

Civil Report Card On GPS Performance

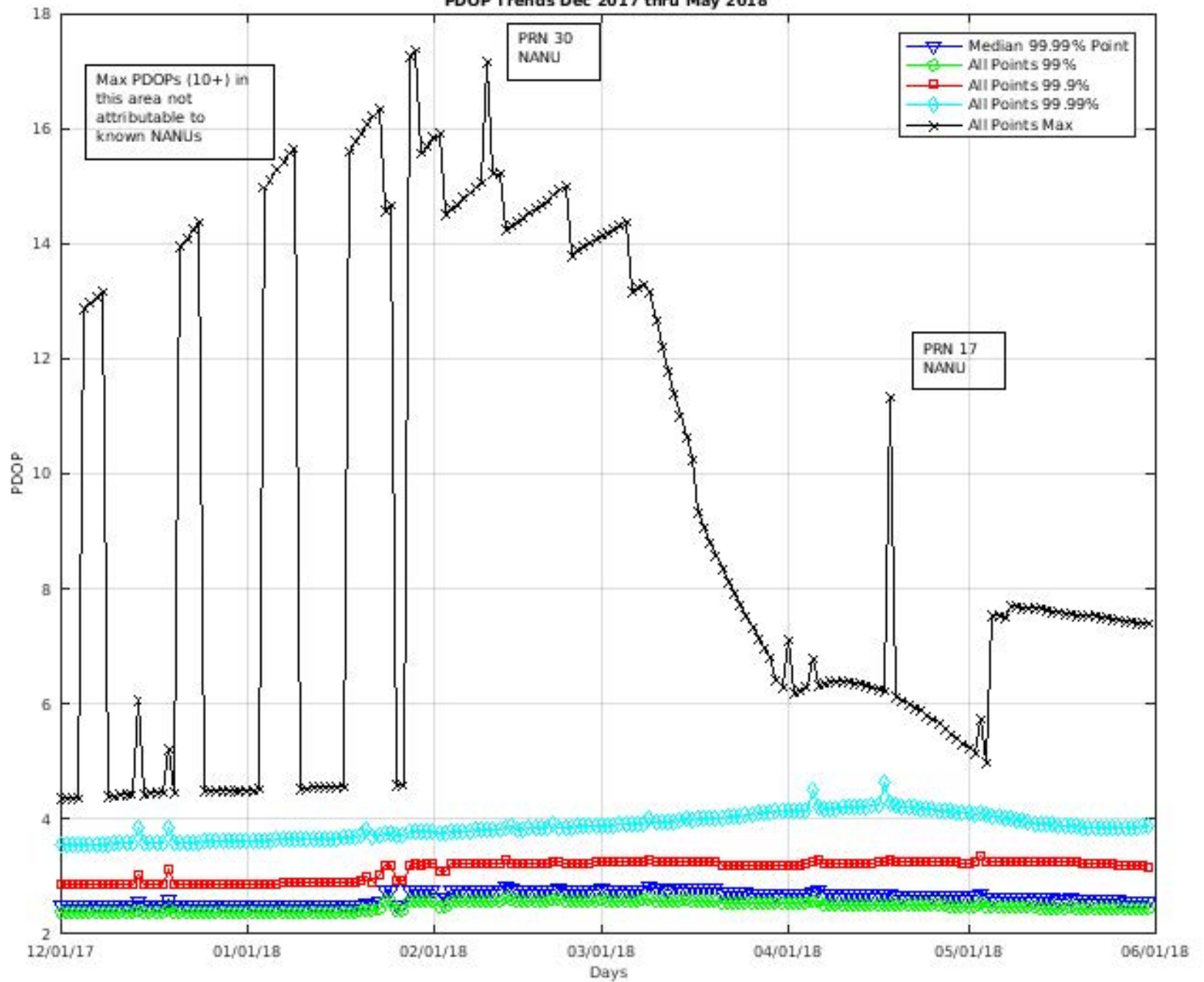
May 2018

Operational Performance Parameter	CY 2017	Apr 2018	May 2018	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.97	30.98	30.98	↑	→
<i>Average number of satellites usable in primary slots</i>	23.97 (99.88%)	23.98 (99.94%)	23.99 (99.96%)	↑	↑
<i>Average availability of 6 satellites in view</i>	100%	100%	100%	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.3	1.4	1.4	↓	→
<i>Worst Site</i>	4.3	3.5	2.9	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.3	2.5	2.4	↓	↑
<i>Worst Site</i>	15.9	10.3	7.1	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.6	2.8	2.7	↓	↑
<i>Worst Site</i>	16.5	10.9	7.7	↑	↑
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	72.87%	44.21%	77.26%	↑	↑
<i>World</i>	73.40%	58.00%	71.26%	↓	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.57	1.74	1.59	↓	↑
<i>Worst Satellite</i>	20.74	13.85	11.44	↑	↑
95% Horizontal Error					
<i>Area Median</i>	1.80	1.99	1.87	↓	↑
<i>Worst Site</i>	4.67	3.55	3.11	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.90%	99.95%	99.99%	↑	↑
95% Vertical Error					
<i>Area Median</i>	3.81	4.54	3.94	↓	↑
<i>Worst Site</i>	6.43	3.55	4.62	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.99%	100%	100%	↑	→

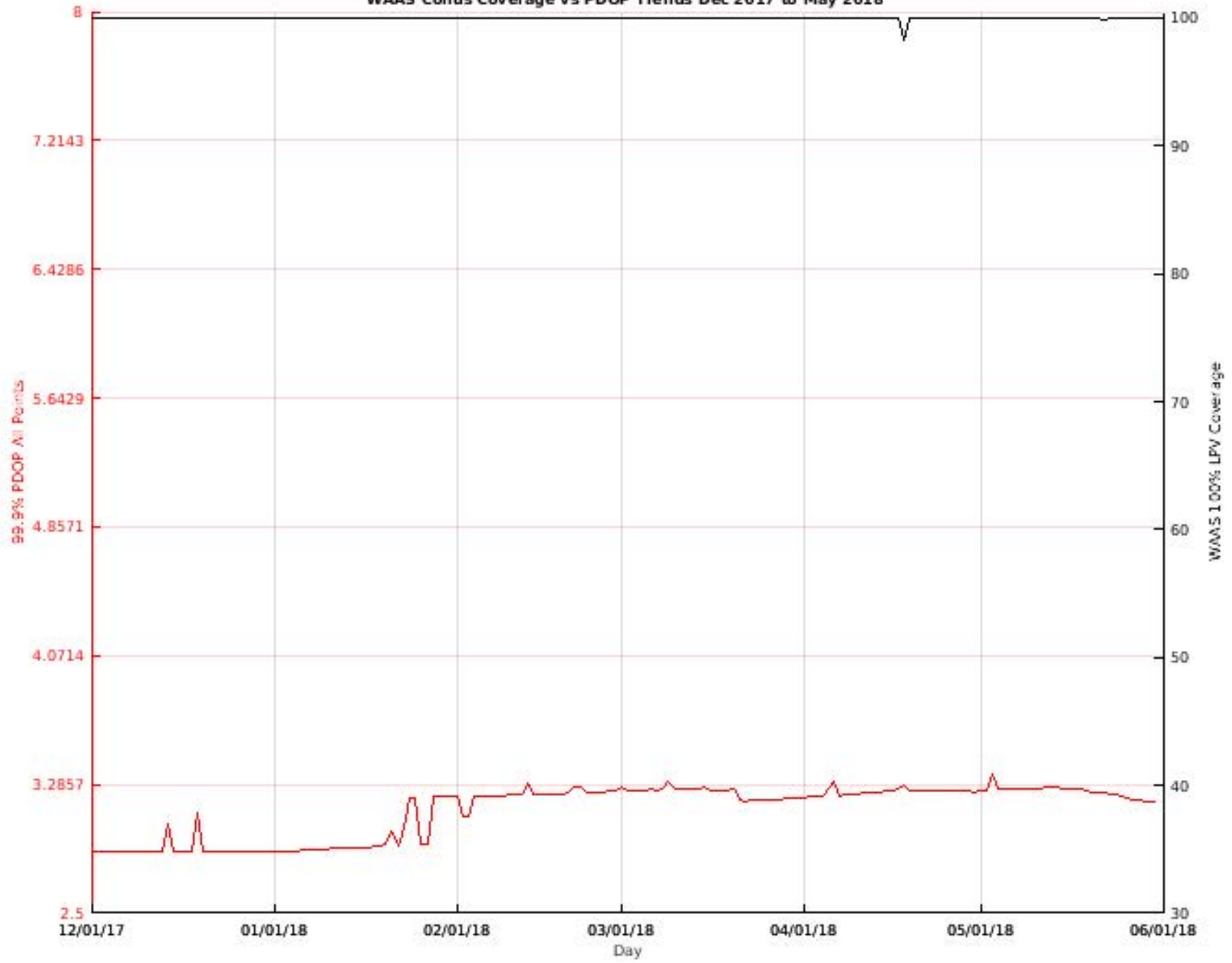
Key: ↑ improving ↓ worsening → no significant change

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

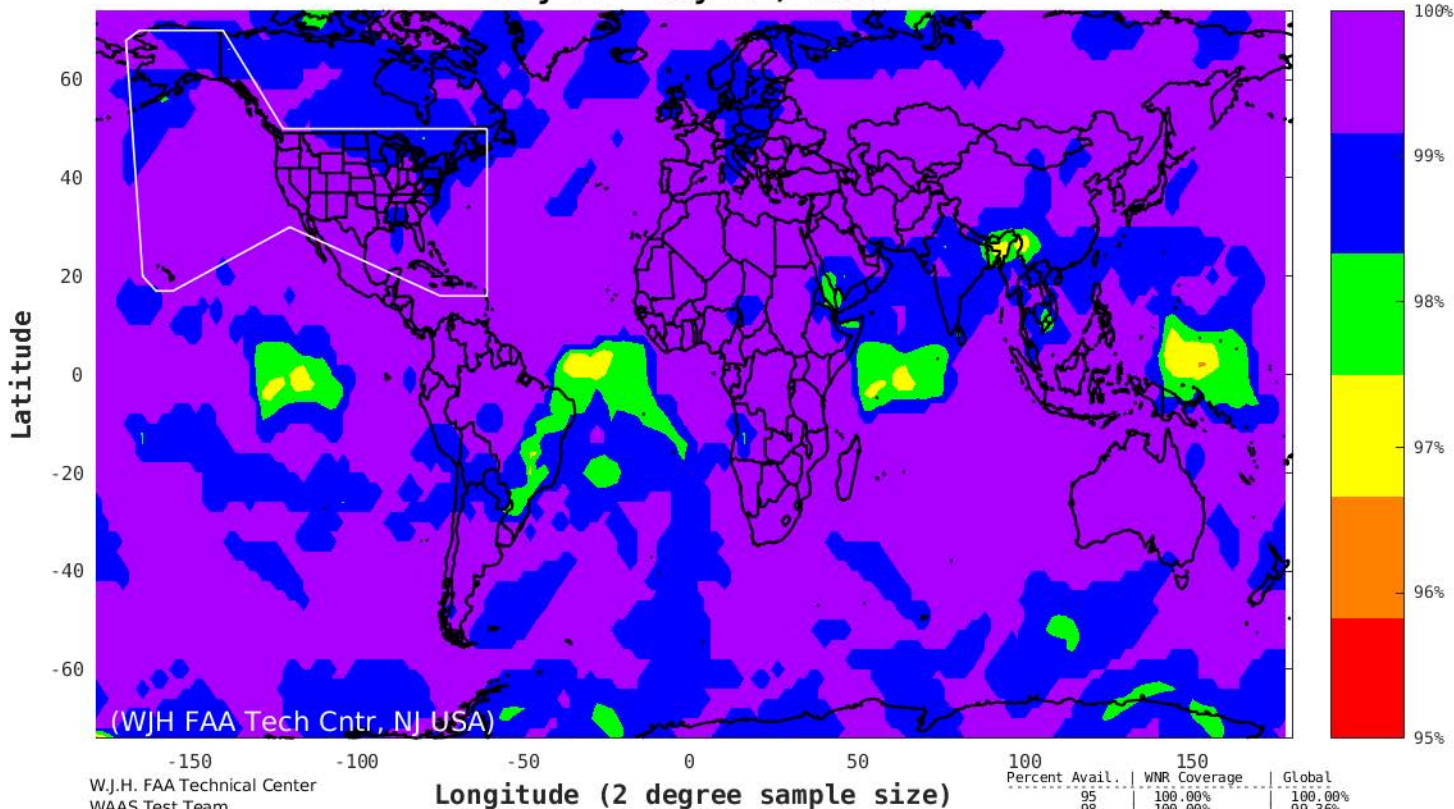
PDOP Trends Dec 2017 thru May 2018



WAAS Conus Coverage vs PDOP Trends Dec 2017 to May 2018

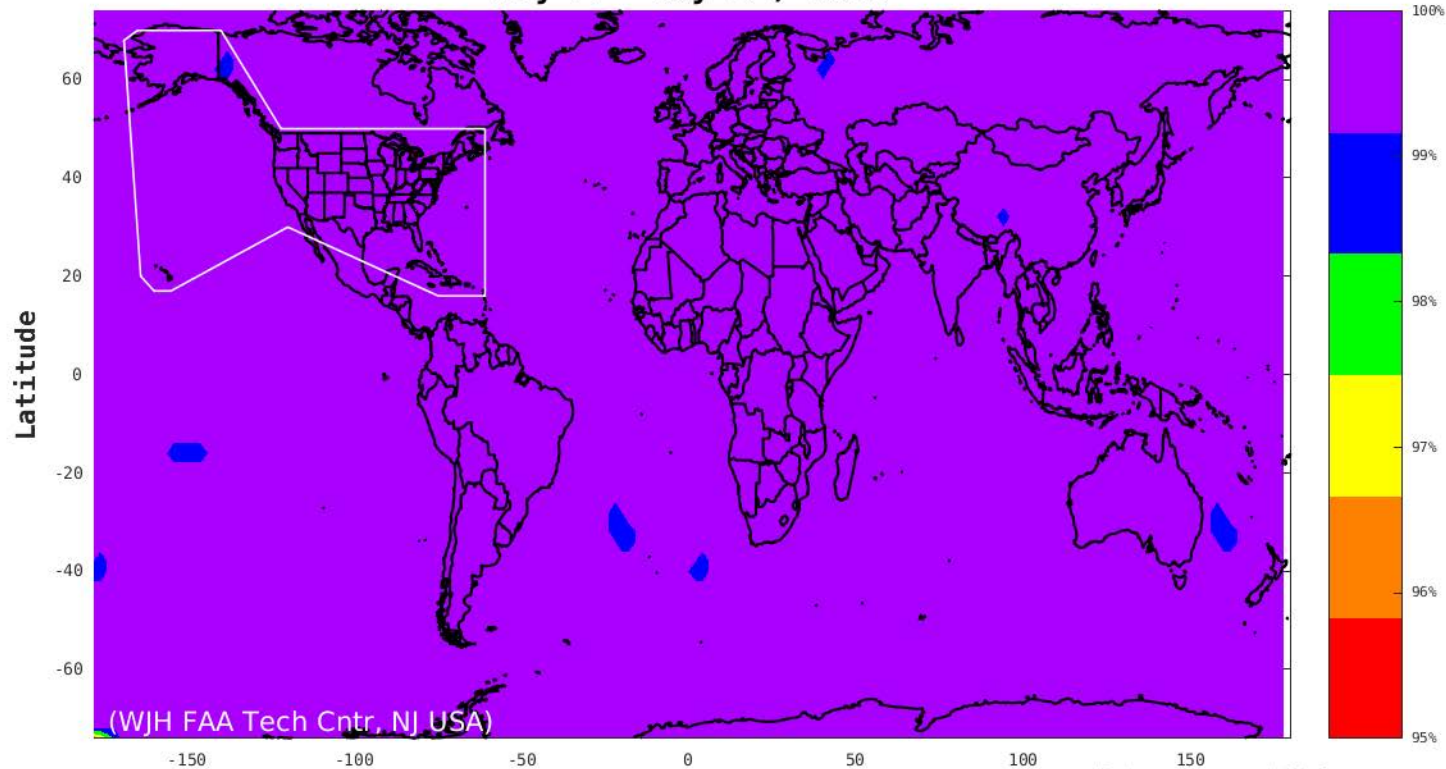


**SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 May 1 - May 31, 2018**



W.J.H. FAA Technical Center
 WAAS Test Team
 06/11/18

**SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 May 1 - May 31, 2018**



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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	99.68%	99.76%

GPS World PDOP 99.99% Index May 2018

