```
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 12:45:28.841748 19296 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 12:45:28.890995 19296 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 12:45:31.492456 19296 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:  1.0093625874787215
             GT_area:  24931
             ST_area:  27840
             Overlap_area:  21049
             IOU:  0.6635458041737595
             Centre Distance:  14.5
             Confidence:  98.47148060798645
             Category:  False Positive
-------------------------------------------
Frame:  2    Total Penalty:  1.989614269512113
             GT_area:  25038
             ST_area:  28680
             Overlap_area:  21614
             IOU:  0.6732494393222028
             Centre Distance:  12.5
             Confidence:  95.79936265945435
             Category:  False Positive
-------------------------------------------
Frame:  3    Total Penalty:  3.131085619756133
             GT_area:  23868
             ST_area:  29890
             Overlap_area:  20564
             IOU:  0.61950954991866
             Centre Distance:  15.0
             Confidence:  93.37153434753418
             Category:  False Positive
-------------------------------------------
Frame:  4    Total Penalty:  3.43894932786123
             GT_area:  25038
             ST_area:  29640
             Overlap_area:  22365
             IOU:  0.692136291894903
             Centre Distance:  8.5
```

```
                Confidence:  94.64142322540283
                Category:  True Positive
------------------------------------------
Frame:  5    Total Penalty:  4.489589962394483
                GT_area:  24440
                ST_area:  29640
                Overlap_area:  21300
                IOU:  0.6497864551555826
                Centre Distance:  12.0
                Confidence:  94.64142322540283
                Category:  False Positive
------------------------------------------
Frame:  6    Total Penalty:  4.734938328335311
                GT_area:  23970
                ST_area:  23653
                Overlap_area:  20482
                IOU:  0.7546516340591725
                Centre Distance:  7.5
                Confidence:  94.24404501914978
                Category:  True Positive
------------------------------------------
Frame:  7    Total Penalty:  5.003822840924986
                GT_area:  24592
                ST_area:  24634
                Overlap_area:  20790
                IOU:  0.731115487410325
                Centre Distance:  8.5
                Confidence:  95.44317722320557
                Category:  True Positive
------------------------------------------
Frame:  8    Total Penalty:  5.283984230024017
                GT_area:  24360
                ST_area:  23381
                Overlap_area:  19982
                IOU:  0.719838610900969
                Centre Distance:  7.0
                Confidence:  96.56454920768738
                Category:  True Positive
------------------------------------------
Frame:  9    Total Penalty:  5.583877048887897
                GT_area:  24514
                ST_area:  23072
                Overlap_area:  19596
                IOU:  0.70010718113612
                Centre Distance:  11.0
                Confidence:  98.3790934085846
                Category:  True Positive
------------------------------------------
Frame:  10   Total Penalty:  6.699165269439275
                GT_area:  23200
                ST_area:  27474
                Overlap_area:  19552
                IOU:  0.6282372598162071
                Centre Distance:  13.0
```

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                Confidence:  93.43715906143188
                Category:  False Positive
-------------------------------------------
Frame:  11    Total Penalty:  7.827273929049019
                GT_area:  23460
                ST_area:  27474
                Overlap_area:  19570
                IOU:  0.6239637801300855
                Centre Distance:  13.0
                Confidence:  93.43715906143188
                Category:  False Positive
-------------------------------------------
Frame:  12    Total Penalty:  8.066842891351865
                GT_area:  23129
                ST_area:  24084
                Overlap_area:  20394
                IOU:  0.760431037697155
                Centre Distance:  5.5
                Confidence:  95.17216682434082
                Category:  True Positive
-------------------------------------------
Frame:  13    Total Penalty:  8.301479549753543
                GT_area:  23533
                ST_area:  22746
                Overlap_area:  20064
                IOU:  0.7653633415983215
                Centre Distance:  5.5
                Confidence:  97.747403383255
                Category:  True Positive
-------------------------------------------
Frame:  14    Total Penalty:  8.570695995455912
                GT_area:  23300
                ST_area:  23175
                Overlap_area:  19623
                IOU:  0.7307835542976314
                Centre Distance:  8.5
                Confidence:  97.3256766796112
                Category:  True Positive
-------------------------------------------
Frame:  15    Total Penalty:  8.8463332431353
                GT_area:  22310
                ST_area:  24503
                Overlap_area:  19665
                IOU:  0.724362752320613
                Centre Distance:  7.0
                Confidence:  89.72432613372803
                Category:  True Positive
-------------------------------------------
Frame:  16    Total Penalty:  9.794995683215708
                GT_area:  20884
                ST_area:  22672
                Overlap_area:  17688
                IOU:  0.6837791866398639
                Centre Distance:  10.0
```

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                Confidence:  84.6162497997284
                Category:  False Positive
-------------------------------------------
Frame:  17    Total Penalty:  10.091908516145491
                GT_area:  22344
                ST_area:  22672
                Overlap_area:  18584
                IOU:  0.7030871670702179
                Centre Distance:  9.0
                Confidence:  84.6162497997284
                Category:  True Positive
-------------------------------------------
Frame:  18    Total Penalty:  10.297647349193829
                GT_area:  21755
                ST_area:  21266
                Overlap_area:  19044
                IOU:  0.794261166951662
                Centre Distance:  4.5
                Confidence:  93.73049139976501
                Category:  True Positive
-------------------------------------------
Frame:  19    Total Penalty:  11.234420041203139
                GT_area:  20520
                ST_area:  22990
                Overlap_area:  17730
                IOU:  0.6877424359968968
                Centre Distance:  10.0
                Confidence:  83.04414749145508
                Category:  False Positive
-------------------------------------------
Frame:  20    Total Penalty:  12.24218927197237
                GT_area:  21111
                ST_area:  22155
                Overlap_area:  17266
                IOU:  0.6640769230769231
                Centre Distance:  10.0
                Confidence:  92.43610501289368
                Category:  False Positive
-------------------------------------------
Frame:  21    Total Penalty:  12.467753181746806
                GT_area:  20384
                ST_area:  22568
                Overlap_area:  18746
                IOU:  0.7744360902255639
                Centre Distance:  5.5
                Confidence:  97.4482774734497
                Category:  True Positive
-------------------------------------------
Frame:  22    Total Penalty:  12.661745672360073
                GT_area:  20608
                ST_area:  19796
                Overlap_area:  18032
                IOU:  0.8060075093867334
                Centre Distance:  4.5
```

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                Confidence:  98.65090250968933
                Category:  True Positive
-----------------------------------------
Frame:  23    Total Penalty:  12.852409945250558
                GT_area:  20516
                ST_area:  19796
                Overlap_area:  18032
                IOU:  0.8093357271095153
                Centre Distance:  4.5
                Confidence:  98.65090250968933
                Category:  True Positive
-----------------------------------------
Frame:  24    Total Penalty:  13.052844065233932
                GT_area:  21056
                ST_area:  17910
                Overlap_area:  17313
                IOU:  0.7995658800166259
                Centre Distance:  5.0
                Confidence:  99.07956719398499
                Category:  True Positive
-----------------------------------------
Frame:  25    Total Penalty:  13.246132964337587
                GT_area:  21755
                ST_area:  17550
                Overlap_area:  17550
                IOU:  0.8067111008963457
                Centre Distance:  2.5
                Confidence:  98.97485375404358
                Category:  True Positive
-----------------------------------------
Frame:  26    Total Penalty:  13.447484649823451
                GT_area:  21280
                ST_area:  22366
                Overlap_area:  19380
                IOU:  0.798648314514135
                Centre Distance:  4.5
                Confidence:  95.95153331756592
                Category:  True Positive
-----------------------------------------
Frame:  27    Total Penalty:  13.746685811769712
                GT_area:  21470
                ST_area:  23028
                Overlap_area:  18335
                IOU:  0.70079883805374
                Centre Distance:  6.5
                Confidence:  93.6317503452301
                Category:  True Positive
-----------------------------------------
Frame:  28    Total Penalty:  14.028663336412063
                GT_area:  22213
                ST_area:  22581
                Overlap_area:  18721
                IOU:  0.7180224753576496
                Centre Distance:  10.0
```

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              Confidence:  92.15611219406128
              Category:  True Positive
----------------------------------------
Frame:  29   Total Penalty:  14.304842757687247
              GT_area:  21600
              ST_area:  19982
              Overlap_area:  17460
              IOU:  0.7238205787248155
              Centre Distance:  9.5
              Confidence:  91.50524735450745
              Category:  True Positive
----------------------------------------
Frame:  30   Total Penalty:  14.596181340364412
              GT_area:  22116
              ST_area:  19982
              Overlap_area:  17460
              IOU:  0.7086614173228346
              Centre Distance:  10.0
              Confidence:  91.50524735450745
              Category:  True Positive
----------------------------------------
Frame:  31   Total Penalty:  14.81888197425988
              GT_area:  22344
              ST_area:  22236
              Overlap_area:  19497
              IOU:  0.777299366104533
              Centre Distance:  6.5
              Confidence:  95.13033032417297
              Category:  True Positive
----------------------------------------
Frame:  32   Total Penalty:  15.026561269275419
              GT_area:  22019
              ST_area:  23540
              Overlap_area:  20140
              IOU:  0.7923207049844604
              Centre Distance:  8.5
              Confidence:  95.66578269004822
              Category:  True Positive
----------------------------------------
Frame:  33   Total Penalty:  15.296265837028608
              GT_area:  22176
              ST_area:  25440
              Overlap_area:  20097
              IOU:  0.7302954322468113
              Centre Distance:  9.5
              Confidence:  90.16942977905273
              Category:  True Positive
----------------------------------------
Frame:  34   Total Penalty:  15.547226320014339
              GT_area:  23730
              ST_area:  27258
              Overlap_area:  21836
              IOU:  0.7490395170142701
              Centre Distance:  8.5
```

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                    Confidence:  96.15336656570435
                    Category:  True Positive
-------------------------------------------
Frame:  35    Total Penalty:  15.702924438662071
                    GT_area:  25536
                    ST_area:  25636
                    Overlap_area:  23426
                    IOU:  0.844301881352267
                    Centre Distance:  8.0
                    Confidence:  95.89436650276184
                    Category:  True Positive
-------------------------------------------
Frame:  36    Total Penalty:  15.835633585396463
                    GT_area:  23625
                    ST_area:  25636
                    Overlap_area:  22880
                    IOU:  0.8672908532656078
                    Centre Distance:  6.5
                    Confidence:  95.89436650276184
                    Category:  True Positive
-------------------------------------------
Frame:  37    Total Penalty:  16.0267209549874
                    GT_area:  24416
                    ST_area:  26040
                    Overlap_area:  22563
                    IOU:  0.8089126304090632
                    Centre Distance:  4.5
                    Confidence:  86.0836923122406
                    Category:  True Positive
-------------------------------------------
Frame:  38    Total Penalty:  16.291979251847863
                    GT_area:  23712
                    ST_area:  26625
                    Overlap_area:  21320
                    IOU:  0.7347417031395389
                    Centre Distance:  3.5
                    Confidence:  90.75942039489746
                    Category:  True Positive
-------------------------------------------
Frame:  39    Total Penalty:  16.522423226477883
                    GT_area:  24300
                    ST_area:  25920
                    Overlap_area:  21840
                    IOU:  0.7695560253699789
                    Centre Distance:  10.0
                    Confidence:  93.26596856117249
                    Category:  True Positive
-------------------------------------------
Frame:  40    Total Penalty:  16.733956487700166
                    GT_area:  24182
                    ST_area:  28728
                    Overlap_area:  23326
                    IOU:  0.7884667387777177
                    Centre Distance:  9.5
```

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                Confidence:  73.08517694473267
                Category:  True Positive
----------------------------------------
Frame:  41   Total Penalty:  16.9402016957576
                GT_area:  23504
                ST_area:  27966
                Overlap_area:  22776
                IOU:  0.7937547919425664
                Centre Distance:  7.0
                Confidence:  94.69563364982605
                Category:  True Positive
----------------------------------------
Frame:  42   Total Penalty:  17.149313439628703
                GT_area:  23608
                ST_area:  27966
                Overlap_area:  22776
                IOU:  0.7908882561288978
                Centre Distance:  7.0
                Confidence:  94.69563364982605
                Category:  True Positive
----------------------------------------
Frame:  43   Total Penalty:  17.34215783063683
                GT_area:  23956
                ST_area:  25645
                Overlap_area:  22154
                IOU:  0.8071556089918752
                Centre Distance:  2.5
                Confidence:  98.69471788406372
                Category:  True Positive
----------------------------------------
Frame:  44   Total Penalty:  17.545165349433823
                GT_area:  23504
                ST_area:  26208
                Overlap_area:  22048
                IOU:  0.7969924812030075
                Centre Distance:  5.5
                Confidence:  97.54535555839539
                Category:  True Positive
----------------------------------------
Frame:  45   Total Penalty:  17.775252922411305
                GT_area:  23625
                ST_area:  27306
                Overlap_area:  22155
                IOU:  0.7699124270225187
                Centre Distance:  5.0
                Confidence:  83.17196369171143
                Category:  True Positive
----------------------------------------
Frame:  46   Total Penalty:  17.94041943906297
                GT_area:  23520
                ST_area:  25404
                Overlap_area:  22260
                IOU:  0.8348334833483348
                Centre Distance:  3.5
```

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                   Confidence:  96.68393731117249
                   Category:  True Positive
--------------------------------------------
Frame:  47    Total Penalty:  18.147304720684062
                   GT_area:  23625
                   ST_area:  25752
                   Overlap_area:  21840
                   IOU:  0.7931147183789083
                   Centre Distance:  6.5
                   Confidence:  94.34781074523926
                   Category:  True Positive
--------------------------------------------
Frame:  48    Total Penalty:  18.354909952028166
                   GT_area:  23175
                   ST_area:  25752
                   Overlap_area:  21630
                   IOU:  0.7923947686558962
                   Centre Distance:  5.5
                   Confidence:  94.34781074523926
                   Category:  True Positive
--------------------------------------------
Frame:  49    Total Penalty:  18.59351101810172
                   GT_area:  22400
                   ST_area:  23532
                   Overlap_area:  19855
                   IOU:  0.7613989339264486
                   Centre Distance:  10.5
                   Confidence:  97.9674756526947
                   Category:  True Positive
--------------------------------------------
Frame:  50    Total Penalty:  18.80318843745656
                   GT_area:  22644
                   ST_area:  22200
                   Overlap_area:  19796
                   IOU:  0.7903225806451613
                   Centre Distance:  5.5
                   Confidence:  93.50855946540833
                   Category:  True Positive
--------------------------------------------
Frame:  51    Total Penalty:  18.968761709386
                   GT_area:  21631
                   ST_area:  20592
                   Overlap_area:  19206
                   IOU:  0.8344267280705565
                   Centre Distance:  2.5
                   Confidence:  94.92756128311157
                   Category:  True Positive
--------------------------------------------
Frame:  52    Total Penalty:  19.18787669540344
                   GT_area:  21056
                   ST_area:  22248
                   Overlap_area:  18988
                   IOU:  0.7808850139825629
                   Centre Distance:  6.0
```

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                  Confidence:  91.57201051712036
                  Category:  True Positive
------------------------------------------
Frame:  53    Total Penalty:  19.42375455799886
                  GT_area:  20774
                  ST_area:  18513
                  Overlap_area:  17017
                  IOU:  0.7641221374045801
                  Centre Distance:  5.5
                  Confidence:  95.7884430885315
                  Category:  True Positive
------------------------------------------
Frame:  54    Total Penalty:  19.65370904703485
                  GT_area:  22077
                  ST_area:  20705
                  Overlap_area:  18612
                  IOU:  0.770045510964005
                  Centre Distance:  6.0
                  Confidence:  91.2115752696991
                  Category:  True Positive
------------------------------------------
Frame:  55    Total Penalty:  19.87738282306891
                  GT_area:  21854
                  ST_area:  20705
                  Overlap_area:  18600
                  IOU:  0.7763262239659419
                  Centre Distance:  6.5
                  Confidence:  91.2115752696991
                  Category:  True Positive
------------------------------------------
Frame:  56    Total Penalty:  20.051276470463627
                  GT_area:  21825
                  ST_area:  19109
                  Overlap_area:  18518
                  IOU:  0.826106352605282
                  Centre Distance:  3.0
                  Confidence:  97.81508445739746
                  Category:  True Positive
------------------------------------------
Frame:  57    Total Penalty:  20.23377241859977
                  GT_area:  21854
                  ST_area:  23002
                  Overlap_area:  20176
                  IOU:  0.8175040518638573
                  Centre Distance:  5.0
                  Confidence:  92.3132836818695
                  Category:  True Positive
------------------------------------------
Frame:  58    Total Penalty:  20.420987423331766
                  GT_area:  21756
                  ST_area:  20384
                  Overlap_area:  18894
                  IOU:  0.8127849952680031
                  Centre Distance:  4.0
```

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                Confidence:  95.596843957901
                Category:  True Positive
------------------------------------------
Frame:  59    Total Penalty:  20.67495567730002
                GT_area:  21534
                ST_area:  22246
                Overlap_area:  18706
                IOU:  0.746031746031746
                Centre Distance:  3.5
                Confidence:  82.53520727157593
                Category:  True Positive
------------------------------------------
Frame:  60    Total Penalty:  20.919437850474893
                GT_area:  20962
                ST_area:  21432
                Overlap_area:  18245
                IOU:  0.7555178268251274
                Centre Distance:  5.0
                Confidence:  97.22977876663208
                Category:  True Positive
------------------------------------------
Frame:  61    Total Penalty:  21.155983788678288
                GT_area:  21658
                ST_area:  21432
                Overlap_area:  18655
                IOU:  0.7634540617966032
                Centre Distance:  5.0
                Confidence:  97.22977876663208
                Category:  True Positive
------------------------------------------
Frame:  62    Total Penalty:  22.387013478238824
                GT_area:  21243
                ST_area:  23358
                Overlap_area:  16544
                IOU:  0.5896567701464875
                Centre Distance:  11.5
                Confidence:  86.54642105102539
                Category:  False Positive
------------------------------------------
Frame:  63    Total Penalty:  22.684884240164784
                GT_area:  21681
                ST_area:  24205
                Overlap_area:  18928
                IOU:  0.7021292380740412
                Centre Distance:  10.0
                Confidence:  93.19445490837097
                Category:  True Positive
------------------------------------------
Frame:  64    Total Penalty:  24.280978118385693
                GT_area:  21879
                ST_area:  31787
                Overlap_area:  17108
                IOU:  0.4679687072596969
                Centre Distance:  25.0
```

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                Confidence:  94.33801770210266
                Category:  False Positive
------------------------------------------
Frame:  65    Total Penalty:  24.586970054990726
                GT_area:  23088
                ST_area:  25652
                Overlap_area:  19968
                IOU:  0.6940080633949673
                Centre Distance:  9.0
                Confidence:  95.71764469146729
                Category:  True Positive
------------------------------------------
Frame:  66    Total Penalty:  25.567829962084435
                GT_area:  22542
                ST_area:  25359
                Overlap_area:  19270
                IOU:  0.6730466976354301
                Centre Distance:  10.5
                Confidence:  95.24685740470886
                Category:  False Positive
------------------------------------------
Frame:  67    Total Penalty:  26.524854755472866
                GT_area:  22440
                ST_area:  25359
                Overlap_area:  19364
                IOU:  0.6809917355371901
                Centre Distance:  10.5
                Confidence:  95.24685740470886
                Category:  False Positive
------------------------------------------
Frame:  68    Total Penalty:  26.8386949822665
                GT_area:  21879
                ST_area:  24514
                Overlap_area:  18879
                IOU:  0.6861597732063677
                Centre Distance:  8.0
                Confidence:  99.03960227966309
                Category:  True Positive
------------------------------------------
Frame:  69    Total Penalty:  27.172406351702282
                GT_area:  22000
                ST_area:  25016
                Overlap_area:  18800
                IOU:  0.6662886305642188
                Centre Distance:  9.0
                Confidence:  97.35942482948303
                Category:  True Positive
------------------------------------------
Frame:  70    Total Penalty:  27.443133066134216
                GT_area:  22866
                ST_area:  24440
                Overlap_area:  19950
                IOU:  0.7292732855680655
                Centre Distance:  8.5
```

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                    Confidence:  99.48209524154663
                    Category:  True Positive
------------------------------------------
Frame:  71   Total Penalty:  27.747671559799816
                    GT_area:  22644
                    ST_area:  26070
                    Overlap_area:  19982
                    IOU:  0.6954615063344006
                    Centre Distance:  9.0
                    Confidence:  98.4640121459961
                    Category:  True Positive
------------------------------------------
Frame:  72   Total Penalty:  28.01280758140892
                    GT_area:  22321
                    ST_area:  22638
                    Overlap_area:  19044
                    IOU:  0.7348639783908933
                    Centre Distance:  7.5
                    Confidence:  99.27217364311218
                    Category:  True Positive
------------------------------------------
Frame:  73   Total Penalty:  28.178002649283986
                    GT_area:  23638
                    ST_area:  23533
                    Overlap_area:  21462
                    IOU:  0.8348049321249368
                    Centre Distance:  5.5
                    Confidence:  99.30171966552734
                    Category:  True Positive
------------------------------------------
Frame:  74   Total Penalty:  28.349470629579553
                    GT_area:  22866
                    ST_area:  23533
                    Overlap_area:  21024
                    IOU:  0.8285320197044335
                    Centre Distance:  6.0
                    Confidence:  99.30171966552734
                    Category:  True Positive
------------------------------------------
Frame:  75   Total Penalty:  28.58100089757546
                    GT_area:  23296
                    ST_area:  23358
                    Overlap_area:  20273
                    IOU:  0.7684697320040939
                    Centre Distance:  6.0
                    Confidence:  98.71405959129333
                    Category:  True Positive
------------------------------------------
Frame:  76   Total Penalty:  28.81906006200105
                    GT_area:  24075
                    ST_area:  22442
                    Overlap_area:  20116
                    IOU:  0.7619408355744101
                    Centre Distance:  8.5
```

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                Confidence:  99.21157956123352
                Category:  True Positive
-----------------------------------------
Frame:  77    Total Penalty:  29.02838264967258
                GT_area:  22866
                ST_area:  26460
                Overlap_area:  21780
                IOU:  0.7906774123284688
                Centre Distance:  6.5
                Confidence:  99.45031404495239
                Category:  True Positive
-----------------------------------------
Frame:  78    Total Penalty:  29.217673750728387
                GT_area:  23540
                ST_area:  24480
                Overlap_area:  21500
                IOU:  0.8107088989441931
                Centre Distance:  4.5
                Confidence:  99.40641522407532
                Category:  True Positive
-----------------------------------------
Frame:  79    Total Penalty:  29.452000748466478
                GT_area:  24525
                ST_area:  27776
                Overlap_area:  22680
                IOU:  0.7656730022619088
                Centre Distance:  5.5
                Confidence:  99.3016242980957
                Category:  True Positive
-----------------------------------------
Frame:  80    Total Penalty:  29.721230217310513
                GT_area:  23415
                ST_area:  27776
                Overlap_area:  21614
                IOU:  0.7307705311559658
                Centre Distance:  7.5
                Confidence:  99.3016242980957
                Category:  True Positive
-----------------------------------------
Frame:  81    Total Penalty:  29.96029787407619
                GT_area:  23754
                ST_area:  27468
                Overlap_area:  22134
                IOU:  0.7609323432343235
                Centre Distance:  6.0
                Confidence:  98.89782071113586
                Category:  True Positive
-----------------------------------------
Frame:  82    Total Penalty:  30.254276622600393
                GT_area:  23976
                ST_area:  28044
                Overlap_area:  21528
                IOU:  0.706021251475797
                Centre Distance:  7.0
```

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                Confidence:  99.30439591407776
                Category:  True Positive
----------------------------------------
Frame:  83   Total Penalty:  30.47846639874473
                GT_area:  24860
                ST_area:  28290
                Overlap_area:  23220
                IOU:  0.7758102238556632
                Centre Distance:  4.5
                Confidence:  99.16521906852722
                Category:  True Positive
----------------------------------------
Frame:  84   Total Penalty:  30.715434492755243
                GT_area:  25088
                ST_area:  27572
                Overlap_area:  22791
                IOU:  0.7630319059894874
                Centre Distance:  5.5
                Confidence:  99.5581328868866
                Category:  True Positive
----------------------------------------
Frame:  85   Total Penalty:  30.995134881491378
                GT_area:  25200
                ST_area:  29232
                Overlap_area:  22791
                IOU:  0.7202996112638665
                Centre Distance:  7.0
                Confidence:  99.31005239486694
                Category:  True Positive
----------------------------------------
Frame:  86   Total Penalty:  31.26317611860478
                GT_area:  25200
                ST_area:  29232
                Overlap_area:  23004
                IOU:  0.7319587628865979
                Centre Distance:  6.0
                Confidence:  99.31005239486694
                Category:  True Positive
----------------------------------------
Frame:  87   Total Penalty:  31.48075875434577
                GT_area:  25086
                ST_area:  28784
                Overlap_area:  23647
                IOU:  0.782417364259008
                Centre Distance:  4.5
                Confidence:  99.47748184204102
                Category:  True Positive
----------------------------------------
Frame:  88   Total Penalty:  31.671839067067875
                GT_area:  24743
                ST_area:  26160
                Overlap_area:  22763
                IOU:  0.8089196872778962
                Centre Distance:  6.0
```

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                  Confidence:  99.70644116401672
                  Category:  True Positive
------------------------------------------
Frame:  89    Total Penalty:  31.903712349757384
                  GT_area:  25197
                  ST_area:  29500
                  Overlap_area:  23762
                  IOU:  0.7681267173104898
                  Centre Distance:  5.5
                  Confidence:  99.7191846370697
                  Category:  True Positive
------------------------------------------
Frame:  90    Total Penalty:  32.14699099533488
                  GT_area:  25197
                  ST_area:  28448
                  Overlap_area:  23108
                  IOU:  0.7567213544225039
                  Centre Distance:  5.5
                  Confidence:  99.28556084632874
                  Category:  True Positive
------------------------------------------
Frame:  91    Total Penalty:  32.40771598134219
                  GT_area:  25410
                  ST_area:  27417
                  Overlap_area:  22454
                  IOU:  0.7392750139926909
                  Centre Distance:  7.5
                  Confidence:  99.71054196357727
                  Category:  True Positive
------------------------------------------
Frame:  92    Total Penalty:  32.68248541480728
                  GT_area:  24961
                  ST_area:  27417
                  Overlap_area:  22018
                  IOU:  0.7252305665349144
                  Centre Distance:  9.0
                  Confidence:  99.71054196357727
                  Category:  True Positive
------------------------------------------
Frame:  93    Total Penalty:  32.94800365174309
                  GT_area:  25872
                  ST_area:  28197
                  Overlap_area:  22896
                  IOU:  0.7344817630641902
                  Centre Distance:  8.5
                  Confidence:  99.56603646278381
                  Category:  True Positive
------------------------------------------
Frame:  94    Total Penalty:  33.198321520878814
                  GT_area:  27028
                  ST_area:  26640
                  Overlap_area:  22995
                  IOU:  0.749682130864278
                  Centre Distance:  8.5
```

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                    Confidence:  99.33537244796753
                    Category:  True Positive
        ----------------------------------------
Frame:  95    Total Penalty:  33.46552362663928
                    GT_area:  24486
                    ST_area:  26862
                    Overlap_area:  21715
                    IOU:  0.7327978942395302
                    Centre Distance:  7.5
                    Confidence:  99.80159997940063
                    Category:  True Positive
        ----------------------------------------
Frame:  96    Total Penalty:  33.73427155091693
                    GT_area:  25488
                    ST_area:  26640
                    Overlap_area:  22018
                    IOU:  0.7312520757223514
                    Centre Distance:  8.5
                    Confidence:  99.595046043396
                    Category:  True Positive
        ----------------------------------------
Frame:  97    Total Penalty:  34.654764052063044
                    GT_area:  24360
                    ST_area:  27346
                    Overlap_area:  21168
                    IOU:  0.693169166284629
                    Centre Distance:  11.0
                    Confidence:  99.33757185935974
                    Category:  False Positive
        ----------------------------------------
Frame:  98    Total Penalty:  34.93602119865392
                    GT_area:  24698
                    ST_area:  27911
                    Overlap_area:  22000
                    IOU:  0.718742853409128
                    Centre Distance:  9.5
                    Confidence:  99.30768013000488
                    Category:  True Positive
        ----------------------------------------
Frame:  99    Total Penalty:  35.22249917576192
                    GT_area:  24336
                    ST_area:  27911
                    Overlap_area:  21756
                    IOU:  0.713522022892001
                    Centre Distance:  10.5
                    Confidence:  99.30768013000488
                    Category:  True Positive
        ----------------------------------------
Frame:  100   Total Penalty:  35.464990683514245
                    GT_area:  24592
                    ST_area:  27664
                    Overlap_area:  22523
                    IOU:  0.7575084922476709
                    Centre Distance:  8.0
```

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                Confidence:  99.45781230926514
                Category:  True Positive
------------------------------------------
Frame:  101  Total Penalty:  35.659488940003975
                GT_area:  25016
                ST_area:  26244
                Overlap_area:  22869
                IOU:  0.8055017435102674
                Centre Distance:  8.0
                Confidence:  99.56830739974976
                Category:  True Positive
------------------------------------------
Frame:  102  Total Penalty:  36.61965840432981
                GT_area:  25252
                ST_area:  27090
                Overlap_area:  21185
                IOU:  0.6799435118913888
                Centre Distance:  11.0
                Confidence:  99.73849654197693
                Category:  False Positive
------------------------------------------
Frame:  103  Total Penalty:  36.89548568439438
                GT_area:  24378
                ST_area:  26892
                Overlap_area:  21534
                IOU:  0.7241727199354318
                Centre Distance:  8.0
                Confidence:  99.80769157409668
                Category:  True Positive
------------------------------------------
Frame:  104  Total Penalty:  37.16912740234819
                GT_area:  24174
                ST_area:  28000
                Overlap_area:  21952
                IOU:  0.7263582820461915
                Centre Distance:  9.0
                Confidence:  99.84152317047119
                Category:  True Positive
------------------------------------------
Frame:  105  Total Penalty:  37.42665094932728
                GT_area:  25095
                ST_area:  28000
                Overlap_area:  22624
                IOU:  0.7424764530209051
                Centre Distance:  7.5
                Confidence:  99.84152317047119
                Category:  True Positive
------------------------------------------
Frame:  106  Total Penalty:  37.63878229420791
                GT_area:  26051
                ST_area:  27417
                Overlap_area:  23562
                IOU:  0.787868655119374
                Centre Distance:  8.0
```

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                Confidence:  99.81076717376709
                Category:  True Positive
----------------------------------------
Frame:  107  Total Penalty:  37.90634553815465
                GT_area:  30366
                ST_area:  33528
                Overlap_area:  27013
                IOU:  0.7324367560532523
                Centre Distance:  10.0
                Confidence:  99.74626302719116
                Category:  True Positive
----------------------------------------
Frame:  108  Total Penalty:  38.079221694703065
                GT_area:  35624
                ST_area:  38232
                Overlap_area:  33434
                IOU:  0.8271238434515857
                Centre Distance:  8.0
                Confidence:  99.93095397949219
                Category:  True Positive
----------------------------------------
Frame:  109  Total Penalty:  38.2594309699905
                GT_area:  42066
                ST_area:  42456
                Overlap_area:  38076
                IOU:  0.8197907247125694
                Centre Distance:  10.0
                Confidence:  99.81732368469238
                Category:  True Positive
----------------------------------------
Frame:  110  Total Penalty:  38.45149895865905
                GT_area:  45080
                ST_area:  44268
                Overlap_area:  39928
                IOU:  0.8079320113314448
                Centre Distance:  9.0
                Confidence:  99.83785152435303
                Category:  True Positive
----------------------------------------
Frame:  111  Total Penalty:  38.64054762223854
                GT_area:  44896
                ST_area:  44268
                Overlap_area:  39928
                IOU:  0.8109513364205053
                Centre Distance:  9.0
                Confidence:  99.83785152435303
                Category:  True Positive
----------------------------------------
Frame:  112  Total Penalty:  38.87493824297834
                GT_area:  46995
                ST_area:  50140
                Overlap_area:  42120
                IOU:  0.7656093792602018
                Centre Distance:  3.5
```

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                    Confidence:  99.75753426551819
                    Category:  True Positive
        ------------------------------------------
Frame:  113  Total Penalty:  39.08952971887635
                    GT_area:  47400
                    ST_area:  48530
                    Overlap_area:  42200
                    IOU:  0.7854085241019915
                    Centre Distance:  3.0
                    Confidence:  99.78152513504028
                    Category:  True Positive
        ------------------------------------------
Frame:  114  Total Penalty:  39.3172731416141
                    GT_area:  45828
                    ST_area:  51040
                    Overlap_area:  42210
                    IOU:  0.7722565772622489
                    Centre Distance:  7.5
                    Confidence:  99.33410286903381
                    Category:  True Positive
        ------------------------------------------
Frame:  115  Total Penalty:  39.54878130683985
                    GT_area:  45800
                    ST_area:  49932
                    Overlap_area:  41600
                    IOU:  0.7684918347742555
                    Centre Distance:  3.0
                    Confidence:  99.68298077583313
                    Category:  True Positive
        ------------------------------------------
Frame:  116  Total Penalty:  39.70622811535049
                    GT_area:  44550
                    ST_area:  41184
                    Overlap_area:  39204
                    IOU:  0.8425531914893617
                    Centre Distance:  1.0
                    Confidence:  99.7521698474884
                    Category:  True Positive
        ------------------------------------------
Frame:  117  Total Penalty:  39.85627772922512
                    GT_area:  44576
                    ST_area:  41184
                    Overlap_area:  39402
                    IOU:  0.8499503861253721
                    Centre Distance:  0.5
                    Confidence:  99.7521698474884
                    Category:  True Positive
        ------------------------------------------
Frame:  118  Total Penalty:  39.97631992805343
                    GT_area:  43956
                    ST_area:  39798
                    Overlap_area:  39203
                    IOU:  0.8799578011716909
                    Centre Distance:  1.0
```

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                  Confidence:  99.81908202171326
                  Category:  True Positive
-------------------------------------------
Frame:  119  Total Penalty:  40.10763446570281
                  GT_area:  42140
                  ST_area:  38391
                  Overlap_area:  37436
                  IOU:  0.8686854623506207
                  Centre Distance:  1.5
                  Confidence:  99.74620342254639
                  Category:  True Positive
-------------------------------------------
Frame:  120  Total Penalty:  40.22617487952403
                  GT_area:  37036
                  ST_area:  36800
                  Overlap_area:  34592
                  IOU:  0.881459586178779
                  Centre Distance:  3.0
                  Confidence:  99.71901774406433
                  Category:  True Positive
-------------------------------------------
Frame:  121  Total Penalty:  40.40278911088299
                  GT_area:  32757
                  ST_area:  31459
                  Overlap_area:  28998
                  IOU:  0.8233857686410359
                  Centre Distance:  3.0
                  Confidence:  99.6743381023407
                  Category:  True Positive
-------------------------------------------
Frame:  122  Total Penalty:  40.552782958551255
                  GT_area:  30624
                  ST_area:  29516
                  Overlap_area:  27632
                  IOU:  0.8500061523317337
                  Centre Distance:  3.0
                  Confidence:  99.71502423286438
                  Category:  True Positive
-------------------------------------------
Frame:  123  Total Penalty:  40.725642811158615
                  GT_area:  29575
                  ST_area:  29184
                  Overlap_area:  26600
                  IOU:  0.8271401473926429
                  Centre Distance:  0.5
                  Confidence:  99.77275729179382
                  Category:  True Positive
-------------------------------------------
Frame:  124  Total Penalty:  40.88064139779764
                  GT_area:  29559
                  ST_area:  29184
                  Overlap_area:  26904
                  IOU:  0.8450014133609723
                  Centre Distance:  1.5
```

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                Confidence:  99.77275729179382
                Category:  True Positive
------------------------------------------
Frame:  125  Total Penalty:  41.03090366253075
                GT_area:  26568
                ST_area:  27387
                Overlap_area:  24786
                IOU:  0.8497377352668929
                Centre Distance:  1.5
                Confidence:  98.474782705307
                Category:  True Positive
------------------------------------------
Frame:  126  Total Penalty:  41.13159810697519
                GT_area:  22200
                ST_area:  21560
                Overlap_area:  20720
                IOU:  0.8993055555555556
                Centre Distance:  1.0
                Confidence:  99.184650182724
                Category:  True Positive
------------------------------------------
Frame:  127  Total Penalty:  41.25873393089642
                GT_area:  20448
                ST_area:  18354
                Overlap_area:  18084
                IOU:  0.8728641760787721
                Centre Distance:  3.0
                Confidence:  98.64576458930969
                Category:  True Positive
------------------------------------------
Frame:  128  Total Penalty:  41.37425117227573
                GT_area:  20300
                ST_area:  17955
                Overlap_area:  17955
                IOU:  0.8844827586206897
                Centre Distance:  2.5
                Confidence:  97.96736240386963
                Category:  True Positive
------------------------------------------
Frame:  129  Total Penalty:  41.57772926227376
                GT_area:  19872
                ST_area:  16698
                Overlap_area:  16214
                IOU:  0.796521910001965
                Centre Distance:  4.0
                Confidence:  98.72313141822815
                Category:  True Positive
------------------------------------------
Frame:  130  Total Penalty:  41.80171138257305
                GT_area:  19856
                ST_area:  16698
                Overlap_area:  15972
                IOU:  0.7760178797007093
                Centre Distance:  5.0
```

```
                Confidence:  98.72313141822815
                Category:  True Positive
--------------------------------------------
Frame:  131  Total Penalty:  41.968739582139214
                GT_area:  19110
                ST_area:  16380
                Overlap_area:  16128
                IOU:  0.8329718004338394
                Centre Distance:  2.0
                Confidence:  98.57500791549683
                Category:  True Positive
--------------------------------------------
Frame:  132  Total Penalty:  42.148647321759924
                GT_area:  19126
                ST_area:  16384
                Overlap_area:  16000
                IOU:  0.8200922603792927
                Centre Distance:  4.5
                Confidence:  99.07844066619873
                Category:  True Positive
--------------------------------------------
Frame:  133  Total Penalty:  42.370603144848225
                GT_area:  19479
                ST_area:  15376
                Overlap_area:  15252
                IOU:  0.7780441769116971
                Centre Distance:  3.5
                Confidence:  99.36919212341309
                Category:  True Positive
--------------------------------------------
Frame:  134  Total Penalty:  42.52392949870756
                GT_area:  21014
                ST_area:  17792
                Overlap_area:  17792
                IOU:  0.8466736461406681
                Centre Distance:  0.5
                Confidence:  96.41014337539673
                Category:  True Positive
--------------------------------------------
Frame:  135  Total Penalty:  42.709924117070756
                GT_area:  27946
                ST_area:  27334
                Overlap_area:  24806
                IOU:  0.8140053816368051
                Centre Distance:  5.0
                Confidence:  95.98840475082397
                Category:  True Positive
--------------------------------------------
Frame:  136  Total Penalty:  42.895073710254174
                GT_area:  29322
                ST_area:  27334
                Overlap_area:  25438
                IOU:  0.8148504068165802
                Centre Distance:  6.5
```

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                Confidence:  95.98840475082397
                Category:  True Positive
------------------------------------------
Frame:  137  Total Penalty:  43.02877613956108
                GT_area:  37740
                ST_area:  34398
                Overlap_area:  33485
                IOU:  0.8662975706930898
                Centre Distance:  2.0
                Confidence:  99.02040958404541
                Category:  True Positive
------------------------------------------
Frame:  138  Total Penalty:  43.16277432632445
                GT_area:  40128
                ST_area:  42200
                Overlap_area:  38208
                IOU:  0.8660018132366274
                Centre Distance:  3.5
                Confidence:  99.36496615409851
                Category:  True Positive
------------------------------------------
Frame:  139  Total Penalty:  43.399265897667014
                GT_area:  45114
                ST_area:  48620
                Overlap_area:  40582
                IOU:  0.7635084286574353
                Centre Distance:  5.5
                Confidence:  99.46789741516113
                Category:  True Positive
------------------------------------------
Frame:  140  Total Penalty:  43.61495217217682
                GT_area:  46144
                ST_area:  47586
                Overlap_area:  41200
                IOU:  0.7843137254901961
                Centre Distance:  4.5
                Confidence:  99.65599179267883
                Category:  True Positive
------------------------------------------
Frame:  141  Total Penalty:  43.88875811192924
                GT_area:  46864
                ST_area:  50609
                Overlap_area:  41006
                IOU:  0.7261940602475783
                Centre Distance:  7.5
                Confidence:  99.64861869812012
                Category:  True Positive
------------------------------------------
Frame:  142  Total Penalty:  44.14985077718732
                GT_area:  47328
                ST_area:  50609
                Overlap_area:  41616
                IOU:  0.7389073347419257
                Centre Distance:  5.5
```

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                Confidence:  99.64861869812012
                Category:  True Positive
------------------------------------------
Frame:  143  Total Penalty:  44.3579778435018
                GT_area:  47502
                ST_area:  54934
                Overlap_area:  45269
                IOU:  0.7918729336855179
                Centre Distance:  6.0
                Confidence:  99.55220222473145
                Category:  True Positive
------------------------------------------
Frame:  144  Total Penalty:  44.576122856383655
                GT_area:  45978
                ST_area:  50848
                Overlap_area:  42486
                IOU:  0.781854987118145
                Centre Distance:  7.0
                Confidence:  99.64070916175842
                Category:  True Positive
------------------------------------------
Frame:  145  Total Penalty:  44.80232975293538
                GT_area:  43384
                ST_area:  44064
                Overlap_area:  38148
                IOU:  0.7737931034482759
                Centre Distance:  11.5
                Confidence:  99.82824325561523
                Category:  True Positive
------------------------------------------
Frame:  146  Total Penalty:  45.040890427668366
                GT_area:  42320
                ST_area:  47066
                Overlap_area:  38640
                IOU:  0.7614393252670161
                Centre Distance:  6.0
                Confidence:  99.54982995986938
                Category:  True Positive
------------------------------------------
Frame:  147  Total Penalty:  45.25437558861161
                GT_area:  40656
                ST_area:  39044
                Overlap_area:  35088
                IOU:  0.786514839056756
                Centre Distance:  1.0
                Confidence:  99.79764819145203
                Category:  True Positive
------------------------------------------
Frame:  148  Total Penalty:  45.47659781083383
                GT_area:  38868
                ST_area:  34444
                Overlap_area:  32074
                IOU:  0.7777777777777778
                Centre Distance:  2.0
```

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                 Confidence:  99.33112859725952
                 Category:  True Positive
---------------------------------------------
Frame:  149  Total Penalty:  45.71430707893823
                 GT_area:  38610
                 ST_area:  34444
                 Overlap_area:  31600
                 IOU:  0.7622907318955952
                 Centre Distance:  1.5
                 Confidence:  99.33112859725952
                 Category:  True Positive
---------------------------------------------
Frame:  150  Total Penalty:  45.903844118463184
                 GT_area:  34950
                 ST_area:  32430
                 Overlap_area:  30163
                 IOU:  0.8104629604750517
                 Centre Distance:  6.5
                 Confidence:  99.60351586341858
                 Category:  True Positive
---------------------------------------------
Frame:  151  Total Penalty:  46.140336689377186
                 GT_area:  32802
                 ST_area:  29866
                 Overlap_area:  27132
                 IOU:  0.7635074290859973
                 Centre Distance:  6.5
                 Confidence:  99.61517453193665
                 Category:  True Positive
---------------------------------------------
Frame:  152  Total Penalty:  46.39395987778298
                 GT_area:  31455
                 ST_area:  30723
                 Overlap_area:  26574
                 IOU:  0.7463768115942029
                 Centre Distance:  12.0
                 Confidence:  99.10812973976135
                 Category:  True Positive
---------------------------------------------
Frame:  153  Total Penalty:  46.65120727434927
                 GT_area:  31020
                 ST_area:  30900
                 Overlap_area:  26390
                 IOU:  0.742752603433718
                 Centre Distance:  11.0
                 Confidence:  98.36713075637817
                 Category:  True Positive
---------------------------------------------
Frame:  154  Total Penalty:  46.868165349175364
                 GT_area:  30654
                 ST_area:  26250
                 Overlap_area:  24990
                 IOU:  0.7830419251739049
                 Centre Distance:  9.0
```

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              Confidence:  99.57581162452698
              Category:  True Positive
--------------------------------------------
Frame:  155  Total Penalty:  47.1121784967728
              GT_area:  29845
              ST_area:  26250
              Overlap_area:  24150
              IOU:  0.7559868524025669
              Centre Distance:  11.0
              Confidence:  99.57581162452698
              Category:  True Positive
--------------------------------------------
Frame:  156  Total Penalty:  47.2965884460486
              GT_area:  29625
              ST_area:  29792
              Overlap_area:  26691
              IOU:  0.8155900507241949
              Centre Distance:  6.0
              Confidence:  98.213791847229
              Category:  True Positive
--------------------------------------------
Frame:  157  Total Penalty:  47.55360078777003
              GT_area:  30353
              ST_area:  34894
              Overlap_area:  27813
              IOU:  0.7429876582785703
              Centre Distance:  9.5
              Confidence:  97.28768467903137
              Category:  True Positive
--------------------------------------------
Frame:  158  Total Penalty:  47.768303308374016
              GT_area:  30464
              ST_area:  28890
              Overlap_area:  26108
              IOU:  0.7852974793960176
              Centre Distance:  9.5
              Confidence:  98.22394847869873
              Category:  True Positive
--------------------------------------------
Frame:  159  Total Penalty:  48.04548789189786
              GT_area:  30099
              ST_area:  33957
              Overlap_area:  26875
              IOU:  0.7228154164761572
              Centre Distance:  12.0
              Confidence:  96.9312846660614
              Category:  True Positive
--------------------------------------------
Frame:  160  Total Penalty:  48.31563171445894
              GT_area:  29274
              ST_area:  30624
              Overlap_area:  25272
              IOU:  0.7298561774389187
              Centre Distance:  10.5
```

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                    Confidence:  99.26815629005432
                    Category:  True Positive
-------------------------------------------
Frame:  161  Total Penalty:  48.58000483844878
             GT_area:  29512
             ST_area:  30624
             Overlap_area:  25488
             IOU:  0.7356268760101593
             Centre Distance:  10.0
             Confidence:  99.26815629005432
             Category:  True Positive
-------------------------------------------
Frame:  162  Total Penalty:  48.7893963094598
             GT_area:  28920
             ST_area:  30872
             Overlap_area:  26400
             IOU:  0.7906085289889794
             Centre Distance:  8.0
             Confidence:  99.31159615516663
             Category:  True Positive
-------------------------------------------
Frame:  163  Total Penalty:  48.98125318792988
             GT_area:  31964
             ST_area:  32518
             Overlap_area:  28820
             IOU:  0.8081431215299199
             Centre Distance:  5.5
             Confidence:  98.42416644096375
             Category:  True Positive
-------------------------------------------
Frame:  164  Total Penalty:  49.17142947412894
             GT_area:  31944
             ST_area:  30989
             Overlap_area:  28160
             IOU:  0.8098237138009375
             Centre Distance:  4.5
             Confidence:  98.90784621238708
             Category:  True Positive
-------------------------------------------
Frame:  165  Total Penalty:  49.41428661698608
             GT_area:  31070
             ST_area:  31414
             Overlap_area:  26924
             IOU:  0.7571428571428571
             Centre Distance:  7.5
             Confidence:  98.33918809890747
             Category:  True Positive
-------------------------------------------
Frame:  166  Total Penalty:  49.6774137893706
             GT_area:  32319
             ST_area:  33142
             Overlap_area:  27772
             IOU:  0.7368728276154847
             Centre Distance:  8.5
```

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                Confidence:  97.01196551322937
                Category:  True Positive
       ------------------------------------------
Frame:  167  Total Penalty:  49.92647939573243
                GT_area:  32912
                ST_area:  33142
                Overlap_area:  28329
                IOU:  0.7509343936381709
                Centre Distance:  8.0
                Confidence:  97.01196551322937
                Category:  True Positive
       ------------------------------------------
Frame:  168  Total Penalty:  50.16947593334653
                GT_area:  31416
                ST_area:  35568
                Overlap_area:  28860
                IOU:  0.7570034623858987
                Centre Distance:  8.0
                Confidence:  99.14610385894775
                Category:  True Positive
       ------------------------------------------
Frame:  169  Total Penalty:  50.445107371190474
                GT_area:  31070
                ST_area:  30033
                Overlap_area:  25668
                IOU:  0.7243685621560604
                Centre Distance:  11.5
                Confidence:  98.68380427360535
                Category:  True Positive
       ------------------------------------------
Frame:  170  Total Penalty:  50.73076332852326
                GT_area:  31330
                ST_area:  35850
                Overlap_area:  27993
                IOU:  0.7143440426672111
                Centre Distance:  11.0
                Confidence:  99.13137555122375
                Category:  True Positive
       ------------------------------------------
Frame:  171  Total Penalty:  51.01577820804712
                GT_area:  32400
                ST_area:  39060
                Overlap_area:  29792
                IOU:  0.7149851204761447
                Centre Distance:  12.0
                Confidence:  98.40189218521118
                Category:  True Positive
       ------------------------------------------
Frame:  172  Total Penalty:  52.23468601279005
                GT_area:  32026
                ST_area:  42771
                Overlap_area:  27864
                IOU:  0.5936973984190229
                Centre Distance:  17.5
```

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              Confidence:  99.22533631324768
              Category:  False Positive
----------------------------------------
Frame:  173  Total Penalty:  53.395810723055845
              GT_area:  33499
              ST_area:  40960
              Overlap_area:  28296
              IOU:  0.6129584299114009
              Centre Distance:  18.5
              Confidence:  99.46552515029907
              Category:  False Positive
----------------------------------------
Frame:  174  Total Penalty:  54.63753814874289
              GT_area:  32568
              ST_area:  40960
              Overlap_area:  27170
              IOU:  0.5860908581043186
              Centre Distance:  19.0
              Confidence:  99.46552515029907
              Category:  False Positive
----------------------------------------
Frame:  175  Total Penalty:  55.96587429739154
              GT_area:  31088
              ST_area:  42662
              Overlap_area:  26390
              IOU:  0.5572212837837838
              Centre Distance:  20.0
              Confidence:  99.43779110908508
              Category:  False Positive
----------------------------------------
Frame:  176  Total Penalty:  56.97151027409929
              GT_area:  32880
              ST_area:  38308
              Overlap_area:  28427
              IOU:  0.6647880077640841
              Centre Distance:  16.0
              Confidence:  98.69630932807922
              Category:  False Positive
----------------------------------------
Frame:  177  Total Penalty:  57.25774161552008
              GT_area:  32232
              ST_area:  36425
              Overlap_area:  28595
              IOU:  0.7137686585792022
              Centre Distance:  12.5
              Confidence:  98.37590456008911
              Category:  True Positive
----------------------------------------
Frame:  178  Total Penalty:  57.498644499285845
              GT_area:  31725
              ST_area:  33972
              Overlap_area:  28350
              IOU:  0.7590971162342357
              Centre Distance:  7.0
```

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            Confidence:  98.34731221199036
            Category:  True Positive
------------------------------------------
Frame:  179  Total Penalty:  57.732260101030775
            GT_area:  32480
            ST_area:  36356
            Overlap_area:  29866
            IOU:  0.766384398255068
            Centre Distance:  7.5
            Confidence:  99.57497119903564
            Category:  True Positive
------------------------------------------
Frame:  180  Total Penalty:  57.957401498585966
            GT_area:  31740
            ST_area:  36356
            Overlap_area:  29729
            IOU:  0.7748586024448093
            Centre Distance:  6.5
            Confidence:  99.57497119903564
            Category:  True Positive
------------------------------------------
Frame:  181  Total Penalty:  58.10626718523745
            GT_area:  32665
            ST_area:  29920
            Overlap_area:  28776
            IOU:  0.8511343133485166
            Centre Distance:  5.5
            Confidence:  99.62640404701233
            Category:  True Positive
------------------------------------------
Frame:  182  Total Penalty:  58.311194396883586
            GT_area:  31373
            ST_area:  31144
            Overlap_area:  27690
            IOU:  0.7950727883538634
            Centre Distance:  6.5
            Confidence:  99.6033251285553
            Category:  True Positive
------------------------------------------
Frame:  183  Total Penalty:  58.52451246595437
            GT_area:  30324
            ST_area:  35224
            Overlap_area:  28861
            IOU:  0.786681930929212
            Centre Distance:  5.5
            Confidence:  99.72683191299438
            Category:  True Positive
------------------------------------------
Frame:  184  Total Penalty:  58.702432091954556
            GT_area:  30228
            ST_area:  30573
            Overlap_area:  27432
            IOU:  0.8220803739998201
            Centre Distance:  3.5
```

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              Confidence:  99.55044388771057
              Category:  True Positive
------------------------------------------
Frame:  185  Total Penalty:  58.92947938843454
              GT_area:  29900
              ST_area:  28728
              Overlap_area:  25560
              IOU:  0.7729527035200193
              Centre Distance:  8.0
              Confidence:  99.83513355255127
              Category:  True Positive
------------------------------------------
Frame:  186  Total Penalty:  59.15955348928399
              GT_area:  30030
              ST_area:  28728
              Overlap_area:  25560
              IOU:  0.7699258991505512
              Centre Distance:  8.0
              Confidence:  99.83513355255127
              Category:  True Positive
------------------------------------------
Frame:  187  Total Penalty:  59.36057533039068
              GT_area:  29106
              ST_area:  31104
              Overlap_area:  26741
              IOU:  0.7989781588933043
              Centre Distance:  6.0
              Confidence:  99.5806336402893
              Category:  True Positive
------------------------------------------
Frame:  188  Total Penalty:  59.58956644858699
              GT_area:  29337
              ST_area:  32875
              Overlap_area:  27084
              IOU:  0.7710088818036893
              Centre Distance:  4.0
              Confidence:  99.69879984855652
              Category:  True Positive
------------------------------------------
Frame:  189  Total Penalty:  59.76990543163784
              GT_area:  28044
              ST_area:  28320
              Overlap_area:  25389
              IOU:  0.8196610169491525
              Centre Distance:  4.5
              Confidence:  99.74560141563416
              Category:  True Positive
------------------------------------------
Frame:  190  Total Penalty:  59.974342291706094
              GT_area:  27830
              ST_area:  24780
              Overlap_area:  23310
              IOU:  0.7955631399317407
              Centre Distance:  6.0
```

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                    Confidence:  99.8047947883606
                    Category:  True Positive
-------------------------------------------
Frame:  191  Total Penalty:  60.13160569919616
                    GT_area:  27830
                    ST_area:  25016
                    Overlap_area:  24168
                    IOU:  0.8427365925099379
                    Centre Distance:  4.5
                    Confidence:  99.7236967086792
                    Category:  True Positive
-------------------------------------------
Frame:  192  Total Penalty:  60.37343226869539
                    GT_area:  26216
                    ST_area:  26378
                    Overlap_area:  22680
                    IOU:  0.7581734305007689
                    Centre Distance:  4.5
                    Confidence:  99.43211078643799
                    Category:  True Positive
-------------------------------------------
Frame:  193  Total Penalty:  60.647503053929434
                    GT_area:  28044
                    ST_area:  26378
                    Overlap_area:  22890
                    IOU:  0.7259292147659521
                    Centre Distance:  3.0
                    Confidence:  99.43211078643799
                    Category:  True Positive
-------------------------------------------
Frame:  194  Total Penalty:  60.79877393514234
                    GT_area:  26680
                    ST_area:  27216
                    Overlap_area:  24743
                    IOU:  0.8487291187870888
                    Centre Distance:  5.0
                    Confidence:  99.82784986495972
                    Category:  True Positive
-------------------------------------------
Frame:  195  Total Penalty:  60.94793250104597
                    GT_area:  27480
                    ST_area:  25641
                    Overlap_area:  24420
                    IOU:  0.8508414340963729
                    Centre Distance:  4.5
                    Confidence:  99.48959946632385
                    Category:  True Positive
-------------------------------------------
Frame:  196  Total Penalty:  61.14596591918528
                    GT_area:  27588
                    ST_area:  24824
                    Overlap_area:  23326
                    IOU:  0.801966581860689
                    Centre Distance:  2.0
```

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                 Confidence:  99.63429570198059
                 Category:  True Positive
-----------------------------------------
Frame:  197  Total Penalty:  61.32570278855231
                 GT_area:  27140
                 ST_area:  25573
                 Overlap_area:  23754
                 IOU:  0.8202631306329639
                 Centre Distance:  3.5
                 Confidence:  99.63759779930115
                 Category:  True Positive
-----------------------------------------
Frame:  198  Total Penalty:  61.551835864733604
                 GT_area:  26096
                 ST_area:  25410
                 Overlap_area:  22470
                 IOU:  0.7738669238187078
                 Centre Distance:  4.0
                 Confidence:  98.7571120262146
                 Category:  True Positive
-----------------------------------------
Frame:  199  Total Penalty:  61.75866698427819
                 GT_area:  26565
                 ST_area:  25410
                 Overlap_area:  22990
                 IOU:  0.793168880455408
                 Centre Distance:  2.5
                 Confidence:  98.7571120262146
                 Category:  True Positive
-----------------------------------------
Frame:  200  Total Penalty:  62.06268217065647
                 GT_area:  25942
                 ST_area:  33024
                 Overlap_area:  24198
                 IOU:  0.6959848136217212
                 Centre Distance:  8.0
                 Confidence:  99.3782103061676
                 Category:  True Positive
-----------------------------------------
Frame:  201  Total Penalty:  62.30303714496754
                 GT_area:  25680
                 ST_area:  30831
                 Overlap_area:  24396
                 IOU:  0.7596450256889304
                 Centre Distance:  11.0
                 Confidence:  98.95691275596619
                 Category:  True Positive
-----------------------------------------
Frame:  202  Total Penalty:  62.581652574712336
                 GT_area:  26076
                 ST_area:  32606
                 Overlap_area:  24592
                 IOU:  0.7213845702552069
                 Centre Distance:  12.5
```

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              Confidence:  97.99094796180725
              Category:  True Positive
------------------------------------------
Frame:  203  Total Penalty:  62.83853788881579
              GT_area:  28548
              ST_area:  34300
              Overlap_area:  26793
              IOU:  0.743114685896547
              Centre Distance:  6.5
              Confidence:  99.36042428016663
              Category:  True Positive
------------------------------------------
Frame:  204  Total Penalty:  63.13740178865349
              GT_area:  26244
              ST_area:  32452
              Overlap_area:  24192
              IOU:  0.7011361001623
              Centre Distance:  1.5
              Confidence:  96.53881192207336
              Category:  True Positive
------------------------------------------
Frame:  205  Total Penalty:  63.43016313616095
              GT_area:  26487
              ST_area:  32452
              Overlap_area:  24416
              IOU:  0.7072386524925413
              Centre Distance:  2.0
              Confidence:  96.53881192207336
              Category:  True Positive
------------------------------------------
Frame:  206  Total Penalty:  63.531581088153615
              GT_area:  27440
              ST_area:  30537
              Overlap_area:  27440
              IOU:  0.8985820480073353
              Centre Distance:  1.5
              Confidence:  98.65092635154724
              Category:  True Positive
------------------------------------------
Frame:  207  Total Penalty:  63.65000799729077
              GT_area:  28431
              ST_area:  30752
              Overlap_area:  27729
              IOU:  0.8815730908628473
              Centre Distance:  2.5
              Confidence:  96.96412682533264
              Category:  True Positive
------------------------------------------
Frame:  208  Total Penalty:  63.778799285203654
              GT_area:  29040
              ST_area:  33333
              Overlap_area:  29040
              IOU:  0.8712087120871209
              Centre Distance:  0.5
```

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                Confidence:  98.7575888633728
                Category:  True Positive
-----------------------------------------
Frame:  209  Total Penalty:  64.0174109988696
                GT_area:  28920
                ST_area:  36040
                Overlap_area:  28080
                IOU:  0.7613882863340564
                Centre Distance:  5.0
                Confidence:  98.31901788711548
                Category:  True Positive
-----------------------------------------
Frame:  210  Total Penalty:  64.158943718152
                GT_area:  29750
                ST_area:  31992
                Overlap_area:  28520
                IOU:  0.8584672807175968
                Centre Distance:  0.5
                Confidence:  99.21815395355225
                Category:  True Positive
-----------------------------------------
Frame:  211  Total Penalty:  64.30781535125077
                GT_area:  29036
                ST_area:  31992
                Overlap_area:  28060
                IOU:  0.8511283669012376
                Centre Distance:  0.0
                Confidence:  99.21815395355225
                Category:  True Positive
-----------------------------------------
Frame:  212  Total Penalty:  64.55977017314477
                GT_area:  29274
                ST_area:  37122
                Overlap_area:  28413
                IOU:  0.7480451781059948
                Centre Distance:  7.5
                Confidence:  98.76341819763184
                Category:  True Positive
-----------------------------------------
Frame:  213  Total Penalty:  64.782366475364
                GT_area:  29161
                ST_area:  34191
                Overlap_area:  27709
                IOU:  0.7774036977807705
                Centre Distance:  3.0
                Confidence:  99.57557916641235
                Category:  True Positive
-----------------------------------------
Frame:  214  Total Penalty:  64.98835714563161
                GT_area:  29988
                ST_area:  35775
                Overlap_area:  29106
                IOU:  0.794009329732384
                Centre Distance:  3.5
```

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                    Confidence:  99.27258491516113
                    Category:  True Positive
------------------------------------------
Frame:  215  Total Penalty:  65.28466388372014
                    GT_area:  30976
                    ST_area:  41540
                    Overlap_area:  29952
                    IOU:  0.7036932619114745
                    Centre Distance:  12.5
                    Confidence:  99.12791848182678
                    Category:  True Positive
------------------------------------------
Frame:  216  Total Penalty:  65.4165365583791
                    GT_area:  34160
                    ST_area:  38144
                    Overlap_area:  33600
                    IOU:  0.86812732534105
                    Centre Distance:  3.5
                    Confidence:  98.53544235229492
                    Category:  True Positive
------------------------------------------
Frame:  217  Total Penalty:  66.6661386983581
                    GT_area:  35321
                    ST_area:  58208
                    Overlap_area:  34463
                    IOU:  0.5834659533403311
                    Centre Distance:  17.5
                    Confidence:  96.60250544548035
                    Category:  False Positive
------------------------------------------
Frame:  218  Total Penalty:  68.0127284471839
                    GT_area:  32943
                    ST_area:  58208
                    Overlap_area:  32387
                    IOU:  0.5511367503913961
                    Centre Distance:  11.5
                    Confidence:  96.60250544548035
                    Category:  False Positive
------------------------------------------
Frame:  219  Total Penalty:  68.35208213319338
                    GT_area:  35478
                    ST_area:  50032
                    Overlap_area:  34018
                    IOU:  0.6606463139905228
                    Centre Distance:  9.0
                    Confidence:  99.40412640571594
                    Category:  True Positive
------------------------------------------
Frame:  220  Total Penalty:  69.56199216106417
                    GT_area:  34510
                    ST_area:  50851
                    Overlap_area:  31900
                    IOU:  0.5966966573764052
                    Centre Distance:  22.0
```

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                Confidence:  93.35344433784485
                Category:  False Positive
-------------------------------------------
Frame:  221  Total Penalty:  69.84655459960891
                GT_area:  31144
                ST_area:  38640
                Overlap_area:  29104
                IOU:  0.7154375614552606
                Centre Distance:  14.0
                Confidence:  98.96290898323059
                Category:  True Positive
-------------------------------------------
Frame:  222  Total Penalty:  70.0183964633129
                GT_area:  28767
                ST_area:  28990
                Overlap_area:  26164
                IOU:  0.828158136296015
                Centre Distance:  5.5
                Confidence:  99.45979118347168
                Category:  True Positive
-------------------------------------------
Frame:  223  Total Penalty:  70.1871862722301
                GT_area:  28288
                ST_area:  26912
                Overlap_area:  25056
                IOU:  0.8312101910828026
                Centre Distance:  4.0
                Confidence:  99.36385750770569
                Category:  True Positive
-------------------------------------------
Frame:  224  Total Penalty:  70.34001288840537
                GT_area:  27720
                ST_area:  26912
                Overlap_area:  25056
                IOU:  0.8471733838247227
                Centre Distance:  5.0
                Confidence:  99.36385750770569
                Category:  True Positive
-------------------------------------------
Frame:  225  Total Penalty:  70.48119833740054
                GT_area:  25272
                ST_area:  25877
                Overlap_area:  23632
                IOU:  0.8588145510048334
                Centre Distance:  3.0
                Confidence:  98.91828894615173
                Category:  True Positive
-------------------------------------------
Frame:  226  Total Penalty:  70.61856794263679
                GT_area:  23653
                ST_area:  21879
                Overlap_area:  21087
                IOU:  0.8626303947637554
                Centre Distance:  4.0
```

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                Confidence:  99.7062623500824
                Category:  True Positive
-------------------------------------------
Frame:  227  Total Penalty:  70.77736622589859
                GT_area:  23760
                ST_area:  22572
                Overlap_area:  21168
                IOU:  0.8412017167381974
                Centre Distance:  6.5
                Confidence:  99.83476400375366
                Category:  True Positive
-------------------------------------------
Frame:  228  Total Penalty:  70.99976819801168
                GT_area:  24198
                ST_area:  21952
                Overlap_area:  20188
                IOU:  0.7775980278869117
                Centre Distance:  3.5
                Confidence:  99.71033930778503
                Category:  True Positive
-------------------------------------------
Frame:  229  Total Penalty:  71.1705929481452
                GT_area:  24966
                ST_area:  22984
                Overlap_area:  21736
                IOU:  0.8291752498664836
                Centre Distance:  1.0
                Confidence:  99.6339201927185
                Category:  True Positive
-------------------------------------------
Frame:  230  Total Penalty:  71.36268056040788
                GT_area:  24725
                ST_area:  22984
                Overlap_area:  21320
                IOU:  0.8079123877373148
                Centre Distance:  1.5
                Confidence:  99.6339201927185
                Category:  True Positive
-------------------------------------------
Frame:  231  Total Penalty:  71.53126121041163
                GT_area:  24738
                ST_area:  24062
                Overlap_area:  22154
                IOU:  0.8314193499962471
                Centre Distance:  0.0
                Confidence:  99.76140260696411
                Category:  True Positive
-------------------------------------------
Frame:  232  Total Penalty:  71.69044488388101
                GT_area:  25185
                ST_area:  23072
                Overlap_area:  22042
                IOU:  0.8408163265306122
                Centre Distance:  5.0
```

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                    Confidence:  99.35663342475891
                    Category:  True Positive
        ------------------------------------------
Frame:  233  Total Penalty:  71.85231270425994
                    GT_area:  25752
                    ST_area:  23532
                    Overlap_area:  22472
                    IOU:  0.8381321796210652
                    Centre Distance:  5.0
                    Confidence:  99.27812218666077
                    Category:  True Positive
        ------------------------------------------
Frame:  234  Total Penalty:  72.11381659239578
                    GT_area:  26180
                    ST_area:  22557
                    Overlap_area:  20703
                    IOU:  0.738496111864165
                    Centre Distance:  4.0
                    Confidence:  99.63018894195557
                    Category:  True Positive
        ------------------------------------------
Frame:  235  Total Penalty:  72.36322835710166
                    GT_area:  27000
                    ST_area:  25080
                    Overlap_area:  22330
                    IOU:  0.7505882352941177
                    Centre Distance:  1.0
                    Confidence:  99.26571249961853
                    Category:  True Positive
        ------------------------------------------
Frame:  236  Total Penalty:  72.60488829791414
                    GT_area:  27206
                    ST_area:  25080
                    Overlap_area:  22550
                    IOU:  0.7583400591875168
                    Centre Distance:  2.0
                    Confidence:  99.26571249961853
                    Category:  True Positive
        ------------------------------------------
Frame:  237  Total Penalty:  72.78449502809862
                    GT_area:  26520
                    ST_area:  27360
                    Overlap_area:  24282
                    IOU:  0.8203932698155281
                    Centre Distance:  1.0
                    Confidence:  99.47799444198608
                    Category:  True Positive
        ------------------------------------------
Frame:  238  Total Penalty:  72.97860461713971
                    GT_area:  26314
                    ST_area:  26418
                    Overlap_area:  23532
                    IOU:  0.8058904109589041
                    Centre Distance:  0.5
```

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                Confidence:  99.6807873249054
                Category:  True Positive
    ------------------------------------------
    Frame:  239  Total Penalty:  73.146167533896
                GT_area:  25086
                ST_area:  26028
                Overlap_area:  23220
                IOU:  0.8324370832437084
                Centre Distance:  0.5
                Confidence:  99.6020495891571
                Category:  True Positive
    ------------------------------------------
    Frame:  240  Total Penalty:  73.26942437591666
                GT_area:  23647
                ST_area:  23052
                Overlap_area:  21816
                IOU:  0.8767431579793433
                Centre Distance:  3.5
                Confidence:  99.70867037773132
                Category:  True Positive
    ------------------------------------------
    Frame:  241  Total Penalty:  73.49060136125904
                GT_area:  20855
                ST_area:  19800
                Overlap_area:  17800
                IOU:  0.7788230146576242
                Centre Distance:  4.5
                Confidence:  99.37751293182373
                Category:  True Positive
    ------------------------------------------
    Frame:  242  Total Penalty:  73.61681495349205
                GT_area:  18576
                ST_area:  18480
                Overlap_area:  17280
                IOU:  0.8737864077669902
                Centre Distance:  3.0
                Confidence:  98.70727062225342
                Category:  True Positive
    ------------------------------------------
    Frame:  243  Total Penalty:  73.7742971969405
                GT_area:  19135
                ST_area:  18480
                Overlap_area:  17200
                IOU:  0.8425177565515553
                Centre Distance:  4.5
                Confidence:  98.70727062225342
                Category:  True Positive
    ------------------------------------------
    Frame:  244  Total Penalty:  73.92416687548089
                GT_area:  17200
                ST_area:  16872
                Overlap_area:  15656
                IOU:  0.8501303214596003
                Centre Distance:  2.0
```

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                Confidence:  90.86059331893921
                Category:  True Positive
------------------------------------------
Frame:  245  Total Penalty:  74.1144200839443
                GT_area:  16125
                ST_area:  15180
                Overlap_area:  14007
                IOU:  0.8097467915365938
                Centre Distance:  3.0
                Confidence:  94.53063607215881
                Category:  True Positive
------------------------------------------
Frame:  246  Total Penalty:  74.26760492177158
                GT_area:  14688
                ST_area:  13668
                Overlap_area:  13002
                IOU:  0.8468151621727237
                Centre Distance:  1.5
                Confidence:  89.21346068382263
                Category:  True Positive
------------------------------------------
Frame:  247  Total Penalty:  74.46304207432374
                GT_area:  13082
                ST_area:  11913
                Overlap_area:  11144
                IOU:  0.8045628474478377
                Centre Distance:  3.5
                Confidence:  79.28358912467957
                Category:  True Positive
------------------------------------------
Frame:  248  Total Penalty:  74.65385134026839
                GT_area:  12660
                ST_area:  11395
                Overlap_area:  10759
                IOU:  0.809190734055355
                Centre Distance:  3.5
                Confidence:  74.4369626045227
                Category:  True Positive
------------------------------------------
Frame:  249  Total Penalty:  74.79627297710103
                GT_area:  12369
                ST_area:  11395
                Overlap_area:  10971
                IOU:  0.8575783631673571
                Centre Distance:  2.0
                Confidence:  74.4369626045227
                Category:  True Positive
------------------------------------------
Frame:  250  Total Penalty:  75.79627297710103
                GT_area:  11077
                ST_area:  11395
                Overlap_area:  0
                IOU:  0.9099099099099099
                Centre Distance:  0.0
```

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                Confidence:  59.03482437133789
                Category:  False Negative
---------------------------------------
Frame:  251  Total Penalty:  76.79627297710103
                GT_area:  10850
                ST_area:  11395
                Overlap_area:  0
                IOU:  0.8859686307757524
                Centre Distance:  1.5
                Confidence:  39.64434862136841
                Category:  False Negative
---------------------------------------
Frame:  252  Total Penalty:  77.79627297710103
                GT_area:  10128
                ST_area:  11395
                Overlap_area:  0
                IOU:  0.842249422237439
                Centre Distance:  2.5
                Confidence:  31.317102909088135
                Category:  False Negative
---------------------------------------
Frame:  253  Total Penalty:  78.79627297710103
                GT_area:  9030
                ST_area:  11395
                Overlap_area:  0
                IOU:  0.7592592592592593
                Centre Distance:  5.0
                Confidence:  36.665961146354675
                Category:  False Negative
---------------------------------------
Frame:  254  Total Penalty:  79.79627297710103
                GT_area:  7752
                ST_area:  11395
                Overlap_area:  0
                IOU:  0.6636545312364237
                Centre Distance:  7.5
                Confidence:  15.163053572177887
                Category:  False Negative
---------------------------------------
Frame:  255  Total Penalty:  80.79627297710103
                GT_area:  7904
                ST_area:  11395
                Overlap_area:  0
                IOU:  0.6768615865844122
                Centre Distance:  7.5
                Confidence:  15.163053572177887
                Category:  False Negative
---------------------------------------
Frame:  256  Total Penalty:  81.79627297710103
                GT_area:  6501
                ST_area:  11395
                Overlap_area:  0
                IOU:  0.5705133830627468
                Centre Distance:  10.0
```

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                    Confidence:  7.146124541759491
                    Category:  False Negative
------------------------------------------
Frame:  257  Total Penalty:  82.79627297710103
                    GT_area:  5070
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.4449319877139096
                    Centre Distance:  13.5
                    Confidence:  3.130503371357918
                    Category:  False Negative
------------------------------------------
Frame:  258  Total Penalty:  83.79627297710103
                    GT_area:  4324
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.37946467749012724
                    Centre Distance:  15.0
                    Confidence:  0.478534959256649
                    Category:  False Negative
------------------------------------------
Frame:  259  Total Penalty:  84.79627297710103
                    GT_area:  2499
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.21930671347082054
                    Centre Distance:  18.0
                    Confidence:  0.1582309021614492
                    Category:  False Negative
------------------------------------------
Frame:  260  Total Penalty:  85.79627297710103
                    GT_area:  780
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.06845107503290918
                    Centre Distance:  21.5
                    Confidence:  0.07993188919499516
                    Category:  False Negative
------------------------------------------
Frame:  261  Total Penalty:  86.79627297710103
                    GT_area:  870
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.07634927599824484
                    Centre Distance:  21.5
                    Confidence:  0.07993188919499516
                    Category:  False Negative
------------------------------------------
Frame:  262  Total Penalty:  87.79627297710103
                    GT_area:  296
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.025976305397103994
                    Centre Distance:  22.5
```

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          Confidence:  0.37593510933220387
          Category:  False Negative
-----------------------------------------
Frame:  263  Total Penalty:  87.79627297710103
          GT_area:  12
          ST_area:  11395
          Overlap_area:  13800
          IOU:  5.76681989134977
          Centre Distance:  328.0
          Confidence:  0.7350626401603222
          Category:  True Negative
-----------------------------------------
Frame:  264  Total Penalty:  87.79627297710103
          GT_area:  9
          ST_area:  11395
          Overlap_area:  16200
          IOU:  3.377814845704754
          Centre Distance:  352.0
          Confidence:  0.9272773750126362
          Category:  True Negative
-----------------------------------------
Frame:  265  Total Penalty:  87.79627297710103
          GT_area:  6
          ST_area:  11395
          Overlap_area:  15850
          IOU:  3.5625983367048777
          Centre Distance:  345.0
          Confidence:  1.6044873744249344
          Category:  True Negative
-----------------------------------------
Frame:  266  Total Penalty:  87.79627297710103
          GT_area:  20
          ST_area:  11395
          Overlap_area:  14355
          IOU:  4.88265306122449
          Centre Distance:  347.5
          Confidence:  1.5260790474712849
          Category:  True Negative
-----------------------------------------
Frame:  267  Total Penalty:  87.79627297710103
          GT_area:  12
          ST_area:  11395
          Overlap_area:  11803
          IOU:  29.805555555555557
          Centre Distance:  346.5
          Confidence:  1.5710394829511642
          Category:  True Negative
-----------------------------------------
Frame:  268  Total Penalty:  87.79627297710103
          GT_area:  2
          ST_area:  11395
          Overlap_area:  14674
          IOU:  4.477876106194691
          Centre Distance:  346.0
```

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                    Confidence:  1.5710394829511642
                    Category:  True Negative
-------------------------------------------
Frame:  269  Total Penalty:  87.79627297710103
                    GT_area:  2
                    ST_area:  11395
                    Overlap_area:  13948
                    IOU:  5.46765974127793
                    Centre Distance:  344.5
                    Confidence:  1.6959572210907936
                    Category:  True Negative
-------------------------------------------
Frame:  270  Total Penalty:  87.79627297710103
                    GT_area:  16
                    ST_area:  11395
                    Overlap_area:  11270
                    IOU:  79.9290780141844
                    Centre Distance:  350.5
                    Confidence:  0.6291827652603388
                    Category:  True Negative
-------------------------------------------
Frame:  271  Total Penalty:  87.79627297710103
                    GT_area:  20
                    ST_area:  11395
                    Overlap_area:  12402
                    IOU:  12.565349544072948
                    Centre Distance:  347.0
                    Confidence:  0.9368587285280228
                    Category:  True Negative
-------------------------------------------
Frame:  272  Total Penalty:  88.79627297710103
                    GT_area:  3800
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.3334795963141729
                    Centre Distance:  16.5
                    Confidence:  1.193652581423521
                    Category:  False Negative
-------------------------------------------
Frame:  273  Total Penalty:  89.79627297710103
                    GT_area:  7175
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.6296621325142606
                    Centre Distance:  9.0
                    Confidence:  1.8596217036247253
                    Category:  False Negative
-------------------------------------------
Frame:  274  Total Penalty:  90.79627297710103
                    GT_area:  7420
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.6511627906976745
                    Centre Distance:  9.0
```

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                    Confidence:  1.8596217036247253
                    Category:  False Negative
------------------------------------------
Frame:   275  Total Penalty:  91.79627297710103
                    GT_area:  12470
                    ST_area:  11395
                    Overlap_area:  0
                    IOU:  0.8818009777637597
                    Centre Distance:  2.5
                    Confidence:  59.96692776679993
                    Category:  False Negative
------------------------------------------
Frame:   276  Total Penalty:  91.97597588994772
                    GT_area:  16275
                    ST_area:  15096
                    Overlap_area:  14137
                    IOU:  0.8202970871533016
                    Centre Distance:  4.5
                    Confidence:  95.25529742240906
                    Category:  True Positive
------------------------------------------
Frame:   277  Total Penalty:  92.17775136618224
                    GT_area:  20832
                    ST_area:  18060
                    Overlap_area:  17264
                    IOU:  0.7982245237654891
                    Centre Distance:  7.0
                    Confidence:  99.03103709220886
                    Category:  True Positive
------------------------------------------
Frame:   278  Total Penalty:  92.35737084377011
                    GT_area:  25857
                    ST_area:  24948
                    Overlap_area:  22896
                    IOU:  0.8203805224121251
                    Centre Distance:  2.5
                    Confidence:  99.66894388198853
                    Category:  True Positive
------------------------------------------
Frame:   279  Total Penalty:  92.6135532239865
                    GT_area:  28416
                    ST_area:  25740
                    Overlap_area:  23100
                    IOU:  0.7438176197836167
                    Centre Distance:  3.0
                    Confidence:  99.54244494438171
                    Category:  True Positive
------------------------------------------
Frame:   280  Total Penalty:  92.85019193472486
                    GT_area:  27875
                    ST_area:  25740
                    Overlap_area:  23210
                    IOU:  0.7633612892616346
                    Centre Distance:  2.5
```

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                  Confidence:  99.54244494438171
                  Category:  True Positive
------------------------------------------
Frame:  281  Total Penalty:  93.07976037597498
                  GT_area:  27875
                  ST_area:  26564
                  Overlap_area:  23690
                  IOU:  0.770431558749878
                  Centre Distance:  5.5
                  Confidence:  99.61841702461243
                  Category:  True Positive
------------------------------------------
Frame:  282  Total Penalty:  93.28191447705204
                  GT_area:  28892
                  ST_area:  27528
                  Overlap_area:  25038
                  IOU:  0.7978458989229494
                  Centre Distance:  7.0
                  Confidence:  99.573814868927
                  Category:  True Positive
------------------------------------------
Frame:  283  Total Penalty:  93.47227155290722
                  GT_area:  28980
                  ST_area:  28896
                  Overlap_area:  25894
                  IOU:  0.8096429241448315
                  Centre Distance:  6.5
                  Confidence:  99.01161789894104
                  Category:  True Positive
------------------------------------------
Frame:  284  Total Penalty:  93.67863595056244
                  GT_area:  30916
                  ST_area:  29056
                  Overlap_area:  26536
                  IOU:  0.793635602344778
                  Centre Distance:  5.5
                  Confidence:  99.0845263004303
                  Category:  True Positive
------------------------------------------
Frame:  285  Total Penalty:  93.9400374077901
                  GT_area:  27798
                  ST_area:  30186
                  Overlap_area:  24633
                  IOU:  0.7385985427723306
                  Centre Distance:  7.0
                  Confidence:  99.57175850868225
                  Category:  True Positive
------------------------------------------
Frame:  286  Total Penalty:  94.16643144862365
                  GT_area:  28625
                  ST_area:  30186
                  Overlap_area:  25652
                  IOU:  0.7736059591664405
                  Centre Distance:  6.0
```

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                Confidence:  99.57175850868225
                Category:  True Positive
----------------------------------------
Frame:  287  Total Penalty:  94.41709294095034
                GT_area:  28413
                ST_area:  31089
                Overlap_area:  25488
                IOU:  0.749338507673311
                Centre Distance:  8.0
                Confidence:  99.58226680755615
                Category:  True Positive
----------------------------------------
Frame:  288  Total Penalty:  94.67813435700121
                GT_area:  29358
                ST_area:  31356
                Overlap_area:  25800
                IOU:  0.7389585839491322
                Centre Distance:  10.0
                Confidence:  99.58035349845886
                Category:  True Positive
----------------------------------------
Frame:  289  Total Penalty:  95.59892813980068
                GT_area:  27951
                ST_area:  31088
                Overlap_area:  24168
                IOU:  0.6930687390668464
                Centre Distance:  13.5
                Confidence:  99.4440495967865
                Category:  False Positive
----------------------------------------
Frame:  290  Total Penalty:  96.68872752688831
                GT_area:  29140
                ST_area:  34416
                Overlap_area:  24725
                IOU:  0.6367335376374547
                Centre Distance:  19.0
                Confidence:  99.67317581176758
                Category:  False Positive
----------------------------------------
Frame:  291  Total Penalty:  97.74265617981294
                GT_area:  28670
                ST_area:  36356
                Overlap_area:  25585
                IOU:  0.6486904490251262
                Centre Distance:  16.5
                Confidence:  98.78584146499634
                Category:  False Positive
----------------------------------------
Frame:  292  Total Penalty:  98.85583081280723
                GT_area:  27144
                ST_area:  33552
                Overlap_area:  23435
                IOU:  0.6289417890019054
                Centre Distance:  21.0
```

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                    Confidence:  99.14472103118896
                    Category:  False Positive
------------------------------------------
Frame:  293  Total Penalty:  99.85101463043445
                    GT_area:  28798
                    ST_area:  33552
                    Overlap_area:  24976
                    IOU:  0.6682720607909242
                    Centre Distance:  19.5
                    Confidence:  99.14472103118896
                    Category:  False Positive
------------------------------------------
Frame:  294  Total Penalty:  100.14812061178537
                    GT_area:  27612
                    ST_area:  32289
                    Overlap_area:  24725
                    IOU:  0.702894018649079
                    Centre Distance:  14.0
                    Confidence:  98.85472059249878
                    Category:  True Positive
------------------------------------------
Frame:  295  Total Penalty:  100.39888163433783
                    GT_area:  27261
                    ST_area:  26180
                    Overlap_area:  22890
                    IOU:  0.7492389774475468
                    Centre Distance:  9.0
                    Confidence:  98.58710169792175
                    Category:  True Positive
------------------------------------------
Frame:  296  Total Penalty:  100.66077389518
                    GT_area:  24804
                    ST_area:  24852
                    Overlap_area:  21087
                    IOU:  0.7381077391578285
                    Centre Distance:  11.0
                    Confidence:  98.98549318313599
                    Category:  True Positive
------------------------------------------
Frame:  297  Total Penalty:  100.92206317974505
                    GT_area:  23000
                    ST_area:  25630
                    Overlap_area:  20661
                    IOU:  0.7387107154349458
                    Centre Distance:  8.0
                    Confidence:  99.03054237365723
                    Category:  True Positive
------------------------------------------
Frame:  298  Total Penalty:  101.16880718373054
                    GT_area:  24232
                    ST_area:  25038
                    Overlap_area:  21168
                    IOU:  0.7532559960145185
                    Centre Distance:  7.5
```

```
                    Confidence:  99.05351996421814
                    Category:  True Positive
--------------------------------------------
Frame:  299  Total Penalty:  101.43988297141149
                    GT_area:  23690
                    ST_area:  25038
                    Overlap_area:  20544
                    IOU:  0.7289242123190462
                    Centre Distance:  9.0
                    Confidence:  99.05351996421814
                    Category:  True Positive
--------------------------------------------
Frame:  300  Total Penalty:  102.34974898846387
                    GT_area:  23587
                    ST_area:  25168
                    Overlap_area:  20020
                    IOU:  0.6967113276492083
                    Centre Distance:  12.5
                    Confidence:  99.35210347175598
                    Category:  False Positive
--------------------------------------------
Frame:  301  Total Penalty:  102.59134211987336
                    GT_area:  25179
                    ST_area:  26432
                    Overlap_area:  22260
                    IOU:  0.758406868590508
                    Centre Distance:  5.5
                    Confidence:  99.08402562141418
                    Category:  True Positive
--------------------------------------------
Frame:  302  Total Penalty:  102.86902480585098
                    GT_area:  24948
                    ST_area:  27376
                    Overlap_area:  21944
                    IOU:  0.7223173140223832
                    Centre Distance:  8.0
                    Confidence:  99.00668859481812
                    Category:  True Positive
--------------------------------------------
Frame:  303  Total Penalty:  103.16967503439666
                    GT_area:  24732
                    ST_area:  28060
                    Overlap_area:  21726
                    IOU:  0.6993497714543231
                    Centre Distance:  9.5
                    Confidence:  99.57356452941895
                    Category:  True Positive
--------------------------------------------
Frame:  304  Total Penalty:  103.39340457789365
                    GT_area:  25312
                    ST_area:  24182
                    Overlap_area:  21630
                    IOU:  0.7762704565030146
                    Centre Distance:  6.5
```

```
                    Confidence:  99.28781390190125
                    Category:  True Positive
---------------------------------------------
Frame:  305  Total Penalty:  103.63266284839402
                    GT_area:  24624
                    ST_area:  24182
                    Overlap_area:  21087
                    IOU:  0.7607417294996212
                    Centre Distance:  8.5
                    Confidence:  99.28781390190125
                    Category:  True Positive
---------------------------------------------
Frame:  306  Total Penalty:  103.82507193437864
                    GT_area:  25538
                    ST_area:  24516
                    Overlap_area:  22363
                    IOU:  0.8075909140153841
                    Centre Distance:  3.5
                    Confidence:  97.39862084388733
                    Category:  True Positive
---------------------------------------------
Frame:  307  Total Penalty:  104.80264072131389
                    GT_area:  25080
                    ST_area:  27612
                    Overlap_area:  21218
                    IOU:  0.6741437376882506
                    Centre Distance:  11.0
                    Confidence:  98.20076823234558
                    Category:  False Positive
---------------------------------------------
Frame:  308  Total Penalty:  105.05284136336847
                    GT_area:  25650
                    ST_area:  26676
                    Overlap_area:  22422
                    IOU:  0.7497993579454254
                    Centre Distance:  4.5
                    Confidence:  98.81542921066284
                    Category:  True Positive
---------------------------------------------
Frame:  309  Total Penalty:  105.36094448198125
                    GT_area:  23976
                    ST_area:  27346
                    Overlap_area:  20988
                    IOU:  0.6918968813872223
                    Centre Distance:  8.5
                    Confidence:  97.70729541778564
                    Category:  True Positive
---------------------------------------------
Frame:  310  Total Penalty:  105.69270091909688
                    GT_area:  24198
                    ST_area:  25172
                    Overlap_area:  19776
                    IOU:  0.6682435628843685
                    Centre Distance:  9.5
```

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                Confidence:  98.58161211013794
                Category:  True Positive
-------------------------------------------
Frame:  311  Total Penalty:  106.0034207885823
                GT_area:  24530
                ST_area:  25172
                Overlap_area:  20280
                IOU:  0.6892801305145809
                Centre Distance:  9.0
                Confidence:  98.58161211013794
                Category:  True Positive
-------------------------------------------
Frame:  312  Total Penalty:  107.33762816474373
                GT_area:  23108
                ST_area:  31460
                Overlap_area:  19482
                IOU:  0.5552642079461894
                Centre Distance:  16.0
                Confidence:  98.60045313835144
                Category:  False Positive
-------------------------------------------
Frame:  313  Total Penalty:  108.55120375610473
                GT_area:  23976
                ST_area:  31872
                Overlap_area:  20844
                IOU:  0.5954748028796709
                Centre Distance:  11.5
                Confidence:  97.88854718208313
                Category:  False Positive
-------------------------------------------
Frame:  314  Total Penalty:  109.76995375610473
                GT_area:  22360
                ST_area:  30680
                Overlap_area:  19760
                IOU:  0.59375
                Centre Distance:  11.0
                Confidence:  97.4663496017456
                Category:  False Positive
-------------------------------------------
Frame:  315  Total Penalty:  111.07215155830252
                GT_area:  22578
                ST_area:  29862
                Overlap_area:  18952
                IOU:  0.5659340659340659
                Centre Distance:  13.0
                Confidence:  97.68442511558533
                Category:  False Positive
-------------------------------------------
Frame:  316  Total Penalty:  112.17647203079402
                GT_area:  21840
                ST_area:  29000
                Overlap_area:  19686
                IOU:  0.6318931758361687
                Centre Distance:  12.5
```

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                Confidence:  97.2271740436554
                Category:  False Positive
------------------------------------------
Frame:  317  Total Penalty:  112.45941763163361
                GT_area:  23108
                ST_area:  25974
                Overlap_area:  20497
                IOU:  0.7170543991603988
                Centre Distance:  10.0
                Confidence:  95.65949440002441
                Category:  True Positive
------------------------------------------
Frame:  318  Total Penalty:  113.37812821327341
                GT_area:  22366
                ST_area:  25974
                Overlap_area:  19800
                IOU:  0.6937631394533987
                Centre Distance:  11.5
                Confidence:  95.65949440002441
                Category:  False Positive
------------------------------------------
Frame:  319  Total Penalty:  114.67956087802986
                GT_area:  22152
                ST_area:  32508
                Overlap_area:  19760
                IOU:  0.566189111747851
                Centre Distance:  10.5
                Confidence:  97.95714616775513
                Category:  False Positive
------------------------------------------
Frame:  320  Total Penalty:  115.78918726645126
                GT_area:  21311
                ST_area:  27120
                Overlap_area:  18721
                IOU:  0.6301245371928643
                Centre Distance:  13.5
                Confidence:  97.646164894104
                Category:  False Positive
------------------------------------------
Frame:  321  Total Penalty:  116.77749178482988
                GT_area:  21424
                ST_area:  24570
                Overlap_area:  18462
                IOU:  0.670565160540462
                Centre Distance:  12.5
                Confidence:  96.4840829372406
                Category:  False Positive
------------------------------------------
Frame:  322  Total Penalty:  117.07289139975758
                GT_area:  19291
                ST_area:  22320
                Overlap_area:  17200
                IOU:  0.7046003850723035
                Centre Distance:  12.5
```

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                    Confidence:  93.21653246879578
                    Category:  True Positive
---------------------------------------------
Frame:  323  Total Penalty:  118.02135804534721
                    GT_area:  18025
                    ST_area:  19257
                    Overlap_area:  15141
                    IOU:  0.6838444514701233
                    Centre Distance:  11.0
                    Confidence:  94.19642686843872
                    Category:  False Positive
---------------------------------------------
Frame:  324  Total Penalty:  119.0757798140547
                    GT_area:  16366
                    ST_area:  19257
                    Overlap_area:  14014
                    IOU:  0.6485260770975056
                    Centre Distance:  12.5
                    Confidence:  94.19642686843872
                    Category:  False Positive
---------------------------------------------
Frame:  325  Total Penalty:  119.30858169425542
                    GT_area:  14157
                    ST_area:  13664
                    Overlap_area:  12078
                    IOU:  0.7671981197992759
                    Centre Distance:  5.5
                    Confidence:  97.35817313194275
                    Category:  True Positive
---------------------------------------------
Frame:  326  Total Penalty:  119.45410622132118
                    GT_area:  11656
                    ST_area:  10989
                    Overlap_area:  10434
                    IOU:  0.8544754729342396
                    Centre Distance:  0.5
                    Confidence:  99.234139919281
                    Category:  True Positive
---------------------------------------------
Frame:  327  Total Penalty:  119.59305228966207
                    GT_area:  9434
                    ST_area:  8648
                    Overlap_area:  8366
                    IOU:  0.861053931659119
                    Centre Distance:  0.5
                    Confidence:  98.63417744636536
                    Category:  True Positive
---------------------------------------------
Frame:  328  Total Penalty:  119.73459311382383
                    GT_area:  7482
                    ST_area:  7040
                    Overlap_area:  6708
                    IOU:  0.858459175838239
                    Centre Distance:  1.0
```

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                Confidence:  98.33261370658875
                Category:  True Positive
------------------------------------------
Frame:  329  Total Penalty:  120.01233298007196
                GT_area:  7138
                ST_area:  5481
                Overlap_area:  5292
                IOU:  0.7222601337518766
                Centre Distance:  2.5
                Confidence:  97.616708278656
                Category:  True Positive
------------------------------------------
Frame:  330  Total Penalty:  120.21876451534168
                GT_area:  6622
                ST_area:  5481
                Overlap_area:  5355
                IOU:  0.7935684647302904
                Centre Distance:  1.5
                Confidence:  97.616708278656
                Category:  True Positive
------------------------------------------
Frame:  331  Total Penalty:  120.36722605380321
                GT_area:  5146
                ST_area:  4482
                Overlap_area:  4428
                IOU:  0.8515384615384616
                Centre Distance:  1.0
                Confidence:  95.25961875915527
                Category:  True Positive
------------------------------------------
Frame:  332  Total Penalty:  121.34925710814831
                GT_area:  3936
                ST_area:  61100
                Overlap_area:  1148
                IOU:  0.017968945654896068
                Centre Distance:  0.0
                Confidence:  97.66761660575867
                Category:  True Positive
------------------------------------------
Frame:  333  Total Penalty:  122.32651175316164
                GT_area:  3159
                ST_area:  62400
                Overlap_area:  1458
                IOU:  0.022745354986661675
                Centre Distance:  6.5
                Confidence:  96.22459411621094
                Category:  True Positive
------------------------------------------
Frame:  334  Total Penalty:  123.31203141728639
                GT_area:  2496
                ST_area:  68544
                Overlap_area:  1014
                IOU:  0.014480335875246338
                Centre Distance:  2.0
```

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                Confidence:  96.50156497955322
                Category:  True Positive
        -----------------------------------------
Frame:  335  Total Penalty:  124.29888150832423
                GT_area:  1800
                ST_area:  73320
                Overlap_area:  975
                IOU:  0.013149908962168723
                Centre Distance:  2.5
                Confidence:  93.42761039733887
                Category:  True Positive
        -----------------------------------------
Frame:  336  Total Penalty:  125.2819717640841
                GT_area:  1425
                ST_area:  70740
                Overlap_area:  1200
                IOU:  0.016909744240118367
                Centre Distance:  7.5
                Confidence:  76.83680057525635
                Category:  True Positive
        -----------------------------------------
Frame:  337  Total Penalty:  126.26532150392379
                GT_area:  1554
                ST_area:  70740
                Overlap_area:  1184
                IOU:  0.016650260160315004
                Centre Distance:  6.0
                Confidence:  76.83680057525635
                Category:  True Positive
        -----------------------------------------
Frame:  338  Total Penalty:  127.25038231274422
                GT_area:  1065
                ST_area:  71289
                Overlap_area:  1065
                IOU:  0.01493919117956487
                Centre Distance:  0.0
                Confidence:  87.87465691566467
                Category:  True Positive
        -----------------------------------------
Frame:  339  Total Penalty:  128.24013195227758
                GT_area:  368
                ST_area:  76704
                Overlap_area:  782
                IOU:  0.01025036046664045
                Centre Distance:  7.0
                Confidence:  81.1402440071106
                Category:  True Positive
        -----------------------------------------
Frame:  340  Total Penalty:  131.23429138400607
                GT_area:  8
                ST_area:  76160
                Overlap_area:  148
                IOU:  0.0019468560905024994
                Centre Distance:  117.0
```

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                Confidence:  74.15417432785034
                Category:  False Positive
-------------------------------------------
Frame:  341  Total Penalty:  131.23429138400607
                GT_area:  6
                ST_area:  76160
                Overlap_area:  58
                IOU:  0.0007620749461291848
                Centre Distance:  126.0
                Confidence:  44.62660551071167
                Category:  True Negative
-------------------------------------------
Frame:  342  Total Penalty:  134.23429138400607
                GT_area:  0
                ST_area:  81771
                Overlap_area:  0
                IOU:  0.0
                Centre Distance:  125.0
                Confidence:  64.66919183731079
                Category:  False Positive
-------------------------------------------
Frame:  343  Total Penalty:  137.23418132053612
                GT_area:  3
                ST_area:  81771
                Overlap_area:  3
                IOU:  3.668782331144293e-05
                Centre Distance:  145.0
                Confidence:  64.66919183731079
                Category:  False Positive
-------------------------------------------
Frame:  344  Total Penalty:  137.23418132053612
                GT_area:  9
                ST_area:  81771
                Overlap_area:  12
                IOU:  0.000146756677428823
                Centre Distance:  146.0
                Confidence:  40.51696956157684
                Category:  True Negative
-------------------------------------------
Frame:  345  Total Penalty:  140.23390442088916
                GT_area:  8
                ST_area:  86674
                Overlap_area:  8
                IOU:  9.229988231765004e-05
                Centre Distance:  137.5
                Confidence:  68.53931546211243
                Category:  False Positive
-------------------------------------------
Frame:  346  Total Penalty:  143.23347816342965
                GT_area:  12
                ST_area:  84456
                Overlap_area:  12
                IOU:  0.00014208581983518045
                Centre Distance:  134.0
```

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                    Confidence:  83.87982845306396
                    Category:  False Positive
--------------------------------------------
Frame:  347  Total Penalty:  146.23155197680356
                    GT_area:  8
                    ST_area:  84150
                    Overlap_area:  54
                    IOU:  0.000642062208693998
                    Centre Distance:  166.5
                    Confidence:  72.36865162849426
                    Category:  False Positive
--------------------------------------------
Frame:  348  Total Penalty:  149.22873428167816
                    GT_area:  6
                    ST_area:  85250
                    Overlap_area:  80
                    IOU:  0.0009392317084624777
                    Centre Distance:  179.0
                    Confidence:  87.97043561935425
                    Category:  False Positive
--------------------------------------------
Frame:  349  Total Penalty:  152.22648060184156
                    GT_area:  8
                    ST_area:  85250
                    Overlap_area:  64
                    IOU:  0.0007512266122027373
                    Centre Distance:  171.5
                    Confidence:  87.97043561935425
                    Category:  False Positive
--------------------------------------------
Frame:  350  Total Penalty:  155.2254618223394
                    GT_area:  8
                    ST_area:  88363
                    Overlap_area:  30
                    IOU:  0.0003395931673854722
                    Centre Distance:  155.5
                    Confidence:  60.80096364021301
                    Category:  False Positive
--------------------------------------------
Frame:  351  Total Penalty:  158.22455873098824
                    GT_area:  6
                    ST_area:  86390
                    Overlap_area:  26
                    IOU:  0.00030103045038786614
                    Centre Distance:  147.0
                    Confidence:  76.92114114761353
                    Category:  False Positive
--------------------------------------------
Frame:  352  Total Penalty:  161.22156749104806
                    GT_area:  8
                    ST_area:  84322
                    Overlap_area:  84
                    IOU:  0.0009970799800584004
                    Centre Distance:  155.0
```

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                Confidence:  73.78443479537964
                Category:  False Positive
-------------------------------------------
Frame:  353  Total Penalty:  164.22128858991852
                GT_area:  8
                ST_area:  86052
                Overlap_area:  8
                IOU:  9.296704318319155e-05
                Centre Distance:  137.0
                Confidence:  71.31086587905884
                Category:  False Positive
-------------------------------------------
Frame:  354  Total Penalty:  167.22100950392513
                GT_area:  8
                ST_area:  85995
                Overlap_area:  8
                IOU:  9.302866445723589e-05
                Centre Distance:  129.5
                Confidence:  71.56870365142822
                Category:  False Positive
-------------------------------------------
Frame:  355  Total Penalty:  170.22080019429805
                GT_area:  8
                ST_area:  85995
                Overlap_area:  6
                IOU:  6.976987569333814e-05
                Centre Distance:  135.5
                Confidence:  71.56870365142822
                Category:  False Positive
-------------------------------------------
Frame:  356  Total Penalty:  173.21912758866938
                GT_area:  8
                ST_area:  82544
                Overlap_area:  46
                IOU:  0.0005575352095605168
                Centre Distance:  159.0
                Confidence:  71.09516859054565
                Category:  False Positive
-------------------------------------------
Frame:  357  Total Penalty:  176.21776352305432
                GT_area:  12
                ST_area:  85800
                Overlap_area:  39
                IOU:  0.0004546885383512294
                Centre Distance:  152.5
                Confidence:  73.3975887298584
                Category:  False Positive
-------------------------------------------
Frame:  358  Total Penalty:  176.21776352305432
                GT_area:  8
                ST_area:  85800
                Overlap_area:  80
                IOU:  0.000933184023889511
                Centre Distance:  179.5
```

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                 Confidence:  43.34963262081146
                 Category:  True Negative
-------------------------------------------
Frame:  359  Total Penalty:  176.21776352305432
                 GT_area:  8
                 ST_area:  85800
                 Overlap_area:  18
                 IOU:  0.00020981466371371954
                 Centre Distance:  148.5
                 Confidence:  44.631269574165344
                 Category:  True Negative
-------------------------------------------
Frame:  360  Total Penalty:  176.21776352305432
                 GT_area:  12
                 ST_area:  85800
                 Overlap_area:  15
                 IOU:  0.000174831287807266
                 Centre Distance:  144.5
                 Confidence:  21.791402995586395
                 Category:  True Negative
-------------------------------------------
Frame:  361  Total Penalty:  176.21776352305432
                 GT_area:  6
                 ST_area:  85800
                 Overlap_area:  20
                 IOU:  0.00023313827431049357
                 Centre Distance:  149.0
                 Confidence:  40.46487212181091
                 Category:  True Negative
-------------------------------------------
Frame:  362  Total Penalty:  176.21776352305432
                 GT_area:  9
                 ST_area:  85800
                 Overlap_area:  9
                 IOU:  0.0001048951048951049
                 Centre Distance:  133.0
                 Confidence:  40.46487212181091
                 Category:  True Negative
-------------------------------------------
Frame:  363  Total Penalty:  176.21776352305432
                 GT_area:  6
                 ST_area:  85800
                 Overlap_area:  14
                 IOU:  0.00016318537859007833
                 Centre Distance:  146.0
                 Confidence:  51.659685373306274
                 Category:  True Negative
-------------------------------------------
Frame:  364  Total Penalty:  179.21776352305432
                 GT_area:  0
                 ST_area:  87425
                 Overlap_area:  0
                 IOU:  0.0
                 Centre Distance:  164.5
```

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                Confidence:  62.24936842918396
                Category:  False Positive
------------------------------------------
Frame:  365  Total Penalty:  179.21776352305432
                GT_area:  9
                ST_area:  87425
                Overlap_area:  36
                IOU:  0.0004119087393304195
                Centre Distance:  148.0
                Confidence:  54.26688194274902
                Category:  True Negative
------------------------------------------
Frame:  366  Total Penalty:  179.21776352305432
                GT_area:  8
                ST_area:  87425
                Overlap_area:  16
                IOU:  0.00018303076060720454
                Centre Distance:  144.5
                Confidence:  57.76229500770569
                Category:  True Negative
------------------------------------------
Frame:  367  Total Penalty:  182.21652398168462
                GT_area:  9
                ST_area:  87156
                Overlap_area:  36
                IOU:  0.0004131804565644045
                Centre Distance:  148.0
                Confidence:  62.55202293395996
                Category:  False Positive
------------------------------------------
Frame:  368  Total Penalty:  185.21521547177898
                GT_area:  4
                ST_area:  87156
                Overlap_area:  38
                IOU:  0.0004361699685498496
                Centre Distance:  154.5
                Confidence:  62.55202293395996
                Category:  False Positive
------------------------------------------
Frame:  369  Total Penalty:  185.21521547177898
                GT_area:  6
                ST_area:  87156
                Overlap_area:  2
                IOU:  2.2946305644791188e-05
                Centre Distance:  135.0
                Confidence:  46.71229124069214
                Category:  True Negative
------------------------------------------
Frame:  370  Total Penalty:  188.21427175758956
                GT_area:  8
                ST_area:  89030
                Overlap_area:  28
                IOU:  0.00031457139647230646
                Centre Distance:  161.0
```

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                    Confidence:  62.42300271987915
                    Category:  False Positive
---------------------------------------------
Frame:  371  Total Penalty:  191.21258649958457
                    GT_area:  8
                    ST_area:  74800
                    Overlap_area:  42
                    IOU:  0.0005617526683251745
                    Centre Distance:  160.5
                    Confidence:  65.62729477882385
                    Category:  False Positive
---------------------------------------------
Frame:  372  Total Penalty:  191.36535466567454
                    GT_area:  5544
                    ST_area:  5133
                    Overlap_area:  4897
                    IOU:  0.8472318339100346
                    Centre Distance:  2.5
                    Confidence:  98.7971842288971
                    Category:  True Positive
---------------------------------------------
Frame:  373  Total Penalty:  191.6435304932986
                    GT_area:  15862
                    ST_area:  17061
                    Overlap_area:  13802
                    IOU:  0.7218241723759218
                    Centre Distance:  4.0
                    Confidence:  92.25428104400635
                    Category:  True Positive
---------------------------------------------
Frame:  374  Total Penalty:  191.9300317261825
                    GT_area:  15600
                    ST_area:  17061
                    Overlap_area:  13600
                    IOU:  0.7134987671161009
                    Centre Distance:  5.5
                    Confidence:  92.25428104400635
                    Category:  True Positive
---------------------------------------------
Frame:  375  Total Penalty:  193.3648463591312
                    GT_area:  20904
                    ST_area:  28680
                    Overlap_area:  17000
                    IOU:  0.5217284556837711
                    Centre Distance:  12.0
                    Confidence:  93.70158314704895
                    Category:  False Positive
---------------------------------------------
Frame:  376  Total Penalty:  194.82508812468515
                    GT_area:  22018
                    ST_area:  32562
                    Overlap_area:  18512
                    IOU:  0.5132527448153488
                    Centre Distance:  17.5
```

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                    Confidence:  97.53382205963135
                    Category:  False Positive
------------------------------------------
Frame:  377  Total Penalty:  196.33494485203622
                    GT_area:  21828
                    ST_area:  33748
                    Overlap_area:  18444
                    IOU:  0.4967144242163094
                    Centre Distance:  19.0
                    Confidence:  95.2584445476532
                    Category:  False Positive
------------------------------------------
Frame:  378  Total Penalty:  197.53870238057726
                    GT_area:  23843
                    ST_area:  29512
                    Overlap_area:  19982
                    IOU:  0.5987474904863213
                    Centre Distance:  15.5
                    Confidence:  97.54801988601685
                    Category:  False Positive
------------------------------------------
Frame:  379  Total Penalty:  198.79239887863173
                    GT_area:  23826
                    ST_area:  33098
                    Overlap_area:  20944
                    IOU:  0.5821011673151751
                    Centre Distance:  12.0
                    Confidence:  97.86545634269714
                    Category:  False Positive
------------------------------------------
Frame:  380  Total Penalty:  200.08229926601413
                    GT_area:  23643
                    ST_area:  33098
                    Overlap_area:  20601
                    IOU:  0.5700332042058661
                    Centre Distance:  13.5
                    Confidence:  97.86545634269714
                    Category:  False Positive
------------------------------------------
Frame:  381  Total Penalty:  201.255342744275
                    GT_area:  24150
                    ST_area:  31360
                    Overlap_area:  21010
                    IOU:  0.6089855072463768
                    Centre Distance:  11.5
                    Confidence:  98.40587973594666
                    Category:  False Positive
------------------------------------------
Frame:  382  Total Penalty:  202.35907285470017
                    GT_area:  25134
                    ST_area:  31178
                    Overlap_area:  21809
                    IOU:  0.6320899631916065
                    Centre Distance:  11.5
```

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                    Confidence:  98.5153079032898
                    Category:  False Positive
------------------------------------------
Frame:  383  Total Penalty:  203.3242468362174
                    GT_area:  26015
                    ST_area:  30464
                    Overlap_area:  22826
                    IOU:  0.6782753394942501
                    Centre Distance:  15.5
                    Confidence:  98.97522926330566
                    Category:  False Positive
------------------------------------------
Frame:  384  Total Penalty:  204.61723146247647
                    GT_area:  26937
                    ST_area:  35216
                    Overlap_area:  22540
                    IOU:  0.5690051245803145
                    Centre Distance:  17.5
                    Confidence:  98.35311770439148
                    Category:  False Positive
------------------------------------------
Frame:  385  Total Penalty:  206.00052345437507
                    GT_area:  26908
                    ST_area:  40716
                    Overlap_area:  23681
                    IOU:  0.5389026693671347
                    Centre Distance:  21.0
                    Confidence:  98.56289029121399
                    Category:  False Positive
------------------------------------------
Frame:  386  Total Penalty:  207.21259972556152
                    GT_area:  26568
                    ST_area:  33696
                    Overlap_area:  22504
                    IOU:  0.5959745762711864
                    Centre Distance:  17.5
                    Confidence:  98.68776202201843
                    Category:  False Positive
------------------------------------------
Frame:  387  Total Penalty:  208.40128341907823
                    GT_area:  27528
                    ST_area:  33696
                    Overlap_area:  23049
                    IOU:  0.6037721021611002
                    Centre Distance:  17.0
                    Confidence:  98.68776202201843
                    Category:  False Positive
------------------------------------------
Total Penalty:  208.40128341907823
True Positive:  275
False Positive:  75
True Negative:  20
False Negative:   17
Average Time:  0.5797911177001874
```

>>>