

# Validators

**Goal: one stop shop for health of the network**

Validators

**3,375**

Current → 52.94%

1,787

Delinquent → 47.05%

1,588

Stake (SOL)

**391,457,955.8476**

Current → 99.33%

388,863,955.3551 SOL

Delinquent → 0.66%

2,594,000.49 SOL

Weighted Skip Rate

**3.11%**

Unweighted

7.02%

Node version (Delinquent = "unknown")

1.13.7

1,281 - 37.95%

1.14.17 - 516 - 15.28%

1.13.6 - 30 - 0.88%



Total 3,375 validators

All Validators Node Versions Leader Schedule

Total 13 records

Version	Current	Delinquent	Total
1.13.7	1254 → 37.15%	27 → 0.8%	1,281
1.14.17	502 → 14.87%	14 → 0.41%	516
1.13.6	17 → 0.5%	13 → 0.38%	30
1.13.5	6 → 0.17%	0 → 0%	6
1.14.18	3 → 0.08%	2 → 0.05%	5
1.14.16	3 → 0.08%	0 → 0%	3
1.13.8	1 → 0.02%	3 → 0.08%	4
1.16.0	1 → 0.02%	2 → 0.05%	3
Unknown	0 → 0%	1521 → 45.06%	1,521
1.14.13	0 → 0%	3 → 0.08%	3
1.14.7	0 → 0%	1 → 0.02%	1
1.15.2	0 → 0%	1 → 0.02%	1
1.8.14	0 → 0%	1 → 0.02%	1

## Existing Metrics

# Validators (Current vs Delinquent)

# Staked (Current vs Delinquent)

Weighted vs Unweighted Skip Rate (calculation?)

## Node Version & Distribution

Vote Account | Commission (latest activity)

Skip Rate % ( 1 - Skip = Attendance ? )

Version

# Stake

#	Identity	Vote account	Commission	Last vote slot	Root vote slot	Skip rate	Credit	Version	Active stake (\$...)
1	Bison Trails	beefKGBWeSp...	8%	194256791 (-1)	194256760 (-1)	2.17%	272,722	1.13.7	8,945,632.2883
2	Staking Facilities	DumiCKHVqoC...	8%	194256792 (0)	194256761 (0)	1.65%	270,400	1.14.17	8,004,218.2942
3	P2P.ORG - P2P V...	FKsC411dik9kt...	7%	194256792 (0)	194256761 (0)	1.47%	272,577	1.13.7	5,902,381.0082
4	Binance Validator	3N7s9zXMZ4Q...	1%	194256792 (0)	194256761 (0)	1.86%	271,520	1.14.17	5,430,152.1063
5	Everstake	9QU2QSxhb24...	7%	194256792 (0)	194256761 (0)	0.89%	271,148	1.13.7	5,394,056.8316
6	Figment	CcaHc2L43ZW...	7%	194256792 (0)	194256761 (0)	1.36%	272,484	1.13.7	5,342,061.4562
7	a16z Validator	BZpEFk6ANWz...	8%	194256791 (-1)	194256760 (-1)	1.14%	272,588	1.13.7	4,895,763.5745
8	Certus One	CertusDeBmq...	10%	194256792 (0)	194256761 (0)	0.92%	272,940	1.13.7	4,892,046.9746
9	Bx7SNaHfyelZD...	55bmPBVG1x...	100%	194256792 (0)	194256761 (0)	0.79%	273,732	1.13.7	4,690,386.4837

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## Atomic Nodes

Atomic Wallet is a decentralized non custodial app to manage, exchange and stake over 300 blockchains and tokens. We have over 1,000,000 users across various devices and support entire blockchain ecosystem since 2017

Epoch

431

# Sol Staked

498,472

Age (epochs)

99

Lifetime Active %

97%

### Key Stats

### Performance & Growth

Stat	Value	Detail
Software Version:	1.13.6	Highest Available: 1.14.7
Node Location:	France	
Current Status:	Active	
10-Epoch Active %:	100%	7.1% <b>above</b> average
10-Epoch Attendance* Rate %:	97.5%	3.3% <b>above</b> average
Commission Rate	7%	

### Metrics & Sourcing

- Software Version: Software\_Version from Validator App Data for Latest Epoch
  - Get Highest Available from MAX() of all validators in epoch
- Node Location: Source from Latitude & Longitude in Validator App Data
- Current Status: Delinquent is FALSE or TRUE for Latest Epoch from Validator App Data
  - Can also be calculated from epoch\_credits in historical vote account data
- 10-Epoch Active %: Percent of last 10 epochs where Delinquent = FALSE in Validator App Data
  - Can also be calculated from historical vote account data looking at epoch\_credits earned
- 10-Epoch Attendance Rate %: In last 10 epochs sum of num\_slots\_skipped / (max slot in latest epoch - min slot from 10 epochs ago).
- Commission Rate: Commission from Validator App Data at Latest Epoch

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Age (epochs)

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Lifetime Active %

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### Key Stats

### Performance & Growth

# Active Stakers

20,973

Avg # Sol Staked

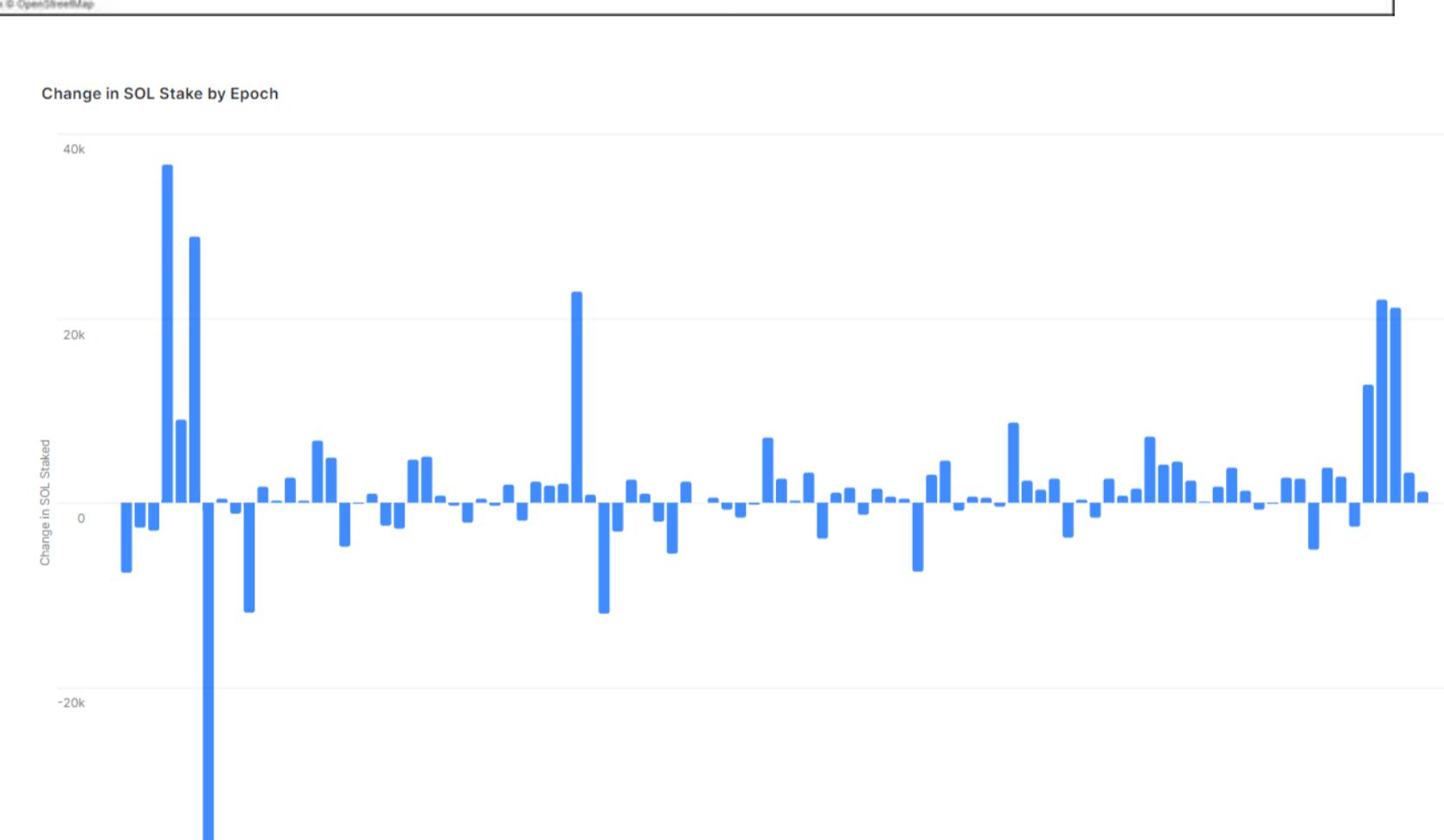
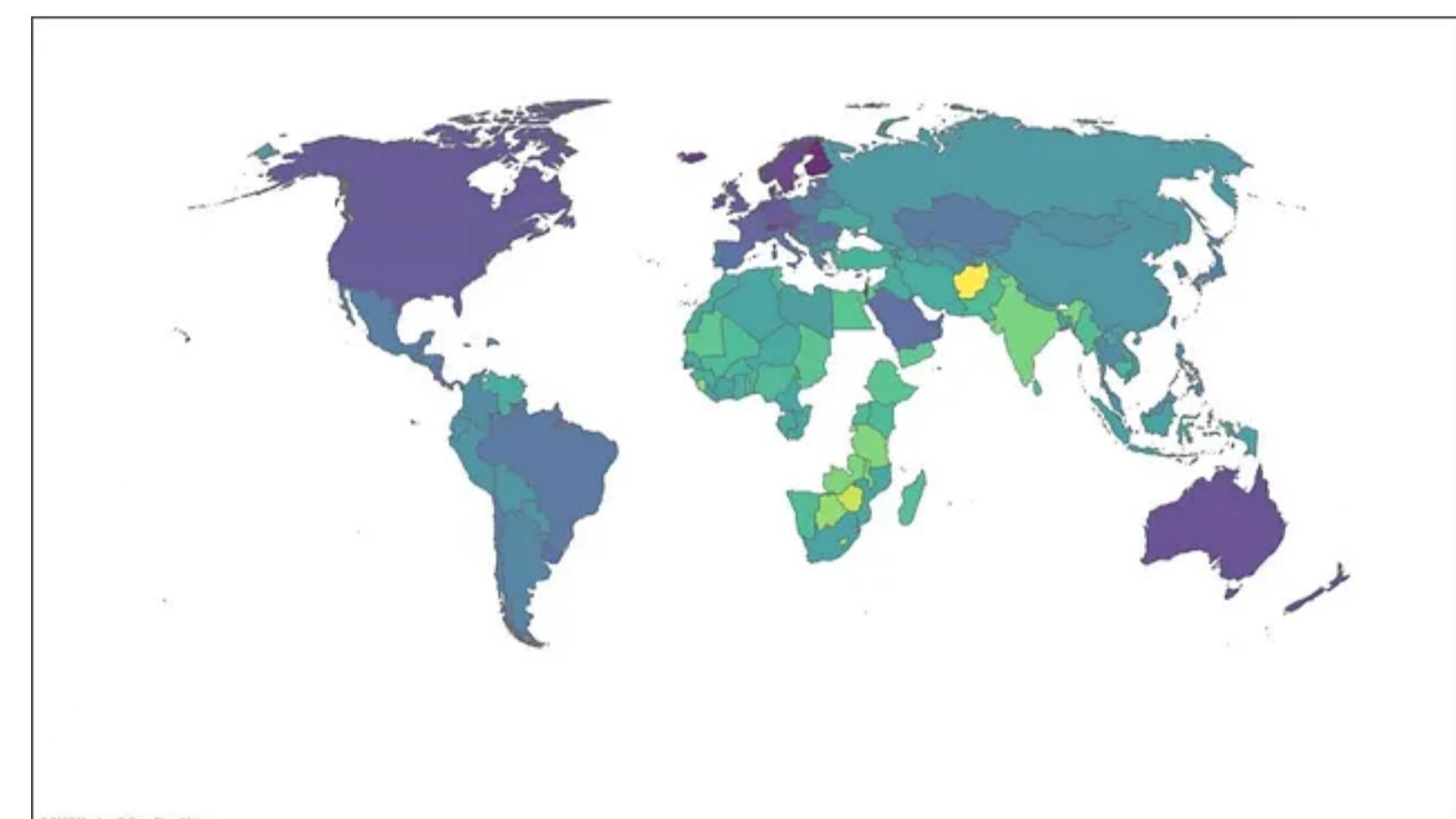
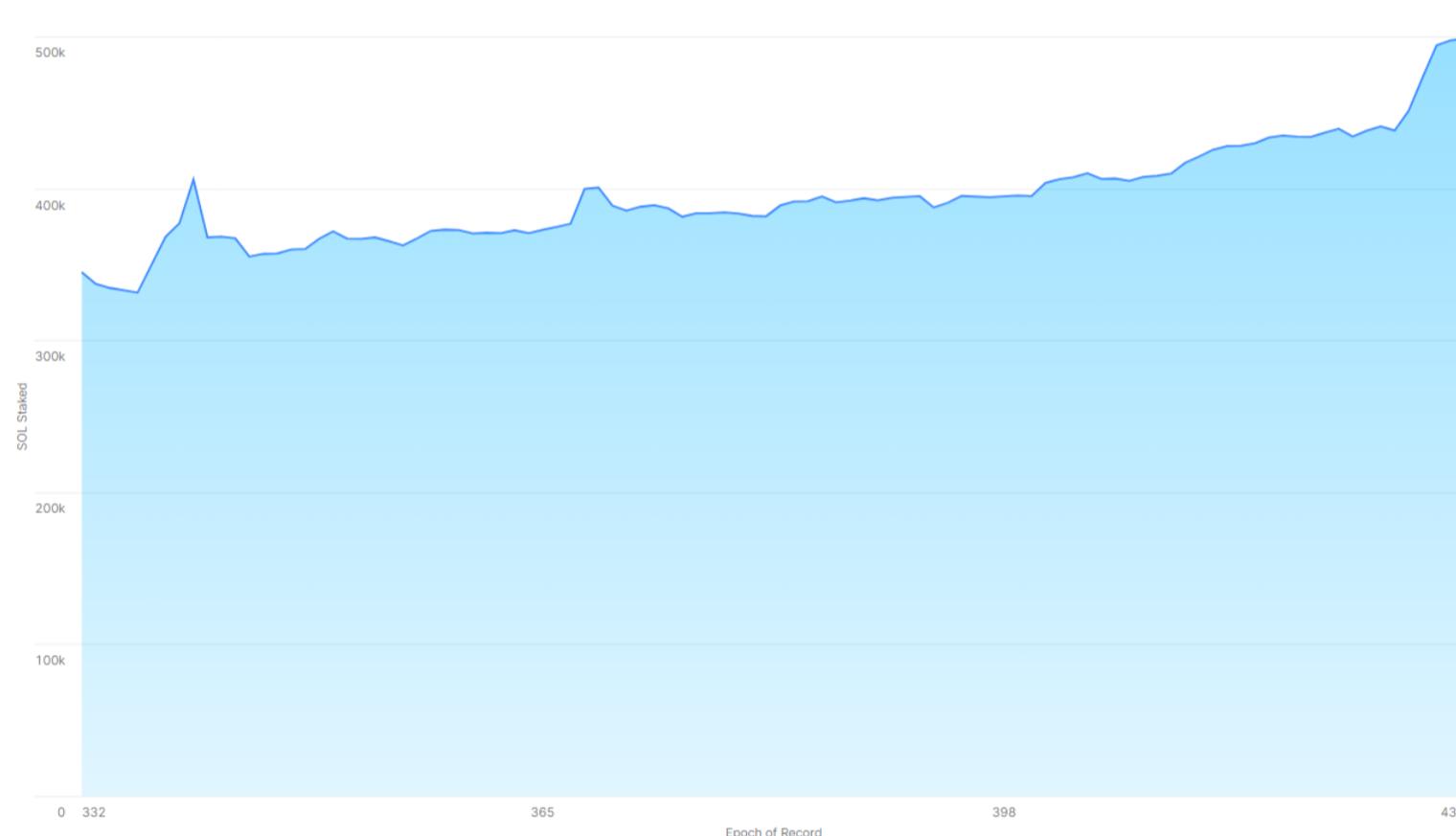
23.77

10-Epoch Churn Rate

0.23%

10-Epoch Attendance %

98.5%



## Metrics & Sourcing

- # Active Stakers: Count distinct stake\_pubkey where stake\_pubkey's deactivation\_epoch > current epoch.
- Avg # Sol Staked: Total active\_stake from stake\_pubkeys where deactivation\_epoch > current epoch, divided by # active stakers.
- 10-Epoch Churn Rate: Over the last 10 epochs,  $(\text{SUM}(\text{new active_stake}) + \text{SUM}(\text{deactivated stake})) / \text{current active stake}$ .
- 10-Epoch Active Rate: In last 10 epochs sum of num\_slots\_skipped / (max slot in latest epoch - min slot from 10 epochs ago).

**CHARTS** - Gray Background for missed epochs (like recessions in economics charts)

- Active Stake over Time (Epoch level)
- Change in Stake from previous Epoch
- # Stakers over time
- Change in # Stakers
- % Attendance in Epoch (epoch level) gray inactive
- Distribution of stake across stakers
  - histogram or cumulative distribution chart
- Location
  - current country colored, previous countries gray

# Solana Ecosystem

Epoch

431

# Sol Staked

390,744,820

# Validators  
(Last 64 Epochs)

3,385

10-Epoch Active %

60%

# Active Stakers

210,340

Avg # Sol Staked

40.5

10-Epoch Churn Rate

15.3%

10-Epoch Attendance %

45.3%

Node version

1.13.7

1,257 - 37.13%

1.14.17 - 549 - 16.21%

1.13.6 - 29 - 0.85%

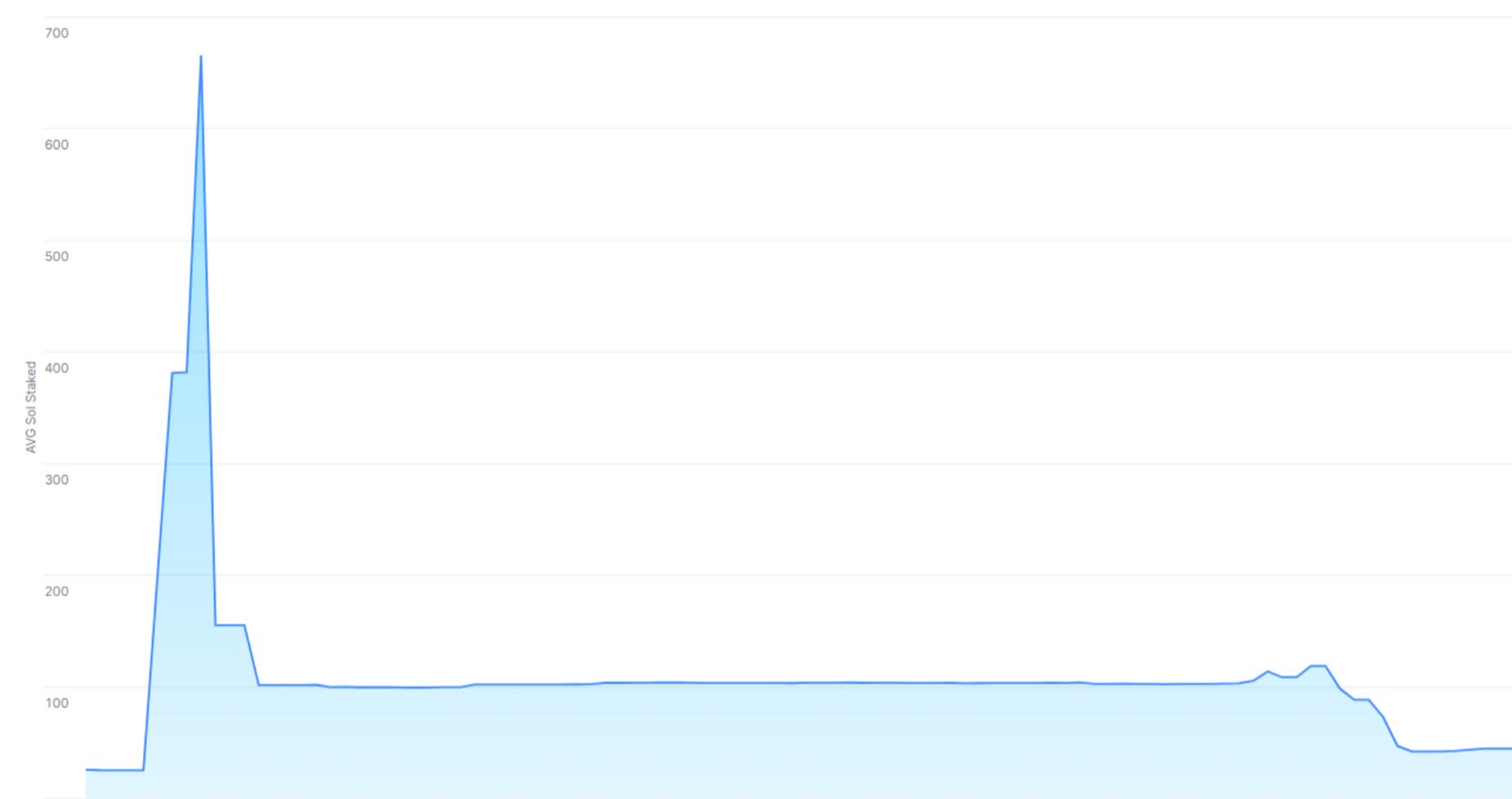
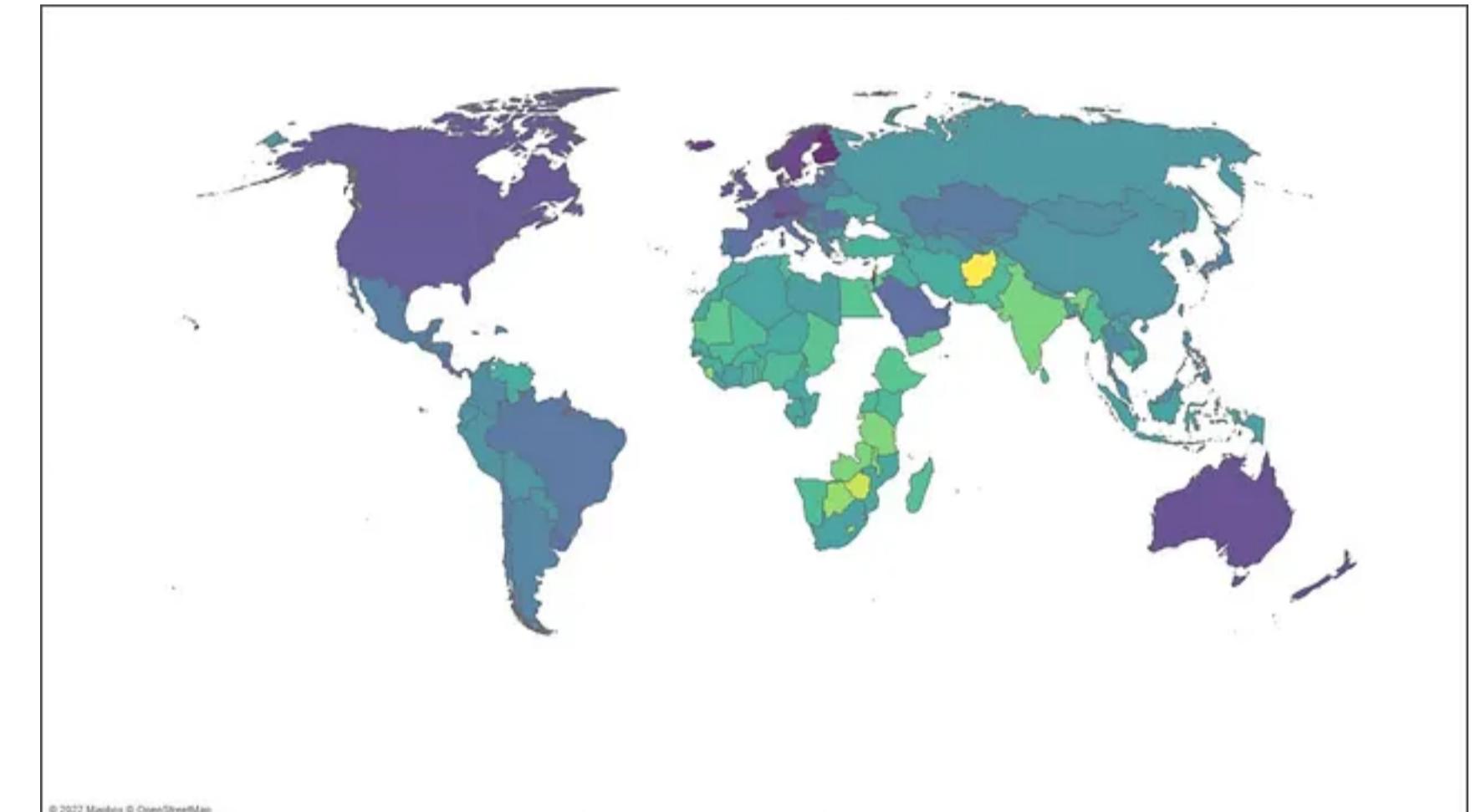
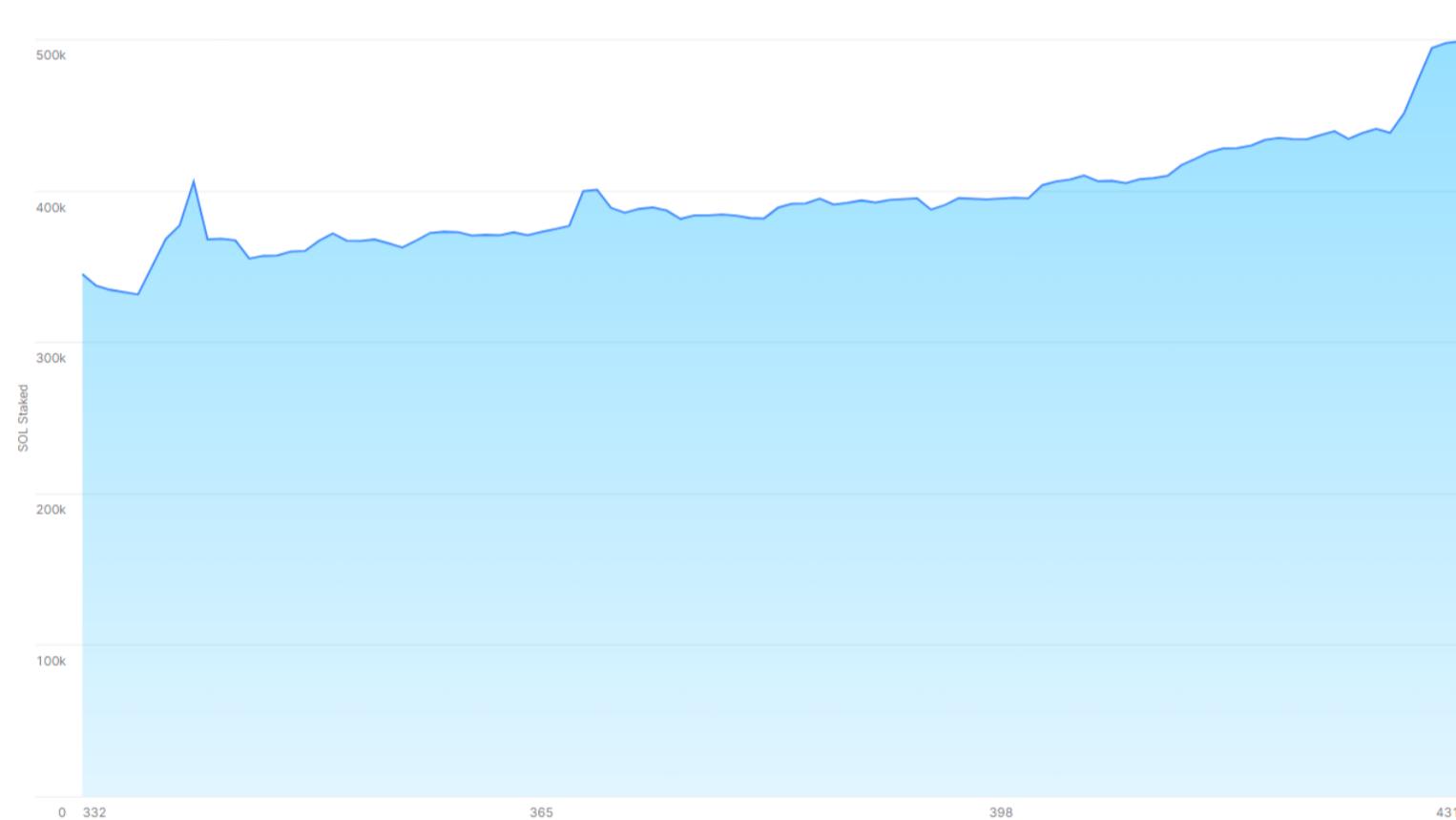


Geo Gini Coefficient

.25

Nakamoto Number

31



## Metrics & Sourcing

- # Active Stakers: Count distinct `stake_pubkey` where `stake_pubkey's deactivation_epoch > current epoch`.
- Avg # Sol Staked: Total `active_stake` from `stake_pubkeys` where `deactivation_epoch > current epoch`, divided by # active stakers.
- 10-Epoch Churn Rate: Over the last 10 epochs,  $(\text{SUM}(\text{new active_stake}) + \text{SUM}(\text{deactivated stake})) / \text{current active stake}$ .
- 10-Epoch Active Rate: In last 10 epochs sum of `num_slots_skipped` / (`max slot in latest epoch - min slot from 10 epochs ago`) for each validator weighted by # SOL Stake

## CHARTS - Gray Background for missed epochs (like recessions in economics charts)

- Active Stake over Time (Epoch level)
- Distribution of Stake Across Validators
- Gini Coefficient over time
- # Stakers over time
- % Attendance in Epoch (epoch level)
- Distribution of stake across validators
  - histogram or cumulative distribution chart
- Location
  - Countries colored by # Validators