

```
Python 3.6.8 |Anaconda custom (64-bit)| (default, Feb 21 2019, 18:30:04) [MSC
v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\ObjDetAPI\models-master\research\object_detection\0
Detection_Evaluator.py
WARNING: Logging before flag parsing goes to stderr.
W1003 12:41:10.600408 23532 deprecation_wrapper.py:119] From
C:\ObjDetAPI\models-master\research\object_detection\utils\label_map_util.py:137
: The name tf.gfile.GFile is deprecated. Please use tf.io.gfile.GFile instead.

W1003 12:41:11.189120 23532 deprecation_wrapper.py:119] From
C:\ObjDetAPI\models-master\research\object_detection\0
Detection_Evaluator.py:75: The name tf.GraphDef is deprecated. Please use
tf.compat.v1.GraphDef instead.

W1003 12:41:13.982207 23532 deprecation_wrapper.py:119] From
C:\ObjDetAPI\models-master\research\object_detection\0
Detection_Evaluator.py:81: The name tf.Session is deprecated. Please use
tf.compat.v1.Session instead.
```

```
Frame: 1      Total Penalty:  1.0026956357656953
              GT_area:    24931
              ST_area:    36864
              Overlap_area: 24698
              IOU:    0.6657681214114349
              Centre Distance: 11.5
              Confidence: 83.18275213241577
              Category:  False Positive
```

```
-----
Frame: 2      Total Penalty:  1.3258465873227887
              GT_area:    25038
              ST_area:    36992
              Overlap_area: 25038
              IOU:    0.6768490484429066
              Centre Distance: 7.5
              Confidence: 81.6860556602478
              Category:  True Positive
```

```
-----
Frame: 3      Total Penalty:  1.6900278388212304
              GT_area:    23868
              ST_area:    37539
              Overlap_area: 23868
              IOU:    0.6358187485015584
              Centre Distance: 7.5
              Confidence: 82.02746510505676
              Category:  True Positive
```

```
-----
Frame: 4      Total Penalty:  2.0230415046088113
              GT_area:    25038
              ST_area:    37539
              Overlap_area: 25038
              IOU:    0.666986334212419
              Centre Distance: 3.0
```

Confidence: 79.93358373641968  
Category: True Positive

-----  
Frame: 5     Total Penalty: 2.371985269759721  
              GT\_area: 24440  
              ST\_area: 37539  
              Overlap\_area: 24440  
              IOU: 0.6510562348490903  
              Centre Distance: 6.5  
              Confidence: 79.93358373641968  
              Category: True Positive

-----  
Frame: 6     Total Penalty: 2.726241735276962  
              GT\_area: 23970  
              ST\_area: 37120  
              Overlap\_area: 23970  
              IOU: 0.6457435344827587  
              Centre Distance: 5.0  
              Confidence: 80.52232265472412  
              Category: True Positive

-----  
Frame: 7     Total Penalty: 3.063741735276962  
              GT\_area: 24592  
              ST\_area: 37120  
              Overlap\_area: 24592  
              IOU: 0.6625  
              Centre Distance: 6.0  
              Confidence: 81.20907545089722  
              Category: True Positive

-----  
Frame: 8     Total Penalty: 3.41720035183034  
              GT\_area: 24360  
              ST\_area: 37410  
              Overlap\_area: 24255  
              IOU: 0.6465413834466214  
              Centre Distance: 6.0  
              Confidence: 80.77359199523926  
              Category: True Positive

-----  
Frame: 9     Total Penalty: 4.436163210596266  
              GT\_area: 24514  
              ST\_area: 36864  
              Overlap\_area: 24411  
              IOU: 0.6603457137446912  
              Centre Distance: 10.5  
              Confidence: 84.12675857543945  
              Category: False Positive

-----  
Frame: 10    Total Penalty: 5.605654736019995  
              GT\_area: 23200  
              ST\_area: 37410  
              Overlap\_area: 22968  
              IOU: 0.6101694915254238  
              Centre Distance: 15.5

Confidence: 82.79066681861877  
Category: False Positive

-----  
Frame: 11    Total Penalty: 6.7836320267514445  
             GT\_area: 23460  
             ST\_area: 37410  
             Overlap\_area: 23000  
             IOU: 0.6073409030895167  
             Centre Distance: 15.5  
             Confidence: 82.79066681861877  
             Category: False Positive

-----  
Frame: 12    Total Penalty: 8.060072638276337  
             GT\_area: 23129  
             ST\_area: 37120  
             Overlap\_area: 21984  
             IOU: 0.5745197961583692  
             Centre Distance: 18.5  
             Confidence: 87.8103256225586  
             Category: False Positive

-----  
Frame: 13    Total Penalty: 9.348956373588644  
             GT\_area: 23533  
             ST\_area: 37410  
             Overlap\_area: 22135  
             IOU: 0.5703720882292311  
             Centre Distance: 20.0  
             Confidence: 80.65894842147827  
             Category: False Positive

-----  
Frame: 14    Total Penalty: 10.860680308111576  
             GT\_area: 23300  
             ST\_area: 37570  
             Overlap\_area: 20184  
             IOU: 0.4960920218256894  
             Centre Distance: 28.0  
             Confidence: 76.42179727554321  
             Category: False Positive

-----  
Frame: 15    Total Penalty: 12.6220365248824  
             GT\_area: 22310  
             ST\_area: 38280  
             Overlap\_area: 17706  
             IOU: 0.4128812610763921  
             Centre Distance: 36.5  
             Confidence: 62.90668249130249  
             Category: False Positive

-----  
Frame: 16    Total Penalty: 13.6220365248824  
             GT\_area: 20884  
             ST\_area: 38280  
             Overlap\_area: 0  
             IOU: 0.31417147934251444  
             Centre Distance: 48.0

Confidence: 50.20679235458374  
Category: False Negative

-----  
Frame: 17    Total Penalty: 14.6220365248824  
             GT\_area: 22344  
             ST\_area: 38280  
             Overlap\_area: 0  
             IOU: 0.3315761729045862  
             Centre Distance: 47.0  
             Confidence: 50.20679235458374  
             Category: False Negative

-----  
Frame: 18    Total Penalty: 15.071674444566403  
             GT\_area: 21755  
             ST\_area: 37120  
             Overlap\_area: 20900  
             IOU: 0.5503620803159973  
             Centre Distance: 2.5  
             Confidence: 60.42548418045044  
             Category: True Positive

-----  
Frame: 19    Total Penalty: 16.529782869818693  
             GT\_area: 20520  
             ST\_area: 37539  
             Overlap\_area: 19710  
             IOU: 0.5139638582492373  
             Centre Distance: 12.5  
             Confidence: 66.80909991264343  
             Category: False Positive

-----  
Frame: 20    Total Penalty: 17.529782869818693  
             GT\_area: 21111  
             ST\_area: 37539  
             Overlap\_area: 0  
             IOU: 0.43076697892271665  
             Centre Distance: 30.0  
             Confidence: 55.98161816596985  
             Category: False Negative

-----  
Frame: 21    Total Penalty: 18.529782869818693  
             GT\_area: 20384  
             ST\_area: 37539  
             Overlap\_area: 0  
             IOU: 0.32189967593226526  
             Centre Distance: 45.0  
             Confidence: 42.47610569000244  
             Category: False Negative

-----  
Frame: 22    Total Penalty: 19.529782869818693  
             GT\_area: 20608  
             ST\_area: 37539  
             Overlap\_area: 0  
             IOU: 0.22631601147292052  
             Centre Distance: 61.5

Confidence: 52.113163471221924  
Category: False Negative

-----  
Frame: 23    Total Penalty: 20.529782869818693  
             GT\_area: 20516  
             ST\_area: 37539  
             Overlap\_area: 0  
             IOU: 0.2242208257770655  
             Centre Distance: 61.5  
             Confidence: 52.113163471221924  
             Category: False Negative

-----  
Frame: 24    Total Penalty: 21.876328555905925  
             GT\_area: 21056  
             ST\_area: 37410  
             Overlap\_area: 20774  
             IOU: 0.5511514379709223  
             Centre Distance: 14.5  
             Confidence: 67.99260973930359  
             Category: False Positive

-----  
Frame: 25    Total Penalty: 22.876328555905925  
             GT\_area: 21755  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.4619832464355433  
             Centre Distance: 30.0  
             Confidence: 51.26494765281677  
             Category: False Negative

-----  
Frame: 26    Total Penalty: 23.876328555905925  
             GT\_area: 21280  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.33671935498565114  
             Centre Distance: 46.0  
             Confidence: 45.65255641937256  
             Category: False Negative

-----  
Frame: 27    Total Penalty: 24.876328555905925  
             GT\_area: 21470  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.2553835657328046  
             Centre Distance: 59.0  
             Confidence: 51.678335666656494  
             Category: False Negative

-----  
Frame: 28    Total Penalty: 26.076393380474435  
             GT\_area: 22213  
             ST\_area: 37023  
             Overlap\_area: 22213  
             IOU: 0.5999783918104962  
             Centre Distance: 10.0

Confidence: 73.67481589317322  
Category: False Positive

-----  
Frame: 29    Total Penalty: 27.509055919174127  
             GT\_area: 21600  
             ST\_area: 37410  
             Overlap\_area: 20250  
             IOU: 0.5224458204334366  
             Centre Distance: 22.5  
             Confidence: 68.7214732170105  
             Category: False Positive

-----  
Frame: 30    Total Penalty: 28.930837183594985  
             GT\_area: 22116  
             ST\_area: 37410  
             Overlap\_area: 20520  
             IOU: 0.5260729118597139  
             Centre Distance: 23.0  
             Confidence: 68.7214732170105  
             Category: False Positive

-----  
Frame: 31    Total Penalty: 29.930837183594985  
             GT\_area: 22344  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.43150783383642377  
             Centre Distance: 34.5  
             Confidence: 48.290133476257324  
             Category: False Negative

-----  
Frame: 32    Total Penalty: 30.930837183594985  
             GT\_area: 22019  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.33707561815195625  
             Centre Distance: 47.0  
             Confidence: 48.015111684799194  
             Category: False Negative

-----  
Frame: 33    Total Penalty: 31.930837183594985  
             GT\_area: 22176  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.27271562219659107  
             Centre Distance: 57.0  
             Confidence: 46.08336687088013  
             Category: False Negative

-----  
Frame: 34    Total Penalty: 32.93083718359499  
             GT\_area: 23730  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.23795253907831862  
             Centre Distance: 65.0

Confidence: 58.83156061172485  
Category: False Negative

-----  
Frame: 35    Total Penalty: 33.93083718359499  
             GT\_area: 25536  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.19993137367036487  
             Centre Distance: 74.5  
             Confidence: 55.91174364089966  
             Category: False Negative

-----  
Frame: 36    Total Penalty: 34.93083718359499  
             GT\_area: 23625  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.19360516280434145  
             Centre Distance: 73.0  
             Confidence: 55.91174364089966  
             Category: False Negative

-----  
Frame: 37    Total Penalty: 35.93083718359499  
             GT\_area: 24416  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.15480593223504802  
             Centre Distance: 82.0  
             Confidence: 48.473966121673584  
             Category: False Negative

-----  
Frame: 38    Total Penalty: 36.93083718359499  
             GT\_area: 23712  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.14037837232732564  
             Centre Distance: 83.5  
             Confidence: 47.54122495651245  
             Category: False Negative

-----  
Frame: 39    Total Penalty: 37.93083718359499  
             GT\_area: 24300  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.1608352144469526  
             Centre Distance: 80.5  
             Confidence: 54.670655727386475  
             Category: False Negative

-----  
Frame: 40    Total Penalty: 38.93083718359499  
             GT\_area: 24182  
             ST\_area: 37410  
             Overlap\_area: 0  
             IOU: 0.19777527128466416  
             Centre Distance: 73.0

Confidence: 57.03481435775757  
Category: False Negative

-----  
Frame: 41    Total Penalty: 39.29866935142716  
             GT\_area: 23504  
             ST\_area: 37180  
             Overlap\_area: 23504  
             IOU: 0.6321678321678321  
             Centre Distance: 0.0  
             Confidence: 62.32024431228638  
             Category: True Positive

-----  
Frame: 42    Total Penalty: 39.66370431646212  
             GT\_area: 23608  
             ST\_area: 37180  
             Overlap\_area: 23608  
             IOU: 0.634965034965035  
             Centre Distance: 0.0  
             Confidence: 62.32024431228638  
             Category: True Positive

-----  
Frame: 43    Total Penalty: 40.66370431646212  
             GT\_area: 23956  
             ST\_area: 37180  
             Overlap\_area: 0  
             IOU: 0.6443249058633674  
             Centre Distance: 12.0  
             Confidence: 41.68466925621033  
             Category: False Negative

-----  
Frame: 44    Total Penalty: 41.66370431646212  
             GT\_area: 23504  
             ST\_area: 37180  
             Overlap\_area: 0  
             IOU: 0.5298744516714566  
             Centre Distance: 24.0  
             Confidence: 46.75290584564209  
             Category: False Negative

-----  
Frame: 45    Total Penalty: 42.66370431646212  
             GT\_area: 23625  
             ST\_area: 37180  
             Overlap\_area: 0  
             IOU: 0.42051162247401  
             Centre Distance: 37.5  
             Confidence: 56.83931112289429  
             Category: False Negative

-----  
Frame: 46    Total Penalty: 43.7985179564304  
             GT\_area: 23520  
             ST\_area: 37830  
             Overlap\_area: 23520  
             IOU: 0.6217287866772403  
             Centre Distance: 10.5



Confidence: 75.7792592048645  
Category: False Positive

-----  
Frame: 47    Total Penalty: 44.173968064456325  
            GT\_area: 23625  
            ST\_area: 37281  
            Overlap\_area: 23415  
            IOU: 0.6245498919740737  
            Centre Distance: 5.0  
            Confidence: 64.20925855636597  
            Category: True Positive

-----  
Frame: 48    Total Penalty: 44.561248988509995  
            GT\_area: 23175  
            ST\_area: 37281  
            Overlap\_area: 22969  
            IOU: 0.612719075946328  
            Centre Distance: 6.0  
            Confidence: 64.20925855636597  
            Category: True Positive

-----  
Frame: 49    Total Penalty: 45.561248988509995  
            GT\_area: 22400  
            ST\_area: 37281  
            Overlap\_area: 0  
            IOU: 0.5216593151627954  
            Centre Distance: 21.5  
            Confidence: 45.62086462974548  
            Category: False Negative

-----  
Frame: 50    Total Penalty: 46.561248988509995  
            GT\_area: 22644  
            ST\_area: 37281  
            Overlap\_area: 0  
            IOU: 0.38911425855954007  
            Centre Distance: 38.5  
            Confidence: 45.68661451339722  
            Category: False Negative

-----  
Frame: 51    Total Penalty: 46.99872912832569  
            GT\_area: 21631  
            ST\_area: 37376  
            Overlap\_area: 21243  
            IOU: 0.5625198601843026  
            Centre Distance: 7.5  
            Confidence: 61.844342947006226  
            Category: True Positive

-----  
Frame: 52    Total Penalty: 47.99872912832569  
            GT\_area: 21056  
            ST\_area: 37376  
            Overlap\_area: 0  
            IOU: 0.5477855477855478  
            Centre Distance: 7.0

Confidence: 49.6248722076416  
Category: False Negative

-----  
Frame: 53    Total Penalty: 48.99872912832569  
             GT\_area: 20774  
             ST\_area: 37376  
             Overlap\_area: 0  
             IOU: 0.4790416115576356  
             Centre Distance: 25.0  
             Confidence: 44.61590647697449  
             Category: False Negative

-----  
Frame: 54    Total Penalty: 49.99872912832569  
             GT\_area: 22077  
             ST\_area: 37376  
             Overlap\_area: 0  
             IOU: 0.33419357734341687  
             Centre Distance: 45.5  
             Confidence: 53.304046392440796  
             Category: False Negative

-----  
Frame: 55    Total Penalty: 50.99872912832569  
             GT\_area: 21854  
             ST\_area: 37376  
             Overlap\_area: 0  
             IOU: 0.33998461608072034  
             Centre Distance: 45.0  
             Confidence: 53.304046392440796  
             Category: False Negative

-----  
Frame: 56    Total Penalty: 51.99872912832569  
             GT\_area: 21825  
             ST\_area: 37376  
             Overlap\_area: 0  
             IOU: 0.21045636705651427  
             Centre Distance: 65.5  
             Confidence: 51.757609844207764  
             Category: False Negative

-----  
Frame: 57    Total Penalty: 52.99872912832569  
             GT\_area: 21854  
             ST\_area: 37376  
             Overlap\_area: 0  
             IOU: 0.10977871877986173  
             Centre Distance: 86.0  
             Confidence: 40.90968072414398  
             Category: False Negative

-----  
Frame: 58    Total Penalty: 54.48361205626386  
             GT\_area: 21756  
             ST\_area: 37830  
             Overlap\_area: 19995  
             IOU: 0.5050390240206107  
             Centre Distance: 21.0

Confidence: 62.15342879295349  
Category: False Positive

-----  
Frame: 59    Total Penalty: 55.48361205626386  
             GT\_area: 21534  
             ST\_area: 37830  
             Overlap\_area: 0  
             IOU: 0.5261845386533666  
             Centre Distance: 3.5  
             Confidence: 53.45779061317444  
             Category: False Negative

-----  
Frame: 60    Total Penalty: 56.48361205626386  
             GT\_area: 20962  
             ST\_area: 37830  
             Overlap\_area: 0  
             IOU: 0.5127624536846439  
             Centre Distance: 15.0  
             Confidence: 43.058615922927856  
             Category: False Negative

-----  
Frame: 61    Total Penalty: 57.48361205626386  
             GT\_area: 21658  
             ST\_area: 37830  
             Overlap\_area: 0  
             IOU: 0.5366811324653854  
             Centre Distance: 15.0  
             Confidence: 43.058615922927856  
             Category: False Negative

-----  
Frame: 62    Total Penalty: 58.48361205626386  
             GT\_area: 21243  
             ST\_area: 37830  
             Overlap\_area: 0  
             IOU: 0.40439340988517225  
             Centre Distance: 32.5  
             Confidence: 53.12679409980774  
             Category: False Negative

-----  
Frame: 63    Total Penalty: 59.93935651002615  
             GT\_area: 21681  
             ST\_area: 37926  
             Overlap\_area: 20256  
             IOU: 0.5147518487459023  
             Centre Distance: 18.0  
             Confidence: 73.12480807304382  
             Category: False Positive

-----  
Frame: 64    Total Penalty: 60.39290544884291  
             GT\_area: 21879  
             ST\_area: 37797  
             Overlap\_area: 21087  
             IOU: 0.5464510611832387  
             Centre Distance: 6.0

Confidence: 61.89579367637634  
Category: True Positive

-----  
Frame: 65    Total Penalty: 61.39290544884291  
             GT\_area: 23088  
             ST\_area: 37797  
             Overlap\_area: 0  
             IOU: 0.5761474539853478  
             Centre Distance: 4.5  
             Confidence: 45.96448242664337  
             Category: False Negative

-----  
Frame: 66    Total Penalty: 62.39290544884291  
             GT\_area: 22542  
             ST\_area: 37797  
             Overlap\_area: 0  
             IOU: 0.5540874671611806  
             Centre Distance: 14.5  
             Confidence: 43.57403516769409  
             Category: False Negative

-----  
Frame: 67    Total Penalty: 63.39290544884291  
             GT\_area: 22440  
             ST\_area: 37797  
             Overlap\_area: 0  
             IOU: 0.5596147373326774  
             Centre Distance: 14.5  
             Confidence: 43.57403516769409  
             Category: False Negative

-----  
Frame: 68    Total Penalty: 64.39290544884291  
             GT\_area: 21879  
             ST\_area: 37797  
             Overlap\_area: 0  
             IOU: 0.47983930962654364  
             Centre Distance: 24.0  
             Confidence: 48.00897836685181  
             Category: False Negative

-----  
Frame: 69    Total Penalty: 65.98403724698107  
             GT\_area: 22000  
             ST\_area: 37990  
             Overlap\_area: 19170  
             IOU: 0.46962273395394416  
             Centre Distance: 25.5  
             Confidence: 73.91932010650635  
             Category: False Positive

-----  
Frame: 70    Total Penalty: 67.37374878051594  
             GT\_area: 22866  
             ST\_area: 37120  
             Overlap\_area: 20952  
             IOU: 0.5367628221550443  
             Centre Distance: 18.5

Confidence: 91.35704636573792  
Category: False Positive

-----  
Frame: 71    Total Penalty: 68.58937235292343  
             GT\_area: 22644  
             ST\_area: 36703  
             Overlap\_area: 22134  
             IOU: 0.594792142530836  
             Centre Distance: 10.5  
             Confidence: 92.15102195739746  
             Category: False Positive

-----  
Frame: 72    Total Penalty: 68.992048685639  
             GT\_area: 22321  
             ST\_area: 36288  
             Overlap\_area: 21917  
             IOU: 0.5973236672844217  
             Centre Distance: 2.5  
             Confidence: 85.0718080997467  
             Category: True Positive

-----  
Frame: 73    Total Penalty: 69.36213593341729  
             GT\_area: 23638  
             ST\_area: 36703  
             Overlap\_area: 23320  
             IOU: 0.629912752221712  
             Centre Distance: 5.5  
             Confidence: 77.29811668395996  
             Category: True Positive

-----  
Frame: 74    Total Penalty: 69.74819353454438  
             GT\_area: 22866  
             ST\_area: 36703  
             Overlap\_area: 22660  
             IOU: 0.6139423988729036  
             Centre Distance: 5.0  
             Confidence: 77.29811668395996  
             Category: True Positive

-----  
Frame: 75    Total Penalty: 70.12968142381774  
             GT\_area: 23296  
             ST\_area: 36576  
             Overlap\_area: 22880  
             IOU: 0.6185121107266436  
             Centre Distance: 9.5  
             Confidence: 68.70344877243042  
             Category: True Positive

-----  
Frame: 76    Total Penalty: 71.12968142381774  
             GT\_area: 24075  
             ST\_area: 36576  
             Overlap\_area: 0  
             IOU: 0.5466670066812873  
             Centre Distance: 20.0

Confidence: 43.46352219581604  
Category: False Negative

-----  
Frame: 77    Total Penalty: 72.71396268072755  
            GT\_area: 22866  
            ST\_area: 37045  
            Overlap\_area: 19208  
            IOU: 0.47190624769672995  
            Centre Distance: 31.0  
            Confidence: 65.08386135101318  
            Category: False Positive

-----  
Frame: 78    Total Penalty: 74.0763712344698  
            GT\_area: 23540  
            ST\_area: 36894  
            Overlap\_area: 21340  
            IOU: 0.5458638154192459  
            Centre Distance: 21.0  
            Confidence: 81.90398216247559  
            Category: False Positive

-----  
Frame: 79    Total Penalty: 75.18486516737487  
            GT\_area: 24525  
            ST\_area: 37152  
            Overlap\_area: 23850  
            IOU: 0.6305020223649774  
            Centre Distance: 13.0  
            Confidence: 94.41685080528259  
            Category: False Positive

-----  
Frame: 80    Total Penalty: 76.3806294253268  
            GT\_area: 23415  
            ST\_area: 37152  
            Overlap\_area: 22746  
            IOU: 0.6014119140160229  
            Centre Distance: 15.0  
            Confidence: 94.41685080528259  
            Category: False Positive

-----  
Frame: 81    Total Penalty: 76.72892430310122  
            GT\_area: 23754  
            ST\_area: 36449  
            Overlap\_area: 23754  
            IOU: 0.6517051222255754  
            Centre Distance: 7.0  
            Confidence: 94.259512424469  
            Category: True Positive

-----  
Frame: 82    Total Penalty: 77.07341249207761  
            GT\_area: 23976  
            ST\_area: 36576  
            Overlap\_area: 23976  
            IOU: 0.655511811023622  
            Centre Distance: 1.5

Confidence: 92.79319047927856  
Category: True Positive

-----  
Frame: 83    Total Penalty: 77.38833753616932  
             GT\_area: 24860  
             ST\_area: 36288  
             Overlap\_area: 24860  
             IOU: 0.6850749559082893  
             Centre Distance: 5.0  
             Confidence: 89.5142912864685  
             Category: True Positive

-----  
Frame: 84    Total Penalty: 77.69697951147796  
             GT\_area: 25088  
             ST\_area: 36288  
             Overlap\_area: 25088  
             IOU: 0.691358024691358  
             Centre Distance: 5.0  
             Confidence: 88.59213590621948  
             Category: True Positive

-----  
Frame: 85    Total Penalty: 78.00800313352521  
             GT\_area: 25200  
             ST\_area: 36576  
             Overlap\_area: 25200  
             IOU: 0.6889763779527559  
             Centre Distance: 0.5  
             Confidence: 94.7605311870575  
             Category: True Positive

-----  
Frame: 86    Total Penalty: 78.31902675557245  
             GT\_area: 25200  
             ST\_area: 36576  
             Overlap\_area: 25200  
             IOU: 0.6889763779527559  
             Centre Distance: 0.5  
             Confidence: 94.7605311870575  
             Category: True Positive

-----  
Frame: 87    Total Penalty: 79.35349285317271  
             GT\_area: 25086  
             ST\_area: 36576  
             Overlap\_area: 24408  
             IOU: 0.6551779674665807  
             Centre Distance: 11.0  
             Confidence: 96.58113718032837  
             Category: False Positive

-----  
Frame: 88    Total Penalty: 80.72329062391306  
             GT\_area: 24743  
             ST\_area: 37152  
             Overlap\_area: 21792  
             IOU: 0.5434007430865522  
             Centre Distance: 23.0

Confidence: 86.18155717849731  
Category: False Positive

-----  
Frame: 89    Total Penalty: 81.72329062391306  
             GT\_area: 25197  
             ST\_area: 37152  
             Overlap\_area: 0  
             IOU: 0.42560878015319537  
             Centre Distance: 38.0  
             Confidence: 44.79391574859619  
             Category: False Negative

-----  
Frame: 90    Total Penalty: 82.03914726252289  
             GT\_area: 25197  
             ST\_area: 36830  
             Overlap\_area: 25197  
             IOU: 0.6841433613901711  
             Centre Distance: 7.0  
             Confidence: 78.12143564224243  
             Category: True Positive

-----  
Frame: 91    Total Penalty: 82.364228626232  
             GT\_area: 25410  
             ST\_area: 37376  
             Overlap\_area: 25300  
             IOU: 0.6749186362908819  
             Centre Distance: 7.0  
             Confidence: 88.32873106002808  
             Category: True Positive

-----  
Frame: 92    Total Penalty: 82.69639365191694  
             GT\_area: 24961  
             ST\_area: 37376  
             Overlap\_area: 24961  
             IOU: 0.6678349743150684  
             Centre Distance: 8.5  
             Confidence: 88.32873106002808  
             Category: True Positive

-----  
Frame: 93    Total Penalty: 84.05701700573607  
             GT\_area: 25872  
             ST\_area: 37539  
             Overlap\_area: 22407  
             IOU: 0.5464588820602868  
             Centre Distance: 23.5  
             Confidence: 75.4659652709961  
             Category: False Positive

-----  
Frame: 94    Total Penalty: 85.05701700573607  
             GT\_area: 27028  
             ST\_area: 37539  
             Overlap\_area: 0  
             IOU: 0.39876516464471407  
             Centre Distance: 43.5



Confidence: 43.057382106781006  
Category: False Negative

-----  
Frame: 95    Total Penalty: 85.3921785588178  
             GT\_area: 24486  
             ST\_area: 36830  
             Overlap\_area: 24486  
             IOU: 0.6648384469182731  
             Centre Distance: 1.5  
             Confidence: 76.66463851928711  
             Category: True Positive

-----  
Frame: 96    Total Penalty: 86.4363255027974  
             GT\_area: 25488  
             ST\_area: 36703  
             Overlap\_area: 24544  
             IOU: 0.6519510186734667  
             Centre Distance: 13.5  
             Confidence: 85.00854969024658  
             Category: False Positive

-----  
Frame: 97    Total Penalty: 87.92523824399711  
             GT\_area: 24360  
             ST\_area: 37281  
             Overlap\_area: 20648  
             IOU: 0.5036957529334276  
             Centre Distance: 28.0  
             Confidence: 60.82388758659363  
             Category: False Positive

-----  
Frame: 98    Total Penalty: 88.92523824399711  
             GT\_area: 24698  
             ST\_area: 37281  
             Overlap\_area: 0  
             IOU: 0.40739815613788094  
             Centre Distance: 40.5  
             Confidence: 40.58842360973358  
             Category: False Negative

-----  
Frame: 99    Total Penalty: 89.92523824399711  
             GT\_area: 24336  
             ST\_area: 37281  
             Overlap\_area: 0  
             IOU: 0.39825719926475595  
             Centre Distance: 41.5  
             Confidence: 40.58842360973358  
             Category: False Negative

-----  
Frame: 100   Total Penalty: 90.25813754955267  
             GT\_area: 24592  
             ST\_area: 36864  
             Overlap\_area: 24592  
             IOU: 0.6671006944444444  
             Centre Distance: 5.0

Confidence: 67.46724843978882  
Category: True Positive

-----  
Frame: 101 Total Penalty: 90.5765583870864  
GT\_area: 25016  
ST\_area: 36703  
Overlap\_area: 25016  
IOU: 0.6815791624662834  
Centre Distance: 8.5  
Confidence: 83.90613198280334  
Category: True Positive

-----  
Frame: 102 Total Penalty: 91.84410965975863  
GT\_area: 25252  
ST\_area: 37281  
Overlap\_area: 22892  
IOU: 0.5774829091092556  
Centre Distance: 21.0  
Confidence: 88.81170749664307  
Category: False Positive

-----  
Frame: 103 Total Penalty: 93.16059217829957  
GT\_area: 24378  
ST\_area: 37510  
Overlap\_area: 22246  
IOU: 0.5611724938196861  
Centre Distance: 30.5  
Confidence: 69.21604871749878  
Category: False Positive

-----  
Frame: 104 Total Penalty: 94.60445666520128  
GT\_area: 24174  
ST\_area: 37510  
Overlap\_area: 21068  
IOU: 0.5187118376994287  
Centre Distance: 36.5  
Confidence: 73.20646047592163  
Category: False Positive

-----  
Frame: 105 Total Penalty: 96.00678224659663  
GT\_area: 25095  
ST\_area: 37510  
Overlap\_area: 21755  
IOU: 0.5325581395348837  
Centre Distance: 35.0  
Confidence: 73.20646047592163  
Category: False Positive

-----  
Frame: 106 Total Penalty: 97.29064156594764  
GT\_area: 26051  
ST\_area: 37510  
Overlap\_area: 23129  
IOU: 0.5720468935496636  
Centre Distance: 31.0

Confidence: 78.17989587783813  
Category: False Positive

-----  
Frame: 107 Total Penalty: 98.43782566438588  
GT\_area: 30366  
ST\_area: 37994  
Overlap\_area: 26100  
IOU: 0.6176053005205868  
Centre Distance: 25.5  
Confidence: 90.00475406646729  
Category: False Positive

-----  
Frame: 108 Total Penalty: 99.44599919472226  
GT\_area: 35624  
ST\_area: 38478  
Overlap\_area: 29568  
IOU: 0.6639421565545426  
Centre Distance: 20.5  
Confidence: 93.84604692459106  
Category: False Positive

-----  
Frame: 109 Total Penalty: 100.44599919472226  
GT\_area: 42066  
ST\_area: 38478  
Overlap\_area: 0  
IOU: 0.6760097384356077  
Centre Distance: 18.0  
Confidence: 55.81045150756836  
Category: False Negative

-----  
Frame: 110 Total Penalty: 101.44599919472226  
GT\_area: 45080  
ST\_area: 38478  
Overlap\_area: 0  
IOU: 0.6402575477994582  
Centre Distance: 20.5  
Confidence: 54.827386140823364  
Category: False Negative

-----  
Frame: 111 Total Penalty: 102.44599919472226  
GT\_area: 44896  
ST\_area: 38478  
Overlap\_area: 0  
IOU: 0.6377064959044569  
Centre Distance: 20.5  
Confidence: 54.827386140823364  
Category: False Negative

-----  
Frame: 112 Total Penalty: 103.48310287104982  
GT\_area: 46995  
ST\_area: 55062  
Overlap\_area: 40365  
IOU: 0.6542987745574791  
Centre Distance: 25.5

Confidence: 91.49628281593323  
Category: False Positive

-----  
Frame: 113 Total Penalty: 103.82692759439965  
GT\_area: 47400  
ST\_area: 71732  
Overlap\_area: 47200  
IOU: 0.6561752766501696  
Centre Distance: 0.5  
Confidence: 77.97971963882446  
Category: True Positive

-----  
Frame: 114 Total Penalty: 104.80542885363543  
GT\_area: 45828  
ST\_area: 54530  
Overlap\_area: 40401  
IOU: 0.6738329135880714  
Centre Distance: 25.5  
Confidence: 76.60157680511475  
Category: False Positive

-----  
Frame: 115 Total Penalty: 105.16208006869373  
GT\_area: 45800  
ST\_area: 71190  
Overlap\_area: 45800  
IOU: 0.6433487849417053  
Centre Distance: 8.0  
Confidence: 71.96835279464722  
Category: True Positive

-----  
Frame: 116 Total Penalty: 105.53549779021272  
GT\_area: 44550  
ST\_area: 71100  
Overlap\_area: 44550  
IOU: 0.6265822784810127  
Centre Distance: 8.5  
Confidence: 76.06927156448364  
Category: True Positive

-----  
Frame: 117 Total Penalty: 105.90854982959387  
GT\_area: 44576  
ST\_area: 71100  
Overlap\_area: 44576  
IOU: 0.6269479606188467  
Centre Distance: 8.0  
Confidence: 76.06927156448364  
Category: True Positive

-----  
Frame: 118 Total Penalty: 106.83266365884998  
GT\_area: 43956  
ST\_area: 54325  
Overlap\_area: 40194  
IOU: 0.6919620569146281  
Centre Distance: 22.5

Confidence: 82.78255462646484  
Category: False Positive

-----  
Frame: 119 Total Penalty: 107.23809575761541  
GT\_area: 42140  
ST\_area: 70875  
Overlap\_area: 42140  
IOU: 0.5945679012345679  
Centre Distance: 1.5  
Confidence: 73.01465272903442  
Category: True Positive

-----  
Frame: 120 Total Penalty: 107.70578576566416  
GT\_area: 37036  
ST\_area: 69576  
Overlap\_area: 37036  
IOU: 0.5323099919512475  
Centre Distance: 1.5  
Confidence: 82.54684209823608  
Category: True Positive

-----  
Frame: 121 Total Penalty: 109.03832362308594  
GT\_area: 32757  
ST\_area: 38957  
Overlap\_area: 25620  
IOU: 0.5558207141927366  
Centre Distance: 31.0  
Confidence: 78.66901755332947  
Category: False Positive

-----  
Frame: 122 Total Penalty: 110.3043334753027  
GT\_area: 30624  
ST\_area: 52983  
Overlap\_area: 30624  
IOU: 0.5779967159277504  
Centre Distance: 32.5  
Confidence: 81.38282299041748  
Category: False Positive

-----  
Frame: 123 Total Penalty: 112.03125566562521  
GT\_area: 29575  
ST\_area: 38394  
Overlap\_area: 20250  
IOU: 0.42435926989249567  
Centre Distance: 33.5  
Confidence: 71.47888541221619  
Category: False Positive

-----  
Frame: 124 Total Penalty: 113.76981078916717  
GT\_area: 29559  
ST\_area: 38394  
Overlap\_area: 20115  
IOU: 0.4204816254860153  
Centre Distance: 34.5

Confidence: 71.47888541221619  
Category: False Positive

-----  
Frame: 125 Total Penalty: 114.62895663928803  
GT\_area: 26568  
ST\_area: 37230  
Overlap\_area: 26568  
IOU: 0.7136180499597099  
Centre Distance: 28.5  
Confidence: 78.98950576782227  
Category: False Positive

-----  
Frame: 126 Total Penalty: 115.76888123082553  
GT\_area: 22200  
ST\_area: 35805  
Overlap\_area: 22200  
IOU: 0.6200251361541684  
Centre Distance: 25.5  
Confidence: 62.99857497215271  
Category: False Positive

-----  
Frame: 127 Total Penalty: 116.76888123082553  
GT\_area: 20448  
ST\_area: 35805  
Overlap\_area: 0  
IOU: 0.5710934227063259  
Centre Distance: 25.5  
Confidence: 55.58851361274719  
Category: False Negative

-----  
Frame: 128 Total Penalty: 117.76888123082553  
GT\_area: 20300  
ST\_area: 35805  
Overlap\_area: 0  
IOU: 0.5669599217986315  
Centre Distance: 26.5  
Confidence: 54.13051247596741  
Category: False Negative

-----  
Frame: 129 Total Penalty: 118.76888123082553  
GT\_area: 19872  
ST\_area: 35805  
Overlap\_area: 0  
IOU: 0.5550062840385421  
Centre Distance: 26.5  
Confidence: 49.20583665370941  
Category: False Negative

-----  
Frame: 130 Total Penalty: 119.76888123082553  
GT\_area: 19856  
ST\_area: 35805  
Overlap\_area: 0  
IOU: 0.5545594190755481  
Centre Distance: 27.5

Confidence: 49.20583665370941  
Category: False Negative

-----  
Frame: 131 Total Penalty: 120.76888123082553  
GT\_area: 19110  
ST\_area: 35805  
Overlap\_area: 0  
IOU: 0.533724340175953  
Centre Distance: 20.5  
Confidence: 49.96468126773834  
Category: False Negative

-----  
Frame: 132 Total Penalty: 121.76888123082553  
GT\_area: 19126  
ST\_area: 35805  
Overlap\_area: 0  
IOU: 0.5341712051389471  
Centre Distance: 22.0  
Confidence: 49.880194664001465  
Category: False Negative

-----  
Frame: 133 Total Penalty: 122.76888123082553  
GT\_area: 19479  
ST\_area: 35805  
Overlap\_area: 0  
IOU: 0.5440301633850021  
Centre Distance: 20.0  
Confidence: 52.57532596588135  
Category: False Negative

-----  
Frame: 134 Total Penalty: 124.39068391048448  
GT\_area: 21014  
ST\_area: 36498  
Overlap\_area: 18104  
IOU: 0.4593991067803492  
Centre Distance: 21.5  
Confidence: 71.07009887695312  
Category: False Positive

-----  
Frame: 135 Total Penalty: 125.58870322824949  
GT\_area: 27946  
ST\_area: 37513  
Overlap\_area: 24564  
IOU: 0.600660227411664  
Centre Distance: 21.0  
Confidence: 75.08708238601685  
Category: False Positive

-----  
Frame: 136 Total Penalty: 126.71414994985987  
GT\_area: 29322  
ST\_area: 37513  
Overlap\_area: 25702  
IOU: 0.624851092796538  
Centre Distance: 19.5

Confidence: 75.08708238601685  
Category: False Positive

-----  
Frame: 137 Total Penalty: 127.64591901438597  
GT\_area: 37740  
ST\_area: 38868  
Overlap\_area: 31262  
IOU: 0.6894103118246372  
Centre Distance: 20.5  
Confidence: 83.4042489528656  
Category: False Positive

-----  
Frame: 138 Total Penalty: 127.94410554288338  
GT\_area: 40128  
ST\_area: 38700  
Overlap\_area: 32508  
IOU: 0.7018134715025907  
Centre Distance: 19.5  
Confidence: 63.433271646499634  
Category: True Positive

-----  
Frame: 139 Total Penalty: 128.23562035218475  
GT\_area: 45114  
ST\_area: 54735  
Overlap\_area: 41406  
IOU: 0.7084851906986295  
Centre Distance: 12.5  
Confidence: 90.11027812957764  
Category: True Positive

-----  
Frame: 140 Total Penalty: 128.5155739745824  
GT\_area: 46144  
ST\_area: 54735  
Overlap\_area: 42230  
IOU: 0.7200463776023461  
Centre Distance: 9.5  
Confidence: 94.73431706428528  
Category: True Positive

-----  
Frame: 141 Total Penalty: 129.44304316137814  
GT\_area: 46864  
ST\_area: 55476  
Overlap\_area: 41814  
IOU: 0.6908436044014142  
Centre Distance: 10.0  
Confidence: 82.67257809638977  
Category: False Positive

-----  
Frame: 142 Total Penalty: 129.74593539592647  
GT\_area: 47328  
ST\_area: 55476  
Overlap\_area: 42228  
IOU: 0.697107765451664  
Centre Distance: 8.0



Confidence: 82.67257809638977  
Category: True Positive

-----  
Frame: 143 Total Penalty: 130.04923869922976  
GT\_area: 47502  
ST\_area: 55328  
Overlap\_area: 42224  
IOU: 0.6966966966966966  
Centre Distance: 2.5  
Confidence: 96.78316116333008  
Category: True Positive

-----  
Frame: 144 Total Penalty: 130.38963487543947  
GT\_area: 45978  
ST\_area: 55062  
Overlap\_area: 40158  
IOU: 0.6596038237902828  
Centre Distance: 0.0  
Confidence: 89.79620933532715  
Category: True Positive

-----  
Frame: 145 Total Penalty: 130.53207988084878  
GT\_area: 43384  
ST\_area: 39032  
Overlap\_area: 38048  
IOU: 0.857554994590696  
Centre Distance: 3.5  
Confidence: 76.08267068862915  
Category: True Positive

-----  
Frame: 146 Total Penalty: 130.70770712099215  
GT\_area: 42320  
ST\_area: 39120  
Overlap\_area: 36800  
IOU: 0.8243727598566308  
Centre Distance: 13.5  
Confidence: 63.32123279571533  
Category: True Positive

-----  
Frame: 147 Total Penalty: 131.70770712099215  
GT\_area: 40656  
ST\_area: 39120  
Overlap\_area: 0  
IOU: 0.7678500199441564  
Centre Distance: 19.5  
Confidence: 58.32487344741821  
Category: False Negative

-----  
Frame: 148 Total Penalty: 132.74528673882654  
GT\_area: 38868  
ST\_area: 39042  
Overlap\_area: 30810  
IOU: 0.654140127388535  
Centre Distance: 33.0

Confidence: 81.97529315948486  
Category: False Positive

-----  
Frame: 149 Total Penalty: 133.78856517620684  
GT\_area: 38610  
ST\_area: 39042  
Overlap\_area: 30654  
IOU: 0.6522405208732287  
Centre Distance: 32.5  
Confidence: 81.97529315948486  
Category: False Positive

-----  
Frame: 150 Total Penalty: 134.7709511395242  
GT\_area: 34950  
ST\_area: 38640  
Overlap\_area: 29591  
IOU: 0.6725380122275506  
Centre Distance: 28.5  
Confidence: 76.00663900375366  
Category: False Positive

-----  
Frame: 151 Total Penalty: 135.75177730616736  
GT\_area: 32802  
ST\_area: 38400  
Overlap\_area: 28644  
IOU: 0.6730579444522768  
Centre Distance: 27.0  
Confidence: 81.71926140785217  
Category: False Positive

-----  
Frame: 152 Total Penalty: 136.69723228966413  
GT\_area: 31455  
ST\_area: 38478  
Overlap\_area: 28426  
IOU: 0.6848483388344134  
Centre Distance: 25.0  
Confidence: 65.34266471862793  
Category: False Positive

-----  
Frame: 153 Total Penalty: 137.60749906411846  
GT\_area: 31020  
ST\_area: 38236  
Overlap\_area: 28435  
IOU: 0.6965777418485584  
Centre Distance: 24.0  
Confidence: 83.1659734249115  
Category: False Positive

-----  
Frame: 154 Total Penalty: 138.47041572042826  
GT\_area: 30654  
ST\_area: 38236  
Overlap\_area: 28659  
IOU: 0.7123611145633963  
Centre Distance: 21.5

Confidence: 77.06997394561768  
Category: False Positive

-----  
Frame: 155 Total Penalty: 139.409133071868  
GT\_area: 29845  
ST\_area: 38236  
Overlap\_area: 27727  
IOU: 0.6870942161867473  
Centre Distance: 23.5  
Confidence: 77.06997394561768  
Category: False Positive

-----  
Frame: 156 Total Penalty: 139.6901127886686  
GT\_area: 29625  
ST\_area: 37752  
Overlap\_area: 28182  
IOU: 0.7190202831993877  
Centre Distance: 18.5  
Confidence: 84.41940546035767  
Category: True Positive

-----  
Frame: 157 Total Penalty: 140.78115906633462  
GT\_area: 30353  
ST\_area: 37960  
Overlap\_area: 26565  
IOU: 0.636317907444668  
Centre Distance: 13.5  
Confidence: 82.54191875457764  
Category: False Positive

-----  
Frame: 158 Total Penalty: 141.82425791735514  
GT\_area: 30464  
ST\_area: 37700  
Overlap\_area: 26910  
IOU: 0.6523003829931643  
Centre Distance: 12.0  
Confidence: 83.19858312606812  
Category: False Positive

-----  
Frame: 159 Total Penalty: 142.12758295693894  
GT\_area: 30099  
ST\_area: 37410  
Overlap\_area: 27720  
IOU: 0.6966749604161955  
Centre Distance: 8.0  
Confidence: 82.68897533416748  
Category: True Positive

-----  
Frame: 160 Total Penalty: 142.42392760445853  
GT\_area: 29274  
ST\_area: 37281  
Overlap\_area: 27489  
IOU: 0.7036553524804178  
Centre Distance: 7.0

Confidence: 78.16022634506226  
Category: True Positive

-----  
Frame: 161 Total Penalty: 142.71448630228056  
GT\_area: 29512  
ST\_area: 37281  
Overlap\_area: 27720  
IOU: 0.7094413021779745  
Centre Distance: 6.5  
Confidence: 78.16022634506226  
Category: True Positive

-----  
Frame: 162 Total Penalty: 143.66730931247687  
GT\_area: 28920  
ST\_area: 37410  
Overlap\_area: 26904  
IOU: 0.682392329934561  
Centre Distance: 10.5  
Confidence: 78.28378081321716  
Category: False Positive

-----  
Frame: 163 Total Penalty: 144.71838616313005  
GT\_area: 31964  
ST\_area: 38121  
Overlap\_area: 27600  
IOU: 0.6496410497822761  
Centre Distance: 16.0  
Confidence: 78.87939214706421  
Category: False Positive

-----  
Frame: 164 Total Penalty: 145.8036091766233  
GT\_area: 31944  
ST\_area: 37990  
Overlap\_area: 27246  
IOU: 0.6382589955022488  
Centre Distance: 17.5  
Confidence: 87.13386058807373  
Category: False Positive

-----  
Frame: 165 Total Penalty: 146.94342338324805  
GT\_area: 31070  
ST\_area: 37990  
Overlap\_area: 26432  
IOU: 0.6200619311250821  
Centre Distance: 18.5  
Confidence: 84.783536195755  
Category: False Positive

-----  
Frame: 166 Total Penalty: 148.09218371382656  
GT\_area: 32319  
ST\_area: 38121  
Overlap\_area: 26880  
IOU: 0.6170798898071626  
Centre Distance: 20.0

Confidence: 83.6627185344696  
Category: False Positive

-----  
Frame: 167 Total Penalty: 149.19999151474025  
GT\_area: 32912  
ST\_area: 38121  
Overlap\_area: 27474  
IOU: 0.6307307330287656  
Centre Distance: 19.5  
Confidence: 83.6627185344696  
Category: False Positive

-----  
Frame: 168 Total Penalty: 150.43845043052613  
GT\_area: 31416  
ST\_area: 38412  
Overlap\_area: 25833  
IOU: 0.5871803614047051  
Centre Distance: 23.0  
Confidence: 68.95802617073059  
Category: False Positive

-----  
Frame: 169 Total Penalty: 151.8515415467991  
GT\_area: 31070  
ST\_area: 38703  
Overlap\_area: 24139  
IOU: 0.5289696279090152  
Centre Distance: 30.5  
Confidence: 69.25904750823975  
Category: False Positive

-----  
Frame: 170 Total Penalty: 153.19369074869584  
GT\_area: 31330  
ST\_area: 38412  
Overlap\_area: 24823  
IOU: 0.5526169327010841  
Centre Distance: 28.0  
Confidence: 69.63012218475342  
Category: False Positive

-----  
Frame: 171 Total Penalty: 154.35812669515855  
GT\_area: 32400  
ST\_area: 38412  
Overlap\_area: 26880  
IOU: 0.6118546845124283  
Centre Distance: 21.5  
Confidence: 83.0830454826355  
Category: False Positive

-----  
Frame: 172 Total Penalty: 154.64903136441924  
GT\_area: 32026  
ST\_area: 38252  
Overlap\_area: 29158  
IOU: 0.7090953307392996  
Centre Distance: 10.5

Confidence: 84.92122888565063  
Category: True Positive

-----  
Frame: 173 Total Penalty: 154.86829922556703  
GT\_area: 33499  
ST\_area: 37960  
Overlap\_area: 31330  
IOU: 0.7807321388522016  
Centre Distance: 1.5  
Confidence: 74.40510988235474  
Category: True Positive

-----  
Frame: 174 Total Penalty: 155.10984704645065  
GT\_area: 32568  
ST\_area: 37960  
Overlap\_area: 30420  
IOU: 0.7584521791163857  
Centre Distance: 1.0  
Confidence: 74.40510988235474  
Category: True Positive

-----  
Frame: 175 Total Penalty: 156.10984704645065  
GT\_area: 31088  
ST\_area: 37960  
Overlap\_area: 0  
IOU: 0.6569399116913035  
Centre Distance: 14.0  
Confidence: 51.958513259887695  
Category: False Negative

-----  
Frame: 176 Total Penalty: 157.10984704645065  
GT\_area: 32880  
ST\_area: 37960  
Overlap\_area: 0  
IOU: 0.5405358385525401  
Centre Distance: 29.5  
Confidence: 57.339537143707275  
Category: False Negative

-----  
Frame: 177 Total Penalty: 158.117429186299  
GT\_area: 32232  
ST\_area: 38880  
Overlap\_area: 28380  
IOU: 0.6641392867172142  
Centre Distance: 16.0  
Confidence: 74.31762218475342  
Category: False Positive

-----  
Frame: 178 Total Penalty: 158.33419626744245  
GT\_area: 31725  
ST\_area: 37830  
Overlap\_area: 30550  
IOU: 0.7832329188565569  
Centre Distance: 1.5

Confidence: 79.0795385837555  
Category: True Positive

-----  
Frame: 179 Total Penalty: 159.33419626744245  
GT\_area: 32480  
ST\_area: 37830  
Overlap\_area: 0  
IOU: 0.6465270947496604  
Centre Distance: 16.0  
Confidence: 52.63668894767761  
Category: False Negative

-----  
Frame: 180 Total Penalty: 160.33419626744245  
GT\_area: 31740  
ST\_area: 37830  
Overlap\_area: 0  
IOU: 0.630801687763713  
Centre Distance: 17.0  
Confidence: 52.63668894767761  
Category: False Negative

-----  
Frame: 181 Total Penalty: 161.66162582717712  
GT\_area: 32665  
ST\_area: 38478  
Overlap\_area: 25466  
IOU: 0.5575234800884471  
Centre Distance: 30.0  
Confidence: 72.60215282440186  
Category: False Positive

-----  
Frame: 182 Total Penalty: 162.77220241178745  
GT\_area: 31373  
ST\_area: 38078  
Overlap\_area: 26838  
IOU: 0.62980780512989  
Centre Distance: 21.5  
Confidence: 87.51205205917358  
Category: False Positive

-----  
Frame: 183 Total Penalty: 163.06446307873807  
GT\_area: 30324  
ST\_area: 37837  
Overlap\_area: 28248  
IOU: 0.7077393330493824  
Centre Distance: 13.0  
Confidence: 92.59605407714844  
Category: True Positive

-----  
Frame: 184 Total Penalty: 163.33766529139942  
GT\_area: 30228  
ST\_area: 37200  
Overlap\_area: 28380  
IOU: 0.7267977873386601  
Centre Distance: 7.5

Confidence: 95.46847343444824  
Category: True Positive

-----  
Frame: 185 Total Penalty: 163.61358071171918  
GT\_area: 29900  
ST\_area: 36960  
Overlap\_area: 28080  
IOU: 0.7240845796802475  
Centre Distance: 2.0  
Confidence: 95.17099857330322  
Category: True Positive

-----  
Frame: 186 Total Penalty: 163.89191533006922  
GT\_area: 30030  
ST\_area: 36960  
Overlap\_area: 28080  
IOU: 0.7216653816499614  
Centre Distance: 2.0  
Confidence: 95.17099857330322  
Category: True Positive

-----  
Frame: 187 Total Penalty: 164.1492479255313  
GT\_area: 29106  
ST\_area: 37023  
Overlap\_area: 28182  
IOU: 0.7426674045379081  
Centre Distance: 5.5  
Confidence: 87.0466947555542  
Category: True Positive

-----  
Frame: 188 Total Penalty: 164.42026611979657  
GT\_area: 29337  
ST\_area: 36328  
Overlap\_area: 27686  
IOU: 0.7289818057347481  
Centre Distance: 12.5  
Confidence: 79.4561505317688  
Category: True Positive

-----  
Frame: 189 Total Penalty: 165.3582520363956  
GT\_area: 28044  
ST\_area: 36414  
Overlap\_area: 26257  
IOU: 0.6873380278003194  
Centre Distance: 17.0  
Confidence: 86.58032417297363  
Category: False Positive

-----  
Frame: 190 Total Penalty: 166.39169374563852  
GT\_area: 27830  
ST\_area: 36328  
Overlap\_area: 25404  
IOU: 0.655519430252361  
Centre Distance: 20.5



Confidence: 84.52661037445068  
Category: False Positive

-----  
Frame: 191 Total Penalty: 167.4797631599552  
GT\_area: 27830  
ST\_area: 36328  
Overlap\_area: 24973  
IOU: 0.6373101952277658  
Centre Distance: 23.5  
Confidence: 78.02304029464722  
Category: False Positive

-----  
Frame: 192 Total Penalty: 168.62082541009798  
GT\_area: 26216  
ST\_area: 36176  
Overlap\_area: 23870  
IOU: 0.6196459166190749  
Centre Distance: 24.0  
Confidence: 78.50788235664368  
Category: False Positive

-----  
Frame: 193 Total Penalty: 169.7941894746335  
GT\_area: 28044  
ST\_area: 36176  
Overlap\_area: 24304  
IOU: 0.6088786451548251  
Centre Distance: 25.5  
Confidence: 78.50788235664368  
Category: False Positive

-----  
Frame: 194 Total Penalty: 170.90216436178133  
GT\_area: 26680  
ST\_area: 36176  
Overlap\_area: 24310  
IOU: 0.6306750376173922  
Centre Distance: 24.0  
Confidence: 75.42582750320435  
Category: False Positive

-----  
Frame: 195 Total Penalty: 172.07341587326863  
GT\_area: 27480  
ST\_area: 36414  
Overlap\_area: 24198  
IOU: 0.6095828295042321  
Centre Distance: 25.5  
Confidence: 74.62044358253479  
Category: False Positive

-----  
Frame: 196 Total Penalty: 173.27828890863825  
GT\_area: 27588  
ST\_area: 36176  
Overlap\_area: 23871  
IOU: 0.5983756548767954  
Centre Distance: 27.5

Confidence: 76.36336088180542  
Category: False Positive

-----  
Frame: 197 Total Penalty: 174.35276251096167  
GT\_area: 27140  
ST\_area: 36176  
Overlap\_area: 24752  
IOU: 0.6418421325588632  
Centre Distance: 23.0  
Confidence: 78.70488166809082  
Category: False Positive

-----  
Frame: 198 Total Penalty: 175.36682001894889  
GT\_area: 26096  
ST\_area: 36328  
Overlap\_area: 24864  
IOU: 0.6619808306709265  
Centre Distance: 10.0  
Confidence: 80.14600872993469  
Category: False Positive

-----  
Frame: 199 Total Penalty: 176.33242650808918  
GT\_area: 26565  
ST\_area: 36328  
Overlap\_area: 25415  
IOU: 0.6781311702865681  
Centre Distance: 11.5  
Confidence: 80.14600872993469  
Category: False Positive

-----  
Frame: 200 Total Penalty: 177.33242650808918  
GT\_area: 25942  
ST\_area: 36328  
Overlap\_area: 0  
IOU: 0.5492747493344612  
Centre Distance: 31.5  
Confidence: 52.92637348175049  
Category: False Negative

-----  
Frame: 201 Total Penalty: 178.33242650808918  
GT\_area: 25680  
ST\_area: 36328  
Overlap\_area: 0  
IOU: 0.13534495385967482  
Centre Distance: 96.5  
Confidence: 42.98723340034485  
Category: False Negative

-----  
Frame: 202 Total Penalty: 179.33242650808918  
GT\_area: 26076  
ST\_area: 36328  
Overlap\_area: 0  
IOU: 0.24310756972111552  
Centre Distance: 183.0

Confidence: 52.099353075027466  
Category: False Negative

-----  
Frame: 203 Total Penalty: 179.57454183144057  
GT\_area: 28548  
ST\_area: 37668  
Overlap\_area: 28548  
IOU: 0.7578846766486143  
Centre Distance: 5.0  
Confidence: 79.29517030715942  
Category: True Positive

-----  
Frame: 204 Total Penalty: 179.87782313121758  
GT\_area: 26244  
ST\_area: 37668  
Overlap\_area: 26244  
IOU: 0.696718700223001  
Centre Distance: 8.5  
Confidence: 82.74506330490112  
Category: True Positive

-----  
Frame: 205 Total Penalty: 180.17465333191845  
GT\_area: 26487  
ST\_area: 37668  
Overlap\_area: 26487  
IOU: 0.7031697992991398  
Centre Distance: 9.0  
Confidence: 82.74506330490112  
Category: True Positive

-----  
Frame: 206 Total Penalty: 180.4461835432384  
GT\_area: 27440  
ST\_area: 37668  
Overlap\_area: 27440  
IOU: 0.7284697886800467  
Centre Distance: 1.5  
Confidence: 79.67488169670105  
Category: True Positive

-----  
Frame: 207 Total Penalty: 181.4461835432384  
GT\_area: 28431  
ST\_area: 37668  
Overlap\_area: 0  
IOU: 0.45451544758383944  
Centre Distance: 38.0  
Confidence: 50.877147912979126  
Category: False Negative

-----  
Frame: 208 Total Penalty: 181.67589176605006  
GT\_area: 29040  
ST\_area: 37700  
Overlap\_area: 29040  
IOU: 0.7702917771883289  
Centre Distance: 2.0

Confidence: 74.32217597961426  
Category: True Positive

-----  
Frame: 209 Total Penalty: 182.9152080053663  
GT\_area: 28920  
ST\_area: 37920  
Overlap\_area: 24720  
IOU: 0.5868945868945868  
Centre Distance: 19.0  
Confidence: 64.62361216545105  
Category: False Positive

-----  
Frame: 210 Total Penalty: 183.9152080053663  
GT\_area: 29750  
ST\_area: 37920  
Overlap\_area: 0  
IOU: 0.5680322550746131  
Centre Distance: 22.5  
Confidence: 57.694011926651  
Category: False Negative

-----  
Frame: 211 Total Penalty: 184.9152080053663  
GT\_area: 29036  
ST\_area: 37920  
Overlap\_area: 0  
IOU: 0.5624212442245765  
Centre Distance: 23.0  
Confidence: 57.694011926651  
Category: False Negative

-----  
Frame: 212 Total Penalty: 186.26252832111206  
GT\_area: 29274  
ST\_area: 37920  
Overlap\_area: 23868  
IOU: 0.5508932280847528  
Centre Distance: 23.5  
Confidence: 68.27956438064575  
Category: False Positive

-----  
Frame: 213 Total Penalty: 187.53485195209382  
GT\_area: 29161  
ST\_area: 37920  
Overlap\_area: 24514  
IOU: 0.5758921230060845  
Centre Distance: 20.5  
Confidence: 77.83797979354858  
Category: False Positive

-----  
Frame: 214 Total Penalty: 188.7145412963174  
GT\_area: 29988  
ST\_area: 38078  
Overlap\_area: 25704  
IOU: 0.6067702185921344  
Centre Distance: 13.0

Confidence: 84.54768061637878  
Category: False Positive

-----  
Frame: 215 Total Penalty: 189.08471540683973  
GT\_area: 30976  
ST\_area: 37920  
Overlap\_area: 26624  
IOU: 0.6298258894776685  
Centre Distance: 1.0  
Confidence: 75.52689909934998  
Category: True Positive

-----  
Frame: 216 Total Penalty: 190.08471540683973  
GT\_area: 34160  
ST\_area: 37920  
Overlap\_area: 0  
IOU: 0.46132792701469844  
Centre Distance: 38.0  
Confidence: 58.23019742965698  
Category: False Negative

-----  
Frame: 217 Total Penalty: 190.91487230577835  
GT\_area: 35321  
ST\_area: 39366  
Overlap\_area: 31347  
IOU: 0.723281033687125  
Centre Distance: 23.5  
Confidence: 68.3924913406372  
Category: False Positive

-----  
Frame: 218 Total Penalty: 191.1478333771109  
GT\_area: 32943  
ST\_area: 39366  
Overlap\_area: 31388  
IOU: 0.7670389286674324  
Centre Distance: 17.5  
Confidence: 68.3924913406372  
Category: True Positive

-----  
Frame: 219 Total Penalty: 192.1478333771109  
GT\_area: 35478  
ST\_area: 39366  
Overlap\_area: 0  
IOU: 0.3064516129032258  
Centre Distance: 77.0  
Confidence: 46.156108379364014  
Category: False Negative

-----  
Frame: 220 Total Penalty: 193.1478333771109  
GT\_area: 34510  
ST\_area: 39366  
Overlap\_area: 0  
IOU: 0.03275411348608335  
Centre Distance: 164.5

Confidence: 46.366775035858154  
Category: False Negative

-----  
Frame: 221 Total Penalty: 194.21664895514286  
GT\_area: 31144  
ST\_area: 38412  
Overlap\_area: 27240  
IOU: 0.6437281406560167  
Centre Distance: 14.0  
Confidence: 67.07707643508911  
Category: False Positive

-----  
Frame: 222 Total Penalty: 194.47554192471264  
GT\_area: 28767  
ST\_area: 37604  
Overlap\_area: 28251  
IOU: 0.7411070304302203  
Centre Distance: 14.5  
Confidence: 70.77486515045166  
Category: True Positive

-----  
Frame: 223 Total Penalty: 195.47554192471264  
GT\_area: 28288  
ST\_area: 37604  
Overlap\_area: 0  
IOU: 0.66247003910685  
Centre Distance: 22.0  
Confidence: 53.17424535751343  
Category: False Negative

-----  
Frame: 224 Total Penalty: 196.47554192471264  
GT\_area: 27720  
ST\_area: 37604  
Overlap\_area: 0  
IOU: 0.666938858834337  
Centre Distance: 21.0  
Confidence: 53.17424535751343  
Category: False Negative

-----  
Frame: 225 Total Penalty: 197.47554192471264  
GT\_area: 25272  
ST\_area: 37604  
Overlap\_area: 0  
IOU: 0.5086860543238315  
Centre Distance: 37.5  
Confidence: 51.22625231742859  
Category: False Negative

-----  
Frame: 226 Total Penalty: 197.6940266218661  
GT\_area: 23653  
ST\_area: 26290  
Overlap\_area: 21909  
IOU: 0.7815153028465435  
Centre Distance: 0.5

Confidence: 67.77266263961792  
Category: True Positive

-----  
Frame: 227 Total Penalty: 197.9077920342244  
GT\_area: 23760  
ST\_area: 26510  
Overlap\_area: 22127  
IOU: 0.7862345876416871  
Centre Distance: 1.0  
Confidence: 70.68754434585571  
Category: True Positive

-----  
Frame: 228 Total Penalty: 198.11524545037346  
GT\_area: 24198  
ST\_area: 26307  
Overlap\_area: 22330  
IOU: 0.7925465838509317  
Centre Distance: 1.0  
Confidence: 77.69609689712524  
Category: True Positive

-----  
Frame: 229 Total Penalty: 198.32021352278943  
GT\_area: 24966  
ST\_area: 26196  
Overlap\_area: 22660  
IOU: 0.7950319275840292  
Centre Distance: 2.5  
Confidence: 71.959388256073  
Category: True Positive

-----  
Frame: 230 Total Penalty: 198.54602447014318  
GT\_area: 24725  
ST\_area: 26196  
Overlap\_area: 22220  
IOU: 0.7741890526462493  
Centre Distance: 3.0  
Confidence: 71.959388256073  
Category: True Positive

-----  
Frame: 231 Total Penalty: 198.74771550414002  
GT\_area: 24738  
ST\_area: 26307  
Overlap\_area: 22660  
IOU: 0.7983089660031707  
Centre Distance: 2.5  
Confidence: 73.67088794708252  
Category: True Positive

-----  
Frame: 232 Total Penalty: 198.96557128437658  
GT\_area: 25185  
ST\_area: 26196  
Overlap\_area: 22550  
IOU: 0.7821442197634491  
Centre Distance: 3.0

Confidence: 74.82624053955078  
Category: True Positive

-----  
Frame: 233 Total Penalty: 199.1641210081335  
GT\_area: 25752  
ST\_area: 26418  
Overlap\_area: 23210  
IOU: 0.801450276243094  
Centre Distance: 3.5  
Confidence: 77.06167697906494  
Category: True Positive

-----  
Frame: 234 Total Penalty: 199.37838011058903  
GT\_area: 26180  
ST\_area: 26544  
Overlap\_area: 23199  
IOU: 0.7857408975444539  
Centre Distance: 4.5  
Confidence: 77.38361358642578  
Category: True Positive

-----  
Frame: 235 Total Penalty: 199.60739380378212  
GT\_area: 27000  
ST\_area: 26544  
Overlap\_area: 23310  
IOU: 0.7709863068069062  
Centre Distance: 5.0  
Confidence: 72.40159511566162  
Category: True Positive

-----  
Frame: 236 Total Penalty: 199.8286526561218  
GT\_area: 27206  
ST\_area: 26544  
Overlap\_area: 23532  
IOU: 0.7787411476603349  
Centre Distance: 6.0  
Confidence: 72.40159511566162  
Category: True Positive

-----  
Frame: 237 Total Penalty: 200.04522857868682  
GT\_area: 26520  
ST\_area: 26544  
Overlap\_area: 23310  
IOU: 0.7834240774349668  
Centre Distance: 5.0  
Confidence: 71.30130529403687  
Category: True Positive

-----  
Frame: 238 Total Penalty: 200.2352858618292  
GT\_area: 26314  
ST\_area: 26768  
Overlap\_area: 23754  
IOU: 0.8099427168576104  
Centre Distance: 4.0



Confidence: 76.46726369857788  
Category: True Positive

-----  
Frame: 239 Total Penalty: 200.40786604916954  
GT\_area: 25086  
ST\_area: 26418  
Overlap\_area: 23320  
IOU: 0.827419812659665  
Centre Distance: 2.0  
Confidence: 79.02165651321411  
Category: True Positive

-----  
Frame: 240 Total Penalty: 200.5610152040939  
GT\_area: 23647  
ST\_area: 26290  
Overlap\_area: 22898  
IOU: 0.8468508450756315  
Centre Distance: 0.5  
Confidence: 84.18626189231873  
Category: True Positive

-----  
Frame: 241 Total Penalty: 200.79939805109854  
GT\_area: 20855  
ST\_area: 25812  
Overlap\_area: 20176  
IOU: 0.7616171529953569  
Centre Distance: 4.5  
Confidence: 75.40774345397949  
Category: True Positive

-----  
Frame: 242 Total Penalty: 201.1082494854104  
GT\_area: 18576  
ST\_area: 26877  
Overlap\_area: 18576  
IOU: 0.6911485656881349  
Centre Distance: 2.5  
Confidence: 60.26486158370972  
Category: True Positive

-----  
Frame: 243 Total Penalty: 201.39630246751406  
GT\_area: 19135  
ST\_area: 26877  
Overlap\_area: 19135  
IOU: 0.7119470178963426  
Centre Distance: 1.0  
Confidence: 60.26486158370972  
Category: True Positive

-----  
Frame: 244 Total Penalty: 202.39630246751406  
GT\_area: 17200  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.6399523756371619  
Centre Distance: 5.5

Confidence: 57.540762424468994  
Category: False Negative

-----  
Frame: 245 Total Penalty: 203.39630246751406  
GT\_area: 16125  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.5999553521598393  
Centre Distance: 8.0  
Confidence: 55.66154718399048  
Category: False Negative

-----  
Frame: 246 Total Penalty: 204.39630246751406  
GT\_area: 14688  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.5464895635673624  
Centre Distance: 11.5  
Confidence: 47.547316551208496  
Category: False Negative

-----  
Frame: 247 Total Penalty: 205.39630246751406  
GT\_area: 13082  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.4867358708189158  
Centre Distance: 14.5  
Confidence: 43.75919699668884  
Category: False Negative

-----  
Frame: 248 Total Penalty: 206.39630246751406  
GT\_area: 12660  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.47103471369572497  
Centre Distance: 15.5  
Confidence: 40.606334805488586  
Category: False Negative

-----  
Frame: 249 Total Penalty: 207.39630246751406  
GT\_area: 12369  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.4602076124567474  
Centre Distance: 17.0  
Confidence: 40.606334805488586  
Category: False Negative

-----  
Frame: 250 Total Penalty: 208.39630246751406  
GT\_area: 11077  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.4121367712170257  
Centre Distance: 19.0

Confidence: 46.07943892478943  
Category: False Negative

-----  
Frame: 251 Total Penalty: 209.39630246751406  
GT\_area: 10850  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.40369088811995385  
Centre Distance: 20.5  
Confidence: 41.40195846557617  
Category: False Negative

-----  
Frame: 252 Total Penalty: 210.39630246751406  
GT\_area: 10128  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.37682777095658  
Centre Distance: 21.5  
Confidence: 45.672157406806946  
Category: False Negative

-----  
Frame: 253 Total Penalty: 211.39630246751406  
GT\_area: 9030  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.33597499720950996  
Centre Distance: 24.0  
Confidence: 43.57090890407562  
Category: False Negative

-----  
Frame: 254 Total Penalty: 212.39630246751406  
GT\_area: 7752  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.2884250474383302  
Centre Distance: 26.5  
Confidence: 43.43579709529877  
Category: False Negative

-----  
Frame: 255 Total Penalty: 213.39630246751406  
GT\_area: 7904  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.29408044052535626  
Centre Distance: 26.5  
Confidence: 43.43579709529877  
Category: False Negative

-----  
Frame: 256 Total Penalty: 214.39630246751406  
GT\_area: 6501  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.24187967407076683  
Centre Distance: 29.0

Confidence: 46.668633818626404  
Category: False Negative

-----  
Frame: 257 Total Penalty: 215.39630246751406  
GT\_area: 5070  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.18863712467909366  
Centre Distance: 32.5  
Confidence: 44.95110511779785  
Category: False Negative

-----  
Frame: 258 Total Penalty: 216.39630246751406  
GT\_area: 4324  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.1608810507125051  
Centre Distance: 34.0  
Confidence: 48.41358661651611  
Category: False Negative

-----  
Frame: 259 Total Penalty: 217.39630246751406  
GT\_area: 2499  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.09297912713472485  
Centre Distance: 37.0  
Confidence: 47.98439145088196  
Category: False Negative

-----  
Frame: 260 Total Penalty: 218.39630246751406  
GT\_area: 780  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.029021096104475945  
Centre Distance: 40.5  
Confidence: 42.91742444038391  
Category: False Negative

-----  
Frame: 261 Total Penalty: 219.39630246751406  
GT\_area: 870  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.032369684116530864  
Centre Distance: 40.5  
Confidence: 42.91742444038391  
Category: False Negative

-----  
Frame: 262 Total Penalty: 220.39630246751406  
GT\_area: 296  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.011013133906313949  
Centre Distance: 41.5

Confidence: 47.025203704833984  
Category: False Negative

-----  
Frame: 263 Total Penalty: 220.39630246751406  
GT\_area: 12  
ST\_area: 26877  
Overlap\_area: 2610  
IOU: 0.10750030890893364  
Centre Distance: 309.0  
Confidence: 52.18261480331421  
Category: True Negative

-----  
Frame: 264 Total Penalty: 220.39630246751406  
GT\_area: 9  
ST\_area: 26877  
Overlap\_area: 3990  
IOU: 0.17426624737945492  
Centre Distance: 333.0  
Confidence: 55.81308603286743  
Category: True Negative

-----  
Frame: 265 Total Penalty: 220.39630246751406  
GT\_area: 6  
ST\_area: 26877  
Overlap\_area: 3892  
IOU: 0.16928363272584926  
Centre Distance: 326.0  
Confidence: 43.67467164993286  
Category: True Negative

-----  
Frame: 266 Total Penalty: 220.39630246751406  
GT\_area: 20  
ST\_area: 26877  
Overlap\_area: 2520  
IOU: 0.10337613324034951  
Centre Distance: 328.5  
Confidence: 47.95862436294556  
Category: True Negative

-----  
Frame: 267 Total Penalty: 220.39630246751406  
GT\_area: 12  
ST\_area: 26877  
Overlap\_area: 280  
IOU: 0.010522755458679395  
Centre Distance: 327.5  
Confidence: 50.276267528533936  
Category: True Negative

-----  
Frame: 268 Total Penalty: 220.39630246751406  
GT\_area: 2  
ST\_area: 26877  
Overlap\_area: 2800  
IOU: 0.11628389883300802  
Centre Distance: 327.0

Confidence: 50.276267528533936  
Category: True Negative

-----  
Frame: 269 Total Penalty: 220.39630246751406  
GT\_area: 2  
ST\_area: 26877  
Overlap\_area: 2224  
IOU: 0.09020482660717907  
Centre Distance: 325.5  
Confidence: 51.14801526069641  
Category: True Negative

-----  
Frame: 270 Total Penalty: 220.39630246751406  
GT\_area: 16  
ST\_area: 26877  
Overlap\_area: 283  
IOU: 0.010635099586621571  
Centre Distance: 331.5  
Confidence: 51.55974626541138  
Category: True Negative

-----  
Frame: 271 Total Penalty: 220.39630246751406  
GT\_area: 20  
ST\_area: 26877  
Overlap\_area: 837  
IOU: 0.03211818879508826  
Centre Distance: 328.0  
Confidence: 54.594486951828  
Category: True Negative

-----  
Frame: 272 Total Penalty: 221.39630246751406  
GT\_area: 3800  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.14138482717565204  
Centre Distance: 35.5  
Confidence: 53.79418730735779  
Category: False Negative

-----  
Frame: 273 Total Penalty: 222.39630246751406  
GT\_area: 7175  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.2669568776277114  
Centre Distance: 28.0  
Confidence: 49.91271197795868  
Category: False Negative

-----  
Frame: 274 Total Penalty: 223.39630246751406  
GT\_area: 7420  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.2760724783271943  
Centre Distance: 28.0

Confidence: 49.91271197795868  
Category: False Negative

-----  
Frame: 275 Total Penalty: 224.39630246751406  
GT\_area: 12470  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.46396547233694235  
Centre Distance: 16.5  
Confidence: 50.158530473709106  
Category: False Negative

-----  
Frame: 276 Total Penalty: 225.39630246751406  
GT\_area: 16275  
ST\_area: 26877  
Overlap\_area: 0  
IOU: 0.6055363321799307  
Centre Distance: 8.0  
Confidence: 50.34017562866211  
Category: False Negative

-----  
Frame: 277 Total Penalty: 225.59259876381037  
GT\_area: 20832  
ST\_area: 25920  
Overlap\_area: 20832  
IOU: 0.8037037037037037  
Centre Distance: 5.0  
Confidence: 73.52377772331238  
Category: True Positive

-----  
Frame: 278 Total Penalty: 225.71592804692094  
GT\_area: 25857  
ST\_area: 26656  
Overlap\_area: 24531  
IOU: 0.8766707168894289  
Centre Distance: 3.5  
Confidence: 72.84016609191895  
Category: True Positive

-----  
Frame: 279 Total Penalty: 226.01488900409979  
GT\_area: 28416  
ST\_area: 36414  
Overlap\_area: 26718  
IOU: 0.7010390428211587  
Centre Distance: 18.5  
Confidence: 73.93960356712341  
Category: True Positive

-----  
Frame: 280 Total Penalty: 226.9245725534149  
GT\_area: 27875  
ST\_area: 36414  
Overlap\_area: 26400  
IOU: 0.6967721502282984  
Centre Distance: 19.0

Confidence: 73.93960356712341  
Category: False Positive

-----  
Frame: 281 Total Penalty: 227.18909635650212  
GT\_area: 27875  
ST\_area: 36322  
Overlap\_area: 27206  
IOU: 0.7354761969127626  
Centre Distance: 4.0  
Confidence: 86.43261194229126  
Category: True Positive

-----  
Frame: 282 Total Penalty: 227.44057252689436  
GT\_area: 28892  
ST\_area: 37440  
Overlap\_area: 28396  
IOU: 0.7485238296077604  
Centre Distance: 13.0  
Confidence: 91.56292080879211  
Category: True Positive

-----  
Frame: 283 Total Penalty: 228.4813660792812  
GT\_area: 28980  
ST\_area: 37680  
Overlap\_area: 26335  
IOU: 0.6530688158710477  
Centre Distance: 26.5  
Confidence: 79.96712923049927  
Category: False Positive

-----  
Frame: 284 Total Penalty: 229.4813660792812  
GT\_area: 30916  
ST\_area: 37680  
Overlap\_area: 0  
IOU: 0.5506827018717786  
Centre Distance: 39.0  
Confidence: 50.72765350341797  
Category: False Negative

-----  
Frame: 285 Total Penalty: 230.4813660792812  
GT\_area: 27798  
ST\_area: 37680  
Overlap\_area: 0  
IOU: 0.39820627802690584  
Centre Distance: 56.0  
Confidence: 56.01768493652344  
Category: False Negative

-----  
Frame: 286 Total Penalty: 231.4813660792812  
GT\_area: 28625  
ST\_area: 37680  
Overlap\_area: 0  
IOU: 0.4172883312314302  
Centre Distance: 55.0



Confidence: 56.01768493652344  
Category: False Negative

-----  
Frame: 287 Total Penalty: 231.73443538621189  
GT\_area: 28413  
ST\_area: 37752  
Overlap\_area: 28290  
IOU: 0.7469306930693069  
Centre Distance: 7.5  
Confidence: 83.44358205795288  
Category: True Positive

-----  
Frame: 288 Total Penalty: 231.97073917177502  
GT\_area: 29358  
ST\_area: 38151  
Overlap\_area: 29232  
IOU: 0.7636962144368681  
Centre Distance: 14.5  
Confidence: 81.65435194969177  
Category: True Positive

-----  
Frame: 289 Total Penalty: 233.0167460079318  
GT\_area: 27951  
ST\_area: 38236  
Overlap\_area: 26106  
IOU: 0.6513310546144059  
Centre Distance: 25.5  
Confidence: 79.54299449920654  
Category: False Positive

-----  
Frame: 290 Total Penalty: 234.32559074807975  
GT\_area: 29140  
ST\_area: 38078  
Overlap\_area: 24232  
IOU: 0.5637184199506816  
Centre Distance: 37.0  
Confidence: 62.91247606277466  
Category: False Positive

-----  
Frame: 291 Total Penalty: 235.32559074807975  
GT\_area: 28670  
ST\_area: 38078  
Overlap\_area: 0  
IOU: 0.4868242264941082  
Centre Distance: 47.0  
Confidence: 45.87252140045166  
Category: False Negative

-----  
Frame: 292 Total Penalty: 235.60806497488386  
GT\_area: 27144  
ST\_area: 37830  
Overlap\_area: 27144  
IOU: 0.7175257731958763  
Centre Distance: 5.0

Confidence: 74.7606098651886  
Category: True Positive

-----  
Frame: 293 Total Penalty: 235.846817287863  
GT\_area: 28798  
ST\_area: 37830  
Overlap\_area: 28798  
IOU: 0.7612476870208829  
Centre Distance: 3.5  
Confidence: 74.7606098651886  
Category: True Positive

-----  
Frame: 294 Total Penalty: 236.11842222613458  
GT\_area: 27612  
ST\_area: 37908  
Overlap\_area: 27612  
IOU: 0.7283950617283951  
Centre Distance: 15.5  
Confidence: 84.38733220100403  
Category: True Positive

-----  
Frame: 295 Total Penalty: 237.1814024503442  
GT\_area: 27261  
ST\_area: 38064  
Overlap\_area: 25630  
IOU: 0.6456732585968006  
Centre Distance: 26.5  
Confidence: 80.42457103729248  
Category: False Positive

-----  
Frame: 296 Total Penalty: 238.59148389432394  
GT\_area: 24804  
ST\_area: 37752  
Overlap\_area: 21669  
IOU: 0.5299728520067503  
Centre Distance: 38.0  
Confidence: 60.488682985305786  
Category: False Positive

-----  
Frame: 297 Total Penalty: 239.59148389432394  
GT\_area: 23000  
ST\_area: 37752  
Overlap\_area: 0  
IOU: 0.4553120134147802  
Centre Distance: 45.0  
Confidence: 44.762223958969116  
Category: False Negative

-----  
Frame: 298 Total Penalty: 239.92832023805684  
GT\_area: 24232  
ST\_area: 36540  
Overlap\_area: 24232  
IOU: 0.6631636562671045  
Centre Distance: 9.0

Confidence: 61.07261776924133  
Category: True Positive

-----  
Frame: 299 Total Penalty: 240.27998964145038  
GT\_area: 23690  
ST\_area: 36540  
Overlap\_area: 23690  
IOU: 0.6483305966064586  
Centre Distance: 7.5  
Confidence: 61.07261776924133  
Category: True Positive

-----  
Frame: 300 Total Penalty: 240.63956064335102  
GT\_area: 23587  
ST\_area: 36830  
Overlap\_area: 23587  
IOU: 0.6404289980993755  
Centre Distance: 2.0  
Confidence: 66.66346788406372  
Category: True Positive

-----  
Frame: 301 Total Penalty: 240.9559060139728  
GT\_area: 25179  
ST\_area: 36830  
Overlap\_area: 25179  
IOU: 0.6836546293782243  
Centre Distance: 1.0  
Confidence: 81.12287521362305  
Category: True Positive

-----  
Frame: 302 Total Penalty: 241.27852344541455  
GT\_area: 24948  
ST\_area: 36830  
Overlap\_area: 24948  
IOU: 0.6773825685582405  
Centre Distance: 0.5  
Confidence: 74.99191761016846  
Category: True Positive

-----  
Frame: 303 Total Penalty: 241.60700566099968  
GT\_area: 24732  
ST\_area: 36830  
Overlap\_area: 24732  
IOU: 0.6715177844148792  
Centre Distance: 2.5  
Confidence: 67.15450882911682  
Category: True Positive

-----  
Frame: 304 Total Penalty: 241.92274960563634  
GT\_area: 25312  
ST\_area: 36992  
Overlap\_area: 25312  
IOU: 0.6842560553633218  
Centre Distance: 6.0

Confidence: 60.17562747001648  
Category: True Positive

-----  
Frame: 305 Total Penalty: 242.25709216618998  
GT\_area: 24624  
ST\_area: 36992  
Overlap\_area: 24624  
IOU: 0.6656574394463668  
Centre Distance: 4.0  
Confidence: 60.17562747001648  
Category: True Positive

-----  
Frame: 306 Total Penalty: 242.58713169188167  
GT\_area: 25538  
ST\_area: 36992  
Overlap\_area: 25086  
IOU: 0.6699604743083004  
Centre Distance: 9.5  
Confidence: 60.9186053276062  
Category: True Positive

-----  
Frame: 307 Total Penalty: 243.58713169188167  
GT\_area: 25080  
ST\_area: 36992  
Overlap\_area: 0  
IOU: 0.677984429065744  
Centre Distance: 6.0  
Confidence: 59.166574478149414  
Category: False Negative

-----  
Frame: 308 Total Penalty: 244.58713169188167  
GT\_area: 25650  
ST\_area: 36992  
Overlap\_area: 0  
IOU: 0.673040970033652  
Centre Distance: 9.0  
Confidence: 57.68266320228577  
Category: False Negative

-----  
Frame: 309 Total Penalty: 245.58713169188167  
GT\_area: 23976  
ST\_area: 36992  
Overlap\_area: 0  
IOU: 0.6481401384083045  
Centre Distance: 7.0  
Confidence: 55.53373098373413  
Category: False Negative

-----  
Frame: 310 Total Penalty: 246.58713169188167  
GT\_area: 24198  
ST\_area: 36992  
Overlap\_area: 0  
IOU: 0.6541414359861591  
Centre Distance: 5.5

Confidence: 59.251439571380615  
Category: False Negative

-----  
Frame: 311 Total Penalty: 247.58713169188167  
GT\_area: 24530  
ST\_area: 36992  
Overlap\_area: 0  
IOU: 0.6631163494809689  
Centre Distance: 6.0  
Confidence: 59.251439571380615  
Category: False Negative

-----  
Frame: 312 Total Penalty: 248.58713169188167  
GT\_area: 23108  
ST\_area: 36992  
Overlap\_area: 0  
IOU: 0.6246756055363322  
Centre Distance: 5.0  
Confidence: 58.441269397735596  
Category: False Negative

-----  
Frame: 313 Total Penalty: 248.95834522343668  
GT\_area: 23976  
ST\_area: 37268  
Overlap\_area: 23643  
IOU: 0.6287864684449882  
Centre Distance: 7.5  
Confidence: 60.992372035980225  
Category: True Positive

-----  
Frame: 314 Total Penalty: 249.95834522343668  
GT\_area: 22360  
ST\_area: 37268  
Overlap\_area: 0  
IOU: 0.5779612575420768  
Centre Distance: 8.0  
Confidence: 54.12964224815369  
Category: False Negative

-----  
Frame: 315 Total Penalty: 250.95834522343668  
GT\_area: 22578  
ST\_area: 37268  
Overlap\_area: 0  
IOU: 0.5744803998947645  
Centre Distance: 10.0  
Confidence: 45.0478196144104  
Category: False Negative

-----  
Frame: 316 Total Penalty: 251.95834522343668  
GT\_area: 21840  
ST\_area: 37268  
Overlap\_area: 0  
IOU: 0.5556374355195284  
Centre Distance: 12.0

Confidence: 43.392741680145264  
Category: False Negative

-----  
Frame: 317 Total Penalty: 252.95834522343668  
GT\_area: 23108  
ST\_area: 37268  
Overlap\_area: 0  
IOU: 0.5875470011306566  
Centre Distance: 16.5  
Confidence: 52.483004331588745  
Category: False Negative

-----  
Frame: 318 Total Penalty: 253.95834522343668  
GT\_area: 22366  
ST\_area: 37268  
Overlap\_area: 0  
IOU: 0.5689029202841358  
Centre Distance: 15.0  
Confidence: 52.483004331588745  
Category: False Negative

-----  
Frame: 319 Total Penalty: 254.95834522343668  
GT\_area: 22152  
ST\_area: 37268  
Overlap\_area: 0  
IOU: 0.5638488261922308  
Centre Distance: 19.0  
Confidence: 55.75287342071533  
Category: False Negative

-----  
Frame: 320 Total Penalty: 256.6201793187353  
GT\_area: 21311  
ST\_area: 37837  
Overlap\_area: 18245  
IOU: 0.4460553015671222  
Centre Distance: 40.0  
Confidence: 75.2709448337555  
Category: False Positive

-----  
Frame: 321 Total Penalty: 257.6201793187353  
GT\_area: 21424  
ST\_area: 37837  
Overlap\_area: 0  
IOU: 0.4362473037493032  
Centre Distance: 40.0  
Confidence: 57.511621713638306  
Category: False Negative

-----  
Frame: 322 Total Penalty: 260.4640397427636  
GT\_area: 19291  
ST\_area: 37873  
Overlap\_area: 2828  
IOU: 0.052046525323910485  
Centre Distance: 20.0

Confidence: 61.58188581466675  
Category: False Positive

-----  
Frame: 323 Total Penalty: 261.4640397427636  
GT\_area: 18025  
ST\_area: 37873  
Overlap\_area: 0  
IOU: 0.01877232631041773  
Centre Distance: 21.0  
Confidence: 53.4853458404541  
Category: False Negative

-----  
Frame: 324 Total Penalty: 262.4640397427636  
GT\_area: 16366  
ST\_area: 37873  
Overlap\_area: 0  
IOU: 0.007279885601797686  
Centre Distance: 19.5  
Confidence: 53.4853458404541  
Category: False Negative

-----  
Frame: 325 Total Penalty: 263.4640397427636  
GT\_area: 14157  
ST\_area: 37873  
Overlap\_area: 0  
IOU: 0.043689320388349516  
Centre Distance: 19.0  
Confidence: 54.381442070007324  
Category: False Negative

-----  
Frame: 326 Total Penalty: 264.368707770645  
GT\_area: 11656  
ST\_area: 12467  
Overlap\_area: 9920  
IOU: 0.6984439907061888  
Centre Distance: 12.5  
Confidence: 70.43840885162354  
Category: False Positive

-----  
Frame: 327 Total Penalty: 265.368707770645  
GT\_area: 9434  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.606469595833639  
Centre Distance: 12.0  
Confidence: 48.38476777076721  
Category: False Negative

-----  
Frame: 328 Total Penalty: 266.368707770645  
GT\_area: 7482  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.5155359720428474  
Centre Distance: 10.5

Confidence: 39.08191919326782  
Category: False Negative

-----  
Frame: 329 Total Penalty: 267.368707770645  
GT\_area: 7138  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.5025291232372777  
Centre Distance: 9.5  
Confidence: 41.74335598945618  
Category: False Negative

-----  
Frame: 330 Total Penalty: 268.368707770645  
GT\_area: 6622  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.4590690208667737  
Centre Distance: 10.5  
Confidence: 41.74335598945618  
Category: False Negative

-----  
Frame: 331 Total Penalty: 269.368707770645  
GT\_area: 5146  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.3587132608192548  
Centre Distance: 12.0  
Confidence: 36.43379807472229  
Category: False Negative

-----  
Frame: 332 Total Penalty: 270.368707770645  
GT\_area: 3936  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.276398723834721  
Centre Distance: 12.5  
Confidence: 36.99688017368317  
Category: False Negative

-----  
Frame: 333 Total Penalty: 271.368707770645  
GT\_area: 3159  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.22278738555442523  
Centre Distance: 13.0  
Confidence: 40.67635536193848  
Category: False Negative

-----  
Frame: 334 Total Penalty: 272.368707770645  
GT\_area: 2496  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.1790245055551178  
Centre Distance: 13.5



Confidence: 32.60672092437744  
Category: False Negative

-----  
Frame: 335 Total Penalty: 273.368707770645  
GT\_area: 1800  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.1313139322813417  
Centre Distance: 14.0  
Confidence: 46.21444642543793  
Category: False Negative

-----  
Frame: 336 Total Penalty: 274.368707770645  
GT\_area: 1425  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.10420475319926874  
Centre Distance: 14.0  
Confidence: 31.142771244049072  
Category: False Negative

-----  
Frame: 337 Total Penalty: 275.368707770645  
GT\_area: 1554  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.11154273029966703  
Centre Distance: 15.5  
Confidence: 31.142771244049072  
Category: False Negative

-----  
Frame: 338 Total Penalty: 276.368707770645  
GT\_area: 1065  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.07764593453850442  
Centre Distance: 16.0  
Confidence: 34.10443961620331  
Category: False Negative

-----  
Frame: 339 Total Penalty: 277.368707770645  
GT\_area: 368  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.028198349755667707  
Centre Distance: 24.5  
Confidence: 32.79294669628143  
Category: False Negative

-----  
Frame: 340 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 627  
IOU: 0.05292032410533423  
Centre Distance: 104.5

Confidence: 30.407050251960754  
Category: True Negative

-----  
Frame: 341 Total Penalty: 277.368707770645  
GT\_area: 6  
ST\_area: 12467  
Overlap\_area: 201  
IOU: 0.016378748370273793  
Centre Distance: 113.5  
Confidence: 30.878520011901855  
Category: True Negative

-----  
Frame: 342 Total Penalty: 277.368707770645  
GT\_area: 0  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.0  
Centre Distance: 113.0  
Confidence: 33.82109999656677  
Category: True Negative

-----  
Frame: 343 Total Penalty: 277.368707770645  
GT\_area: 3  
ST\_area: 12467  
Overlap\_area: 86  
IOU: 0.006944444444444444  
Centre Distance: 133.0  
Confidence: 33.82109999656677  
Category: True Negative

-----  
Frame: 344 Total Penalty: 277.368707770645  
GT\_area: 9  
ST\_area: 12467  
Overlap\_area: 261  
IOU: 0.021367171510437988  
Centre Distance: 134.0  
Confidence: 37.796637415885925  
Category: True Negative

-----  
Frame: 345 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 152  
IOU: 0.012334658768157104  
Centre Distance: 123.5  
Confidence: 32.47276544570923  
Category: True Negative

-----  
Frame: 346 Total Penalty: 277.368707770645  
GT\_area: 12  
ST\_area: 12467  
Overlap\_area: 228  
IOU: 0.01861072565504857  
Centre Distance: 123.5

Confidence: 38.32179605960846  
Category: True Negative

-----  
Frame: 347 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 218  
IOU: 0.017785755078730522  
Centre Distance: 156.5  
Confidence: 38.40734660625458  
Category: True Negative

-----  
Frame: 348 Total Penalty: 277.368707770645  
GT\_area: 6  
ST\_area: 12467  
Overlap\_area: 246  
IOU: 0.020119407867833485  
Centre Distance: 170.0  
Confidence: 38.833558559417725  
Category: True Negative

-----  
Frame: 349 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 230  
IOU: 0.018783176806859942  
Centre Distance: 162.5  
Confidence: 38.833558559417725  
Category: True Negative

-----  
Frame: 350 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 200  
IOU: 0.016293279022403257  
Centre Distance: 147.5  
Confidence: 36.07228994369507  
Category: True Negative

-----  
Frame: 351 Total Penalty: 277.368707770645  
GT\_area: 6  
ST\_area: 12467  
Overlap\_area: 196  
IOU: 0.01596481225054981  
Centre Distance: 145.0  
Confidence: 32.14541673660278  
Category: True Negative

-----  
Frame: 352 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 436  
IOU: 0.03621563252761857  
Centre Distance: 155.5

Confidence: 31.29461407661438  
Category: True Negative

-----  
Frame: 353 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 178  
IOU: 0.014475075221598764  
Centre Distance: 136.5  
Confidence: 39.938899874687195  
Category: True Negative

-----  
Frame: 354 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 164  
IOU: 0.013321419868410365  
Centre Distance: 129.5  
Confidence: 31.125983595848083  
Category: True Negative

-----  
Frame: 355 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 176  
IOU: 0.014310106512724612  
Centre Distance: 135.5  
Confidence: 31.125983595848083  
Category: True Negative

-----  
Frame: 356 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 226  
IOU: 0.018450485753939098  
Centre Distance: 160.5  
Confidence: 32.37270414829254  
Category: True Negative

-----  
Frame: 357 Total Penalty: 277.368707770645  
GT\_area: 12  
ST\_area: 12467  
Overlap\_area: 309  
IOU: 0.025390304026294167  
Centre Distance: 150.5  
Confidence: 35.92531979084015  
Category: True Negative

-----  
Frame: 358 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 260  
IOU: 0.02128530495292673  
Centre Distance: 177.5

Confidence: 30.94068169593811  
Category: True Negative

-----  
Frame: 359 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 198  
IOU: 0.016127718498004397  
Centre Distance: 146.5  
Confidence: 29.643908143043518  
Category: True Negative

-----  
Frame: 360 Total Penalty: 277.368707770645  
GT\_area: 12  
ST\_area: 12467  
Overlap\_area: 285  
IOU: 0.023372150237821878  
Centre Distance: 142.5  
Confidence: 29.794132709503174  
Category: True Negative

-----  
Frame: 361 Total Penalty: 277.368707770645  
GT\_area: 6  
ST\_area: 12467  
Overlap\_area: 200  
IOU: 0.016295934164425974  
Centre Distance: 147.0  
Confidence: 34.03154015541077  
Category: True Negative

-----  
Frame: 362 Total Penalty: 277.368707770645  
GT\_area: 9  
ST\_area: 12467  
Overlap\_area: 252  
IOU: 0.0206151832460733  
Centre Distance: 131.0  
Confidence: 34.03154015541077  
Category: True Negative

-----  
Frame: 363 Total Penalty: 277.368707770645  
GT\_area: 6  
ST\_area: 12467  
Overlap\_area: 194  
IOU: 0.01579933219317534  
Centre Distance: 144.0  
Confidence: 31.127339601516724  
Category: True Negative

-----  
Frame: 364 Total Penalty: 277.368707770645  
GT\_area: 0  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.0  
Centre Distance: 163.5

Confidence: 36.298638582229614  
Category: True Negative

-----  
Frame: 365 Total Penalty: 277.368707770645  
GT\_area: 9  
ST\_area: 12467  
Overlap\_area: 300  
IOU: 0.024638633377135347  
Centre Distance: 147.0  
Confidence: 29.381006956100464  
Category: True Negative

-----  
Frame: 366 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 192  
IOU: 0.015631360416836278  
Centre Distance: 143.5  
Confidence: 32.46062994003296  
Category: True Negative

-----  
Frame: 367 Total Penalty: 277.368707770645  
GT\_area: 9  
ST\_area: 12467  
Overlap\_area: 318  
IOU: 0.026155617700279653  
Centre Distance: 153.0  
Confidence: 39.17649984359741  
Category: True Negative

-----  
Frame: 368 Total Penalty: 277.368707770645  
GT\_area: 4  
ST\_area: 12467  
Overlap\_area: 226  
IOU: 0.018456512862392815  
Centre Distance: 159.5  
Confidence: 39.17649984359741  
Category: True Negative

-----  
Frame: 369 Total Penalty: 277.368707770645  
GT\_area: 6  
ST\_area: 12467  
Overlap\_area: 186  
IOU: 0.015137950679580044  
Centre Distance: 140.0  
Confidence: 28.928065299987793  
Category: True Negative

-----  
Frame: 370 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 238  
IOU: 0.019449211408024844  
Centre Distance: 166.5

Confidence: 28.63934636116028  
Category: True Negative

-----  
Frame: 371 Total Penalty: 277.368707770645  
GT\_area: 8  
ST\_area: 12467  
Overlap\_area: 244  
IOU: 0.01994930913253209  
Centre Distance: 169.5  
Confidence: 31.483280658721924  
Category: True Negative

-----  
Frame: 372 Total Penalty: 278.368707770645  
GT\_area: 5544  
ST\_area: 12467  
Overlap\_area: 0  
IOU: 0.3190040278286342  
Centre Distance: 21.5  
Confidence: 36.978211998939514  
Category: False Negative

-----  
Frame: 373 Total Penalty: 278.5393041645424  
GT\_area: 15862  
ST\_area: 13156  
Overlap\_area: 13156  
IOU: 0.8294036061026352  
Centre Distance: 0.5  
Confidence: 87.2737169265747  
Category: True Positive

-----  
Frame: 374 Total Penalty: 278.6959708312091  
GT\_area: 15600  
ST\_area: 13156  
Overlap\_area: 13156  
IOU: 0.8433333333333334  
Centre Distance: 1.0  
Confidence: 87.2737169265747  
Category: True Positive

-----  
Frame: 375 Total Penalty: 280.2548699420689  
GT\_area: 20904  
ST\_area: 36703  
Overlap\_area: 18693  
IOU: 0.4803669630467184  
Centre Distance: 22.5  
Confidence: 82.00511336326599  
Category: False Positive

-----  
Frame: 376 Total Penalty: 281.69854963799577  
GT\_area: 22018  
ST\_area: 37120  
Overlap\_area: 20200  
IOU: 0.5187734346910473  
Centre Distance: 18.5

Confidence: 89.14471864700317  
Category: False Positive

-----  
Frame: 377 Total Penalty: 282.99204868197285  
GT\_area: 21828  
ST\_area: 37248  
Overlap\_area: 21420  
IOU: 0.5688336520076482  
Centre Distance: 12.5  
Confidence: 90.37778973579407  
Category: False Positive

-----  
Frame: 378 Total Penalty: 283.34750391553683  
GT\_area: 23843  
ST\_area: 36992  
Overlap\_area: 23843  
IOU: 0.6445447664359861  
Centre Distance: 7.5  
Confidence: 86.22249364852905  
Category: True Positive

-----  
Frame: 379 Total Penalty: 283.7056396913989  
GT\_area: 23826  
ST\_area: 37120  
Overlap\_area: 23826  
IOU: 0.641864224137931  
Centre Distance: 2.0  
Confidence: 83.37143659591675  
Category: True Positive

-----  
Frame: 380 Total Penalty: 284.06870542415754  
GT\_area: 23643  
ST\_area: 37120  
Overlap\_area: 23643  
IOU: 0.6369342672413794  
Centre Distance: 3.5  
Confidence: 83.37143659591675  
Category: True Positive

-----  
Frame: 381 Total Penalty: 284.42315610579345  
GT\_area: 24150  
ST\_area: 37410  
Overlap\_area: 24150  
IOU: 0.6455493183640738  
Centre Distance: 0.0  
Confidence: 81.80514574050903  
Category: True Positive

-----  
Frame: 382 Total Penalty: 284.75130365992334  
GT\_area: 25134  
ST\_area: 37410  
Overlap\_area: 25134  
IOU: 0.6718524458700882  
Centre Distance: 2.5



Confidence: 76.6175389289856  
Category: True Positive

-----  
Frame: 383 Total Penalty: 285.100412719328  
GT\_area: 26015  
ST\_area: 37820  
Overlap\_area: 25168  
IOU: 0.6508909405953397  
Centre Distance: 4.0  
Confidence: 69.27608251571655  
Category: True Positive

-----  
Frame: 384 Total Penalty: 286.100412719328  
GT\_area: 26937  
ST\_area: 37820  
Overlap\_area: 0  
IOU: 0.6531029025093814  
Centre Distance: 9.0  
Confidence: 56.55304193496704  
Category: False Negative

-----  
Frame: 385 Total Penalty: 287.75322880616847  
GT\_area: 26908  
ST\_area: 38236  
Overlap\_area: 20188  
IOU: 0.44906130438651126  
Centre Distance: 43.0  
Confidence: 62.3044490814209  
Category: False Positive

-----  
Frame: 386 Total Penalty: 289.2827482569694  
GT\_area: 26568  
ST\_area: 38552  
Overlap\_area: 21420  
IOU: 0.49016018306636155  
Centre Distance: 35.5  
Confidence: 82.18495845794678  
Category: False Positive

-----  
Frame: 387 Total Penalty: 290.79138027473186  
GT\_area: 27528  
ST\_area: 38552  
Overlap\_area: 21942  
IOU: 0.4971226607458426  
Centre Distance: 35.0  
Confidence: 82.18495845794678  
Category: False Positive

-----  
Total Penalty: 290.79138027473186  
True Positive: 112  
False Positive: 104  
True Negative: 41  
False Negative: 130  
Average Time: 0.08975999915938661

>>>