

# GEOINT DATA EXPLORER

About DATA included in the app Optional Offline and Online Connected Services



### **Supported Offline Formats**

Shapefile Zip

**GeoJSON** 

**KML** 

CSV

MBTILES - vector tiles & raster tiles

OSM MBTILES

Mbtiles for Elevation

GPKG - GeoPackage Vector Features and Raster Tiles

GeoTagged Photos

JSON Catalog

### **Supported Online Formats**

Raster Tiles (XYZ/TMS & OGC
WMTS)

ESRI Feature Layer (FeatureServer)

Vector Tiles (PBF/MVT from
XYZ URL)

MapZen Terrarium Elevation

OGC WMS

ESRI Dynamic Map (MapServer)

ESRI Tile Map (Cached Map Server/Image Server)

Data licenced from <a href="http://openmaptiles.com">http://openmaptiles.com</a> by Klokantech

### **Open Map Tiles Data**

Open Street Map Vector Tiles

For each Country

Contour Lines Vector Tiles

We have this data ready!

Hillshade Raster Tiles

In optimized mbtiles format with a Style Picker.

Satellite Imagery Raster Tiles (0-13)

> Klokantech3D. And 3 styles for use with other basemaps below the OSM vector tiles so those styles have Opactity settings/transpareny for the polygons (Bright, Dark Matter, and Klokantech) OSM Basemap Bright(Opac) DarkMatter(Opac) Klokantech(Op Note there is a toggle to turn off the OSM Basemap.

If you load a Raster Tile Basemap from the Basemap Picker you will NOT see if unless you've either turned off the OSM Basemap or switched the style to one with Opacity

This control works with both the default internet connected vector tile Open Street Map basemap (from

OpenMapTiles hosted by Tech Maven Geospatial) as well as the optional offline data The app includes support for the following Styles - Bright, Toner, Positron, Dark Matter, Klokantech.

IRAO: Choose File

boundary\_places.mbtiles

untourlines\_vectortiles.mbtile: elevation terrarium rastertiles mbtiles illshade rastertiles mbtiles

reference labels rastertiles mbtiles reference\_lines\_rastertiles.mbtiles

deline klokantech rastertiles mbtiles stamen terrain rastertiles mbtiles

thunderforest\_outdoors\_rastertiles.mbtiles

osm\_vectortiles.mbtil

Contours OpenStreetMap

Hillshade

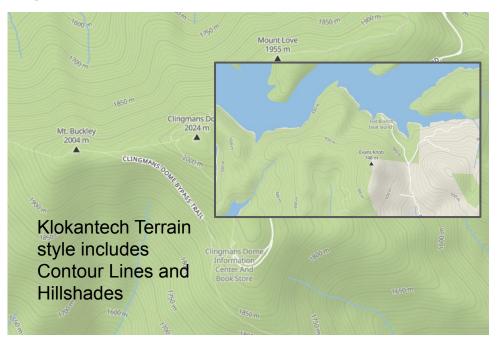
Satellite

#### **Highly Optimized Foundational Base Data**

### Open Street Map data as Vector Tiles (pbf)

https://openmaptiles.org/schema/

Future releases of the app will support loading your own custom STYLE



The vector tile schema describes how the vector data is organized into different thematic layers and which attribute and values each layer contains. This is useful for writing a map style and allows for alternative implementations of a schema.

The OpenMapTiles schema is open (CC-BY) and you are free to use, extend or <u>build upon the existing</u> <u>implementation</u> (BSD license). Please reference OpenMapTiles if you build upon the schema.

The vector tile schema has been developed by Klokan Technologies GmbH and was initially modelled after the cartography of the Carto Basemap Positron. The vector tile schema has been refined and improved in cooperation with the Wikimedia Foundation and is heavily influenced by the many years Paul Norman's experience of creating maps from OpenStreetMap.

## Open Street Map derived data with Styling and Data from **Stamen and Thunderforest**

Tech Maven Geospatial has OSM Planet PBF extract and process to build worldwide raster tiles and style the data in many ways and include other elements and layers.

We've included:

Stamen Terrain Background Raster Tiles

Stamen Reference Lines Raster Tiles

Stamen Reference Labels Raster Tiles

Thunderforest Outdoors Raster Tiles



### **Elevation Tiles**

Tech Maven Geospatial has included for each Country in MBTILES format or online streaming service MapZen created Terrarium Elevation Tiles

https://registry.opendata.aws/terrain-tiles/. This is elevation data that has been encoded in RGB of PNG Raster Image. The app is able to show Spot Elevation and Terrain Profile View. In future releases, we will do 3D Visualization with this data.

The range of the elevation data

(-11000 to 8900 meters)

### Raster Basemaps Selector (Internet Required)

**BING** 

**HERE** 

**GOOGLE** 

**ESRI** 

Thunderforest

Stamen

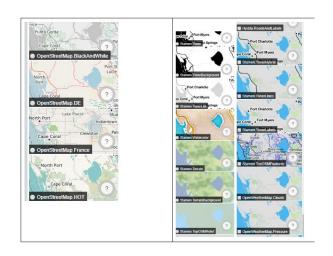
Open Street Map

CartoDB

JusticeMap and Many Others

Users can load any Raster Tiles from any custom source via

- XYZ/TMS Raster Tiles URL
- OGC WMTS Raster Tiles URL
- As well as standard ESRI & OGC map services



### **Online Services**

Add Layer Menu - supports loading data configured via the JSON CATALOG

#### **USGS National Map Layers**

NexRad Weather Radar, Satellite (GEOS, Global Imagery Mosaic, etc)

Political Boundaries

Transporation

Structures

Hydrology

# Vector Tile Layers (internet services hosted by Tech

Maven Geospatial)	
International Boundaries	Global Area Reference
Timezones	System (GARS)

Military Bases and Ranges

Zip Codes

MGRS GRID

PlaceNames

Cities

US State Borders

Mavor Goopatial)	
International Boundaries	Global Area Reference
Timezones	System (GARS)

Urban Areas

Hillshade

Color ETOPO

OpenMapTiles - Contours,