



ILA 38

United States Loran-C Performance

*Presented by
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Commanding Officer
USCG Navigation Center*



Homeland
Security

U.S. Department of
Homeland Security
**United States
Coast Guard**





Overview

Introduction

Current Status

Availability/Performance (2007 to date)

UUT By Cause (2007 to date)

2009 AUTM/EUTM Impact

YTD Chain Availability/Performance

Questions



NAVCEN Vision Statement

Team NAVCEN will operate a continuously improving and innovative high-tech systems operation center delivering precise positioning, navigation, timing, and maritime information to our customers.



2009 Loran Status

- President's FY10 Budget Proposes Terminating LORAN-C
- Congress Considering Proposed Closure in DHS Authorization & Appropriations Acts
 - ❖ Impact to Critical Infrastructure
 - ❖ GAO Report on GPS Overall Health
 - ❖ DHS GPS Survey



2009 Accomplishments

- Draft updated LORAN Signal Specification ready for signature
- LORAN Operations Manual Updated
- Un-manned 3 LORAN Stations
 - LORSTA Jupiter
 - LORSTA Kodiak
 - LORSTA Carolina Beach
- Relocated Spokane PCMS Site



Planning Initiatives

- 3 Potential Paths Forward:
 - ❖ LORAN Closure Plan
 - ❖ Retain LORAN Infrastructure
 - ❖ eLORAN Implementation Plan
- Planning Framework Developed



Radionavigation Initiatives

- Goal: Update LORAN Publications
 - ✓ Update LORAN Operational Orders
 - ✓ Update LORAN Signal Specification
 - ✓ Update LORAN Concept of Operations
 - ❖ Update LORAN User Handbook



Radionavigation Initiatives

- Goal: Reduce total cost of ownership
 - ❖ Develop LORAN Strategic Plan to include:
 - ✓ Evaluate TOT performance & finalize LORAN control method
 - ✓ Evaluate signal availability standard for TOT
 - ✓ Develop business case to replace TTX at Shoal Cove AK and Tok AK
 - ✓ Continue with unmanning Loran Stations



Radionavigation Initiatives

- Goal: Improve LORAN infrastructure
 - ❖ Develop business case to finish modernization, move Attu, and move Port Clarence
 - ❖ Foster support to increase expenditures on LORAN facility maintenance – make whole.
 - ❖ Relocate Mayport & Juneau PCMS sites
 - ❖ Recapitalize LOCUS Loran receivers.



Automated LORAN Station Availability To Date

- LORSTA JUPITER began unmanned operations on 06 March 2009.
 - ALS 7980 M-Y AVAILABILITY IS 99.285%
- LORSTA KODIAK began unmanned operations on 17 March 2009.
 - ALS 9990 M-Z AVAILABILITY IS 99.872%
 - ALS 7960 M-X AVAILABILITY IS 99.873%
- LORSTA CAROLINA BEACH began unmanned operations on 01 April 2009.
 - ALS 7980 M-Z AVAILABILITY IS 99.999%
 - ALS 9960 M-Y AVAILABILITY IS 99.716%



ALS Next Steps

- First six month evaluation report due NLT 30 October.
- Positive results from initial six month evaluation enabled an additional six month extension to complete report and move forward to possible unmanning additional stations.
- Pending six month report, begin OFCO Process.

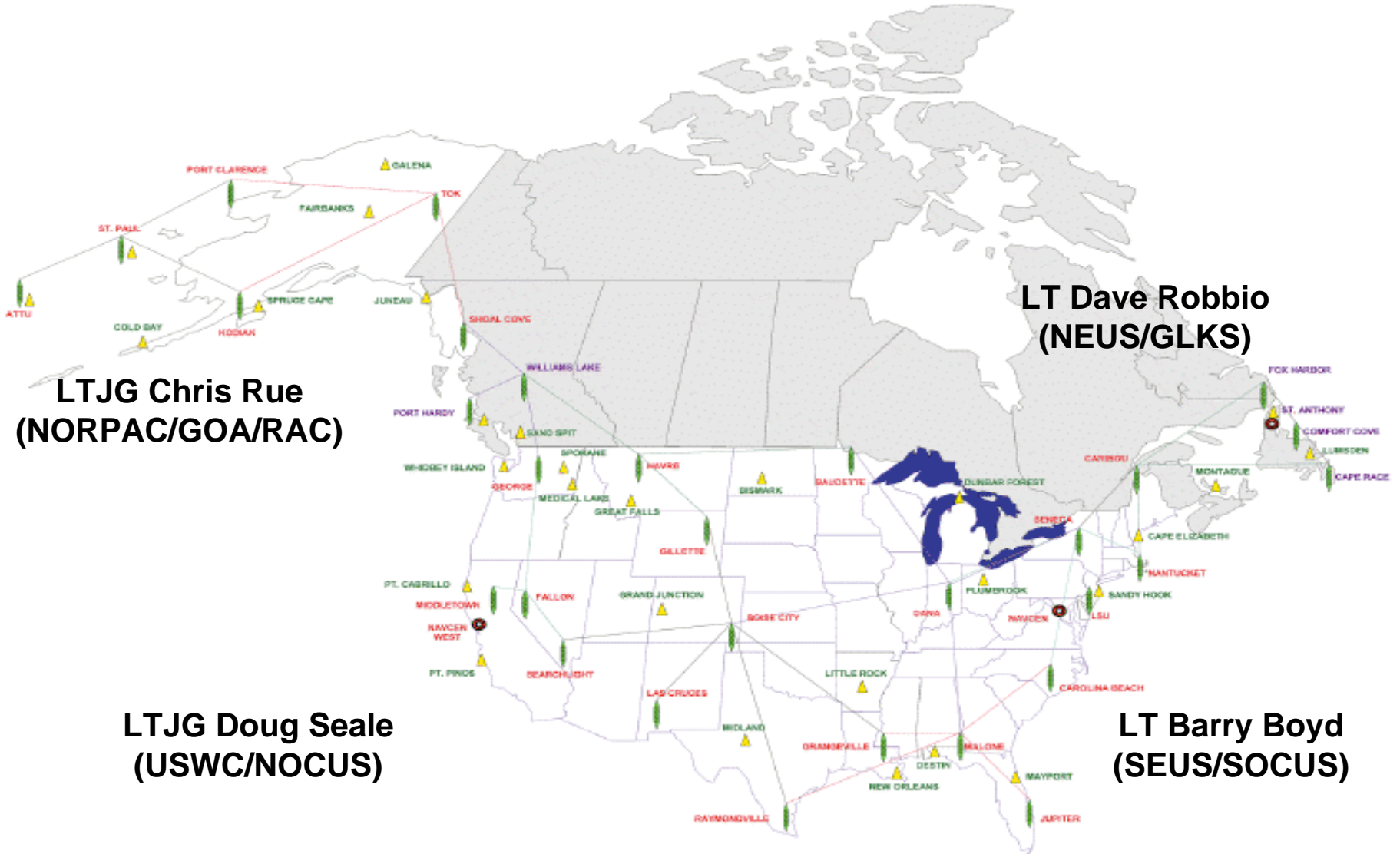


Performance Statistics

2007-2009 YTD

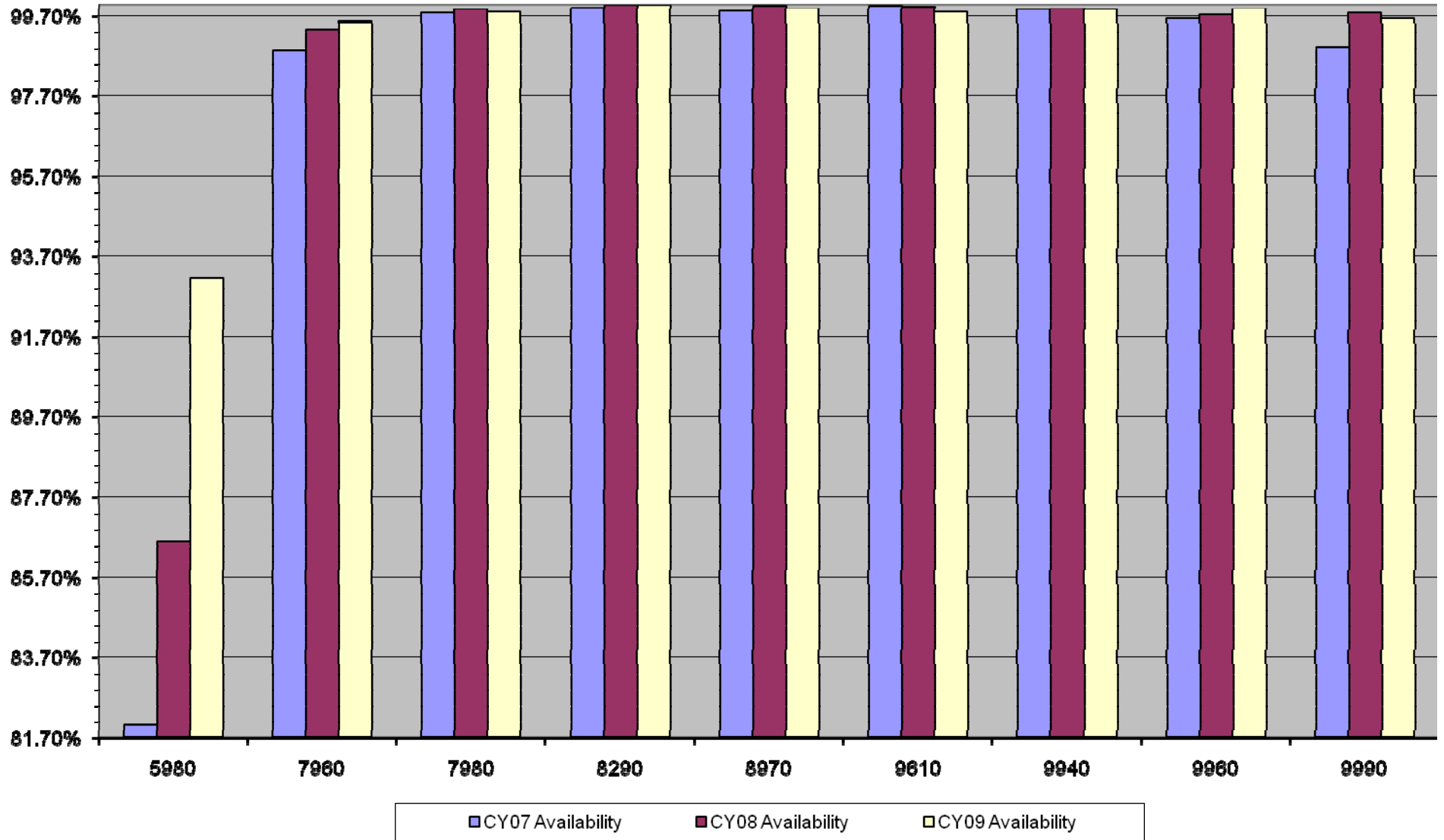


Chain Operation Control Officers (COCO's)



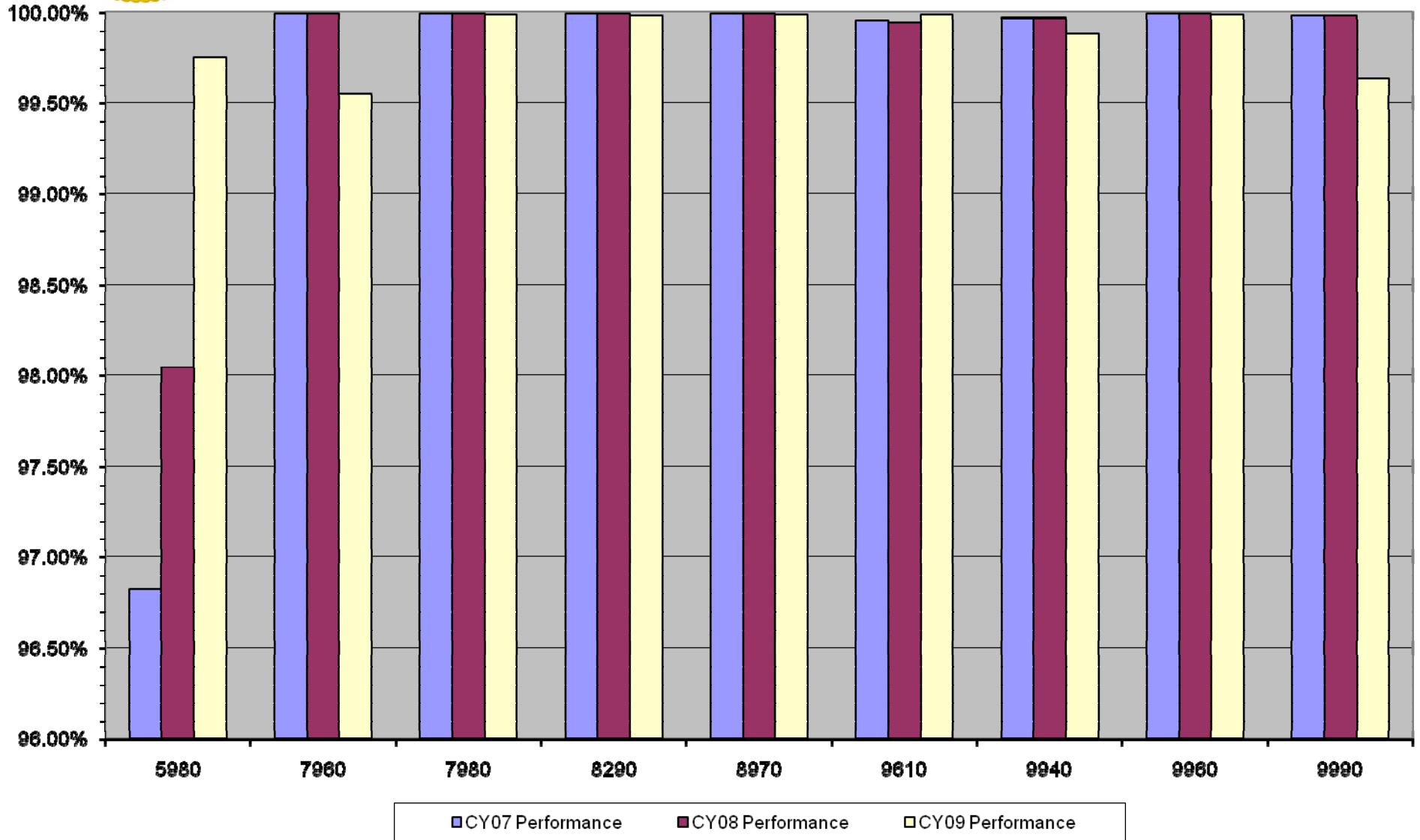


Chain Availability



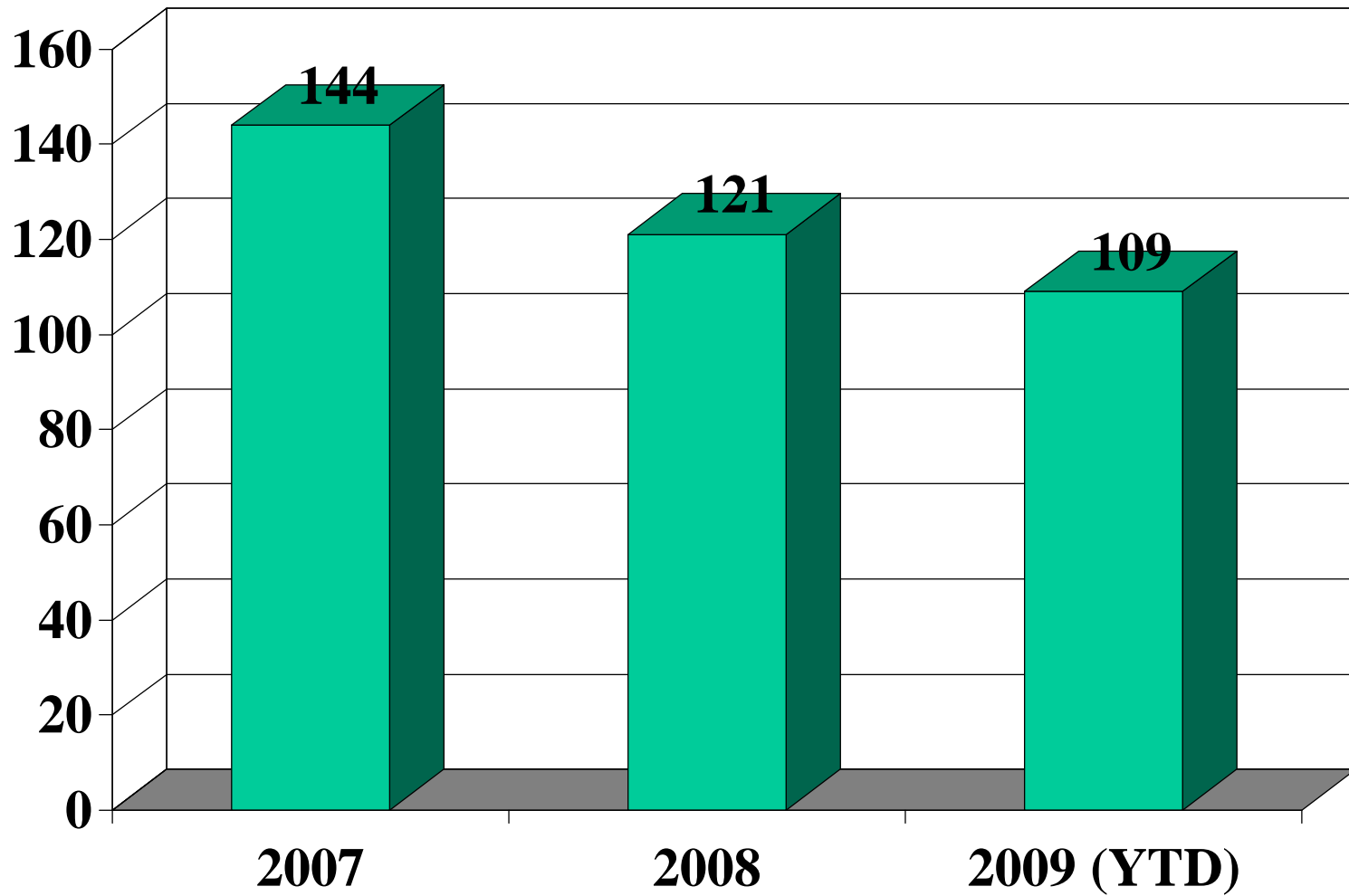


Chain Performance





Equipment Failures

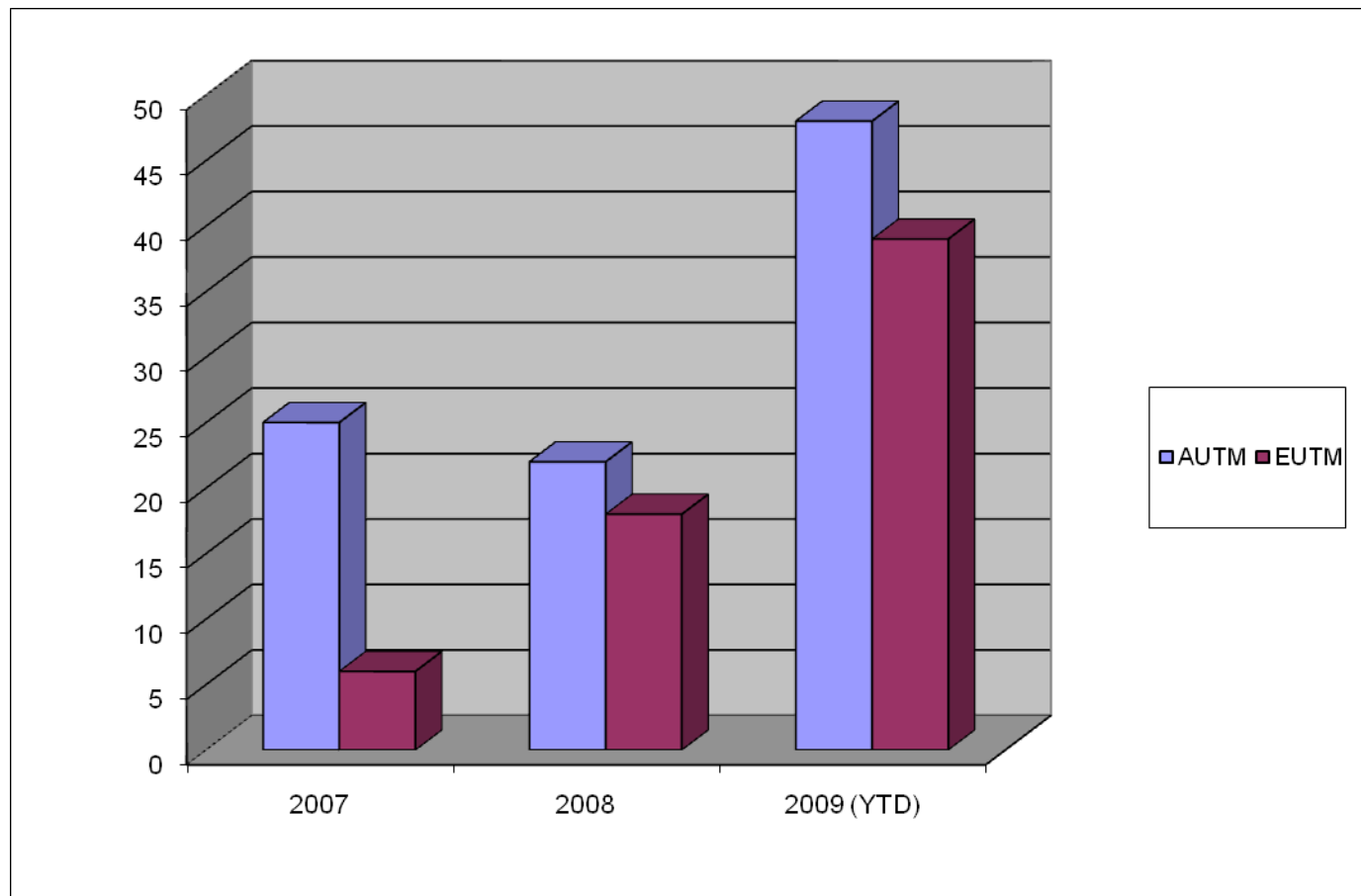




AUTM / EUTM

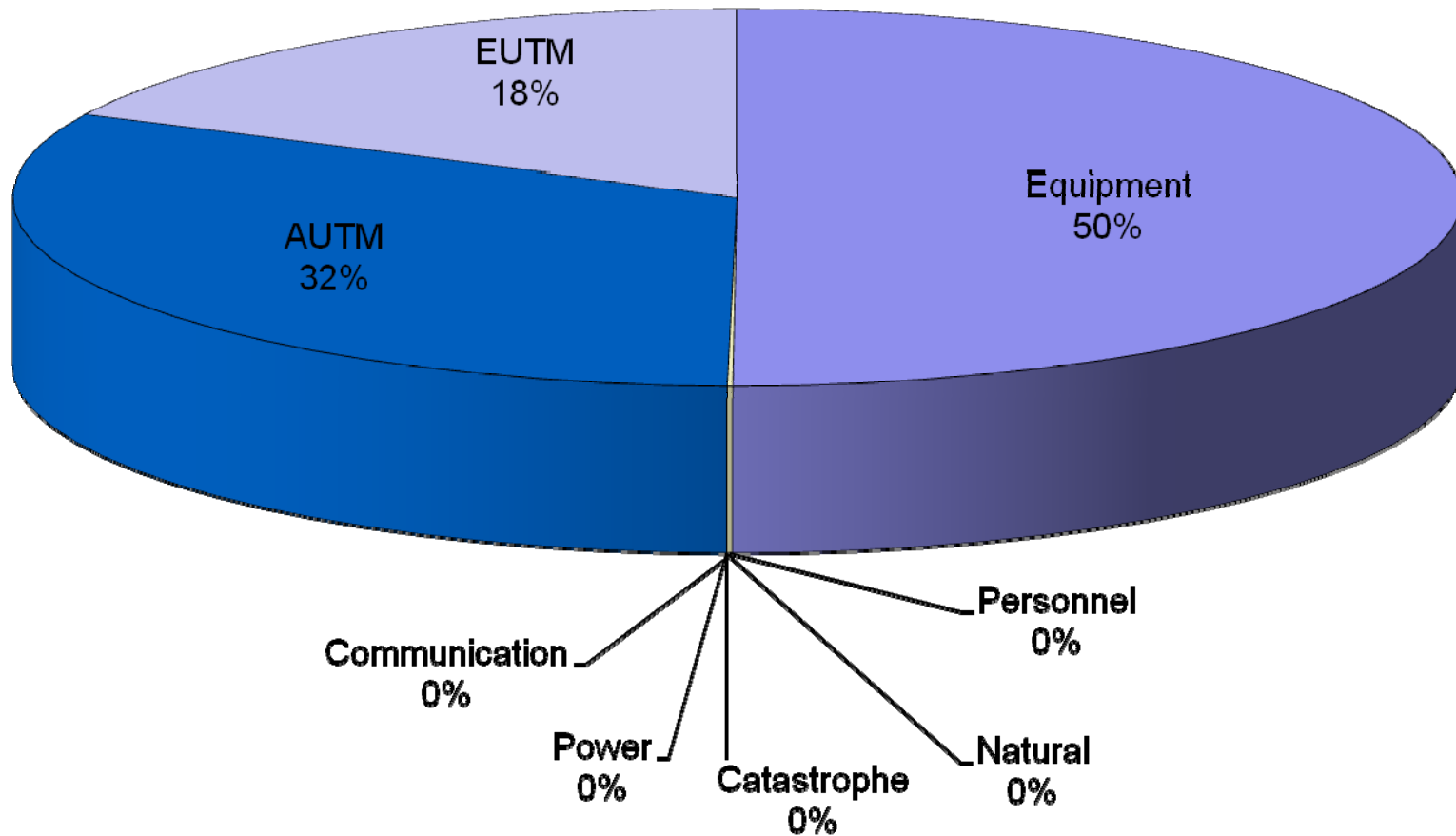
AUTM – Authorized Unusable Time

EUTM – Emergency Unusable Time

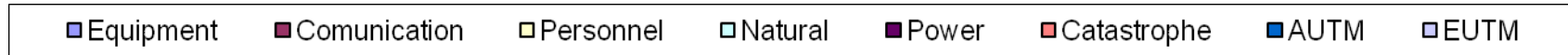




2009 Cumulative UUT by Cause (USWC 9940)

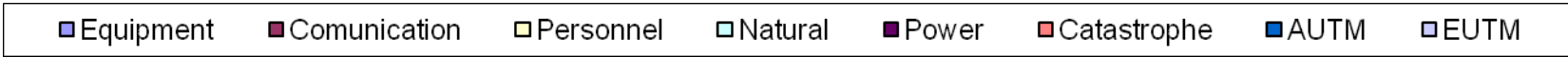
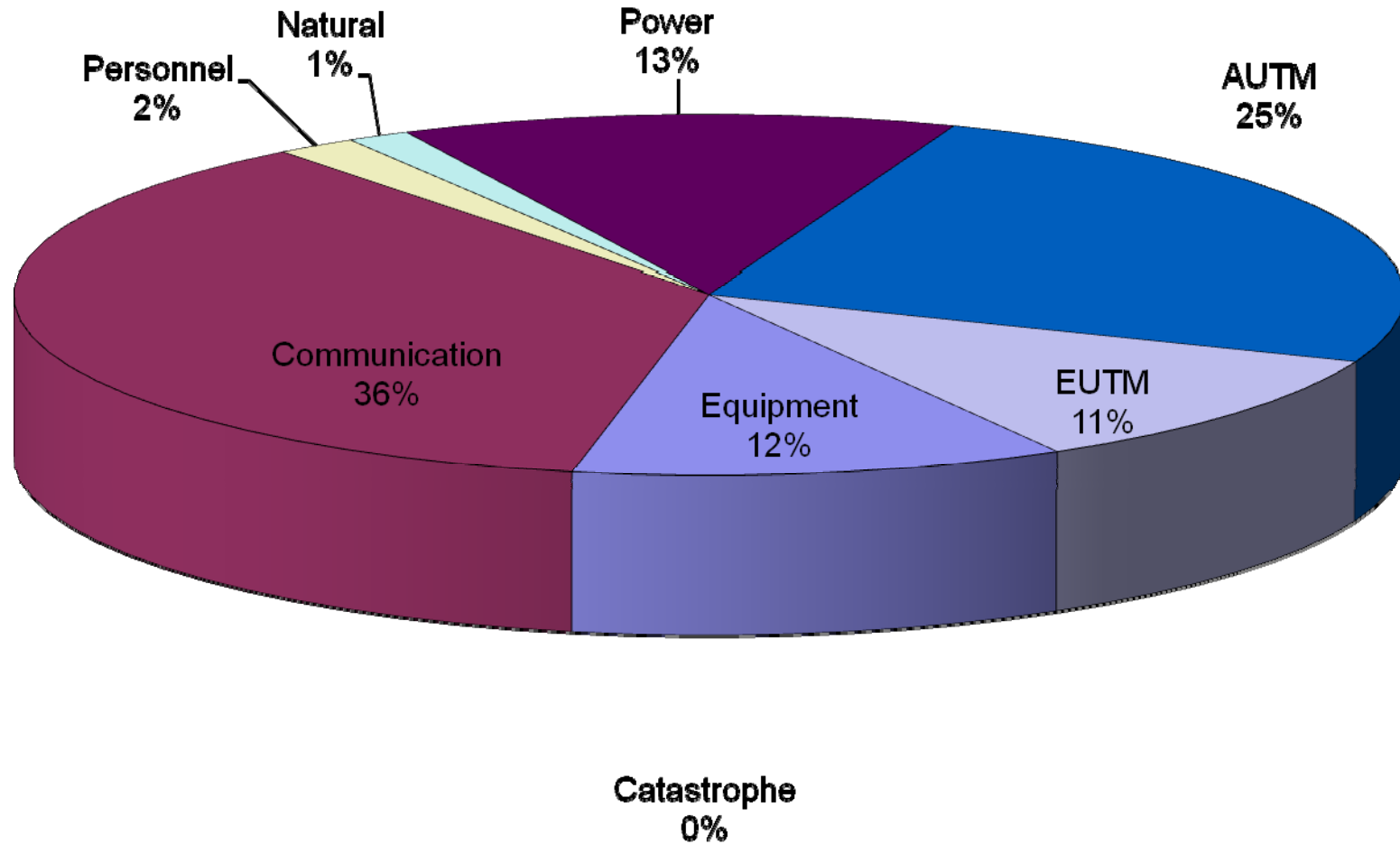


UUT – Unusable Time



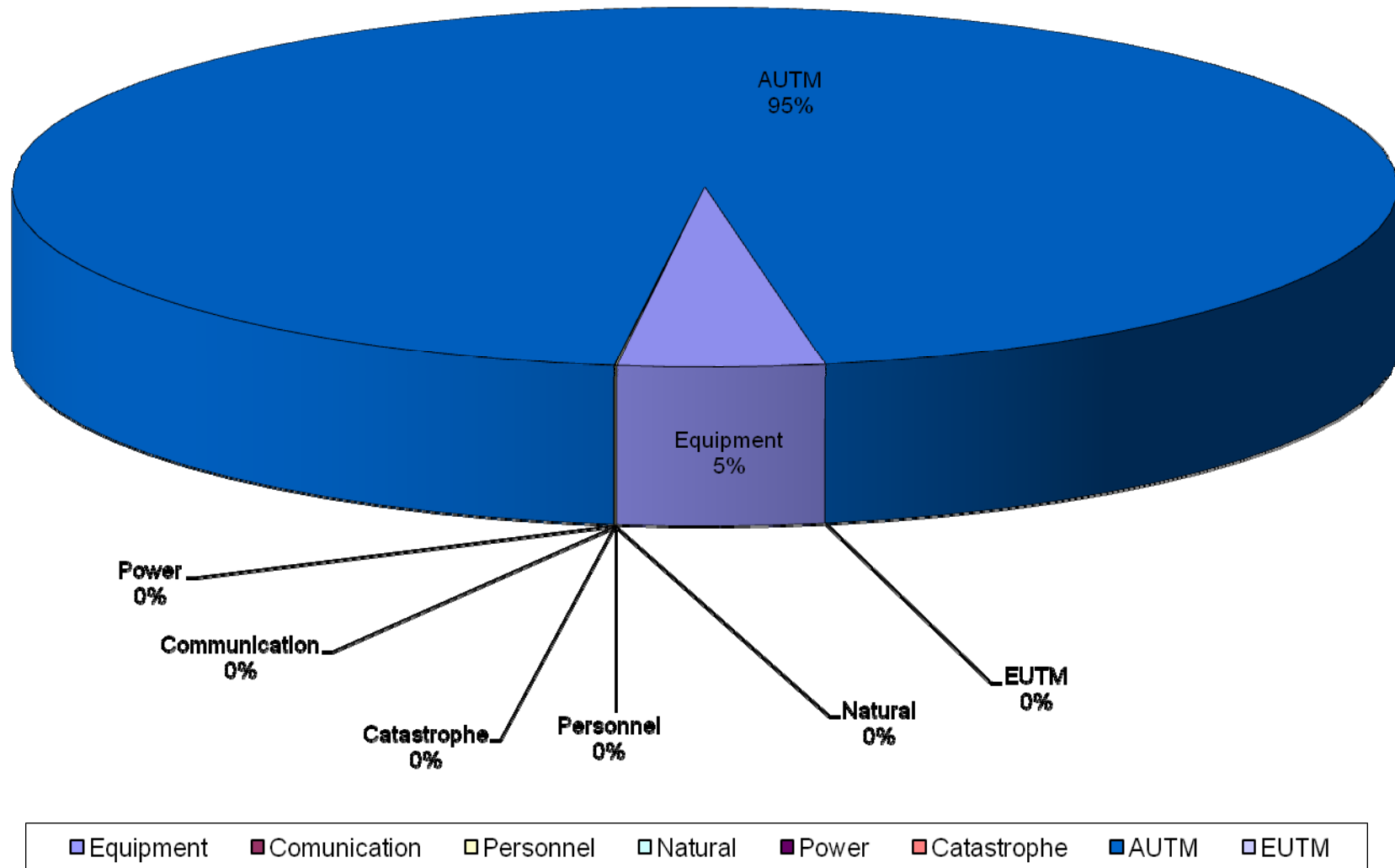


2009 Cumulative UUT by Cause (NOCUS 8290)



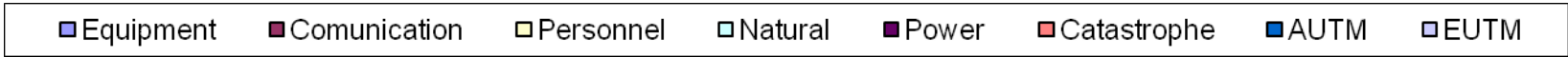
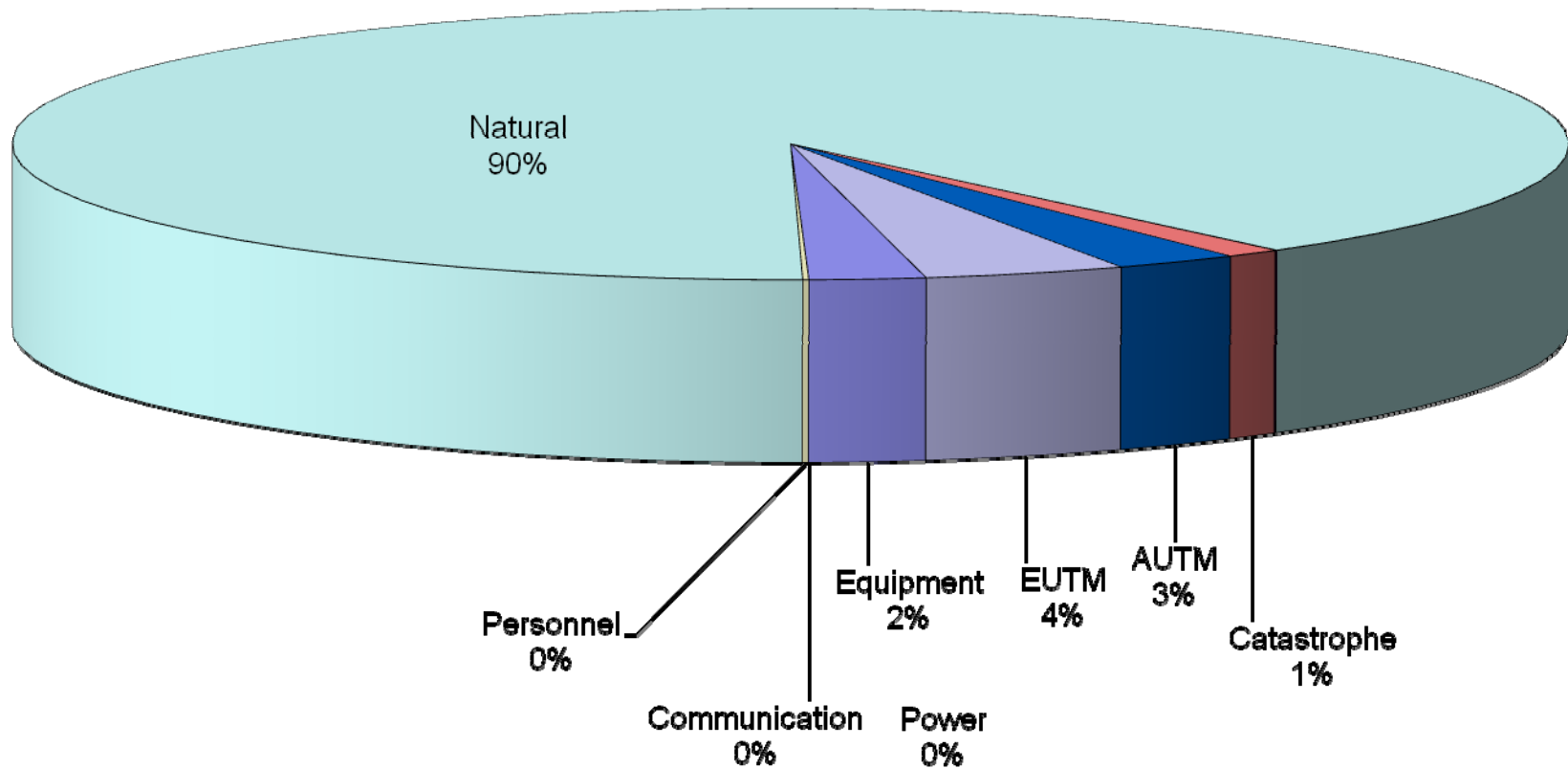


2009 Cumulative UUT by Cause (RAC 5980)



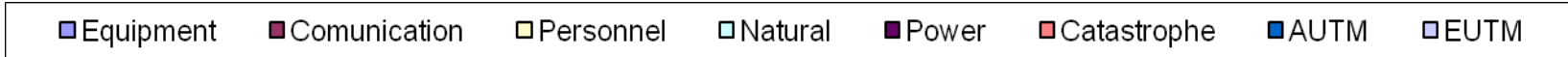
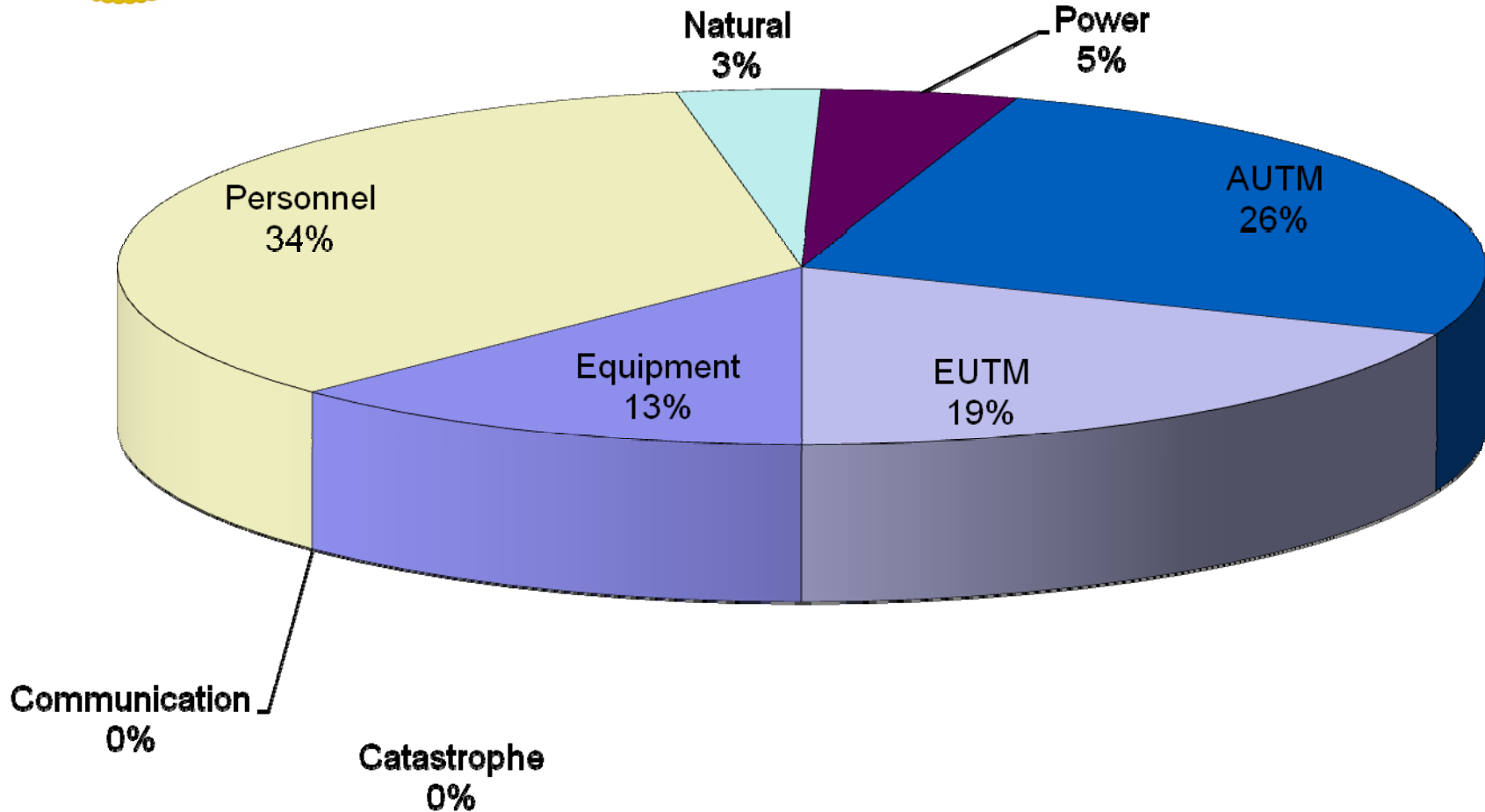


2009 Cumulative UUT by Cause (GOA 7960)



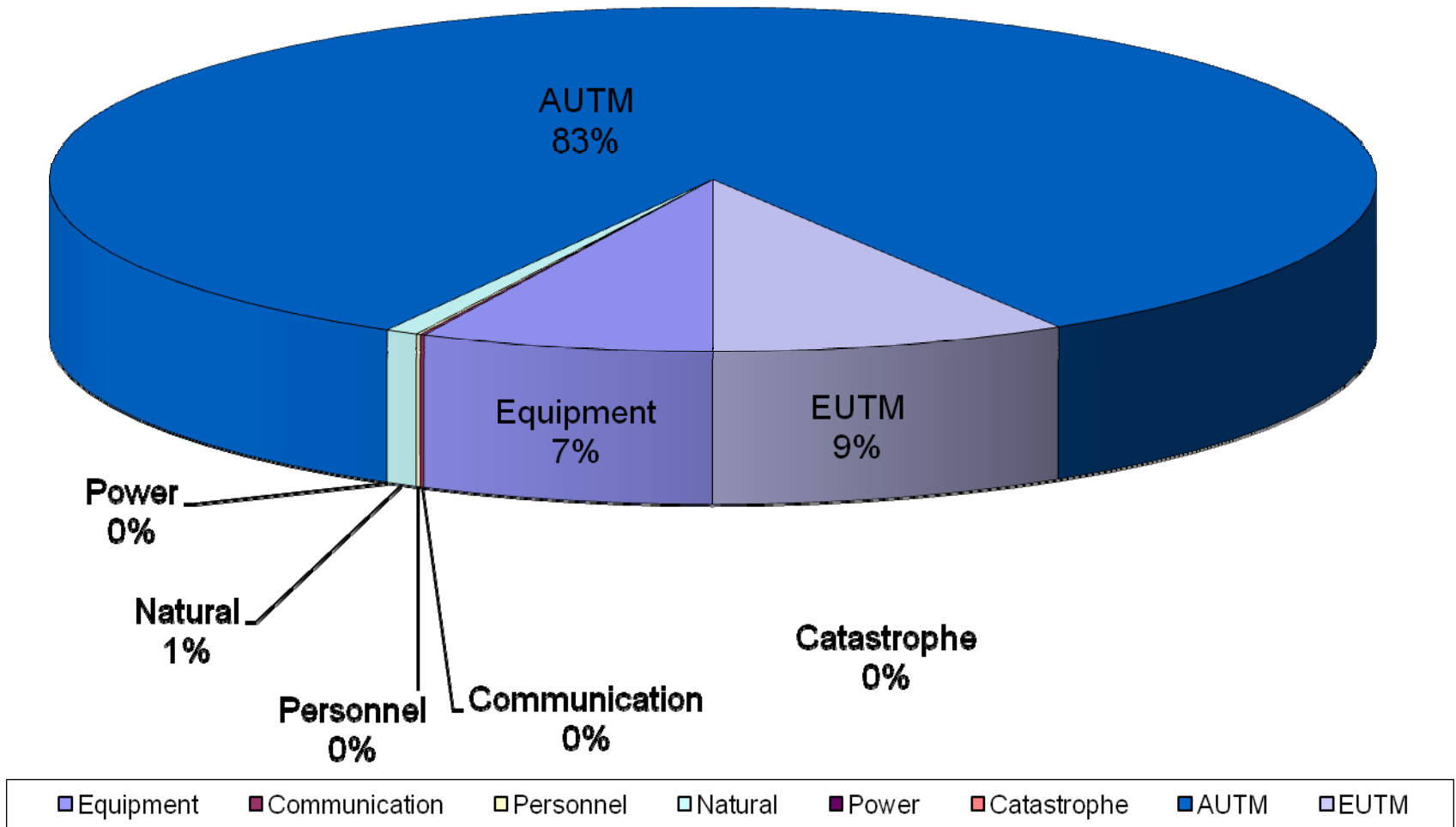


2009 Cumulative UUT by Cause (NORPAC 9990)



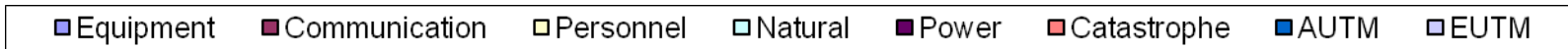
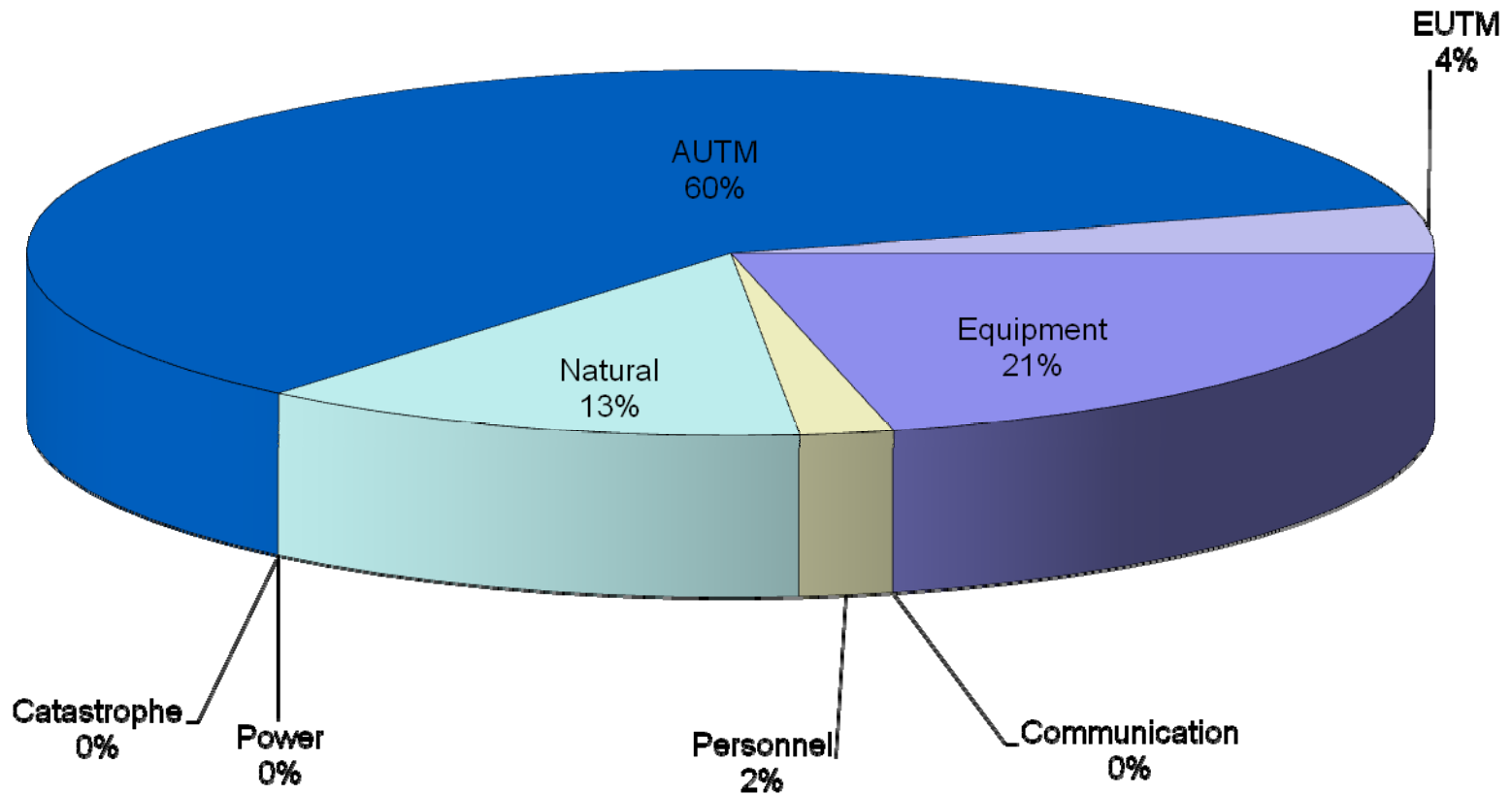


2009 Cumulative UUT by Cause (SEUS 7980)



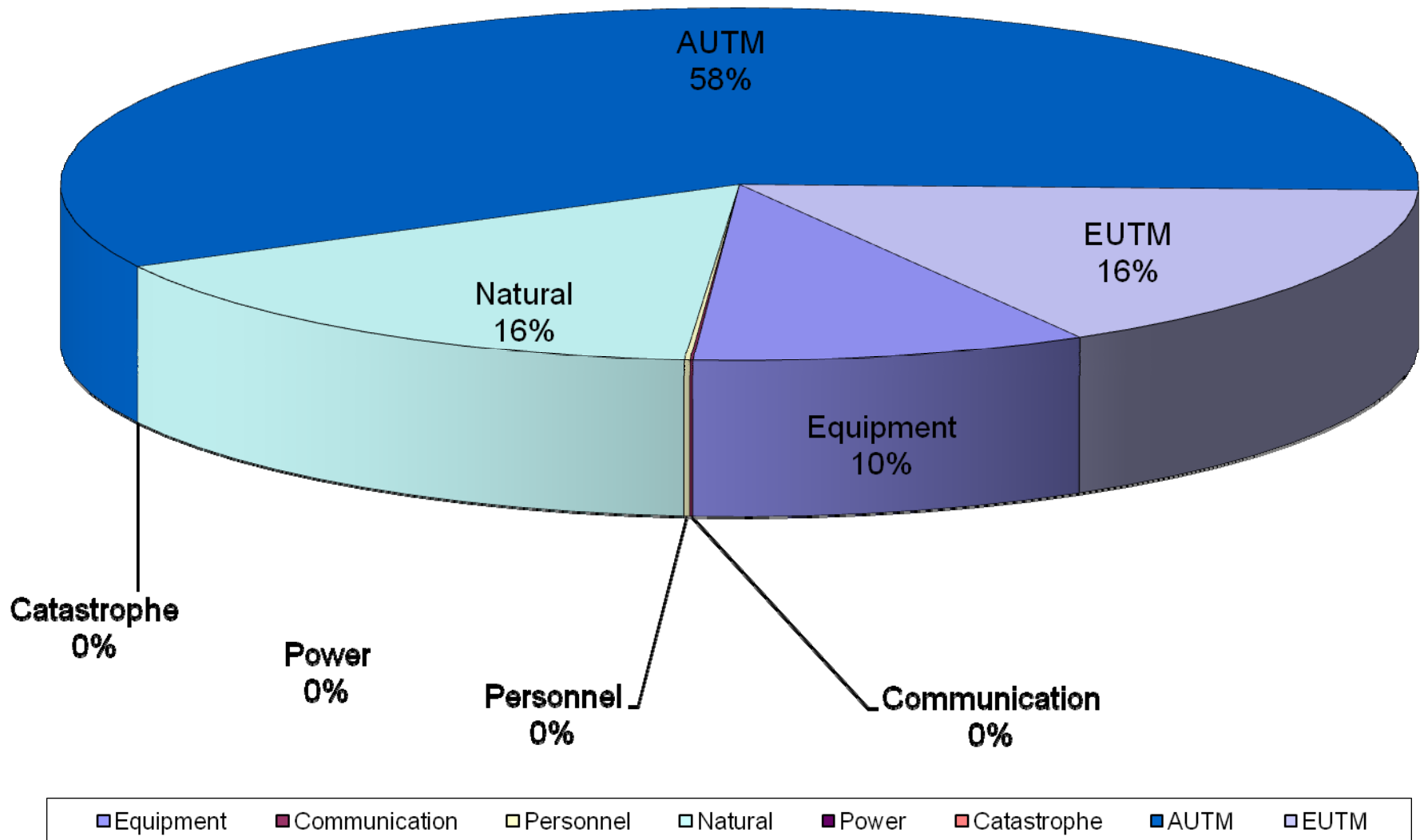


2009 YTD Cumulative UUT by Cause (SOCUS 9610)



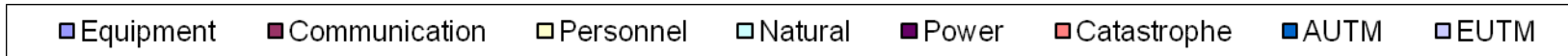
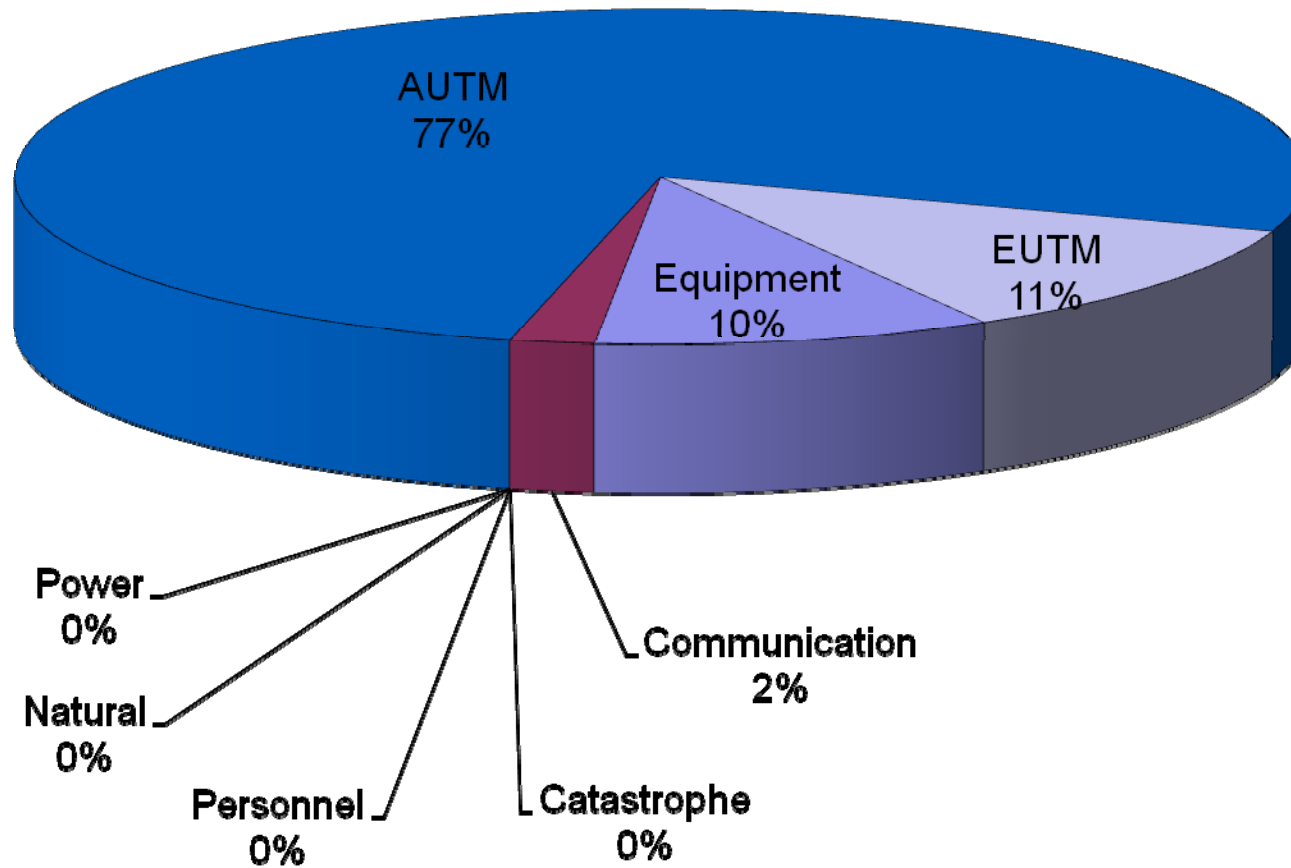


2009 YTD Cumulative UUT by Cause (GLKS 8970)





2009 YTD Cumulative UUT by Cause (NEUS 9960)





Thank you for your attention.

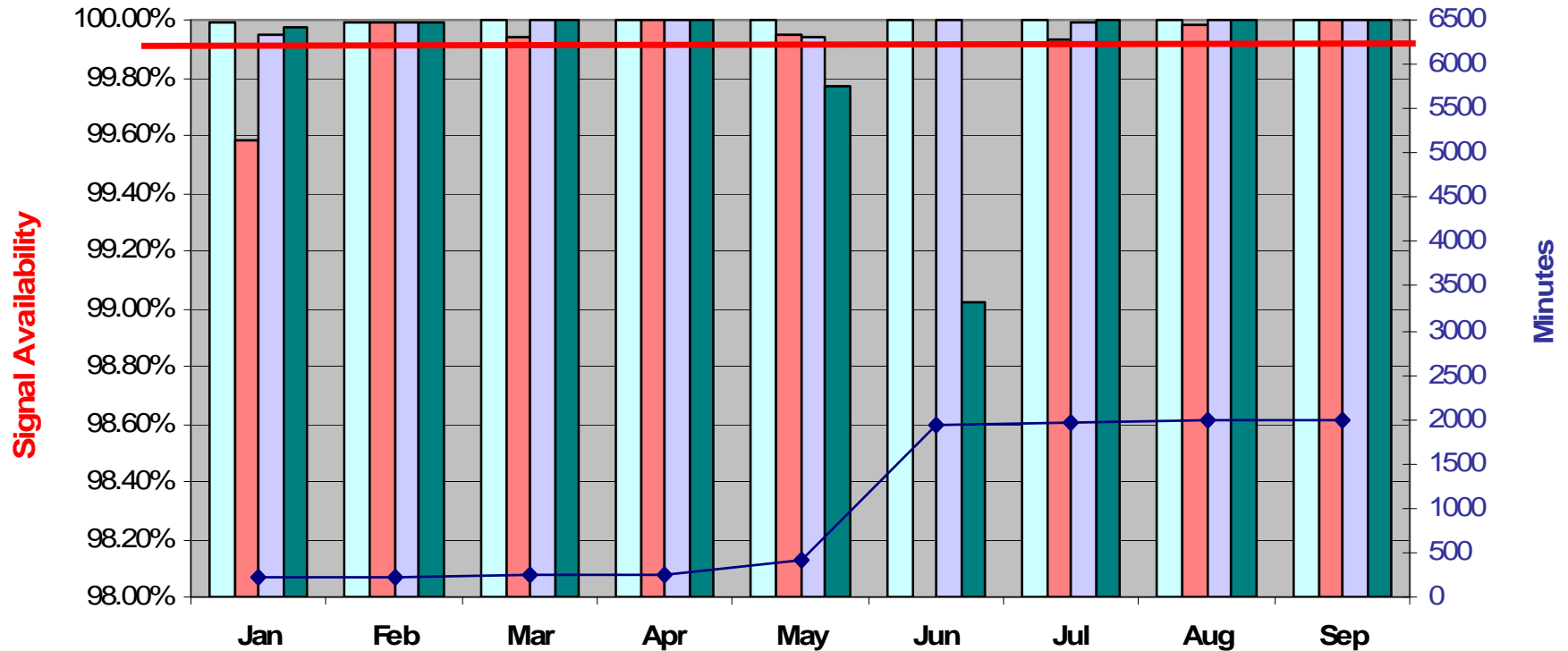
Questions?



Back up slides

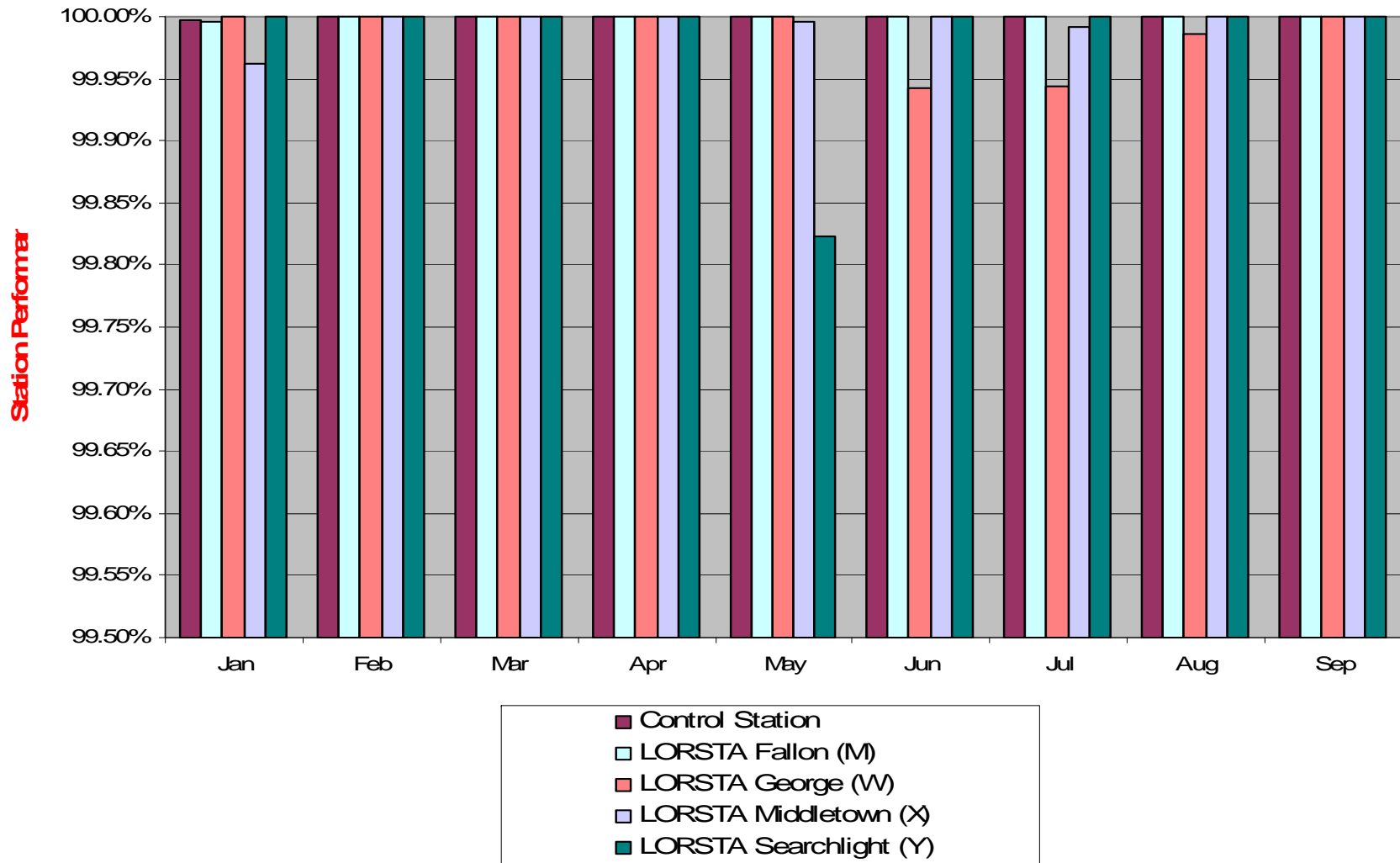


Signal Availability (Station) vs Cumulative UUT (9940) (2009 YTD)



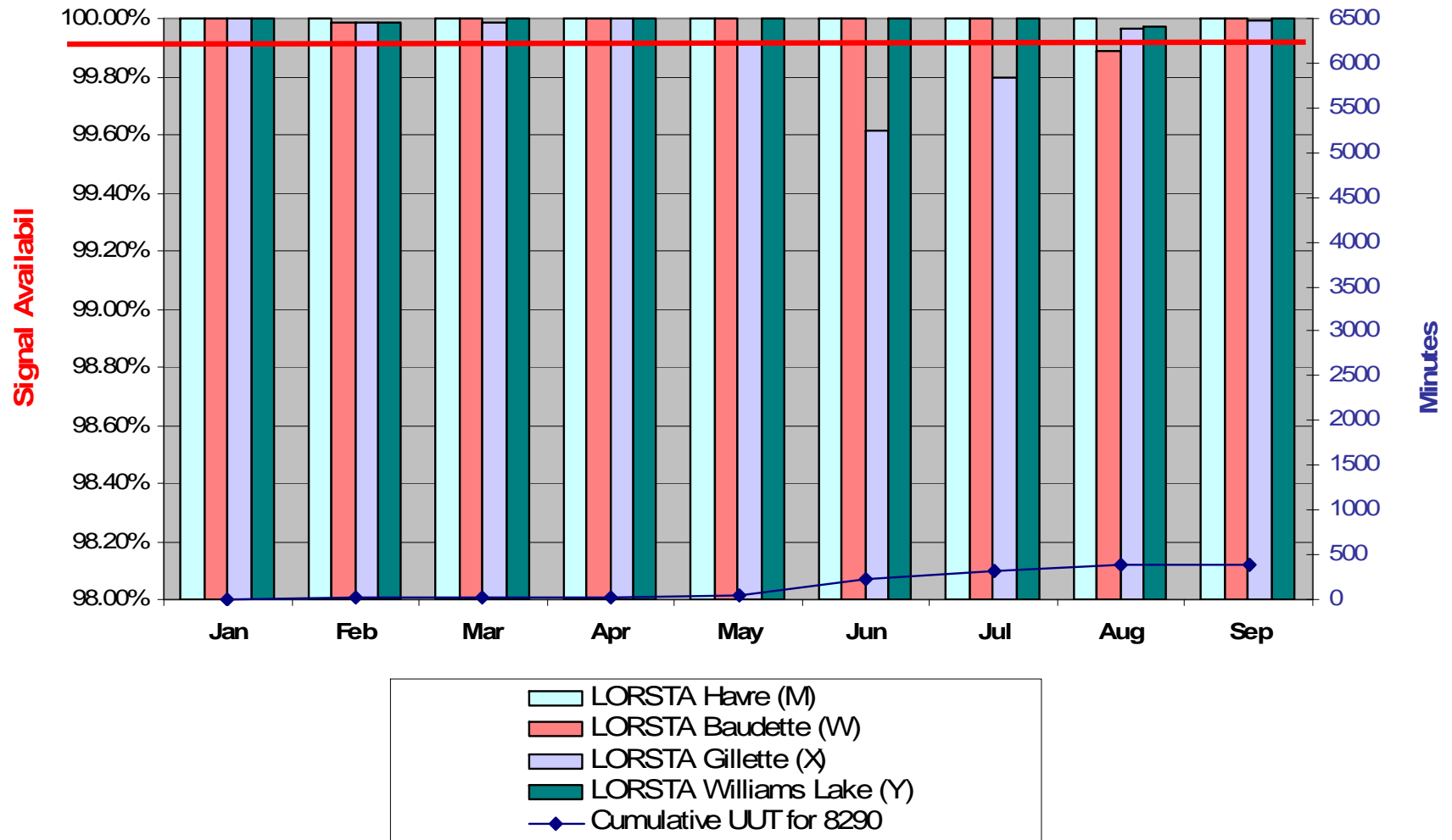


Station Performance (9940) (2009 YTD)



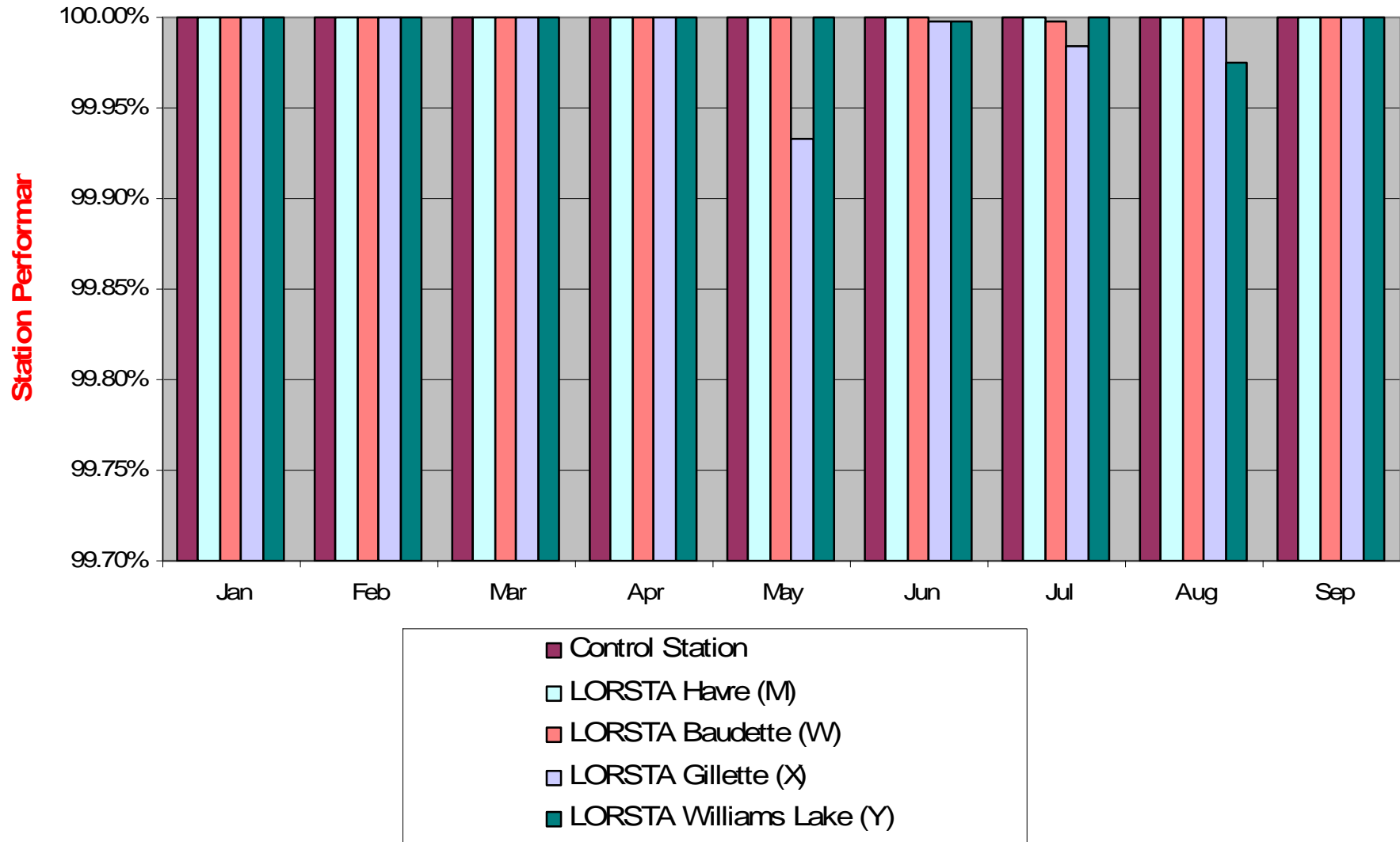


Signal Availability (Station) vs Cumulative UUT (8290) (2009 YTD)



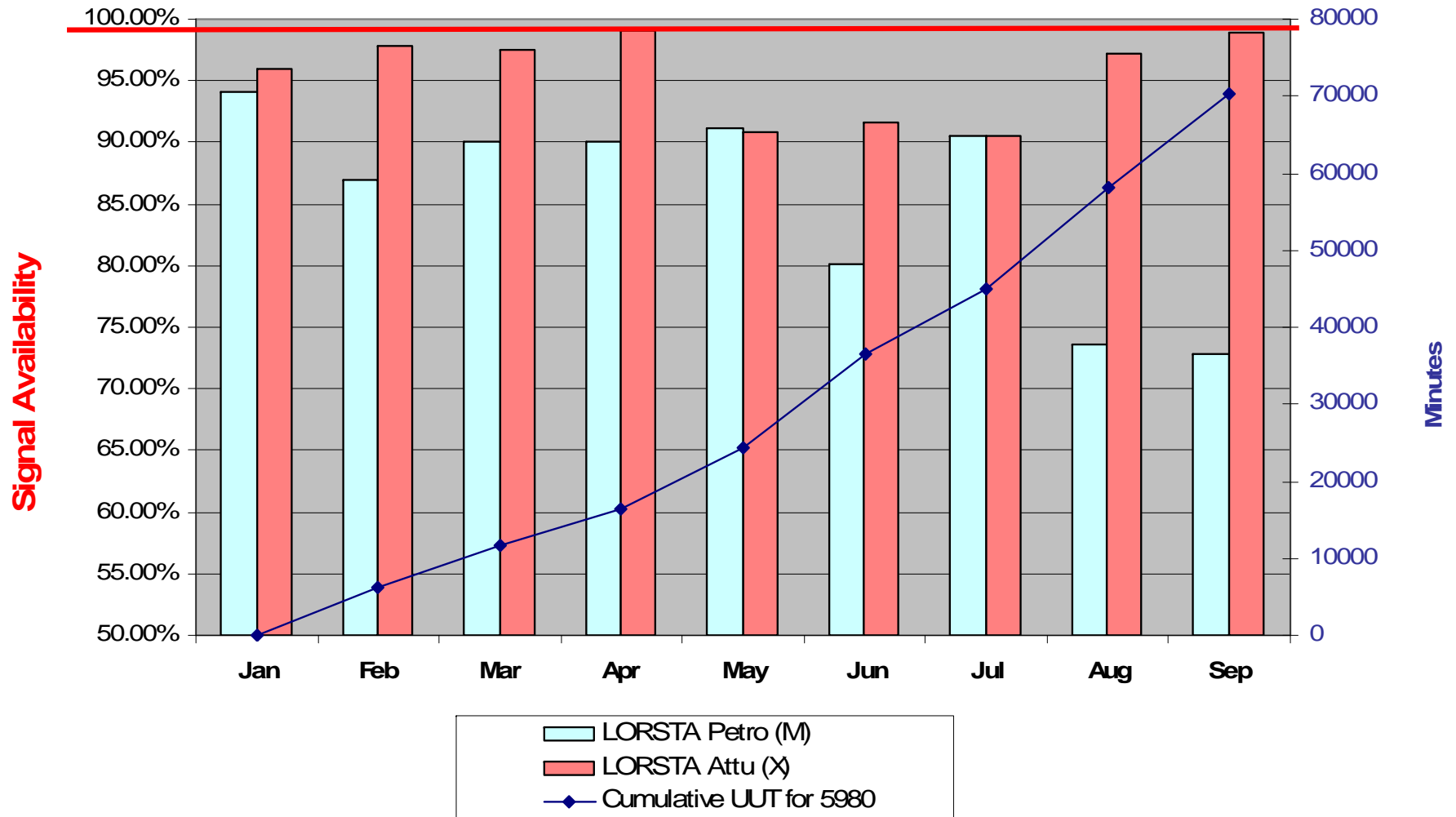


Station Performance (8290) (2009 YTD)



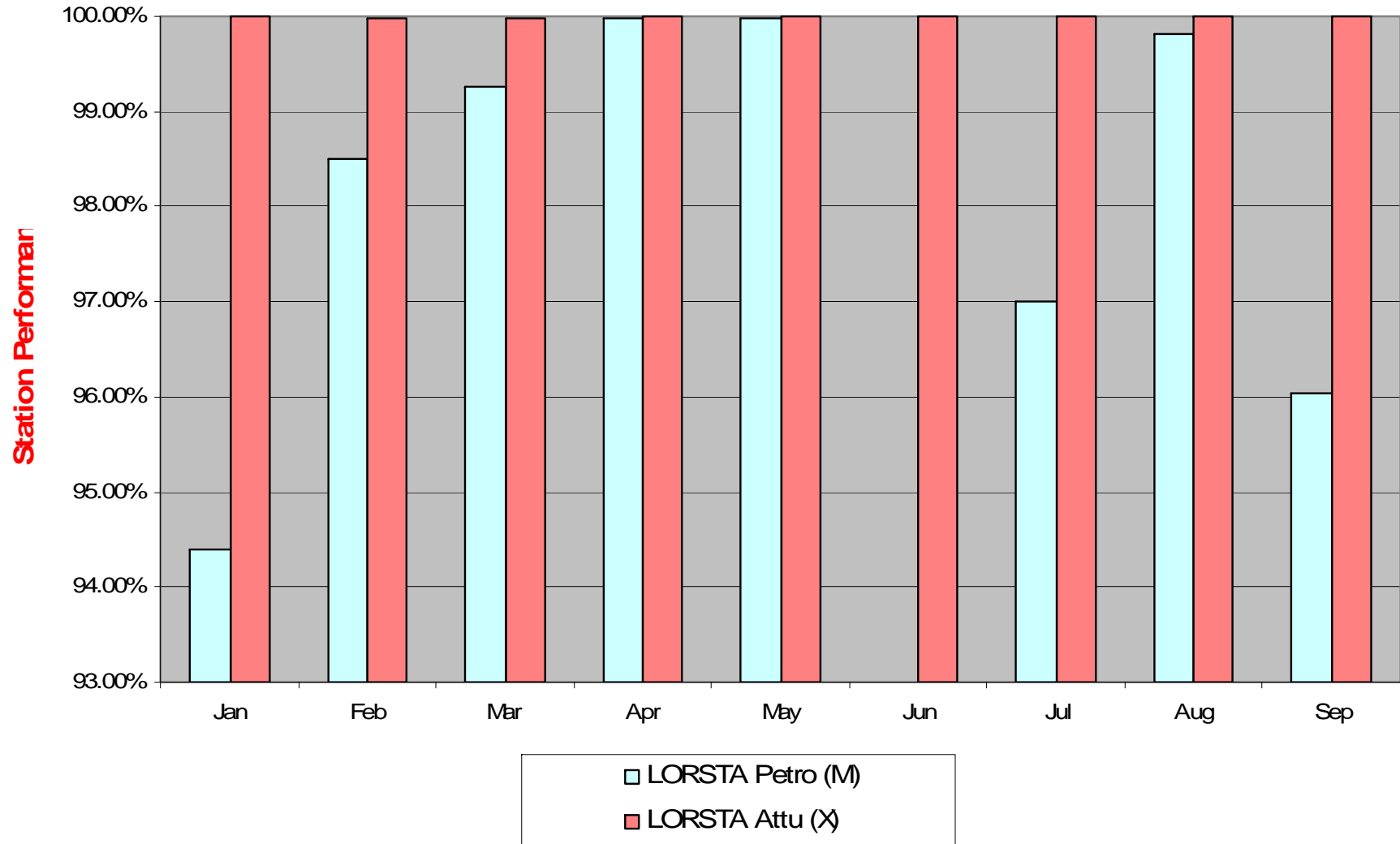


Signal Availability (Station) vs Cumulative UUT (5980) (2009 YTD)



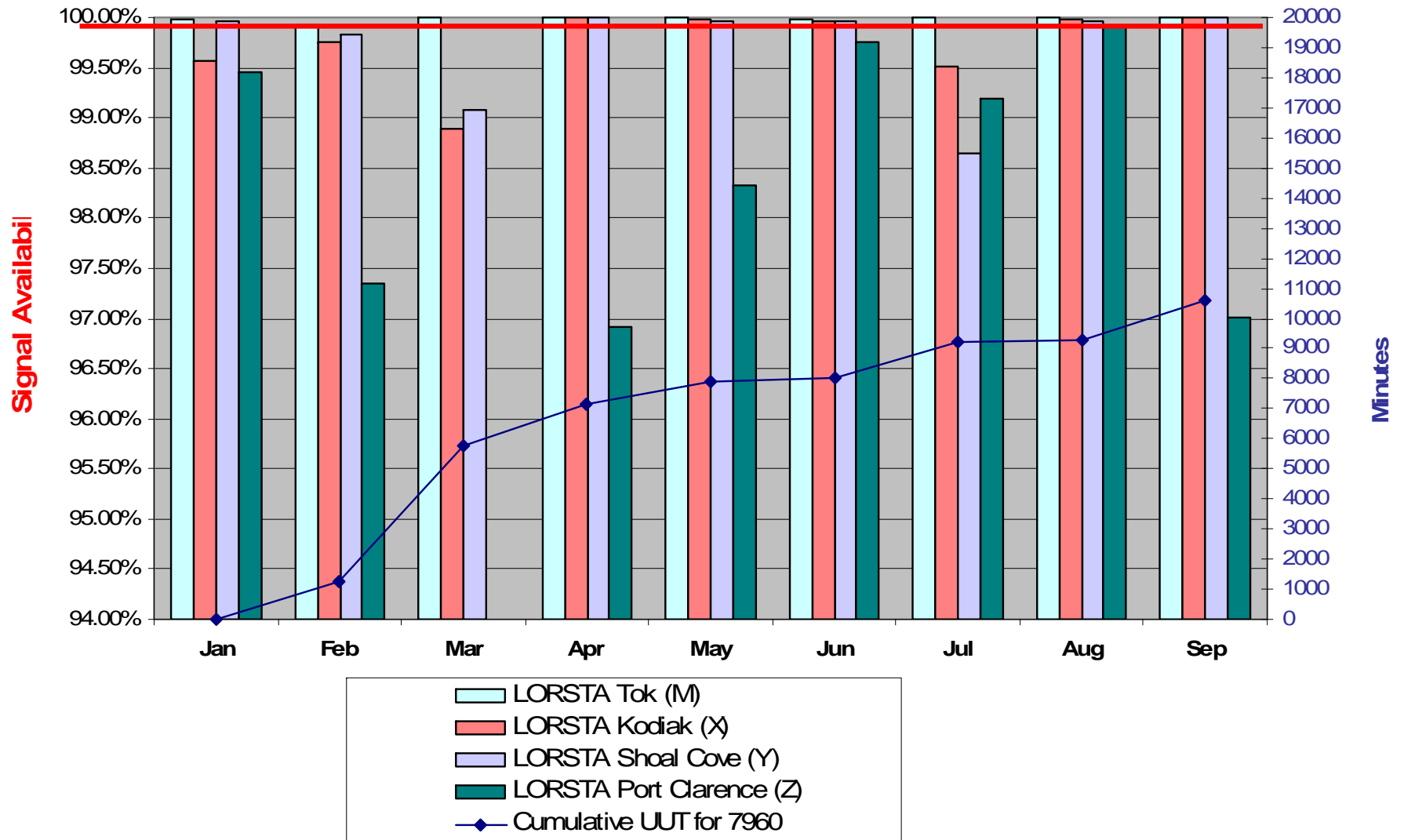


Station Performance (5980) (2009 YTD)



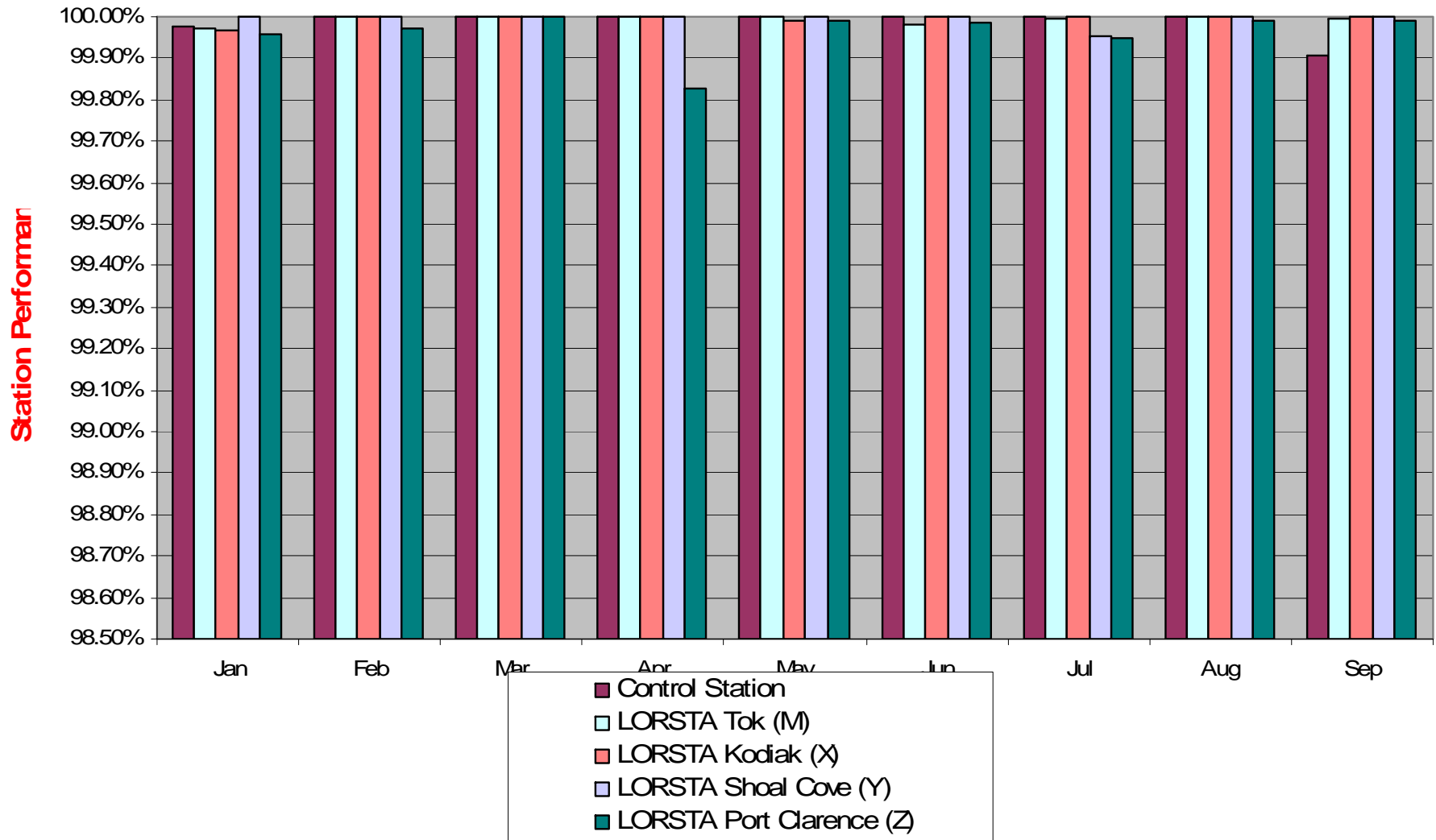


Signal Availability (Station) vs Cumulative UUT (7960) (2009 YTD)



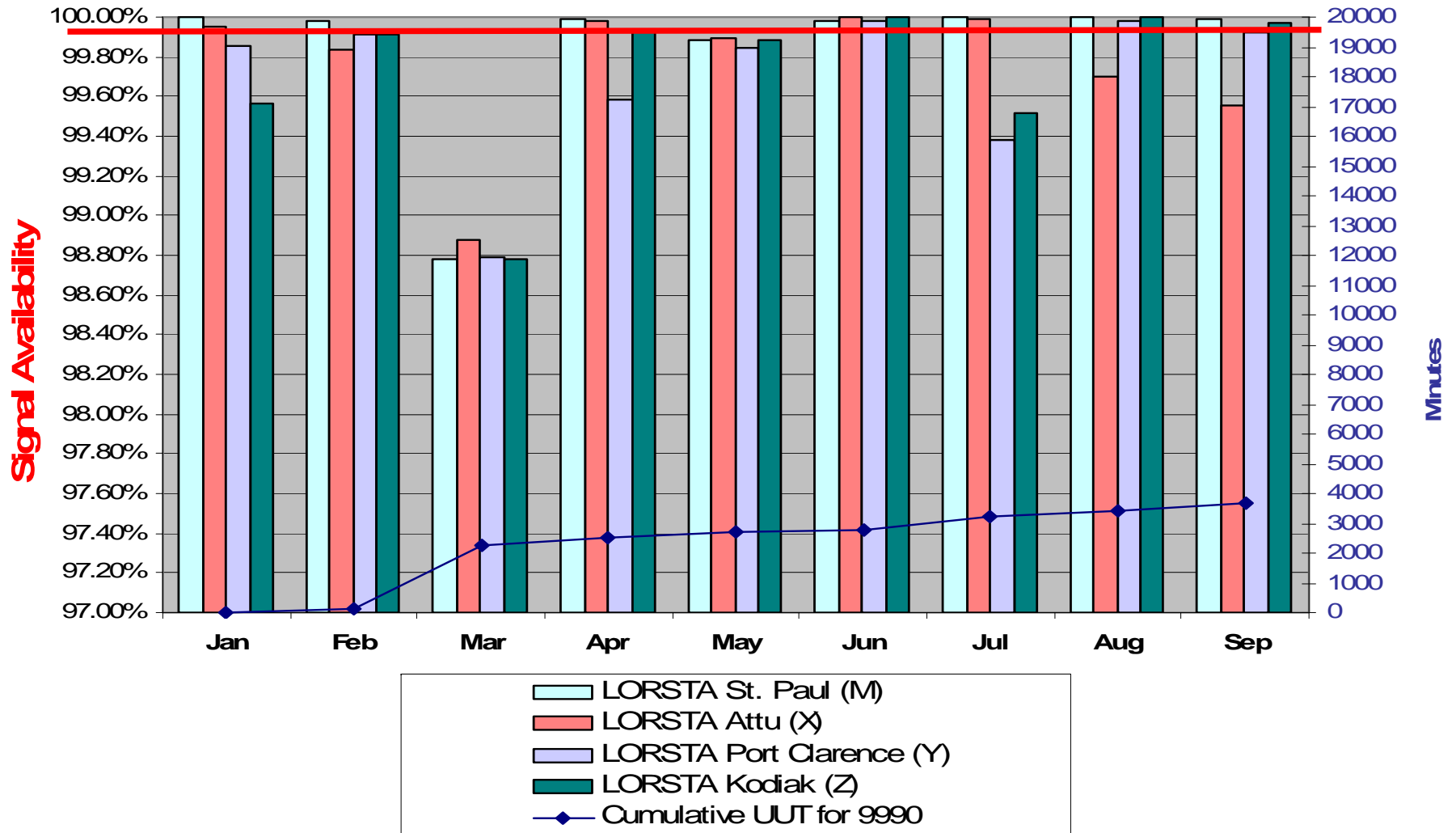


Station Performance (7960) (2009 YTD)



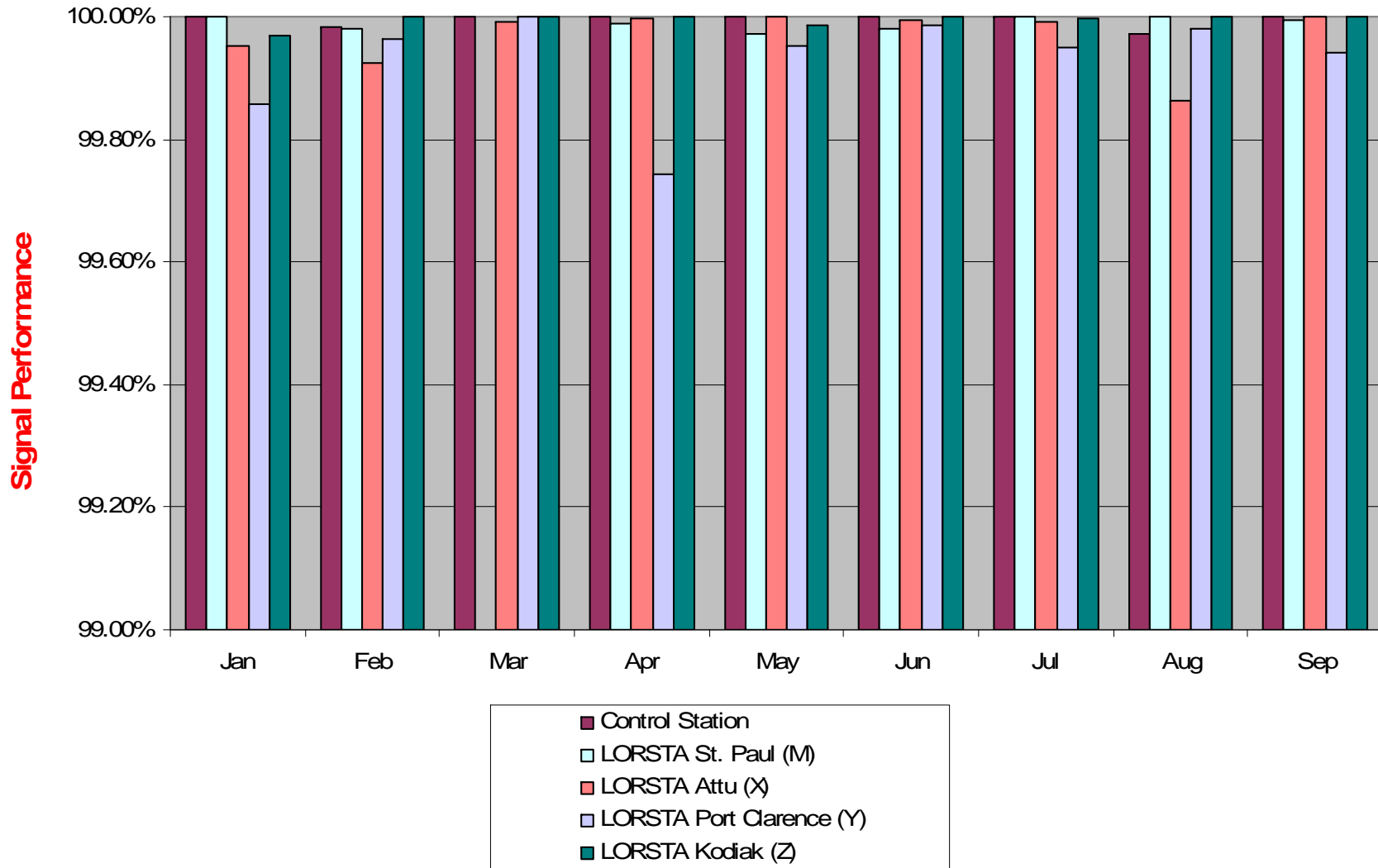


Signal Availability (Station) vs Cumulative UUT (9990) (2009 YTD)



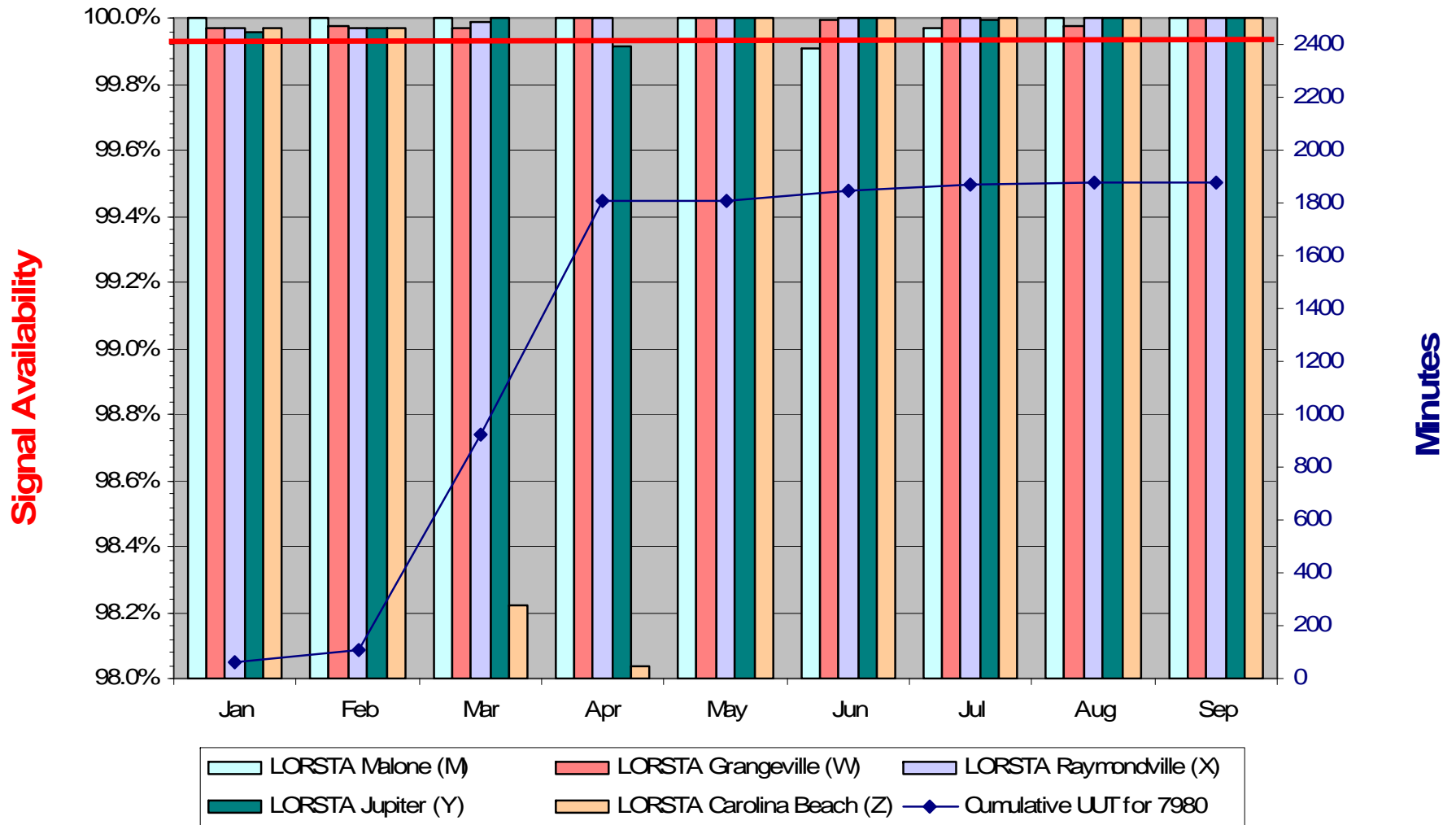


Station Performance (9990) (2009 YTD)



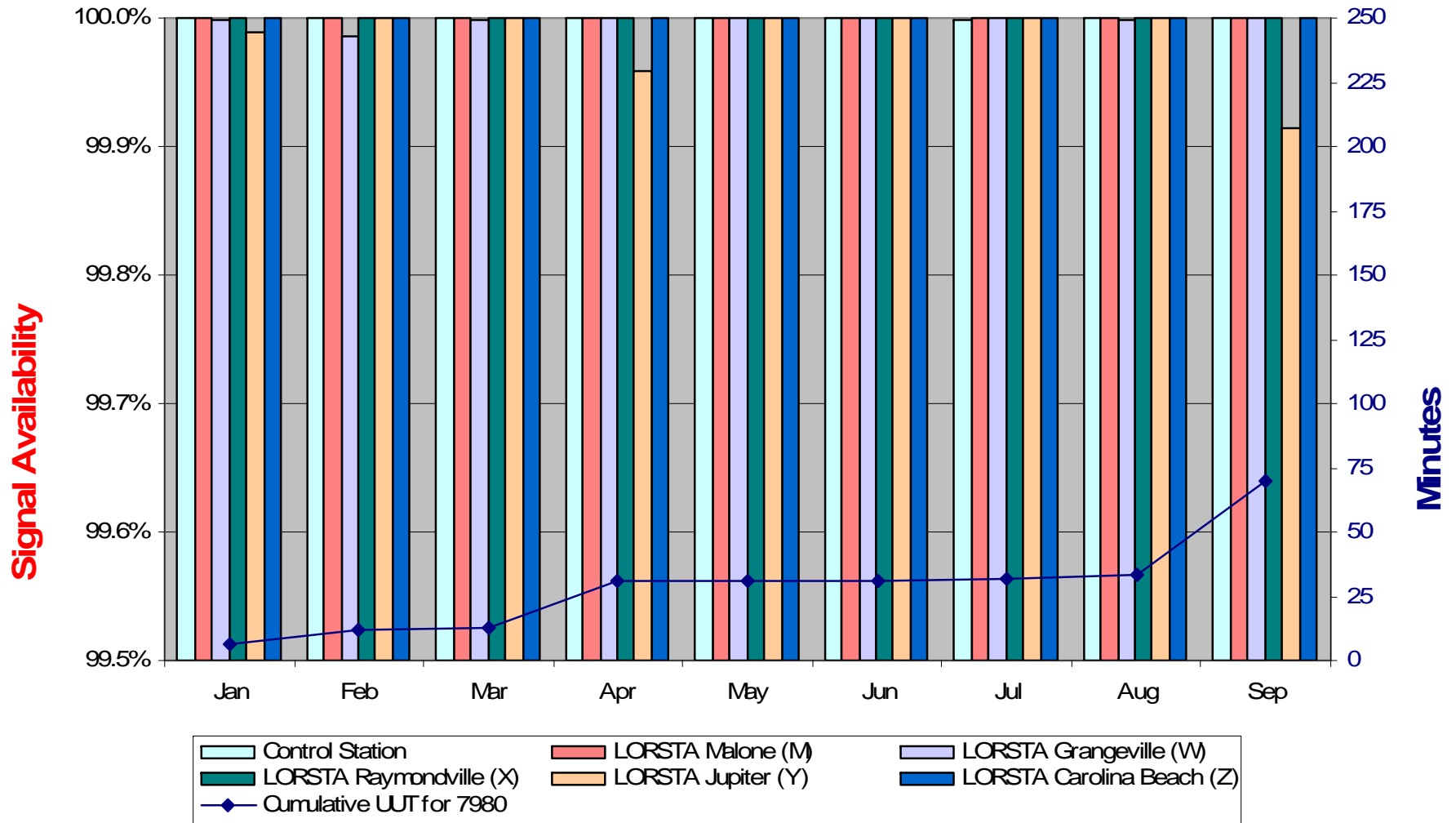


Signal Availability (Station) vs Cumulative UUT (7980) (2009 YTD)



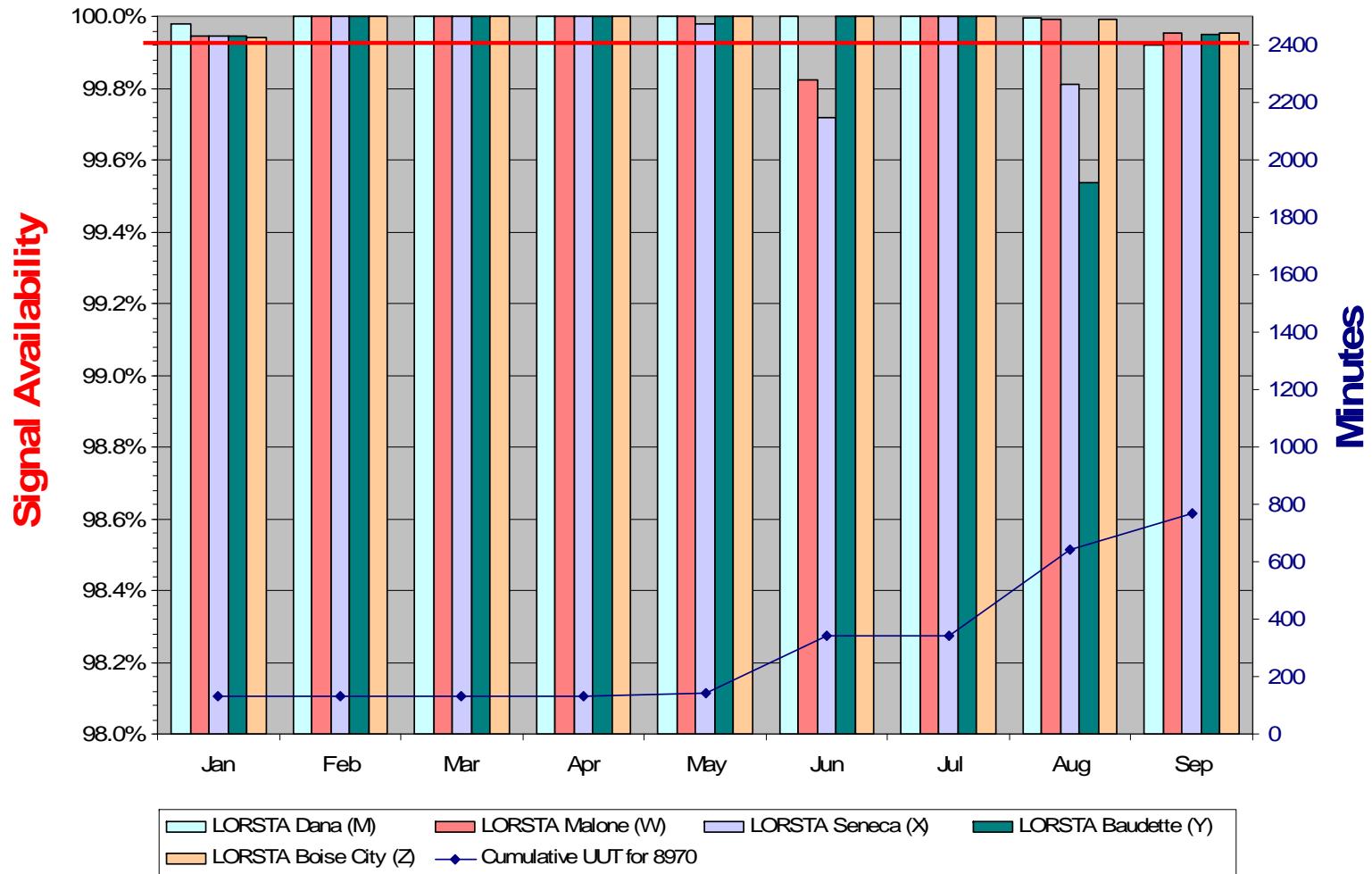


Station Performance (7980) (2009 YTD)



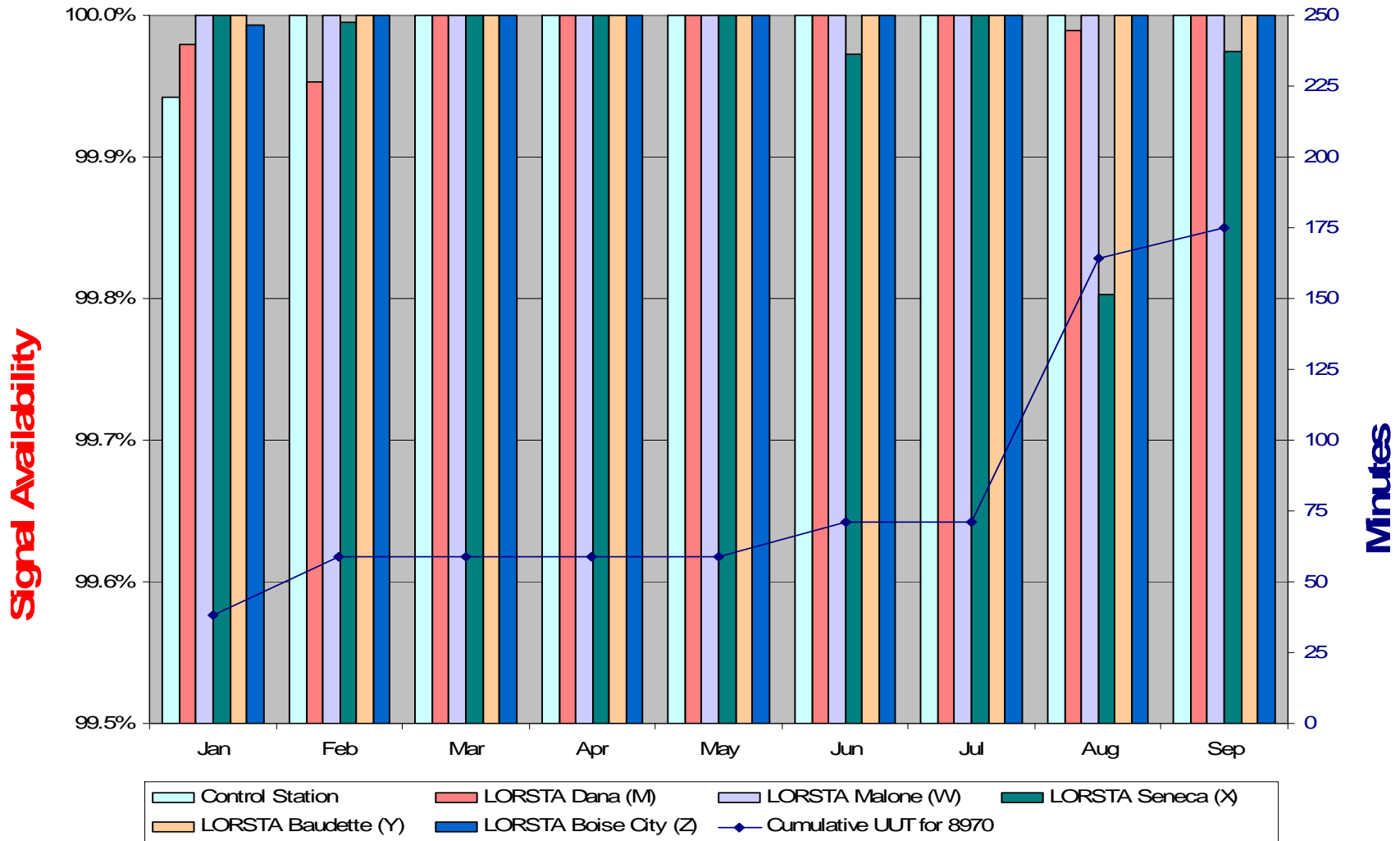


Signal Availability (Station) vs Cumulative UUT (8970) (2009 YTD)



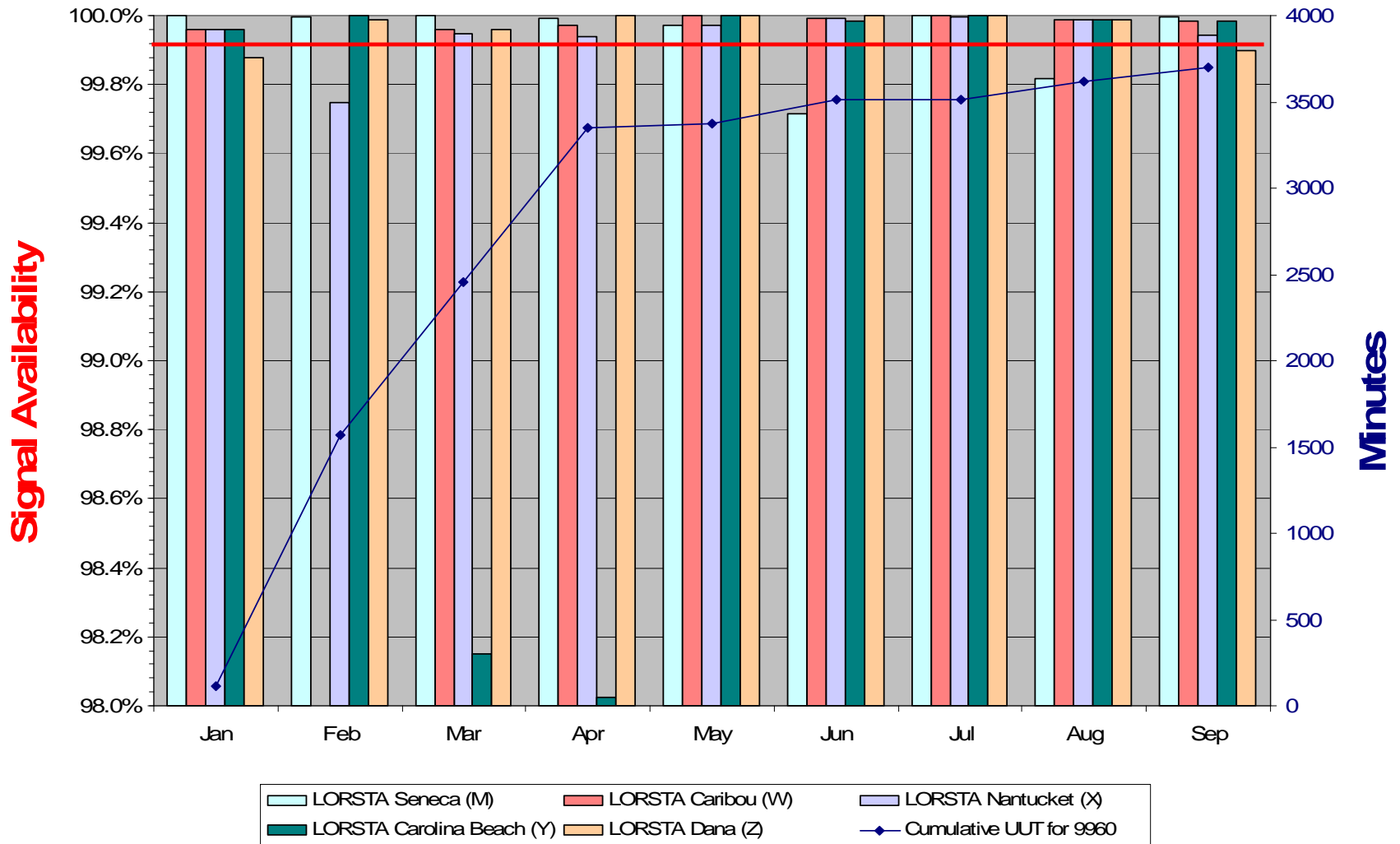


Station Performance (8970) (2009 YTD)





Signal Availability (Station) vs Cumulative UUT (9960) (2009 YTD)





Station Performance (9960) (2009 YTD)

