



Lets publish our data!

+

Marco Pizzolato

We want to make a map!

- + Ask ChatGPT how to make a webmap
- + Find some data
- + Create Github Account
- + Add your repo
- + Publish a github page

Enjoy your map!

Get some data

What do we want on the map?

- + **BaseMap** (OpenStreetMaps, Google Satellite)
- + **WMS Layer** (emodnet:vesseldensity_01)
- + **WMTS Layer** (Copernicus Marine - Sea water velocity)



We are lazy!

+<https://chatgpt.com/share/66fdd5dd-0cb4-8008-819f-1a3c58cb96fe>



Leaflet Map with OSM

October 2, 2024

ⓘ This conversation may reflect the link creator's personalized data, which isn't shared and can meaningfully change how the model responds.

I would like to make a leaflet map with osm and google satellite imagery.
I would like then to publish my map on github as a webpage.



To create a Leaflet map with OpenStreetMap (OSM) and Google satellite imagery and publish it on GitHub as a webpage, follow these steps:

1. Create the Leaflet Map

Here's a basic HTML file that includes OSM and Google satellite layers:

html

Copy code

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Leaflet Map</title>
  <link rel="stylesheet" href="https://unpkg.com/leaflet@1.7.1/dist/leaflet.css" />
  <style>
    #map {
```

Continue this conversation

Lets find the vessels

Energy, Climate change, Environment

<https://emodnet.ec.europa.eu/geonetwork/srv/eng/catalog.search#/search>

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EMODnet Human Activities, Vessel Density Map



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TYPE OF RESOURCES

Dataset (2)

AVAILABLE ACTIONS

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TOPICS

Oceans (2)

Categories

EMODnet Human Activities, EMSA Route Density Map



The Route Density Map at 1 km resolution was created by EMSA in 2019 and made available on EMODnet Human Activities, an initiative funded by the EU Commission.

EMSA

<< < 2 results > >>

Categories

EMODnet Human Activities, Vessel Density Map



The Vessel Density maps in the ... are created since the 2019 by Cogea for the European Marine Observation and Data Network (EMODnet). The data is updated every year and is available for viewing and download on EMODnet website (Human Activities, <https://emodnet.ec.europa.eu/en/human-activities>).

Cogea srl

Search for WMS

Energy, Climate change, Environment

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EMODnet Human Activities, Vessel Density Map

The Vessel Density maps in the EU are created since the 2019 by Cogea for the European Marine

OnLine resource

Linkage	https://ows.emodnet-humanactivities.eu/wms?
Protocol	OGC:WMS-1.3.0-http-get-map
Name of the resource	vesseldensity_01
Description	Vessel Density Monthly totals - Fishing



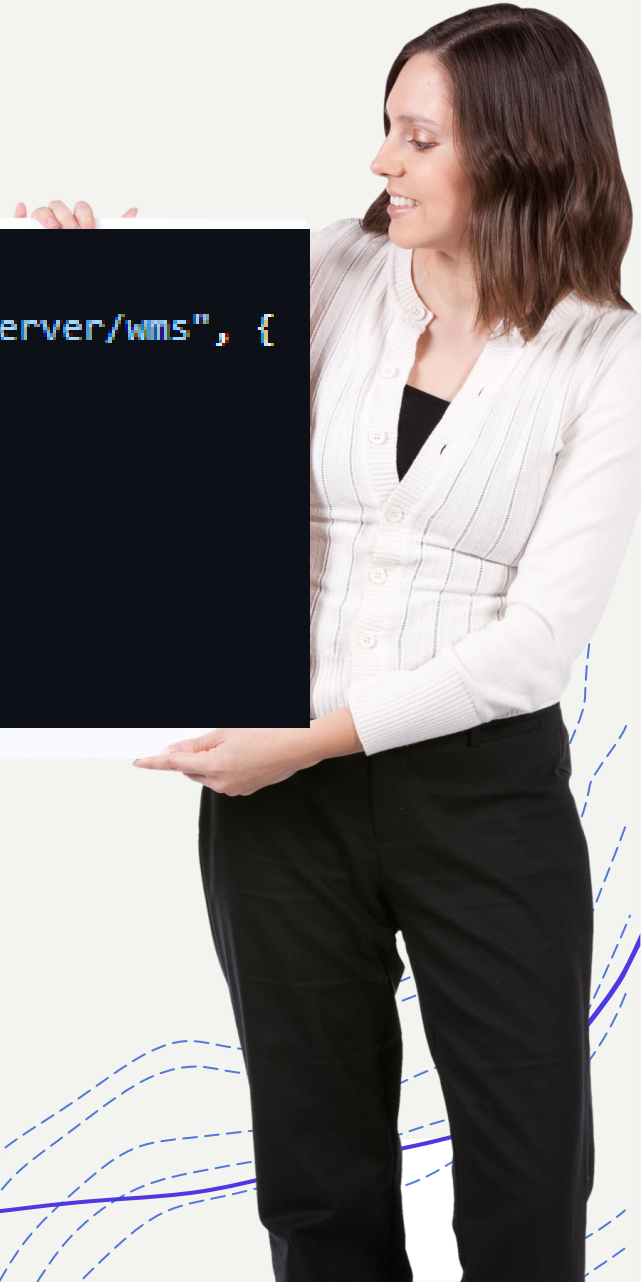
Spatial extent

Bounding box



Copy Copy

```
// Add EMODnet Vessel Density WMS layer
var vesselDensityLayer = L.tileLayer.wms("https://ows.emodnet-humanactivities.eu/geoserver/wms", {
  layers: 'emodnet:vesseldensity_01',
  format: 'image/png',
  transparent: true,
  attribution: '© EMODnet'
}).addTo(map);
```



Now lets get the sea water velocity!

The screenshot displays the WEKEO web application interface. At the top, there is a navigation bar with the WEKEO logo and menu items: SERVICES, DATA, COMPUTING, USE CASES, and SUPPORT. On the right side of the navigation bar, there are icons for refresh, upload, and a list, along with 'REGISTER' and 'SIGN IN' buttons, and a search bar.

The main content area shows a map of the ocean with a color scale for sea water velocity. A young girl with long brown hair, wearing a white sweater and blue jeans, stands in front of the map, pointing towards the legend. The legend is titled 'Global Ocean Physics Analysis and Forecast' and lists several data layers. The layer 'Sea water velocity m/s' is highlighted in orange. Below it, there are several other layers, each with a '3' icon and a dropdown arrow.

On the left side of the map, there is a panel for the 'Sea water velocity m/s' layer. It shows the date and time '02/10/2024 | 00:00 | -0.5 m' and a color scale from 0 to 0.8. Below the scale are icons for download, information, layers, settings, and log.

At the bottom of the map, there is a timeline showing months from April to December. On the right side of the map, there are icons for 'Locate', 'Measure', 'Set AOI', and 'Settings', along with a vertical scale from 0 m to -6,000 m.

What a text mess! Find using CTRL+F

https://wmts.marine.copernicus.eu/teroWmts/GLOBAL_ANALYSISFORECAST_PHY_001_024/cmems_mod_glo_phy-cur_anfc_0.083deg_P1M-m_202406?request=GetCapabilities&service=WMTS

```
▼ <Layer queryable="1">  
  <ows:Identifier>GLOBAL_ANALYSISFORECAST_PHY_001_024/cmems_mod_glo_phy-cur_anfc_0.083deg_P1M-m_202406/sea_water_velocity</ows:Identifier>  
  <ows:Title>Sea water velocity (sea water velocity)</ows:Title>
```

```
// Add Copernicus Marine WMTS layer using the template  
var template = 'https://wmts.marine.copernicus.eu/teroWmts?'+  
  'SERVICE=WMTS'+  
  '&REQUEST=GetTile'+  
  '&LAYER={layer}'+  
  '&FORMAT=image/png'+  
  '&TILEMATRIXSET={tileMatrixSet}'+  
  '&TILEMATRIX={z}'+  
  '&time={time}'+  
  '&TILEROW={y}'+  
  '&TILECOL={x}';  
  
var copernicusLayer = L.tileLayer(template, {  
  layer: 'GLOBAL_ANALYSISFORECAST_PHY_001_024/cmems_mod_glo_phy-cur_anfc_0.083deg_P1M-m_202406/sea_water_velocity',  
  tileMatrixSet: 'EPSG:3857',  
  time: '2023-10-01',  
  noWrap: true,  
  attribution: '© Copernicus Marine'  
}).addTo(map);
```



We want to control our layers!

```
// Add layer control
var baseMaps = {
  "OpenStreetMap": osmLayer,
  "Google Satellite": googleSatLayer
};

var overlayMaps = {
  "Sea Water Velocity": copernicusLayer,
  "Vessel Density": vesselDensityLayer,
};

L.control.layers(baseMaps, overlayMaps).addTo(map);
```

Let's publish it!

What does ChatGPT says?



2. Publish the Map on GitHub

Follow these steps to publish this HTML map as a GitHub Page:

Step 1: Create a GitHub Repository

1. Go to [GitHub](#) and log in.
2. Click the "+" button in the top-right corner and select "New repository."
3. Name your repository (e.g., `leaflet-map`).
4. Set the repository to "Public" and click "Create repository."

Step 2: Upload the HTML File

1. In your new repository, click "Add file" > "Upload files."
2. Drag your `index.html` file (the one you created above) into the upload area.
3. Click "Commit changes" to upload the file.

Step 3: Enable GitHub Pages

1. Go to the "Settings" tab of your repository.
2. Scroll down to the "Pages" section on the left sidebar.
3. Under "Branch," select `main` (or `master` if that's your branch) and set the folder to `/root`.
4. Click "Save."

After a few minutes, GitHub will generate a URL where your map will be hosted (e.g.,

`https://yourusername.github.io/leaflet-map/`).

Your map should now be live and accessible at the provided GitHub Pages URL!

Lets make a github account! - <https://github.com/>



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3M

KPMG

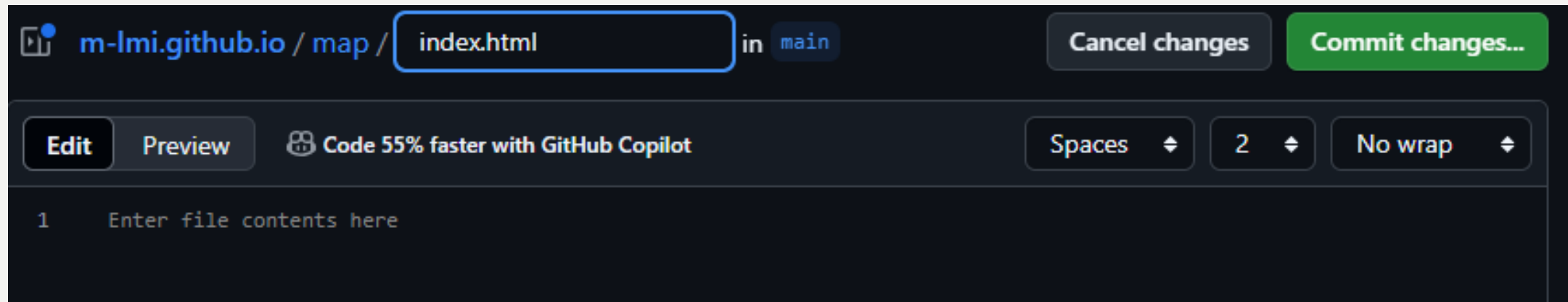
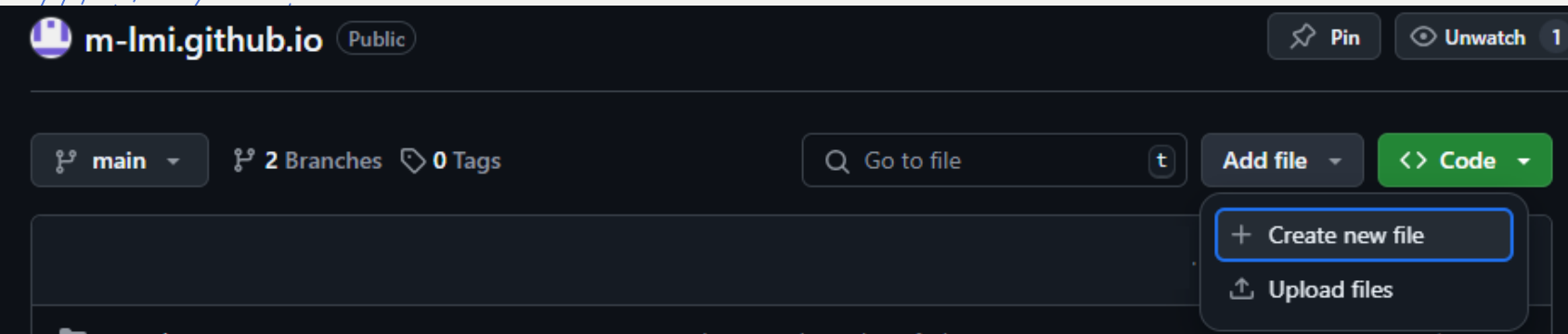
Mercedes-Benz

SAP

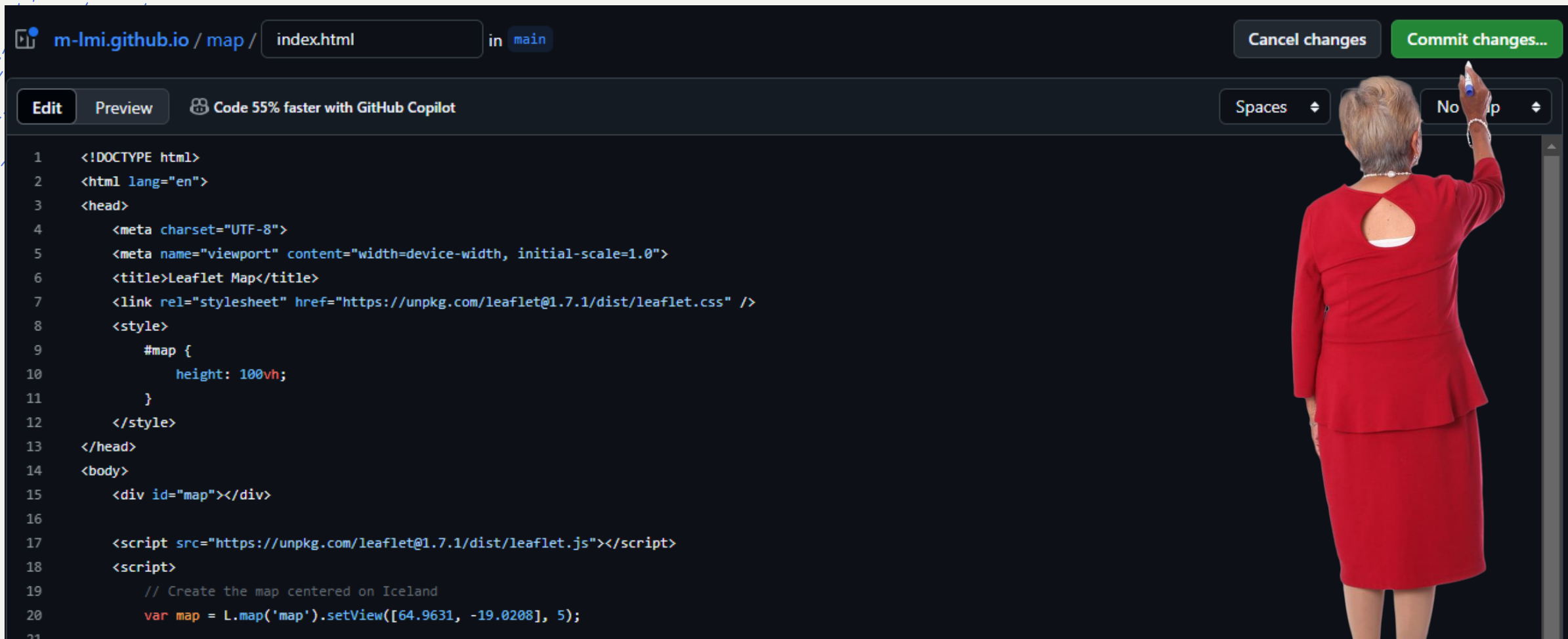
P&G

TELUS

We need a repository



Add index.html

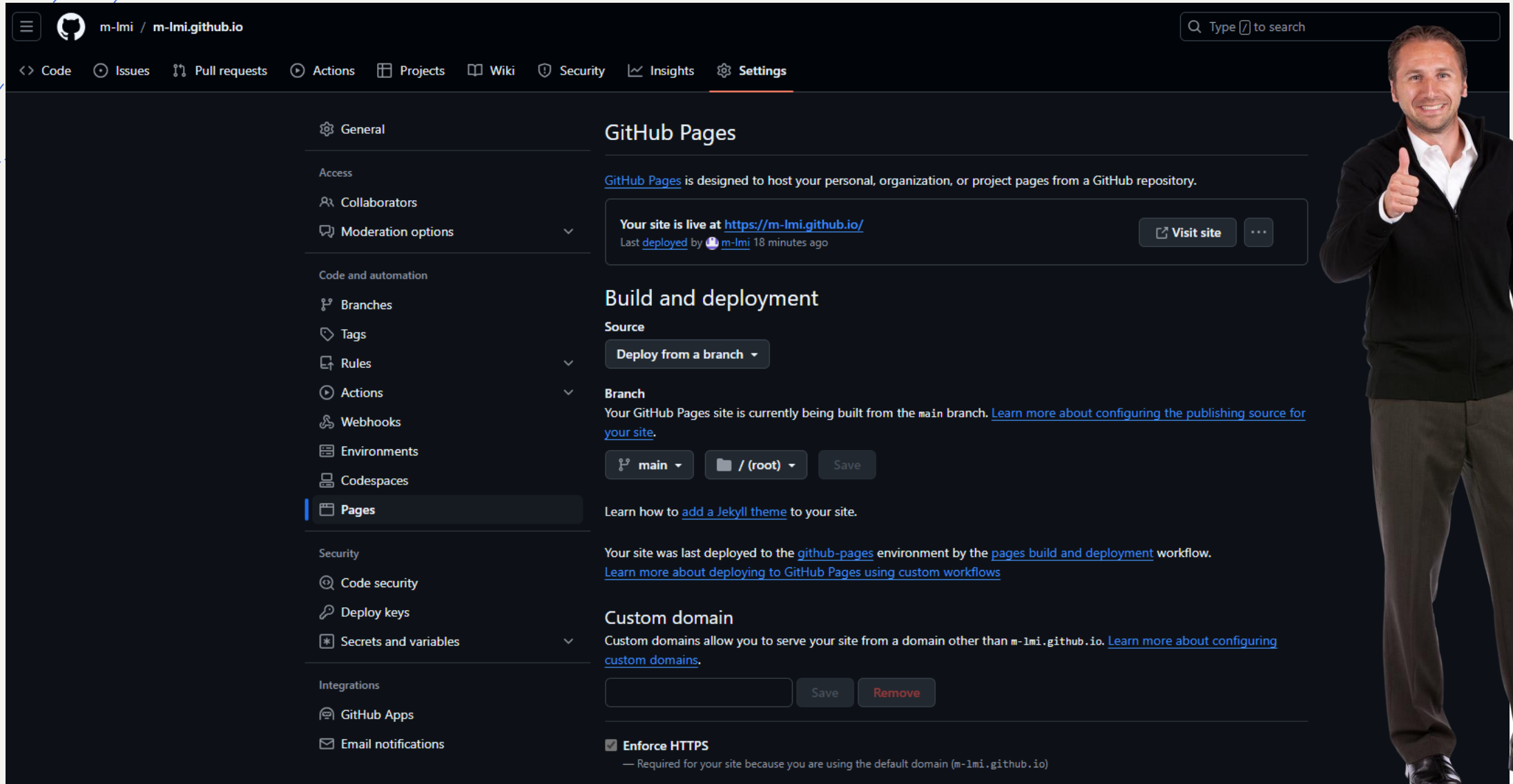


The screenshot shows a GitHub web editor interface for the file `index.html` in the `main` branch. The editor includes a toolbar with 'Edit', 'Preview', and 'Code 55% faster with GitHub Copilot' options. The code content is as follows:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Leaflet Map</title>
7   <link rel="stylesheet" href="https://unpkg.com/leaflet@1.7.1/dist/leaflet.css" />
8   <style>
9     #map {
10       height: 100vh;
11     }
12 </style>
13 </head>
14 <body>
15   <div id="map"></div>
16
17   <script src="https://unpkg.com/leaflet@1.7.1/dist/leaflet.js"></script>
18   <script>
19     // Create the map centered on Iceland
20     var map = L.map('map').setView([64.9631, -19.0208], 5);
21
```

At the top right of the editor, there are two buttons: 'Cancel changes' and 'Commit changes...'. A woman in a red suit is standing in front of the editor, pointing at the 'Commit changes...' button.

Finally publish our page



m-lmi / m-lmi.github.io

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Environments

Codespaces

Pages

Security

Code security

Deploy keys

Secrets and variables

Integrations

GitHub Apps

Email notifications

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Your site is live at <https://m-lmi.github.io/>
Last deployed by [m-lmi](#) 18 minutes ago

Visit site

Build and deployment

Source

Deploy from a branch

Branch

Your GitHub Pages site is currently being built from the `main` branch. [Learn more about configuring the publishing source for your site.](#)

main / (root) Save

Learn how to [add a Jekyll theme](#) to your site.

Your site was last deployed to the `github-pages` environment by the `pages build and deployment` workflow. [Learn more about deploying to GitHub Pages using custom workflows](#)

Custom domain

Custom domains allow you to serve your site from a domain other than `m-lmi.github.io`. [Learn more about configuring custom domains.](#)

Save Remove

Enforce HTTPS
— Required for your site because you are using the default domain (`m-lmi.github.io`)

Voilà! <https://m-lmi.github.io/QuickWebMap/index.html>



Find more local data!



Lýsigagnagátt

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Map

Sign in

English

Search ...



Search 469 data sets, services and maps, ...

<https://gatt.natt.is>

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Kort fyrir Strandhreinsun Íslands - Beach cleaning map of Iceland

[View record](#)



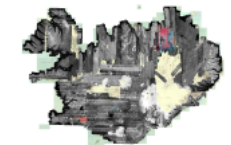
Byggðastofnun - Þjónustukort

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Byggðastofnun Póstnúmer Vefsjá

[View record](#)



Loftmyndasjá - Orthoimagery Map

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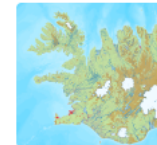
Kortasjá Náttúrufræðistofnun

[View record](#)



Vatnavefsjá - Stjórn vatnamála

[View record](#)



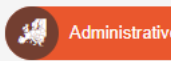
Kort Grunngæ Landupplýsing Landunóvísing

[View record](#)

Browse by INSPIRE themes Topics



Addresses 4



Administrative units 13



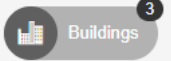
Environmental monitoring facilities 7



Geology 37



Agricultural and aquaculture facilities 15



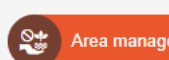
Buildings 3



Elevation 17



Geographical grid systems 3



Area management/restriction/regulation 20



Cadastral parcels 4



Energy resources 2

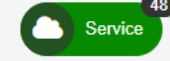


Geographical names 5

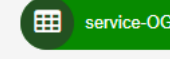
Browse resources



Dataset 406



Service 48



service-OGC:WMS 22

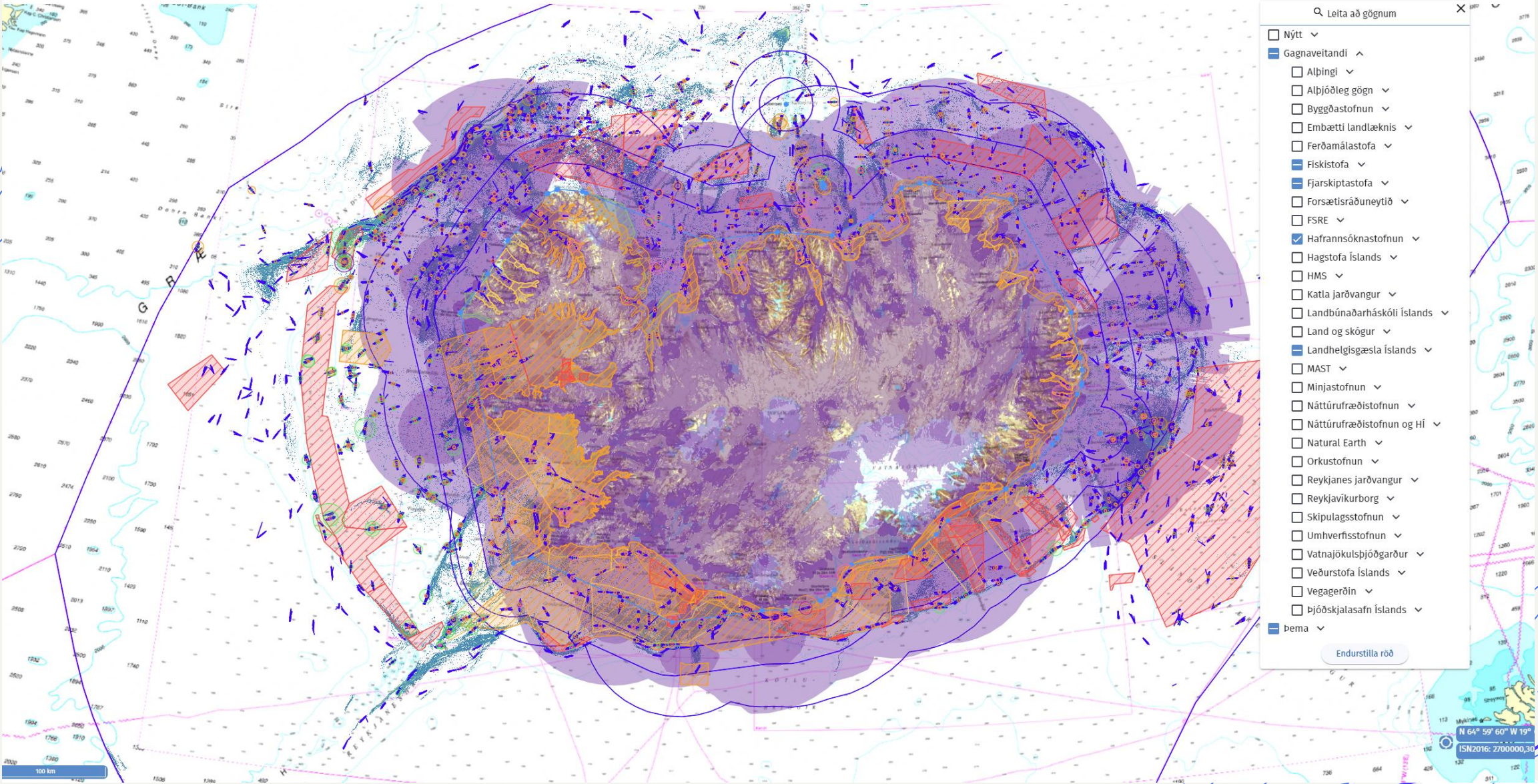


Map 15



15





- Leita að gögnum
- Nýtt
 - Gagnaveitandi
 - Alþingi
 - Alþjóðleg gögn
 - Bygðastofnun
 - Embætti landlæknis
 - Ferðamálastofa
 - Fiskistofa
 - Fjarskiptastofa
 - Forsætisráðuneytið
 - FSRE
 - Hafrannsóknastofnun
 - Hagstofa Íslands
 - HMS
 - Katla jarðvangur
 - Landbúnaðarháskóli Íslands
 - Land og skógur
 - Landhelgisgæsla Íslands
 - MAST
 - Minjastofnun
 - Náttúrufræðistofnun
 - Náttúrufræðistofnun og HÍ
 - Natural Earth
 - Orkustofnun
 - Reykjanes jarðvangur
 - Reykjavíkurborg
 - Skipulagsstofnun
 - Umhverfisstofnun
 - Vatnajökulsþjóðgarður
 - Veðurstofa Íslands
 - Vegagerðin
 - Þjóðskjalasafn Íslands
 - Þema
- Endurstilla röð

