

How to compare NTSB and IO-AVSTATS-DB

1. General

The reconciliation of the databases of **IO-Aero** and **NTSB** can always be done only at the first of the month, because the **NTSB** updates the database **avall** only at this time. The MS Excel file **data\Database Matching\database_matching.xlsx** is used for reconciliation.

2. IO-AVSTATS-DB

The reconciliation data from the **IO-Aero** Database **IO-AVSTATS-DB** is determined with the following database query:

```
SELECT 'aircraft'
"DB Table",
    (SELECT count(*) FROM aircraft WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM aircraft WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM aircraft)
"Total"
UNION
SELECT 'dt_aircraft'
"DB Table",
    (SELECT count(*) FROM dt_aircraft WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM dt_aircraft WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM dt_aircraft)
"Total"
UNION
SELECT 'dt_events'
"DB Table",
    (SELECT count(*) FROM dt_events WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM dt_events WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM dt_events)
"Total"
UNION
SELECT 'dt_flight_crew'
"DB Table",
    (SELECT count(*) FROM dt_flight_crew WHERE ev_id IN (SELECT ev_id FROM
events WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM dt_flight_crew WHERE ev_id IN (SELECT ev_id FROM
events WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM dt_flight_crew)
"Total"
UNION
SELECT 'engines'
```

```

"DB Table",
    (SELECT count(*) FROM engines WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM engines WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM engines)
"Total"
UNION
SELECT 'events' "DB Table",
    (SELECT count(*) FROM events WHERE ev_year < 2008) "< 2008",
    (SELECT count(*) FROM events WHERE ev_year >= 2008) ">= 2008",
    (SELECT count(*) FROM events) "Total"
union
SELECT 'events_sequence'
"DB Table",
    (SELECT count(*) FROM events_sequence WHERE ev_id IN (SELECT ev_id FROM
events WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM events_sequence WHERE ev_id IN (SELECT ev_id FROM
events WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM events_sequence)
"Total"
union
SELECT 'findings'
"DB Table",
    (SELECT count(*) FROM findings WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM findings WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM findings)
"Total"
union
SELECT 'flight_crew'
"DB Table",
    (SELECT count(*) FROM flight_crew WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM flight_crew WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM flight_crew)
"Total"
union
SELECT 'flight_time'
"DB Table",
    (SELECT count(*) FROM flight_time WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM flight_time WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM flight_time)
"Total"
union
SELECT 'injury'
"DB Table",
    (SELECT count(*) FROM injury WHERE ev_id IN (SELECT ev_id FROM events WHERE
ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM injury WHERE ev_id IN (SELECT ev_id FROM events WHERE

```

```

ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM injury)
"Total"
union
SELECT 'narratives'
"DB Table",
    (SELECT count(*) FROM narratives WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM narratives WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM narratives)
"Total"
union
SELECT 'ntsb_admin'
"DB Table",
    (SELECT count(*) FROM ntsb_admin WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM ntsb_admin WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM ntsb_admin)
"Total"
union
SELECT 'occurrences'
"DB Table",
    (SELECT count(*) FROM occurrences WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM occurrences WHERE ev_id IN (SELECT ev_id FROM events
WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM occurrences)
"Total"
union
SELECT 'seq_of_events'
"DB Table",
    (SELECT count(*) FROM seq_of_events WHERE ev_id IN (SELECT ev_id FROM
events WHERE ev_year < 2008)) "< 2008",
    (SELECT count(*) FROM seq_of_events WHERE ev_id IN (SELECT ev_id FROM
events WHERE ev_year >= 2008)) ">= 2008",
    (SELECT count(*) FROM seq_of_events)
"Total"
ORDER BY 1

```

3. NTSB

To do this, these databases must first be downloaded from the [NTSB website](#){:target="_blank"} with task **d_n_a**.

The reconciliation data of both **NTSB** databases **Pre2008** and **avall** are determined with the following database query:

```

SELECT 'aircraft' AS db_table,
       count(*)   AS total

```

```
FROM aircraft
UNION
SELECT 'dt_aircraft' AS db_table,
       count(*)      AS total
FROM dt_aircraft
UNION
SELECT 'dt_events' AS db_table,
       count(*)     AS total
FROM dt_events
UNION
SELECT 'dt_flight_crew' AS db_table,
       count(*)        AS total
FROM dt_flight_crew
UNION
SELECT 'engines' AS db_table,
       count(*)   AS total
FROM engines
UNION
SELECT 'events' AS db_table,
       count(*) AS total
FROM events
UNION
SELECT 'events_sequence' AS db_table,
       count(*)          AS total
FROM events_sequence
UNION
SELECT 'findings' AS db_table,
       count(*)    AS total
FROM findings
UNION
SELECT 'flight_crew' AS db_table,
       count(*)      AS total
FROM flight_crew
UNION
SELECT 'flight_time' AS db_table,
       count(*)      AS total
FROM flight_time
UNION
SELECT 'injury' AS db_table,
       count(*)   AS total
FROM injury
UNION
SELECT 'narratives' AS db_table,
       count(*)     AS total
FROM narratives
UNION
SELECT 'ntsb_admin' AS db_table,
       count(*)     AS total
FROM ntsb_admin
UNION
SELECT 'occurrences' AS db_table,
       count(*)      AS total
FROM occurrences
UNION
```

```
SELECT 'seq_of_events' AS db_table,  
       count(*)        AS total  
FROM seq_of_events  
ORDER BY 1
```