

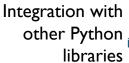


2- and 3D plots





Publication-q uality | visualizations



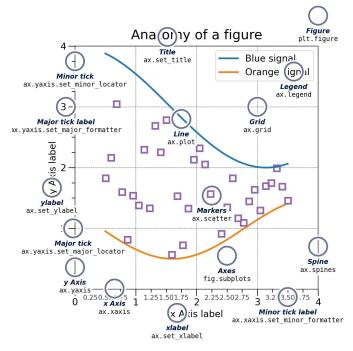


Community § support



Numerous plot types 🖳





Feature	Methods	Description	Example Code	
Line Color	color or c	Sets the color of the plot line.	<pre>plt.plot(x, y, color='blue')</pre>	
Line Style	linestyle or ls	Defines the style of the plot line (solid, dashed, etc.).	<pre>plt.plot(x, y, linestyle='')</pre>	
Line Width	linewidth or lw	Sets the width of the plot line.	plt.plot(x, y, linewidth=2)	
Marker Shape	marker	Changes the shape of the points on the plot (circle, square).	plt.plot(x, y, marker='o')	
Marker Size	markersize or ms	Sets the size of the markers.	<pre>plt.plot(x, y, markersize=5)</pre>	
Marker Color	markerfacecolor or mfc	Sets the fill color of the markers.	<pre>plt.plot(x, y, markerfacecolor='red')</pre>	
Title	plt.title()	Adds a title to the plot.	plt.title('My Plot')	
Axis Labels	<pre>plt.xlabel() / plt.ylabel()</pre>	Adds labels to the x and y axes.	<pre>plt.xlabel('X-axis')</pre>	
Legend	plt.legend()	Adds a legend to the plot.	<pre>plt.legend(['Label'])</pre>	
Grid	plt.grid()	Toggles the visibility of the grid.	plt.grid(True)	
Annotations	plt.annotate()	Adds annotations with optional arrows pointing to data points.	<pre>plt.annotate('Max', xy=(2, 1))</pre>	
Figure Size	plt.figure(figsize=(w, h))	Sets the width and height of the plot.	plt.figure(figsize=(10, 6))	
Axis Limits	<pre>plt.xlim() / plt.ylim()</pre>	Sets the limits for the x and y axes.	plt.xlim(0, 10)	
Axis Ticks	plt.xticks() / plt.yticks()	Sets the ticks for the x and y axes.	plt.xticks([0, 5, 10])	
Save Plot	plt.savefig()	Saves the current figure to a file.	plt.savefig('plot.png')	

Plot Type	Description	Syntax	Image
Line Plot	Trends over a range of values.	<pre>x = np.linspace(0, 10, 100) plt.plot(x, np.sin(x)) plt.plot(x, np.cos(x))</pre>	
Scatter Plot	Relationships between variables.	<pre>x, y = np.random.rand(50), np.random.rand(50) plt.scatter(x, y, c=x+y, cmap='viridis')</pre>	
Bar Plot	Compare categories or groups.	<pre>categories = ['A', 'B', 'C'] values = [20, 35, 30] plt.bar(categories, values)</pre>	
Pie Chart	Proportions of a whole.	<pre>sizes = [25, 35, 20, 20] labels = ['A', 'B', 'C', 'D'] plt.pie(sizes, labels=labels)</pre>	
Histogram	Distribution of data.	<pre>data = np.random.randn(1000) plt.hist(data, bins=20)</pre>	
Heatmap	Data intensity with color.	<pre>data_matrix = np.random.rand(6, 6) plt.imshow(data_matrix, cmap='coolwarm')</pre>	
3D Surface Plot	Visualize surfaces in 3D.	x, y = np.meshgrid(np.linspace(-2, 2, 10), np.linspace(-2, 2, 10)) z = np.sqrt(x^* 2 + y^* 2) ax.plot_surface(x, y, z)	15 10 10 10 10 10 10 10 10 10 10 10 10 10
Box Plot	Summarize distributions.	<pre>data = [np.random.rand(50), np.random.rand(50) + 1] plt.boxplot(data)</pre>	