

Civil Report Card On GPS Performance

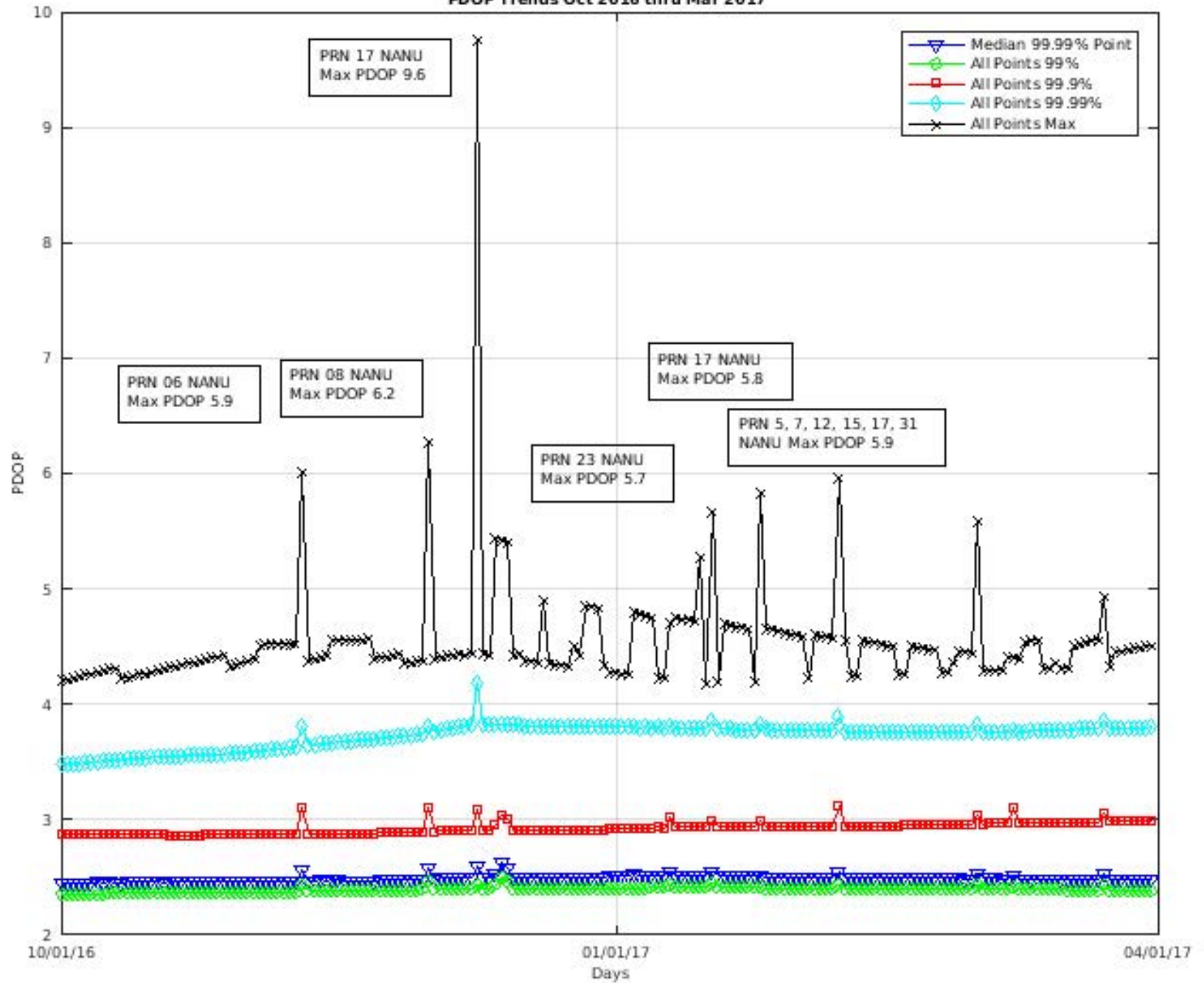
Mar 2017

Operational Performance Parameter	CY 2016	Feb 2017	Mar 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 (99.98%)	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	2.2	2.4	↑	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.3	2.3	2.3	→	→
<i>Worst Site</i>	15.1	5.8	5.3	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.6	2.6	2.6	→	→
<i>Worst Site</i>	15.8	5.9	5.5	↑	↑
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	76.93%	83.36%	77.05%	↑	↓
<i>World</i>	68.27%	66.63%	77.24%	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.64	1.52	1.78	↓	↓
<i>Worst Satellite</i>	16.90	13.46	14.51	↑	↓
95% Horizontal Error					
<i>Area Median</i>	1.98	1.84	2.03	↓	↓
<i>Worst Site</i>	7.82	4.31	4.67	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.65%	99.86%	99.74%	↑	↓
95% Vertical Error					
<i>Area Median</i>	3.87	3.70	4.15	↓	↓
<i>Worst Site</i>	15.03	4.45	4.81	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	99.98%	100%	100%	↑	→

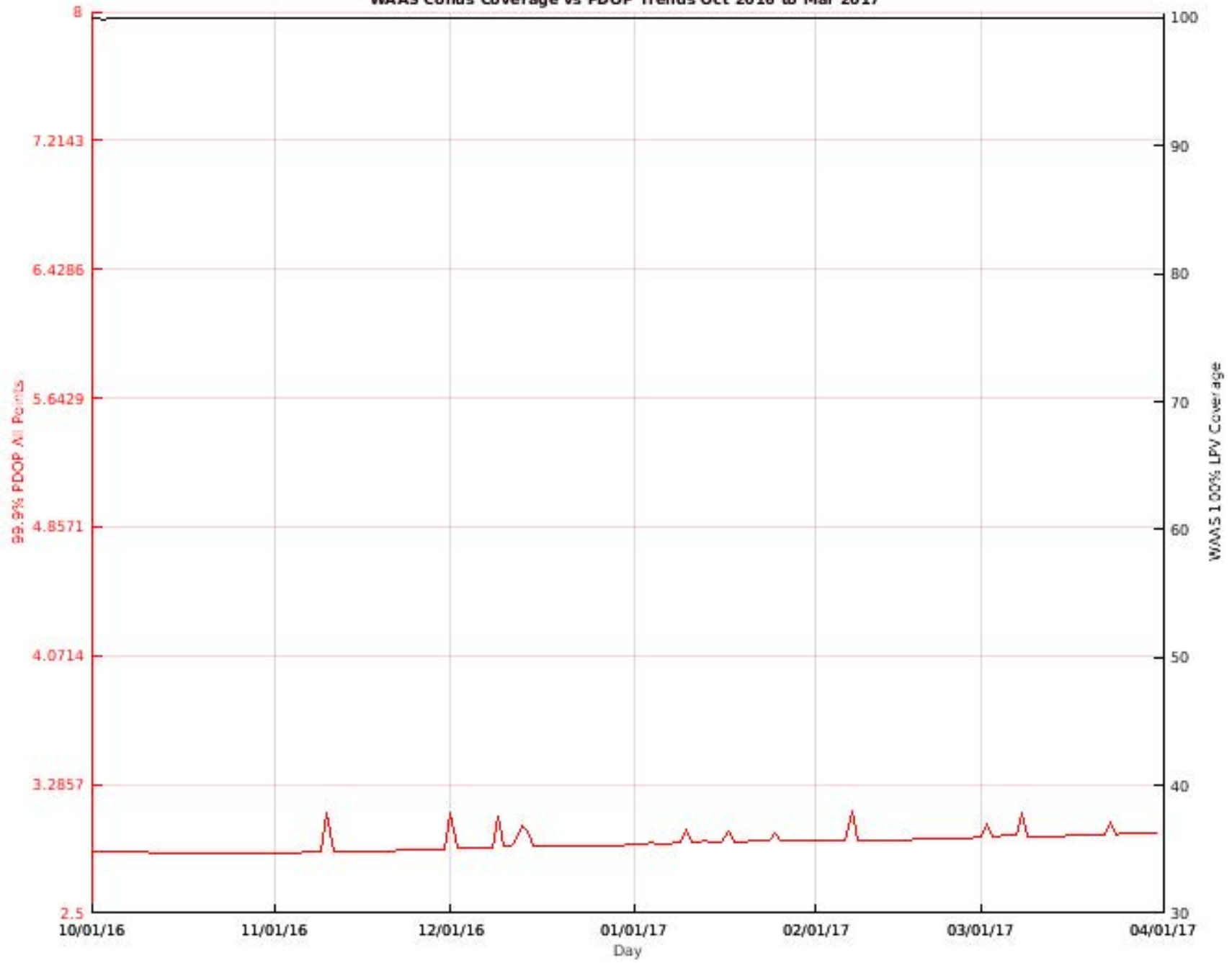
Key: ↑ improving ↓ worsening → no significant change

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

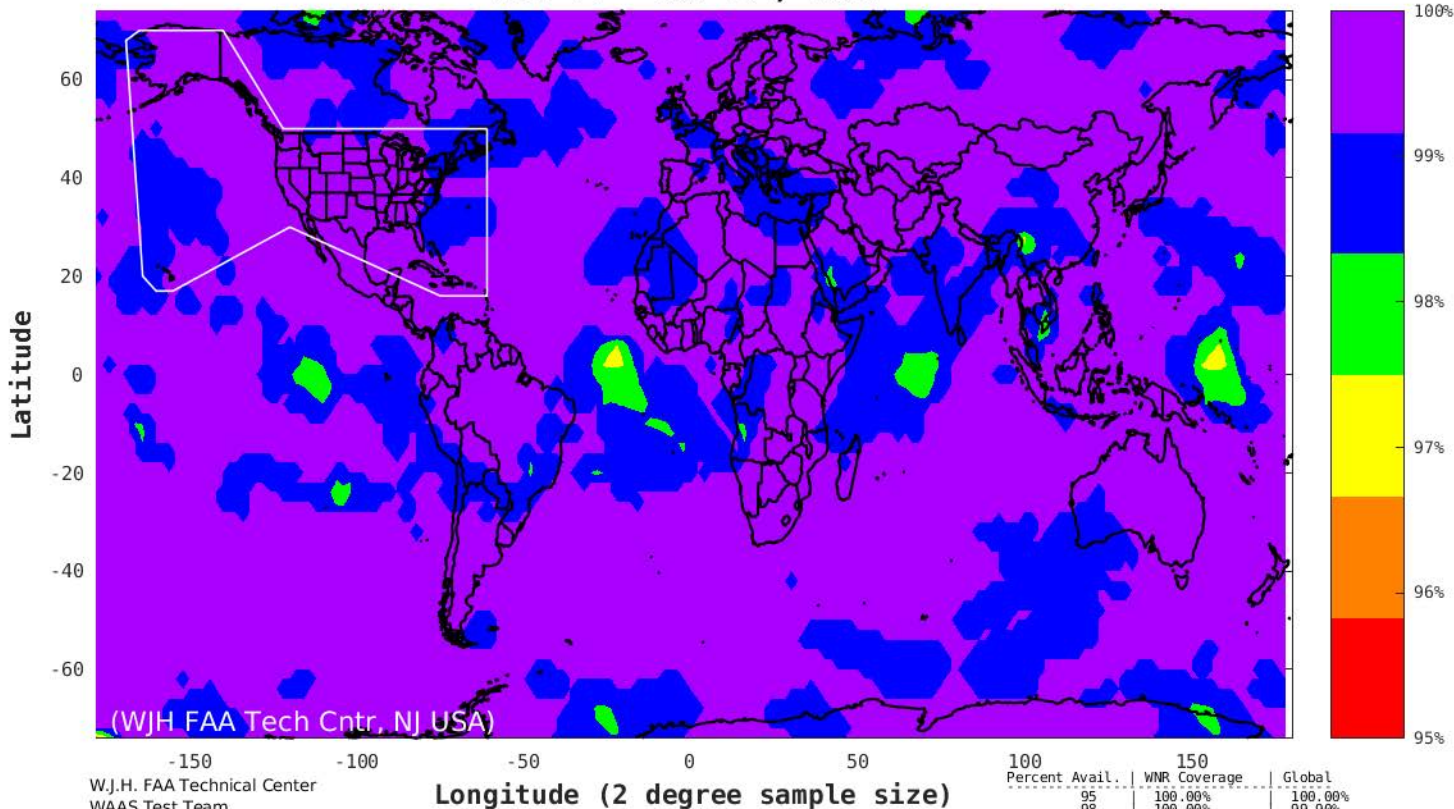
PDOP Trends Oct 2016 thru Mar 2017



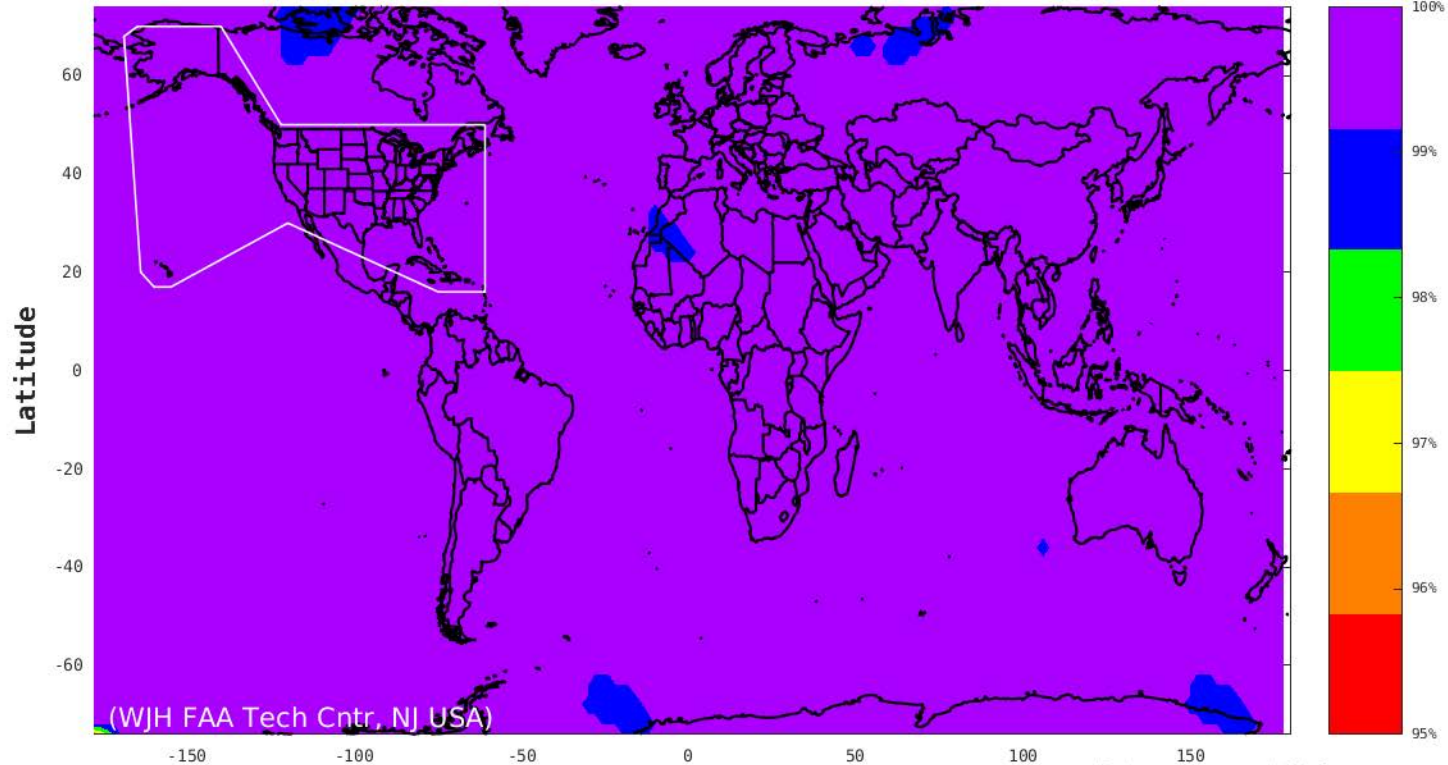
WAAS Conus Coverage vs PDOP Trends Oct 2016 to Mar 2017



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



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



W.J.H. FAA Technical Center
WAAS Test Team
04/14/17

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%	98.90%

GPS World PDOP 99.99% Index Mar 2017

