



ART FROM DATA

1 Email Ticketing System

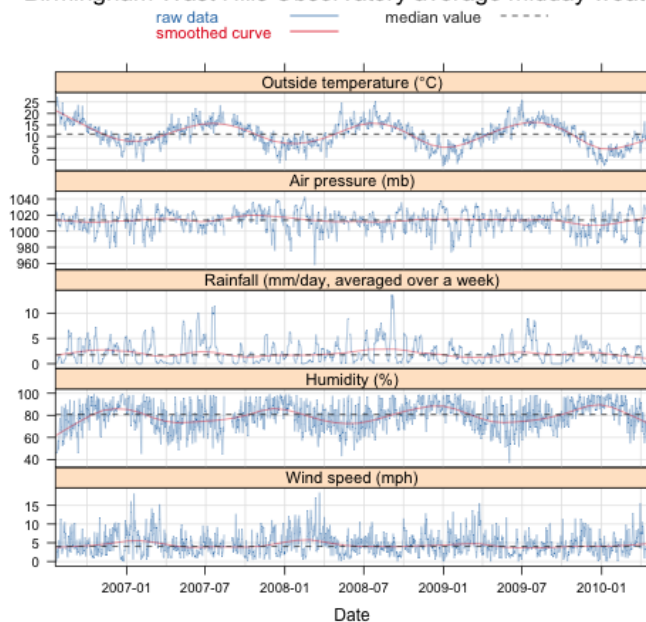
Multi-Channel, Ticketing, Integrations, Kbase, Forums and Much More. Freshdesk

2 Singapore Dollar Is Tumbling - After This Big Announcement

Many Singaporeans Don't Know But This Announcement Is Not Good For Singapore Citizens ceansable.com

#105 PLOTTING TIME SERIES

Birmingham West Hills Observatory average midday weather



This graph has been made by [Alastair Sanderson](#). You can have a look to his gallery [here](#) !

The [lattice package](#) is really usefull to represent multiple [time series](#) like this R chart of [daily weather measurements](#) taken at the University of Birmingham.

```
##--Load previously saved data:
path <- "http://www.sr.bham.ac.uk/~ajrs/R/datasets"
a <- load(url(paste(path,"middayweather.RData", sep="/")))
close(url(paste(path,"middayweather.RData", sep="/")))
print(a) # list names of saved objects

##--Load extra libraries:
require(lattice)

##--The following was used to define the colours, but since it's a non-standard
# package, I've used the hexadecimal colour codes explicitly below to avoid the
# need to install "RColorBrewer". See http://colorbrewer2.org/ for more info.
#require(RColorBrewer)
#colset <- brewer.pal(5, "Set1")

##--Change output device to pdf file:
trellis.device(device="png", file="midday_weather_profiles.png", width = 480, height = 480, color=TRUE)

##--Define plot titles:
lab.wind.speed <- "Wind speed (mph)"
lab.hum <- "Humidity (%)"
lab.rain <- "Rainfall (mm/day, averaged over a week)"
lab.bar <- "Air pressure (mb)"
lab.T.out <- as.expression(expression( paste("Outside temperature (", degree*C, ")") ))

##--Custom strip function:
# (NB the colour used is the default lattice strip background colour)
my.strip <- function(which.given, which.panel, ...) {
  strip.labels <- c(lab.wind.speed, lab.hum, lab.rain, lab.bar, lab.T.out)
```

```

panel.rect(0, 0, 1, 1, col="#ffe5cc", border=1)
panel.text(x=0.5, y=0.5, adj=c(0.5, 0.55), cex=0.95,
          lab=strip.labels[which.panel[which.given]])
}

##--Define X axis date range:
xlim <- range(middayweather$Date)

##--Define annual quarters for plot grid line markers:
d <- seq(from=as.Date("2006-01-01"), to=as.Date("2011-01-01"), by=365/4)

##--Define colours for raw & smoothed data:
col.raw <- "#377EB8" #colset[2] } see note above
col.smo <- "#E41A1C" #colset[1] }
col.lm <- "grey20"

##--Create multipanel plot:
xyplot(wind.speed + hum.out + rain + bar + T.out ~ Date, data=middayweather,
       scales=list(y="free", rot=0), xlim=xlim,
       strip=my.strip, outer=TRUE, layout=c(1, 5, 1), ylab="",
       panel=function(x, y, ...) {panel.grid(h=-1, v=0) # plot default horizontal gridlines
        panel.abline(v=d, col="grey90") # custom vertical gridlines
        panel.xyplot(x, y, ..., type="l", col=col.raw, lwd=0.5) # raw data
        panel.loess(x, y, ..., col=col.smo, span=0.14, lwd=0.5) # smoothed data
        panel.abline(h=median(y, na.rm=TRUE), lty=2, col=col.lm, lwd=1) # median value
      },
       key=list(text=list(c("raw data", "smoothed curve", "median value")),
               title="Birmingham West Hills Observatory average midday weather",
               col=c(col.raw, col.smo, col.lm), lty=c(1, 1, 2),
               columns=2, cex=0.95,
               lines=TRUE
               ),
       )

```

Not what you are looking for ? Make a new search !

- 1
Singapore Dollar Is Tumbling - After This Big Announcement
Many Singaporeans Don't Know But This Announcement Is Not Good For Singapore Citizens ceansable.com

- 2
Freshservice IT Help Desk
Complete Ticketing, Change, Knowledge base, Asset Management & More Freshservice

Search ...

SEARCH

[mediatagger]

Beginner's Guide to
Spatial, Temporal and
Spatial-Temporal Ecological
Data Analysis with R-INLA
Volume 1: Using GLM and GEMM
Elena N Ieno Ananya A Saveliev
Original Research Book

Beginner's Guide to
Spatial, Temporal
and Spatial-
Temporal Ecological
Data Analysis with
R-INLA
Zuur, Ieno, Saveliev

jumping rivers

TRAINING: R, SCALA, STAN

Learn R By Doing
www.DataCamp.com

Start Free Course

Springboard

Introduction to
Data Science

Start learning online

2 LEAVE A REPLY


Join the discussion...

2
0
2
⚡
🔥

☐
Subscribe
▼

▲ newest
▲ oldest
▲ most voted

Valentina

Guest

Good afternoon,

Thanks for the script, it works perfect. How can I do to show on the x-axis every month of every year and not just some of them?

Many thanks in advance.

Valentina

+ 1 -

[Reply](#)

🕒 5 months ago



Manoj Oak



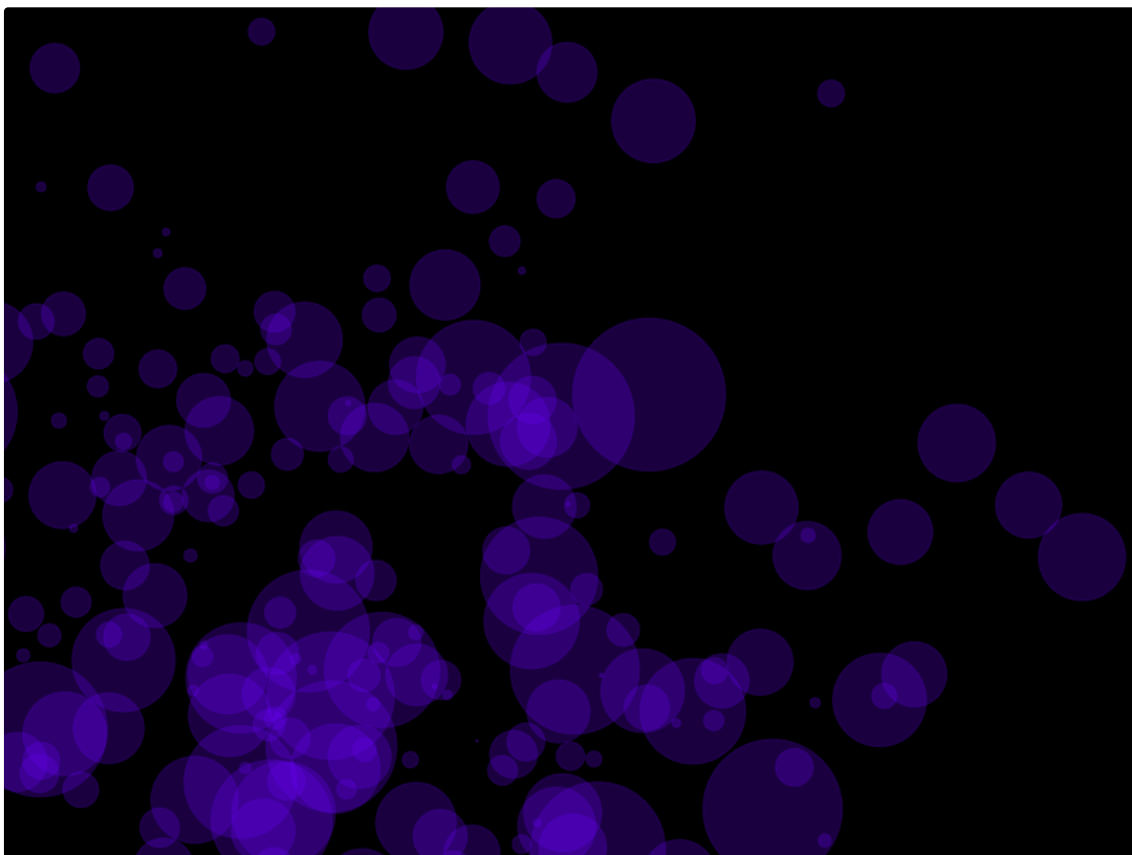
Nice graphs, but I am new to R, the website is fantastic.

Guest

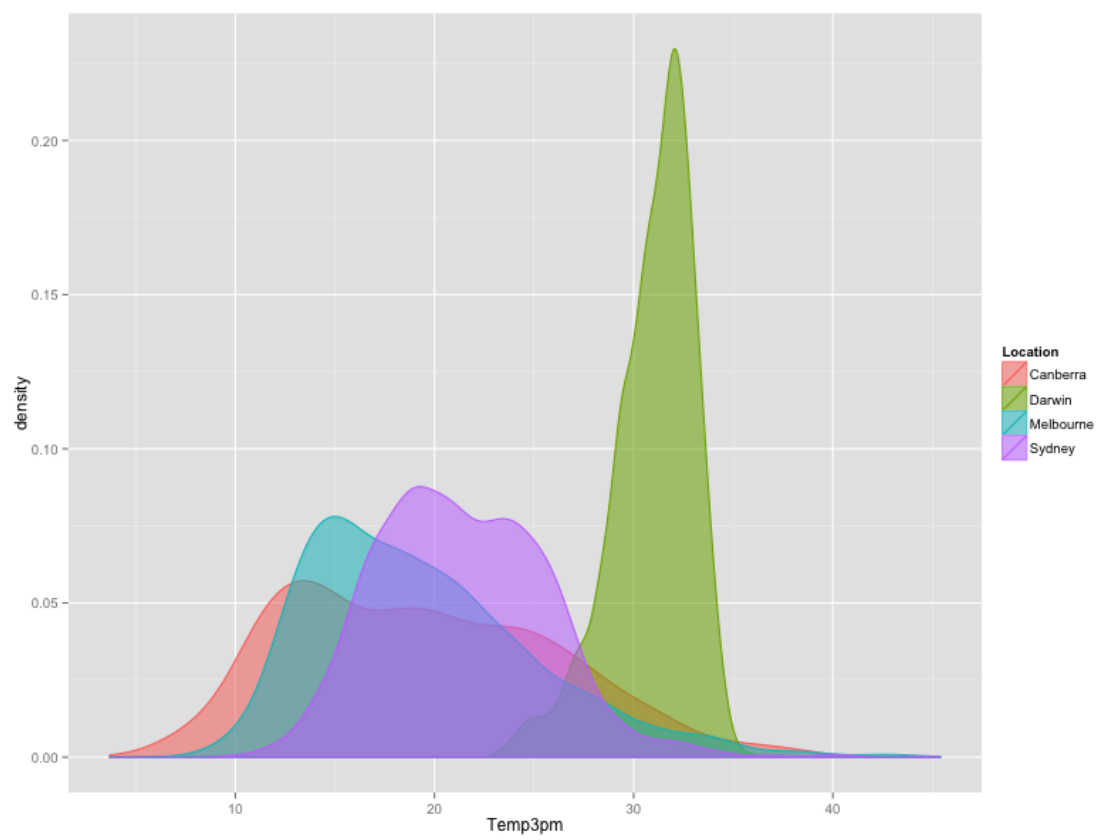
+ 1 -

[Reply](#)

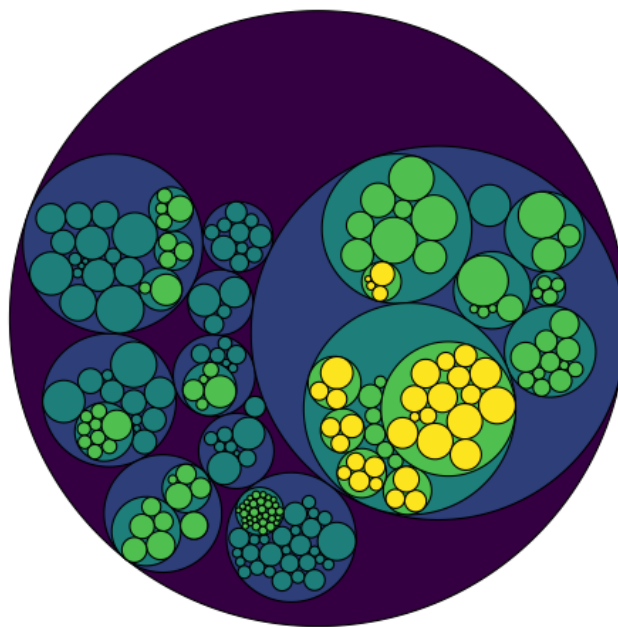
🕒 2 years ago



ART FROM DATA

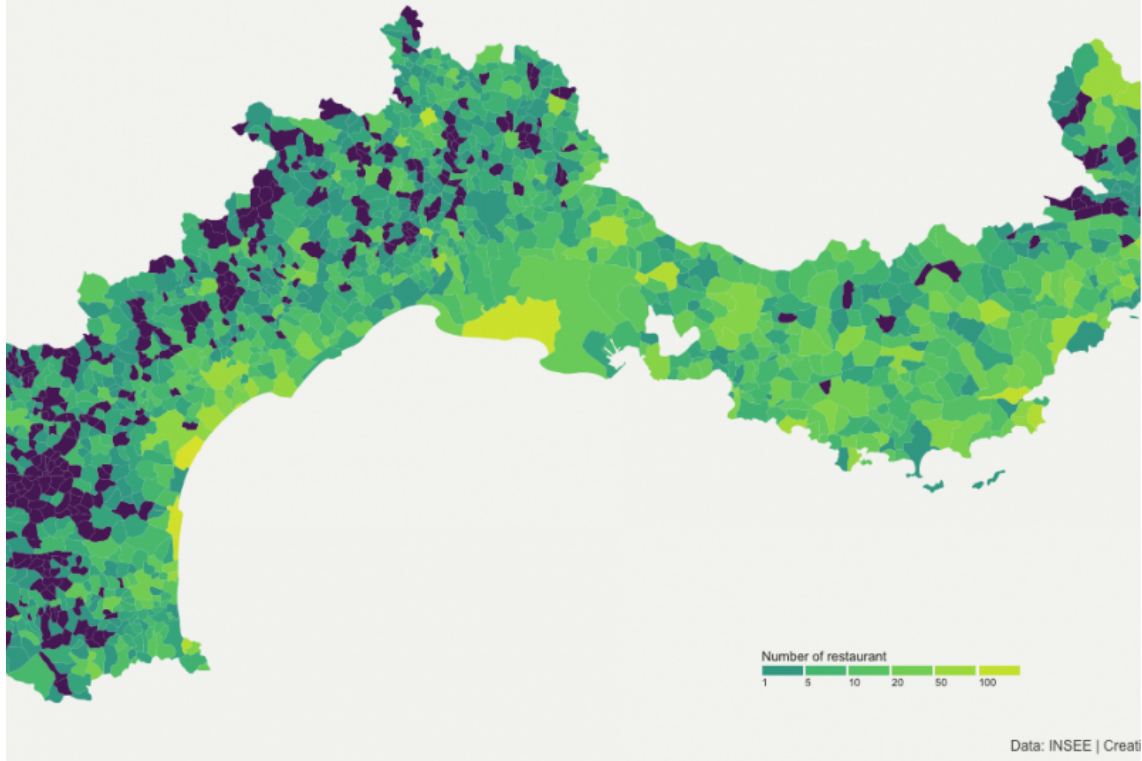


GENERAL GGPLOT2 TIPS



WHAT IS CIRCLE PACKING?

restaurant concentration
per city district



CHOROPLETH MAP WITH GGPLOT2



THE R GRAPH GALLERY IS A PROJECT BY YAN HOLTZ

COPYRIGHT © 2017 | TERMS | LICENSE

