2024-02-19T10:00/12:30 (20 min.)
@Chiyoda Campus, Hitotsubashi University
Geospatial Technology for Multifaceted Crisis: Real-time Crisis Mapping and Long-term Trend Analysis

Smart Maps and Bazaar

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Web maps are open.
But it is not for granted.
ウェブ地図のオープンさは当然ではない

Smart Maps empower individuals to promote collaboration, by making web maps personal.

スマート地図はパーソナル化で協働を強化する。

UN Open GIS Initiative

The UN Open GIS Initiative is an ongoing Partnership Initiative for **Technology in Peacekeeping** of United Nations Department of Operational Support. It has been running by the **United Nations Geospatial** in the Office of Information and Communications Technology (OICT), **since March 2016**.

DEPARTMENT OF OPERATIONAL SUPPORT

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Partnership Initiatives

Viable and implementable projects have been initiated since the first Partnership for Technology in Peacekeeping international symposium held in 2014 in Brindisi, - Italy. These initiatives range from quick-impact projects, which use available resources to achieve small-scale yet high-impact results, to strategic cooperation projects that look at leveraging Member States' capacities, technologies and expertise to enhance the effectiveness, efficiency, agility, and responsiveness of specific areas of field operations. Existing partnership relationships continue to thrive between the United Nations and Member States: Austria, Canada, Denmark, France, Germany, Israel, Italy, Japan, Luxembourg, Netherlands, Republic of Korea, Switzerland, the United Kingdom, and the United States of America.

UN Open GIS Initiative

UN Open GIS (Geospatial Information Systems) Initiative

Partners: Finland, Italy, Japan, Republic of Korea, United States of America

Status: Ongoing

The UN Open GIS Initiative, established in 2016, is an ongoing partnership initiative and supported by Member States, International Organizations including UN Agencies, Academia, NGOs, and the Private Sector.

The aim of UN Open GIS is the creation of an extended spatial data infrastructure by utilizing open source GIS solutions that meet the operational requirements of the United Nations (UN Secretariat including UN field missions and regional commissions). The initiative also reaches to UN agencies and operating partners, and to developing countries.

The UN Open GIS Initiative intends to provide a sustainable, hybrid GIS platform (integrating open source software GIS technology with the existing proprietary GIS platform) to effectively and efficiently support enhanced Situational Awareness and to inform decision-making. This will fulfill UN core mandates that refers to or depends on the following: geospatial information, the saving of lives and the support to emergency operations, and the enablement of cost-effective operations.

Various open source GIS solutions have been explored/assessed in the UN field operational environment, with findings of positive outcomes to move forward from the existing proprietary GIS platform toward the hybrid GIS platform. This is particularly on mobile GIS solutions (QField, KoBoToolbox, Geopaparazzi), desktop GIS solution (QGIS), OpenDroneMap, Cloud Free Satellite Imagery, and Hybrid GIS infrastructure.

To learn more, visit https://www.un.org/geospatial

https://operationalsupport.un.org/en/partnership-initiatives

UN Smart Maps Group

1. Open **Community of Practice**. An open-source multi-sector partnership.
2. Vision: keep **web maps** open for a better world.
3. Mission: **test new technologies** for **future** geospatial operations.

Open Community of Practice

We share a concern and a passion for Smart Maps and learn how to do it better as we interact regularly.

@hfu – Hidenori Fujimura – Smart Maps Bazaar (IPFS)

@yuiseki – Yuiseki – Smart Maps Agent (LLMs)

@smellman – Taro Matsuzawa – Core (PMTiles with OSMFJ)

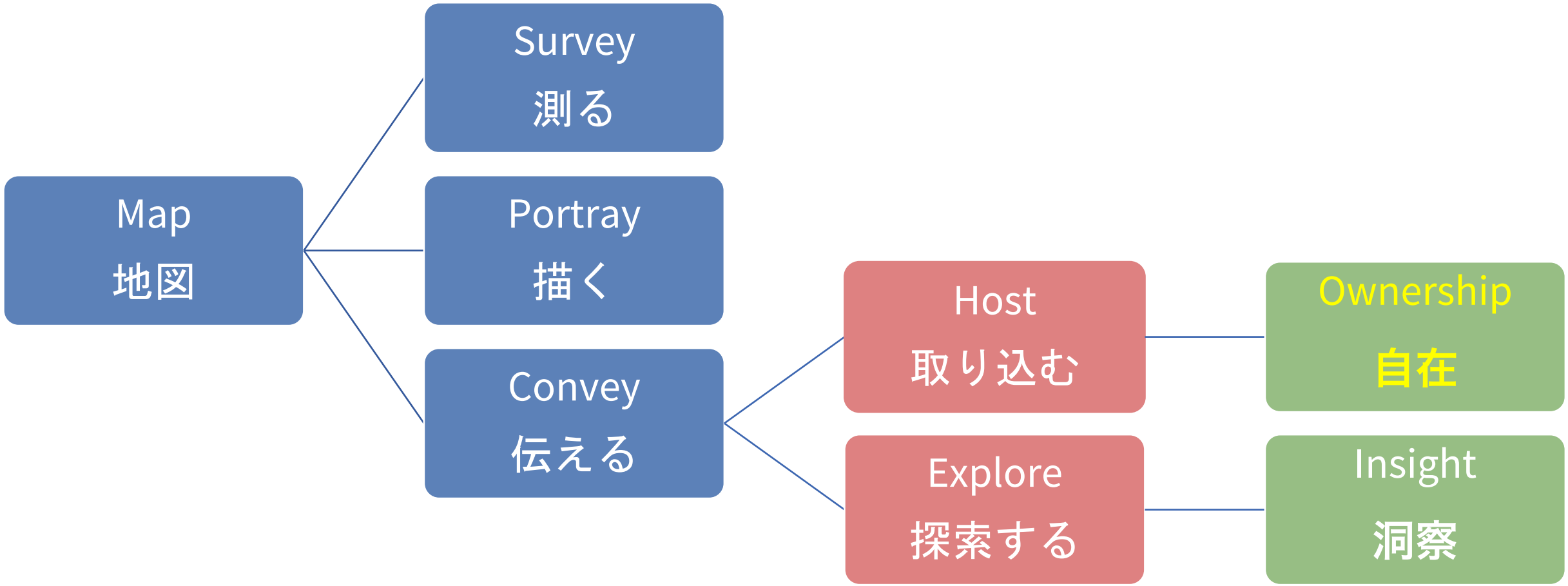
@albertkun - Albert Kochaphum – Documentation and Learning

@ShogoHirasawa – Shogo Hirasawa – UNVT Portable

@k96mz – Koji Osumi – Base map vector tiles project

…among others

Anatomy of Mapping

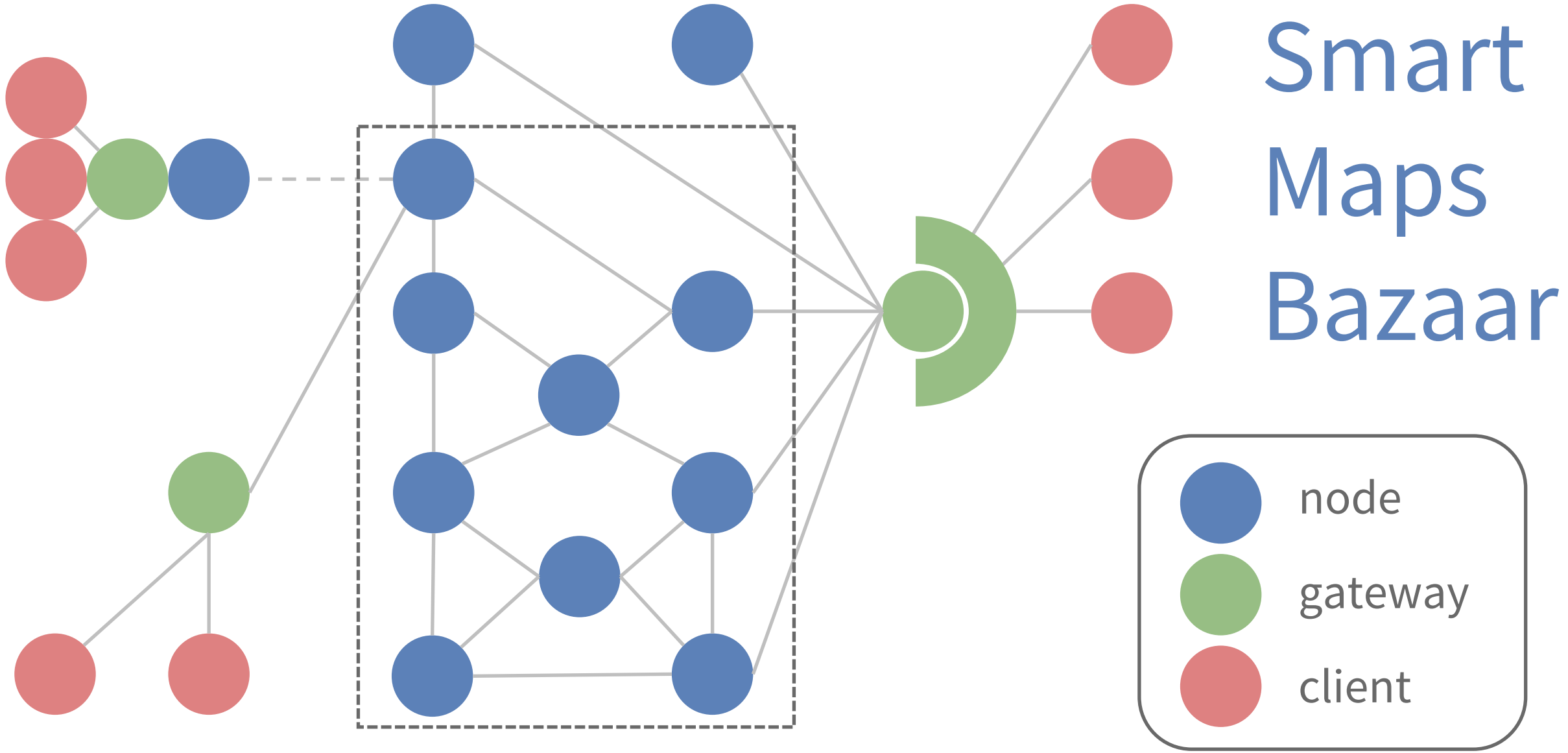


ウェブ地図能力構築の痛みを取り除く

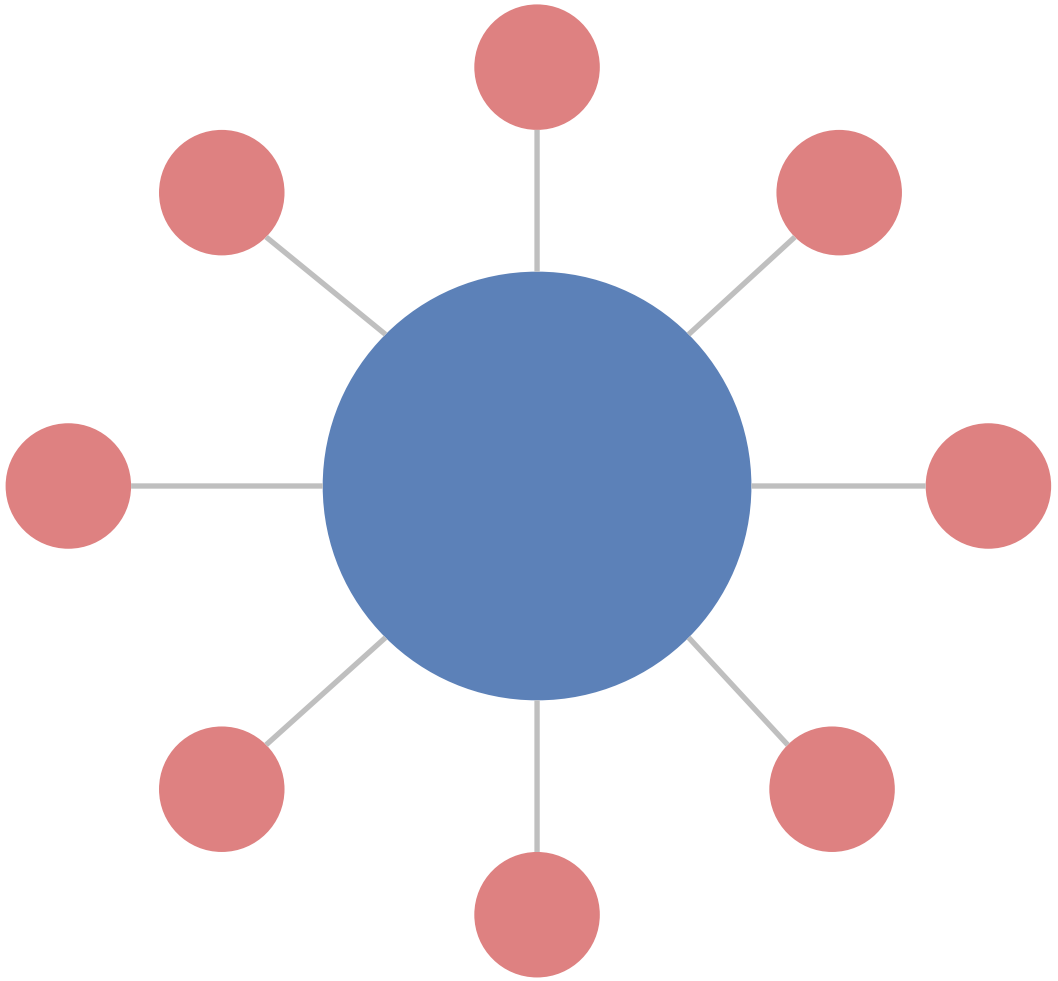
- サーバー環境がない。
- インターネットに出せない。
- 運用費が見積もれない。
- 運用費がない。
- 先立つ運用イメージがない。

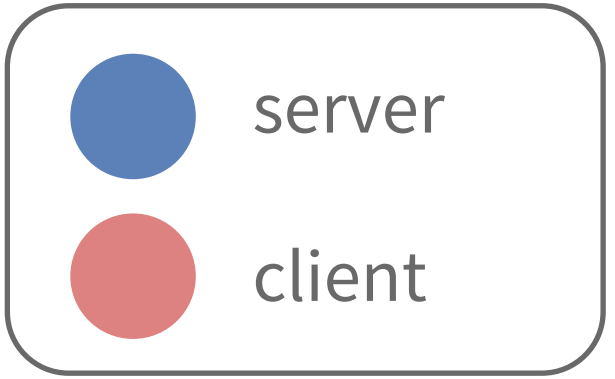
ゲストネットワークでも動く、
パーソナルなウェブ地図サーバー

InterPlanetary File System で共有



c.f. 従来型の中央集権的サーバー



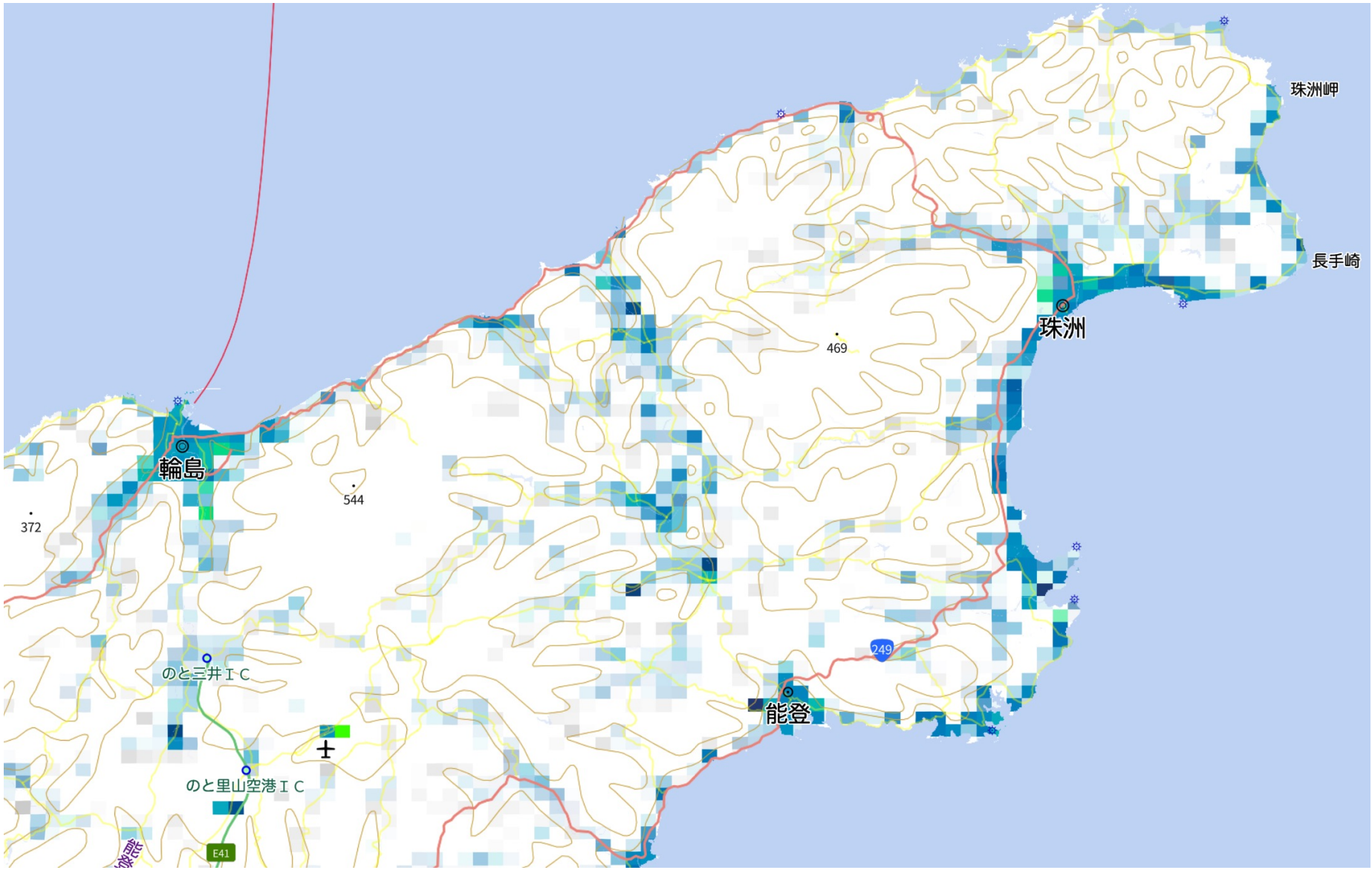


Start small.
Start personal.
Start from open data.

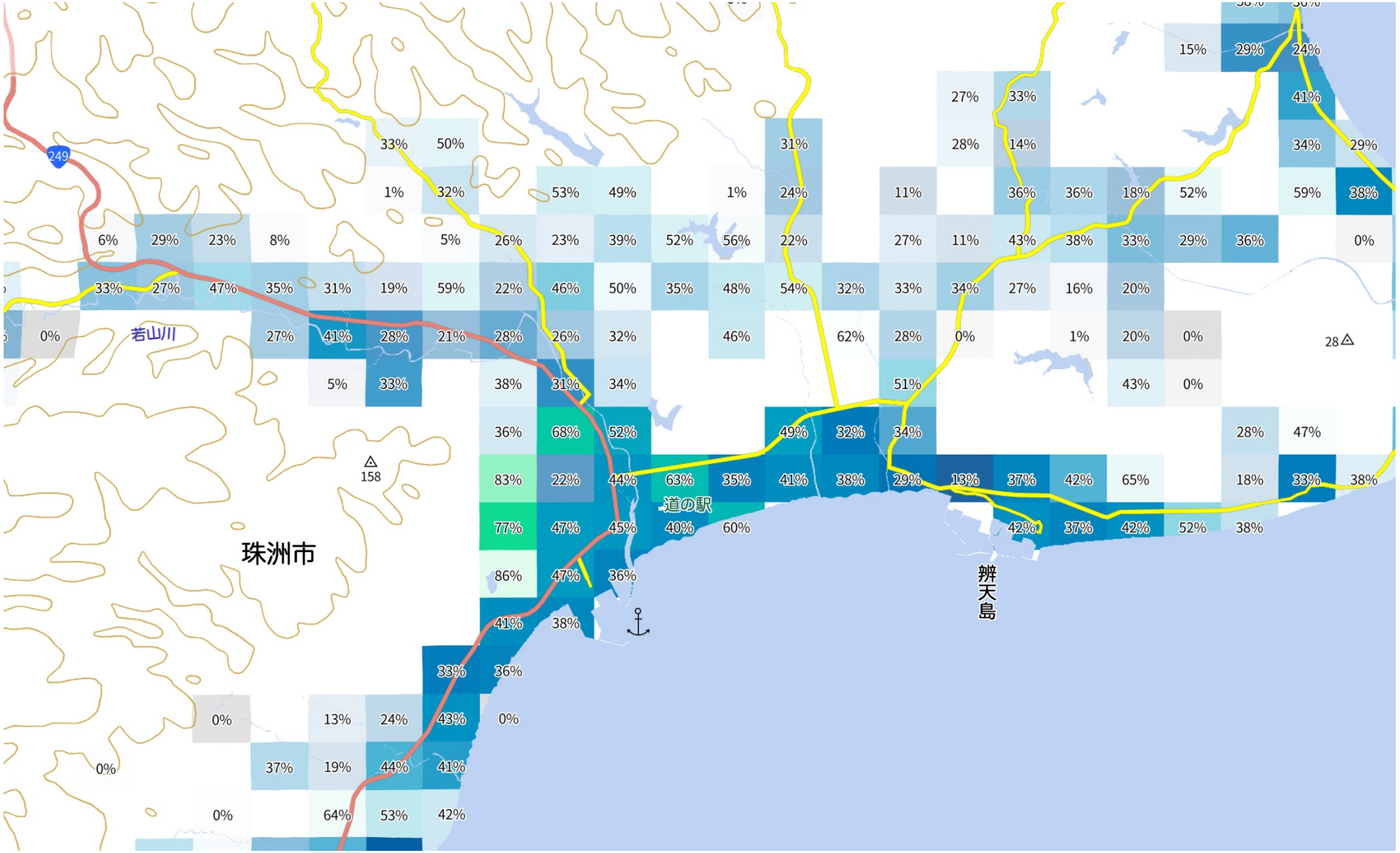
小さく、個人単位で、オープンデータから始める

Ownership 自在

Interactive mapping of population est.



Population est. 2015 to 2050.



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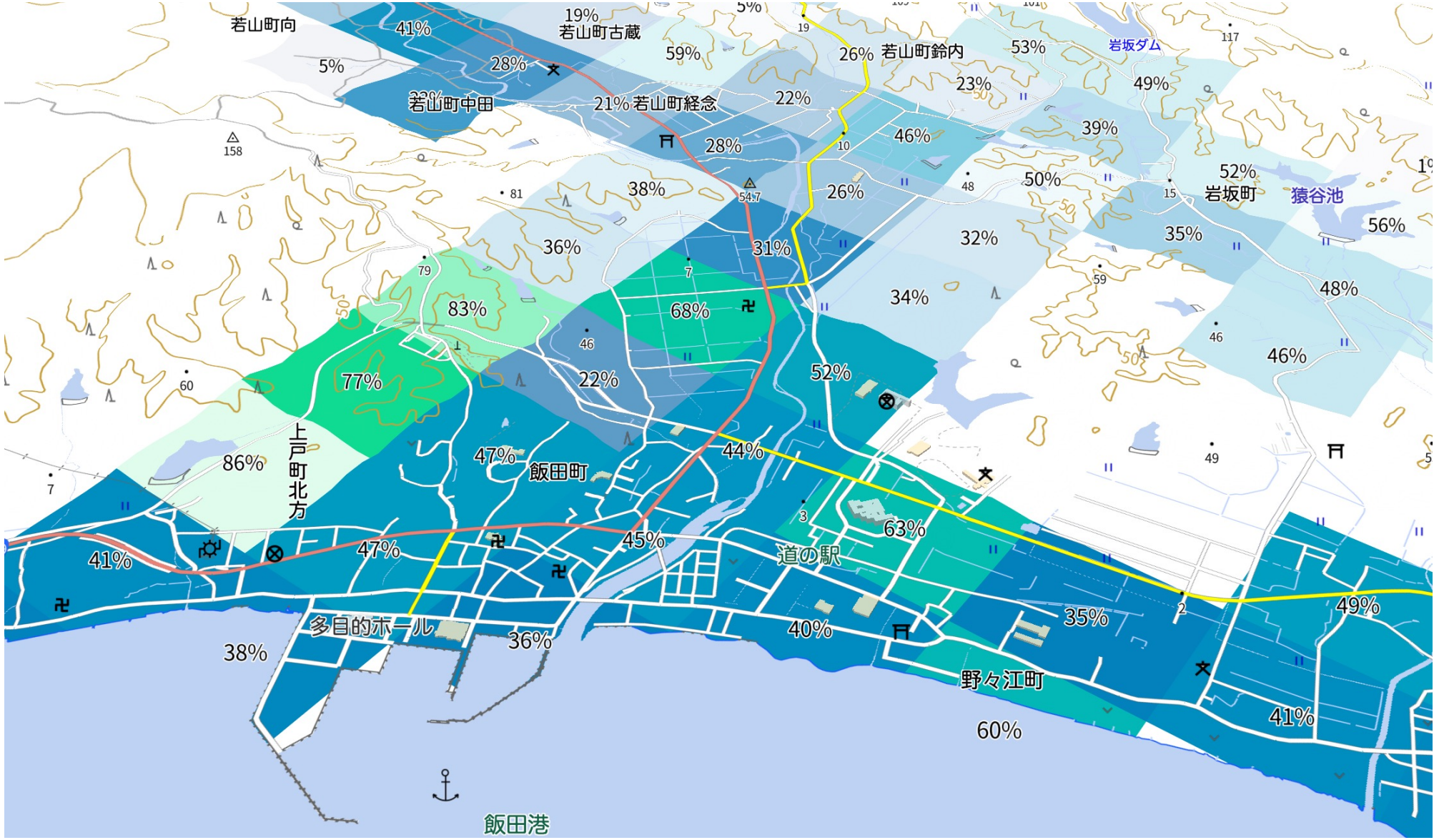

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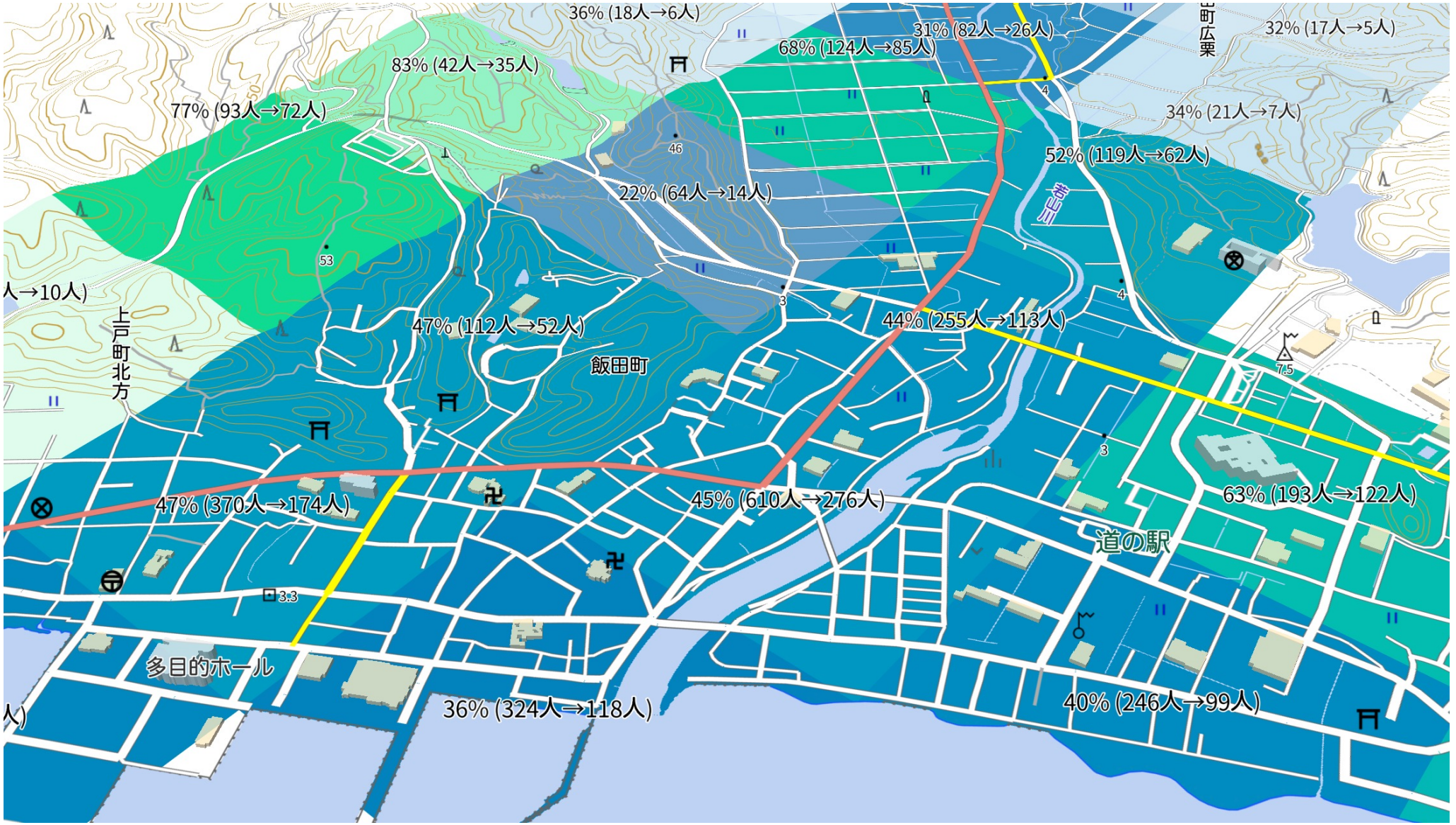
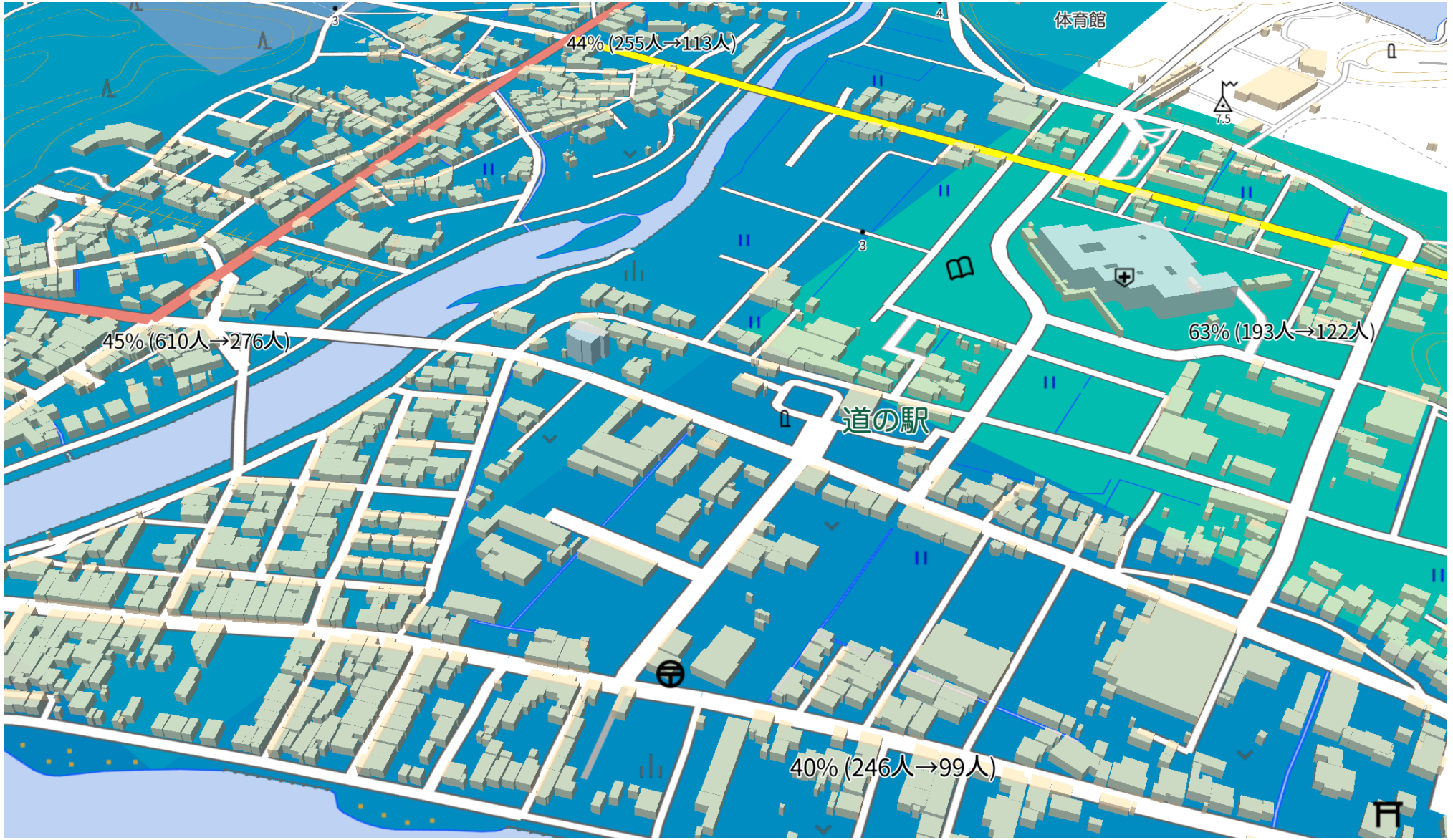
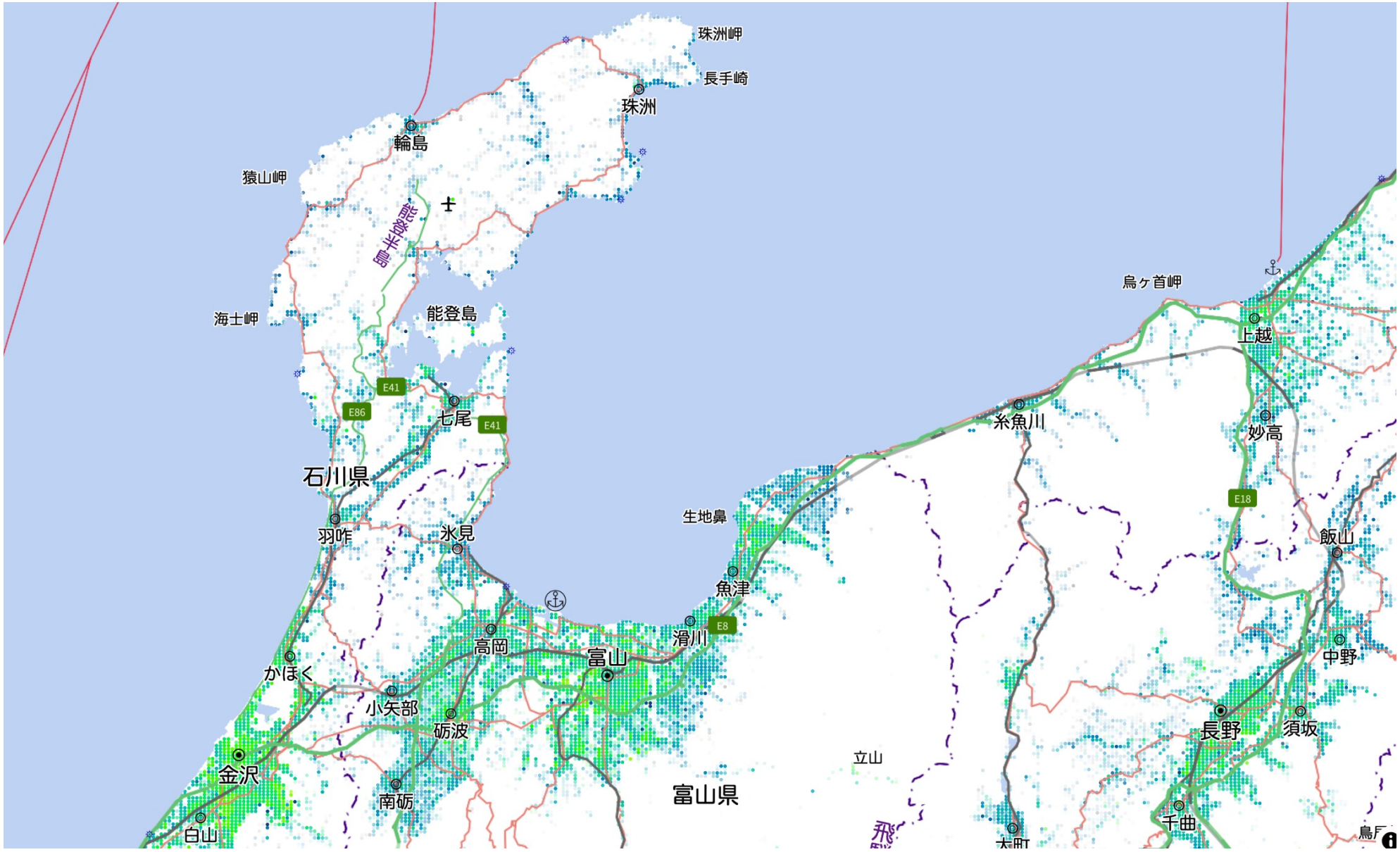


Population est. 2015 to 2050.



Population est. 2015 to 2050.



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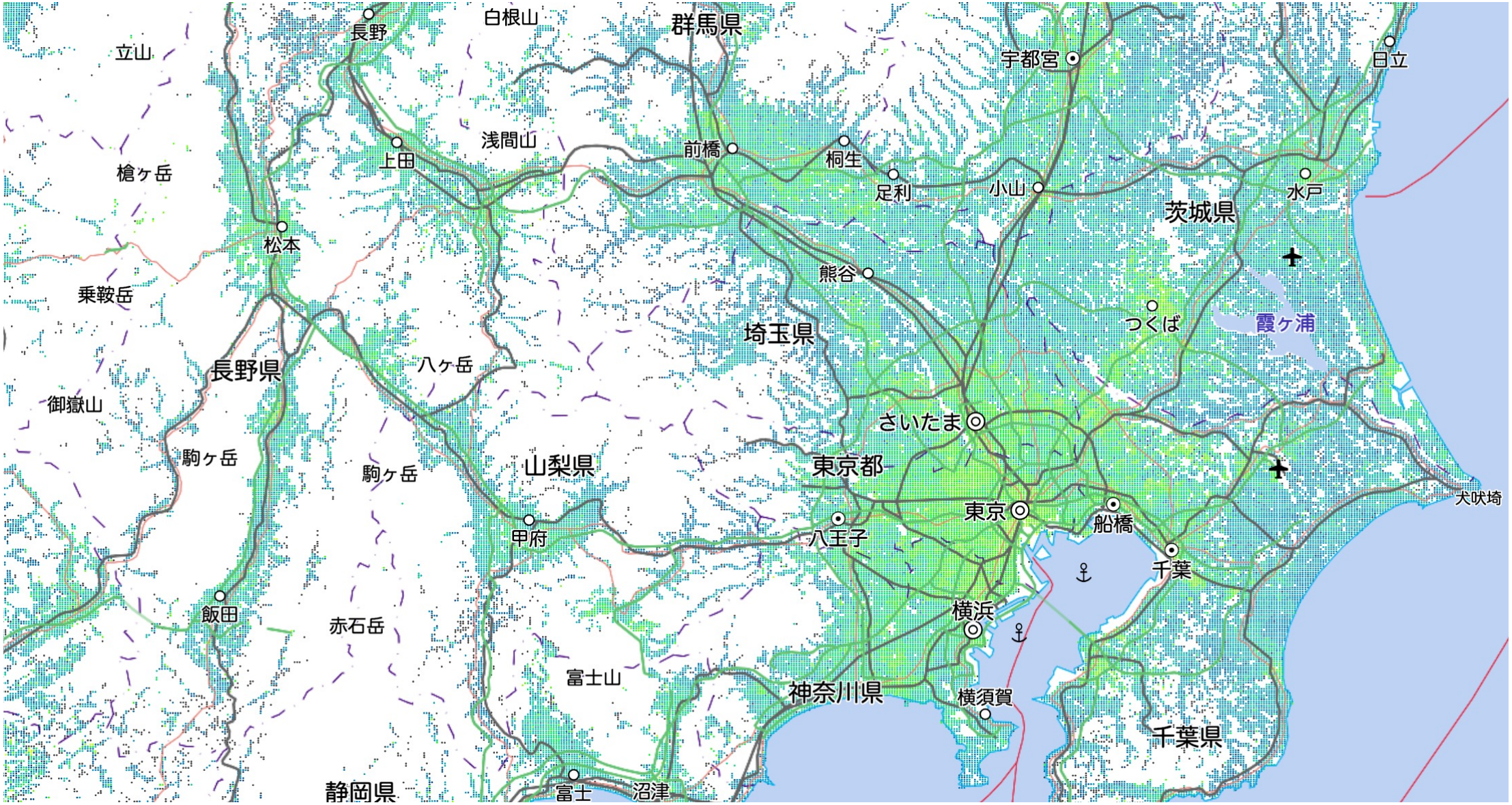

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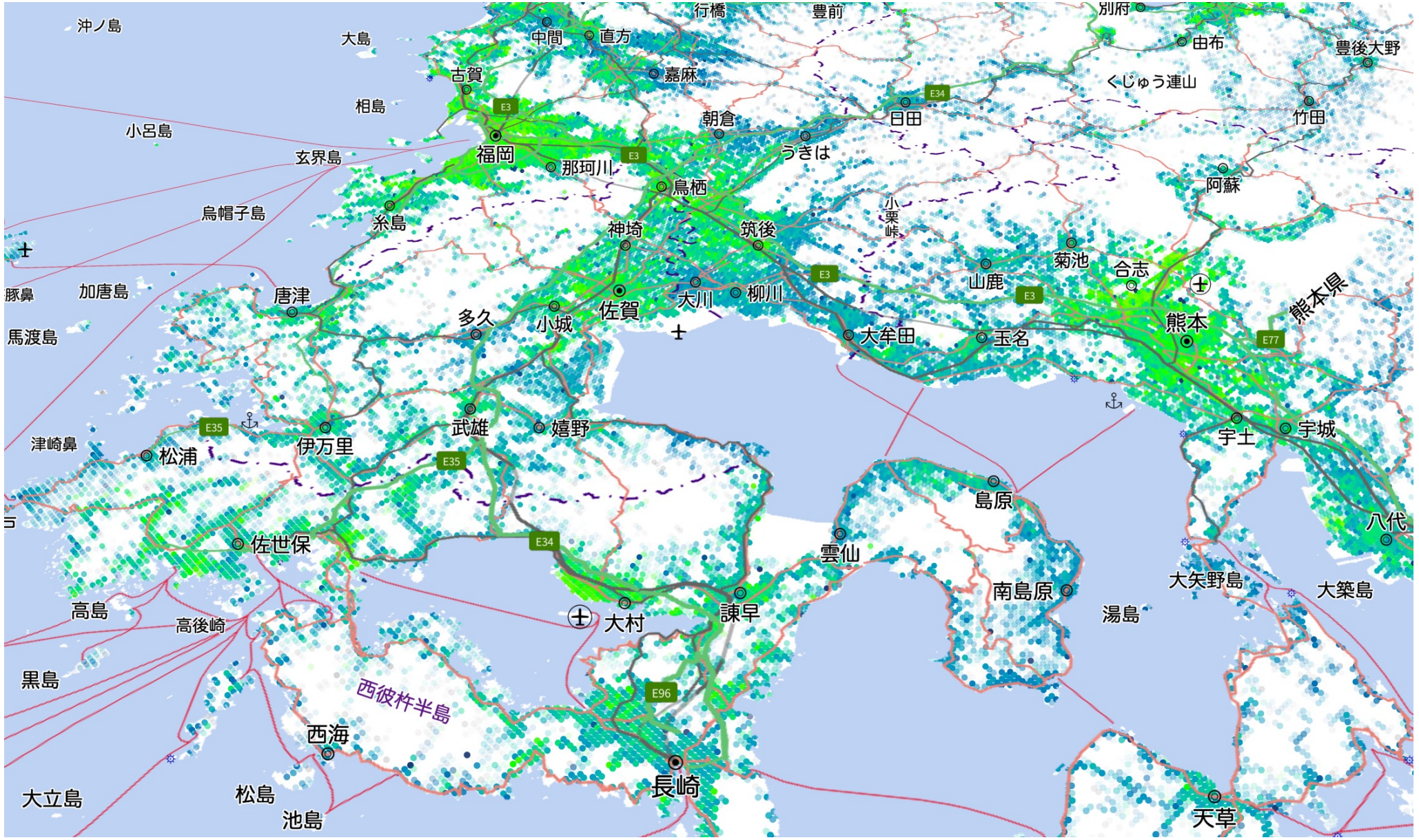
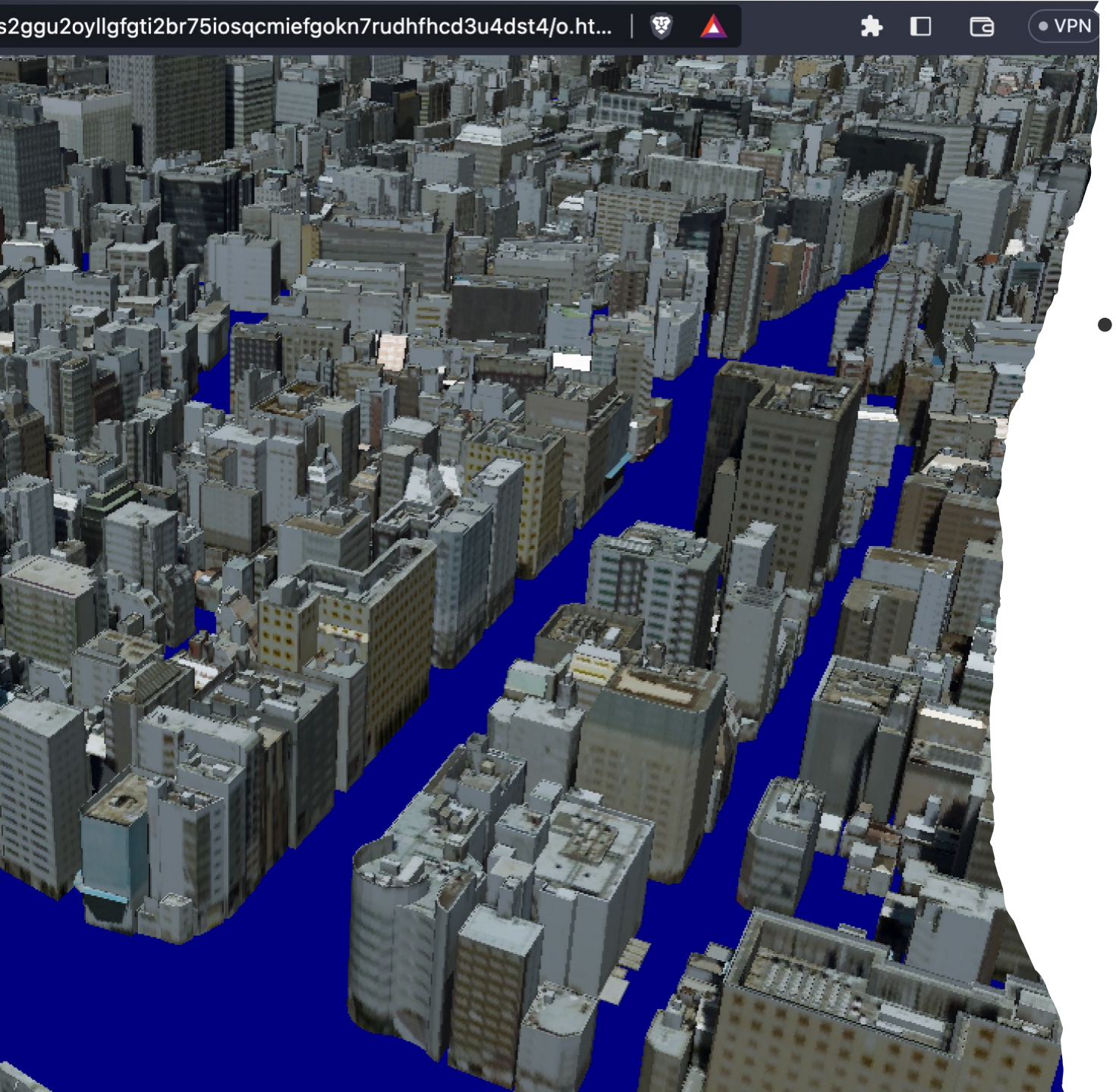


Point Cloud

- Open Data from Nagasaki prefecture.



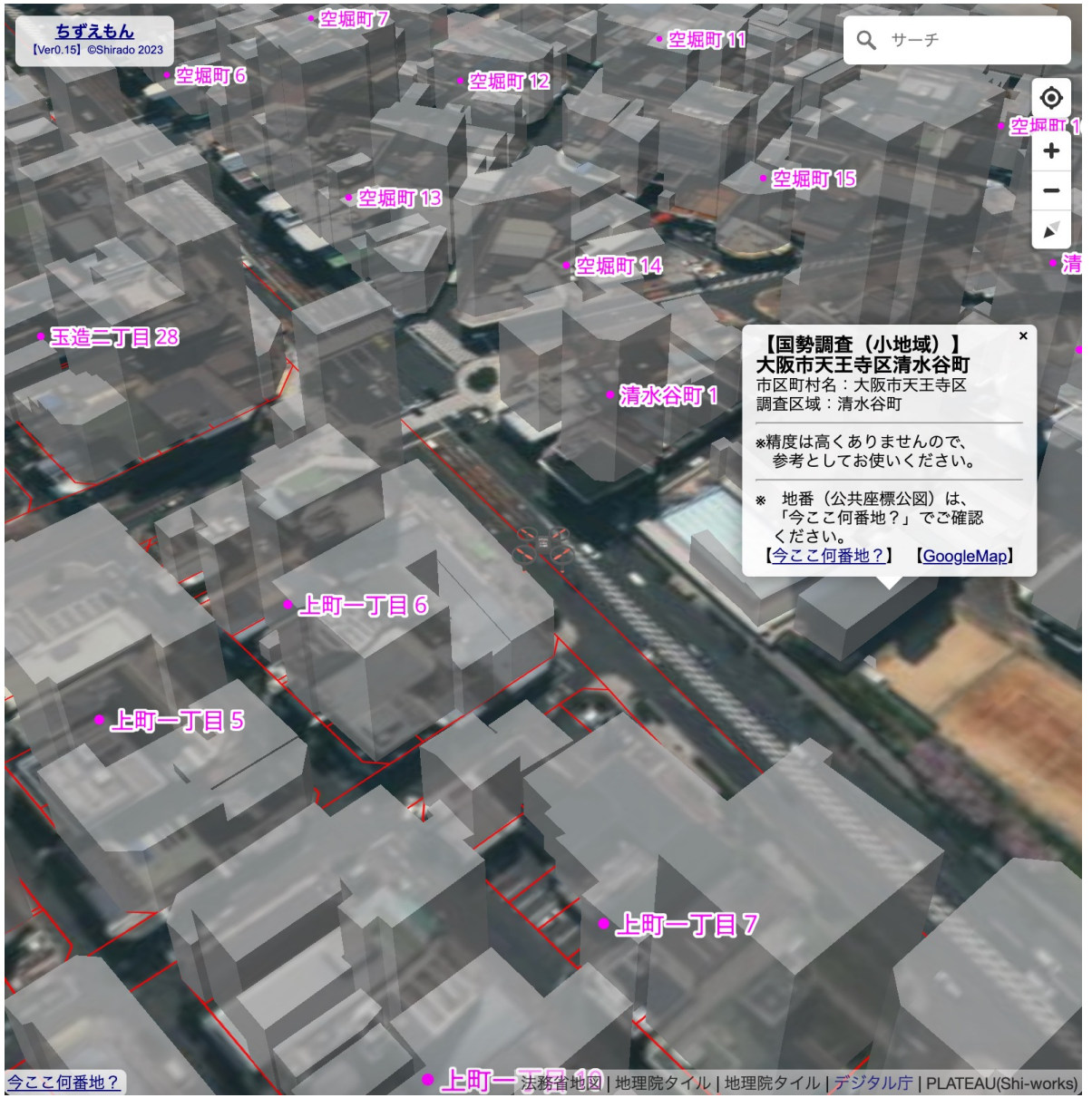
City Model

- 3D Tiles released by a Government Ministry (Project PLATEAU by MLIT)

Chizuemon

Combined open cloud-native data in a simple web map.

Detailed city data from 2 ministries, 1 agency and 1 authority.



Open Community supports Secured Data

Secured Data

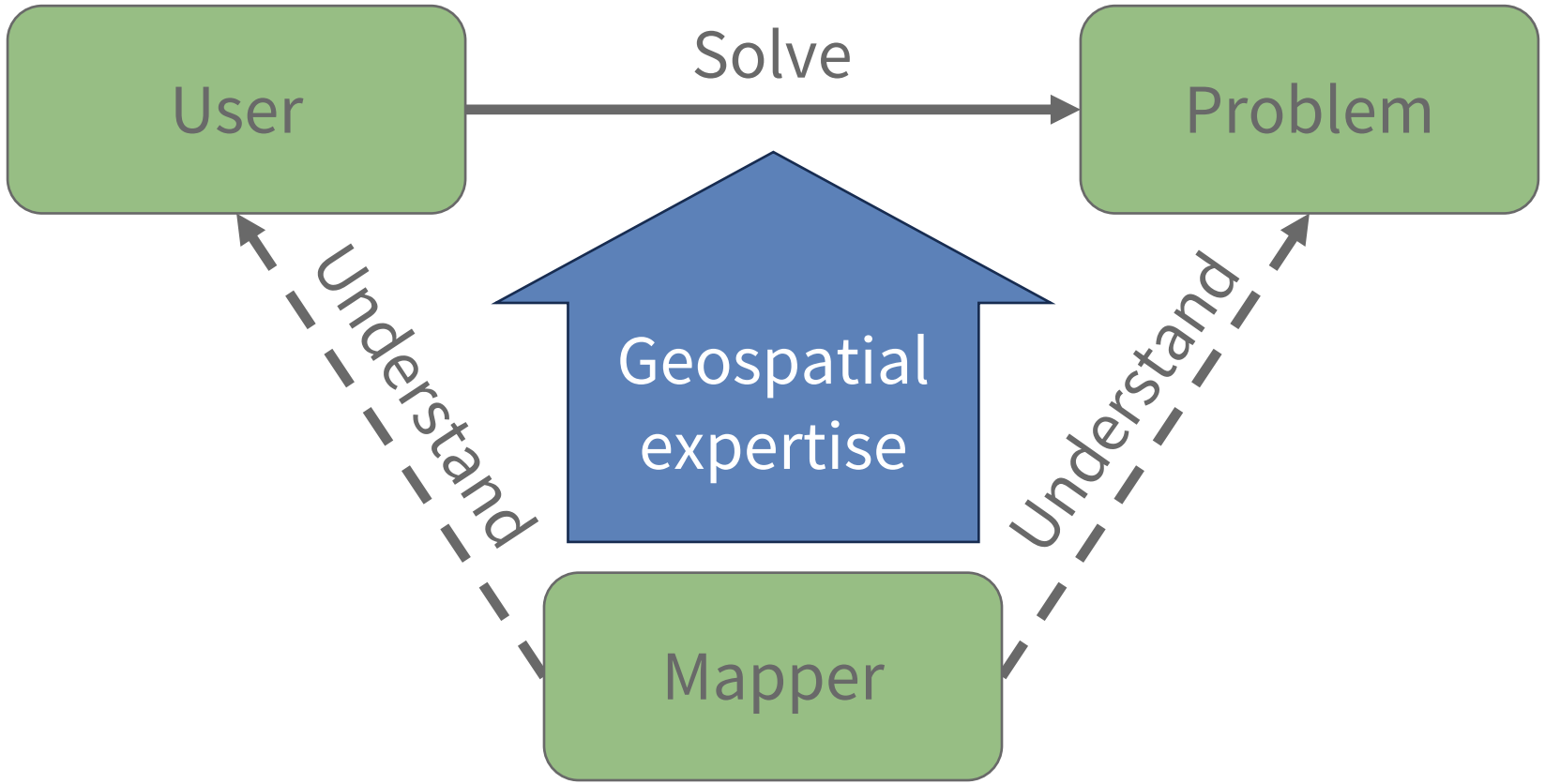
Open Community

Open Data

We transfer technology and respect secured data.

We test new open-source technologies with open data.

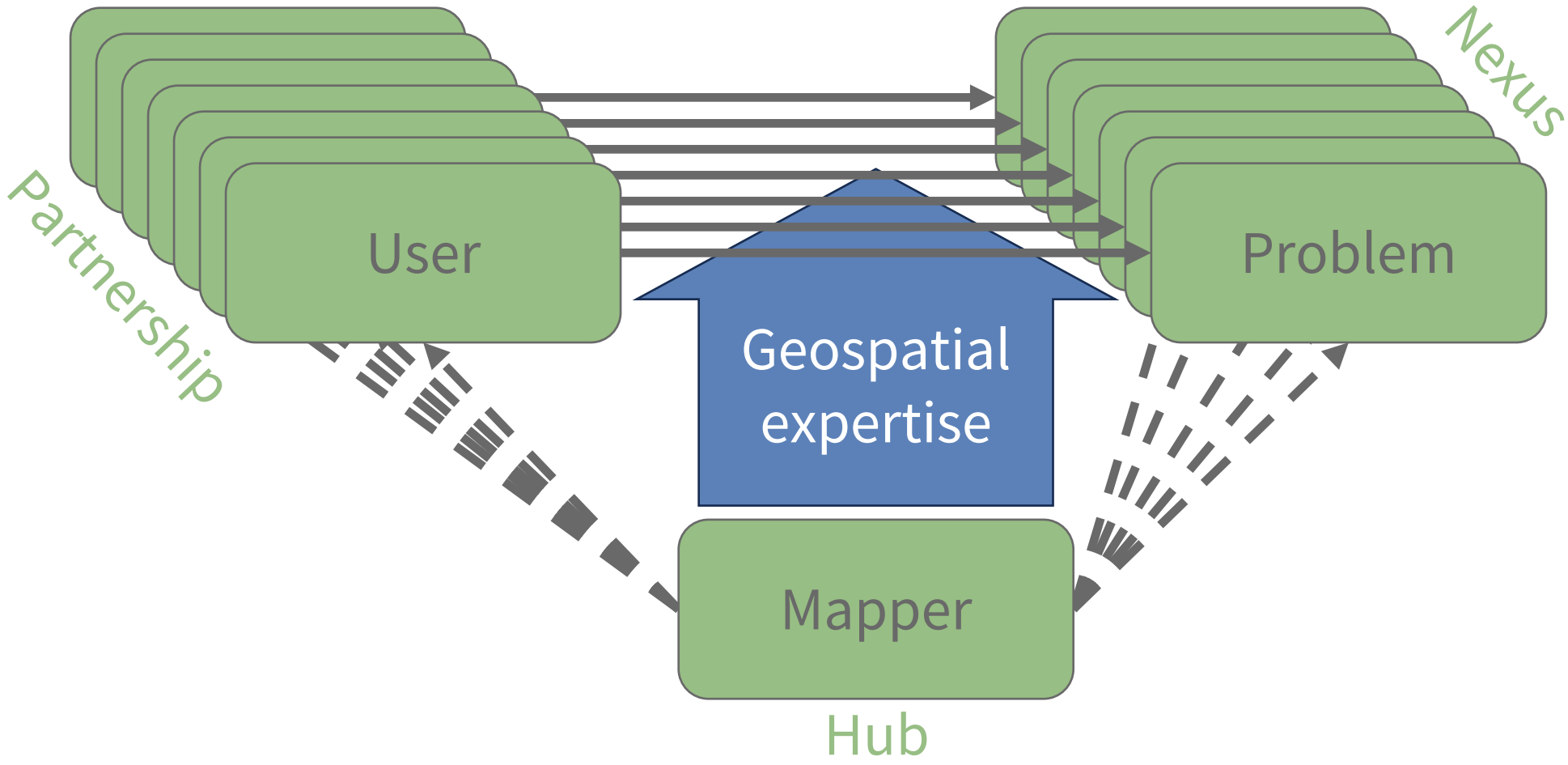
Partnership through geospatial information



Action #580 “地理空間情報によるパートナーシップ” (Partnership through Geospatial Information) of SDGs Action Plan 2023 of SDGs Promotion Headquarters, the Government of Japan (2023-03)

17 PARTNERSHIPS FOR THE GOALS

Mapper as a Partnership Hub



Action #580 “地理空間情報によるパートナーシップ” (Partnership through Geospatial Information) of SDGs Action Plan 2023 of SDGs Promotion Headquarters, the Government of Japan (2023-03)

17 PARTNERSHIPS FOR THE GOALS

Thank you!

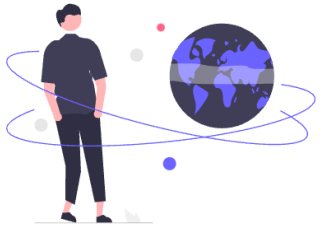
UN Smart Maps

Keep web maps open for a better world

Join UN Smart Maps | See upcoming events

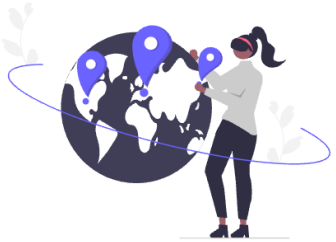
Open License

UN Smart Maps is committed to sharing Open Source Software and Open Data.



Open Practice

UN Smart Maps is a Community of Practice. We share best practices and lessons learned.



Open Community

Anyone can join UN Smart Maps. We welcome contributions from anyone.

「国土数値情報（500mメッシュ別将来推計人口データ）」（国土交通省）を加工して作成。/ 国土地理院 /
Davies, Shawn, Therese Pettersson & Magnus Öberg (2023). Organized violence 1989-2022 and the return of conflicts between states?. Journal of Peace Research 60(4).
Sundberg, Ralph and Erik Melander (2013). Introducing the UCDP Georeferenced Event Dataset. Journal of Peace Research 50(4).