

Horizontal Bar Graph (not included version)



"Warning"

Unsupported, replaced by [Temporal Bar Graph](#)

Description

This algorithm visualizes numeric data over time. It accepts CSV (tabular) datasets, including NSF grant data and the output of burst detections.

In this visualization, the x-axis is time in years, and the y-axis is amount per day. The output of this visualization consists of labeled horizontal bars that correspond to records in the original dataset.

This algorithm accepts the following input parameters:

- *Label*: The field used to label the bar lines.
- *Start Date*: The field used for the starting date of the records that are visualized as horizontal bars.
- *End Date*: The field used for the ending date of the records that are visualized as horizontal bars.
- *Size Bars By*: The field used to size the horizontal bars by.
- *Minimum Amount Per Day For Bar Scaling*: Currently ignored. When implemented, this will be used as a threshold for actually sizing the bars. Bars with the chosen Size Bars By value under this will be sized according to a fixed, pre-determined minimum bar size. Bars with the chosen Size Bars By value at or above this will be sized according to their values.
- *Bar Scaling*: The method to use when scaling the bars. Possible options are "Logarithmic Scaling" and "Linear Scaling".
- *Date Format*: The date format to use for parsing the Start and End Dates. Possible options are "Day-Month-Year Date Format (Europe, e.g. 31/10/2010)" and "Month-Day-Year Date Format (U.S., e.g. 10/31/2010)".
- *Year Label Font Size*: The font size to use for year labels. NOTE: If this is too big, year labels may overlap.
- *Bar Label Font Size*: The font size to use for bar labels. NOTE: Extremely large values here may result in poor results.
- *Colorized By*: The field used to colorize the bars, if colorizing is desired. The default value is "No Coloring". If colorizing is desired, the 6 most used unique values in the chosen "Colorized By" column will be assigned a unique color, and all other values will be assigned to black. If colorizing is not desired, all bars will be black.

The solid black bars in the output represent normal records. The dashed black bars represent records that have Infinity or NaN ("Not a Number") specified in the Size By field. Records that have neither a number, nor Infinity/NaN specified are not represented at all (that is, they are ignored).

It is possible for bars to have no start date, no end date, neither, or both. Bars with no start dates have left bounds of the left-most (or earliest) date found (in any of the bars) and have arrows pointing left at their left bounds. Likewise, bars with no end dates have right bounds of the right-most (or latest) date found (in any of the bars) and have arrows pointing right at their right bounds.

Every visualization generated by this algorithm contains a header and a footer that describe the data and metadata used to generate it.

Usage Hints

Horizontal Bar Graph was originally designed to visualize NSF grant data, but anything that fits the format of "numerical values with start and end dates" is compatible and potentially interesting when visualized with it. The current version of this visualization has been adapted to support the output of burst analysis, as well.

Special Notes

This documentation is for the *Horizontal Bar Graph*, which is the newer version of what used to be called the *Horizontal Line Graph*. The version currently included with the tool is the *Horizontal Line Graph*, and though it contains less functionality than the *Horizontal Bar Graph*, the basic functionality (graphing bars over time, sized by an amount, with labels) is the same.