REALLOCATE Project

Pilot Location GeoJSON Creation Tutorial

Guide for Geographic Data Collection

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Overview

This tutorial provides instructions for creating standardized GeoJSON files containing the pilot location data and corresponding areas of influence for the REALLOCATE project pilots. The methodology employs the web-based http://geojson.io platform to ensure consistent geographic data collection and formatting across all pilot sites.

1 Map Editor Initialization

Navigate to http://geojson.io. Navigate and zoom to your pilot's city or region to locate the specific area where your pilot is situated.
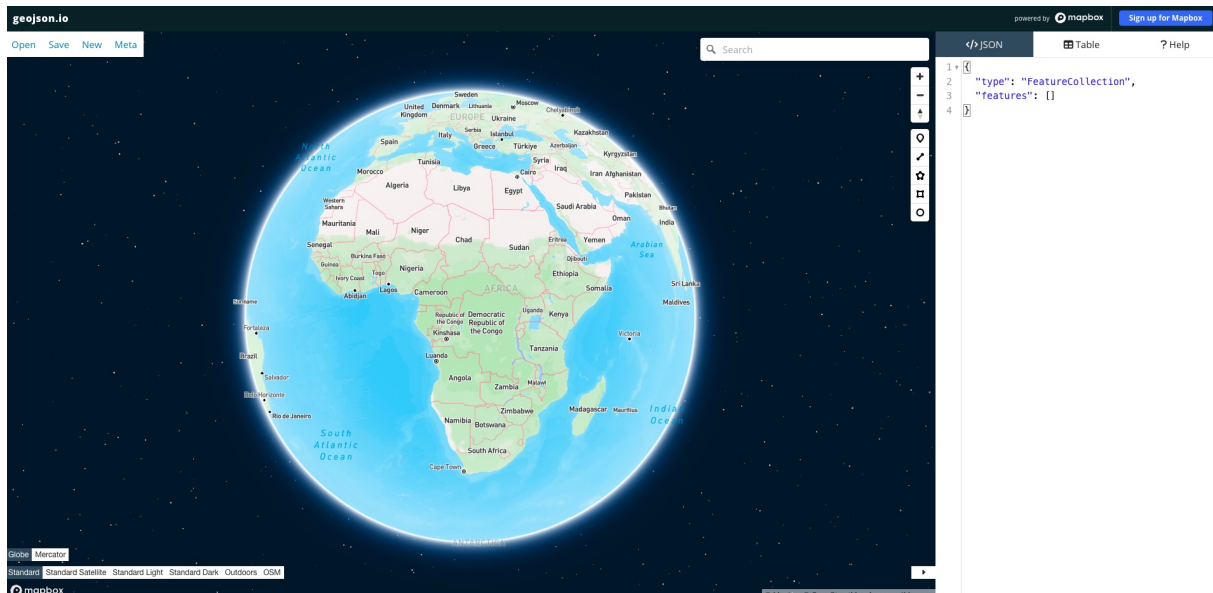

Figure 1: GeoJSON.io interface showing the global map view with editing tools panel on the right side

2 Pilot Location Point Creation

2.1 Tool Selection

Access the point creation tool by clicking the **Draw Point** icon in the right toolbar or use the keyboard shortcut m.
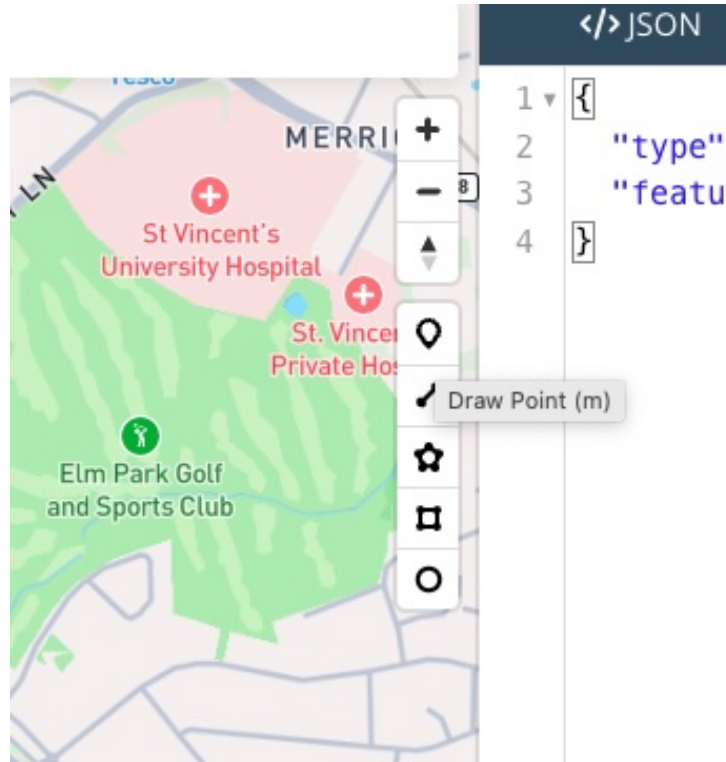

Figure 2: Point drawing tool highlighted in the toolbar interface

2.2 Geographic Positioning

Execute a single click on the map at the precise coordinates where your pilot site is located. This action creates a point geometry with geographic coordinates.
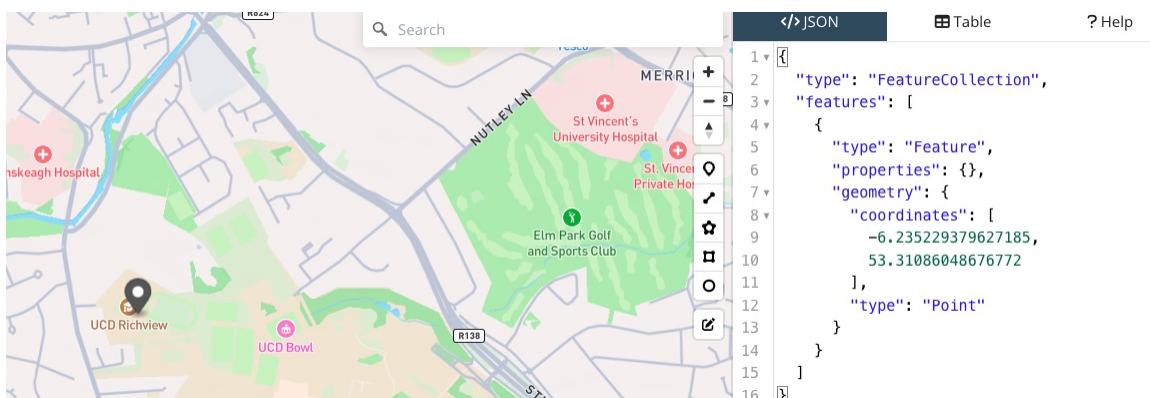

Figure 3: Point marker placed on the map with corresponding GeoJSON coordinates displayed in the code panel

The point coordinates are automatically captured and displayed in the GeoJSON code panel on the right side of the interface.

3   Area of Influence Polygon Creation

3.1   Polygon Tool Activation

Select the **Draw Polygon** tool from the right toolbar or utilize the keyboard shortcut p.
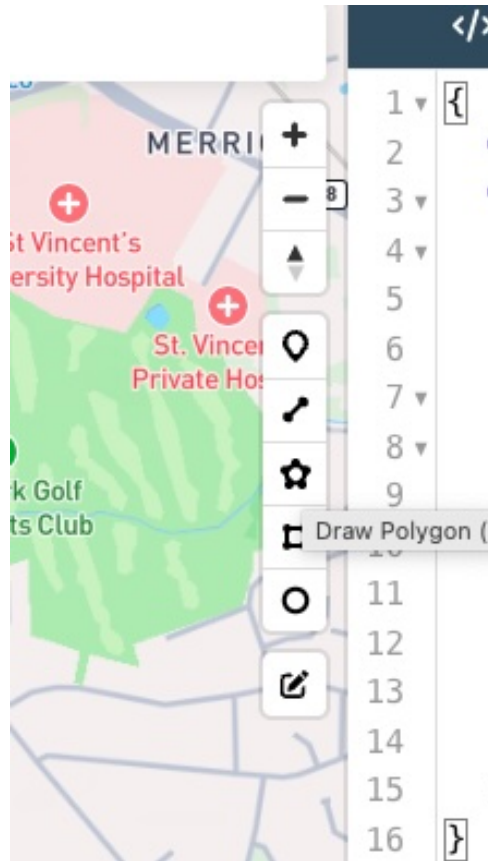

Figure 4: Polygon drawing tool selected in the toolbar

3.2   Polygon Construction

Create the area boundary by clicking multiple points around your designated area to form a polygon shape. Complete the polygon by double-clicking on the final point or press enter.

Figure 5: Completed polygon representing the area of influence around the pilot location

The polygon vertices define the precise boundaries of the pilot's area of influence.

4   Data Export and Validation

4.1   File Export Process

Click the **Save** button located at the top of the screen and select **GeoJSON** format from the dropdown menu to download the file.

Figure 6: Save menu displaying GeoJSON format selection option

4.2 Data Verification

Validate the exported file by opening the saved `.geojson` file in http://geojson.io using the **Open** button. Verify that both the pilot point and area of influence polygon are correctly displayed and positioned.

5 File Submission Protocol

Compose an email with the following standardized subject format:

```
REALLOCATE: Pilot Location and Area - [Your City] - [Pilot Name]
```

Attach the validated `.geojson` file and send to:

- `tiago.tamagusko@ucd.ie`
- `ungku.sonet@ucd.ie`

Technical Specifications

- **Coordinate System:** WGS84 (EPSG:4326)
- **File Format:** GeoJSON (RFC 7946 compliant)
- **Geometry Types:** Point (pilot location) and Polygon (area of influence)
- **Data Validation:** Visual verification required before submission