Visualization of data from assays in microtitre plate or slide format

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The splots package provides a single function, `plotScreen`, for visualising data in microtitre plate or slide format. Here we show a short demo of its parameters. First, we generate example data:
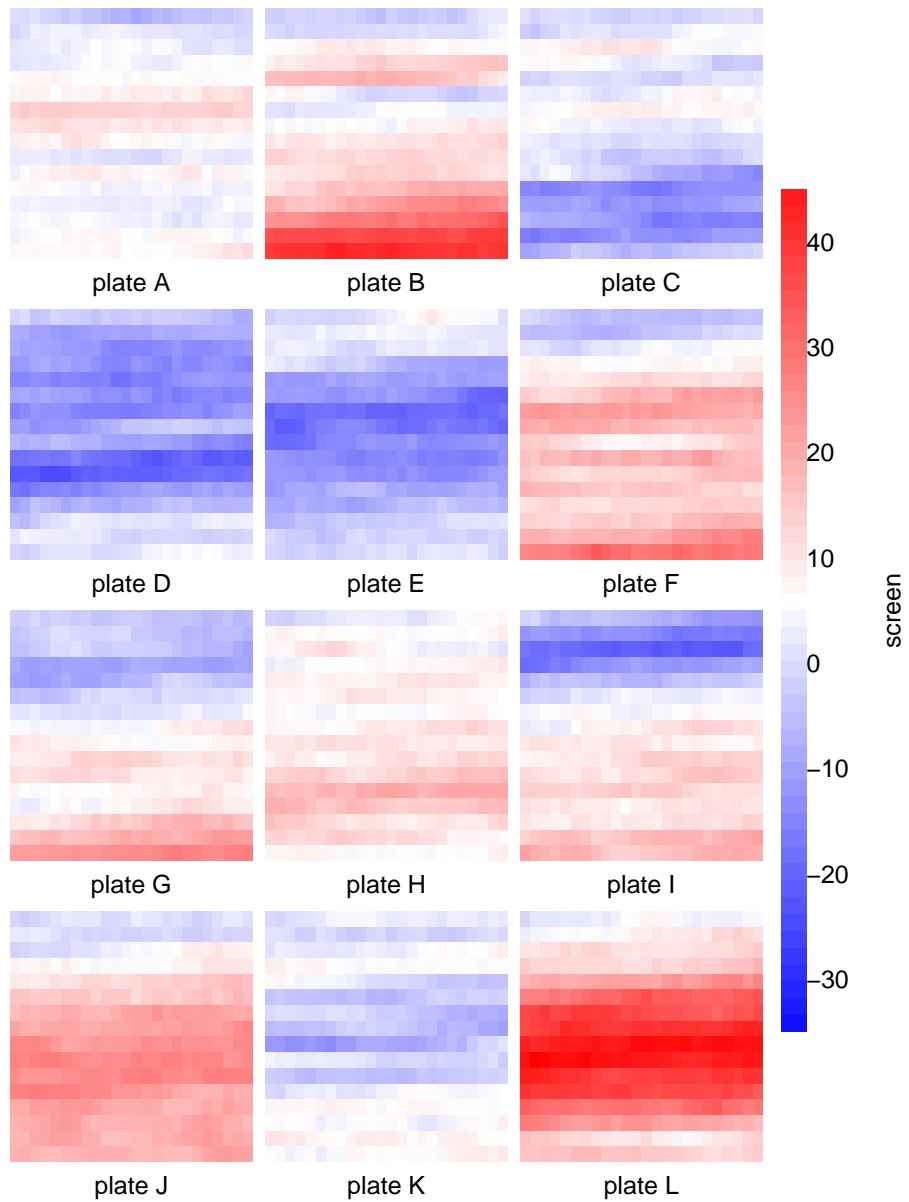
```
> library("splots")
> screen = lapply(1:12, function(i) cumsum(rnorm(384)))
> names(screen) = paste("plate", LETTERS[seq(along=screen)])
```
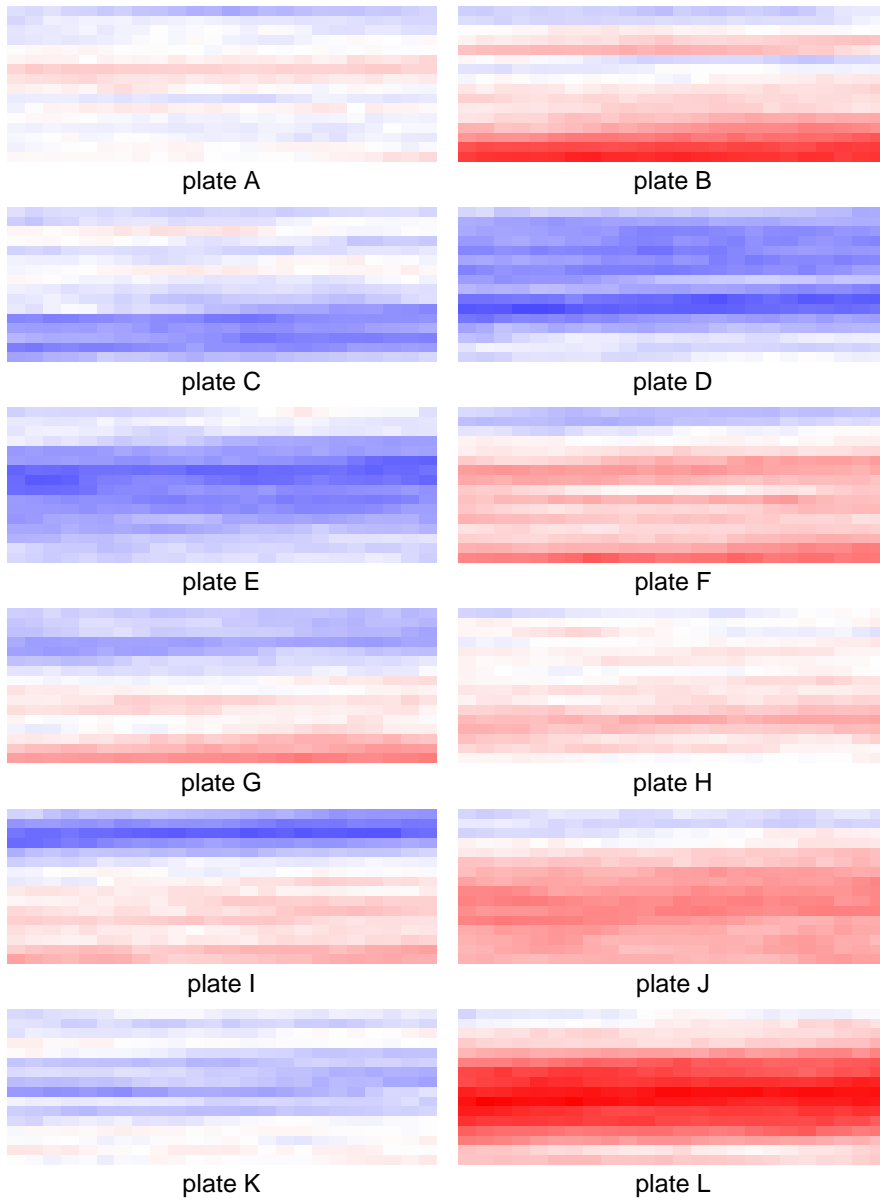
```
> toLatex(sessionInfo())
```

- R version 4.0.0 alpha (2020-04-05 r78150), `x86_64-apple-darwin17.0`

- Locale: `C/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8`

- Running under: `macOS Mojave 10.14.6`

- Matrix products: default

- BLAS: `/Library/Frameworks/R.framework/Versions/4.0/Resources/lib/libRblas.dylib`

- LAPACK: `/Library/Frameworks/R.framework/Versions/4.0/Resources/lib/libRlapack.dylib`

- Base packages: base, datasets, grDevices, graphics, methods, stats, utils

- Other packages: splots 1.53.0

- Loaded via a namespace (and not attached): RColorBrewer 1.1-2, compiler 4.0.0, grid 4.0.0, tools 4.0.0

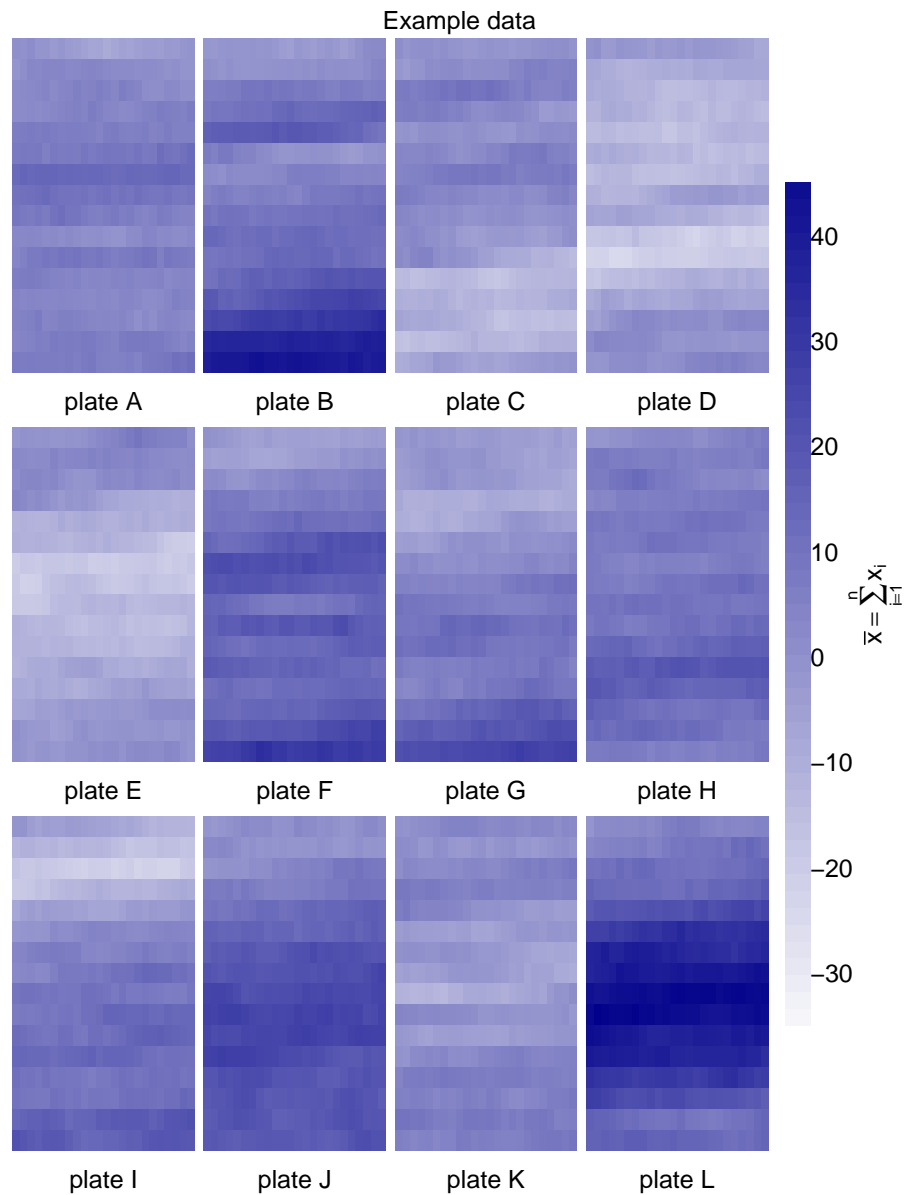Table 1: The output of `sessionInfo` on the build system after running this vignette.

plate A plate B plate C

plate D plate E plate F

plate G plate H plate I

plate J plate K plate L

```
> plotScreen(screen, ncol=2, do.legend=FALSE)
```


plate A

plate B

plate C

plate D

plate E

plate F

plate G

plate H

plate I

plate J

plate K

plate L

```
> plotScreen(screen, ncol=4, fill=c("white", "darkblue"),
+            main="Example data",
+            legend.label=expression(bar(x) == sum(x[i], i==1, n)))
```


Example data

```
> for(i in seq(along=screen))
+   screen[[i]][sample(384, 5)] = NA
> plotScreen(screen, ncol=4, do.names=FALSE,
+            main="Example data", legend.label="Legend label")
```

Example data