

# F-root Anycast Placement Research using RIPE Atlas

Ray Bellis, ISC

UKNOF 32

2015/09/17

# Goals of the Project

- Plan new F-root sites
- Optimise existing sites, if needed

# RIPE Probe Measurements

Measurement 1030x:

- Every root server, every 240s
- DNS Request  
"hostname.bind CH TXT"
- DNS Response IDs site and node, e.g.  
ams1a.f.root-servers.org
- Also records response latency



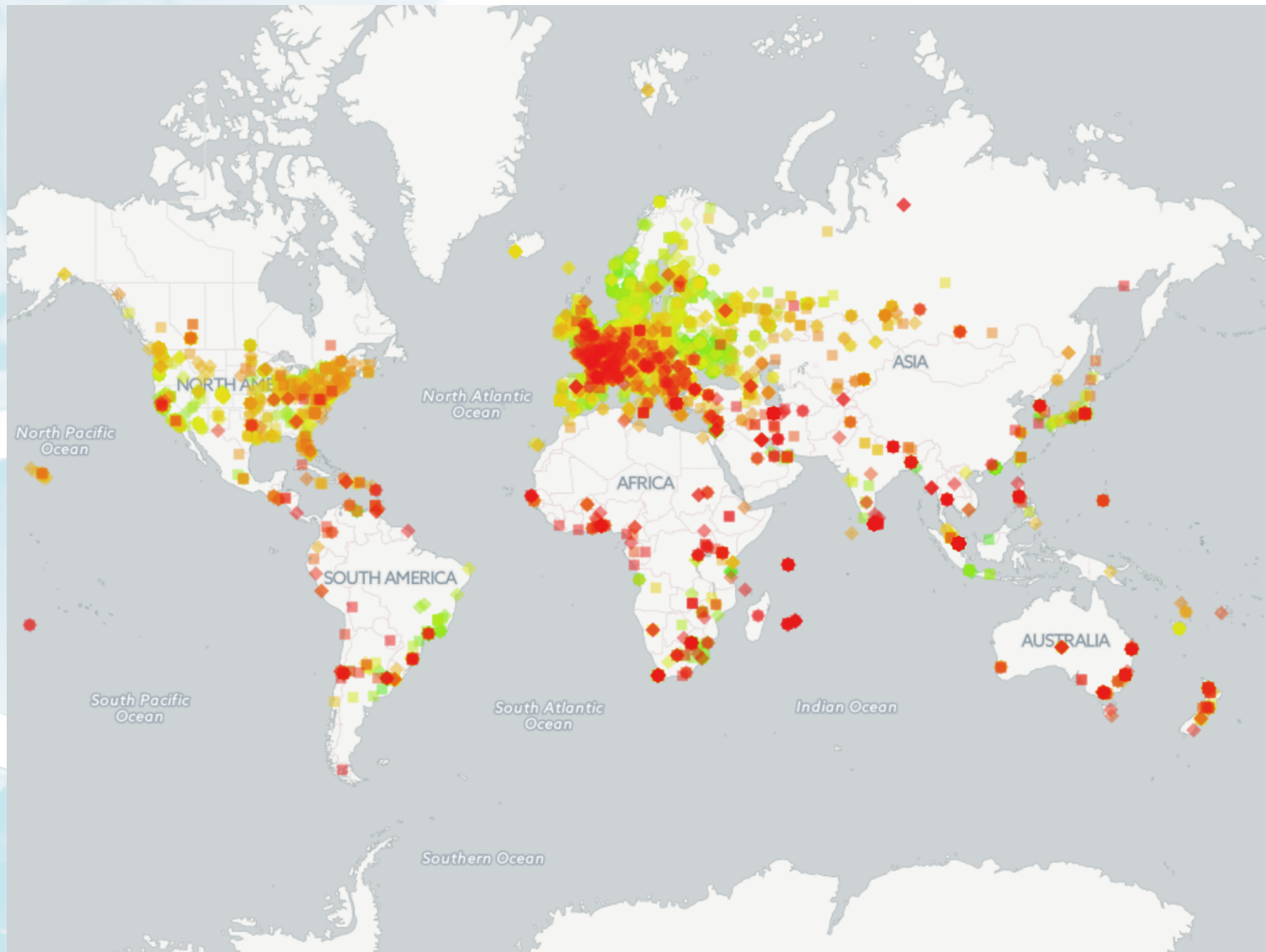
# RIPE Probe Visualisations

<https://atlas.ripe.net/results/maps/>

- not flexible enough for this analysis
- rolled my own using their API



# Global View of F-root Latency (red = 200ms+)





# ATL1 - post reconfiguration

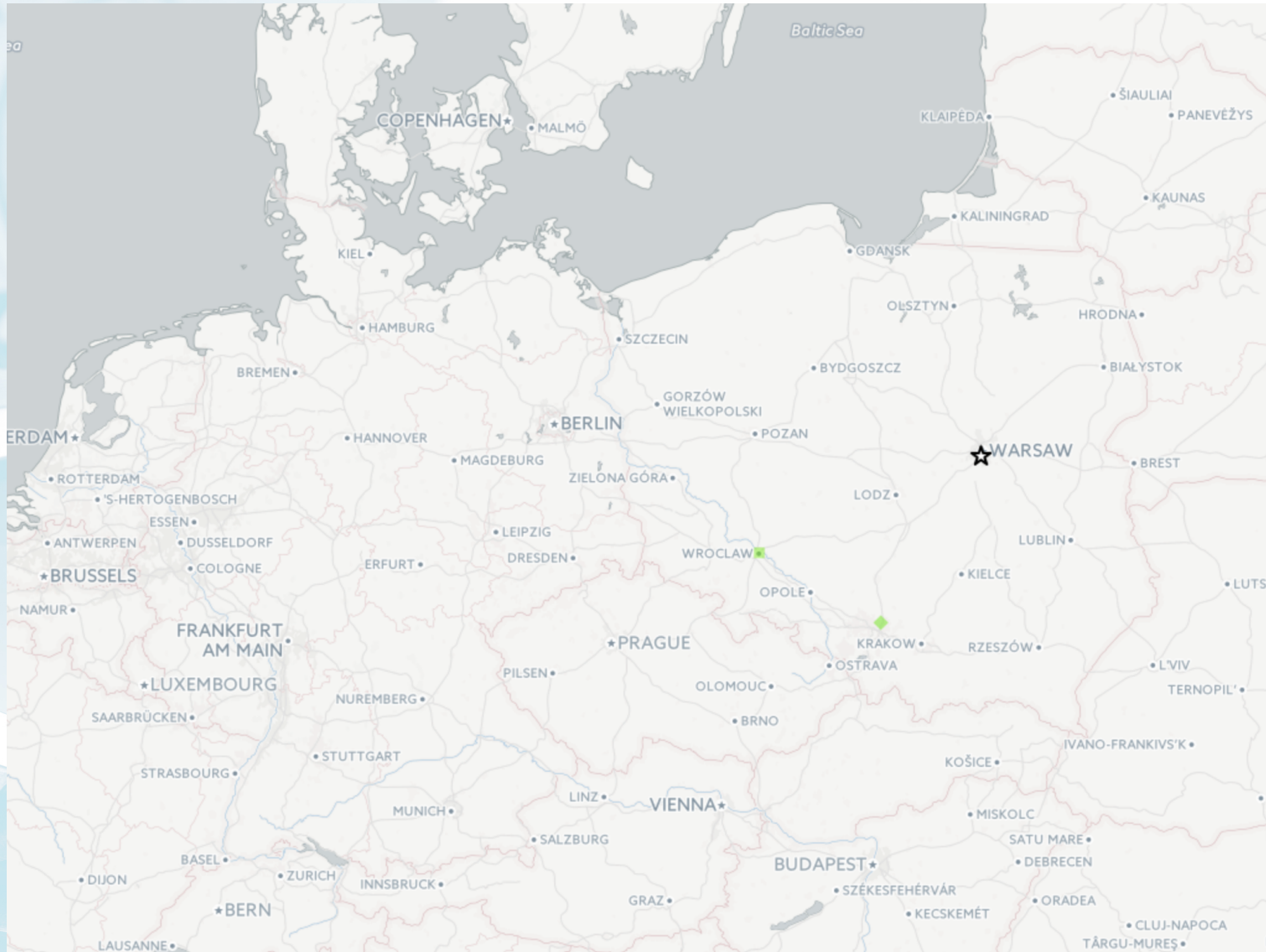




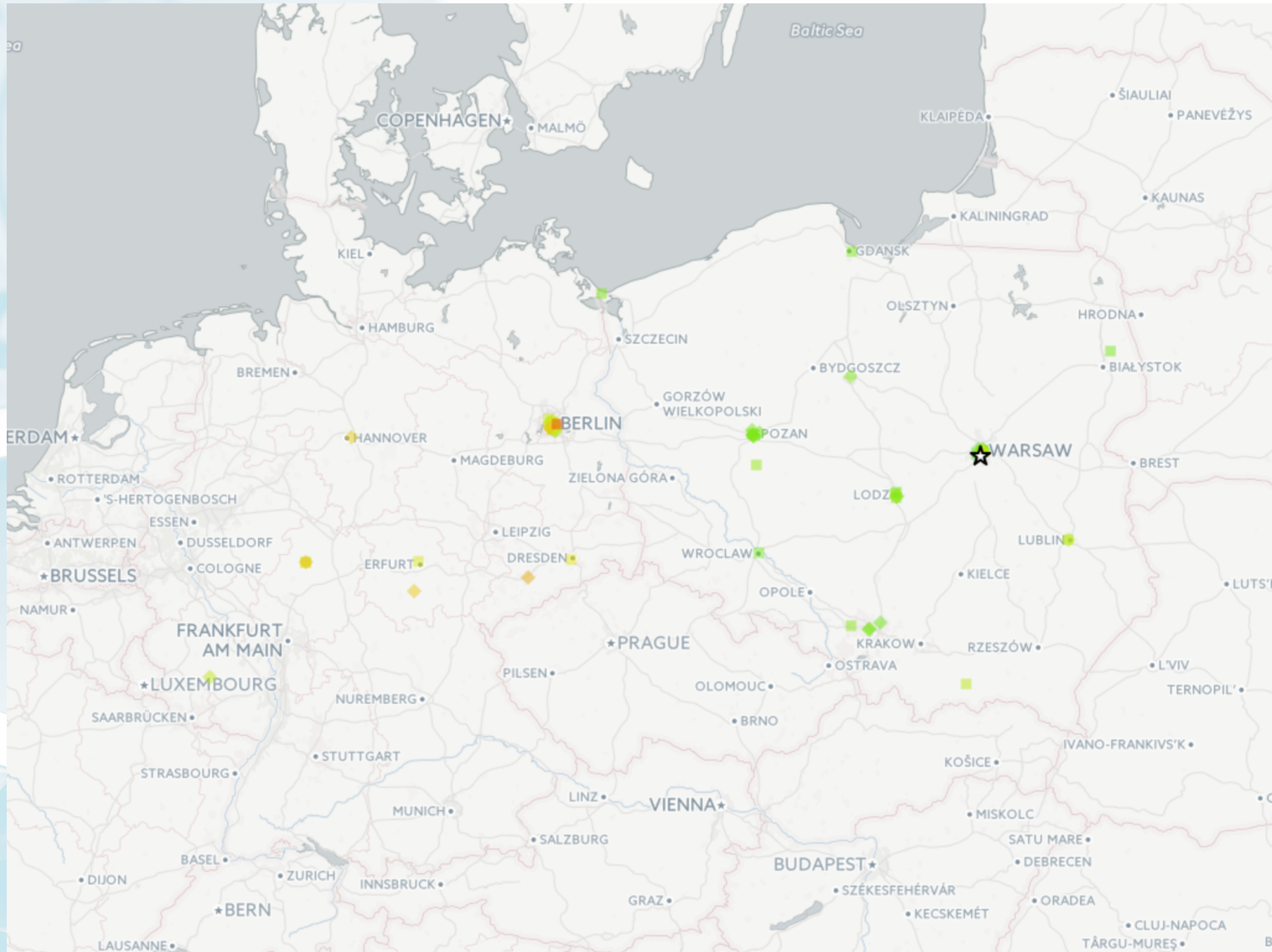
# NO\_EXPORT leak!



# PLIX route server NO\_EXPORT too strict

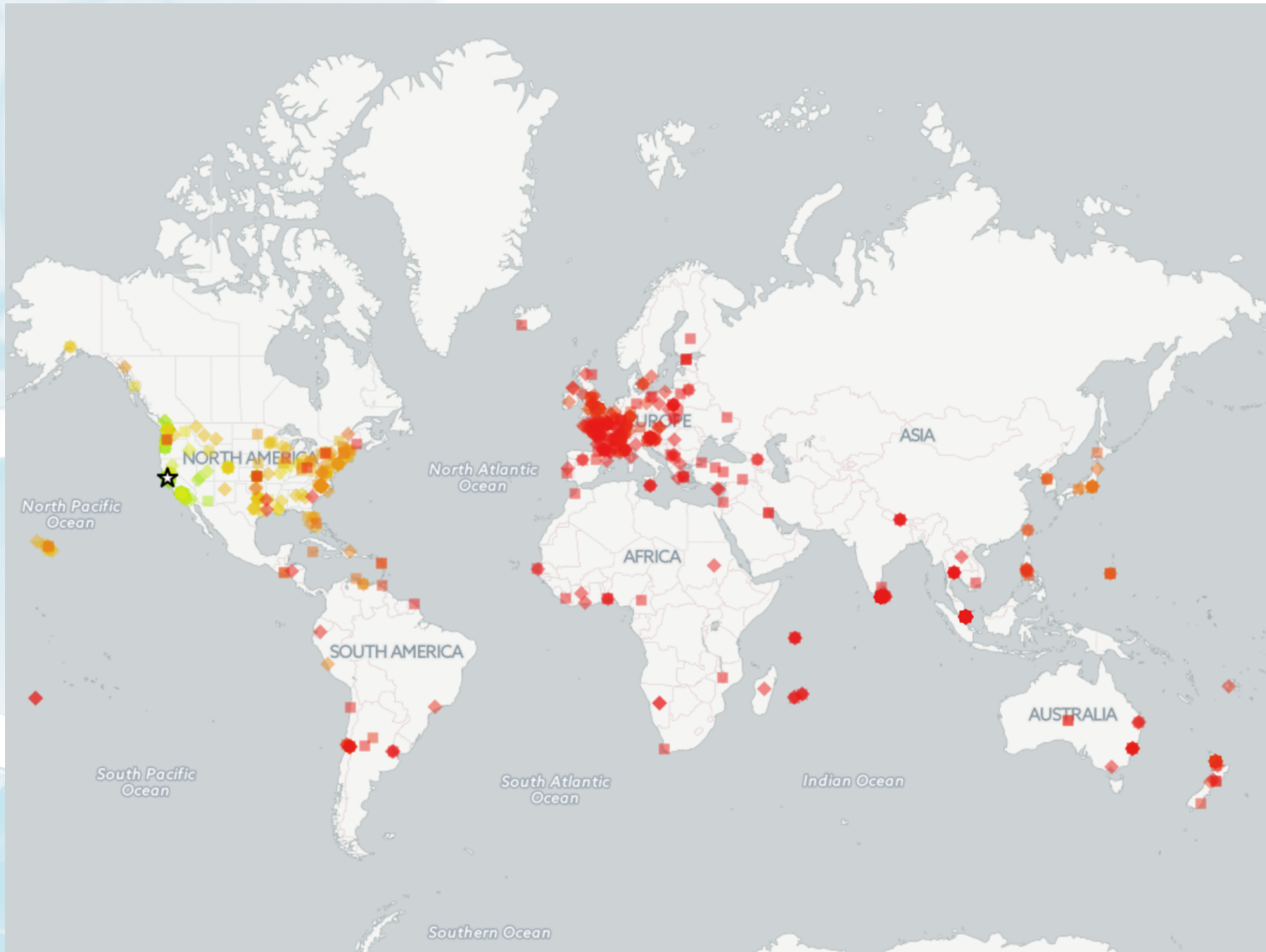


# PLIX Fixed

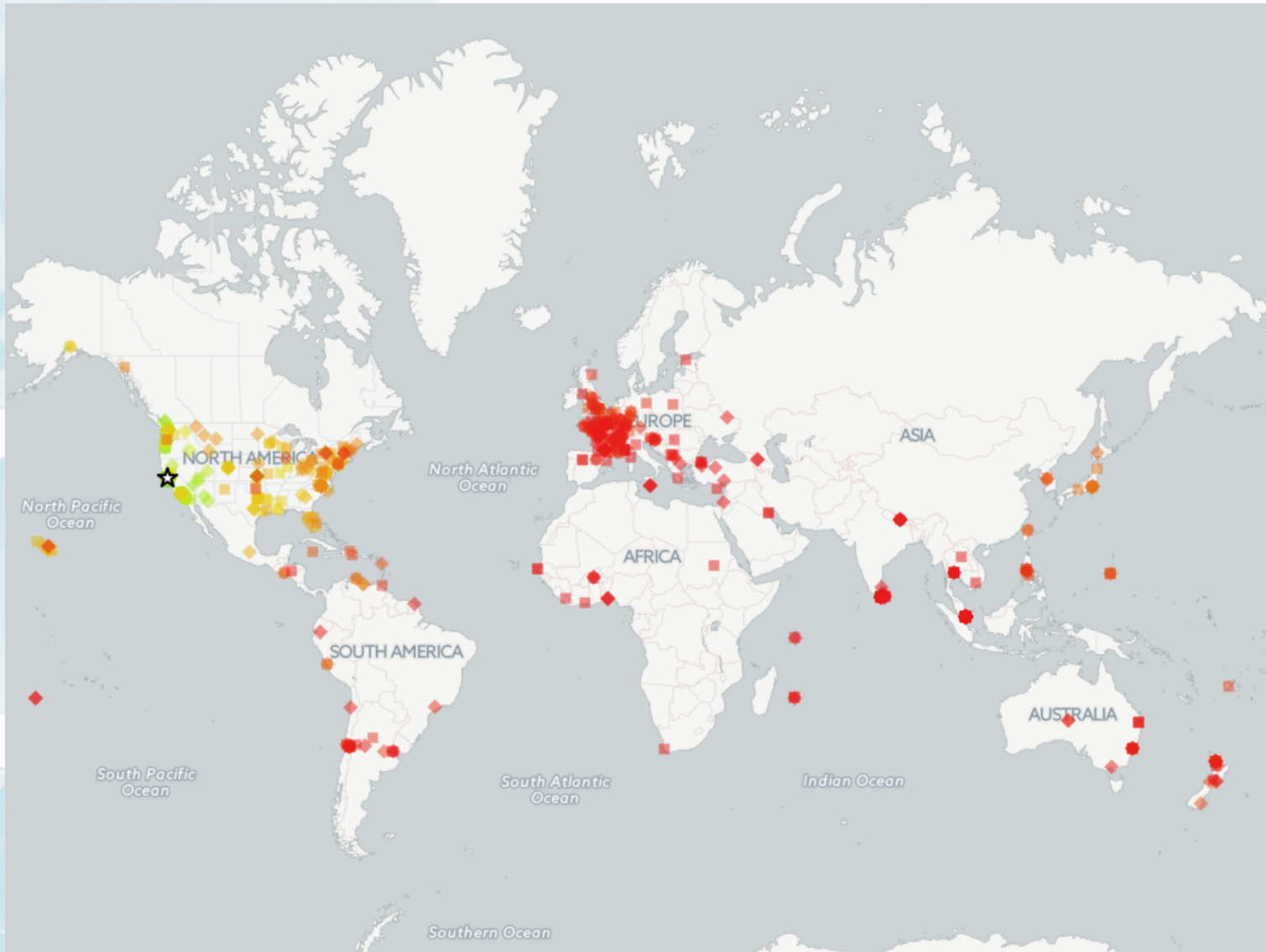




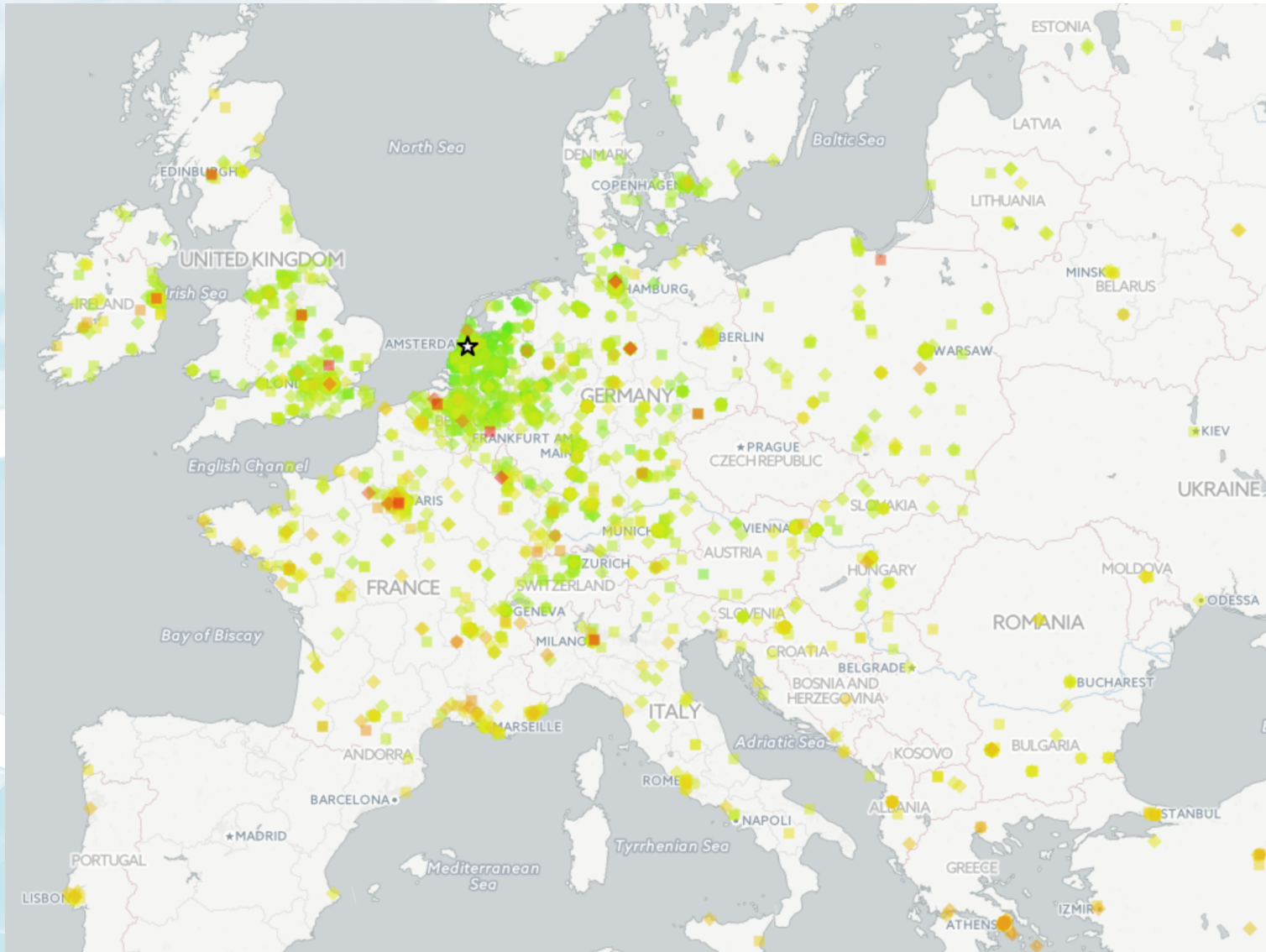
# PAO1 over-connected - long reach IXEs harmful?



# PAO1 after dropping route announcement to AS174



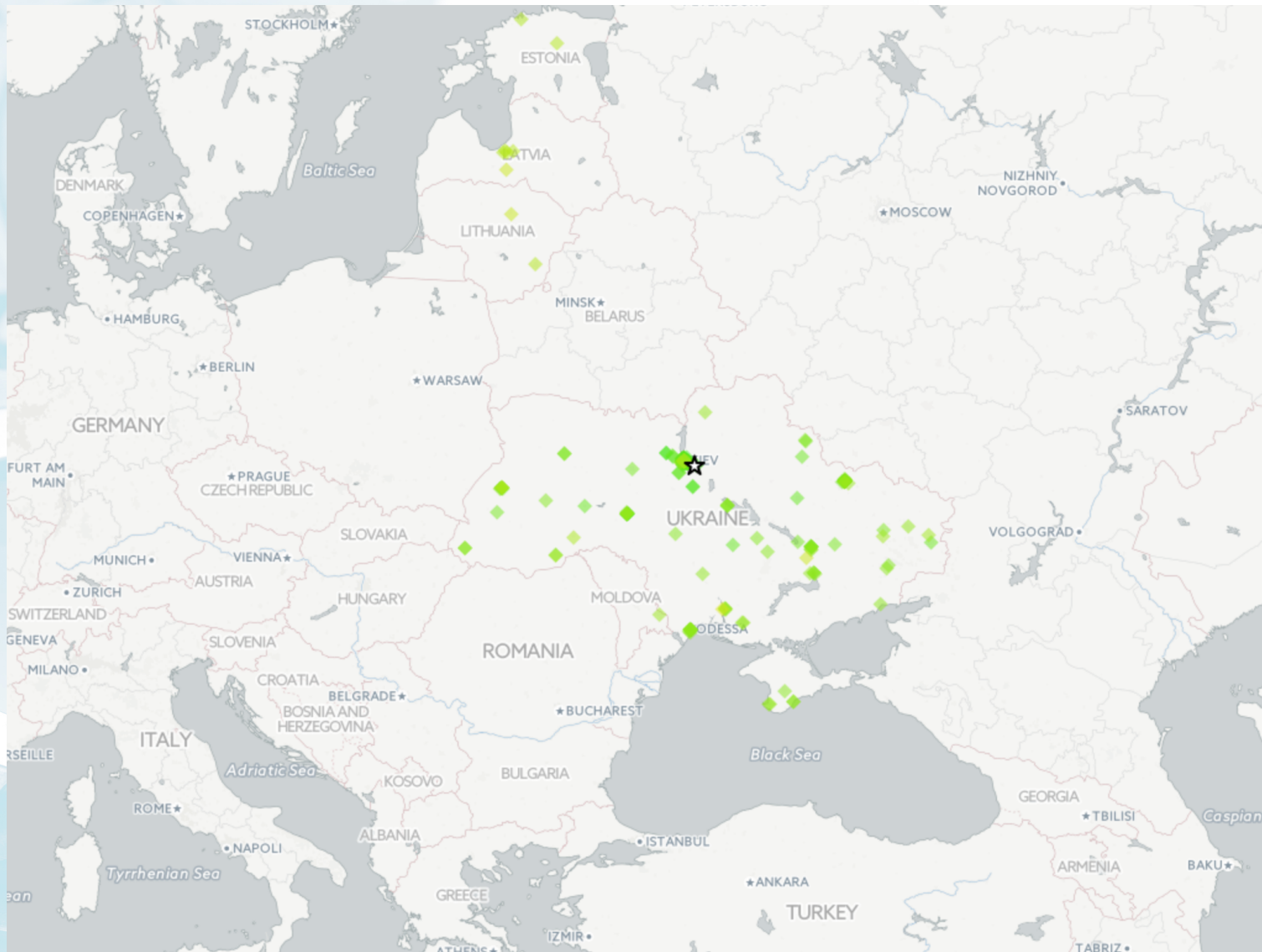
# A closeup on AMS1







# KBP1 probes - political boundaries?



Any Questions

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