

Civil Report Card On GPS Performance

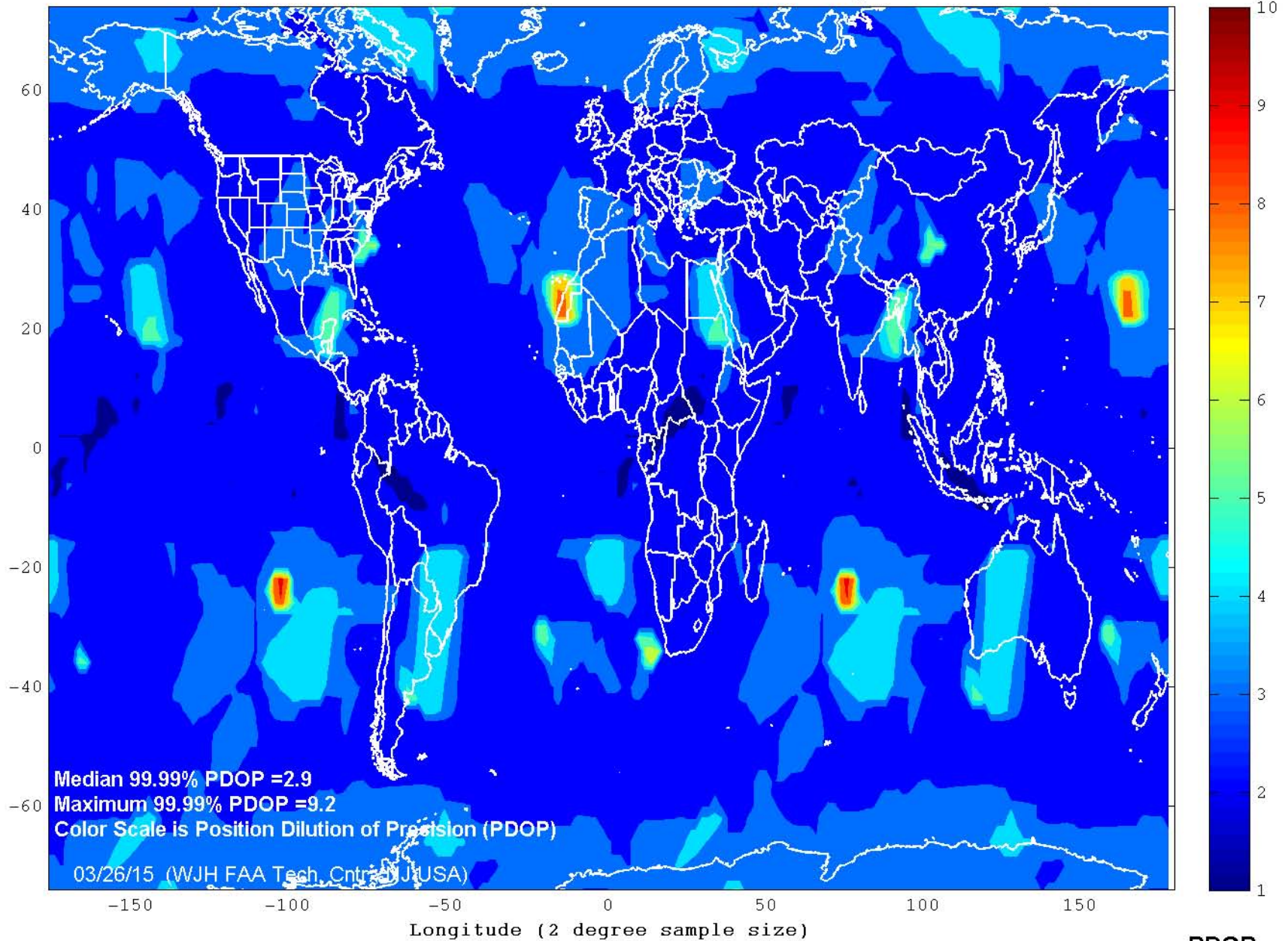
February 2015

Operational Performance Parameter	CY 2014	Jan 2015	Feb 2015	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.40	30.15	29.94	↓	↓
<i>Average number of satellites usable in primary slots</i>	23.98 (99.94%)	23.99 (99.96%)	24.00 (100%)	↑	↑
<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	2.5	2.5	↑	→
99.99% Vertical DOP					
<i>Area Median</i>	2.5	2.5	2.5	→	→
<i>Worst Site</i>	43.0	8.1	9.0	↑	↓
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.8	2.8	→	→
<i>Worst Site</i>	43.4	8.3	9.2	↑	↓
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	43.96%	42.11%	45.79%	↑	↑
<i>World</i>	47.30%	42.34%	49.81%	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.25	2.01	2.05	↑	↓
<i>Worst Satellite</i>	2.69	2.94	2.95	↓	↓
95% Horizontal Error					
<i>Area Median</i>	2.62	2.97	2.97	↓	→
<i>Worst Site</i>	10.23	7.42	9.46	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	97.72%	98.06%	97.47%	↓	↓
95% Vertical Error					
<i>Area Median</i>	5.52	5.28	4.80	↑	↑
<i>Worst Site</i>	9.87	7.32	8.88	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	98.90%	99.61%	99.51%	↑	↓

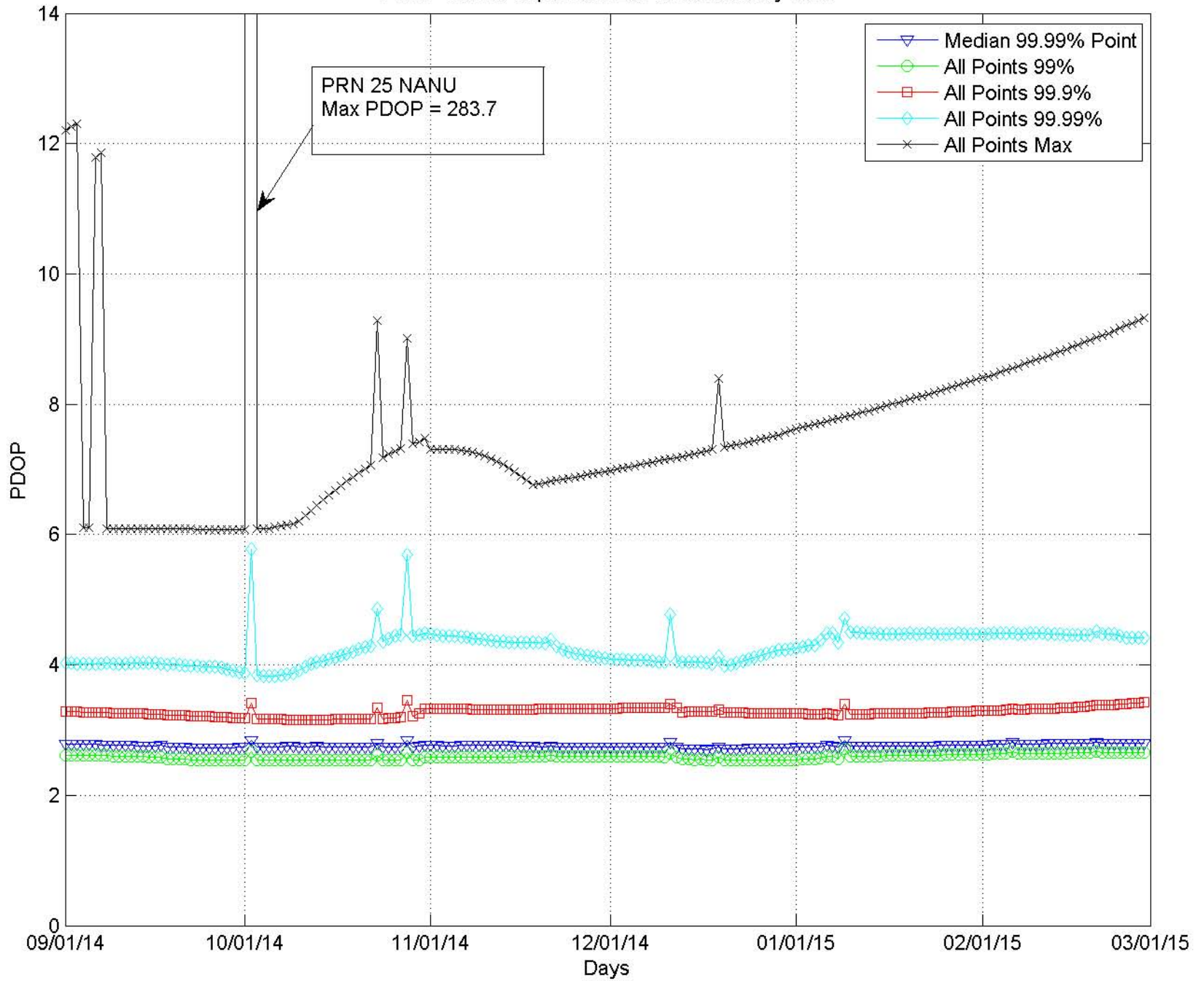
Key: ↑ improving ↓ worsening → no significant change

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

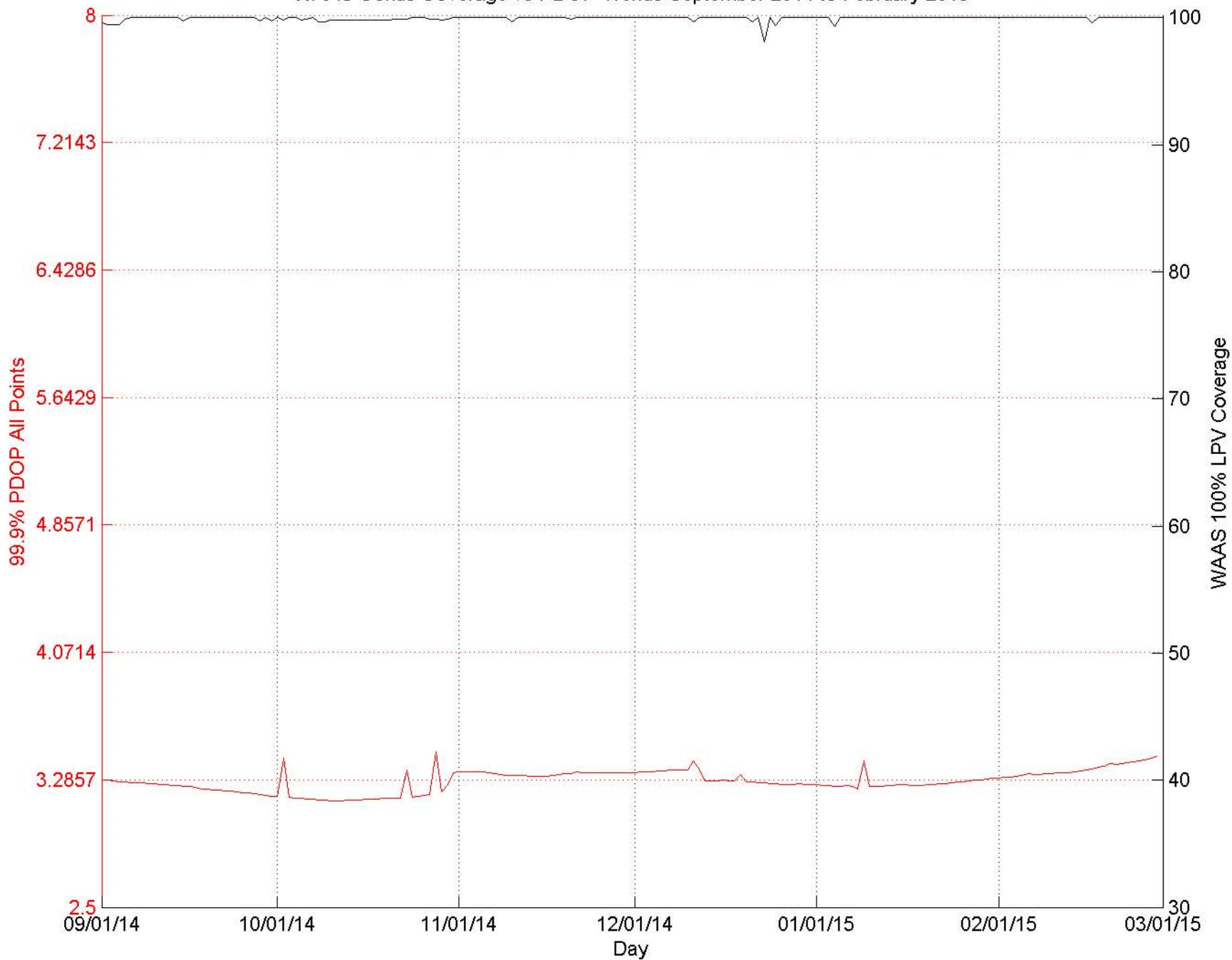
GPS World PDOP 99.99% Index February 2015



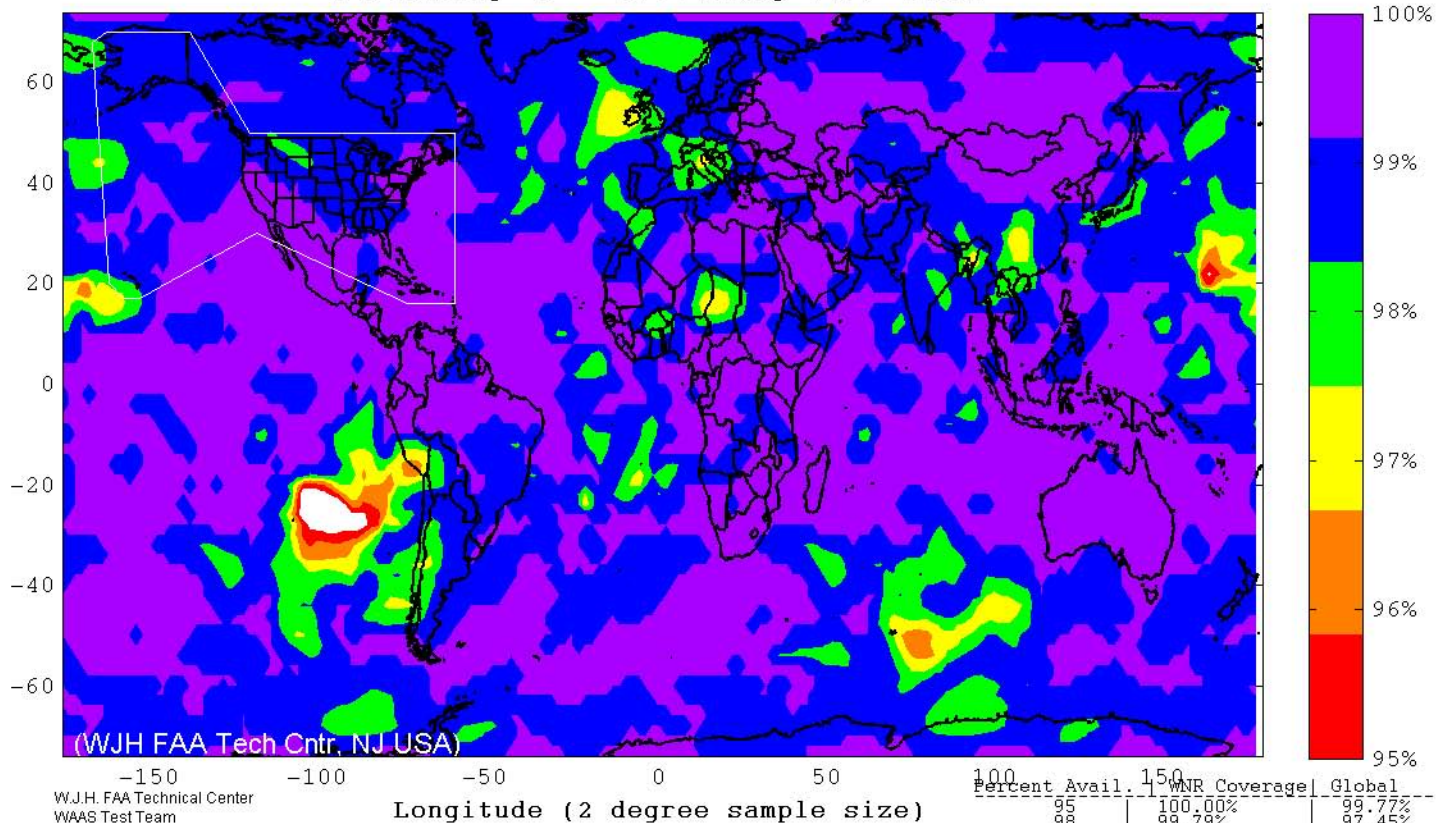
PDOP Trends September 2014 thru February 2015



WAAS Conus Coverage vs PDOP Trends September 2014 to February 2015



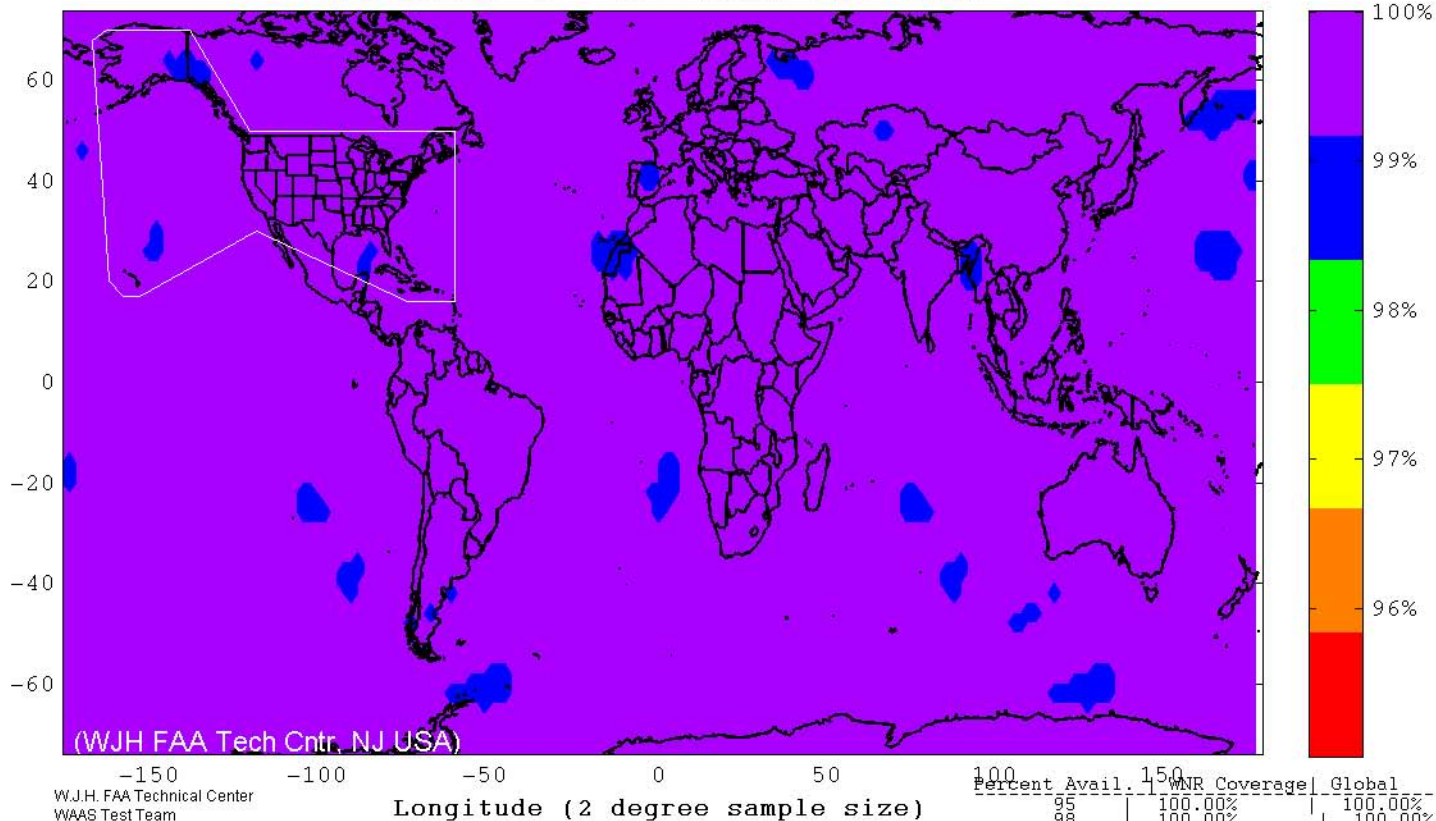
SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 February 1 - February 28, 2015



W.J.H. FAA Technical Center
 WAAS Test Team
 03/26/15

Longitude (2 degree sample size)

SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 February 1 - February 28, 2015



W.J.H. FAA Technical Center
 WAAS Test Team
 03/26/15

Longitude (2 degree sample size)