

Results of Spark

CarrierDelay:

```
spark-sql (default)> SELECT Year, avg((CarrierDelay /ArrDelay)*100) from flightdelays GROUP BY Year;
24/03/06 19:37:05 WARN SessionState: METASTORE_FILTER_HOOK will be ignored, since hive.security.authorization.manager is set to instance of HiveAuthorizerFactory.
NULL      NULL
2004      43.64459443230066
2005      28.01977637202288
2006      30.453296261292596
2007      19.850007017971283
2008      28.88346981456985
2009      28.33058554239575
2010      21.89310246015957
2003      24.557549755575373
Time taken: 7.251 seconds, Fetched 9 row(s)
```

NASDelay:

```
spark-sql (default)> SELECT Year, avg((NASDelay /ArrDelay)*100) from flightdelays GROUP BY Year;
NULL      NULL
2004      18.24570061769958
2005      16.638688053731286
2006      18.119312329937703
2007      30.625925917941924
2008      30.165525625941324
2009      37.63093330628511
2010      33.87351363404216
2003      29.686276314267346
Time taken: 0.625 seconds, Fetched 9 row(s)
```

WeatherDelay:

```
spark-sql (default)> SELECT Year, avg((WeatherDelay /ArrDelay)*100) from flightdelays GROUP BY Year;
NULL      NULL
2003      7.8319479664511205
2004      6.4475279976916555
2005      5.85069715149616
2006      4.588604183967953
2007      4.042975783210287
2008      3.7254490054008964
2009      0.45316615137982363
2010      2.9023312955584664
Time taken: 0.549 seconds, Fetched 9 row(s)
```

SecurityDelay:

```
spark-sql (default)> SELECT Year, avg((SecurityDelay /ArrDelay)*100) from flightdelays GROUP BY Year;
NULL      NULL
2004      0.0
2005      0.0
2006      0.0
2007      0.22865853658536586
2008      0.0
2009      0.0
2010      0.0
2003      0.0
Time taken: 0.691 seconds, Fetched 9 row(s)
```

LateAircraftDelay:

```
spark-sql (default)> SELECT Year, avg((LateAircraftDelay /ArrDelay)*100) from flightdelays GROUP BY Year;
NULL      NULL
2003      37.924225963706164
2004      31.66217695230812
2005      49.49083842274967
2006      46.838787224801735
2007      45.25243274429113
2008      37.22555555408793
2009      33.585314999939314
2010      41.33105261023981
Time taken: 0.468 seconds, Fetched 9 row(s)
```