

Time Distribution Sample

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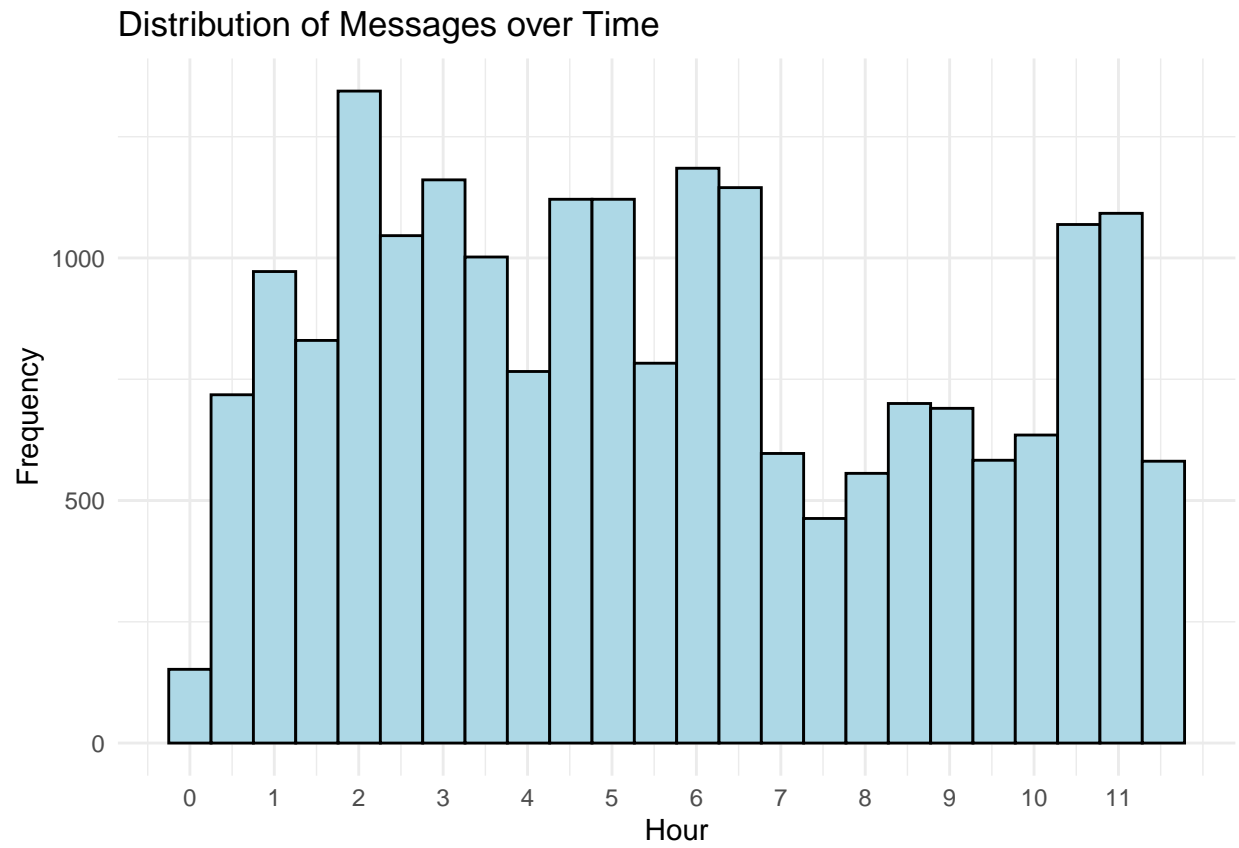
```
library("readr")
dataframe <- read_csv("twitch-chat-2236538812.csv")

## Rows: 20312 Columns: 4
## -- Column specification -----
## Delimiter: ","
## chr (3): user_name, user_color, message
## dbl (1): time
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
```

```
library("ggplot2")
```

```
time_convert <- function(x) {
  minutes <- x %/% 60
  seconds <- x %% 60
  if (minutes > 60) {
    hours <- minutes %/% 60
    minutes <- minutes %% 60
  }
  else {
    hours = "00"
  }
  if (minutes < 10) {
    minutes <- paste("0", minutes, sep = "")
  }
  if (seconds < 10) {
    seconds <- paste("0", seconds, sep = "")
  }
  display <- paste(hours, minutes, seconds, sep = ":")
  display
}
```

```
ggplot(dataframe, aes(x = time)) + geom_histogram(bins = 24, color = "black", fill = "lightblue") + xlab
```



```
ggplot(dataframe, aes(x = time)) + geom_density(alpha = 0.3, fill = "red") + xlab("Hour") + ylab("Densi
```

