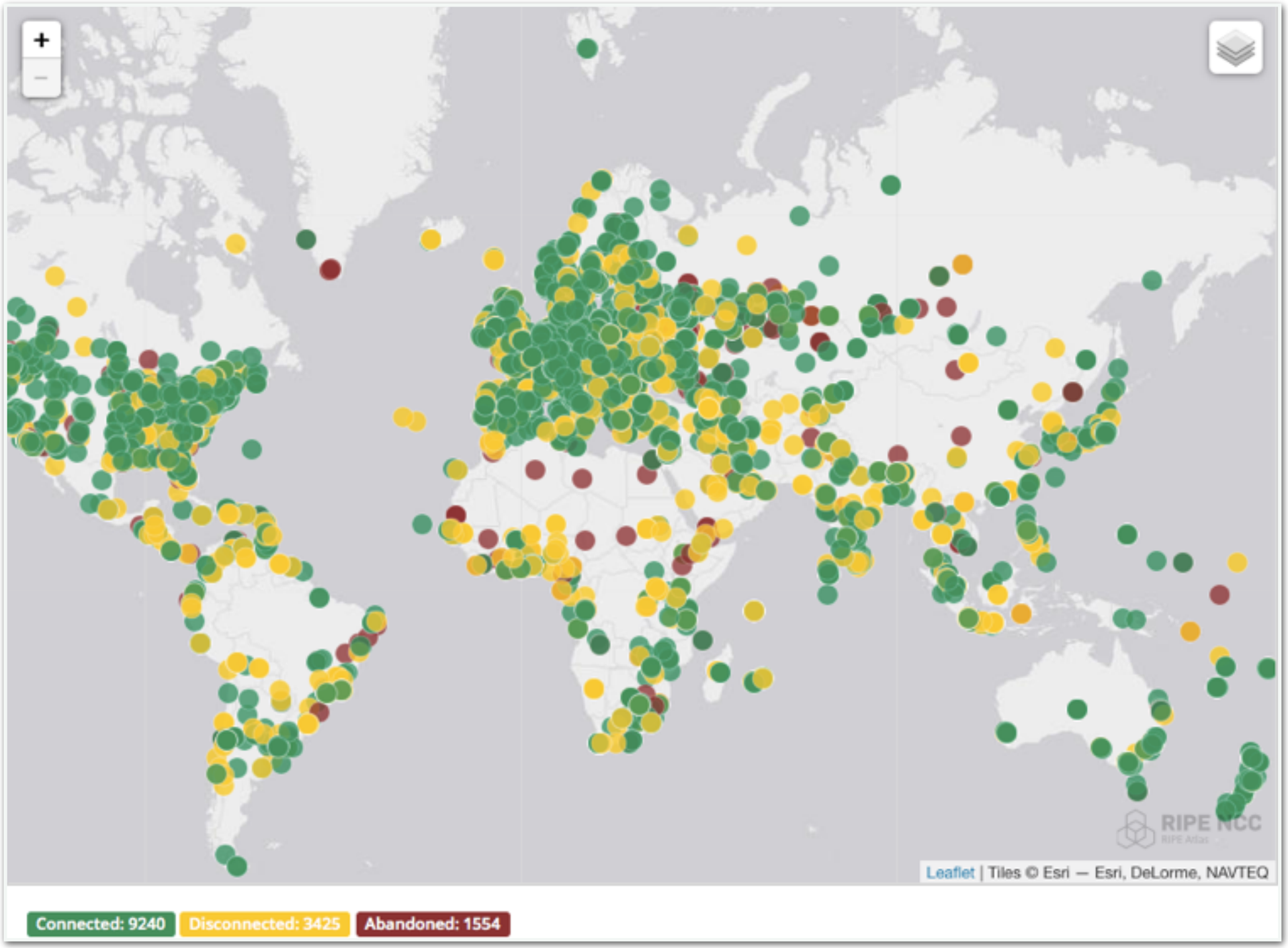
RIPE NCC
RIPE NETWORK COORDINATION CENTRE

RIPE Atlas

A Global Measurement Platform

Johan ter Beest | 24 April 2016 | Levant Regional Meeting

RIPE Atlas Coverage



Probes

What can they do?

- Perform Built-in measurements towards the root name servers
- Participate in User Defined Measurements
- Measurements are done from the probe's perspective

Anchors

What can anchors do?

- Anchors can do anything a probe can do
- They participate in Anchoring Measurements
- They can also be a target for a measurement, ie you measure towards an anchor

Measurements

- Types of measurements
  - Ping
  - Trace route
  - DNS
  - SSL Cert
  - HTTP
  - NTP

Credits

- Running a User Defined Measurement costs credits
- You earn these credits by hosting a probe or an anchor
- You can also sponsor probes
- Occasionally we give credits to students and researchers

Security features of RIPE Atlas

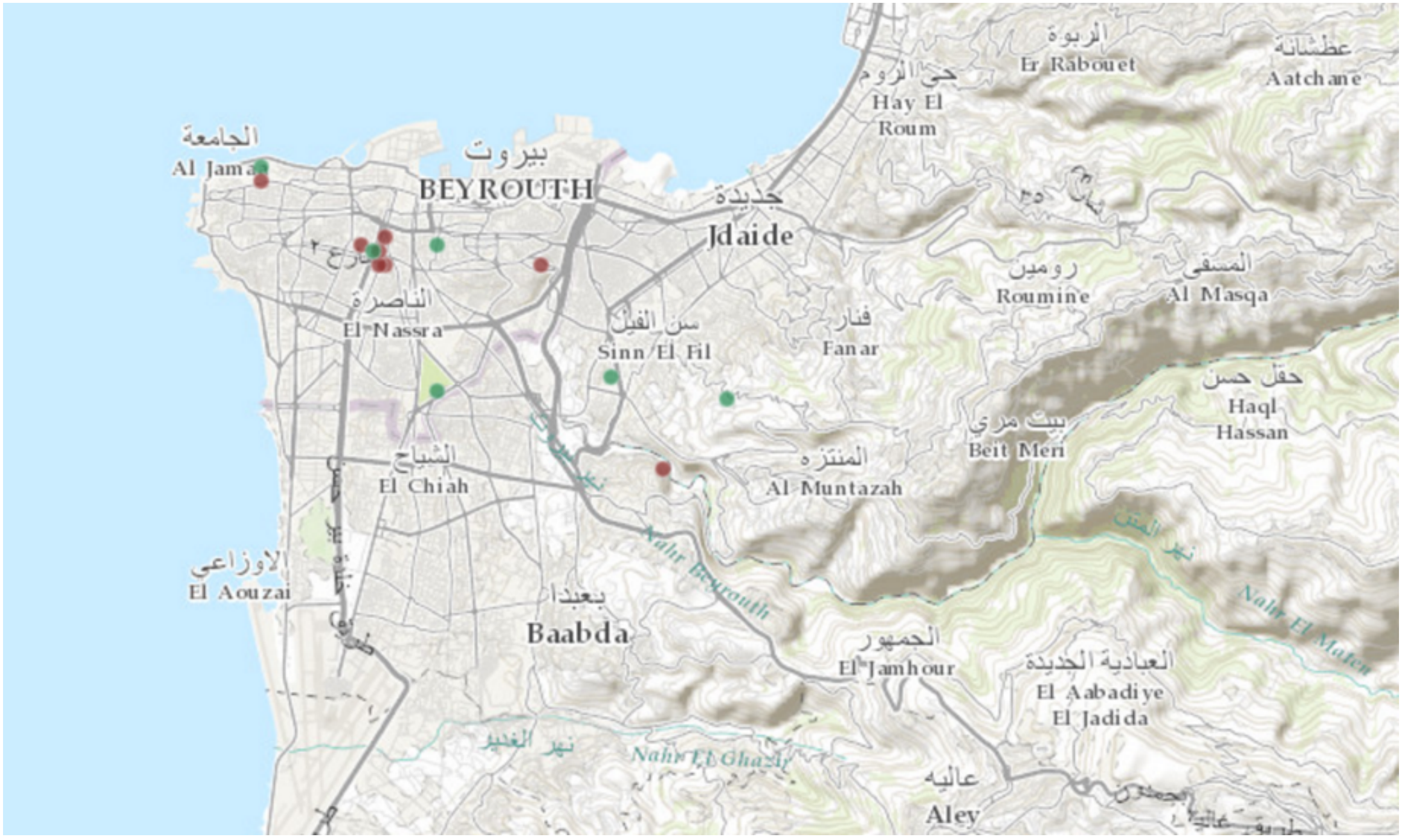
- We don’t measure your local traffic
- Connections to our infrastructure are encrypted
- Keys are unique for every individual device
- No incoming connections to probes
- Regular Security Reviews
- Automatic protection against invalid data
- Firmware is signed with key splitting
- Privilege separation (measurements are not run as root)

The Levant Area

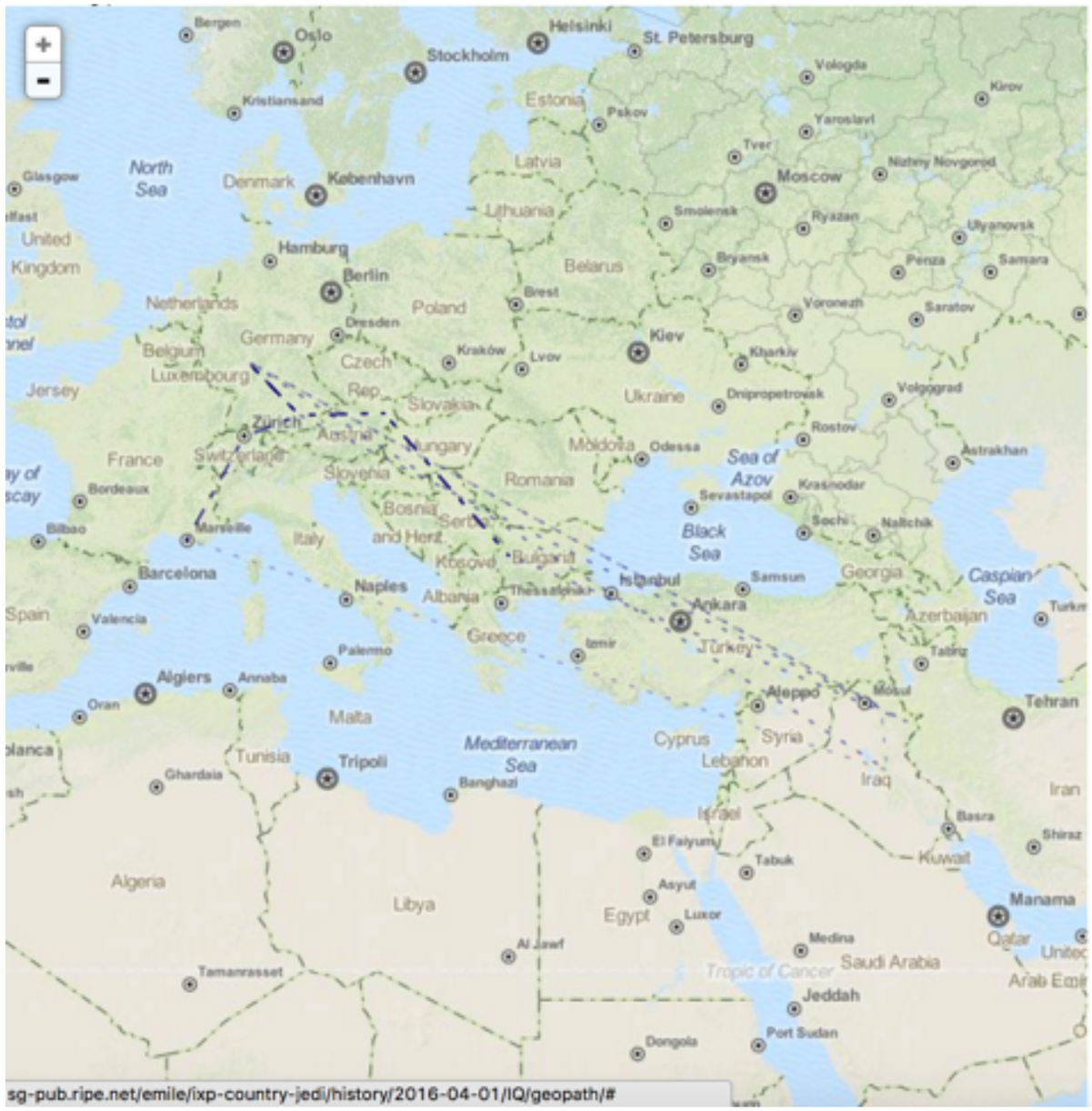
As seen from RIPE Atlas

Probes in the Levant Region

Probes in Lebanon



Internet Traffic in Iraq



Internet Traffic in Lebanon

Routing in the Levant Region

How can you improve?

- Get more probes connected so more accurate measurements can be performed
- Start using IPv6
- Get one or more anchors (when you have IPv6)
- Get an IXP to keep your local traffic local

Questions

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