

Civil Report Card On GPS Performance

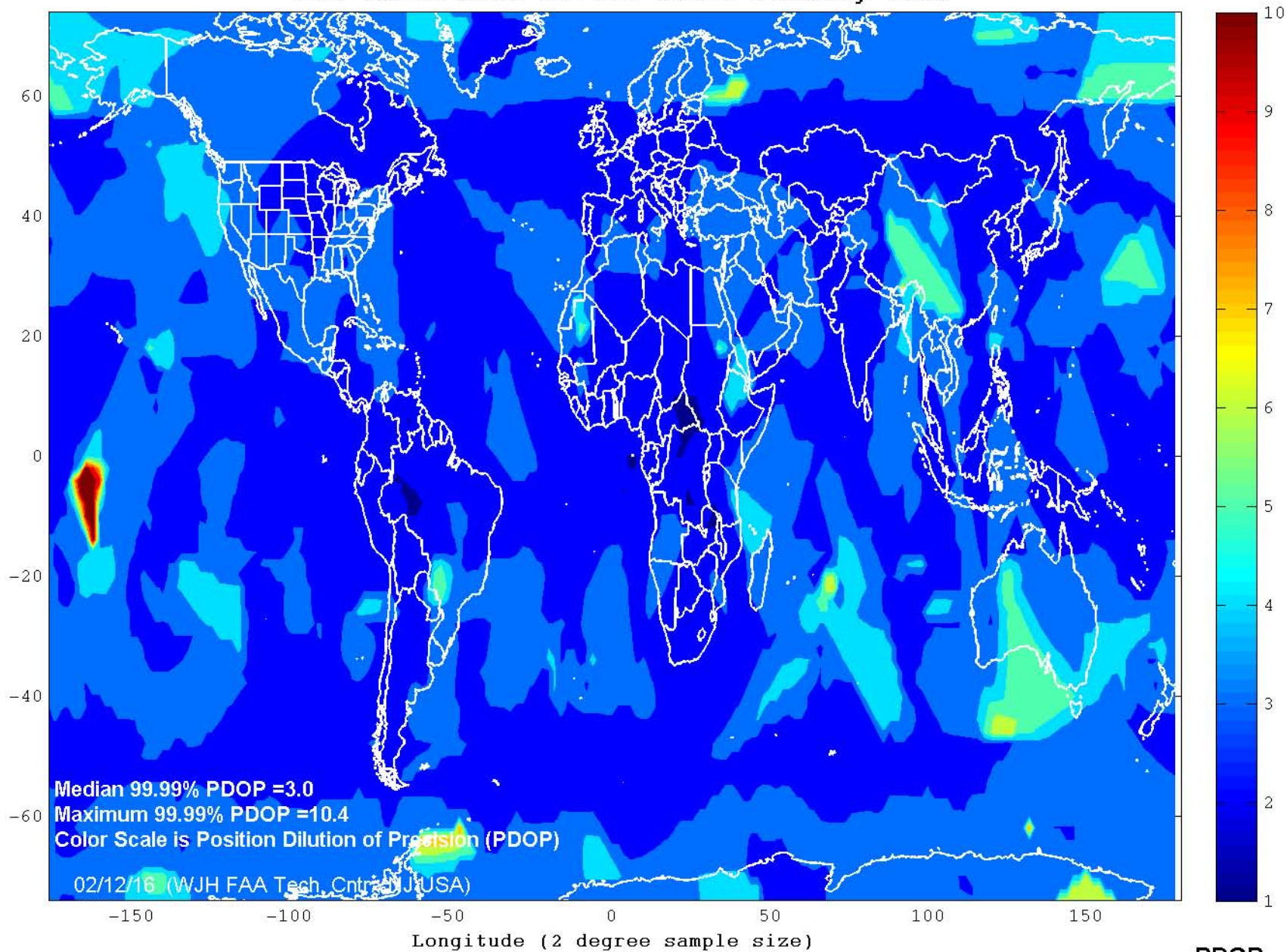
January 2016

Operational Performance Parameter	CY 2015	Dec 2015	Jan 2016	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.50	30.63	30.78	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.99 (99.94%)	23.99 (99.97%)	23.98 (99.91%)	↓	↓
<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	1.3	1.5	↓	↓
<i>Worst Site</i>	9.4	3.9	3.6	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.5	2.5	2.7	↓	↓
<i>Worst Site</i>	34.5	12.2	10.2	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.8	3.0	↓	↓
<i>Worst Site</i>	35.7	12.9	10.4	↑	↑
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	51.34%	87.26%	29.16%	↓	↓
<i>World</i>	55.97%	68.08%	35.85%	↓	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.91	2.04	1.68	↑	↑
<i>Worst Satellite</i>	2.38	3.28	2.53	↓	↑
95% Horizontal Error					
<i>Area Median</i>	2.71	2.37	2.14	↑	↑
<i>Worst Site</i>	9.02	6.11	5.99	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.66%	99.25%	99.52%	↑	↑
95% Vertical Error					
<i>Area Median</i>	4.61	5.77	4.06	↑	↑
<i>Worst Site</i>	8.36	7.28	5.20	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.79%	99.85%	99.97%	↑	↑

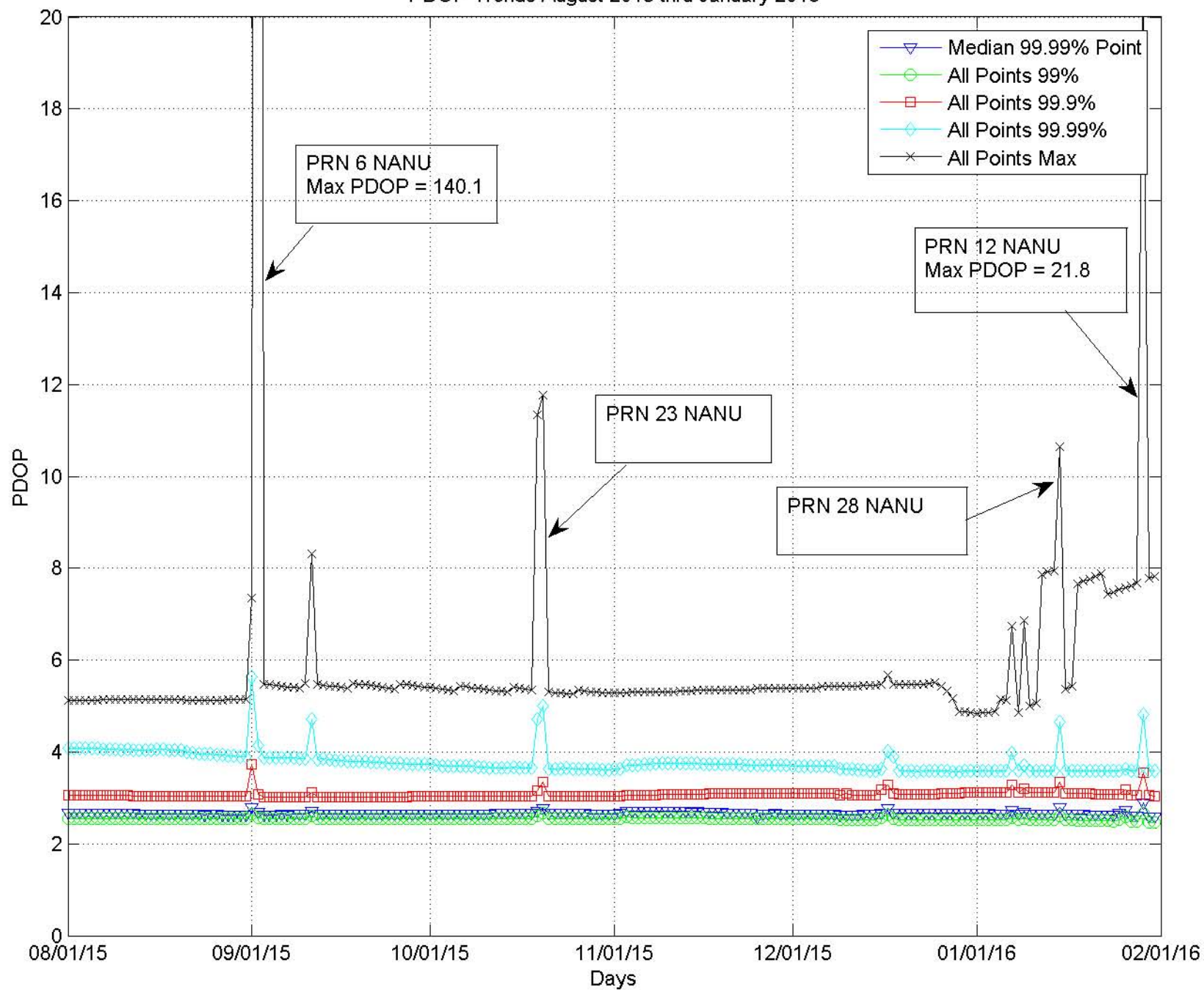
Key: ↑ improving ↓ worsening → no significant change

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

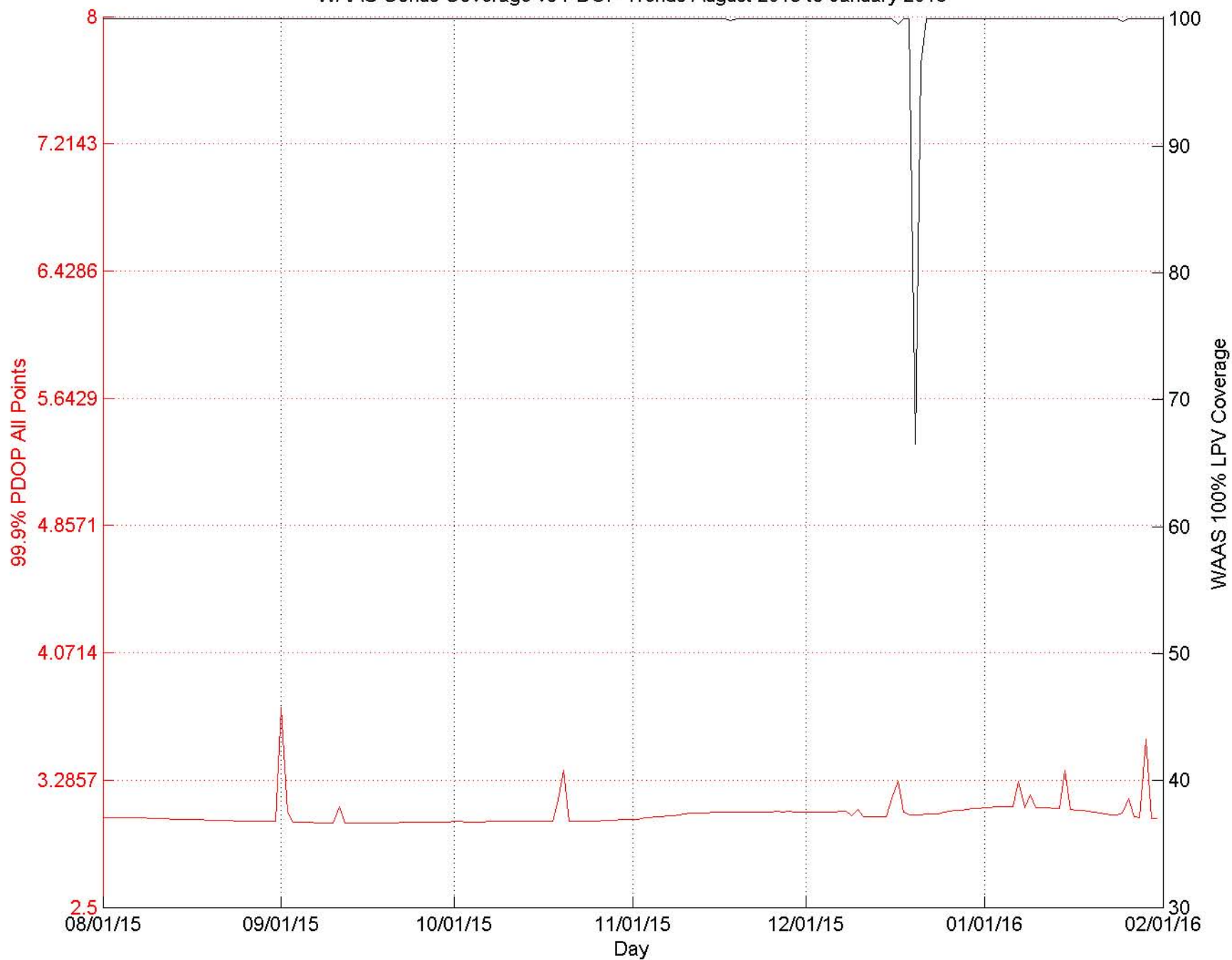
GPS World PDOP 99.99% Index January 2016



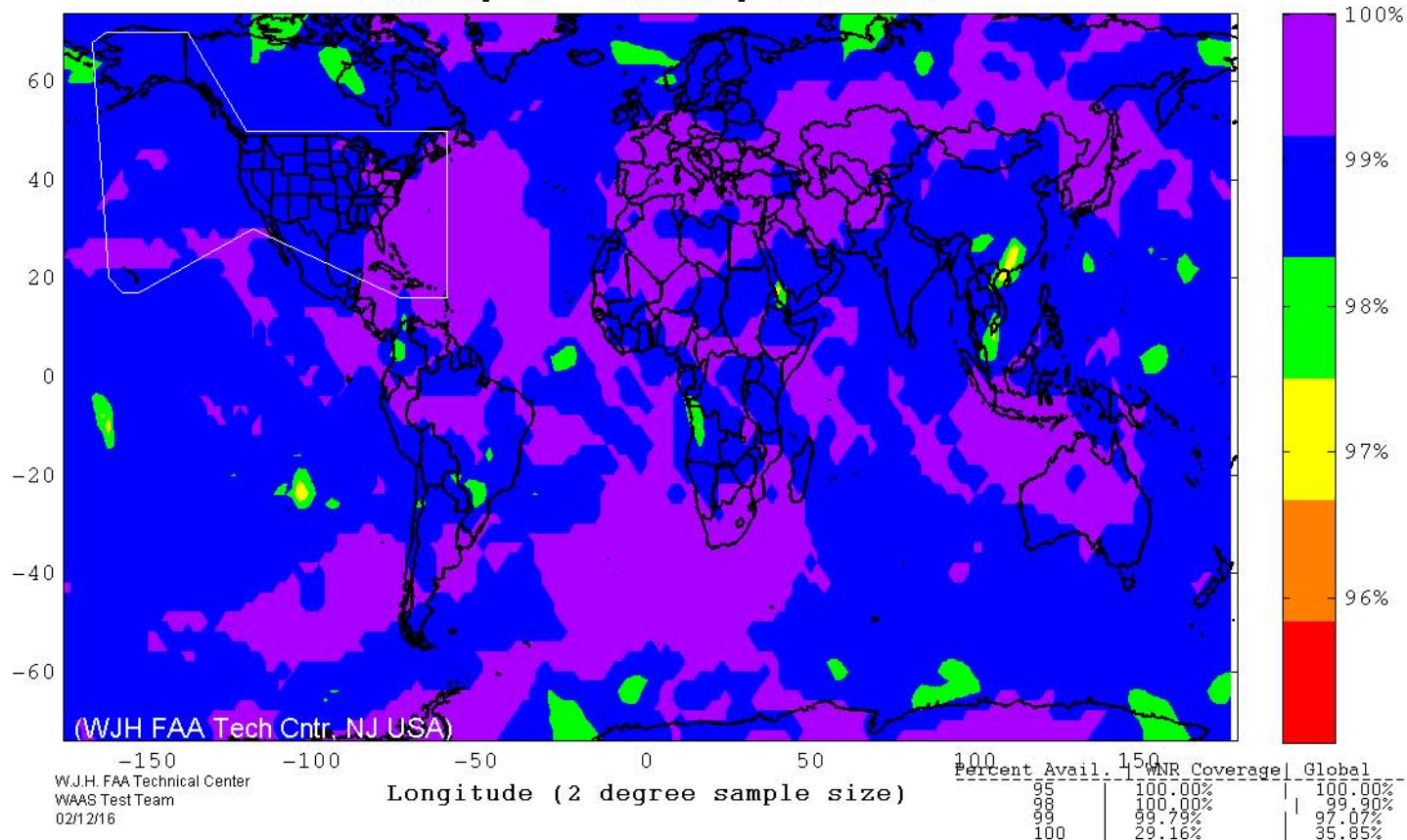
PDOP Trends August 2015 thru January 2016



WAAS Conus Coverage vs PDOP Trends August 2015 to January 2016



SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 January 1 - January 31, 2015



SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 January 1 - January 31, 2015

