

# Climate Change Discourse on Twitter

Isabel Arvelo



## Motivation

- What are the main topics, themes, and narratives that dominate climate change discussions on Twitter? What does the discourse tend to focus on?
- What individuals, organizations, locations, and other entities are most influential in shaping the climate change narrative on Twitter?

# Dataset Overview: Climate Change Tweets on Twitter

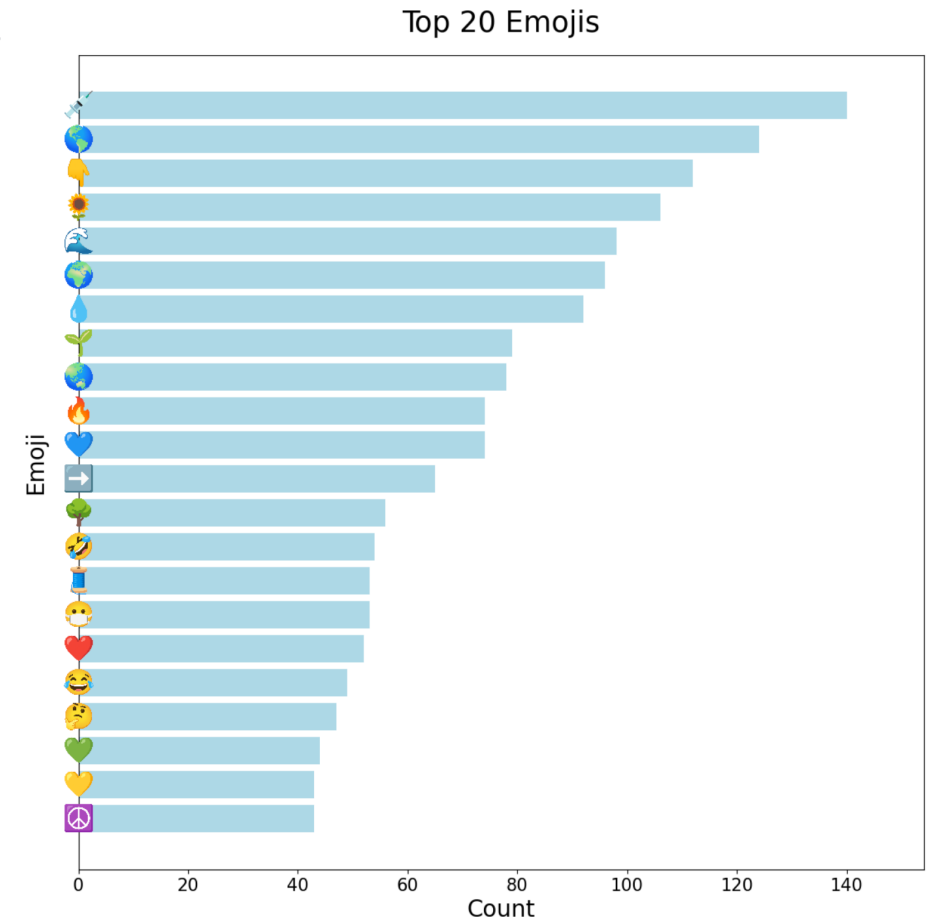
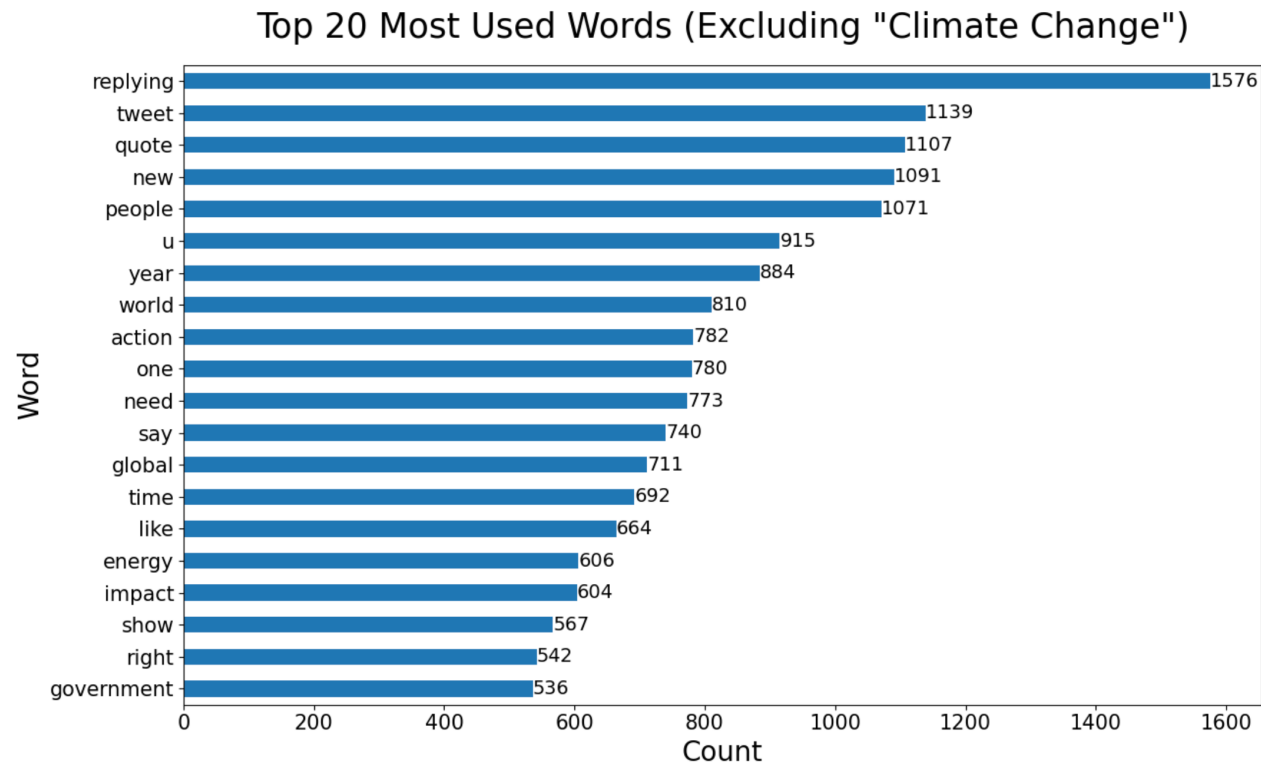
- **Source:** Tweets scraped by Kaggle user Diego Farchione
- **Duration:** Captured from January 2022 to July 2022.
- **Content:** Highlights top tweets with the keyword 'Climate Change' between January 2022 to July 2022.
- **Key Features (for each tweet):**
  - *User & Tweet Details:*
    - User Screen Name, Username, Text, Date
  - *Engagement Metrics :*
    - Comments, Likes, and Retweets
  - *Additional Context:*
    - Emojis, Image Link,





# Analysis: Word and Emoji Frequency

- **Active User Engagement:** Vibrant discussions & debates.
- **Diverse Conversations:** From energy solutions to policy discussions.
- **Sense of Urgency:** Emphasis on immediate action & collective responsibility.



# Analysis: Named Entity Recognition

	people	organizations	geopolitics
0	putin	un	australia
1	anthony albanese	supreme court	california
2	scott morrison	congress	china
3	joe	senate	russia
4	biden	gop	canada
5	gif alt	epa	india
6	taylor	abc.net.au	america
7	joe manchin	abc	pakistan
8	morrison	nasa	texas
9	john kerry	cnn	florida

- Climate change discussions on Twitter are heavily influenced by political decisions, leaders, and policies, especially from the US.
- Media outlets and their reporting are crucial in shaping the narrative around climate change.
- The global nature of the issue is evident, with mentions of diverse regions facing different climate challenges and contributing differently to the problem.

# Analysis: Topic Modeling

## Topic 1: Energy Sources and Their Impact

- Discussing the environmental impact of different energy sources.
- Legal implications with energy companies.
- Advocacy against harmful energy practices and fossil fuels.



## Topic 2: Technical & Policy Aspects:

- Delving into carbon emissions and energy sources.
- Discussing potential strategies and policies.
- Intersection of climate change with food and agriculture.



# Takeaways