

To obtain the MAT-file, Simulink® Coder™ must be installed on the host computer.

Model Configuration:

1. Go to Simulation > Model Configuration Parameters > Hardware Implementation, In Advanced Parameters (May be hidden in the form of three dots). Check the box in front of “Use Simulink Coder Features”. Hit OK.
2. Re-open Model Configuration Parameters. Now you will get Code Generation on the left panel.
3. Go to Code Generation > Interface > Advanced Options, check MAT-file logging. Hit OK.

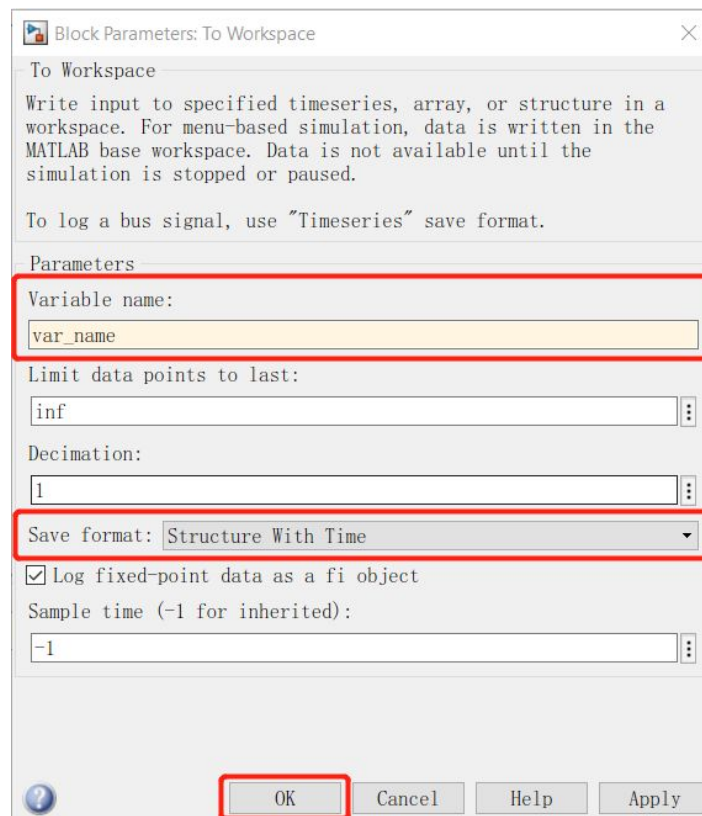
The MAT-log will be automatically generated after each flight.

Settings to specify a signal to be logged:

There are two block options that can create MAT-log during flight.

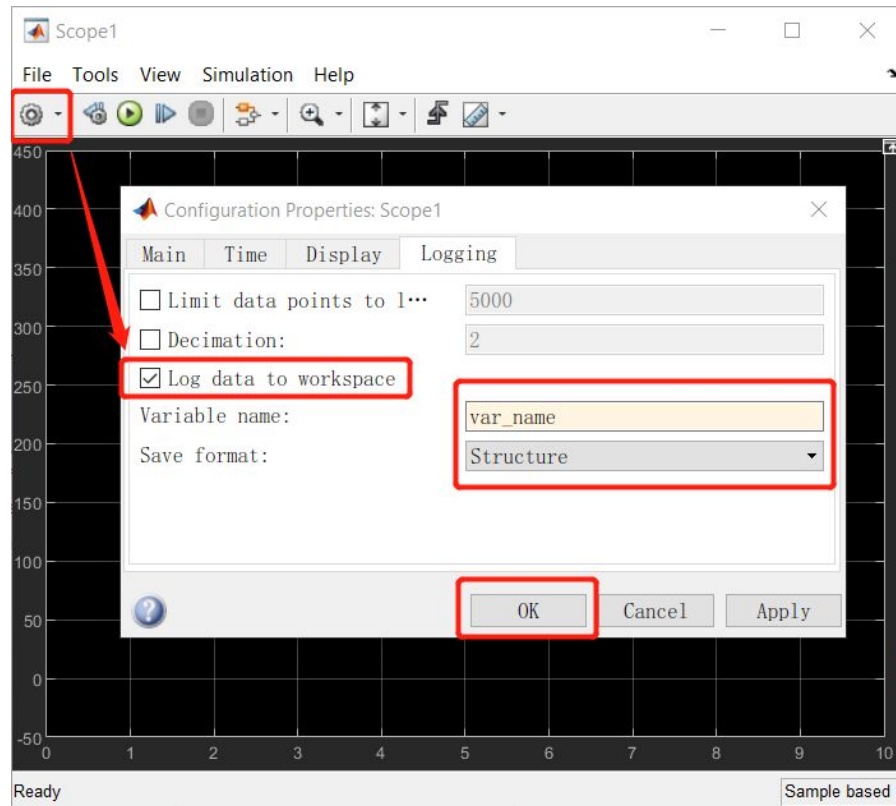
1. To Workspace

- a. Create a “To Workspace” block and connect it to the signal that you want to log.
- b. Double-Click the block.
- c. Specify a variable name for the logged data.
- d. Set the Save format to Structure or Structure With Time.
- e. Click OK.



2. Scope

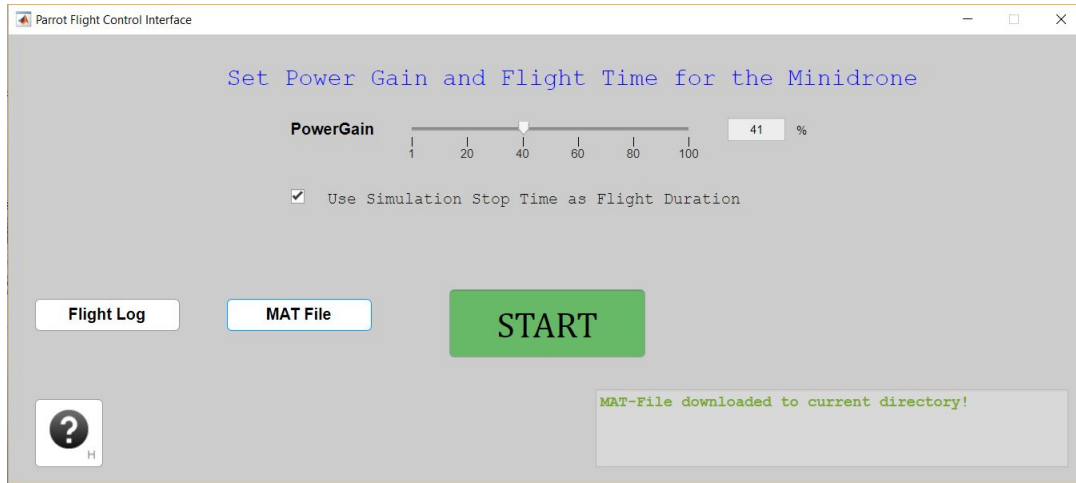
- Create a “Scope” block and connect it to the signal that you want to log.
- Double-Click the block.
- Click the gear on the top-left corner.
- Check Log data to workspace.
- Set a Variable name
- Set the Save format to Structure or Structure With Time.
- Click OK.



- For some reasons, the Parrot Mambo cannot save the log in array form for unknown reasons.
- You can also log data with a output port with similar settings.

Download MAT-log:

1. When the flight ends, click the button “MAT File”. The MAT-log will be saved to the **current folder** you are opening instead of the folder you save your simulink model.



2. In MATLAB > Current Folder, double click RSdata.mat and load the data to workspace.

Links:

Configure Model to Log Signals on the Hardware

<https://www.mathworks.com/help/supportpkg/beagleboneblue/ug/configure-model-to-log-signals-on-the-hardware.html>