

Civil Report Card On GPS Performance

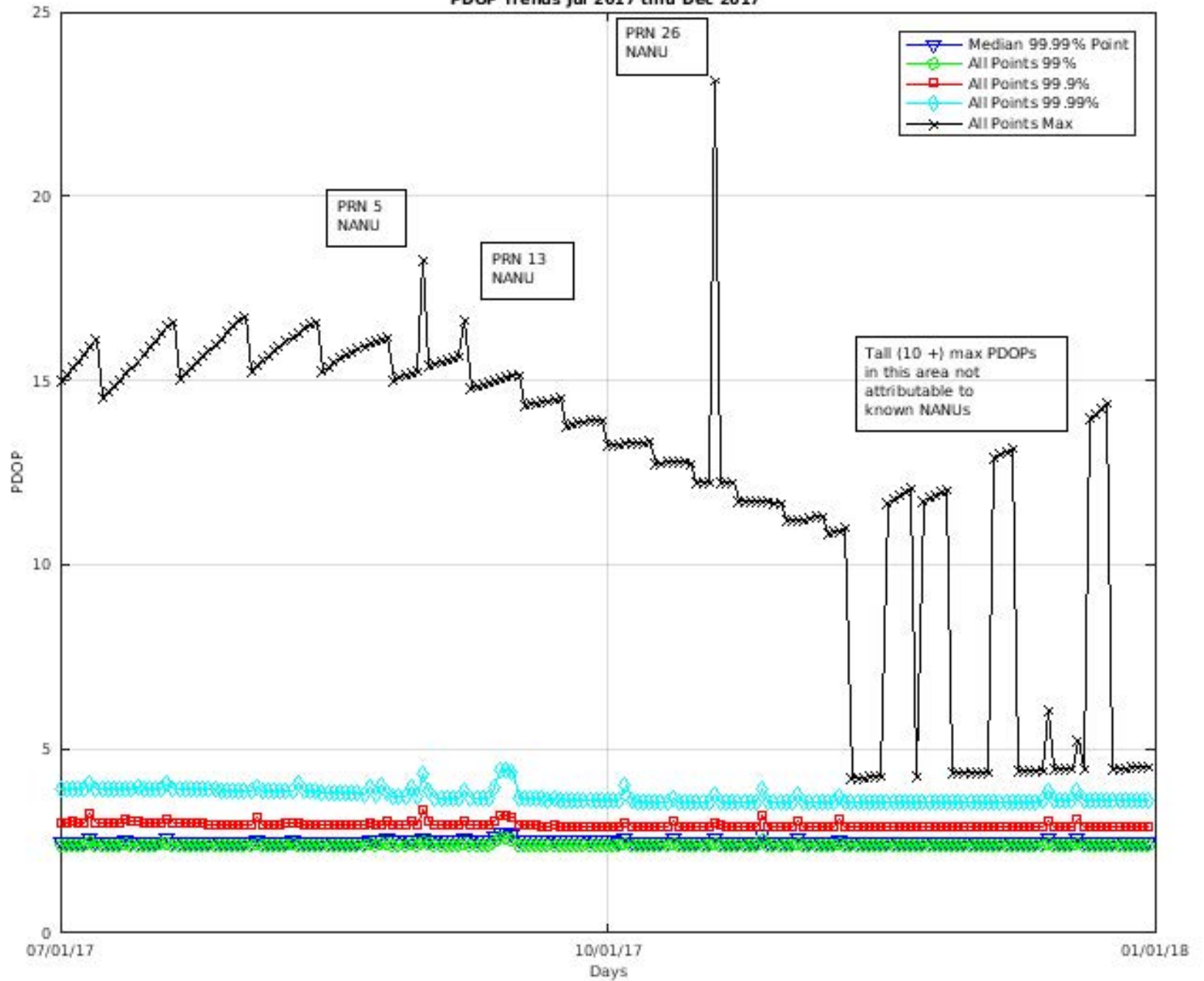
Dec 2017

Operational Performance Parameter	CY 2016	Nov 2017	Dec 2017	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.85	30.99	30.99	↑	→
<i>Average number of satellites usable in primary slots</i>	23.99 (99.94%)	23.99 (99.94%)	23.99 (99.94%)	→	→
<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	3.2	2.9	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.3	2.3	2.3	→	→
<i>Worst Site</i>	15.1	11.4	12.9	↑	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.6	2.6	2.6	→	→
<i>Worst Site</i>	15.8	11.7	13.2	↑	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	76.93%	71.47%	74.21%	↓	↕
<i>World</i>	68.27%	80.25%	77.42%	↑	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.64	1.70	1.62	↑	↑
<i>Worst Satellite</i>	16.90	12.35	11.81	↑	↑
95% Horizontal Error					
<i>Area Median</i>	1.98	1.77	1.74	↑	↑
<i>Worst Site</i>	7.82	3.62	2.77	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.65%	99.98%	99.99%	↑	↑
95% Vertical Error					
<i>Area Median</i>	3.87	3.95	3.89	↓	↑
<i>Worst Site</i>	15.03	4.94	4.50	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.98%	100%	100%	↑	→

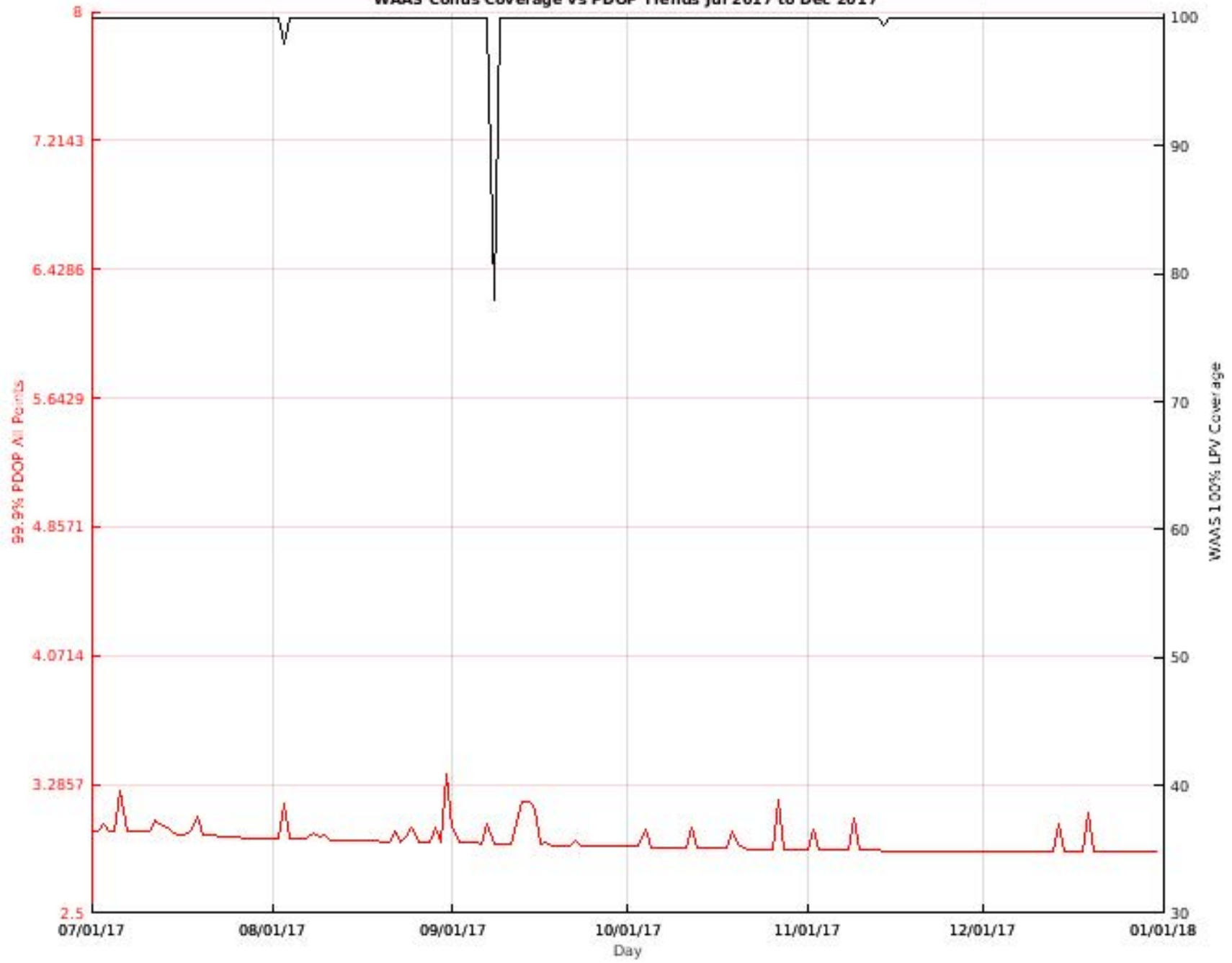
Key: ↑ improving ↓ worsening → no significant change

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

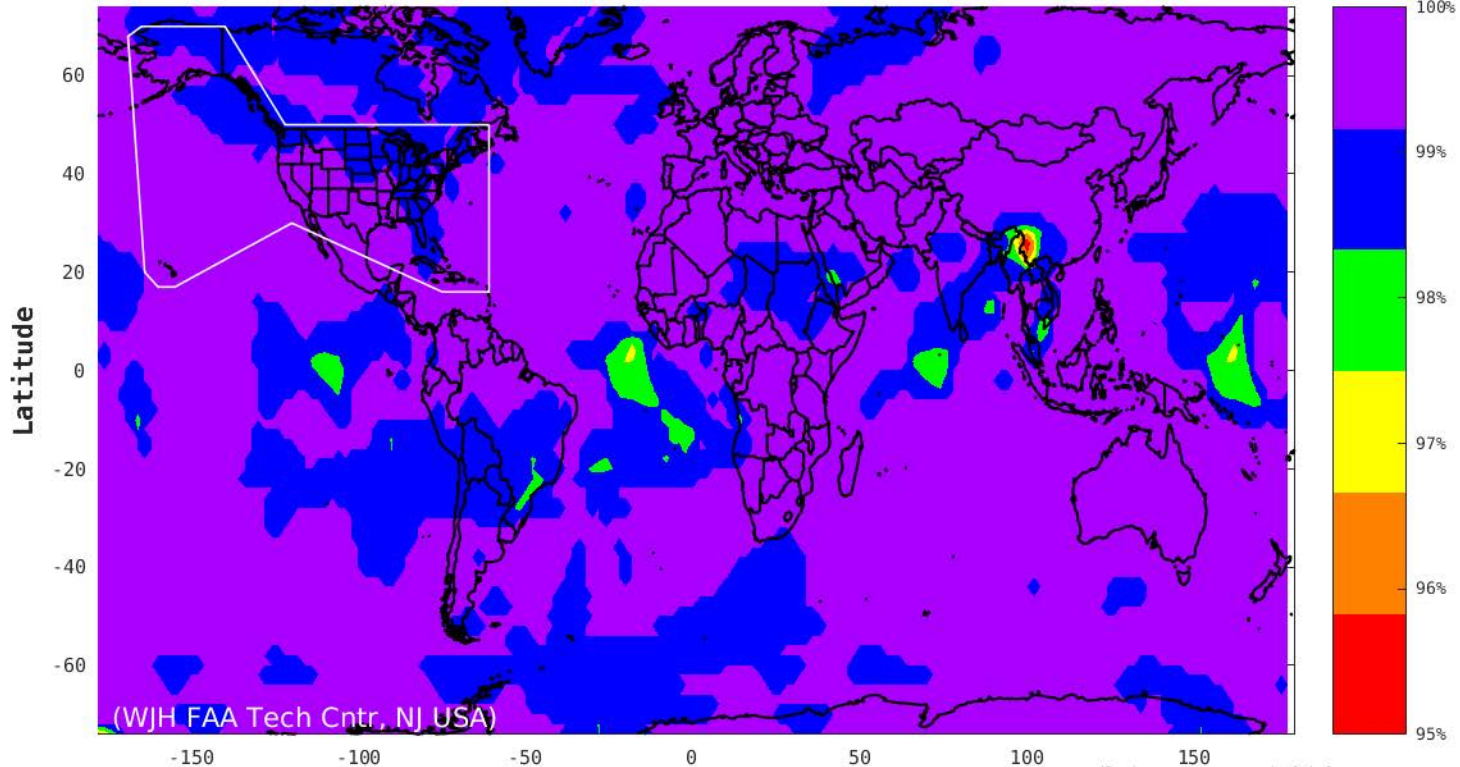
PDOP Trends Jul 2017 thru Dec 2017



WAAS Conus Coverage vs PDOP Trends Jul 2017 to Dec 2017



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

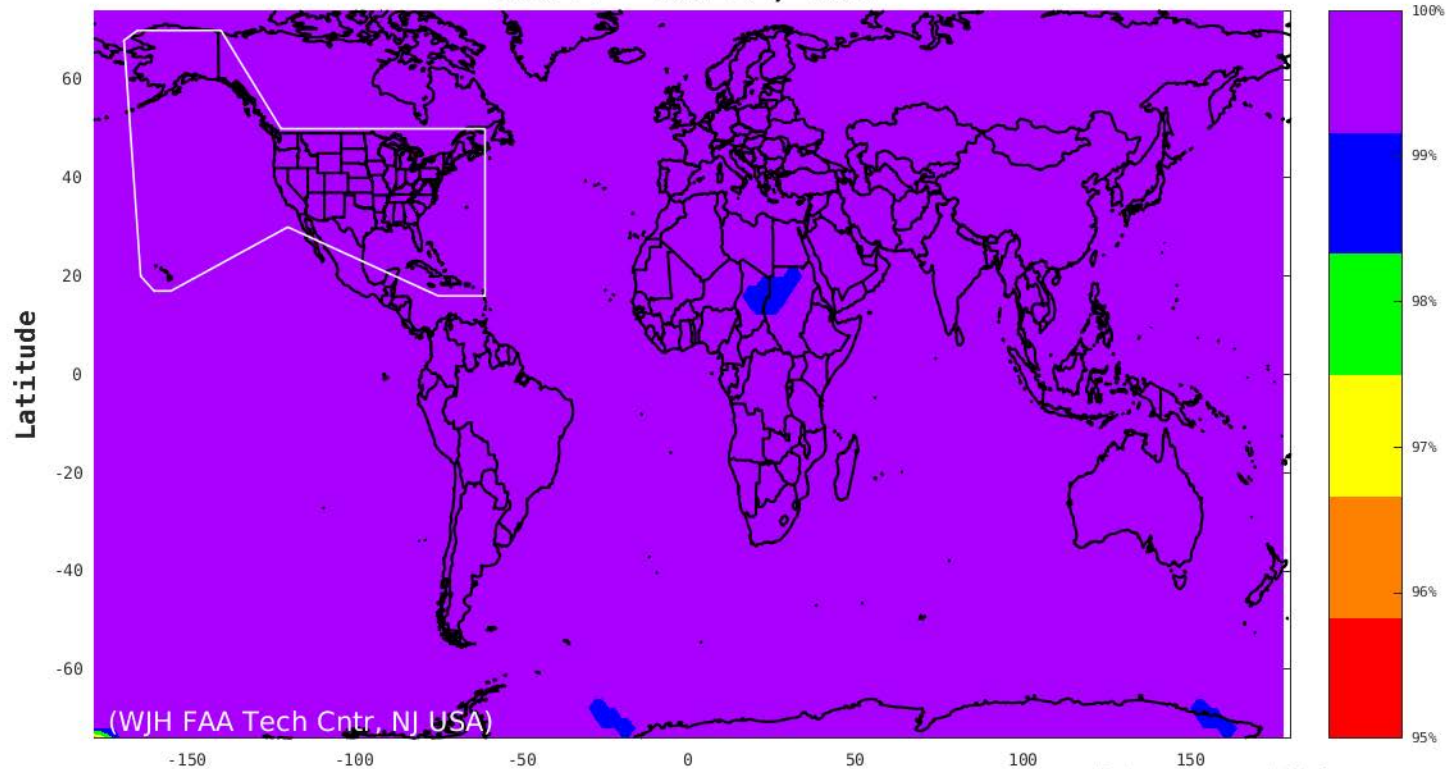


W.J.H. FAA Technical Center
WAAS Test Team
01/02/18

Longitude (2 degree sample size)

100 Percent Avail.	150 WNR Coverage	Global
95	100.00%	100.00%
98	100.00%	99.87%
99	100.00%	98.70%
100	74.21%	77.42%

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



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Percent Avail.	WNR Coverage	Global
95	100.00%	100.00%
98	100.00%	100.00%
99	100.00%	100.00%
100	100.00%	99.77%

GPS World PDOP 99.99% Index Dec 2017

