

Unfolded Studio

Advanced Geo-analytics on the Web

Showcasing the power of open WebGL frameworks deck.gl, kepler.gl and H3.

+ Add Data elevation_nyc.csv + Add Layer Layers > Basic > Color > Coverage > Height ① float elevation linear

Public Slides. Updated 11.18.2020

Open Core

Unfolded Studio is built on a suite of open geospatial web technologies

Analytics



kepler.gl

A powerful web application for geospatial analysis and fast exploration of large-scale datasets.

Rendering



deck.gl

A framework focused on highperformance, WebGL-based visualization of large datasets on web.

Spatial Indexing

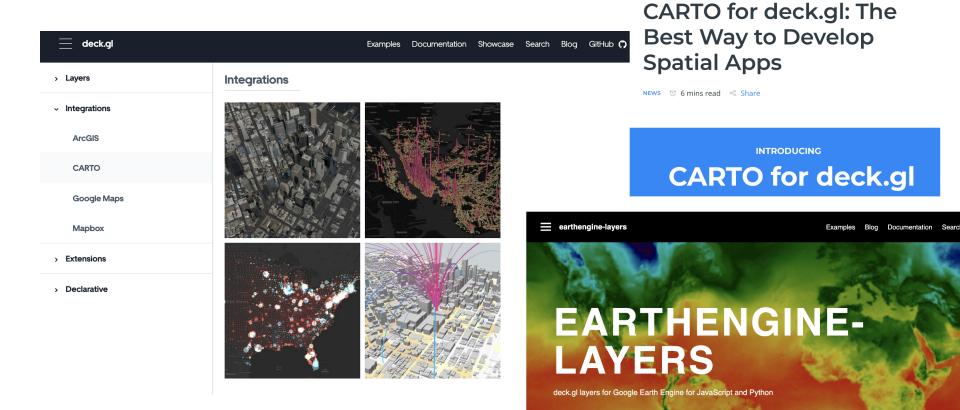


H3

A hexagonal grid based geospatial indexing system, enabling hierarchical hexagonal aggregation of data.

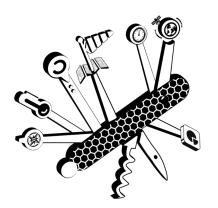
Cross-Industry Adoption

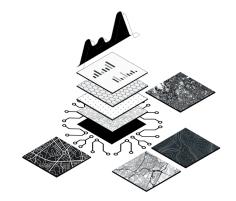
deck.gl / vis.gl - integration and adoption across the geospatial industry



Unfolded Studio is built for fast exploration of million-row geospatial datasets in the browser.

Free community access https://studio.unfolded.ai





All-In-One Tool

Make geospatial insights with a few simple clicks

GPU-based Analytics and Visualization

Fluidly filter, aggregate, and playback million-row datasets in your browser



Unfolded Studio

Client Side Exploration

GPU Acceleration

15+ Preset Layers

Filtering and Interaction

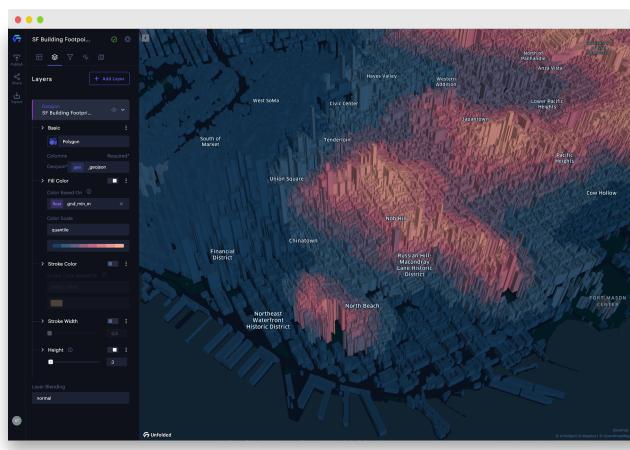
Data Operations

3D Maps

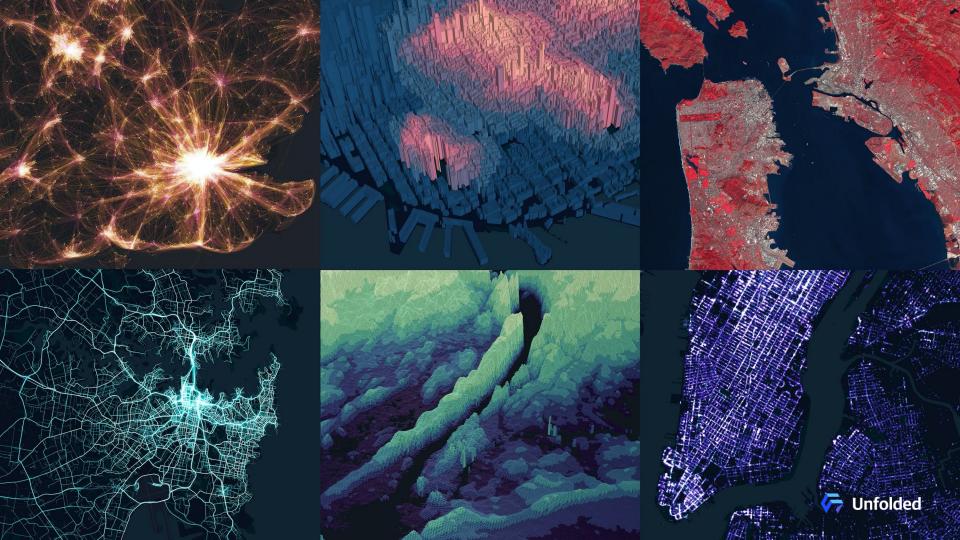
Planetary Datasets

Time Animation

On the Fly Aggregation







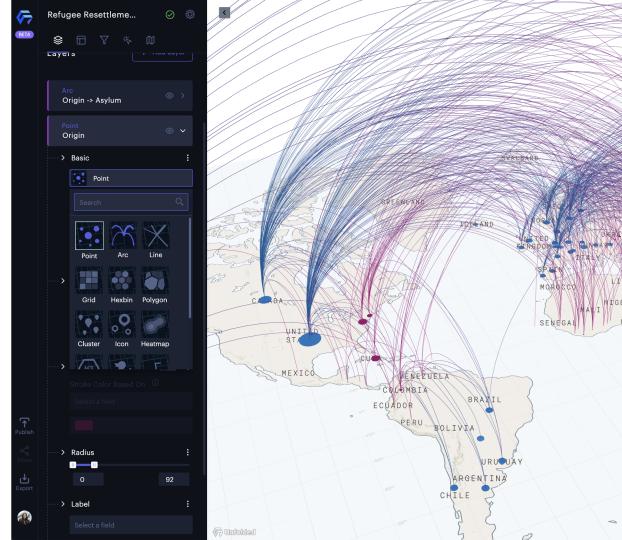
Data Layers

Extensive list of data layers to visualize all major geospatial data formats.

Includes point, arcs, path, admin boundary, vector tile, raster, H3, and scenegraphs.

15 preset data layers
Photoshop like layer UI
Multi channel visual encoding



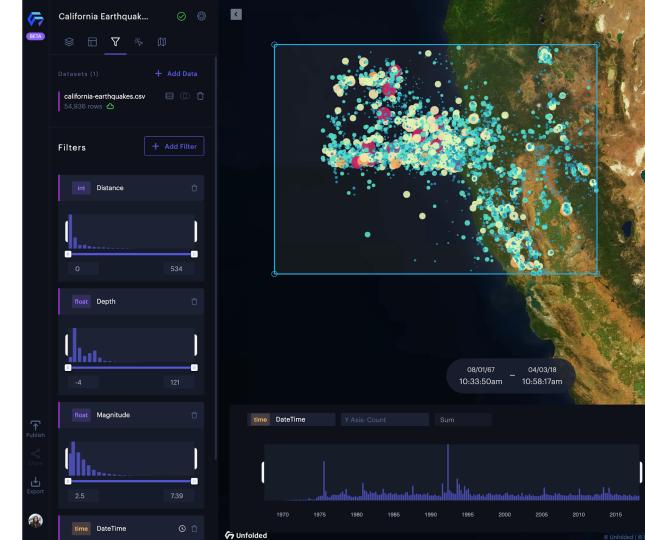


Real-Time Data Filtering

GPU accelerated client side filtering

GPU based filtering
Time animation
Cross filtering



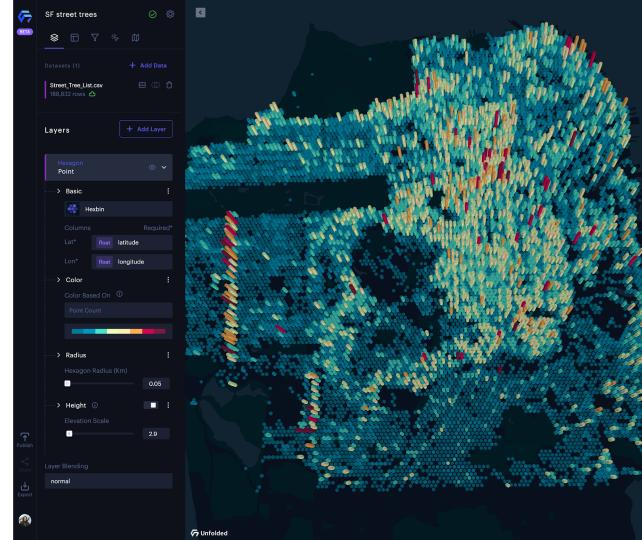


On the Fly Aggregation

Continuous point aggregation and clustering with heatmap, grid, hexagons.

Grid, Hexbin, Heatmap
Kdtree Clustering
Aggregation by metrics
3D Enabled





Data Analytics

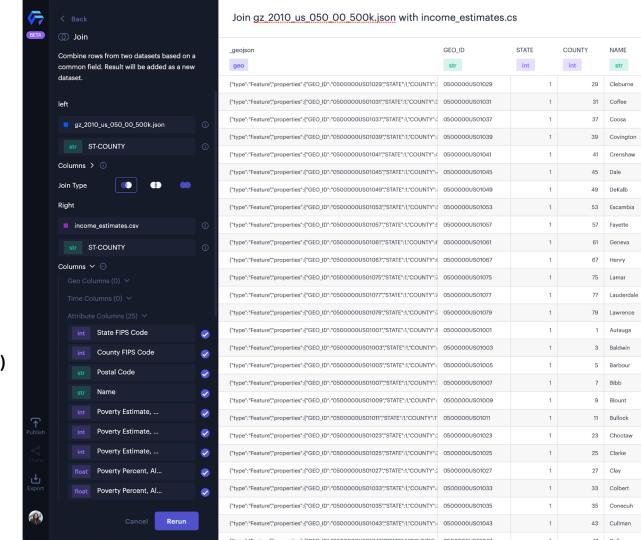
Column-based User Interface enables in-app data operations.

Combine, join, group and summarize data before visualizing it.

Metric Columns (Expressions)
Group By
Table Joins

Geospatial joins Upcoming..





Spatio-Temporal Analytics

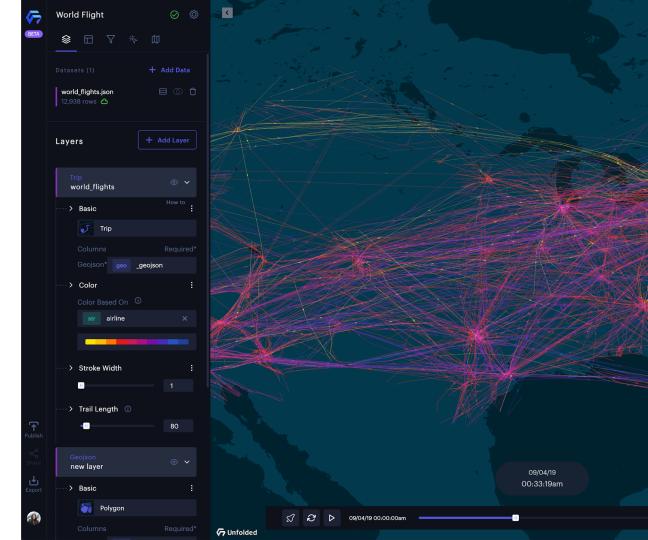
Automatic detection of datasets with time enabling filtering and animation.

Time filtering

Path animation

Temporal joins Upcoming..





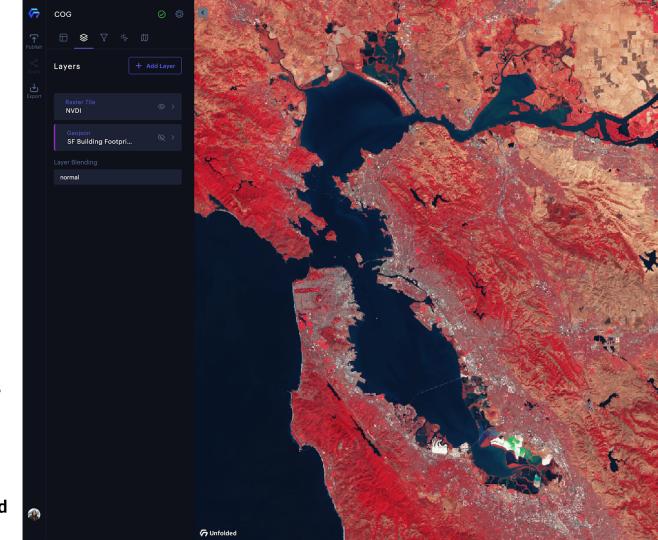
Tile based Data Sources

Cloud Optimized GeoTIFFs

High Bit-Depth Data

Textures

Data Texture Analytics
Unfolded
Vector and Raster Tiles



Globe

Upcoming

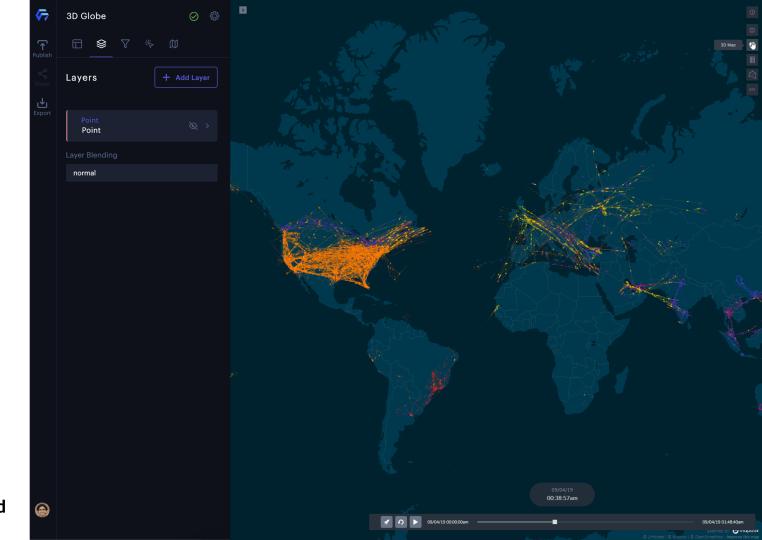
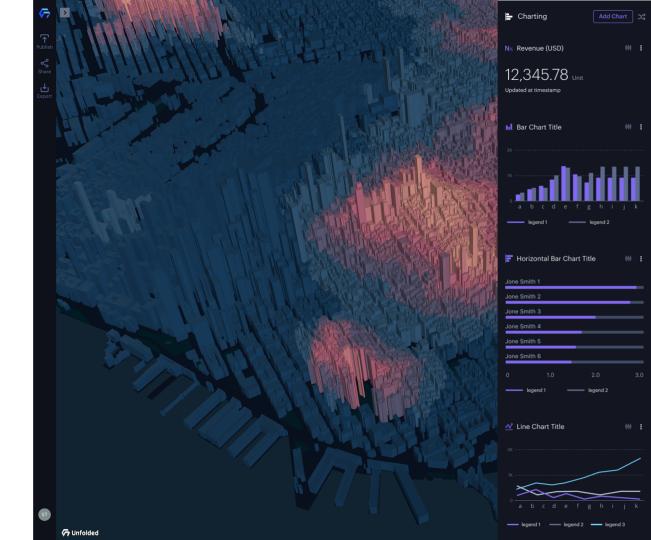




Chart Widget Support

Upcoming





Demo

