



Center for  
Countering  
Digital Hate



# EXTREME WEATHER

How a storm of false and misleading claims about extreme weather events spread unchecked on social media putting lives at risk





The Center for Countering Digital Hate works to stop the spread of online hate and disinformation through innovative research, public campaigns and policy advocacy.

Our mission is to protect human rights and civil liberties online.

Social media platforms have changed the way we communicate, build and maintain relationships, set social standards, and negotiate and assert our society's values. In the process, they have become safe spaces for the spread of hate, conspiracy theories and disinformation.

Social media companies erode basic human rights and civil liberties by enabling the spread of online hate and disinformation.

At CCDH, we have developed a deep understanding of the online harm landscape, showing how easily hate actors and disinformation spreaders exploit the digital platforms and search engines that promote and profit from their content.

We are fighting for better online spaces that promote truth, democracy, and are safe for all. Our goal is to increase the economic and reputational costs for the platforms that facilitate the spread of hate and disinformation.

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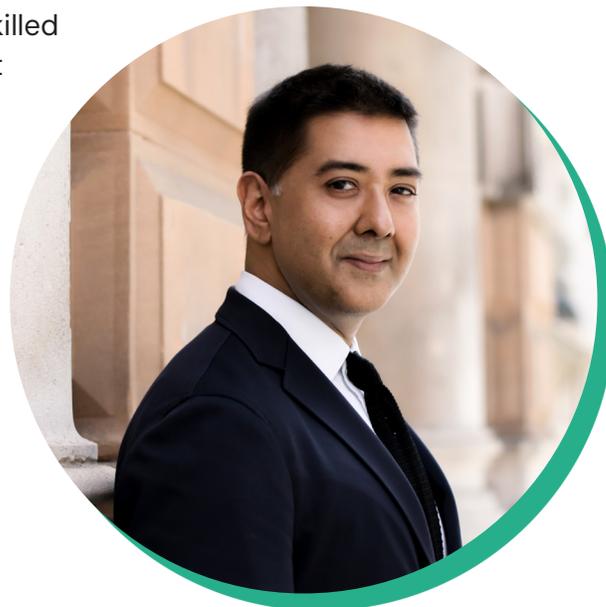
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# 1. INTRODUCTION

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In early July 2025, catastrophic floods in Texas killed over 130 people—including more than 20 girls at summer camp. As families mourned their loved ones and emergency responders frantically searched through debris for survivors, people around the country turned to social media for answers. Instead, they found disturbing lies about rescue efforts, people downplaying the severity of the disaster, and conspiracy theories about weather manipulation.<sup>1</sup> It was a disgusting, but now all too predictable, display of how social media companies exploit deadly disasters for profit and a few extra million clicks.



Sadly, this pattern isn't new. In this report, CCDH researchers investigate how misleading information surged after Hurricanes Helene and Milton in the fall of 2024 and the LA wildfires in early 2025—disasters that claimed hundreds of lives and displaced thousands. What we uncovered is disturbing evidence of tech companies elevating conspiracy superspreaders, profiting from lies about rescue efforts, and enabling falsehoods that could impede emergency response and place lives at risk.

Within hours of each catastrophe, baseless claims that hurricanes were "geo-engineered weapons" and wildfires were ignited by "government lasers" spread faster than updates from emergency officials and reliable news outlets.<sup>2</sup> Conspiracies that migrants were receiving preferential aid over disaster victims stirred resentment and division.<sup>3</sup> One armed man, radicalized by this torrent of lies, was arrested after threatening FEMA employees near a relief site.<sup>4</sup> Officials from LA County described to me how a flood of scammers added to the woes of people displaced from their homes by targeting them with paid ads encouraging them to hand over their personal data to secure federal assistance.

This report documents how Meta, X, and YouTube enable and profit from the spread of false information during disasters, allowing conspiracy theorists to drown out reliable news sources and emergency responders. CCDH researchers found that these platforms applied fact-checks or community notes to fewer than 2% of the 300 misleading posts analyzed across platforms. The overwhelming majority of posts spreading lies about disaster response, climate change causes, and emergency aid were left unmoderated before being algorithmically boosted and monetized.

Consider this: the social media views of just one well-known superspreader of conspiracy theories and lies, Alex Jones, outnumbered the views of official emergency response information amid the LA wildfires. His false claims, including accusations of FEMA “food confiscation” and globalist plots, amassed over 400 million views on X—more than double the combined reach of FEMA and ten major news outlets.

By undermining trust in first responders and sowing confusion in moments of crisis, platforms are sabotaging disaster response for profit.

In our 2023 New Climate Denial report, we highlighted the rise of “New Denial” at the expense of the “Old Denial”: a shift from rejecting the reality of human-caused climate change to undermining proposed solutions and attacking climate science and scientists. These narratives now dominate climate discourse online, appearing in 70% of denial content on YouTube in our study. Natural disasters, devastating lives and entire communities, are cynically co-opted as opportunities to fuel this “New Climate Denial” agenda.

This is not an accident—it is the result of social media business models that reward extremism, punish truth, and profit from chaos. As climate disasters become increasingly severe and frequent, we must confront the reality that tech giants are active participants in the spread of falsehoods that endanger our communities and the planet.

We cannot wait for the next disaster to demand accountability and transparency from these companies.

**Imran Ahmed**  
**CEO, Center for Countering Digital Hate ●**

## 2. EXECUTIVE SUMMARY

### **MISLEADING CLAIMS ABOUT EXTREME WEATHER ARE PART OF A NEW DENIAL THAT RISKS LIVES:**

- ▶ CCDH has measured a shift away from an Old Denial of warming and its causes, towards a New Denial centered on climate impacts, solutions and advocates.<sup>5</sup>
- ▶ Misleading claims about extreme weather are part of the New Denial of climate impacts, preventing informed debate and risking lives during crisis events.<sup>6</sup>

### **CCDH RESEARCHERS ANALYZED MISLEADING EXTREME WEATHER POSTS WITH 221 MILLION VIEWS:**

- ▶ Researchers identified 300 of the most-liked misleading posts about extreme weather made between April 1, 2023 and April 1, 2025, including 100 posts from Meta's platforms, Facebook and Instagram, 100 from YouTube and 100 from X.
- ▶ Over three-quarters of these posts concerned wildfires and hurricanes, with the LA wildfires and Hurricane Helene ranking as the most discussed events.
- ▶ False and misleading claims targeted the actions of emergency responders, the causes of extreme weather events, and the distribution of disaster relief aid.

### **PLATFORMS ARE FAILING TO CORRECT MISLEADING POSTS ABOUT EXTREME WEATHER:**

- ▶ Every platform studied is failing to debunk false or misleading posts about extreme weather using fact-checks or user-generated Community Notes:
  - ▷ Meta lacked fact-checks or Community Notes on 98% of posts
  - ▷ X lacked fact-checks or Community Notes on 99% of posts
  - ▷ YouTube lacked fact-checks or Community Notes on 100% of posts

### **1 IN 3 YOUTUBE VIDEOS DISPLAYED A RECOMMENDATION FOR MORE MISLEADING CONTENT:**

- ▶ Nearly 1 in 3 YouTube videos promoting misleading extreme weather claims featured a recommendation for further climate denial content next to it.

## **PLATFORMS ARE GIVING ‘VERIFIED’ STATUS AND BENEFITS TO USERS PUSHING MISLEADING CLAIMS:**

- ▶ On X, 88% of misleading extreme weather posts were from verified accounts.
- ▶ On YouTube, 73% of posts were from verified accounts.
- ▶ On Meta (Facebook and Instagram), 64% of posts were from verified accounts.

## **PLATFORMS AND POSTERS ARE PROFITING FROM MISLEADING POSTS ABOUT EXTREME WEATHER:**

- ▶ YouTube displayed ads adjacent to 29% of misleading extreme weather videos.
- ▶ X enables paid subscriptions for five content creators pushing misleading extreme weather claims, enabling the creators and the platform to profit.
- ▶ Meta is sharing ad revenue with three content creators pushing misleading claims, enabling them to share in Meta’s revenue from ads near their posts.

## **‘SUPERSPREADER’ ALEX JONES DROWNED OUT CREDIBLE INFORMATION ON LA WILDFIRES:**

- ▶ Conspiracy theorist Alex Jones’ misleading posts about the LA wildfires amassed 408 million views on X.
- ▶ Jones claimed that emergency responders were confiscating food, and that the fires were part of a globalist plot or engineered to trigger a wealth transfer.
- ▶ Jones got more views than all relevant posts from ten leading news outlets and ten key emergency organizations combined, including the LA Times and FEMA.

## **MISLEADING CLAIMS ABOUT EXTREME WEATHER CAUSE REAL-WORLD HARM**

- ▶ When inaccurate information spreads in an acute weather crisis, it can put lives at risk, misleading people about the danger they are in.<sup>7</sup>
- ▶ It can also endanger first responders, disrupt life-saving decisions, and mislead people about the aid that they need.<sup>8</sup>

# 3. METHODOLOGY

## Researchers identified 300 false or misleading extreme weather posts with 221m views

To study the spread of false or misleading claims about extreme weather events online, researchers studied 300 of the most-liked posts promoting these claims, comprising:

- ▶ 100 posts from Meta’s platforms, Facebook (68 posts) and Instagram (32 posts)
- ▶ 100 posts from YouTube
- ▶ 100 posts from X

All posts studied were made between April 1<sup>st</sup>, 2023 and April 1<sup>st</sup>, 2025. Together, these posts amassed 221,418,362 views across all platforms studied. Researchers analyzed these posts to test how often the posts feature fact-checks, carry advertising or display a ‘verified’ badge next to the poster’s name. They also examined ways in which misleading posts can generate income for posters and platforms.

### THE ONLINE DENIERS DATASET

To identify posts for study researchers used the **Online Deniers Dataset (ODD)**, a new dataset compiled by the Center for Countering Digital Hate that enables cross-platform analysis of social media posts from prominent climate change deniers identified by the climate journalism non-profit DeSmog.<sup>9</sup>

Using this dataset, researchers identified posts from prominent climate deniers that match keywords relating to extreme weather events, such as “hurricane”, “flooding”, “LA fires” and “wildfire”, as well as terms relevant to common misleading narratives such as “FEMA”, “emergency response” and “blockade”.

### ACCESSING THE ONLINE DENIERS DATASET (ODD)

Non-profit or academic researchers interested in accessing the **Online Deniers Dataset (ODD)** for studies of online climate denial should email the Climate Action Against Disinformation coalition using the form at [caad.info/contact](mailto:caad.info/contact) setting out details of the organization they are affiliated with and an outline of the project in which they plan to utilize the dataset.

### IDENTIFYING THE MOST-LIKED FALSE OR MISLEADING POSTS

Matching posts were then ranked by likes and labeled by an AI tool designed to identify posts likely to contain false or misleading claims about extreme weather. These labels were used to assist researchers in identifying the 100 most-liked posts promoting false or misleading claims about extreme weather for each company studied.

Each post in the final set of 300 used for this study was agreed by two researchers to be false or misleading, with a link to an independent fact-check justifying that assessment.

More detail is available in **Appendix: Detailed Methodology** at the end of this report.

# 4. KEY NARRATIVES

Over three-quarters of posts in our study were about wildfires or hurricanes.

Posts in our study of 300 false or misleading extreme weather posts accrued 221 million views across all platforms. Some of the key themes in the dataset include:

- ▶ **Misleading claims about the causes of severe weather events**, e.g. false claims that the LA wildfires were intentionally set as part of a “globalist plot” or hurricanes controlled by “weather weapon technology”.<sup>10</sup>
- ▶ **Misleading claims about disaster relief aid**, e.g. misleading claims about the availability of Federal Emergency Management Agency (FEMA) relief funds, the use of FEMA budgets, and eligibility criteria for citizens accessing funds.<sup>11</sup>
- ▶ **Misleading claims about emergency responses**, e.g. that firefighters failed to act and misleading claims about the availability of water for tackling wildfires.<sup>12</sup>
- ▶ **Misleading claims about the impact of climate change**, e.g. misleading interpretations of data to suggest that the intensity and number of hurricanes is decreasing, or false characterizations of climate science as alarmism.<sup>13</sup>
- ▶ **Misleading claims about political responses**, e.g. false claims that the Biden administration halted aid to hurricane victims, or that the LA wildfire water shortage was a result of environmental policies to protect a fish species.<sup>14</sup>

## MISLEADING CLAIMS ABOUT EXTREME WEATHER CAUSE REAL-WORLD HARM

Misleading claims about extreme weather are part of a shift away from an “Old Denial” of global warming and its causes, towards a “New Denial” of climate impacts, solutions and advocates. CCDH measured this shift through an in-depth analysis of climate denial content on YouTube in our report **The New Climate Denial**.<sup>15</sup>

Like all forms of climate denial, misrepresenting the causes and impact of extreme weather makes it harder to implement climate solutions.<sup>16</sup> But when this inaccurate information spreads in an acute weather crisis, it can put lives at risk, misleading people about the danger they are in.<sup>17</sup> It can also endanger first responders, disrupt life-saving decisions, and mislead people about aid.<sup>18</sup>

For example, in the aftermath of hurricanes Helene and Milton, false and misleading social media posts led to threats against first responders, sowed confusion around evacuation, and made victims hesitant or unwilling to apply for aid.<sup>19</sup>

Congressman Chuck Edwards issued a statement after Hurricane Helene saying that falsehoods had “done more harm than most people may realize”, diverting resources away from recovery efforts and instead refuting falsehoods.<sup>20</sup>

## WILDFIRES AND HURRICANES WERE THE MOST-MENTIONED EVENTS

While most posts mentioned specific extreme weather events, a minority made misleading claims about extreme weather in general, for example the claim that climate change is not causing such events to become more common.

The most prominently featured extreme weather event in the dataset was the Los Angeles wildfires, a series of destructive blazes driven by powerful winds and dry conditions that swept through the region in January 2025.<sup>21</sup>

Weather Event	Specific Event	Share of Posts
Wildfires	Los Angeles	38%
	Maui	3%
	Canada	3%
	Other	6%
	Overall Wildfires	49%
Hurricanes	Helene	14%
	Milton	5%
	Other	11%
	Overall Hurricanes	27%
Tornados		1%
Droughts		4%
Heatwaves		4%
Floods		3%
Other Storms		1%
Unspecific/More Than One		11%

# 5. FACT-CHECK LABELS

## Meta, X and YouTube are all failing to debunk misleading extreme weather posts

Researchers tested whether platforms apply fact-checking labels to false or misleading posts about extreme weather, finding that all three companies are failing to do so.

Fact-checking labels are applied to posts to directly refute false or misleading claims that they make with facts and additional context. They come in two main varieties:

- ▶ **Expert fact-checks**, where independent experts and journalists partner with platforms to assess viral claims and write fact-checks.
- ▶ **Crowdsourced fact-checks**, where users write fact-checks and have them rated by other users, with highly-rated fact-checks applied to posts publicly.

All three companies studied have used expert fact-checks in the past. However, X has transitioned to a system of crowdsourced fact-checks it calls “Community Notes”.<sup>22</sup>

Previous research by CCDH has found that X’s Community Notes system has significant weaknesses when it comes to fact-checking false or misleading claims on divisive topics, and use of the feature is reportedly plummeting.<sup>23</sup> Despite these problems, both Meta and YouTube intend to implement similar systems.<sup>24</sup>

Our assessment found that fact-checks of any kind are rarely being applied to false or misleading claims about extreme weather on any of the platforms studied. The table below shows our results after assessing 100 such posts for each company studied.

Label Type		X	YouTube	Meta
Share with debunking label (Labels with a refutation or clarification of a specific claim)	Expert Fact-checks	0%	0%	2%
	Crowdsourced Fact-checks	1%	0%	0%
Share with no debunking label		99%	100%	98%

## YOUTUBE APPLIES WEAKER ‘INFORMATION LABELS’ TO 59% OF POSTS

Platforms can also apply ‘information labels’ that do not directly address misleading claims, but focus on educating users with general information on a topic. Studies suggest that more generalized labels may be less effective than tailored fact-checks.<sup>25</sup>

We found that YouTube applied such labels on 59% of the 100 posts that we assessed, featuring links to sources like the UN’s page titled “What Is Climate Change?”<sup>26</sup> CCDH previously found that Meta was inconsistently applying information labels to some climate posts, but Meta now appears to have stopped doing so at all.<sup>27</sup>

Label Type	X	YouTube	Meta
<b>Share with information label</b> (Labels that provide additional information on a topic without refuting the claim)	0%	59%	0%

## X’S COMMUNITY NOTES FALL SHORT ON FALSE AND MISLEADING EXTREME WEATHER CLAIMS

X relies on Community Notes to correct false or misleading posts.<sup>28</sup> Community Notes are crowdsourced debunks that provide user-added context, clarification, or corrections on posts.<sup>29</sup> Notes are only shown to users if they receive “enough” votes from contributors with “different points of view”.<sup>30</sup>

Previous research by CCDH showed that Community Notes, even when accurate and already written, rarely appear on posts about controversial topics.<sup>31</sup> Similarly, for this study, researchers found that 99% of posts in the sample containing false and misleading extreme weather information on X lacked Community Notes.

Here is an example of an X post without a Community Notes label. More examples are available in **Appendix: Misleading Posts without Labels** at the end of this report.

### X POST WITH NO COMMUNITY NOTE



In the aftermath of Hurricane Helene, Alex Jones made a post on X claiming that the Federal Emergency Management Agency (FEMA) was confiscating food.<sup>32</sup>

There is no evidence FEMA was confiscating food, and the claim was refuted by local officials, FEMA, and state leaders.<sup>33</sup> This post was viewed over 431,100 times.

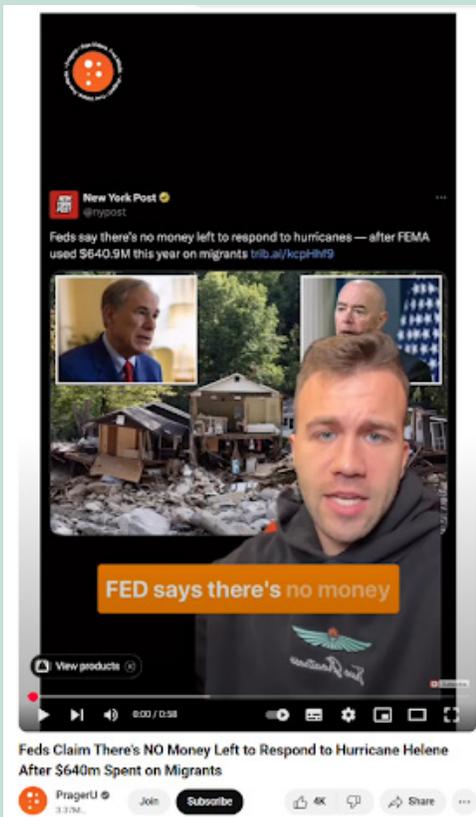
## YOUTUBE DOES NOT REFUTE FALSE OR MISLEADING EXTREME WEATHER VIDEOS BUT ADDS LABELS

YouTube does not have a policy to display debunking labels that target specific false or misleading claims on videos, though it does display topical “information panels”.<sup>34</sup>

In June 2024, YouTube began testing its own version of X’s Community Notes, but it’s not clear how widely on the platform this has been rolled out.<sup>35</sup> The platform’s approach to labelling false or misleading videos instead focuses on information panels under videos for topics “prone to misinformation” and fact-check panels in search results.<sup>36</sup>

Analysis of the 100 false or misleading extreme weather videos for this study showed that none of the videos displayed either a Community Note or any other kind of debunking label that directly targeted claims made in a video. It also showed YouTube’s topical “information panels” were applied inconsistently throughout the sample of 100 false or misleading posts, failing to appear next to 41% of the videos. Importantly, the panels usually did not effectively counter falsehoods about extreme weather, instead providing generalized information, such as a short description of climate change alongside a link to a UN page titled ‘What Is Climate Change?’.<sup>37</sup>

Below is an example of a YouTube post containing misleading information but no information panel or fact-checking label. More examples are available in **Appendix: Misleading Posts without Labels** at the end of this report.



### YOUTUBE POST WITH NO INFORMATION PANEL

In the aftermath of Hurricane Helene, PragerU posted a video claiming that the Federal Emergency Management Agency (FEMA) spent its budget helping migrants and so cannot support hurricane victims.<sup>38</sup>

This is misleading as FEMA has specifically stated: “FEMA has enough money for immediate response and recovery needs. If you were affected by Helene, do not hesitate to apply for disaster assistance as there is a variety of help available for different needs.”<sup>39</sup>

Moreover, FEMA’s hurricane response funding comes from the Disaster Relief Fund which is not used to help migrants.<sup>40</sup> The video has been viewed 21,000 times.

## META'S POLICIES ON FACT-CHECKING ARE IN FLUX

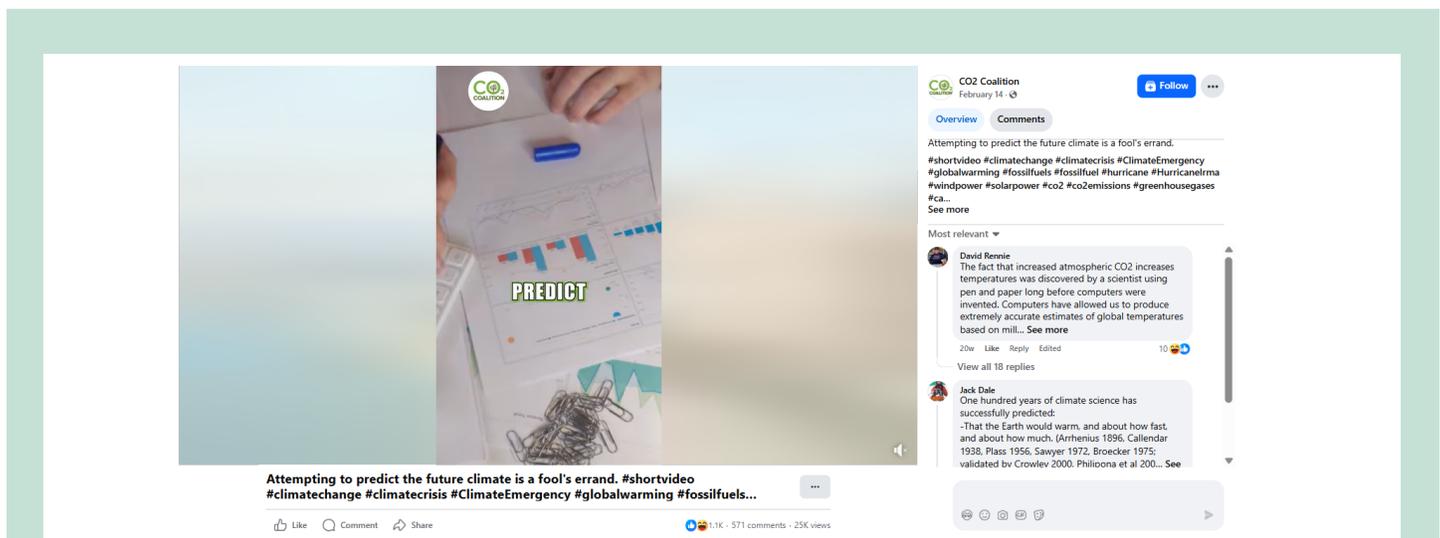
In the past, Meta has used fact-checks and information labels to address climate denial, such as false and misleading extreme weather posts.<sup>41</sup>

However, policy changes announced on January 7, 2025 including a shift away from expert fact-checking to crowdsourced Community Notes make it difficult to know which policies, if any, are currently in effect to protect users from harmful falsehoods.<sup>42</sup> CCDH recently published a report showing that Meta's policy changes reflect a broader shift away from transparency and user safety.<sup>43</sup>

Before January 2025, Meta used certified fact-checkers to label false posts with links to third-party fact-checks.<sup>44</sup> Meta ended this program in the United States in January 2025 and began testing their version of X's Community Notes in March 2025, though their visibility to users is unclear.<sup>45</sup>

Meta has also used information panels for climate change information.<sup>46</sup> In 2021, Meta began labelling posts discussing climate change with information panels linking to the Climate Science Information Center, but the status of this program is unknown.<sup>47</sup> In 2021, CCDH found that Facebook was failing to apply these information panels to 92% of relevant posts, none were identified on the false or misleading posts in this study.<sup>48</sup>

Researchers checked Meta posts for information labels, Community Notes, or fact-checks, and found that 98% of posts lacked any label at all. Below is an example of a Meta post without a label. More examples are available in **Appendix: Misleading Posts without Labels** at the end of this report.

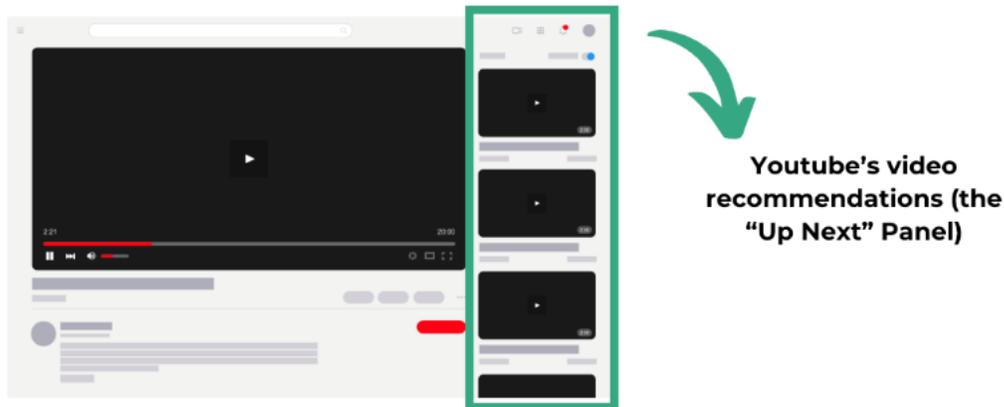


### META POST WITH NO FACT-CHECK, COMMUNITY NOTE, OR INFORMATION PANEL

This Facebook video from CO2 Coalition claims that attempting to predict climate events is a "fool's errand" and that scientist's modeling cannot even predict the path of a hurricane.<sup>49</sup> Climate scientists have repeatedly demonstrated the reliability of climate prediction models.<sup>50</sup> Additionally, while hurricane intensity can be difficult to predict, hurricane path forecasting is increasingly accurate with forecasts typically accurate within less than 100-mile radius, days in advance.<sup>51</sup> This post was viewed over 25,000 times.

# 6. YOUTUBE RECOMMENDATIONS

1 in 3 videos displayed a recommendation for more false and misleading content



Nearly 1 in 3 YouTube videos promoting misleading claims about extreme weather featured a recommendation for further climate denial content in the "Up Next" panel.

The analysis shows that instead of diverting users away from untrustworthy information, YouTube is actively channeling them to more videos containing false and misleading claims on the themes of extreme weather and climate.

Researchers loaded up each of the 100 videos containing false or misleading extreme weather claims and recorded the top five recommendations in the "Up Next" panel displayed next to the videos. They did this without logging into YouTube, ensuring recommendations were not influenced by account-specific personalization.

Out of the 100 videos, 30 had at least one recommendation contained within the top five recommendations which contained false or misleading claims about either extreme weather or about climate change more generally. Videos in the recommendations included:

- ▶ One video that dismisses the role of climate change in the LA wildfires, despite scientific consensus concluding that climate change is exacerbating the frequency and intensity of fires around the world.<sup>52</sup>
- ▶ A video that misleadingly claims that CO<sub>2</sub> is beneficial for the environment.<sup>53</sup> While CO<sub>2</sub> can have some positive effects, like boosting plant growth in controlled environments, it is still a key cause of global warming which negatively affects overall life on earth.<sup>54</sup>
- ▶ A video that promotes the myth that fossil fuels are making the climate "safe" when, in reality, fossil fuels drive climate change which has dangerous effects like more extreme weather, sea level rise, air pollution, and water pollution.<sup>55</sup>

# 7. VERIFIED ACCOUNTS

## X, YouTube and Meta have ‘verified’ accounts posting false or misleading content

Verified status was widely awarded to accounts that were found to have been spreading false and misleading claims about extreme weather events, with 88% of X posts in our sample coming from a verified account, compared to 73% of posts on YouTube and 64% of posts on Meta.

Across all three social media companies, the verification process awards accounts with a ‘verified’ badge, enabling them to benefit from the perception of greater credibility, as well as access to other perks that vary by platform.<sup>56</sup> The table below shows that a substantial share of the posts came from verified accounts, and that most views came from verified users.

Platform	Percentage of posts with verified status	Percentage of views from verified posts
Meta	64%	95.9%
X	88%	99.8%
YouTube	73%	95.2%

### BENEFITS OFFERED TO VERIFIED USERS

The benefits and costs associated with the verification status vary by platform. While all such schemes offer users a special ‘verified’ mark, some offer additional benefits.

**On X**, verified status – known as X Premium – costs users between \$3 to \$40 per month.<sup>57</sup> As well as the verified badge, verified accounts are awarded the additional benefit of visibility from “prioritized ranking” on the platform.<sup>58</sup> This means that X is not only earning money from accounts spreading false and misleading extreme weather claims but may also be enabling their claims to be seen by more people.

**On Meta**, verification status – known as Meta Verified – costs \$14.99, with accounts receiving additional benefits such as account protection and improved support, as well as the verified badge.<sup>59</sup> Meta states that the status can help accounts to “build credibility with [their] audience”.<sup>60</sup> While Meta previously awarded verified accounts a boost to reach in the algorithm, this perk appears to have been revoked.<sup>61</sup>

**On YouTube**, attaining the verification badge is free and exists purely to “help distinguish official channels”.<sup>62</sup> Channels can apply for a verification badge when they reach 100,000 subscribers and are considered authentic and complete, but the platform can also proactively verify channels if they are “well-known outside of YouTube”.<sup>63</sup> This proactive verification was awarded to one of the accounts in the study – the Heartland Institute – despite reports that it was previously demonetized by YouTube for promoting climate denial.<sup>64</sup>

# 8. MONETIZATION

## X, YouTube and Meta are profiting from or enabling profits for misleading accounts

Researchers identified evidence on all three social media companies that accounts with millions of followers either appear next to ads or are otherwise monetized despite posting false or misleading extreme weather information.

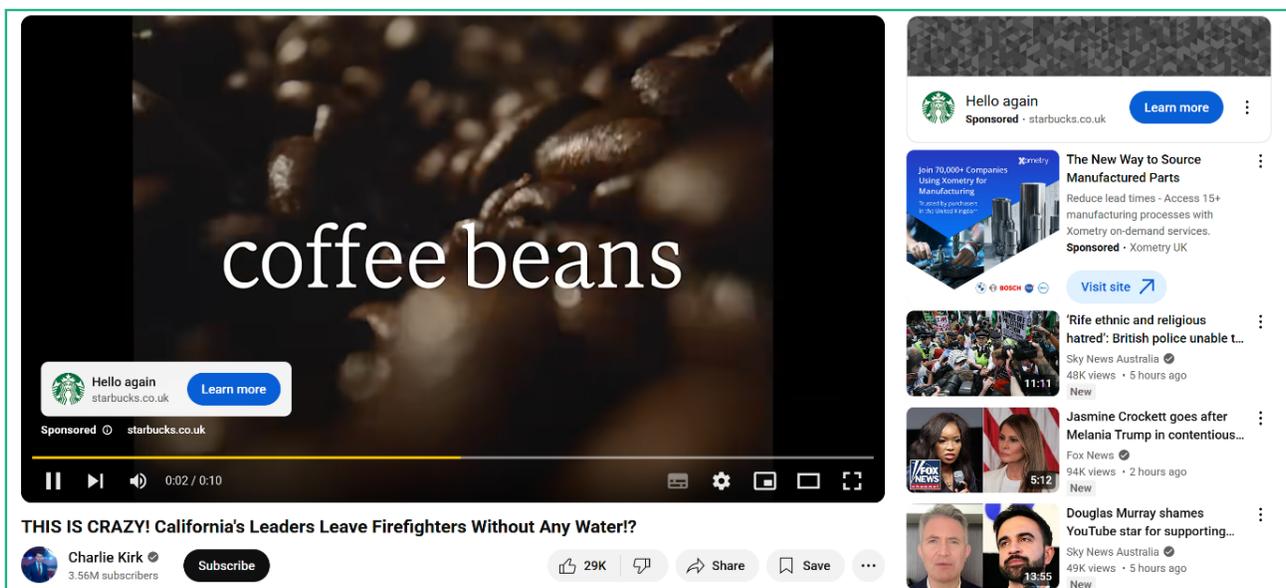
This section examines how false or misleading posts and the accounts behind them appear to be generating income for platforms, for content creators, or both.

### 29% OF FALSE OR MISLEADING VIDEOS ON YOUTUBE DISPLAYED ADS

Researchers found that 29% of videos from our dataset displayed ads. YouTube served ads on 15 of the accounts, including accounts with large followings such as Charlie Kirk, PragerU, and Paul Joseph Watson. The 15 accounts showing ads have a combined following of 13.4 million users.

Researchers tested accounts for monetized videos by opening each of the sample of 100 videos containing false or misleading extreme weather information from a browser and noting whether an ad appeared. Ads appeared next to 29 videos containing misleading extreme weather claims despite YouTube's policies stating that the platform does not allow content to earn ad revenue if it includes "harmful misinformation" or content "contradicting authoritative scientific consensus on the existence of and causes behind climate change".<sup>65</sup>

For example, a Starbucks ad appeared on this video from Charlie Kirk in which he describes environmentalists as "worried by abstractions" and claims that the fires in LA were caused by poor forestry management driven by environmental policies and "LGBTQ pet projects".<sup>66</sup> This contrasts with scientific evidence which shows that climate change has increased the likelihood and impact of wildfires.<sup>67</sup>



The image shows a screenshot of a YouTube video player. The video content is a close-up of coffee beans with the text "coffee beans" overlaid in white. A Starbucks advertisement is displayed in the top right corner of the video player, featuring the Starbucks logo and the text "Hello again" and "Sponsored · starbucks.co.uk". Below the video player, the video title is "THIS IS CRAZY! California's Leaders Leave Firefighters Without Any Water?". The channel name is "Charlie Kirk" with 3.56M subscribers. The video has 29K likes and a share button. The video player interface includes a progress bar at 0:02 / 0:10 and various control icons.

## **ACCOUNTS POSTING INACCURATE CLAIMS ON X WITH 14M FOLLOWERS ALLOW SUBSCRIPTIONS**

Researchers found that five of the accounts identified in this study had enabled monthly subscriptions on X including Alex Jones and Michael Shellenberger. X does not provide public data on the number of subscribers each user has, but the five accounts had a substantial combined following of 14 million users. Subscriptions allow users to pay for exclusive content, such as subscriber-only posts and interactions.<sup>68</sup>

Under X's revenue model, creators earn 97% of subscription revenue after fees until they reach \$50,000 in earnings, after which they receive 80% of the subscription revenue generated.<sup>69</sup> X no longer has policies prohibiting harmful false or misleading claims, but it does say it may restrict the monetization of sensitive content that relates to the "exploitation of controversial political or social issues" including "natural or industrial disasters".<sup>70</sup>

## **ACCOUNTS POSTING INACCURATE CLAIMS ON META WITH 7.9M FOLLOWERS CAN EARN AD REVENUE**

Researchers found that three of the accounts identified in this study were included on Meta's "partner-publisher" lists: Charlie Kirk, Media Research Center, and Laura Ingraham.

Meta's partner-publisher lists identify accounts where ads can appear in Facebook In-Stream videos and Facebook Reels.<sup>71</sup> The non-profit What To Fix estimates that Meta redistributes \$2-4 billion of its ad revenue annually through ad revenue sharing and bonus programs designed to reward content creators.<sup>72</sup>

The three accounts in this study that appear on these lists have a combined following of 7.9 million users. Meta states that accounts on these lists must adhere to the Partner Monetization Policies which do not allow partners to post "misinformation or false news".<sup>73</sup> However, these accounts appear on the lists despite posting false or misleading claims about extreme weather.

Meta previously hosted a similar program on Instagram, allowing Instagram accounts listed on separate partner-publisher lists to earn revenue from advertisements on their content.<sup>74</sup> However, this program ended in January 2025, preventing Instagram accounts in this study from earning revenue in this way at the time of publication.<sup>75</sup>

# 9. CASE STUDY: TEXAS FLOODS

## Misleading claims about the Texas floods spread without fact-checks

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On the weekend of the July 4<sup>th</sup> holiday, devastating floods swept across Central Texas after up to 20 inches of rain fell in a matter of hours.<sup>76</sup> At least 130 people lost their lives, including more than 20 children at a summer camp in Kerr County.<sup>77</sup>

In the aftermath of this tragedy, CCDH analysis shows that false and misleading claims from climate deniers have already reached millions of views, contradicting well-established climate science and stoking confusion over the causes of the floods.

CCDH researchers analyzed the most viewed posts from accounts in the Online Deniers Database mentioning the terms “flood” or “Texas”, finding that one week after the floods, their false and misleading claims had accrued 8.4 million views across X, Meta and YouTube combined.

None of these posts, which include 27 posts on X, 2 posts on Meta and one post on YouTube, held Community Notes, fact-checks or information labels. Examples include:

- ▶ A YouTube video from Charlie Kirk with over 100,000 views that claims that it’s “legitimate” to blame “cloud seeding” for the Texas flooding.<sup>78</sup>
- ▶ An X post from Alex Jones with over 600,000 views that claims that “weather weapons” are responsible for the Texas floods.<sup>79</sup>
- ▶ An Instagram post from Micheal Shellenberger with 35,000 views that claims that the floods were not related to climate change and that those who say they were are “trapped in a weird cult.”<sup>80</sup>

Notably, false narratives that blamed “weather weapons” or “cloud seeding” for causing the storm have led to offline consequences, with threats targeted at weather analysis stations and companies in the cloud seeding space.

For example, some people have responded to “weather weapon” narratives by targeting weather radar systems used by meteorologists to create forecasts, mistakenly blaming them for altering the weather. One extremist group called “Veterans on Patrol” has pledged to take “as many NexRads offline as possible”.<sup>81</sup> In an act of vandalism, a man disabled a weather radar system in Oklahoma City.<sup>82</sup>

Misleading narratives about cloud seeding also led to security implications for companies responsible for cloud seeding, a practice which can slightly boost the amount of rain that clouds produce. A startup called Rainmaker has faced over 100 death threats to their employees on X and through their website, prompting the need for security teams at all their facilities.<sup>83</sup>

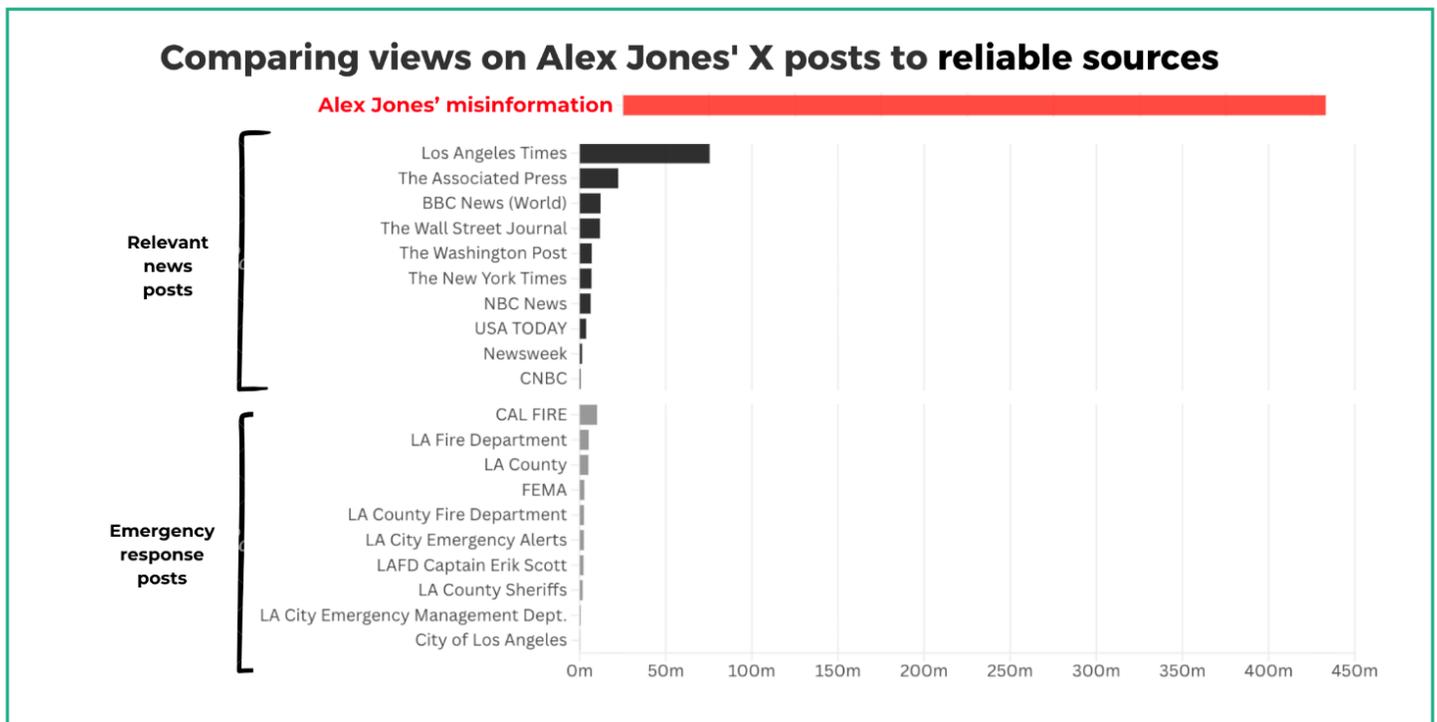
# 10. SUPERSPREADER: ALEX JONES

## Alex Jones' misleading claims drowned out credible sources during wildfires on X

In January 2025, as destructive wildfires swept through Los Angeles, conspiracy theorist Alex Jones posted false and misleading information about the fires on X. These posts received 408 million views – more than the combined viewership of relevant posts from ten major news outlets and ten key emergency response organizations.

Jones is a well-known conspiracy theorist who has previously been found liable for defamation after spreading false claims that the Sandy Hook school shooting was a hoax.<sup>84</sup> He is banned from Instagram, Facebook and YouTube.<sup>85</sup> During the time of the wildfires, Jones used his X account to promote claims that emergency responders were confiscating food, that the fires were a part of a globalist plot to deindustrialize America, and that they were engineered to trigger a wealth transfer.<sup>86</sup>

Researchers identified 44 of Jones' X posts spreading false or misleading information about LA wildfires, totaling 408,207,230 views. These were identified as part of the core data collection for this study as well as an additional review of his posts during the fires.



To compare the reach of Alex Jones with accounts promoting useful information on X at the time of the wildfires, researchers identified ten large, credible US news sites using NewsGuard’s reliability ranking system.<sup>87</sup> Researchers additionally identified ten emergency responders whose job it was to provide accurate, real-time information, then estimated the number of views they received on posts about the wildfires.

The results show that Jones’ false and misleading claims received more views than relevant posts from all of the ten news outlets (147,741,821 views) and the ten key emergency responders (32,841,857 views) combined, with a total of 180,583,678 views. The comparison underscores the difficulties experienced by those trying to share reliable, fact-checked information to counter false and misleading claims about the LA wildfires which went viral on X.

# APPENDIX 1:

# MISLEADING POSTS

# WITHOUT LABELS

## X: EXAMPLES OF FALSE OR MISLEADING POSTS THAT DID NOT RECEIVE COMMUNITY NOTES



Alex Jones promotes the false claim that “weather weapon” technology is being used by the government to manipulate the path hurricanes take and control the areas they destroy.<sup>88</sup> The myth of weather weapon technology has been debunked.<sup>89</sup>



Alex Jones promotes a conspiracy theory that President Biden purposefully withheld FEMA aid from Trump supporters in North Carolina after Hurricane Helene to impact voting outcomes ahead of the US election in November.<sup>90</sup> Counties in North Carolina were included in the federal major disaster declaration to provide federal aid access, regardless of voting records.<sup>91</sup>

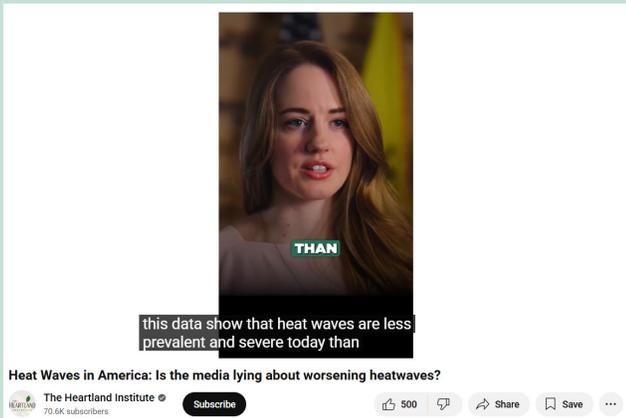


Alex Jones falsely claims that there is evidence of the LA wildfires being set as part of a “deliberate deep state operation” by Democrats to buy up land for regeneration projects in California.<sup>92</sup> There is no evidence that the LA wildfires were started deliberately or that Democrats are seeking to buy up residential properties to enable redevelopment of the area.<sup>93</sup>

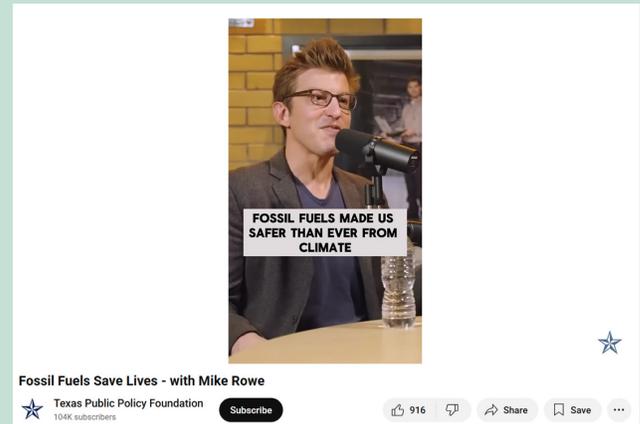


Charlie Kirk promotes the false narrative that FEMA was not present in North Carolina to provide aid to citizens affected by Hurricane Helene because funding was redirected to support migrants.<sup>94</sup> This claim is false as FEMA were in fact present in North Carolina offering support to locals in need of aid.<sup>95</sup> Additionally, funding streams for natural disaster relief and migrant support are separate so no money was diverted from the hurricane relief fund.<sup>96</sup> Importantly, misleading information regarding FEMA's support and accessibility has led some citizens to avoid seeking the aid they are entitled to.<sup>97</sup>

## YOUTUBE: EXAMPLES OF FALSE OR MISLEADING VIDEOS WITHOUT CONTEXT LABELS



In this video by the Heartland Institute, they make the claim that heat waves are less common and less severe today than in the past.<sup>98</sup> Scientific consensus has established that extreme weather, including heat waves, are getting worse from climate change.<sup>99</sup>



In a video by the Texas Public Policy Foundation, Alex Epstein and Mike Rowe have a conversation where Epstein claims that fossil fuels “made us safer than ever” from climate.<sup>100</sup> Scientific consensus has overwhelmingly established the increasingly negative impacts of climate change.<sup>101</sup>

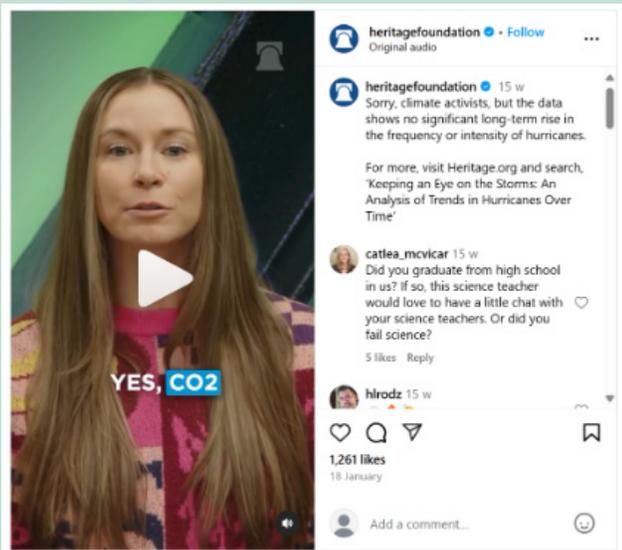


GB News posted a video during the 2025 LA wildfires in which they dismiss climate change as a significant factor causing the fires, describing it as “bogus nonsense”.<sup>102</sup> Scientists have found climate change was a significant factor behind the severity of the wildfires.<sup>103</sup>

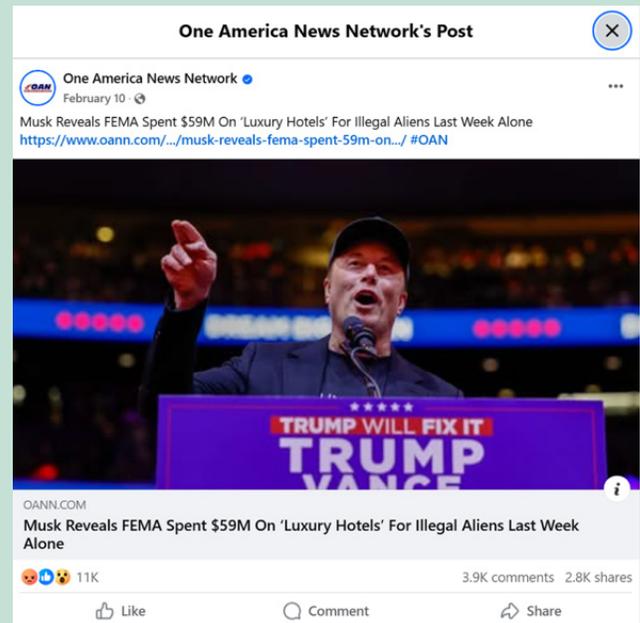


During the 2025 LA wildfires, Paul Joseph Watson posted a YouTube video falsely claiming that water was diverted from Los Angeles to protect a 3-inch fish which caused water shortages during the fires.<sup>104</sup> While there has been limited water diversion in California to protect several fish species, it was in Northern and Central California and had no impact on LA’s water supply.<sup>105</sup>

## META: EXAMPLES OF FALSE OR MISLEADING POSTS WITHOUT FACT-CHECKS



The Heritage Foundation misleadingly claims that hurricanes are not increasing in intensity or frequency.<sup>106</sup> This claim only accounts for US hurricanes and contradicts reports from climate scientists that find climate change to be worsening the impact of hurricanes globally.<sup>107</sup>



After the 2025 LA wildfires, One American News repeated Elon Musk's debunked claim that FEMA diverted \$59 million for luxury hotels for immigrants.<sup>108</sup> In reality, \$19 million came from a U.S. Customs and Border Protection program managed by FEMA but it was not *funded* by FEMA's disaster relief money. Additionally, migrants were not housed in "luxury hotels" but in standard hotel accommodations below government per diem rates.<sup>109</sup>



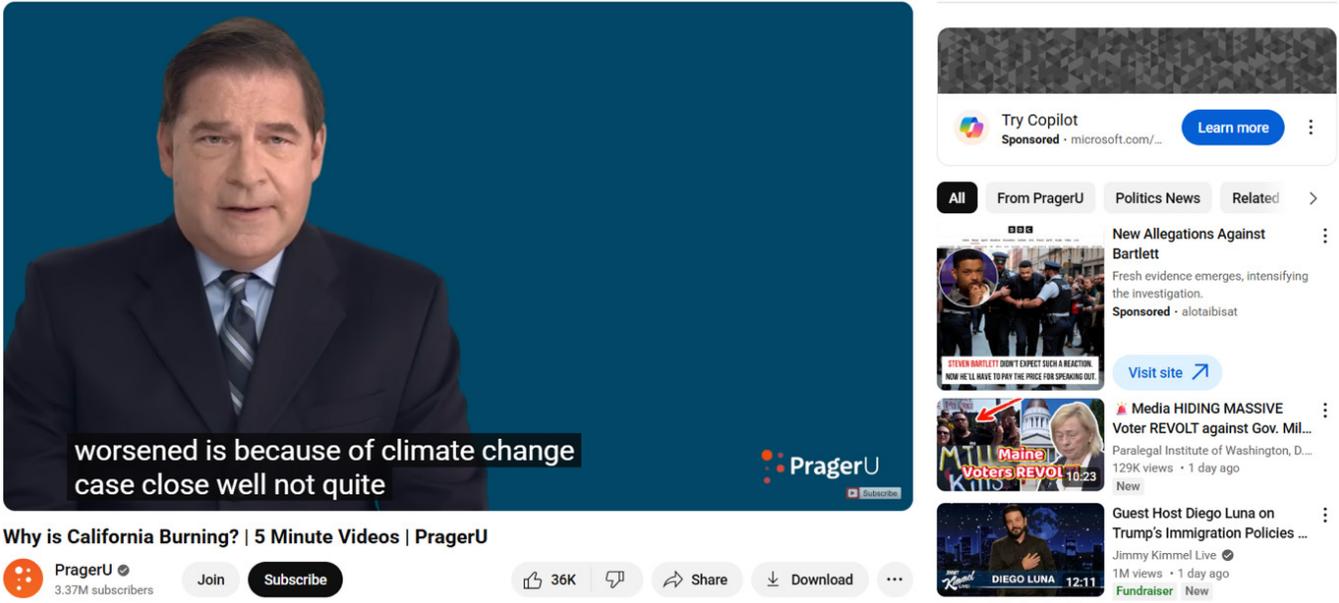
PragerU falsely claims that climate change is not responsible for the increasing severity of extreme weather events and casts doubt on the robustness of climate science.<sup>110</sup> Climate scientists have developed robust methods for monitoring and reporting on the impacts of climate change which have led to the widely held consensus that fossil fuels and excess CO<sub>2</sub> emissions are among the human activities negatively affecting our climate.<sup>111</sup>

# APPENDIX 2:

# ADS ON YOUTUBE

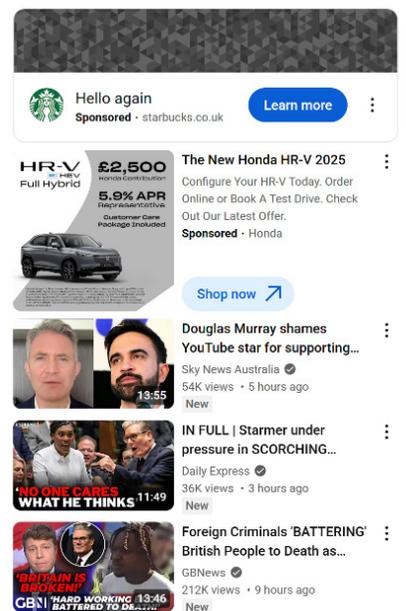
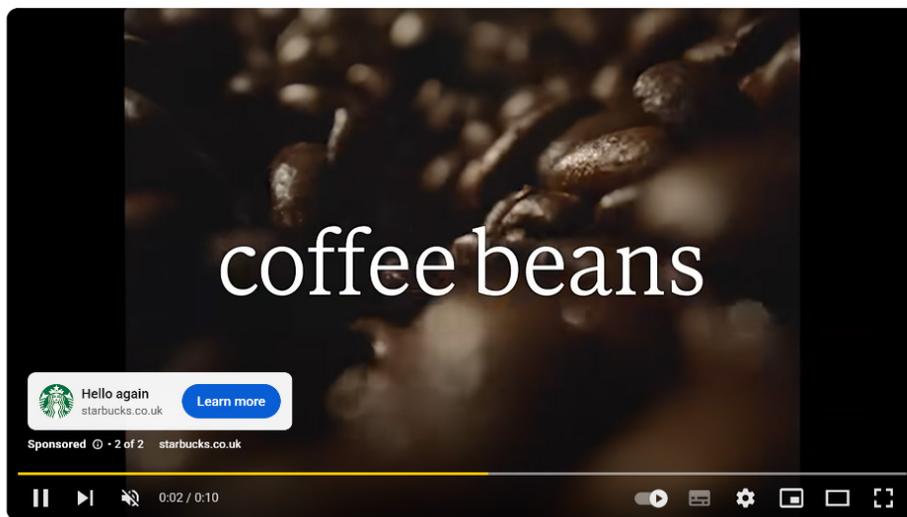
# VIDEOS

This appendix compiles examples of YouTube videos in our study that were found to feature ads and to promote false or misleading claims about extreme weather.



The screenshot shows a YouTube video player interface. The video content features a man in a suit speaking, with a text overlay that reads: "worsened is because of climate change case close well not quite". The PragerU logo is visible in the bottom right corner of the video. Below the video, the title "Why is California Burning? | 5 Minute Videos | PragerU" is displayed, along with the PragerU channel name and 3.37M subscribers. Interaction buttons for "Like" (36K), "Share", and "Download" are visible. To the right of the video player, a "Try Copilot" advertisement is shown, labeled as "Sponsored" and linking to "microsoft.com/...". Below the ad, a "Learn more" button is present. Further down, a "Related" section lists several other videos, including "New Allegations Against Bartlett", "Media HIDING MASSIVE Voter REVOLT against Gov. Mil...", and "Guest Host Diego Luna on Trump's Immigration Policies ...".

An advertisement for **Microsoft's AI tool Copilot** appeared alongside this video from PragerU which claims that wildfires are not worsening because of climate change.<sup>112</sup> Widely held consensus agrees that fossil fuels and excess CO2 emissions are among the human activities negatively affecting our climate.<sup>113</sup>



An ad placed by **Starbucks** as well as an ad placed by **Honda** appeared alongside this video by Paul Joseph Watson where he claims that there wasn't enough water in the fire hydrants because it was diverted to help the delta smelt fish.<sup>114</sup> While there has been limited water diversion in California to protect several fish species, it was in Northern and Central California and had no impact on LA's water supply.<sup>115</sup>

The screenshot shows a YouTube interface. On the left, a video player displays an advertisement for Ofgem's RTS Switch-Off. The ad features a woman speaking and the text "ACT NOW. THE RTS SWITCH-OFF IS ON THE WAY." Below the ad, the video title is "Who's Accountable For The LA Wildfires? | The Way I Heard It with Mike Rowe" by Mike Rowe, with 1.1M subscribers and 28K likes. On the right, a sidebar shows a list of recommended videos, including "Free Up Monthly Expenditure" (Sponsored), "The Dirty Truth About Trade School Versus Law School | Th...", "Lawrence: Trump, who dodged Vietnam, now feels like a...", and "Is This Really Happening in China? | Jan Jekielek #438 | T...".

An ad placed by the British energy supplier **Ofgem** appeared alongside this video by Mike Rowe which claims that climate change was not a factor in the LA wildfires.<sup>116</sup> Widely held scientific consensus agrees that climate change did play a factor in the LA wildfires.<sup>117</sup>

The screenshot shows a YouTube interface. On the left, a video player displays an advertisement for Accenture's "Reinvented with Accenture" campaign. The ad features a man in a suit and the text "New ways of working" and "Welcome to another edition of Reinvented with Accenture." Below the ad, the video title is "THIS IS CRAZY! California's Leaders Leave Firefighters Without Any Water!?" by Charlie Kirk, with 3.56M subscribers and 29K likes. On the right, a sidebar shows a list of recommended videos, including "How to reinvent a nation's digital payments" (Sponsored), "'Rife ethnic and religious hatred': British police unable t...", "Jasmine Crockett goes after Melania Trump in contentious...", "We're throwing them in jails': Bondi's fiery clash with Reed o...", "Douglas Murray shames YouTube star for supporting...", and "Hegseth attacks media over Iran nuclear site reports 'It's in...'".

An ad placed by **Accenture** appeared alongside this video by Charlie Kirk in which he describes environmentalists as "worried by abstractions," blaming the Los Angeles fires on poor forest management and "LGBTQ pet projects."<sup>118</sup> However, this ignores scientific evidence showing that climate change has significantly increased both the likelihood and severity of wildfires.<sup>119</sup>

# APPENDIX 3:

# DETAILED

# METHODOLOGY

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To study the spread of false or misleading claims about extreme weather events online, researchers studied 300 of the most-liked posts promoting these claims, comprising:

- ▶ 100 posts from Meta’s platforms, Facebook (68 posts) and Instagram (32 posts)
- ▶ 100 posts from YouTube
- ▶ 100 posts from X

All posts studied were made between April 1<sup>st</sup>, 2023 and April 1<sup>st</sup>, 2025. Together, these posts amassed 221,418,362 views across all platforms studied. Researchers analyzed these posts to test how often the posts feature fact-checks, carry advertising or display a ‘verified’ badge next to the poster’s name. They also examined ways in which misleading posts can generate income for posters and platforms.

To identify posts for study researchers used the **Online Deniers Dataset (ODD)**, a new dataset compiled by the Center for Countering Digital Hate that enables cross-platform analysis of social media posts from prominent climate change deniers identified by the climate journalism non-profit DeSmog.

## HOW RESEARCHERS COMPILED THE ONLINE DENIERS DATASET (ODD)

To compile the Online Deniers Dataset (ODD), researchers searched for accounts across Facebook, Instagram, X and YouTube for each of the individuals and organizations listed in the [Climate Disinformation Database](#), a list of individuals and organizations that have “helped to delay and distract the public and our elected leaders from taking needed action to reduce greenhouse gas pollution and fight global warming” developed by journalism non-profit DeSmog.<sup>120</sup>

Researchers identified social media accounts using a combination of approaches: checking relevant official websites for social media links, searching for accounts using platform-specific search functions and Google search. They also logged accounts already identified in DeSmog’s [Climate Disinformation Database](#).<sup>121</sup>

Accounts were only included in Online Deniers Dataset where researchers were able to confirm that they likely belonged to the relevant actor based on information such as webpage social media links or details included on accounts such as profile photos, bios and workplaces. Accounts were checked by two researchers to confirm that they appeared to belong to the relevant organization or individual.

In total, researchers identified 1,694 accounts, including:

- ▶ 347 on Facebook
- ▶ 303 on Instagram
- ▶ 589 on X
- ▶ 346 on YouTube

To build the dataset, researchers took a snapshot of the Climate Disinformation Database on January 8<sup>th</sup> 2025. Data collection of social media accounts took place between January 8<sup>th</sup> and 20<sup>th</sup> March 2025.

## HOW WE COLLECTED POSTS FROM EACH SOCIAL MEDIA PLATFORM

To collect a sample of relevant posts for each platform, researchers filtered posts from accounts in the Online Deniers Dataset using a keyword search designed to capture posts about extreme weather events and key disinformation narratives relating to them. Posts filtered by these keywords were collected from Facebook, Instagram and YouTube using Junkipedia, a social media monitoring tool, and from X using a separate licensed third-party tool.

The dataset covered all available posts from accounts in the Online Deniers Dataset from between April 1<sup>st</sup> 2023 and April 1<sup>st</sup> 2025. For some accounts, Junkipedia did not hold data covering the full date range for all accounts in the Online Deniers Dataset, making it possible that some relevant posts were not captured by our analysis.

The full keyword search used to identify possible extreme weather posts is as follows:

```
"LA fires"|wildfire|bushfire|hurricane|storm| tornado|cyclone|FEMA|Helene|Typhoon|flood-  
ing|drought|"heat wave"|flood |"luxury hotel"|"controlled burn"|Maui|"cloud seeding"|"artificial  
rain"|"weather modification"|"HAARP|arson|blockade|"los angeles"|"california"|"emergency response"|"  
forest fire"
```

## HOW RESEARCHERS IDENTIFIED THE MOST-LIKED FALSE OR MISLEADING POSTS

Matching posts were then ranked by likes and labeled by an AI tool designed to identify posts likely to contain false or misleading claims about extreme weather. These labels were used to assist researchers in identifying the 100 most-liked posts promoting false or misleading claims about extreme weather for each company studied.

Each post in the final set of 300 used for this study was agreed by two researchers to be false or misleading. In each case, researchers also identified at least one reputable source to fact-check the relevant claim. Fact-checks were taken from reputable sources including fact-checking agencies, authoritative news publications, climate-specialist organizations or academic journals.

The final dataset consisted of 100 posts on X, 100 posts on YouTube and 100 posts on Meta, with Meta posts featuring slightly more Facebook posts owing to these tending to have higher numbers of likes (68 Facebook posts versus 32 Instagram posts).

## HOW RESEARCHERS USED AI TO HELP IDENTIFY FALSE AND MISLEADING EXTREME WEATHER POSTS

Researchers built an AI tool to assist in the identification of false or misleading extreme weather posts. The tool was designed to guide researchers to the posts that were likely to contain misleading claims and highlight possible citations to aid researchers in their own assessments.

The AI tool is a Retrieval Augmented Generation (RAG) system that helps identify potential false or misleading claims in social media posts related to climate change and extreme weather. It uses OpenAI's GPT-4o model, enhanced with additional content from a curated external knowledge base. The AI tool had a precision score of 71%, meaning that our researchers agreed with the model's categorization of false or misleading claims across 71% of posts. Note that researchers used the model only in an assistive capacity, manually ensuring that posts in the final study of 300 posts qualified as false or misleading posts about extreme weather (see previous section).

To build an external knowledge base, articles relating to extreme weather and climate were compiled from several sources, identified by searching sources for relevant keywords. In total, it consisted of 21,905 news articles (from CNN, Associated Press, BBC, Fox News, USA Today and the Guardian), 2,358 articles from fact-checking organizations (from Politifact, Snopes and Full Fact), 12,661 articles from academic journals (Nature and Science) and 345 articles from specialist organizations (from FEMA, the IPCC and Carbon Brief).

The system works by retrieving relevant parts of the knowledge base via semantic search, adding up the top 10 most relevant excerpts from an external database to the prompt. This technique improves the model's ability to assess false and misleading claims beyond its training data. For each post, the model returns a decision on whether it is likely to contain a false or misleading claim and provides an explanation with citations to the sources used in its assessment.

For YouTube content, transcripts were often lengthy and covered a range of topics beyond climate and extreme weather. To ensure that the retrieval process returned only the most relevant information, climate-related content from each transcript was distilled into a short summary of a few sentences using a Mistral AI Large Language Model. The model chosen was further trained on instruction-following and conversation examples, helping it better understand context and stay focused.<sup>122</sup> This makes it well suited for summarizing long, complex text. This generated summary was passed to the retrieval system when categorizing a YouTube post.

## HOW RESEARCHERS COMPARED ALEX JONES' WILDFIRE POSTS TO CREDIBLE SOURCES

To understand the spread of false or misleading claims during the time of the LA wildfires, researchers compared social media posts containing false or misleading claims by Alex Jones to those from credible sources, including top US news sites and emergency response organizations. All posts in this comparative analysis were posted during the period the wildfires were active: between January 7<sup>th</sup> and January 31<sup>st</sup> 2025.<sup>123</sup>

Researchers gathered 44 false or misleading posts by Alex Jones during this time. These were identified as part of the core dataset of X posts as well as assessing Jones' top 200 most viewed posts during the fires.

For comparative purposes, researchers created a list of the social media accounts of ten large, reliable news sites. These ten news sites consisted of the LA Times, a widely read local paper, and the nine biggest news sites by traffic in the US that had a NewsGuard "reliability" score of over 90.<sup>124</sup> Data on the top US news sites by traffic was based on research by Press Gazette.<sup>125</sup> NewsGuard's scores assess sources based on a set of apolitical criteria of journalistic practice, with a high score reflecting strong reliability.<sup>126</sup> This yielded the following list of ten reliable news sites:

1. Los Angeles Times
2. The Associated Press
3. BBC News (World)
4. The Wall Street Journal
5. The Washington Post
6. The New York Times
7. NBC News
8. USA Today
9. Newsweek
10. CNBC

Researchers produced estimates of the total views on posts about the LA wildfires per news site by using a keyword search to identify posts likely to be relevant to the wildfires and adding up the views on these posts. More specifically, they gathered all posts from the outlets between January 7<sup>th</sup> and January 31<sup>st</sup> 2025 that held one of the following keywords: fires, fire, LA, Los Angeles, wildfires, Palisades, wildfire, Eaton and winds. Researchers assessed the accuracy of this keyword approach by taking a random sample of 300 posts across all news site posts during the time-period and manually checking whether they were related to the LA wildfires. When compared to the keyword search, this resulted in an overall F1 Score of 85%, with a precision of 76% and a recall of 97%, implying that the methodology works well at estimating which posts are relevant but may slightly overestimate the number of relevant posts.

To analyze the views received by key emergency response organizations, researchers selected ten accounts belonging to emergency and support organizations located from official sources for accurate, real-time information. The organizations were:

1. The LA County Fire Department
2. LA County Sheriff
3. LA County
4. The Los Angeles Fire Department
5. L.A. Emergency Alerts
6. LA City Emergency Management Department
7. City of Los Angeles
8. Federal Emergency Management Agency (FEMA)
9. The Public Information Officer for LA fire Department Erik Scott
10. The California Department of Forestry and Fire Protection

Including these organizations provided coverage across a range of official emergency response organizations. All posts on X made by these organizations during the wildfire period were included in the comparison as they were predominantly focused on responding to the wildfires during this time.

## **HOW RESEARCHERS ANALYZED POSTS FOR DIFFERENT TYPES OF CONTEXT LABELS**

Researchers analyzed the presence of Community Notes, fact-checks and information labels across the dataset of 100 posts per social media company. To do this, researchers accessed each of the posts from the US or by using a VPN set to a US location and checked to see if a relevant label appeared on a post.<sup>127</sup> In each case, a screenshot was taken to retain evidence of the result.

## **HOW RESEARCHERS ANALYZED MONETIZATION ON META**

Researchers analyzed the accounts behind the false or misleading extreme weather posts on Facebook to see if they were present on any of Meta's partner-publisher lists showing monetized accounts on Facebook. These are lists that show which accounts are monetized across two key types of ad placement on Facebook: Ads on Facebook Reels and Facebook in-stream videos.<sup>128</sup> Together, they form a database of monetized accounts on Facebook, which is searchable online through the Business Help Center. Specifically, they are described by Meta as "show[ing] publishers that have signed up for monetization and follow our Partner Monetization Policies".<sup>129</sup> Researchers searched these lists for each of the accounts found on Facebook that posted false or misleading extreme weather claims. This data analysis took place on May 1<sup>st</sup>, 2025.

## **HOW RESEARCHERS SIMULATED YOUTUBE'S RECOMMENDATION SYSTEM AND ANALYZED ADS**

Researchers analyzed the top five recommendations on each of the 100 YouTube videos identified as containing false or misleading extreme weather claims. To do this, they opened each video and gathered the five top videos from YouTube's "Up Next" recommendation panel, which appears on the right-hand side of the screen when a video is playing. They did this without logging into YouTube, ensuring recommendations were not influenced by account-specific personalization. This created a dataset of 500 YouTube videos, which were analyzed by researchers with assistance from the same AI-tool used to gather false or misleading posts for the study's core dataset, explained in detail above. Videos were only classed as false or misleading where two researchers agreed they contained a claim that was false or misleading, and a reputable source was identified in each case to fact-check this.

While opening each video for this analysis, researchers also logged which videos carried ads. Researchers recorded the brand name, ad URL, and a screenshot of the page showing the video and ad in context, as well as capturing recommendations. For this part of the analysis, researchers accessed YouTube from the US or by using a VPN set to a US location. This data analysis process took place between April 14<sup>th</sup> through April 22<sup>nd</sup> 2025.

## HOW RESEARCHERS IDENTIFIED FALSE AND MISLEADING POSTS ABOUT THE TEXAS FLOODS

To collect a sample of relevant posts for each platform, researchers studied posts from accounts in the Online Deniers Dataset that contained the keywords “flood” and “Texas”. Posts were collected from the day the floods started on the 4<sup>th</sup> July through 9<sup>th</sup> July.<sup>130</sup> Posts containing these keywords were identified from Facebook, Instagram and YouTube using Junkipedia, a social media monitoring tool, and from X using a separate licensed third-party tool.

The top most viewed posts were analyzed by two researchers who agreed on a final set of 30 posts that were false and misleading. In each case, researchers also identified at least one reputable source to fact-check the relevant claim. Fact-checks were taken from reputable sources including fact-checking agencies, authoritative news publications, climate-specialist organizations or academic journals.

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