

```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
from google.colab import files
upload=files.upload()
```

```
<IPython.core.display.HTML object>
```

```
Saving airports.csv to airports.csv
```

```
df=pd.read_csv("/content/airports.csv")
```

```
df.continent.unique()
```

```
array([nan, 'OC', 'AF', 'AN', 'EU', 'AS', 'SA'], dtype=object)
```

```
df=df.replace("no",0)
```

```
df=df.replace("yes",1)
```

```
#df = df.drop(['continent'],axis=1)
```

```
print(df.tail())
```

	id	ident	type	name \
67307	46378	ZZ-0001	heliport	Sealand Helipad
67308	307326	ZZ-0002	small_airport	Glorioso Islands Airstrip
67309	346788	ZZ-0003	small_airport	Fainting Goat Airport
67310	342102	ZZZW	closed	Scandium City Heliport
67311	313629	ZZZZ	small_airport	Satsuma Iōjima Airport

	latitude_deg	longitude_deg	elevation_ft	continent	iso_country
\ 67307	51.894444	1.482500	40.0	EU	GB
67308	-11.584278	47.296389	11.0	AF	TF
67309	32.110587	-97.356312	690.0	NaN	US
67310	69.355287	-138.939310	4.0	NaN	CA
67311	30.784722	130.270556	338.0	AS	JP

	iso_region	municipality	scheduled_service	gps_code
iata_code \ 67307	GB-ENG	Sealand	0	NaN
NaN 67308	TF-U-A	Grande Glorieuse	0	NaN
NaN 67309	US-TX	Blum	0	87TX

NaN				
67310	CA-YT	(Old) Scandium City	0	ZZZW
ZYW				
67311	JP-46	Mishima	0	RJX7
NaN				

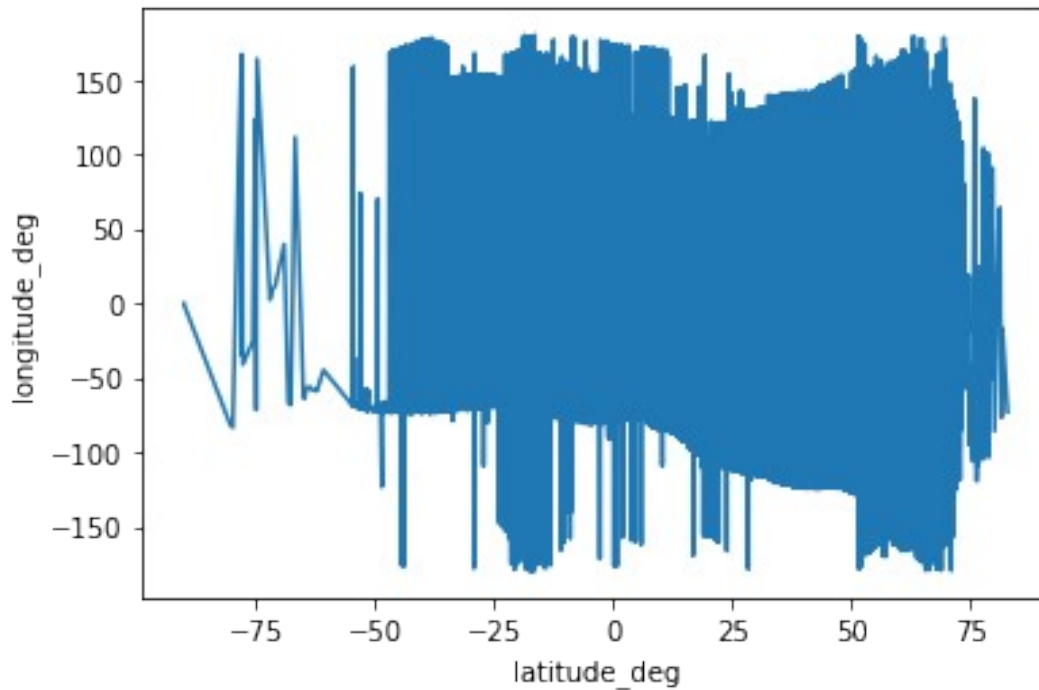
	local_code	home_link \
67307	NaN	http://www.sealandgov.org/
67308	NaN	NaN
67309	87TX	NaN
67310	YK96	NaN
67311	RJX7	NaN

wikipedia_link

keywords	
67307	https://en.wikipedia.org/wiki/Principality_of_... Roughts Tower Helipad
67308	NaN
NaN	
67309	NaN
NaN	
67310	NaN
NaN	
67311	http://wikimapia.org/6705190/Satsuma-Iwo-jima-... SATSUMA, IWOJIMA, RJX7

```
sns.lineplot(df['latitude_deg'],df['longitude_deg'])
plt.show()
```

```
/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43:
FutureWarning: Pass the following variables as keyword args: x, y.
From version 0.12, the only valid positional argument will be `data`,
and passing other arguments without an explicit keyword will result in
an error or misinterpretation.
FutureWarning
```



```

print(df.shape)
n = len(pd.unique(df['name']))
d=len(pd.unique(df['type']))
print("name",n,"type",d)
df['scheduled_service'].value_counts()

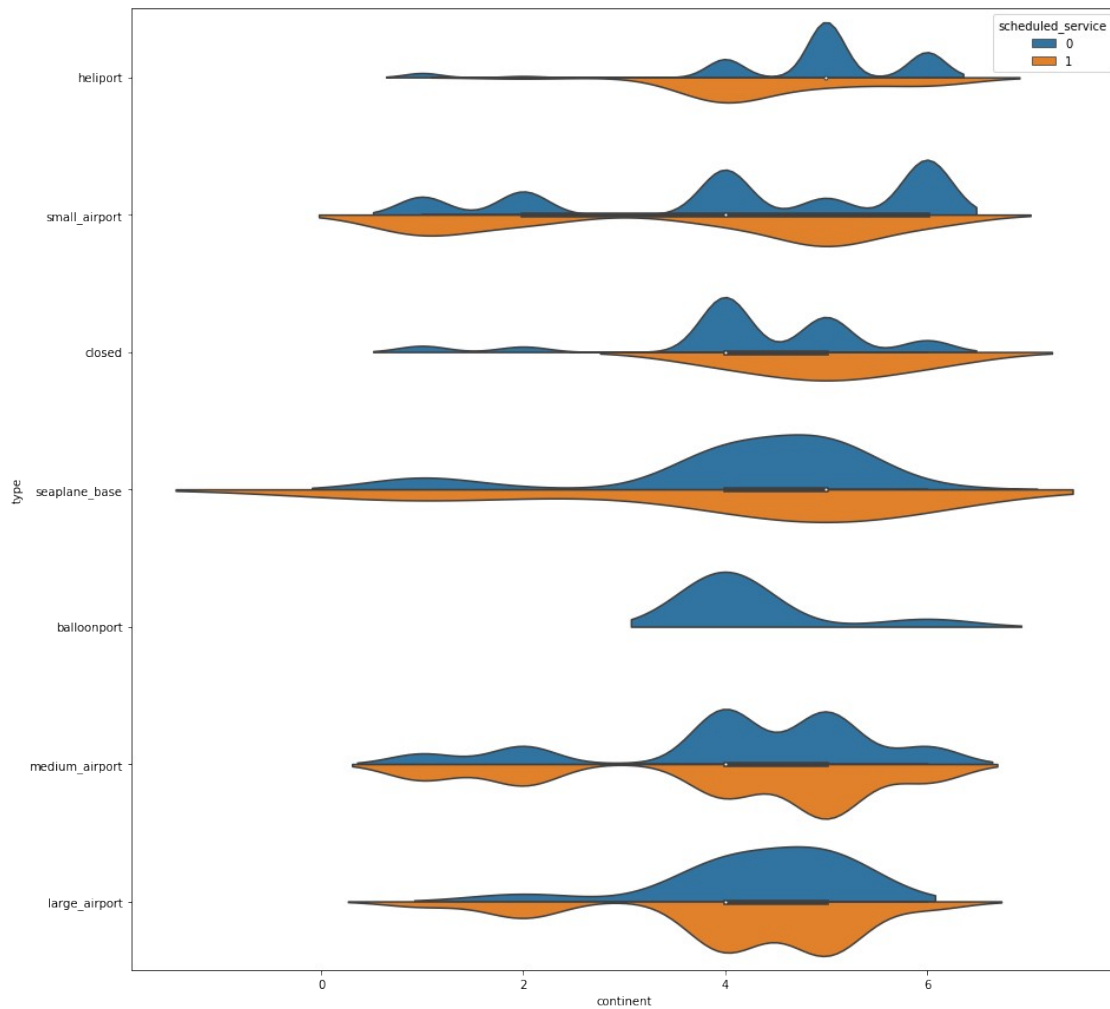
(67312, 18)
name 63826 type 7

0    63228
1     4084
Name: scheduled_service, dtype: int64

plt.figure(figsize= (15,15))
sns.violinplot(x=df["continent"],y=
df["type"],hue=df['scheduled_service'],split=True)

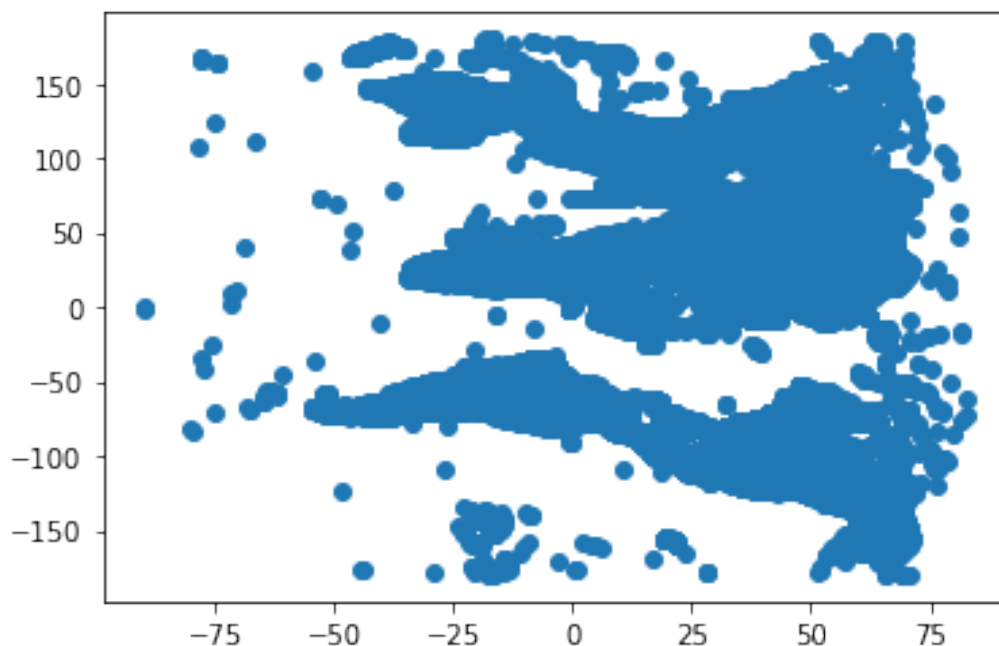
<matplotlib.axes._subplots.AxesSubplot at 0x7f285bec7550>

```



```
import plotly.express as px

plt.scatter(x=df['latitude_deg'], y=df['longitude_deg'])
plt.show()
```



```
df=df.replace('NaN',0)
df=df.replace('OC',1)
df=df.replace('AF',2)
df=df.replace('AN',3)
df=df.replace('EU',4)
df=df.replace('AS',5)
df=df.replace('SA',6)
print(df)
```

	id	ident	type	
name \				
0	6523	00A	heliport	Total Rf
Heliport				
1	323361	00AA	small_airport	Aero B Ranch
Airport				
2	6524	00AK	small_airport	Lowell
Field				
3	6525	00AL	small_airport	Epps
Airpark				
4	6526	00AR	closed	Newport Hospital & Clinic
Heliport				
...	
...				
67307	46378	ZZ-0001	heliport	Sealand
Helipad				
67308	307326	ZZ-0002	small_airport	Glorioso Islands
Airstrip				
67309	346788	ZZ-0003	small_airport	Fainting Goat
Airport				
67310	342102	ZZZW	closed	Scandium City

Heliport
67311 313629 ZZZZ small_airport Satsuma Iōjima
Airport

	latitude_deg	longitude_deg	elevation_ft	continent
iso_country \				
0	40.070801	-74.933601	11.0	NaN
US				
1	38.704022	-101.473911	3435.0	NaN
US				
2	59.947733	-151.692524	450.0	NaN
US				
3	34.864799	-86.770302	820.0	NaN
US				
4	35.608700	-91.254898	237.0	NaN
US				
...
.				
67307	51.894444	1.482500	40.0	4.0
GB				
67308	-11.584278	47.296389	11.0	2.0
TF				
67309	32.110587	-97.356312	690.0	NaN
US				
67310	69.355287	-138.939310	4.0	NaN
CA				
67311	30.784722	130.270556	338.0	5.0
JP				

	iso_region	municipality	scheduled_service	gps_code
iata_code \				
0	US-PA	Bensalem	0	00A
NaN				
1	US-KS	Leoti	0	00AA
NaN				
2	US-AK	Anchor Point	0	00AK
NaN				
3	US-AL	Harvest	0	00AL
NaN				
4	US-AR	Newport	0	NaN
NaN				
...
...				
67307	GB-ENG	Sealand	0	NaN
NaN				
67308	TF-U-A	Grande Glorieuse	0	NaN
NaN				
67309	US-TX	Blum	0	87TX
NaN				
67310	CA-YT (Old)	Scandium City	0	ZZZW

ZYW				
67311	JP-46	Mishima	0	RJX7
NaN				

	local_code	home_link \
0	00A	NaN
1	00AA	NaN
2	00AK	NaN
3	00AL	NaN
4	NaN	NaN
...
67307	NaN	http://www.sealandgov.org/
67308	NaN	NaN
67309	87TX	NaN
67310	YK96	NaN
67311	RJX7	NaN

	keywords	wikipedia_link
0		NaN
NaN		
1		NaN
NaN		
2		NaN
NaN		
3		NaN
NaN		
4		NaN
00AR		
...		...
...		
67307	https://en.wikipedia.org/wiki/Principality_of_...	Roughs Tower
Helipad		
67308		NaN
NaN		
67309		NaN
NaN		
67310		NaN
NaN		
67311	http://wikimapia.org/6705190/Satsuma-Iwo-jima-...	
SATSUMA,IWOJIMA,RJX7		

[67312 rows x 18 columns]

```
plt.bar(df['id'],df['continent'])
plt.show()
```

