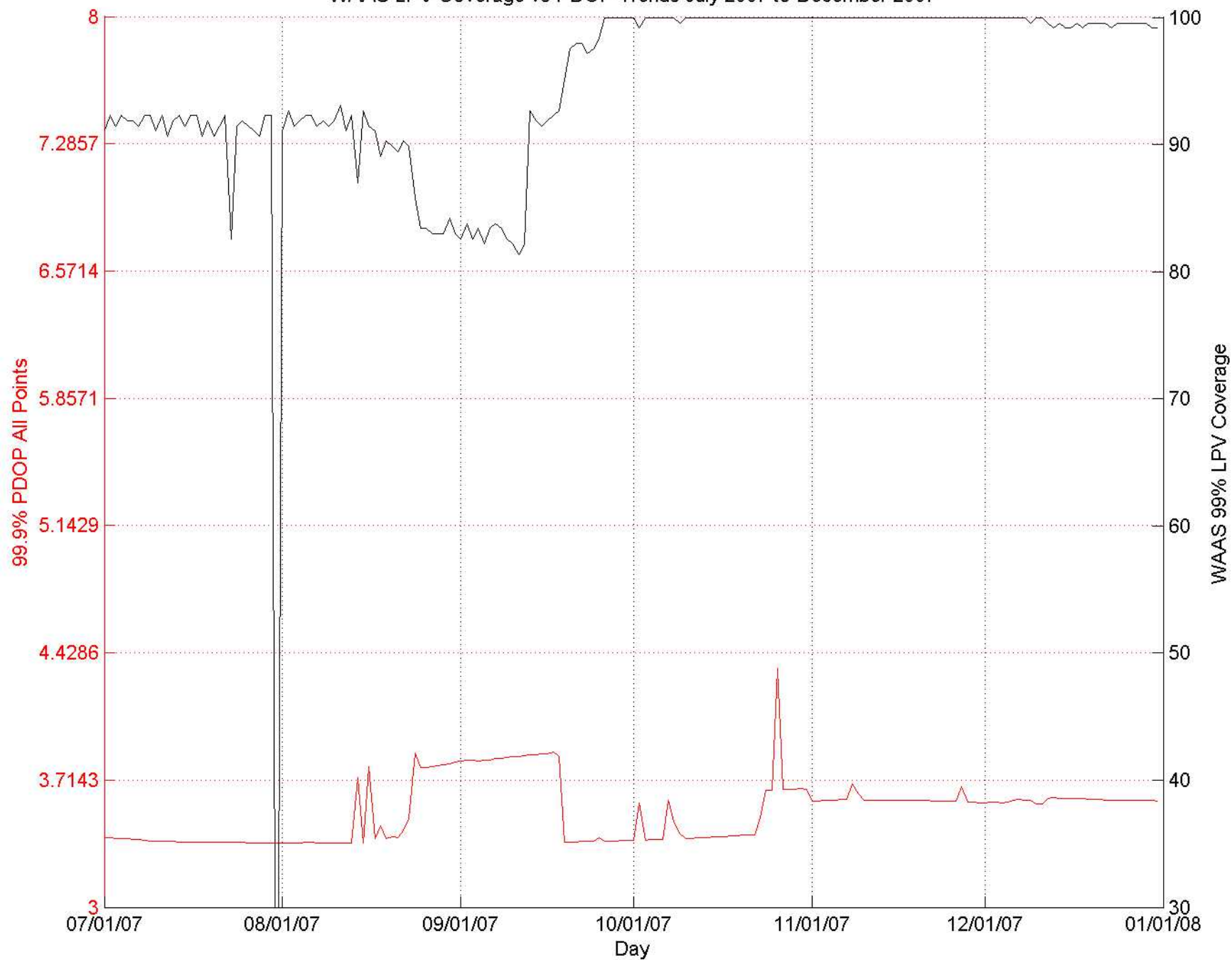
North America GPS PDOP 99.99% Index December 2007



PDOP Trends July 2007 to December 2007



WAAS LPV Coverage vs PDOP Trends July 2007 to December 2007



Six Satellite Availability Trends July 2007 to December 2007

