

Civil Report Card On GPS Performance

September 2008

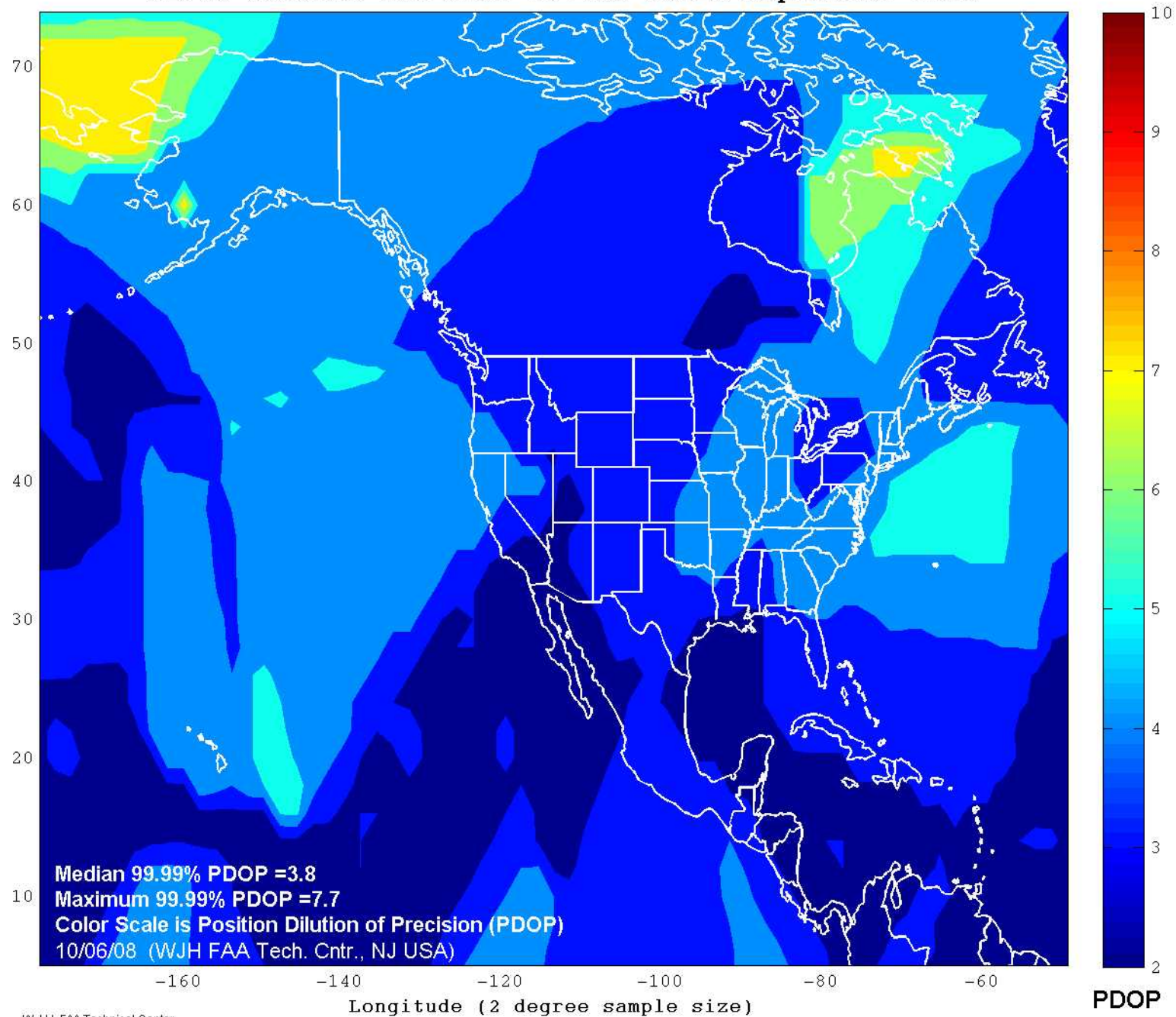
Operational Performance Parameter	CY 2007	August 2008	Sept 2008	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	29.80	30.98	30.44	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.91 (99.62%)	23.98 (99.90%)	23.95 (99.78%)	→	→
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	99.99%	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.8	1.6	1.6	↑	→
<i>Worst Site</i>	3.4	3.4	3.4	→	→
99.99% Vertical DOP					
<i>Area Median</i>	3.3	3.5	3.0	↑	↑
<i>Worst Site</i>	7.4	7.5	6.0	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.6	3.8	3.3	↑	↑
<i>Worst Site</i>	7.8	7.7	6.7	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.77	1.49	1.60	→	→
<i>Worst Satellite</i>	2.29	1.92	2.03	↑	→
95% Horizontal Error					
<i>Area Median</i>	2.32	2.03	2.00	↑	→
<i>Worst Site</i>	3.63	2.64	3.04	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.81%	99.99%	99.95%	↑	↓
95% Vertical Error					
<i>Area Median</i>	4.45	3.65	4.01	↑	↓
<i>Worst Site</i>	4.95	4.36	4.72	→	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.92%	99.98%	99.98%	↑	→

Key: ↑ improving ↓ worsening → no significant change

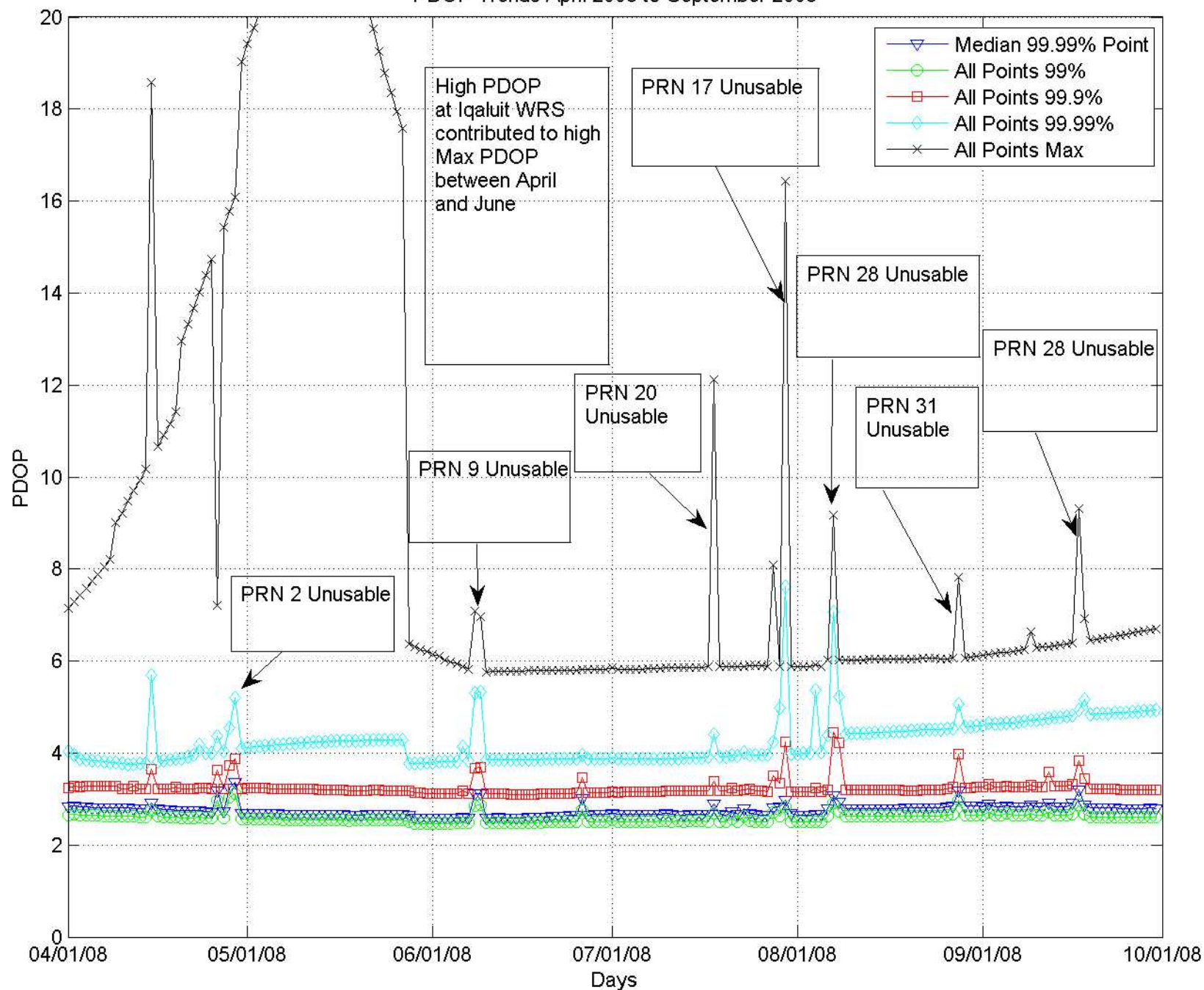
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

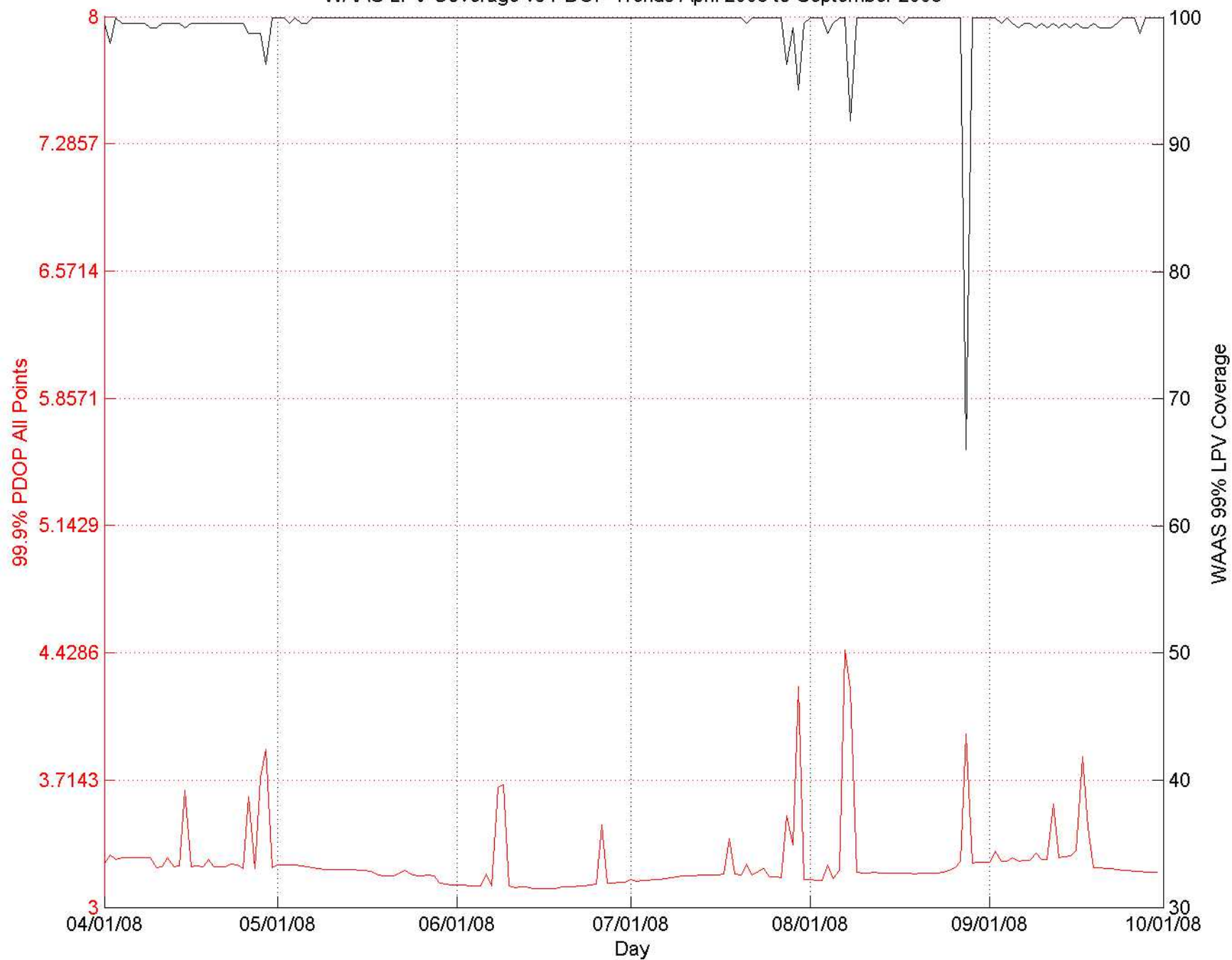
North America GPS PDOP 99.99% Index September 2008



PDOP Trends April 2008 to September 2008



WAAS LPV Coverage vs PDOP Trends April 2008 to September 2008



Six Satellite Availability Trends April 2008 to September 2008

