

Avionics Side Launch Steps

Setup

Rocket Side:

1. Ensure telemetry, and GPS are connected
2. Plug in battery power
3. Give several seconds for boot-up
4. After connecting to Mission Planner, insert the Avionics Bay into the rocket body.

Computer Side:

1. Plug in Telemetry radio to USB port
2. Open Mission Planner
3. Select correct COM Port and Baud Rate
4. Click "Connect"
5. Wait for connection to finalize
6. Once connection finalizes, ensure all parameters are correct

Arming/Disarming

1. Go to the "Data"
2. Go to the "Actions" Tab in the bottom left section.
3. Click "Force Arm"
4. It is normal to get errors or warnings, you can select to "Force Arm"
 - a. The main warning to be wary of is lack of satellites, as this will affect your data results.
5. Once you read "Armed" in the top left display, (The armed will then disappear after a few seconds) you are now collecting data and can launch.
6. If you go back to "quick" you can then look at real-time data being received.
 - a. If you want to change one of the data values, double click the number of the variable you want to change
 - b. Satellite count is listed under "satcount" so just select the check box for that
7. With the way the parameters should be set, we should still record data even if we go out of connection range.
8. Once the rocket has landed bring it back until you are once again receiving data
9. Go back to the "actions" tab and select "arm" again. The system should then disarm and the log should be complete.

Confirming Log

1. In the data tab, go to the "Dataflash Logs" small tab in the bottom left (might have to scroll to the right several times)
2. Click "Download DataFlash Log Via Mavlink"
3. This should populate the list of current saved logs onboard the Navio2. So you can use this to sort of confirm you have a new log after a launch if needed.

- a. **Note: Do not try to download from here, it takes forever.**
4. From here, if you are finished with launches you can disconnect power from the Avionics system.
5. You can now move forward with data extraction and analysis.