

Table 2: Non redundant traceroutes.

| | traceroute/link | | | |
|----------------|------------------------------|-------------------------------|--------------------------------|---------------------------------|
| | ≤ 1 (avg. 15% links) | ≤ 10 (avg. 40% links) | ≤ 100 (avg. 68% links) | ≤ 1000 (avg. 95% links) |
| Jul–Aug | 13,591 | 98,772 | 704,853 | 6,281,824 |
| Sep–Oct | 8,297 | 112,265 | 768,057 | 6,032,234 |
| Nov–Dec | 8,725 | 79,006 | 1,285,591 | 6,536,042 |

ber of targets specifically chosen to be responsive and to be residing in the Internet periphery. Finally we presented results from six months of data collection with Portolan, focusing of the pros and cons of using smartphones. We showed that smartphones are particularly suited to act as vantage points, due to their mobility. In fact they have been able to conduct measurements from over 700 source ASes with an average of just 200 active devices. We also showed that with our methodology Portolan has been able to bring novelty with relatively few measurements, discovering an average of 27.75% of links not found by BGP measurements. On the other hand, we showed that the links found by Portolan in one period show low overlap with the links of other periods, thus they can only be used to enhance other topologies (e.g. BGP ones). Moreover, the number of measurements can still be lowered, given that the percentage of useful traceroutes is approximately 40%.

6. REFERENCES

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