

# RIPE Atlas Update

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MAT-WG, RIPE 67, Athens, October 2013

Iñigo Ortiz de Urbina Cazenave



# RIPE Atlas Deployment



Vesna Manojlovic, RIPE 67, October 2013

# RIPE Atlas: October 2013

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- 4,000+ probes up and active
  - (1000 more since RIPE66!)
- 8,600+ registered users
  - 3,500+ users are from LIRs
- Four types of customised measurements available to **probe hosts** and **RIPE NCC members**:  
ping, traceroute, DNS, SSL

# RIPE Atlas Participation and Benefits

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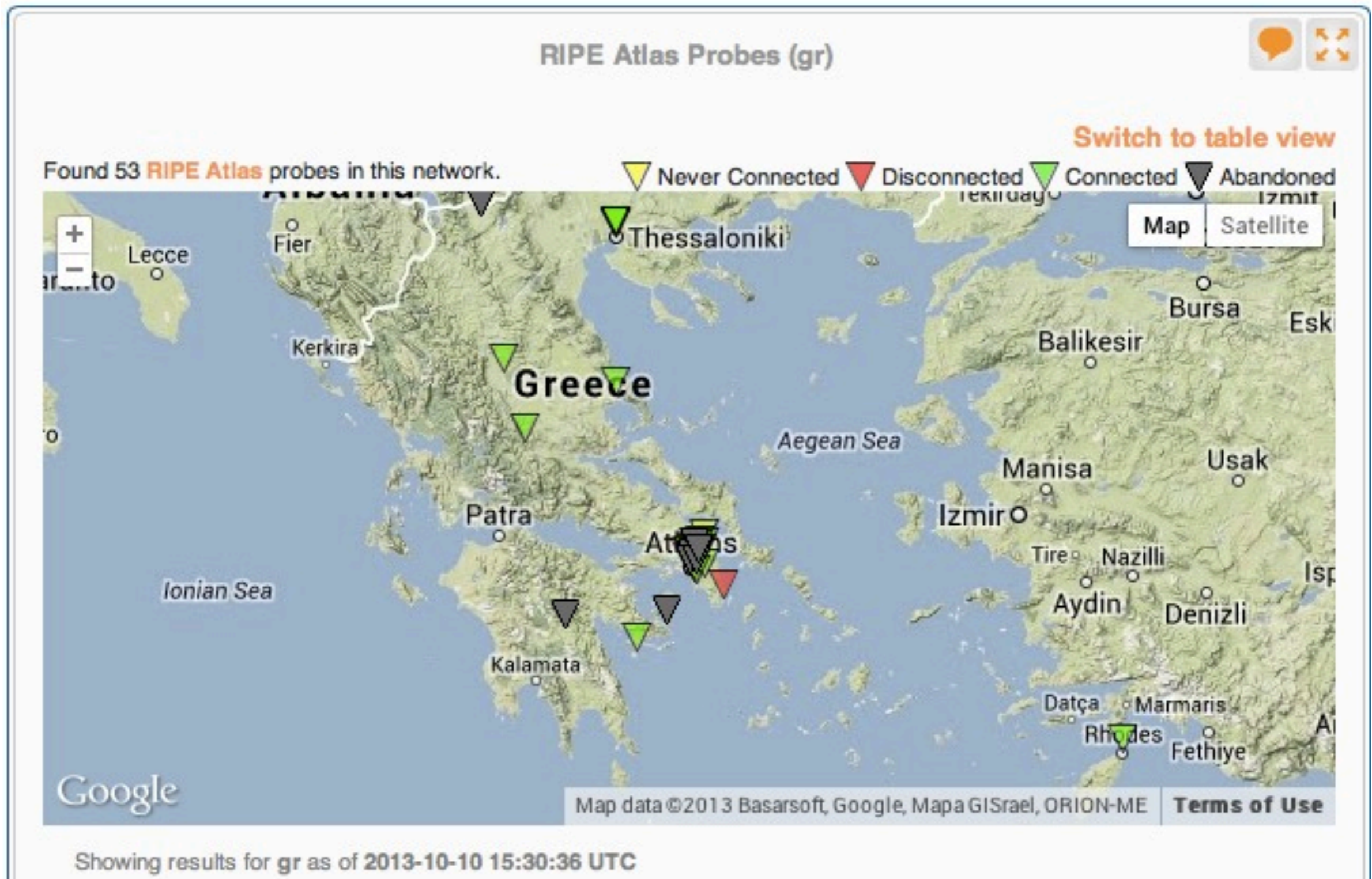
- Anyone can become a RIPE Atlas probe host
- Major personal and operational benefit:  
See your network from the outside!
  - Have at your fingertips ~4,000 external vantage points to do customised measurements towards the destination of your choice
- Data of built-in measurements available to **everyone**
  - Maps, data from public probes, API to download raw data

# Measurement Devices

- v1 & v2: Lantronix XPort Pro
- v3: TP-Link TL-MR3020 powered from USB port
  - Does not work as a wireless router!
  - **Same functionality as the old probe!**
- New RIPE Atlas Anchor: Soekris net6501-70



# Visible via RIPEstat: 53 probes in Greece



# RIPE Atlas News

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# RIPE Atlas Anchors

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- Anchors: well-known targets and powerful probes
  - Regional baseline & “future history”
- 15 anchors installed
- Anchoring measurements
  - Full-mesh between anchors deployed
  - Coming up: each probe will measure 4-5 anchors
- **Production service launching today!**
  - cheaper box, one-service only
  - TTM to be decommissioned
- Apply: <https://atlas.ripe.net/about/anchors/>



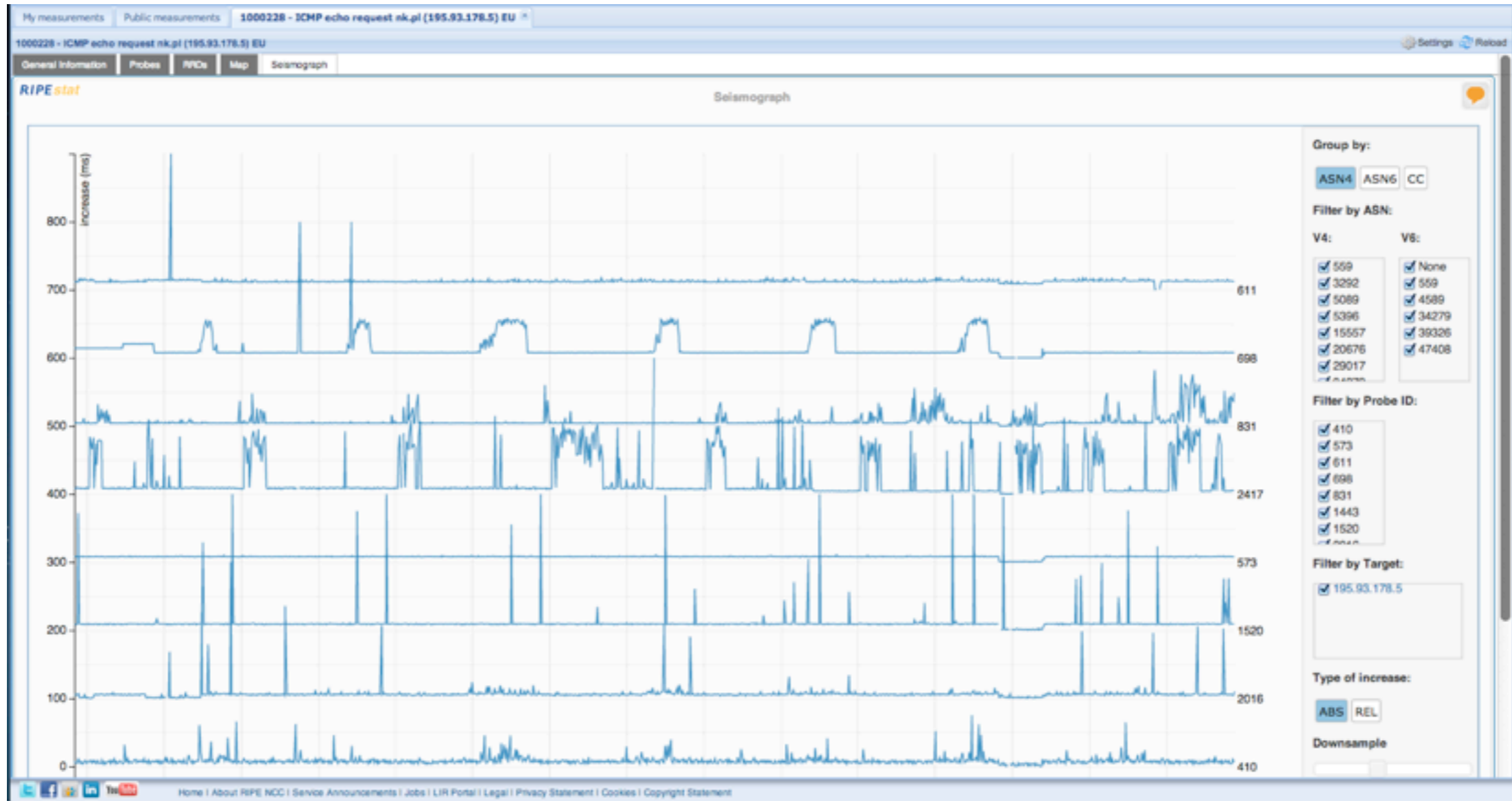


# RIPE Atlas: Recent Developments

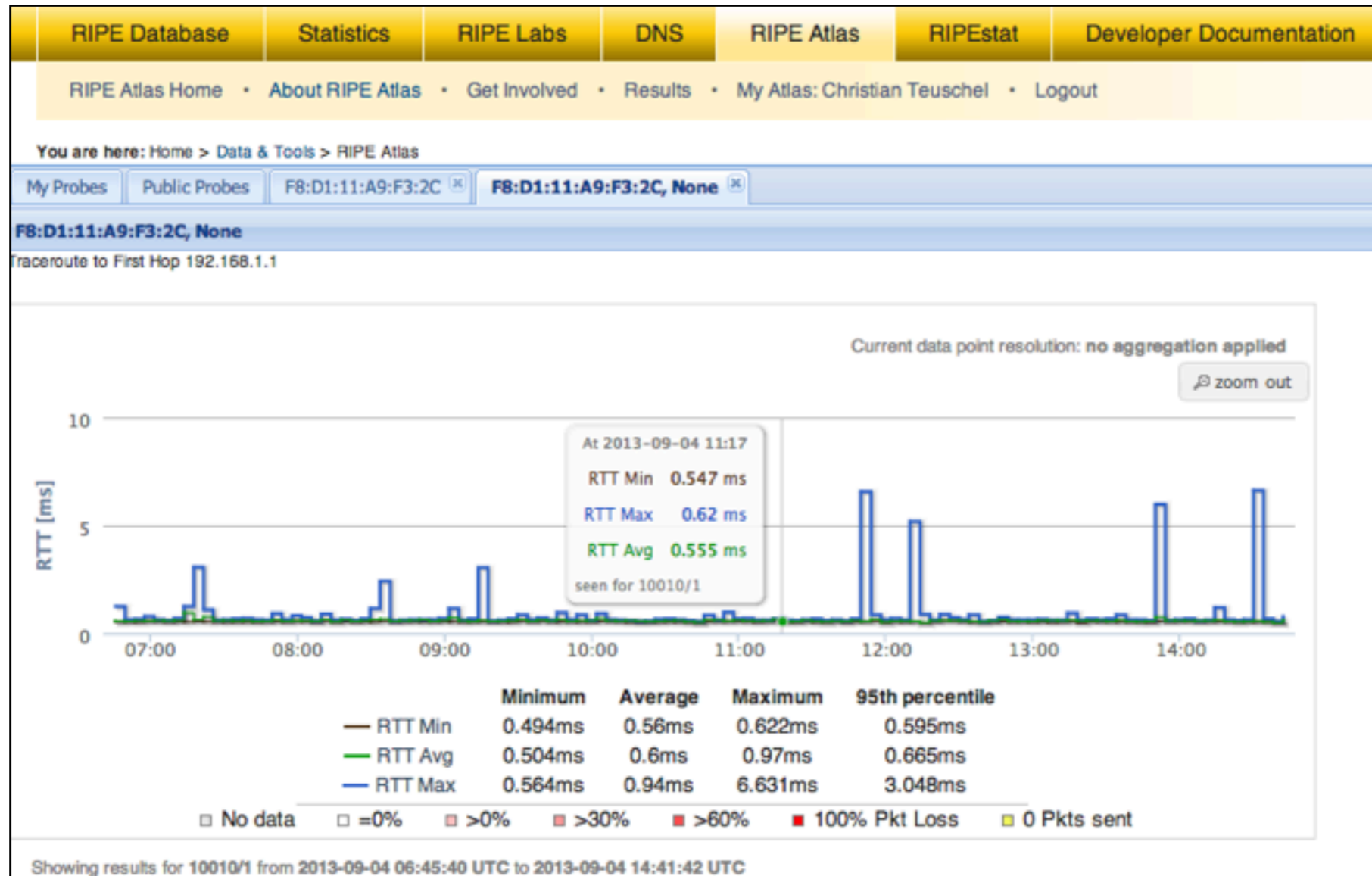
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- Seismograph
  - Multiple ping measurements in one view
  - Stacked chart and an interaction control panel
  - Based on RIPEstat widget framework
- Zoomable ping graph
  - Replacing multiple RRDs graphs: zoom-in, zoom-out in time, in the same graph, without loss of detail
  - Easier visualisation of details of an event
  - Selection of RTT class (max, min, average)
- New release of firmware (4550)

# The Seismograph



# Zoomable Ping Graph



# Additional Quick Look Measurements

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- For RIPE NCC members, via LIR Portal
- Instantaneous view of your target
- Real-time display of results as they roll in
  - Map and table view (ProbeID, ASN, country, RTT)
  - Also as JSON download
- Types:
  - ping
  - **DNS (new)**
  - **traceroute (new)**
  - all IPv4 and IPv6, of course

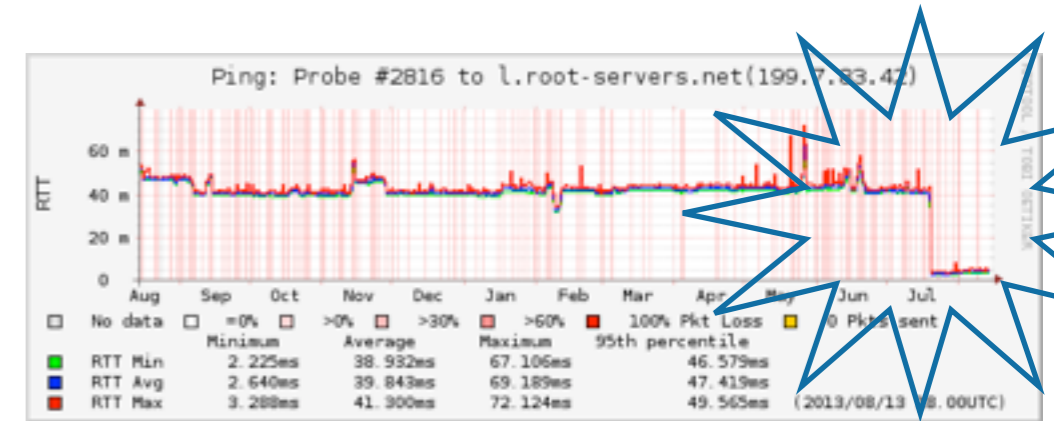
# Many More New Features

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- Increased frequency of measurements
- Added RING nodes as targets
- Added a map of probes for sponsors
- More visualisations for user-defined measurements
- API refinements
- Improved statistics pages: search by ASN & country
- Improved backend infrastructure

# RIPE Atlas Success Stories

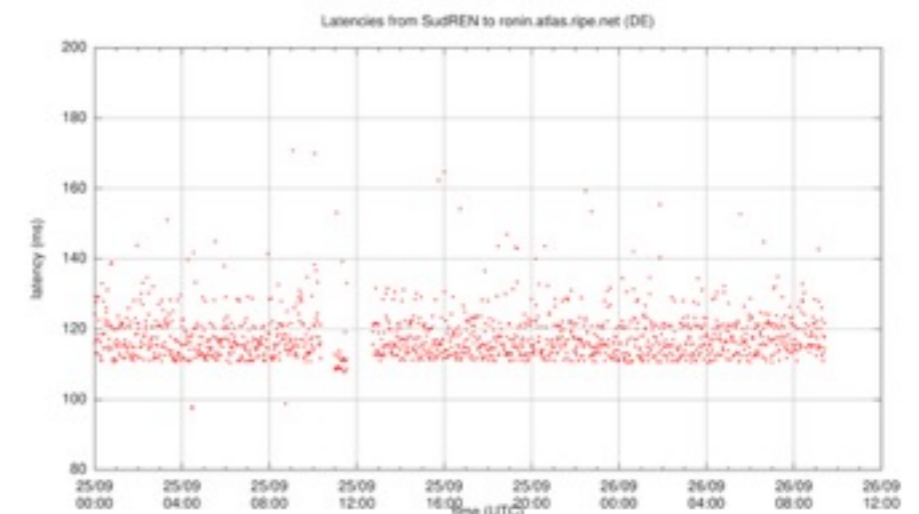
- IXP: Measuring the effect of installing L-root in Belgrade / SOX



- DNS: Looking for most popular instances of .FR anycast servers

Name server instance	Nr. of probes connecting to instance	Percentage
dns.th2.nic.fr	173	36%
dns.fra.nic.fr	173	36%
dns.lon.nic.fr	47	10%
dns.lyn2.nic.fr	29	6%
dns.lyn1.nic.fr	25	5%
dns.bru.nic.fr	19	4%
dns.ix1.nic.fr	18	4%

- Events: Measuring outage of Internet in Sudan



# Community News

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- Increased participation of “ambassadors”
  - Help in distributing probes
  - Giving workshops, tutorials, and promoting RIPE Atlas
- Active GitHub Community Repository
  - New code and new documents published
- Call to action
  - Upload your photos!
  - Regularly check New Arrivals and Top Users
  - Apply to be an ambassador or sponsor



# RIPE Atlas Anchor Hosts





# New Arrivals this Month

- Guess in which country ENOG6 was?

**Community Information**

Find out more about the RIPE Atlas community, their contributions, and the hosts who stand out in the RIPE Atlas network.

Always Up | Big Spenders | **New Arrivals** | Project Sponsors | Anchor Hosts | Photos

New Arrivals are new hosts who connected a RIPE Atlas probe in the last ten days. (Note that the flags are representative of their probe locations and not necessarily their nationality.)

 Albert Einstein	 Andrew Baurin	 Alexander Frei	 Anthony Moore	 Andrey Sokolovsky	 Francis ten Krooden
 Ivan Krgan	 Dmitry Naumenko	 Michail Kononykhin	 Fedor Krashnikov	 Vladimir Ovchinnikov	 Igor Nesterenko
 Hiroki Sato	 Maxim Luppov	 Vladyslav Pokryshka	 Alarig Le Lay	 Jordan Grossemy	 Trond Arne Runde
 Ivan Pavicic	 Kevin Schoen	 William Lindsey	 Jochen Ruttkamp	 Ibrahim AS	
 Gian-Paolo Musumeci	 seppe tielens	 Lieven Costermans	 Javier Galvez	 Leon Swanepoel	 Anatoly Melnyk
 	 				

# RIPE Atlas 2013 Sponsors



# Plans for the Future

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- Integrating DNSMON in RIPE Atlas and RIPEstat
- Implementing alerts
- Introducing “My Favorite” probe and measurements selection and viewing
- Improving traceroute visualization: T-play
- Increasing distribution via RIR cooperation
- Tell us your feature requests:
  - <http://roadmap.ripe.net/ripe-atlas/>

# Questions from / to Community

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- HTTP measurements: limitations and guidelines?
- Alerts: what level of ease or sophistication?
- IPv6: only for researchers? Operators needs?
- Open publication of measurement data
  - to have or not to have private measurements?
- Testing BCP38 compliance
- Most interesting use cases?
- More success stories? Do share!

# RIPE Atlas Contact

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- **<https://atlas.ripe.net>**
- Get a probe: **<https://atlas.ripe.net/apply>**
- Mailing list for active users: **[ripe-atlas@ripe.net](mailto:ripe-atlas@ripe.net)**
- Articles & updated on RIPE Labs
  - **<https://labs.ripe.net/atlas>**
- Questions: **[atlas@ripe.net](mailto:atlas@ripe.net)**
- Twitter: **#RIPEAtlas** and **@RIPE\_Atlas**
- Community Builder, Vesna Manojlovic:  
**@Ms\_Measurements**

# Questions?

