

Civil Report Card On GPS Performance

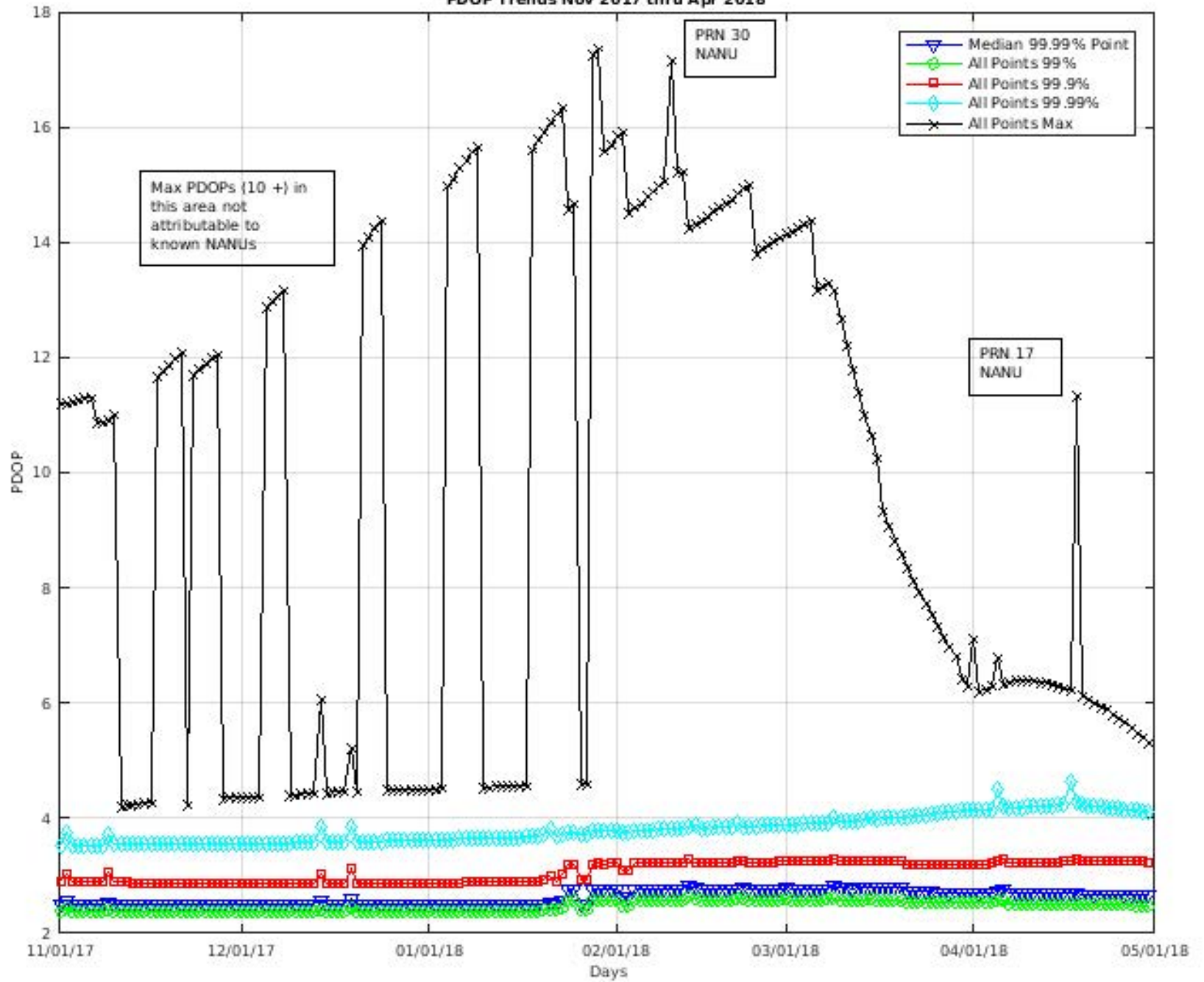
Apr 2018

Operational Performance Parameter	CY 2017	Mar 2018	Apr 2018	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.97	30.33	30.98	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.97 (99.88%)	23.34 (97.25%)	23.98 (99.94%)	↑	↑
<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	3.2	3.5	↑	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.3	2.5	2.5	↓	→
<i>Worst Site</i>	15.9	13.9	10.3	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.6	2.9	2.8	↓	↑
<i>Worst Site</i>	16.5	14.1	10.9	↑	↑
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	72.87%	72.63%	44.21%	↓	↓
<i>World</i>	73.40%	57.30%	58.00%	↓	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.57	1.78	1.74	↓	↑
<i>Worst Satellite</i>	20.74	12.50	13.85	↑	↓
95% Horizontal Error					
<i>Area Median</i>	1.80	1.86	1.99	↓	↓
<i>Worst Site</i>	4.67	3.79	3.55	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.90%	99.93%	99.95%	↑	↑
95% Vertical Error					
<i>Area Median</i>	3.81	4.37	4.54	↓	↓
<i>Worst Site</i>	6.43	4.94	3.55	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.99%	99.99%	100%	↑	↑

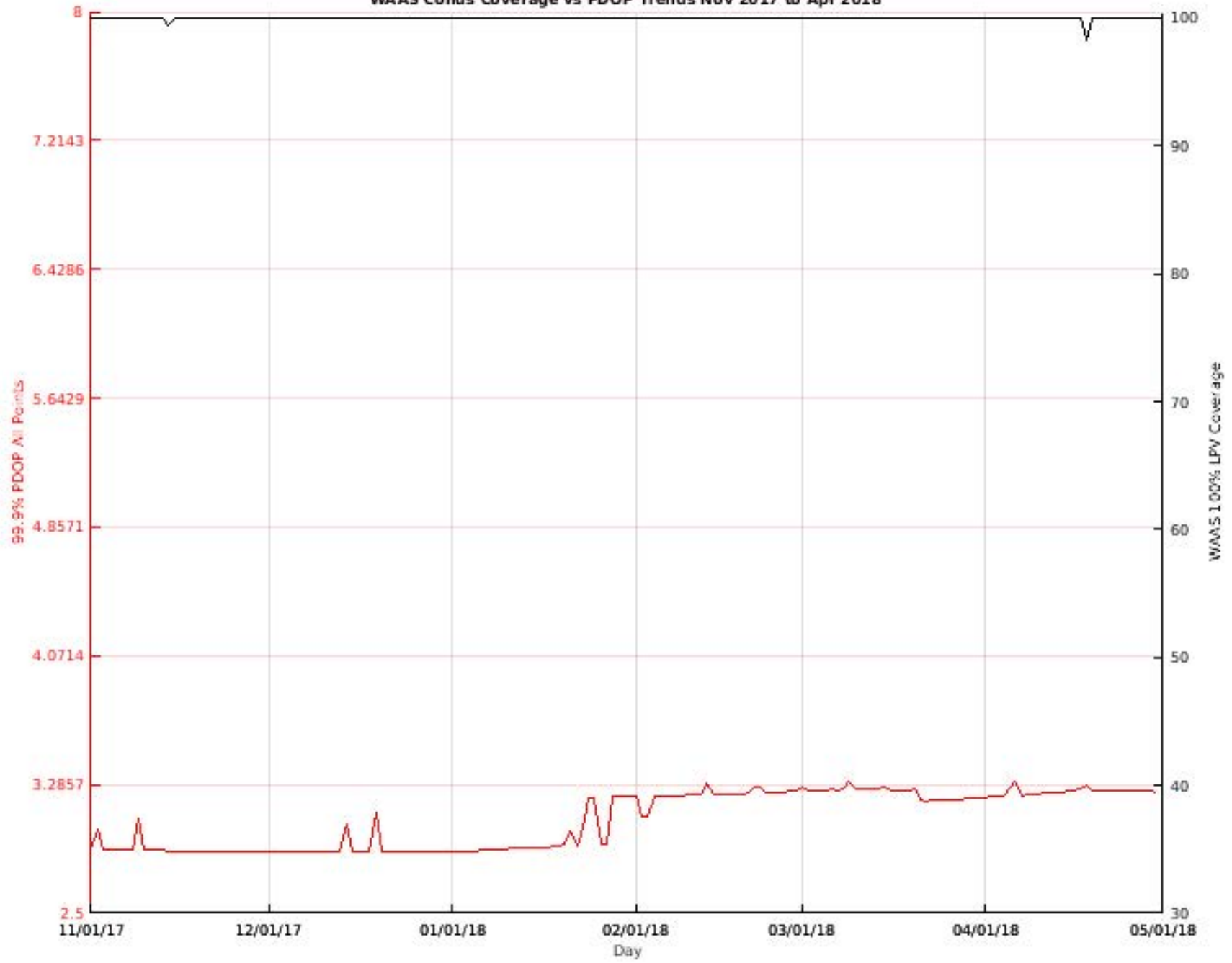
Key: ↑ improving ↓ worsening → no significant change

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

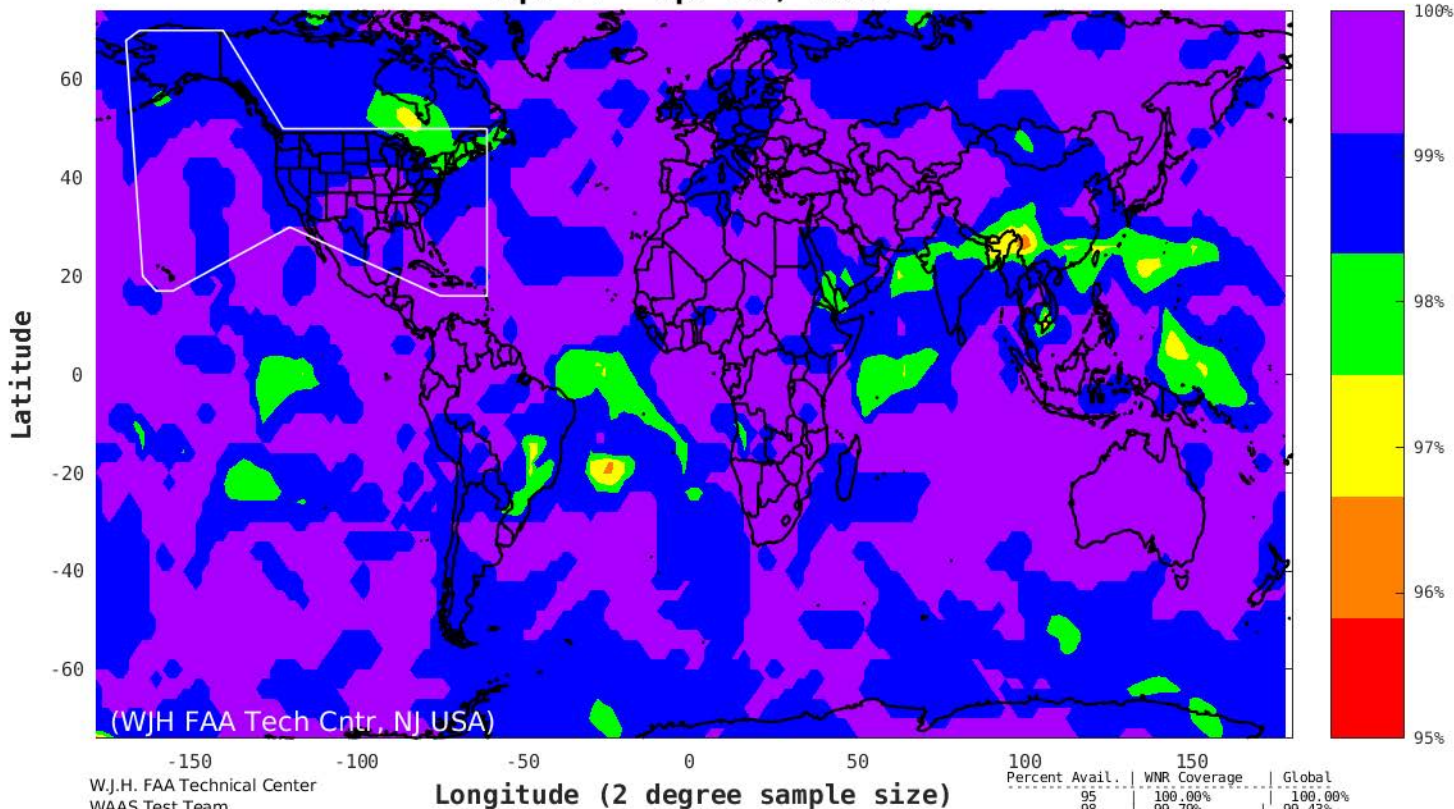
PDOP Trends Nov 2017 thru Apr 2018



WAAS Conus Coverage vs PDOP Trends Nov 2017 to Apr 2018

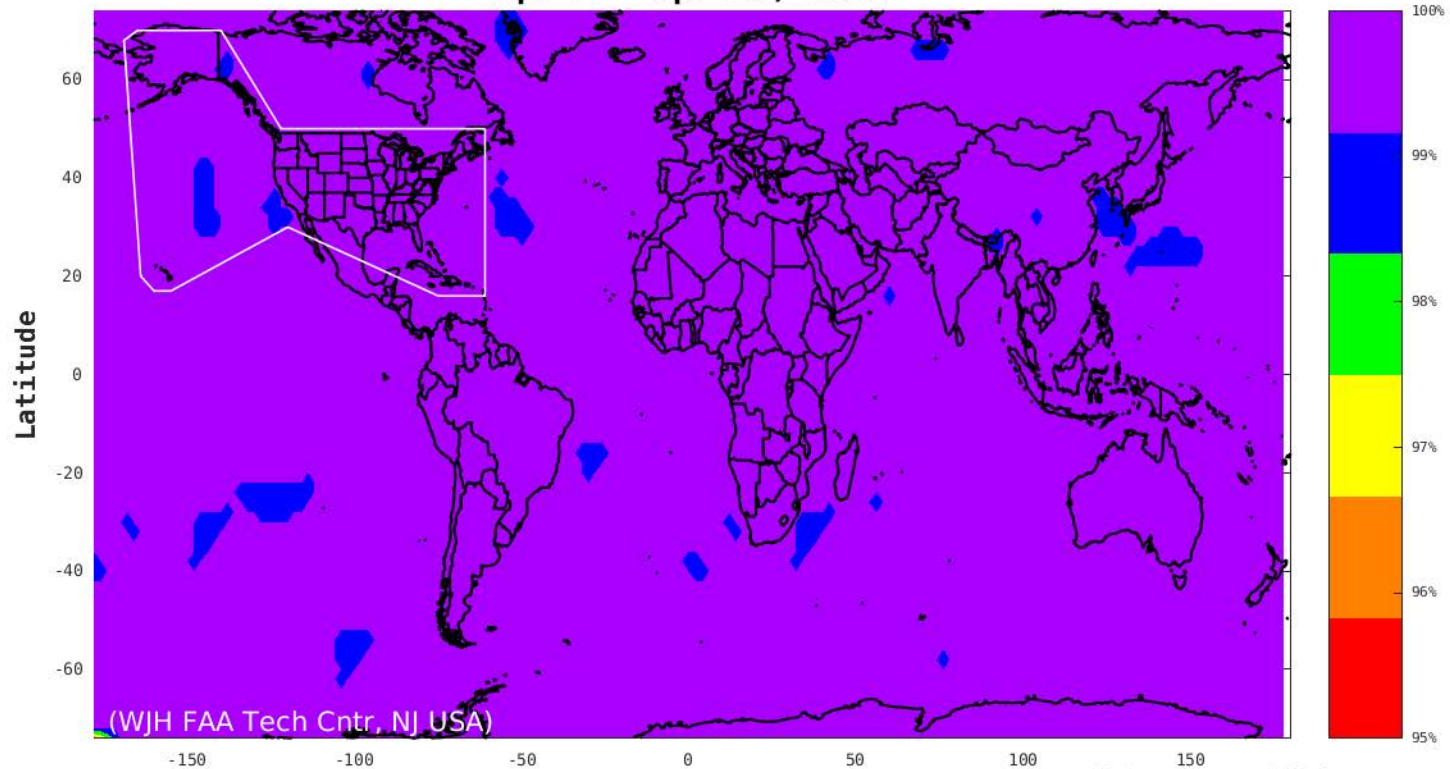


**SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 Apr 1 - Apr 30, 2018**



(WJH FAA Tech Cntr, NJ USA)

**SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 Apr 1 - Apr 30, 2018**



W.J.H. FAA Technical Center
 WAAS Test Team
 05/09/18

Percent Avail.	WNR Coverage	Global
95	100.00%	100.00%
98	100.00%	100.00%
99	100.00%	100.00%
100	97.26%	98.59%

GPS World PDOP 99.99% Index Apr 2018

