



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

RIPE NCC Measurement Data and Tools

Christian Teuschel | November 2016 | Skopje



Measurement Data

Registry Data



- Registry of Internet number resources (INR)
- 5 Regional Internet Registries



5,379 members

https://www.arin.net/about_us/membership/index.html - Nov 2016



14,699 members

<https://labs.ripe.net/statistics/number-of-lirs> - Nov 2016

~6k members

<http://www.lacnic.net/en/web/lacnic/listado-miembros> - Nov 2016



5,794 members

<https://www.apnic.net/get-ip/apnic-membership/who-are-our-members> - Nov 2016



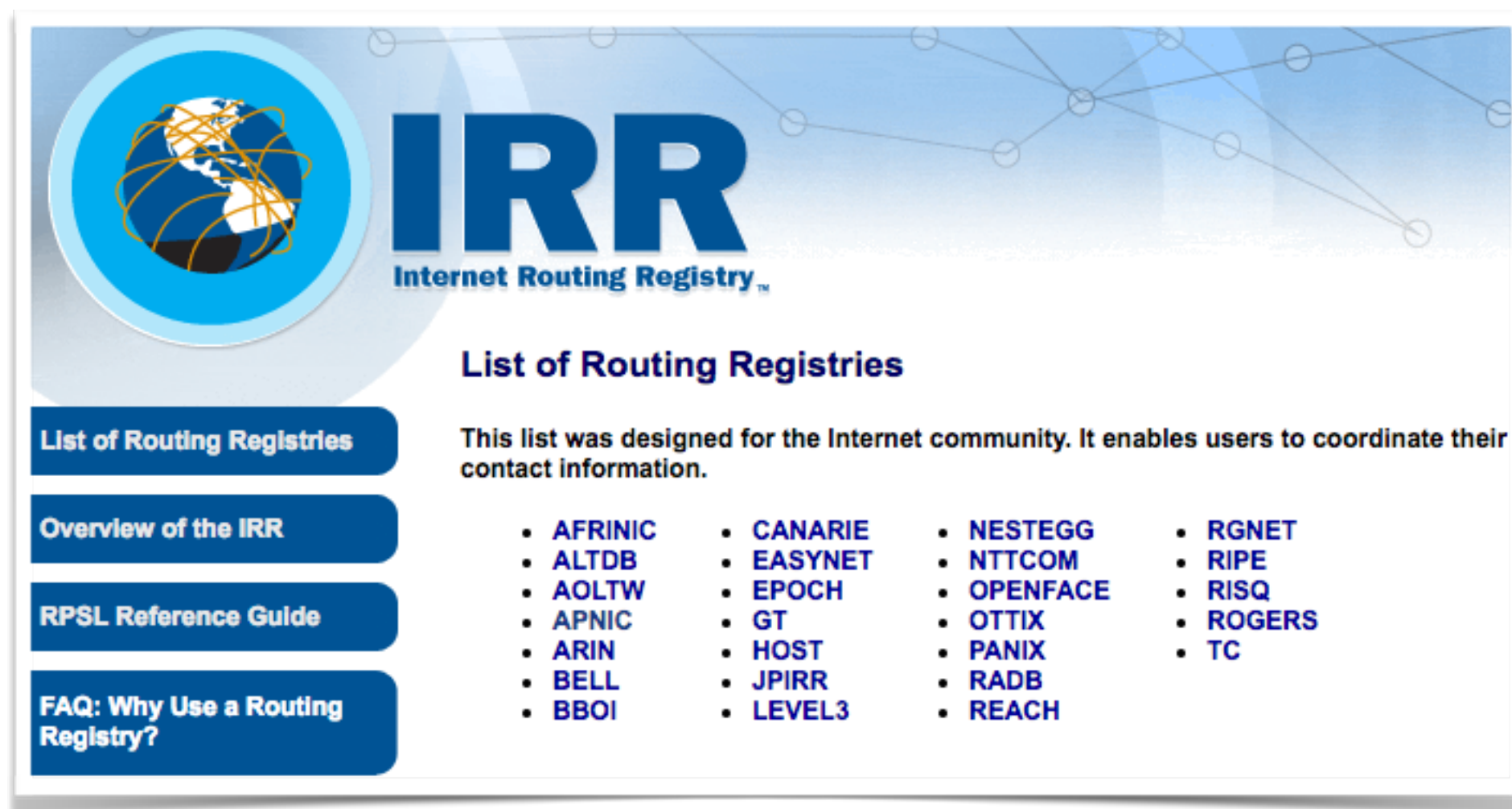
1,419 members

<http://www.afrinic.net/en/about/our-members> - Nov 2016

Registry Data



- Internet Routing Registry (IRR)
- Purpose to facilitate routing (RPSL)



<http://www.irr.net/docs/list.html>

Registry Data



- RIPE Registry data
 - <ftp://ftp.ripe.net/ripe/dbase/>

Index of /ripe/dbase/

Name	Size	Date Modified
[parent directory]		
RIPE.CURRENTSERIAL	8 B	11/6/16, 12:00:00 AM
ripe.db.gz	335 MB	11/6/16, 3:52:00 AM
split/		11/6/16, 12:00:00 AM

Index of /ripe/dbase/split/

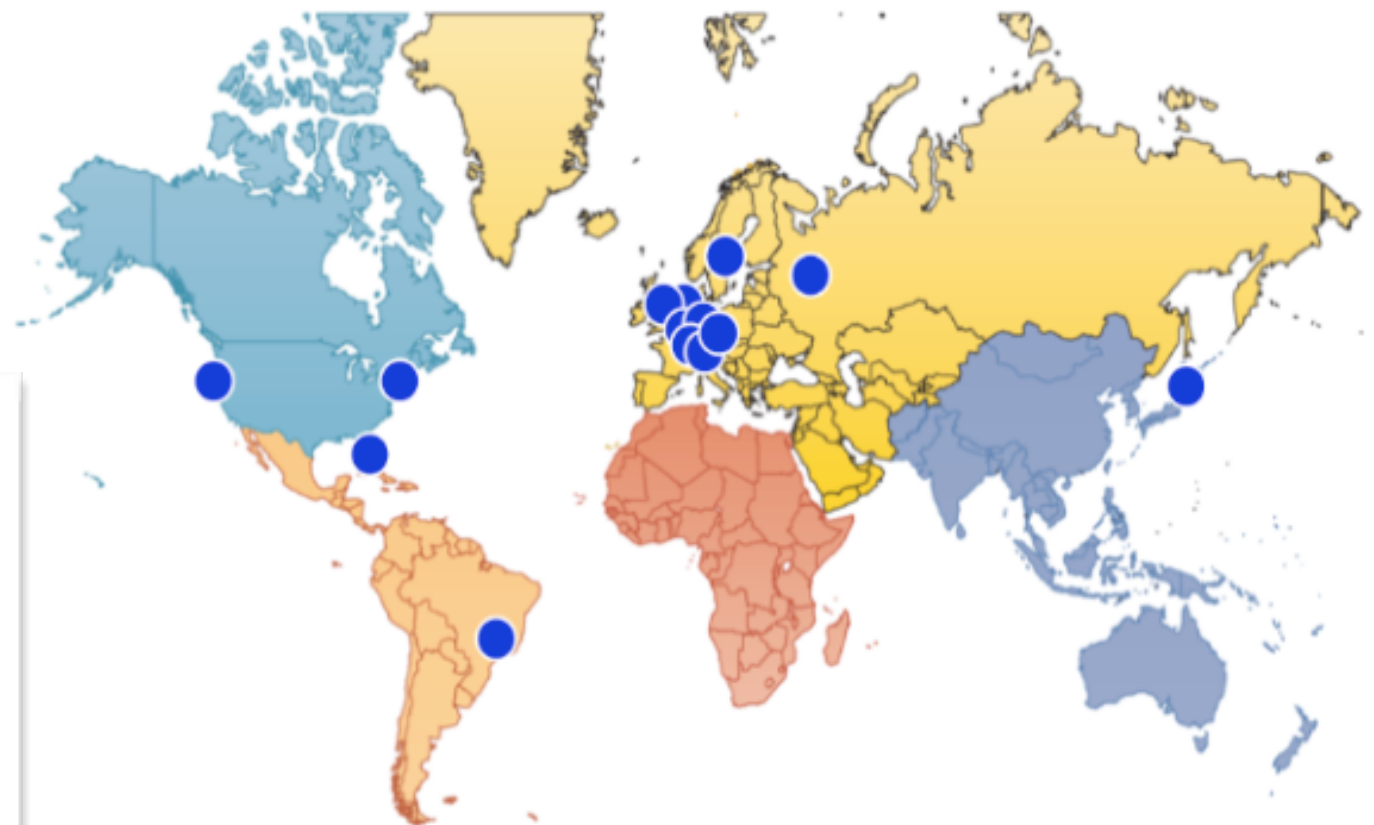
Name	Size	Date Modified
[parent directory]		
ripe.db.as-block.gz	9.4 kB	11/6/16, 3:52:00 AM
ripe.db.as-set.gz	2.0 MB	11/6/16, 3:52:00 AM
ripe.db.aut-num.gz	7.5 MB	11/6/16, 3:52:00 AM
ripe.db.domain.gz	19.2 MB	11/6/16, 3:52:00 AM
ripe.db.filter-set.gz	390 kB	11/6/16, 3:52:00 AM
ripe.db.inet-rtr.gz	10.7 kB	11/6/16, 3:52:00 AM
ripe.db.inet6num.gz	22.4 MB	11/6/16, 3:52:00 AM
ripe.db.inetnum.gz	228 MB	11/6/16, 3:52:00 AM
ripe.db.irt.gz	27.3 kB	11/6/16, 3:52:00 AM
ripe.db.key-cert.gz	14.9 MB	11/6/16, 3:52:00 AM
ripe.db.mntner.gz	1.6 MB	11/6/16, 3:52:00 AM
ripe.db.organisation.gz	4.4 MB	11/6/16, 3:52:00 AM
ripe.db.peering-set.gz	71.7 kB	11/6/16, 3:52:00 AM
ripe.db.person.gz	409 B	11/6/16, 3:52:00 AM
ripe.db.poem.gz	29.1 kB	11/6/16, 3:52:00 AM
ripe.db.poetic-form.gz	1.3 kB	11/6/16, 3:52:00 AM
ripe.db.role.gz	2.7 MB	11/6/16, 3:52:00 AM
ripe.db.route-set.gz	227 kB	11/6/16, 3:52:00 AM
ripe.db.route.gz	8.1 MB	11/6/16, 3:52:00 AM
ripe.db.route6.gz	694 kB	11/6/16, 3:52:00 AM
ripe.db.rtr-set.gz	2.4 kB	11/6/16, 3:52:00 AM

Routing Data



- RIS

- The RIPE NCC has been collecting BGP data since 1999
- 18 collectors and growing
- 160+ full-feed peers
- <http://ris.ripe.net>



Index of /rrc00

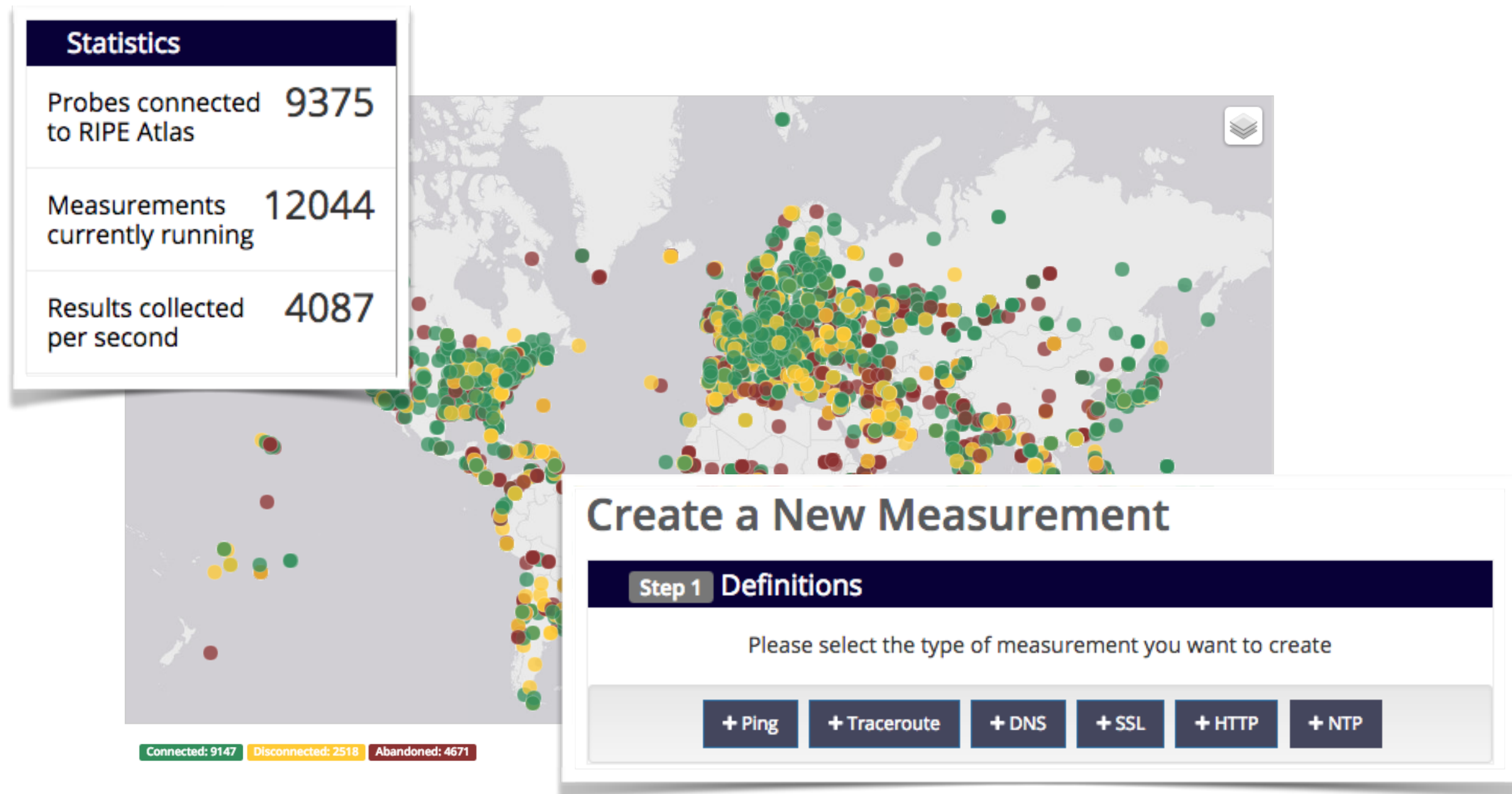
Name	Last modified	Size	Description
Parent Directory		-	
logs/	30-Aug-2016 12:55	-	
latest-update.gz	06-Nov-2016 17:00	261K	
latest-bview.gz	06-Nov-2016 16:05	53M	
invalid/	03-Oct-2013 13:54	-	
2016.12/	31-Oct-2016 00:00	-	
2016.11/	06-Nov-2016 17:05	-	
2016.10/	01-Nov-2016 00:05	-	
2016.09/	01-Oct-2016 00:03	-	

RIPE Atlas

active
✓



- Global network for Internet measurements



RIPE Atlas



- Standard Probe

- TP-Link MR3020
- Version 3



- Atlas Anchor

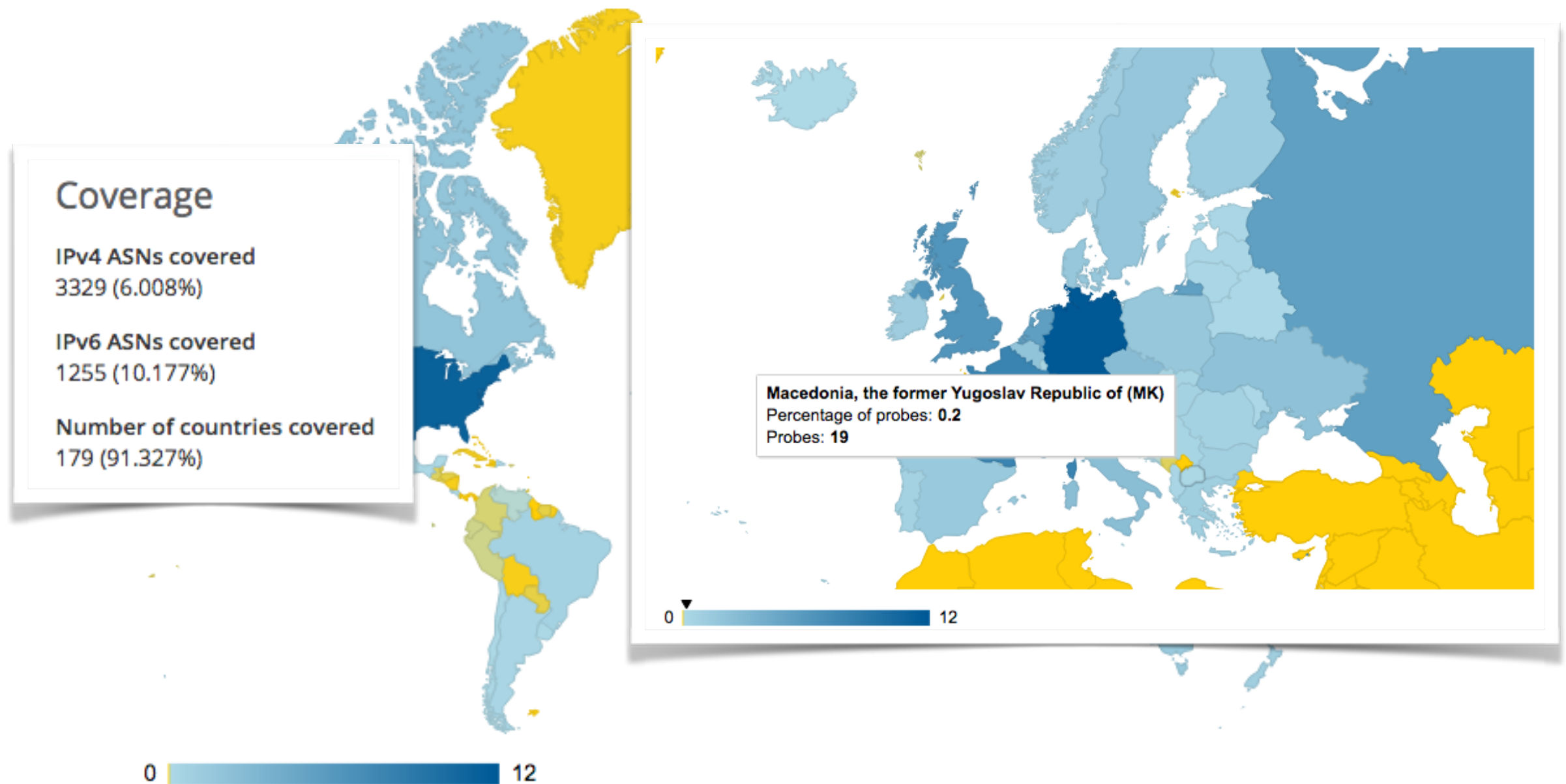
- Higher capacity
- Currently 216 nodes
- Soekris Net6501-70
- <https://atlas.ripe.net/anchors/>



RIPE Atlas



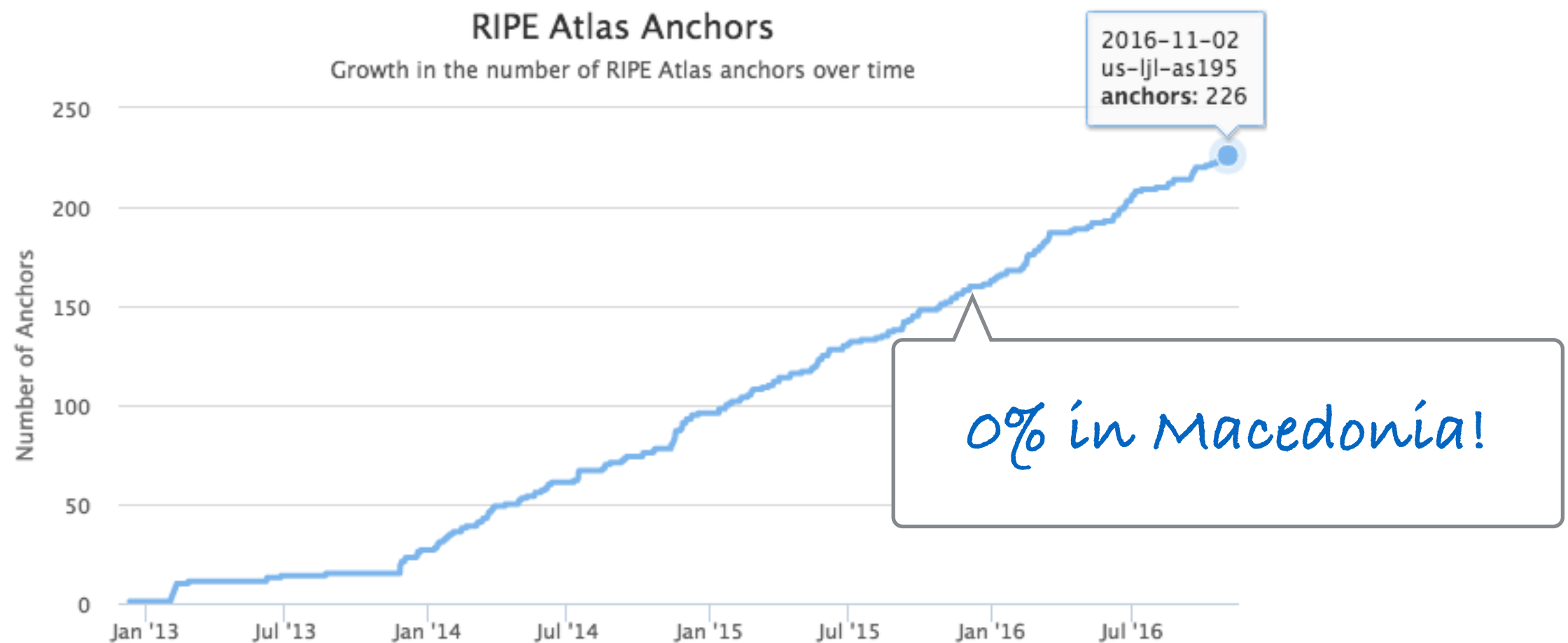
- Deployment statistics



RIPE Atlas



- RIPE Atlas Anchors





- Data access via Rest API

Manage IPs and ASNs > **Analyse** > Participate > Get Support > Publications > About Us >

You are here: Home > Analyse > Internet Measurements > RIPE Atlas > Measurements > Measurement #4925138

RIPE Atlas << About RIPE Atlas > Get Involved > Probes and Anchors > Measurements, Maps and Tools Resources RIPE NCC Members My Atlas Staff Pages >

⚡ Traceroute measurement to uz.wikipedia.org

General Information LatencyMON OpenIPMap Prototype **Results** Modification Log

Download the raw measurement result data here.

<https://atlas.ripe.net/docs/api/v2/manual/>

Start Date*: 2016-09-01 (start time of this measurement) *All dates are start-of-day*

Stop Date*: 2016-09-14 (end time of this measurement) *All dates are end-of-day*

Format: JSON

Download

[https://atlas.ripe.net/api/v2/measurements/4925138/results?
start=1472688000&stop=1473897599&format=json](https://atlas.ripe.net/api/v2/measurements/4925138/results?start=1472688000&stop=1473897599&format=json)

RIPE Atlas



- Data access via Streaming API
 - <https://atlas.ripe.net/docs/result-streaming/>
- Data access via CLI
 - <https://github.com/RIPE-NCC/ripe-atlas-tools/>
 - <https://ripe-atlas-tools.readthedocs.org/>



Measurement Tools



- The source for Internet data and statistics



RIPE NCC
RIPEstat



RIPEstat



- Access to these data sets:
 - RIPE DB (INR, IRR) & other RIRs
 - BGP routing data (RIS)
 - RIPE Atlas, M-Lab, Speedchecker, etc.
 - Geolocation
 - Blacklist
- New data sets are constantly added!



MLAB



BROADBAND
speedchecker



MAXMIND



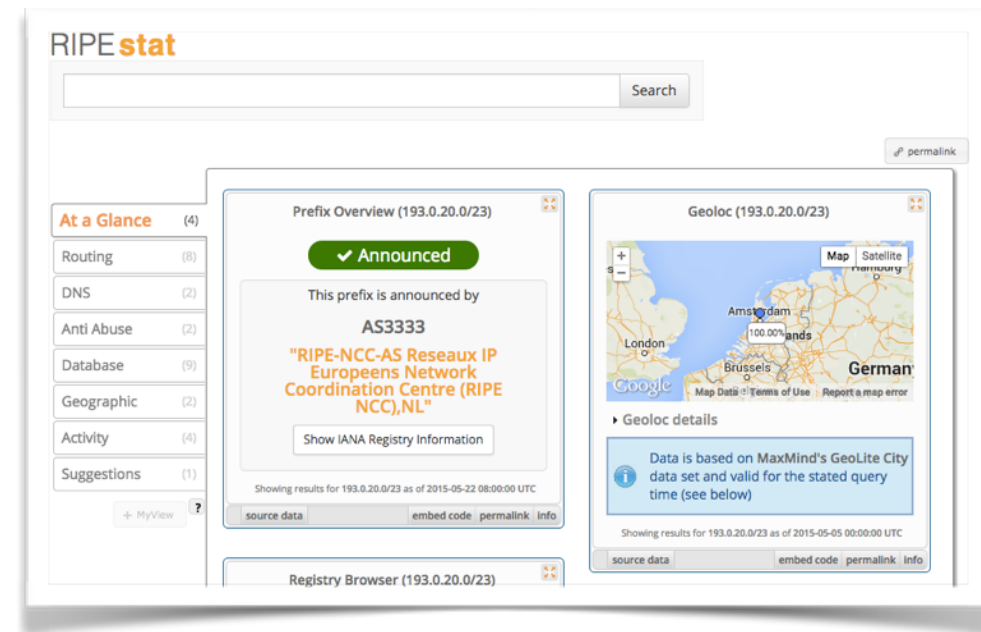
SPAMHAUS

...

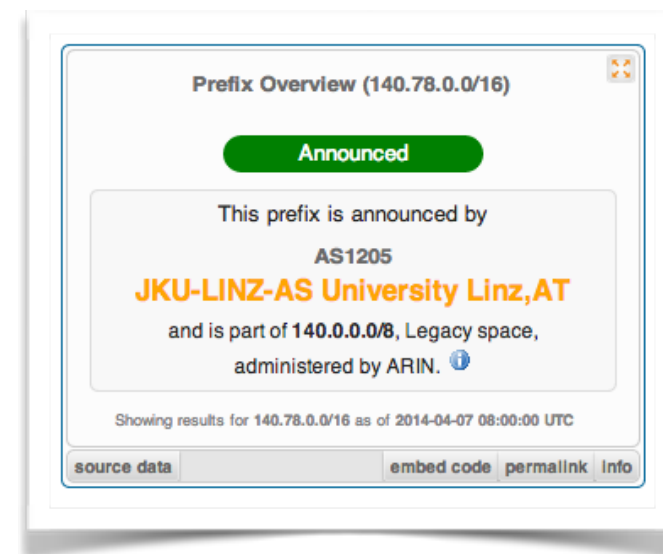
RIPEstat



- <https://stat.ripe.net>



- RIPEstat widget API



- RIPEstat data API

- <https://stat.ripe.net/data/routing-status/data.json?resource=...>



You are here: [Home](#) > [Analyse](#) > [Statistics](#) > [RIPEstat](#)

[RIPEstat Home](#)[About RIPEstat](#)[Documentation](#)[Use Cases](#)

Search RIPEstat

[Search](#)

Your network: [AS33333](#), [193.0.20.0/23](#)

e.g.: IPv4 prefix/range, IPv6, ASN

On average 24 million requests/day!

903,030

Requests seen in the last full hour on
RIPEstat

On RIPE Labs

Processing RIPE Atlas and
RIPEstat Data with Hadoop

address space?

Find your way with the
Address Space Hierarchy
widget.



RIPEstat



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RIPEstat Home



About RIPEstat



Documentation



Use Cases



Your IP address is:
193.0.20.230

System Statistics

903,030

Requests seen in the last full hour on
RIPEstat

On RIPE Labs

Processing RIPE Atlas and
RIPEstat Data with Hadoop

Supported resources:

- * IP address/prefix (v4/v6)
- * ASN
- * Domain names
- * Country

|

Search

Your network: AS3333, 193.0.20.0/23

e.g.: IPv4 prefix/range, IPv6, ASN

Lost in the address space?

Find your way with the
Address Space Hierarchy
widget.





» You are here: [Home](#) > [Analyse](#) > [Statistics](#) > [RIPEstat](#) > 193.0.20.0/23

[🔗 permalink](#)

At a Glance

(4)

[Routing](#)

(9)

[DNS](#)

(2)

[Anti Abuse](#)

(2)

[Database](#)

(9)

[Geographic](#)

(2)

[Activity](#)

(4)

[Suggestions](#)

(1)

Prefix Overview (193.0.20.0/23)

✓ Announced

This prefix is announced by

AS3333**"RIPE-NCC-AS , NL"**

RIR	Status	Registration	Country
RIPE NCC	ALLOCATED	1993-09-01	NL

Geoloc (193.0.20.0/23)



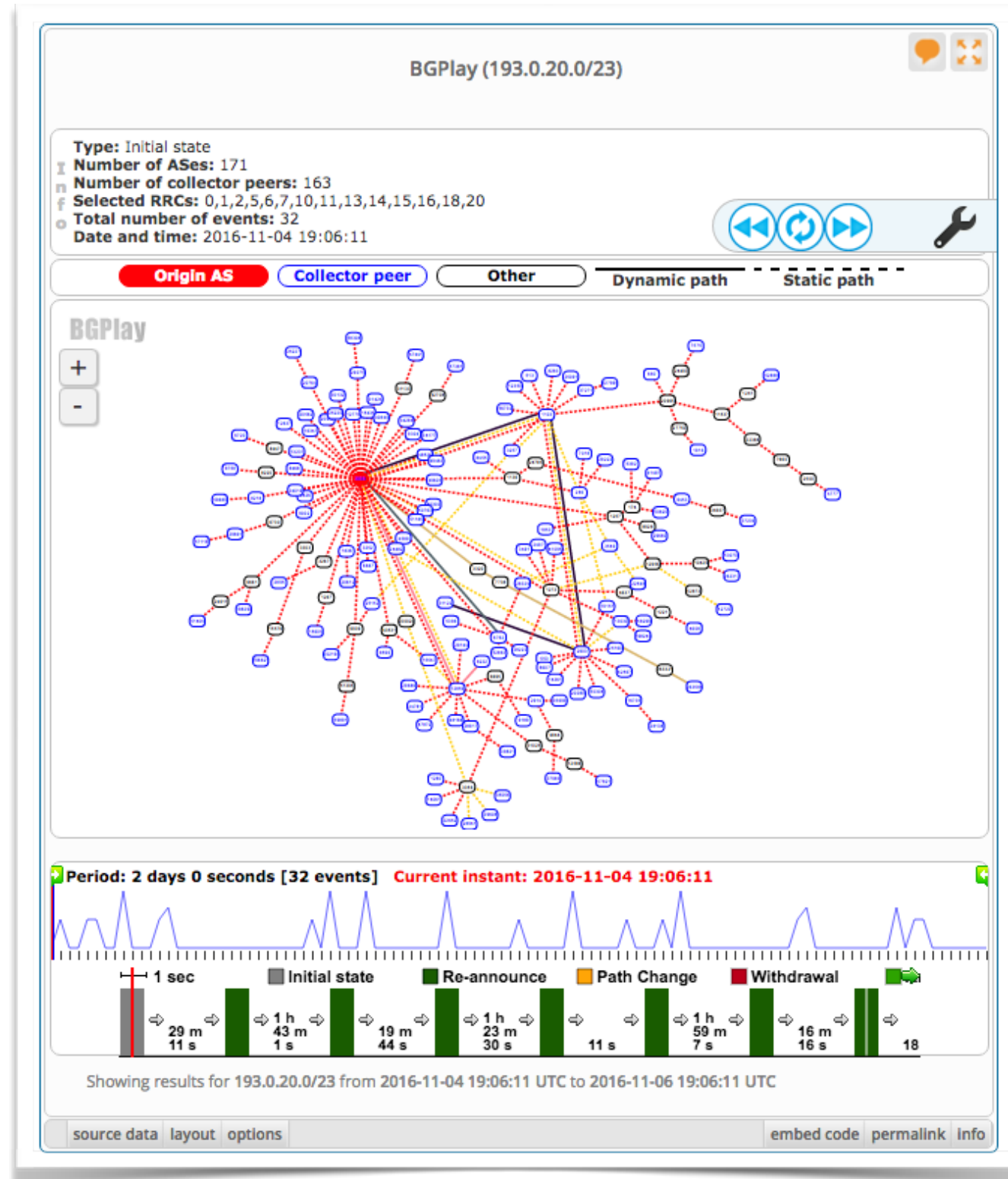
Geoloc details

Data is based on MaxMind's GeoLite City

RIPEstat



- BGPlay





- Abuse-c

Abuse Contact Finder (193.0.20.0/23)

Email-Contact

abuse@ripe.net

☐ Resource information
☐ Information for resource holders

Showing results for 193.0.18.0-193.0.21.255 as of 2016-11-06 19:47:00 UTC

 Please note that the found contact may be unresponsive. For details please click on 'info' below.

 For this prefix we could not find an exact match (193.0.20.0/23) but a less specific IP address space (193.0.18.0-193.0.21.255) was found in the RIPE DB. The result is based on this IP space.

source data

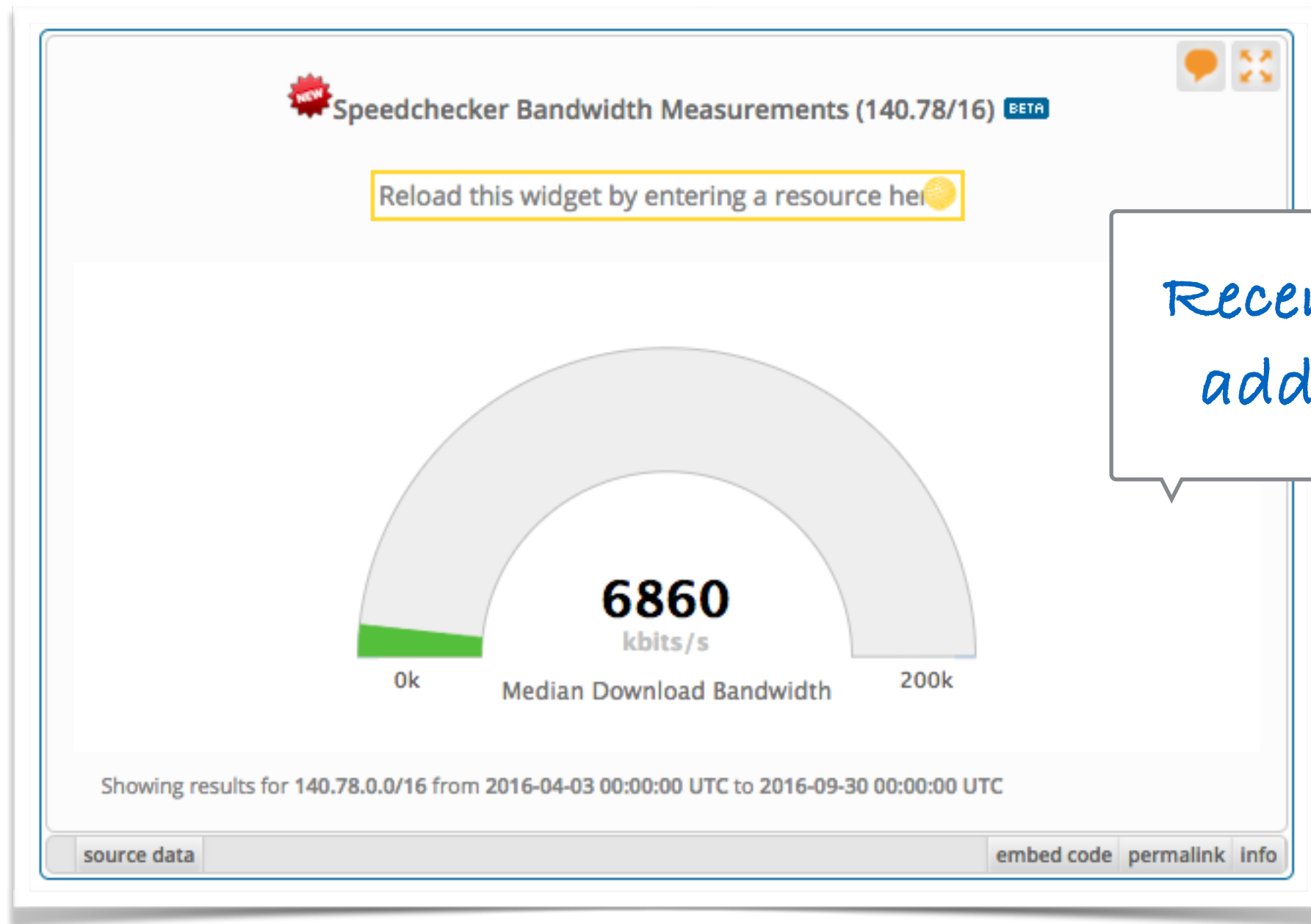
embed code

permalink

info

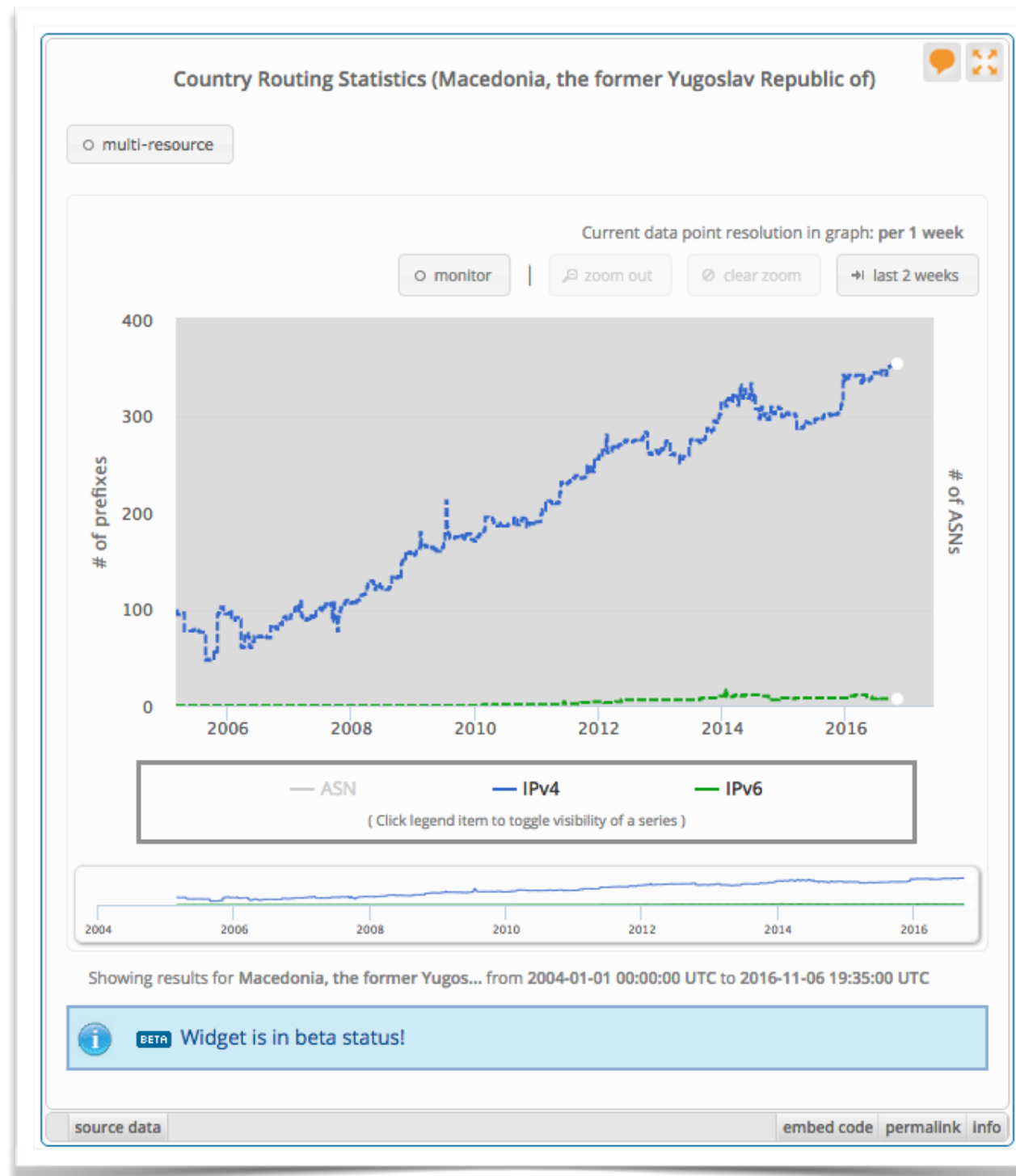


- Bandwidth





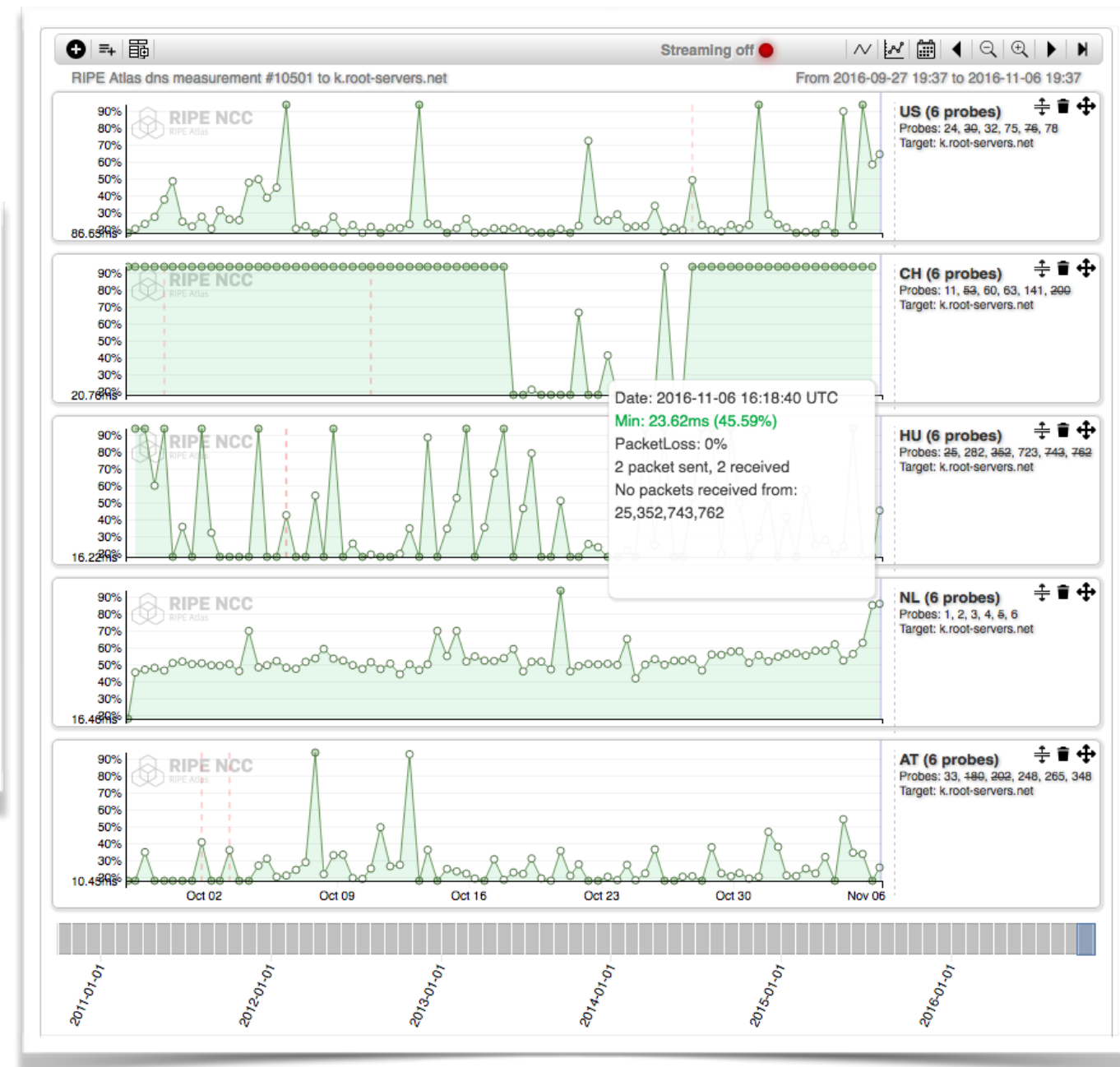
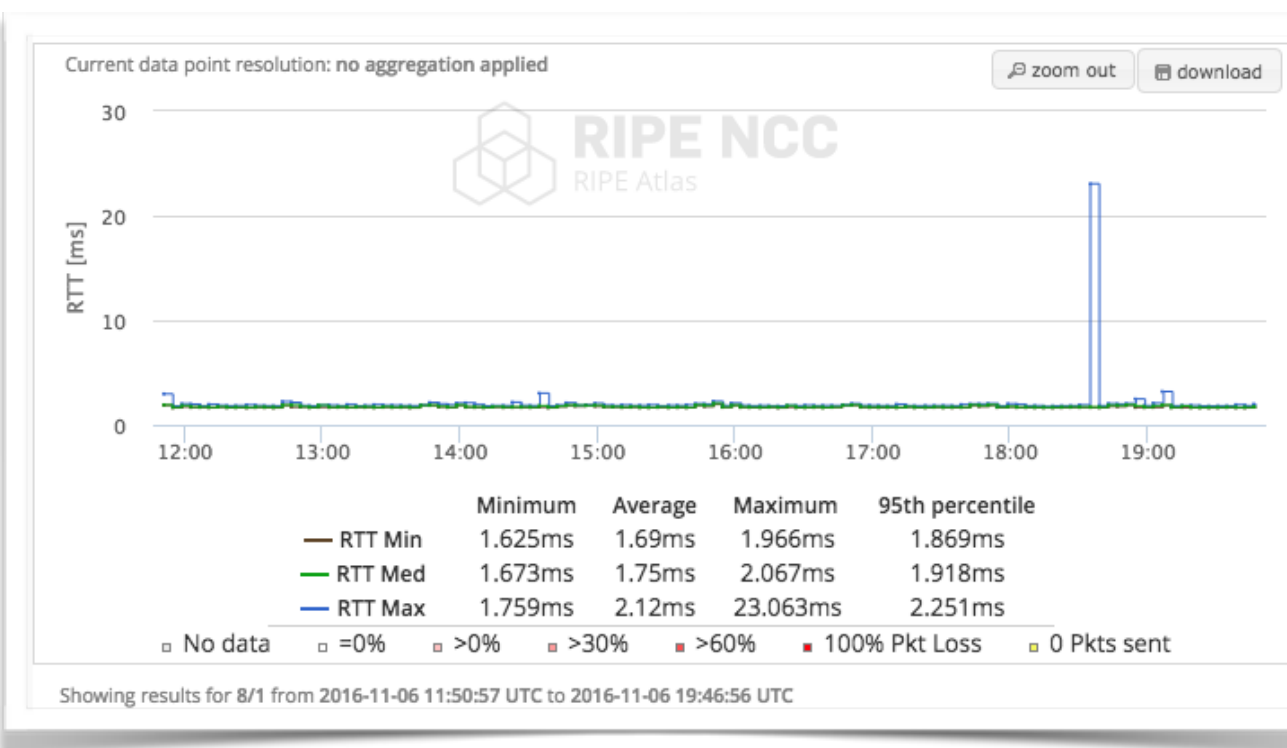
- Country statistics



RIPE Atlas Network Visualisations



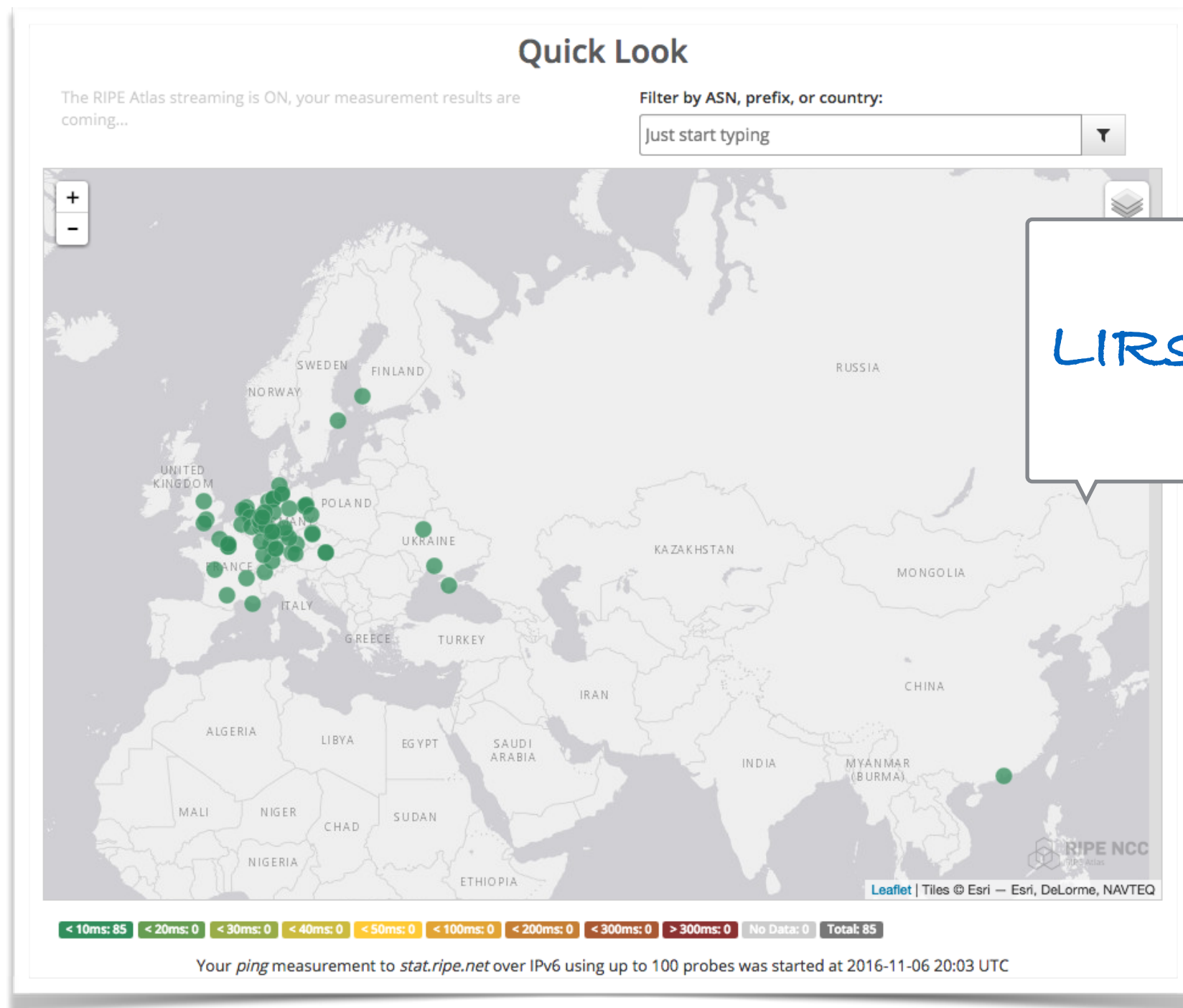
● Ping Measurements



RIPE Atlas Network Visualisations



- Quick Look



RIPE Atlas Network Visualisations



- IXP-Country-Jedi

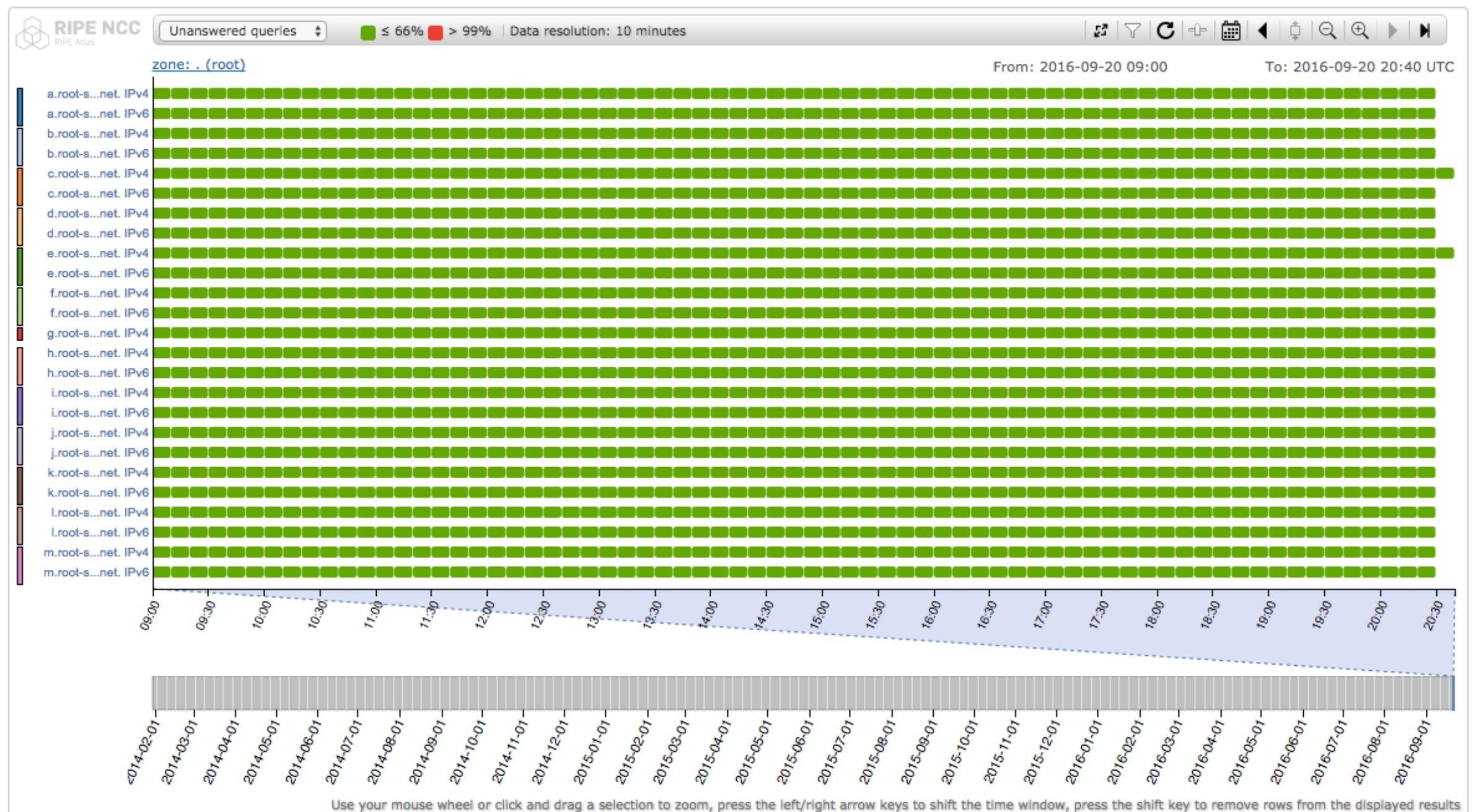


DNSMON



- DNS root and many TLD name servers

<https://atlas.ripe.net/dnsmon/>





Questions



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