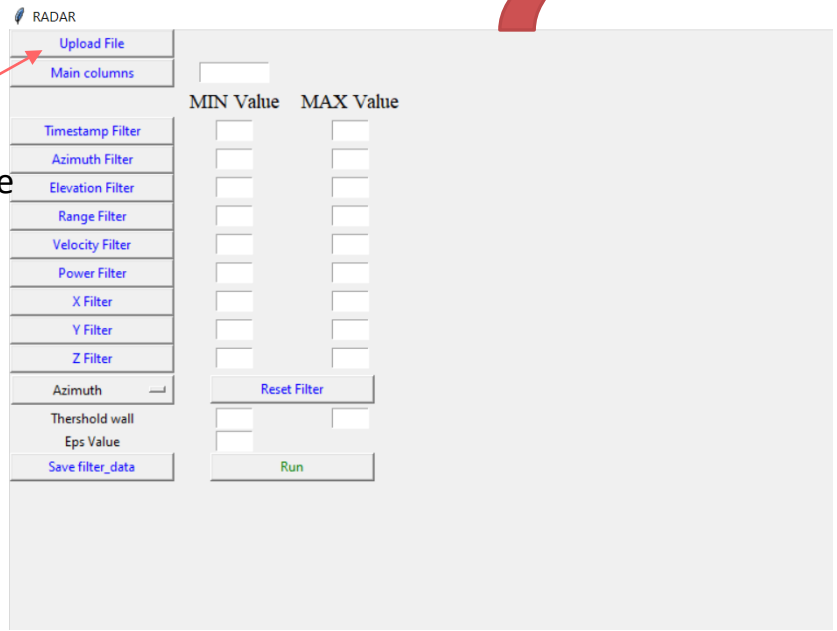
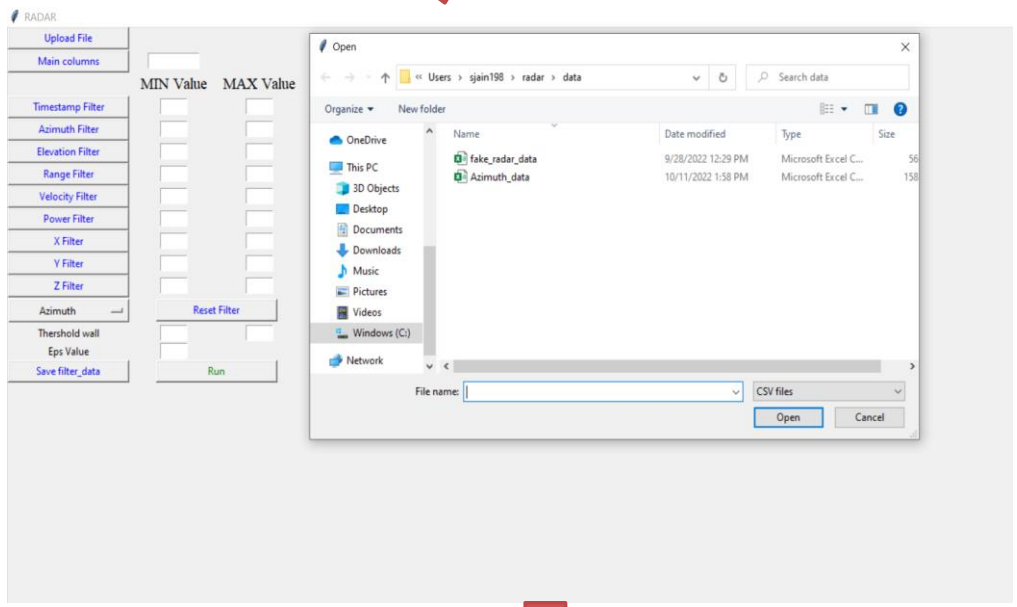
Install all the requirements using $ pip install -r requirements.txt

```
[1000 rows x 9 columns]
PS C:\Users\sjain198\radar> python -u "c:\Users\sjain198\radar\radargui.py"
```

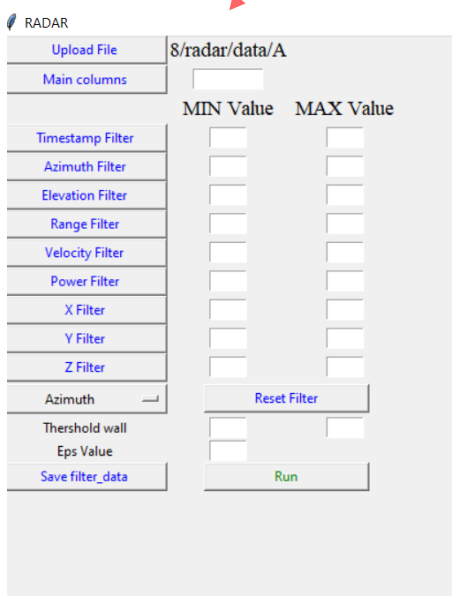
Run the radargui.py
Script into the terminal



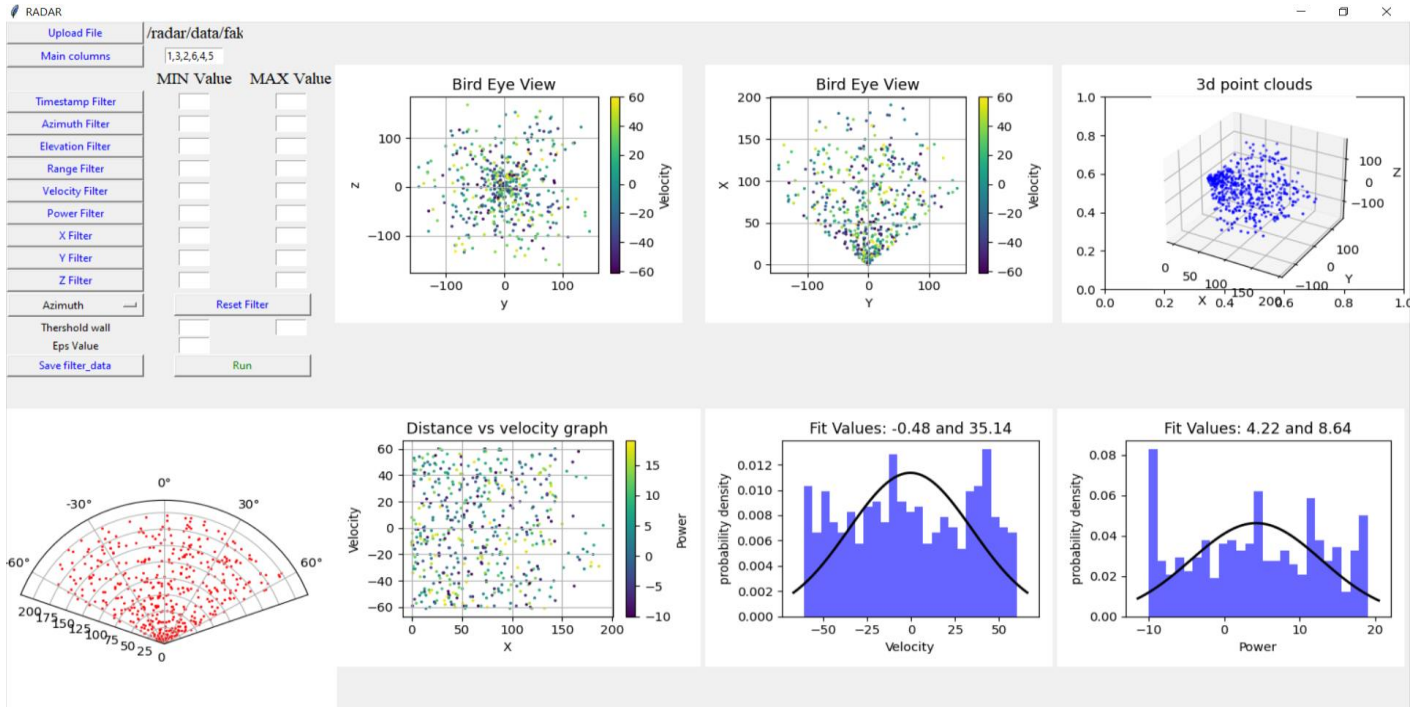
Upload data file

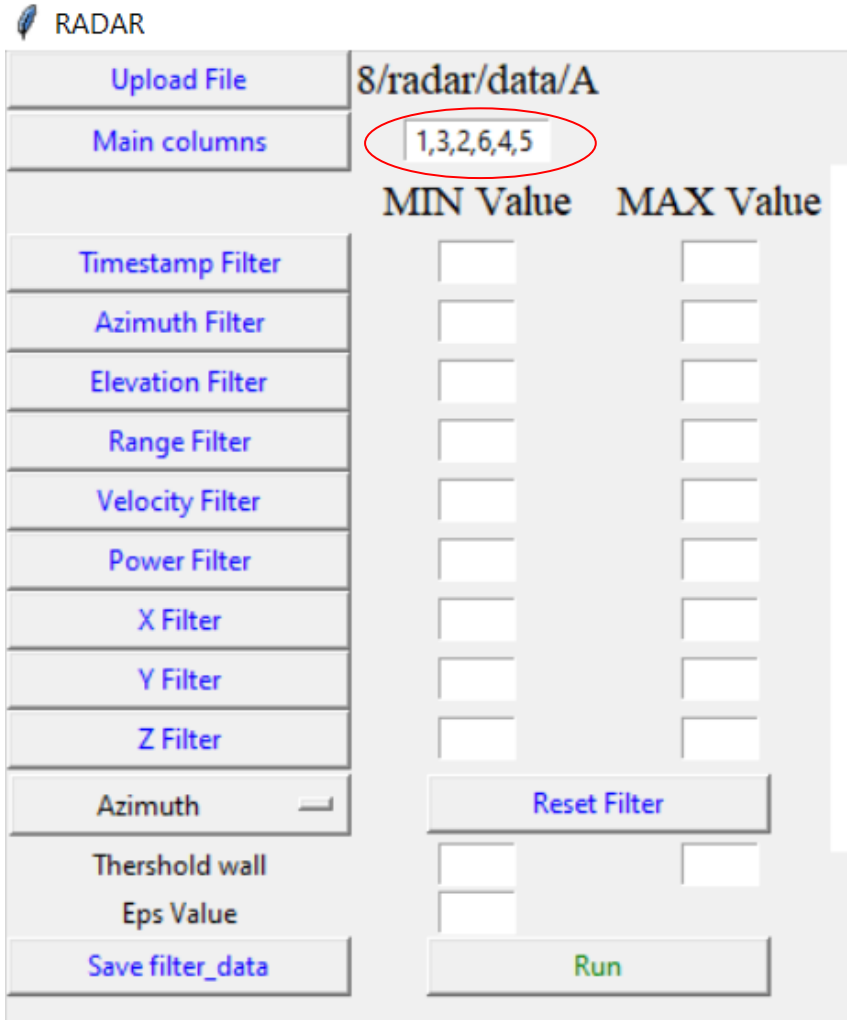


File path will pop up here after successfully upload



- To get main columns here inputs are the number separated by ',' contain original data frame column in order to [timestamp, Azimuth, Elevation, range, range-rate, power]
  example: original data frame column name -> [timestamp, Elevation, Azimuth, range-rate, power, range, x, y, z] input would be 1,3,2,6,4,5
- This help to rearrange the column and remove the extra column
- We needed this arrangement because the data columns differ from company to company.

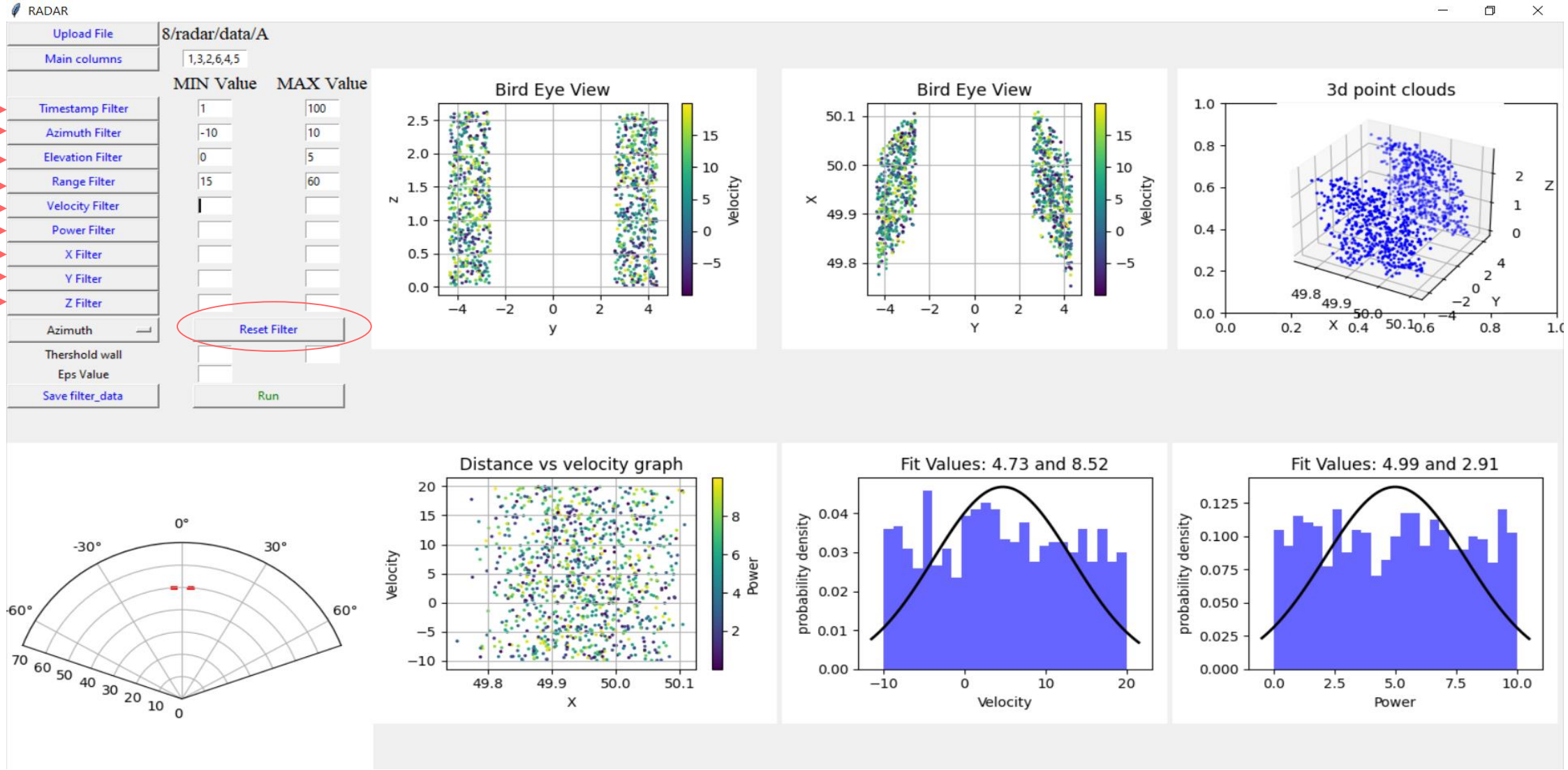




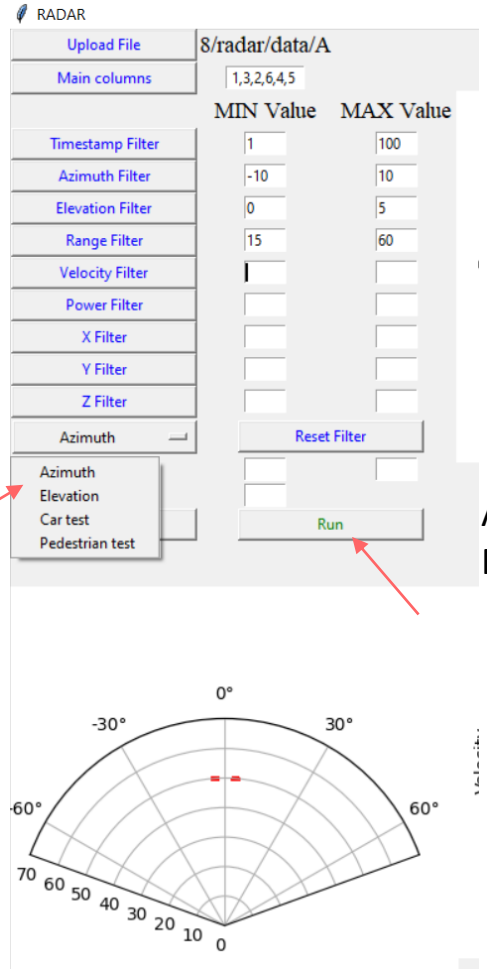
After Click the Main columns Button

Use the filter buttons to achieve the desired target threshold

The reset filter button here help to remove all the applied filter and make the data back to original

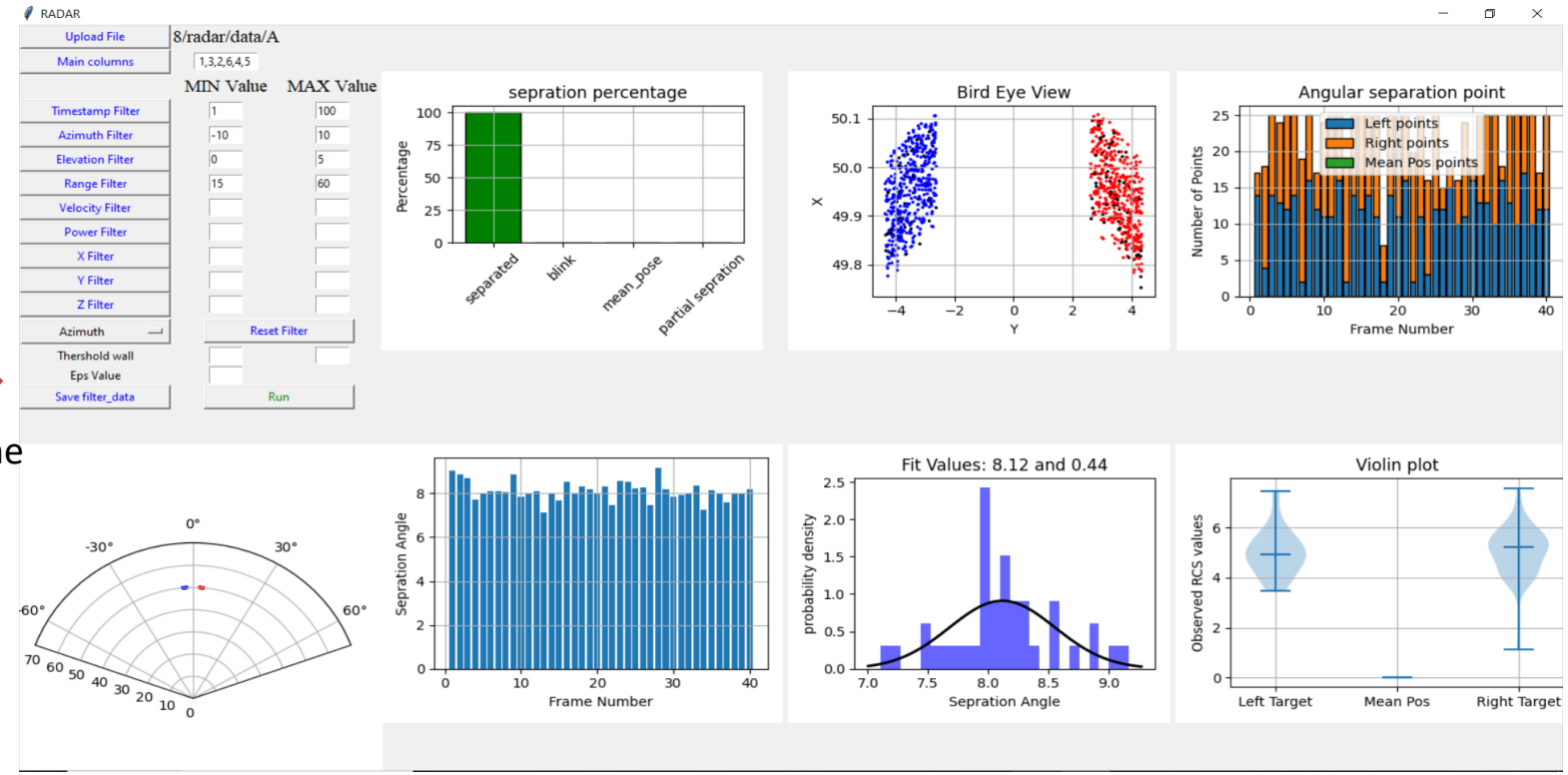


- Select the test
- Click the Run



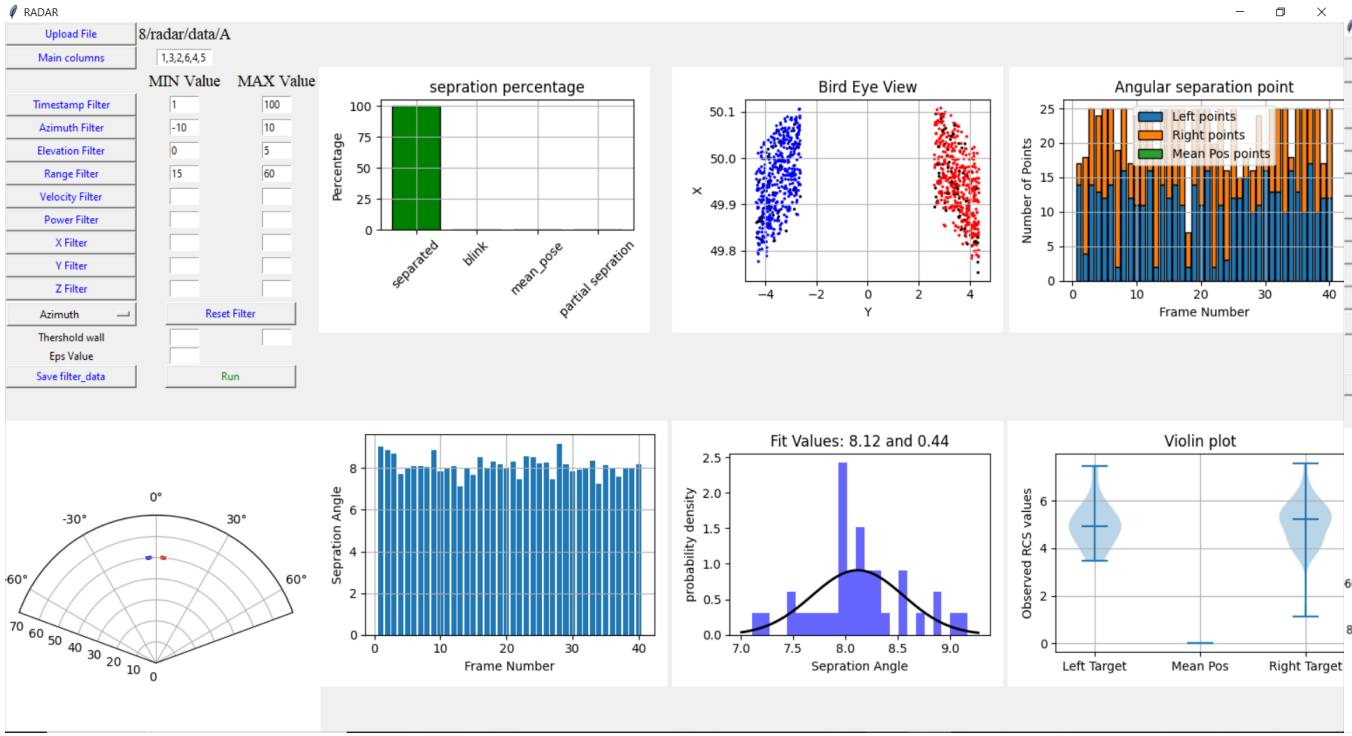
After Click the Run Button

- The default algorithm is set to tune the eps* value that create only one cluster per target. we can also enter the eps value and play with it .
- Default Threshold wall** value is set to ± 0.05 from center of graph, we can also adjust the threshold wall value



***eps:** specifies how close points should be to each other to be considered a part of a cluster.
****Threshold wall** is the wall that separate the two targets and helps to determine the mean pose if value lie inside the threshold value

Sample Azimuth Separation Test case



Sample Elevation Separation Test case