



Flight Log Viewer

Version 2.3.1

Instructions

Welcome to the Flight log viewer for the Potensic Atom line of drones. This open-source project has been developed to assist users in getting the most out of their aircraft by allowing you to replay a flight. This help document will continue to evolve with each version of the application. The repository home location can be found at:

<https://github.com/koen-aerts/potdroneflightparser>

This software is provided “as-is” with no warranties expressed or implied.

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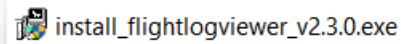
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Installing

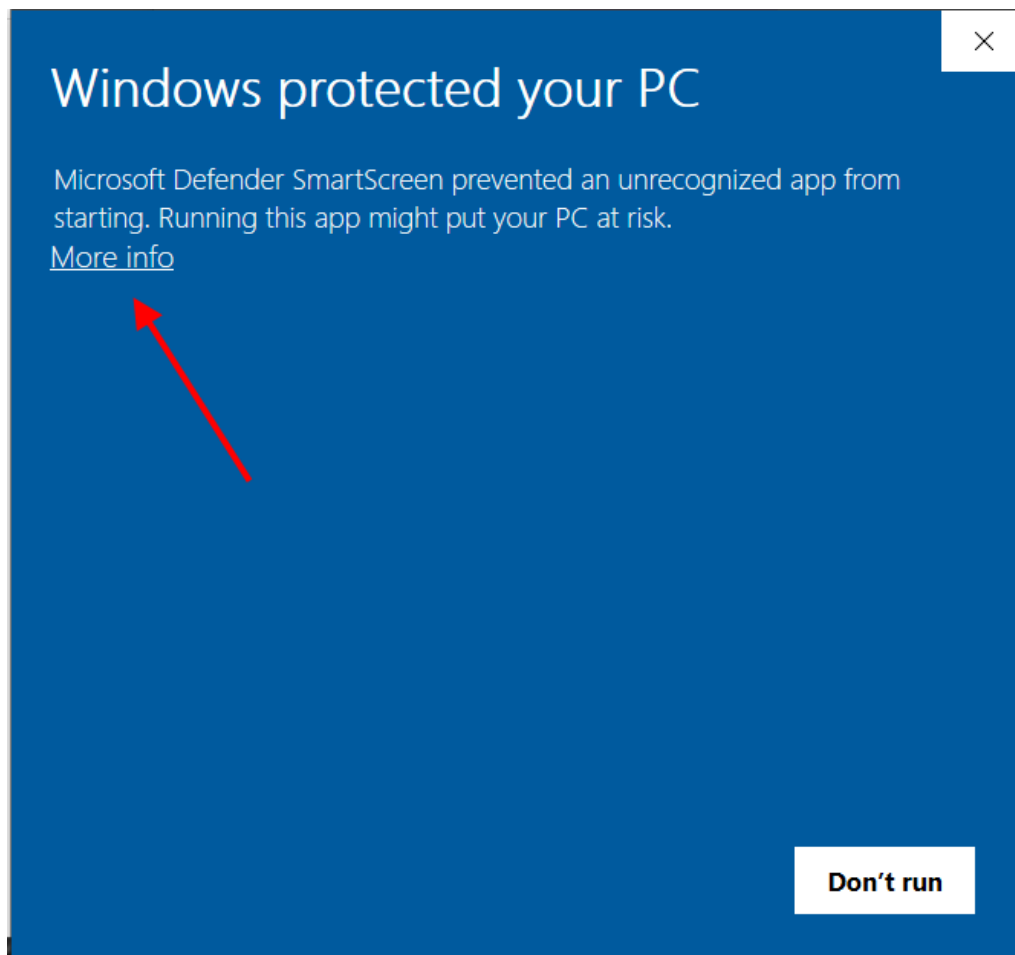
The method of installing this software varies based on the platform you are using. Each one will be briefly touched on.

Windows Installation:

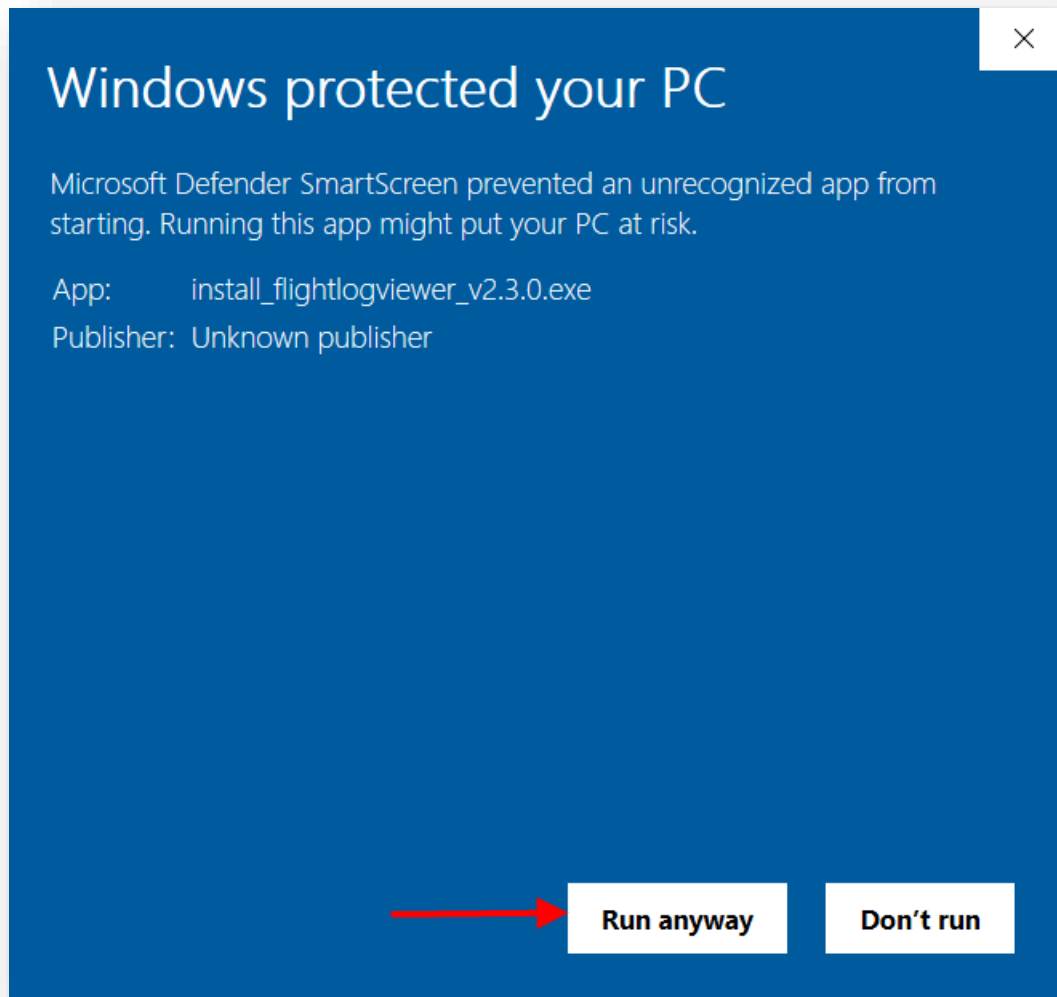
Download the current version of the windows installation program such as this one:



Double click to launch the installation. When you do, you will receive a Windows alert message. When this message appears, click on the “more info” text:

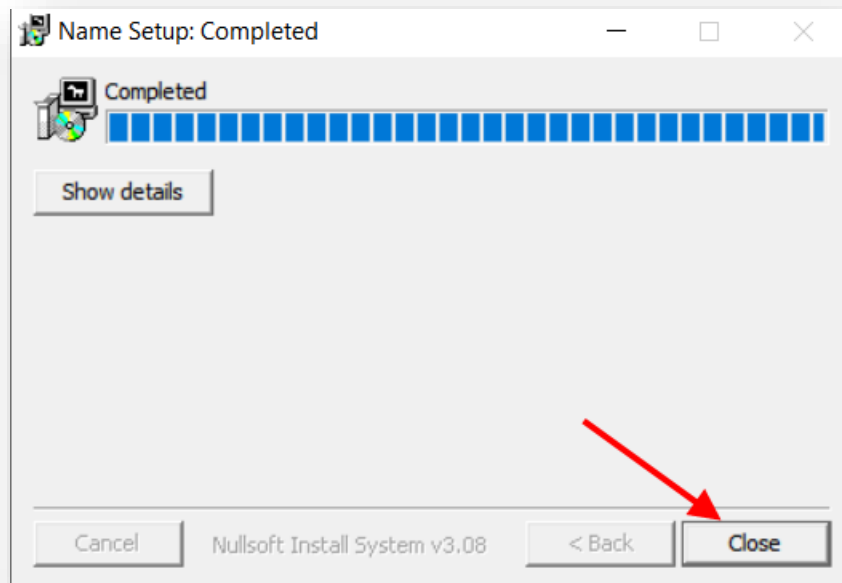


Windows will display that this is an unknown publisher. Click on the “Run anyway” button:

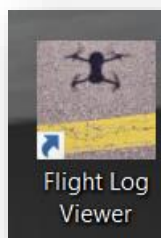


Once you do this, you will also probably see another alert asking you to run the software. You will have to click through that as well. Installation will begin.

When the setup is complete click on the “Close” button.



A new shortcut will appear on your Windows desktop so that you can launch the software.



MacOS installation:

MacOS

Download the zip file and unpack it. Run the .dmg package and slide the App's icon into the Application folder. After that you should unmount/eject the .dmg volume in Finder. You may see MacOS warn you about running content from the Internet, but you should be able to accept this and run the app.

To uninstall, delete Flight Log Viewer from your Applications just like you would with any other application.

You can also delete the app's configuration and cache, which is usually located at:
/Users/[your_user_name]/Library/Application Support/Flight Log Viewer and
/Users/[your_user_name]/Library/Caches/FlightLogViewer.

If you are updating the app to a newer version, you should be able to install on top of the existing app, so basically just install as if you were doing it for the first time. In case this does not work, you can uninstall the app first, then install the latest version. Your existing data should not be affected unless you deleted the directory described above.

You may see warnings or errors that will prevent you from running the app. This is a standard defense mechanism to prevent users from accidentally running arbitrary content that comes from the Internet. Depending on your OS version, the message may be misleading and could say something along the lines of the app is broken or dangerous, and it will prevent you from executing it and instead give you a cancel or delete option.



MacOS Application Warning

To solve this, you can remove the Extended Attributes from the file. You will have to open a Terminal and use the xattr command to remove the attributes. Example:

```
% cd ~/Downloads
```

```
% xattr -r -c ./FlightLogViewer_macos_[arch]_v[x].[x].[x].zip
```

```
% unzip ./FlightLogViewer_macos_[arch]_v[x].[x].[x].zip
```

Android Installation:

Download the .apk file to your device and open it. Depending on your Android version and settings, you will see several warnings about running content from the Internet. You may need to allow the app from which you are launching the apk (web browser or file browser) to launch the apk, and in addition, you will have to read the warnings that will try to stop you from installing the app. There will be options along the way to accept the risk and proceed with the install, albeit those options may not appear until you click on certain links or buttons in the alert pop-ups. You may miss it the first time, so simply try again. It is anything but intuitive, however, there are not too many different options to select from. Most devices will allow you to install anything you want but will attempt to discourage you from doing so.

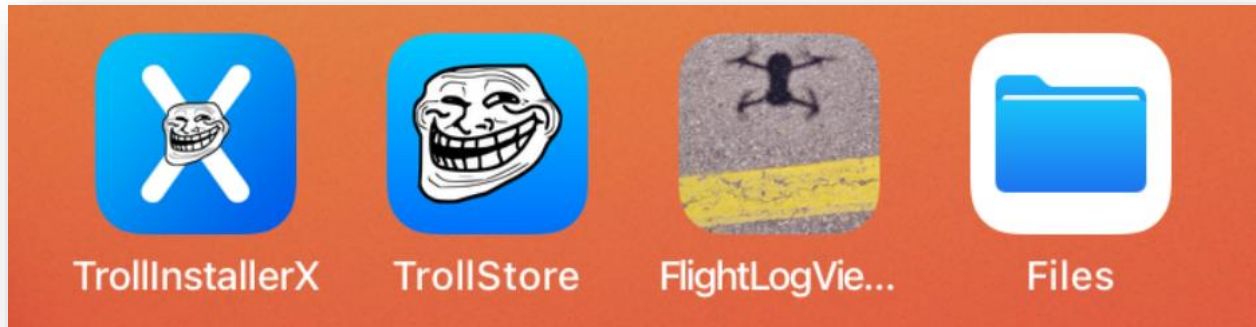
Uninstalling the app is the same as you would for any other mobile app. This action will also delete all the data that is stored within the app, which includes imported log files, preferences, and cache.

If you are updating the app to a newer version, you should be able to install it on top of the existing app. If this does not work, use the app's backup feature first to back up your data. It will be saved to a zip file, so make sure you pay attention to where you save it. Then you can uninstall the app and install the latest version. Once you have the latest version running, you will be able to import the backup zip file into the app to restore your data.

IOS

Option 1: Download the .ipa file to your Mac or Windows computer. Use Sideloadly to side-load it to your iPhone or iPad. No jailbreak required but you need to re-sync the app from your computer every 7 days.

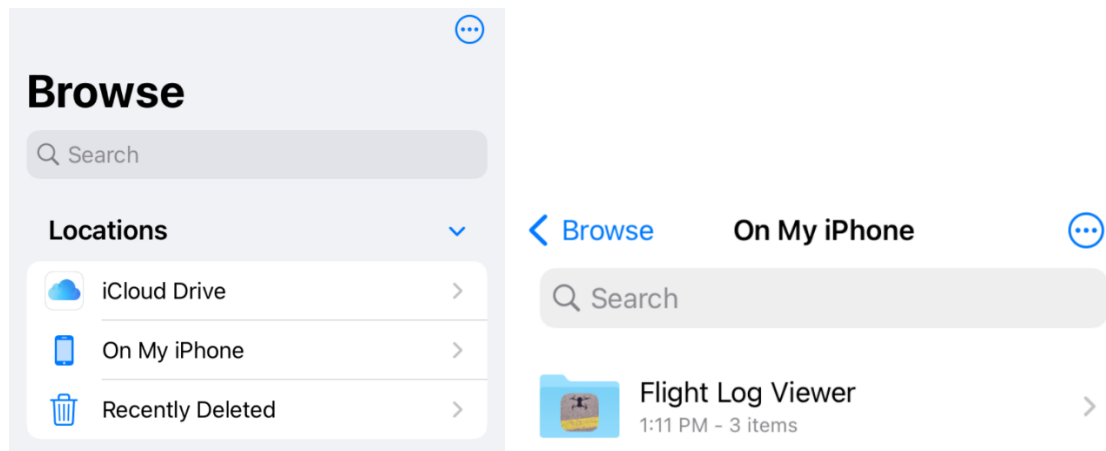
Option 2: Install Trollstore on your mobile device.



Then download the .ipa file to your device and install it via the Trollstore app. No jailbreak required.

Option 3: Jailbreak your iOS device, allowing you to install many 3rd party apps that are not available through the Apple Store.

Note about the iOS version of this app. Unlike on the other platforms, the app does not open a File Browser when you want to import a log file or save a CSV or backup. Instead, you use the standard File Browser on your device to copy files in and out of the Flight Log Viewer Documents folder. You copy the log zip files into that folder, then use the app's import button to import one log file at a time.

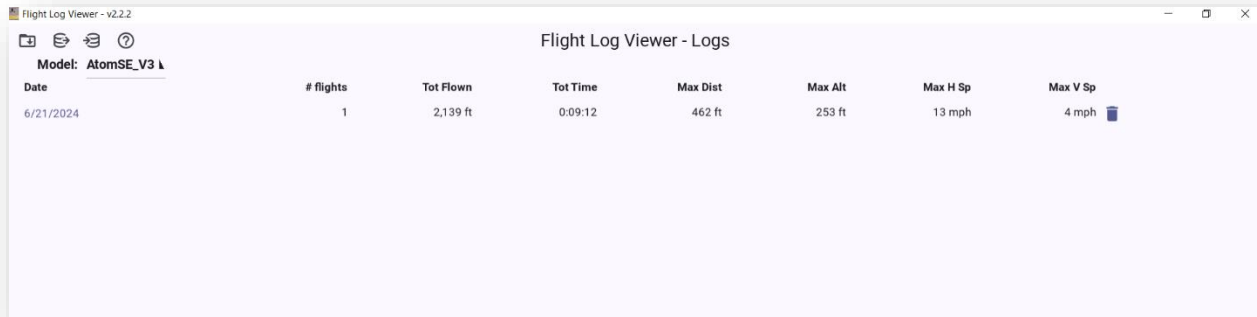


Getting Started: How to load your log files

To use your log files in this application you need to do the following:

The Main Interface

When you start the flight log viewer the system will check to see if there is a new version available. If there is, you will be notified. The main interface will appear. It shows you all the flight logs which you have loaded into the viewer which are available for replay:

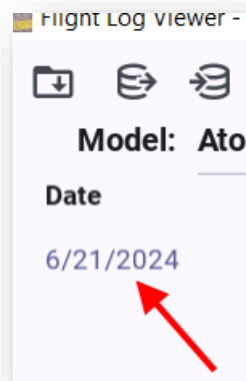


The screenshot shows the 'Flight Log Viewer - v2.2.2' application window. The title bar is 'Flight Log Viewer - Logs'. Below the title bar, there are icons for file operations and a 'Model: AtomSE_V3' dropdown. The main area contains a table with the following data:

Date	# flights	Tot Flown	Tot Time	Max Dist	Max Alt	Max H Sp	Max V Sp
6/21/2024	1	2,139 ft	0:09:12	462 ft	253 ft	13 mph	4 mph


Selecting a Flight for Replay

On this screen you can either select a flight to replay (if you have loaded any) or you can delete it. To select a flight, click on the date of the flight entry:



Deleting a Flight Log

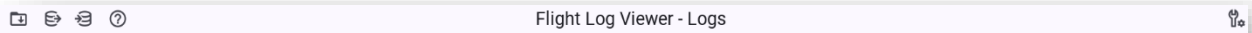
To delete a flight log, click on the trash can button to the right of the flight log entry:

Max Alt	Max H Sp	Max V Sp
253 ft	13 mph	4 mph 

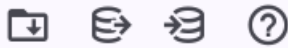


Main Interface Controls

The main interface has four buttons at the top left of the screen and one at the top right:



Top left button functions

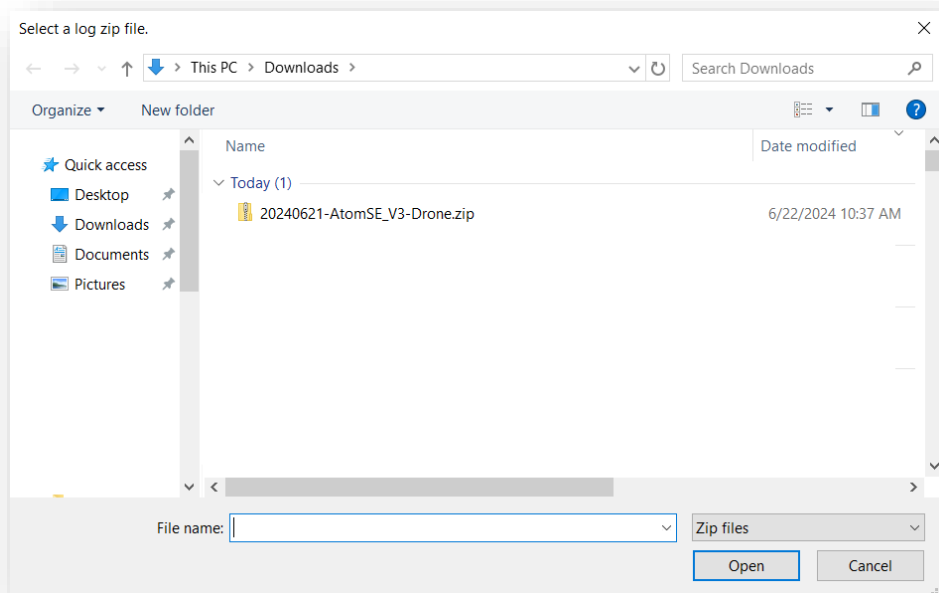


Each of the top left button functions will be explained.

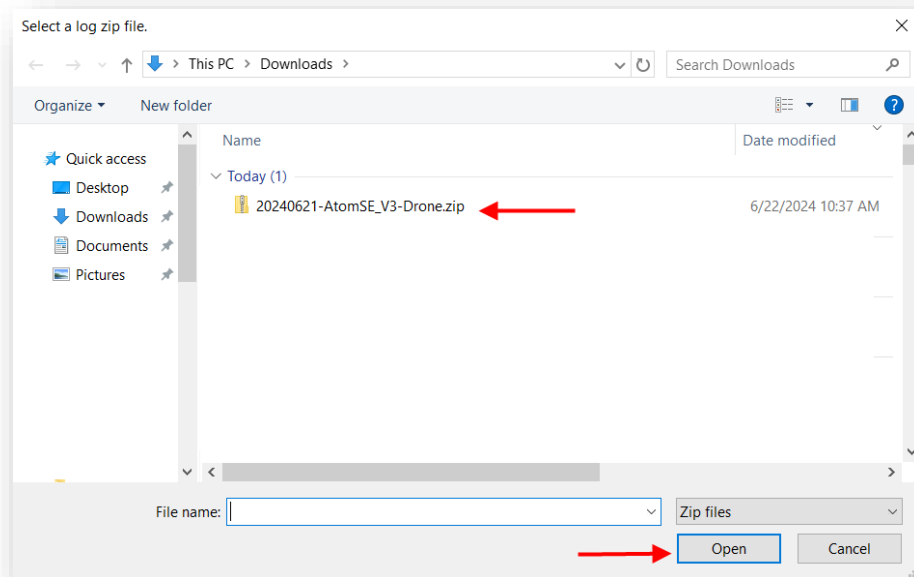


Load a Flight Log Button

Before you can load a flight log you need to create a file you can read. Flight logs are created by the Potensic application. For information on how to create and export those logs see the section “How to create a Log Export from Potensic Pro” section. Once this is done and you have saved one or more flight log files, you can select the button in the Flight Log Viewer. It brings up the window which will allow you to select the log zip file from wherever you saved it.



To load a log select it and click on the “Open” button:

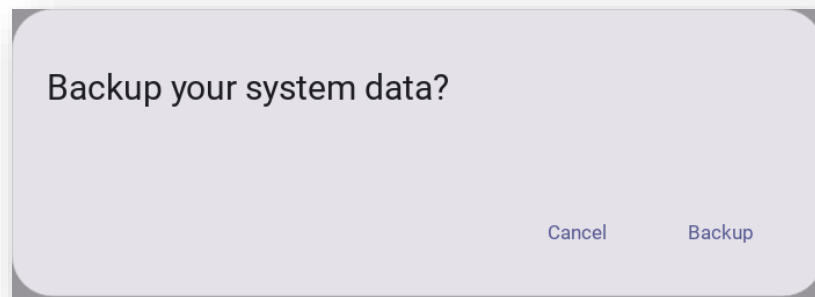


Once you do this, the log will be imported and parsed. Once parsing is complete, you will be taken to the map view which will display the flight you just imported.

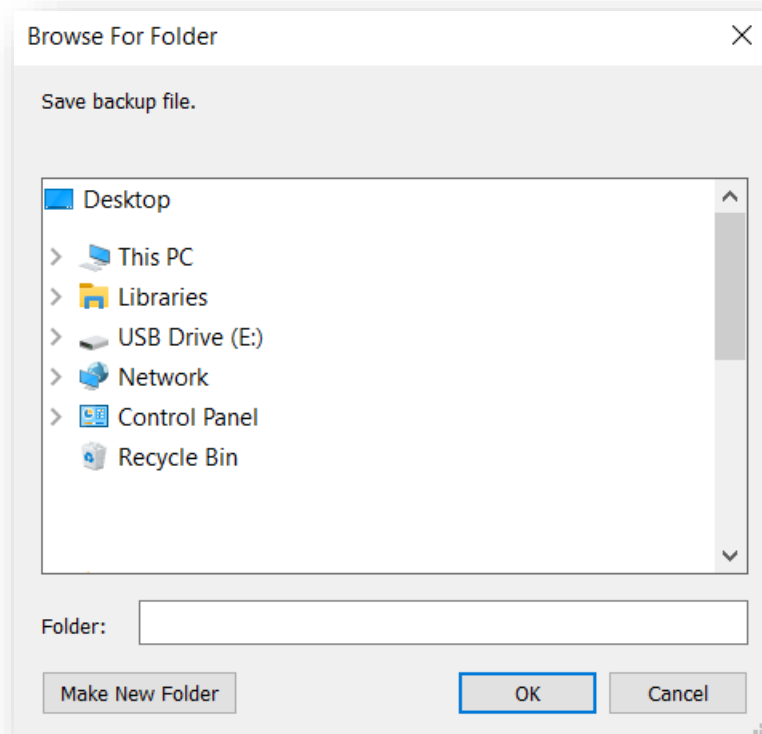


Backup System Button

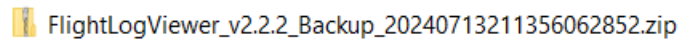
This button will allow backup all the data you have loaded into the Flight Log Viewer. When you click the button, it will bring up a window which will ask you if you want to back up the system.



If you click on "Backup" a window will appear asking you where you wish the backup created.



Once you select a location, click on the “OK” button and a backup file will be created, such as this one:



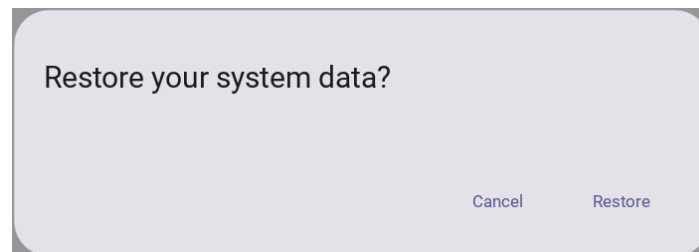
FlightLogViewer_v2.2.2_Backup_20240713211356062852.zip

This file can be used to restore your system using the restore feature.

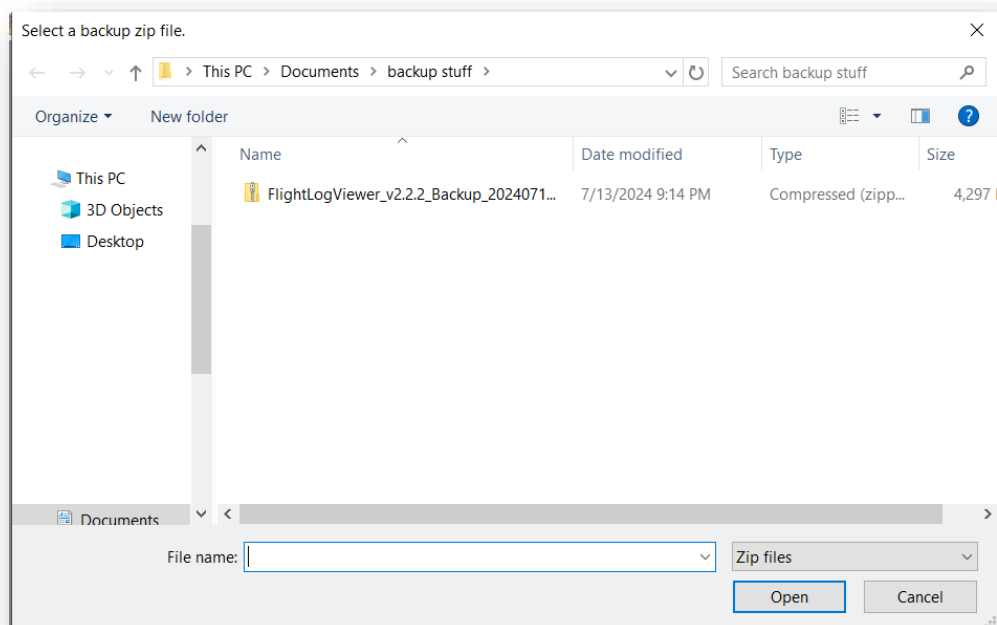


Restore System Button

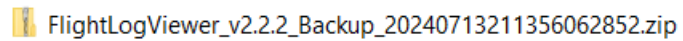
This button will allow you to restore all the data you have loaded into the Flight Log Viewer from a backup (if you created one using the backup system feature). When you click the button, it will bring up a window which will ask you if you want to restore the system from a previous backup.



To restore the system backup, click the Restore button. This will bring up a window asking you to select a system backup file to restore.



Select a backup such as this one, then click on the “Open” button to restore your system:

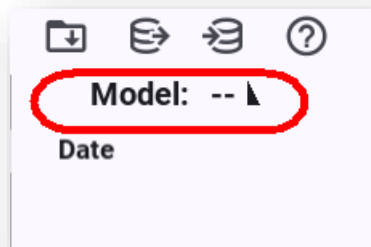


System Help Button

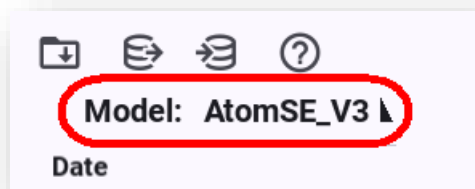
This button will allow you to display the system help you are reading. It will bring up the help file in your default browser.

Model Selection

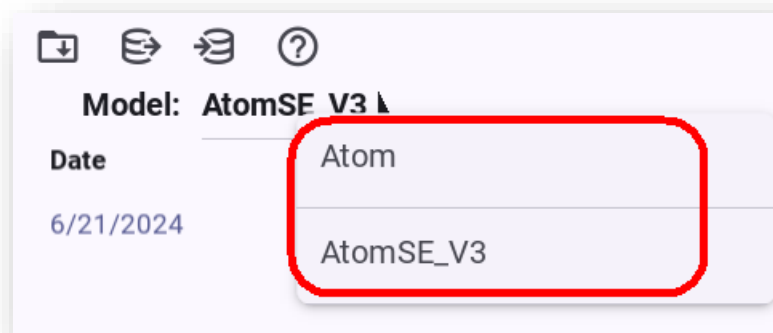
The Flight Log Viewer gives you the ability to group your flights by drone type. This is achieved by the Model Selection drop down at the top of the main screen:



Before you load your first flight into the Flight Log Viewer, the model selector will appear blank with the two dashes as shown above. However, once you load a flight, the main screen will show the model type of the log you last loaded, such as this:



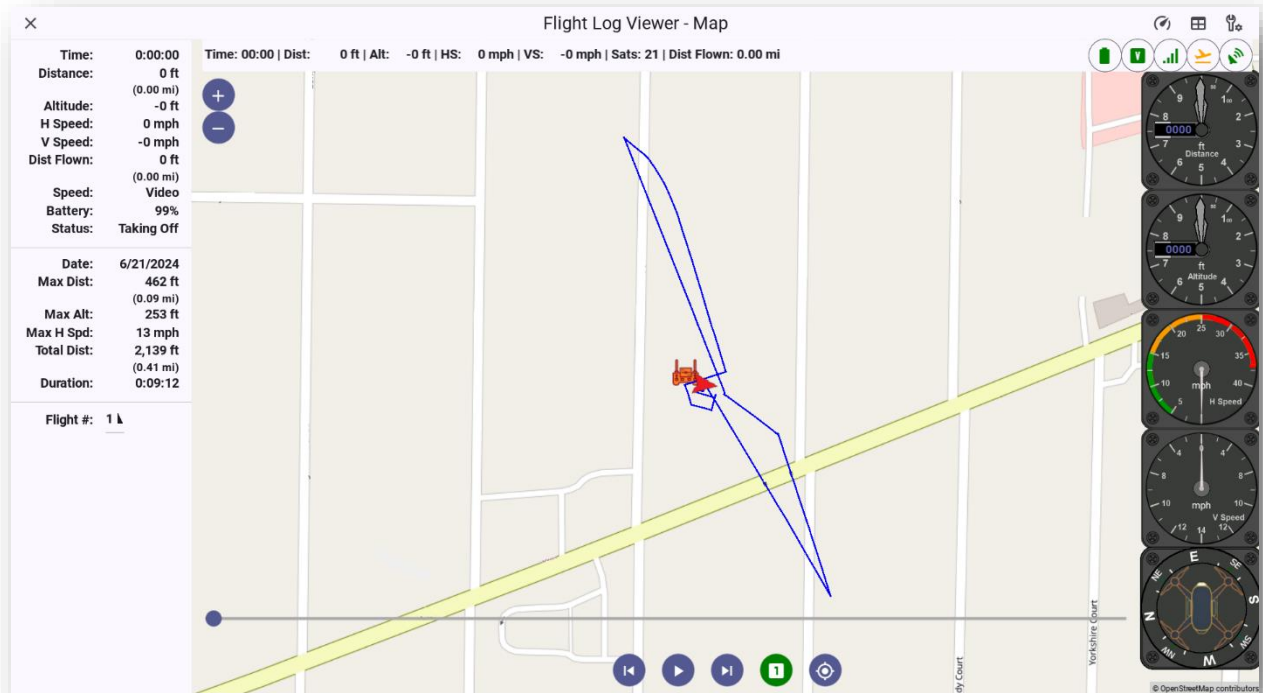
If you own different Potensic drone models, such as both the Atom and Atom SE, and import logs for both, the model selector will give you the ability to switch between the two types of flight log lists.



In this way you can organize what is displayed and selectable for replay.

The Flight Log Viewer Map

When you have selected a flight log for viewing it will bring up the Flight Log Viewer Map screen. The appearance of this screen will vary depending on which type of device you are using the flight log viewer on as well as which options you have chosen:



The screen will show your flights route along with some static information. The information can be shown on both the left side of the screen as well as along the top. Also available as an option, depending on the type of device, are analog gauges along the right side. The playback control buttons at the bottom of the map which are available to you on this screen will be explained.

Log Playback Control Buttons

The playback buttons which allow you to replay your flight are shown at the bottom of the Flight Log Viewer Map screen:



Playback Button

This button will start the replay of your flight. Click on the button to start the replay.



Return to Start of Playback Button

This button will return your replay of your flight to the beginning of the log. Clicking on the button will stop the replay playback. If you have more than one flight log loaded into the Flight Log Viewer application and click on the button a second time it will switch replays to the previous flight from the one you have currently selected.



Move to End of Playback Button

This button will advance your replay of your flight to the end of the log. Clicking on the button will stop the replay playback. If you have more than one flight log loaded into the Flight Log Viewer application and click on the button a second time it will switch replays to the next flight from the one you have currently selected.



Playback Speed Button

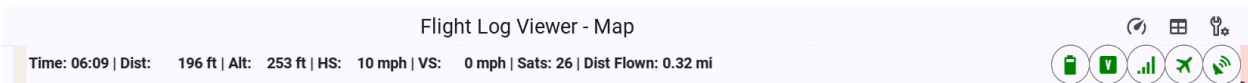
This button will change the rate of your playback. It defaults to standard playback speed (1). Each time you click on the button it will increase the playback speed. Available selections are 1,2,4, 8 and 16 (shown as a rocket icon). When you reach the highest speed, it will cycle back to 1.



Center Map Button

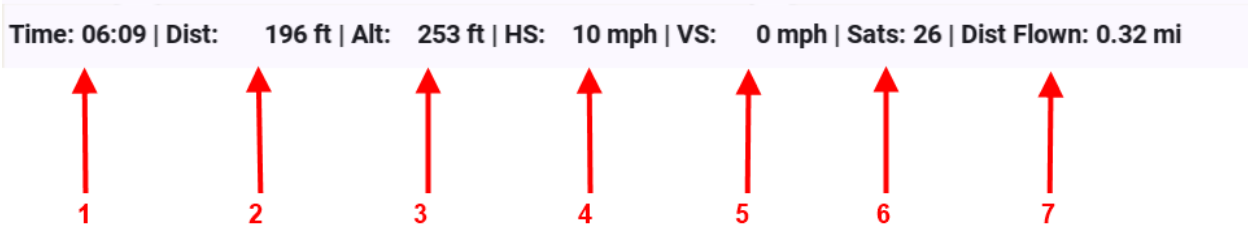
This button will recenter you map on your flight playback.

Top Status Information Bar



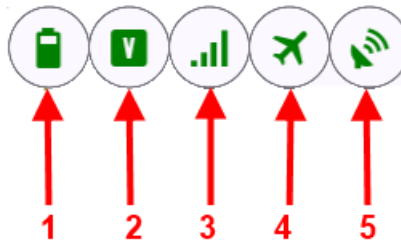
The Flight Log Viewer has a detail status bar along the top of the Map window. The information represented on the strip is shown as both text and some information is also displayed as icons as well on the right side of the strip itself. The details will be explained.

Detail Status bar Text Information:



1. **Elapsed Time** - Current elapsed time of your selected flight as it occurred.
2. **Distance** - Distance from your home point of launch.
3. **Current Altitude** - Current altitude of your flight.
4. **Horizontal Speed** - The horizontal speed of the drone.
5. **Vertical Speed** - The vertical speed of the drone
6. **Satellites** - The number of satellites seen by the drone.
7. **Distance Traveled** - The total distance flown since your flight began.

Detail Status Bar Icon Information:

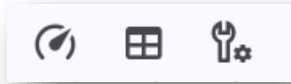


1. **Battery Level** - Current level of your drone's flight battery
2. **Flight Mode** -The flight mode the drone is in (Video, Normal, Sport)
3. **Signal Level** -Current signal level
4. **Flight Status** -Drone's flight status (In flight, etc)
5. **Satellite** - Navigation mode (GPS,OPTI,ATTI)

The above icons will change, like the detailed status bar information does, as your flight progresses. These icons also change color depending on the critical nature of each.

The Flight Log Viewer Map – Right hand side controls

Located at the upper right-hand side of the Flight Log Viewer window are a number of controls.



Each of these controls will be explained.



Show/Hide Side Detail Button

This button will show or hide the side flight detail area of the Flight Log Viewer map section:

Time:	0:00:00
Distance:	0 ft
Altitude:	-0 ft
H Speed:	0 mph
V Speed:	-0 mph
Dist Flown:	0 ft (0.00 mi)
Speed:	Video
Battery:	99% / 8.3V 31C / 0.5A
Status:	Taking Off
Date:	6/21/2024
Max Dist:	462 ft (0.09 mi)
Max Alt:	253 ft
Max H Spd:	13 mph
Total Dist:	2,139 ft (0.41 mi)
Duration:	0:09:12
Flight #:	1 ▾



Display Summary Screen Button

This button will take you to the flight log summary screen:



The screenshot shows a window titled "Flight Log Viewer - v2.2.2" with a subtitle "Flight Log Viewer - Flights". It contains a table with flight data for "Flight #1".

Flight	Duration	Dist Flown	Max Distance	Max Altitude	Max H Speed	Max V Speed
Flight #1	0:09:12	2,139 ft	462 ft	253 ft	13 mph	4 mph

This screen is where you can export a vast amount of flight information as well as give you the ability to create a KML file for export for Google Earth replay. This will be discussed in the next section.



Display Preferences Screen Button


This button will take you to the Flight Log Viewer preferences screen.

Exiting the Flight Log Viewer Map Screen

To exit the Flight Log Viewer Map screen, click on the "X" button at the upper left. This will take you back to the main Logs window where you can select another flight.



Flight Log Viewer Summary Screen

The Flight Log Viewer Summary Screen can be reached after you load a flight log from the Map screen. If you click on the “Display summary” button  on the map screen it will display this screen:

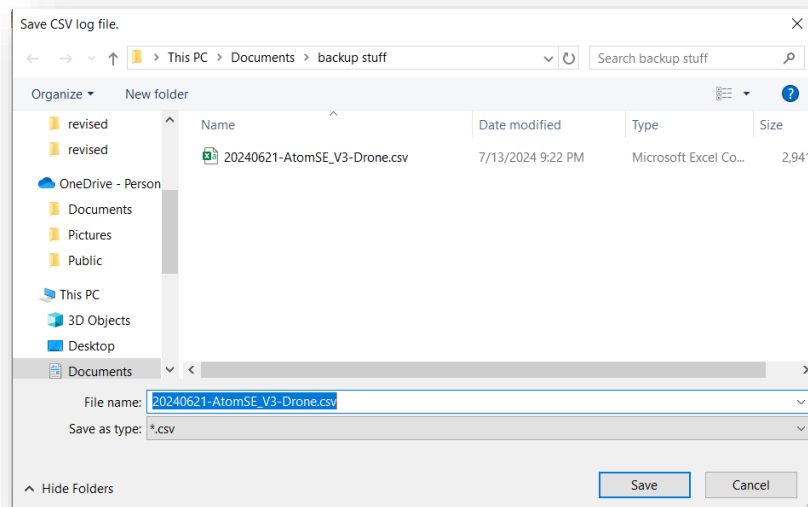
Flight Log Viewer - Flights						
Flight	Duration	Dist Flown	Max Distance	Max Altitude	Max H Speed	Max V Speed
Flight #1	0:09:12	2,139 ft	462 ft	253 ft	13 mph	4 mph

This summary screen will allow you to export the full flight log information as a “CSV” style file. This file can be viewed in another application such as Microsoft Excel. There are three buttons on this screen in the upper right corner.



Save CSV Log File Button

This button will bring up a save window asking you where you wish to save the full flight log information file from this flight:



You can rename and save this file anywhere you wish. After you save the file, you can then go look at it in another application such as Microsoft Excel.



Generate KML file

This button will create a KML file for you to use with Google Earth allowing you to replay your flight from a first-person perspective! To play this file you will need to separately install Google Earth or Google Earth Pro.

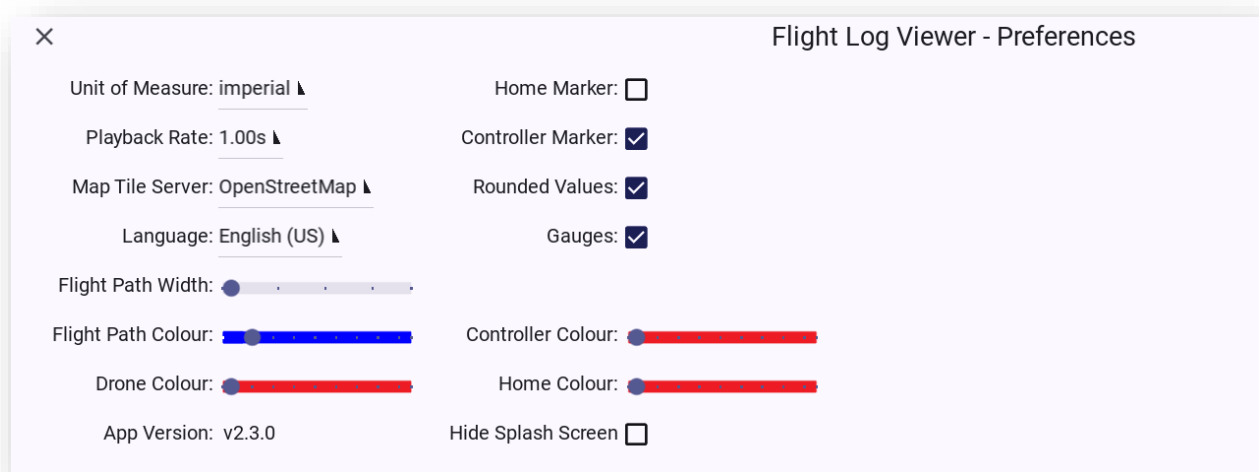


Display Preferences Screen Button

This button will take you to the Flight Log Viewer preferences screen.

Flight Log Viewer Preferences Screen

The preferences screen is where you can set several map options within the application.



Unit of Measure

You can select between “Imperial” and “Metric.”

Playback Rate

The playback rate can be adjusted between .125s and 2s. This value in combination with the map playback selection affects the overall speed of your playback.

Map Tile Server

The map tile server selections can be selected here. Available options are OpenStreetMaps, Google (Standard or Satellite) and Open Topo.

Flight Path Width

This slider controls the width of the line depicting your flightpath.

Flight Path Color

This slider controls the color of the line of the flight path.

Drone Color

This slider changes the color of the drone icon which travels along the path.

Home Marker

A checkbox in this selection will show the home launch point marker on the map.

Controller Marker

A checkbox in this selection will show the GPS location of your controller on the map.

Rounded Values

A checkbox in this selection will round the log value for use in the map playback. Note: If you toggle this value you will need to go back out of the Map view and reselect the flight log you wish to playback.

Gauges

A checkbox in this selection will display the analog gauges on the flight map.

Language Preference

Sets the preferred displayed language. Note: You will need to restart the application for this setting to take effect.

Controller Color

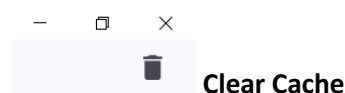
This slider changes the color of the controller icon on the map if it is being displayed.

Home Color

This slider changes the color of the home launch point icon on the map if it is being displayed.

Hide Splash Screen

This checkbox will prevent the Flight Log Viewer splash screen from being displayed at startup.



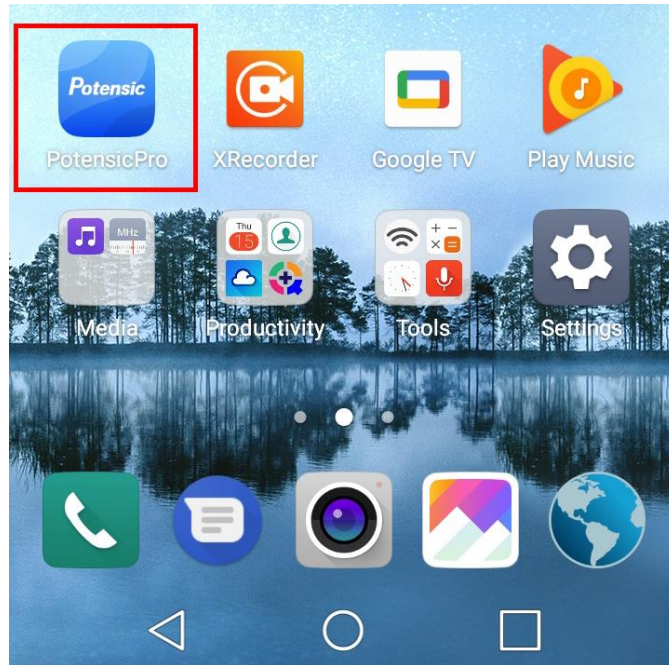
This button will clear the cache of the application when needed, such as with the release of new flight icons.

Please note that some options may not be available on all devices due to screen size and device limitations.

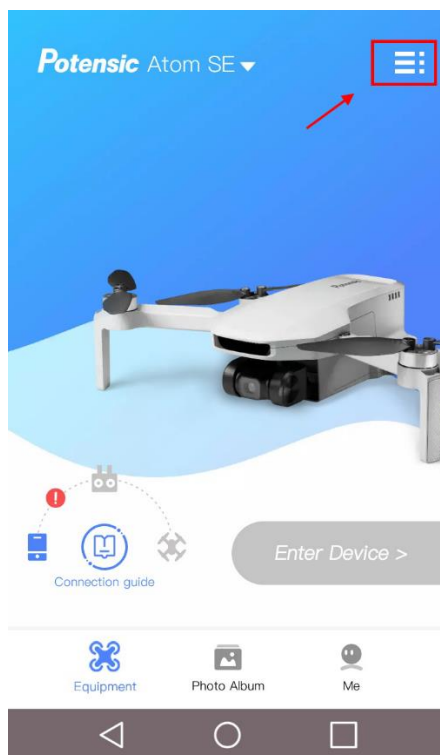
How to create a Log Export from Potensic Pro

To export a flight log from the Potensic Pro app do the following:

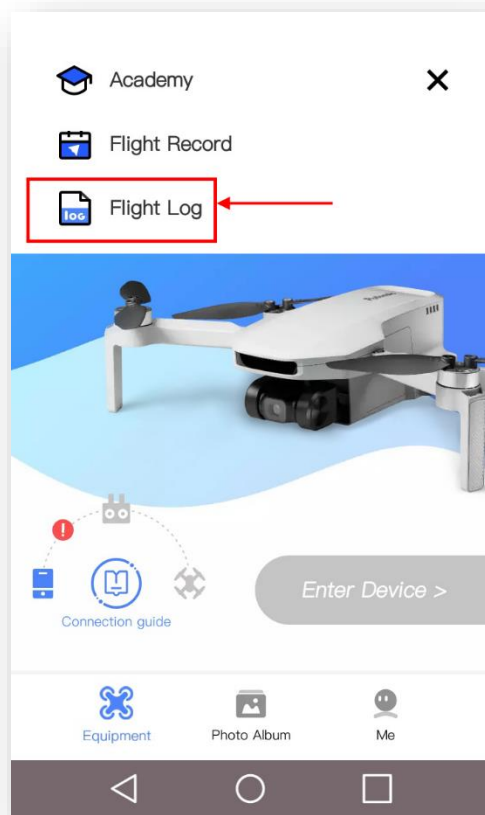
- 1) Launch the Potensic Pro application on your device.



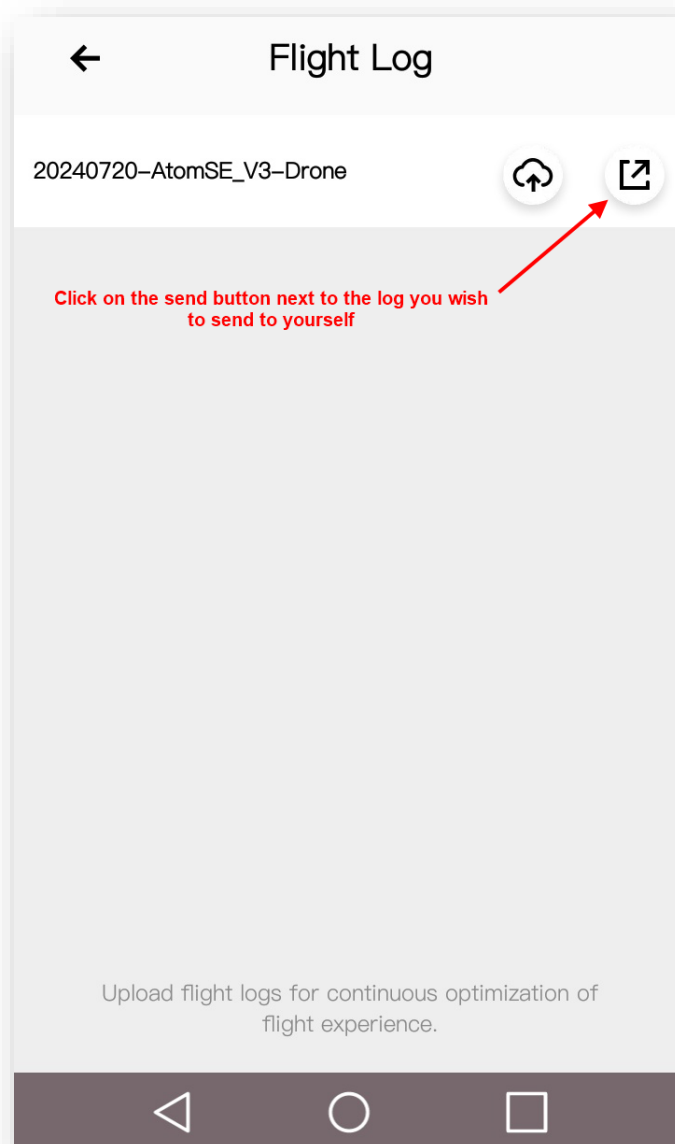
- 2) Click on the three bars in the upper left corner of the app.



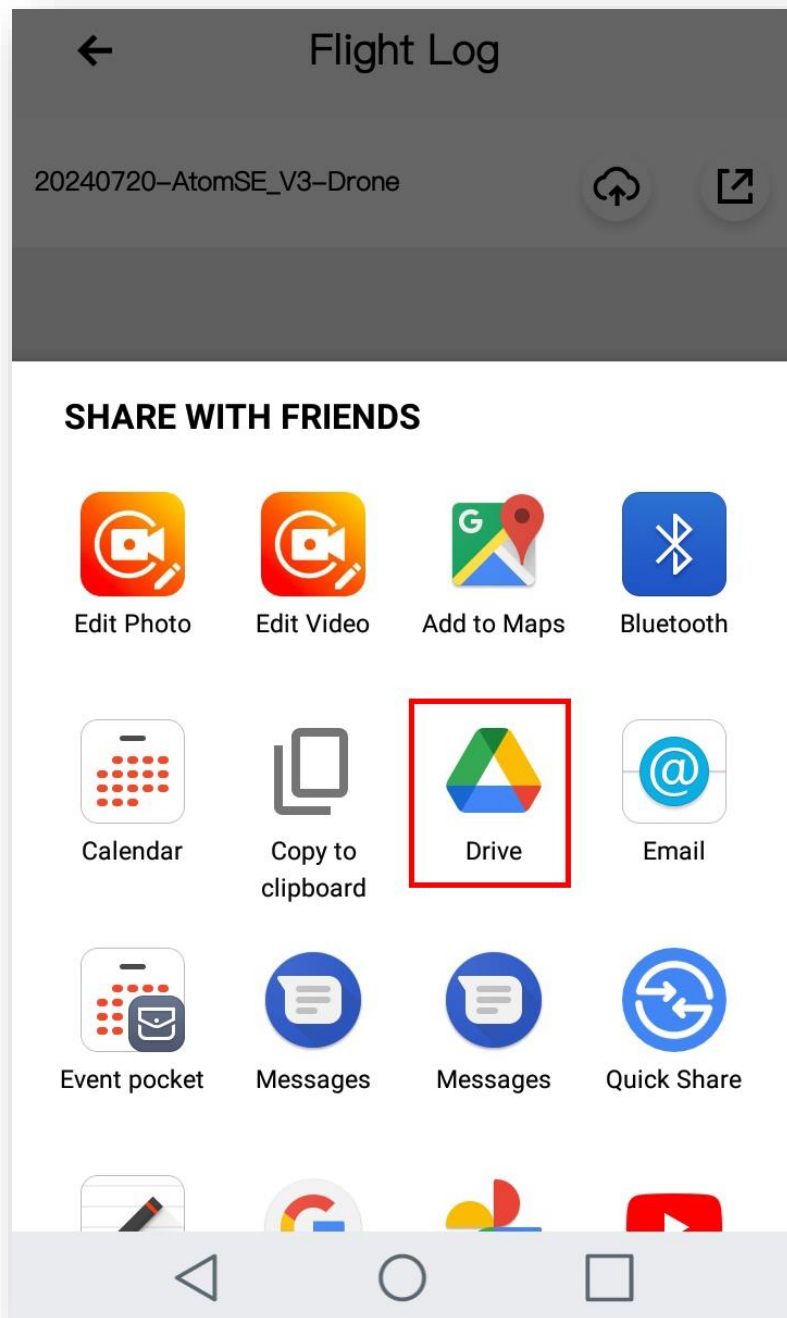
3) Select "Flight Log"



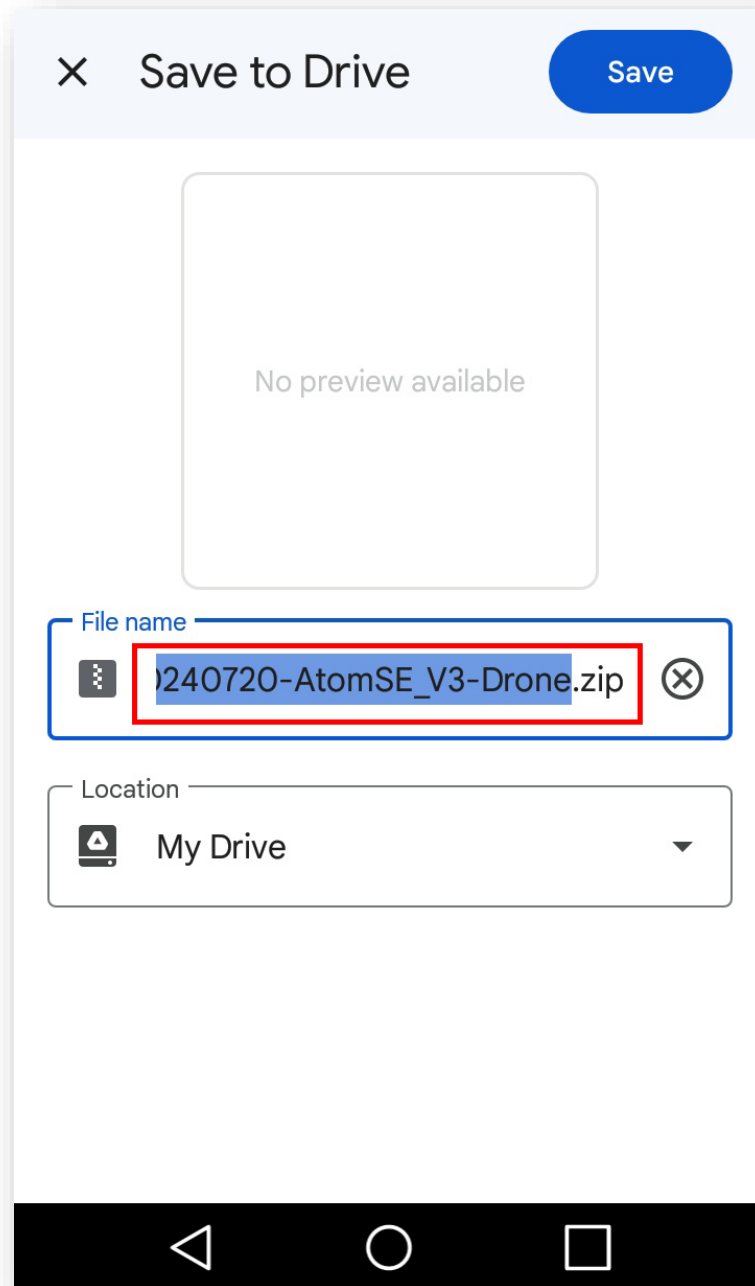
- 4) Select the log you wish to export by clicking on the send button (not the cloud button) next to the log.



- 5) Select the app you wish to use to send the logs to yourself. One of the easiest methods is if you use Google Drive. You can also email it to yourself or select the app of your choice.



- 6) If you are using Google Drive, it will display the flightlog zip file name for you to see.



From this point you can just use standard Google drive functionality to save the log file locally to your PC or mobile device, then follow the rest of this guide. Look at the section “Load a Flight Log Button” for details.

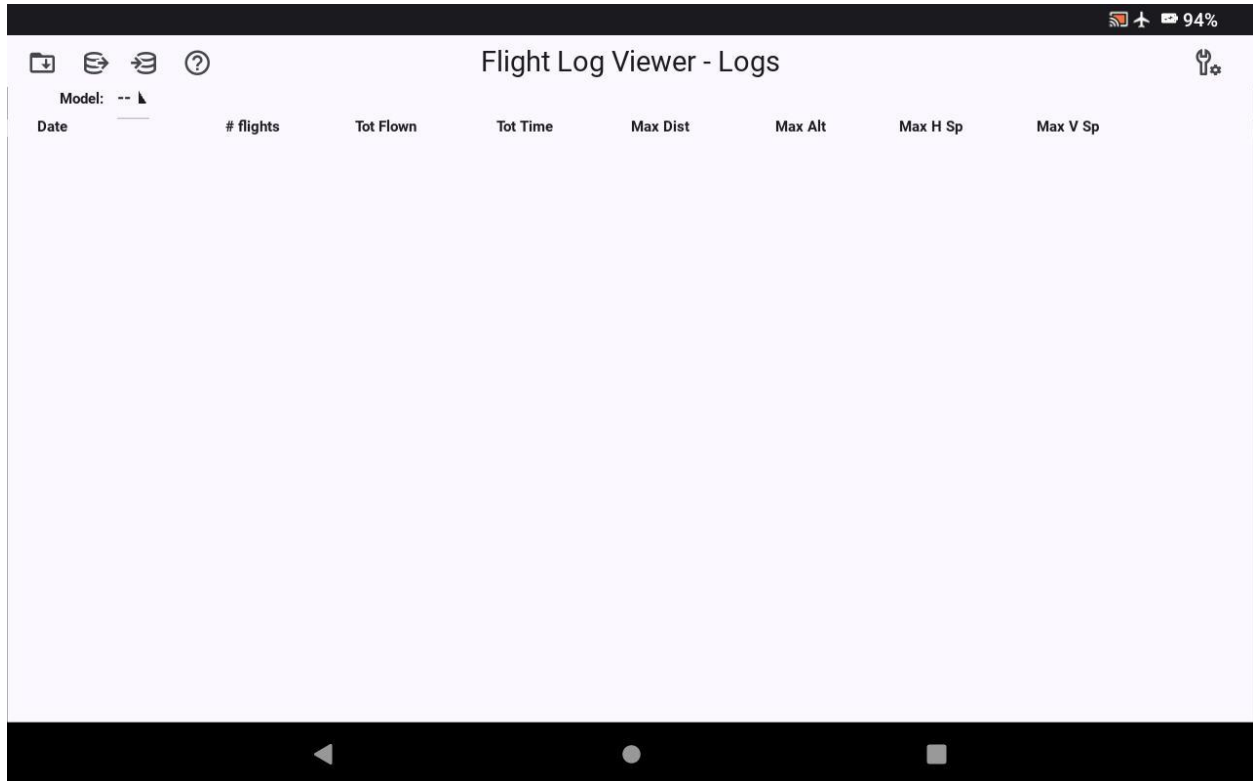
Mobile Device Section

Mobile Devices

The mobile device version of the Flight Log Viewer has a number of differences from the desktop version. They will be briefly touched on in this section.

Main Screen (Mobile)

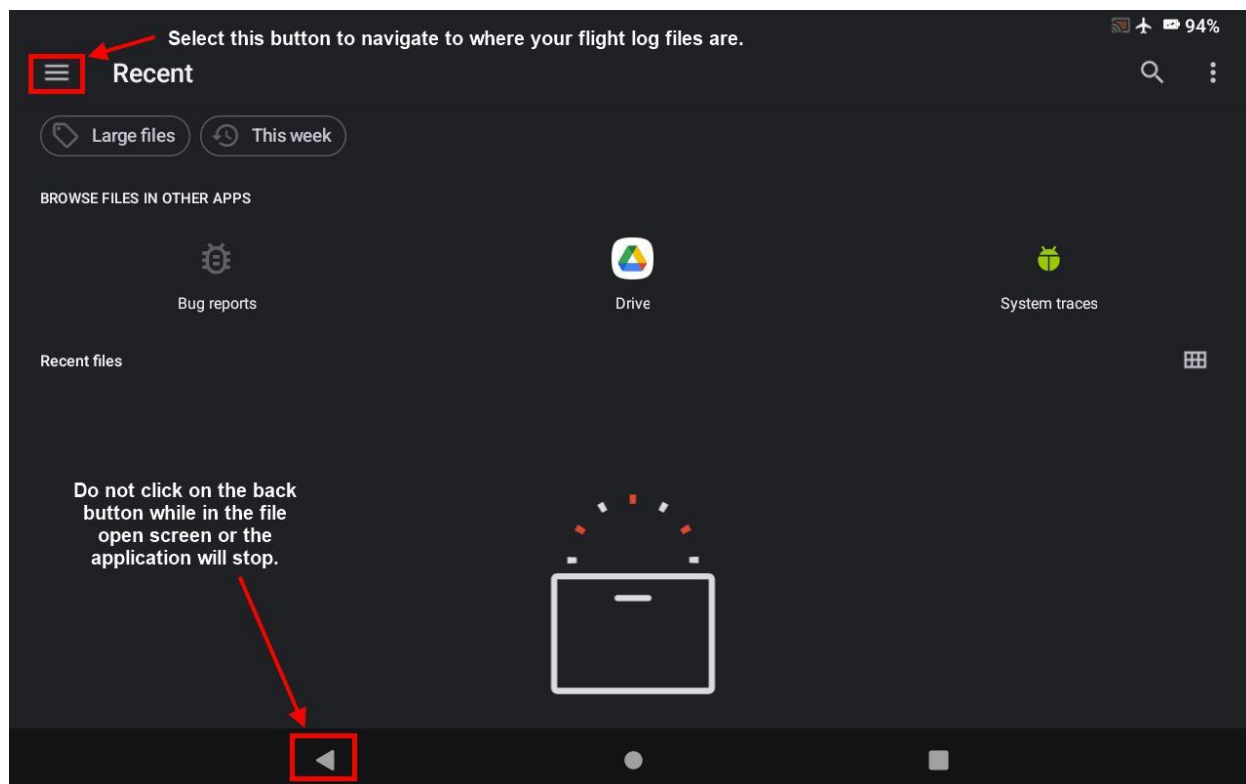
The main Flight Log Viewer screen looks basically the same as its larger counterpart.





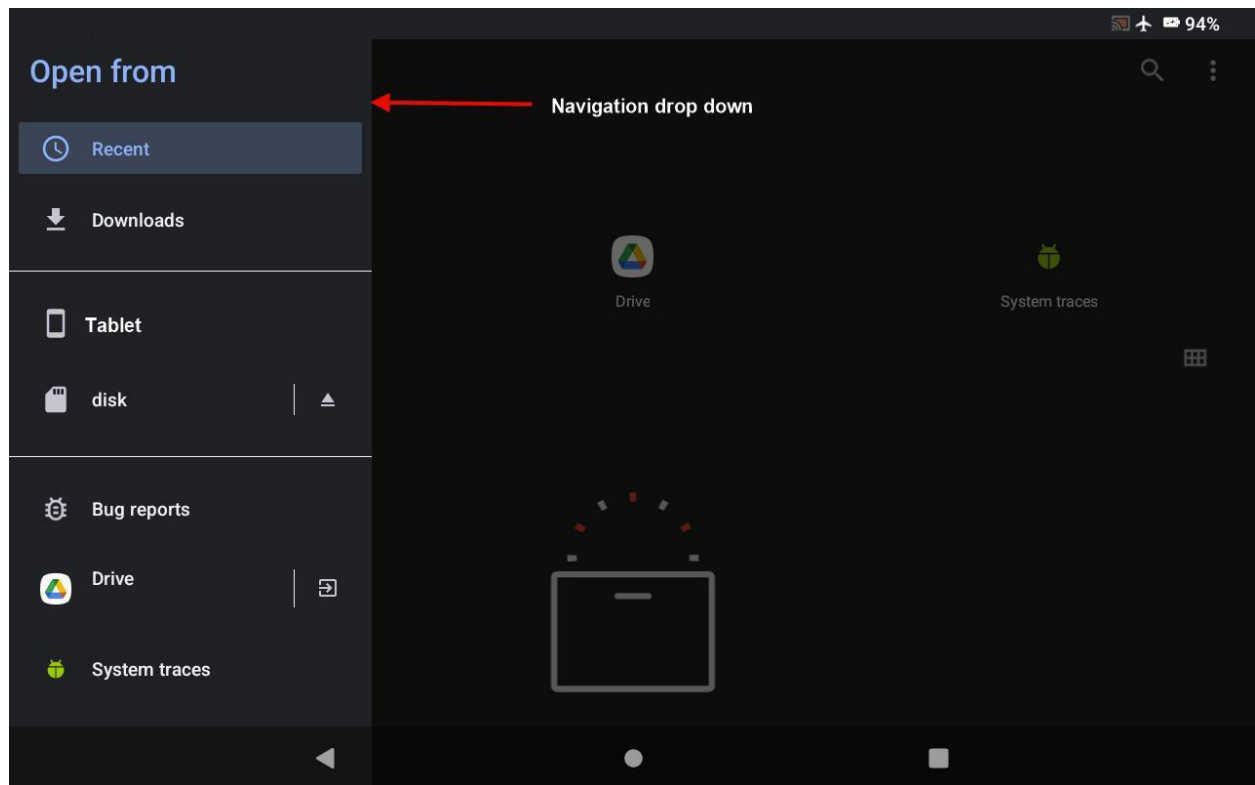
Load a Flight Log Button (Mobile)

Before you can load a flight log you need to create a file you can read. Flight logs are created by the Potensic application. For information on how to create and export those logs see the section “How to create a Log Export from Potensic Pro” section. Once this is done and you have saved one or more flight log files, you can select the button in the Flight Log Viewer. It brings up the window which will allow you to select the log zip file from wherever you saved it.

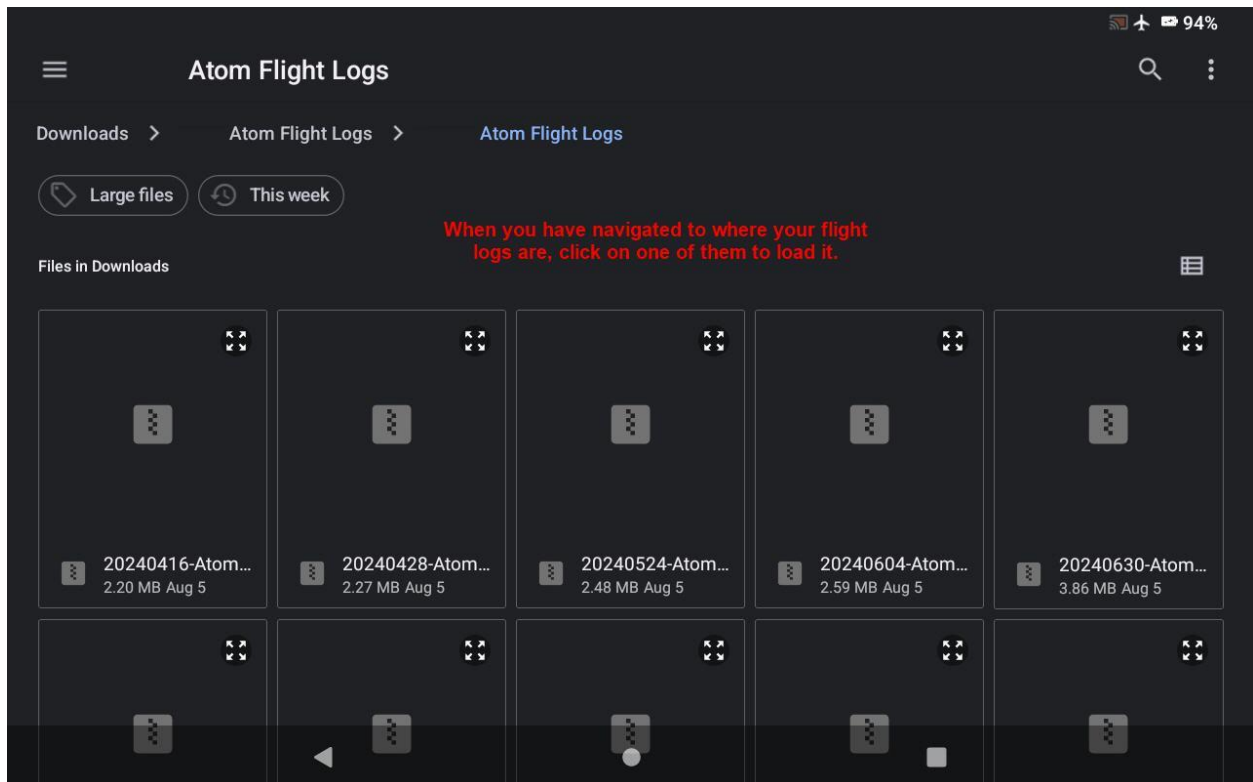


This window looks a bit different than the desktop counterpart. You can select folders or drives by clicking on the three-dash button as shown above. Please note that you should not click on the android back button at this point. If you do, the application will stop, and you will have to close it using standard android functionality (swipe out or application stop) and restart it.

When you open the navigation drop down you will see your list of available options. Select the one where you saved your flight log zip files.

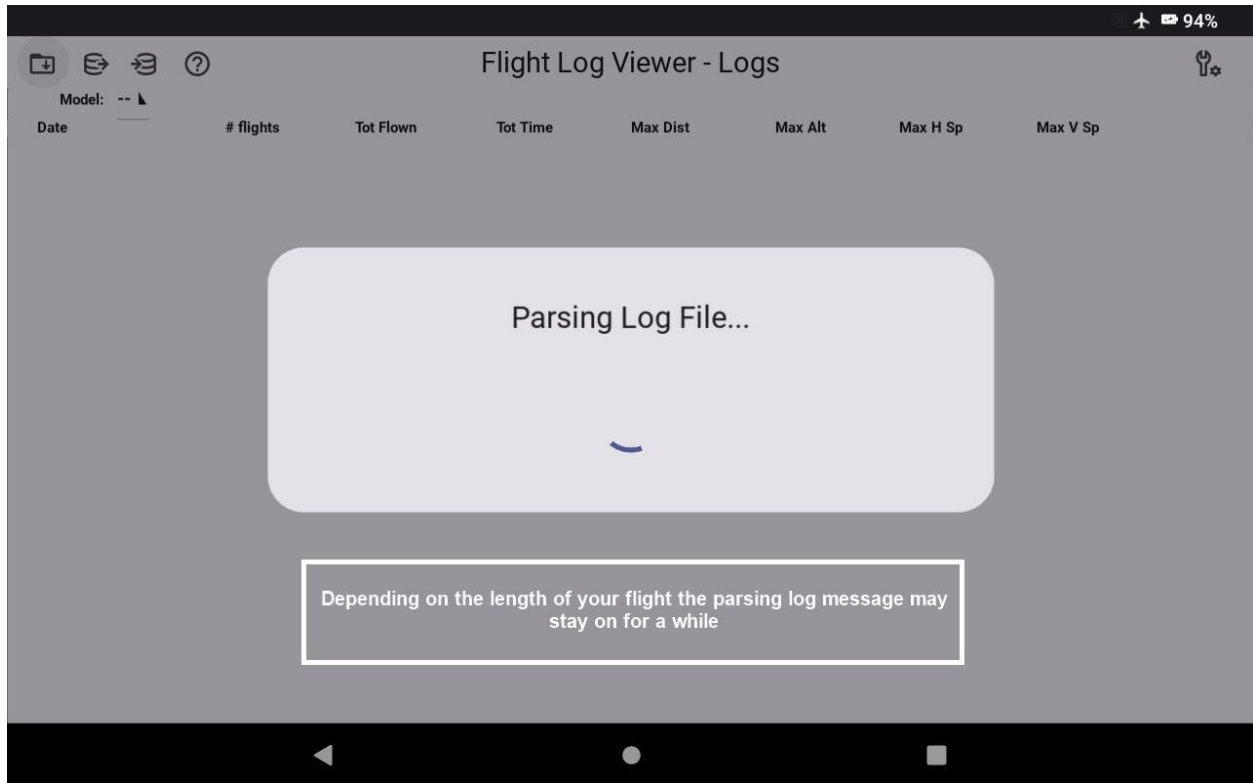


The log files will show up when you have navigated to their location. Select the log of your choice.



Parsing Speed

The log you choose may take a bit longer to load than it does in the desktop version. It all depends on how large the file is based on your flight.



Once the parsing is complete your flight log will appear.

The Flight Log Viewer Map (Mobile)

When you have selected a flight log for viewing it will bring up the Flight Log Viewer Map screen. The appearance of this screen will vary depending on which type of device you are using the flight log viewer on as well as which options you have chosen:



Unlike the desktop version, the mobile version does not have the flight gauges and some of the statistical information along the top.

The playback control buttons at the bottom of the map which are available to you will allow you to replay the flight. For a detailed description of their function please see the desktop section above, "The Flight Log Viewer Map."

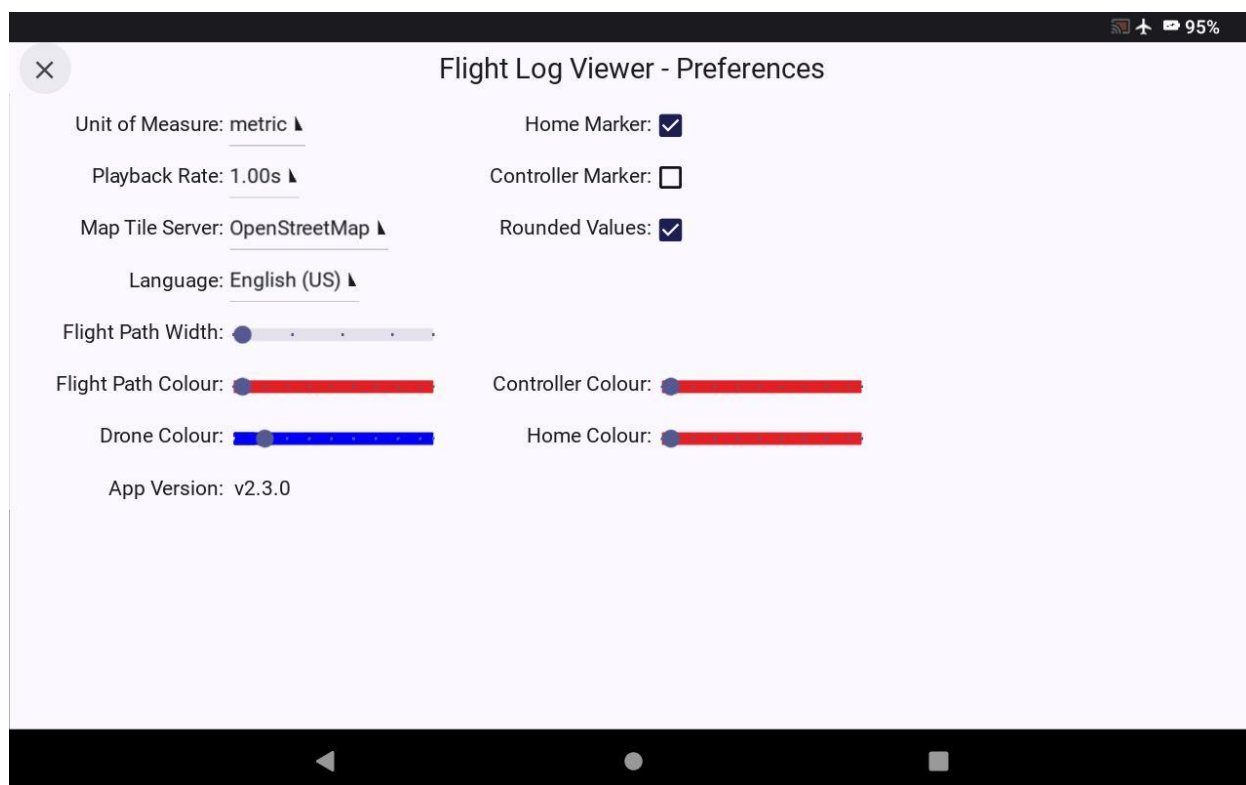


Display Preferences Screen Button (Mobile)

This button will take you to the Flight Log Viewer preferences screen.

Flight Log Viewer Preferences Screen (Mobile)

The preferences screen is where you can set several map options within the application.



Unit of Measure

You can select between “Imperial” and “Metric.”

Playback Rate

The playback rate can be adjusted between .125s and 2s. This value in combination with the map playback selection affects the overall speed of your playback.

Map Tile Server

The map tile server selections can be selected here. Available options are OpenStreetMaps, Google (Standard or Satellite) and Open Topo.

Flight Path Width

This slider controls the width of the line depicting your flightpath.

Flight Path Color

This slider controls the color of the line of the flight path.

Drone Color

This slider changes the color of the drone icon which travels along the path.

Home Marker

A checkbox in this selection will show the home launch point marker on the map.

Controller Marker

A checkbox in this selection will show the GPS location of your controller on the map.

Rounded Values

A checkbox in this selection will round the log value for use in the map playback. Note: If you toggle this value you will need to go back out of the Map view and reselect the flight log you wish to playback.

Language Preference

Sets the preferred displayed language. Note: You will need to restart the application for this setting to take effect.

Controller Color

This slider changes the color of the controller icon on the map if it is being displayed.

Home Color

This slider changes the color of the home launch point icon on the map if it is being displayed.

Epilog:

Flight Log Viewer is an open-source project for your enjoyment. If you have any recommendations for improvement, we welcome them. Have a nice flight!

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