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Flu Influences by Weather

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# OVERVIEW

Our project is to uncover patterns in influenza case breakouts based on weather patterns. We’ll examine relationships between types of influenza and location; trends in influenza over the course of the year; and related questions, as the data admits.

# RESEARCH QUESTIONS to ANSWER

1. What is the relationship between flu and temperature?
2. What is the relationship between flu and other weather parameters (e.g. humidity, precipitation totals)?
3. Is there a common relationship amongst different types of flu (A vs. B)?

# DATA SOURCES

1. CDC Website
   1. <https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>
      1. Influenza cases by state, type
2. WHO Website
   1. <https://www.who.int/influenza/gisrs_laboratory/flunet/en/>
3. Weather API
   1. [http://api.openweathermap.org](http://api.openweathermap.org/)
      1. Weather data by cities, states
4. Google maps

# TASK BREAKDOWN

1. Gather data from websites
2. Import CSV data to dataset
3. Clean datasets
4. Run correlation and comparison studies - look for trends
5. Compare linear regression results
6. Overlay results on Google Maps as heatmap