

Civil Report Card On GPS Performance

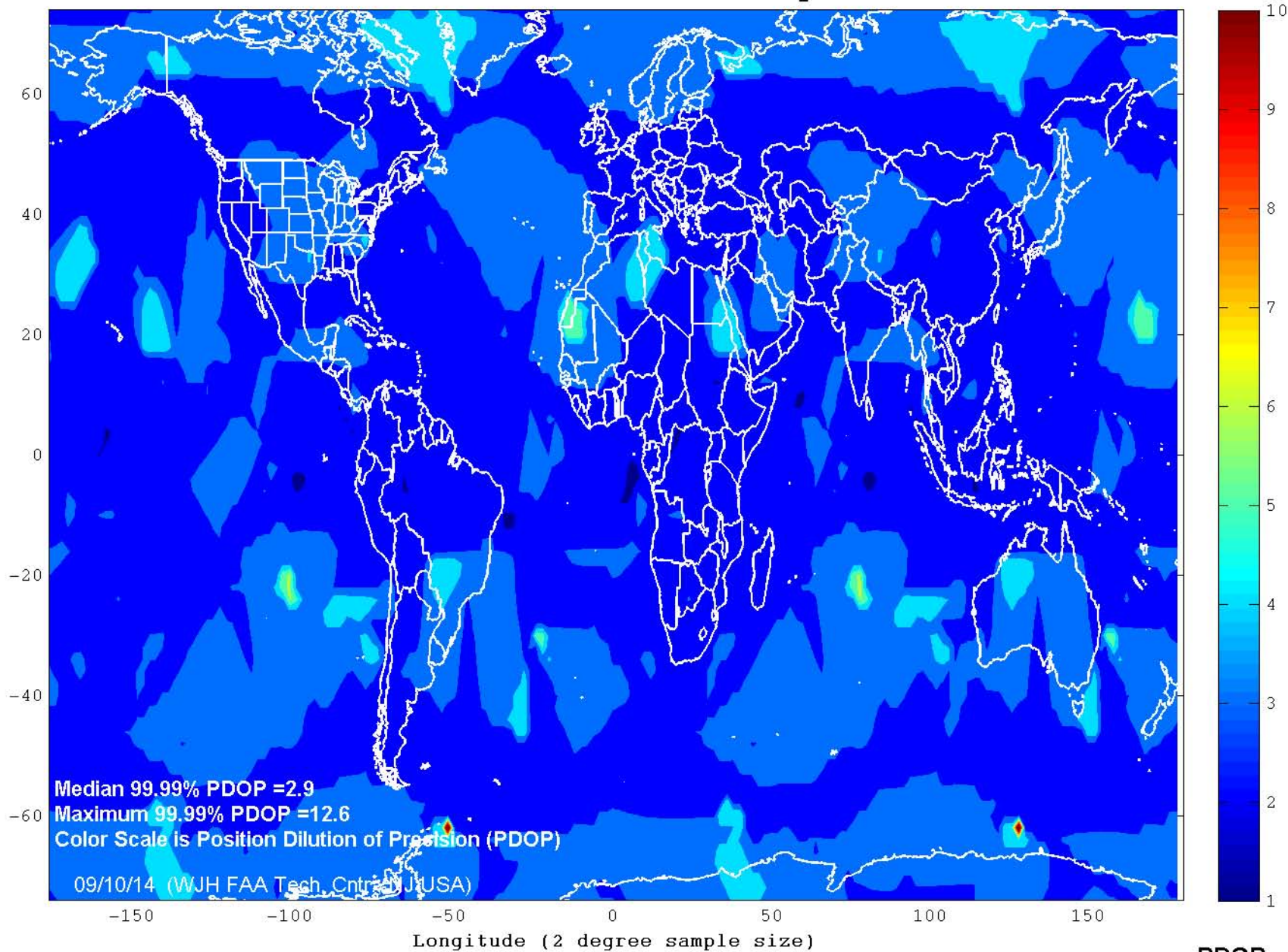
August 2014

Operational Performance Parameter	CY 2013	July 2014	Aug 2014	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.97	30.97	30.01	↓	↓
<i>Average number of satellites usable in primary slots</i>	23.985 (99.94%)	23.996 (99.98%)	23.992 (99.97%)	↑	↓
<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	2.8	3.3	↑	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.4	2.5	2.6	↓	↓
<i>Worst Site</i>	71.9	5.7	12.1	↑	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.8	2.9	↓	↓
<i>Worst Site</i>	80.3	6.0	12.6	↑	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	73.24%	62.53%	53.68%	↓	↓
<i>World</i>	65.97%	55.84%	53.99%	↓	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.06	1.83	1.75	↑	↑
<i>Worst Satellite</i>	4.37	2.40	2.22	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.78	2.64	2.72	↑	↓
<i>Worst Site</i>	8.07	4.52	4.62	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.68%	99.52%	99.15%	↑	↓
95% Vertical Error					
<i>Area Median</i>	5.23	4.41	3.81	↑	↑
<i>Worst Site</i>	9.25	6.34	5.72	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.37%	99.92%	99.95%	↑	↑

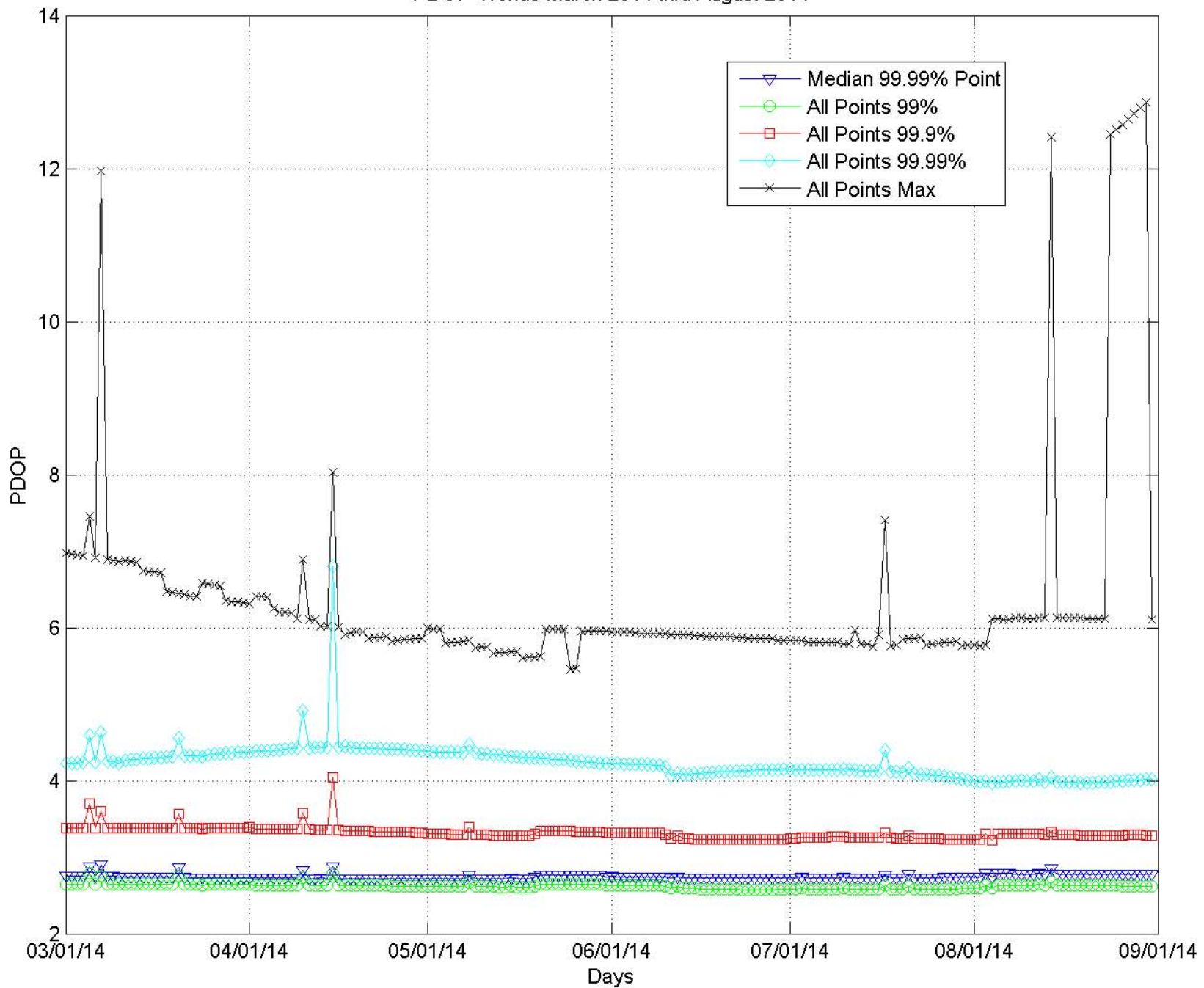
Key: ↑ improving ↓ worsening → no significant change

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

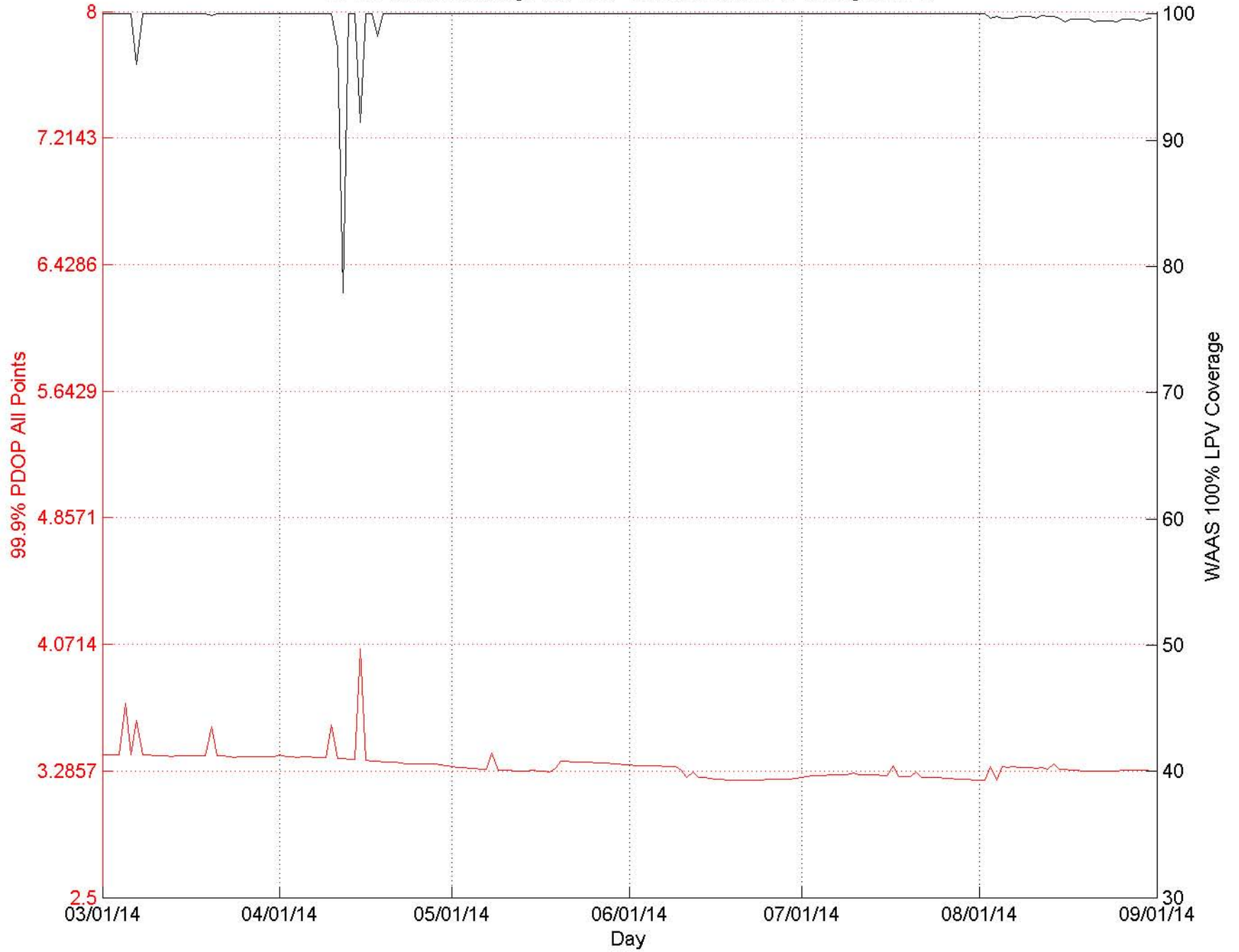
GPS World PDOP 99.99% Index August 2014



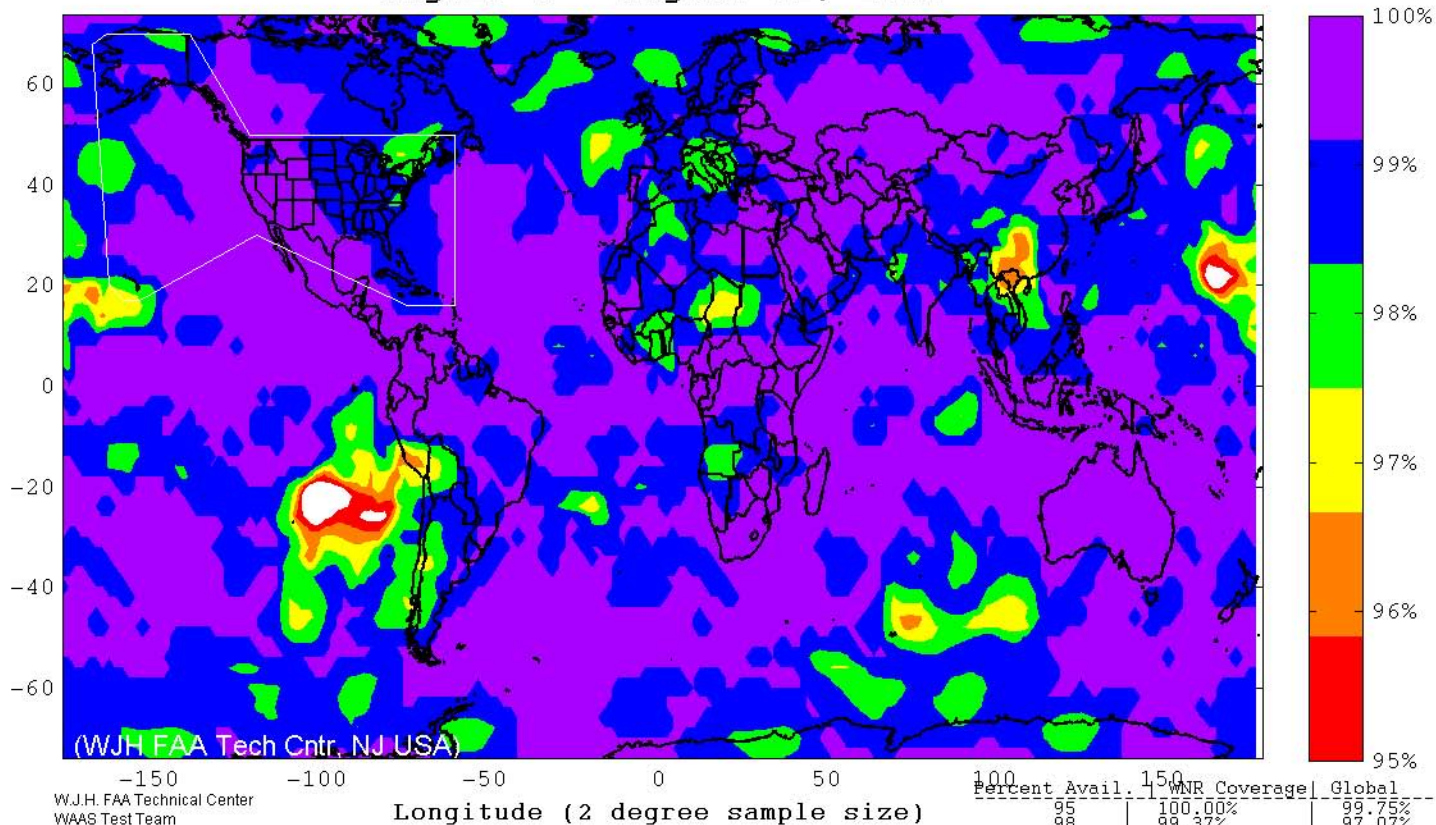
PDOP Trends March 2014 thru August 2014



WAAS Conus Coverage vs PDOP Trends March 2014 to August 2014



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



W.J.H. FAA Technical Center
 WAAS Test Team
 09/11/14

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

