

# DURZ Data Analysis

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# DURZ?

- Deliberately
  - Unvalidatable
  - Root
  - Zone
- 
- (Keys and signatures are present, but they don't match up).

# DURZ Schedule

L	2010-01-27 ✓
A	2010-02-10 ✓
I,M	2010-03-03
D, E, K	2010-03-24
B,C,F,G,H	2010-04-14
J	2010-05-05

# Data Is Collected at DNS-OARC

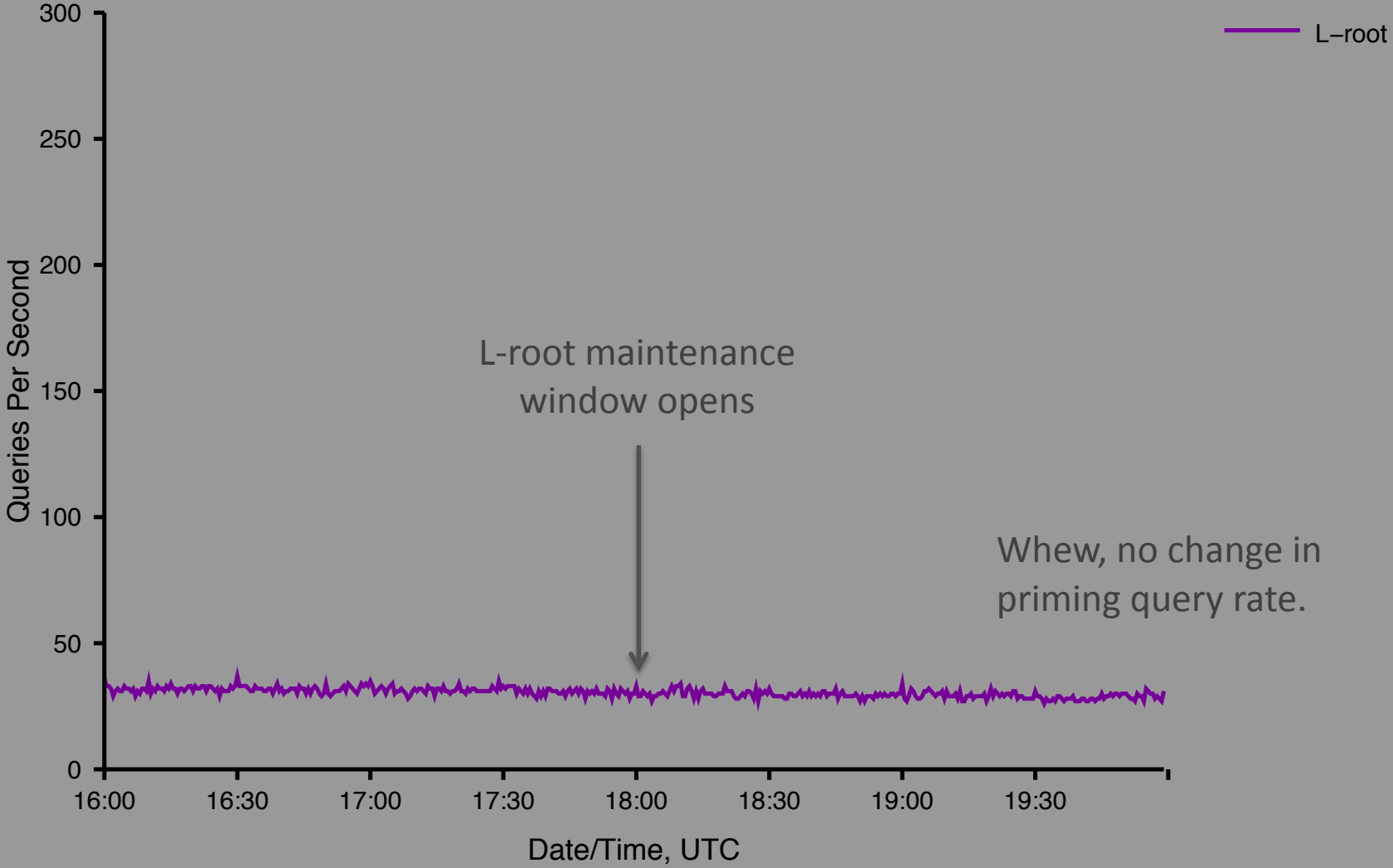
- Priming queries and responses constantly since December 2009
- All queries 24h before and after a root server switches to DURZ

# L-Root DURZ

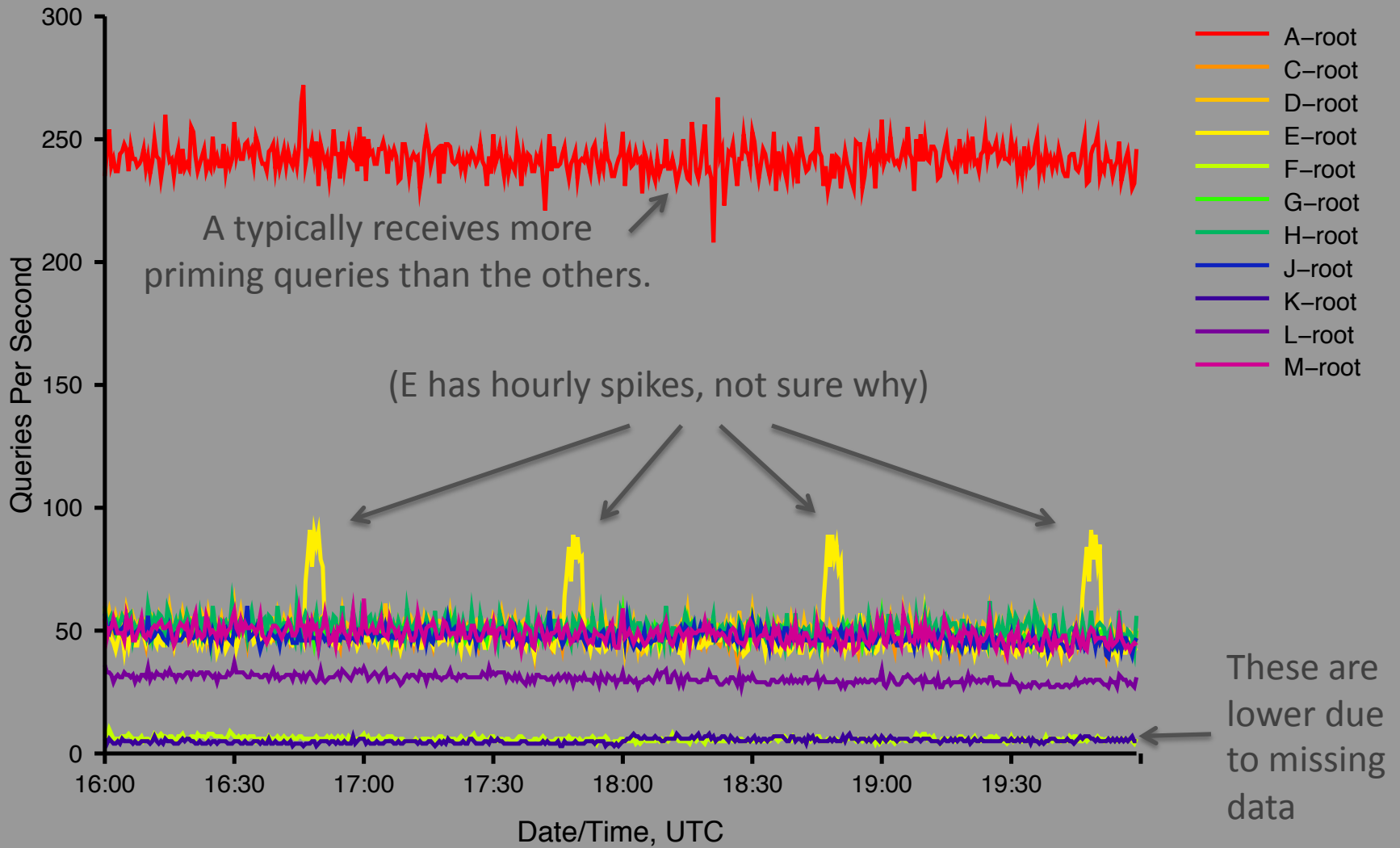
2010-01-27

Maintenance Window: 1800--2000 UTC

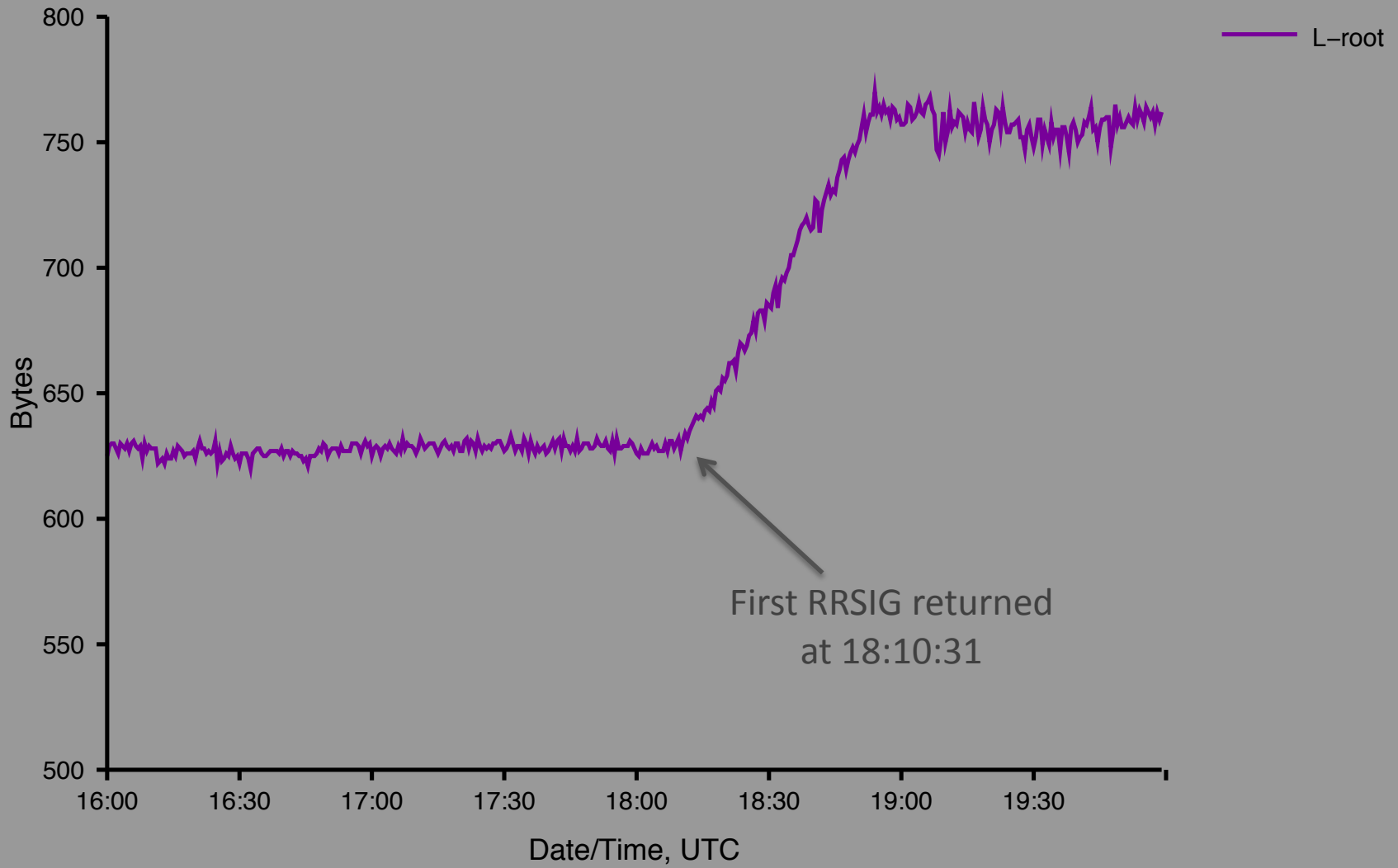
**UDP Priming Query Rate  
for the previous 4h  
as of 2010-01-27 20:00:00**



# UDP Priming Query Rate for the previous 4h as of 2010-01-27 20:00:00

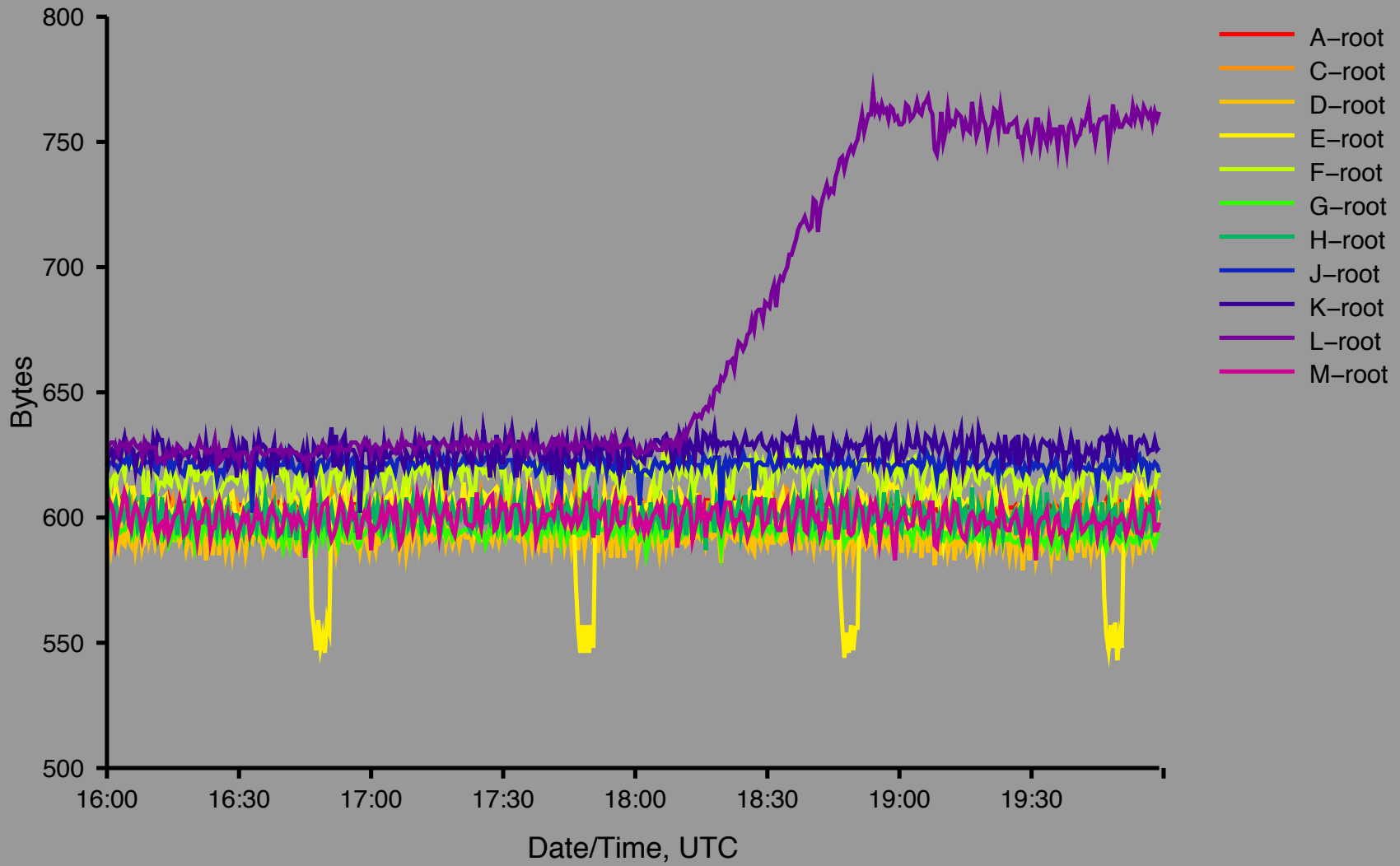


# UDP Priming Query Mean Reply Size for the previous 4h as of 2010-01-27 20:00:00

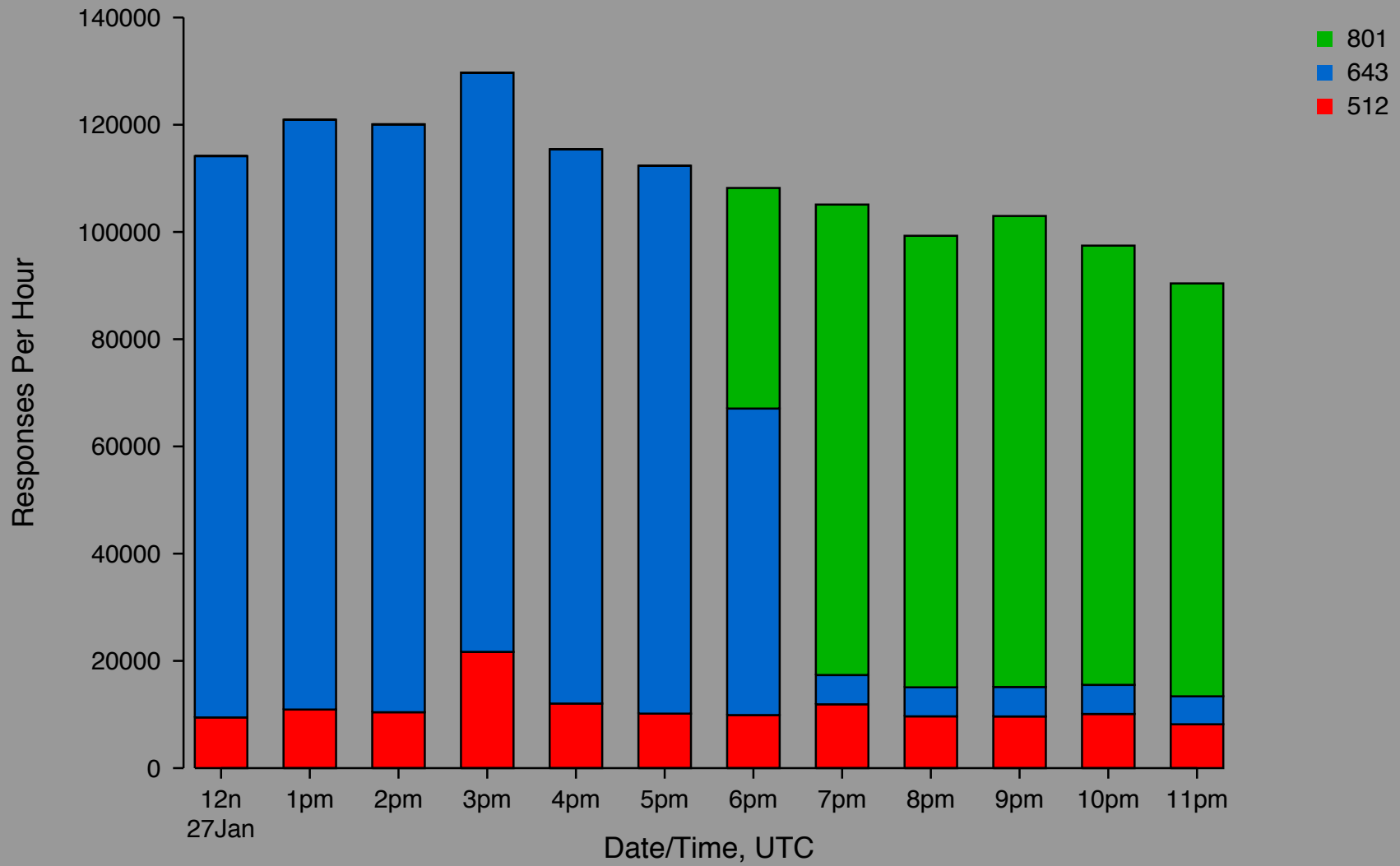




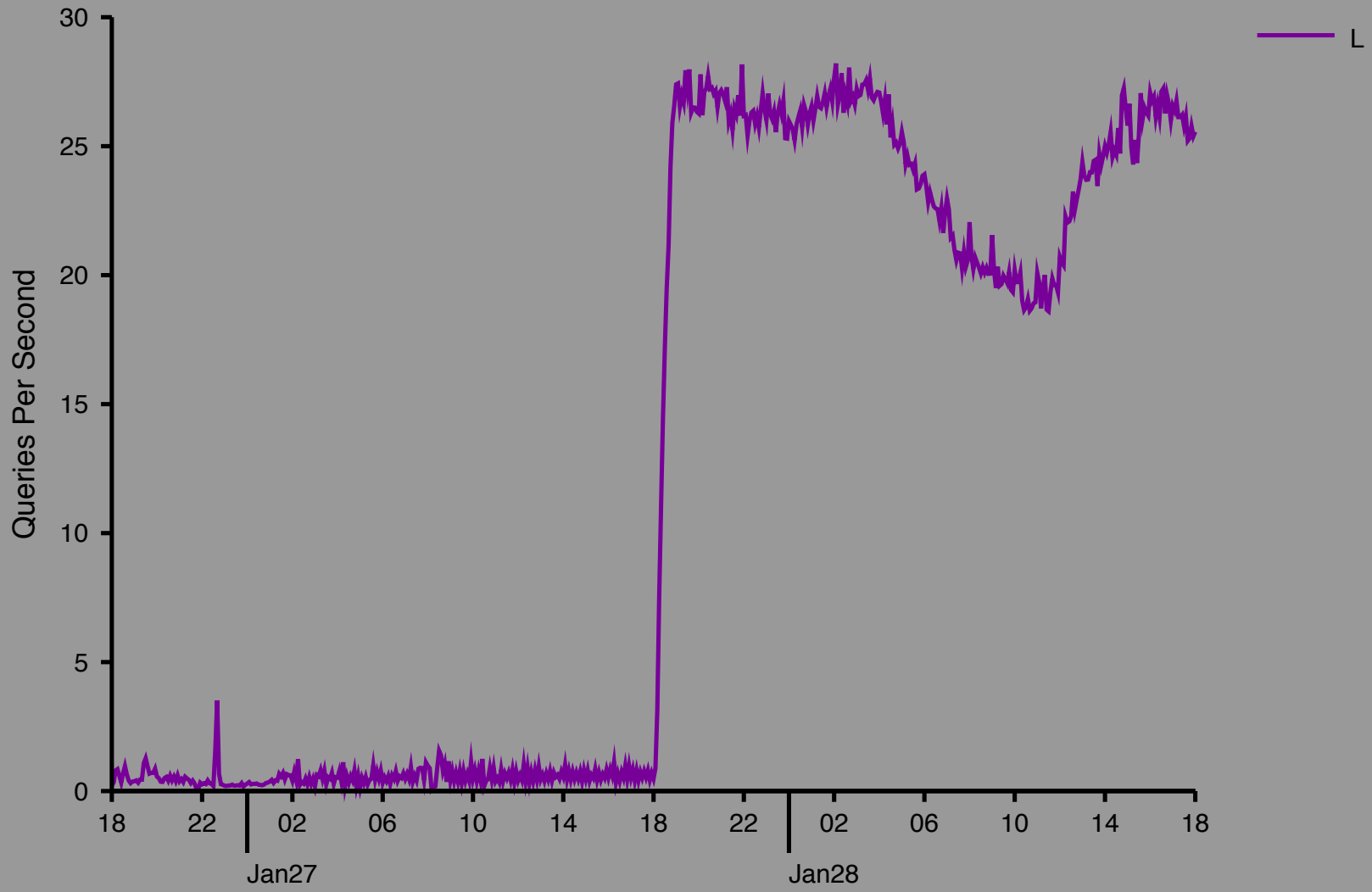
# UDP Priming Query Mean Reply Size for the previous 4h as of 2010-01-27 20:00:00



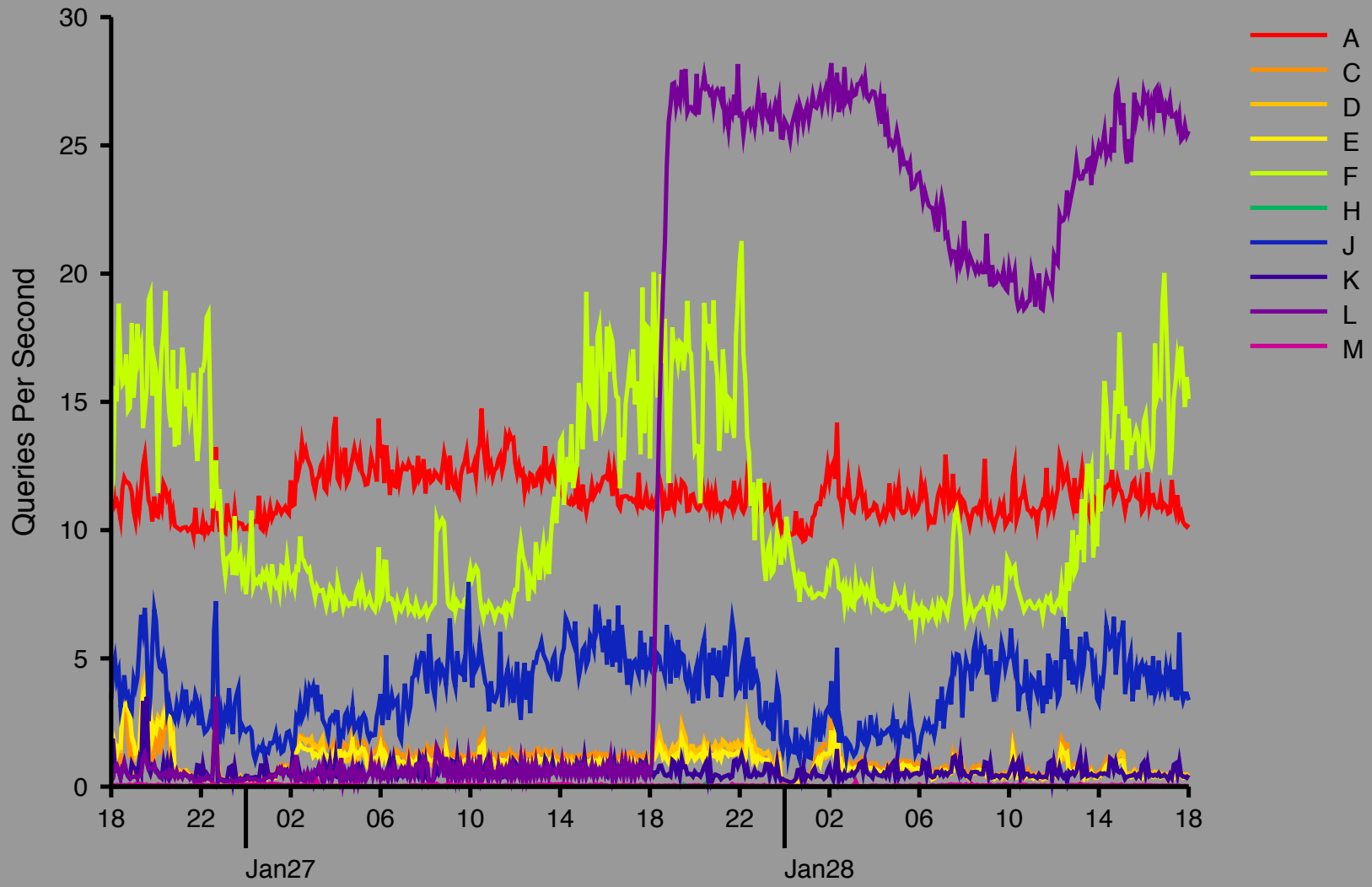
# Histogram of Priming Response Sizes -- L-root



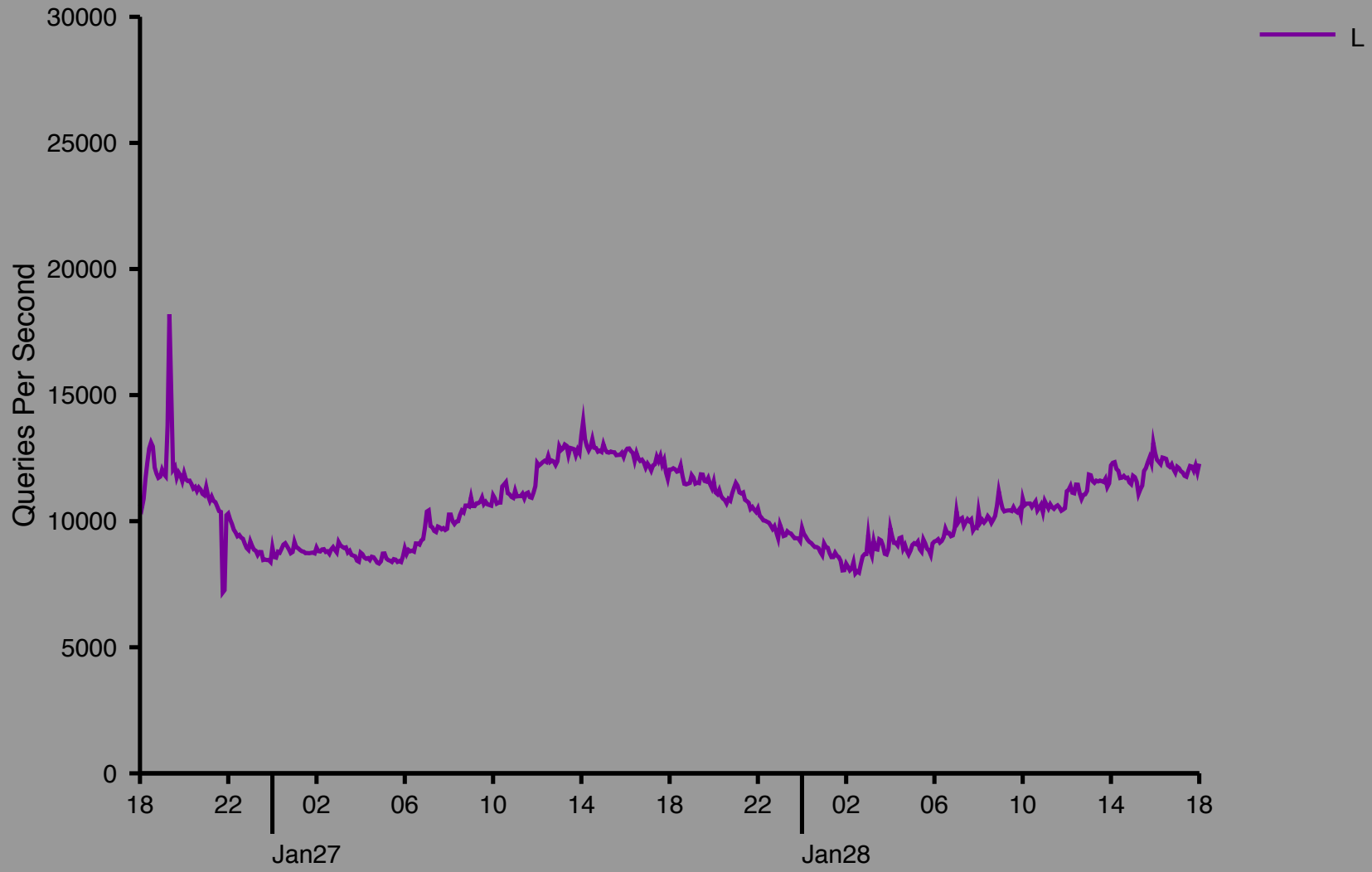
# TCP Query Rate



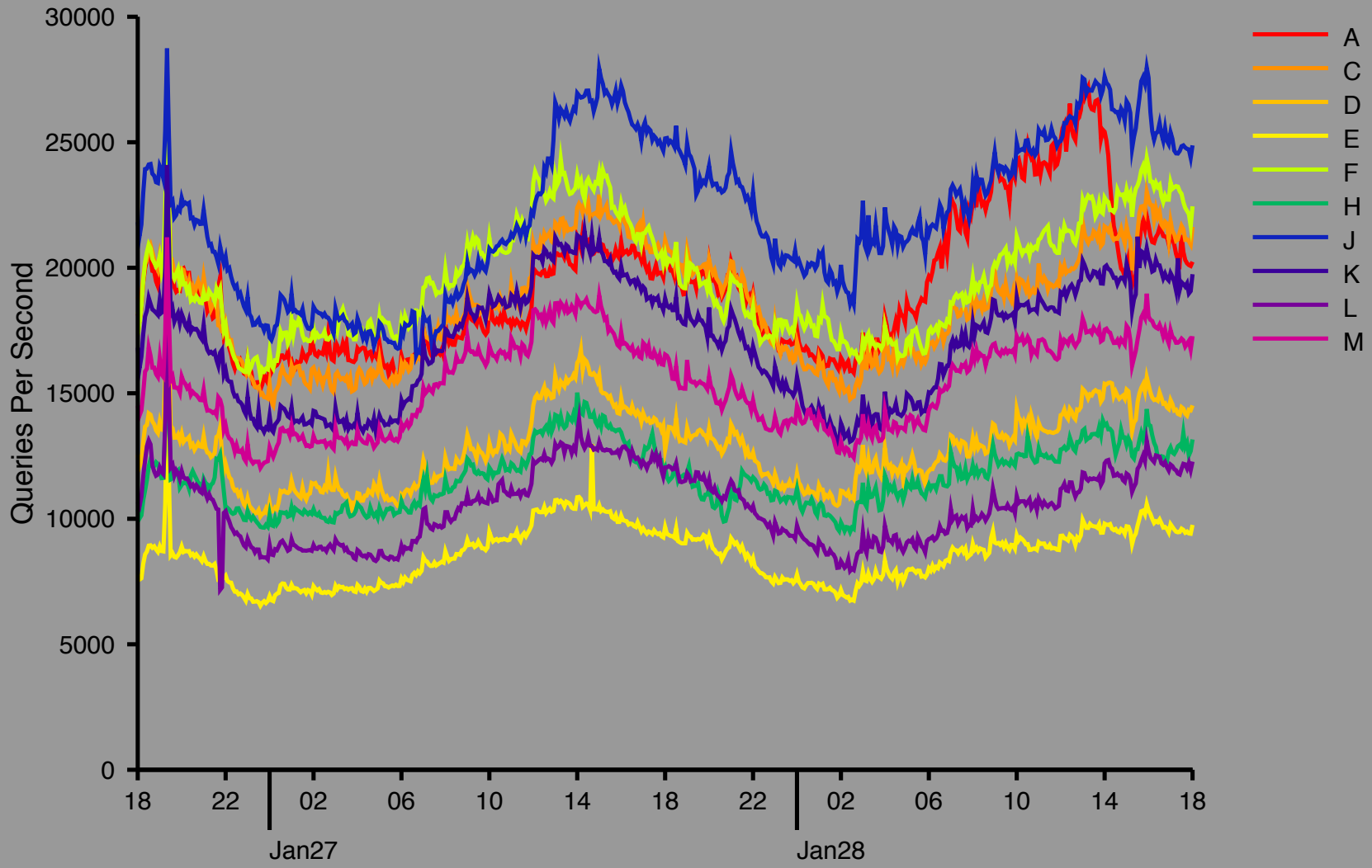
# TCP Query Rate



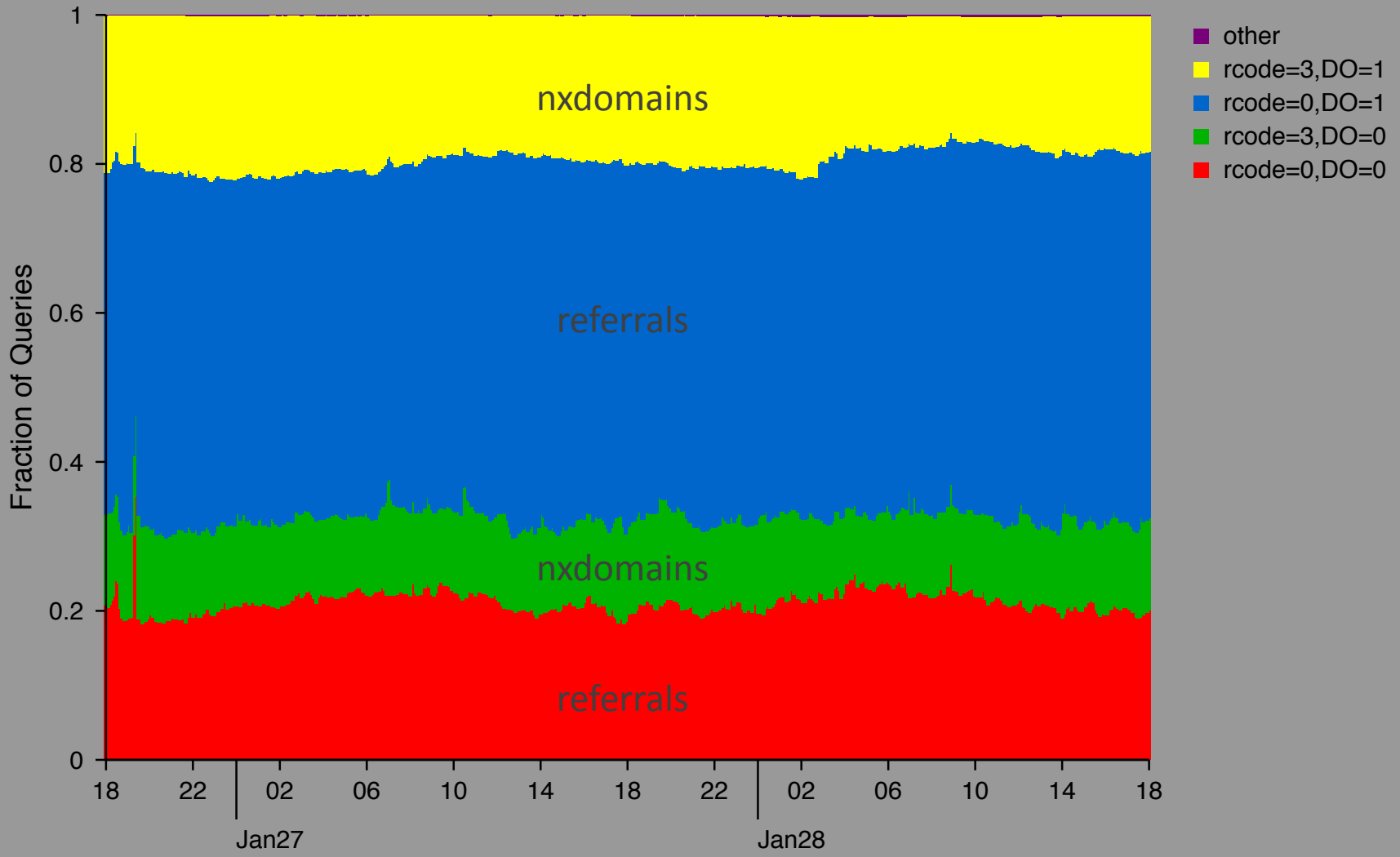
# UDP Query Rate



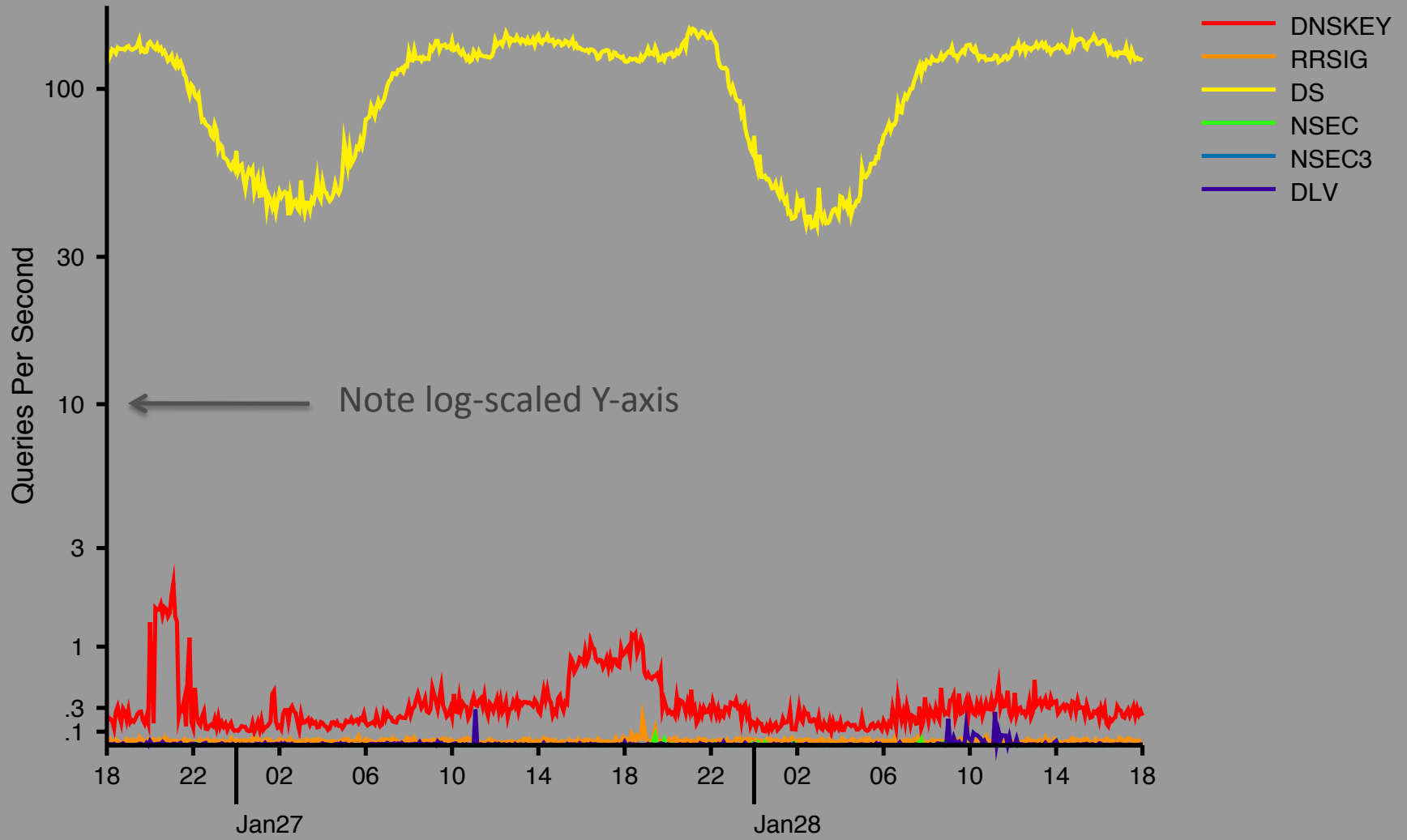
# UDP Query Rate



# RCODE/DO Mix For L-root

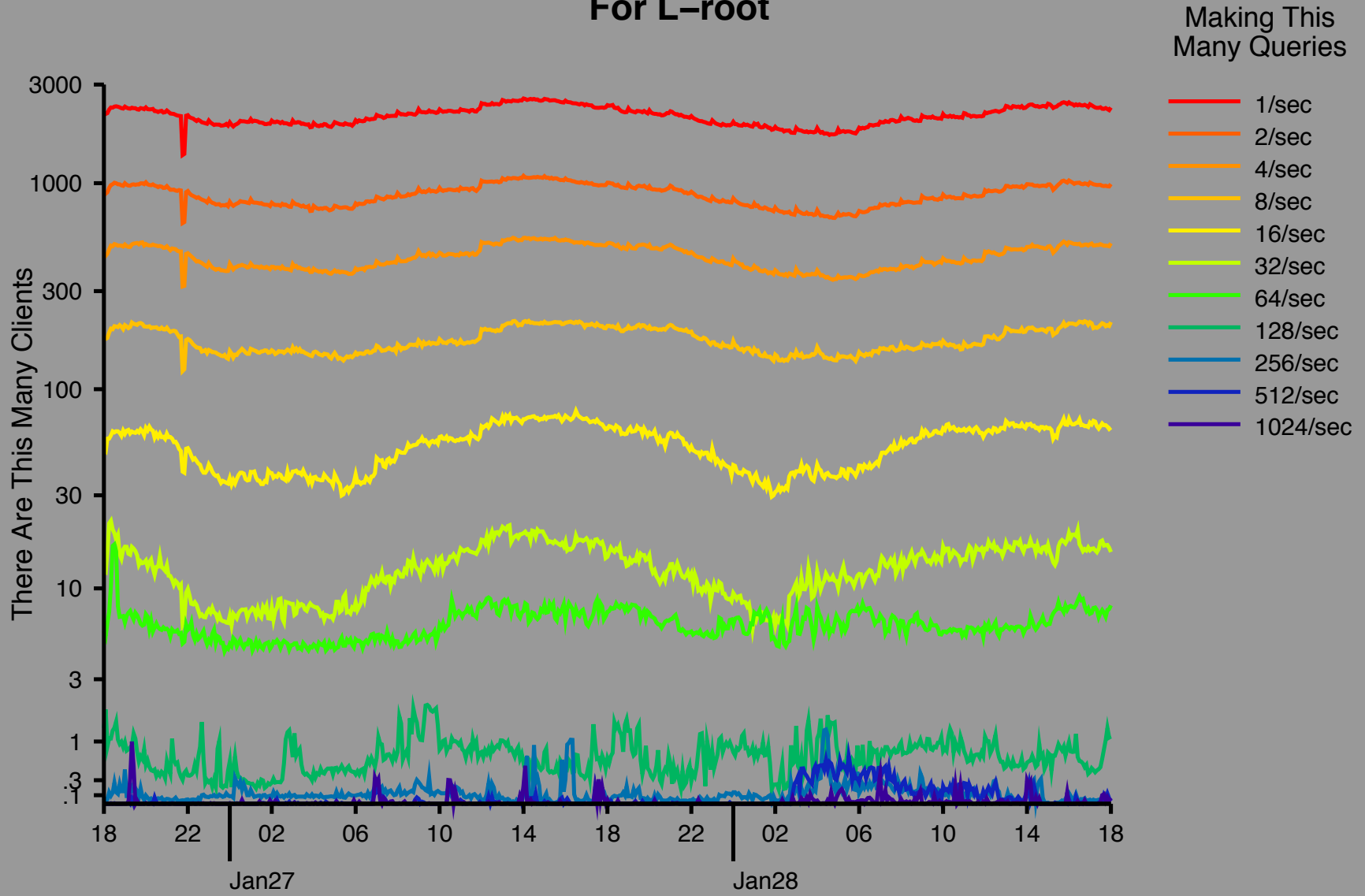


# DNSSEC Query Types For L-root





# Client Query Rates For L-root

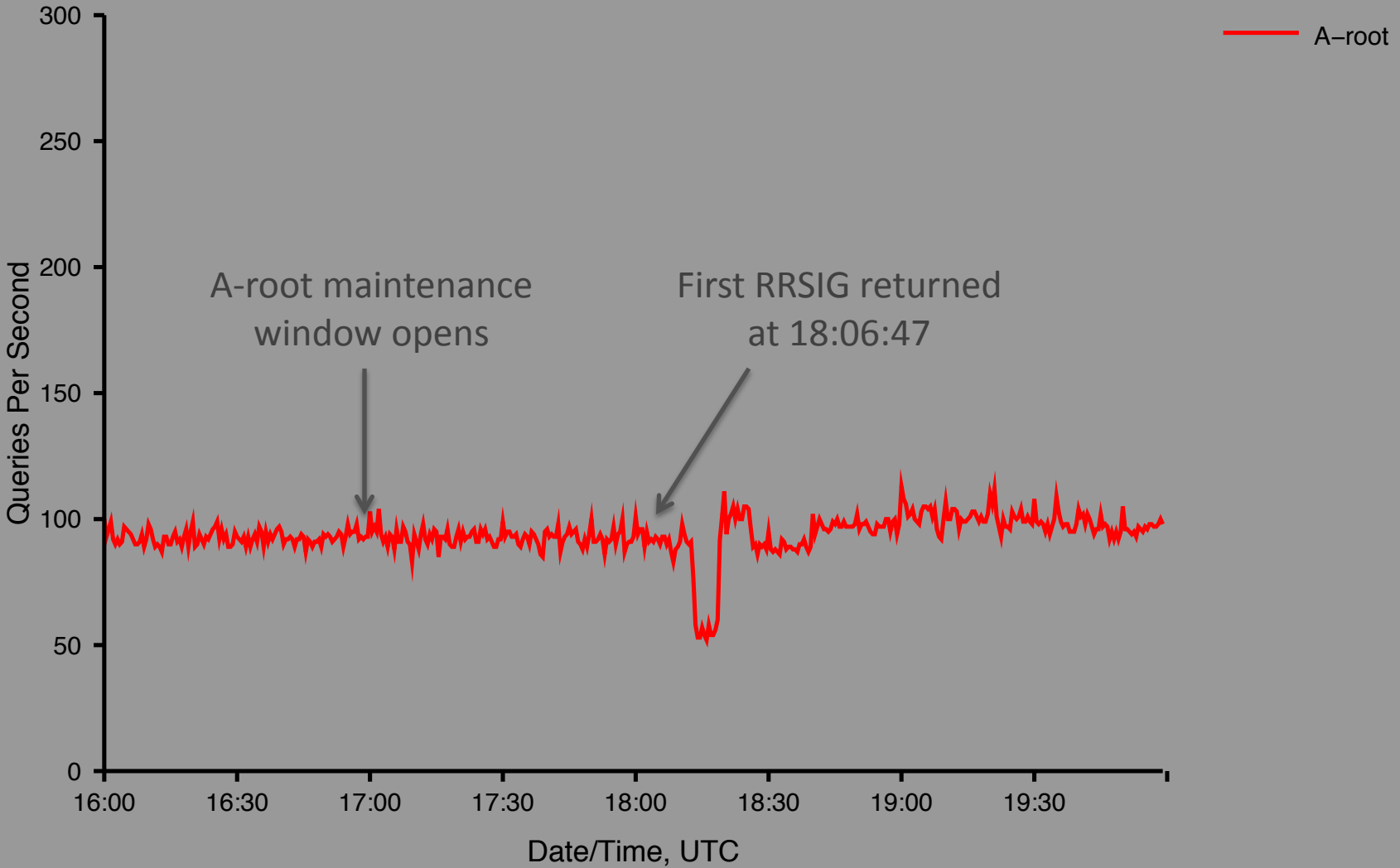


# A-Root DURZ

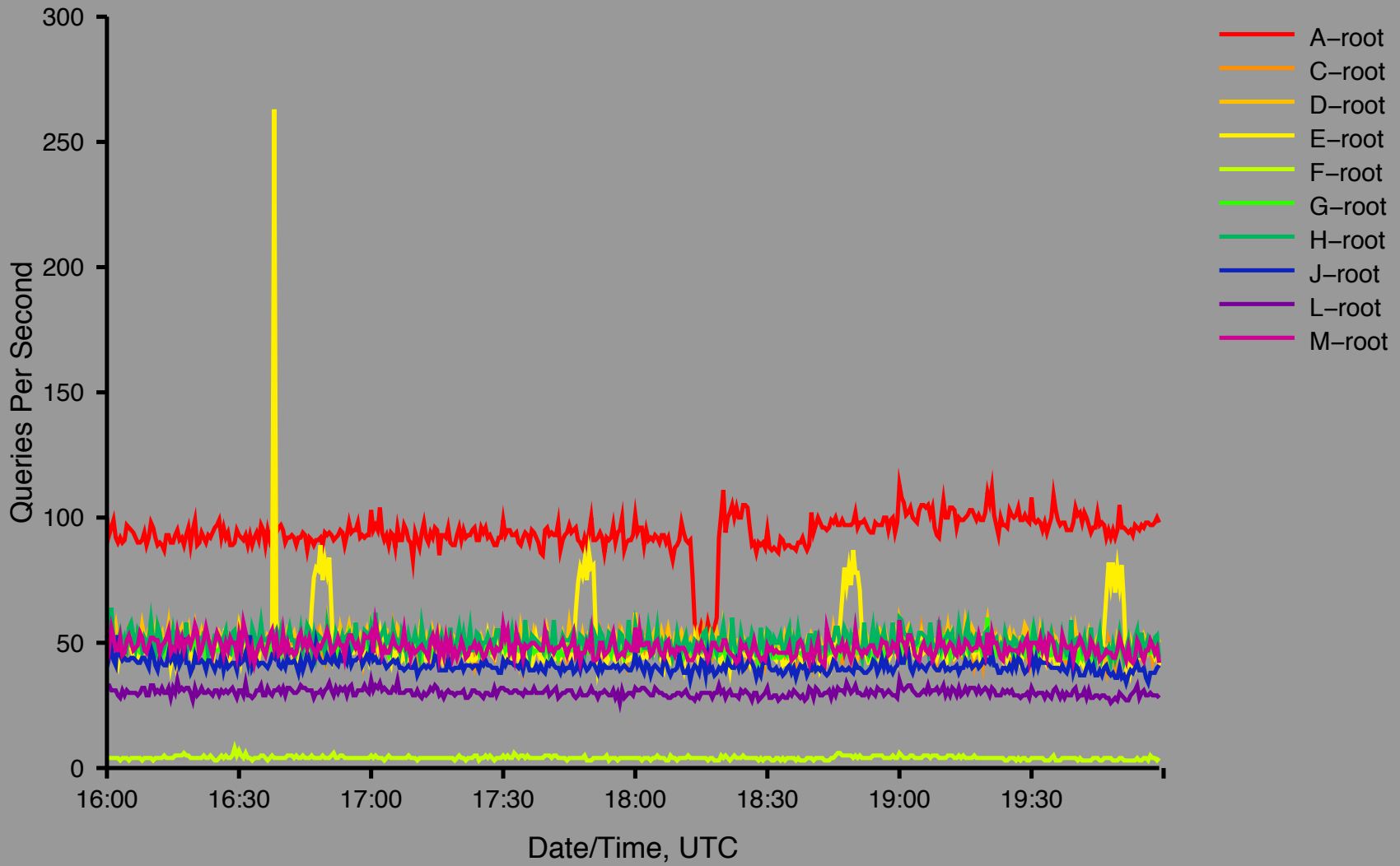
2010-02-10

Maintenance Window: 1700--1900 UTC

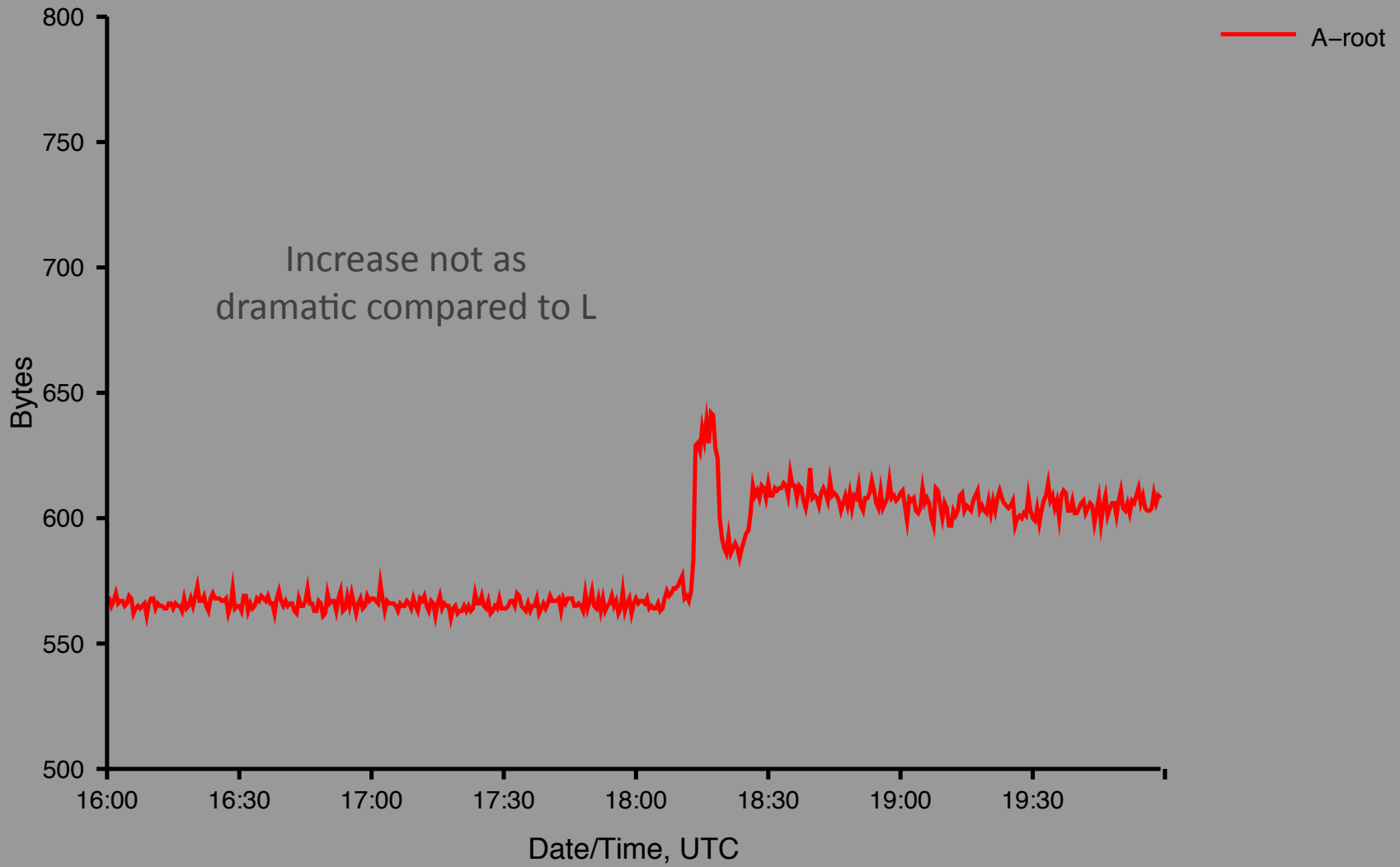
# UDP Priming Query Rate for the previous 4h as of 2010-02-10 20:00:00



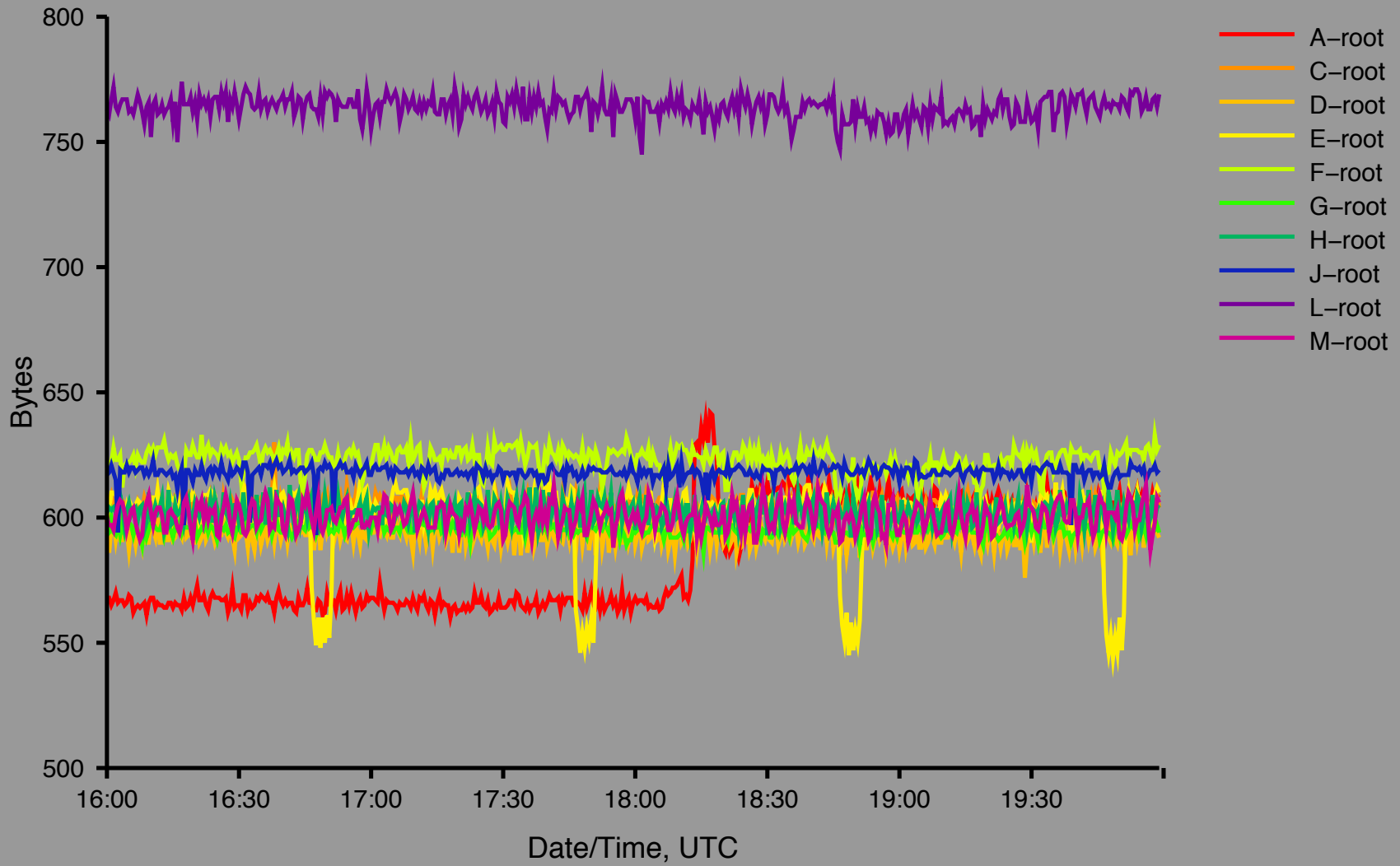
# UDP Priming Query Rate for the previous 4h as of 2010-02-10 20:00:00



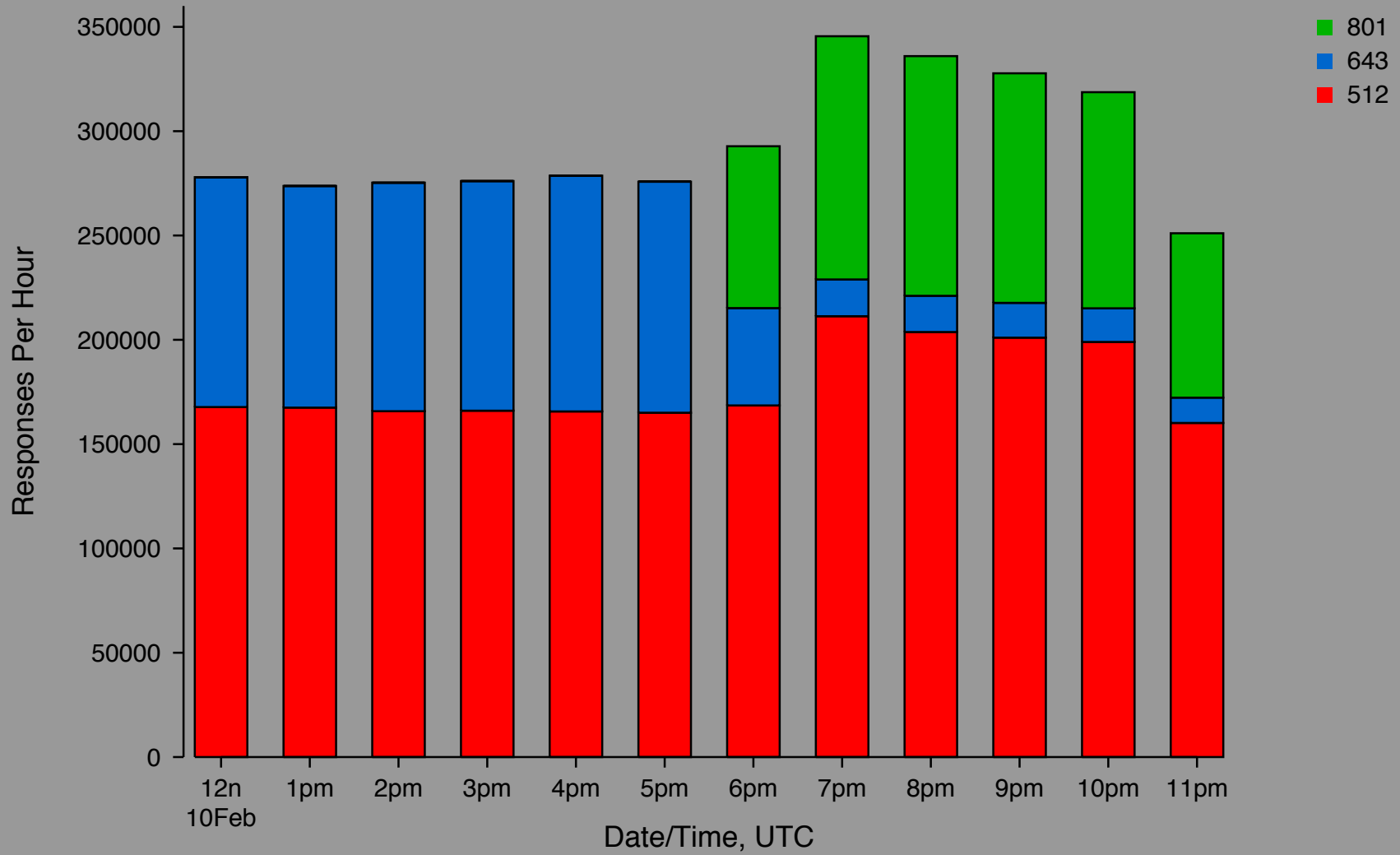
# UDP Priming Query Mean Reply Size for the previous 4h as of 2010-02-10 20:00:00



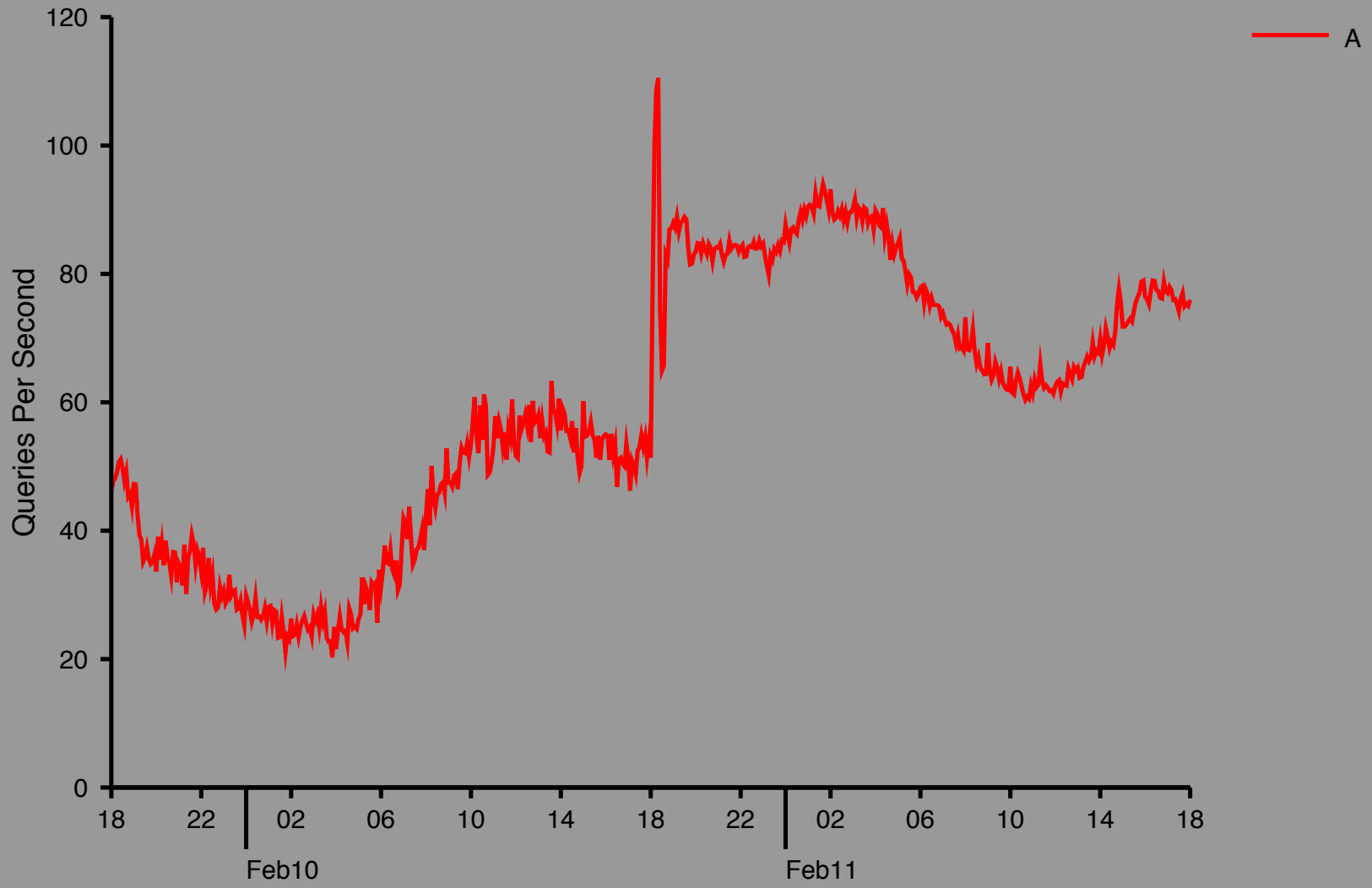
# UDP Priming Query Mean Reply Size for the previous 4h as of 2010-02-10 20:00:00



## Histogram of Priming Response Sizes -- A-root

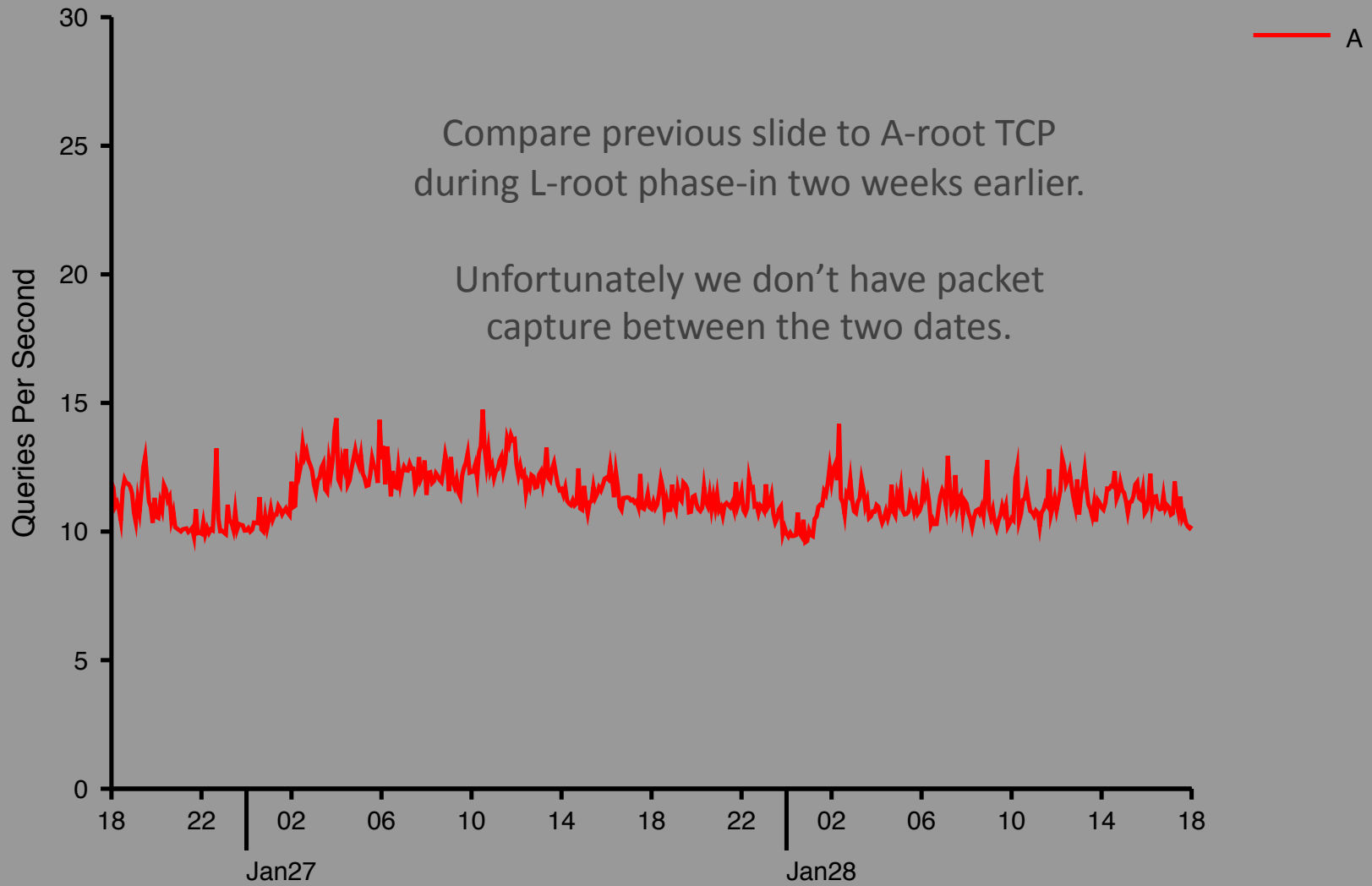


# TCP Query Rate

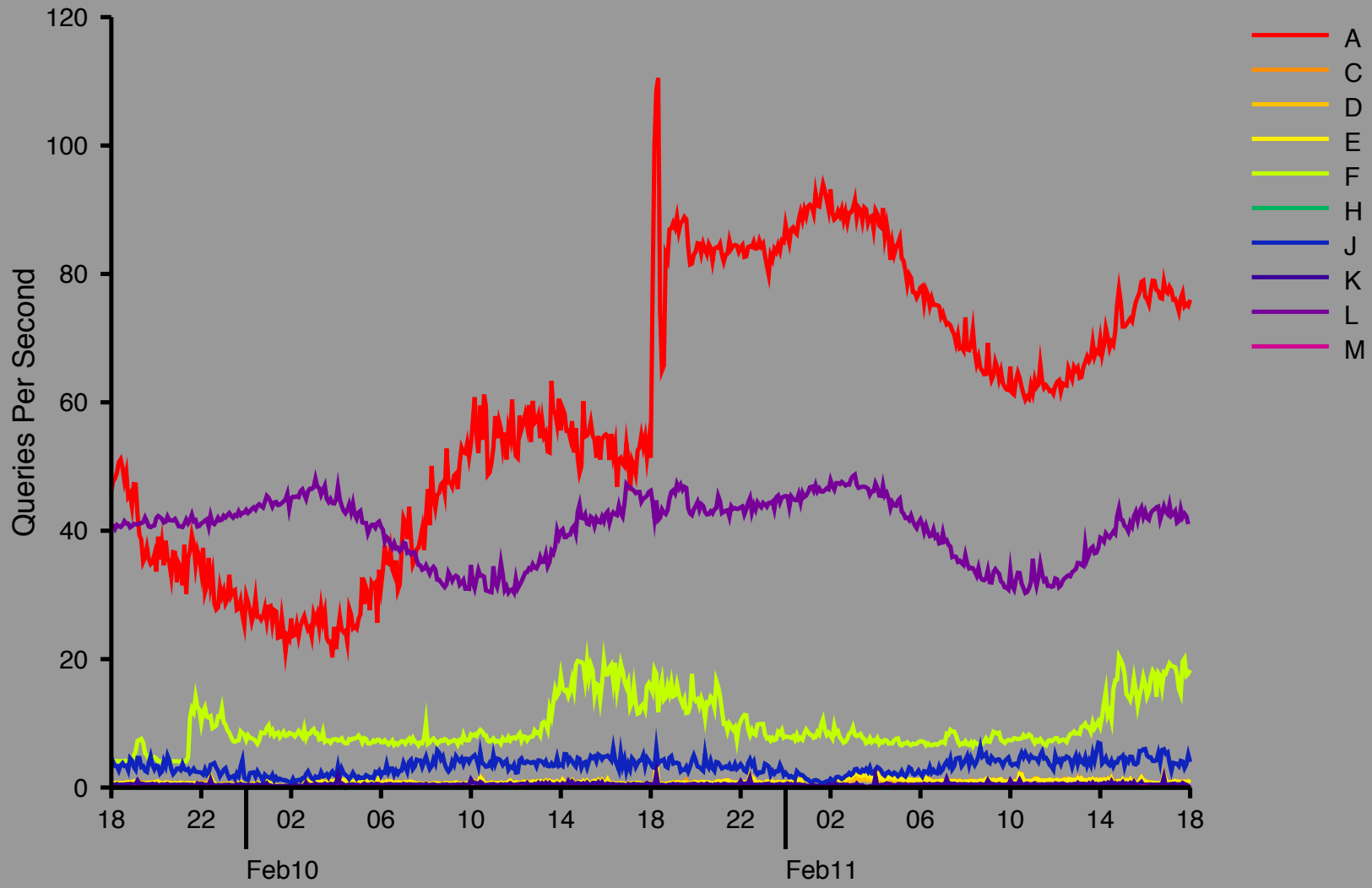




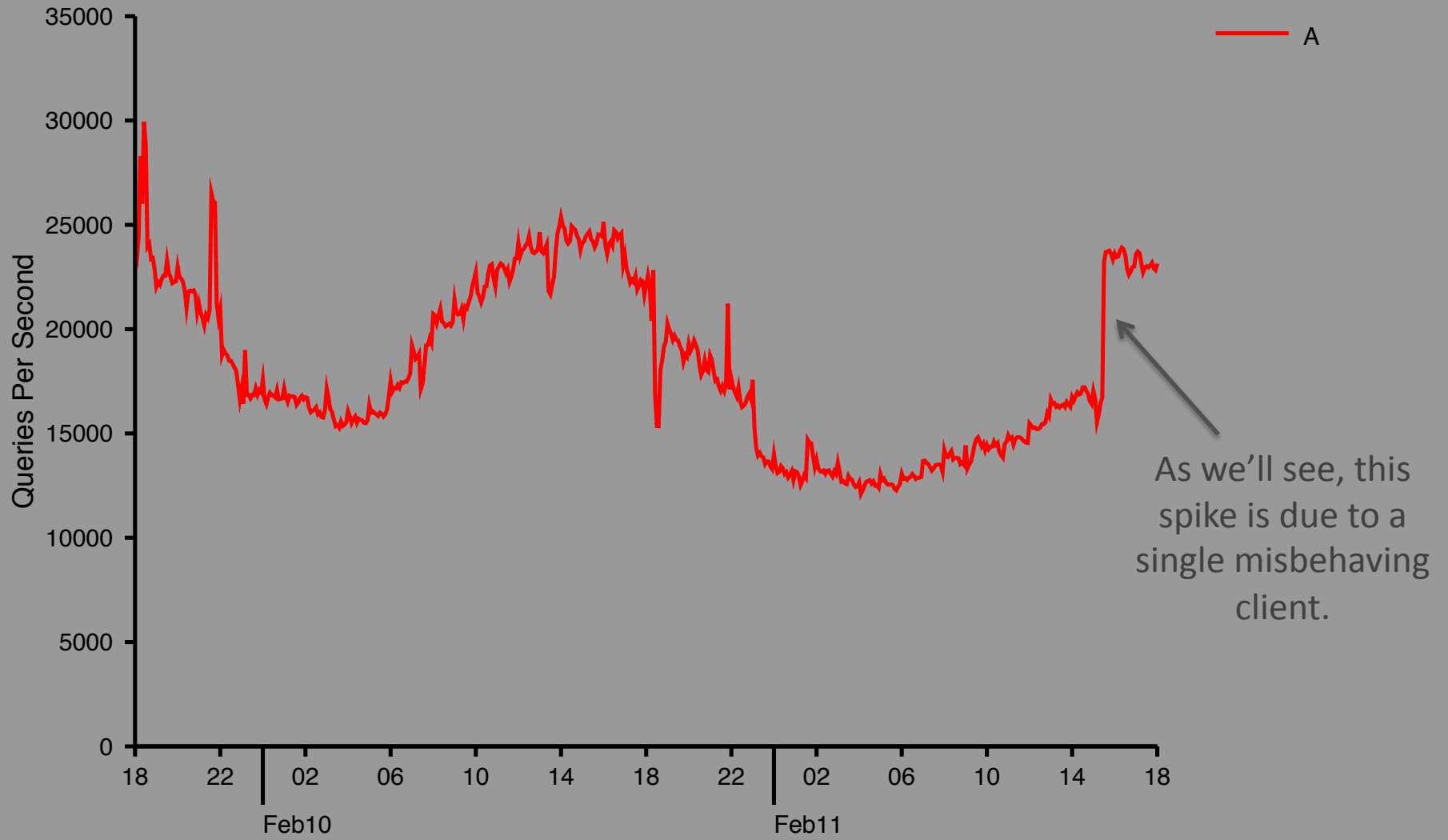
# TCP Query Rate



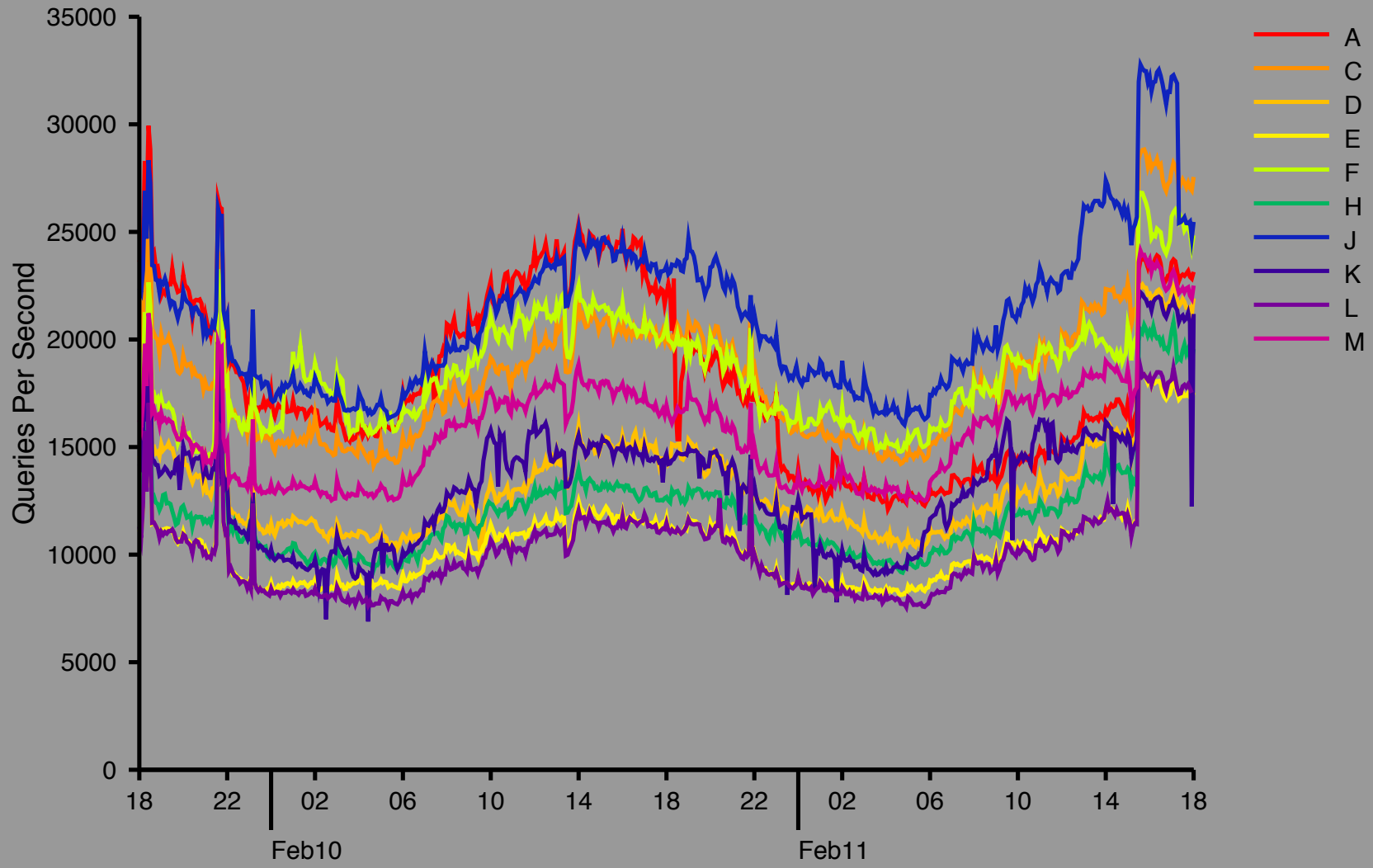
# TCP Query Rate



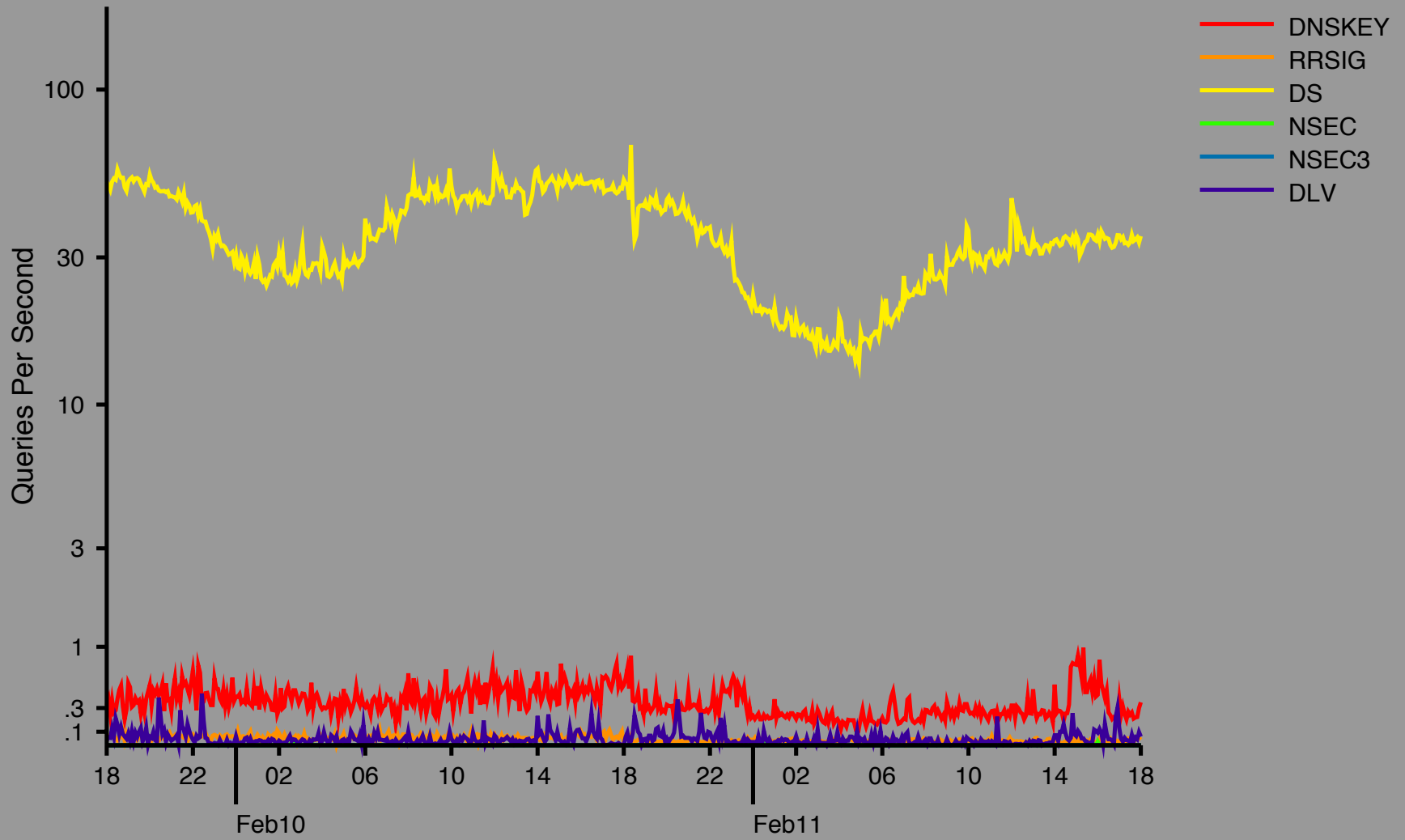
# UDP Query Rate



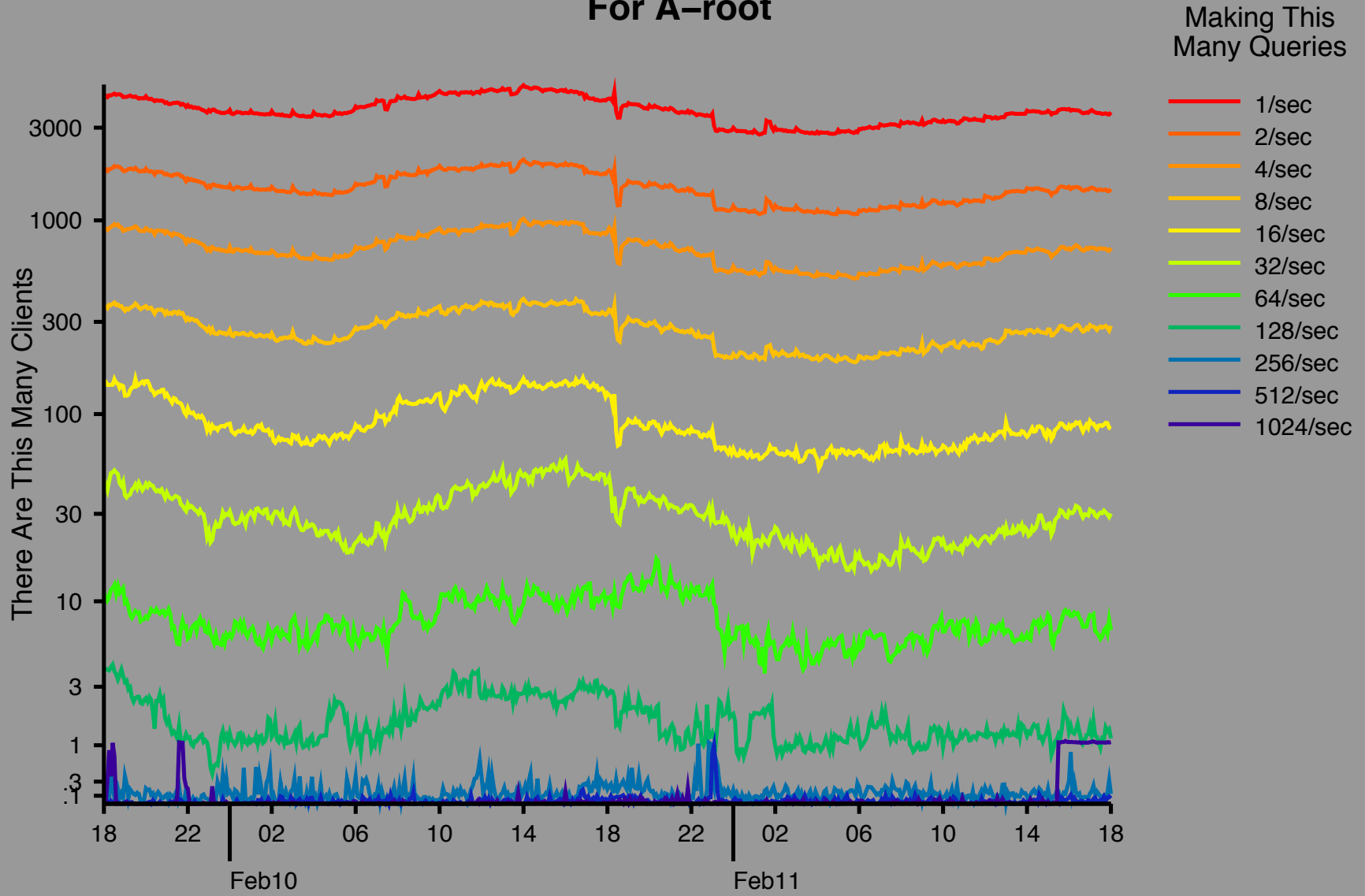
# UDP Query Rate



# DNSSEC Query Types For A-root

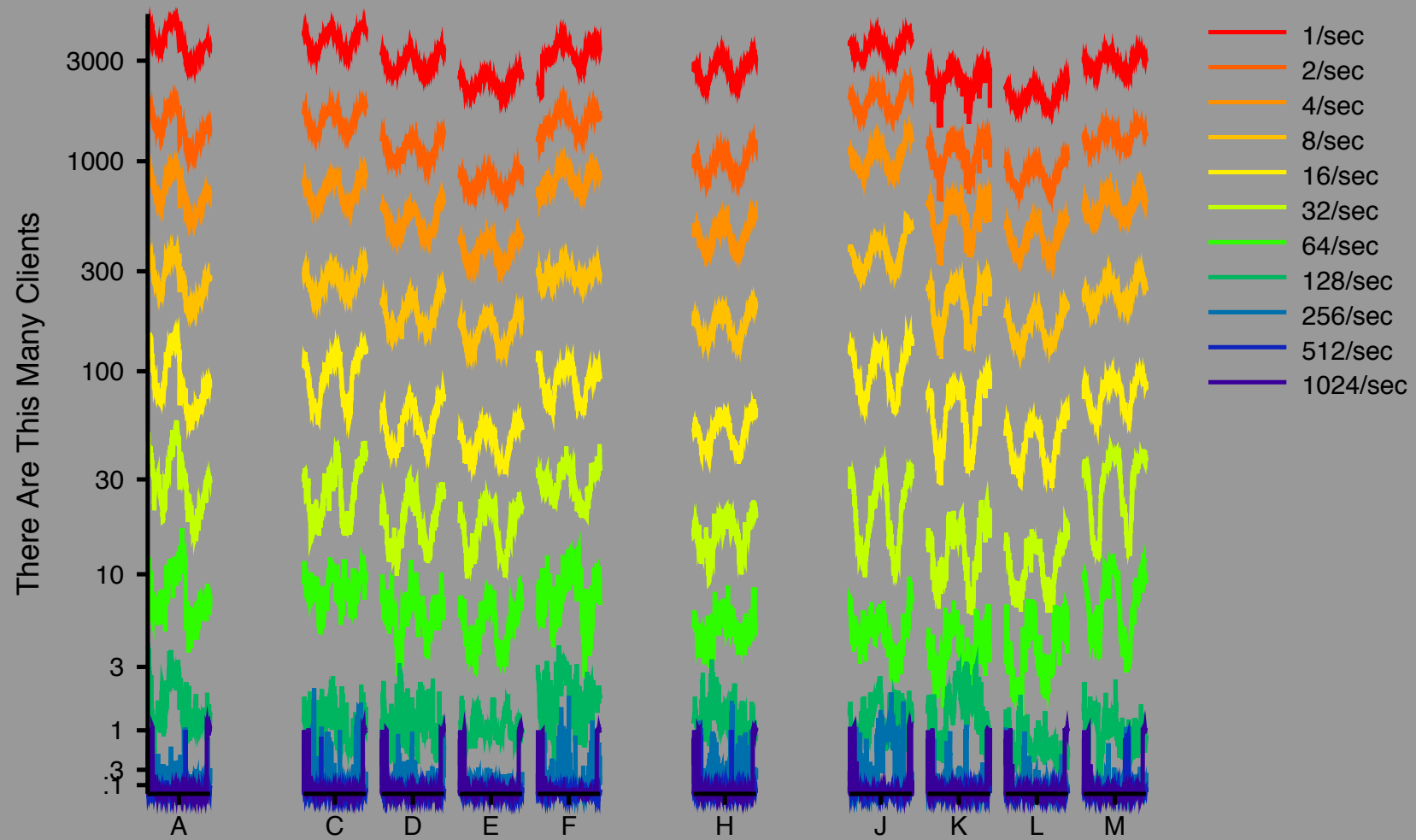


# Client Query Rates For A-root



# Client Query Rates

Making This Many Queries



# Acknowledgements

- Thanks to the Root Server Operators that are providing data.
- Thanks to ISC for being DNS-OARC's remote hands.



# More Information

[www.root-dnssec.org](http://www.root-dnssec.org)

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