

# plot\_trajectories

October 12, 2016

```
In [54]: from matplotlib import pyplot
         %matplotlib inline
         import numpy as np
         from flowtracks.io import trajectories_ptvis

In [55]: inName = '../res/ptv_is.%d'
         trajects = trajectories_ptvis(inName, traj_min_len=5, xuap=False)

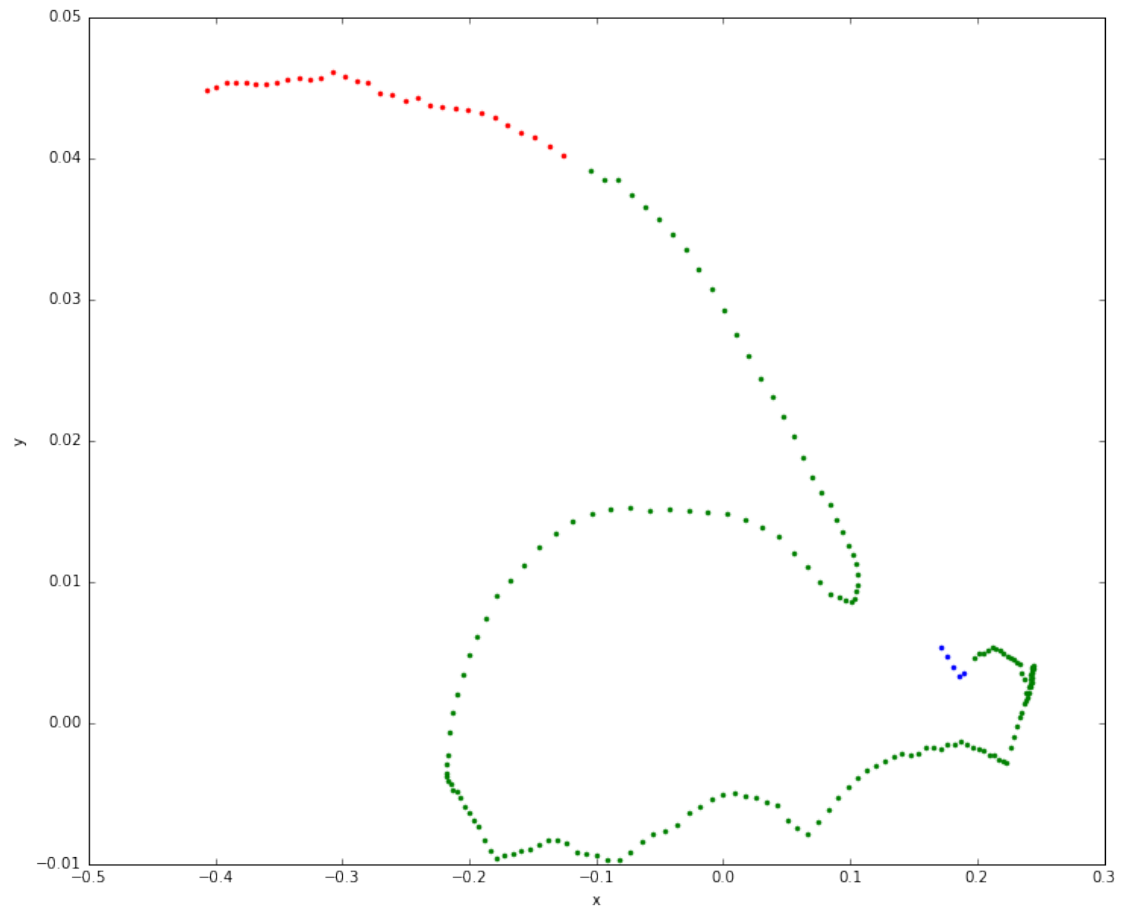
In [56]: trajects

Out[56]: [<flowtracks.trajectory.Trajectory at 0x125504f50>,
         <flowtracks.trajectory.Trajectory at 0x12558f050>,
         <flowtracks.trajectory.Trajectory at 0x12558f0d0>]

In [57]: pyplot.figure(figsize = (12, 10))

         for traj in trajects:
             pyplot.plot(traj.pos()[ :,0], traj.pos()[ :,1], '.')

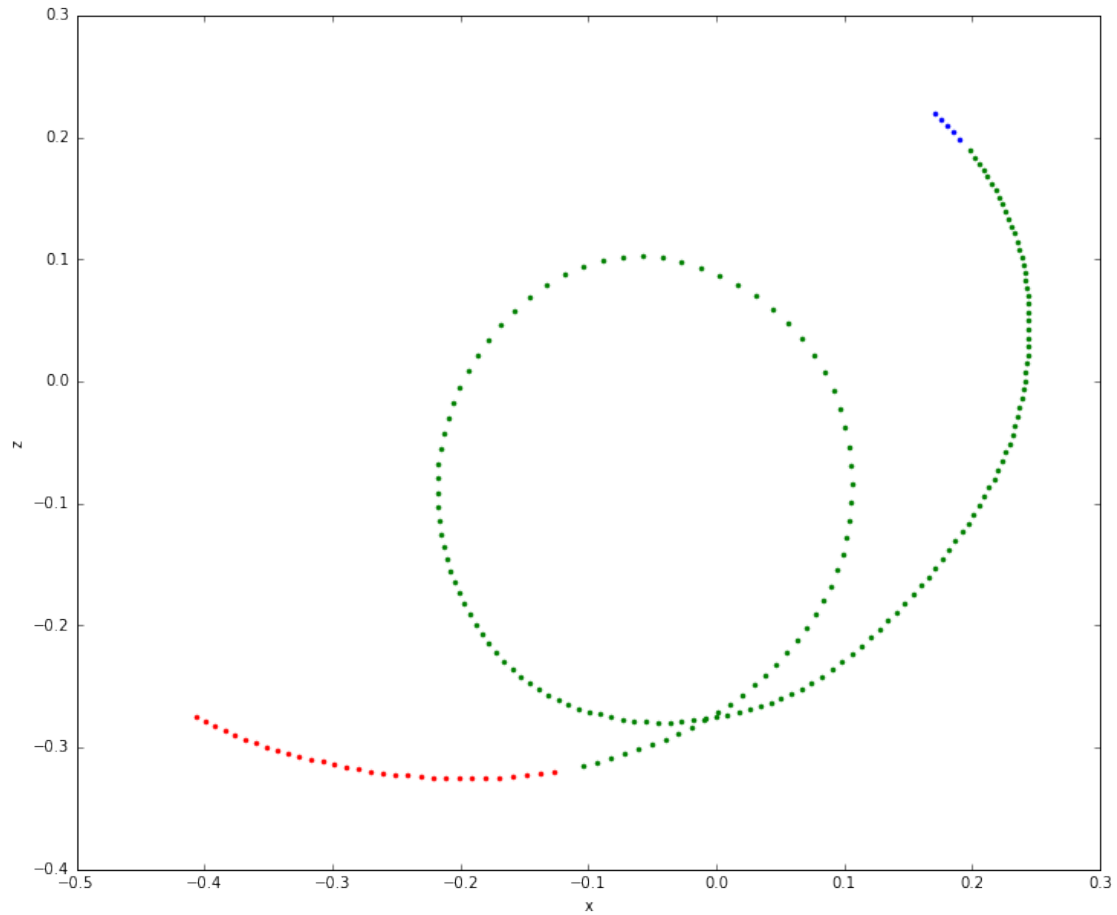
         pyplot.xlabel('x')
         pyplot.ylabel('y')
         pyplot.show()
```



```
In [58]: pyplot.figure(figsize = (12, 10))

        for traj in trajects:
            pyplot.plot(traj.pos()[0], traj.pos()[2], '.')

        pyplot.xlabel('x')
        pyplot.ylabel('z')
        pyplot.show()
```



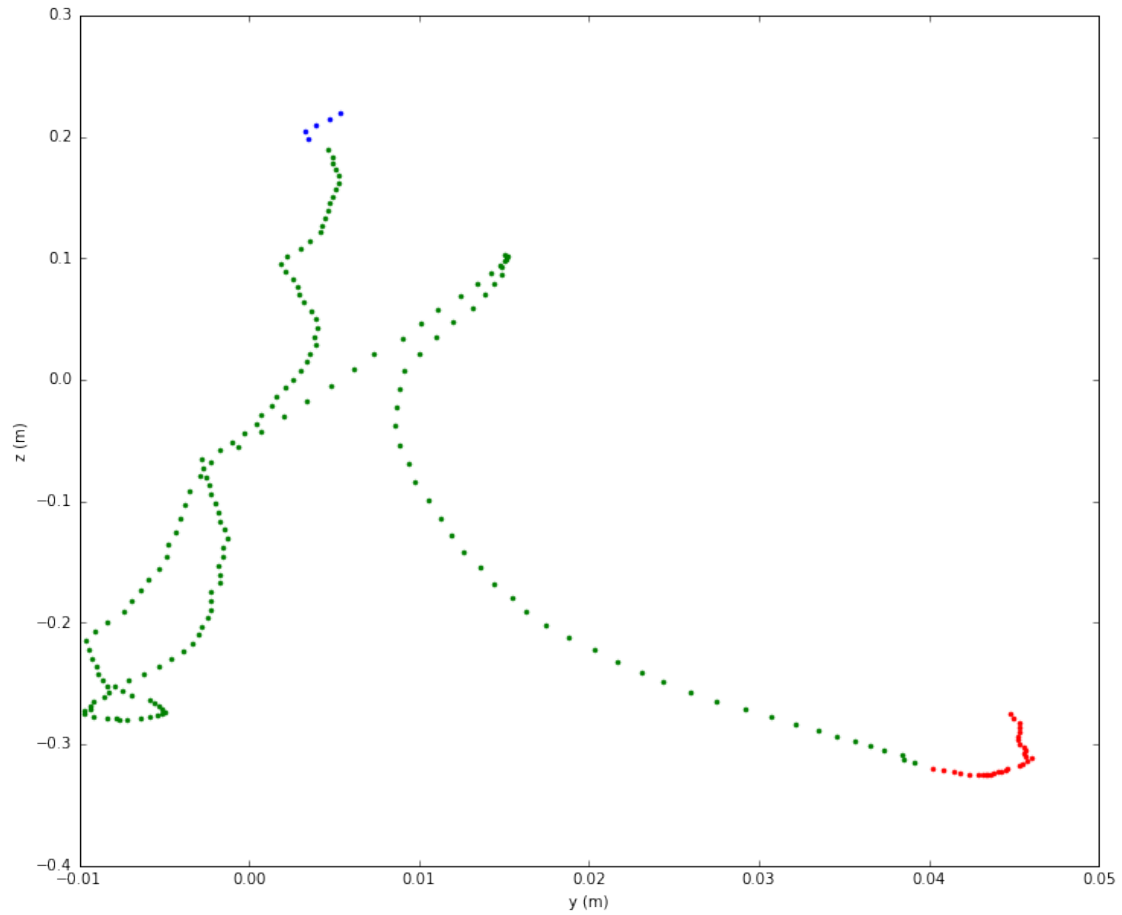
```
In [59]: pyplot.figure(figsize = (12, 10))

        for traj in trajects:
            pyplot.plot(traj.pos()[ :,1], traj.pos()[ :,2], '.')
```

pyplot.xlabel('y (m)')

pyplot.ylabel('z (m)')

pyplot.show()



```
In [60]: # the result is in meters
         trajects[0].pos()[0]
```

```
Out[60]: array([ 0.170964,  0.005328,  0.219507])
```

```
In [61]: # the result was stored in mm
         np.loadtxt('../res/ptv_is.10095', skiprows=1)
```

```
Out[61]: array([ -1.    ,    0.    ,  170.964,    5.328,  219.507])
```

```
In [ ]:
```