Guide for the ADS-B feeder Stats Page

Where to find your ADS-B feeder's Stats Page

If the ADS-B feeder site has been activated and the user is logged into FlightAware the banner will display **My ADS-B** at the top of www.flight aware.com. If it isn't visible please be sure the device has been claimed and you are logged into FlightAware. Follow **My ADS-B** to the Stats page. The Stats page is available to all feeders: FlightFeeder, PiAware, Radarcape, etc.

My FlightAware My Alerts My ADS-B

Below is a guide on the Stats Page



The map shows location of the site(s)

While the site owner and FlightAware personnel can view the location everyone else will see a randomly generated location specified in the control panel below.

View map of all Flight/ware A26-8 she



Any issues needing to be addressed on the site.



reported from all sites' in a line graph.

Total number of aircraft

This chart is only displayed if the owner has more than one site. Just below the chart are checkboxes to

select which sites are being displayed. Hover your mouse over the chart and the legend will display information on that day.

It Includes the longest streak of feeding

data and a way to share a link to social media

Site 29982 - KIAH Site 35715 - KIWS

Sites

If the user has multiple sites choose which one to display below. The orange highlighted button is the one being currently viewed.

Control Panel - Site specific

| Only viewable to the site | owner and FlightAware personnel |
|---|---|
| Customize | What does it do? |
| Public Profile and Name | Choose whether to display your user name or full name to anyone else viewing the page |
| Site name (private) | Custom name for this site shown only to the site owner and FlightAware personnel. |
| Precision on coverage map | How exact should others be able to see your location? The owner of the site and FlightAware personnel will always see the exact location this setting only affects others viewing your stats page. |
| Outage e-mails | If the feeder stops feeding us data how soon do you want to be notified or is no notification necessary (not recommended)? |
| Auto-update PiAware software *Only viewable by site owner | It is strongly recommended that you keep this set to Allow auto-updating if using a packaged install such as the SD card image. If you have heavily modified the image an update can overwrite those changes and you may want to manually update in your own time. |
| Mode S Multilateration (MLAT) *Only viewable by site owner | If an aircraft is sending Mode S signals and is received by several sites that have MLAT enabled its location can be pinpointed. Please be sure you have configured your location below for this to function properly. |

Send command to device *Only viewable by site

owner

Here you can send commands to your device (IF it is connected to the internet and powered on) for the following

Note: This can be done from anywhere when logged in. It doesn't need a local network connection to function

| Command | When to use it |
|---|---|
| Upgrade and restart PiAware | Send this command to update all the PiAware components (PiAware, dump1090, support packages this depends on whether you use the S card image or the package install) This could be used to manually update if you don't have auto-updates enabled or because you want to update before your device is automatically updated which can take a few days after a release. |
| Upgrade and restart dump1090 | Use this to upgrade only dump1090 |
| Upgrade all installed Debian packages | Use this to upgrade all packages - vanilla OS install, PiAware, and an other package sources that you installed. |
| | This can break networking(or other things) and it is recommended that you have physical access to the device when issuing this command. |
| Restart PiAware | If PiAware stops functioning try using this command to restart the program |
| Restart dump1090 | If you aren't receiving any messages try using this command to restar dump1090 |
| Reboot device | If something isn't functioning correctly try using this command to restathe device. |
| Halt device. To restart, device must be unplugged and plugged back in. | Use this when changing hardware or moving the device instead of pulling the power cord to turn the unit off to prevent breaking. |
| Disconnect and reconnect PiAware | Use this if you need to force your feeder to re-establish a connection FlightAware without restarting your Raspberry Pi |

This section is only viewable by the site owner Log - site specific

expand button highlighted with a red box



Site Information

Data feed: The last time data about an aircraft was received by FlightAware from this site.

Feeder Check-in: The last time FlightAware recieved a message from this site.

Joined: The date FlightAware first received data from this site. **Longest Streak**: The longest FlightAware has received check-ins from the site.

Feeder Type: PiAware, FlightFeeder, PlanePlotter, or etc and what version of software is running.

Multilateration (MLAT): States if MLAT is enabled and displays for the site owner how many nearby receivers it is synchronized with.

Option for Social Media links to promote MLAT by asking others to build a feeder.

Nearby Airport: Closest airport, if this is not correct make sure your location is configured correctly by manually selecting via the dropdown option in "Click here to change".

This section is only viewable by site owner and staff

Site identifier: MAC address

Internet IP: External IP address Site local IP: Local IP address of site Web Interface: Link to a live map view of the flights seen by the site

*to view this you must be on the same network as the feeder



Ground elevation: auto-configures based on your location and antenna height Antenna height above ground level: Distance between your antenna and the ground Please set the distance

Location: coordinates of location **Please set the location** The location is only viewable by the owner of the feeder and staff

FlightFeeders

Some FlightFeeders cannot have their location set because the antenna has a GPS chip that automatically sets it. If yours has this a message will display stating:

The location is automatically set by the feeder and cannot be changed.

If you believe this location is incorrect, contact support.

Location Set: Displays what date the location was updated

Statistics

Select which day to view data from above the **Coverage Distribution** heat graph. Selecting the day will affect the **Coverage distribution**, P **ositions Reported by Distance from Receiver**, and **Hourly Collection Graphs**(CST) graphs.

Coverage Distribution



Coverage Distribution displays which direction the antenna is receiving messages from. The image shows an indoor antenna in a west facing window. This can be improved with better antenna placement and/or a better antenna.

Positions Reported by Distance from Receiver



This bar graph shows number of aircraft spotted by distance. Upgrading or repositioning the antenna can improve the number of aircraft spotted further away.

Hourly Collection Graphs (CST)



Hourly Collection Graphs show what time the most messages are received, often times midnight to 6am are the quietest hours. Hovering over the chart will cause the legend to display information for that time.

Hourly Received Reports (positions | aircraft)



Hover over a square to display: "number of messages | number of aircraft."

This highlights traffic patterns, such as when no flights were seen.

| | Thu | Wed | Tue | Mon | Sun | Sat | Fri | Thu | Wed | Tue | Mon | Sun | Sat | Fri | Thu |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 01/19 | 01/18 | 01/17 | 01/16 | 01/15 | 01/14 | 01/13 | 01/12 | 01/11 | 01/10 | 01/09 | 01/08 | 01/07 | 01/06 | 01/05 |
| Reports Reco | eived | | | | | | | | | | | | | | |
| ADS-B | 5,868 | 7,663 | 9,337 | 9,951 | 4,242 | 3,825 | 8,146 | 9,658 | 8,636 | 7,111 | 8,256 | 6,568 | 9,855 | 4,860 | 5,301 |
| MLAT | 3,552 | 5,051 | 5,252 | 6,629 | 2,415 | 1,309 | 4,478 | 6,459 | 6,395 | 4,817 | 5,377 | 3,568 | 2,925 | 1,994 | 3,730 |
| Other | 6,435 | 8,608 | 9,284 | 11,095 | 5,488 | 4,961 | 9,474 | 10,398 | 10,492 | 8,996 | 9,791 | 8,126 | 7,282 | 7,104 | 8,054 |
| Tota/ | 15,855 | 21,322 | 23,873 | 27,675 | 12,145 | 10,095 | 22,098 | 26,515 | 25,523 | 20,924 | 23,424 | 18,262 | 20,062 | 13,958 | 17,085 |
| Aircraft Seen | | | | | | | | | | | | | | | |
| ADS-B | 204 | 242 | 271 | 262 | 215 | 213 | 285 | 284 | 241 | 229 | 267 | 242 | 216 | 227 | 224 |
| MLAT | 232 | 289 | 278 | 315 | 185 | 134 | 323 | 331 | 311 | 275 | 310 | 247 | 212 | 212 | 222 |
| Other | 107 | 151 | 149 | 146 | 151 | 200 | 147 | 139 | 180 | 144 | 138 | 164 | 141 | 197 | 179 |
| Total | 543 | 682 | 698 | 723 | 551 | 547 | 755 | 754 | 732 | 648 | 715 | 653 | 569 | 636 | 625 |

Reports Received are the number of messages.

ADS-B Automatic Dependent Surveillance-Broadcast is a precise satellite-based surveillance system. ADS-B Out (used by the aircraft) uses GPS technology to determine an aircraft's location, airspeed and other data, and broadcasts that information to a network of ground stations (example: your site).

MLAT Mode S data the site sent to FlightAware which was used to calculate the aircraft location alongside messages from other sites. If

MLAT is disabled (see the control panel section to change) there will be no messages of this type.

Other Non-ADS-B Mode S messages where MLAT couldn't be calculated.

Aircraft Seen are the number of different aircraft a message was received from, a single aircraft will send a message every second

Aircraft send an ADS-B message every second and multiple messages can be received from the same aircraft which is why the number of reports is higher than the number of aircraft seen.

If comparing new equipment to old equipment this is best table to view the effect. Keep in mind that weather and air traffic can cause these numbers to vary day to day.

Daily Collection Graphs (UTC)



Graphical display created from the table above. Hovering you mouse on the graph will cause the numbers displayed to update to that date. This goes back a full month further than the table displayed above.



Rankings from every site that feeds FlightAware, the data is calculated using data from the last 30 days. If you have multiple sites please note this only displays information from the one you are currently viewing.

| Flights | | | | | | | | | | | | |
|---|------|-------------|--------------|----------|---------|----------|--------|--|-------------|---|--|--|
| Recent flights with positions from this feeder on FlightAware.com | | | | | | | | | | | | |
| Flight | Туре | Seconds Ago | Ground Speed | Altitude | Heading | Distance | Origin | | Destination | | | |
| | | | | 1 075 | | | ~ | | | • | | |

This list shows flights your data was used to track that appear on FlightAware.com. If you own the feeder click on the tracklog link to see what locations the site provided. Only the site owner and FlightAware personnel can see which specific coordinates the site provided.

| Additional recent flights fed to FlightAware | | | | | | | | | | | |
|---|-------------|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | |
| Flight Tail Number Type Seconds Ago Ground Speed Altitude Heading Distance Origin | Destination | | | | | | | | | | |

This shows flights we received data on but didn't officially use to track for various reasons such as using another feeder's data.

| Nearby ADS-B Sites | | | | | | | | |
|---------------------------|-----------------|-------------|-------|---------|-----------|--------------------------------|-----------|--|
| Distance (miles) Username | Norman Airmont | Feeder Type | MIAT | late ad | Last Seen | Daily Median Stats (past week) | | |
| Distance (miles) Osername | Nearest Airport | reeder Type | PILAT | Joined | Last Seen | Flights | Positions | |

Shows nearby sites and how close they are to the sites location. It can provide an idea of how many flights and positions(reports) can be seen from your geographical location. Sites shown in this list must be active in the last 30 days. The list is designed such that it shows at least the closest 3 nearby sites. The number of nearby sites shown will vary depending on the distance distribution of sites relative to your site but will not be more than 25 total (including your own site).

The check is made within ranges of 100, 175, 250, 500, 1,000, 2,500 and 5,000 km. As soon as it finds at least three nearby sites, it doesn't check for more in the next range.