

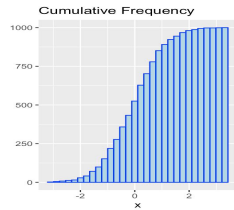
Histogram

base R:

```
hist(v,main,xlab,xlim,ylim,breaks,col,border)
```

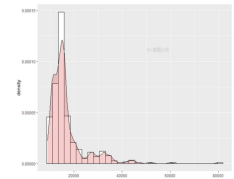
ggplot2:

```
ggplot(df, aes(x)) +  
geom_histogram(color,fill,binwidth)
```



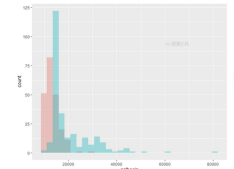
Cumulative frequency histogram

```
ggplot(df, aes(x = x)) +  
geom_histogram(aes(y =  
cumsum(..count..),color = "blue", fill =  
"lightblue")) +  
ggtitle("Cumulative Frequency")
```



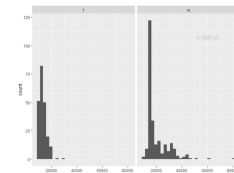
Histograms and Density Plots

```
ggplot(df,aes(x=x))+  
geom_histogram(aes(y =..density..),  
col,fill)+  
geom_density()
```



Histogram by group

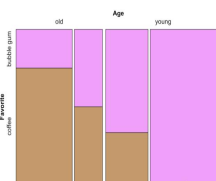
```
ggplot(df,aes(x=x,fill=group))+  
geom_histogram
```



Panel histogram

```
ggplot(df,aes(x))+  
geom_histogram()+  
facet_grid(.~y)  
y:the variable that group
```

Mosaic Plot



```
mosaic(x ~ variable,df,direction,  
highlighting_fill,rot_labels)
```

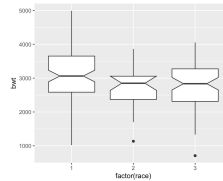
Boxplot

base R:

```
boxplot(x,data, xlab,ylab,main)
```

ggplot2:

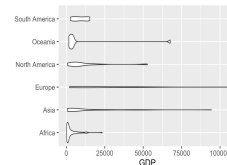
```
ggplot(df, aes(x y)) +  
geom_boxplot()+coord_flip() (Transpose)
```



Notched boxplot

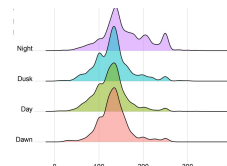
```
ggplot(df, aes(x,y)) +  
geom_boxplot(notch = TRUE)
```

Violin Plot



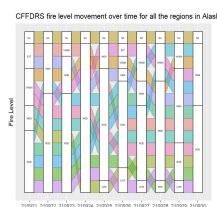
```
ggplot(df, aes(x,y)) +  
geom_violin()
```

Ridgeline Plot



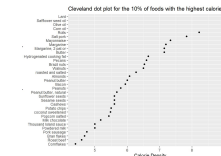
```
ggplot(df, aes(x,y)) +  
geom_density_ridges()
```

Ggalluvial



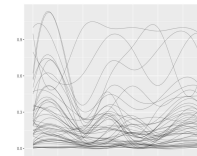
```
ggplot(df, aes(x,y,stratum ,alluvium)) +  
geom_alluvium(aes(fill),color)+  
geom_stratum()+geom_label()
```

Cleveland Dot Plot



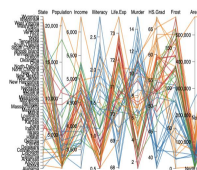
```
ggplot(df, aes(x,y)) +  
geom_point()
```

Parallel Coordinates Plot



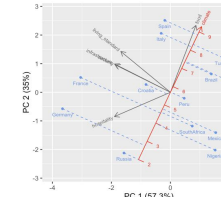
```
GGally::ggparcoord(  
df,columns=m:n,alphaLines,  
scale,splineFactor)
```

Interactive Parcoords Plot



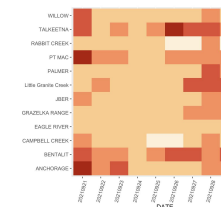
```
parcoords(df,brushMode,  
reorderable,color=list(  
colorBy,colorScale,  
colorScheme),withD3 = TRUE)
```

Biplot



```
draw_biplot(df,'calibrated axis',  
project = FALSE)
```

Heatmap



```
ggplot(df,aes(x,y))+  
geom_tile(fill)
```