# Internet outages: inbound & outbound measurements view

## Humaira, Florian, Laasya

Cloudflare Project 1: Combining multiple datasets

# Introduction

1.  Cloudflare performs passive outage detection based on traffic metrics from clients inside the target AS
2.  MLab throughput measurements from clients inside the AS
3.  IODA performs active ping measurements from outside the target ASes
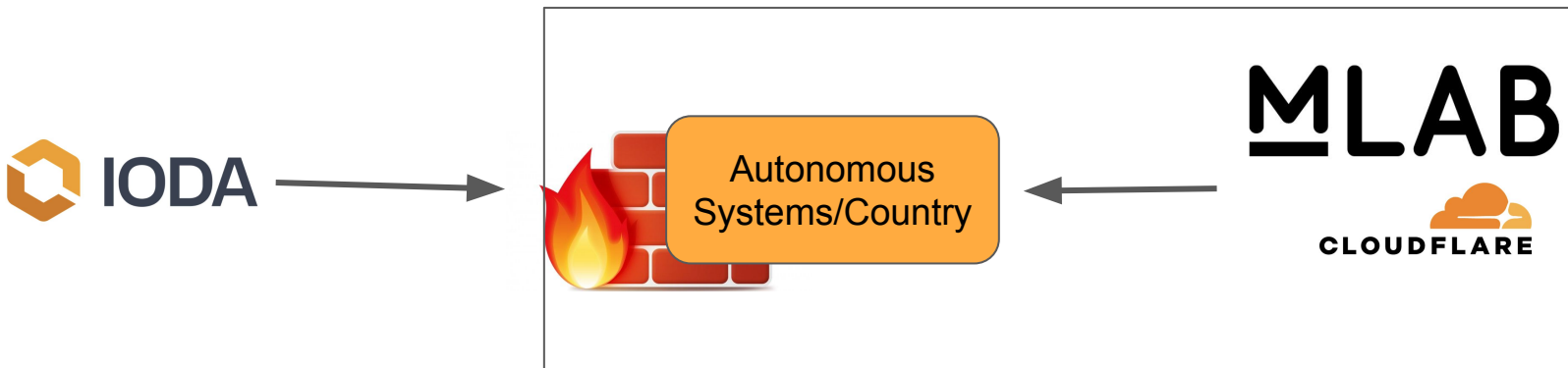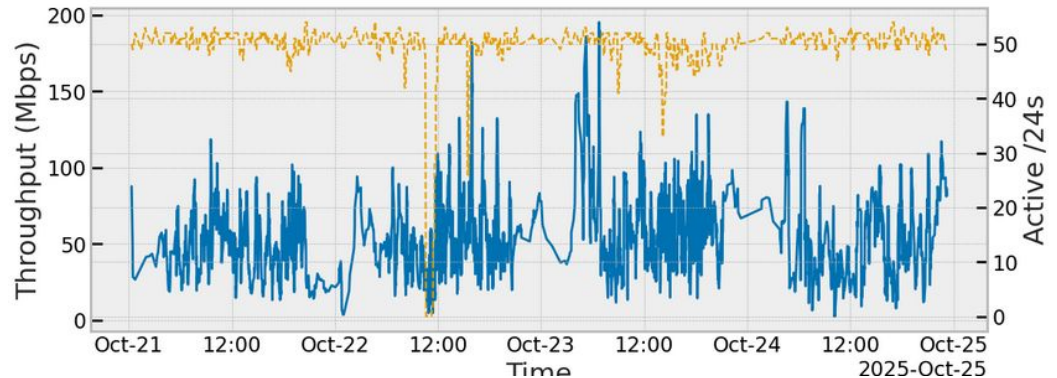
# Data (timeframe: Oct 21 - Oct 25)

MLab (blue)

- Mean Throughput (Mbps), minRTT, loss rate - every 10 minutes
- Rolling average of Mean Throughput raw data points

Cloudflare (not shown)

- Traffic (NetFlows) every 1 hour – % of maximum traffic for the selected time period

IODA (yellow)

- Ping active /24 data
  - every 10 minutes

# Uganda - 20294 (MDN-UG)



Outage recorded by IODA (responsive IPs drop)

No drop in HTTP requests or throughput
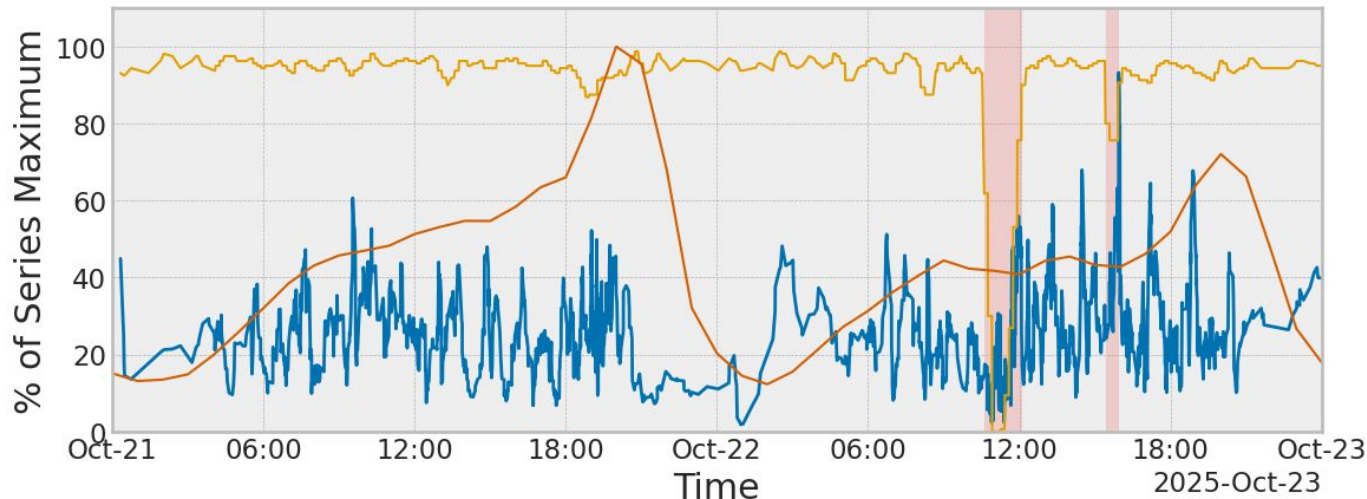
# Next Steps

- Adding a UI where users can provide filters, and get all data
- Quantify occurrences where one dataset reports an outage and the others do not