# Simulating Ethereum Network with

Ryunosuke Nagayama

Kazuyuki Shudo

Tokyo Institute of Technology

Tokyo Tech

# Research on
# Blockchain **"Networks"**

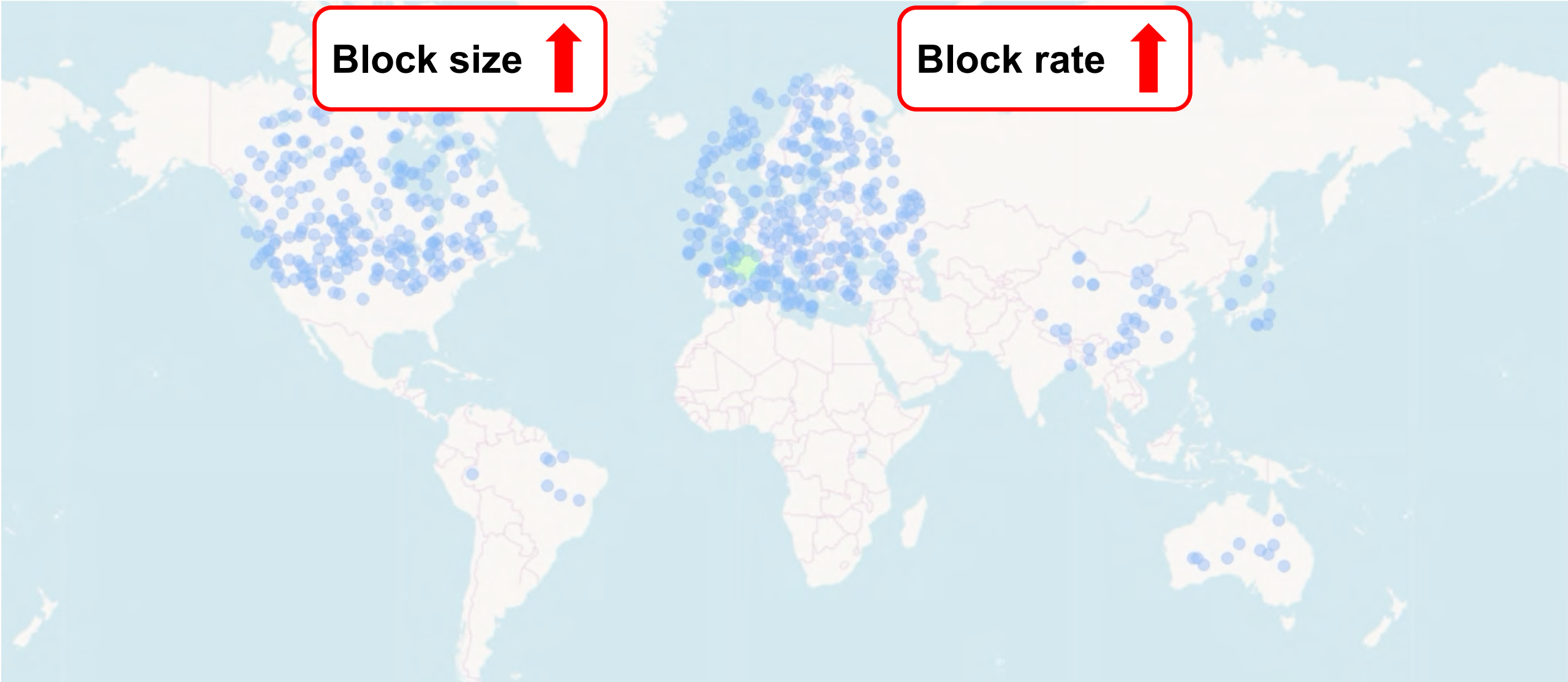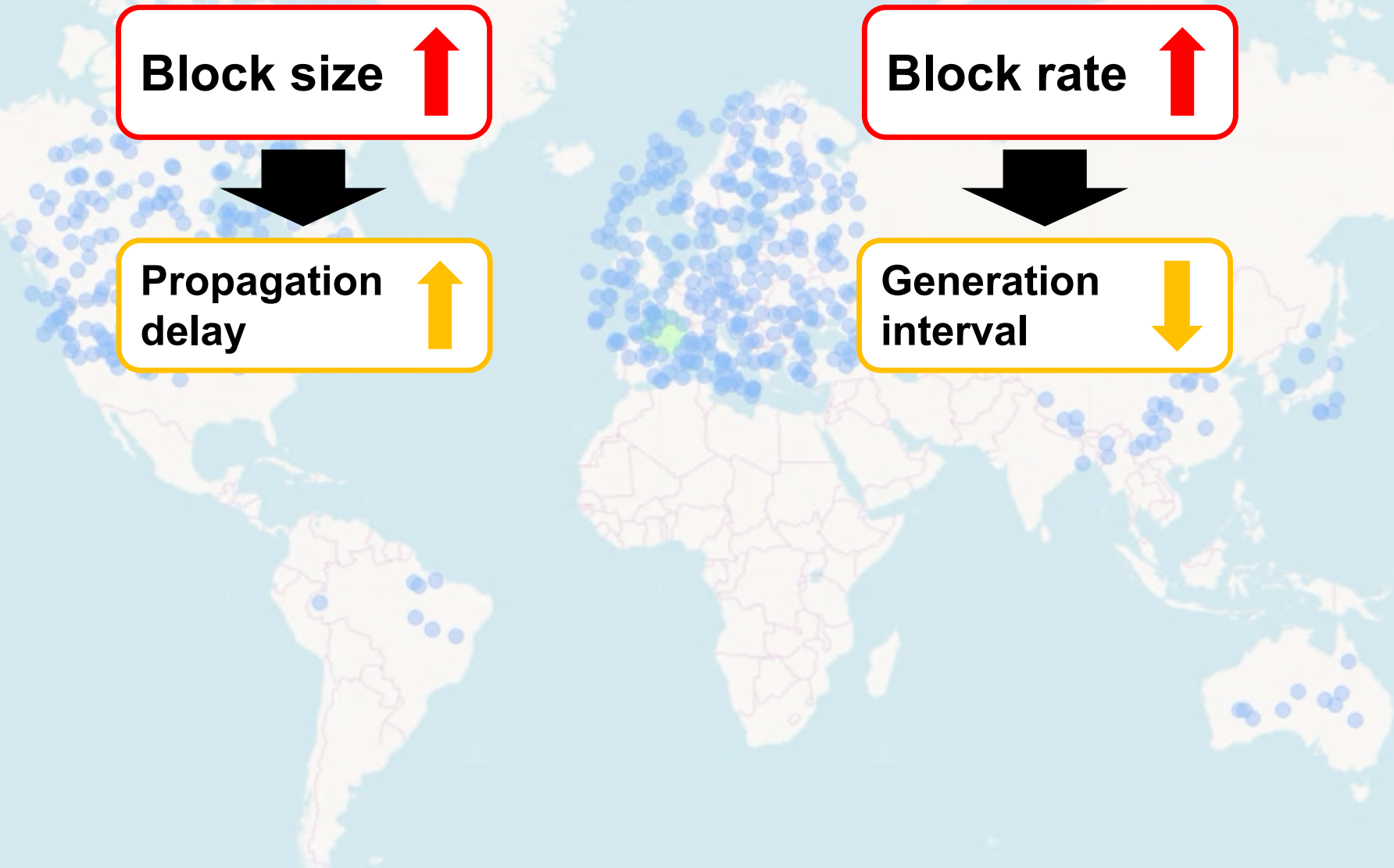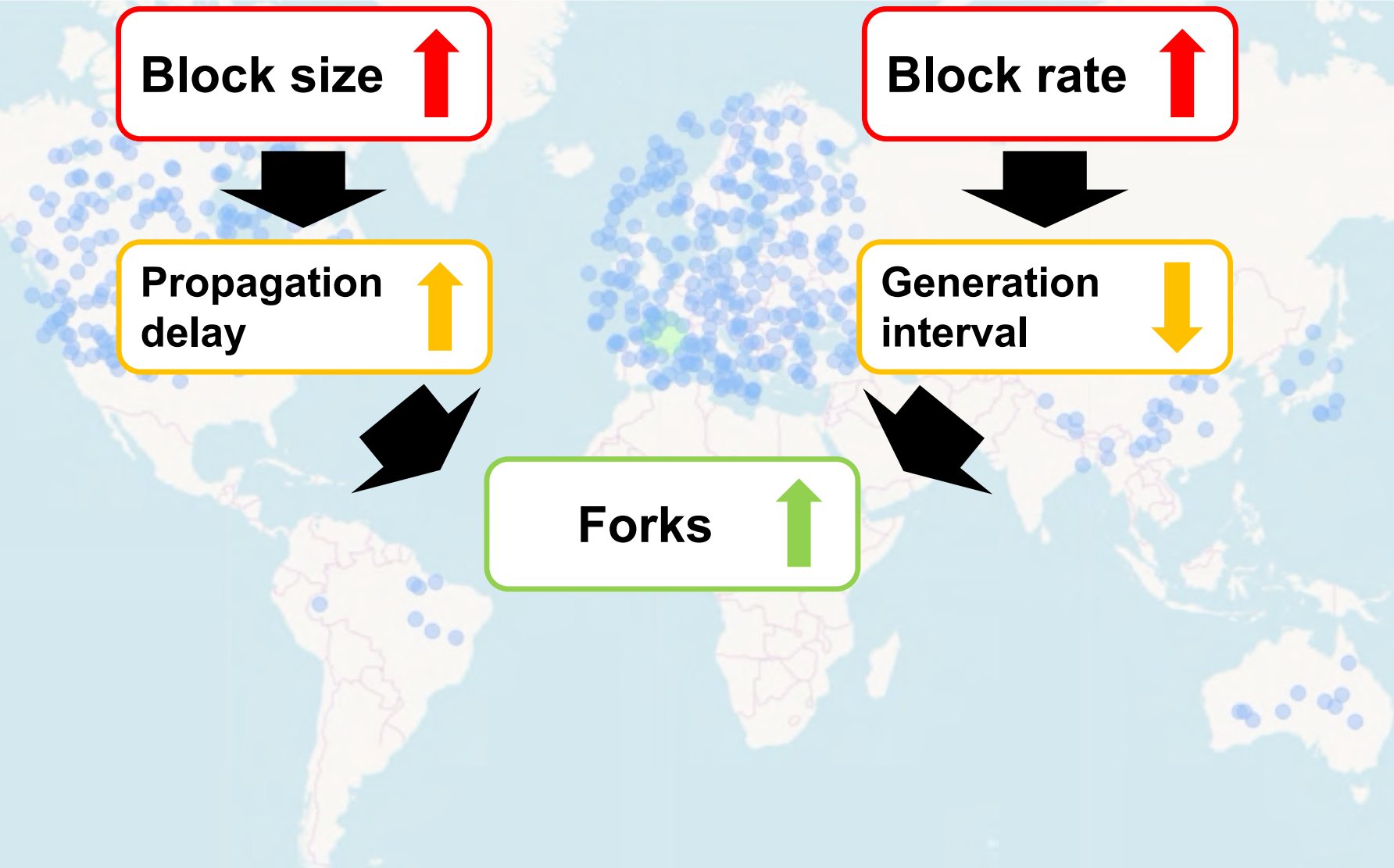# Research on
# Blockchain **"Networks"**

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**Block size** ⬆
⬇
**Propagation delay** ⬆

**Block rate** ⬆
⬇
**Generation interval** ⬇

# Research on Blockchain "**Networks**"

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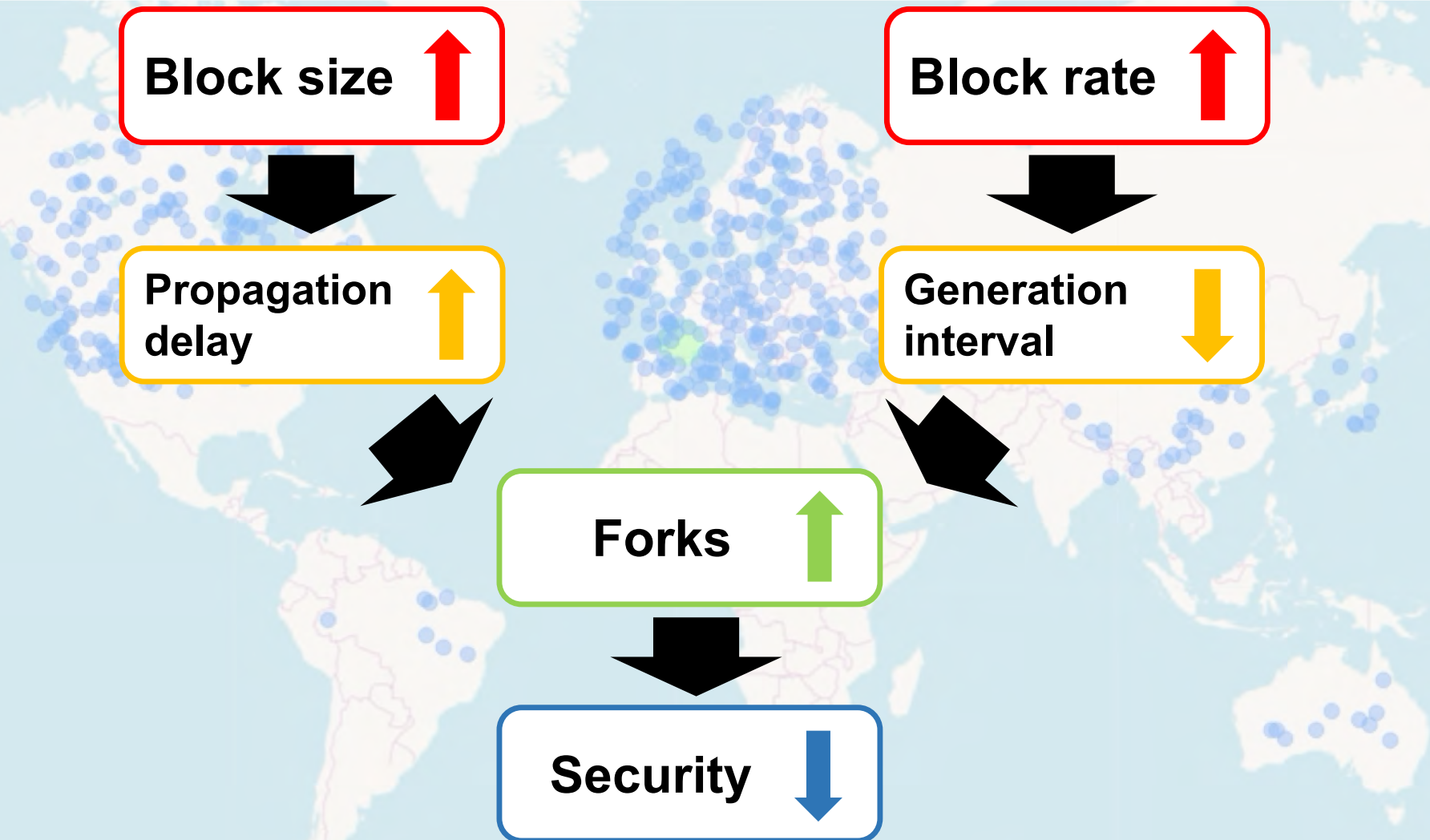
# SimBlock

## You can change network and node behavior

### Node

PoX

Block selection

Attacks

### Routing Table
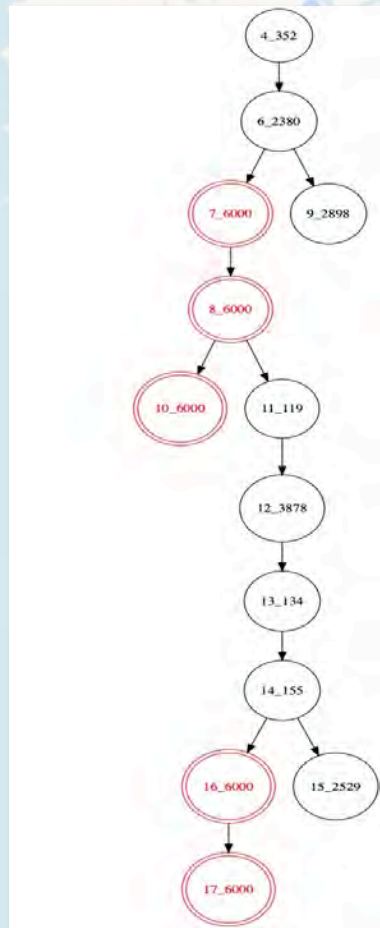
Neighbor selection

Mining pool

Relay network

### Network

Latency

Bandwidth

Node distribution

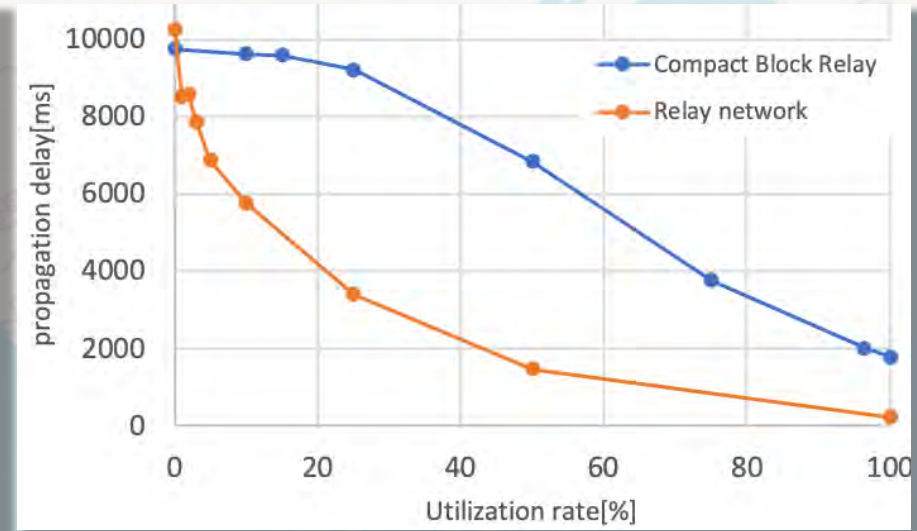# SimBlock provides various data about blockchain network

## Block tree

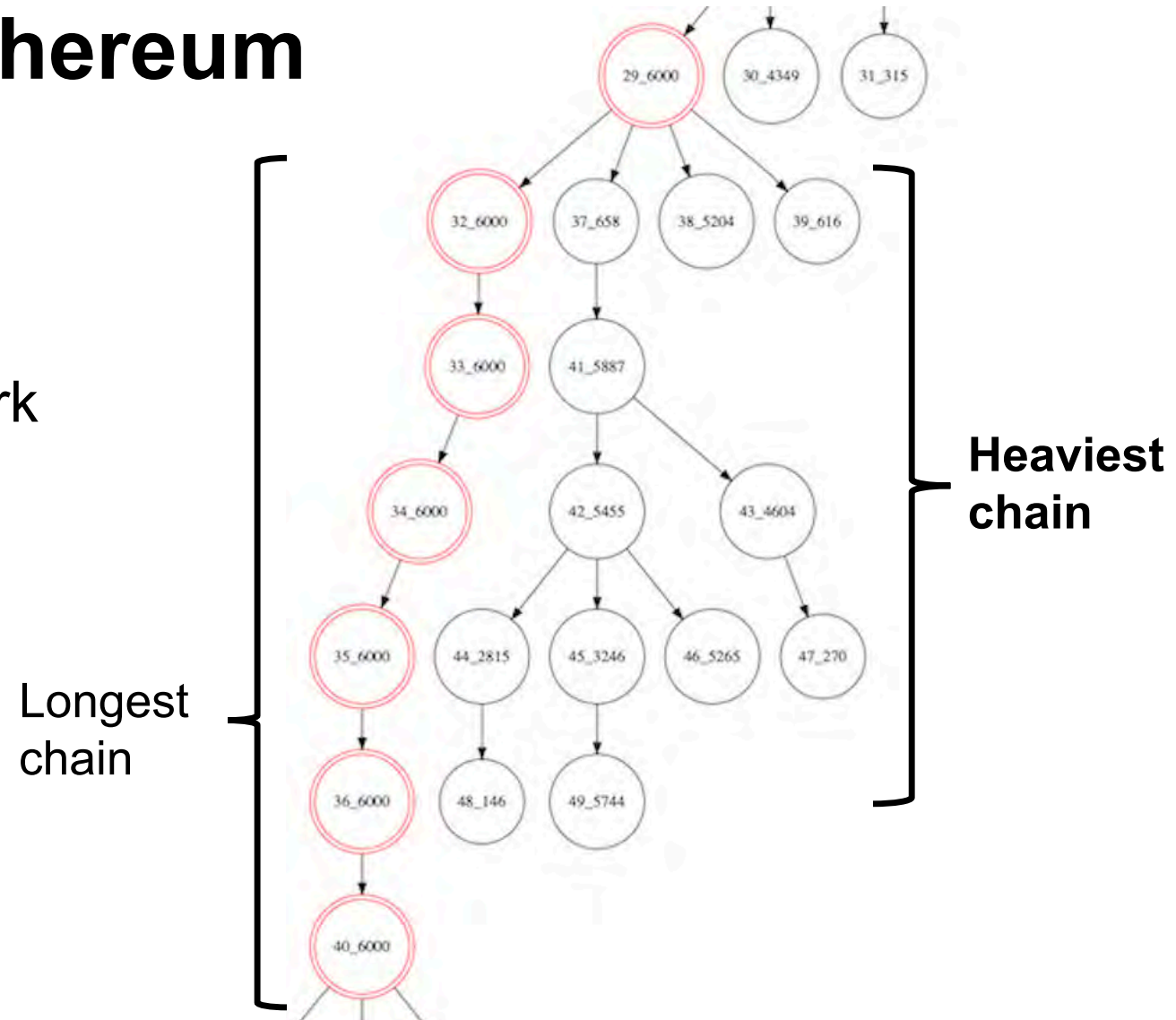## Propagation log

## Propagation delay

# SimBlock for **Ethereum**

## **GHOST**

selects at each fork in the chain

the <u>heaviest</u> subtree rooted at the fork
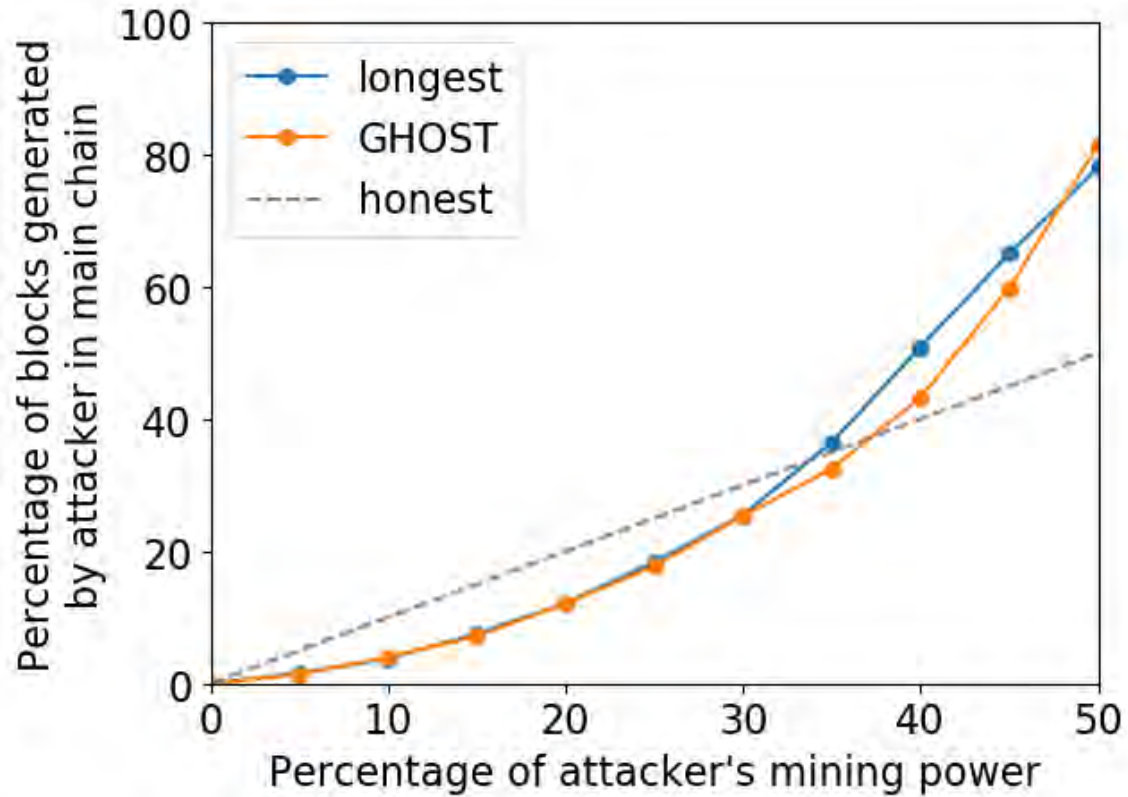
→ Better tolerant of selfish mining

## **Proof of Stake**

## **Plasma**

**…**

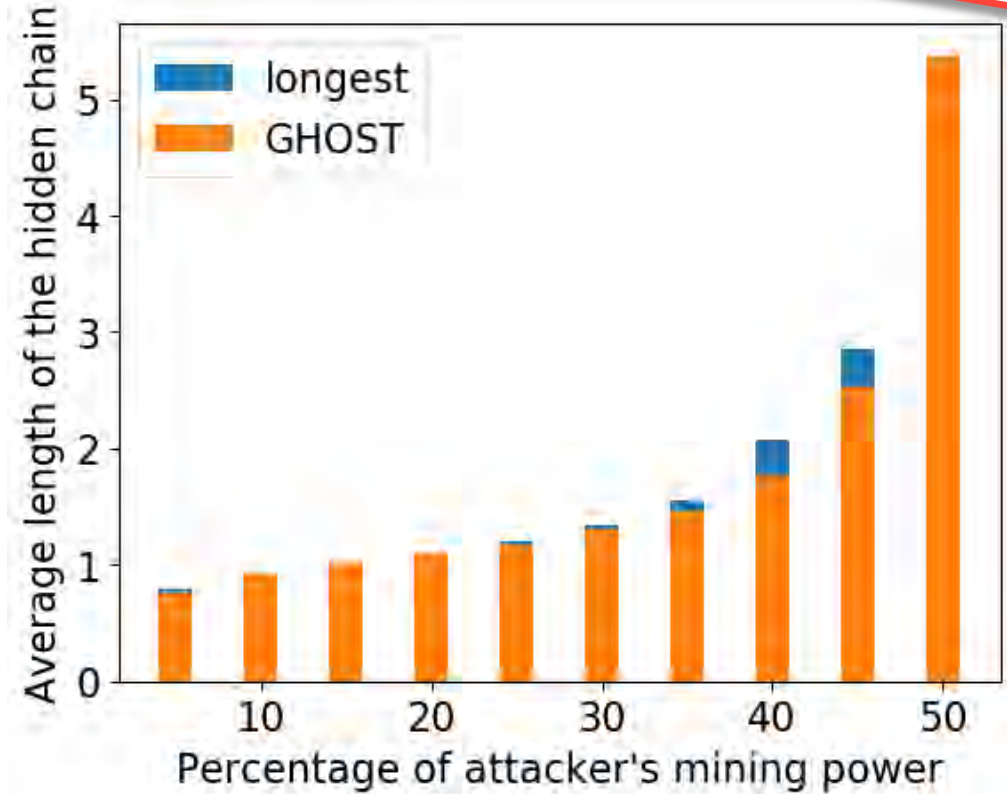# Results

If the ratio of attacker blocks is greater than the attacker's mining power in the network, the attack is successful.

Average length of the hidden chain when attacker released

This is related to safe number of confirmations.

# YOU FOUND A STAR

## Speaker Track

dropparty.tech

# Try it !

Web site, visualizer page, and source code

are available

SimBlock 🔍

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