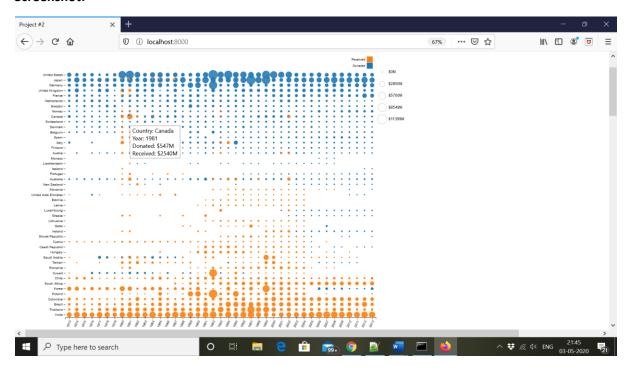
am9435

## Visualization 1:

I created a pie matrix chart that shows the amount donated and amount received by each country over time. We have time in years on x axis and the different countries on y axis. Each pie chart reflects information on how much a country has donated and/or received aid during these years. Colour is used to distinguish between donated and received. Size is proportional to the total amount (donated + received). Furthermore, I have sorted the countries from most donated to most received so as to add to the aesthetics of the graph and help read it better. Additionally, I have also included opacity. If the pie gets big it tends to clutter and hide smaller pies adjacent to it. To overcome this I have used opacity, bigger the pie gets, lesser is the opacity. I have also appended the pie chart to represent the amount donated and received when you hover your mouse over it. I have done data pre-processing in observable and saved it as mini2\_data2.csv file in the data folder.

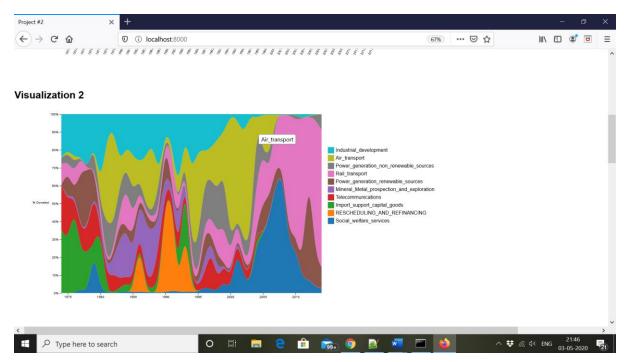
## Screenshot:



## Visualization 2:

I created a normalized area chart that shows how the top 10 purposes of donations have been distributed over time. We have time in years on x axis and the percent amount donated on y axis. Colour is used to distinguish between the top 10 purposes. I have also appended the area chart to show the purpose when you hover your mouse over any area. I have done data pre-processing inside the vis2 function using aiddata-countries-only - aiddata-countries-only.csv file in the data folder.

# Screenshot:



## **Visualization 3:**

## **Solution 1:**

I created small multiples of the world map to show how the trends are among countries that receive aid through the years. I used colour intensity to map the amount received by these countries. I have done data pre-processing in observable and inside the vis3 function using **data2.csv** file in the data folder.

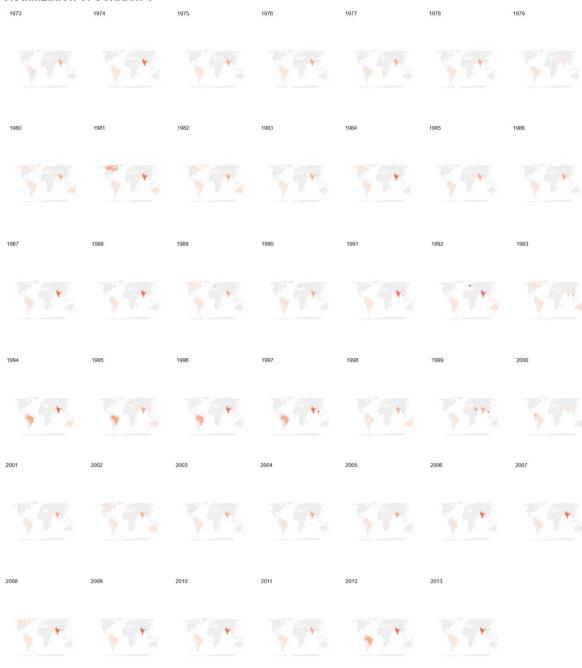
Pro: Can see all the years maps at once.

Con: Since there are too many years, comparing is a problem. Also, the map is too small so we cannot clearly see the countries.

Hence, I have come up with another solution that uses **ANIMATION**. (Solution 2)

# **Screenshot for Solution 1:**

## Visualization 3: Solution 1



# Solution 2:

To overcome the cons in Solution 1 of Visualization 3, I have come up with an animation that shows the history of donations made to these countries. Additionally, I have used colour intensity to map the amount of aid received by these countries. I have done data pre-processing in observable and inside the vis4 function using data2.csv file in the data folder. (Please wait till the file loads while executing)

Pros: Much clearer than Solution 1

Cons: User has to remember the "history".

Screenshot for Solution 2: (Attached video in the main folder - vis3\_sol2\_animation.mov)

# Visualization 3: Solution 2

1990

