

# Analysis of Trump Tweets

# Why Trump

# Why Trump

- There is plenty of data
- His tweets affects real life events
- Massive number of following

# Data source

- From Kaggle
- Around 56571 post
- From 4th of May 2009 to 8th of Jan 2021

# Some interesting finding

Twitter for iPhone	27967
Twitter for Android	14545
Twitter Web Client	12182
TweetDeck	482
TwitLonger Beta	405
Twitter Media Studio	375
Instagram	133
Facebook	105
Twitter for BlackBerry	97
Twitter Ads	97
Twitter Web App	64
Twitter for iPad	60
Twitlonger	23
Twitter QandA	10
Vine - Make a Scene	10
Periscope	7
Neatly For BlackBerry 10	5
Media Studio	2
Twitter for Websites	1
Twitter Mirror for iPad	1



**Donald J. Trump** ✓

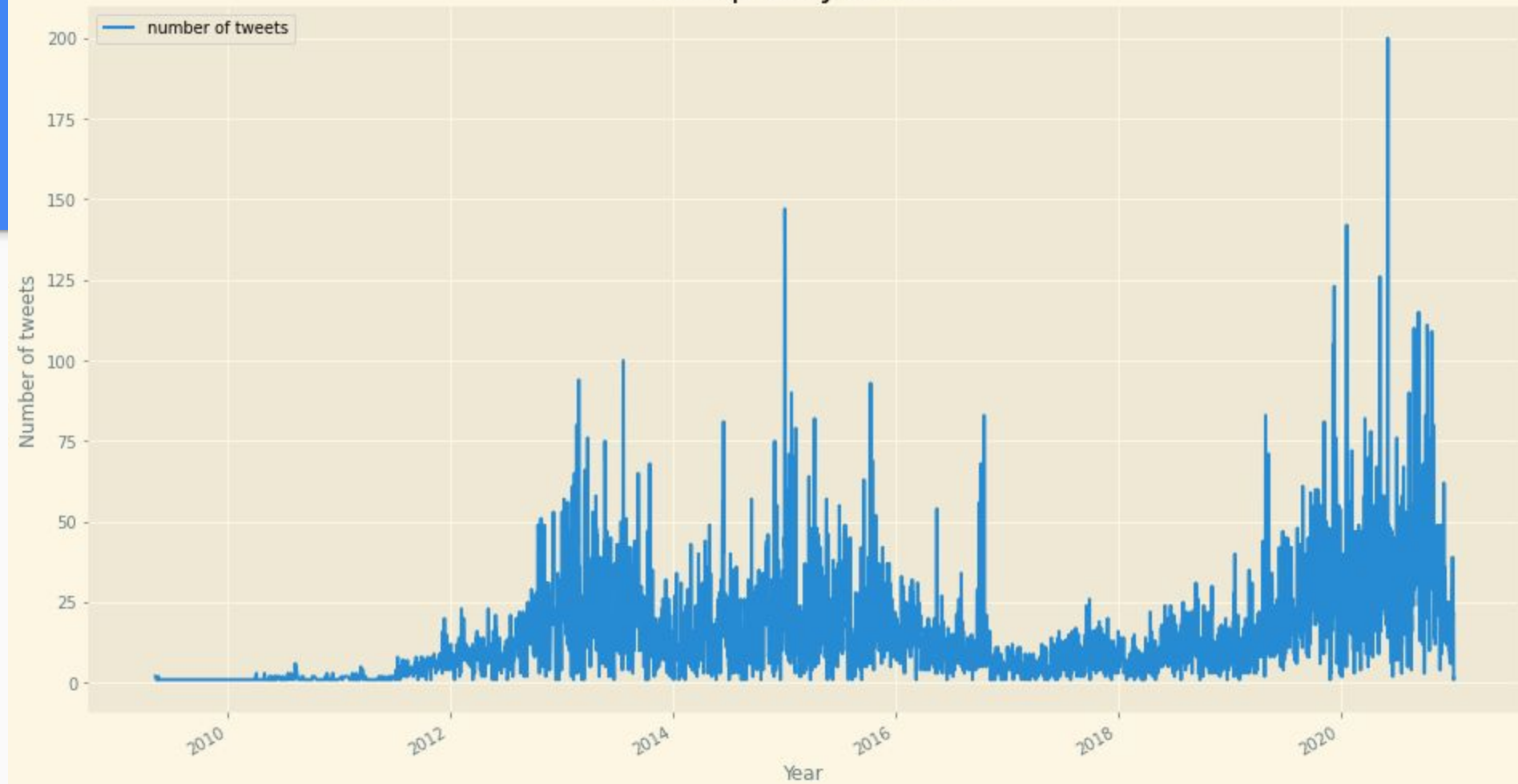
@realDonaldTrump



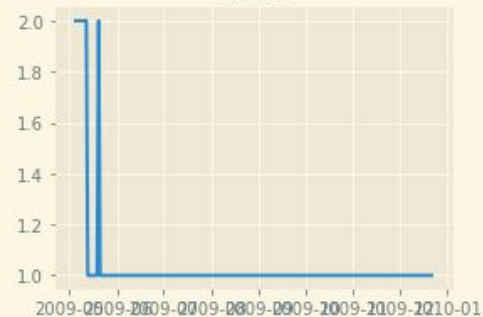
Tonight, @FLOTUS and I tested positive for COVID-19. We will begin our quarantine and recovery process immediately. We will get through this TOGETHER!

12:54 AM · Oct 2, 2020 · Twitter for iPhone

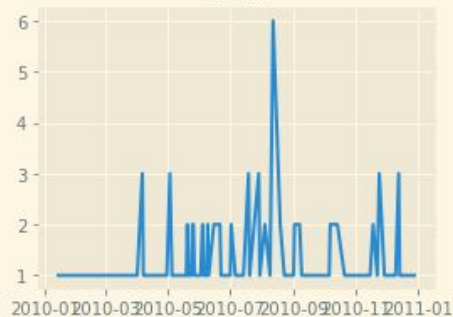
# Trump daily tweets



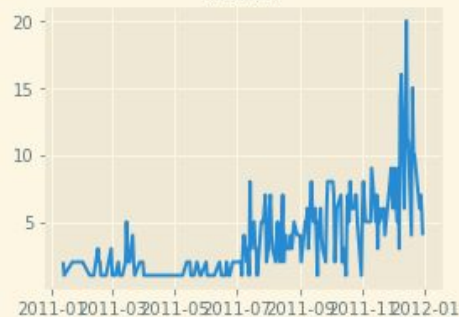
2009



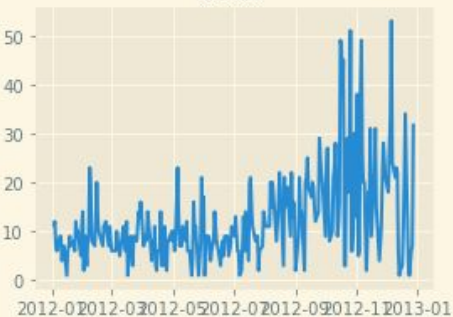
2010



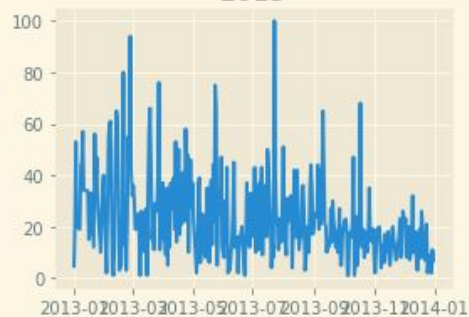
2011



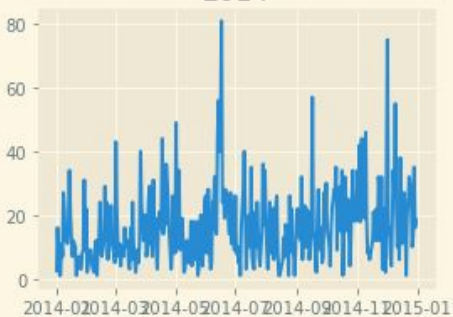
2012



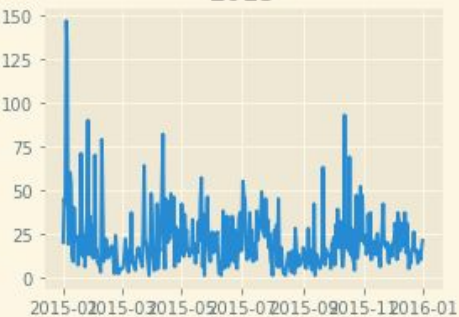
2013



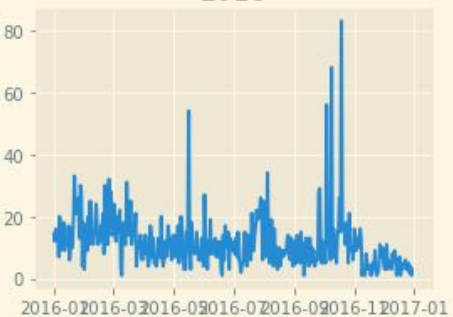
2014



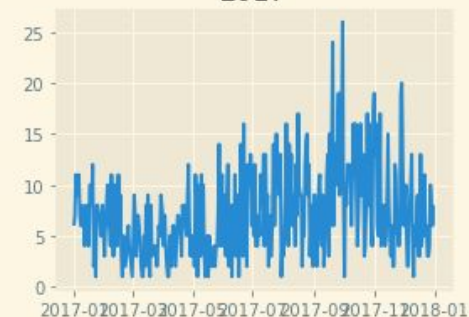
2015



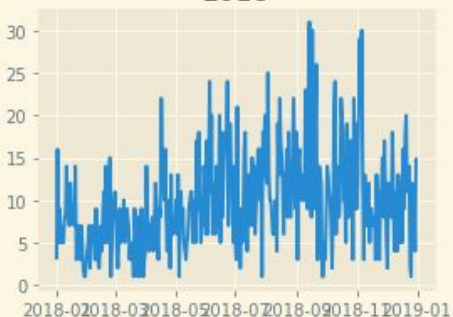
2016



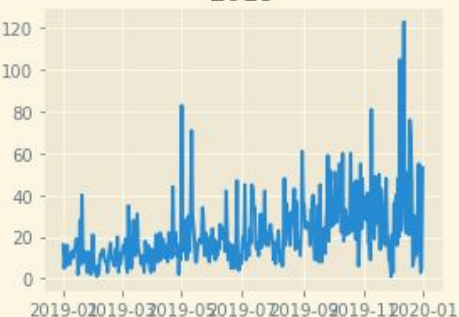
2017



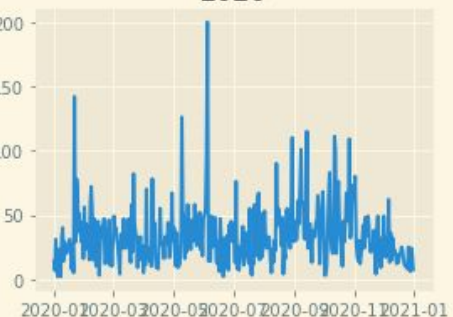
2018



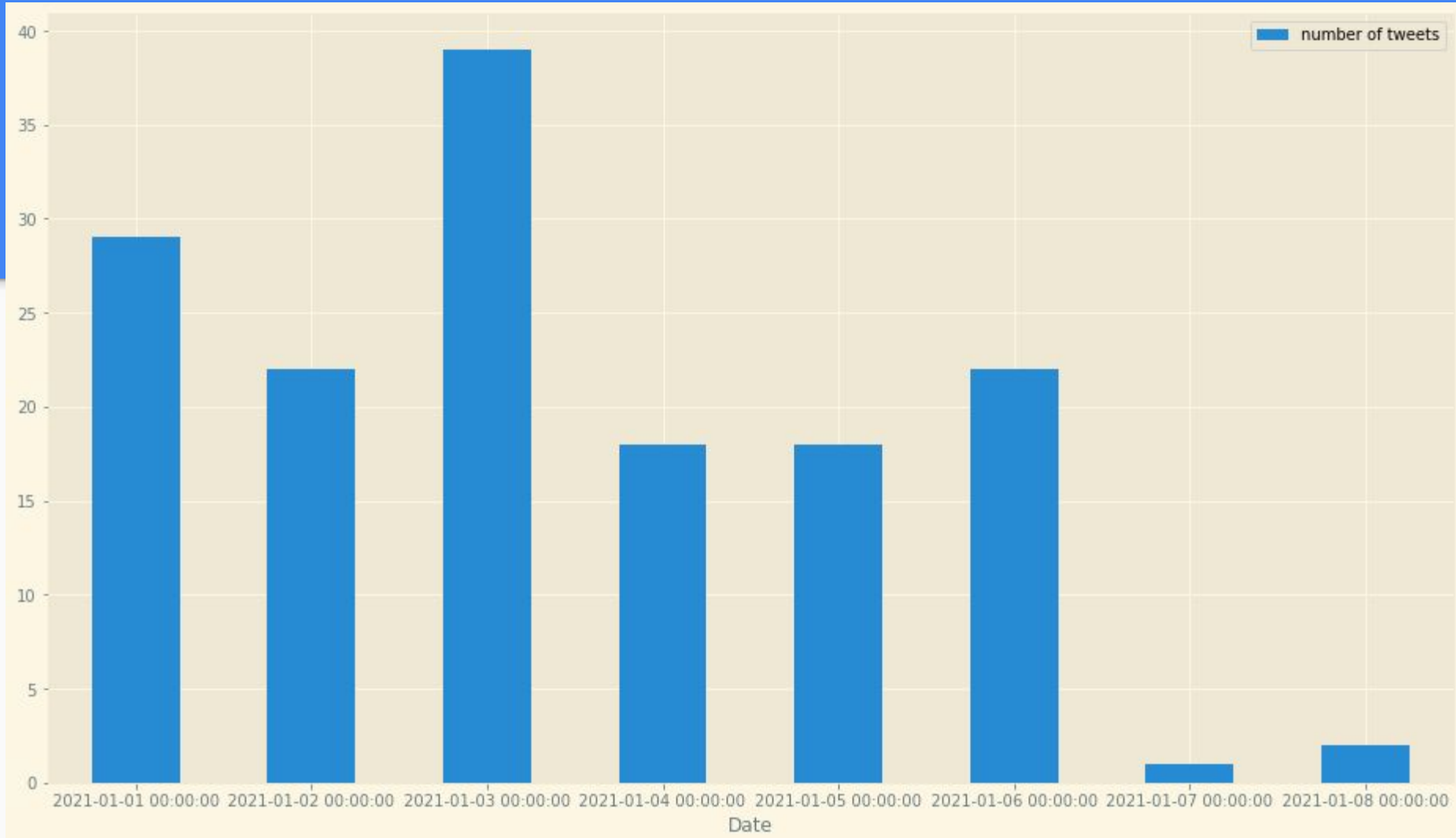
2019



2020



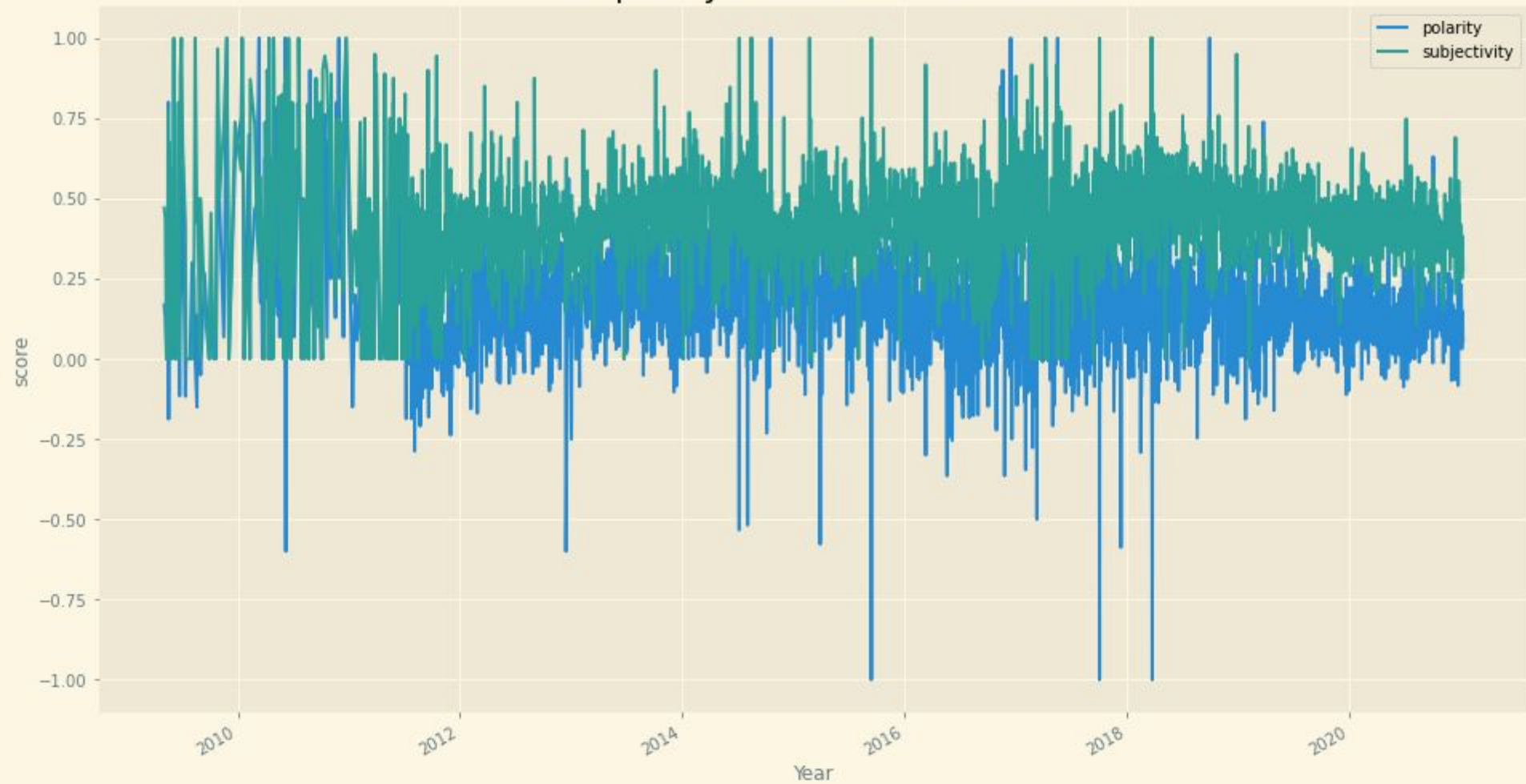




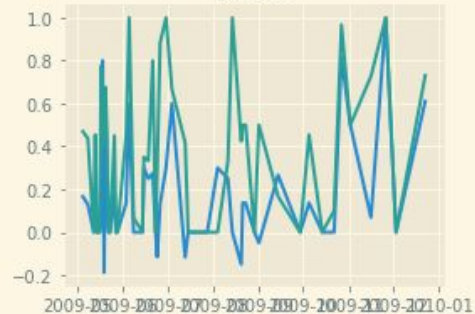
# Sentiment Analysis

- TextBlob
  - Polarity  $[-1, 1]$  and subjectivity  $[0, 1]$
  - Ignore words it doesn't know
  - Sometimes unhelpful result
- VADER
  - Returns the probability to be either positive, negative or neutral

# Trump daily tweet sentiment score



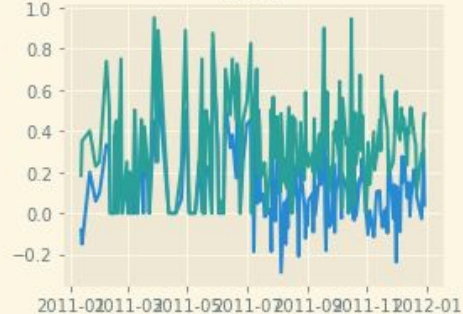
2009



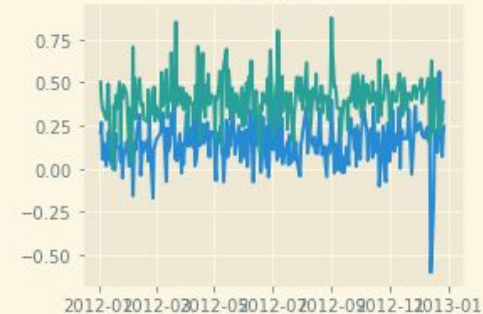
2010



2011



2012



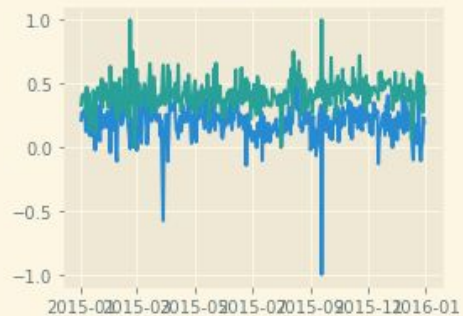
2013



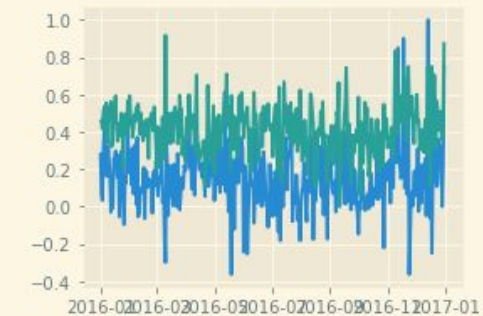
2014



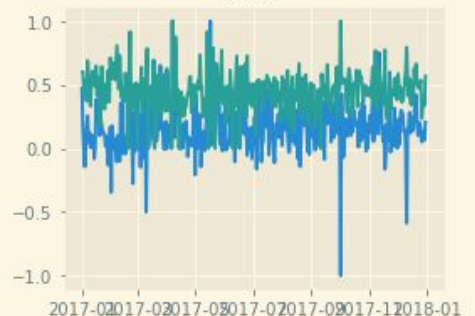
2015



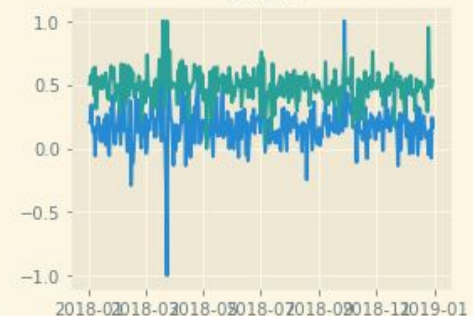
2016



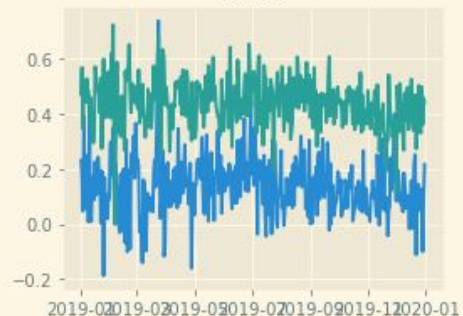
2017



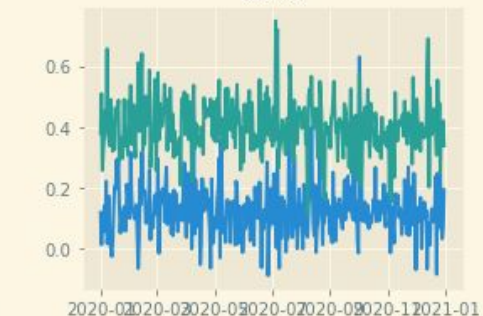
2018



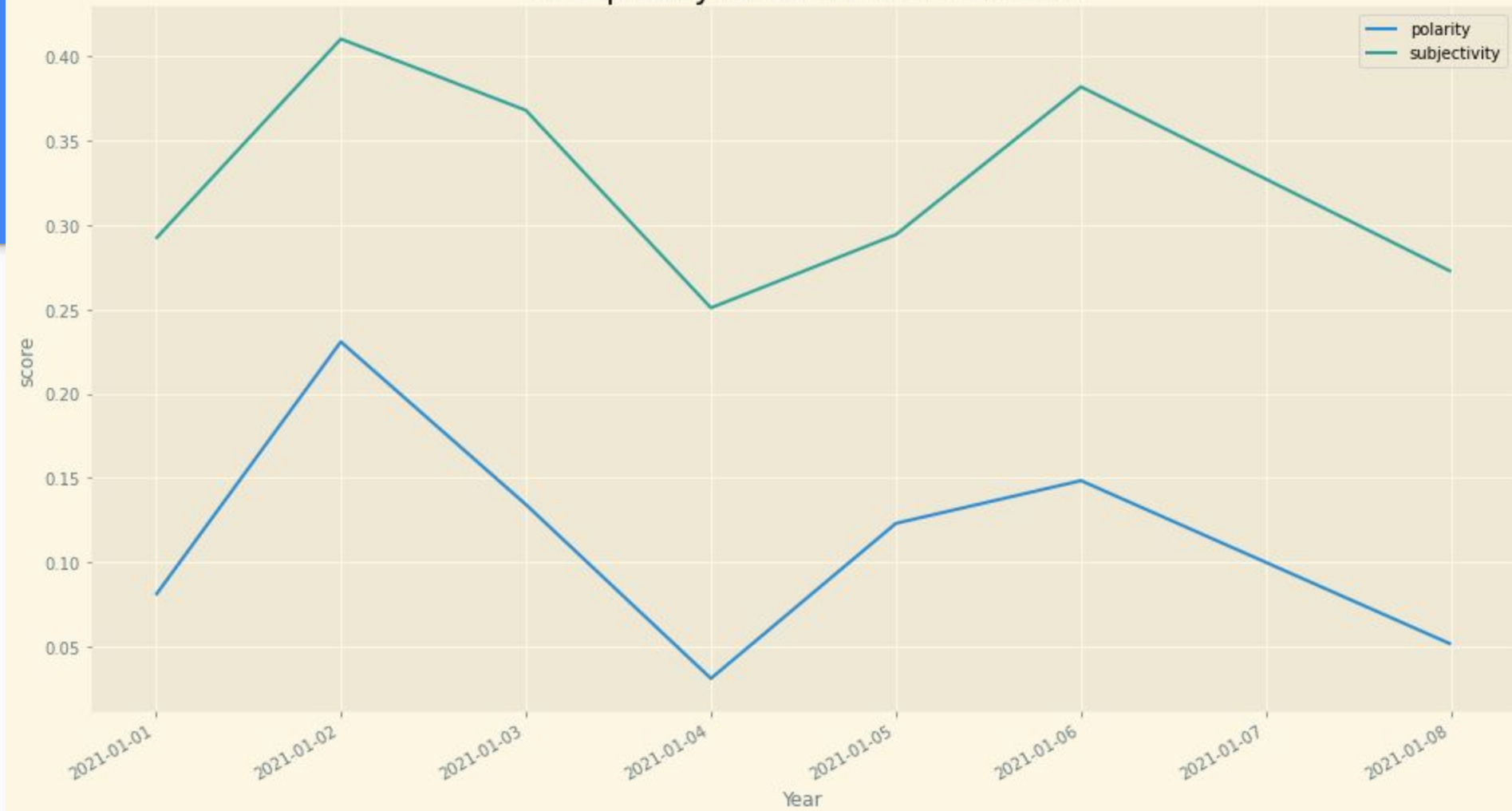
2019



2020



Trump daily tweet sentiment score



# Trump daily tweet sentiment score





2009



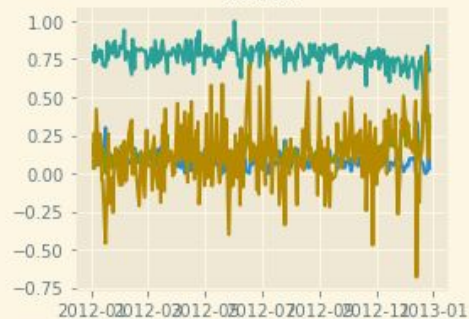
2010



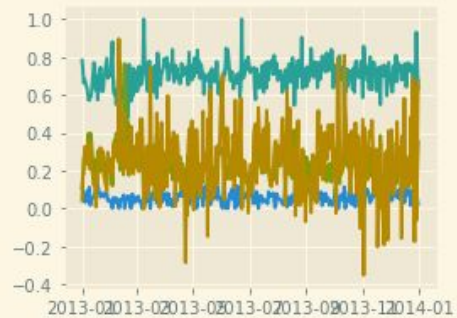
2011



2012



2013



2014



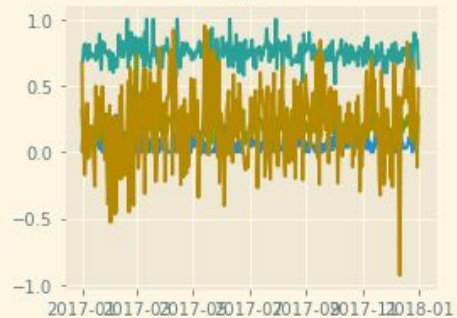
2015



2016



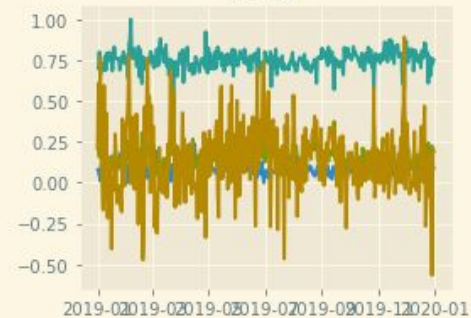
2017



2018



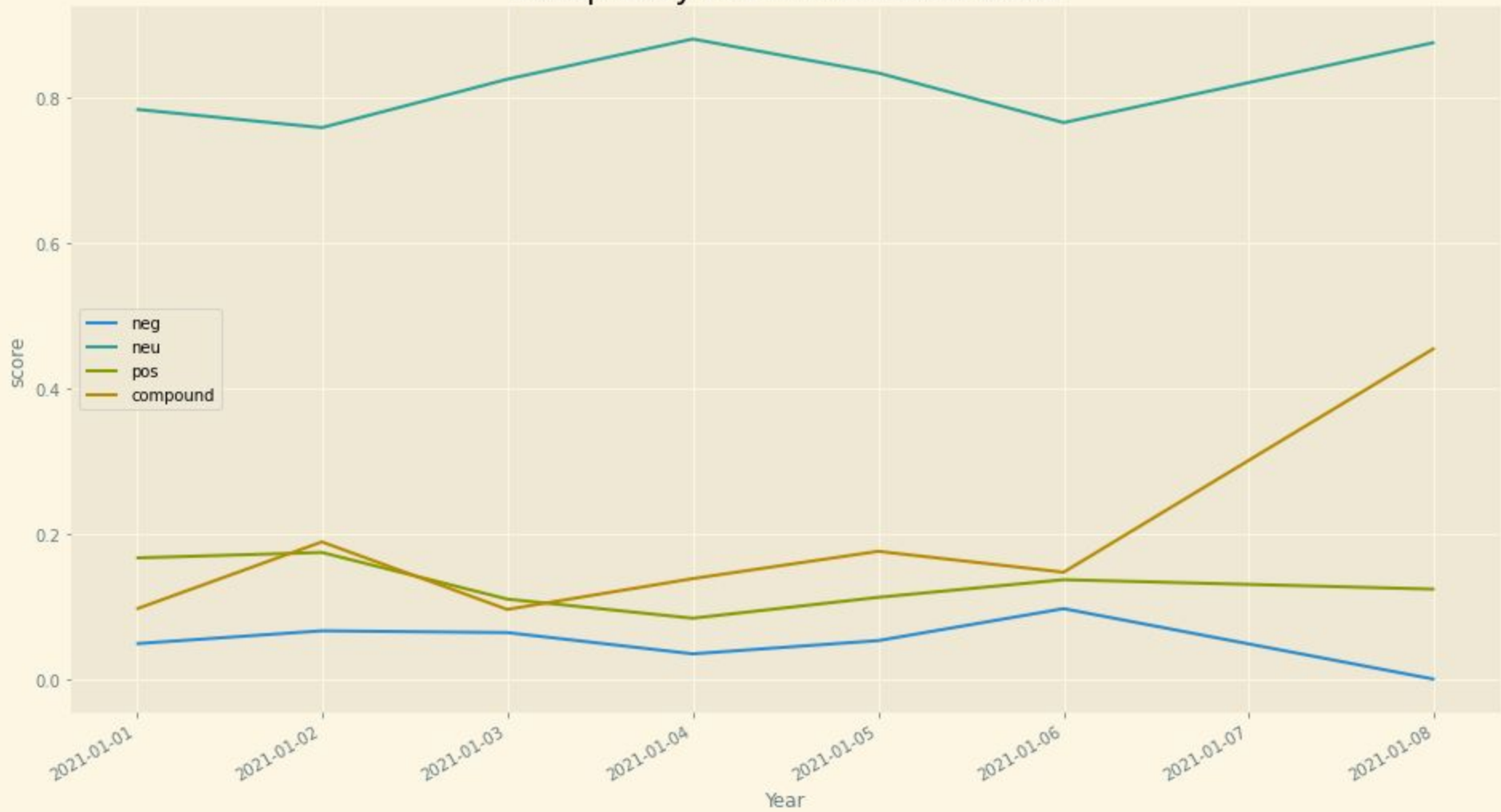
2019



2020



Trump daily tweet sentiment score







Todd Vaziri ✓

@tvaziri

...

Every non-hyperbolic tweet is from iPhone (his staff).

Every hyperbolic tweet is from Android (from him).

Donald J. Trump @realDonaldTrump  
Good luck #TeamUSA heading to New Hampshire  
Inauguration Ceremony #Rig about Hillary saying  
[twitter.com/mS8qsQ](https://twitter.com/mS8qsQ) IT CIRCUITED, and

es

8,3s

1,4

3:59 PM

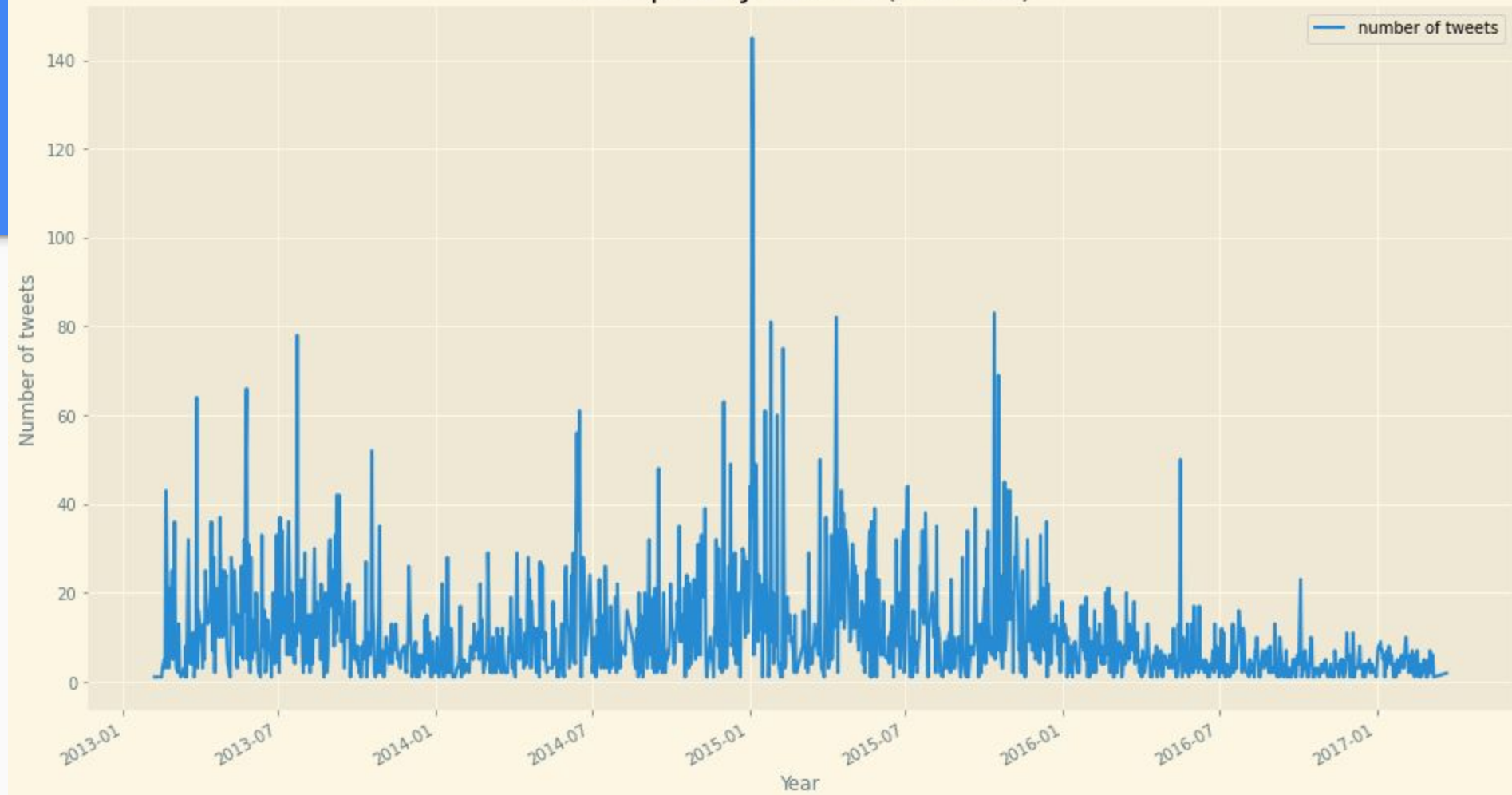
via Twitter

11 AM

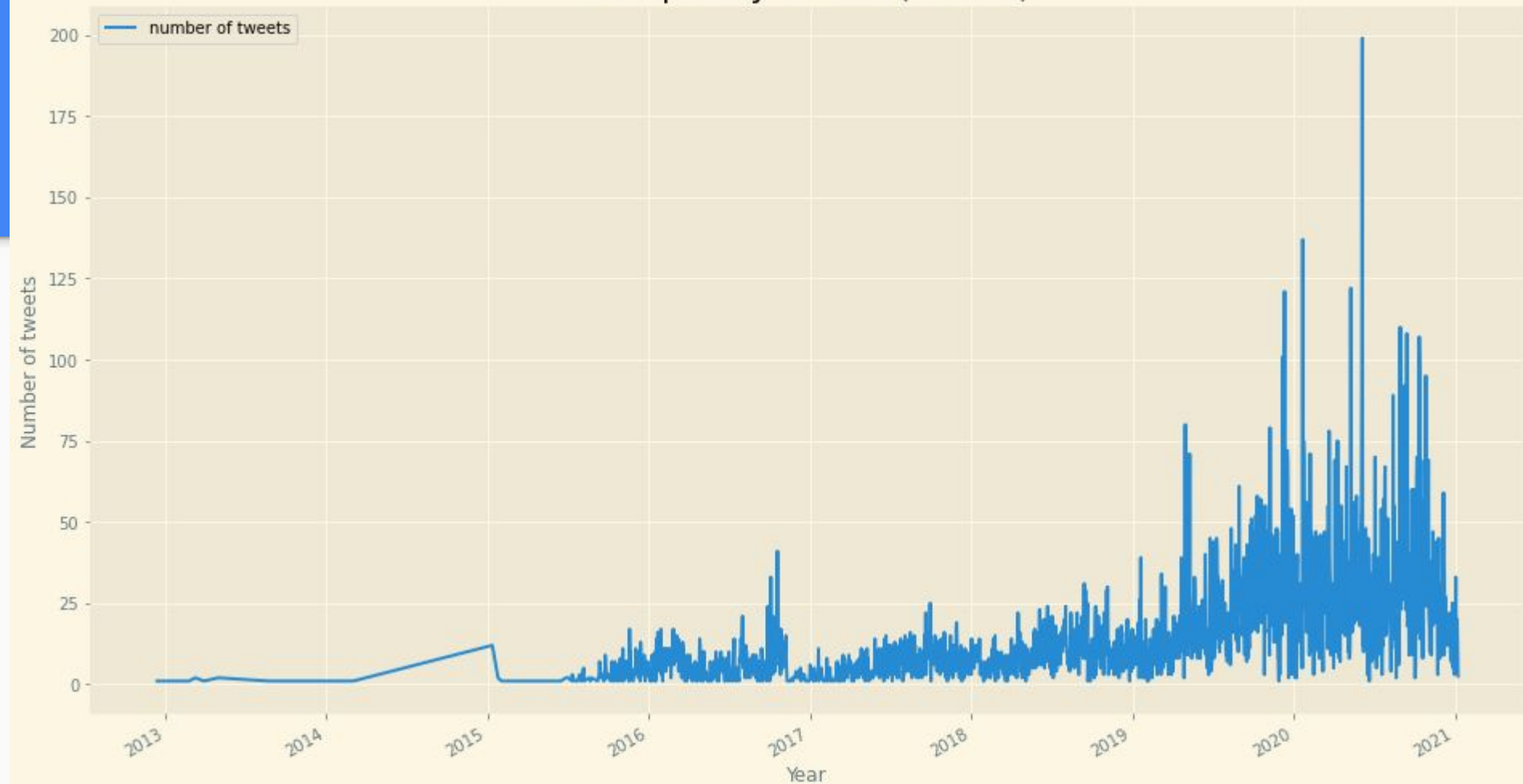
via Twitter

9:20 PM · Aug 6, 2016 · Tweetbot for iOS

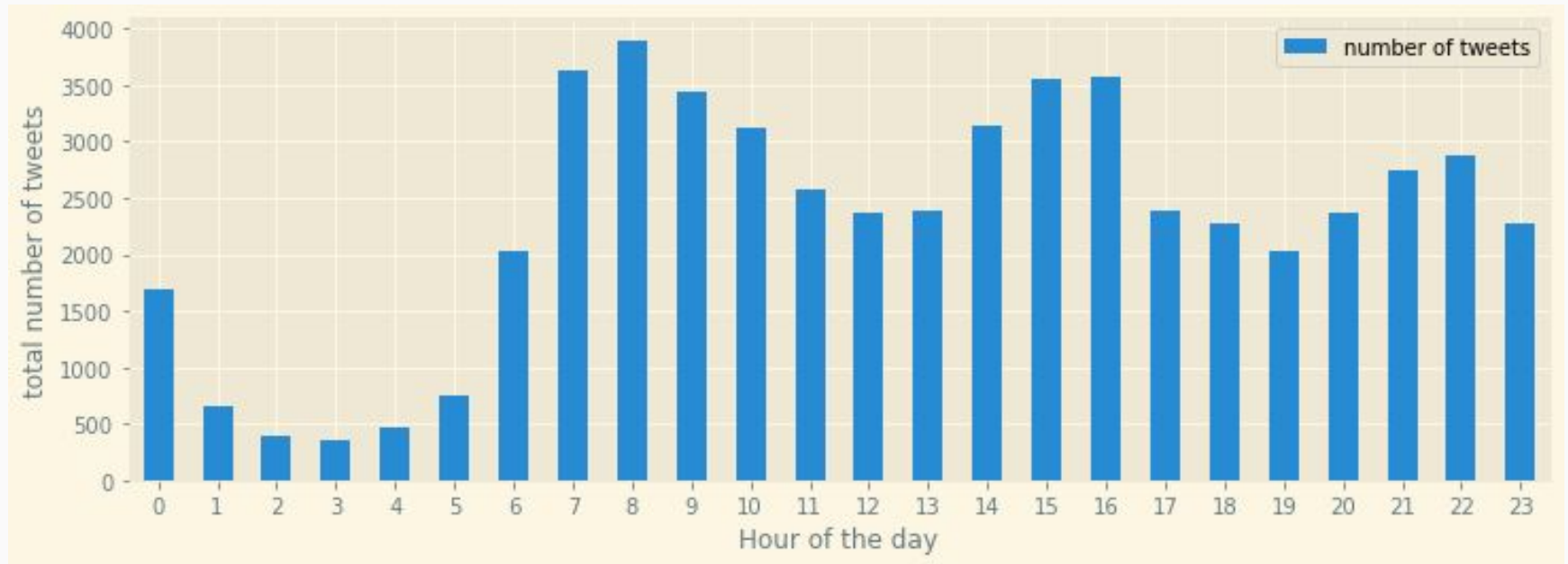
# Trump daily tweets (Android)



# Trump daily tweets (iPhone)



# Number of tweets by hour of the day



# Conclusion

- Trump twitter activity peaked in 2015 and 2020
- Trump tweets are mostly neutral and generally subjective
- iPhone vs Android hypothesis is likely moot
- We can conclude that Trump switched to iPhone as his main device between 2016 and 2017
- He probably doesn't sleep much

# Bonus

I made a chatbot trained with 2020 presidential debate. The model used is Microsoft DialoGPT which is based on Transformer model. You can try it here:

[Hugging Face](#)

[Discord version](#)

18:49



14:01



14:02



14:03



# trump-bot



# trump-bot



# trump-bot



# trump-bot



**TrumpBot** BOT Today at 18:23  
I think it's a little bit late.



**why 1+1=2?** Today at 18:24  
indeed



**TrumpBot** BOT Today at 18:24  
And they will not shut down.




**why 1+1=2?** Today at 18:24  
Oh, they won't



**TrumpBot** BOT Today at 18:24  
Well, they're not going to like that.



**why 1+1=2?** Today at 18:24  




**TrumpBot** BOT Today at 18:24  
Hmm... something is not right.



**Max** Today at 18:24  
yes



**TrumpBot** BOT Today at 18:24  
And by the way, the fact of the matter is that there has been a dramatic increase in homicides in America in the last decade or more, in some cases by at least 7 percent, to the number of homicides. And that number is going up very, very, very, very, very fast.



**why 1+1=2?** Today at 18:24



**why 1+1=2?** Yesterday at 22:21  
you want my ballot?



**TrumpBot** BOT Yesterday at 22:21  
I want my ballot, sir.



**why 1+1=2?** Yesterday at 22:21  
then do a better job



**TrumpBot** BOT Yesterday at 22:21  
You know, I'm going to give you an --



**Turtle** 🐢🐢🐢 Yesterday at 22:22  
When does trump ever say "sir"?



**TrumpBot** BOT Yesterday at 22:22  
When he says it.



**Turtle** 🐢🐢🐢 Yesterday at 22:22  
Smartass



**TrumpBot** BOT Yesterday at 22:22  
Well, you know what? He's wrong.



**Turtle** 🐢🐢🐢 Yesterday at 22:22  
If only there was a way to allow this bot to get smarter all on it's own over time.



**TrumpBot** BOT Yesterday at 22:22  
I think the only way to save lives is to let people out of jail now.



**why 1+1=2?** Yesterday at 22:22  
i'm laughing too much lol



**TrumpBot** BOT Today at 00:54  
And by the way, the mayor of Moscow's son is now a member of the Trump administration and he's going to be very happy because he's going to be able to continue to provide for the American people the help he's been given.




**why 1+1=2?** Today at 00:54  
The model went pepega



**TrumpBot** BOT Today at 00:54  
He went to Michigan State but he didn't want to go back to Pennsylvania.



**why 1+1=2?** Today at 00:54  




**TrumpBot** BOT Today at 00:54  
Hmm... something is not right.



**uncle Cags** Today at 00:54  
Sir



**TrumpBot** BOT Today at 00:54  
I'm not going to listen to him.



**uncle Cags** Today at 00:54  
Okay



**TrumpBot** BOT Today at 00:54  
I'm not going to answer that question because



**uncle Cags** Today at 00:54



**WireSpeed** Today at 01:30  
Boo



**TrumpBot** BOT Today at 01:30  
I'm not going to allow that to happen.



**WireSpeed** Today at 01:30  
Boo



**TrumpBot** BOT Today at 01:30  
I'm not going to allow that to happen.



**WireSpeed** Today at 01:30  
Boooo



**uncle Cags** Today at 01:30  
Let's play a game



**TrumpBot** BOT Today at 01:30  
Go ahead, Joe. Go ahead, Joe, you know what to do. Go ahead, Joe, go ahead, Joe, go ahead, go ahead, you know what to do.  
Let's go to the next question. Vice President Biden you have repeatedly criticized the Obama administration for not specifically calling out Bernie Sanders on that. Are you willing to specifically condemn white supremacists and militia groups --



**uncle Cags** Today at 01:31  
Holy shit



**TrumpBot** BOT Today at 01:31  
And by the way, the people who would like me



Message #trump-bot



Message #trump-bot



Message #trump-bot



Message #trump-bot



**TrumpBot** BOT Today at 22:18

You're in the wrong subreddit, buddy.  
I'm not going to listen to him.