

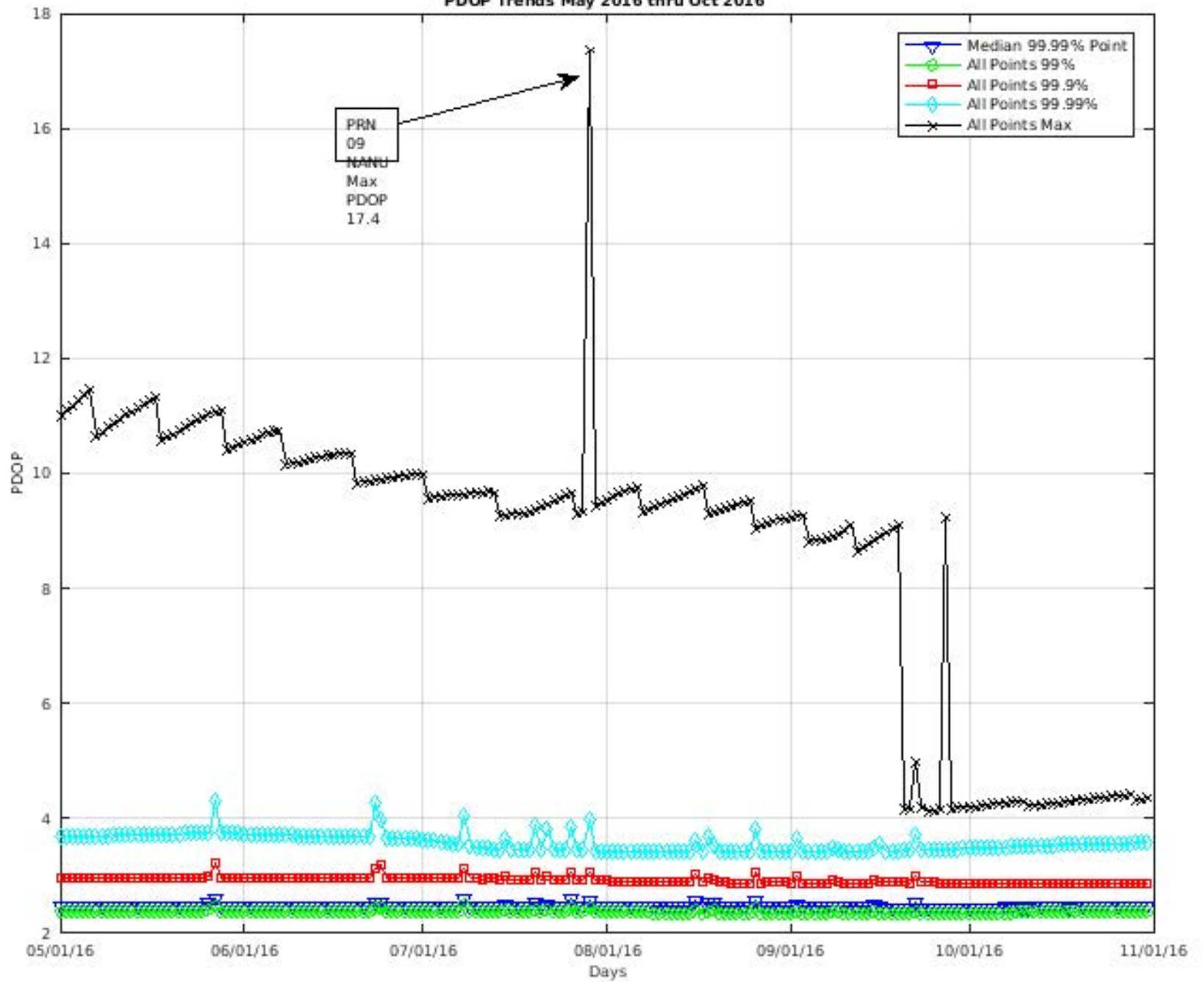
# Civil Report Card On GPS Performance Oct 2016

Operational Performance Parameter	CY 2015	Sep 2016	Oct 2016	Long term	Short term
<b>Availability Parameters</b>					
<i>Average Number of satellites usable</i>	30.50	30.97	31	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.99 (99.94%)	23.97 (99.87)	24	↑	↑
<i>Average availability of 6 satellites in view</i>	99.99%	100%	100%	↑	→
<b>99.99% Horizontal DOP</b>					
<i>Area Median</i>	1.4	1.3	1.3	↑	→
<i>Worst Site</i>	9.4	2.3	2.1	↑	↑
<b>99.99% Vertical DOP</b>					
<i>Area Median</i>	2.5	2.2	2.2	↑	→
<i>Worst Site</i>	34.5	8.8	4.0	↑	↑
<b>99.99% Position DOP (PDOP)</b>					
<i>Area Median</i>	2.8	2.6	2.5	↑	↑
<i>Worst Site</i>	35.7	9.1	4.4	↑	↑
<b>100% RAIM Availability (HAL=185m)</b>					
<i>NPA Service Area (NSA)</i>	51.34%	89.05%	99.79%	↑	↑
<i>World</i>	55.97%	84.93%	91.25%	↑	↑
<b>Accuracy Parameters</b>					
89.05%					
<b>RMS Single Frequency User Range Error</b>					
<i>Constellation Median</i>	1.91	1.63	1.64	↑	↓
<i>Worst Satellite</i>	2.38	16.9	16.43	↓	↑
<b>95% Horizontal Error</b>					
<i>Area Median</i>	2.71	2.11	2.02	↑	↑
<i>Worst Site</i>	9.02	4.97	4.96	↑	↑
<i>Availability (% &lt;4.5m (historical 3-sigma))</i>	98.66%	99.53%	99.63%	↑	↑
<b>95% Vertical Error</b>					
<i>Area Median</i>	4.61	3.78	3.66	↑	↑
<i>Worst Site</i>	8.36	5.02	4.62	↑	↑
<i>Availability (% &lt; 9m (historical 3-sigma))</i>	99.79%	99.99%	99.98%	↑	↓

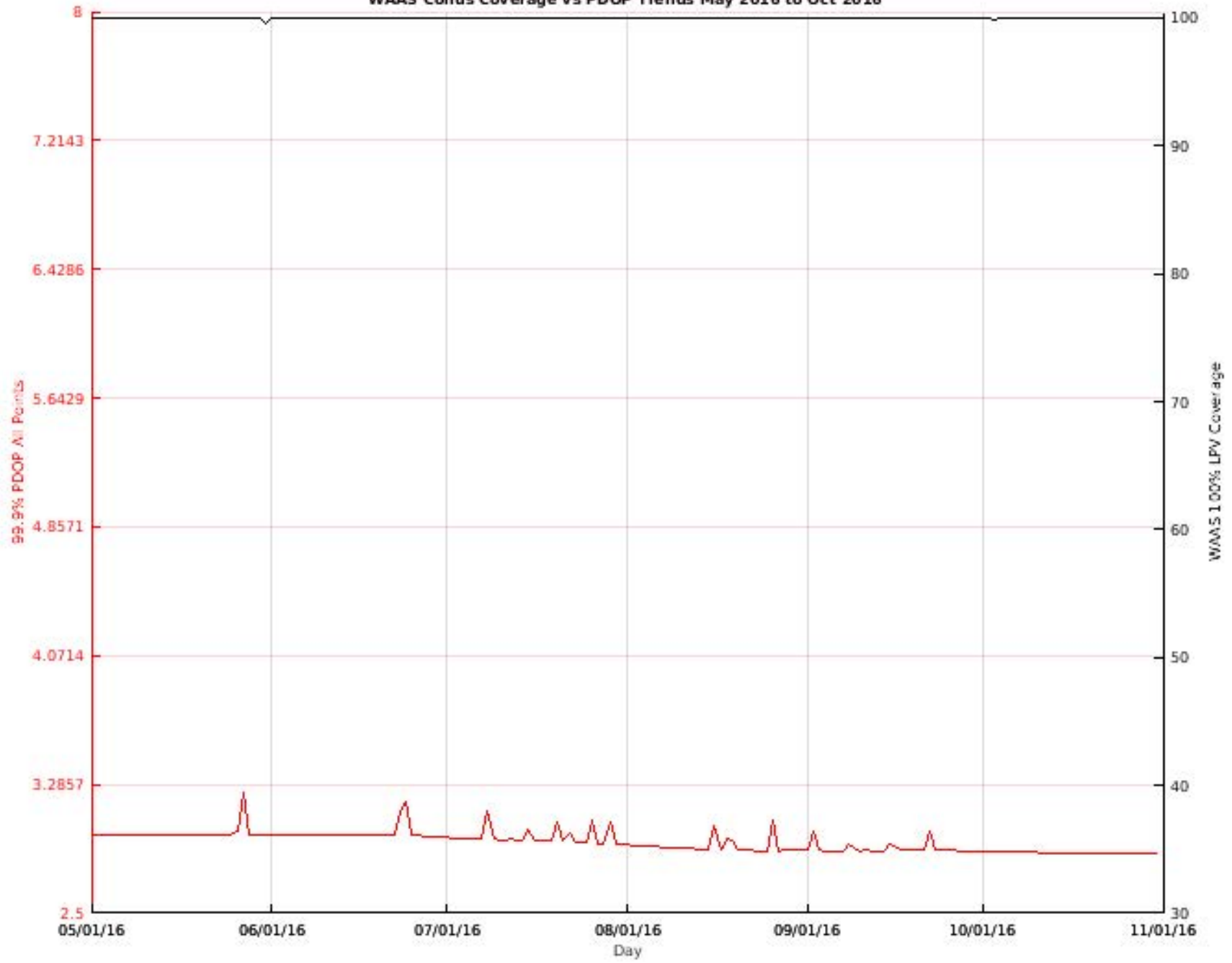
Key: ↑ improving ↓ worsening → no significant change

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

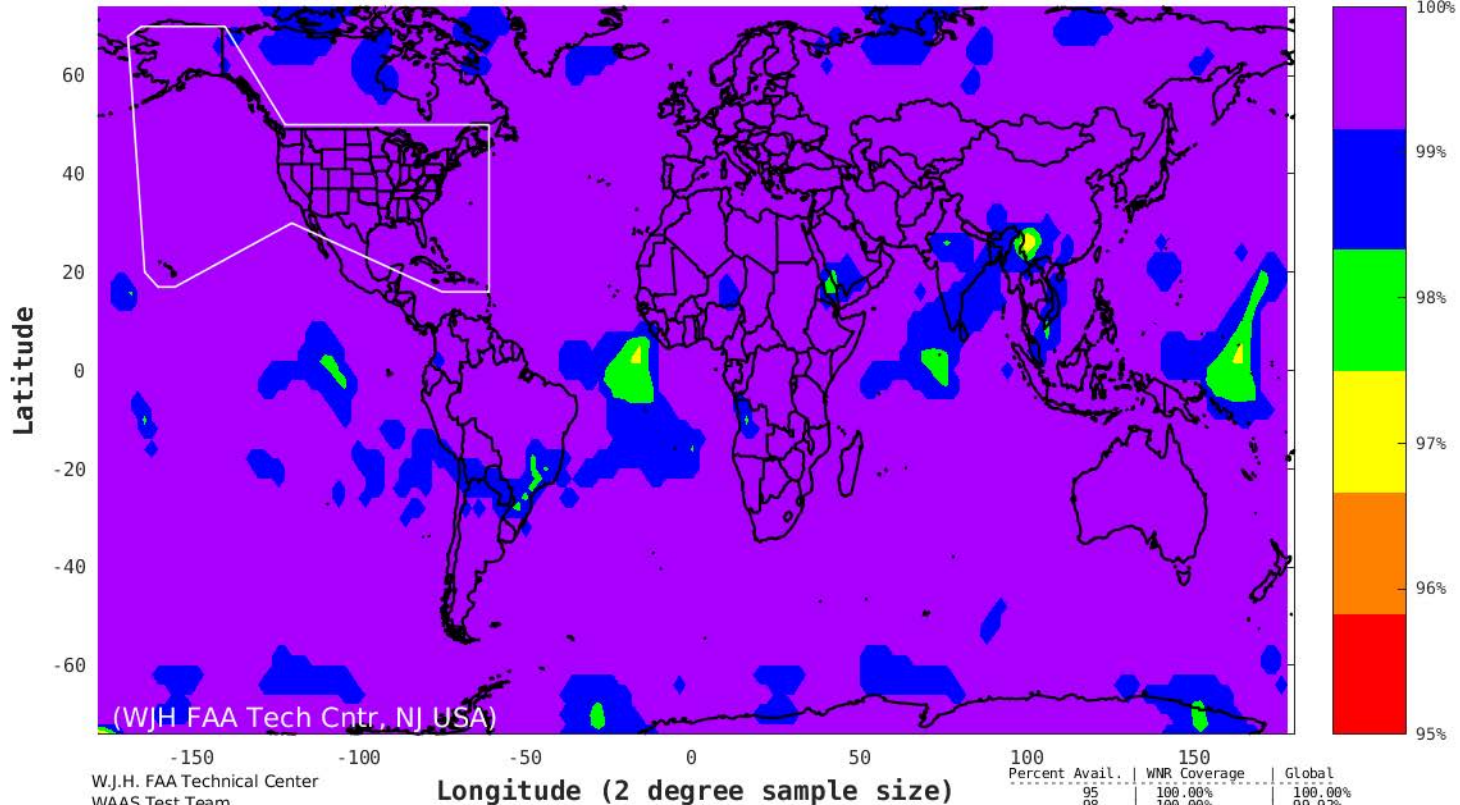
PDOP Trends May 2016 thru Oct 2016



WAAS Conus Coverage vs PDOP Trends May 2016 to Oct 2016



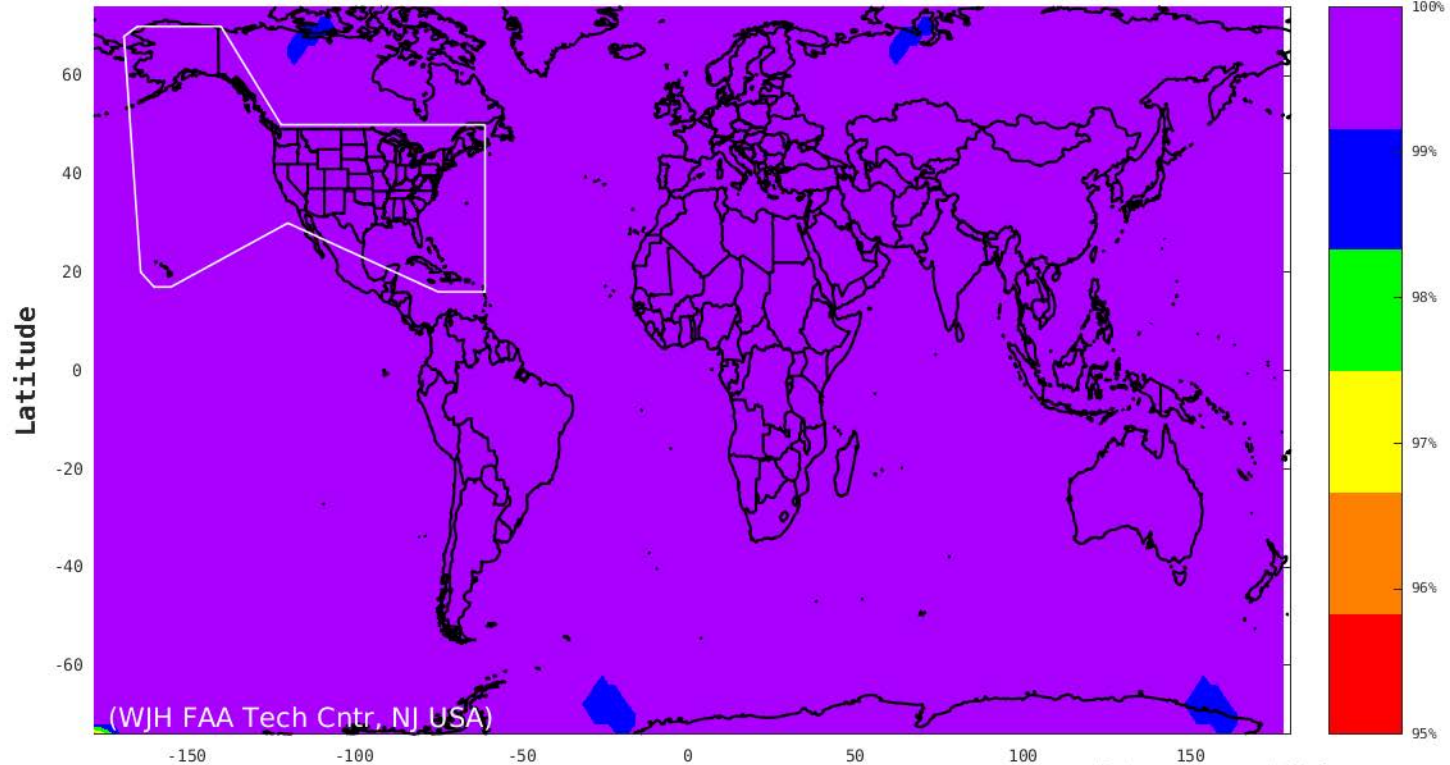
**SPS RAIM RNP 0.1 (HAL = 185m) Availability  
 FD Only, SA Off, without Baro-Aiding  
 Oct 1 - Oct 31, 2016**



(WJH FAA Tech Cntr, NJ USA)

W.J.H. FAA Technical Center  
 WAAS Test Team  
 11/15/16

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



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**Longitude (2 degree sample size)**

Percent Avail.	WNR Coverage	Global
95	100.00%	100.00%
98	100.00%	100.00%
99	100.00%	100.00%
100	100.00%	99.59%

GPS World PDOP 99.99% Index Oct 2016

