

Civil Report Card On GPS Performance

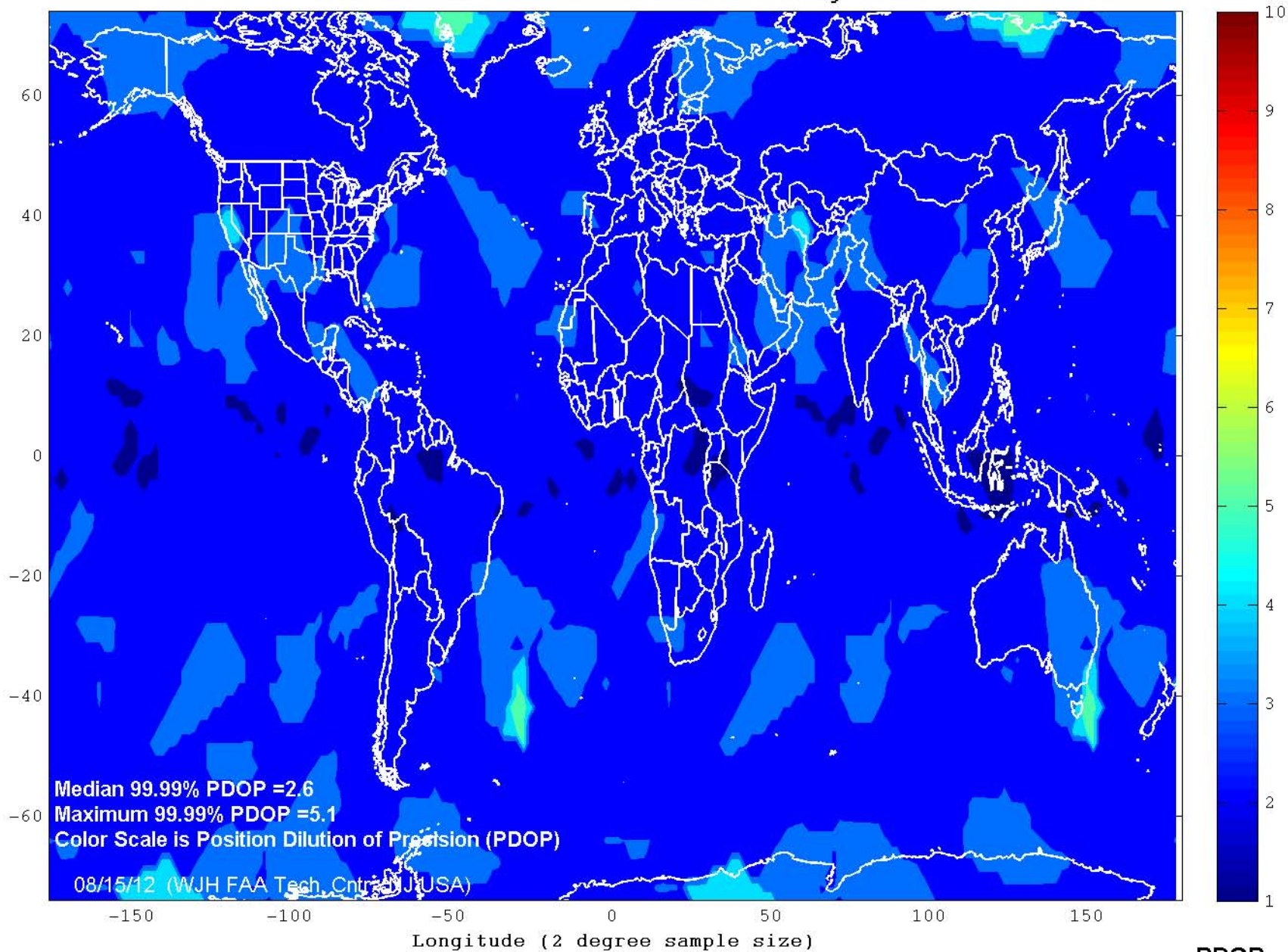
July 2012

Operational Performance Parameter	CY 2011	June 2012	July 2012	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.65	30.98	30.99	↑	↑
<i>Average number of satellites usable in primary slots</i>	23.78 (99.10%)	23.99 (99.99%)	23.99 (99.97%)	↑	↓
<i>Average availability of 6 satellites in view</i>	99.99%	100%	100%	→	→
99.99% Horizontal DOP					
<i>Area Median</i>	1.5	1.3	1.3	↑	→
<i>Worst Site</i>	3.0	2.1	2.2	↑	↓
99.99% Vertical DOP					
<i>Area Median</i>	2.8	2.4	2.3	↑	↑
<i>Worst Site</i>	5.8	4.9	4.8	↑	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.1	2.6	2.6	↑	→
<i>Worst Site</i>	6.5	5.2	5.1	↑	↑
99% RAIM Availability (HAL=100m)					
<i>NPA Service Area (NSA)</i>	-	97.37%	97.05%	-	↓
<i>World</i>	-	97.14%	96.67%	-	↓
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.95	1.77	1.76	↑	↑
<i>Worst Satellite</i>	2.57	2.49	2.34	↑	↑
95% Horizontal Error					
<i>Area Median</i>	2.71	2.65	2.54	↑	↑
<i>Worst Site</i>	10.10	4.24	4.16	↑	↑
<i>Availability (% <4.5m (historical 3-sigma))</i>	98.74%	99.90%	99.83%	↑	↓
95% Vertical Error					
<i>Area Median</i>	5.03	4.04	4.45	↑	↓
<i>Worst Site</i>	10.39	5.93	5.57	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.53%	99.99%	99.98%	↑	↓

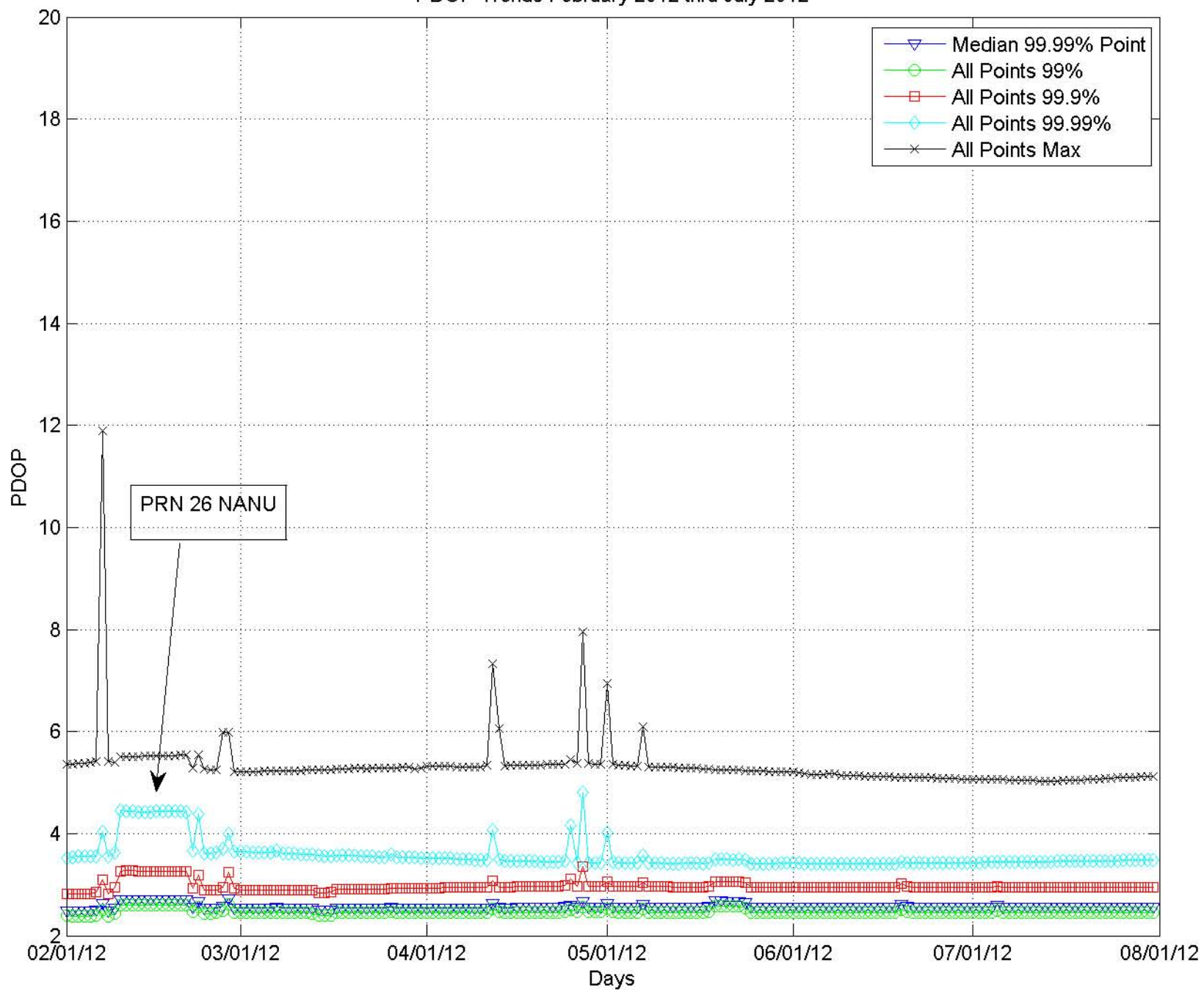
Key: ↑ improving ↓ worsening → no significant change

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

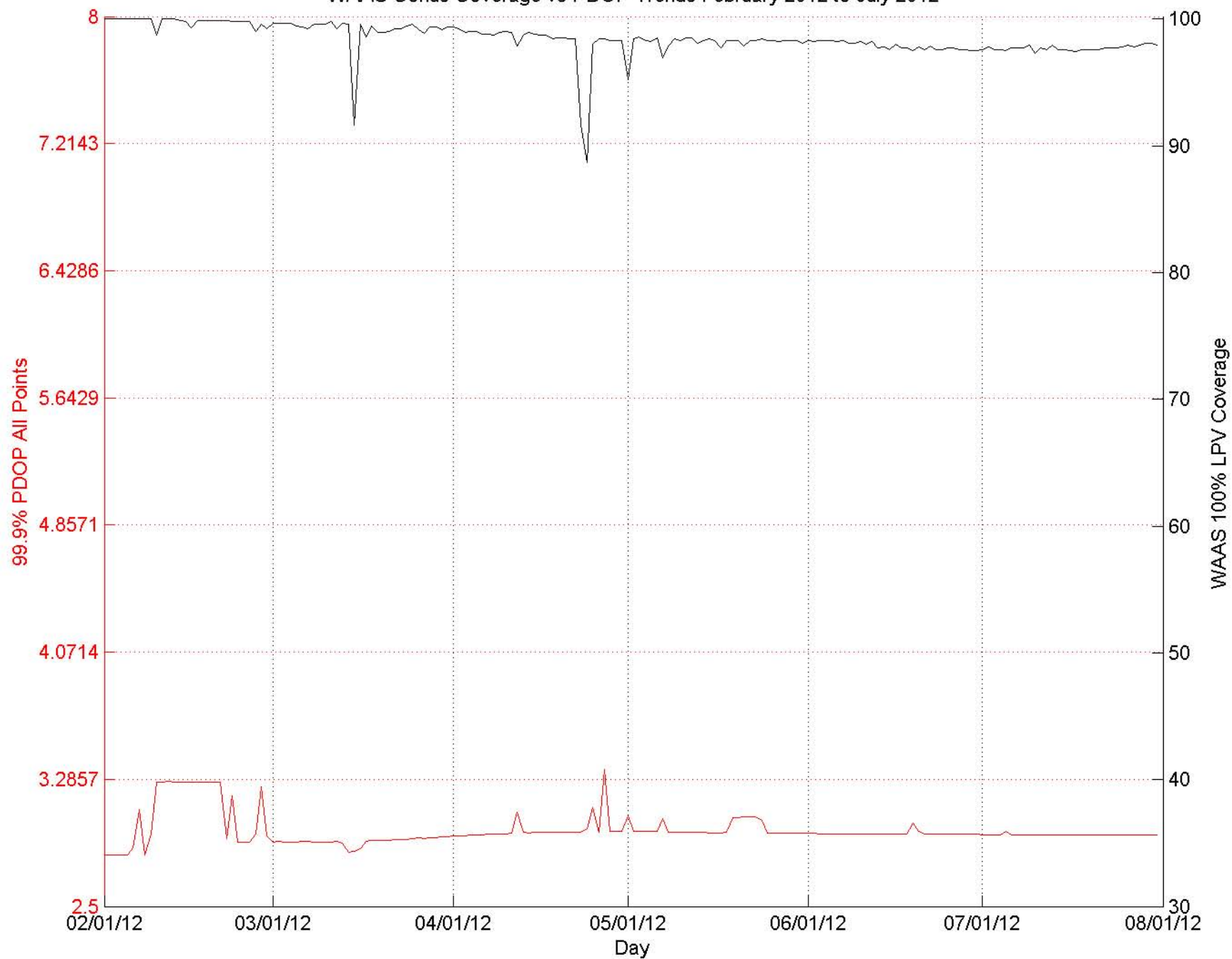
GPS World PDOP 99.99% Index July 2012



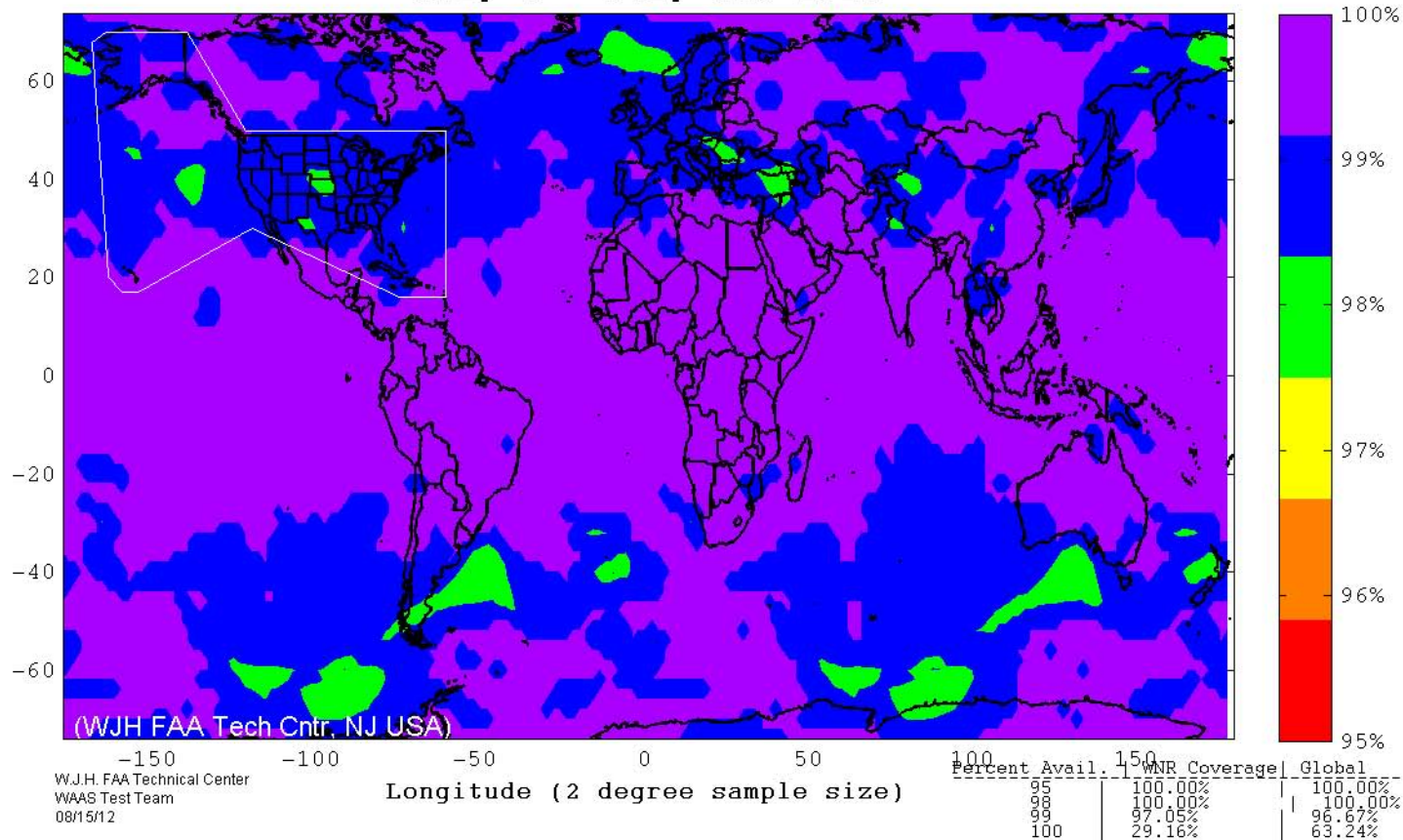
PDOP Trends February 2012 thru July 2012



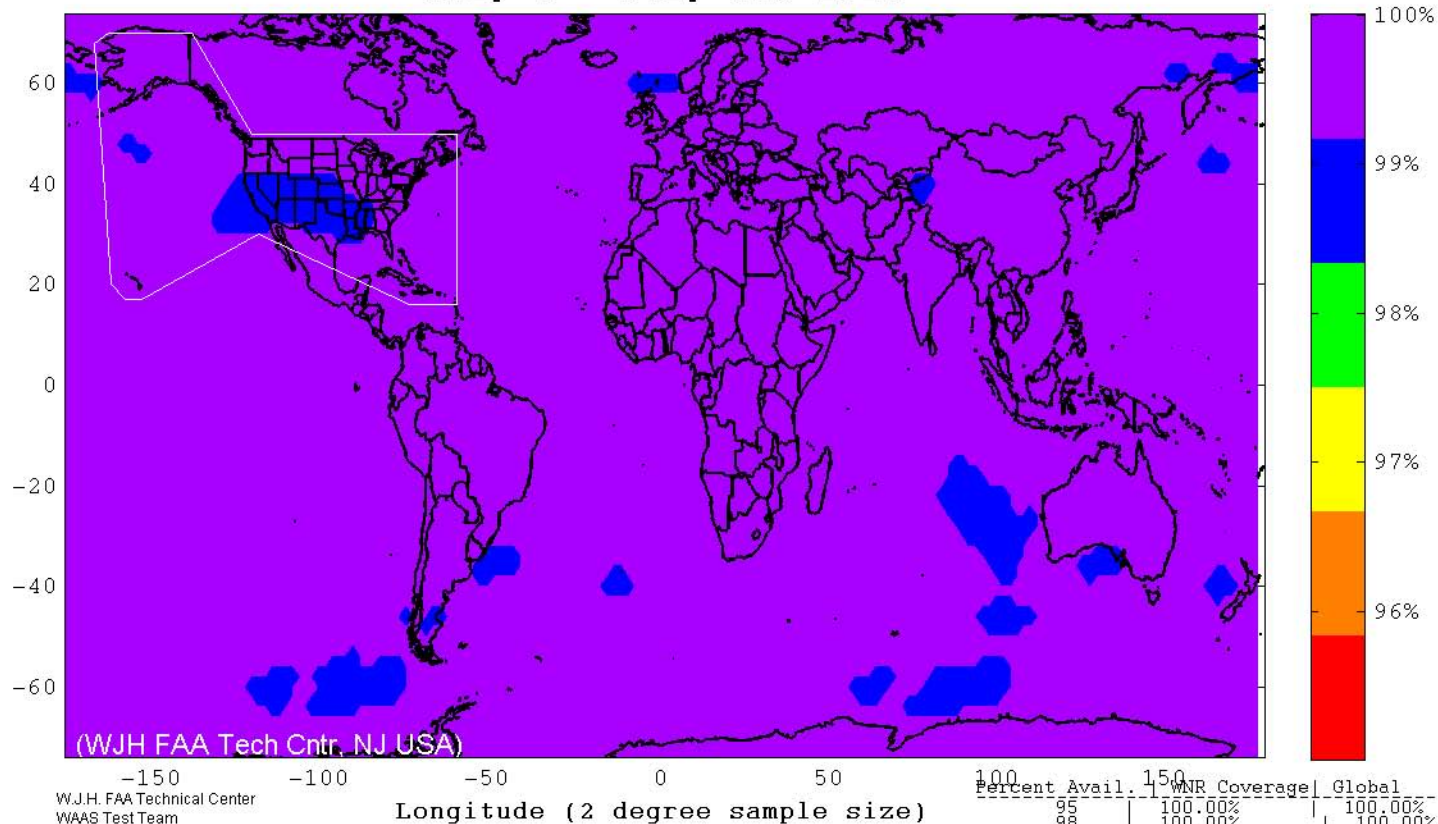
WAAS Conus Coverage vs PDOP Trends February 2012 to July 2012



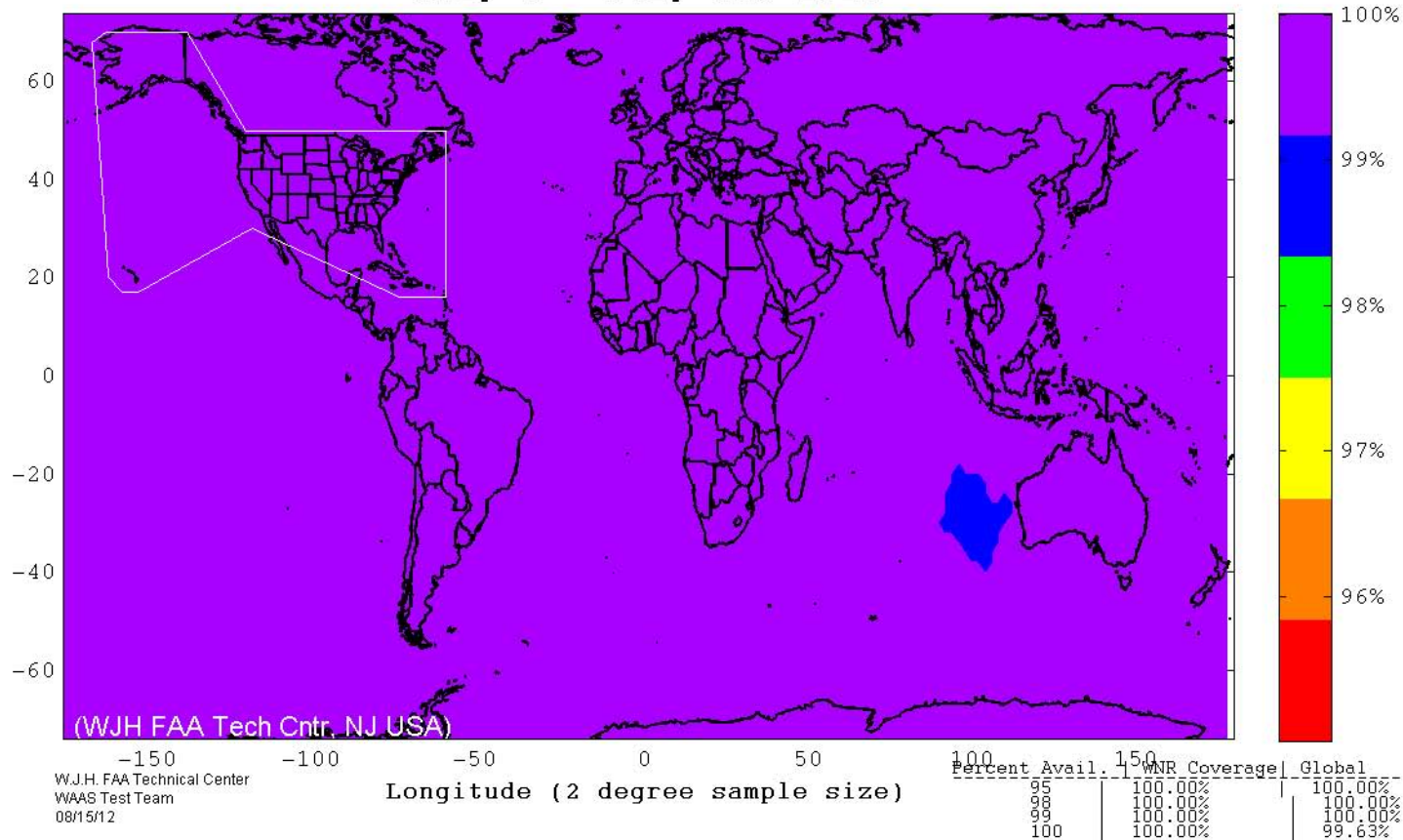
SPS RAIM (HAL=100m) Availability
 FD Only, SA Off, without Baro-Aiding
 July 1 - July 31, 2012



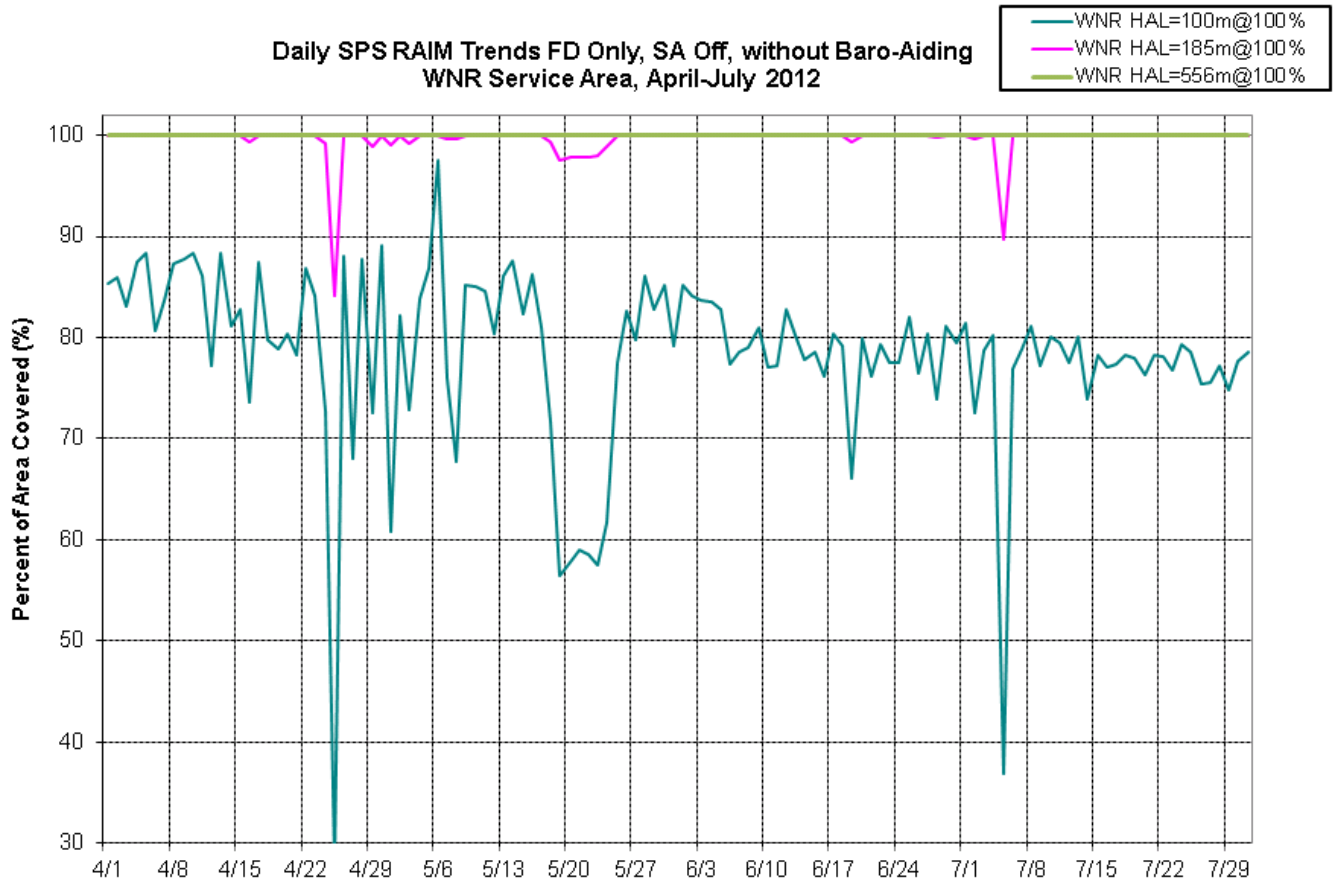
SPS RAIM RNP 0.1 (HAL = 185m) Availability
 FD Only, SA Off, without Baro-Aiding
 July 1 - July 31, 2012



SPS RAIM RNP 0.3 (HAL = 556m) Availability
 FD Only, SA Off, without Baro-Aiding
 July 1 - July 31, 2012



**Daily SPS RAIM Trends FD Only, SA Off, without Baro-Aiding
WNR Service Area, April-July 2012**



**Daily SPS RAIM Trends FD Only, SA Off, without Baro-Aiding
World Service Area, April-July 2012**

