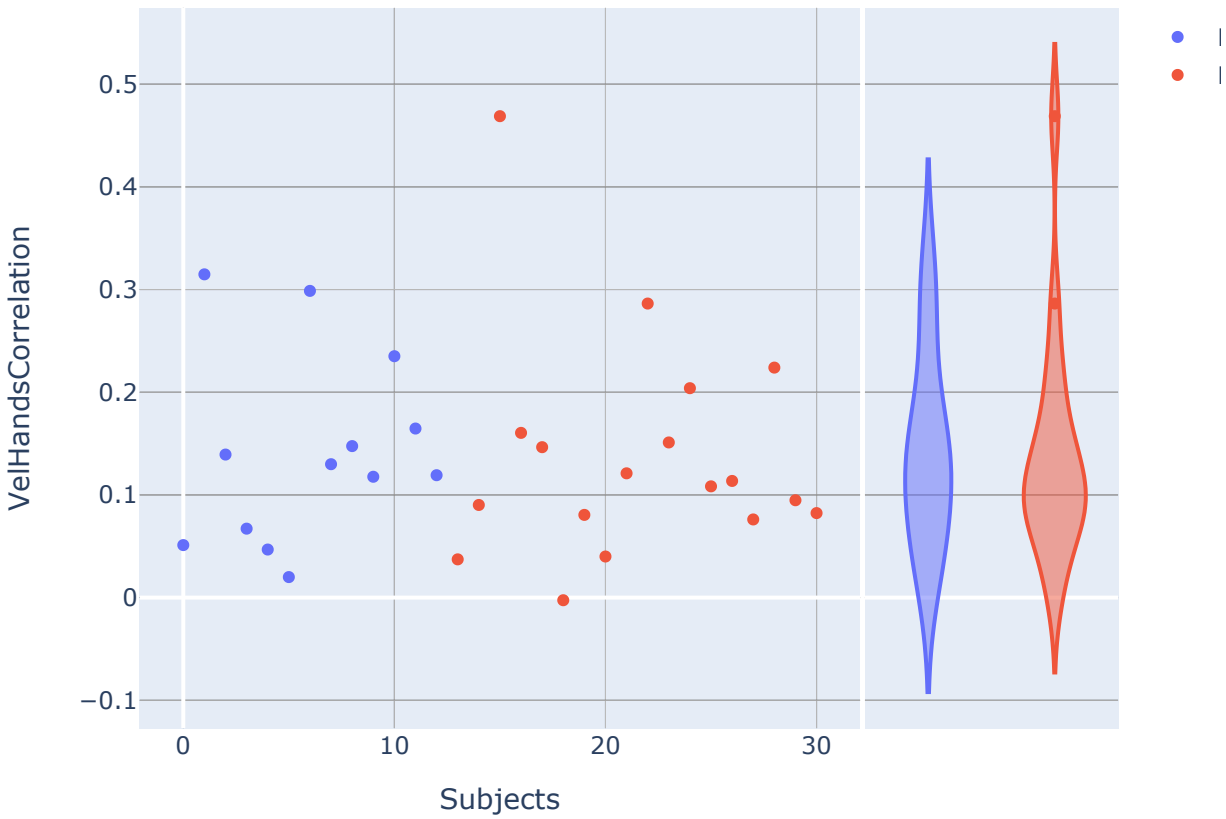
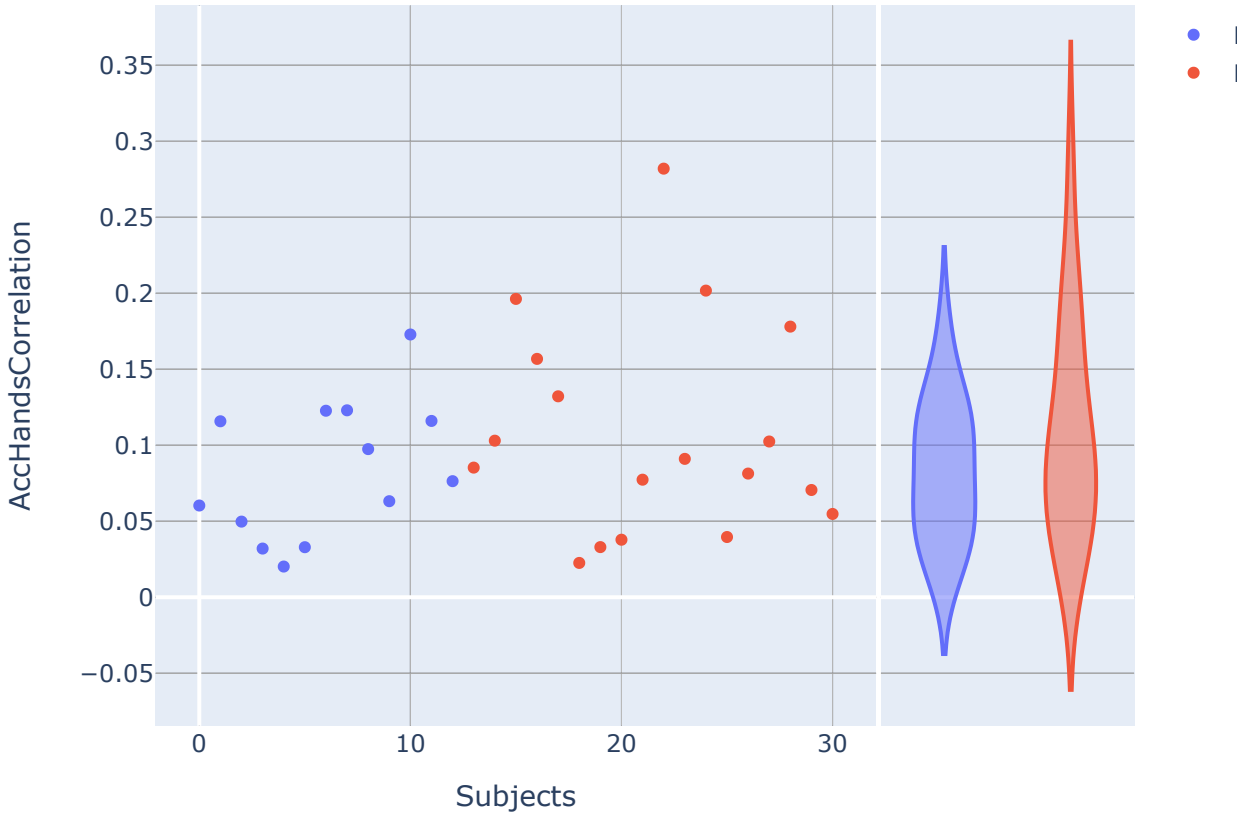
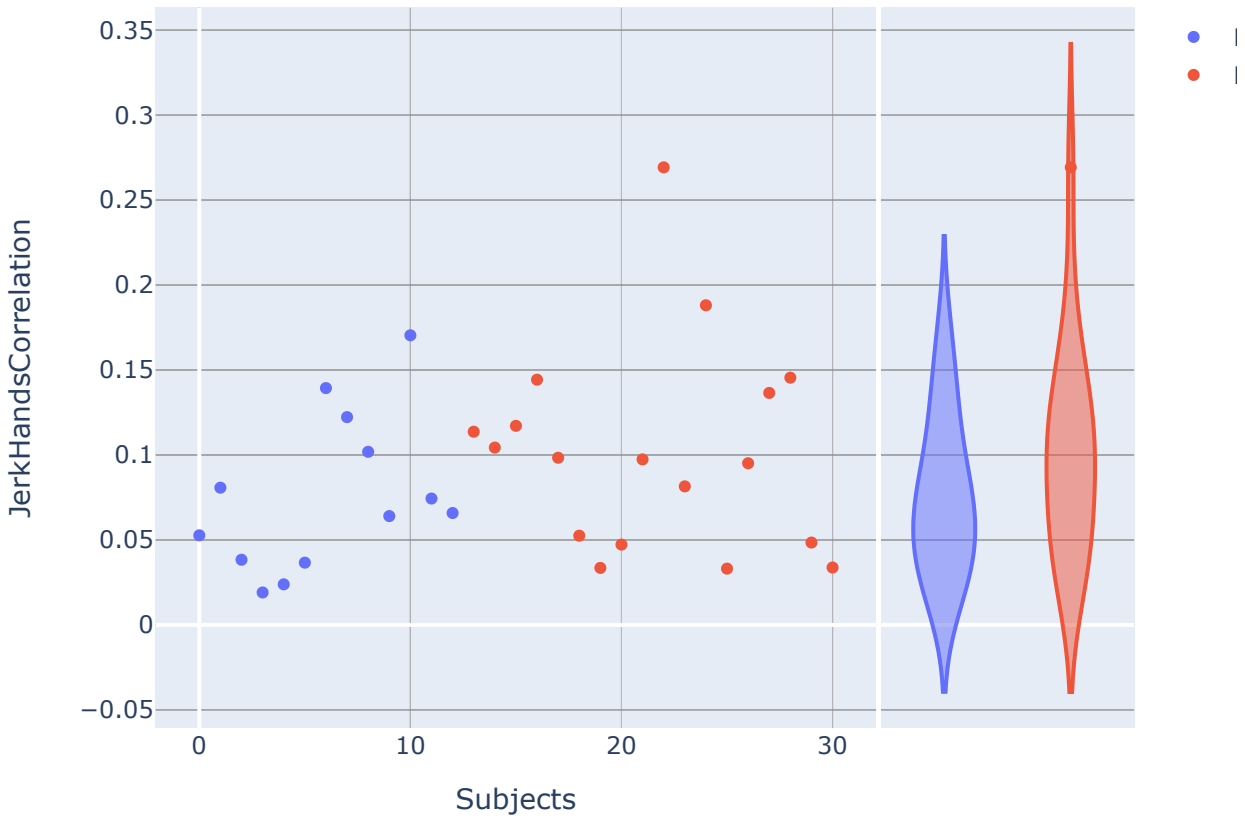
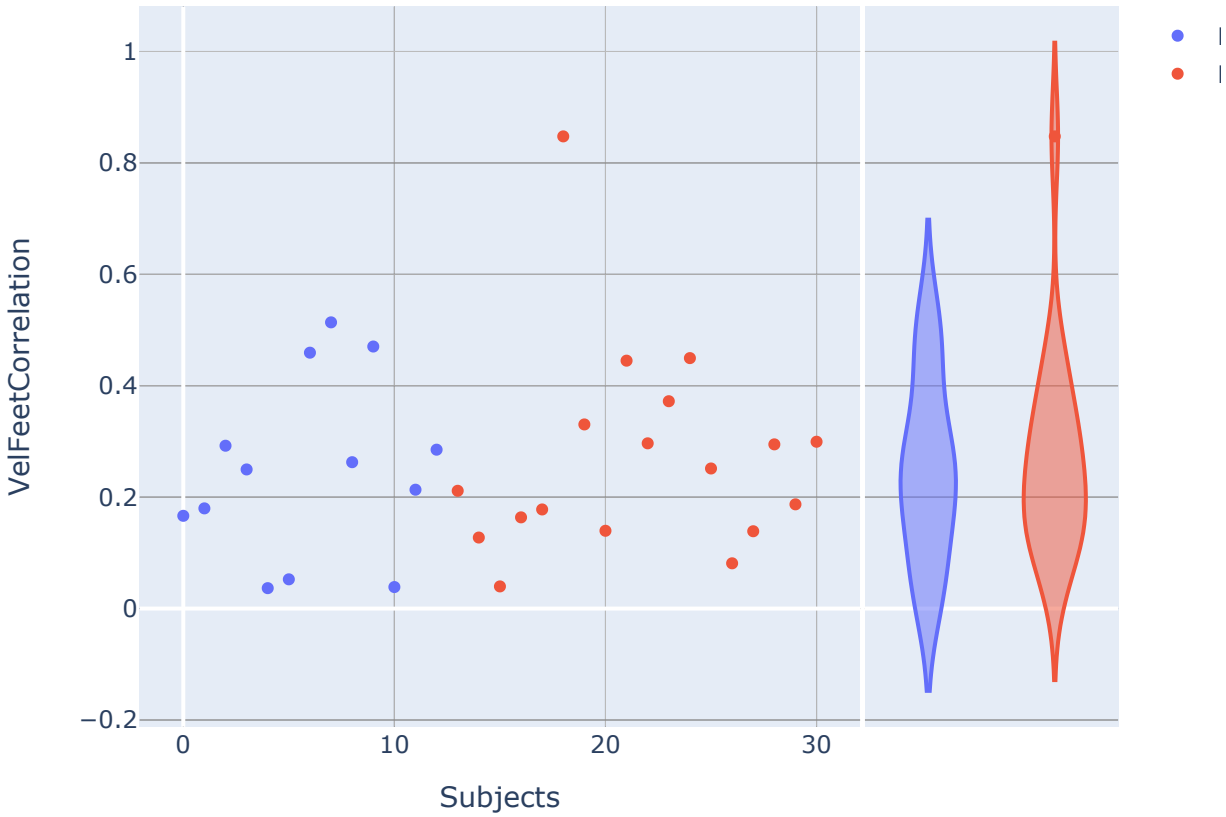
[1]
```
import scipy.io
import numpy as np
import pandas as pd
import plotly.io as pio
import plotly.express as px
import matplotlib.pyplot as plt
import os
import sys

#pio.templates.default = "plotly_white"
#theme = "plotly_white" #"plotly_dark",

os.chdir("/Users/lucagarello/Desktop/Classifier")

Dataset = pd.read_csv("AT-PT.csv")
```

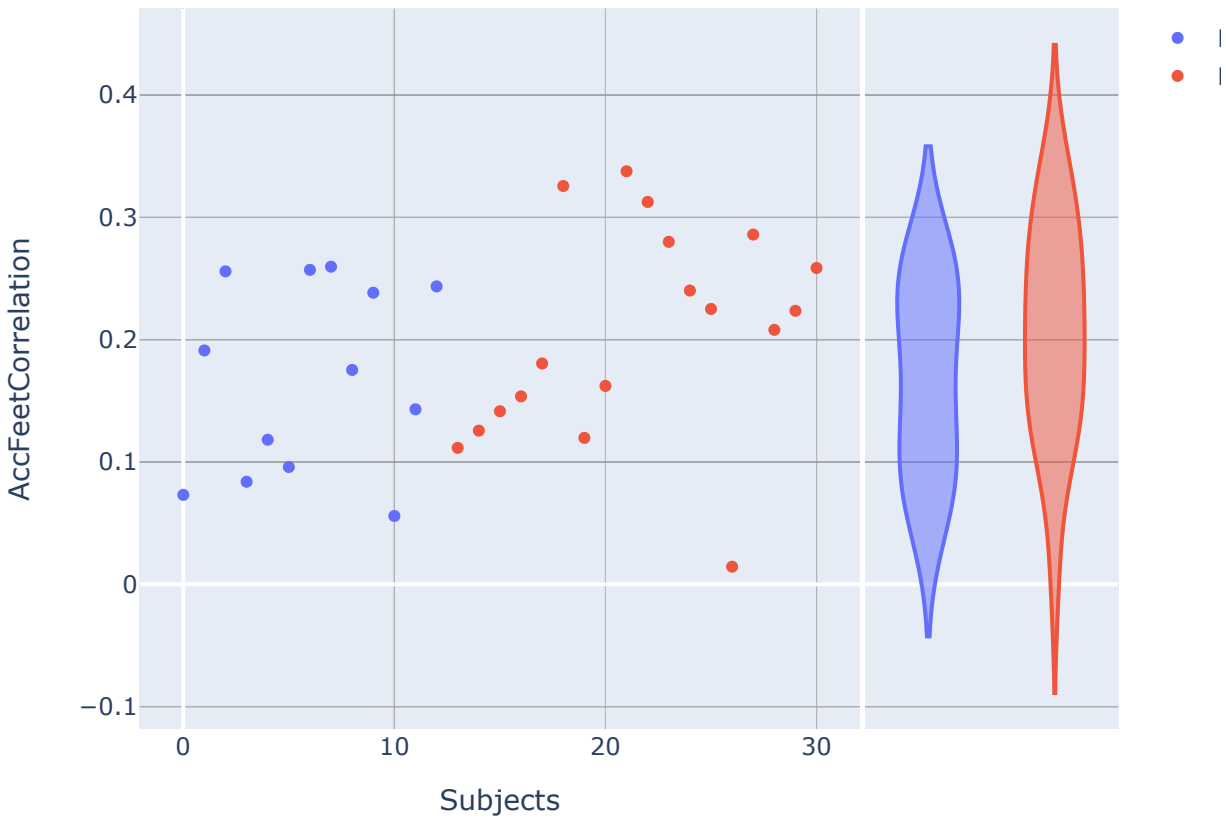
[2]
```
for i in Dataset.columns:
    if i == "Labels":
        break
    fig =
px.scatter(Dataset,x=list(range(len(Dataset))),y=i,color='Labels'
,width=600, height=300,marginal_y="violin")
    fig.update_layout(xaxis_title="Subjects")
    fig.show()
```

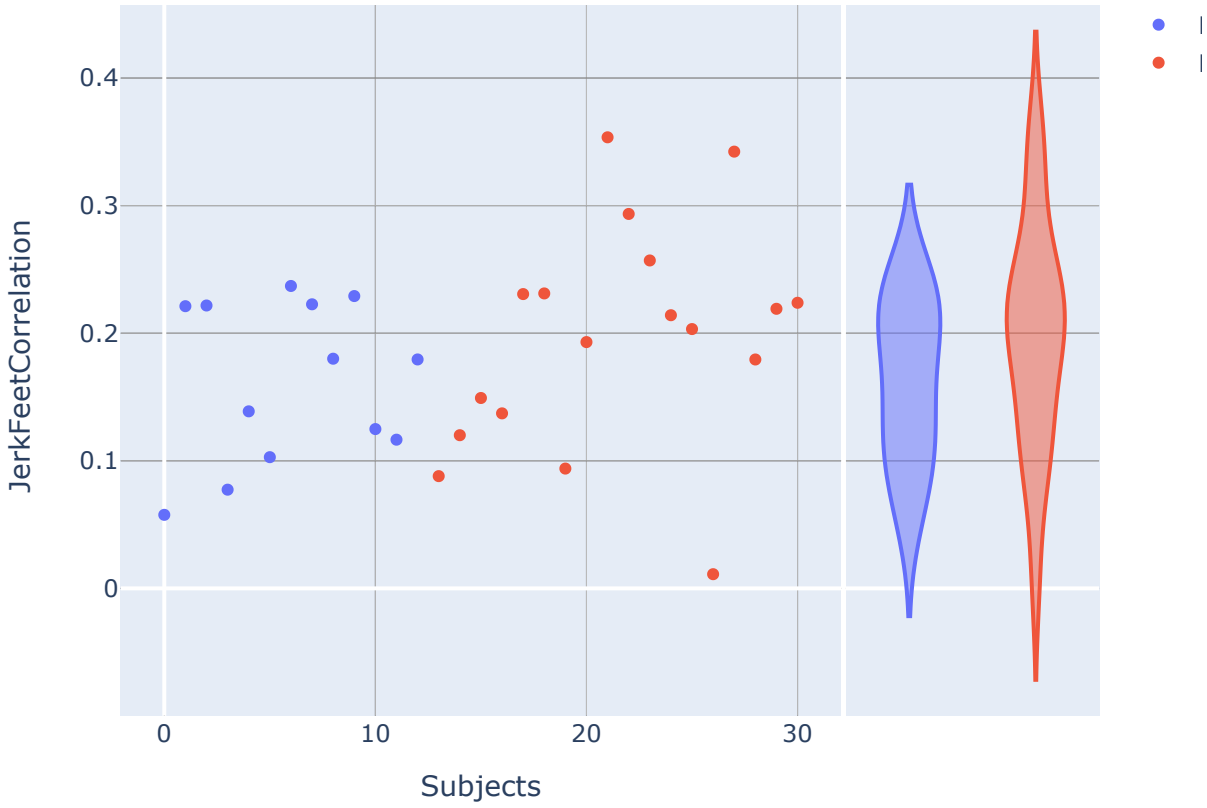


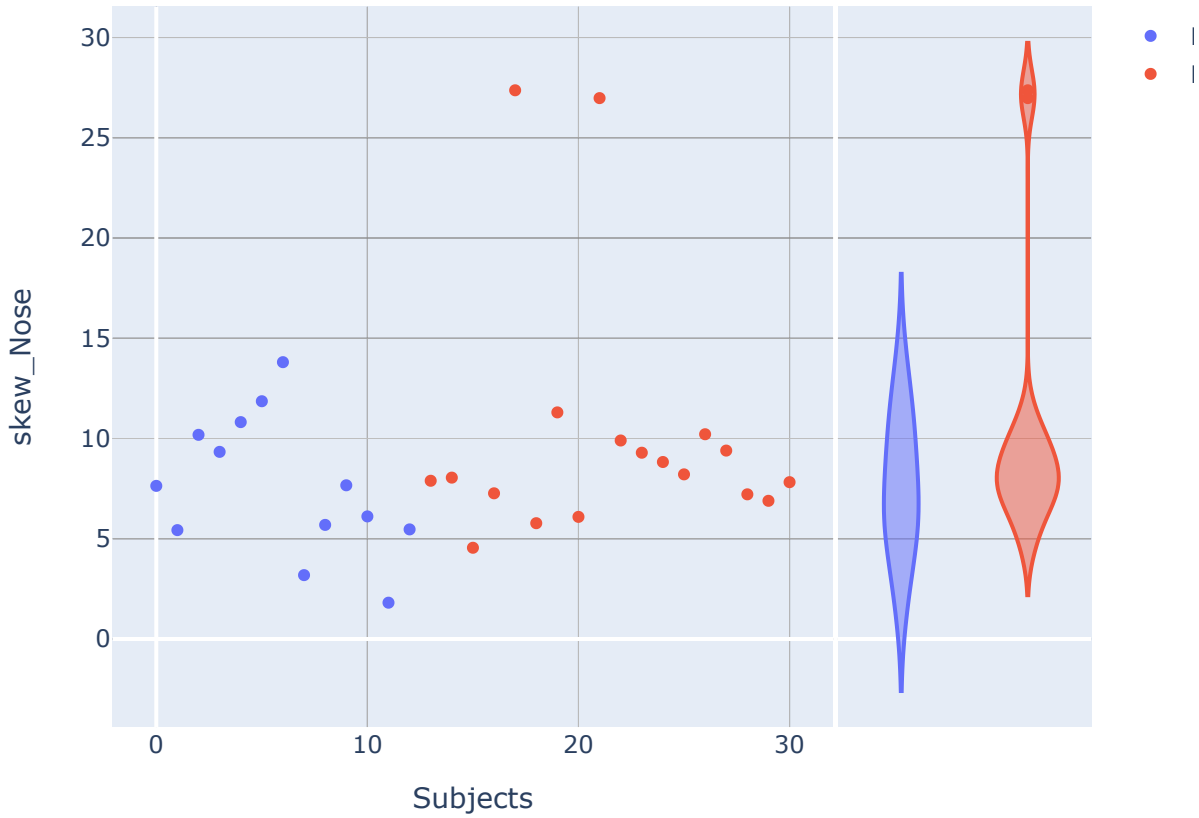

AccHandsCorrelation
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
−0.05
0
10
20
30
Subjects

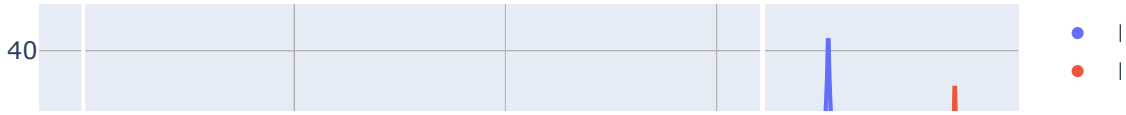

JerkHandsCorrelation
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
−0.05
0
10
20
30
Subjects

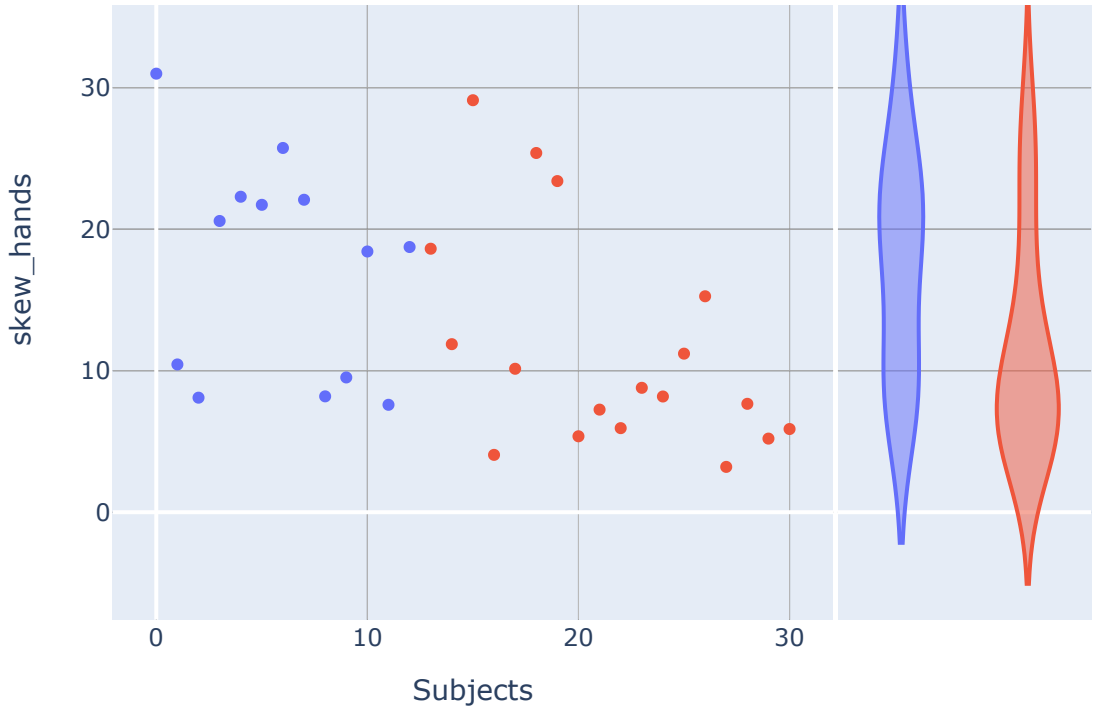

VelFeetCorrelation
1
0.8
0.6
0.4
0.2
0
−0.2
0
10
20
30
Subjects

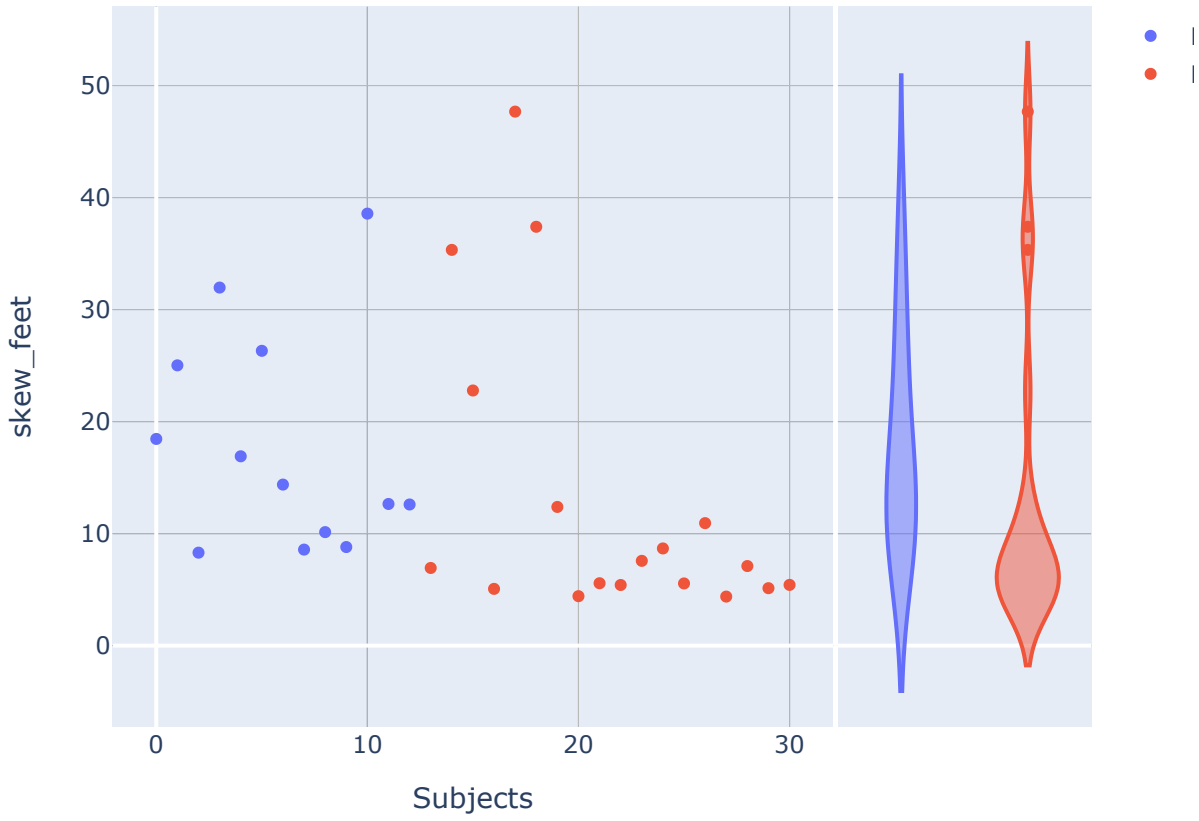

AccFeetCorrelation
0.4
0.3
0.2
0.1
0
−0.1
0
10
20
30
Subjects

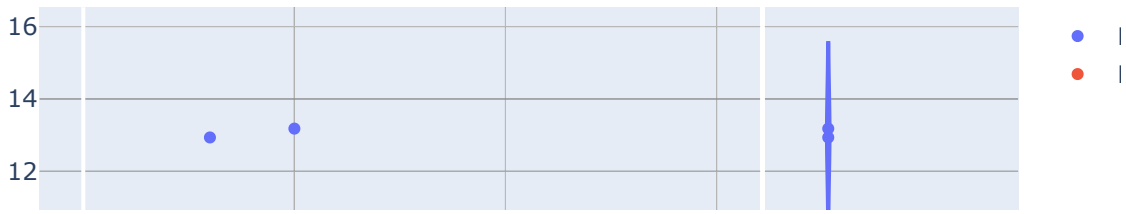

JerkFeetCorrelation
0.4
0.3
0.2
0.1
0
0
10
20
30
Subjects

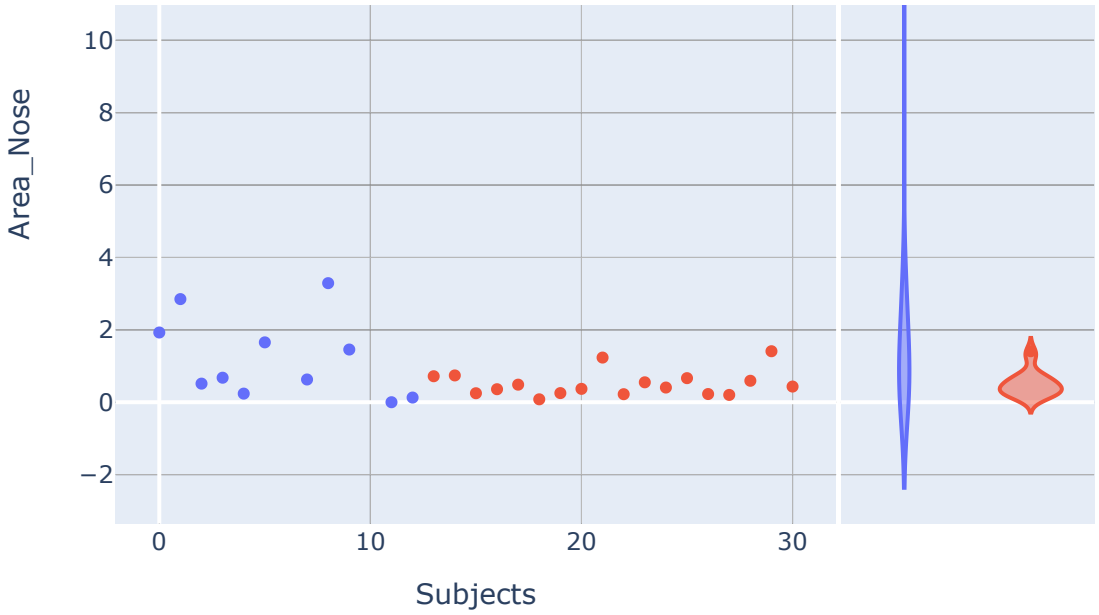

skew_Nose
30
25
20
15
10
5
0
0
10
20
30
Subjects

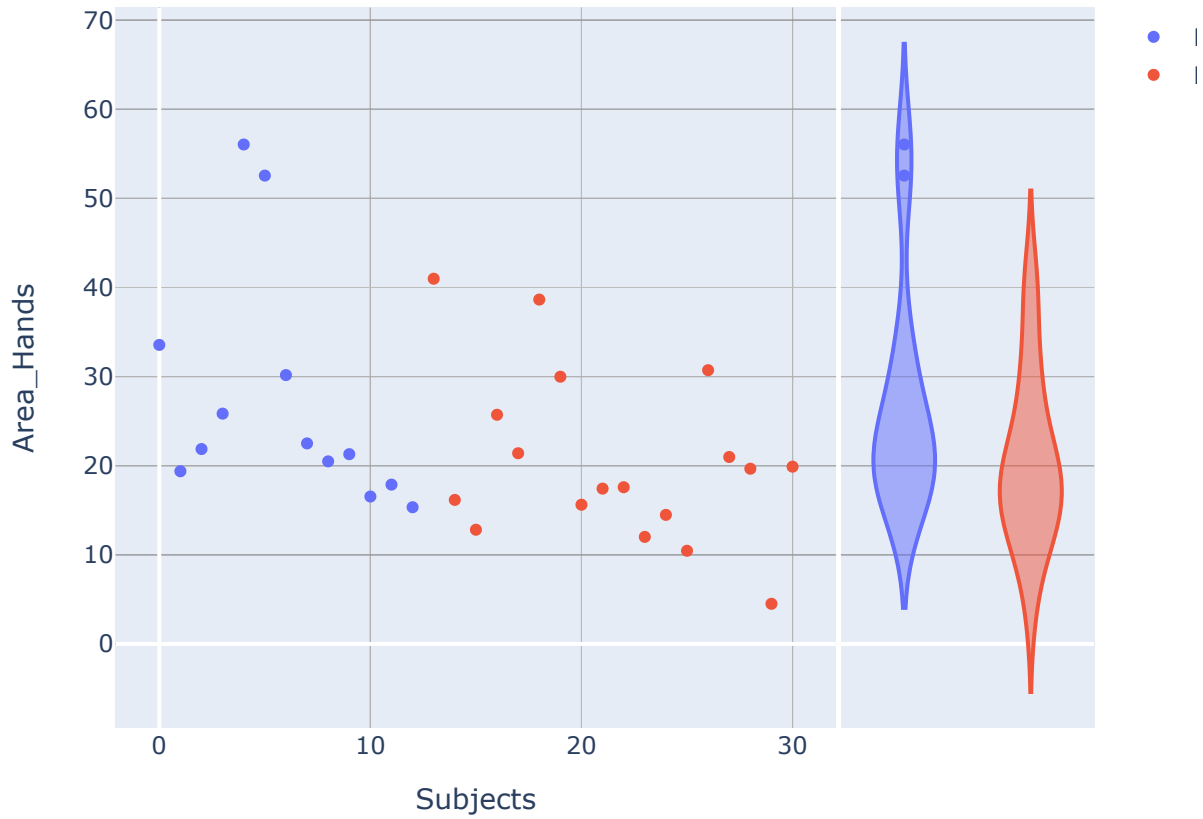

40

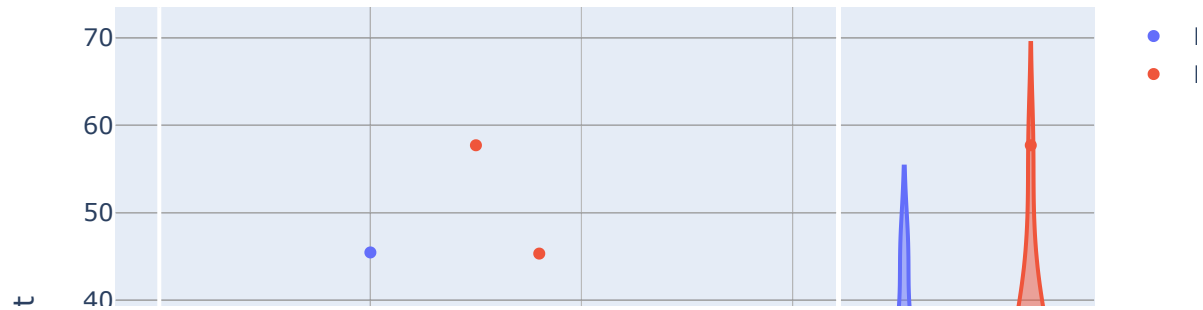

skew_hands
30
20
10
0
0
10
20
30
Subjects

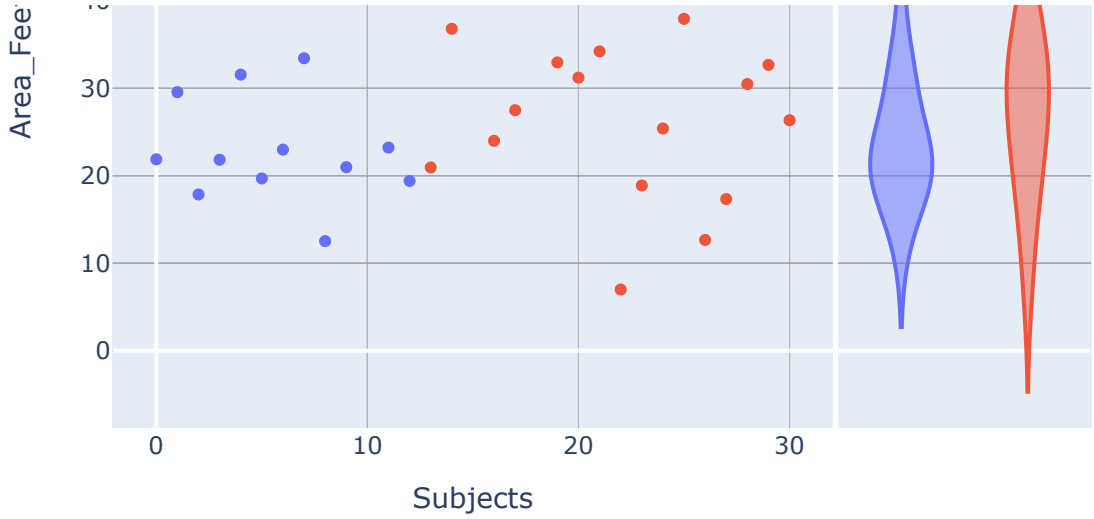

skew_feet
50
40
30
20
10
0
0
10
20
30
Subjects

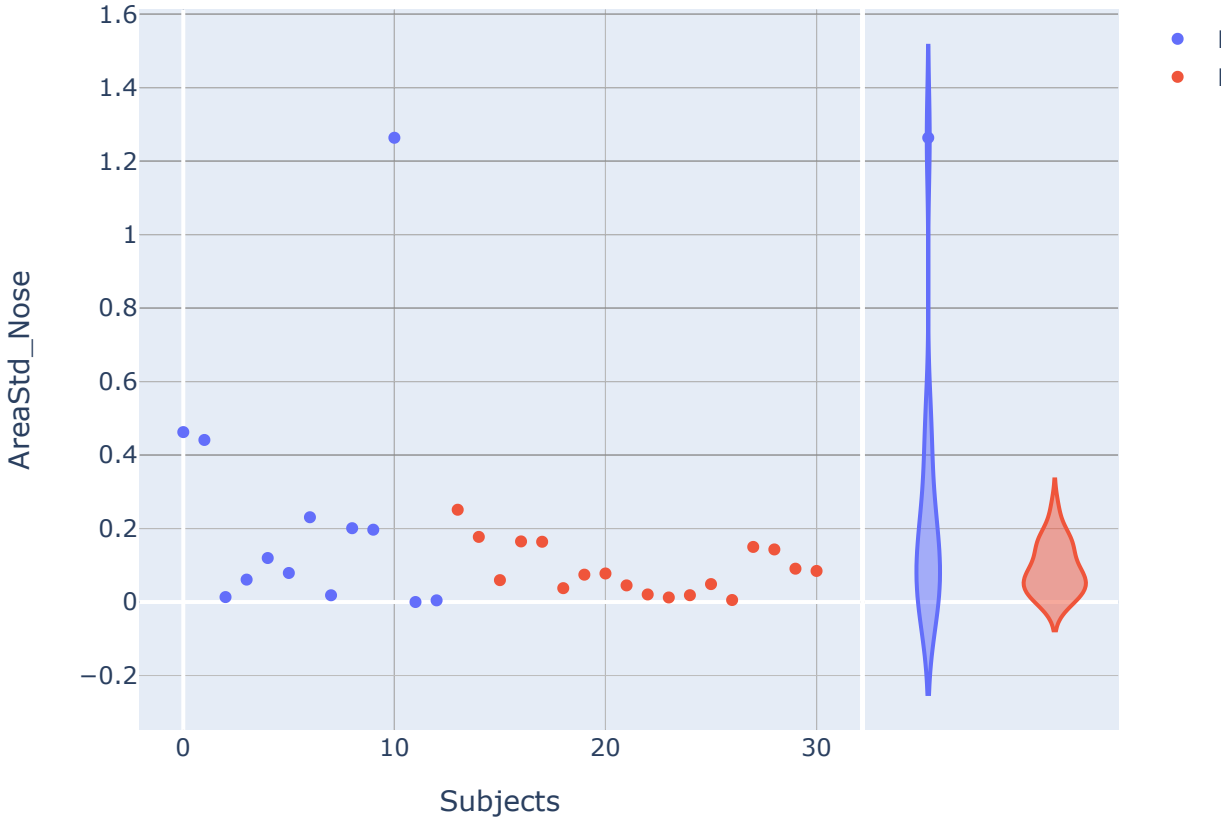

16
14
12

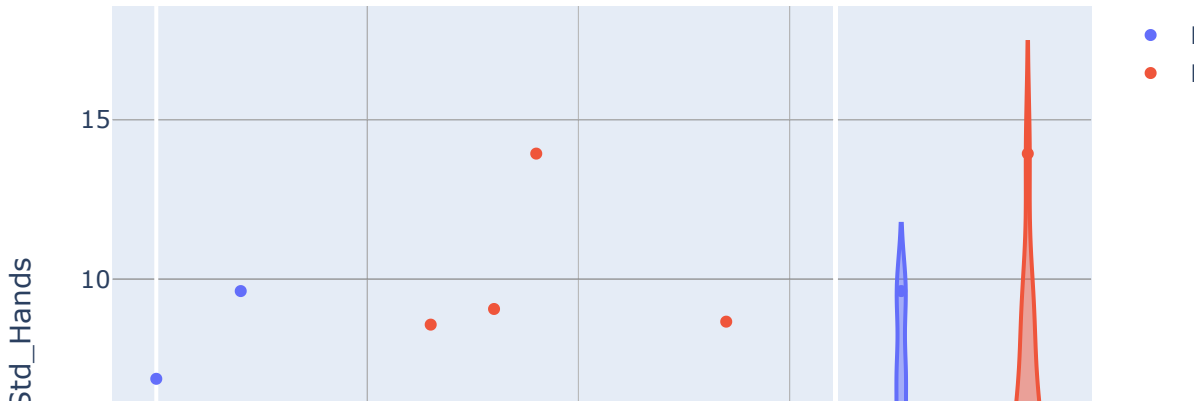

Area_Nose
10
8
6
4
2
0
−2
0
10
20
30
Subjects

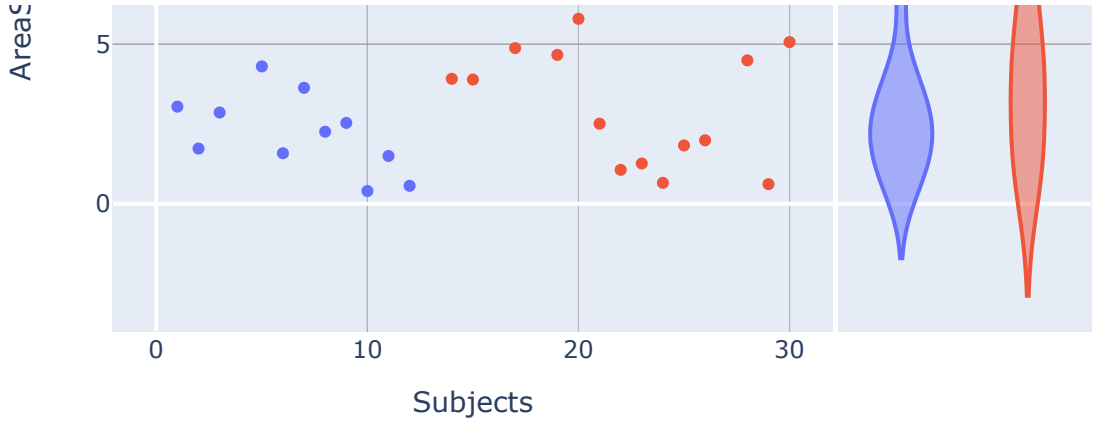

Area_Hands
70
60
50
40
30
20
10
0
0
10
20
30
Subjects

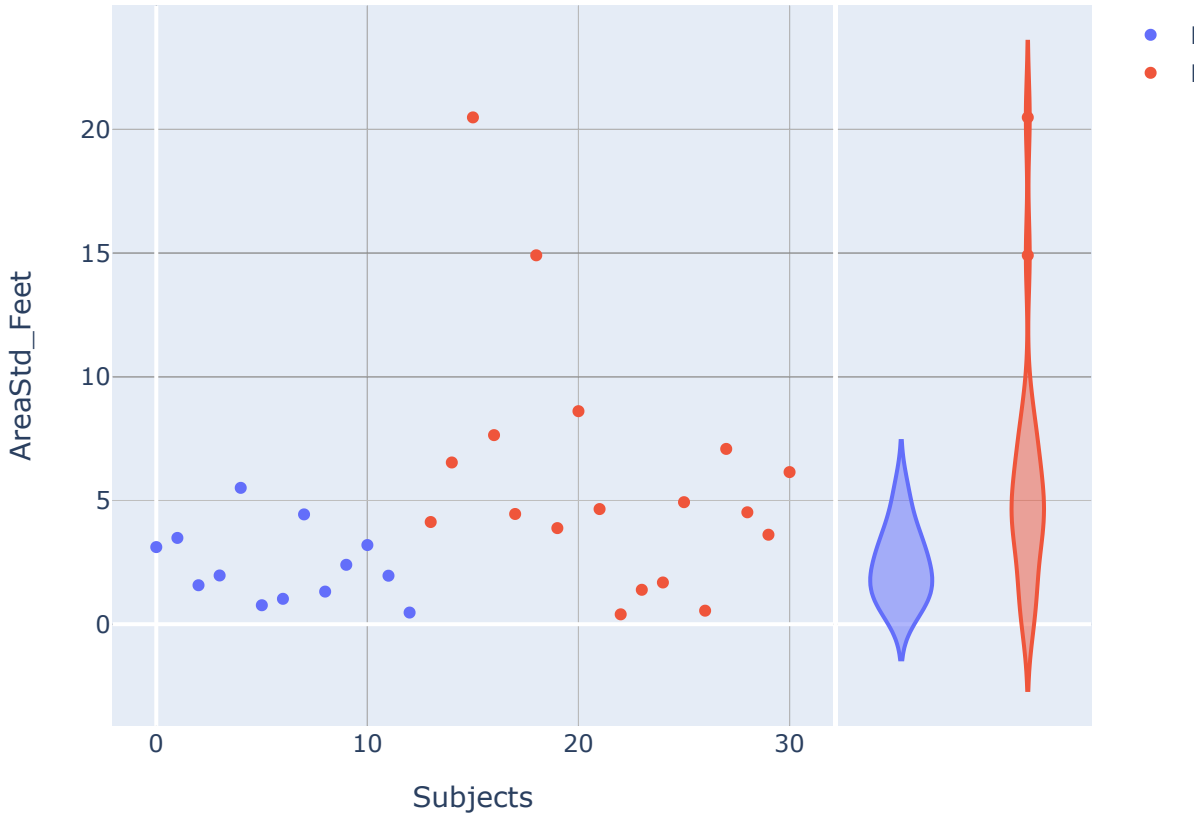

70
60
50
40

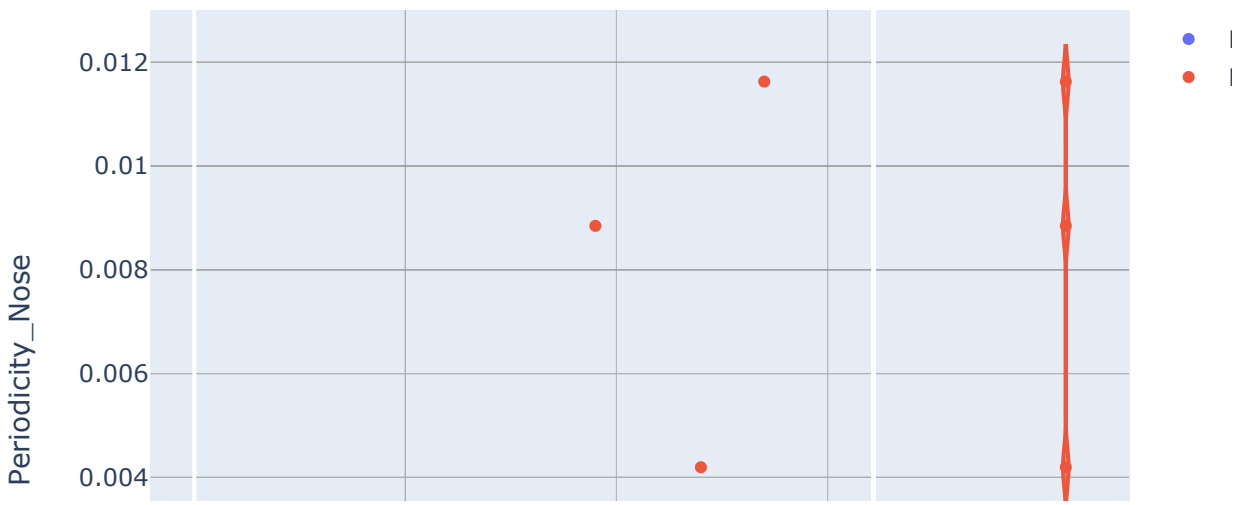

Area_Fee
30
20
10
0
0
10
20
30
Subjects

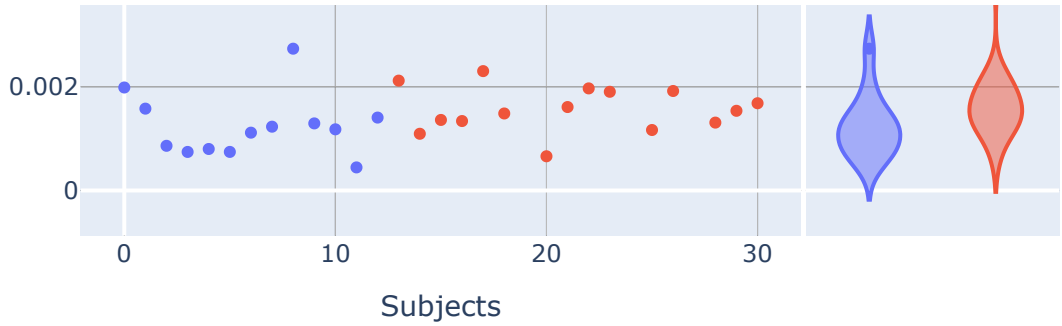

AreaStd_Nose
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
0
10
20
30
Subjects

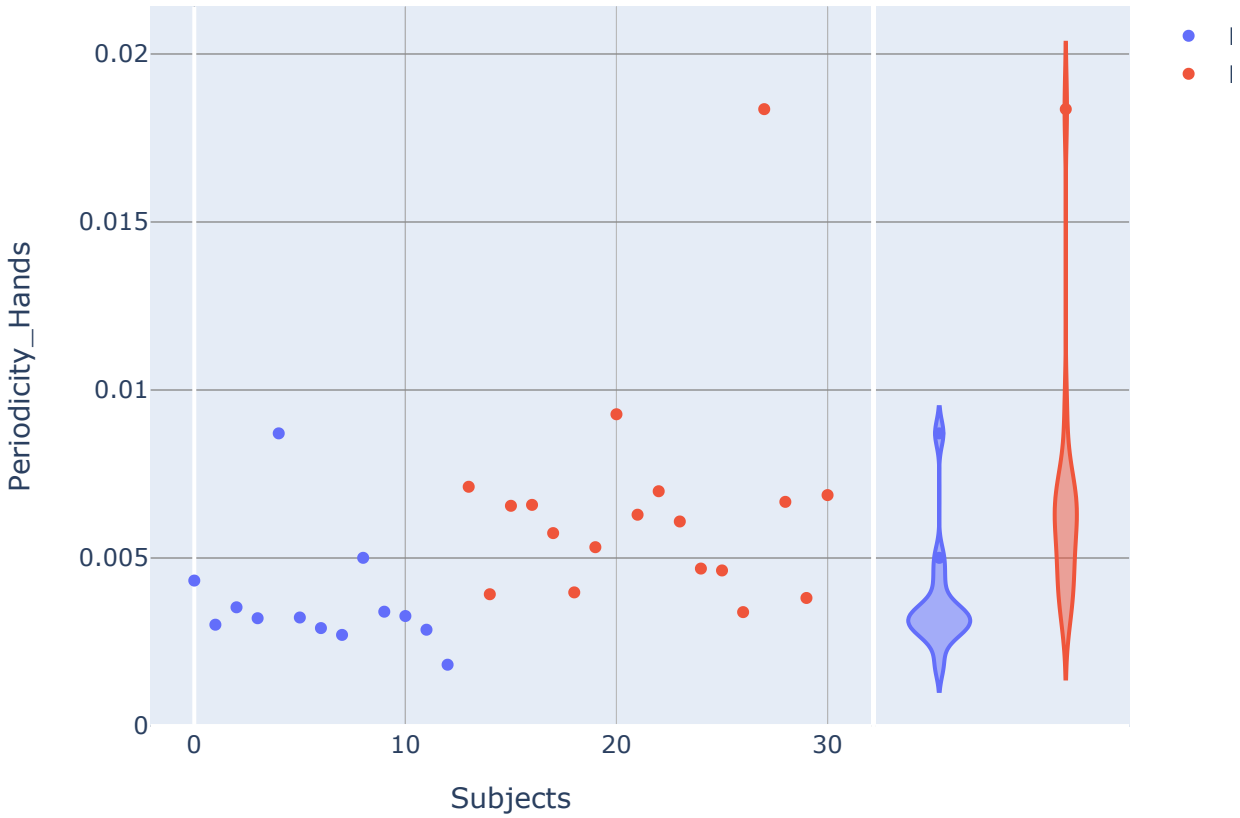

Std_Hands
15
10

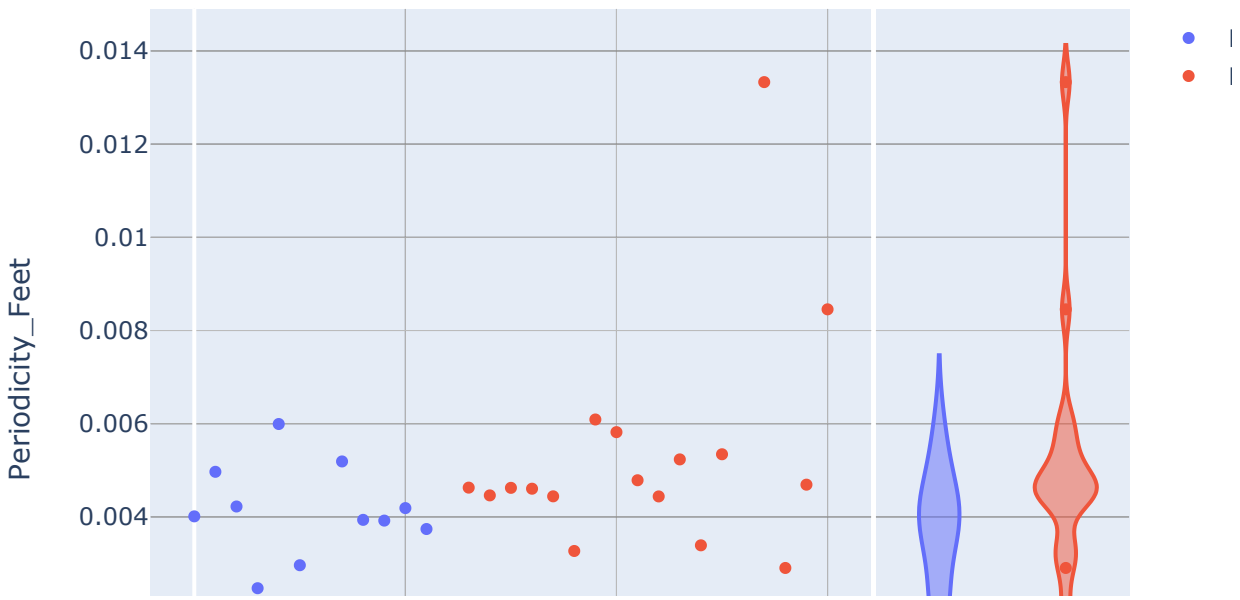

5
0
0
10
20
30
Subjects

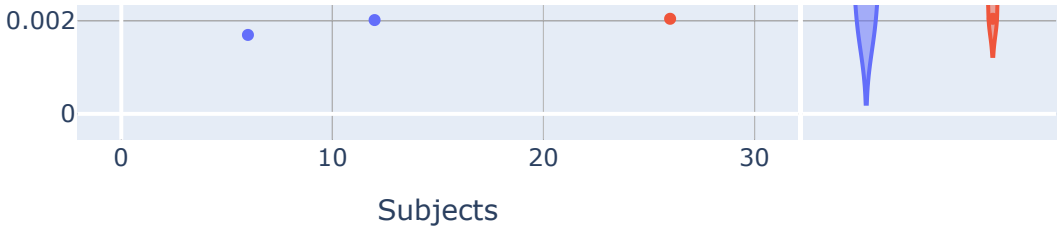

AreaStd_Feet
20
15
10
5
0
0
10
20
30
Subjects


Periodicity_Nose
0.012
0.01
0.008
0.006
0.004


0.002
0
0
10
20
30
Subjects


Periodicity_Hands
0.02
0.015
0.01
0.005
0
0
10
20
30
Subjects


Periodicity_Feet
0.014
0.012
0.01
0.008
0.006
0.004

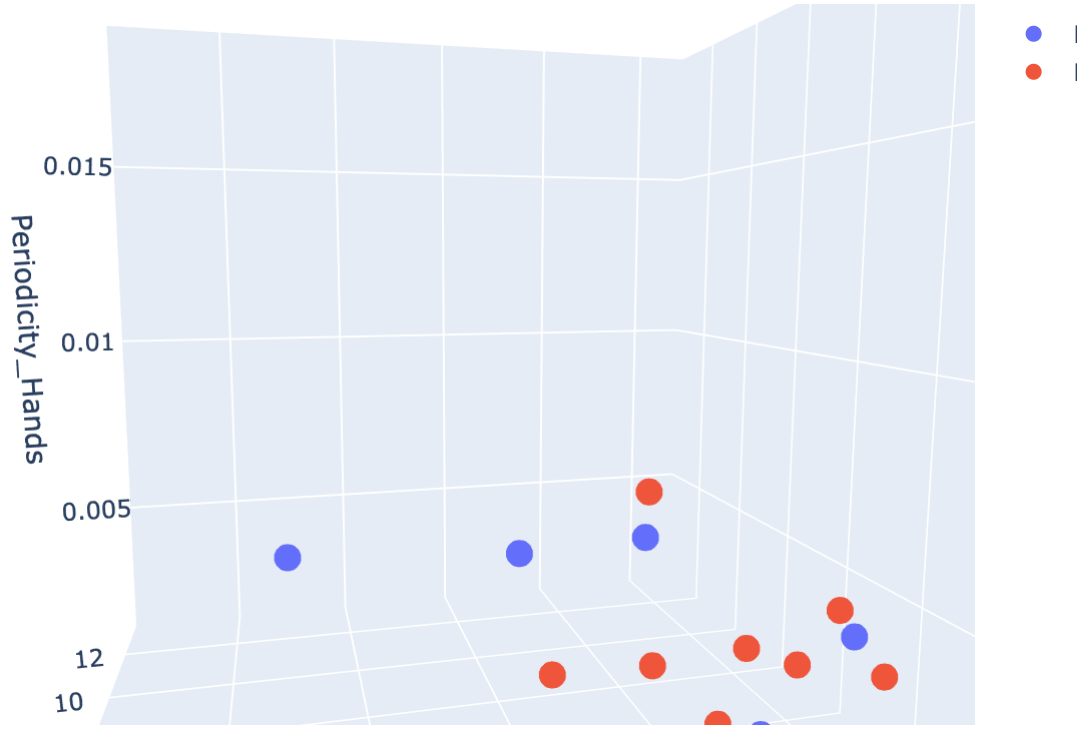


[13]
```
#fig = px.scatter_3d(Dataset, x="VelHandsCorrelation",
y="AccHandsCorrelation", z="JerkHandsCorrelation",
color="Labels",width=700, height=500)
#fig.show()
```

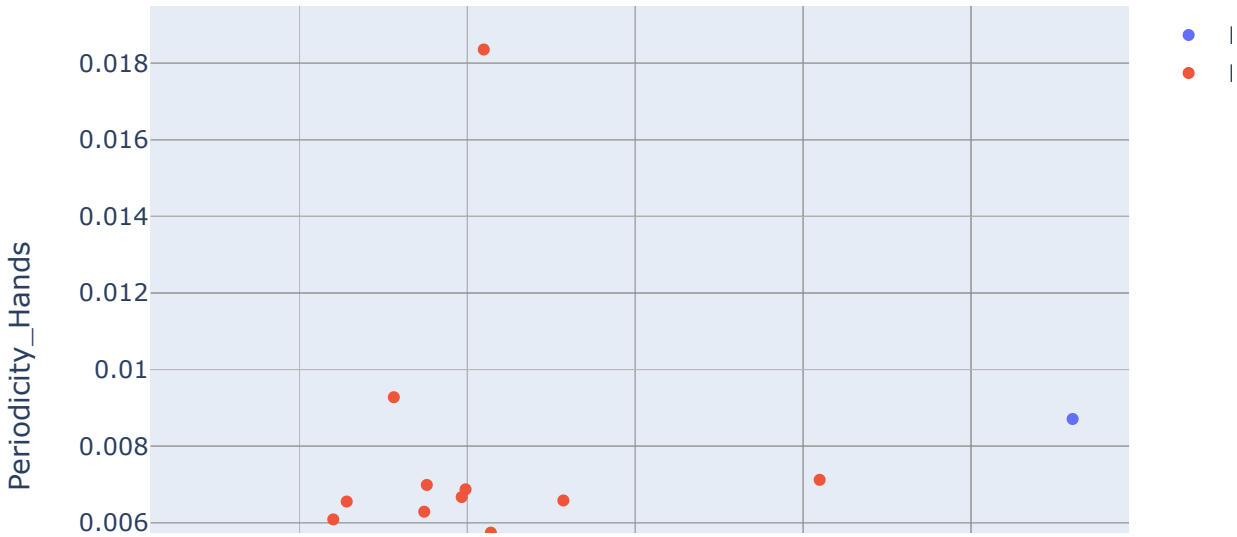
```
'fig = px.scatter_3d(Dataset, x="VelHandsCorrelation",
y="AccHandsCorrelation", z="JerkHandsCorrelation",
color="Labels",width=700, height=500)\nfig.show()'
```

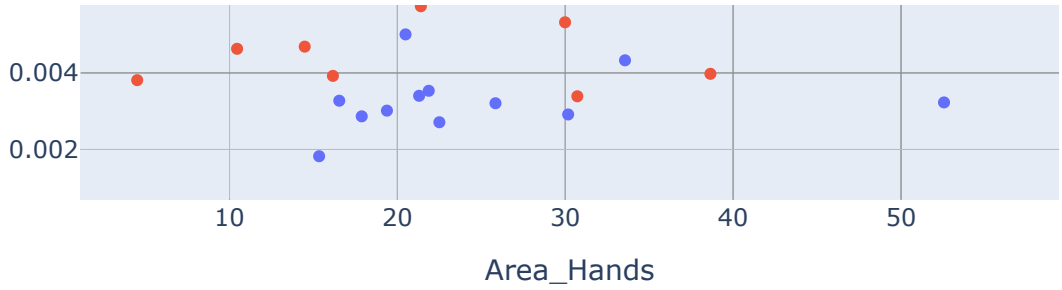
[4]
```
#fig = px.scatter_3d(Dataset, x="VelFeetCorrelation",
y="AccFeetCorrelation", z="JerkFeetCorrelation",
color="Labels",width=700, height=500)
#fig.show()
```

[5]
```
#fig = px.scatter_3d(Dataset, x='Area_Nose', y='Area_Feet',
z='Periodicity_Hands',color='Labels',width=700, height=500)
#fig.show()
```



[19]
```
fig = px.scatter(Dataset, x='Area_Hands',
y='Periodicity_Hands',color='Labels',width=700, height=500)
fig.show()
```




0.004
0.002
10
20
30
40
50
Area_Hands