

Civil Report Card On GPS Performance

June 2006

Operational Performance Parameter	CY 2005	Long term	May 2006	June 2006	Short term
Average Number of satellites usable*	28.93	↓	28.55	27.48	↓
Average number of satellites usable in primary slots*	23.80 (99.17%)	↓	23.55 (98.12%)	22.48 (93.67%)	↓
Average availability of 6 satellites in view*	TBD%		99.99%	99.94%	↓
RMS Single Frequency User Range Error**					
Constellation Median	3.68	↑	1.945	1.826	→
Worst Satellite	5.30	↑	3.216	3.847	↓
99.99% Horizontal DOP**					
Area Median	2.1	↓	2.115	2.348	↓
Worst Site	4.1	↓	3.892	4.228	↓
99.99% Vertical DOP**					
Area Median	3.8	↓	3.640	4.161	↓
Worst Site	5.6	↓	6.626	7.853	↓
99.99% Position DOP (PDOP)**					
Area Median	4.1	↓	4.058	4.525	↓
Worst Site	6.0	↓	7.473	8.673	↓
95% Horizontal Error**					
Area Median	3.44	↑	2.536	2.670	→
Worst Site	6.04	↑	4.222	4.734	↓
Availability (% <4.5m (historical 3-sigma))	99.67%	→	99.73%	99.63%	↓
95% Vertical Error**					
Area Median	5.83	↑	4.742	4.438	↑
Worst Site	7.43	↑	5.233	5.211	→
Availability (% < 9m (historical 3-sigma))	99.94%	→	99.97	99.89%	→

Key: ↑ improving ↓ worsening → no significant change

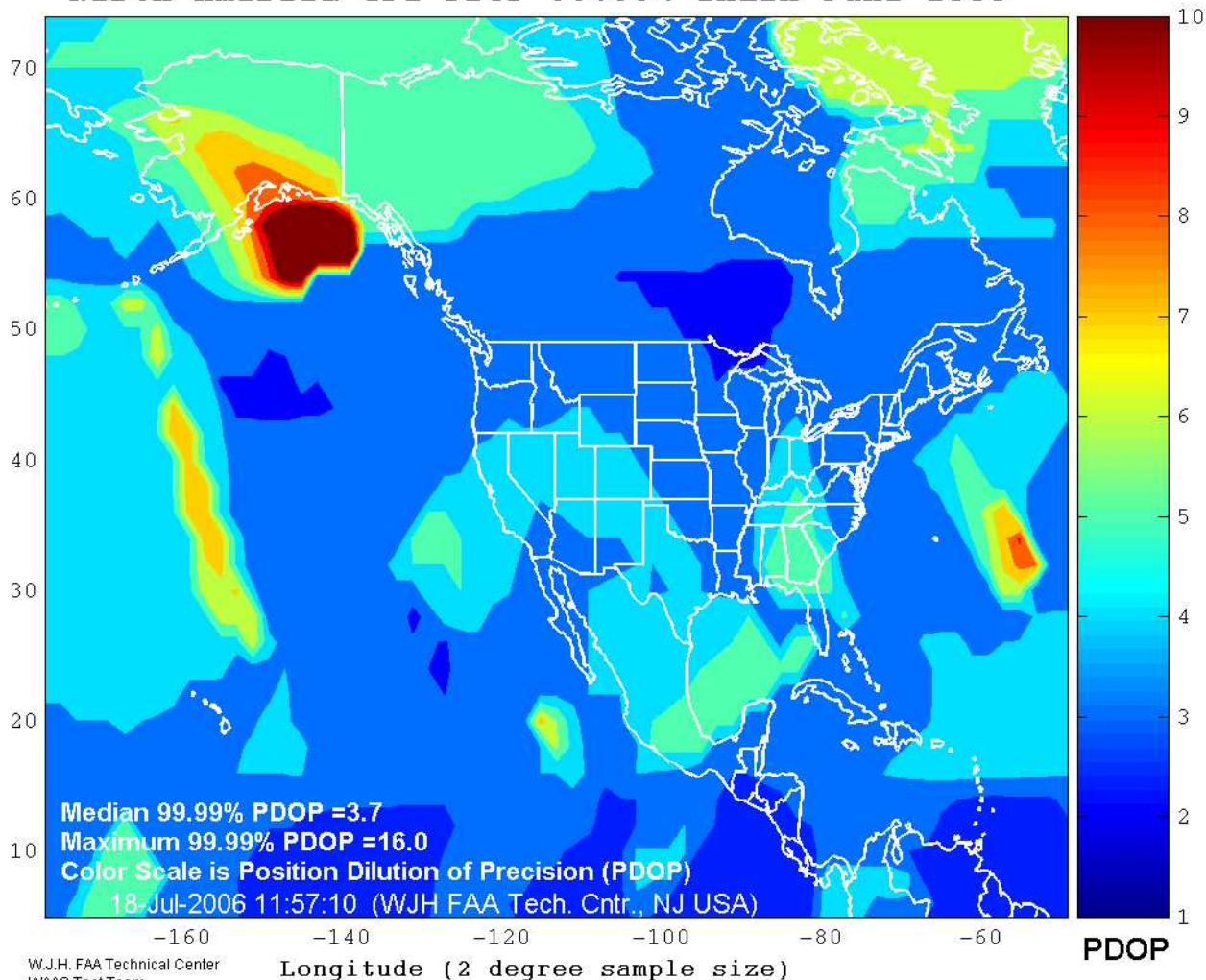
Long Term is current month vs. prior 24 months, Short Term is current month vs. prior month

* Availability Driver

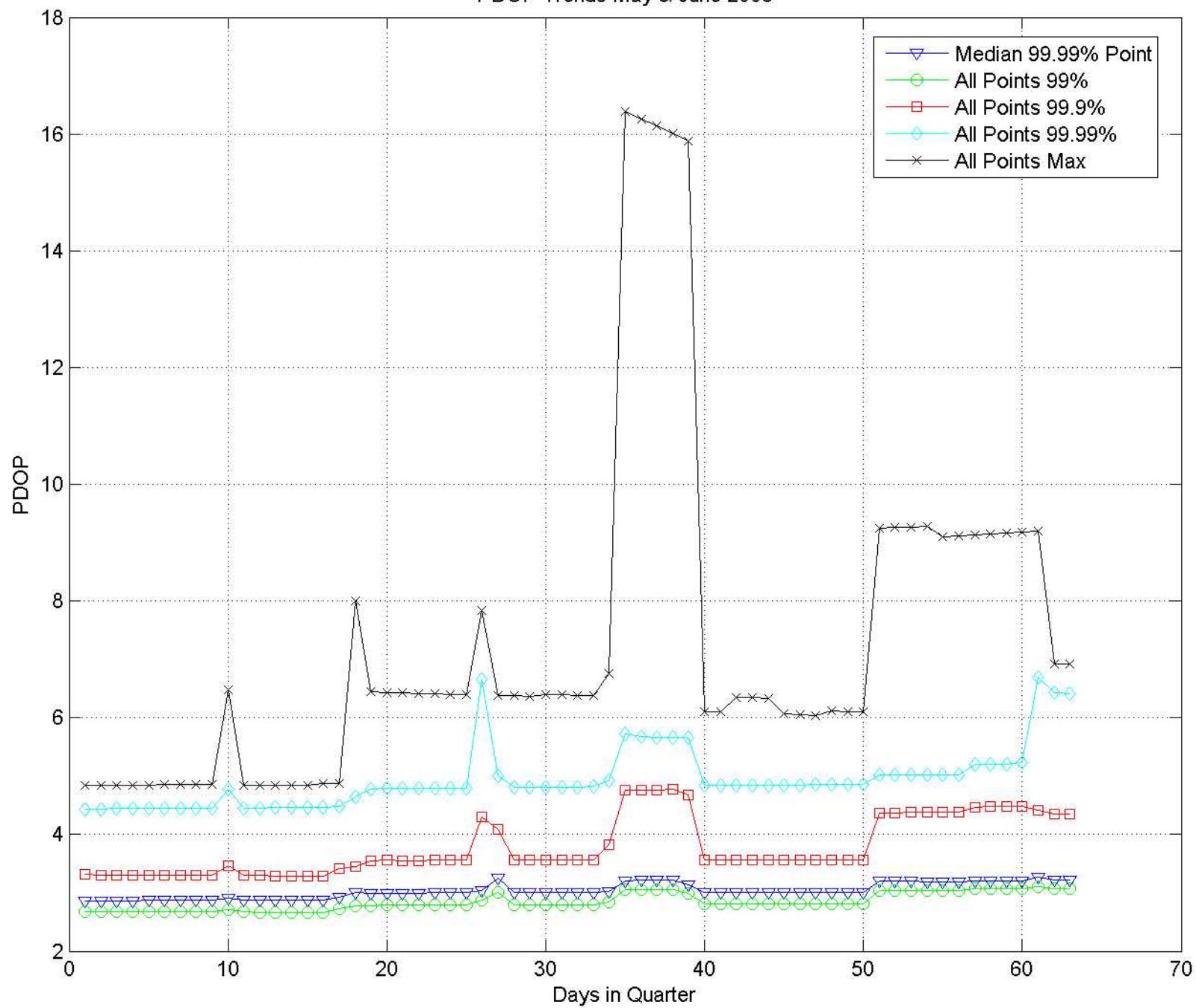
** Accuracy Driver

Compiled from WAAS network as requested by the Defense Science Board

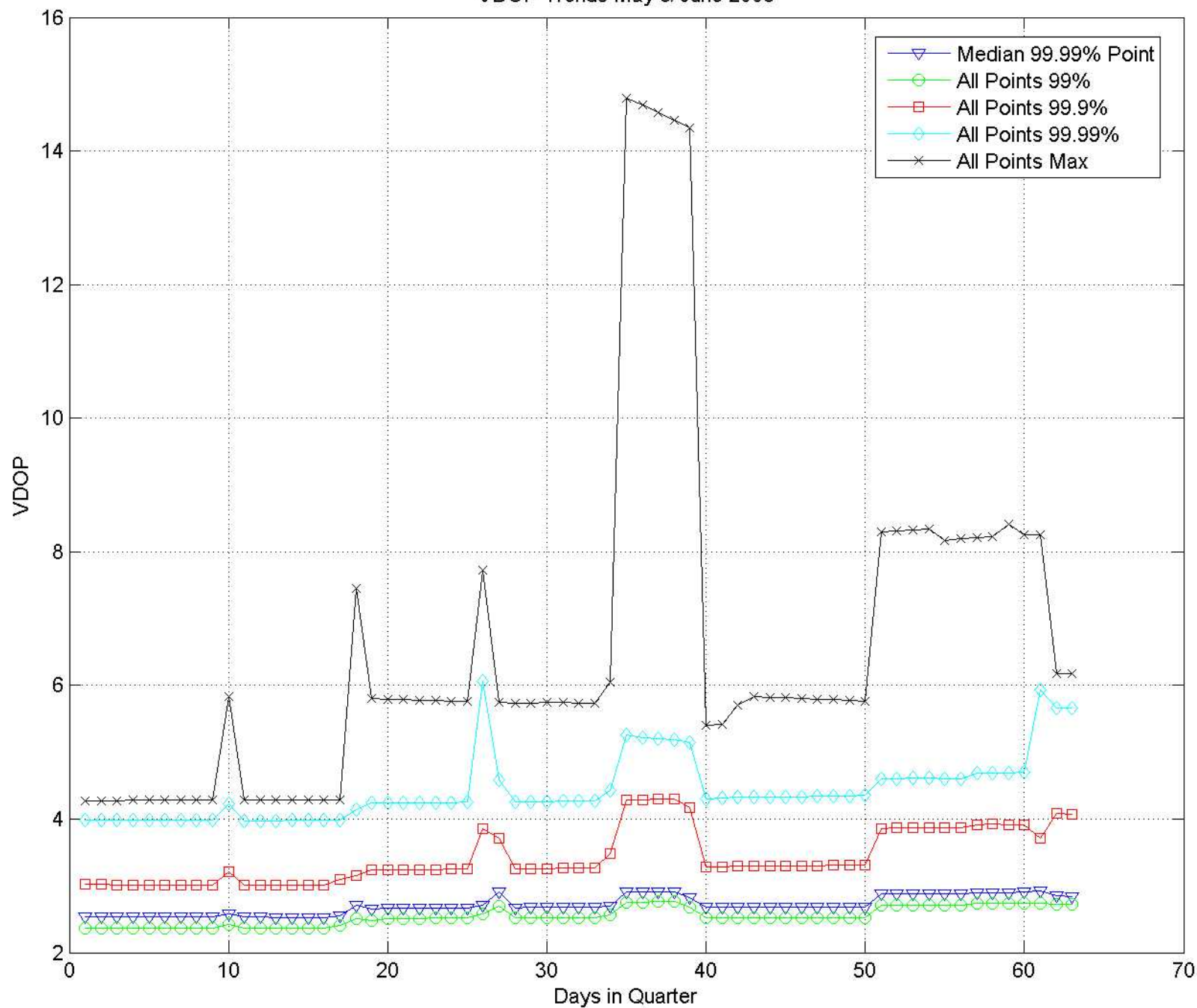
North America GPS PDOP 99.99% Index June 2006



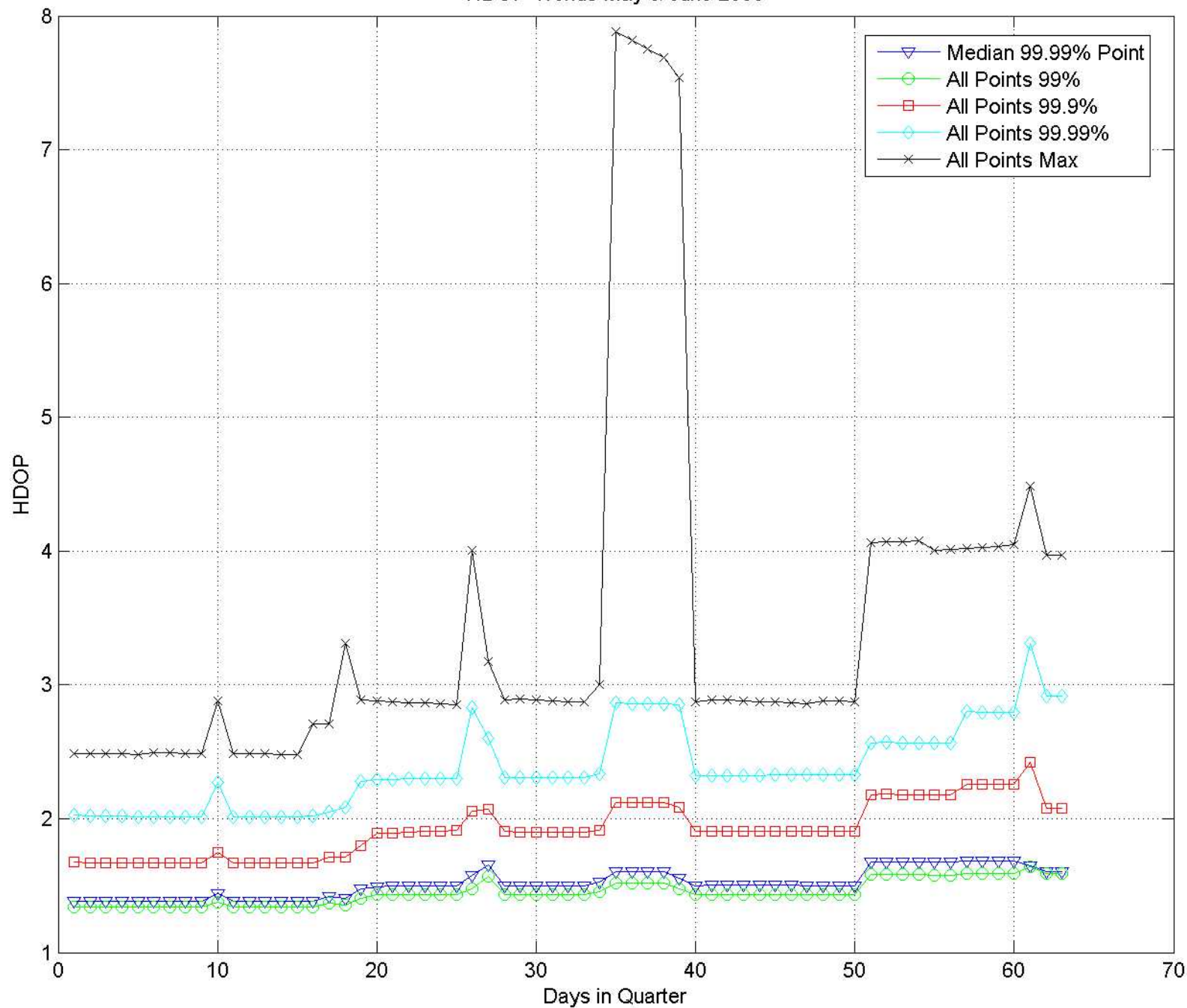
PDOP Trends May & June 2006



VDOP Trends May & June 2006



HDOP Trends May & June 2006



RAIM Availability Trends May & June 2006

