FLIGHT IMPACT

Data for the Conscious Air Traveler

1% OF THE POPULATION

was responsible for

50% OF AVIATION EMISSIONS

FLIGHT IMPACT

DATA PIPELINE

colab

Data cleaning/restructuring

API Calls

MongoDB insertion (using pymongo)

DATA PIPELINE

colab

climatiq

Data cleaning/restructuring

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MongoDB insertion (using pymongo)

mongoDB.

clever cloud

Hosting database on CC

Data Storage

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mongoDB.

clever cloud

Hosting database on CC

Data Storage

Streamlit

Grab data from MongoDB

App interactivity & deployment

DATA EXAMPLE

{
category: ‘Air Travel’,
co2e: 417.23,
dest_city: ‘Toronto’,
dest_code: ‘YYZ’,
dest_continent: ‘NA’,
dest_country: ‘Canada’,
dest_coords: [43.67, -79.63],
dest_name: ‘Lester B. Pearson International Airport’,
gc_distance: 2591.5,
origin_city: ‘Reykjavik’,
origin_code: ‘KEF’,
origin_continent: ‘EU’,
origin_counry: ‘Iceland’,
origin_coords: [63.98, -22.61],
origin_name: ‘Keflavik International Airport’,
id: ‘passenger_flight-route_type_na-aircraft_type_na-distance_gt_2300mi-class_na-contrails_na’
}

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Origin Country

Select or type location

Origin City

Select or type location

Destination Country

Select or type location

Destination City

Select or type location

Per Passenger Emissions Limit (kg)

1995

0 1995

Welcome to Flight Impact!

Flying is one of the most carbon-intensive ways that we can spend our time as individuals, and its use is dominated by a small group: in 2018, only **11% of the global population** took a flight, and just **1% of the population was responsible for 50% of aviation emissions** (Time, 2021). If flying is a part of your life, there are ways to reduce your air travel emissions, and you can start here! Explore route options, understand your flight's carbon impact, and inform your decisions with EPA data.

How to get started:

- Compare the carbon emissions of multiple routes by choosing locations from the left-side dropdowns or filtering your search to an emissions limit
  (*For reference, the EPA estimates that a typical passenger vehicle emits about 4.6 metric tons (4600 kg) of CO2 per year*)
- Hover over the routes on the map, zoom in, and drag left and right to explore the route map
- Check out the table at the bottom of the page for alternative routes, emissions comparisons, and additional ways to travel consciously

Manage app

FUTURE WORK

- *Incorporate bus and train data to recommend alternatives*

- *Automate data collection from Climatiq API*

QUESTIONS?