

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:

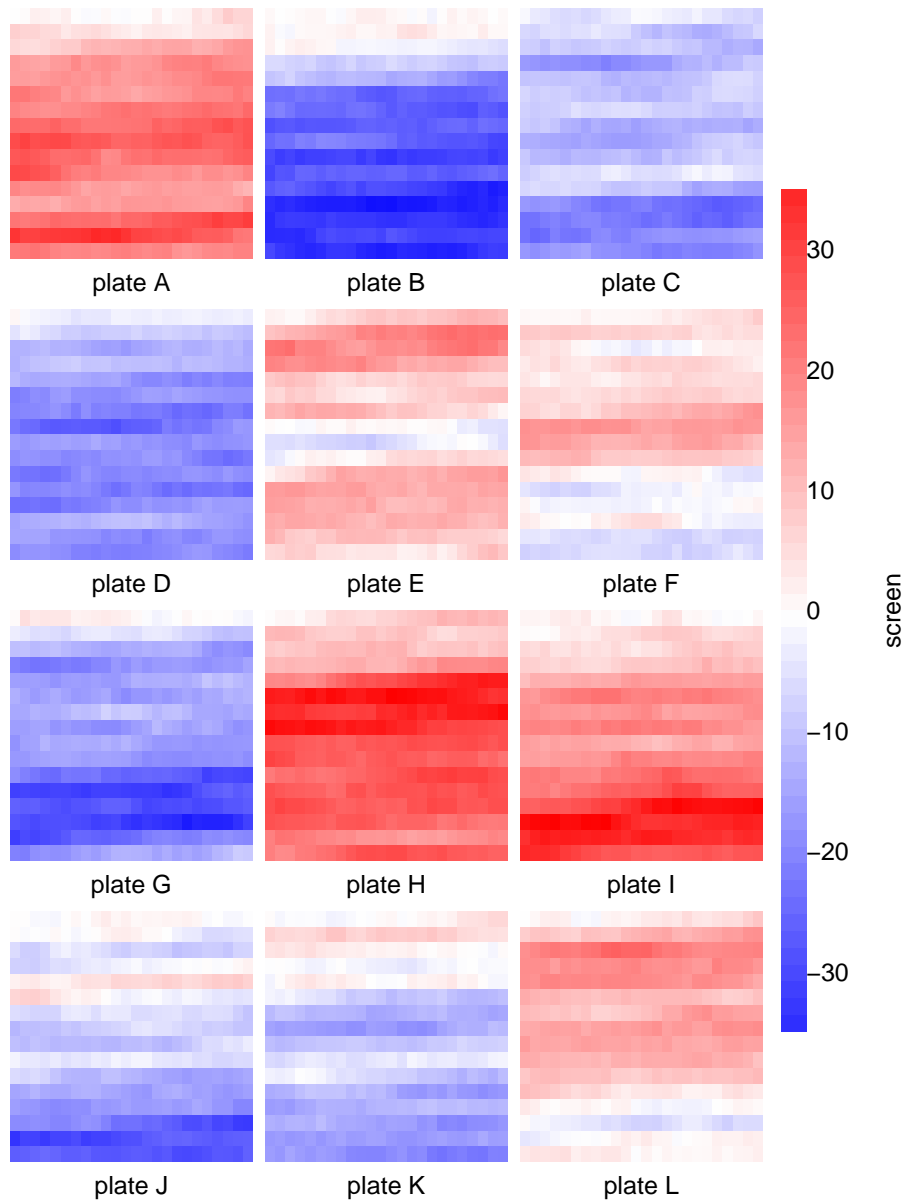
```
> library("splots")
> screen = lapply(1:12, function(i) cumsum(rnorm(384)))
> names(screen) = paste("plate", LETTERS[seq(along=screen)])
```

```
> toLatex(sessionInfo())
```

- R version 3.4.0 (2017-04-21), x86_64-pc-linux-gnu
- Locale: LC_CTYPE=en_US.UTF-8, LC_NUMERIC=C, LC_TIME=en_US.UTF-8, LC_COLLATE=C, LC_MONETARY=en_US.UTF-8, LC_MESSAGES=en_US.UTF-8, LC_PAPER=en_US.UTF-8, LC_NAME=C, LC_ADDRESS=C, LC_TELEPHONE=C, LC_MEASUREMENT=en_US.UTF-8, LC_IDENTIFICATION=C
- Running under: Ubuntu 16.04.2 LTS
- Matrix products: default
- BLAS: /home/biocbuild/bbs-3.5-bioc/R/lib/libRblas.so
- LAPACK: /home/biocbuild/bbs-3.5-bioc/R/lib/libRlapack.so
- Base packages: base, datasets, grDevices, graphics, methods, stats, utils
- Other packages: plots 1.42.0
- Loaded via a namespace (and not attached): RColorBrewer 1.1-2, compiler 3.4.0, grid 3.4.0, tools 3.4.0

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

```
> plotScreen(screen, ncol=3)
```



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



plate A

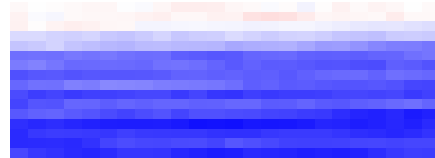


plate B

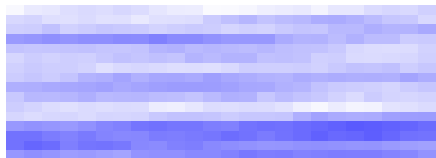


plate C

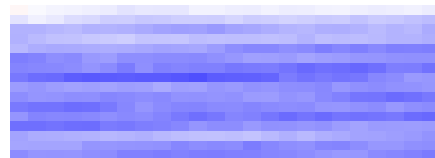


plate D

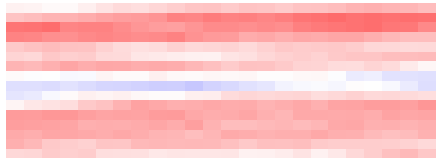


plate E

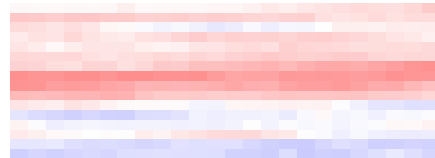


plate F

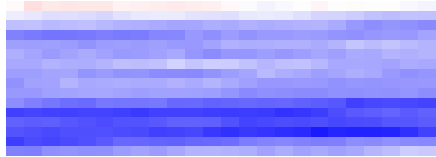


plate G



plate H

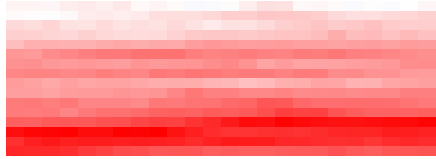


plate I

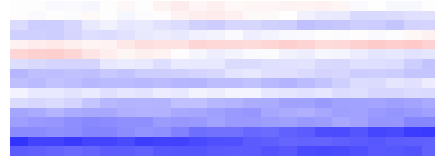


plate J

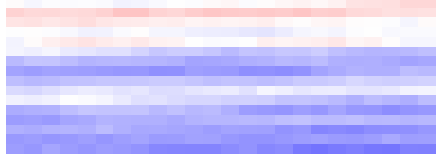


plate K

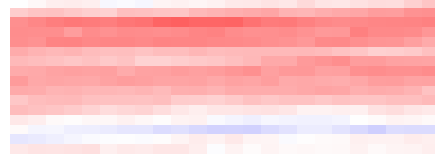
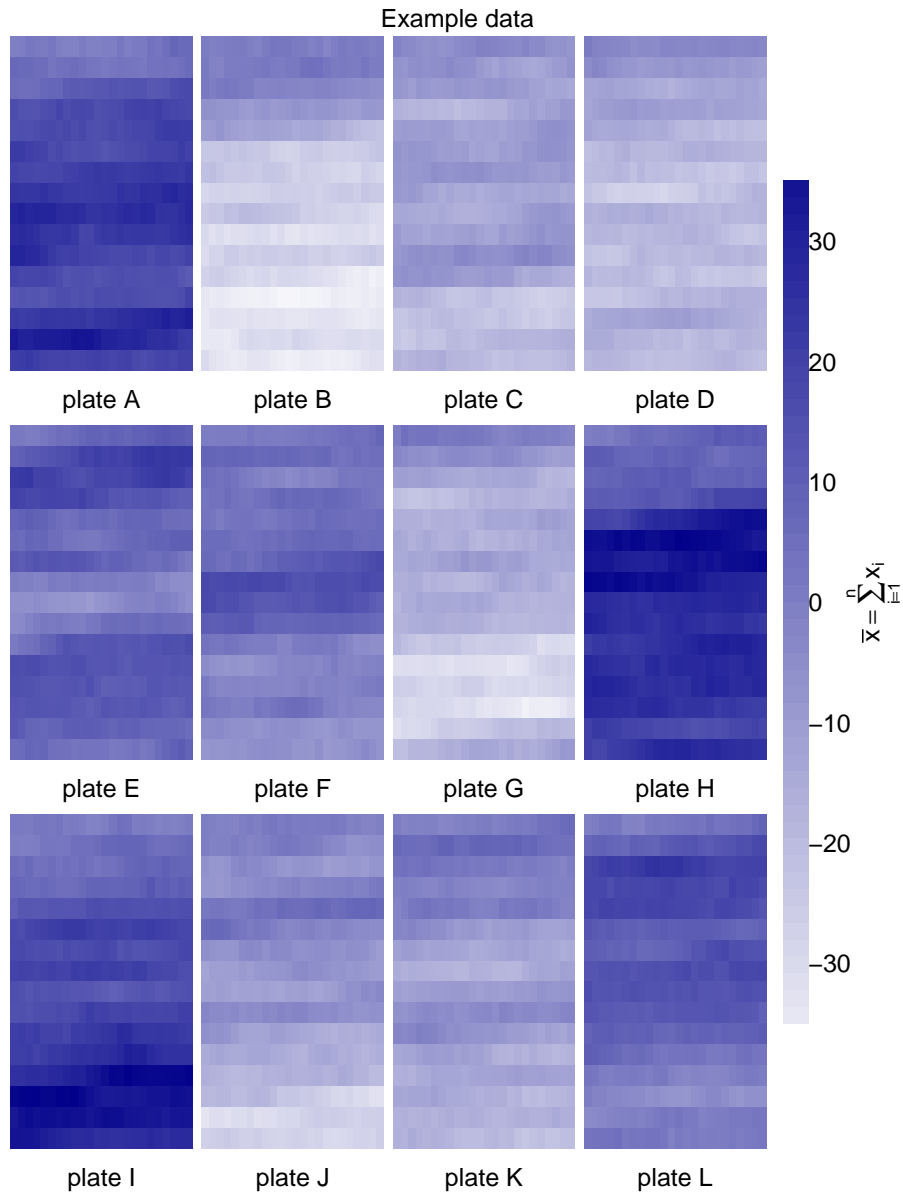


plate L

```

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

```



```
> 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")
```

