

Civil Report Card On GPS Performance

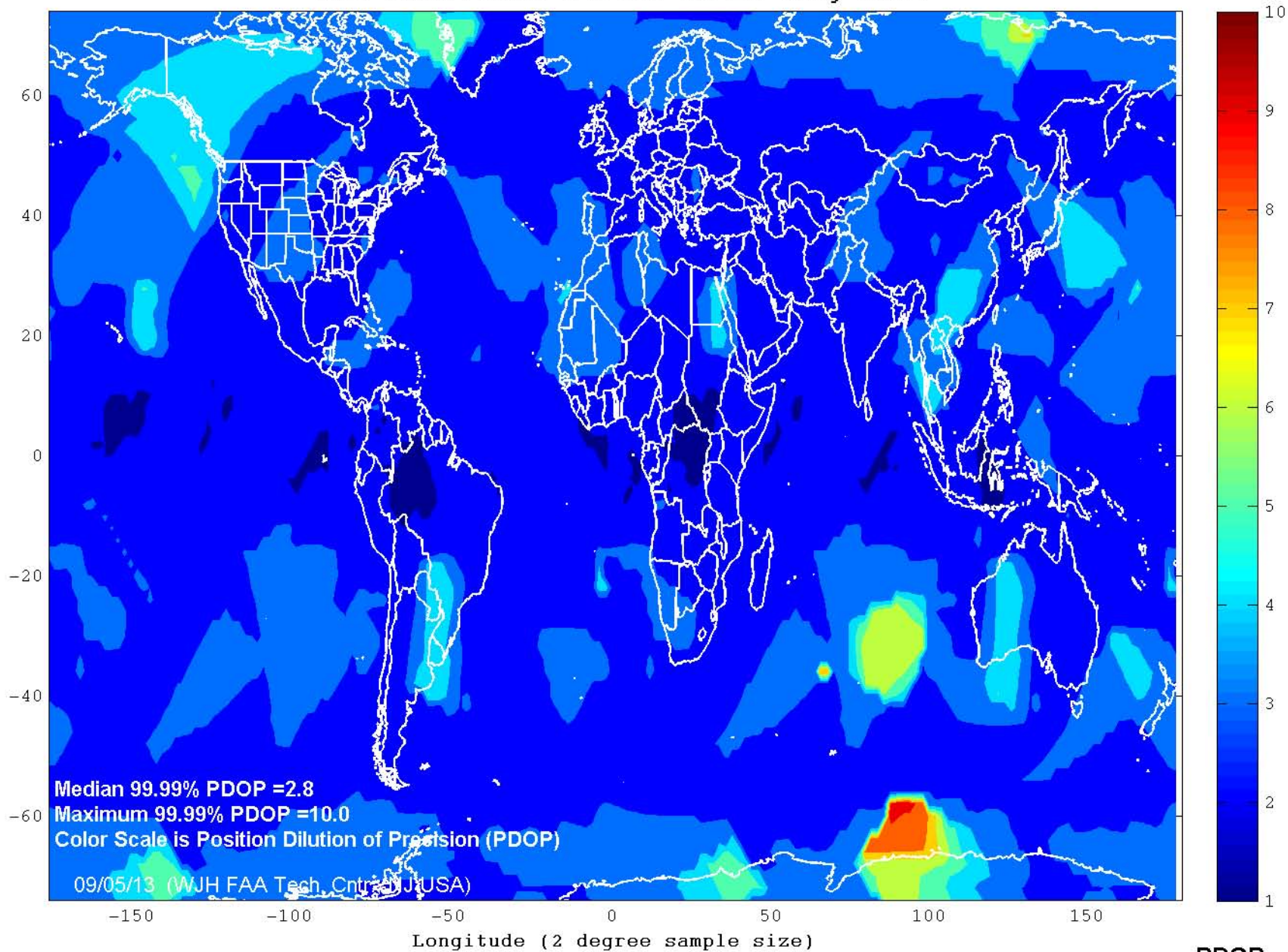
July 2013

Operational Performance Parameter	CY 2012	June 2013	July 2013	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.92	30.99	30.98	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.99 (99.95%)	23.99 (99.97%)	23.99 (99.96%)	↑	↓
<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	1.4	1.4	↓	→
<i>Worst Site</i>	4.0	3.2	5.4	↓	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.4	2.5	2.5	↓	→
<i>Worst Site</i>	10.2	6.1	8.3	↑	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.7	2.8	2.8	↓	→
<i>Worst Site</i>	10.6	6.4	10.0	↑	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	83.70%	70.95%	40.63%	↓	↓
<i>World</i>	85.37%	55.82%	48.52%	↓	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.00	1.91	1.83	↑	↑
<i>Worst Satellite</i>	2.38	2.51	2.48	↓	↑
95% Horizontal Error					
<i>Area Median</i>	2.88	2.70	2.47	↑	↑
<i>Worst Site</i>	8.26	4.38	3.91	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.89%	99.80%	99.97%	↑	↑
95% Vertical Error					
<i>Area Median</i>	4.93	4.31	4.32	↑	↓
<i>Worst Site</i>	9.21	6.60	6.27	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.89%	99.91%	99.98%	↑	↑

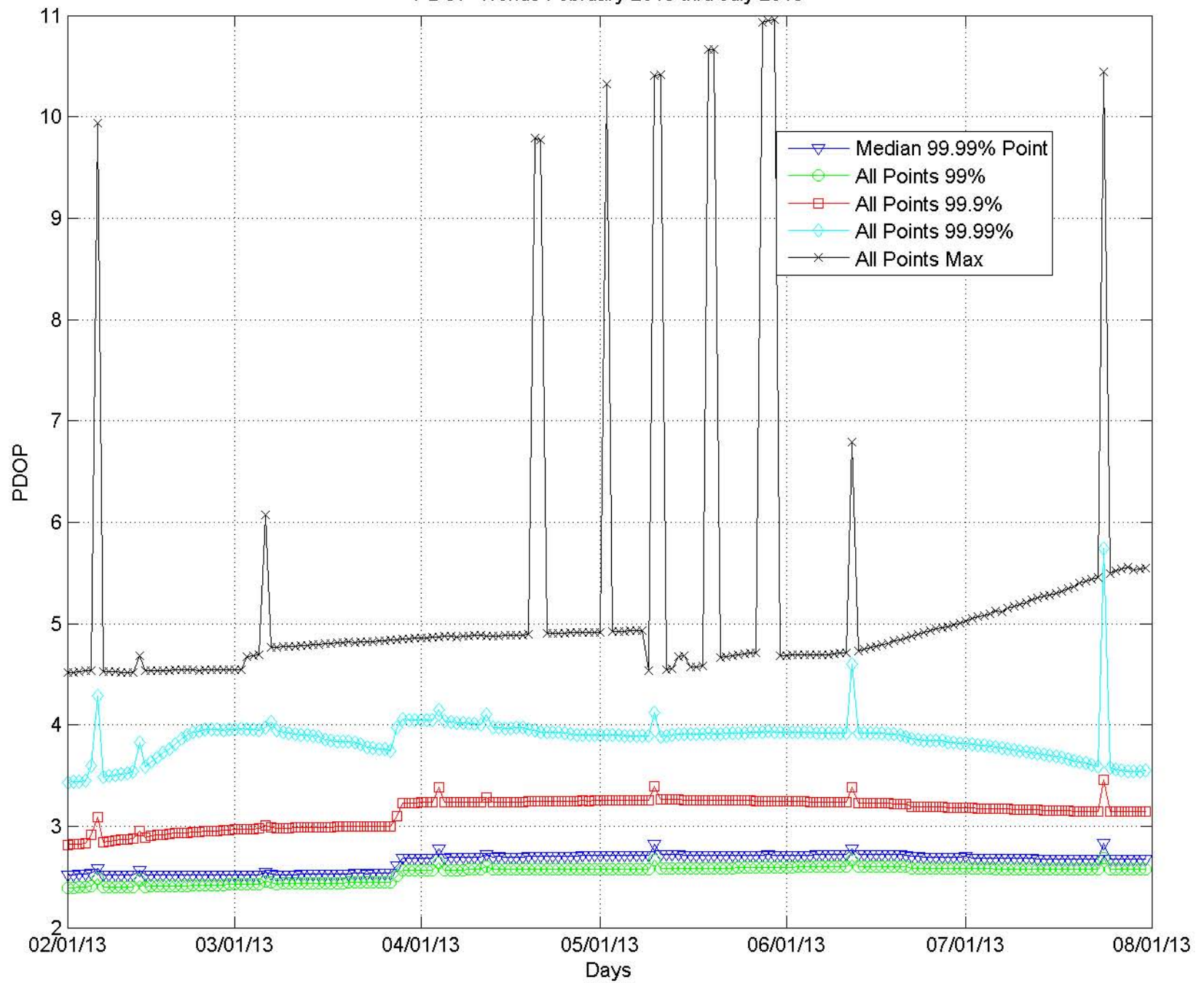
Key: ↑ improving ↓ worsening → no significant change

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

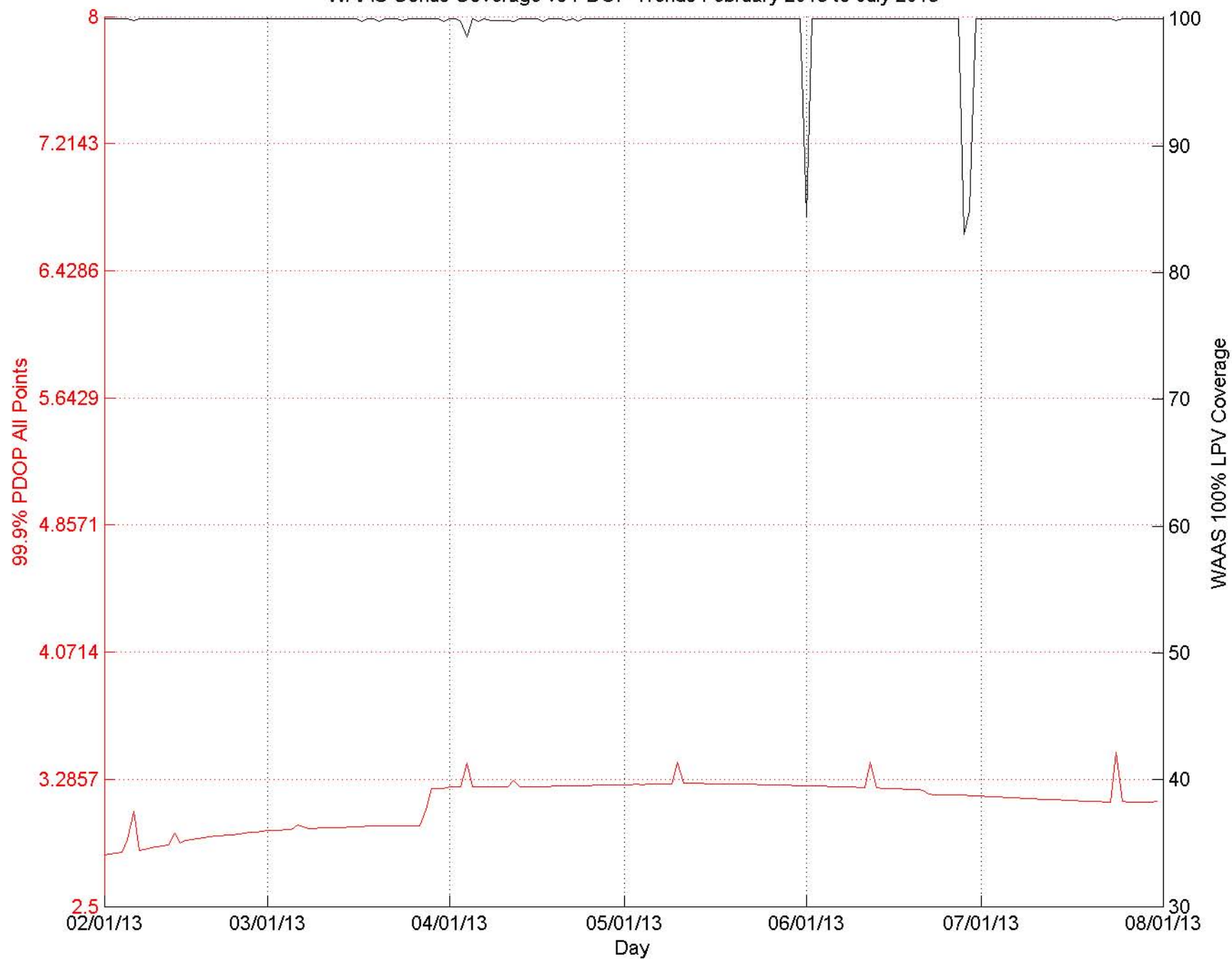
GPS World PDOP 99.99% Index July 2013



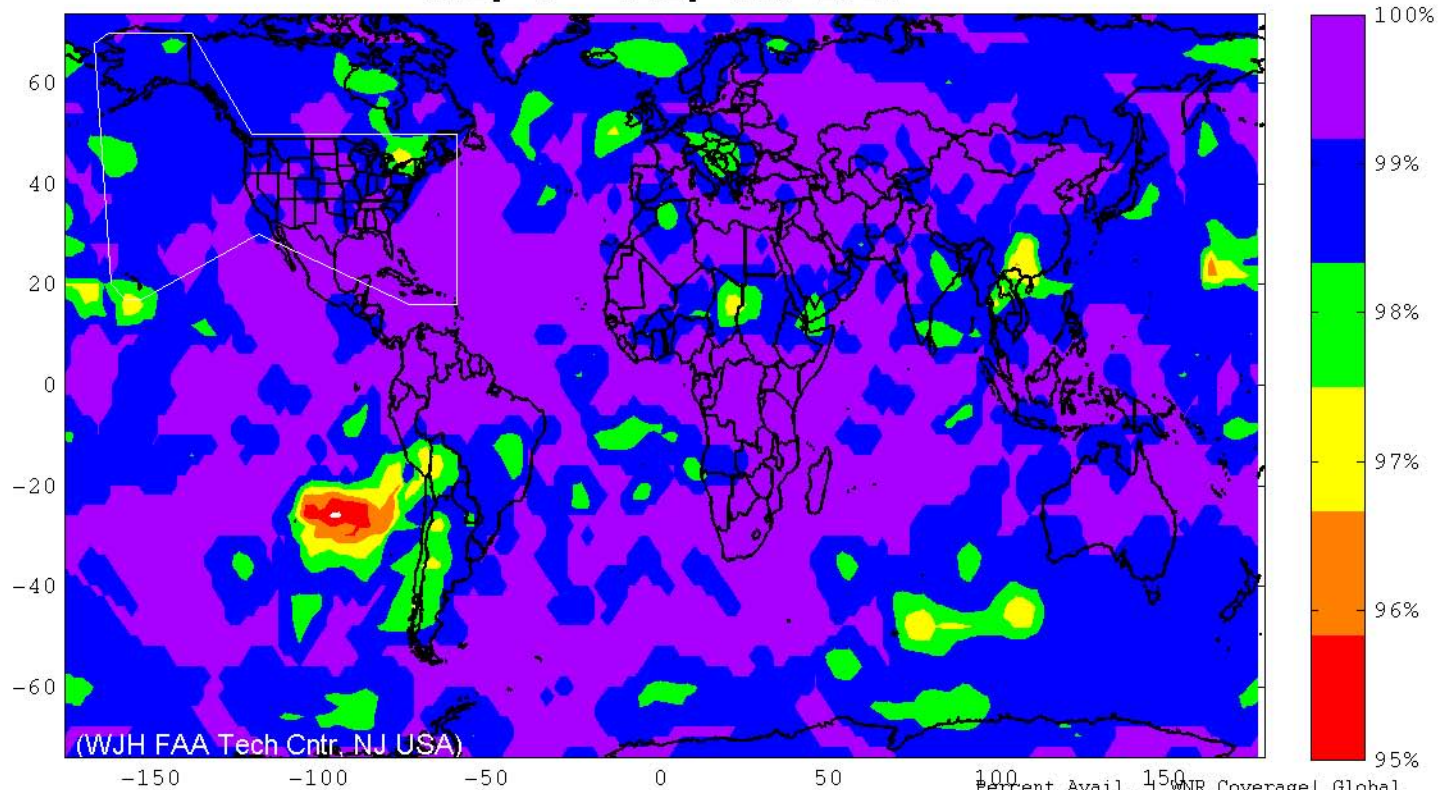
PDOP Trends February 2013 thru July 2013



WAAS Conus Coverage vs PDOP Trends February 2013 to July 2013



SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 July 1 - July 31, 2013



W.J.H. FAA Technical Center
 WAAS Test Team
 09/05/13

Percent Avail.	WNR Coverage	Global
95	100.00%	99.99%
98	99.47%	98.55%
99	94.53%	91.80%
100	40.63%	48.52%

SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 July 1 - July 31, 2013

