

Python API reference for plotly

This is the reference of plotly's API. Also see [plotly's documentation website](https://plot.ly/python) (<https://plot.ly/python>).

Submodules

- Plotly Express: high-level interface for data visualization ([plotly.express.html#px](https://plotly.com/python-api-reference/plotly.express.html#px))
- Graph Objects: low-level interface to figures, traces and layout ([plotly.graph_objects.html#graph-objects](https://plotly.com/python-api-reference/plotly.graph_objects.html#graph-objects))
- Subplots: helper function for layout out multi-plot figures ([plotly.subplots.html#subplots](https://plotly.com/python-api-reference/plotly.subplots.html#subplots))
- Figure Factories: helper methods for building specific complex charts ([plotly.figure_factory.html#ff](https://plotly.com/python-api-reference/plotly.figure_factory.html#ff))
- I/O: low-level interface for displaying, reading and writing figures ([plotly.io.html#io](https://plotly.com/python-api-reference/plotly.io.html#io))

Full reference list

- `plotly.express` : [high-level interface for data visualization](https://plotly.com/python-api-reference/plotly.express.html) ([plotly.express.html](https://plotly.com/python-api-reference/plotly.express.html))
 - `plotly.express.scatter` ([generated/plotly.express.scatter.html](https://plotly.com/python-api-reference/generated/plotly.express.scatter.html))
 - `plotly.express.scatter_3d` ([generated/plotly.express.scatter_3d.html](https://plotly.com/python-api-reference/generated/plotly.express.scatter_3d.html))
 - `plotly.express.scatter_polar` ([generated/plotly.express.scatter_polar.html](https://plotly.com/python-api-reference/generated/plotly.express.scatter_polar.html))
 - `plotly.express.scatter_ternary` ([generated/plotly.express.scatter_ternary.html](https://plotly.com/python-api-reference/generated/plotly.express.scatter_ternary.html))
 - `plotly.express.scatter_mapbox` ([generated/plotly.express.scatter_mapbox.html](https://plotly.com/python-api-reference/generated/plotly.express.scatter_mapbox.html))
 - `plotly.express.scatter_geo` ([generated/plotly.express.scatter_geo.html](https://plotly.com/python-api-reference/generated/plotly.express.scatter_geo.html))
 - `plotly.express.line` ([generated/plotly.express.line.html](https://plotly.com/python-api-reference/generated/plotly.express.line.html))
 - `plotly.express.line_3d` ([generated/plotly.express.line_3d.html](https://plotly.com/python-api-reference/generated/plotly.express.line_3d.html))
 - `plotly.express.line_polar` ([generated/plotly.express.line_polar.html](https://plotly.com/python-api-reference/generated/plotly.express.line_polar.html))
 - `plotly.express.line_ternary` ([generated/plotly.express.line_ternary.html](https://plotly.com/python-api-reference/generated/plotly.express.line_ternary.html))
 - `plotly.express.line_mapbox` ([generated/plotly.express.line_mapbox.html](https://plotly.com/python-api-reference/generated/plotly.express.line_mapbox.html))
 - `plotly.express.line_geo` ([generated/plotly.express.line_geo.html](https://plotly.com/python-api-reference/generated/plotly.express.line_geo.html))
 - `plotly.express.area` ([generated/plotly.express.area.html](https://plotly.com/python-api-reference/generated/plotly.express.area.html))
 - `plotly.express.bar` ([generated/plotly.express.bar.html](https://plotly.com/python-api-reference/generated/plotly.express.bar.html))
 - `plotly.express.bar_polar` ([generated/plotly.express.bar_polar.html](https://plotly.com/python-api-reference/generated/plotly.express.bar_polar.html))
 - `plotly.express.violin` ([generated/plotly.express.violin.html](https://plotly.com/python-api-reference/generated/plotly.express.violin.html))
 - `plotly.express.box` ([generated/plotly.express.box.html](https://plotly.com/python-api-reference/generated/plotly.express.box.html))
 - `plotly.express.strip` ([generated/plotly.express.strip.html](https://plotly.com/python-api-reference/generated/plotly.express.strip.html))
 - `plotly.express.histogram` ([generated/plotly.express.histogram.html](https://plotly.com/python-api-reference/generated/plotly.express.histogram.html))
 - `plotly.express.pie` ([generated/plotly.express.pie.html](https://plotly.com/python-api-reference/generated/plotly.express.pie.html))
 - `plotly.express.treemap` ([generated/plotly.express.treemap.html](https://plotly.com/python-api-reference/generated/plotly.express.treemap.html))
 - `plotly.express.sunburst` ([generated/plotly.express.sunburst.html](https://plotly.com/python-api-reference/generated/plotly.express.sunburst.html))
 - `plotly.express.funnel` ([generated/plotly.express.funnel.html](https://plotly.com/python-api-reference/generated/plotly.express.funnel.html))
 - `plotly.express.funnel_area` ([generated/plotly.express.funnel_area.html](https://plotly.com/python-api-reference/generated/plotly.express.funnel_area.html))
 - `plotly.express.scatter_matrix` ([generated/plotly.express.scatter_matrix.html](https://plotly.com/python-api-reference/generated/plotly.express.scatter_matrix.html))
 - `plotly.express.parallel_coordinates` ([generated/plotly.express.parallel_coordinates.html](https://plotly.com/python-api-reference/generated/plotly.express.parallel_coordinates.html))
 - `plotly.express.parallel_categories` ([generated/plotly.express.parallel_categories.html](https://plotly.com/python-api-reference/generated/plotly.express.parallel_categories.html))
 - `plotly.express.choropleth` ([generated/plotly.express.choropleth.html](https://plotly.com/python-api-reference/generated/plotly.express.choropleth.html))

- `plotly.express.choropleth_mapbox` (generated/plotly.express.choropleth_mapbox.html)
- `plotly.express.density_contour` (generated/plotly.express.density_contour.html)
- `plotly.express.density_heatmap` (generated/plotly.express.density_heatmap.html)
- `plotly.express.density_mapbox` (generated/plotly.express.density_mapbox.html)
- `plotly.express.imshow` (generated/plotly.express.imshow.html)
- `plotly.graph_objects` : [low-level interface to figures, traces and layout](#) (plotly.graph_objects.html)
 - [Figure](#) (plotly.graph_objects.html#figure)
 - `plotly.graph_objects.Figure` (generated/plotly.graph_objects.Figure.html)
 - [Layout](#) (plotly.graph_objects.html#layout)
 - `plotly.graph_objects.Layout` (generated/plotly.graph_objects.Layout.html)
 - `plotly.graph_objects.layout` (generated/plotly.graph_objects.Layout.html#id3)
 - [Simple charts](#) (plotly.graph_objects.html#simple-charts)
 - `plotly.graph_objects.Scatter` (generated/plotly.graph_objects.Scatter.html)
 - `plotly.graph_objects.scatter` (generated/plotly.graph_objects.Scatter.html#id7)
 - `plotly.graph_objects.Scattergl` (generated/plotly.graph_objects.Scattergl.html)
 - `plotly.graph_objects.scattergl` (generated/plotly.graph_objects.Scattergl.html#id3)
 - `plotly.graph_objects.Bar` (generated/plotly.graph_objects.Bar.html)
 - `plotly.graph_objects.bar` (generated/plotly.graph_objects.Bar.html#id1)
 - `plotly.graph_objects.Pie` (generated/plotly.graph_objects.Pie.html)
 - `plotly.graph_objects.pie` (generated/plotly.graph_objects.Pie.html#id1)
 - `plotly.graph_objects.Heatmap` (generated/plotly.graph_objects.Heatmap.html)
 - `plotly.graph_objects.heatmap` (generated/plotly.graph_objects.Heatmap.html#id1)
 - `plotly.graph_objects.Image` (generated/plotly.graph_objects.Image.html)
 - `plotly.graph_objects.image` (generated/plotly.graph_objects.Image.html#id1)
 - `plotly.graph_objects.Contour` (generated/plotly.graph_objects.Contour.html)
 - `plotly.graph_objects.contour` (generated/plotly.graph_objects.Contour.html#id1)
 - `plotly.graph_objects.Table` (generated/plotly.graph_objects.Table.html)
 - `plotly.graph_objects.table` (generated/plotly.graph_objects.Table.html#id1)
 - [Distributions](#) (plotly.graph_objects.html#distributions)
 - `plotly.graph_objects.Box` (generated/plotly.graph_objects.Box.html)
 - `plotly.graph_objects.box` (generated/plotly.graph_objects.Box.html#id1)
 - `plotly.graph_objects.Violin` (generated/plotly.graph_objects.Violin.html)
 - `plotly.graph_objects.violin` (generated/plotly.graph_objects.Violin.html#id1)
 - `plotly.graph_objects.Histogram` (generated/plotly.graph_objects.Histogram.html)
 - `plotly.graph_objects.histogram` (generated/plotly.graph_objects.Histogram.html#id1)
 - `plotly.graph_objects.Histogram2d` (generated/plotly.graph_objects.Histogram2d.html)
 - `plotly.graph_objects.histogram2d`
(generated/plotly.graph_objects.Histogram2d.html#id1)
 - `plotly.graph_objects.Histogram2dContour`
(generated/plotly.graph_objects.Histogram2dContour.html)
 - `plotly.graph_objects.histogram2dcontour`
(generated/plotly.graph_objects.Histogram2dContour.html#id1)
 - [Finance](#) (plotly.graph_objects.html#finance)
 - `plotly.graph_objects.Ohlc` (generated/plotly.graph_objects.Ohlc.html)
 - `plotly.graph_objects.ohlc` (generated/plotly.graph_objects.Ohlc.html#id1)
 - `plotly.graph_objects.Candlestick` (generated/plotly.graph_objects.Candlestick.html)
 - `plotly.graph_objects.candlestick` (generated/plotly.graph_objects.Candlestick.html#id1)
 - `plotly.graph_objects.Waterfall` (generated/plotly.graph_objects.Waterfall.html)
 - `plotly.graph_objects.waterfall` (generated/plotly.graph_objects.Waterfall.html#id1)

- `plotly.graph_objects.Funnel` (generated/plotly.graph_objects.Funnel.html)
- `plotly.graph_objects.funnel` (generated/plotly.graph_objects.Funnel.html#id1)
- `plotly.graph_objects.Funnelarea` (generated/plotly.graph_objects.Funnelarea.html)
- `plotly.graph_objects.funnelarea` (generated/plotly.graph_objects.Funnelarea.html#id1)
- `plotly.graph_objects.Indicator` (generated/plotly.graph_objects.Indicator.html)
- `plotly.graph_objects.indicator` (generated/plotly.graph_objects.Indicator.html#id1)
- **3D** (plotly.graph_objects.html#d)
 - `plotly.graph_objects.Scatter3d` (generated/plotly.graph_objects.Scatter3d.html)
 - `plotly.graph_objects.scatter3d` (generated/plotly.graph_objects.Scatter3d.html#id1)
 - `plotly.graph_objects.Surface` (generated/plotly.graph_objects.Surface.html)
 - `plotly.graph_objects.surface` (generated/plotly.graph_objects.Surface.html#id1)
 - `plotly.graph_objects.Mesh3d` (generated/plotly.graph_objects.Mesh3d.html)
 - `plotly.graph_objects.mesh3d` (generated/plotly.graph_objects.Mesh3d.html#id1)
 - `plotly.graph_objects.Cone` (generated/plotly.graph_objects.Cone.html)
 - `plotly.graph_objects.cone` (generated/plotly.graph_objects.Cone.html#id1)
 - `plotly.graph_objects.Streamtube` (generated/plotly.graph_objects.Streamtube.html)
 - `plotly.graph_objects.streamtube` (generated/plotly.graph_objects.Streamtube.html#id1)
 - `plotly.graph_objects.Volume` (generated/plotly.graph_objects.Volume.html)
 - `plotly.graph_objects.volume` (generated/plotly.graph_objects.Volume.html#id1)
 - `plotly.graph_objects.Isosurface` (generated/plotly.graph_objects.Isosurface.html)
 - `plotly.graph_objects.isosurface` (generated/plotly.graph_objects.Isosurface.html#id1)
- **Maps** (plotly.graph_objects.html#maps)
 - `plotly.graph_objects.Scattergeo` (generated/plotly.graph_objects.Scattergeo.html)
 - `plotly.graph_objects.scattergeo` (generated/plotly.graph_objects.Scattergeo.html#id1)
 - `plotly.graph_objects.Choropleth` (generated/plotly.graph_objects.Choropleth.html)
 - `plotly.graph_objects.choropleth` (generated/plotly.graph_objects.Choropleth.html#id1)
 - `plotly.graph_objects.Scattermapbox`
(generated/plotly.graph_objects.Scattermapbox.html)
 - `plotly.graph_objects.scattermapbox`
(generated/plotly.graph_objects.Scattermapbox.html#id1)
 - `plotly.graph_objects.Choroplethmapbox`
(generated/plotly.graph_objects.Choroplethmapbox.html)
 - `plotly.graph_objects.choroplethmapbox`
(generated/plotly.graph_objects.Choroplethmapbox.html#id1)
 - `plotly.graph_objects.Densitymapbox`
(generated/plotly.graph_objects.Densitymapbox.html)
 - `plotly.graph_objects.densitymapbox`
(generated/plotly.graph_objects.Densitymapbox.html#id1)
- **Specialized** (plotly.graph_objects.html#specialized)
 - `plotly.graph_objects.Scatterpolar` (generated/plotly.graph_objects.Scatterpolar.html)
 - `plotly.graph_objects.scatterpolar`
(generated/plotly.graph_objects.Scatterpolar.html#id1)
 - `plotly.graph_objects.Scatterpolargl`
(generated/plotly.graph_objects.Scatterpolargl.html)
 - `plotly.graph_objects.scatterpolargl`
(generated/plotly.graph_objects.Scatterpolargl.html#id3)
 - `plotly.graph_objects.Barpolar` (generated/plotly.graph_objects.Barpolar.html)
 - `plotly.graph_objects.barpolar` (generated/plotly.graph_objects.Barpolar.html#id1)
 - `plotly.graph_objects.Scatterternary`

- (generated/plotly.graph_objects.Scatterternary.html)
 - `plotly.graph_objects.Scatterternary` (generated/plotly.graph_objects.Scatterternary.html#id1)
 - `plotly.graph_objects.Sunburst` (generated/plotly.graph_objects.Sunburst.html)
 - `plotly.graph_objects.sunburst` (generated/plotly.graph_objects.Sunburst.html#id1)
 - `plotly.graph_objects.Treemap` (generated/plotly.graph_objects.Treemap.html)
 - `plotly.graph_objects.treemap` (generated/plotly.graph_objects.Treemap.html#id1)
 - `plotly.graph_objects.Sankey` (generated/plotly.graph_objects.Sankey.html)
 - `plotly.graph_objects.sankey` (generated/plotly.graph_objects.Sankey.html#id1)
 - `plotly.graph_objects.Splom` (generated/plotly.graph_objects.Splom.html)
 - `plotly.graph_objects.splom` (generated/plotly.graph_objects.Splom.html#id1)
 - `plotly.graph_objects.Parcats` (generated/plotly.graph_objects.Parcats.html)
 - `plotly.graph_objects.parcats` (generated/plotly.graph_objects.Parcats.html#id1)
 - `plotly.graph_objects.Parcoords` (generated/plotly.graph_objects.Parcoords.html)
 - `plotly.graph_objects.parcoords` (generated/plotly.graph_objects.Parcoords.html#id1)
 - `plotly.graph_objects.Carpet` (generated/plotly.graph_objects.Carpet.html)
 - `plotly.graph_objects.carpet` (generated/plotly.graph_objects.Carpet.html#id1)
 - `plotly.graph_objects.Scattercarpet` (generated/plotly.graph_objects.Scattercarpet.html)
 - `plotly.graph_objects.scattercarpet` (generated/plotly.graph_objects.Scattercarpet.html#id1)
 - `plotly.graph_objects.Contourcarpet` (generated/plotly.graph_objects.Contourcarpet.html)
 - `plotly.graph_objects.contourcarpet` (generated/plotly.graph_objects.Contourcarpet.html#id1)
- `plotly.subplots` : [helper function for laying out multi-plot figures](#) (plotly.subplots.html)
 - `plotly.subplots.make_subplots` (generated/plotly.subplots.make_subplots.html)
- `plotly.figure_factory` : [helper methods for building specific complex charts](#) (plotly.figure_factory.html)
 - `plotly.figure_factory.create_2d_density` (generated/plotly.figure_factory.create_2d_density.html)
 - `plotly.figure_factory.create_annotated_heatmap` (generated/plotly.figure_factory.create_annotated_heatmap.html)
 - `plotly.figure_factory.create_bullet` (generated/plotly.figure_factory.create_bullet.html)
 - `plotly.figure_factory.create_candlestick` (generated/plotly.figure_factory.create_candlestick.html)
 - `plotly.figure_factory.create_dendrogram` (generated/plotly.figure_factory.create_dendrogram.html)
 - `plotly.figure_factory.create_distplot` (generated/plotly.figure_factory.create_distplot.html)
 - `plotly.figure_factory.create_facet_grid` (generated/plotly.figure_factory.create_facet_grid.html)
 - `plotly.figure_factory.create_gantt` (generated/plotly.figure_factory.create_gantt.html)
 - `plotly.figure_factory.create_ohlc` (generated/plotly.figure_factory.create_ohlc.html)
 - `plotly.figure_factory.create_quiver` (generated/plotly.figure_factory.create_quiver.html)
 - `plotly.figure_factory.create_scatterplotmatrix` (generated/plotly.figure_factory.create_scatterplotmatrix.html)
 - `plotly.figure_factory.create_streamline` (generated/plotly.figure_factory.create_streamline.html)
 - `plotly.figure_factory.create_table` (generated/plotly.figure_factory.create_table.html)
 - `plotly.figure_factory.create_ternary_contour`

- ([generated/plotly.figure_factory.create_ternary_contour.html](#))
- `plotly.figure_factory.create_trisurf` ([generated/plotly.figure_factory.create_trisurf.html](#))
- `plotly.figure_factory.create_violin` ([generated/plotly.figure_factory.create_violin.html](#))
- `plotly.io` : [low-level interface for displaying, reading and writing figures](#) ([plotly.io.html](#))
 - `plotly.io.to_image` ([generated/plotly.io.to_image.html](#))
 - `plotly.io.write_image` ([generated/plotly.io.write_image.html](#))
 - `plotly.io.to_json` ([generated/plotly.io.to_json.html](#))
 - `plotly.io.from_json` ([generated/plotly.io.from_json.html](#))
 - `plotly.io.read_json` ([generated/plotly.io.read_json.html](#))
 - `plotly.io.write_json` ([generated/plotly.io.write_json.html](#))
 - `plotly.io.templates` ([generated/plotly.io.templates.html](#))
 - `plotly.io.to_templated` ([generated/plotly.io.to_templated.html](#))
 - `plotly.io.to_html` ([generated/plotly.io.to_html.html](#))
 - `plotly.io.write_html` ([generated/plotly.io.write_html.html](#))
 - `plotly.io.renderers` ([generated/plotly.io.renderers.html](#))
 - `plotly.io.show` ([generated/plotly.io.show.html](#))

Indices and tables

- [Index](#) ([genindex.html](#))
- [Module Index](#) ([py-modindex.html](#))
- [Search Page](#) ([search.html](#))