

Competing Views on Climate Change on Twitter During COP 24

Introduction

- A case study analyzing conversations between two competing groups of Twitter users who believe in anthropogenic reasons of climate change (**Believers**) and those who are skeptical of these reasons (**Deniers**) during United Nation's Climate Change Conference – COP24 (2018), Katowice, Poland.
- Collected all tweets containing “#COP24” from 27th November to December 20th, 2018 using Twitter's API. We also collected tweets with hashtags trending during the time frame and related to COP24 (e.g. #climatechange, #climateAction, etc.) by using best-hashtag.com and news articles related to COP24. The combined data set contains a total of **1,379,584** distinct tweets and retweets.
- We identified competing groups of believers and deniers by hashtags used by these groups. We identify that “ClimateHoax” and “ClimateChangelsReal” hashtags are used mostly by deniers and believers respectively. To identify more hashtags used by believers and deniers, we use a variant of semi-supervised machine learning algorithm called Label Propagation Algorithm. Overall, we identified **2,675 denier's tweets and 23,496 believer's tweets**.

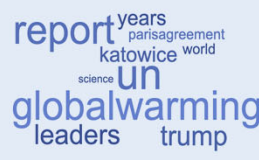
Deniers

“Don't be fooled. They're protesting over immigration and globalism NOT gas prices. #Q #Qanon #maga #leresistance #FranceProtest #France”

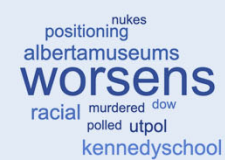
Believers

“No respect is due. Thousands of AMERICANS evacuated from their homes, many burned to the ground and our "President" points his little finger in the wrong direction to settle scores #ClimateChangelsReal”

News Agencies



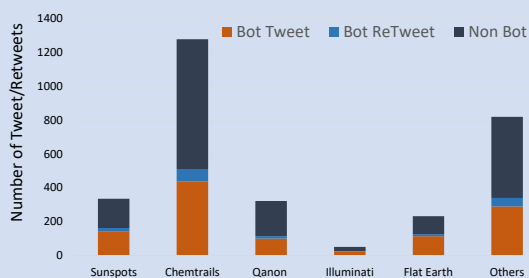
- 3.5% of all denier's tweets were from “news” agency.
- A denier “news” agency status was retweeted on an average **13 times**.



- 2.3% of all believer's tweets were from “news” agency.
- A believer “news” agency status was retweeted on an average **45 times**.

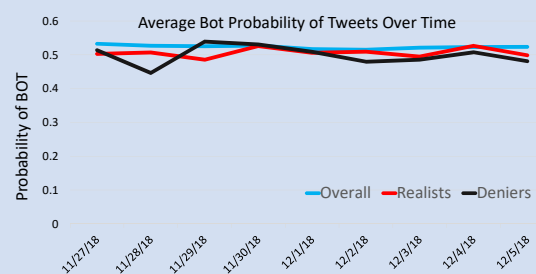
BOT(s) Behavior

Climate Tweets About Conspiracies



- Others include Directed Energy Weapons, Geo Engineering, Weather Modification, and Planet Nibiru.

Deniers vs Believers



- Average BOT probability per tweet remains fairly similar and flat for both deniers and believers.

Key Takeaways

- The fraction of tweets from news agencies is fairly similar for deniers and believers. Tweets from denier news agencies are more concentrated from a single source, and on the other hand, tweets from believer news agencies are more evenly distributed.
- BOTs tweet stories related to conspiracies more than they retweet. Conspiracy regarding “chemtrails” is most popular in our data set.
- BOTs are equally likely among both deniers and believers.