

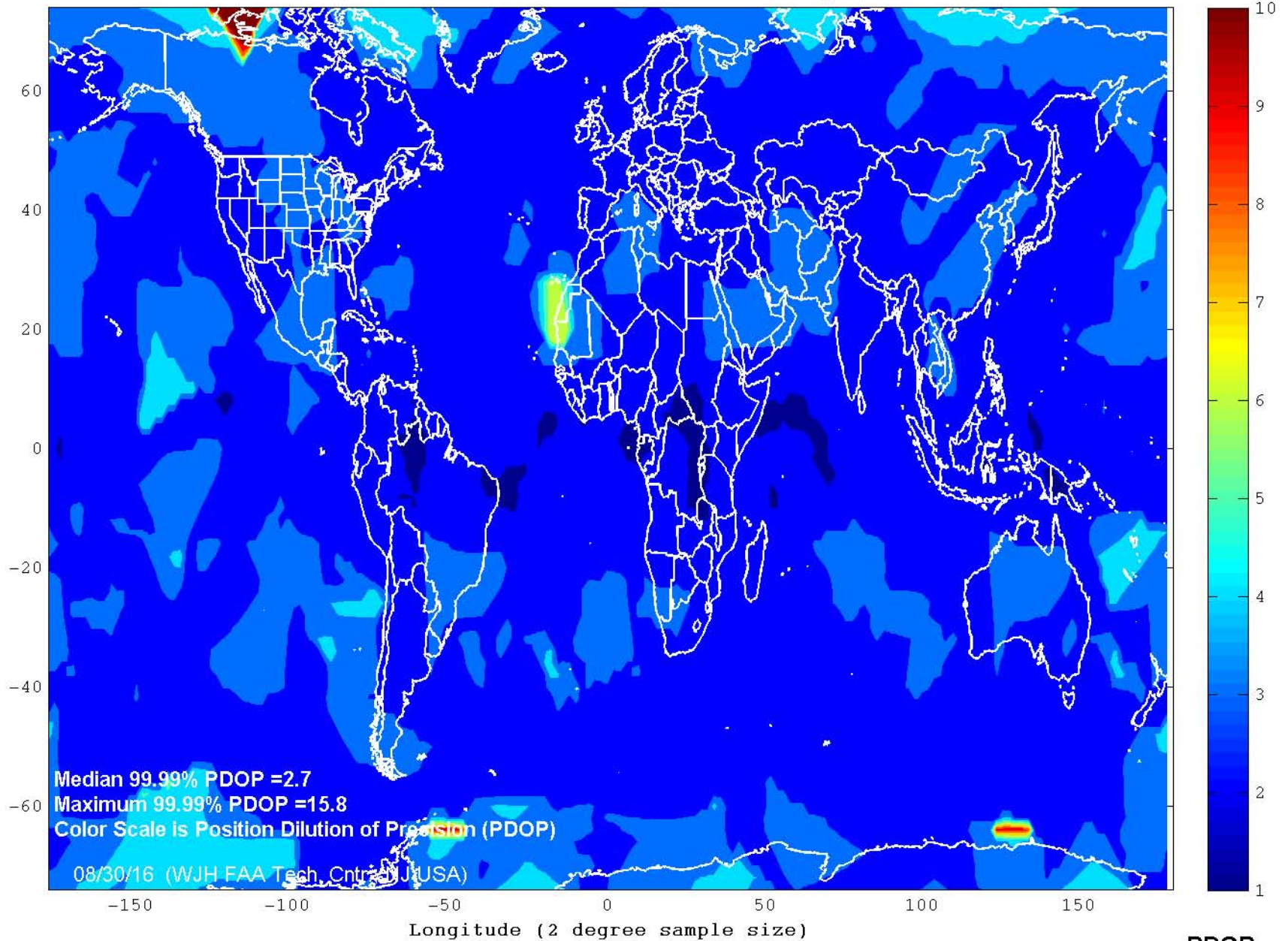
Civil Report Card On GPS Performance July 2016

Operational Performance Parameter	CY 2015	June 2016	July 2016	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.50	30.99	30.95	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.99 (99.94%)	23.99 (99.97%)	23.97 (99.88%)	↓	↓
<i>Average availability of 6 satellites in view</i>	99.99%	100%	99.99%	→	↓
99.99% Horizontal DOP					
<i>Area Median</i>	1.4	1.3	1.3	↑	↓
<i>Worst Site</i>	9.4	2.5	4.9	↑	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.5	2.2	2.4	↑	↓
<i>Worst Site</i>	34.5	10.4	15.1	↑	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.6	2.7	↑	↓
<i>Worst Site</i>	35.7	10.6	15.8	↑	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	51.34%	60.32%	58.95%	↑	↓
<i>World</i>	55.97%	74.43%	61.00%	↑	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.91	1.34	1.27	↑	↓
<i>Worst Satellite</i>	2.38	1.70	1.85	↑	↓
95% Horizontal Error					
<i>Area Median</i>	2.71	1.89	1.75	↑	↑
<i>Worst Site</i>	9.02	3.03	2.66	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.66%	99.97%	99.99%	↑	↑
95% Vertical Error					
<i>Area Median</i>	4.61	3.16	2.90	↑	↑
<i>Worst Site</i>	8.36	4.23	3.54	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.79%	99.99%	99.99%	↑	→

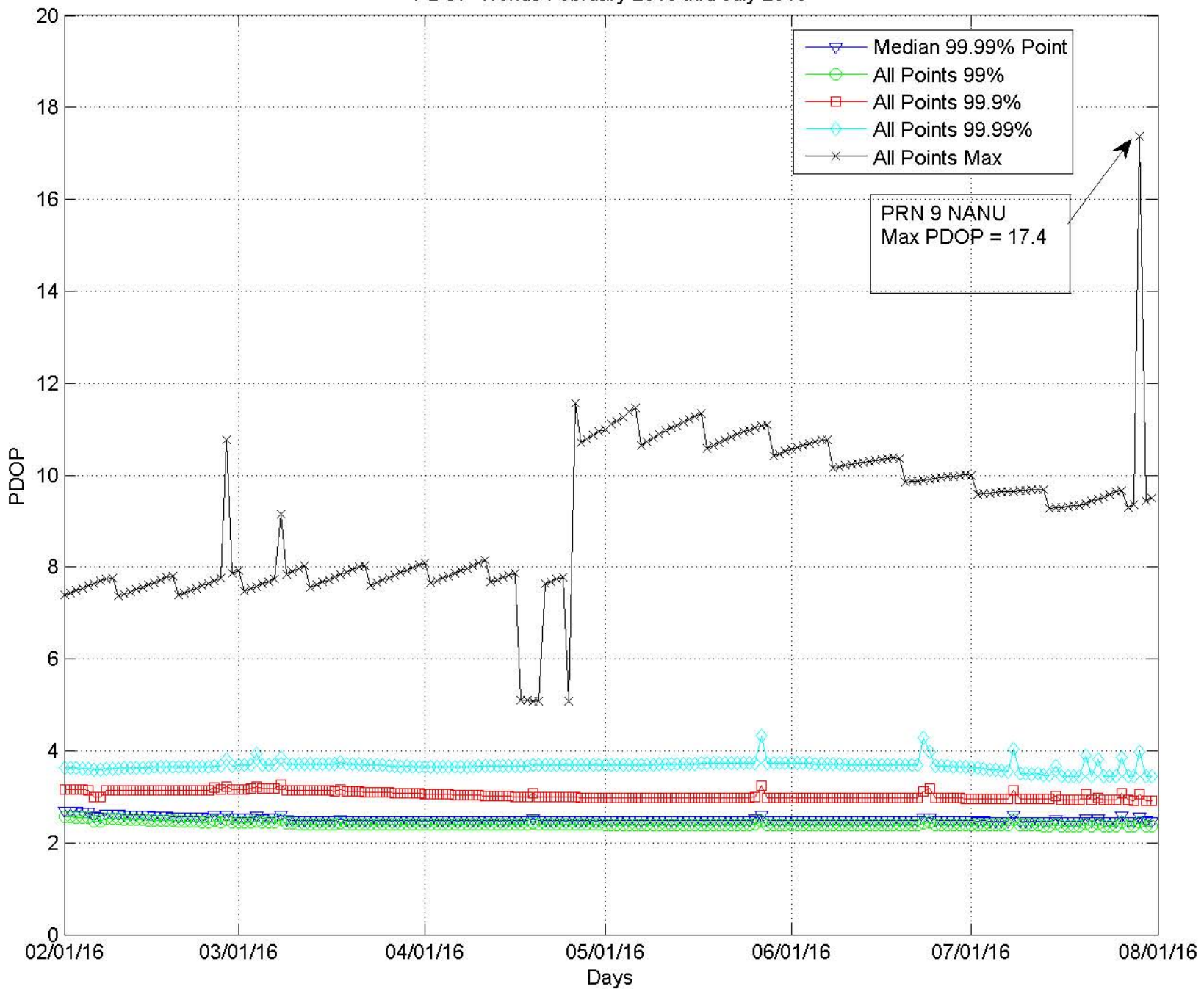
Key: ↑ improving ↓ worsening → no significant change

Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

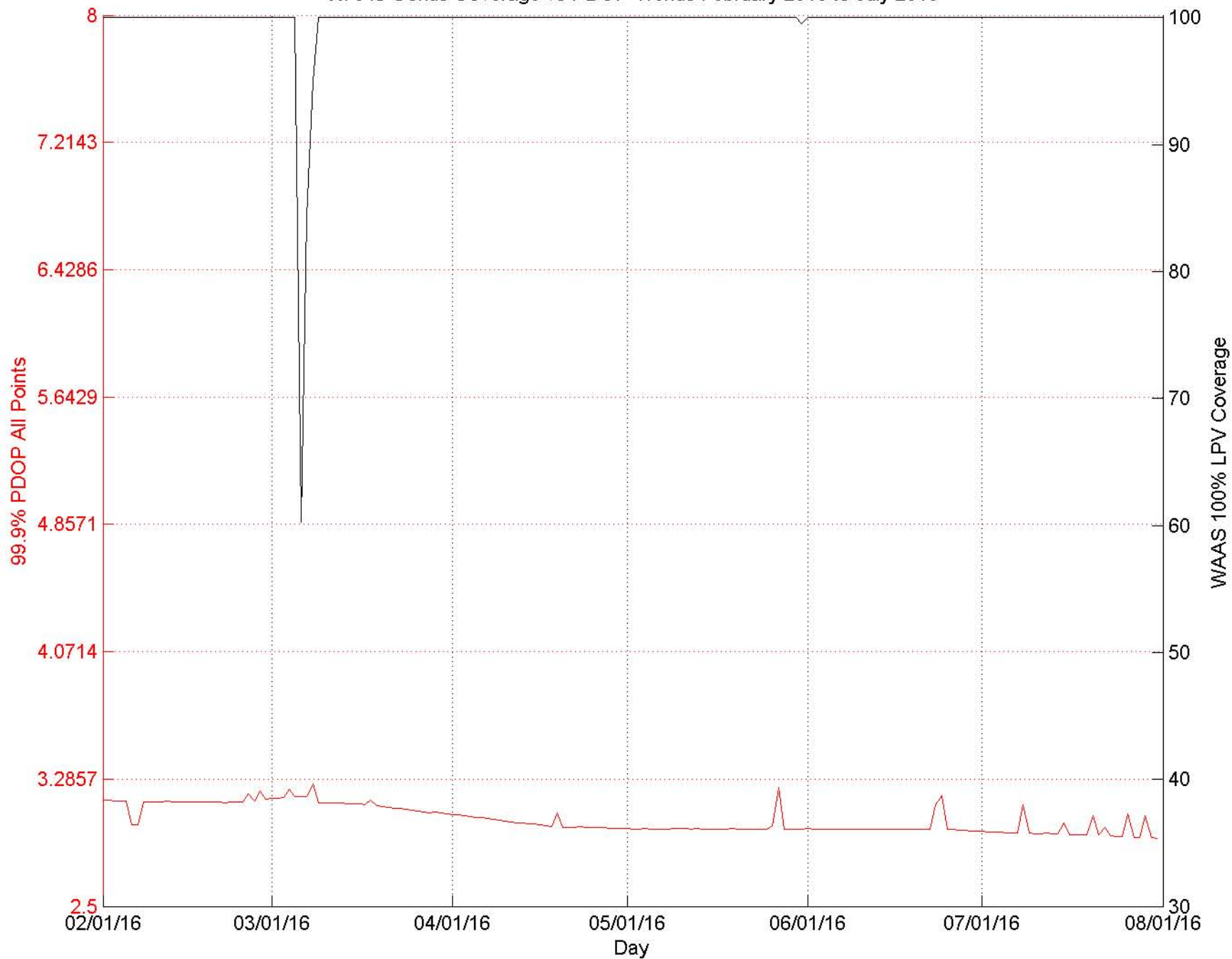
GPS World PDOP 99.99% Index July 2016



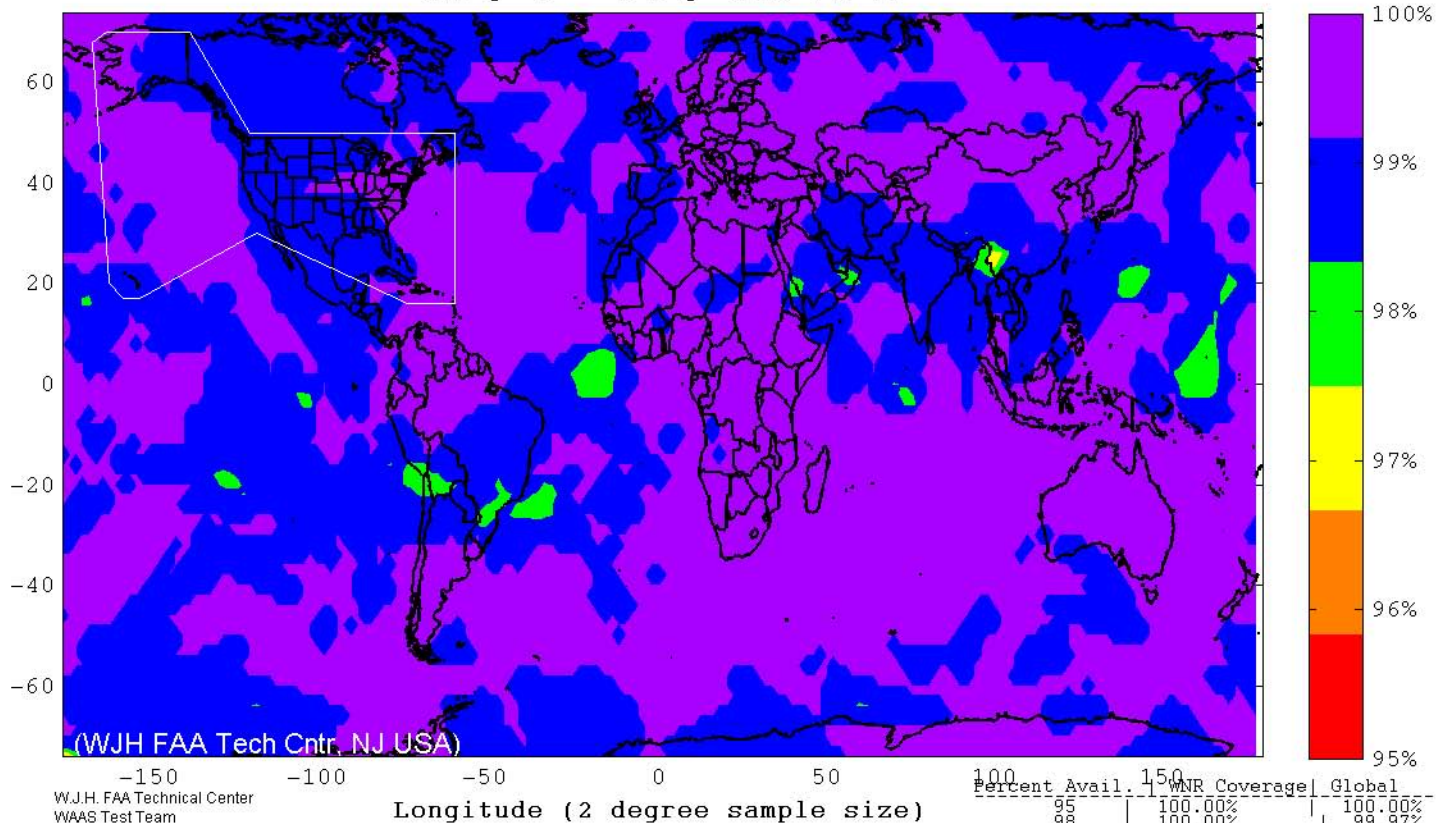
PDOP Trends February 2016 thru July 2016



WAAS Conus Coverage vs PDOP Trends February 2016 to July 2016



SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 July 1 - July 31, 2016



W.J.H. FAA Technical Center
 WAAS Test Team
 09/01/16

Longitude (2 degree sample size)

SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 July 1 - July 31, 2016

