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## Cyber-Echoes of Climate Crisis: Unraveling Anthropogenic Climate Change Narratives on Social Media

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Social media platforms have a key role in spreading narratives about climate change, and therefore it is crucial to understand the discussion about climate change in social media. The discussion on anthropogenic climate change in general, and on social media specifically, has multiple different narratives. Understanding of the discourses can assist efforts of mitigation, adaptation, and policy measures development. In this work, we collected 333,635 tweets in English about anthropogenic climate change. We used Natural Language Processing (NLP) and machine learning methods to embed the semantic meaning of the tweets into vectors, cluster the tweets, and analyze the results. We clustered the tweets into four clusters that correspond to four narratives in the discussion. Analyzing the behavioral dynamics of each cluster revealed that the clusters focus on the discussion of whether climate change is caused by humans or not, scientific arguments, policy, and conspiracy. The research results can serve as input for media policy and awareness-raising measures on climate change mitigation and adaptation policies, and facilitating future communications related to climate change.