

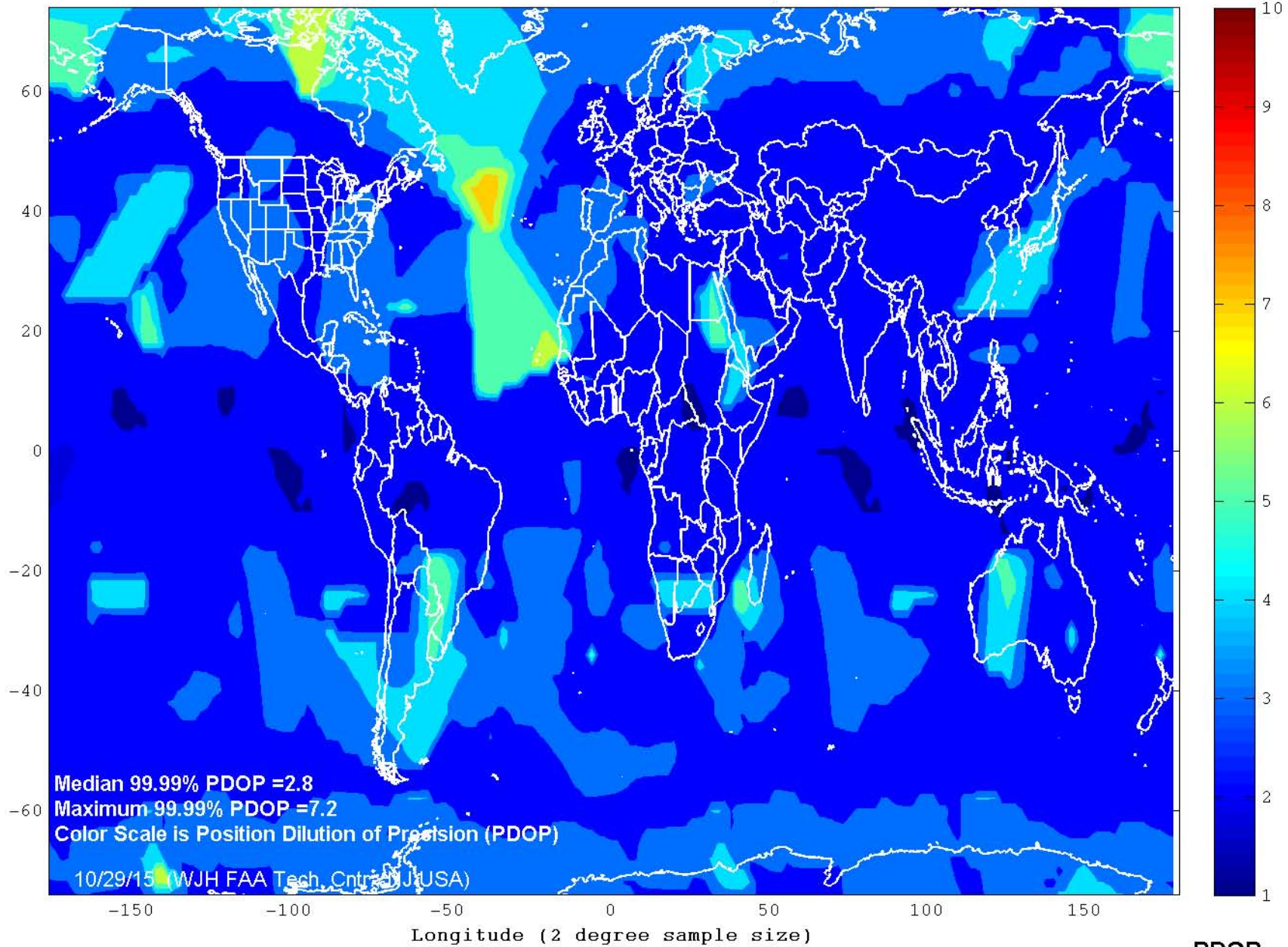
# Civil Report Card On GPS Performance September 2015

Operational Performance Parameter	CY 2014	August 2015	Sept 2015	Long term	Short term
<b>Availability Parameters</b>					
<i>Average Number of satellites usable</i>	30.40	30.98	30.98	↑	→
<i>Average number of satellites usable in primary slots</i>	23.98 (99.94%)	23.99 (99.96%)	23.99 (99.96%)	↑	→
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	99.99%	→	→
<b>99.99% Horizontal DOP</b>					
<i>Area Median</i>	1.4	1.3	1.4	→	↓
<i>Worst Site</i>	18.1	2.3	3.5	↑	↓
<b>99.99% Vertical DOP</b>					
<i>Area Median</i>	2.5	2.4	2.5	→	↓
<i>Worst Site</i>	43.0	5.0	6.7	↑	↓
<b>99.99% Position DOP (PDOP)</b>					
<i>Area Median</i>	2.8	2.7	2.8	→	↓
<i>Worst Site</i>	43.4	5.1	7.2	↑	↓
<b>100% RAIM Availability (HAL=185m)</b>					
<i>NPA Service Area (NSA)</i>	43.96%	90.00%	35.58%	↓	↓
<i>World</i>	47.30%	80.47%	51.25%	↑	↓
<b>Accuracy Parameters</b>					
<b>RMS Single Frequency User Range Error</b>					
<i>Constellation Median</i>	2.25	1.62	1.75	↑	↓
<i>Worst Satellite</i>	2.69	2.21	2.46	↑	↓
<b>95% Horizontal Error</b>					
<i>Area Median</i>	2.62	2.10	2.22	↑	↓
<i>Worst Site</i>	10.23	4.07	4.99	↑	↓
<i>Availability (% &lt;4.5m (historical 3-sigma))</i>	97.72%	99.79%	99.50%	↑	↓
<b>95% Vertical Error</b>					
<i>Area Median</i>	5.52	3.96	3.96	↑	→
<i>Worst Site</i>	9.87	4.82	5.00	↑	↓
<i>Availability (% &lt; 9m (historical 3-sigma))</i>	98.90%	99.99%	99.93%	↑	↓

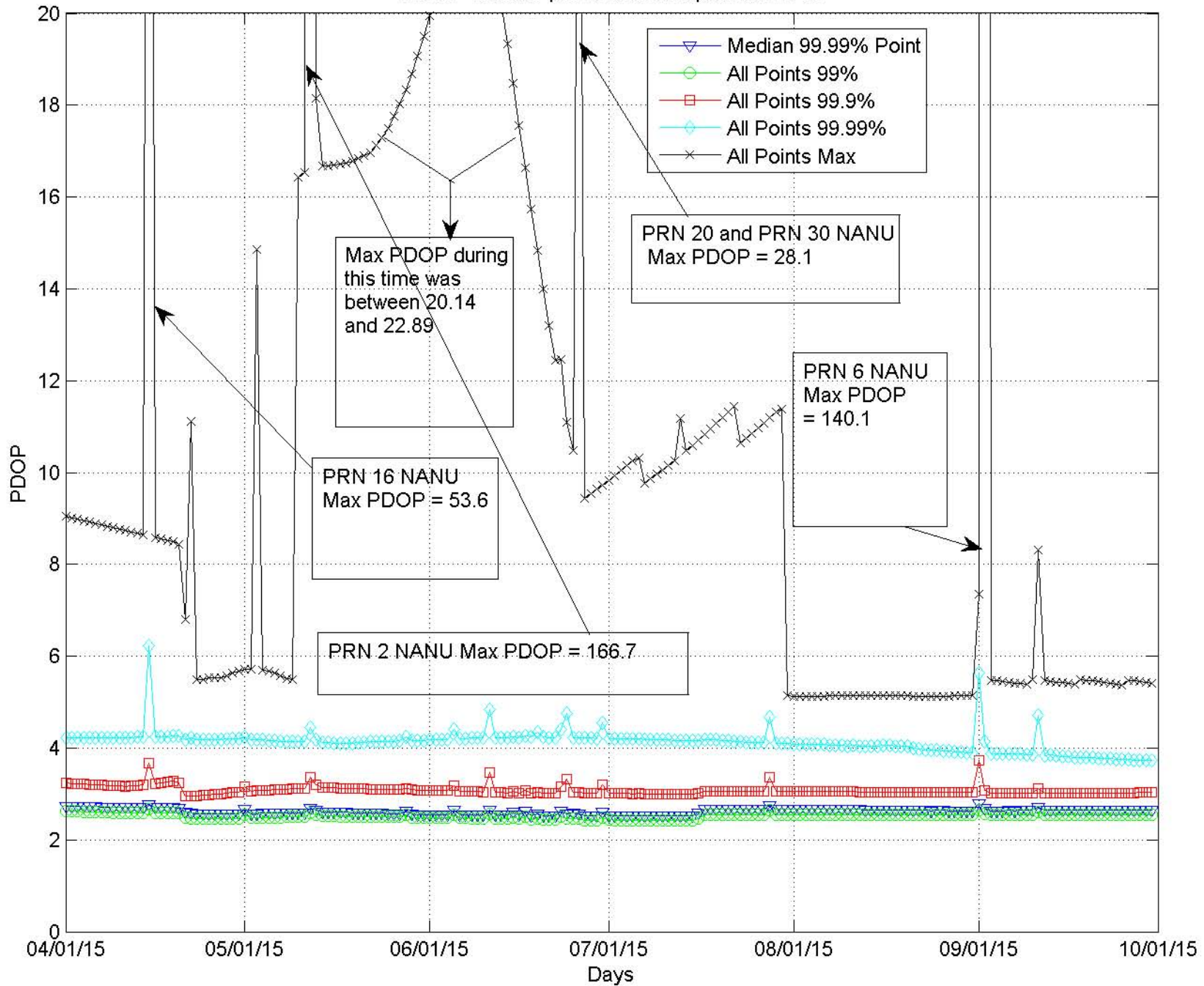
Key: ↑ improving ↓ worsening → no significant change

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

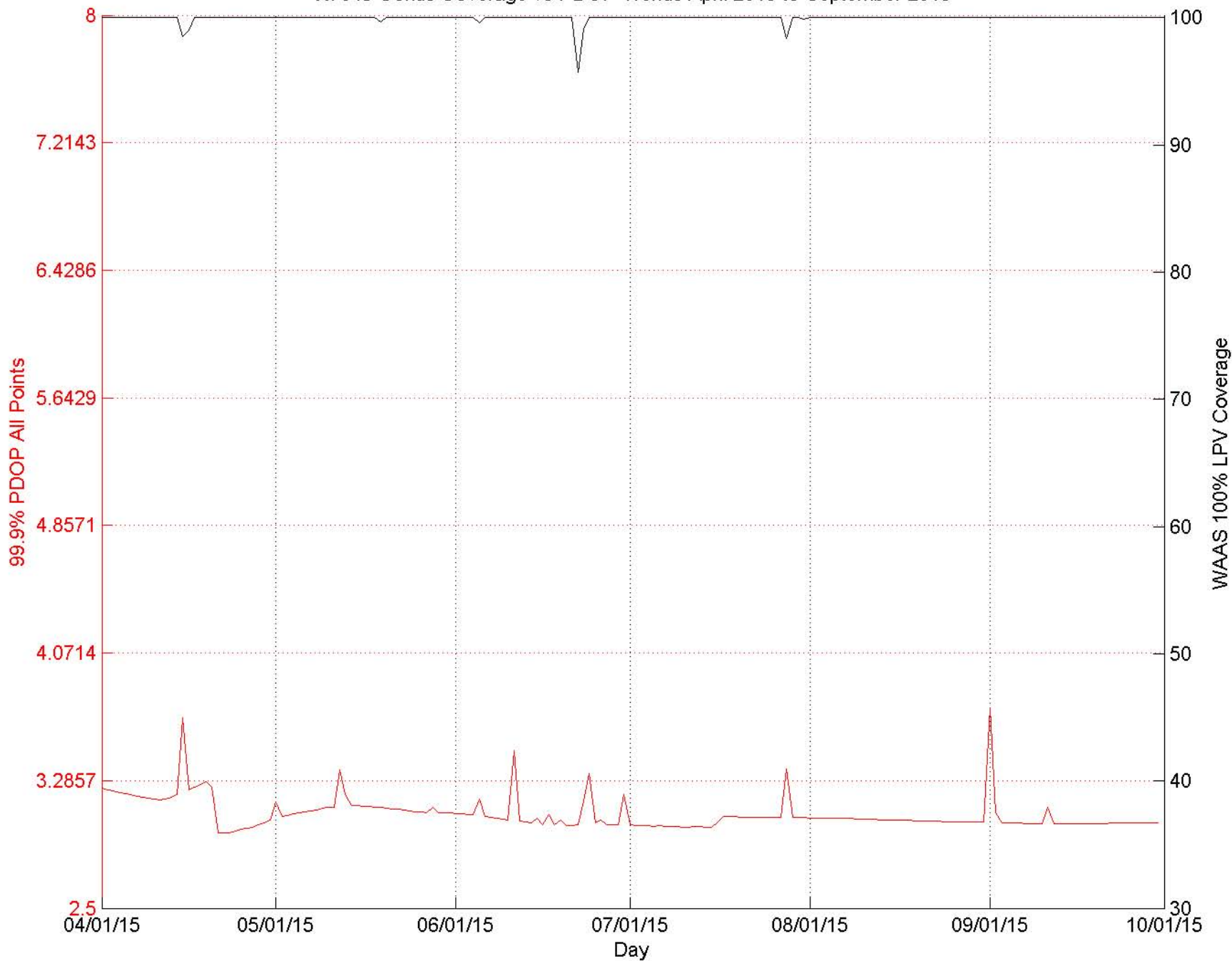
# GPS World PDOP 99.99% Index September 2015



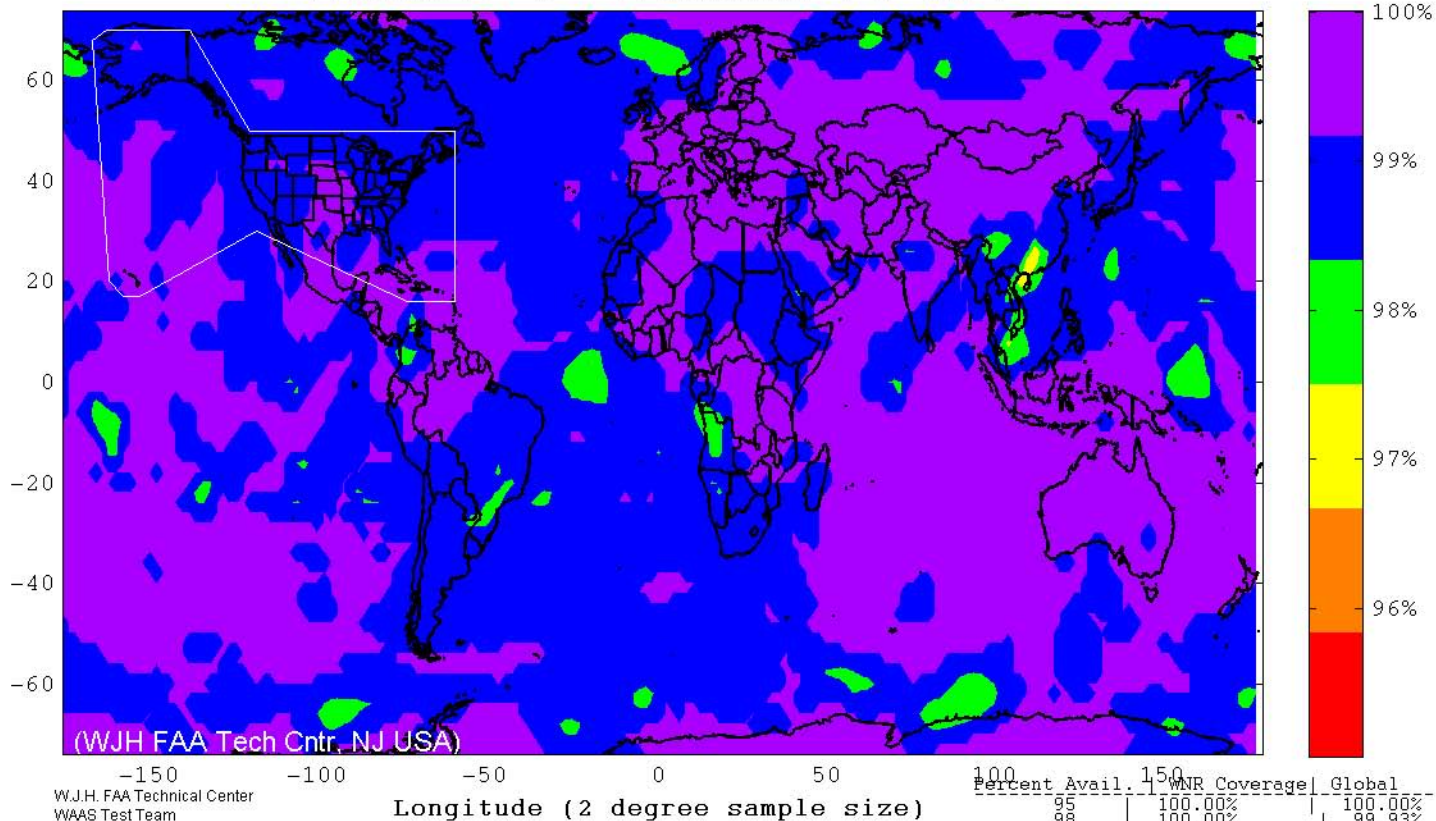
PDOP Trends April 2015 thru September 2015



WAAS Conus Coverage vs PDOP Trends April 2015 to September 2015



SPS RAIM RNP 0.1 (HAL = 185m) Availability  
 FD Only, SA Off, without Baro-Aiding  
 September 1 - September 31, 2015



W.J.H. FAA Technical Center  
 WAAS Test Team  
 10/29/15

Longitude (2 degree sample size)

SPS RAIM RNP 0.3 (HAL = 556m) Availability  
 FD Only, SA Off, without Baro-Aiding  
 September 1 - September 31, 2015

