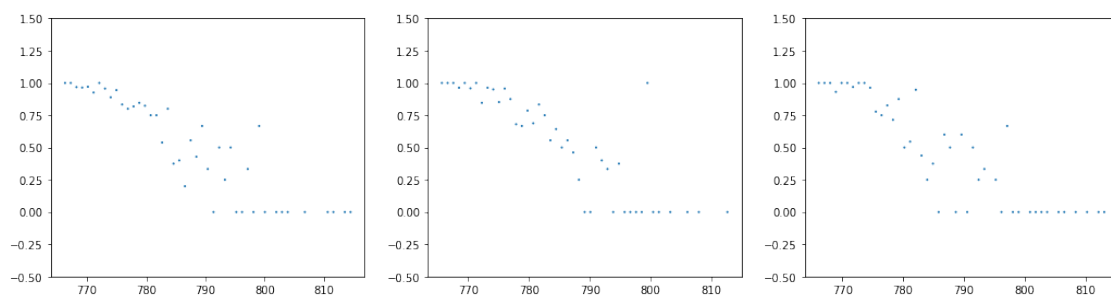


```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
768.8214872879798
```

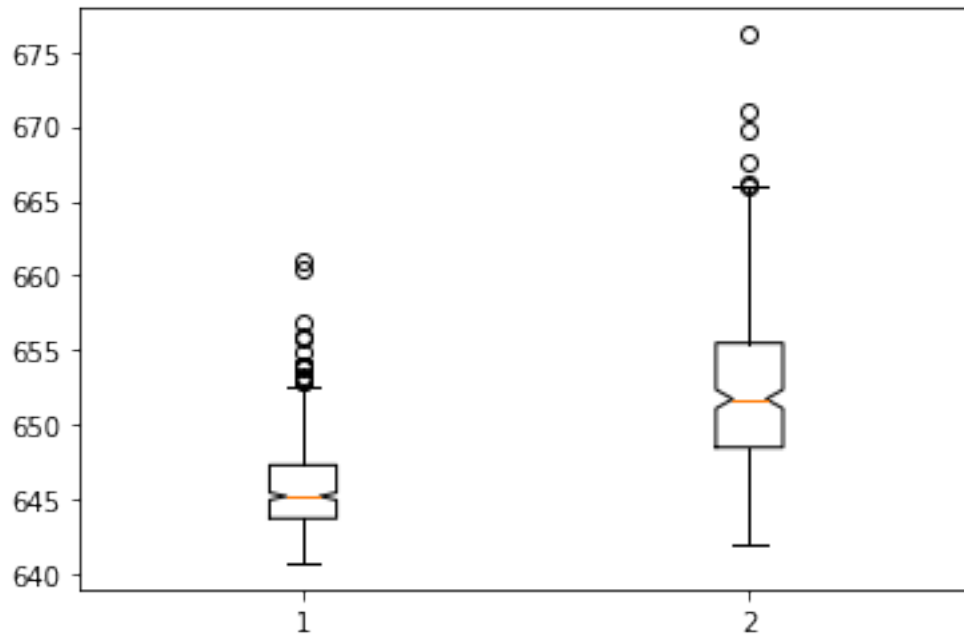
4 fmd-

```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```



5

```
[ ]: fmd_old.set_CM_infos()
```

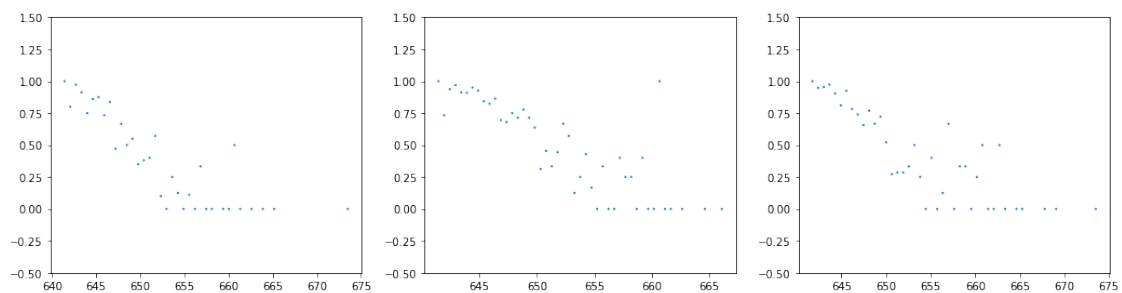


```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
641.9010528732698
```

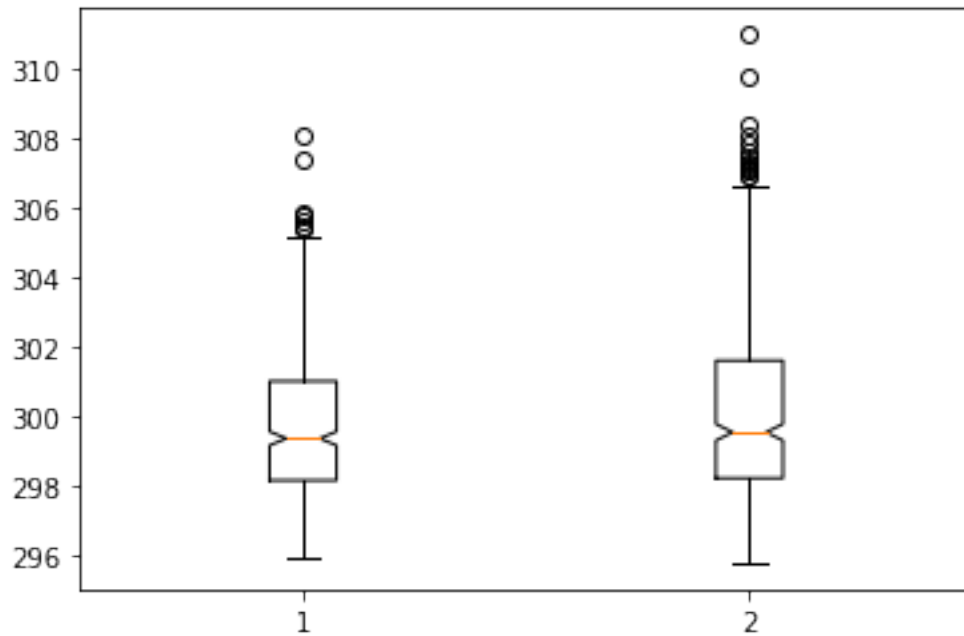
4 fmd-

```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```



5

```
[ ]: fmd_old.set_CM_infos()
```

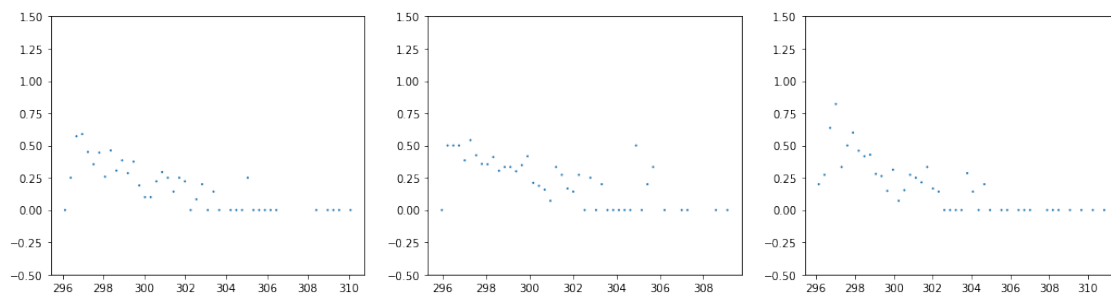


```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
295.7570235056147
```

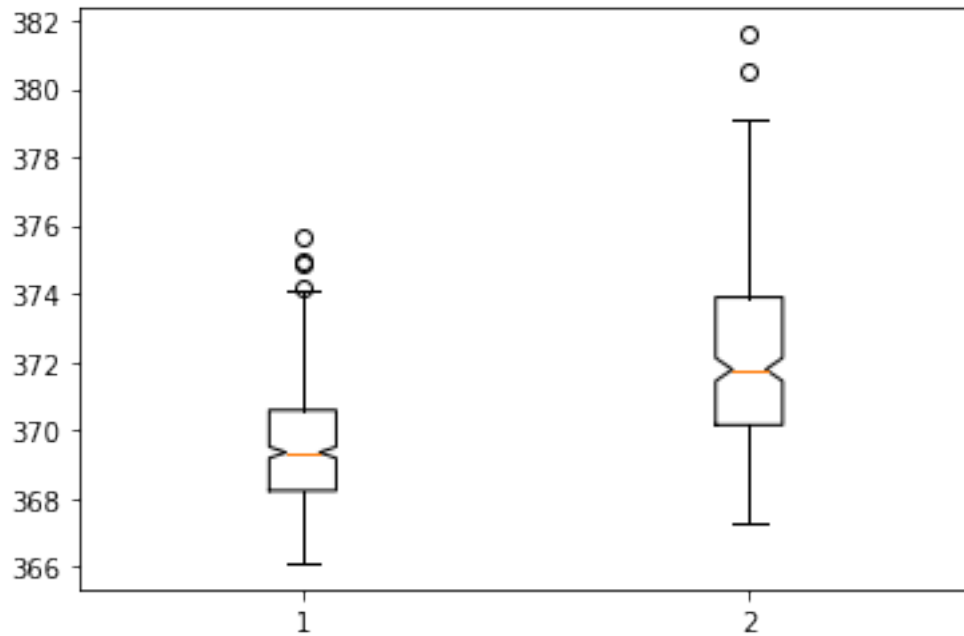
4 fmd-

```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```



5

```
[ ]: fmd_old.set_CM_infos()
```

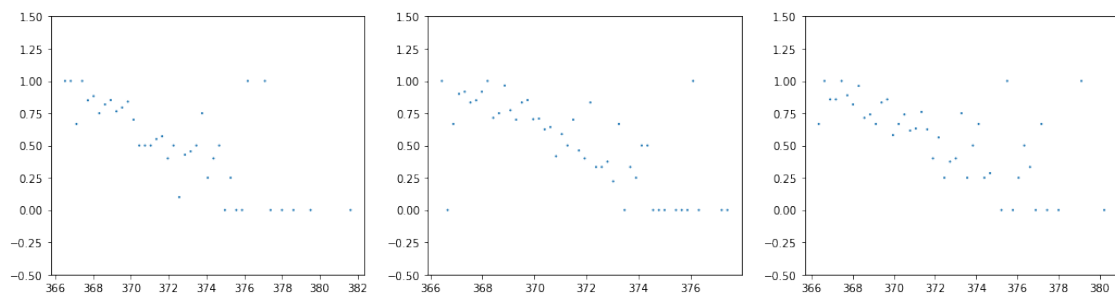


```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
367.24864240594917
```

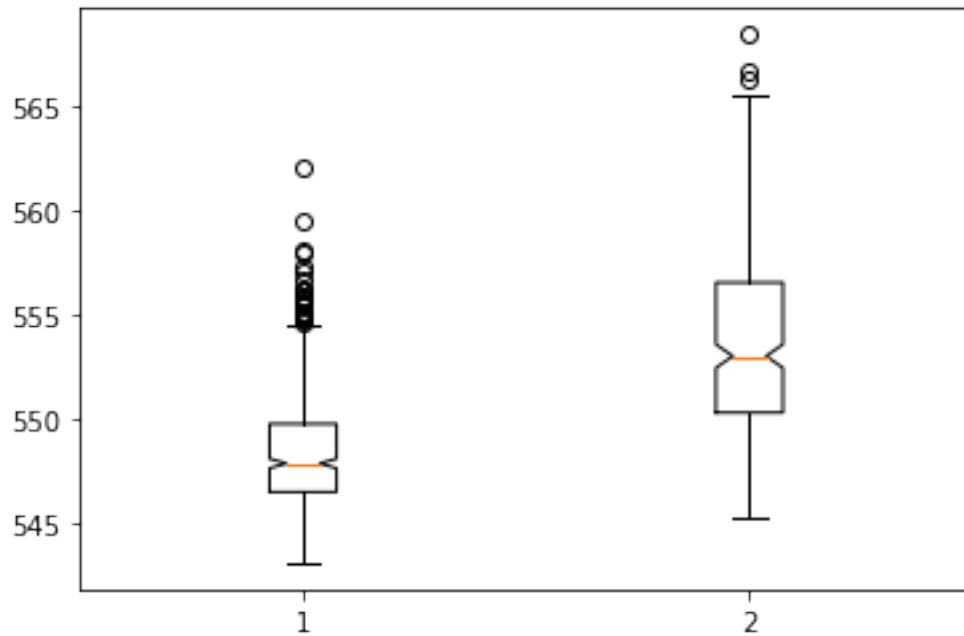
4 fmd-

```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```



5

```
[ ]: fmd_old.set_CM_infos()
```

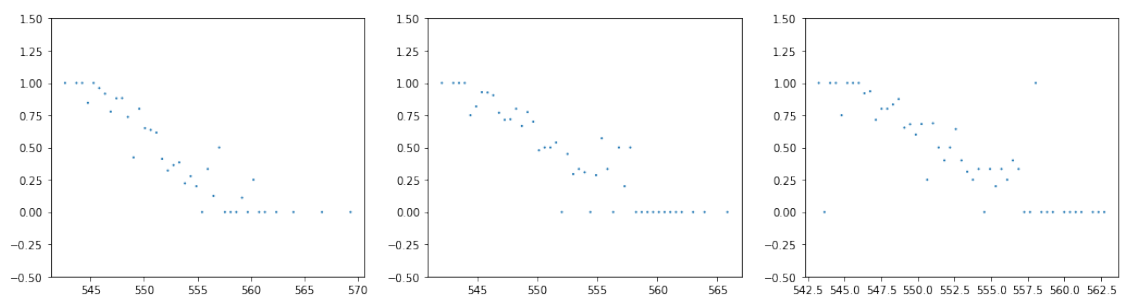


```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
545.3495212797632
```

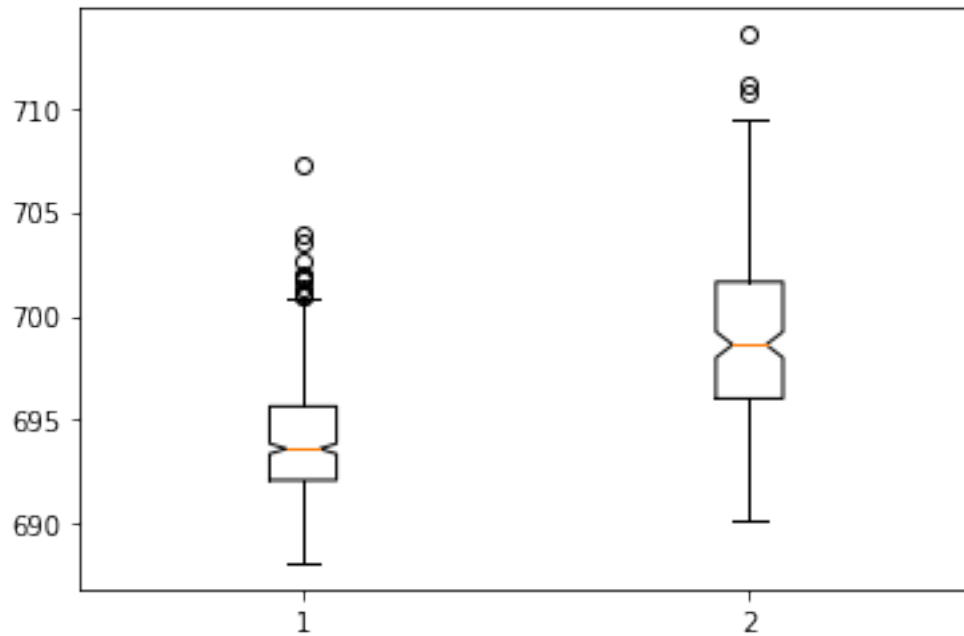
4 fmd-

```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```



5

```
[ ]: fmd_old.set_CM_infos()
```

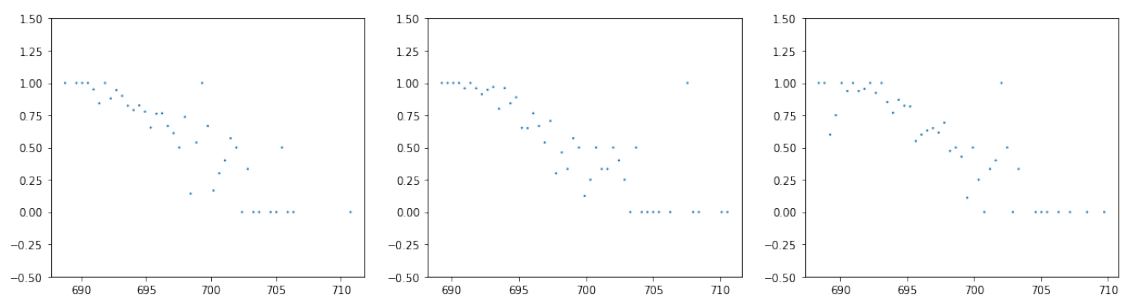


```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
690.1254562567722
```

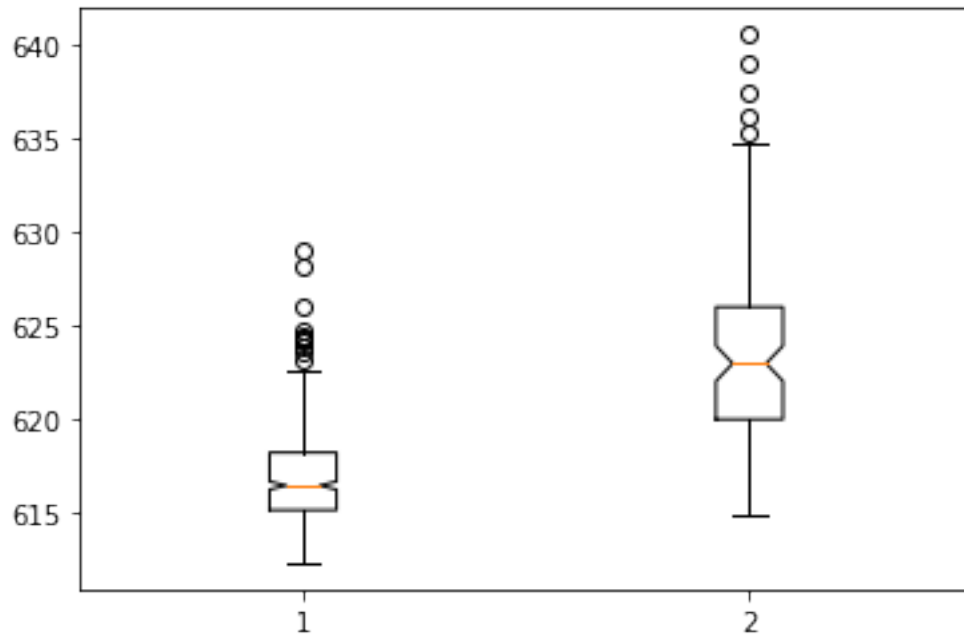
4 fmd-

```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```



5

```
[ ]: fmd_old.set_CM_infos()
```

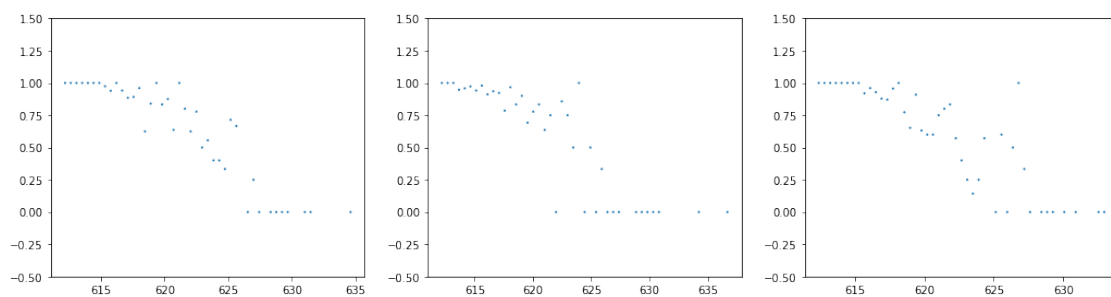


```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
614.8608656628996
```

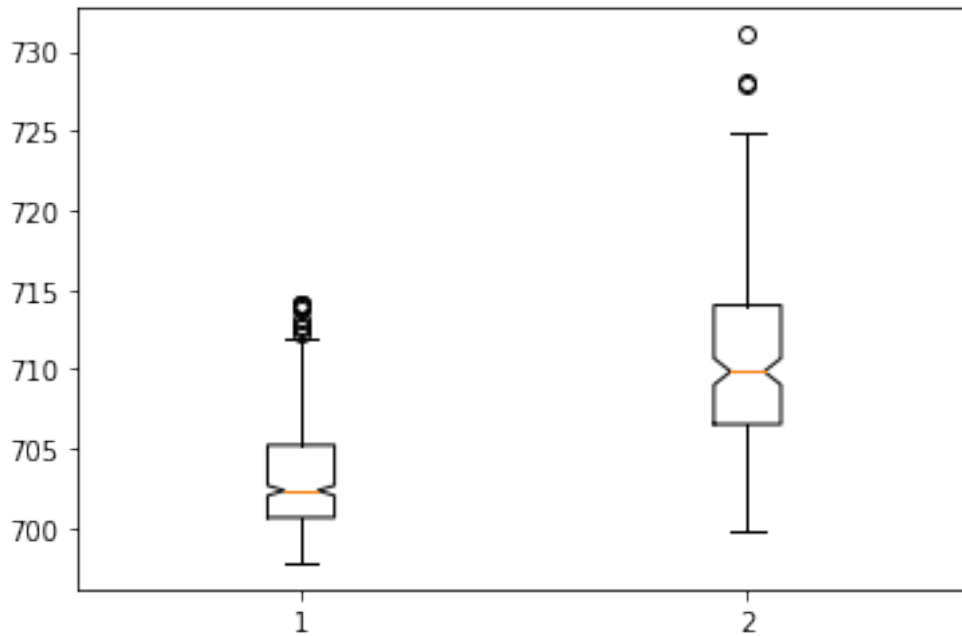
4 fmd-

```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```



5

```
[ ]: fmd_old.set_CM_infos()
```

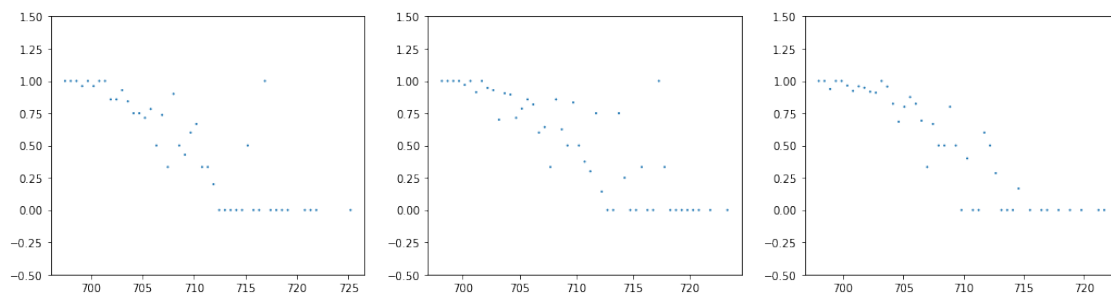


```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
699.8381012770061
```

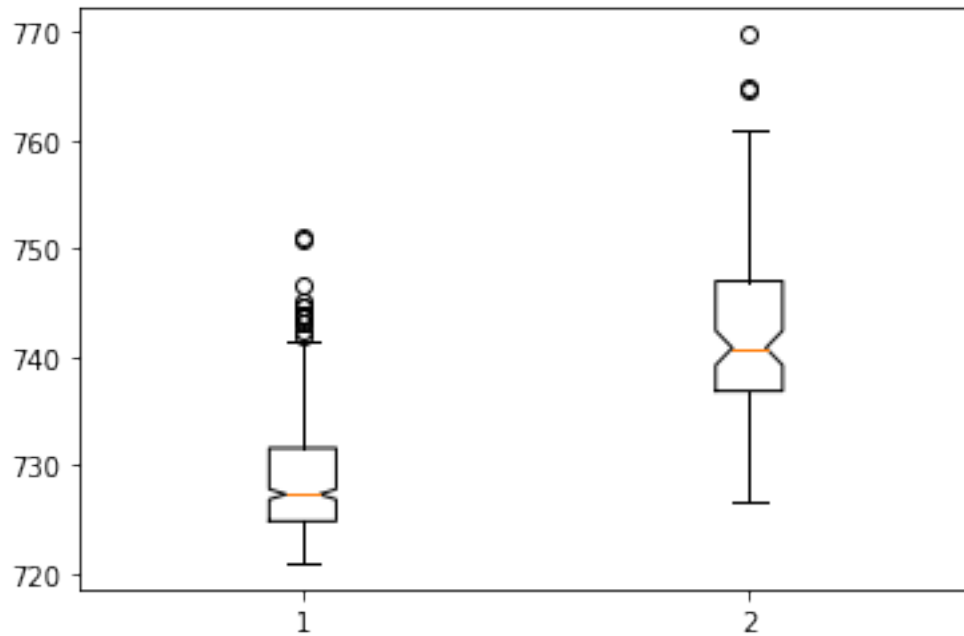
4 fmd-

```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```



5

```
[ ]: fmd_old.set_CM_infos()
```

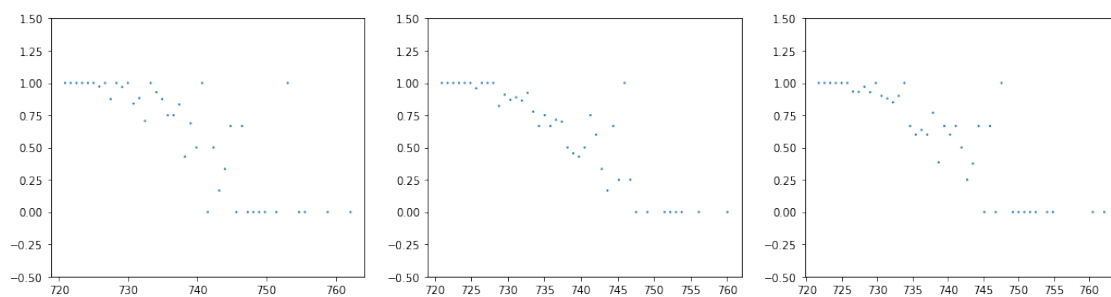



```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
726.6721913487905
```

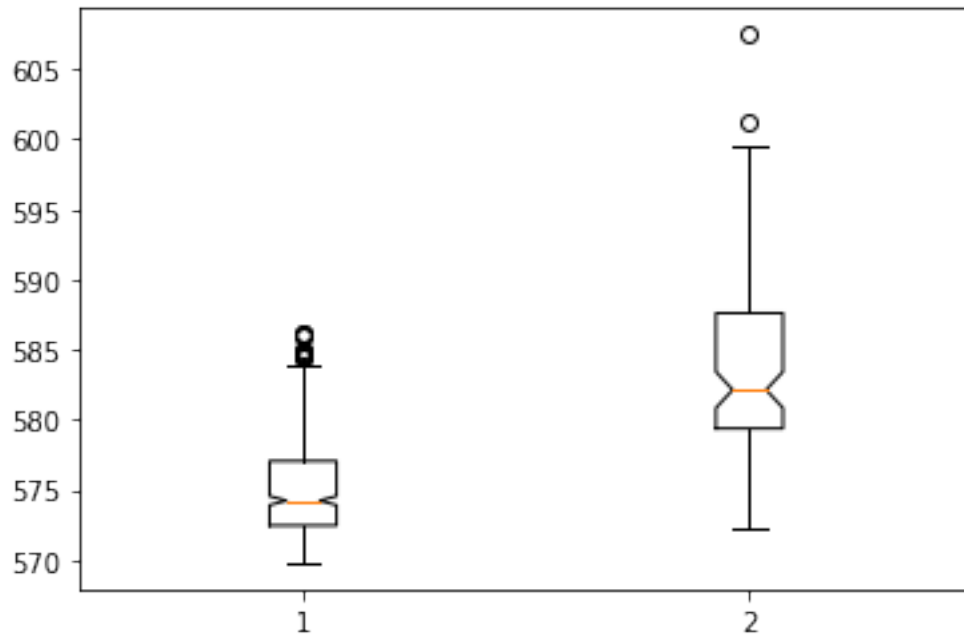
4 fmd-

```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```



5

```
[ ]: fmd_old.set_CM_infos()
```

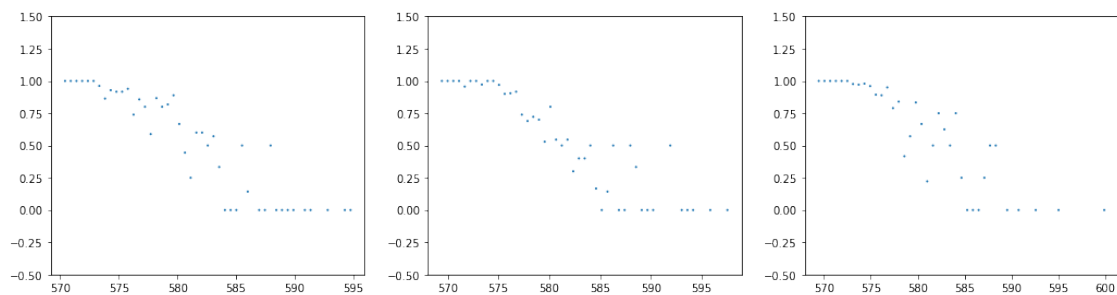


```
[ ]: fmd_old.show_fmdc()
```

```
self.fmdc
572.2999370541254
```

4 fmd-

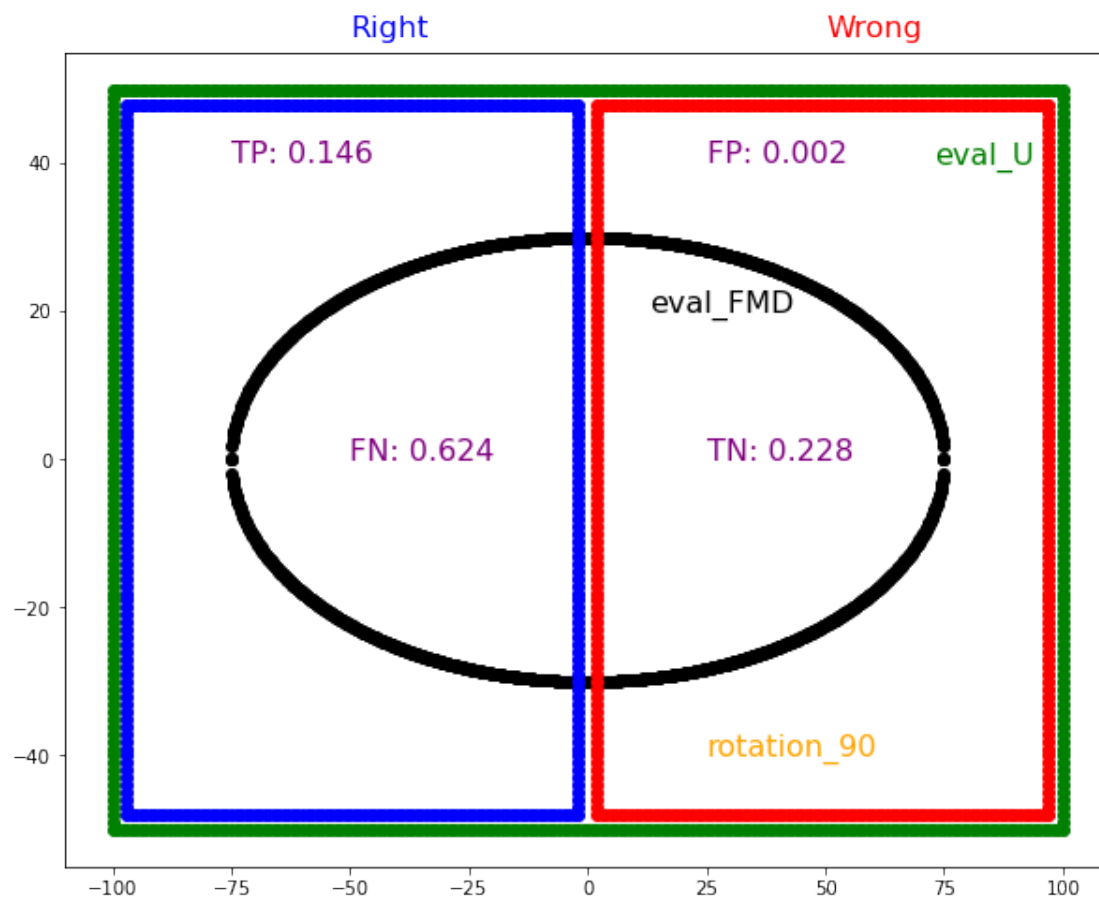
```
[ ]: fmd_old.show_fmd_right_ratio_graph()
```

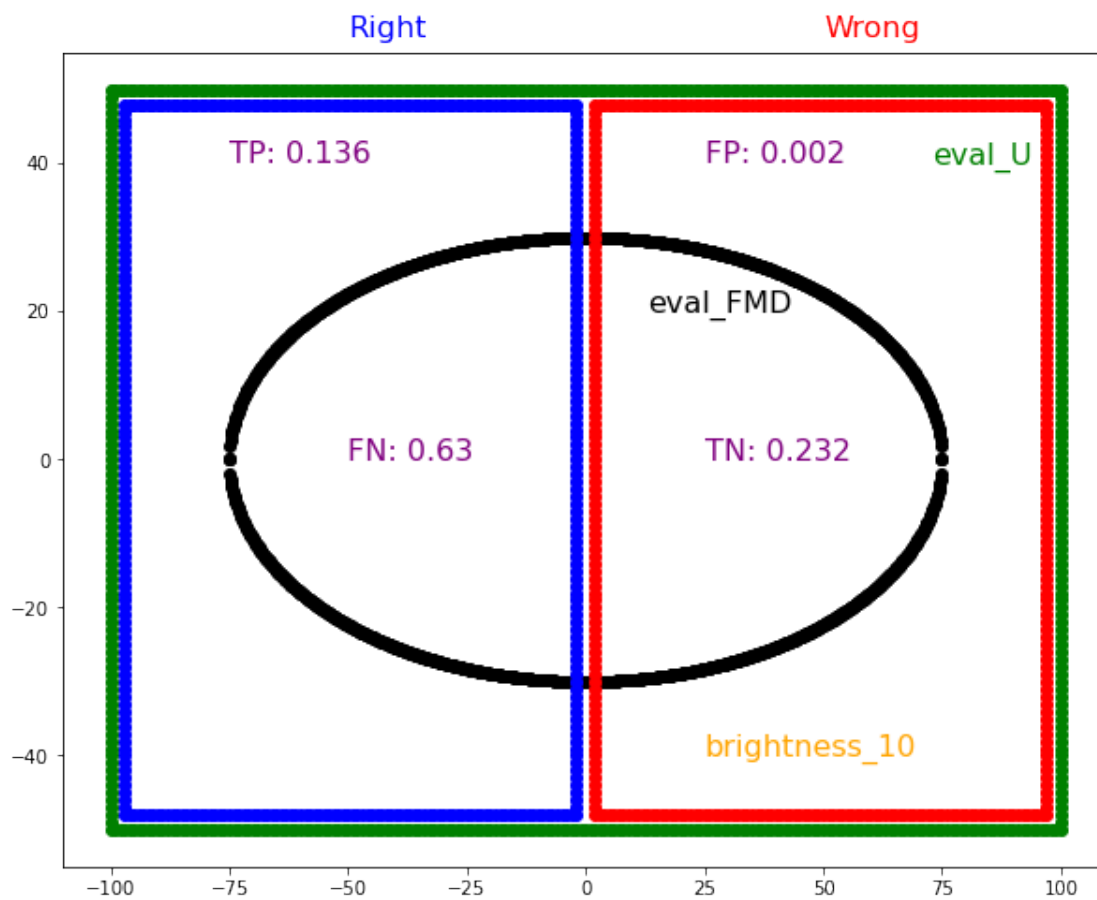


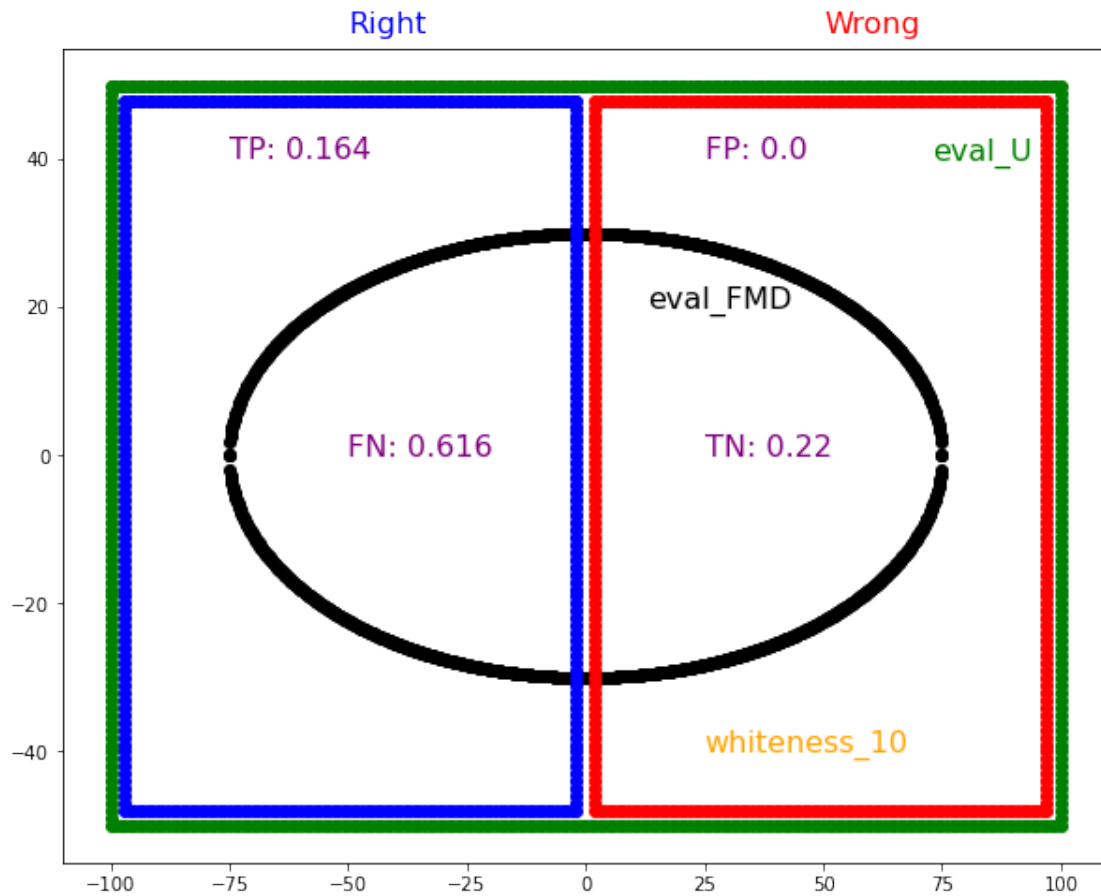
5

```
[ ]: fmd_old.set_CM_infos()
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.23
[   FMD = WR_FMD(NPV)] = 0.26760563380281693

[   (TPR)] = 0.1896103896103896
[   (TNR)] = 0.9913043478260869
-----
[   ] = 1.1809147374364766

[FMD (|eval_FMD|/|eval_U|)] = 0.624
-----

In brightness_10
[   U = WR_U(N)] = 0.234
[   FMD = WR_FMD(NPV)] = 0.26914153132250584

[   (TPR)] = 0.17754569190600522
[   (TNR)] = 0.9914529914529915
```

```
-----  
[ ] = 1.1689986833589967
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.63  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.22
```

```
[ FMD = WR_FMD(NPV)] = 0.2631578947368421
```

```
[ (TPR)] = 0.21025641025641026
```

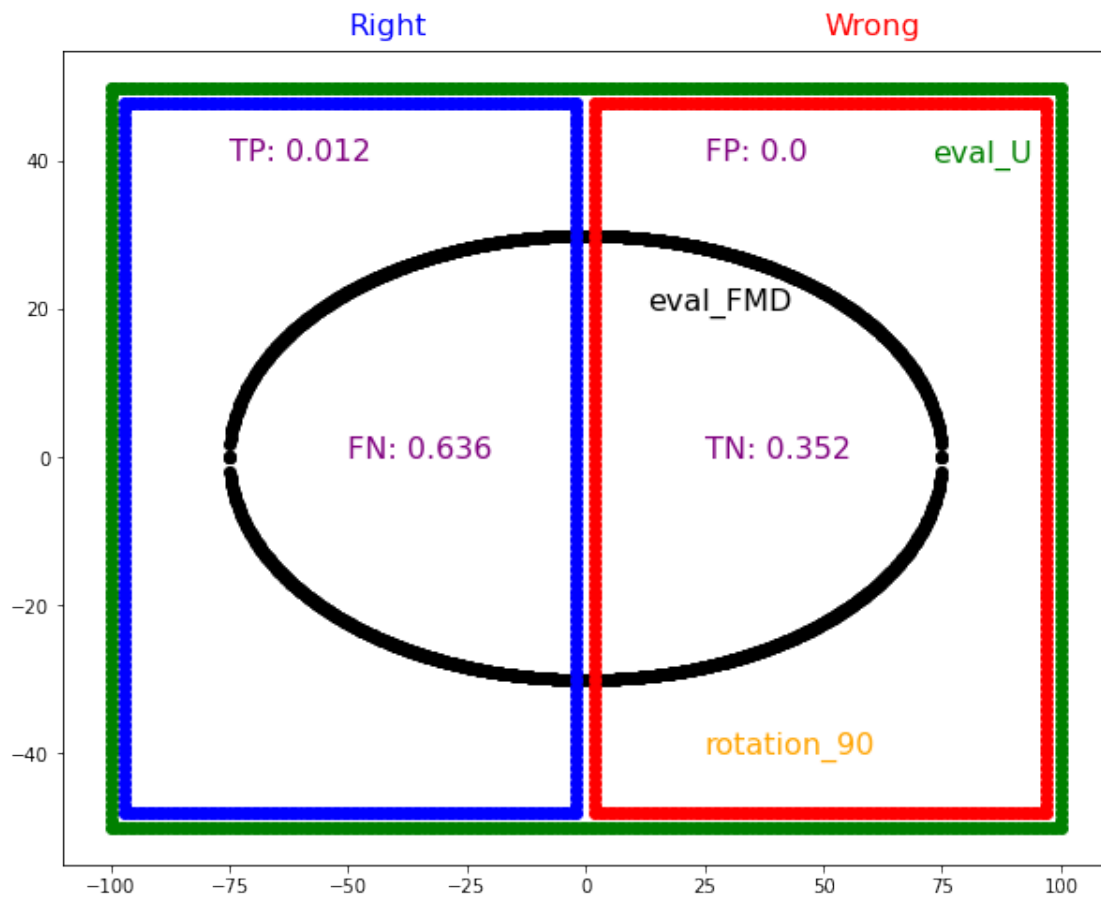
```
[ (TNR)] = 1.0  
-----
```

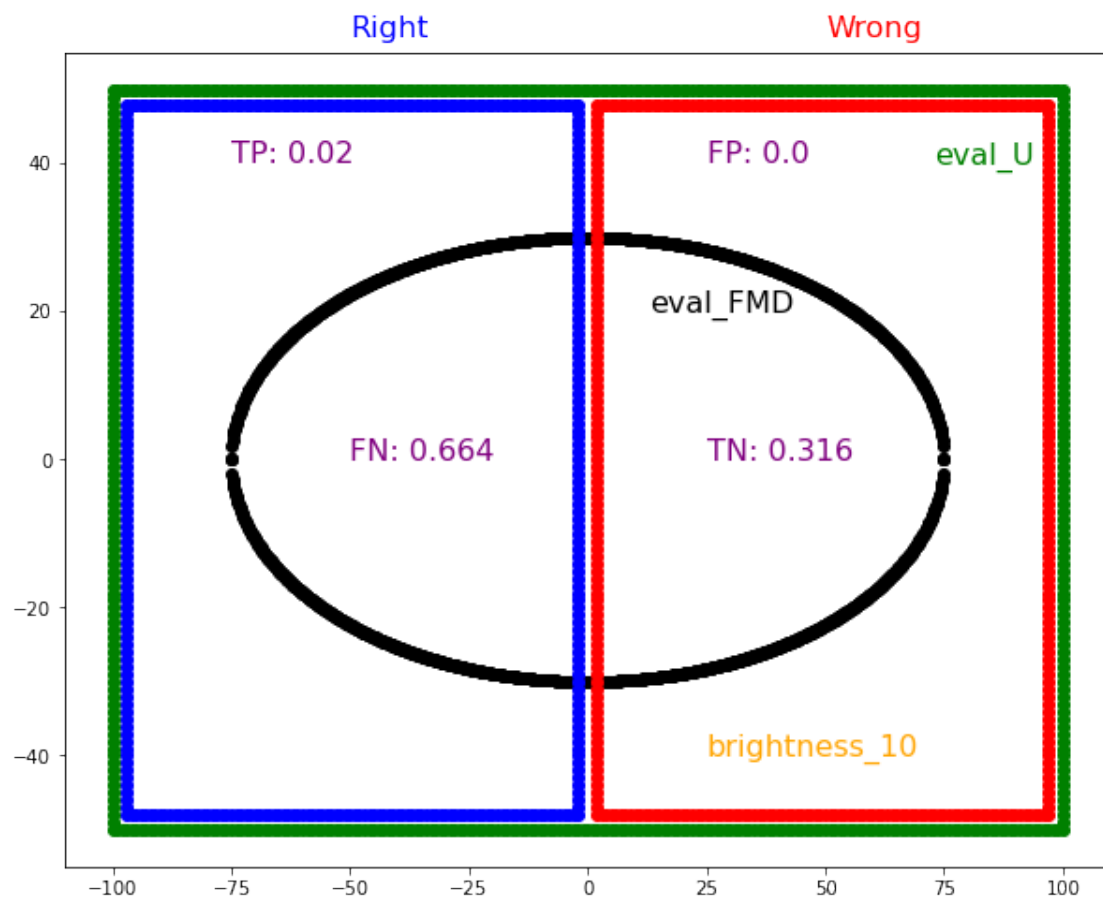
```
[ ] = 1.2102564102564102
```

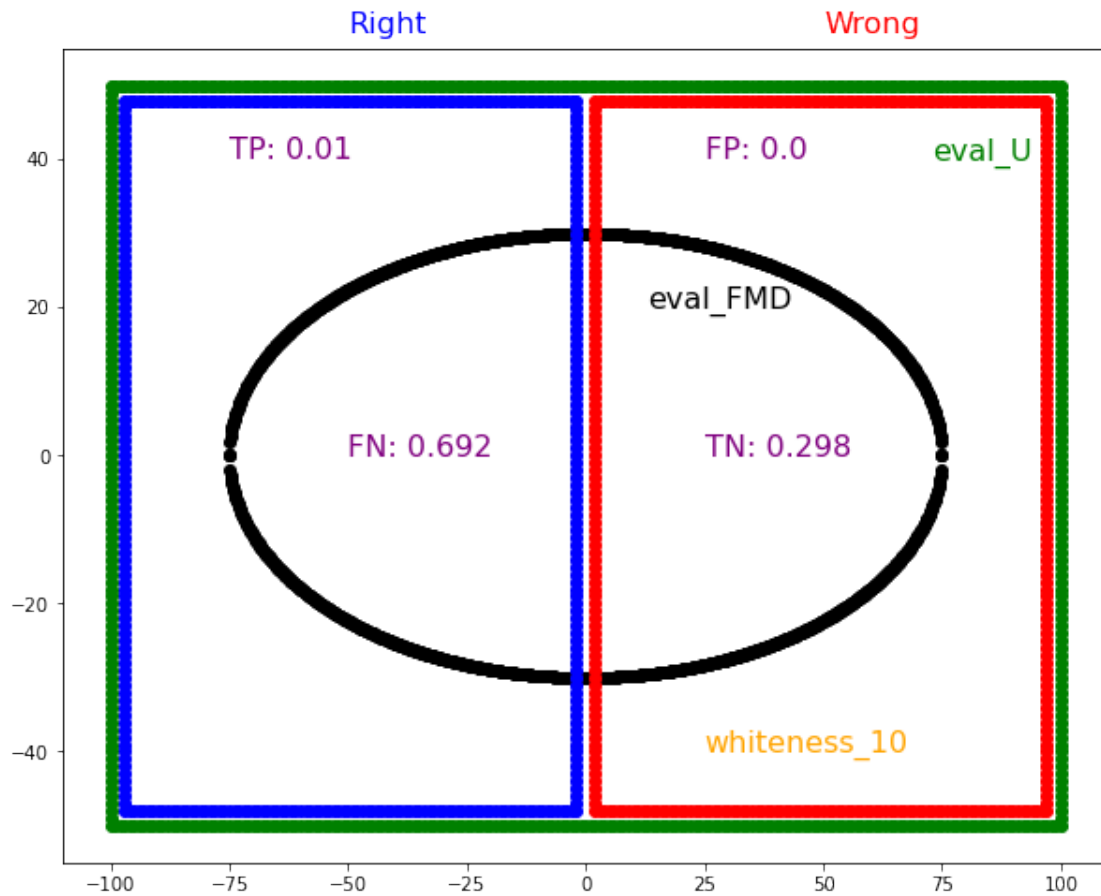
```
[FMD (|eval_FMD|/|eval_U|)] = 0.616  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.352
[   FMD = WR_FMD(NPV)] = 0.3562753036437247

[   (TPR)] = 0.018518518518518517
[   (TNR)] = 1.0
-----
[   ] = 1.0185185185185186

[FMD (|eval_FMD|/|eval_U|)] = 0.636
-----

In brightness_10
[   U = WR_U(N)] = 0.316
[   FMD = WR_FMD(NPV)] = 0.32244897959183677

[   (TPR)] = 0.029239766081871343
[   (TNR)] = 1.0
```

```
-----  
[ ] = 1.0292397660818713
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.664  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.298
```

```
[ FMD = WR_FMD(NPV)] = 0.301010101010101
```

```
[ (TPR)] = 0.014245014245014247
```

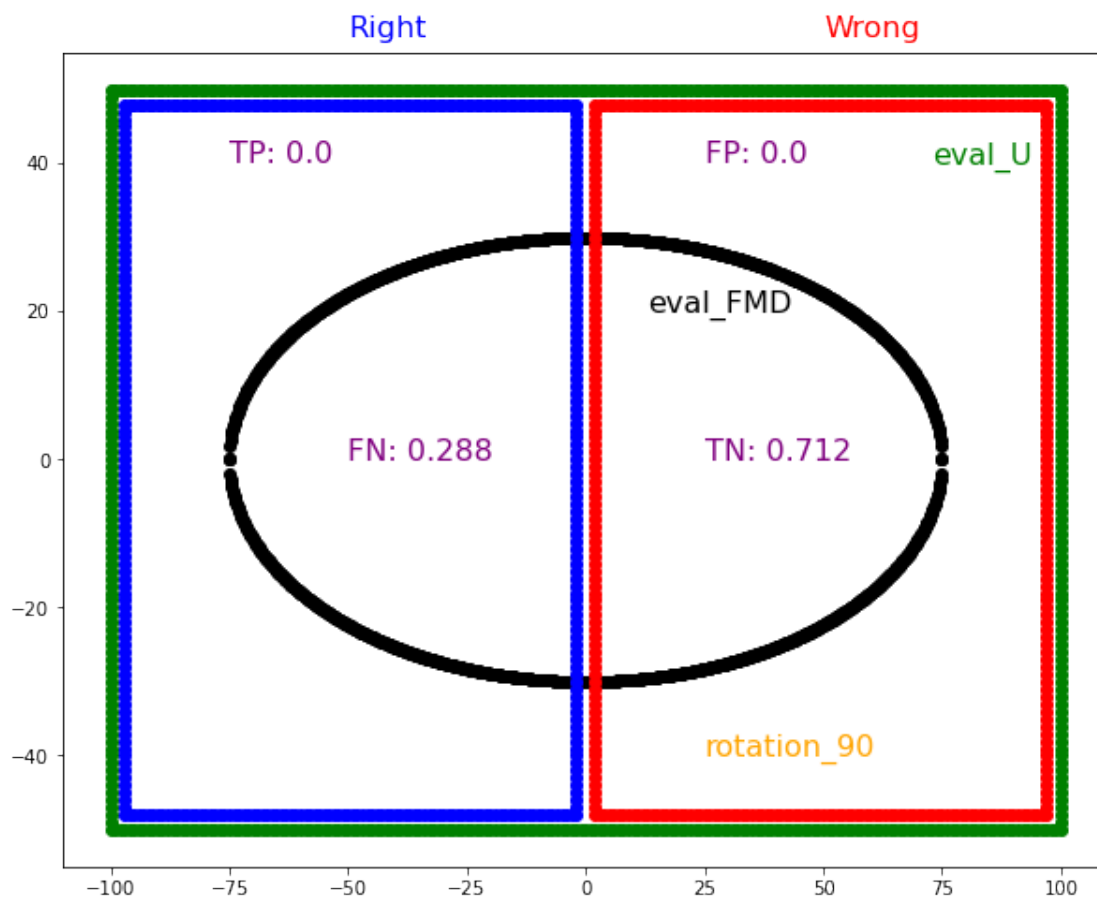
```
[ (TNR)] = 1.0  
-----
```

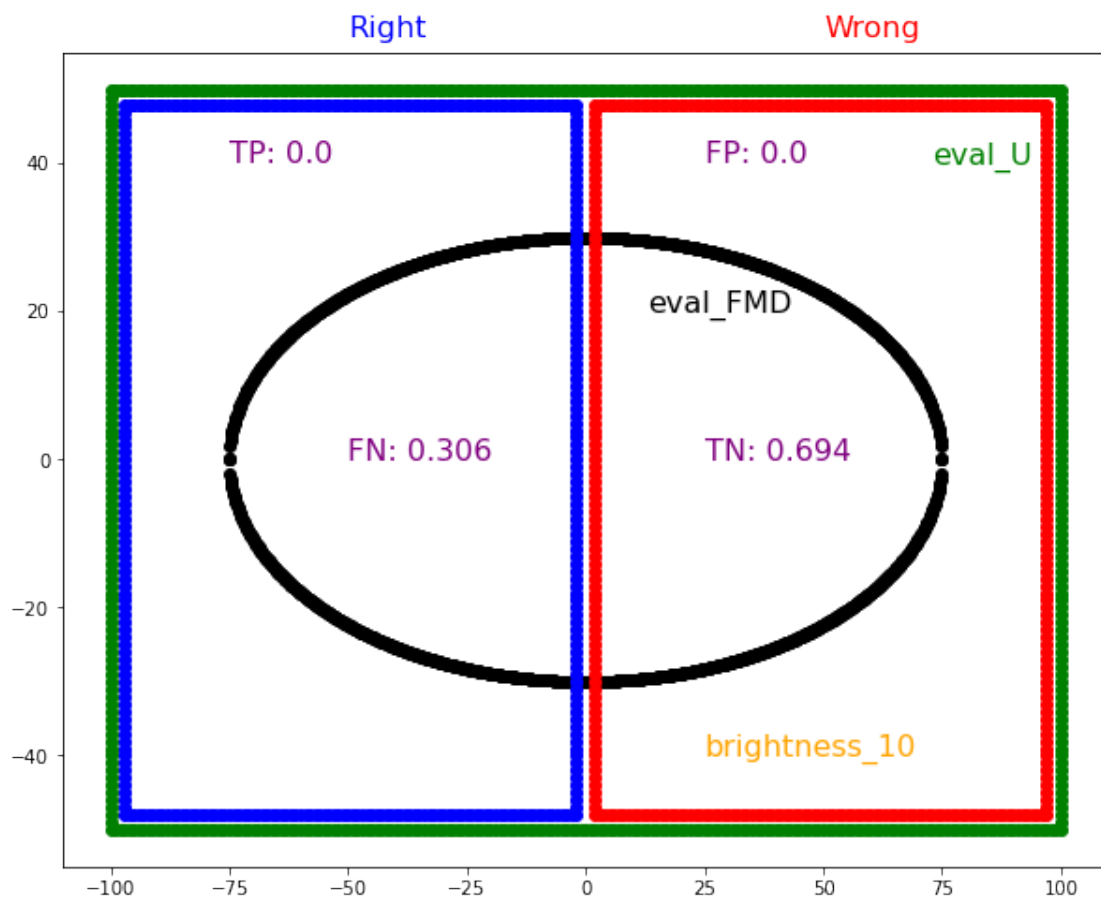
```
[ ] = 1.0142450142450143
```

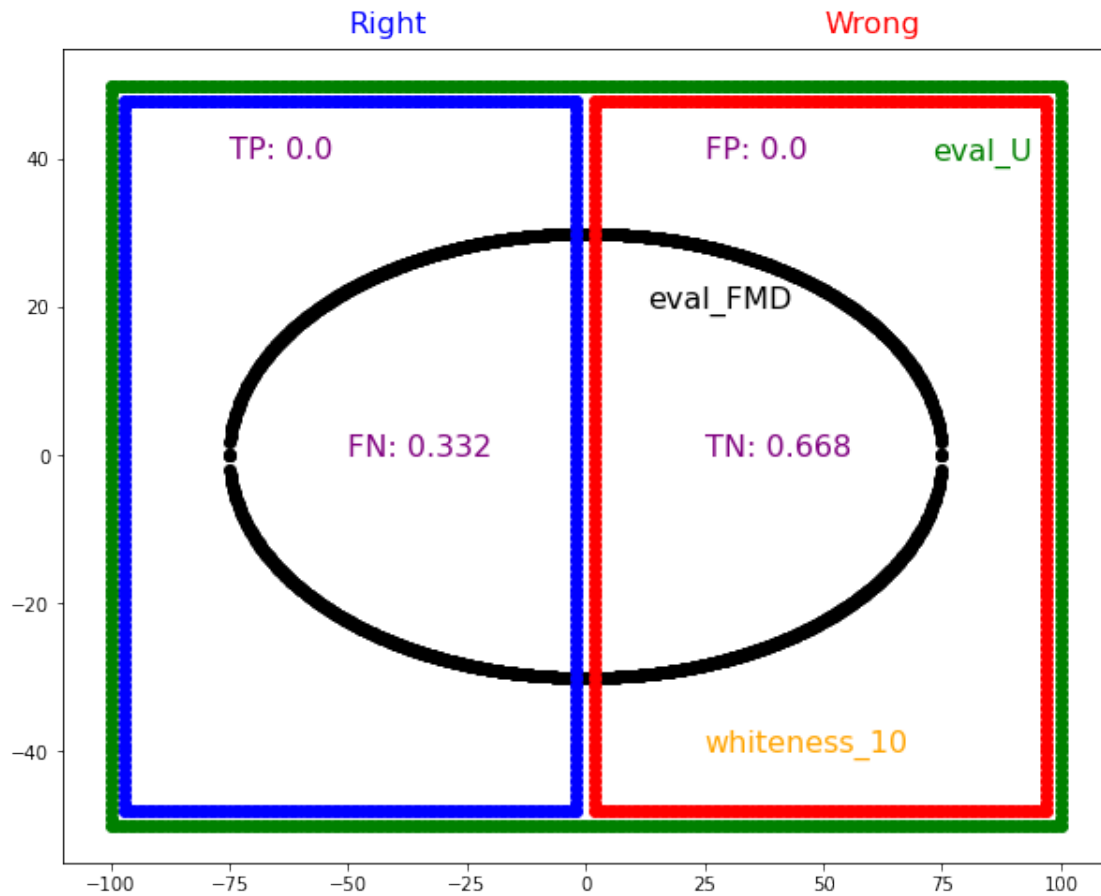
```
[FMD (|eval_FMD|/|eval_U|)] = 0.692  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.712
[   FMD = WR_FMD(NPV)] = 0.712

[   (TPR)] = 0.0
[   (TNR)] = 1.0
-----
[   ] = 1.0

[FMD   (|eval_FMD|/|eval_U|)] = 0.288
-----

In brightness_10
[   U = WR_U(N)] = 0.694
[   FMD = WR_FMD(NPV)] = 0.694

[   (TPR)] = 0.0
[   (TNR)] = 1.0
```

```
-----  
[ ] = 1.0
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.306  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.668
```

```
[ FMD = WR_FMD(NPV)] = 0.668
```

```
[ (TPR)] = 0.0
```

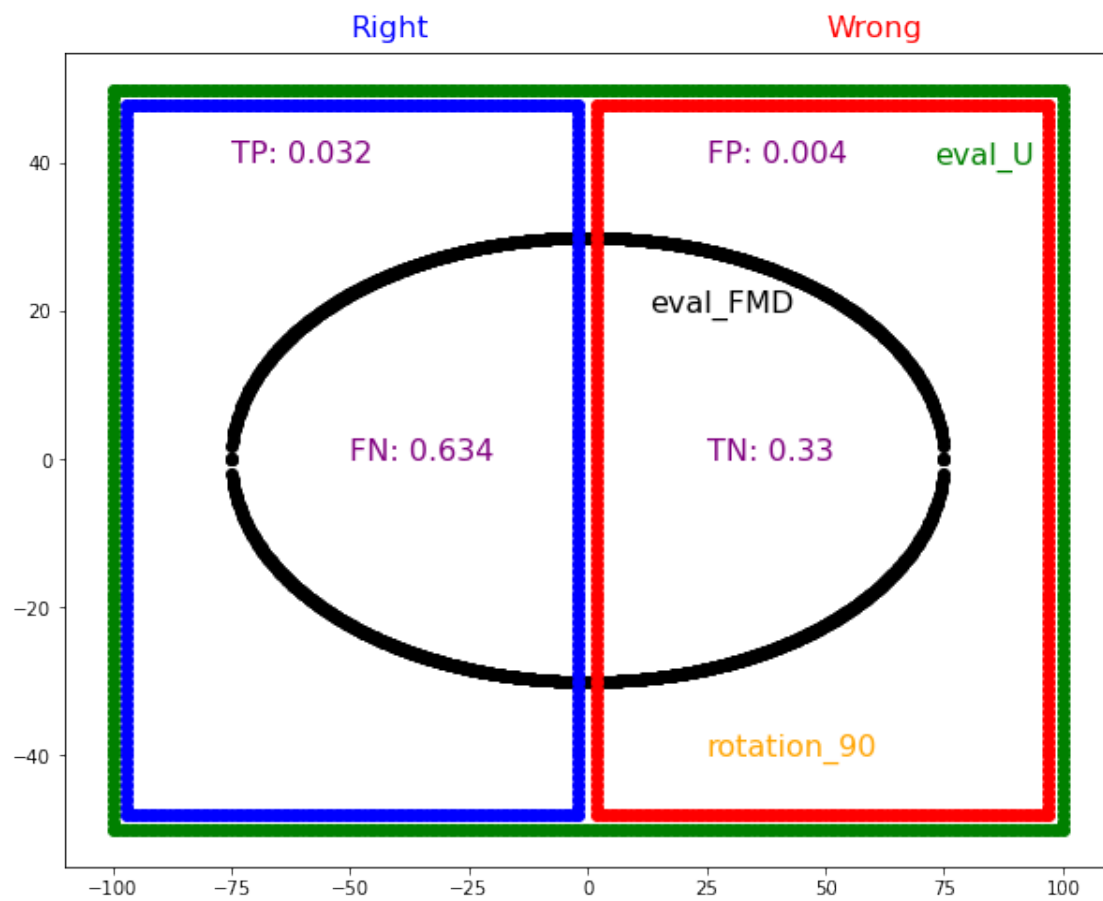
```
[ (TNR)] = 1.0  
-----
```

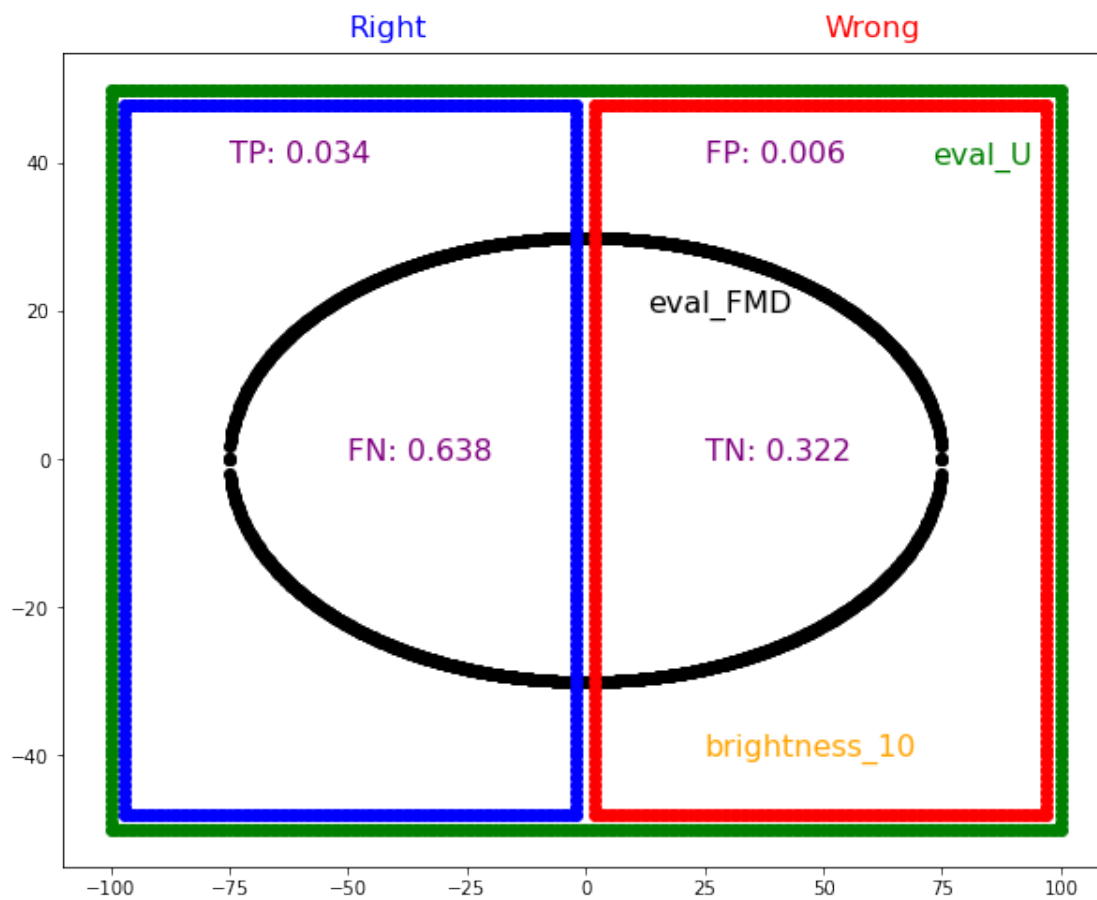
```
[ ] = 1.0
```

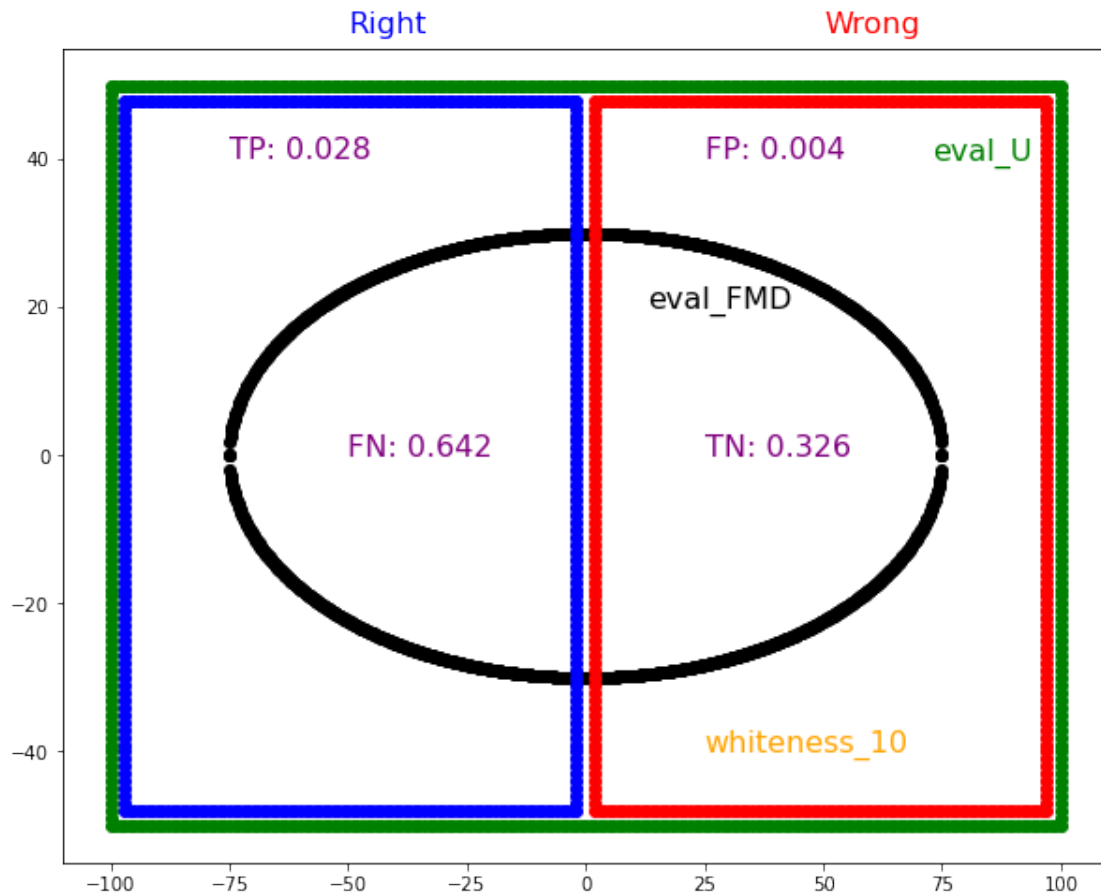
```
[FMD (|eval_FMD|/|eval_U|)] = 0.332  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.334
[   FMD = WR_FMD(NPV)] = 0.34232365145228216

[   (TPR)] = 0.04804804804804805
[   (TNR)] = 0.9880239520958084
-----
[   ] = 1.0360720001438564

[FMD (|eval_FMD|/|eval_U|)] = 0.634
-----

In brightness_10
[   U = WR_U(N)] = 0.328
[   FMD = WR_FMD(NPV)] = 0.33541666666666667

[   (TPR)] = 0.050595238095238096
[   (TNR)] = 0.9817073170731707
```

```
-----  
[ ] = 1.0323025551684089
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.638  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.33
```

```
[ FMD = WR_FMD(NPV)] = 0.3367768595041323
```

```
[ (TPR)] = 0.041791044776119404
```

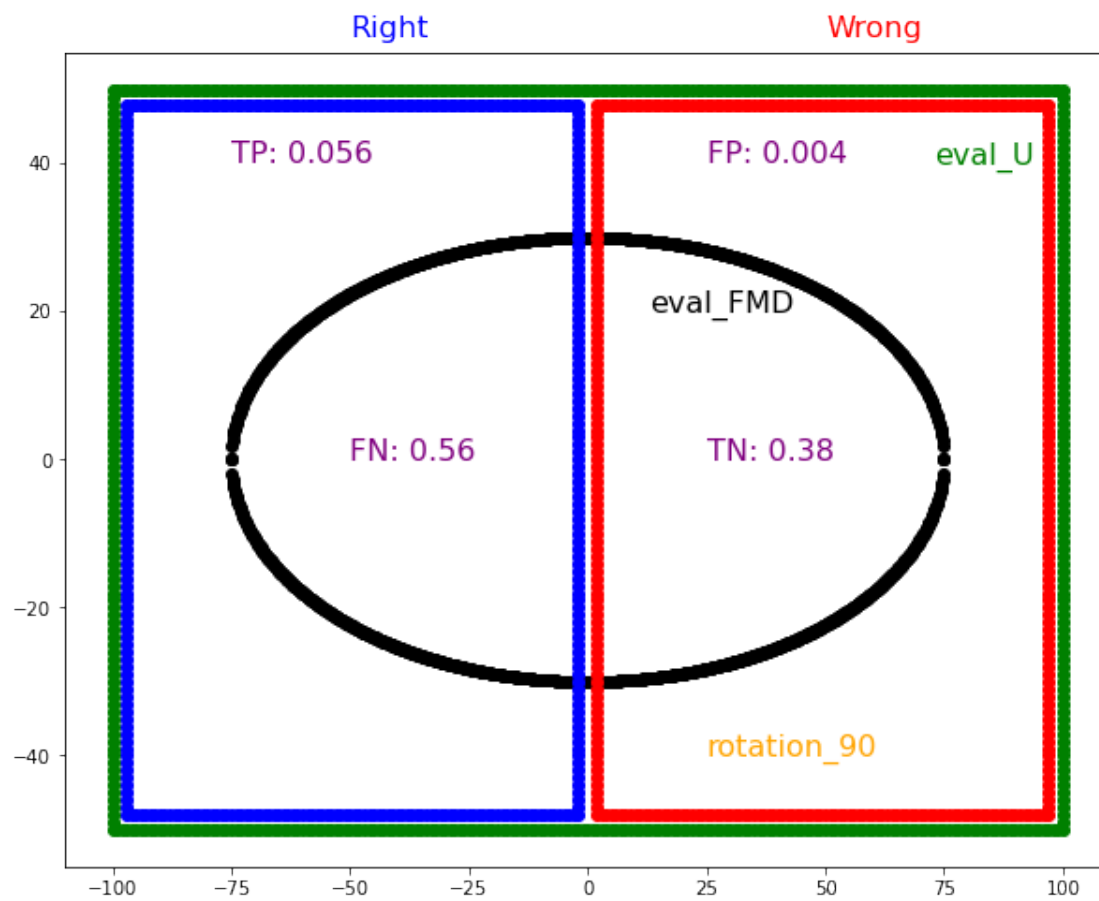
```
[ (TNR)] = 0.9878787878787879  
-----
```

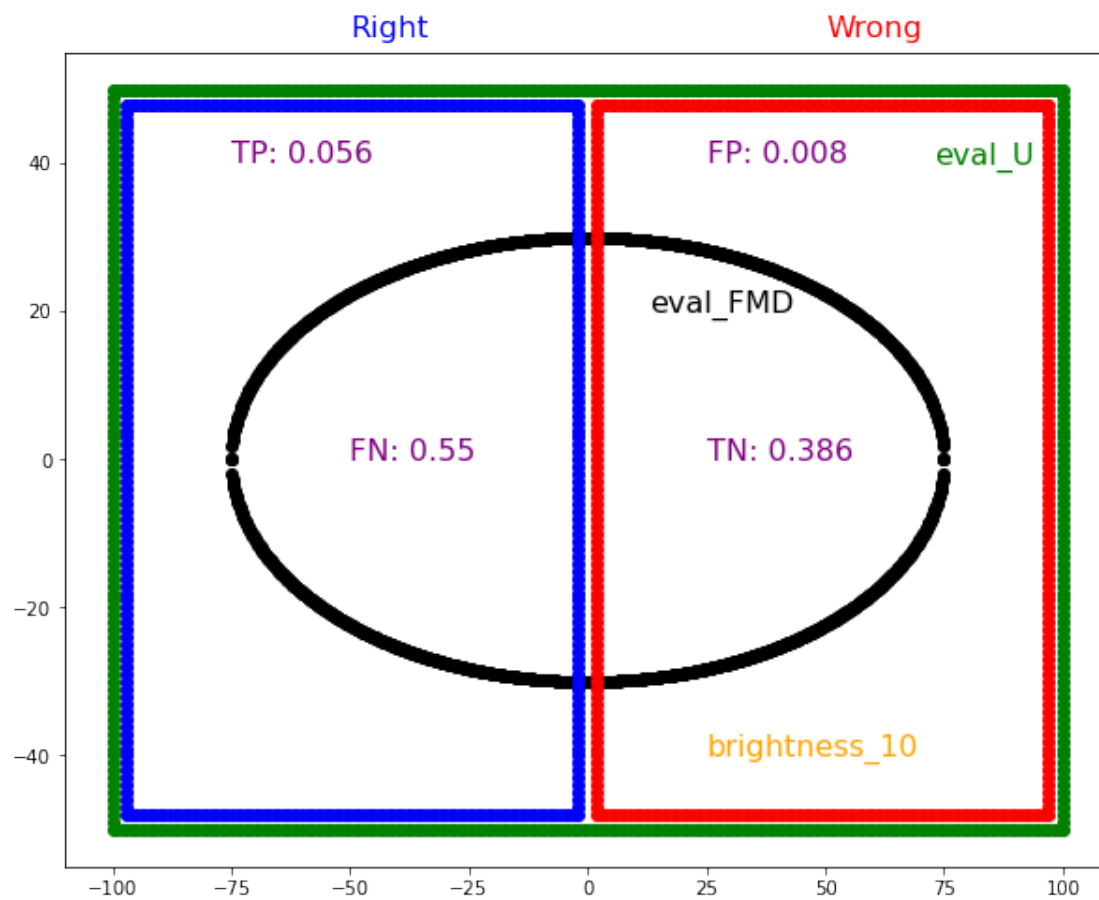
```
[ ] = 1.0296698326549074
```

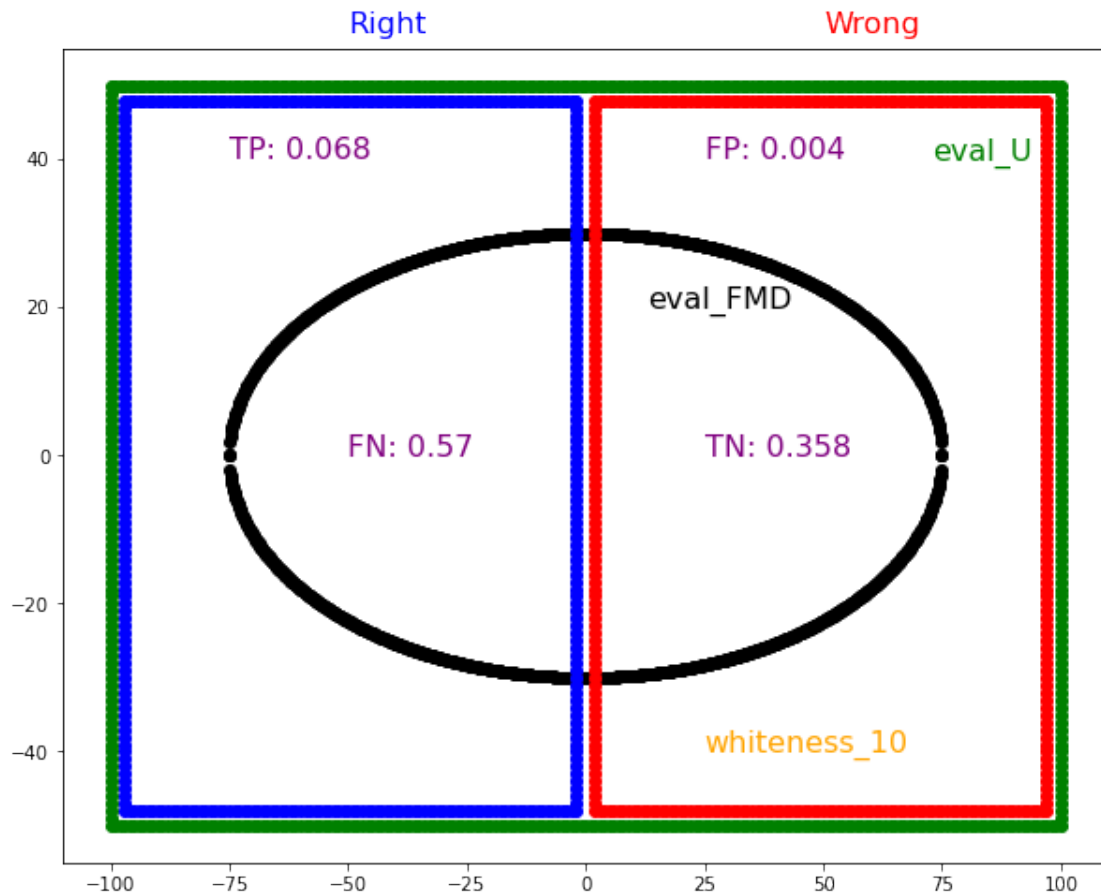
```
[FMD (|eval_FMD|/|eval_U|)] = 0.642  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.384
[   FMD = WR_FMD(NPV)] = 0.40425531914893614

[   (TPR)] = 0.0909090909090909
[   (TNR)] = 0.9895833333333334
-----
[   ] = 1.0804924242424243

[FMD (|eval_FMD|/|eval_U|)] = 0.56
-----

In brightness_10
[   U = WR_U(N)] = 0.394
[   FMD = WR_FMD(NPV)] = 0.41239316239316237

[   (TPR)] = 0.0924092409240924
[   (TNR)] = 0.9796954314720812
```

```
-----  
[ ] = 1.0721046723961736
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.55  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.362
```

```
[ FMD = WR_FMD(NPV)] = 0.3857758620689655
```

```
[ (TPR)] = 0.10658307210031351
```

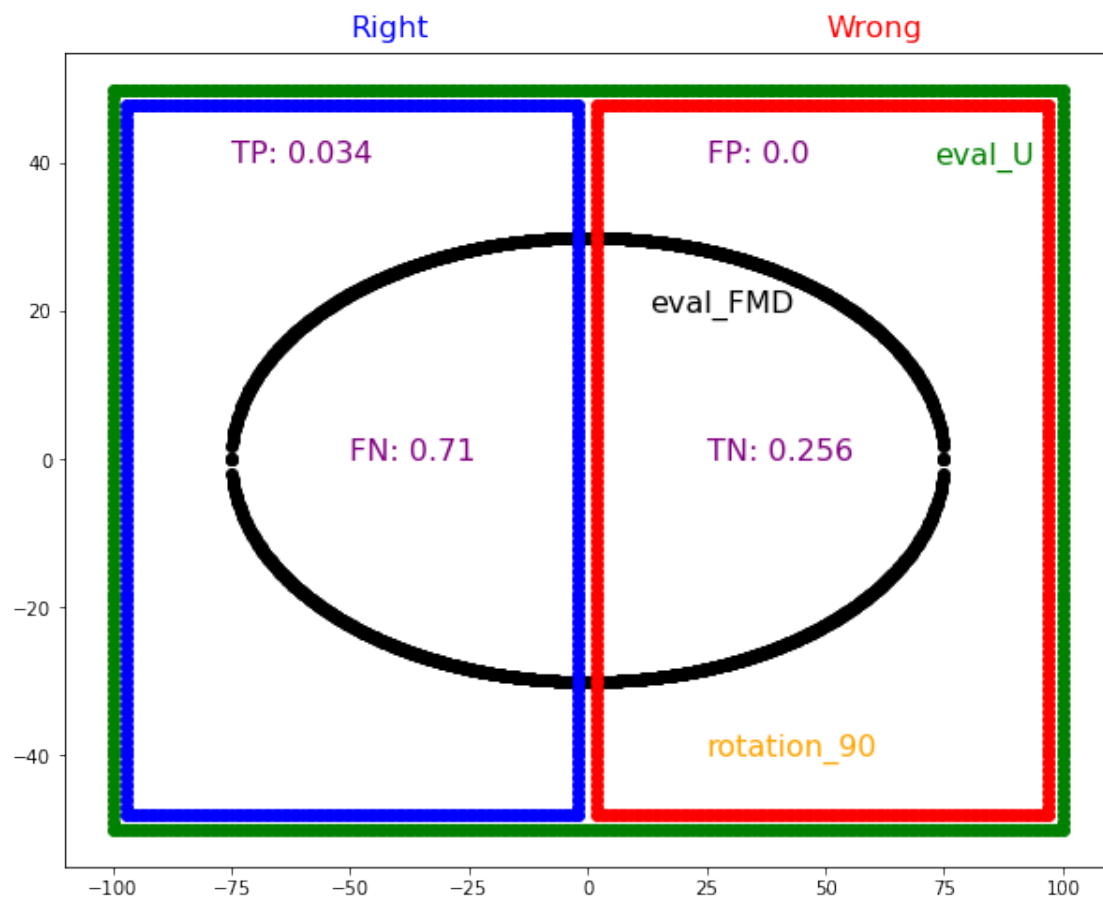
```
[ (TNR)] = 0.988950276243094  
-----
```

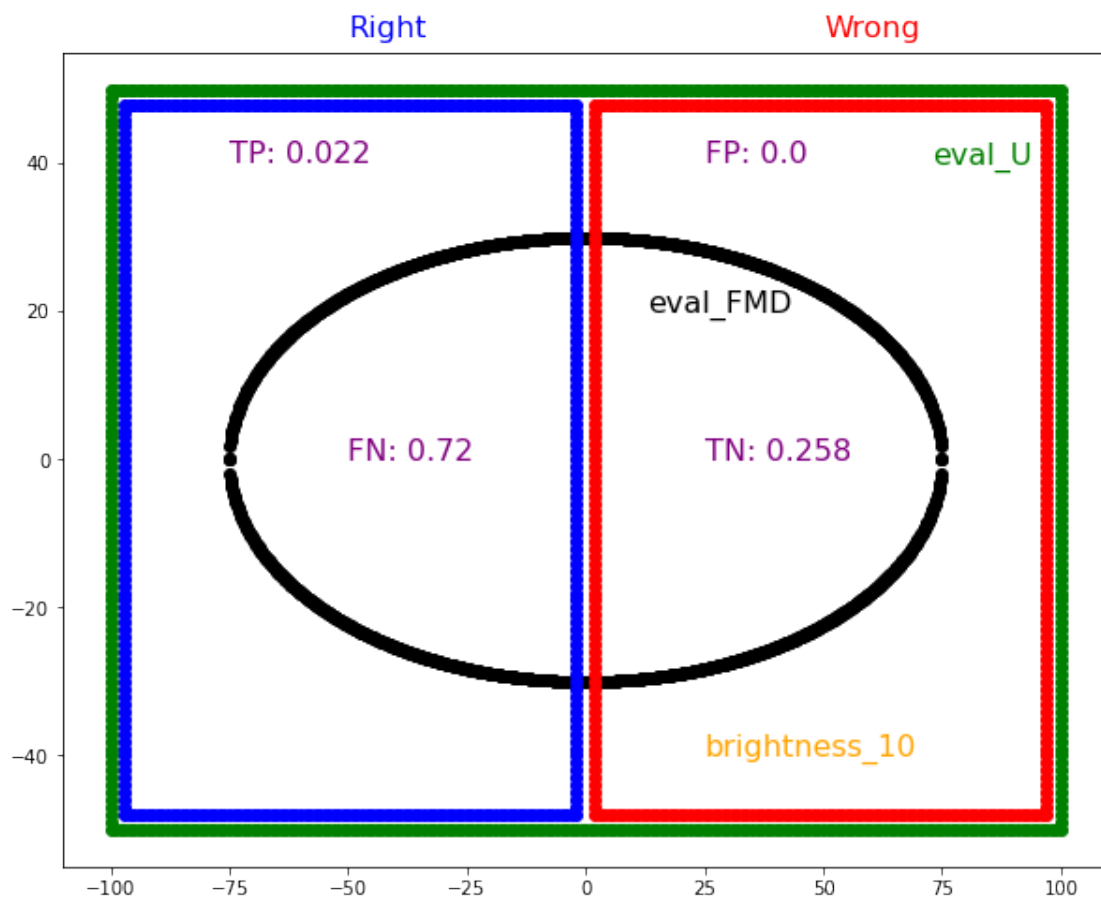
```
[ ] = 1.0955333483434075
```

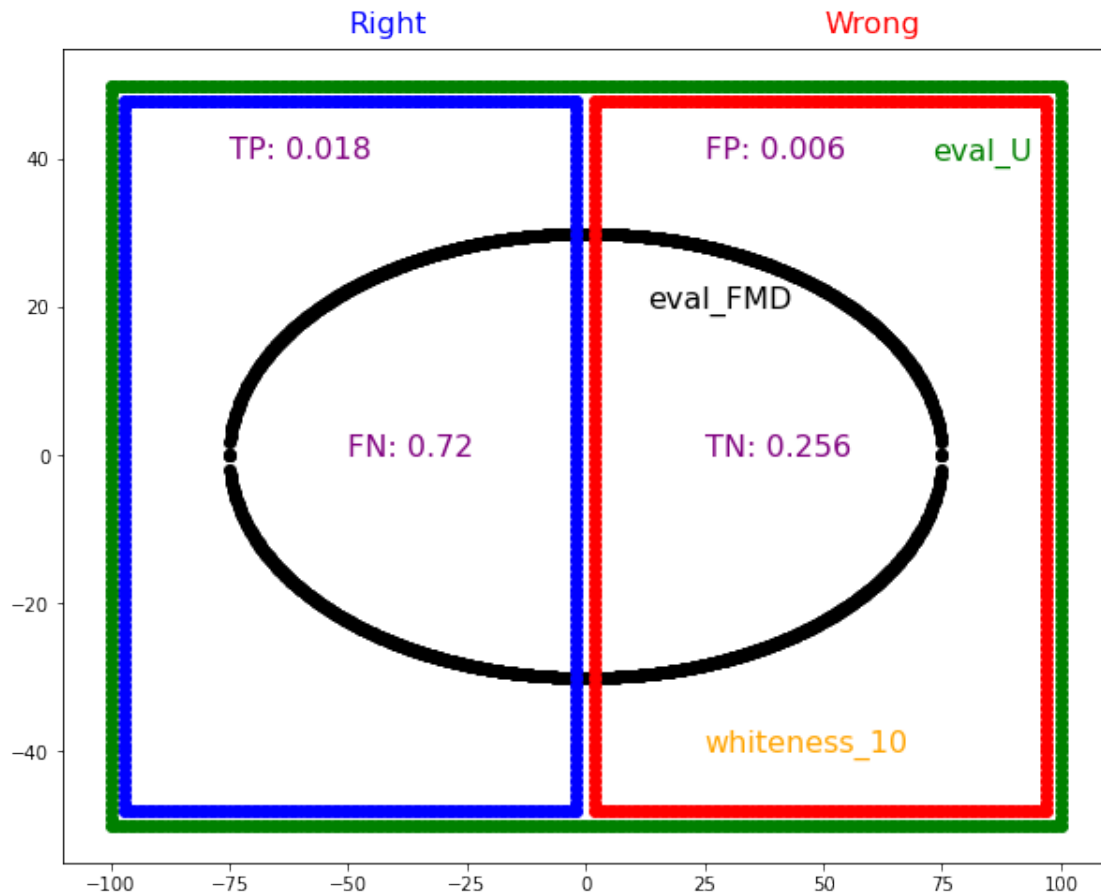
```
[FMD (|eval_FMD|/|eval_U|)] = 0.57  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.256
[   FMD = WR_FMD(NPV)] = 0.2650103519668737

[   (TPR)] = 0.0456989247311828
[   (TNR)] = 1.0
-----
[   ] = 1.0456989247311828

[FMD (|eval_FMD|/|eval_U|)] = 0.71
-----

In brightness_10
[   U = WR_U(N)] = 0.258
[   FMD = WR_FMD(NPV)] = 0.2638036809815951

[   (TPR)] = 0.029649595687331536
[   (TNR)] = 1.0
```

```
-----  
[ ] = 1.0296495956873315
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.72  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.262
```

```
[ FMD = WR_FMD(NPV)] = 0.26229508196721313
```

```
[ (TPR)] = 0.024390243902439022
```

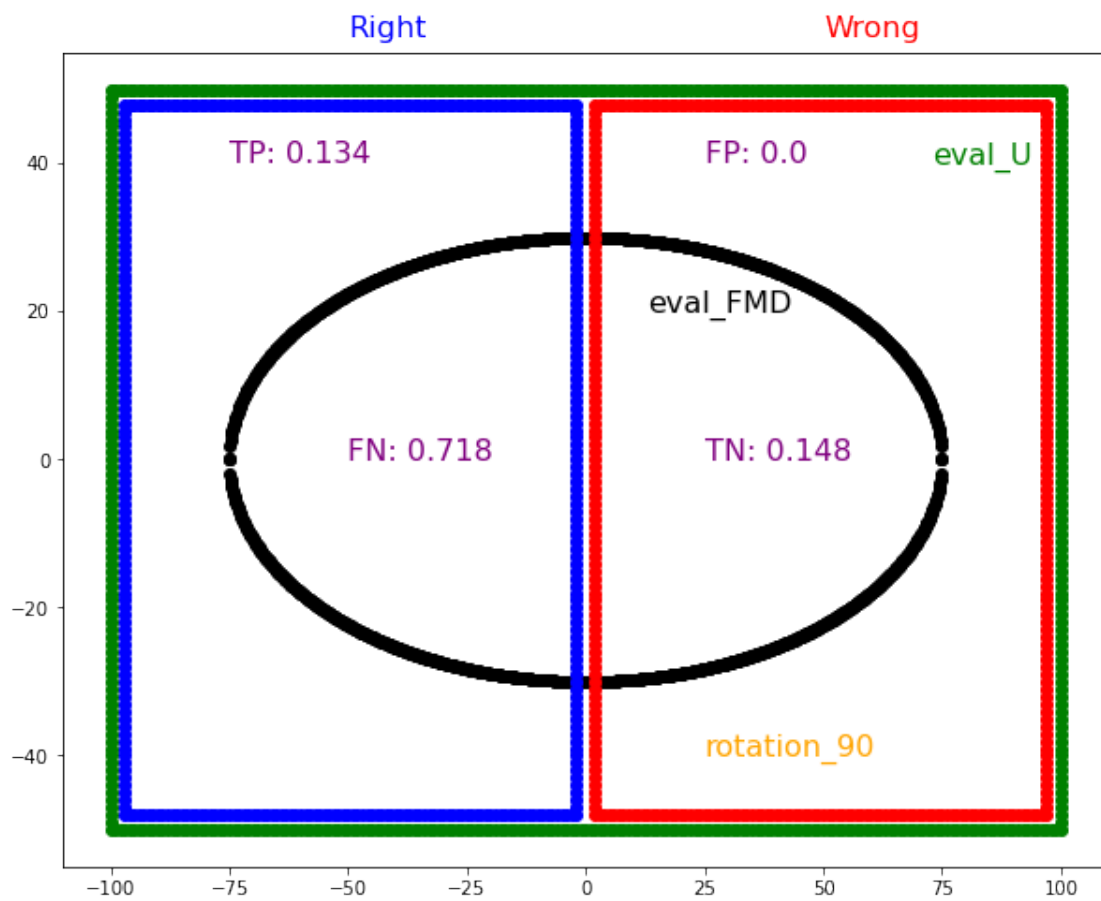
```
[ (TNR)] = 0.9770992366412213  
-----
```

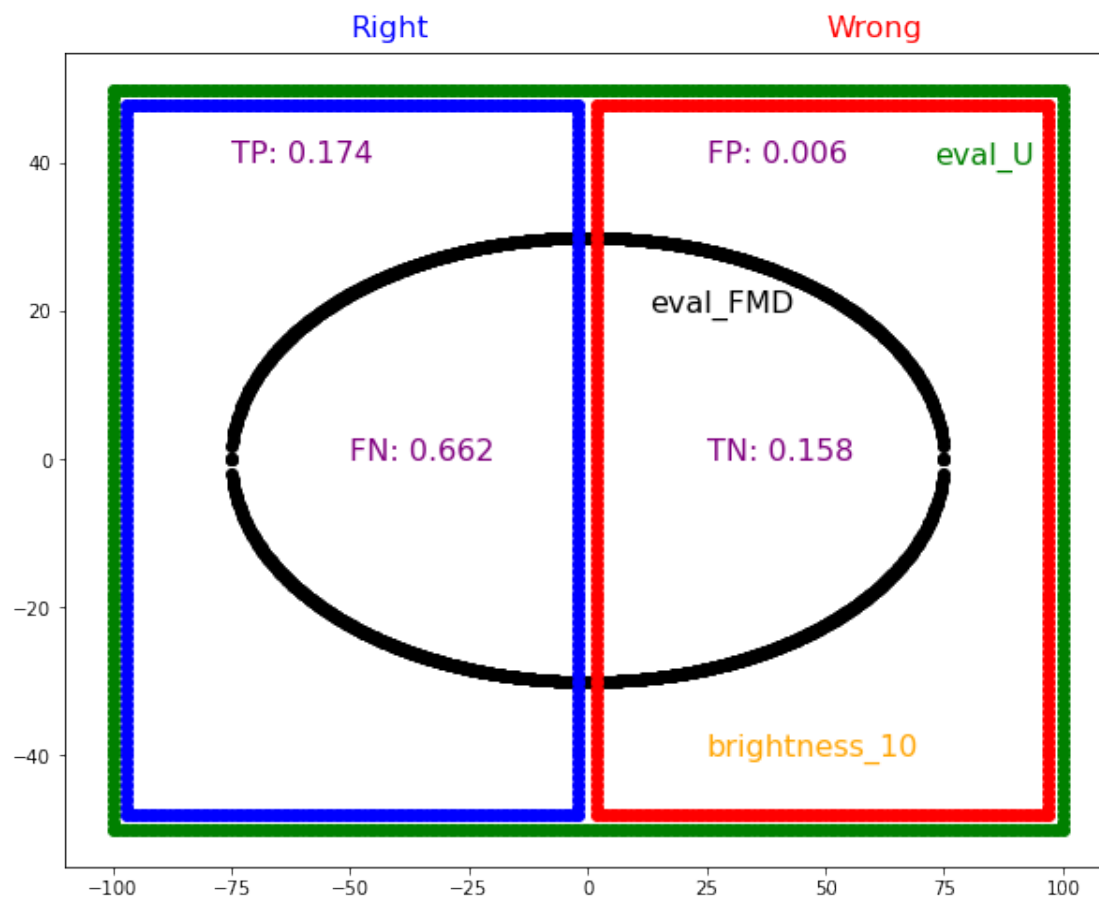
```
[ ] = 1.0014894805436603
```

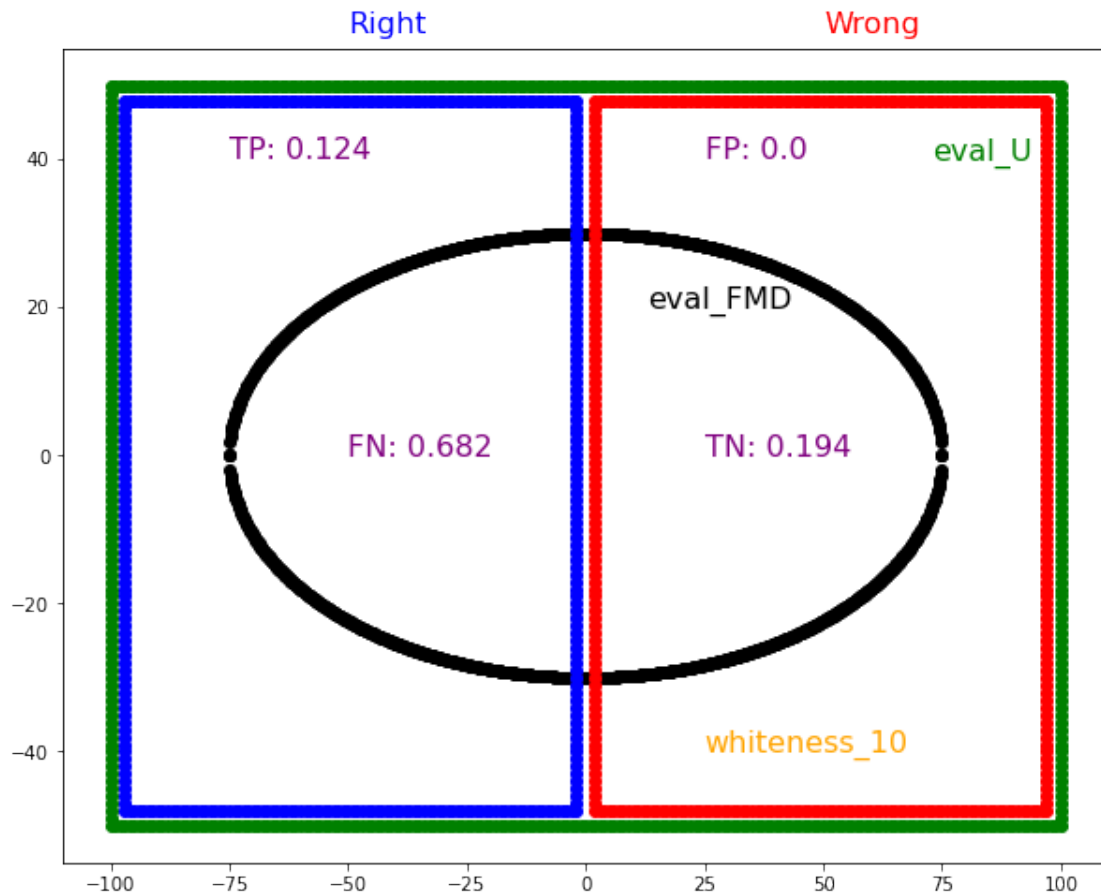
```
[FMD (|eval_FMD|/|eval_U|)] = 0.72  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.148
[   FMD = WR_FMD(NPV)] = 0.17090069284064666

[   (TPR)] = 0.15727699530516434
[   (TNR)] = 1.0
-----
[   ] = 1.1572769953051643

[FMD   (|eval_FMD|/|eval_U|)] = 0.718
-----

In brightness_10
[   U = WR_U(N)] = 0.164
[   FMD = WR_FMD(NPV)] = 0.19268292682926827

[   (TPR)] = 0.208133971291866
[   (TNR)] = 0.9634146341463414
```

```
-----  
[ ] = 1.1715486054382074
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.662  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.194
```

```
[ FMD = WR_FMD(NPV)] = 0.22146118721461186
```

```
[ (TPR)] = 0.15384615384615383
```

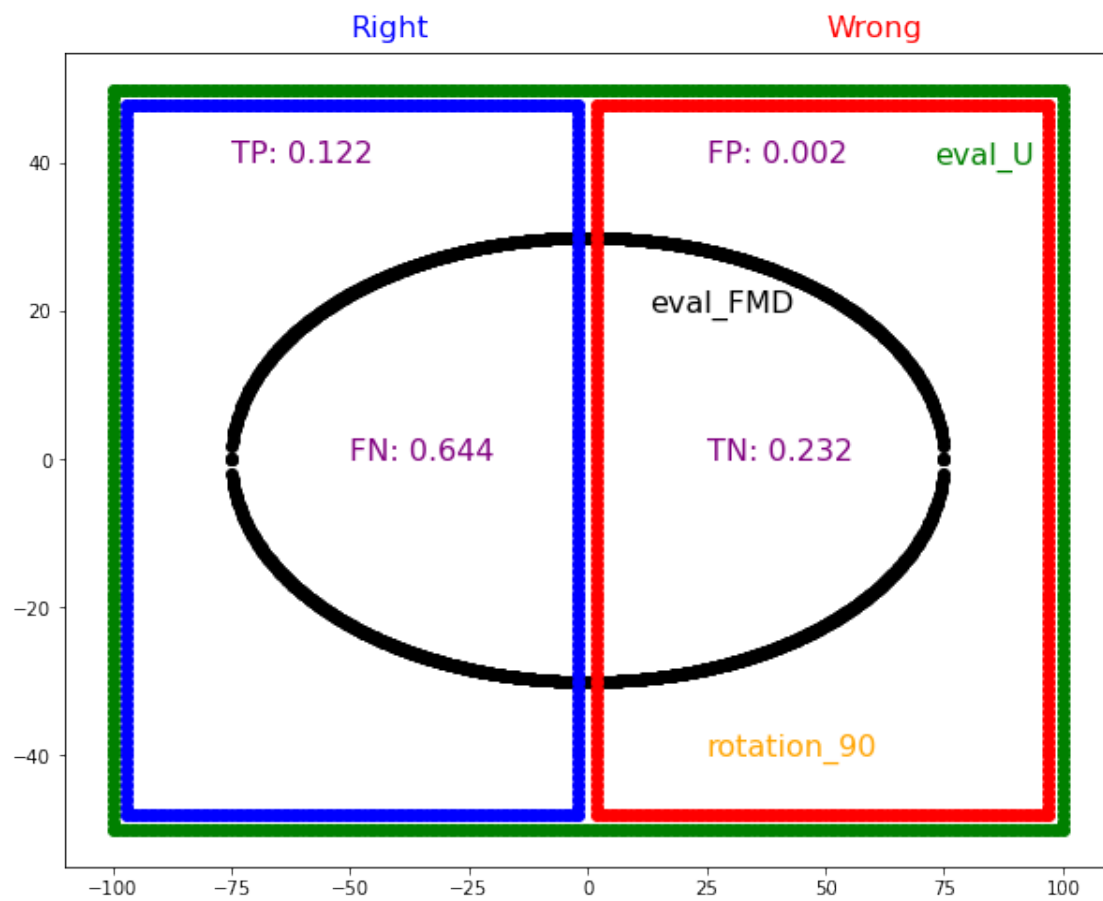
```
[ (TNR)] = 1.0  
-----
```

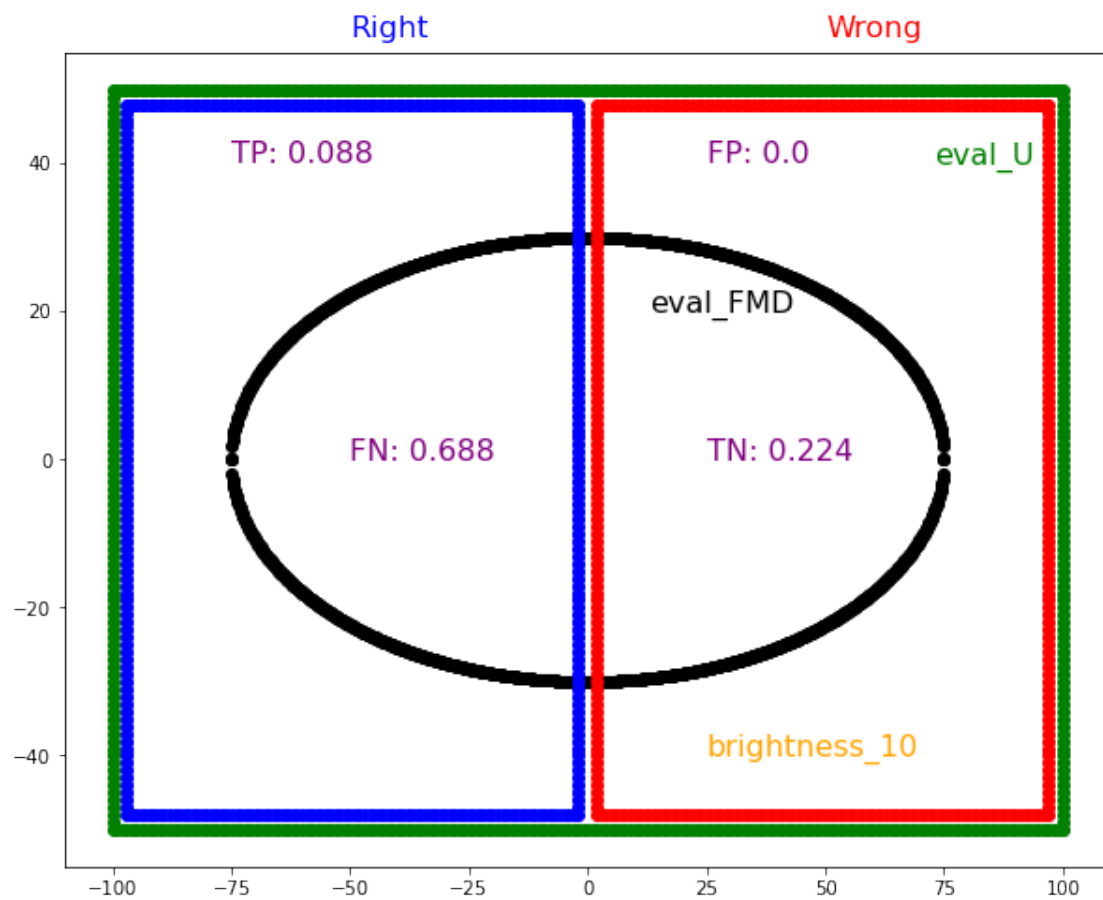
```
[ ] = 1.1538461538461537
```

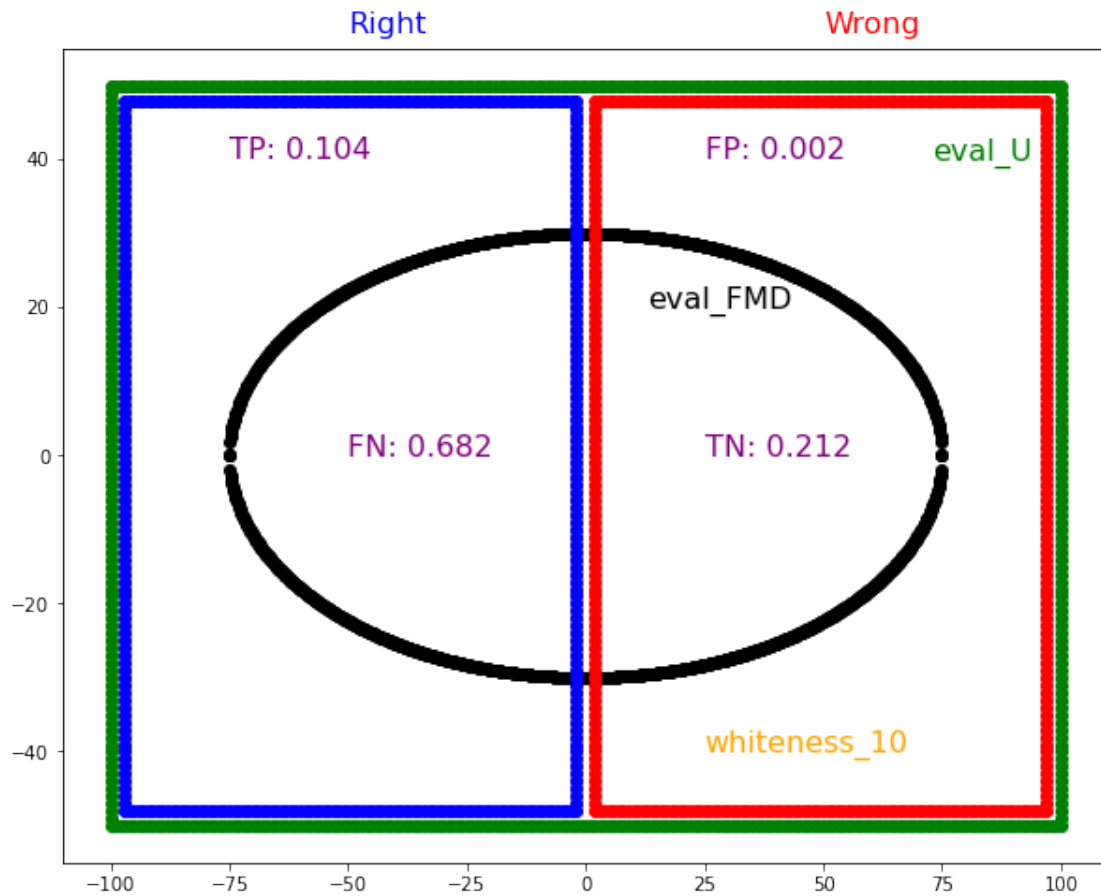
```
[FMD (|eval_FMD|/|eval_U|)] = 0.682  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.234
[   FMD = WR_FMD(NPV)] = 0.26484018264840187

[   (TPR)] = 0.15926892950391644
[   (TNR)] = 0.9914529914529915
-----
[   ] = 1.150721920956908

[FMD (|eval_FMD|/|eval_U|)] = 0.644
-----

In brightness_10
[   U = WR_U(N)] = 0.224
[   FMD = WR_FMD(NPV)] = 0.2456140350877193

[   (TPR)] = 0.1134020618556701
[   (TNR)] = 1.0
```

```
-----  
[ ] = 1.1134020618556701
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.688  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.214
```

```
[ FMD = WR_FMD(NPV)] = 0.2371364653243848
```

```
[ (TPR)] = 0.13231552162849872
```

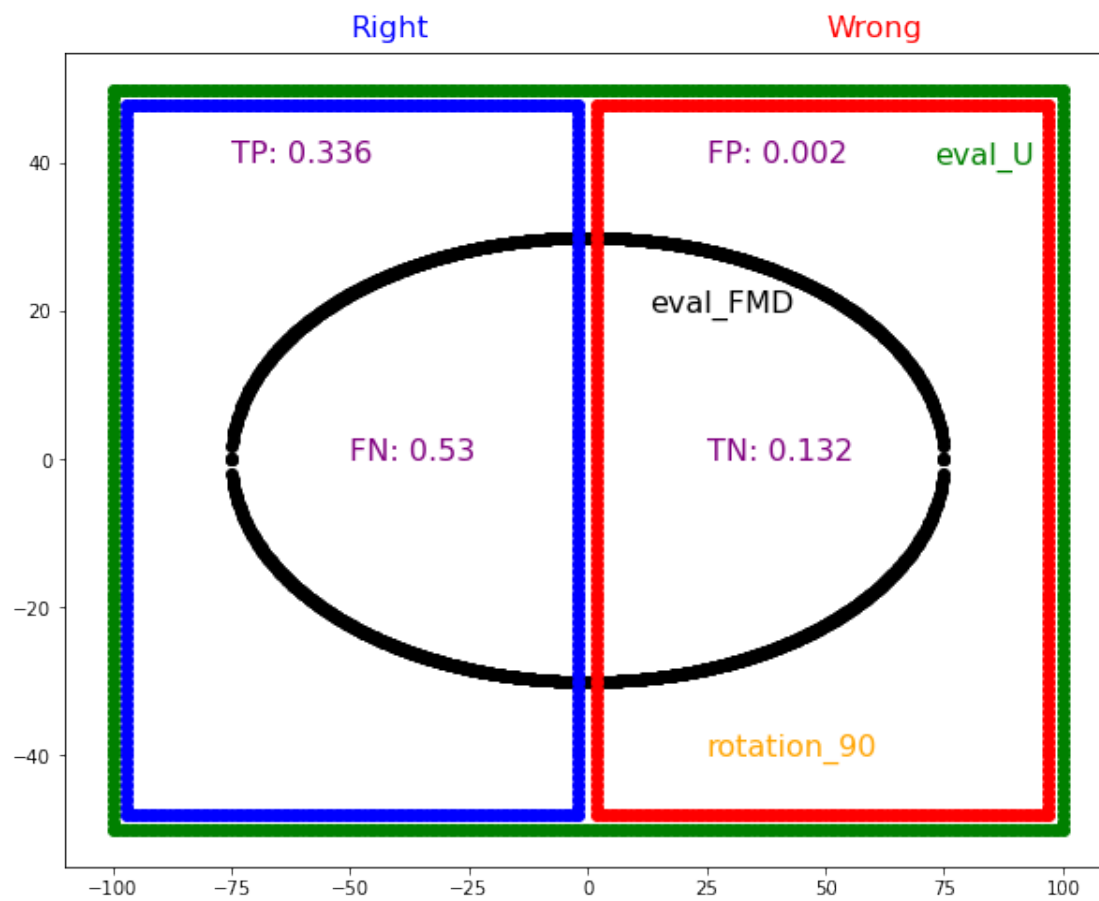
```
[ (TNR)] = 0.9906542056074766  
-----
```

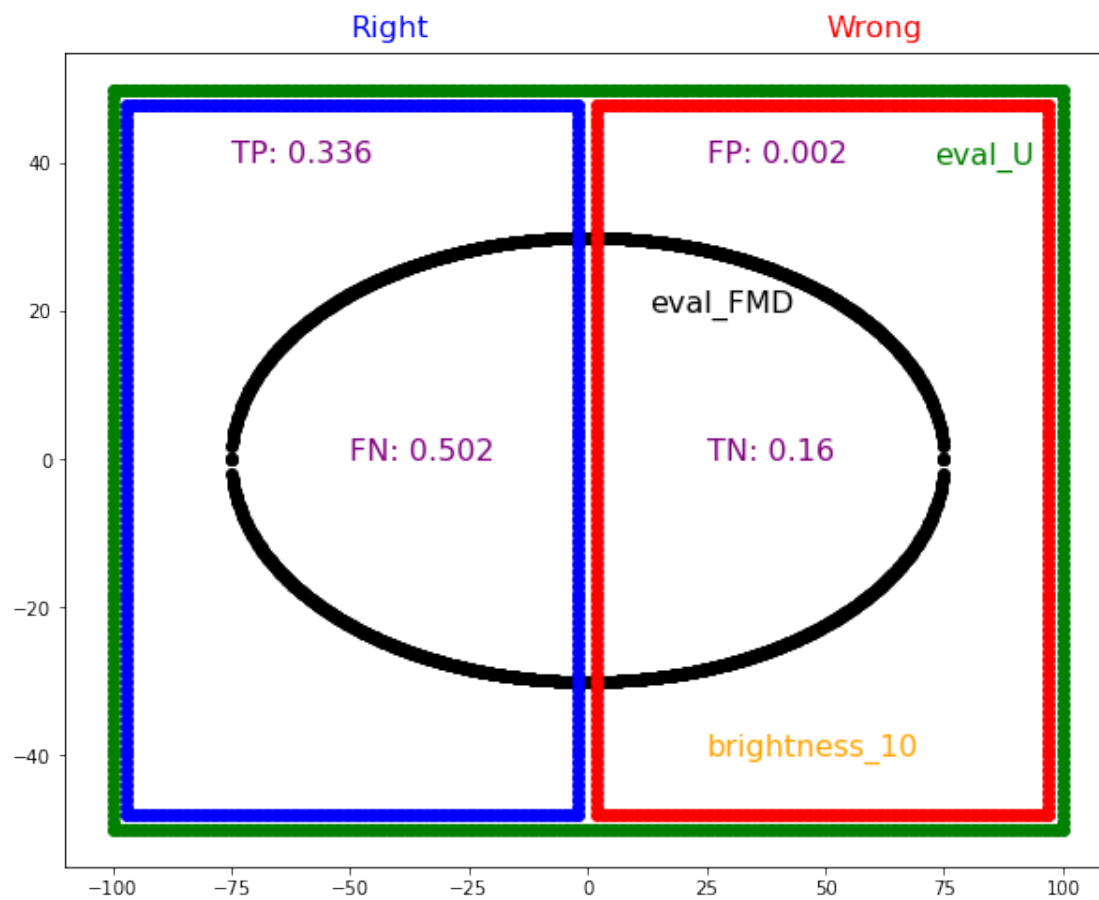
```
[ ] = 1.1229697272359753
```

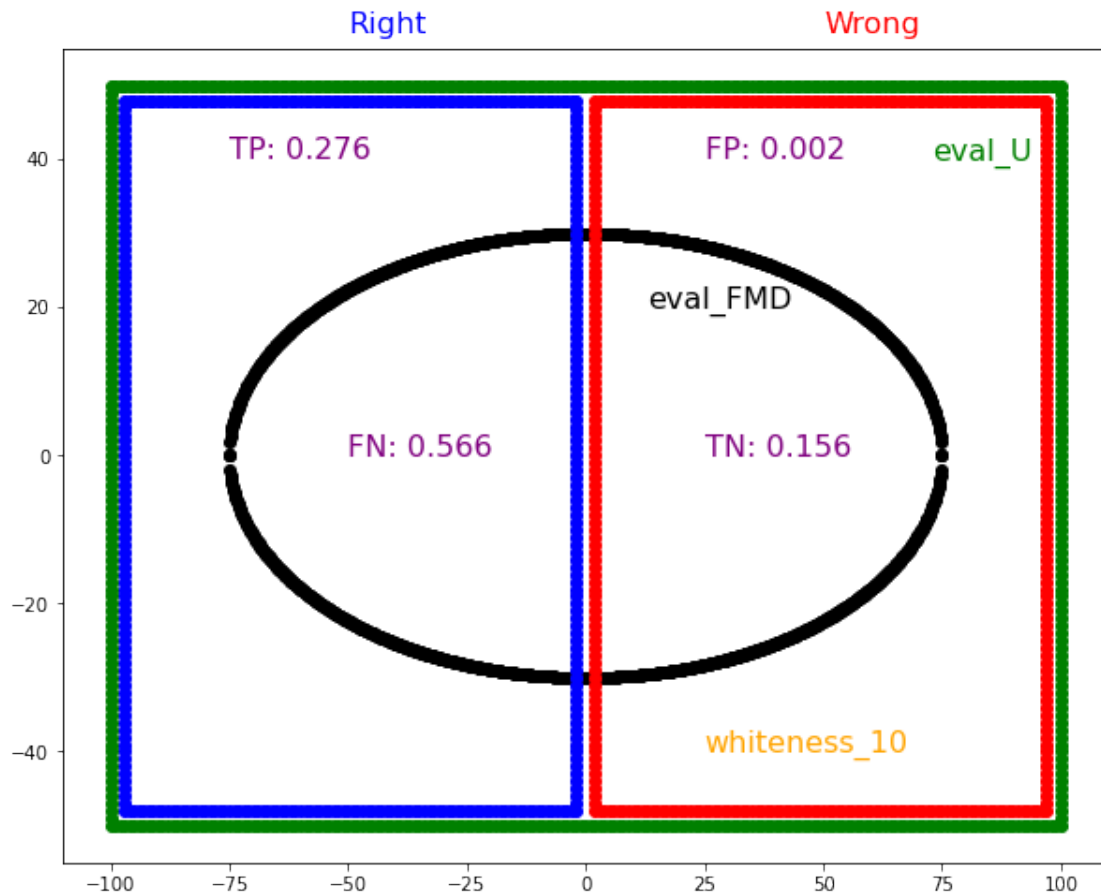
```
[FMD (|eval_FMD|/|eval_U|)] = 0.682  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.134
[   FMD = WR_FMD(NPV)] = 0.19939577039274925

[   (TPR)] = 0.3879907621247113
[   (TNR)] = 0.9850746268656716
-----
[   ] = 1.373065388990383

[FMD (|eval_FMD|/|eval_U|)] = 0.53
-----

In brightness_10
[   U = WR_U(N)] = 0.162
[   FMD = WR_FMD(NPV)] = 0.2416918429003021

[   (TPR)] = 0.4009546539379475
[   (TNR)] = 0.9876543209876543
```

```
-----  
[ ] = 1.3886089749256016
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.502  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.158
```

```
[ FMD = WR_FMD(NPV)] = 0.21606648199445985
```

```
[ (TPR)] = 0.327790973871734
```

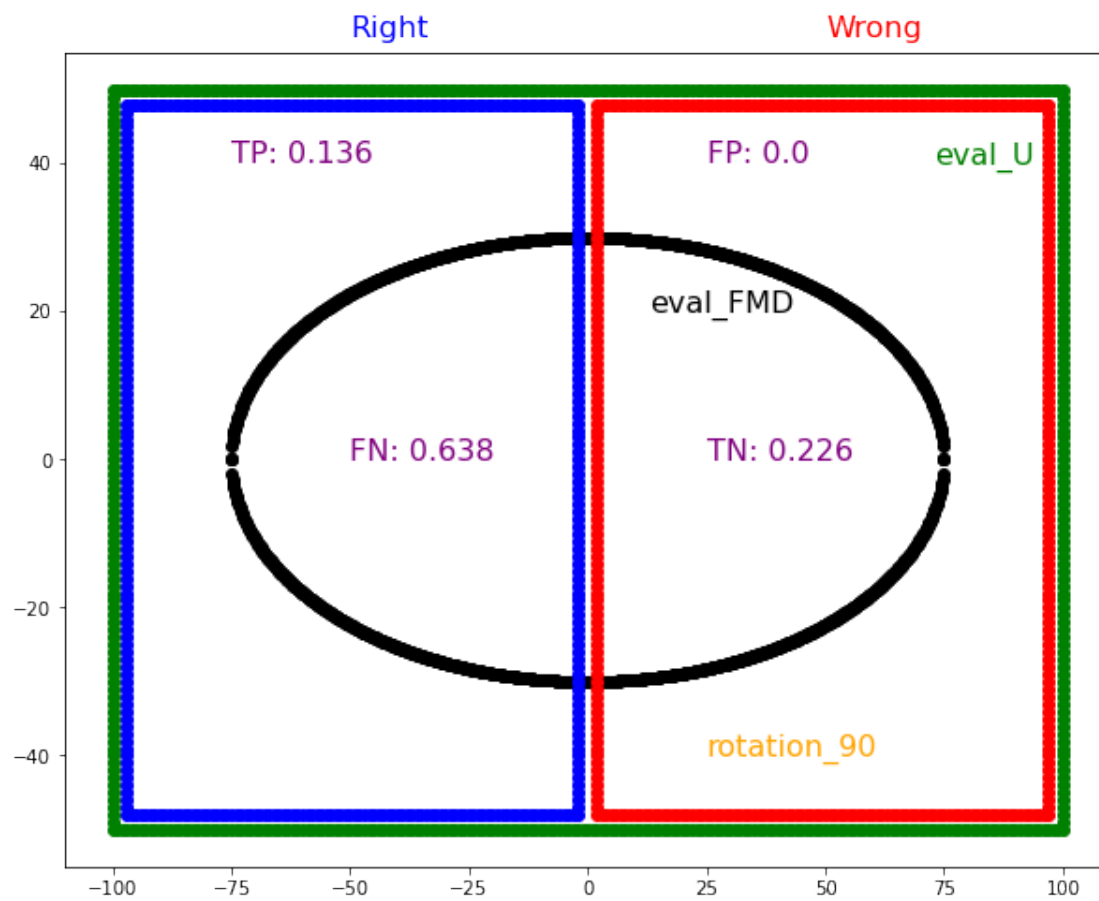
```
[ (TNR)] = 0.9873417721518988  
-----
```

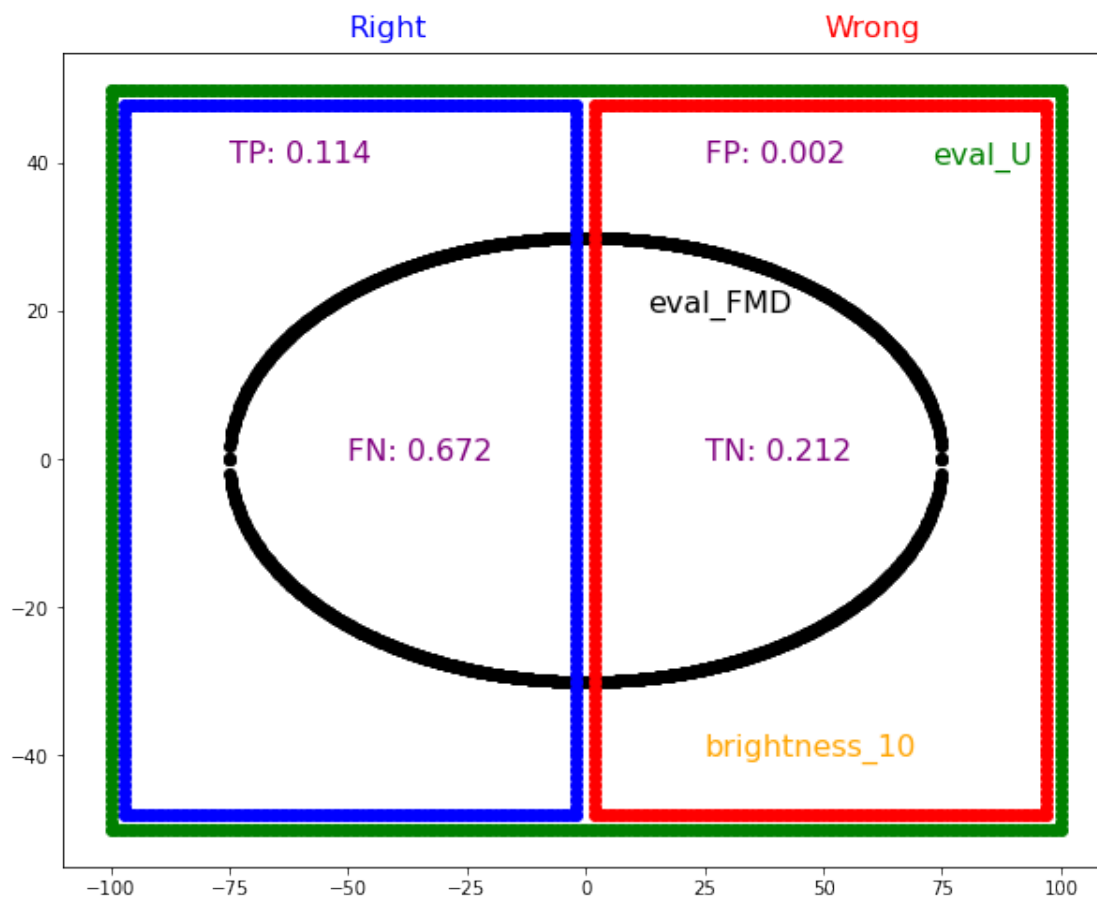
```
[ ] = 1.3151327460236328
```

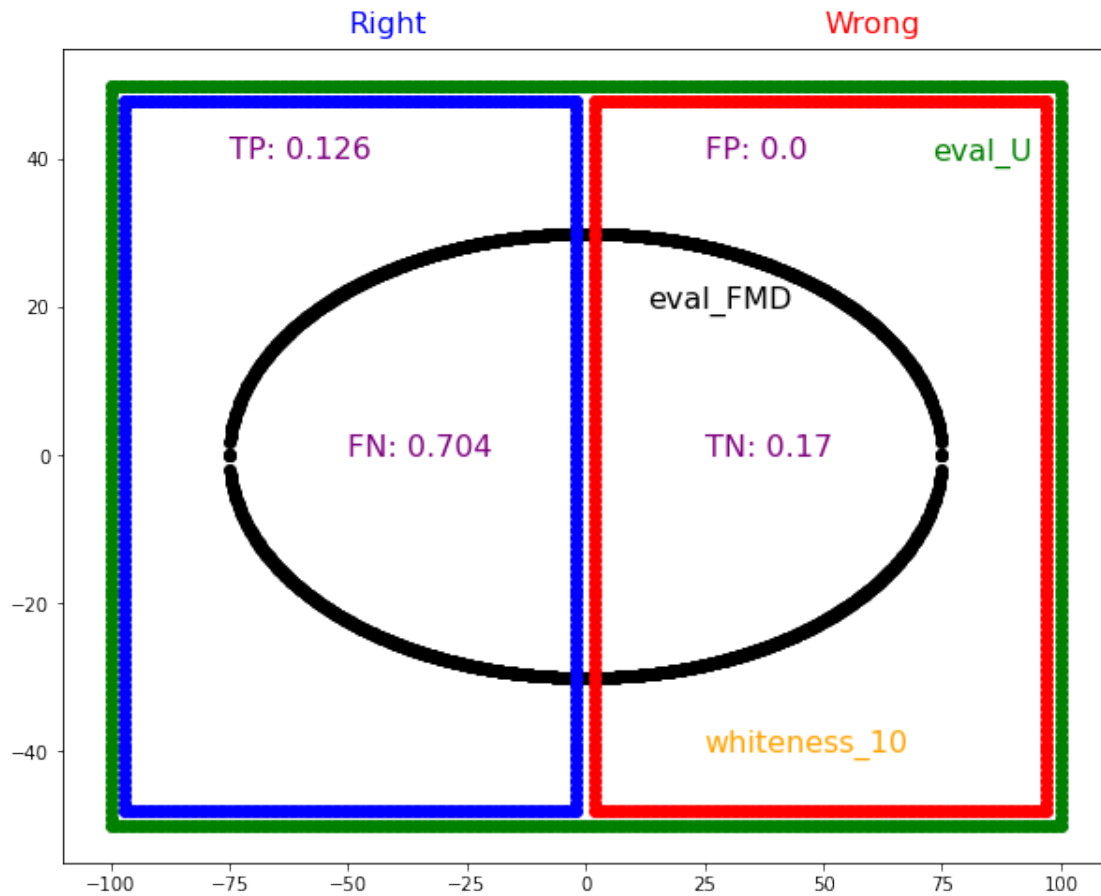
```
[FMD (|eval_FMD|/|eval_U|)] = 0.566  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```

```
[ ]: fmd_old.show_eval_venn_diagrams()
```







```
[ ]: fmd_old.show_efficiency_and_FMD_ratio()
```

```
In rotation_90
[   U = WR_U(N)] = 0.226
[   FMD = WR_FMD(NPV)] = 0.26157407407407407

[   (TPR)] = 0.1757105943152455
[   (TNR)] = 1.0
-----
[   ] = 1.1757105943152455

[FMD (|eval_FMD|/|eval_U|)] = 0.638
-----

In brightness_10
[   U = WR_U(N)] = 0.214
[   FMD = WR_FMD(NPV)] = 0.23981900452488686

[   (TPR)] = 0.1450381679389313
[   (TNR)] = 0.9906542056074766
```

```
-----  
[ ] = 1.135692373546408
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.672  
-----
```

```
In whiteness_10
```

```
[ U = WR_U(N)] = 0.17
```

```
[ FMD = WR_FMD(NPV)] = 0.1945080091533181
```

```
[ (TPR)] = 0.15180722891566265
```

```
[ (TNR)] = 1.0  
-----
```

```
[ ] = 1.1518072289156627
```

```
[FMD (|eval_FMD|/|eval_U|)] = 0.704  
-----
```

```
[ ]: # show_all_mask = {'show_dirs': True,  
                        # 'show_data_infos': True,  
                        # 'show_hyper_parameter': True,  
                        # 'show_FM_repres': True,  
                        # 'show_AMs_and_related': True,  
                        # 'show_layer_infos': True,  
                        # 'show_fmfs_box_plot': True,  
                        # 'show_fmfc': True,  
                        # 'show_eval_infos': True,  
                        # 'show_fmd_right_ratio_graph': True,  
                        # 'show_eval_venn_diagrams': True,  
                        # 'show_efficiency_and_FMD_ratio': True,}  
# fmd_old.show_all(show_all_mask)
```