

Civil Report Card On GPS Performance

January 2007

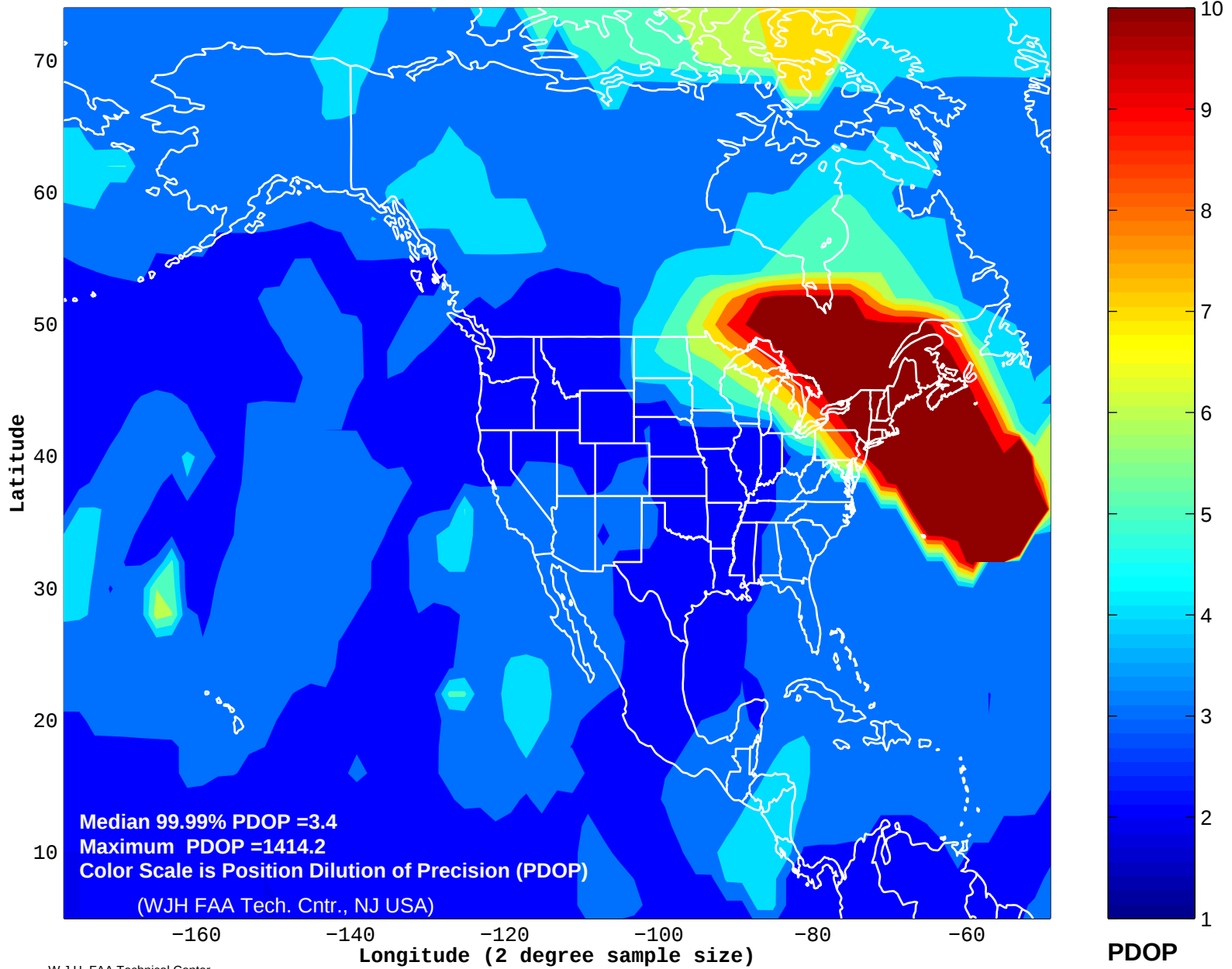
Operational Performance Parameter	CY 2006	Dec 2006	Jan 2007	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	28.53	29.82	29.59	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.47 (97.80%)	23.82 (99.26%)	23.70 (98.75%)	↑	↓
<i>Average availability of 6 satellites in view</i>	99.85%	99.99%	99.97%	↑	→
99.99% Horizontal DOP					
<i>Area Median</i>	2.0	1.6	1.7	↑	→
<i>Worst Site</i>	4.1	3.7	29.9	↓	↓
99.99% Vertical DOP					
<i>Area Median</i>	3.7	3.0	3.5	↑	↓
<i>Worst Site</i>	10.1	7.2	53.0	↓	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	4.1	3.4	3.7	↑	↓
<i>Worst Site</i>	10.6	7.9	55.5	↓	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.81	1.94	1.88	→	→
<i>Worst Satellite</i>	2.21	2.68	2.60	↓	→
95% Horizontal Error					
<i>Area Median</i>	2.49	2.46	2.52	→	→
<i>Worst Site</i>	4.06	4.28	3.95	→	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.42%	99.74%	99.81%	↑	→
95% Vertical Error					
<i>Area Median</i>	4.52	5.24	4.87	↓	↑
<i>Worst Site</i>	4.96	7.08	6.32	↓	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.89%	99.80%	99.90%	→	→

Key: ↑ improving ↓ worsening → no significant change

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

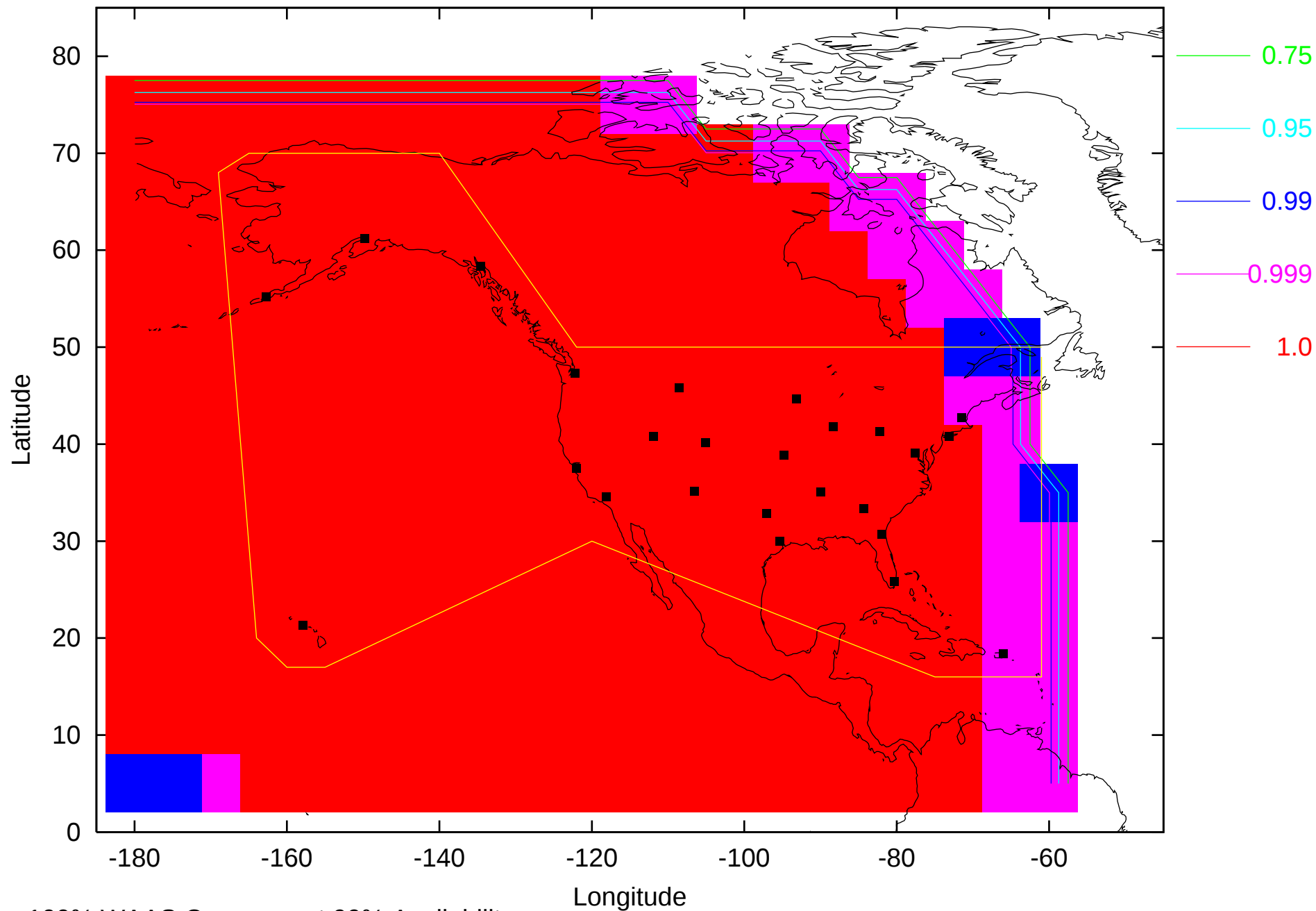
Compiled from WAAS network as requested by the Defense Science Board

01/19/07 North America GPS Maximum PDOP



WAAS Coverage NPA

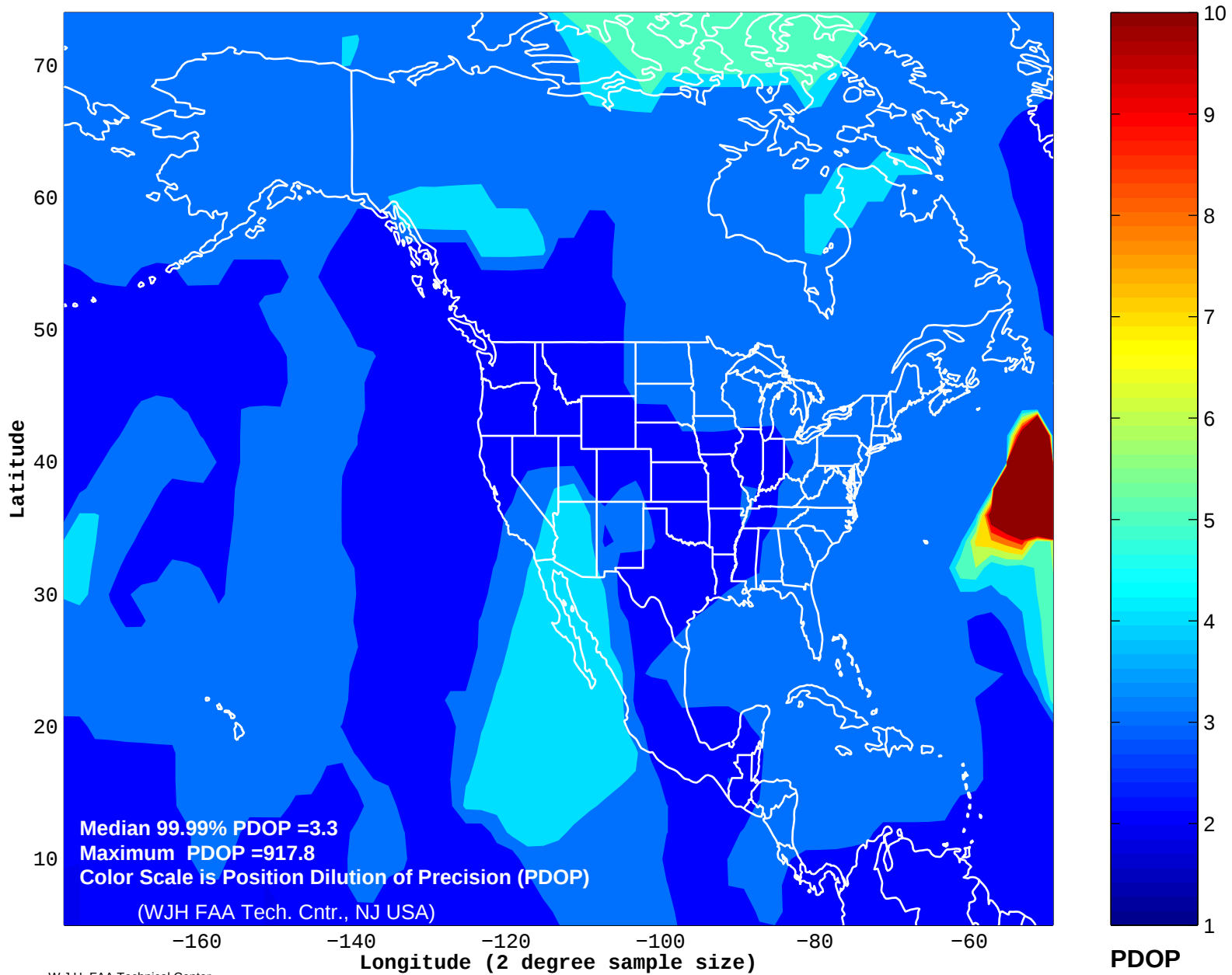
Week 1410 Day 5



100% WAAS Coverage at 99% Availability
100% WAAS Coverage at 99.9% Availability
94.85% WAAS Coverage at 100% Availability

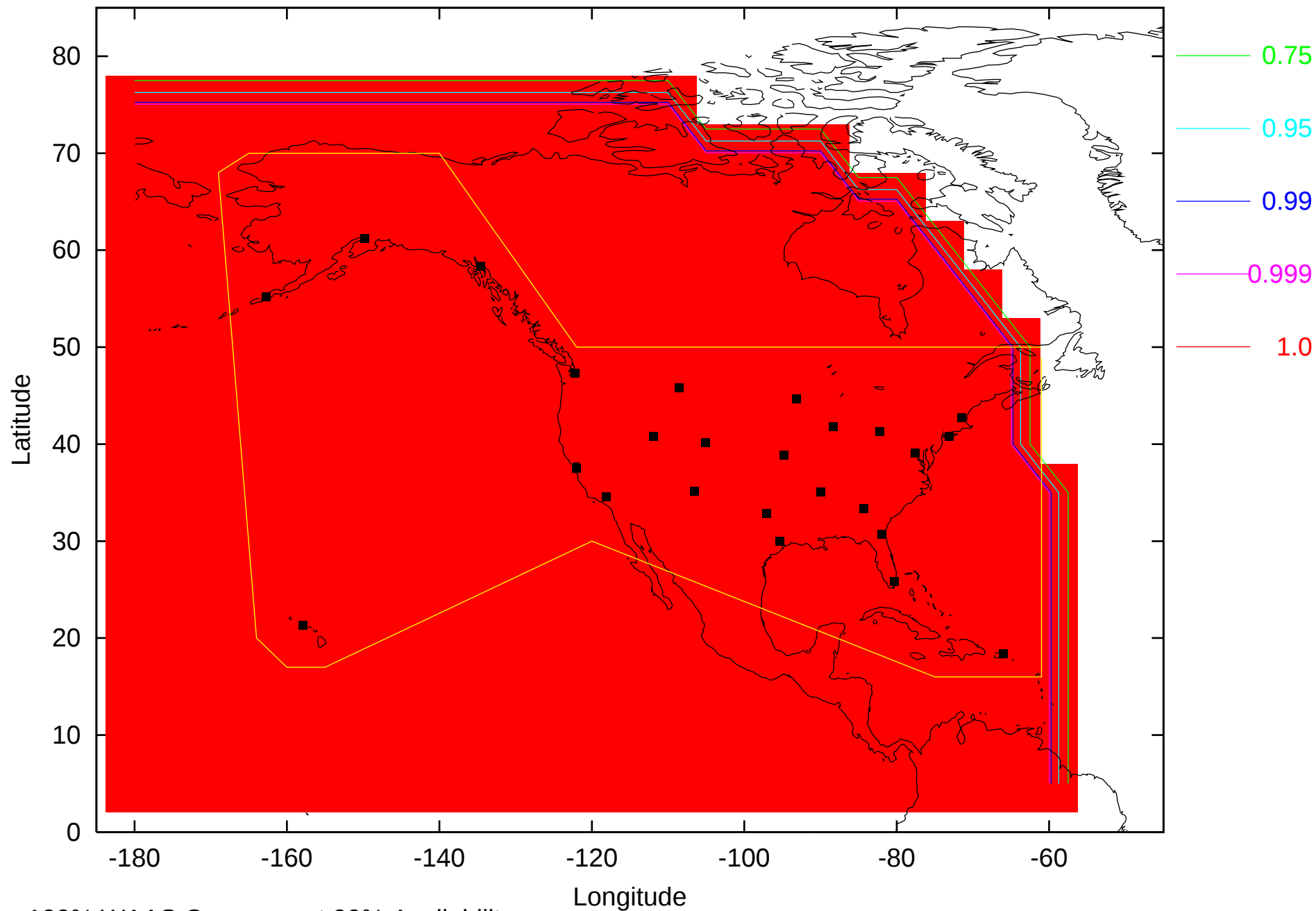
HAL = 556 m

01/25/07 North America GPS Maximum PDOP

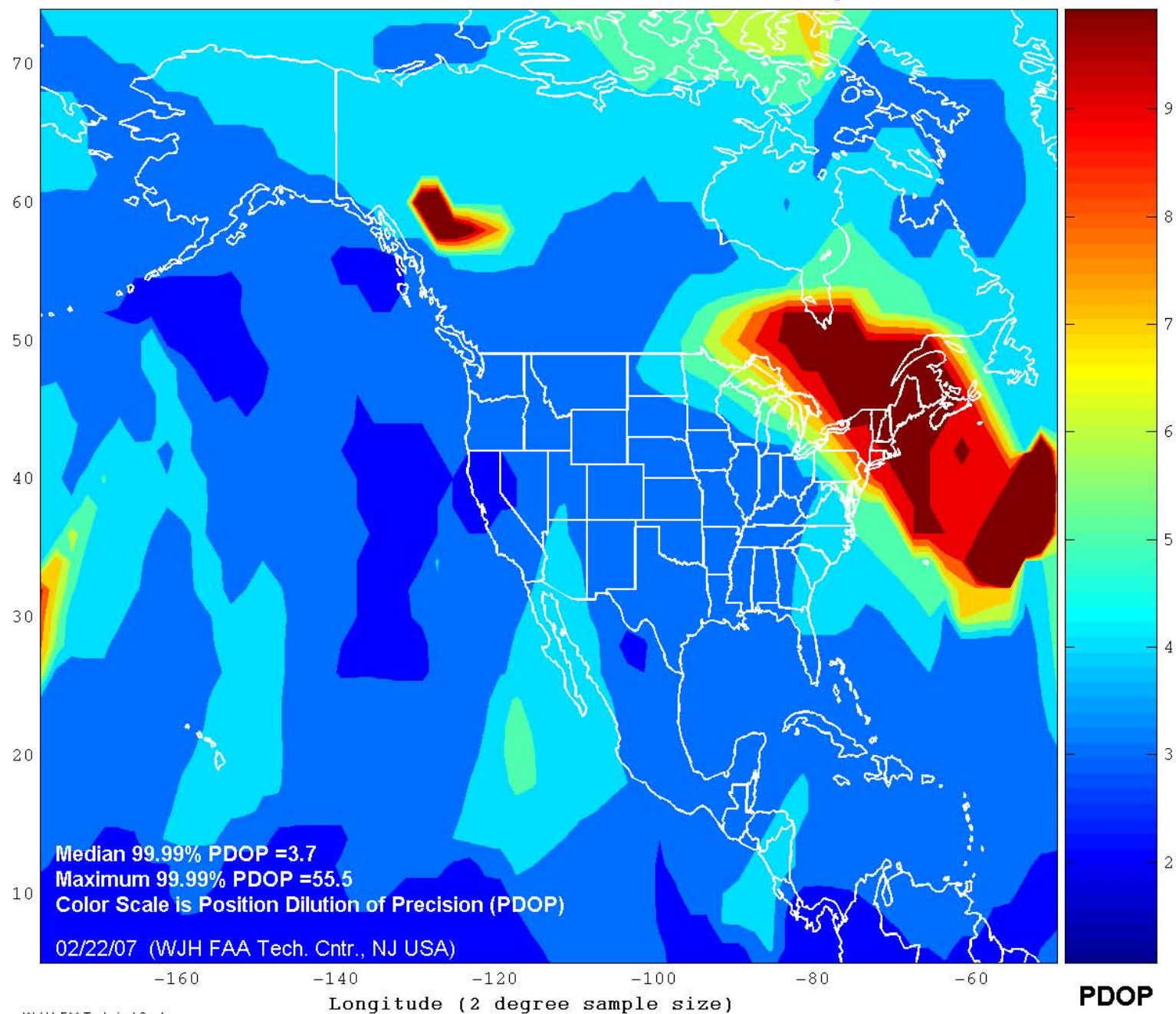


WAAS Coverage NPA

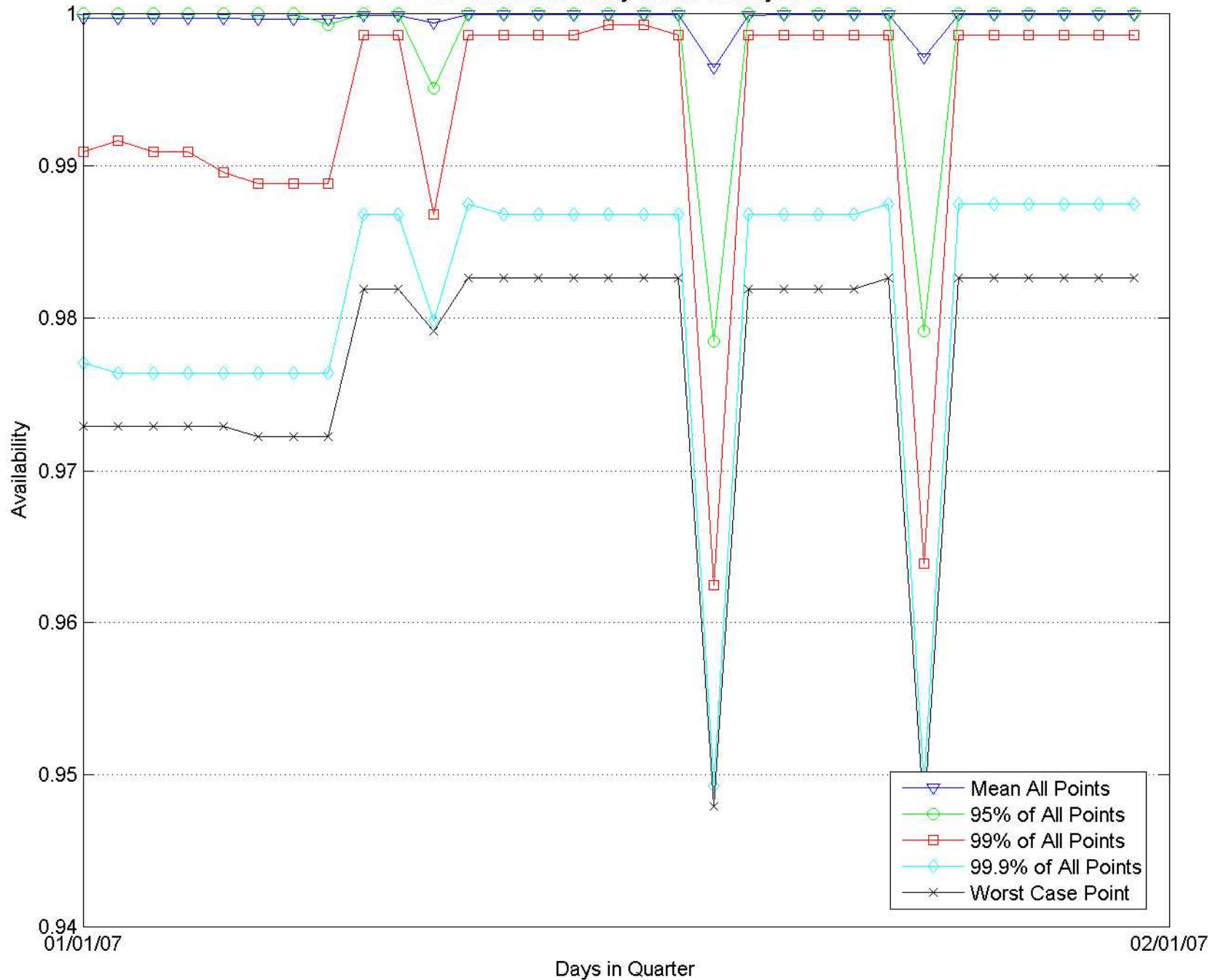
Week 1411 Day 4



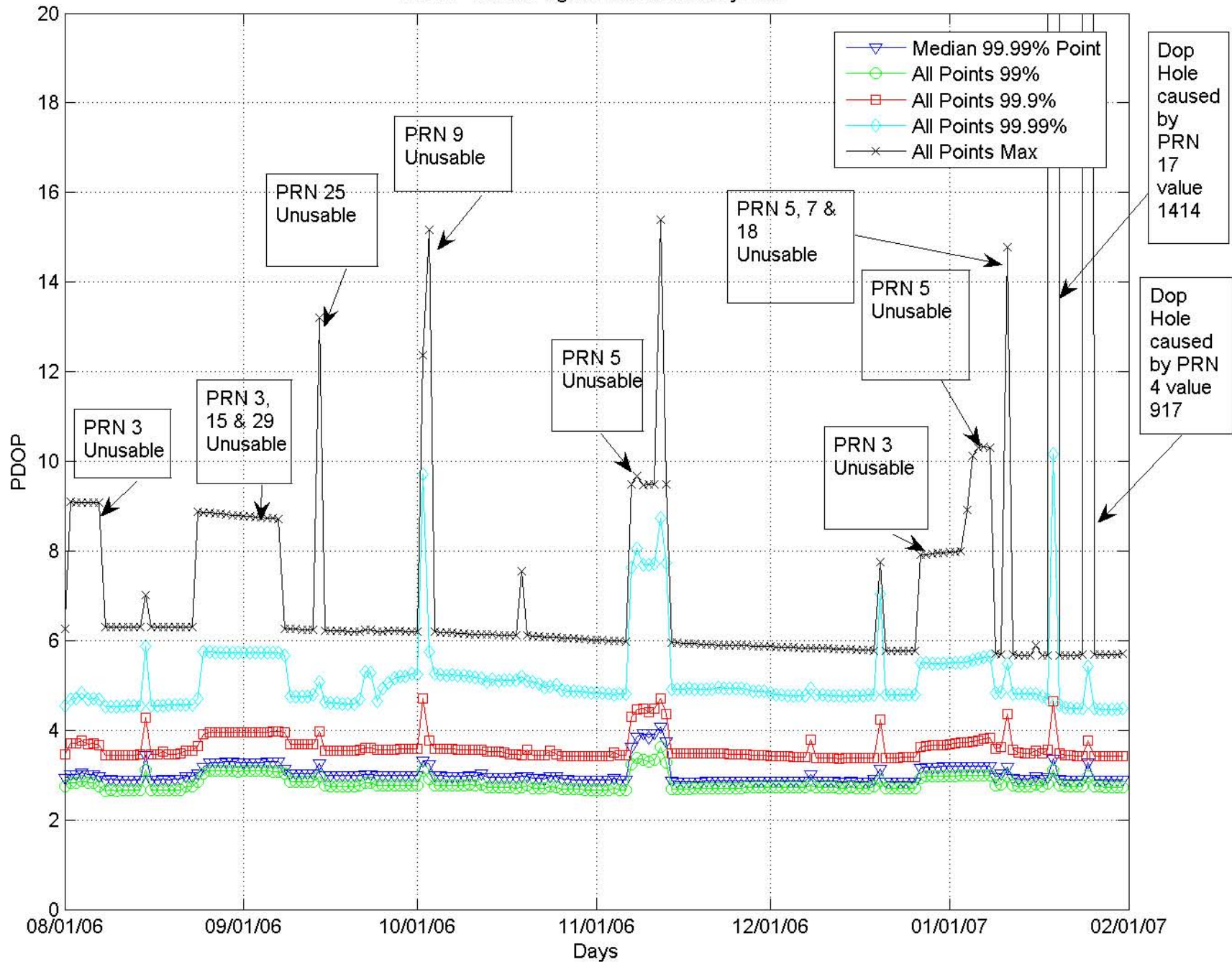
North America GPS PDOP 99.99% Index January 2007



Six Satellite Availability Trends January 2007



PDOP Trends August 2006 to January 2007



WAAS LPV Coverage vs PDOP Trends August 2006 to January 2007

