Airport Arrival ATFM Delay Dataset

Please note that software release 20.0 of the Network Manager on 04 April 2016 introduced a change to improve the accuracy of the ATFM delay calculation for operational purposes. For more information on the change in methodology click here (http://ansperformance.eu/references/methodology/ATFM_delay_calculation.html).

Data description

The *Airport Arrival ATFM Delay* provides an indication of ATFM delays (http://ansperformance.eu/references/definition/atfm_delay.html) on the ground due to constraints at airports.

In Europe, when traffic demand is anticipated to exceed the available capacity in en route centres or at airports, Air Traffic Control (ATC (http://ansperformance.eu/references/acronym/atc.html)) units may request the local Flow Management Position (FMP (http://ansperformance.eu/references/acronym/fmp.html)) to instigate an Air Traffic Flow Management (ATFM (http://ansperformance.eu/references/acronym/atfm.html)) measure, or regulation (http://ansperformance.eu/references/definition/regulation.html). Aircraft expected to arrive during a period of congestion are given ATFM delay at their departure airport, under the authority of the Network Manager, in order to regulate the flow of traffic into the constrained downstream en route sector or airport, thus ensuring safety.

The resulting ATFM delays are calculated as the difference between the estimated take-off time calculated from the filed flight plan including updates and the calculated take-off time allocated by the central unit of ATFM. The reason for the regulation is indicated by the responsible FMP. The delay is attributed to the most constraining ATC unit.

The calculation of Airport arrival ATFM delay is based on a well established and commonly accepted algorithm and has been in use as a commonly agreed proxy for airport capacity shortfalls since 2009.

Column naming and types

Column name	Data source	Label	Reason Group	Column description	Example
YEAR	Network Manager	YEAR		Reference year	2015
MONTH_NUM	Network Manager	MONTH		Month (numeric)	2
MONTH_MON	Network Manager	MONTH_MON		Month (3-letter code)	FEB
FLT_DATE	Network Manager	FLT_DATE		Date of the flight	11/02/2015 (*)
APT_ICAO	Network Manager	APT_ICAO		ICAO 4-letter airport designator	LSGG
APT_NAME	PRU	APT_NAME		Airport name	Geneva

Column name	Data source	Label	Reason Group	Column description	Example
STATE_NAME	PRU	STATE_NAME		Name of the country in which the airport is located	Switzerland
FLT_ARR_1	Network Manager	IFR Arrivals		Number of arrivals (based on activated flight plans submitted to NM)	221
DLY_APT_ARR_1	Network Manager	Airport ATFM arrival delay		Minutes of airport arrival ATFM delay	1312
DLY_APT_ARR_A_1	Network Manager	A - Accident/Incident - AD	AD Disruptions	Minutes of airport arrival ATFM delay with delay code A - Accident/Incident	0
DLY_APT_ARR_C_1	Network Manager	C - ATC Capacity - AD	AD Capacity (ATC)	Minutes of airport arrival ATFM delay with delay code C - ATC Capacity	0
DLY_APT_ARR_D_1	Network Manager	D - De-icing - AD	AD Weather	Minutes of airport arrival ATFM delay with delay code D - De-icing	0
DLY_APT_ARR_E_1	Network Manager	E - Equipment (non-ATC) - AD	AD Disruptions	Minutes of airport arrival ATFM delay with delay code E - Equipment (non-ATC)	0
DLY_APT_ARR_G_1	Network Manager	G - Aerodrome Capacity - AD	AD Capacity	Minutes of airport arrival ATFM delay with delay code G - Aerodrome Capacity	0
DLY_APT_ARR_I_1	Network Manager	I - Industrial Action (ATC) - AD	AD Disruptions (ATC)	Minutes of airport arrival ATFM delay with delay code I - Industrial Action (ATC)	0
DLY_APT_ARR_M_1	Network Manager	M - Airspace Management - AD	AD Capacity	Minutes of airport arrival ATFM delay with delay code M - Airspace Management	0
DLY_APT_ARR_N_1	Network Manager	N - Industrial Action (non-ATC) - AD	AD Disruptions	Minutes of airport arrival ATFM delay with delay code N - Industrial Action (non-ATC)	0

Column name	Data source	Label	Reason Group	Column description	Example
DLY_APT_ARR_O_1	Network Manager	O - Other - AD	AD Disruptions	Minutes of airport arrival ATFM delay with delay code O - Other	0
DLY_APT_ARR_P_1	Network Manager	P - Special Event - AD	AD Events	Minutes of airport arrival ATFM delay with delay code P - Special Event	0
DLY_APT_ARR_R_1	Network Manager	R - ATC Routeing - AD	AD Capacity	Minutes of airport arrival ATFM delay with delay code R - ATC Routeing	0
DLY_APT_ARR_S_1	Network Manager	S - ATC Staffing - AD	AD Staffing (ATC)	Minutes of airport arrival ATFM delay with delay code S - ATC Staffing	1312
DLY_APT_ARR_T_1	Network Manager	T - Equipment (ATC) - AD	AD Disruptions (ATC)	Minutes of airport arrival ATFM delay with delay code T - Equipment (ATC)	0
DLY_APT_ARR_V_1	Network Manager	V - Environmental Issues - AD	AD Capacity	Minutes of airport arrival ATFM delay with delay code V - Environmental Issues	0
DLY_APT_ARR_W_1	Network Manager	W - Weather - AD	AD Weather	Minutes of airport arrival ATFM delay with delay code W - Weather	0
DLY_APT_ARR_NA_1	Network Manager	NA - Not specified - AD	AD Disruptions	Minutes of airport arrival ATFM delay with delay code NA - Not specified	0
FLT_ARR_1_DLY	Network Manager	FLT_ARR_1_DLY		Number of airport ATFM arrival delayed arrivals	0
FLT_ARR_1_DLY_15	Network Manager	FLT_ARR_1_DLY_15		Number of airport ATFM arrival delayed arrivals (>15 min.)	0

(*) The experimental CSV files (http://ansperformance.eu/data/csv/) and APT DLY filter and csv download (http://ansperformance.eu/data/set/apt_dly/airport_arrival_atfm_delay.html) use ISO 8601 (https://en.wikipedia.org/wiki/ISO_8601) date time format, i.e. `2017-01-02T00:00:00Z`