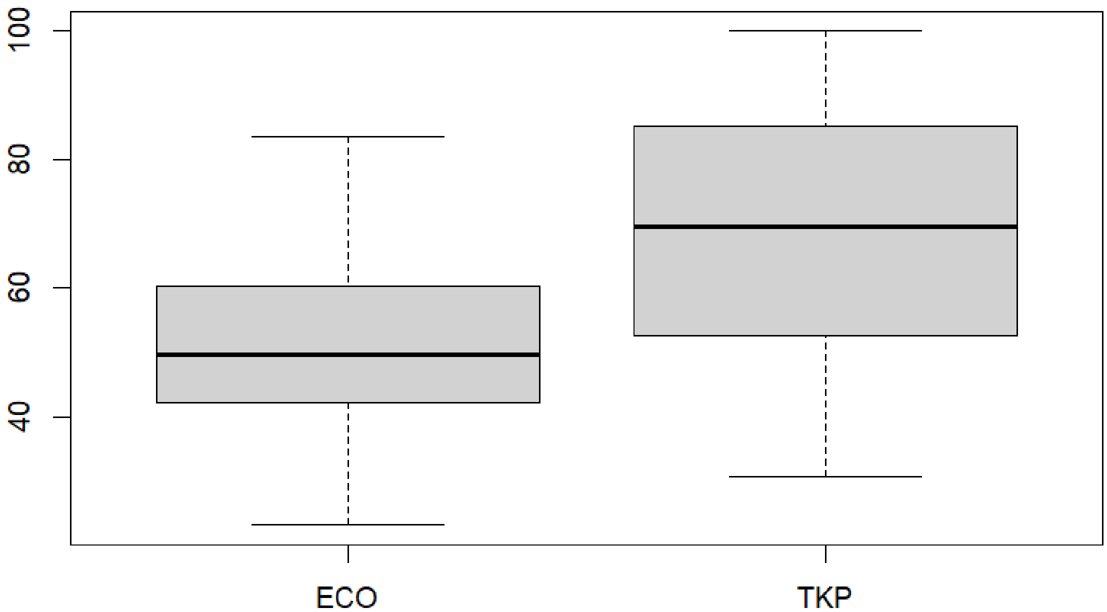
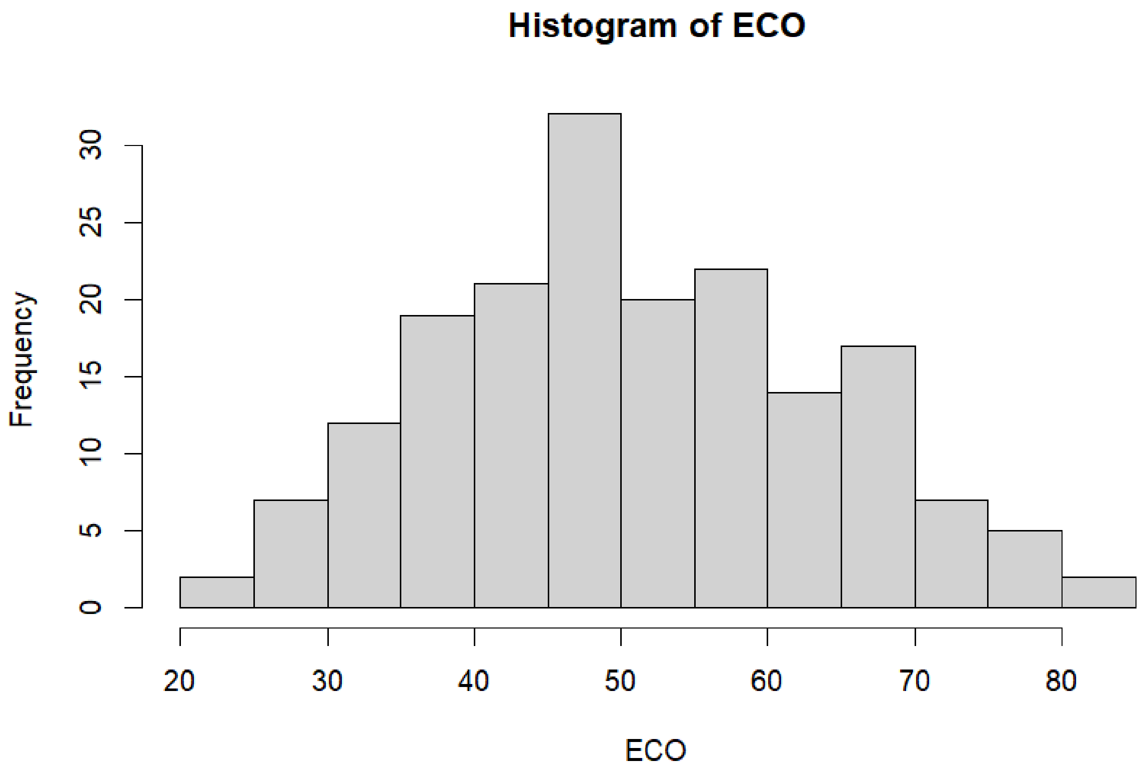
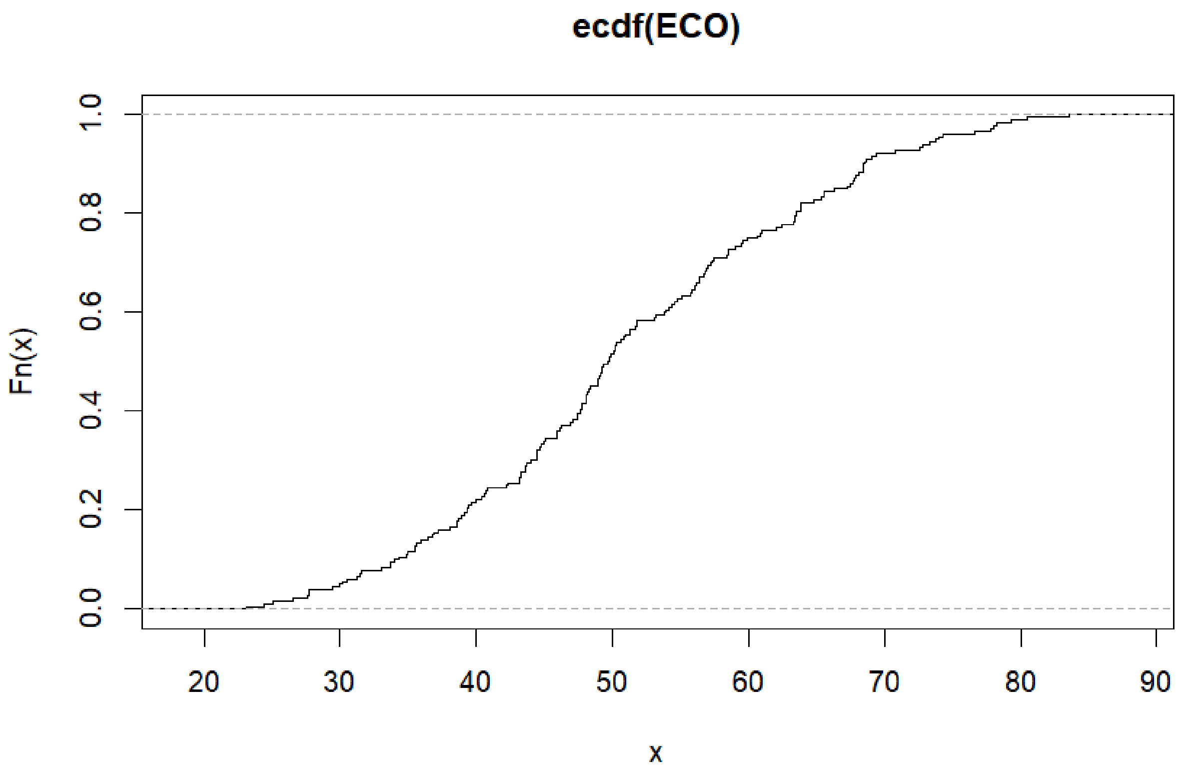
```
> epi.data$ECO.new
  [1] 31.2 51.8 42.2 43.2 53.2 47.1 47.8 63.3 78.2 44.4 53.9 38.6 31.4 35.0
68.1 69.1 57.3 54.6
 [19] 59.5 55.7 51.3 74.0 63.8 48.9 70.8 56.9 48.1 23.1 44.0 48.1 60.6 56.1
49.4 58.4 35.9 56.4
 [37] 44.4 62.5 48.9 72.8 49.8 57.2 78.0 53.1 63.5 24.4 40.6 56.8 56.7 51.7
44.7 43.7 25.1 76.6
 [55] 38.7 45.9 36.9 68.4 68.4 64.8 35.5 50.2 80.5 46.9 67.9 40.4 38.6 47.4
44.8 56.2 36.8 49.0
 [73] 73.8 60.9 30.5 39.3 45.9 33.1 67.5 43.6 63.4 49.7 59.9 50.1 49.2 49.1
45.0 54.8 43.3 40.0
 [91] 68.6 38.1 46.3 30.0 74.3 83.6 27.7 53.8 39.7 39.4 43.2 65.5 34.9 33.7
34.3 47.7 27.6 48.4
[109] 54.4 50.2 40.7 47.8 26.6 62.0 47.4 67.8 51.3 58.5 57.0 43.3 55.1 72.6
65.6 29.4 59.1 35.5
[127] 43.6 56.4 33.7 79.3 63.4 57.4 63.8 68.4 48.2 44.5 45.1 50.6 37.2 31.6
50.3 50.9 56.1 48.3
[145] 38.9 55.9 77.8 67.7 30.2 49.8 49.9 68.5 39.3 42.3 63.9 67.3 69.4 51.8
46.2 59.6 50.8 47.6
[163] 45.9 34.0 48.9 48.1 35.6 40.8 44.5 58.5 63.5 73.3 54.1 39.1 49.3 36.5
61.0 27.7 65.3 66.3

> TKP <- epi.data$TKP.new
> TKP
  [1]  24.6  58.4   6.0  74.7  72.9  40.5  39.5  58.1  70.6  41.3  46.2   0.0
23.9   1.7  93.7
 [16]  46.1  39.8  91.7  77.8  66.5  67.5  78.8  59.7  44.5  99.2  88.8  89.4
1.3  72.6  67.7
 [31]  40.7  94.5  72.0  63.9   3.8  81.2  41.1  54.7  94.0  95.0  71.9  59.9
98.4  66.8  52.4
 [46]   2.1  43.0  95.3  52.4  44.6  45.5 100.0   0.0  95.6  26.6  29.0   5.5
84.0  68.4  90.5
 [61]  15.5  31.9  76.7  90.4  85.2  60.6  35.6  69.6  23.4 100.0  30.9  85.3
83.6  32.2   0.8
 [76]  43.7  68.0  17.0  70.3  23.3  71.9  58.1  26.9  14.9  34.0  54.6  29.7
86.8  13.7  63.2
 [91]  95.2   4.3  66.6  10.3  86.9  89.2  24.5  79.9  40.0   0.0  16.6  99.8
0.0  52.3   6.7
[106]  30.7   0.0  52.9  73.4  50.4   7.7  81.8  27.7  99.0  80.3  76.8  16.8
92.9  85.2  88.7
[121]  26.3  73.4  53.5  62.8  84.0   3.9  61.7  65.6  37.1  90.9  80.0  94.5
75.0  81.1  31.0
[136]  57.0  44.5  61.6  14.5  59.3  15.6  63.8  48.5  89.2  63.3  14.9  91.4
87.3   5.0  37.8
[151]  29.1  64.3  48.3  16.9  32.6  69.3  21.7  79.1  23.1  82.1  69.6  56.2
85.4   0.5  70.5
[166]  59.6   1.0  24.1  77.5  54.5  95.3  83.5  36.9  16.7  26.8   2.9  75.5
44.3  79.4  95.4
```

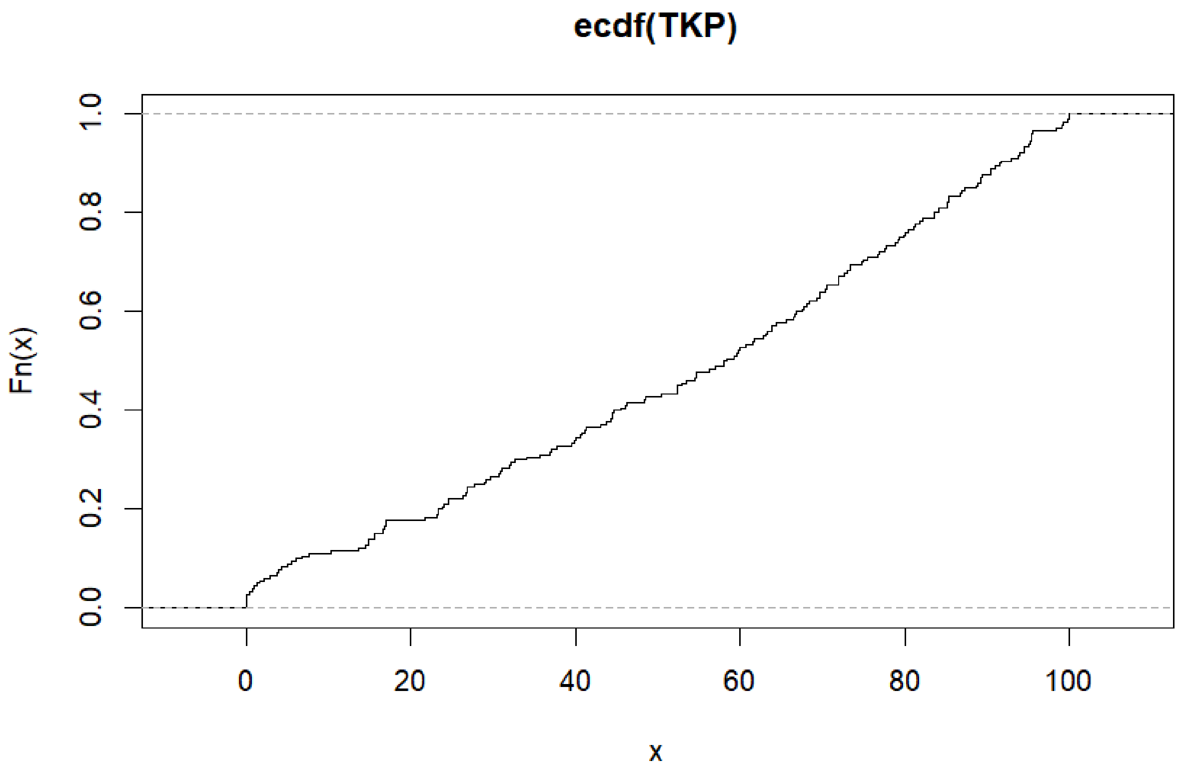
```
> summary(TKP.above30)
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max. 
  30.70   52.77   69.60   68.18   85.20  100.00 
```

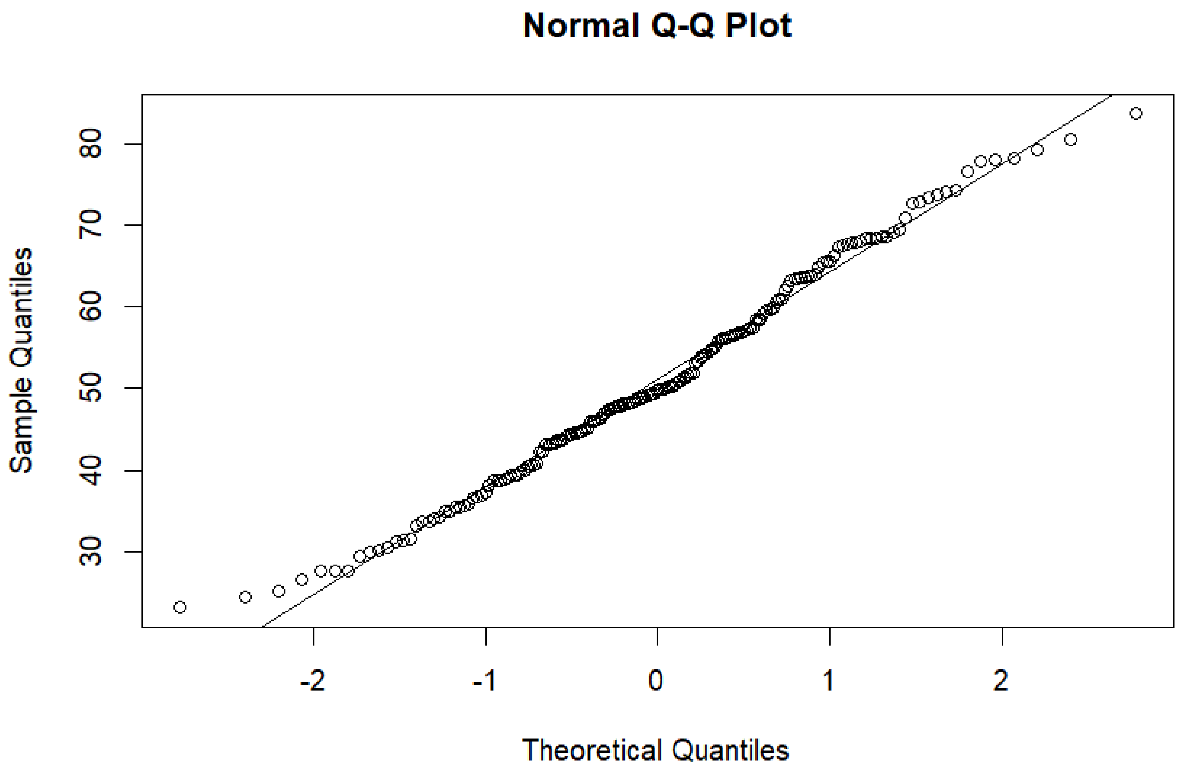


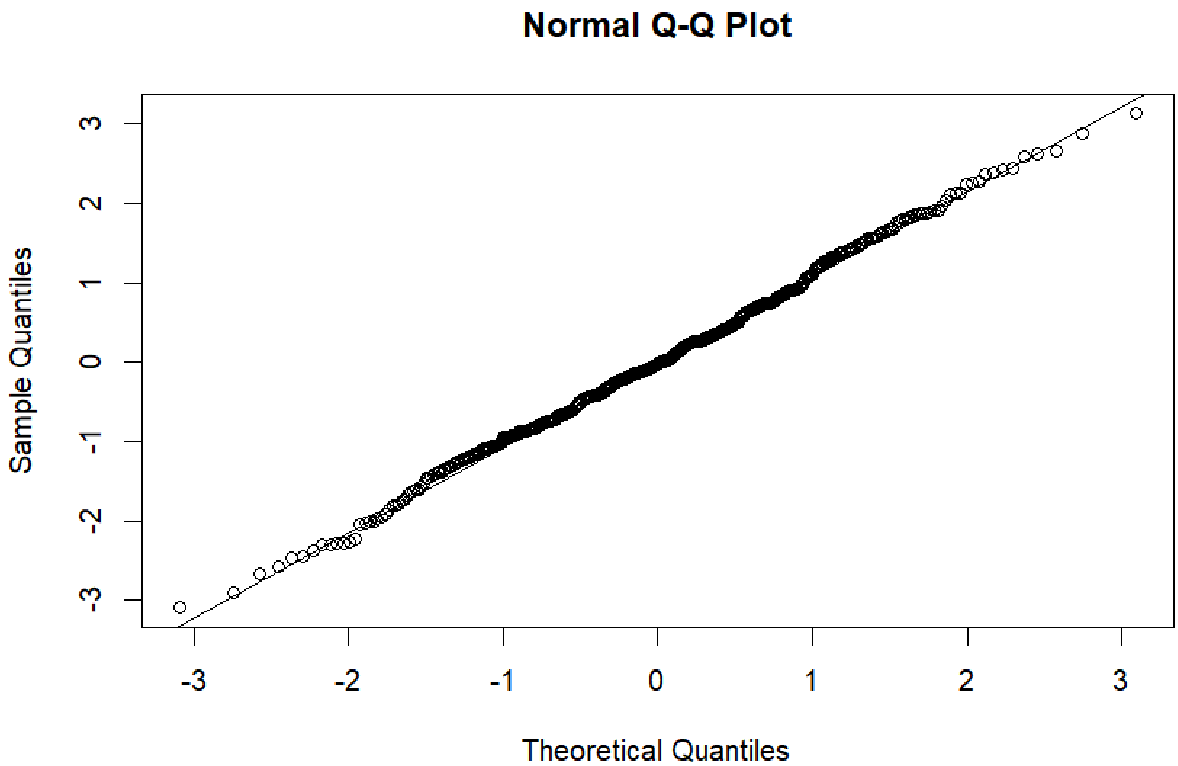


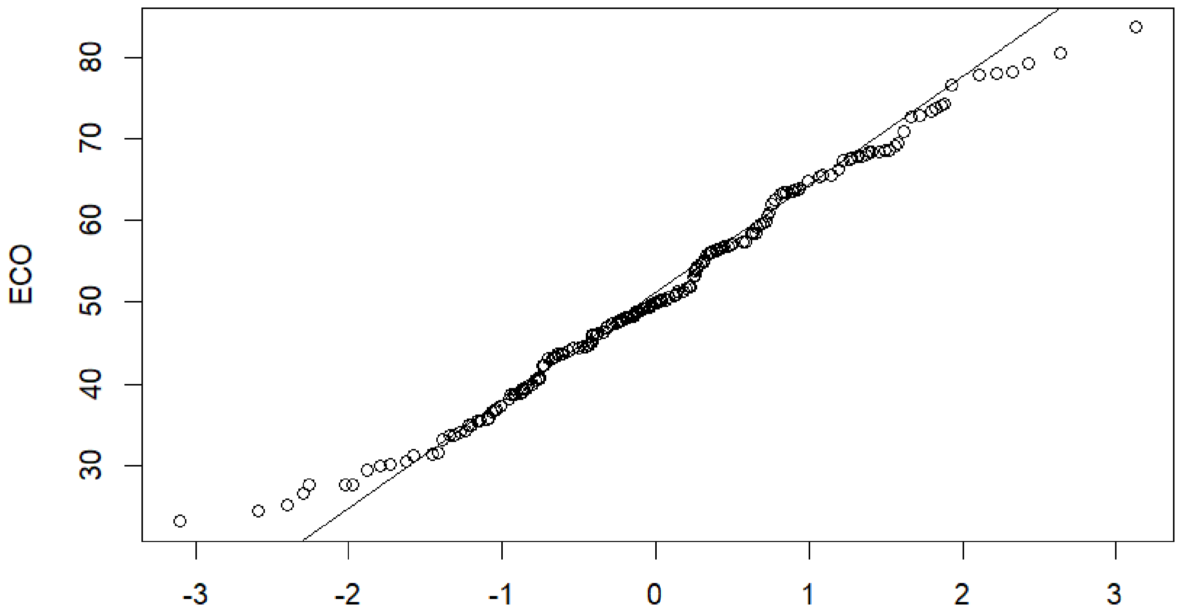
Histogram of ECO
Frequency
0
5
10
15
20
25
30
20
30
40
50
60
70
80
ECO


ecdf(ECO)
Fn(x)
0.0
0.2
0.4
0.6
0.8
1.0
20
30
40
50
60
70
80
90
x

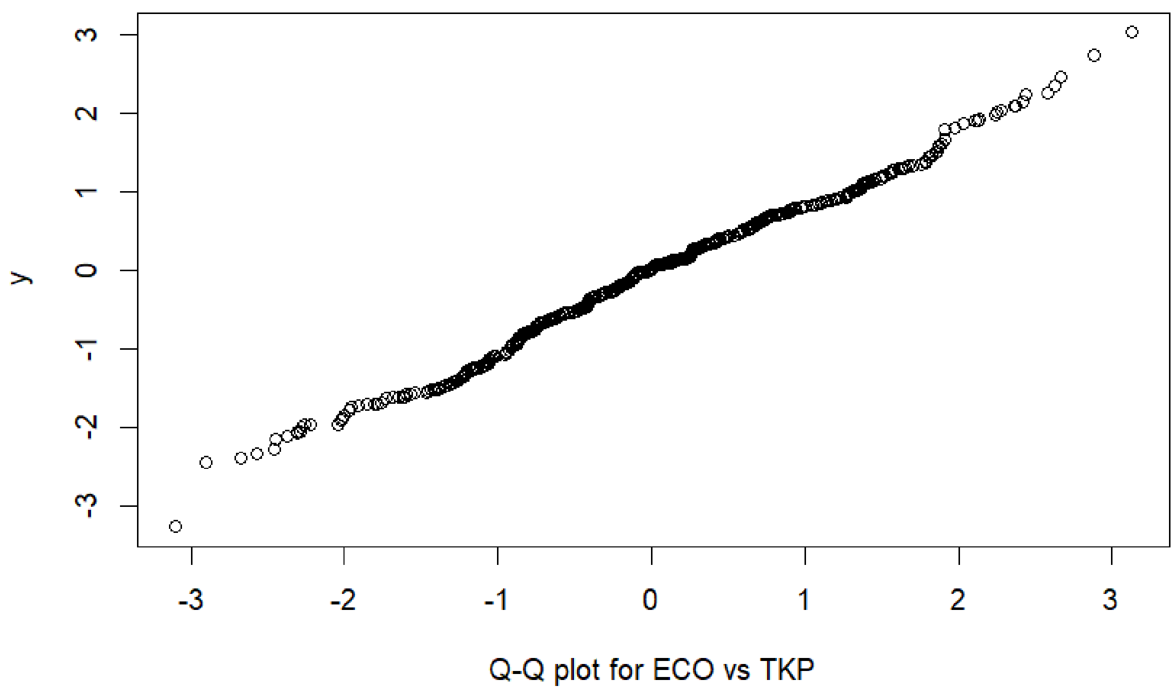

ecdf(TKP)
Fn(x)
x
0.0
0.2
0.4
0.6
0.8
1.0
0
20
40
60
80
100


Normal Q-Q Plot
Sample Quantiles
Theoretical Quantiles
30
40
50
60
70
80
-2
-1
0
1
2

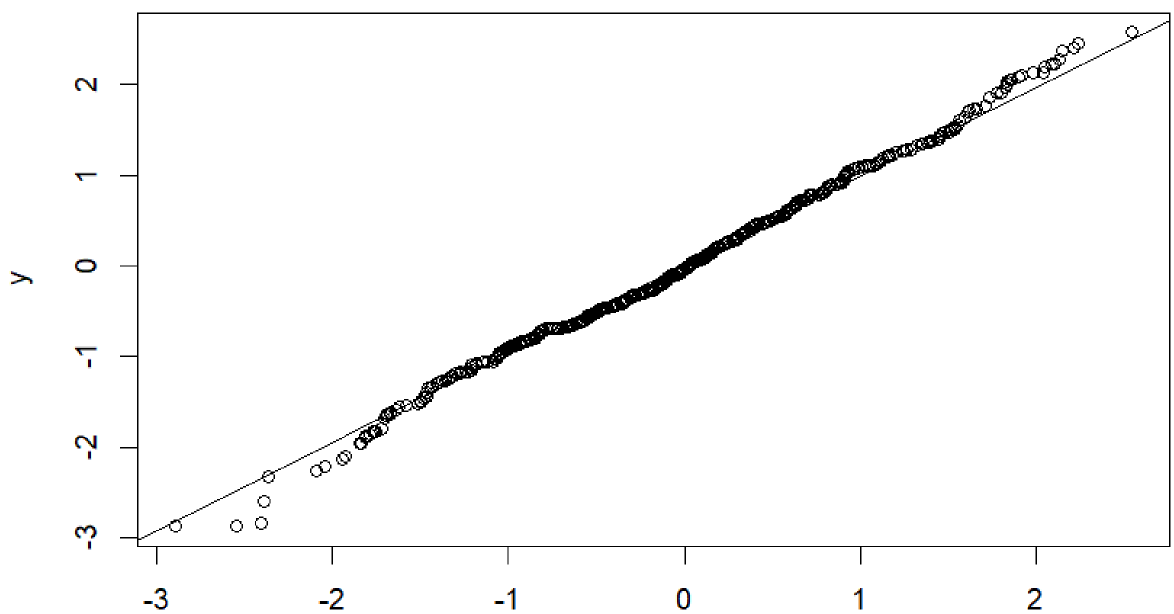

Normal Q-Q Plot
Sample Quantiles
Theoretical Quantiles
-3
-2
-1
0
1
2
3



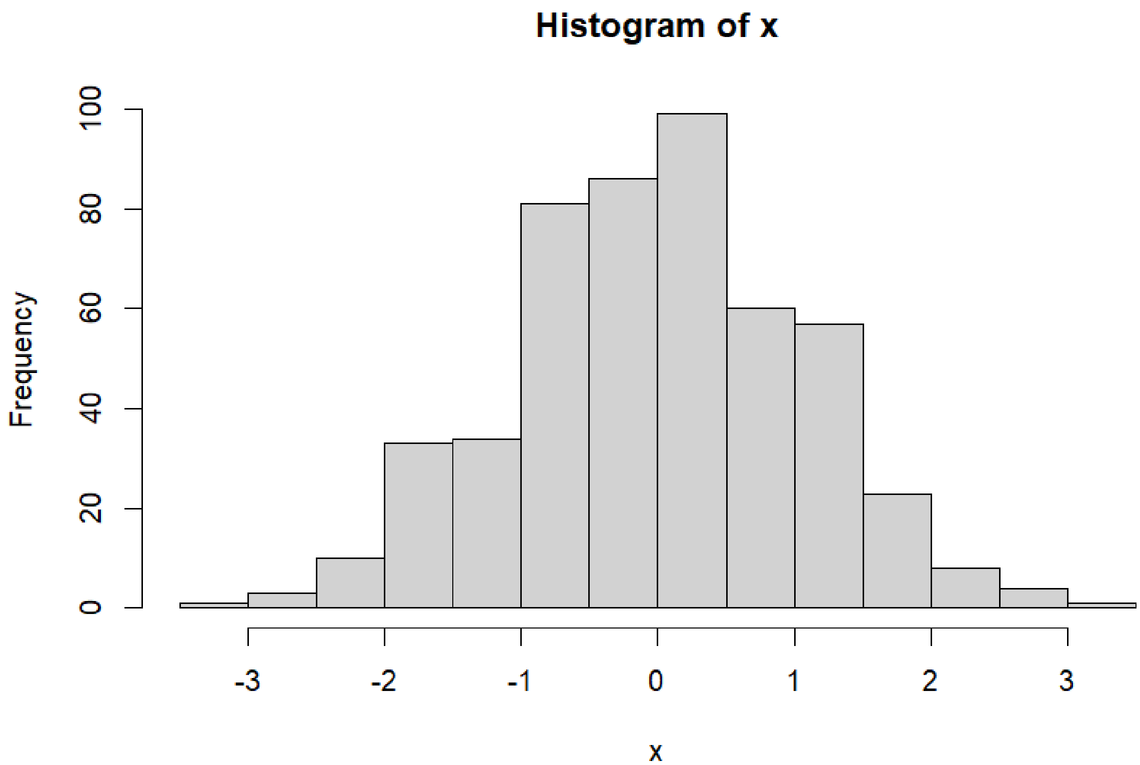
Q-Q plot for ECO vs TKP



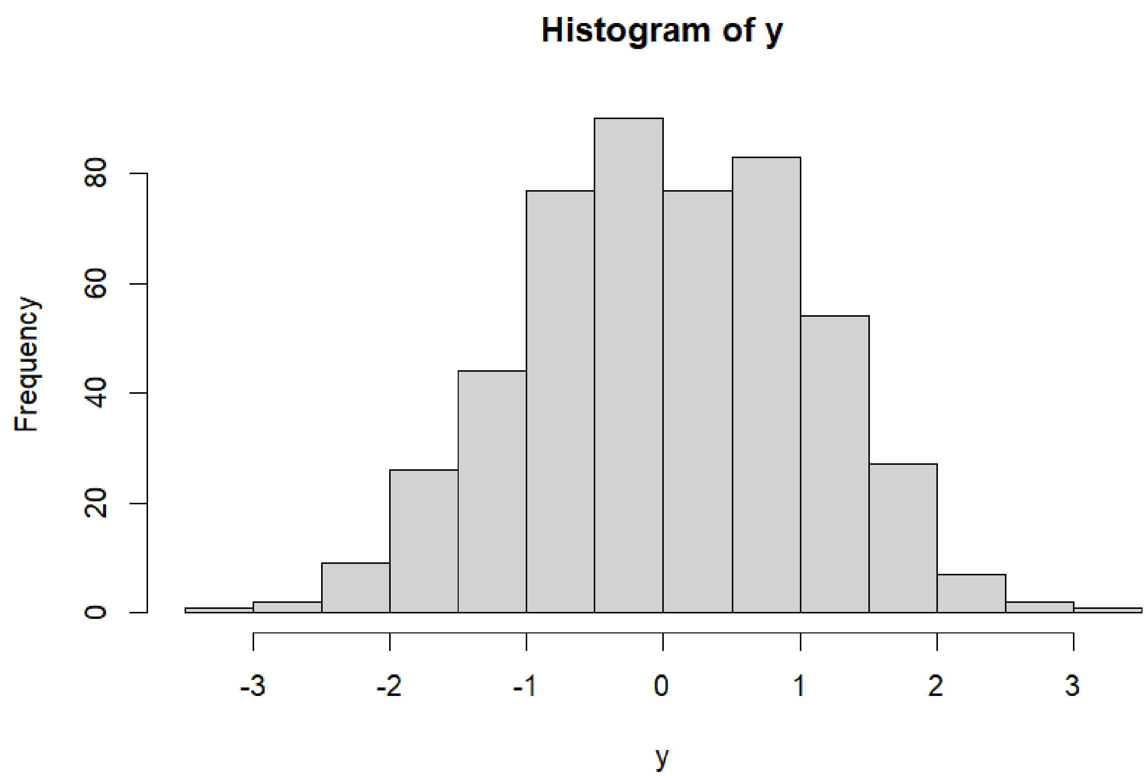
y
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3
Q-Q plot for ECO vs TKP



Q-Q plot for ECO vs TKP



Histogram of x
Frequency
0
20
40
60
80
100
-3
-2
-1
0
1
2
3
x




```
> shapiro.test(x)

	Shapiro-Wilk normality test

data:  x
W = 0.99786, p-value = 0.7852


> shapiro.test(y)

	Shapiro-Wilk normality test

data:  y
W = 0.9978, p-value = 0.7646


> ks.test(x,y)

	Asymptotic two-sample Kolmogorov-Smirnov test

data:  x and y
D = 0.05, p-value = 0.5596
alternative hypothesis: two-sided
```

```
> wilcox.test(x,y)

      Wilcoxon rank sum test with continuity correction

data:  x and y
W = 123402, p-value = 0.7265
alternative hypothesis: true location shift is not equal to 0

> var.test(x,y)

      F test to compare two variances

data:  x and y
F = 1.0475, num df = 499, denom df = 499, p-value = 0.6044
alternative hypothesis: true ratio of variances is not equal to 1
95 percent confidence interval:
 0.8787347 1.2486828
sample estimates:
ratio of variances
          1.047502

> t.test(x,y)

      Welch Two Sample t-test

data:  x and y
t = -0.33522, df = 997.46, p-value = 0.7375
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.1517546  0.1074719
sample estimates:
   mean of x    mean of y
0.0004821523 0.0226235024
```