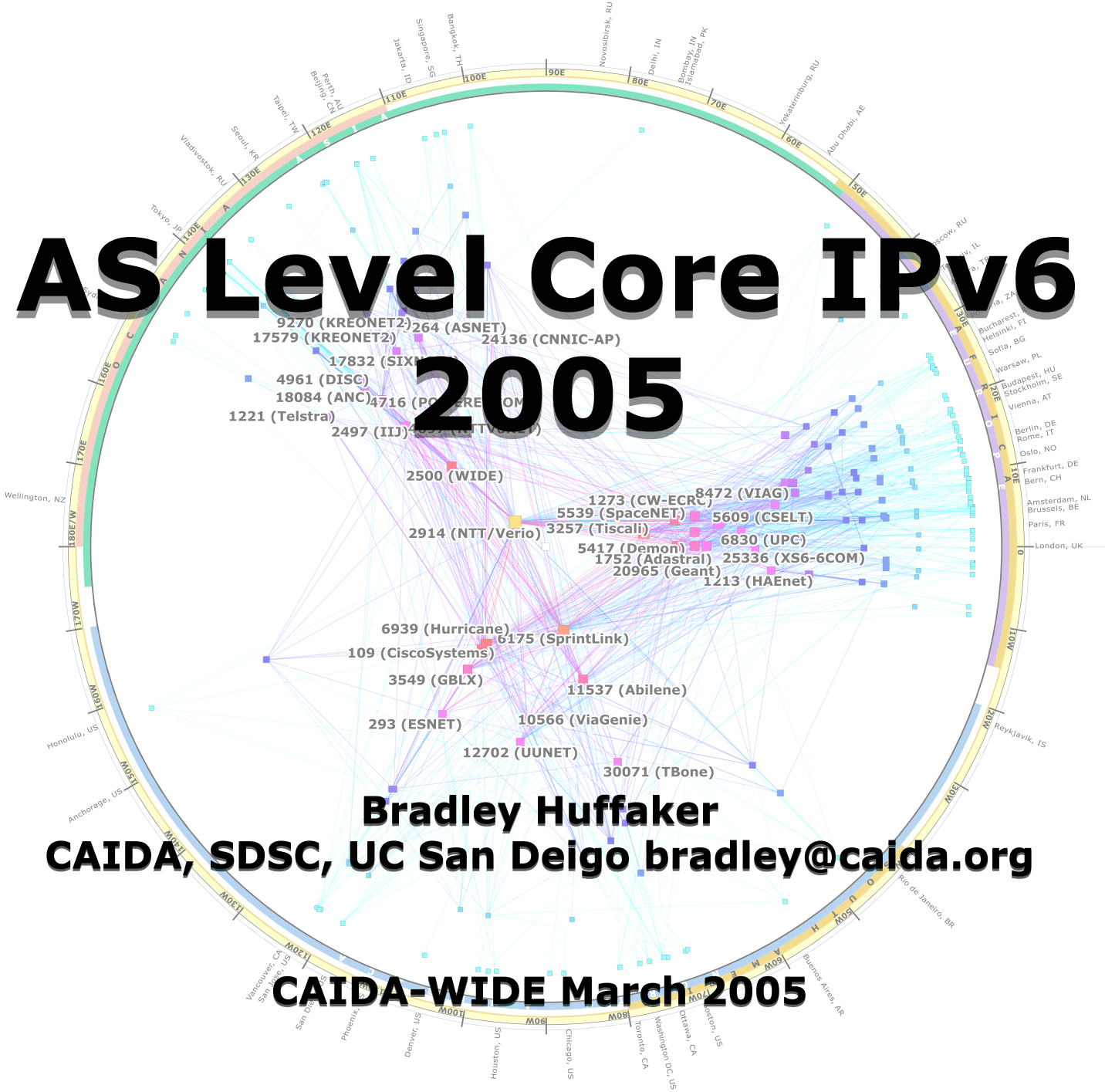
AS Level Core IPv6 2005



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overview

- **IPv6 list creation**
  analysis of IPv6 address location

- **data collection**
  increase number of vantage points on network

- **IPv4 and IPv6 comparison**
  degree and geographic locations of density

IPv6 list creation - goal

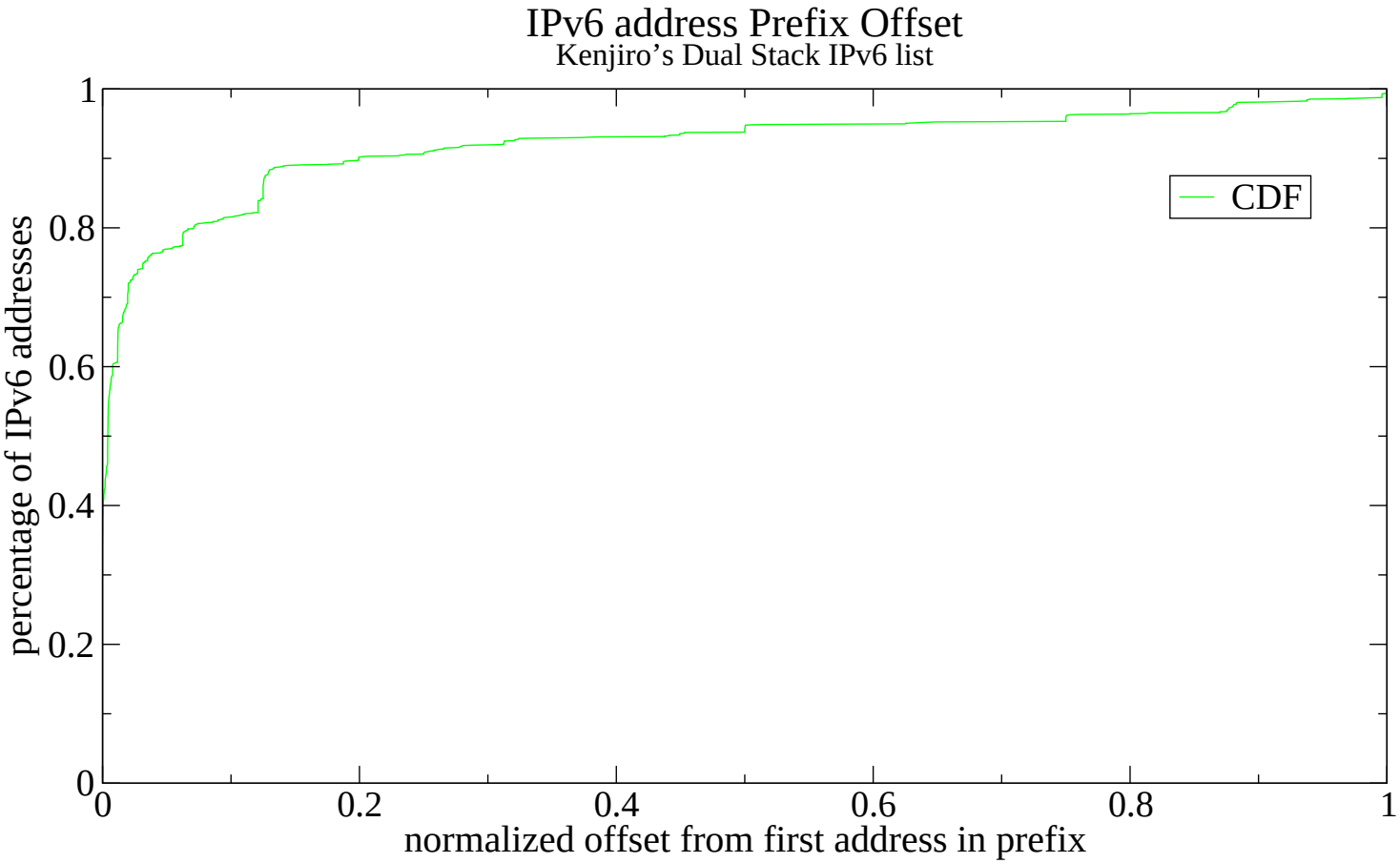
goal

- How to create a list that minimizes number of probes but maximizes the topology collected?

approach

- examine actual IP address allocation within announced prefixes
- create a list that captures some of these allocations preferences

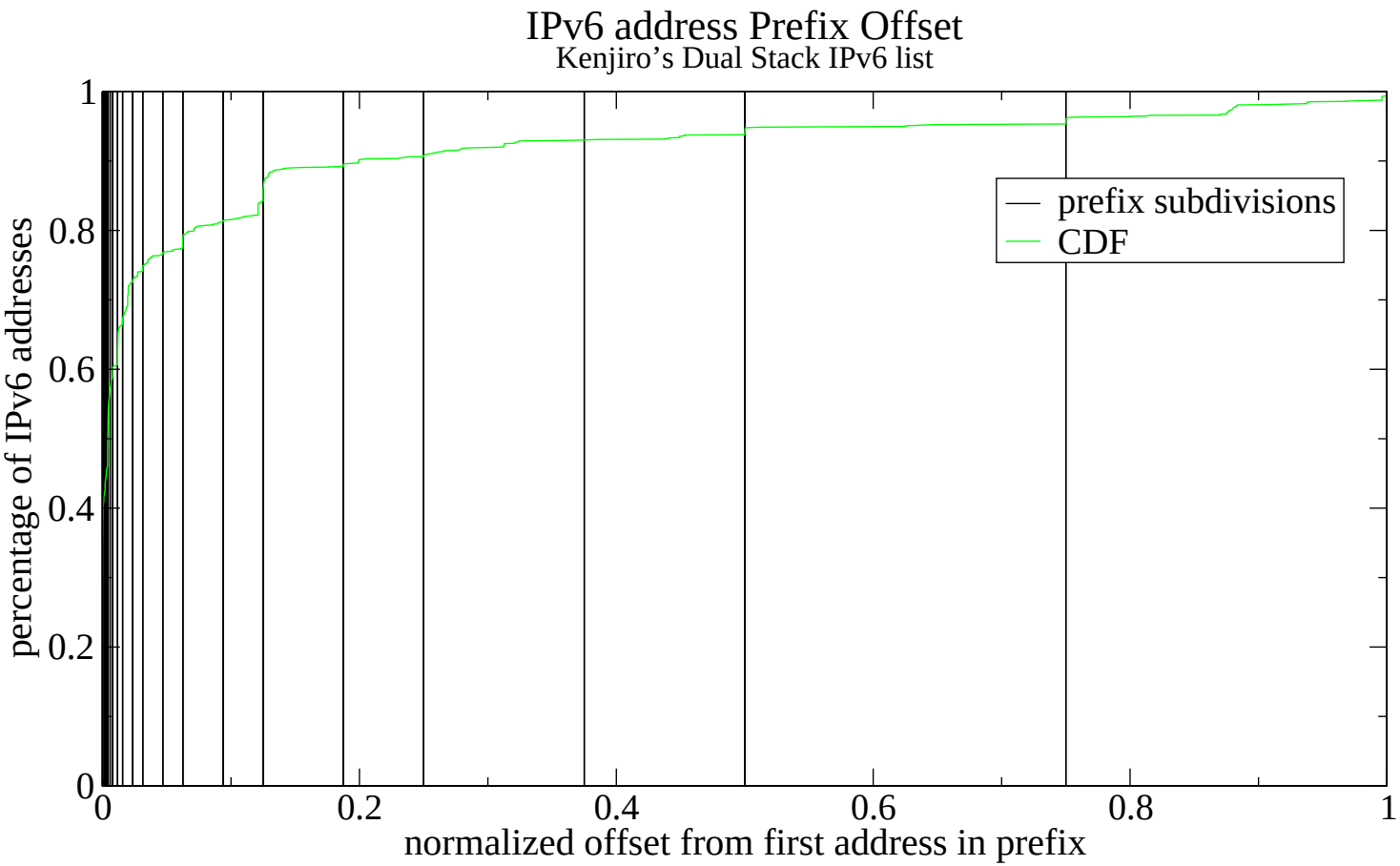
IPv6 list creation - address offset



datasets

- IPv6 addresses from Kenjiro's dual stack list
- prefixes from RIPE's RIS service

IPv6 list creation - prefix division



Datasets

- preferentially divide toward the front of prefix

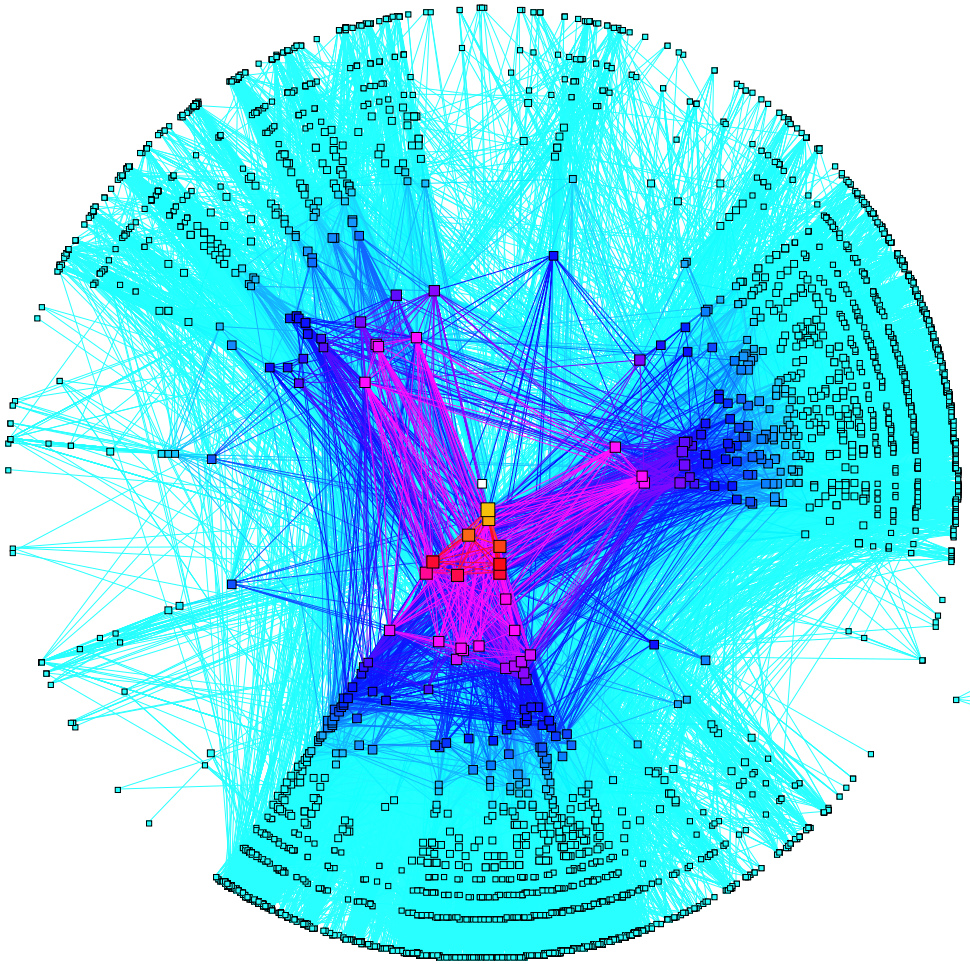
data collection

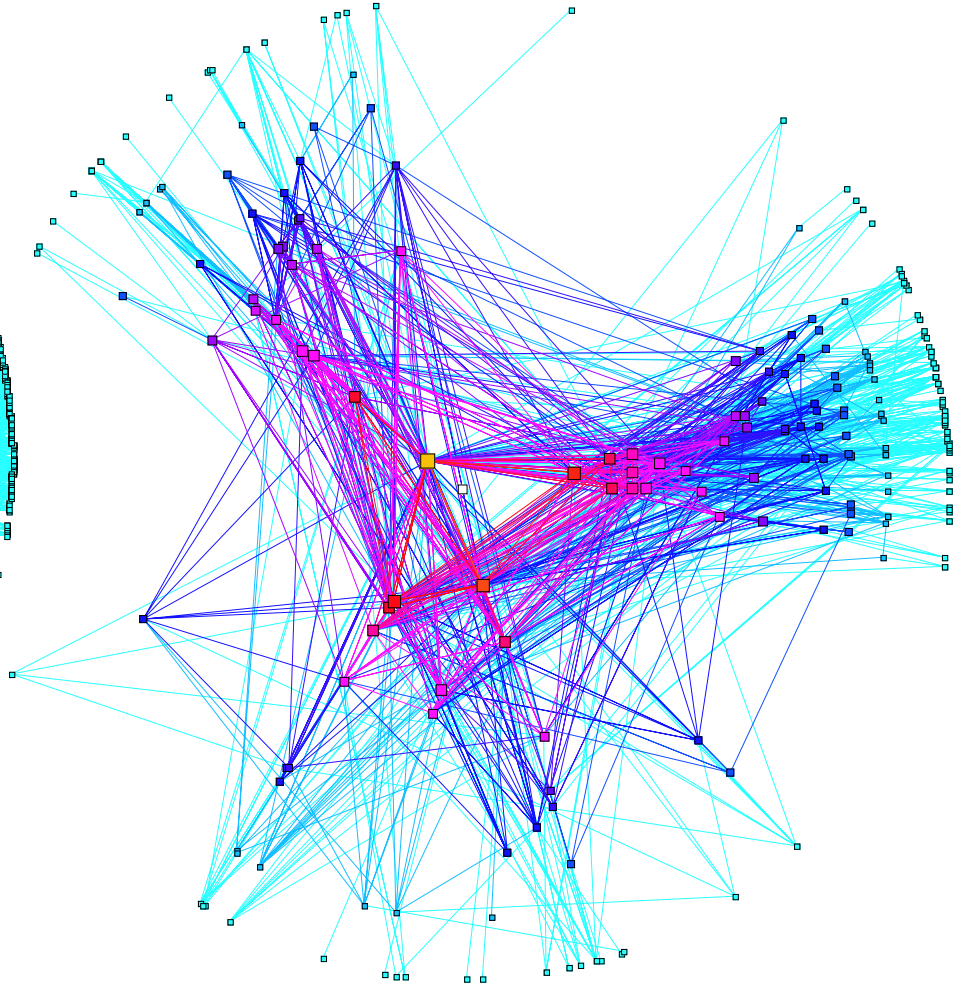
March 4-7th 2005*

country	number of source
Austria	1
Canada	1
Czech Republic	1
Ireland	3
Germany	2
Japan	2
United States	2

*This represents the range over which different sites who measurements, not the duration of measurements taken.

IPv4 vs IPv6 AS core





	IPv4	IPv6
ASes	12,517	333
AS Links	35,334	1,304