

Chart	JSON Specification	Callout Interactions
Scatterplot	<pre>{   "xAttr": "x_attribute",   "yAttr": "y_attribute",   "colorAttr": "color_attribute",   "sizeAttr": "size_attribute",   "strokeAttr": "stroke_attribute",   "opacityAttr": "opacity_attribute",   "groupByAttr": "group_by_attribute",   "identityAttr": "unique_identifier",   "focusValues": ["value1", "value2"],   "aggregationType": "select aggregation type" }</pre>	<ul style="list-style-type: none"> <li>• <b>2D Brush (Area Selection):</b> Highlights data subset, computes summary statistics (mean, count, range).</li> <li>• <b>Discrete Selection (Click):</b> Selects individual points, shows rank, outliers, summary statistics.</li> <li>• <b>Group Selection (Legend Click):</b> Summary statistics</li> </ul>
Bar Chart	<pre>{   "orientation": "vertical",   "xAttr": "category_attribute",   "yAttr": "value_attribute",   "colorAttr": "color_attribute",   "identityAttr": "identity_attribute",   "stackAttr": "stack_attribute",   "groupByAttr": "group_by_attribute",   "focusValues": ["value1", "value2"],   "aggregationType": "select aggregation type" }</pre>	<ul style="list-style-type: none"> <li>• <b>1D Brush (Axis Selection):</b> Highlights subset, computes frequency, min/max values.</li> <li>• <b>Click Selection:</b> Shows specific bar values, rank, extreme differences.</li> <li>• <b>Legend Click (Category Selection):</b> Filters by category, enables group vs. global difference comparison.</li> </ul>
Line Chart	<pre>{   "timeAttr": "time_attribute",   "valueAttr": ["value1", "value2"],   "identityAttr": "identity_attribute",   "groupByAttr": "group_by_attribute",   "focusValues": ["value1", "value2"],   "aggregationType": "select aggregation type" }</pre>	<ul style="list-style-type: none"> <li>• <b>Time Range Brush:</b> Selects a period, highlights trends, peak detection, computes statistics (mean, variance).</li> <li>• <b>Legend Click (Line Selection):</b> Highlight one line.</li> <li>• <b>Click on Data Point:</b> Retrieves value, compares across timestamps.</li> </ul>
Stacked Bar Chart	<pre>{   "xAttr": "category_attribute",   "yAttr": "value_attribute",   "stackAttr": "stack_attribute",   "colorAttr": "color_attribute",   "identityAttr": "identity_attribute",   "groupByAttr": "group_by_attribute",   "focusValues": ["value1", "value2"],   "aggregationType": "select aggregation type" }</pre>	<ul style="list-style-type: none"> <li>• <b>1D Brush (Axis Selection):</b> Highlights subset, computes frequency, min/max values.</li> <li>• <b>Segment Selection:</b> Enables proportion-based comparison between groups.</li> </ul>
Donut/Pie Chart	<pre>{   "xAttr": "category_attribute",   "yAttr": "value_attribute",   "colorAttr": "color_attribute",   "identityAttr": "identity_attribute",   "groupByAttr": "group_by_attribute",   "focusValues": ["value1", "value2"],   "aggregationType": "select aggregation type" }</pre>	<ul style="list-style-type: none"> <li>• <b>Click Selection:</b> Highlights specific segment and proportions.</li> </ul>
Sunburst	<pre>{   "yAttr": "aggregation_value",   "xAttr": "first_layer",   "stackAttr": "second_layer",   "idAttr": "third_layer",   "colorAttr": "color_attribute",   "identityAttr": "identity_attribute",   "groupByAttr": "group_by_attribute",   "focusValues": ["value1", "value2"],   "aggregationType": "select aggregation type" }</pre>	<ul style="list-style-type: none"> <li>• <b>Click on Segment:</b> Highlights proportion.</li> <li>• <b>Double Click (Chained Selection):</b> Chained proportion.</li> </ul>

**Table 2:** Callout taxonomy for different chart types, their required JSON specification, and supported interaction types.