



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

111 views of Swiss Internet Infrastructure

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Bern, Switzerland | June 2023 | SWINOG#38

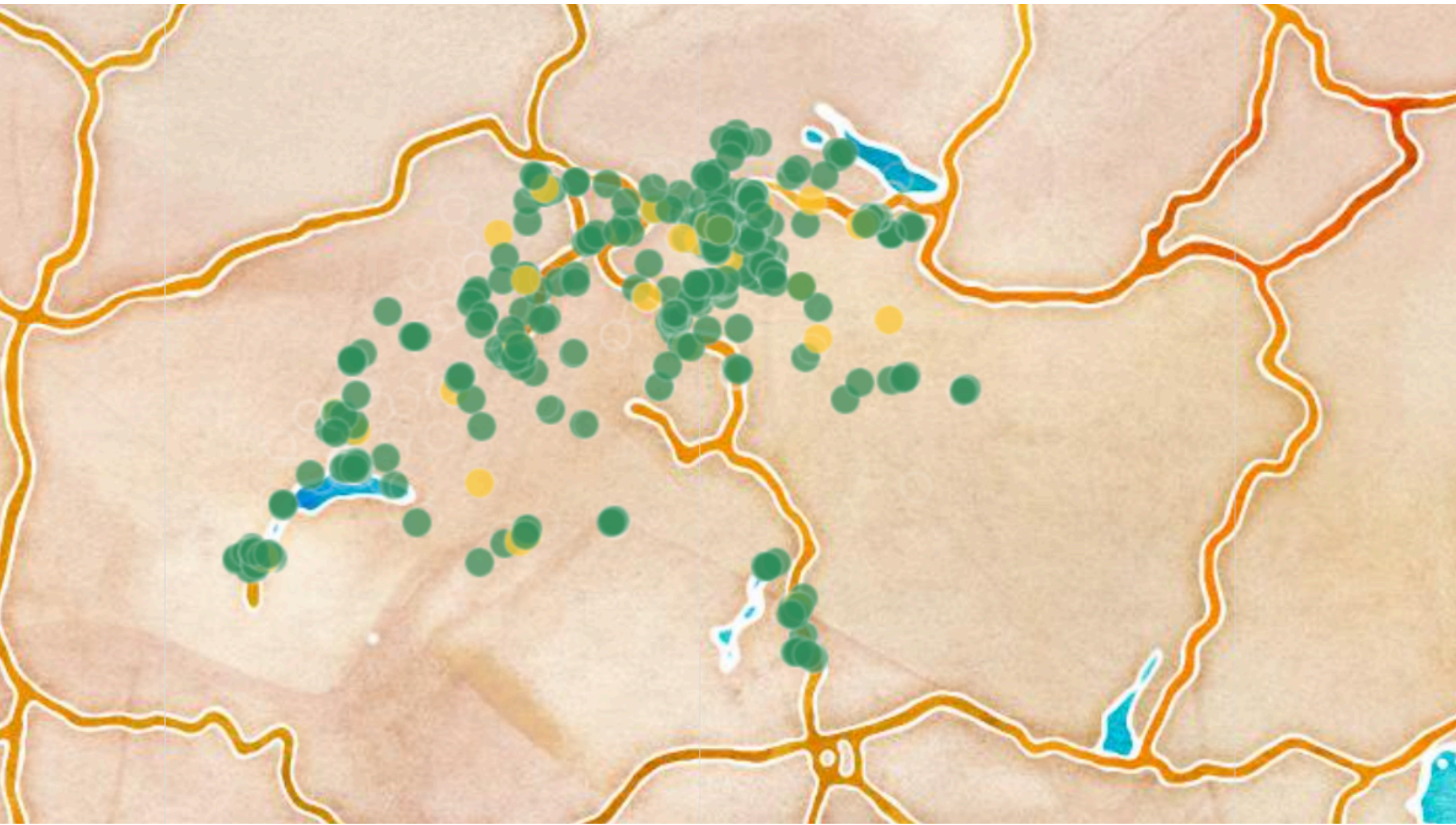
(111)₂ views of Switzerland



- 001: RIPE Atlas Coverage
- 010: Comparative DNS Root RTT
- 011: Traceroute Paths
- 100: Latency Map
- 101: IPv6 RIPEness
- 110: RPKI
- 111: Swiss Green Tech

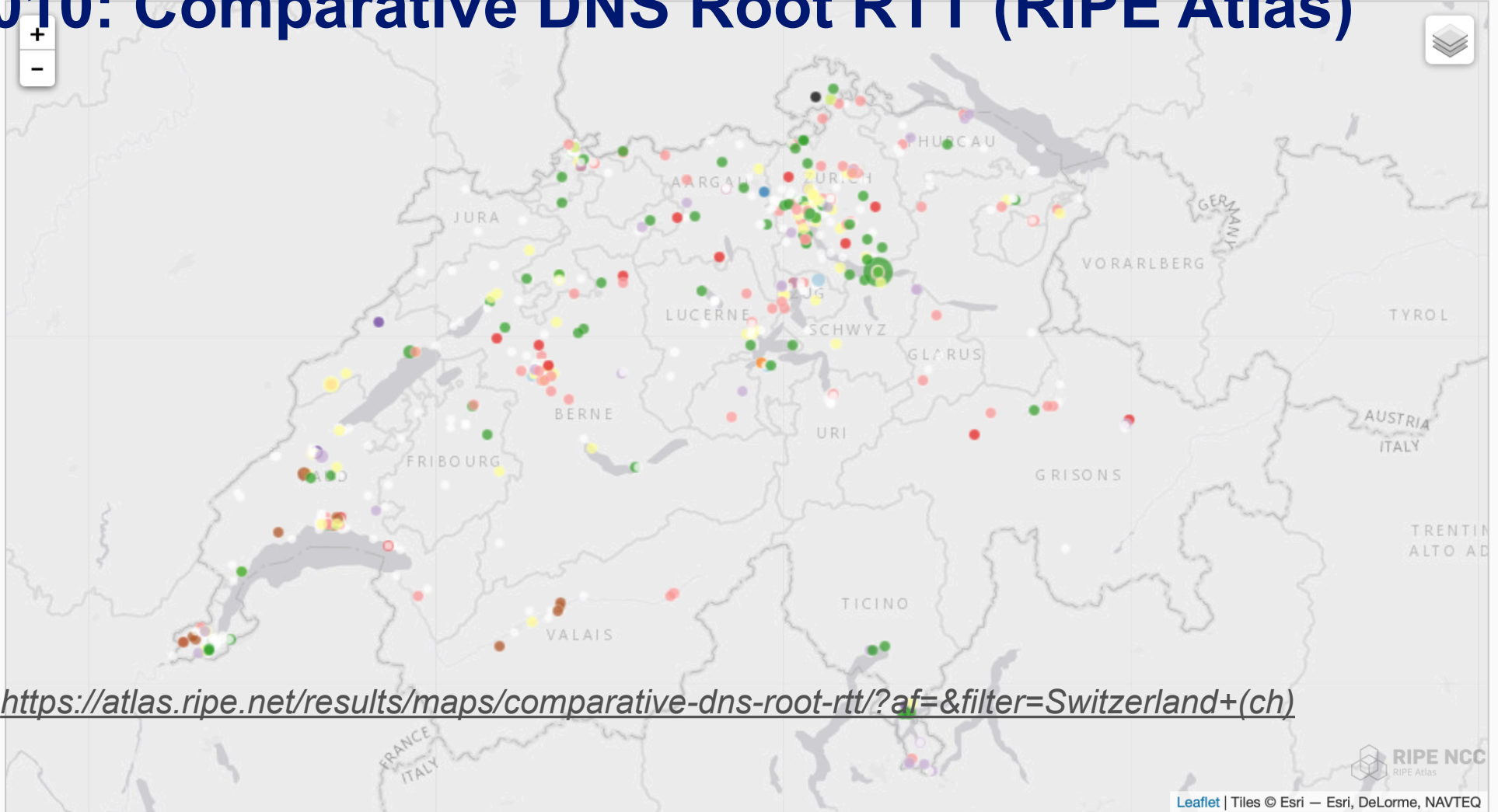


https://en.wikipedia.org/wiki/Thirty-six_Views_of_Mount_Fuji



This map was generated at 2023-06-13 07:32 UTC.

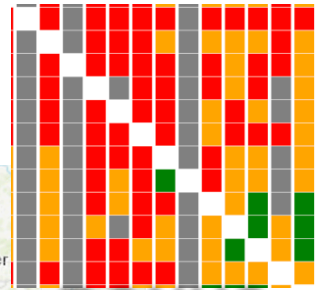
010: Comparative DNS Root RTT (RIPE Atlas)



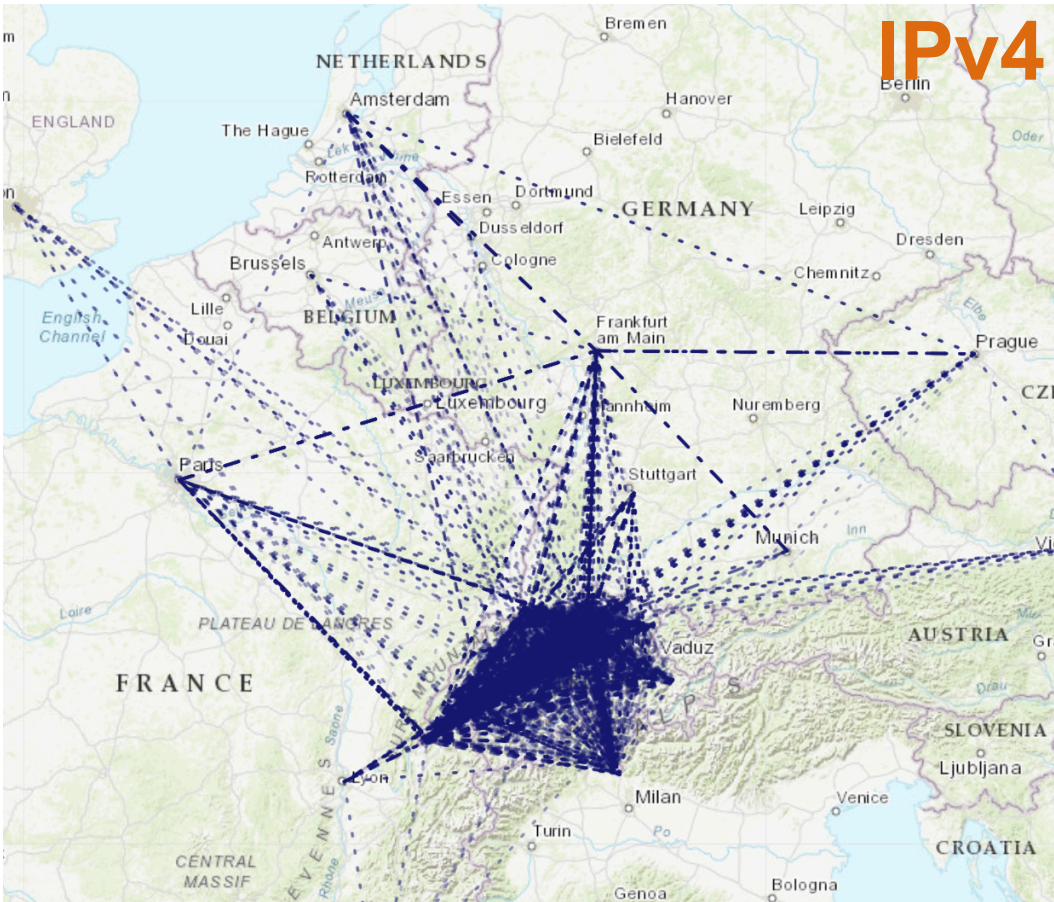
[https://atlas.ripe.net/results/maps/comparative-dns-root-rtt/?af=&filter=Switzerland+\(ch\)](https://atlas.ripe.net/results/maps/comparative-dns-root-rtt/?af=&filter=Switzerland+(ch))

A: 5 B: 1 C: 0 D: 99 E: 99 F: 17 G: 0 H: 1 I: 38 J: 3 K: 77 L: 14 M: 1 No Data: 404 Total: 355

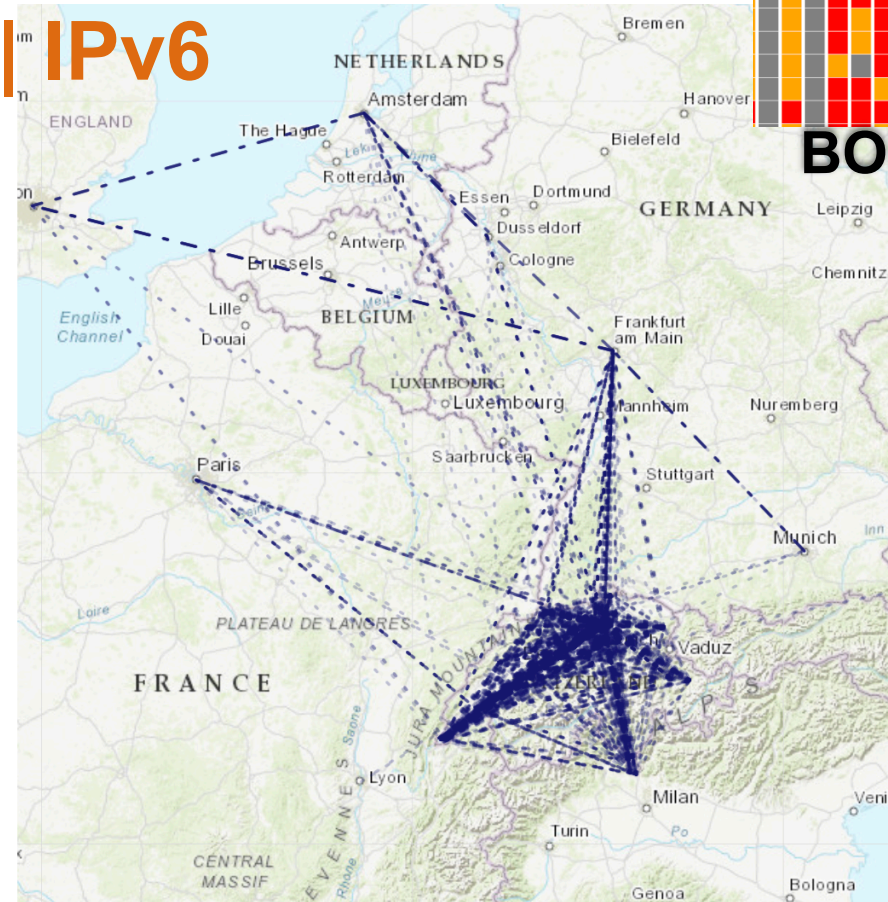
011: IXP-JEDI: Swiss Traceroute Paths



BONUS

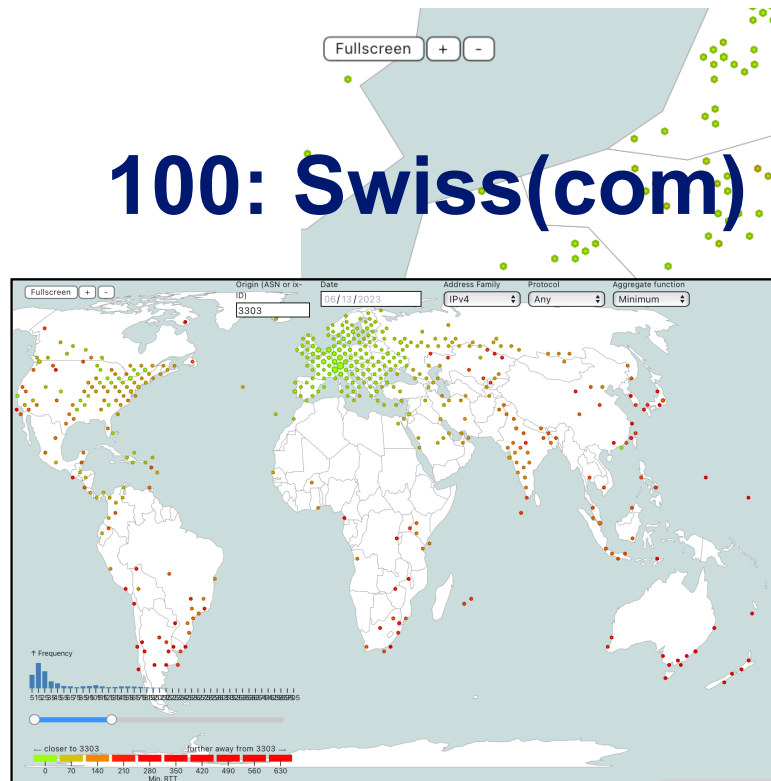


IPv4 | IPv6



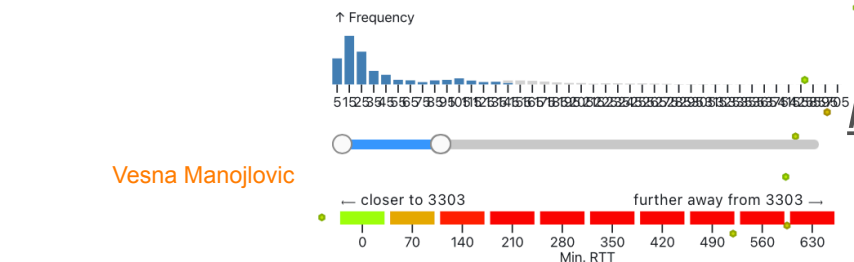
IXP-Country-Jedi : <https://jedi.ripe.net/>

100: Swiss(com) Latency Map



Playing with “Observable”!

<https://labs.ripe.net/author/emileaben/latency-into-your-network-as-seen-from-ripe-atlas/>

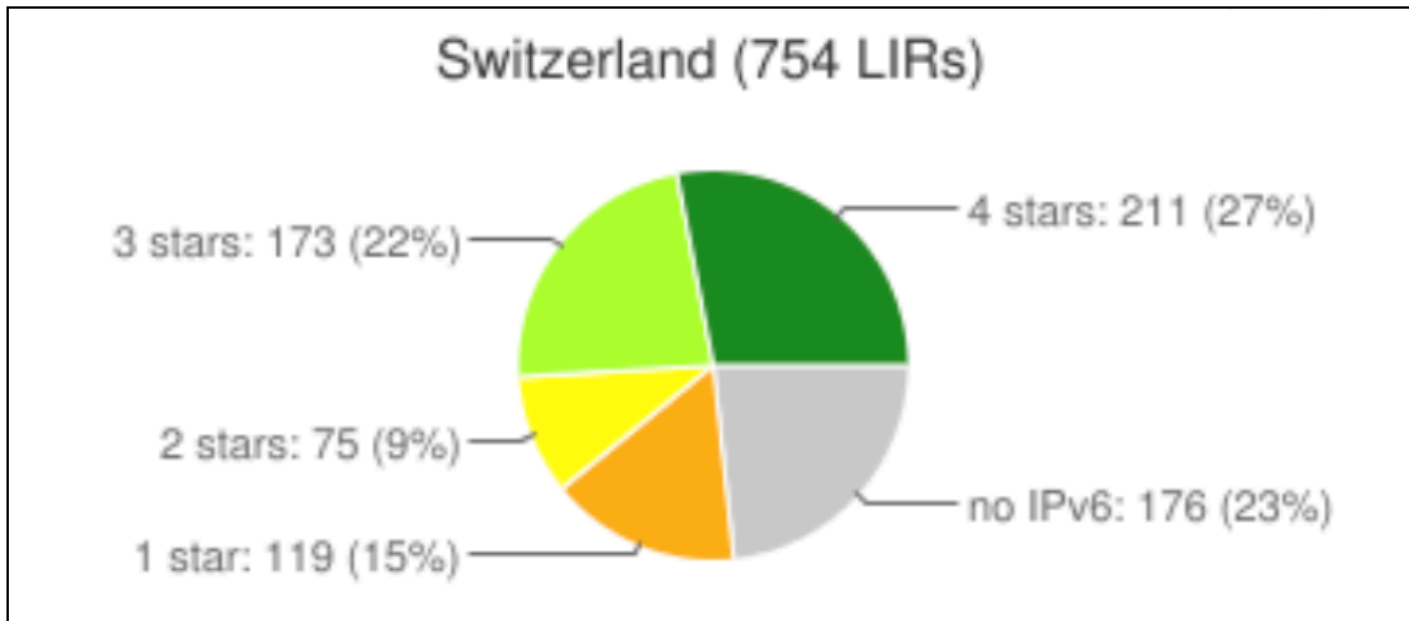


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<https://observablehq.com/@ripencc/atlas-latency-worldmap>

101: IPv6 RIPEness

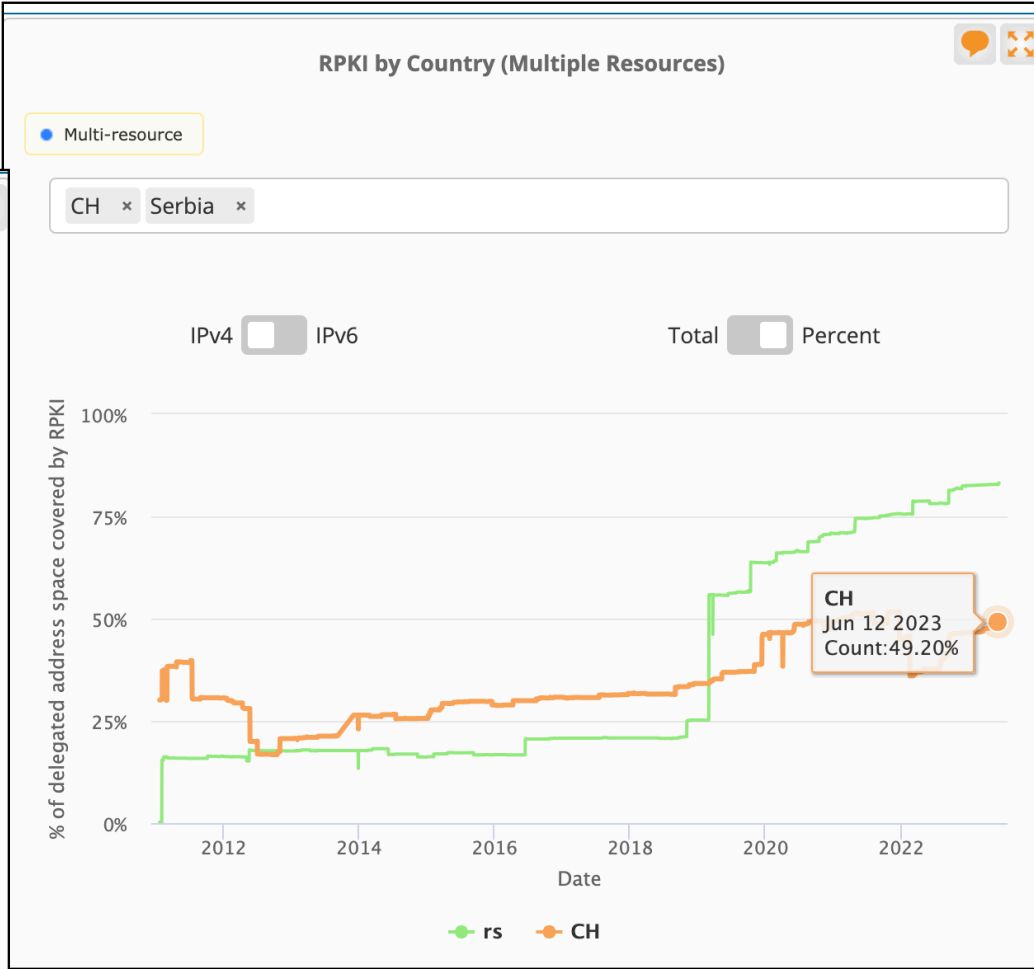
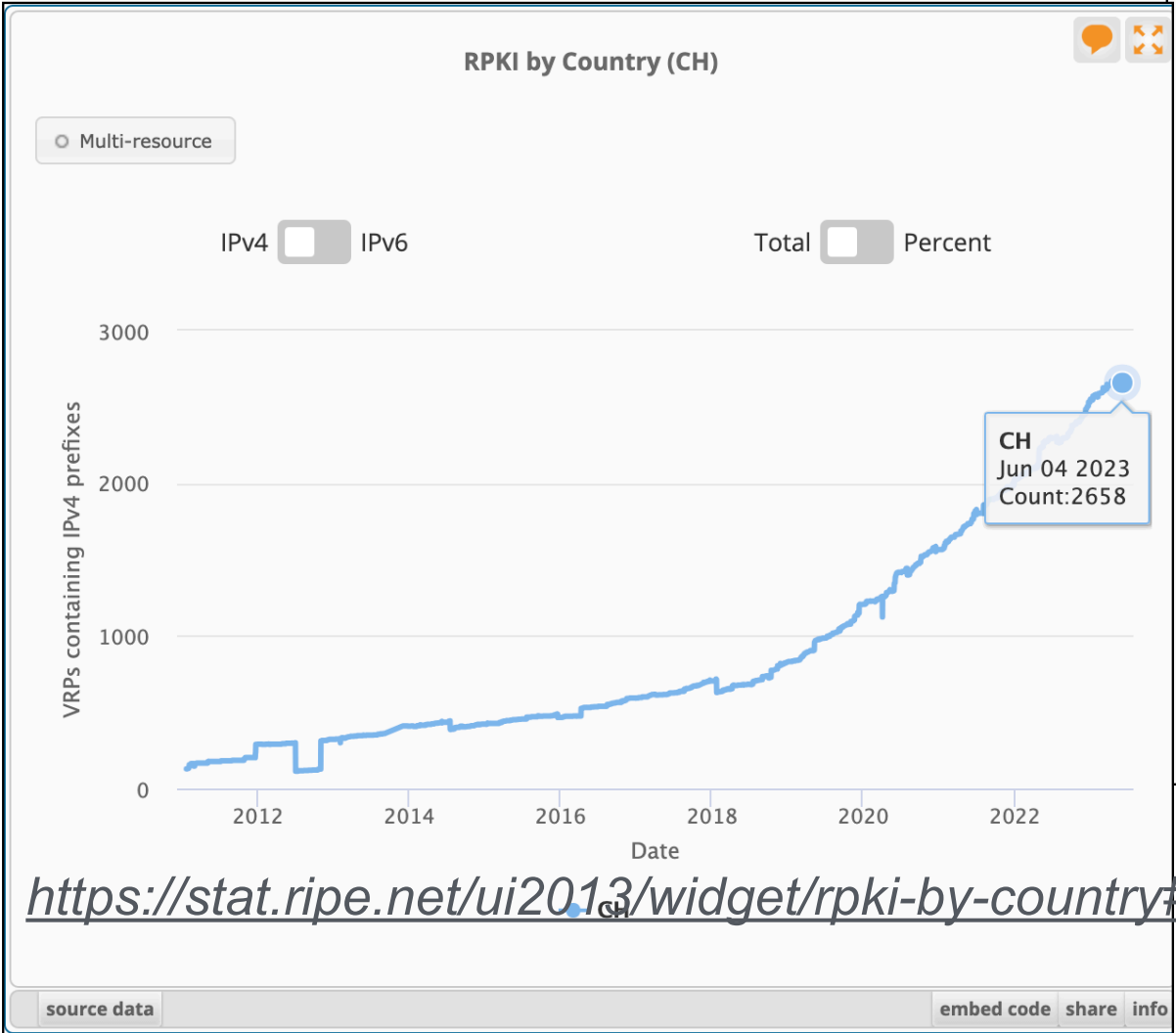
- “Stars” for LIRs who have:
 - IPv6 allocation, route object, reverse DNS, visible in RIS
 - Fifth star: actual traffic (access or content)
- <http://ipv6ripeness.ripe.net/>



Listing of LIRs qualifying for *all* five stars

Access (last 6 months)	Access (last month)	Content LIR
		100.0 % Adfinis AG
		81.8 % Arcade Solutions AG
		100.0 % Backbone Solutions AG
		79.2 % CERN - European Organization for Nuclear Research
		100.0 % CommunityRack.org Verein
50.0 %		Comp-Sys Informatik AG
		67.6 % Cyberlink AG
		84.9 % DATAWIRE AG
	50.0 %	Daedalean AG
		93.3 % Die Schweizerische Post AG
		73.8 % EDSI-Tech Sarl
	66.7 %	FSIT AG
50.0 %		GOLINE SA
		76.4 % Glattwerk AG
100.0 %	100.0 %	Google Switzerland GmbH
		56.0 % HiHo AG
		62.6 % Hostpoint AG
		100.0 % Ifolor AG
		100.0 % ImproWare AG
		74.7 % Infomaniak Network SA
		100.0 % Innotronik Ingenieurburo GmbH
50.0 %		Jeroen Massar
		100.0 % Kantonsschule Zug
		100.0 % MADLAB GmbH
		51.2 % MiroNet AG
		100.0 % Moebel-Pfister Ltd
		100.0 % Monsoon Networks AG
		100.0 % Open Networks Association
		53.2 % Openbusiness S.A.
		100.0 % Openfactory GmbH
		100.0 % Ops One AG
		87.2 % Pascal Mathis trading as SnapServ Mathis
100.0 %		PrivaSphere AG
98.0 %	85.7 %	100.0 % Securebit AG
66.7 %	66.7 %	Sportradar AG
50.0 %	50.0 %	100.0 % SwissNeutralNet
50.0 %	50.0 %	Swisslos Interkantonale Landeslotterie Genossenschaft
		68.9 % WWZ Telekom AG
		100.0 % Xovis AG
		100.0 % comparis.ch AG
		100.0 % connecta ag
		81.5 % cyon GmbH
50.0 %		e-Durable SA
100.0 %		100.0 % embeDD GmbH
50.0 %		100.0 % internezzo ag
100.0 %	100.0 %	netconnect AG
		100.0 % sasag Kabelkommunikation AG
		100.0 % ungleich glarus ag

110: Swiss RPKI



<https://stat.ripe.net/ui2013/widget/rpki-by-country#w.resource=CH>



111: Swiss Green Tech

- SCION <https://www.scion.org>
- Data centres account for 4% of Swiss electricity usage
 - <https://www.swissinfo.ch/eng/sci-tech/data-centres-account-for-4--of-swiss-electricity-usage/48188702>
- Swiss universities' Green Energy Coalition (June 2023)
 - <https://www.swissinfo.ch/eng/swiss-universities-launch-green-energy-coalition/48577382>
- 2000-Watt Society
 - <https://newrepublic.com/article/168750/switzerland-cop27-2000-watt-society>
- labs.ripe.net/sustainability

Average daily household water consumption
Litres of water per person per day
Legend: < 100, 100-150, 150-200, ≥ 200

Experts warn of drought this summer
Mar 7, 2023 • The Swiss Association of Mountain Regions is urging the federal government to take steps in preparation for a possible severe drought this summer.

Spring 2023 was 1.5 °C hotter than norm in Switzerland
May 29, 2023 • Meteorologists report that the average temperature this spring was 1.5 °C warmer than the climate norm.

Authorities warn of climate risks for Swiss forests
May 5, 2023 • Forests in Switzerland have been badly affected by rising temperatures due to climate change.



Questions

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 @becha@v.st

Take the
RIPE NCC
Survey 2023



www.ripe.net/survey

[#RIPENCCSurvey](https://twitter.com/RIPENCCSurvey)



BONUS

Most Wanted Networks for RIPE Atlas



- https://labs.ripe.net/author/petros_gigis/ripe-atlas-coverage-in-eyeball-networks/
- https://sg-pub.ripe.net/petros/population_coverage/country.html?name=CH
- e.g. TeleZug, CDNEXT, M247

RIPE Atlas Population Coverage Home **Countries Table** Map ▾ About

The table below provides an estimate of the number of Internet users for each country, as well as how much of this population is in networks that contain RIPE Atlas probes. Click on a country to see RIPE Atlas coverage across networks in that country.

Select Date: 19/06/2023

Showing data for 19/06/2023

Search:

Country Code	Internet Users	IPv4 Public Probes %	IPv4 Public and Private Probes %	IPv6 Public Probes %	IPv6 Public and Private Probes %
CH	7302714	94.66	94.66	90.74	90.74



NOGs News

- **Newest NOGs:** <http://labs.ripe.net/nogs/>
 - <https://benog.be/>
 - <https://nog.ba/>
 - <https://nog.hr/>
 - <https://hunog.hu/> (11-12. October)
- **ASNs discussion:**
 - <https://www.ripe.net/ripe/mail/archives/address-policy-wg/2023-June/013757.html>
- forum.ripe.net

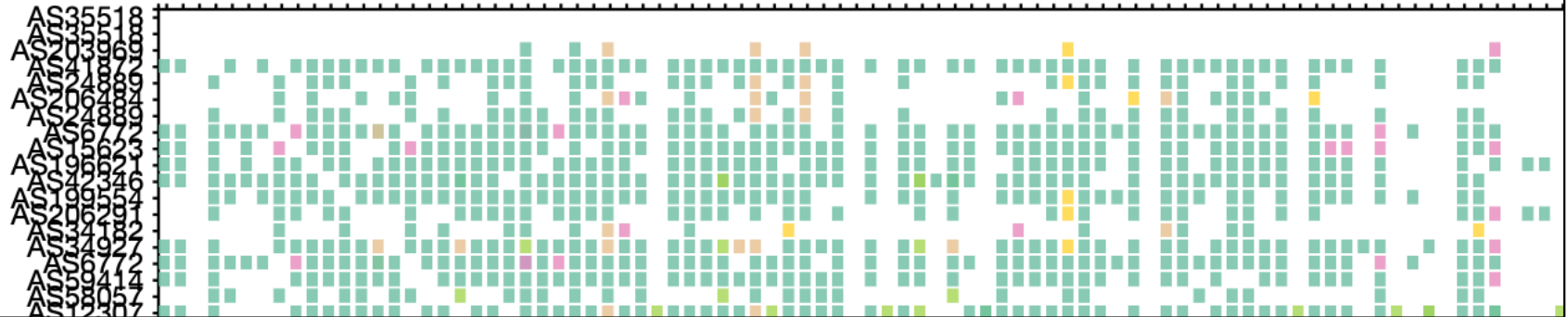
- SwissIX-Peering
- RomandIX-Romandix Lan
- Free-IX-Free IX
- Equinix Zurich-Equinix IX - ZH Metro
- Community-IX.ch-Peering
- CIXP
- CHIX-CH-Main

Destination (North to South)

```

      A A  A AA      AA      A A      AA      A
AASAASA ASASSAA AAASSAAAAASAASAAAAASSAAAAASA AAAAA A AAAAA  AAAAA AA SSAAS S  AAA AA
SS2SS2SAS1S12SSASSS12SSSSS2SS2SSSSS32SSSS2SASSSSSASASSSSSAASSSSSASSA22SSS1 2AAASSSASSA
3304202S1949033S551913561205213635591315116S33521S5S24216SS13462S55S001559A0SSS111S11S
55314646562964469828211350581011419624576228197828781212019548088118655119S19365556336
55988487663521974032847466620081278939575833801830370723080789088338077882510387567008
11678887224598271504628721784397872822770670941707754635134907152992849772554031703333
88929492316412724779546332800684864237679512808575080020664601691551776335954306600000

```



<https://jedi.ripe.net/latest/CH/ixplans/index.html>

RIPE Atlas, RIS & Other Tools & Services



- RIPE Atlas a global network of thousands of probes that actively measure Internet connectivity. Anyone can access this data via Internet traffic maps, streaming data visualisations, and an API. RIPE Atlas users can also perform customised measurements to gain valuable information about their own networks. <https://atlas.ripe.net>
- The Routing Information Service (RIS) has been collecting and storing Internet routing data from locations around the globe since 2001.
 - <https://www.ripe.net/ris>
- Other RIPE NCC Tools and Services
 - RIPEstat: <https://stat.ripe.net/>
 - RIPE IPmap: <https://ipmap.ripe.net/>
 - K-root: <https://www.ripe.net/analyse/dns/k-root>



Survey 2023



15 minutes
can make a
big difference

Take the survey for a chance to win
a trip to a RIPE Meeting and other
tech gadgets.



www.ripe.net/survey

[#RIPENCCSurvey](https://twitter.com/RIPENCCSurvey)

