DKAN Quick Start Guide

Creating Visualizations

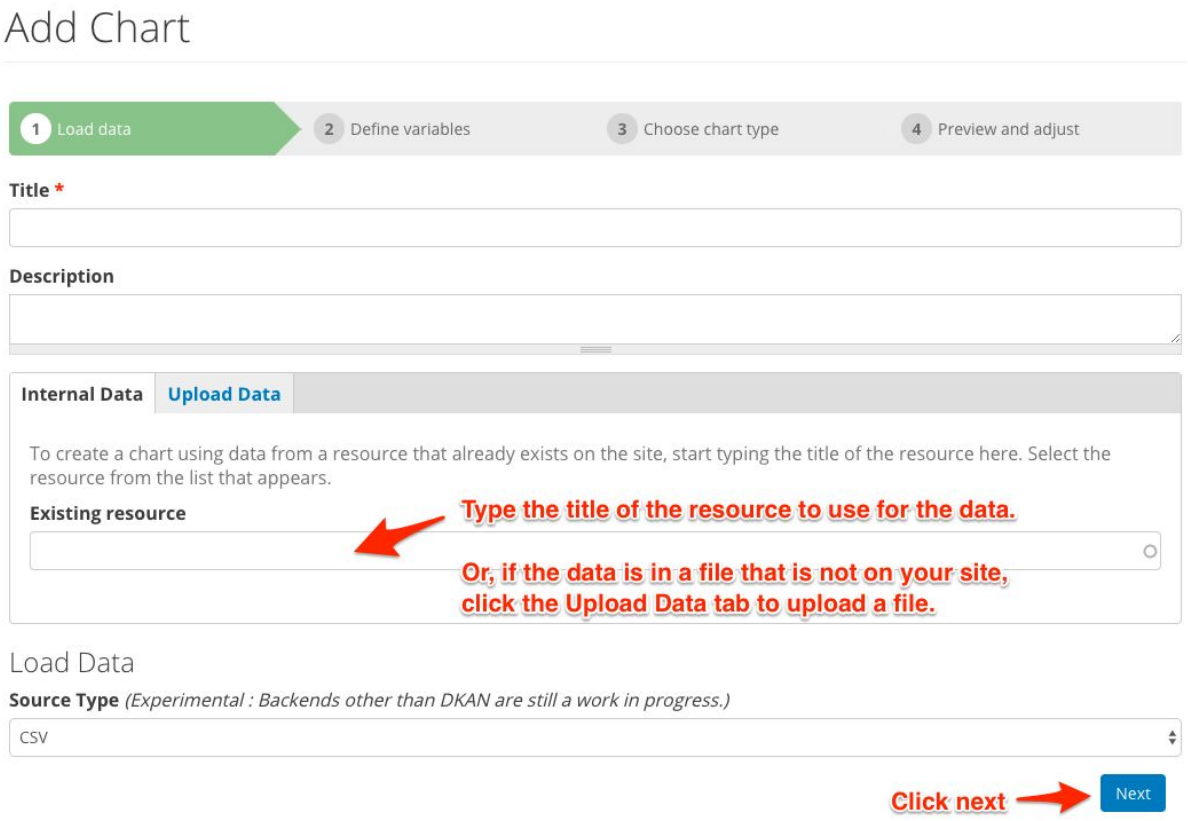
Information in this document contains excerpts from the comprehensive DKAN manual available at https://docs.getdkan.com/en/latest

Introduction

The DKAN data portal software allows for visualizations (i.e. charts) to be created from dataset resources, where that resource is machine-readable. Machine-readable resources are typically resources that have been uploaded in CSV format and have been loaded into the *Datastore.* For more details on loading CSV files into the datastore, see the *Adding a dataset* quick start guide.

Step One - Choose a Resource

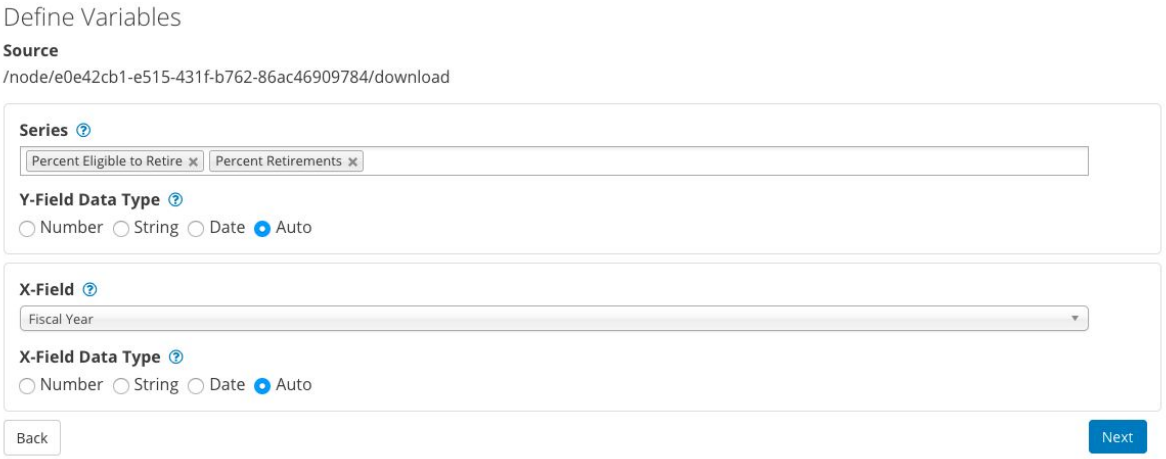
- Enter a title for the chart.
- Enter a description if needed.
- Then start typing the title of a resource that you would like to use as the data source. A list will appear, select the resource from the list.
- OR, if the data you want to use is not on your site, click the Upload Data tab to upload a CSV data file.
- Click the Next button.



Step Two - Define Variables

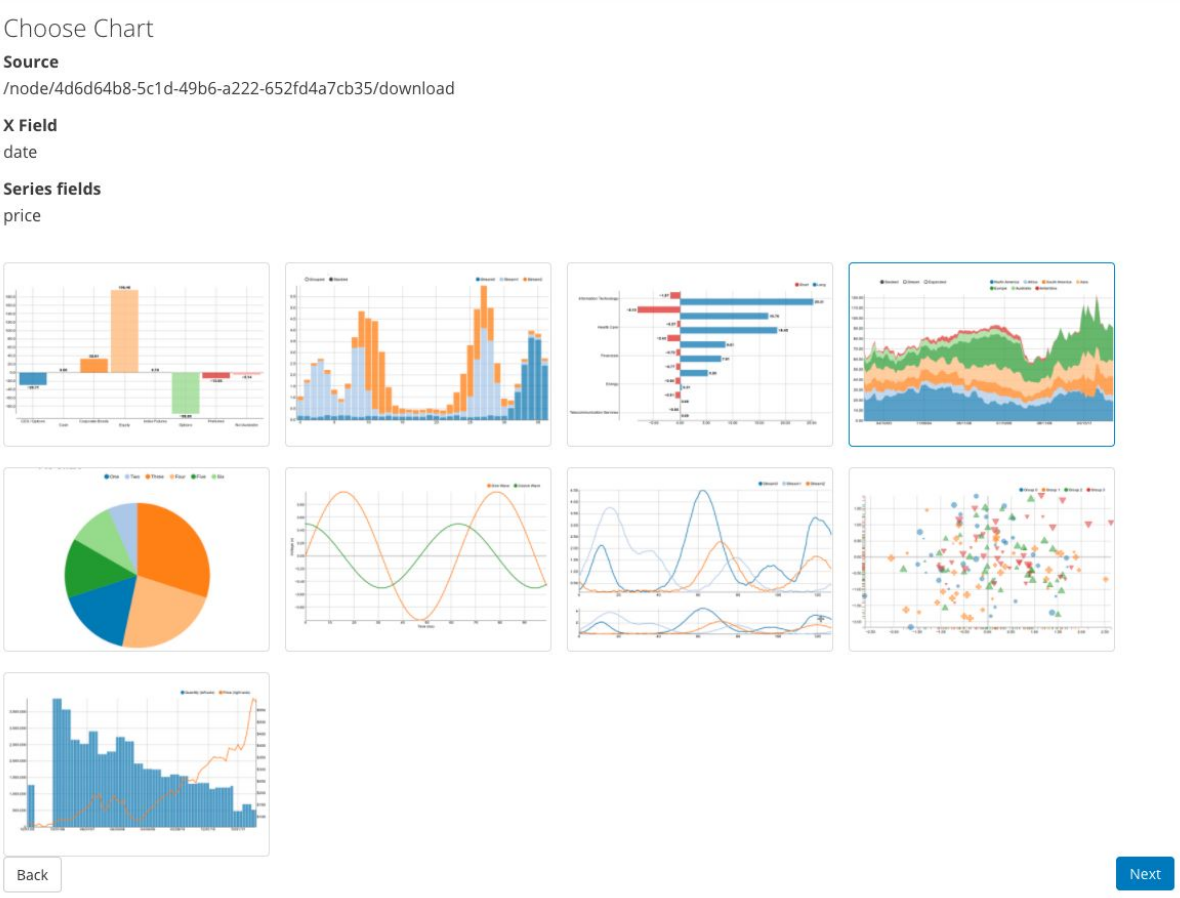
- **Series:** Add all the columns you would like to plot along the y-axis, the **value** axis. A collection of related values is what makes up a 'series'.
- **Y-Field Data Type:** The data type will be auto-detected but if you see issues you can manually select the data type here.
- **X-Field:** Choose a single column for the x-axis, the **category** axis.

- **X-Field Data Type:** The data type will be auto-detected but if you see issues you can manually select the data type here.



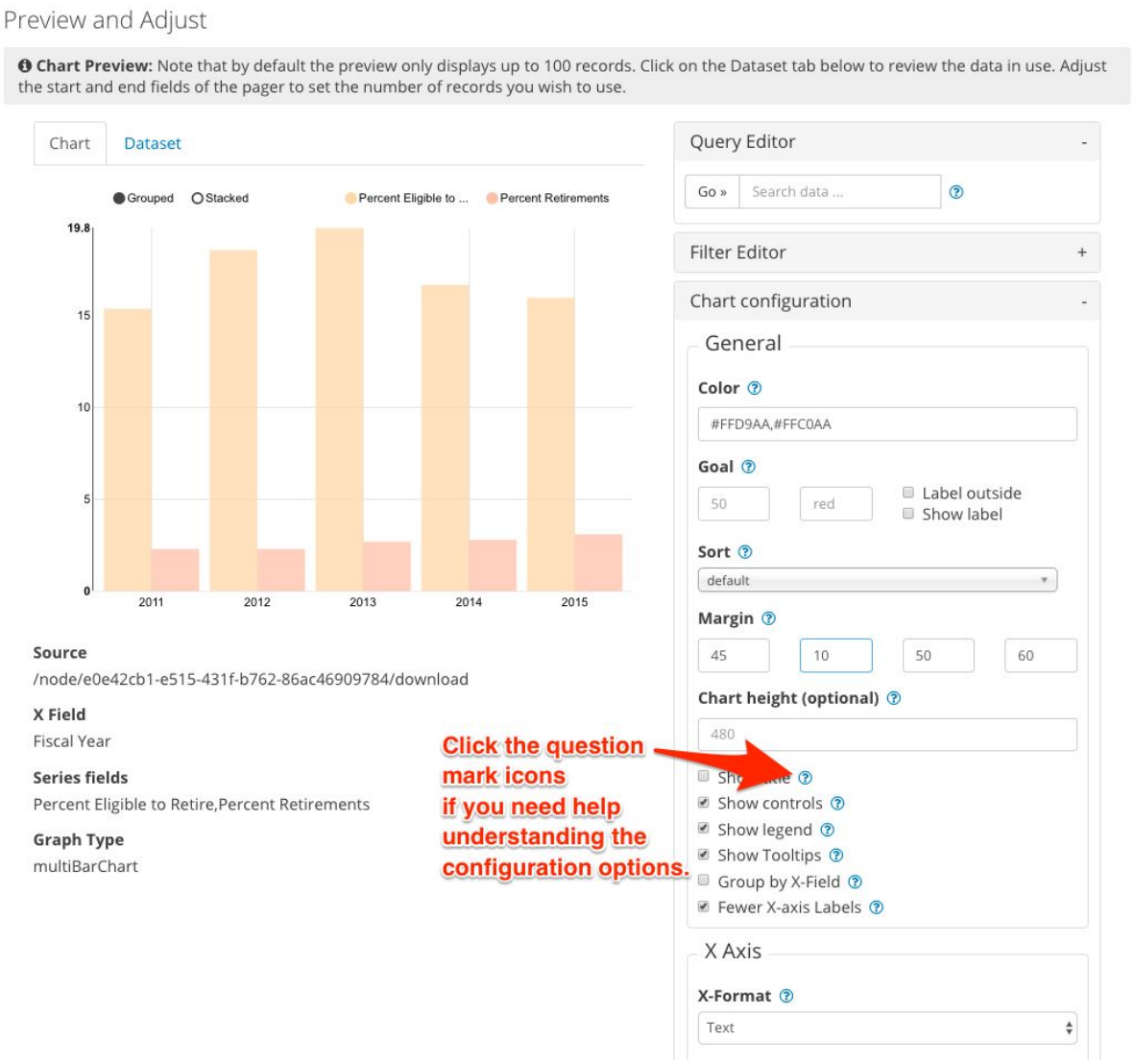
Step Three - Choose Chart Type

Select the chart type that will best represent your data. **NOTE**: X and Y Axis Fields are not supported by the *Pie Chart* type.

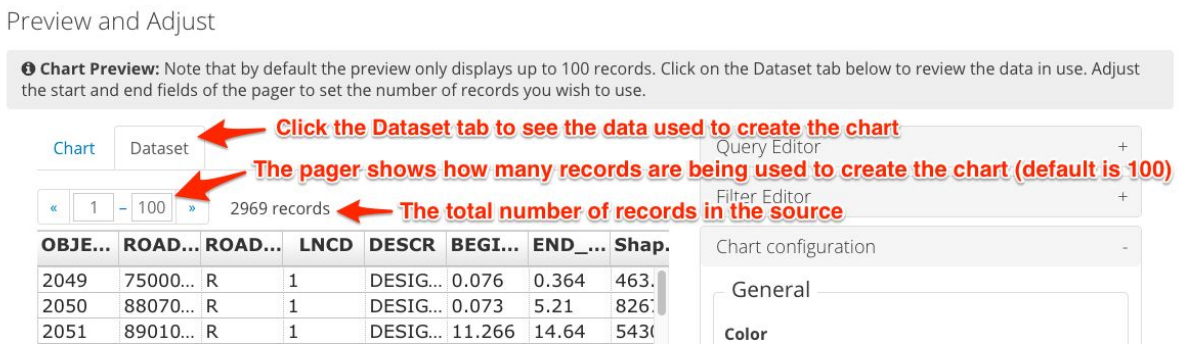


Step Four - Preview and Adjust

You can adjust colors, margins, include a goal, labels, tick values, and more. Click the question mark icons if you need help understanding the configuration options.

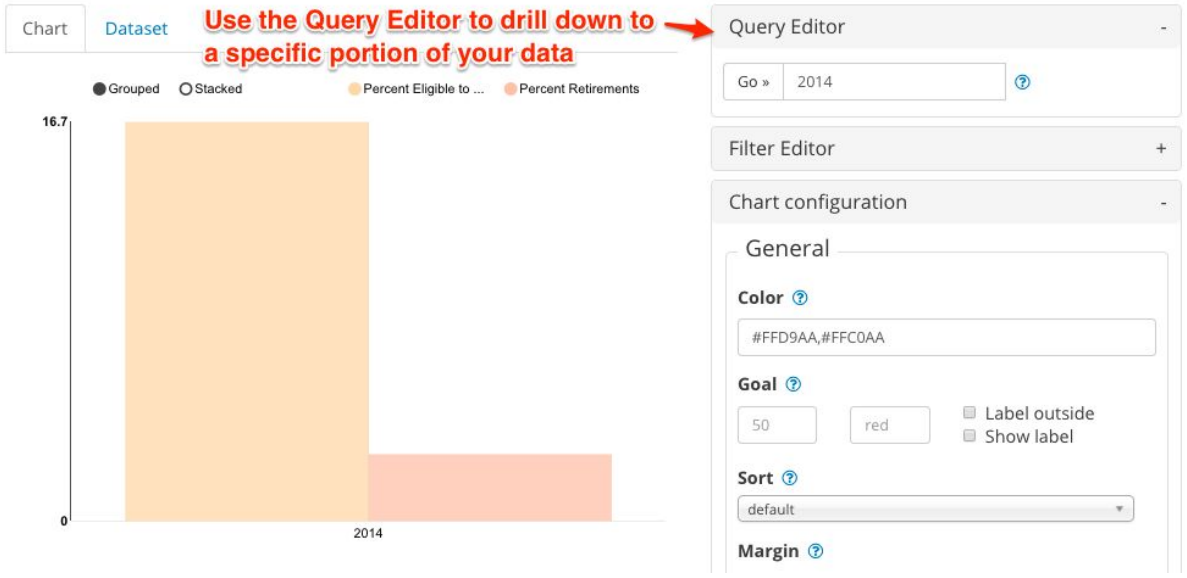


By default the chart will use the first 100 records of your data source. To use all records, click the Dataset tab to reveal the data pager, edit the max range value from 100 to the total number of records present.



Query Editor

Click the ‘+’ on the query editor to see the query input field. Enter text to query the data. Returned rows will contain data matching your text (including partial text matches). Click on the Dataset tab to better see how the data is modified by your query.



Filter Editor

Click the ‘+’ on the filter editor to add one or more filters to limit the data used for the chart. Multiple filters will be applied with the AND operator (all criteria must be met for the data to be included in the chart).

1. Create a filter
    - Select the field you would like to filter by.
    - Select filter type: Select Value to filter by strings (labels), select Range to filter by numerical values, and select Geo distance to filter by geographical data.
    - Click **Add**
    - Value filters check for exact matches (no partial text matches; use the Query Editor instead if you need to search for partial text matches)
1. Configure the filter
    - Fill in the fields to complete the filter.

- Click **Update** to reload the chart.

To remove a filter, click the trash can icon next to the filter name.

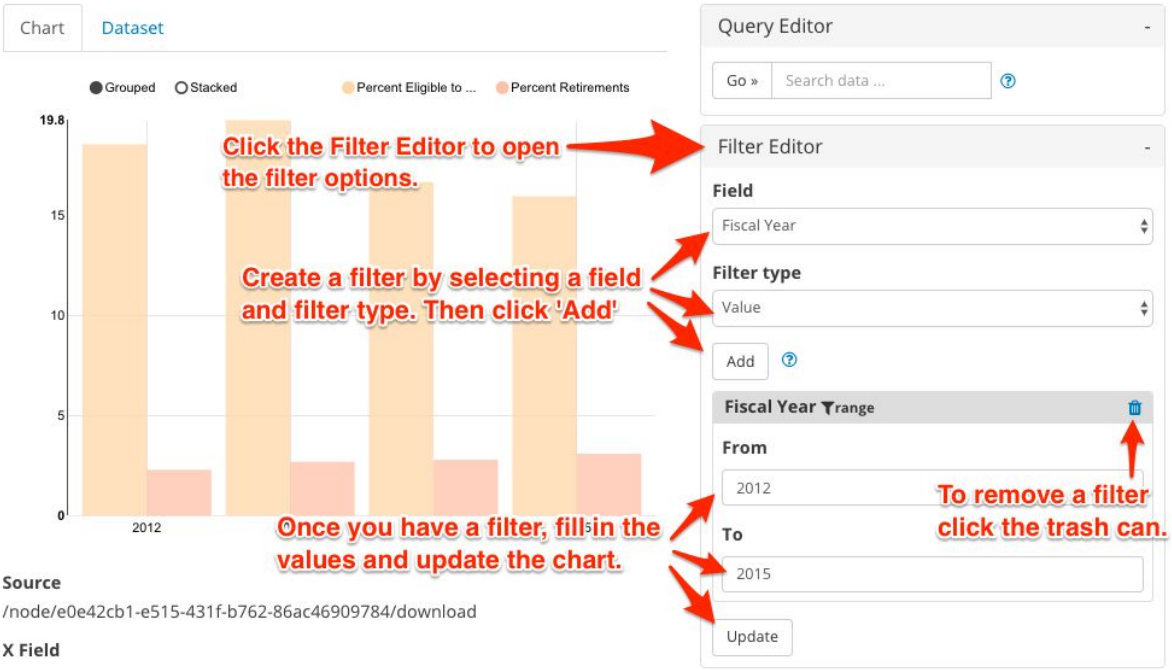


Chart Configuration

X Axis

- **Format** Select an appropriate format for the X Axis labels.
- **Axis Label** will provide a custom label for the x axis.
- **Note:** Axis labels do not display for Pie Charts.
- **Label rotation** will change angle of label values.
- **Tick Values** Enter a numerical range to set the start and end values to display.
- **Step**: Use the Step field to define the value between each tick within the range. **NOTE:** If the range set for tick values is smaller than the range of complete data represented, the chart will be abbreviated.

Y Axis

- **Axis Label** Provides a custom label for the y axis.
- **Note:** Axis labels do not display for Pie Charts.

- Adjust the *distance* field if your axis label overlaps the y-axis data labels. You can move the label left with positive values, and right with negative values. You may need to adjust the left margin of the chart as well.
- **Tick Values** Enter a numerical range to set the start and end values to display.
- **Step**: Use the Step field to define the value between each tick within the range. **NOTE:** If the range set for tick values is smaller than the range of complete data represented, the chart will be abbreviated.

General

Color: Set the color the chart is drawn in. Use either a HEX color code or a valid css color nameSeparate multiple colors with commas.

Goal: Overlay a goal or target line on the chart.

Margin: Enter value of margin in the order: *top, right, bottom, left*

Show Title: Display the title you entered on step 1.

Show Controls: Whether to show extra controls or not. Extra controls include things like making multiBar charts stacked or side by side.

Show Legend: Display a legend for the chart.

Show Tooltips: Shows data and label on hover.

Group By X Field:

If there are two or more rows that have the same value in the column assigned to the x-axis field, those rows will be combined and display

as a single data point. This is only relevant for combining numerical data.

Fewer X-axis Labels:

Reduces the number of labels displayed along the x-axis.

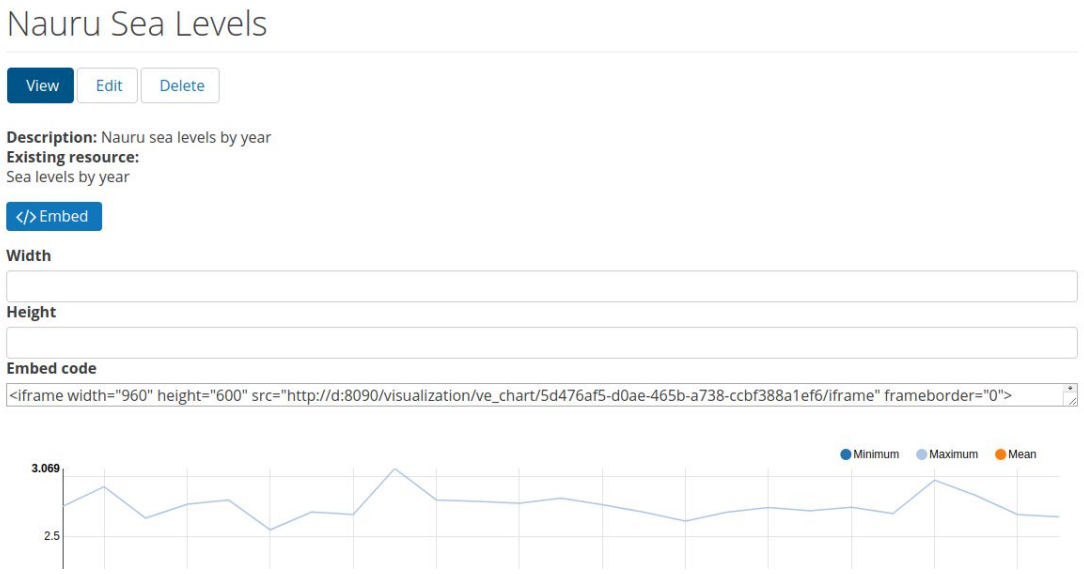
Save the chart

Remember to click **Finish** to save your configuration changes.

Embedding the chart

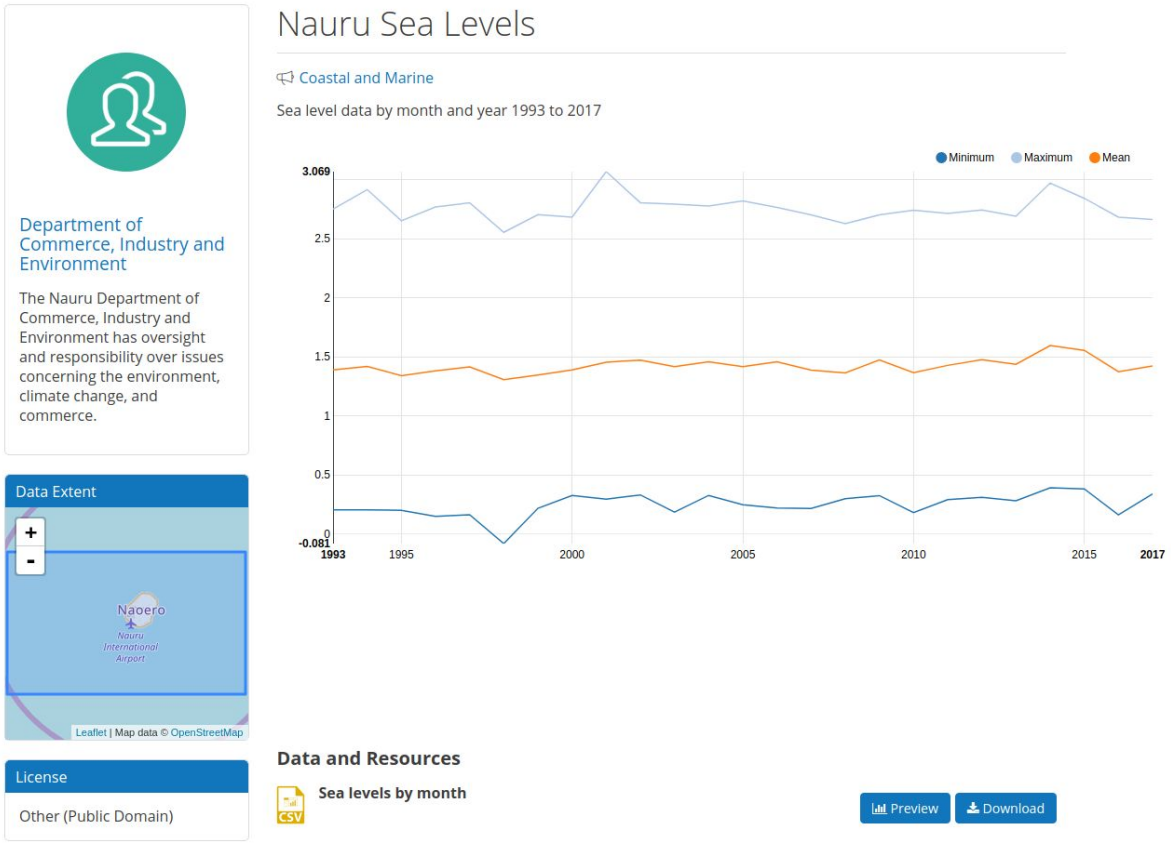
Once configured and saved, a chart can be embedded into other webpages, such as within the data portal in the description field of a dataset and also into external websites.

When viewing a visualization page, click on the </> *Embed* button and copy the *Embed code* text. Paste this code into the webpage where you want to display the chart. Note that some website content management systems will require this code to be pasted while editing in *Source* mode.



Copy and paste the embed code to embed the chart into other webpages.

The embedded chart will be generated dynamically, which means that if the dataset resource is updated and imported into the datastore then the chart will automatically update to reflect the new data. Depending on configured caching rules there may be a delay before the chart re-generates with new data.



Example of a chart embedded into the description of the related dataset.