

Civil Report Card On GPS Performance

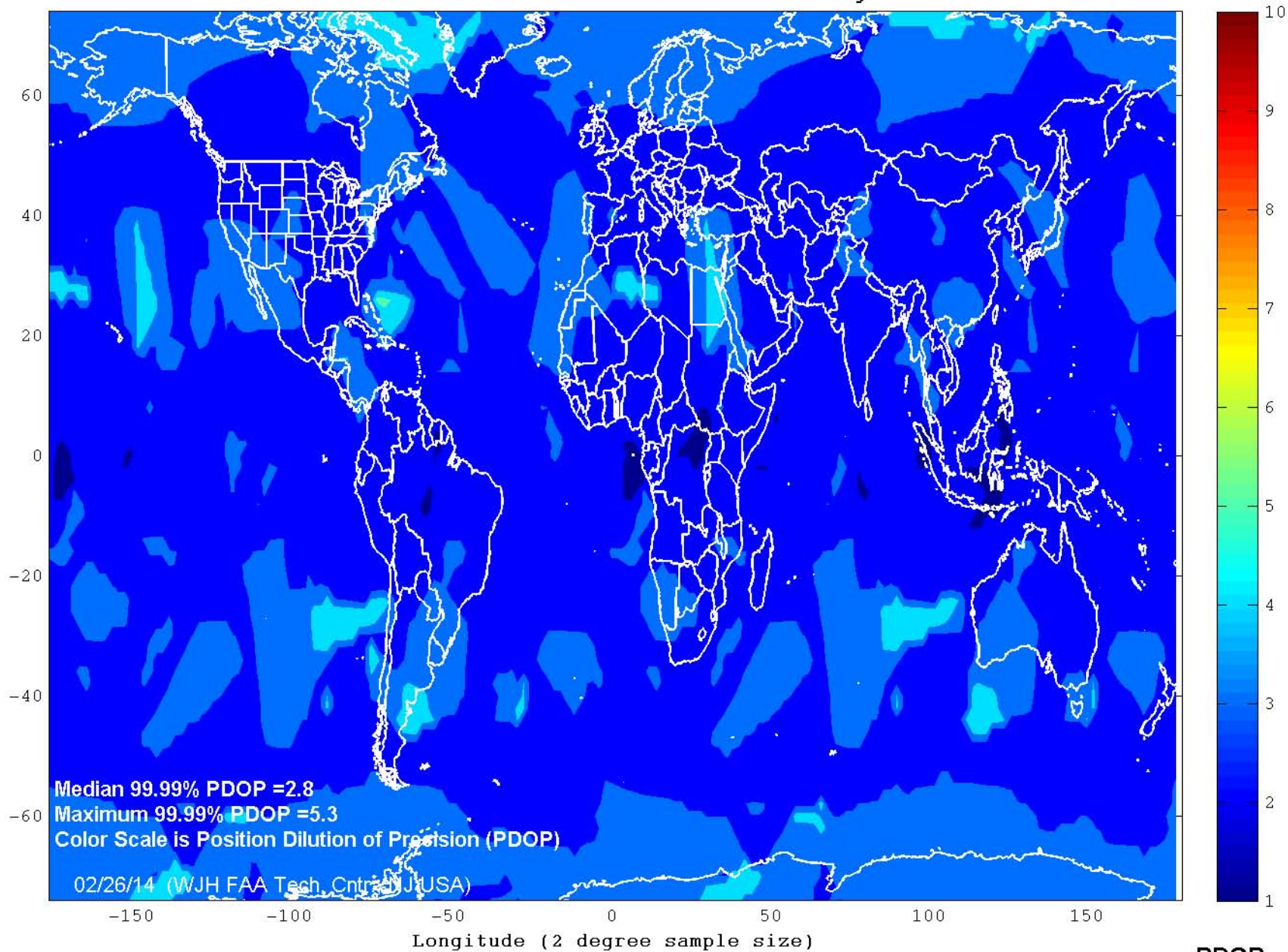
January 2014

Operational Performance Parameter	CY 2013	Dec 2013	Jan 2014	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.97	30.98	30.98	↑	→
<i>Average number of satellites usable in primary slots</i>	23.98 (99.94%)	23.98 (99.94%)	23.98 (99.94%)	→	→
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	99.99%	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.4	1.4	1.4	→	→
<i>Worst Site</i>	35.6	4.7	2.5	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.4	2.5	2.4	→	↑
<i>Worst Site</i>	71.9	10.2	5.0	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.8	2.7	↑	↑
<i>Worst Site</i>	80.3	10.9	5.2	↑	↑
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	73.24%	63.47%	26.11%	↓	↓
<i>World</i>	65.97%	41.62%	50.79%	↓	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.06	2.58	2.42	↓	↑
<i>Worst Satellite</i>	4.37	4.35	3.70	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.78	2.77	2.74	↑	↑
<i>Worst Site</i>	8.07	7.86	7.34	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.68%	98.55%	98.43%	↓	↓
95% Vertical Error					
<i>Area Median</i>	5.23	7.88	7.75	↓	↑
<i>Worst Site</i>	9.25	10.18	9.09	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.37%	97.63%	97.11%	↓	↓

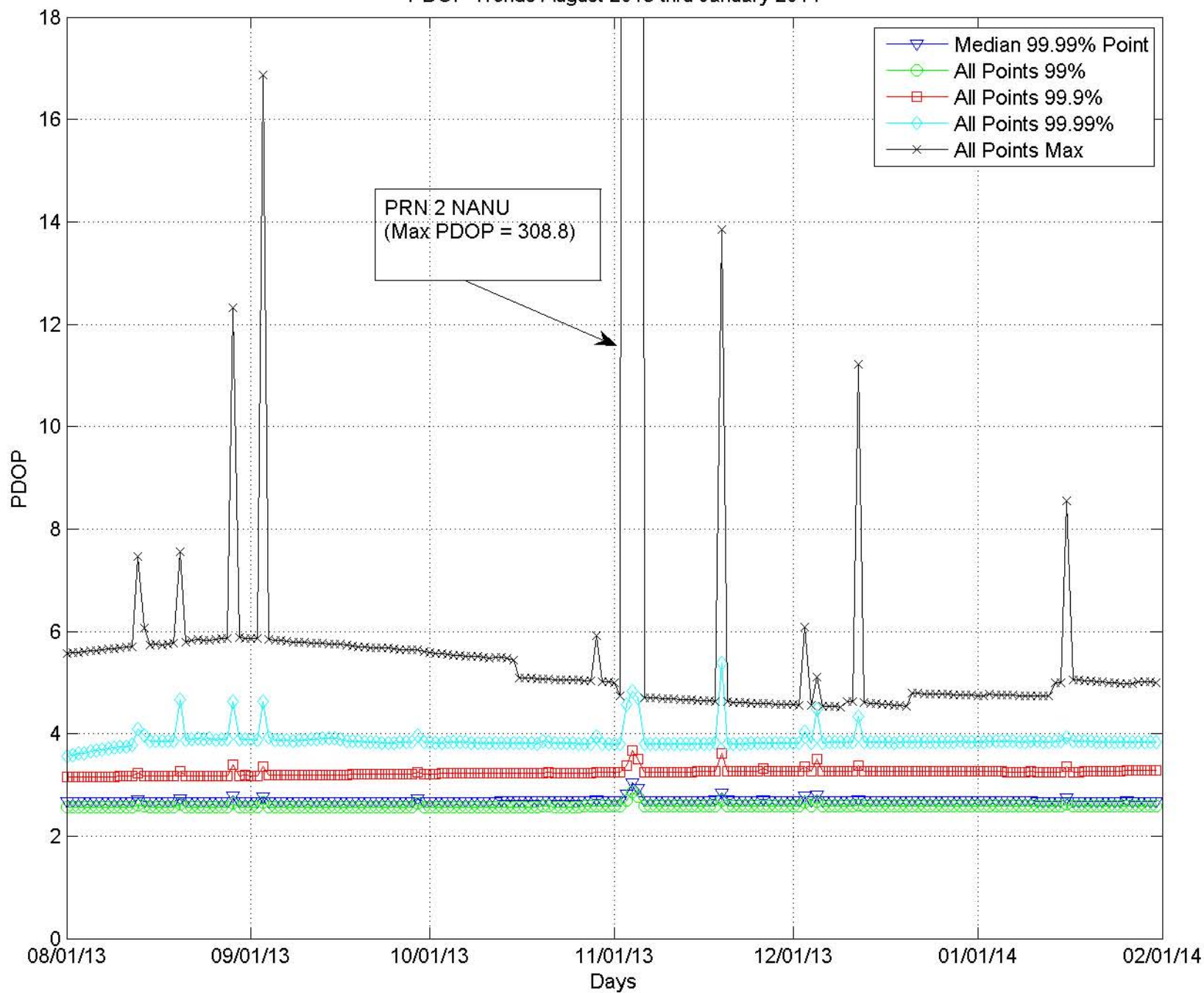
Key: ↑ improving ↓ worsening → no significant change

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

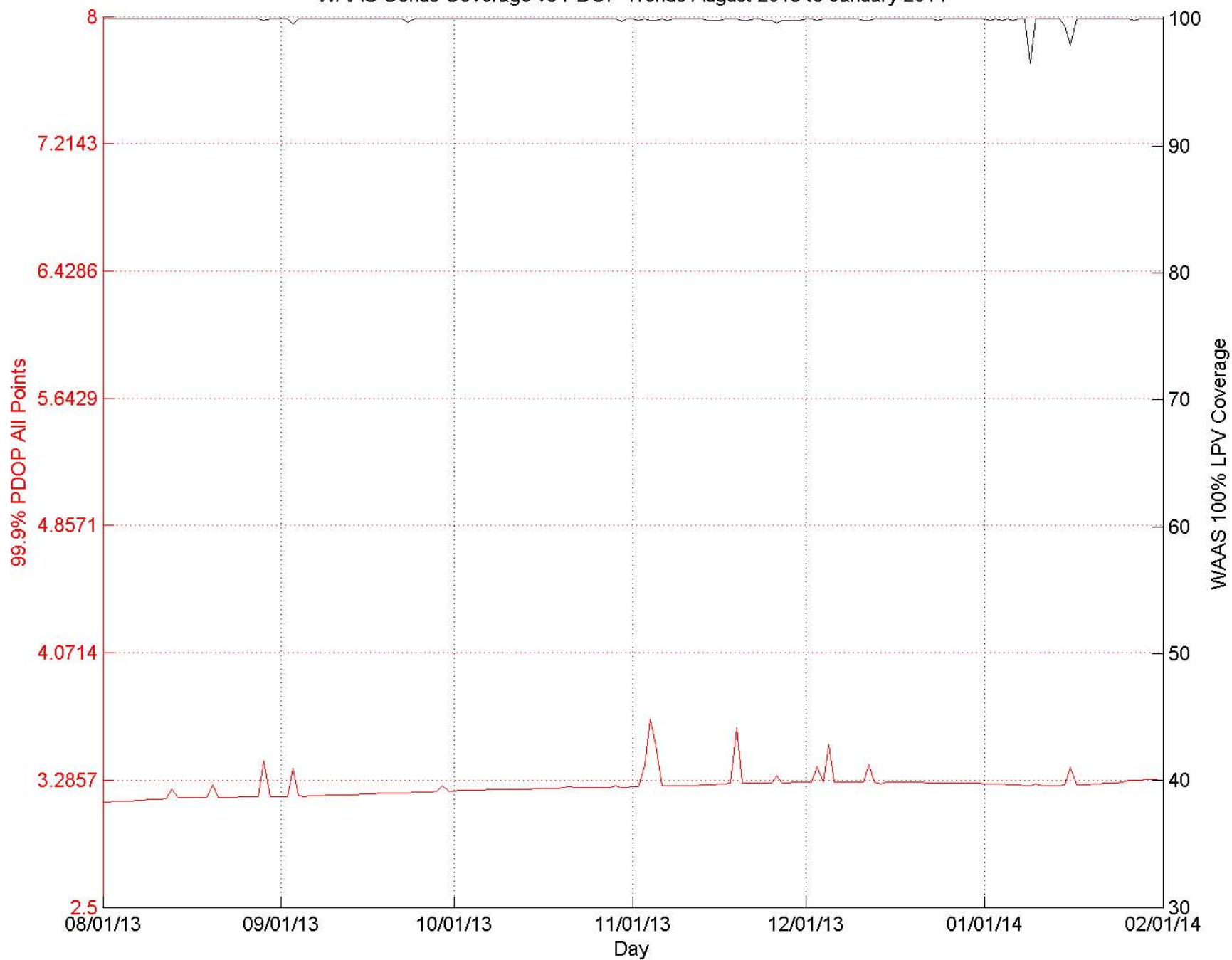
GPS World PDOP 99.99% Index January 2014



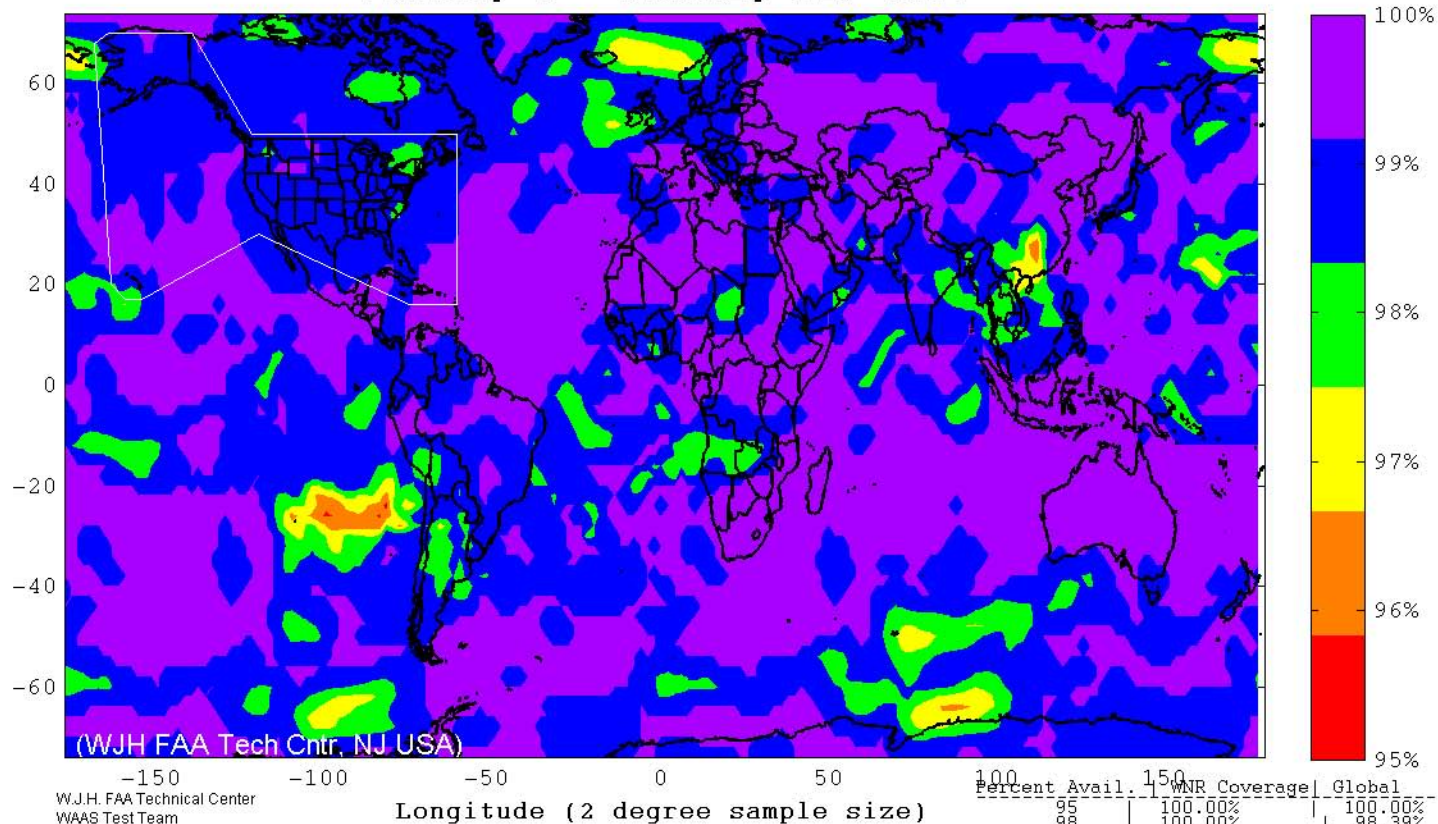
PDOP Trends August 2013 thru January 2014



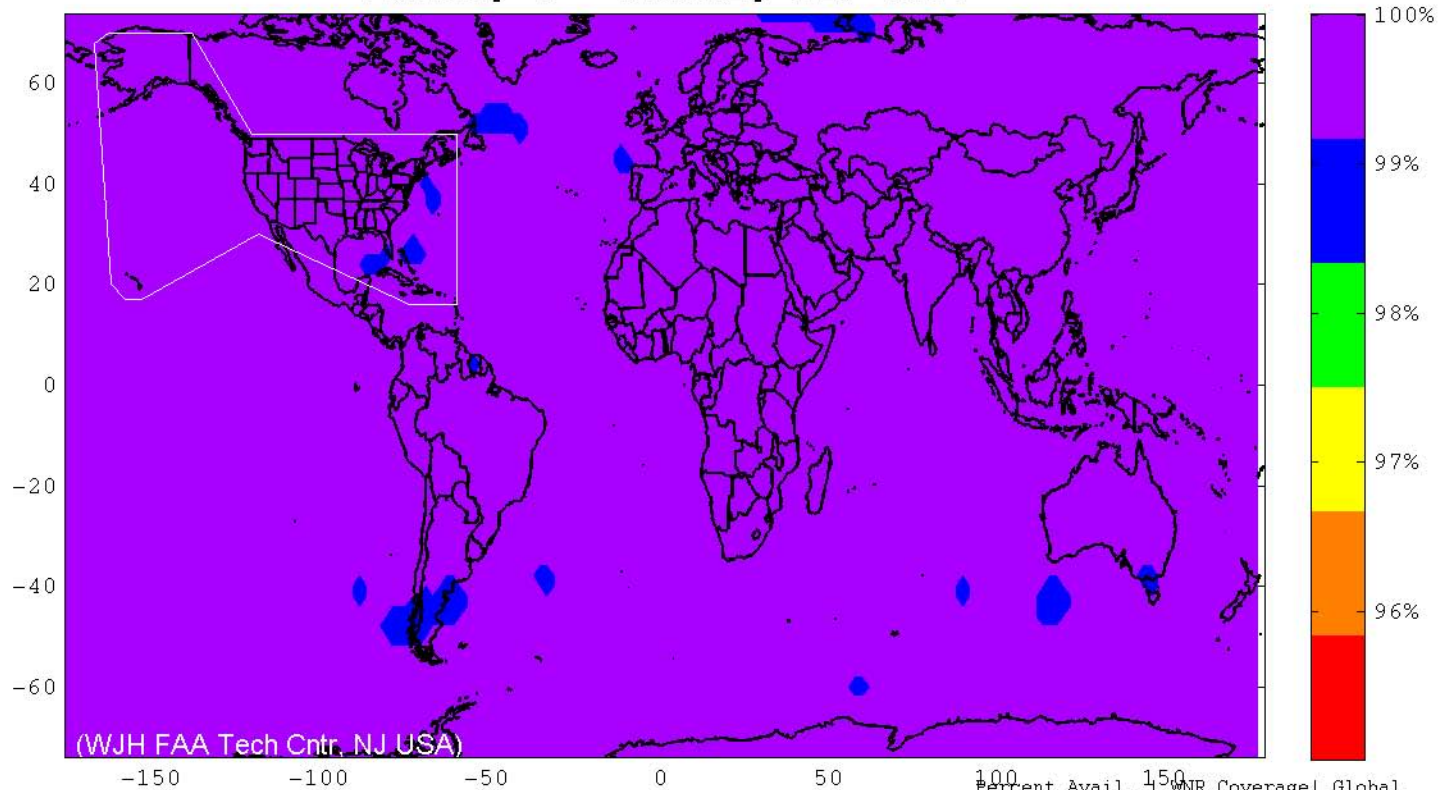
WAAS Conus Coverage vs PDOP Trends August 2013 to January 2014



SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 January 1 - January 31, 2014



SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 January 1 - January 31, 2014



W.J.H. FAA Technical Center
 WAAS Test Team
 02/26/14

Longitude (2 degree sample size)

Percent Avail.	WNR Coverage	Global
95	100.00%	100.00%
98	100.00%	100.00%
99	100.00%	100.00%
100	98.84%	99.13%