A RIPE Atlas Probe for Every Member

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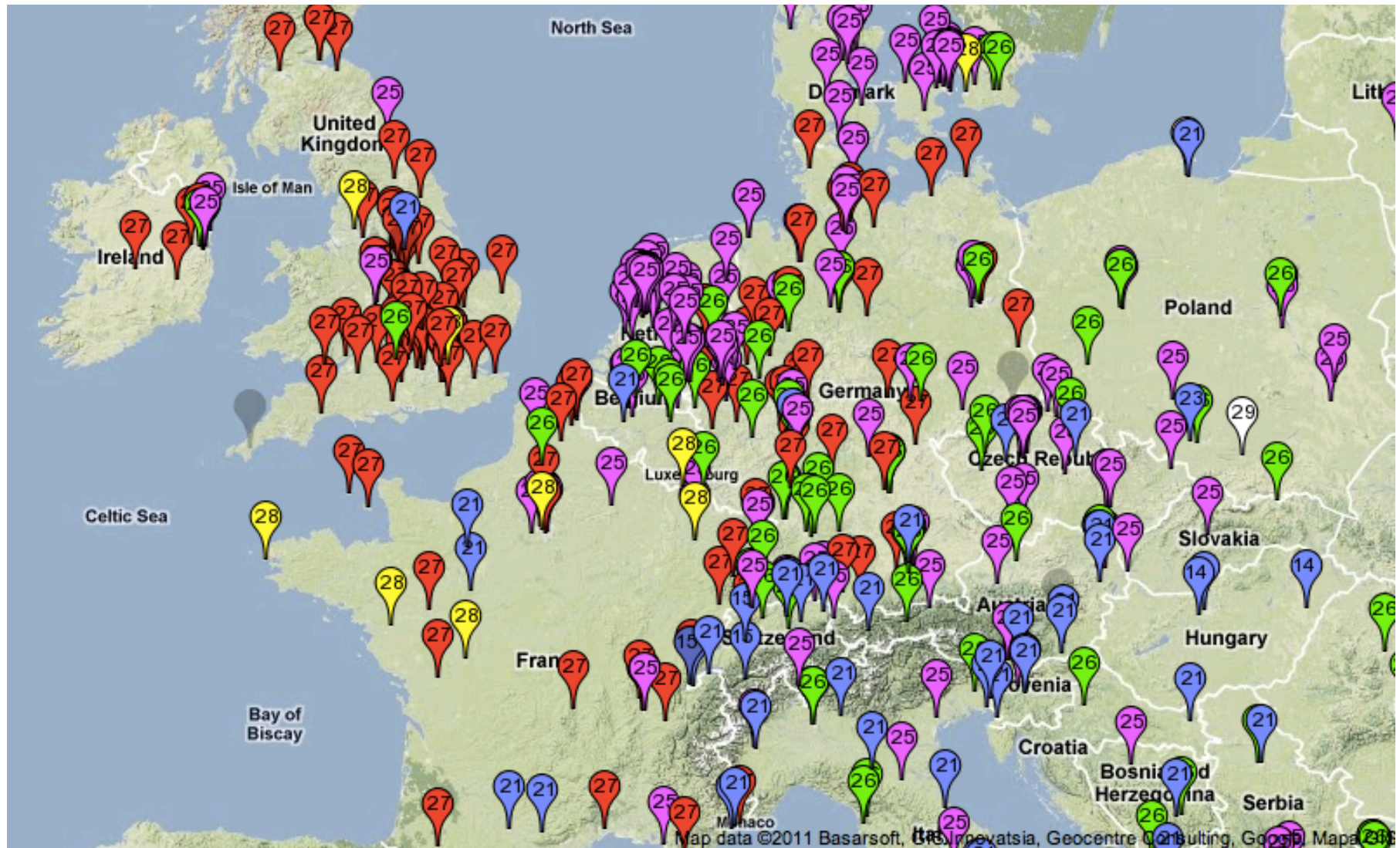RIPE NCC

Reminder

Probes Deployed Today

Preregistered Networks, Active Probes

Legend:
- Probes Up (green)
- Initial goal of 300 (magenta)
- Requested probes (blue)
- Probes Distributed (red)
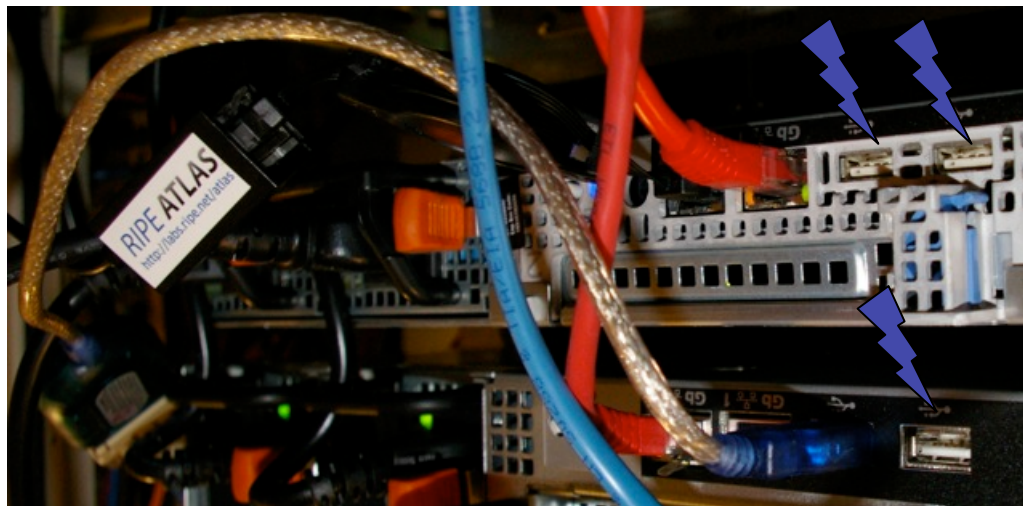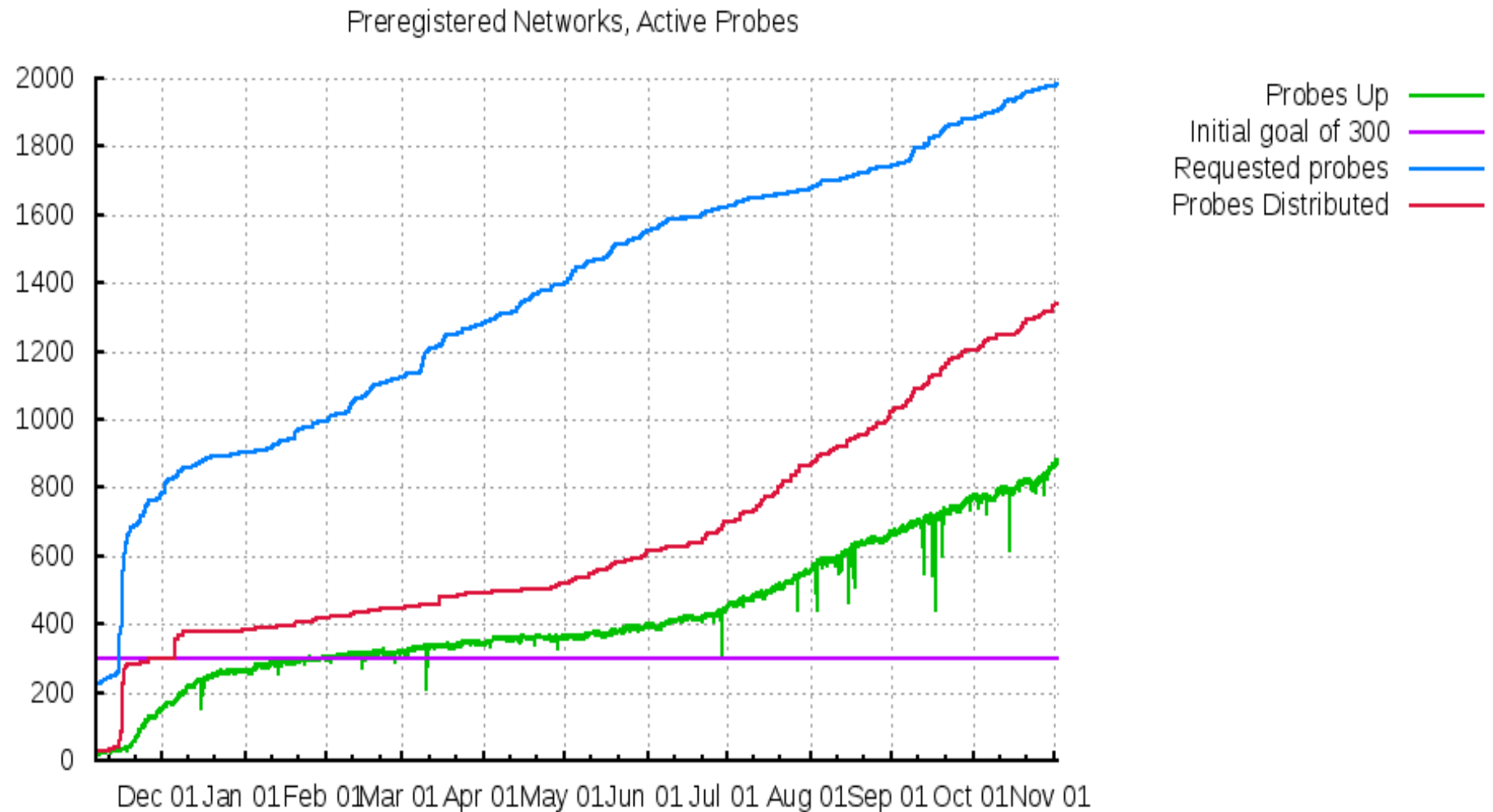
'Closest' DNS Root Name Server

Anycast Instance for k.root-servers.net

Goals & Current Budget

- probes up
  - Q4/11: 1K, Q2/12: 2K, Q4/12: 4K

- User Defined Measurements
  - "now": beta with O(10) testers, ping/traceroute, DNS, raw data access / basic ping visualisation
  - Q4/11 general release of v1.0
  - Q2/12 more measurements, visualisations via RIPEstat

- Map Products:
  - 1 new / 1-2 months

Goals & Current Budget

- **build communities**
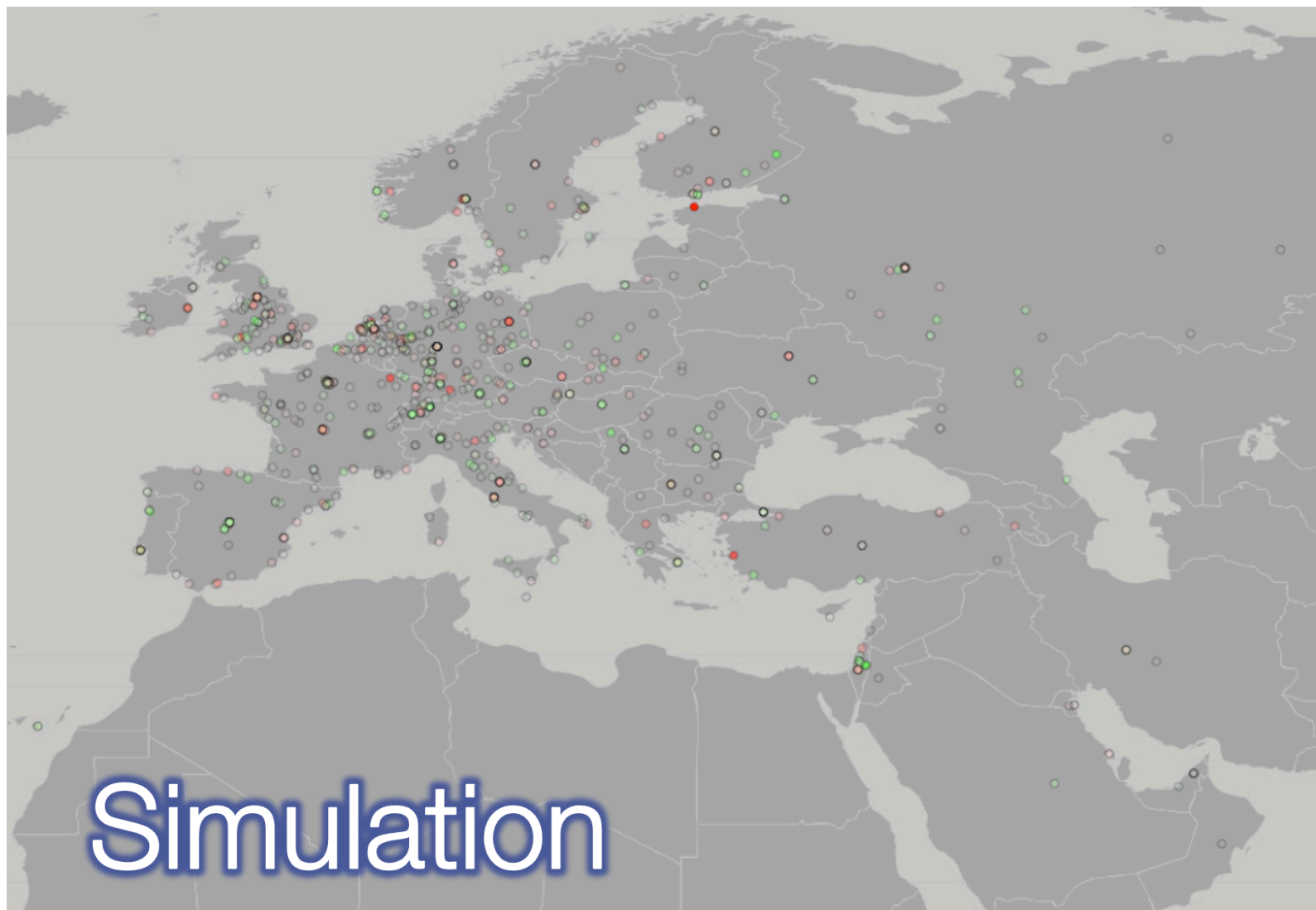 - probe hosts

  - sponsors

  - academic liaison

We have proven that we can can deploy the infrastrucutre.
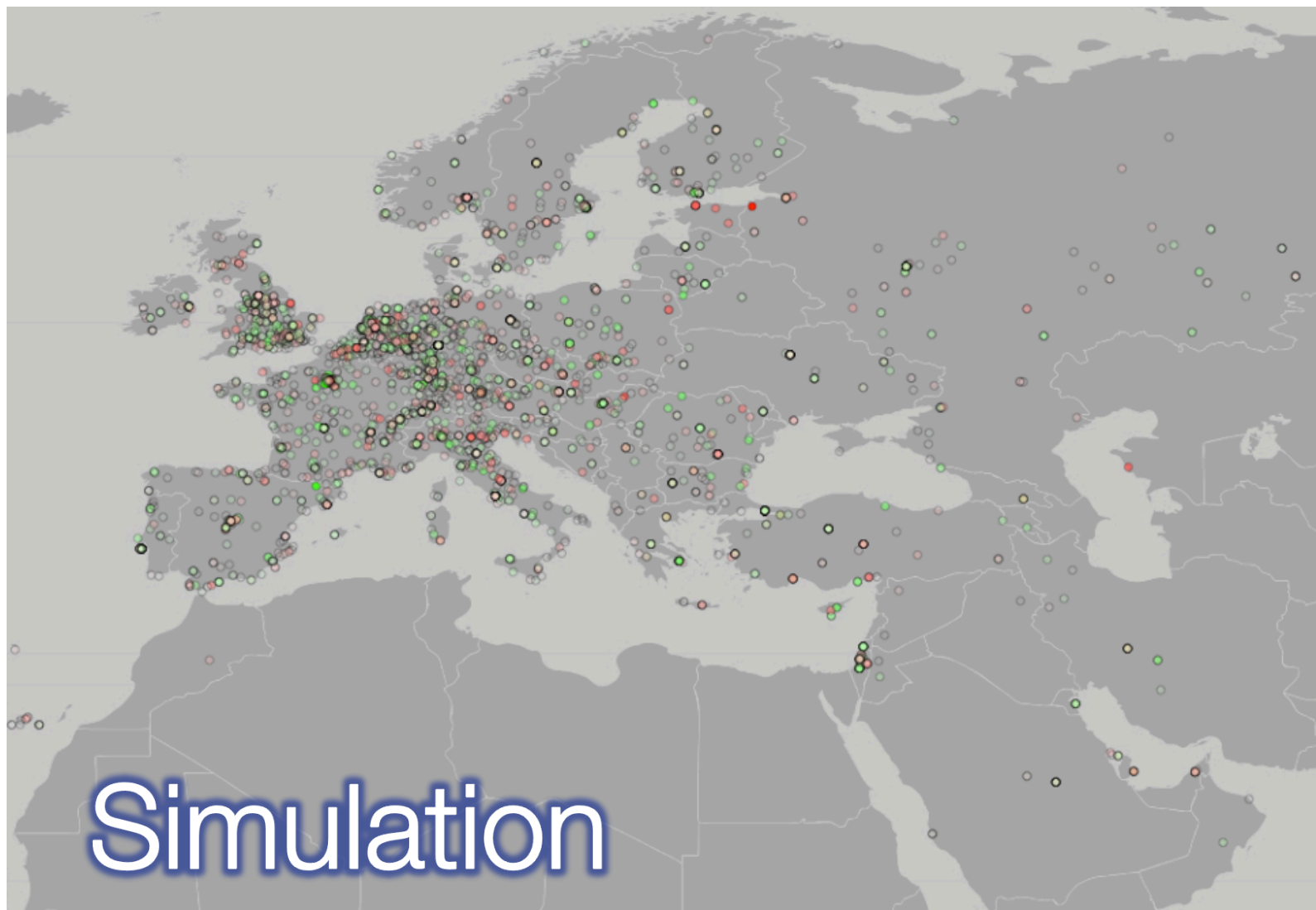
There are others in this space.

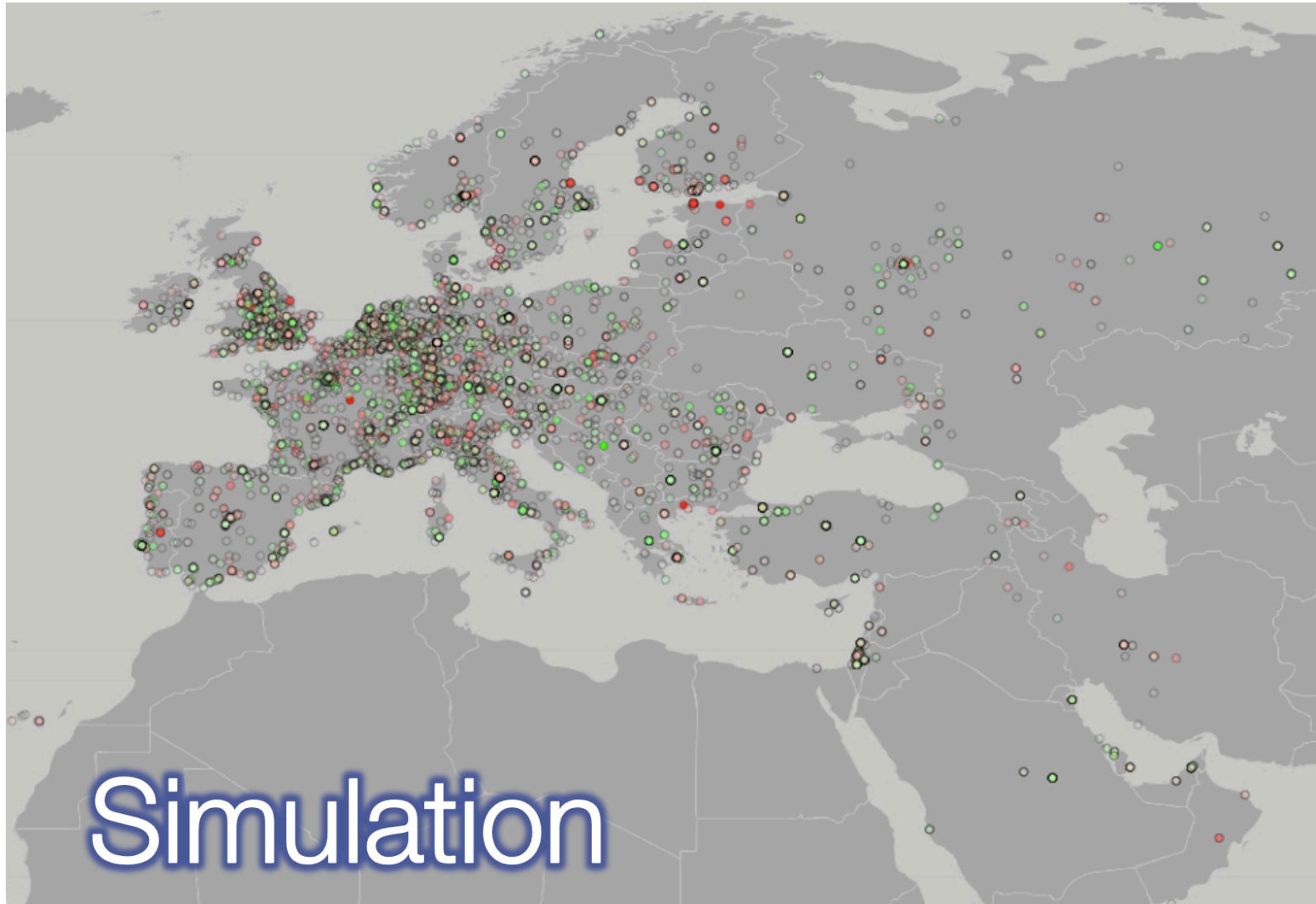The real benefits come with size ….

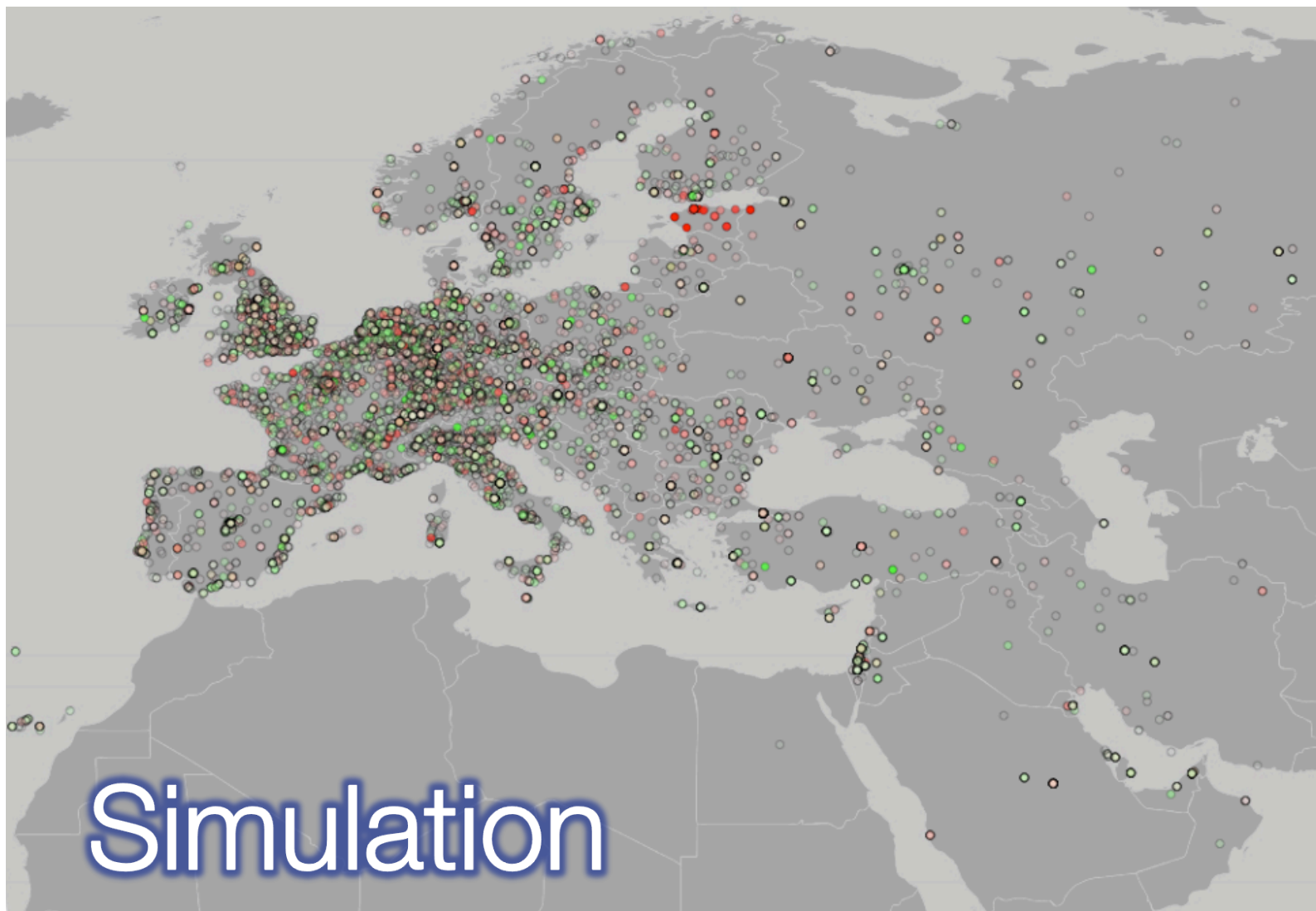# WE SHOULD BE MORE AMBITIOUS

Intuition: 1000 Probes

Simulation
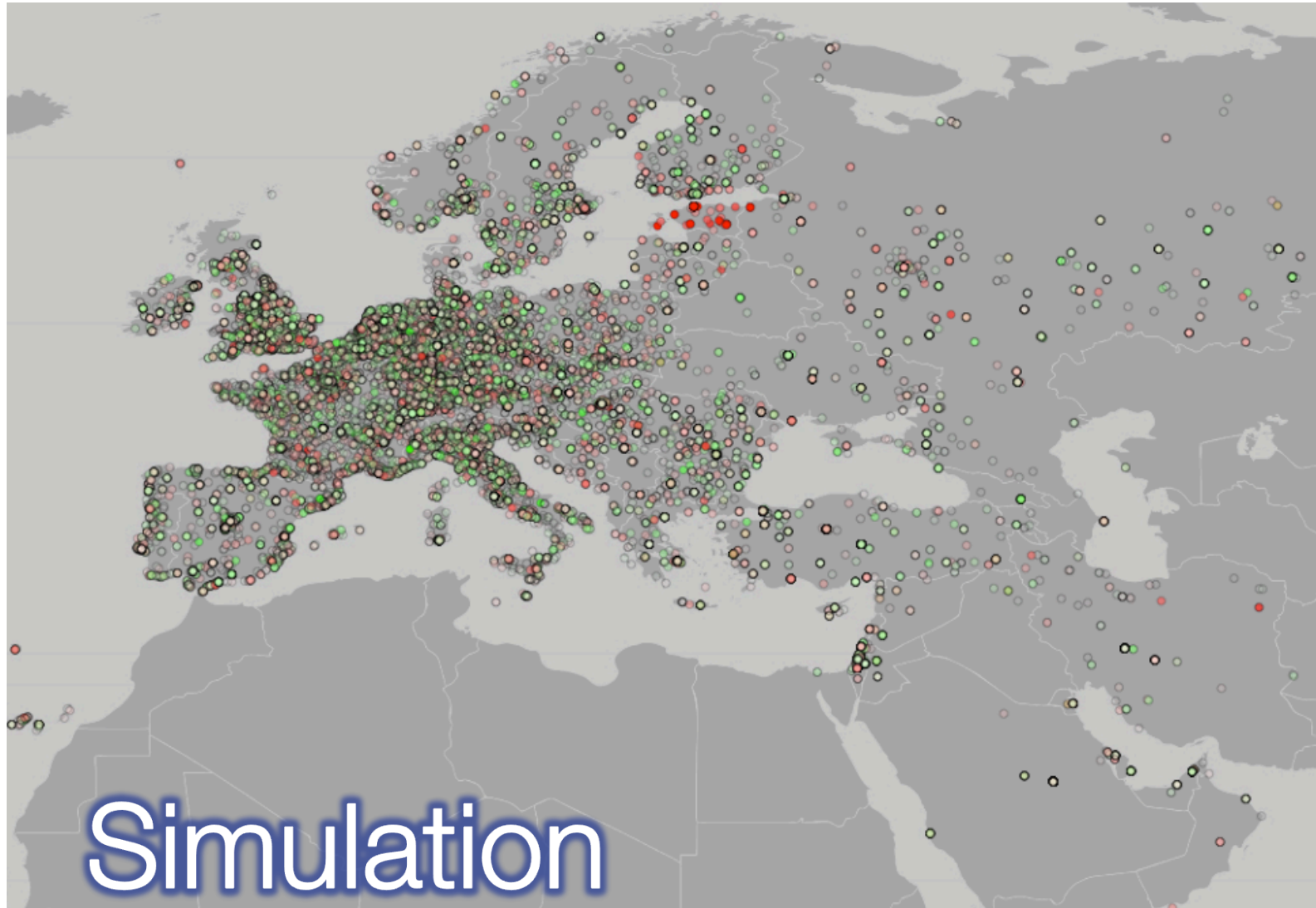
Intuition: 5000 Probes

Simulation

RIPE
NCC

Intuition: 10k Probes

Simulation

Intuition: 20k Probes

Simulation

Intuition: 50k Probes

Simulation
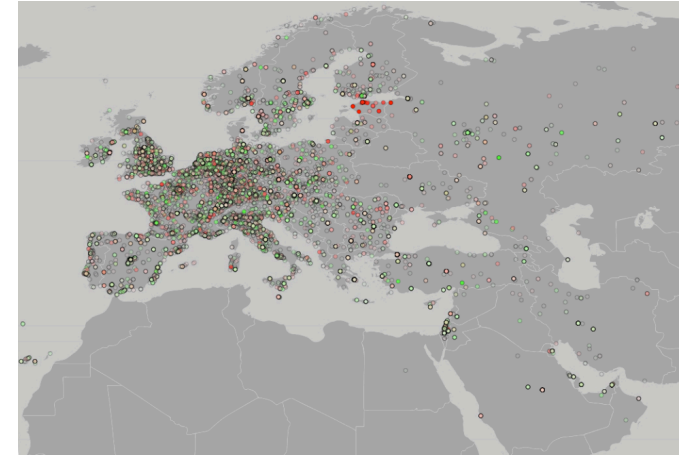
Where to Aim

- **20k probes is a threshold**

  - Buying power for hardware

  - 15+k ASNs active in RIPE region

  - 7+k RIPE NCC members

  - Significant step in 'resolution' of the Atlas 'machine':

Gain

- 20k resolution required for

  - Reliable situational awareness to the small AS level, e.g. the required "resolution" for that

  - Real 'perspectives' for DNS and SSL

  - …

- Noticeable Activity above the Mean Sea Level

- Goodwill with Membership / Governments

- Avoid to be surpassed by others

Additional Cost to Be More Ambitious

(Assuming O(20k) probes by 2013)

- Incrementals: ~50€ / probe = 1M€ @ 20k

- Fixed: ~700k€

- FTE: ~12 in 1st year

- Recurring: ~800k€ /year

Way Forward

- RIPE NCC Executive Board decides on budget.

- So if you agree we should be more ambitious with RIPE Atlas, then make yourself heared.

- And if you do not agree, do the same.

- More detailed story on RIPE Labs.

RIPE NCC

Questions?