

# sparktex Examples

November 5, 2024

This document demonstrates the L<sup>A</sup>T<sub>E</sub>X results of the `sparktex` examples used in the package's R documentation.

## Data used for sparklines:

```
> library(sparktex)
> vals <- sin(seq(1:10))
```

Basic sparkline: 

```
> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals)
```

```
% autogenerated by sparktex
% 2024-11-05 05:27:19.787823
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{10}
\spark
 0.0864 0.841470984807897
 0.1783 0.909297426825682
 0.2702 0.141120008059867
 0.3621 -0.756802495307928
 0.454 -0.958924274663138
 0.546 -0.279415498198926
 0.6379 0.656986598718789
 0.7298 0.989358246623382
 0.8217 0.412118485241757
 0.9136 -0.54402111088937 /
\end{sparkline}
```

A wider sparkline: 


```
> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, width=40)
```

```
% autogenerated by sparktex
% 2024-11-05 05:27:19.790251
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{40}
\spark
 0.0864 0.841470984807897
 0.1783 0.909297426825682
 0.2702 0.141120008059867
```

```

0.3621 -0.756802495307928
0.454 -0.958924274663138
0.546 -0.279415498198926
0.6379 0.656986598718789
0.7298 0.989358246623382
0.8217 0.412118485241757
0.9136 -0.54402111088937 /
\end{sparkline}

```


A thicker sparkline: 

```

> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, linewidth='3px')

% autogenerated by sparktex
% 2024-11-05 05:27:19.792344
{\setlength{\sparklinethickness}{3px}
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{10}
\spark
0.0864 0.841470984807897
0.1783 0.909297426825682
0.2702 0.141120008059867
0.3621 -0.756802495307928
0.454 -0.958924274663138
0.546 -0.279415498198926
0.6379 0.656986598718789
0.7298 0.989358246623382
0.8217 0.412118485241757
0.9136 -0.54402111088937 /
\end{sparkline}}

```


A sparkspike/barplot: 

```

> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, type="sparkspike")

% autogenerated by sparktex
% 2024-11-05 05:27:19.794388
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{10}
\sparkspike 0.0864 0.841470984807897
\sparkspike 0.1783 0.909297426825682
\sparkspike 0.2702 0.141120008059867
\sparkspike 0.3621 -0.756802495307928
\sparkspike 0.454 -0.958924274663138
\sparkspike 0.546 -0.279415498198926
\sparkspike 0.6379 0.656986598718789
\sparkspike 0.7298 0.989358246623382
\sparkspike 0.8217 0.412118485241757
\sparkspike 0.9136 -0.54402111088937
\end{sparkline}

```


Constrain y to (0,1): 

```

> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, normalize=TRUE)

% autogenerated by sparktex
% 2024-11-05 05:27:19.796498
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{10}
\spark
0.0864 0.924094
0.1783 0.958907
0.2702 0.564623
0.3621 0.103744
0.454 0
0.546 0.348773
0.6379 0.829403
0.7298 1
0.8217 0.703719
0.9136 0.212958 /
\end{sparkline}

```

**Constrain the sparkline to LaTeX line height:** 

```

> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, height=1)

% autogenerated by sparktex
% 2024-11-05 05:27:19.800181
\renewcommand{\sparklineheight}{1}
\begin{sparkline}{10}
\spark
0.0864 0.841470984807897
0.1783 0.909297426825682
0.2702 0.141120008059867
0.3621 -0.756802495307928
0.454 -0.958924274663138
0.546 -0.279415498198926
0.6379 0.656986598718789
0.7298 0.989358246623382
0.8217 0.412118485241757
0.9136 -0.54402111088937 /
\end{sparkline}

```

**A gray background:** 

```

> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, rectangle=c(1,2))

% autogenerated by sparktex
% 2024-11-05 05:27:19.802326
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{10}
\definecolor{sparkrectanglecolor}{gray}{0.9}
\sparkrectangle 1 2

```

```

\spark
0.0864 0.841470984807897
0.1783 0.909297426825682
0.2702 0.141120008059867
0.3621 -0.756802495307928
0.454 -0.958924274663138
0.546 -0.279415498198926
0.6379 0.656986598718789
0.7298 0.989358246623382
0.8217 0.412118485241757
0.9136 -0.54402111088937 /
\end{sparkline}

```

A colored background:



```

> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, rectangle=c(1,2,"rgb","0.5,0.7,0.3"))

```

```

% autogenerated by sparktex
% 2024-11-05 05:27:19.804443
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{10}
\definecolor{sparkrectanglecolor}{rgb}{0.5,0.7,0.3}
\sparkrectangle 1 2
\spark
0.0864 0.841470984807897
0.1783 0.909297426825682
0.2702 0.141120008059867
0.3621 -0.756802495307928
0.454 -0.958924274663138
0.546 -0.279415498198926
0.6379 0.656986598718789
0.7298 0.989358246623382
0.8217 0.412118485241757
0.9136 -0.54402111088937 /
\end{sparkline}

```

Two colored background rectangles:



```

> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, rectangle=list(c(1,2,"rgb","0.5,0.7,0.3"), c(-1,0,"rgb","0.2,0.7,0.3")))

```

```


% autogenerated by sparktex
% 2024-11-05 05:27:19.806697
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{10}
\definecolor{sparkrectanglecolor}{rgb}{0.5,0.7,0.3}
\sparkrectangle 1 2
\definecolor{sparkrectanglecolor}{rgb}{0.2,0.7,0.3}
\sparkrectangle -1 0
\spark
0.0864 0.841470984807897
0.1783 0.909297426825682

```

```

0.2702 0.141120008059867
0.3621 -0.756802495307928
0.454 -0.958924274663138
0.546 -0.279415498198926
0.6379 0.656986598718789
0.7298 0.989358246623382
0.8217 0.412118485241757
0.9136 -0.54402111088937 /
\end{sparkline}

```

A sparkline with start and end points: 

```


> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, sparkdot=list(c(0.0864,sin(1),"blue"), c(0.9136,sin(10),"red")))

```

```

% autogenerated by sparktex
% 2024-11-05 05:27:19.808851
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{10}
\spark
0.0864 0.841470984807897
0.1783 0.909297426825682
0.2702 0.141120008059867
0.3621 -0.756802495307928
0.454 -0.958924274663138
0.546 -0.279415498198926
0.6379 0.656986598718789
0.7298 0.989358246623382
0.8217 0.412118485241757
0.9136 -0.54402111088937 /
\sparkdot 0.0864 0.841470984807897 blue
\sparkdot 0.9136 -0.54402111088937 red
\end{sparkline}

```

A thick purple sparkline: 

```

> library(sparktex)
> vals <- sin(seq(1:10))
> sparktex(vals, linewidth='2px', normalize=TRUE, color=c("named","purple"))

```

```

% autogenerated by sparktex
% 2024-11-05 05:27:19.811049
\definecolor{sparklinecolor}{named}{purple}
{\setlength{\sparklinethickness}{2px}
\renewcommand{\sparklineheight}{1.75}
\begin{sparkline}{10}
\spark
0.0864 0.924094
0.1783 0.958907
0.2702 0.564623
0.3621 0.103744
0.454 0
0.546 0.348773
0.6379 0.829403

```

0.7298 1  
0.8217 0.703719  
0.9136 0.212958 /  
\end{sparkline}}