# GROUP 21: Elon Musk's Twitter Sentiment Analysis

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# Read in the elonmusk.csv dataset

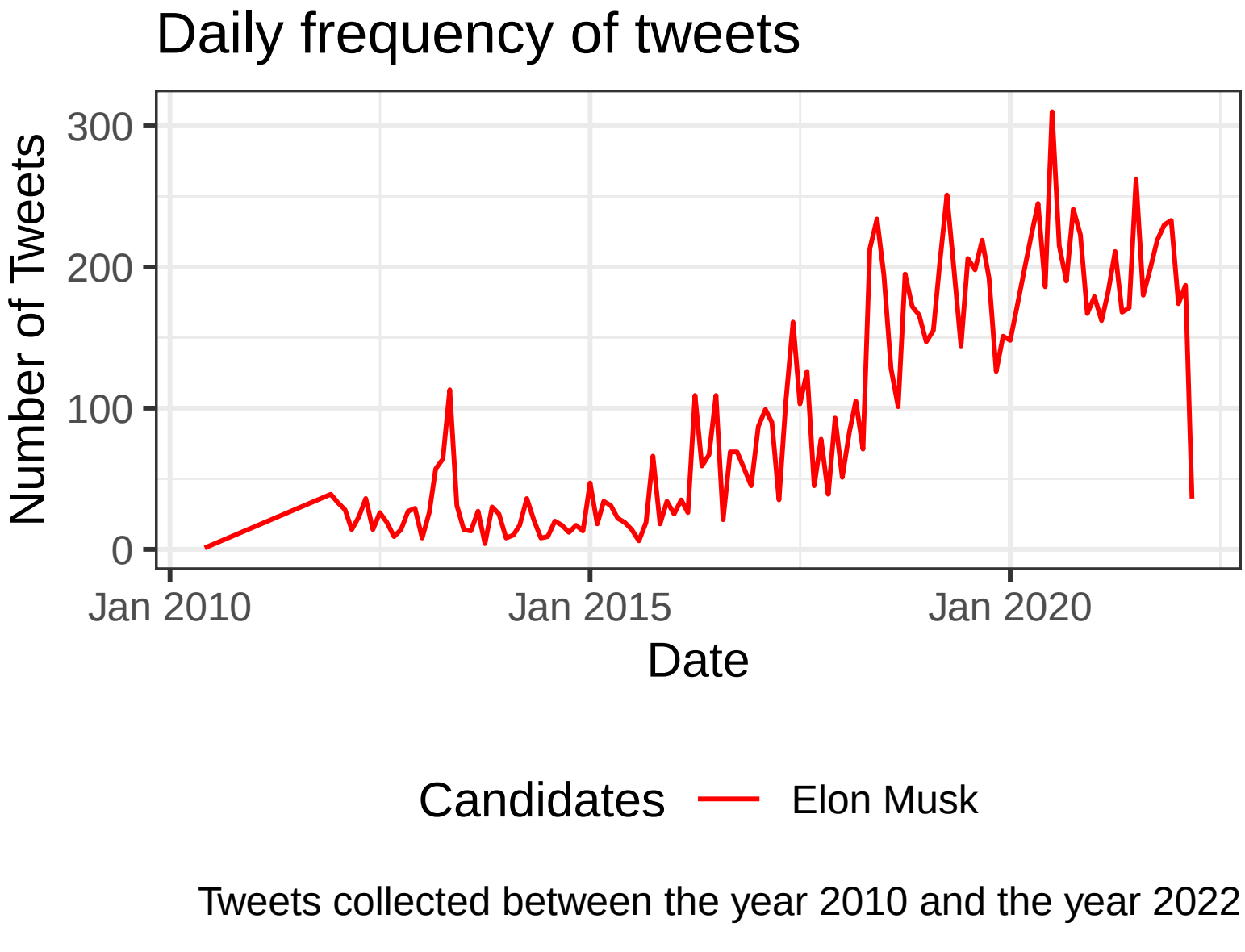
```r
# Read in the data
tweets.df <- read_csv("elonmusk.csv")
dim(tweets.df)
```

```
## [1] 12206    11
```

```r
names(tweets.df)
```

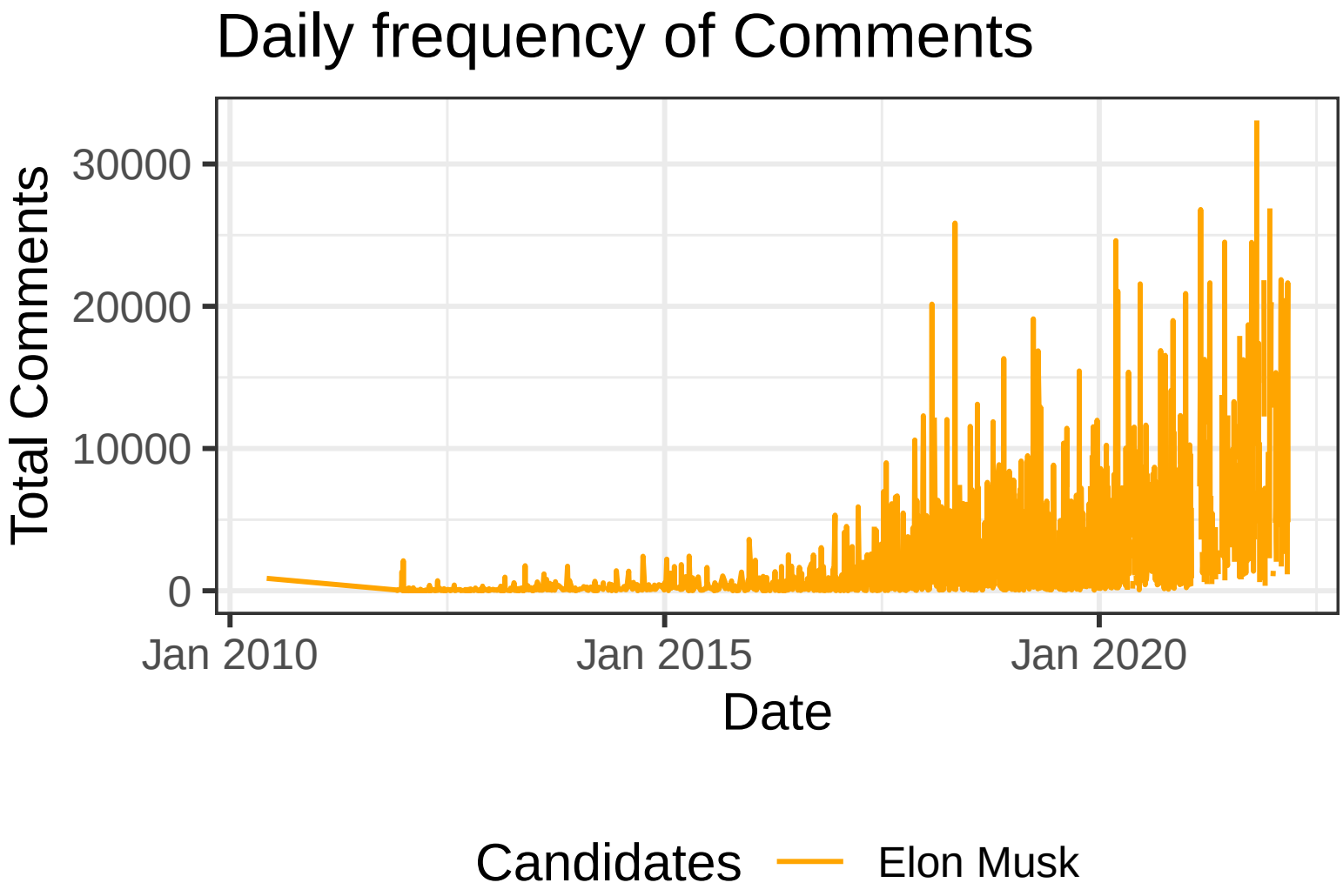
```
##  [1] "Tweet"          "UserScreenName" "UserName"
##  [5] "text"           "Emojis"         "Comments"
##  [9] "Retweets"       "Image link"     "Tweet URL"
```

# THE DAILY FREQUENCY OF TWEETS

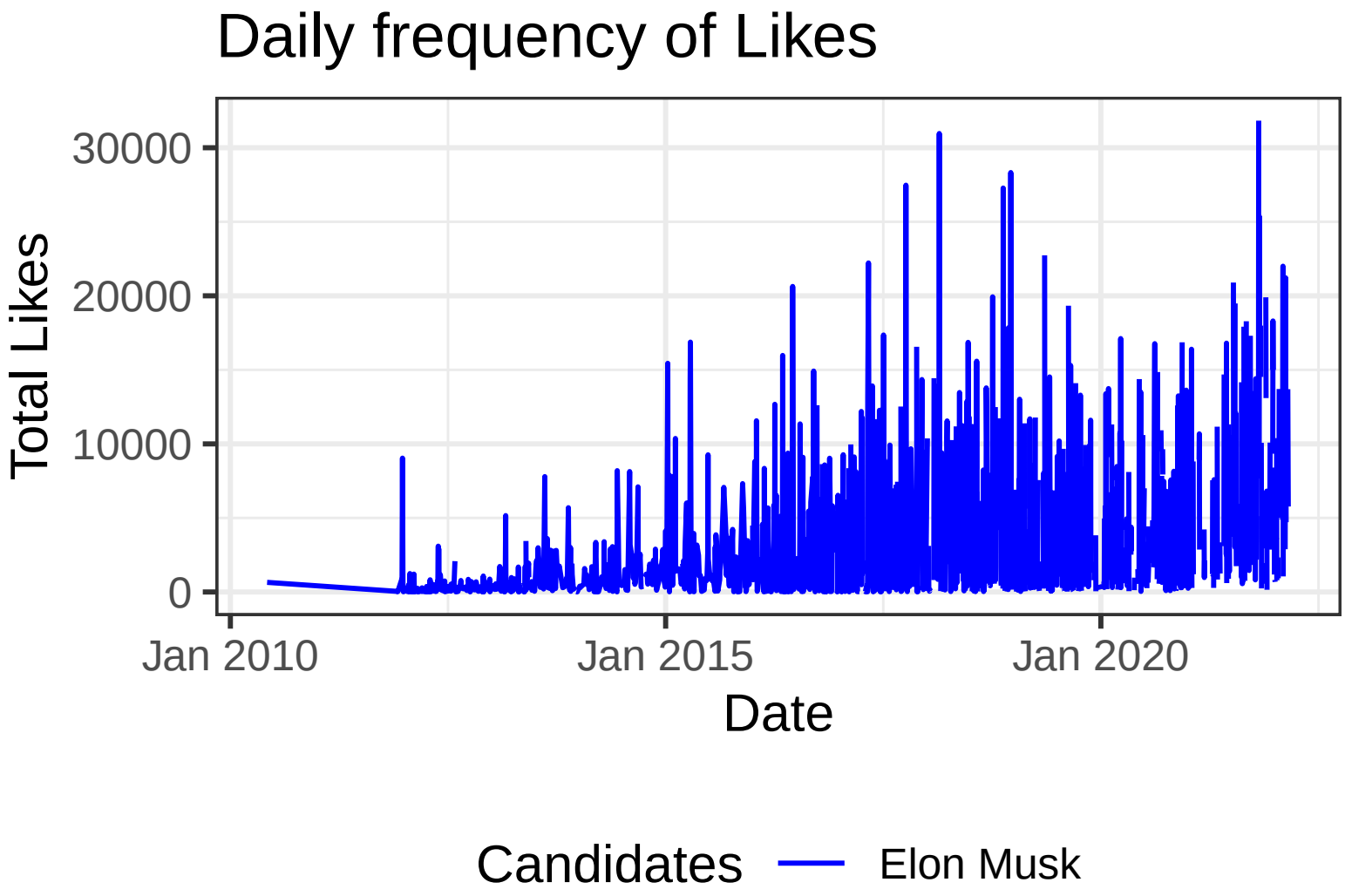



Tweets collected between the year 2010 and the year 2022

# THE DAILY FREQUENCY OF COMMENTS

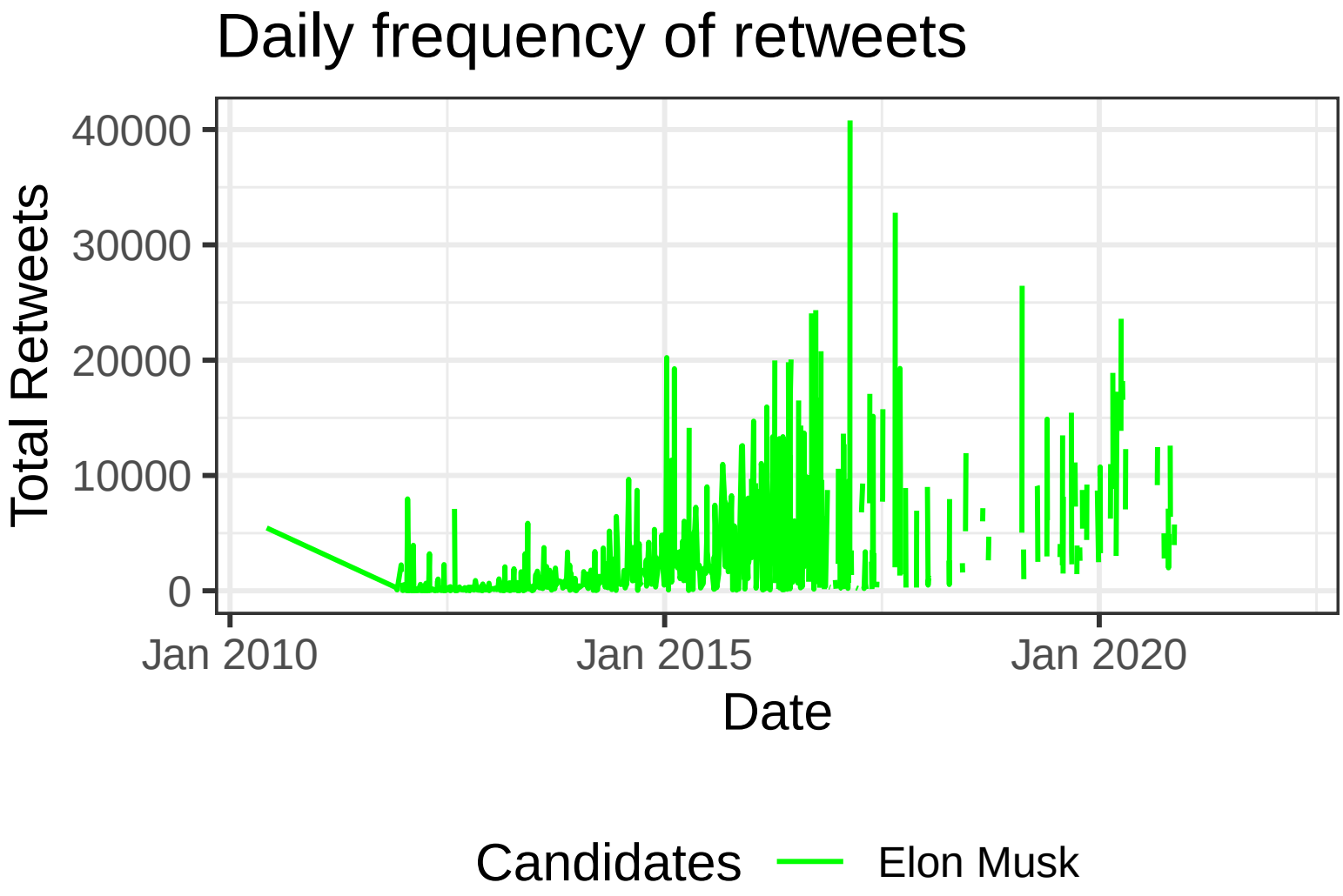


# THE DAILY FREQUENCY OF LIKES




Tweets collected between the year 2010 and the year 2022

# THE DAILY FREQUENCY OF RETWEETS



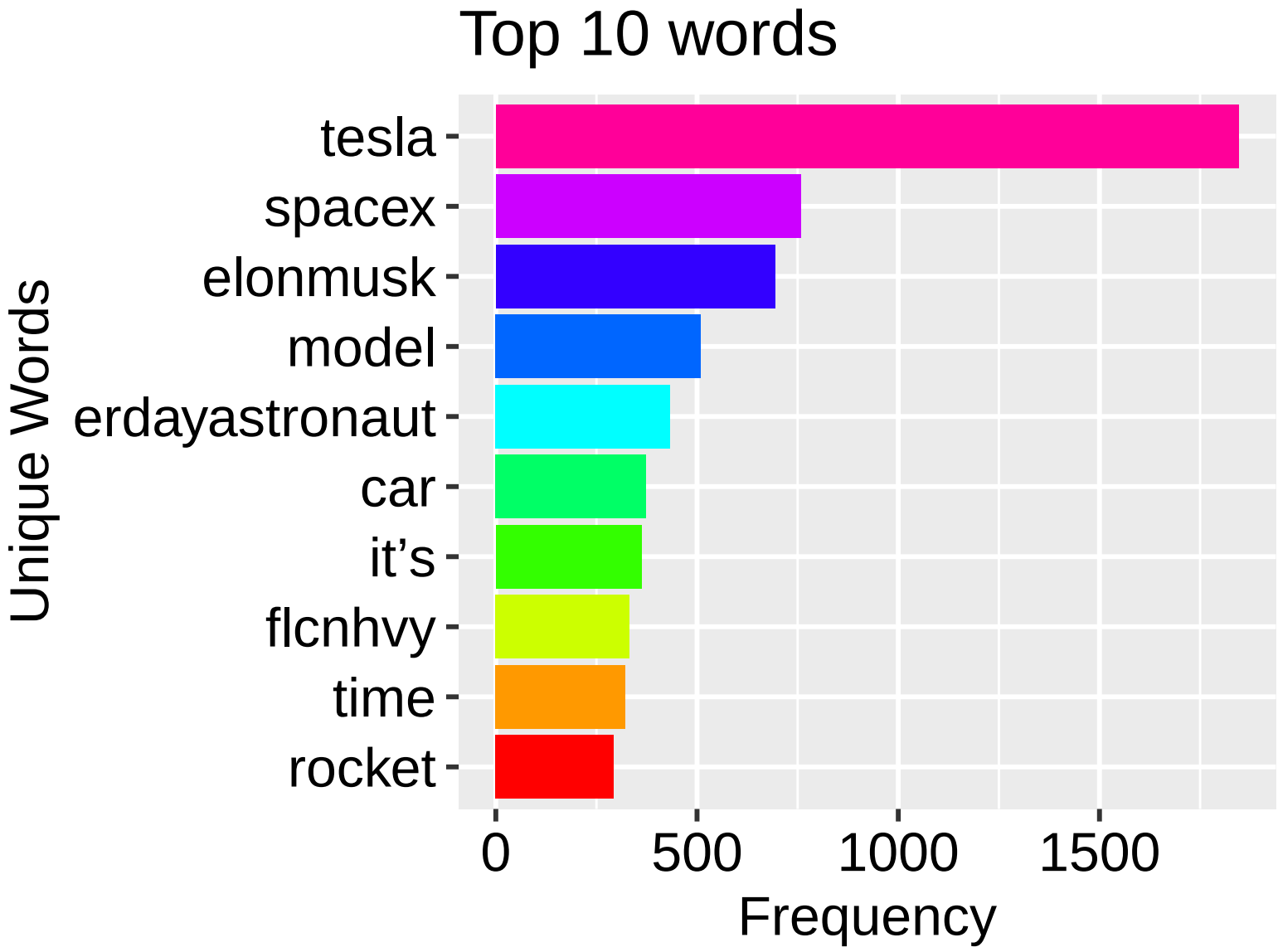

Tweets collected between the year 2010 and the year 2022

# DATA CLEAN-UP

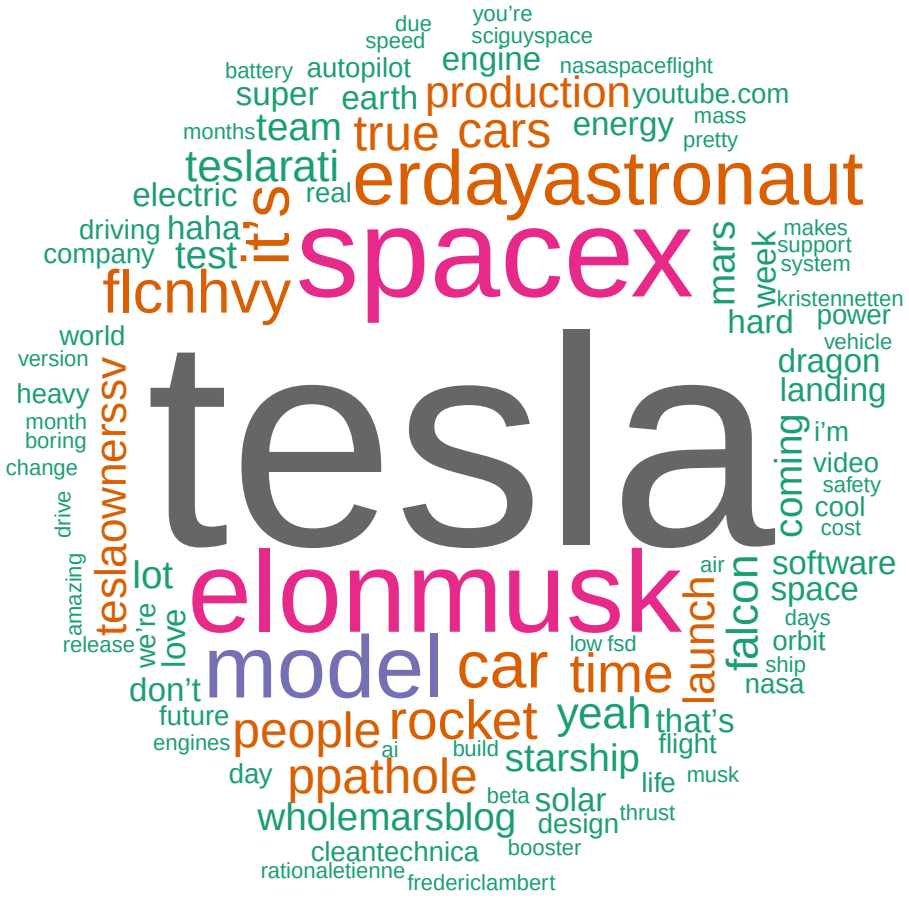
```
Elon_Musk_tweets <- en_tweets %>%
    filter(UserScreenName == "Elon Musk")
Elon_Musk_tweets_clean <- Elon_Musk_tweets %>%
    select(stripped_text) %>%
    mutate(tweetnumber = row_number()) %>%
    unnest_tokens(word, stripped_text)
knitr::kable(head(Elon_Musk_tweets_clean))
```

| tweetnumber | word |
|---|---|
| 1 | please |
| 1 | ignore |
| 1 | prior |
| 1 | tweets |
| 1 | as |
| 1 | that |

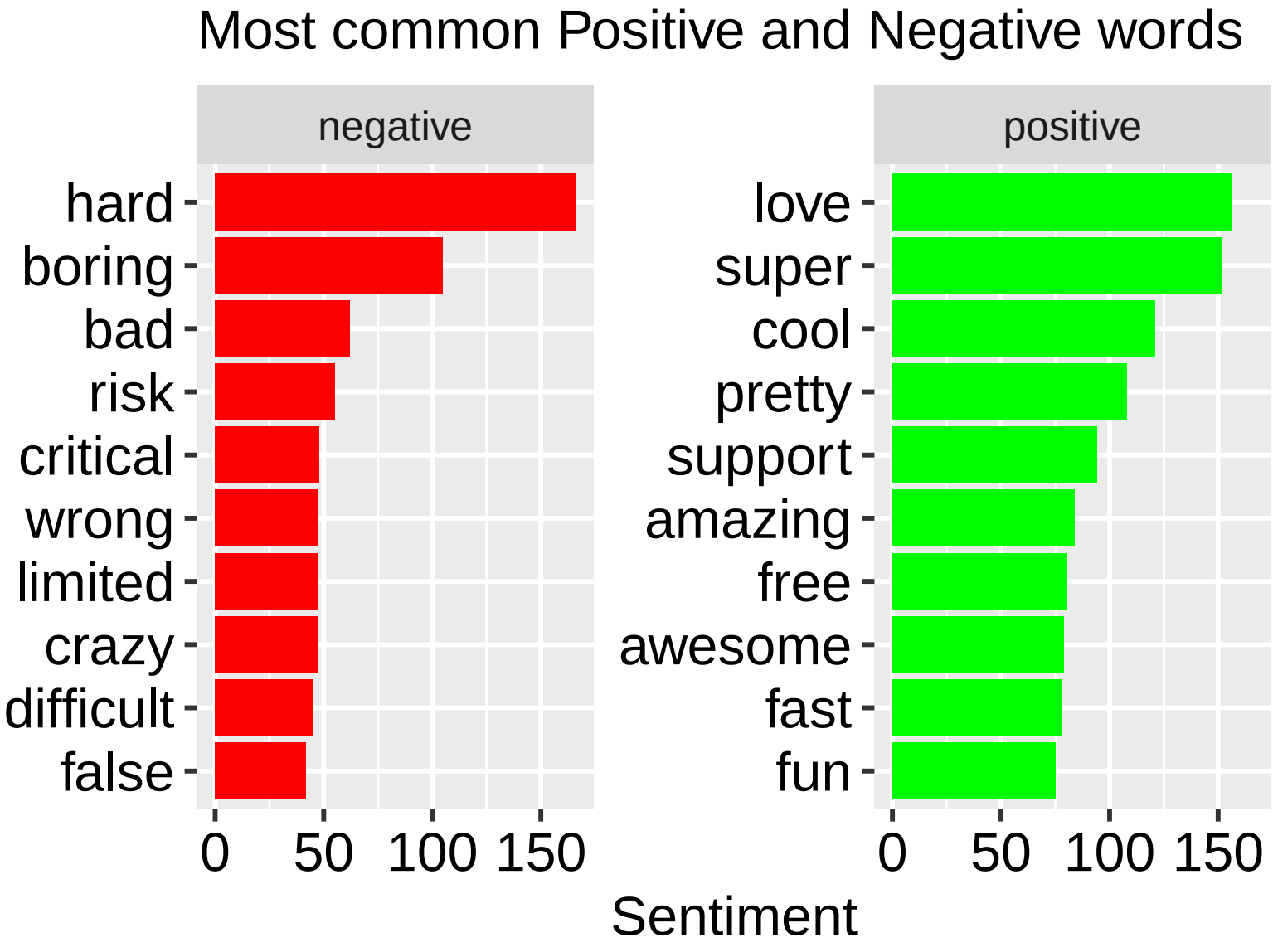
# TOP TEN WORDS IN ELON MUSK'S TWEET



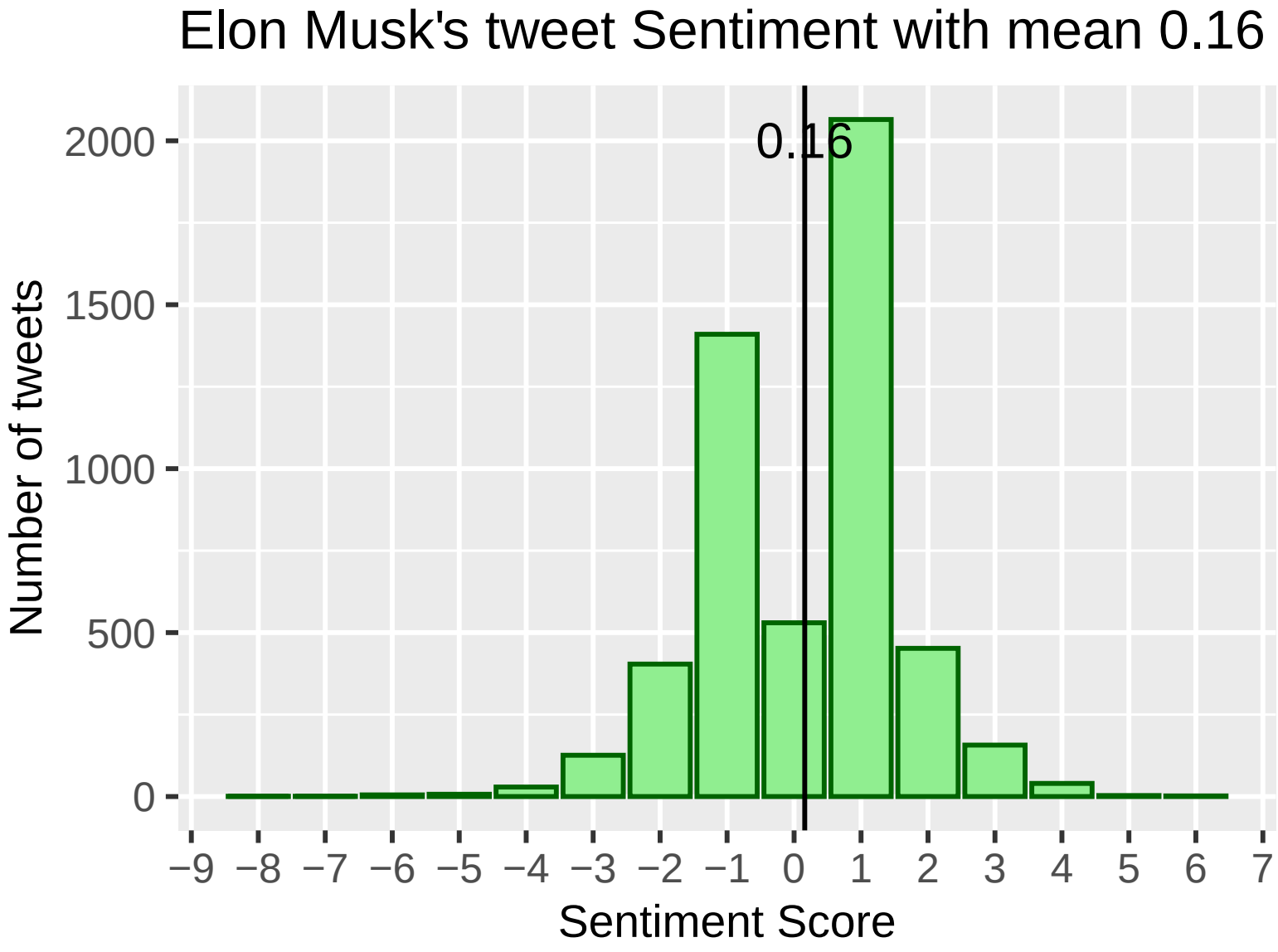
# CREATE A WORDCLOUD



# TOP POSITIVE AND NEGATIVE WORDS



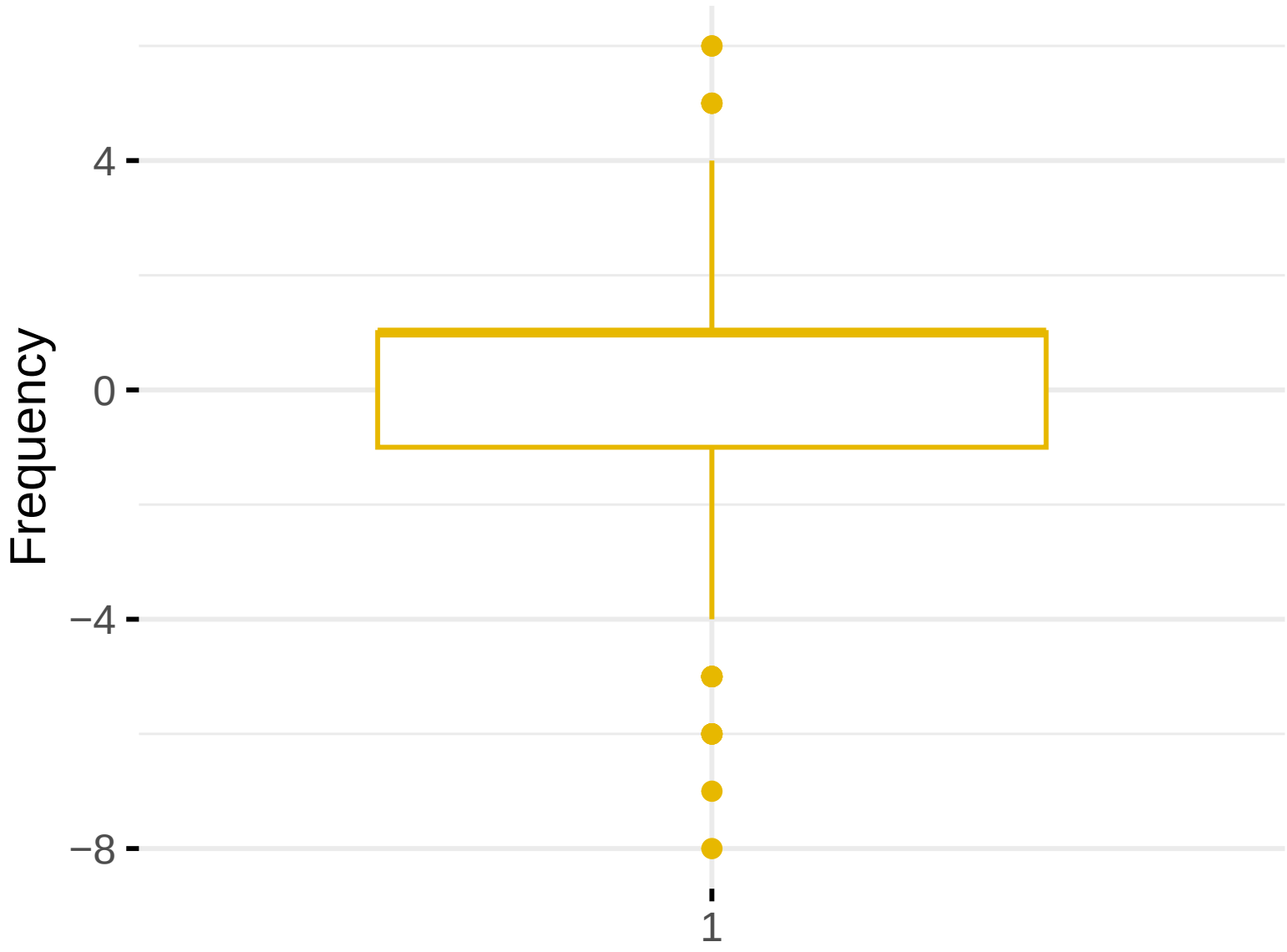
# SENTIMENT SCORE



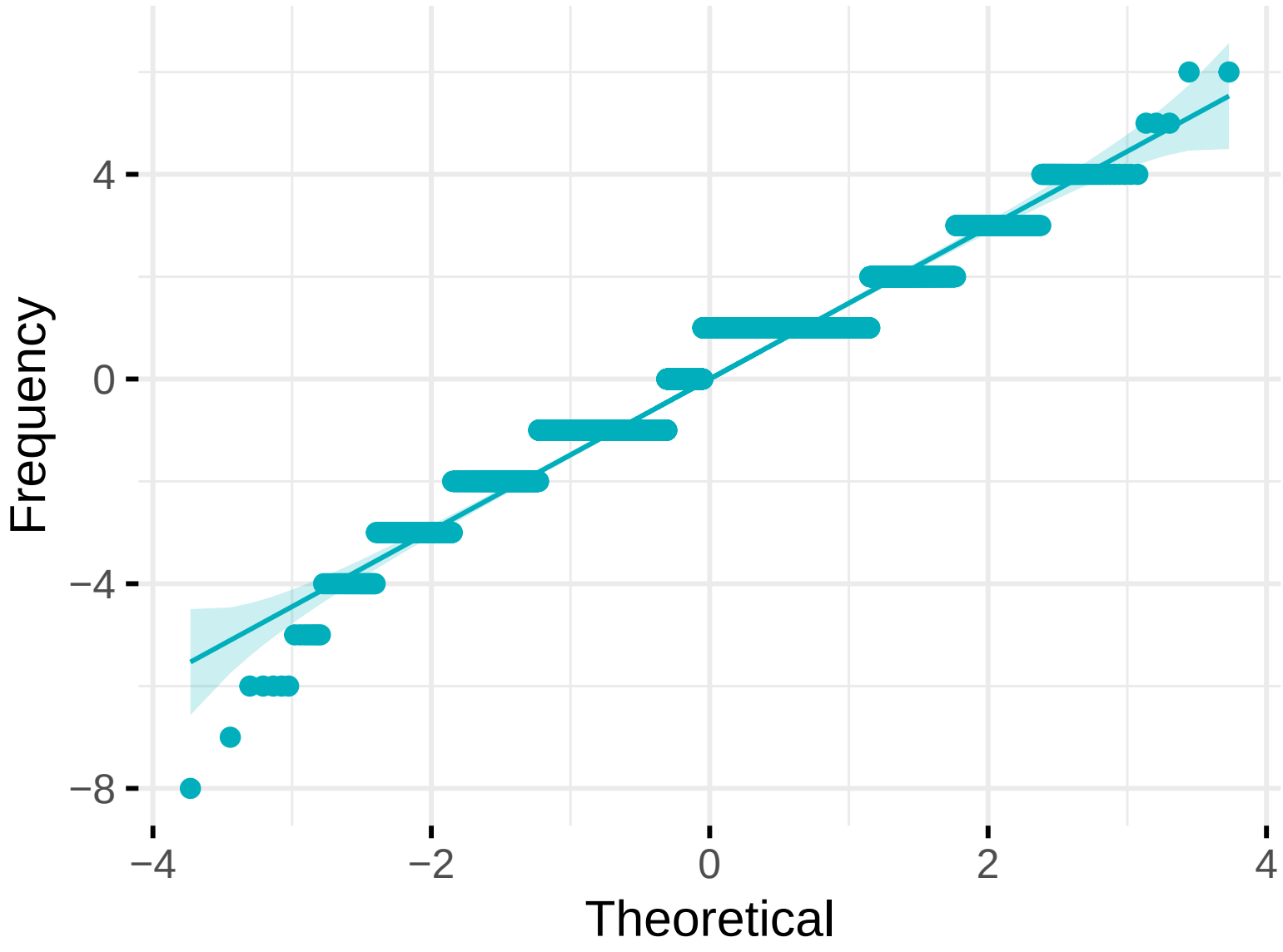
# T.test of Elon Musk Tweets

```
##
##  One Sample t-test
##
## data:  Elon_Musk_sentiment$score
## t = 7.9492, df = 5231, p-value = 2.282e-15
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
##  0.1202358 0.1989538
## sample estimates:
## mean of x
## 0.1595948

## t.test p-value: 2.282138e-15

## t.test estimate: 0.1595948

## t.test confidence interval: 0.1202358 0.1989538

## Number of Observation: 5232
```

# Visualize the Data Using Boxplot



# Visual Inspection of the Data Normality



# References


- Fuadi, A. M. F. (2023, November 26). Unveiling Sentiments in Elon Musk's Tweets: An Exploration through Sentiment Analysis and Text Mining. *Medium*. https://azharmfi.medium.com/unveiling-sentiments-in-elon-musks-tweets-a-data-driven-exploration-78ee2dee16b1
- *RPubs - Tweets on Elon Musk - sentiment analysis*. (2023, January 22).https: //rpubs.com/pruszynskam/Elon_Musk_sentiment_analysis