## In [9]:

```
import pandas as pd
from scipy import stats
import plotly.express as px
import matplotlib
import math
poi_gpd=pd. read_pickle('C:\\Users\\18578\\Desktop\\gyx. pkl1') #读取已经存储为. pkl格式的POI数据,其中
poi_gpd.plot(marker=".", markersize=5)
poi_coordinates=poi_gpd[['location_lng','location_lat']].to_numpy().T #根据stats.gaussian_kde()输入
poi_coordi_kernel=stats.gaussian_kde(poi_coordinates) #核密度估计
poi gpd['poi kde']=poi coordi kernel(poi coordinates)
poi_gpd. shopinfo=poi_gpd. shopinfo. fillna(0)
mapbox_token='pk.eyJ1IjoicmljaG11YmFvIiwiYSI6ImNrYjB3N2NyMzB1MG8yc254dTRzNnMyeHMifQ.QT7MdjQKs9Y6OtaJ
px. set_mapbox_access_token(mapbox_token)
fig=px. scatter mapbox(poi gpd, lat=poi gpd. location lat, lon=poi gpd. location lng, color='poi kde', col
fig. show()
poi gpd. head()
```



```
Out[9]:
```

	photo_url	location_Ing	location_lat	scene	scene_id	pname	cityname	
0	[{'title': [], 'url': 'http://store.is.autonav	108.882107	34.277723	藏腹堂	B0FFL8GLZF	陕西省	西安市	
1	[{'title': [], 'url': 'http://store.is.autonav	108.910498	34.280821	宣禾 堂	B0H6X5VH12	陕西省	西安市	
2	[{'title': [], 'url': 'http://store.is.autonav	108.924099	34.286879	津美 医疗 美容	B0FFL9A5OW	陕西省	西安市	
3	[{'title': [], 'url': 'http://store.is.autonav	108.886230	34.285952	品济 口腔	B0FFLI3URK	陕西省	西安市	
4	[{'title': [], 'url': 'http://store.is.autonav	108.923497	34.292488	西莲铭 口门 实 河	B0FFMCJWMH	陕西省	西安市	•
4							<b>&gt;</b>	
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8: RuntimeWarning:

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C:\Users\97505\anaconda3\lib\site-packages\matplotlib\backends\backend\_agg.py:23

8: RuntimeWarning:

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C:\Users\97505\anaconda3\lib\site-packages\matplotlib\backends\backend\_agg.py:23

8: RuntimeWarning:

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8: RuntimeWarning:

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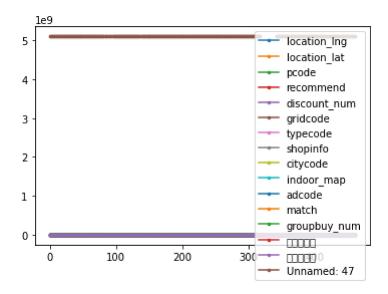
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In [ ]: