



2016-11-09 JICA NSDI Seminar
/ 2016-11-14 SSGCC

Presentation

on “coordination committee for NSDI in Japan”

Geospatial Infrastructure and Open Innovation

Hidenori FUJIMURA
GSI International

Photo by Junkichi Egashira, licensed under CC BY 4.0 International

Geospatial Information Authority of Japan (GSI)

2

We're Japan's National Geospatial Information Authority



Hello



**Hidenori
FUJIMURA**

hfu

- github.com/hfu
- [facebook](#)



coordination

ownership

involvement

coordination

coordination

History of Japan's coordination for NSDI

1	1995-01	Great Kobe earthquake
2	1995-09	Inter-ministerial committee on GIS
3	1996-	National Programs for GIS and NSDI
4	2002	Revision of Survey Act, to adopt ITRF94 (≒WGS84)
5	2003	GSI Maps (web maps by GSI) started
6	2007	NSDI Act* enacted * Basic Act on the Advancement of Utilizing Geospatial Information (地理空間情報活用推進基本法)
7	2008/2012	NSDI Basic Plan** 2008-2012 ** Basic Plan for the Advancement of Utilizing Geospatial Information (地理空間情報活用推進基本計画)
8	2011-03	Great east Japan earthquake
9	2012/2016	NSDI Basic Plan 2012-2016
10	2016/	NSDI Basic Plan 2016- (in development)

Structure of NSDI coordination based on NSDI Act

NSDI Act

Article 9: The national government shall develop a NSDI Basic Plan. The national government shall also review the Plan.

Article 10: The national government shall make institutional arrangements for the cooperation among related administrative organizations ... for the development of NSDI Basic Plan and the implementation of policies based on the Plan.

NSDI Basic Plan

Cabinet decision

NSDI Steering Committee*

* Committee for
the Advancement of Utilizing Geospatial
Information



2 pillars of NSDI Act

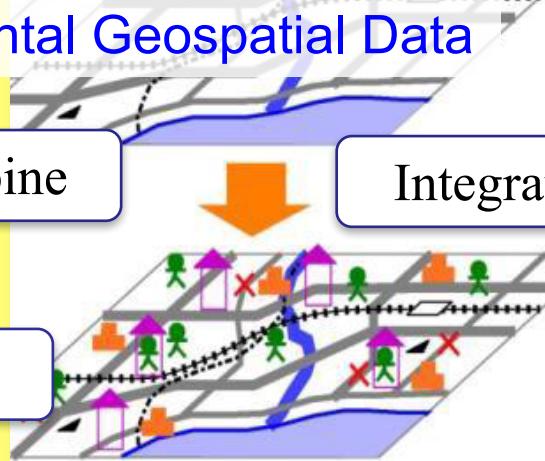
Geospatial Information

Fundamental Geospatial Data

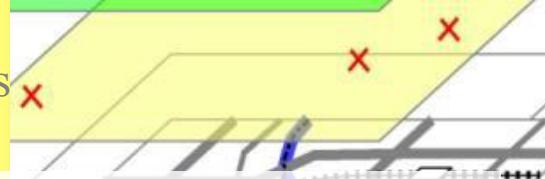
Disaster prevention facilities



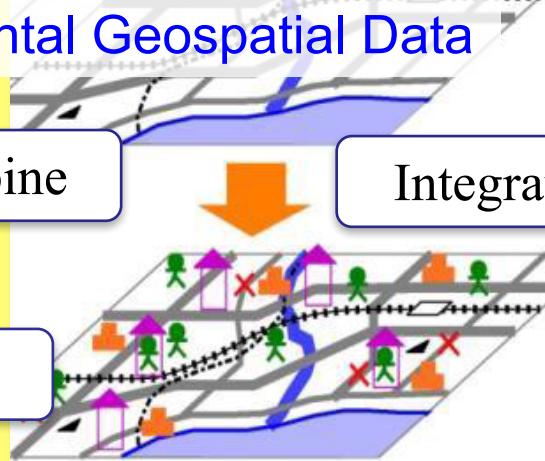
Brittle houses



Residents who need supports



Blocked roads



Fundamental Geospatial Data

Combine

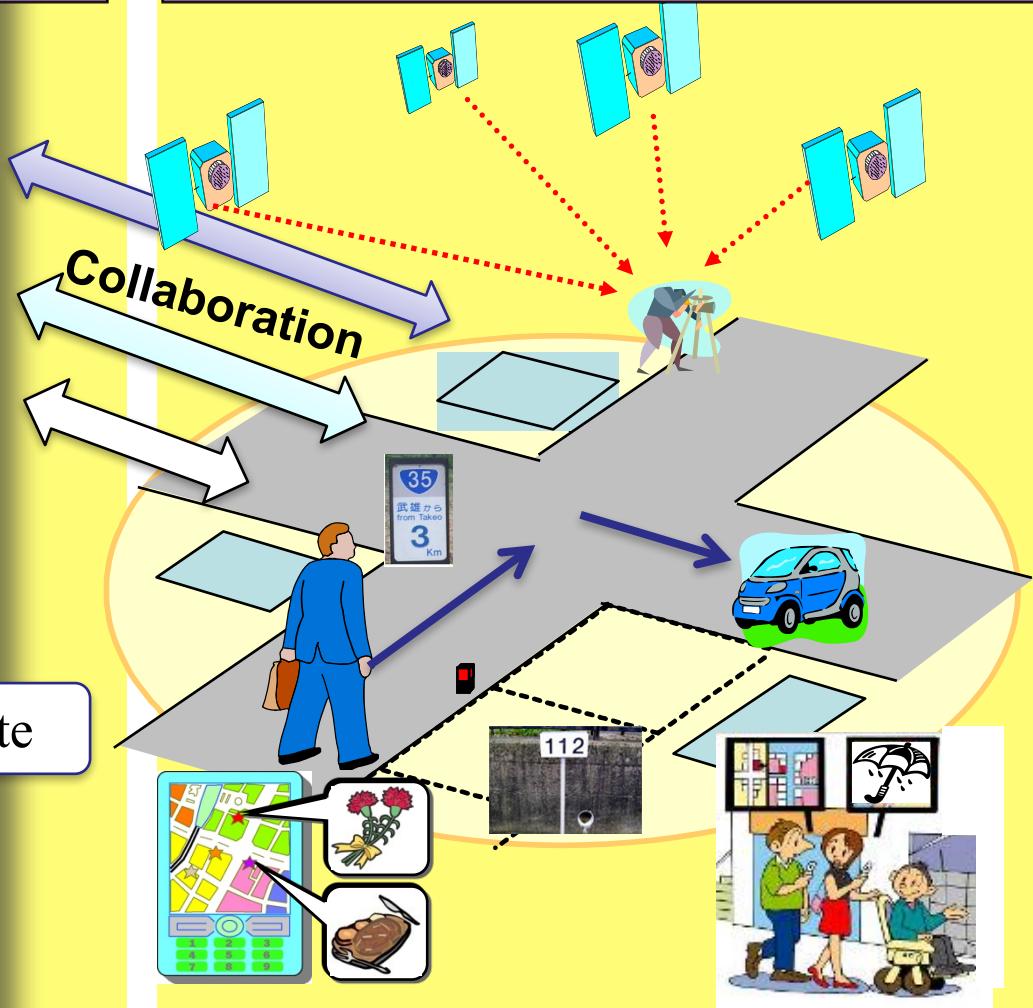
Integrate

Analyze

Promote comprehensive application measures

Satellite Positioning

Multi-GNSS Satellite Positioning



FYI: FGD available in GSI Maps in GeoJSON tiles

地理院地図 (電子国土Web)  例: 銚岳 / 金沢市木ノ新保町 / 35度0分0秒 135度0分0秒 / 35.00 135.00 / 54SUE83694920 

選択中の情報 

+ 情報追加/ベースマップ切替 リセット

ベクトルタイル提供実験 地図情報 (注記) 透過0% 

表示 ベクトルタイル提供実験 基盤地図情報_基本項目 透過0% 



住所: 東京都千代田区霞が関二丁目 (付近の住所。正確な所属を示すとは限らない。)
 35度40分31.54秒 139度45分0.39秒
 35.675429,139.750109 ズーム: 18
 UTMポイント: 54SUE86894867
 標高: 13.1m (5m (レーザー))

町字界線
 fid : 50310-12840-i-616
 IfSpanFr : 2013-08-14
 devDate : 2015-06-25
 orgGILvl : 2500
 vis : 表示
 class : CommBdry
 type : 大字・町・丁目界

表示値の説明 

<http://maps.gsi.go.jp/> or <http://bit.ly/fgd-geojson>

Warning: slow response because of great latency from Ukraine to Japan

national government

◆ responsibility

to develop and carry out comprehensive policies

◆ legal and other measures

taking legal, financial, and other measures

◆ enhancement of cooperation

taking necessary measures to enhance the liaison

local governments

◆ responsibility

Developing and carrying out **policies** in harmony with the circumstances of their regions

private sector

◆ efforts

to provide high quality geospatial information

to cooperate with the national and/or local governments in their policies

cooperation

academic sector

research institutions such as universities

NSDI steering committee*

* Committee for
the advancement of Utilizing Geospatial Information

Chair: Deputy chief cabinet secretary
(parliamentary and administration)

Acting: Assistant deputy chief cabinet secretary

Members: Bureau directors of relevant agencies
including director-general of GSI

Secretariat: Cabinet, MLIT* and GSI

* National and regional policy bureau, ministry of
land, infrastructure, transport and tourism

Geographic information
systems WG

Vice-chair: GSI

Satellite positioning
WG

Vice-chair: GSI

Geospatial projects
promotion WG

Vice-chair: GSI

Review Teams

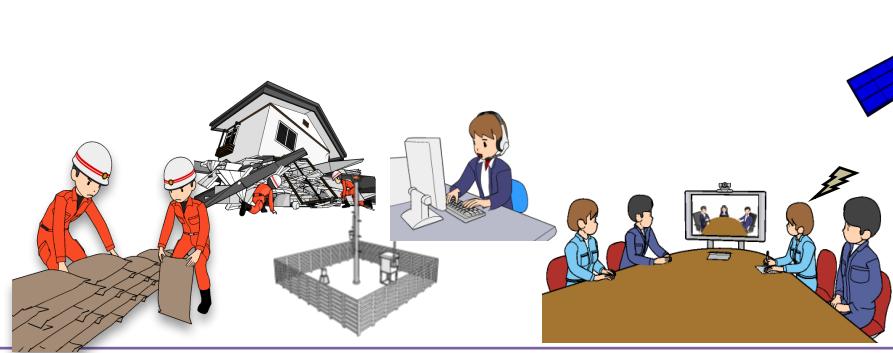
- RT on protecting personal information and intellectual property
- RT on national security
- RT on development and update of fundamental geospatial data

Promotion Teams

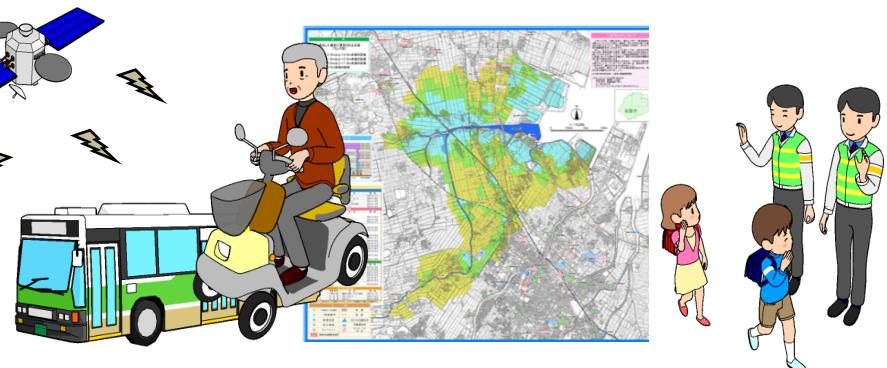
- PT for utilization of geospatial information center
- PT for advancement of disaster prevention system
- PT for IT-based agriculture, forestry and fisheries
- PT for vitalization of communities and small and mid-size enterprises
- PT for overseas development

Approaches for realizing the Geospatial Society

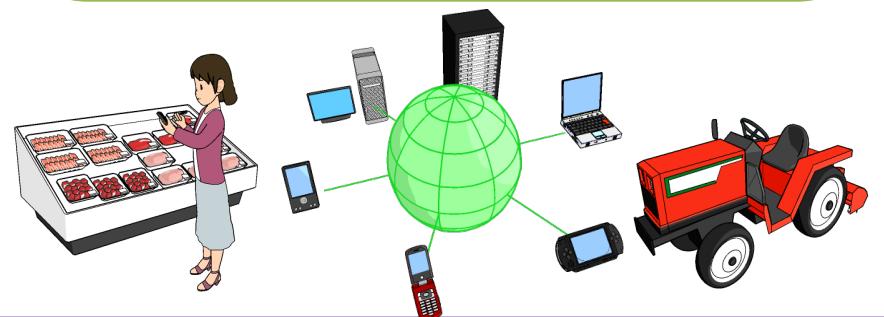
sustainable and disaster-resilient land use



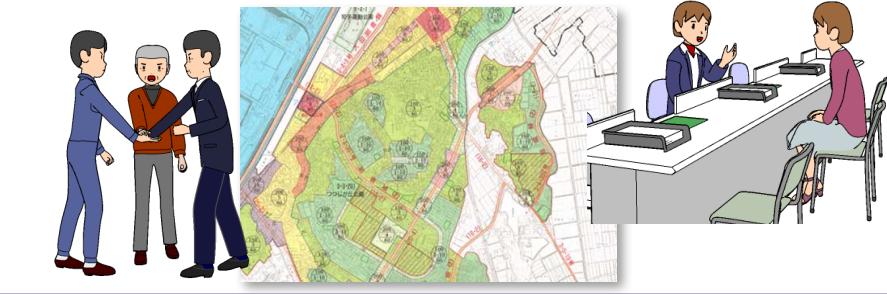
high-quality, safe, and secure living



new services and industries



greater efficiency and quality of govt. services



Goal #1 on geographic information system

developing seamless
geospatial information
to meet society's
needs and
applications to new
uses

Goal #2 on satellite positioning, navigation and timing

development and
utilization of quasi-
zenith satellite systems
(QZSS) inside and
outside Japan

Goal #4 on sustainable and resilient land use

recovery from the Great
east Japan earthquake
and contribution to
sustainable and
disaster-resilient
land-use

Goal #3 for penetration in society

Further penetration and establishment
of the geospatial information in society

Specific measures towards the Geospatial Society

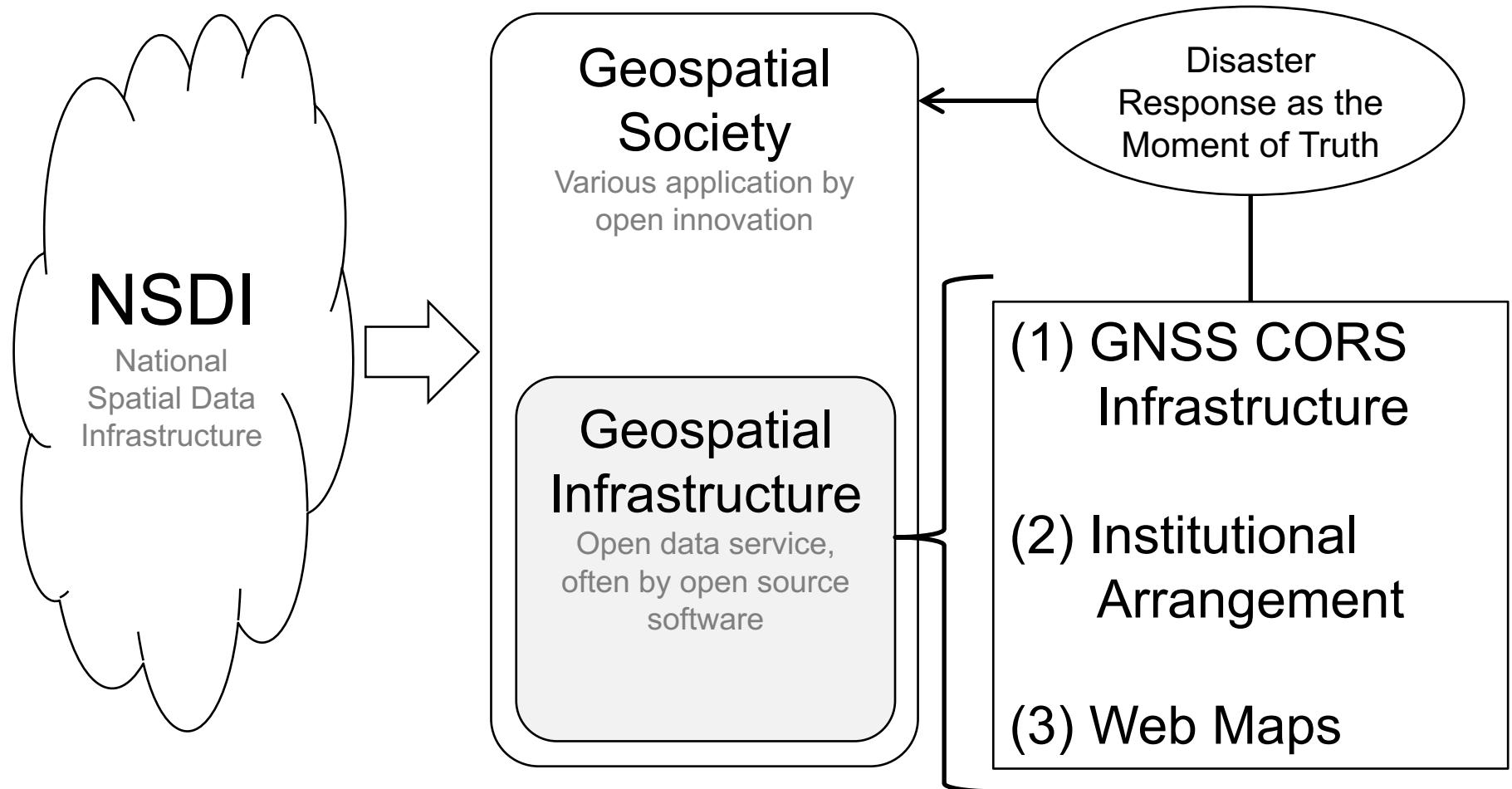
This concludes the introduction of the coordination committee for NSDI in Japan.

ownership

of specific measures

ownership

GSI broke down our contribution to NSDI into 3 components.
ownership and **involvement** matters, to implement NSDI.



These are what we take ownership for Geospatial Society.

involvement
of more partners to promote innovation

involvement

We try involve more partners by:



➤ Open Data

- We follow the Open Data Policy of the Government of Japan (compatible with CC-BY)
- In addition, Survey Act applies to core data.

➤ Open Source

- We use Open Source for (1) lowering running cost and for (2) promoting development of domain-specific applications.
- We also develop open source software available at GitHub.

➤ Open Innovation

- We run a community of geospatial developers who use our data – GSI Maps Partner Network.
- We participate in existing community events such as FOSS4G Tokyo/Kansai, Code for Japan Summit, and GitHub Universe.

We import great open source software developed also in Ukraine

<http://maps.gsi.go.jp/>

Our geoportal “GSI Maps” provides approximately 1,600 layers as tiles or GeoJSON files.



uses

Leaflet/Leaflet

 JavaScript library for mobile-friendly interactive maps

 ★ 16,466  2,822

<http://bit.ly/tokyo-vt>

Global Map data in binary vector tiles, to promote wider application (in development.)



uses

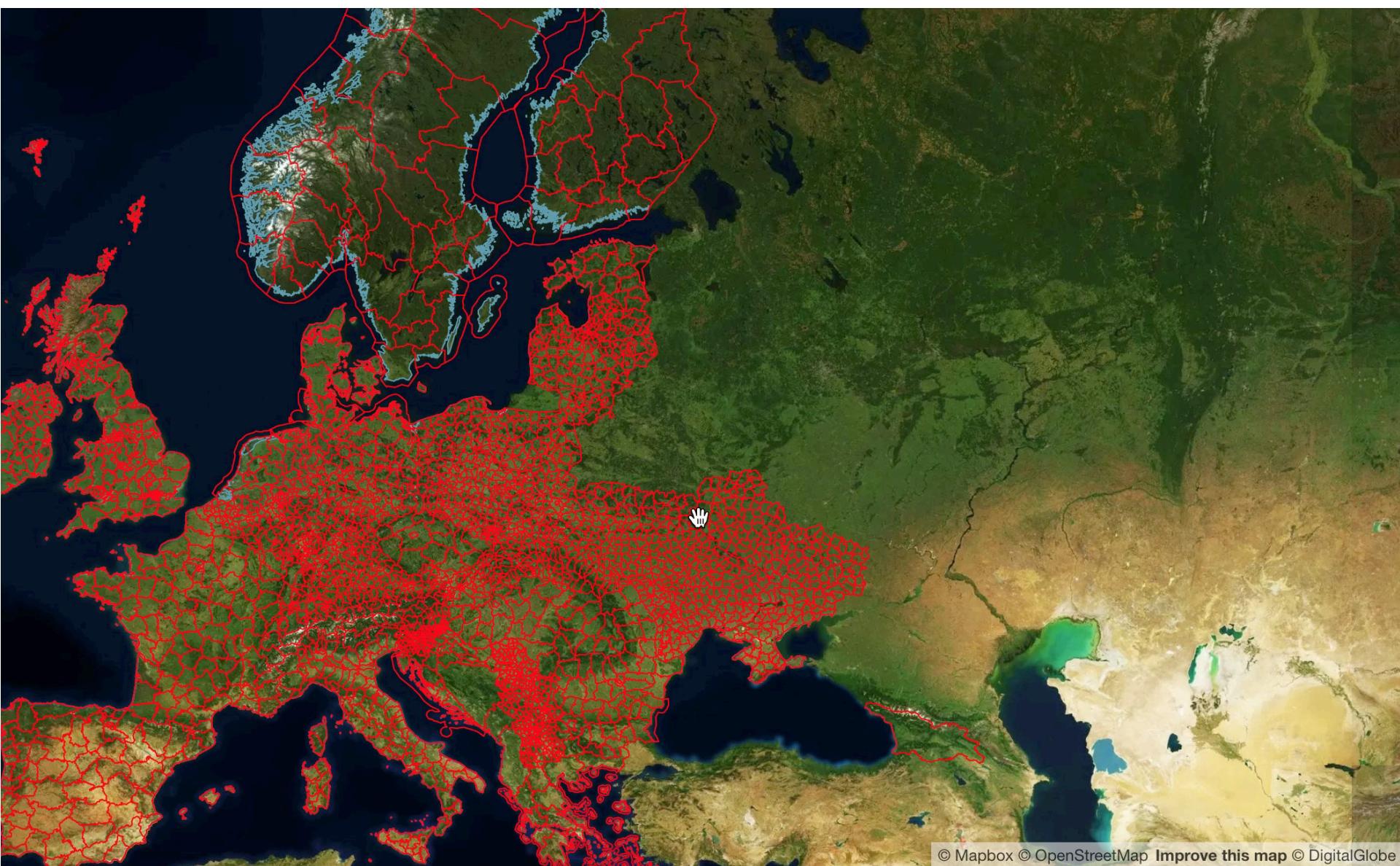
mapbox/mapbox-gl-js

Interactive vector maps in the browser, powered by WebGL

 ★ 1,314  279

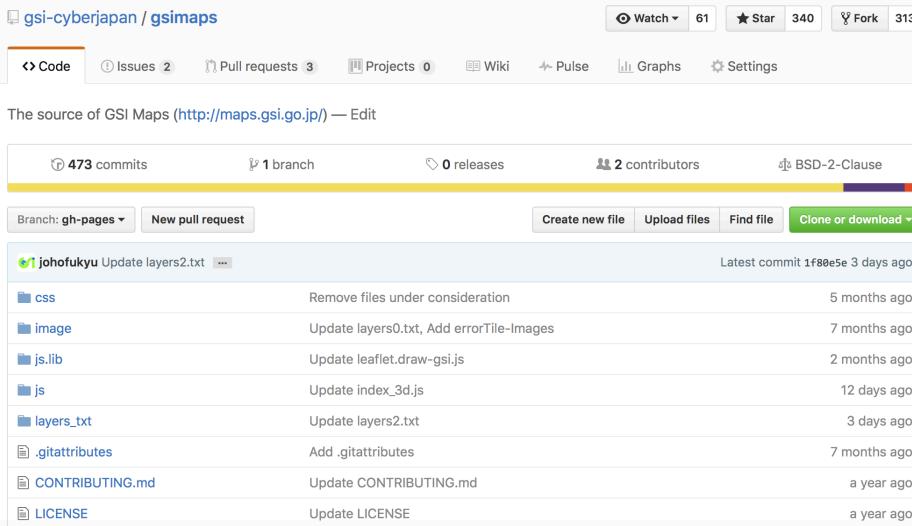


Vladimir Agafonkin
mourner



We share our code

<https://github.com/gsi-cyberjapan/gsimaps>



The source of GSI Maps (<http://maps.gsi.go.jp/>) — Edit

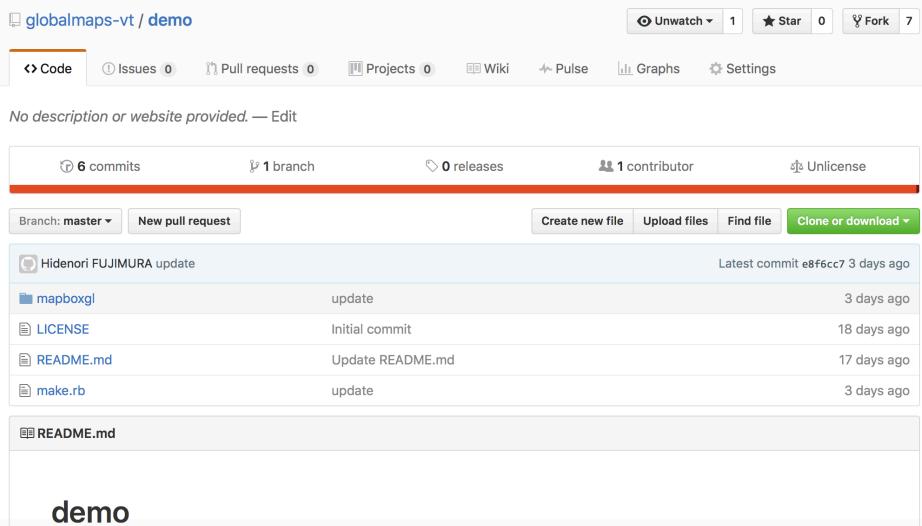
473 commits · 1 branch · 0 releases · 2 contributors · BSD-2-Clause

Branch: [gh-pages](#) · [New pull request](#) · [Create new file](#) · [Upload files](#) · [Find file](#) · [Clone or download](#)

johofukyu Update layers2.txt · Latest commit [1f80e5e](#) 3 days ago

File	Description	Time Ago
css	Remove files under consideration	5 months ago
image	Update layers0.txt, Add errorTile-Images	7 months ago
js.lib	Update leaflet.draw-gsi.js	2 months ago
js	Update index_3d.js	12 days ago
layers_txt	Update layers2.txt	3 days ago
.gitattributes	Add .gitattributes	7 months ago
CONTRIBUTING.md	Update CONTRIBUTING.md	a year ago
LICENSE	Update LICENSE	a year ago

<https://github.com/globalmaps-vt/demo>



No description or website provided. — Edit

6 commits · 1 branch · 0 releases · 1 contributor · Unlicense

Branch: [master](#) · [New pull request](#) · [Create new file](#) · [Upload files](#) · [Find file](#) · [Clone or download](#)

Hidenori FUJIMURA update · Latest commit [e8f6cc7](#) 3 days ago

File	Description	Time Ago
mapboxgl	update	3 days ago
LICENSE	Initial commit	18 days ago
README.md	Update README.md	17 days ago
make.rb	update	3 days ago

[README.md](#)

demo



[the WHITE HOUSE](#) · PRESIDENT BARACK OBAMA

BRIEFING ROOM · ISSUES · THE ADMINISTRATION · PARTICIPATE · 1600 PENN · [Contact Us](#) · [Get Email Updates](#)

HOME · BLOG

The People's Code – Now on Code.gov

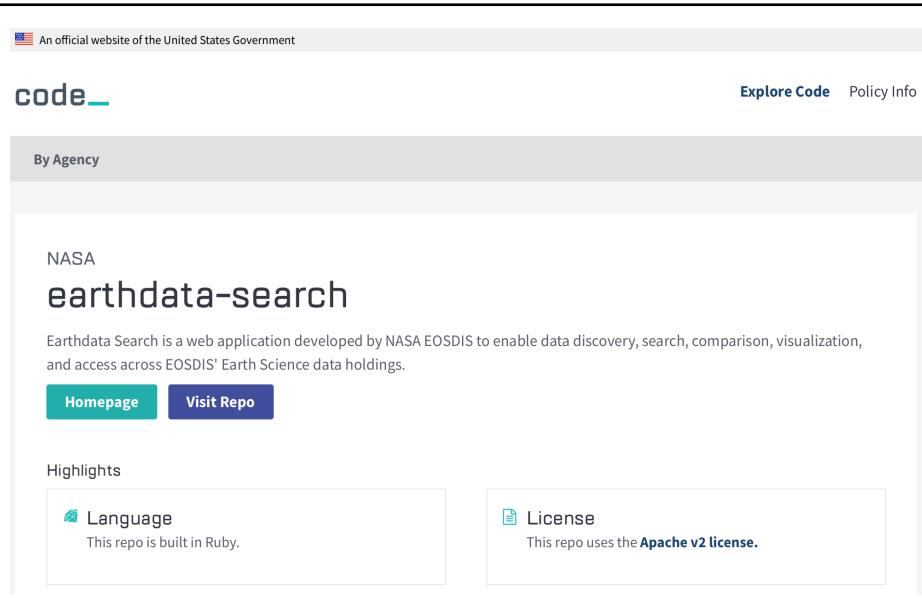
NOVEMBER 3, 2016 AT 7:00 PM ET BY TONY SCOTT

[Twitter](#) · [Facebook](#) · [Email](#)

Summary: Today we're launching Code.gov so that our Nation can continue to unlock the tremendous potential of the Federal Government's software.

Over the past few years, we've taken unprecedented action to help Americans engage with their Government in new and meaningful ways.

Using Vote.gov, citizens can now quickly navigate their state's voter registration process through an easy-to-use site. Veterans can go to Vets.gov to discover, apply for, track and manage their benefits in one, user-friendly place. And for the first time ever, citizens can send a note to President Obama simply by [messaging the White House on Facebook](#).



An official website of the United States Government

code_

Explore Code · Policy Info

By Agency

NASA

earthdata-search

Earthdata Search is a web application developed by NASA EOSDIS to enable data discovery, search, comparison, visualization, and access across EOSDIS' Earth Science data holdings.

[Homepage](#) · [Visit Repo](#)

Highlights

 Language
This repo is built in Ruby.

 License
This repo uses the [Apache v2 license](#).

coordination

ownership

involvement

are all important.

Let's involve everyone and each other, **in order to catch up with changing technology trend**, for wider and better application of our geospatial information.