The Ebb and Flow of Controversial Debates on Social Media
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Dataset available on request

What we study
discussions about controversial topics on Twitter

Questions
Q1: has polarization increased over time?
Q2: is polarization higher when big events occur?

for Q1 we find no clear trend
for Q2 we notice that big events are marked by large volume of activity....

What we do
for each topic & day: build retweet graph
measure polarization via Random Walk Controversy (RWC) score

Data
5 years of tweets, 1% sample
September 2011 to September 2016
controversial topics
obamacare, abortion, gun control

...so we plot
RWC against volume of activity

- for controversial topics we find a positive correlation
- for non-controversial topics stays near zero polarization

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September 2011
September 2016

Obamacare
Abortion
Guncontrol

Number of active users per day (Obamacare)


Supreme Court upholds Obamacare
House passes GDP spending plan that defunds Obamacare
ObamaCare subsidies preserved in US Supreme Court ruling
2012 Presidential debate mentions Obamacare

Number of active users per day (Abortion)


Supreme Court Strikes Down Texas Abortion Restrictions
Planned Parenthood Sting video released
VP debate discusses abortion Texas attempts to change its law on abortion
Shooting at a Planned Parenthood clinic