

Civil Report Card On GPS Performance

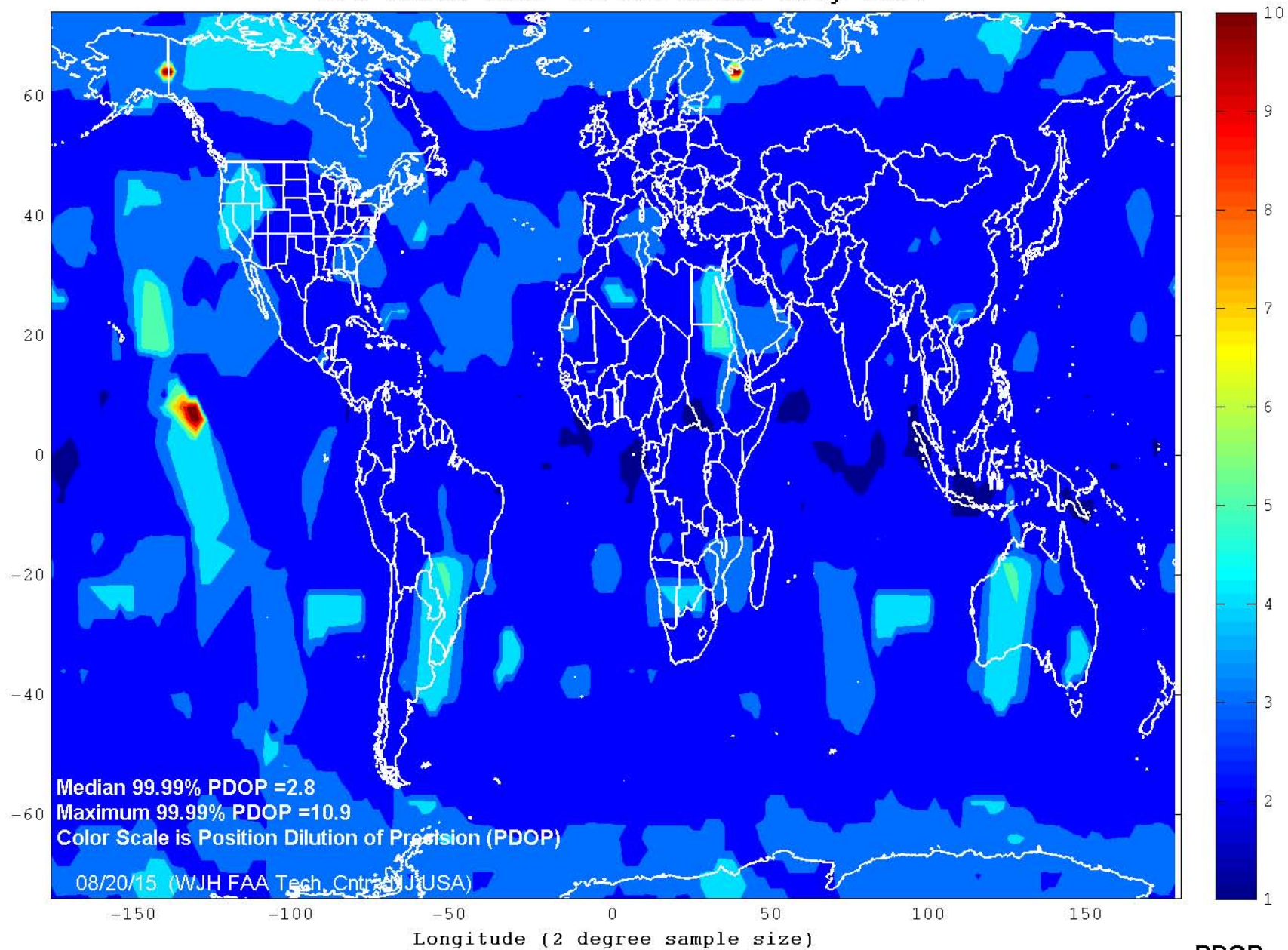
July 2015

Operational Performance Parameter	CY 2014	June 2015	July 2015	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.40	30.94	30.99	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.98 (99.94%)	23.96 (99.86%)	23.99 (99.95%)	↑	↑
<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	1.3	↑	↑
<i>Worst Site</i>	18.1	5.8	3.0	↑	↑
99.99% Vertical DOP					
<i>Area Median</i>	2.5	2.6	2.4	↑	↑
<i>Worst Site</i>	43.0	21.3	10.6	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	2.8	2.9	2.7	↑	↑
<i>Worst Site</i>	43.4	22.1	10.9	↑	↑
100% RAIM Availability (HAL=185m)					
<i>NPA Service Area (NSA)</i>	43.96%	13.68%	16.74%	↓	↑
<i>World</i>	47.30%	50.87%	65.52%	↑	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	2.25	1.67	1.55	↑	↑
<i>Worst Satellite</i>	2.69	2.19	2.09	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.62	2.49	2.21	↑	↑
<i>Worst Site</i>	10.23	4.03	4.15	↑	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	97.72%	99.71%	99.76%	↑	↑
95% Vertical Error					
<i>Area Median</i>	5.52	3.77	3.54	↑	↑
<i>Worst Site</i>	9.87	5.01	5.71	↑	↓
<i>Availability (% < 9m (historical 3-sigma))</i>	98.90%	99.99%	99.96%	↑	↓

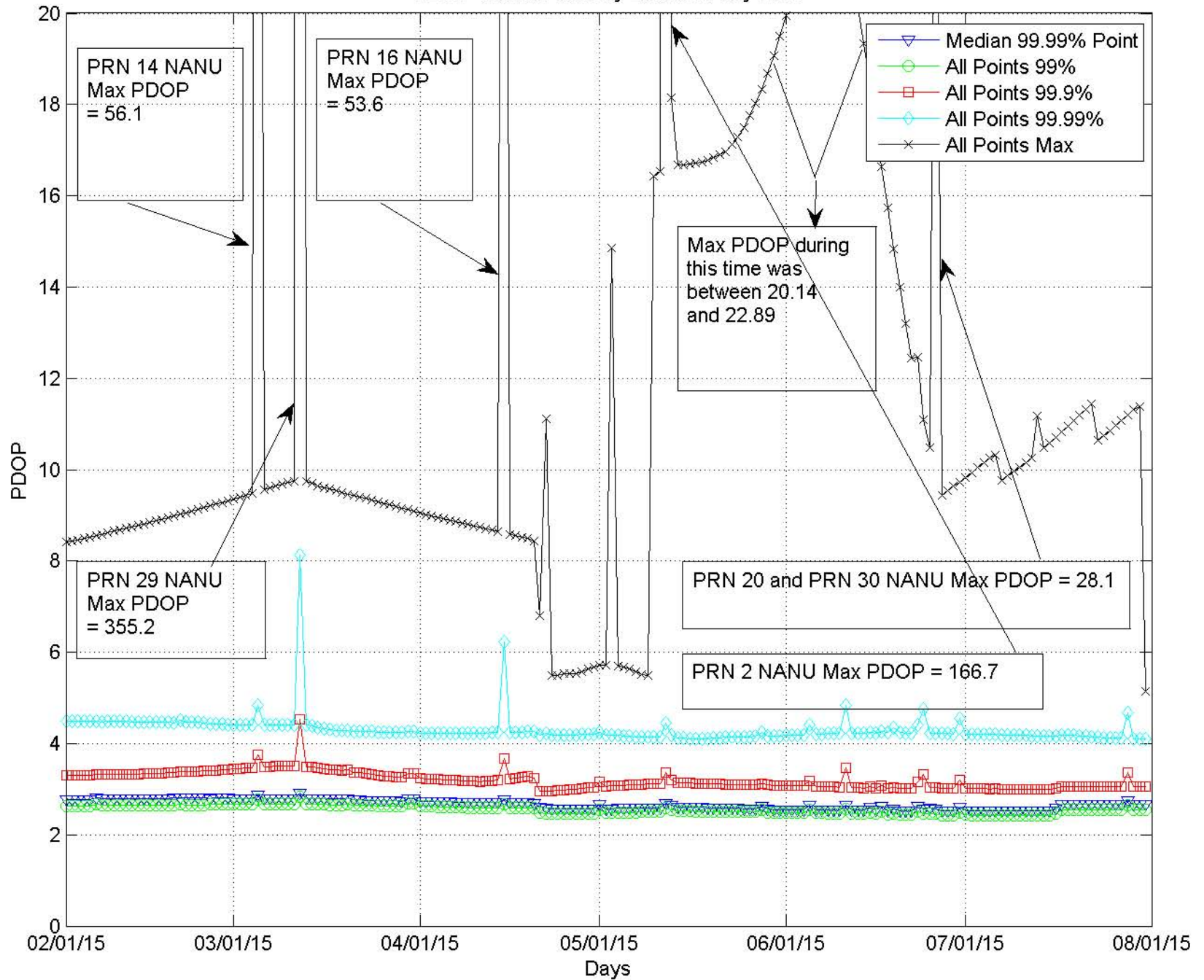
Key: ↑ improving ↓ worsening → no significant change

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

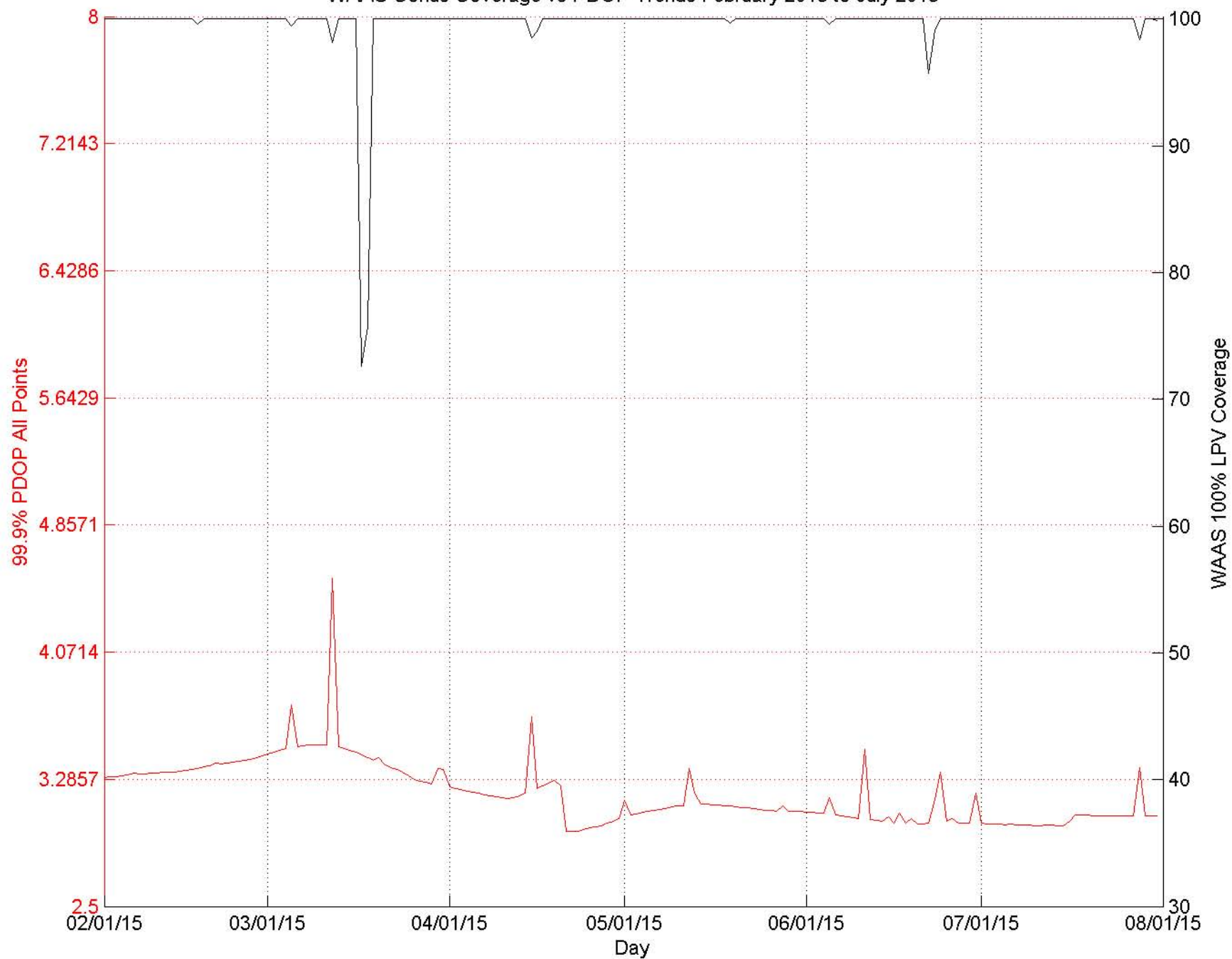
GPS World PDOP 99.99% Index July 2015



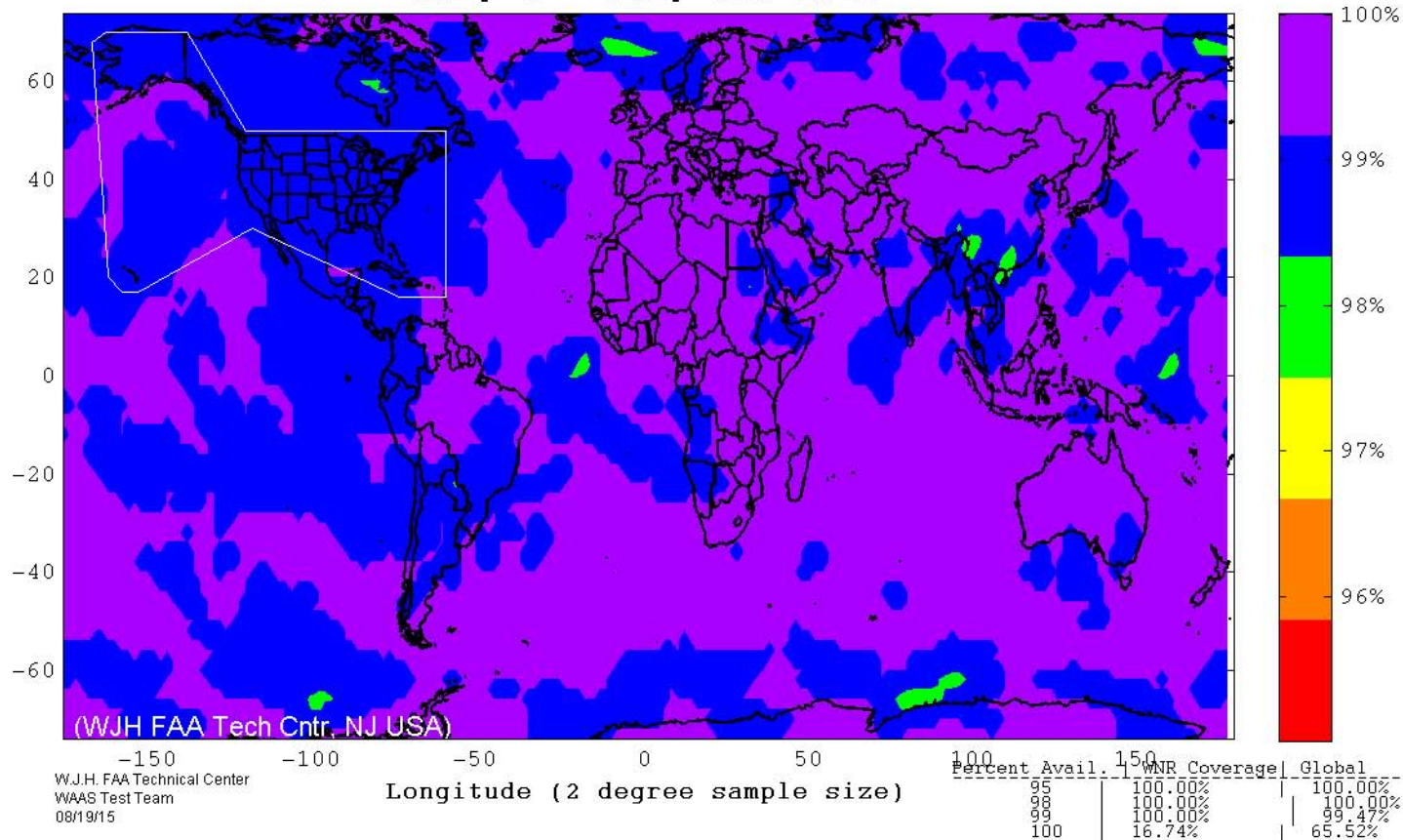
PDOP Trends February 2015 thru July 2015



WAAS Conus Coverage vs PDOP Trends February 2015 to July 2015



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



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

