## Debriefing of Spatial, temporal, and content analysis of Twitter for wildfire hazards by Wang et al.

This paper analyzes wildfire related-tweets in terms of their space, time, content, and network so as to gain insights into usefulness of social media data in revealing situational awareness. They found that social media can provide useful information about wildfires especially home a human perspective, and the news media and local authority can play a dominant role in fire retweet network by acting as "gatekeepers" for what information goes out to the public. They were also able to mix content analysis and GIS for their methodology.

One of the main issues we found with this article is that the authors are not very detailed about their methodology and are quite vague about some steps. For example, they do not mention exactly how they were able to grab all the tweets from twitter without running into issues like captcha. This is an issue the content analysis group has run into, and if the authors provided how they did it, this could have been very helpful.

Another issue we discussed was their kernel density map. The kernel density map did not look very good especially for geographers. It was hard to discern exactly what was going on because there were so many little dots. The authors could have tried other techniques like using different colored dots or a black and white base map. The kernel density map should have also included road data like the heat maps to better identify the area.

Using Twitter for content analysis may come with some inherent biases. For one thing, Twitter users tend to be at least middle to upper class because they are the type of people to have cell phones and access to internet. This can possibly be seen in the heat maps because the wealthier areas seemed to be tweeting more. Along with that, a small portion of the tweets had their location turned on. This can also lead to potential biases in the spatial aspect because certain types of people may be more likely to turn on their geolocation information.

Getting to the more theoretical impressions of the article, we discussed how social media can be used as a source of getting news and information, voluntarily and involuntarily. Often, we subscribe to content to news outlets or other verified sources to get quick information, but other times we just see information on our feed and find out news from there. This can be an issue because then people will only rely on social media for their news source. With powerful people acting as gatekeepers, this can lead to many people getting fake, misinterpreted, or extremely biased news. Thus, it is important to monitor and where the source of information is coming from and how the gatekeeper interpreted it.

Social media is also related to policy because what people see on social media is going to choose how they feel about different issues, which will affect what goes into policies for the general public. This is also related to the gatekeepers because they can

choose what to put out to the public in order to evoke certain emotional responses. Thus, it is very easy to manipulate news into politics.

Lastly, we were all surprised by how easy it is for people to get your information and location off the internet. Phones and Alexa have the power to listen to you all the time, and Google Maps can track you wherever you go if you have location turned on. This is an extremely violating feeling. We can help ensure our privacy by turning off our location on our phones and Google Maps app. We can also use more private search engines Duckduckgo or private browsers like Epic Privacy Browser to represent you somewhere else.