



Digital, AI and
Innovation Hub

GeoHub

Open-source geospatial intelligence for development

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UNDP DAI

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UNDP



policies



finance



institutions



capacity

ESRI



IT



**support
training**



Geospatial

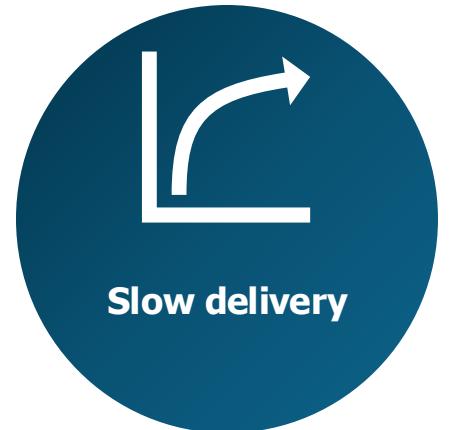


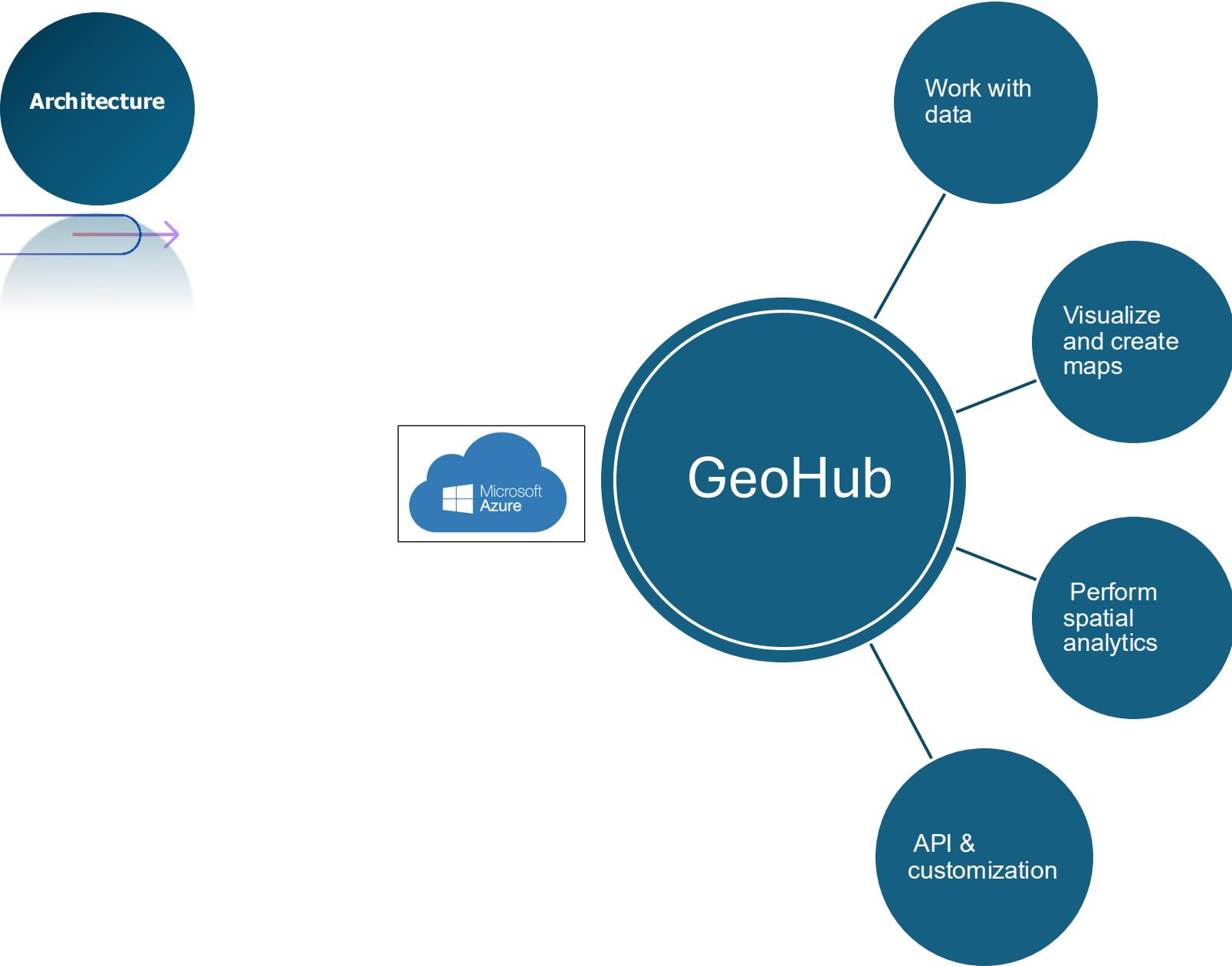
GIS





...issues...







HOME / DATASETS / UPLOAD

DATA UPLOAD

Drag & drop files here

Select files

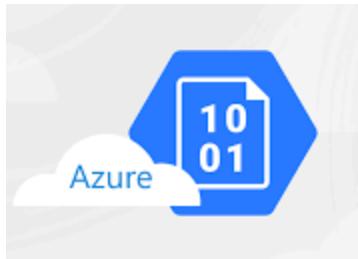
Click here to read about supported formats

UPLOAD

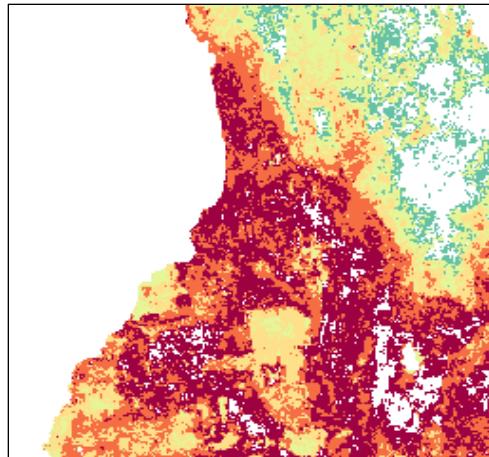
GDAL

Every layer (Point, Line, Polygon) into its own file

CLEAR ALL



Vector Tiles



Cloud Optimized Geotiff







Data Services

Host

DATASETS

DATA UPLOAD

RESET FILTER

Type keywords to explore datasets...

Show starred only

Show satellite data only

Access level: All

SDGs: Select SDG

Countries: Type country name or ISO code

Limits: 25

Sort results: Most recent

View as: Card, List, Map

Dataset name	Description	SDG	License	Updated at
Global Electrification Platform (GEP) – Raster (~1 km resolution)	The GEP dataset provides global, high-resolution spatial data on projected electrification under specific scenarios...		Creative Commons BY 4.0	02:42, 12/05/2025
Individuals with ICT skills: Information and data literacy	Individuals with ICT skills: Information and data literacy		Creative Commons BY 4.0	02:21, 12/05/2025
Access to electricity (% of population)	Access to electricity means having an electricity source that can provide very basic lighting, and charge a phone etc...		Creative Commons BY 4.0	01:16, 12/05/2025
Aqueduct Global	Data include indicators of water quantity, water variability, water quality, public awareness of water issues, access to...		Creative Commons BY 4.0	19:10, 12/04/2025
US Electric Power Transmission Lines	This dataset – based on the Homeland Infrastructure Foundation-Level Data (HIFLD) – depicts electric power...		Other (Open)	16:09, 11/28/2025
Global Transmission Network	This dataset provides a vector shapefile of global electricity transmission		Creative Commons BY 4.0	03:31, 11/28/2025

Style

GLOBAL ELECTRIFICATION

INFO

TOOLS

PERMISSIONS

SHARE LINKS

EDIT

CHANGE DEFAULT APPEARANCE

UNPUBLISH

STAR 0

Fine grained access control

Access levels	user	organization	public
Access levels	Only me	Users with same email domain	everybody

Permissions	reader	editor	owner
Permissions	read/consume	can change but not delete	can change and delete

Disseminate

For developers

GeoHub Dataset API URL

```
https://geohub.data.undp.org/api/datasets/2704e5697c545dec3a75ed5dcd667b23
```

Learn more about GeoHub API

Preview URL

```
https://geohub.data.undp.org/api/datasets/2704e5697c545dec3a75ed5dcd667b23/preview/auto/[width]x[height].webp
```

Please replace (width) and (height) to pixel values

Preview Style URL

```
https://geohub.data.undp.org/api/datasets/2704e5697c545dec3a75ed5dcd667b23/preview/style.json
```

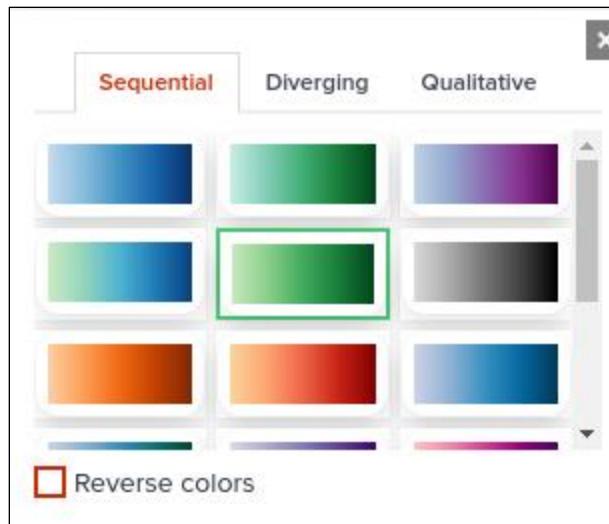
Maplibre style URL for preview



Mapping

Svelte +- kit

- Really easy
- reactive
- Exceptional at managing state
- Fast



Dynamic Subnational HDI

STYLE FILTER LABEL INFO

One condition must be true All conditions must be true

[move back to properties](#) [CANCEL](#)

Equals **Differs** **Larger**

= ≠ >

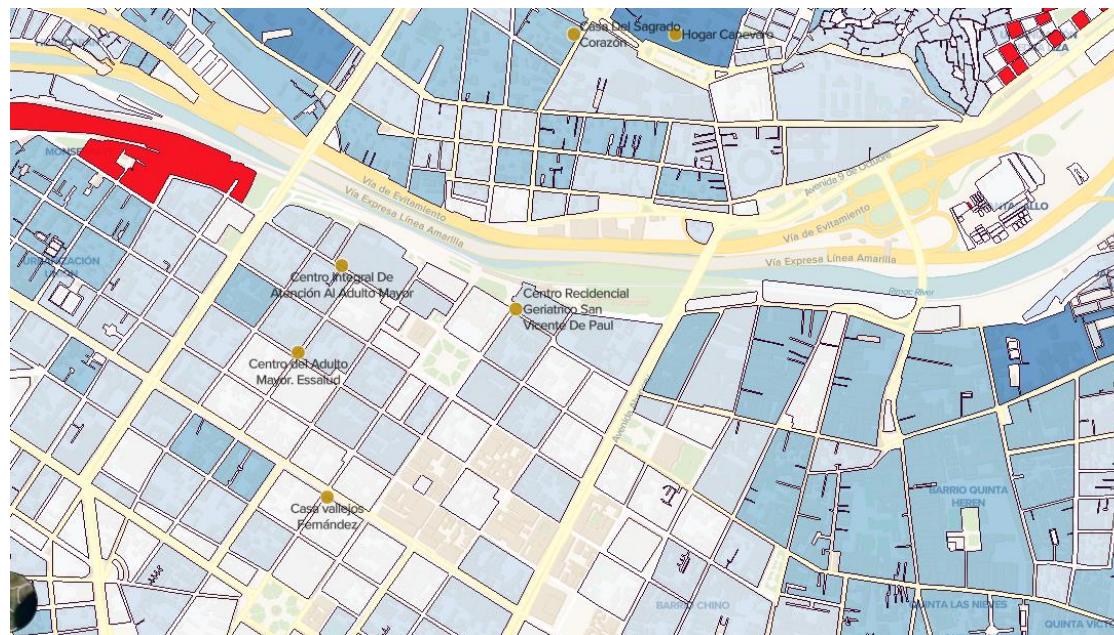
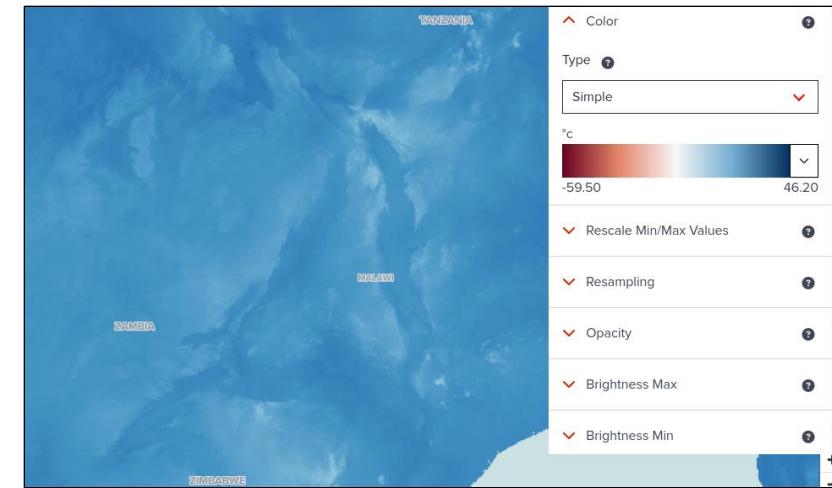
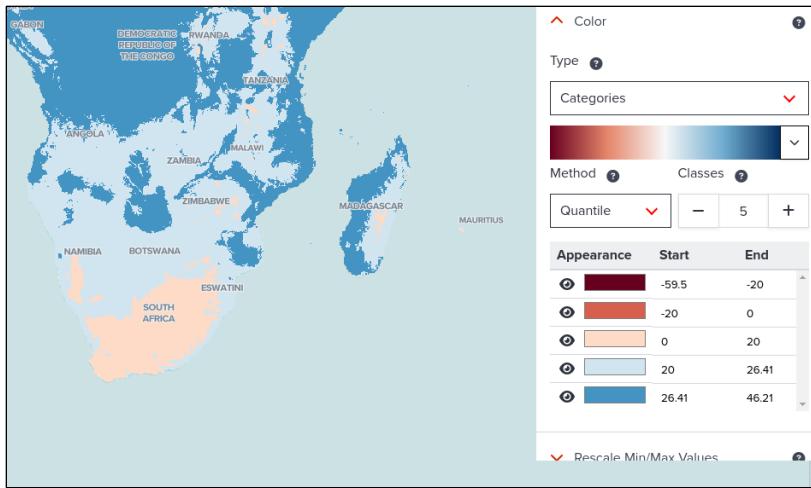
Smaller

<





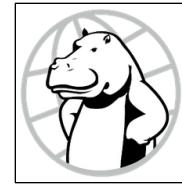
Mapping





Analytics

```
CREATE OR REPLACE FUNCTION admin.dynamic_subnational_hdi(  
    z integer default 0,  
    x integer default 0,  
    y integer default 0,  
    params varchar default '{  
        "le_incr":  
            { "id": "le_incr",  
                "param_name": "life_expectancy_increment",  
                "type": "numeric",  
                "icon": "fa-solid fa-people-roof",  
                "limits": {"min": -10, "max": 10},  
                "abs_limits": {"min": 0, "max": 100},  
                "value": 0,  
                "label": "Life expectancy",  
                "widget_type": "slider",  
                "hidden": 0,  
                "units": "years"},  
    }'::jsonb);
```



```
{  
    "id": "admin.dynamic_subnational_hdi",  
    "schema": "admin",  
    "name": "dynamic_subnational_hdi",  
    "description": "This is dynamic subnational HDI, please insert the desired increment values",  
    "arguments": [  
        {  
            "name": "params",  
            "type": "character varying",  
            "default": "{\n                \"le_incr\"::\n                {\n                    \"id\": \"le_incr\",  
                    \"param_name\": \"life_expectancy_increment\",  
                    \"type\": \"numeric\",  
                    \"icon\": \"fa-solid fa-people-roof\",  
                    \"limits\": {\"min\": -10, \"max\": 10},  
                    \"abs_limits\": {\"min\": 0, \"max\": 100},  
                    \"value\": 0,  
                    \"label\": \"Life expectancy\",  
                    \"widget_type\": \"slider\",  
                    \"hidden\": 0,  
                    \"units\": \"years\"},  
                }\n            }\n        }\n    ]  
}
```



Dynamic Subnational HDI

STYLE FILTER LABEL INFO

Simulation

Life expectancy 0 years

Expected education -3 years X

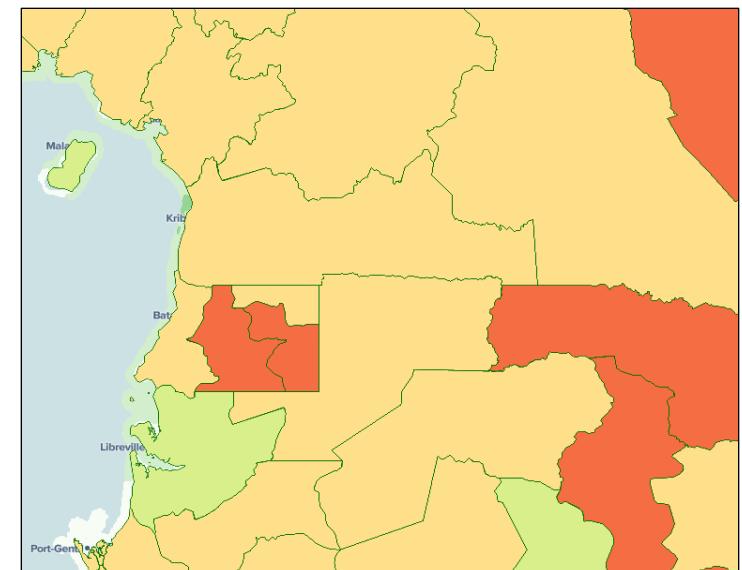
Mean education 0 years

Income 0 %

RESET ALL

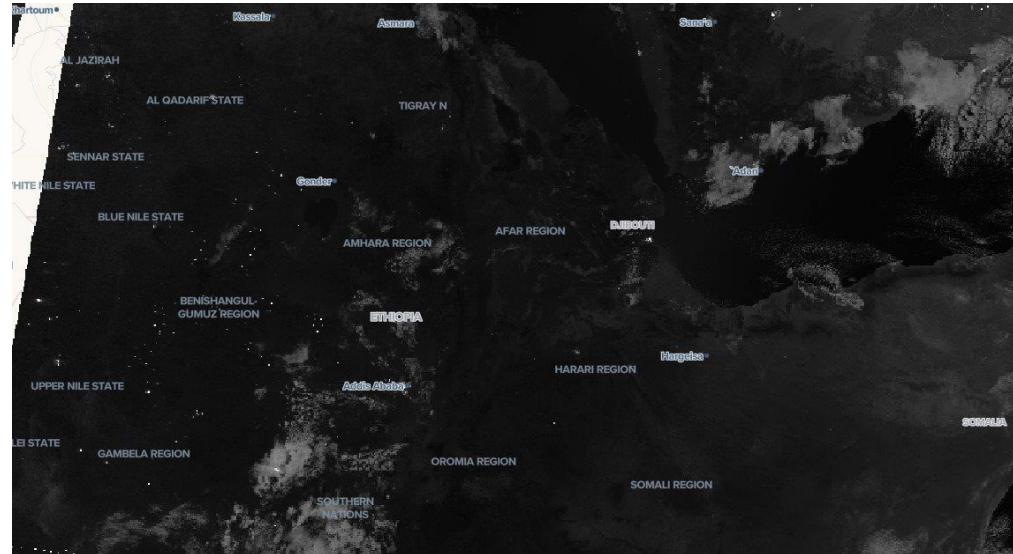


MapLibre





Analytics



```
+ {  
    "title": "Hillshade",  
    "description": "Create hillshade from DEM dataset.",  
    "inputs": {  
        "nbands": 1  
    },  
    "outputs": {  
        "nbands": 1,  
        "dtype": "uint8",  
        "min": null,  
        "max": null  
    },  
    "parameters": {  
        "azimuth": {  
            "default": 90,  
            "maximum": 360,  
            "minimum": 0,  
            "title": "Azimuth",  
            "type": "integer"  
        },  
        "angle_altitude": {  
            "default": 90,  
            "maximum": 90,  
            "minimum": -90,  
            "title": "Angle Altitude",  
            "type": "number"  
        },  
        "buffer": {  
            "default": 3,  
            "maximum": 99,  
            "minimum": 0,  
            "title": "Buffer",  
            "type": "integer"  
        }  
    }  
}
```



STYLE TRANSFORM INFO

▲ Rapid Change Assessment To... ⓘ

Customize parameters

Threshold 10 %

Only pixels with change above this threshold will be returned

Cloud mask threshold Almost no clouds



Senior GIS Engineer & Consultant
Fracta

MSc Water, Sanitation and Health
Engineering (21/22), University of Leeds

GIS for Water

WaQuAC-Net (Water Quality Asian
Cooperation Network)



<https://geohub.data.undp.org/api>

The screenshot shows the UNDP GeoHub API documentation. It lists several endpoints under the 'admin' section:

- continents**: GET /api/continents Get continents
- countries**: GET /api/countries Get countries
- regions**: GET /api/regions Get regions
- datasets**: GET /api/datasets Dataset search API
- dataset registration**: POST /api/datasets Register a dataset feature to GeoHub
- dataset deletion**: DELETE /api/datasets/{id} Delete dataset by ID

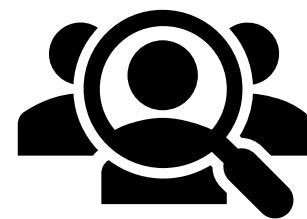
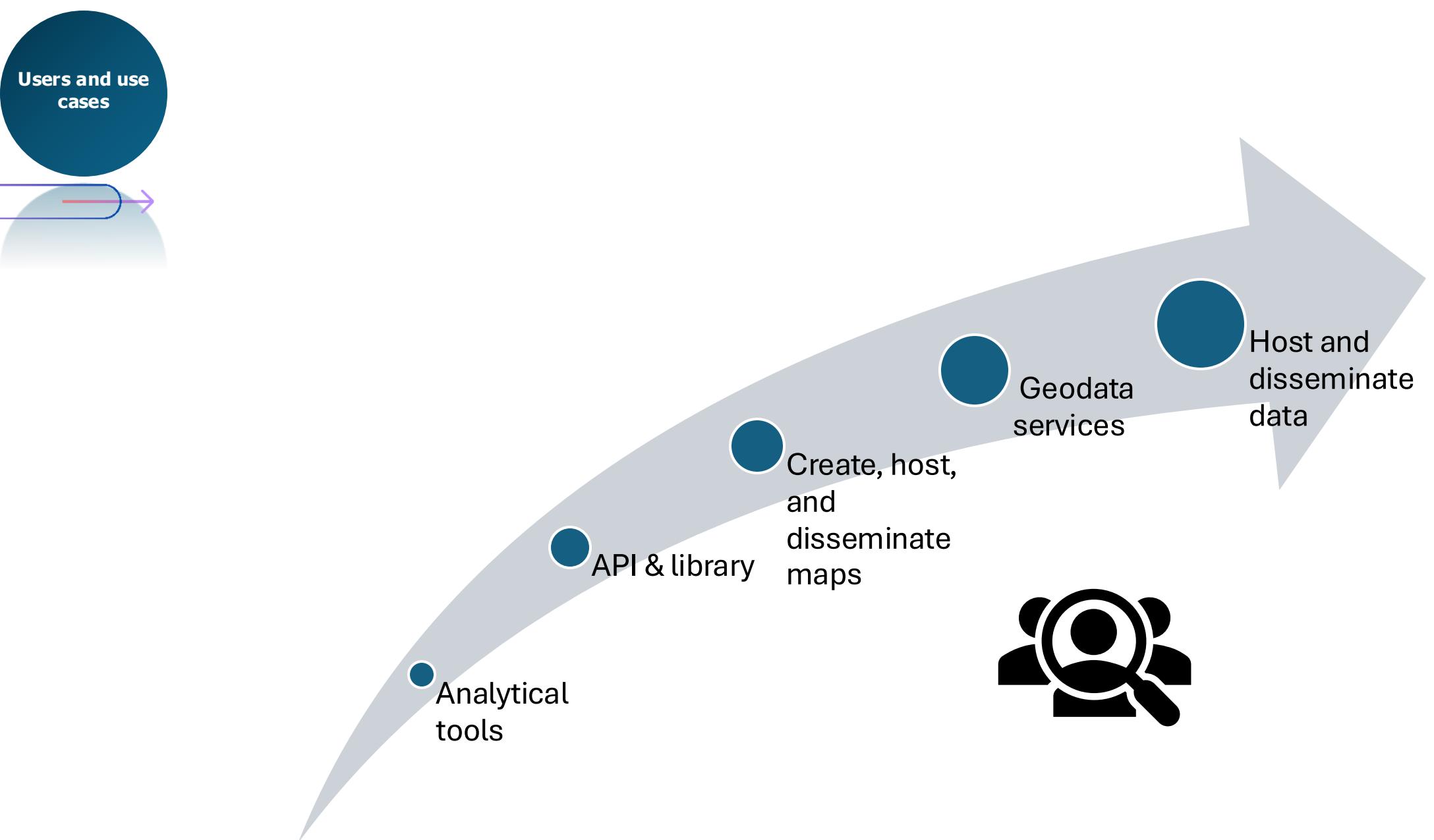
The screenshot shows the Storybook for svelte-undp-components. The left sidebar navigation includes sections for 'Storybook', 'Components', and 'Svelte UNDP Design'. Under 'Components', the 'Maplibre' section is selected, displaying documentation for various map-related components like Map, Circle, FillExtrusion, Heatmap, Hillshade, Line, Raster, Symbol, util, pg_tileserv, titler, and UI.

The main content area displays the 'Welcome to Storybook for svelte-undp-components' page. It includes sections for 'Requirements' (mentioning Bulma and Fontawesome CSS dependencies) and 'Import Instructions' (providing npm and import statements).

<https://svelte-components.undpgeohub.org>

<https://staticimage.undpgeohub.org>

The screenshot shows the 'Export settings' interface. It includes sections for 'Maplibre style url' (with a dropdown menu containing 'https://dev.undpgeohub.org/api'), 'Map settings' (with toggles for 'Tile boundaries is hidden' and 'Collision Boxes is hidden'), 'Export settings' (with options for 'Page size' set to 'Custom', 'Width' 300px, 'Height' 200px, and 'High resolution' at @1x), 'Advanced settings' (with a toggle switch turned on), 'File extension' (set to WEBP), and coordinate inputs for 'Longitude' (0) and 'Latitude' (2.842170943040401e-5).



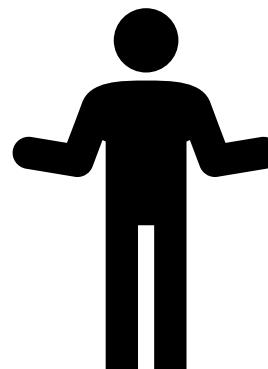


...



Run this tool
Log in here
Click next button
Copy the table
Paste the file

30 % of buildings are destroyed
25 km of roads have been flooded
Three districts account for 80% of affected elderly





Digital, AI and
Innovation Hub

Thank you

<https://geohub.data.undp.org>

10.12.2025