

# CyberGreen BETA-3

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# IT Security vs. scientific thought

- IT Security flaws today:
  - Not enough empirical data
  - Not enough transparency (methodology + open data = repeatability)
  - Not enough (agreed upon) metrics
- What you can't measure, you can't improve

# Science answers a question

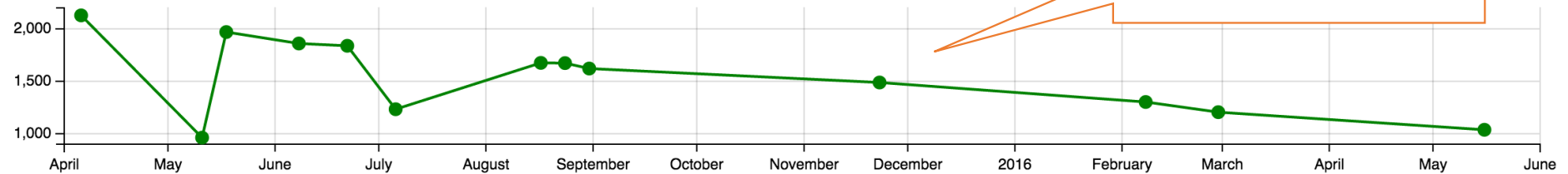
- **How big of a risk do we pose to others?**

- By country
- By ASN
- By protocol
  - Open recursive DNS
  - Open NTP
  - Open SSDP
  - Open SNMP

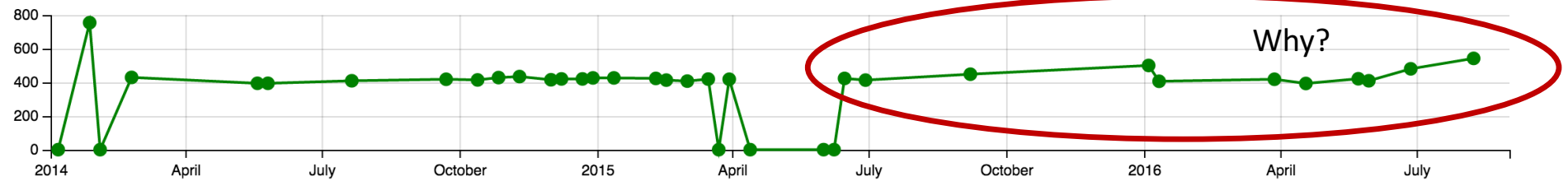
Country	Open NTP	🔒 Open DNS	Open SSDP	Open SNMP	Mirai
United States	100	100	94	94	87
China	92	98	100	86	100
Russian Federation	92	89	98	85	91
Japan	89	85	87	81	60
Brazil	89	92	91	100	100
South Korea	89	88	92	89	76
Germany	87	87	74	77	65
United Kingdom	85	85	72	76	80
India	85	95	87	90	96
France	84	86	72	84	76
Mexico	83	86	78	72	90
Australia	81	80	74	72	87

# ASN: singapore 9506

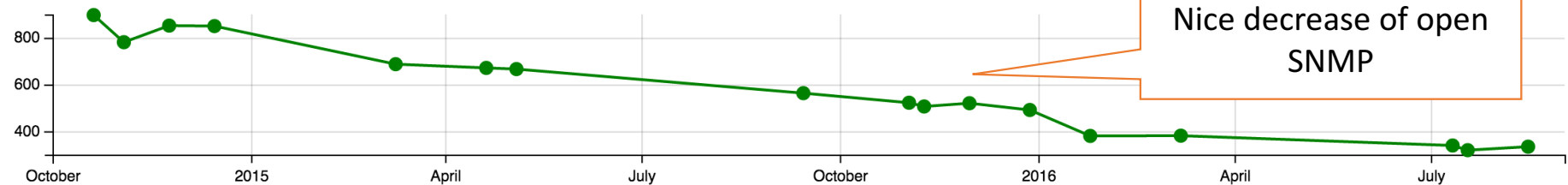
Open DNS



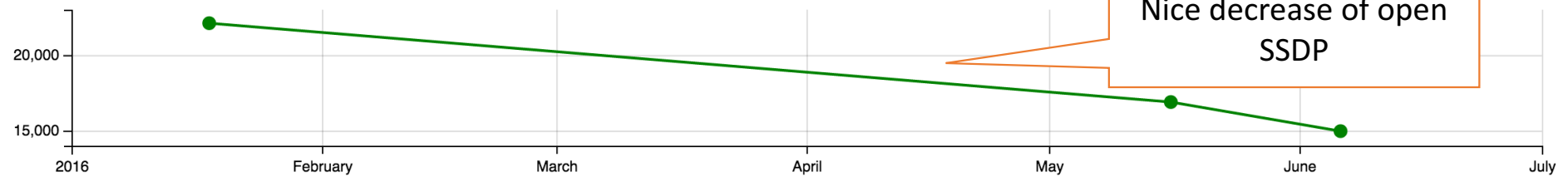
Open NTP



Open SNMP



Open SSDP



# Global DDOS potential



# How to join?

- Contact:
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  - Eireann Leverett <[eireann.leverett@cantab.net](mailto:eireann.leverett@cantab.net)>
- [www.cybergreen.net](http://www.cybergreen.net)
- We need: data vis, data science folks, users of our platform
- Source Code: <https://github.com/cybergreen-net/> (open source)
- ETA for release: 1<sup>st</sup> of April 2017