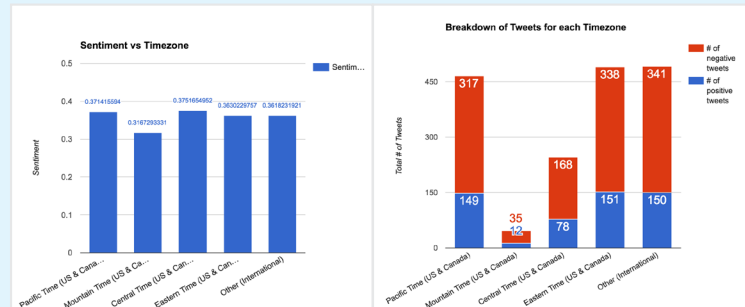# What Does Twitter Activity Reveal About Post-Election Sentiment?
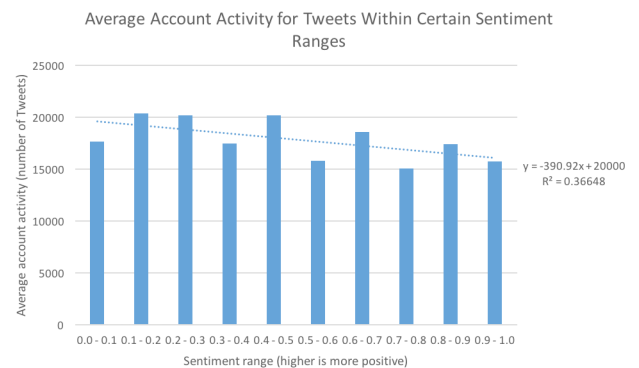
By Cole Carlin and Yunhua Zhao

We collected three main types of data from Twitter using its live streaming API:
Location (Time Zone) • **User Activity Level** (Number of Tweets) • **Account Age** (Days Since Creation)

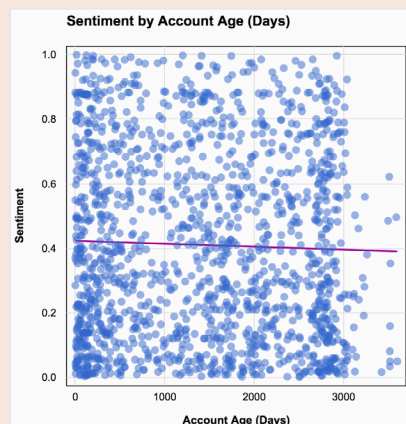## How does location affect Trump support on Twitter?

Sentiment vs Timezone

Sentim...

0.371415594   0.3167293331   0.3751654952   0.3630228757   0.3618231921

Sentiment

Pacific Time (US & Cana...   Mountain Time (US & Ca...   Central Time (US & Ca...   Eastern Time (US & Cah-...   Other (International)

Breakdown of Tweets for each Timezone

# of negative tweets
# of positive tweets

Total # of Tweets

317   149   35   12   168   78   338   151   341   150

Pacific Time (US & Canada)   Mountain Time (US & Canada)   Central Time (US & Canada)   Eastern Time (US & Canada)   Other (International)

Note: This data was collected separately, as it required location data, which not every Tweet has.

Sentiment toward Trump on Twitter does not appear to follow general geopolitical trends.

What about user activity?

Average Account Activity for Tweets Within Certain Sentiment Ranges

Average account activity (number of Tweets)

0.0 - 0.1   0.1 - 0.2   0.2 - 0.3   0.3 - 0.4   0.4 - 0.5   0.5 - 0.6   0.6 - 0.7   0.7 - 0.8   0.8 - 0.9   0.9 - 1.0

Sentiment range (higher is more positive)

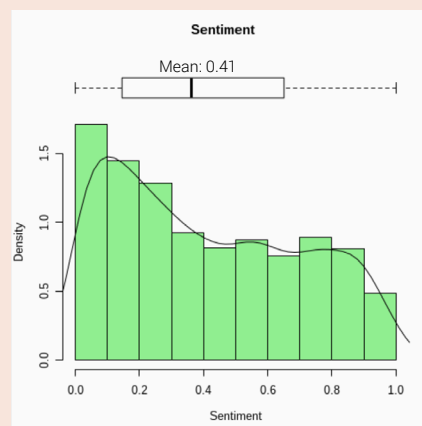$y = -390.92x + 20000$
$R^2 = 0.36648$

There appears to be a slight negative correlation between account activity and pro-Trump tweets.

Is account age correlated with pro-Trump tweets?

Sentiment by Account Age (Days)

Sentiment

Account Age (Days)

There does not appear to be a general linear correlation between account age and sentiment towart Trump. However, a closer look at the data reveals some interesting findings.

Sentiment

Mean: 0.41

Density

Sentiment

Normal Quantile Plot for Sentiment

Sample quantiles

Theoretical quantiles

This is a fat-tailed distribution, suggesting that Twitter introduces more responses toward either extreme than a ordinary normal distributions, but especially (in this case) negatively