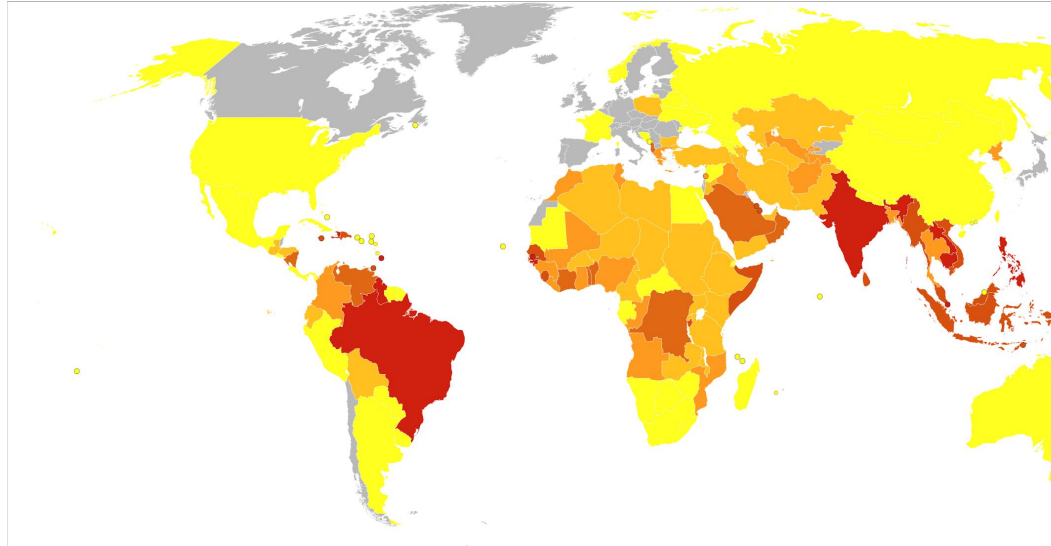


Mapping the Spread of Dengue Fever in South America
Due to Global Warming
By: Akash Rama

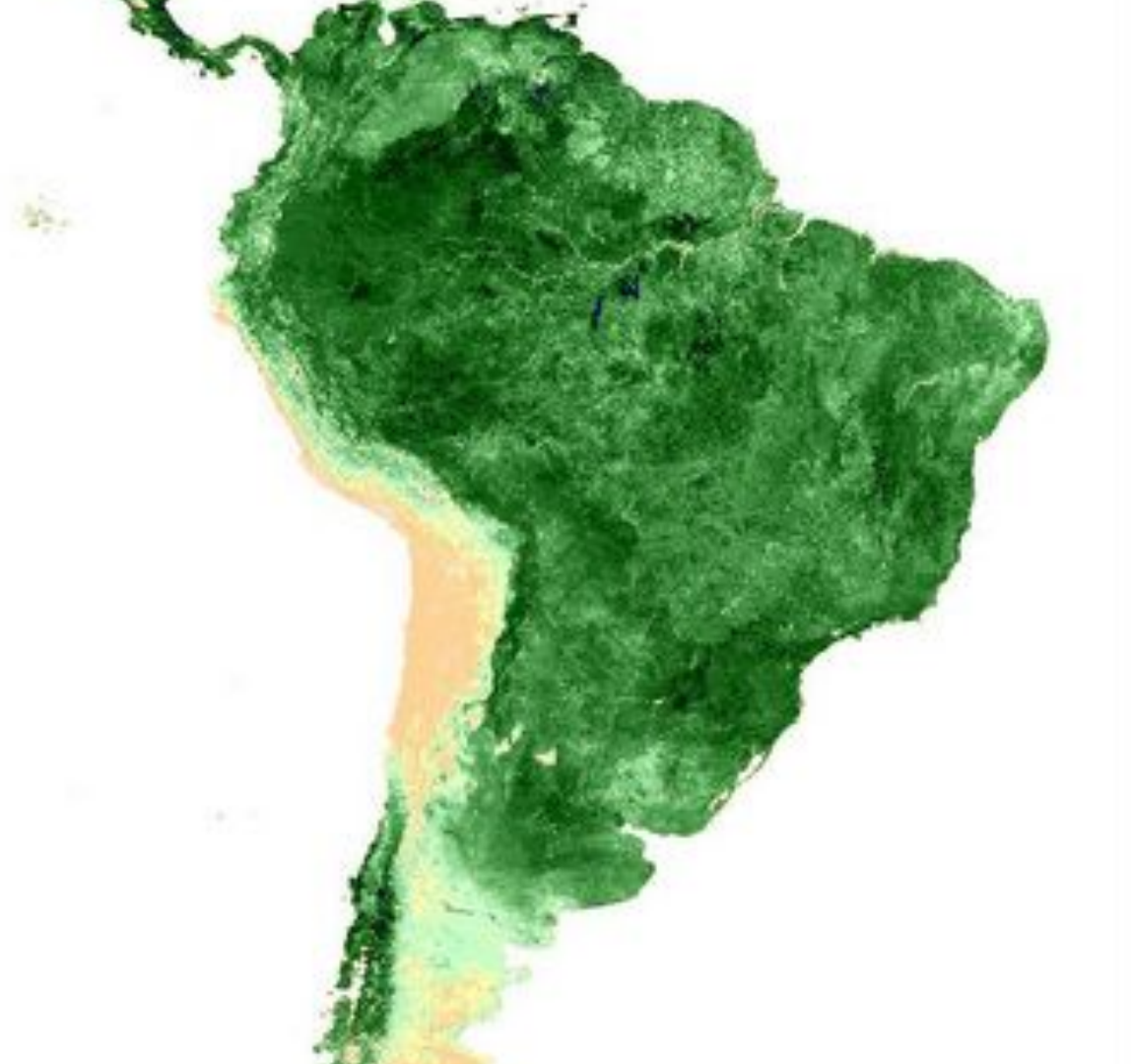
Background

- There are an estimated 400 million cases of dengue fever every year around the world
- About half the world population is at risk mostly in developing countries
- Climate change is changing the rate and area of occurrences
- Knowing where to send resources is important



DATA

- Have data on weather conditions and number of dengue fever cases
- NOAA climate model
- Random Forest model
 - Temporal train-test-split
- MAPE
 - Limited variables: 26%
 - All variables: 17%
- Vegetation data is very important



To Do

Gather more data for the
rest of South America

Incorporate vegetation
index to model

Prettier map

Want to be able to
account for population
increases

Thank You

