

**Broadband Performance and QoE:
Measurement Technologies Improving the Marketplace
--
Internet measurement system with distributed probes**

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NTTコミュニケーションズ / NTTCommunications

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Our Goal: Data-driven Decision Making

Background

- Increasing traffic volumes caused by video streaming services like YouTube is intensifying the competitive environment of ISPs
- QoE has become key performance indicator of user-centric design of networks and services

Data Science Lab (DSL)

“Data-driven Decision Making” by finding correlation between network related data and voice of the customer (VoC).

Network related data

- **Distributed Probe (Active Measurement)**
- Traffic Measurement (Passive Measurement)
- Operational Status
- Routing Information

Voice of the customer (VoC)

- customer's feedback to contact center, web access, twitter...

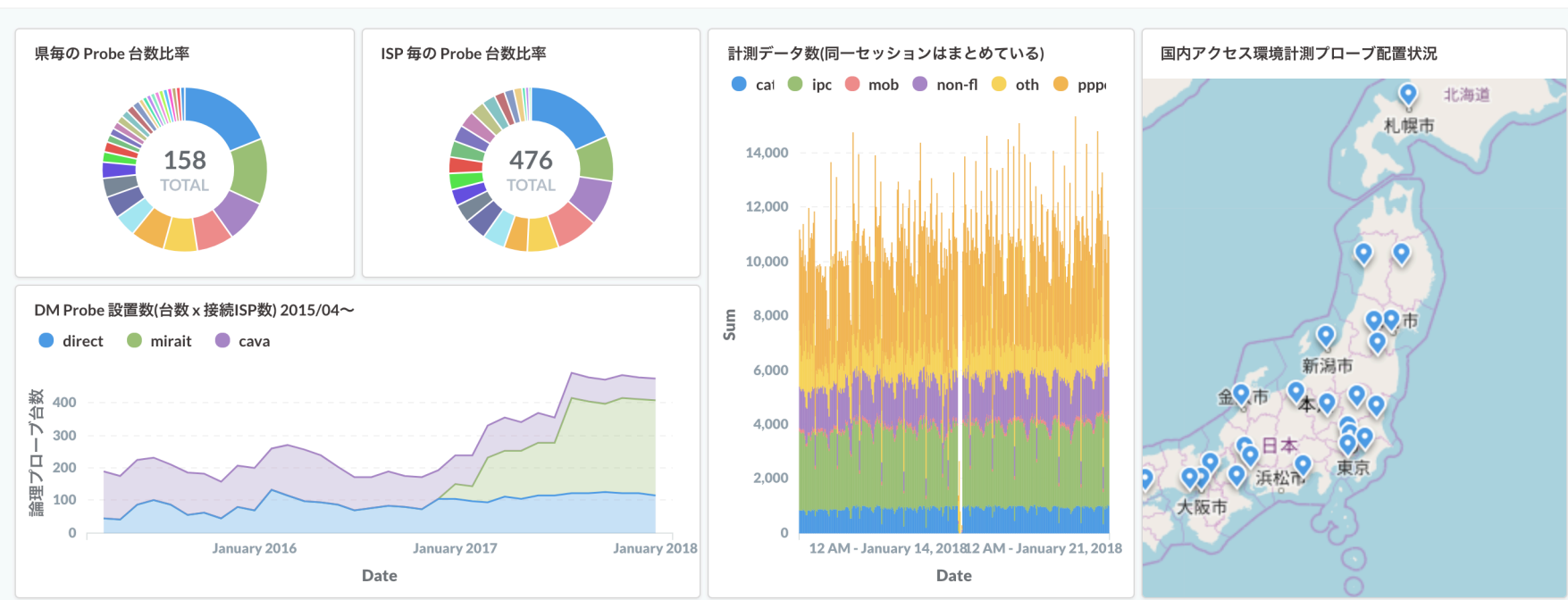
Internet measurement system with distributed probes

Distributing measurement probes to customer's home and connect them to various ISPs.

- over 200 places in Japan
- over 150k measurement per day
- measuring major content sites

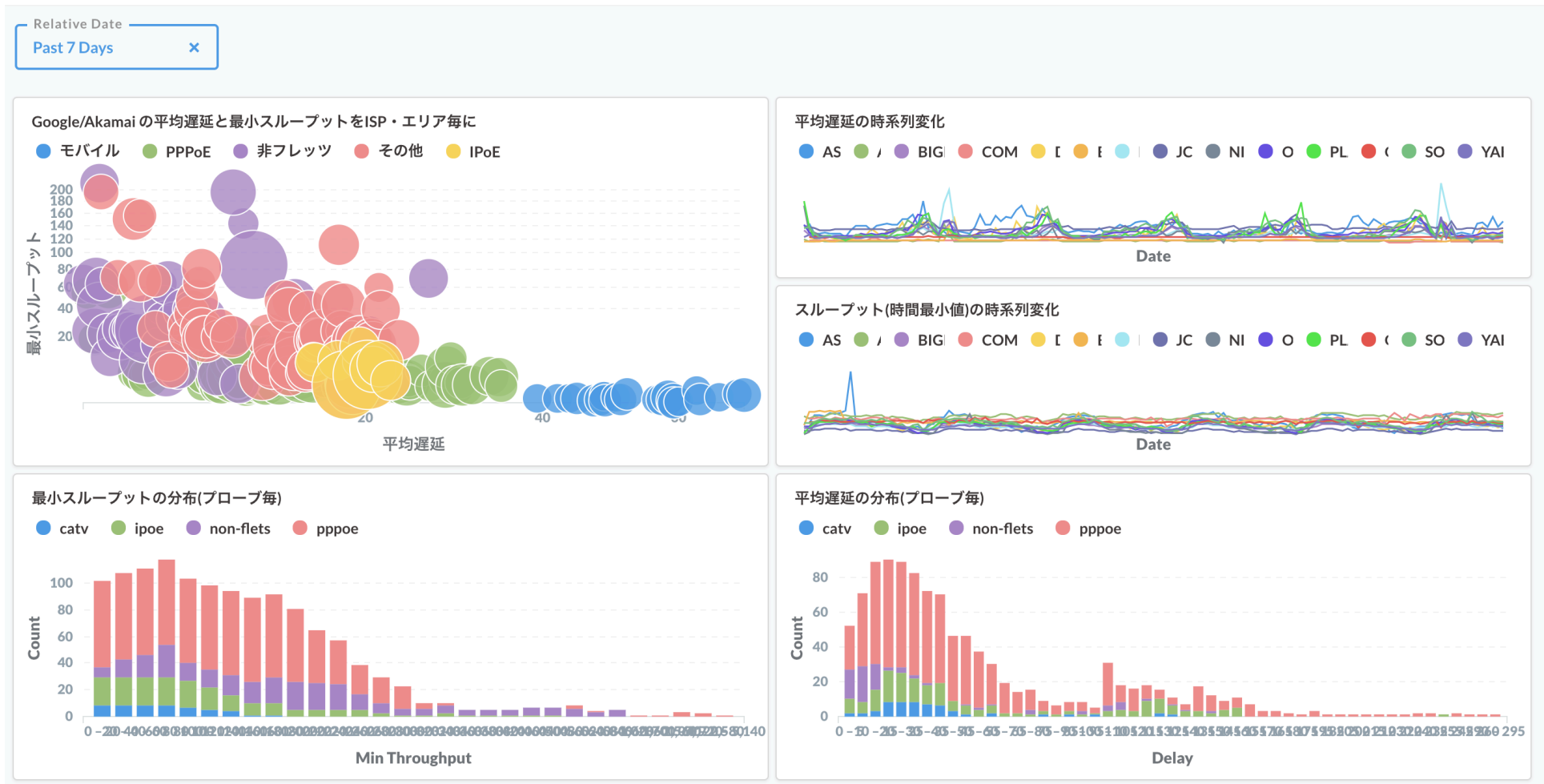


DMPProbe Dashboard / 計測状況

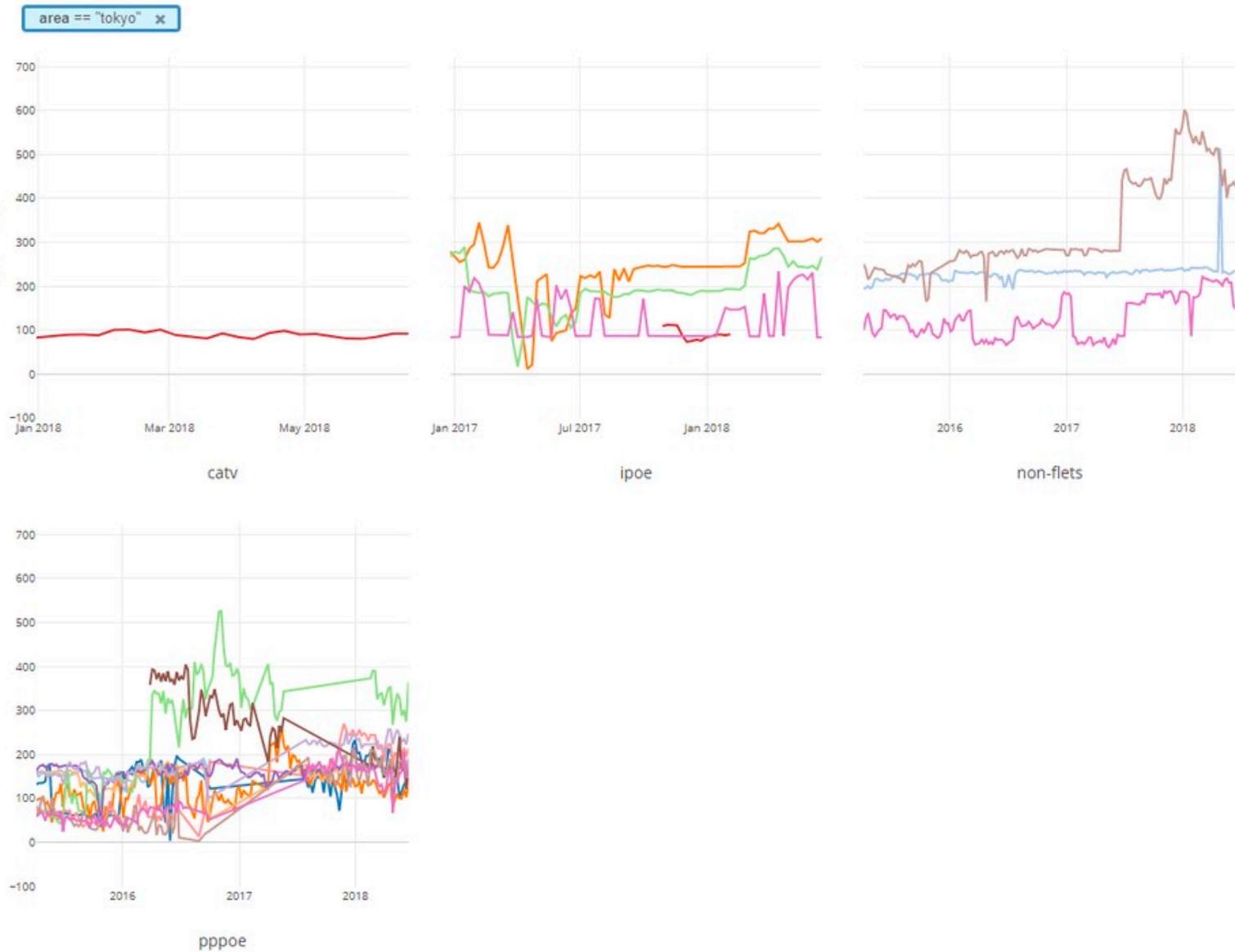


Example of Measurement Results

DMProbe Dashboard / 計測データ



Example of Measurement Results(by line)



Example of Measurement Results(by area)

