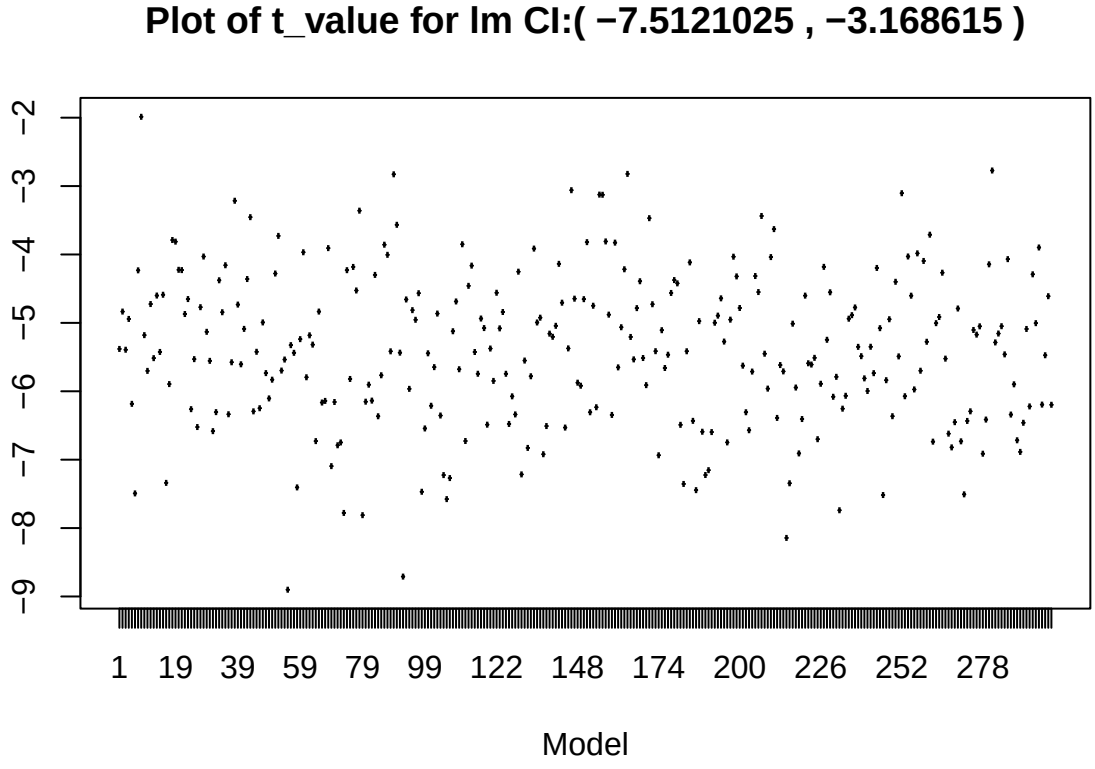
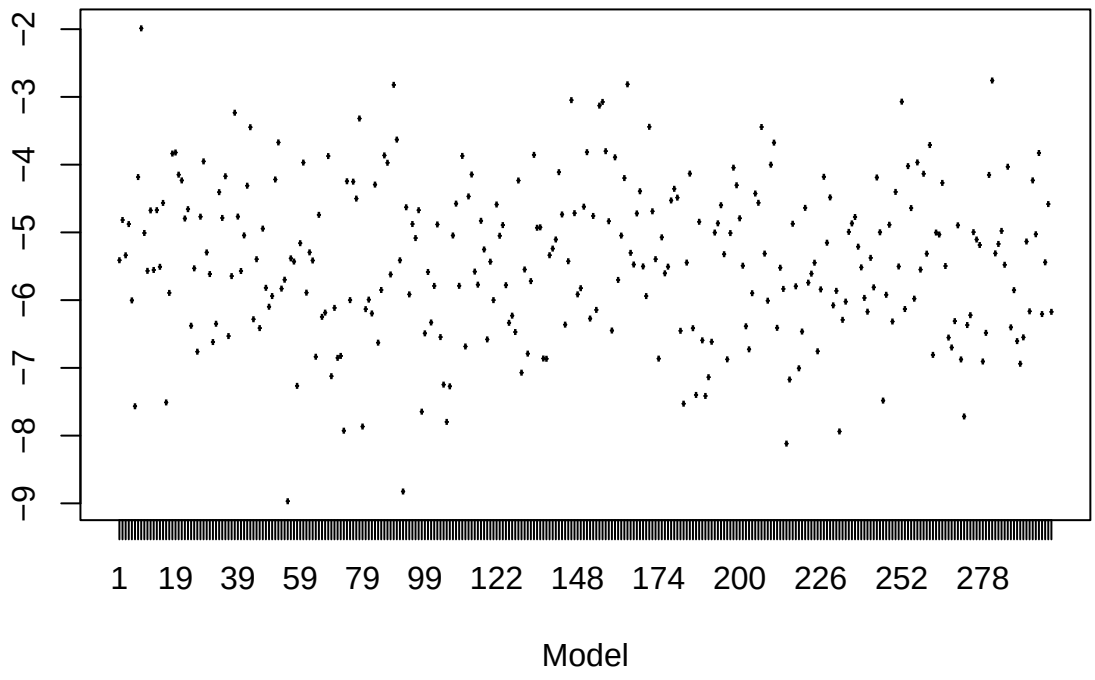
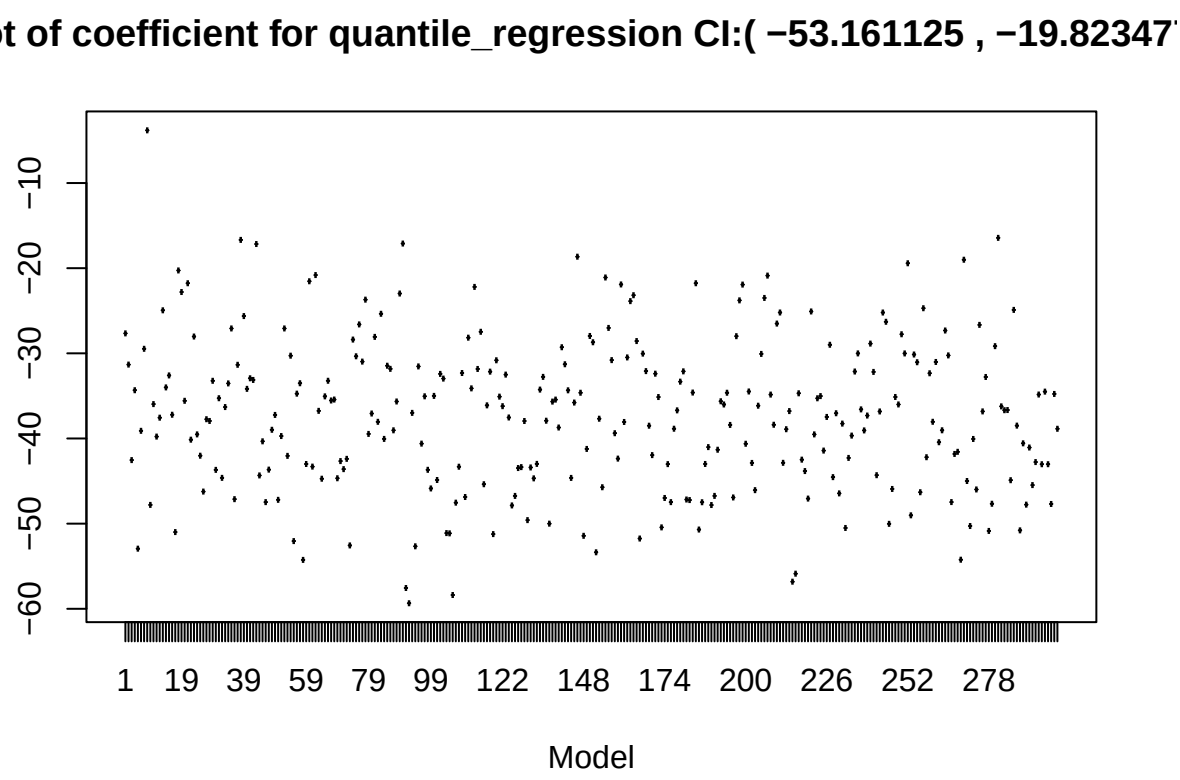
Measure comparison

```
knitr::opts_chunk$set(echo = TRUE)
source("../Rcode/data_analysis.R")
```

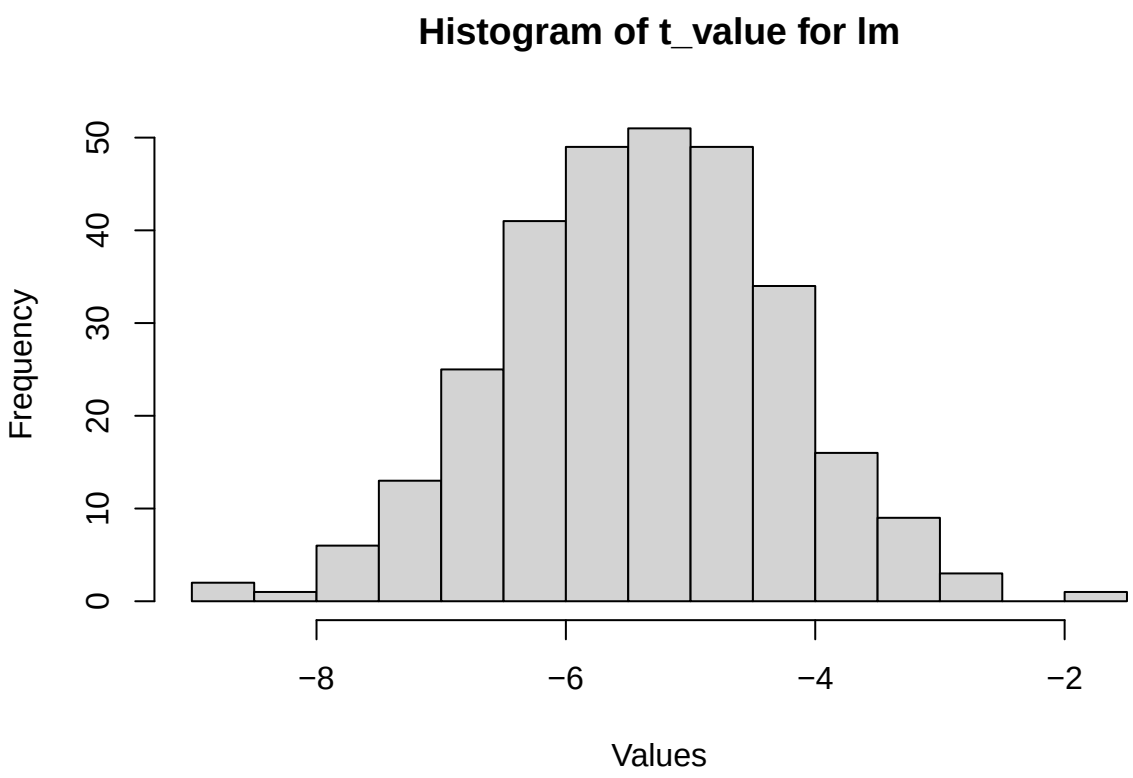
```
library(jsonlite)

# Read the JSON file containing the measurement data
file_name <- "../data/frequecy.json"

# Define the models and parameters of interest
models <- c("lm", "tweedy_1.5_0", "quantile_regression")
parameters <- c("t_value", "t_value", "coefficient")

plot_models(file_name,models,parameters)
```

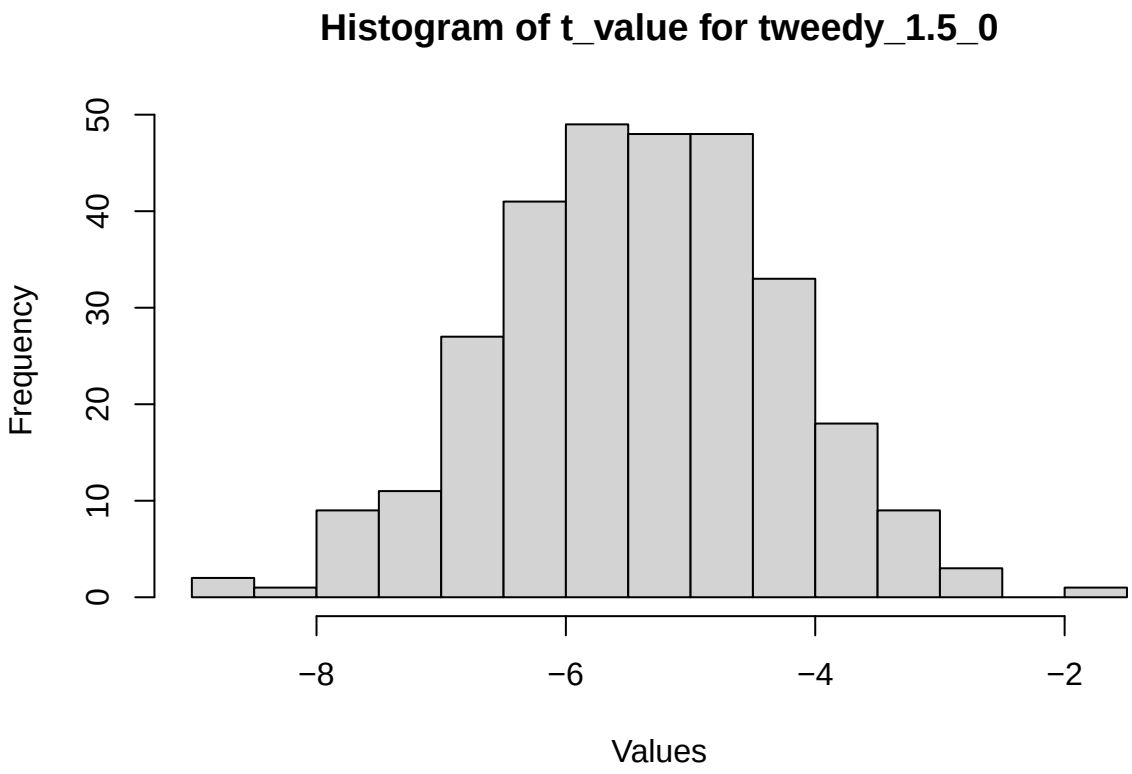


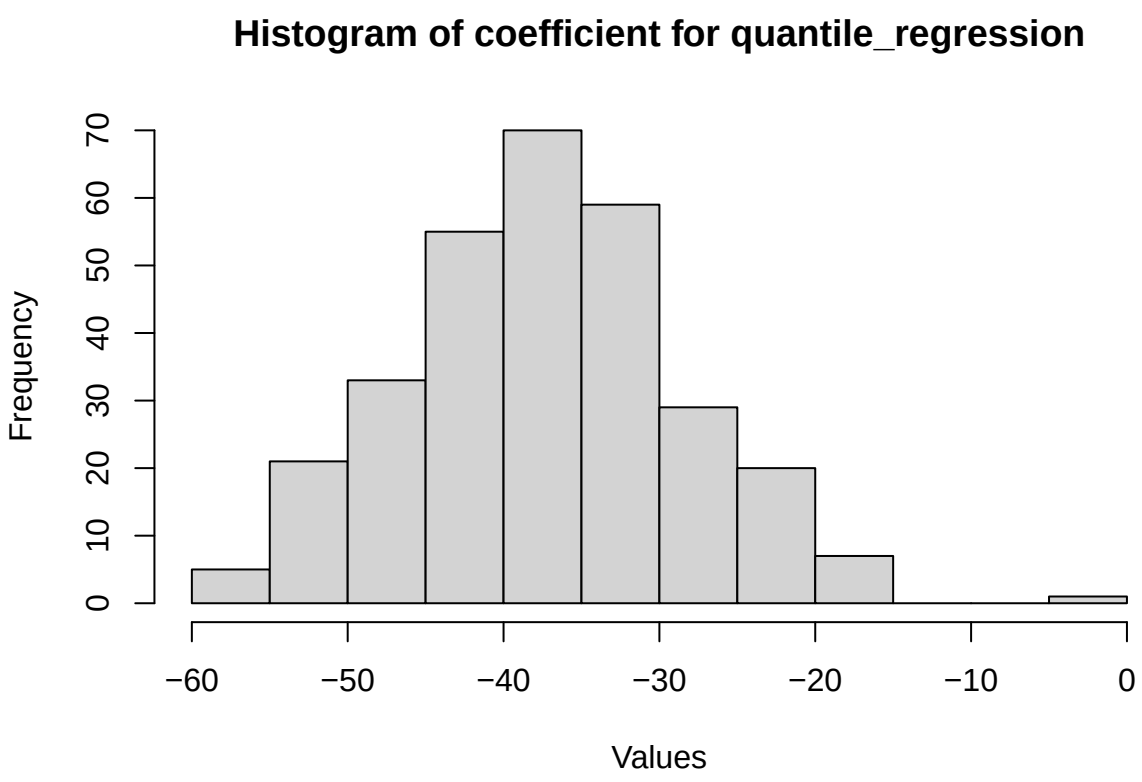

Plot of t_value for tweedy_1.5_0 CI:(−7.68328 , −3.17828)
−2
−3
−4
−5
−6
−7
−8
−9
1
19
39
59
79
99
122
148
174
200
226
252
278
Model



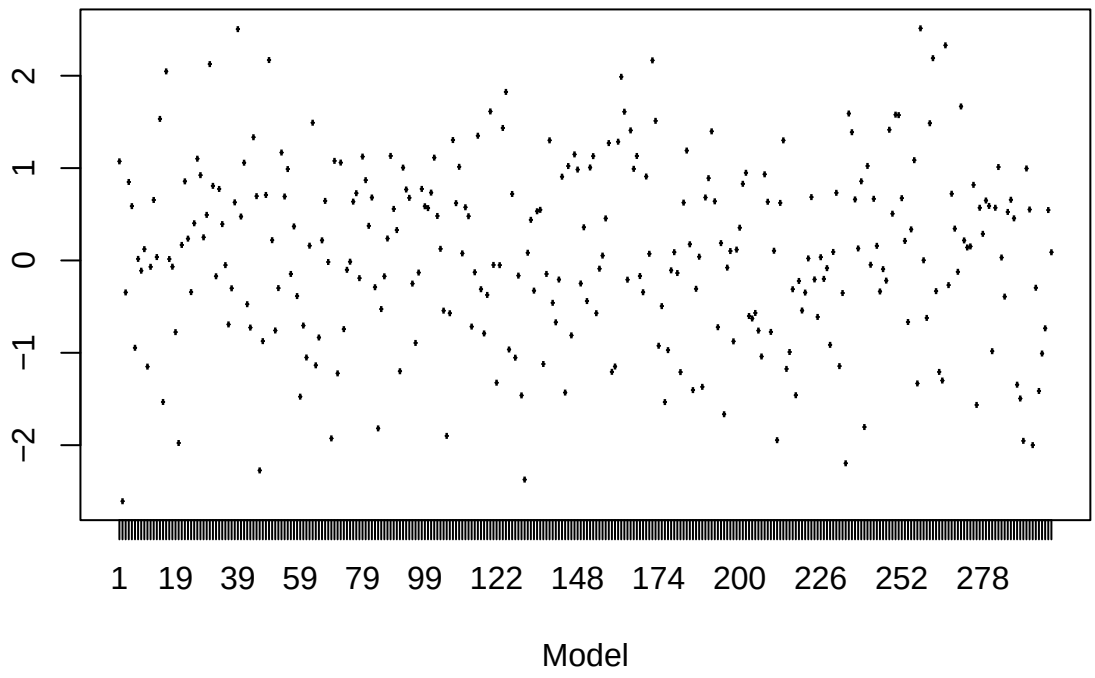

```
plot_distritubtions(file_name,models,parameters)
```

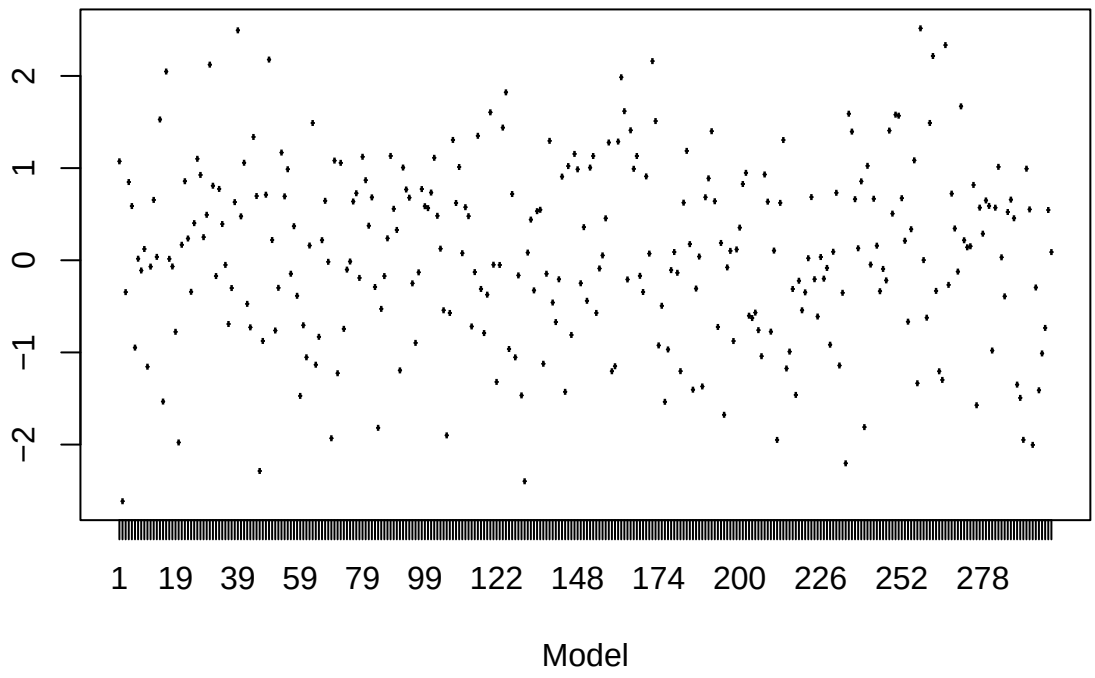

Histogram of t_value for lm
Frequency
0
10
20
30
40
50
−8
−6
−4
−2
Values

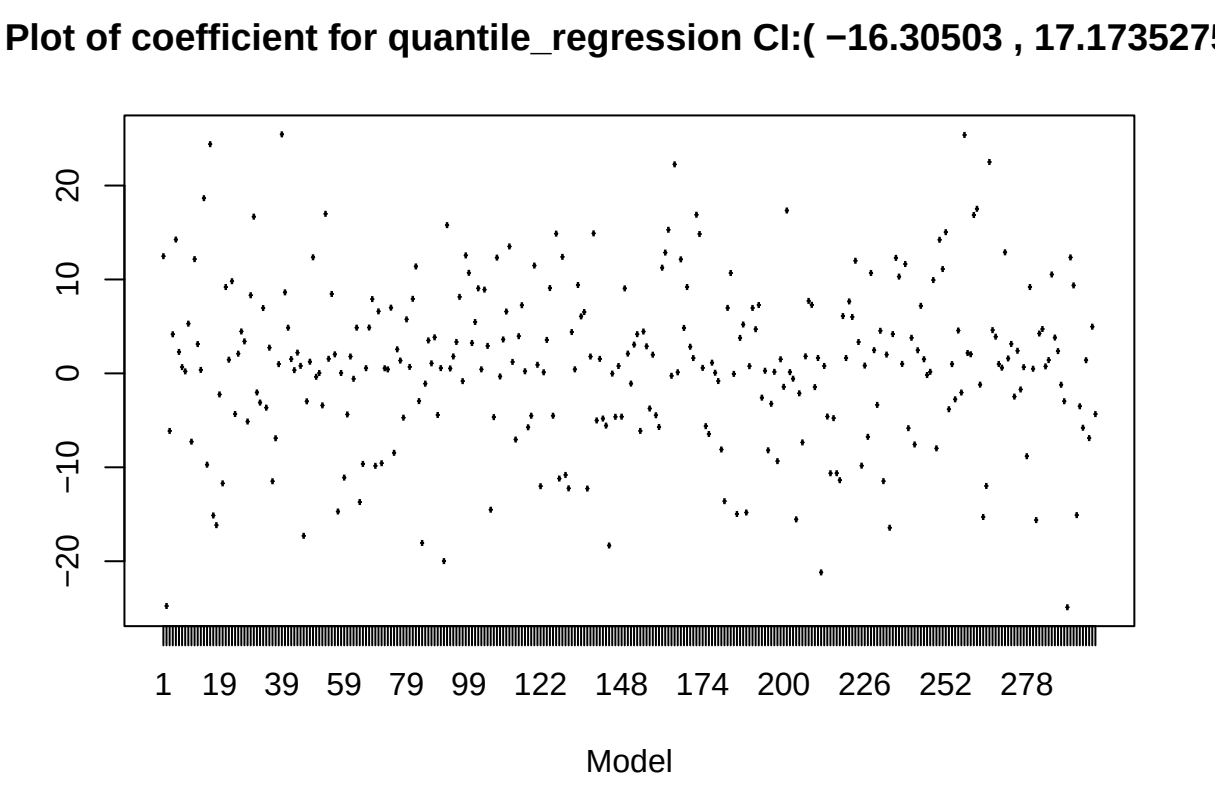

Histogram of t_value for tweedy_1.5_0
Frequency
0
10
20
30
40
50
−8
−6
−4
−2
Values



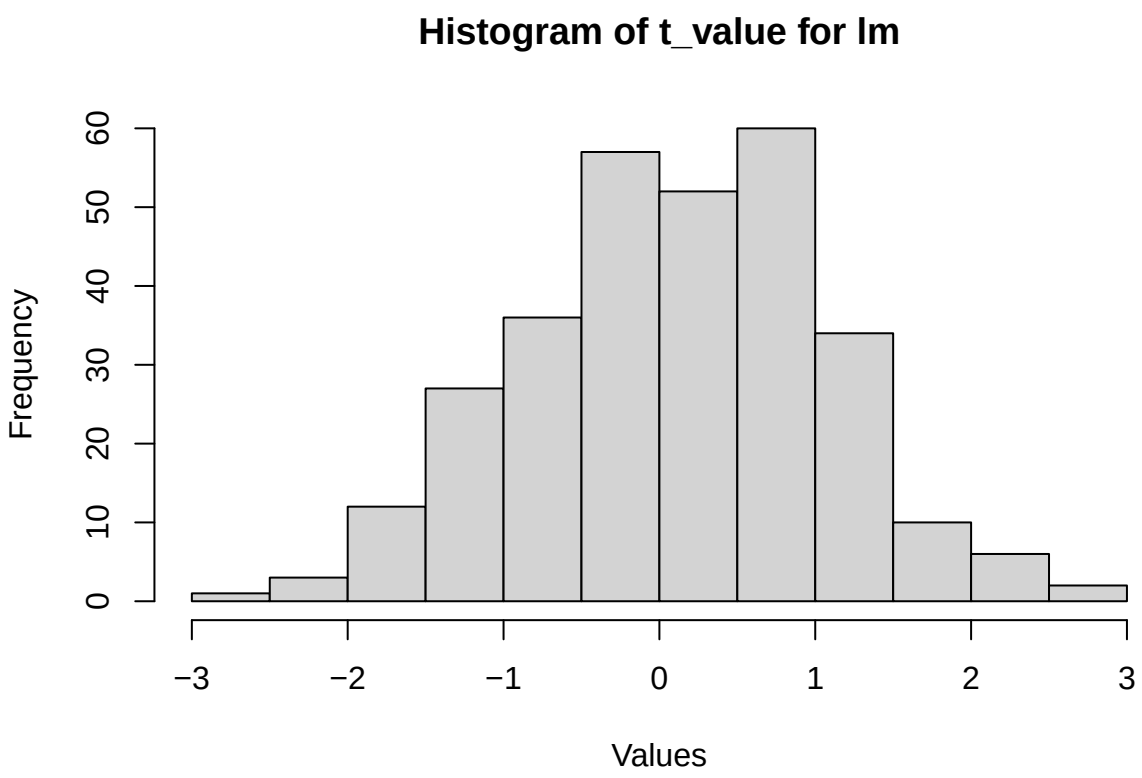

```r
library(jsonlite)

# Read the JSON file containing the measurement data
file_name <- "../data/similar.json"

# Define the models and parameters of interest
models <- c("lm", "tweedy_1.5_0", "quantile_regression")
parameters <- c("t_value", "t_value", "coefficient")

plot_models(file_name,models,parameters)
```

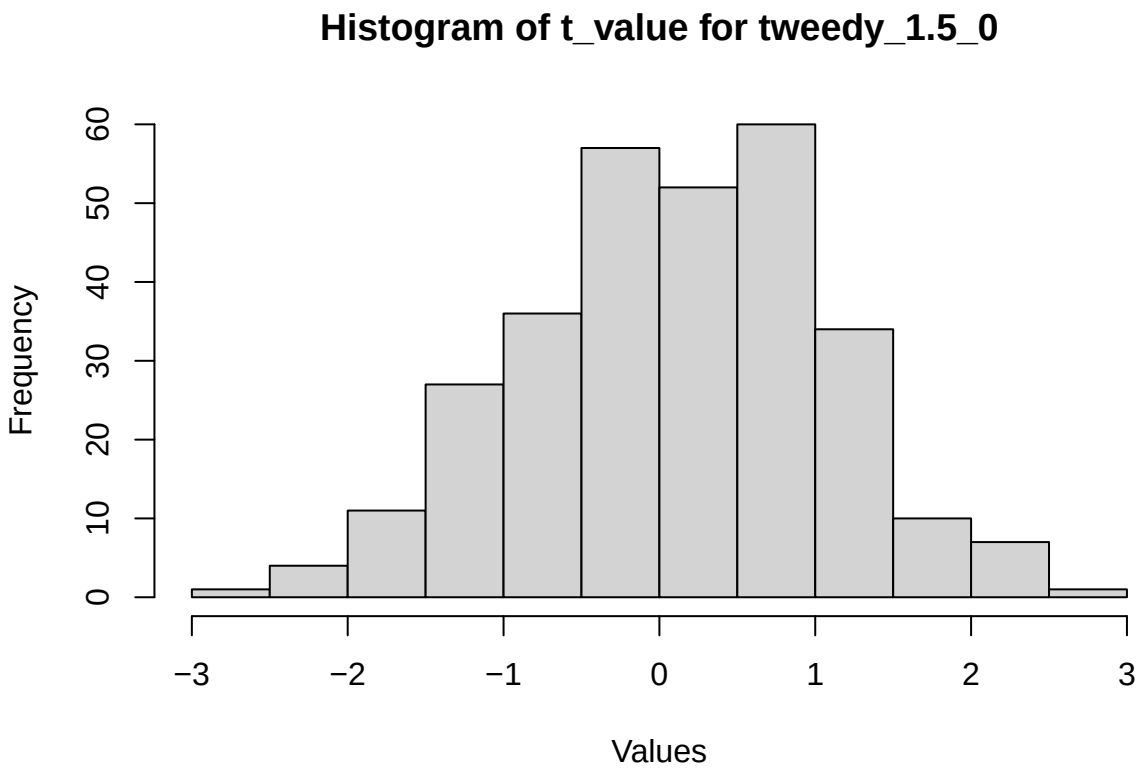

Plot of t_value for lm CI:(−1.9369375 , 2.019465)
2
1
0
−1
−2
1
19
39
59
79
99
122
148
174
200
226
252
278
Model

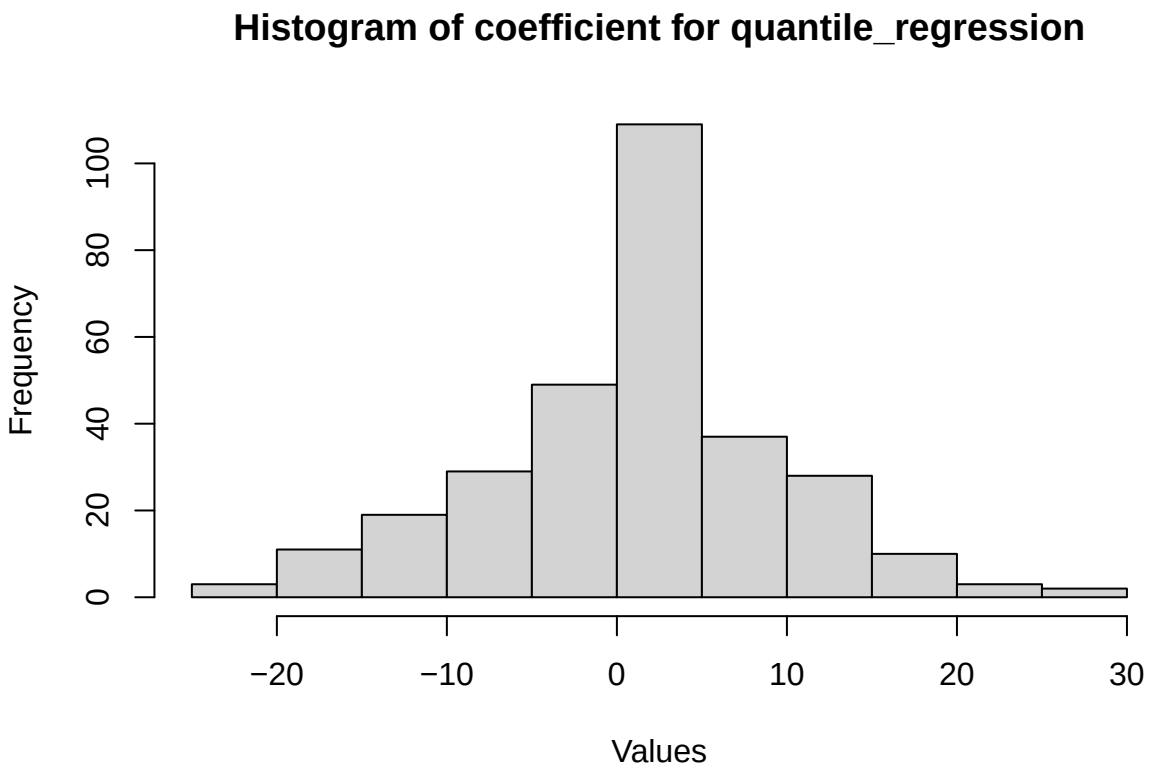

Plot of t_value for tweedy_1.5_0 CI:(−1.9404825 , 2.01816)
2
1
0
−1
−2
1
19
39
59
79
99
122
148
174
200
226
252
278
Model




```
plot_distritubtions(file_name,models,parameters)
```


Histogram of t_value for lm
Frequency
0
10
20
30
40
50
60
−3
−2
−1
0
1
2
3
Values


Histogram of t_value for tweedy_1.5_0
Frequency
0
10
20
30
40
50
60
−3
−2
−1
0
1
2
3
Values


Histogram of coefficient for quantile_regression
Frequency
0
20
40
60
80
100
−20
−10
0
10
20
30
Values