

Data Methodology

A typical line of punctuality data on the site would be presented as follows:

Airline	Avg. Delay (mins)	Within 15 mins (%)	1 hour+ late (%)	3 hours+ late (%)	Total Flights analysed
Air France	13.26	73.98	4.38	0.30	13,391

This data shows that for Air France flights analysed:-

- the average flight operated **13.26** minutes late;
- **73.98%** of flights operated within 15 minutes of the scheduled time (also known as “on-time performance” or “OTP”);
- **4.38%** of flights operated over an hour late;
- **0.30%** of flights operated over three hours late;
- **13,391** flight movements were analysed when calculating the above data.

In all cases, unless otherwise stated, statistics relate both to arrivals and departures at UK 'Reporting Airports'.

Where does the data come from?

The source data used on the site is compiled by the UK Civil Aviation Authority (CAA) in co-operation with Airport Coordination Limited (ACL). Please note that data used by Flightontime.info is sourced directly from the CAA, we do not receive any source information from ACL.

The source is gratefully acknowledged.

How are the delays measured?

The actual operating times of each flight are recorded and measured against the scheduled operating time of the flight.

- Flights operating exactly on-time record a zero minute delay.
- Where the actual operating time is later than the scheduled operating time, this is recorded as a delay in minutes.

There is no 'credit' for flights whose actual time of operation is before the scheduled time (i.e. those operating early), and these flights also record a zero minute delay.

Actual operating times of flights relate to actual airborne and landing times only.

Since the scheduled operating times of flights relate to departure and arrival at the gate, a 'taxi time assumption' is made for each airport and is built in to the data.

This 'taxi time assumption' is shown in the following table for each of the 10 UK reporting airports where punctuality data is recorded.

Reporting Airport	Arrival Taxi Time Assumption	Departure Taxi Time Assumption
London Heathrow	10 minutes	20 minutes
London Gatwick	10 minutes	20 minutes
London Stansted	5 minutes	10 minutes
London Luton	5 minutes	10 minutes
Manchester	10 minutes	20 minutes
Birmingham	None – see note	None – see note
Glasgow	5 minutes	10 minutes
Edinburgh	5 minutes	10 minutes
Newcastle	5 minutes	10 minutes
London City	3 minutes	6 minutes

Note: Birmingham Airport record actual time of operation as arrival / departure at the gate, therefore no taxi time assumption is applied.

The method used to calculate the delay for a specific flight is best explained using the following examples.

Example 1

Thomsonfly flight TOM4063 departing London Gatwick Airport for Alicante has a scheduled departure time of 17:40 (Local). The flight pushes back from the gate at 17:43 (three minutes late). The flight achieves an airborne time of 17:58 local.

Only the airborne time is recorded. As a taxi time assumption of 20 minutes applies at London Gatwick, the flight is assumed to have left the stand at 17:38 (two minutes early). Early flights obtain no 'credit' and so a zero minute delay is recorded for the flight.

Example 2

Thomsonfly flight TOM5467 departing Manchester Airport for Dalaman has a scheduled departure time of 18:25 (Local). The flight pushes back from the gate on-time at 18:25. The flight achieves an airborne time of 18:52 local.

Only the airborne time is recorded. As a taxi time assumption of 20 minutes applies at Manchester, the flight is assumed to have left the stand at 18:32 (seven minutes late). A seven minute delay is recorded for the flight.

Example 3

easyJet flight EZY5265 departing Newcastle Airport for Palma has a scheduled departure time of 08:05 (Local). The flight pushes back from the gate on-time at 08:05, but holds off the stand awaiting an improved slot time. The flight eventually achieves an airborne time of 08:58 local.

Only the airborne time is recorded. As a taxi time assumption of 10 minutes applies at Newcastle, the flight is assumed to have left the stand at 08:48 (43 minutes late). A 43 minute delay is recorded for the flight.

Example 4

Ryanair flight FR221 arriving at London Stansted Airport from Dinard has a scheduled arrival time of 18:15 (Local). The flight lands at 18:15 and arrives at the gate at 18:18 (three minutes late).

Only the landing time is recorded. As a taxi time assumption of 5 minutes applies at London Stansted, the flight is assumed to have arrived at the stand at 18:20 (five minutes late). A five minute delay is recorded for the flight.

Remember that Birmingham Airport record actual time of operation as arrival at / departure from the gate and hence no 'taxi time assumption' is applied.

What is "On-time Performance" / "OTP"?

The "Within 15 minutes" / "On-time Performance" / "OTP" category is regarded as the "on-time" performance of flights. It shows the percentage of services operating "on-time".

This is simply the percentage of flights operating up to (and including) 15 minutes after the scheduled time. Since 'early' flights are reset to zero minutes delay, these all fall into this category regardless of how early they operate.

What is 1 hour+ / 3 hours+ late?

These are simply the proportion of flights running over 1 hour late, or 3 hours late as appropriate.

For example if there are 100 flights analysed and 6 of those operate 61 minutes or longer behind schedule (the others operating within an hour of the scheduled time) then the proportion of flights delayed by over 1 hour is **6%**. If 2 of those 100 flights were delayed by over 3 hours (i.e. by 181 minutes or more) then the proportion delayed by over 3 hours is **2%**.

It is important to remember that the 3 hours+ late category is a sub-set of the 1 hour+ late category (i.e. these flights are already included in the 1 hour+ late category, not in addition to it).

What is "Total Flights Analysed"?

For each row of data, the "Total Flights Analysed" column shows how many flight movements were analysed in the calculation of data in that row.

For example if there are 30 days in a given month, and a daily flight operates to a given destination, then for that month 60 flights will be analysed for punctuality to and from that destination (30 take-offs and 30 landings), assuming data is available for all flights.

If you have any other queries please contact info@flightontime.info