

Civil Report Card On GPS Performance

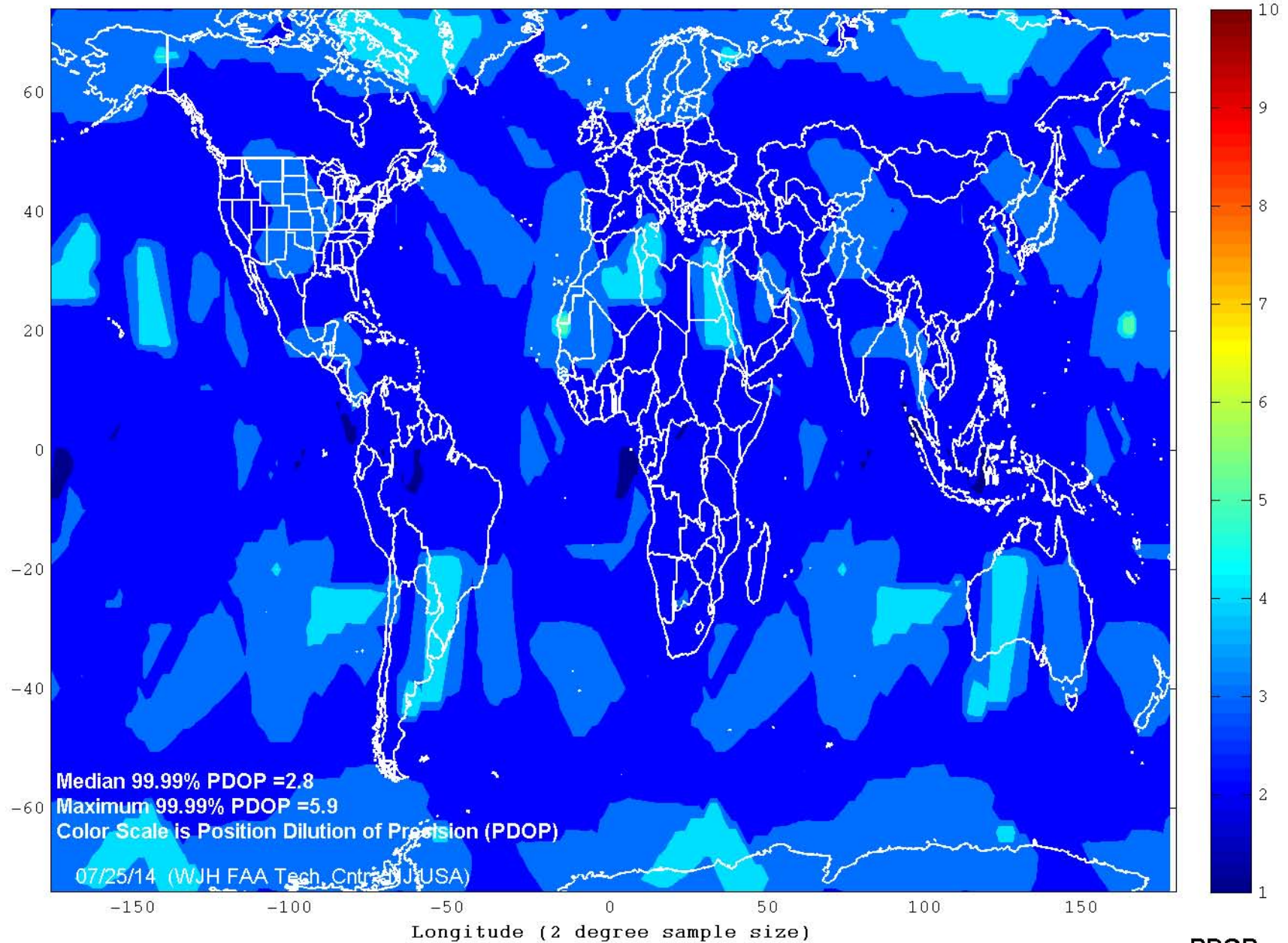
June 2014

Operational Performance Parameter	CY 2013	May 2014	June 2014	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.97	29.56	30.69	↓	↑
<i>Average number of satellites usable in primary slots</i>	23.98 (99.94%)	23.98 (99.92%)	23.99 (99.95%)	↑	↑
<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	2.5	2.5	↑	→
99.99% Vertical DOP					
<i>Area Median</i>	2.4	2.5	2.5	↓	→
<i>Worst Site</i>	71.9	5.7	5.7	↑	→
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.8	2.8	→	→
<i>Worst Site</i>	80.3	6.0	5.9	↑	↑
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	73.24%	53.37%	66.11%	↓	↑
<i>World</i>	65.97%	51.99%	60.12%	↓	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.06	2.17	1.80	↑	↑
<i>Worst Satellite</i>	4.37	2.71	2.38	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.78	3.24	2.63	↑	↑
<i>Worst Site</i>	8.07	6.13	4.23	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.68%	98.41%	99.73%	↑	↑
95% Vertical Error					
<i>Area Median</i>	5.23	4.79	3.95	↑	↑
<i>Worst Site</i>	9.25	7.07	5.35	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.37%	99.95%	99.97%	↑	↑

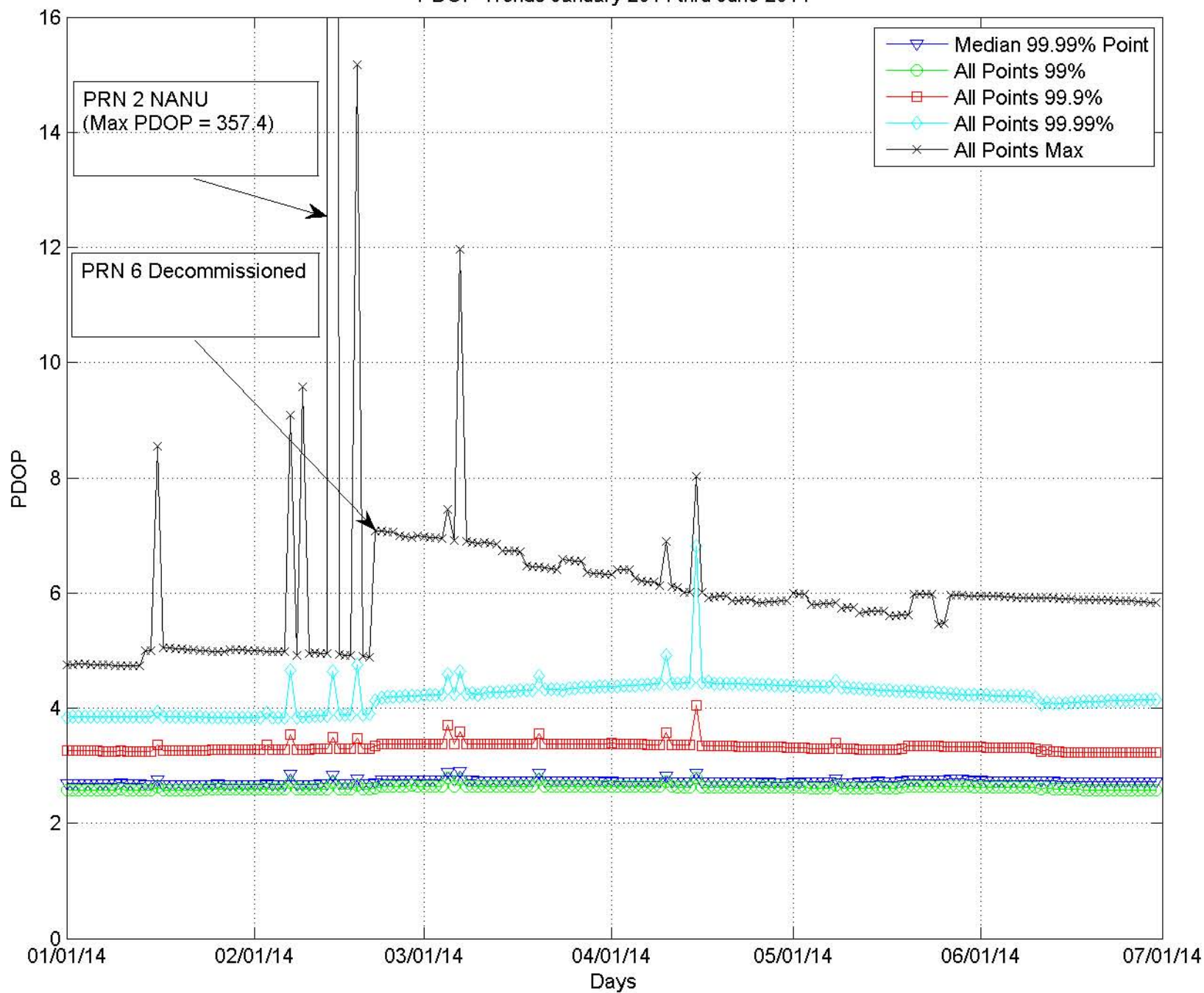
Key: ↑ improving ↓ worsening → no significant change

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

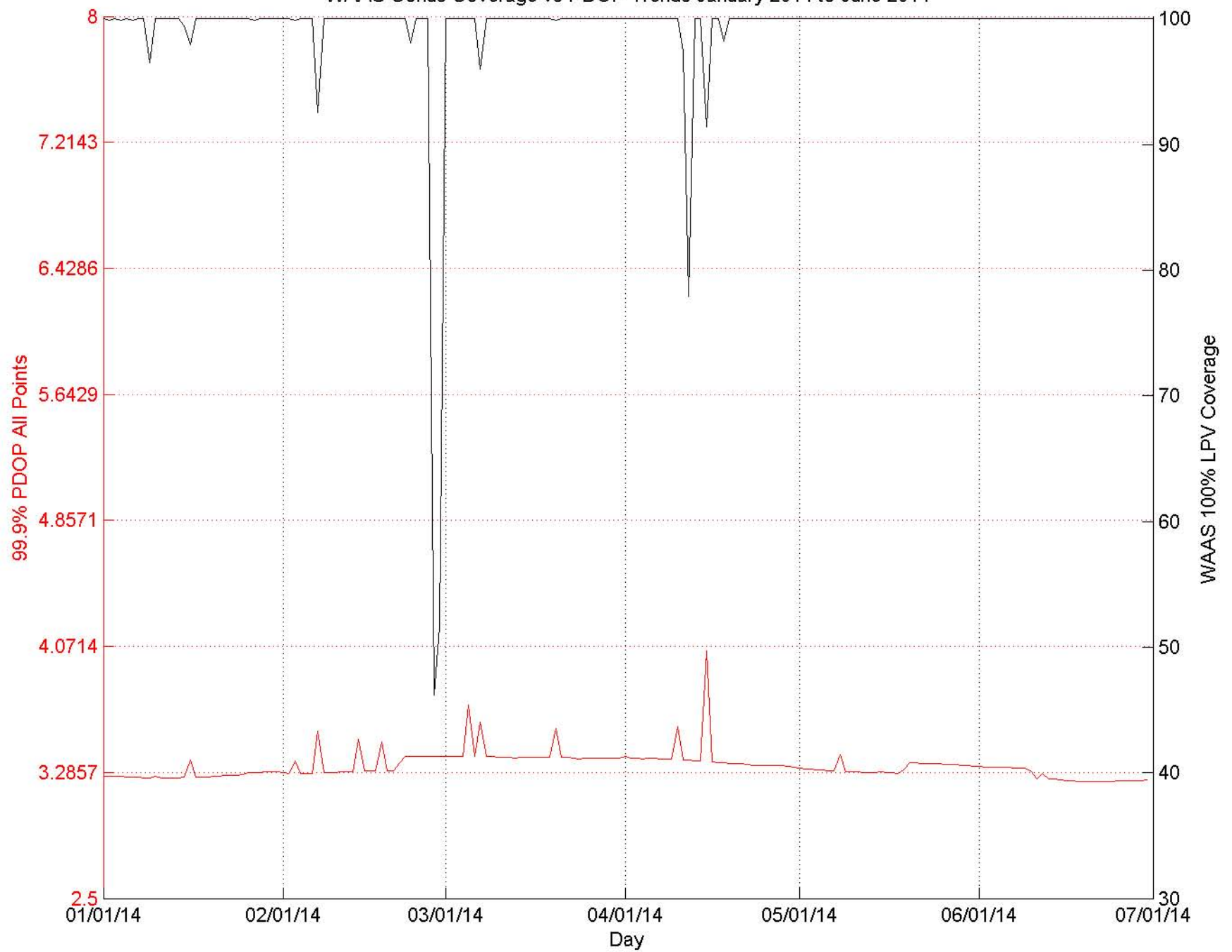
GPS World PDOP 99.99% Index June 2014



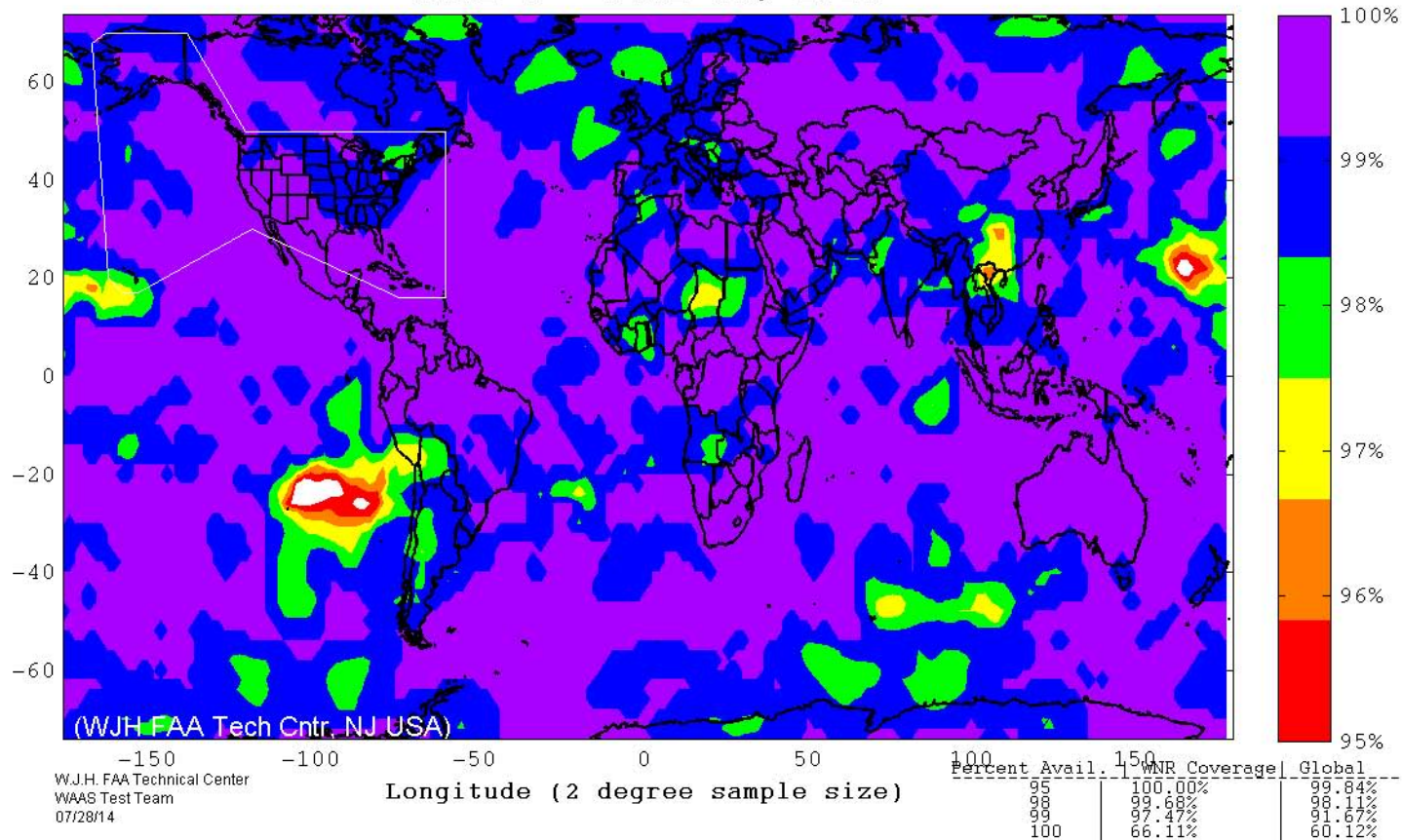
PDOP Trends January 2014 thru June 2014



WAAS Conus Coverage vs PDOP Trends January 2014 to June 2014



SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 June 1 - June 30, 2014



SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 June 1 - June 30, 2014

