

Civil Report Card On GPS Performance

February 2010

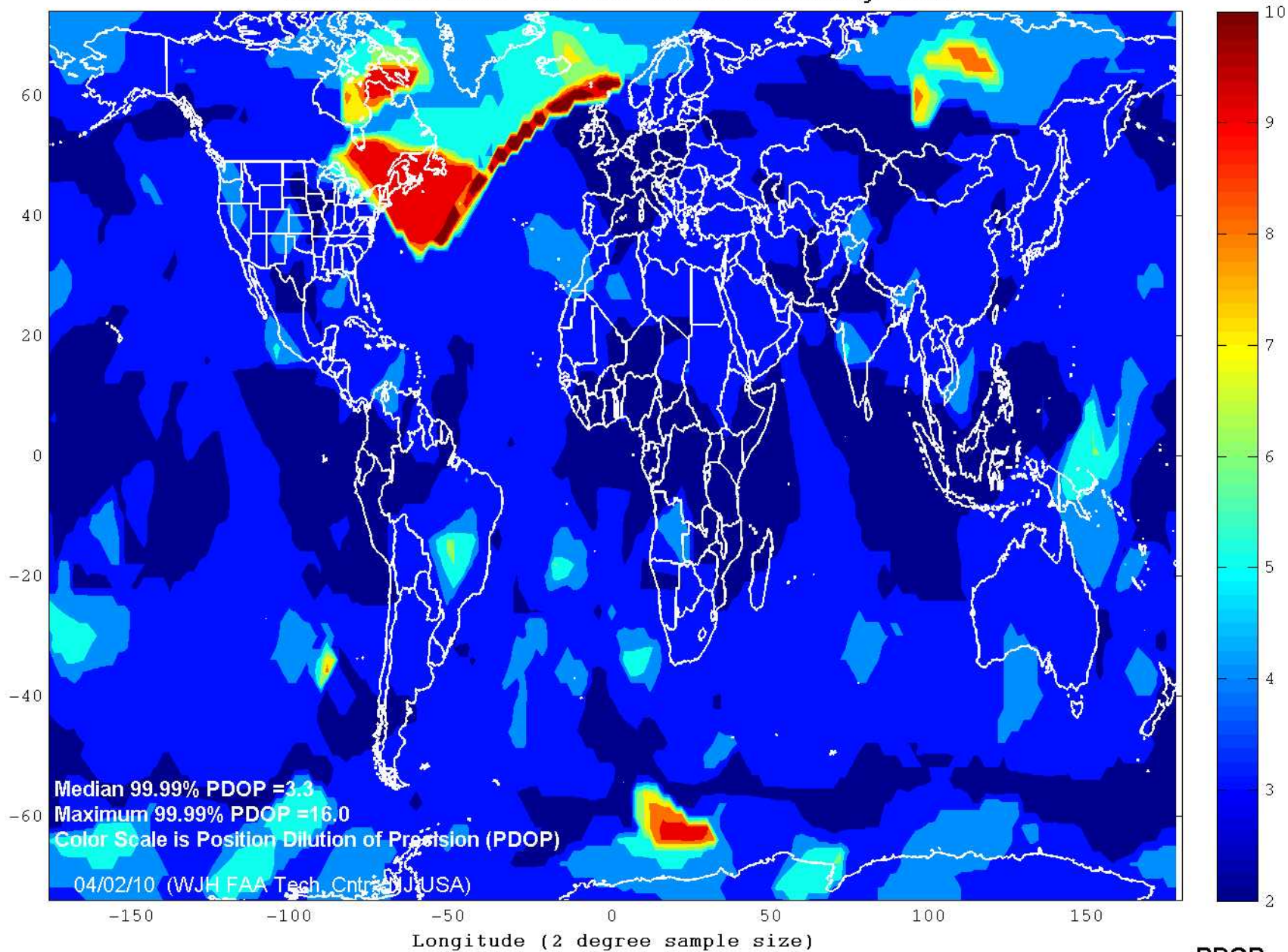
Operational Performance Parameter	CY 2009	January 2010	February 2010	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.85	30.96	30.74	↓	↓
<i>Average number of satellites usable in primary slots</i>	23.90 (99.59%)	23.97 (99.89%)	23.76 (98.98%)	↓	↓
<i>Average 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	1.7	→	↓
<i>Worst Site</i>	4.8	12.0	10.6	↓	↑
99.99% Vertical DOP					
<i>Area Median</i>	3.1	2.8	3.0	→	↓
<i>Worst Site</i>	12.0	38.2	12.1	→	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.5	3.1	3.3	↑↓	↓
<i>Worst Site</i>	12.8	39.6	16.0	↓	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.67	1.74	1.78	↓	↓
<i>Worst Satellite</i>	2.26	2.50	2.45	↓	↑
95% Horizontal Error					
<i>Area Median</i>	2.10	2.18	2.20	↓	↓
<i>Worst Site</i>	3.95	3.36	4.42	↓	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.80%	99.83%	99.72%	↓	↓
95% Vertical Error					
<i>Area Median</i>	4.11	4.22	4.44	↓	↓
<i>Worst Site</i>	5.97	4.94	5.19	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.98%	99.94%	99.89%	↓	↓

Key: ↑ improving ↓ worsening → no significant change

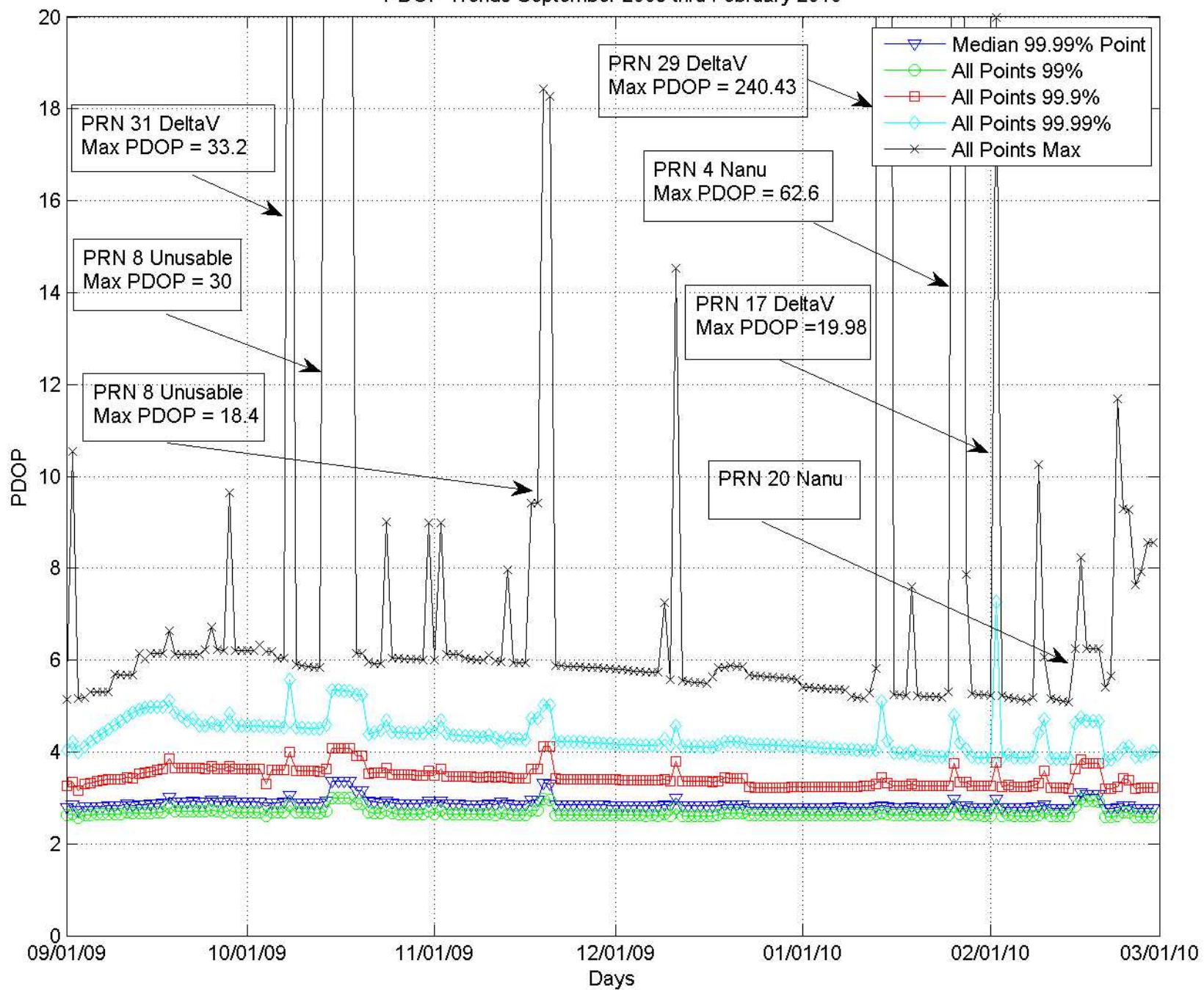
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

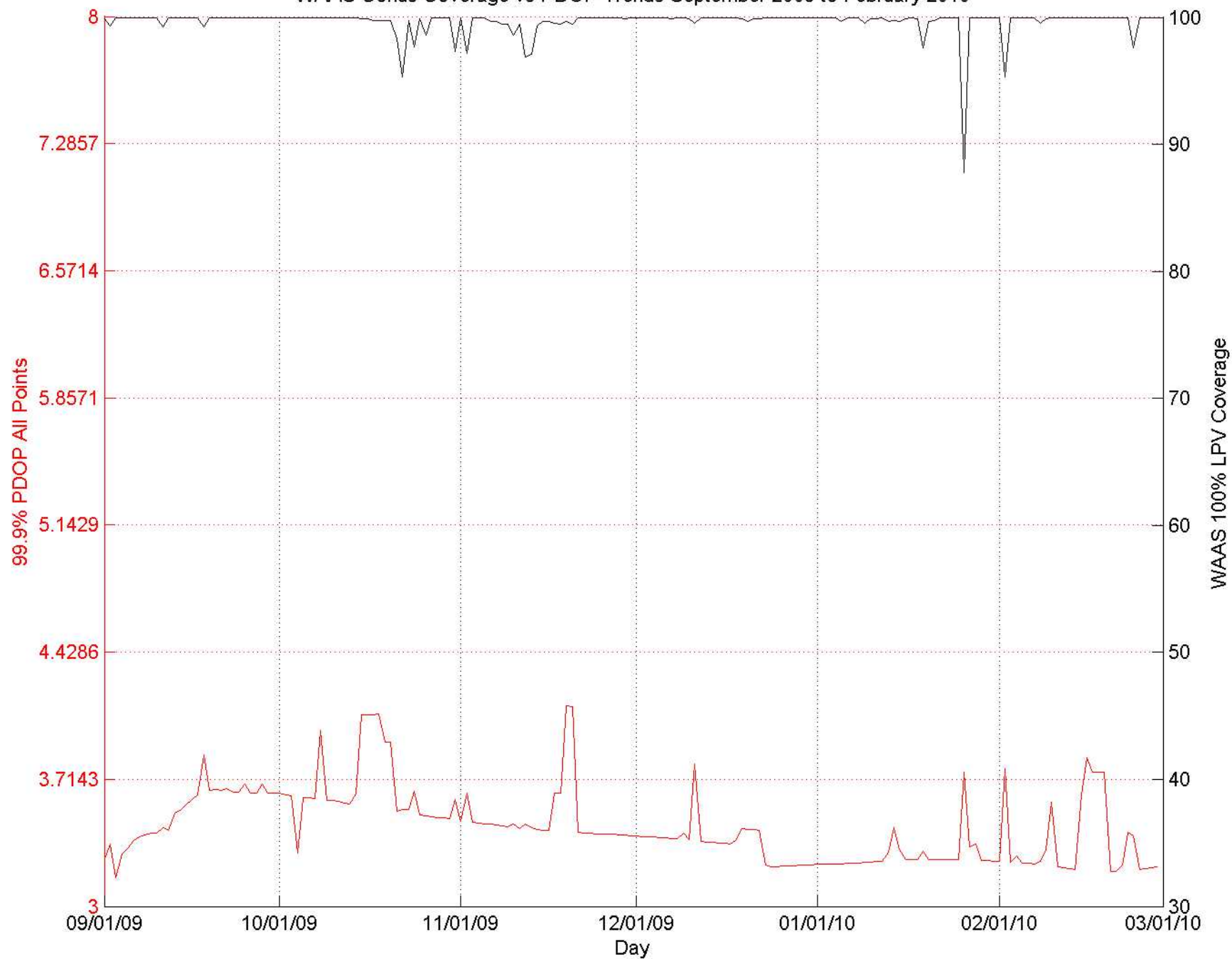
GPS World PDOP 99.99% Index February 2010



PDOP Trends September 2009 thru February 2010



WAAS Conus Coverage vs PDOP Trends September 2009 to February 2010



Six Satellite Availability Trends Sep 2009 thru Feb 2010

