```
classifier result
--------------------------------------------------
activity  1.0
sensitivity:      96.93806541405706
specificity:      95.61752988047809
auc:     0.9976068816822712
--------------------------------------------------
activity  2.0
sensitivity:      99.53735831598426
specificity:      48.97959183673469
auc:     0.964683208467287
--------------------------------------------------
activity  3.0
sensitivity:      97.03380087376408
specificity:      52.58620689655172
auc:     0.9514412250933627
--------------------------------------------------
activity  4.0
sensitivity:      99.812734082397
specificity:      90.94269870609982
auc:     0.9881892233829709
--------------------------------------------------
activity  5.0
sensitivity:      99.91306237774397
specificity:      92.9245283018868
auc:     0.9908377178053992
--------------------------------------------------
activity  6.0
sensitivity:      99.93103448275862
specificity:      83.36933045356372
auc:     0.9884764529182491
--------------------------------------------------
activity  7.0
sensitivity:      99.90772779700116
specificity:      91.42259414225941
auc:     0.9926119500224407
--------------------------------------------------
activity  12.0
sensitivity:      97.4370403387564
specificity:      85.2760736196319
auc:     0.962842212198567
--------------------------------------------------
activity  13.0
sensitivity:      98.49590798495908
specificity:      76.02739726027397
auc:     0.9725432759754328
--------------------------------------------------
activity  16.0
sensitivity:      97.3305954825462
specificity:      93.72093023255815
auc:     0.9806405828014155
--------------------------------------------------
activity  17.0
sensitivity:      93.9912179339034
specificity:      95.06172839506173
auc:     0.9915947904867608
--------------------------------------------------
activity  24.0
sensitivity:      99.87190435525193
specificity:      82.17054263565892
```

```
auc:       0.9812548408237841
--------------------------------------------------
f1_score  81.64083033433947
accuracy  82.00706420112196
micro-average ROC AUC:   0.9773541560652521
macro-average ROC AUC:   0.9802287315685412
```

```
/usr/lib/python3.7/site-packages/matplotlib/cbook/__init__.py:424: Mat
plotlibDeprecationWarning:
Passing one of 'on', 'true', 'off', 'false' as a boolean is deprecate
d; use an actual boolean (True/False) instead.
  warn_deprecated("2.2", "Passing one of 'on', 'true', 'off', 'false'
as a "
```

Out[3]:

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f87f6b52048>
```