DATS 6103 Data Mining, Spring 2024

Team 2 Final Project Proposal

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The effects of climate change are felt across the world, but the sheer scale of the impact is, frankly, often beyond an individual’s comprehension. This lack of context has made the changes in observed local weather a proxy for an individual’s perception of the impact of a warming planet. However, local weather patterns are impacted by factors beyond average global temperature creating confusion across the population as short-term patterns seem counterintuitive to concepts associated with a warming planet. Directly observable variables such as temperature and precipitation as well as larger scale patterns such as the La Nino/La Nina conditions impact the climate experience of individuals differently depending on their location. Our goal for this project is to examine how weather patterns have impacted the perception of climate change across the US. We wish to focus on the more extreme impacts of climate change which began around the beginning of the 21st century. To do so we seek to answer the following SMART questions:

1. How have global temperature changes impacted US opinion of the existence of climate change since 2000?
2. How has temperature and rainfall impacted the perception of climate change occurring in individuals in the US since 2000?
3. How has the El Nino/La Nina weather pattern impacted public perception of climate change since 2000?
4. How have weather patterns impacted the perceptions of climate change among different political and socio-economic groups since 2000?
5. How has extreme weather impacted public perception of climate change since 2000?

Potential data sources and references:

<https://climate.nasa.gov/vital-signs/global-temperature/?intent=121>

<https://www.fema.gov/data-visualizations/hazard-mitigation-assistance-obligations>

<https://origin.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php>

<https://osf.io/jw79p/>

<https://sercc.com/noaa-online-weather/>