tickstyle — Choices for the overall look of axis ticks and axis tick labels

Syntax

\textit{tickstyle} \\
Description

\begin{tabular}{ll}
\textbf{major} & major tick and major tick label \\
\textbf{major\_nolabel} & major tick with no tick label \\
\textbf{major\_notick} & major tick label with no tick \\
\textbf{minor} & minor tick and minor tick label \\
\textbf{minor\_nolabel} & minor tick with no tick label \\
\textbf{minor\_notick} & minor tick label with no tick \\
\textbf{none} & no tick, no tick label \\
\end{tabular}

Other \textit{tickstyles} may be available; type

\begin{verbatim}
        . graph query tickstyle
\end{verbatim}

to obtain the complete list of \textit{tickstyles} installed on your computer.

Description

Ticks are the marks that appear on axes. \textit{tickstyle} specifies the overall look of ticks. See [G-3]\textit{axis\_label\_options}.

Remarks and examples

Remarks are presented under the following headings:

What is a tick? What is a tick label?
What is a tickstyle?
You do not need to specify a tickstyle
Suppressing ticks and/or tick labels

What is a tick? What is a tick label?

A tick is the small line that extends or crosses an axis and next to which, sometimes, numbers are placed.

A tick label is the text (typically a number) that optionally appears beside the tick.
What is a tickstyle?

`tickstyle` is really misnamed; it ought to be called a `tick_and_tick_label_style` in that it controls both the look of ticks and their labels.

Ticks are defined by three attributes:
1. The length of the tick; see\[G-4\] `relativesize`
2. Whether the tick extends out, extends in, or crosses the axis
3. The line style of the tick, including its thickness, color, and whether it is to be solid, dashed, etc.; see \[G-4\] `linestyle`

Labels are defined by two attributes:
1. The size of the text
2. The color of the text

Ticks and tick labels share one more attribute:
1. The gap between the tick and the tick label

The `tickstyle` specifies all six of these attributes.

You do not need to specify a tickstyle

The `tickstyle` is specified in the options named
\[
\{y | x\} \{label | tick | mlabel | mtick\} (tstyle(tickstyle))
\]

Correspondingly, there are other \[
\{y | x\} \{label | tick | mlabel | mtick\} ()\] suboptions that allow you to specify the individual attributes; see \[G-3\] `axis_label_options`.

You specify the `tickstyle` when a style exists that is exactly what you desire or when another style would allow you to specify fewer changes to obtain what you want.

Suppressing ticks and/or tick labels

To suppress the ticks that usually appear, specify one of these styles

<table>
<thead>
<tr>
<th><code>tickstyle</code></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>major_nolabel</td>
<td>major tick with no tick label</td>
</tr>
<tr>
<td>major_notick</td>
<td>major tick label with no tick</td>
</tr>
<tr>
<td>minor_nolabel</td>
<td>minor tick with no tick label</td>
</tr>
<tr>
<td>minor_notick</td>
<td>minor tick label with no tick</td>
</tr>
<tr>
<td>none</td>
<td>no tick, no tick label</td>
</tr>
</tbody>
</table>

For instance, you might type
\[
.scatter ..., ylabel(,tstyle(major_notick))
\]
Suppressing the ticks can be useful when you are creating special effects. For instance, consider a case where you wish to add grid lines to a graph at \( y = 10, 20, 30, \) and \( 40, \) but you do not want ticks or labels at those values. Moreover, you do not want even to interfere with the ordinary ticking or labeling of the graph. The solution is

```
.scatter ..., ymtick(10(10)40, grid tstyle(none))
```

We “borrowed” the `ymtick()` option and changed it so that it did not output ticks. We could just as well have borrowed the `ytick()` option. See \[G-3\] \textit{axis\_label\_options}.

\textbf{Also see}

\[G-3\] \textit{axis\_label\_options} — Options for specifying axis labels