📍 POP – Proof of Place

The Spatial Verification Layer for Web3

🧠 What Is It?

POP proves that a user was at a specific location, at a specific time, and optionally performed a task.
Think of it like Proof of Attendance Protocol (POAP) but leveled up with geolocation, ZK logic, and real-world impact.

> "Don't just say you were there. Show it. And get rewarded."

🛠️ Tech Modes of Verification

Type	Description	Privacy Level
🛰️ GPS Proof	Location shared via device sensors	Low
📷 Photo/Video Upload	Media evidence, optionally AI-verified	Medium
🧠 Satellite+AI	Task confirmation via open satellite + machine learning	High
👫 Peer Witnessing	Other verified users confirm presence	High
🛡️ ZK Proof of Location	Zero-knowledge circuit proving location without exposing it	Very High

Combine them = composite POP.

🧬 POP Data Structure

Each POP event includes:

Timestamp

Geocoordinates (hashed or raw)

Proof method

Optional media or task metadata

Associated wallet or burner ID

rNFT/GeoNFT ID (if it unlocks something)

Stored via IPFS, Arweave, or local mesh until synced.

💡 Use Cases

Domain   Example

🏙️ Urban Planning   Voters prove they're residents of a zone to vote on zoning
🎉 Events   Prove you were at a protest, concert, or conference
🧹 Missions   Complete a clean-up, tree-plant, or SDG task + submit proof
🛍️ Shopping   Reward walking to a local business, eco-market, or museum
🎓 Education   Attendance tracking for outdoor learning or civic tours

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💼 Integrated Stack

POP is not standalone — it plugs into:

rNFTs: Unlock layers, rewards, or narrative branches

Drop.me: Scan → prove → receive token/message

GeoNFTs: Enforce location-based ownership

POSI: Proof = points. Points = public good karma.

Mintstations: Station asks for POP → NFT minted

Flashloan triggers: Optional. You get in, you mint, then you qualify

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🌐 Why It's Different

Unlike Google Maps or POAPs:

Verifiable, permissionless, optional zk

Open standard for spatial coordination

Civic layer for the real world

Works offline and syncs later if needed

Layered logic (e.g., "You must have POP'd in Berlin + cleaned a park")

🔄 POP Reward Loop

1. 👟 You do something at a place

2. 🔐 POP proves it

3. 🎁 Unlock mission, rNFT, POSI, or token drop

4. 🚀 Share, build rep, climb leaderboard

It's IRL karma mining.

🧱 POP & SDGgame

Each SDG quest has:

🎯 A location

🕐 A timeframe

📍 A POP requirement

🎖️ A reward → verified via Drop.me or GeoDAO

You do it → you prove it → world gets better → you rise.

🔥 TL;DR

> POP = your key to unlock spatial value in Web3.
From protests to pizza shops, cleanups to cathedrals —
if you were there, it counts.