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st.scatter_chart



Display a scatterplot chart.

This is syntax-sugar around `st.altair_chart`. The main difference is this command uses the data's own column and indices to figure out the chart's Altair spec. As a result this is easier to use for many "just plot this" scenarios, while being less customizable.

If `st.scatter_chart` does not guess the data specification correctly, try specifying your desired chart using `st.altair_chart`.

Function signature[\[source\]](#)

`st.scatter_chart(data=None, *, x=None, y=None, x_label=None, y_label=None, color=None, size=None, width=None, height=None, use_container_width=True)`

Parameters

data (Anything supported by <code>st.dataframe</code>)	Data to be plotted.
x (str or None)	Column name or key associated to the x-axis data. If <code>x</code> is <code>None</code> (default), Streamlit uses the data index for the x-axis values.
y (str, Sequence of str, or None)	Column name(s) or key(s) associated to the y-axis data. If this is <code>None</code> (default), Streamlit draws the data of all remaining columns as data series. If this is a sequence of strings, Streamlit draws several series on the same chart by melting your wide-format table into a long-format table behind the scenes.
x_label (str or None)	The label for the x-axis. If this is <code>None</code> (default), Streamlit will use the column name specified in <code>x</code> if available, or else no label will be displayed.
y_label (str or None)	The label for the y-axis. If this is <code>None</code> (default), Streamlit will use the column name(s) specified in <code>y</code> if available, or else no label will be displayed.
color (str, tuple, Sequence of str, Sequence of tuple, or None)	<p>The color of the circles representing each datapoint.</p> <p>This can be:</p> <ul style="list-style-type: none"> • <code>None</code>, to use the default color. • A hex string like <code>"#ffaa00"</code> or <code>"#ffaa0088"</code>. • An RGB or RGBA tuple with the red, green, blue, and alpha components specified as ints from 0 to 255 or floats from 0.0 to 1.0. • The name of a column in the dataset where the color of that datapoint will come from. <p>If the values in this column are in one of the color formats above (hex string or color tuple), then that color will be used.</p> <p>Otherwise, the color will be automatically picked from the default palette.</p> <p>For example: if the dataset has 1000 rows, but this column only contains the values <code>"adult"</code>, <code>"child"</code>, and <code>"baby"</code>, then those 1000 datapoints be shown using three colors</p>

```
st.scatter_chart(data=None, *, x=None, y=None, x_label=None, y_label=None, color=None, size=None, width=None, height=None, use_container_width=True)
```

from the default palette.

But if this column only contains floats or ints, then those 1000 datapoints will be shown using a colors from a continuous color gradient.

Finally, if this column only contains the values "#ffaa00", "#f0f", "#0000ff", then then each of those 1000 datapoints will be assigned "#ffaa00", "#f0f", or "#0000ff" as appropriate.

If the dataframe is in wide format (that is, y is a Sequence of columns), this can also be:

- A list of string colors or color tuples to be used for each of the series in the chart. This list should have the same length as the number of y values (e.g. `color=["#fd0", "#f0f", "#04f"]` for three series).

The size of the circles representing each point.

This can be:

size (str, float, int, or None)

- A number like 100, to specify a single size to use for all datapoints.
- The name of the column to use for the size. This allows each datapoint to be represented by a circle of a different size.

width (int or None)

Desired width of the chart expressed in pixels. If `width` is `None` (default), Streamlit sets the width of the chart to fit its contents according to the plotting library, up to the width of the parent container. If `width` is greater than the width of the parent container, Streamlit sets the chart width to match the width of the parent container.

To use `width`, you must set `use_container_width=False`.

height (int or None)

Desired height of the chart expressed in pixels. If `height` is `None` (default), Streamlit sets the height of the chart to fit its contents according to the plotting library.

use_container_width (bool)

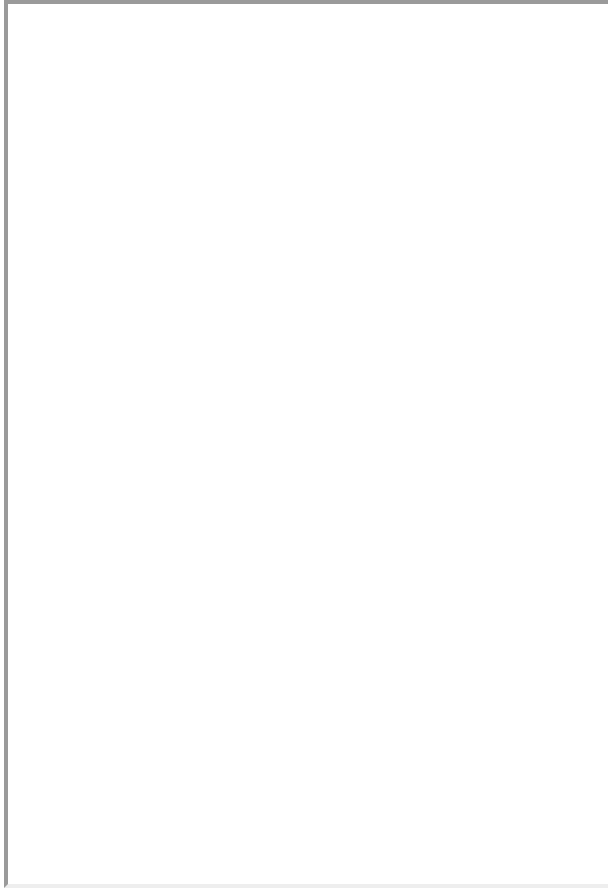
Whether to override `width` with the width of the parent container. If `use_container_width` is `True` (default), Streamlit sets the width of the chart to match the width of the parent container. If `use_container_width` is `False`, Streamlit sets the chart's width according to `width`.

Examples

```
import streamlit as st
import pandas as pd
import numpy as np

chart_data = pd.DataFrame(np.random.randn(20, 3), columns=["a", "b", "c"])

st.scatter_chart(chart_data)
```



[Built with Streamlit !\[\]\(8af806fb1314382d09bc5ec5b767526c_img.jpg\)](#)
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You can also choose different columns to use for x and y, as well as set the color dynamically based on a 3rd column (assuming your dataframe is in long format):

```
import streamlit as st
import pandas as pd
import numpy as np

chart_data = pd.DataFrame(
    np.random.randn(20, 3), columns=["col1", "col2", "col3"]
)
chart_data["col4"] = np.random.choice(["A", "B", "C"], 20)

st.scatter_chart(
    chart_data,
    x="col1",
    y="col2",
    color="col4",
    size="col3",
)
```



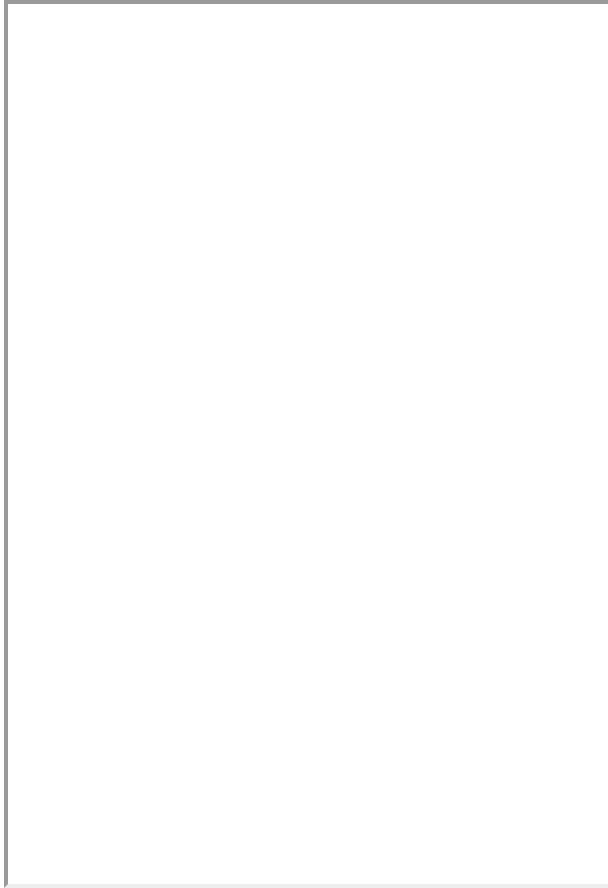
[Built with Streamlit !\[\]\(d0a1791f26d167e866e44ebbf83efebe_img.jpg\)](#)
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Finally, if your dataframe is in wide format, you can group multiple columns under the y argument to show multiple series with different colors:

```
import streamlit as st
import pandas as pd
import numpy as np

chart_data = pd.DataFrame(
    np.random.randn(20, 4), columns=["col1", "col2", "col3", "col4"]
)

st.scatter_chart(
    chart_data,
    x="col1",
    y=["col2", "col3"],
    size="col4",
    color=["#FF0000", "#0000FF"], # Optional
)
```



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element.add_rows



Streamlit Version 

Concatenate a dataframe to the bottom of the current one.

Function signature [\[source\]](#)

element.add_rows(data=None, **kwargs)

Parameters

data (pandas.DataFrame, pandas.Styler, pyarrow.Table, numpy.ndarray, pyspark.sql.DataFrame, snowflake.snowpark.dataframe.DataFrame, Iterable, dict, or None)	Table to concat. Optional.
**kwargs (pandas.DataFrame, numpy.ndarray, Iterable, dict, or None)	The named dataset to concat. Optional. You can only pass in 1 dataset (including the one in the data parameter).

Example

```
import streamlit as st
import pandas as pd
import numpy as np
```

```

df1 = pd.DataFrame(
    np.random.randn(50, 20), columns=("col %d" % i for i in range(20))
)

my_table = st.table(df1)

df2 = pd.DataFrame(
    np.random.randn(50, 20), columns=("col %d" % i for i in range(20))
)

my_table.add_rows(df2)
# Now the table shown in the Streamlit app contains the data for
# df1 followed by the data for df2.

```

You can do the same thing with plots. For example, if you want to add more data to a line chart:

```

# Assuming df1 and df2 from the example above still exist...
my_chart = st.line_chart(df1)
my_chart.add_rows(df2)
# Now the chart shown in the Streamlit app contains the data for
# df1 followed by the data for df2.

```

And for plots whose datasets are named, you can pass the data with a keyword argument where the key is the name:

```

my_chart = st.vega_lite_chart(
    {
        "mark": "line",
        "encoding": {"x": "a", "y": "b"},
        "datasets": {
            "some_fancy_name": df1, # <-- named dataset
        },
        "data": {"name": "some_fancy_name"},
    }
)
my_chart.add_rows(some_fancy_name=df2) # <-- name used as keyword

```

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forum

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