



Airport Analysis

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Overview of Dataset



Overview of dataset

- 29 airports
- June 2003 - March 2013
- Notable metrics (for each airport in each month):
 - Number/names of carriers
 - Number of delays and minutes delayed due to
 - Carrier
 - Late aircraft
 - National Aviation System
 - Security
 - Number of flights
 - Cancelled
 - Delayed
 - Diverted
 - On Time

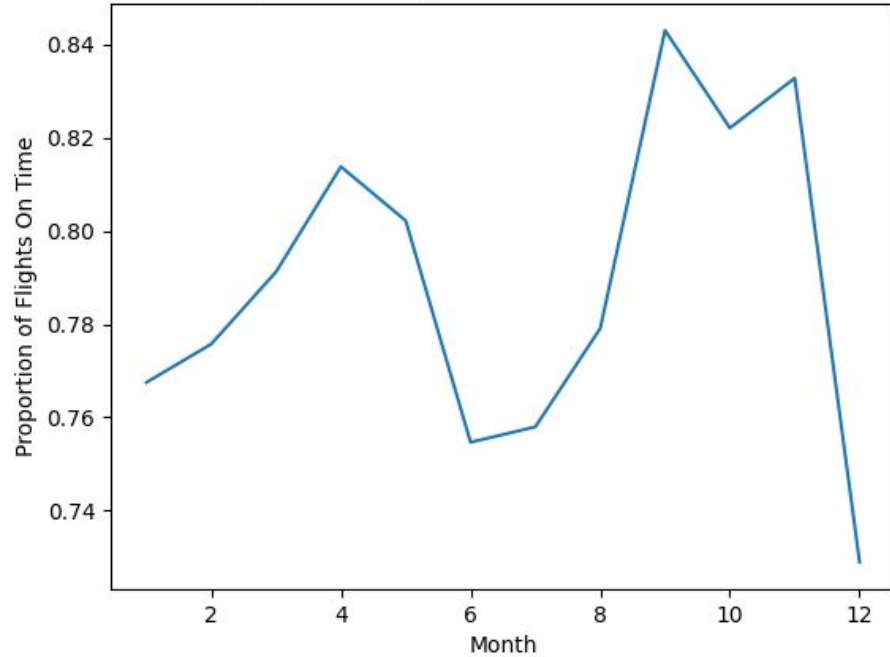
Findings



Some findings

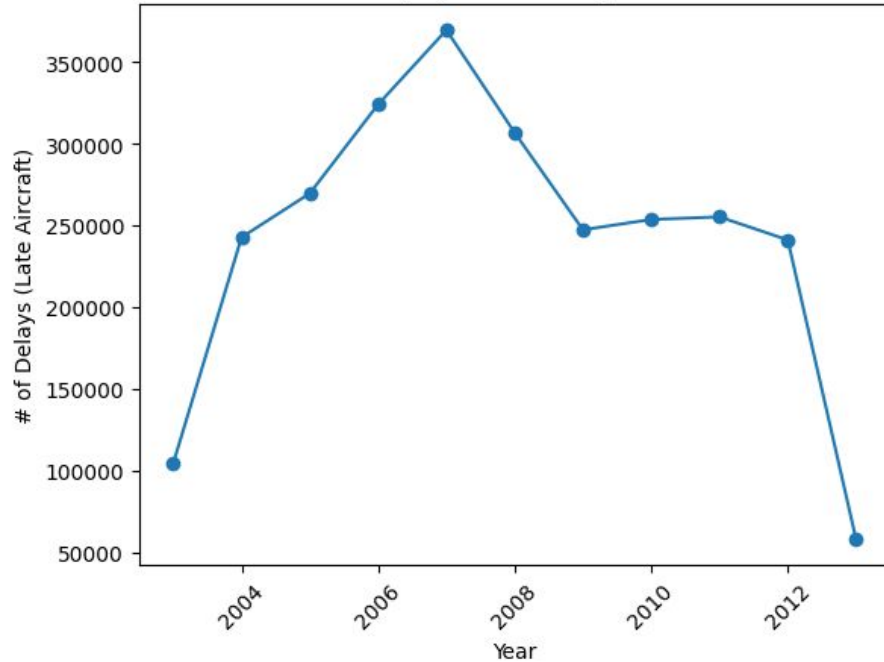
- Total # of flights:
 - Min: 3566
 - Max: 38241
 - Mean: 12084
 - Median: 9970.0
- Proportion of flights on time:
 - Min: 0.47
 - Max: 0.93
 - Mean: 0.78
 - Median: 0.79

Proportion of Flights On Time in Each Month



The most delays occur during the winter and summer, while the least occur during spring and fall.

of Delays (Late Aircraft) over Time



Over the years, the number of delayed flights has varied.

The Atlanta airport experienced the most delays in a year in 2010 with 26.305 delays.



Proportion of flights delayed or cancelled

- Proportion of flights delayed or cancelled (per month per airport):
 - Min: 0.001
 - Max: 0.227
 - Mean: 0.019
 - Median: 0.014

Airport	Delayed/cancellation rate (median of all dates)
Portland, OR	0.007
Orlando, FL	0.007
Tampa, FL	0.007
...	...
Newark, NJ	0.03
Chicago, IL (O'Hare)	0.03
New York, NY (LaGuardia)	0.04



Proportion of flights delayed due to security

- Proportion of flights delayed or cancelled (per month per airport):
 - Min: 0
 - Max: 0.007
 - Mean: 0.00055
 - Median: 0.0004

Airport	Security delay rate (median of all dates)
New York, NY (LaGuardia)	0.00013
Atlanta, GA	0.00020
Chicago, IL (O'Hare)	0.00022
...	...
Phoenix, AZ	0.0007
Seattle, WA	0.0008
Chicago, IL (Midway)	0.0008

Data Dashboard



Data dashboard

- To enable further analysis of the dataset, I created a dashboard to allow us to investigate many metrics using various filters.

Thank you for listening!

Any questions?

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