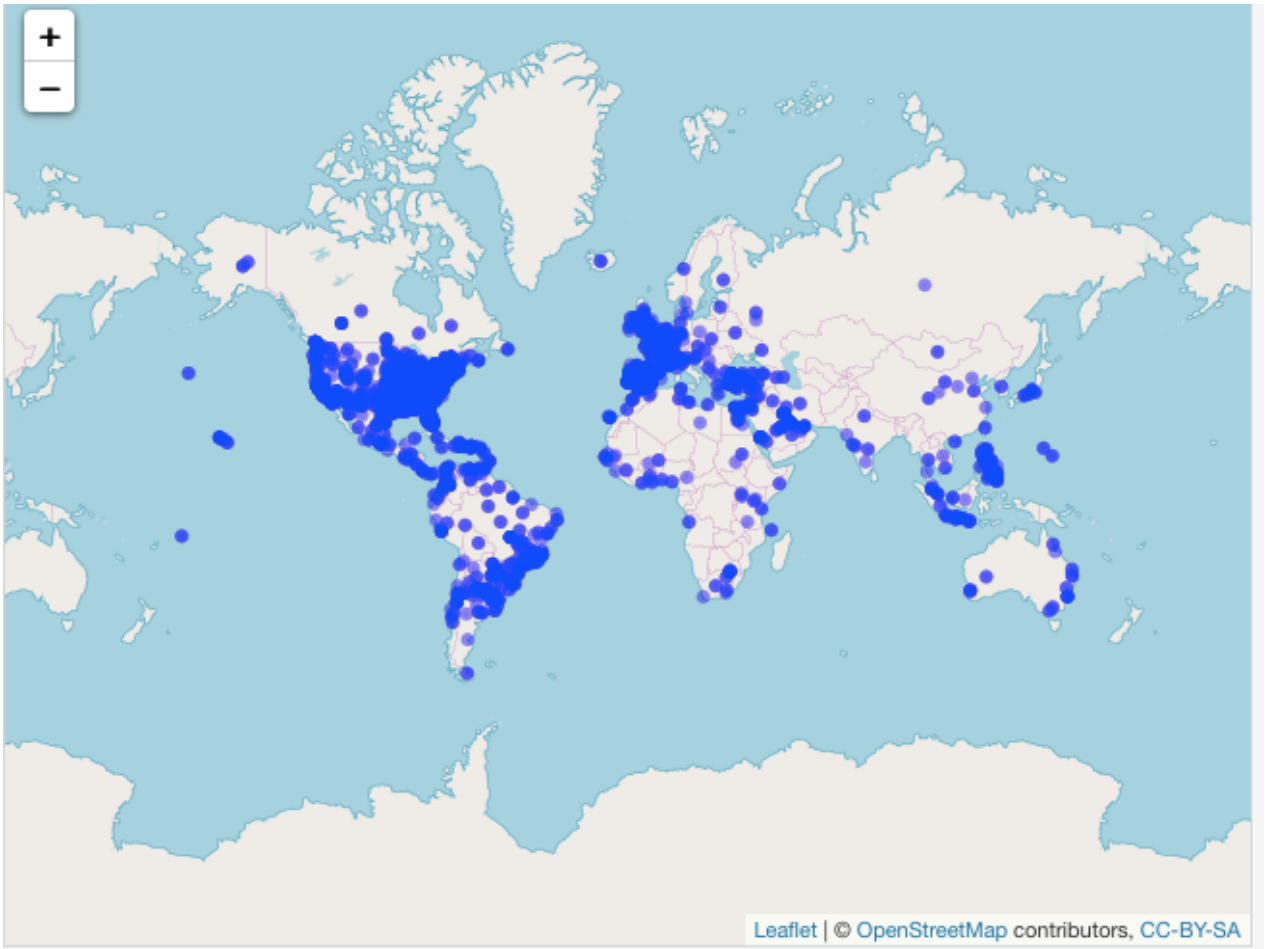
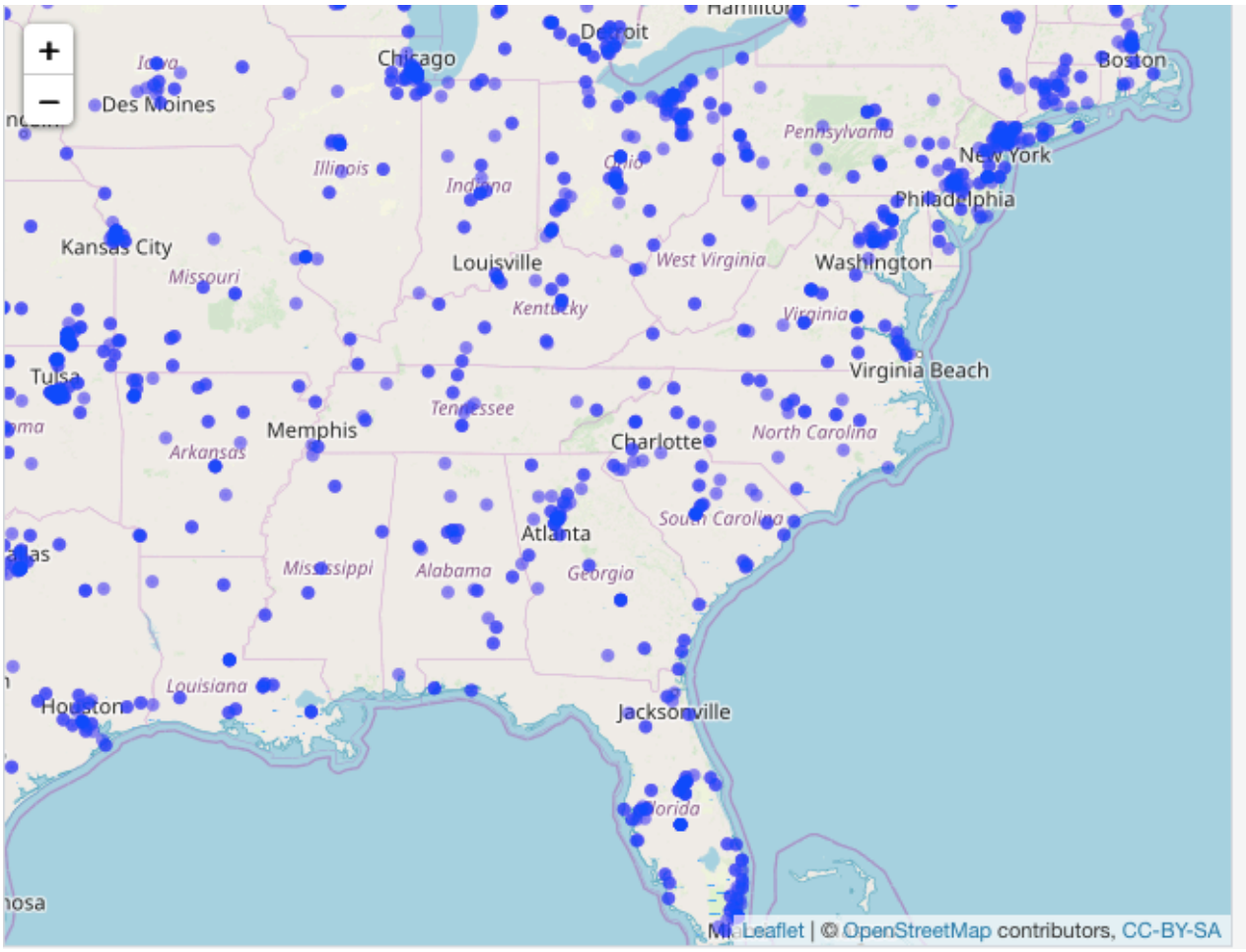
```
# Load require library
library(tidyverse)
library(leaflet)
library(ggmap)
library(igraph)
library(tm)
library(wordcloud)
```

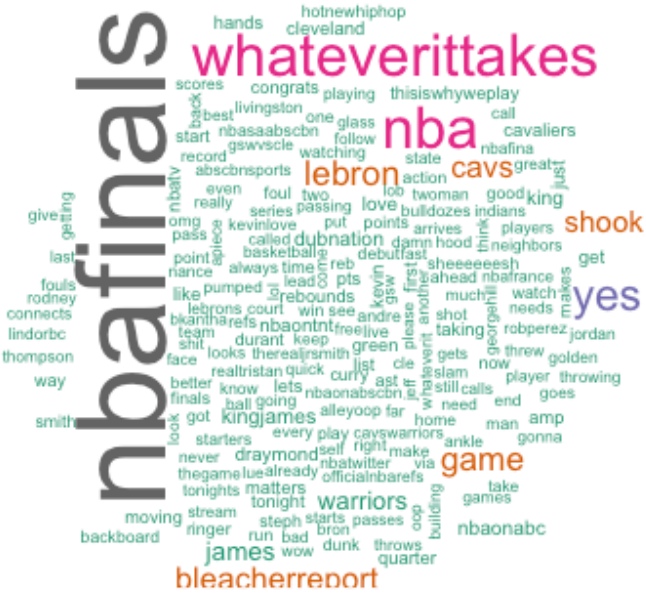
```
# Load the location data
locations <- read.csv('data/locations.csv')

# Create Interactive map
leaflet(data=locations) %>%
  addTiles() %>%
  addCircles (lat=locations$lat, lng=locations$lon)
```






```
# Load tweets data
tweets.df <- read.csv('data/TweetsNBA.csv')
tweets.df <- tweets.df %>%
  mutate_at(vars(text), as.character) %>%
  mutate_at(vars(lang), factor) %>%
  mutate(lang=recode(lang, en="English", es="Spanish"))

# Most frequent word's wordcloud
# English Tweets
en_tweets <- tweets.df %>%
  filter(lang=="English")

# Function to clean the corpus
removeURL <- function(x) gsub("http[[:alnum:]]*", "", x)
cleanCorpus <- function(corpus){

  corpus.tmp <- tm_map(corpus, removePunctuation)
  corpus.tmp <- tm_map(corpus.tmp, stripWhitespace)
  corpus.tmp <- tm_map(corpus.tmp, content_transformer(tolower))
  corpus.tmp <- tm_map(corpus.tmp, content_transformer(removeURL))
  v_stopwords <- c(stopwords("english"),
                   "thats","weve","hes","theres","ive",
"im","will","can","cant",
```

```
"dont","youve","us","youre","youll","theyre","whats","didnt")
  corpus.tmp <- tm_map(corpus.tmp, removeWords, v_stopwords)
  corpus.tmp <- tm_map(corpus.tmp, removeNumbers)
  return(corpus.tmp)

}

# Function to find the frequency of each word
frequentTerms <- function(text){

  s.cor <- Corpus(VectorSource(text))
  s.cor.cl <- cleanCorpus(s.cor)
  s.tdm <- TermDocumentMatrix(s.cor.cl)
  s.tdm <- removeSparseTerms(s.tdm, 0.999)
  m <- as.matrix(s.tdm)
  word_freqs <- sort(rowSums(m), decreasing=TRUE)
  dm <- data.frame(word=names(word_freqs), freq=word_freqs)
  return(dm)

}

# Generate wordcloud
dm <- frequentTerms(en_tweets$text)
wordcloud(dm$word, dm$freq, min.freq=30, colors=brewer.pal(8,"Dark2"),
max.words=200)
```


nbafinals
whateverittakes
nba
lebron
cavs
yes
shook
game
warriors
kingjames
dubnation
bleacherreport
james
hotnewhiphop
hands
cleveland
congrats
playing
thisiswhyweplay
livingston
glass
cavaliers
nbafina
gswvscle
watching
state
absdbnsports
action
great
just
foul
two
passing
love
lob
twoman
good
king
series
bulldozes
indians
kevinlove
put
points
arrives
players
called
damn
hood
neighbors
basketball
debut
fast
sheeeeeesh
get
always
time
reb
pts
ahead
nbafrance
pumped
lead
rebounds
much
watch
lebrons
court
win
see
andre
shot
needs
refs
nbaontnt
free
live
taking
robperez
jordan
durant
keep
green
gets
threw
looks
therealjrsmith
list
cle
now
golden
realtristan
quick
curry
slam
player
throwing
better
know
lets
ast
still
calls
goes
finals
ball
going
nbaonabscbn
need
end
got
alleyoop
far
home
man
amp
starters
every
play
cavswarriors
ankle
gonna
never
draymond
self
right
make
nbatwitter
via
thegame
lue
already
officialnbarefs
tonights
matters
tonight
games
moving
stream
steph
starts
passes
nbaonabc
backboard
ringer
run
bad
bron
wow
dunk
throws
quarter