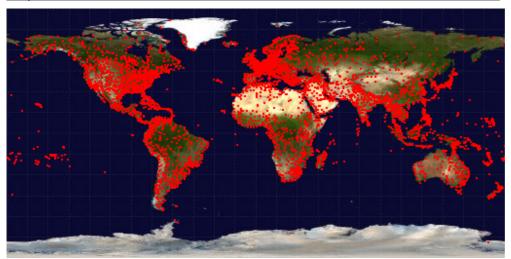
# Airport, airline and route data

Navigation: Airport | Airline | Route | Schedule | Other | License

## Airport database



(click to enlarge)

As of January 2012, the OpenFlights Airports Database contains **6977** airports spanning the globe, as shown in the map above. Each entry contains the following information:

Airport ID Unique OpenFlights identifier for this airport.

Name Name of airport. May or may not contain the City name.

**City** Main city served by airport. May be spelled differently from **Name**.

**Country** Country or territory where airport is located.

IATA/FAA 3-letter FAA code, for airports located in Country "United States of

America".

3-letter IATA code, for all other airports.

Blank if not assigned.

ICAO 4-letter ICAO code.

Blank if not assigned.

Latitude Decimal degrees, usually to six significant digits. Negative is South,

positive is North.

Longitude Decimal degrees, usually to six significant digits. Negative is West,

positive is East.

Altitude In feet.

Timezone Hours offset from UTC. Fractional hours are expressed as decimals,

eg. India is 5.5.

DST Daylight savings time. One of E (Europe), A (US/Canada), S (South

America), O (Australia), Z (New Zealand), N (None) or U (Unknown).

See also: Help: Time

Tz Timezone in "tz" (Olson) format, eg. "America/Los\_Angeles".

database time zone

The data is ISO 8859-1 (Latin-1) encoded, with no special characters.

*Note*: Rules for daylight savings time change from year to year and from country to country. The current data is an approximation for 2009, built on a country level. Most airports in DST-less regions in countries that generally observe DST (eg. AL, HI in the USA, NT, QL in Australia, parts of Canada) are marked incorrectly.

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# Web Development

Enterprise Web and Mobile Websites. Data Driven Websites.





#### Sample entries

507, "Heathrow", "London", "United Kingdom", "LHR", "EGLL", 51.4775, -0.461389, 83, 0, "E", "Europe/London" 26, "Kugaaruk", "Pelly Bay", "Canada", "YBB", "CYBB", 68.534444, -89.808056, 56, -7, "A", "America/Edmonton" 3127, "Pokhara", "Pokhara", "Nepal", "PKR", "VNPK", 28.200881, 83.982056, 2712, 5.75, "N", "Asia/Katmandu"

# Try it out: Airport Search (new window)

*Note*: The Airport Search window above is a part of <u>OpenFlights</u>. You will not be able to add or edit airports unless you are logged in.

#### **Download**

To download the current data dump from <u>GitHub</u> as a very straightforward CSV (comma-separated value) file, suitable for use in spreadsheets etc, simply click below:

# Download: airports.dat (~650 KB)

Creating and maintaining this database has required and continues to require an *immense amount* of work, which is why it would cost you over one thousand dollars to buy it from a commercial supplier. We need your support to keep this database up-to-date: just click on the PayPal link to the right (Visa, MasterCard, American Express and Discover also accepted). We suggest **US\$50**, but any amount at all is welcome, and you may use the data for free if you feel that you are unable to pay. If you do donate, please specify in the comments if you would like a itemized receipt for business expense or tax purposes.



The GitHub copy is only a sporadically updated static snapshot of the live OpenFlights database (see <u>revision log</u>). If you would like an up-to-the-minute copy, or you would like your data filtered by any information available to us (eg. number of flights at the airport), do not hesitate to <u>contact us</u>.

If you'd like an even more thorough database, with extensive coverage of airstrips, heliports and other places of less interest for commercial airline frequent flyers, do check out <u>OurAirports</u>, whose public domain database covers over 40,000 places to fly from.

# Airline database

As of January 2012, the OpenFlights Airlines Database contains **5888** airlines. Each entry contains the following information:

Airline Unique OpenFlights identifier for this airline.

ID

Name Name of the airline.

Alias Alias of the airline. For example, All Nippon Airways is commonly

known as "ANA".

IATA 2-letter IATA code, if available.
ICAO 3-letter ICAO code, if available.

Callsign Airline callsign.

Country Country or territory where airline is incorporated.

#### Active

"Y" if the airline is or has until recently been operational, "N" if it is defunct. This field is *not* reliable: in particular, major airlines that stopped flying long ago, but have not had their IATA code reassigned (eg. Ansett/AN), will incorrectly show as "Y".

The data is ISO 8859-1 (Latin-1) encoded. The special value \N is used for "NULL" to indicate that no value is available, and is understood automatically by MySQL if imported.

*Notes*: Airlines with null codes/callsigns/countries generally represent useradded airlines. Since the data is intended primarily for current flights, defunct IATA codes are generally not included. For example, "Sabena" is not listed with a SN IATA code, since "SN" is presently used by its successor Brussels Airlines.

#### Sample entries

```
324, "All Nippon Airways", "ANA All Nippon Airways", "NH", "ANA", "ALL NIPPON", "Japan", "Y" 412, "Aerolineas Argentinas", \N, "AR", "ARG", "ARGENTINA", "Argentina", "Y" 413, "Arrowhead Airways", \N, "", "ARH", "ARROWHEAD", "United States", "N"
```

# Try it out: Airline Search (new window)

*Note*: The Airline Search window above is a part of <u>OpenFlights</u>. You will not be able to view, add or edit airline details unless you are logged in.

#### **Download**

To download the current data dump from <u>GitHub</u> as a very straightforward CSV (comma-separated value) file, suitable for use in spreadsheets etc, simply click below:

# Download: airlines.dat (~400 KB)

Creating and maintaining this database has required and continues to require an *immense amount* of work. We need your support to keep this database up-to-date: just click on the PayPal link to the right (Visa, MasterCard, American Express and Discover also accepted). We suggest **US\$50**, but any amount at all is welcome, and you may use the data for free if you feel that you are unable to pay. If you do donate, please specify in the comments if you would like a itemized receipt for business expense or tax purposes.



The GitHub copy is only a sporadically updated static snapshot of the live OpenFlights database (see <u>revision log</u>). If you would like an up-to-the-minute copy, or you would like your data filtered by any information available to us (eg. number of flights by airline), do not hesitate to <u>contact us</u>.

#### Route database



(click to enlarge)

As of January 2012, the OpenFlights/Airline Route Mapper Route Database contains **59036** routes between **3209** airports on **531** airlines spanning the globe, as shown in the map above. Each entry contains the following information:

Airline 2-letter (IATA) or 3-letter (ICAO) code of the airline.

Airline ID Unique OpenFlights identifier for airline (see Airline).

**Source** 3-letter (IATA) or 4-letter (ICAO) code of the source airport.

airport

Source Unique OpenFlights identifier for source airport (see Airport)

airport ID Destination

3-letter (IATA) or 4-letter (ICAO) code of the destination airport.

airport

**Destination** Unique OpenFlights identifier for destination airport (see

airport ID Airport)

**Codeshare** "Y" if this flight is a codeshare (that is, not operated by *Airline*,

but another carrier), empty otherwise.

**Stops** Number of stops on this flight ("0" for direct)

**Equipment** 3-letter codes for plane type(s) generally used on this flight,

separated by spaces

The data is ISO 8859-1 (Latin-1) encoded. The special value  $\N$  is used for "NULL" to indicate that no value is available, and is understood automatically by MySQL if imported.

#### Notes:

- Routes are directional: if an airline operates services from A to B and from B to A, both A-B and B-A are listed separately.
- Routes where one carrier operates both its own and codeshare flights are listed only once.

#### Sample entries

BA,1355,SIN,3316,LHR,507,,0,744 777 BA,1355,SIN,3316,MEL,3339,Y,0,744 TOM,5013,ACE,1055,BFS,465,,0,320

Route maps for airports and airlines can be viewed by <u>searching for their names</u> <u>or code in the website's Search box</u>; alternatively, check out the <u>alphabetical list</u> <u>of all covered airports and airlines</u>.

#### **Download**

To download the current data dump from <u>GitHub</u> as a tab-delimited file, suitable for use in spreadsheets etc, simply click below:

# Download: routes.dat (~2 MB)

Creating and maintaining this database has required and continues to require an *immense amount* of work. We need your support to keep this database up-to-date: just click on the PayPal link to the right (Visa, MasterCard, American Express and Discover also accepted). We suggest **US\$50**, but any amount at all is welcome, and you may use the data for free if you feel that you are unable to pay. If you do donate, please specify in the comments if you would like a itemized receipt for business expense or tax purposes.



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### Schedules (Timetables)

OpenFlights is currenty considering launching an airline schedule (timetable) data service. Please register your interest by filling out this short survey.

#### Other

OpenFlights can, on request, create customized versions of the images you see above. Options include higher resolution (suitable for printing), different backgrounds, filtering to highlight an airport or airline, etc. Please <u>contact us</u> for a quote.

OpenFlights offers only airport, airline and route data; we do not have any other data available. We also do not have historical data older than 2009.

Some alternative commercial sources of data include:

• Cleartrip: airfares

• FlightAware: flight tracking

• FlightStats: schedules, flight tracking, historical data

• FlightWise: flight tracking

If you or a website you know of offers any of these for free, please let us know!

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Any corrections will be gratefully received.

#### Sources

Airport base data was generated by from DAFIF (October 2006 cycle) and OurAirports, plus timezone information from EarthTools. All DST information added manually. Significant revisions and additions made by the users of OpenFlights.

Airline data was extracted directly from Wikipedia's gargantuan <u>List of airlines</u>. Significant revisions and additions made by the users of OpenFlights.

Route data is maintained by and imported directly from <u>Airline Route Mapper</u>. Duplicate entry removal and cross-referencing to airport/airline IDs by OpenFlights.

See also: Help: Database