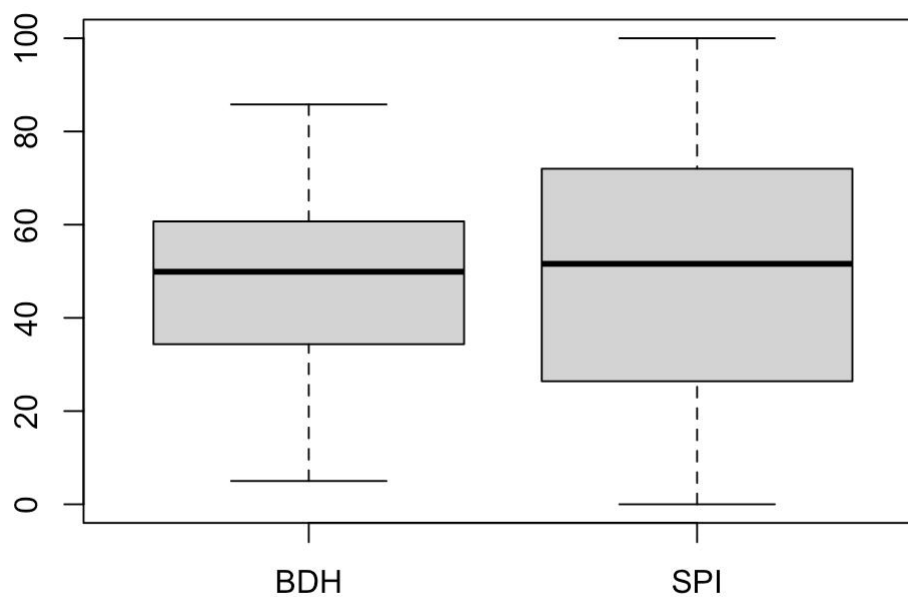


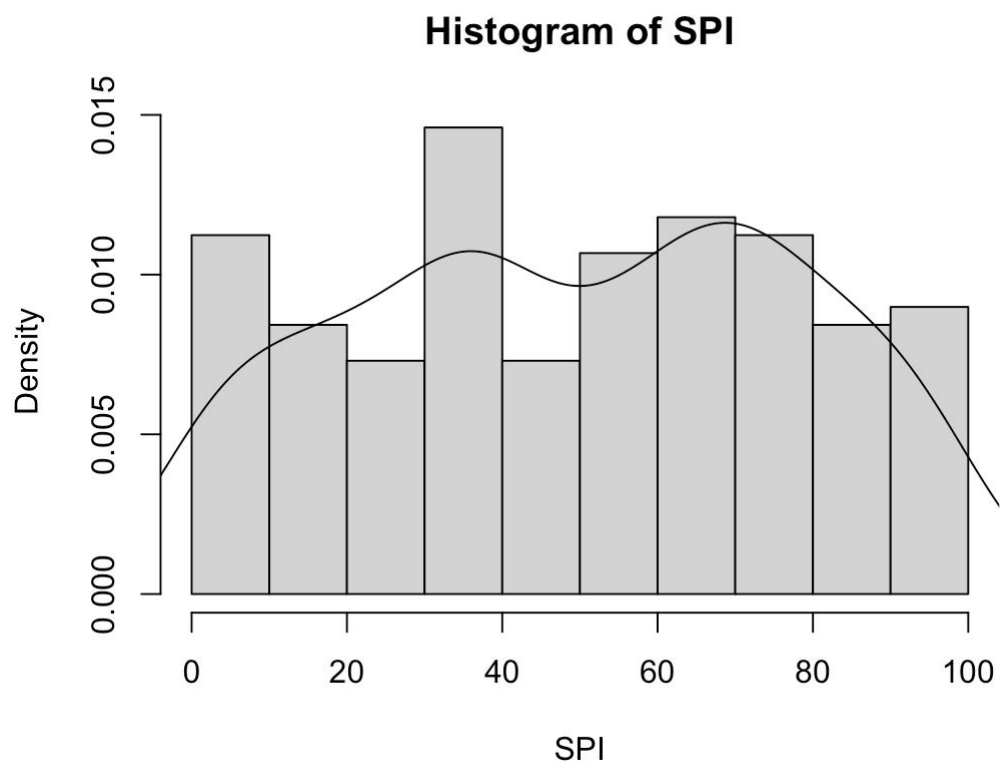
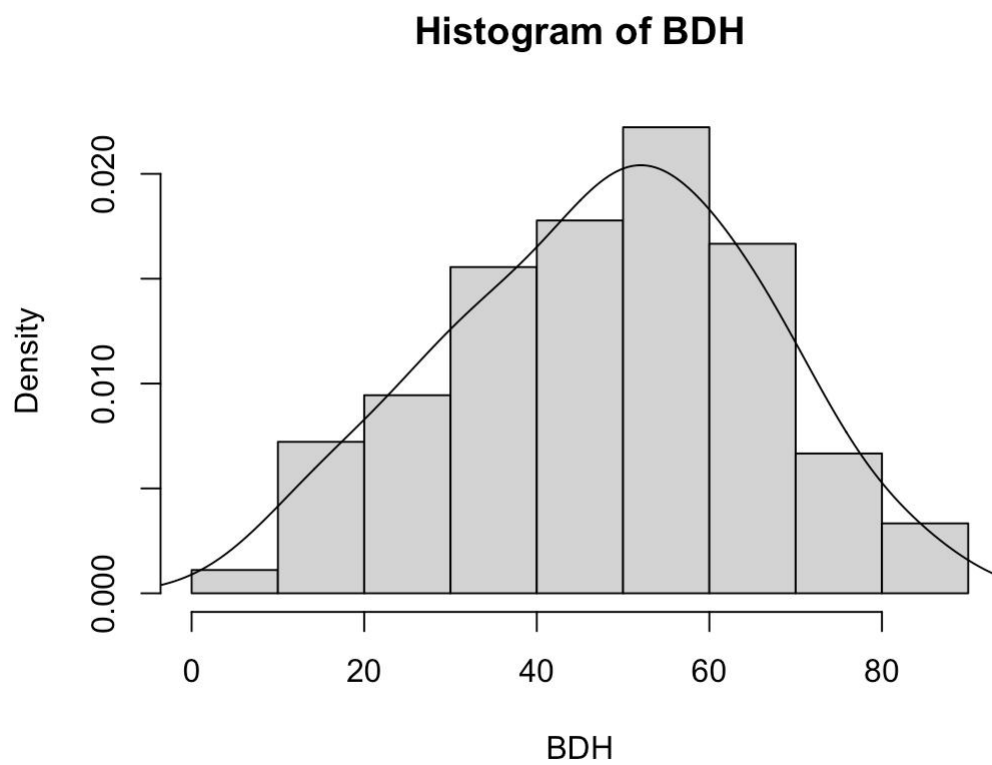
1. Variable summaries

```
> # print summary of variables in dataframe
> summary(eps.data$BDH.new)
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
  5.00  34.67  49.90  47.71  60.55  85.80
> summary(eps.data$SPI.new)
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.   NA's
  0.00  26.88  51.60  49.84  71.95  100.00     2
```

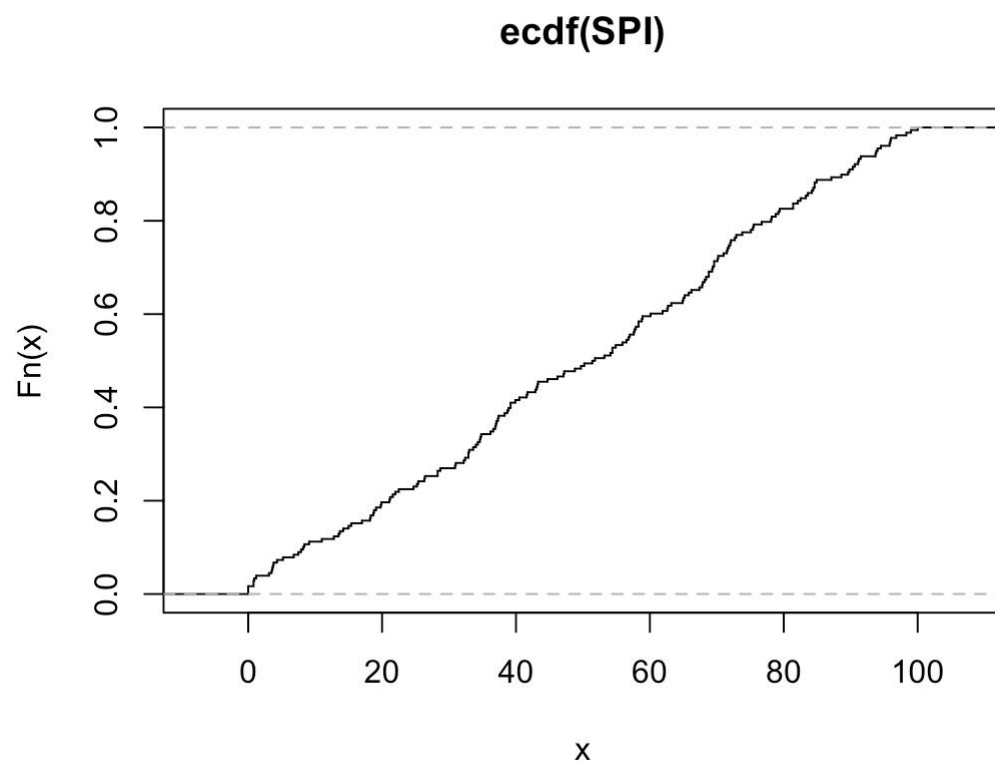
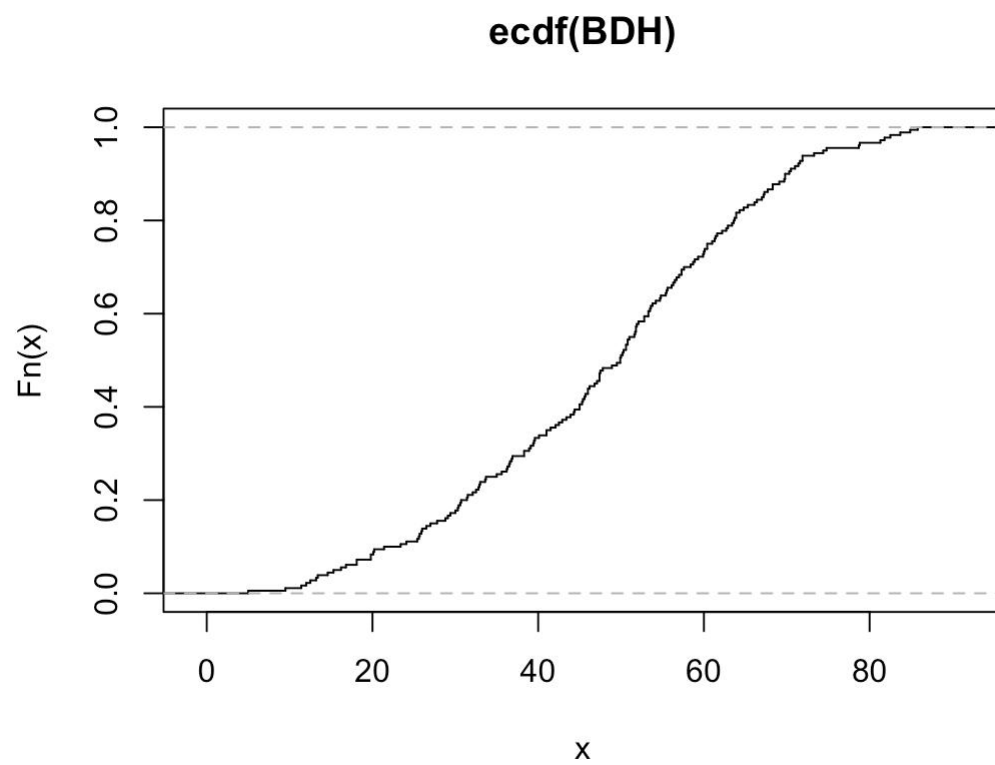
2. Variable boxplots



3. Histograms with overlaid theoretical probability distributions

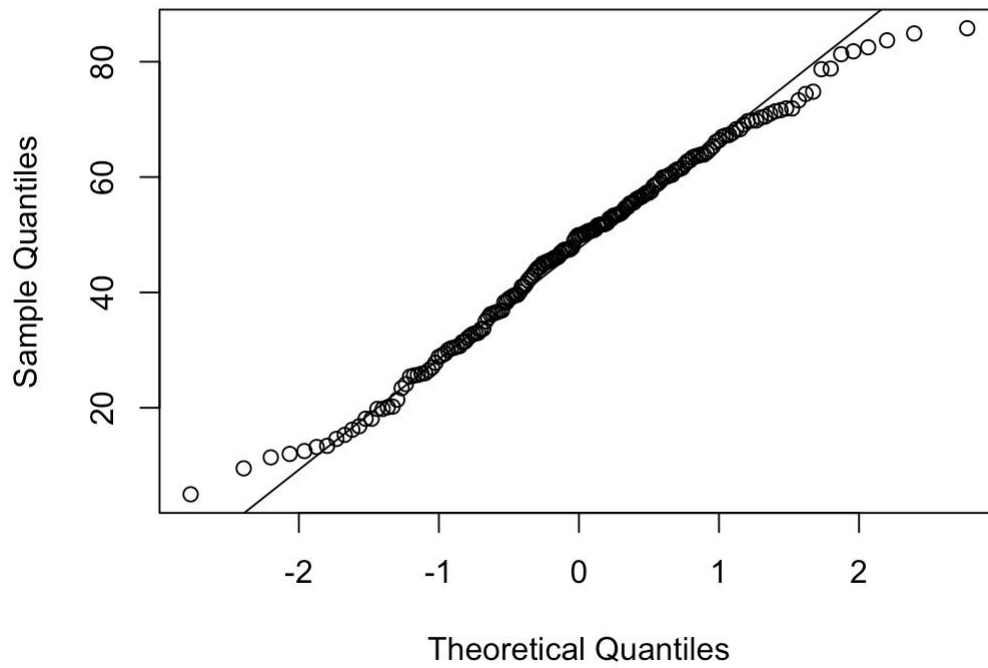


4. ECDF plots

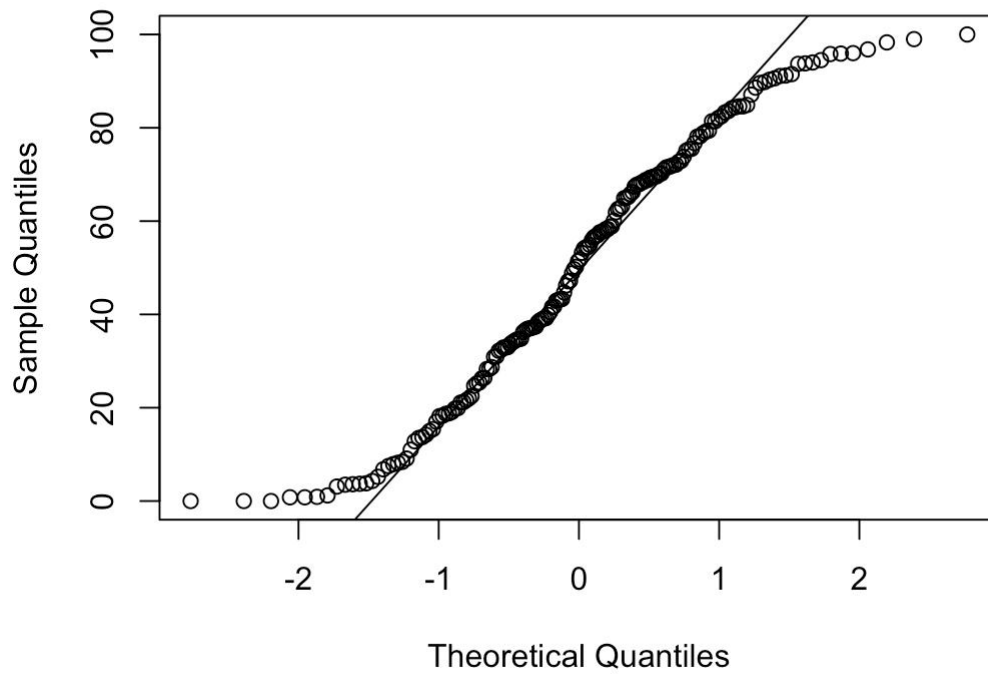


5. QQ plots of each variable against the normal distribution

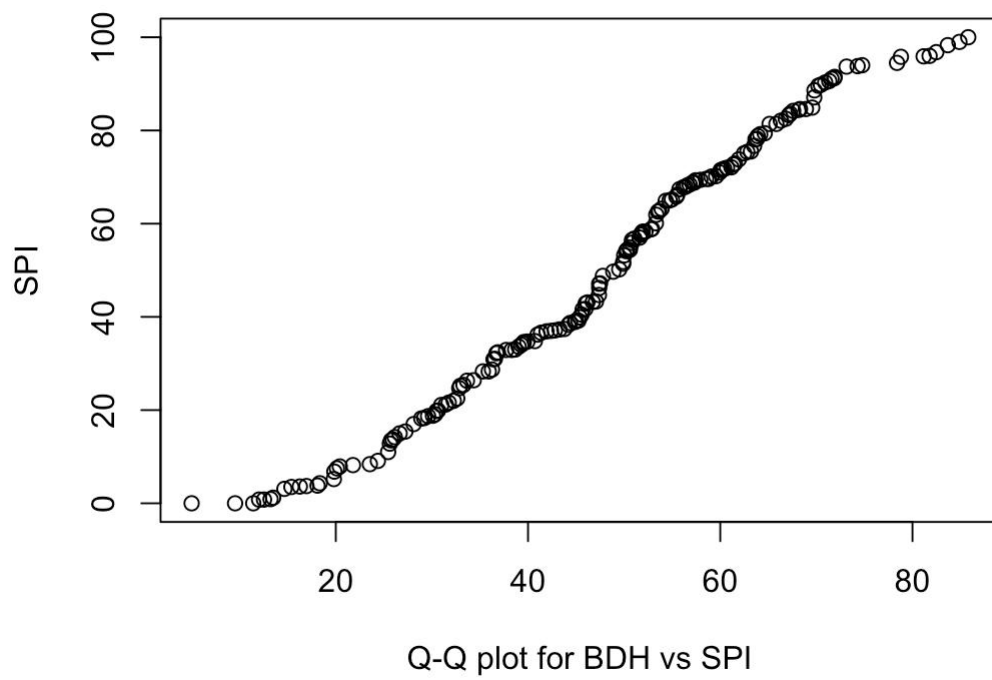
Normal Q-Q Plot



Normal Q-Q Plot



6. QQ plot of the 2 variables against each other



7. Normality statistical tests for each variable

```
> #Normality statistical tests for each variable  
> shapiro.test(BDH)
```

Shapiro-Wilk normality test

data: BDH
W = 0.98759, p-value = 0.1149

```
> shapiro.test(SPI)
```

Shapiro-Wilk normality test

data: SPI
W = 0.95998, p-value = 5.774e-05

```
>  
> ad.test(BDH)
```

Anderson-Darling normality test

data: BDH
A = 0.51809, p-value = 0.186

```
> ad.test(SPI)
```

Anderson-Darling normality test

data: SPI
A = 1.7105, p-value = 0.0002121

8. Statistical test for the variables having identical distributions

```
> #Statistical test for the variables having identical distributions  
> ks.test(BDH,SPI)
```

Asymptotic two-sample Kolmogorov-Smirnov test

data: BDH and SPI
D = 0.20943, p-value = 0.0007791
alternative hypothesis: two-sided

Warning message:
In ks.test.default(BDH, SPI) :
p-value will be approximate in the presence of ties

```
> wilcox.test(BDH,SPI)
```

Wilcoxon rank sum test with continuity correction

data: BDH and SPI

W = 15077, p-value = 0.3357

alternative hypothesis: true location shift is not equal to 0

```
>
```

```
>
```

```
> t.test(BDH,SPI)
```

Welch Two Sample t-test

data: BDH and SPI

t = -0.84698, df = 297.69, p-value = 0.3977

alternative hypothesis: true difference in means is not equal to 0

95 percent confidence interval:

-7.071337 2.816006

sample estimates:

mean of x mean of y

47.71222 49.83989