RIPE NCC
RIPE NETWORK COORDINATION CENTRE

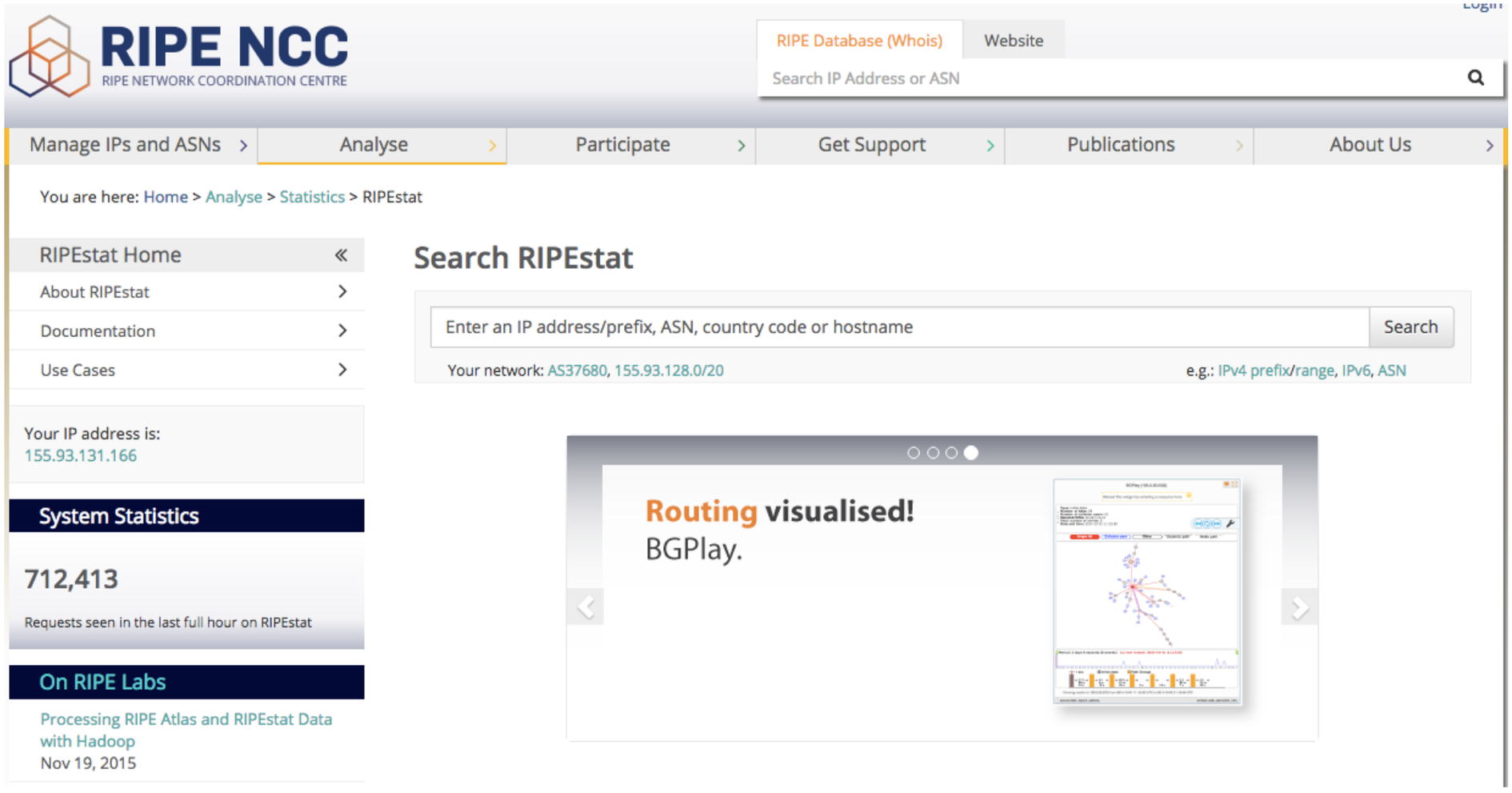
Applications of Internet Data

Is our data ~~good~~ safe enough?

Christian Teuschel | September 2016 | iWeek

The Trend to More Data

- RIPEstat usage grew by 1600% (2011 - 2016)
- https://stat.ripe.net



Last week…

- …I went to the IPv6 Day in Tel Aviv
- What is the IPv6 deployment in Israel?

Measurement Types

- Passive Measurements
  - Registry data
  - Routing Information System (RIS)
- Active Measurements
  - APNIC Google ad measurements
  - Google IPv6
  - Cisco IPv6
  - ~~Maxmind IPv6 geolocation~~
  - Alexa

15%

13%

0.8%

0.59%

17.24%

3.6%

Overview of Internet Data

- Three basic layers of Internet Data
  - Registry data
  - Routing data
  - Flow data

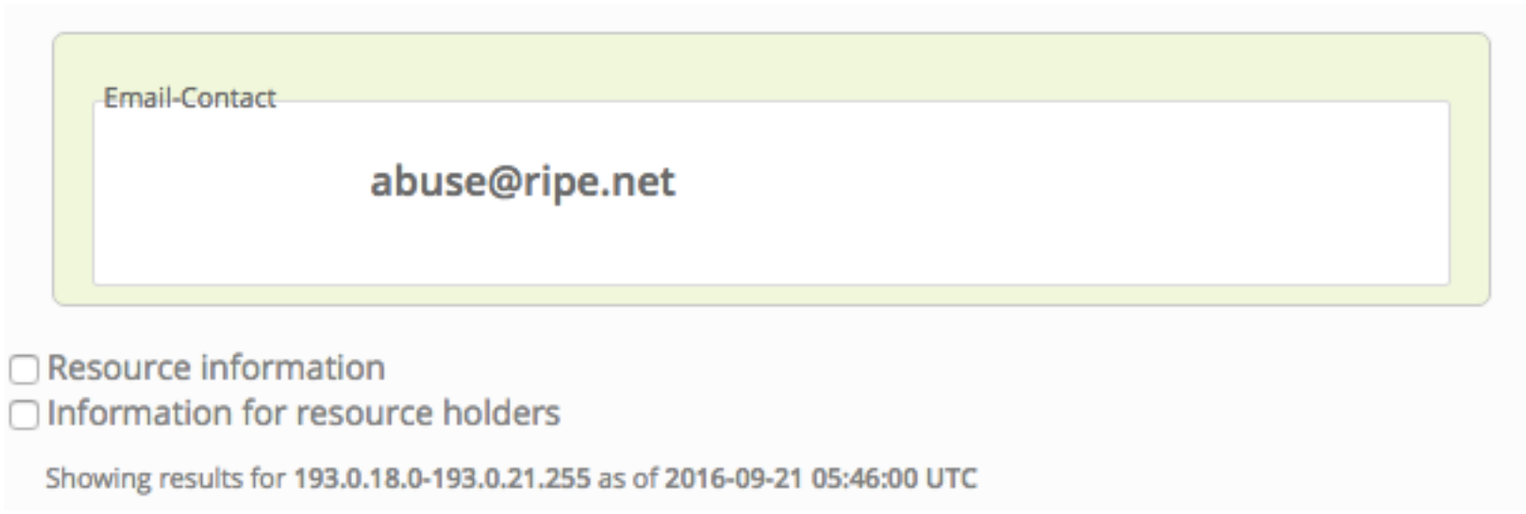
Registry Data

- Whois
- Maintained by the RIRs

- Public and private part of registry
- RIPE NCC: 14000+ members

Registry Data

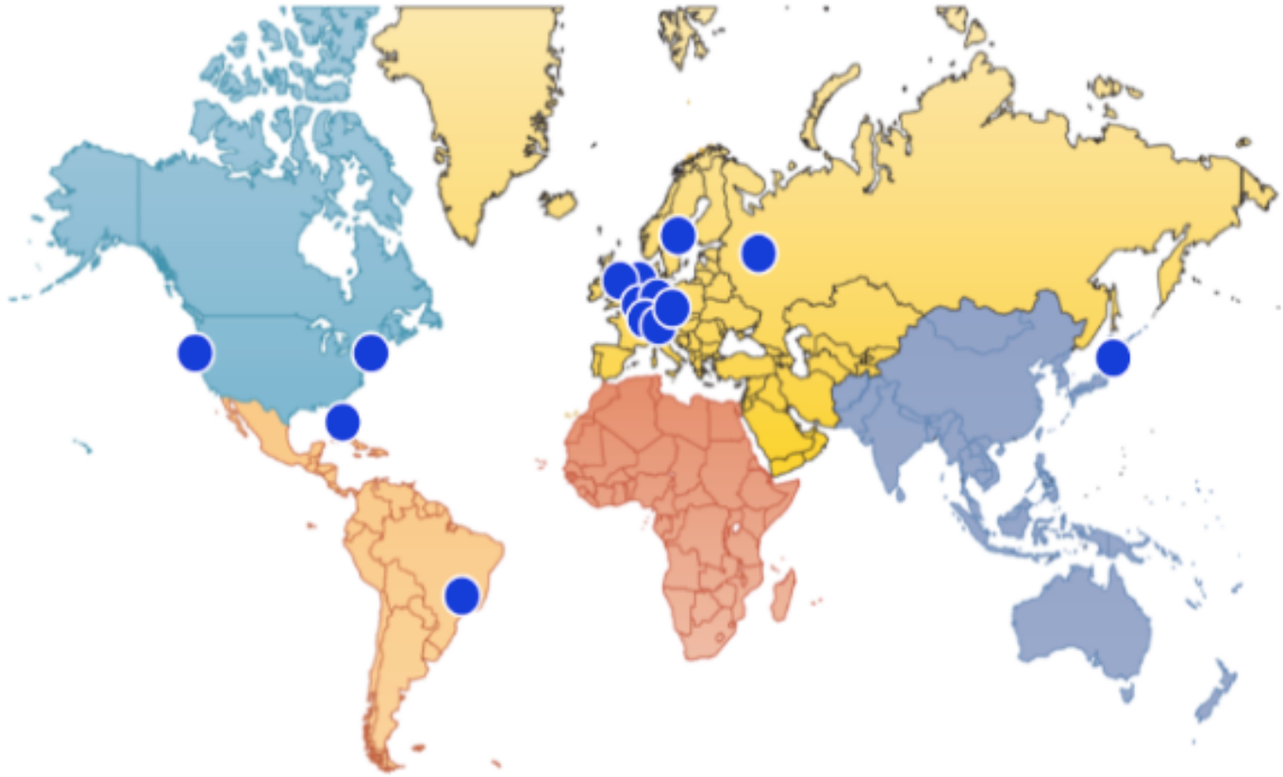
- Application of registry data



https://stat.ripe.net/widget/abuse-contact-finder

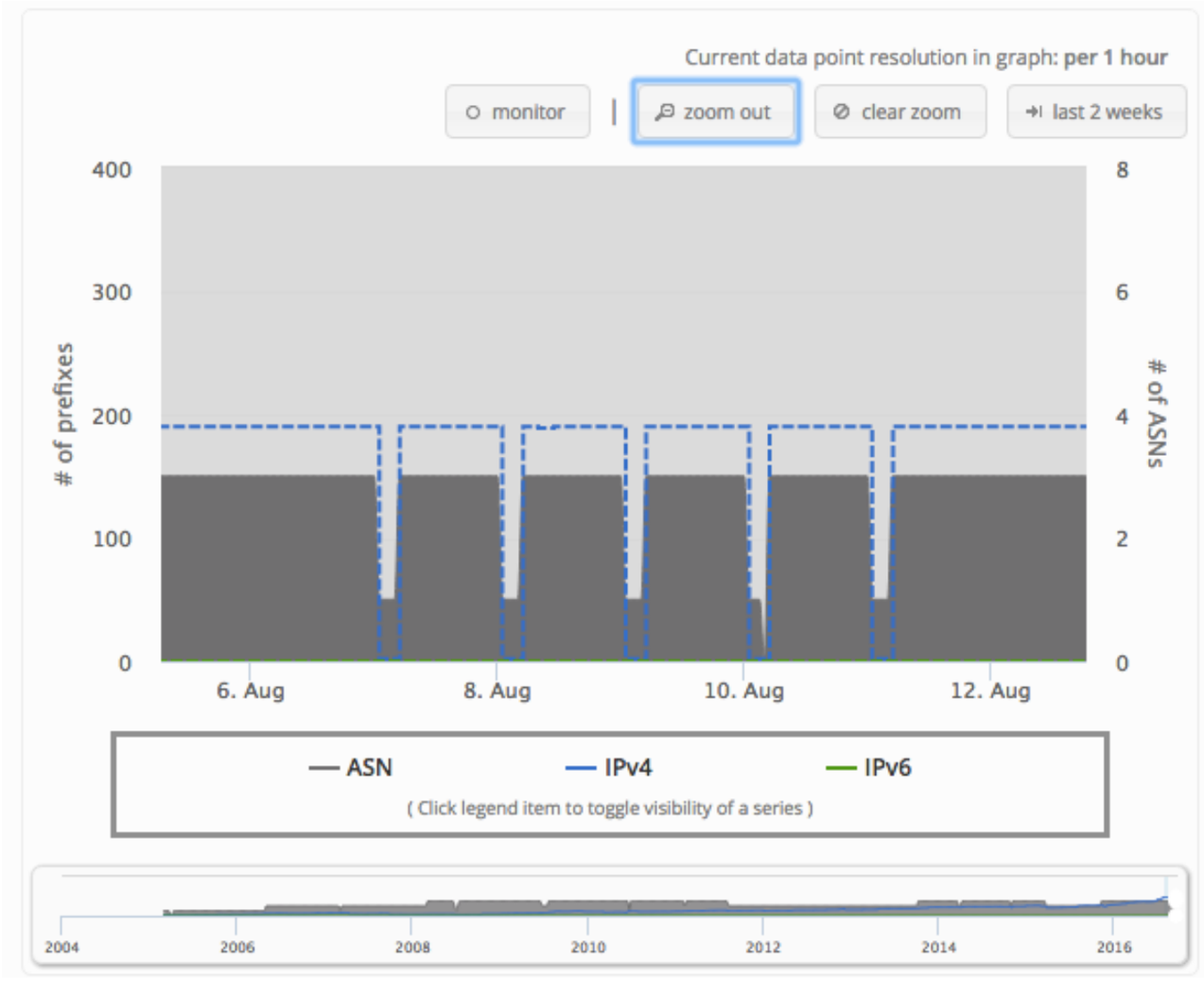
Routing Data

- RIS
  - The RIPE NCC has been collecting BGP information since 1999
  - 18 collectors
  - 160+ full-feed peers
  - http://ris.ripe.net



Routing Data

- Application of RIS data



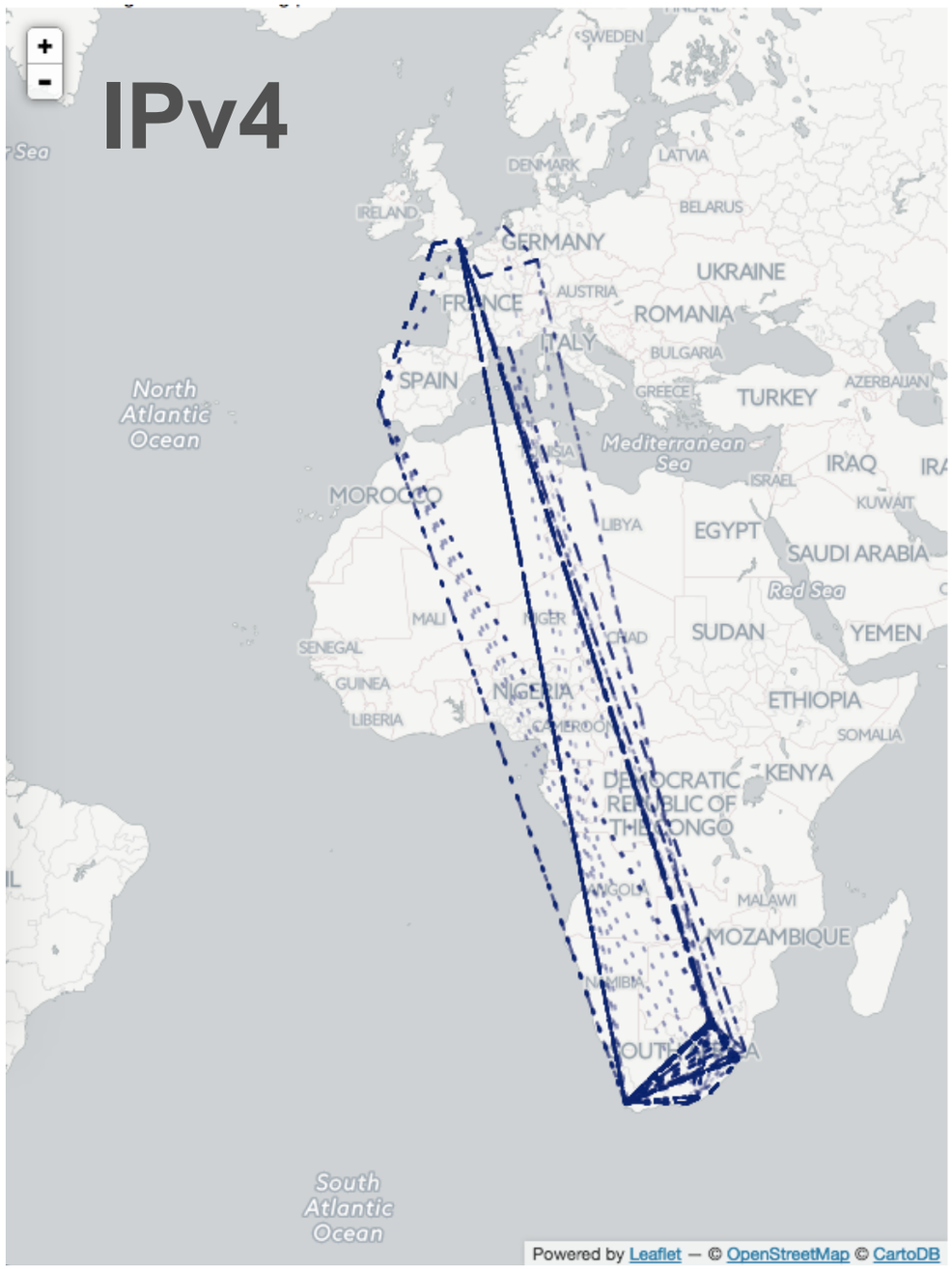
https://stat.ripe.net/SY#tabId=routing

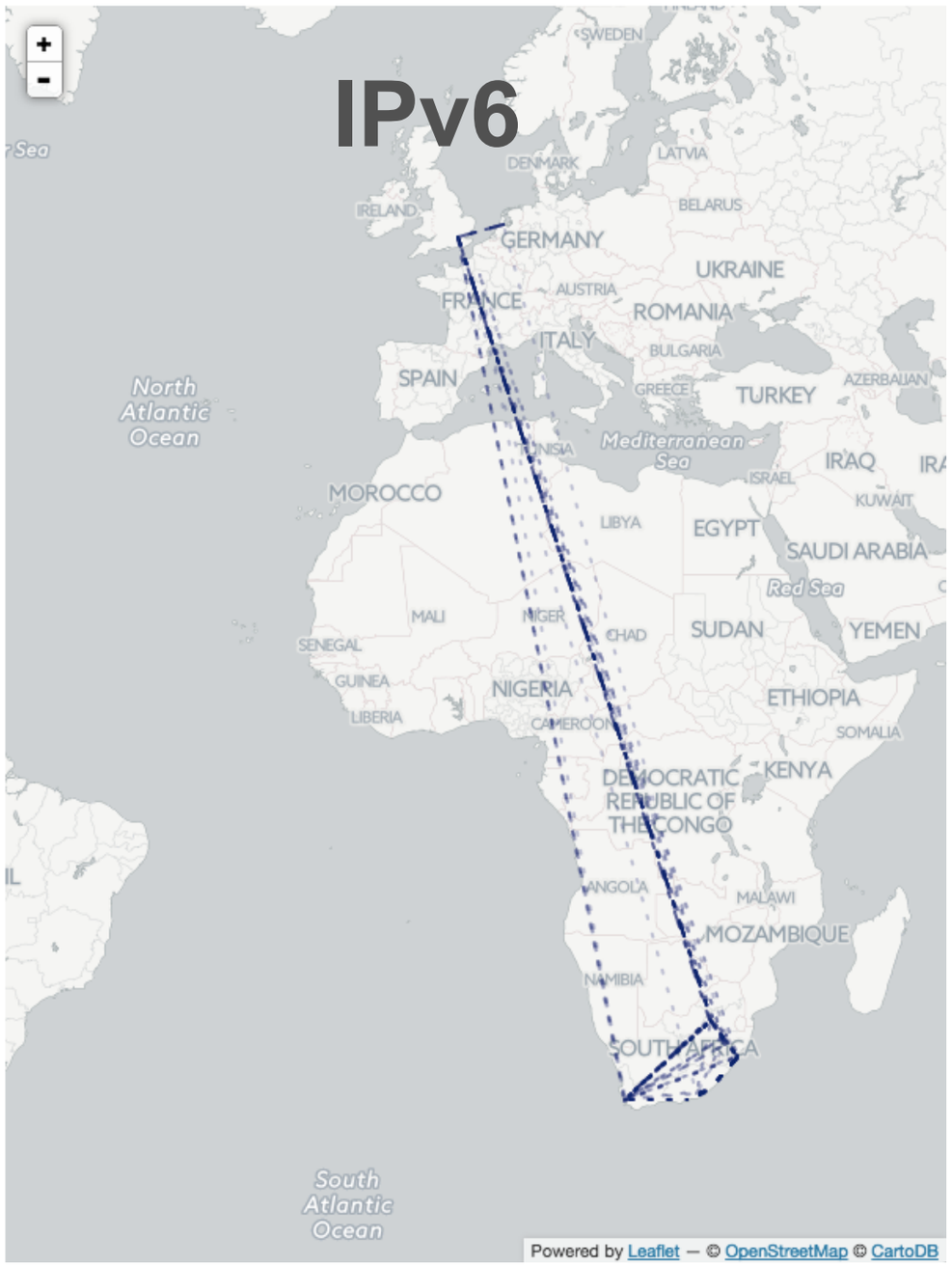
Flow Data

- RIPE Atlas
- Largest network for Internet measurements
- 9000+ probes
- 50000+ networks on the Internet (measured with RIS)
- Coverage: ~ 6% of all IPv4 networks

Flow Data

- Application of Atlas data





Discussion

Questions

christian.teuschel@ripe.net
@cteuschel