cat

August 11, 2022

1 FMD

[ ]:
```
from FMD_old import FMD as FMD_old

fmd_old = FMD_old("/Volumes/My Passport_ssd_sg3/data_sets/cifar10/cat")
```

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

2

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

3 FMD

[ ]:
```
# fmd_old.show_data_infos()
```

[ ]:
```
# fmd_old.show_FM_repres()
```

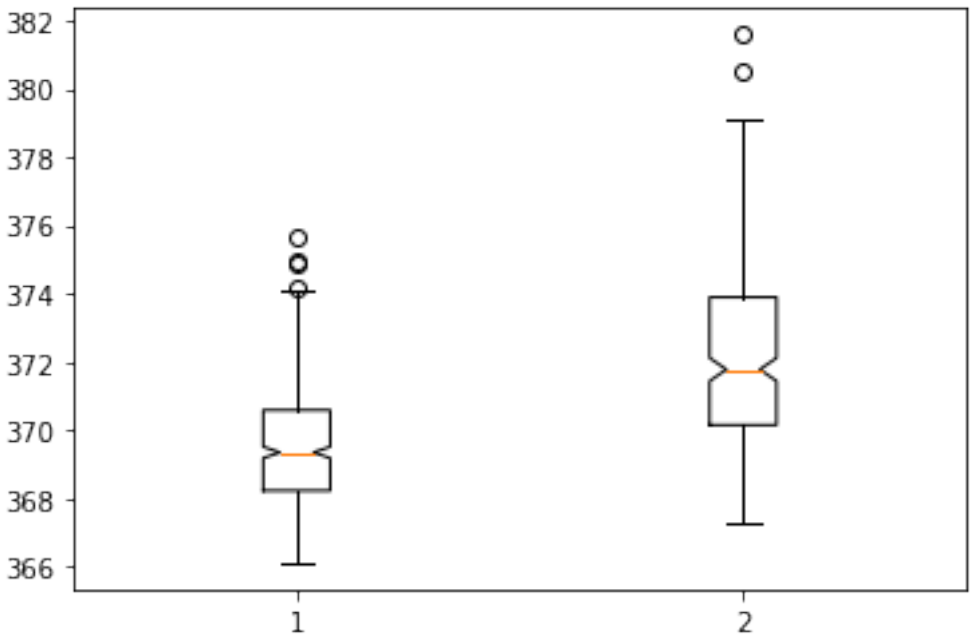
[ ]:
```
# fmd_old.show_AMs_and_related()
```

[ ]:
```
# fmd_old.show_dirs()
```

[ ]:
```
# fmd_old.show_layer_infos()
```

[ ]:
```
# fmd_old.show_eval_infos()
```

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

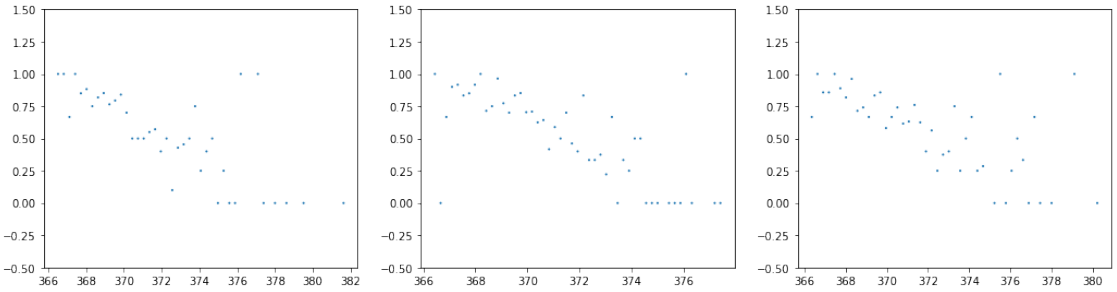


[ ]:
```
fmd_old.show_fmdc()
```

```
self.fmdc
367.24864240594917
```

4 fmd-

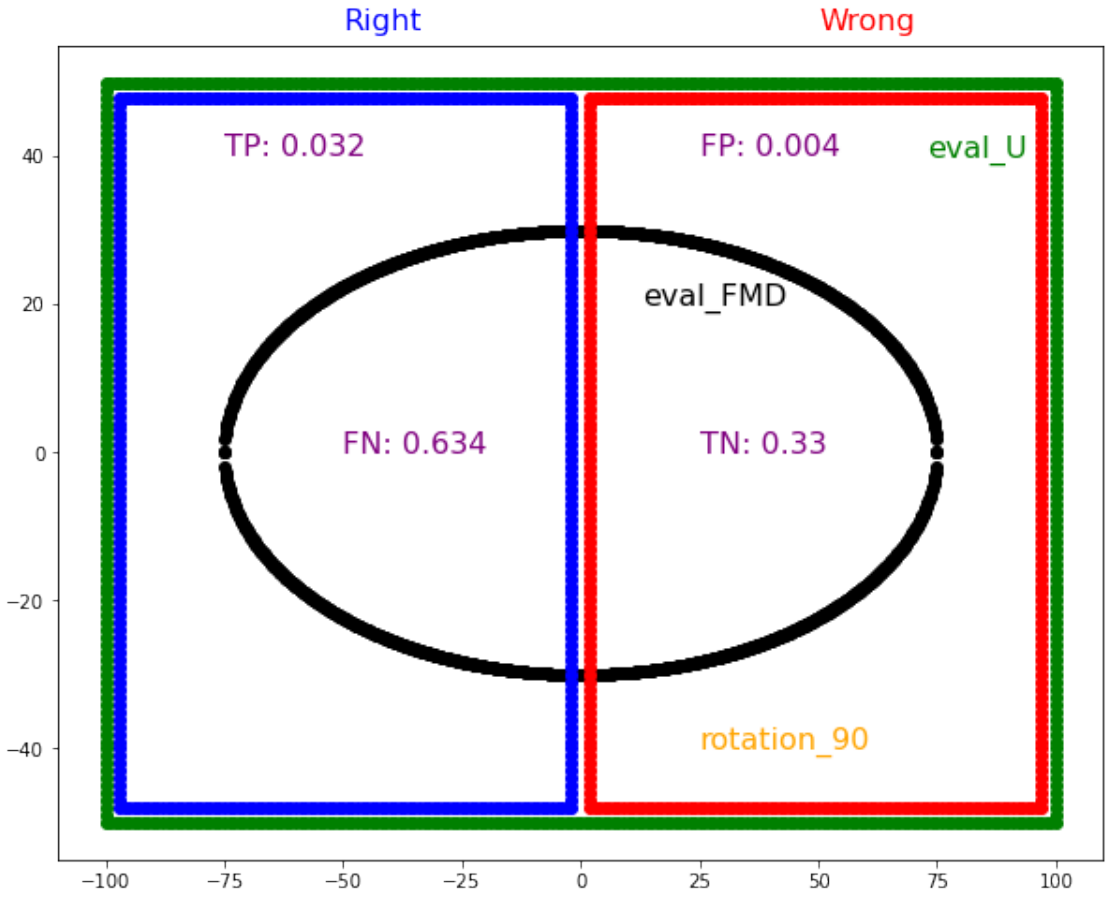
[ ]:
```
fmd_old.show_fmd_right_ratio_graph()
```

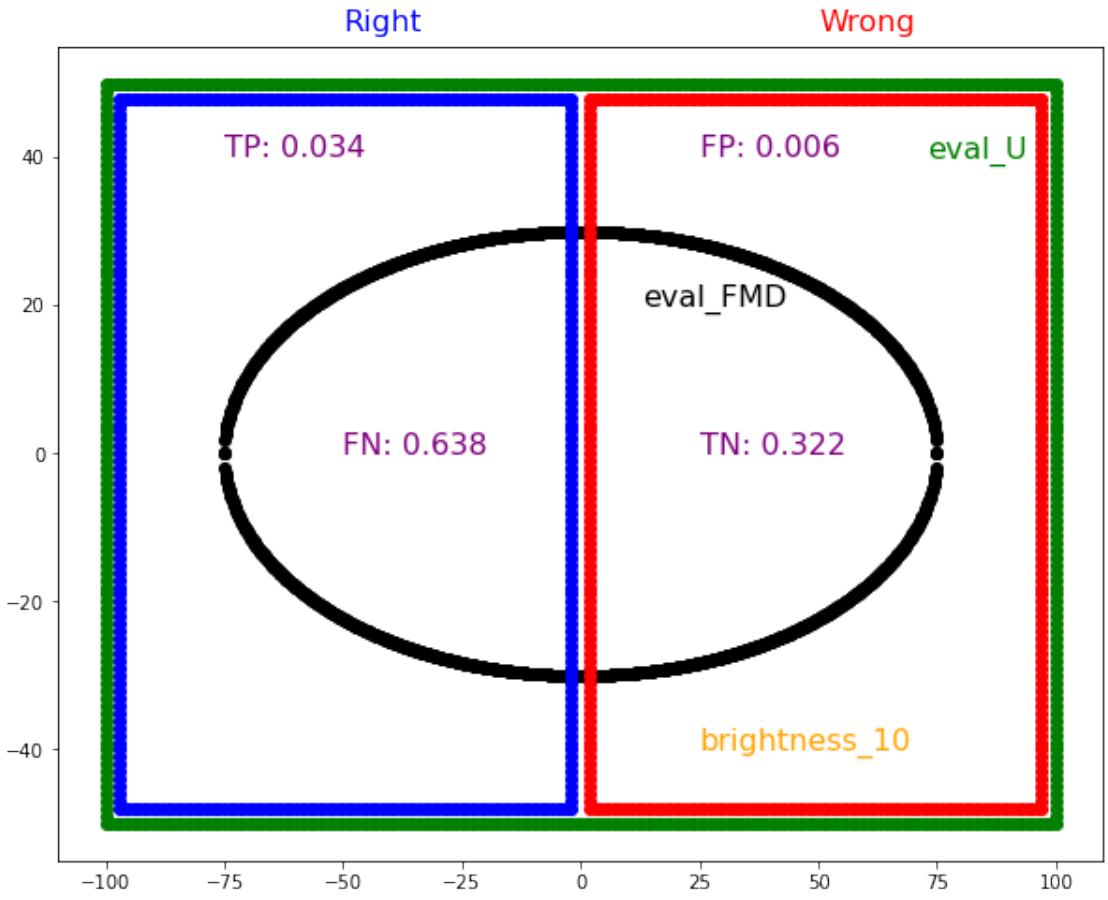


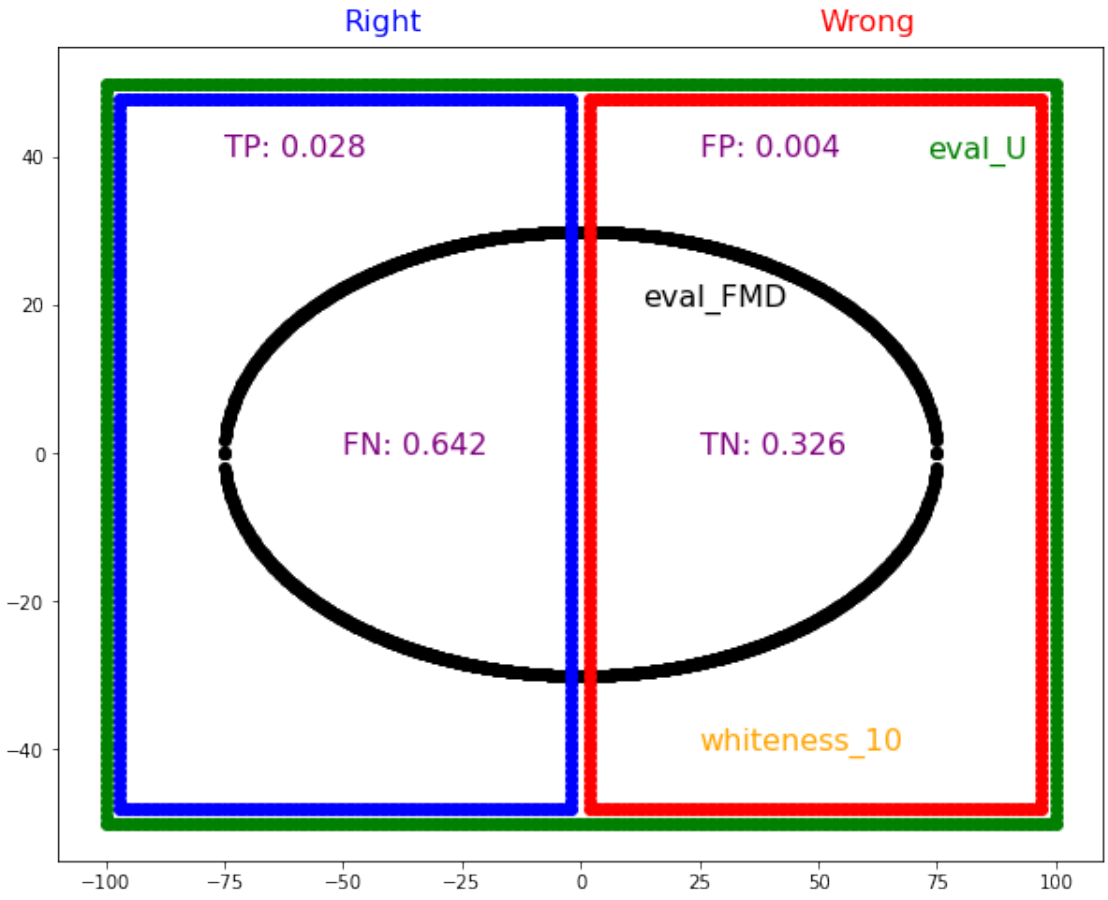
5

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

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




Right
Wrong
TP: 0.034
FP: 0.006
eval_U
eval_FMD
FN: 0.638
TN: 0.322
brightness_10
40
20
0
−20
−40
−100
−75
−50
−25
0
25
50
75
100



[ ]:
```
fmd_old.show_efficience_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)] = 0.3354166666666667

[     (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_fmds_box_plot': True,
                   #   'show_fmdc': True,
                   #   'show_eval_infos': True,
                   #   'show_fmd_right_ratio_graph': True,
                   #   'show_eval_venn_diagrams': True,
                   #   'show_efficience_and_FMD_ratio': True,}
# fmd_old.show_all(show_all_mask)
```