

Civil Report Card On GPS Performance

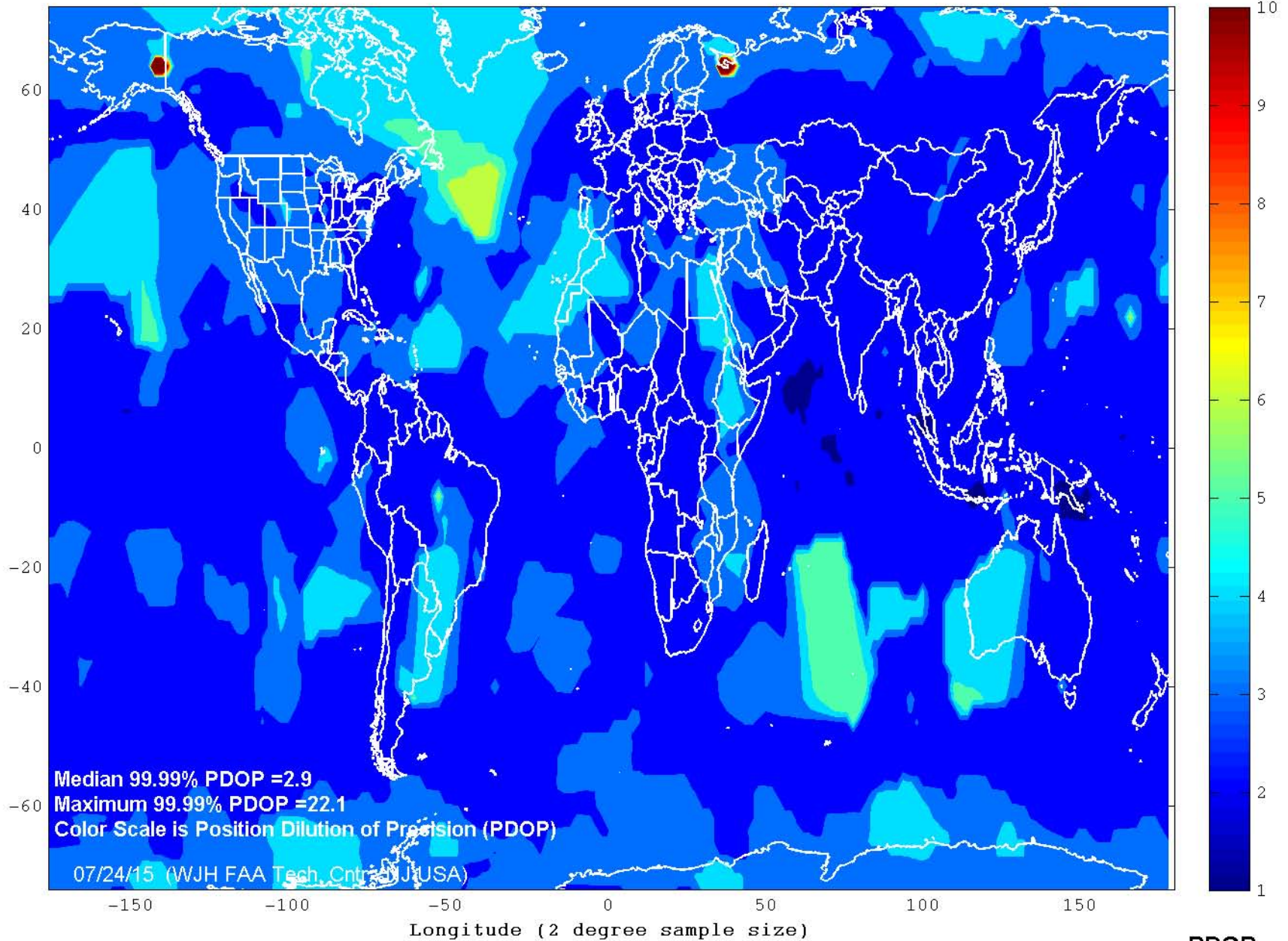
June 2015

Operational Performance Parameter	CY 2014	May 2015	June 2015	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.40	30.97	30.94	↑	↓
<i>Average number of satellites usable in primary slots</i>	23.98 (99.94%)	23.97 (99.89%)	23.96 (99.86%)	↓	↓
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	99.99	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.4	1.4	1.4	→	→
<i>Worst Site</i>	18.1	4.6	5.8	↑	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.5	2.5	2.6	↓	↓
<i>Worst Site</i>	43.0	17.4	21.3	↑	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.8	2.9	↓	↓
<i>Worst Site</i>	43.4	18.0	22.1	↑	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	43.96%	55.47%	13.68%	↓	↓
<i>World</i>	47.30%	62.28%	50.87%	↑	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.25	1.98	1.67	↑	↑
<i>Worst Satellite</i>	2.69	2.43	2.19	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.62	3.04	2.49	↑	↑
<i>Worst Site</i>	10.23	6.95	4.03	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	97.72%	98.63%	99.71%	↑	↑
95% Vertical Error					
<i>Area Median</i>	5.52	4.26	3.77	↑	↑
<i>Worst Site</i>	9.87	6.98	5.01	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	98.90%	99.84%	99.99%	↑	↑

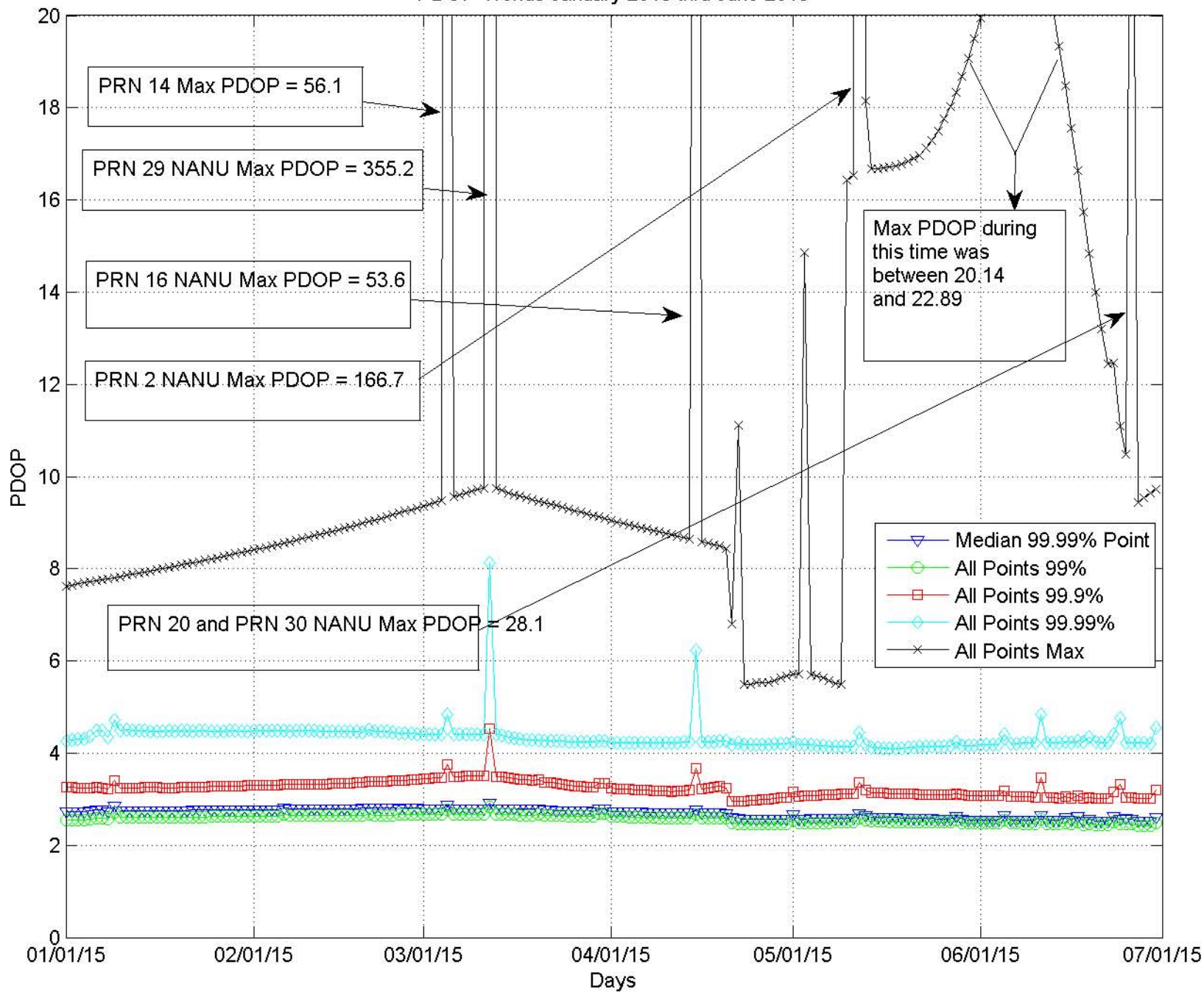
Key: ↑ improving ↓ worsening → no significant change

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

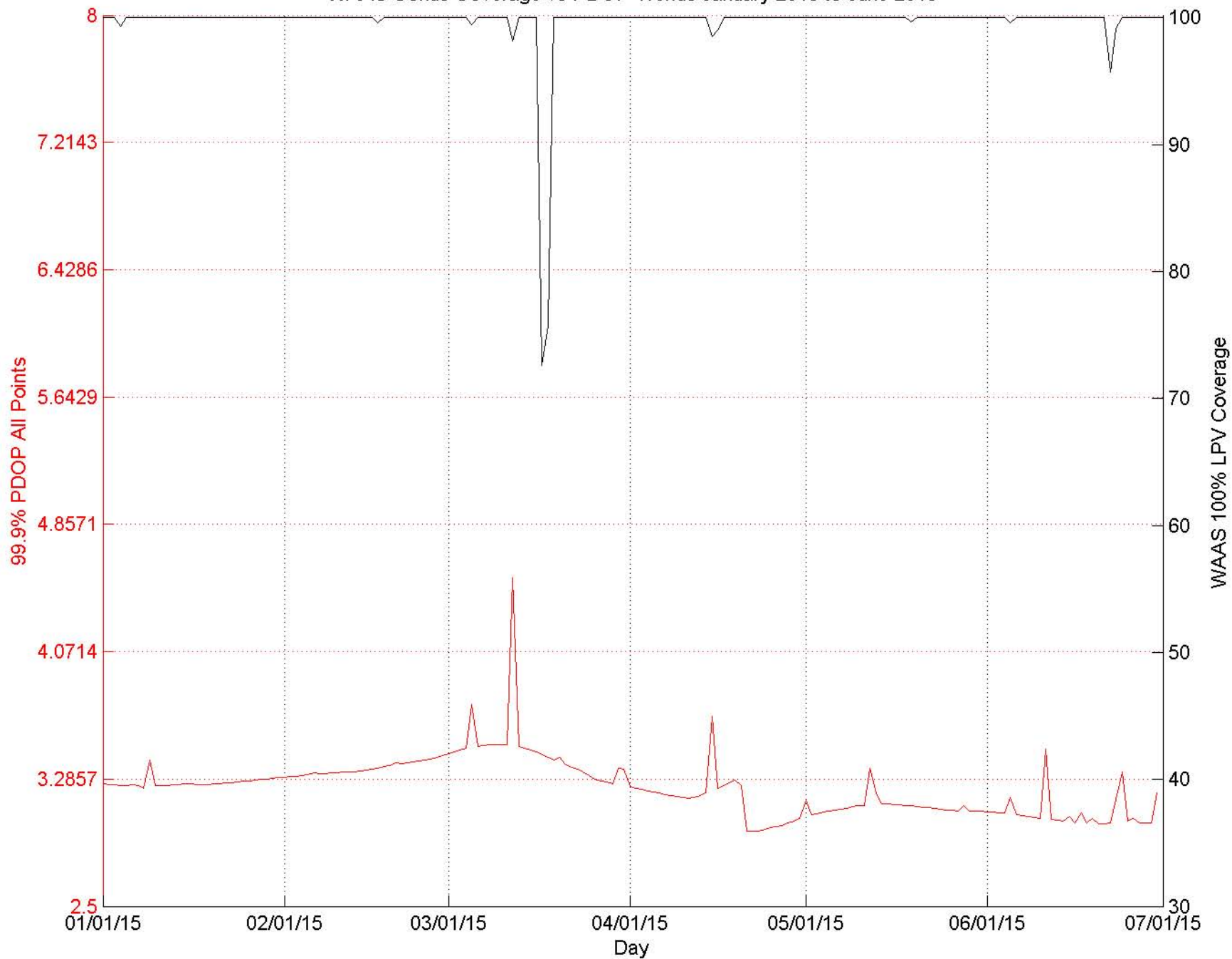
GPS World PDOP 99.99% Index June 2015



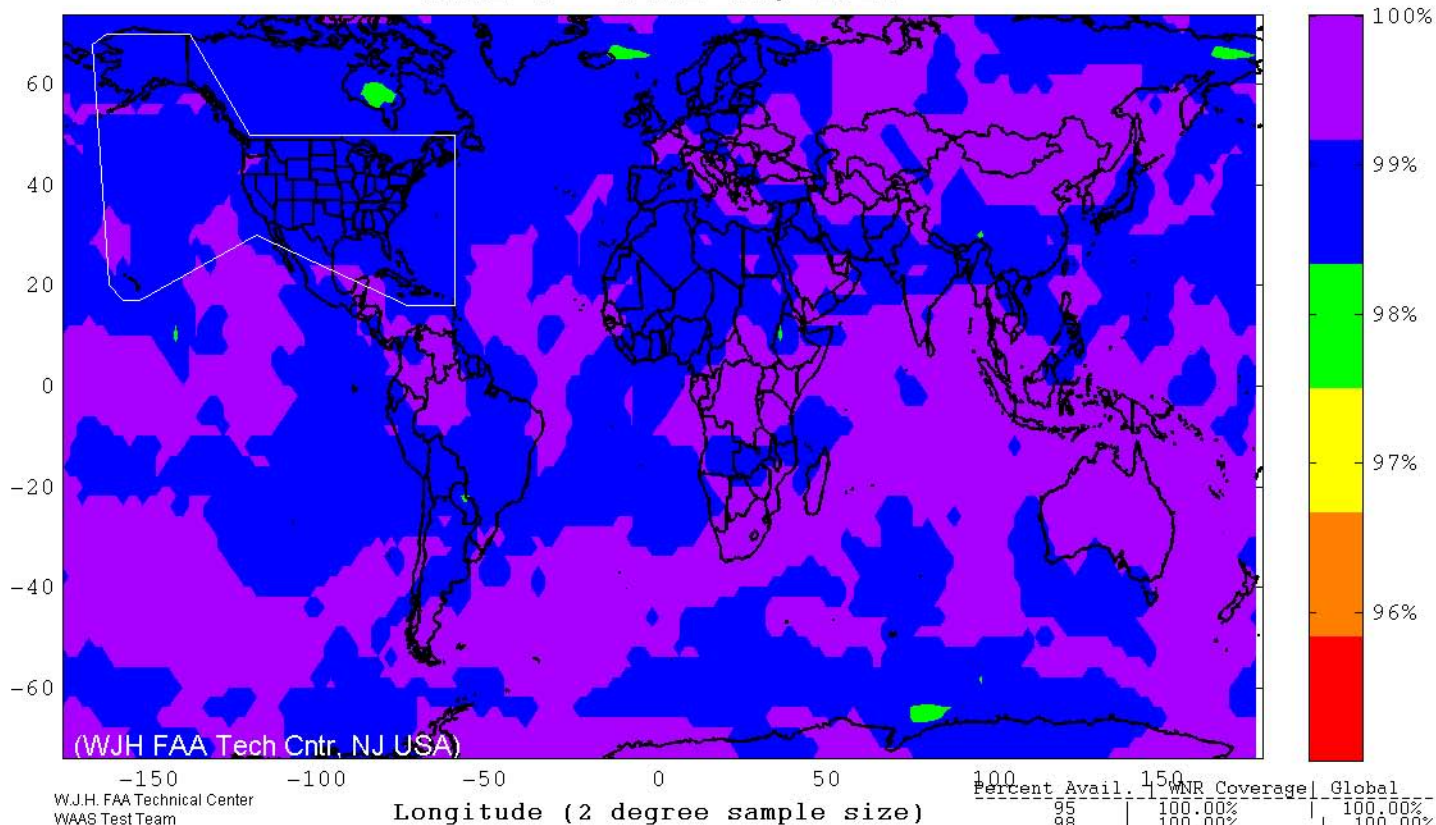
PDOP Trends January 2015 thru June 2015



WAAS Conus Coverage vs PDOP Trends January 2015 to June 2015



SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 June 1 - June 30, 2015



W.J.H. FAA Technical Center
 WAAS Test Team
 07/24/15

Longitude (2 degree sample size)

SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 June 1 - June 30, 2015

