

# A First Look at the Root KSK Rollover

By the Root Canary Project

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2018-10-13 at DNS OARC 29 in Amsterdam



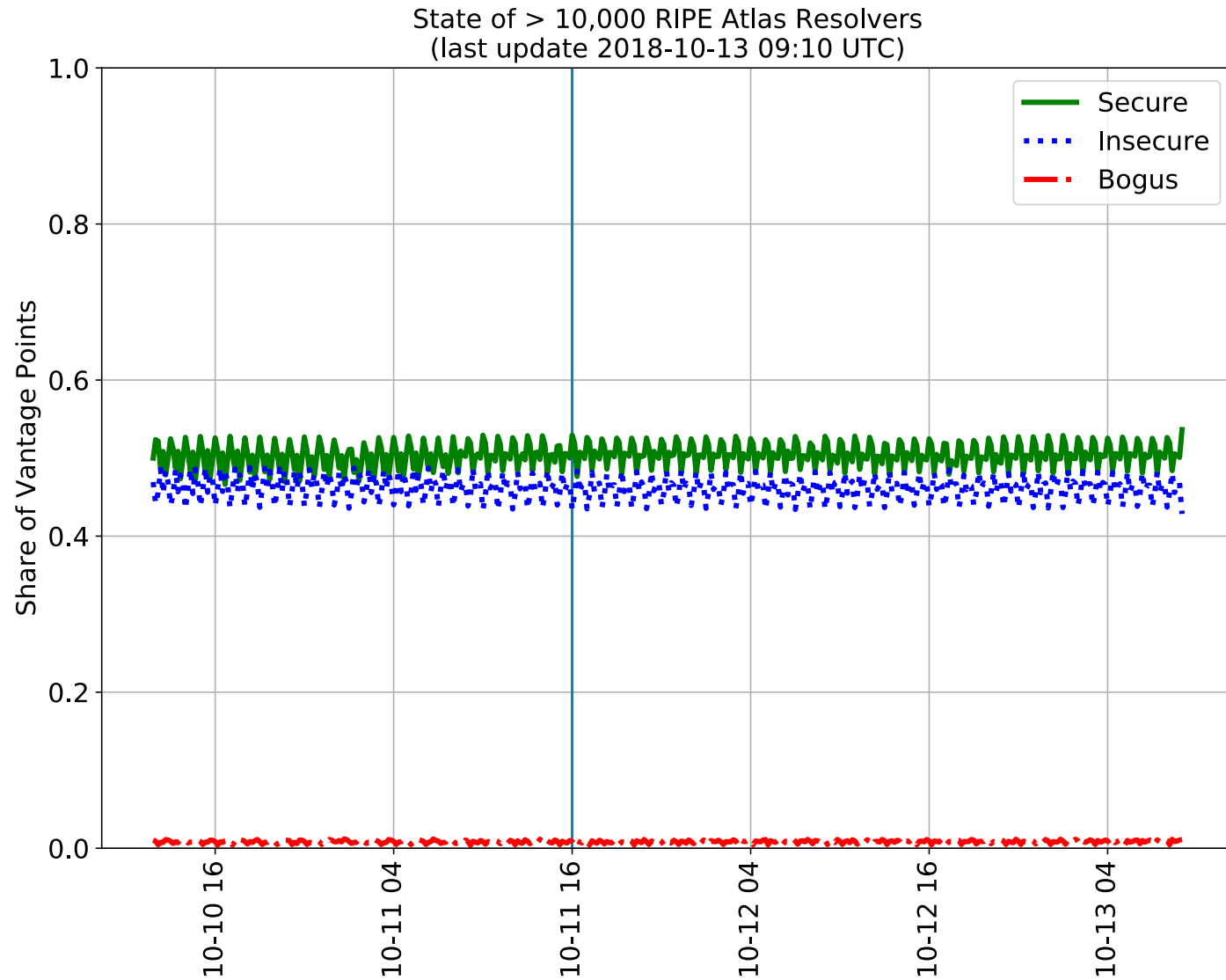
# Methodology

- rootcanary.org
- 10,000 RIPE Atlas Probes
- Measuring from each probe once per hour
  - RRSIG for .
  - Query for valid and bogus domain

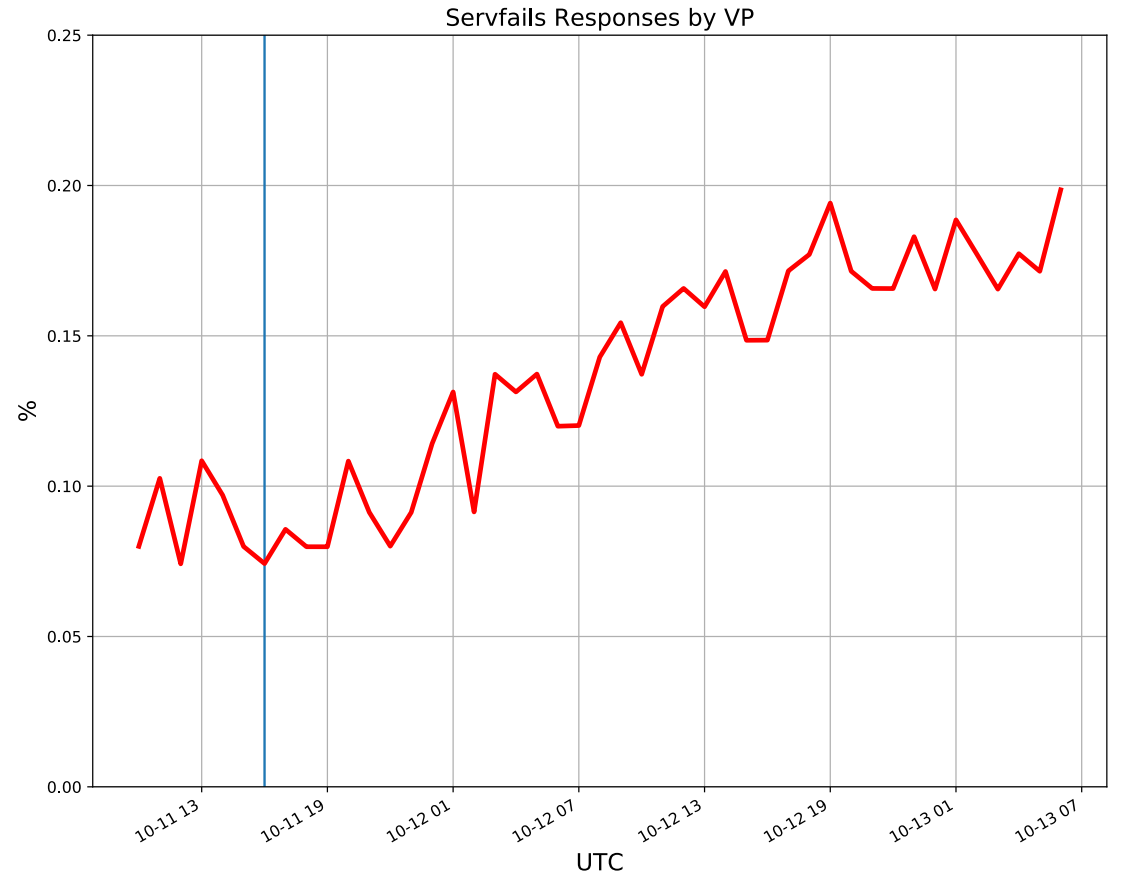
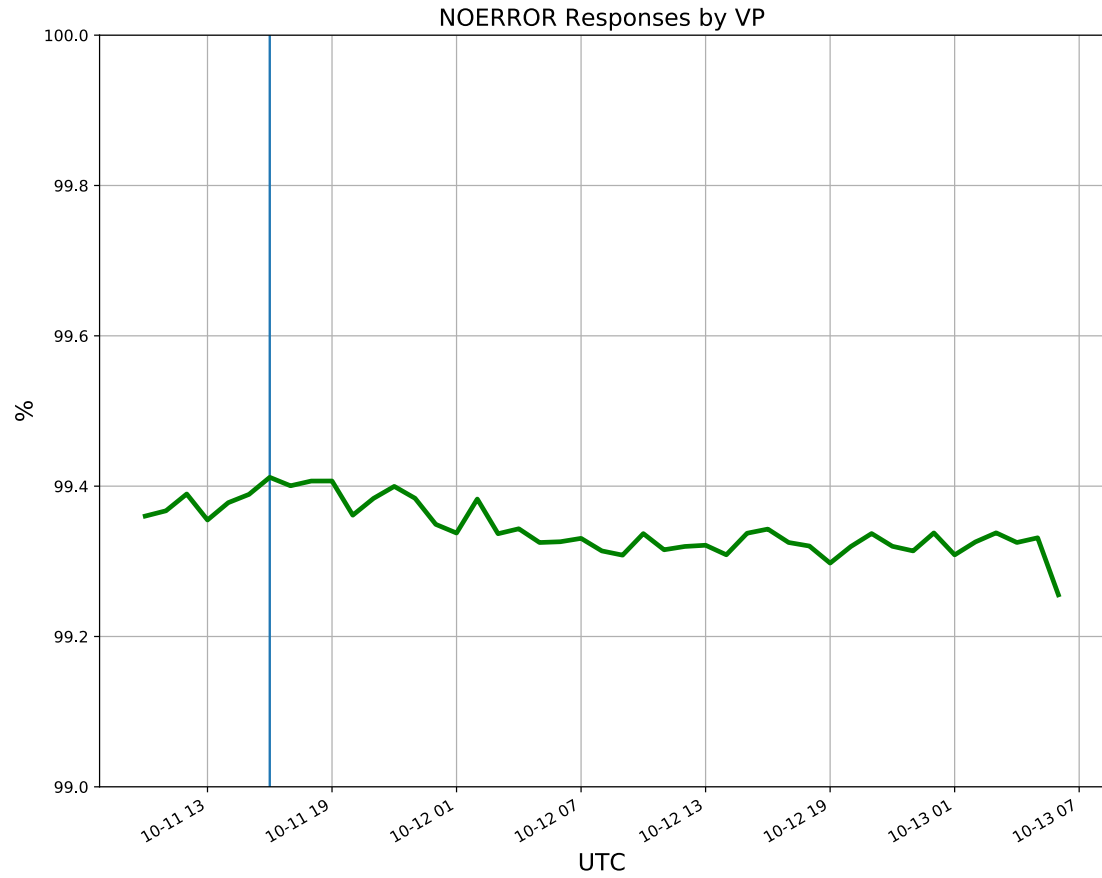
# Methodology

- rootcanary.org
- 10,000 RIPE Atlas Probes
- Measuring from each probe once per hour
  - RRSIG for .
  - Query for valid and bogus domain
- Spam Twitter

# Validation Errors

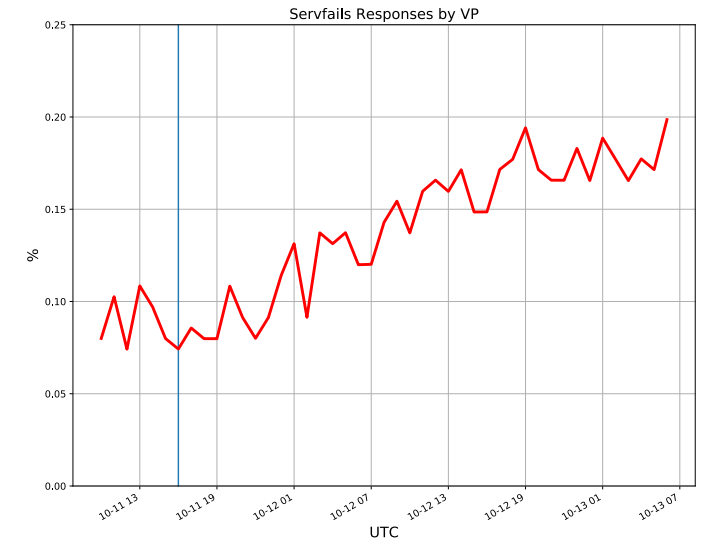


# Validation Errors



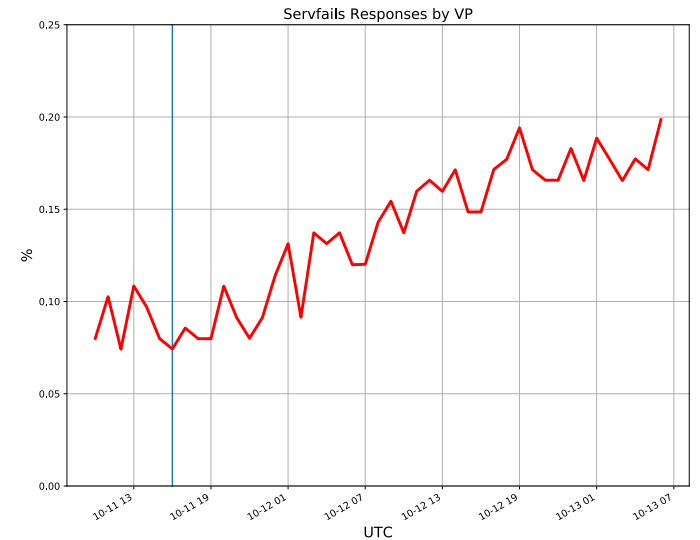
# Who is failing?

Resolvers	Probes
8.8.8.8	24
8.8.4.4	11
63.221.246.95	6
192.168.1.1	6
2001:4860:4860::8888	6
192.168.2.1	3
217.218.127.127	3
10.0.1.1	2
2a01:b1c0::c6	2
194.62.23.198	2

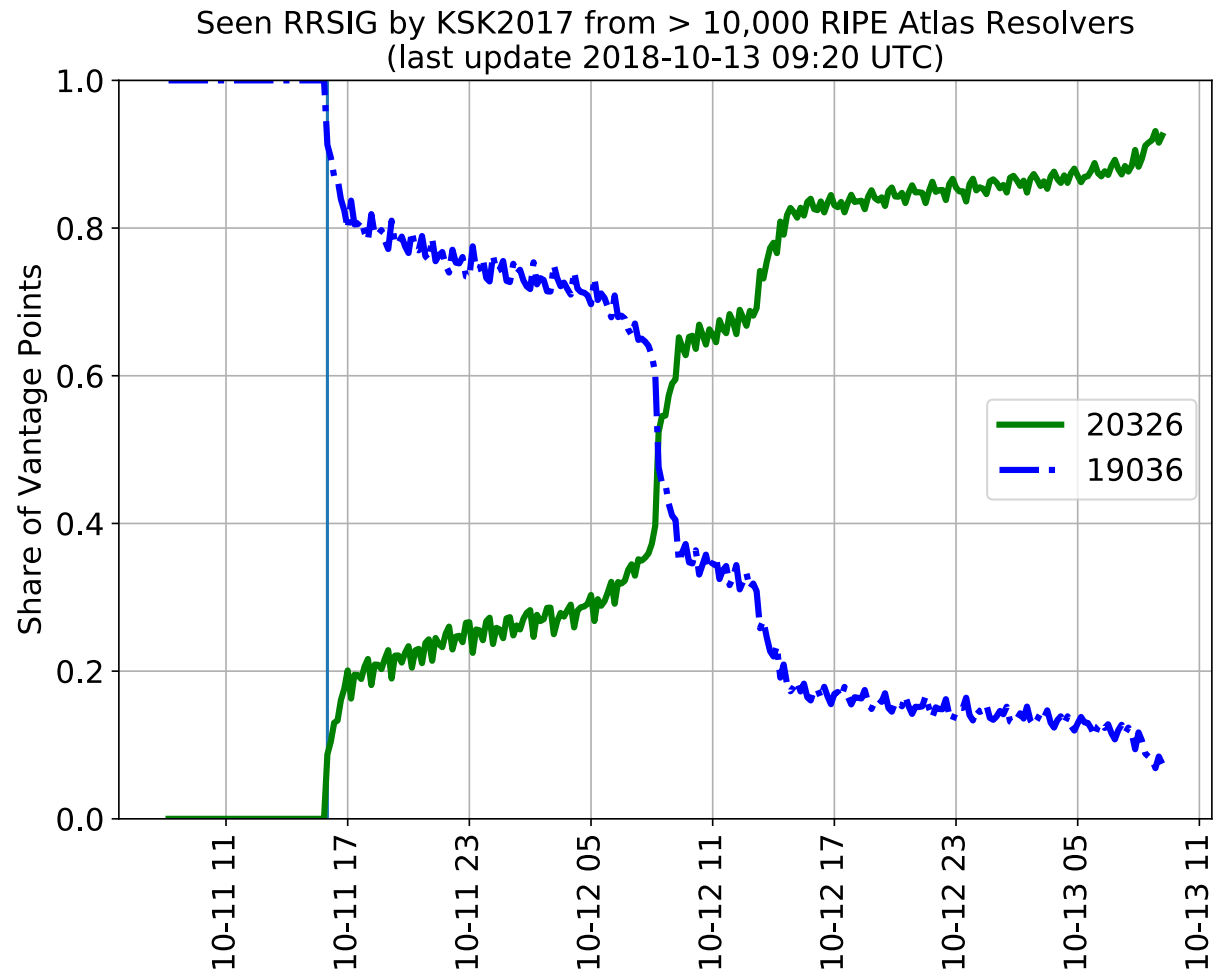


# Who is failing?

AS Name	Probes
BTN-ASN - PCCW Global, Inc., US	7
DTAG Internet service provider operations, DE	5
COMCAST-7922 - Comcast Cable Communications, LLC, US	5
TPG-INTERNET-AP TPG Telecom Limited, AU	3
LGI-UPC formerly known as UPC Broadband Holding B.V., AT	3
ASN-IBSNAZ, IT	2
Universidad Nacional de La Plata, AR	2
EIRCOM Internet House, IE	2
OPTEAMAX-AS, DE	2
FASTWEB, IT	2
GGAMAUR, CH	2

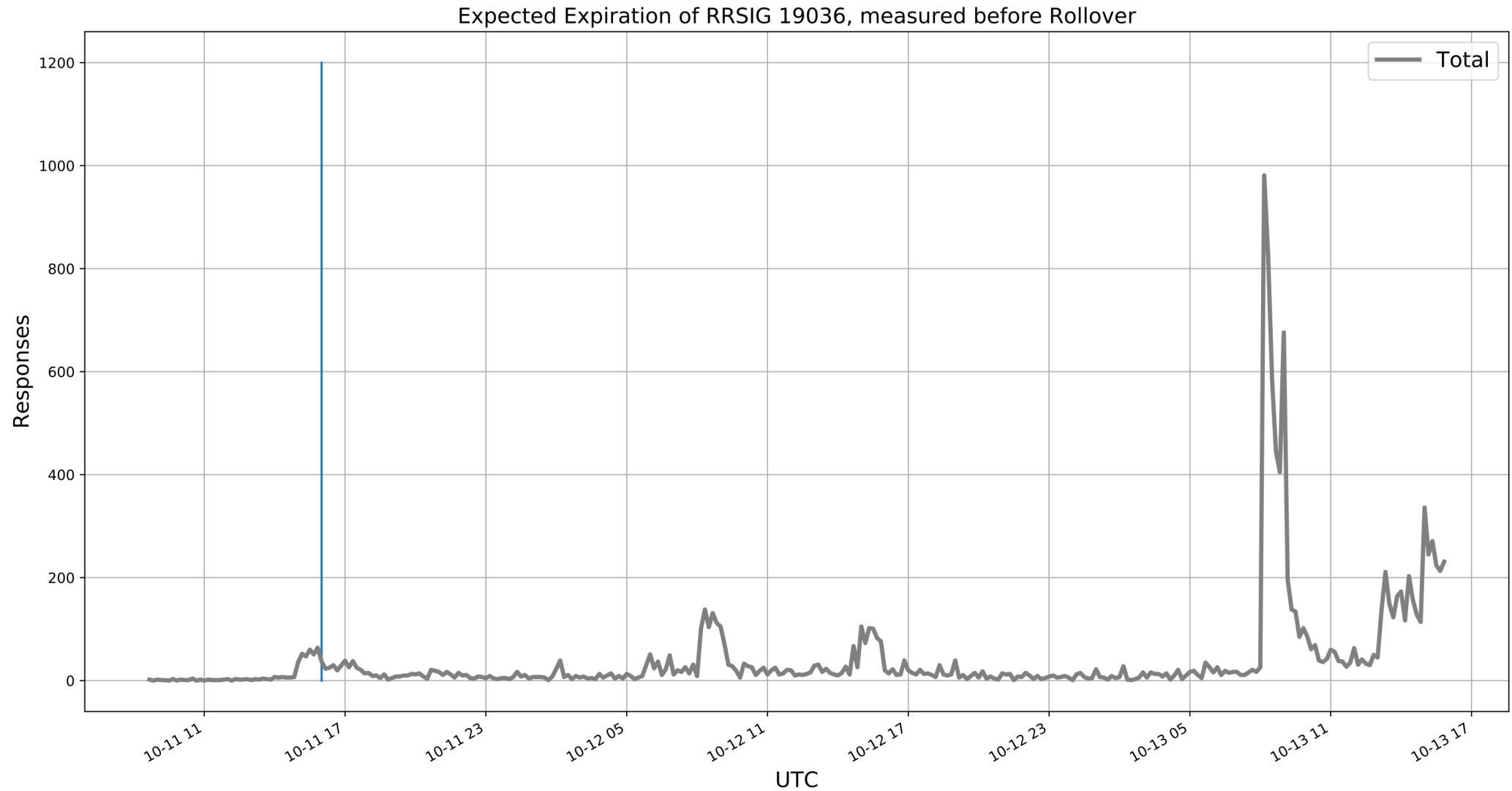


# Seen RRSIGs

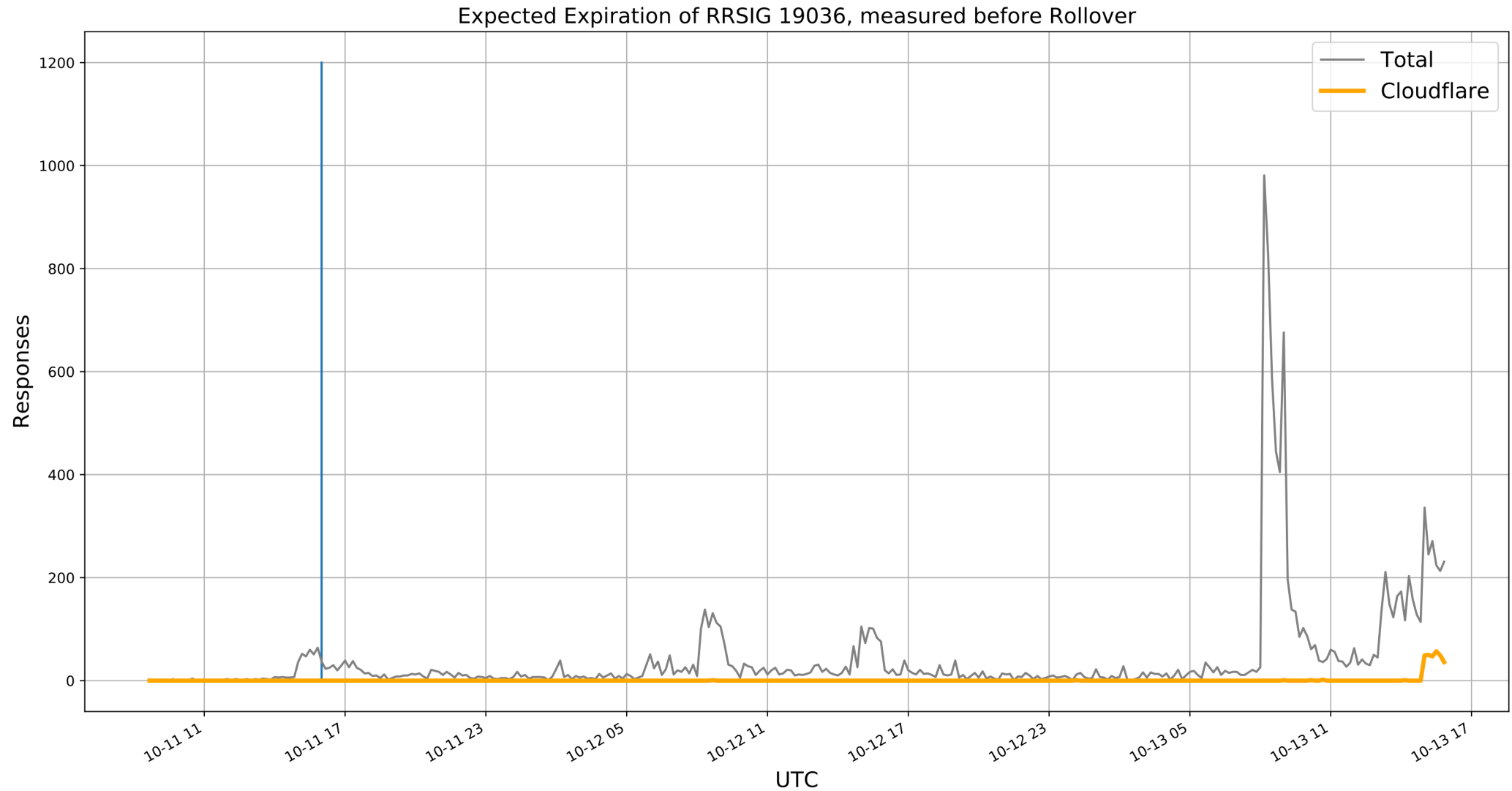




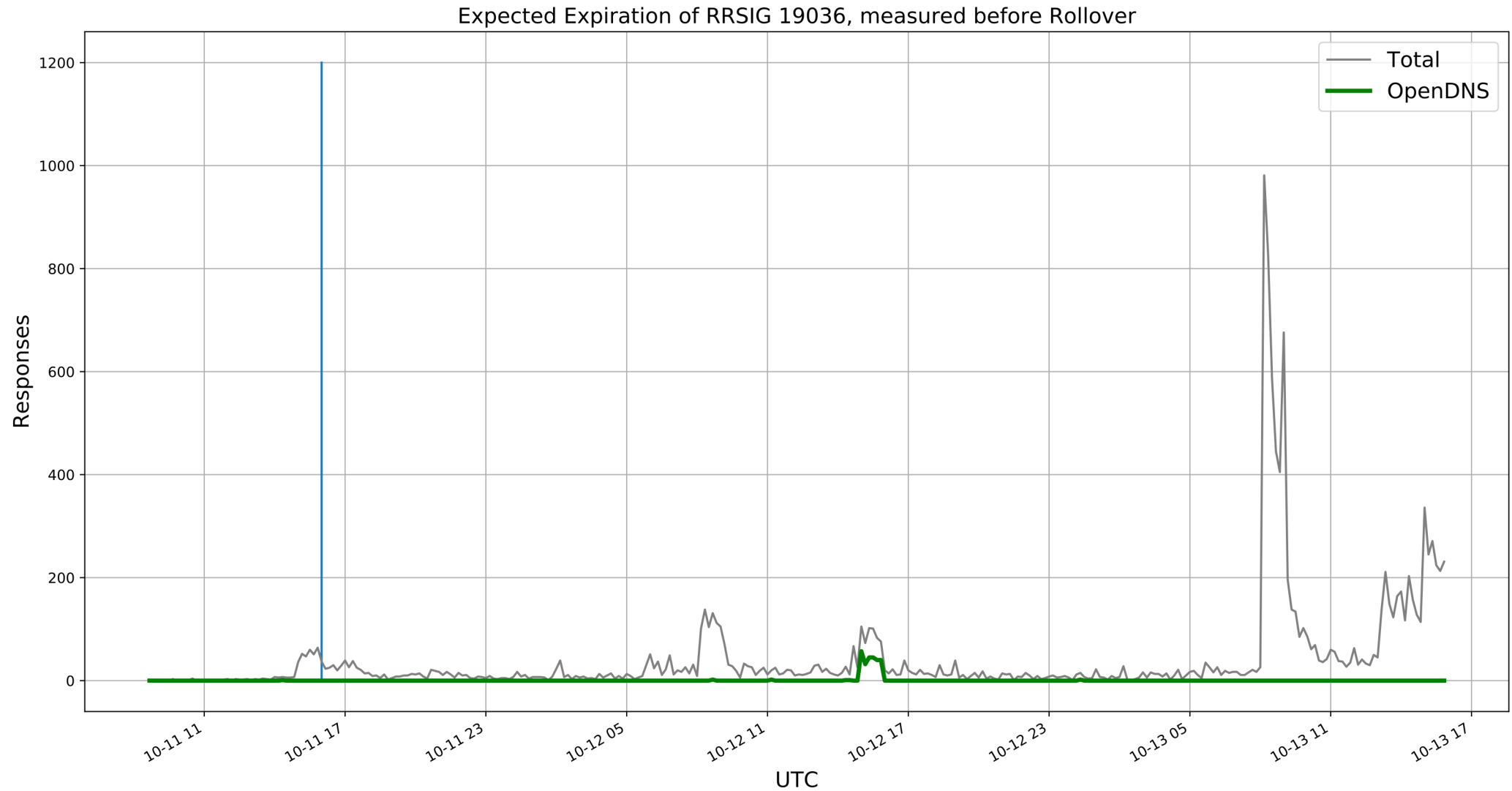
# Expected RRSIG expiration



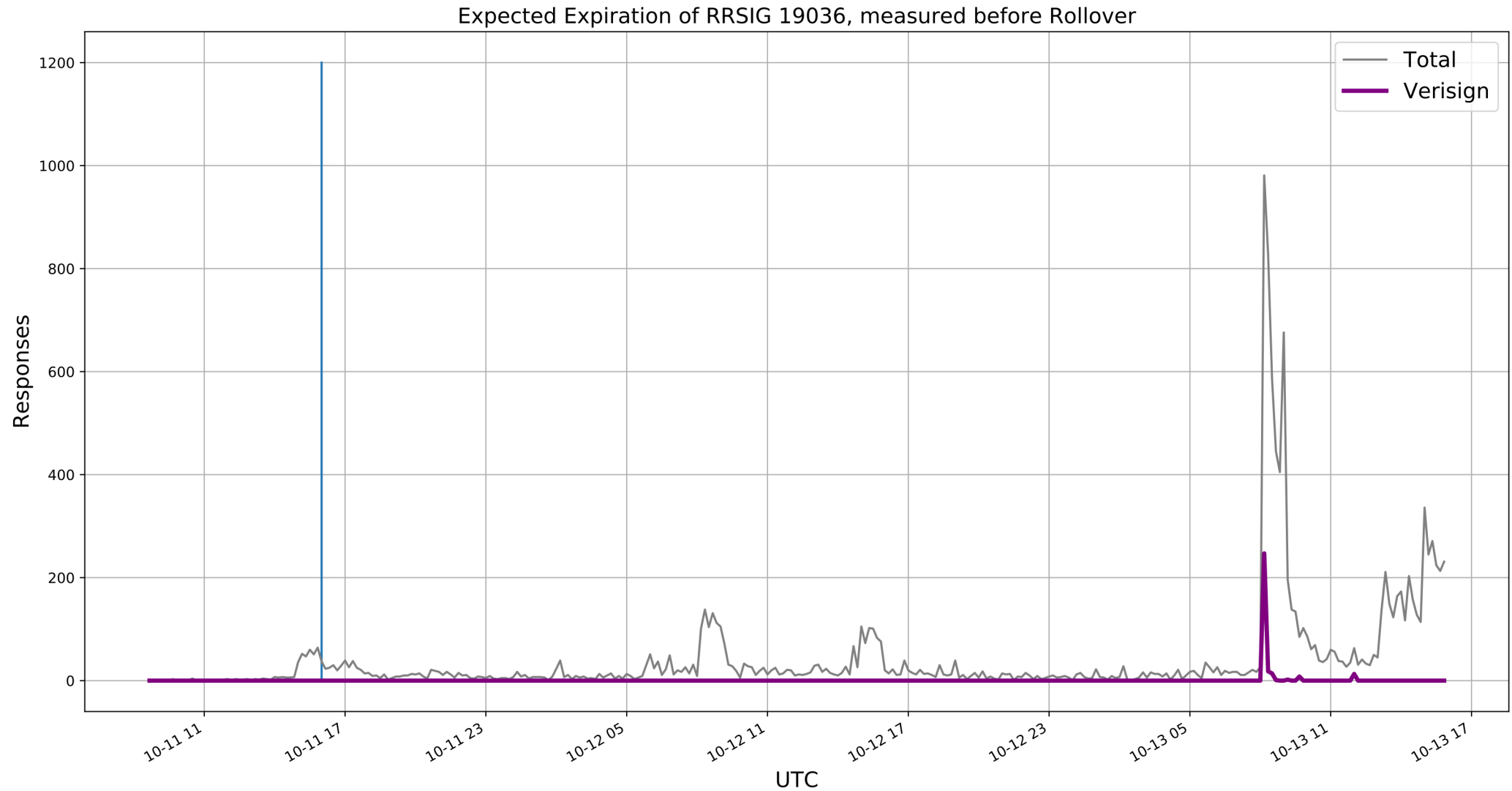
# Expected RRSIG expiration



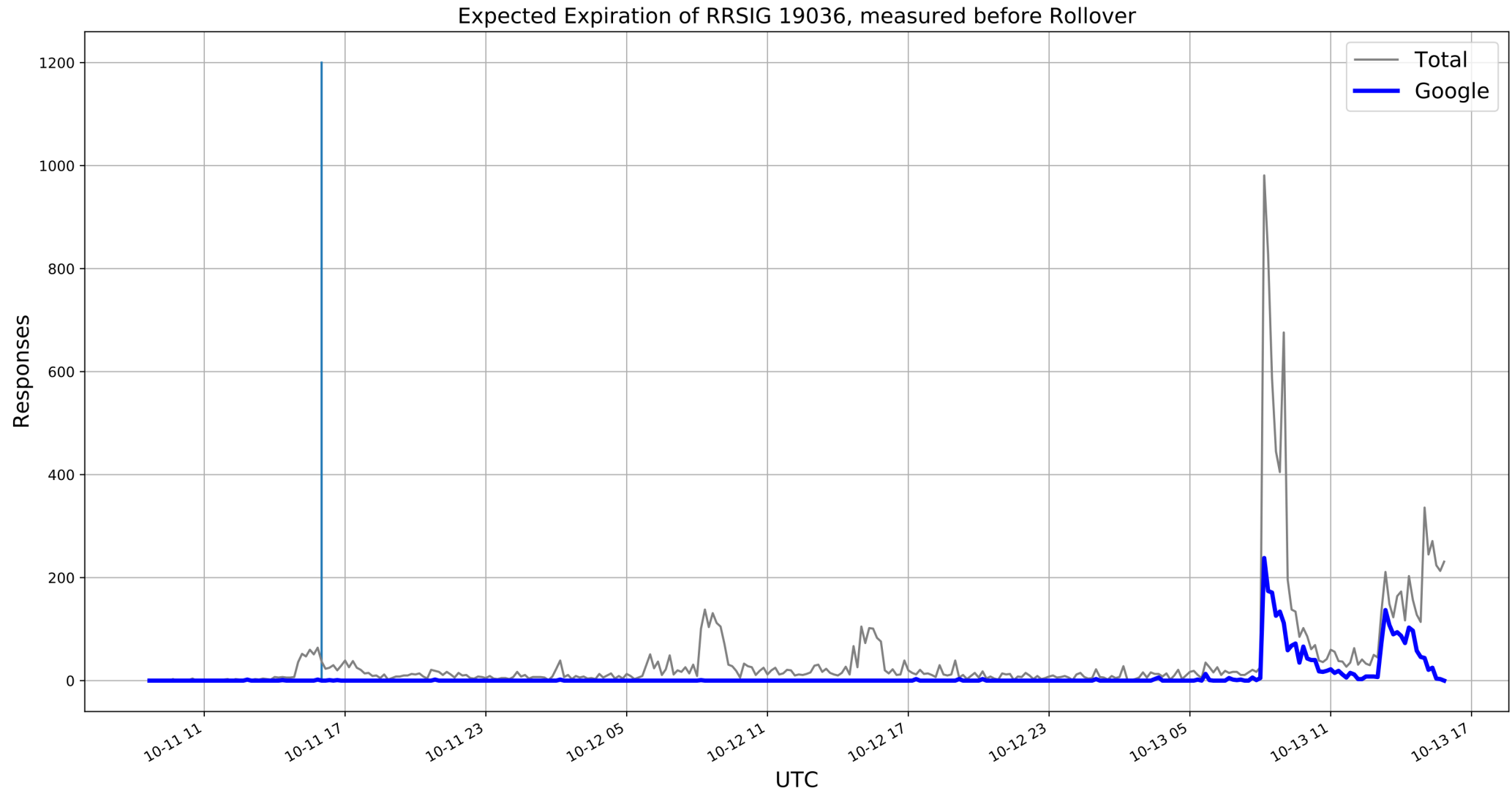
# Expected RRSIG expiration



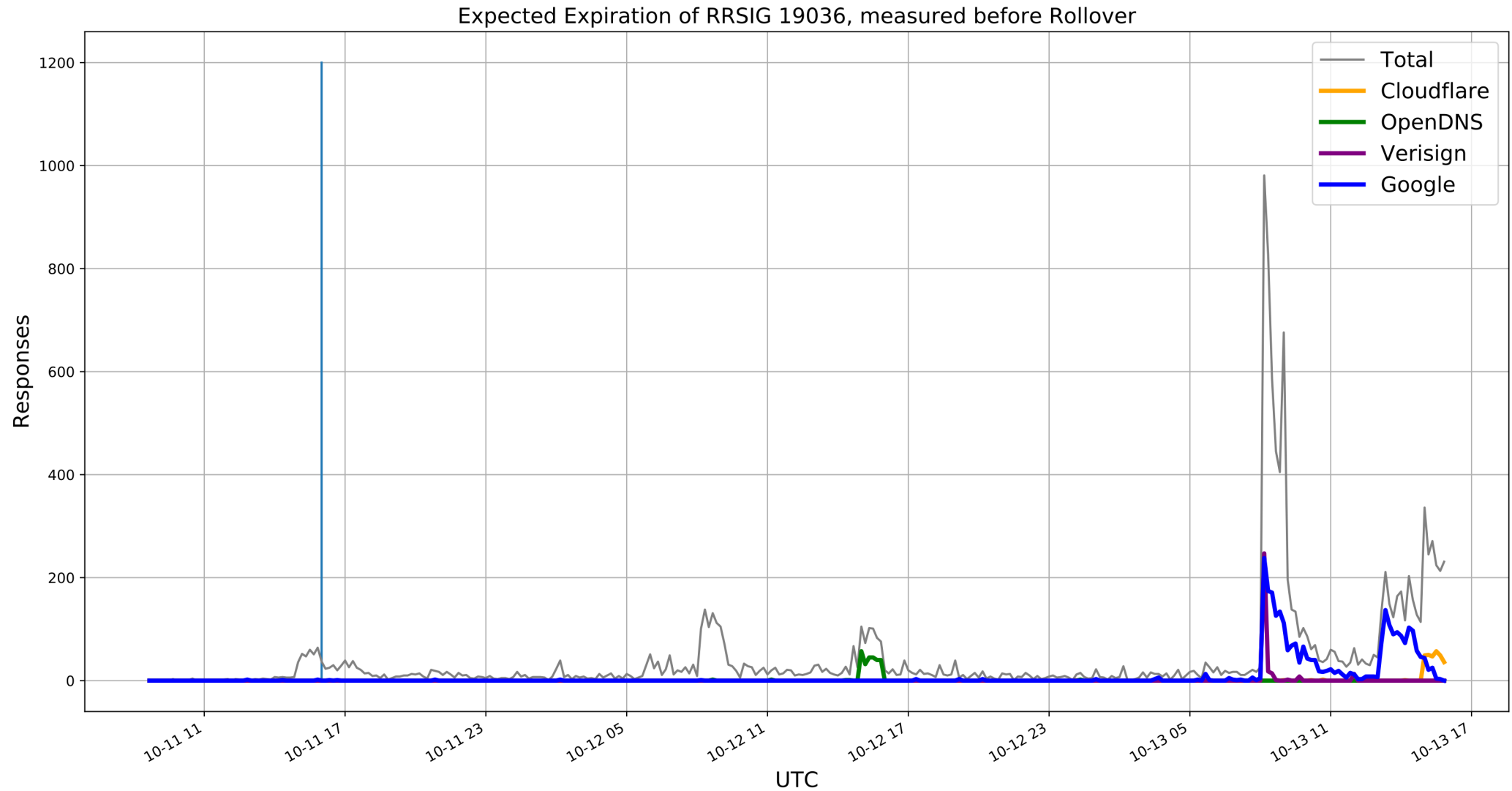
# Expected RRSIG expiration



# Expected RRSIG expiration



# Expected RRSIG expiration



# (Very Early) Conclusions and Next Steps

- Rollover went fine (from our perspective)
- Dive more into data, e.g.
  - Upstream resolvers
  - DITL
  - ....?