

IPv6 Fanatics

31 October 2025

IMC25 Hackathon

Where does IPv6
performance stand
compared to IPv4?

Project Roadmap

- IPv6 Adoption per Country
- IPv4 vs IPv6 Differences in Performance
 - Latency
 - Download/Upload Speeds
 - Loss Rate

Datasets

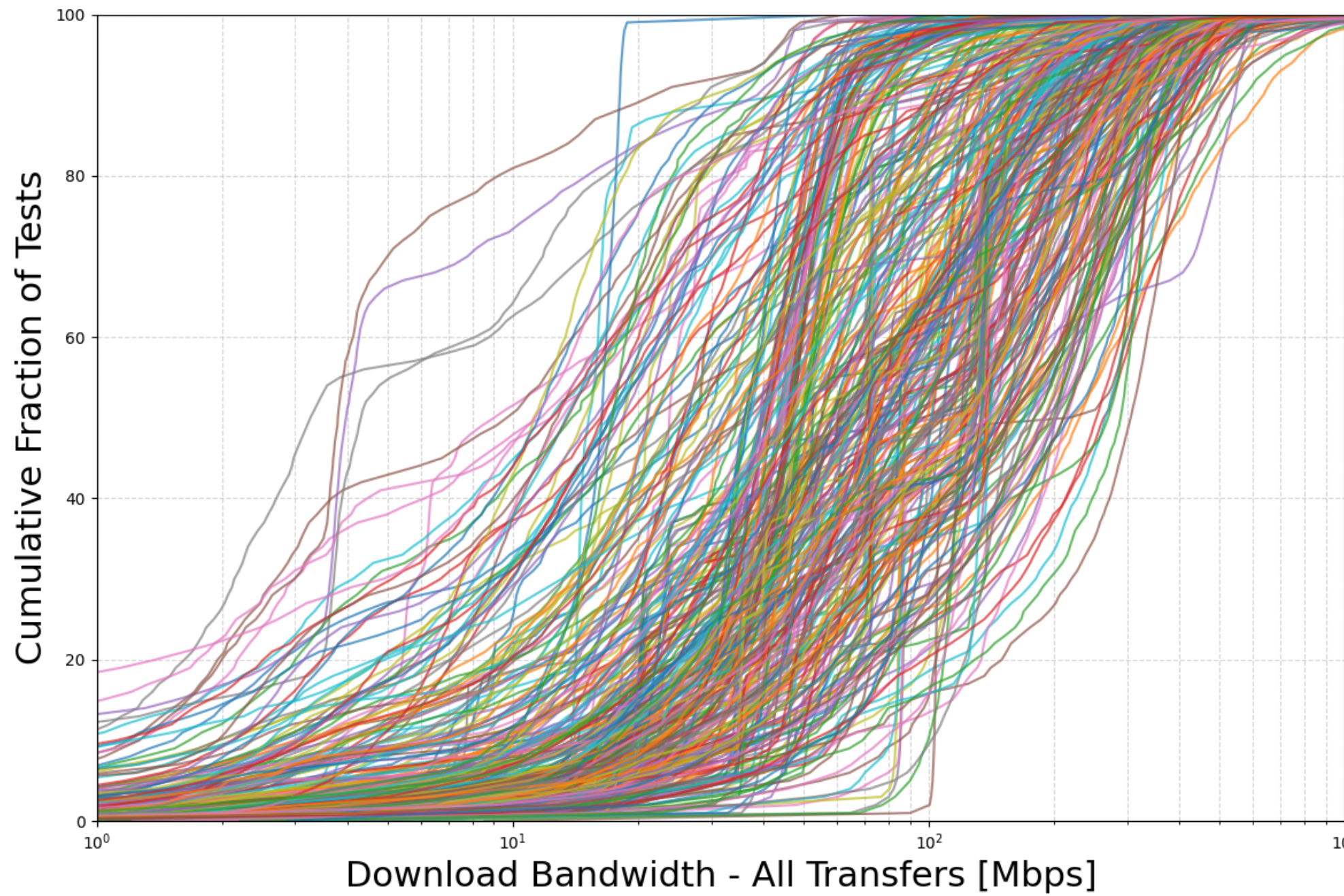
- M-lab data snapshots from [2025/10/01 - 2025/10/07]
- Network Diagnosis Tool (NDT):
 - Client grouped by (AS, Geolocation): RTT, Loss Rates, Throughput Mbps
- Cloudflare Speedtest Data:
 - Average Latency, Download/Upload bps

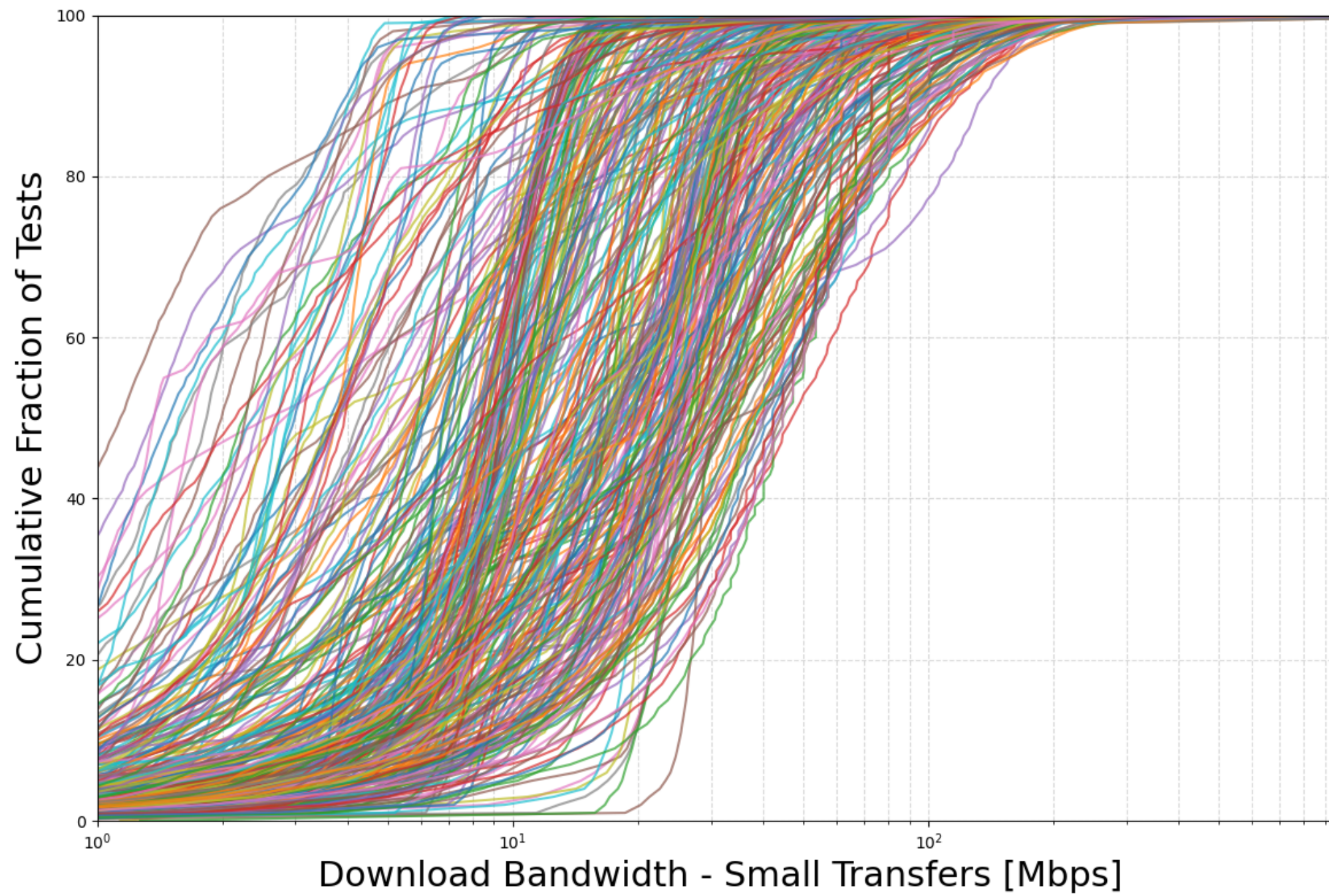
Assumptions

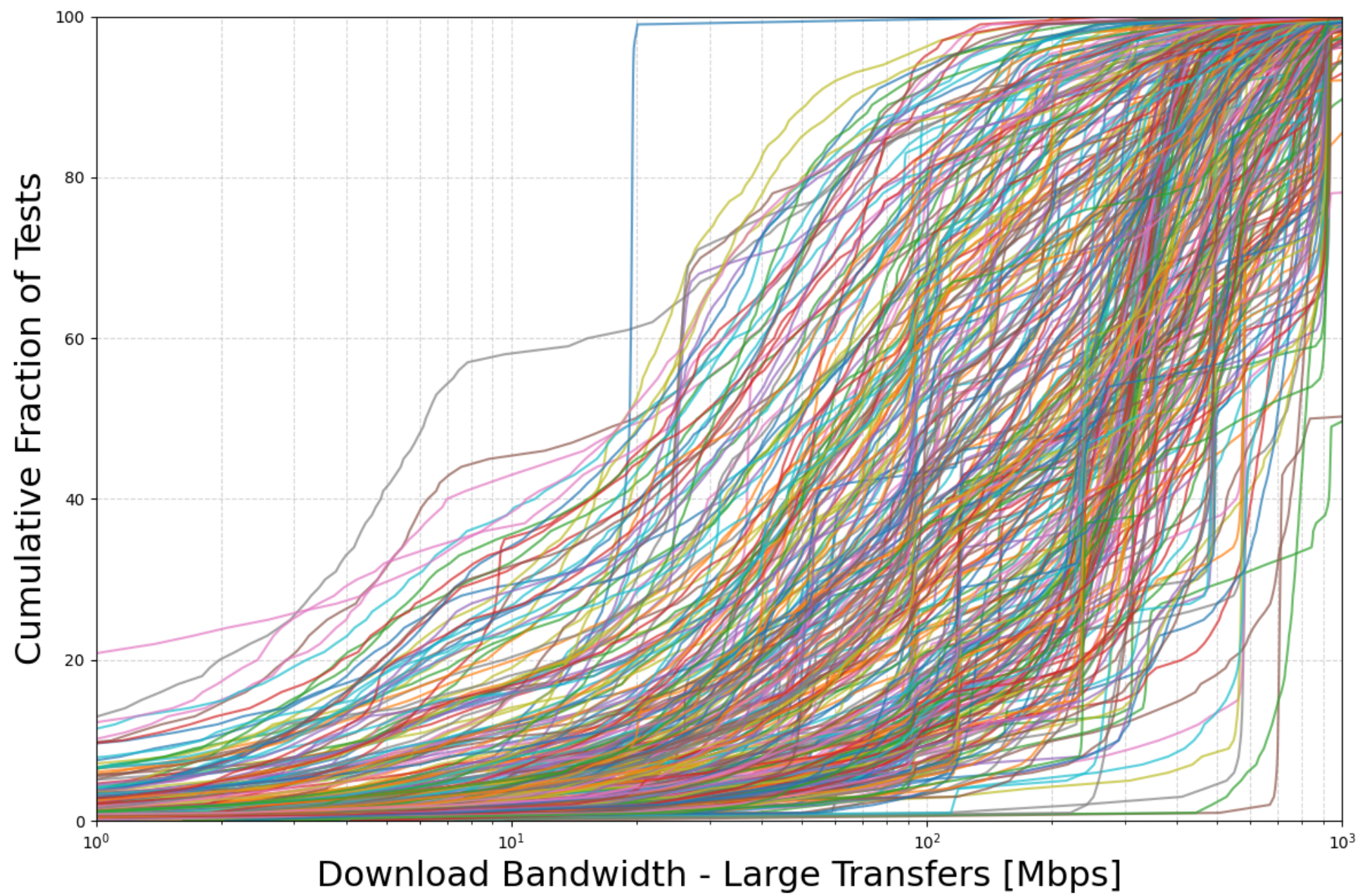
- Speed-tests are run with IPv4 and IPv6 using happy eyeballs so IPv6 should be favored from IPv4 unless performance much worse (i.e., time-out).

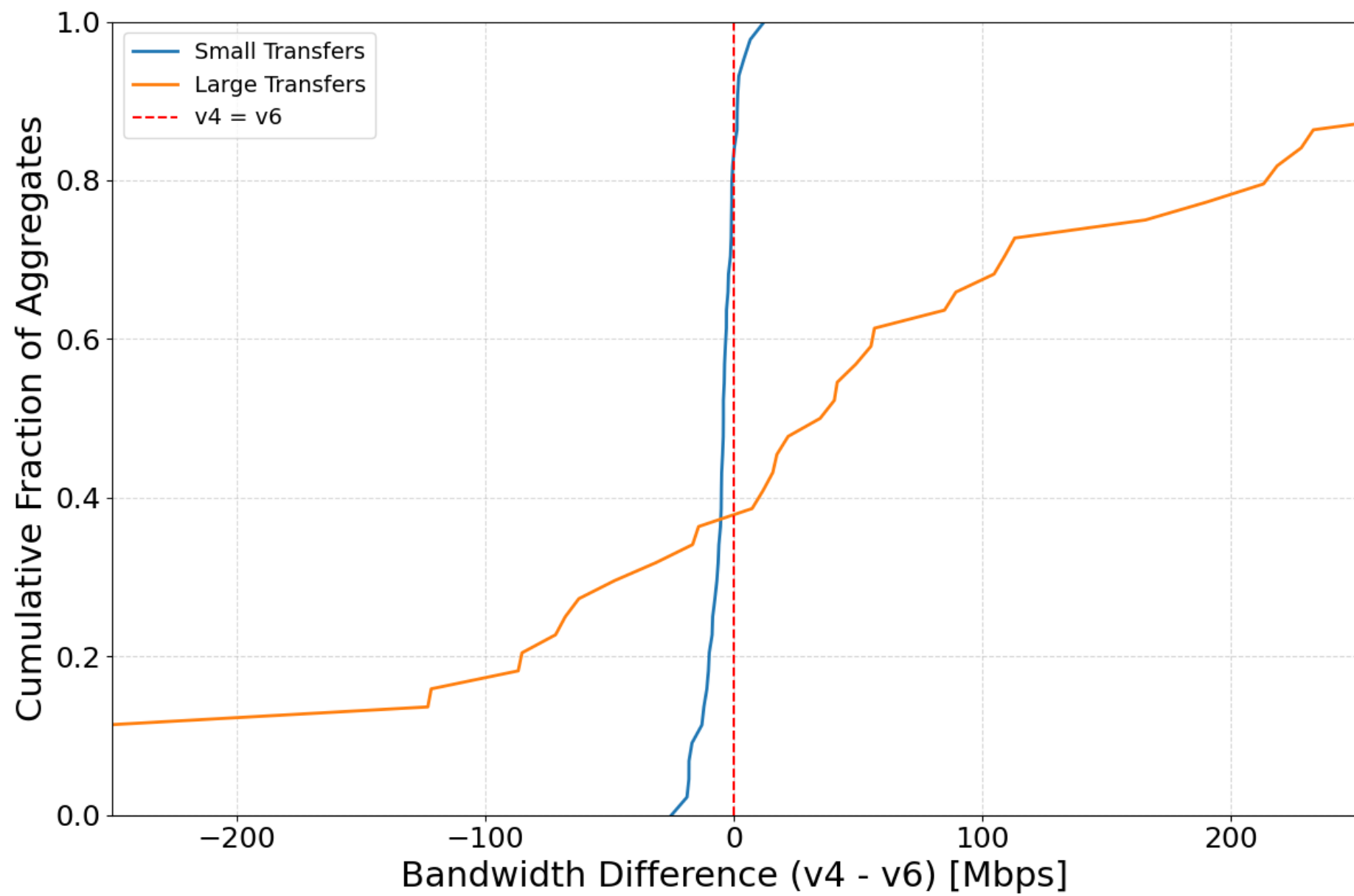
IPv6 Activity in the Wild

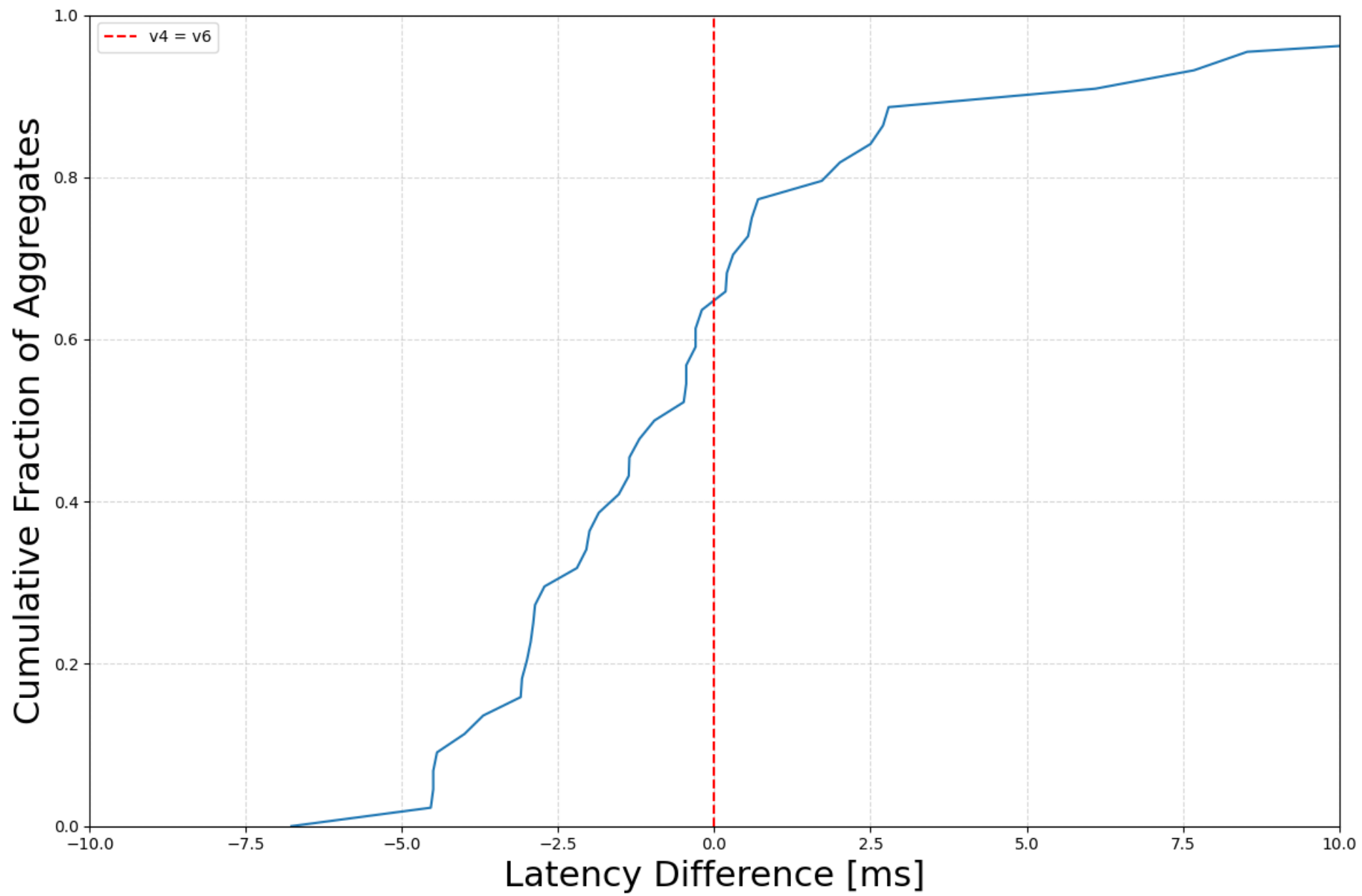
Cloudflare





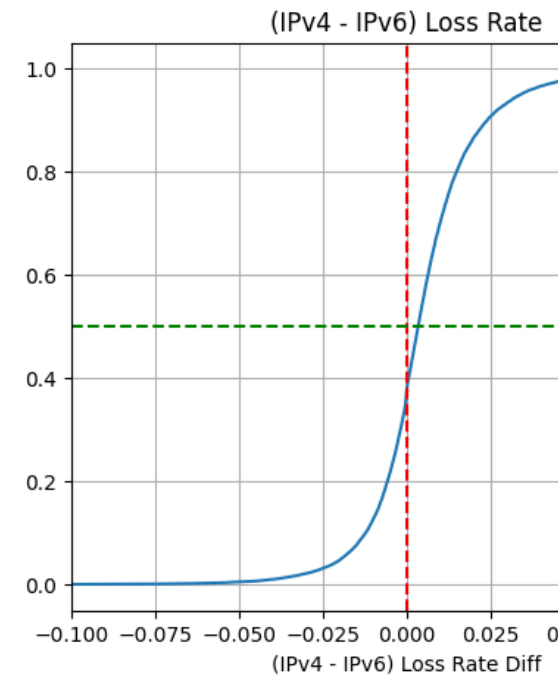
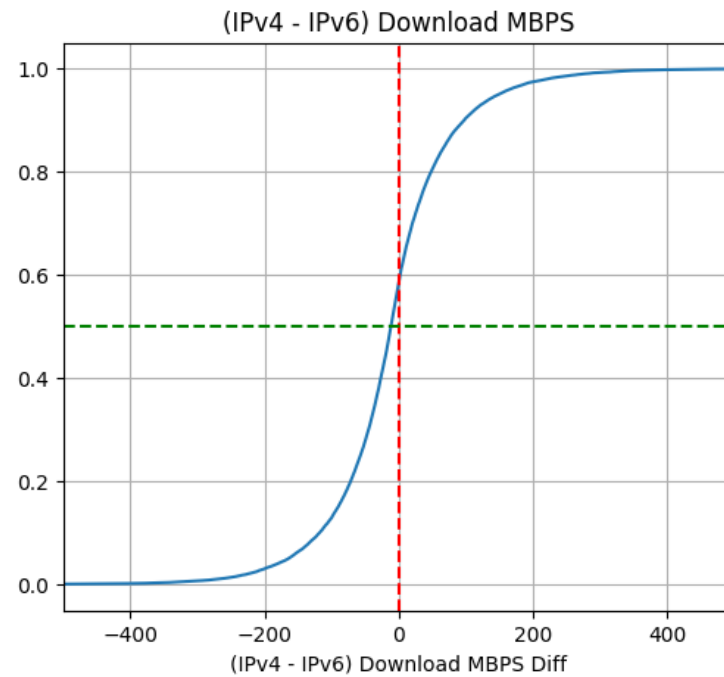
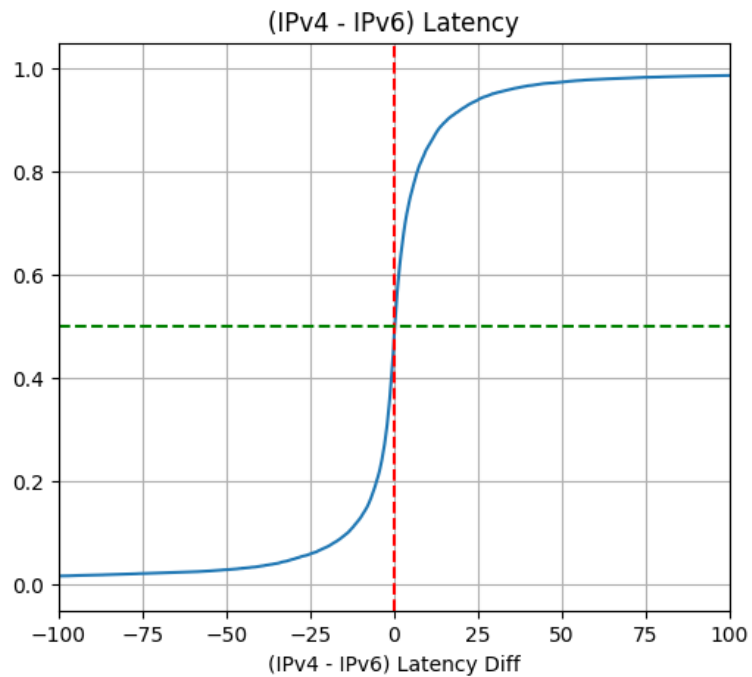






M-Lab

IPv4 vs IPv6 Performance



Next steps