Data Visualization of Bird Strikes between 2000-2011

INTRODUCTION

- Transport and communication are in the crucial domain in the field of analytics. Environmental impacts and safety are, nowadays, two major concerns of the scientific community with respect to transport scenarios and to the ever-growing urban areas .
- These issues gain more importance due to the increasing amount of vehicles and people. Seeking new solutions is reaching a point where available technologies and artificial intelligence. especially MAS are being recognized as ways to cope with and tackle these kinds of problems in a distributed and more appropriate way.

Details of the Data

- 42.72% incidents where pilot was warned about the birds• Prior warning to the pilot reduces the risk of damage to the aircraft•
- 52.78% of incidents have happened due to some small unknown bird.•
- 72.9% incidents have happened when there is 1 bird/wildlife is struck in the airplane and caused damage.
- • 90.31% incidents caused no damage while 9.69% incidents caused damage•
- 80.84% of bird strike incidents have happened when the altitude of airplane was <1000 ft and 19.16% have happened when altitude was >1000 ft.

Main KPIs

- 80.84% of bird strike incidents have happened when the altitude of airplane was <1000 ft and 19.16% have happened when altitude was >1000 ft.
- 72.9% incidents have happened when there is 1 bird/wildlife is struck in the airplane and caused damage.• 90.31% incidents caused no damage while 9.69% incidents caused damage

Mock-up Dashboard

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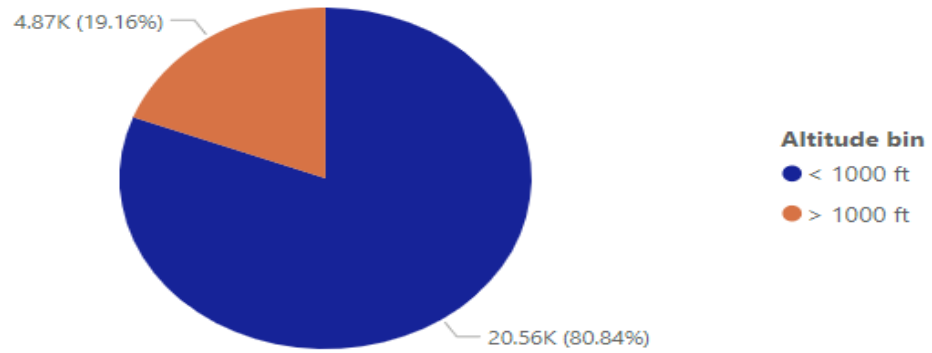
Number of Bird Strikes

24.75K

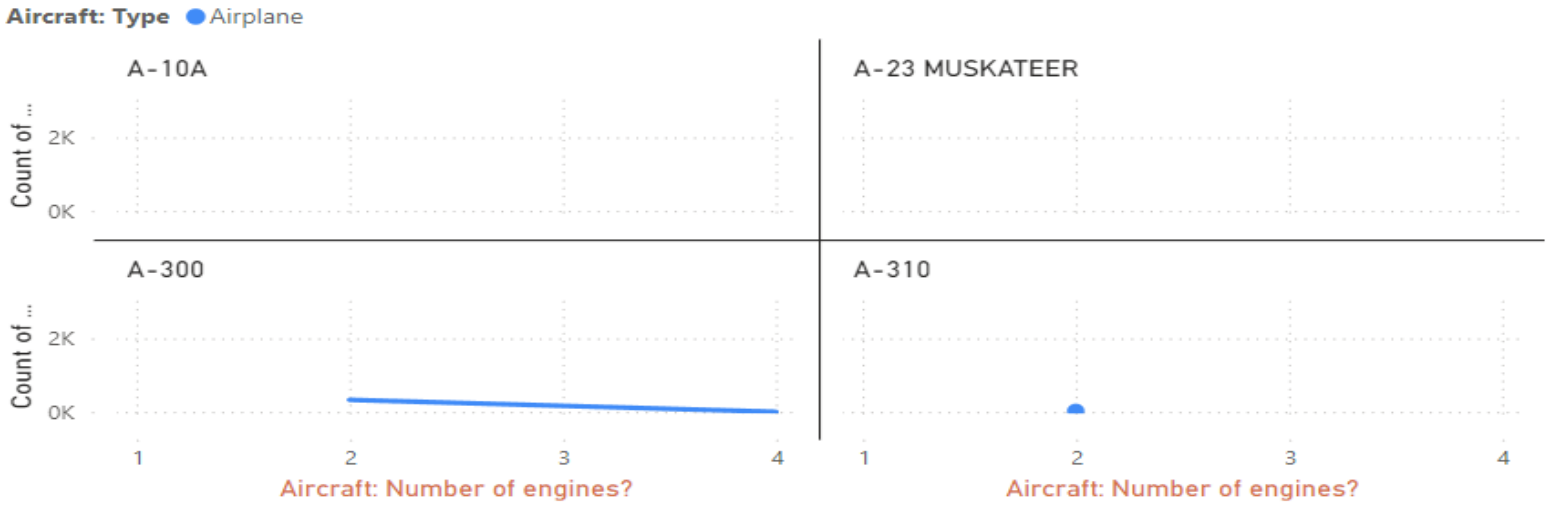
Total Cost in Repairments

136M

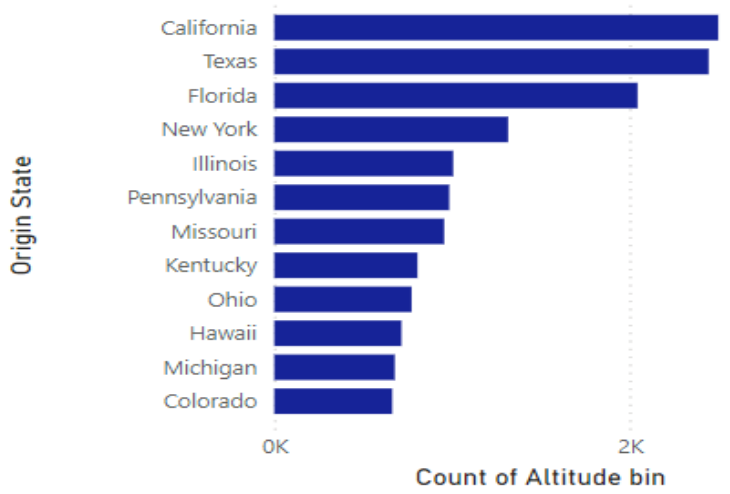
Count of Aircraft: Airline/Operator by Altitude bin



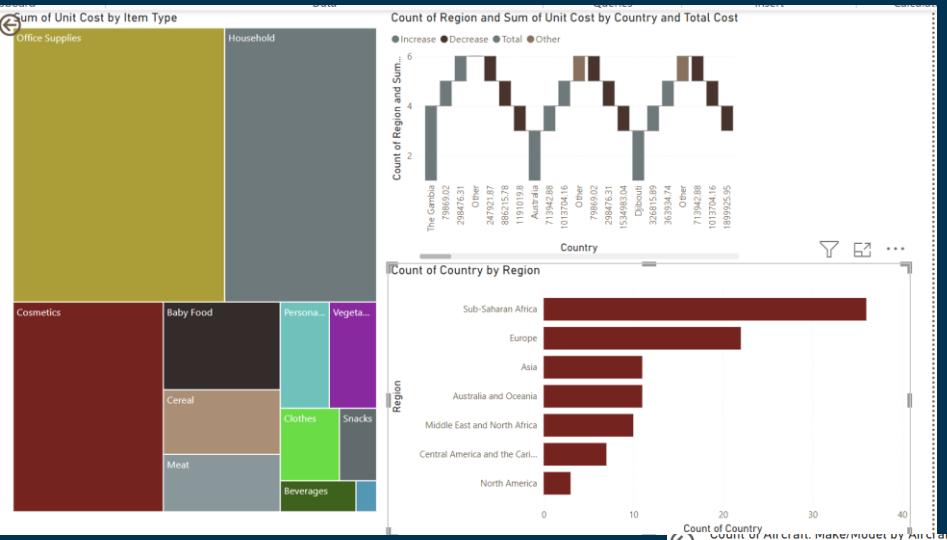
Count of Aircraft: Airline/Operator by Aircraft: Number of engines?, Aircraft: Type and Aircraft: Make/Model

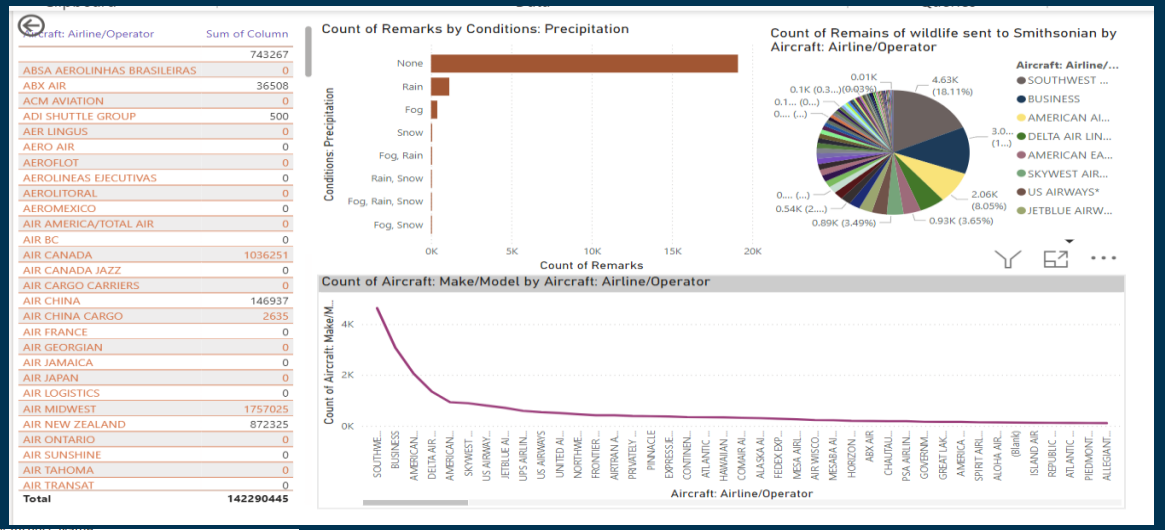


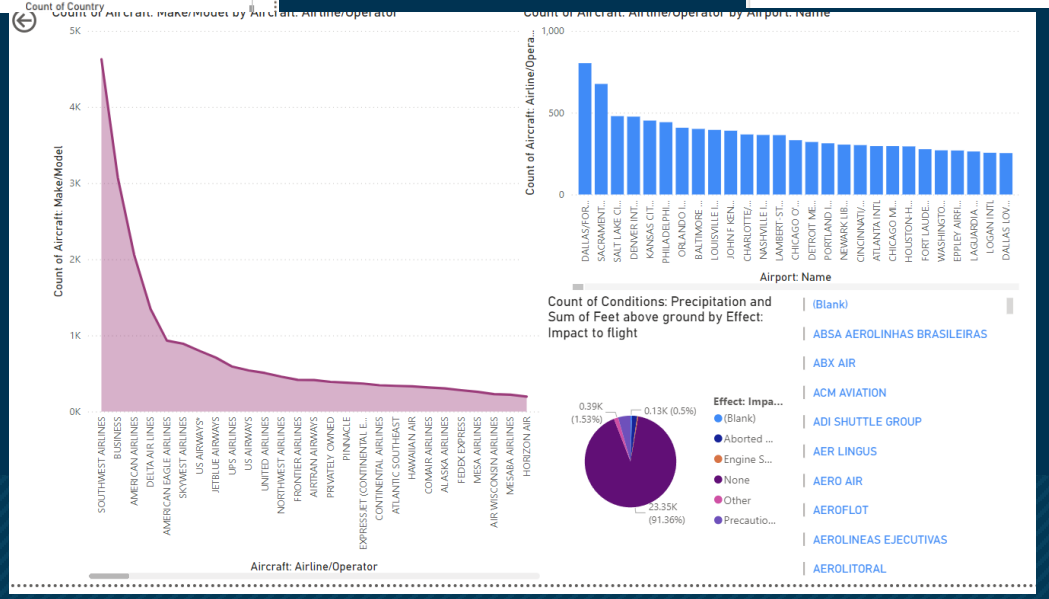
Count of Altitude bin by Origin State



My Design


Sum of Unit Cost by Item Type
Office Supplies
Household
Cosmetics
Baby Food
Cereal
Clothes
Snacks
Meat
Beverages
Count of Region and Sum of Unit Cost by Country and Total Cost
Increase
Decrease
Total
Other
Count of Region and Sum...
Country
Count of Country by Region
Sub-Saharan Africa
Europe
Asia
Australia and Oceania
Middle East and North Africa
Central America and the Cari...
North America
Region
Count of Country


Aircraft: Airline/Operator
Sum of Column
743267
ABSA AEROLINHAS BRASILEIRAS 0
ABX AIR 36508
ACM AVIATION 0
ADI SHUTTLE GROUP 500
AER LINGUS 0
AERO AIR 0
AEROFLOT 0
AEROLINEAS EJECUTIVAS 0
AEROLITORAL 0
AEROMEXICO 0
AIR AMERICA/TOTAL AIR 0
AIR BC 0
AIR CANADA 1036251
AIR CANADA JAZZ 0
AIR CARGO CARRIERS 0
AIR CHINA 146937
AIR CHINA CARGO 2635
AIR FRANCE 0
AIR GEORGIAN 0
AIR JAMAICA 0
AIR JAPAN 0
AIR LOGISTICS 0
AIR MIDWEST 1757025
AIR NEW ZEALAND 872325
AIR ONTARIO 0
AIR SUNSHINE 0
AIR TAHOMA 0
AIR TRANSAT 0
Total 142290445
Count of Remarks by Conditions: Precipitation
None
Rain
Fog
Snow
Fog, Rain
Rain, Snow
Fog, Rain, Snow
Fog, Snow
Conditions Precipitation
Count of Remarks
Count of Remains of wildlife sent to Smithsonian by Aircraft: Airline/Operator
Aircraft: Airline/...
SOUTHWEST ...
BUSINESS
AMERICAN AI...
DELTA AIR LIN...
AMERICAN EA...
SKYWEST AIR...
US AIRWAYS*
JETBLUE AIRW...
4.63K (18.11%)
2.06K (8.05%)
0.93K (3.65%)
0.89K (3.49%)
0.54K (2....)
Count of Aircraft: Make/Model by Aircraft: Airline/Operator
Count of Aircraft: Make/M...
Aircraft: Airline/Operator


Count of Aircraft: Make/Model
Aircraft: Airline/Operator
Count of Aircraft: Airline/Opera...
Airport: Name
Count of Conditions: Precipitation and Sum of Feet above ground by Effect: Impact to flight
0.39K (1.53%)
0.13K (0.5%)
23.35K (91.36%)
Effect: Impa...
(Blank)
Aborted ...
Engine S...
None
Other
Precautio...
(Blank)
ABSA AEROLINHAS BRASILEIRAS
ABX AIR
ACM AVIATION
ADI SHUTTLE GROUP
AER LINGUS
AERO AIR
AEROFLOT
AEROLINEAS EJECUTIVAS
AEROLITORAL

THANK YOU