Instructions for creating plots in R for JNAFS

The specifications for the figures should be as follows:

Boxes/axis lines/tick markers .5pt black

Graph lines
Dotted: 1 pt black
Dashed: .75 pt black
Solid: .75 pt black

Text
Headings: 9 point size Arial Regular
Numbers on axis: 7 point size Arial Regular

Save the plot as a windows metafile or svg file.

Please find examples on how to do so below:

If you are using the ggplot2 package:

```
ggsave("testJNAFS1.svg") #or

ggsave("testJNAFS2.wmf")
```

If you prefer to use base R:

```
data("iris")# Example data iris
plot(iris$Sepal.Length, iris$Petal.Length,
     col = iris$Species,
     main = "Sepal vs Petal Length in Iris")
```

Save the plot as a .wmf file

```
win.metafile("baseRwmf.wmf")
plot(iris$Sepal.Length, iris$Petal.Length,
      col = iris$Species,
      main = "Sepal vs Petal Length in Iris")
dev.off()
```

Save the plots as an .svg file

```
svg("baseRSVG.svg")
plot(iris$Sepal.Length, iris$Petal.Length,
     col = iris$Species,
```

```
     main = "Sepal vs Petal Length in Iris")
dev.off()
```

Add a theme

Below is an example of a theme using the **ggplot2** package and the “pressure” data set. To import the pressure data set, run >data(“pressure”). Adjust it so it fits your plot.

The extrafont package is used to set your desired font, in this case Arial. The svglite package is only needed if you are saving your file as an .svg file.

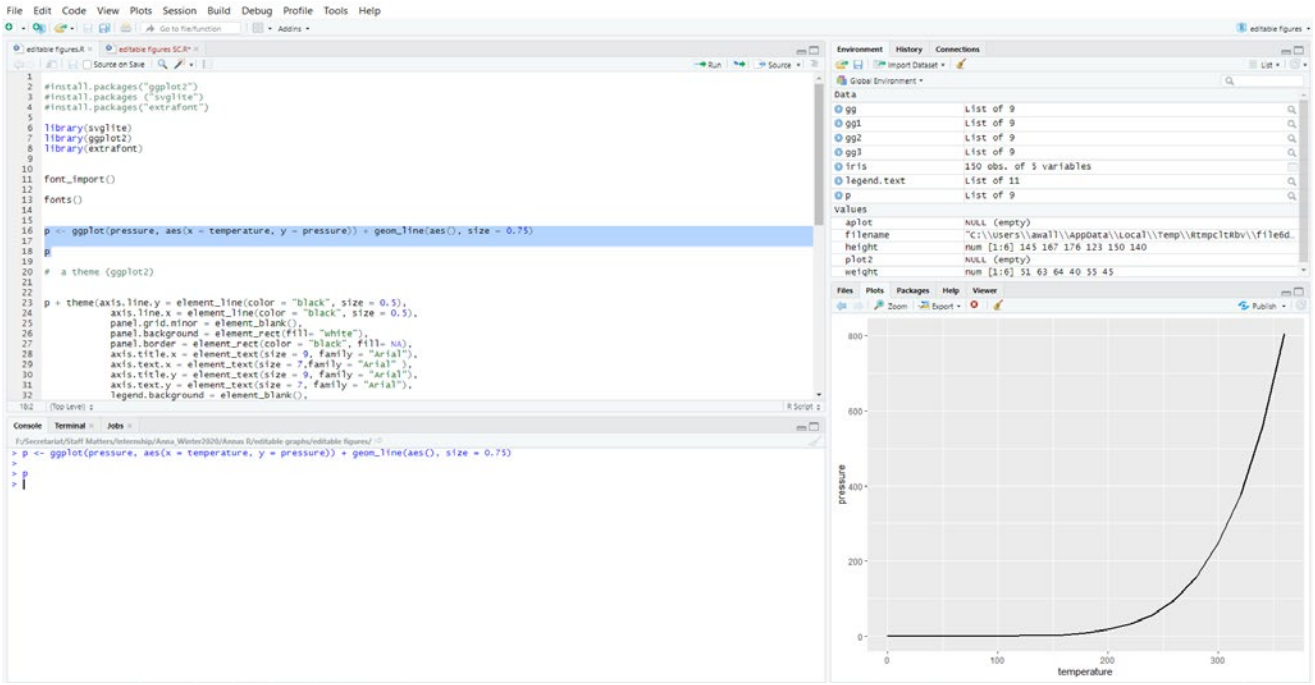
```
#install.packages("ggplot2")
#install.packages ("svglite")
#install.packages("extrafont")

library(svglite)
library(ggplot2)
library(extrafont)

font_import()

fonts()

data(“pressure”)

p <- ggplot(pressure, aes(x = temperature, y = pressure)) + geom_line(aes(), size
0.75)
```

Add a theme (p is the name you have assigned to your plot). Below is an example of what the theme could look like:

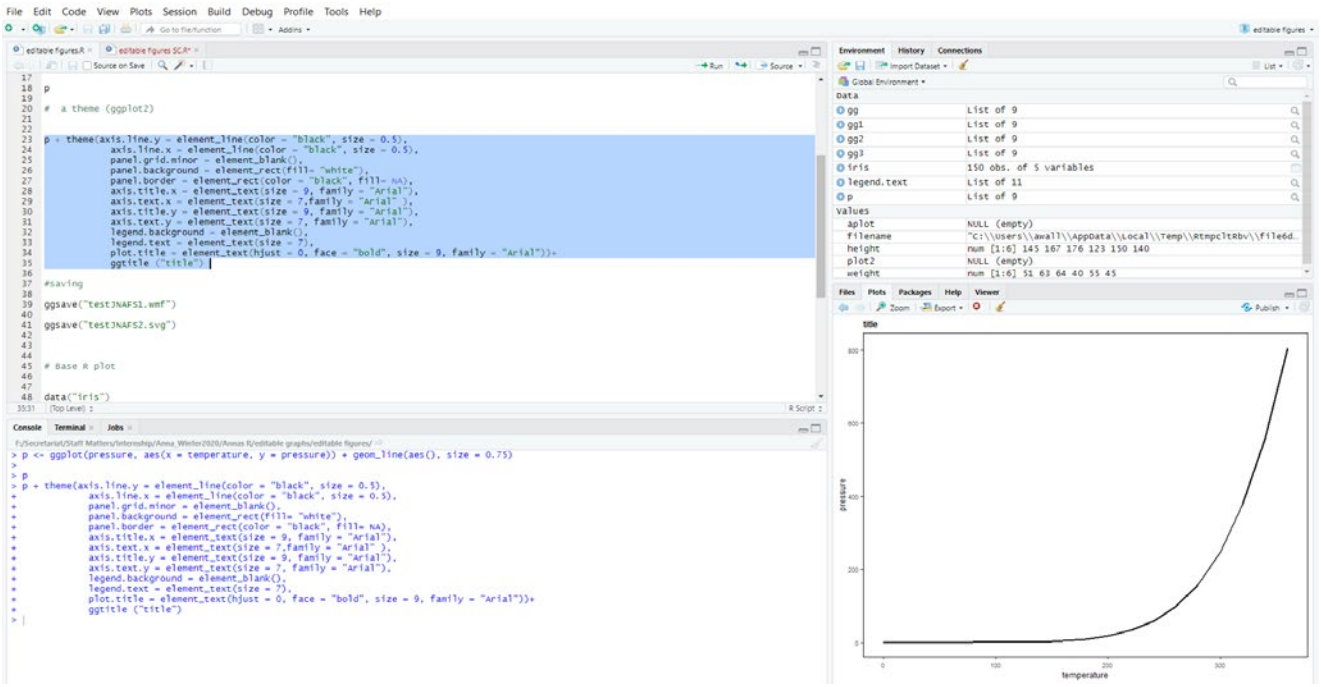
```
p + theme(axis.line.y = element_line(color = "black", size = 0.5),
            axis.line.x = element_line(color = "black", size = 0.5),
            panel.grid.minor = element_blank(),
            panel.background = element_rect(fill= "white"),
            panel.border = element_rect(color = "black", fill= NA),
            axis.title.x = element_text(size = 9, family = "Arial"),
            axis.text.x = element_text(size = 7,family = "Arial" ),
            axis.title.y = element_text(size = 9, family = "Arial"),
            axis.text.y = element_text(size = 7, family = "Arial"),
            legend.background = element_blank(),
            legend.text = element_text(size = 7),
            plot.title = element_text(hjust = 0, face = "bold",
            size = 9, family = "Arial"))+
            ggtitle ("title")

ggsave(“myPlot.wmf”)
```

R script in 3 pictures

1. Create a plot and set the graph line size to 0.75 pt



2. Add the theme to your plot, adjust as necessary for your plot:



3. Save the plot using ggsave(“myPlot.wmf”):