

Civil Report Card On GPS Performance

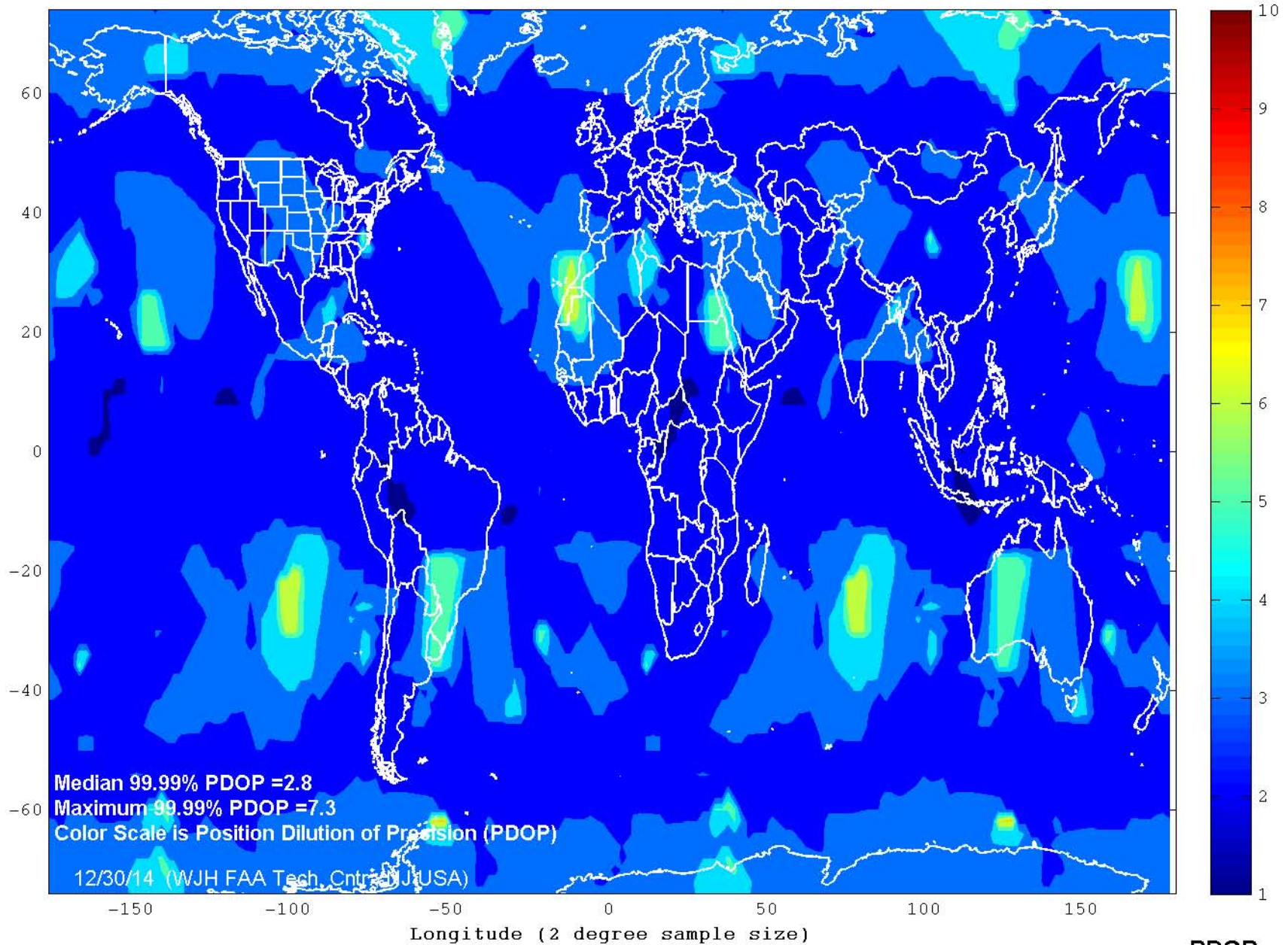
November 2014

Operational Performance Parameter	CY 2013	Oct 2014	Nov 2014	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.97	30.94	29.99	↓	↓
<i>Average number of satellites usable in primary slots</i>	23.985 (99.94%)	23.973 (99.89%)	24.00 (100%)	↑	↑
<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	6.8	2.6	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.4	2.7	2.5	↓	↑
<i>Worst Site</i>	71.9	43.0	6.8	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	3.0	2.8	→	↑
<i>Worst Site</i>	80.3	43.4	7.3	↑	↑
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	73.24%	26.63%	67.16%	↓	↑
<i>World</i>	65.97%	38.54%	56.97%	↓	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.06	2.78	2.58	↓	↑
<i>Worst Satellite</i>	4.37	3.95	4.08	↑	↓
95% Horizontal Error					
<i>Area Median</i>	2.78	3.31	3.29	↓	↑
<i>Worst Site</i>	8.07	9.77	9.25	↓	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.68%	96.76%	96.64%	↓	↓
95% Vertical Error					
<i>Area Median</i>	5.23	8.71	7.44	↓	↑
<i>Worst Site</i>	9.25	10.80	9.85	↓	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.37%	95.65%	98.03%	↓	↑

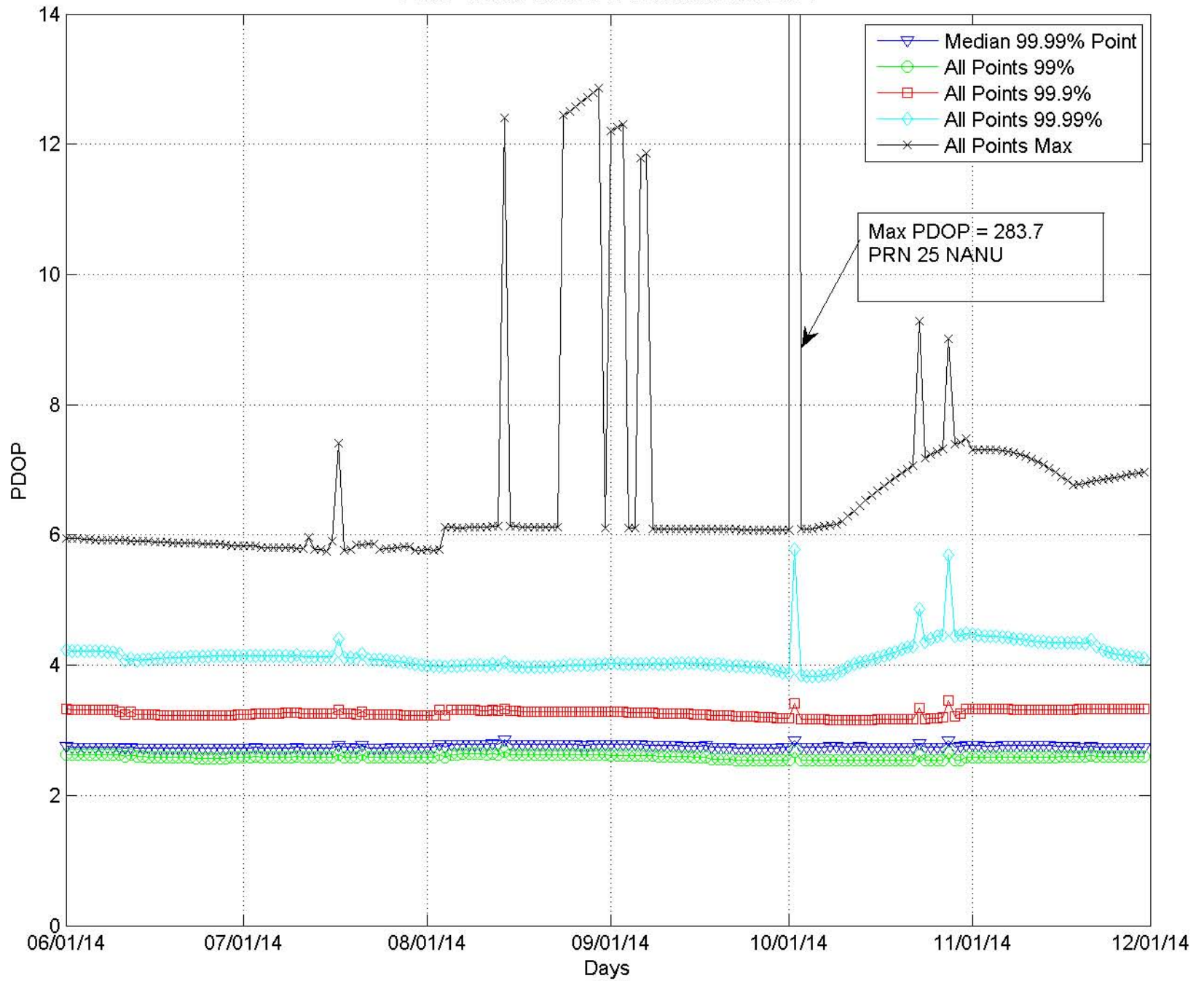
Key: ↑ improving ↓ worsening → no significant change

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

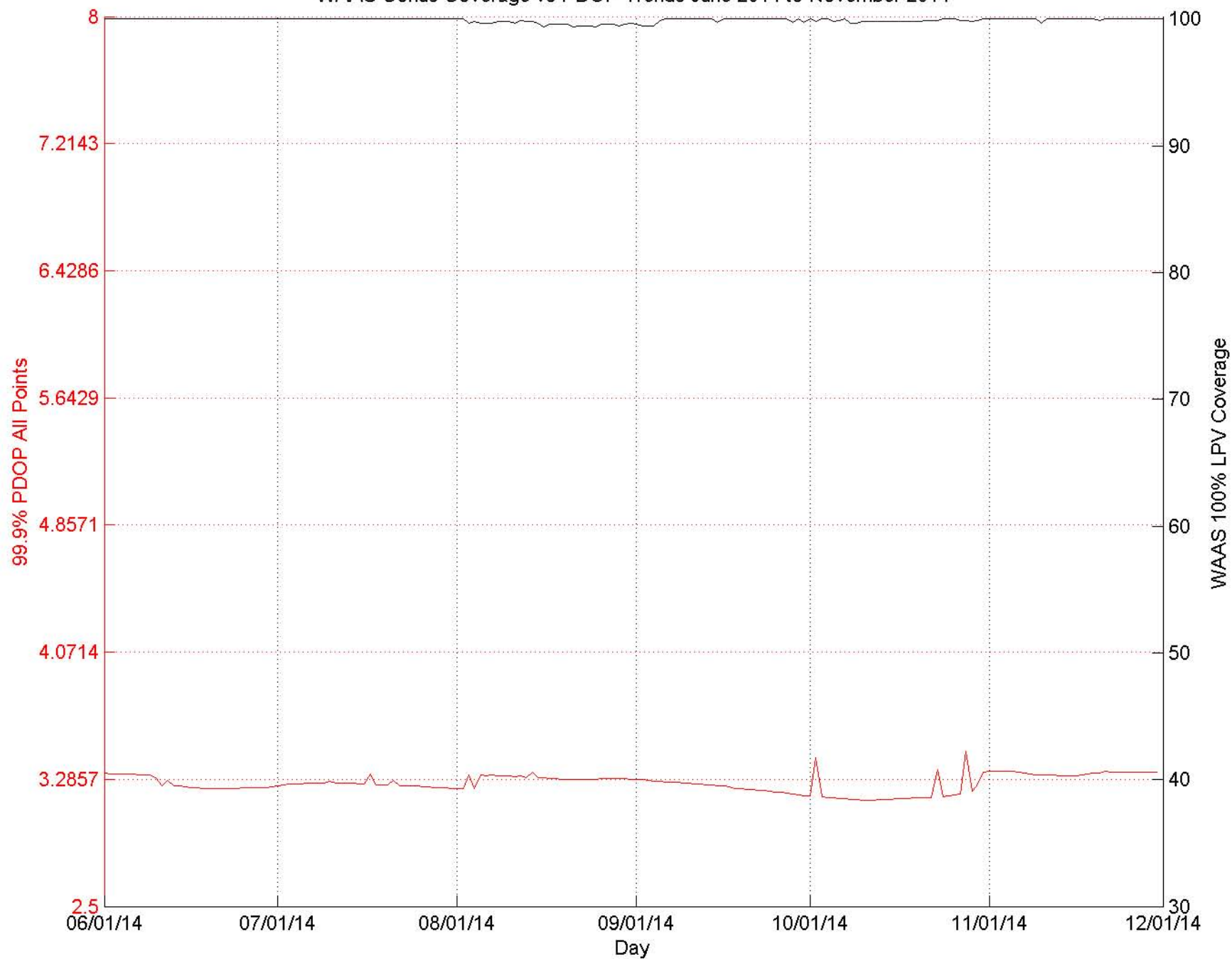
GPS World PDOP 99.99% Index November 2014



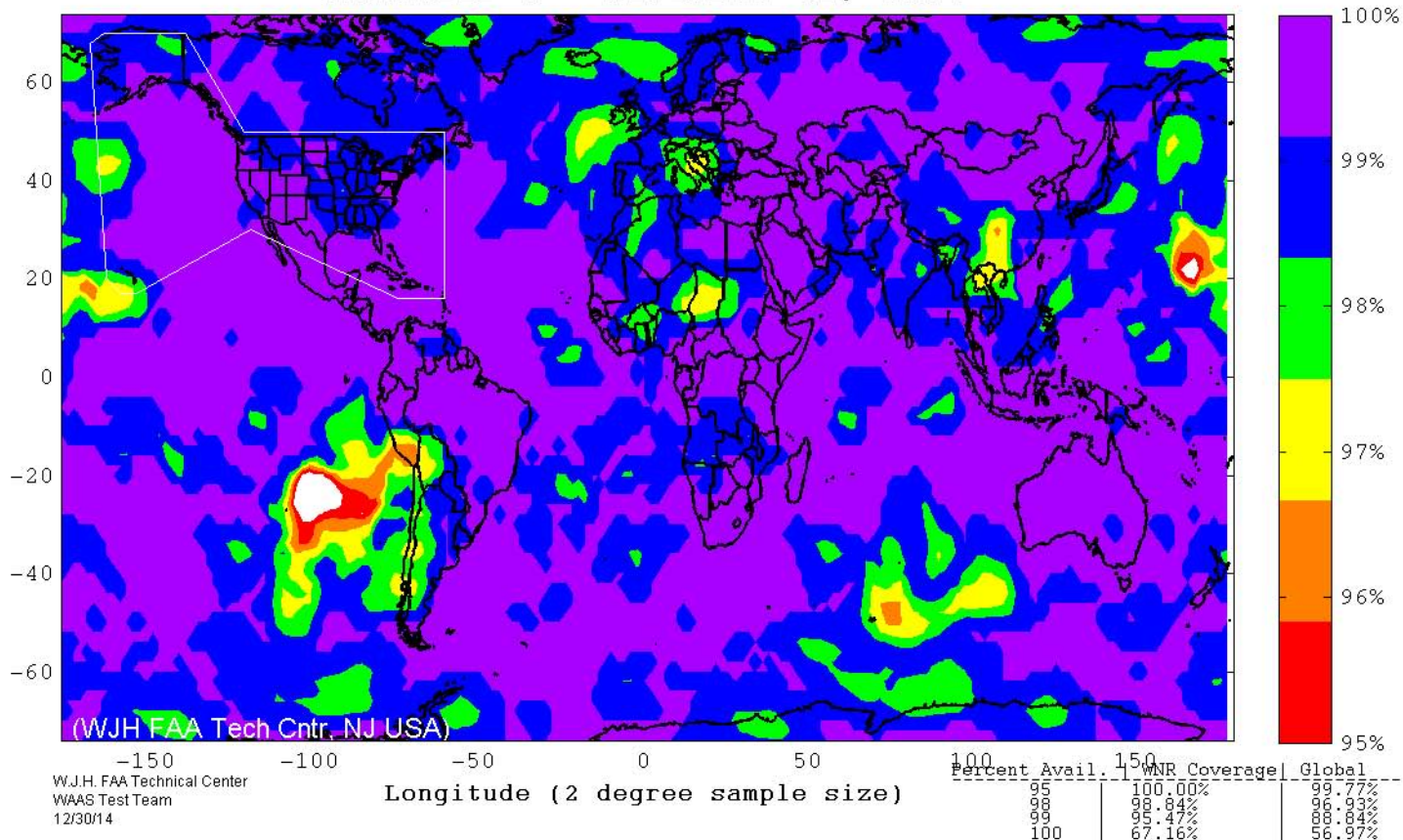
PDOP Trends June 2014 thru November 2014



WAAS Conus Coverage vs PDOP Trends June 2014 to November 2014



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



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

