

Civil Report Card On GPS Performance

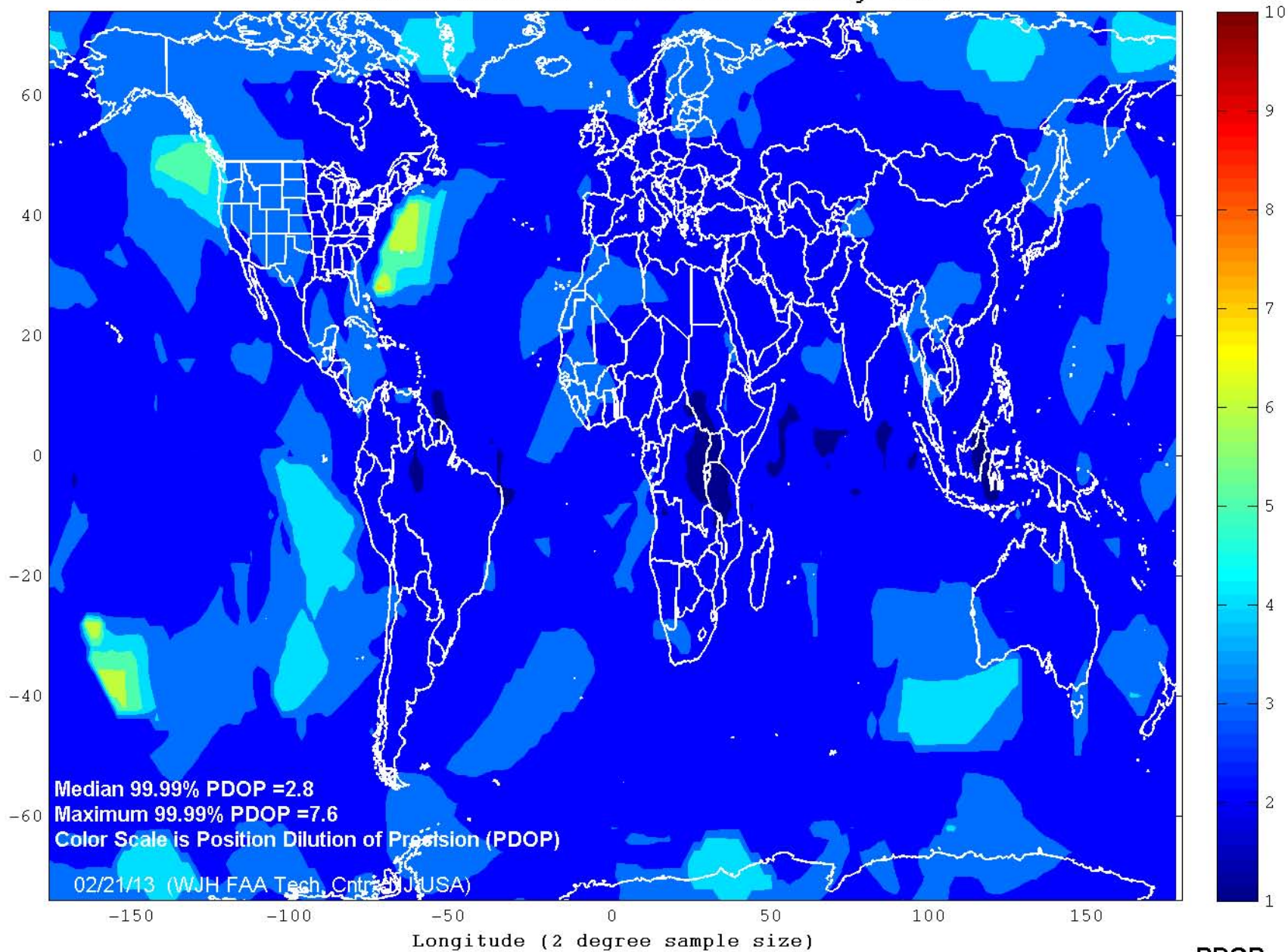
January 2013

Operational Performance Parameter	CY 2012	Dec 2012	Jan 2013	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.92	30.97	30.97	↑	→
<i>Average number of satellites usable in primary slots</i>	23.99 (99.95%)	23.99 (99.96%)	23.97 (99.89%)	↓	↓
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	99.99%	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.3	1.3	1.4	↓	↓
<i>Worst Site</i>	4.0	3.4	3.6	↑	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.4	2.3	2.5	↓	↓
<i>Worst Site</i>	10.2	5.0	6.7	↑	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.7	2.6	2.8	↓	↓
<i>Worst Site</i>	10.6	5.9	7.6	↑	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	83.70%	67.16%	38.42%	↓	↓
<i>World</i>	85.37%	64.94%	48.12%	↓	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.00	2.04	2.02	↓	↑
<i>Worst Satellite</i>	2.38	3.41	2.91	↓	↑
95% Horizontal Error					
<i>Area Median</i>	2.88	2.45	2.48	↑	↓
<i>Worst Site</i>	8.26	6.48	6.05	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.89%	99.98%	99.91%	↑	↓
95% Vertical Error					
<i>Area Median</i>	4.93	5.57	5.98	↓	↓
<i>Worst Site</i>	9.21	7.13	7.38	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.89%	99.95%	99.61%	↓	↓

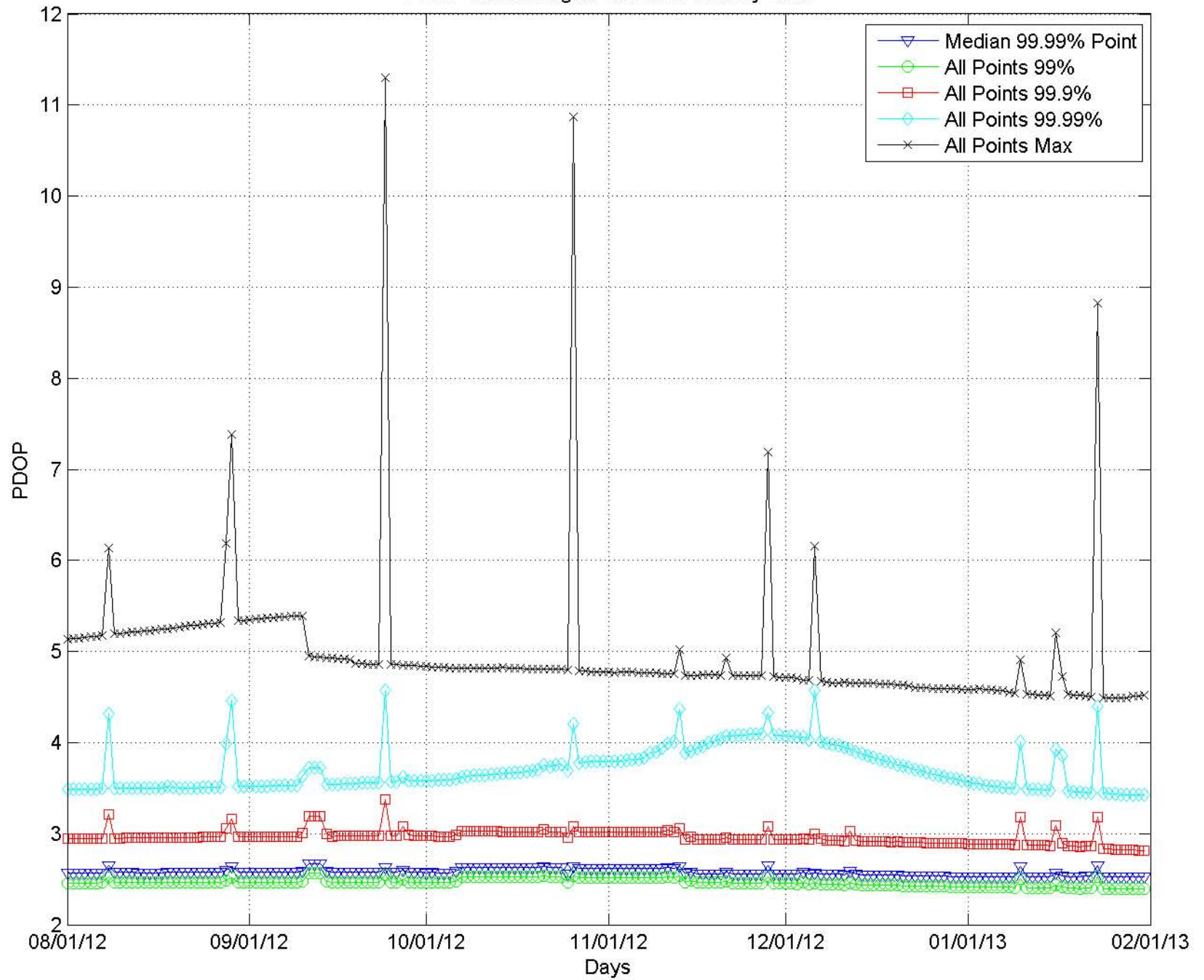
Key: ↑ improving ↓ worsening → no significant change

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

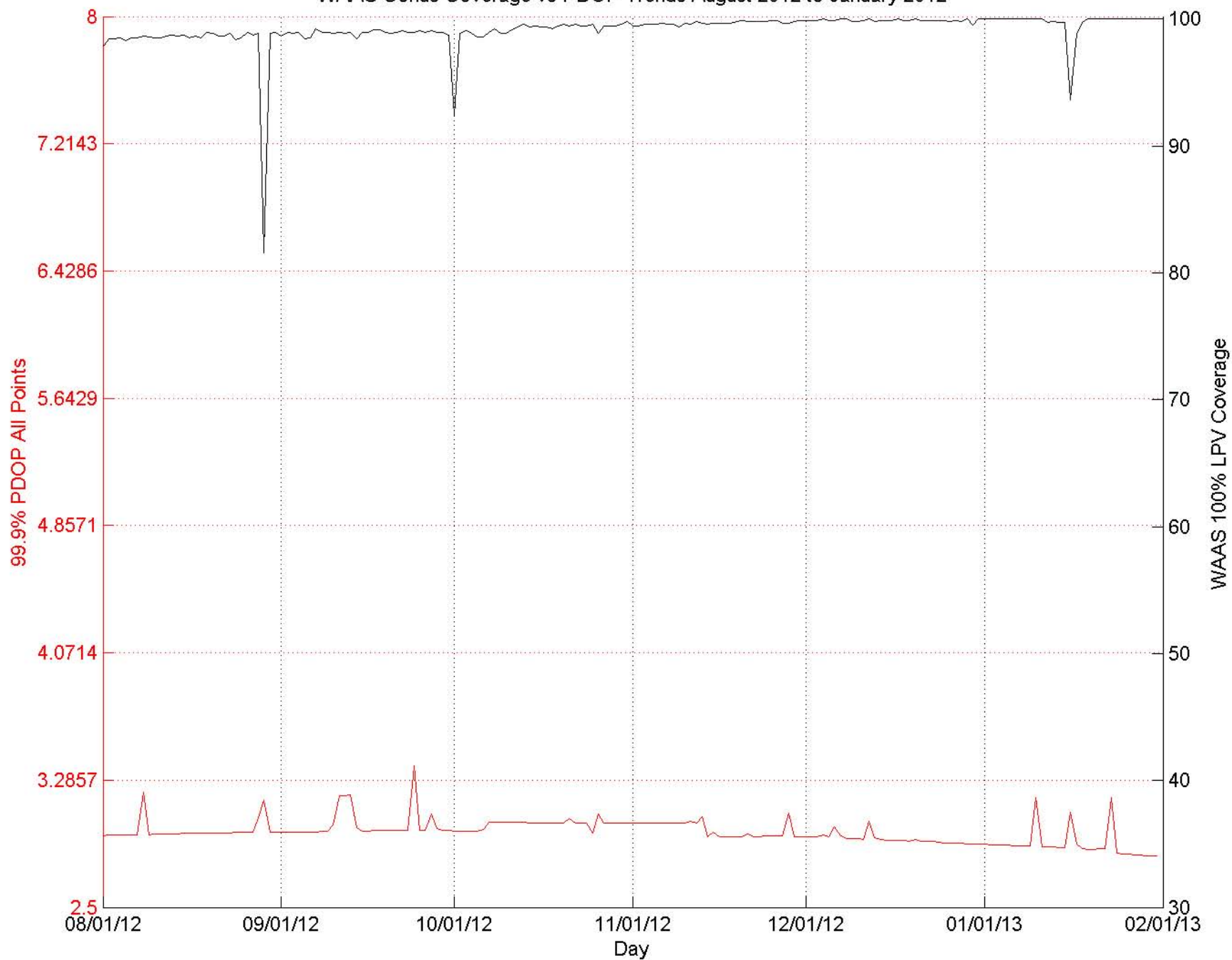
GPS World PDOP 99.99% Index January 2013



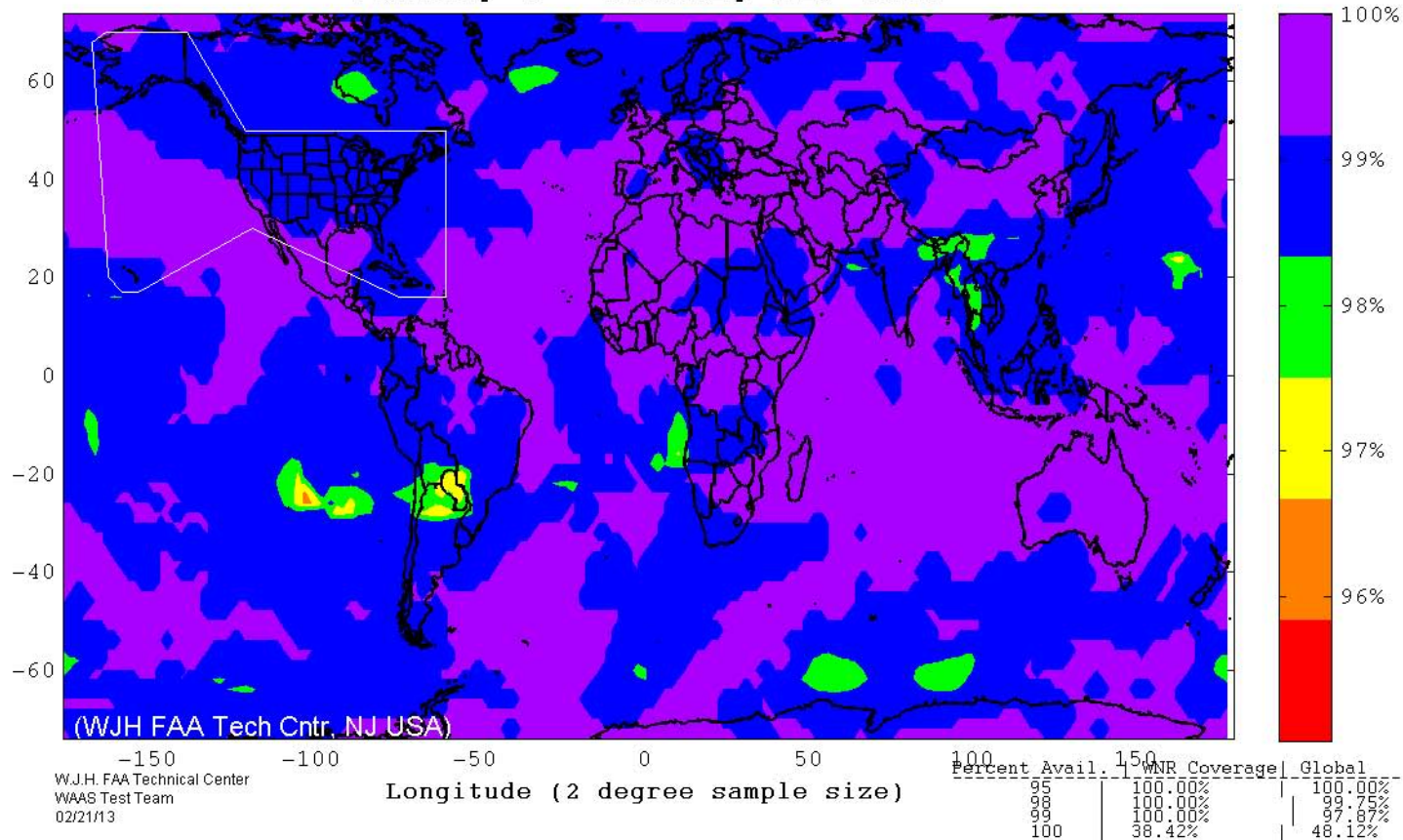
PDOP Trends August 2012 thru January 2013



WAAS Conus Coverage vs PDOP Trends August 2012 to January 2012



SPS RAIM 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 January 1 - January 31, 2012



SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 January 1 - January 31, 2012

