

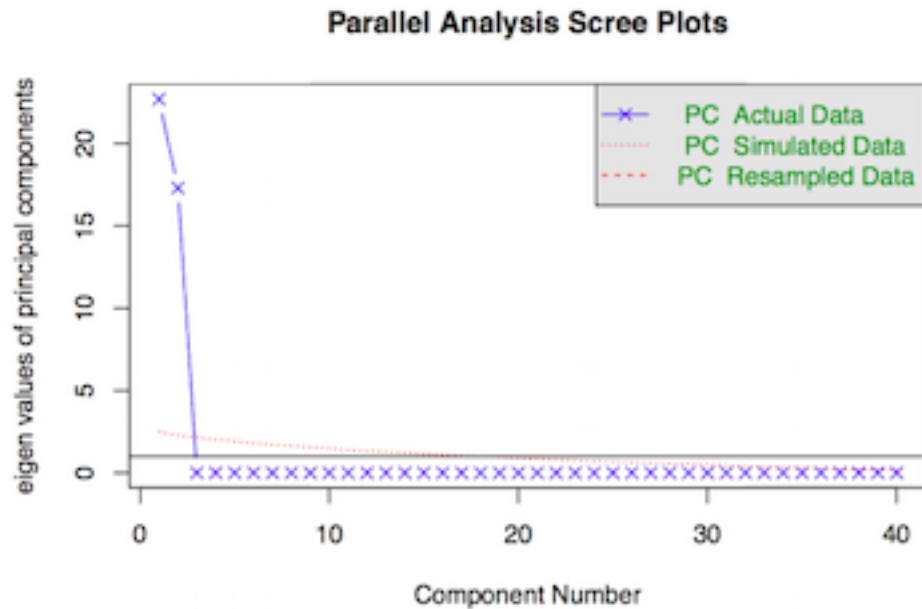
Lecture 8a

What should you be aware of when using the rainbow colormap with plots?

- All of these
- After the ROYGBIV colors are exhausted the colors will start repeating
- Certain colors, such as yellow, are hard to distinguish on some screens
- Our eyes tend to focus on colors that “pop”, potentially biasing our interpretation of the plot

Lecture 8b

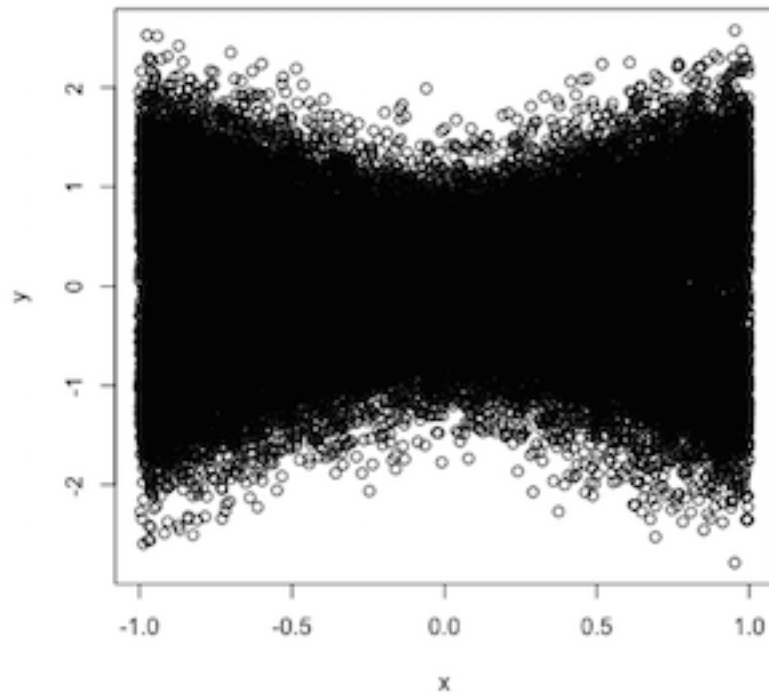
A scree plot displays eigenvalues associated with components or factors and can help determine the number of factors that display most of the variability in a given data set. Using the scree plot below, what is the ideal number of factors for PCA from this data set?



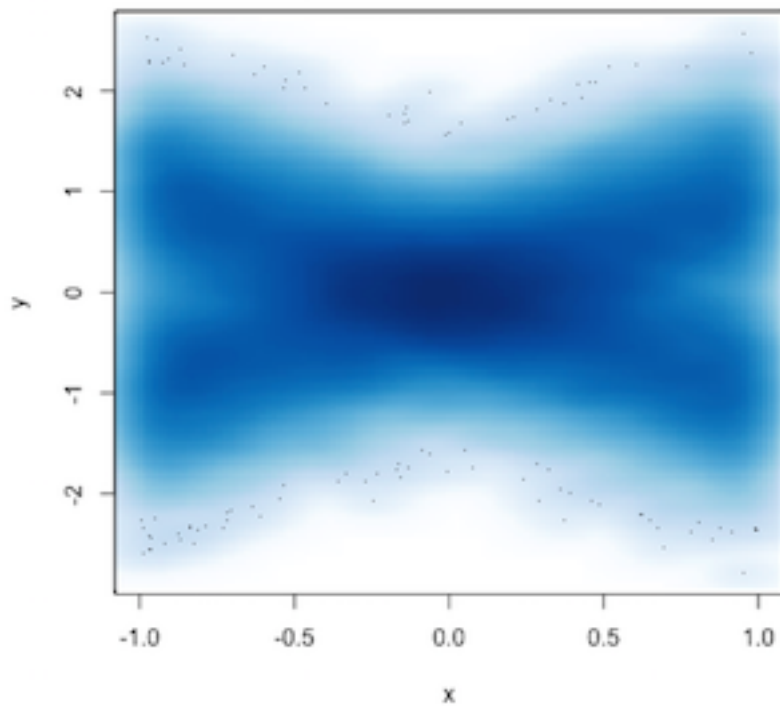
- 2
- 1
- 3
- 40

Lecture 9b

You create the plot below.



Realizing this display format does not tell you much about the data, you plot the same data, this time creating the new plot below.



What can be said about this new plot?

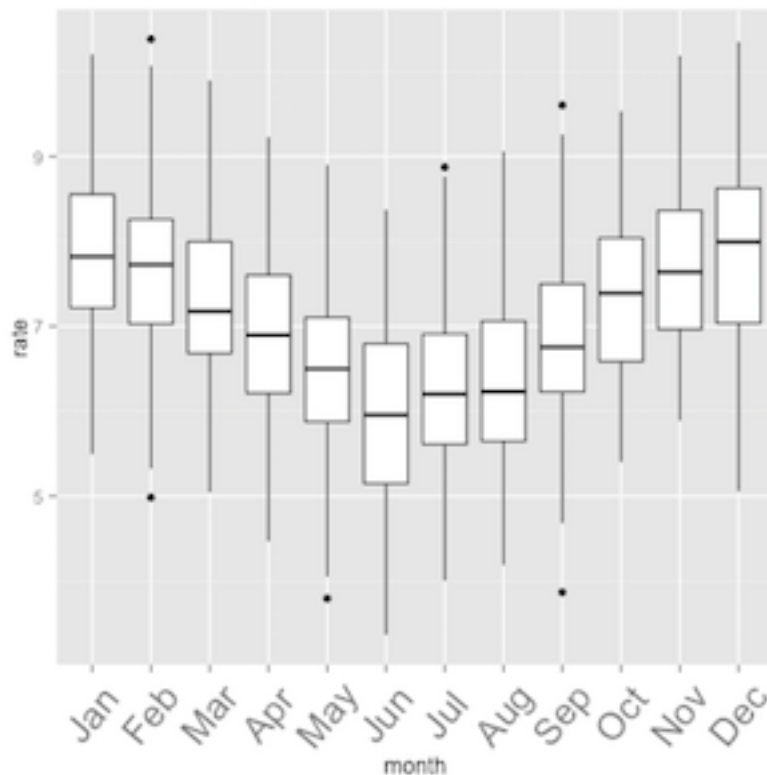
- It is a smooth scatter, or density plot, useful when a data set displays overplotting

- It is a blurred scatter, useful when a data set displays overplotting
- It not considered a scatter or density plot at all
- It requires a special package in R to produce

Lecture 9b

The following code generates the plot below:

```
g2 + geom_boxplot() + theme(axis.text.x=element_text(angle=50, size=20, vjust=0.5))
```



What do the box and whisker represent in the plot?

- The interquartile range (the middle half of the data set), and the median of the data, respectively
- The most common values in the data set, and the median of the data, respectively
- The interquartile range (the middle half of the data set), and the mean of the data
- The middle 25% of the data, and the median of the data, respectively