
aviation-accident-report-logd Documentation

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Analysis of the Aviation Accidents

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This is a LOGD (Linking Open Government Data) project. You can have access to other LOGD projects by clicking on the image. [!\[\]\(8af806fb1314382d09bc5ec5b767526c_img.jpg\)TWC LOGD](https://logd.tw.rpi.edu/)

CHAPTER 1

Summary

This is a project for Semantic Web course during my Master of Science in University of Texas at Dallas. This project details the aviation accidents occurring in commercial air carriers from 2000-2009. This report enables understanding of the rate of change of different accident severities, the passenger fatalities and type of fatalities occurring due to aircraft accidents.

1. **RDF** - Resource Description Framework. The RDF data model is similar to classical conceptual modeling approaches (such as entity–relationship or class diagrams). It is based on the idea of making statements about resources (in particular web resources) in expressions of the form **subject–predicate–object**, known as **triples**. The subject denotes the resource, and the predicate denotes traits or aspects of the resource, and expresses a relationship between the subject and the object.
2. **SPARQL** - SPARQL Protocol and RDF Query Language, a semantic query language for databases, able to retrieve and manipulate data stored in Resource Description Framework (RDF) format.
3. **Google Visualization API** - Refer the documentation [here](#)
4. **Fuseki server** - It is a SPARQL server. You can read about it [here](#)

Description of Datasets

1. **Dataset 1567** This dataset provides the different categories of accident severity classification and the number of accidents in each category for the years 1999-2009 and has 146 triples.
2. **Dataset 1568** This dataset provides the statistics of passenger injuries and injury rates for the years 1999-2009, for U.S. Air Carriers operating under 14 CFR 121 and has 106 triples.
3. **Dataset 1569** This dataset provides the statistics of the number and rate of Destroyed Aircraft for the years 1999 - 2009, for U.S. Air Carriers Operating under 14 CFR 121 and has 86 triples.
4. **Dataset 1570** This dataset provides the data of the accidents, fatalities, and rates for the years 1999 - 2009, for U.S. Air Carriers Operating under 14 CFR 121, Scheduled and Nonscheduled Service (Airlines) and has 186 triples.
5. **Dataset 1573** This dataset provides the of the accidents, fatalities, and rates for the years 1999 - 2009, for U.S. Air Carriers Operating under 14 CFR 135, Scheduled Service and has 186 triples.

CHAPTER 4

Observations

1. **Accident Severity Categories from 2000-2009**
2. **Classification of Effects of Aviation Accidents from 2000-2009**
3. **Type of Fatalities for Aviation Accidents from 2000-2009**
4. **Accidents per Million Departures for CFR part 121 and part 135 operators**
5. **Fatalities per Accident for CFR part 121 and part 135 operators**

CHAPTER 5

Authors

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