

AIS ML GUI Instructions (Raspberry pi)

(Note: Prior to using, you will likely need to change file paths)



1) Click “Select Ship File”

a) Select a daily CSV file from hard drive

i) This will create three separate files:

- (1) {date of ship file}_inputs.npy
- (2) {date of ship file}_outputs.npy
- (3) {date of ship file}_MMSIs.npy

ii) Three pieces of info will display:

- (1) Status: (When data prep is done it will display “Done!”)
- (2) Count: (will display number of ships it was able to prepare)
- (3) Types?: (will display “True” if ship types were found, else it will display “False”)

(a)Note: if no ship types were found, the {date of ship file}_outputs.npy will only contain an array filled with “None”

2) Click “Inputs”

a) Select {date of ship file}_inputs.npy

3) Click “Types”

a) Select {date of ship file}_outputs.npy

4) Click “MMSIs”

a) Select {date of ship file}_MMSIs.npy

5) Click “AIS Model”

a) This will run the Tensorflow Lite Model

i) If suspicious ships were found it will display “Yes!” in “Suspicious Ships?” field, as well as store a text file containing all the ships flagged as suspicious

6) Plot MMSI

a) Select an MMSI number from the drop down list

b) Select “Plot” To display a pie chart containing the percentages of confidence for the ship