Data Science with R
Miscellaneous Plots in R

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In this module we explore a variety of plots generated using R. For plots based on **ggplot2** see the specific GGPlot2 module.

The required packages for this module include:

As we work through this module, new R commands will be introduced. Be sure to review the command's documentation and understand what the command does. You can ask for help using the **?** command as in:

```
?read.csv
```

We can obtain documentation on a particular package using the *help=* option of `library()`:

```
library(help=rattle)
```

This module is intended to be hands on. To learn effectively, you are encouraged to have R running (e.g., RStudio) and to run all the commands as they appear here. Check that you get the same output, and you understand the output. Try some variations. Explore.
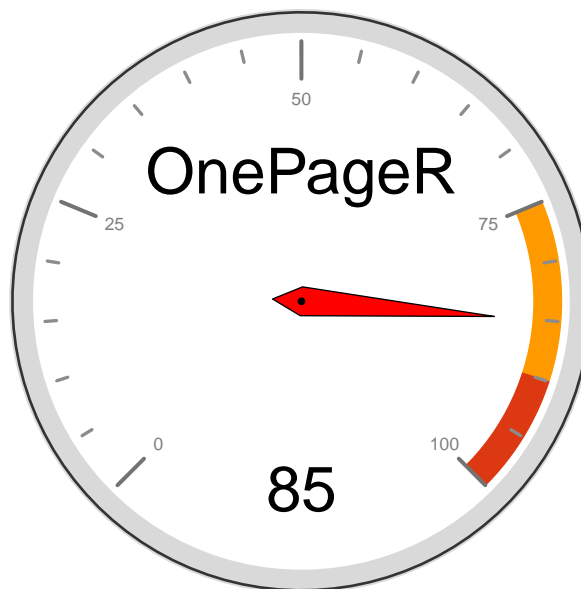
1   Dial Plot

The dial plot is available as the Google Gauge Plot. Pentaho Business Intelligence provides the dial plot for dashboards However, Hadley Wickham suggests we "are trying to understand your data, not driving a racing car or aeroplane." Hadley points us to the work of Stephen Few who presents the "powerful and eloquent" arguments and suggests alternatives for the most effective presentation of data.

Nonetheless, Gaston Sanchez wrote and Jeff Hemsley modified a version of `dial.plot()` for R.

```
source("http://onepager.togaware.com/dial.plot.R")
dial.plot(label="OnePageR", value=85)
```

2 Dashboard

```
opar <- par(mfrow=c(2,3))
dial.plot(label="Temperature", label.cex=1, value=85, value.cex=2)
dial.plot(label="Humidity", label.cex=1, value=5, value.cex=2)
dial.plot(label="Sunshine", label.cex=1, value=65, value.cex=2)
dial.plot(label="Rainfull", label.cex=1, value=0, value.cex=2)
dial.plot(label="Electricity\nGenerated", label.cex=1, value=55, value.cex=2)
dial.plot(label="Electricity\nConsumed", label.cex=1, value=40, value.cex=2)
```
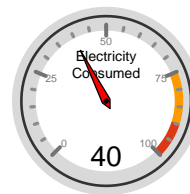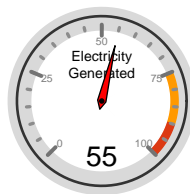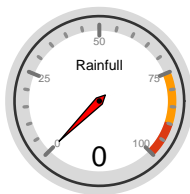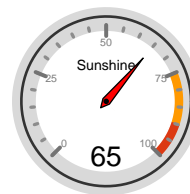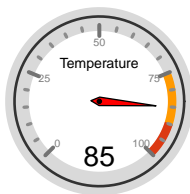
3   Further Reading

4   References

R Core Team (2013). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria. URL http://www.R-project.org/.

Williams GJ (2009). "Rattle: A Data Mining GUI for R." *The R Journal*, **1**(2), 45–55. URL http://journal.r-project.org/archive/2009-2/RJournal_2009-2_Williams.pdf.

Williams GJ (2011). *Data Mining with Rattle and R: The art of excavating data for knowledge discovery.* Use R! Springer, New York. URL http://www.amazon.com/gp/product/1441998896/ref=as_li_qf_sp_asin_tl?ie=UTF8&tag=togaware-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=1441998896.