Visualization: GeoChart

Overview

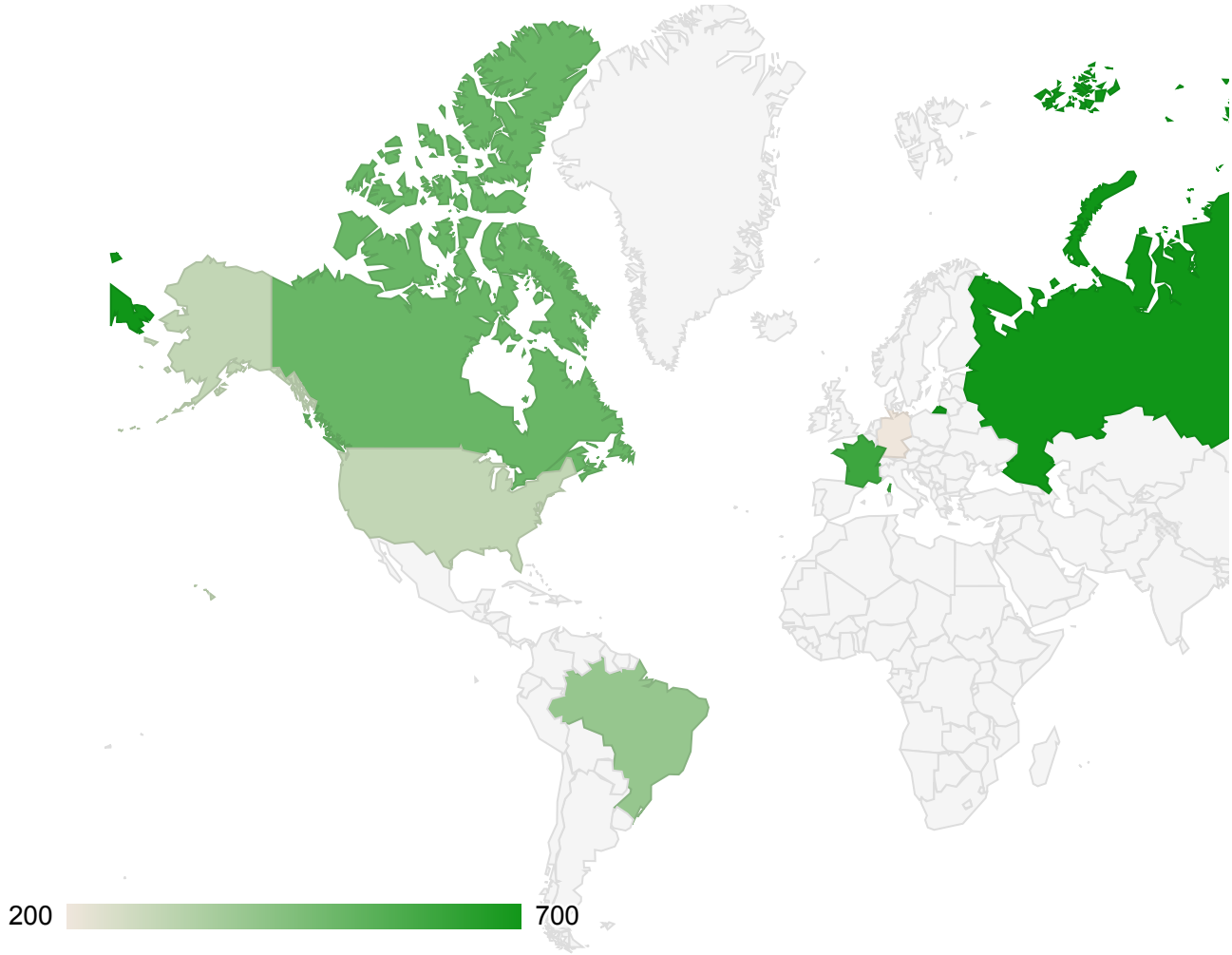
A *geochart* is a map of a country, a continent, or a region with areas identified in one of three ways:

- The **region** mode colors whole regions, such as countries, provinces, or states.
- The **markers** mode uses circles to designate regions that are scaled according to a value that you specify.
- The **text** mode labels the regions with identifiers (e.g., "Russia" or "Asia").

A geochart is rendered within the browser using SVG (http://www.w3.org/Graphics/SVG/) or VML (http://en.wikipedia.org/wiki/Vector_Markup_Language). Note that the geochart is not scrollable or draggable, and it's a line drawing rather than a terrain map; if you want any of that, consider a map visualization (//developers.google.com/chart/interactive/docs/gallery/map) instead.

Region GeoCharts

The `regions` style fills entire regions (typically countries) with colors corresponding to the values that you assign.



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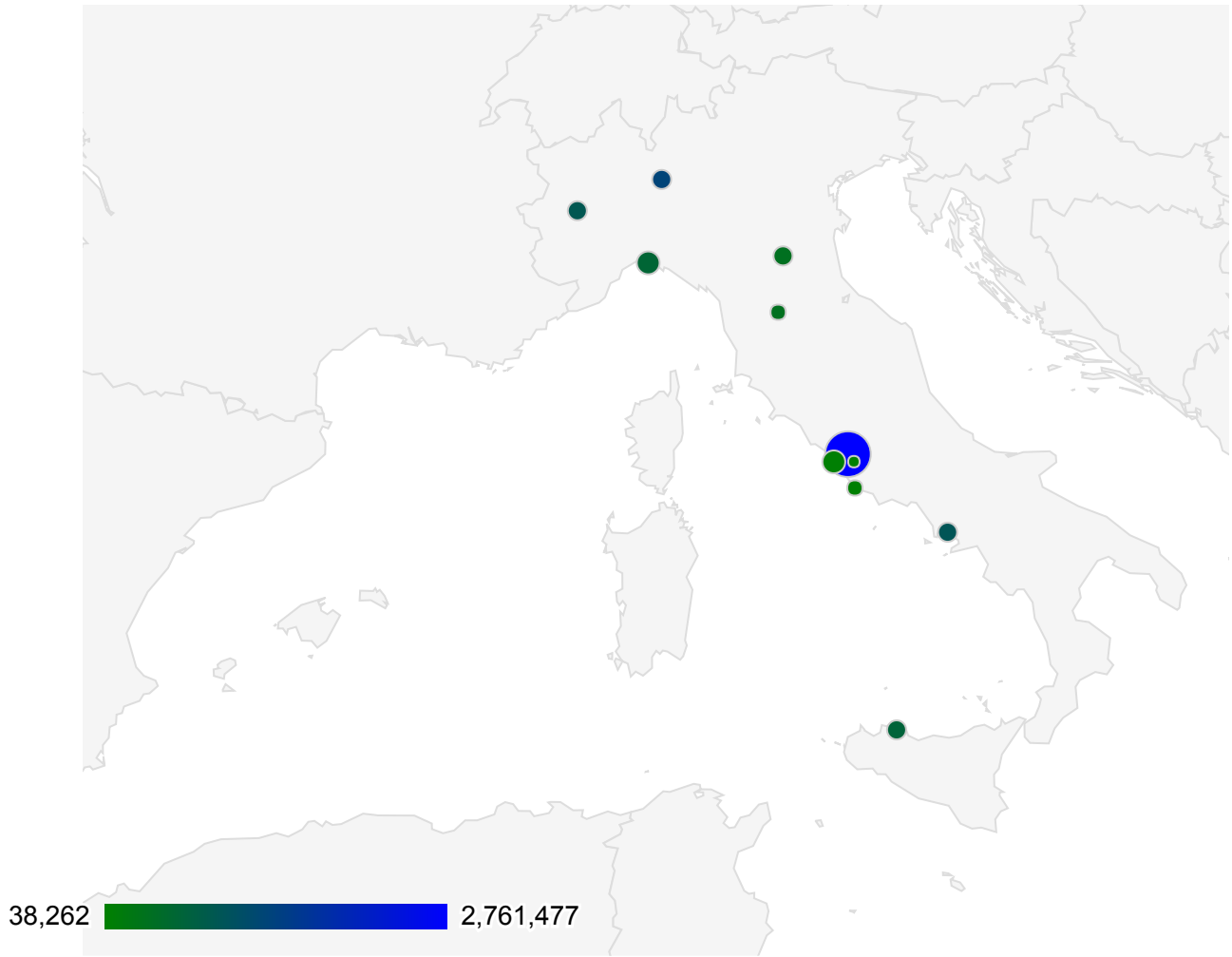
```
<html>
  <head>
    <script type="text/javascript" src="https://www.gstatic.com/charts/loader
    <script type="text/javascript">
      google.charts.load('current', {'packages':['geochart']});
      google.charts.setOnLoadCallback(drawRegionsMap);

      function drawRegionsMap() {

        var data = google.visualization.arrayToDataTable([
          ['Country', 'Popularity'],
          ['Germany', 200],
          ['United States', 300],
          ['Brazil', 400],
          ['Canada', 500],
          ['France', 600],
          ['RU', 700]
```

```
        ]);

        var options = {};

        var chart = new google.visualization.GeoChart(document.getElementById

        chart.draw(data, options);
      }
    </script>
  </head>
  <body>
    <div id="regions_div" style="width: 900px; height: 500px;"></div>
  </body>
</html>
```

Marker GeoCharts

The `markers` style renders circles at specified locations on the geochart, with the color and size that you specify.
Try hovering over the cluttered markers around Rome, and a magnifying glass will open to show the markers in more detail. (The magnifying glass is not supported in Internet Explorer version 8 or earlier.)



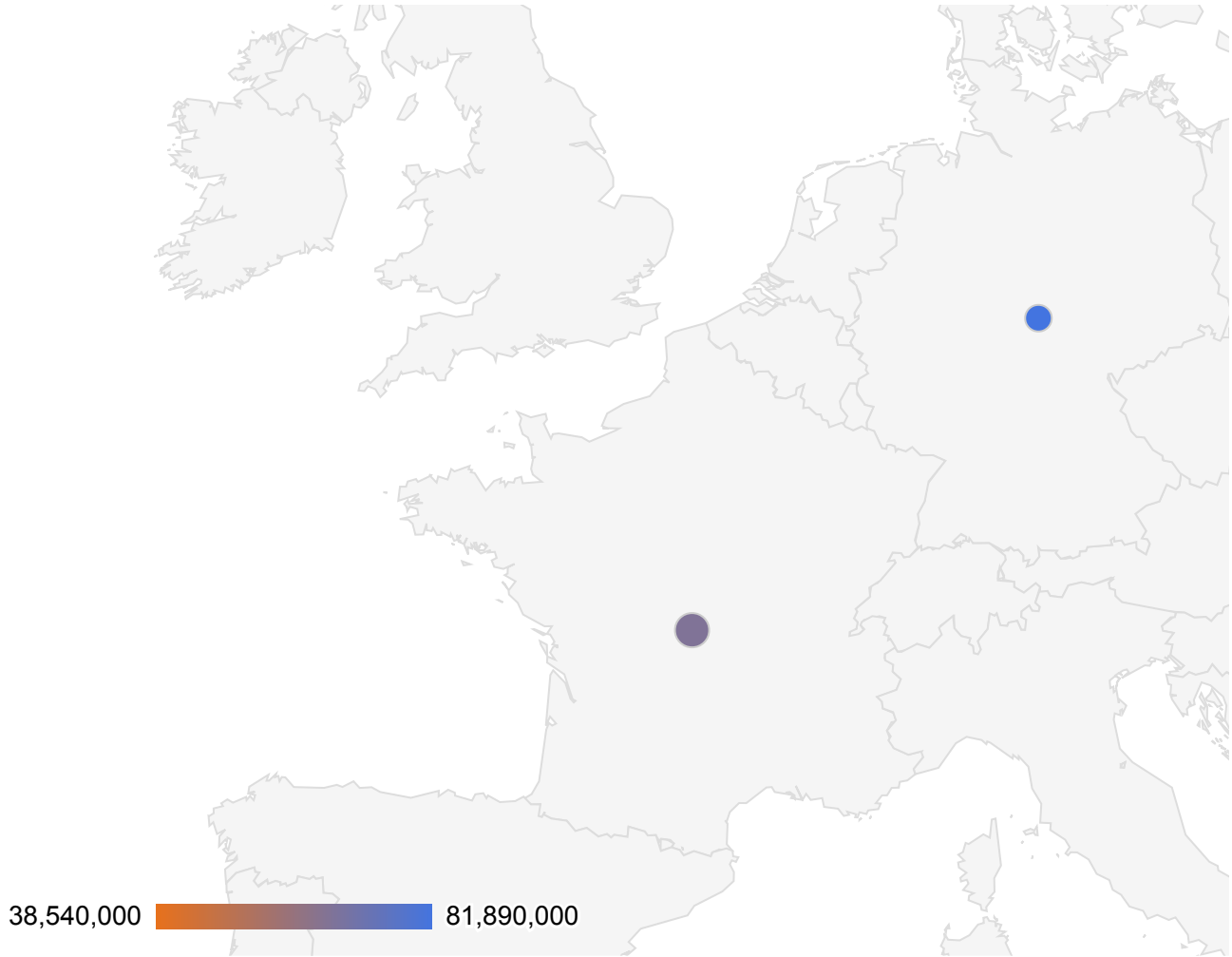

```
<html>
  <head>
    <script type='text/javascript' src='https://www.gstatic.com/charts/loader
    <script type='text/javascript'>
     google.charts.load('current', {'packages': ['geochart']});
     google.charts.setOnLoadCallback(drawMarkersMap);

      function drawMarkersMap() {
      var data = google.visualization.arrayToDataTable([
        ['City',   'Population', 'Area'],
        ['Rome',      2761477,    1285.31],
        ['Milan',     1324110,    181.76],
        ['Naples',    959574,     117.27],
        ['Turin',     907563,     130.17],
        ['Palermo',   655875,     158.9],
        ['Genoa',     607906,     243.60],
        ['Bologna',   380181,     140.7],
        ['Florence',  371282,     102.41],
        ['Fiumicino', 67370,      213.44],
```

```
        ['Anzio',     52192,      43.43],
        ['Ciampino',  38262,      11]
      ]);

      var options = {
        region: 'IT',
        displayMode: 'markers',
        colorAxis: {colors: ['green', 'blue']}
      };

      var chart = new google.visualization.GeoChart(document.getElementById('
      chart.draw(data, options);
    };
    </script>
  </head>
  <body>
    <div id="chart_div" style="width: 900px; height: 500px;"></div>
  </body>
</html>
```

Displaying Proportional Markers

Normally, marker geocharts display the smallest marker value as a minimal point. If you instead want to display proportional marker values (say, because they're percentages), use the `sizeAxis` option to set `minValue` and `maxValue` explicitly.

For instance, here's a map of western Europe with populations and areas for three countries: France, Germany, and Poland. The populations are all absolute numbers (e.g., 65 million for France) but the areas are all percentages of the whole: the France marker is colored violet because it's population is middling, but is sized 50 (out of a possible 100) because it contains 50% of the combined area.



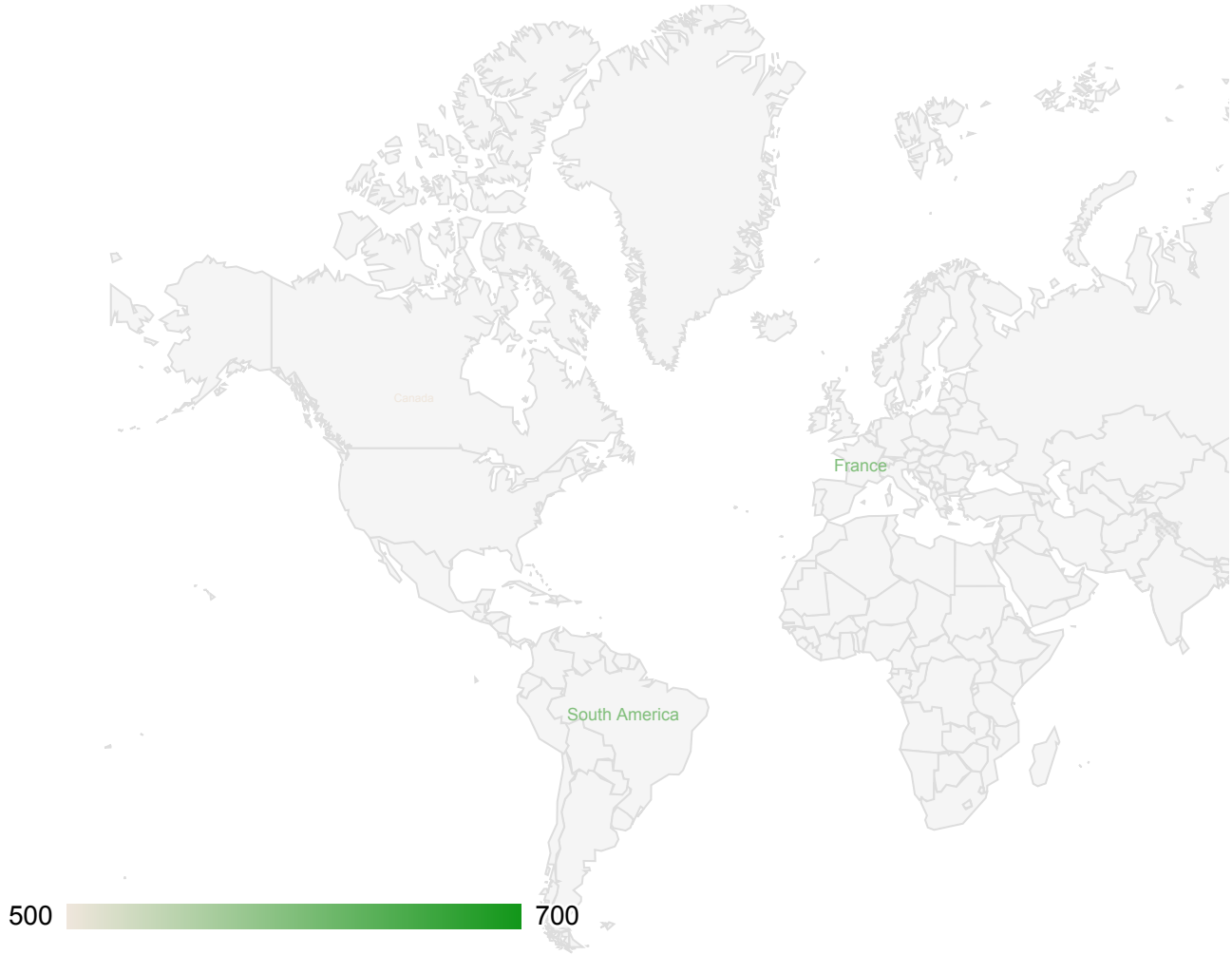
In this code, we use `sizeAxis` to specify marker sizes in the range from 0 to 100. We also use a `colorAxis` with RGB values to show the populations as a range of colors from orange to blue, a spectrum that will work well for users with color vision deficiencies. Finally, we specify western Europe with a `region` of 155, per the "Content Hierarchy and Codes" section later in this document.

```
<html>
  <head>
    <script type='text/javascript' src='https://www.gstatic.com/charts/loader
    <script type='text/javascript'>
     google.charts.load('current', {'packages': ['geochart']});
     google.charts.setOnLoadCallback(drawMarkersMap);

      function drawMarkersMap() {
      var data = google.visualization.arrayToDataTable([
        ['Country',   'Population', 'Area Percentage'],
        ['France',  65700000, 50],
        ['Germany', 81890000, 27],
```

```
        ['Poland',  38540000, 23]
      ]);

      var options = {
        sizeAxis: { minValue: 0, maxValue: 100 },
        region: '155', // Western Europe
        displayMode: 'markers',
        colorAxis: {colors: ['#e7711c', '#4374e0']} // orange to blue
      };

      var chart = new google.visualization.GeoChart(document.getElementById('
      chart.draw(data, options);
    };
    </script>
  </head>
  <body>
    <div id="chart_div" style="width: 900px; height: 500px;"></div>
  </body>
</html>
```

Text GeoCharts

You can overlay text labels onto a geochart with `displayMode: text`.



DATA & OPTIONS FULL HTML

```
var data = google.visualization.arrayToDataTable([
  ['Country', 'Popularity'],
  ['South America', 600],
  ['Canada', 500],
  ['France', 600],
  ['Russia', 700],
  ['Australia', 600]
]);

var options = { displayMode: 'text' };
```

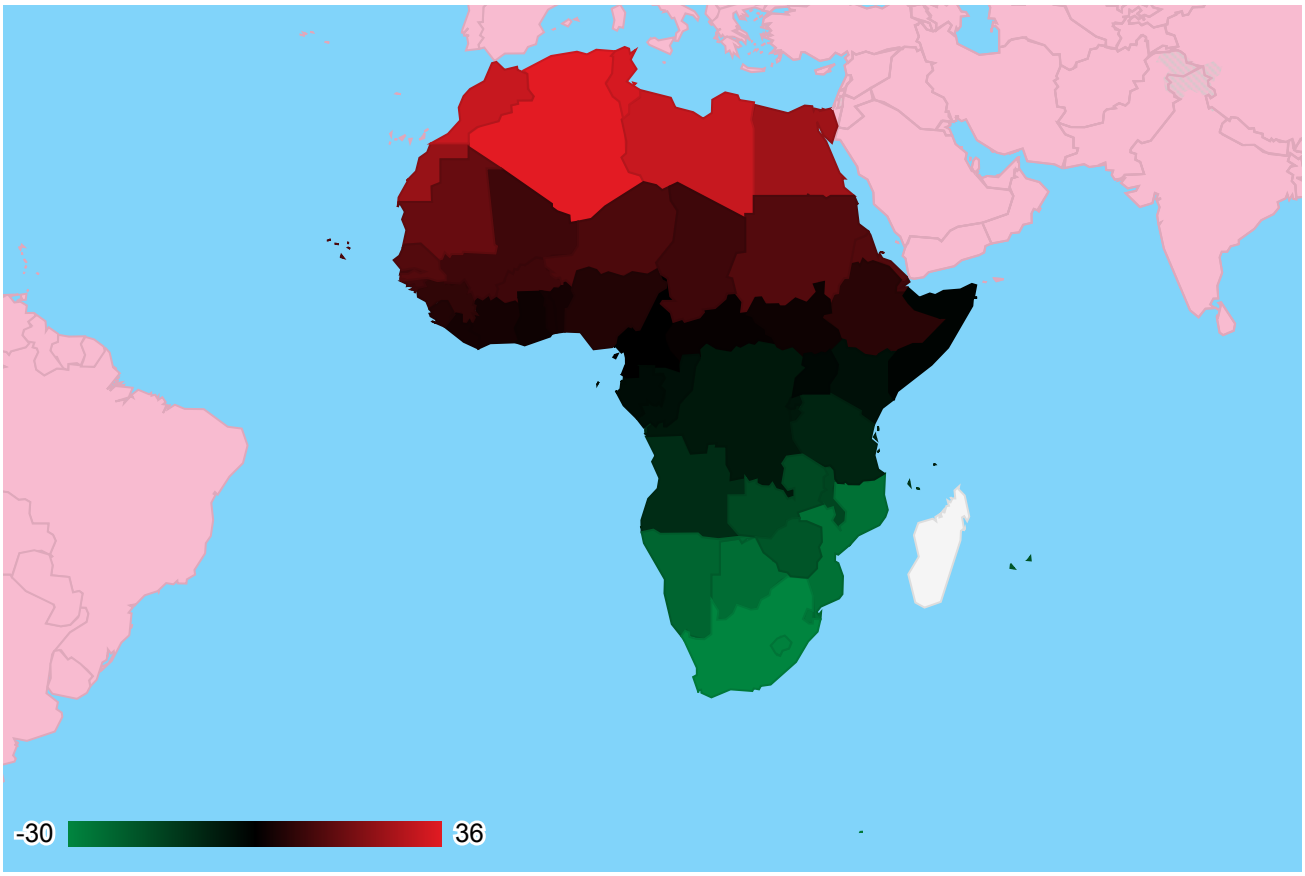
Coloring your chart

There are several options for customizing the colors of GeoCharts:

- `colorAxis`: the spectrum of colors to use for the regions in the datatable.
- `backgroundColor`: the background color for the chart.
- `datalessRegionColor`: the color to assign to regions with no associated data.
- `defaultColor`: the color to assign to regions in the datatable for which the value is either `null` or unspecified.

The `colorAxis` option is the important one: it specifies the range of colors for your data values. In the `colorAxis` array, the first element is the color given to the smallest value in your dataset, and the last element is the color given to the largest value in your dataset. If you specify more than two colors, interpolation will occur between them.

In the following chart, we'll use all four options. The `colorAxis` is used to display Africa with the colors of the pan-African flag, using the latitudes of the countries: from red in the north, through black, to green in the south. The `backgroundColor` option is used to color the background a light blue, `datalessRegionColor` to color the non-African countries a light pink, and `defaultColor` for Madagascar.



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OPTIONS FULL WEB PAGE

```
var options = {
  region: '002', // Africa
  colorAxis: {colors: ['#00853f', 'black', '#e31b23']},
  backgroundColor: '#81d4fa',
  datalessRegionColor: '#f8bbd0',
  defaultColor: '#f5f5f5',
};
```

Loading

The `google.charts.load` package name is `"geochart"`.

```
google.charts.load('current', {'packages': ['geochart']});
```

The geochart visualization class name is `google.visualization.GeoChart`.

```
var visualization = new google.visualization.GeoChart(container);
```

Data format

The format of the DataTable varies depending on which display mode that you use: `regions`, `markers`, or `text`.

Regions mode format

The location is entered in one column, plus one optional column as described here:

1. **Region location** [*String, Required*] - A region to highlight. All of following formats are accepted. You can use different formats in different rows:
    - A country name as a string (for example, "England"), or an uppercase ISO-3166-1 alpha-2 (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2) code or its English text equivalent (for example, "GB" or "United Kingdom").
    - An uppercase ISO-3166-2 (http://en.wikipedia.org/wiki/ISO_3166-2) region code name or its English text equivalent (for example, "US-NJ" or "New Jersey").
    - A metropolitan area code (//developers.google.com/adwords/api/docs/appendix/metrocodes). These are three-

digit metro codes used to designate various regions; US codes only supported. Note that these are *not* the same as telephone area codes.

- Any value supported by the `region` property.

2. **Region color** [*Number, Optional*] - An optional numeric column used to assign a color to this region, based on the scale specified in the `colorAxis.colors` property. If this column is not present, all regions will be the same color. If the column is present, null values are not allowed. Values are scaled relative to the `sizeAxis.minValue`/`sizeAxis.maxValue` values, or to the values specified in the `colorAxis.values` property, if provided.

Markers mode format

The number of columns varies depending on the marker format used, as well as other optional columns.

- **Marker location** [*Required*]
  The **first column** is a specific string address (for example, "1600 Pennsylvania Ave").

  OR

  The **first two columns** are numeric, where the first column is the latitude, and the second column is the longitude.

> **Note:** Although we recommend ISO 3166 codes to be used for 'regions' mode, 'markers' mode works best with longer names for regions (like Germany, Panama, etc). This is because geocharts, when in 'markers' mode, uses Google Maps (//developers.google.com/maps) for geocoding the locations (converting a string location to a latitude and longitude). This may result in ambiguous locations not getting geocoded as you might expect; such as 'DE' standing for Germany or Delaware, or 'PA' standing for Panama or Pennsylvania.

- **Marker color** [*Number, Optional*] The next column is an optional numeric column used to assign a color to this marker, based on the scale specified in the `colorAxis.colors` property. If this column is not present, all markers will be the same color. If the column is present, null values are not allowed. Values are scaled relative to each other, or absolutely to values specified in the `colorAxis.values` property.
- **Marker size** [*Number, Optional*] An optional numeric column used to assign the marker size, relative to the other marker sizes. If this column is not present, the value from the previous column will be used (or default size, if no color column is provided as well). If the column is present, null values are not allowed.

Text mode format

The label is entered in the first column, plus one optional column:

- **Text label** [*String*, *Required*] A specific string address (for example, "1600 Pennsylvania Ave").
- **Text size** [*Number, Optional*] The second column is an optional numeric column used to assign the size of the label. If this column is not present, all labels will be the same size.

Configuration options

Name	
backgroundColor	The background color for the main area of the chart. Can be either a simple HTML color string, for example: `'red'` or `'#00cc00'`, or an object with the following properties. **Type:** string or object **Default:** white
backgroundColor.fill	The chart fill color, as an HTML color string. **Type:** string **Default:** white
backgroundColor.stroke	The color of the chart border, as an HTML color string. **Type:** string **Default:** '#666'
backgroundColor.strokeWidth	The border width, in pixels. **Type:** number **Default:** 0
colorAxis	An object that specifies a mapping between color column values and colors or a gradient scale. To specify properties of this object, you can use object literal notation, as shown here: `{minValue: 0,  colors: ['#FF0000', '#00FF00']}` **Type:** object **Default:** null

colorAxis.minValue	If present, specifies a minimum value for chart color data. Color data values of this value and lower will be rendered as the first color in the `colorAxis.colors` range. **Type:** number **Default:** Minimum value of color column in chart data
colorAxis.maxValue	If present, specifies a maximum value for chart color data. Color data values of this value and higher will be rendered as the last color in the `colorAxis.colors` range. **Type:** number **Default:** Maximum value of color column in chart data
colorAxis.values	If present, controls how values are associated with colors. Each value is associated with the corresponding color in the `colorAxis.colors` array. These values apply to the chart color data. Coloring is done according to a gradient of the values specified here. Not specifying a value for this option is equivalent to specifying [minValue, maxValue]. **Type:** array of numbers **Default:** null
colorAxis.colors	Colors to assign to values in the visualization. An array of strings, where each element is an HTML color string, for example: `colorAxis: {colors:['red','#004411']}`. You must have at least two values; the gradient will include all your values, plus calculated intermediary values, with the first color as the smallest value, and the last color as the highest. **Type:** array of color strings **Default:** null
datalessRegionColor	Color to assign to regions with no associated data. **Type:** string **Default:** '#F5F5F5'
defaultColor	The color to use when for data points in a geochart when the location (e.g., `'US'`) is present but the value is either `null` or unspecified. This is distinct from `datalessRegionColor`, which is the color used when data is missing. **Type:** string **Default:** '#267114'
displayMode	Which type of geochart this is. The DataTable format must match the value specified. The following values are supported: • 'auto' - Choose based on the format of the DataTable.

	• 'regions' - Color the regions on the geochart. • 'markers' - Place markers on the regions. • 'text' - Label the regions with text from the DataTable. **Type:** string **Default:** 'auto'
domain	Show the geochart as though it were being served from this region. For instance, setting **`domain`** to **`'IN'`** will display Kashmir as belonging to India rather than as a disputed territory. **Type:** string **Default:** null
enableRegionInteractivity	If true, enable region interactivity, including focus and tool-tip elaboration on mouse hover, and region selection and firing of **`regionClick`** and **`select`** events on mouse click. The default is true in region mode, and false in marker mode. **Type:** boolean **Default:** automatic
forceIFrame	Draws the chart inside an inline frame. (Note that on IE8, this option is ignored; all IE8 charts are drawn in i-frames.) **Type:** boolean **Default:** false
height	Height of the visualization, in pixels. The default height is 347 pixels, unless the **`width`** option is specified and **`keepAspectRatio`** is set to true - in which case the height is calculated accordingly. **Type:** number **Default:** auto
keepAspectRatio	If true, the geochart will be drawn at the largest size that can fit inside the chart area at its natural aspect ratio. If only one of the **`width`** and **`height`** options is specified, the other one will be calculated according to the aspect ratio. If false, the geochart will be stretched to the exact size of the chart as specified by the **`width`** and **`height`** options. **Type:** boolean **Default:** true
legend	An object with members to configure various aspects of the legend, or 'none', if no legend should appear. To specify properties of this object, you can use object literal notation, as shown here:

	`{textStyle: {color: 'blue', fontSize: 16}}` **Type:** Object / 'none' **Default:** null
legend.numberFormat	A format string for numeric labels. This is a subset of the ICU pattern set (http://icu-project.org/apiref/icu4c/classDecimalFormat.html#_details). For instance, **`{numberFormat:'.##'}`** will display values "10.66", "10.6", and "10.0" for values 10.666, 10.6, and 10. **Type:** string **Default:** auto

legend.textStyle	An object that specifies the legend text style. The object has this format:
	
	`{ color: <string>,`
	`fontName: <string>,`
	`fontSize: <number>,`
	`bold: <boolean>,`
	`italic: <boolean> }`
	
	The **`color`** can be any HTML color string, for example: **`'red'`** or **`'#00cc00'`**. Also see **`fontName`** and **`fontSize`**.
	
	Type: object
	Default: **`{color: 'black', fontName: <global-font-name>, fontSize: <global-font-size>}`**

region	The area to display on the geochart. (Surrounding areas will be displayed as well.) Can be one of the following: • 'world' - A geochart of the entire world. • A continent or a sub-continent, specified by its 3-digit code (#Continent_Hierarchy), e.g., '011' for Western Africa. • A country, specified by its ISO 3166-1 alpha-2 (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2) code, e.g., 'AU' for Australia. • A state in the United States, specified by its ISO 3166-2:US (http://en.wikipedia.org/wiki/ISO_3166-2:US) code, e.g., 'US-AL' for Alabama. Note that the **`resolution`** option must be set to either 'provinces' or 'metros'. **Type:** string **Default:** 'world'

magnifyingGlass	An object with members to configure various aspects of the magnifying glass. To specify properties of this object, you can use object literal notation, as shown here: `{enable: true, zoomFactor: 7.5}` **Type:** Object **Default:** **`{enable: true, zoomFactor: 5.0}`**
magnifyingGlass.enable	If true, when the user lingers over a cluttered marker, a magnifiying glass will be opened. Note: this feature is not supported in browsers that do not support SVG (http://www.w3.org/Graphics/SVG/), i.e. Internet Explorer version 8 or earlier. **Type:** boolean **Default:** true
magnifyingGlass.zoomFactor	The zoom factor of the magnifying glass. Can be any number greater than 0. **Type:** number **Default:** 5.0
markerOpacity	The opacity of the markers, where 0.0 is fully transparent and 1.0 is fully opaque. **Type:** number, 0.0–1.0 **Default:** 1.0
resolution	The resolution of the geochart borders. Choose one of the following values: • 'countries' - Supported for all regions, except for US state regions. • 'provinces' - Supported only for country regions and US state regions. Not supported for all countries; please test a country to see whether this option is supported. • 'metros' - Supported for the US country region and US state regions only. **Type:** string **Default:** 'countries'
sizeAxis	An object with members to configure how values are associated with bubble size. To specify properties of this object, you can use object literal notation, as shown here: `{minValue: 0,  maxSize: 20}`

	Type: object **Default:** null
sizeAxis.maxSize	Maximum radius of the largest possible bubble, in pixels. **Type:** number **Default:** 12
sizeAxis.maxValue	The size value (as appears in the chart data) to be mapped to **`sizeAxis.maxSize`**. Larger values will be cropped to this value. **Type:** number **Default:** Maximum value of size column in chart data
sizeAxis.minSize	Mininum radius of the smallest possible bubble, in pixels. **Type:** number **Default:** 3
sizeAxis.minValue	The size value (as appears in the chart data) to be mapped to **`sizeAxis.minSize`**. Smaller values will be cropped to this value. **Type:** number **Default:** Minimum value of size column in chart data
tooltip	An object with members to configure various tooltip elements. To specify properties of this object, you can use object literal notation, as shown here: `{textStyle: {color: '#FF0000'}, showColorCode: true}` **Type:** object **Default:** null

tooltip.textStyle	An object that specifies the tooltip text style. The object has this format:
	
	`{ color: <string>,`
	`  fontName: <string>,`
	`  fontSize: <number>,`
	`  bold: <boolean>,`
	`  italic: <boolean> }`
	
	The **`color`** can be any HTML color string, for example: **`'red'`** or **`'#00cc00'`**. Also see **`fontName`** and **`fontSize`**.
	
	Type: object
	Default: **`{color: 'black', fontName: <global-font-name>, fontSize: <global-font-size>}`**

tooltip.trigger	The user interaction that causes the tooltip to be displayed: • 'focus' - The tooltip will be displayed when the user hovers over the element. • 'none' - The tooltip will not be displayed. • 'selection' - The tooltip will be displayed when the user selects the element. **Type:** string **Default:** 'focus'
width	Width of the visualization, in pixels. The default width is 556 pixels, unless the **`height`** option is specified and **`keepAspectRatio`** is set to true - in which case the width is calculated accordingly. **Type:** number **Default:** auto

Continent Hierarchy and Codes

It is possible to show geocharts of continents/sub-continents by setting the **`region`** option to one of the following 3-digit codes. The codes and the hierarchy are based, with some exceptions, on those developed and maintained by the United Nations Statistics Division (http://unstats.un.org/unsd/methods/m49/m49regin.htm).

Continent	Sub-Continent	Countries
`002` - Africa	**`015`** - Northern Africa	DZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#DZ), EG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#EG), EH (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#EH), LY (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LY), MA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MA), SD (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SD), SS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SS), TN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TN)
	`011` - Western Africa	BF (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BF), BJ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BJ), CI (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CI), CV (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CV), GH (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GH), GM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GM), GN

	(http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GN), GW (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GW), LR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LR), ML (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ML), MR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MR), NE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NE), NG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NG), SH (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SH), SL (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SL), SN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SN), TG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TG)
017 - Middle Africa	AO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AO), CD (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CD), ZR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ZR), CF (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CF), CG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CG), CM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CM), GA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GA), GQ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GQ), ST (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ST), TD (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TD)
014 - Eastern Africa	BI (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BI), DJ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#DJ), ER (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ER), ET (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ET), KE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KE), KM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KM), MG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MG), MU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MU), MW (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MW), MZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MZ), RE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#RE), RW (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#RW), SC (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SC), SO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SO), TZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TZ), UG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#UG), YT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#YT), ZM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ZM), ZW (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ZW)
018 - Southern Africa	BW (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BW), LS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LS), NA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NA), SZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SZ), ZA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ZA)

150 - Europe	**154** - Northern Europe	GG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GG), JE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#JE), AX (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AX), DK (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#DK), EE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#EE), FI (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#FI), FO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#FO), GB (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GB), IE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#IE), IM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#IM), IS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#IS), LT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LT), LV (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LV), NO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NO), SE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SE), SJ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SJ)
	155 - Western Europe	AT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AT), BE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BE), CH (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CH), DE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#DE), DD (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#DD), FR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#FR), FX (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#FX), LI (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LI), LU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LU), MC (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MC), NL (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NL)
	151 - Eastern Europe	BG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BG), BY (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BY), CZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CZ), HU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#HU), MD (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MD), PL (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PL), RO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#RO), RU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#RU), SU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SU), SK (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SK), UA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#UA)
	039 - Southern Europe	AD (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AD), AL (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AL), BA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BA), ES (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ES), GI (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GI), GR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GR), HR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#HR), IT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#IT), ME

		(http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ME), MK (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MK), MT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MT), CS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CS), RS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#RS), PT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PT), SI (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SI), SM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SM), VA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#VA), YU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#YU)
019 - Americas	**021** - Northern America	BM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BM), CA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CA), GL (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GL), PM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PM), US (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#US)
	029 - Caribbean	AG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AG), AI (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AI), AN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AN), AW (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AW), BB (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BB), BL (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BL), BS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BS), CU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CU), DM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#DM), DO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#DO), GD (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GD), GP (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GP), HT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#HT), JM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#JM), KN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KN), KY (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KY), LC (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LC), MF (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MF), MQ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MQ), MS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MS), PR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PR), TC (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TC), TT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TT), VC (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#VC), VG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#VG), VI (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#VI)
	013 - Central America	BZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BZ), CR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CR), GT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GT), HN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#HN), MX (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MX), NI

		(http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NI), PA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PA), SV (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SV)
	005 - South America	AR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AR), BO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BO), BR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BR), CL (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CL), CO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CO), EC (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#EC), FK (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#FK), GF (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GF), GY (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GY), PE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PE), PY (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PY), SR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SR), UY (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#UY), VE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#VE)
142 - Asia	**143** - Central Asia	TM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TM), TJ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TJ), KG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KG), KZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KZ), UZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#UZ)
	030 - Eastern Asia	CN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CN), HK (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#HK), JP (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#JP), KP (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KP), KR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KR), MN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MN), MO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MO), TW (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TW)
	034 - Southern Asia	AF (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AF), BD (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BD), BT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BT), IN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#IN), IR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#IR), LK (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LK), MV (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MV), NP (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NP), PK (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PK)
	035 - South-Eastern Asia	BN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BN), ID (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#ID), KH (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KH), LA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LA), MM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MM), BU

		(http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BU), MY (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MY), PH (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PH), SG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SG), TH (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TH), TL (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TL), TP (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TP), VN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#VN)
	145 - Western Asia	AE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AE), AM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AM), AZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AZ), BH (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#BH), CY (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CY), GE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GE), IL (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#IL), IQ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#IQ), JO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#JO), KW (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KW), LB (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#LB), OM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#OM), PS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PS), QA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#QA), SA (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SA), NT (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NT), SY (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SY), TR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TR), YE (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#YE), YD (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#YD)
009 - Oceania	**053** - Australia and New Zealand	AU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AU), NF (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NF), NZ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NZ)
	054 - Melanesia	FJ (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#FJ), NC (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NC), PG (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PG), SB (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#SB), VU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#VU)
	057 - Micronesia	FM (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#FM), GU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#GU), KI (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#KI), MH (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MH), MP (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#MP), NR (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NR), PW (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PW)

	061 - Polynesia	AS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#AS), CK (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#CK), NU (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#NU), PF (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PF), PN (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#PN), TK (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TK), TO (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TO), TV (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#TV), WF (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#WF), WS (http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2#WS)

Methods

Method	
`clearChart()`	Clears the chart, and releases all of its allocated resources. **Return Type:** none
`draw(data, options)`	Draws the chart. The chart accepts further method calls only after the (#Events)event is fired. `Extended description` (https://developers.google.com/chart/interactive/docs/reference#vis **Return Type:** none
`getImageURI()`	Returns the chart serialized as an image URI. Call this *after* the chart is drawn. See Printing PNG Charts (https://developers.google.com/chart/interactive/docs/printing). **Return Type:** string
`getSelection()`	Returns an array of the selected chart entities. Selectable entities are r an assigned value. For this chart, only one entity can be selected at any moment. `Extended description` (https://developers.google.com/chart/interactive/docs/reference#vis . **Return Type:** Array of selection elements
`setSelection()`	Selects the specified chart entities. Cancels any previous selection. Se entities are regions with an assigned value. For this chart, only one ent selected at a time. `Extended description` (https://developers.google.com/chart/interactive/docs/reference#vis .

	Return Type: none

Events

Name	
`error`	Fired when an error occurs when attempting to render the chart. **Properties:** id, message
`ready`	The chart is ready for external method calls. If you want to interact with the chart, and call methods after you draw it, you should set up a listener for this event *before* you call the `draw` method, and call them only after the event was fired. **Properties:** none
`regionClick`	Called when a region is clicked. This will not be thrown for the specific country assigned in the 'region' option (if a specific country was listed). **Properties:** An object with a single property, `region`, that is a string in ISO-3166 format describing the region clicked.
`select`	Fired when the user clicks a visual entity. To learn what has been selected, call `getSelection()` (#Methods). **Properties:** none

Data policy

Locations are geocoded by Google Maps. Any data that does not require geocoding is not sent to any server. Please see the Google Maps Terms of Service (https://developers.google.com/maps/terms) for more information on their data policy.

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