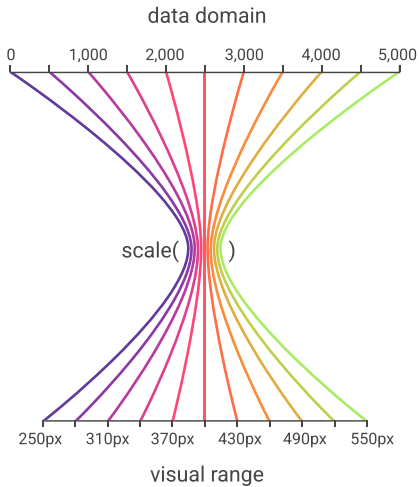


# Plot: Scales

Scales project your data from an abstract data domain to a visual range

## Working with scales

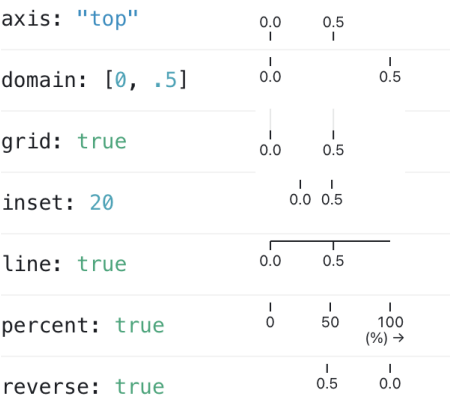
How scales map values:



Configure the scale for each channel:

```
Plot.plot({
  // Configure the scale for the x channel
  x: {
    type: "log",      // scale type
    ticks: 5,         // # of ticks
    tickFormat: ".2s", // tick format
    grid: true,        // show grid lines
    axis: "top"        // show above chart
  }
})
```

Scale options:



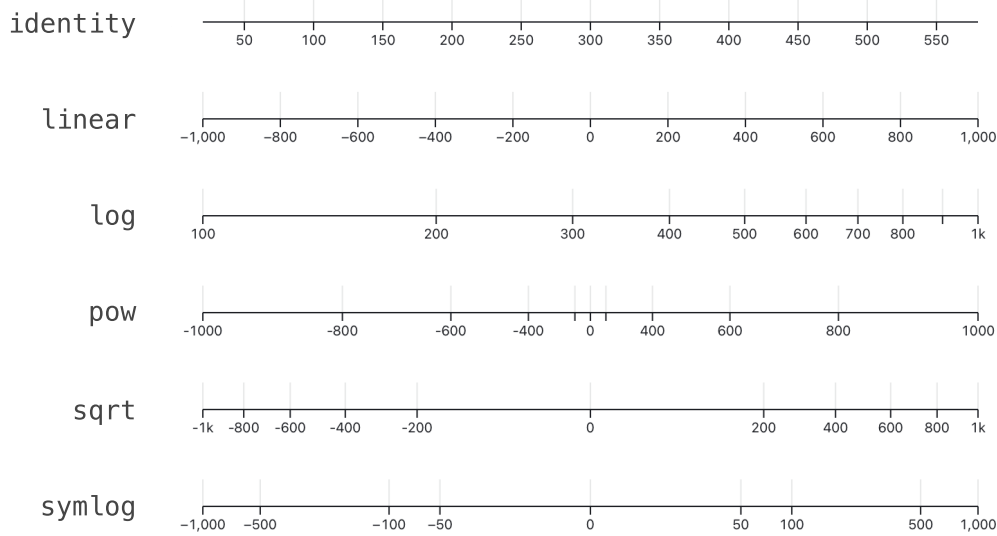
Label and tick options:



## Quantitative

Display continuous data by setting one of these types:

```
Plot.plot({ x: { type: "identity" } })
```



Specify a tickFormat: “[symbol][comma][precision][type]”

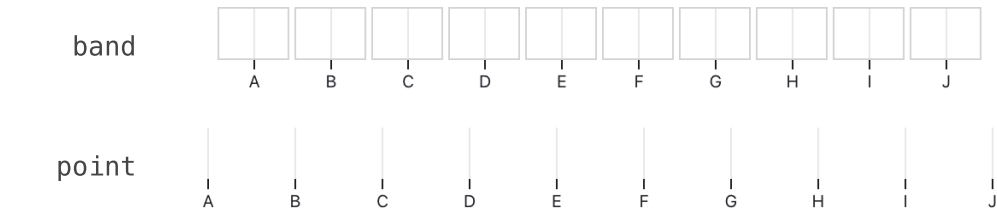
```
Plot.plot({ x: { tickFormat: ".2s" } })
```

Syntax	Description	format(0.00013)	format(543005)
\$	Currency symbol	\$0.00013	\$543005
,	Comma separated	0.00013	543,005
.2	Precision of 2 digits	0.00013	5.4e+5
.5	Precision of 5 digits	0.00013	5.4301e+5
s	International System of Units (SI).	130.000μ	543.005k
e	Exponent notation	1.300000e-4	5.430050e+5
f	Fixed point notation	0.000130	543005.000000
p	Percentage notation	0.0130000%	54300500%
.2s	Two significant digits, shown in SI.	130μ	540k
,.1f	Comma separated, one fixed value after the decimal place	0.0	543,005.0
,.1p	Comma separated, one digit, percentage type	0.01%	50,000,000%
,\$,.1	Currency syntax, Comma separated, one digit, percentage type	\$0.0001	\$5e+5

## Categorical

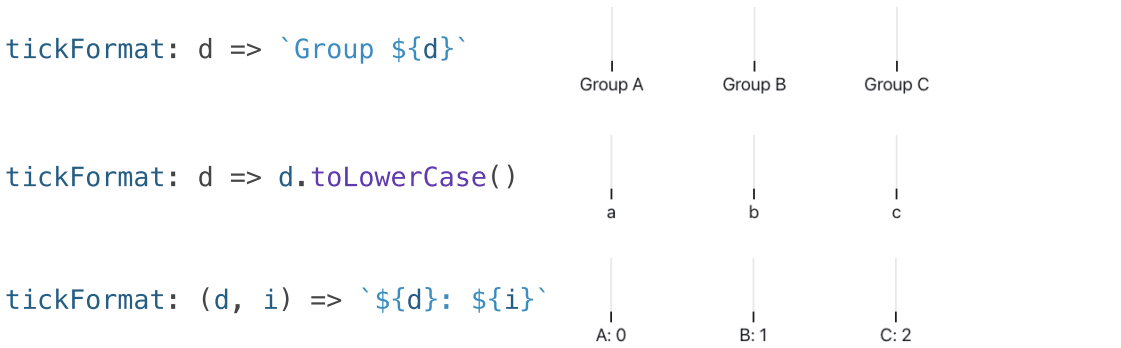
Display categorical data by setting one of these types:

```
Plot.plot({ x: { type: "band" } })
```



Customize your ticks using a function:

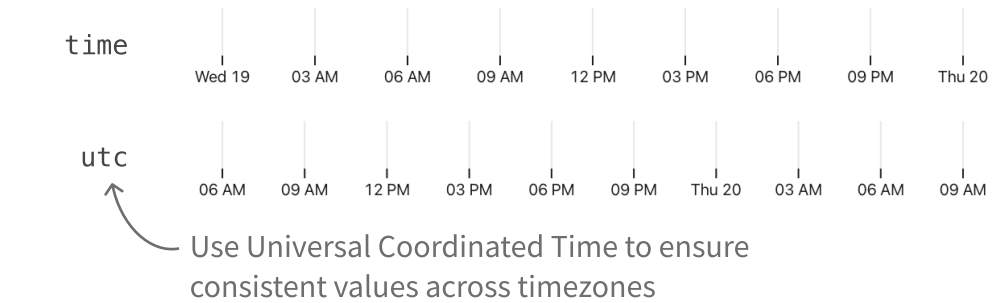
```
Plot.plot({ x: { tickFormat: (d) => `Group ${d}` } })
```



## Date

Display temporal data by setting one of these types:

```
Plot.plot({ x: { type: "utc" } })
```



e.g. Saturday January 01, 2022

Compose a time formatter using this syntax:

```
Plot.plot({ x: { tickFormat: d3.utcFormat("%A %B %d, %Y") } })
```

Year	Month	Day	Hour	Minute	Second	Misc
%Y 2022	%B January	%A Saturday	%I 04	%M 00	%S 00	%p AM
%y 22	%b Jan	%a Sat	%H 16			
	%m 01	%d 01				
		%e 1				