

User guide to run the GUI

This guide covers two parts the first part will cover the extraction of data before using the GUI software the second part will be the operation of the software.

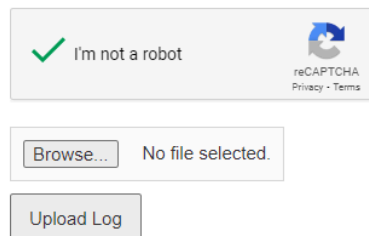
Extraction data

Assuming the user has already flown the drone and collected the flight path data.

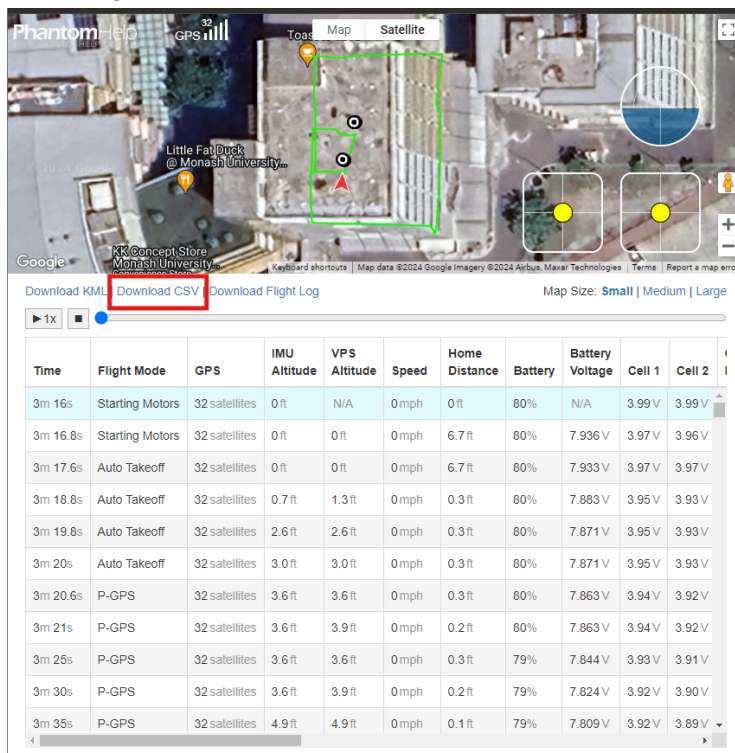
1. Load Flight Record to convert the flight path record TXT file (e.g: DJIFlightRecord_2024-06-20_[09-22-37].txt) to CSV (e.g: DJIFlightRecord_2024-06-20_[09-22-37].csv) data using tools like PhantomHelp log viewer (<https://www.phantomhelp.com/LogViewer/upload/>).

Upload Your Flight Log

Click the "Browse..." button below to select and upload your **DJI GO TXT** flight log (e.g. "DJIFlightRecord_2016-02-12_[15-33-10].txt") or your **Litchi CSV** flight log.



2. Download the CSV file and store it in an appropriate folder to be accessed when operating the GUI software.

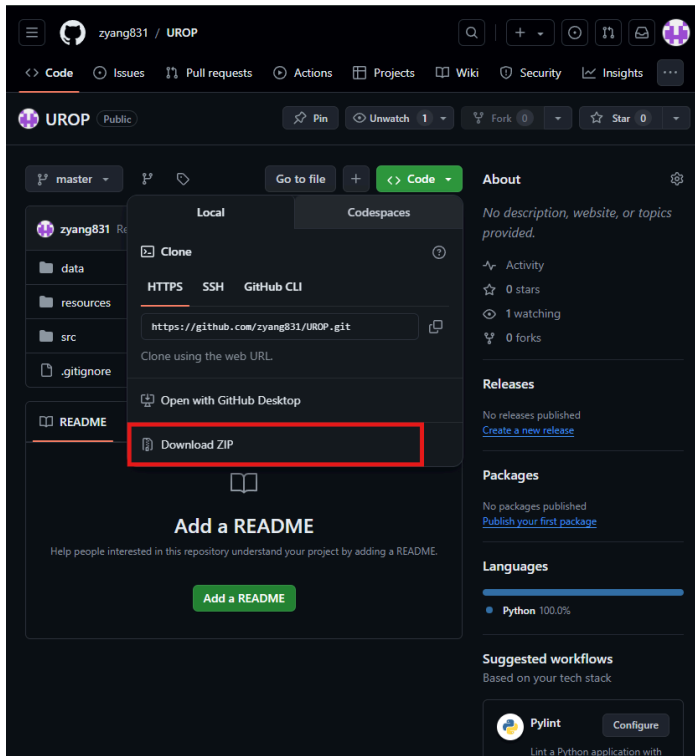


Download KML Download CSV Download Flight Log Map Size: Small | Medium | Large

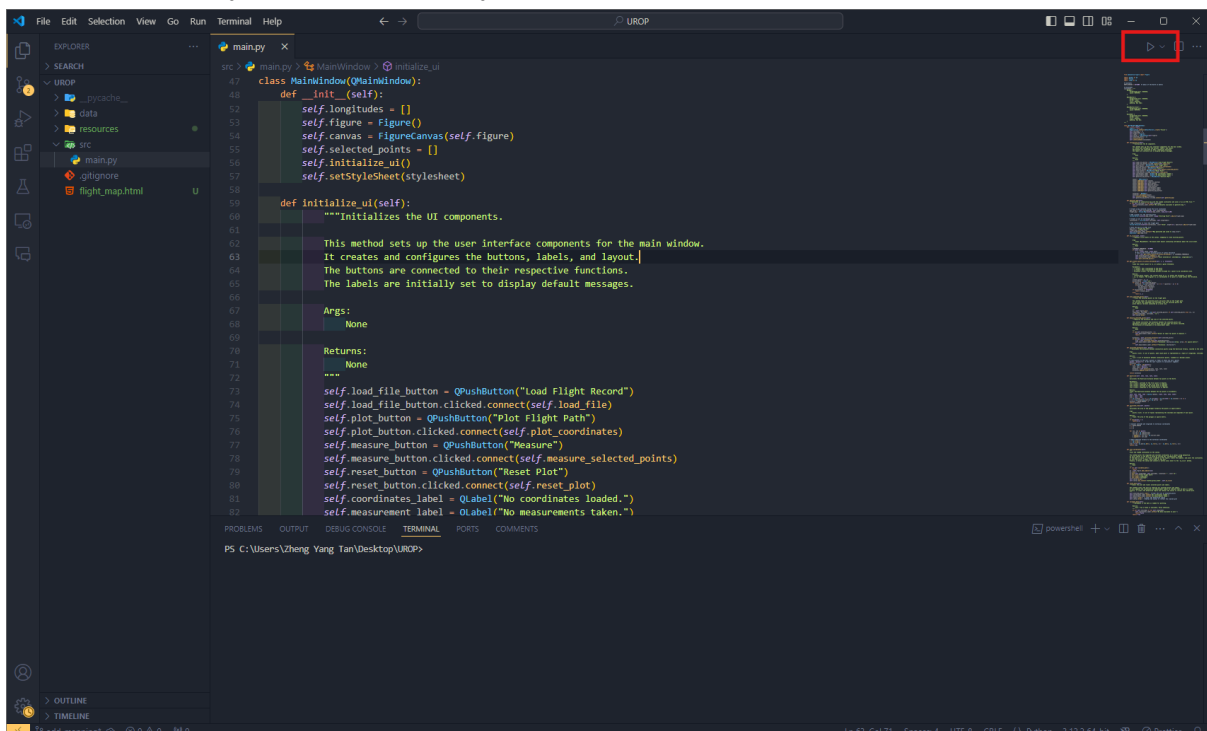
Time	Flight Mode	GPS	IMU Altitude	VPS Altitude	Speed	Home Distance	Battery	Battery Voltage	Cell 1	Cell 2
3m 16s	Starting Motors	32 satellites	0 ft	N/A	0 mph	0 ft	80%	N/A	3.99 V	3.99 V
3m 16.8s	Starting Motors	32 satellites	0 ft	0 ft	0 mph	6.7 ft	80%	7.936 V	3.97 V	3.96 V
3m 17.6s	Auto Takeoff	32 satellites	0 ft	0 ft	0 mph	6.7 ft	80%	7.933 V	3.97 V	3.97 V
3m 18.8s	Auto Takeoff	32 satellites	0.7 ft	1.3 ft	0 mph	0.3 ft	80%	7.883 V	3.95 V	3.93 V
3m 19.8s	Auto Takeoff	32 satellites	2.6 ft	2.6 ft	0 mph	0.3 ft	80%	7.871 V	3.95 V	3.93 V
3m 20s	Auto Takeoff	32 satellites	3.0 ft	3.0 ft	0 mph	0.3 ft	80%	7.871 V	3.95 V	3.93 V
3m 20.6s	P-GPS	32 satellites	3.6 ft	3.6 ft	0 mph	0.3 ft	80%	7.863 V	3.94 V	3.92 V
3m 21s	P-GPS	32 satellites	3.6 ft	3.9 ft	0 mph	0.2 ft	80%	7.863 V	3.94 V	3.92 V
3m 25s	P-GPS	32 satellites	3.6 ft	3.6 ft	0 mph	0.3 ft	79%	7.844 V	3.93 V	3.91 V
3m 30s	P-GPS	32 satellites	3.6 ft	3.9 ft	0 mph	0.2 ft	79%	7.824 V	3.92 V	3.90 V
3m 35s	P-GPS	32 satellites	4.9 ft	4.9 ft	0 mph	0.1 ft	79%	7.809 V	3.92 V	3.89 V

Operating the GUI software

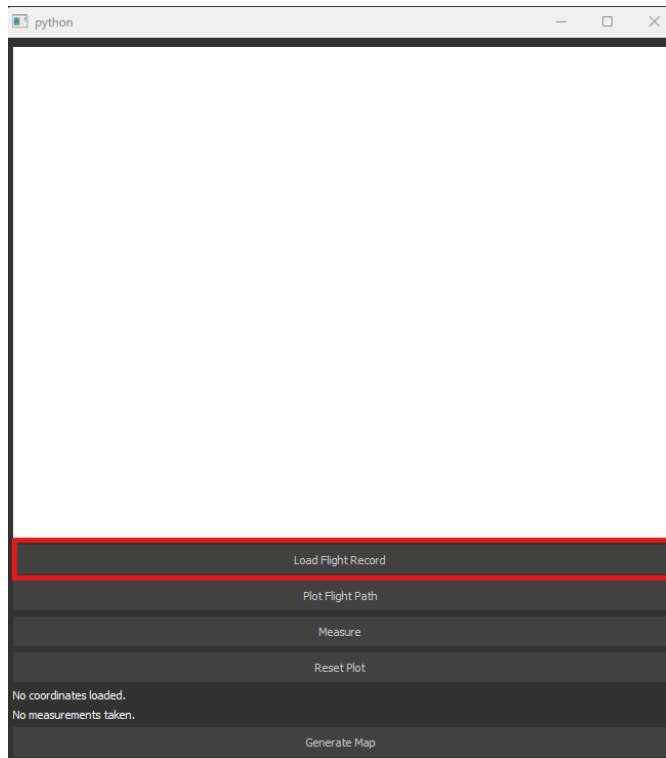
The GUI software files can be accessed from <https://github.com/zyang831/UROP>.



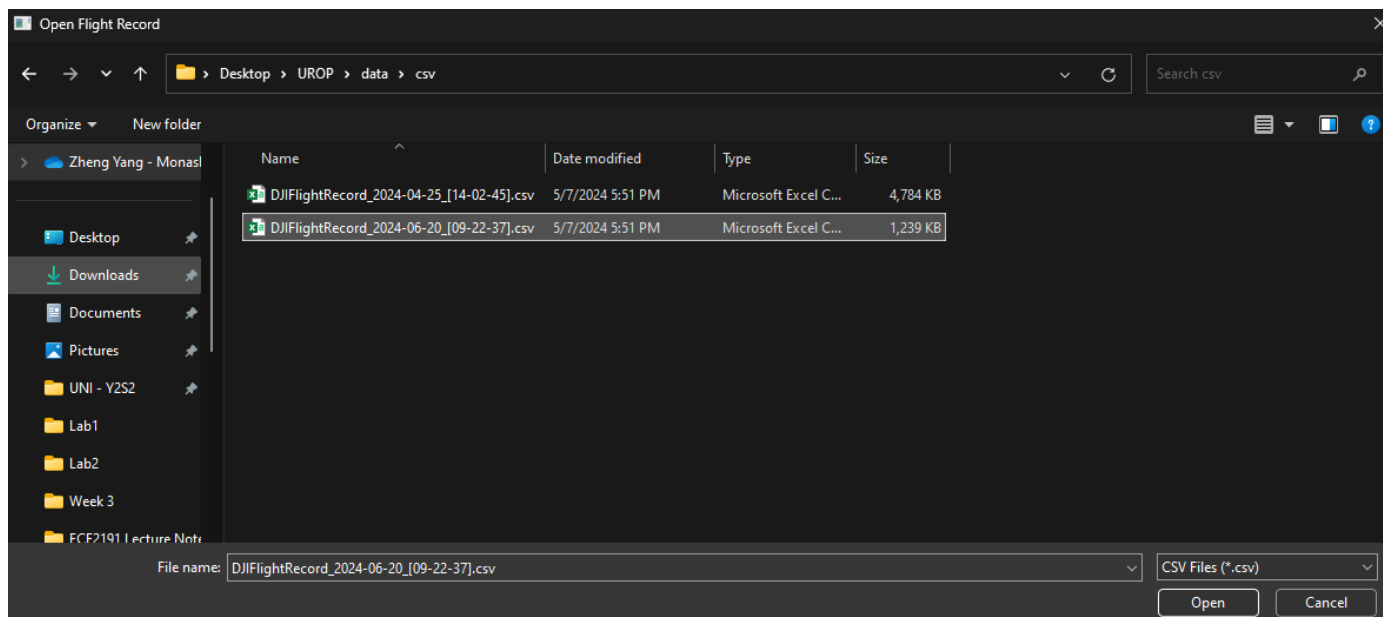
1. Run the Python Script main.py



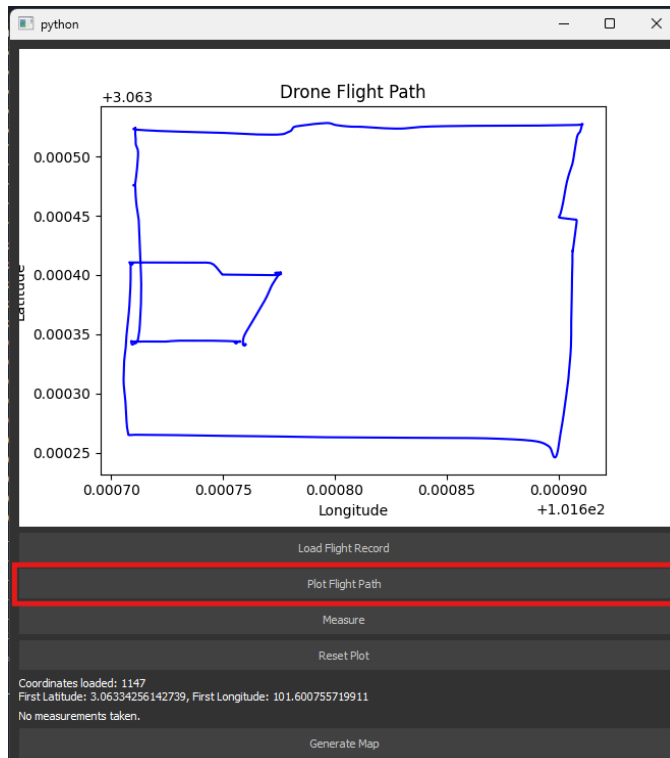
2. Click on the “Load Flight Record” button and input



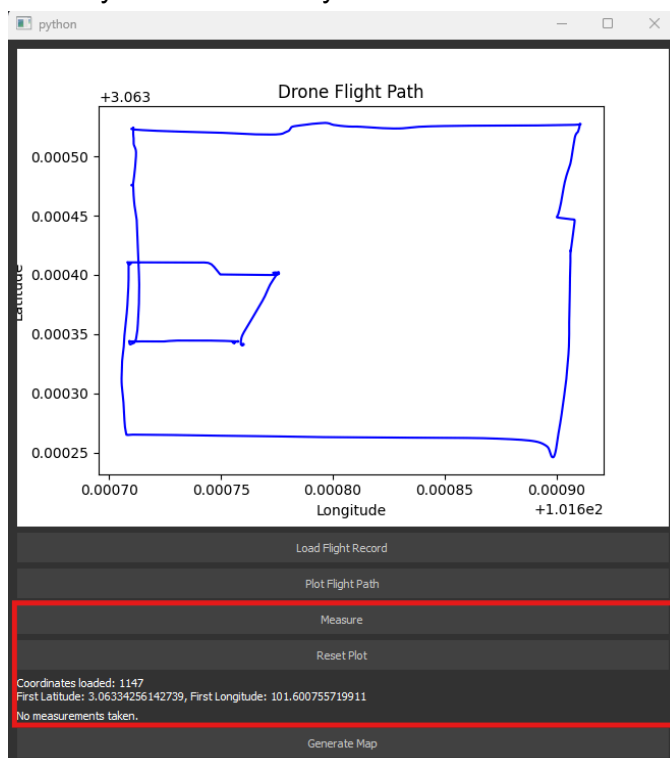
3. Load the extracted CSV file



4. Click on “Plot Flight Path” and the flight path will be shown on the main window



5. Click on “Measure” and select the area you wish to measure. Click on “Reset Plot” if you wish to redo your measurements.



- After you have selected the area, click on “Measure” again to get the area and side measurements

