

Aviation Flight Analysis

The Problem

In the next few years, NASA predicts the number of flights will double and therefore the number of accidents are likely to increase.

NASA needs statistical tools for investigating flights to uncover subtle safety issues.

The Approach

- Develop an analysis toolkit to automatically analyze gigabytes of flight data
- Identify typical patterns, atypical flights, and trends over time
- Focus proactive investigations by aviation experts based on statistical findings

The Accomplishments

- Incorporated statistical algorithms in prototype workstation which is being used by airlines
- Discovered insight not envisioned by aviation experts using traditional methods
- Incorporating additional data sources and quantitative techniques in the analysis

