

Civil Report Card On GPS Performance

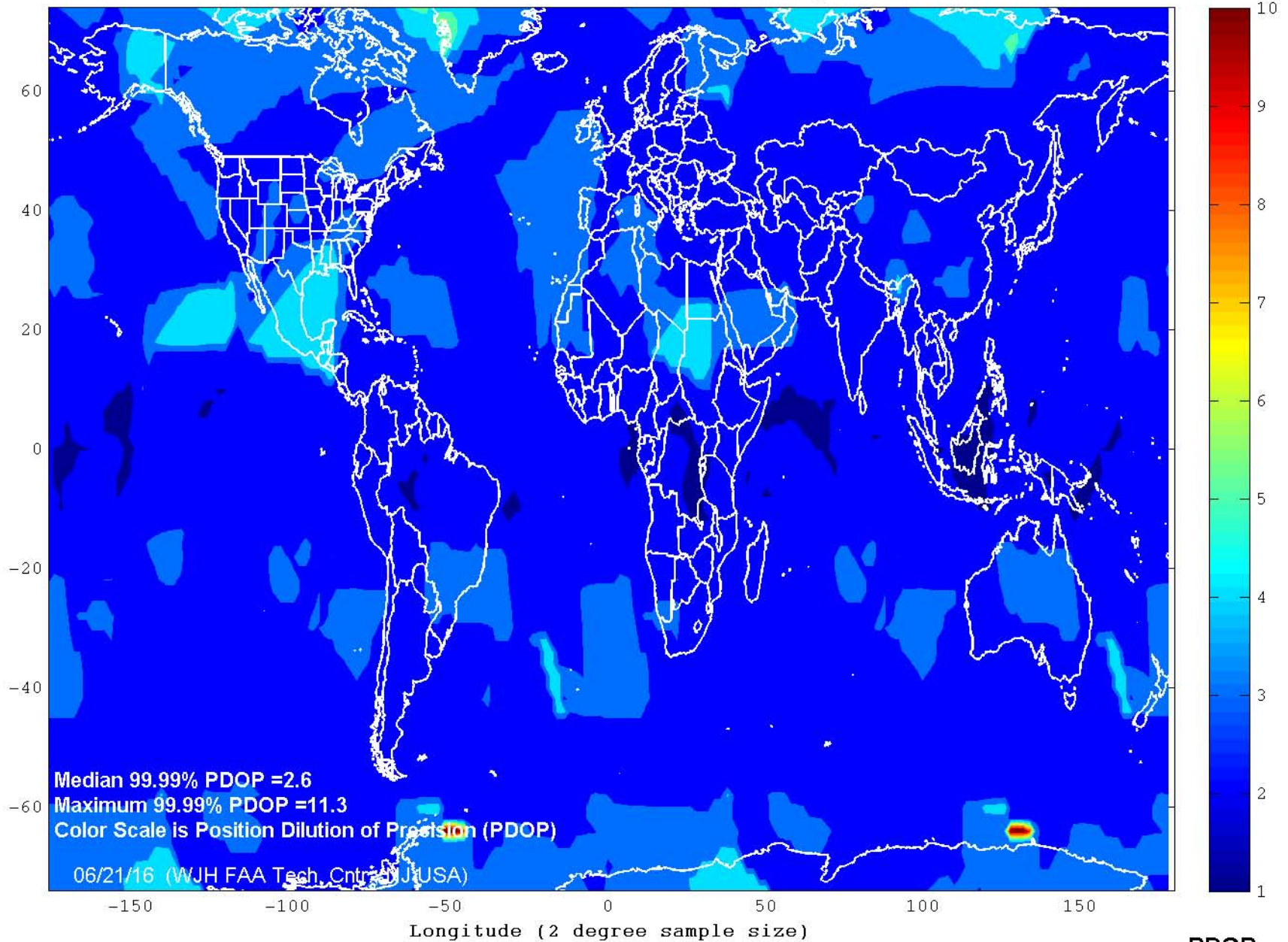
May 2016

Operational Performance Parameter	CY 2015	Apr 2016	May 2016	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.50	30.99	30.98	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.99 (99.94%)	24.00 (100%)	23.99 (99.96%)	↑	↓
<i>Average availability of 6 satellites in view</i>	99.99%	100%	99.99%	→	↓
99.99% Horizontal DOP					
<i>Area Median</i>	1.4	1.3	1.3	↑	→
<i>Worst Site</i>	9.4	2.1	2.7	↑	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.5	2.2	2.3	↑	↓
<i>Worst Site</i>	34.5	7.7	11.1	↑	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.5	2.6	↑	↓
<i>Worst Site</i>	35.7	7.9	11.3	↑	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	51.34%	93.05%	53.79%	↑	↓
<i>World</i>	55.97%	83.94%	75.66%	↑	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.91	1.87	1.69	↑	↑
<i>Worst Satellite</i>	2.38	2.50	2.26	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.71	2.30	2.29	↑	↑
<i>Worst Site</i>	9.02	5.72	4.34	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.66%	99.39%	99.69%	↑	↑
95% Vertical Error					
<i>Area Median</i>	4.61	4.75	4.32	↑	↑
<i>Worst Site</i>	8.36	5.93	5.14	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.79%	99.95%	99.98%	↑	↑

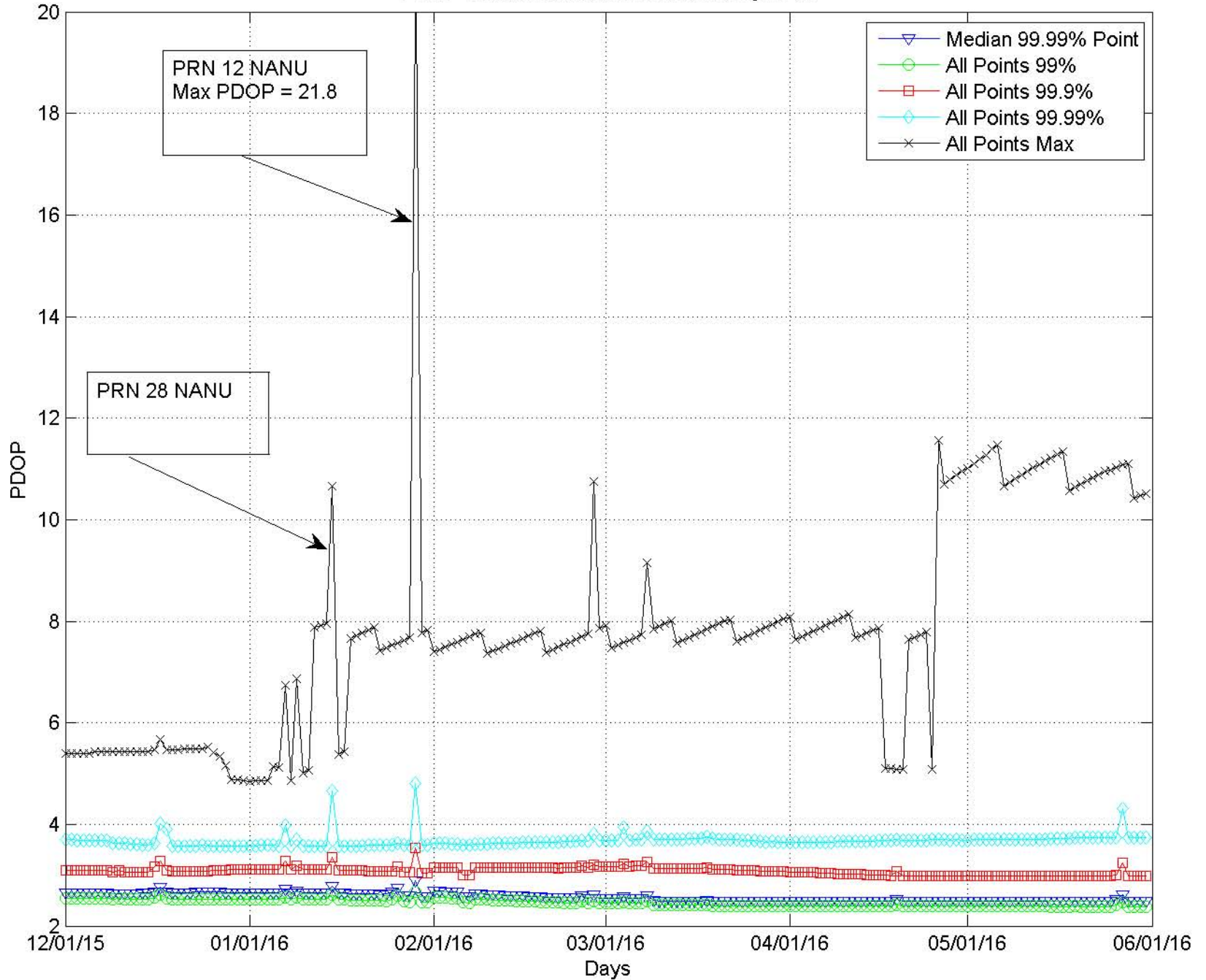
Key: ↑ improving ↓ worsening → no significant change

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

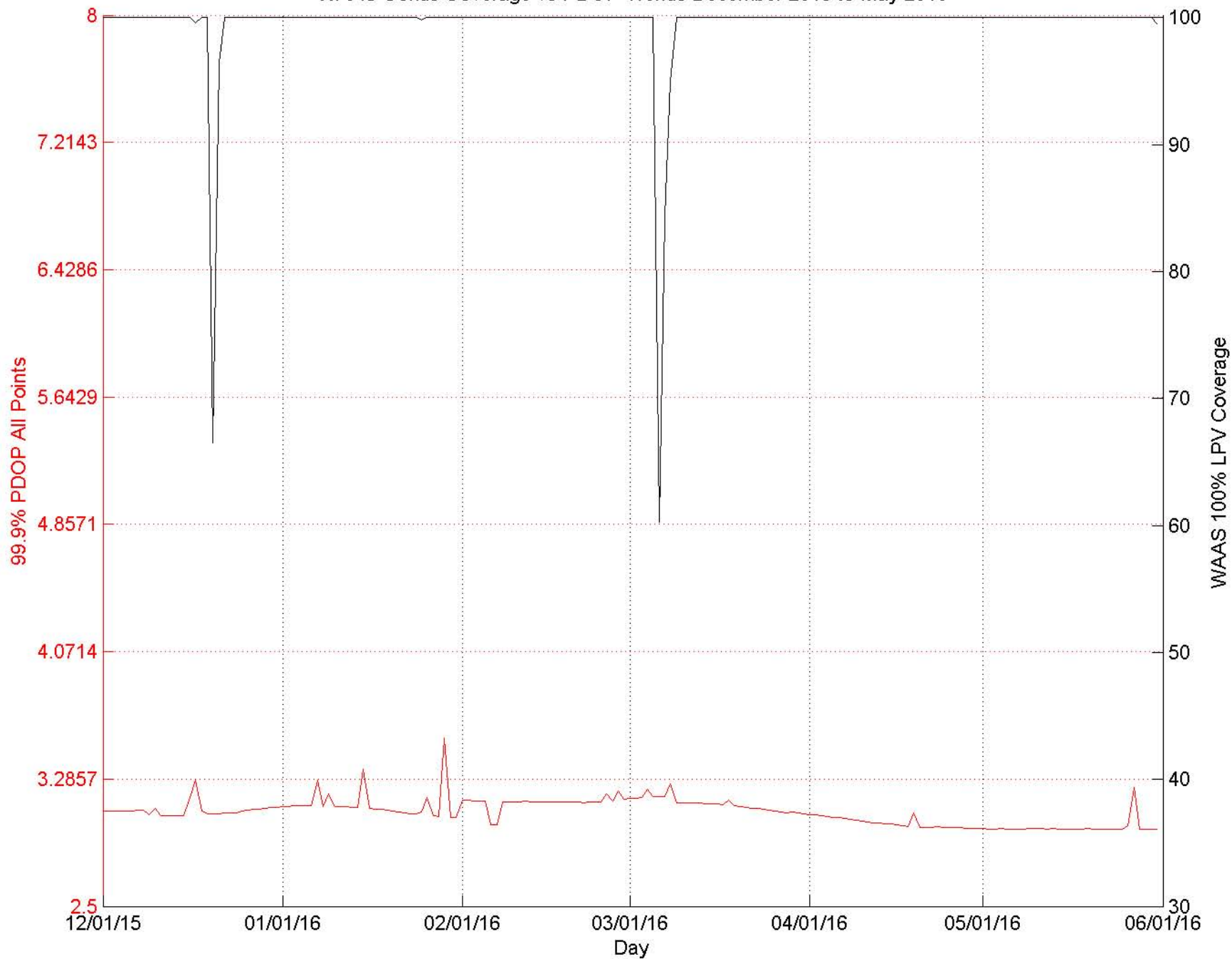
GPS World PDOP 99.99% Index May 2016



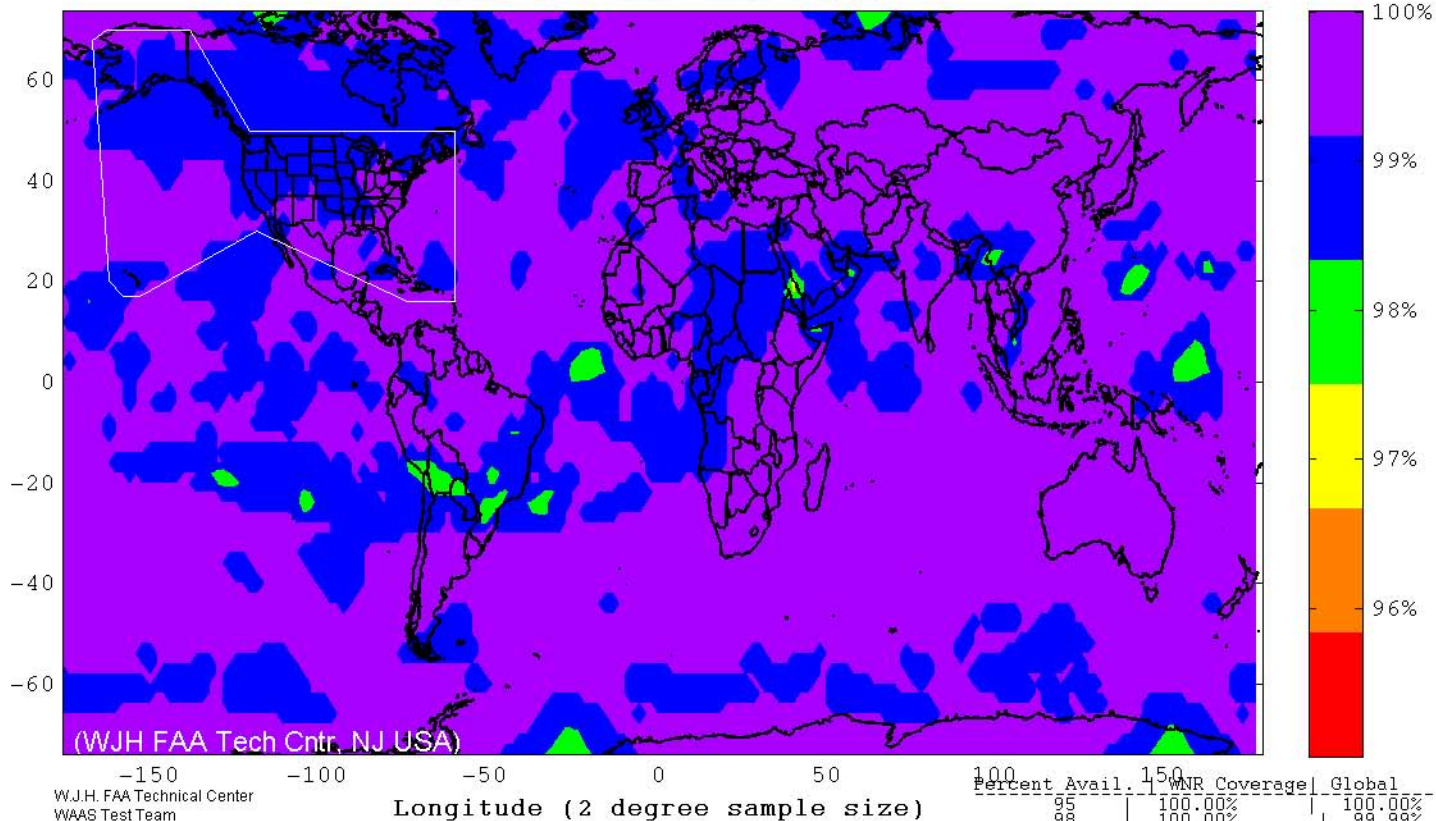
PDOP Trends December 2015 thru May 2016



WAAS Conus Coverage vs PDOP Trends December 2015 to May 2016



SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 May 1 - May 31, 2016



W.J.H. FAA Technical Center
 WAAS Test Team
 06/21/16

Longitude (2 degree sample size)

100 Percent Avail. 150 WNR Coverage Global

SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 May 1 - May 31, 2016

