[8]
```
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
import flowtracks
from flowtracks import io
```

[5]
```
%ls test_data
```

```
ptv_is.101000     trajPoint.101000  xuag.101000       xuap.101001
ptv_is.101001     trajPoint.101001  xuag.101001       xuap.101002
ptv_is.101002     trajPoint.101002  xuag.101002       xuap.101003
ptv_is.101003     trajPoint.101003  xuag.101003       xuap.101004
ptv_is.101004     trajPoint.101004  xuag.101004       xuap.101005
ptv_is.101005     trajPoint.101005  xuag.101005       xuap.101006
ptv_is.101006     trajPoint.101006  xuag.101006       xuap.101007
ptv_is.101007     trajPoint.101007  xuag.101007       xuap.101008
ptv_is.101008     trajPoint.101008  xuag.101008       xuap.101009
ptv_is.101009     trajPoint.101009  xuag.101009       xuap.101010
ptv_is.101010     trajPoint.101010  xuag.101010       xuap.101011
ptv_is.101011     trajPoint.101011  xuag.101011       xuap.101012
ptv_is.101012     trajPoint.101012  xuag.101012       xuap.101013
ptv_is.101013     trajPoint.101013  xuag.101013       xuap.101014
ptv_is.101014     trajPoint.101014  xuag.101014       xuap.101015
ptv_is.101015     trajPoint.101015  xuag.101015       xuap.101016
ptv_is.101016     trajPoint.101016  xuag.101016       xuap.101017
ptv_is.101017     trajPoint.101017  xuag.101017       xuap.101018
ptv_is.101018     trajPoint.101018  xuag.101018       xuap.101019
ptv_is.101019     trajPoint.101019  xuag.101019       xuap.101020
ptv_is.101020     trajPoint.101020  xuag.101020       xuap.101021
ptv_is.101021     trajPoint.101021  xuag.101021       xuap.101022
ptv_is.101022     trajPoint.101022  xuag.101022       xuap.101023
ptv_is.101023     trajPoint.101023  xuag.101023       xuap.101024
ptv_is.101024     trajPoint.101024  xuag.101024       xuap.101025
ptv_is.101025     trajPoint.101025  xuap.101000
```

[14]
```
for tr in io.iter_trajectories_ptvis('./test_data/ptv_is.%d'):
    print(tr.time()[-1])
```

```
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
```

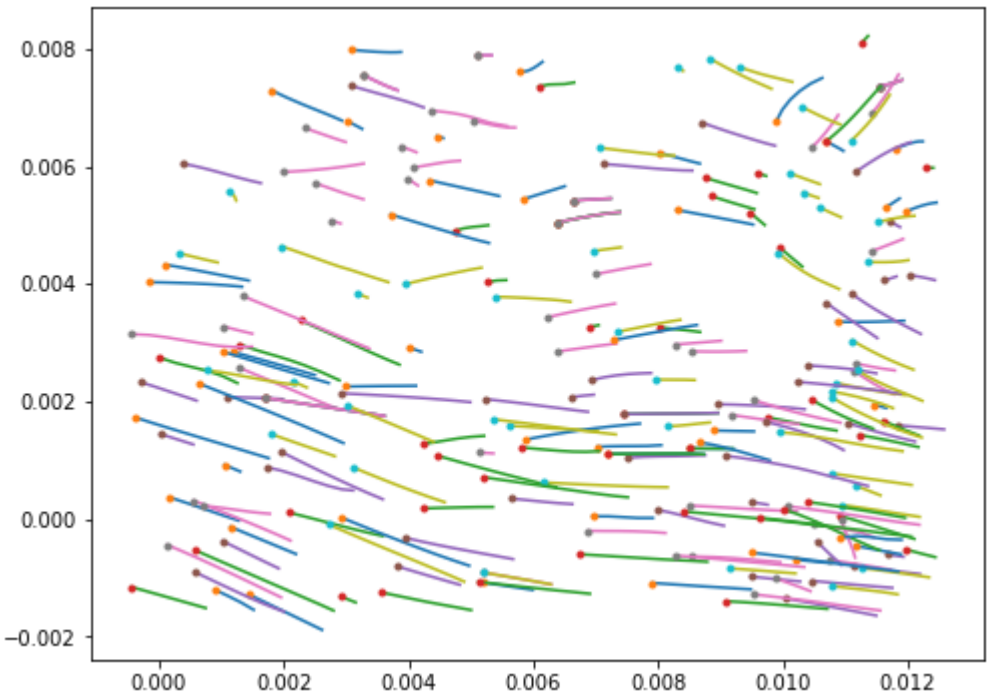
```
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101013.0
101014.0
101014.0
101014.0
101014.0
101014.0
101014.0
101014.0
101014.0
101014.0
101014.0
101014.0
101014.0
```

[17]
```python
max_frame = 101010
trajectories = []
for tr in io.iter_trajectories_ptvis('./test_data/ptv_is.%d'):
    if tr.time()[-1] <= max_frame:
        trajectories.append(tr)
```

[18]
```python
len(trajectories)
```

```
229
```

[20]
```python
fig, ax = plt.subplots(figsize=(8,6))
for tr in trajectories:
    plt.plot(tr.pos()[:,0],tr.pos()[:,1])
    plt.plot(tr.pos()[0,0],tr.pos()[0,1],'.')
```


0.008
0.006
0.004
0.002
0.000
−0.002
0.000
0.002
0.004
0.006
0.008
0.010
0.012

```
[ ]
```