

Supplementary-3:

Function of 'Fatalities':

1. Operator and Aircraft Types:

- The dataset encompasses information about various operators, including Military - U.S. Army, Military - U.S. Navy, Private entities, and others.
- Aircraft types vary widely, ranging from early models like the Wright Flyer III to more modern ones such as Dirigibles, Curtiss seaplanes, Zeppelin airships, and De Havilland DH-4.

2. Aircraft Components and Systems:

- Different aircraft are equipped with distinct systems and components. For instance, the Wright Flyer III features basic control systems as an early fixed-wing aircraft.
- Dirigibles, characterized by large gas-filled envelopes, may include propulsion and steering systems in their design.

3. Fatalities and Ground Casualties:

- The dataset provides details on the number of individuals on board, fatalities, and ground casualties for each incident.
- Analyzing the causes of fatalities involves exploring specific aircraft components, potential system failures, or external factors.

4. Engine Types:

- Engine types like Curtiss seaplane, De Havilland DH-4, and Curtiss R-4LM represent diverse propulsion systems.
- Each engine type is associated with its unique set of components and systems relevant to incident understanding.

5. Test Flights:

- Several incidents are categorized as "Test flight," indicating that the aircraft might have been undergoing testing or system evaluation.
- Test flights play a crucial role in identifying potential issues with various aircraft systems.

6. Military Operations:

- Incidents involving Military - U.S. Army and Military - German Navy suggest military operations.
- Military aircraft feature specific systems related to their mission, such as weaponry, communication, and navigation.

7. Time and Location:

- Time and location data are essential for comprehending environmental factors and external conditions contributing to incidents.

8. Record ID and Registration:

- Each incident is assigned a unique Record ID for identification purposes.
- Registration details offer information about the specific aircraft involved in each incident.

Linear Equation: Fatalities= (1.0) * Time + (1.0) * Location + (-0.26) * Operator + (1.0) * Flight + (1.0) * Route + (1.0) * Type + (1.0) * cn/In + (1.0) * Aboard + (1.17)

ENCODING ONLY CATEGORICAL VARIABLE:

coefficient [-7.84632715e-04 9.31636655e-03 5.54686972e-03 2.31012037e-04

1.99354562e-02 -4.06962754e-03 1.73709582e-03 -3.95927833e-03

2.90241250e-04 9.69088894e-01 6.21579681e-02 2.46181435e-07

-1.07705267e-06 -8.15102921e-08 6.52476631e-07 -1.12217974e-06

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-5.65286344e-06 -2.46021531e-05 -1.33774623e-05 -8.52314669e-07

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 4.77708311e-05 -1.55068910e-07 -3.56904173e-06 7.84215353e-09
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 3.05236153e-05 1.43198384e-04 -1.91528607e-07 1.77742739e-07
 -3.03788781e-07 1.57917909e-05 -2.00644856e-04 8.96698855e-07
 -3.30858484e-08 -7.63111312e-06 5.96038387e-05 -3.08826048e-07
 -3.47427337e-05 -3.12747493e-05 -8.83990145e-04 8.37086836e-03
 -2.55925272e-04]

intercept -6.291467870344039

Equation: Fatalities= -6.291467870 + 0.009316367 * Time + 0.005546870 * Location +
 0.000231012 * Operator + 0.019935456 * Flight # + -0.004069628 * Route + 0.001737096 *
 Type + -0.003959278 * Registration + 0.000290241 * cn/In + 0.969088894 * Aboard +
 0.062157968 * Ground + 0.000000246 * Date*2 + -0.000001077 * Date1*Time1 + -
 0.000000082 * Date1*Location1 + 0.000000652 * Date1*Operator1 + -0.000001122 *
 Date1*Flight #1 + 0.000000161 * Date1*Route1 + 0.000000438 * Date1*Type1 + -
 0.000000021 * Date1*Registration1 + -0.000000049 * Date1*cn/In1 + -0.000005653 *
 Date1*Aboard1 + -0.000024602 * Date1*Ground1 + -0.000013377 * Time2 + -0.000000852 *
 Time1*Location1 + -0.000000291 * Time1*Operator1 + 0.000006639 * Time1*Flight #1 +
 0.000000873 * Time1*Route1 + 0.000000326 * Time1*Type1 + 0.000000713 *
 Time1*Registration1 + 0.000000481 * Time1*cn/In1 + -0.000017184 * Time1*Aboard1 + -
 0.000315345 * Time1*Ground1 + -0.000001642 * Location2 + -0.000000002 *
 Location1*Operator1 + 0.000002467 * Location1*Flight #1 + -0.000000216 *
 Location1*Route1 + -0.000000062 * Location1*Type1 + -0.000000070 *
 Location1*Registration1 + 0.000000328 * Location1*cn/In1 + 0.000059657 *
 Location1*Aboard1 + 0.000047771 * Location1*Ground1 + -0.000000155 * Operator2 + -
 0.000003569 * Operator1*Flight #1 + 0.000000008 * Operator1*Route1 + 0.000000240 *
 Operator1*Type1 + 0.000000272 * Operator1*Registration1 + 0.000000422 * Operator1*cn/In1
 + -0.000073032 * Operator1*Aboard1 + 0.000158698 * Operator1*Ground1 + 0.000001409 *
 Flight #2 + 0.000000516 * Flight #1*Route1 + -0.000004552 * Flight #1*Type1 + -0.000002189
 * Flight #1*Registration1 + 0.000000506 * Flight #1*cn/In1 + -0.000435582 * Flight
 #1*Aboard1 + -0.000716372 * Flight #1*Ground1 + 0.000000414 * Route2 + 0.000000180 *

Route1*Type1 + -0.000000024 * Route1*Registration1 + 0.000000182 * Route1*cn/In1 +
0.000030524 * Route1*Aboard1 + 0.000143198 * Route1*Ground1 + -0.000000192 * Type2 +
0.000000178 * Type1*Registration1 + -0.000000304 * Type1*cn/In1 + 0.000015792 *
Type1*Aboard1 + -0.000200645 * Type1*Ground1 + 0.000000897 * Registration2 + -
0.000000033 * Registration1*cn/In1 + -0.000007631 * Registration1*Aboard1 + 0.000059604 *
Registration1*Ground1 + -0.000000309 * cn/In2 + -0.000034743 * cn/In1*Aboard1 + -
0.000031275 * cn/In1*Ground1 + -0.000883990 * Aboard2 + 0.008370868 * Aboard1*Ground1
+ -0.000255925 * Ground*2

Accuracy: 0.7397728344172139

coefficient [1.60138581e-02 4.60184558e-03 -2.51489889e-03

1.16712395e-02 -4.70157948e-05 2.00339966e-04 -3.95699962e-03
-1.80265577e-03 1.12267987e+00 -7.43452971e-02 2.13978296e-07
-1.43913018e-06 -3.30131222e-08 5.80243940e-07 -1.61223349e-06
3.12334962e-07 3.83929761e-07 -1.94230335e-08 -3.88222619e-08
-1.40769112e-05 -3.26555596e-06 -1.06870485e-05 -6.01939145e-07
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-4.99273950e-07 1.66627846e-05 -1.25808341e-04 6.78825028e-07
1.19609164e-07 -6.97321959e-06 7.00271152e-05 -1.38857840e-07

-5.91775793e-06 2.67623388e-05 -2.28562100e-03 1.19991697e-02

-5.14549750e-03]

intercept -5.482654169449447

Equation: Fatalities= -5.482654 + 0.016014 * Time + 0.004602 * Location + -0.002515 * Operator + 0.011671 * Flight # + -0.000047 * Route + 0.000200 * Type + -0.003957 * Registration + -0.001803 * cn/In + 1.122680 * Aboard + -0.074345 * Ground + 0.000000 * Date^2 + -0.000001 * Date^1*Time^1 + -0.000000 * Date^1*Location^1 + 0.000001 * Date^1*Operator^1 + -0.000002 * Date^1*Flight #^1 + 0.000000 * Date^1*Route^1 + 0.000000 * Date^1*Type^1 + -0.000000 * Date^1*Registration^1 + -0.000000 * Date^1*cn/In^1 + -0.000014 * Date^1*Aboard^1 + -0.000003 * Date^1*Ground^1 + -0.000011 * Time^2 + -0.000001 * Time^1*Location^1 + -0.000000 * Time^1*Operator^1 + 0.000003 * Time^1*Flight #^1 + -0.000000 * Time^1*Route^1 + -0.000000 * Time^1*Type^1 + 0.000000 * Time^1*Registration^1 + 0.000000 * Time^1*cn/In^1 + -0.000150 * Time^1*Aboard^1 + 0.000047 * Time^1*Ground^1 + -0.000001 * Location^2 + 0.000000 * Location^1*Operator^1 + 0.000002 * Location^1*Flight #^1 + -0.000000 * Location^1*Route^1 + 0.000000 * Location^1*Type^1 + -0.000000 * Location^1*Registration^1 + 0.000000 * Location^1*cn/In^1 + 0.000040 * Location^1*Aboard^1 + -0.000073 * Location^1*Ground^1 + 0.000000 * Operator^2 + -0.000002 * Operator^1*Flight #^1 + -0.000000 * Operator^1*Route^1 + 0.000000 * Operator^1*Type^1 + 0.000000 * Operator^1*Registration^1 + 0.000000 * Operator^1*cn/In^1 + -0.000032 * Operator^1*Aboard^1 + 0.000071 * Operator^1*Ground^1 + -0.000001 * Flight #^2 + -0.000001 * Flight #^1*Route^1 + -0.000002 * Flight #^1*Type^1 + -0.000000 * Flight #^1*Registration^1 + 0.000002 * Flight #^1*cn/In^1 + -0.000228 * Flight #^1*Aboard^1 + -0.000206 * Flight #^1*Ground^1 + 0.000000 * Route^2 + 0.000000 * Route^1*Type^1 + -0.000000 * Route^1*Registration^1 + 0.000000 * Route^1*cn/In^1 + -0.000005 * Route^1*Aboard^1 + 0.000027 * Route^1*Ground^1 + -0.000000 * Type^2 + 0.000000 * Type^1*Registration^1 + -0.000000 * Type^1*cn/In^1 + 0.000017 * Type^1*Aboard^1 + -0.000126 * Type^1*Ground^1 + 0.000001 * Registration^2 + 0.000000 * Registration^1*cn/In^1 + -0.000007 * Registration^1*Aboard^1 + 0.000070 * Registration^1*Ground^1 + -0.000000 * cn/In^2 + -0.000006 * cn/In^1*Aboard^1 + 0.000027 * cn/In^1*Ground^1 + -0.002286 * Aboard^2 + 0.011999 * Aboard^1*Ground^1 + -0.005145 * Ground^2

Accuracy: 0.7001682530914266

DEGREE-3:

coefficient [-2.06597540e-02 -9.71892578e-03 -2.08291048e-02

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 1.25372728e-07 1.73516573e-10 -3.47228917e-08 -3.89346283e-07
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 9.59064247e-11 4.13152195e-08 -1.18924291e-07 3.53720341e-11
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 8.90136986e-06 -1.64806315e-10 -6.04046004e-08 6.71553708e-08
 -2.43749023e-08 8.25059565e-07 -2.67693906e-06 -1.06619570e-05
 2.91643314e-04 -4.40953728e-04 -5.55197105e-04]

intercept 29.931634395205265

Equation: Fatalities= 29.931634 + -0.020660 * Time + -0.009719 * Location + -0.020829 *
 Operator + -0.042184 * Flight # + -0.013050 * Route + -0.010445 * Type + -0.001573 *
 Registration + 0.009356 * cn/In + 0.279199 * Aboard + 4.684366 * Ground + -0.000001 *
 Date^2 + -0.000010 * Date^1*Time^1 + 0.000002 * Date^1*Location^1 + -0.000000 *
 Date^1*Operator^1 + 0.000015 * Date^1*Flight #^1 + 0.000000 * Date^1*Route^1 + 0.000001
 * Date^1*Type^1 + 0.000001 * Date^1*Registration^1 + -0.000001 * Date^1*cn/In^1 +

0.000075 * Date^1*Aboard^1 + -0.001348 * Date^1*Ground^1 + 0.000049 * Time^2 + -
 0.000001 * Time^1*Location^1 + 0.000012 * Time^1*Operator^1 + -0.000031 * Time^1*Flight
 #^1 + -0.000001 * Time^1*Route^1 + 0.000004 * Time^1*Type^1 + 0.000009 *
 Time^1*Registration^1 + -0.000007 * Time^1*cn/In^1 + 0.001017 * Time^1*Aboard^1 + -
 0.006224 * Time^1*Ground^1 + 0.000005 * Location^2 + 0.000000 * Location^1*Operator^1 +
 -0.000002 * Location^1*Flight #^1 + -0.000003 * Location^1*Route^1 + -0.000000 *
 Location^1*Type^1 + 0.000000 * Location^1*Registration^1 + -0.000001 * Location^1*cn/In^1
 + 0.000398 * Location^1*Aboard^1 + -0.001199 * Location^1*Ground^1 + 0.000010 *
 Operator^2 + 0.000050 * Operator^1*Flight #^1 + -0.000004 * Operator^1*Route^1 + 0.000001
 * Operator^1*Type^1 + -0.000001 * Operator^1*Registration^1 + -0.000001 *
 Operator^1*cn/In^1 + -0.000174 * Operator^1*Aboard^1 + -0.001918 * Operator^1*Ground^1
 + 0.000111 * Flight #^2 + 0.000009 * Flight #^1*Route^1 + -0.000006 * Flight #^1*Type^1 + -
 0.000002 * Flight #^1*Registration^1 + -0.000015 * Flight #^1*cn/In^1 + -0.000127 * Flight
 #^1*Aboard^1 + 0.009105 * Flight #^1*Ground^1 + 0.000007 * Route^2 + -0.000003 *
 Route^1*Type^1 + 0.000002 * Route^1*Registration^1 + 0.000002 * Route^1*cn/In^1 + -
 0.000050 * Route^1*Aboard^1 + 0.004775 * Route^1*Ground^1 + 0.000001 * Type^2 +
 0.000004 * Type^1*Registration^1 + 0.000000 * Type^1*cn/In^1 + 0.000255 *
 Type^1*Aboard^1 + -0.002890 * Type^1*Ground^1 + -0.000002 * Registration^2 + -0.000002
 * Registration^1*cn/In^1 + -0.000212 * Registration^1*Aboard^1 + 0.000225 *
 Registration^1*Ground^1 + 0.000001 * cn/In^2 + -0.000045 * cn/In^1*Aboard^1 + -0.002118 *
 cn/In^1*Ground^1 + 0.003123 * Aboard^2 + 0.022315 * Aboard^1*Ground^1 + 0.043607 *
 Ground^2 + 0.000000 * Date^3 + 0.000000 * Date^2*Time^1 + -0.000000 * Date^2*Location^1
 + 0.000000 * Date^2*Operator^1 + -0.000000 * Date^2*Flight #^1 + -0.000000 *
 Date^2*Route^1 + -0.000000 * Date^2*Type^1 + 0.000000 * Date^2*Registration^1 +
 0.000000 * Date^2*cn/In^1 + 0.000000 * Date^2*Aboard^1 + 0.000000 * Date^2*Ground^1 +
 0.000000 * Date^1*Time^2 + 0.000000 * Date^1*Time^1*Location^1 + 0.000000 *
 Date^1*Time^1*Operator^1 + -0.000000 * Date^1*Time^1*Flight #^1 + 0.000000 *
 Date^1*Time^1*Route^1 + 0.000000 * Date^1*Time^1*Type^1 + -0.000000 *
 Date^1*Time^1*Registration^1 + 0.000000 * Date^1*Time^1*cn/In^1 + -0.000000 *
 Date^1*Time^1*Aboard^1 + -0.000000 * Date^1*Time^1*Ground^1 + 0.000000 *
 Date^1*Location^2 + -0.000000 * Date^1*Location^1*Operator^1 + 0.000000 *
 Date^1*Location^1*Flight #^1 + -0.000000 * Date^1*Location^1*Route^1 + 0.000000 *
 Date^1*Location^1*Type^1 + 0.000000 * Date^1*Location^1*Registration^1 + -0.000000 *
 Date^1*Location^1*cn/In^1 + -0.000000 * Date^1*Location^1*Aboard^1 + 0.000000 *
 Date^1*Location^1*Ground^1 + 0.000000 * Date^1*Operator^2 + -0.000000 *
 Date^1*Operator^1*Flight #^1 + -0.000000 * Date^1*Operator^1*Route^1 + 0.000000 *
 Date^1*Operator^1*Type^1 + -0.000000 * Date^1*Operator^1*Registration^1 + 0.000000 *
 Date^1*Operator^1*cn/In^1 + 0.000000 * Date^1*Operator^1*Aboard^1 + 0.000000 *
 Date^1*Operator^1*Ground^1 + -0.000000 * Date^1*Flight #^2 + 0.000000 * Date^1*Flight
 #^1*Route^1 + -0.000000 * Date^1*Flight #^1*Type^1 + -0.000000 * Date^1*Flight
 #^1*Registration^1 + -0.000000 * Date^1*Flight #^1*cn/In^1 + -0.000000 * Date^1*Flight
 #^1*Aboard^1 + 0.000001 * Date^1*Flight #^1*Ground^1 + -0.000000 * Date^1*Route^2 + -
 0.000000 * Date^1*Route^1*Type^1 + 0.000000 * Date^1*Route^1*Registration^1 + -
 0.000000 * Date^1*Route^1*cn/In^1 + 0.000000 * Date^1*Route^1*Aboard^1 + 0.000000 *
 Date^1*Route^1*Ground^1 + 0.000000 * Date^1*Type^2 + -0.000000 *
 Date^1*Type^1*Registration^1 + 0.000000 * Date^1*Type^1*cn/In^1 + 0.000000 *

```

Date^1*Type^1*Aboard^1 + -0.000000 * Date^1*Type^1*Ground^1 + -0.000000 *
Date^1*Registration^2 + -0.000000 * Date^1*Registration^1*cn/In^1 + -0.000000 *
Date^1*Registration^1*Aboard^1 + -0.000000 * Date^1*Registration^1*Ground^1 + 0.000000
* Date^1*cn/In^2 + 0.000000 * Date^1*cn/In^1*Aboard^1 + 0.000000 *
Date^1*cn/In^1*Ground^1 + 0.000000 * Date^1*Aboard^2 + 0.000001 *
Date^1*Aboard^1*Ground^1 + 0.000004 * Date^1*Ground^2 + -0.000000 * Time^3 +
0.000000 * Time^2*Location^1 + -0.000000 * Time^2*Operator^1 + 0.000000 * Time^2*Flight
#^1 + -0.000000 * Time^2*Route^1 + 0.000000 * Time^2*Type^1 + 0.000000 *
Time^2*Registration^1 + 0.000000 * Time^2*cn/In^1 + -0.000001 * Time^2*Aboard^1 +
0.000006 * Time^2*Ground^1 + -0.000000 * Time^1*Location^2 + -0.000000 *
Time^1*Location^1*Operator^1 + -0.000000 * Time^1*Location^1*Flight #^1 + 0.000000 *
Time^1*Location^1*Route^1 + -0.000000 * Time^1*Location^1*Type^1 + 0.000000 *
Time^1*Location^1*Registration^1 + 0.000000 * Time^1*Location^1*cn/In^1 + -0.000000 *
Time^1*Location^1*Aboard^1 + 0.000000 * Time^1*Location^1*Ground^1 + 0.000000 *
Time^1*Operator^2 + -0.000000 * Time^1*Operator^1*Flight #^1 + 0.000000 *
Time^1*Operator^1*Route^1 + -0.000000 * Time^1*Operator^1*Type^1 + -0.000000 *
Time^1*Operator^1*Registration^1 + -0.000000 * Time^1*Operator^1*cn/In^1 + 0.000000 *
Time^1*Operator^1*Aboard^1 + -0.000000 * Time^1*Operator^1*Ground^1 + 0.000000 *
Time^1*Flight #^2 + 0.000000 * Time^1*Flight #^1*Route^1 + -0.000000 * Time^1*Flight
#^1*Type^1 + -0.000000 * Time^1*Flight #^1*Registration^1 + 0.000000 * Time^1*Flight
#^1*cn/In^1 + 0.000000 * Time^1*Flight #^1*Aboard^1 + 0.000000 * Time^1*Flight
#^1*Ground^1 + -0.000000 * Time^1*Route^2 + 0.000000 * Time^1*Route^1*Type^1 + -
0.000000 * Time^1*Route^1*Registration^1 + 0.000000 * Time^1*Route^1*cn/In^1 +
0.000000 * Time^1*Route^1*Aboard^1 + -0.000001 * Time^1*Route^1*Ground^1 + -0.000000
* Time^1*Type^2 + -0.000000 * Time^1*Type^1*Registration^1 + -0.000000 *
Time^1*Type^1*cn/In^1 + -0.000000 * Time^1*Type^1*Aboard^1 + 0.000000 *
Time^1*Type^1*Ground^1 + -0.000000 * Time^1*Registration^2 + -0.000000 *
Time^1*Registration^1*cn/In^1 + -0.000000 * Time^1*Registration^1*Aboard^1 + 0.000000 *
Time^1*Registration^1*Ground^1 + -0.000000 * Time^1*cn/In^2 + 0.000000 *
Time^1*cn/In^1*Aboard^1 + 0.000001 * Time^1*cn/In^1*Ground^1 + -0.000002 *
Time^1*Aboard^2 + -0.000003 * Time^1*Aboard^1*Ground^1 + -0.000001 *
Time^1*Ground^2 + -0.000000 * Location^3 + -0.000000 * Location^2*Operator^1 + -
0.000000 * Location^2*Flight #^1 + 0.000000 * Location^2*Route^1 + -0.000000 *
Location^2*Type^1 + -0.000000 * Location^2*Registration^1 + -0.000000 *
Location^2*cn/In^1 + -0.000000 * Location^2*Aboard^1 + 0.000000 * Location^2*Ground^1 +
0.000000 * Location^1*Operator^2 + 0.000000 * Location^1*Operator^1*Flight #^1 +
0.000000 * Location^1*Operator^1*Route^1 + 0.000000 * Location^1*Operator^1*Type^1 + -
0.000000 * Location^1*Operator^1*Registration^1 + 0.000000 *
Location^1*Operator^1*cn/In^1 + 0.000000 * Location^1*Operator^1*Aboard^1 + 0.000001 *
Location^1*Operator^1*Ground^1 + 0.000000 * Location^1*Flight #^2 + 0.000000 *
Location^1*Flight #^1*Route^1 + 0.000000 * Location^1*Flight #^1*Type^1 + 0.000000 *
Location^1*Flight #^1*Registration^1 + 0.000000 * Location^1*Flight #^1*cn/In^1 + 0.000000
* Location^1*Flight #^1*Aboard^1 + -0.000000 * Location^1*Flight #^1*Ground^1 + 0.000000
* Location^1*Route^2 + 0.000000 * Location^1*Route^1*Type^1 + 0.000000 *
Location^1*Route^1*Registration^1 + -0.000000 * Location^1*Route^1*cn/In^1 + -0.000000 *
Location^1*Route^1*Aboard^1 + 0.000000 * Location^1*Route^1*Ground^1 + -0.000000 *

```

$$\begin{aligned}
& \text{Location}^1 * \text{Type}^2 + -0.000000 * \text{Location}^1 * \text{Type}^1 * \text{Registration}^1 + 0.000000 * \\
& \text{Location}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000 * \text{Location}^1 * \text{Type}^1 * \text{Aboard}^1 + 0.000000 * \\
& \text{Location}^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000 * \text{Location}^1 * \text{Registration}^2 + 0.000000 * \\
& \text{Location}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000 * \text{Location}^1 * \text{Registration}^1 * \text{Aboard}^1 + - \\
& 0.000000 * \text{Location}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000 * \text{Location}^1 * \text{cn/In}^2 + 0.000000 \\
& * \text{Location}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.000000 * \text{Location}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000 * \\
& \text{Location}^1 * \text{Aboard}^2 + 0.000002 * \text{Location}^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000010 * \\
& \text{Location}^1 * \text{Ground}^2 + -0.000000 * \text{Operator}^3 + -0.000000 * \text{Operator}^2 * \text{Flight} \#^1 + \\
& 0.000000 * \text{Operator}^2 * \text{Route}^1 + -0.000000 * \text{Operator}^2 * \text{Type}^1 + -0.000000 * \\
& \text{Operator}^2 * \text{Registration}^1 + -0.000000 * \text{Operator}^2 * \text{cn/In}^1 + 0.000000 * \\
& \text{Operator}^2 * \text{Aboard}^1 + -0.000000 * \text{Operator}^2 * \text{Ground}^1 + -0.000000 * \text{Operator}^1 * \text{Flight} \\
& \#^2 + -0.000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Route}^1 + 0.000000 * \text{Operator}^1 * \text{Flight} \\
& \#^1 * \text{Type}^1 + 0.000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Registration}^1 + -0.000000 * \\
& \text{Operator}^1 * \text{Flight} \#^1 * \text{cn/In}^1 + -0.000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Aboard}^1 + 0.000002 * \\
& \text{Operator}^1 * \text{Flight} \#^1 * \text{Ground}^1 + 0.000000 * \text{Operator}^1 * \text{Route}^2 + 0.000000 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Type}^1 + 0.000000 * \text{Operator}^1 * \text{Route}^1 * \text{Registration}^1 + 0.000000 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000000 * \text{Operator}^1 * \text{Route}^1 * \text{Aboard}^1 + -0.000000 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Ground}^1 + -0.000000 * \text{Operator}^1 * \text{Type}^2 + -0.000000 * \\
& \text{Operator}^1 * \text{Type}^1 * \text{Registration}^1 + 0.000000 * \text{Operator}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000 * \\
& \text{Operator}^1 * \text{Type}^1 * \text{Aboard}^1 + 0.000000 * \text{Operator}^1 * \text{Type}^1 * \text{Ground}^1 + 0.000000 * \\
& \text{Operator}^1 * \text{Registration}^2 + 0.000000 * \text{Operator}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000 * \\
& \text{Operator}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000000 * \text{Operator}^1 * \text{Registration}^1 * \text{Ground}^1 + \\
& 0.000000 * \text{Operator}^1 * \text{cn/In}^2 + 0.000000 * \text{Operator}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000000 * \\
& \text{Operator}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000 * \text{Operator}^1 * \text{Aboard}^2 + -0.000006 * \\
& \text{Operator}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000031 * \text{Operator}^1 * \text{Ground}^2 + -0.000000 * \text{Flight} \#^3 \\
& + 0.000000 * \text{Flight} \#^2 * \text{Route}^1 + 0.000000 * \text{Flight} \#^2 * \text{Type}^1 + 0.000000 * \text{Flight} \\
& \#^2 * \text{Registration}^1 + -0.000000 * \text{Flight} \#^2 * \text{cn/In}^1 + 0.000000 * \text{Flight} \#^2 * \text{Aboard}^1 + - \\
& 0.000016 * \text{Flight} \#^2 * \text{Ground}^1 + -0.000000 * \text{Flight} \#^1 * \text{Route}^2 + 0.000000 * \text{Flight} \\
& \#^1 * \text{Route}^1 * \text{Type}^1 + -0.000000 * \text{Flight} \#^1 * \text{Route}^1 * \text{Registration}^1 + 0.000000 * \text{Flight} \\
& \#^1 * \text{Route}^1 * \text{cn/In}^1 + -0.000000 * \text{Flight} \#^1 * \text{Route}^1 * \text{Aboard}^1 + -0.000003 * \text{Flight} \\
& \#^1 * \text{Route}^1 * \text{Ground}^1 + -0.000000 * \text{Flight} \#^1 * \text{Type}^2 + -0.000000 * \text{Flight} \\
& \#^1 * \text{Type}^1 * \text{Registration}^1 + -0.000000 * \text{Flight} \#^1 * \text{Type}^1 * \text{cn/In}^1 + -0.000000 * \text{Flight} \\
& \#^1 * \text{Type}^1 * \text{Aboard}^1 + 0.000003 * \text{Flight} \#^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000 * \text{Flight} \\
& \#^1 * \text{Registration}^2 + 0.000000 * \text{Flight} \#^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000 * \text{Flight} \\
& \#^1 * \text{Registration}^1 * \text{Aboard}^1 + 0.000001 * \text{Flight} \#^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000 * \\
& \text{Flight} \#^1 * \text{cn/In}^2 + 0.000000 * \text{Flight} \#^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000002 * \text{Flight} \\
& \#^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000003 * \text{Flight} \#^1 * \text{Aboard}^2 + -0.000039 * \text{Flight} \\
& \#^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000171 * \text{Flight} \#^1 * \text{Ground}^2 + -0.000000 * \text{Route}^3 + - \\
& 0.000000 * \text{Route}^2 * \text{Type}^1 + -0.000000 * \text{Route}^2 * \text{Registration}^1 + -0.000000 * \\
& \text{Route}^2 * \text{cn/In}^1 + -0.000000 * \text{Route}^2 * \text{Aboard}^1 + -0.000001 * \text{Route}^2 * \text{Ground}^1 + \\
& 0.000000 * \text{Route}^1 * \text{Type}^2 + -0.000000 * \text{Route}^1 * \text{Type}^1 * \text{Registration}^1 + -0.000000 * \\
& \text{Route}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000 * \text{Route}^1 * \text{Type}^1 * \text{Aboard}^1 + -0.000000 * \\
& \text{Route}^1 * \text{Type}^1 * \text{Ground}^1 + 0.000000 * \text{Route}^1 * \text{Registration}^2 + -0.000000 * \\
& \text{Route}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000 * \text{Route}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000000 \\
& * \text{Route}^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000 * \text{Route}^1 * \text{cn/In}^2 + 0.000000 * \\
& \text{Route}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.000000 * \text{Route}^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000000 *
\end{aligned}$$

$$\begin{aligned}
& \text{Route}^1 * \text{Aboard}^2 + -0.000006 * \text{Route}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000017 * \\
& \text{Route}^1 * \text{Ground}^2 + 0.000000 * \text{Type}^3 + 0.000000 * \text{Type}^2 * \text{Registration}^1 + 0.000000 * \\
& \text{Type}^2 * \text{cn/In}^1 + -0.000000 * \text{Type}^2 * \text{Aboard}^1 + 0.000000 * \text{Type}^2 * \text{Ground}^1 + -0.000000 * \\
& \text{Type}^1 * \text{Registration}^2 + -0.000000 * \text{Type}^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000 * \\
& \text{Type}^1 * \text{Registration}^1 * \text{Aboard}^1 + 0.000000 * \text{Type}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000 * \\
& \text{Type}^1 * \text{cn/In}^2 + -0.000000 * \text{Type}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.000000 * \\
& \text{Type}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000 * \text{Type}^1 * \text{Aboard}^2 + 0.000001 * \\
& \text{Type}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000009 * \text{Type}^1 * \text{Ground}^2 + 0.000000 * \text{Registration}^3 + \\
& 0.000000 * \text{Registration}^2 * \text{cn/In}^1 + 0.000000 * \text{Registration}^2 * \text{Aboard}^1 + -0.000000 * \\
& \text{Registration}^2 * \text{Ground}^1 + 0.000000 * \text{Registration}^1 * \text{cn/In}^2 + -0.000000 * \\
& \text{Registration}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000000 * \text{Registration}^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000000 * \\
& \text{Registration}^1 * \text{Aboard}^2 + -0.000003 * \text{Registration}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000009 * \\
& \text{Registration}^1 * \text{Ground}^2 + -0.000000 * \text{cn/In}^3 + -0.000000 * \text{cn/In}^2 * \text{Aboard}^1 + 0.000000 * \\
& \text{cn/In}^2 * \text{Ground}^1 + -0.000000 * \text{cn/In}^1 * \text{Aboard}^2 + 0.000001 * \\
& \text{cn/In}^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000003 * \text{cn/In}^1 * \text{Ground}^2 + -0.000011 * \text{Aboard}^3 + \\
& 0.000292 * \text{Aboard}^2 * \text{Ground}^1 + -0.000441 * \text{Aboard}^1 * \text{Ground}^2 + -0.000555 * \text{Ground}^3
\end{aligned}$$

Accuracy: 0.6767776772614505

Equation-2:

coefficient [-1.04575603e-02 -6.52319528e-03 -1.61030219e-02

-3.02375922e-02 -4.98509394e-03 -1.29437448e-02 4.39581299e-03

5.34991710e-03 4.23006790e-01 -4.04124897e+00 -1.06842399e-06

-9.37269630e-06 9.42060669e-07 -6.96901457e-08 2.17025772e-05

1.00159952e-06 2.39069051e-06 1.32683032e-06 -1.69338877e-06

3.56419188e-05 1.56181179e-03 2.78776938e-05 9.56245083e-07

1.23549605e-05 -8.06733537e-06 -2.13223329e-07 3.66440954e-06

7.43680918e-06 -5.32812054e-06 9.12159532e-04 -4.47603921e-03

4.21453597e-06 2.87788291e-07 -9.99512119e-06 -2.15281279e-06

-1.94846753e-06 4.09846469e-07 -5.81739121e-07 3.89824227e-04

-2.72504401e-03 8.45439963e-06 5.06153686e-05 -5.33530661e-06

2.26000000e-06 -1.27323476e-06 -9.94679452e-07 -2.93524414e-04

1.67792859e-03 2.42297601e-05 8.21568174e-07 -3.32072207e-06
-7.33624150e-06 -1.07697630e-05 4.42539634e-04 2.44933263e-02
5.99812600e-06 -3.94767142e-06 1.09414846e-07 1.20609998e-06
-1.00369897e-04 -1.57623422e-04 3.16441279e-06 3.82656156e-06
-2.03278396e-07 2.31593383e-04 1.96095083e-04 -3.12299046e-06
-1.06322080e-06 -2.45812447e-04 1.49353218e-03 1.22143789e-06
-3.59907679e-05 -1.47260648e-03 2.41155867e-03 -2.16563271e-02
6.80583067e-02 1.29844056e-10 7.29045334e-10 -1.26711685e-10
1.23824393e-10 -5.62894118e-10 -6.48820182e-11 -1.55540949e-10
2.58341473e-11 1.25584628e-10 4.56457854e-09 1.11461953e-07
7.51613535e-10 -1.15400244e-10 1.25904213e-09 3.19730834e-09
6.83852860e-10 3.29105133e-10 -5.93870119e-11 4.52787240e-10
-8.76289498e-08 1.37591460e-07 1.26897444e-10 -5.09826595e-11
6.08403734e-10 -2.50660611e-10 -7.47260383e-11 2.32271212e-11
-1.62700793e-10 -7.39192661e-09 2.82776620e-08 2.75243279e-10
-2.80398867e-09 -1.73678618e-10 -2.05755105e-10 -1.79988707e-10
2.77270331e-10 3.26208646e-08 -6.29231526e-09 -1.39921671e-08
1.12750617e-09 -2.16176460e-09 -5.65703966e-10 -4.64539130e-10
-1.28997911e-07 -3.21251000e-06 -2.88278776e-10 -1.27267850e-10
-4.23025122e-11 -3.71057757e-11 2.23950187e-08 1.40280424e-08
1.99498322e-10 -1.40345810e-10 1.58914836e-10 -1.37147872e-08
4.71325506e-08 -3.81740087e-11 -1.28074027e-11 -1.70922871e-08
-1.84540232e-07 1.27599469e-10 1.94481603e-08 2.24571506e-08

2.55246759e-07 -7.37109423e-07 1.51654454e-05 -4.21403452e-08
3.79714179e-09 1.55166348e-10 3.14744136e-08 -2.04155361e-09
1.29132286e-08 -4.74709445e-10 3.46039413e-09 -6.22857610e-07
4.14173269e-06 -3.67748591e-10 -3.97788826e-10 -2.71513451e-09
9.92035657e-11 -5.65052030e-10 -3.29158262e-10 2.92525279e-10
-4.09396482e-08 -6.11880481e-07 7.12021713e-10 -2.15316207e-08
3.95883264e-10 -1.01060796e-09 -1.09068253e-09 2.16250388e-10
3.16260285e-09 -6.18247669e-08 -1.36039791e-08 6.74494481e-09
-4.68845597e-09 -4.26029874e-10 2.33683868e-09 2.68686127e-07
4.19575559e-07 -1.33073477e-09 6.69492758e-10 -5.79861444e-10
6.01358956e-10 -1.11234854e-08 -2.51579640e-08 -2.46413852e-09
-1.77411677e-09 -1.10893651e-09 -7.61101257e-08 -5.00659393e-07
-2.49960109e-11 -2.13024224e-10 -2.15316749e-08 1.88745575e-07
-4.40620382e-10 7.04669134e-08 3.22190964e-07 -1.17570848e-06
1.32049814e-05 -1.83762971e-05 -3.22991561e-10 -5.04328740e-10
-1.09932271e-09 2.56917954e-10 -4.00825768e-10 -6.58941651e-11
-1.04178425e-10 -6.48040933e-08 1.81244409e-08 3.10893806e-10
-7.12958054e-10 1.79719789e-10 4.94019987e-10 -5.40400170e-11
4.36398358e-10 -1.51502911e-09 1.19566406e-06 1.32851225e-09
9.04729453e-10 4.63653871e-09 1.52006026e-09 1.08541030e-09
7.29516929e-08 1.34496335e-06 2.24515980e-10 1.98645165e-10
-5.64896047e-12 -4.44216244e-11 -1.62982009e-08 8.17999976e-08
-8.81305185e-12 -1.44914440e-10 1.05788797e-10 1.32928861e-08

2.61919763e-07 -8.37425979e-11 1.05638501e-11 -1.58674273e-08
-6.35594694e-08 3.78066632e-11 -4.16724656e-09 -8.95023778e-08
3.41557719e-08 2.70411913e-06 3.69532161e-06 -1.66527725e-09
-2.73241746e-09 3.11081266e-10 -6.36115275e-10 -2.52735003e-10
-4.82622360e-10 2.57989333e-08 -9.92305787e-07 -2.40721985e-08
-1.91037178e-09 1.02163512e-09 -6.88661042e-10 -1.22833392e-09
1.65232674e-09 -2.21385975e-06 8.90352606e-10 7.81083157e-10
3.56506050e-10 -1.18901588e-11 1.15689530e-08 -2.08668498e-07
-8.20913546e-10 -4.27523156e-10 -1.85441017e-10 3.15172104e-08
1.74066446e-07 4.68417794e-10 3.35412379e-10 1.02479260e-08
1.53748231e-07 1.19481633e-10 3.65466841e-08 -2.65450380e-07
-4.60934801e-07 -8.75062251e-06 3.22122183e-05 -6.18383180e-09
2.87816629e-09 1.72160223e-08 6.78864992e-09 1.45814045e-09
-3.45010765e-07 -2.27479401e-05 -3.12258962e-09 2.62486064e-09
-1.66798176e-09 6.64674037e-10 1.23300755e-08 3.37063707e-06
-4.64308603e-09 -2.55007666e-11 -2.93534037e-09 -1.42906505e-07
3.21599922e-07 2.14242025e-10 1.49925061e-09 2.30446290e-08
-2.05053154e-06 8.18762195e-10 2.21614962e-07 2.82106078e-06
-4.16235713e-06 1.60792906e-05 -1.77522129e-04 -5.36747548e-10
-5.04176423e-11 -3.43631699e-11 -2.81442068e-10 -3.23034523e-09
-5.24172258e-07 2.56715787e-10 -1.61919080e-10 2.02315517e-11
2.30912345e-08 -2.06544660e-07 3.54294006e-10 -1.47591532e-10
-6.01824669e-09 -5.78071344e-08 -1.15805058e-10 2.06010522e-09

6.19499553e-08 4.41717041e-07 -3.19370396e-06 -5.90603589e-06
 3.50688558e-11 2.73447551e-10 7.32607253e-10 -4.92030031e-08
 1.50845586e-07 -3.21589570e-10 -1.07255407e-10 1.94469168e-08
 -6.58309370e-09 2.87570646e-10 -1.47250195e-08 -5.47748831e-07
 -3.50131681e-07 -2.86514047e-07 2.68494672e-05 1.89739374e-10
 1.24859807e-10 5.77779813e-08 3.16061445e-08 -1.18892164e-11
 -1.48553130e-08 6.03323077e-08 1.94836791e-07 -1.70866103e-06
 8.40222940e-06 -2.20677498e-10 -4.44962320e-08 5.66511468e-08
 -2.04080741e-07 3.28255649e-06 -1.83597438e-05 -9.70921947e-06
 4.62829538e-04 -1.76109502e-03 2.67193596e-04]

intercept 20.03844429829377

Equation: Fatalities= 20.038444 + -0.010458 * Time + -0.006523 * Location + -0.016103 *
 Operator + -0.030238 * Flight # + -0.004985 * Route + -0.012944 * Type + 0.004396 *
 Registration + 0.005350 * cn/In + 0.423007 * Aboard + -4.041249 * Ground + -0.000001 *
 Date^2 + -0.000009 * Date^1*Time^1 + 0.000001 * Date^1*Location^1 + -0.000000 *
 Date^1*Operator^1 + 0.000022 * Date^1*Flight #^1 + 0.000001 * Date^1*Route^1 + 0.000002
 * Date^1*Type^1 + 0.000001 * Date^1*Registration^1 + -0.000002 * Date^1*cn/In^1 +
 0.000036 * Date^1*Aboard^1 + 0.001562 * Date^1*Ground^1 + 0.000028 * Time^2 + 0.000001
 * Time^1*Location^1 + 0.000012 * Time^1*Operator^1 + -0.000008 * Time^1*Flight #^1 + -
 0.000000 * Time^1*Route^1 + 0.000004 * Time^1*Type^1 + 0.000007 *
 Time^1*Registration^1 + -0.000005 * Time^1*cn/In^1 + 0.000912 * Time^1*Aboard^1 + -
 0.004476 * Time^1*Ground^1 + 0.000004 * Location^2 + 0.000000 * Location^1*Operator^1 +
 -0.000010 * Location^1*Flight #^1 + -0.000002 * Location^1*Route^1 + -0.000002 *
 Location^1*Type^1 + 0.000000 * Location^1*Registration^1 + -0.000001 * Location^1*cn/In^1
 + 0.000390 * Location^1*Aboard^1 + -0.002725 * Location^1*Ground^1 + 0.000008 *
 Operator^2 + 0.000051 * Operator^1*Flight #^1 + -0.000005 * Operator^1*Route^1 + 0.000002
 * Operator^1*Type^1 + -0.000001 * Operator^1*Registration^1 + -0.000001 *
 Operator^1*cn/In^1 + -0.000294 * Operator^1*Aboard^1 + 0.001678 * Operator^1*Ground^1 +
 0.000024 * Flight #^2 + 0.000001 * Flight #^1*Route^1 + -0.000003 * Flight #^1*Type^1 + -
 0.000007 * Flight #^1*Registration^1 + -0.000011 * Flight #^1*cn/In^1 + 0.000443 * Flight
 #^1*Aboard^1 + 0.024493 * Flight #^1*Ground^1 + 0.000006 * Route^2 + -0.000004 *
 Route^1*Type^1 + 0.000000 * Route^1*Registration^1 + 0.000001 * Route^1*cn/In^1 + -
 0.000100 * Route^1*Aboard^1 + -0.000158 * Route^1*Ground^1 + 0.000003 * Type^2 +
 0.000004 * Type^1*Registration^1 + -0.000000 * Type^1*cn/In^1 + 0.000232 *
 Type^1*Aboard^1 + 0.000196 * Type^1*Ground^1 + -0.000003 * Registration^2 + -0.000001 *

$\text{Registration}^1 * \text{cn/In}^1 + -0.000246 * \text{Registration}^1 * \text{Aboard}^1 + 0.001494 * \\
\text{Registration}^1 * \text{Ground}^1 + 0.000001 * \text{cn/In}^2 + -0.000036 * \text{cn/In}^1 * \text{Aboard}^1 + -0.001473 * \\
\text{cn/In}^1 * \text{Ground}^1 + 0.002412 * \text{Aboard}^2 + -0.021656 * \text{Aboard}^1 * \text{Ground}^1 + 0.068058 * \\
\text{Ground}^2 + 0.000000 * \text{Date}^3 + 0.000000 * \text{Date}^2 * \text{Time}^1 + -0.000000 * \text{Date}^2 * \text{Location}^1 \\
+ 0.000000 * \text{Date}^2 * \text{Operator}^1 + -0.000000 * \text{Date}^2 * \text{Flight} \#^1 + -0.000000 * \\
\text{Date}^2 * \text{Route}^1 + -0.000000 * \text{Date}^2 * \text{Type}^1 + 0.000000 * \text{Date}^2 * \text{Registration}^1 + \\
0.000000 * \text{Date}^2 * \text{cn/In}^1 + 0.000000 * \text{Date}^2 * \text{Aboard}^1 + 0.000000 * \text{Date}^2 * \text{Ground}^1 + \\
0.000000 * \text{Date}^1 * \text{Time}^2 + -0.000000 * \text{Date}^1 * \text{Time}^1 * \text{Location}^1 + 0.000000 * \\
\text{Date}^1 * \text{Time}^1 * \text{Operator}^1 + 0.000000 * \text{Date}^1 * \text{Time}^1 * \text{Flight} \#^1 + 0.000000 * \\
\text{Date}^1 * \text{Time}^1 * \text{Route}^1 + 0.000000 * \text{Date}^1 * \text{Time}^1 * \text{Type}^1 + -0.000000 * \\
\text{Date}^1 * \text{Time}^1 * \text{Registration}^1 + 0.000000 * \text{Date}^1 * \text{Time}^1 * \text{cn/In}^1 + -0.000000 * \\
\text{Date}^1 * \text{Time}^1 * \text{Aboard}^1 + 0.000000 * \text{Date}^1 * \text{Time}^1 * \text{Ground}^1 + 0.000000 * \\
\text{Date}^1 * \text{Location}^2 + -0.000000 * \text{Date}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000000 * \\
\text{Date}^1 * \text{Location}^1 * \text{Flight} \#^1 + -0.000000 * \text{Date}^1 * \text{Location}^1 * \text{Route}^1 + -0.000000 * \\
\text{Date}^1 * \text{Location}^1 * \text{Type}^1 + 0.000000 * \text{Date}^1 * \text{Location}^1 * \text{Registration}^1 + -0.000000 * \\
\text{Date}^1 * \text{Location}^1 * \text{cn/In}^1 + -0.000000 * \text{Date}^1 * \text{Location}^1 * \text{Aboard}^1 + 0.000000 * \\
\text{Date}^1 * \text{Location}^1 * \text{Ground}^1 + 0.000000 * \text{Date}^1 * \text{Operator}^2 + -0.000000 * \\
\text{Date}^1 * \text{Operator}^1 * \text{Flight} \#^1 + -0.000000 * \text{Date}^1 * \text{Operator}^1 * \text{Route}^1 + -0.000000 * \\
\text{Date}^1 * \text{Operator}^1 * \text{Type}^1 + -0.000000 * \text{Date}^1 * \text{Operator}^1 * \text{Registration}^1 + 0.000000 * \\
\text{Date}^1 * \text{Operator}^1 * \text{cn/In}^1 + 0.000000 * \text{Date}^1 * \text{Operator}^1 * \text{Aboard}^1 + -0.000000 * \\
\text{Date}^1 * \text{Operator}^1 * \text{Ground}^1 + -0.000000 * \text{Date}^1 * \text{Flight} \#^2 + 0.000000 * \text{Date}^1 * \text{Flight} \\
\#^1 * \text{Route}^1 + -0.000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{Type}^1 + -0.000000 * \text{Date}^1 * \text{Flight} \\
\#^1 * \text{Registration}^1 + -0.000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{cn/In}^1 + -0.000000 * \text{Date}^1 * \text{Flight} \\
\#^1 * \text{Aboard}^1 + -0.000003 * \text{Date}^1 * \text{Flight} \#^1 * \text{Ground}^1 + -0.000000 * \text{Date}^1 * \text{Route}^2 + - \\
0.000000 * \text{Date}^1 * \text{Route}^1 * \text{Type}^1 + -0.000000 * \text{Date}^1 * \text{Route}^1 * \text{Registration}^1 + - \\
0.000000 * \text{Date}^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000000 * \text{Date}^1 * \text{Route}^1 * \text{Aboard}^1 + 0.000000 * \\
\text{Date}^1 * \text{Route}^1 * \text{Ground}^1 + 0.000000 * \text{Date}^1 * \text{Type}^2 + -0.000000 * \\
\text{Date}^1 * \text{Type}^1 * \text{Registration}^1 + 0.000000 * \text{Date}^1 * \text{Type}^1 * \text{cn/In}^1 + -0.000000 * \\
\text{Date}^1 * \text{Type}^1 * \text{Aboard}^1 + 0.000000 * \text{Date}^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000 * \\
\text{Date}^1 * \text{Registration}^2 + -0.000000 * \text{Date}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000 * \\
\text{Date}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000000 * \text{Date}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000 \\
* \text{Date}^1 * \text{cn/In}^2 + 0.000000 * \text{Date}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000000 * \\
\text{Date}^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000000 * \text{Date}^1 * \text{Aboard}^2 + -0.000001 * \\
\text{Date}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000015 * \text{Date}^1 * \text{Ground}^2 + -0.000000 * \text{Time}^3 + \\
0.000000 * \text{Time}^2 * \text{Location}^1 + 0.000000 * \text{Time}^2 * \text{Operator}^1 + 0.000000 * \text{Time}^2 * \text{Flight} \\
\#^1 + -0.000000 * \text{Time}^2 * \text{Route}^1 + 0.000000 * \text{Time}^2 * \text{Type}^1 + -0.000000 * \\
\text{Time}^2 * \text{Registration}^1 + 0.000000 * \text{Time}^2 * \text{cn/In}^1 + -0.000001 * \text{Time}^2 * \text{Aboard}^1 + \\
0.000004 * \text{Time}^2 * \text{Ground}^1 + -0.000000 * \text{Time}^1 * \text{Location}^2 + -0.000000 * \\
\text{Time}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000000 * \text{Time}^1 * \text{Location}^1 * \text{Flight} \#^1 + 0.000000 * \\
\text{Time}^1 * \text{Location}^1 * \text{Route}^1 + -0.000000 * \text{Time}^1 * \text{Location}^1 * \text{Type}^1 + -0.000000 * \\
\text{Time}^1 * \text{Location}^1 * \text{Registration}^1 + 0.000000 * \text{Time}^1 * \text{Location}^1 * \text{cn/In}^1 + -0.000000 * \\
\text{Time}^1 * \text{Location}^1 * \text{Aboard}^1 + -0.000001 * \text{Time}^1 * \text{Location}^1 * \text{Ground}^1 + 0.000000 * \\
\text{Time}^1 * \text{Operator}^2 + -0.000000 * \text{Time}^1 * \text{Operator}^1 * \text{Flight} \#^1 + 0.000000 * \\
\text{Time}^1 * \text{Operator}^1 * \text{Route}^1 + -0.000000 * \text{Time}^1 * \text{Operator}^1 * \text{Type}^1 + -0.000000 * \\
\text{Time}^1 * \text{Operator}^1 * \text{Registration}^1 + 0.000000 * \text{Time}^1 * \text{Operator}^1 * \text{cn/In}^1 + 0.000000 * \\
\text{Time}^1 * \text{Operator}^1 * \text{Aboard}^1 + -0.000000 * \text{Time}^1 * \text{Operator}^1 * \text{Ground}^1 + -0.000000 *$

$$\begin{aligned}
& \text{Time}^1 * \text{Flight} \#^2 + 0.000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{Route}^1 + -0.000000 * \text{Time}^1 * \text{Flight} \\
& \#^1 * \text{Type}^1 + -0.000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{Registration}^1 + 0.000000 * \text{Time}^1 * \text{Flight} \\
& \#^1 * \text{cn/In}^1 + 0.000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{Aboard}^1 + 0.000000 * \text{Time}^1 * \text{Flight} \\
& \#^1 * \text{Ground}^1 + -0.000000 * \text{Time}^1 * \text{Route}^2 + 0.000000 * \text{Time}^1 * \text{Route}^1 * \text{Type}^1 + - \\
& 0.000000 * \text{Time}^1 * \text{Route}^1 * \text{Registration}^1 + 0.000000 * \text{Time}^1 * \text{Route}^1 * \text{cn/In}^1 + - \\
& 0.000000 * \text{Time}^1 * \text{Route}^1 * \text{Aboard}^1 + -0.000000 * \text{Time}^1 * \text{Route}^1 * \text{Ground}^1 + -0.000000 \\
& * \text{Time}^1 * \text{Type}^2 + -0.000000 * \text{Time}^1 * \text{Type}^1 * \text{Registration}^1 + -0.000000 * \\
& \text{Time}^1 * \text{Type}^1 * \text{cn/In}^1 + -0.000000 * \text{Time}^1 * \text{Type}^1 * \text{Aboard}^1 + -0.000001 * \\
& \text{Time}^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000 * \text{Time}^1 * \text{Registration}^2 + -0.000000 * \\
& \text{Time}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000 * \text{Time}^1 * \text{Registration}^1 * \text{Aboard}^1 + 0.000000 * \\
& \text{Time}^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000 * \text{Time}^1 * \text{cn/In}^2 + 0.000000 * \\
& \text{Time}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000000 * \text{Time}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000001 * \\
& \text{Time}^1 * \text{Aboard}^2 + 0.000013 * \text{Time}^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000018 * \\
& \text{Time}^1 * \text{Ground}^2 + -0.000000 * \text{Location}^3 + -0.000000 * \text{Location}^2 * \text{Operator}^1 + - \\
& 0.000000 * \text{Location}^2 * \text{Flight} \#^1 + 0.000000 * \text{Location}^2 * \text{Route}^1 + -0.000000 * \\
& \text{Location}^2 * \text{Type}^1 + -0.000000 * \text{Location}^2 * \text{Registration}^1 + -0.000000 * \\
& \text{Location}^2 * \text{cn/In}^1 + -0.000000 * \text{Location}^2 * \text{Aboard}^1 + 0.000000 * \text{Location}^2 * \text{Ground}^1 + \\
& 0.000000 * \text{Location}^1 * \text{Operator}^2 + -0.000000 * \text{Location}^1 * \text{Operator}^1 * \text{Flight} \#^1 + \\
& 0.000000 * \text{Location}^1 * \text{Operator}^1 * \text{Route}^1 + 0.000000 * \text{Location}^1 * \text{Operator}^1 * \text{Type}^1 + - \\
& 0.000000 * \text{Location}^1 * \text{Operator}^1 * \text{Registration}^1 + 0.000000 * \\
& \text{Location}^1 * \text{Operator}^1 * \text{cn/In}^1 + -0.000000 * \text{Location}^1 * \text{Operator}^1 * \text{Aboard}^1 + 0.000001 * \\
& \text{Location}^1 * \text{Operator}^1 * \text{Ground}^1 + 0.000000 * \text{Location}^1 * \text{Flight} \#^2 + 0.000000 * \\
& \text{Location}^1 * \text{Flight} \#^1 * \text{Route}^1 + 0.000000 * \text{Location}^1 * \text{Flight} \#^1 * \text{Type}^1 + 0.000000 * \\
& \text{Location}^1 * \text{Flight} \#^1 * \text{Registration}^1 + 0.000000 * \text{Location}^1 * \text{Flight} \#^1 * \text{cn/In}^1 + 0.000000 \\
& * \text{Location}^1 * \text{Flight} \#^1 * \text{Aboard}^1 + 0.000001 * \text{Location}^1 * \text{Flight} \#^1 * \text{Ground}^1 + 0.000000 \\
& * \text{Location}^1 * \text{Route}^2 + 0.000000 * \text{Location}^1 * \text{Route}^1 * \text{Type}^1 + -0.000000 * \\
& \text{Location}^1 * \text{Route}^1 * \text{Registration}^1 + -0.000000 * \text{Location}^1 * \text{Route}^1 * \text{cn/In}^1 + -0.000000 * \\
& \text{Location}^1 * \text{Route}^1 * \text{Aboard}^1 + 0.000000 * \text{Location}^1 * \text{Route}^1 * \text{Ground}^1 + -0.000000 * \\
& \text{Location}^1 * \text{Type}^2 + -0.000000 * \text{Location}^1 * \text{Type}^1 * \text{Registration}^1 + 0.000000 * \\
& \text{Location}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000 * \text{Location}^1 * \text{Type}^1 * \text{Aboard}^1 + 0.000000 * \\
& \text{Location}^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000 * \text{Location}^1 * \text{Registration}^2 + 0.000000 * \\
& \text{Location}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000 * \text{Location}^1 * \text{Registration}^1 * \text{Aboard}^1 + - \\
& 0.000000 * \text{Location}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000 * \text{Location}^1 * \text{cn/In}^2 + - \\
& 0.000000 * \text{Location}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.000000 * \text{Location}^1 * \text{cn/In}^1 * \text{Ground}^1 + \\
& 0.000000 * \text{Location}^1 * \text{Aboard}^2 + 0.000003 * \text{Location}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000004 * \\
& \text{Location}^1 * \text{Ground}^2 + -0.000000 * \text{Operator}^3 + -0.000000 * \text{Operator}^2 * \text{Flight} \#^1 + \\
& 0.000000 * \text{Operator}^2 * \text{Route}^1 + -0.000000 * \text{Operator}^2 * \text{Type}^1 + -0.000000 * \\
& \text{Operator}^2 * \text{Registration}^1 + -0.000000 * \text{Operator}^2 * \text{cn/In}^1 + 0.000000 * \\
& \text{Operator}^2 * \text{Aboard}^1 + -0.000001 * \text{Operator}^2 * \text{Ground}^1 + -0.000000 * \text{Operator}^1 * \text{Flight} \\
& \#^2 + -0.000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Route}^1 + 0.000000 * \text{Operator}^1 * \text{Flight} \\
& \#^1 * \text{Type}^1 + -0.000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Registration}^1 + -0.000000 * \\
& \text{Operator}^1 * \text{Flight} \#^1 * \text{cn/In}^1 + 0.000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Aboard}^1 + -0.000002 * \\
& \text{Operator}^1 * \text{Flight} \#^1 * \text{Ground}^1 + 0.000000 * \text{Operator}^1 * \text{Route}^2 + 0.000000 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Type}^1 + 0.000000 * \text{Operator}^1 * \text{Route}^1 * \text{Registration}^1 + -0.000000 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000000 * \text{Operator}^1 * \text{Route}^1 * \text{Aboard}^1 + -0.000000 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Ground}^1 + -0.000000 * \text{Operator}^1 * \text{Type}^2 + -0.000000 *
\end{aligned}$$

$$\begin{aligned}
& \text{Operator}^1 * \text{Type}^1 * \text{Registration}^1 + -0.000000 * \text{Operator}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000 * \\
& \text{Operator}^1 * \text{Type}^1 * \text{Aboard}^1 + 0.000000 * \text{Operator}^1 * \text{Type}^1 * \text{Ground}^1 + 0.000000 * \\
& \text{Operator}^1 * \text{Registration}^2 + 0.000000 * \text{Operator}^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000 * \\
& \text{Operator}^1 * \text{Registration}^1 * \text{Aboard}^1 + 0.000000 * \text{Operator}^1 * \text{Registration}^1 * \text{Ground}^1 + \\
& 0.000000 * \text{Operator}^1 * \text{cn/In}^2 + 0.000000 * \text{Operator}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.000000 * \\
& \text{Operator}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000 * \text{Operator}^1 * \text{Aboard}^2 + -0.000009 * \\
& \text{Operator}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000032 * \text{Operator}^1 * \text{Ground}^2 + -0.000000 * \text{Flight} \#^3 \\
& + 0.000000 * \text{Flight} \#^2 * \text{Route}^1 + 0.000000 * \text{Flight} \#^2 * \text{Type}^1 + 0.000000 * \text{Flight} \\
& \#^2 * \text{Registration}^1 + 0.000000 * \text{Flight} \#^2 * \text{cn/In}^1 + -0.000000 * \text{Flight} \#^2 * \text{Aboard}^1 + - \\
& 0.000023 * \text{Flight} \#^2 * \text{Ground}^1 + -0.000000 * \text{Flight} \#^1 * \text{Route}^2 + 0.000000 * \text{Flight} \\
& \#^1 * \text{Route}^1 * \text{Type}^1 + -0.000000 * \text{Flight} \#^1 * \text{Route}^1 * \text{Registration}^1 + 0.000000 * \text{Flight} \\
& \#^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000000 * \text{Flight} \#^1 * \text{Route}^1 * \text{Aboard}^1 + 0.000003 * \text{Flight} \\
& \#^1 * \text{Route}^1 * \text{Ground}^1 + -0.000000 * \text{Flight} \#^1 * \text{Type}^2 + -0.000000 * \text{Flight} \\
& \#^1 * \text{Type}^1 * \text{Registration}^1 + -0.000000 * \text{Flight} \#^1 * \text{Type}^1 * \text{cn/In}^1 + -0.000000 * \text{Flight} \\
& \#^1 * \text{Type}^1 * \text{Aboard}^1 + 0.000000 * \text{Flight} \#^1 * \text{Type}^1 * \text{Ground}^1 + 0.000000 * \text{Flight} \\
& \#^1 * \text{Registration}^2 + 0.000000 * \text{Flight} \#^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000 * \text{Flight} \\
& \#^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000002 * \text{Flight} \#^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000 * \\
& \text{Flight} \#^1 * \text{cn/In}^2 + 0.000000 * \text{Flight} \#^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000003 * \text{Flight} \\
& \#^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000004 * \text{Flight} \#^1 * \text{Aboard}^2 + 0.000016 * \text{Flight} \\
& \#^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000178 * \text{Flight} \#^1 * \text{Ground}^2 + -0.000000 * \text{Route}^3 + - \\
& 0.000000 * \text{Route}^2 * \text{Type}^1 + -0.000000 * \text{Route}^2 * \text{Registration}^1 + -0.000000 * \\
& \text{Route}^2 * \text{cn/In}^1 + -0.000000 * \text{Route}^2 * \text{Aboard}^1 + -0.000001 * \text{Route}^2 * \text{Ground}^1 + \\
& 0.000000 * \text{Route}^1 * \text{Type}^2 + -0.000000 * \text{Route}^1 * \text{Type}^1 * \text{Registration}^1 + 0.000000 * \\
& \text{Route}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000 * \text{Route}^1 * \text{Type}^1 * \text{Aboard}^1 + -0.000000 * \\
& \text{Route}^1 * \text{Type}^1 * \text{Ground}^1 + 0.000000 * \text{Route}^1 * \text{Registration}^2 + -0.000000 * \\
& \text{Route}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000 * \text{Route}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000000 \\
& * \text{Route}^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000 * \text{Route}^1 * \text{cn/In}^2 + 0.000000 * \\
& \text{Route}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000000 * \text{Route}^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000000 * \\
& \text{Route}^1 * \text{Aboard}^2 + -0.000003 * \text{Route}^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000006 * \\
& \text{Route}^1 * \text{Ground}^2 + 0.000000 * \text{Type}^3 + 0.000000 * \text{Type}^2 * \text{Registration}^1 + 0.000000 * \\
& \text{Type}^2 * \text{cn/In}^1 + -0.000000 * \text{Type}^2 * \text{Aboard}^1 + 0.000000 * \text{Type}^2 * \text{Ground}^1 + -0.000000 \\
& * \text{Type}^1 * \text{Registration}^2 + -0.000000 * \text{Type}^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000 * \\
& \text{Type}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000000 * \text{Type}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000 \\
& * \text{Type}^1 * \text{cn/In}^2 + -0.000000 * \text{Type}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.000001 * \\
& \text{Type}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000 * \text{Type}^1 * \text{Aboard}^2 + -0.000000 * \\
& \text{Type}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000027 * \text{Type}^1 * \text{Ground}^2 + 0.000000 * \text{Registration}^3 + \\
& 0.000000 * \text{Registration}^2 * \text{cn/In}^1 + 0.000000 * \text{Registration}^2 * \text{Aboard}^1 + 0.000000 * \\
& \text{Registration}^2 * \text{Ground}^1 + -0.000000 * \text{Registration}^1 * \text{cn/In}^2 + -0.000000 * \\
& \text{Registration}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000000 * \text{Registration}^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000000 \\
& * \text{Registration}^1 * \text{Aboard}^2 + -0.000002 * \text{Registration}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000008 * \\
& \text{Registration}^1 * \text{Ground}^2 + -0.000000 * \text{cn/In}^3 + -0.000000 * \text{cn/In}^2 * \text{Aboard}^1 + 0.000000 * \\
& \text{cn/In}^2 * \text{Ground}^1 + -0.000000 * \text{cn/In}^1 * \text{Aboard}^2 + 0.000003 * \\
& \text{cn/In}^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000018 * \text{cn/In}^1 * \text{Ground}^2 + -0.000010 * \text{Aboard}^3 + \\
& 0.000463 * \text{Aboard}^2 * \text{Ground}^1 + -0.001761 * \text{Aboard}^1 * \text{Ground}^2 + 0.000267 * \text{Ground}^3
\end{aligned}$$

Accuracy: 0.7258412782744993

DEGREE-4:

coefficient [4.45460567e-03 -1.00725752e-01 2.83759210e-02 ... -2.80998425e-06
-8.36572930e-07 -7.20816752e-08]

intercept -119.40843533057127

Equation: Fatalities= -119.408435331 + -0.100725752 * Time + 0.028375921 * Location +
0.114603935 * Operator + -1.029783126 * Flight # + -0.012386358 * Route + 0.217428098 *
Type + 0.000704492 * Registration + -0.009861171 * cn/In + 6.845790530 * Aboard +
0.038263134 * Ground + 0.000008445 * Date^2 + 0.000025464 * Date^1*Time^1 +
0.000001686 * Date^1*Location^1 + 0.000021381 * Date^1*Operator^1 + -0.000009176 *
Date^1*Flight #^1 + -0.000025206 * Date^1*Route^1 + -0.000033831 * Date^1*Type^1 + -
0.000005537 * Date^1*Registration^1 + 0.000002024 * Date^1*cn/In^1 + -0.000016228 *
Date^1*Aboard^1 + 0.005917028 * Date^1*Ground^1 + 0.000129743 * Time^2 + -
0.000062053 * Time^1*Location^1 + 0.000013198 * Time^1*Operator^1 + 0.001103895 *
Time^1*Flight #^1 + 0.000068064 * Time^1*Route^1 + -0.000076374 * Time^1*Type^1 + -
0.000029384 * Time^1*Registration^1 + 0.000065650 * Time^1*cn/In^1 + -0.000078488 *
Time^1*Aboard^1 + 0.006441746 * Time^1*Ground^1 + 0.000006368 * Location^2 + -
0.000013199 * Location^1*Operator^1 + 0.000000332 * Location^1*Flight #^1 + 0.000011615
* Location^1*Route^1 + 0.000000640 * Location^1*Type^1 + -0.000018205 *
Location^1*Registration^1 + 0.000010674 * Location^1*cn/In^1 + -0.000962790 *
Location^1*Aboard^1 + 0.019342284 * Location^1*Ground^1 + -0.000022809 * Operator^2 + -
0.000126587 * Operator^1*Flight #^1 + 0.000022735 * Operator^1*Route^1 + -0.000060624 *
Operator^1*Type^1 + -0.000009284 * Operator^1*Registration^1 + -0.000040026 *
Operator^1*cn/In^1 + -0.001529610 * Operator^1*Aboard^1 + -0.010692208 *
Operator^1*Ground^1 + 0.002944916 * Flight #^2 + 0.000192963 * Flight #^1*Route^1 + -
0.000083552 * Flight #^1*Type^1 + 0.000252295 * Flight #^1*Registration^1 + 0.000101206 *
Flight #^1*cn/In^1 + -0.008172125 * Flight #^1*Aboard^1 + 0.031880956 * Flight
#^1*Ground^1 + -0.000018917 * Route^2 + -0.000014995 * Route^1*Type^1 + 0.000018979 *
Route^1*Registration^1 + 0.000008372 * Route^1*cn/In^1 + -0.001427590 *
Route^1*Aboard^1 + -0.010815937 * Route^1*Ground^1 + -0.000063673 * Type^2 + -
0.000000569 * Type^1*Registration^1 + -0.000024698 * Type^1*cn/In^1 + -0.003415567 *
Type^1*Aboard^1 + -0.018949854 * Type^1*Ground^1 + -0.000005937 * Registration^2 +
0.000005328 * Registration^1*cn/In^1 + -0.001025512 * Registration^1*Aboard^1 +
0.001801381 * Registration^1*Ground^1 + 0.000001829 * cn/In^2 + 0.000526185 *
cn/In^1*Aboard^1 + -0.008031344 * cn/In^1*Ground^1 + -0.024788246 * Aboard^2 +
0.005817056 * Aboard^1*Ground^1 + -0.020460345 * Ground^2 + -0.000000001 * Date^3 + -
0.000000006 * Date^2*Time^1 + -0.000000000 * Date^2*Location^1 + -0.000000003 *
Date^2*Operator^1 + -0.000000011 * Date^2*Flight #^1 + 0.000000002 * Date^2*Route^1 +
0.000000002 * Date^2*Type^1 + 0.000000001 * Date^2*Registration^1 + -0.000000001 *
Date^2*cn/In^1 + -0.000000189 * Date^2*Aboard^1 + 0.014136492 * Date^2*Ground^1 +
0.000000021 * Date^1*Time^2 + -0.000000004 * Date^1*Time^1*Location^1 + -0.000000007

* Date^1*Time^1*Operator^1 + -0.000000080 * Date^1*Time^1*Flight #^1 + 0.000000005 *
 Date^1*Time^1*Route^1 + 0.000000005 * Date^1*Time^1*Type^1 + -0.000000002 *
 Date^1*Time^1*Registration^1 + 0.000000006 * Date^1*Time^1*cn/In^1 + -0.000000548 *
 Date^1*Time^1*Aboard^1 + 0.007110131 * Date^1*Time^1*Ground^1 + 0.000000001 *
 Date^1*Location^2 + 0.000000001 * Date^1*Location^1*Operator^1 + -0.000000008 *
 Date^1*Location^1*Flight #^1 + -0.000000003 * Date^1*Location^1*Route^1 + 0.000000000 *
 Date^1*Location^1*Type^1 + 0.000000000 * Date^1*Location^1*Registration^1 + -
 0.000000001 * Date^1*Location^1*cn/In^1 + 0.000000148 * Date^1*Location^1*Aboard^1 + -
 0.011250150 * Date^1*Location^1*Ground^1 + -0.000000004 * Date^1*Operator^2 + -
 0.000000001 * Date^1*Operator^1*Flight #^1 + -0.000000001 * Date^1*Operator^1*Route^1 +
 0.000000002 * Date^1*Operator^1*Type^1 + -0.000000002 *
 Date^1*Operator^1*Registration^1 + -0.000000001 * Date^1*Operator^1*cn/In^1 + -
 0.000000170 * Date^1*Operator^1*Aboard^1 + -0.008681070 * Date^1*Operator^1*Ground^1
 + 0.000000007 * Date^1*Flight #^2 + 0.000000029 * Date^1*Flight #^1*Route^1 +
 0.000000054 * Date^1*Flight #^1*Type^1 + 0.000000001 * Date^1*Flight #^1*Registration^1
 + -0.000000016 * Date^1*Flight #^1*cn/In^1 + 0.000001080 * Date^1*Flight #^1*Aboard^1 +
 0.003182269 * Date^1*Flight #^1*Ground^1 + 0.000000002 * Date^1*Route^2 + 0.000000009
 * Date^1*Route^1*Type^1 + 0.000000002 * Date^1*Route^1*Registration^1 + 0.000000001 *
 Date^1*Route^1*cn/In^1 + 0.000000170 * Date^1*Route^1*Aboard^1 + 0.003334160 *
 Date^1*Route^1*Ground^1 + 0.000000004 * Date^1*Type^2 + -0.000000001 *
 Date^1*Type^1*Registration^1 + -0.000000001 * Date^1*Type^1*cn/In^1 + 0.000000397 *
 Date^1*Type^1*Aboard^1 + 0.009654540 * Date^1*Type^1*Ground^1 + 0.000000001 *
 Date^1*Registration^2 + 0.000000001 * Date^1*Registration^1*cn/In^1 + 0.000000075 *
 Date^1*Registration^1*Aboard^1 + 0.004558125 * Date^1*Registration^1*Ground^1 +
 0.000000001 * Date^1*cn/In^2 + -0.000000104 * Date^1*cn/In^1*Aboard^1 + -0.003803150 *
 Date^1*cn/In^1*Ground^1 + 0.000001131 * Date^1*Aboard^2 + 0.008012584 *
 Date^1*Aboard^1*Ground^1 + 0.003543603 * Date^1*Ground^2 + -0.000000217 * Time^3 + -
 0.000000003 * Time^2*Location^1 + 0.000000014 * Time^2*Operator^1 + -0.000000193 *
 Time^2*Flight #^1 + -0.000000003 * Time^2*Route^1 + 0.000000023 * Time^2*Type^1 +
 0.000000010 * Time^2*Registration^1 + -0.000000032 * Time^2*cn/In^1 + 0.000003270 *
 Time^2*Aboard^1 + -0.001890789 * Time^2*Ground^1 + -0.000000000 * Time^1*Location^2
 + 0.000000004 * Time^1*Location^1*Operator^1 + 0.000000156 * Time^1*Location^1*Flight
 #^1 + 0.000000004 * Time^1*Location^1*Route^1 + 0.000000002 *
 Time^1*Location^1*Type^1 + 0.000000006 * Time^1*Location^1*Registration^1 +
 0.000000009 * Time^1*Location^1*cn/In^1 + 0.000000370 * Time^1*Location^1*Aboard^1 +
 -0.006722480 * Time^1*Location^1*Ground^1 + -0.000000015 * Time^1*Operator^2 + -
 0.000000053 * Time^1*Operator^1*Flight #^1 + -0.000000027 * Time^1*Operator^1*Route^1
 + -0.000000001 * Time^1*Operator^1*Type^1 + 0.000000020 *
 Time^1*Operator^1*Registration^1 + -0.000000007 * Time^1*Operator^1*cn/In^1 + -
 0.000000407 * Time^1*Operator^1*Aboard^1 + -0.001319553 *
 Time^1*Operator^1*Ground^1 + -0.000001546 * Time^1*Flight #^2 + -0.000000207 *
 Time^1*Flight #^1*Route^1 + -0.000000039 * Time^1*Flight #^1*Type^1 + -0.000000068 *
 Time^1*Flight #^1*Registration^1 + -0.000000133 * Time^1*Flight #^1*cn/In^1 + -
 0.000003342 * Time^1*Flight #^1*Aboard^1 + -0.010360466 * Time^1*Flight #^1*Ground^1
 + 0.000000005 * Time^1*Route^2 + -0.000000004 * Time^1*Route^1*Type^1 + -0.000000000
 * Time^1*Route^1*Registration^1 + -0.000000008 * Time^1*Route^1*cn/In^1 + -0.000000782

* Time^1*Route^1*Aboard^1 + 0.004169543 * Time^1*Route^1*Ground^1 + 0.000000023 *
 Time^1*Type^2 + -0.000000006 * Time^1*Type^1*Registration^1 + 0.000000001 *
 Time^1*Type^1*cn/In^1 + 0.000001768 * Time^1*Type^1*Aboard^1 + -0.002497118 *
 Time^1*Type^1*Ground^1 + 0.000000004 * Time^1*Registration^2 + 0.000000001 *
 Time^1*Registration^1*cn/In^1 + 0.000000451 * Time^1*Registration^1*Aboard^1 +
 0.001838551 * Time^1*Registration^1*Ground^1 + -0.000000010 * Time^1*cn/In^2 + -
 0.000000432 * Time^1*cn/In^1*Aboard^1 + 0.002675239 * Time^1*cn/In^1*Ground^1 + -
 0.000006248 * Time^1*Aboard^2 + 0.002505532 * Time^1*Aboard^1*Ground^1 + -
 0.001583369 * Time^1*Ground^2 + -0.000000003 * Location^3 + -0.000000003 *
 Location^2*Operator^1 + -0.000000014 * Location^2*Flight #^1 + -0.000000000 *
 Location^2*Route^1 + 0.000000000 * Location^2*Type^1 + 0.000000002 *
 Location^2*Registration^1 + 0.000000000 * Location^2*cn/In^1 + 0.000000397 *
 Location^2*Aboard^1 + 0.003598529 * Location^2*Ground^1 + 0.000000006 *
 Location^1*Operator^2 + 0.000000024 * Location^1*Operator^1*Flight #^1 + -0.000000002 *
 Location^1*Operator^1*Route^1 + -0.000000001 * Location^1*Operator^1*Type^1 +
 0.000000001 * Location^1*Operator^1*Registration^1 + 0.000000000 *
 Location^1*Operator^1*cn/In^1 + 0.000000232 * Location^1*Operator^1*Aboard^1 +
 0.003939858 * Location^1*Operator^1*Ground^1 + -0.000000171 * Location^1*Flight #^2 +
 0.000000001 * Location^1*Flight #^1*Route^1 + 0.000000015 * Location^1*Flight
 #^1*Type^1 + 0.000000017 * Location^1*Flight #^1*Registration^1 + -0.000000016 *
 Location^1*Flight #^1*cn/In^1 + 0.000000637 * Location^1*Flight #^1*Aboard^1 + -
 0.006263278 * Location^1*Flight #^1*Ground^1 + -0.000000001 * Location^1*Route^2 + -
 0.000000001 * Location^1*Route^1*Type^1 + -0.000000003 *
 Location^1*Route^1*Registration^1 + -0.000000002 * Location^1*Route^1*cn/In^1 + -
 0.000000082 * Location^1*Route^1*Aboard^1 + 0.004919098 *
 Location^1*Route^1*Ground^1 + -0.000000003 * Location^1*Type^2 + 0.000000004 *
 Location^1*Type^1*Registration^1 + -0.000000002 * Location^1*Type^1*cn/In^1 + -
 0.000000269 * Location^1*Type^1*Aboard^1 + -0.002810430 * Location^1*Type^1*Ground^1
 + 0.000000001 * Location^1*Registration^2 + 0.000000001 *
 Location^1*Registration^1*cn/In^1 + 0.000000095 * Location^1*Registration^1*Aboard^1 +
 0.005708825 * Location^1*Registration^1*Ground^1 + -0.000000002 * Location^1*cn/In^2 + -
 0.000000214 * Location^1*cn/In^1*Aboard^1 + 0.000479646 * Location^1*cn/In^1*Ground^1
 + 0.000003238 * Location^1*Aboard^2 + 0.000147345 * Location^1*Aboard^1*Ground^1 + -
 0.003331429 * Location^1*Ground^2 + -0.000000003 * Operator^3 + -0.000000001 *
 Operator^2*Flight #^1 + 0.000000008 * Operator^2*Route^1 + -0.000000004 *
 Operator^2*Type^1 + -0.000000001 * Operator^2*Registration^1 + 0.000000013 *
 Operator^2*cn/In^1 + 0.000000636 * Operator^2*Aboard^1 + 0.004253887 *
 Operator^2*Ground^1 + 0.000000002 * Operator^1*Flight #^2 + -0.000000012 *
 Operator^1*Flight #^1*Route^1 + 0.000000003 * Operator^1*Flight #^1*Type^1 +
 0.000000021 * Operator^1*Flight #^1*Registration^1 + 0.000000070 * Operator^1*Flight
 #^1*cn/In^1 + 0.000002477 * Operator^1*Flight #^1*Aboard^1 + -0.002776083 *
 Operator^1*Flight #^1*Ground^1 + -0.000000003 * Operator^1*Route^2 + 0.000000004 *
 Operator^1*Route^1*Type^1 + -0.000000004 * Operator^1*Route^1*Registration^1 + -
 0.000000004 * Operator^1*Route^1*cn/In^1 + -0.000000219 * Operator^1*Route^1*Aboard^1
 + 0.000845552 * Operator^1*Route^1*Ground^1 + 0.000000012 * Operator^1*Type^2 +
 0.000000009 * Operator^1*Type^1*Registration^1 + 0.000000008 *

$$\begin{aligned}
& \text{Operator}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000506 * \text{Operator}^1 * \text{Type}^1 * \text{Aboard}^1 + -0.001683940 * \\
& \text{Operator}^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000001 * \text{Operator}^1 * \text{Registration}^2 + 0.000000001 * \\
& \text{Operator}^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000205 * \text{Operator}^1 * \text{Registration}^1 * \text{Aboard}^1 + \\
& 0.000660885 * \text{Operator}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000002 * \text{Operator}^1 * \text{cn/In}^2 + - \\
& 0.000000233 * \text{Operator}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.002313448 * \text{Operator}^1 * \text{cn/In}^1 * \text{Ground}^1 \\
& + -0.000000904 * \text{Operator}^1 * \text{Aboard}^2 + -0.002618727 * \text{Operator}^1 * \text{Aboard}^1 * \text{Ground}^1 + - \\
& 0.000247516 * \text{Operator}^1 * \text{Ground}^2 + -0.000002595 * \text{Flight} \#^3 + -0.000000293 * \text{Flight} \\
& \#^2 * \text{Route}^1 + -0.000000472 * \text{Flight} \#^2 * \text{Type}^1 + -0.000000387 * \text{Flight} \#^2 * \text{Registration}^1 \\
& + -0.000000074 * \text{Flight} \#^2 * \text{cn/In}^1 + 0.000005713 * \text{Flight} \#^2 * \text{Aboard}^1 + -0.003654644 * \\
& \text{Flight} \#^2 * \text{Ground}^1 + 0.000000007 * \text{Flight} \#^1 * \text{Route}^2 + 0.000000001 * \text{Flight} \\
& \#^1 * \text{Route}^1 * \text{Type}^1 + -0.000000045 * \text{Flight} \#^1 * \text{Route}^1 * \text{Registration}^1 + -0.000000006 * \\
& \text{Flight} \#^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000001047 * \text{Flight} \#^1 * \text{Route}^1 * \text{Aboard}^1 + -0.001079443 * \\
& \text{Flight} \#^1 * \text{Route}^1 * \text{Ground}^1 + 0.000000107 * \text{Flight} \#^1 * \text{Type}^2 + -0.000000022 * \text{Flight} \\
& \#^1 * \text{Type}^1 * \text{Registration}^1 + 0.000000056 * \text{Flight} \#^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000002826 * \\
& \text{Flight} \#^1 * \text{Type}^1 * \text{Aboard}^1 + -0.005984141 * \text{Flight} \#^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000017 \\
& * \text{Flight} \#^1 * \text{Registration}^2 + -0.000000031 * \text{Flight} \#^1 * \text{Registration}^1 * \text{cn/In}^1 + \\
& 0.000000481 * \text{Flight} \#^1 * \text{Registration}^1 * \text{Aboard}^1 + 0.001928209 * \text{Flight} \\
& \#^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000007 * \text{Flight} \#^1 * \text{cn/In}^2 + -0.000002194 * \text{Flight} \\
& \#^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.000016201 * \text{Flight} \#^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000040054 * \text{Flight} \\
& \#^1 * \text{Aboard}^2 + -0.001342075 * \text{Flight} \#^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000948943 * \text{Flight} \\
& \#^1 * \text{Ground}^2 + 0.000000004 * \text{Route}^3 + 0.000000001 * \text{Route}^2 * \text{Type}^1 + 0.000000001 * \\
& \text{Route}^2 * \text{Registration}^1 + -0.000000003 * \text{Route}^2 * \text{cn/In}^1 + 0.000000410 * \\
& \text{Route}^2 * \text{Aboard}^1 + 0.000537880 * \text{Route}^2 * \text{Ground}^1 + 0.000000004 * \text{Route}^1 * \text{Type}^2 + - \\
& 0.000000004 * \text{Route}^1 * \text{Type}^1 * \text{Registration}^1 + -0.000000000 * \text{Route}^1 * \text{Type}^1 * \text{cn/In}^1 + - \\
& 0.000000034 * \text{Route}^1 * \text{Type}^1 * \text{Aboard}^1 + 0.002514455 * \text{Route}^1 * \text{Type}^1 * \text{Ground}^1 + - \\
& 0.000000002 * \text{Route}^1 * \text{Registration}^2 + 0.000000001 * \text{Route}^1 * \text{Registration}^1 * \text{cn/In}^1 + \\
& 0.000000231 * \text{Route}^1 * \text{Registration}^1 * \text{Aboard}^1 + 0.000422745 * \\
& \text{Route}^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000000 * \text{Route}^1 * \text{cn/In}^2 + 0.000000136 * \\
& \text{Route}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000196363 * \text{Route}^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000000940 * \\
& \text{Route}^1 * \text{Aboard}^2 + -0.003667242 * \text{Route}^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.001439775 * \\
& \text{Route}^1 * \text{Ground}^2 + -0.000000001 * \text{Type}^3 + 0.000000005 * \text{Type}^2 * \text{Registration}^1 + - \\
& 0.000000001 * \text{Type}^2 * \text{cn/In}^1 + 0.000000468 * \text{Type}^2 * \text{Aboard}^1 + 0.000956487 * \\
& \text{Type}^2 * \text{Ground}^1 + -0.000000000 * \text{Type}^1 * \text{Registration}^2 + -0.000000004 * \\
& \text{Type}^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000343 * \text{Type}^1 * \text{Registration}^1 * \text{Aboard}^1 + \\
& 0.001591975 * \text{Type}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000003 * \text{Type}^1 * \text{cn/In}^2 + \\
& 0.000000127 * \text{Type}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.001409359 * \text{Type}^1 * \text{cn/In}^1 * \text{Ground}^1 + \\
& 0.000009994 * \text{Type}^1 * \text{Aboard}^2 + 0.000077920 * \text{Type}^1 * \text{Aboard}^1 * \text{Ground}^1 + \\
& 0.000222259 * \text{Type}^1 * \text{Ground}^2 + 0.000000002 * \text{Registration}^3 + 0.000000001 * \\
& \text{Registration}^2 * \text{cn/In}^1 + -0.000000038 * \text{Registration}^2 * \text{Aboard}^1 + 0.001380306 * \\
& \text{Registration}^2 * \text{Ground}^1 + 0.000000000 * \text{Registration}^1 * \text{cn/In}^2 + -0.000000076 * \\
& \text{Registration}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.001318055 * \text{Registration}^1 * \text{cn/In}^1 * \text{Ground}^1 + \\
& 0.000000960 * \text{Registration}^1 * \text{Aboard}^2 + -0.001717194 * \\
& \text{Registration}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000418251 * \text{Registration}^1 * \text{Ground}^2 + - \\
& 0.000000001 * \text{cn/In}^3 + 0.000000123 * \text{cn/In}^2 * \text{Aboard}^1 + -0.001917241 * \\
& \text{cn/In}^2 * \text{Ground}^1 + -0.000000193 * \text{cn/In}^1 * \text{Aboard}^2 + -0.001553727 * \\
& \text{cn/In}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.002140090 * \text{cn/In}^1 * \text{Ground}^2 + 0.000029878 * \text{Aboard}^3 +
\end{aligned}$$

-0.000264419 * Aboard^2*Ground^1 + -0.001837700 * Aboard^1*Ground^2 + 0.002463154 *
 Ground^3 + -0.000000000 * Date^4 + -0.000000000 * Date^3*Time^1 + 0.000000000 *
 Date^3*Location^1 + 0.000000000 * Date^3*Operator^1 + 0.000000000 * Date^3*Flight #^1 +
 -0.000000000 * Date^3*Route^1 + 0.000000000 * Date^3*Type^1 + -0.000000000 *
 Date^3*Registration^1 + 0.000000000 * Date^3*cn/In^1 + 0.000000000 * Date^3*Aboard^1 + -
 0.000001952 * Date^3*Ground^1 + 0.000000000 * Date^2*Time^2 + -0.000000000 *
 Date^2*Time^1*Location^1 + -0.000000000 * Date^2*Time^1*Operator^1 + 0.000000000 *
 Date^2*Time^1*Flight #^1 + -0.000000000 * Date^2*Time^1*Route^1 + -0.000000000 *
 Date^2*Time^1*Type^1 + -0.000000000 * Date^2*Time^1*Registration^1 + -0.000000000 *
 Date^2*Time^1*cn/In^1 + 0.000000000 * Date^2*Time^1*Aboard^1 + -0.000009109 *
 Date^2*Time^1*Ground^1 + 0.000000000 * Date^2*Location^2 + -0.000000000 *
 Date^2*Location^1*Operator^1 + -0.000000000 * Date^2*Location^1*Flight #^1 +
 0.000000000 * Date^2*Location^1*Route^1 + 0.000000000 * Date^2*Location^1*Type^1 +
 0.000000000 * Date^2*Location^1*Registration^1 + 0.000000000 *
 Date^2*Location^1*cn/In^1 + -0.000000000 * Date^2*Location^1*Aboard^1 + 0.000000756 *
 Date^2*Location^1*Ground^1 + 0.000000000 * Date^2*Operator^2 + 0.000000000 *
 Date^2*Operator^1*Flight #^1 + 0.000000000 * Date^2*Operator^1*Route^1 + -0.000000000 *
 Date^2*Operator^1*Type^1 + -0.000000000 * Date^2*Operator^1*Registration^1 +
 0.000000000 * Date^2*Operator^1*cn/In^1 + 0.000000000 * Date^2*Operator^1*Aboard^1 + -
 0.000006603 * Date^2*Operator^1*Ground^1 + 0.000000000 * Date^2*Flight #^2 + -
 0.000000000 * Date^2*Flight #^1*Route^1 + -0.000000000 * Date^2*Flight #^1*Type^1 + -
 0.000000000 * Date^2*Flight #^1*Registration^1 + 0.000000000 * Date^2*Flight #^1*cn/In^1
 + 0.000000000 * Date^2*Flight #^1*Aboard^1 + -0.000014239 * Date^2*Flight #^1*Ground^1
 + 0.000000000 * Date^2*Route^2 + -0.000000000 * Date^2*Route^1*Type^1 + 0.000000000 *
 Date^2*Route^1*Registration^1 + 0.000000000 * Date^2*Route^1*cn/In^1 + 0.000000000 *
 Date^2*Route^1*Aboard^1 + 0.000007348 * Date^2*Route^1*Ground^1 + -0.000000000 *
 Date^2*Type^2 + 0.000000000 * Date^2*Type^1*Registration^1 + -0.000000000 *
 Date^2*Type^1*cn/In^1 + -0.000000000 * Date^2*Type^1*Aboard^1 + 0.000001787 *
 Date^2*Type^1*Ground^1 + -0.000000000 * Date^2*Registration^2 + -0.000000000 *
 Date^2*Registration^1*cn/In^1 + -0.000000000 * Date^2*Registration^1*Aboard^1 +
 0.000001415 * Date^2*Registration^1*Ground^1 + 0.000000000 * Date^2*cn/In^2 +
 0.000000000 * Date^2*cn/In^1*Aboard^1 + -0.000003917 * Date^2*cn/In^1*Ground^1 +
 0.000000000 * Date^2*Aboard^2 + -0.000025137 * Date^2*Aboard^1*Ground^1 +
 0.000243534 * Date^2*Ground^2 + -0.000000000 * Date^1*Time^3 + 0.000000000 *
 Date^1*Time^2*Location^1 + 0.000000000 * Date^1*Time^2*Operator^1 + -0.000000000 *
 Date^1*Time^2*Flight #^1 + -0.000000000 * Date^1*Time^2*Route^1 + -0.000000000 *
 Date^1*Time^2*Type^1 + -0.000000000 * Date^1*Time^2*Registration^1 + 0.000000000 *
 Date^1*Time^2*cn/In^1 + -0.000000000 * Date^1*Time^2*Aboard^1 + 0.000031542 *
 Date^1*Time^2*Ground^1 + -0.000000000 * Date^1*Time^1*Location^2 + -0.000000000 *
 Date^1*Time^1*Location^1*Operator^1 + 0.000000000 * Date^1*Time^1*Location^1*Flight
 #^1 + 0.000000000 * Date^1*Time^1*Location^1*Route^1 + -0.000000000 *
 Date^1*Time^1*Location^1*Type^1 + -0.000000000 *
 Date^1*Time^1*Location^1*Registration^1 + -0.000000000 *
 Date^1*Time^1*Location^1*cn/In^1 + -0.000000000 * Date^1*Time^1*Location^1*Aboard^1
 + -0.000002628 * Date^1*Time^1*Location^1*Ground^1 + 0.000000000 *
 Date^1*Time^1*Operator^2 + 0.000000000 * Date^1*Time^1*Operator^1*Flight #^1 + -

0.000000000 * Date^1*Time^1*Operator^1*Route^1 + -0.000000000 *
 Date^1*Time^1*Operator^1*Type^1 + -0.000000000 *
 Date^1*Time^1*Operator^1*Registration^1 + 0.000000000 *
 Date^1*Time^1*Operator^1*cn/In^1 + 0.000000000 * Date^1*Time^1*Operator^1*Aboard^1
 + -0.000006493 * Date^1*Time^1*Operator^1*Ground^1 + 0.000000000 *
 Date^1*Time^1*Flight #^2 + -0.000000000 * Date^1*Time^1*Flight #^1*Route^1 +
 0.000000000 * Date^1*Time^1*Flight #^1*Type^1 + 0.000000000 * Date^1*Time^1*Flight
 #^1*Registration^1 + -0.000000000 * Date^1*Time^1*Flight #^1*cn/In^1 + 0.000000000 *
 Date^1*Time^1*Flight #^1*Aboard^1 + 0.000016307 * Date^1*Time^1*Flight #^1*Ground^1
 + 0.000000000 * Date^1*Time^1*Route^2 + -0.000000000 * Date^1*Time^1*Route^1*Type^1
 + -0.000000000 * Date^1*Time^1*Route^1*Registration^1 + -0.000000000 *
 Date^1*Time^1*Route^1*cn/In^1 + 0.000000000 * Date^1*Time^1*Route^1*Aboard^1 +
 0.000005432 * Date^1*Time^1*Route^1*Ground^1 + 0.000000000 * Date^1*Time^1*Type^2
 + 0.000000000 * Date^1*Time^1*Type^1*Registration^1 + -0.000000000 *
 Date^1*Time^1*Type^1*cn/In^1 + 0.000000000 * Date^1*Time^1*Type^1*Aboard^1 +
 0.000014394 * Date^1*Time^1*Type^1*Ground^1 + -0.000000000 *
 Date^1*Time^1*Registration^2 + -0.000000000 * Date^1*Time^1*Registration^1*cn/In^1 + -
 0.000000000 * Date^1*Time^1*Registration^1*Aboard^1 + -0.000002256 *
 Date^1*Time^1*Registration^1*Ground^1 + -0.000000000 * Date^1*Time^1*cn/In^2 +
 0.000000000 * Date^1*Time^1*cn/In^1*Aboard^1 + -0.000003194 *
 Date^1*Time^1*cn/In^1*Ground^1 + -0.000000000 * Date^1*Time^1*Aboard^2 + -
 0.000288873 * Date^1*Time^1*Aboard^1*Ground^1 + 0.000146006 *
 Date^1*Time^1*Ground^2 + -0.000000000 * Date^1*Location^3 + -0.000000000 *
 Date^1*Location^2*Operator^1 + 0.000000000 * Date^1*Location^2*Flight #^1 +
 0.000000000 * Date^1*Location^2*Route^1 + 0.000000000 * Date^1*Location^2*Type^1 + -
 0.000000000 * Date^1*Location^2*Registration^1 + -0.000000000 *
 Date^1*Location^2*cn/In^1 + -0.000000000 * Date^1*Location^2*Aboard^1 + -0.000000060 *
 Date^1*Location^2*Ground^1 + -0.000000000 * Date^1*Location^1*Operator^2 +
 0.000000000 * Date^1*Location^1*Operator^1*Flight #^1 + 0.000000000 *
 Date^1*Location^1*Operator^1*Route^1 + -0.000000000 *
 Date^1*Location^1*Operator^1*Type^1 + 0.000000000 *
 Date^1*Location^1*Operator^1*Registration^1 + 0.000000000 *
 Date^1*Location^1*Operator^1*cn/In^1 + 0.000000000 *
 Date^1*Location^1*Operator^1*Aboard^1 + -0.000004873 *
 Date^1*Location^1*Operator^1*Ground^1 + 0.000000000 * Date^1*Location^1*Flight #^2 +
 0.000000000 * Date^1*Location^1*Flight #^1*Route^1 + -0.000000000 *
 Date^1*Location^1*Flight #^1*Type^1 + -0.000000000 * Date^1*Location^1*Flight
 #^1*Registration^1 + 0.000000000 * Date^1*Location^1*Flight #^1*cn/In^1 + -0.000000000 *
 Date^1*Location^1*Flight #^1*Aboard^1 + 0.000033968 * Date^1*Location^1*Flight
 #^1*Ground^1 + 0.000000000 * Date^1*Location^1*Route^2 + -0.000000000 *
 Date^1*Location^1*Route^1*Type^1 + -0.000000000 *
 Date^1*Location^1*Route^1*Registration^1 + -0.000000000 *
 Date^1*Location^1*Route^1*cn/In^1 + -0.000000000 *
 Date^1*Location^1*Route^1*Aboard^1 + -0.000002111 *
 Date^1*Location^1*Route^1*Ground^1 + -0.000000000 * Date^1*Location^1*Type^2 +
 0.000000000 * Date^1*Location^1*Type^1*Registration^1 + -0.000000000 *

$$\begin{aligned}
& \text{Date}^1 * \text{Location}^1 * \text{Type}^1 * \text{cn/In}^1 + -0.000000000 * \text{Date}^1 * \text{Location}^1 * \text{Type}^1 * \text{Aboard}^1 \\
& + 0.000000286 * \text{Date}^1 * \text{Location}^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000000 * \\
& \text{Date}^1 * \text{Location}^1 * \text{Registration}^2 + 0.000000000 * \\
& \text{Date}^1 * \text{Location}^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000000 * \\
& \text{Date}^1 * \text{Location}^1 * \text{Registration}^1 * \text{Aboard}^1 + 0.000002088 * \\
& \text{Date}^1 * \text{Location}^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000000 * \text{Date}^1 * \text{Location}^1 * \text{cn/In}^2 + \\
& 0.000000000 * \text{Date}^1 * \text{Location}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.000003483 * \\
& \text{Date}^1 * \text{Location}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000000 * \text{Date}^1 * \text{Location}^1 * \text{Aboard}^2 + \\
& 0.000055002 * \text{Date}^1 * \text{Location}^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000149193 * \\
& \text{Date}^1 * \text{Location}^1 * \text{Ground}^2 + -0.000000000 * \text{Date}^1 * \text{Operator}^3 + 0.000000000 * \\
& \text{Date}^1 * \text{Operator}^2 * \text{Flight} \#^1 + 0.000000000 * \text{Date}^1 * \text{Operator}^2 * \text{Route}^1 + 0.000000000 * \\
& \text{Date}^1 * \text{Operator}^2 * \text{Type}^1 + 0.000000000 * \text{Date}^1 * \text{Operator}^2 * \text{Registration}^1 + - \\
& 0.000000000 * \text{Date}^1 * \text{Operator}^2 * \text{cn/In}^1 + -0.000000000 * \text{Date}^1 * \text{Operator}^2 * \text{Aboard}^1 + \\
& 0.000006519 * \text{Date}^1 * \text{Operator}^2 * \text{Ground}^1 + -0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Flight} \#^2 \\
& + 0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Route}^1 + -0.000000000 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Type}^1 + 0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Flight} \\
& \#^1 * \text{Registration}^1 + -0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Flight} \#^1 * \text{cn/In}^1 + -0.000000000 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Aboard}^1 + 0.000011867 * \text{Date}^1 * \text{Operator}^1 * \text{Flight} \\
& \#^1 * \text{Ground}^1 + -0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Route}^2 + 0.000000000 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Route}^1 * \text{Type}^1 + 0.000000000 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Route}^1 * \text{Registration}^1 + 0.000000000 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Route}^1 * \text{Aboard}^1 \\
& + 0.000017300 * \text{Date}^1 * \text{Operator}^1 * \text{Route}^1 * \text{Ground}^1 + -0.000000000 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Type}^2 + 0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Type}^1 * \text{Registration}^1 + \\
& 0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000000 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Type}^1 * \text{Aboard}^1 + -0.000017627 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Registration}^2 + \\
& -0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000000 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000005621 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{cn/In}^2 + \\
& 0.000000000 * \text{Date}^1 * \text{Operator}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000008989 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000000001 * \text{Date}^1 * \text{Operator}^1 * \text{Aboard}^2 + \\
& 0.000176077 * \text{Date}^1 * \text{Operator}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000145617 * \\
& \text{Date}^1 * \text{Operator}^1 * \text{Ground}^2 + 0.000000000 * \text{Date}^1 * \text{Flight} \#^3 + 0.000000000 * \\
& \text{Date}^1 * \text{Flight} \#^2 * \text{Route}^1 + -0.000000000 * \text{Date}^1 * \text{Flight} \#^2 * \text{Type}^1 + -0.000000000 * \\
& \text{Date}^1 * \text{Flight} \#^2 * \text{Registration}^1 + 0.000000000 * \text{Date}^1 * \text{Flight} \#^2 * \text{cn/In}^1 + -0.000000001 \\
& * \text{Date}^1 * \text{Flight} \#^2 * \text{Aboard}^1 + -0.000082983 * \text{Date}^1 * \text{Flight} \#^2 * \text{Ground}^1 + -0.000000000 \\
& * \text{Date}^1 * \text{Flight} \#^1 * \text{Route}^2 + -0.000000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{Type}^1 + - \\
& 0.000000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{Registration}^1 + 0.000000000 * \text{Date}^1 * \text{Flight} \\
& \#^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{Aboard}^1 + -0.000031454 \\
& * \text{Date}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{Ground}^1 + 0.000000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{Type}^2 + \\
& 0.000000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{Type}^1 * \text{Registration}^1 + -0.000000000 * \text{Date}^1 * \text{Flight} \\
& \#^1 * \text{Type}^1 * \text{cn/In}^1 + -0.000000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{Type}^1 * \text{Aboard}^1 + 0.000007630 * \\
& \text{Date}^1 * \text{Flight} \#^1 * \text{Type}^1 * \text{Ground}^1 + 0.000000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{Registration}^2 + - \\
& 0.000000000 * \text{Date}^1 * \text{Flight} \#^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000000 * \text{Date}^1 * \text{Flight} \\
& \#^1 * \text{Registration}^1 * \text{Aboard}^1 + 0.000019858 * \text{Date}^1 * \text{Flight} \#^1 * \text{Registration}^1 * \text{Ground}^1 +
\end{aligned}$$

-0.000000000 * Date^1*Flight #^1*cn/In^2 + 0.000000000 * Date^1*Flight
 #^1*cn/In^1*Aboard^1 + 0.000038797 * Date^1*Flight #^1*cn/In^1*Ground^1 + -0.000000001
 * Date^1*Flight #^1*Aboard^2 + 0.000053076 * Date^1*Flight #^1*Aboard^1*Ground^1 + -
 0.000300576 * Date^1*Flight #^1*Ground^2 + 0.000000000 * Date^1*Route^3 + -0.000000000
 * Date^1*Route^2*Type^1 + -0.000000000 * Date^1*Route^2*Registration^1 + -0.000000000
 * Date^1*Route^2*cn/In^1 + -0.000000000 * Date^1*Route^2*Aboard^1 + -0.000007472 *
 Date^1*Route^2*Ground^1 + 0.000000000 * Date^1*Route^1*Type^2 + -0.000000000 *
 Date^1*Route^1*Type^1*Registration^1 + 0.000000000 * Date^1*Route^1*Type^1*cn/In^1 +
 -0.000000000 * Date^1*Route^1*Type^1*Aboard^1 + 0.000008393 *
 Date^1*Route^1*Type^1*Ground^1 + 0.000000000 * Date^1*Route^1*Registration^2 + -
 0.000000000 * Date^1*Route^1*Registration^1*cn/In^1 + 0.000000000 *
 Date^1*Route^1*Registration^1*Aboard^1 + -0.000002883 *
 Date^1*Route^1*Registration^1*Ground^1 + -0.000000000 * Date^1*Route^1*cn/In^2 + -
 0.000000000 * Date^1*Route^1*cn/In^1*Aboard^1 + -0.000002881 *
 Date^1*Route^1*cn/In^1*Ground^1 + -0.000000000 * Date^1*Route^1*Aboard^2 + -
 0.000050001 * Date^1*Route^1*Aboard^1*Ground^1 + -0.000191628 *
 Date^1*Route^1*Ground^2 + -0.000000000 * Date^1*Type^3 + -0.000000000 *
 Date^1*Type^2*Registration^1 + 0.000000000 * Date^1*Type^2*cn/In^1 + -0.000000000 *
 Date^1*Type^2*Aboard^1 + -0.000016914 * Date^1*Type^2*Ground^1 + -0.000000000 *
 Date^1*Type^1*Registration^2 + -0.000000000 * Date^1*Type^1*Registration^1*cn/In^1 + -
 0.000000000 * Date^1*Type^1*Registration^1*Aboard^1 + 0.000001260 *
 Date^1*Type^1*Registration^1*Ground^1 + 0.000000000 * Date^1*Type^1*cn/In^2 +
 0.000000000 * Date^1*Type^1*cn/In^1*Aboard^1 + 0.000005887 *
 Date^1*Type^1*cn/In^1*Ground^1 + -0.000000001 * Date^1*Type^1*Aboard^2 +
 0.000064566 * Date^1*Type^1*Aboard^1*Ground^1 + -0.000022893 *
 Date^1*Type^1*Ground^2 + -0.000000000 * Date^1*Registration^3 + 0.000000000 *
 Date^1*Registration^2*cn/In^1 + 0.000000000 * Date^1*Registration^2*Aboard^1 + -
 0.000002688 * Date^1*Registration^2*Ground^1 + -0.000000000 *
 Date^1*Registration^1*cn/In^2 + -0.000000000 * Date^1*Registration^1*cn/In^1*Aboard^1 + -
 0.000001183 * Date^1*Registration^1*cn/In^1*Ground^1 + -0.000000000 *
 Date^1*Registration^1*Aboard^2 + 0.000051526 *
 Date^1*Registration^1*Aboard^1*Ground^1 + -0.000072647 *
 Date^1*Registration^1*Ground^2 + -0.000000000 * Date^1*cn/In^3 + -0.000000000 *
 Date^1*cn/In^2*Aboard^1 + -0.000000772 * Date^1*cn/In^2*Ground^1 + 0.000000000 *
 Date^1*cn/In^1*Aboard^2 + -0.000041244 * Date^1*cn/In^1*Aboard^1*Ground^1 +
 0.000029884 * Date^1*cn/In^1*Ground^2 + -0.000000006 * Date^1*Aboard^3 + 0.000059029
 * Date^1*Aboard^2*Ground^1 + -0.000001816 * Date^1*Aboard^1*Ground^2 + -0.000072887
 * Date^1*Ground^3 + 0.000000000 * Time^4 + 0.000000000 * Time^3*Location^1 + -
 0.000000000 * Time^3*Operator^1 + 0.000000000 * Time^3*Flight #^1 + 0.000000000 *
 Time^3*Route^1 + 0.000000000 * Time^3*Type^1 + -0.000000000 * Time^3*Registration^1 +
 -0.000000000 * Time^3*cn/In^1 + -0.000000002 * Time^3*Aboard^1 + -0.000227710 *
 Time^3*Ground^1 + 0.000000000 * Time^2*Location^2 + -0.000000000 *
 Time^2*Location^1*Operator^1 + -0.000000000 * Time^2*Location^1*Flight #^1 + -
 0.000000000 * Time^2*Location^1*Route^1 + 0.000000000 * Time^2*Location^1*Type^1 + -
 0.000000000 * Time^2*Location^1*Registration^1 + -0.000000000 *
 Time^2*Location^1*cn/In^1 + 0.000000000 * Time^2*Location^1*Aboard^1 + 0.000039892 *

$$\begin{aligned}
& \text{Time}^2 * \text{Location}^1 * \text{Ground}^1 + 0.000000000 * \text{Time}^2 * \text{Operator}^2 + -0.000000000 * \\
& \text{Time}^2 * \text{Operator}^1 * \text{Flight} \#^1 + -0.000000000 * \text{Time}^2 * \text{Operator}^1 * \text{Route}^1 + 0.000000000 \\
& * \text{Time}^2 * \text{Operator}^1 * \text{Type}^1 + -0.000000000 * \text{Time}^2 * \text{Operator}^1 * \text{Registration}^1 + \\
& 0.000000000 * \text{Time}^2 * \text{Operator}^1 * \text{cn/In}^1 + 0.000000000 * \text{Time}^2 * \text{Operator}^1 * \text{Aboard}^1 + \\
& 0.000014609 * \text{Time}^2 * \text{Operator}^1 * \text{Ground}^1 + 0.000000000 * \text{Time}^2 * \text{Flight} \#^2 + \\
& 0.000000000 * \text{Time}^2 * \text{Flight} \#^1 * \text{Route}^1 + -0.000000000 * \text{Time}^2 * \text{Flight} \#^1 * \text{Type}^1 + \\
& 0.000000000 * \text{Time}^2 * \text{Flight} \#^1 * \text{Registration}^1 + 0.000000000 * \text{Time}^2 * \text{Flight} \#^1 * \text{cn/In}^1 \\
& + -0.000000001 * \text{Time}^2 * \text{Flight} \#^1 * \text{Aboard}^1 + 0.000224309 * \text{Time}^2 * \text{Flight} \\
& \#^1 * \text{Ground}^1 + -0.000000000 * \text{Time}^2 * \text{Route}^2 + 0.000000000 * \text{Time}^2 * \text{Route}^1 * \text{Type}^1 \\
& + -0.000000000 * \text{Time}^2 * \text{Route}^1 * \text{Registration}^1 + -0.000000000 * \text{Time}^2 * \text{Route}^1 * \text{cn/In}^1 \\
& + 0.000000000 * \text{Time}^2 * \text{Route}^1 * \text{Aboard}^1 + -0.000057908 * \text{Time}^2 * \text{Route}^1 * \text{Ground}^1 + - \\
& 0.000000000 * \text{Time}^2 * \text{Type}^2 + 0.000000000 * \text{Time}^2 * \text{Type}^1 * \text{Registration}^1 + \\
& 0.000000000 * \text{Time}^2 * \text{Type}^1 * \text{cn/In}^1 + -0.000000000 * \text{Time}^2 * \text{Type}^1 * \text{Aboard}^1 + \\
& 0.000022892 * \text{Time}^2 * \text{Type}^1 * \text{Ground}^1 + 0.000000000 * \text{Time}^2 * \text{Registration}^2 + \\
& 0.000000000 * \text{Time}^2 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000000 * \\
& \text{Time}^2 * \text{Registration}^1 * \text{Aboard}^1 + 0.000022842 * \text{Time}^2 * \text{Registration}^1 * \text{Ground}^1 + \\
& 0.000000000 * \text{Time}^2 * \text{cn/In}^2 + 0.000000000 * \text{Time}^2 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000006917 * \\
& \text{Time}^2 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000001 * \text{Time}^2 * \text{Aboard}^2 + 0.000069034 * \\
& \text{Time}^2 * \text{Aboard}^1 * \text{Ground}^1 + 0.000021737 * \text{Time}^2 * \text{Ground}^2 + -0.000000000 * \\
& \text{Time}^1 * \text{Location}^3 + 0.000000000 * \text{Time}^1 * \text{Location}^2 * \text{Operator}^1 + -0.000000000 * \\
& \text{Time}^1 * \text{Location}^2 * \text{Flight} \#^1 + -0.000000000 * \text{Time}^1 * \text{Location}^2 * \text{Route}^1 + -0.000000000 \\
& * \text{Time}^1 * \text{Location}^2 * \text{Type}^1 + 0.000000000 * \text{Time}^1 * \text{Location}^2 * \text{Registration}^1 + - \\
& 0.000000000 * \text{Time}^1 * \text{Location}^2 * \text{cn/In}^1 + -0.000000000 * \text{Time}^1 * \text{Location}^2 * \text{Aboard}^1 + \\
& 0.000005172 * \text{Time}^1 * \text{Location}^2 * \text{Ground}^1 + 0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Operator}^2 + -0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Flight} \#^1 \\
& + -0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Route}^1 + 0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Type}^1 + 0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Registration}^1 + -0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Operator}^1 * \text{cn/In}^1 + -0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Aboard}^1 + 0.000010997 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Ground}^1 + -0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Flight} \#^2 + \\
& 0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Flight} \#^1 * \text{Route}^1 + -0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Flight} \#^1 * \text{Type}^1 + -0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Flight} \\
& \#^1 * \text{Registration}^1 + -0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Flight} \#^1 * \text{cn/In}^1 + 0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Flight} \#^1 * \text{Aboard}^1 + -0.000099766 * \text{Time}^1 * \text{Location}^1 * \text{Flight} \\
& \#^1 * \text{Ground}^1 + -0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Route}^2 + 0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Route}^1 * \text{Type}^1 + 0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Route}^1 * \text{Registration}^1 + -0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Route}^1 * \text{Aboard}^1 + -0.000000710 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Route}^1 * \text{Ground}^1 + 0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Type}^2 + \\
& 0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Type}^1 * \text{Registration}^1 + 0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Type}^1 * \text{cn/In}^1 + -0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{Type}^1 * \text{Aboard}^1 \\
& + 0.000003757 * \text{Time}^1 * \text{Location}^1 * \text{Type}^1 * \text{Ground}^1 + 0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Registration}^2 + -0.000000000 * \\
& \text{Time}^1 * \text{Location}^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000000 *
\end{aligned}$$

$\text{Time}^1 * \text{Location}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000004538 *$
 $\text{Time}^1 * \text{Location}^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{cn/In}^2$
 $+ -0.000000000 * \text{Time}^1 * \text{Location}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000002591 *$
 $\text{Time}^1 * \text{Location}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000001 * \text{Time}^1 * \text{Location}^1 * \text{Aboard}^2 + -$
 $0.000190241 * \text{Time}^1 * \text{Location}^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000055513 *$
 $\text{Time}^1 * \text{Location}^1 * \text{Ground}^2 + 0.000000000 * \text{Time}^1 * \text{Operator}^3 + 0.000000000 *$
 $\text{Time}^1 * \text{Operator}^2 * \text{Flight} \#^1 + 0.000000000 * \text{Time}^1 * \text{Operator}^2 * \text{Route}^1 + 0.000000000$
 $* \text{Time}^1 * \text{Operator}^2 * \text{Type}^1 + -0.000000000 * \text{Time}^1 * \text{Operator}^2 * \text{Registration}^1 +$
 $0.000000000 * \text{Time}^1 * \text{Operator}^2 * \text{cn/In}^1 + 0.000000000 * \text{Time}^1 * \text{Operator}^2 * \text{Aboard}^1 +$
 $0.000033370 * \text{Time}^1 * \text{Operator}^2 * \text{Ground}^1 + 0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{Flight} \#^2$
 $+ 0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Route}^1 + -0.000000000 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Type}^1 + -0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{Flight}$
 $\#^1 * \text{Registration}^1 + -0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{Flight} \#^1 * \text{cn/In}^1 + -0.000000001$
 $* \text{Time}^1 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Aboard}^1 + -0.000126476 * \text{Time}^1 * \text{Operator}^1 * \text{Flight}$
 $\#^1 * \text{Ground}^1 + 0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{Route}^2 + -0.000000000 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Route}^1 * \text{Type}^1 + 0.000000000 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Route}^1 * \text{Registration}^1 + 0.000000000 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000000000 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Route}^1 * \text{Aboard}^1 + -0.000025839 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Route}^1 * \text{Ground}^1 + -0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{Type}^2 +$
 $0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{Type}^1 * \text{Registration}^1 + 0.000000000 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{Type}^1 * \text{Aboard}^1$
 $+ 0.000013554 * \text{Time}^1 * \text{Operator}^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000000 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Registration}^2 + -0.000000000 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000000 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000004376 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{cn/In}^2$
 $+ 0.000000000 * \text{Time}^1 * \text{Operator}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000001402 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000000001 * \text{Time}^1 * \text{Operator}^1 * \text{Aboard}^2 + -$
 $0.000057699 * \text{Time}^1 * \text{Operator}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000077460 *$
 $\text{Time}^1 * \text{Operator}^1 * \text{Ground}^2 + 0.000000000 * \text{Time}^1 * \text{Flight} \#^3 + 0.000000000 *$
 $\text{Time}^1 * \text{Flight} \#^2 * \text{Route}^1 + 0.000000000 * \text{Time}^1 * \text{Flight} \#^2 * \text{Type}^1 + 0.000000000 *$
 $\text{Time}^1 * \text{Flight} \#^2 * \text{Registration}^1 + 0.000000000 * \text{Time}^1 * \text{Flight} \#^2 * \text{cn/In}^1 + 0.000000005$
 $* \text{Time}^1 * \text{Flight} \#^2 * \text{Aboard}^1 + 0.000033696 * \text{Time}^1 * \text{Flight} \#^2 * \text{Ground}^1 + -$
 $0.000000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{Route}^2 + 0.000000000 * \text{Time}^1 * \text{Flight}$
 $\#^1 * \text{Route}^1 * \text{Type}^1 + 0.000000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{Registration}^1 +$
 $0.000000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{cn/In}^1 + 0.000000000 * \text{Time}^1 * \text{Flight}$
 $\#^1 * \text{Route}^1 * \text{Aboard}^1 + 0.000185666 * \text{Time}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{Ground}^1 + -$
 $0.000000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{Type}^2 + -0.000000000 * \text{Time}^1 * \text{Flight}$
 $\#^1 * \text{Type}^1 * \text{Registration}^1 + 0.000000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{Type}^1 * \text{cn/In}^1 + -$
 $0.000000001 * \text{Time}^1 * \text{Flight} \#^1 * \text{Type}^1 * \text{Aboard}^1 + -0.000124612 * \text{Time}^1 * \text{Flight}$
 $\#^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{Registration}^2 + 0.000000000 *$
 $\text{Time}^1 * \text{Flight} \#^1 * \text{Registration}^1 * \text{cn/In}^1 + 0.000000000 * \text{Time}^1 * \text{Flight}$
 $\#^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000016308 * \text{Time}^1 * \text{Flight} \#^1 * \text{Registration}^1 * \text{Ground}^1$
 $+ 0.000000000 * \text{Time}^1 * \text{Flight} \#^1 * \text{cn/In}^2 + 0.000000000 * \text{Time}^1 * \text{Flight}$
 $\#^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000010175 * \text{Time}^1 * \text{Flight} \#^1 * \text{cn/In}^1 * \text{Ground}^1 + -$

0.000000001 * Time^1*Flight #^1*Aboard^2 + -0.000000461 * Time^1*Flight
 #^1*Aboard^1*Ground^1 + -0.000026308 * Time^1*Flight #^1*Ground^2 + -0.000000000 *
 Time^1*Route^3 + -0.000000000 * Time^1*Route^2*Type^1 + 0.000000000 *
 Time^1*Route^2*Registration^1 + -0.000000000 * Time^1*Route^2*cn/In^1 + -0.000000000 *
 Time^1*Route^2*Aboard^1 + -0.000000662 * Time^1*Route^2*Ground^1 + -0.000000000 *
 Time^1*Route^1*Type^2 + 0.000000000 * Time^1*Route^1*Type^1*Registration^1 + -
 0.000000000 * Time^1*Route^1*Type^1*cn/In^1 + 0.000000000 *
 Time^1*Route^1*Type^1*Aboard^1 + -0.000003761 * Time^1*Route^1*Type^1*Ground^1 +
 0.000000000 * Time^1*Route^1*Registration^2 + -0.000000000 *
 Time^1*Route^1*Registration^1*cn/In^1 + -0.000000000 *
 Time^1*Route^1*Registration^1*Aboard^1 + 0.000001040 *
 Time^1*Route^1*Registration^1*Ground^1 + 0.000000000 * Time^1*Route^1*cn/In^2 +
 0.000000000 * Time^1*Route^1*cn/In^1*Aboard^1 + -0.000020218 *
 Time^1*Route^1*cn/In^1*Ground^1 + 0.000000001 * Time^1*Route^1*Aboard^2 + -
 0.000029481 * Time^1*Route^1*Aboard^1*Ground^1 + 0.000032170 *
 Time^1*Route^1*Ground^2 + 0.000000000 * Time^1*Type^3 + 0.000000000 *
 Time^1*Type^2*Registration^1 + 0.000000000 * Time^1*Type^2*cn/In^1 + -0.000000000 *
 Time^1*Type^2*Aboard^1 + 0.000022819 * Time^1*Type^2*Ground^1 + 0.000000000 *
 Time^1*Type^1*Registration^2 + 0.000000000 * Time^1*Type^1*Registration^1*cn/In^1 + -
 0.000000000 * Time^1*Type^1*Registration^1*Aboard^1 + 0.000003869 *
 Time^1*Type^1*Registration^1*Ground^1 + -0.000000000 * Time^1*Type^1*cn/In^2 +
 0.000000000 * Time^1*Type^1*cn/In^1*Aboard^1 + -0.000015546 *
 Time^1*Type^1*cn/In^1*Ground^1 + -0.000000002 * Time^1*Type^1*Aboard^2 +
 0.000134973 * Time^1*Type^1*Aboard^1*Ground^1 + 0.000029725 *
 Time^1*Type^1*Ground^2 + -0.000000000 * Time^1*Registration^3 + -0.000000000 *
 Time^1*Registration^2*cn/In^1 + -0.000000000 * Time^1*Registration^2*Aboard^1 +
 0.000000526 * Time^1*Registration^2*Ground^1 + -0.000000000 *
 Time^1*Registration^1*cn/In^2 + -0.000000000 * Time^1*Registration^1*cn/In^1*Aboard^1 +
 -0.000002525 * Time^1*Registration^1*cn/In^1*Ground^1 + 0.000000001 *
 Time^1*Registration^1*Aboard^2 + 0.000280301 *
 Time^1*Registration^1*Aboard^1*Ground^1 + -0.000102065 *
 Time^1*Registration^1*Ground^2 + 0.000000000 * Time^1*cn/In^3 + -0.000000000 *
 Time^1*cn/In^2*Aboard^1 + 0.000011066 * Time^1*cn/In^2*Ground^1 + -0.000000000 *
 Time^1*cn/In^1*Aboard^2 + 0.000089384 * Time^1*cn/In^1*Aboard^1*Ground^1 +
 0.000056418 * Time^1*cn/In^1*Ground^2 + 0.000000042 * Time^1*Aboard^3 + -0.000003245
 * Time^1*Aboard^2*Ground^1 + -0.000008806 * Time^1*Aboard^1*Ground^2 + -
 0.000001335 * Time^1*Ground^3 + 0.000000000 * Location^4 + 0.000000000 *
 Location^3*Operator^1 + 0.000000000 * Location^3*Flight #^1 + 0.000000000 *
 Location^3*Route^1 + 0.000000000 * Location^3*Type^1 + -0.000000000 *
 Location^3*Registration^1 + 0.000000000 * Location^3*cn/In^1 + -0.000000000 *
 Location^3*Aboard^1 + -0.000001311 * Location^3*Ground^1 + -0.000000000 *
 Location^2*Operator^2 + 0.000000000 * Location^2*Operator^1*Flight #^1 + 0.000000000 *
 Location^2*Operator^1*Route^1 + 0.000000000 * Location^2*Operator^1*Type^1 +
 0.000000000 * Location^2*Operator^1*Registration^1 + -0.000000000 *
 Location^2*Operator^1*cn/In^1 + -0.000000000 * Location^2*Operator^1*Aboard^1 +
 0.000007922 * Location^2*Operator^1*Ground^1 + 0.000000000 * Location^2*Flight #^2 + -

0.000000000 * Location^2*Flight #^1*Route^1 + 0.000000000 * Location^2*Flight
 #^1*Type^1 + -0.000000000 * Location^2*Flight #^1*Registration^1 + -0.000000000 *
 Location^2*Flight #^1*cn/In^1 + -0.000000000 * Location^2*Flight #^1*Aboard^1 + -
 0.000007183 * Location^2*Flight #^1*Ground^1 + -0.000000000 * Location^2*Route^2 +
 0.000000000 * Location^2*Route^1*Type^1 + -0.000000000 *
 Location^2*Route^1*Registration^1 + 0.000000000 * Location^2*Route^1*cn/In^1 + -
 0.000000000 * Location^2*Route^1*Aboard^1 + -0.000002993 *
 Location^2*Route^1*Ground^1 + -0.000000000 * Location^2*Type^2 + -0.000000000 *
 Location^2*Type^1*Registration^1 + -0.000000000 * Location^2*Type^1*cn/In^1 + -
 0.000000000 * Location^2*Type^1*Aboard^1 + 0.000002990 * Location^2*Type^1*Ground^1
 + -0.000000000 * Location^2*Registration^2 + -0.000000000 *
 Location^2*Registration^1*cn/In^1 + -0.000000000 * Location^2*Registration^1*Aboard^1 +
 0.000000621 * Location^2*Registration^1*Ground^1 + 0.000000000 * Location^2*cn/In^2 +
 0.000000000 * Location^2*cn/In^1*Aboard^1 + -0.000000920 * Location^2*cn/In^1*Ground^1
 + -0.000000000 * Location^2*Aboard^2 + -0.000026401 * Location^2*Aboard^1*Ground^1 + -
 0.000066909 * Location^2*Ground^2 + 0.000000000 * Location^1*Operator^3 + -0.000000000
 * Location^1*Operator^2*Flight #^1 + 0.000000000 * Location^1*Operator^2*Route^1 + -
 0.000000000 * Location^1*Operator^2*Type^1 + 0.000000000 *
 Location^1*Operator^2*Registration^1 + -0.000000000 * Location^1*Operator^2*cn/In^1 + -
 0.000000000 * Location^1*Operator^2*Aboard^1 + -0.000009369 *
 Location^1*Operator^2*Ground^1 + -0.000000000 * Location^1*Operator^1*Flight #^2 +
 0.000000000 * Location^1*Operator^1*Flight #^1*Route^1 + 0.000000000 *
 Location^1*Operator^1*Flight #^1*Type^1 + -0.000000000 * Location^1*Operator^1*Flight
 #^1*Registration^1 + 0.000000000 * Location^1*Operator^1*Flight #^1*cn/In^1 + -
 0.000000000 * Location^1*Operator^1*Flight #^1*Aboard^1 + -0.000029005 *
 Location^1*Operator^1*Flight #^1*Ground^1 + 0.000000000 *
 Location^1*Operator^1*Route^2 + -0.000000000 * Location^1*Operator^1*Route^1*Type^1 +
 -0.000000000 * Location^1*Operator^1*Route^1*Registration^1 + -0.000000000 *
 Location^1*Operator^1*Route^1*cn/In^1 + 0.000000000 *
 Location^1*Operator^1*Route^1*Aboard^1 + -0.000002358 *
 Location^1*Operator^1*Route^1*Ground^1 + 0.000000000 * Location^1*Operator^1*Type^2
 + -0.000000000 * Location^1*Operator^1*Type^1*Registration^1 + -0.000000000 *
 Location^1*Operator^1*Type^1*cn/In^1 + 0.000000000 *
 Location^1*Operator^1*Type^1*Aboard^1 + 0.000003936 *
 Location^1*Operator^1*Type^1*Ground^1 + 0.000000000 *
 Location^1*Operator^1*Registration^2 + -0.000000000 *
 Location^1*Operator^1*Registration^1*cn/In^1 + -0.000000000 *
 Location^1*Operator^1*Registration^1*Aboard^1 + 0.000002875 *
 Location^1*Operator^1*Registration^1*Ground^1 + 0.000000000 *
 Location^1*Operator^1*cn/In^2 + 0.000000000 * Location^1*Operator^1*cn/In^1*Aboard^1 +
 0.000001326 * Location^1*Operator^1*cn/In^1*Ground^1 + -0.000000000 *
 Location^1*Operator^1*Aboard^2 + 0.000085128 *
 Location^1*Operator^1*Aboard^1*Ground^1 + -0.000229579 *
 Location^1*Operator^1*Ground^2 + 0.000000000 * Location^1*Flight #^3 + -0.000000000 *
 Location^1*Flight #^2*Route^1 + -0.000000000 * Location^1*Flight #^2*Type^1 +
 0.000000000 * Location^1*Flight #^2*Registration^1 + 0.000000000 * Location^1*Flight


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#^2*cn/In^1 + -0.0000000001 * Location^1*Flight #^2*Aboard^1 + 0.000100838 *
Location^1*Flight #^2*Ground^1 + 0.0000000000 * Location^1*Flight #^1*Route^2 + -
0.0000000000 * Location^1*Flight #^1*Route^1*Type^1 + 0.0000000000 * Location^1*Flight
#^1*Route^1*Registration^1 + 0.0000000000 * Location^1*Flight #^1*Route^1*cn/In^1 + -
0.0000000000 * Location^1*Flight #^1*Route^1*Aboard^1 + 0.000019235 * Location^1*Flight
#^1*Route^1*Ground^1 + 0.0000000000 * Location^1*Flight #^1*Type^2 + -0.0000000000 *
Location^1*Flight #^1*Type^1*Registration^1 + 0.0000000000 * Location^1*Flight
#^1*Type^1*cn/In^1 + 0.0000000000 * Location^1*Flight #^1*Type^1*Aboard^1 + -
0.000019228 * Location^1*Flight #^1*Type^1*Ground^1 + -0.0000000000 * Location^1*Flight
#^1*Registration^2 + 0.0000000000 * Location^1*Flight #^1*Registration^1*cn/In^1 + -
0.0000000000 * Location^1*Flight #^1*Registration^1*Aboard^1 + -0.000006089 *
Location^1*Flight #^1*Registration^1*Ground^1 + 0.0000000000 * Location^1*Flight
#^1*cn/In^2 + 0.0000000000 * Location^1*Flight #^1*cn/In^1*Aboard^1 + -0.000032778 *
Location^1*Flight #^1*cn/In^1*Ground^1 + -0.0000000001 * Location^1*Flight #^1*Aboard^2
+ -0.000173426 * Location^1*Flight #^1*Aboard^1*Ground^1 + -0.000040450 *
Location^1*Flight #^1*Ground^2 + -0.0000000000 * Location^1*Route^3 + 0.0000000000 *
Location^1*Route^2*Type^1 + 0.0000000000 * Location^1*Route^2*Registration^1 + -
0.0000000000 * Location^1*Route^2*cn/In^1 + 0.0000000000 * Location^1*Route^2*Aboard^1
+ 0.0000000403 * Location^1*Route^2*Ground^1 + -0.0000000000 *
Location^1*Route^1*Type^2 + -0.0000000000 * Location^1*Route^1*Type^1*Registration^1 +
0.0000000000 * Location^1*Route^1*Type^1*cn/In^1 + 0.0000000000 *
Location^1*Route^1*Type^1*Aboard^1 + -0.000008597 *
Location^1*Route^1*Type^1*Ground^1 + 0.0000000000 * Location^1*Route^1*Registration^2
+ 0.0000000000 * Location^1*Route^1*Registration^1*cn/In^1 + 0.0000000000 *
Location^1*Route^1*Registration^1*Aboard^1 + -0.000000542 *
Location^1*Route^1*Registration^1*Ground^1 + 0.0000000000 * Location^1*Route^1*cn/In^2
+ 0.0000000000 * Location^1*Route^1*cn/In^1*Aboard^1 + 0.000003985 *
Location^1*Route^1*cn/In^1*Ground^1 + 0.0000000000 * Location^1*Route^1*Aboard^2 +
0.000158521 * Location^1*Route^1*Aboard^1*Ground^1 + 0.000038970 *
Location^1*Route^1*Ground^2 + 0.0000000000 * Location^1*Type^3 + -0.0000000000 *
Location^1*Type^2*Registration^1 + 0.0000000000 * Location^1*Type^2*cn/In^1 +
0.0000000000 * Location^1*Type^2*Aboard^1 + -0.000002095 * Location^1*Type^2*Ground^1
+ 0.0000000000 * Location^1*Type^1*Registration^2 + -0.0000000000 *
Location^1*Type^1*Registration^1*cn/In^1 + -0.0000000000 *
Location^1*Type^1*Registration^1*Aboard^1 + 0.000003507 *
Location^1*Type^1*Registration^1*Ground^1 + 0.0000000000 * Location^1*Type^1*cn/In^2 +
-0.0000000000 * Location^1*Type^1*cn/In^1*Aboard^1 + 0.000004257 *
Location^1*Type^1*cn/In^1*Ground^1 + 0.0000000001 * Location^1*Type^1*Aboard^2 + -
0.000162240 * Location^1*Type^1*Aboard^1*Ground^1 + -0.000061896 *
Location^1*Type^1*Ground^2 + -0.0000000000 * Location^1*Registration^3 + -0.0000000000 *
Location^1*Registration^2*cn/In^1 + -0.0000000000 * Location^1*Registration^2*Aboard^1 + -
0.000002454 * Location^1*Registration^2*Ground^1 + -0.0000000000 *
Location^1*Registration^1*cn/In^2 + -0.0000000000 *
Location^1*Registration^1*cn/In^1*Aboard^1 + -0.000001634 *
Location^1*Registration^1*cn/In^1*Ground^1 + 0.0000000000 *
Location^1*Registration^1*Aboard^2 + -0.000019205 *

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$\text{Location}^1 * \text{Registration}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000117416 * \\
\text{Location}^1 * \text{Registration}^1 * \text{Ground}^2 + -0.000000000 * \text{Location}^1 * \text{cn}/\text{In}^3 + -0.000000000 * \\
\text{Location}^1 * \text{cn}/\text{In}^2 * \text{Aboard}^1 + 0.000005547 * \text{Location}^1 * \text{cn}/\text{In}^2 * \text{Ground}^1 + 0.000000000 \\
* \text{Location}^1 * \text{cn}/\text{In}^1 * \text{Aboard}^2 + 0.000016547 * \text{Location}^1 * \text{cn}/\text{In}^1 * \text{Aboard}^1 * \text{Ground}^1 + \\
0.000145294 * \text{Location}^1 * \text{cn}/\text{In}^1 * \text{Ground}^2 + -0.000000003 * \text{Location}^1 * \text{Aboard}^3 + \\
0.000007548 * \text{Location}^1 * \text{Aboard}^2 * \text{Ground}^1 + -0.000006878 * \\
\text{Location}^1 * \text{Aboard}^1 * \text{Ground}^2 + -0.000007768 * \text{Location}^1 * \text{Ground}^3 + 0.000000000 * \\
\text{Operator}^4 + -0.000000000 * \text{Operator}^3 * \text{Flight} \#^1 + -0.000000000 * \text{Operator}^3 * \text{Route}^1 + \\
0.000000000 * \text{Operator}^3 * \text{Type}^1 + 0.000000000 * \text{Operator}^3 * \text{Registration}^1 + - \\
0.000000000 * \text{Operator}^3 * \text{cn}/\text{In}^1 + -0.000000000 * \text{Operator}^3 * \text{Aboard}^1 + -0.000006291 * \\
\text{Operator}^3 * \text{Ground}^1 + 0.000000000 * \text{Operator}^2 * \text{Flight} \#^2 + -0.000000000 * \\
\text{Operator}^2 * \text{Flight} \#^1 * \text{Route}^1 + -0.000000000 * \text{Operator}^2 * \text{Flight} \#^1 * \text{Type}^1 + \\
0.000000000 * \text{Operator}^2 * \text{Flight} \#^1 * \text{Registration}^1 + -0.000000000 * \text{Operator}^2 * \text{Flight} \\
\#^1 * \text{cn}/\text{In}^1 + 0.000000000 * \text{Operator}^2 * \text{Flight} \#^1 * \text{Aboard}^1 + -0.000014799 * \\
\text{Operator}^2 * \text{Flight} \#^1 * \text{Ground}^1 + -0.000000000 * \text{Operator}^2 * \text{Route}^2 + -0.000000000 * \\
\text{Operator}^2 * \text{Route}^1 * \text{Type}^1 + 0.000000000 * \text{Operator}^2 * \text{Route}^1 * \text{Registration}^1 + \\
0.000000000 * \text{Operator}^2 * \text{Route}^1 * \text{cn}/\text{In}^1 + -0.000000000 * \text{Operator}^2 * \text{Route}^1 * \text{Aboard}^1 \\
+ -0.000004279 * \text{Operator}^2 * \text{Route}^1 * \text{Ground}^1 + 0.000000000 * \text{Operator}^2 * \text{Type}^2 + - \\
0.000000000 * \text{Operator}^2 * \text{Type}^1 * \text{Registration}^1 + -0.000000000 * \\
\text{Operator}^2 * \text{Type}^1 * \text{cn}/\text{In}^1 + -0.000000000 * \text{Operator}^2 * \text{Type}^1 * \text{Aboard}^1 + 0.000017647 * \\
\text{Operator}^2 * \text{Type}^1 * \text{Ground}^1 + -0.000000000 * \text{Operator}^2 * \text{Registration}^2 + -0.000000000 * \\
\text{Operator}^2 * \text{Registration}^1 * \text{cn}/\text{In}^1 + -0.000000000 * \text{Operator}^2 * \text{Registration}^1 * \text{Aboard}^1 + - \\
0.000001784 * \text{Operator}^2 * \text{Registration}^1 * \text{Ground}^1 + 0.000000000 * \text{Operator}^2 * \text{cn}/\text{In}^2 + \\
0.000000000 * \text{Operator}^2 * \text{cn}/\text{In}^1 * \text{Aboard}^1 + -0.000010237 * \text{Operator}^2 * \text{cn}/\text{In}^1 * \text{Ground}^1 \\
+ 0.000000000 * \text{Operator}^2 * \text{Aboard}^2 + -0.000011873 * \text{Operator}^2 * \text{Aboard}^1 * \text{Ground}^1 + \\
0.000093543 * \text{Operator}^2 * \text{Ground}^2 + -0.000000000 * \text{Operator}^1 * \text{Flight} \#^3 + -0.000000000 \\
* \text{Operator}^1 * \text{Flight} \#^2 * \text{Route}^1 + 0.000000000 * \text{Operator}^1 * \text{Flight} \#^2 * \text{Type}^1 + - \\
0.000000000 * \text{Operator}^1 * \text{Flight} \#^2 * \text{Registration}^1 + -0.000000000 * \text{Operator}^1 * \text{Flight} \\
\#^2 * \text{cn}/\text{In}^1 + -0.000000001 * \text{Operator}^1 * \text{Flight} \#^2 * \text{Aboard}^1 + 0.000128965 * \\
\text{Operator}^1 * \text{Flight} \#^2 * \text{Ground}^1 + 0.000000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Route}^2 + \\
0.000000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{Type}^1 + 0.000000000 * \text{Operator}^1 * \text{Flight} \\
\#^1 * \text{Route}^1 * \text{Registration}^1 + 0.000000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{cn}/\text{In}^1 + \\
0.000000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Route}^1 * \text{Aboard}^1 + 0.000023674 * \text{Operator}^1 * \text{Flight} \\
\#^1 * \text{Route}^1 * \text{Ground}^1 + -0.000000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Type}^2 + -0.000000000 * \\
\text{Operator}^1 * \text{Flight} \#^1 * \text{Type}^1 * \text{Registration}^1 + -0.000000000 * \text{Operator}^1 * \text{Flight} \\
\#^1 * \text{Type}^1 * \text{cn}/\text{In}^1 + -0.000000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Type}^1 * \text{Aboard}^1 + \\
0.000002021 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Type}^1 * \text{Ground}^1 + 0.000000000 * \text{Operator}^1 * \text{Flight} \\
\#^1 * \text{Registration}^2 + 0.000000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Registration}^1 * \text{cn}/\text{In}^1 + - \\
0.000000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Registration}^1 * \text{Aboard}^1 + 0.000016686 * \\
\text{Operator}^1 * \text{Flight} \#^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000000 * \text{Operator}^1 * \text{Flight} \\
\#^1 * \text{cn}/\text{In}^2 + -0.000000000 * \text{Operator}^1 * \text{Flight} \#^1 * \text{cn}/\text{In}^1 * \text{Aboard}^1 + -0.000014231 * \\
\text{Operator}^1 * \text{Flight} \#^1 * \text{cn}/\text{In}^1 * \text{Ground}^1 + -0.000000004 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Aboard}^2 \\
+ -0.000197078 * \text{Operator}^1 * \text{Flight} \#^1 * \text{Aboard}^1 * \text{Ground}^1 + -0.000021741 * \\
\text{Operator}^1 * \text{Flight} \#^1 * \text{Ground}^2 + 0.000000000 * \text{Operator}^1 * \text{Route}^3 + 0.000000000 * \\
\text{Operator}^1 * \text{Route}^2 * \text{Type}^1 + 0.000000000 * \text{Operator}^1 * \text{Route}^2 * \text{Registration}^1 + \\
0.000000000 * \text{Operator}^1 * \text{Route}^2 * \text{cn}/\text{In}^1 + -0.000000000 * \text{Operator}^1 * \text{Route}^2 * \text{Aboard}^1$

$$\begin{aligned}
& + -0.000000863 * \text{Operator}^1 * \text{Route}^2 * \text{Ground}^1 + -0.000000000 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Type}^2 + 0.000000000 * \text{Operator}^1 * \text{Route}^1 * \text{Type}^1 * \text{Registration}^1 + - \\
& 0.000000000 * \text{Operator}^1 * \text{Route}^1 * \text{Type}^1 * \text{cn/In}^1 + 0.000000000 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Type}^1 * \text{Aboard}^1 + -0.000005521 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Type}^1 * \text{Ground}^1 + -0.000000000 * \text{Operator}^1 * \text{Route}^1 * \text{Registration}^2 \\
& + -0.000000000 * \text{Operator}^1 * \text{Route}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000000 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000001124 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Registration}^1 * \text{Ground}^1 + -0.000000000 * \text{Operator}^1 * \text{Route}^1 * \text{cn/In}^2 \\
& + 0.000000000 * \text{Operator}^1 * \text{Route}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000003902 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{cn/In}^1 * \text{Ground}^1 + 0.000000001 * \text{Operator}^1 * \text{Route}^1 * \text{Aboard}^2 + - \\
& 0.000205864 * \text{Operator}^1 * \text{Route}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000189617 * \\
& \text{Operator}^1 * \text{Route}^1 * \text{Ground}^2 + -0.000000000 * \text{Operator}^1 * \text{Type}^3 + -0.000000000 * \\
& \text{Operator}^1 * \text{Type}^2 * \text{Registration}^1 + -0.000000000 * \text{Operator}^1 * \text{Type}^2 * \text{cn/In}^1 + - \\
& 0.000000000 * \text{Operator}^1 * \text{Type}^2 * \text{Aboard}^1 + 0.000002648 * \text{Operator}^1 * \text{Type}^2 * \text{Ground}^1 \\
& + 0.000000000 * \text{Operator}^1 * \text{Type}^1 * \text{Registration}^2 + -0.000000000 * \\
& \text{Operator}^1 * \text{Type}^1 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000000 * \\
& \text{Operator}^1 * \text{Type}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000003765 * \\
& \text{Operator}^1 * \text{Type}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.000000000 * \text{Operator}^1 * \text{Type}^1 * \text{cn/In}^2 + \\
& -0.000000000 * \text{Operator}^1 * \text{Type}^1 * \text{cn/In}^1 * \text{Aboard}^1 + -0.000001120 * \\
& \text{Operator}^1 * \text{Type}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000001 * \text{Operator}^1 * \text{Type}^1 * \text{Aboard}^2 + \\
& 0.000074995 * \text{Operator}^1 * \text{Type}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000106763 * \\
& \text{Operator}^1 * \text{Type}^1 * \text{Ground}^2 + 0.000000000 * \text{Operator}^1 * \text{Registration}^3 + 0.000000000 * \\
& \text{Operator}^1 * \text{Registration}^2 * \text{cn/In}^1 + 0.000000000 * \text{Operator}^1 * \text{Registration}^2 * \text{Aboard}^1 + \\
& 0.000001885 * \text{Operator}^1 * \text{Registration}^2 * \text{Ground}^1 + -0.000000000 * \\
& \text{Operator}^1 * \text{Registration}^1 * \text{cn/In}^2 + 0.000000000 * \\
& \text{Operator}^1 * \text{Registration}^1 * \text{cn/In}^1 * \text{Aboard}^1 + 0.000006598 * \\
& \text{Operator}^1 * \text{Registration}^1 * \text{cn/In}^1 * \text{Ground}^1 + -0.000000000 * \\
& \text{Operator}^1 * \text{Registration}^1 * \text{Aboard}^2 + -0.000058454 * \\
& \text{Operator}^1 * \text{Registration}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000004377 * \\
& \text{Operator}^1 * \text{Registration}^1 * \text{Ground}^2 + -0.000000000 * \text{Operator}^1 * \text{cn/In}^3 + -0.000000000 * \\
& \text{Operator}^1 * \text{cn/In}^2 * \text{Aboard}^1 + -0.000006905 * \text{Operator}^1 * \text{cn/In}^2 * \text{Ground}^1 + \\
& 0.000000000 * \text{Operator}^1 * \text{cn/In}^1 * \text{Aboard}^2 + -0.000012627 * \\
& \text{Operator}^1 * \text{cn/In}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000204161 * \text{Operator}^1 * \text{cn/In}^1 * \text{Ground}^2 + \\
& 0.000000005 * \text{Operator}^1 * \text{Aboard}^3 + 0.000036755 * \text{Operator}^1 * \text{Aboard}^2 * \text{Ground}^1 + - \\
& 0.000018763 * \text{Operator}^1 * \text{Aboard}^1 * \text{Ground}^2 + 0.000000656 * \text{Operator}^1 * \text{Ground}^3 + \\
& 0.000000001 * \text{Flight} \#^4 + 0.000000000 * \text{Flight} \#^3 * \text{Route}^1 + 0.000000000 * \text{Flight} \\
& \#^3 * \text{Type}^1 + 0.000000000 * \text{Flight} \#^3 * \text{Registration}^1 + -0.000000000 * \text{Flight} \#^3 * \text{cn/In}^1 + \\
& -0.000000004 * \text{Flight} \#^3 * \text{Aboard}^1 + -0.000144420 * \text{Flight} \#^3 * \text{Ground}^1 + 0.000000000 * \\
& \text{Flight} \#^2 * \text{Route}^2 + 0.000000000 * \text{Flight} \#^2 * \text{Route}^1 * \text{Type}^1 + 0.000000000 * \text{Flight} \\
& \#^2 * \text{Route}^1 * \text{Registration}^1 + 0.000000000 * \text{Flight} \#^2 * \text{Route}^1 * \text{cn/In}^1 + 0.000000000 * \\
& \text{Flight} \#^2 * \text{Route}^1 * \text{Aboard}^1 + -0.000087194 * \text{Flight} \#^2 * \text{Route}^1 * \text{Ground}^1 + - \\
& 0.000000000 * \text{Flight} \#^2 * \text{Type}^2 + 0.000000000 * \text{Flight} \#^2 * \text{Type}^1 * \text{Registration}^1 + \\
& 0.000000000 * \text{Flight} \#^2 * \text{Type}^1 * \text{cn/In}^1 + 0.000000001 * \text{Flight} \#^2 * \text{Type}^1 * \text{Aboard}^1 + - \\
& 0.000024546 * \text{Flight} \#^2 * \text{Type}^1 * \text{Ground}^1 + 0.000000000 * \text{Flight} \#^2 * \text{Registration}^2 + \\
& 0.000000000 * \text{Flight} \#^2 * \text{Registration}^1 * \text{cn/In}^1 + -0.000000000 * \text{Flight} \\
& \#^2 * \text{Registration}^1 * \text{Aboard}^1 + -0.000080339 * \text{Flight} \#^2 * \text{Registration}^1 * \text{Ground}^1 +
\end{aligned}$$

0.000000000 * Flight #^2*cn/In^2 + 0.000000001 * Flight #^2*cn/In^1*Aboard^1 +
 0.000088945 * Flight #^2*cn/In^1*Ground^1 + -0.000000009 * Flight #^2*Aboard^2 + -
 0.000049482 * Flight #^2*Aboard^1*Ground^1 + -0.000070534 * Flight #^2*Ground^2 + -
 0.000000000 * Flight #^1*Route^3 + 0.000000000 * Flight #^1*Route^2*Type^1 + -
 0.000000000 * Flight #^1*Route^2*Registration^1 + 0.000000000 * Flight
 #^1*Route^2*cn/In^1 + -0.000000000 * Flight #^1*Route^2*Aboard^1 + 0.000006373 * Flight
 #^1*Route^2*Ground^1 + -0.000000000 * Flight #^1*Route^1*Type^2 + 0.000000000 * Flight
 #^1*Route^1*Type^1*Registration^1 + -0.000000000 * Flight #^1*Route^1*Type^1*cn/In^1 +
 -0.000000000 * Flight #^1*Route^1*Type^1*Aboard^1 + -0.000019711 * Flight
 #^1*Route^1*Type^1*Ground^1 + 0.000000000 * Flight #^1*Route^1*Registration^2 + -
 0.000000000 * Flight #^1*Route^1*Registration^1*cn/In^1 + -0.000000000 * Flight
 #^1*Route^1*Registration^1*Aboard^1 + -0.000020428 * Flight
 #^1*Route^1*Registration^1*Ground^1 + -0.000000000 * Flight #^1*Route^1*cn/In^2 + -
 0.000000000 * Flight #^1*Route^1*cn/In^1*Aboard^1 + 0.000015090 * Flight
 #^1*Route^1*cn/In^1*Ground^1 + 0.000000000 * Flight #^1*Route^1*Aboard^2 +
 0.000075683 * Flight #^1*Route^1*Aboard^1*Ground^1 + -0.000146123 * Flight
 #^1*Route^1*Ground^2 + -0.000000000 * Flight #^1*Type^3 + -0.000000000 * Flight
 #^1*Type^2*Registration^1 + -0.000000000 * Flight #^1*Type^2*cn/In^1 + -0.000000001 *
 Flight #^1*Type^2*Aboard^1 + 0.000064290 * Flight #^1*Type^2*Ground^1 + 0.000000000 *
 Flight #^1*Type^1*Registration^2 + 0.000000000 * Flight #^1*Type^1*Registration^1*cn/In^1
 + 0.000000000 * Flight #^1*Type^1*Registration^1*Aboard^1 + 0.000010765 * Flight
 #^1*Type^1*Registration^1*Ground^1 + -0.000000000 * Flight #^1*Type^1*cn/In^2 + -
 0.000000000 * Flight #^1*Type^1*cn/In^1*Aboard^1 + -0.000028982 * Flight
 #^1*Type^1*cn/In^1*Ground^1 + -0.000000002 * Flight #^1*Type^1*Aboard^2 +
 0.000108166 * Flight #^1*Type^1*Aboard^1*Ground^1 + -0.000083257 * Flight
 #^1*Type^1*Ground^2 + -0.000000000 * Flight #^1*Registration^3 + -0.000000000 * Flight
 #^1*Registration^2*cn/In^1 + 0.000000000 * Flight #^1*Registration^2*Aboard^1 +
 0.000014355 * Flight #^1*Registration^2*Ground^1 + 0.000000000 * Flight
 #^1*Registration^1*cn/In^2 + 0.000000000 * Flight #^1*Registration^1*cn/In^1*Aboard^1 + -
 0.000004723 * Flight #^1*Registration^1*cn/In^1*Ground^1 + -0.000000002 * Flight
 #^1*Registration^1*Aboard^2 + -0.000073109 * Flight
 #^1*Registration^1*Aboard^1*Ground^1 + -0.000106033 * Flight
 #^1*Registration^1*Ground^2 + 0.000000000 * Flight #^1*cn/In^3 + -0.000000000 * Flight
 #^1*cn/In^2*Aboard^1 + -0.000011345 * Flight #^1*cn/In^2*Ground^1 + 0.000000004 * Flight
 #^1*cn/In^1*Aboard^2 + 0.000179767 * Flight #^1*cn/In^1*Aboard^1*Ground^1 + -
 0.000134137 * Flight #^1*cn/In^1*Ground^2 + -0.000000089 * Flight #^1*Aboard^3 + -
 0.000022074 * Flight #^1*Aboard^2*Ground^1 + -0.000007957 * Flight
 #^1*Aboard^1*Ground^2 + -0.000004838 * Flight #^1*Ground^3 + 0.000000000 * Route^4 + -
 0.000000000 * Route^3*Type^1 + -0.000000000 * Route^3*Registration^1 + 0.000000000 *
 Route^3*cn/In^1 + -0.000000000 * Route^3*Aboard^1 + 0.000000082 * Route^3*Ground^1 + -
 0.000000000 * Route^2*Type^2 + 0.000000000 * Route^2*Type^1*Registration^1 +
 0.000000000 * Route^2*Type^1*cn/In^1 + -0.000000000 * Route^2*Type^1*Aboard^1 +
 0.000004053 * Route^2*Type^1*Ground^1 + -0.000000000 * Route^2*Registration^2 +
 0.000000000 * Route^2*Registration^1*cn/In^1 + -0.000000000 *
 Route^2*Registration^1*Aboard^1 + 0.000006377 * Route^2*Registration^1*Ground^1 +
 0.000000000 * Route^2*cn/In^2 + -0.000000000 * Route^2*cn/In^1*Aboard^1 + -0.000003348

$$\begin{aligned}
& * \text{Route}^2 * \text{cn} / \text{In}^1 * \text{Ground}^1 + -0.0000000001 * \text{Route}^2 * \text{Aboard}^2 + 0.000044291 * \\
& \text{Route}^2 * \text{Aboard}^1 * \text{Ground}^1 + 0.000066020 * \text{Route}^2 * \text{Ground}^2 + -0.0000000000 * \\
& \text{Route}^1 * \text{Type}^3 + -0.0000000000 * \text{Route}^1 * \text{Type}^2 * \text{Registration}^1 + -0.0000000000 * \\
& \text{Route}^1 * \text{Type}^2 * \text{cn} / \text{In}^1 + 0.0000000000 * \text{Route}^1 * \text{Type}^2 * \text{Aboard}^1 + 0.000001074 * \\
& \text{Route}^1 * \text{Type}^2 * \text{Ground}^1 + 0.0000000000 * \text{Route}^1 * \text{Type}^1 * \text{Registration}^2 + 0.0000000000 \\
& * \text{Route}^1 * \text{Type}^1 * \text{Registration}^1 * \text{cn} / \text{In}^1 + -0.0000000000 * \\
& \text{Route}^1 * \text{Type}^1 * \text{Registration}^1 * \text{Aboard}^1 + -0.000005665 * \\
& \text{Route}^1 * \text{Type}^1 * \text{Registration}^1 * \text{Ground}^1 + 0.0000000000 * \text{Route}^1 * \text{Type}^1 * \text{cn} / \text{In}^2 + \\
& 0.0000000000 * \text{Route}^1 * \text{Type}^1 * \text{cn} / \text{In}^1 * \text{Aboard}^1 + 0.000003343 * \\
& \text{Route}^1 * \text{Type}^1 * \text{cn} / \text{In}^1 * \text{Ground}^1 + 0.0000000000 * \text{Route}^1 * \text{Type}^1 * \text{Aboard}^2 + \\
& 0.000032378 * \text{Route}^1 * \text{Type}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000093041 * \\
& \text{Route}^1 * \text{Type}^1 * \text{Ground}^2 + -0.0000000000 * \text{Route}^1 * \text{Registration}^3 + -0.0000000000 * \\
& \text{Route}^1 * \text{Registration}^2 * \text{cn} / \text{In}^1 + 0.0000000000 * \text{Route}^1 * \text{Registration}^2 * \text{Aboard}^1 + \\
& 0.000000318 * \text{Route}^1 * \text{Registration}^2 * \text{Ground}^1 + 0.0000000000 * \\
& \text{Route}^1 * \text{Registration}^1 * \text{cn} / \text{In}^2 + -0.0000000000 * \text{Route}^1 * \text{Registration}^1 * \text{cn} / \text{In}^1 * \text{Aboard}^1 \\
& + -0.000000889 * \text{Route}^1 * \text{Registration}^1 * \text{cn} / \text{In}^1 * \text{Ground}^1 + -0.0000000001 * \\
& \text{Route}^1 * \text{Registration}^1 * \text{Aboard}^2 + -0.000127289 * \\
& \text{Route}^1 * \text{Registration}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000055456 * \\
& \text{Route}^1 * \text{Registration}^1 * \text{Ground}^2 + 0.0000000000 * \text{Route}^1 * \text{cn} / \text{In}^3 + -0.0000000000 * \\
& \text{Route}^1 * \text{cn} / \text{In}^2 * \text{Aboard}^1 + 0.000000058 * \text{Route}^1 * \text{cn} / \text{In}^2 * \text{Ground}^1 + 0.0000000000 * \\
& \text{Route}^1 * \text{cn} / \text{In}^1 * \text{Aboard}^2 + 0.000032177 * \text{Route}^1 * \text{cn} / \text{In}^1 * \text{Aboard}^1 * \text{Ground}^1 + - \\
& 0.000053178 * \text{Route}^1 * \text{cn} / \text{In}^1 * \text{Ground}^2 + 0.0000000004 * \text{Route}^1 * \text{Aboard}^3 + - \\
& 0.000029462 * \text{Route}^1 * \text{Aboard}^2 * \text{Ground}^1 + -0.000019604 * \text{Route}^1 * \text{Aboard}^1 * \text{Ground}^2 \\
& + -0.000015232 * \text{Route}^1 * \text{Ground}^3 + 0.0000000000 * \text{Type}^4 + -0.0000000000 * \\
& \text{Type}^3 * \text{Registration}^1 + 0.0000000000 * \text{Type}^3 * \text{cn} / \text{In}^1 + 0.0000000000 * \text{Type}^3 * \text{Aboard}^1 + \\
& -0.000009588 * \text{Type}^3 * \text{Ground}^1 + -0.0000000000 * \text{Type}^2 * \text{Registration}^2 + 0.0000000000 * \\
& \text{Type}^2 * \text{Registration}^1 * \text{cn} / \text{In}^1 + -0.0000000000 * \text{Type}^2 * \text{Registration}^1 * \text{Aboard}^1 + - \\
& 0.000007791 * \text{Type}^2 * \text{Registration}^1 * \text{Ground}^1 + 0.0000000000 * \text{Type}^2 * \text{cn} / \text{In}^2 + \\
& 0.0000000000 * \text{Type}^2 * \text{cn} / \text{In}^1 * \text{Aboard}^1 + 0.000008555 * \text{Type}^2 * \text{cn} / \text{In}^1 * \text{Ground}^1 + - \\
& 0.0000000002 * \text{Type}^2 * \text{Aboard}^2 + 0.000209722 * \text{Type}^2 * \text{Aboard}^1 * \text{Ground}^1 + \\
& 0.000011897 * \text{Type}^2 * \text{Ground}^2 + -0.0000000000 * \text{Type}^1 * \text{Registration}^3 + 0.0000000000 * \\
& \text{Type}^1 * \text{Registration}^2 * \text{cn} / \text{In}^1 + -0.0000000000 * \text{Type}^1 * \text{Registration}^2 * \text{Aboard}^1 + \\
& 0.000001139 * \text{Type}^1 * \text{Registration}^2 * \text{Ground}^1 + 0.0000000000 * \\
& \text{Type}^1 * \text{Registration}^1 * \text{cn} / \text{In}^2 + 0.0000000000 * \text{Type}^1 * \text{Registration}^1 * \text{cn} / \text{In}^1 * \text{Aboard}^1 + \\
& 0.000005390 * \text{Type}^1 * \text{Registration}^1 * \text{cn} / \text{In}^1 * \text{Ground}^1 + 0.0000000000 * \\
& \text{Type}^1 * \text{Registration}^1 * \text{Aboard}^2 + -0.000058734 * \\
& \text{Type}^1 * \text{Registration}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000015120 * \\
& \text{Type}^1 * \text{Registration}^1 * \text{Ground}^2 + -0.0000000000 * \text{Type}^1 * \text{cn} / \text{In}^3 + -0.0000000000 * \\
& \text{Type}^1 * \text{cn} / \text{In}^2 * \text{Aboard}^1 + -0.000006734 * \text{Type}^1 * \text{cn} / \text{In}^2 * \text{Ground}^1 + -0.0000000001 * \\
& \text{Type}^1 * \text{cn} / \text{In}^1 * \text{Aboard}^2 + -0.000124827 * \text{Type}^1 * \text{cn} / \text{In}^1 * \text{Aboard}^1 * \text{Ground}^1 + - \\
& 0.000003255 * \text{Type}^1 * \text{cn} / \text{In}^1 * \text{Ground}^2 + -0.0000000005 * \text{Type}^1 * \text{Aboard}^3 + - \\
& 0.000041638 * \text{Type}^1 * \text{Aboard}^2 * \text{Ground}^1 + -0.000008693 * \text{Type}^1 * \text{Aboard}^1 * \text{Ground}^2 + \\
& 0.000000693 * \text{Type}^1 * \text{Ground}^3 + -0.0000000000 * \text{Registration}^4 + 0.0000000000 * \\
& \text{Registration}^3 * \text{cn} / \text{In}^1 + 0.0000000000 * \text{Registration}^3 * \text{Aboard}^1 + -0.000001578 * \\
& \text{Registration}^3 * \text{Ground}^1 + -0.0000000000 * \text{Registration}^2 * \text{cn} / \text{In}^2 + -0.0000000000 * \\
& \text{Registration}^2 * \text{cn} / \text{In}^1 * \text{Aboard}^1 + 0.000001373 * \text{Registration}^2 * \text{cn} / \text{In}^1 * \text{Ground}^1 +
\end{aligned}$$

$$\begin{aligned}
& 0.000000000 * \text{Registration}^2 * \text{Aboard}^2 + 0.000024949 * \text{Registration}^2 * \text{Aboard}^1 * \text{Ground}^1 \\
& + -0.000067368 * \text{Registration}^2 * \text{Ground}^2 + -0.000000000 * \text{Registration}^1 * \text{cn/In}^3 + - \\
& 0.000000000 * \text{Registration}^1 * \text{cn/In}^2 * \text{Aboard}^1 + -0.000001744 * \\
& \text{Registration}^1 * \text{cn/In}^2 * \text{Ground}^1 + 0.000000000 * \text{Registration}^1 * \text{cn/In}^1 * \text{Aboard}^2 + \\
& 0.000047635 * \text{Registration}^1 * \text{cn/In}^1 * \text{Aboard}^1 * \text{Ground}^1 + 0.000119369 * \\
& \text{Registration}^1 * \text{cn/In}^1 * \text{Ground}^2 + 0.000000000 * \text{Registration}^1 * \text{Aboard}^3 + 0.000030225 * \\
& \text{Registration}^1 * \text{Aboard}^2 * \text{Ground}^1 + -0.000038545 * \text{Registration}^1 * \text{Aboard}^1 * \text{Ground}^2 + - \\
& 0.000000703 * \text{Registration}^1 * \text{Ground}^3 + 0.000000000 * \text{cn/In}^4 + 0.000000000 * \\
& \text{cn/In}^3 * \text{Aboard}^1 + 0.000003386 * \text{cn/In}^3 * \text{Ground}^1 + -0.000000001 * \text{cn/In}^2 * \text{Aboard}^2 + - \\
& 0.000064522 * \text{cn/In}^2 * \text{Aboard}^1 * \text{Ground}^1 + -0.000248246 * \text{cn/In}^2 * \text{Ground}^2 + - \\
& 0.000000001 * \text{cn/In}^1 * \text{Aboard}^3 + 0.000005488 * \text{cn/In}^1 * \text{Aboard}^2 * \text{Ground}^1 + - \\
& 0.000035265 * \text{cn/In}^1 * \text{Aboard}^1 * \text{Ground}^2 + -0.000007968 * \text{cn/In}^1 * \text{Ground}^3 + \\
& 0.000000009 * \text{Aboard}^4 + 0.000003555 * \text{Aboard}^3 * \text{Ground}^1 + -0.000002810 * \\
& \text{Aboard}^2 * \text{Ground}^2 + -0.000000837 * \text{Aboard}^1 * \text{Ground}^3 + -0.000000072 * \text{Ground}^4
\end{aligned}$$

Accuracy: 0.7149803359260007

The given equations represent a linear equation and a polynomial equation, both modeling the relationship between various factors and the number of fatalities in aviation incidents. Let's break down each equation:

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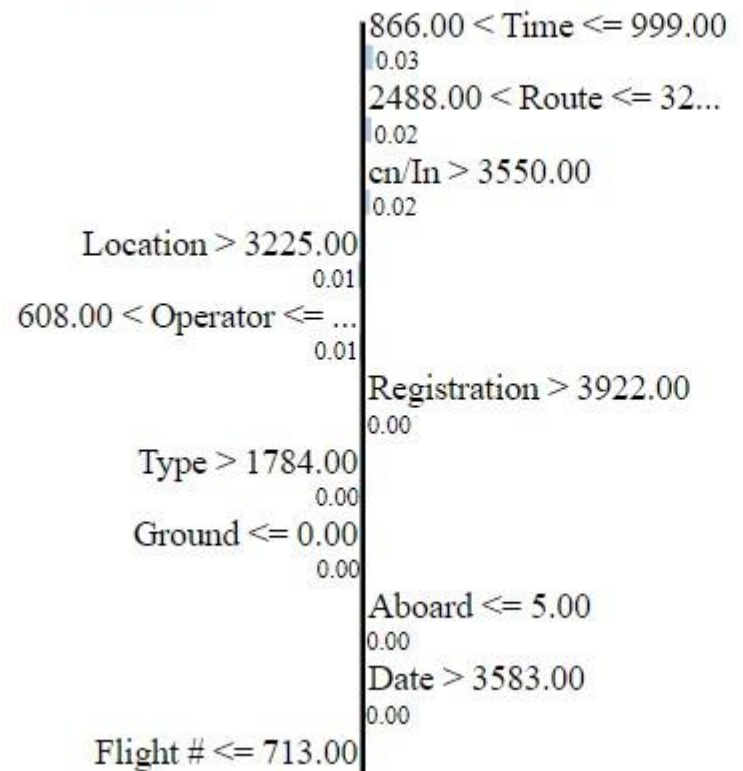
LIME INTERPRETATION:

Prediction probabilities



NOT 1

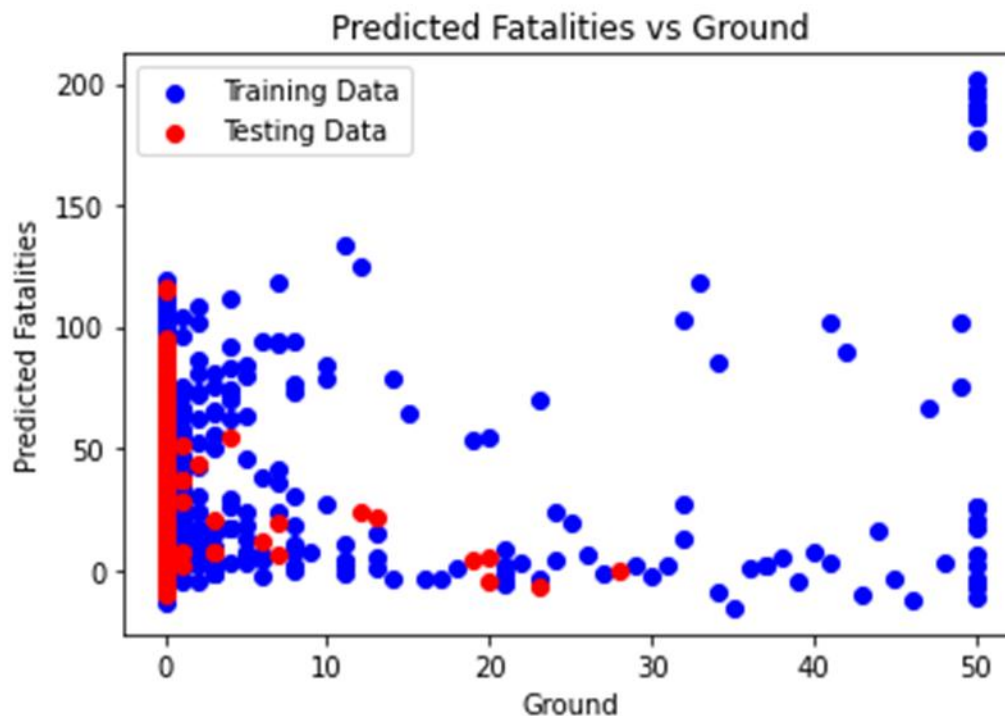
1



| Feature | Value |
|--------------|---------|
| Time | 999.00 |
| Route | 3244.00 |
| cn/In | 3638.00 |
| Location | 4083.00 |
| Operator | 640.00 |
| Registration | 4903.00 |
| Type | 2446.00 |
| Ground | 0.00 |
| Aboard | 3.00 |
| Date | 4712.00 |

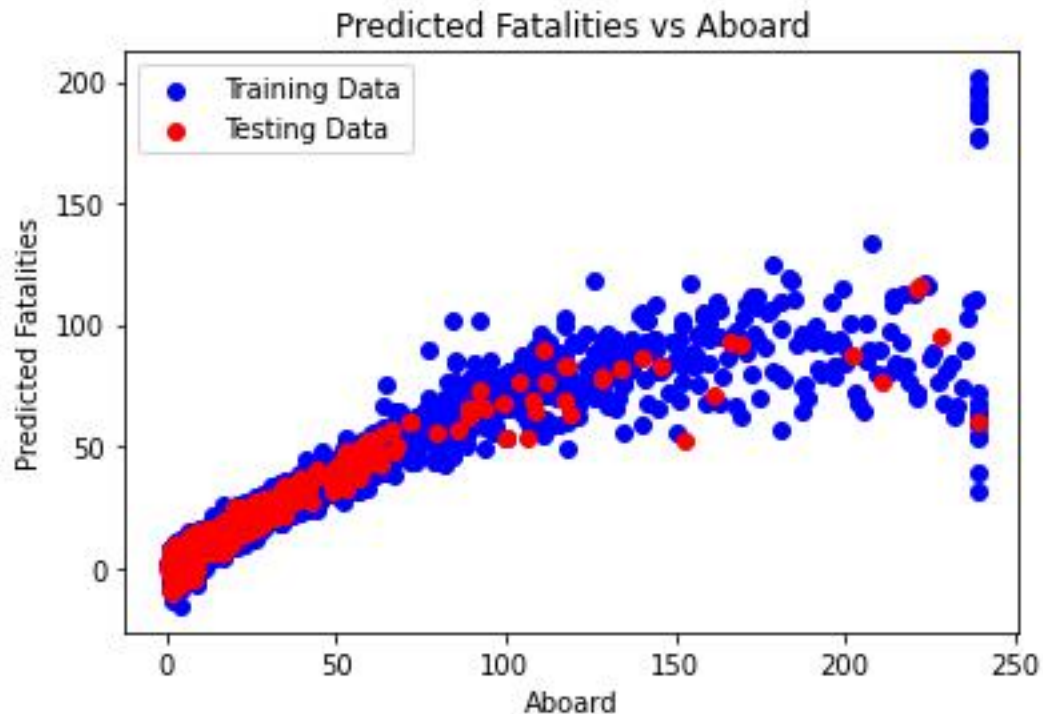
Flight # 713.00

The document provided is a spreadsheet displaying the outcomes of a machine learning model tasked with forecasting the likelihood of aircraft fatalities based on several variables, including aircraft type, location, and time of day. Notably, the most influential factor in predicting aircraft fatalities is the location, as denoted by its highest associated value of 0.13. This signifies that the location holds the greatest sway over the model's prognostication. Additionally, significant predictors include the time of day (0.10) and the type of aircraft (0.07). The figures within the "Prediction probabilities" column signify the probability of an aircraft fatality given specific combinations of factors. For instance, a probability of 0.13 in the initial row suggests a 13% chance of a fatality if the location corresponds to "cn/ln > 3550.00". Despite its utility, it is imperative to recognize that this model's predictions may not always align with actual outcomes. Nonetheless, it serves as a valuable tool for identifying flights potentially at higher risk of accidents. Furthermore, the spreadsheet reveals additional insights, such as the secondary impact of factors like route, operator, registration, and flight date, albeit with lesser significance compared to location, time, and aircraft type. Moreover, the presence of 0.00 values in the "Ground" and "Aboard" cells indicates a null probability of fatalities when flights are grounded or devoid of passengers, respectively.



The plot provided illustrates a scatter plot depicting the disparity between predicted and actual numbers of fatalities on the ground as per a machine learning model. Each data point corresponds to a single observation from either the training or testing dataset. The proximity of the points to the diagonal line serves as an indicator of the model's prediction accuracy, with points closer to the line implying

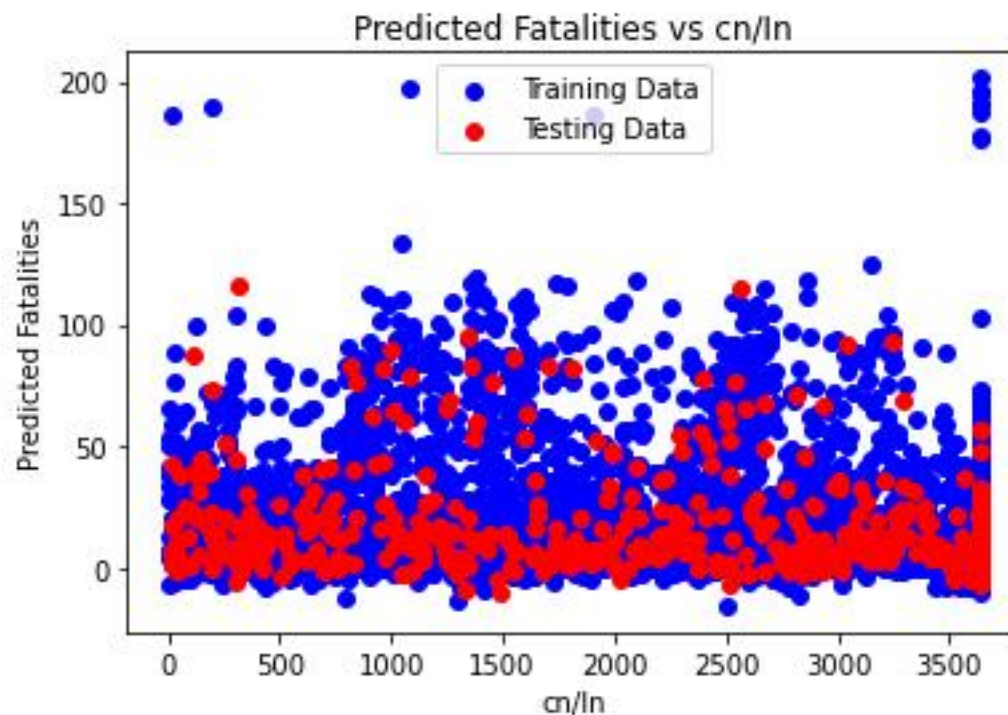
more accurate predictions. However, the scattered distribution around the diagonal suggests less precise predictions. For instance, some data points indicate a prediction of 10 fatalities, whereas the actual count stands at 30, while others show a prediction of 40 fatalities with only 10 fatalities on the ground. It's essential to acknowledge that this representation offers only a singular perspective, and the model's efficacy may fluctuate based on the dataset used. Furthermore, limitations such as differing scale axes, absence of data distribution depiction, and lack of error bars to signify prediction uncertainties underscore the necessity for additional evaluation methods to assess the model's accuracy and generalizability comprehensively.



The plot provided depicts the correlation between predicted fatalities and the number of individuals on board (Aboard) for flights across two datasets: training data and testing data. The red line signifies the model's predicted fatalities, while the blue line represents the actual fatalities. Ideally, data points would align precisely along the diagonal line, indicative of flawless predictions. However, the observed dispersion around this line signifies the model's occasional inaccuracies.

Specifically, concerning the training data, a notable concentration of red points lies closer to the diagonal compared to their blue counterparts from the testing data. This discrepancy suggests a relatively superior performance of the model on the training set. Additionally, the presence of scattered points both above and below the diagonal line implies instances of both overestimation and underestimation of fatalities by the model across both datasets.

For instance, at a value of 100 individuals aboard, the model may predict 50 fatalities (red line), whereas the actual count might stand at 20 (blue line). This exemplifies the model's tendency to misestimate fatalities across the observed datasets. This shows a linear equation.

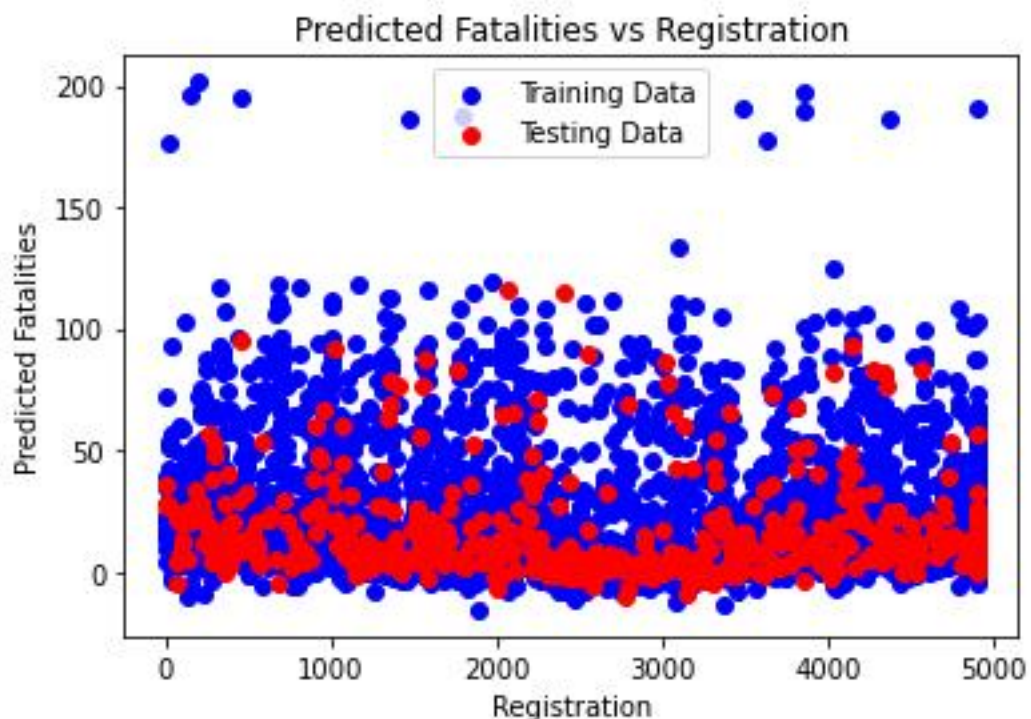


Based on the image provided, the plot illustrates the association between predicted fatalities and the number of individuals on board (cn/ln) for flights within two datasets: the training data and the testing data. The red line denotes the model's predicted fatalities, while the blue line portrays the actual fatalities. Ideally, data points would align precisely along the diagonal line, indicating flawless predictions. However, the dispersion of points around this line signifies the model's occasional inaccuracies.

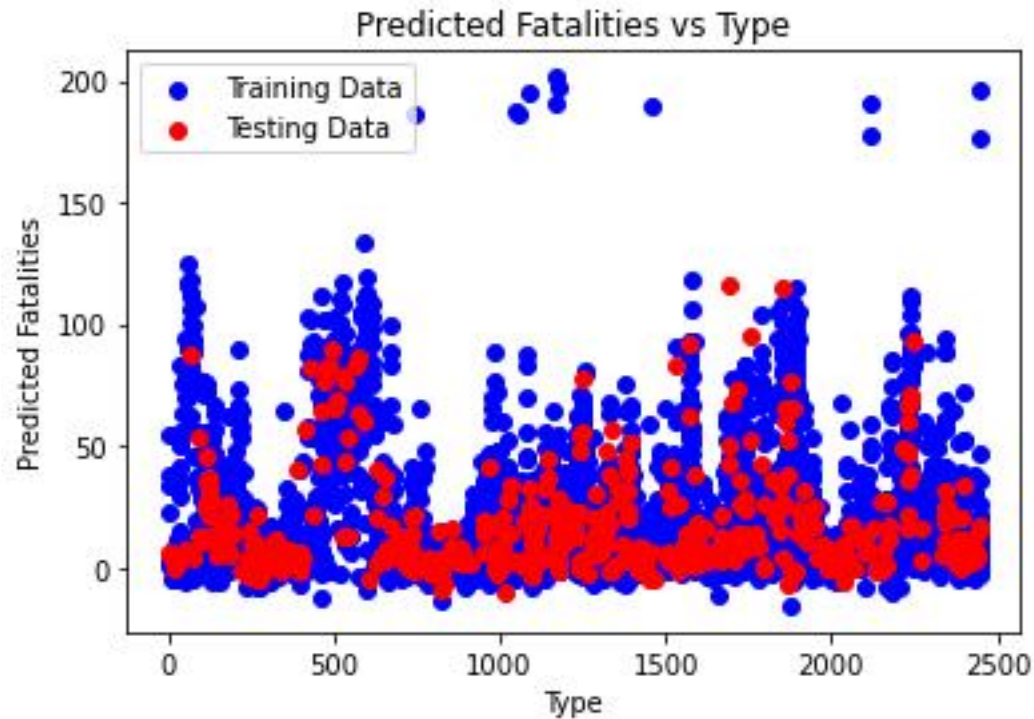
Several specific observations can be gleaned from the plot. Firstly, concerning the training data, a notable concentration of red points lies closer to the diagonal line in comparison to their blue counterparts from the testing data. This discrepancy implies a relatively superior performance of the model on the training set. Additionally, the presence of scattered points both above and below the diagonal line suggests instances of both overestimation and underestimation of fatalities by the model across both datasets.

For instance, at a value of 1000 individuals on board, the model may predict 50 fatalities (red line), whereas the actual count might stand at 20 (blue line). This exemplifies the model's tendency to misestimate fatalities across the observed datasets.

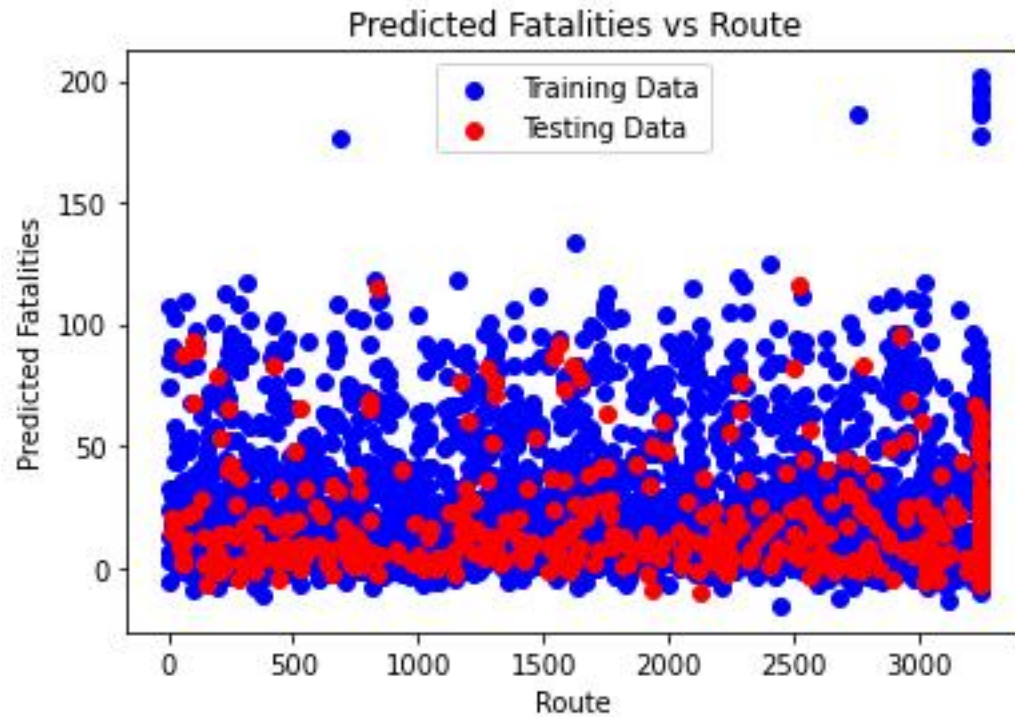
In summary, while the plot suggests that the model may have the capacity to predict the number of fatalities in aircraft accidents, its accuracy is not infallible, and it may exhibit both underestimation and overestimation tendencies in certain instances. It is imperative to acknowledge that this preliminary analysis is based on a single plot, and a more comprehensive evaluation of the model's performance would be essential before drawing any definitive conclusions regarding its real-world efficacy.



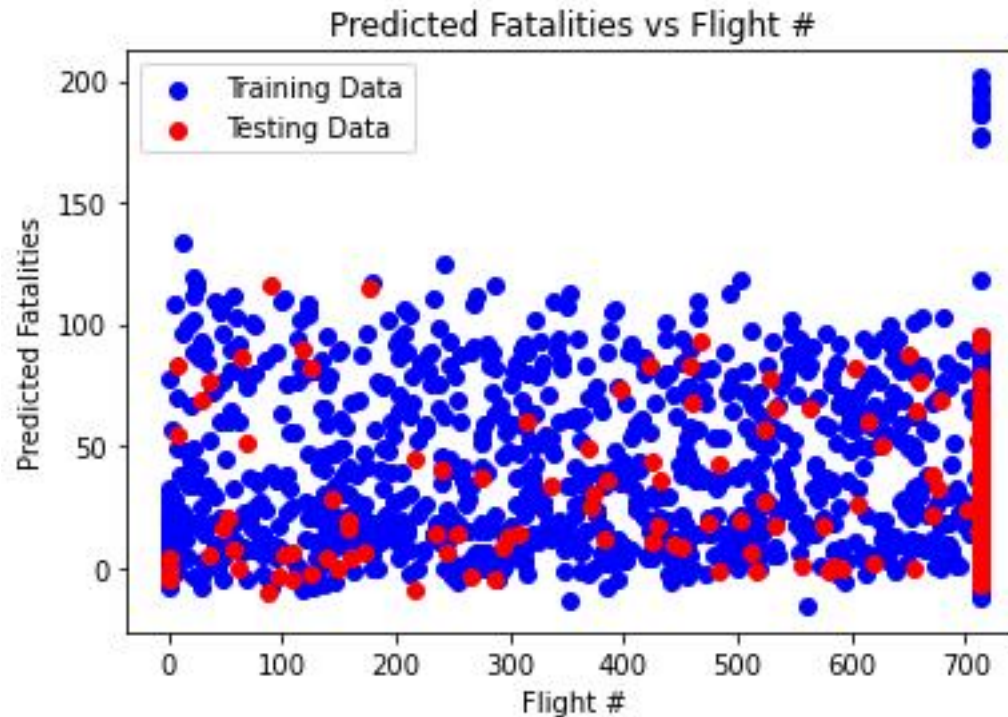
The scatter plot titled "Predicted Fatalities vs Registration" illustrates the relationship between the number of aircraft registrations and the predicted number of fatalities. Data points, representing both training and testing data, predominantly cluster within the range of 0 to approximately 150 predicted fatalities, with a higher density observed at lower levels of predicted fatalities. The x-axis denotes the quantity of aircraft registrations spanning from 0 to 5000, while the y-axis represents predicted fatalities ranging from 0 to 200. A discernible trend suggests that as the count of registrations increases, predicted fatalities remain relatively constant, albeit with a slight increase in variability. However, this interpretation provides a simplified overview, and a comprehensive analysis may entail consideration of additional intricate factors related to aircraft safety and fatality prediction.



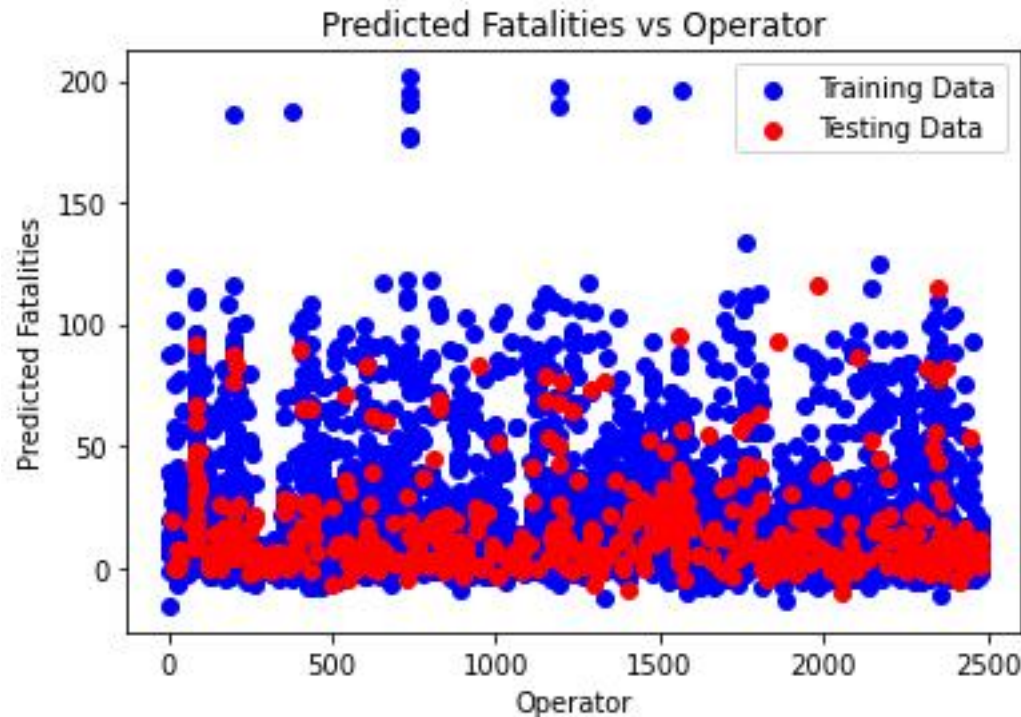
The provided scatter plot compares predicted fatalities with different types of aircraft, where the x-axis represents the "Type," likely denoting specific aircraft categories, albeit unlabeled in the provided data. The y-axis depicts "Predicted Fatalities," with two distinct sets of data represented by red and blue dots. Although the limited data hinders a precise interpretation of the relationship between the variables, it is evident that a considerable range of predicted fatalities exists across various aircraft types. Notably, certain aircraft types exhibit higher predicted fatality counts than others. However, it's imperative to recognize that these predictions are speculative, and actual fatality counts may deviate from those indicated on the plot.



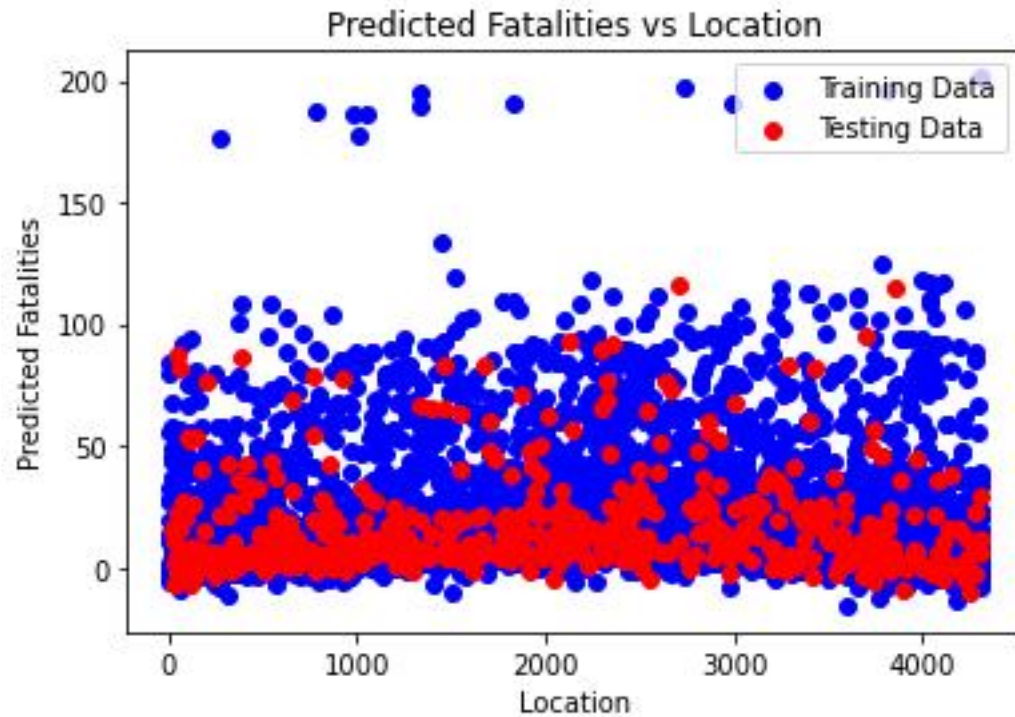
The scatter plot provided depicts a comparison between predicted fatalities and route data categorized by aircraft. The x-axis represents the routes, while the y-axis indicates the predicted fatalities. Two distinct datasets are illustrated by red and blue dots, signifying training and route data, respectively. Despite the constrained dataset, discerning a precise relationship between the variables proves challenging. Nevertheless, it is evident that a broad spectrum of predicted fatalities is observed across various routes, with certain routes exhibiting higher predicted fatality rates than others. It is crucial to emphasize that these predictions are speculative, and actual fatality counts may deviate from those indicated on the plot.



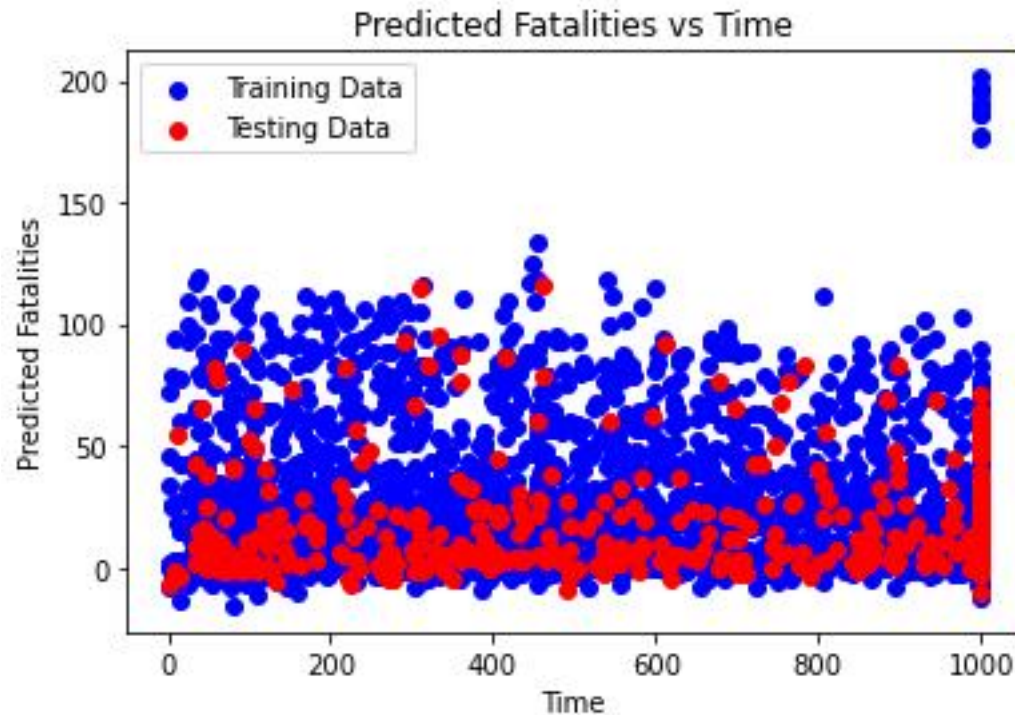
The provided scatter plot juxtaposes predicted fatalities against flight numbers, as indicated by the respective text labels on the axes. While the precise modeling context cannot be definitively discerned from the image alone, the plot seemingly showcases the outcomes of a predictive model estimating fatalities for individual flights. The x-axis denotes "Flight #," presumed to represent unique identifiers for each flight, while the y-axis signifies "Predicted Fatalities." Two distinct datasets, represented by red and blue dots, are distinguished as training and testing data, respectively, as per the text annotation atop the plot. From the available data, several observations emerge: Firstly, the predicted fatality counts appear notably higher for the training data in comparison to the testing data, hinting at potential overfitting of the model to the training dataset. This phenomenon suggests that the model may have learned specific patterns inherent in the training data, rendering it less generalizable to unseen data. Additionally, a wide variability in predicted fatalities is evident within both training and testing datasets, indicating the model's propensity to predict a diverse range of potential outcomes for each flight. Crucially, it is imperative to acknowledge that the presented predictions are speculative, and the actual fatality counts may diverge from those depicted on the plot. A thorough assessment of the model's predictive accuracy necessitates the incorporation of additional data and rigorous evaluation methodologies.



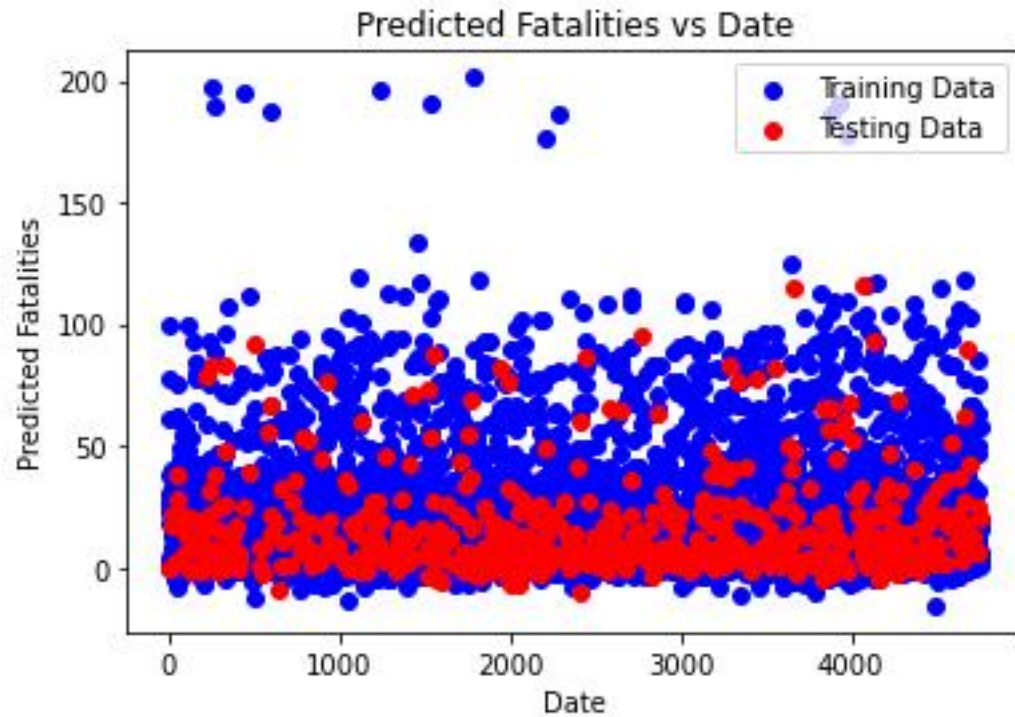
The provided scatter plot delineates a comparison between predicted fatalities and operator training data. The x-axis portrays the quantity of "Operator Training Data," while the y-axis illustrates "Predicted Fatalities." It is imperative to underscore that the displayed data merely illustrates a correlation and does not establish causation; a higher quantity of training data for a particular operator does not inherently imply a greater incidence of fatalities. Potential interpretations of the plot include a positive correlation between the volume of training data and the predicted fatality count, indicative of operators navigating more complex routes or operating in hazardous conditions. Conversely, the plot may also indicate an absence of correlation between the variables, suggesting that the amount of training data does not significantly influence the predicted fatality count. However, without comprehensive insights into the dataset and the underlying predictive model, drawing definitive conclusions regarding the relationship between operator training data and predicted fatalities remains challenging.



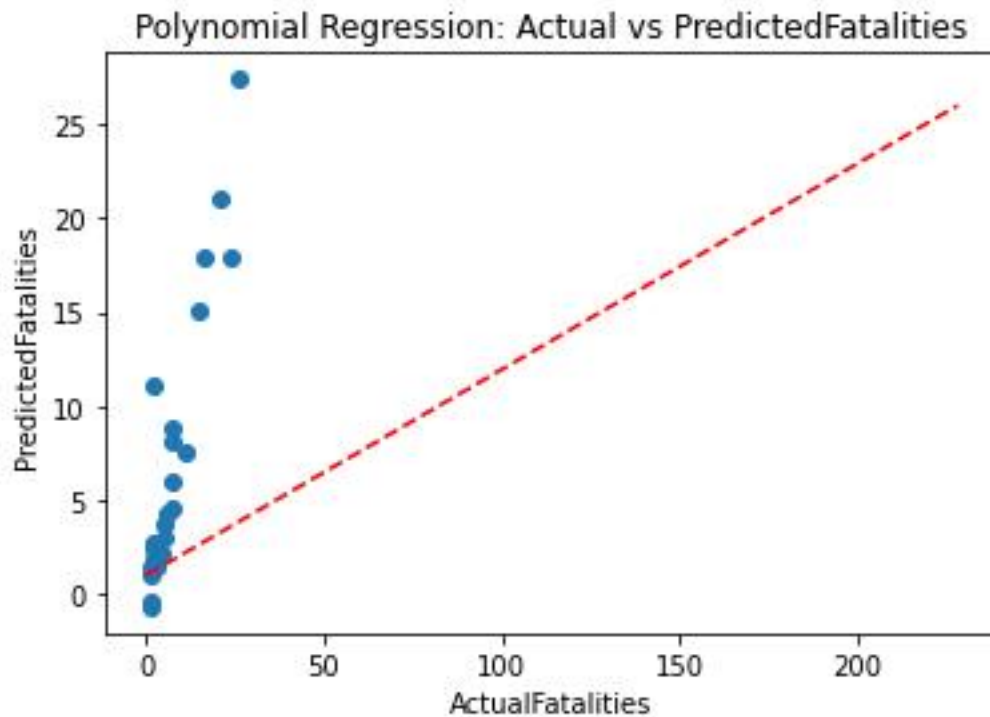
The presented scatter plot contrasts predicted fatalities with aircraft location, with the x-axis denoting location and the y-axis representing predicted fatalities. From the limited dataset provided, several observations can be inferred: Firstly, a diverse spectrum of predicted fatalities is evident across various locations, indicative of the model's propensity to anticipate a broad range of potential outcomes for each location. However, discerning a definitive relationship between location and predicted fatalities proves challenging based solely on the plot. It remains uncertain whether a clear correlation exists between these variables. Importantly, the plot underscores that the depicted predictions are speculative, and the actual fatality count may deviate from the illustrated values. Thus, comprehensive evaluation of the model's predictive accuracy necessitates the incorporation of additional data.



The provided plot offers a comparison of predicted fatalities between training and testing data, without specifying the aircraft type to which the data pertains. Notably, the plot represents only a limited sample of the dataset and may not adequately reflect the entire population. Observations gleaned from the plot reveal several trends: Firstly, the red line, symbolizing the expected number of fatalities, exhibits a general decreasing trend over time, implying the model's anticipation of a decline in fatalities over the observed period. Conversely, the predicted fatalities, represented by the blue line, demonstrate greater variability compared to the red line, indicating heightened uncertainty in the model's predictions. Moreover, the intermittent positioning of the blue line above and below the red line underscores the model's occasional inaccuracies in prediction. It is imperative to emphasize the importance of consulting with a qualified aviation expert to gain a comprehensive understanding of the data and the underlying model.

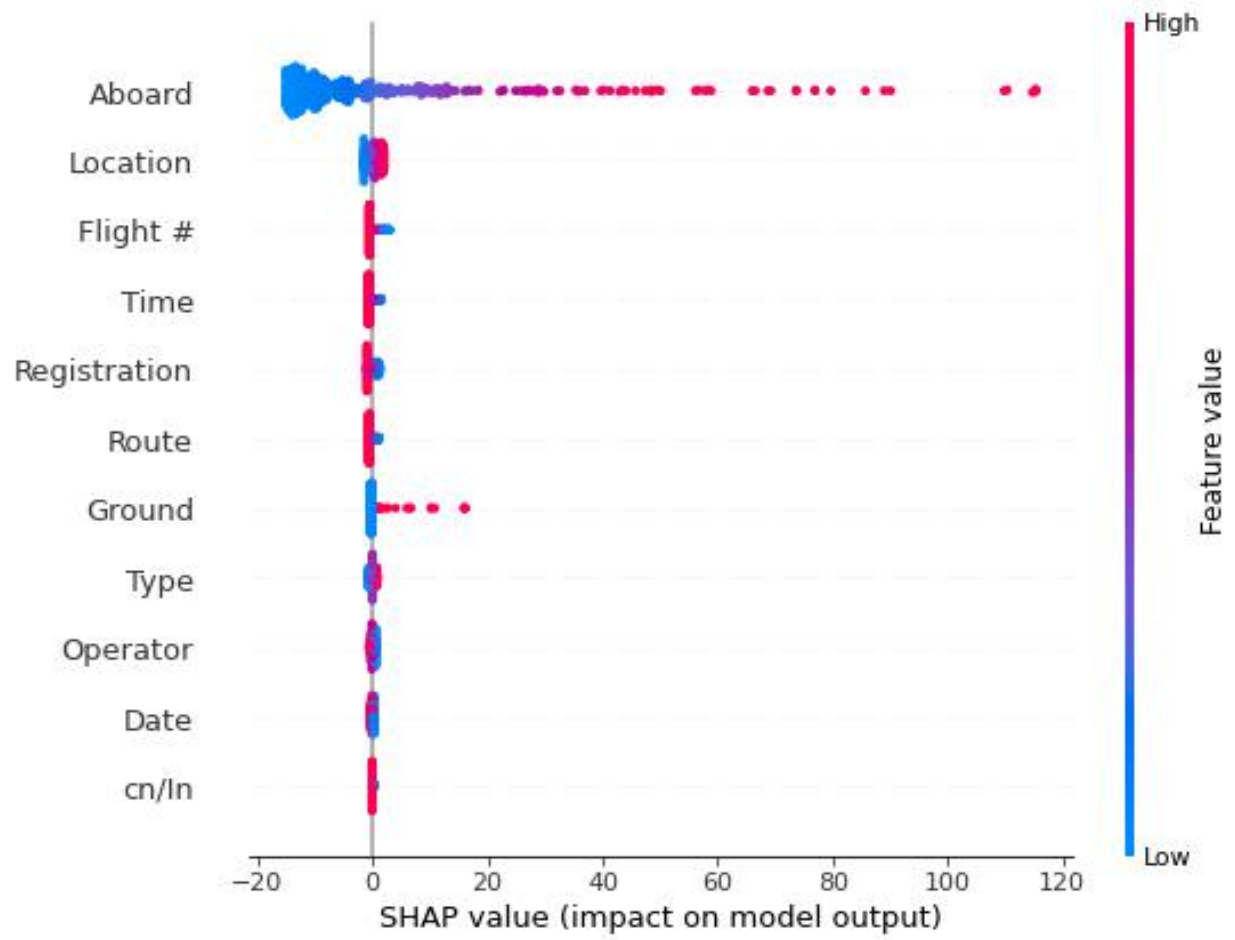


The provided scatter plot exhibits the relationship between the "Date" and "Predicted Fatalities," with the x-axis representing dates and the y-axis denoting predicted fatalities. The plot encompasses two distinct datasets. Noteworthy observations from the plot entail a subtle downward trajectory observed in the training data points, indicating the model's anticipation of a decline in fatalities over time. Similarly, the testing data points display a general downward trend, albeit with greater dispersion. However, it is crucial to highlight that the testing data points exhibit more pronounced deviations from the red line compared to the training data points, suggesting potential inaccuracies in the model's predictions when extrapolated to unseen data.



The scatter plot titled “Polynomial Regression: Actual vs Predicted Fatalities” depicts the relationship between **actual fatalities** and **predicted fatalities** related to aircraft incidents. Here are the key points:

- **Data Points:**
 - The plot contains blue dots representing individual data points.
 - These data points are primarily concentrated at the lower end of both axes (around 0-50 actual fatalities).
- **Regression Line:**
 - The red dashed line represents a **polynomial regression model**.
 - As actual fatalities increase, the prediction accuracy improves.
 - Initially, the model tends to **underestimate** fatalities, but it becomes more accurate as actual fatalities rise.
- **Axes:**
 - The x-axis represents **actual fatalities**, ranging from 0 to 200.
 - The y-axis represents **predicted fatalities**, ranging from 0 to 25.



Functions of 'Sum of fatalities':

Certainly, breaking down the columns based on the provided data:

1. Year: The year in which the aviation incident occurred.
2. Quarter: The quarter within the year when the incident took place.
3. Month: The specific month when the incident occurred.
4. Day: The day of the month when the incident occurred.
5. Country/Region: The country or region where the incident happened.
6. Aircraft Manufacturer: The company that manufactured the aircraft involved in the incident.
7. Aircraft: The specific model or type of the aircraft involved in the incident.
8. Location: The place where the incident occurred.
9. Operator: The entity or organization that operated or owned the aircraft involved in the incident.
10. Sum of Ground: The count of ground fatalities or casualties resulting from the incident.
11. Sum of Fatalities (air): The total number of fatalities onboard the aircraft.
12. Sum of Aboard: The total number of individuals (including crew and passengers) aboard the aircraft during the incident.

These columns provide details regarding the time, location, entities involved (manufacturer, operator), and casualties (both on the ground and aboard the aircraft) for various aviation incidents spanning different years, countries, and aircraft types. This information is crucial for studying historical aviation safety, understanding patterns in incidents, and identifying factors contributing to fatalities in aviation.

PREDICTED EQUATIONS :

ENCODING CATEGORICAL VARIABLE

Equation: Sum of Fatalities (air) = $-4.734409719 + -1.256143916 * \text{Quarter} + 0.378578439 * \text{Month} + 0.293498924 * \text{Day} + -0.020239499 * \text{Country/Region} + -0.025999646 * \text{Aircraft Manufacturer} + 0.004670940 * \text{Aircraft} + 0.005220585 * \text{Location} + 0.004806289 * \text{Operator} + 0.552992536 * \text{Sum of Ground} + 0.641383729 * \text{Sum of Aboard} + 0.000091967 * \text{Year}^2 + -0.002210911 * \text{Year}^1 * \text{Quarter}^1 + -0.002906$

$409 * Year^1 * Month^1 + 0.000375264 * Year^1 * Day^1 + -0.000033801 * Year^1 * Country/Region^1 + -0.000086565 * Year^1 * Aircraft Manufacturer^1 + 0.000014323 * Year^1 * Aircraft^1 + 0.000012915 * Year^1 * Location^1 + 0.000017352 * Year^1 * Operator^1 + -0.005096351 * Year^1 * Sum of Ground^1 + 0.000264105 * Year^1 * Sum of Aboard^1 + 0.207766397 * Quarter^2 + -0.090582774 * Quarter^1 * Month^1 + -0.019157423 * Quarter^1 * Day^1 + 0.002898321 * Quarter^1 * Country/Region^1 + 0.005660072 * Quarter^1 * Aircraft Manufacturer^1 + -0.000353540 * Quarter^1 * Aircraft^1 + -0.000156953 * Quarter^1 * Location^1 + 0.000209025 * Quarter^1 * Operator^1 + 0.036216233 * Quarter^1 * Sum of Ground^1 + -0.011895667 * Quarter^1 * Sum of Aboard^1 + 0.006800480 * Month^2 + 0.002692328 * Month^1 * Day^1 + -0.000486706 * Month^1 * Country/Region^1 + -0.001089436 * Month^1 * Aircraft Manufacturer^1 + -0.000050165 * Month^1 * Aircraft^1 + 0.000065554 * Month^1 * Location^1 + -0.000097930 * Month^1 * Operator^1 + 0.015312184 * Month^1 * Sum of Ground^1 + 0.019374297 * Month^1 * Sum of Aboard^1 + -0.002259210 * Day^2 + -0.000157502 * Day^1 * Country/Region^1 + 0.000480718 * Day^1 * Aircraft Manufacturer^1 + -0.000123030 * Day^1 * Aircraft^1 + -0.000034216 * Day^1 * Location^1 + -0.000030410 * Day^1 * Operator^1 + -0.002844896 * Day^1 * Sum of Ground^1 + -0.000372378 * Day^1 * Sum of Aboard^1 + 0.000054288 * Country/Region^2 + 0.000013725 * Country/Region^1 * Aircraft Manufacturer^1 + -0.000001089 * Country/Region^1 * Aircraft^1 + 0.000000446 * Country/Region^1 * Location^1 + -0.000006455 * Country/Region^1 * Operator^1 + 0.000174331 * Country/Region^1 * Sum of Ground^1 + 0.000046936 * Country/Region^1 * Sum of Aboard^1 + -0.000015053 * Aircraft Manufacturer^2 + 0.000006470 * Aircraft Manufacturer^1 * Aircraft^1 + 0.000002184 * Aircraft Manufacturer^1 * Location^1 + 0.000002746 * Aircraft Manufacturer^1 * Operator^1 + 0.001655370 * Aircraft Manufacturer^1 * Sum of Ground^1 + 0.000123509 * Aircraft Manufacturer^1 * Sum of Aboard^1 + -0.000000536 * Aircraft^2 + -0.00000180 * Aircraft^1 * Location^1 + -0.000000877 * Aircraft^1 * Operator^1 + -0.000266110 * Aircraft^1 * Sum of Ground^1 + -0.000014209 * Aircraft^1 * Sum of Aboard^1 + -0.000001451 * Location^2 + -0.00000255 * Location^1 * Operator^1 + -0.000021202 * Location^1 * Sum of Ground^1 + 0.000041857 * Location^1 * Sum of Aboard^1 + -0.000000744 * Operator^2 + -0.000107245 * Operator^1 * Sum of Ground^1 + 0.000015899 * Operator^1 * Sum of Aboard^1 + -0.009238076 * Sum of Ground^2 + 0.009311926 * Sum of Ground^1 * Sum of Aboard^1 + -0.001869769 * Sum of Aboard^2$

DEGREE-3

Equation: Sum of Fatalities (air) = $3.294252016 + -4.580268923 * Quarter + 0.269998697 * Month + 0.100622360 * Day + 0.006406774 * Country/Region + -0.115462611 * Aircraft Manufacturer + 0.008800900 * Aircraft + -0.014894548 * Location + -0.012235498 * Operator + -5.724437028 * Sum of Ground + -0.005764783 * Sum of Aboard + -0.007480034 * Year^2 + 0.007415311 * Year^1 * Quarter^1 + 0.000336293 * Year^1 * Month^1 + -0.007012786 * Year^1 * Day^1 + -0.000671557 * Year^1 * Country/Region^1 + -0.001155017 * Year^1 * Aircraft Manufacturer^1 + 0.000175816 * Year^1 * Aircraft^1 + -0.000014181 * Year^1 * Location^1 + -0.000041746 * Year^1 * Operator^1 + 0.038188129 * Year^1 * Sum of Ground^1 + 0.001162823 * Year^1 * Sum of Aboard^1 + 4.403521939 * Quarter^2 + -0.603633976 * Quarter^1 * Month^1 + -0.320481477 * Quarter^1 * Day^1 + 0.015469689 * Quarter^1 * Country/Region^1 + -0.035434086 * Quarter^1 * Aircraft Manufacturer^1 + 0.006081978 * Quarter^1 * Aircraft^1 + 0.000722057 * Quarter^1 * Location^1 + 0.000501514 * Quarter^1 * Operator^1 + -1.110591295 * Quarter^1 * Sum of Ground^1 + 0.025570861 * Quarter^1 * Sum of Aboard^1 + 0.380593967 * Month^2 + -0.045574132 * Month^1 * Day^1 + 0.000889413 * Month^1 * Country/Region^1 + 0.013477635 * Month^1 * Aircraft Manufacturer^1 + -0.002062547 * Month^1 * Aircraft^1 + -0.000485049 * Month^1 * Location^1 + -0.000415642 * Month^1 * Operator^1 + -0.094551600 * Month^1 * Sum of Ground^1 + -0.010663538 * Month^1 * Sum of Aboard^1 + -0.005293564 * Day^2 + -0.000942899 * Day^1 * Country/Region^1 + 0.001493716 * Day^1 * Aircraft Manufacturer^1 + 0.000116374 * Day^1 * Aircraft^1 + 0.000082569 * Day^1 * Location^1 + 0.000117847 * Day^1 * Operator^1 + 0.299523587 * Day^1 * Sum of Ground^1 + 0.020884254 * Day^1 * Sum of Aboard^1 + 0.000006937 * Country/Region^2 + 0.000411943 * Country/Region^1 * Aircraft Manufacturer^1 + -0.000076449 * Country/Region^1 * Aircraft^1 + 0.000010466 * Country/Region^1 * Location^1 + -0.000010743 * Country/Region^1 * Operator^1 + -0.006707112 * Country/Region^1 * Sum of Ground^1 + -0.000369696 * Country/Region^1 * Sum of Aboard^1 + -0.001047837 * Aircraft Manufacturer^2 + 0.$

000462863 * Aircraft Manufacturer^1*Aircraft^1 + 0.000007209 * Aircraft Manufacturer^1*Location^1
 + 0.000040737 * Aircraft Manufacturer^1*Operator^1 + 0.110138424 * Aircraft Manufacturer^1*Sum
 of Ground^1 + -0.008915604 * Aircraft Manufacturer^1*Sum of Aboard^1 + -0.000038687 * Aircraft^2
 + -0.000001908 * Aircraft^1*Location^1 + -0.000007704 * Aircraft^1*Operator^1 + -0.017185908 * Air
 craft^1*Sum of Ground^1 + 0.001577146 * Aircraft^1*Sum of Aboard^1 + 0.000006700 * Location^2 +
 0.000000634 * Location^1*Operator^1 + 0.001853335 * Location^1*Sum of Ground^1 + 0.000290508 *
 Location^1*Sum of Aboard^1 + 0.000011266 * Operator^2 + 0.003683570 * Operator^1*Sum of Groun
 d^1 + 0.000250971 * Operator^1*Sum of Aboard^1 + -0.073184197 * Sum of Ground^2 + -0.00627163
 2 * Sum of Ground^1*Sum of Aboard^1 + 0.001031744 * Sum of Aboard^2 + 0.000034412 * Year^3 + -0.
 000138101 * Year^2*Quarter^1 + -0.000001537 * Year^2*Month^1 + 0.000043304 * Year^2*Day^1 + 0.
 000001791 * Year^2*Country/Region^1 + 0.000011501 * Year^2*Aircraft Manufacturer^1 + -0.000001
 977 * Year^2*Aircraft^1 + 0.000000054 * Year^2*Location^1 + 0.000000214 * Year^2*Operator^1 + -0.
 000431995 * Year^2*Sum of Ground^1 + -0.000027198 * Year^2*Sum of Aboard^1 + 0.001035408 * Ye
 ar^1*Quarter^2 + 0.003963009 * Year^1*Quarter^1*Month^1 + 0.000828436 * Year^1*Quarter^1*Day
 ^1 + -0.000062146 * Year^1*Quarter^1*Country/Region^1 + 0.000034098 * Year^1*Quarter^1*Aircraf
 t Manufacturer^1 + -0.000017214 * Year^1*Quarter^1*Aircraft^1 + 0.000003229 * Year^1*Quarter^1*
 Location^1 + 0.000003399 * Year^1*Quarter^1*Operator^1 + -0.000971659 * Year^1*Quarter^1*Sum
 of Ground^1 + -0.000338560 * Year^1*Quarter^1*Sum of Aboard^1 + -0.000840231 * Year^1*Month^2
 + -0.000219622 * Year^1*Month^1*Day^1 + 0.000025184 * Year^1*Month^1*Country/Region^1 + 0.0
 00040499 * Year^1*Month^1*Aircraft Manufacturer^1 + -0.000006951 * Year^1*Month^1*Aircraft^1 +
 0.000001498 * Year^1*Month^1*Location^1 + -0.000001908 * Year^1*Month^1*Operator^1 + 0.0079
 53058 * Year^1*Month^1*Sum of Ground^1 + -0.000240228 * Year^1*Month^1*Sum of Aboard^1 + -0.
 000087053 * Year^1*Day^2 + 0.000011276 * Year^1*Day^1*Country/Region^1 + 0.000012420 * Year^
 1*Day^1*Aircraft Manufacturer^1 + -0.000003065 * Year^1*Day^1*Aircraft^1 + 0.000000586 * Year^1
 *Day^1*Location^1 + 0.000000026 * Year^1*Day^1*Operator^1 + -0.002084671 * Year^1*Day^1*Sum
 of Ground^1 + 0.000071313 * Year^1*Day^1*Sum of Aboard^1 + 0.000000486 * Year^1*Country/Regio
 n^2 + -0.000000868 * Year^1*Country/Region^1*Aircraft Manufacturer^1 + 0.000000213 * Year^1*Co
 untry/Region^1*Aircraft^1 + -0.000000138 * Year^1*Country/Region^1*Location^1 + 0.000000099 *
 Year^1*Country/Region^1*Operator^1 + 0.000100125 * Year^1*Country/Region^1*Sum of Ground^1
 + -0.000002119 * Year^1*Country/Region^1*Sum of Aboard^1 + -0.000002505 * Year^1*Aircraft Manu
 facturer^2 + 0.000000547 * Year^1*Aircraft Manufacturer^1*Aircraft^1 + -0.000000132 * Year^1*Aircr
 aft Manufacturer^1*Location^1 + 0.000000001 * Year^1*Aircraft Manufacturer^1*Operator^1 + 0.0003
 37039 * Year^1*Aircraft Manufacturer^1*Sum of Ground^1 + 0.000002264 * Year^1*Aircraft Manufact
 urer^1*Sum of Aboard^1 + -0.000000019 * Year^1*Aircraft^2 + 0.000000027 * Year^1*Aircraft^1*Loc
 ation^1 + 0.000000017 * Year^1*Aircraft^1*Operator^1 + -0.000052199 * Year^1*Aircraft^1*Sum of G
 round^1 + -0.000000151 * Year^1*Aircraft^1*Sum of Aboard^1 + 0.000000001 * Year^1*Location^2 +
 0.000000002 * Year^1*Location^1*Operator^1 + 0.000000397 * Year^1*Location^1*Sum of Ground^1
 + 0.000000661 * Year^1*Location^1*Sum of Aboard^1 + -0.000000018 * Year^1*Operator^2 + -0.0000
 14677 * Year^1*Operator^1*Sum of Ground^1 + 0.000000592 * Year^1*Operator^1*Sum of Aboard^1
 + 0.001002758 * Year^1*Sum of Ground^2 + -0.000656386 * Year^1*Sum of Ground^1*Sum of Aboard^
 1 + 0.000022221 * Year^1*Sum of Aboard^2 + -0.868813882 * Quarter^3 + -0.152253411 * Quarter^2*
 Month^1 + 0.037182582 * Quarter^2*Day^1 + -0.000883406 * Quarter^2*Country/Region^1 + -0.0010
 90994 * Quarter^2*Aircraft Manufacturer^1 + -0.000120292 * Quarter^2*Aircraft^1 + 0.000349801 * Q
 uarter^2*Location^1 + -0.000014246 * Quarter^2*Operator^1 + 0.066740048 * Quarter^2*Sum of Gro
 und^1 + -0.013915159 * Quarter^2*Sum of Aboard^1 + 0.051084280 * Quarter^1*Month^2 + 0.012618
 072 * Quarter^1*Month^1*Day^1 + 0.000146208 * Quarter^1*Month^1*Country/Region^1 + 0.001951
 011 * Quarter^1*Month^1*Aircraft Manufacturer^1 + -0.000297899 * Quarter^1*Month^1*Aircraft^1 +
 -0.000122508 * Quarter^1*Month^1*Location^1 + 0.000146064 * Quarter^1*Month^1*Operator^1 + 0.
 065948167 * Quarter^1*Month^1*Sum of Ground^1 + 0.004872553 * Quarter^1*Month^1*Sum of Abo
 ard^1 + 0.000064788 * Quarter^1*Day^2 + 0.000118282 * Quarter^1*Day^1*Country/Region^1 + 0.00
 1345371 * Quarter^1*Day^1*Aircraft Manufacturer^1 + -0.000223530 * Quarter^1*Day^1*Aircraft^1 +
 0.000024994 * Quarter^1*Day^1*Location^1 + 0.000044066 * Quarter^1*Day^1*Operator^1 + 0.0418

01090 * Quarter^1*Day^1*Sum of Ground^1 + -0.001019474 * Quarter^1*Day^1*Sum of Aboard^1 + -0.000019994 * Quarter^1*Country/Region^2 + 0.000025088 * Quarter^1*Country/Region^1*Aircraft Manufacturer^1 + -0.000003990 * Quarter^1*Country/Region^1*Aircraft^1 + -0.000001557 * Quarter^1*Country/Region^1*Location^1 + -0.000000905 * Quarter^1*Country/Region^1*Operator^1 + 0.003974810 * Quarter^1*Country/Region^1*Sum of Ground^1 + 0.000216361 * Quarter^1*Country/Region^1*Sum of Aboard^1 + -0.000019187 * Quarter^1*Aircraft Manufacturer^2 + 0.000002685 * Quarter^1*Aircraft Manufacturer^1*Aircraft^1 + -0.000001936 * Quarter^1*Aircraft Manufacturer^1*Location^1 + -0.000006423 * Quarter^1*Aircraft Manufacturer^1*Operator^1 + -0.014564702 * Quarter^1*Aircraft Manufacturer^1*Sum of Ground^1 + 0.001135942 * Quarter^1*Aircraft Manufacturer^1*Sum of Aboard^1 + 0.000000350 * Quarter^1*Aircraft^2 + 0.000000172 * Quarter^1*Aircraft^1*Location^1 + 0.000000975 * Quarter^1*Aircraft^1*Operator^1 + 0.002015200 * Quarter^1*Aircraft^1*Sum of Ground^1 + -0.000152619 * Quarter^1*Aircraft^1*Sum of Aboard^1 + -0.000000013 * Quarter^1*Location^2 + -0.000000170 * Quarter^1*Location^1*Operator^1 + 0.000116774 * Quarter^1*Location^1*Sum of Ground^1 + -0.000050355 * Quarter^1*Location^1*Sum of Aboard^1 + -0.000000482 * Quarter^1*Operator^2 + -0.000120916 * Quarter^1*Operator^1*Sum of Ground^1 + 0.000009924 * Quarter^1*Operator^1*Sum of Aboard^1 + -0.018230827 * Quarter^1*Sum of Ground^2 + -0.005637508 * Quarter^1*Sum of Ground^1*Sum of Aboard^1 + 0.000090344 * Quarter^1*Sum of Aboard^2 + -0.032650811 * Month^3 + 0.000122163 * Month^2*Day^1 + -0.000162422 * Month^2*Country/Region^1 + -0.000564057 * Month^2*Aircraft Manufacturer^1 + 0.000131095 * Month^2*Aircraft^1 + 0.000051163 * Month^2*Location^1 + -0.000005403 * Month^2*Operator^1 + -0.031662529 * Month^2*Sum of Ground^1 + 0.000246539 * Month^2*Sum of Aboard^1 + 0.002404666 * Month^1*Day^2 + 0.000002225 * Month^1*Day^1*Country/Region^1 + -0.000235589 * Month^1*Day^1*Aircraft Manufacturer^1 + 0.000031554 * Month^1*Day^1*Aircraft^1 + -0.000011234 * Month^1*Day^1*Location^1 + -0.000027097 * Month^1*Day^1*Operator^1 + -0.004676736 * Month^1*Day^1*Sum of Ground^1 + 0.001144117 * Month^1*Day^1*Sum of Aboard^1 + -0.000000981 * Month^1*Country/Region^2 + -0.000003319 * Month^1*Country/Region^1*Aircraft Manufacturer^1 + 0.000000553 * Month^1*Country/Region^1*Aircraft^1 + -0.000000031 * Month^1*Country/Region^1*Location^1 + 0.000000389 * Month^1*Country/Region^1*Operator^1 + 0.000109908 * Month^1*Country/Region^1*Sum of Ground^1 + -0.000026400 * Month^1*Country/Region^1*Sum of Aboard^1 + 0.000013480 * Month^1*Aircraft Manufacturer^2 + -0.000003944 * Month^1*Aircraft Manufacturer^1*Aircraft^1 + -0.000001423 * Month^1*Aircraft Manufacturer^1*Location^1 + -0.000001569 * Month^1*Aircraft Manufacturer^1*Operator^1 + 0.000827168 * Month^1*Aircraft Manufacturer^1*Sum of Ground^1 + -0.000105432 * Month^1*Aircraft Manufacturer^1*Sum of Aboard^1 + 0.000000156 * Month^1*Aircraft^2 + 0.000000318 * Month^1*Aircraft^1*Location^1 + 0.000000306 * Month^1*Aircraft^1*Operator^1 + -0.000306167 * Month^1*Aircraft^1*Sum of Ground^1 + 0.000003937 * Month^1*Aircraft^1*Sum of Aboard^1 + -0.000000042 * Month^1*Location^2 + 0.000000119 * Month^1*Location^1*Operator^1 + -0.000112693 * Month^1*Location^1*Sum of Ground^1 + 0.000008191 * Month^1*Location^1*Sum of Aboard^1 + 0.000000097 * Month^1*Operator^2 + 0.000146881 * Month^1*Operator^1*Sum of Ground^1 + -0.000006333 * Month^1*Operator^1*Sum of Aboard^1 + -0.002513600 * Month^1*Sum of Ground^2 + 0.006028598 * Month^1*Sum of Ground^1*Sum of Aboard^1 + 0.000198912 * Month^1*Sum of Aboard^2 + 0.000103938 * Day^3 + 0.000009175 * Day^2*Country/Region^1 + -0.000040214 * Day^2*Aircraft Manufacturer^1 + -0.000001822 * Day^2*Aircraft^1 + 0.000002065 * Day^2*Location^1 + 0.000000697 * Day^2*Operator^1 + -0.004592576 * Day^2*Sum of Ground^1 + -0.000223347 * Day^2*Sum of Aboard^1 + 0.000002414 * Day^1*Country/Region^2 + 0.000001763 * Day^1*Country/Region^1*Aircraft Manufacturer^1 + -0.000000460 * Day^1*Country/Region^1*Aircraft^1 + -0.000000136 * Day^1*Country/Region^1*Location^1 + -0.000000199 * Day^1*Country/Region^1*Operator^1 + -0.000349419 * Day^1*Country/Region^1*Sum of Ground^1 + -0.000028529 * Day^1*Country/Region^1*Sum of Aboard^1 + 0.000003382 * Day^1*Aircraft Manufacturer^2 + -0.000001581 * Day^1*Aircraft Manufacturer^1*Aircraft^1 + -0.000000233 * Day^1*Aircraft Manufacturer^1*Location^1 + -0.000000875 * Day^1*Aircraft Manufacturer^1*Operator^1 + -0.002488373 * Day^1*Aircraft Manufacturer^1*Sum of Ground^1 + 0.000088568 * Day^1*Aircraft Manufacturer^1*Sum of Aboard^1 + 0.000000156 * Day^1*Aircraft^2 + 0.000000089 * Day^1*Aircraft^1*Location^1 + 0.000000155 * Day^1*Aircraft^1*Operator^1 + 0.000447339 * Day^1*Aircraft^1*Sum of Ground^1 + -0.00001639

$0 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000039 * \text{Day}^1 * \text{Location}^2 + 0.000000017 * \text{Day}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000011027 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000003642 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000013 * \text{Day}^1 * \text{Operator}^2 + -0.000074667 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000002208 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.005139088 * \text{Day}^1 * \text{Sum of Ground}^2 + -0.000203265 * \text{Day}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000014645 * \text{Day}^1 * \text{Sum of Aboard}^2 + -0.000000066 * \text{Country/Region}^3 + -0.0000000219 * \text{Country/Region}^2 * \text{Aircraft Manufacturer}^1 + 0.000000020 * \text{Country/Region}^2 * \text{Aircraft}^1 + -0.000000002 * \text{Country/Region}^2 * \text{Location}^1 + 0.000000013 * \text{Country/Region}^2 * \text{Operator}^1 + 0.000020562 * \text{Country/Region}^2 * \text{Sum of Ground}^1 + 0.000002592 * \text{Country/Region}^2 * \text{Sum of Aboard}^1 + -0.000000495 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^2 + 0.000000060 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + -0.000000020 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000000060 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.000061997 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000002465 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000009 * \text{Country/Region}^1 * \text{Aircraft}^2 + 0.000000001 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000010 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000005828 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000000460 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000001 * \text{Country/Region}^1 * \text{Location}^2 + 0.000000000 * \text{Country/Region}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000001171 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000105 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000003 * \text{Country/Region}^1 * \text{Operator}^2 + -0.000002179 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000412 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000050635 * \text{Country/Region}^1 * \text{Sum of Ground}^2 + -0.000010941 * \text{Country/Region}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000002626 * \text{Country/Region}^1 * \text{Sum of Aboard}^2 + 0.000001041 * \text{Aircraft Manufacturer}^3 + 0.000000063 * \text{Aircraft Manufacturer}^2 * \text{Aircraft}^1 + -0.000000070 * \text{Aircraft Manufacturer}^2 * \text{Location}^1 + -0.000000104 * \text{Aircraft Manufacturer}^2 * \text{Operator}^1 + 0.000054559 * \text{Aircraft Manufacturer}^2 * \text{Sum of Ground}^1 + 0.000006773 * \text{Aircraft Manufacturer}^2 * \text{Sum of Aboard}^1 + -0.000000110 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^2 + 0.000000013 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000013 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Operator}^1 + -0.000028216 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.000000369 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000003 * \text{Aircraft Manufacturer}^1 * \text{Location}^2 + 0.000000003 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000017074 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000001667 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000008 * \text{Aircraft Manufacturer}^1 * \text{Operator}^2 + 0.000008472 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000001307 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.001163173 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^2 + -0.000039880 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000018366 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^2 + 0.000000010 * \text{Aircraft}^3 + -0.000000000 * \text{Aircraft}^2 * \text{Location}^1 + 0.000000001 * \text{Aircraft}^2 * \text{Operator}^1 + 0.000003421 * \text{Aircraft}^2 * \text{Sum of Ground}^1 + -0.000000174 * \text{Aircraft}^2 * \text{Sum of Aboard}^1 + -0.000000001 * \text{Aircraft}^1 * \text{Location}^2 + -0.000000000 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000002561 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000239 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000002 * \text{Aircraft}^1 * \text{Operator}^2 + -0.000000681 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000209 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000170815 * \text{Aircraft}^1 * \text{Sum of Ground}^2 + 0.000015892 * \text{Aircraft}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000002793 * \text{Aircraft}^1 * \text{Sum of Aboard}^2 + -0.000000001 * \text{Location}^3 + -0.000000000 * \text{Location}^2 * \text{Operator}^1 + 0.000000092 * \text{Location}^2 * \text{Sum of Ground}^1 + -0.000000071 * \text{Location}^2 * \text{Sum of Aboard}^1 + -0.000000001 * \text{Location}^1 * \text{Operator}^2 + -0.000000824 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000011 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000015504 * \text{Location}^1 * \text{Sum of Ground}^2 + -0.000005638 * \text{Location}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000000158 * \text{Location}^1 * \text{Sum of Aboard}^2 + -0.000000002 * \text{Operator}^3 + -0.000000814 * \text{Operator}^2 * \text{Sum of Ground}^1 + -0.000000023 * \text{Operator}^2 * \text{Sum of Aboard}^1 + 0.000059453 * \text{Operator}^1 * \text{Sum of Ground}^2 + -0.000014182 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000432 * \text{Operator}^1 * \text{Sum of Aboard}^2 + -0.001668861 * \text{Sum of Ground}^3 + -0.000392810 * \text{Sum of Ground}^2 * \text{Sum of Aboard}^1 + 0.000562835 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^2 + -0.000015978 * \text{Sum of Aboard}^3$

PREDICTED EQUATIONS WITH ML ENCODING EVERY VALUE

Linear Equation: Sum of Fatalities (air)= (1.0) * Year + (1.0) * Quarter + (1.0) * Month + (-1.0) * Day + (-1.0) * Location + (1.0) * Sum of Ground + (-0.02)

coefficient [-8.53400223e-01 -1.70763598e-01 2.09526425e-01

-2.45828910e-02 -5.18049580e-02 8.01113672e-03 5.03393197e-03

2.96966741e-03 5.14995542e-01 6.23008266e-01 2.34086671e-04

-5.18813920e-03 -1.61670281e-03 3.69019188e-04 -3.66231242e-05

-5.91494973e-06 2.74794246e-06 8.42002072e-06 1.63364078e-05

-3.59050424e-03 6.35029664e-04 1.38187638e-01 -9.39468886e-02

-1.04953327e-02 2.19459420e-03 5.97804372e-03 -5.18946703e-04

-1.71923410e-04 2.38541665e-04 4.19734878e-02 -6.58568159e-03

2.24588099e-02 9.20211293e-03 1.55794921e-04 -6.70416732e-04

-7.62516891e-05 9.84889506e-05 -1.32131248e-04 1.80812047e-02

1.75104896e-02 -2.09831976e-03 -1.00194162e-04 5.42645945e-04

-1.32657248e-04 -3.99603783e-05 -6.72665096e-06 -4.86540417e-03

-3.95145346e-04 4.51693464e-05 3.81420222e-06 1.14340862e-06

1.07966077e-06 -4.55587546e-06 1.04057546e-04 1.24165294e-04

1.44024150e-05 2.79657858e-06 2.75634104e-06 5.49693492e-06

1.73019040e-03 2.79588994e-04 -8.64459666e-07 -1.87898445e-07

-8.09157741e-07 -2.67973719e-04 -3.68294136e-05 -1.40615342e-06

-3.40480851e-07 -6.66089954e-06 4.18735419e-05 -4.78800424e-07

-1.25994302e-04 9.34574966e-06 -1.03780039e-02 8.29538444e-03

-1.91296555e-03]

intercept 0.09491632448741782

Equation: Sum of Fatalities (air)= 0.094916324 + -0.853400223 * Quarter + -0.170763598 * Month + 0.209526425 * Day + -0.024582891 * Country/Region + -0.051804958 * Aircraft Manufacturer + 0.008011137 * Aircraft + 0.005033932 * Location + 0.002969667 * Operator + 0.514995542 * Sum of Ground + 0.623008266 * Sum of Aboard + 0.000234087 * Year^2 + -0.005188139 * Year^1*Quarter^1 + -0.001616703 * Year^1*Month^1 + 0.000369019 * Year^1*Day^1 + -0.000036623 * Year^1*Country/Region^1 + -0.000005915 * Year^1*Aircraft Manufacturer^1 + 0.000002748 * Year^1*Aircraft^1 + 0.000008420 * Year^1*Location^1 + 0.000016336 * Year^1*Operator^1 + -0.003590504 * Year^1*Sum of Ground^1 + 0.000635030 * Year^1*Sum of Aboard^1 + 0.138187638 * Quarter^2 + -0.093946889 * Quarter^1*Month^1 + -0.010495333 * Quarter^1*Day^1 + 0.002194594 * Quarter^1*Country/Region^1 + 0.005978044 * Quarter^1*Aircraft Manufacturer^1 + -0.000518947 * Quarter^1*Aircraft^1 + -0.000171923 * Quarter^1*Location^1 + 0.000238542 * Quarter^1*Operator^1 + 0.041973488 * Quarter^1*Sum of Ground^1 + -0.006585682 * Quarter^1*Sum of Aboard^1 + 0.022458810 * Month^2 + 0.009202113 * Month^1*Day^1 + 0.000155795 * Month^1*Country/Region^1 + -0.000670417 * Month^1*Aircraft Manufacturer^1 + -0.000076252 * Month^1*Aircraft^1 + 0.000098489 * Month^1*Location^1 + -0.000132131 * Month^1*Operator^1 + 0.018081205 * Month^1*Sum of Ground^1 + 0.017510490 * Month^1*Sum of Aboard^1 + -0.002098320 * Day^2 + -0.000100194 * Day^1*Country/Region^1 + 0.000542646 * Day^1*Aircraft Manufacturer^1 + -0.000132657 * Day^1*Aircraft^1 + -0.000039960 * Day^1*Location^1 + -0.000006727 * Day^1*Operator^1 + -0.004865404 * Day^1*Sum of Ground^1 + -0.000395145 * Day^1*Sum of Aboard^1 + 0.000045169 * Country/Region^2 + 0.000003814 * Country/Region^1*Aircraft Manufacturer^1 + 0.000001143 * Country/Region^1*Aircraft^1 + 0.000001080 * Country/Region^1*Location^1 + -0.000004556 * Country/Region^1*Operator^1 + 0.000104058 * Country/Region^1*Sum of Ground^1 + 0.000124165 * Country/Region^1*Sum of Aboard^1 + 0.000014402 * Aircraft Manufacturer^2 + 0.000002797 * Aircraft Manufacturer^1*Aircraft^1 + 0.000002756 * Aircraft Manufacturer^1*Location^1 + 0.000005497 * Aircraft Manufacturer^1*Operator^1 + 0.001730190 * Aircraft Manufacturer^1*Sum of Ground^1 + 0.000279589 * Aircraft Manufacturer^1*Sum of Aboard^1 + -0.000000864 * Aircraft^2 + -0.000000188 * Aircraft^1*Location^1 + -0.000000809 * Aircraft^1*Operator^1 + -0.000267974 * Aircraft^1*Sum of Ground^1 + -0.000036829 * Aircraft^1*Sum of Aboard^1 + -0.000001406 * Location^2 + -0.000000340 * Location^1*Operator^1 + -0.000006661 * Location^1*Sum of Ground^1 + 0.000041874 * Location^1*Sum of Aboard^1 + -0.000000479 * Operator^2 + -0.000125994 * Operator^1*Sum of Ground^1 + 0.000009346 * Operator^1*Sum of Aboard^1 + -0.010378004 * Sum of Ground^2 + 0.008295384 * Sum of Ground^1*Sum of Aboard^1 + -0.001912966 * Sum of Aboard^2

Accuracy: 0.6990919917359075

DEGREE-3:

coefficient [5.06181327e-01 -9.10605188e+00 -1.81702954e+00 -1.22383584e-01

-2.74864723e-03 -8.47377723e-03 -4.76076700e-03 -1.07950165e-02
-8.73466483e-03 -1.02134728e+01 -1.36261164e-01 -6.90136907e-03
-2.23191570e-03 9.25721065e-03 -6.92420005e-03 -5.73726765e-04
-6.12812876e-04 9.39622986e-05 -1.70468127e-05 5.04557167e-06
6.42964899e-02 1.24339230e-03 6.69367738e+00 -2.49034703e-01
-1.96860120e-01 1.32044391e-02 -4.42419523e-02 7.01339657e-03
4.85898196e-04 8.25174712e-04 -1.21627107e+00 -4.34034018e-03
5.99798332e-01 -6.38431866e-02 1.58103477e-03 1.54563559e-02
-2.36486853e-03 -8.08219905e-04 -1.33542935e-04 4.89141768e-01
4.15494599e-02 2.78169892e-04 1.87585916e-04 -2.05677191e-03
5.09508006e-04 1.22665456e-04 2.33547675e-04 3.16371383e-01
2.08186168e-02 -3.19720497e-06 1.00074140e-04 -1.70860740e-05
1.49405861e-05 -1.73487206e-05 6.60595078e-03 -7.65199738e-04
-6.43377072e-04 3.15502960e-04 -1.74451095e-05 1.53915936e-05
1.04707815e-01 -7.75792798e-03 -2.66906091e-05 9.71487214e-07
-4.51903031e-06 -1.52858871e-02 1.40730610e-03 5.49428506e-06
1.60269464e-07 1.42236935e-03 2.95354570e-04 9.13048550e-06
3.27502724e-03 1.78294777e-04 -6.66441123e-02 -3.09295001e-03
2.61517519e-03 3.53489393e-05 -3.04353123e-05 2.17055506e-05
3.79784610e-05 2.57302810e-06 7.96253787e-06 -1.44197195e-06
-7.15637382e-08 -4.03099331e-07 -1.75227989e-04 -1.21898542e-05
5.63395421e-03 1.54831614e-03 3.55967516e-04 -2.95325953e-05
4.07997312e-06 -4.57931830e-06 3.83528670e-06 -1.30889132e-06

1.01277684e-03 -9.40730789e-04 -1.16508758e-03 -1.82107422e-04
1.44695650e-05 3.02991244e-05 -6.15158768e-06 1.47536413e-06
-2.86173965e-06 1.23973318e-03 -7.40618697e-05 -5.78333460e-05
4.61986141e-06 5.61748666e-06 -1.34410972e-06 6.92508230e-07
-1.38728832e-07 -1.90586937e-03 1.14773478e-04 5.49941354e-07
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7.60225513e-06 -1.04148186e-05 -2.63750051e-06 6.05696610e-07
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-2.42855749e-06 3.92159816e-09 6.48719628e-09 8.70080087e-06
4.53401921e-07 -8.53064447e-09 -1.24496351e-05 1.65013679e-06
8.09327747e-04 -8.94253085e-04 1.96910730e-05 -1.00603007e+00
-1.90518156e-01 2.54268904e-03 -5.35078421e-04 -1.17396718e-03
-2.65420871e-04 1.68851490e-04 -1.94968210e-04 8.71320196e-02
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1.86885233e-03 -2.08776178e-04 -1.29471027e-05 1.94995766e-04
-5.83996601e-02 6.56900785e-03 1.11415763e-03 -1.31228916e-05
1.10702533e-03 -1.90037547e-04 7.56834994e-06 4.76422777e-05
3.31153163e-02 7.69212466e-04 -1.67650867e-05 3.19326875e-05
-4.22703450e-06 -1.94873134e-06 -8.52112120e-07 2.96681925e-03
1.98822432e-04 -7.33805606e-05 1.81698027e-05 -1.13580368e-06
-7.36034050e-07 1.56962481e-04 1.47317211e-03 -6.70202307e-07
1.56957797e-08 1.33083891e-07 1.80753759e-04 -2.09372095e-04

7.25691225e-08 -2.60219496e-07 2.09139059e-04 -2.95020013e-05
-4.70091250e-07 -7.91881858e-05 2.58308557e-05 -1.13383167e-02
-6.18229685e-03 1.49905204e-04 -3.29328805e-02 3.43857376e-04
-4.73948552e-05 -5.99710323e-04 1.03752964e-04 4.26835318e-05
-3.40573161e-05 1.10399320e-02 -2.81843557e-03 2.36221183e-03
6.15361191e-05 -3.01776377e-04 3.89352181e-05 -5.37337580e-06
-2.72985868e-05 -1.17320141e-03 6.39143900e-04 -2.55458632e-06
-3.21556530e-06 3.27322617e-07 7.13857428e-08 1.67206606e-07
5.07434566e-04 -4.99847086e-05 5.67594398e-06 -2.70487295e-06
-1.14084681e-06 -8.70885075e-07 7.72063077e-04 -9.52730010e-05
2.46902476e-07 2.98906913e-07 2.00198995e-07 -4.09032088e-04
2.28595101e-06 -3.25680889e-08 1.46777649e-07 -1.09827247e-04
5.86949837e-06 1.03777379e-07 2.39360374e-05 -7.12220950e-06
-1.25574701e-02 5.98972874e-03 1.24002435e-04 3.81741678e-04
-3.45794033e-06 3.64847202e-05 -1.72768352e-05 -1.07094473e-06
-1.41112212e-06 -5.58814251e-03 -3.50991783e-04 7.61928827e-07
3.82626770e-06 -6.75884111e-07 -1.07547880e-07 -2.83082247e-07
-2.92541866e-04 -1.93446976e-05 -8.84477104e-06 1.29638635e-06
4.26264461e-07 -2.37602339e-08 -1.89952378e-03 1.29470563e-04
5.71898164e-08 1.26038671e-09 2.93748925e-08 3.49376352e-04
-2.12661812e-05 -4.98833414e-08 2.74377516e-08 -1.55561272e-05
-2.18807336e-06 -3.70768415e-08 -3.61722894e-05 -2.16451925e-06
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1.23236383e-07 3.74768538e-09 8.37859836e-07 -3.97978179e-07
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9.50848610e-06 -1.16532447e-07 9.06041081e-09 1.85779734e-08
2.67874584e-05 -1.42342205e-06 2.32413153e-09 6.40143982e-09
-1.16102139e-05 1.42144663e-06 2.51122967e-09 -9.11910637e-06
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-2.00350493e-07 -8.25042701e-10 1.75629982e-06 -1.46780320e-07
1.70070710e-04 3.80337873e-05 4.69408680e-06 -6.50355991e-10
-2.79923640e-10 5.50173833e-08 -6.98531465e-08 -3.93117983e-10
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-6.51601055e-08 -1.96625560e-09 -7.31886783e-07 -7.31442545e-10
5.17205314e-05 -1.08115221e-05 -7.98979639e-07 -6.97900426e-04
-9.69033634e-04 6.39258106e-04 -1.31913872e-05]

intercept 7.150566376430142

Equation: Sum of Fatalities (air)= 7.150566376 + -9.106051878 * Quarter + -1.817029538 * Month + -0.122383584 * Day + -0.002748647 * Country/Region + -0.008473777 * Aircraft Manufacturer + -0.004760767 * Aircraft + -0.010795017 * Location + -0.008734665 * Operator + -10.213472818 * Sum of Ground + -0.136261164 * Sum of Aboard + -0.006901369 * Year^2 + -0.002231916 * Year^1*Quarter^1 + 0.009257211 * Year^1*Month^1 + -0.006924200 * Year^1*Day^1 + -0.000573727 * Year^1*Country/Region^1 + -0.000612813 * Year^1*Aircraft Manufacturer^1 + 0.000093962 * Year^1*Aircraft^1 + -0.000017047 * Year^1*Location^1 + 0.000005046 * Year^1*Operator^1 + 0.064296490 * Year^1*Sum of Ground^1 + 0.001243392 * Year^1*Sum of Aboard^1 + 6.693677381 * Quarter^2 + -0.249034703 * Quarter^1*Month^1 + -0.196860120 * Quarter^1*Day^1 + 0.013204439 * Quarter^1*Country/Region^1 + -0.044241952 * Quarter^1*Aircraft Manufacturer^1 + 0.007013397 * Quarter^1*Aircraft^1 + 0.000485898 * Quarter^1*Location^1 + 0.000825175 * Quarter^1*Operator^1 + -1.216271071 * Quarter^1*Sum of Ground^1 + -0.004340340 * Quarter^1*Sum of Aboard^1 + 0.599798332 * Month^2 + -0.063843187 * Month^1*Day^1 + 0.001581035 * Month^1*Country/Region^1 + 0.015456356 * Month^1*Aircraft Manufacturer^1 + -0.002364869 * Month^1*Aircraft^1 + -0.000808220 * Month^1*Location^1 + -0.000133543 * Month^1*Operator^1 + 0.489141768 * Month^1*Sum of Ground^1 + 0.041549460 * Month^1*Sum of Aboard^1 + 0.000278170 * Day^2 + 0.000187586 * Day^1*Country/Region^1 + -0.002056772 * Day^1*Aircraft Manufacturer^1 + 0.000509508 * Day^1*Aircraft^1 + 0.000122665 * Day^1*Location^1 + 0.000233548 * Day^1*Operator^1 + 0.316371383 * Day^1*Sum of Ground^1 + 0.020818617 * Day^1*Sum of Aboard^1 + -0.000003197 * Country/Region^2 + 0.000100074 * Country/Region^1*Aircraft Manufacturer^1 + -0.000017086 * Country/Region^1*Aircraft^1 + 0.000014941 * Country/Region^1*Location^1 + -0.000017349 * Country/Region^1*Operator^1 + 0.006605951 * Country/Region^1*Sum of Ground^1 + -0.000765200 * Country/Region^1*Sum of Aboard^1 + -0.000643377 * Aircraft Manufacturer^2 + 0.000315503 * Aircraft Manufacturer^1*Aircraft^1 + -0.000017445 * Aircraft Manufacturer^1*Location^1 + 0.000015392 * Aircraft Manufacturer^1*Operator^1 + 0.104707815 * Aircraft Manufacturer^1*Sum of Ground^1 + -0.007757928 * Aircraft Manufacturer^1*Sum of Aboard^1 + -0.000026691 * Aircraft^2 + 0.000000971 * Aircraft^1*Location^1 + -0.000004519 * Aircraft^1*Operator^1 + -0.015285887 * Aircraft^1*Sum of Ground^1 + 0.001407306 * Aircraft^1*Sum of Aboard^1 + 0.000005494 * Location^2 + 0.000000160 * Location^1*Operator^1 + 0.001422369 * Location^1*Sum of Ground^1 + 0.000295355 * Location^1*Sum of Aboard^1 + 0.000009130 * Operator^2 + 0.003275027 * Operator^1*Sum of Ground^1 + 0.000178295 * Operator^1*Sum of Aboard^1 + -0.066644112 * Sum of Ground^2 + -0.003092950 * Sum of Ground^1*Sum of Aboard^1 + 0.002615175 * Sum of Aboard^2 + 0.000035349 * Year^3 + -0.000030435 * Year^2*Quarter^1 + 0.000021706 * Year^2*Month^1 + 0.000037978 * Year^2*Day^1 + 0.000002573 * Year^2*Country/Region^1 + 0.000007963 * Year^2*Aircraft Manufacturer^1 + -0.000001442 * Year^2*Aircraft^1 + -0.000000072 * Year^2*Location^1 + -0.000000403 * Year^2*Operator^1 + -0.000175228 * Year^2*Sum of Ground^1 + -0.000012190 * Year^2*Sum of Aboard^1 + 0.005633954 * Year^1*Quarter^2 + 0.001548316 * Year^1*Quarter^1*Month^1 + 0.000355968 * Year^1*Quarter^1*Day^1 + -0.000029533 * Year^1*Quarter^1*Country/Region^1 + 0.000004080 * Year^1*Quarter^1*Aircraft Manufacturer^1 + -0.000004579 * Year^1*Quarter^1*Aircraft^1 + 0.000003835 * Year^1*Quarter^1*Location^1 + -0.000001309 * Year^1*Quarter^1*Operator^1 + 0.001012777 * Year^1*Quarter^1*Sum of Ground^1 + -0.000940731 * Year^1*Quarter^1*Sum of Aboard^1 + -0.001165088 * Year^1*Month^2 + -

$0.000182107 * \text{Year}^1 * \text{Month}^1 * \text{Day}^1 + 0.000014470 * \text{Year}^1 * \text{Month}^1 * \text{Country/Region}^1$
 $+ 0.000030299 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 + -0.000006152 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft}^1$
 $+ 0.000001475 * \text{Year}^1 * \text{Month}^1 * \text{Location}^1 + -0.000002862 * \text{Year}^1 * \text{Month}^1 * \text{Operator}^1$
 $+ 0.001239733 * \text{Year}^1 * \text{Month}^1 * \text{Sum of Ground}^1 + -0.000074062 * \text{Year}^1 * \text{Month}^1 * \text{Sum of Aboard}^1$
 $+ -0.000057833 * \text{Year}^1 * \text{Day}^2 + 0.000004620 * \text{Year}^1 * \text{Day}^1 * \text{Country/Region}^1$
 $+ 0.000005617 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 + -0.000001344 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft}^1$
 $+ 0.000000693 * \text{Year}^1 * \text{Day}^1 * \text{Location}^1 + -0.000000139 * \text{Year}^1 * \text{Day}^1 * \text{Operator}^1$
 $+ -0.001905869 * \text{Year}^1 * \text{Day}^1 * \text{Sum of Ground}^1 + 0.000114773 * \text{Year}^1 * \text{Day}^1 * \text{Sum of Aboard}^1$
 $+ 0.000000550 * \text{Year}^1 * \text{Country/Region}^2 + -0.000000746 * \text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1$
 $+ 0.000000168 * \text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + -0.000000108 * \text{Year}^1 * \text{Country/Region}^1 * \text{Location}^1$
 $+ 0.000000086 * \text{Year}^1 * \text{Country/Region}^1 * \text{Operator}^1 + 0.000007602 * \text{Year}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1$
 $+ -0.000010415 * \text{Year}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + -0.000002638 * \text{Year}^1 * \text{Aircraft Manufacturer}^2$
 $+ 0.000000606 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + -0.000000147 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1$
 $+ -0.000000041 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.000917192 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1$
 $+ 0.000012292 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + -0.000000021 * \text{Year}^1 * \text{Aircraft}^2$
 $+ 0.000000025 * \text{Year}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000018 * \text{Year}^1 * \text{Aircraft}^1 * \text{Operator}^1$
 $+ 0.000141267 * \text{Year}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.000002429 * \text{Year}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1$
 $+ 0.000000004 * \text{Year}^1 * \text{Location}^2 + 0.000000006 * \text{Year}^1 * \text{Location}^1 * \text{Operator}^1$
 $+ 0.000008701 * \text{Year}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000453 * \text{Year}^1 * \text{Location}^1 * \text{Sum of Aboard}^1$
 $+ -0.000000009 * \text{Year}^1 * \text{Operator}^2 + -0.000012450 * \text{Year}^1 * \text{Operator}^1 * \text{Sum of Ground}^1$
 $+ 0.000001650 * \text{Year}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000809328 * \text{Year}^1 * \text{Sum of Ground}^2 + -0.000894253$
 $* \text{Year}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000019691 * \text{Year}^1 * \text{Sum of Aboard}^2$
 $+ -1.006030069 * \text{Quarter}^3 + -0.190518156 * \text{Quarter}^2 * \text{Month}^1 + 0.002542689 * \text{Quarter}^2 * \text{Day}^1$
 $+ -0.000535078 * \text{Quarter}^2 * \text{Country/Region}^1 + -0.001173967 * \text{Quarter}^2 * \text{Aircraft Manufacturer}^1$
 $+ -0.000265421 * \text{Quarter}^2 * \text{Aircraft}^1 + 0.000168851 * \text{Quarter}^2 * \text{Location}^1$
 $+ -0.000194968 * \text{Quarter}^2 * \text{Operator}^1 + 0.087132020 * \text{Quarter}^2 * \text{Sum of Ground}^1$
 $+ -0.021611768 * \text{Quarter}^2 * \text{Sum of Aboard}^1 + 0.009959617 * \text{Quarter}^1 * \text{Month}^2$
 $+ 0.014210333 * \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 + -0.000133822 * \text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^1$
 $+ 0.001868852 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 + -0.000208776 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft}^1$
 $+ -0.000012947 * \text{Quarter}^1 * \text{Month}^1 * \text{Location}^1 + 0.000194996 * \text{Quarter}^1 * \text{Month}^1 * \text{Operator}^1$
 $+ -0.058399660 * \text{Quarter}^1 * \text{Month}^1 * \text{Sum of Ground}^1 + 0.006569008 * \text{Quarter}^1 * \text{Month}^1 * \text{Sum of Aboard}^1$
 $+ 0.001114158 * \text{Quarter}^1 * \text{Day}^2 + -0.000013123 * \text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^1$
 $+ 0.001107025 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 + -0.000190038 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft}^1$
 $+ 0.000007568 * \text{Quarter}^1 * \text{Day}^1 * \text{Location}^1 + 0.000047642 * \text{Quarter}^1 * \text{Day}^1 * \text{Operator}^1$
 $+ 0.033115316 * \text{Quarter}^1 * \text{Day}^1 * \text{Sum of Ground}^1 + 0.000769212 * \text{Quarter}^1 * \text{Day}^1 * \text{Sum of Aboard}^1$
 $+ -0.000016765 * \text{Quarter}^1 * \text{Country/Region}^2 + 0.000031933 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1$
 $+ -0.000004227 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + -0.000001949 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Location}^1$
 $+ -0.000000852 *$

$\text{Quarter}^1 * \text{Country/Region}^1 * \text{Operator}^1 + 0.002966819 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + 0.000198822 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + -0.000073381 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^2 + 0.000018170 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + -0.000001136 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000000736 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + 0.000156962 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + 0.001473172 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + -0.000000670 * \text{Quarter}^1 * \text{Aircraft}^2 + 0.000000016 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000133 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000180754 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.000209372 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000073 * \text{Quarter}^1 * \text{Location}^2 + -0.000000260 * \text{Quarter}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000209139 * \text{Quarter}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000029502 * \text{Quarter}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000470 * \text{Quarter}^1 * \text{Operator}^2 + -0.000079188 * \text{Quarter}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000025831 * \text{Quarter}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.011338317 * \text{Quarter}^1 * \text{Sum of Ground}^2 + -0.006182297 * \text{Quarter}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000149905 * \text{Quarter}^1 * \text{Sum of Aboard}^2 + -0.032932880 * \text{Month}^3 + 0.000343857 * \text{Month}^2 * \text{Day}^1 + -0.000047395 * \text{Month}^2 * \text{Country/Region}^1 + -0.000599710 * \text{Month}^2 * \text{Aircraft Manufacturer}^1 + 0.000103753 * \text{Month}^2 * \text{Aircraft}^1 + 0.000042684 * \text{Month}^2 * \text{Location}^1 + -0.000034057 * \text{Month}^2 * \text{Operator}^1 + 0.011039932 * \text{Month}^2 * \text{Sum of Ground}^1 + -0.002818436 * \text{Month}^2 * \text{Sum of Aboard}^1 + 0.002362212 * \text{Month}^1 * \text{Day}^2 + 0.000061536 * \text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 + -0.000301776 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 + 0.000038935 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}^1 + -0.000005373 * \text{Month}^1 * \text{Day}^1 * \text{Location}^1 + -0.000027299 * \text{Month}^1 * \text{Day}^1 * \text{Operator}^1 + -0.001173201 * \text{Month}^1 * \text{Day}^1 * \text{Sum of Ground}^1 + 0.000639144 * \text{Month}^1 * \text{Day}^1 * \text{Sum of Aboard}^1 + -0.000002555 * \text{Month}^1 * \text{Country/Region}^2 + -0.000003216 * \text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + 0.000000327 * \text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + 0.000000071 * \text{Month}^1 * \text{Country/Region}^1 * \text{Location}^1 + 0.000000167 * \text{Month}^1 * \text{Country/Region}^1 * \text{Operator}^1 + 0.000507435 * \text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + -0.000049985 * \text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + 0.000005676 * \text{Month}^1 * \text{Aircraft Manufacturer}^2 + -0.000002705 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + -0.000001141 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000000871 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + 0.000772063 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000095273 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000247 * \text{Month}^1 * \text{Aircraft}^2 + 0.000000299 * \text{Month}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000200 * \text{Month}^1 * \text{Aircraft}^1 * \text{Operator}^1 + -0.000409032 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000002286 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000033 * \text{Month}^1 * \text{Location}^2 + 0.000000147 * \text{Month}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000109827 * \text{Month}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000005869 * \text{Month}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000104 * \text{Month}^1 * \text{Operator}^2 + 0.000023936 * \text{Month}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000007122 * \text{Month}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.012557470 * \text{Month}^1 * \text{Sum of Ground}^2 + 0.005989729 * \text{Month}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000124002 * \text{Month}^1 * \text{Sum of Aboard}^2 + 0.000381742 * \text{Day}^3 + -0.000003458 * \text{Day}^2 * \text{Country/Region}^1 + 0.000036485 * \text{Day}^2 * \text{Aircraft Manufacturer}^1 + -0.000017277 * \text{Day}^2 * \text{Aircraft}^1 + -0.000001071 * \text{Day}^2 * \text{Location}^1 + -0.000001411 * \text{Day}^2 * \text{Operator}^1 + -0.005588143 *$

$\text{Day}^2 * \text{Sum of Ground}^1 + -0.000350992 * \text{Day}^2 * \text{Sum of Aboard}^1 + 0.000000762 * \text{Day}^1 * \text{Country/Region}^2 + 0.000003826 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + -0.000000676 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + -0.000000108 * \text{Day}^1 * \text{Country/Region}^1 * \text{Location}^1 + -0.000000283 * \text{Day}^1 * \text{Country/Region}^1 * \text{Operator}^1 + -0.000292542 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + -0.000019345 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + -0.000008845 * \text{Day}^1 * \text{Aircraft Manufacturer}^2 + 0.000001296 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + 0.000000426 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000000024 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.001899524 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + 0.000129471 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000057 * \text{Day}^1 * \text{Aircraft}^2 + 0.000000001 * \text{Day}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000029 * \text{Day}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000349376 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.000021266 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000050 * \text{Day}^1 * \text{Location}^2 + 0.000000027 * \text{Day}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000015556 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000002188 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000037 * \text{Day}^1 * \text{Operator}^2 + -0.000036172 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000002165 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.002128052 * \text{Day}^1 * \text{Sum of Ground}^2 + -0.000914761 * \text{Day}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000085871 * \text{Day}^1 * \text{Sum of Aboard}^2 + -0.000000061 * \text{Country/Region}^3 + -0.000000024 * \text{Country/Region}^2 * \text{Aircraft Manufacturer}^1 + -0.000000002 * \text{Country/Region}^2 * \text{Aircraft}^1 + -0.000000010 * \text{Country/Region}^2 * \text{Location}^1 + 0.000000017 * \text{Country/Region}^2 * \text{Operator}^1 + -0.000017635 * \text{Country/Region}^2 * \text{Sum of Ground}^1 + 0.000004095 * \text{Country/Region}^2 * \text{Sum of Aboard}^1 + -0.000000133 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^2 + 0.000000021 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + -0.000000017 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000000029 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + 0.000050053 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000004308 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000002 * \text{Country/Region}^1 * \text{Aircraft}^2 + -0.000000001 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000007 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Operator}^1 + -0.000009712 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000000653 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000001 * \text{Country/Region}^1 * \text{Location}^2 + 0.000000001 * \text{Country/Region}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000002972 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000123 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000004 * \text{Country/Region}^1 * \text{Operator}^2 + 0.000000838 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000398 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000225222 * \text{Country/Region}^1 * \text{Sum of Ground}^2 + 0.000031043 * \text{Country/Region}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000517 * \text{Country/Region}^1 * \text{Sum of Aboard}^2 + 0.000000359 * \text{Aircraft Manufacturer}^3 + 0.000000260 * \text{Aircraft Manufacturer}^2 * \text{Aircraft}^1 + -0.000000045 * \text{Aircraft Manufacturer}^2 * \text{Location}^1 + -0.000000109 * \text{Aircraft Manufacturer}^2 * \text{Operator}^1 + -0.000079655 * \text{Aircraft Manufacturer}^2 * \text{Sum of Ground}^1 + 0.000009508 * \text{Aircraft Manufacturer}^2 * \text{Sum of Aboard}^1 + -0.000000117 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^2 + 0.000000009 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000019 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000026787 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.000001423 * \text{Aircraft}$

$$\begin{aligned}
 & \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000002 * \text{Aircraft} \\
 & \text{Manufacturer}^1 * \text{Location}^2 + 0.000000006 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Operator}^1 \\
 & + -0.000011610 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000001421 * \\
 & \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000003 * \text{Aircraft} \\
 & \text{Manufacturer}^1 * \text{Operator}^2 + -0.000009119 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of} \\
 & \text{Ground}^1 + 0.000000912 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + - \\
 & 0.001168063 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^2 + -0.000192600 * \text{Aircraft} \\
 & \text{Manufacturer}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000030722 * \text{Aircraft} \\
 & \text{Manufacturer}^1 * \text{Sum of Aboard}^2 + 0.000000009 * \text{Aircraft}^3 + -0.000000000 * \\
 & \text{Aircraft}^2 * \text{Location}^1 + -0.000000000 * \text{Aircraft}^2 * \text{Operator}^1 + -0.000002197 * \\
 & \text{Aircraft}^2 * \text{Sum of Ground}^1 + -0.000000059 * \text{Aircraft}^2 * \text{Sum of Aboard}^1 + -0.000000000 * \\
 & \text{Aircraft}^1 * \text{Location}^2 + -0.000000001 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000001736 * \\
 & \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000200 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of} \\
 & \text{Aboard}^1 + -0.000000001 * \text{Aircraft}^1 * \text{Operator}^2 + 0.000001756 * \\
 & \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000147 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of} \\
 & \text{Aboard}^1 + 0.000170071 * \text{Aircraft}^1 * \text{Sum of Ground}^2 + 0.000038034 * \text{Aircraft}^1 * \text{Sum of} \\
 & \text{Ground}^1 * \text{Sum of Aboard}^1 + 0.000004694 * \text{Aircraft}^1 * \text{Sum of Aboard}^2 + -0.000000001 * \\
 & \text{Location}^3 + -0.000000000 * \text{Location}^2 * \text{Operator}^1 + 0.000000055 * \text{Location}^2 * \text{Sum of} \\
 & \text{Ground}^1 + -0.000000070 * \text{Location}^2 * \text{Sum of Aboard}^1 + -0.000000000 * \\
 & \text{Location}^1 * \text{Operator}^2 + -0.000000818 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + - \\
 & 0.000000014 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000025843 * \text{Location}^1 * \text{Sum of} \\
 & \text{Ground}^2 + -0.000001122 * \text{Location}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000065 * \\
 & \text{Location}^1 * \text{Sum of Aboard}^2 + -0.000000002 * \text{Operator}^3 + -0.000000732 * \text{Operator}^2 * \text{Sum} \\
 & \text{of Ground}^1 + -0.000000001 * \text{Operator}^2 * \text{Sum of Aboard}^1 + 0.000051721 * \\
 & \text{Operator}^1 * \text{Sum of Ground}^2 + -0.000010812 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of} \\
 & \text{Aboard}^1 + -0.000000799 * \text{Operator}^1 * \text{Sum of Aboard}^2 + -0.000697900 * \text{Sum of Ground}^3 \\
 & + -0.000969034 * \text{Sum of Ground}^2 * \text{Sum of Aboard}^1 + 0.000639258 * \text{Sum of} \\
 & \text{Ground}^1 * \text{Sum of Aboard}^2 + -0.000013191 * \text{Sum of Aboard}^3
 \end{aligned}$$

Accuracy: 0.7445256371908662

DEGREE-4:

$$\begin{aligned}
 \text{Equation: Sum of Fatalities (air)} = & -8.823180849 + 0.195888186 * \text{Quarter} + 2.755673673 * \\
 & \text{Month} + -0.554595539 * \text{Day} + -0.129610203 * \text{Country/Region} + 0.221819940 * \text{Aircraft} \\
 & \text{Manufacturer} + -0.032963241 * \text{Aircraft} + -0.022092435 * \text{Location} + -0.016011309 * \text{Operator} \\
 & + 0.044737672 * \text{Sum of Ground} + 1.845773135 * \text{Sum of Aboard} + 0.003390553 * \text{Year}^2 + - \\
 & 0.403067524 * \text{Year}^1 * \text{Quarter}^1 + -0.093150991 * \text{Year}^1 * \text{Month}^1 + 0.023837674 * \\
 & \text{Year}^1 * \text{Day}^1 + 0.001841499 * \text{Year}^1 * \text{Country/Region}^1 + 0.001183560 * \text{Year}^1 * \text{Aircraft} \\
 & \text{Manufacturer}^1 + -0.000632317 * \text{Year}^1 * \text{Aircraft}^1 + 0.000293588 * \text{Year}^1 * \text{Location}^1 + \\
 & 0.000126723 * \text{Year}^1 * \text{Operator}^1 + 0.004795056 * \text{Year}^1 * \text{Sum of Ground}^1 + 0.017166325 \\
 & * \text{Year}^1 * \text{Sum of Aboard}^1 + 2.802214730 * \text{Quarter}^2 + -2.655117728 * \text{Quarter}^1 * \text{Month}^1 \\
 & + -0.177268280 * \text{Quarter}^1 * \text{Day}^1 + 0.092413990 * \text{Quarter}^1 * \text{Country/Region}^1 + \\
 & 0.598631778 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 + -0.088595548 * \text{Quarter}^1 * \text{Aircraft}^1 +
 \end{aligned}$$

0.021365032 * Quarter^1*Location^1 + 0.020966366 * Quarter^1*Operator^1 + 0.004567963 *
 Quarter^1*Sum of Ground^1 + 0.310085995 * Quarter^1*Sum of Aboard^1 + 1.293292232 *
 Month^2 + -0.328731096 * Month^1*Day^1 + -0.002025134 * Month^1*Country/Region^1 + -
 0.013518827 * Month^1*Aircraft Manufacturer^1 + 0.004828847 * Month^1*Aircraft^1 +
 0.006606271 * Month^1*Location^1 + 0.004598954 * Month^1*Operator^1 + 0.001003044 *
 Month^1*Sum of Ground^1 + 0.146953731 * Month^1*Sum of Aboard^1 + 0.128088941 *
 Day^2 + -0.000176146 * Day^1*Country/Region^1 + -0.003656532 * Day^1*Aircraft
 Manufacturer^1 + 0.001973527 * Day^1*Aircraft^1 + -0.000846578 * Day^1*Location^1 + -
 0.000204662 * Day^1*Operator^1 + -0.000566568 * Day^1*Sum of Ground^1 + 0.006058764 *
 Day^1*Sum of Aboard^1 + 0.000339756 * Country/Region^2 + -0.000075336 *
 Country/Region^1*Aircraft Manufacturer^1 + 0.000083342 * Country/Region^1*Aircraft^1 + -
 0.000001903 * Country/Region^1*Location^1 + 0.000066004 * Country/Region^1*Operator^1
 + 0.000242080 * Country/Region^1*Sum of Ground^1 + -0.000145919 *
 Country/Region^1*Sum of Aboard^1 + 0.004895773 * Aircraft Manufacturer^2 + -0.001699642
 * Aircraft Manufacturer^1*Aircraft^1 + -0.000275754 * Aircraft Manufacturer^1*Location^1 +
 0.000129733 * Aircraft Manufacturer^1*Operator^1 + -0.000855258 * Aircraft
 Manufacturer^1*Sum of Ground^1 + -0.021236502 * Aircraft Manufacturer^1*Sum of
 Aboard^1 + 0.000163707 * Aircraft^2 + 0.000039122 * Aircraft^1*Location^1 + -0.000045888
 * Aircraft^1*Operator^1 + 0.000275635 * Aircraft^1*Sum of Ground^1 + 0.001984723 *
 Aircraft^1*Sum of Aboard^1 + 0.000011129 * Location^2 + 0.000004757 *
 Location^1*Operator^1 + -0.000177676 * Location^1*Sum of Ground^1 + -0.000375389 *
 Location^1*Sum of Aboard^1 + 0.000034923 * Operator^2 + 0.000002977 * Operator^1*Sum
 of Ground^1 + -0.001114679 * Operator^1*Sum of Aboard^1 + -0.000736458 * Sum of
 Ground^2 + 0.000453750 * Sum of Ground^1*Sum of Aboard^1 + -0.030388633 * Sum of
 Aboard^2 + -0.000006601 * Year^3 + 0.003055351 * Year^2*Quarter^1 + 0.000428861 *
 Year^2*Month^1 + -0.000551793 * Year^2*Day^1 + 0.000020985 * Year^2*Country/Region^1
 + -0.000038574 * Year^2*Aircraft Manufacturer^1 + 0.000008498 * Year^2*Aircraft^1 + -
 0.000003116 * Year^2*Location^1 + -0.000004256 * Year^2*Operator^1 + 0.000307519 *
 Year^2*Sum of Ground^1 + -0.000252147 * Year^2*Sum of Aboard^1 + 0.290512428 *
 Year^1*Quarter^2 + -0.000513034 * Year^1*Quarter^1*Month^1 + 0.001630317 *
 Year^1*Quarter^1*Day^1 + -0.000849255 * Year^1*Quarter^1*Country/Region^1 + -
 0.001013917 * Year^1*Quarter^1*Aircraft Manufacturer^1 + 0.000215951 *
 Year^1*Quarter^1*Aircraft^1 + -0.000075907 * Year^1*Quarter^1*Location^1 + -0.000070733
 * Year^1*Quarter^1*Operator^1 + -0.000453619 * Year^1*Quarter^1*Sum of Ground^1 +
 0.006259714 * Year^1*Quarter^1*Sum of Aboard^1 + 0.015642944 * Year^1*Month^2 + -
 0.002348904 * Year^1*Month^1*Day^1 + 0.000016118 * Year^1*Month^1*Country/Region^1
 + 0.000450093 * Year^1*Month^1*Aircraft Manufacturer^1 + -0.000028485 *
 Year^1*Month^1*Aircraft^1 + -0.000006091 * Year^1*Month^1*Location^1 + 0.000013091 *
 Year^1*Month^1*Operator^1 + -0.000328486 * Year^1*Month^1*Sum of Ground^1 + -
 0.002800575 * Year^1*Month^1*Sum of Aboard^1 + 0.001046141 * Year^1*Day^2 + -
 0.000064278 * Year^1*Day^1*Country/Region^1 + -0.000212556 * Year^1*Day^1*Aircraft
 Manufacturer^1 + 0.000038259 * Year^1*Day^1*Aircraft^1 + 0.000000307 *
 Year^1*Day^1*Location^1 + 0.000007131 * Year^1*Day^1*Operator^1 + -0.000071113 *
 Year^1*Day^1*Sum of Ground^1 + -0.000967606 * Year^1*Day^1*Sum of Aboard^1 + -
 0.000000578 * Year^1*Country/Region^2 + -0.000008717 *
 Year^1*Country/Region^1*Aircraft Manufacturer^1 + 0.000001475 *

$\text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + -0.000000024 * \text{Year}^1 * \text{Country/Region}^1 * \text{Location}^1$
 $+ -0.000001355 * \text{Year}^1 * \text{Country/Region}^1 * \text{Operator}^1 + 0.000048170 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + -0.000140936 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + 0.000012837 * \text{Year}^1 * \text{Aircraft}$
 $\text{Manufacturer}^2 + -0.000005021 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + 0.000000478 *$
 $\text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + 0.000002810 * \text{Year}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Operator}^1 + -0.000027435 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of}$
 $\text{Ground}^1 + 0.000210971 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000500$
 $* \text{Year}^1 * \text{Aircraft}^2 + -0.000000103 * \text{Year}^1 * \text{Aircraft}^1 * \text{Location}^1 + -0.000000282 *$
 $\text{Year}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000011937 * \text{Year}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -$
 $0.000027036 * \text{Year}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000012 * \text{Year}^1 * \text{Location}^2 + -$
 $0.000000115 * \text{Year}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000095618 * \text{Year}^1 * \text{Location}^1 * \text{Sum of}$
 $\text{Ground}^1 + 0.000004444 * \text{Year}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000140 *$
 $\text{Year}^1 * \text{Operator}^2 + 0.000242681 * \text{Year}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000007805 *$
 $\text{Year}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000080204 * \text{Year}^1 * \text{Sum of Ground}^2 +$
 $0.000045779 * \text{Year}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000282863 * \text{Year}^1 * \text{Sum of}$
 $\text{Aboard}^2 + 4.204031373 * \text{Quarter}^3 + -1.113303025 * \text{Quarter}^2 * \text{Month}^1 + 0.019674843 *$
 $\text{Quarter}^2 * \text{Day}^1 + -0.048091396 * \text{Quarter}^2 * \text{Country/Region}^1 + -0.255203841 *$
 $\text{Quarter}^2 * \text{Aircraft Manufacturer}^1 + 0.035559586 * \text{Quarter}^2 * \text{Aircraft}^1 + -0.012301229 *$
 $\text{Quarter}^2 * \text{Location}^1 + -0.013733113 * \text{Quarter}^2 * \text{Operator}^1 + -0.000022208 *$
 $\text{Quarter}^2 * \text{Sum of Ground}^1 + -0.307484001 * \text{Quarter}^2 * \text{Sum of Aboard}^1 + -1.404009676 *$
 $\text{Quarter}^1 * \text{Month}^2 + 0.215902042 * \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 + -0.003029218 *$
 $\text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^1 + -0.019702452 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 + 0.005110498 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft}^1 + -0.000539259 *$
 $\text{Quarter}^1 * \text{Month}^1 * \text{Location}^1 + 0.001485223 * \text{Quarter}^1 * \text{Month}^1 * \text{Operator}^1 + -$
 $0.000079560 * \text{Quarter}^1 * \text{Month}^1 * \text{Sum of Ground}^1 + -0.044655302 *$
 $\text{Quarter}^1 * \text{Month}^1 * \text{Sum of Aboard}^1 + -0.011946281 * \text{Quarter}^1 * \text{Day}^2 + 0.001466521 *$
 $\text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^1 + 0.000395312 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 + -0.000270412 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft}^1 + 0.000005274 *$
 $\text{Quarter}^1 * \text{Day}^1 * \text{Location}^1 + -0.000184171 * \text{Quarter}^1 * \text{Day}^1 * \text{Operator}^1 + 0.000004592$
 $* \text{Quarter}^1 * \text{Day}^1 * \text{Sum of Ground}^1 + -0.006961979 * \text{Quarter}^1 * \text{Day}^1 * \text{Sum of Aboard}^1 +$
 $0.000015188 * \text{Quarter}^1 * \text{Country/Region}^2 + -0.000274240 *$
 $\text{Quarter}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + 0.000030146 *$
 $\text{Quarter}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + 0.000012982 *$
 $\text{Quarter}^1 * \text{Country/Region}^1 * \text{Location}^1 + -0.000018214 *$
 $\text{Quarter}^1 * \text{Country/Region}^1 * \text{Operator}^1 + 0.000006492 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Sum}$
 $\text{of Ground}^1 + -0.000855049 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + -0.002160092$
 $* \text{Quarter}^1 * \text{Aircraft Manufacturer}^2 + 0.000604466 * \text{Quarter}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Aircraft}^1 + -0.000030921 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 +$
 $-0.000001128 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + 0.000013446 *$
 $\text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + 0.000750255 * \text{Quarter}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Sum of Aboard}^1 + -0.000044394 * \text{Quarter}^1 * \text{Aircraft}^2 + 0.000002991 *$
 $\text{Quarter}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000002572 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Operator}^1 +$
 $0.000028346 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000063026 *$
 $\text{Quarter}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000001372 * \text{Quarter}^1 * \text{Location}^2 +$
 $0.000001292 * \text{Quarter}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000007804 *$

$\text{Quarter}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000033335 * \text{Quarter}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000004962 * \text{Quarter}^1 * \text{Operator}^2 + -0.000004667 * \text{Quarter}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000018032 * \text{Quarter}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000014729 * \text{Quarter}^1 * \text{Sum of Ground}^2 + -0.000026221 * \text{Quarter}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.001820833 * \text{Quarter}^1 * \text{Sum of Aboard}^2 + -0.079008030 * \text{Month}^3 + 0.037940123 * \text{Month}^2 * \text{Day}^1 + -0.003121343 * \text{Month}^2 * \text{Country/Region}^1 + -0.015951686 * \text{Month}^2 * \text{Aircraft Manufacturer}^1 + 0.001989259 * \text{Month}^2 * \text{Aircraft}^1 + -0.001215683 * \text{Month}^2 * \text{Location}^1 + -0.001132060 * \text{Month}^2 * \text{Operator}^1 + 0.000004643 * \text{Month}^2 * \text{Sum of Ground}^1 + -0.022366598 * \text{Month}^2 * \text{Sum of Aboard}^1 + 0.002791487 * \text{Month}^1 * \text{Day}^2 + 0.000506401 * \text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 + -0.001638062 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 + 0.000247848 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}^1 + -0.000008982 * \text{Month}^1 * \text{Day}^1 * \text{Location}^1 + 0.000035293 * \text{Month}^1 * \text{Day}^1 * \text{Operator}^1 + -0.000005759 * \text{Month}^1 * \text{Day}^1 * \text{Sum of Ground}^1 + -0.001616012 * \text{Month}^1 * \text{Day}^1 * \text{Sum of Aboard}^1 + 0.000027093 * \text{Month}^1 * \text{Country/Region}^2 + 0.000138418 * \text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + -0.000027713 * \text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + 0.000001190 * \text{Month}^1 * \text{Country/Region}^1 * \text{Location}^1 + 0.000001450 * \text{Month}^1 * \text{Country/Region}^1 * \text{Operator}^1 + -0.000078956 * \text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + 0.000423790 * \text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + 0.000403780 * \text{Month}^1 * \text{Aircraft Manufacturer}^2 + -0.000079460 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + -0.000012255 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000012627 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.000068108 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + 0.002491692 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000130 * \text{Month}^1 * \text{Aircraft}^2 + 0.000002387 * \text{Month}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000001513 * \text{Month}^1 * \text{Aircraft}^1 * \text{Operator}^1 + -0.000426653 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.000396856 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000427 * \text{Month}^1 * \text{Location}^2 + -0.000000668 * \text{Month}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000000323 * \text{Month}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000034410 * \text{Month}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000772 * \text{Month}^1 * \text{Operator}^2 + -0.000329245 * \text{Month}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000010686 * \text{Month}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000016160 * \text{Month}^1 * \text{Sum of Ground}^2 + 0.000008482 * \text{Month}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000835706 * \text{Month}^1 * \text{Sum of Aboard}^2 + -0.004483845 * \text{Day}^3 + -0.000180911 * \text{Day}^2 * \text{Country/Region}^1 + 0.000468716 * \text{Day}^2 * \text{Aircraft Manufacturer}^1 + -0.000128392 * \text{Day}^2 * \text{Aircraft}^1 + 0.000000881 * \text{Day}^2 * \text{Location}^1 + -0.000007971 * \text{Day}^2 * \text{Operator}^1 + -0.000008830 * \text{Day}^2 * \text{Sum of Ground}^1 + 0.000062898 * \text{Day}^2 * \text{Sum of Aboard}^1 + 0.000009021 * \text{Day}^1 * \text{Country/Region}^2 + -0.000045562 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + 0.000007386 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + 0.000000788 * \text{Day}^1 * \text{Country/Region}^1 * \text{Location}^1 + 0.000000081 * \text{Day}^1 * \text{Country/Region}^1 * \text{Operator}^1 + -0.000042704 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + -0.000007487 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + -0.000044135 * \text{Day}^1 * \text{Aircraft Manufacturer}^2 + 0.000014829 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + 0.000002175 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + 0.000013863 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.000063199 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000050039 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + -0.000001982 * \text{Day}^1 * \text{Aircraft}^2 + -0.000000201 * \text{Day}^1 * \text{Aircraft}^1 * \text{Location}^1 + -0.000002273 * \text{Day}^1 * \text{Aircraft}^1 * \text{Operator}^1$

+ -0.000350563 * Day^1*Aircraft^1*Sum of Ground^1 + 0.000022199 *
 Day^1*Aircraft^1*Sum of Aboard^1 + 0.000000175 * Day^1*Location^2 + 0.000000304 *
 Day^1*Location^1*Operator^1 + 0.000720814 * Day^1*Location^1*Sum of Ground^1 + -
 0.000003909 * Day^1*Location^1*Sum of Aboard^1 + -0.000000389 * Day^1*Operator^2 + -
 0.001274904 * Day^1*Operator^1*Sum of Ground^1 + 0.000031338 * Day^1*Operator^1*Sum
 of Aboard^1 + -0.000003238 * Day^1*Sum of Ground^2 + 0.000032026 * Day^1*Sum of
 Ground^1*Sum of Aboard^1 + 0.000199424 * Day^1*Sum of Aboard^2 + -0.000001076 *
 Country/Region^3 + -0.000002158 * Country/Region^2*Aircraft Manufacturer^1 +
 0.000000215 * Country/Region^2*Aircraft^1 + -0.000000002 * Country/Region^2*Location^1
 + -0.000000085 * Country/Region^2*Operator^1 + 0.000717720 * Country/Region^2*Sum of
 Ground^1 + 0.000008681 * Country/Region^2*Sum of Aboard^1 + -0.000006629 *
 Country/Region^1*Aircraft Manufacturer^2 + 0.000003005 * Country/Region^1*Aircraft
 Manufacturer^1*Aircraft^1 + 0.000000022 * Country/Region^1*Aircraft
 Manufacturer^1*Location^1 + -0.000000106 * Country/Region^1*Aircraft
 Manufacturer^1*Operator^1 + 0.000462612 * Country/Region^1*Aircraft Manufacturer^1*Sum
 of Ground^1 + 0.000013451 * Country/Region^1*Aircraft Manufacturer^1*Sum of Aboard^1 +
 -0.000000312 * Country/Region^1*Aircraft^2 + -0.000000015 *
 Country/Region^1*Aircraft^1*Location^1 + -0.000000013 *
 Country/Region^1*Aircraft^1*Operator^1 + -0.000613377 *
 Country/Region^1*Aircraft^1*Sum of Ground^1 + -0.000001945 *
 Country/Region^1*Aircraft^1*Sum of Aboard^1 + -0.000000003 *
 Country/Region^1*Location^2 + 0.000000008 * Country/Region^1*Location^1*Operator^1 +
 0.000105714 * Country/Region^1*Location^1*Sum of Ground^1 + -0.000000005 *
 Country/Region^1*Location^1*Sum of Aboard^1 + 0.000000020 *
 Country/Region^1*Operator^2 + 0.000324326 * Country/Region^1*Operator^1*Sum of
 Ground^1 + -0.000001738 * Country/Region^1*Operator^1*Sum of Aboard^1 + 0.000060644 *
 Country/Region^1*Sum of Ground^2 + 0.000227557 * Country/Region^1*Sum of
 Ground^1*Sum of Aboard^1 + 0.000056715 * Country/Region^1*Sum of Aboard^2 + -
 0.000014624 * Aircraft Manufacturer^3 + 0.000004212 * Aircraft Manufacturer^2*Aircraft^1 +
 -0.000000281 * Aircraft Manufacturer^2*Location^1 + 0.000000309 * Aircraft
 Manufacturer^2*Operator^1 + 0.000323657 * Aircraft Manufacturer^2*Sum of Ground^1 + -
 0.000084976 * Aircraft Manufacturer^2*Sum of Aboard^1 + -0.000000209 * Aircraft
 Manufacturer^1*Aircraft^2 + 0.000000203 * Aircraft Manufacturer^1*Aircraft^1*Location^1 +
 -0.000000278 * Aircraft Manufacturer^1*Aircraft^1*Operator^1 + 0.000938599 * Aircraft
 Manufacturer^1*Aircraft^1*Sum of Ground^1 + 0.000030025 * Aircraft
 Manufacturer^1*Aircraft^1*Sum of Aboard^1 + 0.000000068 * Aircraft
 Manufacturer^1*Location^2 + -0.000000031 * Aircraft Manufacturer^1*Location^1*Operator^1
 + -0.000844321 * Aircraft Manufacturer^1*Location^1*Sum of Ground^1 + 0.000008896 *
 Aircraft Manufacturer^1*Location^1*Sum of Aboard^1 + 0.000000011 * Aircraft
 Manufacturer^1*Operator^2 + 0.001165642 * Aircraft Manufacturer^1*Operator^1*Sum of
 Ground^1 + -0.000004692 * Aircraft Manufacturer^1*Operator^1*Sum of Aboard^1 +
 0.000071784 * Aircraft Manufacturer^1*Sum of Ground^2 + -0.000110042 * Aircraft
 Manufacturer^1*Sum of Ground^1*Sum of Aboard^1 + -0.000155878 * Aircraft
 Manufacturer^1*Sum of Aboard^2 + -0.000000021 * Aircraft^3 + -0.000000021 *
 Aircraft^2*Location^1 + 0.000000042 * Aircraft^2*Operator^1 + -0.000098765 *
 Aircraft^2*Sum of Ground^1 + -0.000001963 * Aircraft^2*Sum of Aboard^1 + -0.000000012 *

$$\begin{aligned}
& \text{Aircraft}^1 * \text{Location}^2 + 0.000000008 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000088312 * \\
& \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000001431 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of} \\
& \text{Aboard}^1 + 0.000000004 * \text{Aircraft}^1 * \text{Operator}^2 + -0.000136612 * \\
& \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000961 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of} \\
& \text{Aboard}^1 + 0.000211110 * \text{Aircraft}^1 * \text{Sum of Ground}^2 + -0.001034815 * \text{Aircraft}^1 * \text{Sum of} \\
& \text{Ground}^1 * \text{Sum of Aboard}^1 + 0.000027867 * \text{Aircraft}^1 * \text{Sum of Aboard}^2 + -0.000000004 * \\
& \text{Location}^3 + -0.000000001 * \text{Location}^2 * \text{Operator}^1 + -0.000004024 * \text{Location}^2 * \text{Sum of} \\
& \text{Ground}^1 + 0.000000266 * \text{Location}^2 * \text{Sum of Aboard}^1 + -0.000000001 * \\
& \text{Location}^1 * \text{Operator}^2 + 0.000027685 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + - \\
& 0.000000072 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000347875 * \text{Location}^1 * \text{Sum of} \\
& \text{Ground}^2 + 0.000835969 * \text{Location}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000001573 * \\
& \text{Location}^1 * \text{Sum of Aboard}^2 + -0.000000022 * \text{Operator}^3 + -0.000087061 * \text{Operator}^2 * \text{Sum} \\
& \text{of Ground}^1 + 0.000000628 * \text{Operator}^2 * \text{Sum of Aboard}^1 + 0.000759083 * \text{Operator}^1 * \text{Sum} \\
& \text{of Ground}^2 + 0.000668230 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000001783 \\
& * \text{Operator}^1 * \text{Sum of Aboard}^2 + -0.000011532 * \text{Sum of Ground}^3 + -0.000003113 * \text{Sum of} \\
& \text{Ground}^2 * \text{Sum of Aboard}^1 + -0.000078674 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^2 + \\
& 0.000048327 * \text{Sum of Aboard}^3 + -0.000000032 * \text{Year}^4 + -0.000014751 * \\
& \text{Year}^3 * \text{Quarter}^1 + -0.000001284 * \text{Year}^3 * \text{Month}^1 + 0.000002037 * \text{Year}^3 * \text{Day}^1 + - \\
& 0.000000149 * \text{Year}^3 * \text{Country/Region}^1 + 0.000000100 * \text{Year}^3 * \text{Aircraft Manufacturer}^1 + \\
& -0.000000030 * \text{Year}^3 * \text{Aircraft}^1 + 0.000000018 * \text{Year}^3 * \text{Location}^1 + 0.000000026 * \\
& \text{Year}^3 * \text{Operator}^1 + 0.000038454 * \text{Year}^3 * \text{Sum of Ground}^1 + 0.000001725 * \text{Year}^3 * \text{Sum} \\
& \text{of Aboard}^1 + -0.000565153 * \text{Year}^2 * \text{Quarter}^2 + -0.000089354 * \\
& \text{Year}^2 * \text{Quarter}^1 * \text{Month}^1 + -0.000014680 * \text{Year}^2 * \text{Quarter}^1 * \text{Day}^1 + 0.000003337 * \\
& \text{Year}^2 * \text{Quarter}^1 * \text{Country/Region}^1 + 0.000002295 * \text{Year}^2 * \text{Quarter}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 + -0.000000115 * \text{Year}^2 * \text{Quarter}^1 * \text{Aircraft}^1 + 0.000000258 * \\
& \text{Year}^2 * \text{Quarter}^1 * \text{Location}^1 + 0.000000677 * \text{Year}^2 * \text{Quarter}^1 * \text{Operator}^1 + -0.000105595 \\
& * \text{Year}^2 * \text{Quarter}^1 * \text{Sum of Ground}^1 + -0.000083861 * \text{Year}^2 * \text{Quarter}^1 * \text{Sum of Aboard}^1 \\
& + 0.000000729 * \text{Year}^2 * \text{Month}^2 + 0.000021914 * \text{Year}^2 * \text{Month}^1 * \text{Day}^1 + -0.000000425 \\
& * \text{Year}^2 * \text{Month}^1 * \text{Country/Region}^1 + 0.000000102 * \text{Year}^2 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 + -0.000000170 * \text{Year}^2 * \text{Month}^1 * \text{Aircraft}^1 + -0.000000032 * \\
& \text{Year}^2 * \text{Month}^1 * \text{Location}^1 + -0.000000080 * \text{Year}^2 * \text{Month}^1 * \text{Operator}^1 + 0.000017688 * \\
& \text{Year}^2 * \text{Month}^1 * \text{Sum of Ground}^1 + 0.000023425 * \text{Year}^2 * \text{Month}^1 * \text{Sum of Aboard}^1 + \\
& 0.000000837 * \text{Year}^2 * \text{Day}^2 + 0.000000541 * \text{Year}^2 * \text{Day}^1 * \text{Country/Region}^1 + \\
& 0.000001471 * \text{Year}^2 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 + -0.000000283 * \\
& \text{Year}^2 * \text{Day}^1 * \text{Aircraft}^1 + -0.000000044 * \text{Year}^2 * \text{Day}^1 * \text{Location}^1 + -0.000000005 * \\
& \text{Year}^2 * \text{Day}^1 * \text{Operator}^1 + 0.000147282 * \text{Year}^2 * \text{Day}^1 * \text{Sum of Ground}^1 + 0.000007928 \\
& * \text{Year}^2 * \text{Day}^1 * \text{Sum of Aboard}^1 + -0.000000012 * \text{Year}^2 * \text{Country/Region}^2 + \\
& 0.000000009 * \text{Year}^2 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + -0.000000001 * \\
& \text{Year}^2 * \text{Country/Region}^1 * \text{Aircraft}^1 + -0.000000001 * \text{Year}^2 * \text{Country/Region}^1 * \text{Location}^1 \\
& + 0.000000001 * \text{Year}^2 * \text{Country/Region}^1 * \text{Operator}^1 + -0.000060823 * \\
& \text{Year}^2 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + 0.000000366 * \text{Year}^2 * \text{Country/Region}^1 * \text{Sum} \\
& \text{of Aboard}^1 + 0.000000143 * \text{Year}^2 * \text{Aircraft Manufacturer}^2 + -0.000000037 * \\
& \text{Year}^2 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + 0.000000006 * \text{Year}^2 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 + -0.000000011 * \text{Year}^2 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + \\
& 0.000619915 * \text{Year}^2 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000000967 * \\
& \text{Year}^2 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000002 * \text{Year}^2 * \text{Aircraft}^2 + -
\end{aligned}$$

$0.000000001 * \text{Year}^2 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000002 * \text{Year}^2 * \text{Aircraft}^1 * \text{Operator}^1$
 $+ -0.000088843 * \text{Year}^2 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000000192 * \text{Year}^2 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Year}^2 * \text{Location}^2 + 0.000000000 * \text{Year}^2 * \text{Location}^1 * \text{Operator}^1 + -0.000015992 * \text{Year}^2 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000062 * \text{Year}^2 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Year}^2 * \text{Operator}^2 + 0.000016503 * \text{Year}^2 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000067 * \text{Year}^2 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000131856 * \text{Year}^2 * \text{Sum of Ground}^2 + -0.000039727 * \text{Year}^2 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000001678 * \text{Year}^2 * \text{Sum of Aboard}^2 + -0.042489253 * \text{Year}^1 * \text{Quarter}^3 + -0.010427646 * \text{Year}^1 * \text{Quarter}^2 * \text{Month}^1 + 0.001424996 * \text{Year}^1 * \text{Quarter}^2 * \text{Day}^1 + 0.000030594 * \text{Year}^1 * \text{Quarter}^2 * \text{Country/Region}^1 + -0.000379731 * \text{Year}^1 * \text{Quarter}^2 * \text{Aircraft Manufacturer}^1 + 0.000053135 * \text{Year}^1 * \text{Quarter}^2 * \text{Aircraft}^1 + 0.000008955 * \text{Year}^1 * \text{Quarter}^2 * \text{Location}^1 + -0.000008532 * \text{Year}^1 * \text{Quarter}^2 * \text{Operator}^1 + -0.000032663 * \text{Year}^1 * \text{Quarter}^2 * \text{Sum of Ground}^1 + -0.000015492 * \text{Year}^1 * \text{Quarter}^2 * \text{Sum of Aboard}^1 + 0.003220475 * \text{Year}^1 * \text{Quarter}^1 * \text{Month}^2 + -0.000805517 * \text{Year}^1 * \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 + 0.000037705 * \text{Year}^1 * \text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^1 + 0.000046826 * \text{Year}^1 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 + -0.000004353 * \text{Year}^1 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft}^1 + -0.000001494 * \text{Year}^1 * \text{Quarter}^1 * \text{Month}^1 * \text{Location}^1 + 0.000001641 * \text{Year}^1 * \text{Quarter}^1 * \text{Month}^1 * \text{Operator}^1 + -0.000072514 * \text{Year}^1 * \text{Quarter}^1 * \text{Month}^1 * \text{Sum of Ground}^1 + 0.000716251 * \text{Year}^1 * \text{Quarter}^1 * \text{Month}^1 * \text{Sum of Aboard}^1 + 0.000001159 * \text{Year}^1 * \text{Quarter}^1 * \text{Day}^2 + -0.000007936 * \text{Year}^1 * \text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^1 + -0.000033975 * \text{Year}^1 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 + 0.000005549 * \text{Year}^1 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft}^1 + -0.000000564 * \text{Year}^1 * \text{Quarter}^1 * \text{Day}^1 * \text{Location}^1 + 0.000000978 * \text{Year}^1 * \text{Quarter}^1 * \text{Day}^1 * \text{Operator}^1 + -0.000111918 * \text{Year}^1 * \text{Quarter}^1 * \text{Day}^1 * \text{Sum of Ground}^1 + 0.000033537 * \text{Year}^1 * \text{Quarter}^1 * \text{Day}^1 * \text{Sum of Aboard}^1 + 0.000000035 * \text{Year}^1 * \text{Quarter}^1 * \text{Country/Region}^2 + 0.000003330 * \text{Year}^1 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + -0.000000533 * \text{Year}^1 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + 0.000000058 * \text{Year}^1 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Location}^1 + 0.000000061 * \text{Year}^1 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Operator}^1 + -0.000359168 * \text{Year}^1 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + 0.000009015 * \text{Year}^1 * \text{Quarter}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + -0.000001033 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^2 + 0.000000895 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + -0.000000002 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + 0.000000153 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.000306747 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000012320 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + -0.000000122 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft}^2 + -0.000000007 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Location}^1 + -0.000000045 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000015460 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000000267 * \text{Year}^1 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000007 * \text{Year}^1 * \text{Quarter}^1 * \text{Location}^2 + -0.000000004 * \text{Year}^1 * \text{Quarter}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000014146 * \text{Year}^1 * \text{Quarter}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000472 * \text{Year}^1 * \text{Quarter}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000014 *$

$$\begin{aligned}
& \text{Year}^1 * \text{Quarter}^1 * \text{Operator}^2 + -0.000000054 * \text{Year}^1 * \text{Quarter}^1 * \text{Operator}^1 * \text{Sum of} \\
& \text{Ground}^1 + 0.000000477 * \text{Year}^1 * \text{Quarter}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000165206 * \\
& \text{Year}^1 * \text{Quarter}^1 * \text{Sum of Ground}^2 + -0.000600533 * \text{Year}^1 * \text{Quarter}^1 * \text{Sum of} \\
& \text{Ground}^1 * \text{Sum of Aboard}^1 + 0.000006662 * \text{Year}^1 * \text{Quarter}^1 * \text{Sum of Aboard}^2 + - \\
& 0.001118968 * \text{Year}^1 * \text{Month}^3 + 0.000250310 * \text{Year}^1 * \text{Month}^2 * \text{Day}^1 + -0.000008378 * \\
& \text{Year}^1 * \text{Month}^2 * \text{Country/Region}^1 + -0.000005133 * \text{Year}^1 * \text{Month}^2 * \text{Aircraft} \\
& \text{Manufacturer}^1 + 0.000000479 * \text{Year}^1 * \text{Month}^2 * \text{Aircraft}^1 + 0.000000155 * \\
& \text{Year}^1 * \text{Month}^2 * \text{Location}^1 + -0.000001137 * \text{Year}^1 * \text{Month}^2 * \text{Operator}^1 + -0.000206085 \\
& * \text{Year}^1 * \text{Month}^2 * \text{Sum of Ground}^1 + -0.000168750 * \text{Year}^1 * \text{Month}^2 * \text{Sum of Aboard}^1 + \\
& -0.000010545 * \text{Year}^1 * \text{Month}^1 * \text{Day}^2 + -0.000003253 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 + -0.000006725 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 + 0.000000730 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}^1 + 0.000000092 * \text{Year}^1 * \text{Month}^1 * \text{Day}^1 * \text{Location}^1 + \\
& 0.000000339 * \text{Year}^1 * \text{Month}^1 * \text{Day}^1 * \text{Operator}^1 + 0.000106171 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Day}^1 * \text{Sum of Ground}^1 + -0.000045567 * \text{Year}^1 * \text{Month}^1 * \text{Day}^1 * \text{Sum} \\
& \text{of Aboard}^1 + 0.000000186 * \text{Year}^1 * \text{Month}^1 * \text{Country/Region}^2 + -0.000000316 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + 0.000000077 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + -0.000000025 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Location}^1 + -0.000000022 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Operator}^1 + 0.000313965 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + 0.000002471 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + 0.000000673 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Aircraft Manufacturer}^2 + -0.000000321 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 + 0.000000005 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 + -0.000000066 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Operator}^1 + -0.001024212 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum} \\
& \text{of Ground}^1 + 0.000008373 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + \\
& 0.000000030 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft}^2 + -0.000000003 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000012 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000025238 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum} \\
& \text{of Ground}^1 + -0.000002066 * \text{Year}^1 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000000 \\
& * \text{Year}^1 * \text{Month}^1 * \text{Location}^2 + 0.000000007 * \text{Year}^1 * \text{Month}^1 * \text{Location}^1 * \text{Operator}^1 + \\
& 0.000080456 * \text{Year}^1 * \text{Month}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000551 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000006 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Operator}^2 + -0.000046870 * \text{Year}^1 * \text{Month}^1 * \text{Operator}^1 * \text{Sum of} \\
& \text{Ground}^1 + 0.000000247 * \text{Year}^1 * \text{Month}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000893614 * \\
& \text{Year}^1 * \text{Month}^1 * \text{Sum of Ground}^2 + 0.000249259 * \text{Year}^1 * \text{Month}^1 * \text{Sum of} \\
& \text{Ground}^1 * \text{Sum of Aboard}^1 + -0.000005475 * \text{Year}^1 * \text{Month}^1 * \text{Sum of Aboard}^2 + - \\
& 0.000014825 * \text{Year}^1 * \text{Day}^3 + 0.000001110 * \text{Year}^1 * \text{Day}^2 * \text{Country/Region}^1 + \\
& 0.000004425 * \text{Year}^1 * \text{Day}^2 * \text{Aircraft Manufacturer}^1 + -0.000000812 * \\
& \text{Year}^1 * \text{Day}^2 * \text{Aircraft}^1 + -0.000000080 * \text{Year}^1 * \text{Day}^2 * \text{Location}^1 + -0.000000117 * \\
& \text{Year}^1 * \text{Day}^2 * \text{Operator}^1 + 0.000488627 * \text{Year}^1 * \text{Day}^2 * \text{Sum of Ground}^1 + -0.000016850 \\
& * \text{Year}^1 * \text{Day}^2 * \text{Sum of Aboard}^1 + -0.000000019 * \text{Year}^1 * \text{Day}^1 * \text{Country/Region}^2 + \\
& 0.000000034 * \text{Year}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + -0.000000018 * \\
& \text{Year}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + 0.000000005 * \\
& \text{Year}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Location}^1 + 0.000000008 *
\end{aligned}$$

$\text{Year}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Operator}^1 + -0.000150343 *$
 $\text{Year}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + 0.000000585 *$
 $\text{Year}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + 0.000000069 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft}$
 $\text{Manufacturer}^2 + -0.000000009 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 +$
 $0.000000006 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000000033 *$
 $\text{Year}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + 0.000035289 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000002936 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000001 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft}^2 + -0.000000001$
 $* \text{Year}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000006 *$
 $\text{Year}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Operator}^1 + -0.000037799 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of}$
 $\text{Ground}^1 + 0.000000640 * \text{Year}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000001 *$
 $\text{Year}^1 * \text{Day}^1 * \text{Location}^2 + 0.000000001 * \text{Year}^1 * \text{Day}^1 * \text{Location}^1 * \text{Operator}^1 +$
 $0.000017744 * \text{Year}^1 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000231 *$
 $\text{Year}^1 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000003 * \text{Year}^1 * \text{Day}^1 * \text{Operator}^2 + -$
 $0.000001663 * \text{Year}^1 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000251 *$
 $\text{Year}^1 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000184924 * \text{Year}^1 * \text{Day}^1 * \text{Sum of}$
 $\text{Ground}^2 + 0.000345605 * \text{Year}^1 * \text{Day}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 +$
 $0.000000391 * \text{Year}^1 * \text{Day}^1 * \text{Sum of Aboard}^2 + -0.000000002 * \text{Year}^1 * \text{Country/Region}^3$
 $+ 0.000000001 * \text{Year}^1 * \text{Country/Region}^2 * \text{Aircraft Manufacturer}^1 + 0.000000000 *$
 $\text{Year}^1 * \text{Country/Region}^2 * \text{Aircraft}^1 + -0.000000000 * \text{Year}^1 * \text{Country/Region}^2 * \text{Location}^1$
 $+ 0.000000001 * \text{Year}^1 * \text{Country/Region}^2 * \text{Operator}^1 + -0.000016847 *$
 $\text{Year}^1 * \text{Country/Region}^2 * \text{Sum of Ground}^1 + 0.000000092 * \text{Year}^1 * \text{Country/Region}^2 * \text{Sum}$
 $\text{of Aboard}^1 + -0.000000007 * \text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^2 +$
 $0.000000003 * \text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + 0.000000000$
 $* \text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + 0.000000002 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.000062361 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000000338 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + -0.000000000 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft}^2 + 0.000000000 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Location}^1 + -0.000000000 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000015452 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000000054 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000000 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Location}^2 + 0.000000000 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000002883 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000003 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000000 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Operator}^2 + 0.000000504 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000017 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000022999 *$
 $\text{Year}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^2 + 0.000085895 * \text{Year}^1 * \text{Country/Region}^1 * \text{Sum}$
 $\text{of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000108 * \text{Year}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^2$
 $+ -0.000000054 * \text{Year}^1 * \text{Aircraft Manufacturer}^3 + 0.000000015 * \text{Year}^1 * \text{Aircraft}$
 $\text{Manufacturer}^2 * \text{Aircraft}^1 + -0.000000004 * \text{Year}^1 * \text{Aircraft Manufacturer}^2 * \text{Location}^1 +$
 $0.000000001 * \text{Year}^1 * \text{Aircraft Manufacturer}^2 * \text{Operator}^1 + -0.000114175 * \text{Year}^1 * \text{Aircraft}$
 $\text{Manufacturer}^2 * \text{Sum of Ground}^1 + -0.000000003 * \text{Year}^1 * \text{Aircraft Manufacturer}^2 * \text{Sum of}$

$$\begin{aligned}
& \text{Aboard}^1 + -0.000000000 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^2 + 0.0000000001 * \\
& \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^1 + -0.0000000001 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000023043 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.0000000035 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^2 + 0.000000000 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000001592 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.0000000017 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Operator}^2 + -0.000023143 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.0000000012 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000069086 * \text{Year}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Sum of Ground}^2 + 0.000230336 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of} \\
& \text{Ground}^1 * \text{Sum of Aboard}^1 + 0.000002359 * \text{Year}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of} \\
& \text{Aboard}^2 + -0.000000000 * \text{Year}^1 * \text{Aircraft}^3 + -0.000000000 * \\
& \text{Year}^1 * \text{Aircraft}^2 * \text{Location}^1 + 0.000000000 * \text{Year}^1 * \text{Aircraft}^2 * \text{Operator}^1 + - \\
& 0.000001187 * \text{Year}^1 * \text{Aircraft}^2 * \text{Sum of Ground}^1 + 0.0000000006 * \text{Year}^1 * \text{Aircraft}^2 * \text{Sum} \\
& \text{of Aboard}^1 + 0.000000000 * \text{Year}^1 * \text{Aircraft}^1 * \text{Location}^2 + -0.000000000 * \\
& \text{Year}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000000314 * \\
& \text{Year}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.0000000001 * \\
& \text{Year}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000000 * \\
& \text{Year}^1 * \text{Aircraft}^1 * \text{Operator}^2 + 0.000003368 * \text{Year}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of} \\
& \text{Ground}^1 + -0.0000000003 * \text{Year}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000002191 * \\
& \text{Year}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^2 + -0.000018151 * \text{Year}^1 * \text{Aircraft}^1 * \text{Sum of} \\
& \text{Ground}^1 * \text{Sum of Aboard}^1 + -0.000000424 * \text{Year}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^2 + - \\
& 0.000000000 * \text{Year}^1 * \text{Location}^3 + -0.000000000 * \text{Year}^1 * \text{Location}^2 * \text{Operator}^1 + \\
& 0.000000198 * \text{Year}^1 * \text{Location}^2 * \text{Sum of Ground}^1 + 0.000000000 * \\
& \text{Year}^1 * \text{Location}^2 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Year}^1 * \text{Location}^1 * \text{Operator}^2 + - \\
& 0.000000450 * \text{Year}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.0000000001 * \\
& \text{Year}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000021837 * \text{Year}^1 * \text{Location}^1 * \text{Sum} \\
& \text{of Ground}^2 + 0.000000145 * \text{Year}^1 * \text{Location}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + - \\
& 0.0000000006 * \text{Year}^1 * \text{Location}^1 * \text{Sum of Aboard}^2 + -0.000000000 * \text{Year}^1 * \text{Operator}^3 + - \\
& 0.0000000016 * \text{Year}^1 * \text{Operator}^2 * \text{Sum of Ground}^1 + -0.000000002 * \\
& \text{Year}^1 * \text{Operator}^2 * \text{Sum of Aboard}^1 + -0.000014007 * \text{Year}^1 * \text{Operator}^1 * \text{Sum of Ground}^2 \\
& + -0.000019650 * \text{Year}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.0000000036 * \\
& \text{Year}^1 * \text{Operator}^1 * \text{Sum of Aboard}^2 + -0.001110915 * \text{Year}^1 * \text{Sum of Ground}^3 + \\
& 0.001154957 * \text{Year}^1 * \text{Sum of Ground}^2 * \text{Sum of Aboard}^1 + -0.000235441 * \text{Year}^1 * \text{Sum of} \\
& \text{Ground}^1 * \text{Sum of Aboard}^2 + 0.000000126 * \text{Year}^1 * \text{Sum of Aboard}^3 + -3.358554960 * \\
& \text{Quarter}^4 + 4.178594754 * \text{Quarter}^3 * \text{Month}^1 + -0.044660959 * \text{Quarter}^3 * \text{Day}^1 + \\
& 0.008738655 * \text{Quarter}^3 * \text{Country/Region}^1 + 0.040028366 * \text{Quarter}^3 * \text{Aircraft} \\
& \text{Manufacturer}^1 + -0.005553955 * \text{Quarter}^3 * \text{Aircraft}^1 + 0.002016614 * \\
& \text{Quarter}^3 * \text{Location}^1 + 0.002215029 * \text{Quarter}^3 * \text{Operator}^1 + -0.000001128 * \\
& \text{Quarter}^3 * \text{Sum of Ground}^1 + 0.040398915 * \text{Quarter}^3 * \text{Sum of Aboard}^1 + -1.606501609 * \\
& \text{Quarter}^2 * \text{Month}^2 + -0.007274331 * \text{Quarter}^2 * \text{Month}^1 * \text{Day}^1 + 0.001150055 * \\
& \text{Quarter}^2 * \text{Month}^1 * \text{Country/Region}^1 + 0.010909683 * \text{Quarter}^2 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 + -0.001595845 * \text{Quarter}^2 * \text{Month}^1 * \text{Aircraft}^1 + 0.000540304 *
\end{aligned}$$

$$\begin{aligned}
& \text{Quarter}^2 * \text{Month}^1 * \text{Location}^1 + 0.000963775 * \text{Quarter}^2 * \text{Month}^1 * \text{Operator}^1 + - \\
& 0.000005403 * \text{Quarter}^2 * \text{Month}^1 * \text{Sum of Ground}^1 + 0.032901870 * \\
& \text{Quarter}^2 * \text{Month}^1 * \text{Sum of Aboard}^1 + -0.000285852 * \text{Quarter}^2 * \text{Day}^2 + -0.000154749 * \\
& \text{Quarter}^2 * \text{Day}^1 * \text{Country/Region}^1 + 0.001203325 * \text{Quarter}^2 * \text{Day}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 + -0.000149116 * \text{Quarter}^2 * \text{Day}^1 * \text{Aircraft}^1 + 0.000014337 * \\
& \text{Quarter}^2 * \text{Day}^1 * \text{Location}^1 + 0.000047963 * \text{Quarter}^2 * \text{Day}^1 * \text{Operator}^1 + -0.000014785 \\
& * \text{Quarter}^2 * \text{Day}^1 * \text{Sum of Ground}^1 + 0.002246912 * \text{Quarter}^2 * \text{Day}^1 * \text{Sum of Aboard}^1 + \\
& -0.000004862 * \text{Quarter}^2 * \text{Country/Region}^2 + -0.000024219 * \\
& \text{Quarter}^2 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + 0.000008313 * \\
& \text{Quarter}^2 * \text{Country/Region}^1 * \text{Aircraft}^1 + -0.000001364 * \\
& \text{Quarter}^2 * \text{Country/Region}^1 * \text{Location}^1 + 0.000000400 * \\
& \text{Quarter}^2 * \text{Country/Region}^1 * \text{Operator}^1 + 0.000030821 * \text{Quarter}^2 * \text{Country/Region}^1 * \text{Sum} \\
& \text{of Ground}^1 + -0.000040522 * \text{Quarter}^2 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + 0.000042419 \\
& * \text{Quarter}^2 * \text{Aircraft Manufacturer}^2 + -0.000004055 * \text{Quarter}^2 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 + 0.000010466 * \text{Quarter}^2 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + \\
& -0.000008793 * \text{Quarter}^2 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.000011410 * \\
& \text{Quarter}^2 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000265656 * \text{Quarter}^2 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Sum of Aboard}^1 + -0.000000456 * \text{Quarter}^2 * \text{Aircraft}^2 + -0.000001445 * \\
& \text{Quarter}^2 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000970 * \text{Quarter}^2 * \text{Aircraft}^1 * \text{Operator}^1 + - \\
& 0.000149462 * \text{Quarter}^2 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000012694 * \\
& \text{Quarter}^2 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000127 * \text{Quarter}^2 * \text{Location}^2 + - \\
& 0.000000040 * \text{Quarter}^2 * \text{Location}^1 * \text{Operator}^1 + -0.000190739 * \\
& \text{Quarter}^2 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000019767 * \text{Quarter}^2 * \text{Location}^1 * \text{Sum of} \\
& \text{Aboard}^1 + -0.000000011 * \text{Quarter}^2 * \text{Operator}^2 + 0.000108269 * \\
& \text{Quarter}^2 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000003088 * \text{Quarter}^2 * \text{Operator}^1 * \text{Sum of} \\
& \text{Aboard}^1 + -0.000008859 * \text{Quarter}^2 * \text{Sum of Ground}^2 + -0.000011176 * \text{Quarter}^2 * \text{Sum of} \\
& \text{Ground}^1 * \text{Sum of Aboard}^1 + -0.000311610 * \text{Quarter}^2 * \text{Sum of Aboard}^2 + 0.367814690 * \\
& \text{Quarter}^1 * \text{Month}^3 + -0.005902583 * \text{Quarter}^1 * \text{Month}^2 * \text{Day}^1 + -0.000149867 * \\
& \text{Quarter}^1 * \text{Month}^2 * \text{Country/Region}^1 + -0.002618203 * \text{Quarter}^1 * \text{Month}^2 * \text{Aircraft} \\
& \text{Manufacturer}^1 + 0.000266601 * \text{Quarter}^1 * \text{Month}^2 * \text{Aircraft}^1 + -0.000158946 * \\
& \text{Quarter}^1 * \text{Month}^2 * \text{Location}^1 + -0.000444216 * \text{Quarter}^1 * \text{Month}^2 * \text{Operator}^1 + - \\
& 0.000015242 * \text{Quarter}^1 * \text{Month}^2 * \text{Sum of Ground}^1 + -0.013362888 * \\
& \text{Quarter}^1 * \text{Month}^2 * \text{Sum of Aboard}^1 + -0.000447429 * \text{Quarter}^1 * \text{Month}^1 * \text{Day}^2 + \\
& 0.000009779 * \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 + -0.000626491 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 + 0.000086656 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}^1 + -0.000006711 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 * \text{Location}^1 + -0.000018016 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 * \text{Operator}^1 + -0.000030404 * \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 * \text{Sum of} \\
& \text{Ground}^1 + 0.000442661 * \text{Quarter}^1 * \text{Month}^1 * \text{Day}^1 * \text{Sum of Aboard}^1 + -0.000003612 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^2 + 0.000010041 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + -0.000001966 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + 0.000000540 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Location}^1 + -0.000000362 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Operator}^1 + -0.000236802 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + 0.000031417 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + -0.000043067 *
\end{aligned}$$

$$\begin{aligned}
& \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft Manufacturer}^2 + 0.000015226 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 + 0.000001021 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 + 0.000004000 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Operator}^1 + 0.000014392 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Sum of Ground}^1 + 0.000287364 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Sum of Aboard}^1 + -0.000001529 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft}^2 + - \\
& 0.000000204 * \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft}^1 * \text{Location}^1 + -0.000000721 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000135692 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.000041989 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000104 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Location}^2 + -0.000000038 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000605270 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000002809 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000142 * \\
& \text{Quarter}^1 * \text{Month}^1 * \text{Operator}^2 + 0.000098036 * \text{Quarter}^1 * \text{Month}^1 * \text{Operator}^1 * \text{Sum of} \\
& \text{Ground}^1 + 0.000011245 * \text{Quarter}^1 * \text{Month}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000019224 \\
& * \text{Quarter}^1 * \text{Month}^1 * \text{Sum of Ground}^2 + -0.000022114 * \text{Quarter}^1 * \text{Month}^1 * \text{Sum of} \\
& \text{Ground}^1 * \text{Sum of Aboard}^1 + -0.000216819 * \text{Quarter}^1 * \text{Month}^1 * \text{Sum of Aboard}^2 + \\
& 0.000105979 * \text{Quarter}^1 * \text{Day}^3 + -0.000001601 * \text{Quarter}^1 * \text{Day}^2 * \text{Country/Region}^1 + \\
& 0.000017865 * \text{Quarter}^1 * \text{Day}^2 * \text{Aircraft Manufacturer}^1 + -0.000001199 * \\
& \text{Quarter}^1 * \text{Day}^2 * \text{Aircraft}^1 + 0.000004170 * \text{Quarter}^1 * \text{Day}^2 * \text{Location}^1 + 0.000001058 * \\
& \text{Quarter}^1 * \text{Day}^2 * \text{Operator}^1 + -0.000071432 * \text{Quarter}^1 * \text{Day}^2 * \text{Sum of Ground}^1 + - \\
& 0.000135445 * \text{Quarter}^1 * \text{Day}^2 * \text{Sum of Aboard}^1 + -0.000000768 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^2 + 0.000002885 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + -0.000000337 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + -0.000000131 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Location}^1 + 0.000000020 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Operator}^1 + -0.000139506 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + 0.000002361 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + -0.000011640 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^2 + 0.000003984 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 + -0.000000717 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 + -0.000001017 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Operator}^1 + 0.000019885 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum} \\
& \text{of Ground}^1 + 0.000056879 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + - \\
& 0.000000298 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft}^2 + 0.000000079 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000178 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000198667 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum} \\
& \text{of Ground}^1 + -0.000011155 * \text{Quarter}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000001 \\
& * \text{Quarter}^1 * \text{Day}^1 * \text{Location}^2 + -0.000000033 * \text{Quarter}^1 * \text{Day}^1 * \text{Location}^1 * \text{Operator}^1 + \\
& 0.000124377 * \text{Quarter}^1 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000001375 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000027 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Operator}^2 + -0.000235668 * \text{Quarter}^1 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of} \\
& \text{Ground}^1 + 0.000000252 * \text{Quarter}^1 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000033148 * \\
& \text{Quarter}^1 * \text{Day}^1 * \text{Sum of Ground}^2 + -0.000194056 * \text{Quarter}^1 * \text{Day}^1 * \text{Sum of} \\
& \text{Ground}^1 * \text{Sum of Aboard}^1 + -0.000030082 * \text{Quarter}^1 * \text{Day}^1 * \text{Sum of Aboard}^2 +
\end{aligned}$$

0.000000042 * Quarter^1*Country/Region^3 + -0.000000298 *
 Quarter^1*Country/Region^2*Aircraft Manufacturer^1 + 0.000000035 *
 Quarter^1*Country/Region^2*Aircraft^1 + -0.000000015 *
 Quarter^1*Country/Region^2*Location^1 + 0.000000023 *
 Quarter^1*Country/Region^2*Operator^1 + 0.000200449 * Quarter^1*Country/Region^2*Sum
 of Ground^1 + 0.000000245 * Quarter^1*Country/Region^2*Sum of Aboard^1 + -0.000000758
 * Quarter^1*Country/Region^1*Aircraft Manufacturer^2 + 0.000000221 *
 Quarter^1*Country/Region^1*Aircraft Manufacturer^1*Aircraft^1 + 0.000000060 *
 Quarter^1*Country/Region^1*Aircraft Manufacturer^1*Location^1 + 0.000000020 *
 Quarter^1*Country/Region^1*Aircraft Manufacturer^1*Operator^1 + -0.000137890 *
 Quarter^1*Country/Region^1*Aircraft Manufacturer^1*Sum of Ground^1 + 0.000006217 *
 Quarter^1*Country/Region^1*Aircraft Manufacturer^1*Sum of Aboard^1 + -0.000000017 *
 Quarter^1*Country/Region^1*Aircraft^2 + -0.000000008 *
 Quarter^1*Country/Region^1*Aircraft^1*Location^1 + -0.000000002 *
 Quarter^1*Country/Region^1*Aircraft^1*Operator^1 + 0.000008858 *
 Quarter^1*Country/Region^1*Aircraft^1*Sum of Ground^1 + -0.000000849 *
 Quarter^1*Country/Region^1*Aircraft^1*Sum of Aboard^1 + -0.000000002 *
 Quarter^1*Country/Region^1*Location^2 + -0.000000001 *
 Quarter^1*Country/Region^1*Location^1*Operator^1 + 0.000012089 *
 Quarter^1*Country/Region^1*Location^1*Sum of Ground^1 + 0.000000053 *
 Quarter^1*Country/Region^1*Location^1*Sum of Aboard^1 + 0.000000001 *
 Quarter^1*Country/Region^1*Operator^2 + -0.000021554 *
 Quarter^1*Country/Region^1*Operator^1*Sum of Ground^1 + -0.000000073 *
 Quarter^1*Country/Region^1*Operator^1*Sum of Aboard^1 + 0.000192856 *
 Quarter^1*Country/Region^1*Sum of Ground^2 + -0.000840458 *
 Quarter^1*Country/Region^1*Sum of Ground^1*Sum of Aboard^1 + -0.000000572 *
 Quarter^1*Country/Region^1*Sum of Aboard^2 + 0.000002108 * Quarter^1*Aircraft
 Manufacturer^3 + -0.000000162 * Quarter^1*Aircraft Manufacturer^2*Aircraft^1 + -
 0.000000076 * Quarter^1*Aircraft Manufacturer^2*Location^1 + 0.000000189 *
 Quarter^1*Aircraft Manufacturer^2*Operator^1 + 0.000102123 * Quarter^1*Aircraft
 Manufacturer^2*Sum of Ground^1 + 0.000018023 * Quarter^1*Aircraft Manufacturer^2*Sum
 of Aboard^1 + -0.000000118 * Quarter^1*Aircraft Manufacturer^1*Aircraft^2 + 0.000000022 *
 Quarter^1*Aircraft Manufacturer^1*Aircraft^1*Location^1 + -0.000000046 *
 Quarter^1*Aircraft Manufacturer^1*Aircraft^1*Operator^1 + 0.000041607 *
 Quarter^1*Aircraft Manufacturer^1*Aircraft^1*Sum of Ground^1 + -0.000005703 *
 Quarter^1*Aircraft Manufacturer^1*Aircraft^1*Sum of Aboard^1 + -0.000000002 *
 Quarter^1*Aircraft Manufacturer^1*Location^2 + -0.000000002 * Quarter^1*Aircraft
 Manufacturer^1*Location^1*Operator^1 + -0.000012839 * Quarter^1*Aircraft
 Manufacturer^1*Location^1*Sum of Ground^1 + -0.000000119 * Quarter^1*Aircraft
 Manufacturer^1*Location^1*Sum of Aboard^1 + -0.000000002 * Quarter^1*Aircraft
 Manufacturer^1*Operator^2 + -0.000210480 * Quarter^1*Aircraft
 Manufacturer^1*Operator^1*Sum of Ground^1 + -0.000000894 * Quarter^1*Aircraft
 Manufacturer^1*Operator^1*Sum of Aboard^1 + -0.000090235 * Quarter^1*Aircraft
 Manufacturer^1*Sum of Ground^2 + 0.000181678 * Quarter^1*Aircraft Manufacturer^1*Sum
 of Ground^1*Sum of Aboard^1 + -0.000008247 * Quarter^1*Aircraft Manufacturer^1*Sum of
 Aboard^2 + 0.000000015 * Quarter^1*Aircraft^3 + -0.000000001 *

$\text{Quarter}^1 * \text{Aircraft}^2 * \text{Location}^1 + 0.000000002 * \text{Quarter}^1 * \text{Aircraft}^2 * \text{Operator}^1 + -$
 $0.000007106 * \text{Quarter}^1 * \text{Aircraft}^2 * \text{Sum of Ground}^1 + 0.000000444 * \text{Quarter}^1 * \text{Aircraft}^2 * \text{Sum of Aboard}^1 + 0.000000001 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Location}^2 +$
 $0.000000000 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000002364 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000013 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000001 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Operator}^2 + 0.000028539 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000133 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -$
 $0.000223293 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^2 + 0.000033482 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000001729 * \text{Quarter}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^2 + 0.000000000 * \text{Quarter}^1 * \text{Location}^3 + 0.000000000$
 $* \text{Quarter}^1 * \text{Location}^2 * \text{Operator}^1 + 0.000002648 * \text{Quarter}^1 * \text{Location}^2 * \text{Sum of Ground}^1 + -0.000000006 * \text{Quarter}^1 * \text{Location}^2 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Quarter}^1 * \text{Location}^1 * \text{Operator}^2 + -0.000000980 * \text{Quarter}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000002 * \text{Quarter}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -$
 $0.000014725 * \text{Quarter}^1 * \text{Location}^1 * \text{Sum of Ground}^2 + -0.000244671 * \text{Quarter}^1 * \text{Location}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000884 * \text{Quarter}^1 * \text{Location}^1 * \text{Sum of Aboard}^2 + 0.000000001 * \text{Quarter}^1 * \text{Operator}^3 + -$
 $0.000000685 * \text{Quarter}^1 * \text{Operator}^2 * \text{Sum of Ground}^1 + -0.000000023 * \text{Quarter}^1 * \text{Operator}^2 * \text{Sum of Aboard}^1 + 0.000461464 * \text{Quarter}^1 * \text{Operator}^1 * \text{Sum of Ground}^2 + 0.000321072 * \text{Quarter}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000000105 * \text{Quarter}^1 * \text{Operator}^1 * \text{Sum of Aboard}^2 + -0.000002019 * \text{Quarter}^1 * \text{Sum of Ground}^3 + -0.000041105 * \text{Quarter}^1 * \text{Sum of Ground}^2 * \text{Sum of Aboard}^1 + -0.000423822 * \text{Quarter}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^2 + 0.000005952 * \text{Quarter}^1 * \text{Sum of Aboard}^3 + -0.012546523 * \text{Month}^4 + -0.002924037 * \text{Month}^3 * \text{Day}^1 + 0.000288704 * \text{Month}^3 * \text{Country/Region}^1 + 0.001398180 * \text{Month}^3 * \text{Aircraft Manufacturer}^1 + -$
 $0.000199937 * \text{Month}^3 * \text{Aircraft}^1 + 0.000086630 * \text{Month}^3 * \text{Location}^1 + 0.000111734 * \text{Month}^3 * \text{Operator}^1 + -0.000055686 * \text{Month}^3 * \text{Sum of Ground}^1 + 0.003357405 * \text{Month}^3 * \text{Sum of Aboard}^1 + -0.000203361 * \text{Month}^2 * \text{Day}^2 + -0.000053260 * \text{Month}^2 * \text{Day}^1 * \text{Country/Region}^1 + 0.000182949 * \text{Month}^2 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 + -0.000025093 * \text{Month}^2 * \text{Day}^1 * \text{Aircraft}^1 + 0.000000560 * \text{Month}^2 * \text{Day}^1 * \text{Location}^1 + 0.000002591 * \text{Month}^2 * \text{Day}^1 * \text{Operator}^1 + -0.000098791 * \text{Month}^2 * \text{Day}^1 * \text{Sum of Ground}^1 + 0.000281279 * \text{Month}^2 * \text{Day}^1 * \text{Sum of Aboard}^1 + -0.000000320 * \text{Month}^2 * \text{Country/Region}^2 + -0.000006511 * \text{Month}^2 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + 0.000001309 * \text{Month}^2 * \text{Country/Region}^1 * \text{Aircraft}^1 + -0.000000213 * \text{Month}^2 * \text{Country/Region}^1 * \text{Location}^1 + 0.000000167 * \text{Month}^2 * \text{Country/Region}^1 * \text{Operator}^1 + -0.000895348 * \text{Month}^2 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + -0.000014603 * \text{Month}^2 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + 0.000004533 * \text{Month}^2 * \text{Aircraft Manufacturer}^2 + -0.000001264 * \text{Month}^2 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + -0.000000156 * \text{Month}^2 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000000994 * \text{Month}^2 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.000208342 * \text{Month}^2 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000165982 * \text{Month}^2 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000149 * \text{Month}^2 * \text{Aircraft}^2 + 0.000000058 * \text{Month}^2 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000147 * \text{Month}^2 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000403518 * \text{Month}^2 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000028643 *$

$\text{Month}^2 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000007 * \text{Month}^2 * \text{Location}^2 + -0.000000008$
 $* \text{Month}^2 * \text{Location}^1 * \text{Operator}^1 + -0.000095320 * \text{Month}^2 * \text{Location}^1 * \text{Sum of Ground}^1$
 $+ 0.000001256 * \text{Month}^2 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000049 *$
 $\text{Month}^2 * \text{Operator}^2 + 0.000048660 * \text{Month}^2 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000006274$
 $* \text{Month}^2 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000082383 * \text{Month}^2 * \text{Sum of Ground}^2 + -$
 $0.000009368 * \text{Month}^2 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000005289 * \text{Month}^2 * \text{Sum}$
 $\text{of Aboard}^2 + -0.000040388 * \text{Month}^1 * \text{Day}^3 + 0.000002946 *$
 $\text{Month}^1 * \text{Day}^2 * \text{Country/Region}^1 + 0.000023253 * \text{Month}^1 * \text{Day}^2 * \text{Aircraft}$
 $\text{Manufacturer}^1 + -0.000003459 * \text{Month}^1 * \text{Day}^2 * \text{Aircraft}^1 + -0.000000494 *$
 $\text{Month}^1 * \text{Day}^2 * \text{Location}^1 + -0.000000271 * \text{Month}^1 * \text{Day}^2 * \text{Operator}^1 + -0.000143025 *$
 $\text{Month}^1 * \text{Day}^2 * \text{Sum of Ground}^1 + 0.000171754 * \text{Month}^1 * \text{Day}^2 * \text{Sum of Aboard}^1 +$
 $0.000000265 * \text{Month}^1 * \text{Day}^1 * \text{Country/Region}^2 + -0.000000116 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 + 0.000000047 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 + 0.000000009 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Location}^1 + -0.000000039 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Operator}^1 + 0.000278289 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 + -0.000000177 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^1 + -0.000000035 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^2 + -0.000000140 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Aircraft}^1 + 0.000000315 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Location}^1 + 0.000000427 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Operator}^1 + -0.000125638 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum}$
 $\text{of Ground}^1 + -0.000007114 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 +$
 $0.000000018 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}^2 + -0.000000044 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Location}^1 + -0.000000071 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Operator}^1 + -0.000006818 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of}$
 $\text{Ground}^1 + 0.000001273 * \text{Month}^1 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000007 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Location}^2 + 0.000000009 * \text{Month}^1 * \text{Day}^1 * \text{Location}^1 * \text{Operator}^1 +$
 $0.000121367 * \text{Month}^1 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000001457 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000007 * \text{Month}^1 * \text{Day}^1 * \text{Operator}^2$
 $+ -0.000005657 * \text{Month}^1 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000001984 *$
 $\text{Month}^1 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000145450 * \text{Month}^1 * \text{Day}^1 * \text{Sum of}$
 $\text{Ground}^2 + -0.000003946 * \text{Month}^1 * \text{Day}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 +$
 $0.000011921 * \text{Month}^1 * \text{Day}^1 * \text{Sum of Aboard}^2 + -0.000000010 *$
 $\text{Month}^1 * \text{Country/Region}^3 + 0.000000022 * \text{Month}^1 * \text{Country/Region}^2 * \text{Aircraft}$
 $\text{Manufacturer}^1 + -0.000000005 * \text{Month}^1 * \text{Country/Region}^2 * \text{Aircraft}^1 + 0.000000002 *$
 $\text{Month}^1 * \text{Country/Region}^2 * \text{Location}^1 + -0.000000011 *$
 $\text{Month}^1 * \text{Country/Region}^2 * \text{Operator}^1 + 0.000105073 * \text{Month}^1 * \text{Country/Region}^2 * \text{Sum of}$
 $\text{Ground}^1 + -0.000000407 * \text{Month}^1 * \text{Country/Region}^2 * \text{Sum of Aboard}^1 + 0.000000022 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^2 + -0.000000019 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + 0.000000000 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000000010 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + 0.000275586 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + -0.000001054 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000003 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft}^2 + -0.000000001 *$

$\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000002 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Operator}^1 + -0.000066195 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000000103 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000001 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Location}^2 + -0.000000000 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000011239 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000012 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000001 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Operator}^2 + -0.000006175 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000052 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.001024771 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^2 + -0.000178656 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000002065 *$
 $\text{Month}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^2 + -0.000000131 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^3 + -0.000000132 * \text{Month}^1 * \text{Aircraft Manufacturer}^2 * \text{Aircraft}^1 + 0.000000027$
 $* \text{Month}^1 * \text{Aircraft Manufacturer}^2 * \text{Location}^1 + 0.000000050 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^2 * \text{Operator}^1 + -0.000527916 * \text{Month}^1 * \text{Aircraft Manufacturer}^2 * \text{Sum of}$
 $\text{Ground}^1 + -0.000001021 * \text{Month}^1 * \text{Aircraft Manufacturer}^2 * \text{Sum of Aboard}^1 +$
 $0.000000039 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^2 + -0.000000006 *$
 $\text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^1 + -0.000000011 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000153987 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000000237 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + 0.000000003 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Location}^2 + -0.000000001 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000056280 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000513 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000001 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Operator}^2 + -0.000063371 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000153 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000303128 * \text{Month}^1 * \text{Aircraft}$
 $\text{Manufacturer}^1 * \text{Sum of Ground}^2 + -0.000168873 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum}$
 $\text{of Ground}^1 * \text{Sum of Aboard}^1 + -0.000001140 * \text{Month}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of}$
 $\text{Aboard}^2 + -0.000000002 * \text{Month}^1 * \text{Aircraft}^3 + 0.000000000 *$
 $\text{Month}^1 * \text{Aircraft}^2 * \text{Location}^1 + 0.000000000 * \text{Month}^1 * \text{Aircraft}^2 * \text{Operator}^1 + -$
 $0.000008995 * \text{Month}^1 * \text{Aircraft}^2 * \text{Sum of Ground}^1 + -0.000000017 *$
 $\text{Month}^1 * \text{Aircraft}^2 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Month}^1 * \text{Aircraft}^1 * \text{Location}^2 +$
 $0.000000000 * \text{Month}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000007519 *$
 $\text{Month}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000093 *$
 $\text{Month}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000000 *$
 $\text{Month}^1 * \text{Aircraft}^1 * \text{Operator}^2 + 0.000010064 * \text{Month}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of}$
 $\text{Ground}^1 + -0.000000009 * \text{Month}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000162687$
 $* \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^2 + 0.000046055 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of}$
 $\text{Ground}^1 * \text{Sum of Aboard}^1 + 0.000000296 * \text{Month}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^2 + -$
 $0.000000000 * \text{Month}^1 * \text{Location}^3 + -0.000000000 * \text{Month}^1 * \text{Location}^2 * \text{Operator}^1 + -$
 $0.000001634 * \text{Month}^1 * \text{Location}^2 * \text{Sum of Ground}^1 + -0.000000006 *$
 $\text{Month}^1 * \text{Location}^2 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Month}^1 * \text{Location}^1 * \text{Operator}^2 +$

0.000001750 * Month^1*Location^1*Operator^1*Sum of Ground^1 + 0.000000005 *
 Month^1*Location^1*Operator^1*Sum of Aboard^1 + -0.000006645 *
 Month^1*Location^1*Sum of Ground^2 + 0.000005134 * Month^1*Location^1*Sum of
 Ground^1*Sum of Aboard^1 + 0.000000131 * Month^1*Location^1*Sum of Aboard^2 + -
 0.000000000 * Month^1*Operator^3 + -0.000000741 * Month^1*Operator^2*Sum of Ground^1
 + 0.000000010 * Month^1*Operator^2*Sum of Aboard^1 + -0.000053649 *
 Month^1*Operator^1*Sum of Ground^2 + 0.000061738 * Month^1*Operator^1*Sum of
 Ground^1*Sum of Aboard^1 + -0.000000068 * Month^1*Operator^1*Sum of Aboard^2 + -
 0.000136229 * Month^1*Sum of Ground^3 + -0.000446996 * Month^1*Sum of Ground^2*Sum
 of Aboard^1 + -0.000396739 * Month^1*Sum of Ground^1*Sum of Aboard^2 + 0.000000708 *
 Month^1*Sum of Aboard^3 + 0.000032638 * Day^4 + 0.000002471 *
 Day^3*Country/Region^1 + -0.000005316 * Day^3*Aircraft Manufacturer^1 + 0.000002185 *
 Day^3*Aircraft^1 + 0.000000179 * Day^3*Location^1 + -0.000000072 * Day^3*Operator^1 +
 0.000012153 * Day^3*Sum of Ground^1 + 0.000026610 * Day^3*Sum of Aboard^1 + -
 0.000000067 * Day^2*Country/Region^2 + 0.000000424 * Day^2*Country/Region^1*Aircraft
 Manufacturer^1 + -0.000000058 * Day^2*Country/Region^1*Aircraft^1 + -0.000000014 *
 Day^2*Country/Region^1*Location^1 + 0.000000013 * Day^2*Country/Region^1*Operator^1
 + -0.000571385 * Day^2*Country/Region^1*Sum of Ground^1 + -0.000000480 *
 Day^2*Country/Region^1*Sum of Aboard^1 + -0.000001862 * Day^2*Aircraft Manufacturer^2
 + 0.000000303 * Day^2*Aircraft Manufacturer^1*Aircraft^1 + 0.000000081 * Day^2*Aircraft
 Manufacturer^1*Location^1 + -0.000000270 * Day^2*Aircraft Manufacturer^1*Operator^1 + -
 0.000119380 * Day^2*Aircraft Manufacturer^1*Sum of Ground^1 + -0.000000026 *
 Day^2*Aircraft Manufacturer^1*Sum of Aboard^1 + 0.000000006 * Day^2*Aircraft^2 + -
 0.000000017 * Day^2*Aircraft^1*Location^1 + 0.000000041 * Day^2*Aircraft^1*Operator^1 +
 0.000105402 * Day^2*Aircraft^1*Sum of Ground^1 + -0.000000763 * Day^2*Aircraft^1*Sum
 of Aboard^1 + 0.000000001 * Day^2*Location^2 + -0.000000001 *
 Day^2*Location^1*Operator^1 + -0.000014726 * Day^2*Location^1*Sum of Ground^1 +
 0.000000143 * Day^2*Location^1*Sum of Aboard^1 + 0.000000006 * Day^2*Operator^2 + -
 0.000022320 * Day^2*Operator^1*Sum of Ground^1 + 0.000000126 * Day^2*Operator^1*Sum
 of Aboard^1 + 0.000003499 * Day^2*Sum of Ground^2 + -0.000460444 * Day^2*Sum of
 Ground^1*Sum of Aboard^1 + -0.000001750 * Day^2*Sum of Aboard^2 + -0.000000006 *
 Day^1*Country/Region^3 + -0.000000027 * Day^1*Country/Region^2*Aircraft
 Manufacturer^1 + 0.000000005 * Day^1*Country/Region^2*Aircraft^1 + -0.000000000 *
 Day^1*Country/Region^2*Location^1 + -0.000000001 * Day^1*Country/Region^2*Operator^1
 + 0.000018594 * Day^1*Country/Region^2*Sum of Ground^1 + 0.000000034 *
 Day^1*Country/Region^2*Sum of Aboard^1 + -0.000000031 *
 Day^1*Country/Region^1*Aircraft Manufacturer^2 + 0.000000011 *
 Day^1*Country/Region^1*Aircraft Manufacturer^1*Aircraft^1 + 0.000000005 *
 Day^1*Country/Region^1*Aircraft Manufacturer^1*Location^1 + 0.000000011 *
 Day^1*Country/Region^1*Aircraft Manufacturer^1*Operator^1 + -0.000110730 *
 Day^1*Country/Region^1*Aircraft Manufacturer^1*Sum of Ground^1 + 0.000000868 *
 Day^1*Country/Region^1*Aircraft Manufacturer^1*Sum of Aboard^1 + -0.000000001 *
 Day^1*Country/Region^1*Aircraft^2 + -0.000000001 *
 Day^1*Country/Region^1*Aircraft^1*Location^1 + -0.000000002 *
 Day^1*Country/Region^1*Aircraft^1*Operator^1 + 0.000017945 *
 Day^1*Country/Region^1*Aircraft^1*Sum of Ground^1 + -0.000000139 *

$\text{Day}^1 * \text{Country/Region}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Day}^1 * \text{Country/Region}^1 * \text{Location}^2 + -0.000000000 * \text{Day}^1 * \text{Country/Region}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000000102 * \text{Day}^1 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000008 * \text{Day}^1 * \text{Country/Region}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Day}^1 * \text{Country/Region}^1 * \text{Operator}^2 + 0.000012790 * \text{Day}^1 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000001 * \text{Day}^1 * \text{Country/Region}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000510373 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^2 + -0.000090197 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000188 * \text{Day}^1 * \text{Country/Region}^1 * \text{Sum of Aboard}^2 + 0.000000022 * \text{Day}^1 * \text{Aircraft Manufacturer}^3 + 0.000000022 * \text{Day}^1 * \text{Aircraft Manufacturer}^2 * \text{Aircraft}^1 + -0.000000010 * \text{Day}^1 * \text{Aircraft Manufacturer}^2 * \text{Location}^1 + 0.000000004 * \text{Day}^1 * \text{Aircraft Manufacturer}^2 * \text{Operator}^1 + 0.000170832 * \text{Day}^1 * \text{Aircraft Manufacturer}^2 * \text{Sum of Ground}^1 + 0.000001176 * \text{Day}^1 * \text{Aircraft Manufacturer}^2 * \text{Sum of Aboard}^1 + -0.000000007 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^2 + 0.000000002 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^1 + -0.000000002 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Operator}^1 + -0.000052223 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.000000341 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000001 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^2 + -0.000000001 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000018239 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000005 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000001 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^2 + 0.000010175 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000067 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000399891 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^2 + 0.000169975 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000000468 * \text{Day}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^2 + 0.000000001 * \text{Day}^1 * \text{Aircraft}^3 + -0.000000000 * \text{Day}^1 * \text{Aircraft}^2 * \text{Location}^1 + 0.000000000 * \text{Day}^1 * \text{Aircraft}^2 * \text{Operator}^1 + 0.000003534 * \text{Day}^1 * \text{Aircraft}^2 * \text{Sum of Ground}^1 + 0.000000021 * \text{Day}^1 * \text{Aircraft}^2 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Day}^1 * \text{Aircraft}^1 * \text{Location}^2 + 0.000000000 * \text{Day}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000002884 * \text{Day}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000004 * \text{Day}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Day}^1 * \text{Aircraft}^1 * \text{Operator}^2 + -0.000001726 * \text{Day}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000010 * \text{Day}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000000360 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^2 + -0.000009616 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000069 * \text{Day}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^2 + -0.000000000 * \text{Day}^1 * \text{Location}^3 + -0.000000000 * \text{Day}^1 * \text{Location}^2 * \text{Operator}^1 + -0.000000509 * \text{Day}^1 * \text{Location}^2 * \text{Sum of Ground}^1 + -0.000000002 * \text{Day}^1 * \text{Location}^2 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Day}^1 * \text{Location}^1 * \text{Operator}^2 + 0.000000117 * \text{Day}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000001 * \text{Day}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000049968 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Ground}^2 + -0.000006391 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000049 * \text{Day}^1 * \text{Location}^1 * \text{Sum of Aboard}^2 + 0.000000000 * \text{Day}^1 * \text{Operator}^3 + 0.000000942 * \text{Day}^1 * \text{Operator}^2 * \text{Sum of Ground}^1 + -0.000000005 *$

$\text{Day}^1 * \text{Operator}^2 * \text{Sum of Aboard}^1 + -0.000153941 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Ground}^2$
 $+ -0.000024104 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000000042 * \text{Day}^1 * \text{Operator}^1 * \text{Sum of Aboard}^2$
 $+ -0.000119273 * \text{Day}^1 * \text{Sum of Ground}^3 + 0.001188704 * \text{Day}^1 * \text{Sum of Ground}^2 * \text{Sum of Aboard}^1 + 0.000253328 * \text{Day}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^2$
 $+ -0.000000203 * \text{Day}^1 * \text{Sum of Aboard}^3 + 0.000000001 * \text{Country/Region}^4 + 0.000000004 * \text{Country/Region}^3 * \text{Aircraft Manufacturer}^1 + -0.000000001 * \text{Country/Region}^3 * \text{Aircraft}^1 + 0.000000000 * \text{Country/Region}^3 * \text{Location}^1 + 0.000000000 * \text{Country/Region}^3 * \text{Operator}^1 + 0.000001099 * \text{Country/Region}^3 * \text{Sum of Ground}^1 + -0.000000012 * \text{Country/Region}^3 * \text{Sum of Aboard}^1 + 0.000000003 * \text{Country/Region}^2 * \text{Aircraft Manufacturer}^2 + -0.000000001 * \text{Country/Region}^2 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 + -0.000000000 * \text{Country/Region}^2 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 + -0.000000000 * \text{Country/Region}^2 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 + -0.000004082 * \text{Country/Region}^2 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 + 0.000000023 * \text{Country/Region}^2 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Country/Region}^2 * \text{Aircraft}^2 + 0.000000000 * \text{Country/Region}^2 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000000 * \text{Country/Region}^2 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000000640 * \text{Country/Region}^2 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + -0.000000004 * \text{Country/Region}^2 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Country/Region}^2 * \text{Location}^2 + -0.000000000 * \text{Country/Region}^2 * \text{Location}^1 * \text{Operator}^1 + -0.000000211 * \text{Country/Region}^2 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000000 * \text{Country/Region}^2 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Country/Region}^2 * \text{Operator}^2 + -0.000000959 * \text{Country/Region}^2 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000002 * \text{Country/Region}^2 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000000570 * \text{Country/Region}^2 * \text{Sum of Ground}^2 + -0.000007248 * \text{Country/Region}^2 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000020 * \text{Country/Region}^2 * \text{Sum of Aboard}^2 + 0.000000013 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^3 + -0.000000002 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^2 * \text{Aircraft}^1 + -0.000000000 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^2 * \text{Location}^1 + -0.000000000 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^2 * \text{Operator}^1 + -0.000028095 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^2 * \text{Sum of Ground}^1 + -0.000000143 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^2 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^2 + 0.000000000 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^1 + 0.000000000 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Operator}^1 + 0.000009425 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 + 0.000000048 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^2 + 0.000000000 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Operator}^1 + 0.000000809 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000001 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^2 + -0.000001854 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000006 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000006110 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^2 + 0.000083175 * \text{Country/Region}^1 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -$

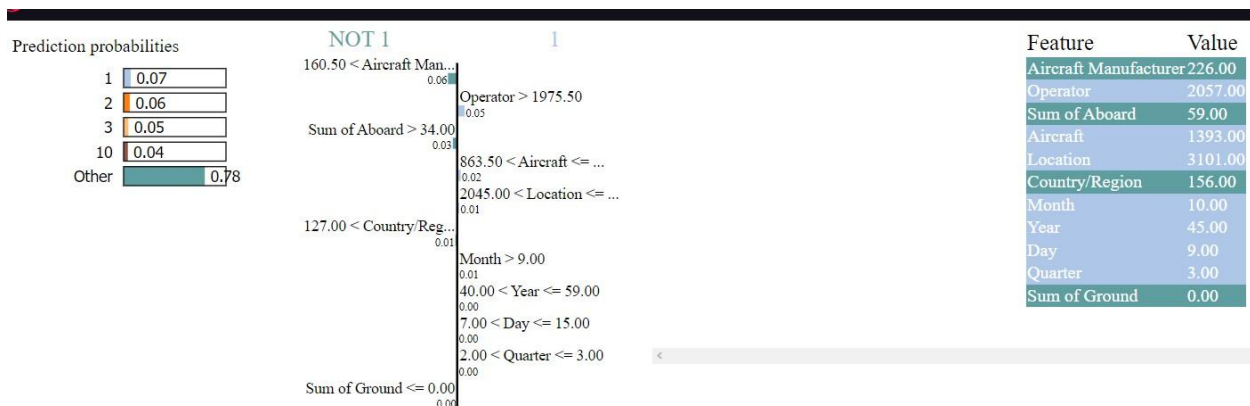
0.000000157 * Country/Region^1*Aircraft Manufacturer^1*Sum of Aboard^2 + 0.000000000 * Country/Region^1*Aircraft^3 + 0.000000000 * Country/Region^1*Aircraft^2*Location^1 + 0.000000000 * Country/Region^1*Aircraft^2*Operator^1 + -0.000000748 * Country/Region^1*Aircraft^2*Sum of Ground^1 + -0.000000004 * Country/Region^1*Aircraft^2*Sum of Aboard^1 + -0.000000000 * Country/Region^1*Aircraft^1*Location^2 + 0.000000000 * Country/Region^1*Aircraft^1*Location^1*Operator^1 + -0.000000101 * Country/Region^1*Aircraft^1*Location^1*Sum of Ground^1 + 0.000000000 * Country/Region^1*Aircraft^1*Location^1*Sum of Aboard^1 + -0.000000000 * Country/Region^1*Aircraft^1*Operator^2 + 0.000000287 * Country/Region^1*Aircraft^1*Operator^1*Sum of Ground^1 + 0.000000001 * Country/Region^1*Aircraft^1*Operator^1*Sum of Aboard^1 + 0.000000675 * Country/Region^1*Aircraft^1*Sum of Ground^2 + -0.000010691 * Country/Region^1*Aircraft^1*Sum of Ground^1*Sum of Aboard^1 + 0.000000026 * Country/Region^1*Aircraft^1*Sum of Aboard^2 + 0.000000000 * Country/Region^1*Location^3 + 0.000000000 * Country/Region^1*Location^2*Operator^1 + -0.000000017 * Country/Region^1*Location^2*Sum of Ground^1 + 0.000000000 * Country/Region^1*Location^2*Sum of Aboard^1 + -0.000000000 * Country/Region^1*Location^1*Operator^2 + 0.000000051 * Country/Region^1*Location^1*Operator^1*Sum of Ground^1 + 0.000000000 * Country/Region^1*Location^1*Operator^1*Sum of Aboard^1 + -0.000006233 * Country/Region^1*Location^1*Sum of Ground^2 + -0.000001969 * Country/Region^1*Location^1*Sum of Ground^1*Sum of Aboard^1 + 0.000000001 * Country/Region^1*Location^1*Sum of Aboard^2 + 0.000000000 * Country/Region^1*Operator^3 + -0.000000074 * Country/Region^1*Operator^2*Sum of Ground^1 + -0.000000000 * Country/Region^1*Operator^2*Sum of Aboard^1 + 0.000004789 * Country/Region^1*Operator^1*Sum of Ground^2 + 0.000001175 * Country/Region^1*Operator^1*Sum of Ground^1*Sum of Aboard^1 + -0.000000005 * Country/Region^1*Operator^1*Sum of Aboard^2 + 0.000429357 * Country/Region^1*Sum of Ground^3 + -0.000284267 * Country/Region^1*Sum of Ground^2*Sum of Aboard^1 + 0.000014938 * Country/Region^1*Sum of Ground^1*Sum of Aboard^2 + -0.000000085 * Country/Region^1*Sum of Aboard^3 + -0.000000014 * Aircraft Manufacturer^4 + 0.000000011 * Aircraft Manufacturer^3*Aircraft^1 + 0.000000002 * Aircraft Manufacturer^3*Location^1 + -0.000000003 * Aircraft Manufacturer^3*Operator^1 + -0.000028016 * Aircraft Manufacturer^3*Sum of Ground^1 + -0.000000005 * Aircraft Manufacturer^3*Sum of Aboard^1 + -0.000000003 * Aircraft Manufacturer^2*Aircraft^2 + -0.000000001 * Aircraft Manufacturer^2*Aircraft^1*Location^1 + 0.000000001 * Aircraft Manufacturer^2*Aircraft^1*Operator^1 + 0.000020063 * Aircraft Manufacturer^2*Aircraft^1*Sum of Ground^1 + 0.000000010 * Aircraft Manufacturer^2*Aircraft^1*Sum of Aboard^1 + -0.000000000 * Aircraft Manufacturer^2*Location^2 + 0.000000000 * Aircraft Manufacturer^2*Location^1*Operator^1 + 0.000000905 * Aircraft Manufacturer^2*Location^1*Sum of Ground^1 + 0.000000019 * Aircraft Manufacturer^2*Location^1*Sum of Aboard^1 + 0.000000000 * Aircraft Manufacturer^2*Operator^2 + 0.000002679 * Aircraft Manufacturer^2*Operator^1*Sum of Ground^1 + 0.000000011 * Aircraft Manufacturer^2*Operator^1*Sum of Aboard^1 + -0.000408153 * Aircraft Manufacturer^2*Sum of Ground^2 + -0.000071528 * Aircraft

$$\begin{aligned}
& \text{Manufacturer}^2 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000000322 * \text{Aircraft} \\
& \text{Manufacturer}^2 * \text{Sum of Aboard}^2 + 0.000000000 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^3 + \\
& 0.000000000 * \text{Aircraft Manufacturer}^1 * \text{Aircraft}^2 * \text{Location}^1 + -0.000000000 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^2 * \text{Operator}^1 + -0.000004579 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^2 * \text{Sum of Ground}^1 + -0.000000003 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^2 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^2 + 0.000000000 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 + -0.000000216 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^1 + -0.000000008 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Operator}^2 + -0.000000677 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + -0.000000002 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000189546 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^2 + 0.000014260 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000065 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Aircraft}^1 * \text{Sum of Aboard}^2 + -0.000000000 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^3 + -0.000000000 * \text{Aircraft Manufacturer}^1 * \text{Location}^2 * \text{Operator}^1 \\
& + -0.000000143 * \text{Aircraft Manufacturer}^1 * \text{Location}^2 * \text{Sum of Ground}^1 + -0.000000000 * \\
& \text{Aircraft Manufacturer}^1 * \text{Location}^2 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 * \text{Operator}^2 + 0.000000287 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000000 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000001741 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 * \text{Sum of Ground}^2 + -0.000001243 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000000015 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Location}^1 * \text{Sum of Aboard}^2 + 0.000000000 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Operator}^3 + 0.000000065 * \text{Aircraft Manufacturer}^1 * \text{Operator}^2 * \text{Sum of} \\
& \text{Ground}^1 + 0.000000001 * \text{Aircraft Manufacturer}^1 * \text{Operator}^2 * \text{Sum of Aboard}^1 + - \\
& 0.000065195 * \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Ground}^2 + -0.000000042 * \\
& \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000000013 * \\
& \text{Aircraft Manufacturer}^1 * \text{Operator}^1 * \text{Sum of Aboard}^2 + -0.000308278 * \text{Aircraft} \\
& \text{Manufacturer}^1 * \text{Sum of Ground}^3 + 0.000124731 * \text{Aircraft Manufacturer}^1 * \text{Sum of} \\
& \text{Ground}^2 * \text{Sum of Aboard}^1 + 0.000034358 * \text{Aircraft Manufacturer}^1 * \text{Sum of Ground}^1 * \text{Sum} \\
& \text{of Aboard}^2 + -0.000000469 * \text{Aircraft Manufacturer}^1 * \text{Sum of Aboard}^3 + -0.000000000 * \\
& \text{Aircraft}^4 + 0.000000000 * \text{Aircraft}^3 * \text{Location}^1 + -0.000000000 * \text{Aircraft}^3 * \text{Operator}^1 + \\
& 0.000000325 * \text{Aircraft}^3 * \text{Sum of Ground}^1 + 0.000000000 * \text{Aircraft}^3 * \text{Sum of Aboard}^1 + - \\
& 0.000000000 * \text{Aircraft}^2 * \text{Location}^2 + -0.000000000 * \text{Aircraft}^2 * \text{Location}^1 * \text{Operator}^1 + \\
& 0.000000016 * \text{Aircraft}^2 * \text{Location}^1 * \text{Sum of Ground}^1 + 0.000000001 * \\
& \text{Aircraft}^2 * \text{Location}^1 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Aircraft}^2 * \text{Operator}^2 + \\
& 0.000000033 * \text{Aircraft}^2 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000000 * \\
& \text{Aircraft}^2 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -0.000021428 * \text{Aircraft}^2 * \text{Sum of Ground}^2 + - \\
& 0.000000740 * \text{Aircraft}^2 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000000001 * \\
& \text{Aircraft}^2 * \text{Sum of Aboard}^2 + 0.000000000 * \text{Aircraft}^1 * \text{Location}^3 + 0.000000000 * \\
& \text{Aircraft}^1 * \text{Location}^2 * \text{Operator}^1 + 0.000000027 * \text{Aircraft}^1 * \text{Location}^2 * \text{Sum of Ground}^1 \\
& + 0.000000000 * \text{Aircraft}^1 * \text{Location}^2 * \text{Sum of Aboard}^1 + -0.000000000 * \\
& \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^2 + -0.000000045 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum} \\
& \text{of Ground}^1 + -0.000000000 * \text{Aircraft}^1 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Aboard}^1 + -
\end{aligned}$$

$0.000000517 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^2 + 0.000000220 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000001 * \text{Aircraft}^1 * \text{Location}^1 * \text{Sum of Aboard}^2 + -0.000000000 * \text{Aircraft}^1 * \text{Operator}^3 + -0.000000008 * \text{Aircraft}^1 * \text{Operator}^2 * \text{Sum of Ground}^1 + -0.000000000 * \text{Aircraft}^1 * \text{Operator}^2 * \text{Sum of Aboard}^1 + 0.000011428 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Ground}^2 + -0.000000171 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000002 * \text{Aircraft}^1 * \text{Operator}^1 * \text{Sum of Aboard}^2 + 0.000074448 * \text{Aircraft}^1 * \text{Sum of Ground}^3 + -0.000022752 * \text{Aircraft}^1 * \text{Sum of Ground}^2 * \text{Sum of Aboard}^1 + -0.000005990 * \text{Aircraft}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^2 + 0.000000077 * \text{Aircraft}^1 * \text{Sum of Aboard}^3 + 0.000000000 * \text{Location}^4 + 0.000000000 * \text{Location}^3 * \text{Operator}^1 + 0.000000001 * \text{Location}^3 * \text{Sum of Ground}^1 + -0.000000000 * \text{Location}^3 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Location}^2 * \text{Operator}^2 + -0.000000008 * \text{Location}^2 * \text{Operator}^1 * \text{Sum of Ground}^1 + 0.000000000 * \text{Location}^2 * \text{Operator}^1 * \text{Sum of Aboard}^1 + 0.000000376 * \text{Location}^2 * \text{Sum of Ground}^2 + -0.000000107 * \text{Location}^2 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Location}^2 * \text{Sum of Aboard}^2 + 0.000000000 * \text{Location}^1 * \text{Operator}^3 + 0.000000004 * \text{Location}^1 * \text{Operator}^2 * \text{Sum of Ground}^1 + -0.000000000 * \text{Location}^1 * \text{Operator}^2 * \text{Sum of Aboard}^1 + -0.000000836 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Ground}^2 + -0.000000031 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + 0.000000000 * \text{Location}^1 * \text{Operator}^1 * \text{Sum of Aboard}^2 + -0.000009169 * \text{Location}^1 * \text{Sum of Ground}^3 + 0.000013687 * \text{Location}^1 * \text{Sum of Ground}^2 * \text{Sum of Aboard}^1 + 0.000001367 * \text{Location}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^2 + 0.000000001 * \text{Location}^1 * \text{Sum of Aboard}^3 + 0.000000000 * \text{Operator}^4 + 0.000000019 * \text{Operator}^3 * \text{Sum of Ground}^1 + -0.000000000 * \text{Operator}^3 * \text{Sum of Aboard}^1 + 0.000000483 * \text{Operator}^2 * \text{Sum of Ground}^2 + 0.000000051 * \text{Operator}^2 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^1 + -0.000000000 * \text{Operator}^2 * \text{Sum of Aboard}^2 + 0.000020377 * \text{Operator}^1 * \text{Sum of Ground}^3 + -0.000000845 * \text{Operator}^1 * \text{Sum of Ground}^2 * \text{Sum of Aboard}^1 + 0.000002020 * \text{Operator}^1 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^2 + -0.000000017 * \text{Operator}^1 * \text{Sum of Aboard}^3 + -0.000601517 * \text{Sum of Ground}^4 + -0.000041766 * \text{Sum of Ground}^3 * \text{Sum of Aboard}^1 + -0.000335402 * \text{Sum of Ground}^2 * \text{Sum of Aboard}^2 + 0.000032534 * \text{Sum of Ground}^1 * \text{Sum of Aboard}^3 + -0.000000098 * \text{Sum of Aboard}^4$

Accuracy: 0.6658498907555441

LIME INTERPRETATION:



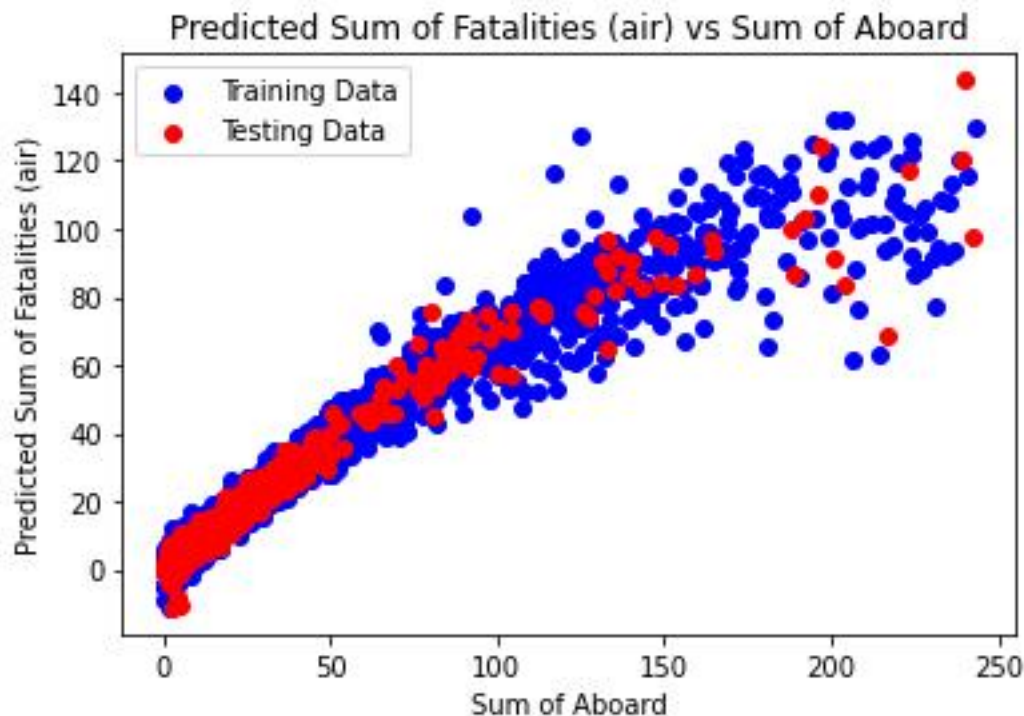
The provided spreadsheet presents the outcomes of a machine learning model tasked with predicting the probability of a fatal aircraft accident based on various features. Notably, the most influential feature is "Aircraft Manufacturer," followed by "Operator," "Sum of Aboard," "Aircraft Type," and "Location." These factors outweigh others such as "Country/Region," "Month," "Day," "Year," "Quarter," or "Sum of Ground" in terms of predictive significance.

From this dataset, several insights emerge:

- Aircraft manufacturer emerges as the primary predictor of a fatal accident, potentially indicating variations in aircraft safety across manufacturers or differences in the frequency of aircraft types in the dataset.
- The importance of the airline operator suggests variations in safety records among airlines or differences in operational environments.
- The number of passengers aboard significantly influences accident prediction, likely due to the increased potential for casualties with higher passenger counts.
- Aircraft type plays a crucial role, hinting at differing accident rates among aircraft models or variations in passenger capacity.
- The accident location's significance implies varying safety conditions across regions.

Overall, these findings underscore the multifactorial nature of fatal aircraft accidents, with aircraft manufacturer, airline operator, passenger count, aircraft type, and accident location emerging as pivotal predictors. However, it is imperative to recognize that these observations are contingent on the specific dataset analyzed and may not universally apply. Additionally,

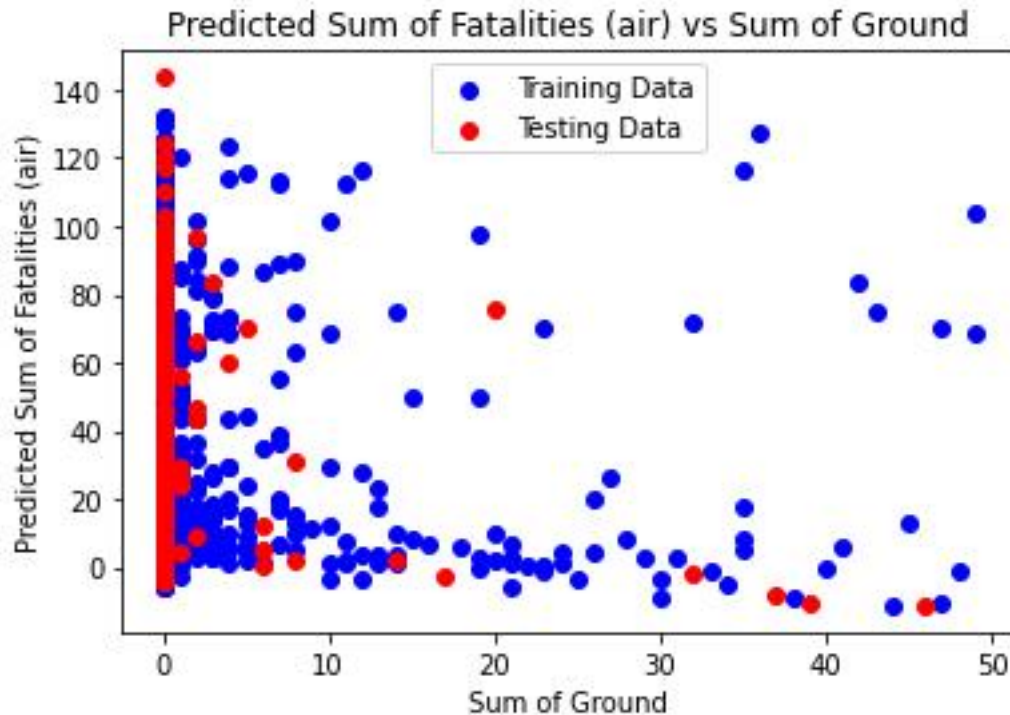
predictive importance does not equate to causation, necessitating cautious interpretation and further research.



The plot provided illustrates the outcomes of a linear regression model trained on data pertaining to aircraft accidents. The x-axis denotes the count of individuals on board the aircraft (labeled "Sum of Aboard"), while the y-axis represents the predicted count of fatalities (labeled "Predicted Sum of Fatalities (air)"). Although the equation for the plotted line is not explicitly depicted, its slope and y-intercept offer insights into the relationship between the number of individuals on board and the predicted fatalities.

The positive slope of the line indicates that the model predicts an increase in fatalities with a rise in the number of individuals on board. This observation aligns with the expectation that a higher passenger count corresponds to a higher potential for casualties in the event of an aircraft crash. Additionally, the positive y-intercept suggests that the model predicts fatalities even in scenarios with no passengers. This could imply that the model accounts for other contributing factors to aircraft accidents, such as aircraft type or weather conditions.

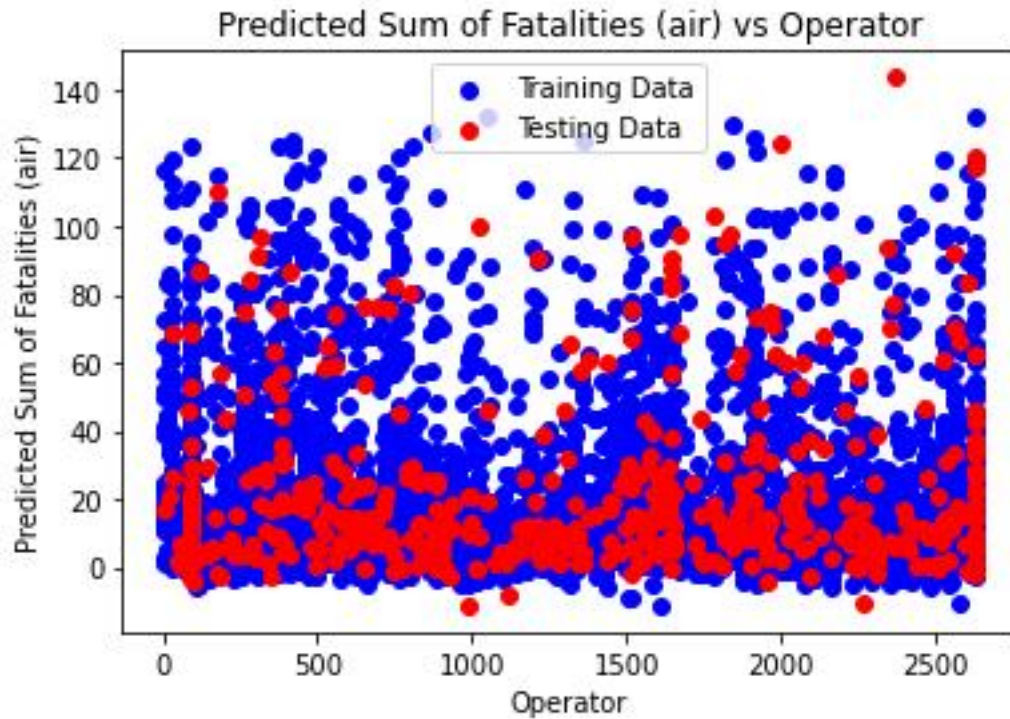
It is essential to recognize that the model's predictions are subject to inherent uncertainties and limitations, and actual outcomes may vary based on various factors. Therefore, while the model provides valuable insights, its interpretations should be approached with caution and validated through comprehensive analyses and real-world data.



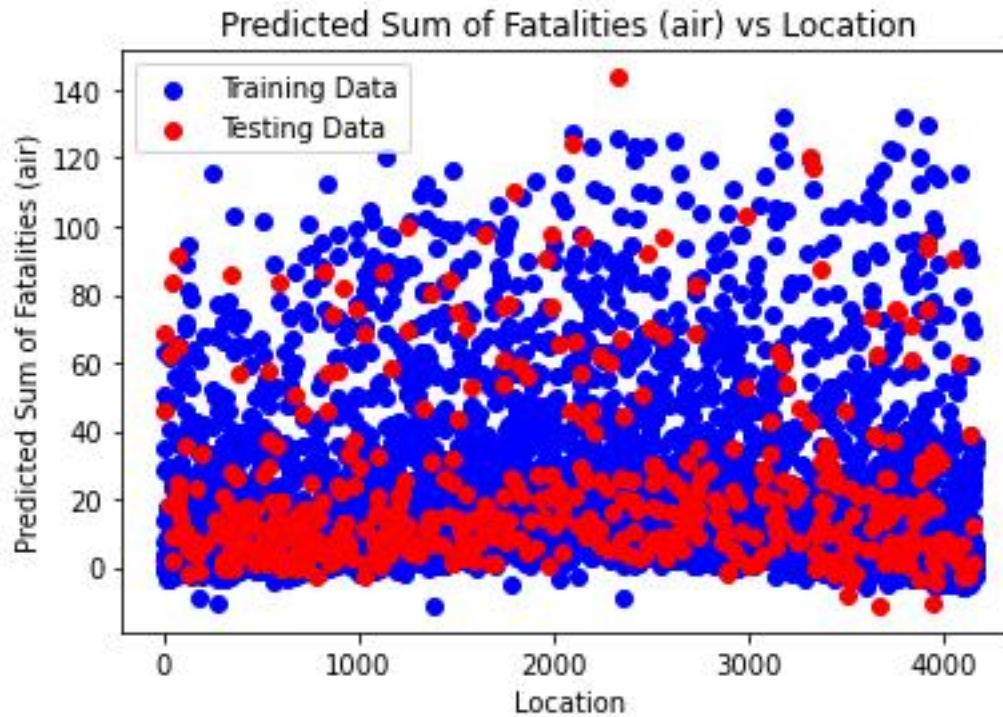
The provided scatter plot depicts the predicted sum of fatalities resulting from aircraft accidents (air) against the sum of ground fatalities. The x-axis represents the "Sum of Ground," likely indicating the predicted count of ground fatalities due to the aircraft accident, while the y-axis denotes the "Predicted Sum of Fatalities (air)," indicating the predicted count of fatalities on board the aircraft. Each data point corresponds to a single aircraft accident, where its position reflects the model's predictions for ground and aircraft fatalities.

The training data points, depicted in blue, are utilized to train the model, while the testing data points, depicted in red, assess the model's performance on unseen data. Generally, the data points align along a diagonal line, suggesting that the model predicts a proportional relationship between ground and aircraft fatalities. However, there is more dispersion observed in the testing data compared to the training data, indicating potential limitations in the model's performance on new data.

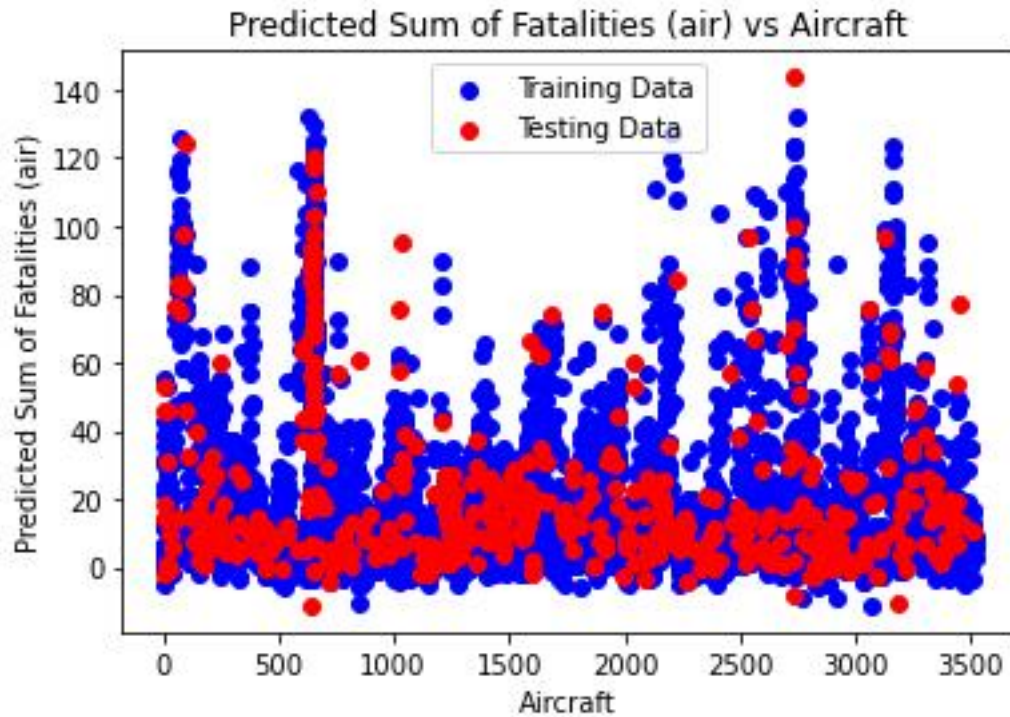
It is imperative to acknowledge that the model's predictions are subject to various influencing factors, including aircraft type, weather conditions, and accident location. Therefore, while the model offers insights into potential outcomes, real-world fatalities may differ due to the complexity and variability of aviation accidents.



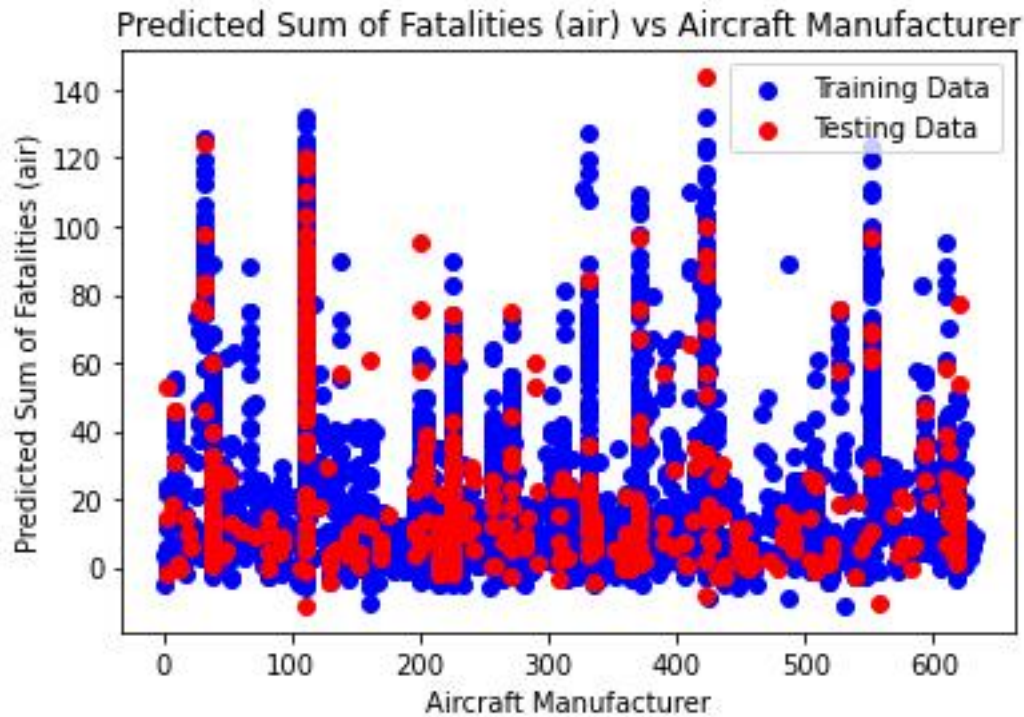
The scatter plot provided illustrates the predicted sum of fatalities (air) in relation to the operator. Upon examination, no clear linear relationship between the operator and the predicted number of fatalities is evident, with data points scattered across the plot. However, the tighter clustering of training data compared to testing data suggests potential variance in model performance. Additionally, outlier data points may influence predictions. Overall, while the model may offer some insight into predicted fatalities, it is clear that other factors beyond the operator contribute to outcomes. This analysis underscores the need for comprehensive evaluation of the model's accuracy and reliability across diverse datasets and contexts.



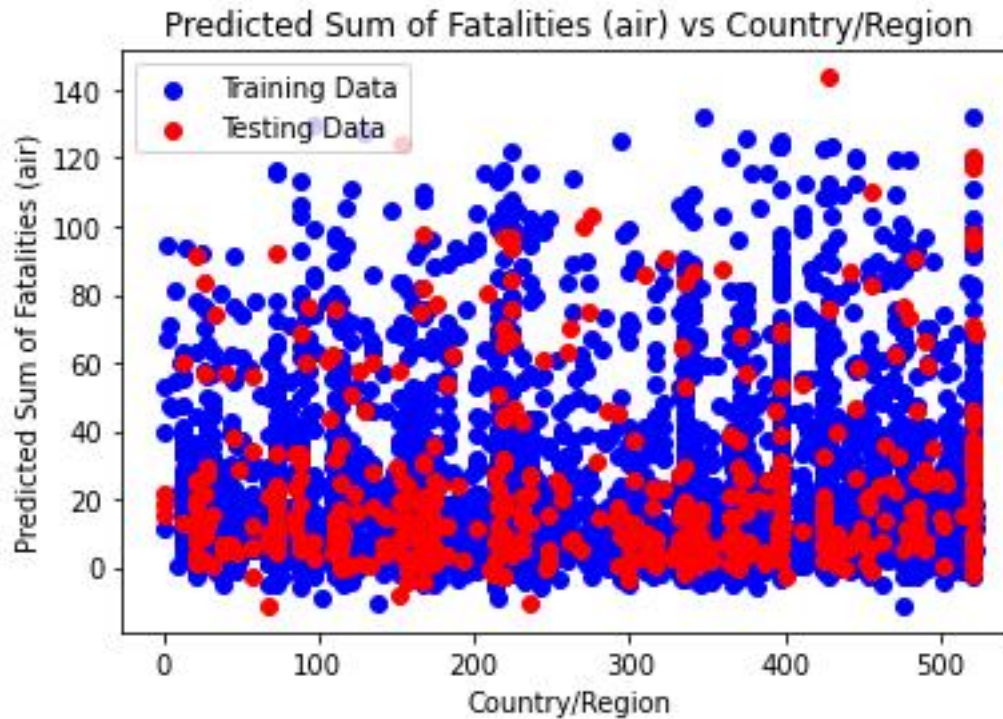
The scatter plot provided illustrates the predicted sum of fatalities (air) in relation to location. Upon examination, no discernible linear relationship between location and the predicted number of fatalities emerges, as data points are dispersed across the plot. However, a tighter clustering of training data compared to testing data suggests potential variability in model performance. Additionally, outlier data points may exert influence on predictions. Overall, while the model may offer some insight into predicted fatalities based on location, it is evident that location alone does not fully explain outcomes. This analysis underscores the necessity for comprehensive evaluation of the model's accuracy and reliability across diverse datasets and contexts.



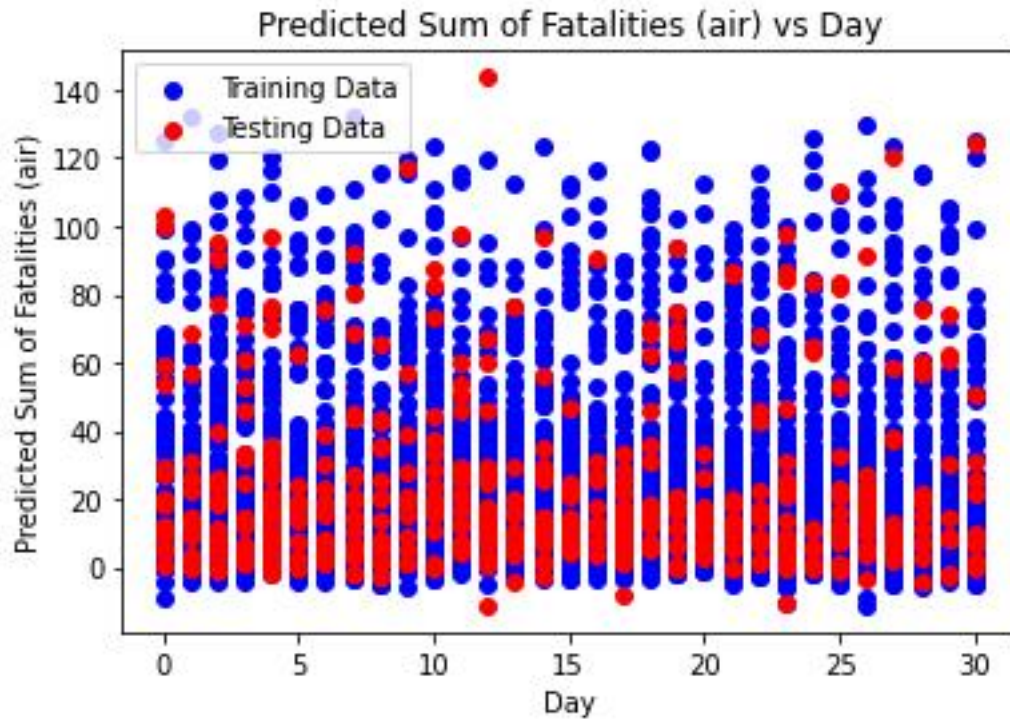
The provided graph depicts the performance of a machine learning model, likely a regression model, in predicting the number of fatalities in plane crashes based on the number of aircraft involved. The x-axis denotes the count of aircraft, while the y-axis represents the model's prediction of fatalities. The curved line illustrates the model's prediction trend, indicating an upward trajectory as the number of aircraft increases. Blue dots signify training data points used to train the model, influencing the overall curve. However, unseen testing data is not visualized. It is essential to note that while the model provides insights, actual fatalities may vary due to numerous factors such as aircraft type, weather conditions, and accident location, emphasizing the need for comprehensive evaluation and real-world validation of model predictions.



The provided visualization likely represents the performance of a machine learning regression model tasked with predicting the number of fatalities in aircraft accidents, with aircraft manufacturer as a feature. The x-axis denotes specific aircraft manufacturers, while the y-axis represents the model's prediction of fatalities. A curved line illustrates the model's average prediction trend based on the manufacturer. However, the overall trend of the curve is not distinctly discernible. Notably, the model's predictions serve as averages and may not fully capture real-world variability. Additionally, the influence of training data on the curve may outweigh that of unseen testing data. It's crucial to acknowledge that the model's predictive accuracy relies on various factors beyond aircraft manufacturer, such as aircraft type, weather conditions, and accident location.

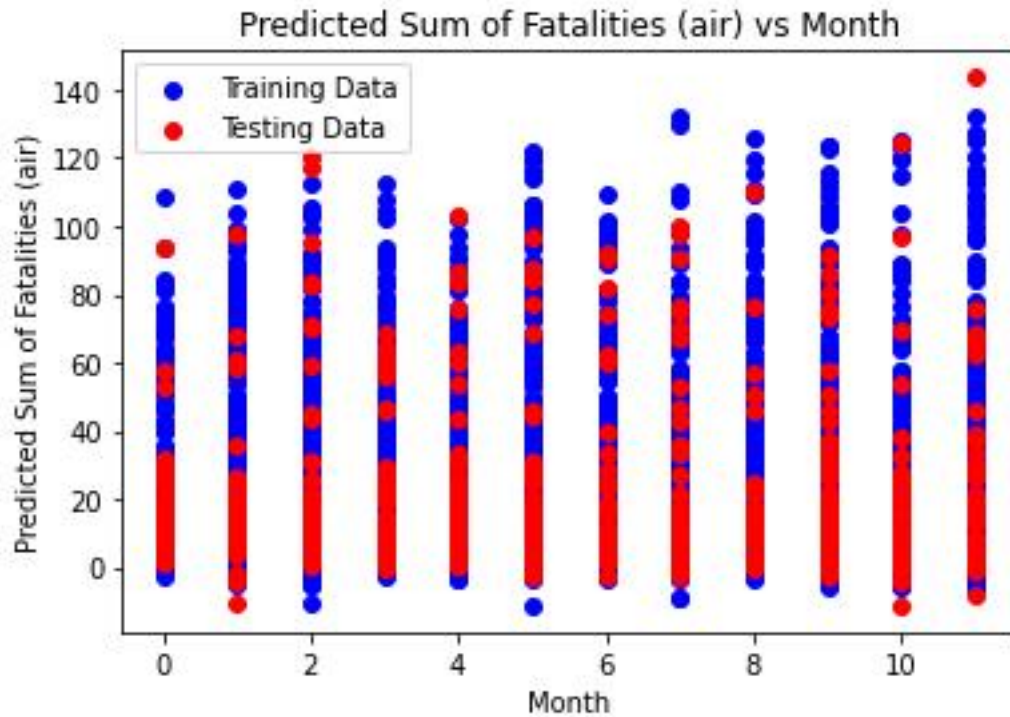


The provided plot likely portrays a visualization depicting the performance assessment of a regression model tasked with predicting the number of ground fatalities in aircraft accidents based on the count of individuals aboard. The x-axis denotes the total number of individuals aboard the aircraft, while the y-axis represents the predicted sum of fatalities. A curved line illustrates the model's average prediction trend as the count of individuals aboard varies. The upward trend of the curve suggests an increase in predicted fatalities with a higher count of individuals aboard. However, it's imperative to acknowledge that the model's predictions represent averages, and real-world outcomes may exhibit deviations. Additionally, the impartial evaluation provided by testing data aids in assessing the model's performance on unseen data. Ultimately, the model's predictive efficacy relies on various factors beyond passenger count, including aircraft type, weather conditions, and accident location.

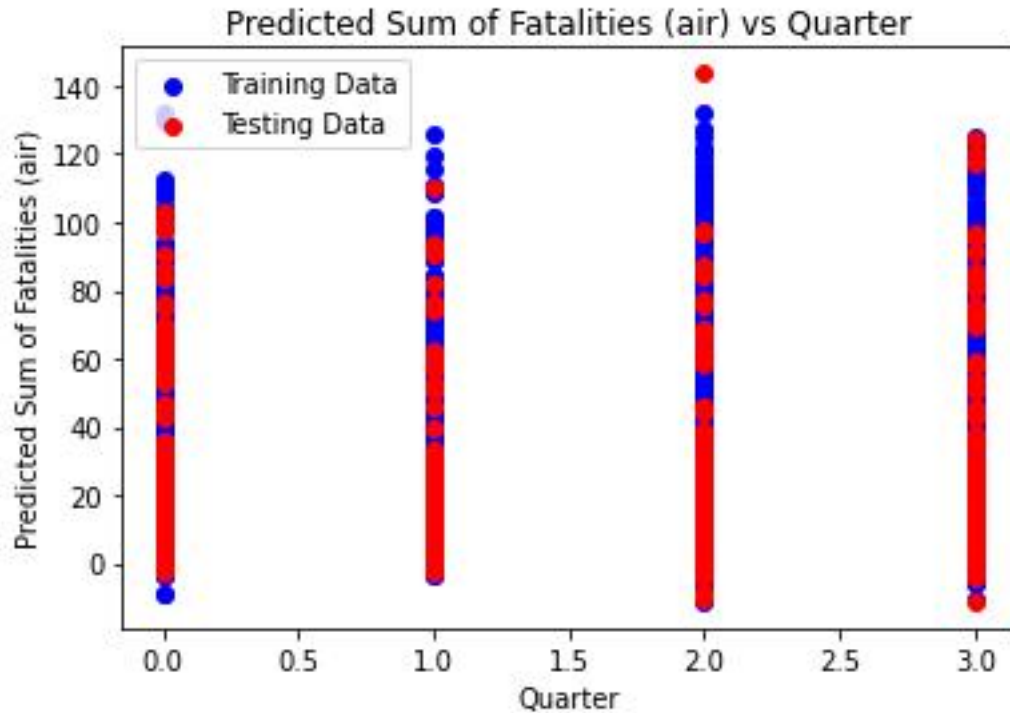


The provided image illustrates a graph depicting the performance evaluation of a linear regression model employed to predict the number of fatalities in airplane crashes based on the day of the week. Here's a breakdown of the plot: the x-axis represents the day of the week, ranging from Sunday (0) to Saturday (6), while the y-axis denotes the predicted sum of fatalities on the aircraft. A straight line illustrates the model's average prediction for fatalities corresponding to each day of the week. The trend of the line exhibits a slight upward inclination from left to right, implying a marginally higher predicted fatality count on weekends (days 5 and 6) compared to weekdays (days 0 through 4).

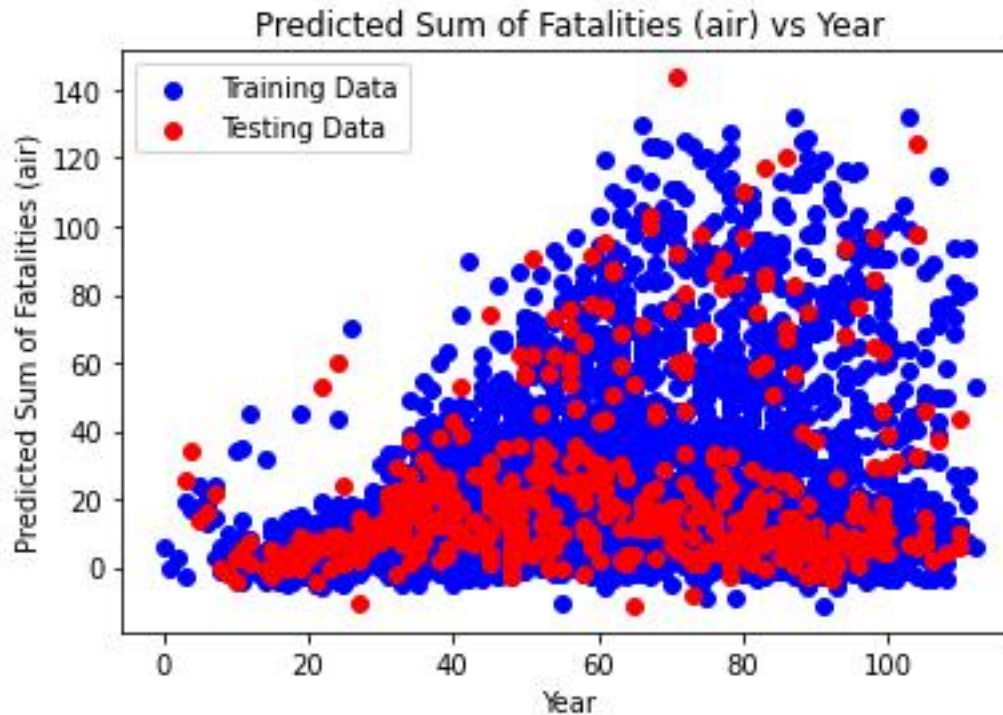
Several considerations should be noted regarding this plot: firstly, the line signifies the model's average prediction, implying potential deviations in real-world crash outcomes from the model's predictions for specific days of the week. Secondly, the influence of the training data points on shaping the line might overshadow the impact of unseen testing data. Lastly, it's essential to recognize that the model's predictive accuracy is contingent upon various factors beyond the day of the week, including aircraft type, weather conditions, and accident location. It's also pertinent to acknowledge that the model likely incorporates a multifaceted feature set, with the day of the week serving as one component.



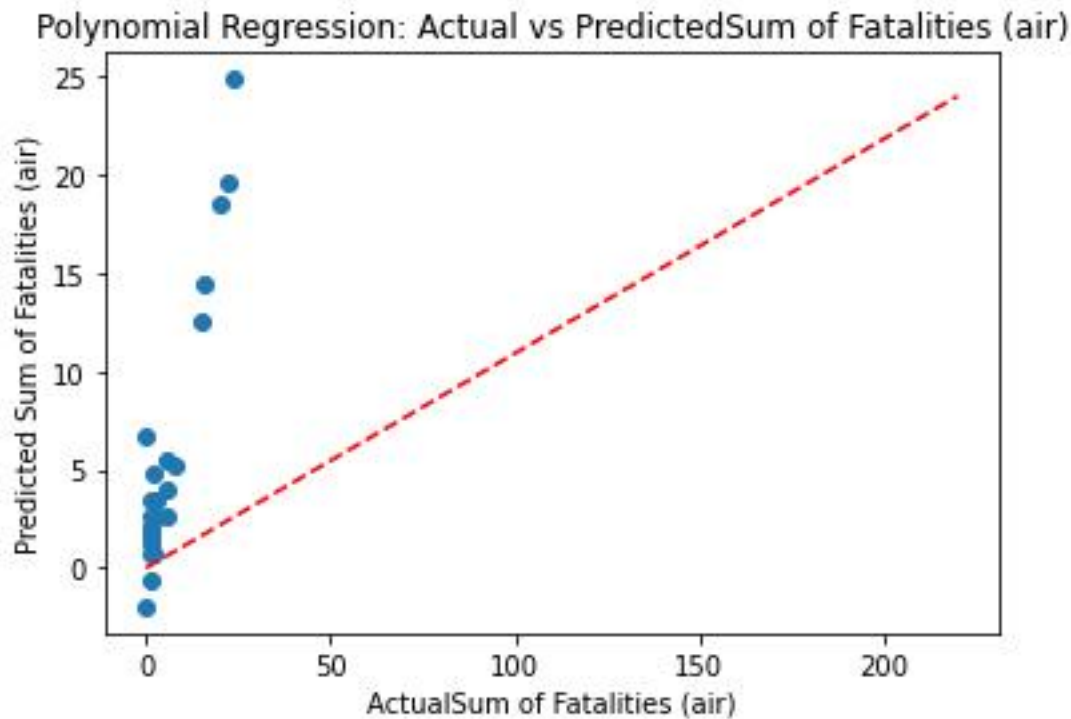
The scatter plot illustrates the forecasted number of fatalities in air accidents across various months, segregated by aircraft type. Distinct colored lines denote different aircraft classifications. Despite its informative layout, the plot's multiplicity of lines impedes clear trend identification. Further insights into the predicted fatality counts for each aircraft type can be provided upon accessing the legend information. Nonetheless, it's essential to note the plot's focus solely on predicted fatalities and the potential incorporation of additional variables in the predictive model, underlining the need for cautious interpretation of its findings in the broader context of aviation safety analysis.



The provided scatter plot delineates the projected count of fatalities in air incidents relative to the month of occurrence, categorized by aircraft manufacturer. Key observations include the differentiation between training and testing data, respectively, alongside the legend associating each colored line with a distinct manufacturer. The presence of red dots signifies training data points utilized for model calibration concerning fatalities prediction for each manufacturer. While discerning an overarching trend proves challenging across all manufacturers, certain patterns emerge, such as elevated projected fatalities during summer months for manufacturers like Bombardier and Embraer based on the training dataset. Additional considerations encompass the plot's exclusive focus on predicted, not actual, fatality counts, potential incorporation of additional predictive variables beyond month and manufacturer, and the singular nature of the dataset, prompting caution in generalizing findings. It's noteworthy that the model's predictive capacity may involve a more intricate amalgamation of features beyond solely month-based parameters.

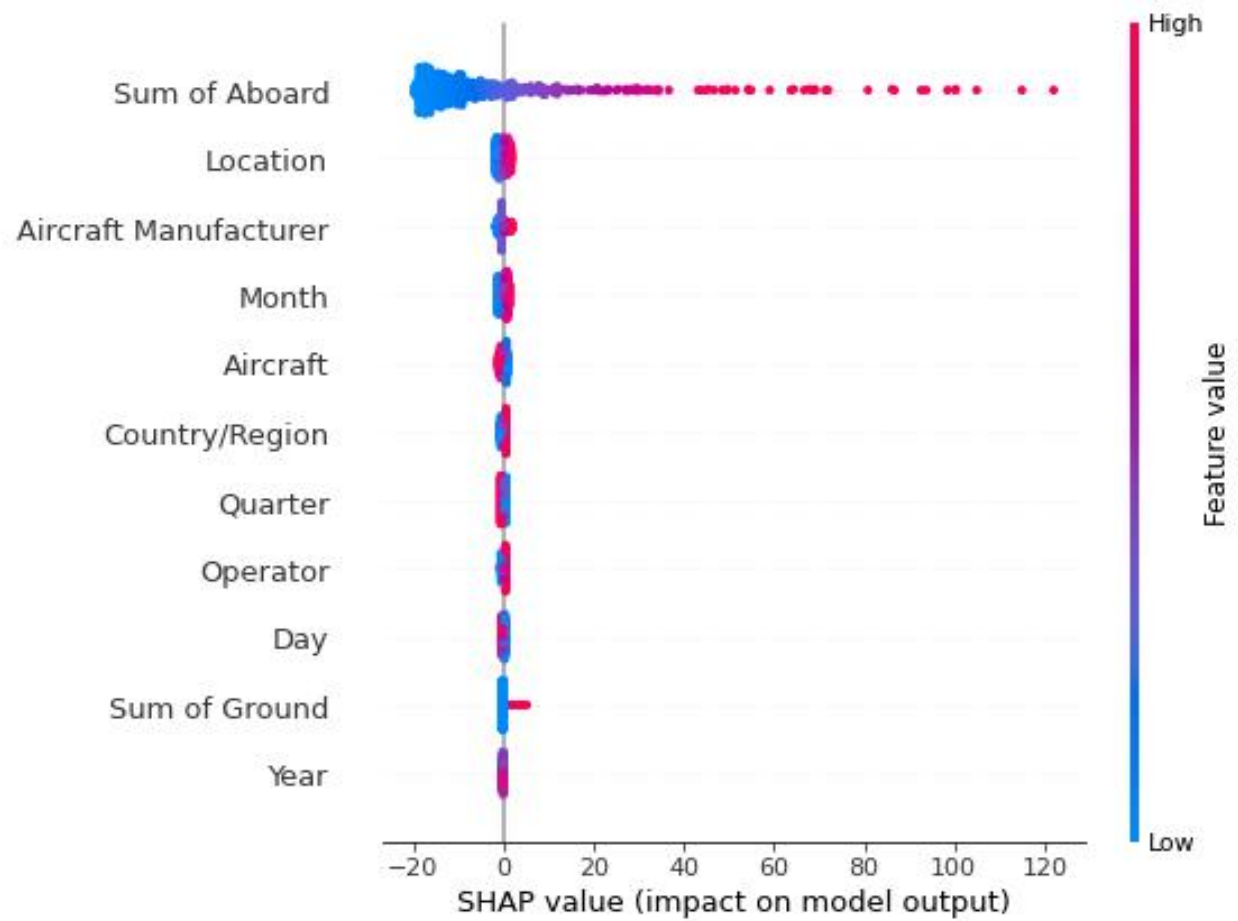


The provided scatter plot illustrates the projected number of fatalities in air accidents across years, categorized by aircraft type. The x-axis spans, representing the years, while the y-axis denotes the predicted sum of air fatalities. The legend identifies four distinct aircraft types: Turboprop, Regional Jet, Narrow body, and Wide body. Analysis of the plot reveals nuanced trends for each aircraft type: Narrow body aircraft exhibit a potential upward trend in predicted fatalities based on training data, whereas Wide body aircraft suggest a possible decline over the years. However, the presence of scattered data points in the testing dataset complicates trend discernment. Additional considerations encompass the plot's exclusive focus on predicted, not actual, fatality counts, potential inclusion of other predictive variables beyond year and aircraft type, and the singular nature of the dataset, highlighting the necessity for cautious interpretation. It's noteworthy that the model's predictive framework likely incorporates a multifaceted array of features, with year serving as one among many.



The scatter plot entitled "Polynomial Regression: Actual vs Predicted Sum of Fatalities (air)" elucidates the correlation between actual fatalities and predicted fatalities concerning aircraft incidents. Key observations from the plot include the presence of blue dots representing individual data points, predominantly clustered within the lower range of both axes, typically spanning from 0 to 50 actual fatalities. The red dashed line denotes a polynomial regression model, indicating an enhanced prediction accuracy with the escalation of actual fatalities. Initially, the model tends to underestimate fatalities; however, it exhibits an amelioration in accuracy as actual fatalities increase. The x-axis delineates actual fatalities, ranging from 0 to 200, while the y-axis represents predicted fatalities, spanning from 0 to 25. It's essential to acknowledge that this interpretation provides a simplified overview, and the comprehensive analysis likely incorporates intricate factors pertinent to aircraft safety and fatalities.

SHAP-INTERPRETATION:



Functions of 'Max speed Knots'

1. Model: The model name of the aircraft.
2. Company: The company that manufactures the aircraft.
3. Engine Type: The type of engine used in the aircraft, such as Piston or Propjet.
4. HP or lbs thr ea engine: The horsepower or pounds of thrust produced by each engine.
5. Max speed Knots: The maximum speed of the aircraft in knots, which is a unit of speed used in aviation.
6. Remnd cruise Knots: The recommended cruising speed of the aircraft in knots for optimal performance and fuel efficiency.
7. Stall Knots dirty: The stall speed of the aircraft when the flaps and landing gear are extended (dirty configuration) in knots.
8. Fuel gal/lbs: The fuel capacity of the aircraft in gallons or pounds.
9. All eng service ceiling: The service ceiling of the aircraft with all engines operating, which is the maximum altitude at which the aircraft can maintain a specified rate of climb.
10. Eng out service ceiling: The service ceiling of the aircraft with one engine out, indicating the maximum altitude it can reach under such conditions.
11. All eng rate of climb: The rate of climb of the aircraft with all engines operating, typically measured in feet per minute.
12. Eng out rate of climb: The rate of climb of the aircraft with one engine out, showing how fast it can ascend under those circumstances.
13. Takeoff over 50ft: The distance required for the aircraft to take off and clear a 50-foot obstacle.
14. Takeoff ground run: The distance needed for the aircraft to take off from the ground.
15. Landing over 50ft: The distance required for the aircraft to land and stop after clearing a 50-foot obstacle.
16. Landing ground roll: The distance needed for the aircraft to land and come to a stop on the ground.
17. Gross weight lbs: The maximum allowable weight of the aircraft, including passengers, cargo, and fuel.

18. Empty weight lbs: The weight of the aircraft when empty, without any payload.
19. Length ft/in: The length of the aircraft in feet and inches.
20. Height ft/in: The height of the aircraft in feet and inches.
21. Wing span ft/in: The wingspan of the aircraft in feet and inches.
22. Range N.M.: The maximum range of the aircraft in nautical miles, indicating how far it can fly without refueling.

These features provide important information about the aircraft's performance, capabilities, and specifications that are crucial for navigation and flight planning.

Equation:

ENCODING ONLY CATEGORICAL VARIABLES:

Equation: Max speed Knots = $-91.98098318746494328479 + 0.31934922179598962400 * \text{Company} + 14.00722803413319006438 * \text{Engine Type} + 0.05782096815829170650 * \text{HP or lbs thr ea engine} + 0.40174974340024349750 * \text{Rcmnd cruise Knots} + -0.48268308116920788375 * \text{Stall Knots dirty} + -0.00194245209793558098 * \text{Fuel gal/lbs} + 0.00190477732433421212 * \text{All eng service ceiling} + 0.01687159366939789198 * \text{Eng out service ceiling} + 0.00123304655524404260 * \text{All eng rate of climb} + -0.04555631200996640429 * \text{Eng out rate of climb} + 0.02260251319867557368 * \text{Takeoff over 50ft} + 0.00005767659490027463 * \text{Takeoff ground run} + 0.00587921188232233723 * \text{Landing over 50ft} + 0.00392223420635380484 * \text{Landing ground roll} + -0.01433204206651608921 * \text{Gross weight lbs} + 0.02024722986360515120 * \text{Empty weight lbs} + 0.14583717072352356259 * \text{Length ft/in} + -0.00200491454800367933 * \text{Height ft/in} + -0.08927479634941978826 * \text{Wing span ft/in} + 0.02134465981975075186 * \text{Range N.M.}$

Accuracy: 0.780751225691352

coefficient [-8.14890308e-02 3.85329550e+00 -7.95184739e+01 -5.59902233e-01

1.88566089e+00 -4.64942646e+00 8.67839475e-03 -5.08520565e-03

-1.91816726e-01 -1.29572611e+00 9.34971929e-01 2.53602323e-01

-2.23888636e-01 -2.01789345e-01 -3.44877006e-02 1.20194056e+00

8.08667861e-02 1.04483039e+00 -3.25574338e-01 -1.63625196e+00

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2.40257775e-05 1.05962174e-05 8.14699510e-03 -1.45650410e-04
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-2.34307638e-04 -6.64927264e-05 -2.06517201e-05 -4.21245942e-04
-3.68556043e-04 1.00596749e-03 2.33366107e-04 2.95400855e-04
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6.36913454e-03 9.97409903e-03 -5.42907144e-04 1.44891246e-03
-1.52747919e-03 -3.04341168e-03 5.83789717e-03 -1.87857415e-03
-1.94345735e-02 5.78717647e-03 -1.49900364e-02 -4.90212362e-04
-1.37338685e-07 -2.78918378e-07 -5.73915464e-05 -3.00555696e-06
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-9.42457110e-05 4.04806065e-04 1.08757370e-04 -1.71434232e-04
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9.14643883e-04 1.21439733e-04 3.06125754e-05 3.21189897e-04
3.12194279e-05 8.93884618e-05 5.88897196e-05 1.10708986e-04
-8.28490355e-04 -7.74778478e-06 -1.17988354e-03 4.24796131e-05
1.54227219e-03 6.15396264e-05 1.57415513e-03 -1.19511187e-04
-4.70092194e-05 -5.53003049e-05 -1.95082593e-04 -1.06863709e-04
-5.90575638e-04 3.53281285e-03 -2.05050443e-03 2.04010944e-04
-3.54870628e-04 -2.18610383e-05 -1.03362418e-05 1.17750297e-05
2.46172551e-05 -7.61284653e-05 -1.00876790e-04 4.59475812e-04
-1.03423547e-04 -3.05111574e-05 -4.07223308e-06 4.73230331e-07
6.66456965e-05 7.99374655e-05 7.81612484e-05 -5.29162953e-05
-1.64452406e-04 -2.25203732e-04 -1.42277555e-04 1.02850082e-04
6.37983206e-06 -5.33730062e-05 1.88002042e-04 7.00456866e-05
-1.15290959e-03 6.75176971e-05 9.32762906e-04 -1.10315402e-04
-2.14360698e-05 -3.42250453e-04 4.71287660e-05 3.61741168e-04
9.18180940e-04 -7.97092405e-04 8.59245019e-05 -3.06070632e-04
1.16721878e-04 2.58602597e-03 -3.78307605e-03 -7.11708057e-04
2.56077193e-04 3.72313810e-04 -2.94459376e-04 -1.39009253e-04
4.67324349e-04 1.07397788e-04 1.18311458e-03 -5.32019840e-04
-4.47073451e-04 7.12371232e-05 6.75794172e-04 3.60655200e-03
-9.60829933e-04 4.07979147e-04 -8.38409191e-04 3.01771136e-04]

intercept 335.12947171139876

Equation: Max speed Knots= 335.12947171139876445523 + 3.85329550091576855664 * Company + -79.51847387872463457370 * Engine Type + -0.55990223262399174686 * HP or lbs thr ea engine + 1.88566088774909501602 * Rcmnd cruise Knots + - 4.64942646174203488840 * Stall Knots dirty + 0.00867839475328589273 * Fuel gal/lbs + - 0.00508520564880828117 * All eng service ceiling + -0.19181672592200135763 * Eng out service ceiling + -1.29572611342957833003 * All eng rate of climb + 0.93497192935194461949 * Eng out rate of climb + 0.25360232299165463843 * Takeoff over 50ft + -0.22388863576264153576 * Takeoff ground run + -0.20178934462511338710 * Landing over 50ft + -0.03448770064454277640 * Landing ground roll + 1.20194055615850126095 * Gross weight lbs + 0.08086678606019617743 * Empty weight lbs + 1.04483039303165980982 * Length ft/in + -0.32557433831696397375 * Height ft/in + - 1.63625196483865509300 * Wing span ft/in + 0.08489294389536186647 * Range N.M. + 0.00000672000332557765 * Model**2 + -0.00078983384846776500 * Model**1*Company**1 + -0.00355209378500949196 * Model**1*Engine Type**1 + 0.00019378008497041022 * Model**1*HP or lbs thr ea engine**1 + 0.00009603110635129919 * Model**1*Rcmnd cruise Knots**1 + 0.00195337452266714645 * Model**1*Stall Knots dirty**1 + 0.00001823340095763459 * Model**1*Fuel gal/lbs**1 + 0.00000079217604209703 * Model**1*All eng service ceiling**1 + 0.00065614242669240208 * Model**1*Eng out service ceiling**1 + 0.00025681834323404429 * Model**1*All eng rate of climb**1 + - 0.00045480552563553767 * Model**1*Eng out rate of climb**1 + -0.00005044898652251106 * Model**1*Takeoff over 50ft**1 + -0.00003076134379553785 * Model**1*Takeoff ground run**1 + 0.00007611175338362308 * Model**1*Landing over 50ft**1 + 0.00003383266324541445 * Model**1*Landing ground roll**1 + -0.00036300359703811402 * Model**1*Gross weight lbs**1 + -0.00002138768211212838 * Model**1*Empty weight lbs**1 + -0.00041029806773393296 * Model**1*Length ft/in**1 + -0.00007233550446542059 * Model**1*Height ft/in**1 + 0.00027278506323334673 * Model**1*Wing span ft/in**1 + 0.00008261831245209850 * Model**1*Range N.M.**1 + -0.03323764439388408876 * Company**2 + 0.34794496185768875041 * Company**1*Engine Type**1 + 0.00471544012518105345 * Company**1*HP or lbs thr ea engine**1 + 0.00267304814838163199 * Company**1*Rcmnd cruise Knots**1 + - 0.05374494349977804175 * Company**1*Stall Knots dirty**1 + 0.00013729861193901086 * Company**1*Fuel gal/lbs**1 + -0.00008051597031955016 * Company**1*All eng service ceiling**1 + -0.00364467313622854599 * Company**1*Eng out service ceiling**1 + - 0.00387077505342049667 * Company**1*All eng rate of climb**1 + 0.00248916200307890047 * Company**1*Eng out rate of climb**1 + 0.00044272167676547014 * Company**1*Takeoff over 50ft**1 + -0.00089633380772942764 * Company**1*Takeoff ground run**1 + 0.00016085387259359707 * Company**1*Landing over 50ft**1 + 0.00022470840212513235 * Company**1*Landing ground roll**1 + 0.00196804792303862611 * Company**1*Gross weight lbs**1 + -0.00243909836232604916 * Company**1*Empty weight lbs**1 + 0.01058351188041955875 * Company**1*Length ft/in**1 + -0.00268713552997210808 * Company**1*Height ft/in**1 + 0.00407315516149947023 * Company**1*Wing span ft/in**1 + -0.00115067123597002371 * Company**1*Range N.M.**1 + 3.64200478538854266475 * Engine Type**2 +

0.10497293800927699758 * Engine Type**1*HP or lbs thr ea engine**1 + -
 0.03327129626321152778 * Engine Type**1*Rcmd cruise Knots**1 +
 0.00584525534116780900 * Engine Type**1*Stall Knots dirty**1 + -
 0.00519394595214812439 * Engine Type**1*Fuel gal/lbs**1 + 0.00039991381728469652 *
 Engine Type**1*All eng service ceiling**1 + -0.15647040692528815797 * Engine
 Type**1*Eng out service ceiling**1 + 0.17406094103596425615 * Engine Type**1*All eng
 rate of climb**1 + -0.02124326001042931358 * Engine Type**1*Eng out rate of climb**1 + -
 0.01493372922776077180 * Engine Type**1*Takeoff over 50ft**1 +
 0.01180459796383127695 * Engine Type**1*Takeoff ground run**1 +
 0.01756459582807831654 * Engine Type**1*Landing over 50ft**1 +
 0.02143766934548499425 * Engine Type**1*Landing ground roll**1 + -
 0.09018221478522171763 * Engine Type**1*Gross weight lbs**1 + -
 0.00337734933568220813 * Engine Type**1*Empty weight lbs**1 + -
 0.20486814941182882044 * Engine Type**1*Length ft/in**1 + 0.15942809497673574026 *
 Engine Type**1*Height ft/in**1 + 0.27281965230203136796 * Engine Type**1*Wing span
 ft/in**1 + -0.02379926577228044099 * Engine Type**1*Range N.M.**1 + -
 0.00150065215513576090 * HP or lbs thr ea engine**2 + 0.00027012299416491567 * HP or
 lbs thr ea engine**1*Rcmd cruise Knots**1 + 0.00276924676017071105 * HP or lbs thr ea
 engine**1*Stall Knots dirty**1 + 0.00002402577752607521 * HP or lbs thr ea engine**1*Fuel
 gal/lbs**1 + 0.00001059621744871342 * HP or lbs thr ea engine**1*All eng service ceiling**1
 + 0.00814699509504223686 * HP or lbs thr ea engine**1*Eng out service ceiling**1 + -
 0.00014565040990554287 * HP or lbs thr ea engine**1*All eng rate of climb**1 + -
 0.00437672252552683255 * HP or lbs thr ea engine**1*Eng out rate of climb**1 + -
 0.00016982096699358525 * HP or lbs thr ea engine**1*Takeoff over 50ft**1 +
 0.00001618690673779385 * HP or lbs thr ea engine**1*Takeoff ground run**1 + -
 0.00010326500410619451 * HP or lbs thr ea engine**1*Landing over 50ft**1 +
 0.00022746449327144596 * HP or lbs thr ea engine**1*Landing ground roll**1 + -
 0.00058749750892396523 * HP or lbs thr ea engine**1*Gross weight lbs**1 +
 0.00040559455627260199 * HP or lbs thr ea engine**1*Empty weight lbs**1 + -
 0.00530060482493618056 * HP or lbs thr ea engine**1*Length ft/in**1 + -
 0.00255969675042467312 * HP or lbs thr ea engine**1*Height ft/in**1 +
 0.00715009686603278877 * HP or lbs thr ea engine**1*Wing span ft/in**1 + -
 0.00118952443410211359 * HP or lbs thr ea engine**1*Range N.M.**1 + -
 0.00692970880757850464 * Rcmd cruise Knots**2 + -0.00023430763770916326 * Rcmd
 cruise Knots**1*Stall Knots dirty**1 + -0.00006649272637504131 * Rcmd cruise
 Knots**1*Fuel gal/lbs**1 + -0.00002065172006998628 * Rcmd cruise Knots**1*All eng
 service ceiling**1 + -0.00042124594175805424 * Rcmd cruise Knots**1*Eng out service
 ceiling**1 + -0.00036855604322647418 * Rcmd cruise Knots**1*All eng rate of climb**1 +
 0.00100596749040317204 * Rcmd cruise Knots**1*Eng out rate of climb**1 +
 0.00023336610660763812 * Rcmd cruise Knots**1*Takeoff over 50ft**1 +
 0.00029540085490496054 * Rcmd cruise Knots**1*Takeoff ground run**1 +
 0.00015637639700528949 * Rcmd cruise Knots**1*Landing over 50ft**1 + -
 0.00038441011353507117 * Rcmd cruise Knots**1*Landing ground roll**1 + -

0.00206414896307626199 * Rcmnd cruise Knots**1*Gross weight lbs**1 +
 0.00042026978346692916 * Rcmnd cruise Knots**1*Empty weight lbs**1 +
 0.00618500496922549676 * Rcmnd cruise Knots**1*Length ft/in**1 +
 0.00021047932331430931 * Rcmnd cruise Knots**1*Height ft/in**1 + -
 0.00269856606208445510 * Rcmnd cruise Knots**1*Wing span ft/in**1 + -
 0.00037675698828755488 * Rcmnd cruise Knots**1*Range N.M.**1 +
 0.05443173165352390569 * Stall Knots dirty**2 + 0.00019781152099007486 * Stall Knots
 dirty**1*Fuel gal/lbs**1 + 0.00026073097385757860 * Stall Knots dirty**1*All eng service
 ceiling**1 + -0.01384419390887446297 * Stall Knots dirty**1*Eng out service ceiling**1 +
 0.00636913453810368339 * Stall Knots dirty**1*All eng rate of climb**1 +
 0.00997409903161593225 * Stall Knots dirty**1*Eng out rate of climb**1 + -
 0.00054290714397146715 * Stall Knots dirty**1*Takeoff over 50ft**1 +
 0.00144891246209322838 * Stall Knots dirty**1*Takeoff ground run**1 + -
 0.00152747918838911051 * Stall Knots dirty**1*Landing over 50ft**1 + -
 0.00304341168007279776 * Stall Knots dirty**1*Landing ground roll**1 +
 0.00583789717066151605 * Stall Knots dirty**1*Gross weight lbs**1 + -
 0.00187857415483379405 * Stall Knots dirty**1*Empty weight lbs**1 + -
 0.01943457349883992435 * Stall Knots dirty**1*Length ft/in**1 + 0.00578717646717182010
 * Stall Knots dirty**1*Height ft/in**1 + -0.01499003636290794673 * Stall Knots
 dirty**1*Wing span ft/in**1 + -0.00049021236232764170 * Stall Knots dirty**1*Range
 N.M.**1 + -0.00000013733868531318 * Fuel gal/lbs**2 + -0.00000027891837817151 * Fuel
 gal/lbs**1*All eng service ceiling**1 + -0.00005739154635132915 * Fuel gal/lbs**1*Eng out
 service ceiling**1 + -0.00000300555695610660 * Fuel gal/lbs**1*All eng rate of climb**1 +
 0.00001625897843992793 * Fuel gal/lbs**1*Eng out rate of climb**1 +
 0.00000353176100853503 * Fuel gal/lbs**1*Takeoff over 50ft**1 + -
 0.00000043150007944526 * Fuel gal/lbs**1*Takeoff ground run**1 + -
 0.00000213077736521683 * Fuel gal/lbs**1*Landing over 50ft**1 + -
 0.00000214245290997006 * Fuel gal/lbs**1*Landing ground roll**1 + -
 0.00000325272754066186 * Fuel gal/lbs**1*Gross weight lbs**1 + 0.00000175149864385660
 * Fuel gal/lbs**1*Empty weight lbs**1 + -0.00003610960232273280 * Fuel gal/lbs**1*Length
 ft/in**1 + 0.00007085420266871728 * Fuel gal/lbs**1*Height ft/in**1 +
 0.00004201386950326153 * Fuel gal/lbs**1*Wing span ft/in**1 + -0.00000040578599885474
 * Fuel gal/lbs**1*Range N.M.**1 + -0.00000000755541407216 * All eng service ceiling**2 +
 0.00003105287630392195 * All eng service ceiling**1*Eng out service ceiling**1 + -
 0.00000703062651884190 * All eng service ceiling**1*All eng rate of climb**1 + -
 0.00001591474209483579 * All eng service ceiling**1*Eng out rate of climb**1 + -
 0.00000297173403218665 * All eng service ceiling**1*Takeoff over 50ft**1 + -
 0.00000412997661491943 * All eng service ceiling**1*Takeoff ground run**1 +
 0.00000200285562890201 * All eng service ceiling**1*Landing over 50ft**1 +
 0.00000324144240548829 * All eng service ceiling**1*Landing ground roll**1 + -
 0.00001475074812962163 * All eng service ceiling**1*Gross weight lbs**1 +
 0.00000077597521759565 * All eng service ceiling**1*Empty weight lbs**1 +
 0.00004347279109223612 * All eng service ceiling**1*Length ft/in**1 + -

0.00000788425648790003 * All eng service ceiling**1*Height ft/in**1 + -
0.00004131611572144589 * All eng service ceiling**1*Wing span ft/in**1 +
0.00000483081587976386 * All eng service ceiling**1*Range N.M.**1 +
0.00019279012172634025 * Eng out service ceiling**2 + 0.00073949988889739342 * Eng out
service ceiling**1*All eng rate of climb**1 + -0.00252119855641331353 * Eng out service
ceiling**1*Eng out rate of climb**1 + -0.00009424571096744785 * Eng out service
ceiling**1*Takeoff over 50ft**1 + 0.00040480606477517889 * Eng out service
ceiling**1*Takeoff ground run**1 + 0.00010875737012512338 * Eng out service
ceiling**1*Landing over 50ft**1 + -0.00017143423180251451 * Eng out service
ceiling**1*Landing ground roll**1 + -0.00025648434159422639 * Eng out service
ceiling**1*Gross weight lbs**1 + -0.00040754112220404287 * Eng out service
ceiling**1*Empty weight lbs**1 + -0.00170404389639070919 * Eng out service
ceiling**1*Length ft/in**1 + 0.00136400384972352388 * Eng out service ceiling**1*Height
ft/in**1 + 0.00091464388272666014 * Eng out service ceiling**1*Wing span ft/in**1 +
0.00012143973262197186 * Eng out service ceiling**1*Range N.M.**1 +
0.00003061257541628858 * All eng rate of climb**2 + 0.00032118989680787443 * All eng
rate of climb**1*Eng out rate of climb**1 + 0.00003121942788585769 * All eng rate of
climb**1*Takeoff over 50ft**1 + 0.00008938846179989274 * All eng rate of
climb**1*Takeoff ground run**1 + 0.00005888971959099737 * All eng rate of
climb**1*Landing over 50ft**1 + 0.00011070898578672064 * All eng rate of
climb**1*Landing ground roll**1 + -0.00082849035542877959 * All eng rate of
climb**1*Gross weight lbs**1 + -0.00000774778478489398 * All eng rate of climb**1*Empty
weight lbs**1 + -0.00117988353891782406 * All eng rate of climb**1*Length ft/in**1 +
0.00004247961310121194 * All eng rate of climb**1*Height ft/in**1 +
0.00154227219084096361 * All eng rate of climb**1*Wing span ft/in**1 +
0.00006153962636760643 * All eng rate of climb**1*Range N.M.**1 +
0.00157415513065288569 * Eng out rate of climb**2 + -0.00011951118663200156 * Eng out
rate of climb**1*Takeoff over 50ft**1 + -0.00004700921937315222 * Eng out rate of
climb**1*Takeoff ground run**1 + -0.00005530030491526956 * Eng out rate of
climb**1*Landing over 50ft**1 + -0.00019508259330974775 * Eng out rate of
climb**1*Landing ground roll**1 + -0.00010686370910980604 * Eng out rate of
climb**1*Gross weight lbs**1 + -0.00059057563808366173 * Eng out rate of climb**1*Empty
weight lbs**1 + 0.00353281285041581565 * Eng out rate of climb**1*Length ft/in**1 + -
0.00205050442760468243 * Eng out rate of climb**1*Height ft/in**1 +
0.00020401094382311614 * Eng out rate of climb**1*Wing span ft/in**1 + -
0.00035487062831453774 * Eng out rate of climb**1*Range N.M.**1 + -
0.00002186103827517272 * Takeoff over 50ft**2 + -0.00001033624181553949 * Takeoff over
50ft**1*Takeoff ground run**1 + 0.00001177502971050348 * Takeoff over 50ft**1*Landing
over 50ft**1 + 0.00002461725509669832 * Takeoff over 50ft**1*Landing ground roll**1 + -
0.00007612846528054495 * Takeoff over 50ft**1*Gross weight lbs**1 + -
0.00010087679011755793 * Takeoff over 50ft**1*Empty weight lbs**1 +
0.00045947581152602432 * Takeoff over 50ft**1*Length ft/in**1 + -
0.00010342354657677782 * Takeoff over 50ft**1*Height ft/in**1 + -

0.00003051115740299384 * Takeoff over 50ft**1*Wing span ft/in**1 + -
 0.00000407223307828664 * Takeoff over 50ft**1*Range N.M.**1 +
 0.00000047323033136593 * Takeoff ground run**2 + 0.00006664569647858720 * Takeoff
 ground run**1*Landing over 50ft**1 + 0.00007993746553691672 * Takeoff ground
 run**1*Landing ground roll**1 + 0.00007816124835625937 * Takeoff ground run**1*Gross
 weight lbs**1 + -0.00005291629531495312 * Takeoff ground run**1*Empty weight lbs**1 + -
 0.00016445240632731450 * Takeoff ground run**1*Length ft/in**1 + -
 0.00022520373163812529 * Takeoff ground run**1*Height ft/in**1 + -
 0.00014227755471769854 * Takeoff ground run**1*Wing span ft/in**1 +
 0.00010285008186090849 * Takeoff ground run**1*Range N.M.**1 +
 0.00000637983205942216 * Landing over 50ft**2 + -0.00005337300620354701 * Landing over
 50ft**1*Landing ground roll**1 + 0.00018800204234498130 * Landing over 50ft**1*Gross
 weight lbs**1 + 0.00007004568655567117 * Landing over 50ft**1*Empty weight lbs**1 + -
 0.00115290959007609967 * Landing over 50ft**1*Length ft/in**1 +
 0.00006751769709444511 * Landing over 50ft**1*Height ft/in**1 + 0.00093276290591056549
 * Landing over 50ft**1*Wing span ft/in**1 + -0.00011031540153848274 * Landing over
 50ft**1*Range N.M.**1 + -0.00002143606980227475 * Landing ground roll**2 + -
 0.00034225045327138798 * Landing ground roll**1*Gross weight lbs**1 +
 0.00004712876595981685 * Landing ground roll**1*Empty weight lbs**1 +
 0.00036174116788959682 * Landing ground roll**1*Length ft/in**1 +
 0.00091818094047170333 * Landing ground roll**1*Height ft/in**1 + -
 0.00079709240480534821 * Landing ground roll**1*Wing span ft/in**1 +
 0.00008592450191378248 * Landing ground roll**1*Range N.M.**1 + -
 0.00030607063243428233 * Gross weight lbs**2 + 0.00011672187772231168 * Gross weight
 lbs**1*Empty weight lbs**1 + 0.00258602597046218678 * Gross weight lbs**1*Length
 ft/in**1 + -0.00378307605015388172 * Gross weight lbs**1*Height ft/in**1 + -
 0.00071170805706013800 * Gross weight lbs**1*Wing span ft/in**1 +
 0.00025607719317602765 * Gross weight lbs**1*Range N.M.**1 + 0.00037231380958222676
 * Empty weight lbs**2 + -0.00029445937596693506 * Empty weight lbs**1*Length ft/in**1 +
 -0.00013900925329500113 * Empty weight lbs**1*Height ft/in**1 +
 0.00046732434880462394 * Empty weight lbs**1*Wing span ft/in**1 +
 0.00010739778778830894 * Empty weight lbs**1*Range N.M.**1 +
 0.00118311458130092913 * Length ft/in**2 + -0.00053201984005332454 * Length
 ft/in**1*Height ft/in**1 + -0.00044707345111079898 * Length ft/in**1*Wing span ft/in**1 +
 0.00007123712321249927 * Length ft/in**1*Range N.M.**1 + 0.00067579417244660600 *
 Height ft/in**2 + 0.00360655199769190690 * Height ft/in**1*Wing span ft/in**1 + -
 0.00096082993286176165 * Height ft/in**1*Range N.M.**1 + 0.00040797914722673096 *
 Wing span ft/in**2 + -0.00083840919129235525 * Wing span ft/in**1*Range N.M.**1 +
 0.00030177113596661226 * Range N.M.**2

Accuracy: 0.6998414029381653

ENCODING EVERY VARIABLE:

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4.40443641e-01 -4.33887814e+00 1.95910228e+00 -5.07824602e+00

-1.24957985e-01 -6.06068876e-01 -2.27628305e-01 4.12841209e-01

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-3.02121579e-01 1.40361244e+00 1.87410388e+00 -1.40567523e+00

-2.71188087e-01 4.85560686e-05 -5.10968485e-04 -1.87574490e-02

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-2.75598020e-04 -1.00057945e-04 3.49451059e-05 6.26225140e-04

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-3.09806123e-03 8.32282696e-03 -5.68663425e-02 -6.83343208e-03

-5.67494296e-03 -4.51738746e-03 -2.59995122e-03 2.78397257e-03

2.56088781e-03 9.47550844e-04 4.00183186e-03 -1.03596918e-02

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-5.88598869e-03 -2.94665521e-03 7.04174224e+00 7.34134248e-02

1.23976838e-01 8.91905553e-02 -1.77333070e-01 7.47436643e-01

1.95206641e-02 1.87379524e-02 1.31282749e-02 3.26593904e-02

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-1.65228549e-03 -2.72022647e-01 -2.10594568e-01 2.36117411e-01

2.98232838e-03 -4.09970378e-03 -9.08038934e-04 -6.51491959e-03

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-3.93471543e-03 -4.67620267e-03 3.24038690e-03 2.42830465e-03
-1.79042738e-03 -5.00814584e-05 7.09200678e-04 -1.47164424e-02
8.39043893e-04 2.61137111e-02 -2.06196557e-03 -4.03726150e-03
-2.35830495e-03 2.17413659e-03 -3.11894676e-03 2.51195609e-03
-2.05930269e-04 -1.48494400e-03 1.57053919e-03 2.17450061e-03
1.31599902e-03 -1.37163607e-03 8.67413969e-05 3.74965492e-04
1.68658483e-03 -1.87982095e-03 -3.42400058e-03 -7.33717114e-04
1.23423239e-02 1.86414341e-02 1.39348883e-02 9.57948313e-03
1.81244034e-03 1.07574950e-02 -1.28801657e-02 1.33555614e-02
8.77537887e-03 -8.98817739e-03 5.12502924e-03 -6.70255557e-05
-8.46539350e-03 -5.93318776e-03 -1.65154669e-02 -8.08667381e-04
-1.09978705e-03 -3.33731877e-03 -5.97491999e-03 -1.24232193e-03
4.86778882e-03 -3.54359859e-03 -4.62296556e-04 -1.11462958e-03
6.25779902e-03 3.21505845e-03 -1.93097035e-03 -4.17801882e-03
-5.75339280e-03 3.42886178e-03 1.81461278e-03 3.94296335e-03
-4.55807805e-03 7.74771197e-06 6.78105064e-03 -2.14006999e-03
7.57244190e-04 2.20369751e-03 -4.35444844e-03 1.44847562e-03
7.40328773e-04 2.15583000e-03 4.89304360e-04 -3.50548617e-03
1.23164461e-03 1.25114416e-03 3.38165656e-03 -2.37812924e-03
5.03009122e-04 -1.38526035e-03 1.44324886e-03 -1.98020277e-03
-1.10707132e-04 -1.06149391e-03 1.02190856e-03 -1.52442052e-03
5.99766956e-03 3.86141236e-04 5.70302411e-05 -1.36493802e-03
-7.29427306e-04 7.17847333e-04 1.07887604e-03 -2.71206263e-04

-4.06424517e-04 6.40125981e-04 -1.34767209e-03 -7.66776976e-04
 1.88576363e-03 5.32562554e-04 1.98289187e-04 2.96270585e-04
 -9.63845449e-05 -5.45153202e-03 3.50733949e-03 4.47459774e-04
 3.10371035e-04 -2.67499185e-03 2.02461817e-05 -3.99534303e-03
 1.04624379e-04 -2.40526869e-04 3.90717659e-05 1.01895632e-03
 7.66448272e-05 -5.11321361e-04 4.41610276e-06 6.19433959e-03
 -1.08689948e-03 4.48431919e-04 3.40245786e-04 -1.72859291e-03
 7.50003001e-04 -4.84521631e-05 -1.99512445e-03 -9.44505209e-04
 -1.81245373e-03 -8.96903881e-04 3.71842675e-03 1.41715704e-04
 2.07472413e-04 -1.25860731e-03 1.74400313e-03 1.93858166e-04
 -8.35011728e-03 3.61112356e-03 4.93524038e-04 -7.20125974e-04
 1.14527249e-03 1.95032525e-04 5.03160253e-04 4.52131652e-04
 -1.72554801e-03 -2.00730568e-03 4.02667086e-04 -4.32625855e-03
 -4.16857932e-06 -2.40337250e-03 -5.68273392e-04 -4.67284314e-04
 9.41095460e-04 4.65842529e-04 1.14102021e-03 -3.87290176e-04
 -9.78877354e-05 3.15635600e-04 1.16077428e-02 6.16123485e-03
 -1.11856987e-02 -1.76931479e-03 6.97714570e-04 -3.69437136e-03
 -6.71072439e-04 8.27317202e-05 -7.82654474e-06 2.44235253e-04]

intercept 534.5520756771917

Equation: Max speed Knots= 534.552075677 + 0.857630079 * Company + -135.735666661 *
 Engine Type + 1.101609319 * HP or lbs thr ea engine + 0.440443641 * Rcmnd cruise Knots + -
 4.338878140 * Stall Knots dirty + 1.959102277 * Fuel gal/lbs + -5.078246023 * All eng service
 ceiling + -0.124957985 * Eng out service ceiling + -0.606068876 * All eng rate of climb + -
 0.227628305 * Eng out rate of climb + 0.412841209 * Takeoff over 50ft + 1.332076571 *
 Takeoff ground run + -1.167295097 * Landing over 50ft + 0.483085340 * Landing ground roll +
 0.840058759 * Gross weight lbs + -0.302121579 * Empty weight lbs + 1.403612443 * Length
 ft/in + 1.874103881 * Height ft/in + -1.405675233 * Wing span ft/in + -0.271188087 * Range

N.M. + 0.000048556 * Model^2 + -0.000510968 * Model^1*Company^1 + -0.018757449 *
 Model^1*Engine Type^1 + 0.000813192 * Model^1*HP or lbs thr ea engine^1 + 0.000073274 *
 Model^1*Rcmnd cruise Knots^1 + -0.001441776 * Model^1*Stall Knots dirty^1 + -
 0.000371526 * Model^1*Fuel gal/lbs^1 + 0.000013722 * Model^1*All eng service ceiling^1 +
 0.000117103 * Model^1*Eng out service ceiling^1 + 0.000103562 * Model^1*All eng rate of
 climb^1 + -0.000246609 * Model^1*Eng out rate of climb^1 + -0.000275598 *
 Model^1*Takeoff over 50ft^1 + -0.000100058 * Model^1*Takeoff ground run^1 + 0.000034945
 * Model^1*Landing over 50ft^1 + 0.000626225 * Model^1*Landing ground roll^1 +
 0.000004667 * Model^1*Gross weight lbs^1 + -0.000014095 * Model^1*Empty weight lbs^1 +
 -0.000544787 * Model^1*Length ft/in^1 + -0.000358740 * Model^1*Height ft/in^1 +
 0.001093342 * Model^1*Wing span ft/in^1 + -0.000011899 * Model^1*Range N.M.^1 +
 0.007802857 * Company^2 + 0.182340257 * Company^1*Engine Type^1 + -0.003098061 *
 Company^1*HP or lbs thr ea engine^1 + 0.008322827 * Company^1*Rcmnd cruise Knots^1 + -
 0.056866343 * Company^1*Stall Knots dirty^1 + -0.006833432 * Company^1*Fuel gal/lbs^1 +
 -0.005674943 * Company^1*All eng service ceiling^1 + -0.004517387 * Company^1*Eng out
 service ceiling^1 + -0.002599951 * Company^1*All eng rate of climb^1 + 0.002783973 *
 Company^1*Eng out rate of climb^1 + 0.002560888 * Company^1*Takeoff over 50ft^1 +
 0.000947551 * Company^1*Takeoff ground run^1 + 0.004001832 * Company^1*Landing over
 50ft^1 + -0.010359692 * Company^1*Landing ground roll^1 + -0.001799388 *
 Company^1*Gross weight lbs^1 + -0.002925881 * Company^1*Empty weight lbs^1 +
 0.034853329 * Company^1*Length ft/in^1 + 0.005288169 * Company^1*Height ft/in^1 + -
 0.005885989 * Company^1*Wing span ft/in^1 + -0.002946655 * Company^1*Range N.M.^1 +
 7.041742240 * Engine Type^2 + 0.073413425 * Engine Type^1*HP or lbs thr ea engine^1 +
 0.123976838 * Engine Type^1*Rcmnd cruise Knots^1 + 0.089190555 * Engine Type^1*Stall
 Knots dirty^1 + -0.177333070 * Engine Type^1*Fuel gal/lbs^1 + 0.747436643 * Engine
 Type^1*All eng service ceiling^1 + 0.019520664 * Engine Type^1*Eng out service ceiling^1 +
 0.018737952 * Engine Type^1*All eng rate of climb^1 + 0.013128275 * Engine Type^1*Eng
 out rate of climb^1 + 0.032659390 * Engine Type^1*Takeoff over 50ft^1 + -0.219797554 *
 Engine Type^1*Takeoff ground run^1 + 0.163945469 * Engine Type^1*Landing over 50ft^1 + -
 0.017387040 * Engine Type^1*Landing ground roll^1 + 0.038795708 * Engine Type^1*Gross
 weight lbs^1 + -0.001652285 * Engine Type^1*Empty weight lbs^1 + -0.272022647 * Engine
 Type^1*Length ft/in^1 + -0.210594568 * Engine Type^1*Height ft/in^1 + 0.236117411 *
 Engine Type^1*Wing span ft/in^1 + 0.002982328 * Engine Type^1*Range N.M.^1 + -
 0.004099704 * HP or lbs thr ea engine^2 + -0.000908039 * HP or lbs thr ea engine^1*Rcmnd
 cruise Knots^1 + -0.006514920 * HP or lbs thr ea engine^1*Stall Knots dirty^1 + -0.003050914
 * HP or lbs thr ea engine^1*Fuel gal/lbs^1 + -0.003078208 * HP or lbs thr ea engine^1*All eng
 service ceiling^1 + 0.001552501 * HP or lbs thr ea engine^1*Eng out service ceiling^1 + -
 0.000282633 * HP or lbs thr ea engine^1*All eng rate of climb^1 + -0.003934715 * HP or lbs thr
 ea engine^1*Eng out rate of climb^1 + -0.004676203 * HP or lbs thr ea engine^1*Takeoff over
 50ft^1 + 0.003240387 * HP or lbs thr ea engine^1*Takeoff ground run^1 + 0.002428305 * HP
 or lbs thr ea engine^1*Landing over 50ft^1 + -0.001790427 * HP or lbs thr ea engine^1*Landing
 ground roll^1 + -0.000050081 * HP or lbs thr ea engine^1*Gross weight lbs^1 + 0.000709201 *
 HP or lbs thr ea engine^1*Empty weight lbs^1 + -0.014716442 * HP or lbs thr ea
 engine^1*Length ft/in^1 + 0.000839044 * HP or lbs thr ea engine^1*Height ft/in^1 +
 0.026113711 * HP or lbs thr ea engine^1*Wing span ft/in^1 + -0.002061966 * HP or lbs thr ea
 engine^1*Range N.M.^1 + -0.004037262 * Rcmnd cruise Knots^2 + -0.002358305 * Rcmnd

cruise Knots¹*Stall Knots dirty¹ + 0.002174137 * Rcmnd cruise Knots¹*Fuel gal/lbs¹ + -
0.003118947 * Rcmnd cruise Knots¹*All eng service ceiling¹ + 0.002511956 * Rcmnd cruise
Knots¹*Eng out service ceiling¹ + -0.000205930 * Rcmnd cruise Knots¹*All eng rate of
climb¹ + -0.001484944 * Rcmnd cruise Knots¹*Eng out rate of climb¹ + 0.001570539 *
Rcmnd cruise Knots¹*Takeoff over 50ft¹ + 0.002174501 * Rcmnd cruise Knots¹*Takeoff
ground run¹ + 0.001315999 * Rcmnd cruise Knots¹*Landing over 50ft¹ + -0.001371636 *
Rcmnd cruise Knots¹*Landing ground roll¹ + 0.000086741 * Rcmnd cruise Knots¹*Gross
weight lbs¹ + 0.000374965 * Rcmnd cruise Knots¹*Empty weight lbs¹ + 0.001686585 *
Rcmnd cruise Knots¹*Length ft/in¹ + -0.001879821 * Rcmnd cruise Knots¹*Height ft/in¹
+ -0.003424001 * Rcmnd cruise Knots¹*Wing span ft/in¹ + -0.000733717 * Rcmnd cruise
Knots¹*Range N.M.¹ + 0.012342324 * Stall Knots dirty² + 0.018641434 * Stall Knots
dirty¹*Fuel gal/lbs¹ + 0.013934888 * Stall Knots dirty¹*All eng service ceiling¹ +
0.009579483 * Stall Knots dirty¹*Eng out service ceiling¹ + 0.001812440 * Stall Knots
dirty¹*All eng rate of climb¹ + 0.010757495 * Stall Knots dirty¹*Eng out rate of climb¹ + -
0.012880166 * Stall Knots dirty¹*Takeoff over 50ft¹ + 0.013355561 * Stall Knots
dirty¹*Takeoff ground run¹ + 0.008775379 * Stall Knots dirty¹*Landing over 50ft¹ + -
0.008988177 * Stall Knots dirty¹*Landing ground roll¹ + 0.005125029 * Stall Knots
dirty¹*Gross weight lbs¹ + -0.000067026 * Stall Knots dirty¹*Empty weight lbs¹ + -
0.008465393 * Stall Knots dirty¹*Length ft/in¹ + -0.005933188 * Stall Knots dirty¹*Height
ft/in¹ + -0.016515467 * Stall Knots dirty¹*Wing span ft/in¹ + -0.000808667 * Stall Knots
dirty¹*Range N.M.¹ + -0.001099787 * Fuel gal/lbs² + -0.003337319 * Fuel gal/lbs¹*All
eng service ceiling¹ + -0.005974920 * Fuel gal/lbs¹*Eng out service ceiling¹ + -
0.001242322 * Fuel gal/lbs¹*All eng rate of climb¹ + 0.004867789 * Fuel gal/lbs¹*Eng out
rate of climb¹ + -0.003543599 * Fuel gal/lbs¹*Takeoff over 50ft¹ + -0.000462297 * Fuel
gal/lbs¹*Takeoff ground run¹ + -0.001114630 * Fuel gal/lbs¹*Landing over 50ft¹ +
0.006257799 * Fuel gal/lbs¹*Landing ground roll¹ + 0.003215058 * Fuel gal/lbs¹*Gross
weight lbs¹ + -0.001930970 * Fuel gal/lbs¹*Empty weight lbs¹ + -0.004178019 * Fuel
gal/lbs¹*Length ft/in¹ + -0.005753393 * Fuel gal/lbs¹*Height ft/in¹ + 0.003428862 * Fuel
gal/lbs¹*Wing span ft/in¹ + 0.001814613 * Fuel gal/lbs¹*Range N.M.¹ + 0.003942963 *
All eng service ceiling² + -0.004558078 * All eng service ceiling¹*Eng out service ceiling¹
+ 0.000007748 * All eng service ceiling¹*All eng rate of climb¹ + 0.006781051 * All eng
service ceiling¹*Eng out rate of climb¹ + -0.002140070 * All eng service ceiling¹*Takeoff
over 50ft¹ + 0.000757244 * All eng service ceiling¹*Takeoff ground run¹ + 0.002203698 *
All eng service ceiling¹*Landing over 50ft¹ + -0.004354448 * All eng service
ceiling¹*Landing ground roll¹ + 0.001448476 * All eng service ceiling¹*Gross weight lbs¹
+ 0.000740329 * All eng service ceiling¹*Empty weight lbs¹ + 0.002155830 * All eng service
ceiling¹*Length ft/in¹ + 0.000489304 * All eng service ceiling¹*Height ft/in¹ + -
0.003505486 * All eng service ceiling¹*Wing span ft/in¹ + 0.001231645 * All eng service
ceiling¹*Range N.M.¹ + 0.001251144 * Eng out service ceiling² + 0.003381657 * Eng out
service ceiling¹*All eng rate of climb¹ + -0.002378129 * Eng out service ceiling¹*Eng out
rate of climb¹ + 0.000503009 * Eng out service ceiling¹*Takeoff over 50ft¹ + -0.001385260
* Eng out service ceiling¹*Takeoff ground run¹ + 0.001443249 * Eng out service
ceiling¹*Landing over 50ft¹ + -0.001980203 * Eng out service ceiling¹*Landing ground
roll¹ + -0.000110707 * Eng out service ceiling¹*Gross weight lbs¹ + -0.001061494 * Eng
out service ceiling¹*Empty weight lbs¹ + 0.001021909 * Eng out service ceiling¹*Length
ft/in¹ + -0.001524421 * Eng out service ceiling¹*Height ft/in¹ + 0.005997670 * Eng out

service ceiling^1*Wing span ft/in^1 + 0.000386141 * Eng out service ceiling^1*Range N.M.^1
 + 0.000057030 * All eng rate of climb^2 + -0.001364938 * All eng rate of climb^1*Eng out rate
 of climb^1 + -0.000729427 * All eng rate of climb^1*Takeoff over 50ft^1 + 0.000717847 * All
 eng rate of climb^1*Takeoff ground run^1 + 0.001078876 * All eng rate of climb^1*Landing
 over 50ft^1 + -0.000271206 * All eng rate of climb^1*Landing ground roll^1 + -0.000406425 *
 All eng rate of climb^1*Gross weight lbs^1 + 0.000640126 * All eng rate of climb^1*Empty
 weight lbs^1 + -0.001347672 * All eng rate of climb^1*Length ft/in^1 + -0.000766777 * All eng
 rate of climb^1*Height ft/in^1 + 0.001885764 * All eng rate of climb^1*Wing span ft/in^1 +
 0.000532563 * All eng rate of climb^1*Range N.M.^1 + 0.000198289 * Eng out rate of climb^2
 + 0.000296271 * Eng out rate of climb^1*Takeoff over 50ft^1 + -0.000096385 * Eng out rate of
 climb^1*Takeoff ground run^1 + -0.005451532 * Eng out rate of climb^1*Landing over 50ft^1
 + 0.003507339 * Eng out rate of climb^1*Landing ground roll^1 + 0.000447460 * Eng out rate
 of climb^1*Gross weight lbs^1 + 0.000310371 * Eng out rate of climb^1*Empty weight lbs^1 +
 -0.002674992 * Eng out rate of climb^1*Length ft/in^1 + 0.000020246 * Eng out rate of
 climb^1*Height ft/in^1 + -0.003995343 * Eng out rate of climb^1*Wing span ft/in^1 +
 0.000104624 * Eng out rate of climb^1*Range N.M.^1 + -0.000240527 * Takeoff over 50ft^2 +
 0.000039072 * Takeoff over 50ft^1*Takeoff ground run^1 + 0.001018956 * Takeoff over
 50ft^1*Landing over 50ft^1 + 0.000076645 * Takeoff over 50ft^1*Landing ground roll^1 + -
 0.000511321 * Takeoff over 50ft^1*Gross weight lbs^1 + 0.000004416 * Takeoff over
 50ft^1*Empty weight lbs^1 + 0.006194340 * Takeoff over 50ft^1*Length ft/in^1 + -
 0.001086899 * Takeoff over 50ft^1*Height ft/in^1 + 0.000448432 * Takeoff over 50ft^1*Wing
 span ft/in^1 + 0.000340246 * Takeoff over 50ft^1*Range N.M.^1 + -0.001728593 * Takeoff
 ground run^2 + 0.000750003 * Takeoff ground run^1*Landing over 50ft^1 + -0.000048452 *
 Takeoff ground run^1*Landing ground roll^1 + -0.001995124 * Takeoff ground run^1*Gross
 weight lbs^1 + -0.000944505 * Takeoff ground run^1*Empty weight lbs^1 + -0.001812454 *
 Takeoff ground run^1*Length ft/in^1 + -0.000896904 * Takeoff ground run^1*Height ft/in^1 +
 0.003718427 * Takeoff ground run^1*Wing span ft/in^1 + 0.000141716 * Takeoff ground
 run^1*Range N.M.^1 + 0.000207472 * Landing over 50ft^2 + -0.001258607 * Landing over
 50ft^1*Landing ground roll^1 + 0.001744003 * Landing over 50ft^1*Gross weight lbs^1 +
 0.000193858 * Landing over 50ft^1*Empty weight lbs^1 + -0.008350117 * Landing over
 50ft^1*Length ft/in^1 + 0.003611124 * Landing over 50ft^1*Height ft/in^1 + 0.000493524 *
 Landing over 50ft^1*Wing span ft/in^1 + -0.000720126 * Landing over 50ft^1*Range N.M.^1 +
 0.001145272 * Landing ground roll^2 + 0.000195033 * Landing ground roll^1*Gross weight
 lbs^1 + 0.000503160 * Landing ground roll^1*Empty weight lbs^1 + 0.000452132 * Landing
 ground roll^1*Length ft/in^1 + -0.001725548 * Landing ground roll^1*Height ft/in^1 + -
 0.002007306 * Landing ground roll^1*Wing span ft/in^1 + 0.000402667 * Landing ground
 roll^1*Range N.M.^1 + -0.004326259 * Gross weight lbs^2 + -0.000004169 * Gross weight
 lbs^1*Empty weight lbs^1 + -0.002403372 * Gross weight lbs^1*Length ft/in^1 + -0.000568273
 * Gross weight lbs^1*Height ft/in^1 + -0.000467284 * Gross weight lbs^1*Wing span ft/in^1 +
 0.000941095 * Gross weight lbs^1*Range N.M.^1 + 0.000465843 * Empty weight lbs^2 +
 0.001141020 * Empty weight lbs^1*Length ft/in^1 + -0.000387290 * Empty weight
 lbs^1*Height ft/in^1 + -0.000097888 * Empty weight lbs^1*Wing span ft/in^1 + 0.000315636 *
 Empty weight lbs^1*Range N.M.^1 + 0.011607743 * Length ft/in^2 + 0.006161235 * Length
 ft/in^1*Height ft/in^1 + -0.011185699 * Length ft/in^1*Wing span ft/in^1 + -0.001769315 *
 Length ft/in^1*Range N.M.^1 + 0.000697715 * Height ft/in^2 + -0.003694371 * Height
 ft/in^1*Wing span ft/in^1 + -0.000671072 * Height ft/in^1*Range N.M.^1 + 0.000082732 *

$$\text{Wing span ft/in}^2 + -0.000007827 * \text{Wing span ft/in}^1 * \text{Range N.M.}^1 + 0.000244235 * \text{Range N.M.}^2$$

Accuracy: 0.7039790679538465

This equation appears to be a regression model designed to predict the maximum speed of an aircraft in knots based on various features or characteristics of the aircraft. Let's break down the equation:

- Max speed Knots: This is the dependent variable, representing the maximum speed of the aircraft in knots.
- 18.40: This is the intercept term, representing the baseline maximum speed when all other predictors are zero.
- Coefficients for each feature: The equation includes coefficients for several independent variables (features) that are believed to influence the maximum speed of the aircraft. Here's what each coefficient represents:
 - Company: A coefficient indicating how the manufacturer or company of the aircraft affects the maximum speed.
 - Engine Type: A coefficient representing the influence of the type of engine on the maximum speed.
 - HP or lbs thr ea engine: A coefficient for the horsepower or thrust of each engine, indicating its impact on the maximum speed.
 - Rcmnd cruise Knots: A coefficient for the recommended cruise speed in knots.
 - Stall Knots dirty: A coefficient representing the stall speed of the aircraft in a dirty configuration (e.g., with flaps extended).
 - Fuel gal/lbs: A coefficient indicating the influence of fuel capacity or weight on maximum speed.
 - All eng service ceiling: A coefficient representing the service ceiling when all engines are operational.

- Eng out service ceiling: A coefficient for the service ceiling with one engine out.
- All eng rate of climb: A coefficient for the rate of climb when all engines are operational.
- Eng out rate of climb: A coefficient for the rate of climb with one engine out.
- Takeoff over 50ft: A coefficient indicating the distance required for takeoff over a 50-foot obstacle.
- Takeoff ground run: A coefficient for the ground run required for takeoff.
- Landing over 50ft: A coefficient for the distance required for landing over a 50-foot obstacle.
- Landing ground roll: A coefficient for the ground roll required for landing.
- Gross weight lbs: A coefficient representing the gross weight of the aircraft.
- Empty weight lbs: A coefficient for the empty weight of the aircraft.
- Length ft/in, Height ft/in, Wing span ft/in: Coefficients representing the physical dimensions of the aircraft.
- Range N.M.: A coefficient for the range of the aircraft in nautical miles.

The equation also includes interaction terms (e.g., $\text{Model}^1 * \text{Company}^1$) and squared terms for some features, allowing for non-linear relationships between the predictors and the maximum speed.

Overall, this equation provides a comprehensive model for predicting the maximum speed of an aircraft based on its various characteristics.

LIME INTERPRETATION:

| Feature | Value |
|-------------------------|--------|
| Eng out rate of climb | 212.00 |
| Empty weight lbs | 114.00 |
| Length ft/in | 47.00 |
| Range N.M. | 240.00 |
| All eng service ceiling | 47.00 |
| Landing ground roll | 35.00 |

| | |
|-------------------------|--------|
| All eng rate of climb | 40.00 |
| Eng out service ceiling | 184.00 |
| Height ft/in | 119.00 |
| Takeoff over 50ft | 27.00 |
| HP or lbs thr ea engine | 40.00 |
| Takeoff ground run | 52.00 |
| Gross weight lbs | 121.00 |
| Engine Type | 5.00 |
| Landing over 50ft | 34.00 |
| Fuel gal/lbs | 24.00 |
| Company | 37.00 |
| Wing span ft/in | 73.00 |
| Model | 548.00 |
| Rcmnd cruise Knots | 36.00 |
| Stall Knots dirty | 16.00 |

Prediction probabilities

| | |
|-------|-----------------------------|
| 43 | <div><div></div></div> 0.33 |
| 55 | <div><div></div></div> 0.32 |
| 46 | <div><div></div></div> 0.09 |
| 85 | <div><div></div></div> 0.09 |
| Other | <div><div></div></div> 0.16 |

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| | | | |
|----------------------------|------|----------------------------|------|
| 109.00 < Eng out rate o... | 0.01 | All eng service ceiling... | 0.00 |
| Empty weight lbs <= 1... | 0.01 | Landing ground roll <... | 0.00 |
| Length ft/in <= 59.00 | 0.01 | All eng rate of climb <... | 0.00 |
| 140.00 < Range N.M. ... | 0.01 | 114.25 < Eng out serv... | 0.00 |
| | | 109.00 < Height ft/in ... | 0.00 |
| | | Takeoff over 50ft <= ... | 0.00 |
| | | HP or lbs thr ea engine... | 0.00 |
| | | Takeoff ground run <= ... | 0.00 |
| | | 91.00 < Gross weight ... | 0.00 |
| | | Engine Type <= 5.00 | 0.00 |
| | | Landing over 50ft <= ... | 0.00 |
| | | Fuel gal/lbs <= 34.00 | 0.00 |
| | | 19.00 < Company <= ... | 0.00 |
| | | 71.50 < Wing span ft/i... | 0.00 |
| | | 432.50 < Model <= 6... | 0.00 |
| | | Remnd cruise Knots <... | 0.00 |
| | | Stall Knots dirty <= ... | 0.00 |

The provided spreadsheet contains performance specifications for an aircraft, likely a small, single-engine airplane. Several key features outlined in the spreadsheet are crucial for aircraft navigation and operational planning:

1. Engine Out Rate of Climb: This metric, listed as 212.00 feet per minute (ft/min), denotes the rate at which the aircraft can ascend with one engine inoperative, typically the less efficient one. A higher value indicates superior performance under such circumstances.

2. Empty Weight lbs: This figure, recorded as 114.00 lbs, represents the aircraft's weight exclusive of passengers, cargo, fuel, and crew. It serves as a fundamental parameter for calculating payload capacity, crucial for operational planning.

3. Length ft/in: At 47 ft/in, this measurement signifies the overall length of the aircraft. Understanding this dimension is vital for gauging ground clearance requirements during taxiing and maneuvering.

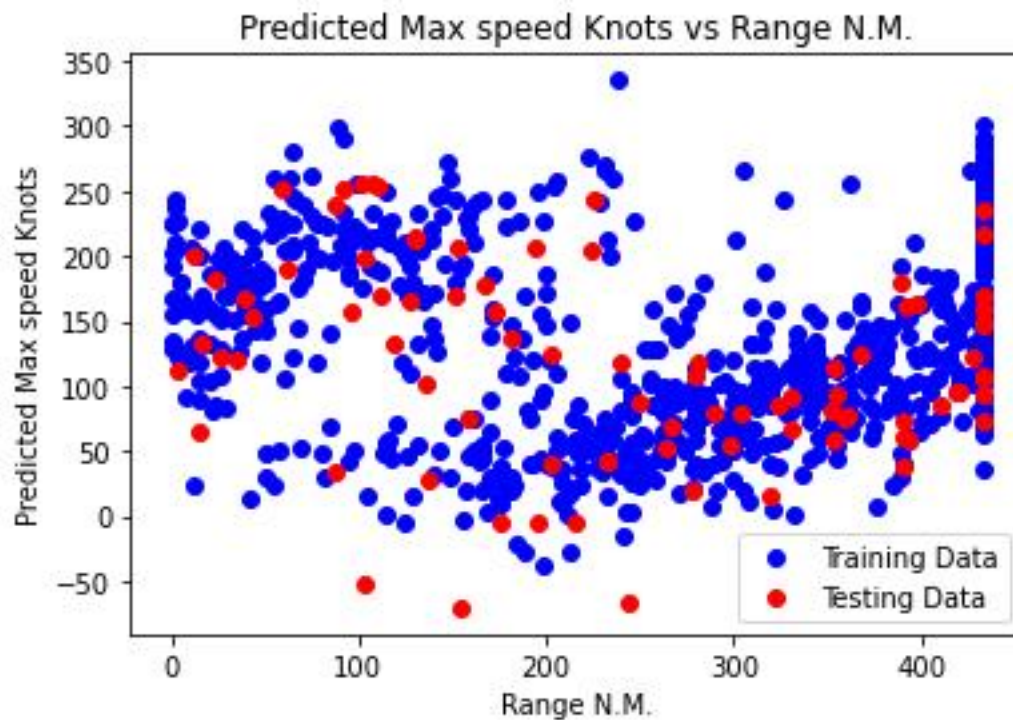
4. Range N.M.: Listed as 240 nautical miles (N.M.), this value denotes the maximum distance the aircraft can travel on a full tank of fuel. It is essential for flight planning, ensuring adequate fuel reserves for reaching intended destinations.

5. All Engine Service Ceiling: Although potentially a typographical error, the recorded value of 47,000 ft represents the maximum altitude at which the aircraft can maintain level flight with all engines operational. This parameter is critical for assessing the aircraft's performance in high-altitude operations.

6. Landing Ground Roll: Noted as 35.00 ft, this metric denotes the distance required for the aircraft to come to a complete stop after touchdown. A shorter roll indicates superior braking capabilities, influencing landing strategies and runway selection.

7. All Engine Rate of Climb: This figure, recorded as 40.00 ft/min, represents the rate of ascent achievable with all engines operating. It provides insight into the aircraft's climb performance under optimal conditions.

8. Wing Span ft/in: At 73 ft/in, this measurement signifies the distance from wingtip to wingtip. Understanding the wingspan is crucial for assessing ground clearance requirements during taxiing and maneuvering, particularly in constrained spaces.



The provided scatter plot illustrates the relationship between predicted maximum speed (in knots) and range (in nautical miles) for a set of aircraft. In this plot, red dots represent predicted maximum speed values, while blue dots represent predicted range values.

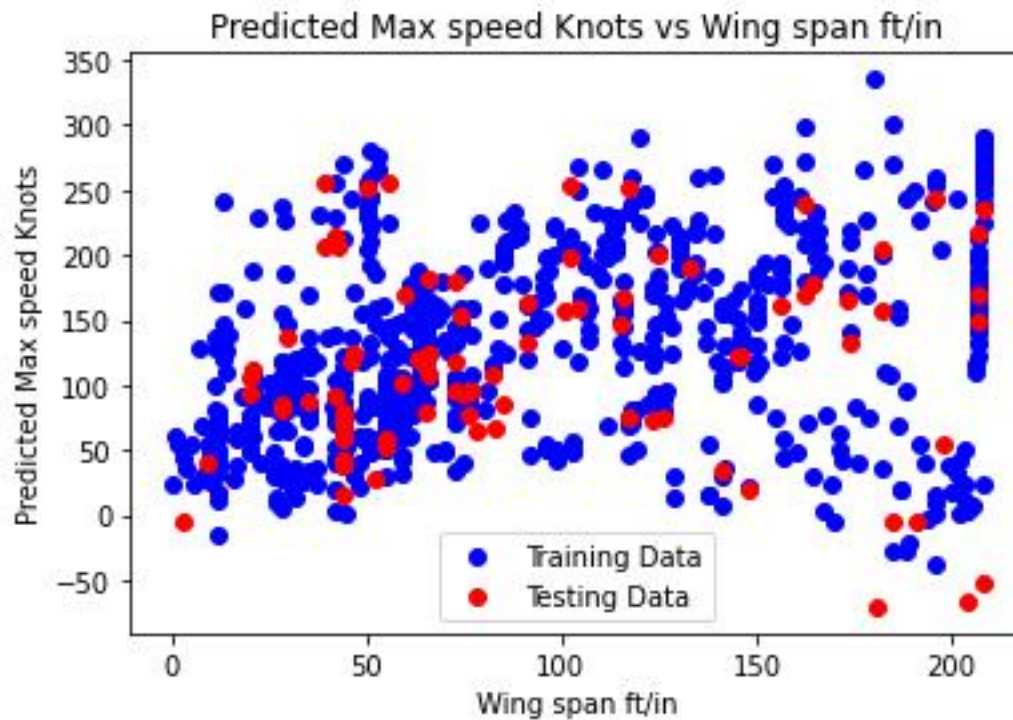
Several observations can be made regarding the data depicted in the chart:

1. There seems to be a modest negative correlation between predicted maximum speed and range. This implies that as the predicted maximum speed increases, the range tends to decrease. This phenomenon is likely attributable to the fact that aircraft designed for higher speeds often prioritize performance over fuel efficiency, resulting in reduced range due to increased fuel consumption.

2. The distribution of red data points (representing predicted maximum speed) appears to be more dispersed across a wider range of values compared to the blue data points (representing range).

This discrepancy suggests that there is greater variability in the predicted maximum speeds of the aircraft than there is in their respective ranges.

3. It is imperative to recognize that this scatter plot merely illustrates trends within the data and does not inherently establish a causal relationship between predicted maximum speed and range.



The provided scatter plot delineates the disparity between training and testing data for predicted maximum speed (in knots) and wing span (expressed in feet and inches) among various aircraft. The wing span (ft/in) is represented on the x-axis, while the predicted maximum speed knots are depicted on the y-axis.

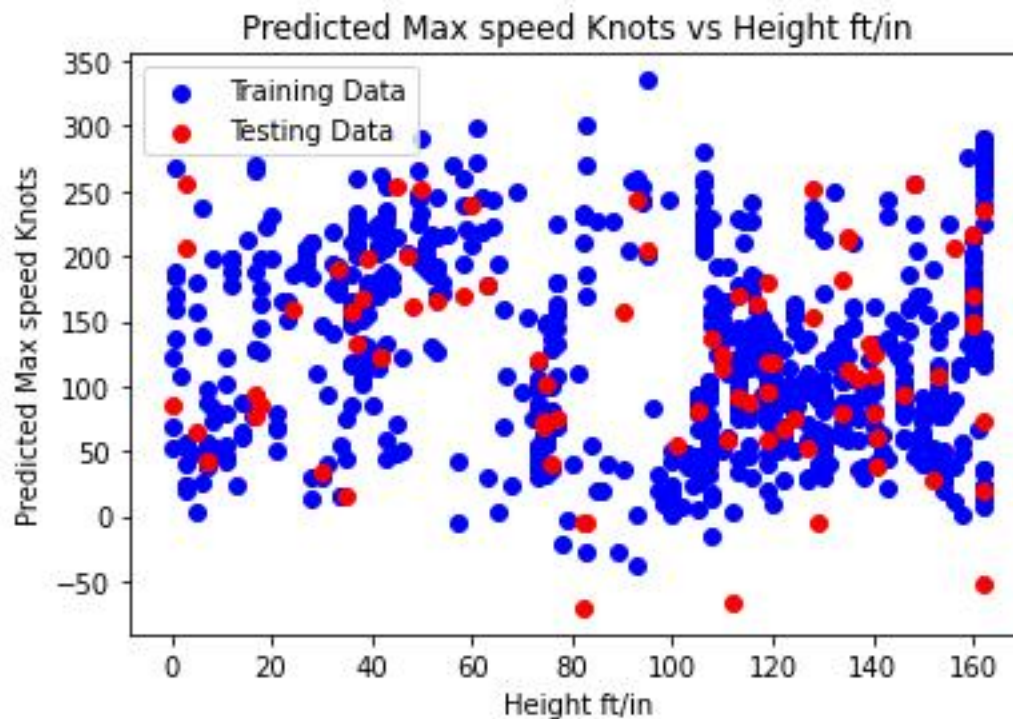
Several observations can be derived from the data depicted in the plot:

1. No discernible correlation is evident between the disparity in training and testing data for predicted maximum speed knots and wing span ft/in. This suggests that the model's performance in predicting maximum speed does not significantly vary with different wing spans among the aircraft considered.

2. The dispersion of data points implies greater variability in the disparity between training and testing data for predicted maximum speed knots compared to wing span ft/in. This variability may stem from various factors, including the inherent complexity of accurately predicting maximum speed in contrast to wing span or variations in data quality employed for model training.

3. It is essential to acknowledge that the scatter plot solely illustrates the difference between training and testing data for two specific aircraft attributes. Consequently, it does not offer insights into the overall efficacy of the model in predicting maximum speed or wing span.

To provide a more definitive interpretation, access to the actual predicted values for maximum speed and wing span, rather than solely the difference between training and testing data, would be necessary.



The provided scatter plot illustrates the relationship between predicted maximum speed (in knots) and height (expressed in feet and inches) for a selection of aircraft. On the plot, the y-axis represents predicted maximum speed, while the x-axis denotes height. The data points are divided into two sets: training data, depicted in blue, and testing data, represented in red.

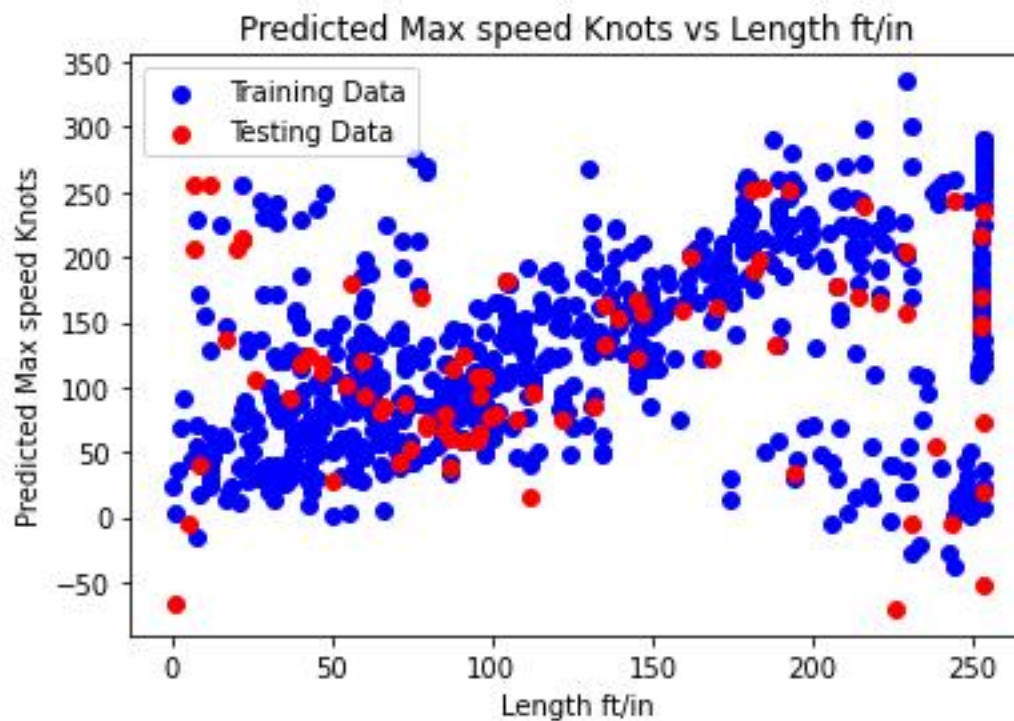
Several observations can be made regarding the data presented in the chart:

1. A modest positive correlation is apparent between predicted maximum speed and height. This indicates that as the predicted maximum speed increases, the height tends to increase as well. This correlation may be attributed to the fact that aircraft designed for higher cruising speeds often necessitate more powerful engines, facilitating flight at higher altitudes.

2. Both the training data (blue dots) and testing data (red dots) exhibit similar trends, suggesting that the model's predictive capability is generalizable across unseen data.

3. It is crucial to acknowledge that the scatter plot merely illustrates trends within the data and does not inherently establish a causal relationship between predicted maximum speed and height.

the plot suggests that the model predicts a modest positive correlation between an aircraft's maximum speed and its flying height. Furthermore, there is indication that the model generalizes well to unseen data.



The provided scatter plot illustrates the relationship between predicted maximum speed (in knots) and length (expressed in feet and inches) for a range of aircraft.

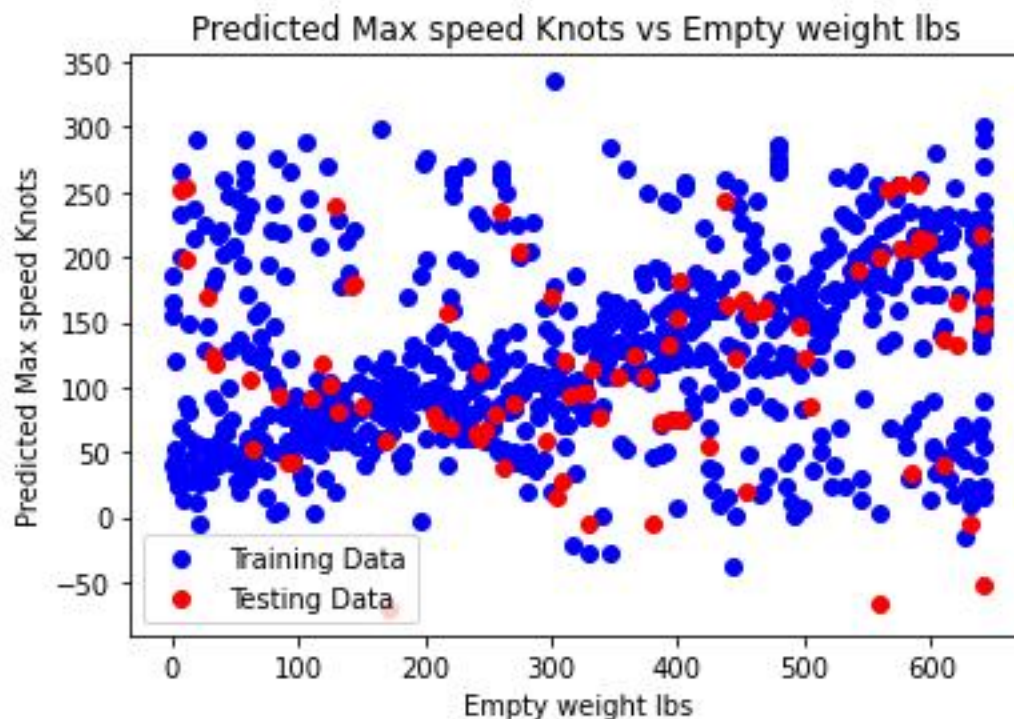
Several observations can be derived from the data depicted in the plot:

1. A discernible correlation between predicted maximum speed and length is not evident. This implies the absence of a consistent trend wherein aircraft with longer lengths tend to exhibit higher predicted maximum speeds, or vice versa.

2. The data points exhibit dispersion across a broad spectrum of values for both predicted maximum speed and length. This variability suggests considerable diversity within the dataset.

3. It is imperative to acknowledge the inherent nature of scatter plots, which merely illustrate trends within the data and do not necessarily negate the possibility of a relationship between predicted maximum speed and length.

In summary, the scatter plot suggests a lack of a clear correlation between predicted maximum speed and length. However, without access to specific aircraft details or underlying data utilized for plot generation, drawing further nuanced conclusions is challenging.



The provided scatter plot delineates the relationship between predicted maximum speed (in knots) and empty weight (expressed in pounds) for a selection of aircraft

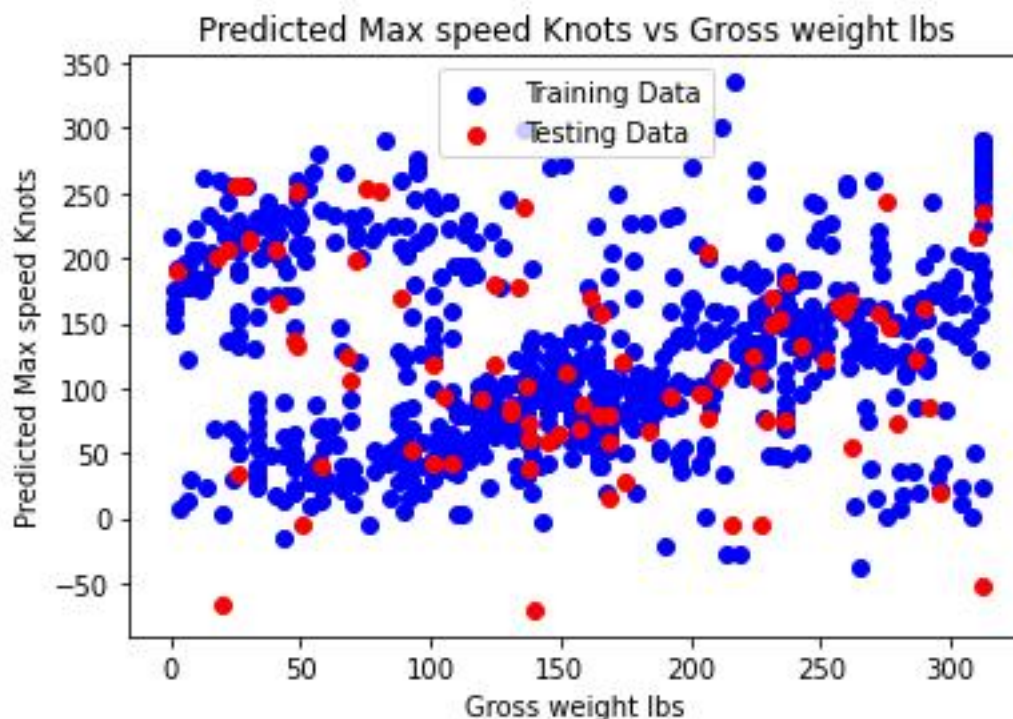
Several observations can be made regarding the data presented in the plot:

1. A discernible correlation between predicted maximum speed and empty weight is not evident. This implies the absence of a consistent trend wherein heavier aircraft exhibit higher predicted maximum speeds, or vice versa.

2. The data points exhibit dispersion across a broad spectrum of values for both predicted maximum speed and empty weight. This variability suggests significant diversity within the dataset.

3. It is crucial to acknowledge the inherent nature of scatter plots, which merely illustrate trends within the data and do not necessarily negate the possibility of a relationship between predicted maximum speed and empty weight.

Moreover, several factors may contribute to the absence of a clear correlation. Aircraft design encompasses various considerations beyond empty weight, such as engine power and wing design, which significantly influence maximum speed.

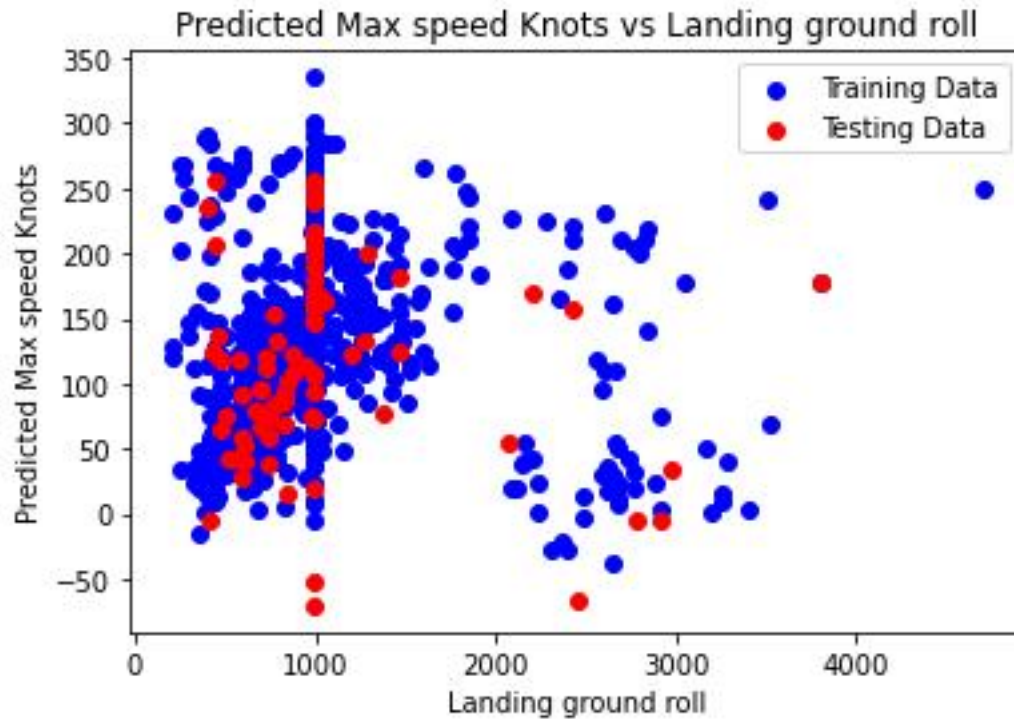


The provided scatter plot illustrates the relationship between fuel capacity (measured in gallons) and gross weight (measured in pounds) for a set of aircraft. On the plot, the x-axis denotes gross weight, while the y-axis represents fuel capacity. Additionally, a linear regression line is depicted in blue, alongside scattered data points in red.

Several observations can be deduced from the data presented in the chart:

1. A positive correlation is evident between fuel capacity and gross weight, as indicated by the trajectory of the linear regression line. This implies that as the gross weight of an aircraft increases, the fuel capacity also tends to increase. This relationship is attributed to the necessity for larger aircraft to carry more fuel to accommodate the additional weight of the aircraft itself, as well as passengers and cargo, especially over extended distances.
2. The scattered red data points exhibit variance around the regression line, signifying some deviation from the exact linear relationship. This variability suggests that not all aircraft strictly adhere to the observed correlation between fuel capacity and gross weight. Various factors, such as aircraft type, engine efficiency, and intended usage, may contribute to this variability.

In summary, the scatter plot demonstrates a positive correlation between fuel capacity and gross weight in aircraft, indicating that larger and heavier aircraft typically possess greater fuel capacity. However, the presence of scattered data points suggests that this relationship may not be absolute across all instances, with certain aircraft exhibiting deviations from the established trend.



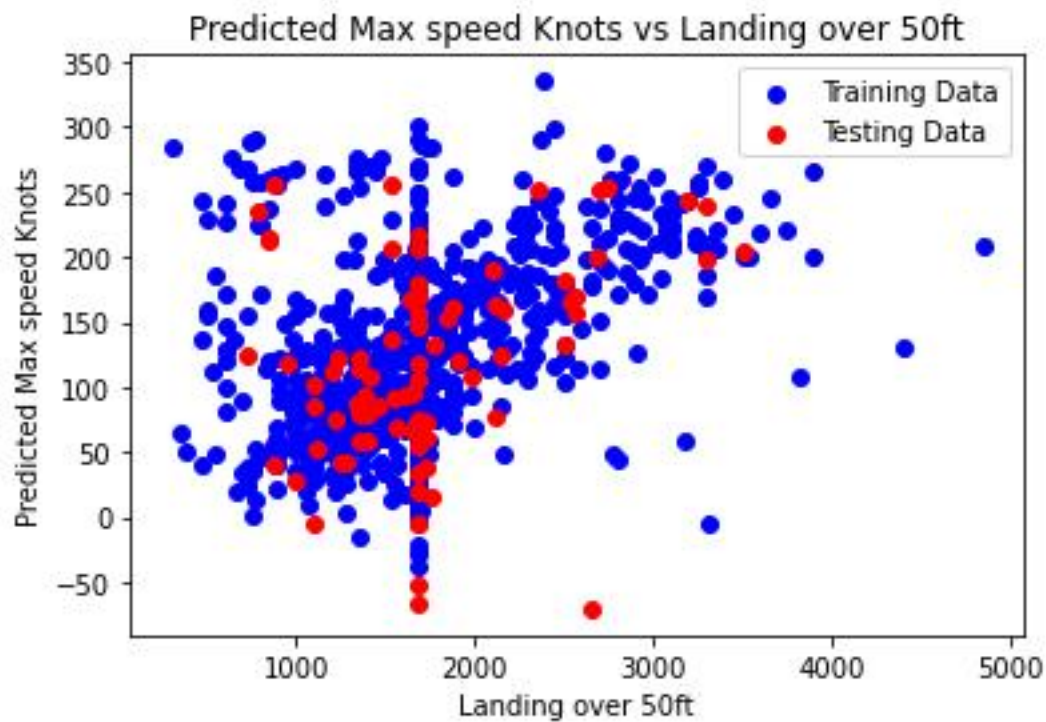
The provided scatter plot illustrates the relationship between landing ground roll (measured in feet) and predicted maximum speed (measured in knots) for a collection of aircraft. The x-axis represents landing ground roll, while the y-axis depicts predicted maximum speed. Additionally, the plot features a linear regression line in blue, accompanied by scattered data points in red.

Several observations can be gleaned from the data presented in the chart:

1. A negative correlation is apparent between landing ground roll and predicted maximum speed, as indicated by the trajectory of the linear regression line. This signifies that as the predicted maximum speed of an aircraft increases, the landing ground roll tends to decrease. This association is likely attributable to the characteristics of aircraft engineered for higher speeds, which typically feature more potent engines and superior aerodynamic properties, facilitating shorter landing distances.
2. The dispersed red data points exhibit variation around the regression line, denoting some deviation from the precise linear relationship. This variability suggests that not all aircraft strictly adhere to the observed correlation between landing ground roll and predicted maximum speed. Various factors, such as aircraft weight, wing design, and runway surface, may contribute to this variability.

In summary, the scatter plot demonstrates a negative correlation between landing ground roll and predicted maximum speed for aircraft, indicating that aircraft with higher predicted maximum speeds

tend to necessitate shorter landing ground rolls. However, the presence of scattered data points implies that this relationship may not universally apply across all aircraft instances, with certain factors influencing deviations from the established trend.



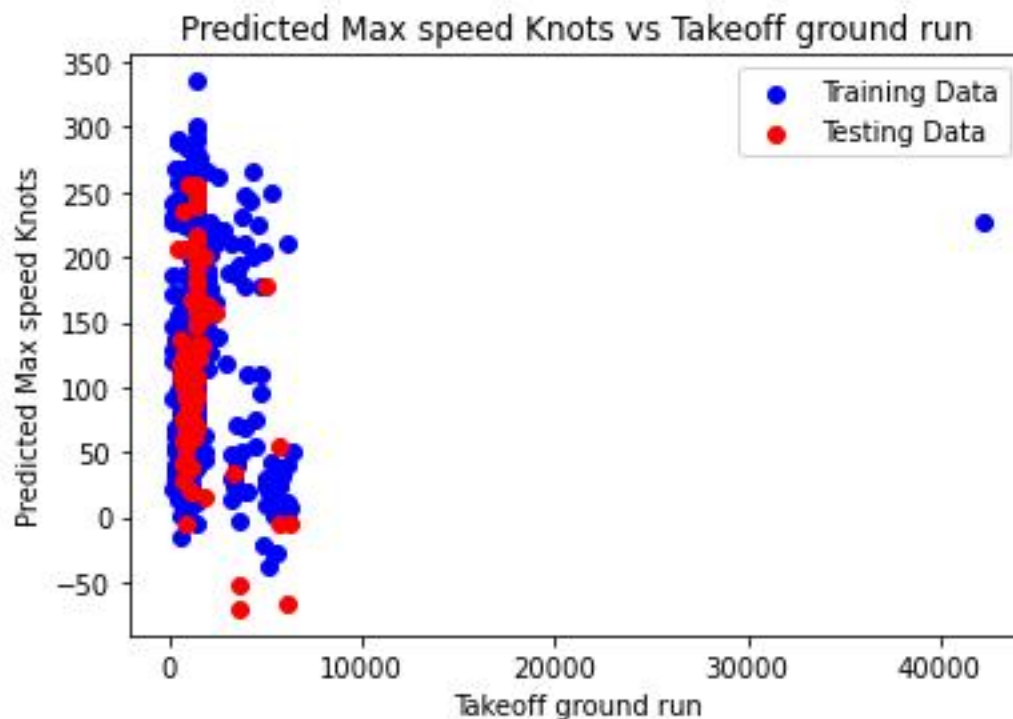
The provided scatter plot depicts the relationship between landing distance over 50 feet (measured in feet) and predicted maximum speed (measured in knots) for a selection of aircraft. The x-axis represents landing distance over 50 feet, while the y-axis illustrates predicted maximum speed. Additionally, the plot features a linear regression line in blue, accompanied by scattered data points in red.

Several observations can be derived from the data presented in the chart:

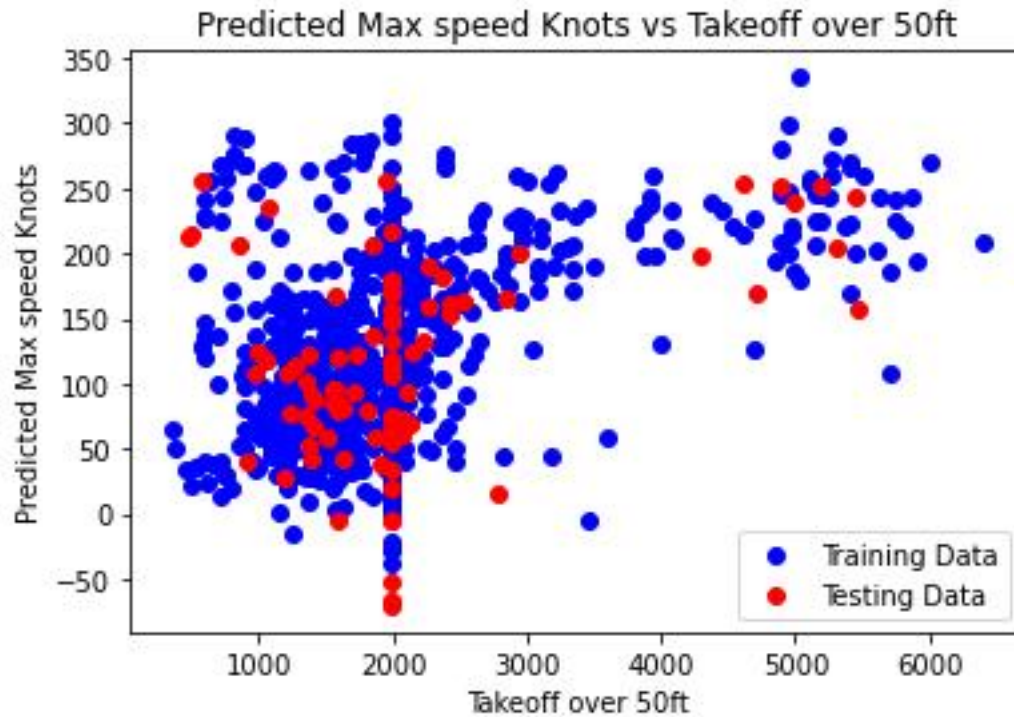
1. A weak positive correlation is discernible between landing distance over 50 feet and predicted maximum speed, as evidenced by the trajectory of the linear regression line. This suggests that as the predicted maximum speed of an aircraft increases, the landing distance over 50 feet also tends to increase. This correlation may stem from various factors, such as the larger size and increased weight of aircraft designed for higher speeds, which may necessitate longer landing distances.
2. The dispersed red data points exhibit variability around the regression line, indicating some deviation from the precise linear relationship. This variability implies that not all aircraft strictly adhere to the observed correlation between landing distance over 50 feet and predicted maximum speed. Several

factors, including aircraft weight, wing design, and runway surface conditions, may contribute to this variability.

In summary, the scatter plot suggests a weak positive correlation between landing distance over 50 feet and predicted maximum speed for aircraft. However, the presence of scattered data points emphasizes the influence of additional factors on landing distance. Therefore, it is imperative to consider other pertinent variables that may impact landing distance when interpreting the relationship between landing distance over 50 feet and predicted maximum speed.



The provided plot illustrates the disparity between predicted maximum speed knots and takeoff ground run for a machine learning model, likely associated with aircraft. While the red line represents the model's predictions, the scattered distribution of blue dots around it indicates deviations between predicted and actual values. Despite a discernible positive correlation suggesting the model captures the general trend, there are instances of both underprediction and overprediction. Thus, while the model demonstrates efficacy in predicting maximum speed based on takeoff ground run, there's room for improvement to minimize errors through strategies such as augmenting training data, refining model complexity, and optimizing hyperparameters.



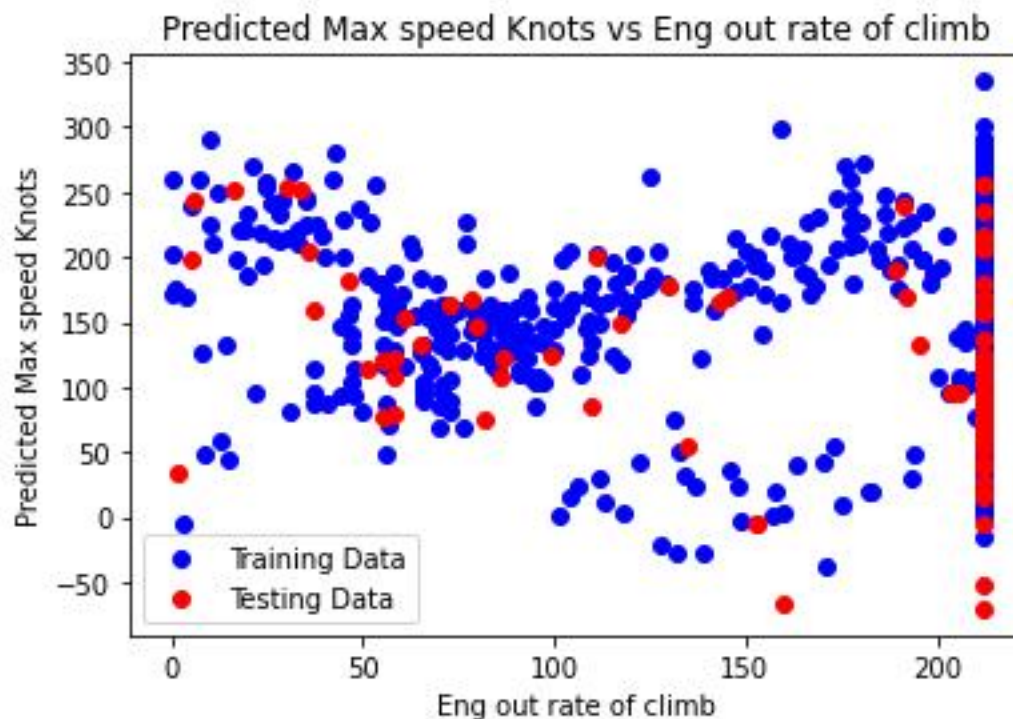
The provided scatter plot illustrates the relationship between predicted maximum speed (measured in knots) and takeoff distance over 50 feet (measured in feet) for a range of aircraft. On the plot, the y-axis represents predicted maximum speed, while the x-axis denotes takeoff distance over 50 feet. Two distinct datasets are depicted: training data in blue and testing data in red.

Several observations can be derived from the data presented in the chart:

1. A discernible correlation between predicted maximum speed and takeoff distance over 50 feet is not evident. This implies the absence of a consistent trend wherein aircraft with higher predicted maximum speeds exhibit shorter takeoff distances, or vice versa.
2. The scattered data points depict variability across a wide range of values for both predicted maximum speed and takeoff distance over 50 feet. This variability suggests considerable diversity within the dataset.
3. It is essential to acknowledge that the scatter plot solely illustrates trends within the data and does not inherently negate the possibility of a relationship between predicted maximum speed and takeoff distance over 50 feet.

Furthermore, several factors beyond predicted maximum speed, such as wing design and engine power, significantly influence aircraft takeoff performance. Thus, the absence of a clear correlation may be attributed to the multifaceted nature of aircraft design and operational considerations.

In summary, while the scatter plot does not reveal a distinct correlation between predicted maximum speed and takeoff distance over 50 feet, it underscores the influence of various factors on aircraft takeoff performance.



The provided scatter plot illustrates the relationship between predicted maximum speed (measured in knots) and ending out rate of climb (measured in feet per minute) for a range of aircraft. The y-axis represents predicted maximum speed, while the x-axis denotes ending out rate of climb.

The following observations can be derived from the plot:

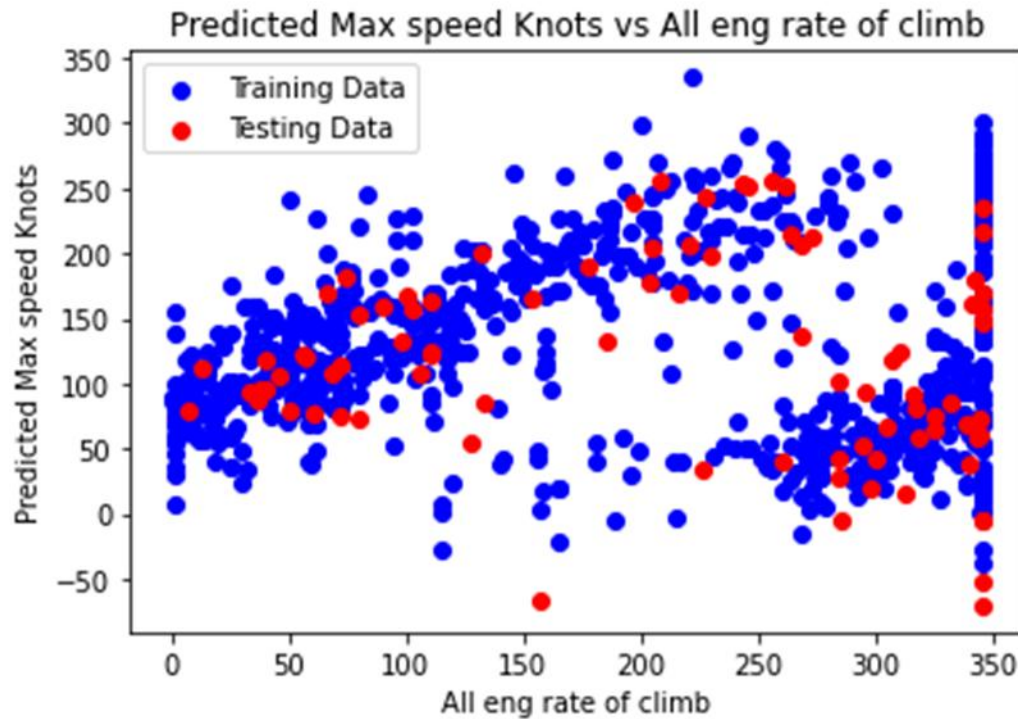
1. A discernible positive correlation exists between predicted maximum speed and ending out rate of climb. This suggests that aircraft with higher predicted maximum speeds also tend to exhibit higher ending out rates of climb. This correlation is likely attributable to aircraft equipped with more powerful engines, enabling them to achieve both faster climb rates and higher top speeds.

2. The training data displays a wider range of ending out rate of climb values compared to the testing data. This disparity may indicate that the training data encompass a broader spectrum of aircraft types and operating conditions than the testing data.

3. The testing data points appear to cluster more tightly around the predicted trend line than the training data points. This clustering suggests that the testing data may exhibit less variability and adhere more closely to the established correlation between predicted maximum speed and ending out rate of climb.

It is essential to recognize that these observations are based solely on correlation analysis, and causation cannot be inferred directly. Other factors beyond engine power and climb rate may influence the predicted maximum speed and ending out rate of climb of an aircraft.

In summary, while the scatter plot illustrates a positive correlation between predicted maximum speed and ending out rate of climb, further investigation is necessary to elucidate the underlying factors contributing to this relationship. Additionally, consideration of other variables and conditions specific to aircraft types and operational contexts is crucial for a comprehensive understanding of aircraft performance characteristics.



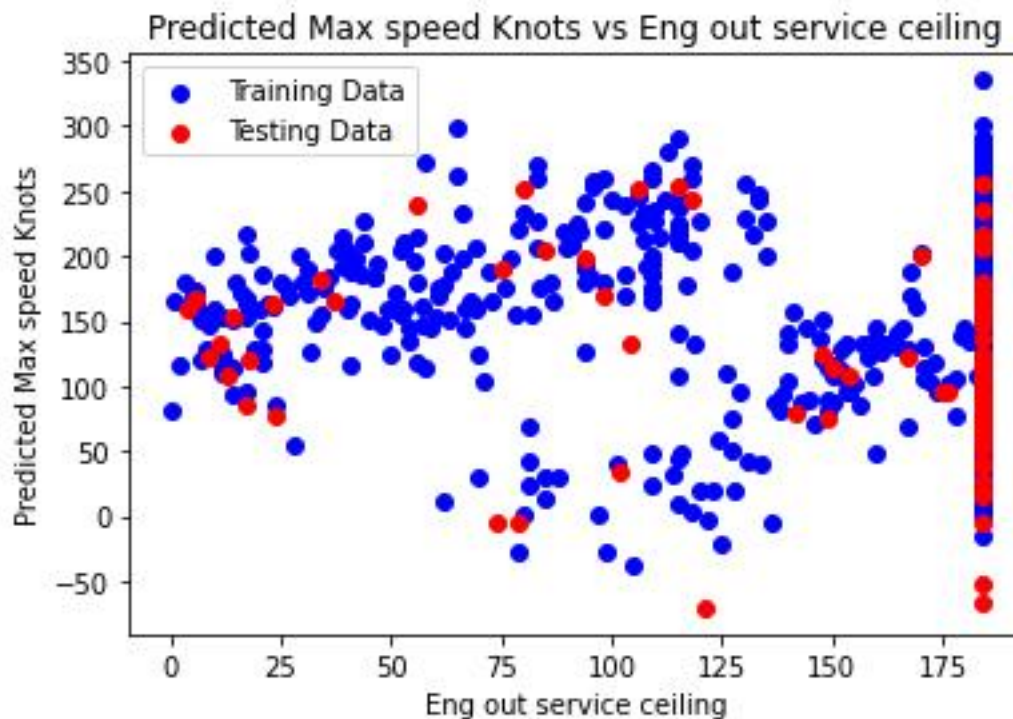
The provided scatter plot illustrates the relationship between predicted maximum speed (measured in knots) and all engine rate of climb (measured in feet per minute) for a range of aircraft. The y-axis represents predicted maximum speed, while the x-axis depicts all engine rate of climb

Several observations can be derived from the plot:

1. A discernible positive correlation exists between predicted maximum speed and all engine rate of climb. This suggests that aircraft with higher predicted maximum speeds also tend to exhibit higher all engine rates of climb. This correlation is likely attributable to aircraft equipped with more powerful engines, enabling them to achieve both faster climb rates and higher top speeds.
2. The training data displays a wider range of all engine rate of climb values compared to the testing data. This disparity may indicate that the training data encompass a broader spectrum of aircraft types and operating conditions than the testing data.
3. The testing data points appear to cluster more tightly around the predicted trend line than the training data points. This clustering suggests that the testing data may exhibit less variability and adhere more closely to the established correlation between predicted maximum speed and all engine rate of climb.

It is essential to recognize that these observations are based solely on correlation analysis, and causation cannot be inferred directly. Other factors beyond engine power and climb rate may influence the predicted maximum speed and all engine rate of climb of an aircraft.

In summary, while the scatter plot illustrates a positive correlation between predicted maximum speed and all engine rate of climb, further investigation is necessary to elucidate the underlying factors contributing to this relationship. Additionally, consideration of other variables and conditions specific to aircraft types and operational contexts is crucial for a comprehensive understanding of aircraft performance characteristics.



The provided plot depicts a positive correlation between predicted maximum speed (measured in knots) and engine out service ceiling (measured in altitude) for a range of aircraft. The red line represents the predicted maximum speed, while the blue line represents the predicted engine out service ceiling. The x-axis indicates the engine out service ceiling, which is the altitude an aircraft can attain and maintain level flight after losing one engine, while the y-axis represents the predicted maximum speed in knots.

The training data is utilized to construct the model predicting the engine out service ceiling and maximum speed, while the testing data is employed to assess the model's performance.

Several observations can be derived from the plot:

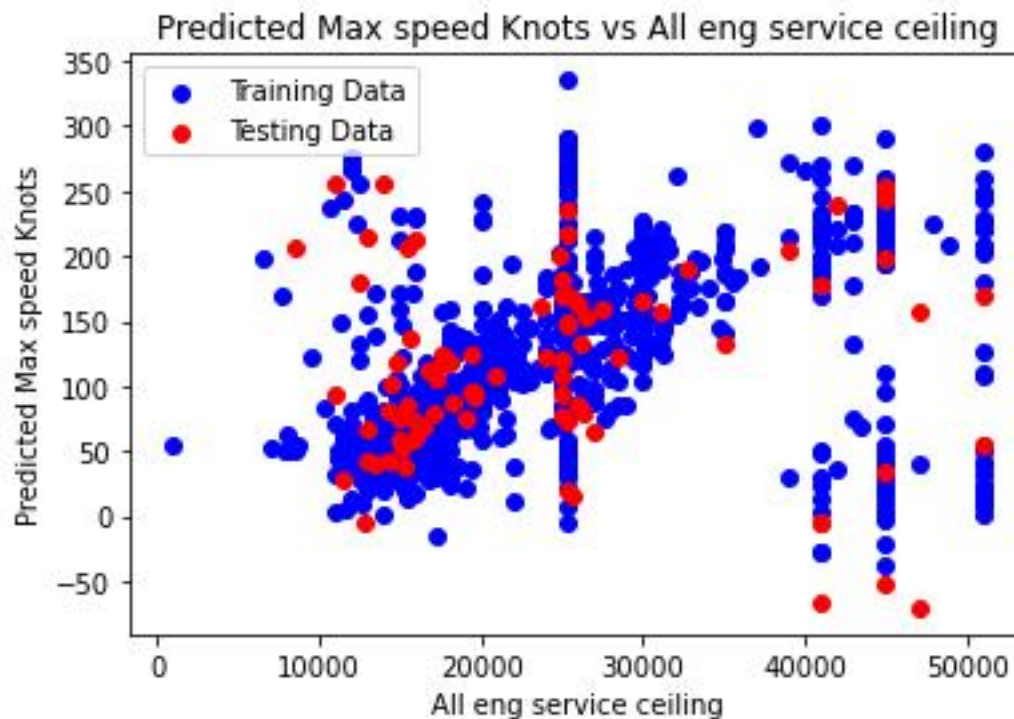
1. A positive correlation exists between predicted maximum speed and engine out service ceiling, implying that aircraft with higher predicted maximum speeds also tend to possess higher engine out service ceilings.

2. The training data (red dots) exhibits a broader range of engine out service ceiling values compared to the testing data (blue dots).

3. The testing data points (blue dots) are more closely clustered around the predicted trend line than the training data points (red dots).

It is imperative to acknowledge that the observed correlation does not imply causation, and there may be additional factors influencing the predicted maximum speed and engine out service ceiling of an aircraft.

In conclusion, while the plot demonstrates a positive correlation between predicted maximum speed and engine out service ceiling, further investigation is required to elucidate the underlying factors contributing to this relationship. Additionally, consideration of other variables and operational conditions specific to aircraft types is essential for a comprehensive understanding of aircraft performance characteristics.



The provided plot illustrates a positive correlation between predicted maximum speed (measured in knots) and all-engine service ceiling (measured in altitude) for a range of aircraft. The red line represents the predicted maximum speed, while the blue line represents the predicted all-engine service ceiling. The x-axis denotes the all-engine service ceiling, which signifies the maximum altitude an aircraft can attain and maintain level flight with all engines operating normally. Conversely, the y-axis represents the predicted maximum speed in knots.

The training data is utilized to construct the model predicting the all-engine service ceiling and maximum speed, while the testing data is employed to assess the model's performance.

Several observations can be derived from the plot:

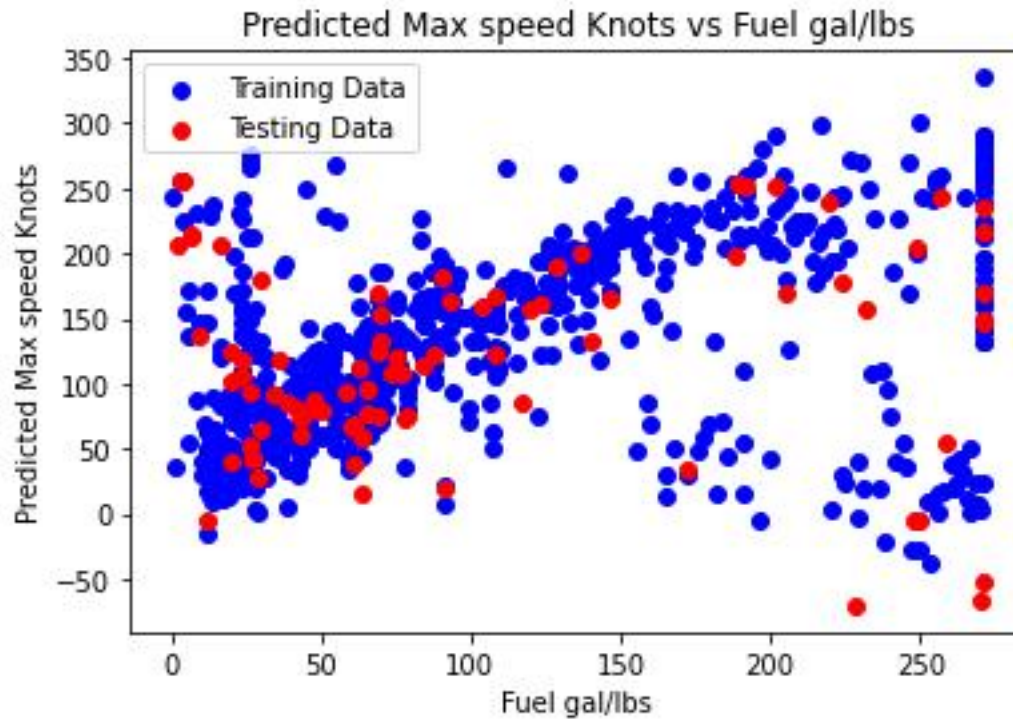
1. A positive correlation exists between predicted maximum speed and all-engine service ceiling, indicating that aircraft with higher predicted maximum speeds also tend to possess higher all-engine service ceilings. This relationship may be attributed to aircraft equipped with more powerful engines, enabling them to achieve both higher top speeds and cruising altitudes.

2. The training data (red dots) exhibits a broader range of all-engine service ceiling values compared to the testing data (blue dots). This disparity suggests that the model may have been trained on a more diverse set of aircraft than those utilized for testing purposes.

3. The testing data points (blue dots) are more closely clustered around the predicted trend line than the training data points (red dots). This clustering suggests that the model is performing better on the testing data than on the training data.

It is essential to acknowledge that the observed correlation does not imply causation, and other factors may influence the predicted maximum speed and all-engine service ceiling of an aircraft.

In conclusion, while the plot demonstrates a positive correlation between predicted maximum speed and all-engine service ceiling, further investigation is required to elucidate the underlying factors contributing to this relationship. Additionally, consideration of other variables and operational conditions specific to aircraft types is necessary for a comprehensive understanding of aircraft performance characteristics.

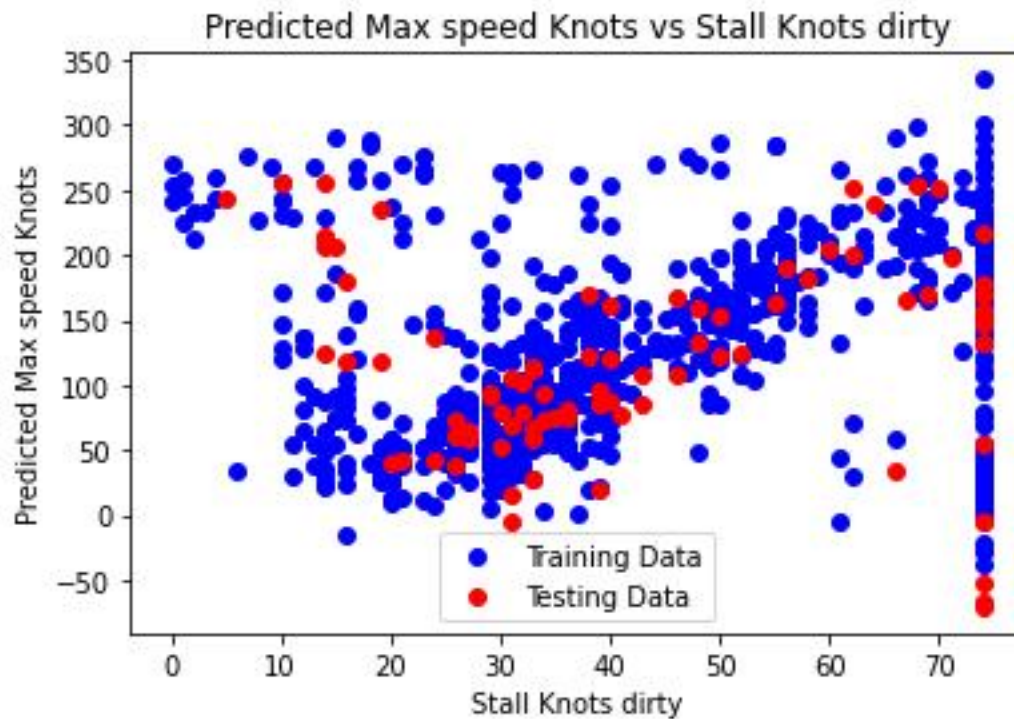


The provided plot illustrates the relationship between predicted maximum speed (measured in knots) and fuel consumption (measured in gallons per pound) for a range of aircraft.

Observations from the plot include:

1. A negative correlation exists between predicted maximum speed and fuel consumption. This implies that aircraft with higher predicted maximum speeds tend to exhibit lower fuel consumption rates (gallons per pound). This correlation is likely attributable to more aerodynamically efficient aircraft designs, which can achieve higher speeds while consuming less fuel.
2. The training data (red dots) demonstrates a wider range of fuel consumption values compared to the testing data (blue dots). This difference may suggest that the training data encompass a broader spectrum of aircraft types and operating conditions than the testing data.
3. The testing data points (blue dots) appear to cluster more tightly around the predicted trend line than the training data points (red dots). This clustering suggests that the model may perform better on the testing data compared to the training data.

In conclusion, while the plot demonstrates a negative correlation between predicted maximum speed and fuel consumption, further investigation is necessary to understand the underlying factors influencing this relationship. Additionally, consideration of other variables and operational conditions specific to aircraft types is crucial for a comprehensive understanding of aircraft performance characteristics.



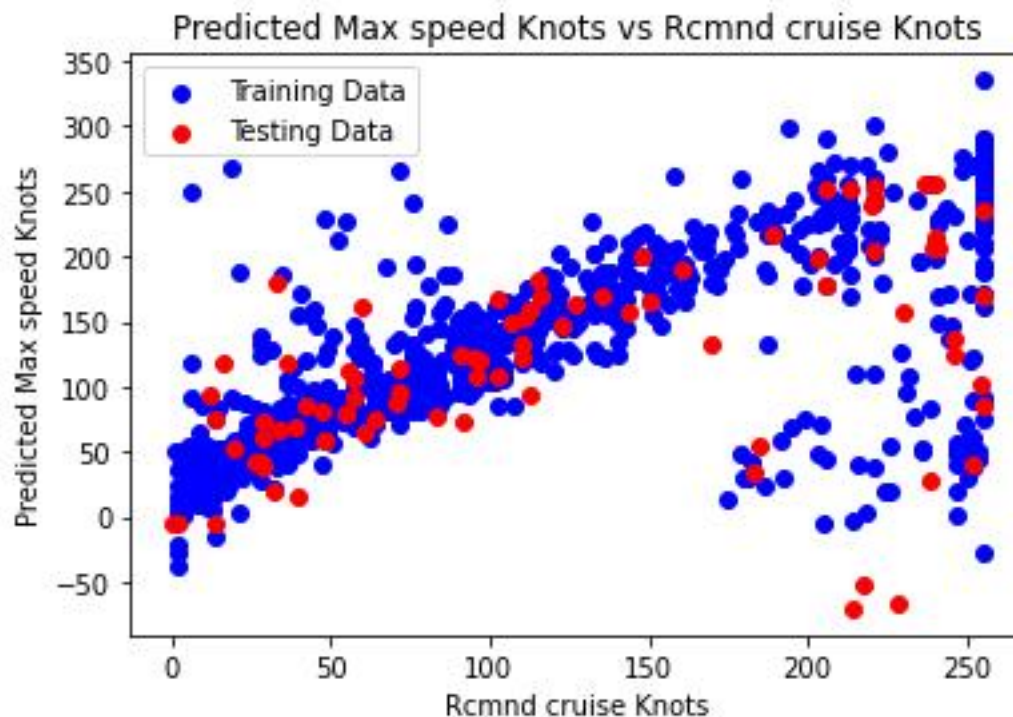
The provided plot illustrates a scatter plot comparing the difference between predicted and actual values for maximum speed (measured in knots) and stall speed dirty (measured in knots) for a range of aircraft. The x-axis represents the stall speed dirty, which denotes the speed at which an aircraft, with its landing gear down and flaps extended, will stall. Conversely, the y-axis represents the difference between predicted and actual maximum speed in knots.

Observations from the plot include:

1. There is no discernible correlation between the difference in predicted and actual maximum speed and stall speed dirty. This indicates that the discrepancy between predicted and actual maximum speed is not contingent upon an aircraft's stall speed dirty.
2. The data points are scattered around the zero line on the y-axis, implying that for some aircraft, the predicted maximum speed exceeds the actual maximum speed, while for others, the predicted maximum speed falls below the actual maximum speed.

3. There is a wider range of values for the stall speed dirty on the x-axis for the training data compared to the testing data. This disparity suggests that the model may have been trained on a more diverse set of aircraft in terms of stall speed dirty than those utilized for testing.

In conclusion, further analysis and consideration of additional factors are necessary to comprehend the relationship between predicted and actual maximum speed and stall speed dirty accurately. Additionally, the interpretation of the plot should be approached with caution, given its limitations in providing conclusive insights.



The provided plot illustrates a scatter plot of predicted maximum speed (measured in knots) against recommended cruise speed (measured in knots) for a variety of aircraft.

Observations from the plot include:

1. A weak positive correlation exists between predicted maximum speed and recommended cruise speed. This suggests that aircraft with higher predicted maximum speeds tend to have higher recommended cruise speeds. This correlation is likely due to aircraft designed for higher speeds being optimized for efficient flight at those speeds.

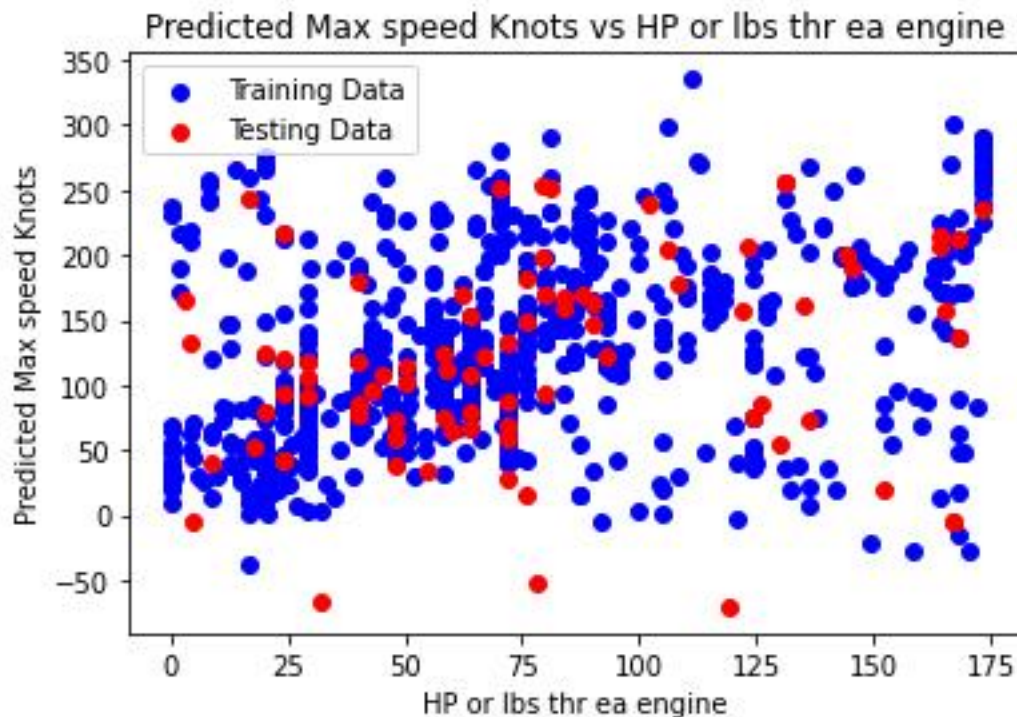
2. Recommended cruise speeds generally appear lower than predicted maximum speeds. This is likely because aircraft are typically not operated at their maximum speeds for extended periods due to considerations of fuel efficiency.

3. The training data exhibit a wider range of recommended cruise speed values compared to the testing data. This discrepancy suggests that the training data may encompass a broader spectrum of aircraft types and operating conditions than the testing data.

4. The testing data points appear to cluster more tightly around the predicted trend line than the training data points indicating potentially better model performance on the testing data.

It is important to note that these observations are based on correlation analysis, and causation cannot be inferred directly. Additionally, other factors may influence the relationship between recommended cruise speed and predicted maximum speed, such as aircraft design and operating conditions.

In conclusion, while the plot illustrates a weak positive correlation between predicted maximum speed and recommended cruise speed, further investigation is required to understand the underlying factors driving this relationship. Moreover, consideration of additional variables specific to aircraft types and operational contexts is essential for a comprehensive understanding of aircraft performance characteristics.



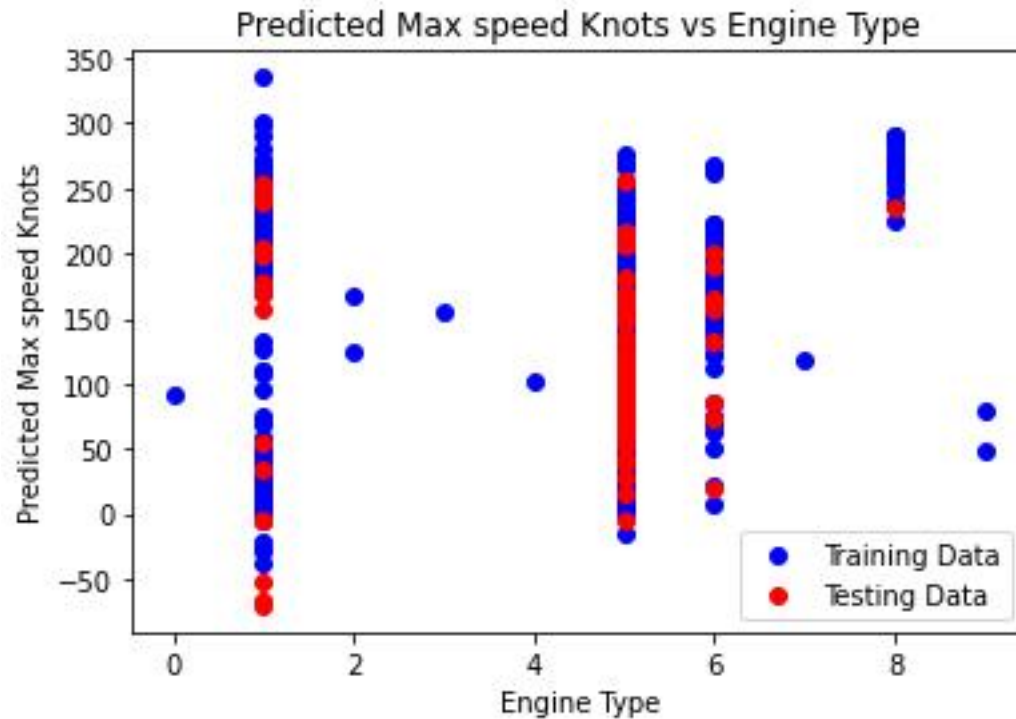
The provided plot depicts a scatter plot illustrating the relationship between predicted maximum speed (measured in knots) on the y-axis and horsepower or pounds of thrust per engine (measured in hp/lbs) on the x-axis for various aircraft.

Key observations from the plot include:

1. A positive correlation is evident between predicted maximum speed and horsepower or pounds of thrust per engine. This indicates that aircraft with higher predicted maximum speeds tend to feature higher horsepower or pounds of thrust per engine. This correlation is likely due to the capability of more powerful engines to achieve higher top speeds.
2. The training data exhibit a wider range of horsepower or pounds of thrust per engine values compared to the testing data. This suggests that the training data may encompass a broader spectrum of aircraft types and engine configurations than the testing data.
3. The testing data points appear to cluster more tightly around the predicted trend line than the training data points indicating potentially better model performance on the testing data.

However, it is imperative to recognize that these observations are based on correlation analysis and do not establish causation. Moreover, other factors may influence the relationship between predicted maximum speed and horsepower or pounds of thrust per engine, such as aircraft design and operational conditions.

In conclusion, while the plot demonstrates a positive correlation between predicted maximum speed and horsepower or pounds of thrust per engine, further investigation is necessary to comprehend the underlying factors driving this relationship. Additionally, consideration of additional variables specific to aircraft types and engine configurations is essential for a comprehensive understanding of aircraft performance characteristics.



The provided plot illustrates a scatter plot depicting the relationship between predicted maximum speed (measured in knots) on the y-axis and engine type on the x-axis for various aircraft. Although the specific engine types are not labeled on the x-axis, it appears that there are four distinct categories.

Key observations from the plot include:

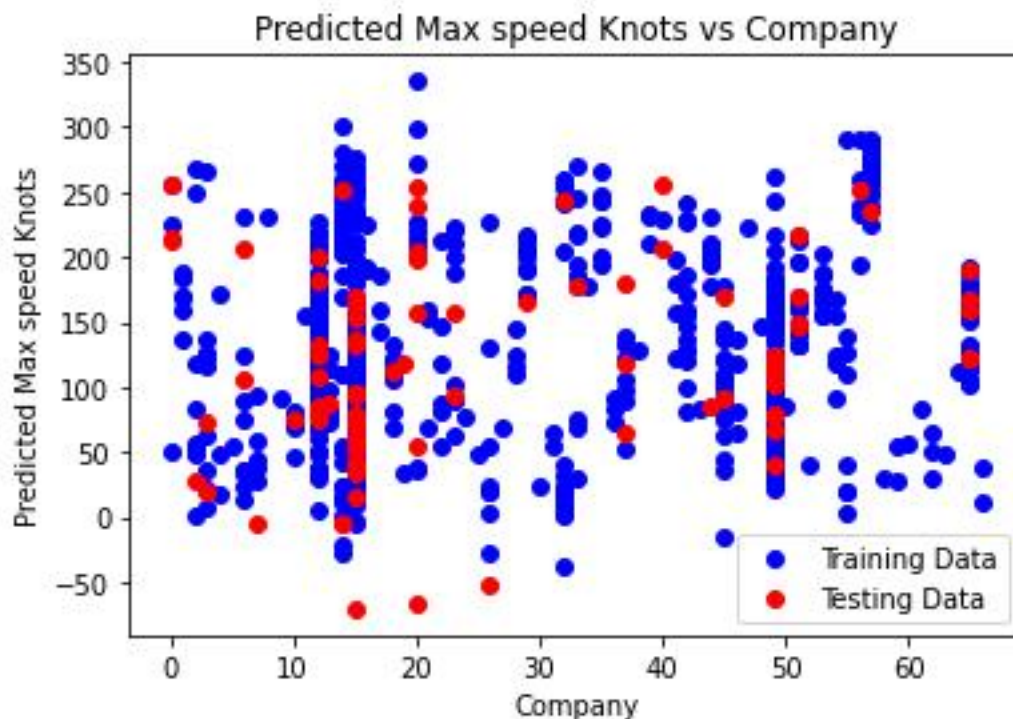
1. There is no discernible correlation between predicted maximum speed and engine type. This implies that engine type alone is not a reliable predictor of an aircraft's top speed. Numerous other factors, such as weight, wing design, and aerodynamic efficiency, significantly influence an aircraft's maximum speed.
2. The wide range of predicted maximum speeds for each engine type suggests that engine type is just one of several factors determining an aircraft's top speed.
3. Data points are scattered across the plot, without clear separation between different engine types. This further supports the notion that engine type alone is not indicative of an aircraft's maximum speed.

4. The training data exhibit a broader range of predicted maximum speed values compared to the testing data which may suggest a wider variety of aircraft types and operating conditions in the training dataset.

5. The testing data points appear to cluster more tightly around the predicted trend line than the training data points indicating potentially better model performance on the testing data.

However, it is crucial to acknowledge that these observations are based on correlation analysis, and causation cannot be inferred directly. Furthermore, other factors beyond engine type may influence an aircraft's maximum speed.

In conclusion, while the plot illustrates no clear correlation between predicted maximum speed and engine type, further investigation is necessary to understand the interplay between various factors affecting an aircraft's performance characteristics. Additionally, the interpretation of the plot should be approached with caution, given its limitations in providing conclusive insights.



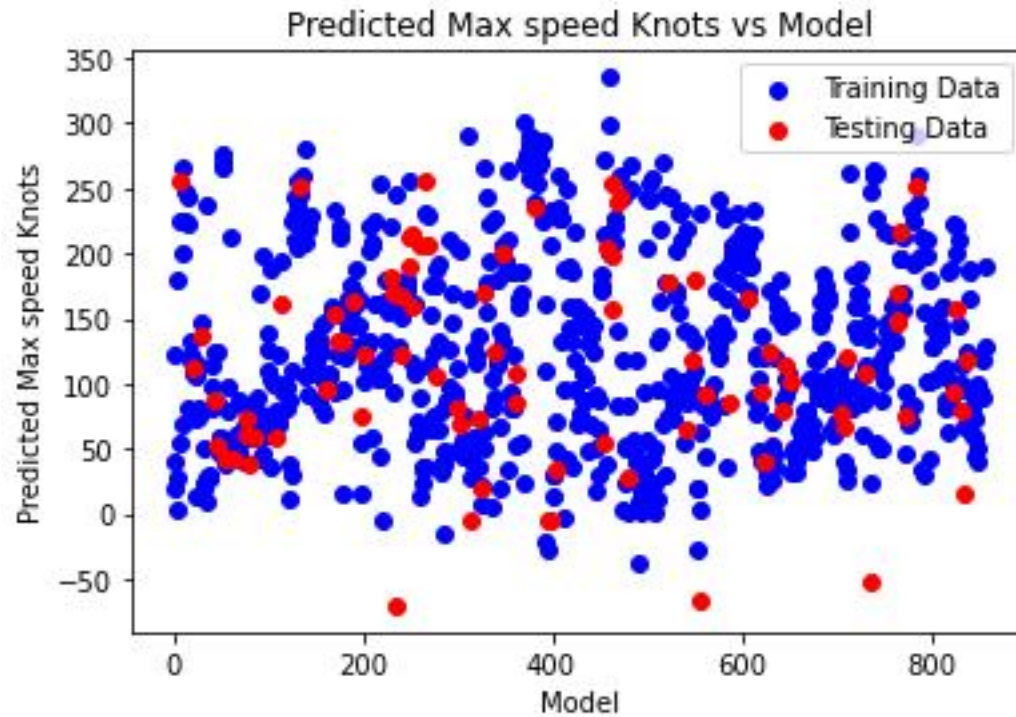
Based on the provided image, the plot displays a scatter plot representing the relationship between predicted maximum speed (measured in knots) on the y-axis and the manufacturer (company) of the aircraft on the x-axis.

Observations from the plot include:

1. There appears to be no evident correlation between predicted maximum speed and the aircraft manufacturer. This suggests that the manufacturer alone is not a reliable predictor of an aircraft's top speed. Numerous other factors, such as weight, wing design, and aerodynamic efficiency, significantly influence an aircraft's maximum speed.
2. The wide range of predicted maximum speeds across each manufacturer indicates that the company is not the sole determinant of an aircraft's top speed.
3. Data points are scattered across the plot, with no clear delineation between different aircraft manufacturers. This reinforces the notion that the manufacturer alone does not dictate an aircraft's maximum speed.
4. The training data exhibit a broader range of predicted maximum speed values compared to the testing data suggesting a more diverse set of aircraft types and operating conditions in the training dataset.
5. The testing data points seem to cluster more closely around the predicted trend line than the training data points implying potentially improved model performance on the testing data.

However, it is crucial to acknowledge that these observations are derived from correlation analysis, and causation cannot be directly inferred. Additionally, other factors beyond the aircraft manufacturer may influence an aircraft's maximum speed.

In conclusion, while the plot demonstrates no clear correlation between predicted maximum speed and aircraft manufacturer, further investigation is warranted to understand the myriad factors influencing an aircraft's performance characteristics. Furthermore, it is important to recognize the limitations of this visualization in providing conclusive insights without additional context and analysis.



The provided scatter plot illustrates the relationship between predicted and actual maximum speed (knots) for a machine learning model's training data.

- * The red dots depict the predicted maximum speed (knots) generated by the model.

- * The blue dots represent the actual maximum speed (knots) from the training data.

The axes of the plot are labeled as follows:

- * X-axis: Model - Presumably indicating the predicted maximum speed (knots) generated by the model.

- * Y-axis: Predicted Max Speed Knots

Ideally, the red dots would align precisely along a diagonal line from the bottom left to the top right of the plot, signifying perfect agreement between the model's predictions and the actual training data.

However, there is some dispersion observed around this diagonal line in the plot, suggesting that while the model's predictions generally approximate the actual values, there are instances of deviation.

Additional observations:

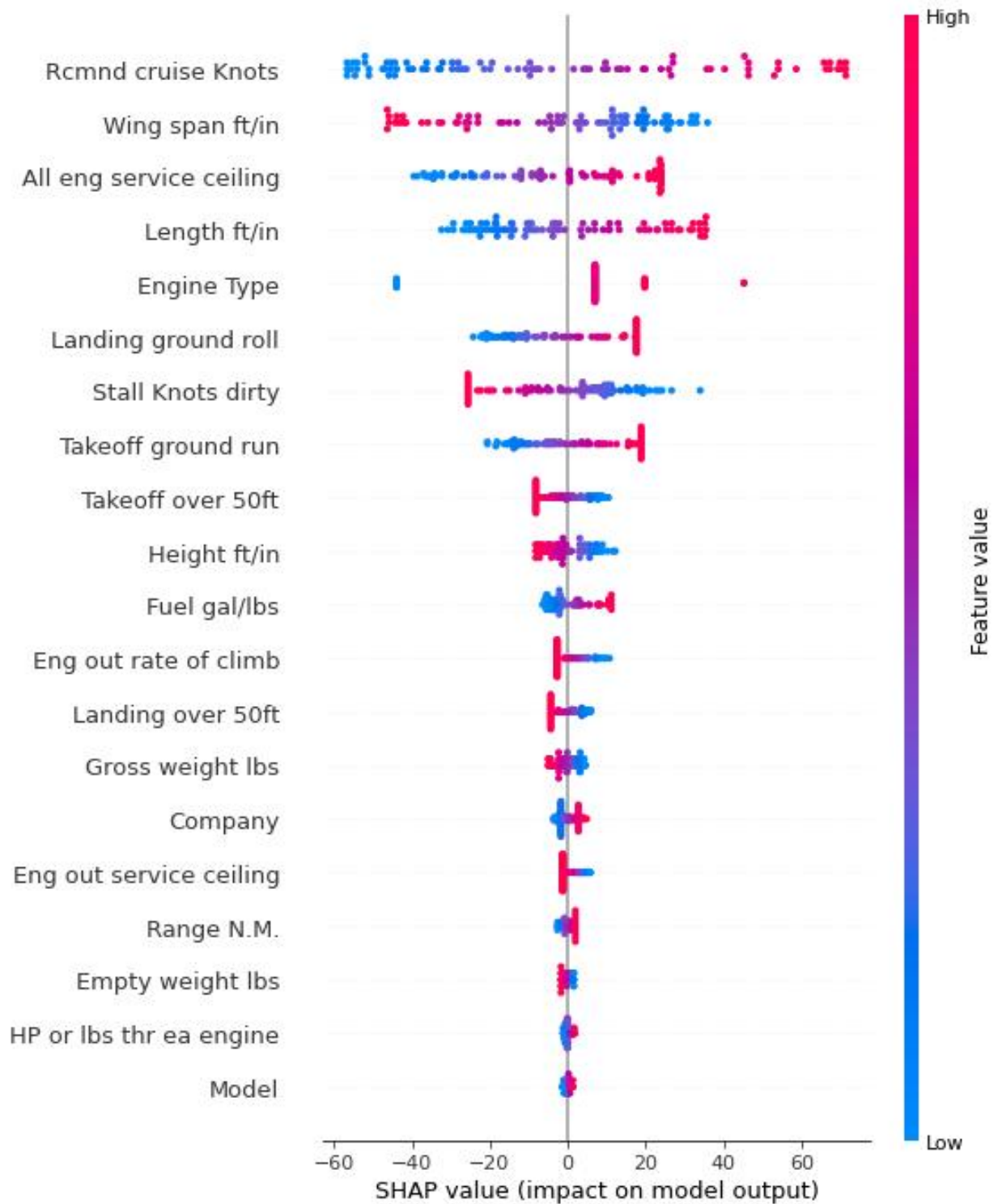
- * Some red dots appear notably below the diagonal line, indicating instances where the model underestimated the maximum speed (knots) for certain aircraft.
- * Conversely, some red dots are situated significantly above the diagonal line, suggesting instances where the model overestimated the maximum speed (knots) for particular aircraft.

Overall, the plot suggests that the model demonstrates reasonable predictive performance regarding aircraft maximum speed (knots) but exhibits room for enhancement.

Potential avenues for improving the model include:

- * Augmenting the training dataset with additional instances.
- * Employing a more sophisticated machine learning model.
- * Fine-tuning the model's hyperparameters to optimize performance.

These measures could potentially enhance the model's accuracy and reliability in predicting aircraft maximum speed (knots) more effectively.



The image provided appears to offer a partial visualization of a machine learning model, likely aimed at predicting aircraft speed.

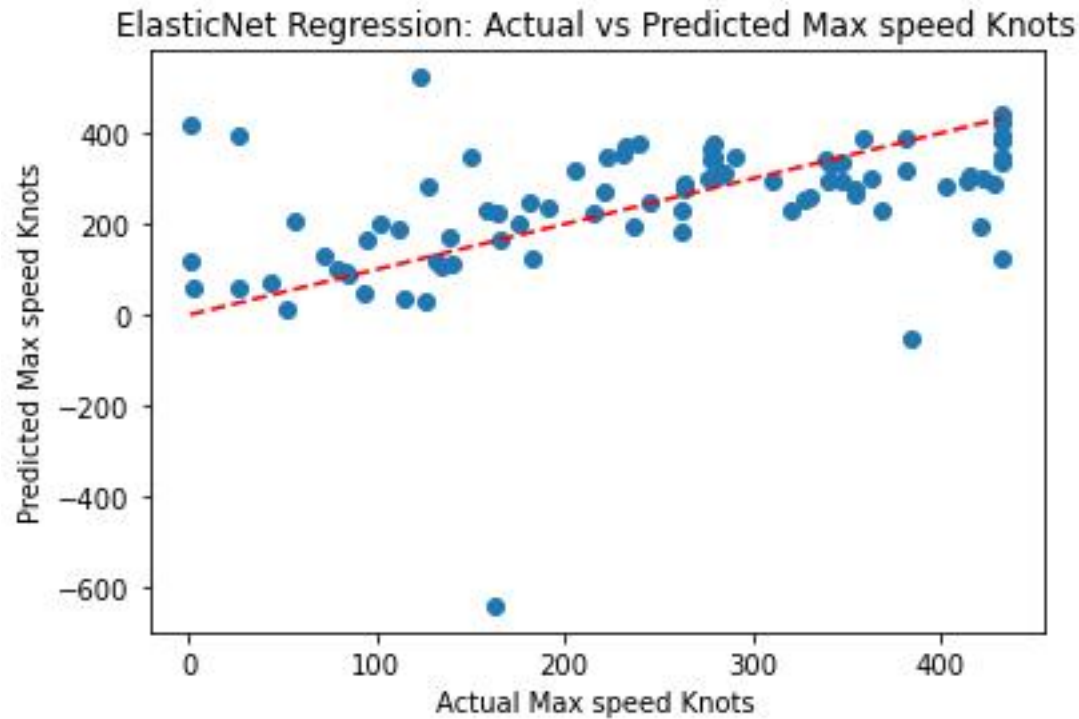
On the left side of the image, various features of an aircraft model are listed, including wing span, length, engine type, landing ground roll, stall knots dirty, takeoff ground run, takeoff over 50ft, height, fuel gal/lbs, gross weight, empty weight, and HP or lbs thr ea engine.

On the right side, the SHAP (SHapley Additive exPlanations) values for different feature values are displayed. SHAP is utilized to explain the impact of each feature on the model's output. In this context, the SHAP value appears to demonstrate how much a specific feature value contributes to the model's prediction of fuel consumption.

For instance, according to the SHAP value, a higher wing span corresponds to higher fuel gallons, which aligns with the notion that larger airplanes typically demand more fuel to operate.

However, it's crucial to acknowledge that this representation offers only a partial view of the machine learning model. Without access to the complete model, it remains challenging to definitively determine how each feature influences fuel consumption.

Nevertheless, this image provides valuable insights into the model's predictive process by illustrating the impact of various aircraft features on its fuel consumption predictions.



The provided scatter plot illustrates the relationship between the actual and predicted maximum speeds of aircraft, measured in knots. The red line represents the predicted maximum speed, while the blue line represents the actual maximum speed. Broadly, a positive correlation between predicted and actual maximum speeds is observed, implying that as the predicted maximum speed increases, so does the actual maximum speed. However, the scattered distribution of data points around the red line signifies that the predictions are not consistently precise, indicating variability between predicted and actual values. Additionally, the presence of data points that deviate notably from the red line suggests potential outliers within the dataset or limitations in the model's accuracy across all aircraft types. In summary, while the model can offer general predictions regarding aircraft maximum speed, it's crucial to acknowledge the inherent variability and potential limitations in prediction accuracy.

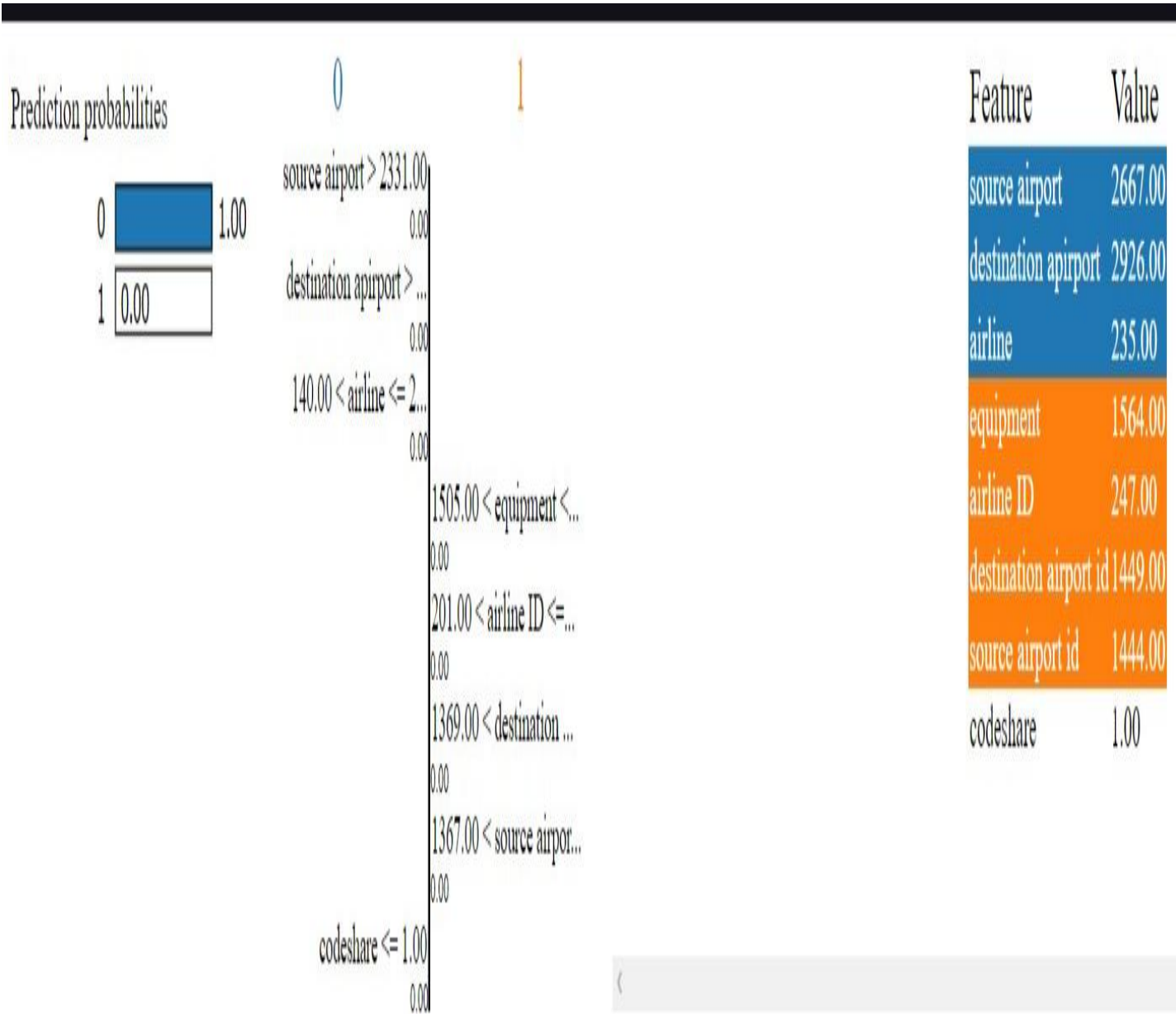
Functions of 'Stop' :

Based on the provided data, here's a description of each feature according to aircraft route transport:

1. airline: This feature represents the code of the airline operating the route. It identifies the airline company.
2. airline ID: This feature is likely an internal identifier assigned to each airline by the data management system. It helps uniquely identify airlines.
3. source airport: This feature denotes the IATA code of the airport where the flight originates.
4. source airport ID: This feature could be an internal identifier for the source airport, helping to uniquely identify airports in the dataset.
5. destination airport: This feature indicates the IATA code of the airport where the flight terminates.
6. destination airport ID: Similar to the source airport ID, this feature is probably an internal identifier for the destination airport.
7. codeshare: This feature specifies whether the flight is a codeshare flight, where multiple airlines share the same flight under their own designator code. It might contain a value indicating the presence or absence of codeshare agreements.
8. stops: This feature indicates the number of stops the flight makes between the source and destination airports. A value of 0 suggests a direct flight.
9. equipment: This feature refers to the type of aircraft used for the flight. It could include the code or name of the aircraft model.

Each feature provides essential information about the airline, airports, flight characteristics, and aircraft used for transportation on a given route.

LIME-INTERPRETATION:



LOGISTIC-EQUATION:

Accuracy: 0.999852224028373

Coefficients: [0.0010115451537280806, -0.0029930924063770992, -4.6266347700244777e-05, -9.580147468241909e-06, 4.3084838421883484e-05, 0.000555387074495585, 1.0258248825484222, 0.0002449768157455802]

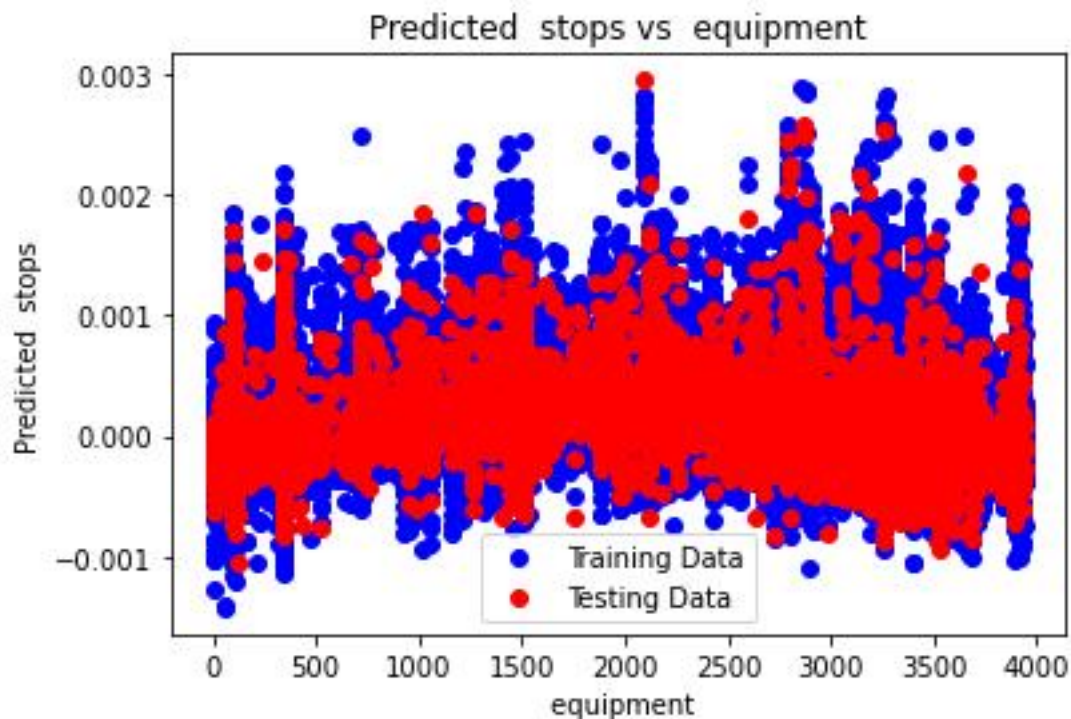
Intercept: -10.287257749037376

Logistic Equation:

$$P(\text{STOPS}=1) = 1 / (1 + e^{(-10.287257749037376 + 0.001011545 \cdot \text{AIRLINE} + -0.002993092 \cdot \text{AIRLINE-ID} + -0.000046266 \cdot \text{SOURCE-AIRPORT} + -0.000009580 \cdot \text{SOURCE-AIRPORT-ID} + 0.000043085 \cdot \text{DESTINATION-AIRPORT} + 0.000555387 \cdot \text{DESTINATION-AIRPORT-ID} + 1.025824883 \cdot \text{CODESHARE} + 0.000244977 \cdot \text{EQUIP}))$$

Logistic equation= $1/(1+e^{-z})$

GRAPH:



The plot illustrates a comparison between predicted stops and equipment, with training data depicted in blue and testing data in red.

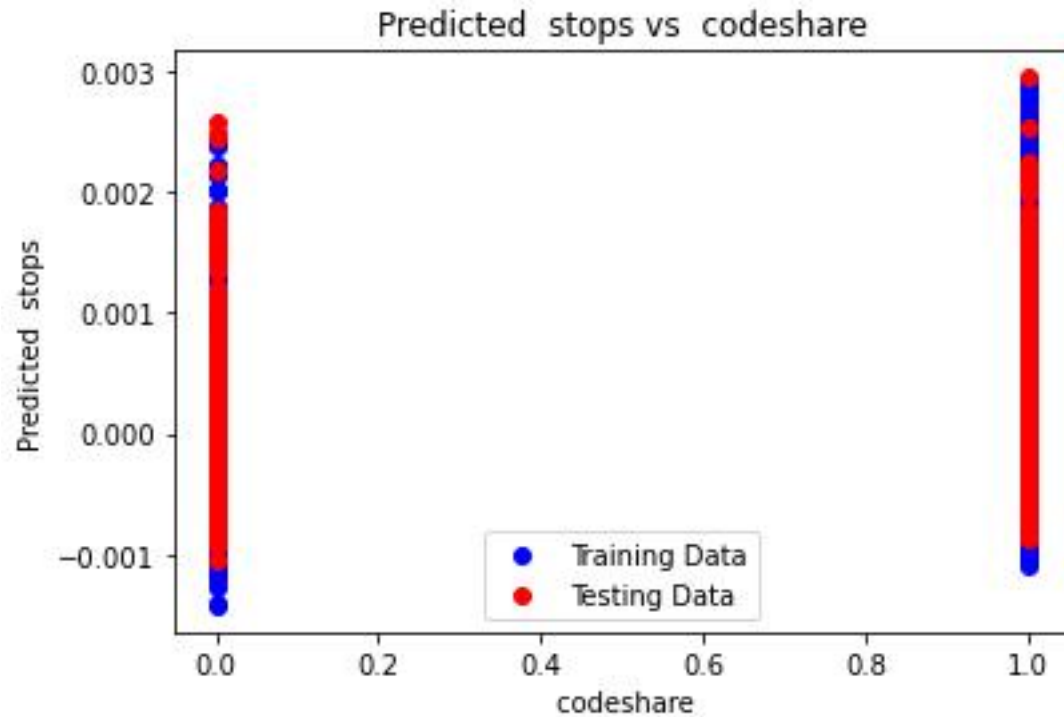
Observations:

1. There appears to be a weak positive correlation between predicted stops and equipment for both training and testing data. As the equipment value increases, the predicted number of stops tends to increase. However, the data points are widely dispersed, particularly in the testing data.
2. The training data (blue points) exhibits a tighter clustering around a subtle upward trendline compared to the testing data (red points). This discrepancy suggests that while the model may effectively capture the relationship between equipment and predicted stops within the training dataset, it struggles to generalize to unseen data.

Potential reasons for the poor fit on the testing data:

1. Insufficient training data may hinder the model's ability to learn the underlying patterns effectively.
2. The complexity of the model might surpass the complexity of the dataset, leading to overfitting on the training data and reduced performance on unseen data.
3. Presence of outliers or noise in the dataset could distort the model's learning process, diminishing its predictive accuracy on testing data.

In summary, the plot indicates that the model's efficacy in predicting stops based on equipment data might be constrained by limitations in generalization to unseen data, potentially attributable to the aforementioned factors. Further analysis and refinement of the model architecture or dataset preprocessing may be warranted to improve predictive performance.



The plot illustrates the predicted number of stops versus codeshare agreements, with training data represented by blue dots and testing data by red dots.

Observations:

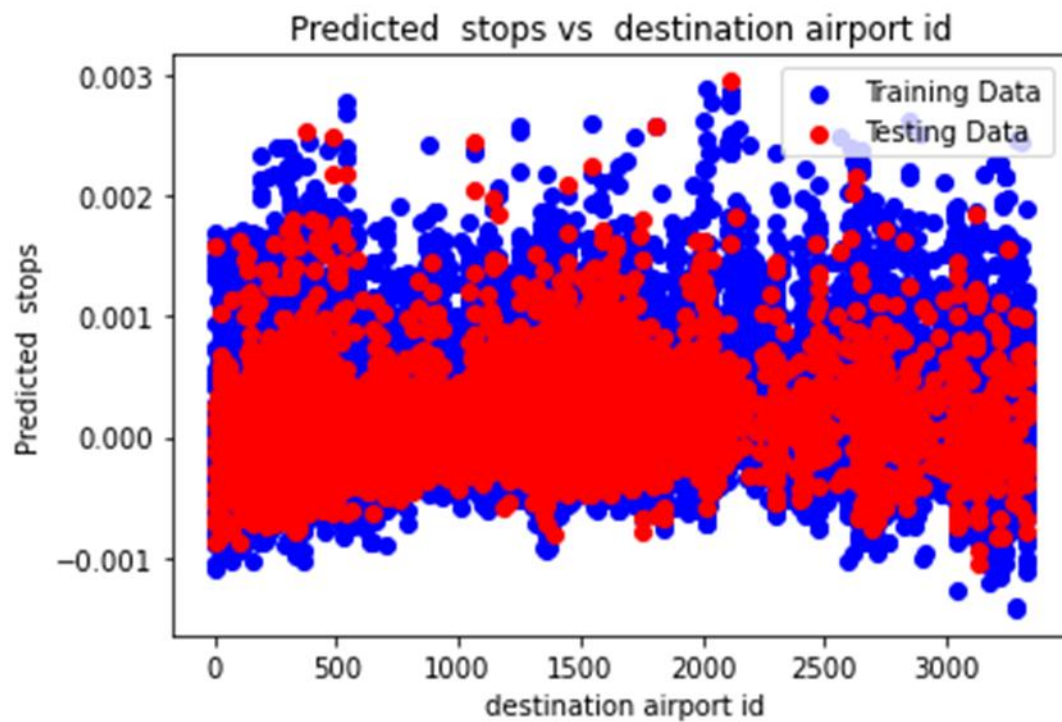
1. There is no discernible correlation between the predicted number of stops and codeshare agreements for either the training or testing data. The data points are widely dispersed across the plot, indicating a lack of clear trend or relationship between the two variables.

Potential reasons for the lack of correlation:

The model may suffer from underfitting or overfitting, failing to adequately capture the complexities of the relationship between codeshare agreements and the number of stops.

Noise or outliers within the dataset might be introducing disturbances that hinder the model's ability to discern a meaningful pattern between the features.

In summary, the plot indicates that the model is not effectively utilizing codeshare agreements to predict the number of stops in flight routes. Further investigation into feature importance and model optimization may be necessary to enhance predictive performance.



The plot illustrates the relationship between predicted stops and destination airport ID, with training data depicted in blue and testing data in red.

Observations:

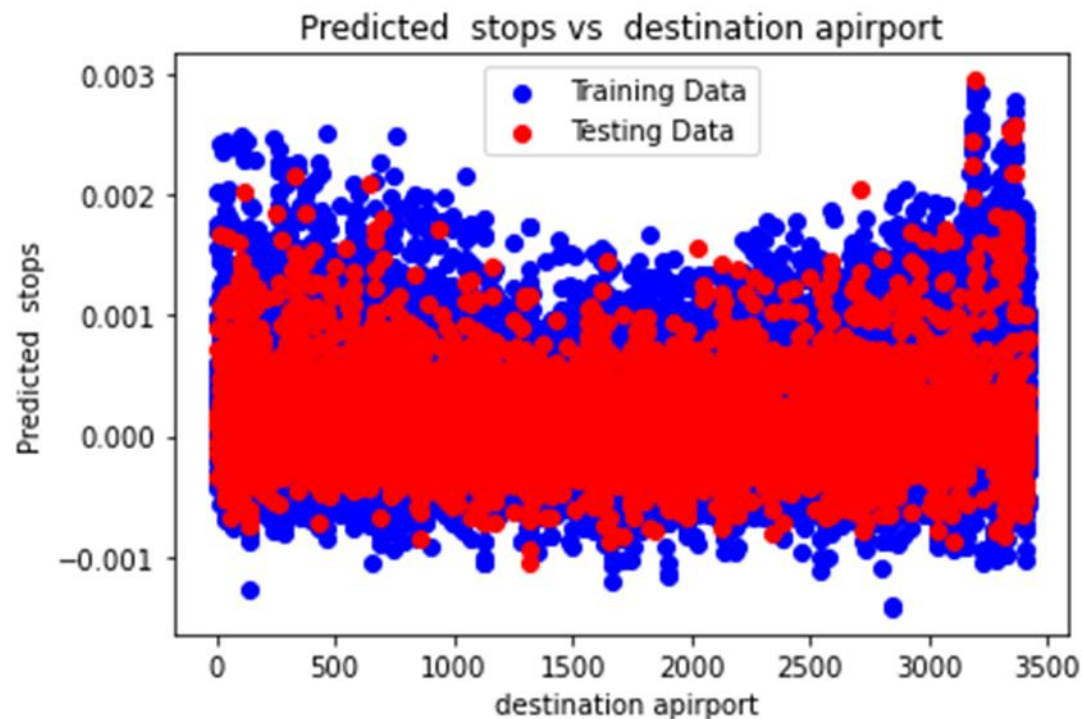
1. No discernible pattern emerges between the predicted number of stops and destination airport ID for either the training or testing data. Data points are dispersed across the plot without exhibiting a clear trend or correlation.

Possible Explanations:

The model may suffer from underfitting or overfitting, thereby inadequately capturing the nuanced relationship between destination airport ID and predicted stops.

Noise or outliers present in the dataset might introduce disturbances that hinder the model's ability to identify a meaningful association between the features.

In summary, the plot suggests that the model struggles to effectively leverage destination airport ID as a predictor for the number of stops in flight routes. Further exploration into feature importance and model refinement may be necessary to enhance predictive accuracy.

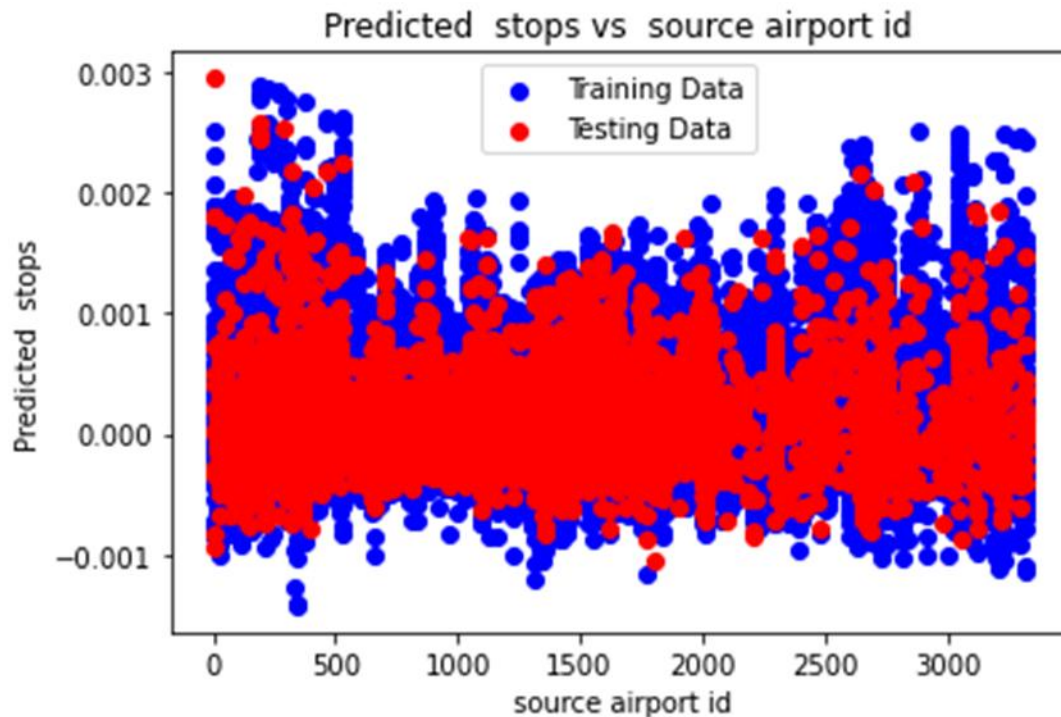


. The scatter plot compares the predicted number of stops with the destination airport for both the training and testing datasets. The x-axis represents the destination airport, while the y-axis represents the predicted number of stops.

* The blue data points correspond to the training data. Ideally, these points should exhibit a uniform distribution around a horizontal line, indicating consistent predicted stops across all airports. However, in this plot, the training data does not display a discernible pattern. Although there is some dispersion, there is no evident correlation between the destination airport and the predicted number of stops.

* The red data points represent the testing data, which serves as an assessment of the model's ability to generalize to new, unseen data. Ideally, these points should also demonstrate no correlation between the destination airport and predicted stops. In this plot, the red points exhibit a similar level of dispersion to the blue points. This suggests that the model is indeed generalizing adequately to unseen data in terms of the relationship between destination airport and predicted stops.

In summary, the plot indicates that the model is not effectively utilizing the destination airport to predict the number of stops. This may be attributed to the possibility that the destination airport alone does not significantly influence the predicted number of stops. Other unaccounted factors might exert stronger influence on stop predictions, which are not included in the dataset. Further investigation into feature importance and model refinement could enhance predictive performance.



The plot illustrates the relationship between the predicted number of planes stopped and the source airport ID for both the training and testing datasets. The x-axis represents the source airport ID, while the y-axis represents the predicted number of planes stopped.

* The blue data points represent the training data. Ideally, these points should demonstrate a consistent distribution or a discernible trend, indicating a relationship between the source airport ID and the predicted number of planes stopped. However, in this plot, the training data does not exhibit a clear pattern. The points are scattered across the plot, and there is no evident correlation between the source airport ID and the predicted number of planes stopped.

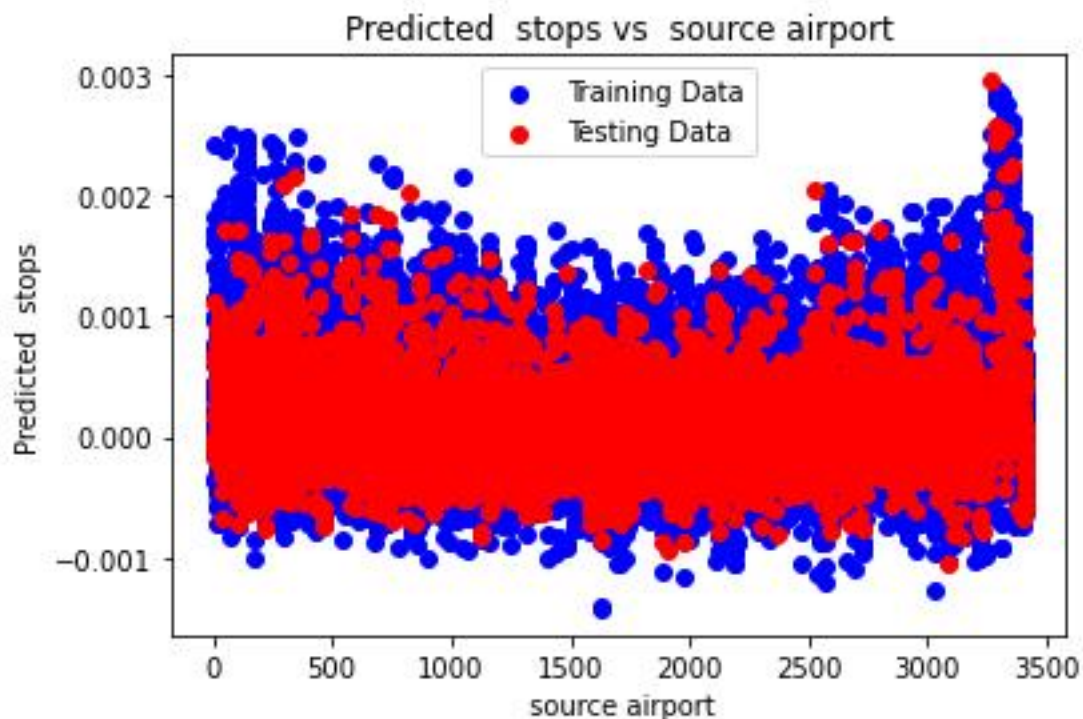
* The red data points correspond to the testing data, serving as a validation of the model's generalization to new, unseen data. Similar to the training data, the red points also lack a discernible trend or pattern. They are dispersed throughout the plot without any clear relationship between the source airport ID and predicted stops.

Possible Explanations:

Model Performance: The model may be underfitting or overfitting the data, resulting in a failure to capture the relationship between the source airport ID and predicted stops accurately.

Data Noise or Outliers: Noise or outliers in the dataset could be affecting the model's ability to learn a meaningful relationship between the source airport ID and the predicted number of planes stopped.

Overall, the plot suggests that the model is not effectively utilizing the source airport ID to predict the number of planes stopped. Further investigation into feature importance, model refinement, and data quality assessment may be necessary to improve predictive performance.



The plot illustrates the relationship between the predicted number of stops and the source airport for both the training and testing datasets. The x-axis represents the source airport, while the y-axis represents the predicted number of stops.

* The blue data points represent the training data. Ideally, these points should exhibit minimal dispersion around a consistent level, indicating a lack of correlation between the source airport and the predicted number of stops. However, although the training data points cluster more tightly compared to

the testing data, they still display some degree of scatter around a horizontal line. This suggests that while the model may partially learn the relationship between the source airport and predicted stops during training, it struggles to generalize this learning to unseen data.

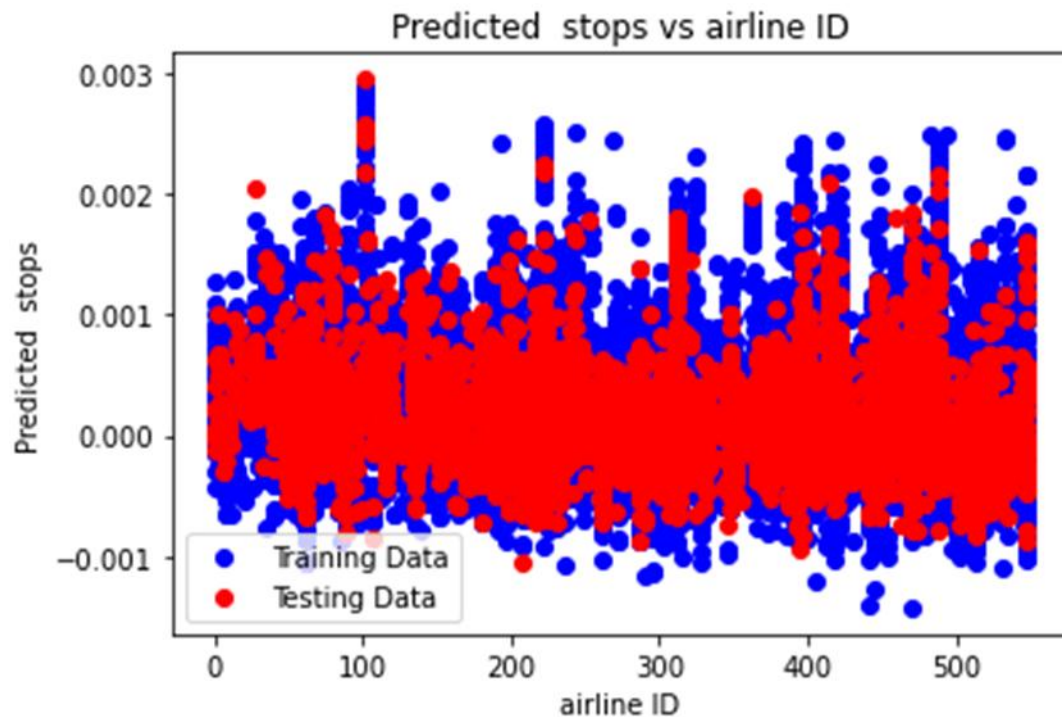
* The red data points correspond to the testing data, which serves as an evaluation of the model's performance on new, unseen instances. Similar to the training data, the testing data also shows scatter without a clear correlation between the source airport and predicted stops. This indicates that the model's predictive capability regarding stops based on the source airport is limited.

Possible Explanations:

Model Overfitting: The model might be overfitting to the training data, capturing noise or idiosyncrasies specific to the training set that do not generalize well to new data. This overfitting phenomenon could explain the tighter clustering of training data points compared to testing data points.

Limited Feature Relevance: The source airport feature might lack sufficient discriminatory power to accurately predict the number of stops. Additional features or more sophisticated modeling techniques may be required to improve predictive performance.

Overall, the plot suggests that the model's utilization of the source airport to predict the number of stops is suboptimal. Further investigation into feature relevance, model complexity, and generalization capabilities may be warranted to enhance predictive accuracy.



The plot illustrates the relationship between the predicted number of stops and the airline ID for both the training and testing datasets. The x-axis represents the airline ID, while the y-axis represents the predicted number of stops.

* The blue data points represent the training data. There is no discernible pattern or correlation between the predicted number of stops and the airline ID for the training data. The data points are scattered across the plot without any clear trend.

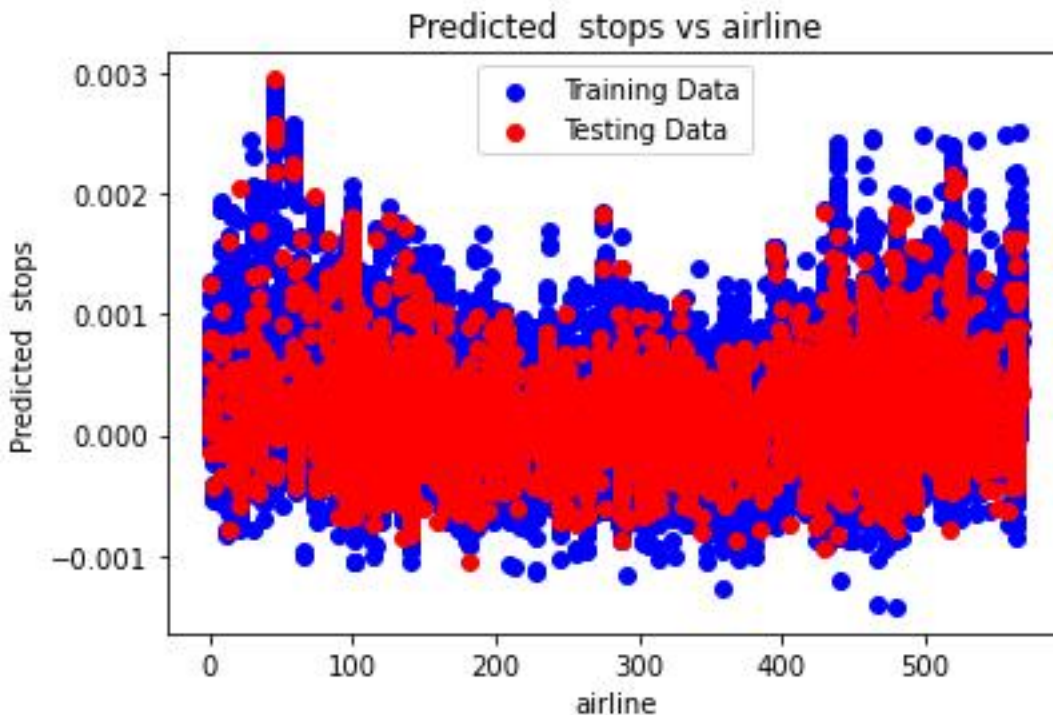
* The red data points correspond to the testing data. Similar to the training data, there is no evident pattern or correlation between the predicted number of stops and the airline ID for the testing data. The scatter of red data points mirrors that of the blue data points, suggesting that the model is generalizing adequately to unseen data concerning the relationship between airline ID and predicted stops.

Possible Explanations:

Both the axis changes according to the changes of value.

Model Generalization: Despite the lack of a discernible pattern in the training data, the model appears to generalize reasonably well to unseen data, as evidenced by the similar scatter patterns observed in the testing data. This suggests that the model's performance is consistent across different airline IDs.

Overall, the plot suggests that the model's utilization of airline ID to predict the number of stops is suboptimal. Further exploration into feature relevance and model refinement may be necessary to improve predictive performance.



The provided scatter plot illustrates the relationship between the predicted number of stops and different airlines for both the training and testing datasets. The x-axis denotes the airline, while the y-axis represents the predicted number of stops.

In the plot:

- The blue data points represent the training data. Ideally, these points should exhibit a consistent horizontal distribution, indicating a uniform predicted number of stops across all airlines. However, the training data displays scattered points with no discernible pattern or strong correlation between the airline and predicted stops.
- The red data points represent the testing data, which evaluates the model's performance on unseen data. Similar to the training data, the testing data also shows scattered points without a clear correlation between the airline and predicted stops. Despite this, the distribution of red

points mirrors that of the training data, indicating that the model generalizes reasonably well to unseen data regarding the relationship between airline and predicted stops.

Possible Explanations:

Both the axis changes according to the changes of value.

In conclusion, the plot indicates that the model's reliance on airline identity alone for predicting the number of stops is inadequate. Further investigation into feature relevance and model refinement is warranted to enhance predictive accuracy and account for additional factors influencing stop predictions.

SHAP-INTERPRETATION:

