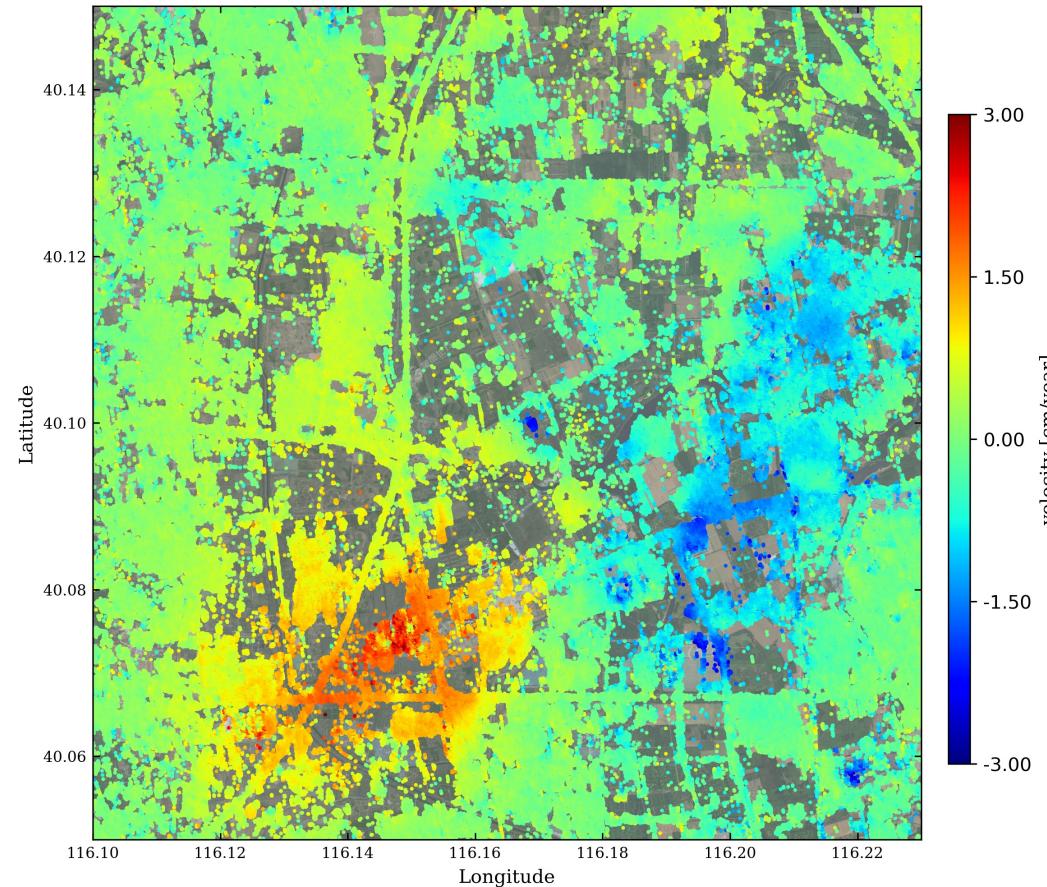


viewer_PS_tiff.py

- display velocity field on optical image with subset args

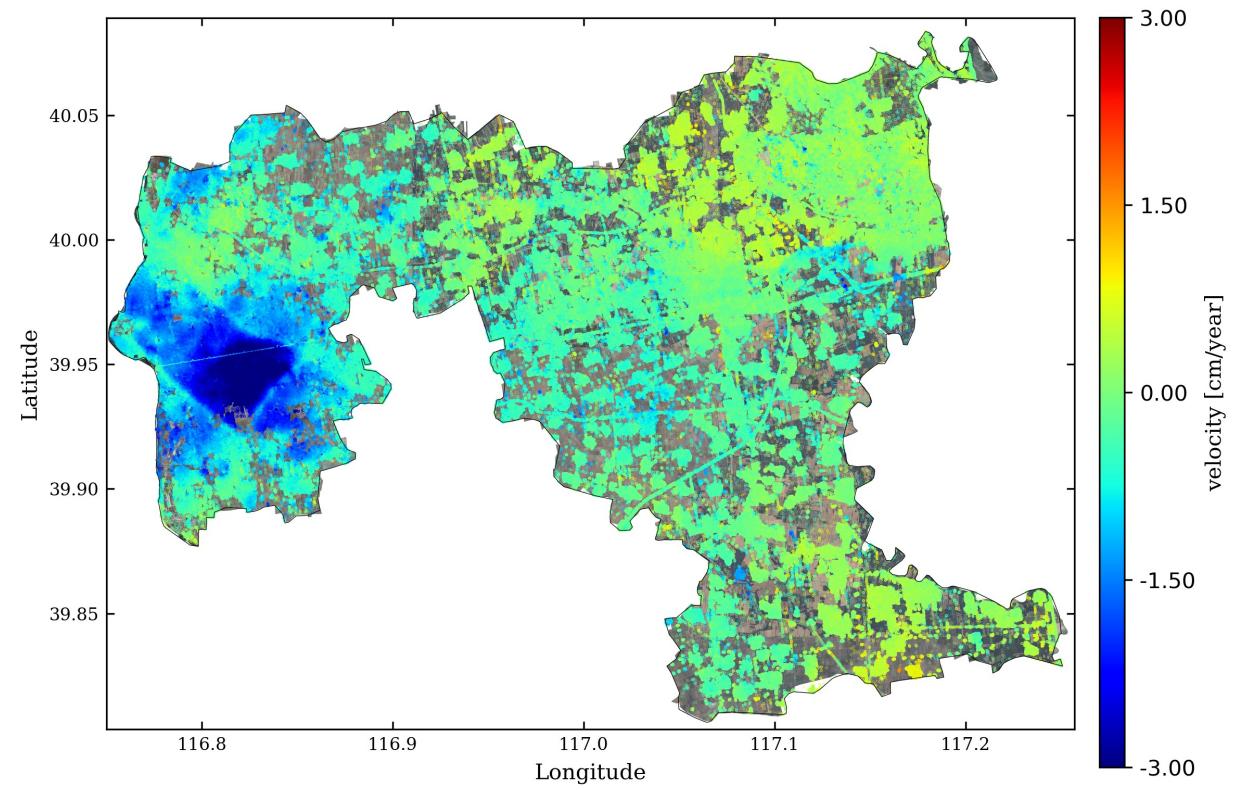
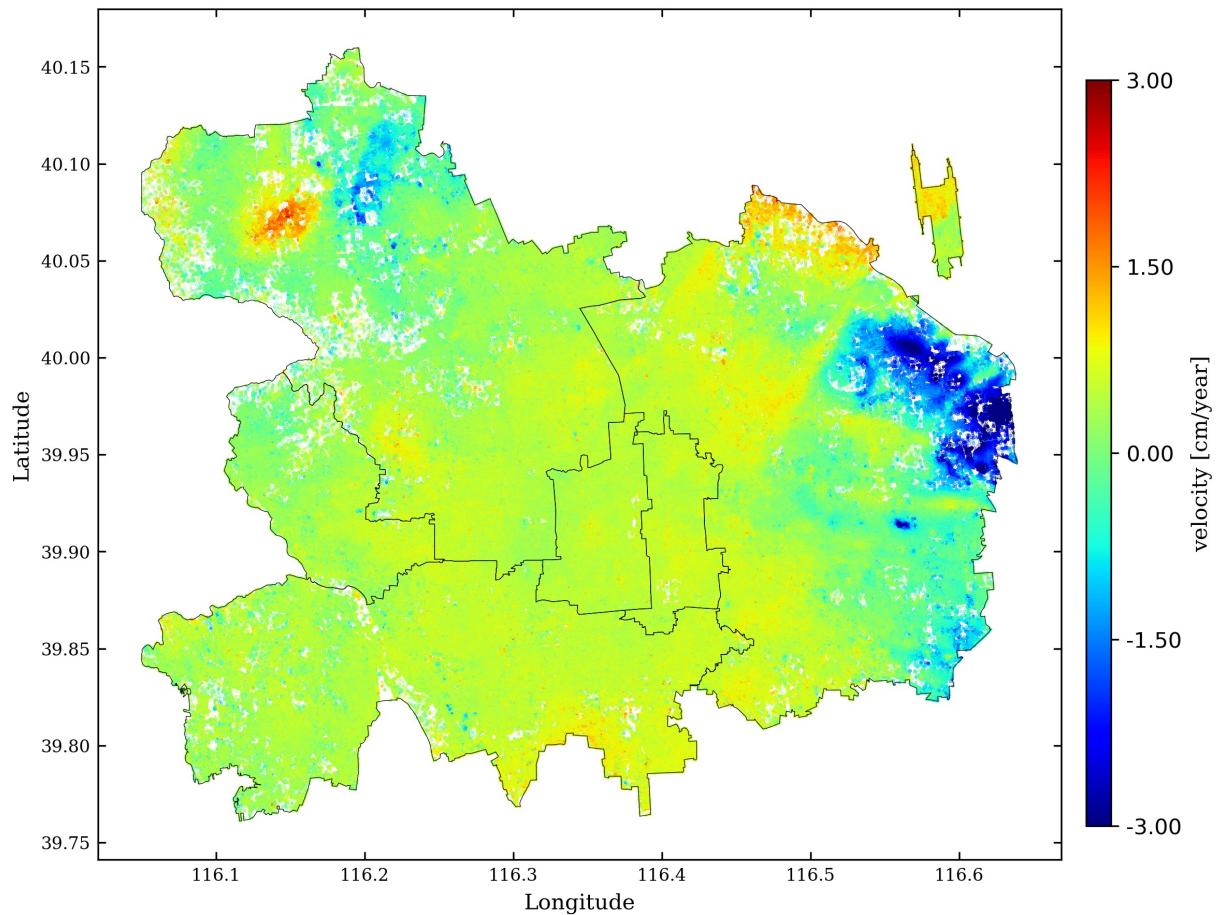
```
viewer_PS_tiff.py velocity.h5 --tiff_file ./tiff/sanheshi.tif --geo_file ./inputs/geometryRadar.h5 --subset 39.8 40.09 116.75 117.30 --vlim -3 3 --output **.png --outdir ./
```



viewer_PS_tiff.py

- display velocity field on an optical image with a polygon shapefile

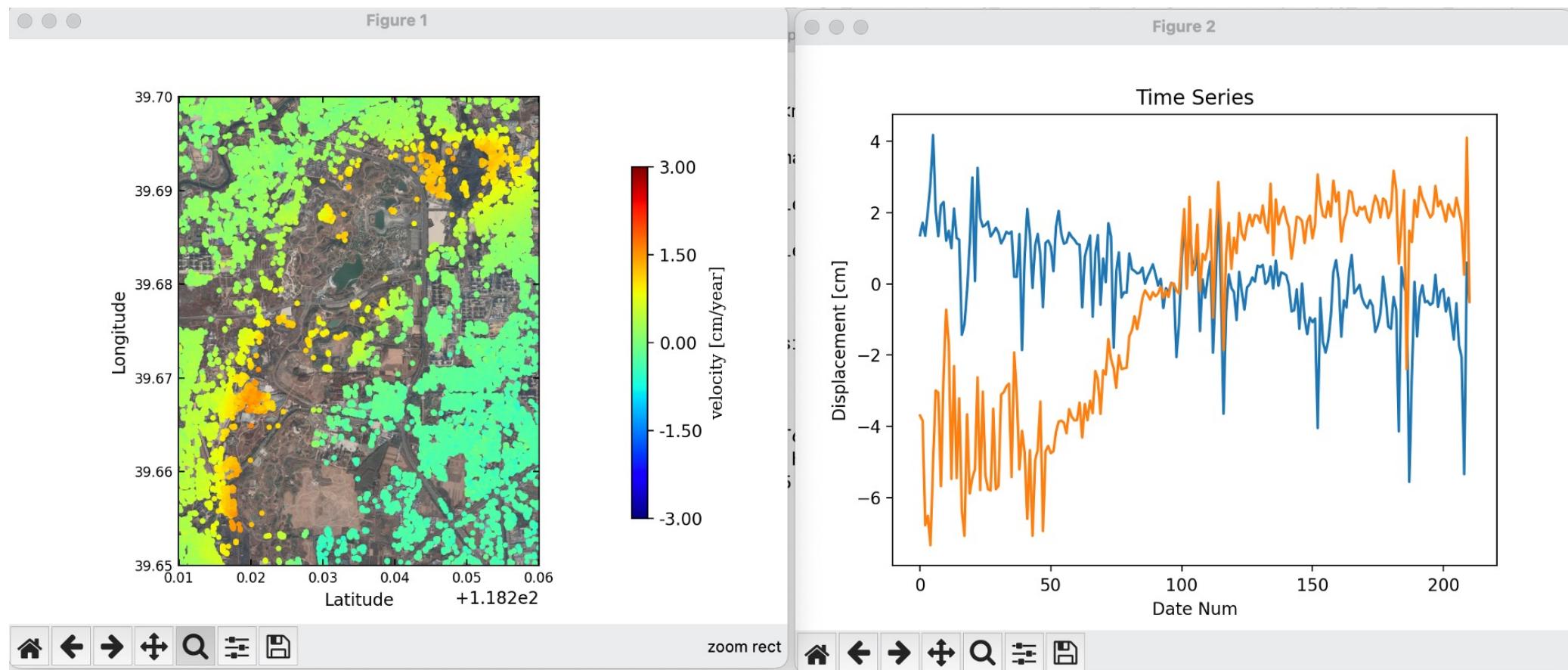
```
viewer_PS_tiff.py velocity.h5 --shp_file ../shapefile/Beijing/SixDistricts.shp --geo_file ./inputs/geometryRadar.h5 --subset 39.76 40.16 116.05 116.64 --shp_type polygon --vlim -3 3 --output ***.png --outdir ./ --markersize 0.1
```



viewer_PS_tiff.py

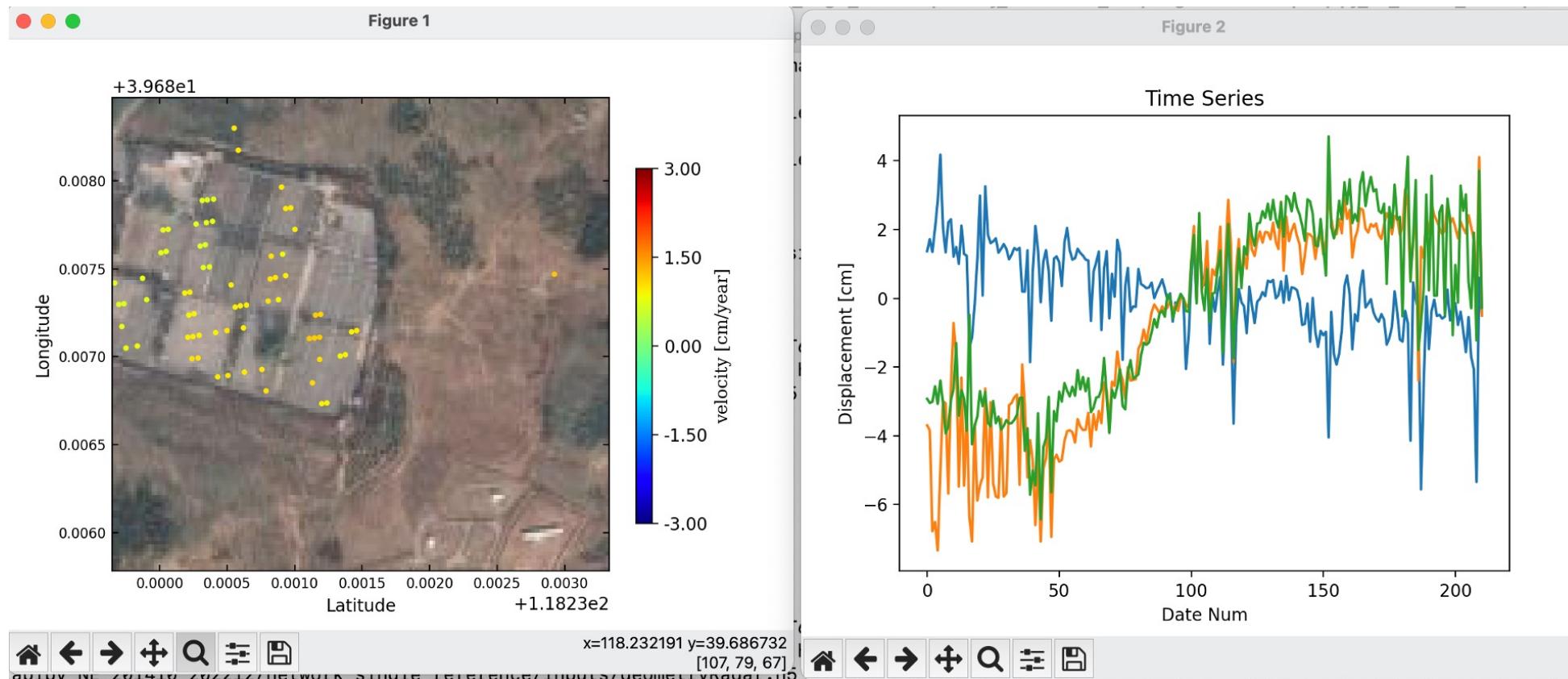
- display velocity field and show the time series of chosen point selected by mouse (interactive mode)

```
viewer_PS_tiff.py velocity.h5 --tiff_file tangshan_NE_patch.tiff --geo_file ./inputs/geometryRadar.h5 --subset 39.6 39.7 118.2 118.3 --vlim -0.4 0.4 --ts_file ./TangshanSenAT69/miaplpy_NE_201410_202212/network_single_reference/timeseries.h5 --interactive --save_txt
```



viewer_PS_tiff.py

- display velocity field and show the time series of chosen point selected by mouse (interactive mode)

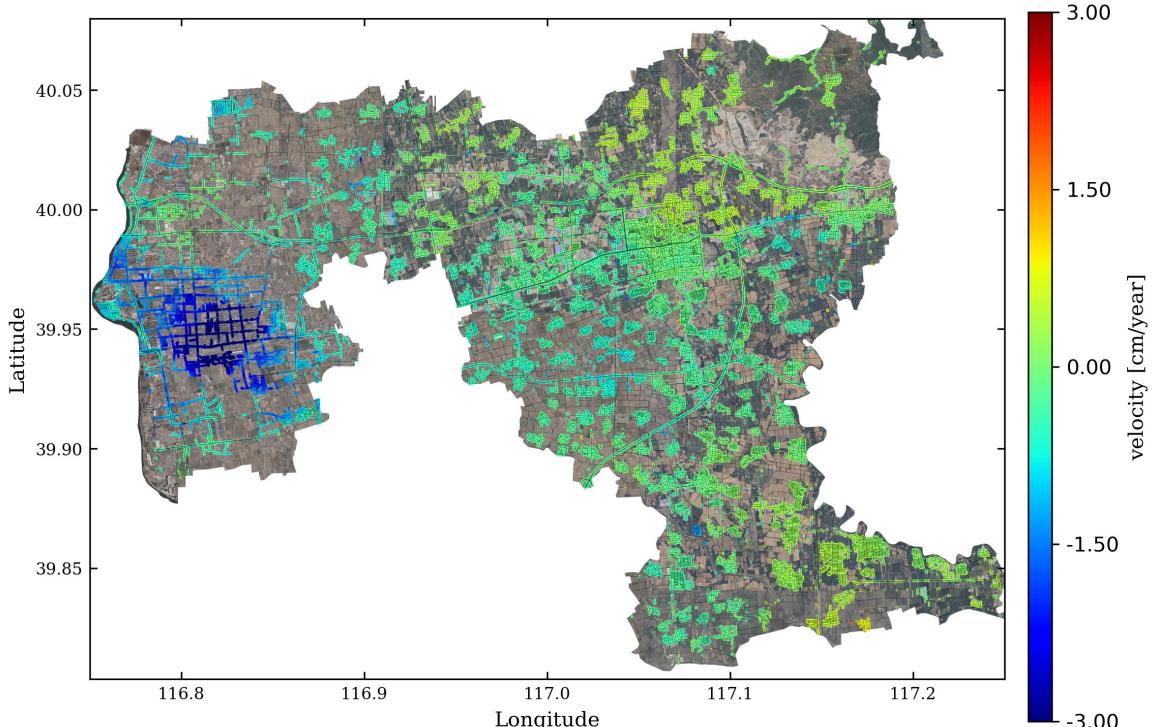
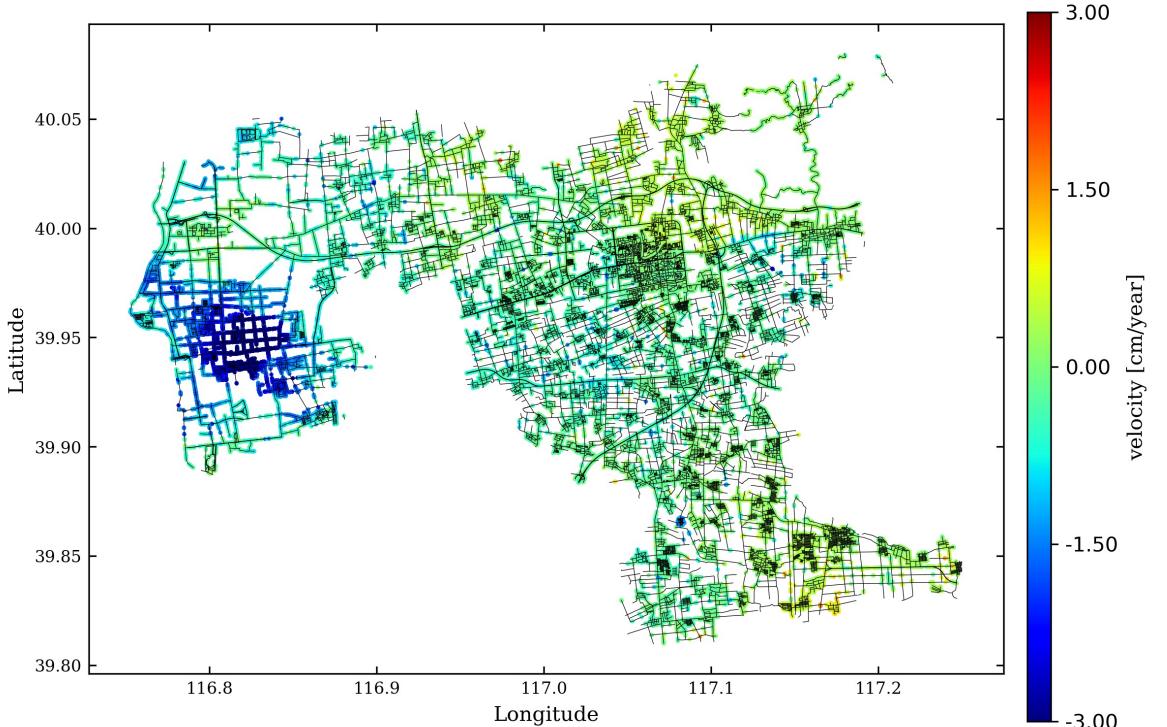


- Shortage: users have to zoom in to selected the points.

viewer_PS_tiff.py

- extract and display velocity field based on polyline shapefile and buffer distance

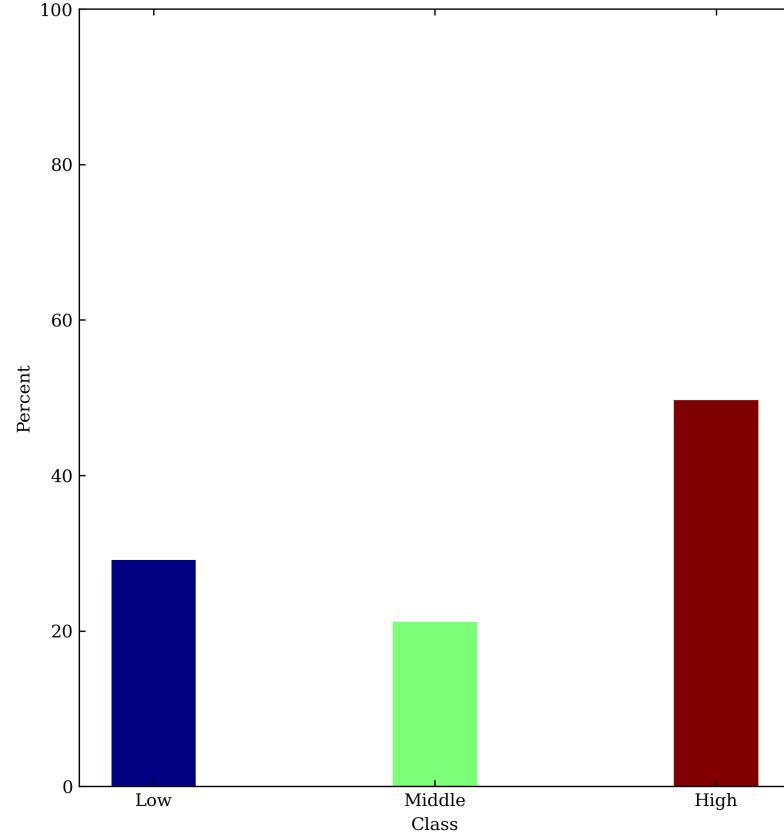
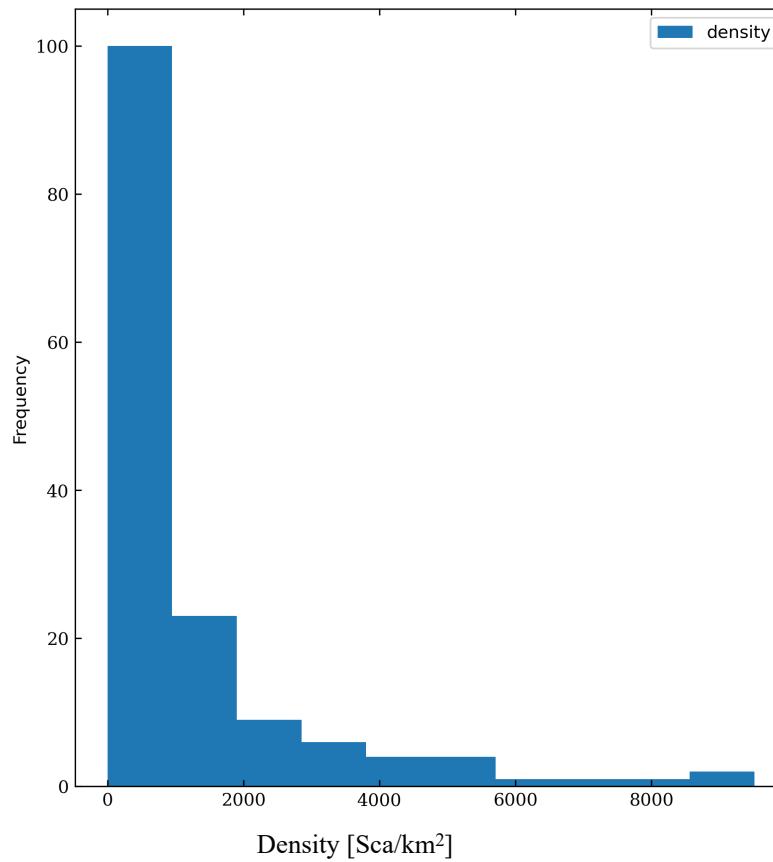
```
viewer_PS_tiff.py velocity.h5 --shp_file ./shapefile/roads.shp --geo_file ./inputs/geometryRadar.h5 --subset 39.8 40.08 116.75 117.25 --vlim -3 3 --output ***.png --outdir ./ --shp_type line --save_gdf --buffer 5
```



viewer_PS_tiff.py

- analyze the coherent points density in the buffer

```
viewer_PS_tiff.py velocity.h5 --shp_file ../shp/Beijing_Transfer/railway_subway_OSM.shp --geo_file ./inputs/geometryRadar.h5 --subset 39.95 40.02 116.50 116.56 --vlim -3 3 --output PS_density.png --outdir ./ --shp_type line --buffer 10 --density --interval 500
```



Coherent scatterers density	Class
< 100 Sca/km ²	Low
100-500 Sca/km ²	Middle
> 500 Sca/km ²	High

LOS displacement field of subway in Beijing

