

Civil Report Card On GPS Performance

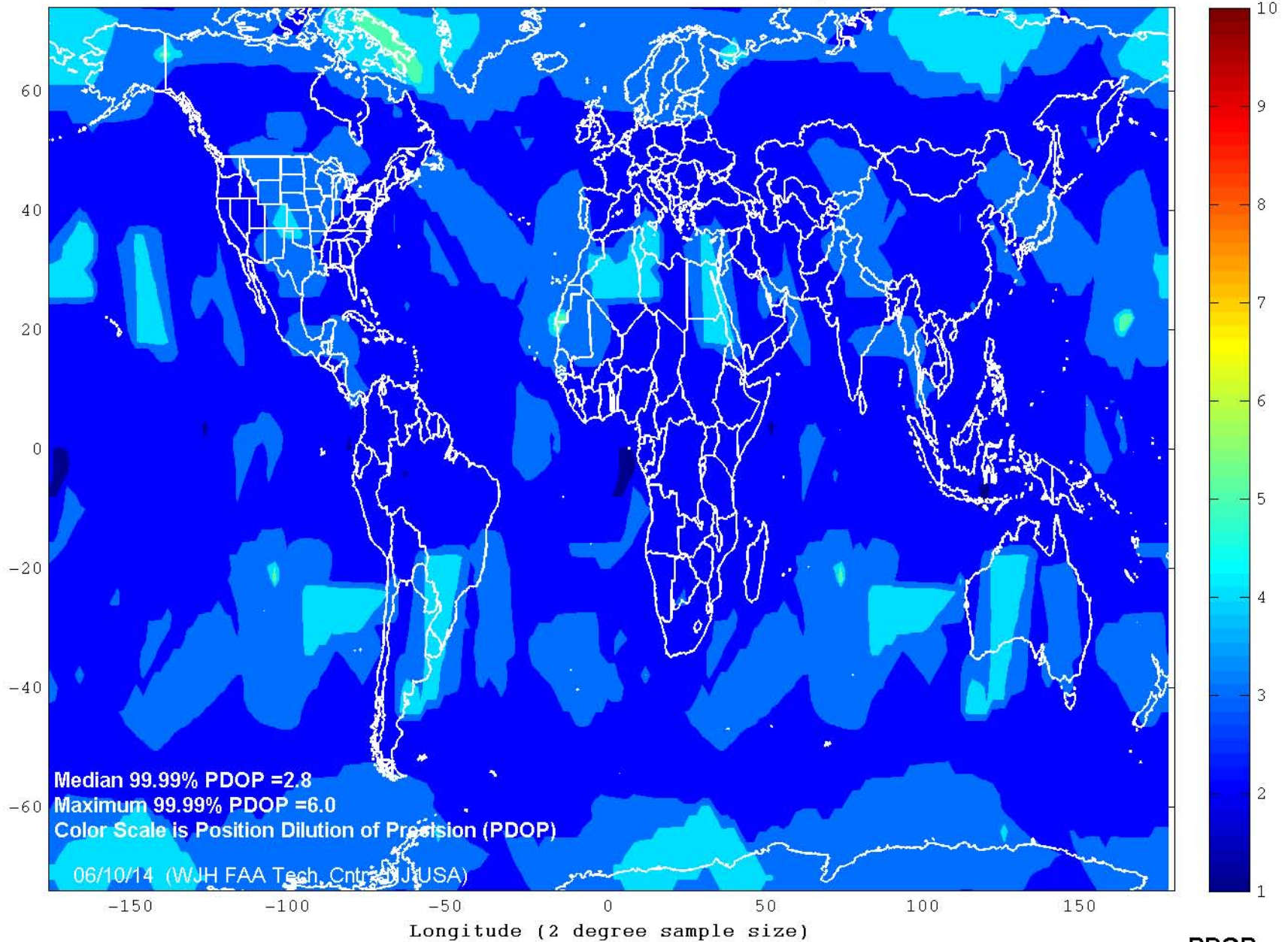
May 2014

Operational Performance Parameter	CY 2013	Apr 2014	May 2014	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.97	29.98	29.56	↓	↓
<i>Average number of satellites usable in primary slots</i>	23.98 (99.94%)	23.98 (99.93%)	23.98 (99.92%)	↓	↓
<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	1.5	1.4	→	↑
<i>Worst Site</i>	35.6	4.0	2.5	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.4	2.6	2.5	↓	↑
<i>Worst Site</i>	71.9	7.2	5.7	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.9	2.8	→	↑
<i>Worst Site</i>	80.3	7.8	6.0	↑	↑
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	73.24%	30.63%	53.37%	↓	↑
<i>World</i>	65.97%	34.52%	51.99%	↓	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.06	2.40	2.17	↓	↑
<i>Worst Satellite</i>	4.37	2.93	2.71	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.78	3.85	3.24	↓	↑
<i>Worst Site</i>	8.07	10.79	6.13	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.68%	96.20%	98.41%	↓	↑
95% Vertical Error					
<i>Area Median</i>	5.23	5.15	4.79	↑	↑
<i>Worst Site</i>	9.25	8.83	7.07	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.37%	99.50%	99.95%	↑	↑

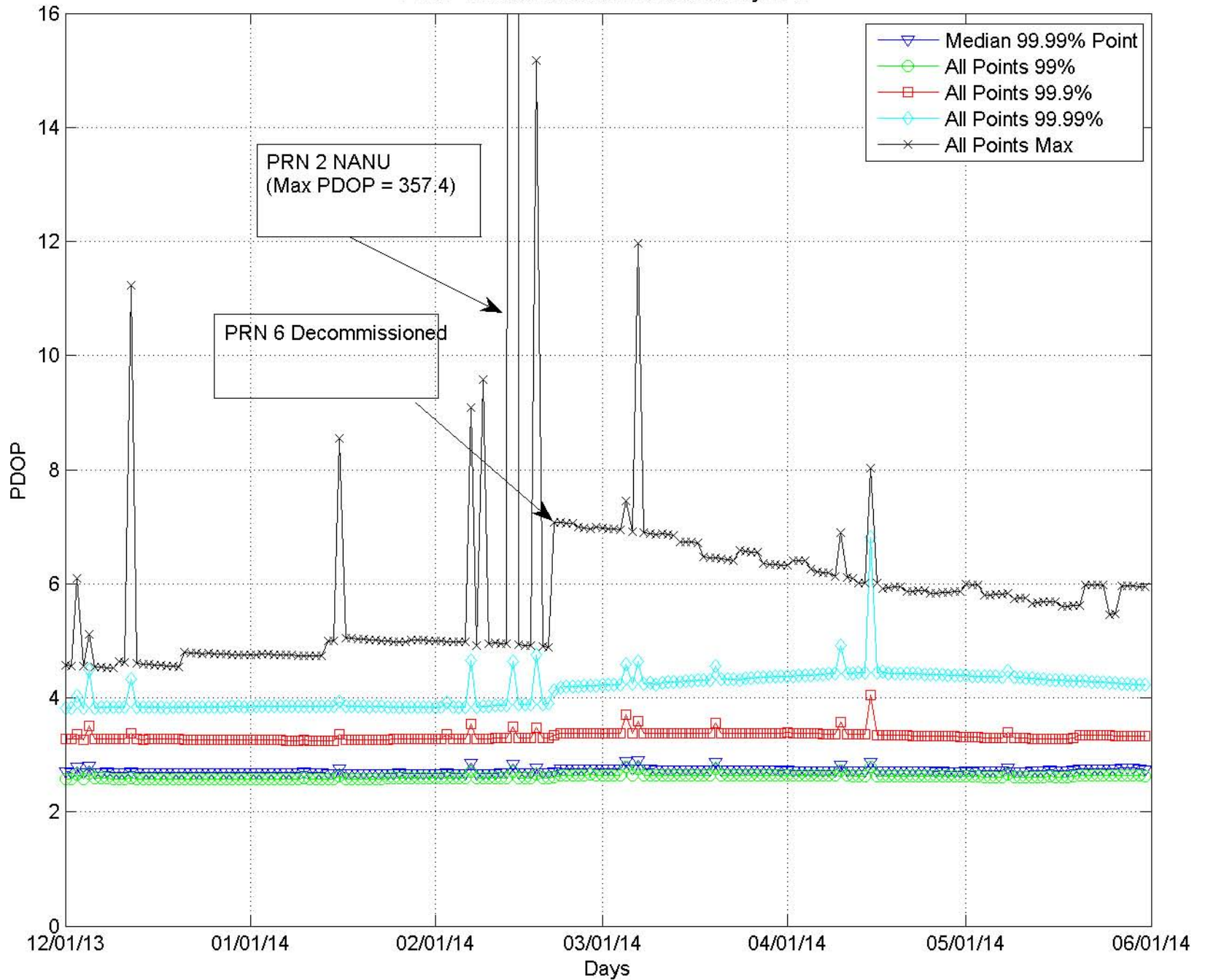
Key: ↑ improving ↓ worsening → no significant change

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

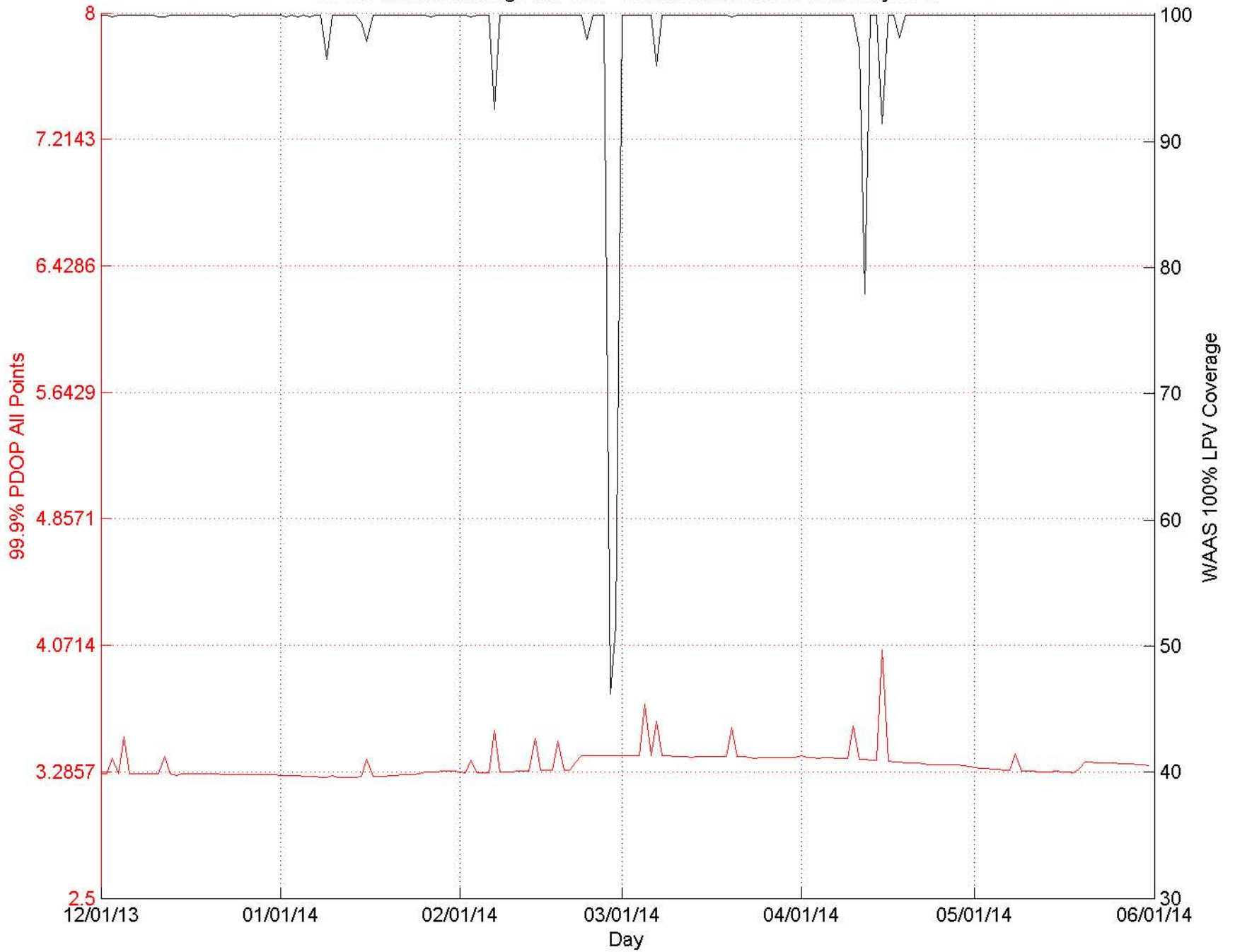
GPS World PDOP 99.99% Index May 2014



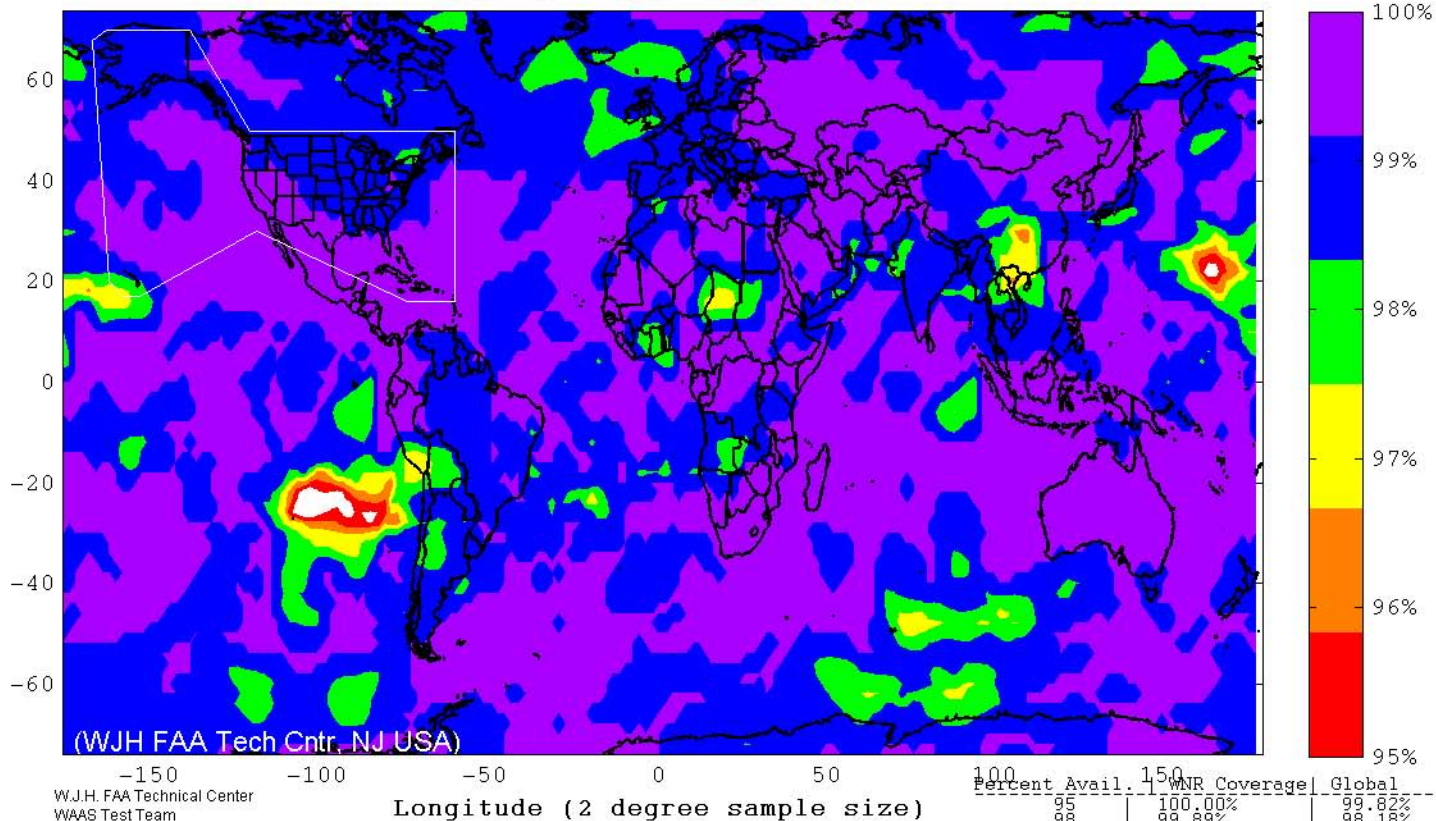
PDOP Trends December 2013 thru May 2014



WAAS Conus Coverage vs PDOP Trends December 2013 to May 2014



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



W.J.H. FAA Technical Center
 WAAS Test Team
 06/10/14

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

