

Paul Johnson <pauljohn@ku.edu>
August 29, 2017

This does the usual R thing of creating a blank plot and then writing on it.

```
plot(c(0, 1), c(0, 1), xlim=c(0,1), ylim=c(0,1), type="n",
     ann=FALSE, axes=F)
rect(0, 0, 1, 1, col="light grey", border="grey")
axis(1, tck=0.01, pos=0, cex.axis=0.6, padj=-3, lwd=0.8,
     at=seq(0, 1, by=0.2), labels=c("", seq(0.2,0.8, by=0.2), ""))
axis(2, tck=0.01, pos=0, cex.axis=0.6, padj=3, lwd=0.3,
     at=seq(0, 1, by=0.2), labels=c("", seq(0.2,0.8, by=0.2), ""))
mtext(expression(x), side=1, line=0.5, at=.6, cex=.6)
mtext(expression(y), side=2, line=0.5, at=.6, cex=.6)
mtext(c("Min x", "Max x"), side=1, line=-0.5, at=c(0.05, 0.95),
     cex=.6)
mtext(c("Min y", "Max y"), side=2, line=-0.5, at=c(0.05, 0.95),
     cex=.6)
lines(c(.6, .6, 0), c(0, .6, .6), lty="dashed")
text(.6, .6, expression(paste("The location ",
                               group("(" , list(x[i] == .6, y[i] ==
                               .6), ")"))), pos=3, cex=.7)
points(.6, .6, pch=16)
```

We might be in teaching mode and we need to demonstrate the effect of each successive R function in the process of creating the figure. I ask for each intermediate plot by inserting fig.keep="all"

```
```\{r chunk76, ref.label='chunk71', echo=F, fig=T, include=F,
 fig.keep="all", collapse=T, fig.width=4, fig.height=4}
```
```

A quick check of the tmpout directory shows that this code created several graphs. Observe:

```
list.files("tmpout", pattern="p-chunk76.*pdf")
```

```
[1] "p-chunk76-1.pdf" "p-chunk76-10.pdf" "p-chunk76-11.pdf"
[4] "p-chunk76-2.pdf" "p-chunk76-3.pdf" "p-chunk76-4.pdf"
[7] "p-chunk76-5.pdf" "p-chunk76-6.pdf" "p-chunk76-7.pdf"
[10] "p-chunk76-8.pdf" "p-chunk76-9.pdf"
```

The problem I see is that the output figures are not uniform in their margins. Some have the large white space, some do not. I need to remedy this.

The margins are large on even numbered graphs and small on odd numbered.

1 Session Info

```
warnings()
```

```
NULL
```

```
sessionInfo()
```

```
R version 3.4.1 (2017-06-30)
Platform: x86_64-pc-linux-gnu (64-bit)
Running under: Ubuntu 17.04

Matrix products: default
BLAS: /usr/lib/libblas/libblas.so.3.7.0
LAPACK: /usr/lib/lapack/liblapack.so.3.7.0

locale:
 [1] LC_CTYPE=en_US.UTF-8      LC_NUMERIC=C
 [3] LC_TIME=en_US.UTF-8      LC_COLLATE=en_US.UTF-8
 [5] LC_MONETARY=en_US.UTF-8  LC_MESSAGES=en_US.UTF-8
 [7] LC_PAPER=en_US.UTF-8     LC_NAME=C
 [9] LC_ADDRESS=C             LC_TELEPHONE=C
[11] LC_MEASUREMENT=en_US.UTF-8 LC_IDENTIFICATION=C

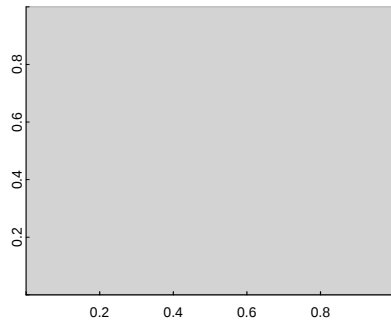
attached base packages:
[1] stats      graphics  grDevices  utils      datasets   base

other attached packages:
[1] crmda_0.34

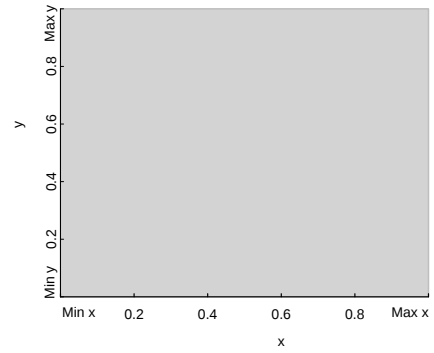
loaded via a namespace (and not attached):
 [1] Rcpp_0.12.11    digest_0.6.12   rprojroot_1.2  plyr_1.8.4
 [5] xtable_1.8-2    backports_1.1.0 magrittr_1.5    evaluate_0.10
 [9] stringi_1.1.5   openxlsx_4.0.17 rmarkdown_1.6   tools_3.4.1
[13] stringr_1.2.0   kutils_1.18     yaml_2.1.14     compiler_3.4.1
[17] htmltools_0.3.6 knitr_1.16      methods_3.4.1
```

Available under [Created Commons license 3.0](#)

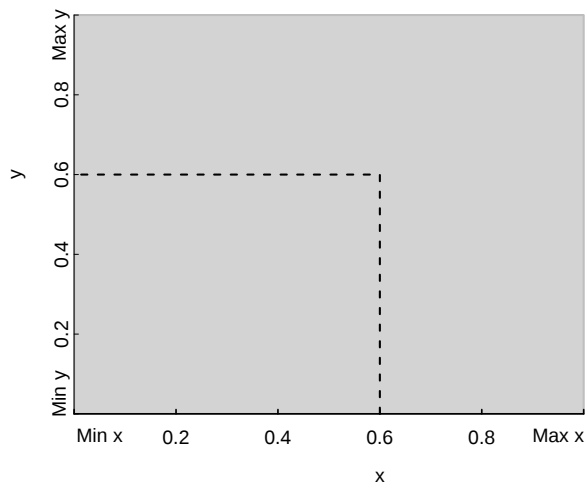
Figure 1: Four snapshots not all same margins



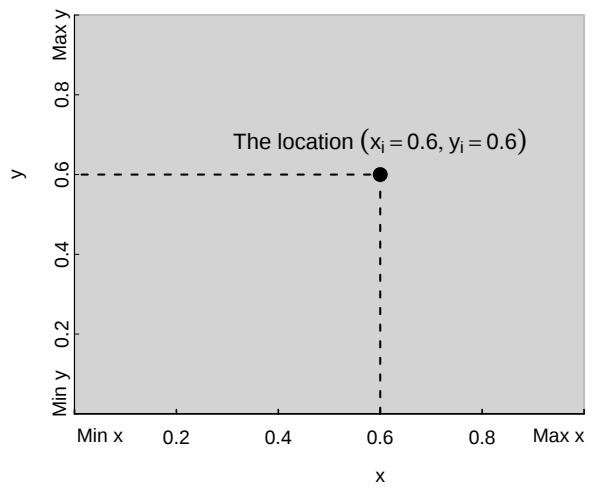
(a) graph 4



(b) graph 8

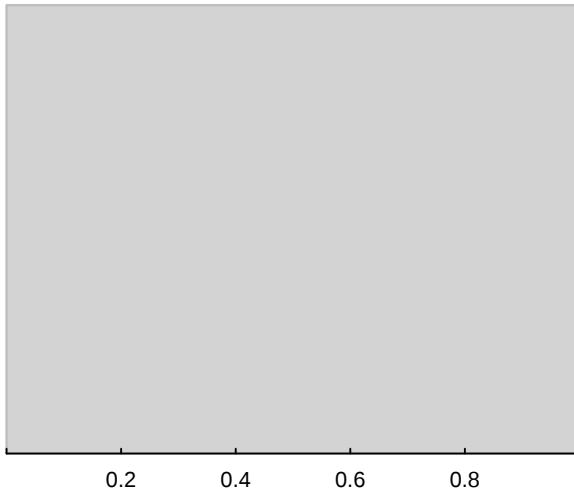


(c) graph 9

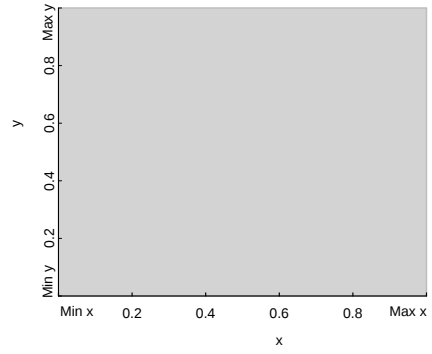


(d) graph 11

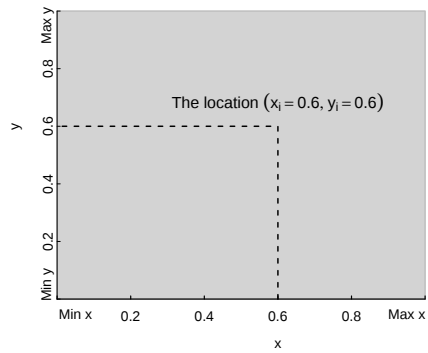
Figure 2: Checking the odd-even pattern



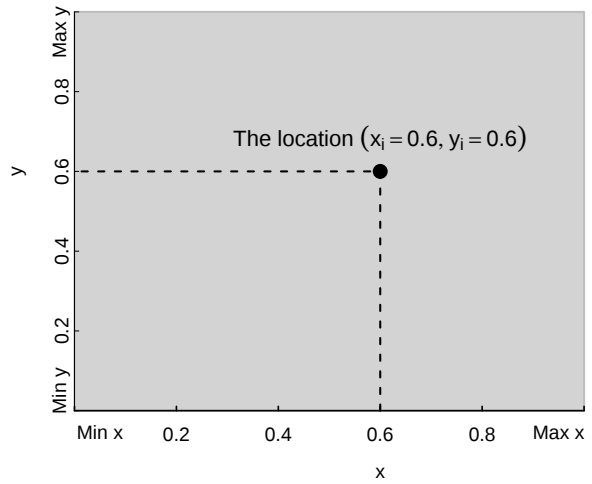
(a) graph 3



(b) graph 8



(c) graph 10



(d) graph 11