# Analyze Incidents & Flights CS3200 Final Project

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#### Summer1

#### Analysis by Month

Table 1: Total Monthly Incidents by Type

	crew	faa	mechanical	medical	security	turbulence	weather
January	116	137	124	131	118	102	123
February	202	202	249	218	225	248	225
March	210	244	223	219	234	221	227
April	221	245	221	236	251	221	219
May	239	229	218	229	259	244	272
June	236	232	244	224	248	212	206
$_{ m July}$	217	253	251	251	232	244	243
August	241	242	247	214	255	218	242
September	244	215	241	249	235	261	226
October	268	233	211	216	231	238	232
November	231	242	234	252	245	245	221
December	118	120	113	103	122	113	129

#### Analysis By Airline

Table 2: Total Incident And Average Delay Per Airline

Airline	${\bf Total Incident}$	DelayAvg
$\overline{SQ}$	463	69.51
AV	440	72.99
SV	427	75.88
G3	481	76.49
IB	450	74.78
EK	491	72.52
U2	441	73.17
DL	474	72.85
CZ	449	75.23
NH	438	73.17
LA	467	74.59
AC	456	73.70

AZ 499 72.75 AI 428 75.98 AD 444 71.41  CX 449 74.06 NZ 432 71.88 TG 478 72.34 AM 509 72.56 JL 481 72.43  UA 462 74.02 FR 440 75.84 QF 423 70.64 KE 458 72.25 SU 435 74.17  MH 478 72.44 KL 428 72.65 BA 435 72.92 WN 472 74.58 LH 455 73.60  AF 424 77.14 AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06  VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11 QR 442 72.23			
AD 444 71.41  CX 449 74.06  NZ 432 71.88  TG 478 72.34  AM 509 72.56  JL 481 72.43  UA 462 74.02  FR 440 75.84  QF 423 70.64  KE 458 72.25  SU 435 74.17  MH 478 72.44  KL 428 72.65  BA 435 72.92  WN 472 74.58  LH 455 73.60  AF 424 77.14  AA 440 72.38  MU 428 74.11  OZ 429 72.04  EY 450 76.06  VN 409 73.33  TK 430 75.40  AY 453 73.00  DY 454 76.11	AZ	499	72.75
CX	AI	428	75.98
NZ       432       71.88         TG       478       72.34         AM       509       72.56         JL       481       72.43         UA       462       74.02         FR       440       75.84         QF       423       70.64         KE       458       72.25         SU       435       74.17         MH       478       72.44         KL       428       72.65         BA       435       72.92         WN       472       74.58         LH       455       73.60         AF       424       77.14         AA       440       72.38         MU       428       74.11         OZ       429       72.04         EY       450       76.06         VN       409       73.33         TK       430       75.40         AY       453       73.00         DY       454       76.11	AD	444	71.41
NZ       432       71.88         TG       478       72.34         AM       509       72.56         JL       481       72.43         UA       462       74.02         FR       440       75.84         QF       423       70.64         KE       458       72.25         SU       435       74.17         MH       478       72.44         KL       428       72.65         BA       435       72.92         WN       472       74.58         LH       455       73.60         AF       424       77.14         AA       440       72.38         MU       428       74.11         OZ       429       72.04         EY       450       76.06         VN       409       73.33         TK       430       75.40         AY       453       73.00         DY       454       76.11	$\mathbf{C}\mathbf{X}$	440	74.06
TG 478 72.34 AM 509 72.56 JL 481 72.43  UA 462 74.02 FR 440 75.84 QF 423 70.64 KE 458 72.25 SU 435 74.17  MH 478 72.44 KL 428 72.65 BA 435 72.92 WN 472 74.58 LH 455 73.60  AF 424 77.14 AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06  VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11		_	
AM 509 72.56 JL 481 72.43 UA 462 74.02 FR 440 75.84 QF 423 70.64 KE 458 72.25 SU 435 74.17 MH 478 72.44 KL 428 72.65 BA 435 72.92 WN 472 74.58 LH 455 73.60 AF 424 77.14 AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06 VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11			
JL       481       72.43         UA       462       74.02         FR       440       75.84         QF       423       70.64         KE       458       72.25         SU       435       74.17         MH       478       72.44         KL       428       72.65         BA       435       72.92         WN       472       74.58         LH       455       73.60         AF       424       77.14         AA       440       72.38         MU       428       74.11         OZ       429       72.04         EY       450       76.06         VN       409       73.33         TK       430       75.40         AY       453       73.00         DY       454       76.11			
UA 462 74.02 FR 440 75.84 QF 423 70.64 KE 458 72.25 SU 435 74.17 MH 478 72.44 KL 428 72.65 BA 435 72.92 WN 472 74.58 LH 455 73.60 AF 424 77.14 AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06 VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11			
FR 440 75.84 QF 423 70.64 KE 458 72.25 SU 435 74.17 MH 478 72.44 KL 428 72.65 BA 435 72.92 WN 472 74.58 LH 455 73.60 AF 424 77.14 AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06 VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11	$_{ m JL}$	481	72.43
QF 423 70.64 KE 458 72.25 SU 435 74.17 MH 478 72.44 KL 428 72.65 BA 435 72.92 WN 472 74.58 LH 455 73.60 AF 424 77.14 AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06 VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11	UA	462	74.02
KE       458       72.25         SU       435       74.17         MH       478       72.44         KL       428       72.65         BA       435       72.92         WN       472       74.58         LH       455       73.60         AF       424       77.14         AA       440       72.38         MU       428       74.11         OZ       429       72.04         EY       450       76.06         VN       409       73.33         TK       430       75.40         AY       453       73.00         DY       454       76.11	FR	440	75.84
SU     435     74.17       MH     478     72.44       KL     428     72.65       BA     435     72.92       WN     472     74.58       LH     455     73.60       AF     424     77.14       AA     440     72.38       MU     428     74.11       OZ     429     72.04       EY     450     76.06       VN     409     73.33       TK     430     75.40       AY     453     73.00       DY     454     76.11	QF	423	70.64
SU     435     74.17       MH     478     72.44       KL     428     72.65       BA     435     72.92       WN     472     74.58       LH     455     73.60       AF     424     77.14       AA     440     72.38       MU     428     74.11       OZ     429     72.04       EY     450     76.06       VN     409     73.33       TK     430     75.40       AY     453     73.00       DY     454     76.11	KE	458	72.25
KL       428       72.65         BA       435       72.92         WN       472       74.58         LH       455       73.60         AF       424       77.14         AA       440       72.38         MU       428       74.11         OZ       429       72.04         EY       450       76.06         VN       409       73.33         TK       430       75.40         AY       453       73.00         DY       454       76.11	SU		74.17
KL       428       72.65         BA       435       72.92         WN       472       74.58         LH       455       73.60         AF       424       77.14         AA       440       72.38         MU       428       74.11         OZ       429       72.04         EY       450       76.06         VN       409       73.33         TK       430       75.40         AY       453       73.00         DY       454       76.11	MH	478	72.44
BA 435 72.92 WN 472 74.58 LH 455 73.60 AF 424 77.14 AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06 VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11			72.65
WN 472 74.58 LH 455 73.60 AF 424 77.14 AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06 VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11	BA		
LH     455     73.60       AF     424     77.14       AA     440     72.38       MU     428     74.11       OZ     429     72.04       EY     450     76.06       VN     409     73.33       TK     430     75.40       AY     453     73.00       DY     454     76.11			
AF 424 77.14 AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06  VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11			
AA 440 72.38 MU 428 74.11 OZ 429 72.04 EY 450 76.06  VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11			
MU 428 74.11 OZ 429 72.04 EY 450 76.06  VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11			
OZ     429     72.04       EY     450     76.06       VN     409     73.33       TK     430     75.40       AY     453     73.00       DY     454     76.11			
EY       450       76.06         VN       409       73.33         TK       430       75.40         AY       453       73.00         DY       454       76.11		_	
VN 409 73.33 TK 430 75.40 AY 453 73.00 DY 454 76.11	=	_	
TK 430 75.40 AY 453 73.00 DY 454 76.11	EY	450	76.06
AY 453 73.00 DY 454 76.11	VN	409	73.33
DY 454 76.11	TK	430	75.40
	AY	453	73.00
	DY	454	76.11
	QR	442	72.23

## Trend by Year

### **Year vs Incidents**

