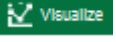


Creating a Point and Heat Maps

Montana Data Portal

How do I create a Map?

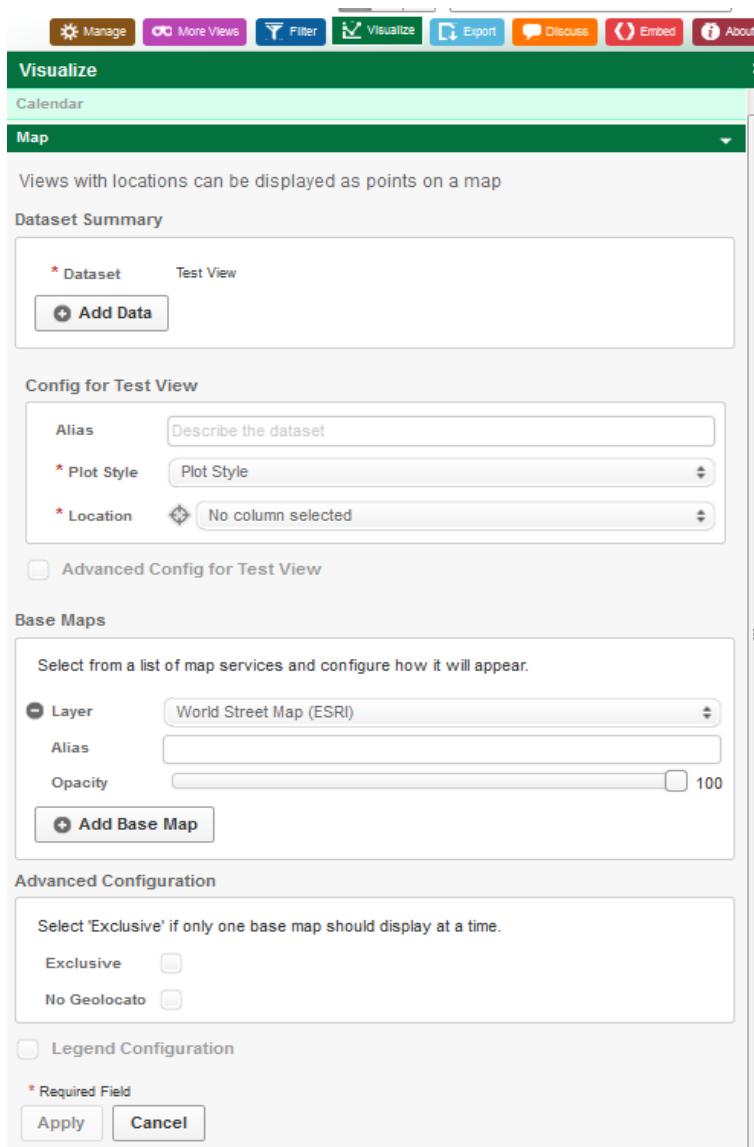
To create a Point or Heat Map, select a filtered view or dataset and open it.

Select the Visualize button  in the upper right hand corner of a view or dataset.

Select the Map option.

In the directions pages 2 through 10, if there are variations in how the point and heat map are setup, they will be broken out by each type of map.

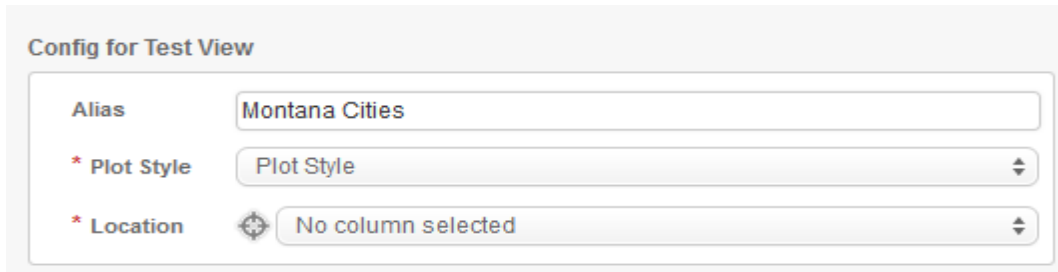
Please note that the map will not display until you click on the 'Apply' button, which will be greyed out until all the required fields are completed.



The screenshot shows the 'Visualize' interface for a dataset named 'Calendar'. The 'Map' option is selected in the visualization dropdown menu. The interface includes a 'Dataset Summary' section with a 'Test View' selected and an 'Add Data' button. Below this is the 'Config for Test View' section, which has three required fields: 'Alias' (with the placeholder text 'Describe the dataset'), 'Plot Style' (set to 'Plot Style'), and 'Location' (set to 'No column selected'). There is an unchecked checkbox for 'Advanced Config for Test View'. The 'Base Maps' section allows selecting a map service (currently 'World Street Map (ESRI)'), an alias, and an opacity slider (set to 100), with an 'Add Base Map' button. The 'Advanced Configuration' section has an unchecked checkbox for 'Legend Configuration' and two radio button options: 'Exclusive' and 'No Geolocate'. At the bottom, there are 'Apply' and 'Cancel' buttons, with the 'Apply' button being greyed out.

Point and Heat Maps: Under the Config section:

The alias field is typically used for naming the Map



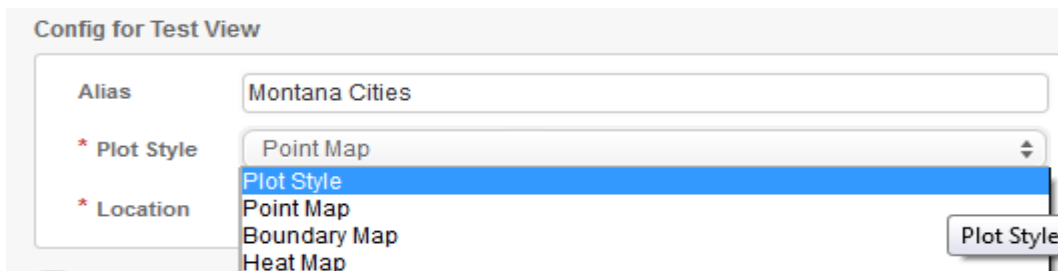
Config for Test View

Alias: Montana Cities

* Plot Style: Plot Style

* Location: No column selected

There are three options for Plot Style; point map, boundry map, and heat map.



Config for Test View

Alias: Montana Cities

* Plot Style: Plot Style

* Location: No column selected

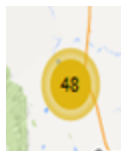
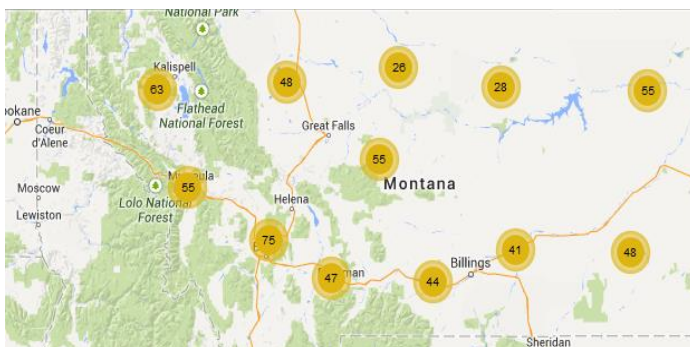
Plot Style

Point Map

Boundary Map

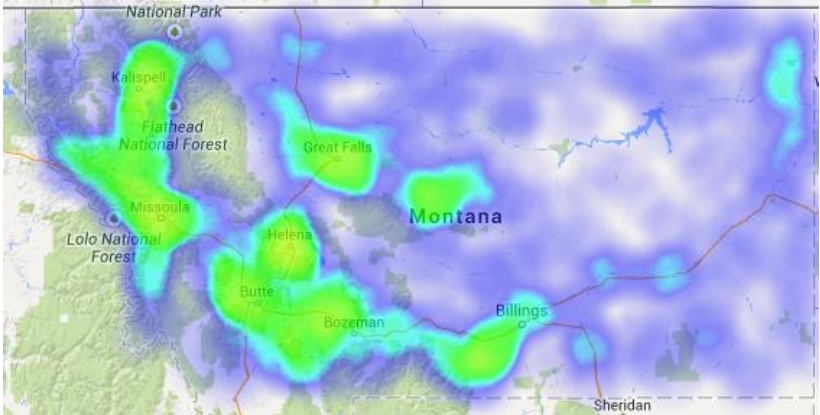
Heat Map

A point map – plots the locations of data



Clustering is a responsive feature which occurs when a point map is viewed beyond a certain zoomed-out threshold where the point density is large enough to make it difficult to distinguish individual points.

A heat map - shows the distribution of data in the form of heat spots. The warmer the color the greater the data incidences in that area.



A boundary map – shows the data variation between boundires. Please see the how to 'Overlaying a Boundary Map and Dataset.docx' document for details

The Location field, will identify the valid location field. In the example below, the location field of this dataset is 'location'.

Point Map:

Config for Test View

| | |
|--------------|--------------------|
| Alias | Montana Cities |
| * Plot Style | Point Map |
| * Location | No column selected |

Advanced Config

Base Maps

Select from a list of n ...

- No column selected
- Valid Columns**
- Location
- Invalid Columns**
- City
- County
- Population (2010)

Heat Map:

Config for Test View

| | |
|--------------|----------------|
| Alias | Montana Cities |
| * Plot Style | Heat Map |
| * Location | Location |

Point and Heat Maps: Under the Config section, and 'Advance Config' Section:

Point Map: Select the box next to the 'Advanced Config' Section

Config for Test View

Alias: Montana Cities

* Plot Style: Point Map

* Location: Location

Advanced Config for Test View

Base Color: [Color Picker]

Hover Color: [Color Picker]

Point Customization

Point Size: No column selected

Point Color: No column selected

Icon: No column selected

Flyout Configuration

Title: No column selected

Flyout Details: No column selected

+ Add Flyout Details

w/o Labels?

Opacity: 100

You can customize the map colors through the 'Base Color' and 'Hover Color' fields. Select the arrow and select a color or type in the color code and select enter on your keyboard.

Base Color: [Color Picker]

Hover Color: [Color Bar]

Point Customization: [Color Bar]

Point Size: [Color Bar]

Point Color: [Color Bar]

Icon: [Color Bar]

Flyout Configuration: Hex #555555

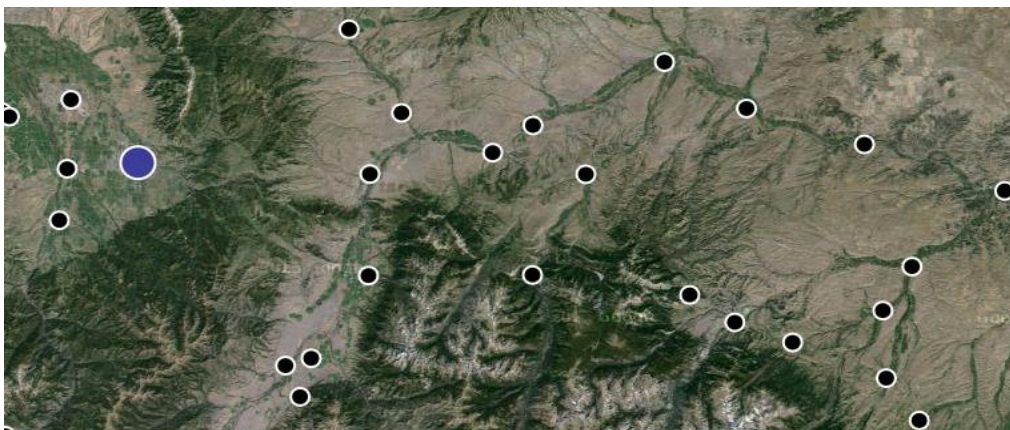
Heat Map: Select the box next to the 'Advanced Config' Section



Point Maps only: Under Point Customization, there are options for Point size, Point color, and icon.

- The 'Point Size' field allows you to select which column in the dataset you want to determine the size of your data points.
- The 'Point Color' field allows you to select the column of data you want the opacity of the data points to depend on.
- The 'Icon' field allows you to add images as icons for data points, if your dataset has a separate column with images.

In the example below, selecting the 'Population' as the point size will result in larger data points the higher the population is. The point color of 'Population' will result in darker data point colors where the 'Population' has lower values and lighter point colors where the 'Population' has higher values.



Point Maps only: Under Flyout Configuration, there are options to select which data points will display when you click on the data point. The 'Add Flyout Details' allows you to select several data fields in a dataset to display when the data point is clicked. The example below reflects

Flyout Configuration

Title

Flyout Details



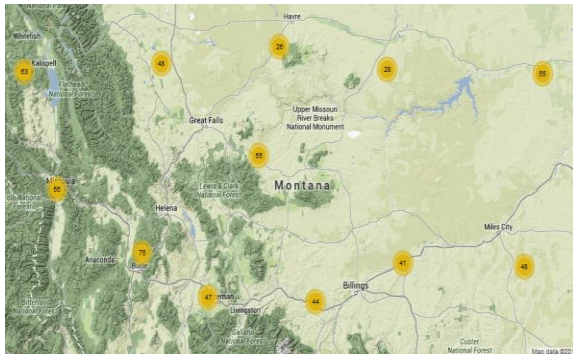
Point and Heat Maps: Under Base Maps, there is an option to add multiple base map layers.

Base Maps

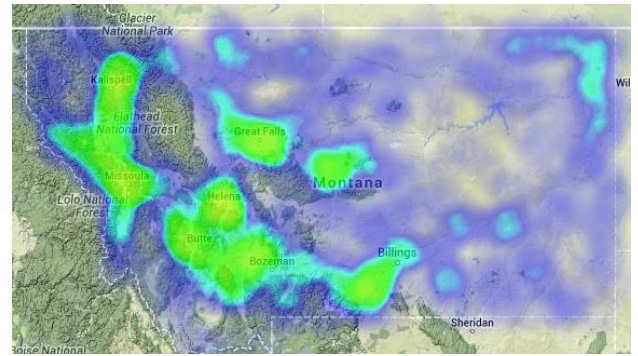
Select from a list of map services and configure how it will appear.

| | | |
|--------------------------|---------|---|
| <input type="checkbox"/> | Layer | <input type="text" value="Google Roadmap"/> |
| | Alias | <input type="text"/> |
| | Opacity | <input type="range" value="100"/> |
| <input type="checkbox"/> | Layer | <input type="text" value="Google Satellite"/> |
| | Alias | <input type="text"/> |
| | Opacity | <input type="range" value="100"/> |
| <input type="checkbox"/> | Layer | <input type="text" value="Google Terrain"/> |
| | Alias | <input type="text"/> |
| | Opacity | <input type="range" value="100"/> |

Point Map



Heat Map



Opacity allows you to change the opaqueness of each base map layer.

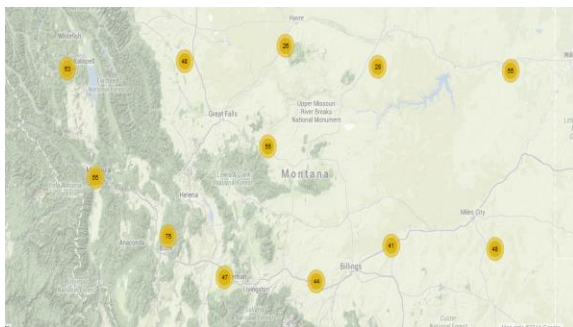
Base Maps

Select from a list of map services and configure how it will appear.

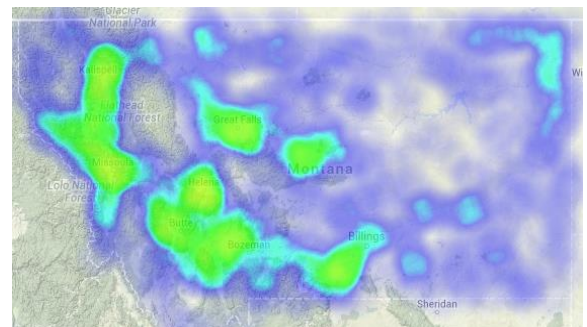
| | |
|---------|------------------|
| Layer | Google Roadmap |
| Alias | |
| Opacity | 100 |
| Layer | Google Satellite |
| Alias | |
| Opacity | 75 |
| Layer | Google Terrain |
| Alias | |
| Opacity | 51 |

+ Add Base Map

Point Map



Heat Map



Point and Heat Maps: Under the Advance Configuration, there is an 'exclusive' option that allows you to display multiple base maps one at a time, and an option to have 'no geo-location'.

In the example below, the Google Roadmap, alias Primary, is the primary map.

Base Maps

Select from a list of map services and configure how it will appear.

| | |
|---------|------------------|
| Layer | Google Roadmap |
| Alias | Primary |
| Opacity | 100 |
| Layer | Google Satellite |
| Alias | |
| Opacity | 75 |
| Layer | Google Terrain |
| Alias | |
| Opacity | 51 |

Advanced Configuration

Select 'Exclusive' if only one base map should display at a time.

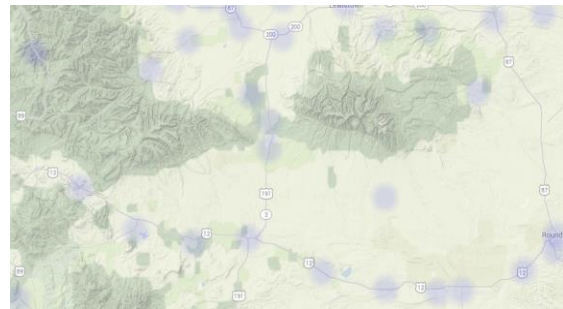
Exclusive

No Geolocator

Point Map



Heat Map



Point Map Only: Under the Legend Configuration, there are options to select the position of the legend, add custom legend entries, and a 'Describe conditional formats' check box.

Legend Configuration


Legend Top Right

Describe Conditional Formats

+ Add Custom Legend Entry

* Required Field

Apply **Cancel**

To add a conditional format, select the Filter button  from the upper right hand menu.



Select the Conditional Formatting section. Input a description, choose a color or icon change, define the conditions, and select apply. In the example below, we selected a color to identify cities with populations over 50,000.

Filter

Conditional Formatting

Conditional Formatting allows you to change the background color of rows based on custom criteria. Each row will be assigned the color of the first matching condition.


Conditions

Description: Population over 50,000

Use this color or this icon (change)

When: All Conditions

Condition: Population (2010) is greater than 50000

Navigate back to the Visualize button , and scroll down to the 'Legend Configuration' section.



If you would like to customize your legend, select the 'add custom legend entry' section.

Legend Configuration

Legend: Top Right

Describe Conditional Formats

Select the 'Describe Conditional Formats' check box.

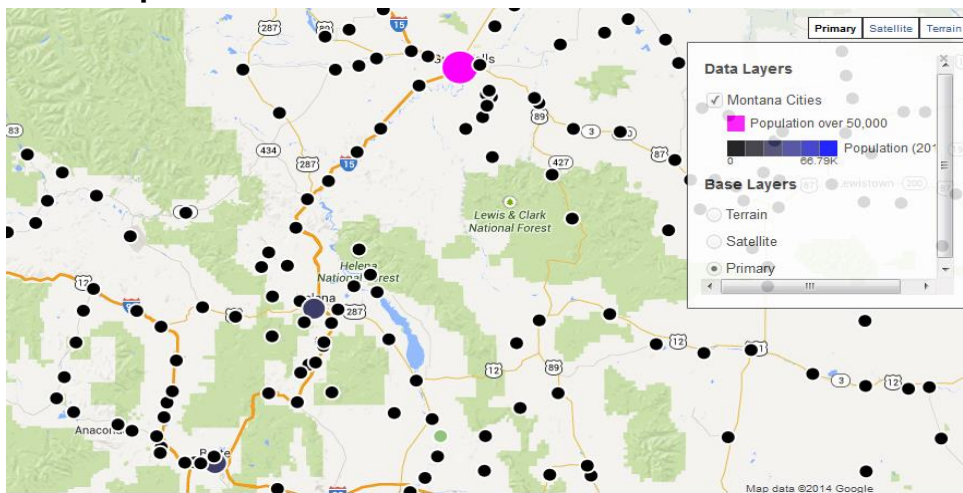
Legend Configuration

Legend Top Right

Describe Conditional Formats

* Required Field


Point Map



Point and Heat Maps: Select the apply button to refresh

* Required Field

Point and Heat Maps: Save your view if it is an existing view or select save as to create a new chart view.

 **Unsaved View**
Based on Test View