

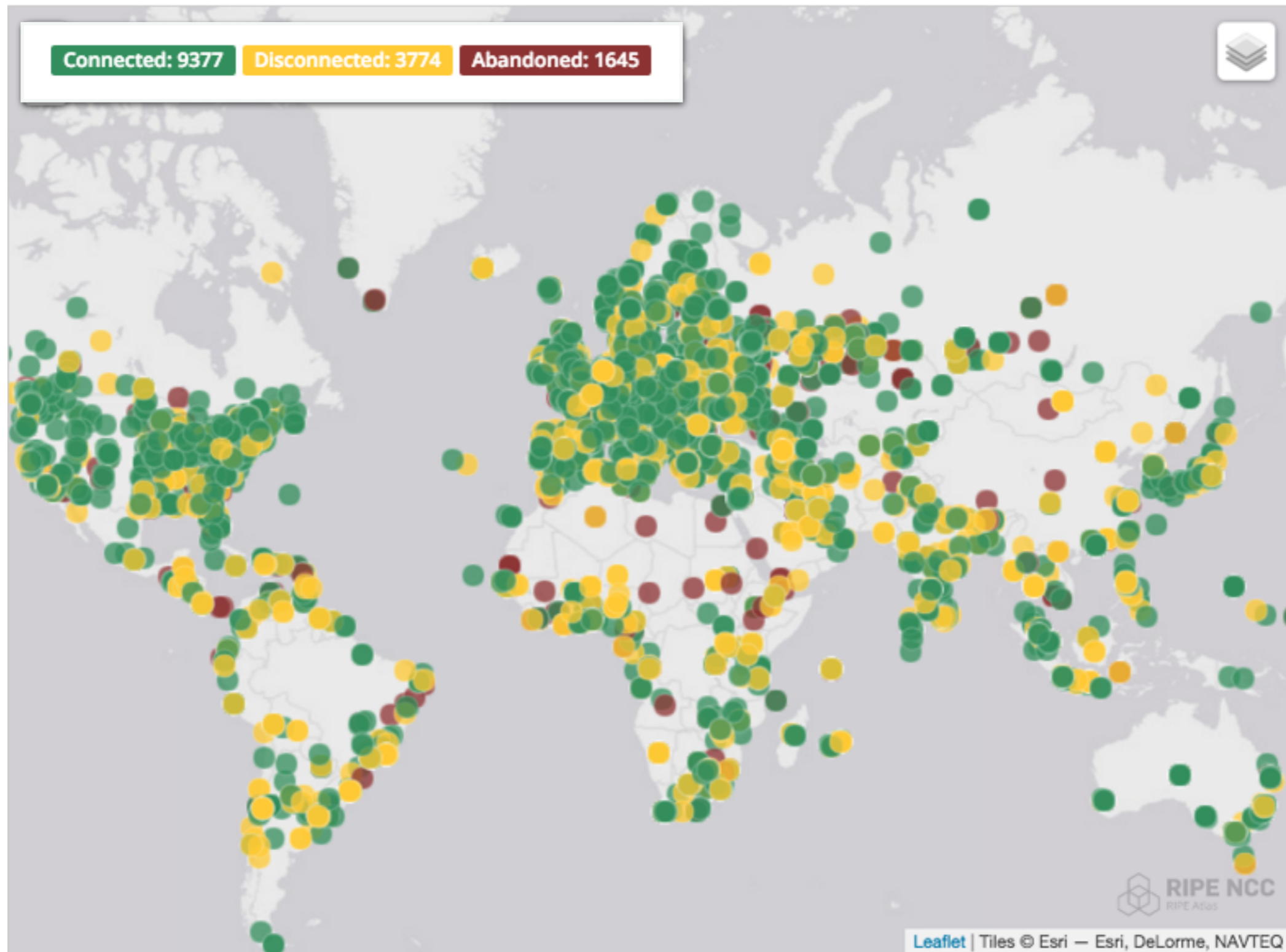


RIPE NCC
RIPE NETWORK COORDINATION CENTRE

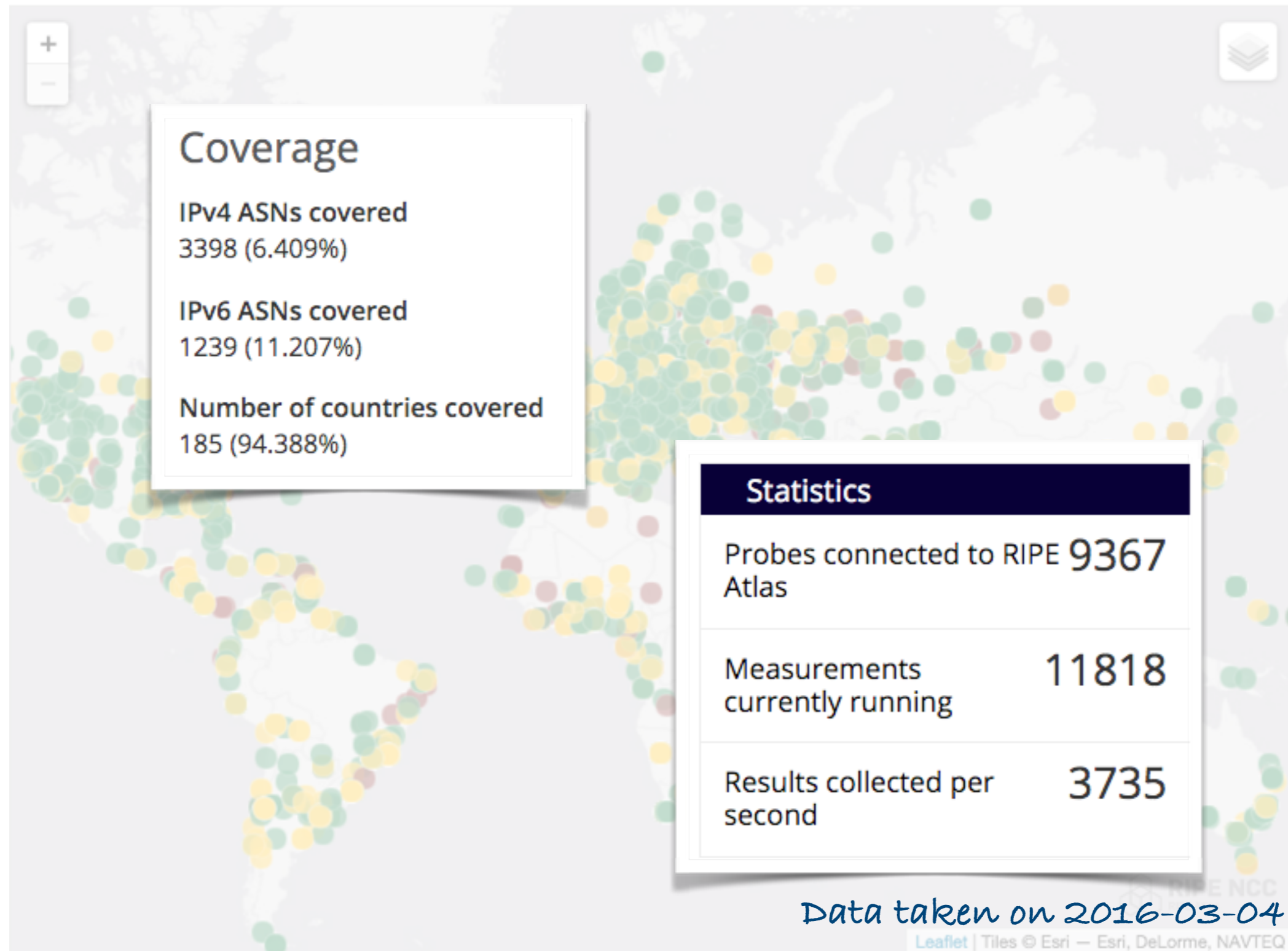
RIPE Atlas

A Global Measurement
Network

What is RIPE Atlas?



What is RIPE Atlas?



RIPE Atlas Probe Devices



- Version 1 and Version 2: Lantronix XPort Pro
 - uClinux based
- Version 3 (latest): TP-Link TL-MR3020
 - OpenWRT based
- RIPE Atlas Anchor: Soekris net6501-70
 - Rack-mounted “super” probe based on Centos



Active Internet Measurements



- What RIPE Atlas supports:

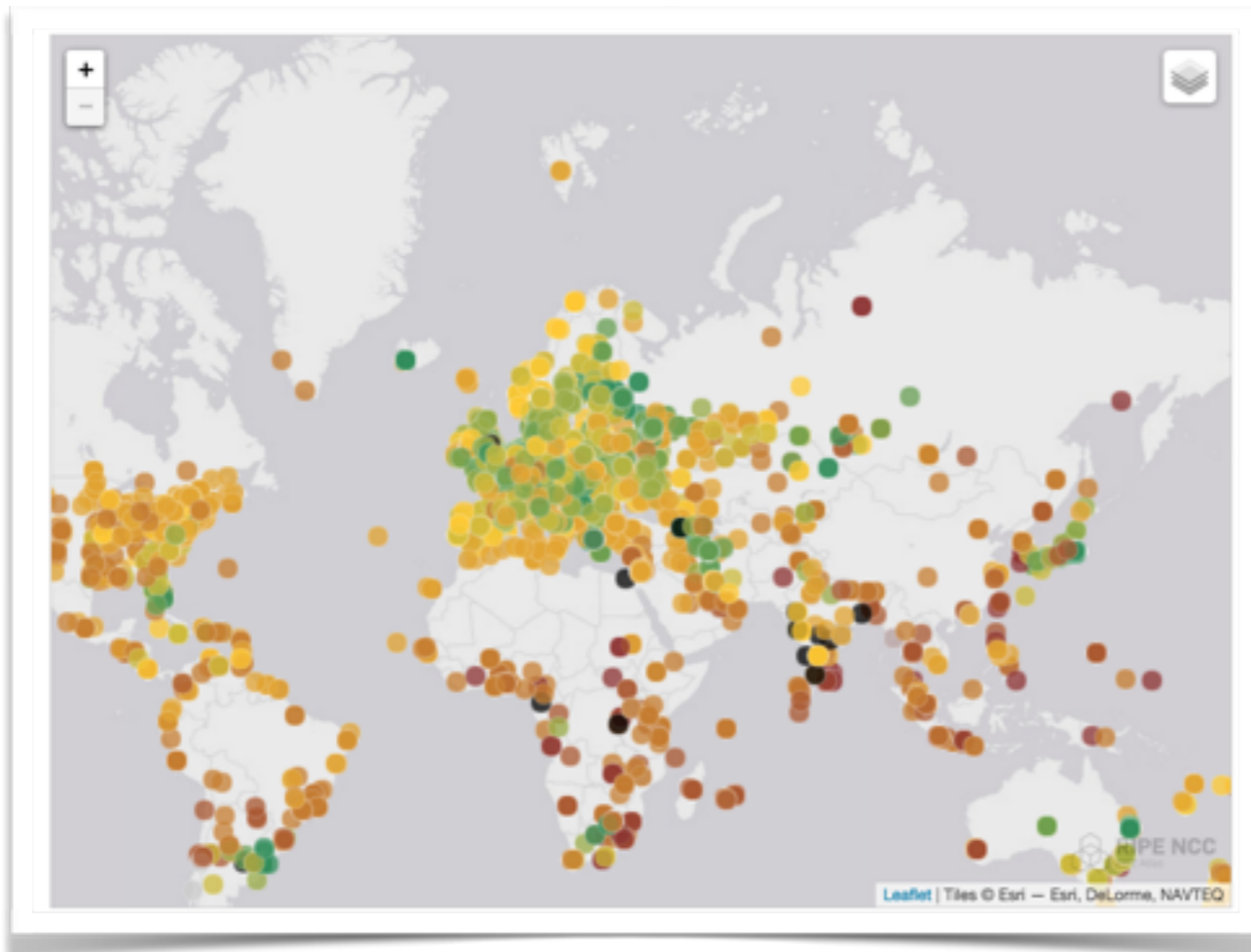
A screenshot of the RIPE Atlas web interface for creating a new measurement. The page is titled "Create a New Measurement" and is divided into two steps. Step 1, "Definitions", is currently active and shows a prompt to "Please select the type of measurement you want to create". Below this prompt are six buttons: "+ Ping", "+ Traceroute", "+ DNS", "+ SSL", "+ HTTP", and "+ NTP". Step 2, "Probe Selection", is partially visible below and shows a dropdown menu with "Worldwide" selected and a count of "50". Below the dropdown are four buttons: "+ New Set - wizard", "+ New Set - manual", "+ IDs List", and "+ Reuse a set from a measurement".

- What does it not do?
 - Bandwidth measurements
 - Emulating application traffic (for net neutrality)

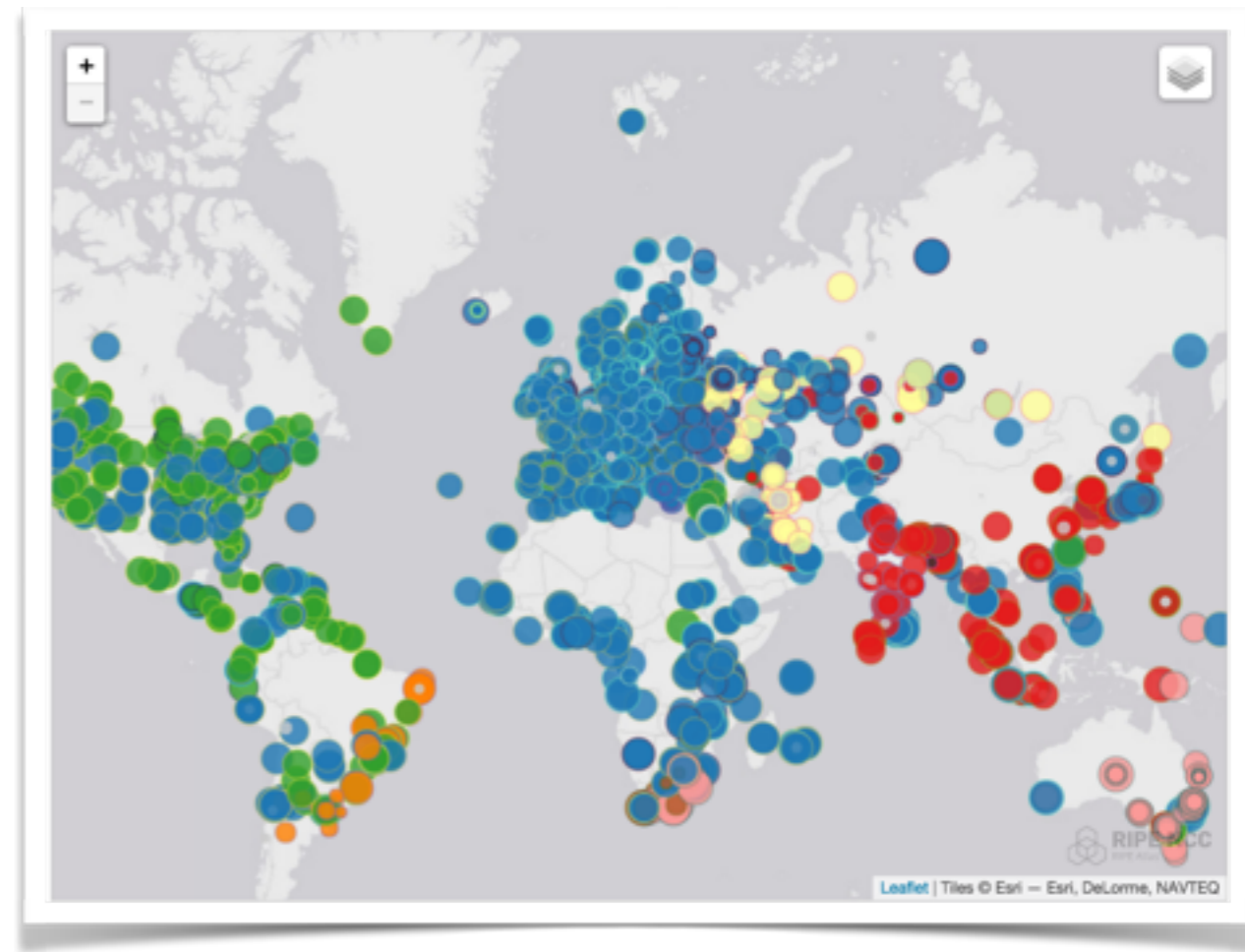
Merits of RIPE Atlas



- Value for the Internet community
 - Baseline metrics for the Internet



Latency to fixed locations

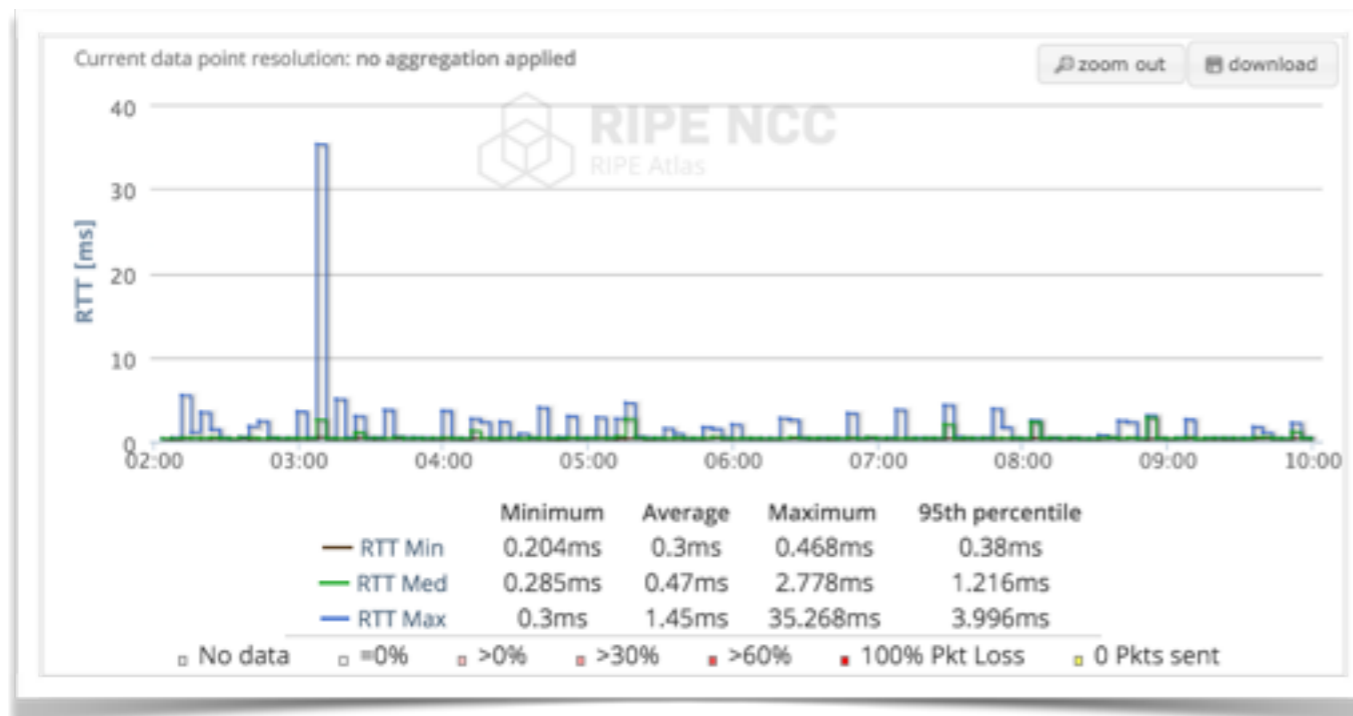


Instance of anycast K-root

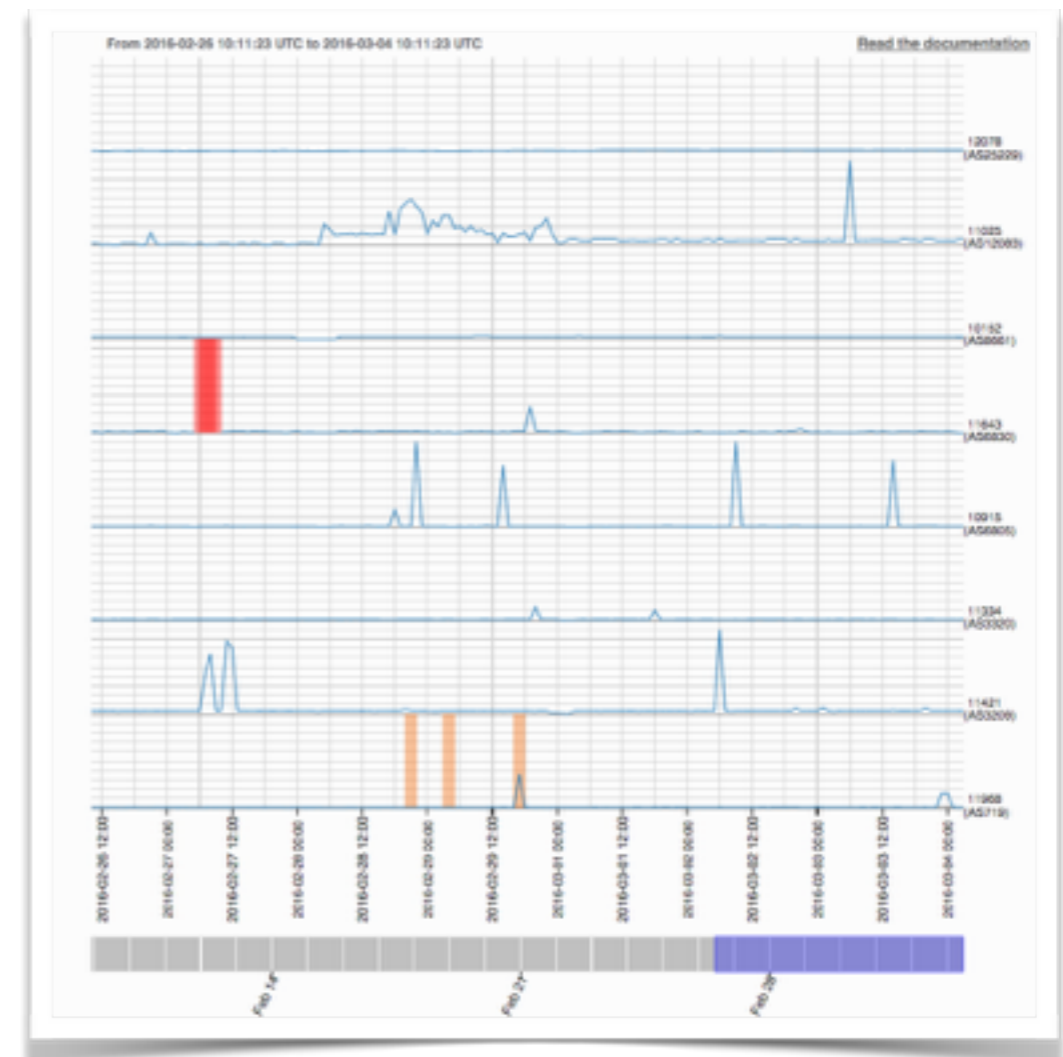
Merits of RIPE Atlas



- Value for individuals
 - Benchmarking and monitoring of networks



Ping measurements...



...from different locations

RIPE Atlas & Security



- Security is high priority
 - Secure communication via SSH
 - Hardware platform raises the bar for tampering
 - Security review by external party
- Data quality
 - Measurement data coming from probes is vetted
 - Keeping raw data allows for flexible (re)processing of output data

RIPE Atlas Workshop



- Two-hour, interactive workshop
 - Create measurements
 - Access measurement data
 - Explore the streaming API
 - And more

Done by Daniel Karrenberg and Massimo Candela





Questions



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Bonus: RIPE Atlas Architecture

