Supplement Material: Wildfires and Social Media Discourse: Exploring Mental Health and Emotional Well-Being Through Twitter

Yury E. García Miryam Elizabeth Villa-Pérez Kuang Li Xiao Hui Tai, Luis A. Trejo, Maria L. Daza–Torres, J. Cricelio Montesinos-López, and Miriam Nuño

Keywords used during the data collection process

Tubbs Fire (Octobre 8-31 2017)
Period to download tweets: Septiembre 8 - Noviembre 30 Coordinates 38.60895°N 122.62879°W
Most affected communities: Santa Rosa, Napa, Sonoma, Calistoga, Petaluma impacted by smoke: Sonoma, Lake, Mendocino, Solano

The Tubbs Fire was a devastating wildfire that occurred in California in October 2017. Some of the most popular hashtags used during the Tubbs Fire on Twitter were:

#TubbsFire, #NapaFire, #SantaRosaFire, #CaliforniaWildfires, #SonomaStrong, #PrayForCalifornia, #WineCountryFires, #FireStorm, #NorthBayFires, #SFBayFires, #SonomaFire, #CaliforniaWildfires, #NorCalFires, #airquality, #Smokeintheair, #smokeyair

query = """-RT (#TubbsFire OR wildfire OR smoke OR #NapaFire OR #SantaRosaFire OR #WineCountryFires OR #PrayForCalifornia OR #CaliforniaWildfires OR #NorCalFires OR #airquality OR #smokeintheair OR #smokeyair OR fire OR Nightmares OR Anxiety OR Depressio OR Panic attacks OR Survivor guilt OR #PTSD OR PTSD OR stress OR stress OR struggle OR struggle OR sad OR #sad OR #flashbacks OR #californiafires OR #evacuation OR #disaster OR #fatigue OR #smokeinhalation OR #respiratoryproblems OR #asthma OR #COPD OR #lunghealth OR #burningeyes OR #sorethroat OR #headaches OR #fatigue OR #stress OR coughing OR wheezing OR breath OR asthma OR bronchitis OR (Eye irritation) OR (nose irritation) OR congestion OR irritation OR Headaches OR fatigue OR itching OR irritation OR redness OR inflammation OR dryness OR flakiness OR discomfort OR rashes OR hives OR "I was diagnosed" OR "I've been diagnosed" OR "I have been diagnosed" OR "I'm diagnosed") pointradius:[-122.62879 38.60895 40km] lang:en -is:retweet"""

Tweets Examples

Positive

We are so lucky to have a home. Cannot believe our Home was spared by the fire. Our wood shingle...

We are ONE community. Dropped off donations and volunteered at @refb benefiting NorCal wildfire relief efforts. @CiscoCitizen #WeAreCisco

Watching wine country, Napa Valley & Sonoma coming together for fire relief! #NapaValleySpirit #neighbors #bestmoment

Feeling relief thanks to the rain 2 nights ago. Respect for all. Speedy rebuild in progress #SantaRosaStrong #TubbsFire

"The love in the air is thicker than the smoke", we will rebuild our community collectively

Negative

I can't believe what I am seeing in Santa Rosa. Fires were unstoppable and forever changed the area. The endless smell of fire in the air.

The worst fire in California history that killed around 50 people and destroyed more property than ever recorded was attributedto an illegal

This bitch ass whore ass Sonoma county wildfire need to end this fuck ass stupid shit is fucked as hell🔞

The fire in Northern California so devastating, being burnt to death has to be the worst most painful torturous way for someone to die.

@reolDonaldTrump You damn fuckin idiot. For days California is on fire with dozens dead and your Orange candy was says shit. God damn I hate you.

Neutral

#AirQuality Advisory for #MetroVancouver and @FVRD1 continued. Wildfire smoke still lingering in some areas

Heavy smoke coverage in the #YMM Forest Area today due to wildfire in Slave Lake Forest Area

NASA is tracking wildfires globally, offering a view of wildfires from high above Earth.

California large wildfire activity for September 8 #cawildfires.

Californian wildfires: Smoke from wildfires in California disperses over the North Pacific Ocean.

Figure S1. Examples of tweets categorized as Positive, Negative, or Neutral according to the VADER algorithm.