

Civil Report Card On GPS Performance

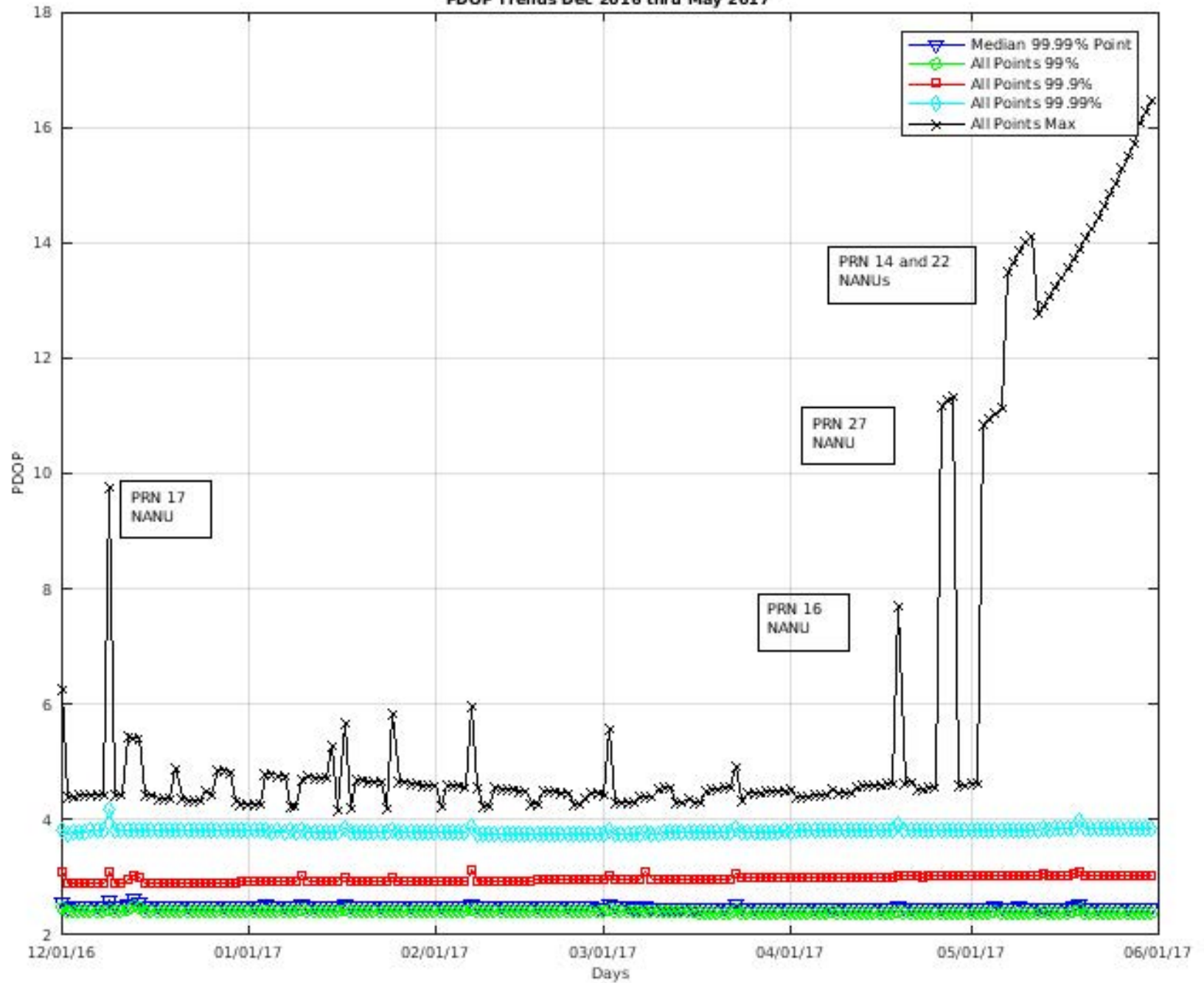
May 2017

Operational Performance Parameter	CY 2016	Apr 2017	May 2017	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.85	30.99	30.98	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.99 (99.94%)	23.99 (99.97%)	23.99 (99.95%)	↑	↓
<i>Average availability of 6 satellites in view</i>	99.94%	100%	100%	↑	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.3	1.3	1.3	→	→
<i>Worst Site</i>	4.9	2.1	3.6	↑	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.3	2.2	2.3	→	↓
<i>Worst Site</i>	15.1	5.2	15.1	→	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.6	2.5	2.6	→	↓
<i>Worst Site</i>	15.8	5.3	15.5	↑	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	76.93%	99.37%	65.05%	↓	↓
<i>World</i>	68.27%	86.69%	77.79%	↑	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.64	1.86	1.56	↑	↑
<i>Worst Satellite</i>	16.90	16.03	10.04	↑	↑
95% Horizontal Error					
<i>Area Median</i>	1.98	2.17	1.86	↑	↑
<i>Worst Site</i>	7.82	4.33	3.19	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.65%	99.79%	99.99%	↑	↑
95% Vertical Error					
<i>Area Median</i>	3.87	4.99	3.82	↑	↑
<i>Worst Site</i>	15.03	6.43	4.55	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.98%	99.89%	100%	↑	↑

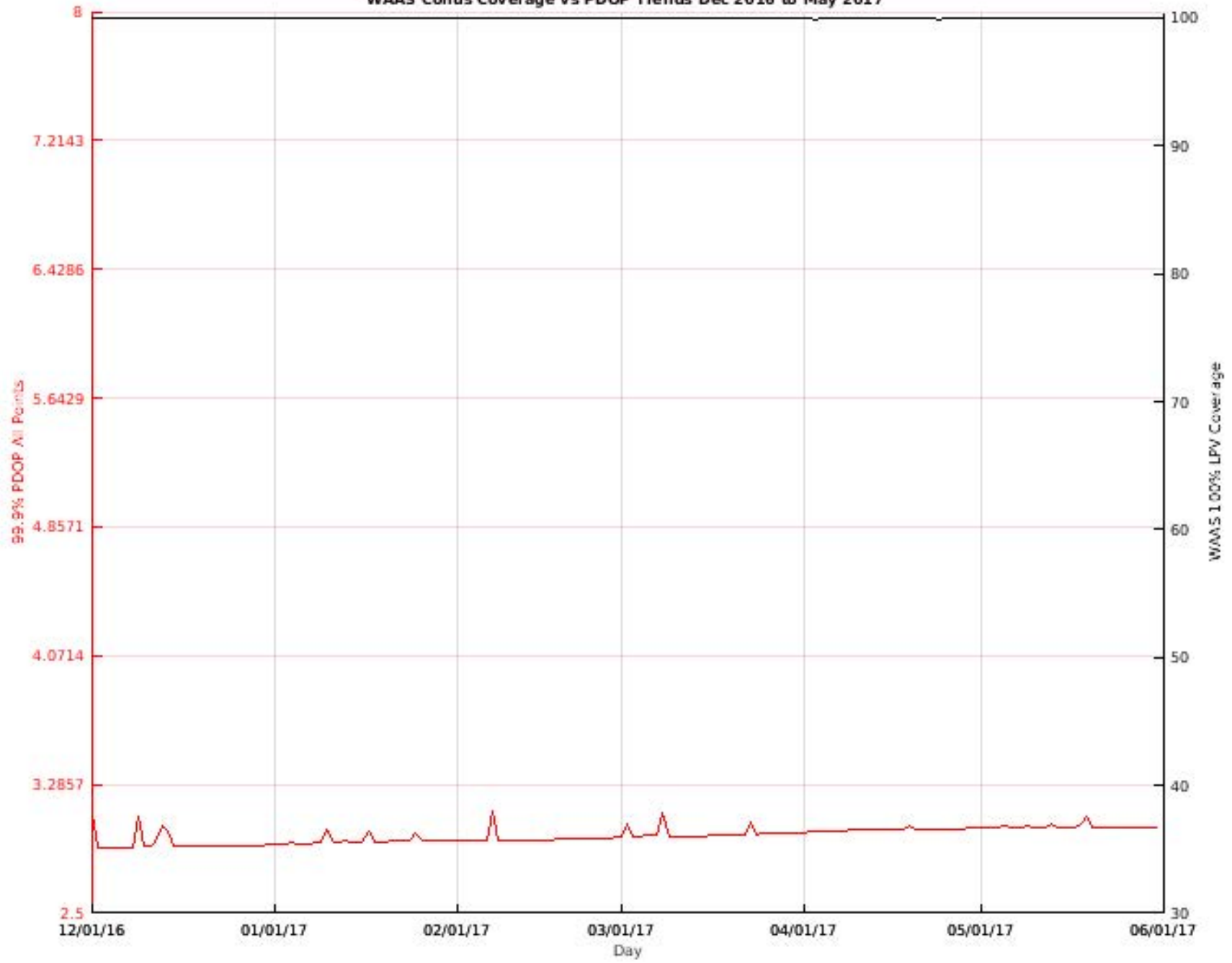
Key: ↑ improving ↓ worsening → no significant change

Long Term is current month vs. prior 12 months; Short Term is current month vs. prior month

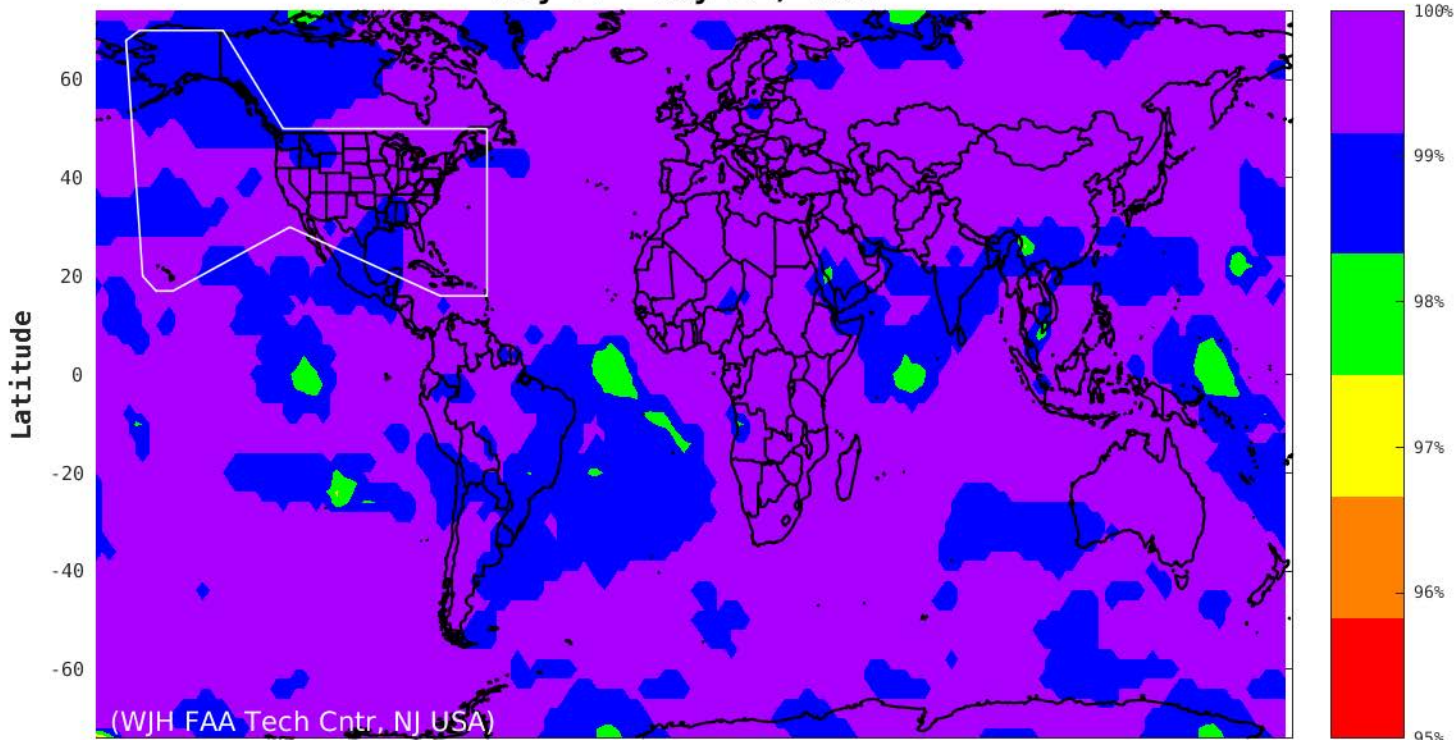
PDOP Trends Dec 2016 thru May 2017



WAAS Conus Coverage vs PDOP Trends Dec 2016 to May 2017



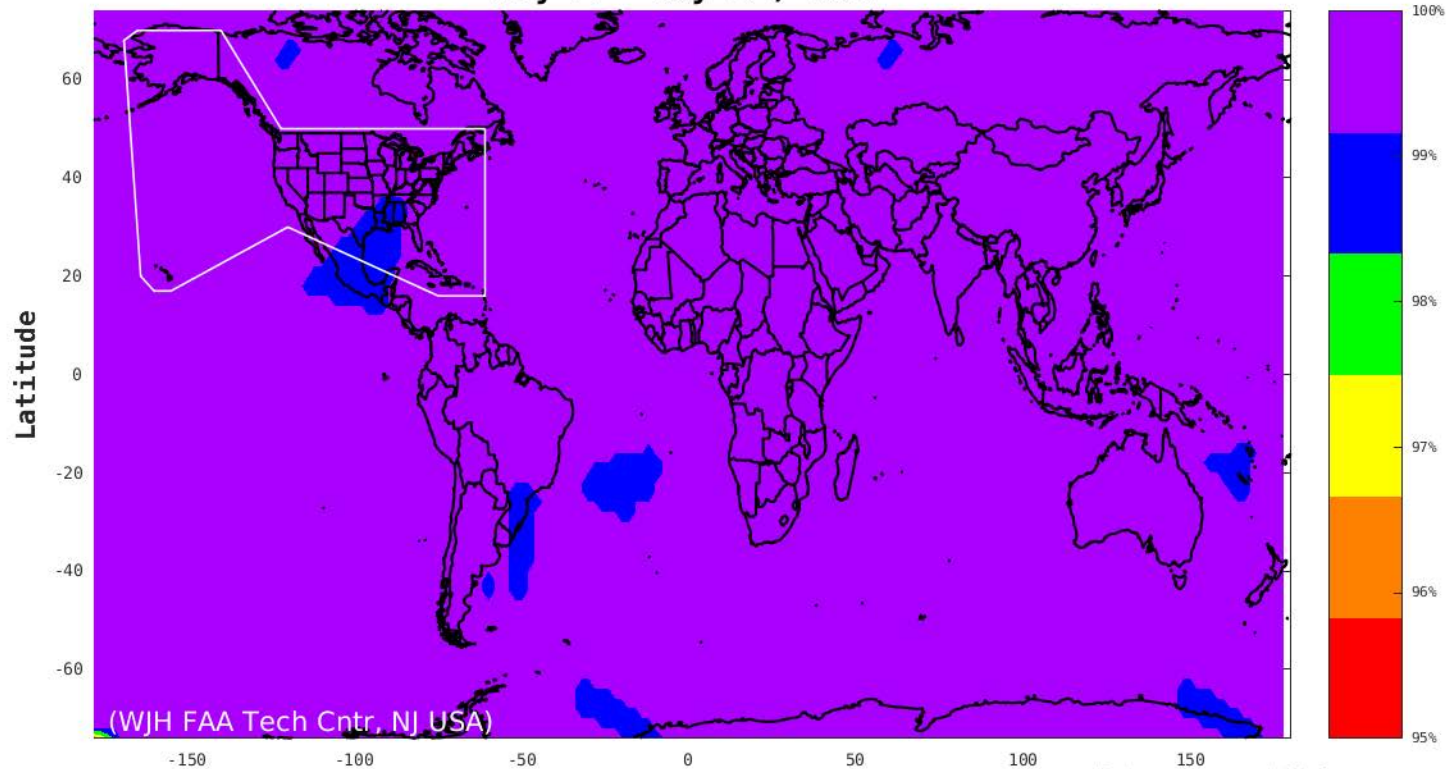
**SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 May 1 - May 31, 2017**



W.J.H. FAA Technical Center
 WAAS Test Team
 06/05/17

100 Percent Avail.	150 WNR Coverage	Global
95	100.00%	100.00%
98	100.00%	99.98%
99	100.00%	98.79%
100	65.05%	77.79%

**SPS RAIM RNP 0.3 (HAL = 556m) Availability
FD Only, SA Off, without Baro-Aiding
May 1 - May 31, 2017**



W.J.H. FAA Technical Center
WAAS Test Team
06/05/17

Longitude (2 degree sample size)

100	150	Global
Percent Avail.	WNR Coverage	
95	100.00%	100.00%
98	100.00%	100.00%
99	100.00%	100.00%
100	95.58%	98.17%

GPS World PDOP 99.99% Index May 2017

