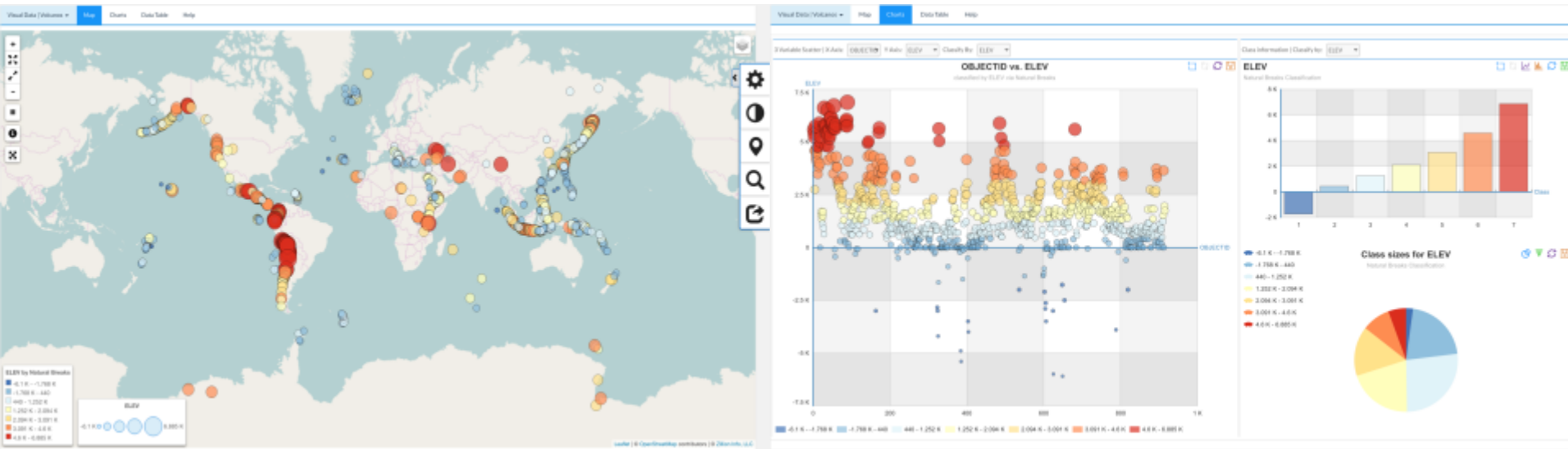
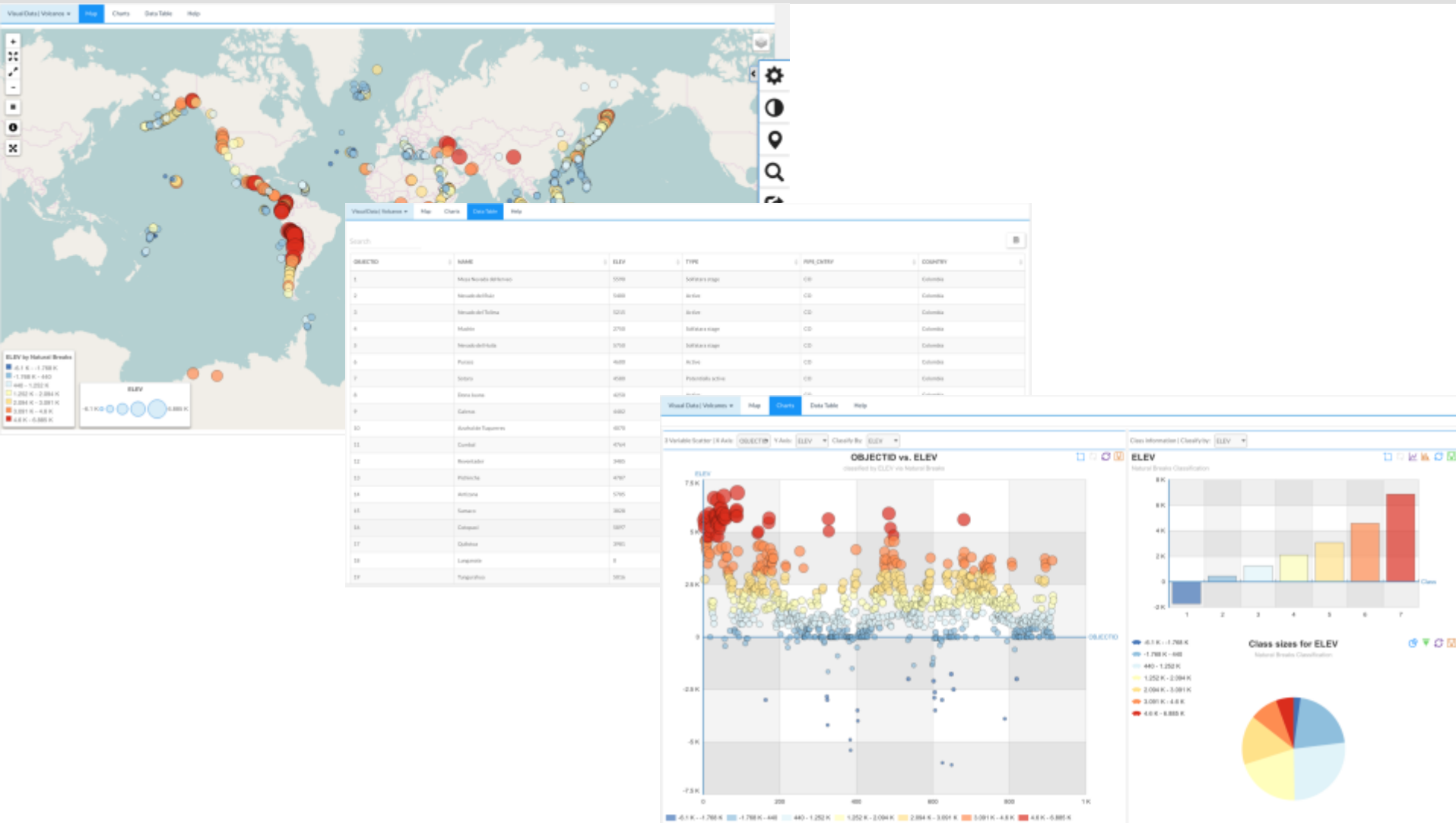


## VISUAL DATA USER GUIDE

<http://services.zillioninfo.com>  
[info@zillioninfo.com](mailto:info@zillioninfo.com)

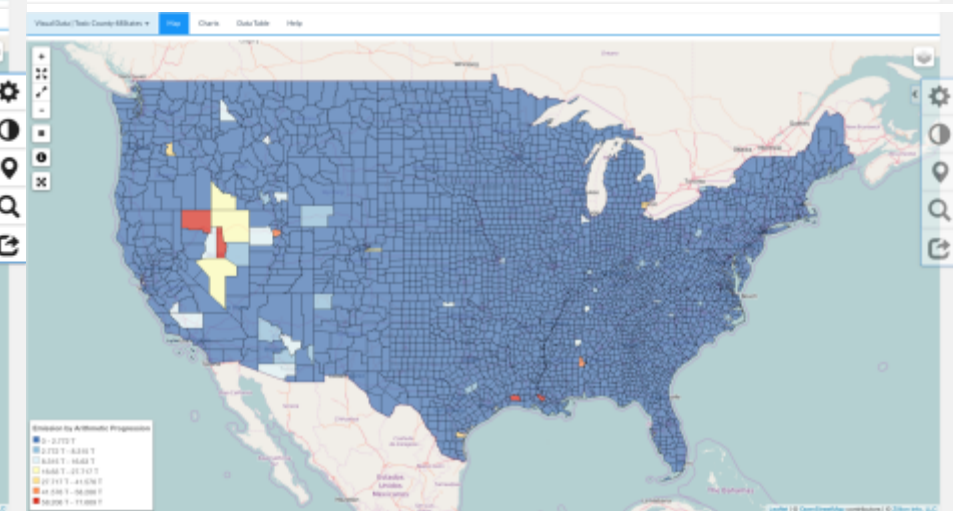
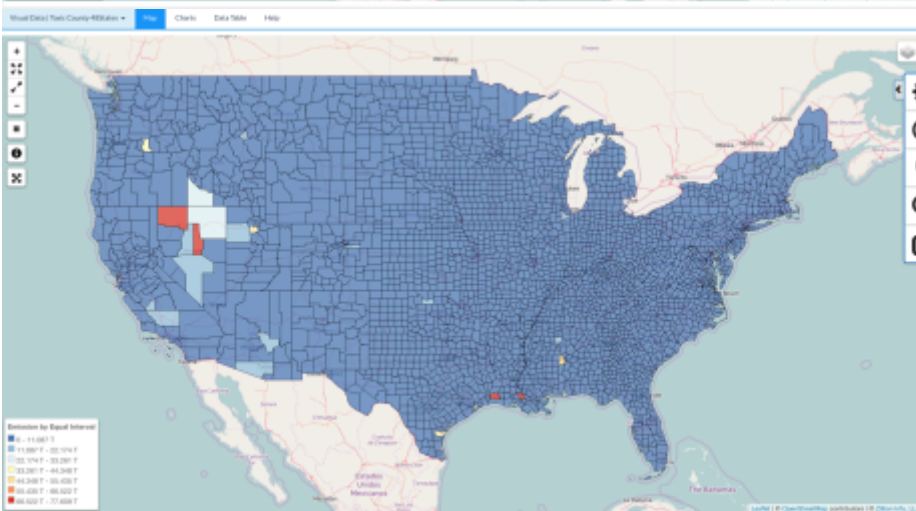
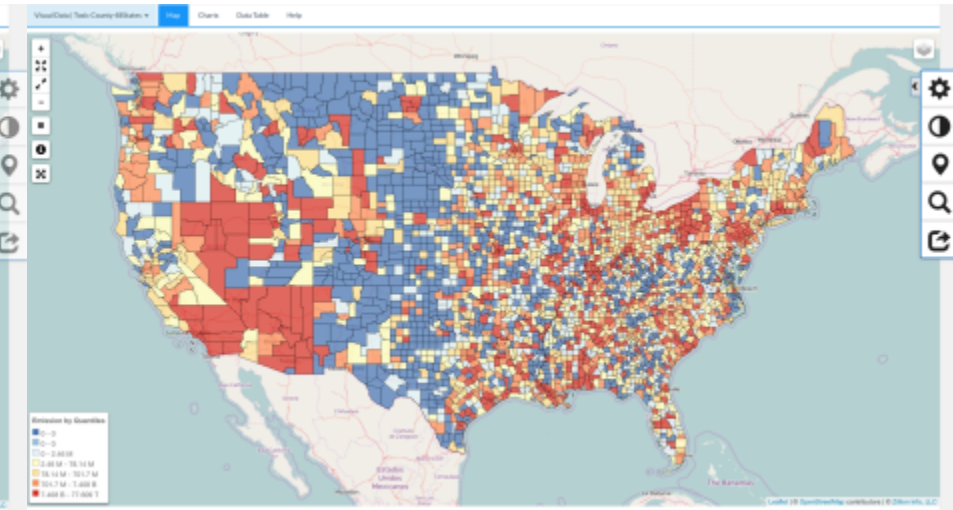
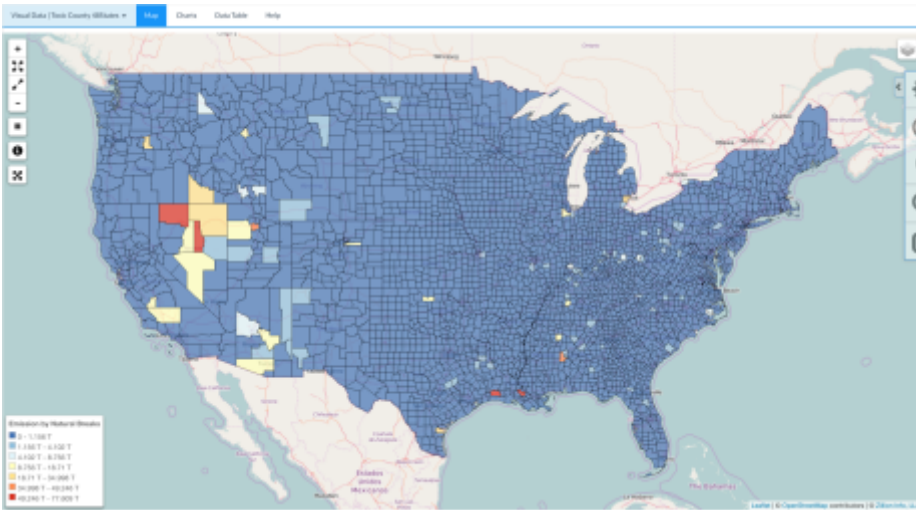


# Integrate Maps, Tables, Graphs and Charts



# Various Classification Methods

(Quantiles, Natural Breaks, Equal Interval, Geometric Progression, Arithmetic Progression)



## Various Classification Methods

### Classification

Classify by:

Numeric

Categorical

AREA

Classification method:

Natural Breaks

Classify

Close Panel

1. Choose "Numeric" or "Categorical". This will depend on your dataset. If you choose numeric it will give you the option to classify data that has values associated with each field. If you choose categorical it will give you the option to classify data that has text or categories associated with each field

2. Select the variable

3. Select Classification method

**Quantile**- Automatically divides data into equal size groups based on values within the dataset

**Natural breaks**- Automatically determines values at which breaks occur using optimization algorithms

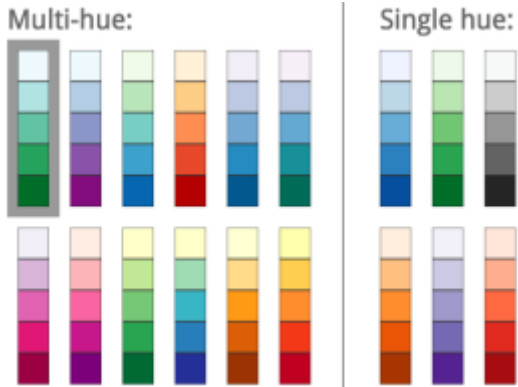
**Equal Interval**- Automatically divides breaks using equivalent differences between each break

**Geometric Progression**- A progression of numbers with a constant ratio between each number and the one before (e.g., each subsequent number is increased by a factor of 3 in the progression 1, 3, 9, 27, 81 ).

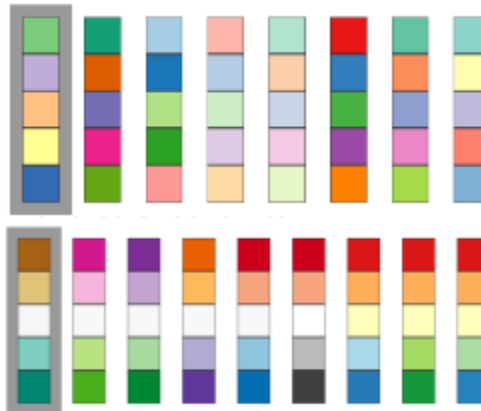
**Arithmetic Progression**- A sequence of numbers in which each differs from the preceding by a constant quantity (e.g., 3, 6, 9, 12, etc.; 9, 7, 5, 3, etc.).

# Color Schemes

There are two color schemes : Preset schema and Custom schema



"**Custom Scheme**" to generate your own color scheme. Type in the number of colors and choose a base color. Click "Add a new base color" to add more colors to the color scheme. Click "Generate Schema" when finished.



" **Preset Schema** " to use a color scheme that has been previously generated. Use dropdown menu to choose preset color scheme.

**Classification**

**Color Schemes**

Class color scheme:

Preset Schema  Custom Schema

BuYlRd 5

**Classify**

**Close Panel**

**Color Schemes**

Class color scheme:

Preset Schema  Custom Schema

**Generate Schema**

Number of colors

Base Colors

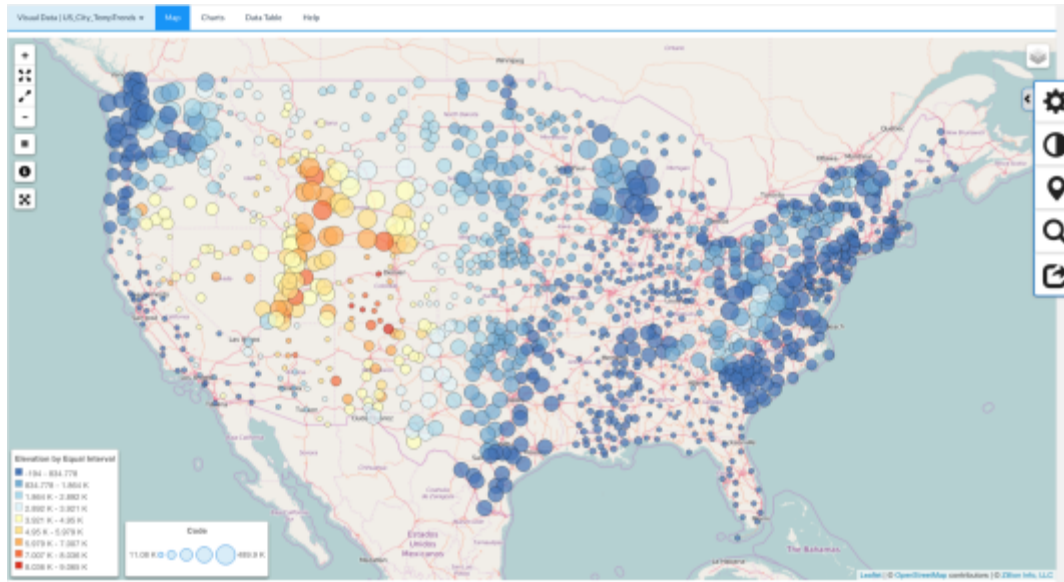
**+Add a new base color**

Left click: edit; Right click: remove; Drag: reorder

**Classify**

**Close Panel**

# Bubble Map



**Equal:** Selecting equal will cause all points to be of equal size. This size can be controlled under "Radius" by sliding the bar from left to right.

**Varying by field:** Selecting "varying by field" will cause the size of the point to represent the number of data items within the field previously chosen. The user can then determine the field from which the radius is calculated from by using the drop down menu provided.

**Visualization** allows you to set options to customize the display of the data items you have selected to compare.

Point representation:

Circle

Point radius:

Equal

Varying by field

Determine radius from:

POP

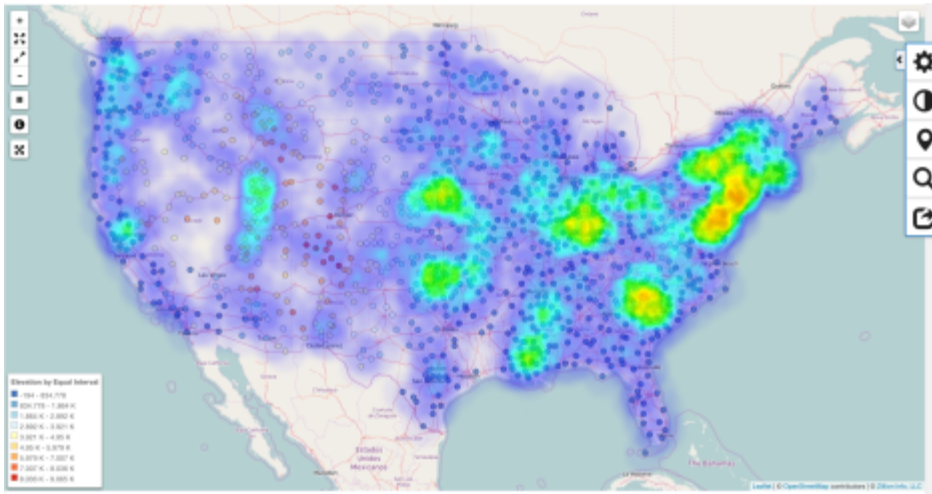
Radius range: 4-15



Show Legend

# Heat Map

**Heat Map:** A heat map is a graphical representation of data where the individual values contained in a matrix are represented as colors. In this case the color scheme is determined based on density of points in an area.



1. Select the distance or size of the heat map spots by using the sliding bar under "**Radius**"
2. Select the transparency of the heat map by using the sliding bar under "**Opacity**"

### 3. Determine Point Intensity

**Equal:** Selecting equal will cause the intensity of each individual point to be of equal size. Intensity can be controlled under "Radius" by sliding the bar from left to right.

**Varying by field:** Selecting "varying by field" will cause the intensity of each individual point to represent the data items it represents. The user can then determine the field from which heat map intensity is calculated from by using the drop down menu provided.

Show heatmap

Radius: 6.49



Opacity: 0.6



Individual point intensity:

Equal

Varying by field

Intensity: 0.5



## Data Filtering

**Filter**

---

Column

OBJECTID

Range: 1 to 915


Column Type: number

Treat values as filters

Operation

=

Value

Query 

---

Close Panel

Click Filter to narrow results based off information in your data set. Filter acts as a form of search engine that will allow you to only display certain criteria on the interface.

1. Use the dropdown menu to choose a field.
2. Use the dropdown menu to choose an operation for search
3. Type in the value in the search box

## Animation

Select a type or time attribute and click Treat values as filters, the animation will be played in terms of type or time.

Filter

Column

TYPE

Column Type: text

Treat values as filters

Operation

=

Value

Animate

Close Panel

Filter

Column

TYPE

Column Type: text

Treat values as filters

Play


Current Value: Solfatara stage

Pause

Stop

Close Panel

## Share (Embed this map/Link to this map)

 Share

---

Shared map title: Median Income in US

**Share Current State**

To manage your saved data, navigate to "Saved Data" in the top bar.

Share this link with anyone that you want to view this map:

```
http://services.zillioninfo.com/zi/visualdata/app/embedFrame?o=352&view=map&org=24&key=q6m8852fep4spnv3
```

Place this code in your site to embed this map:

```
<div id="q6m8852fep4spnv3ntoc469u87"><script async src="http://services.zillioninfo.com/zi/visualdata/app/embed?o=352&view=map&org=24&key=q6m8852fep4spnv3"></script></div>
```

**Copy Link**      **Copy Code**

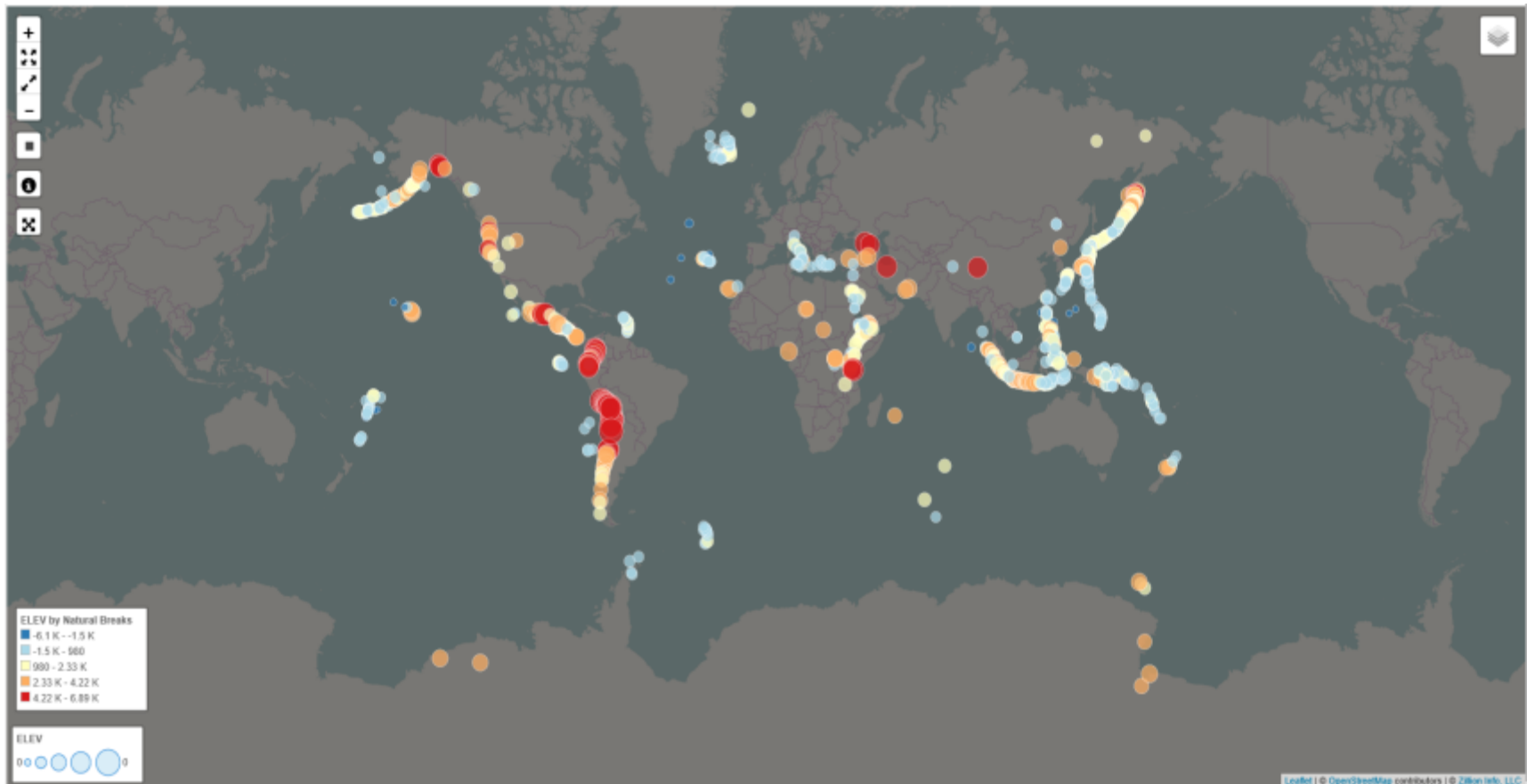
Close Panel

Click **Share** to reveal sharing options. Set shared map title and select "**Share Current State**" to lead to two sharing options:

1. Share map via a link. Select "**Copy Link**" to copy the link.
2. Share map via embedding. Select "**Copy Code**" to copy the code snippet. Place this piece of codes in a web page or a web app, similar to how videos are shared.

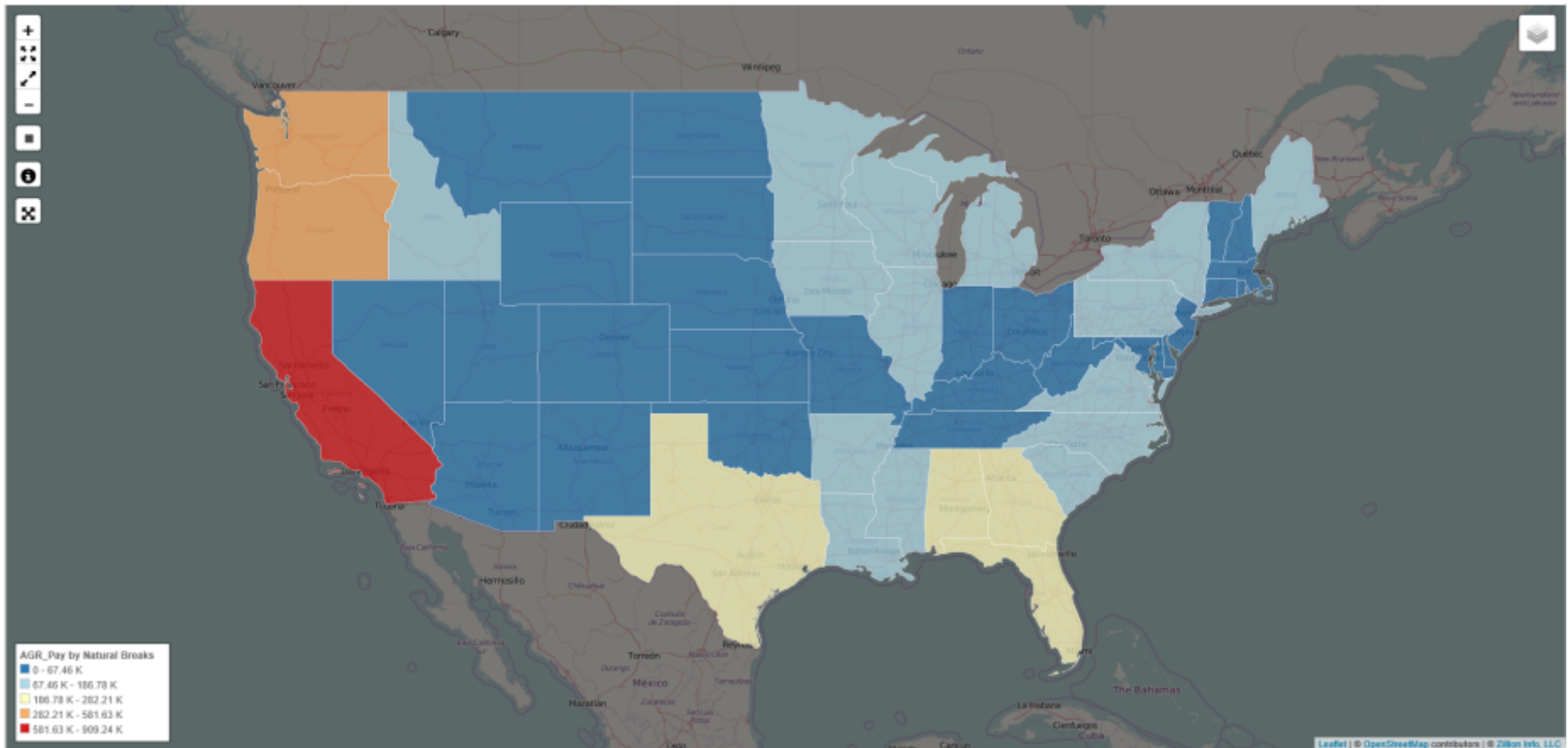
## A Sample Shared Map: Volcanoes

[http://services.zillioninfo.com/zi/visualdata/app/embedFrame?o=487&view=map&org=24&key=ihl573k6fkheh4ch9a2laqnsr9&host=zi\\_static#](http://services.zillioninfo.com/zi/visualdata/app/embedFrame?o=487&view=map&org=24&key=ihl573k6fkheh4ch9a2laqnsr9&host=zi_static#)

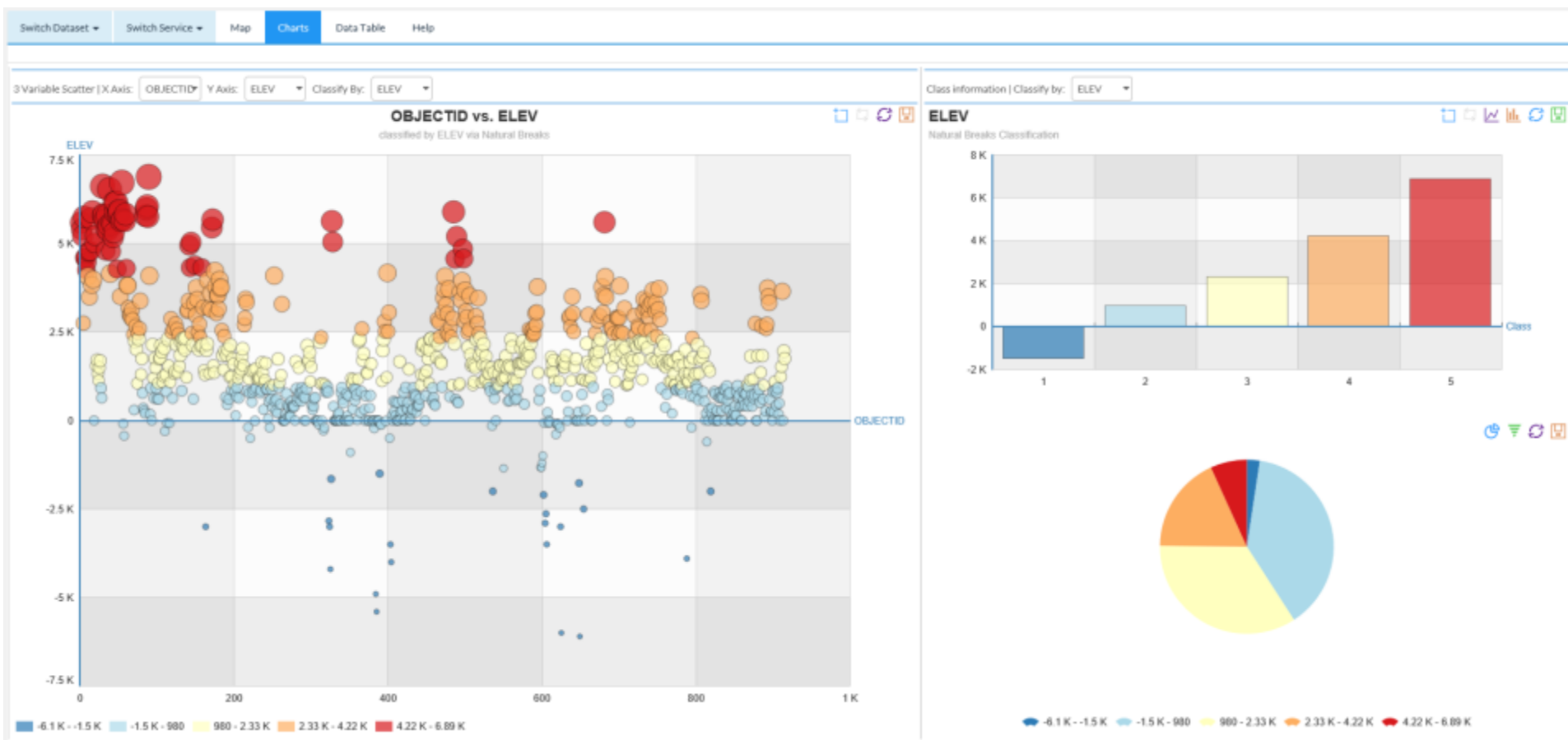


# A Sample Shared Map: Average Pay in US

[http://services.zillioninfo.com/zi/visualdata/app/embedFrame?o=630&view=map&org=24&key=j9toadjv1Inmg5ffldmlcaqrq8&host=zi\\_static](http://services.zillioninfo.com/zi/visualdata/app/embedFrame?o=630&view=map&org=24&key=j9toadjv1Inmg5ffldmlcaqrq8&host=zi_static)



# Scatter Plot, Bar Chart and Pie Chart



# Data Table

Display the data items and allow each column to sort.  
The color of each row represents the class which matches with the class in the map.

OBJECTID	NAME	ELEV	TYPE	FPS_CNTRY	COUNTRY
1	Meza Nevada de Iruvio	5590	Solfataral stage	CO	Colombia
2	Nevado del Ruiz	5400	Active	CO	Colombia
3	Nevado del Tolima	5215	Active	CO	Colombia
4	Mackin	2750	Solfataral stage	CO	Colombia
5	Nevado del Huila	5750	Solfataral stage	CO	Colombia
6	Parícuti	4600	Active	CO	Colombia
7	Sotara	4580	Potentially active	CO	Colombia
8	Dona Juana	4250	Active	CO	Colombia
9	Galeras	4482	Active	CO	Colombia
10	Azufral de Tuquerres	4070	Solfataral stage	CO	Colombia
11	Cumbal	4764	Active	EC	Ecuador
12	Reventador	3483	Active	EC	Ecuador
13	Pichincha	4767	Active	EC	Ecuador
14	Antitana	5705	Active	EC	Ecuador
15	Sumaco	3628	Active	EC	Ecuador
16	Cotopaxi	5897	Active	EC	Ecuador
17	Quilotoa	3981	Active	EC	Ecuador
18	Lungarate	0	Potentially active	EC	Ecuador

## Settings



Show Legend

Boundary Color

Background Color

AGE15  Show Label

select mouse over label

 Set Default Extent  Reset Default Extent

Close Panel

Click settings to set map title, show legend and select a feature attribute to show a label on the map.

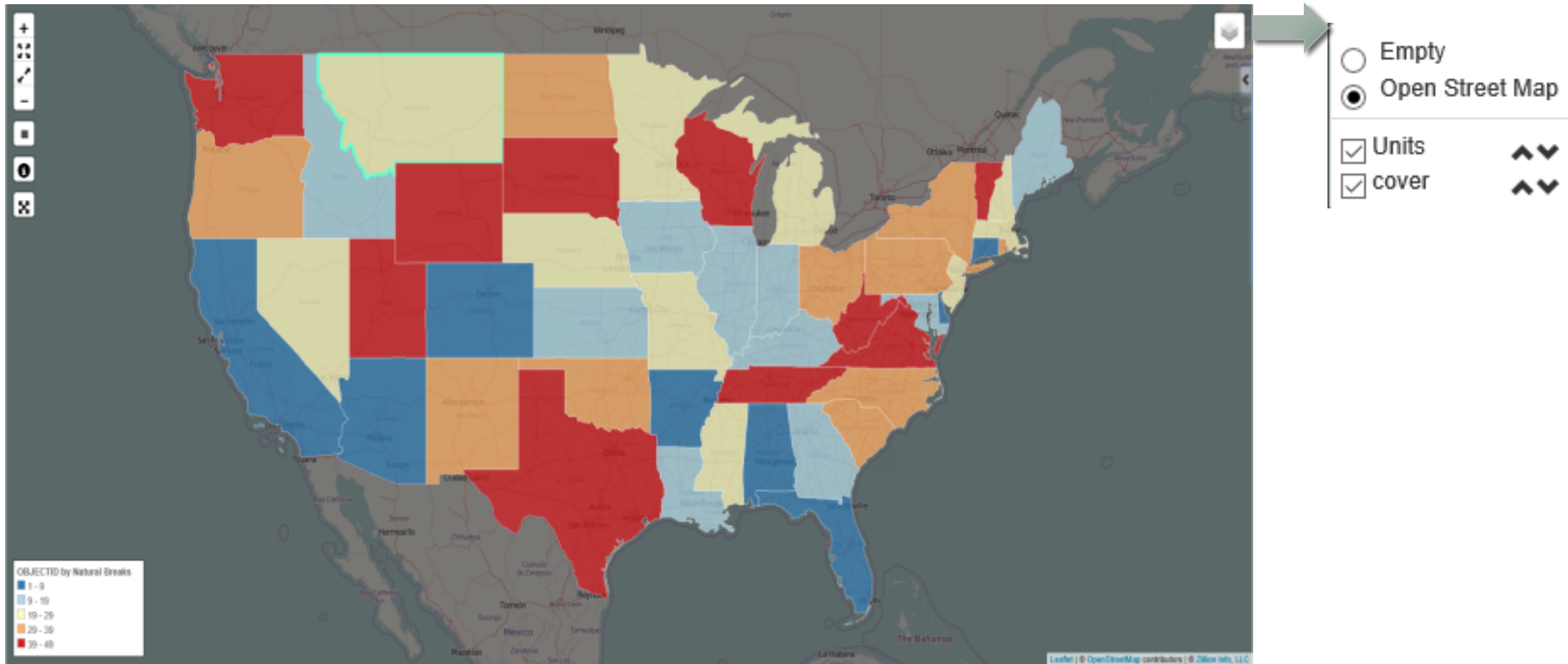
Boundary Color: Change the boundary color of the base map.

Background Color: Change the color of the base map background.

Set Default Extent: Set the current viewport to be the default viewport for this dataset for all users in your organization.

Reset Default Extent: Reset the default viewport for this dataset to be bounds of the unit layer for all users in your organization.

# Layer Management



The base map can be set as Open Street Map or no map. The layer order can be adjusted.

# DATA AND CONFIGURE

---

<http://services.zillioninfo.com>

## Welcome to ZillionInfo Online

ZillionInfo Online provides five types of data analytics services: VisualData, Multivariate Mapping, Regionalization, iRedistrict, and iRedistrict with Site. VisualData is available for free accounts. For more information about the subscription plans, please check our subscription plans. Please contact [info@zillioninfo.com](mailto:info@zillioninfo.com) for subscription or for more details.

If you are an account administrator, please upload data in the "data" page, assign the data to the service you would like to use for analysis in "Configuration" page, and click the "Launch" button to start data analytics. You may also pick the data shared by ZillionInfo or by other users in the data list. Limited user and standard user accounts cannot upload data and cannot configure services. Please check our user manuals for instructions on service usage.

Shapefiles and geo-tagged CSV files are currently supported. Support of other file formats is coming soon. When uploading a shapefile, please make sure the shapefile is zipped without any folders. When uploading a geo-tagged CSV file, please make sure the latitude and longitude attributes are not null values.

This data analytics platform is for quantitative analytics, so there should be at least one numeric attribute in the dataset being analyzed.

# Data List

All data that has been uploaded to the online service will be displayed in the Data List. Click the radio-button in front of each data item to configure, launch or delete. A search bar is located above the list for easy access to previously loaded data.

[Data List](#)[Add New Data](#)[Create Space-Time Cube](#)

653.4 KB of 500.0 MB used

Please select the data, and then configure/launch it.

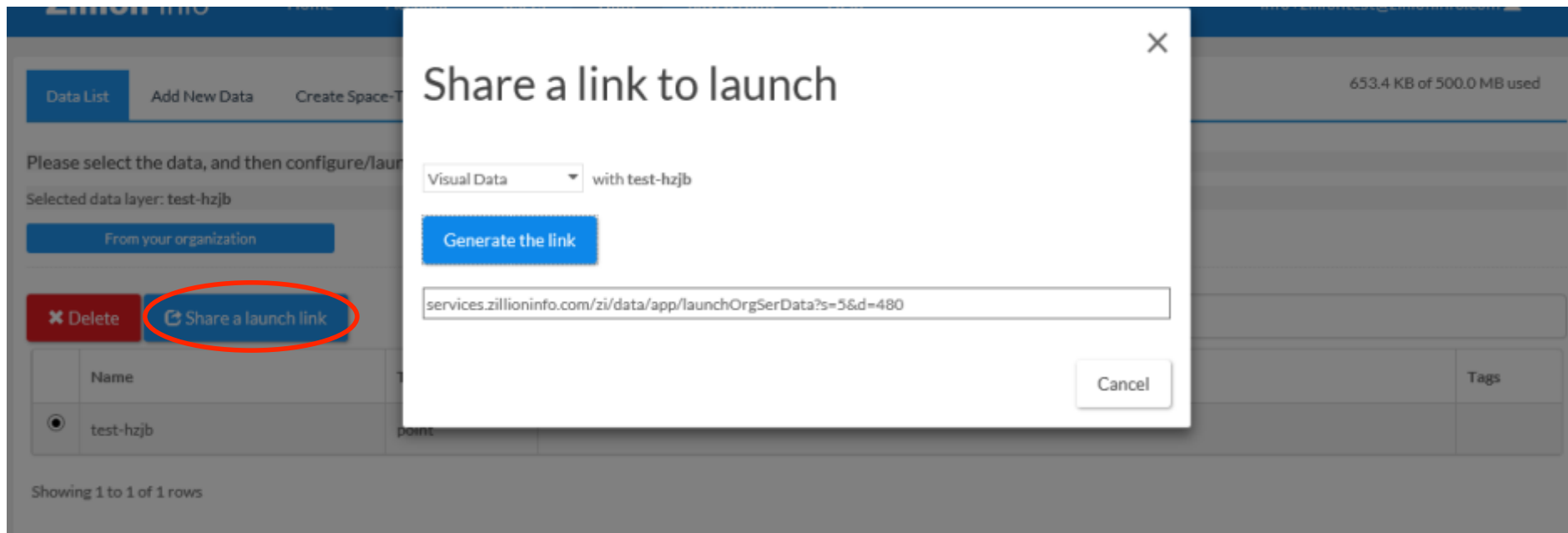
Selected data layer: test-hzjb

[From your organization](#)[From ZillionInfo](#)[Shared by other users](#)[✕ Delete](#)[🔗 Share a launch link](#)[✔ Configure/Launch](#)Search: 

	Name	Type	Description	Tags
<input checked="" type="radio"/>	test-hzjb	point		

## Share a Launch Link

Click Share a launch link button and select the appropriate service for other users. Click Generate the link to share the generated web link to other users. The specific dataset and service can be accessed by users. Also the service can be embedded to other web pages or APPs.



The screenshot displays the Zillion Info user interface. In the background, there is a 'Data List' section with a table containing one row for 'test-hzjb'. A red circle highlights the 'Share a launch link' button in the table's action column. A modal dialog box titled 'Share a link to launch' is open in the foreground. The dialog shows a dropdown menu set to 'Visual Data' with the text 'with test-hzjb' next to it. Below this is a blue 'Generate the link' button. Underneath the button is a text input field containing the URL: 'services.zillioninfo.com/zi/data/app/launchOrgSerData?s=5&d=480'. A 'Cancel' button is located at the bottom right of the dialog.

Name	Tags
test-hzjb	

Showing 1 to 1 of 1 rows

653.4 KB of 500.0 MB used

# Upload Data

A shapefile or a CSV file with longitude and latitude can be uploaded to the server.

**Zillion Info** Home Account Users **Data** Saved Data Help info+zilliontest@zillioninfo.com

Data List **Add New Data** Create Space-Time Cube 653.4 KB of 500.0 MB used

**Upload Data File** ESRI Help

### Upload Shapefile

Please zip the shapefile without using folders. Each zip file contains one shapefile collection. If the projection file (.prj) is missing, the projection of the shapefile will be assumed to be WGS 84.

Name(\*)

Specify a name for the shapefile

High Resolution

### Upload CSV file

**Geospatial** Non-geospatial

Please make sure the latitude/longitude values are not missed.

Name(\*)

Specify a name for CSV file

# Upload Data from ESRI ArcGIS Online

Click "ArcGIS Online" to upload data files from your ArcGIS Online account. This option is not available unless you have an account with the ArcGIS Online service.

The image shows two overlapping screenshots. The background screenshot is the ArcGIS Online 'Add New Data' page. It features a navigation bar with 'Data List', 'Add New Data' (highlighted in blue), and 'Create Space-Time Cube'. Below the navigation bar, there are three main options: 'Upload Data File' with an upload icon, 'ESRI' with the ESRI logo, and 'Help' with a question mark icon. A blue link states 'Esri Map Service can be used as contextual layers to overlay with other...'. Below this, there is a text input field for 'Please specify a name for this data resource:'. Underneath is a 'Unit Url:' section with two radio button options: 'ArcGIS Online Connection:' (which is selected and highlighted with a red box) and 'Please type in a public map service URL'. The 'ArcGIS Online Connection:' option includes a 'Get your contents' button. At the bottom of the page is a blue 'Add' button. The foreground screenshot is a browser window titled 'ArcGIS - Sign In' with the URL 'arcgis.com/home'. It displays the 'Sign In' form with the ESRI logo. The form includes fields for 'Username' and 'Password', a 'Keep me signed in' checkbox, and an orange 'SIGN IN' button. Below the button are links for 'Forgot password?' and 'Forgot username?'. At the bottom, there are options to 'Sign in with' an 'ENTERPRISE ACCOUNT', Facebook, or Google+.

# Add Public Esri Map Service as Contextual Layers

Public Esri Map Service can be added to serve as contextual layers. Add one layer each time. Make sure to include the layerID at the end of the url.

Data List

Add New Data

Create Space-Time Cube

653.4 KB of 500.0 MB used

 Upload Data File Help

Esri Map Service can be used as contextual layers to overlay with other layers.

Please specify a name for this data resource:

Unit Url:

ArcGIS Online Connection:

Please type in a public map service url (to the layer level, e.g.

[http://services.arcgisonline.com/arcgis/rest/services/World\\_Street\\_Map/MapServer/0](http://services.arcgisonline.com/arcgis/rest/services/World_Street_Map/MapServer/0)):

Get your contents

[http://services.arcgisonline.com/arcgis/rest/services/World\\_Street\\_Map/MapServer/0](http://services.arcgisonline.com/arcgis/rest/services/World_Street_Map/MapServer/0)

Add

# Configure and Launch

Click the "Configure/Launch" button to start service configuration and launch the service."

Data List

Add New Data

Create Space-Time Cube

653.4 KB of 500.0 MB used

Please select the data, and then configure/launch it.

Selected data layer: test-hzjb

From your organization

From ZillionInfo

Shared by other users

✕ Delete

🔗 Share a launch link

✔ Configure/Launch

Search: 

	Name	Type	Description	Tags
<input checked="" type="radio"/>	test-hzjb	point		

Showing 1 to 1 of 1 rows

Selected data layer: test-hzjb

✕ Delete

🔗 Share a launch link

✔ Configure/Launch

## Description and Tags for Dataset

Click the "Back" button on the top to return to the data list.

Click the "Edit" button to edit data details;

Data Tags can be added to help categorize datasets.

653.4 KB of 500.0 MB used

Data List Add New Data Create Space-Time Cube

◀ Back to data list

### Data Details

Name	<a href="#">test-hzjb</a>
Type	point
Number of features	728
Description	Empty
Tags	testdata ×

Edit Save

# Launch Data

Select the checkbox in front of each data analytics service to assign this dataset to it;  
Click the "save" button to save the service configuration;  
Click the "Launch" button to launch the service;  
Click the "Config" button in the contextual layer section to add contextual layers to each dataset.)

Please select the service below to configure and launch.

- VisualData
- Multivariate Mapping
- Regionalization

Map classification field	—
Chart X-Axis field	—
Chart Y-Axis field	—
Chart classification field	—

✓ Save

## Contextual layers

Contextual layers are optional. You may add multiple contextual layers to your dataset. These layers can be turned on/off.

Name	Style
No matching records found	

✓ Save Order



⚙ Config

Launch

# Change the Style or Appearance of Contextual Layers

## Contextual layers

Contextual layers are optional. You may add multiple contextual layers to your dataset. These layers can be turned on/off.

Name	Style
Business Patterns 2013 US	 

[✓ Save Order](#)[⚙ Config](#)

### Style for Business Patterns 2013 US



Fill color:

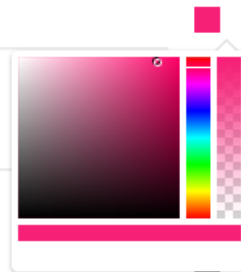
rgba(246,32,118,1)

Boundary width:

1

Boundary color:

rgba(0,0,0,1)

[Apply](#)

**Thank you for choosing our products!**

For more information, Please visit our website  
<http://services.zillioninfo.com>

**Zillion** Info