Bond
Internet Systems

RESOLVER TRAFFIC: WHAT DOES IT LOOK LIKE?

João Damas

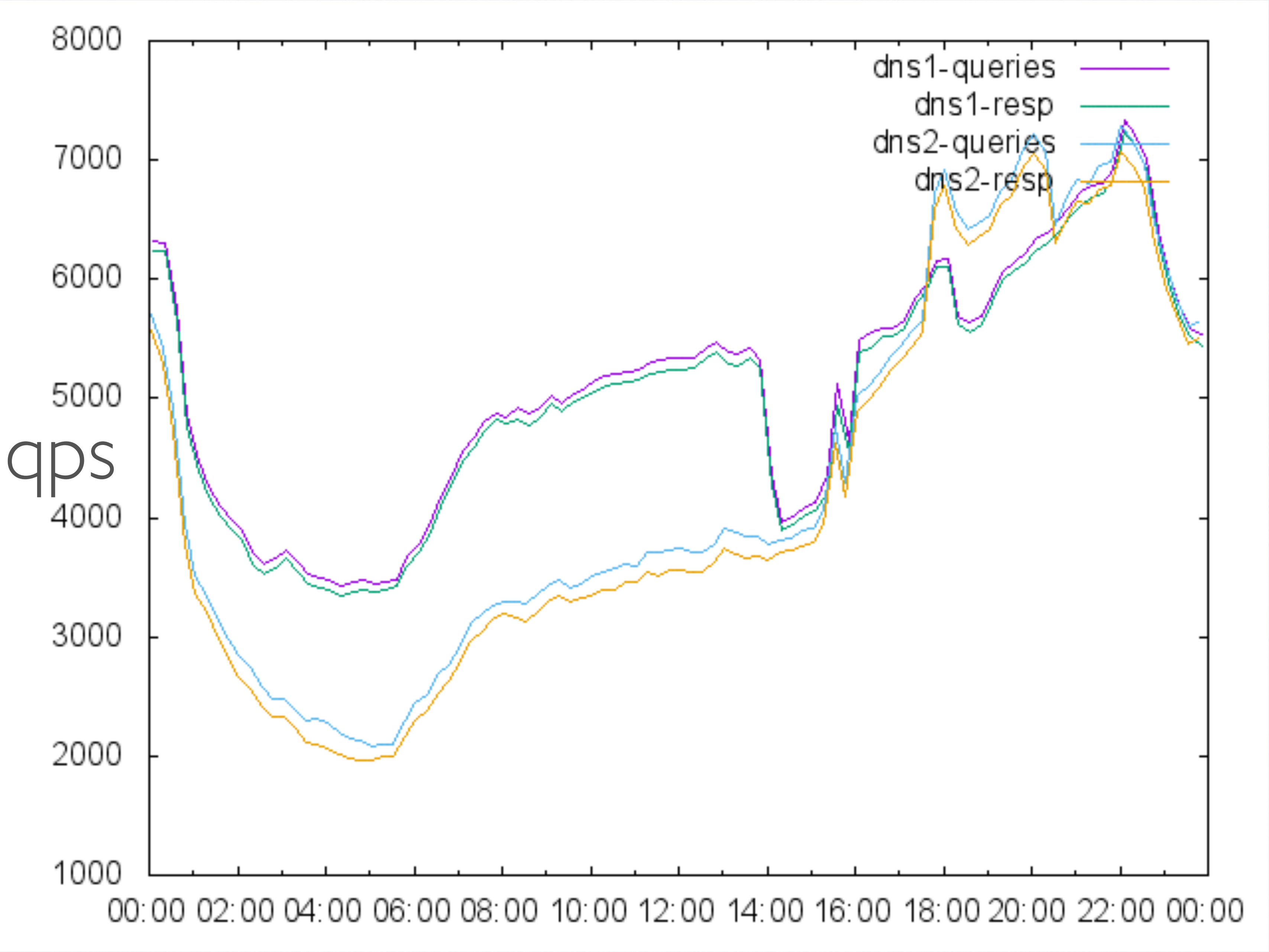
Background

- We look a lot at traffic between resolvers and authoritative servers
- and very little at traffic between recursive resolvers and they clients.
- Is it still the Internet? or maybe something similar to the Internet?

Where is the data?

- Hard to get a hold of this sort of traffic
- Concerns about PII, exposing customer issues, etc

The sample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dns2-queries
dns2-resp

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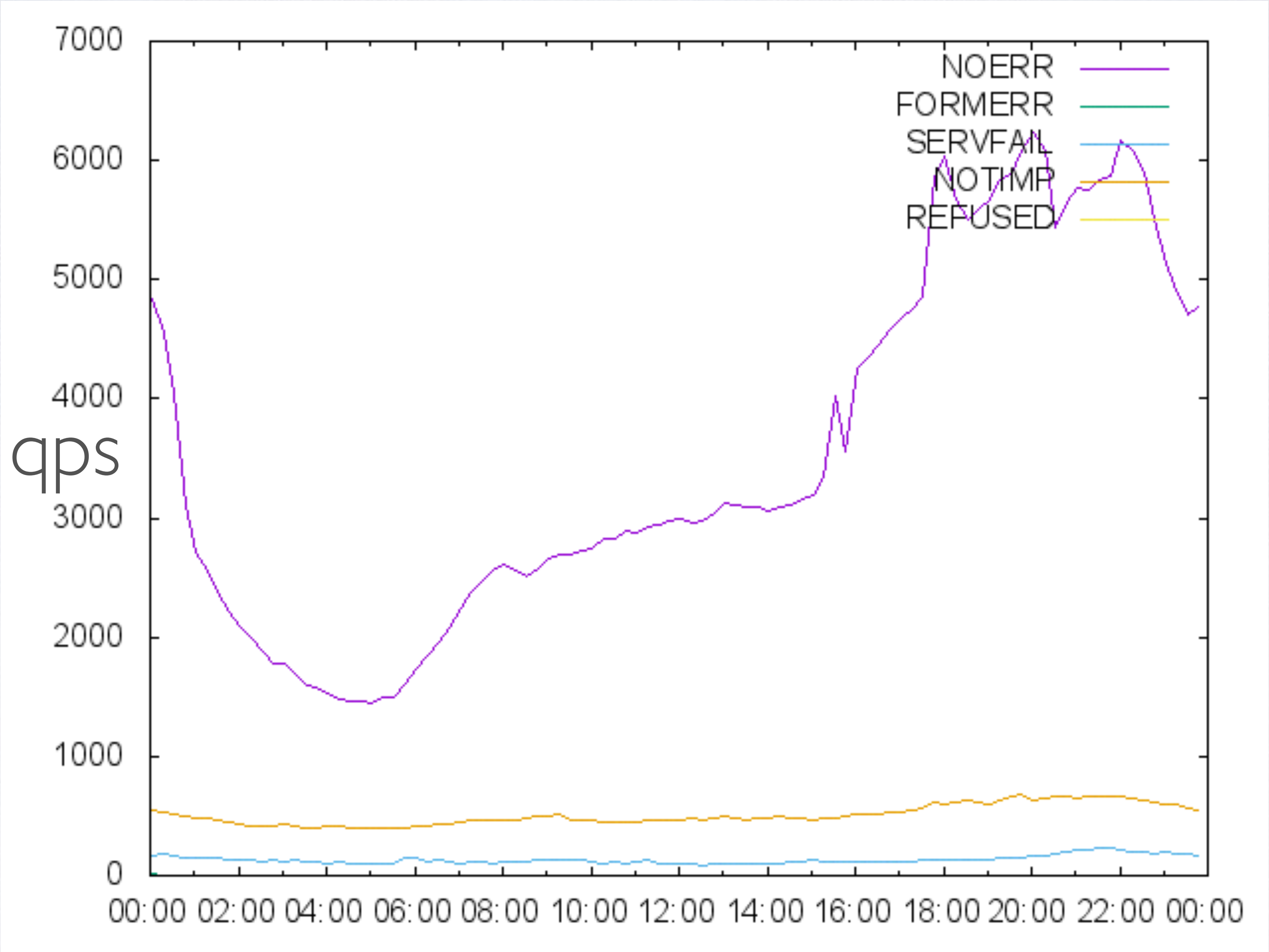
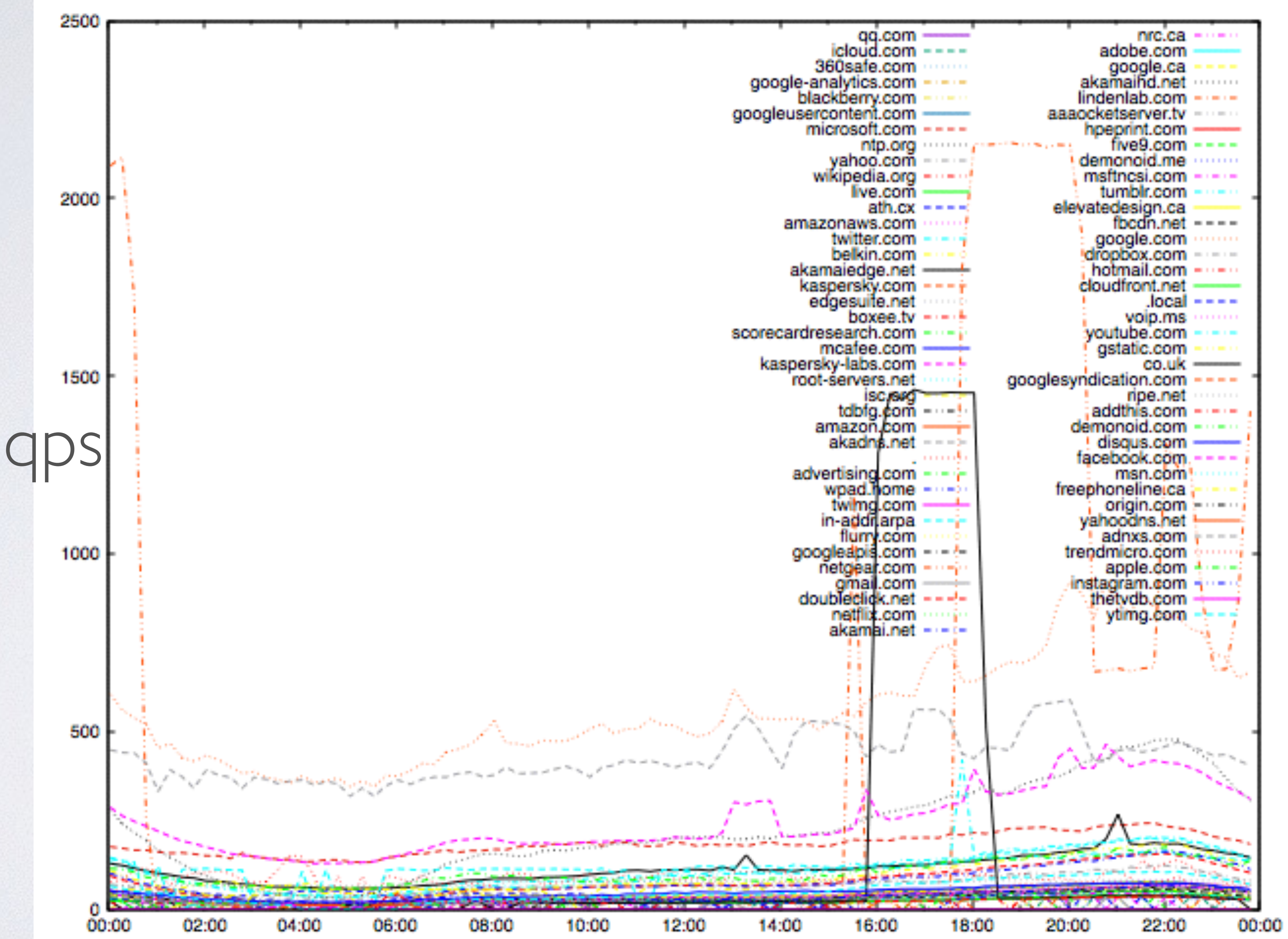
RCODE distribution



Domains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ytimg.com

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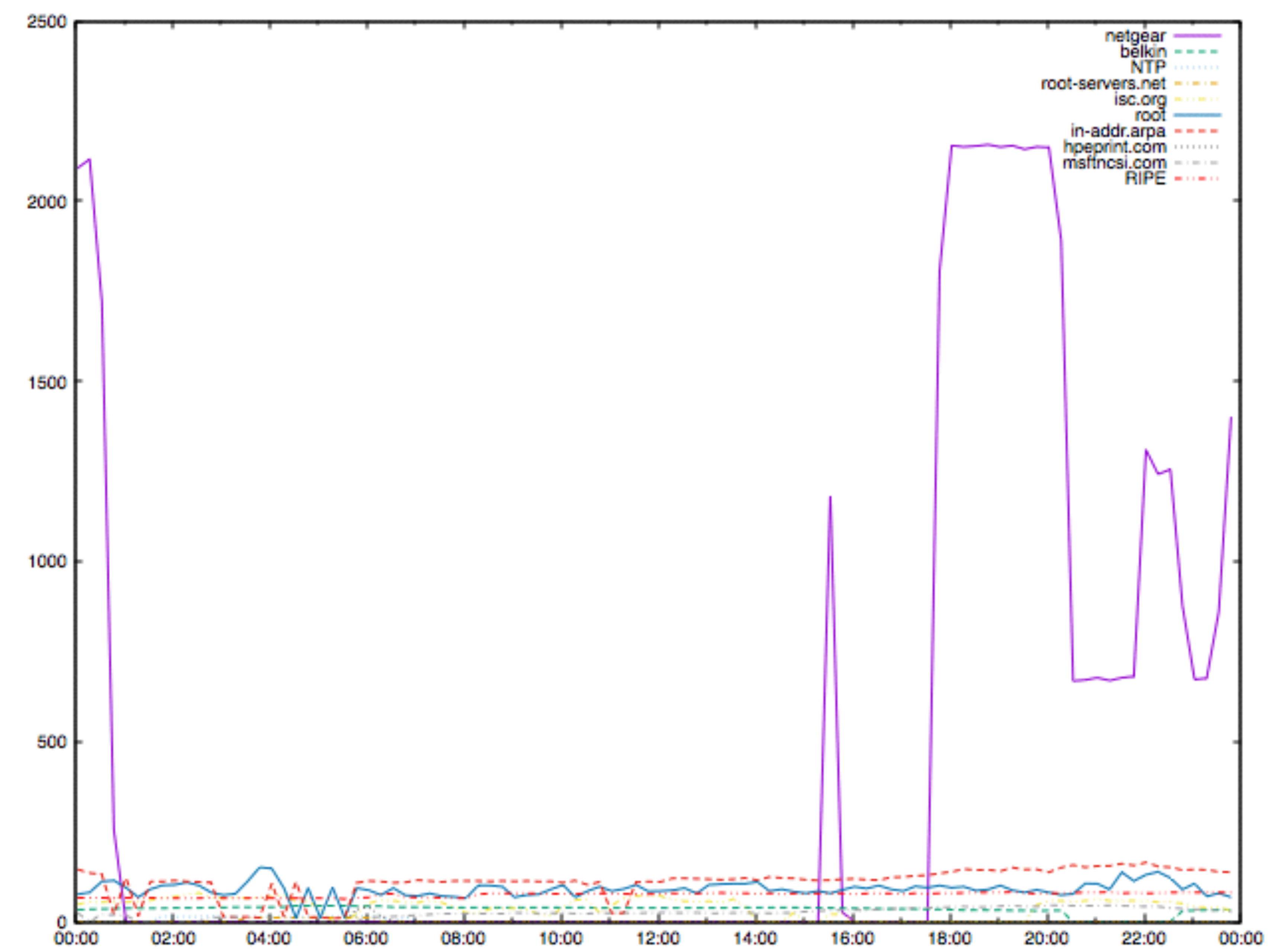
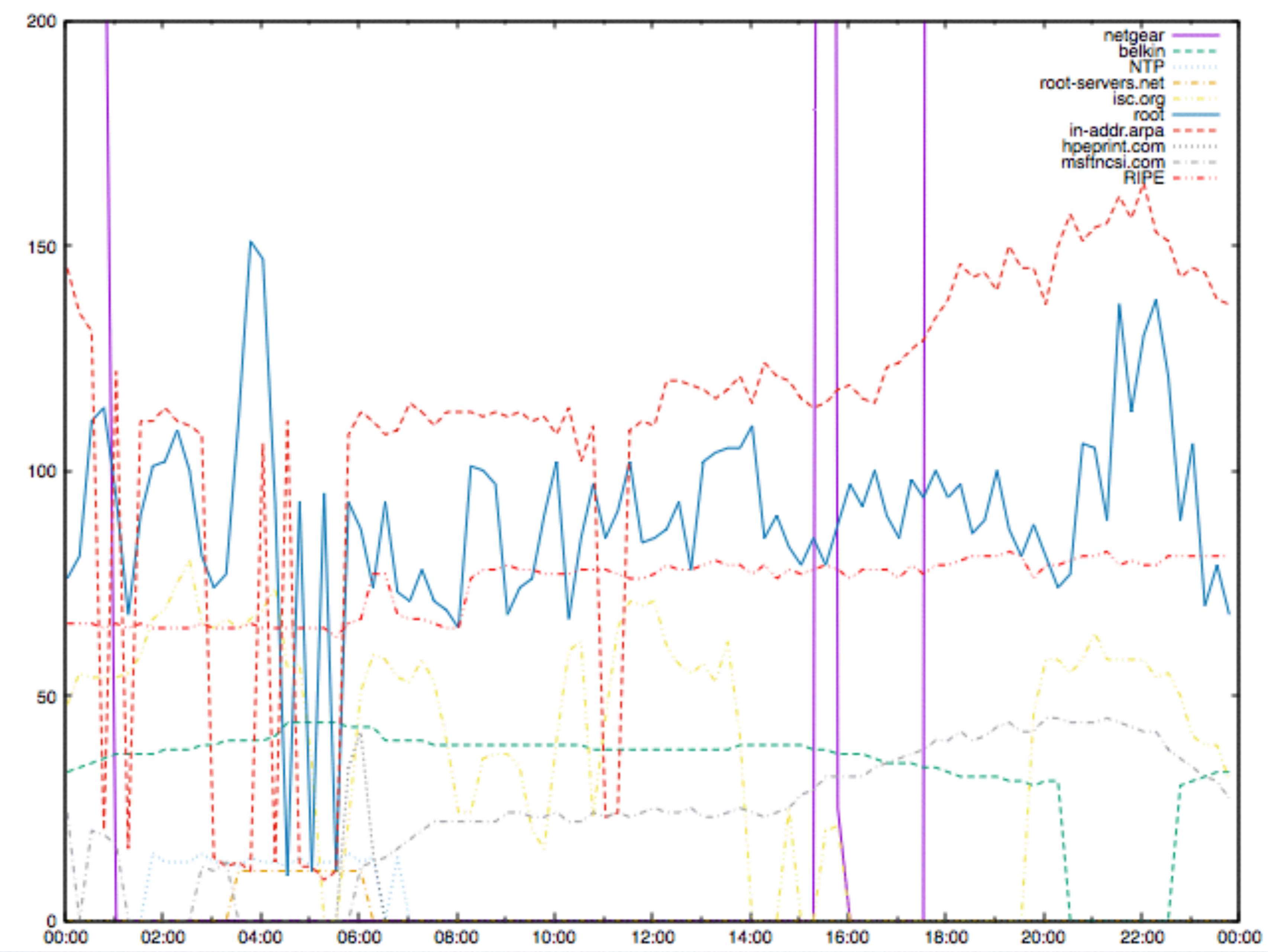
Infrastructure domains



Infrastructure domains zoom



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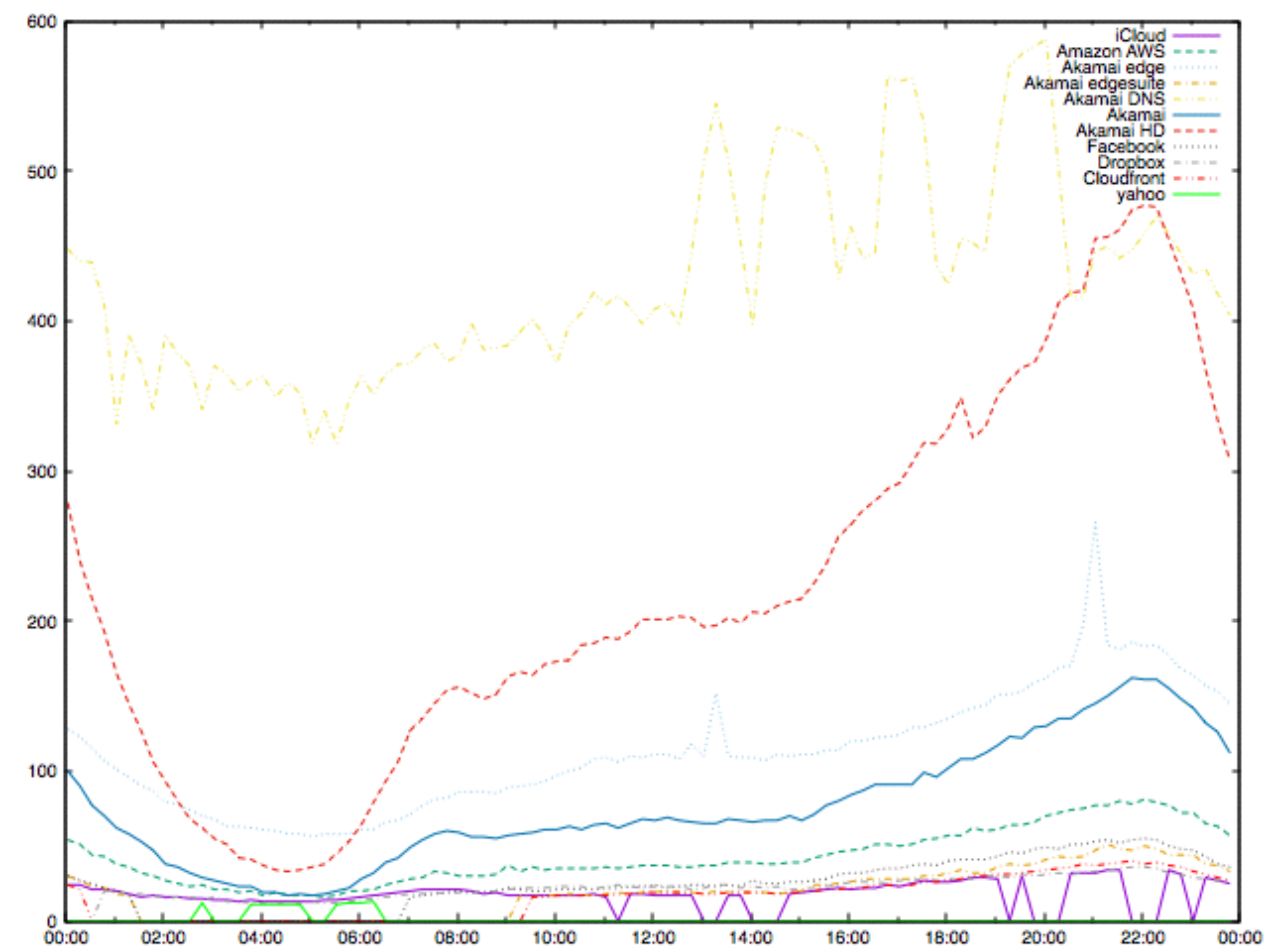
CDNs



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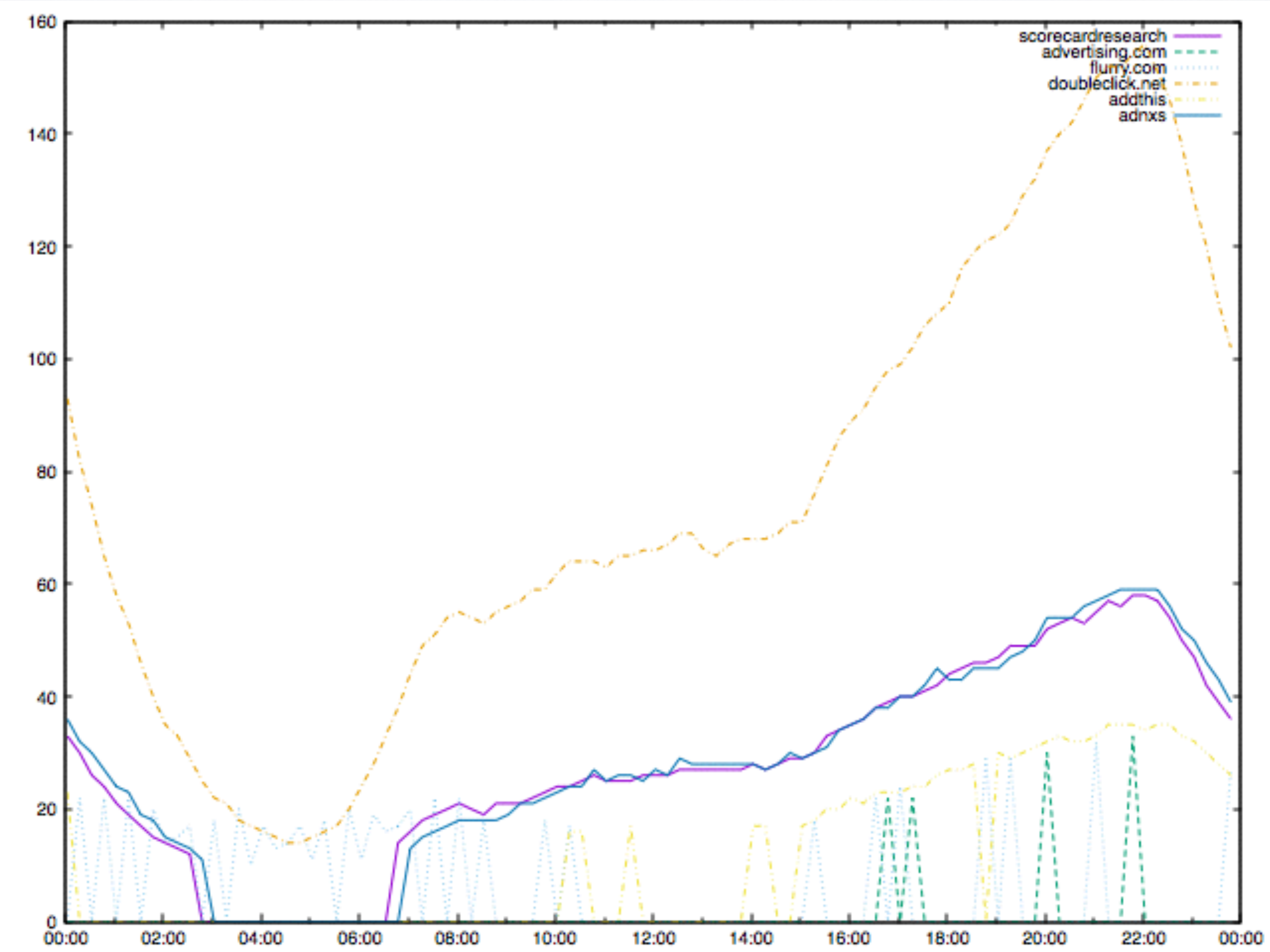
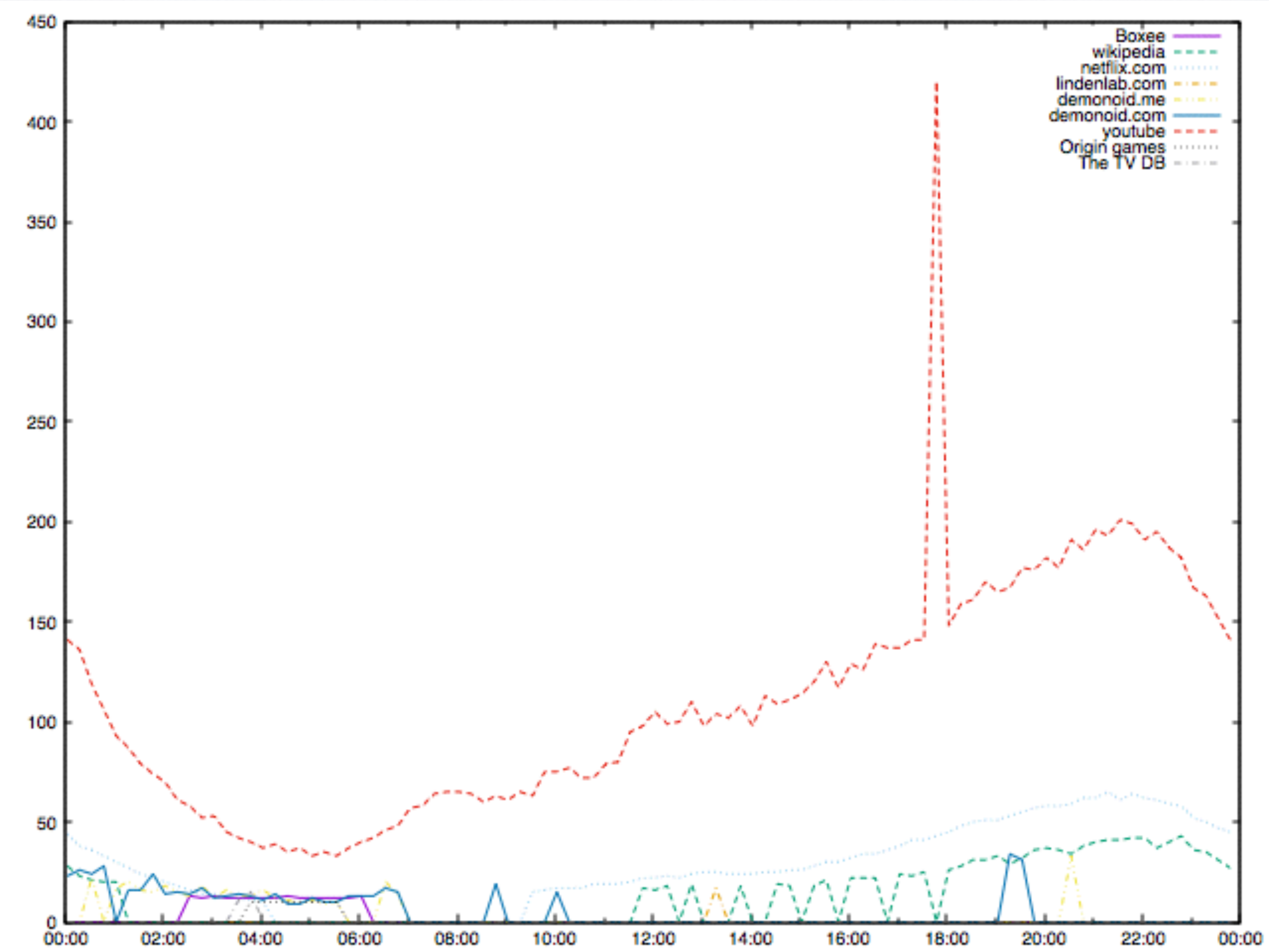
ADs



Entertainment sites



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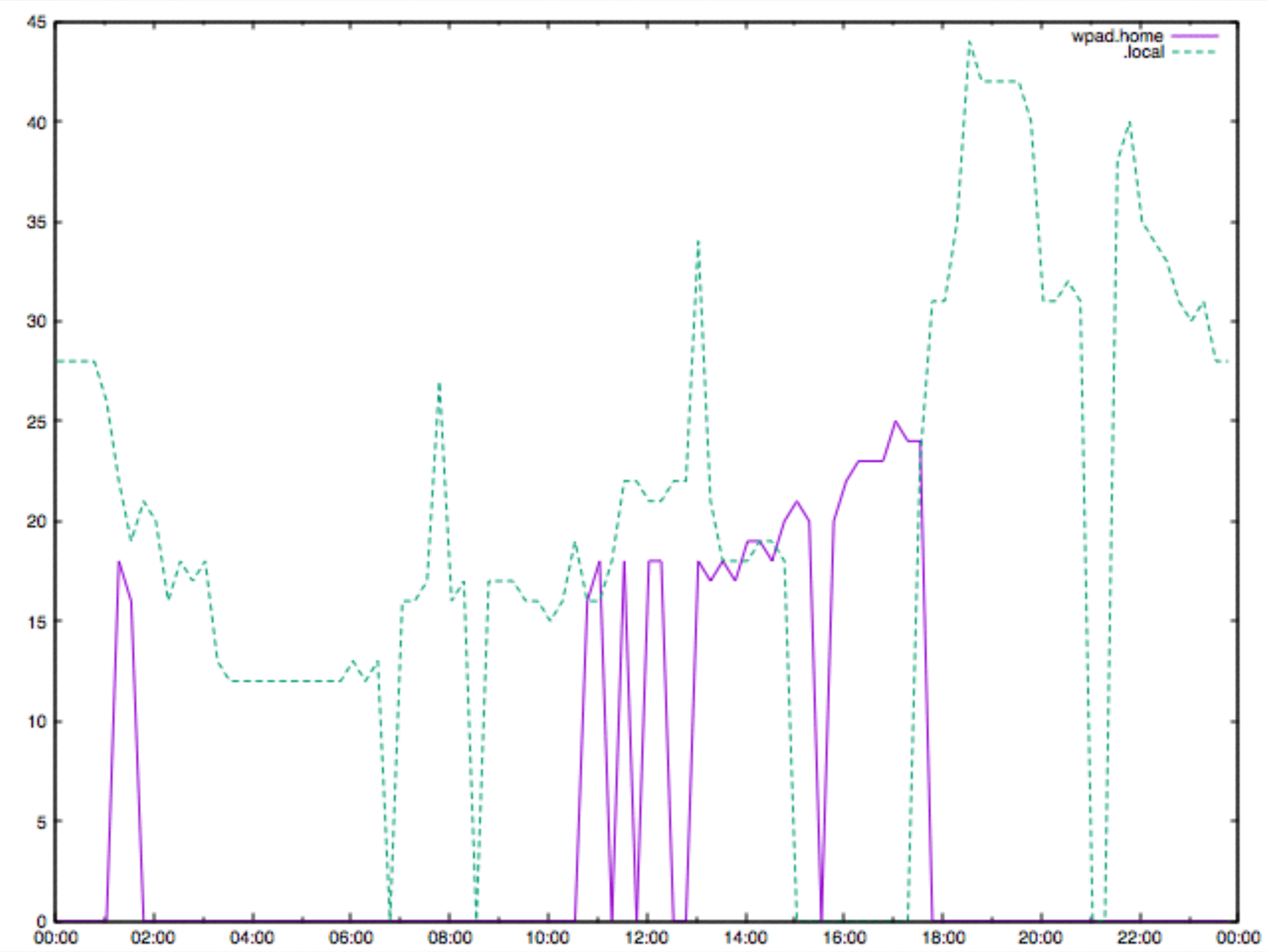
wtf sites



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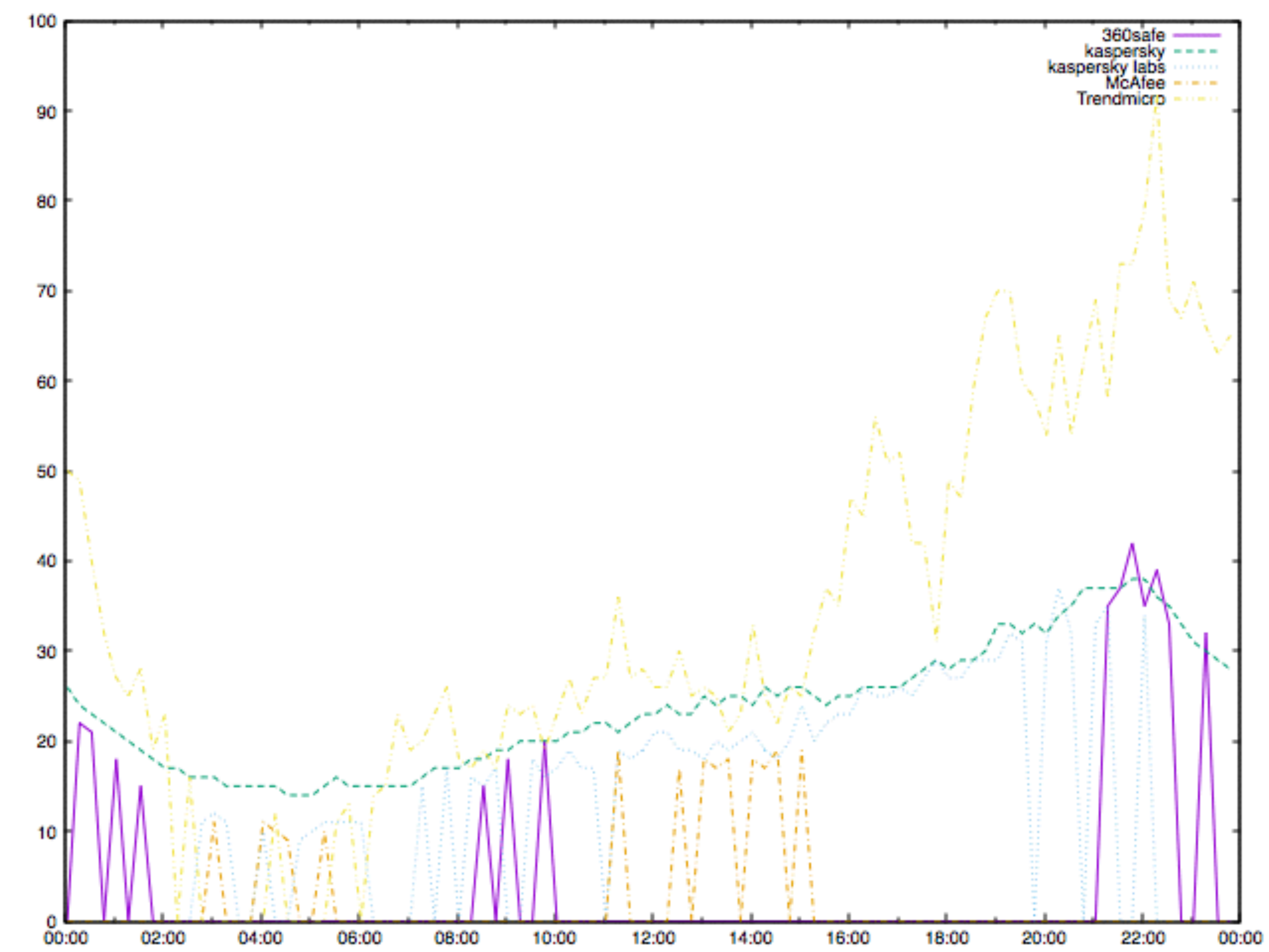
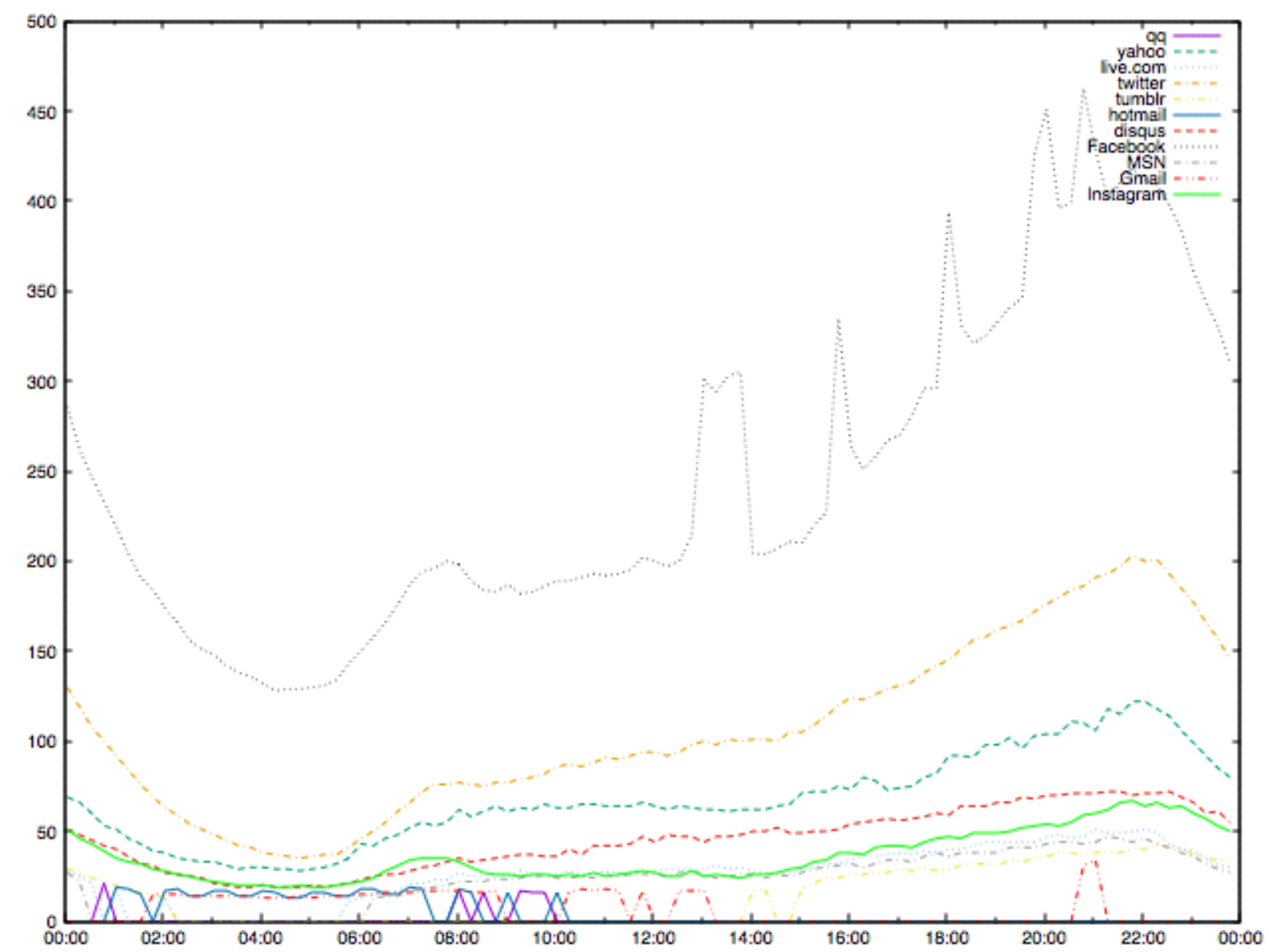
Security services



Social



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MSN
Gmail
Instagram

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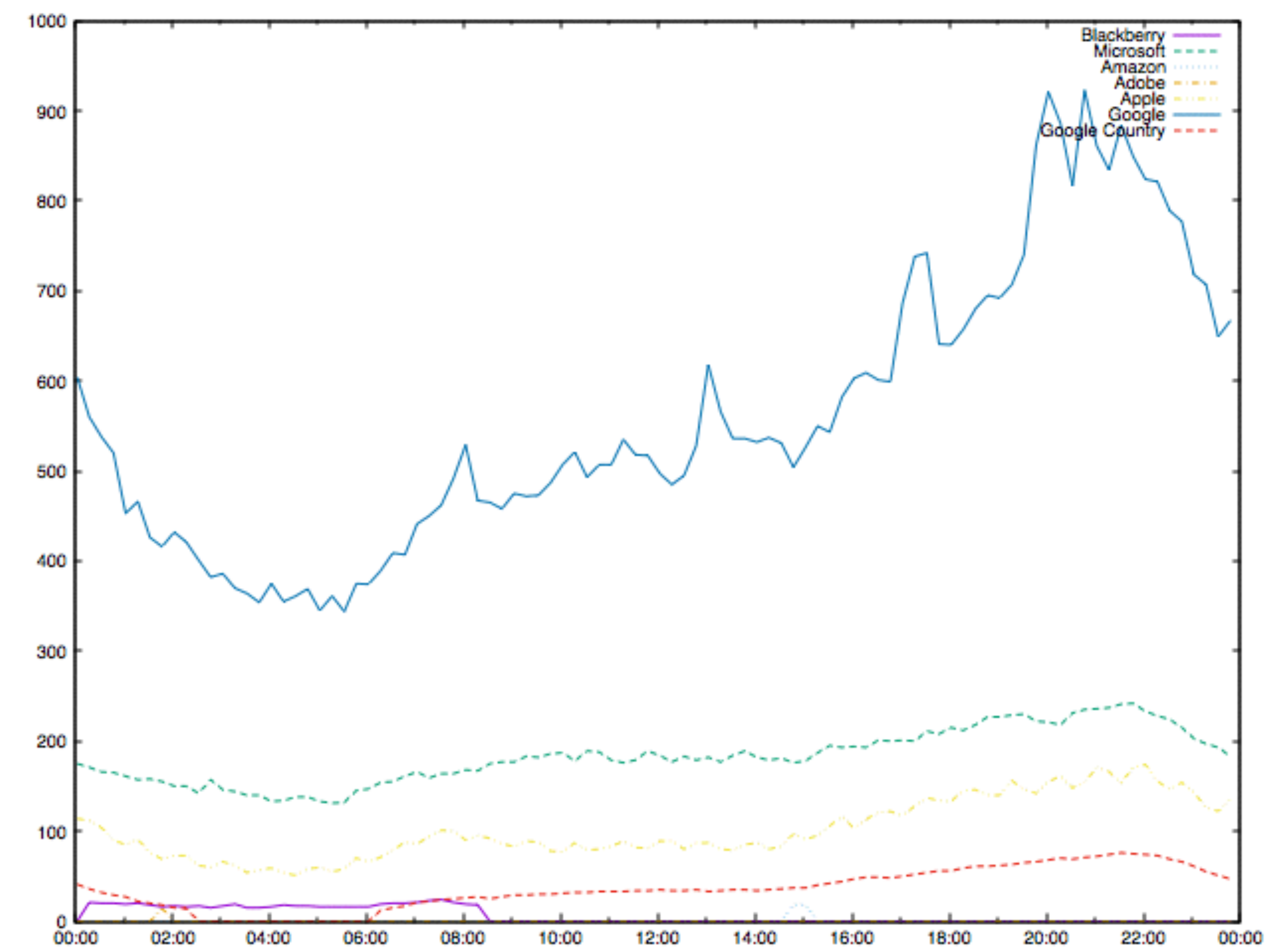
Main domains



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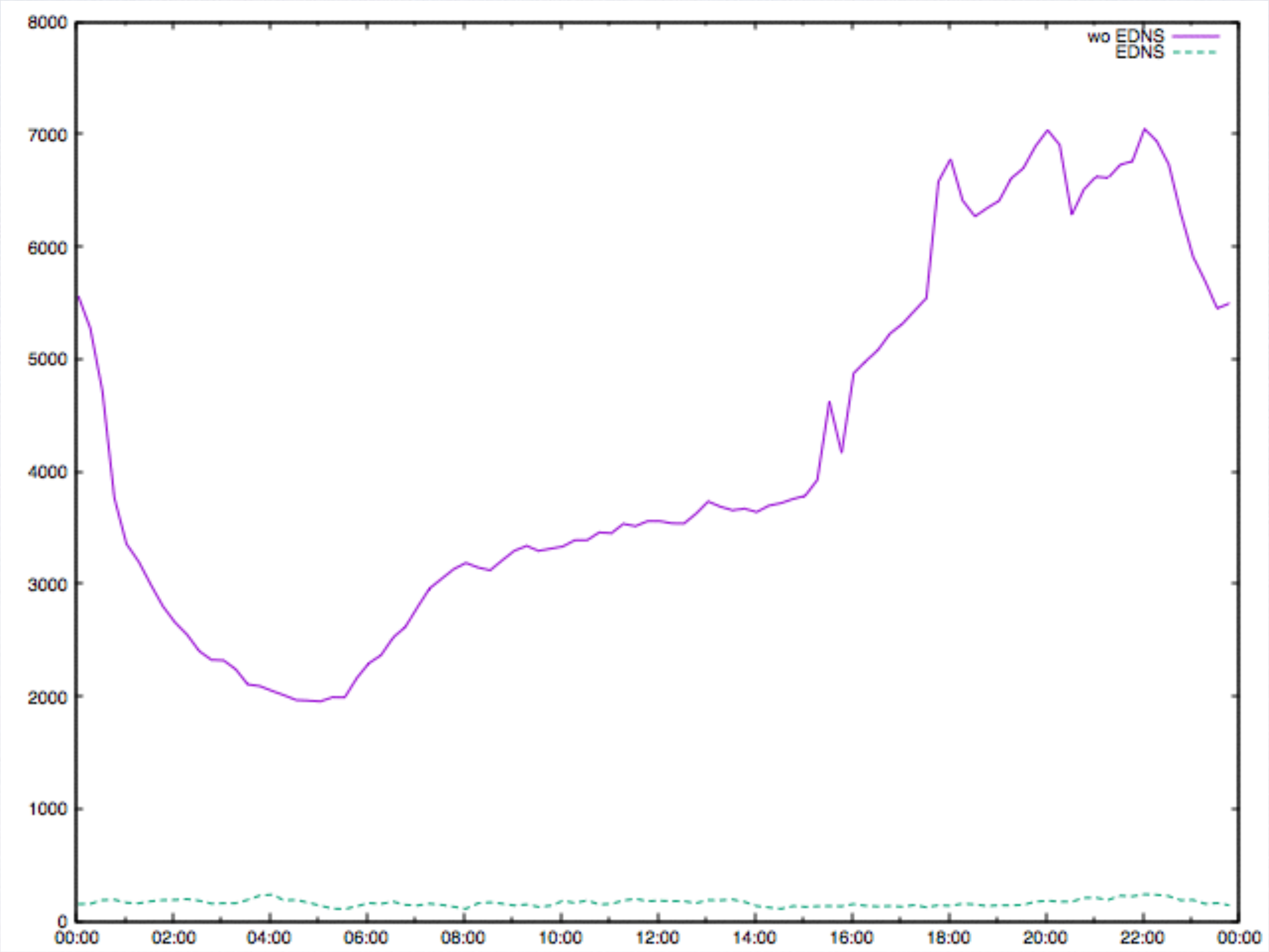
EDNS usage



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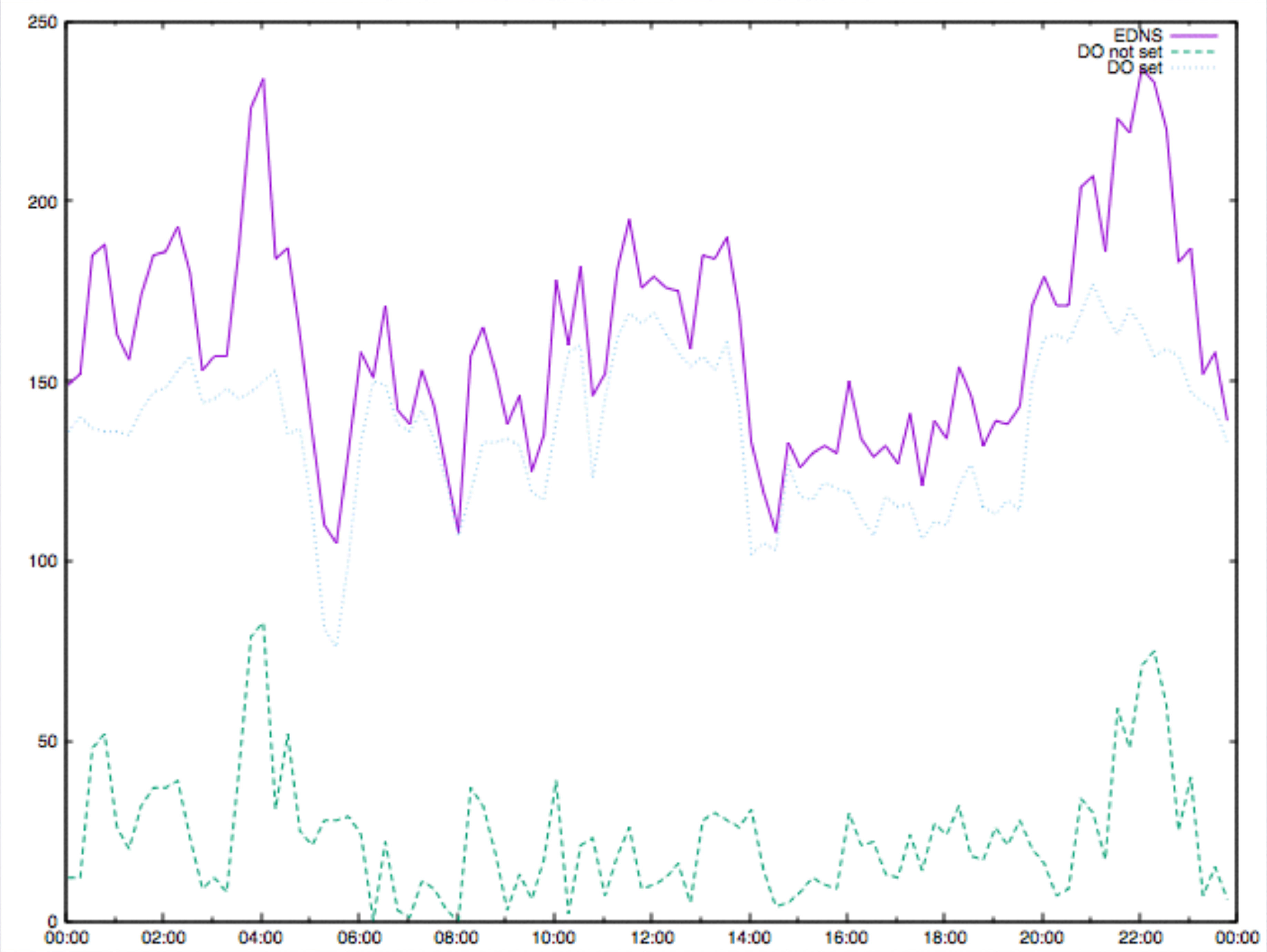
DNSSEC - do



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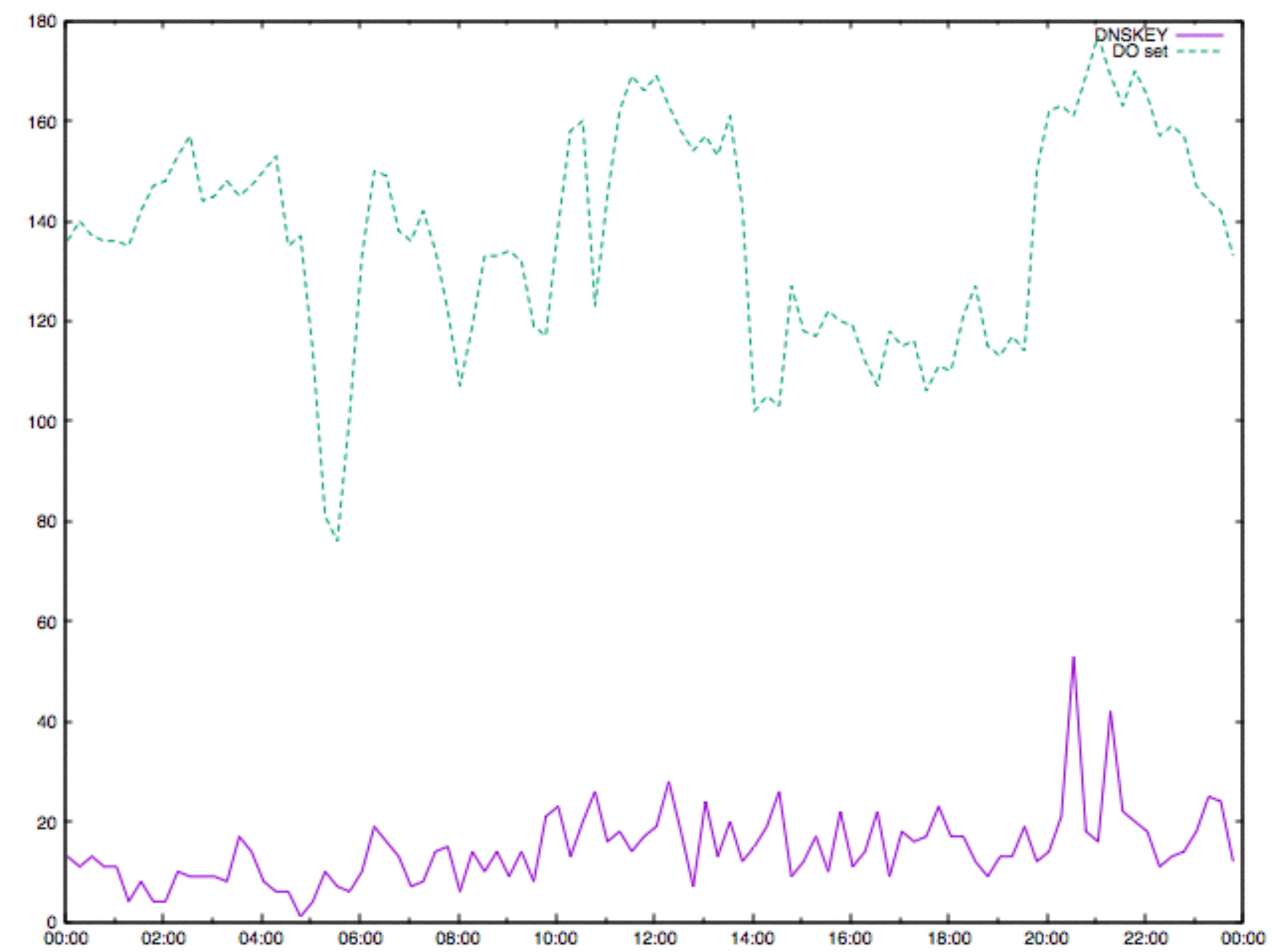
DNSSEC - dnskey



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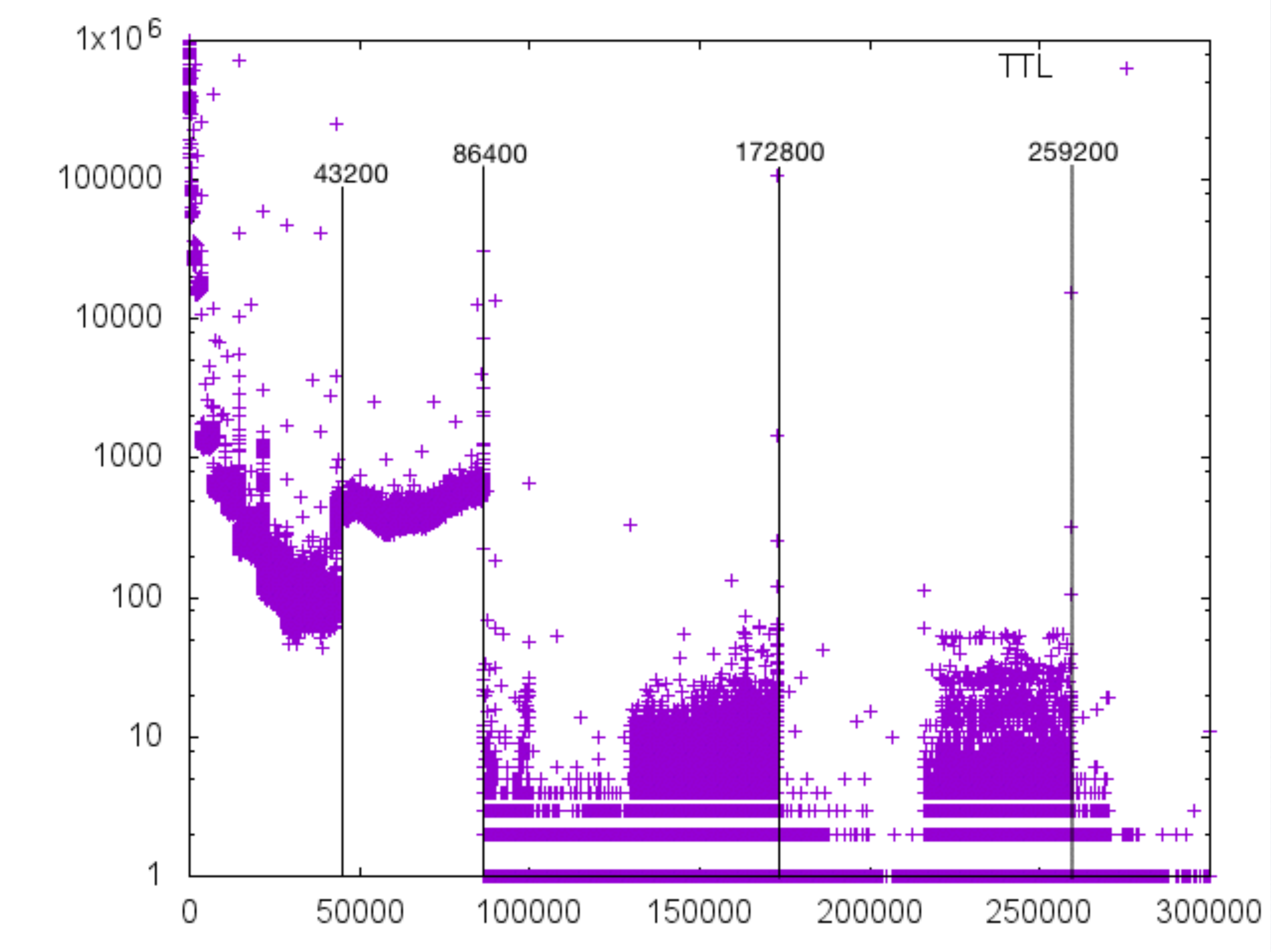
TTL



What now?

- Study how parameter changes at resolves affect their behaviour towards clients
- Followup work: study impact of changes in server configuration and actions on load handling
  - how does min_ttl help/harm
  - can prefetch help? When and how?

Acknowledgements

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Questions?