

[Covariate]	[Type]	[Description]
DEST	Factor w/ 362 levels	IATA code for destination airport
ORIGIN	Factor w/ 362 levels	IATA code for origin airport
YEAR	Factor w/ 2 levels	2018 or 2019
QUARTER	Factor w/ 4 levels	Q1, Q2, Q3, or Q4 of a year
FL_DATE	Factor w/ 546 levels	A unique day between 01/01/2018 and 06/30/2019
MONTH	Factor w/ 12 levels	Month of year
DAY_OF_MONTH	Factor w/ 31 levels	Day of the month
DAY_OF_WEEK	Factor w/ 7 levels	Day of the week
CARRIER	Factor w/ 17 levels	IATA code for airline carrier for that flight
FL_NUM	Integer	Flight number
Route	Factor w/ 6,684 levels	Unique route number for that flight path from origin to destination
DEST_CITY	Factor w/ 355 levels	Destination city
DEST_STATE	Factor w/ 52 levels	Destination state
CRS_DEP_TIME	Integer	CRS scheduled departure time
DEP_TIME	Integer	Actual departure time
DEP_DELAY	Integer	Difference in minutes between scheduled and actual departure time
DEP_DELAY_NEW	Integer	Same as DEP_DELAY except early arrivals are set to zero
DEP_DEL15	Binary	0=less than 15 minute delay, 1=more than 15 minute delay
DEP_DELAY_GROUP	Factor w/ 13 levels	Delay Intervals: every 15 minutes from -15 to 180 minutes
DEP_TIME_BLK	Factor w/ 19 levels	CRS scheduled departure time block (hourly)
TAXI_OUT	Integer	Taxi out time (minutes)
WHEELS_OFF	Integer	Wheels off time
WHEELS_ON	Integer	Wheels on time
TAXI_IN	Integer	Taxi in time (minutes)
CRS_ARR_TIME	Integer	CRS scheduled/expected arrival time
ARR_TIME	Integer	Actual arrival time
ARR_DELAY	Numeric	Difference in minutes between scheduled and actual arrival time
ARR_DELAY_NEW	Integer	Same as ARR_DELAY except early arrivals are set to zero
ARR_DEL15	Binary	0=less than 15 minute delay, 1=more than 15 minute delay
ARR_DELAY_GROUP	Factor w/ 13 levels	Delay Intervals: every 15 minutes from -15 to 180 minutes
ARR_TIME_BLK	Factor w/ 19 levels	CRS scheduled arrival time block (hourly)
CANCELED	Binary	0=not cancelled, 1=flight was cancelled
CANCELLATION_CODE	Factor w/ 5 levels	A, B, C, or D
DIVERTED	Binary	0=not diverted, 1=was diverted
CRS_ELAPSED_TIME	Integer	CRS allotted elapsed time of flight (in minutes)
ACTUAL_ELAPSED_TIME	Integer	Actual elapsed time of flight in minutes
AIR_TIME	Integer	Actual elapsed time of flight in minutes
DISTANCE	Integer	Distance between airports
CARRIER_DELAY	Integer	Carrier delay in minutes
WEATHER_DELAY	Integer	Weather delay in minutes
NAS_DELAY	Integer	National Air System delay in minutes
SECURITY_DELAY	Integer	Security delay in minutes
LATE_AIRCRAFT_DELAY	Integer	Late aircraft delay in minutes
PASSENGERS	Integer	Total number of passengers for this year, month, route and carrier
EMPFULL	Integer	Full-time employees for this year, month, route and carrier
EMPPART	Integer	Part-time employees for this year, month, route and carrier
EMPTOTAL	Integer	Total employees for this year, month, route and carrier
EMPFTE	Integer	Full-time equivalent employees for this year, month, route and carrier
NET_INCOME	Numeric	Net income for this year, month, route and carrier
OP_REVENUES	Numeric	Operating revenue for this year, month, route and carrier
ID	Factor w/ 350 levels	Unique ID of origin airport from NDCS database
AIRPORT_NAME	Factor w/ 350 levels	Full origin airport name
Latitude	Coordinate	Latitude coordinate of origin airport

Longitude	Coordinate	Longitude coordinate of origin airport
DIST	Numeric	Distance from origin airport to nearest active weather station (km)
Prcp	Numeric	Precipitation at origin (tenths of mm)
Snow	Numeric	Snowfall at origin (mm)
Tavg	Numeric	Average temperature at origin (tenths of degrees C)
Tmax	Numeric	Maximum temperature at origin (tenths of degrees C)
Tmin	Numeric	Minimum temperature at origin (tenths of degrees C)
Wt01	Binary	Fog, ice fog, or freezing fog (may include heavy fog)
Wt02	Binary	Heavy fog or heaving freezing fog (not always distinguished from fog)
Wt03	Binary	Thunder
Wt04	Binary	Ice pellets, sleet, snow pellets, or small hail
Wt05	Binary	Hail (may include small hail)
Wt06	Binary	Glaze or rime
Wt07	Binary	Dust, volcanic ash, blowing dust, blowing sand, or blowing obstruction
Wt08	Binary	Smoke or haze
Wt09	Binary	Blowing or drifting snow
Wt10	Binary	Tornado, waterspout, or funnel cloud
Wt11	Binary	High or damaging winds
ID.DEST	Factor w/ 350 levels	Unique ID of destination airport from NCDC database
AIRPORT_NAME.DEST	Factor w/ 350 levels	Full destination airport name
Latitude.DEST	Coordinate	Latitude coordinate of destination airport
Longitude.DEST	Coordinate	Longitude coordinate of destination airport
DIST.DEST	Numeric	Distance from destination airport to nearest active weather station (km)
Prcp.DEST	Numeric	Precipitation at destination (tenths of mm)
Snow.DEST	Numeric	Snowfall at destination (mm)
Tavg.DEST	Numeric	Average temperature at destination (tenths of degrees C)
Tmax.DEST	Numeric	Maximum temperature at destination (tenths of degrees C)
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Wt11.DEST	Binary	High or damaging winds
Nsmiles	Integer	Non-stop miles between these cities
Fare	Numeric	Average fare between these cities
Carrier_lg	Factor w/ 10 levels	Carrier with the largest market share between these cities
Large_ms	Numeric	Proportion of market covered by carrier with largest market share
Fare_lg	Numeric	Average Fare for Largest Carrier between these cities
Carrier_low	Factor w/ 12 levels	Carrier with smallest market share between these cities
Lf_ms	numeric	Proportion of market covered by carrier with smallest market share
Fare_low	Numeric	Average fare for carrier with smallest market share