

1.2 D3 Range Graph

The D3 range graph is a time series chart that supports live zoom and heavy runtime configuration. It also contains a lot of style and behavior properties. Using it requires binding to the **Data** property. This must be an infotable with at least a timestamp field and one or more numeric data fields. The runtime configuration is managed through a series of bindable properties. These properties are all JSON strings:

- **YFields** is a json array that tells the chart which columns it should use as data fields.
- **YFieldColors** optionally controls the colors for each data field. If this is not set, the chart will auto-select colors from a set of defaults. The positions of the colors in this array should match the field positions in the YFields property.
 - For example, if YFields is set to ["a", "b"] and YFieldColors to ["red", "blue"] the time series line for field a will be red and the line for b will be blue.
- **StrokeWidths** is optional and similar to YFieldColors and controls the line thickness for each data field.
- **Labels** is optional and similar to YFieldColors. It controls the human-readable labels that the chart will use to display each data field. If it is not set, the chart will directly display the values in the YFields property.
- **Patterns** is another optional array that controls which lines will appear dashed and how they will appear. This is specified as a SVG dash array for each data field <https://developer.mozilla.org/en-US/docs/Web/SVG/Attribute/stroke-dasharray>
- Specifying horizontal lines in a JSON string by setting the **Thresholds** property. These lines don't have to exist in the data set and drawn in a more optimized way. The property takes a **stringified** JSON array like this:

```
[
  {
    "threshold": 5,
    "color": "blue",
    "thickness": 1,
    "label": "Blue Threshold"
  }, {
    "threshold": 2,
    "color": "red",
    "thickness": 3,
    "label": "Red Threshold",
    "pattern": "5, 5, 10, 10"
  }
]
```