

Read Navigation from Parrot Mambo

Version: June 16, 2019

Reference

[Read and Plot Navigation data using MATLAB® Support Package for Parrot® Drones](#)

Preamble

Using WiFi, connect to the mini drone, then create a drone object:

```
p = parrot();
```

Take-off

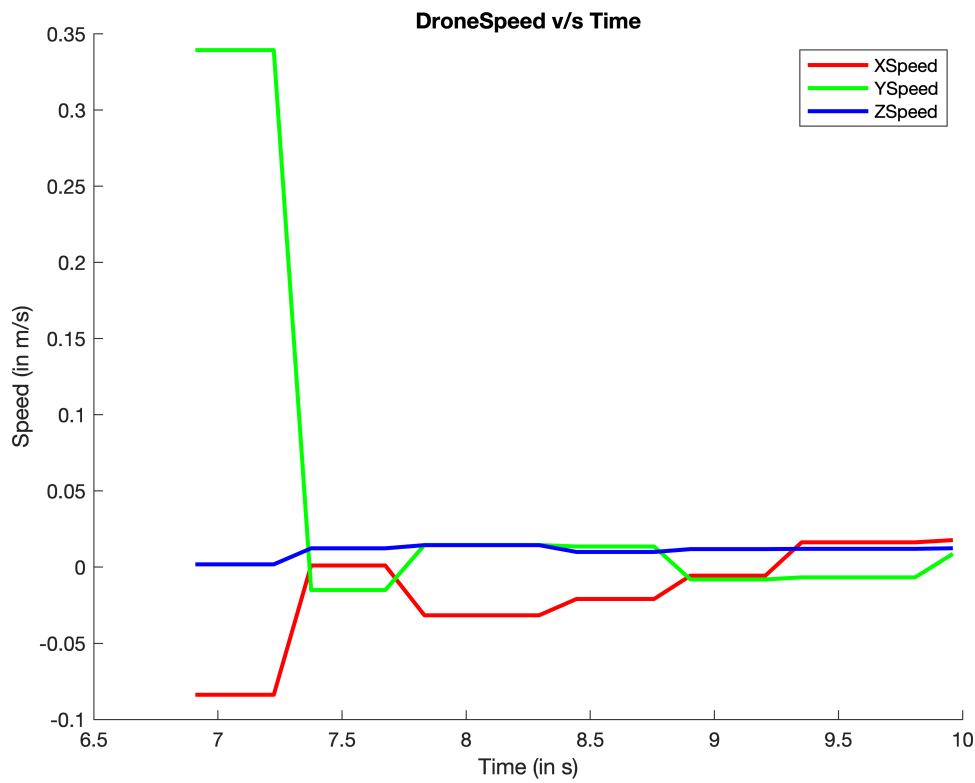
```
takeoff(p);
```

Create an animated figure:

```
f = figure;
hx = animatedline('Color', 'r', 'LineWidth', 2);
hy = animatedline('Color', 'g', 'LineWidth', 2);
hz = animatedline('Color', 'b', 'LineWidth', 2);
title('DroneSpeed v/s Time');
xlabel('Time (in s)');
ylabel('Speed (in m/s)');
legend('XSpeed', 'YSpeed', 'ZSpeed');
```

Plot navigation data:

```
flightTime = 10;
tObj = tic;
data = [];
% fly along a circular path
move(p, 5, 'Roll', deg2rad(4), 'RotationSpeed', deg2rad(120));
while(p.BatteryLevel > 10 && toc(tObj) < flightTime)
    % move(p, 'Pitch', deg2rad(-4), 'Roll', deg2rad(4));
    takeoff(p);
    speed = readSpeed(p);
    tStamp = toc(tObj);
    addpoints(hx, tStamp, speed(1));
    addpoints(hy, tStamp, speed(2));
    addpoints(hz, tStamp, speed(3));
    data = [data ; [tStamp speed] ];
    drawnow;
    pause(0.1);
end
```



Land:

```
land(p);
```

Clean-up:

```
clear p;
```

Save data to file:

```
fileID = fopen('realdata6.txt','w');  
fprintf(fileID,'%6.8f %6.8f %6.8f %6.8f\n',data);  
fclose(fileID)
```

```
ans = 0
```