drowsiness-detection

July 11, 2023

!pip install torch torchvision torchaudio --index-url https://download.pytorch.

[70]: #install and import dependencies

```
org/whl/cu117
Looking in indexes: https://download.pytorch.org/whl/cu117
Requirement already satisfied: torch in c:\users\kiit\anaconda3\lib\site-
packages (2.0.1+cu117)
Requirement already satisfied: torchvision in c:\users\kiit\anaconda3\lib\site-
packages (0.15.2+cu117)
Requirement already satisfied: torchaudio in c:\users\kiit\anaconda3\lib\site-
packages (2.0.2+cu117)
Requirement already satisfied: filelock in c:\users\kiit\anaconda3\lib\site-
packages (from torch) (3.6.0)
Requirement already satisfied: jinja2 in c:\users\kiit\anaconda3\lib\site-
packages (from torch) (2.11.3)
Requirement already satisfied: typing-extensions in
c:\users\kiit\anaconda3\lib\site-packages (from torch) (4.3.0)
Requirement already satisfied: networkx in c:\users\kiit\anaconda3\lib\site-
packages (from torch) (2.8.4)
Requirement already satisfied: sympy in c:\users\kiit\anaconda3\lib\site-
packages (from torch) (1.10.1)
Requirement already satisfied: requests in c:\users\kiit\anaconda3\lib\site-
packages (from torchvision) (2.28.1)
Requirement already satisfied: pillow!=8.3.*,>=5.3.0 in
c:\users\kiit\anaconda3\lib\site-packages (from torchvision) (9.2.0)
Requirement already satisfied: numpy in c:\users\kiit\anaconda3\lib\site-
packages (from torchvision) (1.24.4)
Requirement already satisfied: MarkupSafe>=0.23 in
c:\users\kiit\anaconda3\lib\site-packages (from jinja2->torch) (2.0.1)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in
c:\users\kiit\anaconda3\lib\site-packages (from requests->torchvision) (1.26.11)
Requirement already satisfied: certifi>=2017.4.17 in
c:\users\kiit\anaconda3\lib\site-packages (from requests->torchvision)
(2022.12.7)
Requirement already satisfied: idna<4,>=2.5 in c:\users\kiit\anaconda3\lib\site-
packages (from requests->torchvision) (3.3)
Requirement already satisfied: charset-normalizer<3,>=2 in
c:\users\kiit\anaconda3\lib\site-packages (from requests->torchvision) (2.0.4)
```

```
Requirement already satisfied: mpmath>=0.19 in c:\users\kiit\anaconda3\lib\site-
    packages (from sympy->torch) (1.2.1)
[4]:
    'git' is not recognized as an internal or external command,
    operable program or batch file.
[1]: import torch
     from matplotlib import pyplot as plt
     import numpy as np
     import cv2
[3]: #load Model
     model = torch.hub.load('ultralytics/yolov5','yolov5s')
    Downloading: "https://github.com/ultralytics/yolov5/zipball/master" to
    C:\Users\KIIT/.cache\torch\hub\master.zip
    YOLOv5 2023-7-8 Python-3.9.13 torch-2.0.1+cu117 CUDA:0 (GeForce MX330, 2048MiB)
    Downloading
    https://github.com/ultralytics/yolov5/releases/download/v7.0/yolov5s.pt to
    yolov5s.pt...
    100%|
     | 14.1M/14.1M [00:01<00:00, 14.3MB/s]
    Fusing layers...
    YOLOv5s summary: 213 layers, 7225885 parameters, 0 gradients
    Adding AutoShape...
[6]: model
[6]: AutoShape(
       (model): DetectMultiBackend(
         (model): DetectionModel(
           (model): Sequential(
             (0): Conv(
               (conv): Conv2d(3, 32, kernel_size=(6, 6), stride=(2, 2), padding=(2,
     2))
               (act): SiLU(inplace=True)
             )
             (1): Conv(
               (conv): Conv2d(32, 64, kernel_size=(3, 3), stride=(2, 2), padding=(1,
     1))
               (act): SiLU(inplace=True)
             )
```

(2): C3(

(cv1): Conv(

```
(conv): Conv2d(64, 32, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv2): Conv(
            (conv): Conv2d(64, 32, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv3): Conv(
            (conv): Conv2d(64, 64, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (m): Sequential(
            (0): Bottleneck(
              (cv1): Conv(
                (conv): Conv2d(32, 32, kernel_size=(1, 1), stride=(1, 1))
                (act): SiLU(inplace=True)
              )
              (cv2): Conv(
                 (conv): Conv2d(32, 32, kernel_size=(3, 3), stride=(1, 1),
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
            )
          )
        )
        (3): Conv(
          (conv): Conv2d(64, 128, kernel_size=(3, 3), stride=(2, 2), padding=(1,
1))
          (act): SiLU(inplace=True)
        )
        (4): C3(
          (cv1): Conv(
            (conv): Conv2d(128, 64, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv2): Conv(
            (conv): Conv2d(128, 64, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv3): Conv(
            (conv): Conv2d(128, 128, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          (m): Sequential(
            (0): Bottleneck(
              (cv1): Conv(
                (conv): Conv2d(64, 64, kernel_size=(1, 1), stride=(1, 1))
```

```
(act): SiLU(inplace=True)
              )
              (cv2): Conv(
                (conv): Conv2d(64, 64, kernel_size=(3, 3), stride=(1, 1),
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
            )
            (1): Bottleneck(
              (cv1): Conv(
                (conv): Conv2d(64, 64, kernel_size=(1, 1), stride=(1, 1))
                 (act): SiLU(inplace=True)
              (cv2): Conv(
                (conv): Conv2d(64, 64, kernel_size=(3, 3), stride=(1, 1),
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
            )
          )
        )
        (5): Conv(
          (conv): Conv2d(128, 256, kernel_size=(3, 3), stride=(2, 2),
padding=(1, 1))
          (act): SiLU(inplace=True)
        )
        (6): C3(
          (cv1): Conv(
            (conv): Conv2d(256, 128, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv2): Conv(
            (conv): Conv2d(256, 128, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv3): Conv(
            (conv): Conv2d(256, 256, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (m): Sequential(
            (0): Bottleneck(
              (cv1): Conv(
                (conv): Conv2d(128, 128, kernel_size=(1, 1), stride=(1, 1))
                (act): SiLU(inplace=True)
              )
              (cv2): Conv(
                (conv): Conv2d(128, 128, kernel_size=(3, 3), stride=(1, 1),
```

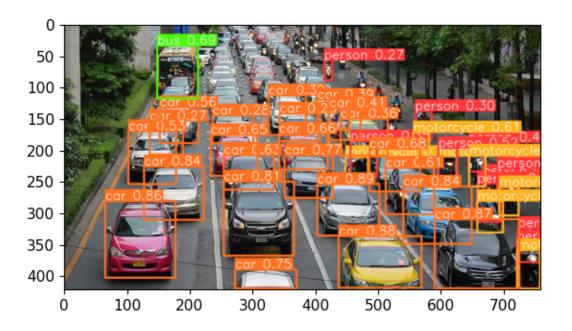
```
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
            (1): Bottleneck(
              (cv1): Conv(
                (conv): Conv2d(128, 128, kernel_size=(1, 1), stride=(1, 1))
                (act): SiLU(inplace=True)
              )
              (cv2): Conv(
                (conv): Conv2d(128, 128, kernel_size=(3, 3), stride=(1, 1),
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
            (2): Bottleneck(
              (cv1): Conv(
                (conv): Conv2d(128, 128, kernel_size=(1, 1), stride=(1, 1))
                (act): SiLU(inplace=True)
              (cv2): Conv(
                (conv): Conv2d(128, 128, kernel_size=(3, 3), stride=(1, 1),
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
          )
        (7): Conv(
          (conv): Conv2d(256, 512, kernel_size=(3, 3), stride=(2, 2),
padding=(1, 1))
          (act): SiLU(inplace=True)
        (8): C3(
          (cv1): Conv(
            (conv): Conv2d(512, 256, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv2): Conv(
            (conv): Conv2d(512, 256, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv3): Conv(
            (conv): Conv2d(512, 512, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (m): Sequential(
```

```
(0): Bottleneck(
              (cv1): Conv(
                (conv): Conv2d(256, 256, kernel_size=(1, 1), stride=(1, 1))
                (act): SiLU(inplace=True)
              )
              (cv2): Conv(
                (conv): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1),
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
            )
          )
        )
        (9): SPPF(
          (cv1): Conv(
            (conv): Conv2d(512, 256, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv2): Conv(
            (conv): Conv2d(1024, 512, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          (m): MaxPool2d(kernel_size=5, stride=1, padding=2, dilation=1,
ceil mode=False)
        (10): Conv(
          (conv): Conv2d(512, 256, kernel_size=(1, 1), stride=(1, 1))
          (act): SiLU(inplace=True)
        (11): Upsample(scale_factor=2.0, mode='nearest')
        (12): Concat()
        (13): C3(
          (cv1): Conv(
            (conv): Conv2d(512, 128, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          (cv2): Conv(
            (conv): Conv2d(512, 128, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv3): Conv(
            (conv): Conv2d(256, 256, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          (m): Sequential(
            (0): Bottleneck(
              (cv1): Conv(
```

```
(conv): Conv2d(128, 128, kernel_size=(1, 1), stride=(1, 1))
                (act): SiLU(inplace=True)
              )
              (cv2): Conv(
                (conv): Conv2d(128, 128, kernel_size=(3, 3), stride=(1, 1),
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
            )
          )
        )
        (14): Conv(
          (conv): Conv2d(256, 128, kernel_size=(1, 1), stride=(1, 1))
          (act): SiLU(inplace=True)
        (15): Upsample(scale_factor=2.0, mode='nearest')
        (16): Concat()
        (17): C3(
          (cv1): Conv(
            (conv): Conv2d(256, 64, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv2): Conv(
            (conv): Conv2d(256, 64, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv3): Conv(
            (conv): Conv2d(128, 128, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (m): Sequential(
            (0): Bottleneck(
              (cv1): Conv(
                (conv): Conv2d(64, 64, kernel_size=(1, 1), stride=(1, 1))
                 (act): SiLU(inplace=True)
              (cv2): Conv(
                (conv): Conv2d(64, 64, kernel_size=(3, 3), stride=(1, 1),
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
            )
          )
        )
        (18): Conv(
          (conv): Conv2d(128, 128, kernel_size=(3, 3), stride=(2, 2),
padding=(1, 1))
```

```
(act): SiLU(inplace=True)
        )
        (19): Concat()
        (20): C3(
          (cv1): Conv(
            (conv): Conv2d(256, 128, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv2): Conv(
            (conv): Conv2d(256, 128, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv3): Conv(
            (conv): Conv2d(256, 256, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (m): Sequential(
            (0): Bottleneck(
              (cv1): Conv(
                (conv): Conv2d(128, 128, kernel_size=(1, 1), stride=(1, 1))
                (act): SiLU(inplace=True)
              )
              (cv2): Conv(
                (conv): Conv2d(128, 128, kernel_size=(3, 3), stride=(1, 1),
padding=(1, 1))
                (act): SiLU(inplace=True)
              )
            )
          )
        )
        (21): Conv(
          (conv): Conv2d(256, 256, kernel_size=(3, 3), stride=(2, 2),
padding=(1, 1))
          (act): SiLU(inplace=True)
        (22): Concat()
        (23): C3(
          (cv1): Conv(
            (conv): Conv2d(512, 256, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv2): Conv(
            (conv): Conv2d(512, 256, kernel_size=(1, 1), stride=(1, 1))
            (act): SiLU(inplace=True)
          )
          (cv3): Conv(
            (conv): Conv2d(512, 512, kernel_size=(1, 1), stride=(1, 1))
```

```
(act): SiLU(inplace=True)
                )
                (m): Sequential(
                  (0): Bottleneck(
                    (cv1): Conv(
                      (conv): Conv2d(256, 256, kernel_size=(1, 1), stride=(1, 1))
                      (act): SiLU(inplace=True)
                    )
                    (cv2): Conv(
                      (conv): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1),
     padding=(1, 1))
                      (act): SiLU(inplace=True)
                    )
                  )
                )
              )
              (24): Detect(
                (m): ModuleList(
                  (0): Conv2d(128, 255, kernel_size=(1, 1), stride=(1, 1))
                  (1): Conv2d(256, 255, kernel_size=(1, 1), stride=(1, 1))
                  (2): Conv2d(512, 255, kernel_size=(1, 1), stride=(1, 1))
              )
            )
          )
        )
      )
[18]: img =
             'https://images.indianexpress.com/2016/08/traffic-jam-7591.jpg'
[19]: results = model(img)
      results.print()
     image 1/1: 422x759 10 persons, 23 cars, 7 motorcycles, 1 bus
     Speed: 7230.9ms pre-process, 31.4ms inference, 0.0ms NMS per image at shape (1,
     3, 384, 640)
[20]: #to show it int he notebbok
      %matplotlib inline
      #imshow displays the img on screen
      plt.imshow(np.squeeze(results.render()))
      plt.show()
```



```
[16]: results.render()
[16]: [array([[[72, 48, 38],
                [74, 50, 40],
               [73, 51, 40],
               ...,
               [56, 21, 25],
               [54, 20, 21],
               [51, 15, 17]],
               [[71, 47, 37],
               [71, 47, 37],
               [70, 48, 37],
               ...,
               [55, 20, 24],
               [52, 16, 18],
               [47, 11, 13]],
               [[75, 51, 41],
               [72, 50, 39],
               [70, 48, 37],
               [56, 20, 24],
               [52, 16, 20],
               [48, 12, 16]],
```

```
[[40, 43, 48],
[41, 44, 49],
[40, 43, 48],
[35, 49, 49],
[35, 49, 49],
[36, 50, 50]],
[[39, 42, 47],
[39, 42, 49],
[39, 42, 49],
[35, 49, 50],
[35, 49, 50],
[36, 50, 51]],
[[38, 41, 48],
[38, 41, 48],
[38, 41, 48],
...,
[35, 49, 50],
[35, 49, 50],
[36, 50, 51]]], dtype=uint8)]
```

[17]: results.show()



```
[23]: #real time detections
      #if you want ot use any other video you can add the path in videocapture
      cap = cv2.VideoCapture(0)
      while cap.isOpened():
          ret, frame = cap.read()
          #make detections
          results = model(frame)
          cv2.imshow('Detection',np.squeeze(results.render()))
          if cv2.waitKey(10) & OxFF == ord('q'):
              break
      cap.release()
      cv2.destroyAllWindows()
[24]: #Train from Scratch
      import uuid#unique identifier
      import os
      import time
[25]: IMAGES_PATH = os.path.join('data', 'images')
      labels = ['awake','drowsy']
      number_imgs = 20
[29]: cap = cv2.VideoCapture(0)
      for label in labels:
          print('Collecting images for {}'.format(label))
          time.sleep(5)
          #loop through images
          for img_num in range(number_imgs):
              print('collecting images for {},image numvber{}'.format(label,img num))
              ret,frame = cap.read()
              imgname = os.path.join(IMAGES_PATH,label+'.'+str(uuid.uuid1())+'.jpg')
              cv2.imwrite(imgname,frame)
              cv2.imshow('Image Collection',frame)
              time.sleep(2)
              if cv2.waitKey(10) & OxFF == ord('q'):
                      break
      cap.release()
      cv2.destroyAllWindows()
     Collecting images for awake
     collecting images for awake, image numvber0
     collecting images for awake, image numvber1
     collecting images for awake, image numvber2
     collecting images for awake, image numvber3
     collecting images for awake, image numvber4
     collecting images for awake, image numvber5
```

```
collecting images for awake, image numvber6
     collecting images for awake, image numvber7
     collecting images for awake, image numvber8
     collecting images for awake, image numvber9
     collecting images for awake, image numvber10
     collecting images for awake, image numvber11
     collecting images for awake, image numvber12
     collecting images for awake, image numvber13
     collecting images for awake, image numvber14
     collecting images for awake, image numvber15
     collecting images for awake, image numvber16
     collecting images for awake, image numvber17
     collecting images for awake, image numvber18
     collecting images for awake, image numvber19
     Collecting images for drowsy
     collecting images for drowsy, image numvber0
     collecting images for drowsy, image numvber1
     collecting images for drowsy, image numvber2
     collecting images for drowsy, image numvber3
     collecting images for drowsy, image numvber4
     collecting images for drowsy, image numvber5
     collecting images for drowsy, image numvber6
     collecting images for drowsy, image numvber7
     collecting images for drowsy, image numvber8
     collecting images for drowsy, image numvber9
     collecting images for drowsy, image numvber10
     collecting images for drowsy, image numvber11
     collecting images for drowsy, image numvber12
     collecting images for drowsy, image numvber13
     collecting images for drowsy, image numvber14
     collecting images for drowsy, image numvber15
     collecting images for drowsy, image numvber16
     collecting images for drowsy, image numvber17
     collecting images for drowsy, image numvber18
     collecting images for drowsy, image numvber19
[30]: !git clone https://github.com/heartexlabs/labelImg
     Cloning into 'labelImg' ...
[31]: !pip install pyqt5 lxml --upgrade
      !cd labelImg && pyrcc5 -o libs/resources.py resources.qrc
     Collecting pyqt5
       Downloading PyQt5-5.15.9-cp37-abi3-win_amd64.whl (6.8 MB)
          ----- 6.8/6.8 MB 10.9 MB/s eta 0:00:00
     Requirement already satisfied: lxml in c:\users\kiit\anaconda3\lib\site-packages
     (4.9.1)
```

```
Collecting lxml
      Downloading lxml-4.9.3-cp39-cp39-win_amd64.whl (3.9 MB)
         ----- 3.9/3.9 MB 11.3 MB/s eta 0:00:00
     Collecting PyQt5-sip<13,>=12.11
      Downloading PyQt5 sip-12.12.1-cp39-cp39-win amd64.whl (78 kB)
         ----- 78.4/78.4 kB ? eta 0:00:00
     Collecting PyQt5-Qt5>=5.15.2
      Downloading PyQt5_Qt5-5.15.2-py3-none-win_amd64.whl (50.1 MB)
         ----- 50.1/50.1 MB 15.2 MB/s eta 0:00:00
     Installing collected packages: PyQt5-Qt5, PyQt5-sip, 1xml, pyqt5
      Attempting uninstall: lxml
        Found existing installation: lxml 4.9.1
        Uninstalling lxml-4.9.1:
          Successfully uninstalled lxml-4.9.1
     Successfully installed PyQt5-Qt5-5.15.2 PyQt5-sip-12.12.1 lxml-4.9.3
     pyqt5-5.15.9
     ERROR: pip's dependency resolver does not currently take into account all the
     packages that are installed. This behaviour is the source of the following
     dependency conflicts.
     spyder 5.2.2 requires pyqtwebengine<5.13, which is not installed.
     spyder 5.2.2 requires pyqt5<5.13, but you have pyqt5 5.15.9 which is
     incompatible.
[33]: !pip install PyQtWebEngine
     Collecting PyQtWebEngine
      Downloading PyQtWebEngine-5.15.6-cp37-abi3-win_amd64.whl (182 kB)
         ----- 182.7/182.7 kB 1.8 MB/s eta 0:00:00
     Requirement already satisfied: PyQt5-sip<13,>=12.11 in
     c:\users\kiit\anaconda3\lib\site-packages (from PyQtWebEngine) (12.12.1)
     Requirement already satisfied: PyQt5>=5.15.4 in
     c:\users\kiit\anaconda3\lib\site-packages (from PyQtWebEngine) (5.15.9)
     Collecting PyQtWebEngine-Qt5>=5.15.0
      Downloading PyQtWebEngine_Qt5-5.15.2-py3-none-win_amd64.whl (60.0 MB)
         ----- 60.0/60.0 MB 11.7 MB/s eta 0:00:00
     Requirement already satisfied: PyQt5-Qt5>=5.15.2 in
     c:\users\kiit\anaconda3\lib\site-packages (from PyQt5>=5.15.4->PyQtWebEngine)
     (5.15.2)
     Installing collected packages: PyQtWebEngine-Qt5, PyQtWebEngine
     Successfully installed PyQtWebEngine-5.15.6 PyQtWebEngine-Qt5-5.15.2
     ERROR: pip's dependency resolver does not currently take into account all the
     packages that are installed. This behaviour is the source of the following
     dependency conflicts.
     spyder 5.2.2 requires pyqt5<5.13, but you have pyqt5 5.15.9 which is
     incompatible.
     spyder 5.2.2 requires pygtwebengine <5.13, but you have pygtwebengine 5.15.6
```

which is incompatible.

```
[34]: !git clone yolov5 & pip install -r requirments.txty
     fatal: repository 'yolov5' does not exist
     ERROR: Could not open requirements file: [Errno 2] No such file or directory:
     'requirments.txt'
[39]: !git clone https://github.com/ultralytics/yolov5
     fatal: destination path 'yolov5' already exists and is not an empty directory.
[40]: cd yolov5 & pip install -r requirements.txt
     Requirement already satisfied: gitpython>=3.1.30 in
     c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 5))
     (3.1.31)
     Requirement already satisfied: matplotlib>=3.3 in
     c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 6))
     Requirement already satisfied: numpy>=1.18.5 in
     c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 7))
     (1.24.3)
     Requirement already satisfied: opency-python>=4.1.1 in
     c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 8))
     (4.8.0.74)
     Requirement already satisfied: Pillow>=7.1.2 in
     c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 9))
     (9.2.0)
     Requirement already satisfied: psutil in c:\users\kiit\anaconda3\lib\site-
     packages (from -r requirements.txt (line 10)) (5.9.0)
     Requirement already satisfied: PyYAML>=5.3.1 in
     c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 11))
     Requirement already satisfied: requests>=2.23.0 in
     c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 12))
     (2.28.1)
     Requirement already satisfied: scipy>=1.4.1 in c:\users\kiit\anaconda3\lib\site-
     packages (from -r requirements.txt (line 13)) (1.9.1)
     Requirement already satisfied: thop>=0.1.1 in c:\users\kiit\anaconda3\lib\site-
     packages (from -r requirements.txt (line 14)) (0.1.1.post2209072238)
     Requirement already satisfied: torch>=1.7.0 in c:\users\kiit\anaconda3\lib\site-
     packages (from -r requirements.txt (line 15)) (2.0.1+cu117)
     Requirement already satisfied: torchvision>=0.8.1 in
     c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 16))
     (0.15.2+cu117)
     Requirement already satisfied: tqdm>=4.64.0 in c:\users\kiit\anaconda3\lib\site-
     packages (from -r requirements.txt (line 17)) (4.64.1)
     Requirement already satisfied: ultralytics>=8.0.111 in
     c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 18))
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(8.0.131)
Requirement already satisfied: pandas>=1.1.4 in
c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 27))
Requirement already satisfied: seaborn>=0.11.0 in
c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 28))
Requirement already satisfied: setuptools>=65.5.1 in
c:\users\kiit\anaconda3\lib\site-packages (from -r requirements.txt (line 42))
Requirement already satisfied: gitdb<5,>=4.0.1 in
c:\users\kiit\anaconda3\lib\site-packages (from gitpython>=3.1.30->-r
requirements.txt (line 5)) (4.0.10)
Requirement already satisfied: python-dateutil>=2.7 in
c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3->-r
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Requirement already satisfied: cycler>=0.10 in c:\users\kiit\anaconda3\lib\site-
packages (from matplotlib>=3.3->-r requirements.txt (line 6)) (0.11.0)
Requirement already satisfied: pyparsing>=2.2.1 in
c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (3.0.9)
Requirement already satisfied: packaging>=20.0 in
c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (21.3)
Requirement already satisfied: kiwisolver>=1.0.1 in
c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (1.4.2)
Requirement already satisfied: fonttools>=4.22.0 in
c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (4.25.0)
Requirement already satisfied: idna<4,>=2.5 in c:\users\kiit\anaconda3\lib\site-
packages (from requests>=2.23.0->-r requirements.txt (line 12)) (3.3)
Requirement already satisfied: certifi>=2017.4.17 in
c:\users\kiit\anaconda3\lib\site-packages (from requests>=2.23.0->-r
requirements.txt (line 12)) (2022.12.7)
Requirement already satisfied: charset-normalizer<3,>=2 in
c:\users\kiit\anaconda3\lib\site-packages (from requests>=2.23.0->-r
requirements.txt (line 12)) (2.0.4)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in
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requirements.txt (line 12)) (1.26.11)
Requirement already satisfied: typing-extensions in
c:\users\kiit\anaconda3\lib\site-packages (from torch>=1.7.0->-r
requirements.txt (line 15)) (4.3.0)
Requirement already satisfied: sympy in c:\users\kiit\anaconda3\lib\site-
packages (from torch>=1.7.0->-r requirements.txt (line 15)) (1.10.1)
Requirement already satisfied: networkx in c:\users\kiit\anaconda3\lib\site-
packages (from torch>=1.7.0->-r requirements.txt (line 15)) (2.8.4)
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Requirement already satisfied: filelock in c:\users\kiit\anaconda3\lib\site-
     packages (from torch>=1.7.0->-r requirements.txt (line 15)) (3.6.0)
     Requirement already satisfied: jinja2 in c:\users\kiit\anaconda3\lib\site-
     packages (from torch>=1.7.0->-r requirements.txt (line 15)) (2.11.3)
     Requirement already satisfied: colorama in c:\users\kiit\anaconda3\lib\site-
     packages (from tqdm>=4.64.0->-r requirements.txt (line 17)) (0.4.5)
     Requirement already satisfied: pytz>=2020.1 in c:\users\kiit\anaconda3\lib\site-
     packages (from pandas>=1.1.4->-r requirements.txt (line 27)) (2022.1)
     Requirement already satisfied: smmap<6,>=3.0.1 in
     c:\users\kiit\anaconda3\lib\site-packages (from
     gitdb<5,>=4.0.1->gitpython>=3.1.30->-r requirements.txt (line 5)) (5.0.0)
     Requirement already satisfied: six>=1.5 in c:\users\kiit\anaconda3\lib\site-
     packages (from python-dateutil>=2.7->matplotlib>=3.3->-r requirements.txt (line
     6)) (1.16.0)
     Requirement already satisfied: MarkupSafe>=0.23 in
     c:\users\kiit\anaconda3\lib\site-packages (from jinja2->torch>=1.7.0->-r
     requirements.txt (line 15)) (2.0.1)
     Requirement already satisfied: mpmath>=0.19 in c:\users\kiit\anaconda3\lib\site-
     packages (from sympy->torch>=1.7.0->-r requirements.txt (line 15)) (1.2.1)
[49]: import torch
      torch.cuda.empty_cache()
[50]: t = torch.cuda.get_device_properties(0).total_memory
      r = torch.cuda.memory_reserved(0)
      a = torch.cuda.memory_allocated(0)
      f = r-a # free inside reserved
[55]: r
[55]: 71303168
[53]: || cd yolov5 && python train.py --img 320 --batch 5 --epochs 500 --data dataset.
       →yaml --weights yolov5s.pt --workers 2
     train: weights=yolov5s.pt, cfg=, data=dataset.yaml,
     hyp=data\hyps\hyp.scratch-low.yaml, epochs=500, batch_size=5, imgsz=320,
     rect=False, resume=False, nosave=False, noval=False, noautoanchor=False,
     noplots=False, evolve=None, bucket=, cache=None, image_weights=False, device=,
     multi_scale=False, single_cls=False, optimizer=SGD, sync_bn=False, workers=2,
     project=runs\train, name=exp, exist_ok=False, quad=False, cos_lr=False,
     label_smoothing=0.0, patience=100, freeze=[0], save_period=-1, seed=0,
     local_rank=-1, entity=None, upload_dataset=False, bbox_interval=-1,
     artifact_alias=latest
     github: up to date with https://github.com/ultralytics/yolov5
     YOLOv5 v7.0-193-g485da42 Python-3.9.13 torch-2.0.1+cu117 CUDA:0 (GeForce MX330,
     2048MiB)
```

hyperparameters: lr0=0.01, lrf=0.01, momentum=0.937,
weight_decay=0.0005, warmup_epochs=3.0, warmup_momentum=0.8, warmup_bias_lr=0.1,
box=0.05, cls=0.5, cls_pw=1.0, obj=1.0, obj_pw=1.0, iou_t=0.2, anchor_t=4.0,
fl_gamma=0.0, hsv_h=0.015, hsv_s=0.7, hsv_v=0.4, degrees=0.0, translate=0.1,
scale=0.5, shear=0.0, perspective=0.0, flipud=0.0, fliplr=0.5, mosaic=1.0,
mixup=0.0, copy_paste=0.0

Comet: run 'pip install comet_ml' to automatically track and
visualize YOLOv5 runs in Comet

 ${\tt TensorBoard:} \ {\tt Start with 'tensorboard --log dir runs \backslash train', view at}$

http://localhost:6006/

Overriding model.yaml nc=80 with nc=17

	from	n	params	module	
arguments					
0	-1	1	3520	models.common.Conv	[3,
32, 6, 2, 2]					
1	-1	1	18560	models.common.Conv	[32,
64, 3, 2]					
2	-1	1	18816	models.common.C3	[64,
64, 1]					
3	-1	1	73984	models.common.Conv	[64,
128, 3, 2]					
4	-1	2	115712	models.common.C3	
[128, 128, 2]					
5	-1	1	295424	models.common.Conv	
[128, 256, 3, 2]					
6	-1	3	625152	models.common.C3	
[256, 256, 3]					
7	-1	1	1180672	models.common.Conv	
[256, 512, 3, 2]					
8	-1	1	1182720	models.common.C3	
[512, 512, 1]					
9	-1	1	656896	models.common.SPPF	
[512, 512, 5]					
10	-1	1	131584	models.common.Conv	
[512, 256, 1, 1]	_	_			
11	-1	1	0	torch.nn.modules.upsampling.Upsample	
[None, 2, 'neare	st.'l	_	· ·	00_011.111.110.101.115.11b.110.115.11b.110.11b.110.11b.110.11b.110.11b.110.11b.110.11b.110.11b.110.11b.110.11b	
	1, 6]	1	0	models.common.Concat	[1]
13	-1			models.common.C3	
[512, 256, 1, Fa		-	001001	model D. Common. Co	
14	-1	1	33024	models.common.Conv	
[256, 128, 1, 1]	-	-	00021	modelb.common.com	
15	-1	1	0	torch.nn.modules.upsampling.Upsample	
[None, 2, 'neare	_	-	· ·	Toron.m.moduros.apsampring.opsampro	
	1, 4]	1	0	models.common.Concat	[1]
17		1	90880	models.common.C3	[±]
[256, 128, 1, Fa	_	1	20000	models. Common. Oo	
[200, 120, 1, Fd	TPEl				

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18
                           147712 models.common.Conv
                   -1 1
[128, 128, 3, 2]
                                 0 models.common.Concat
                                                                            [1]
 19
             [-1, 14] 1
20
                  -1 1
                            296448 models.common.C3
[256, 256, 1, False]
                   -1 1
                           590336 models.common.Conv
21
[256, 256, 3, 2]
 22
             [-1, 10]
                                 0 models.common.Concat
                                                                            [1]
                  -1 1
                           1182720 models.common.C3
23
[512, 512, 1, False]
         [17, 20, 23] 1
                            59334 models.yolo.Detect
24
                                                                            [17,
[[10, 13, 16, 30, 33, 23], [30, 61, 62, 45, 59, 119], [116, 90, 156, 198, 373,
326]], [128, 256, 512]]
Model summary: 214 layers, 7065478 parameters, 7065478 gradients, 16.1 GFLOPs
Transferred 343/349 items from yolov5s.pt
AMP: checks passed
optimizer: SGD(1r=0.01) with parameter groups 57 weight(decay=0.0),
60 weight(decay=0.0005078125), 60 bias
train: Scanning
C:\Users\KIIT\Desktop\drowsiness detection\data\labels.cache... 40 images, 0
backgrounds, 0 corrupt: 100%|######## 40/40 [00:00<?, ?it/s]
train: Scanning
C:\Users\KIIT\Desktop\drowsiness_detection\data\labels.cache... 40 images, 0
backgrounds, 0 corrupt: 100%|######## 40/40 [00:00<?, ?it/s]
val: Scanning
```

C:\Users\KIIT\Desktop\drowsiness_detection\data\labels.cache... 40 images, 0
backgrounds, 0 corrupt: 100%|######### 40/40 [00:00<?, ?it/s]
val: Scanning</pre>

C:\Users\KIIT\Desktop\drowsiness_detection\data\labels.cache... 40 images, 0 backgrounds, 0 corrupt: 100%|######## 40/40 [00:00<?, ?it/s]

AutoAnchor: 5.57 anchors/target, 1.000 Best Possible Recall (BPR). Current anchors are a good fit to dataset Plotting labels to runs\train\exp4\labels.jpg...
Image sizes 320 train, 320 val
Using 2 dataloader workers

Logging results to ${\tt runs \train \exp4}$

Starting training for 500 epochs...

	Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
0%		0/8 [00):00 , ?it,</td <td>/s]</td> <td></td> <td></td> <td></td>	/s]			
	0/499	0.371G	0.1162	0.0166	0.07386	13	320:
0%		0/8 [00:0	00 , ?it/s</td <td>]</td> <td></td> <td></td> <td></td>]			
	0/499	0.371G	0.1162	0.0166	0.07386	13	320:

12% #2	-		.67s/it]			
0/499		0.384G 0.1141	0.01593	0.07682	11	320:
12% #2	١		.67s/it]			
0/499			0.01593	0.07682	11	320:
25% ##5	ı		.31s/it]			
0/499		0.384G 0.1133		0.07756	14	320:
25% ##5	ı		.31s/it]			
0/499			0.01657	0.07756	14	320:
38% ###7	ı	·	.15it/s]	0 07004	4.0	000
0/499		0.384G 0.1125	0.0157	0.07694	10	320:
38% ###7	١		.15it/s]	0 07004	4.0	000
0/499			0.0157	0.07694	10	320:
50% #####	ı		.52it/s]	0 07745	4.0	000
0/499		0.384G 0.1123	0.01593	0.07745	13	320:
50% #####	ı		.52it/s]	0 07745	40	200
0/499		0.384G 0.1123	0.01593	0.07745	13	320:
62% ######2	١		.90it/s]	0 07700	10	200
0/499		0.384G 0.1108	0.01588	0.07729	10	320:
62% ######2	ı		.90it/s]	0.07700	4.0	000
0/499		0.384G 0.1108	0.01588	0.07729	10	320:
75% #######5	ı		.22it/s]			
0/499		0.298G 0.1103	0.01537	0.07754	8	320:
	ı		.22it/s]	0 00001		000
0/499		0.298G 0.1103	0.01537	0.07754	8	320:
	ı		.46it/s]	0 07000	4.0	000
0/499		0.306G 0.1093	0.01555	0.07689	12	320:
	١		.46it/s]	0 07000	4.0	000
0/499			0.01555	0.07689	12	320:
	##	8/8 [00:05<00:00,		0.07400	40	000
0/499		0.306G 0.1093		0.07689	12	320:
100% ########	##	8/8 [00:05<00:00,	1.551t/s]			
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mAP50-95: 50°	/ ₀	##### 2/4 [00:00 Class Images In		0.011t/s]	ת	~ ADEO
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map50-95: 100	/₀ I	######### 4/4 [00:00		6.09it/s]	D	ADEO
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шагоо-95: 100	/ ₀	######### 4/4 [00:00 all 40	0<00:00, 40	6.12it/s]	0.075	0 00125
0.000209		all 40	40	0.002	0.075	0.00135
0.000209						
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0%	0/8 [00:0	0 , ?it/s</th <th>3]</th> <th></th> <th></th> <th></th>	3]			
1/499	0.365G	0.1109	0.01678	0.07441	13	320:
0%	0/8 [00:00<					
1/499	0.365G	0.1109	0.01678	0.07441	13	320:
12% #2	1/8 [00:00	<00:04, 1	57it/s]			
1/499	0.346G	0.1134	0.01473	0.07661	9	320:
12% #2	1/8 [00:01	<00:04, 1	57it/s]			
1/499	0.346G	0.1134	0.01473	0.07661	9	320:
25% ##5	2/8 [00:01	<00:04, 1	.47it/s]			
1/499	0.35G		0.01444	0.07682	11	320:
25% ##5	2/8 [00:02	-	47it/s]			
1/499		0.1123	0.01444	0.07682	11	320:
38% ###7	3/8 [00:02		.48it/s]			
1/499	0.346G		0.01676	0.07495	16	320:
38% ###7	3/8 [00:02	-	.48it/s]			
1/499	0.346G		0.01676	0.07495	16	320:
50% #####	4/8 [00:02		56it/s]			
1/499	0.352G	0.1059	0.01559	0.07475	7	320:
50% #####	4/8 [00:03		56it/s]			
1/499		0.1059	0.01559	0.07475	7	320:
62% ######2	5/8 [00:03		58it/s]			
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75% ######5	6/8 [00:03		67it/s]		_	
1/499	0.352G	0.102		0.07671	7	320:
75% #######5			.67it/s]		_	
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	7 7/8 [00:04		72it/s]	0.07000		200
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	7 7/8 [00:04		.72it/s]	0.07000		200
1/499	0.35G		0.01488	0.07903	6	320:
	### 8/8 [00:0		1.69it/s]	0.07000		200
1/499	0.35G		0.01488	0.07903	6	320:
100% ########	### 8/8 [00:0	4<00:00,	1.631t/s]			
	Closs	Tmomog T		Р	R	ADEO
ADEO OE C	Class	0	instances		n.	mAP50
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шигоо-эо. ос	Class	Images I		3.92it/s] P	R	mAP50
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MAI 00 00. 70	Class		Instances	3.0010/s] P	R	mAP50
mAP50-95 100	01435	•		3.59it/s]	16	mni oo
00 00. 100	Class		Instances	0.0010/5] P	R	mAP50
	01400	000		-	10	

mAP50-95: 100% ######### 4/4 [00:01<00:00, all 40 40	3.67it/s] 0.00553	0.2	0.00378
0.000567	0.00333	0.2	0.00376
Epoch GPU_mem box_loss obj_loss	cls_loss	Instances	Size
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2/499 0.338G 0.0998 0.01419	0.08444	9	320:
12% #2 1/8 [00:00<00:04, 1.47it/s]	0 07700	10	200
2/499 0.342G 0.09882 0.01769 12% #2 1/8 [00:01<00:04, 1.47it/s]	0.07728	13	320:
2/499 0.342G 0.09882 0.01769	0.07728	13	320:
25% ##5 2/8 [00:01<00:04, 1.45it/s]	0.01128	13	320.
2/499 0.34G 0.09845 0.0173	0.07707	11	320:
25% ##5 2/8 [00:02<00:04, 1.45it/s]	0.01101		020.
2/499 0.34G 0.09845 0.0173	0.07707	11	320:
38% ###7 3/8 [00:02<00:03, 1.48it/s]			
2/499 0.342G 0.09902 0.01609	0.07609	8	320:
38% ###7 3/8 [00:02<00:03, 1.48it/s]			
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50% ##### 4/8 [00:02<00:02, 1.57it/s]			
2/499 0.348G 0.09824 0.01639	0.0754	10	320:
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62% ######2 5/8 [00:03<00:01, 1.56it/s]			
2/499 0.346G 0.09786 0.01692	0.07537	13	320:
62% ######2 5/8 [00:03<00:01, 1.56it/s]			
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75% ######5 6/8 [00:03<00:01, 1.56it/s]			
2/499 0.342G 0.0956 0.01824	0.07477	13	320:
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2/499 0.342G 0.0956 0.01824	0.07477	13	320:
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2/499 0.348G 0.09595 0.01835	0.07427	12	320:
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100% ######### 8/8 [00:05<00:00, 1.58it/s] 2/499 0.348G 0.09595 0.01835	0.07427	12	320:
100% ######## 8/8 [00:05<00:00, 1.55it/s]		12	320:
100% ######## 0/0 [00.00\00.00, 1.331t/8]			
Class Images Instances	Р	R	mAP50
mAP50-95: 0% 0/4 [00:00 , ?it/</td <td></td> <td>10</td> <td></td>		10	
Class Images Instances	P	R	mAP50
mAP50-95: 25% ##5 1/4 [00:00<00:00,			
Class Images Instances	P	R	mAP50
mAP50-95: 50% ##### 2/4 [00:00<00:00,	5.60it/s]		

ADEO OF 75% 111		_	Instances	P	R	mAP50
mAP50-95: 75% ##	Class	Images	Instances	Р	R	mAP50
mAP50-95: 100% ##	Class	Images	Instances	5.23it/s] P	R	mAP50
mAP50-95: 100% ##	all	4/4 [00 40	40	0.00559	0.225	0.00601
0.000973						
Epoch GF	PU_mem box	x_loss	obj_loss	cls_loss	Instances	Size
0%	0/8 [00:00	, ?it</td <td>/s]</td> <td></td> <td></td> <td></td>	/s]			
			0.02383	0.06988	14	320:
	/8 [00:00 </td <td></td> <td></td> <td></td> <td></td> <td>000</td>					000
	0.354G (0.06988	14	320:
	1/8 [00:00< 0.357G (=		0.06908	9	320:
	1/8 [00:01<		0.01999 1.67it/s]	0.00908	9	320.
	0.357G (=	0.01999	0.06908	9	320:
	2/8 [00:01<		1.68it/s]	0.00300	3	020.
		.09451	0.02212	0.06815	14	320:
	2/8 [00:01<		1.68it/s]			
	0.35G 0		0.02212	0.06815	14	320:
38% ###7 3	3/8 [00:01<		1.77it/s]			
		.09182	0.02312	0.06746	13	320:
38% ###7 3	3/8 [00:02<	00:02,	1.77it/s]			
3/499	0.392G 0	.09182	0.02312	0.06746	13	320:
50% ##### 4	4/8 [00:02<	00:01,	2.15it/s]			
3/499 (0.352G 0	.09037	0.02338	0.06707	12	320:
50% ##### 4	4/8 [00:02<	00:01,	2.15it/s]			
3/499 (0.352G 0	.09037	0.02338	0.06707	12	320:
62% ######2 5	5/8 [00:02<	00:01,	2.04it/s]			
3/499	0.392G 0	.09027	0.0228	0.06821	11	320:
62% ######2 5	5/8 [00:02<	00:01,	2.04it/s]			
		.09027	0.0228	0.06821	11	320:
	6/8 [00:02<	=	2.30it/s]			
		.08555	0.02148	0.06502	7	320:
	6/8 [00:03<	-	2.30it/s]		_	
		.08555	0.02148	0.06502	7	320:
88% #######7 7			2.64it/s]	0.00554	4.4	200
		.08455	0.02162	0.06554	11	320:
88% #######7 7			2.64it/s]	0.00554	4.4	200
3/499 (100% #########		.08455	0.02162	0.06554	11	320:
			1.83it/s] 0.02162	0.06554	11	320:
100% #########				0.00554	11	520.
±00/0 ##########	J, J [JJ]. J4	,	1.0110/8]			
	Class	Images	Instances	P	R	mAP50

```
mAP50-95:
                 0%1
                               | 0/4 [00:00<?, ?it/s]
                       Class
                                 Images Instances
                                                            Ρ
                                                                       R.
                                                                               mAP50
                               | 1/4 [00:00<00:00,
     mAP50-95:
                25% | ##5
                                                    5.73it/s
                                 Images Instances
                                                                        R
                                                                               mAP50
                      Class
     mAP50-95:
                50% | #####
                               | 2/4 [00:00<00:00,
                                                    5.86it/s]
                                 Images Instances
                                                                        R
                      Class
                                                                               mAP50
     mAP50-95:
                75%|######5
                             | 3/4 [00:00<00:00,
                                                    5.83it/s]
                                 Images Instances
                                                                        R.
                                                                               mAP50
     mAP50-95: 100%|######### 4/4 [00:00<00:00,
                                                    6.00it/s
                                 Images Instances
                      Class
                                                                        R.
                                                                               mAP50
     mAP50-95: 100%|######### 4/4 [00:00<00:00,
                                                    5.93it/s
                                     40
                                                40
                                                       0.0071
                                                                   0.375
                                                                              0.0154
                         all
     0.0022
           Epoch
                    {\tt GPU\_mem}
                              box_loss
                                          obj_loss
                                                     cls_loss Instances
                                                                                Size
       0%1
                     | 0/8 [00:00<?, ?it/s]
                     | 0/8 [00:00<?, ?it/s]
       0%1
     Traceback (most recent call last):
       File "C:\Users\KIIT\Desktop\drowsiness detection\yolov5\train.py", line 647,
     in <module>
         main(opt)
       File "C:\Users\KIIT\Desktop\drowsiness_detection\yolov5\train.py", line 536,
         train(opt.hyp, opt, device, callbacks)
       File "C:\Users\KIIT\Desktop\drowsiness detection\yolov5\train.py", line 325,
     in train
         scaler.scale(loss).backward()
       File "C:\Users\KIIT\anaconda3\lib\site-packages\torch\_tensor.py", line 487,
     in backward
         torch.autograd.backward(
       File "C:\Users\KIIT\anaconda3\lib\site-packages\torch\autograd\__init__.py",
     line 200, in backward
         Variable._execution_engine.run_backward( # Calls into the C++ engine to run
     the backward pass
     torch.cuda.OutOfMemoryError: CUDA out of memory. Tried to allocate 2.00 MiB (GPU
     0; 2.00 GiB total capacity; 294.00 MiB already allocated; 1002.80 KiB free;
     360.00 MiB reserved in total by PyTorch) If reserved memory is >> allocated
     memory try setting max_split_size_mb to avoid fragmentation. See documentation
     for Memory Management and PYTORCH_CUDA_ALLOC_CONF
[56]: torch.cuda.empty_cache()
[57]: ||!cd yolov5 && python train.py --img 320 --batch 1 --epochs 500 --data dataset.
```

train: weights=yolov5s.pt, cfg=, data=dataset.yaml,
hyp=data\hyps\hyp.scratch-low.yaml, epochs=500, batch_size=1, imgsz=320,

→yaml --weights yolov5s.pt --workers 2

rect=False, resume=False, nosave=False, noval=False, noautoanchor=False, noplots=False, evolve=None, bucket=, cache=None, image_weights=False, device=, multi_scale=False, single_cls=False, optimizer=SGD, sync_bn=False, workers=2, project=runs\train, name=exp, exist_ok=False, quad=False, cos_lr=False, label_smoothing=0.0, patience=100, freeze=[0], save_period=-1, seed=0, local_rank=-1, entity=None, upload_dataset=False, bbox_interval=-1, artifact_alias=latest github: up to date with https://github.com/ultralytics/yolov5

github: up to date with https://github.com/ultralytics/yolov5
YOLOv5 v7.0-193-g485da42 Python-3.9.13 torch-2.0.1+cu117 CUDA:0 (GeForce MX330, 2048MiB)

hyperparameters: lr0=0.01, lrf=0.01, momentum=0.937,
weight_decay=0.0005, warmup_epochs=3.0, warmup_momentum=0.8, warmup_bias_lr=0.1,
box=0.05, cls=0.5, cls_pw=1.0, obj=1.0, obj_pw=1.0, iou_t=0.2, anchor_t=4.0,
fl_gamma=0.0, hsv_h=0.015, hsv_s=0.7, hsv_v=0.4, degrees=0.0, translate=0.1,
scale=0.5, shear=0.0, perspective=0.0, flipud=0.0, fliplr=0.5, mosaic=1.0,
mixup=0.0, copy_paste=0.0

Comet: run 'pip install comet_ml' to automatically track and
visualize YOLOv5 runs in Comet

TensorBoard: Start with 'tensorboard --logdir runs\train', view at http://localhost:6006/

Overriding model.yaml nc=80 with nc=17

	from	n	params	module	
arguments					
0	-1	1	3520	models.common.Conv	[3,
32, 6, 2, 2]					
1	-1	1	18560	models.common.Conv	[32,
64, 3, 2]					
2	-1	1	18816	models.common.C3	[64,
64, 1]					
3	-1	1	73984	models.common.Conv	[64,
128, 3, 2]					
4	-1	2	115712	models.common.C3	
[128, 128, 2]					
5	-1	1	295424	models.common.Conv	
[128, 256, 3, 2]					
6	-1	3	625152	models.common.C3	
[256, 256, 3]					
7	-1	1	1180672	models.common.Conv	
[256, 512, 3, 2]					
8	-1	1	1182720	models.common.C3	
[512, 512, 1]					
9	-1	1	656896	models.common.SPPF	
[512, 512, 5]					
10	-1	1	131584	models.common.Conv	
[512, 256, 1, 1]					
11	-1	1	0	torch.nn.modules.upsampling.Upsample	

```
[None, 2, 'nearest']
              [-1, 6] 1
                                0 models.common.Concat
                                                                            [1]
 12
13
                  -1 1
                           361984 models.common.C3
[512, 256, 1, False]
14
                  -1 1
                            33024 models.common.Conv
[256, 128, 1, 1]
15
                  -1 1
                                 0 torch.nn.modules.upsampling.Upsample
[None, 2, 'nearest']
16
              [-1, 4] 1
                                0 models.common.Concat
                                                                            [1]
                            90880 models.common.C3
                  -1 1
17
[256, 128, 1, False]
                            147712 models.common.Conv
18
                  -1 1
[128, 128, 3, 2]
                                 0 models.common.Concat
                                                                            [1]
19
             [-1, 14] 1
20
                            296448 models.common.C3
                  -1 1
[256, 256, 1, False]
21
                  -1 1
                           590336 models.common.Conv
[256, 256, 3, 2]
 22
             [-1, 10] 1
                                 0 models.common.Concat
                                                                            [1]
23
                  -1 1 1182720 models.common.C3
[512, 512, 1, False]
         [17, 20, 23] 1 59334 models.yolo.Detect
                                                                            [17,
[[10, 13, 16, 30, 33, 23], [30, 61, 62, 45, 59, 119], [116, 90, 156, 198, 373,
326]], [128, 256, 512]]
Model summary: 214 layers, 7065478 parameters, 7065478 gradients, 16.1 GFLOPs
Transferred 343/349 items from yolov5s.pt
AMP: checks passed
optimizer: SGD(lr=0.01) with parameter groups 57 weight(decay=0.0),
60 weight(decay=0.0005), 60 bias
train: Scanning
C:\Users\KIIT\Desktop\drowsiness_detection\data\labels.cache... 40 images, 0
backgrounds, 0 corrupt: 100%|######## 40/40 [00:00<?, ?it/s]
train: Scanning
C:\Users\KIIT\Desktop\drowsiness detection\data\labels.cache... 40 images, 0
backgrounds, 0 corrupt: 100% | ####### | 40/40 [00:00<?, ?it/s]
val: Scanning
C:\Users\KIIT\Desktop\drowsiness_detection\data\labels.cache... 40 images, 0
backgrounds, 0 corrupt: 100%|######## 40/40 [00:00<?, ?it/s]
val: Scanning
C:\Users\KIIT\Desktop\drowsiness_detection\data\labels.cache... 40 images, 0
backgrounds, 0 corrupt: 100%|######## 40/40 [00:00<?, ?it/s]
AutoAnchor: 5.57 anchors/target, 1.000 Best Possible Recall (BPR).
Current anchors are a good fit to dataset
Plotting labels to runs\train\exp5\labels.jpg...
```

Image sizes 320 train, 320 val
Using 0 dataloader workers
Logging results to runs\train\exp5
Starting training for 500 epochs...

Epoch	GPU_mem box_loss	obj_loss	cls_loss	Instances	Size
0%1	0/40 [00:00 , ?</td <td>it/sl</td> <td></td> <td></td> <td></td>	it/sl			
0/499			0.08477	4	320:
0%	0/40 [00:00 , ?it</td <td>/s]</td> <td></td> <td></td> <td></td>	/s]			
0/499	0.157G 0.1212	0.01955	0.08477	4	320:
2% 2	1/40 [00:02<01:18,	2.02s/it]			
0/499	0.18G 0.1042		0.09018	3	320:
2% 2	1/40 [00:02<01:18,				
	0.18G 0.1042		0.09018	3	320:
	2/40 [00:02<00:36,				
	0.206G 0.1018		0.0909	2	320:
5% 5					
	0.206G 0.1018		0.0909	2	320:
8% 7					
	0.206G 0.09485		0.07923	2	320:
	3/40 [00:02<00:23,				
	0.206G 0.09485		0.07923	2	320:
	4/40 [00:02<00:15				
	0.206G 0.09155			1	320:
	4/40 [00:02<00:15				
	0.206G 0.09155			1	320:
	5/40 [00:02<00:11				
0/499			0.07355	4	320:
	5/40 [00:02<00:11				
0/499	0.206G 0.09423		0.07355	4	320:
15% #5					
0/499				1	320:
	6/40 [00:03<00:09				
	0.206G 0.09159			1	320:
	7/40 [00:03<00:08				
	0.206G 0.08532		0.06406	2	320:
	7/40 [00:03<00:08				
0/499		0.01512	0.06406	2	320:
20% ##	8/40 [00:03<00:06			_	
0/499		0.01457	0.06237	2	320:
20% ##	8/40 [00:03<00:06	•			
0/499	0.206G 0.08536		0.06237	2	320:
22% ##2	9/40 [00:03<00:06		0.000==	_	
0/499		0.01396	0.06075	1	320:
22% ##2	9/40 [00:03<00:06	-	0 000==		
0/499		0.01396	0.06075	1	320:
25% ##5	10/40 [00:03<00:0	b, 5.42it/s]			

0/499	0.206G 0.08644	0.01536	0.0626	4	320:
25% ##5	10/40 [00:03<00:05,	5.42it/s]			
0/499	0.206G 0.08644	0.01536	0.0626	4	320:
28% ##7	11/40 [00:03<00:05,	5.67it/s]			
0/499	0.206G 0.08514		0.06195	1	320:
28% ##7	11/40 [00:03<00:05,				
0/499	0.206G 0.08514	0.01477	0.06195	1	320:
30% ###	12/40 [00:03<00:04,				
0/499	0.206G 0.08773		0.06303	4	320:
30% ###	12/40 [00:04<00:04,			_	
0/499	0.206G 0.08773	0.01553	0.06303	4	320:
32% ###2	13/40 [00:04<00:04,				
0/499	0.206G 0.08649		0.06185	1	320:
32% ###2	13/40 [00:04<00:04,				
0/499	0.206G 0.08649		0.06185	1	320:
35% ###5	14/40 [00:04<00:04,				
0/499	0.206G 0.08587		0.06067	1	320:
35% ###5	14/40 [00:04<00:04,				
0/499	0.206G 0.08587	0.01471	0.06067	1	320:
38% ###7	15/40 [00:04<00:04,				
0/499	0.206G 0.08466		0.05991	1	320:
38% ###7	15/40 [00:04<00:04,				
0/499	0.206G 0.08466		0.05991	1	320:
40% ####	16/40 [00:04<00:03,				
0/499	0.206G 0.08701		0.06009	2	320:
40% ####	16/40 [00:04<00:03,				
0/499	0.206G 0.08701	0.01437	0.06009	2	320:
42% ####2	17/40 [00:04<00:03,				
0/499	0.206G 0.08643	0.01404	0.05966	1	320:
42% ####2	17/40 [00:04<00:03,				
0/499	0.206G 0.08643		0.05966	1	320:
45% ####5	18/40 [00:04<00:03,				
0/499	0.206G 0.0871	0.01413	0.06135	2	320:
45% ####5	18/40 [00:05<00:03,				
0/499		0.01413	0.06135	2	320:
48% ####7	19/40 [00:05<00:03,				
0/499	0.206G 0.08629		0.06074	1	320:
48% ####7	19/40 [00:05<00:03,				
0/499	0.206G 0.08629		0.06074	1	320:
50% #####	20/40 [00:05<00:03,	6.00it/s]			
0/499	0.206G 0.08694	0.01471	0.06173	4	320:
50% #####	20/40 [00:05<00:03,	6.00it/s]			
0/499	0.206G 0.08694		0.06173	4	320:
52% #####2	21/40 [00:05<00:03,				
0/499	0.206G 0.08726		0.06274	2	320:
52% #####2	21/40 [00:05<00:03,	5.97it/s]			
0/499	0.206G 0.08726	0.0148	0.06274	2	320:
55% #####5	22/40 [00:05<00:02,	6.09it/s]			

0/499		0.206G	0.08813	0.01533	0.06342	4	320:
55% #####5	1	22/40 [00:	05<00:02,	6.09it/s]			
0/499		0.206G	0.08813	0.01533	0.06342	4	320:
57% #####7		23/40 [00:	05<00:02,	6.17it/s]			
0/499		0.206G	0.08876	0.01523	0.06411	2	320:
57% #####7		23/40 [00:		6.17it/s]			
0/499				0.01523	0.06411	2	320:
60% #####	١	24/40 [00:	=	5.89it/s]			
0/499				0.01522	0.06351	2	320:
60% ######	١	24/40 [00:		5.89it/s]	0.0054		
0/499				0.01522	0.06351	2	320:
62% ######2	ı	25/40 [00:		6.03it/s]	0.0000	4	000
0/499				0.01579	0.06388	4	320:
62% ######2	ı	25/40 [00:		6.03it/s]	0.00000	4	200
0/499				0.01579	0.06388	4	320:
65% ######5	ı	26/40 [00:		5.97it/s]	0.0044	0	200
0/499				0.01585	0.0644	2	320:
65% ######5	ı	26/40 [00:	•	5.97it/s]	0.0044	0	200
0/499				0.01585	0.0644	2	320:
68% ######7	ı	27/40 [00:	•	5.97it/s]	0 00070	4	200
0/499				0.01566	0.06373	1	320:
68% ######7	ı	27/40 [00:		5.97it/s]	0 06272	4	200.
0/499				0.01566	0.06373	1	320:
70% #######	١	28/40 [00:	-	5.92it/s]	0 06340	1	200.
0/499				0.01543	0.06342	1	320:
70% #######	ı	28/40 [00:		5.92it/s]	0.06340	4	200.
0/499				0.01543	0.06342	1	320:
72% #######2 0/499	ı	29/40 [00: 0.206G	=	5.89it/s] 0.01521	0 06005	1	320:
					0.06295	1	320:
72% #######2 0/499	1	29/40 [00:		5.89it/s] 0.01521	0 06005	1	320:
75% ######5	ı	0.206G 30/40 [00:		5.96it/s]	0.06295	1	320:
0/499	1		0.08836	0.01532	0 06353	4	320:
	ı				0.06353	4	320.
0/499	'	30/40 [00: 0.206G		5.96it/s] 0.01532	0.06353	4	320:
78% ######7	1			5.92it/s]	0.00333	4	320.
	'		-	0.01513	0.06281	1	320:
		31/40 [00:		5.92it/s]	0.00201	1	520.
0/499	'			0.01513	0.06281	1	320:
	ı	32/40 [00:		5.58it/s]	0.00201	1	020.
0/499	'		-	0.01523	0.06328	2	320:
80% ########	ı			5.58it/s]	0.00020	-	520.
	'	-	•	0.01523	0.06328	2	320:
82% #######2				5.69it/s]		_	520.
0/499	'			0.01581	0.06368	4	320:
82% #######2	ı			5.69it/s]		-	020.
0/499	'			0.01581	0.06368	4	320:
85% #######5	I			5.88it/s]	-		•
	•	. •	•	- · ·			

0/499 0.206G			0.06319	2	320:
85% #######5 34/40 [00: 0/499 0.206G	0,200:01, 0.08751		0.06319	2	320:
88% #######7 35/40 [00:	07<00:00,	5.86it/s]			
	0.08774	0.01586	0.06347	2	320:
88% #######7 35/40 [00:			0.0001	_	020.
			0 06247	0	200.
	0.08774		0.06347	2	320:
90% ####### 36/40 [00:					
0/499 0.206G	0.08834	0.01623	0.06366	4	320:
90% ######## 36/40 [00:	08<00:00,	5.94it/s			
0/499 0.206G	0.08834	0.01623	0.06366	4	320:
92% ########2 37/40 [00:	08<00:00,	6.07it/s]			
	0.08788		0.06316	2	320:
92% ########2 37/40 [00:			0.00010	_	0201
		0.0162	0.06316	2	320:
			0.06316	2	320:
95% #######5 38/40 [00:					
	0.08718		0.06286	1	320:
95% ########5 38/40 [00:	08<00:00,	6.16it/s]			
0/499 0.206G	0.08718	0.01605	0.06286	1	320:
98% ########7 39/40 [00:	08<00:00,	6.07it/s]			
	0.08666		0.0625	2	320:
98% #######7 39/40 [00:					
	0.08666		0.0625	2	320:
			0.0025	2	320.
100% ######## 40/40 [00				•	222
	0.08666		0.0625	2	320:
100% ######## 40/40 [00	:08<00:00,	4.69it/s]			
Class	Images I	nstances	P	R	mAP50
mAP50-95: 0%	0/20 [00:	00 , ?it/s</td <td>]</td> <td></td> <td></td>]		
Class	Images I		Р	R	mAP50
	•	00<00:01, 1			
Class	Images I		P	R	mAP50
	_			16	IIIAI 50
		00<00:00, 1		_	
Class	Images I		Р	R	mAP50
mAP50-95: 35% ###5	7/20 [00:	00<00:00, 1	9.47it/s]		
Class	Images I	nstances	P	R	mAP50
mAP50-95: 50% #####	10/20 [00	:00<00:00,	20.66it/s]		
Class		nstances		R	mAP50
	•	:00<00:00,			
Class	Images I		P	R	mAP50
	•		=	16	IIIAI 50
		:00<00:00,		_	. = = -
Class	Images I		P	R	mAP50
mAP50-95: 95% #######5	19/20 [00	:00<00:00,	21.12it/s]		
Class	Images I	nstances	Р	R	mAP50
mAP50-95: 100% ########	20/20 [00	:00<00:00,	20.59it/s]		
all	40	40	0.0118	0.35	0.0265
0.00362	-		- -	- -	
J. J					

F	Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
0%		0/40 [0	00:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
1	1/499	0.206G	0.1134	0.02758	0.07119	4	320:
0%		0/40 [00:	:00 , ?it/</td <td>s]</td> <td></td> <td></td> <td></td>	s]			
1	1/499	0.206G	0.1134	0.02758	0.07119	4	320:
2% 2		1/40 [00:	:00<00:05,	6.52it/s			
1	1/499	0.206G			0.07032	4	320:
		1/40 [00:					
	1/499	0.206G			0.07032	4	320:
07010		2/40 [00:	=				
	1/499	0.206G			0.06336	2	320:
5% 5		2/40 [00:					
	1/499	0.206G			0.06336	2	320:
8% 7		3/40 [00:					
	1/499	0.206G			0.05951	2	320:
8% 7		3/40 [00:					
	1/499		0.09024		0.05951	2	320:
		4/40 [00	=				
		0.206G		0.0228	0.06315	4	320:
10% #				6.66it/s]			
		0.206G			0.06315	4	320:
12% #2			=	6.33it/s]			
	1/499			0.02146	0.06083	2	320:
12% #2			=	6.33it/s]		_	
	1/499			0.02146	0.06083	2	320:
15% #5			=	6.35it/s]			
				0.01981	0.05913	1	320:
15% #5			=	6.35it/s]	0.05040		200
	-,			0.01981	0.05913	1	320:
18% #7				6.35it/s]	0 0011	4	800
	1/499				0.0611	4	320:
18% #7				6.35it/s]		•	000
	1/499				0.0611	4	320:
20% ##		8/40 [00):01<00:05,	6.35it/s]			

IOPub data rate exceeded.

The notebook server will temporarily stop sending output to the client in order to avoid crashing it.

To change this limit, set the config variable

Current values:

NotebookApp.iopub_data_rate_limit=1000000.0 (bytes/sec) NotebookApp.rate_limit_window=3.0 (secs)

423/499	0.206G	0.0222	0.008925	0.02035	2	320:
40% ####	16/40 [00	:03<00:04,	5.65it/s]			
423/499	0.206G	0.0222	0.008925	0.02035	2	320:

^{`--}NotebookApp.iopub_data_rate_limit`.

42% ####2	- 1	17/40 [00:03<00:04,	5.55it/s]			
423/499		0.206G 0.0214	0.008593	0.02015	1	320:
42% ####2	- 1	17/40 [00:03<00:04,	5.55it/s]			
423/499		0.206G 0.0214	0.008593	0.02015	1	320:
45% ####5	- 1	18/40 [00:03<00:03,	5.61it/s]			
423/499		0.206G 0.0209	0.008351	0.01996	1	320:
45% ####5	- 1	18/40 [00:03<00:03,	5.61it/s]			
423/499		0.206G 0.0209	0.008351	0.01996	1	320:
48% ####7	-	19/40 [00:03<00:03,	5.67it/s			
423/499		0.206G 0.02082	0.008596	0.0202	4	320:
48% ####7	- 1	19/40 [00:03<00:03,	5.67it/s			
423/499		0.206G 0.02082	0.008596	0.0202	4	320:
50% #####	- 1	20/40 [00:03<00:03,	5.71it/s			
423/499		0.206G 0.02022	0.008379	0.02009	1	320:
50% #####		20/40 [00:03<00:03,	5.71it/s			
423/499		0.206G 0.02022	0.008379	0.02009	1	320:
52% #####2	- 1	21/40 [00:03<00:03,	5.73it/s			
423/499		0.206G 0.02189	0.008348	0.0207	2	320:
52% #####2		21/40 [00:04<00:03,	5.73it/s			
423/499		0.206G 0.02189	0.008348	0.0207	2	320:
55% #####5	-	22/40 [00:04<00:03,	5.46it/s			
423/499		0.206G 0.02224	0.008225	0.02059	2	320:
55% #####5	-	22/40 [00:04<00:03,	5.46it/s]			
423/499		0.206G 0.02224	0.008225	0.02059	2	320:
57% #####7	-	23/40 [00:04<00:03,	5.42it/s			
423/499		0.206G 0.02236	0.008676	0.02063	4	320:
57% #####7	- 1	23/40 [00:04<00:03,				
423/499		0.206G 0.02236	0.008676	0.02063	4	320:
60% ######	I	24/40 [00:04<00:02,				
423/499		0.206G 0.02322		0.02043	2	320:
60% ######		24/40 [00:04<00:02,				
423/499			0.008784	0.02043	2	320:
62% ######2	ı	25/40 [00:04<00:02,				
423/499		0.206G 0.02278	0.008594	0.02028	1	320:
62% ######2	ı	25/40 [00:04<00:02,				
423/499		0.206G 0.02278	0.008594	0.02028	1	320:
65% ######5	ı	26/40 [00:04<00:02,				
423/499		0.206G 0.02256	0.008837	0.02012	4	320:
65% ######5	ı	26/40 [00:04<00:02,				
423/499		0.206G 0.02256		0.02012	4	320:
68% ######7	ı	27/40 [00:04<00:02,				
423/499		0.206G 0.02243	0.008806	0.01998	1	320:
68% ######7	ı	27/40 [00:05<00:02,				
423/499		0.206G 0.02243	0.008806	0.01998	1	320:
70% #######	I	28/40 [00:05<00:02,		0.04005		
423/499		0.206G 0.02197		0.01996	2	320:
70% #######	I	28/40 [00:05<00:02,		0.04000	0	222
423/499		0.206G 0.02197	0.008736	0.01996	2	320:

72% #######2	29/40 [00:05<00:01,	5 71;+/al			
423/499	•	0.008831	0.02005	4	320:
	29/40 [00:05<00:01,		0.02000	T	020.
423/499		0.008831	0.02005	4	320:
	30/40 [00:05<00:01,		0.02000	1	020.
423/499			0.01993	2	320:
	30/40 [00:05<00:01,		0.01000	2	020.
423/499	•		0.01993	2	320:
	31/40 [00:05<00:01,		0.0200	_	0_0.
423/499		0.008576	0.01974	1	320:
	31/40 [00:05<00:01,			_	
423/499	•	0.008576	0.01974	1	320:
	32/40 [00:05<00:01,				
423/499			0.0197	2	320:
	32/40 [00:06<00:01,				
423/499	·		0.0197	2	320:
	33/40 [00:06<00:01,				
423/499	0.206G 0.02181	0.008536	0.0204	2	320:
82% ########2	33/40 [00:06<00:01,	5.60it/s]			
423/499	0.206G 0.02181	0.008536	0.0204	2	320:
85% ########5	34/40 [00:06<00:01,	5.52it/s			
423/499	0.206G 0.02143	0.008408	0.02052	1	320:
85% ########5	34/40 [00:06<00:01,	5.52it/s			
423/499	0.206G 0.02143	0.008408	0.02052	1	320:
88% #######7	35/40 [00:06<00:00,	5.60it/s]			
423/499	0.206G 0.02106	0.00833	0.02038	1	320:
88% #######7	35/40 [00:06<00:00,	5.60it/s]			
423/499	0.206G 0.02106	0.00833	0.02038	1	320:
90% ########	36/40 [00:06<00:00,	5.49it/s			
423/499			0.0202	2	320:
	36/40 [00:06<00:00,				
423/499	0.206G 0.0209		0.0202	2	320:
	37/40 [00:06<00:00,				
423/499	0.206G 0.02123		0.02007	2	320:
	37/40 [00:06<00:00,				
423/499	*		0.02007	2	320:
	38/40 [00:06<00:00,				
423/499		0.008192	0.02	1	320:
	38/40 [00:07<00:00,				222
423/499		0.008192	0.02	1	320:
	39/40 [00:07<00:00,		0.0004	4	000
423/499		0.008259	0.0201	4	320:
	39/40 [00:07<00:00,		0.0004	А	200
423/499	*		0.0201	4	320:
	1 40/40 [00:07<00:00 0.206G 0.02116	0.008259	0 0201	Л	200.
423/499			0.0201	4	320:
TOO%!###########	40/40 [00:07<00:00	, 5.5U1T/S]			

mAP50-95:	Class 0%		_	Instances [00:00 , ?it/</th <th>P 'sl</th> <th>R</th> <th>mAP50</th>	P 'sl	R	mAP50
	Class	I	mages	Instances	Р	R	mAP50
mAP50-95:	10% #	2	/20 [00:00<00:01,	13.75it/s]		
	Class		mages			R	mAP50
mAP50-95:	20% ##	4	/20 [00:00<00:01,	13.32it/s]		
	Class		_	Instances		R	mAP50
mAP50-95:	30% ###	6	/20 [00:00<00:00,	15.20it/s]		
	Class	I	mages	Instances	P	R	mAP50
mAP50-95:	40% ####	8	/20 [00:00<00:00,	15.51it/s]		
	Class	I	mages	Instances	P	R	mAP50
mAP50-95:	50% #####	1	0/20	[00:00<00:00,	, 16.40it/s]		
	Class	I	mages	Instances	P	R	mAP50
mAP50-95:	60% ######	1	2/20	[00:00<00:00,	, 16.15it/s]		
	Class	I	mages	Instances	P	R	mAP50
mAP50-95:	70% #######	1	4/20	[00:00<00:00,	, 16.79it/s]		
	Class	I	mages	Instances	P	R	mAP50
mAP50-95:	80% ########	1	6/20	[00:00<00:00,	, 17.24it/s]		
	Class			Instances		R	mAP50
mAP50-95:	90% #######	# 1	8/20	[00:01<00:00,	, 17.55it/s]		
	Class			Instances		R	mAP50
mAP50-95:	100% ########	## 2	0/20	[00:01<00:00,	, 17.77it/s]		
	Class	I	mages	Instances	P	R	mAP50
mAP50-95:	100% ########	## 2	0/20	[00:01<00:00,	, 16.56it/s]		
	all		40	40	0.98	0.985	0.995
0.76	all		40	40	0.98	0.985	0.995
0.76	all		40	40	0.98	0.985	0.995
0.76 Epoc		box	40 loss_			0.985 Instances	0.995 Size
Ерос	h GPU_mem		_loss	obj_loss			
Epoc	h GPU_mem 0/40 [00:00	_loss	obj_loss	cls_loss	Instances	Size
Epoc 0% 424/49	h GPU_mem 0/40 [9 0.206G	00:00	_loss , ?<br 01367	obj_loss	cls_loss		
Epoc 0% 424/49 0%	h GPU_mem 0/40 [9 0.206G 0/40 [00	00:00 0. :00 </td <td>_loss <?, ? 01367 , ?it</td> <td>obj_loss fit/s] 0.004213</td> <td>cls_loss 0.01494</td> <td>Instances</td> <td>Size 320:</td>	_loss , ?<br 01367 , ?it	obj_loss fit/s] 0.004213	cls_loss 0.01494	Instances	Size 320:
Epoc 0% 424/49 0% 424/49	h GPU_mem	00:00 0. :00 <br 0.	_loss , ?<br 01367 , ?it	obj_loss fit/s] f 0.004213 f/s] f 0.004213	cls_loss	Instances	Size
Epoc 0% 424/49 0% 424/49 2% 2	h GPU_mem 0/40 [9 0.206G 0/40 [00 9 0.206G 1/40 [00	00:00 0. :00 <br 0.	_loss , ?<br 01367 , ?it 01367 0:07,	obj_loss fit/s] f 0.004213 f/s] f 0.004213 5.33it/s]	0.01494 0.01494	Instances	Size 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49	h GPU_mem 0/40 [9 0.206G 0/40 [00 9 0.206G 1/40 [00 9 0.206G	00:00 0. :00 <br 0. :00<0	_loss , ?<br 01367 , ?it 01367 0:07,	obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481	cls_loss 0.01494	Instances	Size 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 2% 2	h GPU_mem 0/40 [9 0.206G 0/40 [00 9 0.206G 1/40 [00 9 0.206G 1/40 [00	00:00 0. :00 <br 0. :00<0 0.	_loss , ?<br 01367 , ?it 01367 0:07, 02376	obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s]	0.01494 0.01494	Instances 1 1 2	Size 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49	h GPU_mem 0/40 [9 0.206G 0/40 [00 9 0.206G 1/40 [00 9 0.206G 1/40 [00	00:00 0. :00 <br 0. :00<0 0.	_loss , ?<br 01367 , ?it 01367 0:07,	obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s]	0.01494 0.01494	Instances 1	Size 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 2% 2	h GPU_mem 0/40 [9 0.206G 0/40 [00 9 0.206G 1/40 [00 9 0.206G 1/40 [00	00:00 0. :00 <br 0. :00<0 0. :00<0	_loss , ? 01367 , ?it 01367 0:07, 02376 0:07, 02376</td <td>obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s]</td> <td>0.01494 0.01494 0.01599</td> <td>Instances 1 1 2</td> <td>Size 320: 320: 320:</td>	obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s]	0.01494 0.01494 0.01599	Instances 1 1 2	Size 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 2% 2 424/49	h GPU_mem 0/40 [9 0.206G 0/40 [00 9 0.206G 1/40 [00 9 0.206G 1/40 [00 9 0.206G 2/40 [00	00:00 0. :00 <br 0. :00<0 0. :00<0	_loss , ?<br 01367 , ?it 01367 0:07, 02376 0:07,	obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s]	0.01494 0.01494 0.01599	Instances 1 1 2	Size 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 2% 2 424/49 5% 5	h GPU_mem 0/40 [9 0.206G 0/40 [00 9 0.206G 1/40 [00 9 0.206G 1/40 [00 9 0.206G 2/40 [00 9 0.206G	00:00 0. :00 <br 0. :00<0 0. :00<0 0.	_loss , ? 01367 , ?it 01367 0:07, 02376 0:07, 02376 0:06, 01999</td <td>obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354</td> <td>0.01494 0.01494 0.01599 0.01599</td> <td>Instances 1 1 2 2</td> <td>Size 320: 320: 320:</td>	obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354	0.01494 0.01494 0.01599 0.01599	Instances 1 1 2 2	Size 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 5% 5 424/49	h GPU_mem 0/40 [9 0.206G	00:00 0. :00 <br 0. :00<0 0. :00<0 0. :00<0	_loss , ? 01367 , ?it 01367 0:07, 02376 0:07, 02376 0:06, 01999</td <td>obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354</td> <td>0.01494 0.01494 0.01599 0.01599</td> <td>Instances 1 1 2 2</td> <td>Size 320: 320: 320:</td>	obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354	0.01494 0.01494 0.01599 0.01599	Instances 1 1 2 2	Size 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 5% 5 424/49 5% 5	h GPU_mem 0/40 [9 0.206G	00:00 0. :00 <br 0. :00<0 0. :00<0 0. :00<0	_loss , ? 01367 , ?it 01367 0:07, 02376 0:07, 02376 0:06, 01999</td <td>obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s]</td> <td>0.01494 0.01494 0.01599 0.01599 0.01576</td> <td>Instances 1 1 2 2 1</td> <td>Size 320: 320: 320: 320:</td>	obj_loss rit/s] 0.004213 r/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s]	0.01494 0.01494 0.01599 0.01599 0.01576	Instances 1 1 2 2 1	Size 320: 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 5% 5 424/49 5% 5 424/49	h GPU_mem 0/40 [9 0.206G	00:00 0. :00 <br 0. :00<0 0. :00<0 0. :00<0	_loss , ? 01367 , ?it 01367 0:07, 02376 0:07, 02376 0:06, 01999</td <td>obj_loss it/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s]</td> <td>0.01494 0.01494 0.01599 0.01599 0.01576</td> <td>Instances 1 1 2 2 1</td> <td>Size 320: 320: 320: 320:</td>	obj_loss it/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s]	0.01494 0.01494 0.01599 0.01599 0.01576	Instances 1 1 2 2 1	Size 320: 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 5% 5 424/49 5% 5 424/49 8% 7	h GPU_mem 0/40 [9 0.206G	00:00 0. :00 <br 0. :00<0 0. :00<0 0. :00<0 0.	_loss , ? 01367 , ?it 01367 0:07, 02376 0:06, 01999 0:06, 01999 0:06, 02391</td <td>obj_loss lit/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874</td> <td>0.01494 0.01494 0.01599 0.01599 0.01576</td> <td>Instances 1 1 2 2 1 1</td> <td>Size 320: 320: 320: 320: 320:</td>	obj_loss lit/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874	0.01494 0.01494 0.01599 0.01599 0.01576	Instances 1 1 2 2 1 1	Size 320: 320: 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 5% 5 424/49 5% 5 424/49 8% 7 424/49	h GPU_mem 0/40 [9	00:00 0. :00 <br 0. :00<0 0. :00<0 0. :00<0 0. :00<0	_loss , ? 01367 , ?it 01367 0:07, 02376 0:06, 01999 0:06, 01999 0:06, 02391</td <td>obj_loss lit/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874</td> <td>0.01494 0.01494 0.01599 0.01599 0.01576</td> <td>Instances 1 1 2 2 1 1</td> <td>Size 320: 320: 320: 320: 320:</td>	obj_loss lit/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874	0.01494 0.01494 0.01599 0.01599 0.01576	Instances 1 1 2 2 1 1	Size 320: 320: 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 5% 5 424/49 5% 5 424/49 8% 7 424/49	h GPU_mem 0/40 [9 0.206G	00:00 0. :00 <br 0. :00<0 0. :00<0 0. :00<0 0. :00<0	_loss , ? 01367 , ?it 01367 0:07, 02376 0:06, 01999 0:06, 02391 0:06, 02391</td <td>obj_loss fit/s] 0.004213 f/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874 5.69it/s]</td> <td>0.01494 0.01494 0.01599 0.01599 0.01576 0.01576</td> <td>Instances 1 1 2 2 1 1 4</td> <td>Size 320: 320: 320: 320: 320: 320:</td>	obj_loss fit/s] 0.004213 f/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874 5.69it/s]	0.01494 0.01494 0.01599 0.01599 0.01576 0.01576	Instances 1 1 2 2 1 1 4	Size 320: 320: 320: 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 5% 5 424/49 5% 5 424/49 8% 7 424/49	h GPU_mem 0/40 [9 0.206G	00:00 0. :00 <br 0. :00<0 0. :00<0 0. :00<0 0. :00<0 0.	_loss , ? 01367 , ?it 01367 0:07, 02376 0:06, 01999 0:06, 02391 0:06, 02391</td <td>obj_loss it/s] 0.004213 i/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874 5.69it/s] 0.00874</td> <td>0.01494 0.01494 0.01599 0.01599 0.01576 0.01576</td> <td>Instances 1 1 2 2 1 1 4</td> <td>Size 320: 320: 320: 320: 320: 320:</td>	obj_loss it/s] 0.004213 i/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874 5.69it/s] 0.00874	0.01494 0.01494 0.01599 0.01599 0.01576 0.01576	Instances 1 1 2 2 1 1 4	Size 320: 320: 320: 320: 320: 320:
Epoc 0% 424/49 0% 424/49 2% 2 424/49 5% 5 424/49 5% 5 424/49 8% 7 424/49 8% 7 424/49	h GPU_mem 0/40 [9	00:00 0. :00 <br 0. :00<0 0. :00<0 0. :00<0 0. :00<0 0. :00<0 0.	_loss , ? 01367 , ?it 01367 0:07, 02376 0:06, 01999 0:06, 02391 0:06, 02391 00:06</td <td>obj_loss lit/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874 5.69it/s] 0.00874 5.69it/s]</td> <td>0.01494 0.01494 0.01599 0.01599 0.01576 0.01576 0.01857</td> <td>Instances 1</td> <td>Size 320: 320: 320: 320: 320: 320: 320:</td>	obj_loss lit/s] 0.004213 5.33it/s] 0.006481 5.33it/s] 0.006481 5.59it/s] 0.005354 5.59it/s] 0.005354 5.69it/s] 0.00874 5.69it/s] 0.00874 5.69it/s]	0.01494 0.01494 0.01599 0.01599 0.01576 0.01576 0.01857	Instances 1	Size 320: 320: 320: 320: 320: 320: 320:

	0.206G 0.02393		0.01964	4	320:
12% #2	5/40 [00:00<00:06,				
424/499		0.01041	0.01927	2	320:
12% #2	5/40 [00:01<00:06,				
424/499	0.206G 0.0224		0.01927	2	320:
15% #5	6/40 [00:01<00:06,				
424/499	0.206G 0.02453		0.01982	4	320:
15% #5	6/40 [00:01<00:06,				
424/499	0.206G 0.02453		0.01982	4	320:
18% #7	,				
424/499	0.206G 0.02232		0.01968	1	320:
18% #7	7/40 [00:01<00:06,				
•	0.206G 0.02232		0.01968	1	320:
	8/40 [00:01<00:05,				
424/499	0.206G 0.02243		0.01964	2	320:
20% ##	8/40 [00:01<00:05,				
424/499		0.009885	0.01964	2	320:
22% ##2	9/40 [00:01<00:05,	5.45it/s]			
424/499	0.206G 0.02396	0.009662	0.01928	2	320:
22% ##2	9/40 [00:01<00:05,	5.45it/s			
424/499	0.206G 0.02396	0.009662	0.01928	2	320:
25% ##5	10/40 [00:01<00:05,	5.54it/s			
424/499	0.206G 0.02292	0.009079	0.01924	1	320:
25% ##5	10/40 [00:02<00:05,	5.54it/s]			
424/499	0.206G 0.02292	0.009079	0.01924	1	320:
28% ##7	11/40 [00:02<00:05,	5.34it/s			
424/499	0.206G 0.02167	0.008607	0.01947	1	320:
28% ##7	11/40 [00:02<00:05,	5.34it/s			
424/499	0.206G 0.02167	0.008607	0.01947	1	320:
30% ###	12/40 [00:02<00:05,	5.48it/s			
424/499	0.206G 0.02209	0.009121	0.01979	4	320:
30% ###	12/40 [00:02<00:05,	5.48it/s			
424/499	0.206G 0.02209	0.009121	0.01979	4	320:
32% ###2	13/40 [00:02<00:04,	5.56it/s]			
424/499	0.206G 0.02334	0.008979	0.02027	3	320:
32% ###2	13/40 [00:02<00:04,	5.56it/s]			
424/499	0.206G 0.02334	0.008979	0.02027	3	320:
35% ###5	14/40 [00:02<00:04,	5.63it/s]			
424/499	0.206G 0.02386	0.00955	0.02032	4	320:
35% ###5	14/40 [00:02<00:04,	5.63it/s]			
424/499	0.206G 0.02386	0.00955	0.02032	4	320:
38% ###7	15/40 [00:02<00:04,	5.40it/s]			
424/499	0.206G 0.02338		0.02009	2	320:
38% ###7	15/40 [00:02<00:04,				
424/499		0.009559	0.02009	2	320:
40% ####	16/40 [00:02<00:04,				
424/499	0.206G 0.02321		0.01979	2	320:
40% ####	16/40 [00:03<00:04,				
	•	_			

424/499	0.206G 0.02321 0.009614	0.01979	2	320:
42% ####2	17/40 [00:03<00:04, 5.59it/s]			
424/499	0.206G 0.02273 0.009278	0.0196	1	320:
42% ####2	17/40 [00:03<00:04, 5.59it/s]			
424/499	0.206G 0.02273 0.009278	0.0196	1	320:
45% ####5	18/40 [00:03<00:03, 5.65it/s]	0.04050		000
424/499	0.206G 0.02285 0.009429	0.01952	2	320:
45% ####5	18/40 [00:03<00:03, 5.65it/s]	0.01050	0	200.
424/499 48% ####7	0.206G 0.02285 0.009429	0.01952	2	320:
424/499	19/40 [00:03<00:03, 5.54it/s] 0.206G	0.01942	1	320:
424/499	19/40 [00:03<00:03, 5.54it/s]	0.01942	1	320.
424/499	0.206G 0.02256 0.009171	0.01942	1	320:
50% #####	20/40 [00:03<00:03, 5.62it/s]	0.01342	1	520.
424/499	0.206G 0.02183 0.008875	0.01898	1	320:
50% #####	20/40 [00:03<00:03, 5.62it/s]	0.01000	1	020.
424/499	0.206G 0.02183 0.008875	0.01898	1	320:
52% #####2	21/40 [00:03<00:03, 5.84it/s]	0.0100	-	020.
424/499	0.206G 0.02209 0.00913	0.01937	4	320:
52% #####2	21/40 [00:03<00:03, 5.84it/s]	0.0200.	_	0201
424/499	0.206G 0.02209 0.00913	0.01937	4	320:
55% #####5	22/40 [00:03<00:03, 5.67it/s]			
424/499	0.206G 0.02183 0.00928	0.01935	2	320:
55% #####5	22/40 [00:04<00:03, 5.67it/s]			
424/499	0.206G 0.02183 0.00928	0.01935	2	320:
57% #####7	23/40 [00:04<00:02, 5.71it/s]			
424/499	0.206G 0.02197 0.009671	0.01968	4	320:
57% #####7	23/40 [00:04<00:02, 5.71it/s]			
424/499	0.206G 0.02197 0.009671	0.01968	4	320:
60% #####	24/40 [00:04<00:03, 5.31it/s]			
424/499	0.206G 0.02144 0.009614	0.01951	2	320:
60% ######	24/40 [00:04<00:03, 5.31it/s]			
424/499	0.206G 0.02144 0.009614	0.01951	2	320:
62% ######2	25/40 [00:04<00:02, 5.44it/s]			
424/499	0.206G 0.02121 0.009573	0.0193	2	320:
62% #####2	25/40 [00:04<00:02, 5.44it/s]			
424/499	0.206G 0.02121 0.009573	0.0193	2	320:
65% ######5	26/40 [00:04<00:02, 5.55it/s]			
424/499	0.206G 0.02132 0.009955	0.01925	4	320:
65% ######5	26/40 [00:04<00:02, 5.55it/s]			
424/499	0.206G 0.02132 0.009955	0.01925	4	320:
68% ######7	27/40 [00:04<00:02, 5.48it/s]			
424/499	0.206G 0.02117 0.01005	0.01947	4	320:
68% ######7	27/40 [00:05<00:02, 5.48it/s]		_	
424/499	0.206G 0.02117 0.01005	0.01947	4	320:
70% #######	28/40 [00:05<00:02, 5.03it/s]	0.0405;		000
424/499	0.206G 0.02059 0.009783	0.01931	1	320:
70% #######	28/40 [00:05<00:02, 5.03it/s]			

424/499	0.206G 0.02059	0.009783	0.01931	1	320:
72% #######2	29/40 [00:05<00:02,	5.25it/s]			
424/499	0.206G 0.02024	0.009624	0.0191	1	320:
72% ######2	29/40 [00:05<00:02,	5.25it/s			
424/499	0.206G 0.02024		0.0191	1	320:
	30/40 [00:05<00:01,				
424/499	0.206G 0.01987		0.01906	1	320:
	30/40 [00:05<00:01,				
424/499			0.01906	1	320:
	31/40 [00:05<00:01,				
424/499	0.206G 0.02011		0.0191	4	320:
	31/40 [00:05<00:01,		0.0404		000
424/499			0.0191	4	320:
	32/40 [00:05<00:01,				
424/499		0.009442	0.01901	1	320:
	32/40 [00:06<00:01,				
	0.206G 0.01993		0.01901	1	320:
	33/40 [00:06<00:01,				
424/499	0.206G 0.02002	0.009352	0.01905	2	320:
	33/40 [00:06<00:01,				
424/499			0.01905	2	320:
	34/40 [00:06<00:01,				
424/499	0.206G 0.01986		0.01906	2	320:
	34/40 [00:06<00:01,				
424/499	0.206G 0.01986	0.009365	0.01906	2	320:
	35/40 [00:06<00:01,				
424/499	0.206G 0.01959	0.009176	0.01885	1	320:
	35/40 [00:06<00:01,				
424/499	0.206G 0.01959		0.01885	1	320:
	36/40 [00:06<00:00,				
424/499		0.00909	0.01878	2	320:
	36/40 [00:06<00:00,				
424/499	0.206G 0.0202	0.00909	0.01878	2	320:
	37/40 [00:06<00:00,				
		0.009004	0.01871	2	320:
	37/40 [00:07<00:00,				
424/499			0.01871	2	320:
	38/40 [00:07<00:00,				
424/499	0.206G 0.02015		0.01875	2	320:
	38/40 [00:07<00:00,				
424/499			0.01875	2	320:
	39/40 [00:07<00:00,	· -			
	0.206G 0.01984		0.01877	1	320:
	39/40 [00:07<00:00,				
424/499	0.206G 0.01984		0.01877	1	320:
	40/40 [00:07<00:00				
424/499	0.206G 0.01984		0.01877	1	320:
100% ##########	40/40 [00:07<00:00	, 5.29it/s]			

ADEO OF :	Class	•	Instances	P	R	mAP50
mAP50-95:	0% Class		0:00 , ?it/<br Instances	rsj P	R	mAP50
mAP50-95:		_	0:00<00:01,		10	mAI 00
	Class		Instances		R	mAP50
mAP50-95:	20% ##	4/20 [0	0:00<00:01,	15.29it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:			0:00<00:00,	14.78it/s]		
	Class	Images		P	R	mAP50
mAP50-95:			0:00<00:00,		_	
ADE0 05	Class	•	Instances		R	mAP50
mAP50-95:			00:00<00:00,		D	ADEO
mAP50-95:	Class 60% #####	_	Instances 00:00<00:00,		R	mAP50
MAP50-95.	Class		Instances		R	mAP50
mAP50-95:		•	00:00<00:00,		16	mai oo
	Class		Instances		R	mAP50
mAP50-95:		•				
	Class		Instances		R	mAP50
mAP50-95:	95% ########5	•				
	Class	Images	Instances	P	R	mAP50
mAP50-95:	100% #########	20/20 [00:01<00:00,	, 15.56it/s]		
	all	40	40	0.98	0.983	0.995
0.777						
Enoc	sh CDII mam h	or logg	ohi logg	ala loga	Ingtoncog	Cigo
Epoc	ch GPU_mem b	oox_loss	obj_loss	cls_loss	Instances	Size
-	_		-	cls_loss	Instances	Size
0%	0/40 [00:		t/s]		Instances	
-	0/40 [00:	00 , ?i</td <td>t/s] 0.00648</td> <td>cls_loss 0.01632</td> <td></td> <td>Size 320:</td>	t/s] 0.00648	cls_loss 0.01632		Size 320:
0% 425/49	0/40 [00: 09	00 , ?i<br 0.04474) , ?it/</td <td>t/s] 0.00648</td> <td></td> <td></td> <td></td>	t/s] 0.00648			
0% 425/49 0%	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474	t/s] 0.00648 s] 0.00648	0.01632	2	320:
0% 425/49 0% 425/49	0/40 [00: 9	00 , ?i<br 0.04474 0 , ?it/<br 0.04474	t/s] 0.00648 s] 0.00648 5.32it/s]	0.01632	2	320:
0% 425/49 0% 425/49 2% 2	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005	0.01632 0.01632	2	320: 320:
0% 425/49 0% 425/49 2% 2 425/49 2% 2 425/49	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03167	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005	0.01632 0.01632	2	320: 320:
0% 425/49 0% 425/49 2% 2 425/49 5% 5	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03167	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s]	0.01632 0.01632 0.01822 0.01822	2 2 4 4	320: 320: 320: 320:
0% 425/49 0% 425/49 2% 2 425/49 5% 5 425/49	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03167 0<00:07, 0.03632	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s] 0.01033	0.01632 0.01632 0.01822	2 2 4	320: 320: 320:
0% 425/49 0% 425/49 2% 2 425/49 2% 2 425/49 5% 5 425/49	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03167 0<00:07, 0.03632 0<00:07,	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s] 0.01033 5.33it/s]	0.01632 0.01632 0.01822 0.01822 0.02057	2 2 4 4	320: 320: 320: 320:
0% 425/49 0% 425/49 2% 2 425/49 5% 5 425/49 5% 5 425/49	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03167 0<00:07, 0.03632 0<00:07,	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s] 0.01033 5.33it/s] 0.01033	0.01632 0.01632 0.01822 0.01822	2 2 4 4	320: 320: 320: 320:
0% 425/49 0% 425/49 2% 2 425/49 2% 2 425/49 5% 5 425/49 5% 5 425/49 8% 7	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03632 0<00:07, 0.03632 0<00:06,	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s] 0.01033 5.33it/s] 0.01033	0.01632 0.01632 0.01822 0.01822 0.02057	2 2 4 4 4	320: 320: 320: 320: 320:
0% 425/49 0% 425/49 2% 2 425/49 2% 2 425/49 5% 5 425/49 5% 5 425/49 8% 7 425/49	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03632 0<00:07, 0.03632 0<00:06, 0.0354	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s] 0.01033 5.33it/s] 0.01033 5.33it/s] 0.01033	0.01632 0.01632 0.01822 0.01822 0.02057	2 2 4 4	320: 320: 320: 320:
0% 425/49 0% 425/49 2% 2 425/49 2% 2 425/49 5% 5 425/49 8% 7 425/49	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03632 0<00:07, 0.03632 0<00:06, 0.0354 0<00:06,	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s] 0.01033 5.33it/s] 0.01033 5.53it/s] 0.01224 5.53it/s]	0.01632 0.01632 0.01822 0.01822 0.02057 0.02057	2 2 4 4 4 4	320: 320: 320: 320: 320: 320:
0% 425/49 0% 425/49 2% 2 425/49 5% 5 425/49 5% 5 425/49 8% 7 425/49	0/40 [00: 09	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03632 0<00:07, 0.03632 0<00:06, 0.0354 0<00:06, 0.0354	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s] 0.01033 5.33it/s] 0.01033 5.53it/s] 0.01224 5.53it/s] 0.01224	0.01632 0.01632 0.01822 0.01822 0.02057	2 2 4 4 4	320: 320: 320: 320: 320:
0% 425/49 0% 425/49 2% 2 425/49 2% 2 425/49 5% 5 425/49 8% 7 425/49	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03632 0<00:07, 0.03632 0<00:06, 0.0354 0<00:06, 0.0354	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s] 0.01033 5.33it/s] 0.01033 5.53it/s] 0.01224 5.53it/s] 0.01224	0.01632 0.01632 0.01822 0.01822 0.02057 0.02057	2 2 4 4 4 4	320: 320: 320: 320: 320: 320:
0% 425/49 0% 425/49 2% 2 425/49 2% 2 425/49 5% 5 425/49 5% 5 425/49 8% 7 425/49 8% 7 425/49	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	00 , ?i<br 0.04474 0 , ?it/<br 0.04474 0<00:07, 0.03167 0<00:07, 0.03632 0<00:07, 0.03632 0<00:06, 0.0354 0<00:06, 0.0354 00<00:06, 0.03662	t/s] 0.00648 s] 0.00648 5.32it/s] 0.01005 5.32it/s] 0.01005 5.33it/s] 0.01033 5.33it/s] 0.01033 5.53it/s] 0.01224 5.53it/s] 0.01224 5.27it/s] 0.01105	0.01632 0.01632 0.01822 0.01822 0.02057 0.02057 0.02223	2 2 4 4 4 4 4	320: 320: 320: 320: 320: 320: 320:

	1 - (12 - 52 - 22 - 23 - 24 - 24 - 24 - 24 - 24 - 2			
12% #2				
	0.206G 0.03557 0.01115	0.02626	2	320:
12% #2	5/40 [00:01<00:06, 5.45it/s]	0 00000	0	000
425/499	0.206G 0.03557 0.01115	0.02626	2	320:
15% #5	6/40 [00:01<00:06, 5.40it/s]	0.0054	4	200
425/499	0.206G 0.03293 0.0117	0.0251	4	320:
15% #5	6/40 [00:01<00:06, 5.40it/s]	0.0054	4	200.
425/499	0.206G 0.03293 0.0117	0.0251	4	320:
18% #7	7/40 [00:01<00:06, 5.10it/s]	0.00453	4	200.
425/499	0.206G 0.03375 0.01139	0.02453	4	320:
18% #7	7/40 [00:01<00:06, 5.10it/s]	0 00453	4	200.
425/499	0.206G 0.03375 0.01139 8/40 [00:01<00:06, 5.30it/s]	0.02453	4	320:
20% ##		0.02381	1	320:
425/499 20% ##	0.206G 0.03143 0.01048 8/40 [00:01<00:06, 5.30it/s]	0.02381	1	320:
425/499	0.206G 0.03143 0.01048	0 00201	1	200.
425/499	9/40 [00:01<00:05, 5.29it/s]	0.02381	1	320:
	0.206G 0.02936 0.009778	0.02302	1	320:
,	9/40 [00:01<00:05, 5.29it/s]	0.02302	1	320:
22% ##2 425/499		0 00200	1	320:
	0.206G 0.02936 0.009778 10/40 [00:01<00:05, 5.59it/s]	0.02302	1	320:
25% ##5 425/499	· ·	0 0006	1	320:
	0.206G 0.02804 0.009321 10/40 [00:02<00:05, 5.59it/s]	0.0226	1	320:
25% ##5 425/499	0.206G 0.02804 0.009321	0 0006	1	320:
425/499 28% ##7	11/40 [00:02<00:05, 5.51it/s]	0.0226	1	320.
425/499	0.206G 0.02678 0.0092	0.0218	1	320:
425/499 28% ##7	11/40 [00:02<00:05, 5.51it/s]	0.0216	1	320:
425/499	0.206G 0.02678 0.0092	0.0218	1	320:
30% ###	12/40 [00:02<00:05, 5.58it/s]	0.0210	1	320.
425/499	0.206G 0.02545 0.009052	0.02156	2	320:
30% ###	12/40 [00:02<00:05, 5.58it/s]	0.02130	2	520.
425/499	0.206G 0.02545 0.009052	0.02156	2	320:
32% ###2	13/40 [00:02<00:04, 5.65it/s]	0.02100	2	020.
425/499	0.206G 0.02528 0.009642	0.02189	4	320:
32% ###2	13/40 [00:02<00:04, 5.65it/s]	0.02103	I	020.
425/499	0.206G 0.02528 0.009642	0.02189	4	320:
35% ###5	14/40 [00:02<00:04, 5.70it/s]	0.02100	1	020.
425/499	0.206G 0.02469 0.009319	0.02155	2	320:
35% ###5	14/40 [00:02<00:04, 5.70it/s]	0.02100	2	020.
425/499	0.206G 0.02469 0.009319	0.02155	2	320:
38% ###7	15/40 [00:02<00:04, 5.73it/s]	0.02200	_	0_0.
425/499	0.206G 0.02369 0.008956	0.02114	1	320:
38% ###7	15/40 [00:02<00:04, 5.73it/s]		-	
425/499	0.206G 0.02369 0.008956	0.02114	1	320:
40% ####	16/40 [00:02<00:04, 5.76it/s]		-	
425/499	0.206G 0.02361 0.009051	0.02083	1	320:
40% ####	16/40 [00:03<00:04, 5.76it/s]	2000	-	
425/499	0.206G 0.02361 0.009051	0.02083	1	320:
-,				

42% ####2	I	17/40 [00:03<00:04,				
425/499		0.206G 0.02463	0.009653	0.02122	4	320:
42% ####2	ı	17/40 [00:03<00:04,				
425/499		0.206G 0.02463	0.009653	0.02122	4	320:
45% ####5	I	18/40 [00:03<00:03,				
425/499		0.206G 0.02411	0.009849	0.02118	4	320:
45% ####5	I	18/40 [00:03<00:03,				
425/499		0.206G 0.02411	0.009849	0.02118	4	320:
48% ####7	ı	19/40 [00:03<00:03,				
425/499		0.206G 0.02377	0.009965	0.02171	4	320:
48% ####7	I	19/40 [00:03<00:03,				
425/499		0.206G 0.02377		0.02171	4	320:
50% #####	ı	20/40 [00:03<00:03,				
425/499		0.206G 0.02376		0.02153	4	320:
50% #####		20/40 [00:03<00:03,				
425/499		0.206G 0.02376		0.02153	4	320:
52% #####2		21/40 [00:03<00:03,				
425/499		0.206G 0.02322		0.02144	1	320:
52% #####2		21/40 [00:03<00:03,	5.52it/s			
425/499		0.206G 0.02322	0.01001	0.02144	1	320:
55% #####5		22/40 [00:03<00:03,	5.61it/s			
425/499		0.206G 0.02295	0.009891	0.02202	2	320:
55% #####5		22/40 [00:04<00:03,	5.61it/s			
425/499		0.206G 0.02295	0.009891	0.02202	2	320:
57% #####7		23/40 [00:04<00:02,	5.67it/s]			
425/499		0.206G 0.02391	0.009935	0.02191	4	320:
57% #####7	-	23/40 [00:04<00:02,	5.67it/s			
425/499		0.206G 0.02391	0.009935	0.02191	4	320:
60% #####		24/40 [00:04<00:02,	5.53it/s			
425/499		0.206G 0.0234	0.009658	0.02157	1	320:
60% ######		24/40 [00:04<00:02,	5.53it/s]			
425/499		0.206G 0.0234	0.009658	0.02157	1	320:
62% ######2		25/40 [00:04<00:02,	5.61it/s]			
425/499		0.206G 0.02304	0.009655	0.02128	2	320:
62% ######2		25/40 [00:04<00:02,	5.61it/s]			
425/499		0.206G 0.02304	0.009655	0.02128	2	320:
65% ######5		26/40 [00:04<00:02,	5.68it/s]			
425/499		0.206G 0.02254	0.009433	0.02139	1	320:
65% ######5	-	26/40 [00:04<00:02,	5.68it/s]			
425/499		0.206G 0.02254	0.009433	0.02139	1	320:
68% ######7	- 1	27/40 [00:04<00:02,	5.73it/s]			
425/499		0.206G 0.02226	0.009234	0.02127	1	320:
68% #####7	- 1	27/40 [00:05<00:02,	5.73it/s]			
425/499		0.206G 0.02226	0.009234	0.02127	1	320:
70% ######	- 1	28/40 [00:05<00:02,	5.32it/s]			
425/499		0.206G 0.0231	0.009137	0.02137	2	320:
70% ######	- 1	28/40 [00:05<00:02,	5.32it/s]			
425/499		0.206G 0.0231	0.009137	0.02137	2	320:

72% #######2	29/40 [00:05<00:02,	5.37it/s]			
425/499	0.206G 0.02424	0.009024	0.02125	2	320:
72% #######2	29/40 [00:05<00:02,	5.37it/s]			
425/499	0.206G 0.02424	0.009024	0.02125	2	320:
75% ######5	30/40 [00:05<00:01,	5.42it/s			
425/499	0.206G 0.02382	0.008878	0.02107	1	320:
	30/40 [00:05<00:01,				
425/499			0.02107	1	320:
	31/40 [00:05<00:01,				
425/499			0.02111	4	320:
	31/40 [00:05<00:01,		0.00444		000
425/499	0.206G 0.02397	0.009139	0.02111	4	320:
	32/40 [00:05<00:01,		0 00005	4	200.
425/499	0.206G 0.02361		0.02095	4	320:
	32/40 [00:06<00:01, 0.206G 0.02361		0 00005	1	320:
425/499	33/40 [00:06<00:01,		0.02095	4	320:
425/499			0.02096	1	320:
	33/40 [00:06<00:01,		0.02090	1	320.
425/499	0.206G 0.02327	0.009086	0.02096	1	320:
	34/40 [00:06<00:01,		0.02030	1	020.
425/499			0.02074	1	320:
	34/40 [00:06<00:01,		0.020.1	_	0_0.
425/499	0.206G 0.02281		0.02074	1	320:
	35/40 [00:06<00:00,				
425/499	0.206G 0.0233	0.009106	0.02089	4	320:
88% #######7	35/40 [00:06<00:00,	5.55it/s]			
425/499	0.206G 0.0233	0.009106	0.02089	4	320:
90% ########	36/40 [00:06<00:00,	5.34it/s			
425/499	0.206G 0.0235	0.00902	0.02111	2	320:
90% #######	36/40 [00:06<00:00,	5.34it/s]			
425/499	0.206G 0.0235		0.02111	2	320:
	37/40 [00:06<00:00,	· -			
425/499	0.206G 0.02335		0.02098	1	320:
	37/40 [00:06<00:00,				
425/499		0.00888	0.02098	1	320:
	38/40 [00:06<00:00,		0.00400	0	200
425/499	0.206G 0.02328		0.02103	3	320:
	38/40 [00:07<00:00,		0.00102	2	200.
425/499	0.206G 0.02328 39/40 [00:07<00:00,		0.02103	3	320:
425/499			0.02097	4	320:
·	39/40 [00:07<00:00,		0.02031	Ŧ	JZU:
425/499			0.02097	4	320:
	40/40 [00:07<00:00		0.02001	±	020.
425/499	0.206G 0.02318		0.02097	4	320:
	40/40 [00:07<00:00				
	=	· -			

mAP50-95:	Cla 0%		_	Instances 00:00 , ?it/</th <th>P /sl</th> <th>R</th> <th>mAP50</th>	P /sl	R	mAP50
	Cla	ss	Images	Instances	Р	R	mAP50
mAP50-95:	10% #	1		00:00<00:01,			
	Cla		Images			R	mAP50
mAP50-95:	20% ##			00:00<00:00,			
	Cla		_	Instances		R	mAP50
mAP50-95:	30% ###			00:00<00:00,	18.16it/s]		
	Cla	ISS	Images	Instances	P	R	mAP50
mAP50-95:	40% ####		8/20 [00:00<00:00,	16.37it/s]		
	Cla		_	Instances		R	mAP50
mAP50-95:	50% #####	ŧ	10/20	[00:00<00:00	, 15.89it/s]		
	Cla	ıss	Images	Instances	P	R	mAP50
mAP50-95:	60% #####	#	12/20	[00:00<00:00	, 17.00it/s]		
	Cla	ISS	Images	Instances	P	R	mAP50
mAP50-95:	70% #####	##	14/20	[00:00<00:00	, 17.40it/s]		
	Cla	ıss	Images	Instances	P	R	mAP50
mAP50-95:	80% #####	###	16/20	[00:00<00:00	, 17.67it/s]		
	Cla			Instances		R	mAP50
mAP50-95:	90% #####	####	_	[00:01<00:00			
	Cla			Instances		R	mAP50
mAP50-95:			_	[00:01<00:00			
	Cla			Instances		R	mAP50
mAP50-95:			•	[00:01<00:00			
					,		
	а	111	40	40	0.977	1	0.995
0.796	а	111	40	40	0.977	1	0.995
0.796	а	ıTT	40	40	0.977	1	0.995
0.796 Epoc			40 ox_loss			1 Instances	0.995 Size
Epoc	h GPU_m	nem b	ox_loss	obj_loss		_	
Epoc	h GPU_m 0/4	nem b	ox_loss	obj_loss it/s]	cls_loss	_	Size
Epoc 0% 426/49	h GPU_m 0/4 0.20	nem b 40 [00:	ox_loss 00 , ?<br 0.0236	obj_loss it/s] 0.01133	cls_loss	_	
Epoc 0% 426/49 0%	h GPU_m 0/4 0.20 0/40	nem b 40 [00: 06G [00:00	ox_loss 00 , ?<br 0.0236 , ?it</td <td>obj_loss it/s] 0.01133 /s]</td> <td>cls_loss 0.02055</td> <td>Instances</td> <td>Size 320:</td>	obj_loss it/s] 0.01133 /s]	cls_loss 0.02055	Instances	Size 320:
Epoc 0% 426/49	h GPU_m 0/4 0.20 0/40 0.20	nem b 80 [00: 86G [00:00	ox_loss 00 , ?<br 0.0236 , ?it<br 0.0236	obj_loss it/s] 0.01133 /s] 0.01133	cls_loss	Instances	Size
Epoc 0% 426/49 0%	GPU_m 0/4 0.20 0/40 0.20 1/40	nem b 40 [00: 06G [00:00 06G [00:00	ox_loss 00 , ?<br 0.0236 , ?it</td <td>obj_loss it/s] 0.01133 /s] 0.01133</td> <td>cls_loss 0.02055</td> <td>Instances</td> <td>Size 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133	cls_loss 0.02055	Instances	Size 320: 320:
Epoc 0% 426/49 0% 426/49	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 0.20	nem b 40 [00: 06G [00:00 06G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097</td> <td>cls_loss 0.02055</td> <td>Instances</td> <td>Size 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097	cls_loss 0.02055	Instances	Size 320:
Epoc 0% 426/49 0% 426/49 2% 2	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 0.20	nem b 40 [00: 06G [00:00 06G [00:00	ox_loss 00 , ?<br 0.0236 , ?it<br 0.0236 <00:06,	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097	cls_loss 0.02055 0.02055	Instances 4	Size 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 1/40	nem b 60 [00: 06G [00:00 6G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06,</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097</td> <td>cls_loss 0.02055 0.02055</td> <td>Instances 4</td> <td>Size 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097	cls_loss 0.02055 0.02055	Instances 4	Size 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 2% 2	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 1/40 0.20 1/40	nem b 10 [00: 06G [00:00 06G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06,</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097</td> <td>0.02055 0.02055 0.02695</td> <td>Instances 4 4</td> <td>Size 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097	0.02055 0.02055 0.02695	Instances 4 4	Size 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 2% 2 426/49	Ph GPU_m 0/4 0.20 0/40 1/40 0.20 1/40 0.20 2/40	nem b 06G [00:00 06G [00:00 06G [00:00 06G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06, 0.02554 <00:06,</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097</td> <td>0.02055 0.02055 0.02695</td> <td>Instances 4 4</td> <td>Size 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097	0.02055 0.02055 0.02695	Instances 4 4	Size 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 5% 5	h GPU_m 0/4 0/40 0/40 0/40 1/40 1/40 1/40 2/40 0.20	nem b 10 [00: 06G [00:00 06G [00:00 06G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06, 0.02554 <00:06,</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096</td> <td>cls_loss 0.02055 0.02055 0.02695 0.02695</td> <td>Instances 4 4 2</td> <td>Size 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096	cls_loss 0.02055 0.02055 0.02695 0.02695	Instances 4 4 2	Size 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 2% 5 426/49 5% 5 426/49	h GPU_m 0/4 0/20 0/40 0/20 1/40 0.20 1/40 0.20 2/40 2/40	nem b 10 [00: 06G [00:00 06G [00:00 06G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06, 0.02554 <00:06, 0.02577 <00:06,</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096</td> <td>cls_loss 0.02055 0.02055 0.02695 0.02695</td> <td>Instances 4 4 2</td> <td>Size 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096	cls_loss 0.02055 0.02055 0.02695 0.02695	Instances 4 4 2	Size 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 5% 5 426/49 5% 5	Ph GPU_m 0/4 0.20 0/40 1/40 0.20 1/40 0.20 2/40 0.20 2/40 0.20	nem b 00:00:00 06G [00:00 06G [00:00 06G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06, 0.02554 <00:06, 0.02577 <00:06,</td <td>obj_loss it/s]</td> <td>0.02055 0.02055 0.02055 0.02695 0.02695 0.02549</td> <td>Instances 4 4 2 2 4</td> <td>Size 320: 320: 320: 320:</td>	obj_loss it/s]	0.02055 0.02055 0.02055 0.02695 0.02695 0.02549	Instances 4 4 2 2 4	Size 320: 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 5% 5 426/49 5% 5 426/49	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 1/40 0.20 2/40 0.20 2/40 1/40	nem b 10 [00: 06G [00:00 06G [00:00 06G [00:00 06G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06, 0.02554 <00:06, 0.02577 <00:06,</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s]</td> <td>0.02055 0.02055 0.02055 0.02695 0.02695 0.02549</td> <td>Instances 4 4 2 2 4</td> <td>Size 320: 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s]	0.02055 0.02055 0.02055 0.02695 0.02695 0.02549	Instances 4 4 2 2 4	Size 320: 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 5% 5 426/49 5% 5 426/49 8% 7	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 1/40 0.20 2/40 0.20 2/40 0.20 3/40 0.20	nem b 10 [00: 06G [00:00 06G [00:00 06G [00:00 06G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06, 0.02577 <00:06, 0.02577 <00:06,</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068</td> <td>cls_loss 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549</td> <td>Instances 4 4 2 2 4 4</td> <td>Size 320: 320: 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068	cls_loss 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549	Instances 4 4 2 2 4 4	Size 320: 320: 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 5% 5 426/49 5% 5 426/49 8% 7 426/49	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 1/40 0.20 2/40 0.20 2/40 0.20 3/40 0.20 3/40	nem b 10 [00: 06G [00:00 06G [00:00 06G [00:00 06G [00:00	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06, 0.02577 <00:06, 0.02577 <00:06, 0.02862</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068 5.43it/s]</td> <td>cls_loss 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549</td> <td>Instances 4 4 2 2 4 4</td> <td>Size 320: 320: 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068 5.43it/s]	cls_loss 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549	Instances 4 4 2 2 4 4	Size 320: 320: 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 5% 5 426/49 5% 5 426/49 8% 7 426/49	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 1/40 0.20 2/40 0.20 2/40 0.20 3/40 0.20 3/40 0.20 3/40 0.20	nem b 10 [00: 06G	ox_loss 00 ,? 0.0236 <?,?it 0.0236 <00:06, 0.02554 <00:06, 0.02577 <00:06, 0.02577 <00:06, 0.02577 <00:06, 0.02862 <00:06, 0.02862</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068 5.43it/s]</td> <td>cls_loss 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549 0.02308</td> <td>Instances 4 4 2 2 4 4 2</td> <td>Size 320: 320: 320: 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068 5.43it/s]	cls_loss 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549 0.02308	Instances 4 4 2 2 4 4 2	Size 320: 320: 320: 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 5% 5 426/49 5% 5 426/49 8% 7 426/49	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 1/40 0.20 2/40 0.20 2/40 0.20 3/40 0.20 3/40 0.20 4/40	nem b 10 [00:00 16G 100:00	ox_loss 00 ,? 0.0236 <?,?it 0.0236 <00:06, 0.02554 <00:06, 0.02577 <00:06, 0.02577 <00:06, 0.02862 <00:06, 0.02862 0<00:06</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068 5.43it/s] 0.01068</td> <td>cls_loss 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549 0.02308</td> <td>Instances 4 4 2 2 4 4 2</td> <td>Size 320: 320: 320: 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068 5.43it/s] 0.01068	cls_loss 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549 0.02308	Instances 4 4 2 2 4 4 2	Size 320: 320: 320: 320: 320: 320:
Epoc 0% 426/49 0% 426/49 2% 2 426/49 5% 5 426/49 5% 5 426/49 8% 7 426/49 8% 7 426/49 10% #	h GPU_m 0/4 0.20 0/40 0.20 1/40 0.20 1/40 0.20 2/40 0.20 2/40 0.20 3/40 0.20 3/40 0.20 4/40 0.20 4/40	nem b 10 [00:00 16G 100:00 16G 100:00 16G	ox_loss 00 , ? 0.0236 <?, ?it 0.0236 <00:06, 0.02554 <00:06, 0.02577 <00:06, 0.02577 <00:06, 0.02862 <00:06, 0.02862 0<00:06 0.02437</td <td>obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068 5.43it/s] 0.01068 5.43it/s] 0.01068 5.54it/s]</td> <td>0.02055 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549 0.02308</td> <td>Instances 4 4 2 2 4 4 2 2</td> <td>Size 320: 320: 320: 320: 320: 320: 320:</td>	obj_loss it/s] 0.01133 /s] 0.01133 5.77it/s] 0.008097 5.77it/s] 0.008097 5.51it/s] 0.01096 5.51it/s] 0.01096 5.43it/s] 0.01068 5.43it/s] 0.01068 5.43it/s] 0.01068 5.54it/s]	0.02055 0.02055 0.02055 0.02695 0.02695 0.02549 0.02549 0.02308	Instances 4 4 2 2 4 4 2 2	Size 320: 320: 320: 320: 320: 320: 320:

426/499	0.206G 0.02437	0 000610	0.02209	1	320:
12% #2	5/40 [00:00<00:06,		0.02209	1	520.
426/499		0.008511	0.02139	1	320:
	5/40 [00:01<00:06,		0.02139	1	320.
12% #2	0.206G 0.02243		0 00120	4	200.
426/499		0.008511	0.02139	1	320:
15% #5	6/40 [00:01<00:05,		0.004.04	4	200
,	0.206G 0.0245	0.009646	0.02131	4	320:
15% #5	6/40 [00:01<00:05,			_	
426/499	0.206G 0.0245	0.009646	0.02131	4	320:
18% #7	7/40 [00:01<00:05,				
426/499	0.206G 0.02384	0.009792	0.02083	3	320:
18% #7	7/40 [00:01<00:05,	5.56it/s			
426/499	0.206G 0.02384	0.009792	0.02083	3	320:
20% ##	8/40 [00:01<00:05,	5.64it/s]			
426/499	0.206G 0.02208	0.009185	0.02029	1	320:
20% ##	8/40 [00:01<00:05,	5.64it/s]			
426/499	0.206G 0.02208	0.009185	0.02029	1	320:
22% ##2	9/40 [00:01<00:05,				
426/499		0.01011	0.02018	4	320:
22% ##2	9/40 [00:01<00:05,		0.02010	-	020.
426/499	0.206G 0.02184		0.02018	4	320:
25% ##5	10/40 [00:01<00:05,		0.02010	7	520.
			0.00004	1	220.
		0.009824	0.02004	1	320:
25% ##5	10/40 [00:01<00:05,		0.00004	4	000
426/499	0.206G 0.02264		0.02004	1	320:
28% ##7	11/40 [00:01<00:05,				
426/499		0.009528	0.01982	2	320:
28% ##7	11/40 [00:02<00:05,	5.75it/s			
426/499	0.206G 0.02487	0.009528	0.01982	2	320:
30% ###	12/40 [00:02<00:04,	5.77it/s			
426/499	0.206G 0.02377	0.009398	0.01927	2	320:
30% ###	12/40 [00:02<00:04,	5.77it/s			
426/499	0.206G 0.02377	0.009398	0.01927	2	320:
32% ###2	13/40 [00:02<00:04,	5.61it/s]			
426/499		0.008949	0.01871	1	320:
32% ###2	13/40 [00:02<00:04,				
426/499	0.206G 0.02256		0.01871	1	320:
35% ###5	14/40 [00:02<00:04,		0.01011	-	020.
426/499	0.206G 0.02221		0.01907	4	320:
35% ###5	14/40 [00:02<00:04,		0.01501	1	020.
426/499		0.009322	0.01907	4	320:
			0.01907	4	320.
38% ###7	15/40 [00:02<00:04,		0.04000	4	200
426/499	0.206G 0.02259		0.01928	4	320:
38% ###7	15/40 [00:02<00:04,		0.04655	_	000
426/499		0.00961	0.01928	4	320:
40% ####	16/40 [00:02<00:04,				
426/499	0.206G 0.02199		0.01892	2	320:
40% ####	16/40 [00:03<00:04,	5.57it/s			

426/499	0.206G 0.02199 0.009508	0.01892	2	320:
42% ####2	17/40 [00:03<00:04, 5.50it/s]			
426/499	0.206G 0.02143 0.00924	0.0189	2	320:
42% ####2	17/40 [00:03<00:04, 5.50it/s]			
426/499	0.206G 0.02143 0.00924	0.0189	2	320:
45% ####5	18/40 [00:03<00:04, 5.27it/s]	0.04004	4	000
426/499	0.206G 0.02163 0.009486	0.01884	4	320:
45% ####5 426/499	18/40 [00:03<00:04, 5.27it/s] 0.206G	0 01004	4	200.
426/499 48% ####7	0.206G 0.02163 0.009486 19/40 [00:03<00:04, 5.17it/s]	0.01884	4	320:
426/499	0.206G 0.02138 0.009389	0.01873	2	320:
420/499	19/40 [00:03<00:04, 5.17it/s]	0.01073	2	320.
426/499	0.206G 0.02138 0.009389	0.01873	2	320:
50% #####	20/40 [00:03<00:03, 5.22it/s]	0.01075	2	020.
426/499	0.206G 0.02095 0.009207	0.01881	2	320:
50% #####	20/40 [00:03<00:03, 5.22it/s]	0.01001	2	020.
426/499	0.206G 0.02095 0.009207	0.01881	2	320:
52% #####2	21/40 [00:03<00:03, 5.26it/s]	0.02001	_	0201
426/499	0.206G 0.02064 0.00905	0.01872	2	320:
52% #####2	21/40 [00:04<00:03, 5.26it/s]		_	
426/499	0.206G 0.02064 0.00905	0.01872	2	320:
55% #####5	22/40 [00:04<00:03, 5.15it/s]			
426/499	0.206G 0.02027 0.008877	0.01862	2	320:
55% #####5	22/40 [00:04<00:03, 5.15it/s]			
426/499	0.206G 0.02027 0.008877	0.01862	2	320:
57% #####7	23/40 [00:04<00:03, 5.20it/s]			
426/499	0.206G 0.02196 0.009163	0.01861	3	320:
57% #####7	23/40 [00:04<00:03, 5.20it/s]			
426/499	0.206G 0.02196 0.009163	0.01861	3	320:
60% ######	24/40 [00:04<00:03, 4.99it/s]			
426/499	0.206G 0.02237 0.00953	0.01888	4	320:
60% ######	24/40 [00:04<00:03, 4.99it/s]			
426/499	0.206G 0.02237 0.00953	0.01888	4	320:
62% ######2	25/40 [00:04<00:03, 4.75it/s]			
426/499	0.206G 0.02218 0.009646	0.01926	4	320:
62% ######2	25/40 [00:04<00:03, 4.75it/s]			
426/499	0.206G 0.02218 0.009646	0.01926	4	320:
65% ######5	26/40 [00:04<00:02, 4.80it/s]			
426/499	0.206G 0.02264 0.009532	0.01913	2	320:
65% ######5	26/40 [00:05<00:02, 4.80it/s]			
426/499	0.206G 0.02264 0.009532	0.01913	2	320:
68% ######7	27/40 [00:05<00:02, 4.81it/s]			
426/499	0.206G 0.02216 0.00943	0.01925	2	320:
68% ######7	27/40 [00:05<00:02, 4.81it/s]			
426/499	0.206G 0.02216 0.00943	0.01925	2	320:
70% #######	28/40 [00:05<00:02, 4.84it/s]			
426/499	0.206G 0.02171 0.009338	0.01904	2	320:
70% ######	28/40 [00:05<00:02, 4.84it/s]			

426/499	0.206G 0.02171	0.009338	0.01904	2	320:
	29/40 [00:05<00:02,				
426/499	0.206G 0.02193	0.009527	0.01913	4	320:
72% #######2	29/40 [00:05<00:02,	4.97it/s			
426/499	0.206G 0.02193	0.009527	0.01913	4	320:
75% ######5	30/40 [00:05<00:02,	4.73it/s]			
426/499			0.01924	4	320:
	30/40 [00:05<00:02,				
426/499		0.009694	0.01924	4	320:
	31/40 [00:05<00:01,				
426/499			0.01946	4	320:
	31/40 [00:06<00:01,				
426/499		0.009777	0.01946	4	320:
	32/40 [00:06<00:01,			_	
426/499			0.01947	2	320:
	32/40 [00:06<00:01,		0.04045		000
426/499			0.01947	2	320:
	33/40 [00:06<00:01,		0.04074		000
426/499	*		0.01974	4	320:
	33/40 [00:06<00:01,		0.04074	4	200
426/499			0.01974	4	320:
	34/40 [00:06<00:01,		0.04000	4	200
426/499			0.01963	1	320:
	34/40 [00:06<00:01,		0.01063	4	200.
426/499	0.206G 0.02243	0.009704	0.01963	1	320:
	35/40 [00:06<00:00,		0.0100	0	200
426/499	******		0.0196	2	320:
	35/40 [00:06<00:00,		0.0100	0	200
426/499			0.0196	2	320:
	36/40 [00:06<00:00, 0.206G 0.02168		0.01047	2	220.
426/499	36/40 [00:06<00:00,		0.01947	2	320:
426/499	0.206G 0.02168	· -	0.01947	2	320:
			0.01947	2	320.
	37/40 [00:06<00:00, 0.206G 0.02126	0.009397	0.01924	1	320:
	37/40 [00:07<00:00,		0.01924	1	320.
426/499		0.009397	0.01924	1	320:
	38/40 [00:07<00:00,		0.01924	1	520.
426/499			0 0193	2	320:
	38/40 [00:07<00:00,		0.0100	2	020.
426/499		0.009291	0.0193	2	320:
	39/40 [00:07<00:00,		3.0200	_	
	0.206G 0.02107		0.01927	4	320:
	39/40 [00:07<00:00,			-	
426/499		0.009457	0.01927	4	320:
	40/40 [00:07<00:00				
	0.206G 0.02107		0.01927	4	320:
	40/40 [00:07<00:00				

ADEO OF -			_	Instances		R	mAP50
mAP50-95:		Class		0:00 , ?it/<br Instances		R	mAP50
mAP50-95:	10% #		•	0:00<00:00,			
			Images		P	R	mAP50
mAP50-95:	20% ##			0:00<00:00,		D	ADEO
mAP50-95:		Class #	•	Instances 0:00<00:00,		R	mAP50
шигоо зо.		Class		Instances		R	mAP50
mAP50-95:	40% ##	##		0:00<00:00,			
		Class	•	Instances		R	mAP50
mAP50-95:	50% ##	### Class		00:00<00:00, Instances		R	mAP50
mAP50-95:		####5	_	[00:00<00:00,		n.	MAPSO
		Class		Instances		R	mAP50
mAP50-95:				00:00<00:00,			
ADEO OF :		Class	•	Instances		R	mAP50
MAP50-95:				[00:00<00:00, Instances		R	mAP50
mAP50-95:			•	00:01<00:00,		10	mili 00
		Class	_	Instances		R	mAP50
mAP50-95:	100% ##			00:01<00:00,			0.005
0.796		all	40	40	0.977	1	0.995
0.790							
Epoc	h GP	U_mem	box_loss	obj_loss	cls_loss	Instances	Size
Ерос				-	cls_loss	Instances	Size
Epoc	1		0:00 , ?i</td <td>-</td> <td></td> <td>Instances 2</td> <td>Size 320:</td>	-		Instances 2	Size 320:
Epoc 0% 427/49 0%	 9 0 0/	0/40 [00 .206G /40 [00:0	0:00 , ?i<br 0.05882 00 , ?it/</td <td>t/s] 0.005266 [s]</td> <td></td> <td></td> <td></td>	t/s] 0.005266 [s]			
Epoc 0% 427/49 0% 427/49	 9 0 0/	0/40 [00 0.206G (40 [00:0	0:00 , ?i<br 0.05882 00 , ?it/<br 0.05882	.t/s] 0.005266 [s] 0.005266			
Epoc 0% 427/49 0% 427/49 2% 2	9 0 0/ 9 0 1/	0/40 [00 0.206G (40 [00:0 0.206G (40 [00:0	0:00 , ?i<br 0.05882 00 , ?it/<br 0.05882 00<00:06,	t/s] 0.005266 [s] 0.005266 5.78it/s]	0.01607 0.01607	2	320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49	9 0 0/ 9 0 1/ 9 0	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i<br 0.05882 00 , ?it/<br 0.05882 00<00:06, 0.0411	t/s] 0.005266 (s] 0.005266 5.78it/s] 0.007647	0.01607 0.01607	2	320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 2% 2	9 0 0/ 9 0 1/ 9 0 1/	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i<br 0.05882 00 , ?it/<br 0.05882 00<00:06, 0.0411	t/s] 0.005266 [s] 0.005266 5.78it/s]	0.01607 0.01607	2	320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 2% 2 427/49 5% 5	9 0 0/ 9 0 1/ 9 0 1/ 9 0	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i<br 0.05882 00 , ?it/<br 0.05882 00<00:06, 0.0411 00<00:06, 0.0411	0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s]	0.01607 0.01607 0.02218 0.02218	2 2 3 3	320: 320: 320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 2% 2 427/49 5% 5 427/49	9 0 0/ 9 0 1/ 9 0 1/ 9 0 2/	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i<br 0.05882 00 , ?it/<br 0.05882 00<00:06, 0.0411 00<00:06, 0.0411	0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792	0.01607 0.01607 0.02218	2 2 3	320: 320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 5% 5 427/49 5% 5	9 0 0/ 9 0 1/ 9 0 1/ 9 0 2/	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i 0.05882 00<?, ?it/ 0.05882 00<00:06, 0.0411 00<00:06, 0.0411 00<00:06, 0.03205</td <td>0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s]</td> <td>0.01607 0.01607 0.02218 0.02218 0.02015</td> <td>2 2 3 3 2</td> <td>320: 320: 320: 320:</td>	0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s]	0.01607 0.01607 0.02218 0.02218 0.02015	2 2 3 3 2	320: 320: 320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 5% 5 427/49 5% 5	9 0 9 0 9 0 1 1/ 9 0 1 1/ 9 0 1 2/ 9 0	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i 0.05882 00<?, ?it/ 0.05882 00<00:06, 0.0411 00<00:06, 0.0411 00<00:06, 0.03205 00<00:06,</td <td>0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792</td> <td>0.01607 0.01607 0.02218 0.02218</td> <td>2 2 3 3</td> <td>320: 320: 320: 320:</td>	0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792	0.01607 0.01607 0.02218 0.02218	2 2 3 3	320: 320: 320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 5% 5 427/49 5% 5 427/49 8% 7 427/49	9 0 0/ 9 0 1/ 9 0 1/ 9 0 2/ 9 0 3/ 9 0	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i 0.05882 00<?, ?it/ 0.05882 00<00:06, 0.0411 00<00:06, 0.0411 00<00:06, 0.03205 00<00:06, 0.03205</td <td>0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657</td> <td>0.01607 0.01607 0.02218 0.02218 0.02015</td> <td>2 2 3 3 2</td> <td>320: 320: 320: 320:</td>	0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657	0.01607 0.01607 0.02218 0.02218 0.02015	2 2 3 3 2	320: 320: 320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 5% 5 427/49 5% 5 427/49 8% 7 427/49	9 0 0/9 0 1/9 0 1/9 0 1/9 0 2/9 0 2/9 0 3/9 0	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i 0.05882 00<?, ?it/ 0.05882 00<00:06, 0.0411 00<00:06, 0.03205 00<00:06, 0.03205 00<00:06, 0.03293 00<00:06,</td <td>0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657 5.87it/s]</td> <td>0.01607 0.01607 0.02218 0.02218 0.02015 0.02015</td> <td>2 2 3 3 2 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657 5.87it/s]	0.01607 0.01607 0.02218 0.02218 0.02015 0.02015	2 2 3 3 2 2 2	320: 320: 320: 320: 320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 5% 5 427/49 5% 5 427/49 8% 7 427/49	9 0 0/ 9 0 1/ 9 0 1/ 9 0 2/ 9 0 3/ 9 0	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i 0.05882 00<?, ?it/ 0.05882 00<00:06, 0.0411 00<00:06, 0.03205 00<00:06, 0.03205 00<00:06, 0.03293</td <td>0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657 5.87it/s] 0.00657</td> <td>0.01607 0.01607 0.02218 0.02218 0.02015</td> <td>2 2 3 3 2 2</td> <td>320: 320: 320: 320: 320:</td>	0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657 5.87it/s] 0.00657	0.01607 0.01607 0.02218 0.02218 0.02015	2 2 3 3 2 2	320: 320: 320: 320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 5% 5 427/49 5% 5 427/49 8% 7 427/49	9 0 0/ 9 0 1/ 9 0 1/ 9 0 2/ 9 0 3/ 9 0 3/ 9 0 4	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i 0.05882 00<?, ?it/ 0.05882 00<00:06, 0.0411 00<00:06, 0.03205 00<00:06, 0.03205 00<00:06, 0.03293 00<00:06, 0.03293 :00<00:06,</td <td>0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657 5.87it/s]</td> <td>0.01607 0.01607 0.02218 0.02218 0.02015 0.02015</td> <td>2 2 3 3 2 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657 5.87it/s]	0.01607 0.01607 0.02218 0.02218 0.02015 0.02015	2 2 3 3 2 2 2	320: 320: 320: 320: 320: 320:
Epoc 0% 427/49 0% 427/49 2% 2 427/49 5% 5 427/49 5% 5 427/49 8% 7 427/49 8% 7 427/49 10% #	9 0 0/9 0 1/9 0 1/9 0 2/9 0 3/9 0 3/9 0	0/40 [00:00:00:00:00:00:00:00:00:00:00:00:00:	0:00 , ?i 0.05882 00<?, ?it/ 0.05882 00<00:06, 0.0411 00<00:06, 0.03205 00<00:06, 0.03205 00<00:06, 0.03293 00<00:06, 0.03293 :00<00:06, 0.03293</td <td>0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657 5.87it/s] 0.00657 5.66it/s]</td> <td>0.01607 0.01607 0.02218 0.02218 0.02015 0.02015 0.019</td> <td>2 2 3 3 2 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	0.005266 (s) 0.005266 5.78it/s] 0.007647 5.78it/s] 0.007647 5.48it/s] 0.006792 5.48it/s] 0.006792 5.87it/s] 0.00657 5.87it/s] 0.00657 5.66it/s]	0.01607 0.01607 0.02218 0.02218 0.02015 0.02015 0.019	2 2 3 3 2 2 2 2	320: 320: 320: 320: 320: 320: 320:

12% #2	5/40 [00:00<00:06, 5.64it/s]			
427/499	0.206G 0.03053 0.006693		1	320:
12% #2	5/40 [00:01<00:06, 5.64it/s]			
427/499	0.206G 0.03053 0.006693		1	320:
15% #5	6/40 [00:01<00:06, 5.58it/s]			000
427/499			2	320:
15% #5	6/40 [00:01<00:06, 5.58it/s]		0	000
427/499	0.206G 0.0292 0.006861		2	320:
18% #7	7/40 [00:01<00:06, 5.47it/s]		4	200
427/499	0.206G 0.02876 0.007479		4	320:
18% #7	7/40 [00:01<00:06, 5.47it/s]		4	000
427/499	0.206G 0.02876 0.007479		4	320:
20% ##	8/40 [00:01<00:05, 5.43it/s]		0	200
427/499	0.206G 0.03006 0.007959		3	320:
20% ##	8/40 [00:01<00:05, 5.43it/s]		0	200
427/499	0.206G 0.03006 0.007959		3	320:
22% ##2	9/40 [00:01<00:05, 5.40it/s]		4	200
427/499	0.206G 0.0282 0.007484		1	320:
22% ##2	9/40 [00:01<00:05, 5.40it/s]		4	200
427/499	0.206G 0.0282 0.007484		1	320:
25% ##5	10/40 [00:01<00:05, 5.50it/s		0	200
427/499	0.206G 0.02721 0.007687		2	320:
25% ##5	10/40 [00:01<00:05, 5.50it/s		0	000
427/499	0.206G 0.02721 0.007687		2	320:
28% ##7	11/40 [00:01<00:05, 5.60it/s			000
427/499	0.206G 0.02675 0.008437		4	320:
28% ##7	11/40 [00:02<00:05, 5.60it/s		4	000
427/499	0.206G 0.02675 0.008437		4	320:
30% ###	12/40 [00:02<00:05, 5.24it/s		4	000
427/499	0.206G 0.02717 0.008949		4	320:
30% ###	12/40 [00:02<00:05, 5.24it/s		4	000
427/499	0.206G 0.02717 0.008949		4	320:
32% ###2	13/40 [00:02<00:05, 5.38it/s	_		000
427/499	0.206G 0.02696 0.009806		4	320:
32% ###2	13/40 [00:02<00:05, 5.38it/s			000
427/499	0.206G 0.02696 0.009806		4	320:
35% ###5	•	_		000
427/499	0.206G 0.02665 0.009512		2	320:
35% ###5	14/40 [00:02<00:04, 5.37it/s			000
427/499	0.206G 0.02665 0.009512		2	320:
38% ###7	15/40 [00:02<00:04, 5.50it/s			
427/499	0.206G 0.02592 0.009311		2	320:
38% ###7	15/40 [00:02<00:04, 5.50it/s			
427/499	0.206G 0.02592 0.009311		2	320:
40% ####	16/40 [00:02<00:04, 5.43it/s		•	000
427/499	0.206G 0.02512 0.009259	0.02033	2	320:
40% ####	16/40 [00:03<00:04, 5.43it/s		•	000
427/499	0.206G 0.02512 0.009259	0.02033	2	320:

42% ####2	I	17/40 [00:03<00:04,				
427/499		0.206G 0.02427		0.02023	2	320:
42% ####2	١	17/40 [00:03<00:04,	· -			
427/499		0.206G 0.02427		0.02023	2	320:
45% ####5		18/40 [00:03<00:03,				
427/499		0.206G 0.02416	0.009351	0.02012	4	320:
45% ####5		18/40 [00:03<00:03,				
427/499		0.206G 0.02416		0.02012	4	320:
48% ####7		19/40 [00:03<00:03,				
427/499		0.206G 0.02336	0.009374	0.01993	4	320:
48% ####7	-	19/40 [00:03<00:03,	5.67it/s]			
427/499		0.206G 0.02336	0.009374	0.01993	4	320:
50% #####	- 1	20/40 [00:03<00:03,	5.57it/s			
427/499		0.206G 0.02384		0.01989	2	320:
50% #####	- 1	20/40 [00:03<00:03,	5.57it/s			
427/499		0.206G 0.02384	0.009239	0.01989	2	320:
52% #####2	-	21/40 [00:03<00:03,	5.49it/s			
427/499		0.206G 0.02337	0.009017	0.01968	1	320:
52% #####2	- 1	21/40 [00:04<00:03,	5.49it/s]			
427/499		0.206G 0.02337	0.009017	0.01968	1	320:
55% #####5	- 1	22/40 [00:04<00:03,	5.39it/s			
427/499		0.206G 0.02294	0.008927	0.01972	2	320:
55% #####5	- 1	22/40 [00:04<00:03,	5.39it/s			
427/499		0.206G 0.02294	0.008927	0.01972	2	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.51it/s			
427/499		0.206G 0.0224	0.008835	0.01959	2	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.51it/s			
427/499		0.206G 0.0224	0.008835	0.01959	2	320:
60% #####	- 1	24/40 [00:04<00:02,	5.46it/s]			
427/499		0.206G 0.02182	0.008623	0.01941	1	320:
60% ######	- 1	24/40 [00:04<00:02,	5.46it/s]			
427/499		0.206G 0.02182	0.008623	0.01941	1	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.57it/s			
427/499		0.206G 0.02173	0.008818	0.0193	2	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.57it/s]			
427/499		0.206G 0.02173		0.0193	2	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.64it/s]			
427/499		0.206G 0.02248	0.008975	0.01935	2	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.64it/s]			
427/499		0.206G 0.02248	0.008975	0.01935	2	320:
68% #####7	- 1	27/40 [00:04<00:02,				
427/499		0.206G 0.02258	0.008854	0.01932	2	320:
68% #####7	ı	27/40 [00:05<00:02,				
427/499	•	0.206G 0.02258	0.008854	0.01932	2	320:
70% #######	ı	28/40 [00:05<00:02,				
427/499	•	0.206G 0.02275	0.008783	0.01916	2	320:
70% #######	ı	28/40 [00:05<00:02,				
427/499	•	0.206G 0.02275	0.008783	0.01916	2	320:

72X w w w w w w w w w w w w w w w w w w w	72% #######2	29/40 [00.05<00.02	5 33i+/al			
72% ######## 29/40 [00:05<00:02, 5.33it/s]				0.01929	4	320:
A27/499				0.01020	1	020.
T5% ######## 30/40 [00:05<00:01, 5.32it/s 427/499 0.206G 0.02294 0.009169 0.0197 4 320: 75% ######## 30/40 [00:05<00:01, 5.32it/s 427/499 0.206G 0.02294 0.009169 0.0197 4 320: 78% ######## 31/40 [00:05<00:01, 5.32it/s 427/499 0.206G 0.02275 0.009302 0.01966 4 320: 78% ######## 31/40 [00:05<00:01, 5.32it/s 427/499 0.206G 0.02275 0.009302 0.01966 4 320: 320: 327/499 0.206G 0.02275 0.009302 0.01966 4 320: 327/499 0.206G 0.02275 0.009302 0.01966 4 320: 327/499 0.206G 0.02275 0.009363 0.0197 4 320: 327/499 0.206G 0.02257 0.009363 0.0197 4 320: 327/499 0.206G 0.02257 0.009363 0.0197 4 320: 327/499 0.206G 0.02257 0.009363 0.0197 4 320: 327/499 0.206G 0.02256 0.009296 0.01994 2 320: 327/499 0.206G 0.02246 0.009296 0.01994 2 320: 327/499 0.206G 0.02245 0.009167 0.0198 1 320: 327/499 0.206G 0.02245 0.009167 0.0198 1 320: 320: 327/499 0.206G 0.02245 0.009167 0.0198 1 320:				0.01929	4	320:
A27/499						
A27/499				0.0197	4	320:
Ref	75% ######5	30/40 [00:05<00:01,	5.32it/s			
427/499	427/499	0.206G 0.02294	0.009169	0.0197	4	320:
T8% ####### 31/40 [00:05<00:01, 5.32it/s 427/499 0.206g 0.02257 0.009302 0.01966 4 320: 80% ######## 32/40 [00:05<00:01, 5.46it/s 427/499 0.206g 0.02257 0.009363 0.0197 4 320: 80% ######## 32/40 [00:06<00:01, 5.46it/s 427/499 0.206g 0.02257 0.009363 0.0197 4 320: 82% ######### 33/40 [00:06<00:01, 5.46it/s 427/499 0.206g 0.02246 0.009296 0.01994 2 320: 82% ######## 33/40 [00:06<00:01, 5.42it/s 427/499 0.206g 0.02246 0.009296 0.01994 2 320: 82% ####### 33/40 [00:06<00:01, 5.53it/s 427/499 0.206g 0.02245 0.009167 0.0198 1 320: 85% ######## 34/40 [00:06<00:01, 5.53it/s 427/499 0.206g 0.02245 0.009167 0.0198 1 320: 88% ######## 35/40 [00:06<00:00, 5.47it/s 427/499 0.206g 0.02245 0.009167 0.0198 1 320: 88% ######## 35/40 [00:06<00:00, 5.47it/s 427/499 0.206g 0.02269 0.009166 0.01979 2 320: 88% ######### 36/40 [00:06<00:00, 5.55it/s 427/499 0.206g 0.02269 0.009166 0.01979 2 320: 88% ######### 36/40 [00:06<00:00, 5.55it/s 427/499 0.206g 0.02254 0.009314 0.01978 4 320: 90% ########### 36/40 [00:06<00:00, 5.55it/s 427/499 0.206g 0.02254 0.009314 0.01978 4 320: 92% ###################################	78% ######7	31/40 [00:05<00:01,	5.32it/s			
427/499	427/499	0.206G 0.02275	0.009302	0.01966	4	320:
80%		•				
427/499				0.01966	4	320:
80% ######## 32/40 [00:06<00:01, 5.46it/s]						
427/499				0.0197	4	320:
82% ######### 33/40 [00:06<00:01, 5.42it/s]		•		0.0405		
427/499				0.0197	4	320:
82% ######## 33/40 [00:06<00:01, 5.42it/s]	_			0.04004	0	200
427/499				0.01994	2	320:
85% ########5 34/40 [00:06<00:01, 5.53it/s] 427/499 0.206G 0.02245 0.009167 0.0198 1 320: 85% ########5 34/40 [00:06<00:01, 5.53it/s] 427/499 0.206G 0.02245 0.009167 0.0198 1 320: 88% #######7 35/40 [00:06<00:00, 5.47it/s] 427/499 0.206G 0.02269 0.009166 0.01979 2 320: 88% ######## 35/40 [00:06<00:00, 5.47it/s] 427/499 0.206G 0.02269 0.009166 0.01979 2 320: 88% ######## 36/40 [00:06<00:00, 5.47it/s] 427/499 0.206G 0.02254 0.009314 0.01978 4 320: 90% ######### 36/40 [00:06<00:00, 5.55it/s] 427/499 0.206G 0.02254 0.009314 0.01978 4 320: 92% #########2 37/40 [00:06<00:00, 5.55it/s] 427/499 0.206G 0.02254 0.009314 0.01978 4 320: 92% #########2 37/40 [00:06<00:00, 5.62it/s] 427/499 0.206G 0.02258 0.00948 0.01969 4 320: 92% ######### 38/40 [00:06<00:00, 5.62it/s] 427/499 0.206G 0.02258 0.00948 0.01969 4 320: 95% #########5 38/40 [00:06<00:00, 5.53it/s] 427/499 0.206G 0.02222 0.009354 0.01972 1 320: 95% #########5 38/40 [00:07<00:00, 5.53it/s] 427/499 0.206G 0.02222 0.009354 0.01972 1 320: 98% #########7 39/40 [00:07<00:00, 5.53it/s] 427/499 0.206G 0.02222 0.009354 0.01972 1 320: 98% #########7 39/40 [00:07<00:00, 5.60it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320: 98% ########### 39/40 [00:07<00:00, 5.60it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320: 100% ###################################		-		0.01004	0	200.
427/499				0.01994	2	320:
85% ########5 34/40 [00:06<00:01, 5.53it/s] 427/499		•		0 0198	1	320.
427/499 0.206G 0.02245 0.009167 0.0198 1 320: 88% ########7 35/40 [00:06<00:00, 5.47it/s]				0.0150	1	020.
88% ########7 35/40 [00:06<00:00, 5.47it/s] 427/499		•		0.0198	1	320:
427/499 0.206G 0.02269 0.009166 0.01979 2 320: 88% ########7 35/40 [00:06<00:00, 5.47it/s]				0.0200	_	0_0.
88% ####### 35/40 [00:06<00:00, 5.47it/s] 427/499		•		0.01979	2	320:
90% ######## 36/40 [00:06<00:00, 5.55it/s] 427/499	88% #######7	35/40 [00:06<00:00,				
427/499	427/499	0.206G 0.02269	0.009166	0.01979	2	320:
90% ######## 36/40 [00:06<00:00, 5.55it/s] 427/499	90% ########	36/40 [00:06<00:00,	5.55it/s			
427/499				0.01978	4	320:
92% ########2 37/40 [00:06<00:00, 5.62it/s] 427/499		36/40 [00:06<00:00,	5.55it/s]			
427/499 0.206G 0.02258 0.00948 0.01969 4 320: 92% ######### 37/40 [00:06<00:00, 5.62it/s] 427/499 0.206G 0.02258 0.00948 0.01969 4 320: 95% ########5 38/40 [00:06<00:00, 5.53it/s] 427/499 0.206G 0.02222 0.009354 0.01972 1 320: 95% ########5 38/40 [00:07<00:00, 5.53it/s] 427/499 0.206G 0.02222 0.009354 0.01972 1 320: 98% ########7 39/40 [00:07<00:00, 5.60it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320: 98% #########7 39/40 [00:07<00:00, 5.60it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320: 100% ######### 40/40 [00:07<00:00, 5.82it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320:	•			0.01978	4	320:
92% ######## 37/40 [00:06<00:00, 5.62it/s] 427/499 0.206G 0.02258 0.00948 0.01969 4 320: 95% ########5 38/40 [00:06<00:00, 5.53it/s] 427/499 0.206G 0.02222 0.009354 0.01972 1 320: 95% #######5 38/40 [00:07<00:00, 5.53it/s] 427/499 0.206G 0.02222 0.009354 0.01972 1 320: 98% #######7 39/40 [00:07<00:00, 5.60it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320: 98% #########7 39/40 [00:07<00:00, 5.60it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320: 100% ######## 40/40 [00:07<00:00, 5.82it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320:						
427/499				0.01969	4	320:
95% #######5 38/40 [00:06<00:00, 5.53it/s] 427/499		•				
427/499				0.01969	4	320:
95% #######5 38/40 [00:07<00:00, 5.53it/s] 427/499				0.01070	4	200
427/499				0.01972	1	320:
98% #######7 39/40 [00:07<00:00, 5.60it/s] 427/499				0 01072	1	320.
427/499 0.206G 0.0221 0.009345 0.01973 2 320: 98% ########7 39/40 [00:07<00:00, 5.60it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320: 100% ######## 40/40 [00:07<00:00, 5.82it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320:				0.01372	1	520.
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427/499 0.206G 0.0221 0.009345 0.01973 2 320: 100% ####### 40/40 [00:07<00:00, 5.82it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320:				0.01070	2	020.
100% ######## 40/40 [00:07<00:00, 5.82it/s] 427/499 0.206G 0.0221 0.009345 0.01973 2 320:		•		0.01973	2	320:
427/499 0.206G 0.0221 0.009345 0.01973 2 320:				-		
100% ######## 40/40 [00:07<00:00, 5.52it/s]				0.01973	2	320:
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		Class	_	Instances		R	mAP50
mAP50-95:	20% #	#	4/20 [0	00:00<00:00,	18.28it/s]		
		Class	Images	Instances	Р	R	mAP50
mAP50-95:	30% #	##	I 6/20 [0	00:00<00:00,	17.42it/sl		
	00/01	Class		Instances		R	mAP50
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		Class		Instances	=	R	mAP50
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mAP50-95:	75% #	#####5	15/20 [00:00<00:00	, 17.03it/s]		
		Class		Instances		R	mAP50
mADE0-05.			_	00:00<00:00			
MAF 50-95.	00/01#						
		Class	_	Instances		R	mAP50
mAP50-95:	95% #	#######5	19/20 [00:01<00:00	, 16.28it/s]		
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0.801							
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0%	I	0/40 [00	:00 , ?i</td <td>t/s]</td> <td></td> <td>Instances</td> <td></td>	t/s]		Instances	
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0% 428/49 0% 428/49 2% 2 428/49 5% 5		0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?i<br 0.01708 0 , ?it/<br 0.01708 0<00:07, 0.02611 0<00:07, 0.02611	0.01237 (s) 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s]	0.02053 0.02053 0.01781 0.01781	4 4 2 2	320: 320: 320: 320:
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0% 428/49 0% 428/49 2% 2 428/49 2% 2 428/49 5% 5 428/49 5% 5 428/49 8% 7 428/49 10% #	0, 0, 0, 0, 0, 0, 0,	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?i 0.01708 0<?, ?it/ 0.01708 0<00:07, 0.02611 0<00:06, 0.02087 0<00:06, 0.02087 0<00:06, 0.01886 0<00:06, 0.01886</td <td>0.01237 (s) 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s]</td> <td>0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166</td> <td>4 4 2 2 4 4 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	0.01237 (s) 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s]	0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166	4 4 2 2 4 4 1	320: 320: 320: 320: 320: 320: 320:
0% 428/49 0% 428/49 2% 2 428/49 2% 2 428/49 5% 5 428/49 5% 5 428/49 8% 7 428/49 10% # 428/49	09	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?i 0.01708 0<?, ?it/ 0.01708 0<00:07, 0.02611 0<00:06, 0.02087 0<00:06, 0.02087 0<00:06, 0.01886 0<00:06, 0.01886 00<00:06, 0.01886</td <td>0.01237 (s] 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s] 0.009584</td> <td>0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166</td> <td>4 4 2 2 4 4</td> <td>320: 320: 320: 320: 320: 320:</td>	0.01237 (s] 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s] 0.009584	0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166	4 4 2 2 4 4	320: 320: 320: 320: 320: 320:
0% 428/49 0% 428/49 2% 2 428/49 5% 5 428/49 5% 5 428/49 8% 7 428/49 10% # 428/49	0,99	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G 40 [00:0	:00 , ?i 0.01708 0<?, ?it/ 0.01708 0<00:07, 0.02611 0<00:06, 0.02087 0<00:06, 0.02087 0<00:06, 0.01886 0<00:06, 0.01886 0<00:06, 0.01856 0<00:06,</td <td>0.01237 (s) 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s] 0.009584 5.80it/s]</td> <td>0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166 0.0166</td> <td>4 4 2 2 4 4 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	0.01237 (s) 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s] 0.009584 5.80it/s]	0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166 0.0166	4 4 2 2 4 4 1 1	320: 320: 320: 320: 320: 320: 320: 320:
0% 428/49 0% 428/49 2% 2 428/49 2% 2 428/49 5% 5 428/49 5% 5 428/49 8% 7 428/49 10% # 428/49	0,99	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G 40 [00:0	:00 , ?i 0.01708 0<?, ?it/ 0.01708 0<00:07, 0.02611 0<00:06, 0.02087 0<00:06, 0.02087 0<00:06, 0.01886 0<00:06, 0.01886 0<00:06, 0.01856 0<00:06,</td <td>0.01237 (s] 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s] 0.009584</td> <td>0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166 0.0166</td> <td>4 4 2 2 4 4 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	0.01237 (s] 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s] 0.009584	0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166 0.0166	4 4 2 2 4 4 1	320: 320: 320: 320: 320: 320: 320:
0% 428/49 0% 428/49 2% 2 428/49 5% 5 428/49 5% 5 428/49 8% 7 428/49 10% # 428/49	0, 0, 0, 0, 0, 0, 0,	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0	:00 , ?i 0.01708 0<?, ?it/ 0.01708 0<00:07, 0.02611 0<00:06, 0.02087 0<00:06, 0.02087 0<00:06, 0.01886 0<00:06, 0.01886 0<00:06, 0.01856 00<00:06, 0.01856</td <td>0.01237 (s) 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s] 0.009584 5.80it/s]</td> <td>0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166 0.0166</td> <td>4 4 2 2 4 4 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	0.01237 (s) 0.01237 5.42it/s] 0.01199 5.42it/s] 0.01199 5.86it/s] 0.0125 5.86it/s] 0.0125 5.84it/s] 0.01063 5.84it/s] 0.01063 5.80it/s] 0.009584 5.80it/s]	0.02053 0.02053 0.01781 0.01781 0.01661 0.01661 0.0166 0.0166	4 4 2 2 4 4 1 1	320: 320: 320: 320: 320: 320: 320: 320:

Images Instances

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Class

428/499	0.206G 0.01956	0.009113	0.01634	2	320:
12% #2	5/40 [00:01<00:06,	5.63it/s]			
428/499		0.009113	0.01634	2	320:
15% #5	6/40 [00:01<00:06,				
428/499	0.206G 0.02223	0.009706	0.01685	4	320:
15% #5	6/40 [00:01<00:06,		0.04605	4	200
,		0.009706	0.01685	4	320:
18% #7	7/40 [00:01<00:06, 0.206G 0.02075		0 01692	0	220.
428/499 18% #7	7/40 [00:01<00:06,	0.009584	0.01683	2	320:
428/499	0.206G 0.02075	0.009584	0.01683	2	320:
20% ##	8/40 [00:01<00:06,		0.01065	2	320.
428/499	0.206G 0.02134		0.01847	3	320:
20% ##	8/40 [00:01<00:06,		0.01047	3	520.
	0.206G 0.02134		0.01847	3	320:
22% ##2	9/40 [00:01<00:06,		0.01047	3	520.
428/499		0.009548	0.01832	3	320:
22% ##2	9/40 [00:01<00:06,		0.01032	3	520.
428/499	0.206G 0.02076		0.01832	3	320:
25% ##5	10/40 [00:01<00:05,		0.01032	3	520.
428/499	0.206G 0.02035		0.01821	2	320:
25% ##5	10/40 [00:02<00:05,		0.01021	2	020.
		0.009359	0.01821	2	320:
28% ##7	11/40 [00:02<00:05,		0.01021	2	020.
428/499	0.206G 0.02017		0.01837	4	320:
28% ##7	11/40 [00:02<00:05,		0.01001	-	020.
428/499		0.009647	0.01837	4	320:
30% ###	12/40 [00:02<00:05,		0.01001	-	020.
428/499	0.206G 0.01957		0.01813	1	320:
30% ###	12/40 [00:02<00:05,		0.01010	-	020.
428/499		0.009193	0.01813	1	320:
32% ###2	13/40 [00:02<00:05,			_	
428/499	0.206G 0.01878	0.00898	0.01833	2	320:
32% ###2	13/40 [00:02<00:05,				
428/499		0.00898	0.01833	2	320:
35% ###5	14/40 [00:02<00:05,				
428/499	0.206G 0.01919		0.01902	4	320:
35% ###5	14/40 [00:02<00:05,	5.01it/s]			
428/499	0.206G 0.01919	0.009754	0.01902	4	320:
38% ###7	15/40 [00:02<00:05,	4.85it/s]			
428/499	0.206G 0.01838	0.009357	0.01884	1	320:
38% ###7	15/40 [00:03<00:05,	4.85it/s]			
428/499	0.206G 0.01838	0.009357	0.01884	1	320:
40% ####	16/40 [00:03<00:04,	4.99it/s]			
428/499	0.206G 0.0182	0.009291	0.01873	2	320:
40% ####	16/40 [00:03<00:04,	4.99it/s]			
428/499	0.206G 0.0182	0.009291	0.01873	2	320:
42% ####2	17/40 [00:03<00:04,	5.09it/s]			

428/499 0.206G 0.01969 0.009161 0.01951 2 320:	428/499	0.206G 0.01969 0.009163	0.0197	2	320:
428/499					
A28/499	428/499	0.206G 0.01969 0.009163	0.0197	2	320:
45% ####5	45% ####5	18/40 [00:03<00:04, 5.01it/s]			
428/499	428/499	0.206G 0.01972 0.009161	0.01951	2	320:
48% ####7					
428/499			0.01951	2	320:
48% ####7					
\$\frac{428}{499}			0.01995	4	320:
SON #####		•		_	
A28/499			0.01995	4	320:
1					
428/499			0.01972	1	320:
52% #####2			0.04070	_	000
428/499			0.01972	1	320:
1			0.04000	4	200
428/499			0.01988	4	320:
55% #####5		• • • •	0.04000	4	200
428/499 0.206G 0.02009 0.009322 0.01961 1 320: 55% #####5 22/40 [00:04<00:03, 4.87it/s]			0.01988	4	320:
S5% #####5		•	0.01061	4	200
428/499 0.206G 0.02009 0.009322 0.01961 1 320: 57% ####7 23/40 [00:04<00:03, 5.09it/s]			0.01961	1	320:
57% #####7 23/40 [00:04<00:03, 5.09it/s]			0.01061	4	200.
428/499 0.206G 0.01953 0.009095 0.01949 1 320: 57% #####7 23/40 [00:04<00:03, 5.09it/s]			0.01961	1	320:
57% #####7 23/40 [00:04<00:03, 5.09it/s]			0.01040	4	200.
428/499 0.206G 0.01953 0.009095 0.01949 1 320: 60% ###### 24/40 [00:04<00:03, 5.29it/s]			0.01949	1	320:
60% ######			0.01040	4	200
428/499 0.206G 0.01993 0.009558 0.01946 4 320: 60% ###### 24/40 [00:04<00:03, 5.29it/s]			0.01949	1	320:
60% ###### 24/40 [00:04<00:03, 5.29it/s] 428/499 0.206G 0.01993 0.009558 0.01946 4 320: 62% ######2 25/40 [00:04<00:02, 5.30it/s] 428/499 0.206G 0.01947 0.00929 0.01929 1 320: 62% ######2 25/40 [00:05<00:02, 5.30it/s] 428/499 0.206G 0.01947 0.00929 0.01929 1 320: 65% #####5 26/40 [00:05<00:02, 5.45it/s] 428/499 0.206G 0.01922 0.009184 0.0192 2 320: 65% #####5 26/40 [00:05<00:02, 5.45it/s] 428/499 0.206G 0.01922 0.009184 0.0192 2 320: 65% ######5 26/40 [00:05<00:02, 5.45it/s] 428/499 0.206G 0.01922 0.009184 0.0192 2 320: 68% #####7 27/40 [00:05<00:02, 5.42it/s] 428/499 0.206G 0.01881 0.009027 0.01921 2 320: 68% ######7 27/40 [00:05<00:02, 5.42it/s] 428/499 0.206G 0.01881 0.009027 0.01921 2 320: 70% ####### 28/40 [00:05<00:02, 5.68it/s] 428/499 0.206G 0.01879 0.009261 0.01942 4 320: 70% ####### 28/40 [00:05<00:02, 5.68it/s] 428/499 0.206G 0.01879 0.009261 0.01942 4 320: 70% ####### 28/40 [00:05<00:02, 5.68it/s] 428/499 0.206G 0.01879 0.009261 0.01942 4 320: 70% ####################################			0.01046	4	200.
428/499			0.01946	4	320:
62% ######2 25/40 [00:04<00:02, 5.30it/s] 428/499			0.01046	1	220.
428/499			0.01940	4	320.
62% #####2 25/40 [00:05<00:02, 5.30it/s] 428/499 0.206G 0.01947 0.00929 0.01929 1 320: 65% #####5 26/40 [00:05<00:02, 5.45it/s] 428/499 0.206G 0.01922 0.009184 0.0192 2 320: 65% #####5 26/40 [00:05<00:02, 5.45it/s] 428/499 0.206G 0.01922 0.009184 0.0192 2 320: 68% #####7 27/40 [00:05<00:02, 5.42it/s] 428/499 0.206G 0.01881 0.009027 0.01921 2 320: 68% #####7 27/40 [00:05<00:02, 5.42it/s] 428/499 0.206G 0.01881 0.009027 0.01921 2 320: 70% ###### 28/40 [00:05<00:02, 5.68it/s] 428/499 0.206G 0.01879 0.009261 0.01942 4 320: 70% ####### 28/40 [00:05<00:02, 5.68it/s] 428/499 0.206G 0.01879 0.009261 0.01942 4 320:		-	0 01020	1	320.
428/499			0.01929	1	320.
65% #####5 26/40 [00:05<00:02, 5.45it/s]			0 01020	1	320.
428/499			0.01929	1	520.
65% #####5 26/40 [00:05<00:02, 5.45it/s]		•	0 0192	2	320.
428/499			0.0132	2	020.
68% #####7 27/40 [00:05<00:02, 5.42it/s] 428/499		•	0 0192	2	320.
428/499			0.0102	2	020.
68% #####7 27/40 [00:05<00:02, 5.42it/s]		•	0.01921	2	320:
428/499 0.206G 0.01881 0.009027 0.01921 2 320: 70% ###### 28/40 [00:05<00:02, 5.68it/s] 428/499 0.206G 0.01879 0.009261 0.01942 4 320: 70% ####### 28/40 [00:05<00:02, 5.68it/s] 428/499 0.206G 0.01879 0.009261 0.01942 4 320:				-	220.
70% ###### 28/40 [00:05<00:02, 5.68it/s] 428/499			0.01921	2	320:
428/499 0.206G 0.01879 0.009261 0.01942 4 320: 70% ###### 28/40 [00:05<00:02, 5.68it/s] 428/499 0.206G 0.01879 0.009261 0.01942 4 320:					3_0.
70% ###### 28/40 [00:05<00:02, 5.68it/s] 428/499			0.01942	4	320:
428/499 0.206G 0.01879 0.009261 0.01942 4 320:			-	-	·
			0.01942	4	320:

	0.206G 0.01872		0.0193	2	320:
	29/40 [00:05<00:02,				
428/499	* * * * * * * * * * * * * * * * * *		0.0193	2	320:
	30/40 [00:05<00:01,		0.0103	4	200
428/499	0.206G 0.01877		0.0193	4	320:
75% #######5 428/499	30/40 [00:05<00:01, 0.206G 0.01877		0.0193	4	320:
	31/40 [00:05<00:01,		0.0193	4	320.
428/499			0.01923	3	320:
	31/40 [00:06<00:01,		0.01020	Ü	020.
428/499			0.01923	3	320:
	32/40 [00:06<00:01,		0.01010	· ·	0201
428/499			0.01918	2	320:
	32/40 [00:06<00:01,				
428/499		0.009443	0.01918	2	320:
82% ########2	33/40 [00:06<00:01,	5.64it/s]			
428/499	0.206G 0.01965	0.009349	0.01925	2	320:
82% ########2	33/40 [00:06<00:01,	5.64it/s]			
428/499	0.206G 0.01965	0.009349	0.01925	2	320:
85% #######5	34/40 [00:06<00:01,	5.54it/s			
428/499	0.206G 0.02063	0.009305	0.01925	3	320:
85% ########	34/40 [00:06<00:01,	5.54it/s			
428/499	0.206G 0.02063	0.009305	0.01925	3	320:
88% #######7	35/40 [00:06<00:00,	5.61it/s]			
428/499	0.206G 0.02036	0.009341	0.01912	2	320:
88% #######7	35/40 [00:06<00:00,	5.61it/s			
428/499	0.206G 0.02036	0.009341	0.01912	2	320:
90% ########	36/40 [00:06<00:00,	5.39it/s			
428/499	0.206G 0.02009	0.009247	0.01899	1	320:
	36/40 [00:07<00:00,	5.39it/s]			
428/499		0.009247	0.01899	1	320:
	37/40 [00:07<00:00,				
428/499	0.206G 0.02014	0.009464	0.01906	4	320:
	37/40 [00:07<00:00,				
428/499		0.009464	0.01906	4	320:
	38/40 [00:07<00:00,				
428/499	0.206G 0.02007		0.01904	4	320:
	38/40 [00:07<00:00,				
428/499	0.206G 0.02007		0.01904	4	320:
	39/40 [00:07<00:00,				
428/499			0.01899	2	320:
	39/40 [00:07<00:00,		0.04000		222
428/499	0.206G 0.01992		0.01899	2	320:
	40/40 [00:07<00:00		0.01800	0	200
428/499	0.206G 0.01992		0.01899	2	320:
100% ##########	1 40/40 [00:07<00:00	, 5.∠81t/S]			
	Class Images	Instances	P	R	mAP50
	otabb tillageb .	THEFAUCES	Г	r,	IIIAF 50

mAP50-95:	0%	I 0/20 [0	0:00 , ?it/</th <th>′a1</th> <th></th> <th></th>	′a1		
MAF 50-95.			Instances		R	mAP50
mAP50-95:		•	0:00<00:01,		10	mm 00
	Class		Instances		R	mAP50
mAP50-95:		•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	30% ###	•	0:00<00:00,			
	Class	Images	Instances	P	R	mAP50
mAP50-95:	40% ####	8/20 [0	0:00<00:00,	15.91it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	50% #####	10/20 [00:00<00:00,	15.83it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:	90% ########					ADE0
ADEO 05 4	Class	•	Instances		R	mAP50
mAP50-95: 1	100% ##########		-			4.D.E.O.
ADEO OF	Class	_	Instances		R	mAP50
mAP50-95: 1	100% #########					0.005
0.754	all	40	40	0.989	1	0.995
0.754						
Epoch	n GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
-	_		-	cls_loss	Instances	Size
0%	0/40 [00	:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
0% 429/499	0/40 [00 0.206G	:00 , ?i<br 0.04133	t/s] 0.008075		Instances	Size 320:
0% 429/499	0/40 [00 0.206G 0/40 [00:0	:00 , ?i<br 0.04133 0 , ?it/</td <td>t/s] 0.008075 s]</td> <td>0.02855</td> <td>3</td> <td>320:</td>	t/s] 0.008075 s]	0.02855	3	320:
0% 429/499 0% 429/499	0/40 [00 0.206G 0/40 [00:0	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133	t/s] 0.008075 s] 0.008075			
0% 429/499 0% 429/499 2% 2	0/40 [00 0.206G 0/40 [00:0	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06,	t/s] 0.008075 s] 0.008075	0.02855	3	320:
0% 429/499 0% 429/499 2% 2 429/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236	0.02855	3	320: 320:
0% 429/499 0% 429/499 2% 2 429/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0]	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349 0<00:06,	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236	0.02855 0.02855 0.02108	3	320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 2% 2	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349 0<00:06, 0.03349	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236	0.02855	3 3 1	320: 320:
0% 429/499 0% 429/499 2% 2 429/499 429/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0]	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349 0<00:06, 0.03349 0<00:06,	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236	0.02855 0.02855 0.02108	3 3 1	320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 2% 2 429/499 5% 5	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349 0<00:06, 0.03349 0<00:06,	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477	0.02855 0.02855 0.02108 0.02108	3 3 1	320: 320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 2% 2 429/499 5% 5 429/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0]	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06,	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477	0.02855 0.02855 0.02108 0.02108	3 3 1	320: 320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 5% 5 429/499 5% 5	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0]	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06,	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477	0.02855 0.02855 0.02108 0.02108 0.01987	3 3 1 1 2	320: 320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 5% 5 429/499 5% 5 429/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0] 0.206G 3/40 [00:0]	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06, 0.02648	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477	0.02855 0.02855 0.02108 0.02108 0.01987	3 3 1 1 2	320: 320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 5% 5 429/499 5% 5 429/499 8% 7	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0] 0.206G 3/40 [00:0]	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06, 0.02648 0<00:05, 0.02259	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453	0.02855 0.02855 0.02108 0.02108 0.01987 0.01987	3 3 1 1 2 2	320: 320: 320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 5% 5 429/499 5% 5 429/499 8% 7 429/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0]	:00 , ?i 0.04133 0<?, ?it/ 0.04133 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06, 0.02648 0<00:05, 0.02259 0<00:05,</td <td>t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s]</td> <td>0.02855 0.02855 0.02108 0.02108 0.01987 0.01987</td> <td>3 3 1 1 2 2</td> <td>320: 320: 320: 320: 320:</td>	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s]	0.02855 0.02855 0.02108 0.02108 0.01987 0.01987	3 3 1 1 2 2	320: 320: 320: 320: 320:
0% 429/498 0% 429/498 2% 2 429/498 2% 2 429/498 5% 5 429/498 8% 7 429/498 8% 7	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0] 0.206G	:00 , ?i 0.04133 0<?, ?it/ 0.04133 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06, 0.02648 0<00:05, 0.02259 0<00:05, 0.02259</td <td>t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s] 0.006453</td> <td>0.02855 0.02855 0.02108 0.02108 0.01987 0.01987</td> <td>3 3 1 1 2 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s] 0.006453	0.02855 0.02855 0.02108 0.02108 0.01987 0.01987	3 3 1 1 2 2 2	320: 320: 320: 320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 5% 5 429/499 5% 5 429/499 8% 7 429/499 8% 7 429/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0] 0.206G 4/40 [00:0]	:00 , ?i 0.04133 0<?, ?it/ 0.04133 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06, 0.02648 0<00:05, 0.02259 0<00:05, 0.02259</td <td>t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s] 0.006453 5.80it/s]</td> <td>0.02855 0.02855 0.02108 0.02108 0.01987 0.01987</td> <td>3 3 1 1 2 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s] 0.006453 5.80it/s]	0.02855 0.02855 0.02108 0.02108 0.01987 0.01987	3 3 1 1 2 2 2	320: 320: 320: 320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 5% 5 429/499 5% 5 429/499 8% 7 429/499 8% 7 429/499 10% #	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0] 0.206G 4/40 [00:0]	:00 , ?i 0.04133 0<?, ?it/ 0.04133 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06, 0.02648 0<00:05, 0.02259 0<00:05, 0.02259 0<00:06, 0.02203</td <td>t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s] 0.006453 5.80it/s] 0.007853</td> <td>0.02855 0.02855 0.02108 0.02108 0.01987 0.01987 0.01851 0.01851</td> <td>3 3 1 1 2 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s] 0.006453 5.80it/s] 0.007853	0.02855 0.02855 0.02108 0.02108 0.01987 0.01987 0.01851 0.01851	3 3 1 1 2 2 2 2	320: 320: 320: 320: 320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 5% 5 429/499 5% 5 429/499 8% 7 429/499 8% 7 429/499 10% # 429/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0] 0.206G 4/40 [00:0] 0.206G 4/40 [00:0]	:00 , ?i<br 0.04133 0 , ?it/<br 0.04133 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06, 0.02648 0<00:05, 0.02259 0<00:05, 0.02259 0<00:06, 0.02259	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s] 0.006453 5.80it/s] 0.007853 5.80it/s]	0.02855 0.02855 0.02108 0.02108 0.01987 0.01987 0.01851 0.01851	3 3 1 1 2 2 2 2	320: 320: 320: 320: 320: 320: 320:
0% 429/499 0% 429/499 2% 2 429/499 5% 5 429/499 5% 5 429/499 8% 7 429/499 10% # 429/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0] 0.206G 4/40 [00:0] 0.206G 4/40 [00:0] 0.206G 4/40 [00:0] 0.206G 4/40 [00:0] 0.206G 4/40 [00:0] 0.206G 4/40 [00:0]	:00 , ?i 0.04133 0<?, ?it/ 0.04133 0<00:06, 0.03349 0<00:06, 0.02648 0<00:06, 0.02648 0<00:05, 0.02259 0<00:05, 0.02259 0<00:06, 0.02203</td <td>t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s] 0.006453 5.80it/s] 0.007853 5.80it/s]</td> <td>0.02855 0.02855 0.02108 0.02108 0.01987 0.01987 0.01851 0.01851 0.01958</td> <td>3 3 1 1 2 2 2 2 4</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.008075 s] 0.008075 6.36it/s] 0.006236 6.36it/s] 0.006236 6.02it/s] 0.006477 6.02it/s] 0.006477 6.19it/s] 0.006453 6.19it/s] 0.006453 5.80it/s] 0.007853 5.80it/s]	0.02855 0.02855 0.02108 0.02108 0.01987 0.01987 0.01851 0.01851 0.01958	3 3 1 1 2 2 2 2 4	320: 320: 320: 320: 320: 320: 320: 320:

12% #2	5/40 [00:01<00:06, 5.80it/s]			
429/499	0.206G 0.02335 0.008926	0.02062	4	320:
15% #5	6/40 [00:01<00:06, 5.47it/s]			
,	0.206G 0.02301 0.008571	0.02231	2	320:
15% #5	6/40 [00:01<00:06, 5.47it/s]			
429/499	0.206G 0.02301 0.008571	0.02231	2	320:
18% #7	7/40 [00:01<00:06, 5.42it/s]			
429/499	0.206G 0.02158 0.008212	0.02123	1	320:
18% #7	7/40 [00:01<00:06, 5.42it/s]			
429/499	0.206G 0.02158 0.008212	0.02123	1	320:
20% ##	8/40 [00:01<00:05, 5.54it/s]			
429/499	0.206G 0.02058 0.007933	0.02039	1	320:
20% ##	8/40 [00:01<00:05, 5.54it/s]			
429/499	0.206G 0.02058 0.007933	0.02039	1	320:
22% ##2	9/40 [00:01<00:05, 5.63it/s]			
429/499	0.206G 0.01986 0.008087	0.02025	2	320:
22% ##2	9/40 [00:01<00:05, 5.63it/s]			
429/499	0.206G 0.01986 0.008087	0.02025	2	320:
25% ##5	10/40 [00:01<00:05, 5.51it/s]			
429/499	0.206G 0.02178 0.008604	0.02123	4	320:
25% ##5	10/40 [00:01<00:05, 5.51it/s]			
429/499	0.206G 0.02178 0.008604	0.02123	4	320:
28% ##7	11/40 [00:01<00:05, 5.60it/s]			
429/499	0.206G 0.02085 0.008133	0.02062	1	320:
28% ##7	11/40 [00:02<00:05, 5.60it/s]			
429/499	0.206G 0.02085 0.008133	0.02062	1	320:
30% ###	12/40 [00:02<00:04, 5.67it/s]			
429/499	0.206G 0.0208 0.008135	0.02035	2	320:
30% ###	12/40 [00:02<00:04, 5.67it/s]			
429/499	0.206G 0.0208 0.008135	0.02035	2	320:
32% ###2	13/40 [00:02<00:04, 5.68it/s]			
429/499	0.206G 0.02004 0.007923	0.01993	1	320:
32% ###2	13/40 [00:02<00:04, 5.68it/s]			
429/499	0.206G 0.02004 0.007923	0.01993	1	320:
35% ###5	14/40 [00:02<00:04, 5.53it/s]			
429/499	0.206G 0.01953 0.007828	0.01975	1	320:
35% ###5	14/40 [00:02<00:04, 5.53it/s]			
429/499	0.206G 0.01953 0.007828	0.01975	1	320:
38% ###7	15/40 [00:02<00:04, 5.66it/s]			
429/499	0.206G 0.01907 0.007727	0.01985	2	320:
38% ###7	15/40 [00:02<00:04, 5.66it/s]			
429/499	0.206G 0.01907 0.007727	0.01985	2	320:
40% ####	16/40 [00:02<00:04, 5.68it/s]			
429/499	0.206G 0.01908 0.007981	0.01978	4	320:
40% ####	16/40 [00:03<00:04, 5.68it/s]			
429/499	0.206G 0.01908 0.007981	0.01978	4	320:
42% ####2	17/40 [00:03<00:04, 5.57it/s]			
429/499	0.206G 0.01917 0.008366	0.02003	4	320:

42% ####2		17/40 [00:03<00:04,				
429/499		0.206G 0.01917		0.02003	4	320:
45% ####5	١	18/40 [00:03<00:03,				
429/499		0.206G 0.01874		0.01957	1	320:
45% ####5	١	18/40 [00:03<00:03,				
429/499		0.206G 0.01874		0.01957	1	320:
48% ####7		19/40 [00:03<00:03,				
429/499		0.206G 0.0188		0.02036	2	320:
48% ####7	١	19/40 [00:03<00:03,				
429/499		0.206G 0.0188	0.008159	0.02036	2	320:
50% #####		20/40 [00:03<00:03,				
429/499		0.206G 0.01954		0.02111	4	320:
50% #####	١	20/40 [00:03<00:03,				
429/499		0.206G 0.01954		0.02111	4	320:
52% #####2		21/40 [00:03<00:03,				
429/499		0.206G 0.01927		0.02089	1	320:
52% #####2		21/40 [00:03<00:03,				
429/499		0.206G 0.01927	0.008221	0.02089	1	320:
55% #####5		22/40 [00:03<00:03,	5.55it/s]			
429/499		0.206G 0.01979	0.00852	0.02131	4	320:
55% #####5		22/40 [00:04<00:03,	5.55it/s]			
429/499		0.206G 0.01979	0.00852	0.02131	4	320:
57% #####7		23/40 [00:04<00:03,	5.63it/s			
429/499		0.206G 0.01936	0.008436	0.02115	2	320:
57% #####7	-	23/40 [00:04<00:03,	5.63it/s			
429/499		0.206G 0.01936	0.008436	0.02115	2	320:
60% ######		24/40 [00:04<00:02,	5.68it/s]			
429/499		0.206G 0.01932	0.008483	0.02093	2	320:
60% ######		24/40 [00:04<00:02,	5.68it/s]			
429/499		0.206G 0.01932	0.008483	0.02093	2	320:
62% ######2		25/40 [00:04<00:02,	5.70it/s			
429/499		0.206G 0.01915	0.00829	0.02089	1	320:
62% ######2	-	25/40 [00:04<00:02,	5.70it/s			
429/499		0.206G 0.01915	0.00829	0.02089	1	320:
65% ######5	-	26/40 [00:04<00:02,	5.73it/s			
429/499		0.206G 0.01905	0.008315	0.02132	2	320:
65% ######5	-	26/40 [00:04<00:02,	5.73it/s			
429/499		0.206G 0.01905	0.008315	0.02132	2	320:
68% ######7	-	27/40 [00:04<00:02,	5.76it/s]			
429/499		0.206G 0.01895	0.008247	0.0211	2	320:
68% ######7	-	27/40 [00:04<00:02,	5.76it/s]			
429/499		0.206G 0.01895	0.008247	0.0211	2	320:
70% ######	-	28/40 [00:04<00:02,	5.75it/s]			
429/499		0.206G 0.01946		0.0212	2	320:
70% ######	-	28/40 [00:05<00:02,	5.75it/s]			
429/499		0.206G 0.01946	0.008228	0.0212	2	320:
72% #######2	1	29/40 [00:05<00:01,				
429/499		0.206G 0.01999	0.008211	0.0214	2	320:

	29/40 [00:05<00:01,				
429/499			0.0214	2	320:
75% ######5	30/40 [00:05<00:01,	5.63it/s]			
429/499		0.008054	0.02108	1	320:
75% ######5	30/40 [00:05<00:01,	5.63it/s			
429/499	0.206G 0.01963	0.008054	0.02108	1	320:
78% ######7	31/40 [00:05<00:01,	5.52it/s			
429/499	0.206G 0.01972	0.008188	0.02123	4	320:
78% ######7	31/40 [00:05<00:01,	5.52it/s			
429/499	0.206G 0.01972	0.008188	0.02123	4	320:
80% #######	32/40 [00:05<00:01,	5.33it/s			
429/499	0.206G 0.0194	0.008108	0.02102	2	320:
80% #######	32/40 [00:05<00:01,	5.33it/s]			
429/499	· · · · · · · · · · · · · · · · · · ·		0.02102	2	320:
	33/40 [00:05<00:01,				
429/499	0.206G 0.01996		0.02093	2	320:
	33/40 [00:06<00:01,		0.02000	-	020.
429/499	0.206G 0.01996		0.02093	2	320:
	34/40 [00:06<00:01,		0.02030	2	020.
429/499	· · · · · · · · · · · · · · · · · · ·	0.008124	0.02127	2	320:
	34/40 [00:06<00:01,		0.02127	2	320.
429/499	0.206G 0.02012		0.02127	2	320:
			0.02127	2	320:
	35/40 [00:06<00:00,		0.00407	0	200
429/499	0.206G 0.01988		0.02107	2	320:
	35/40 [00:06<00:00,		0.00400		000
429/499	0.206G 0.01988	0.008191	0.02107	2	320:
	36/40 [00:06<00:00,				
429/499	0.206G 0.02001		0.0212	1	320:
	36/40 [00:06<00:00,				
429/499	0.206G 0.02001		0.0212	1	320:
	37/40 [00:06<00:00,				
429/499	0.206G 0.02023	0.008273	0.02126	4	320:
92% ########2	37/40 [00:06<00:00,	5.70it/s			
429/499	0.206G 0.02023	0.008273	0.02126	4	320:
95% ########5	38/40 [00:06<00:00,	5.58it/s]			
429/499	0.206G 0.0202	0.008524	0.02146	4	320:
95% ########5	38/40 [00:06<00:00,	5.58it/s			
429/499	0.206G 0.0202	0.008524	0.02146	4	320:
98% ########7	39/40 [00:06<00:00,	5.50it/s			
429/499	0.206G 0.0199	0.008481	0.02127	2	320:
98% ########7	39/40 [00:07<00:00,	5.50it/s]			
429/499		0.008481	0.02127	2	320:
	40/40 [00:07<00:00				
429/499	0.206G 0.0199	=	0.02127	2	320:
	40/40 [00:07<00:00				
		,			
	Class Images	Instances	P	R	mAP50
mAP50-95: 0%	•	:00 , ?it/s]</td <td></td> <td>•</td> <td></td>		•	
	, 0,20 [00		•		

	Class	•	Instances		R	mAP50
mAP50-95:	10% # Class		00:00<00:00, Instances		R	mAP50
mAP50-95:		•	00:00<00:00,		10	111111111111111111111111111111111111111
	Class	Images		P	R	mAP50
mAP50-95:	30% ###	6/20 [0	00:00<00:00,	16.43it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	40% ####		00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:			[00:00<00:00			
ADEO OF:	Class	•	Instances		R	mAP50
mAP50-95:	60% ###### Class		[00:00<00:00 Instances		R	mAP50
mAP50-95:		_	[00:00<00:00]			MAPSO
MAI 50 95.	Class		Instances		R	mAP50
mAP50-95:		_	[00:00<00:00			111111111111111111111111111111111111111
	Class		Instances		R	mAP50
mAP50-95:	90% #########	•				
	Class		Instances		R	mAP50
mAP50-95:	100% #########	20/20	[00:01<00:00	, 16.24it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########	20/20	[00:01<00:00			
	all	40	40	0.989	1	0.995
0.754						
Epoc	h GPU_mem 1	box_loss	obj_loss	cls_loss	Instances	Size
_			-	cls_loss	Instances	Size
0%	0/40 [00	:00 , ?i</td <td>it/s]</td> <td></td> <td></td> <td></td>	it/s]			
0% 430/49	0/40 [00 9 0.206G	:00 , ?i</td <td>it/s] 0.008261</td> <td></td> <td>Instances</td> <td>Size 320:</td>	it/s] 0.008261		Instances	Size 320:
0% 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/</td <td>it/s] 0.008261 /s]</td> <td>0.02488</td> <td>2</td> <td>320:</td>	it/s] 0.008261 /s]	0.02488	2	320:
0% 430/49 0% 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916	it/s] 0.008261 /s] 0.008261			
0% 430/49 0% 430/49 2% 2	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it,<br 0.01916 0<00:07,	it/s] 0.008261 /s] 0.008261 4.92it/s]	0.02488	2	320: 320:
0% 430/49 0% 430/49 2% 2 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299	0.02488	2	320:
0% 430/49 0% 430/49 2% 2 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07,	0.008261 (s) 0.008261 4.92it/s] 0.01299 4.92it/s]	0.02488 0.02488 0.02317	2 2 4	320: 320: 320:
0% 430/49 0% 430/49 2% 2 430/49 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07, 0.02411	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01299	0.02488 0.02488 0.02317	2	320: 320:
0% 430/49 0% 430/49 2% 2 430/49 2% 2 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07, 0.02411	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01299 4.92it/s]	0.02488 0.02488 0.02317 0.02317	2 2 4 4	320: 320: 320: 320:
0% 430/49 0% 430/49 2% 2 430/49 2% 2 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07, 0.02411 0<00:07,	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01299 4.92it/s] 0.01255	0.02488 0.02488 0.02317	2 2 4	320: 320: 320:
0% 430/49 0% 430/49 2% 2 430/49 2% 2 430/49 5% 5 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07, 0.02411 0<00:07, 0.02111	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s]	0.02488 0.02488 0.02317 0.02317	2 2 4 4	320: 320: 320: 320:
0% 430/49 0% 430/49 2% 2 430/49 2% 2 430/49 5% 5 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07, 0.02411 0<00:07, 0.02111	0.008261 (s) 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255	0.02488 0.02488 0.02317 0.02317 0.01995	2 2 4 4 2	320: 320: 320: 320: 320:
0% 430/49' 0% 430/49' 2% 2 430/49' 5% 5 430/49' 5% 5 430/49' 8% 7 430/49'	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07, 0.02411 0<00:07, 0.02111 0<00:07, 0.02111	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01255	0.02488 0.02488 0.02317 0.02317 0.01995 0.01995	2 2 4 4 2	320: 320: 320: 320: 320:
0% 430/49 0% 430/49 2% 2 430/49 2% 2 430/49 5% 5 430/49 5% 5 430/49 8% 7 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07, 0.02111 0<00:07, 0.02111 0<00:07, 0.02111 0<00:07, 0.02111	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s]	0.02488 0.02488 0.02317 0.02317 0.01995 0.01995	2 2 4 4 2	320: 320: 320: 320: 320:
0% 430/49 0% 430/49 2% 2 430/49 2% 2 430/49 5% 5 430/49 8% 7 430/49	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07, 0.02411 0<00:07, 0.02111 0<00:07, 0.02111 0<00:07, 0.01821 0<00:07,	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01009 4.92it/s] 0.01009	0.02488 0.02488 0.02317 0.02317 0.01995 0.01995	2 2 4 4 2	320: 320: 320: 320: 320:
0% 430/49' 0% 430/49' 2% 2 430/49' 2% 5 430/49' 5% 5 430/49' 8% 7 430/49' 8% 7 430/49' 10% #	0/40 [00 9	:00 , ?i<br 0.01916 0 , ?it/<br 0.01916 0<00:07, 0.02411 0<00:07, 0.02111 0<00:07, 0.02111 0<00:07, 0.01821 0<00:07, 0.01821 0<00:07,	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01009 4.92it/s] 0.01009 5.07it/s]	0.02488 0.02488 0.02317 0.02317 0.01995 0.01995 0.02102	2 2 4 4 2 2 1	320: 320: 320: 320: 320: 320: 320:
0% 430/49' 0% 430/49' 2% 2 430/49' 2% 2 430/49' 5% 5 430/49' 8% 7 430/49' 8% 7 430/49' 10% # 430/49'	0/40 [00 9	:00 , ?i 0.01916 0<?, ?it/ 0.01916 0<00:07, 0.02411 0<00:07, 0.02111 0<00:07, 0.02111 0<00:07, 0.01821 0<00:07, 0.01821 0<00:07, 0.01821</td <td>it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01009 4.92it/s] 0.01009 5.07it/s] 0.01189</td> <td>0.02488 0.02488 0.02317 0.02317 0.01995 0.01995 0.02102</td> <td>2 2 4 4 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01009 4.92it/s] 0.01009 5.07it/s] 0.01189	0.02488 0.02488 0.02317 0.02317 0.01995 0.01995 0.02102	2 2 4 4 2 2	320: 320: 320: 320: 320: 320:
0%	0/40 [00 9	:00 , ?i 0.01916 0<?, ?it/ 0.01916 0<00:07, 0.02411 0<00:07, 0.02411 0<00:07, 0.02111 0<00:07, 0.02111 0<00:07, 0.01821 0<00:07, 0.01821 0<00:07, 0.01821</td <td>it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01009 4.92it/s] 0.01009 5.07it/s] 0.01189 5.07it/s]</td> <td>0.02488 0.02488 0.02317 0.02317 0.01995 0.01995 0.02102 0.02102</td> <td>2 2 4 4 2 2 1 1 4</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01009 4.92it/s] 0.01009 5.07it/s] 0.01189 5.07it/s]	0.02488 0.02488 0.02317 0.02317 0.01995 0.01995 0.02102 0.02102	2 2 4 4 2 2 1 1 4	320: 320: 320: 320: 320: 320: 320: 320:
0% 430/49' 0% 430/49' 2% 2 430/49' 2% 2 430/49' 5% 5 430/49' 5% 5 430/49' 8% 7 430/49' 10% # 430/49' 10% # 430/49'	0/40 [00 9	:00 , ?i 0.01916 0<?, ?it/ 0.01916 0<00:07, 0.02411 0<00:07, 0.02411 0<00:07, 0.02111 0<00:07, 0.02111 0<00:07, 0.01821 0<00:07, 0.01821 0<00:07, 0.02084</td <td>it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01009 4.92it/s] 0.01009 5.07it/s] 0.01189 5.07it/s]</td> <td>0.02488 0.02488 0.02317 0.02317 0.01995 0.01995 0.02102 0.02102</td> <td>2 2 4 4 2 2 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	it/s] 0.008261 /s] 0.008261 4.92it/s] 0.01299 4.92it/s] 0.01255 4.92it/s] 0.01255 4.92it/s] 0.01009 4.92it/s] 0.01009 5.07it/s] 0.01189 5.07it/s]	0.02488 0.02488 0.02317 0.02317 0.01995 0.01995 0.02102 0.02102	2 2 4 4 2 2 1	320: 320: 320: 320: 320: 320: 320:

A30/499					
15 16 16 16 10 10 10 10 10	430/499	0.206G 0.02376 0.0	0.0211	4	320:
15% #5					
15 16 16 16 16 17 17 17 17				4	320:
15% #5		-			
430/499				1	320:
18% #7		-			
18 19	430/499			1	320:
18% #7		-			
1				1	320:
20% ##		·			
A30/499				1	320:
20% ##					
430/499	430/499			1	320:
22% ##2					
430/499	430/499			1	320:
22% ##2					
A30/499				1	320:
25% ##5	22% ##2				
430/499				1	320:
10/40					
A30/499				4	320:
28% ##7					
430/499 0.206G 0.02334 0.008891 0.02046 2 320: 28% ##7 11/40 [00:02<00:05, 5.16it/s]	430/499			4	320:
28% ##7 11/40 [00:02<00:05, 5.16it/s]					
430/499 0.206G 0.02334 0.008891 0.02046 2 320: 30% ### 12/40 [00:02<00:05, 5.20it/s]	430/499			2	320:
30% ###	28% ##7				
430/499 0.206G 0.02224 0.008443 0.02003 1 320: 30% ### 12/40 [00:02<00:05, 5.20it/s]	430/499			2	320:
30% ###	30% ###	12/40 [00:02<00:05, 5.2	?Oit/s]		
430/499 0.206G 0.02224 0.008443 0.02003 1 320: 32% ###2 13/40 [00:02<00:05, 5.36it/s]	430/499			1	320:
32% ###2 13/40 [00:02<00:05, 5.36it/s]	30% ###	12/40 [00:02<00:05, 5.2	?Oit/s]		
430/499 0.206G 0.02175 0.008311 0.01973 2 320: 32% ###2 13/40 [00:02<00:05, 5.36it/s]				1	320:
32% ###2 13/40 [00:02<00:05, 5.36it/s]	32% ###2	13/40 [00:02<00:05, 5.3	66it/s]		
430/499	430/499	0.206G 0.02175 0.00	0.01973	2	320:
35% ###5 14/40 [00:02<00:04, 5.35it/s]	32% ###2	13/40 [00:02<00:05, 5.3	66it/s]		
430/499	430/499			2	320:
35% ###5 14/40 [00:02<00:04, 5.35it/s]	35% ###5				
430/499	430/499	0.206G 0.02112 0.0	0.01943	1	320:
38% ###7 15/40 [00:02<00:04, 5.49it/s]	35% ###5	14/40 [00:02<00:04, 5.3	S5it/s]		
430/499	430/499	0.206G 0.02112 0.0	0.01943	1	320:
38% ###7 15/40 [00:03<00:04, 5.49it/s] 430/499 0.206G 0.02122 0.008 0.0193 2 320: 40% #### 16/40 [00:03<00:04, 5.31it/s] 430/499 0.206G 0.02155 0.008091 0.0193 2 320: 40% #### 16/40 [00:03<00:04, 5.31it/s] 430/499 0.206G 0.02155 0.008091 0.0193 2 320:	38% ###7	15/40 [00:02<00:04, 5.4	9it/s]		
430/499 0.206G 0.02122 0.008 0.0193 2 320: 40% #### 16/40 [00:03<00:04, 5.31it/s] 430/499 0.206G 0.02155 0.008091 0.0193 2 320: 40% #### 16/40 [00:03<00:04, 5.31it/s] 430/499 0.206G 0.02155 0.008091 0.0193 2 320:	430/499			2	320:
40% #### 16/40 [00:03<00:04, 5.31it/s] 430/499	38% ###7	15/40 [00:03<00:04, 5.4	9it/s]		
430/499 0.206G 0.02155 0.008091 0.0193 2 320: 40% #### 16/40 [00:03<00:04, 5.31it/s] 430/499 0.206G 0.02155 0.008091 0.0193 2 320:	430/499			2	320:
40% #### 16/40 [00:03<00:04, 5.31it/s] 430/499	40% ####				
430/499 0.206G 0.02155 0.008091 0.0193 2 320:	430/499			2	320:
	40% ####				
42% ####2 17/40 [00:03<00:04, 5.45it/s]	430/499	0.206G 0.02155 0.00	0.0193	2	320:
	42% ####2	17/40 [00:03<00:04, 5.4	:5it/s]		

430/499	0.206G 0.02094 0.007838	0.01898	1	320:
42% ####2	17/40 [00:03<00:04, 5.45it/s]			
430/499	0.206G 0.02094 0.007838	0.01898	1	320:
45% ####5	18/40 [00:03<00:03, 5.56it/s]			
430/499	0.206G 0.02084 0.008085	0.01908	4	320:
45% ####5	18/40 [00:03<00:03, 5.56it/s]	0.01000	4	200.
430/499	0.206G 0.02084 0.008085	0.01908	4	320:
48% ####7 430/499	19/40 [00:03<00:03, 5.60it/s] 0.206G	0.01909	4	320:
48% ####7	19/40 [00:03<00:03, 5.60it/s]	0.01909	4	320.
430/499	0.206G 0.02173 0.00842	0.01909	4	320:
50% #####	20/40 [00:03<00:03, 5.25it/s]	0.01303	T	020.
430/499	0.206G 0.02141 0.008315	0.019	2	320:
50% #####	20/40 [00:04<00:03, 5.25it/s]	0.010	2	020.
430/499	0.206G 0.02141 0.008315	0.019	2	320:
52% #####2	21/40 [00:04<00:03, 5.25it/s]	0.020	_	0_0.
430/499	0.206G 0.0222 0.008413	0.01892	2	320:
52% #####2	21/40 [00:04<00:03, 5.25it/s]			
430/499	0.206G 0.0222 0.008413	0.01892	2	320:
55% #####5	22/40 [00:04<00:03, 5.28it/s]			
430/499	0.206G 0.02255 0.008699	0.01937	4	320:
55% #####5	22/40 [00:04<00:03, 5.28it/s]			
430/499	0.206G 0.02255 0.008699	0.01937	4	320:
57% #####7	23/40 [00:04<00:03, 5.43it/s]			
430/499	0.206G 0.02232 0.008748	0.01908	2	320:
57% #####7	23/40 [00:04<00:03, 5.43it/s]			
430/499	0.206G 0.02232 0.008748	0.01908	2	320:
60% ######	24/40 [00:04<00:03, 5.32it/s]			
430/499	0.206G 0.02339 0.00862	0.01903	2	320:
60% ######	24/40 [00:04<00:03, 5.32it/s]			
430/499	0.206G 0.02339 0.00862	0.01903	2	320:
62% #####2	25/40 [00:04<00:02, 5.53it/s]			
430/499	0.206G 0.0233 0.008778	0.01922	4	320:
62% #####2	25/40 [00:04<00:02, 5.53it/s]			
430/499	0.206G 0.0233 0.008778	0.01922	4	320:
65% ######5	26/40 [00:04<00:02, 5.33it/s]			
430/499	0.206G 0.02327 0.008982	0.01931	4	320:
65% ######5	26/40 [00:05<00:02, 5.33it/s]			
430/499	0.206G 0.02327 0.008982	0.01931	4	320:
68% ######7	27/40 [00:05<00:02, 5.41it/s]			
430/499	0.206G 0.02307 0.0088	0.0191	1	320:
68% ######7	27/40 [00:05<00:02, 5.41it/s]			
430/499	0.206G 0.02307 0.0088	0.0191	1	320:
70% #######	28/40 [00:05<00:02, 5.57it/s]	0.045==	_	
430/499	0.206G 0.02307 0.008955	0.01957	4	320:
70% #######	28/40 [00:05<00:02, 5.57it/s]	0.04055	A	500
430/499	0.206G 0.02307 0.008955	0.01957	4	320:
72% ######2	29/40 [00:05<00:02, 5.50it/s]			

	0.206G 0.02277		0.01964	1	320:
	29/40 [00:05<00:02,		0.04064	4	200
430/499	* * * * * * * * * * * * * * * * * *		0.01964	1	320:
	30/40 [00:05<00:01,		0.01067	4	200.
430/499 75% ######5	0.206G 0.02241 30/40 [00:05<00:01,		0.01967	1	320:
430/499			0.01967	1	320:
	31/40 [00:05<00:01,		0.01907	1	520.
430/499			0.01959	1	320:
	31/40 [00:06<00:01,		0.01000	-	020.
430/499			0.01959	1	320:
	32/40 [00:06<00:01,			_	
430/499			0.01948	2	320:
80% #######	32/40 [00:06<00:01,				
430/499	0.206G 0.02164	0.008295	0.01948	2	320:
82% ########2	33/40 [00:06<00:01,	5.56it/s]			
430/499	0.206G 0.02139	0.008295	0.0194	2	320:
82% ########	33/40 [00:06<00:01,	5.56it/s			
430/499	0.206G 0.02139	0.008295	0.0194	2	320:
85% ########	34/40 [00:06<00:01,	5.79it/s			
430/499	0.206G 0.02102	0.00824	0.0192	1	320:
85% #######5	34/40 [00:06<00:01,	5.79it/s]			
430/499	0.206G 0.02102	0.00824	0.0192	1	320:
88% #######7	35/40 [00:06<00:00,	5.64it/s			
430/499	0.206G 0.02119	0.00824	0.01916	2	320:
88% #######7	35/40 [00:06<00:00,	5.64it/s]			
430/499	0.206G 0.02119	0.00824	0.01916	2	320:
90% #######	36/40 [00:06<00:00,	5.38it/s]			
430/499	0.206G 0.02125		0.01929	2	320:
	36/40 [00:06<00:00,				
430/499	0.206G 0.02125		0.01929	2	320:
	37/40 [00:06<00:00,				
430/499	0.206G 0.02097	0.008171	0.01928	2	320:
	37/40 [00:07<00:00,				
		0.008171	0.01928	2	320:
	38/40 [00:07<00:00,		0.04040	4	000
430/499		0.008044	0.01919	1	320:
	38/40 [00:07<00:00,	· -	0.04040	4	200
430/499		0.008044	0.01919	1	320:
	39/40 [00:07<00:00,		0.01000	0	200.
430/499	0.206G 0.02124 39/40 [00:07<00:00,		0.01922	2	320:
430/499			0.01922	2	320:
	40/40 [00:07<00:00		0.01322	۷	520.
430/499	0.206G 0.02124		0.01922	2	320:
	40/40 [00:07<00:00			4	020.
		,, 23			
	Class Images	Instances	P	R	mAP50
	9				

mAP50-95:	0%	I 0/20 [0	0:00 , ?it/</th <th>'al</th> <th></th> <th></th>	'al		
MAP50-95.			Instances		R	mAP50
mAP50-95:		_	0:00<00:00,		10	mai oo
miii oo oo.	Class		Instances		R	mAP50
mAP50-95:		•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:		•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	40% ####	8/20 [0	0:00<00:00,	17.74it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	50% #####	10/20 [00:00<00:00,	17.07it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	60% #####		00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00,			
	Class	•	Instances		R	mAP50
mAP50-95:			00:00<00:00,			
	Class	•	Instances		R	mAP50
mAP50-95:	95% ########5					1750
1750 05 4	Class	_	Instances		R	mAP50
mAP50-95: 1	00% #########					0.005
0.704	all	40	40	0.987	0.988	0.995
0.794						
Epoch	GPU_mem 1	box_loss	obj_loss	cls_loss	Instances	Size
-	_		-	cls_loss	Instances	Size
0%1	0/40 [00	:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
0% 431/499	0.206G	:00 , ?i<br 0.01577	t/s] 0.008053	0.0162	Instances 2	Size 320:
0% 431/499 0%	0/40 [00 0.206G 0/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/</td <td>t/s] 0.008053</td> <td>0.0162</td> <td></td> <td>320:</td>	t/s] 0.008053	0.0162		320:
0% 431/499 0% 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577	t/s] 0.008053 s] 0.008053		2	
0% 431/499 0% 431/499 2% 2	0/40 [00 0.206G 0/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06,	t/s] 0.008053 s] 0.008053	0.0162	2	320:
0% 431/499 0% 431/499 2% 2 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501	0.0162 0.0162	2	320: 320:
0% 431/499 0% 431/499 2% 2 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06,	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501	0.0162 0.0162	2	320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.01094	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501	0.0162 0.0162 0.01849	2 2 1	320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.01094 0<00:06,	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501	0.0162 0.0162 0.01849	2 2 1	320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499 5% 5	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.01094 0<00:06,	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496	0.0162 0.0162 0.01849 0.01849	2 2 1 1	320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499 5% 5 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06,	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496	0.0162 0.0162 0.01849 0.01849	2 2 1 1	320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499 5% 5 431/499 5% 5	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06,	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496	0.0162 0.0162 0.01849 0.01849 0.02801	2 2 1 1 2	320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499 5% 5 431/499 5% 5	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06,	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s]	0.0162 0.0162 0.01849 0.01849 0.02801	2 2 1 1 2	320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499 5% 5 431/499 5% 5 431/499 8% 7	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02358	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s] 0.006631	0.0162 0.0162 0.01849 0.01849 0.02801	2 2 1 1 2 2	320: 320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 5 431/499 5% 5 431/499 8% 7 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02358	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s] 0.006631	0.0162 0.0162 0.01849 0.01849 0.02801	2 2 1 1 2 2	320: 320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 5 431/499 5% 5 431/499 8% 7 431/499 8% 7 431/499 10% #	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02013 0<00:06,	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s] 0.006631 5.77it/s] 0.006631 5.79it/s]	0.0162 0.0162 0.01849 0.01849 0.02801 0.02801	2 2 1 1 2 2	320: 320: 320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499 5% 5 431/499 5% 5 431/499 8% 7 431/499 8% 7 431/499 10% # 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:00 0.206G	:00 , ?i 0.01577 0<?, ?it/ 0.01577 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02013 0<00:06, 0.02013</td <td>t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s] 0.006631 5.77it/s] 0.006631 5.79it/s] 0.005887</td> <td>0.0162 0.0162 0.01849 0.01849 0.02801 0.02801</td> <td>2 2 1 1 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s] 0.006631 5.77it/s] 0.006631 5.79it/s] 0.005887	0.0162 0.0162 0.01849 0.01849 0.02801 0.02801	2 2 1 1 2 2	320: 320: 320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499 5% 5 431/499 5% 5 431/499 8% 7 431/499 10% # 431/499 10% #	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:00 0.206G 4/40 [00:00 0.206G	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02013 0<00:06, 0.02013	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s] 0.006631 5.77it/s] 0.006631 5.79it/s] 0.005887 5.79it/s]	0.0162 0.0162 0.01849 0.01849 0.02801 0.02801 0.02644 0.02644	2 2 1 1 2 2 1	320: 320: 320: 320: 320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499 5% 5 431/499 5% 5 431/499 8% 7 431/499 10% # 431/499 10% # 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:00 0.206G 4/40 [00:00 0.206G	:00 , ?i<br 0.01577 0 , ?it/<br 0.01577 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02013 0<00:06, 0.02013 0<00:06, 0.02013 0<00:06, 0.02013	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s] 0.006631 5.77it/s] 0.006631 5.79it/s] 0.005887 5.79it/s] 0.005887	0.0162 0.0162 0.01849 0.01849 0.02801 0.02801 0.02644	2 2 1 1 2 2 1	320: 320: 320: 320: 320: 320: 320:
0% 431/499 0% 431/499 2% 2 431/499 2% 2 431/499 5% 5 431/499 5% 5 431/499 8% 7 431/499 10% # 431/499 10% # 431/499	0/40 [00 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:00	:00 , ?i 0.01577 0<?, ?it/ 0.01577 0<00:06, 0.01094 0<00:06, 0.02358 0<00:06, 0.02358 0<00:06, 0.02013 0<00:06, 0.02013 00<00:06, 0.01768 00<00:06, 0.01768</td <td>t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s] 0.006631 5.77it/s] 0.006631 5.79it/s] 0.005887 5.79it/s]</td> <td>0.0162 0.0162 0.01849 0.01849 0.02801 0.02801 0.02644 0.02644</td> <td>2 2 1 1 2 2 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.008053 s] 0.008053 5.81it/s] 0.005501 5.81it/s] 0.005501 5.82it/s] 0.007496 5.82it/s] 0.007496 5.77it/s] 0.006631 5.77it/s] 0.006631 5.79it/s] 0.005887 5.79it/s]	0.0162 0.0162 0.01849 0.01849 0.02801 0.02801 0.02644 0.02644	2 2 1 1 2 2 1 1	320: 320: 320: 320: 320: 320: 320: 320:

0/ 1				
12% #2	5/40 [00:01<00:06, 5.80it/s]			
431/499	0.206G 0.01629 0.005873	0.02337	2	320:
15% #5	6/40 [00:01<00:05, 5.80it/s]			000
,	0.206G 0.02226 0.005802	0.02285	3	320:
15% #5	6/40 [00:01<00:05, 5.80it/s]	0 00005		000
431/499	0.206G 0.02226 0.005802	0.02285	3	320:
18% #7	7/40 [00:01<00:06, 5.47it/s]	0 00045	4	200
431/499	0.206G 0.02103 0.005592	0.02245	1	320:
18% #7	7/40 [00:01<00:06, 5.47it/s] 0.206G	0.00045	1	320:
431/499	0.206G 0.02103 0.005592 8/40 [00:01<00:05, 5.57it/s]	0.02245	1	320:
20% ## 431/499	0.206G 0.02003 0.005513	0.02164	1	320:
20% ##	8/40 [00:01<00:05, 5.57it/s]	0.02104	Ţ	320.
431/499	0.206G 0.02003 0.005513	0.02164	1	320:
22% ##2	9/40 [00:01<00:05, 5.80it/s]	0.02104	T	320.
431/499	0.206G 0.02269 0.005684	0.02197	2	320:
22% ##2	9/40 [00:01<00:05, 5.80it/s]	0.02191	2	320.
431/499	0.206G 0.02269 0.005684	0.02197	2	320:
25% ##5	10/40 [00:01<00:05, 5.64it/s]	0.02191	2	320.
431/499	0.206G 0.02164 0.005895	0.02158	2	320:
25% ##5	10/40 [00:01<00:05, 5.64it/s]	0.02130	2	320.
431/499	0.206G 0.02164 0.005895	0.02158	2	320:
28% ##7	11/40 [00:01<00:05, 5.70it/s]	0.02100	2	020.
431/499	0.206G 0.02104 0.005761	0.02104	1	320:
28% ##7	11/40 [00:02<00:05, 5.70it/s]	0.02101	_	020.
431/499	0.206G 0.02104 0.005761	0.02104	1	320:
30% ###	12/40 [00:02<00:04, 5.73it/s]	0.02101	_	020.
431/499	0.206G 0.02056 0.005744	0.02054	2	320:
30% ###	12/40 [00:02<00:04, 5.73it/s]		_	
431/499	0.206G 0.02056 0.005744	0.02054	2	320:
32% ###2	13/40 [00:02<00:04, 5.60it/s]			
431/499	0.206G 0.02192 0.005973	0.02027	2	320:
32% ###2	13/40 [00:02<00:04, 5.60it/s]			
431/499	0.206G 0.02192 0.005973	0.02027	2	320:
35% ###5	14/40 [00:02<00:04, 5.62it/s]			
431/499	0.206G 0.02101 0.005743	0.01973	1	320:
35% ###5	14/40 [00:02<00:04, 5.62it/s]			
431/499	0.206G 0.02101 0.005743	0.01973	1	320:
38% ###7	15/40 [00:02<00:04, 5.55it/s]			
431/499	0.206G 0.02022 0.005534	0.01953	1	320:
38% ###7	15/40 [00:02<00:04, 5.55it/s]			
431/499	0.206G 0.02022 0.005534	0.01953	1	320:
40% ####	16/40 [00:02<00:04, 5.63it/s]			
431/499	0.206G 0.02026 0.005745	0.02017	3	320:
40% ####	16/40 [00:02<00:04, 5.63it/s]			
431/499	0.206G 0.02026 0.005745	0.02017	3	320:
42% ####2	17/40 [00:02<00:04, 5.68it/s]			
431/499	0.206G 0.02176 0.006366	0.02062	4	320:

42% ####2	-	17/40 [00:03<00:04,	5.68it/s]			
431/499		0.206G 0.02176	0.006366	0.02062	4	320:
45% ####5	-	18/40 [00:03<00:03,	5.70it/s]			
431/499		0.206G 0.02185	0.006804	0.02058	4	320:
45% ####5	-	18/40 [00:03<00:03,	5.70it/s]			
431/499		0.206G 0.02185	0.006804	0.02058	4	320:
48% ####7	-	19/40 [00:03<00:03,	5.44it/s]			
431/499		0.206G 0.02136	0.006751	0.02028	1	320:
48% ####7		19/40 [00:03<00:03,	5.44it/s			
431/499		0.206G 0.02136	0.006751	0.02028	1	320:
50% #####		20/40 [00:03<00:03,	5.55it/s			
431/499		0.206G 0.02076	0.006824	0.02016	2	320:
50% #####		20/40 [00:03<00:03,	5.55it/s]			
431/499		0.206G 0.02076	0.006824	0.02016	2	320:
52% #####2	-	21/40 [00:03<00:03,	5.47it/s			
431/499		0.206G 0.02017	0.006655	0.01987	1	320:
52% #####2		21/40 [00:03<00:03,	5.47it/s			
431/499		0.206G 0.02017	0.006655	0.01987	1	320:
55% #####5		22/40 [00:03<00:03,	5.57it/s			
431/499		0.206G 0.02044	0.00675	0.02064	2	320:
55% #####5		22/40 [00:04<00:03,	5.57it/s			
431/499		0.206G 0.02044	0.00675	0.02064	2	320:
57% #####7		23/40 [00:04<00:03,	5.64it/s]			
431/499		0.206G 0.02027	0.006615	0.02046	1	320:
57% #####7		23/40 [00:04<00:03,	5.64it/s]			
431/499		0.206G 0.02027	0.006615	0.02046	1	320:
60% ######		24/40 [00:04<00:02,	5.67it/s]			
431/499		0.206G 0.02126	0.006708	0.02075	3	320:
60% ######		24/40 [00:04<00:02,	5.67it/s]			
431/499		0.206G 0.02126	0.006708	0.02075	3	320:
62% ######2		25/40 [00:04<00:02,				
431/499		0.206G 0.02099		0.02046	2	320:
62% ######2		25/40 [00:04<00:02,	5.71it/s			
431/499		0.206G 0.02099	0.006752	0.02046	2	320:
65% ######5		26/40 [00:04<00:02,	5.47it/s			
431/499			0.00668	0.02038	2	320:
65% ######5		26/40 [00:04<00:02,	5.47it/s			
431/499		0.206G 0.02067	0.00668	0.02038	2	320:
68% ######7		27/40 [00:04<00:02,	5.55it/s			
431/499		0.206G 0.02153	0.006687	0.0202	2	320:
68% ######7		27/40 [00:04<00:02,	5.55it/s			
431/499		0.206G 0.02153		0.0202	2	320:
70% #######		28/40 [00:04<00:02,	5.63it/s]			
431/499		0.206G 0.02105	0.006807	0.02014	2	320:
70% #######		28/40 [00:05<00:02,				
431/499		0.206G 0.02105		0.02014	2	320:
72% #######2		29/40 [00:05<00:01,				
431/499		0.206G 0.02156	0.00678	0.02062	3	320:

	29/40 [00:05<00:01,				
431/499			0.02062	3	320:
	30/40 [00:05<00:01,				
431/499			0.0205	2	320:
	30/40 [00:05<00:01,				
431/499	0.206G 0.02121		0.0205	2	320:
	31/40 [00:05<00:01,				
431/499	0.206G 0.02136		0.02054	4	320:
	31/40 [00:05<00:01,				
431/499		0.007219	0.02054	4	320:
	32/40 [00:05<00:01,				
431/499			0.02034	1	320:
	32/40 [00:05<00:01,				
431/499	0.2000		0.02034	1	320:
82% #######2	33/40 [00:05<00:01,	5.60it/s]			
431/499			0.02015	1	320:
82% #######2	33/40 [00:06<00:01,	5.60it/s]			
431/499	0.206G 0.02056	0.007003	0.02015	1	320:
85% #######5	34/40 [00:06<00:01,	5.82it/s			
431/499	0.206G 0.02054	0.007194	0.02008	4	320:
85% #######5	34/40 [00:06<00:01,	5.82it/s			
431/499	0.206G 0.02054	0.007194	0.02008	4	320:
88% #######7	35/40 [00:06<00:00,	5.55it/s]			
431/499	0.206G 0.0202	0.007107	0.01995	1	320:
88% #######7	35/40 [00:06<00:00,	5.55it/s]			
431/499	0.206G 0.0202	0.007107	0.01995	1	320:
90% #######	36/40 [00:06<00:00,	5.57it/s			
431/499	0.206G 0.02004	0.007115	0.01982	2	320:
90% #######	36/40 [00:06<00:00,	5.57it/s			
431/499	0.206G 0.02004	0.007115	0.01982	2	320:
92% ########2	37/40 [00:06<00:00,	5.36it/s]			
431/499	0.206G 0.02006	0.007188	0.01985	2	320:
92% ########2	37/40 [00:06<00:00,	5.36it/s]			
431/499	0.206G 0.02006	0.007188	0.01985	2	320:
95% ########5	38/40 [00:06<00:00,	5.09it/s]			
431/499	0.206G 0.0197	0.007113	0.01996	1	320:
95% ########5	38/40 [00:07<00:00,	5.09it/s]			
431/499	0.206G 0.0197	0.007113	0.01996	1	320:
98% ########7	39/40 [00:07<00:00,	5.16it/s]			
431/499	0.206G 0.01971	0.007446	0.01998	4	320:
98% ########7	39/40 [00:07<00:00,	5.16it/s]			
431/499	0.206G 0.01971	0.007446	0.01998	4	320:
100% ##########	40/40 [00:07<00:00	, 4.72it/s]			
431/499	0.206G 0.01971	0.007446	0.01998	4	320:
100% ##########	40/40 [00:07<00:00	, 5.50it/s]			
	Class Images	Instances	P	R	mAP50
mAP50-95: 0%	0/20 [00	:00 , ?it/s]</td <td>]</td> <td></td> <td></td>]		

	Class	Tillages	Instances	1	16	IIIAI OO
mAP50-95:	10% #	2/20 [0	0:00<00:01,	11.79it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:		•	00:00<00:01,			
MAF 50-35.					7	1050
	Class	•	Instances		R	mAP50
mAP50-95:	30% ###	6/20 [0	00:00<00:00,	14.07it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	40% ####	I 8/20 [0	00:00<00:00,	13.39it/sl		
	Class		Instances		R	mAP50
1050 05		_				IIIAPSO
mAP50-95:	50% #####		00:00<00:00			
	Class	Images	Instances	P	R	mAP50
mAP50-95:	60% ######	12/20 [00:00<00:00	, 13.85it/s]		
	Class		Instances		R	mAP50
mADE0_0E+		•	00:01<00:00			
MAP50-95.						1750
			Instances		R	mAP50
mAP50-95:	80% #######	16/20 [00:01<00:00	, 14.22it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	90% #######					
	Class		Instances		R	mAP50
ADEO 05		•				IIIAF 50
mAP50-95:	100% ########			-		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	100% #######	## 20/20 [00:01<00:00	, 14.19it/s]		
	all	40	40	0.987	0.988	0.995
0.794	4.1.1				0.000	0.000
0.134						
Epo	ch GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
Еро	ch GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
_			-	cls_loss	Instances	Size
0%	0/40 [00:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
0% 432/4	0/40 [4 99 0.206G	00:00 , ?i<br 0.01588	0.007378		Instances	Size 320:
0% 432/4	0/40 [0 99	00:00 , ?i<br 0.01588 :00 , ?it/</td <td>0.007378 's]</td> <td>0.01957</td> <td>2</td> <td>320:</td>	0.007378 's]	0.01957	2	320:
0% 432/4 0% 432/4	0/40 [0 99	00:00 , ?i<br 0.01588 :00 , ?it/<br 0.01588	0.007378 0.007378 (s] 0.007378	0.01957		
0% 432/4 0% 432/4	0/40 [0 99	00:00 , ?i<br 0.01588 :00 , ?it/<br 0.01588	0.007378 0.007378 (s] 0.007378	0.01957	2	320:
0% 432/4 0% 432/4 2% 2	0/40 [099	00:00 , ?i<br 0.01588 :00 , ?it/<br 0.01588 :00<00:06,	0.007378 0.007378 0.007378 5.82it/s]	0.01957 0.01957	2	320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4:	0/40 [0 99	00:00 , ?i<br 0.01588 :00 , ?it/<br 0.01588 :00<00:06, 0.01233	0.007378 (s) 0.007378 5.82it/s] 0.005021	0.01957	2	320:
0% 432/49 0% 432/49 2% 2 432/49 2% 2	0/40 [0 99	00:00 , ?i<br 0.01588 :00 , ?it/<br 0.01588 :00<00:06, 0.01233 :00<00:06,	0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s]	0.01957 0.01957 0.01686	2 2 1	320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 2% 2 432/4:	0/40 [0 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01233</td <td>0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021</td> <td>0.01957 0.01957 0.01686</td> <td>2</td> <td>320: 320:</td>	0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021	0.01957 0.01957 0.01686	2	320: 320:
0% 432/49 0% 432/49 2% 2 432/49 2% 2 432/49	0/40 [0 99	00:00 , ?i<br 0.01588 :00 , ?it/<br 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01233 :00<00:06,	0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s]	0.01957 0.01957 0.01686 0.01686	2 2 1	320: 320: 320:
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0% 432/4: 0% 432/4: 2% 2 432/4: 2% 2 432/4: 5% 5 432/4:	0/40 [0 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01233 :00<00:06, 0.01254</td <td>0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209</td> <td>0.01957 0.01957 0.01686 0.01686</td> <td>2 2 1</td> <td>320: 320: 320: 320:</td>	0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209	0.01957 0.01957 0.01686 0.01686	2 2 1	320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 2% 2 432/4: 5% 5 432/4:	0/40 [0 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06,</td <td>0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s]</td> <td>0.01957 0.01957 0.01686 0.01686 0.01705</td> <td>2 2 1 1 2</td> <td>320: 320: 320: 320: 320:</td>	0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s]	0.01957 0.01957 0.01686 0.01686 0.01705	2 2 1 1 2	320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4:	0/40 [0] 0.206G	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06, 0.01254</td <td>0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209</td> <td>0.01957 0.01957 0.01686 0.01686</td> <td>2 2 1</td> <td>320: 320: 320: 320:</td>	0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209	0.01957 0.01957 0.01686 0.01686	2 2 1	320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7	0/40 [0 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06,</td <td>0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s]</td> <td>0.01957 0.01957 0.01686 0.01686 0.01705</td> <td>2 2 1 1 2 2</td> <td>320: 320: 320: 320: 320:</td>	0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s]	0.01957 0.01957 0.01686 0.01686 0.01705	2 2 1 1 2 2	320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7 432/4:	0/40 [0] 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06, 0.01254</td <td>0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582</td> <td>0.01957 0.01957 0.01686 0.01686 0.01705</td> <td>2 2 1 1 2</td> <td>320: 320: 320: 320: 320:</td>	0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582	0.01957 0.01957 0.01686 0.01686 0.01705	2 2 1 1 2	320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7	0/40 [0] 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06, 0.01254</td <td>0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582</td> <td>0.01957 0.01957 0.01686 0.01686 0.01705</td> <td>2 2 1 1 2 2</td> <td>320: 320: 320: 320: 320:</td>	0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582	0.01957 0.01957 0.01686 0.01686 0.01705	2 2 1 1 2 2	320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7 432/4:	0/40 [0] 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06,</td <td>0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582</td> <td>0.01957 0.01957 0.01686 0.01686 0.01705</td> <td>2 2 1 1 2 2</td> <td>320: 320: 320: 320: 320:</td>	0.007378 0.007378 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582	0.01957 0.01957 0.01686 0.01686 0.01705	2 2 1 1 2 2	320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7 432/4: 8% 7 432/4:	0/40 [0] 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06, 0.02306 :00<00:06, 0.02306</td <td>0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582</td> <td>0.01957 0.01957 0.01686 0.01686 0.01705 0.01705</td> <td>2 2 1 1 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582	0.01957 0.01957 0.01686 0.01686 0.01705 0.01705	2 2 1 1 2 2	320: 320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7 432/4: 8% 7 432/4: 10% #	0/40 [0 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06, 0.02306 :00<00:06, 0.02306</td <td>0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s]</td> <td>0.01957 0.01957 0.01686 0.01686 0.01705 0.01705 0.01728</td> <td>2 2 1 1 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s]	0.01957 0.01957 0.01686 0.01686 0.01705 0.01705 0.01728	2 2 1 1 2 2 2	320: 320: 320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7 432/4: 10% # 432/4:	0/40 [0] 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06, 0.02306 :00<00:06, 0.02306 0:00<00:07, 0.02019</td <td>0.007378 (s] 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s] 0.006173</td> <td>0.01957 0.01957 0.01686 0.01686 0.01705 0.01705 0.01728</td> <td>2 2 1 1 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	0.007378 (s] 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s] 0.006173	0.01957 0.01957 0.01686 0.01686 0.01705 0.01705 0.01728	2 2 1 1 2 2	320: 320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7 432/4: 8% 7 432/4: 10% #	0/40 [0] 99	00:00 , ?i 0.01588 :00<?, ?it/ 0.01588 :00<00:06, 0.01233 :00<00:06, 0.01254 :00<00:06, 0.01254 :00<00:06, 0.02306 :00<00:06, 0.02306 0:00<00:07, 0.02019</td <td>0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s] 0.006173 4.92it/s]</td> <td>0.01957 0.01957 0.01957 0.01686 0.01686 0.01705 0.01728 0.01728 0.01653</td> <td>2 2 1 1 2 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s] 0.006173 4.92it/s]	0.01957 0.01957 0.01957 0.01686 0.01686 0.01705 0.01728 0.01728 0.01653	2 2 1 1 2 2 2 2	320: 320: 320: 320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7 432/4: 10% # 432/4:	0/40 [0] 99	00:00 , ?i</td <td>0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s] 0.006173 4.92it/s] 0.006173</td> <td>0.01957 0.01957 0.01957 0.01686 0.01686 0.01705 0.01728 0.01728 0.01653</td> <td>2 2 1 1 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s] 0.006173 4.92it/s] 0.006173	0.01957 0.01957 0.01957 0.01686 0.01686 0.01705 0.01728 0.01728 0.01653	2 2 1 1 2 2 2	320: 320: 320: 320: 320: 320: 320:
0% 432/4: 0% 432/4: 2% 2 432/4: 5% 5 432/4: 5% 5 432/4: 8% 7 432/4: 8% 7 432/4: 10% # 432/4:	0/40 [0] 99	00:00 , ?i</td <td>0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s] 0.006173 4.92it/s]</td> <td>0.01957 0.01957 0.01957 0.01686 0.01686 0.01705 0.01728 0.01728 0.01653</td> <td>2 2 1 1 2 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	0.007378 (s) 0.007378 5.82it/s] 0.005021 5.82it/s] 0.005021 5.78it/s] 0.005209 5.78it/s] 0.005209 5.80it/s] 0.006582 5.80it/s] 0.006582 4.92it/s] 0.006173 4.92it/s]	0.01957 0.01957 0.01957 0.01686 0.01686 0.01705 0.01728 0.01728 0.01653	2 2 1 1 2 2 2 2	320: 320: 320: 320: 320: 320: 320: 320:

Images Instances

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Class

432/499	0.206G 0.01898	0.007102	0.0168	4	320:
12% #2	5/40 [00:01<00:06,	5.21it/s]			
432/499		0.007102	0.0168	4	320:
15% #5	6/40 [00:01<00:06,				
432/499	0.206G 0.02002	0.007064	0.01738	2	320:
15% #5	6/40 [00:01<00:06,		0.04700	0	200
,		0.007064	0.01738	2	320:
18% #7	7/40 [00:01<00:06, 0.206G 0.02034		0 01705	0	200.
432/499 18% #7	7/40 [00:01<00:06,	0.007475	0.01725	2	320:
432/499		0.007475	0.01725	2	320:
20% ##	8/40 [00:01<00:05,		0.01725	2	320.
432/499		0.007823	0.01851	3	320:
20% ##	8/40 [00:01<00:05,		0.01031	3	520.
	0.206G 0.02074		0.01851	3	320:
22% ##2	9/40 [00:01<00:05,		0.01031	3	520.
432/499		0.007699	0.01816	2	320:
22% ##2	9/40 [00:01<00:05,		0.01010	2	520.
432/499		0.007699	0.01816	2	320:
25% ##5	10/40 [00:01<00:05,		0.01010	2	520.
432/499	0.206G 0.01928		0.01775	2	320:
25% ##5	10/40 [00:02<00:05,		0.01770	2	020.
		0.007711	0.01775	2	320:
28% ##7	11/40 [00:02<00:05,		0.01770	2	020.
432/499	0.206G 0.01961		0.01775	4	320:
28% ##7	11/40 [00:02<00:05,		0.01110	1	020.
432/499	-	0.008313	0.01775	4	320:
30% ###	12/40 [00:02<00:05,		0.01110	1	020.
432/499		0.008134	0.01783	2	320:
30% ###	12/40 [00:02<00:05,		0.01700	2	020.
432/499	-	0.008134	0.01783	2	320:
32% ###2	13/40 [00:02<00:04,			_	
432/499	0.206G 0.02184	0.007917	0.01791	2	320:
32% ###2	13/40 [00:02<00:04,				
432/499		0.007917	0.01791	2	320:
35% ###5	14/40 [00:02<00:04,				
432/499	0.206G 0.02336		0.0178	2	320:
35% ###5	14/40 [00:02<00:04,	5.59it/s]			
432/499	0.206G 0.02336	0.007892	0.0178	2	320:
38% ###7	15/40 [00:02<00:04,	5.51it/s]			
432/499	0.206G 0.02296	0.007878	0.01782	2	320:
38% ###7	15/40 [00:02<00:04,	5.51it/s]			
432/499	0.206G 0.02296	0.007878	0.01782	2	320:
40% ####	16/40 [00:02<00:04,	5.59it/s]			
432/499	0.206G 0.02238	0.007852	0.01778	2	320:
40% ####	16/40 [00:03<00:04,	5.59it/s			
432/499	0.206G 0.02238	0.007852	0.01778	2	320:
42% ####2	17/40 [00:03<00:04,	5.66it/s]			

432/499	0.206G 0.02207 0.008234	0.01793	4	320:
42% ####2	17/40 [00:03<00:04, 5.66it/s]			
432/499	0.206G 0.02207 0.008234	0.01793	4	320:
45% ####5	18/40 [00:03<00:03, 5.70it/s]	0.04040	•	000
432/499	0.206G 0.02289 0.008807	0.01846	3	320:
45% ####5	18/40 [00:03<00:03, 5.70it/s]	0.01046	2	200.
432/499	0.206G 0.02289 0.008807 19/40 [00:03<00:03, 5.35it/s]	0.01846	3	320:
48% ####7 432/499	0.206G 0.02352 0.009167	0.01854	4	320:
432/499	19/40 [00:03<00:03, 5.35it/s]	0.01054	4	320.
432/499	0.206G 0.02352 0.009167	0.01854	4	320:
50% #####	20/40 [00:03<00:03, 5.44it/s]	0.01054	4	520.
432/499	0.206G 0.02307 0.009014	0.01854	1	320:
50% #####	20/40 [00:03<00:03, 5.44it/s]	0.01054	1	520.
432/499	0.206G 0.02307 0.009014	0.01854	1	320:
52% #####2	21/40 [00:03<00:03, 5.49it/s]	0.01054	1	320.
432/499	0.206G 0.0228 0.009381	0.01866	4	320:
52% #####2	21/40 [00:04<00:03, 5.49it/s]	0.01000	4	320.
432/499	0.206G 0.0228 0.009381	0.01866	4	320:
432/499 55% ####5	22/40 [00:04<00:03, 5.34it/s]	0.01000	4	320.
432/499	0.206G 0.02255 0.009306	0.01859	2	320:
55% #####5	22/40 [00:04<00:03, 5.34it/s]	0.01059	2	320.
432/499	0.206G 0.02255 0.009306	0.01859	2	320:
432/4 <i>99</i> 57% ####7	23/40 [00:04<00:03, 5.34it/s]	0.01059	2	320.
432/499	0.206G 0.02241 0.009083	0.0185	1	320:
432/4 <i>99</i> 57% ####7	23/40 [00:04<00:03, 5.34it/s]	0.0105	1	520.
432/499	0.206G 0.02241 0.009083	0.0185	1	320:
60% ######	24/40 [00:04<00:02, 5.47it/s]	0.0105	1	320.
432/499	0.206G 0.02201 0.008899	0.01851	1	320:
432/499 60% #####	24/40 [00:04<00:02, 5.47it/s]	0.01051	1	320.
432/499	0.206G 0.02201 0.008899	0.01851	1	320:
62% ######2	25/40 [00:04<00:02, 5.55it/s]	0.01031	1	320.
432/499	0.206G 0.02146 0.008691	0.0183	1	320:
	25/40 [00:04<00:02, 5.55it/s]	0.0103	1	520.
432/499	0.206G 0.02146 0.008691	0.0183	1	320:
	26/40 [00:04<00:02, 5.48it/s]	0.0103	1	520.
432/499	0.206G 0.02214 0.008834	0.01841	4	320:
65% ######5	26/40 [00:04<00:02, 5.48it/s]	0.01041	Ŧ	020.
432/499	0.206G 0.02214 0.008834	0.01841	4	320:
68% ######7	27/40 [00:04<00:02, 5.58it/s]	0.01041	Ŧ	020.
432/499	0.206G 0.02213 0.008791	0.01842	2	320:
68% ######7	27/40 [00:05<00:02, 5.58it/s]	0.01012	4	020.
432/499	0.206G 0.02213 0.008791	0.01842	2	320:
	28/40 [00:05<00:02, 5.61it/s]	3.01012	-	020.
432/499	0.206G 0.02183 0.008809	0.01902	4	320:
70% ######	28/40 [00:05<00:02, 5.61it/s]		-	020.
432/499	0.206G 0.02183 0.008809	0.01902	4	320:
72% #######2	29/40 [00:05<00:01, 5.67it/s]	, 	-	2 -0.

	0.206G 0.0214	0.008754	0.01889	2	320:
	29/40 [00:05<00:01,		0.04000		000
432/499		0.008754	0.01889	2	320:
	30/40 [00:05<00:01, 0.206G 0.02096		0.01881	1	320:
•	30/40 [00:05<00:01,		0.01001	1	320.
432/499			0.01881	1	320:
	31/40 [00:05<00:01,		0.01001	_	020.
432/499			0.01882	1	320:
	31/40 [00:05<00:01,			_	
432/499	-		0.01882	1	320:
	32/40 [00:05<00:01,	5.77it/s]			
432/499	0.206G 0.02082	0.008635	0.01895	4	320:
80% #######	32/40 [00:05<00:01,	5.77it/s			
432/499	0.206G 0.02082	0.008635	0.01895	4	320:
82% #######2	33/40 [00:05<00:01,	5.78it/s			
432/499	0.206G 0.02173	0.008526	0.0189	2	320:
82% #######2	33/40 [00:06<00:01,	5.78it/s			
432/499	0.206G 0.02173	0.008526	0.0189	2	320:
85% #######5	34/40 [00:06<00:01,	5.64it/s			
432/499	0.206G 0.02213	0.008582	0.01921	2	320:
85% #######5	34/40 [00:06<00:01,	5.64it/s]			
432/499	0.206G 0.02213	0.008582	0.01921	2	320:
88% #######7	35/40 [00:06<00:00,	5.54it/s			
432/499	0.206G 0.0218	0.008574	0.01908	2	320:
88% #######7	35/40 [00:06<00:00,	5.54it/s			
432/499	0.206G 0.0218	0.008574	0.01908	2	320:
90% #######	36/40 [00:06<00:00,	5.62it/s			
432/499		0.008648	0.01914	4	320:
	36/40 [00:06<00:00,	5.62it/s			
432/499	0.206G 0.02182		0.01914	4	320:
	37/40 [00:06<00:00,	5.37it/s]			
432/499	0.206G 0.02153		0.01902	1	320:
	37/40 [00:06<00:00,				
432/499	*		0.01902	1	320:
	38/40 [00:06<00:00,				
432/499	0.206G 0.02134		0.01898	2	320:
	38/40 [00:07<00:00,				
432/499	0.206G 0.02134		0.01898	2	320:
	39/40 [00:07<00:00,				
432/499			0.01919	4	320:
	39/40 [00:07<00:00,		0.040:5	_	
432/499		0.008574	0.01919	4	320:
	40/40 [00:07<00:00		0.04040		200
432/499	0.206G 0.02139		0.01919	4	320:
100% ##########	40/40 [00:07<00:00	, 5.5lit/s]			
	Claga Tmamas	Tnatanasa	מ	D	m / DEO
	Class Images	Instances	Р	R	mAP50

mAP50-95:	0%	1 0/20 [0	0:00 , ?it/</th <th>al</th> <th></th> <th></th>	al		
MAF 30-93.	Class		Instances		R	mAP50
mAP50-95:	10% #	•	0:00<00:01,			
	Class		Instances		R	mAP50
mAP50-95:	20% ##	4/20 [0	0:00<00:00,	16.31it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	30% ###		0:00<00:00,			
	Class	•	Instances		R	mAP50
mAP50-95:	40% ####		0:00<00:00,			1750
ADEO OF.	Class	0	Instances		R	mAP50
mAP50-95:	50% ##### Class		00:00<00:00, Instances	17.721t/s ₋ P	ı R	mAP50
mAP50-95:	60% ######	_	00:00<00:00,	=		IIIAF 50
miii co so.	Class		Instances		R	mAP50
mAP50-95:		_	00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	80% ########	16/20 [00:00<00:00,	18.10it/s]	
	Class	0	Instances		R	mAP50
mAP50-95:	90% ########					
	Class	_	Instances		R.	mAP50
mAP50-95:	100% ##########					1750
ADEO OF .	Class	_	Instances			mAP50
MAP50-95:	100% ######## all	40 £	40	0.982	0.987	0.995
0.815	dII	40	40	0.902	0.901	0.995
Epoc	h GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
0%1						
433/49			0.005859	0.01751	2	320:
0%	0/40 [00:0				_	
433/49			0.005859	0.01751	2	320:
	1/40 [00:0			0.01720	4	200
	9 0.206G 1/40 [00:0			0.01738	1	320:
433/49		-		0.01738	1	320:
5% 5				0.01730	1	320.
433/49				0.01873	1	320:
5% 5	2/40 [00:0			0.010.0	_	0201
433/49		0.01121		0.01873	1	320:
8% 7	3/40 [00:0	0<00:06,	5.71it/s]			
433/49	9 0.206G	0.01084	0.004769	0.0181	2	320:
8% 7	3/40 [00:0	0<00:06,	5.71it/s]			
433/49			0.004769	0.0181	2	320:
10% #						
433/49				0.01841	2	320:
	4/40 [00:			0.04044	2	200
433/49	9 0.206G	0.01802	0.005279	0.01841	2	320:

12% #2	5/40 [00:00<00:06, 5.42it/s]			
433/499	0.206G 0.0164 0.004843	0.01825	1	320:
12% #2	5/40 [00:01<00:06, 5.42it/s]			
,	0.206G 0.0164 0.004843	0.01825	1	320:
15% #5	6/40 [00:01<00:06, 5.52it/s]			
433/499	0.206G 0.01828 0.00639	0.01825	4	320:
15% #5	6/40 [00:01<00:06, 5.52it/s]			
433/499	0.206G 0.01828 0.00639	0.01825	4	320:
18% #7	7/40 [00:01<00:05, 5.61it/s]			
433/499	0.206G 0.01707 0.006756	0.01851	2	320:
18% #7	7/40 [00:01<00:05, 5.61it/s]			
433/499	0.206G 0.01707 0.006756	0.01851	2	320:
20% ##	8/40 [00:01<00:05, 5.63it/s]			
433/499	0.206G 0.01671 0.006634	0.01807	1	320:
20% ##	8/40 [00:01<00:05, 5.63it/s]			
433/499	0.206G 0.01671 0.006634	0.01807	1	320:
22% ##2	9/40 [00:01<00:05, 5.72it/s]			
433/499	0.206G 0.01788 0.007027	0.01794	4	320:
22% ##2	9/40 [00:01<00:05, 5.72it/s]			
433/499	0.206G 0.01788 0.007027	0.01794	4	320:
25% ##5	10/40 [00:01<00:05, 5.45it/s]			
433/499	0.206G 0.01741 0.007123	0.0176	2	320:
25% ##5	10/40 [00:01<00:05, 5.45it/s]			
433/499	0.206G 0.01741 0.007123	0.0176	2	320:
28% ##7	11/40 [00:01<00:05, 5.71it/s]			
433/499	0.206G 0.0168 0.007004	0.01728	2	320:
28% ##7	11/40 [00:02<00:05, 5.71it/s]			
433/499	0.206G 0.0168 0.007004	0.01728	2	320:
30% ###	12/40 [00:02<00:04, 5.72it/s]			
433/499	0.206G 0.0173 0.006737	0.01738	1	320:
30% ###	12/40 [00:02<00:04, 5.72it/s]			
433/499	0.206G 0.0173 0.006737	0.01738	1	320:
32% ###2	13/40 [00:02<00:04, 5.75it/s]			
433/499	0.206G 0.01765 0.006771	0.01848	2	320:
32% ###2	13/40 [00:02<00:04, 5.75it/s]			
433/499	0.206G 0.01765 0.006771	0.01848	2	320:
35% ###5	14/40 [00:02<00:04, 5.77it/s]			
433/499	0.206G 0.01707 0.006682	0.01809	2	320:
35% ###5	14/40 [00:02<00:04, 5.77it/s]			
433/499	0.206G 0.01707 0.006682	0.01809	2	320:
38% ###7	15/40 [00:02<00:04, 5.78it/s]			
433/499	0.206G 0.01663 0.006626	0.01804	2	320:
38% ###7	15/40 [00:02<00:04, 5.78it/s]			
433/499	0.206G 0.01663 0.006626	0.01804	2	320:
40% ####	16/40 [00:02<00:04, 5.79it/s]			
433/499	0.206G 0.017 0.006789	0.01779	1	320:
40% ####	16/40 [00:02<00:04, 5.79it/s]			
433/499	0.206G 0.017 0.006789	0.01779	1	320:

42% ####2		17/40 [00:02<00:04,				
433/499		0.206G 0.01658		0.01766	1	320:
42% ####2	ı	17/40 [00:03<00:04,				
433/499		0.206G 0.01658		0.01766	1	320:
45% ####5	ı	18/40 [00:03<00:03,			_	
433/499		0.206G 0.01743		0.01804	4	320:
45% ####5	ı	18/40 [00:03<00:03,				
433/499		0.206G 0.01743		0.01804	4	320:
48% ####7	ı	19/40 [00:03<00:03,				
433/499		0.206G 0.01919		0.01819	2	320:
48% ####7	ı	19/40 [00:03<00:03,				
433/499		0.206G 0.01919		0.01819	2	320:
50% #####	ı	20/40 [00:03<00:03,				
433/499			0.007039	0.01881	2	320:
50% #####	I	20/40 [00:03<00:03,				
433/499		0.206G 0.0195		0.01881	2	320:
52% #####2		21/40 [00:03<00:03,				
433/499		0.206G 0.02088		0.01868	2	320:
52% #####2		21/40 [00:03<00:03,				
433/499		0.206G 0.02088		0.01868	2	320:
55% #####5		22/40 [00:03<00:03,	5.55it/s			
433/499		0.206G 0.02231		0.0186	2	320:
55% #####5		22/40 [00:04<00:03,	5.55it/s			
433/499		0.206G 0.02231	0.007147	0.0186	2	320:
57% #####7		23/40 [00:04<00:03,	5.24it/s			
433/499		0.206G 0.0222	0.007473	0.0188	4	320:
57% #####7		23/40 [00:04<00:03,	5.24it/s			
433/499		0.206G 0.0222		0.0188	4	320:
60% #####		24/40 [00:04<00:03,	5.22it/s			
433/499		0.206G 0.02169	0.007467	0.01862	2	320:
60% #####		24/40 [00:04<00:03,	5.22it/s			
433/499		0.206G 0.02169	0.007467	0.01862	2	320:
62% ######2		25/40 [00:04<00:02,	5.13it/s			
433/499		0.206G 0.02238	0.007735	0.01869	4	320:
62% ######2		25/40 [00:04<00:02,	5.13it/s			
433/499		0.206G 0.02238	0.007735	0.01869	4	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.05it/s			
433/499		0.206G 0.02205	0.007737	0.01859	2	320:
65% ######5		26/40 [00:04<00:02,	5.05it/s			
433/499		0.206G 0.02205	0.007737	0.01859	2	320:
68% ######7		27/40 [00:04<00:02,	4.79it/s			
433/499		0.206G 0.02173	0.007586	0.01853	1	320:
68% ######7	-	27/40 [00:05<00:02,	4.79it/s]			
433/499		0.206G 0.02173	0.007586	0.01853	1	320:
70% ######	-	28/40 [00:05<00:02,	4.61it/s]			
433/499		0.206G 0.02143	0.007442	0.01856	1	320:
70% ######	-	28/40 [00:05<00:02,	4.61it/s]			
433/499		0.206G 0.02143	0.007442	0.01856	1	320:

72% #######2	29/40 [00:05<00:02,	4.81it/s]			
433/499	0.206G 0.02113	0.007282	0.0184	1	320:
72% ######2	29/40 [00:05<00:02,	4.81it/s]			
433/499	0.206G 0.02113	0.007282	0.0184	1	320:
75% ######5	30/40 [00:05<00:02,	4.96it/s]			
433/499	0.206G 0.02115	0.007451	0.01875	3	320:
75% ######5	30/40 [00:05<00:02,				
433/499		0.007451	0.01875	3	320:
	31/40 [00:05<00:01,				
	0.206G 0.02082		0.01872	2	320:
	31/40 [00:06<00:01,			_	
433/499		0.007392	0.01872	2	320:
	32/40 [00:06<00:01,		0.04004		000
433/499			0.01864	1	320:
	32/40 [00:06<00:01,		0.01064	4	200
433/499		0.007289	0.01864	1	320:
	33/40 [00:06<00:01,		Λ Λ1001	4	320:
	0.206G 0.02043 33/40 [00:06<00:01,		0.01881	4	320:
433/499	•	0.007367	0.01881	4	320:
•	34/40 [00:06<00:01,		0.01001	4	320.
	0.206G 0.02138		0.01877	2	320:
	34/40 [00:06<00:01,		0.01011	۷	020.
433/499		0.007435	0.01877	2	320:
	35/40 [00:06<00:01,		0.020	_	0_0.
433/499	0.206G 0.02155		0.01873	2	320:
	35/40 [00:06<00:01,				
433/499	0.206G 0.02155	0.007716	0.01873	2	320:
90% ########	36/40 [00:06<00:00,	4.85it/s]			
433/499	0.206G 0.02156	0.007652	0.01873	1	320:
90% ########	36/40 [00:07<00:00,	4.85it/s]			
433/499	0.206G 0.02156	0.007652	0.01873	1	320:
92% ########2	37/40 [00:07<00:00,	4.98it/s]			
433/499	0.206G 0.02133		0.0187	2	320:
	37/40 [00:07<00:00,				
433/499			0.0187	2	320:
	38/40 [00:07<00:00,				
433/499			0.01886	4	320:
	38/40 [00:07<00:00,		0.01000	4	000
433/499	0.206G 0.02126		0.01886	4	320:
	39/40 [00:07<00:00,		0.01074	0	200
433/499	0.206G 0.02106 39/40 [00:07<00:00,		0.01874	2	320:
	0.206G 0.02106		0.01874	2	320:
	40/40 [00:07<00:00		0.010/4	۷	320:
433/499		0.007712	0.01874	2	320:
	40/40 [00:07<00:00		0.01014	۷	020.
_ 5 5 70 1	. 13, 10 [00.01 100.00	, 0.0010/5]			

		_	Instances		R	mAP50
mAP50-95:	0% Class		00:00 , ?it/<br Instances		R	mAP50
mAP50-95:	10% #	0	00:00<00:01,			
	Class	0		P	R	mAP50
mAP50-95:	20% ## Class		00:00<00:01, Instances		R	mAP50
mAP50-95:	30% ###	_	00:00<00:00,		16	IIIAI 50
	Class		Instances		R	mAP50
mAP50-95:	40% ####		00:00<00:00,			
ADEO OF .	Class	•	Instances		R	mAP50
mAP50-95:	50% ##### Class		[00:00<00:00, Instances		R	mAP50
mAP50-95:		_	[00:00<00:00,		10	IIIAI 00
	Class		Instances		R	mAP50
mAP50-95:	70% ######		[00:00<00:00,			
4DE0 05	Class	•	Instances		R	mAP50
mAP50-95:	85% #######5 Class		Instances		R	mAP50
mAP50-95:	95% ########	_			n	MAPSO
			Instances		R	mAP50
mAP50-95: 1	100% #########	# 20/20 [[00:01<00:00,	17.76it/s]		
	all	40	40	0.983	0.986	0.995
0.792						
Epoch	n GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
_			-	cls_loss	Instances	Size
_	0/40 [0	0:00 , ?i</td <td>-</td> <td></td> <td>Instances</td> <td>Size 320:</td>	-		Instances	Size 320:
0%	0/40 [00 9	0:00 , ?i<br 0.01329	it/s] 0.004815			320:
0% 434/499 0% 434/499	0/40 [00 0.206G 0/40 [00:0	0:00 , ?i<br 0.01329 00 , ?it/<br 0.01329	it/s] 0.004815 's] 0.004815			
0% 434/499 0% 434/499 2% 2	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0	0:00 , ?i<br 0.01329 00 , ?it/<br 0.01329 00<00:06,	0.004815 0.004815 0.004815 6.40it/s]	0.01074 0.01074	1	320: 320:
0% 434/499 0% 434/499 2% 2 434/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G	0:00 , ?i<br 0.01329 00 , ?it/<br 0.01329 00<00:06, 0.01286	0.004815 0.004815 0.004815 6.40it/s] 0.003885	0.01074	1	320:
0% 434/499 0% 434/499 2% 2 434/499	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0]	0:00 , ?i<br 0.01329 00 , ?it/<br 0.01329 00<00:06, 0.01286	0.004815 (s) 0.004815 6.40it/s] 0.003885 6.40it/s]	0.01074 0.01074 0.01804	1 1 1	320: 320: 320:
0% 434/499 0% 434/499 2% 2 434/499 2% 2	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G	0:00 , ?i<br 0.01329 00 , ?it/<br 0.01329 00<00:06, 0.01286 00<00:06, 0.01286	0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885	0.01074 0.01074	1	320: 320:
0% 434/499 0% 434/499 2% 2 434/499 2% 2	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0	0:00 , ?i<br 0.01329 00 , ?it/<br 0.01329 00<00:06, 0.01286 00<00:06, 0.01286	0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s]	0.01074 0.01074 0.01804	1 1 1	320: 320: 320:
0% 434/499 0% 434/499 2% 2 434/499 5% 5 434/499 5% 5	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0	0:00 , ?i 0.01329 00<?, ?it/ 0.01329 00<00:06, 0.01286 00<00:06, 0.01286 00<00:06, 0.02094 00<00:06,</td <td>0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s]</td> <td>0.01074 0.01074 0.01804 0.01804 0.01892</td> <td>1 1 1 1</td> <td>320: 320: 320: 320: 320:</td>	0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s]	0.01074 0.01074 0.01804 0.01804 0.01892	1 1 1 1	320: 320: 320: 320: 320:
0% 434/499 0% 434/499 2% 2 434/499 5% 5 434/499 5% 5 434/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G	0:00 , ?i<br 0.01329 00 , ?it/<br 0.01329 00<00:06, 0.01286 00<00:06, 0.01286 00<00:06, 0.02094 00<00:06, 0.02094	0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456	0.01074 0.01074 0.01804 0.01804	1 1 1	320: 320: 320: 320:
0% 434/499 0% 434/499 2% 2 434/499 5% 5 434/499 5% 5 434/499 8% 7	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0	0:00 , ?i<br 0.01329 00 , ?it/<br 0.01329 00<00:06, 0.01286 00<00:06, 0.01286 00<00:06, 0.02094 00<00:06, 0.02094	0.004815 (s) 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456	0.01074 0.01074 0.01804 0.01804 0.01892 0.01892	1 1 1 2 2	320: 320: 320: 320: 320:
0% 434/499 0% 434/499 2% 2 434/499 5% 5 434/499 5% 5 434/499 8% 7 434/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G	0:00 , ?i 0.01329 00<?, ?it/ 0.01329 00<00:06, 0.01286 00<00:06, 0.01286 00<00:06, 0.02094 00<00:06, 0.02094 00<00:06, 0.02404</td <td>0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987</td> <td>0.01074 0.01074 0.01804 0.01804 0.01892 0.01892</td> <td>1 1 1 1</td> <td>320: 320: 320: 320: 320:</td>	0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987	0.01074 0.01074 0.01804 0.01804 0.01892 0.01892	1 1 1 1	320: 320: 320: 320: 320:
0% 434/499 0% 434/499 2% 2 434/499 5% 5 434/499 5% 5 434/499 8% 7 434/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G	0:00 , ?i 0.01329 00<?, ?it/ 0.01329 00<00:06, 0.01286 00<00:06, 0.01286 00<00:06, 0.02094 00<00:06, 0.02094 00<00:06, 0.02404</td <td>0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987</td> <td>0.01074 0.01074 0.01804 0.01804 0.01892 0.01892</td> <td>1 1 1 2 2</td> <td>320: 320: 320: 320: 320:</td>	0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987	0.01074 0.01074 0.01804 0.01804 0.01892 0.01892	1 1 1 2 2	320: 320: 320: 320: 320:
0% 434/499 0% 434/499 2% 2 434/499 5% 5 434/499 5% 5 434/499 8% 7 434/499 8% 7 434/499 10% #	0/40 [00 0.206G 0/40 [00:0] 0.206G 1/40 [00:0] 0.206G 1/40 [00:0] 0.206G 2/40 [00:0] 0.206G 2/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0] 0.206G 3/40 [00:0] 0.206G 4/40 [00:0]	0:00 , ?i 0.01329 00<?, ?it/ 0.01329 00<00:06, 0.01286 00<00:06, 0.01286 00<00:06, 0.02094 00<00:06, 0.02094 00<00:06, 0.02404 00<00:06, 0.02404 :00<00:06,</td <td>1t/s] 0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987 5.92it/s] 0.005987 5.67it/s]</td> <td>0.01074 0.01074 0.01804 0.01804 0.01892 0.01892 0.02477 0.02477</td> <td>1 1 1 2 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	1t/s] 0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987 5.92it/s] 0.005987 5.67it/s]	0.01074 0.01074 0.01804 0.01804 0.01892 0.01892 0.02477 0.02477	1 1 1 2 2 2 2	320: 320: 320: 320: 320: 320: 320:
0% 434/499 0% 434/499 2% 2 434/499 5% 5 434/499 5% 5 434/499 8% 7 434/499 8% 7 434/499 10% # 434/499	0/40 [00] 0.206G	0:00 , ?i 0.01329 00<?, ?it/ 0.01329 00<00:06, 0.01286 00<00:06, 0.01286 00<00:06, 0.02094 00<00:06, 0.02094 00<00:06, 0.02404 00<00:06, 0.02404 :00<00:06, 0.02404</td <td>0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987 5.92it/s] 0.005987 5.92it/s] 0.005987</td> <td>0.01074 0.01074 0.01804 0.01804 0.01892 0.01892 0.02477 0.02477</td> <td>1 1 1 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987 5.92it/s] 0.005987 5.92it/s] 0.005987	0.01074 0.01074 0.01804 0.01804 0.01892 0.01892 0.02477 0.02477	1 1 1 2 2	320: 320: 320: 320: 320: 320:
0%	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00 0.206G 4/40 [00	0:00 , ?i 0.01329 00<?, ?it/ 0.01329 00<00:06, 0.01286 00<00:06, 0.02094 00<00:06, 0.02094 00<00:06, 0.02404 00<00:06, 0.02404 00<00:06, 0.02404 :00<00:06,</td <td>0.004815 (s) 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987 5.92it/s] 0.005987 5.67it/s] 0.006587 5.67it/s]</td> <td>0.01074 0.01074 0.01804 0.01804 0.01892 0.01892 0.02477 0.02477</td> <td>1 1 1 2 2 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	0.004815 (s) 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987 5.92it/s] 0.005987 5.67it/s] 0.006587 5.67it/s]	0.01074 0.01074 0.01804 0.01804 0.01892 0.01892 0.02477 0.02477	1 1 1 2 2 2 2 2	320: 320: 320: 320: 320: 320: 320: 320:
0%	0/40 [00] 0.206G	0:00 , ?i 0.01329 00<?, ?it/ 0.01329 00<00:06, 0.01286 00<00:06, 0.02094 00<00:06, 0.02094 00<00:06, 0.02404 00<00:06, 0.02404 :00<00:06, 0.02406 :00<00:06, 0.0226</td <td>1.t/s] 0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987 5.92it/s] 0.005987 5.67it/s] 0.006587 5.67it/s] 0.006587</td> <td>0.01074 0.01074 0.01804 0.01804 0.01892 0.01892 0.02477 0.02477</td> <td>1 1 1 2 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	1.t/s] 0.004815 (s] 0.004815 6.40it/s] 0.003885 6.40it/s] 0.003885 6.00it/s] 0.004456 6.00it/s] 0.004456 5.92it/s] 0.005987 5.92it/s] 0.005987 5.67it/s] 0.006587 5.67it/s] 0.006587	0.01074 0.01074 0.01804 0.01804 0.01892 0.01892 0.02477 0.02477	1 1 1 2 2 2 2	320: 320: 320: 320: 320: 320: 320:

424/400	0.206G 0.02178	0 007700	0 00604	4	320:
			0.02624	4	320:
12% #2	5/40 [00:01<00:06,		0.00004	4	200
434/499		0.007788	0.02624	4	320:
15% #5	6/40 [00:01<00:06,		0.00077	4	000
434/499	0.206G 0.02453	0.008929	0.02677	4	320:
15% #5	6/40 [00:01<00:06,			_	
		0.008929	0.02677	4	320:
18% #7	7/40 [00:01<00:05,				
434/499		0.009144	0.02534	1	320:
18% #7	7/40 [00:01<00:05,				
434/499	0.206G 0.02291	0.009144	0.02534	1	320:
20% ##	8/40 [00:01<00:05,	5.55it/s]			
434/499	0.206G 0.02097	0.008413	0.02403	1	320:
20% ##	8/40 [00:01<00:05,	5.55it/s]			
434/499	0.206G 0.02097	0.008413	0.02403	1	320:
22% ##2	9/40 [00:01<00:05,	5.63it/s]			
434/499	0.206G 0.02051	0.008001	0.02347	1	320:
22% ##2	9/40 [00:01<00:05,	5.63it/s]			
434/499	0.206G 0.02051		0.02347	1	320:
25% ##5	10/40 [00:01<00:05,				
434/499	0.206G 0.01994		0.02362	4	320:
25% ##5	10/40 [00:01<00:05,		0.02002	_	0_0.
	•	0.008373	0.02362	4	320:
28% ##7	11/40 [00:01<00:05,		0.02002	-	020.
434/499	0.206G 0.02033		0.02313	2	320:
28% ##7	11/40 [00:02<00:05,		0.02010	2	020.
434/499	•	0.008397	0.02313	2	320:
	12/40 [00:02<00:05,		0.02313	2	320.
30% ###	•		0 00050	0	200.
434/499	0.206G 0.02278		0.02258	2	320:
30% ###	12/40 [00:02<00:05,		0.00050	0	000
434/499		0.008356	0.02258	2	320:
32% ###2	13/40 [00:02<00:04,				
434/499	0.206G 0.02246	0.008307	0.02239	2	320:
32% ###2	13/40 [00:02<00:04,				
434/499		0.008307	0.02239	2	320:
35% ###5	14/40 [00:02<00:04,				
434/499	0.206G 0.02403	0.008378	0.02194	3	320:
35% ###5	14/40 [00:02<00:04,	5.52it/s			
434/499	0.206G 0.02403	0.008378	0.02194	3	320:
38% ###7	15/40 [00:02<00:04,	5.46it/s]			
434/499	0.206G 0.02339	0.008244	0.02176	2	320:
38% ###7	15/40 [00:02<00:04,	5.46it/s			
434/499	0.206G 0.02339	0.008244	0.02176	2	320:
40% ####	16/40 [00:02<00:04,	5.42it/s]			
434/499	0.206G 0.02292		0.02216	4	320:
40% ####	16/40 [00:03<00:04,				
434/499	0.206G 0.02292		0.02216	4	320:
42% ####2	17/40 [00:03<00:04,				

434/499	0.206G 0.0225 0.008958	0.02214	4	320:
42% ####2	17/40 [00:03<00:04, 5.52it/s]			
434/499	0.206G 0.0225 0.008958	0.02214	4	320:
45% ####5	18/40 [00:03<00:03, 5.61it/s]			
434/499	0.206G 0.02175 0.00867	0.0218	1	320:
45% ####5	18/40 [00:03<00:03, 5.61it/s]	0.0010	4	200
434/499	0.206G 0.02175 0.00867	0.0218	1	320:
48% ####7 434/499	19/40 [00:03<00:03, 5.67it/s]	0 00154	2	320:
434/499	0.206G 0.02307 0.00851 19/40 [00:03<00:03, 5.67it/s]	0.02154	2	320:
434/499	0.206G 0.02307 0.00851	0 00154	2	320:
434/499 50% #####	20/40 [00:03<00:03, 5.55it/s]	0.02154	2	320:
434/499	0.206G 0.02263 0.008268		1	320:
50% #####	20/40 [00:03<00:03, 5.55it/s]		1	320.
434/499	0.206G 0.02263 0.008268	0.02164	1	320:
52% #####2	21/40 [00:03<00:03, 5.48it/s]		1	320.
434/499	0.206G 0.02224 0.008128		1	320:
52% #####2	21/40 [00:03<00:03, 5.48it/s]	0.02132	1	320.
434/499	0.206G 0.02224 0.008128	0.02132	1	320:
55% #####5	22/40 [00:03<00:03, 5.57it/s]		1	320.
434/499	0.206G 0.0224 0.008349		4	320:
55% #####5	22/40 [00:04<00:03, 5.57it/s]		4	520.
434/499	0.206G 0.0224 0.008349	0.02148	4	320:
57% #####7	23/40 [00:04<00:03, 5.50it/s]		-	520.
434/499	0.206G 0.02326 0.008352		2	320:
57% #####7	23/40 [00:04<00:03, 5.50it/s]	0.02120	2	020.
434/499	0.206G 0.02326 0.008352	0.02125	2	320:
60% ######	24/40 [00:04<00:02, 5.59it/s]	0.02125	2	520.
434/499	0.206G 0.02276 0.008407	0.0211	4	320:
60% ######	24/40 [00:04<00:02, 5.59it/s]	0.0211	1	020.
434/499	0.206G 0.02276 0.008407	0.0211	4	320:
62% ######2	25/40 [00:04<00:02, 5.66it/s]	0.0211	1	020.
434/499	0.206G 0.02311 0.008927	0.02126	4	320:
•	25/40 [00:04<00:02, 5.66it/s]	0.02120	-	020.
434/499	0.206G 0.02311 0.008927	0.02126	4	320:
	26/40 [00:04<00:02, 5.68it/s]	0.02120	-	020.
434/499	0.206G 0.02253 0.008807	0.02112	2	320:
65% ######5	26/40 [00:04<00:02, 5.68it/s]	***************************************	_	0_0.
434/499	0.206G 0.02253 0.008807	0.02112	2	320:
68% ######7	27/40 [00:04<00:02, 5.72it/s]		_	
434/499	0.206G 0.02244 0.009021	0.02122	4	320:
68% ######7	27/40 [00:05<00:02, 5.72it/s]			
434/499	0.206G 0.02244 0.009021		4	320:
70% #######	28/40 [00:05<00:02, 5.60it/s]			
434/499	0.206G 0.02216 0.008826	0.02094	1	320:
70% ######	28/40 [00:05<00:02, 5.60it/s]			
434/499	0.206G 0.02216 0.008826	0.02094	1	320:
72% #######2	29/40 [00:05<00:01, 5.64it/s]			

434/499		0.206G	0.02239	0.008992	0.02162	2	320:
72% ######2		29/40 [00	:05<00:01,	, 5.64it/s]			
434/499		0.206G	0.02239		0.02162	2	320:
			-	, 5.40it/s]			
434/499		0.206G	0.02197	0.008867	0.0214	1	320:
			-	, 5.40it/s]			
434/499		0.206G		0.008867	0.0214	1	320:
78% #######7							000
		0.206G	0.02164		0.02119	1	320:
	ı		-	, 5.66it/s]	0 00110	_	000
434/499		0.206G	0.02164		0.02119	1	320:
			-	, 5.70it/s]	0.00000	4	200
			0.02124		0.02096	1	320:
80% ########			-		0 00006	4	200.
434/499 82% #######2				0.008582	0.02096	1	320:
		0.206G	0.02202		0.02104	2	320:
82% ########2					0.02104	2	320.
	ı	0.206G	0.02202		0.02104	2	320:
434/499 85% #######5					0.02104	2	320.
	'	0.206G	0.02176		0.02083	2	320:
85% #######5					0.02003	2	520.
434/499		0.206G	-		0.02083	2	320:
88% ########7					0.02000	2	020.
434/499	'	0.206G	0.02213	0.008494	0.02086	4	320:
88% ########7	ı				0.02000	-	020.
434/499	'	0.206G	0.02213		0.02086	4	320:
90% #########	ı				0.02000	-	020.
434/499	•	0.206G	-	0.00835	0.02066	1	320:
90% #########	ı				0.02000	_	0_0.
434/499	·	0.206G		0.00835	0.02066	1	320:
92% #########	2						
434/499			-	0.008403	0.02051	2	320:
92% #########	2	37/40 [00	:06<00:00	, 5.46it/s]			
		0.206G	0.02163		0.02051	2	320:
95% ########	5	38/40 [00	:06<00:00,	, 5.56it/s]			
434/499		0.206G	0.02148	0.008371	0.02048	2	320:
95% ########	5	38/40 [00	:06<00:00,	, 5.56it/s]			
434/499		0.206G	0.02148	0.008371	0.02048	2	320:
98% ########7	7	39/40 [00	:06<00:00	5.49it/s			
434/499		0.206G	0.02153	0.008464	0.02066	2	320:
98% ########	7	39/40 [00	:07<00:00,	, 5.49it/s]			
434/499		0.206G	0.02153	0.008464	0.02066	2	320:
100% ########	##						
434/499		0.206G	0.02153		0.02066	2	320:
100% ########	##	40/40 [0	0:07<00:00), 5.56it/s]			
		43	_		_	_	
		Class	Images	Instances	P	R	mAP50

₩ADEO OF.	0%1	I 0/20 [0	00.00/2 2:+/	′a]		
mAP50-95:	0% Class		0:00 , ?it/<br Instances		R	mAP50
mAP50-95:	10% #	•	0:00<00:00,		11	IIIAF 50
MAI 30 93.	Class		Instances	P	R	mAP50
mAP50-95:	20% ##	_	0:00<00:00,	=	10	IIIAI 50
MAI 30 93.	Class		Instances		R	mAP50
mAP50-95:		•	00:00<00:00,		10	mai oo
MAI 00 50.	Class		Instances		R	mAP50
mAP50-95:	40% ####	_	00:00<00:00,		10	mm oo
mA1 00 30.	Class		Instances		R	mAP50
mAP50-95:	50% #####	_	00:00<00:00,			mm 00
MAT 00 30.	Class		Instances		R	mAP50
mAP50-95:	60% #####		00:00<00:00,		= -	mm 00
mili oo oo.	Class		Instances		R	mAP50
mAP50-95:	70% ######		[00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:		_	[00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	90% #########	_				
	Class		Instances		R.	mAP50
mAP50-95:	100% ########	_				
	Class		Instances		R	mAP50
mAP50-95:	100% #########	_				
	all	40	40	0.983		0.995
0.792						
Epoc	h GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
•	_	_	<i>5</i> –	_		
0%1	0/40 [0	0:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
435/49	9 0.206G	0.006807	0.00247	0.01523	1	320:
0%	0/40 [00:	00 , ?it/</td <td>ˈs]</td> <td></td> <td></td> <td></td>	ˈs]			
435/49	9 0.206G	0.006807	0.00247	0.01523	1	320:
2% 2	1/40 [00:	00<00:06,	6.32it/s			
435/49	9 0.206G	0.01457	0.004302	0.0118	2	320:
2% 2	1/40 [00:	00<00:06,	6.32it/s			
435/49	9 0.206G	0.01457	0.004302	0.0118	2	320:
5% 5	2/40 [00:	00<00:05,	6.37it/s			
435/49	9 0.206G	0.0136	0.003964	0.01272	1	320:
5% 5	2/40 [00:	00<00:05,	6.37it/s			
435/49	9 0.206G	0.0136	0.003964	0.01272	1	320:
8% 7	3/40 [00:	00<00:06,	6.10it/s]			
435/49	9 0.206G	0.0149	0.005692	0.0139	4	320:
8% 7	3/40 [00:	00<00:06,	6.10it/s]			
435/49				0.0139	4	320:
10% #	4/40 [00	:00<00:06,	5.77it/s]			
435/49	9 0.206G	0.0146	0.005291	0.01481	1	320:
10% #	4/40 [00	:00<00:06,	5.77it/s]			
435/49	9 0.206G	0.0146	0.005291	0.01481	1	320:

12% #2	5/40 [00:00<00:06, 5.79it/s]		
435/499	0.206G 0.01927 0.006161	0.01719	4 320:
12% #2	5/40 [00:01<00:06, 5.79it/s]		
,	0.206G 0.01927 0.006161	0.01719	4 320:
15% #5	6/40 [00:01<00:06, 5.45it/s]		
435/499	0.206G 0.02034 0.007814	0.01782	4 320:
15% #5	6/40 [00:01<00:06, 5.45it/s]		
435/499	0.206G 0.02034 0.007814	0.01782	4 320:
18% #7	7/40 [00:01<00:06, 5.25it/s]		
435/499	0.206G 0.02586 0.007685	0.01761	2 320:
18% #7	7/40 [00:01<00:06, 5.25it/s]		
435/499	0.206G 0.02586 0.007685	0.01761	2 320:
20% ##	8/40 [00:01<00:06, 5.14it/s]		
435/499	0.206G 0.02708 0.008102	0.01786	3 320:
20% ##	8/40 [00:01<00:06, 5.14it/s]		
435/499	0.206G 0.02708 0.008102	0.01786	3 320:
22% ##2	9/40 [00:01<00:05, 5.20it/s]		
435/499	0.206G 0.02517 0.007687	0.01743	1 320:
22% ##2	9/40 [00:01<00:05, 5.20it/s]		
435/499	0.206G 0.02517 0.007687	0.01743	1 320:
25% ##5	10/40 [00:01<00:05, 5.35it/s]		
435/499	0.206G 0.02361 0.007276	0.0172	1 320:
25% ##5	10/40 [00:01<00:05, 5.35it/s]		
435/499	0.206G 0.02361 0.007276	0.0172	1 320:
28% ##7	11/40 [00:01<00:05, 5.48it/s]		
435/499	0.206G 0.02418 0.008045	0.01743	4 320:
28% ##7	11/40 [00:02<00:05, 5.48it/s]		
435/499	0.206G 0.02418 0.008045	0.01743	4 320:
30% ###	12/40 [00:02<00:05, 5.30it/s]		
435/499	0.206G 0.02406 0.008484	0.01801	4 320:
30% ###	12/40 [00:02<00:05, 5.30it/s]		
435/499	0.206G 0.02406 0.008484	0.01801	4 320:
32% ###2	13/40 [00:02<00:05, 5.17it/s]		
435/499	0.206G 0.02487 0.008789	0.01803	4 320:
32% ###2	13/40 [00:02<00:05, 5.17it/s]		
435/499	0.206G 0.02487 0.008789	0.01803	4 320:
35% ###5	14/40 [00:02<00:05, 5.09it/s]		
435/499	0.206G 0.0251 0.009393	0.01902	4 320:
35% ###5	14/40 [00:02<00:05, 5.09it/s]		
435/499	0.206G 0.0251 0.009393	0.01902	4 320:
38% ###7	15/40 [00:02<00:04, 5.03it/s]		
435/499	0.206G 0.02495 0.01004	0.01907	4 320:
38% ###7	15/40 [00:03<00:04, 5.03it/s]		
435/499	0.206G 0.02495 0.01004	0.01907	4 320:
40% ####	16/40 [00:03<00:04, 4.99it/s]		
435/499	0.206G 0.02398 0.009757	0.01929	1 320:
40% ####	16/40 [00:03<00:04, 4.99it/s]		
435/499	0.206G 0.02398 0.009757	0.01929	1 320:

42% ####2	I	17/40 [00:03<00:04,				
435/499		0.206G 0.02589		0.02008	3	320:
42% ####2	ı	17/40 [00:03<00:04,				
435/499		0.206G 0.02589	0.009588	0.02008	3	320:
45% ####5	ı	18/40 [00:03<00:04,				
435/499		0.206G 0.02595	0.009743	0.02005	3	320:
45% ####5	ı	18/40 [00:03<00:04,				
435/499		0.206G 0.02595	0.009743	0.02005	3	320:
48% ####7	ı	19/40 [00:03<00:04,	· -			
435/499		0.206G 0.02654		0.0208	4	320:
48% ####7	I	19/40 [00:03<00:04,				
435/499		0.206G 0.02654	0.009958	0.0208	4	320:
50% #####	I	20/40 [00:03<00:04,				
435/499		0.206G 0.02603		0.02083	2	320:
50% #####	I	20/40 [00:04<00:04,				
435/499		0.206G 0.02603	0.009753	0.02083	2	320:
52% #####2		21/40 [00:04<00:03,				
435/499		0.206G 0.02533		0.0205	2	320:
52% #####2	I	21/40 [00:04<00:03,	5.00it/s			
435/499		0.206G 0.02533	0.009657	0.0205	2	320:
55% #####5		22/40 [00:04<00:03,	4.98it/s]			
435/499		0.206G 0.02499	0.009836	0.02072	4	320:
55% #####5		22/40 [00:04<00:03,	4.98it/s]			
435/499		0.206G 0.02499	0.009836	0.02072	4	320:
57% #####7		23/40 [00:04<00:03,	4.83it/s			
435/499		0.206G 0.02418	0.009558	0.0208	1	320:
57% #####7	-	23/40 [00:04<00:03,	4.83it/s]			
435/499		0.206G 0.02418	0.009558	0.0208	1	320:
60% ######	-	24/40 [00:04<00:03,	4.97it/s			
435/499		0.206G 0.02385	0.009477	0.02104	2	320:
60% ######	-	24/40 [00:04<00:03,	4.97it/s			
435/499		0.206G 0.02385	0.009477	0.02104	2	320:
62% #####2	-	25/40 [00:04<00:03,	4.83it/s]			
435/499		0.206G 0.02409	0.009477	0.0216	2	320:
62% ######2		25/40 [00:05<00:03,	4.83it/s]			
435/499		0.206G 0.02409	0.009477	0.0216	2	320:
65% ######5		26/40 [00:05<00:02,	4.85it/s]			
435/499		0.206G 0.02366	0.00936	0.02158	2	320:
65% ######5		26/40 [00:05<00:02,	4.85it/s]			
435/499		0.206G 0.02366	0.00936	0.02158	2	320:
68% #####7	-	27/40 [00:05<00:02,	4.98it/s]			
435/499		0.206G 0.02364	0.009261	0.02136	2	320:
68% ######7	-	27/40 [00:05<00:02,	4.98it/s]			
435/499		0.206G 0.02364	0.009261	0.02136	2	320:
70% #######	-	28/40 [00:05<00:02,	5.09it/s]			
435/499		0.206G 0.02308	0.009088	0.02128	2	320:
70% #######	- [28/40 [00:05<00:02,	5.09it/s]			
435/499		0.206G 0.02308	0.009088	0.02128	2	320:

72% #######2	29/40 [00:05<00:02,	5.27it/s]			
435/499	0.206G 0.0227	0.008897	0.02102	1	320:
72% ######2	29/40 [00:05<00:02,	5.27it/s			
435/499	0.206G 0.0227	0.008897	0.02102	1	320:
75% ######5	30/40 [00:05<00:01,	5.29it/s			
435/499	0.206G 0.02283	0.008801	0.02094	2	320:
75% ######5	30/40 [00:05<00:01,	5.29it/s			
435/499			0.02094	2	320:
	31/40 [00:05<00:01,				
435/499			0.02096	4	320:
	31/40 [00:06<00:01,	· -			
435/499			0.02096	4	320:
	32/40 [00:06<00:01,				
435/499			0.02079	1	320:
	32/40 [00:06<00:01,				
435/499		0.008938	0.02079	1	320:
	33/40 [00:06<00:01,				000
	0.206G 0.02261		0.02121	4	320:
	33/40 [00:06<00:01,		0.004.04	4	200
435/499	0.206G 0.02261		0.02121	4	320:
	34/40 [00:06<00:01,		0 00106	0	200.
435/499	0.206G 0.02292 34/40 [00:06<00:01,		0.02106	2	320:
435/499		0.009047	0.02106	2	320:
	35/40 [00:06<00:00,		0.02100	2	320.
435/499	0.206G 0.02302		0.02109	4	320:
	35/40 [00:06<00:00,		0.02109	7	520.
435/499	0.206G 0.02302		0.02109	4	320:
	36/40 [00:06<00:00,		0.02100	-	020.
435/499	0.206G 0.02317		0.02109	4	320:
	36/40 [00:07<00:00,		0.02200	-	0201
435/499		0.009296	0.02109	4	320:
	37/40 [00:07<00:00,				
435/499	0.206G 0.02272	0.009215	0.02097	2	320:
92% ########2	37/40 [00:07<00:00,	5.45it/s]			
435/499	0.206G 0.02272	0.009215	0.02097	2	320:
95% ########5	38/40 [00:07<00:00,	5.56it/s]			
435/499	0.206G 0.02295	0.009358	0.02095	4	320:
95% ########5	38/40 [00:07<00:00,	5.56it/s			
435/499	0.206G 0.02295	0.009358	0.02095	4	320:
98% ########7	39/40 [00:07<00:00,	5.63it/s]			
435/499	0.206G 0.02259	0.009216	0.0209	1	320:
98% ########7	39/40 [00:07<00:00,				
435/499	* * * * * * * * * * * * * * * * * * * *		0.0209	1	320:
	40/40 [00:07<00:00	-			
435/499		0.009216	0.0209	1	320:
100% ##########	40/40 [00:07<00:00	, 5.27it/s]			

		•	Instances		16	IIIAI 50
mAP50-95:	0%	0/20 [0	0:00 , ?it/</td <td>ˈs]</td> <td></td> <td></td>	ˈs]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	10% #	2/20 [0	0:00<00:01,	16.00it/s]		
	Class		Instances		R	mAP50
mAP50-95:		•	00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:		•	00:00<00:00,		10	mAI 00
MAF 50-95.	Class				R	mAP50
ADEO 05		•	Instances		r.	MAPSO
mAP50-95:			00:00<00:00,		_	
	Class	0	Instances		R	mAP50
mAP50-95:			[00:00<00:00,			
	Class	•	Instances		R	mAP50
mAP50-95:	60% #####	12/20	[00:00<00:00,	16.56it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	70% ######	14/20	[00:00<00:00,	16.35it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	80% #######	_				
	Class		Instances		R	mAP50
mAP50-95.	90% ########	_				
mm 00 00.			Instances		R	mAP50
₩ADEO OF.	100% #########	_				mai 50
MAP50-95.						0 005
0.704	all	40	40	0.984	0.985	0.995
0.784						
Epoc	ch GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
_			-	cls_loss	Instances	Size
0%	0/40 [00	:00 , ?i</td <td>it/s]</td> <td></td> <td></td> <td></td>	it/s]			
0% 436/49	0/40 [00 99	:00 , ?i<br 0.006316	it/s] 0.00251		Instances	Size 320:
0% 436/49	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/</td <td>it/s] 0.00251 's]</td> <td>0.01396</td> <td>1</td> <td>320:</td>	it/s] 0.00251 's]	0.01396	1	320:
0% 436/49 0% 436/49	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316	it/s] 0.00251 's] 0.00251	0.01396		
0% 436/49 0% 436/49 2% 2	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05,	it/s] 0.00251 /s] 0.00251 6.51it/s]	0.01396 0.01396	1	320: 320:
0% 436/49 0% 436/49 2% 2 436/49	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145	0.00251 (s) 0.00251 6.51it/s] 0.004136	0.01396	1	320:
0% 436/49 0% 436/49 2% 2 436/49	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05,	0.00251 (s) 0.00251 6.51it/s] 0.004136 6.51it/s]	0.01396 0.01396 0.015	1 1 2	320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05,	0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136	0.01396 0.01396	1	320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05,	0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136	0.01396 0.01396 0.015	1 1 2	320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49 5% 5	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05, 0.007145	0.00251 (s) 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s]	0.01396 0.01396 0.015	1 1 2	320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 5% 5 436/49	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05, 0.007145	0.00251 (s) 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179	0.01396 0.01396 0.015 0.015	1 1 2 2	320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 5% 5 436/49	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05, 0.007145 0<00:05,	0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s]	0.01396 0.01396 0.015 0.015	1 1 2 2	320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49 5% 5 436/49	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05, 0.007145 0<00:05, 0.009153	0.00251 0.00251 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179	0.01396 0.01396 0.015 0.015	1 1 2 2 2	320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 5% 5 436/49 5% 5 436/49 8% 7	0/40 [00 99	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05, 0.007145 0<00:05, 0.009153 0<00:05,	0.00251 (s) 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s]	0.01396 0.01396 0.015 0.015 0.01638	1 1 2 2 2 2	320: 320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49 5% 5 436/49 5% 5 436/49 8% 7 436/49	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05, 0.007145 0<00:05, 0.009153 0<00:05, 0.009153	0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662	0.01396 0.01396 0.015 0.015	1 1 2 2 2	320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49 5% 5 436/49 5% 5 436/49 8% 7 436/49	0/40 [00 99	:00 , ?i 0.006316 0<?, ?it/ 0.006316 0<00:05, 0.007145 0<00:05, 0.007145 0<00:05, 0.009153 0<00:05, 0.009153 0<00:06, 0.01037</td <td>0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s]</td> <td>0.01396 0.01396 0.015 0.015 0.01638 0.01638</td> <td>1 1 2 2 2 2 1</td> <td>320: 320: 320: 320: 320: 320:</td>	0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s]	0.01396 0.01396 0.015 0.015 0.01638 0.01638	1 1 2 2 2 2 1	320: 320: 320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 5% 5 436/49 5% 5 436/49 8% 7 436/49	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G	:00 , ?i<br 0.006316 0 , ?it/<br 0.006316 0<00:05, 0.007145 0<00:05, 0.007145 0<00:05, 0.009153 0<00:05, 0.009153 0<00:06, 0.01037	0.00251 (s) 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662	0.01396 0.01396 0.015 0.015 0.01638	1 1 2 2 2 2	320: 320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49 5% 5 436/49 5% 5 436/49 8% 7 436/49 10% #	0/40 [00 99	:00 , ?i 0.006316 0<?, ?it/ 0.006316 0<00:05, 0.007145 0<00:05, 0.009153 0<00:05, 0.009153 0<00:06, 0.01037 0<00:06, 0.01037</td <td>0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s]</td> <td>0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714</td> <td>1 1 2 2 2 2 1 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s]	0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714	1 1 2 2 2 2 1 1	320: 320: 320: 320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49 5% 5 436/49 5% 5 436/49 8% 7 436/49 10% # 436/49	0/40 [00 09 0.206G 0/40 [00:0 09 0.206G 1/40 [00:0 09 0.206G 1/40 [00:0 09 0.206G 2/40 [00:0 09 0.206G 2/40 [00:0 09 0.206G 3/40 [00:0 09 0.206G	:00 , ?i 0.006316 0<?, ?it/ 0.006316 0<00:05, 0.007145 0<00:05, 0.009153 0<00:05, 0.009153 0<00:06, 0.01037 0<00:06, 0.01037</td <td>0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s] 0.005182</td> <td>0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714</td> <td>1 1 2 2 2 2 1</td> <td>320: 320: 320: 320: 320: 320:</td>	0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s] 0.005182	0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714	1 1 2 2 2 2 1	320: 320: 320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49 5% 5 436/49 8% 7 436/49 10% #	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0	:00 , ?i 0.006316 0<?, ?it/ 0.006316 0<00:05, 0.007145 0<00:05, 0.007145 0<00:05, 0.009153 0<00:06, 0.01037 0<00:06, 0.01037 00<00:06, 0.01092 00<00:06,</td <td>0.00251 (s) 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s] 0.005182 5.82it/s]</td> <td>0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714</td> <td>1 1 2 2 2 2 1 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	0.00251 (s) 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s] 0.005182 5.82it/s]	0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714	1 1 2 2 2 2 1 1 1	320: 320: 320: 320: 320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49 5% 5 436/49 5% 5 436/49 8% 7 436/49 10% # 436/49	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0 0.206G	:00 , ?i 0.006316 0<?, ?it/ 0.006316 0<00:05, 0.007145 0<00:05, 0.007145 0<00:05, 0.009153 0<00:06, 0.01037 0<00:06, 0.01037 0<00:06, 0.01092 00<00:06, 0.01092</td <td>0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s] 0.005182 5.82it/s] 0.005182</td> <td>0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714</td> <td>1 1 2 2 2 2 1 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s] 0.005182 5.82it/s] 0.005182	0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714	1 1 2 2 2 2 1 1	320: 320: 320: 320: 320: 320: 320:
0% 436/49 0% 436/49 2% 2 436/49 2% 2 436/49 5% 5 436/49 8% 7 436/49 10% #	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0	:00 , ?i 0.006316 0<?, ?it/ 0.006316 0<00:05, 0.007145 0<00:05, 0.007145 0<00:05, 0.009153 0<00:06, 0.01037 0<00:06, 0.01037 0<00:06, 0.01092 00<00:06, 0.01092</td <td>0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s] 0.005182 5.82it/s] 0.005182</td> <td>0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714</td> <td>1 1 2 2 2 2 1 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	0.00251 (s] 0.00251 6.51it/s] 0.004136 6.51it/s] 0.004136 6.45it/s] 0.005179 6.45it/s] 0.005179 5.86it/s] 0.004662 5.86it/s] 0.004662 5.82it/s] 0.005182 5.82it/s] 0.005182	0.01396 0.01396 0.015 0.015 0.01638 0.01638 0.01714 0.01714	1 1 2 2 2 2 1 1 1	320: 320: 320: 320: 320: 320: 320: 320:

Images Instances

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mAP50

Class

436/499	0.206G 0.01247	0.004991	0.01726	1	320:
12% #2	5/40 [00:01<00:05,				
436/499		0.004991	0.01726	1	320:
15% #5	6/40 [00:01<00:05,	5.95it/s]			
436/499	0.206G 0.01193	0.004969	0.01755	1	320:
15% #5	6/40 [00:01<00:05,	5.95it/s]			
436/499	0.206G 0.01193	0.004969	0.01755	1	320:
18% #7	7/40 [00:01<00:05,	5.89it/s]			
436/499	0.206G 0.01146	0.004671	0.01758	1	320:
18% #7	7/40 [00:01<00:05,	5.89it/s]			
436/499	0.206G 0.01146	0.004671	0.01758	1	320:
20% ##	8/40 [00:01<00:05,	6.05it/s]			
436/499	0.206G 0.01397		0.01828	2	320:
20% ##	8/40 [00:01<00:05,	6.05it/s]			
436/499	0.206G 0.01397		0.01828	2	320:
22% ##2	9/40 [00:01<00:05,				
436/499		0.005682	0.01832	2	320:
22% ##2	9/40 [00:01<00:05,				
436/499		0.005682	0.01832	2	320:
25% ##5	10/40 [00:01<00:05,				
436/499	0.206G 0.01827		0.01898	2	320:
25% ##5	10/40 [00:01<00:05,				
		0.005672	0.01898	2	320:
28% ##7	11/40 [00:01<00:05,				
436/499	0.206G 0.0197		0.01935	4	320:
28% ##7	11/40 [00:02<00:05,				
436/499		0.006288	0.01935	4	320:
30% ###	12/40 [00:02<00:04,				
436/499	0.206G 0.01893		0.0194	1	320:
30% ###	12/40 [00:02<00:04,				
436/499		0.006061	0.0194	1	320:
32% ###2	13/40 [00:02<00:04,				
436/499	0.206G 0.01998	0.006269	0.0201	4	320:
32% ###2	13/40 [00:02<00:04,				
436/499	0.206G 0.01998		0.0201	4	320:
35% ###5	14/40 [00:02<00:04,				
436/499	0.206G 0.02038		0.02015	2	320:
35% ###5	14/40 [00:02<00:04,				
436/499	0.206G 0.02038		0.02015	2	320:
38% ###7	15/40 [00:02<00:04,				
436/499		0.006365	0.02012	2	320:
38% ###7	15/40 [00:02<00:04,		-	-	
436/499	0.206G 0.01985		0.02012	2	320:
40% ####	16/40 [00:02<00:04,			_	
436/499	0.206G 0.01919		0.01986	1	320:
40% ####	16/40 [00:02<00:04,		,	_	
436/499	0.206G 0.01919		0.01986	1	320:
42% ####2	17/40 [00:02<00:04,			_	
		, -			

436/499	0.206G 0.02023 0.006493	0.0198	4	320:
42% ####2	17/40 [00:03<00:04, 5.72it/s]			
436/499	0.206G 0.02023 0.006493	0.0198	4	320:
45% ####5	18/40 [00:03<00:03, 5.75it/s]			
436/499	0.206G 0.01981 0.006505	0.0197	2	320:
45% ####5	18/40 [00:03<00:03, 5.75it/s]			
436/499	0.206G 0.01981 0.006505	0.0197	2	320:
48% ####7	19/40 [00:03<00:03, 5.75it/s]			
436/499	0.206G 0.0221 0.006477		2	320:
48% ####7	19/40 [00:03<00:03, 5.75it/s]		_	
436/499	0.206G 0.0221 0.006477		2	320:
50% #####	20/40 [00:03<00:03, 5.77it/s]		_	
436/499	0.206G 0.02215 0.006849	0.0195	4	320:
50% #####	20/40 [00:03<00:03, 5.77it/s]		_	
436/499	0.206G 0.02215 0.006849	0.0195	4	320:
52% #####2	21/40 [00:03<00:03, 5.78it/s]		_	
436/499	0.206G 0.02178 0.007073		2	320:
52% #####2	21/40 [00:03<00:03, 5.78it/s]			
436/499	0.206G 0.02178 0.007073		2	320:
55% #####5	22/40 [00:03<00:03, 5.77it/s]			
436/499	0.206G 0.02153 0.007403		4	320:
55% #####5	22/40 [00:04<00:03, 5.77it/s]			
436/499	0.206G 0.02153 0.007403	0.01961	4	320:
57% #####7	23/40 [00:04<00:03, 5.49it/s]			
436/499	0.206G 0.02309 0.007402		2	320:
57% #####7	23/40 [00:04<00:03, 5.49it/s]			
436/499	0.206G 0.02309 0.007402		2	320:
60% ######	24/40 [00:04<00:02, 5.58it/s]			
436/499	0.206G 0.02437 0.007527		4	320:
60% ######	24/40 [00:04<00:02, 5.58it/s]			
436/499	0.206G 0.02437 0.007527		4	320:
62% ######2	25/40 [00:04<00:02, 5.49it/s]			
436/499	0.206G 0.02372 0.007392	0.02012	1	320:
62% ######2	25/40 [00:04<00:02, 5.49it/s]			
436/499	0.206G 0.02372 0.007392		1	320:
	26/40 [00:04<00:02, 5.73it/s]			
436/499	0.206G 0.02447 0.007397		2	320:
65% ######5	26/40 [00:04<00:02, 5.73it/s]			
436/499	0.206G 0.02447 0.007397	0.02003	2	320:
68% #####7	27/40 [00:04<00:02, 5.61it/s]			
436/499	0.206G 0.02395 0.00738	0.0198	2	320:
68% ######7	27/40 [00:04<00:02, 5.61it/s]			
436/499	0.206G 0.02395 0.00738	0.0198	2	320:
70% ######	28/40 [00:04<00:02, 5.66it/s]			
436/499	0.206G 0.02353 0.007446		2	320:
70% ######	28/40 [00:05<00:02, 5.66it/s]			
436/499	0.206G 0.02353 0.007446	0.01965	2	320:
72% ######2	29/40 [00:05<00:01, 5.87it/s]			

436/499	*		0.01973	2	320:
	29/40 [00:05<00:01,				
436/499		0.007428	0.01973	2	320:
	30/40 [00:05<00:01,	· –			
436/499		0.00741	0.01976	2	320:
	30/40 [00:05<00:01,				
436/499		0.00741	0.01976	2	320:
	31/40 [00:05<00:01,				
436/499			0.0199	4	320:
78% ######7	31/40 [00:05<00:01,	5.56it/s			
436/499	0.206G 0.02494	0.007601	0.0199	4	320:
80% #######	32/40 [00:05<00:01,	5.63it/s			
436/499	0.206G 0.0246	0.00751	0.01975	1	320:
80% #######	32/40 [00:05<00:01,	5.63it/s			
436/499	0.206G 0.0246	0.00751	0.01975	1	320:
82% #######2	33/40 [00:05<00:01,	5.69it/s]			
436/499	0.206G 0.02472	0.00775	0.01975	4	320:
82% #######2	33/40 [00:05<00:01,	5.69it/s]			
436/499	0.206G 0.02472	0.00775	0.01975	4	320:
85% #######5	34/40 [00:05<00:01,	5.56it/s]			
436/499	0.206G 0.02422	0.007652	0.01953	1	320:
85% #######5	34/40 [00:06<00:01,	5.56it/s]			
436/499	0.206G 0.02422	0.007652	0.01953	1	320:
88% #######7	35/40 [00:06<00:00,	5.63it/s]			
436/499	0.206G 0.02401	0.007768	0.01955	4	320:
88% #######7	35/40 [00:06<00:00,	5.63it/s]			
436/499	0.206G 0.02401	0.007768	0.01955	4	320:
90% ########	36/40 [00:06<00:00,	5.01it/s			
436/499	0.206G 0.02393	0.007962	0.01959	4	320:
90% ########	36/40 [00:06<00:00,	5.01it/s			
436/499	0.206G 0.02393	0.007962	0.01959	4	320:
92% ########2	37/40 [00:06<00:00,	5.34it/s]			
436/499	0.206G 0.02358	0.007862	0.01951	1	320:
92% ########2	37/40 [00:06<00:00,	5.34it/s]			
436/499	0.206G 0.02358	0.007862	0.01951	1	320:
95% ########5	38/40 [00:06<00:00,	5.47it/s]			
436/499	0.206G 0.02334		0.0194	1	320:
95% ########5	38/40 [00:06<00:00,	5.47it/s]			
436/499		0.007742	0.0194	1	320:
98% ########7	39/40 [00:06<00:00,	5.47it/s]			
	0.206G 0.02331		0.01962	4	320:
98% ########7	39/40 [00:07<00:00,	5.47it/s]			
436/499	0.206G 0.02331	0.007952	0.01962	4	320:
	40/40 [00:07<00:00				
436/499	0.206G 0.02331		0.01962	4	320:
	40/40 [00:07<00:00				
		_			
	Class Images	Instances	Р	R	mAP50
	e e				

mAP50-95:	0%	I 0/20 [0	0:00 , ?it/</th <th>al</th> <th></th> <th></th>	al		
MAF 50-95.			Instances		R	mAP50
mAP50-95:	10% #	_	0:00<00:00,		10	mai 00
	Class		Instances		R	mAP50
mAP50-95:	20% ##	_	0:00<00:01,			
	Class		Instances		R	mAP50
mAP50-95:	30% ###	•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	40% ####	8/20 [0	0:00<00:00,	16.73it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	50% #####	10/20 [00:00<00:00,	17.26it/s		
	Class	Images			R	mAP50
mAP50-95:	60% #####	12/20 [00:00<00:00,	17.58it/s		
	Class	_	Instances		R	mAP50
mAP50-95:	70% ######	14/20 [00:00<00:00,	17.03it/s		
	Class	•	Instances		R	mAP50
mAP50-95:			00:00<00:00,			
	Class	•	Instances		R	mAP50
mAP50-95:	90% ########					
	Class	0	Instances		R	mAP50
mAP50-95:	100% #########					
	Class	•	Instances			mAP50
mAP50-95:	100% #########	20/20 [
0.795	all	40	40	0.981	0.975	0.994
Epocl	n GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
09/ 1	I 0/40 F00	0040 01				
	0/40 [00			0.04004	0	200
437/499			0.008222	0.01991	2	320:
0%	0/40 [00:0 9			0.01001	0	200.
437/499			0.008222	0.01991	2	320:
	1/40 [00:0			0 00126	0	200.
437/499			0.006851	0.02136	2	320:
2% 2			0.006851	0 00126	0	200.
437/499				0.02136	2	320:
5% 5				0.00043	4	200.
437/499	0.206G 2/40 [00:0			0.02043	4	320:
5% 5		•		0 00042	1	200.
437/499 8% 7	3/40 [00:0	0.03609		0.02043	4	320:
				0 00070	1	200.
437/499 8% 7			0.008719 5.57;+/al	0.02079	1	320:
				0 00070	4	200 -
437/499			0.008719 5.67i+/al	0.02079	1	320:
10% #				0 00156	0	200 -
437/499 10% #	9 0.206G 4/40 [00:			0.02156	2	320:
437/499				0.02156	2	320:
	0.ZU0G	0.03194	0.000	0.02150	2	3∠0:

12% #2	5/40 [00:00<00:06, 5.22it/s]			
437/499	0.206G 0.02974 0.007694	0.02035	1	320:
12% #2	5/40 [00:01<00:06, 5.22it/s]			
437/499	0.206G 0.02974 0.007694	0.02035	1	320:
15% #5	6/40 [00:01<00:06, 5.39it/s]	0.0405		200
437/499		0.0195	1	320:
15% #5	6/40 [00:01<00:06, 5.39it/s]	0.0105	4	200.
437/499	0.206G 0.02632 0.00696	0.0195	1	320:
18% #7 437/499	7/40 [00:01<00:06, 5.09it/s] 0.206G 0.02626 0.007251	0.01918	3	320:
4377499 18% #7		0.01916	3	320:
437/499	7/40 [00:01<00:06, 5.09it/s] 0.206G 0.02626 0.007251	0 01019	3	320:
	8/40 [00:01<00:06, 5.16it/s]	0.01918	3	320:
20% ##		0.01899	2	320:
	0.206G 0.02492 0.007574 8/40 [00:01<00:06, 5.16it/s]	0.01099	2	320:
20% ## 437/499	0.206G 0.02492 0.007574	0.01900	2	320:
	9/40 [00:01<00:06, 5.08it/s]	0.01899	2	320:
22% ##2 437/499	0.206G 0.02443 0.00747	0.0191	1	320:
22% ##2	9/40 [00:01<00:06, 5.08it/s]	0.0191	1	320.
437/499	0.206G 0.02443 0.00747	0 0101	1	200.
4577499 25% ##5	10/40 [00:01<00:05, 5.03it/s]	0.0191	1	320:
	0.206G 0.02304 0.007061	0.01907	1	320:
437/499		0.01907	1	320:
25% ##5	10/40 [00:02<00:05, 5.03it/s]	0.01007	1	200.
437/499	0.206G 0.02304 0.007061	0.01907	1	320:
28% ##7	11/40 [00:02<00:05, 4.98it/s]	0.01004	4	200
437/499	0.206G 0.02173 0.006779	0.01904	1	320:
28% ##7	11/40 [00:02<00:05, 4.98it/s]	0.01004	1	200.
437/499	0.206G 0.02173 0.006779	0.01904	1	320:
30% ###	12/40 [00:02<00:05, 5.08it/s] 0.206G	0.01052	4	200.
437/499	0.206G 0.0236 0.007415 12/40 [00:02<00:05, 5.08it/s]	0.01953	4	320:
30% ###		0.01052	4	200.
437/499 32% ###2	0.206G 0.0236 0.007415 13/40 [00:02<00:05, 5.03it/s]	0.01953	4	320:
	· · · · · ·	0.01014	4	200
437/499	0.206G 0.02279 0.007379	0.01914	1	320:
32% ###2	13/40 [00:02<00:05, 5.03it/s]	0.01014	4	200.
437/499	0.206G 0.02279 0.007379	0.01914	1	320:
35% ###5	•	0.01006	4	200.
437/499	0.206G 0.02286 0.007109	0.01896	1	320:
35% ###5	14/40 [00:02<00:05, 4.99it/s]	0.01006	4	200.
437/499	0.206G 0.02286 0.007109	0.01896	1	320:
38% ###7	15/40 [00:02<00:05, 4.85it/s]	0.0100	4	200
437/499	0.206G 0.02319 0.007655	0.0189	4	320:
38% ###7	15/40 [00:03<00:05, 4.85it/s]	0.0100	А	200
437/499	0.206G 0.02319 0.007655	0.0189	4	320:
40% ####	16/40 [00:03<00:04, 4.85it/s]	0.00000	0	200
437/499	0.206G 0.02392 0.00767	0.02029	2	320:
40% ####	16/40 [00:03<00:04, 4.85it/s]	0.00000	0	200
437/499	0.206G 0.02392 0.00767	0.02029	2	320:

		_				
42% ####2	ı	17/40 [00:03<00:04,				
437/499		0.206G 0.023	0.007379	0.0207	1	320:
42% ####2	١	17/40 [00:03<00:04,				
437/499		0.206G 0.023	0.007379	0.0207	1	320:
45% ####5		18/40 [00:03<00:04,	· -			
437/499		0.206G 0.02249	0.007163	0.02057	1	320:
45% ####5		18/40 [00:03<00:04,	5.00it/s			
437/499		0.206G 0.02249	0.007163	0.02057	1	320:
48% ####7		19/40 [00:03<00:04,	4.97it/s			
437/499		0.206G 0.02276	0.00748	0.02082	4	320:
48% ####7		19/40 [00:03<00:04,	4.97it/s			
437/499		0.206G 0.02276	0.00748	0.02082	4	320:
50% #####		20/40 [00:03<00:04,	4.84it/s]			
437/499		0.206G 0.02268	0.007894	0.02108	4	320:
50% #####		20/40 [00:04<00:04,	4.84it/s]			
437/499		0.206G 0.02268	0.007894	0.02108	4	320:
52% #####2		21/40 [00:04<00:03,	4.97it/s			
437/499		0.206G 0.02235	0.007803	0.02078	1	320:
52% #####2		21/40 [00:04<00:03,	4.97it/s]			
437/499		0.206G 0.02235	0.007803	0.02078	1	320:
55% #####5	-	22/40 [00:04<00:03,	5.28it/s			
437/499		0.206G 0.02193	0.00777	0.02071	2	320:
55% #####5	-	22/40 [00:04<00:03,	5.28it/s			
437/499		0.206G 0.02193	0.00777	0.02071	2	320:
57% #####7	-	23/40 [00:04<00:03,	5.47it/s			
437/499		0.206G 0.02169	0.007735	0.02054	2	320:
57% #####7	-	23/40 [00:04<00:03,	5.47it/s			
437/499		0.206G 0.02169	0.007735	0.02054	2	320:
60% ######	- 1	24/40 [00:04<00:02,	5.43it/s			
437/499		0.206G 0.02161	0.007728	0.0205	2	320:
60% ######	- 1	24/40 [00:04<00:02,				
437/499		0.206G 0.02161	0.007728	0.0205	2	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.53it/s]			
437/499		0.206G 0.02172	0.007658	0.02036	2	320:
	- 1	25/40 [00:05<00:02,				
437/499	·	•	0.007658	0.02036	2	320:
65% ######5	- 1	26/40 [00:05<00:02,				
437/499	·		0.007727	0.02019	3	320:
65% ######5	- 1	26/40 [00:05<00:02,				
437/499	·		0.007727	0.02019	3	320:
68% ######7	- 1	27/40 [00:05<00:02,				
437/499	·	0.206G 0.02297		0.02039	4	320:
68% ######7	1	27/40 [00:05<00:02,		0.0200	-	0_0.
437/499	'	0.206G 0.02297		0.02039	4	320:
70% #######	1	28/40 [00:05<00:02,		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-	==••
437/499	'	0.206G 0.02254		0.0203	2	320:
70% #######	1	28/40 [00:05<00:02,		0.0200	-	
437/499	'	0.206G 0.02254		0.0203	2	320:
-31, 100				0.0200	_	

72% #######2	29/40 [00:05<00:02,	5.47it/s]			
437/499	0.206G 0.02224	0.007998	0.02026	2	320:
72% #######2	29/40 [00:05<00:02,	5.47it/s]			
437/499	0.206G 0.02224	0.007998	0.02026	2	320:
75% ######5	30/40 [00:05<00:01,	5.41it/s			
437/499	0.206G 0.02188	0.007976	0.02021	2	320:
	30/40 [00:05<00:01,				
437/499		0.007976	0.02021	2	320:
	31/40 [00:05<00:01,				
	0.206G 0.02155		0.02043	1	320:
	31/40 [00:06<00:01,		0.00040		000
437/499		0.007824	0.02043	1	320:
	32/40 [00:06<00:01,		0 00000	0	200.
437/499	0.206G 0.02233 32/40 [00:06<00:01,		0.02029	2	320:
437/499		0.007801	0.02029	2	320:
	33/40 [00:06<00:01,		0.02029	۷	320.
	0.206G 0.02244		0.02046	2	320:
	33/40 [00:06<00:01,		0.02010	_	020.
437/499	0.206G 0.02244		0.02046	2	320:
	34/40 [00:06<00:01,		0.02010	_	0_0.
	0.206G 0.02241		0.02044	1	320:
	34/40 [00:06<00:01,				
437/499	0.206G 0.02241	0.007652	0.02044	1	320:
88% #######7	35/40 [00:06<00:00,	5.59it/s			
437/499	0.206G 0.02211	0.007837	0.02034	4	320:
88% #######7	35/40 [00:06<00:00,	5.59it/s			
437/499	0.206G 0.02211	0.007837	0.02034	4	320:
	36/40 [00:06<00:00,				
437/499	0.206G 0.02221		0.0204	4	320:
	36/40 [00:06<00:00,				
437/499		0.007955	0.0204	4	320:
	37/40 [00:06<00:00,				000
437/499	0.206G 0.02188		0.02021	1	320:
	37/40 [00:07<00:00,		0 00001	4	200.
437/499	0.206G 0.02188 38/40 [00:07<00:00,		0.02021	1	320:
437/499		0.007725	0.02007	1	320:
	38/40 [00:07<00:00,		0.02001	1	520.
437/499	0.206G 0.02163		0.02007	1	320:
	39/40 [00:07<00:00,		0.0200.	_	0_0.
437/499			0.02059	2	320:
	39/40 [00:07<00:00,				
	0.206G 0.02187		0.02059	2	320:
100% ##########	40/40 [00:07<00:00	, 5.86it/s]			
437/499	0.206G 0.02187	0.007718	0.02059	2	320:
100% #########	40/40 [00:07<00:00	, 5.35it/s]			

mAP50-95: 0			_	Instances		R	mAP50
Class	mAP50-95:	0% Class				R	mAP50
mAP50-95: 20% ## 4/20 [00:00<00:00, 17.26it/s] mapes Images Instances P R mAP50 mAP50-95: 30% ### 6/20 [00:00<00:00, 16.70it/s] mAP50 mAP50 mAP50 mAP50-95: 40% #### 8/20 [00:00<00:00, 17.09it/s] mAP50 mAP50 mAP50-95: 50% ##### 10/20 [00:00<00:00, 16.66it/s] R mAP50 mAP50-95: 60% ###### 10/20 [00:00<00:00, 16.43it/s] R mAP50 mAP50-95: 60% ###################################	mAP50-95:				15.98it/s]	To the state of th	AREO
Class	mAP50-95:		_		P 17.26it/sl	R	mAP50
Class		Class	Images	Instances	P	R	mAP50
mAP50-95: 40% ##### 8/20 [00:00<00:00, 17.09it/s] mAP50 mAP50-95: Class Class Class Images Instances P R R P R MAP50 mAP50-95: 60% ##### 10/20 [00:00<00:00, 16.66it/s] mAP50 mAP50-95: 60% ###### 12/20 [00:00<00:00, 16.43it/s] mAP50 mAP50-95: 70% ####### 14/20 [00:00<00:00, 16.99it/s] mAP50 mAP50-95: 80% ######## 16/20 [00:00<00:00, 15.93it/s] mAP50 mAP50-95: 80% ######### 16/20 [00:00<00:00, 15.93it/s] mAP50 mAP50-95: 95% ############ 16/20 [00:00<00:00, 17.75it/s] mAP50 mAP50-95: 95% ########### 19/20 [00:01<00:00, 17.75it/s] mAP50 mAP50-95: 100% ############ 19/20 [00:01<00:00, 17.75it/s] mAP50 mAP50-95: 95% ################# 20/20 [00:01<00:00, 16.98it/s] 0.975 0.994 0.795 mAP50 MAP50 40 0.981 0.975 0.994 0.795 Epoch GPU_mem box_loss obj_loss cls_loss Instances Size P R mAP50 438/499 0.2066 0.02715 0.01051 0.0174 2 320: 0.020 0.0216 0.0174 2 320: 0.02174 2 320: <t< td=""><td>mAP50-95:</td><td></td><td></td><td></td><td></td><td>p</td><td>m / D50</td></t<>	mAP50-95:					p	m / D50
mAP50-95: 50% ##### 10√20 [00:00<00:00, 16.66it/s] Images Instances P R mAP50 mAP50-95: 60% ###### 12/20 [00:00<00:00, 16.43it/s] Rap50 P R mAP50 mAP50-95: 60% ####### 14/20 [00:00<00:00, 16.99it/s] Rap50 Rap50-95: Rap50 Rap50 mAP50-95: 80% ####### 16/20 [00:00<00:00, 15.93it/s] Rap50-95: 80% ######## 16/20 [00:00<00:00, 15.93it/s] Rap50-95: Rap50 Rap50 mAP50-95: 95% ########## 19/20 [00:01<00:00, 17.75it/s] Rap50-95: Rap50 Rap50 Rap50-95: Rap50 Rap50-95: Rap50 Rap50 Rap50 Rap50 Rap50 Rap50 Rap50-95: Rap50 Ra	mAP50-95:		•			11	IIIAF 30
mAP50-95: 60% ####### 12/20 [00:00<00:00, 16.43it/s] mAP50 mAP50-95: 60% ####### 12/20 [00:00<00:00, 16.43it/s] mAP50 mAP50-95: 70% ######## 14/20 [00:00<00:00, 16.99it/s] mAP50 mAP50-95: 80% ######## 16/20 [00:00<00:00, 15.93it/s] mAP50 mAP50-95: 95% ######### 19/20 [00:01<00:00, 17.75it/s] mAP50 mAP50-95: 95% ########## 19/20 [00:01<00:00, 17.75it/s] mAP50 mAP50-95: 100% ########## 14/20 [00:00 17.75it/s] mAP50 mAP50-95: 100% ############ 20/20 [00:01<00:00, 16.98it/s] mAP50 mAP50-95: 100% ##################################			•			R	mAP50
mAP50-95: 60% ##### 12/20 100:00<00:00, 16.43it/s 1 mages 1 mages 1 matances P R maP50 mAP50-95: 70% ###################################	mAP50-95:					R	mΔP50
mAP50-95: 70% ###### 14/20 [00:00 16.99it/s] mAP50 mAP50-95: 80% ####### 16/20 [00:00 15.93it/s] mAP50 mAP50-95: 80% ######## 16/20 [00:01 15.93it/s] mAP50 mAP50-95: 95% ######## 19/20 [00:01 17.75it/s] mAP50 mAP50-95: 100% ######### 20/20 [00:01 16.98it/s] mAP50 mAP50-95: 100% ########## 20/20 [00:01 16.98it/s] 0.994 Class Images Instances P R mAP50 mAP50-95: 100% ############### 20/20 [00:01 40 0.98it 0.975 0.994 O.795 Epoch GPU_mem box_loss obj_loss obj_loss Cls_loss Instances Size O% GPU_mem box_loss obj_loss obj_loss O.01744 2 320: O% O/40 [00:00 0.02715 0.01051 0.0174 2 320: O% O/40 [00:00 O% O/40 [00:00 O% O/40 [00:0	mAP50-95:		_			10	IIIAI OO
mAP50-95: 80% #######			_			R	mAP50
mAP50-95: 80% ########	mAP50-95:					R	mAP50
mAP50-95: 95% #########5 19/20 [00:01<00:00, 17.75it/s] R mAP50 mAP50-95: 100% ########## 20/20 [00:01<00:00, 16.98it/s]	mAP50-95:		_			16	MAI OO
Class Images Instances P R mAP50 mAP50-95: 100% ###################################			_			R	mAP50
mAP50-95: 100% ######### 20/20 [00:01<00:00, 16.98it/s]	mAP50-95:					D	m / DEO
Epoch GPU_mem box_loss obj_loss cls_loss Instances Size 0%	mAP50-95: 10		_			11.	MAFSO
Epoch GPU_mem box_loss obj_loss cls_loss Instances Size 0%						0.975	0.994
0%	0.795						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
0%	0%	Ι 0/40 Γο		. / 7			
438/499 0.206G 0.02715 0.01051 0.0174 2 320: 2% 2 1/40 [00:00<00:06, 6.41it/s]	120/100	1 0/ 10 [0):00 , ?i</td <td>.t/s]</td> <td></td> <td></td> <td></td>	.t/s]			
2% 2		0.206G	0.02715	0.01051	0.0174	2	320:
438/499	0%	0.206G 0/40 [00:0	0.02715 00 , ?it/</td <td>0.01051 s]</td> <td></td> <td></td> <td></td>	0.01051 s]			
438/499 0.206G 0.01848 0.008443 0.01763 2 320: 5% 5 2/40 [00:00<00:06, 6.00it/s]	0% 438/499	0.206G 0/40 [00:0 0.206G	0.02715 00 , ?it/<br 0.02715	0.01051 [s] 0.01051			
5% 5	0% 438/499 2% 2	0.206G 0/40 [00:0 0.206G 1/40 [00:0	0.02715 00 , ?it/<br 0.02715 00<00:06,	0.01051 [s] 0.01051 6.41it/s]	0.0174	2	320:
438/499	0% 438/499 2% 2 438/499	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848	0.01051 s] 0.01051 6.41it/s] 0.008443	0.0174	2	320:
5% 5	0% 438/499 2% 2 438/499 2% 2 438/499	0.206G 0/40 [00:0 0.206G 1/40 [00:0 1/40 [00:0 0.206G	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848 00<00:06, 0.01848	0.01051 (s) 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443	0.0174 0.01763	2	320: 320:
438/499	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848 00<00:06, 0.01848	0.01051 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s]	0.0174 0.01763 0.01763	2 2 2	320: 320: 320:
8% 7	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5 438/499	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 2/40 [00:0 0.206G	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848 00<00:06, 0.01848	0.01051 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916	0.0174 0.01763 0.01763	2 2 2	320: 320: 320:
438/499	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5 438/499 5% 5	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 2/40 [00:0	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848 00<00:06, 0.01848 00<00:06, 0.01742	0.01051 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s]	0.0174 0.01763 0.01763 0.01686	2 2 2	320: 320: 320: 320:
8% 7	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5 438/499 5% 5 438/499	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848 00<00:06, 0.01848 00<00:06, 0.01742	0.01051 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s]	0.0174 0.01763 0.01763 0.01686	2 2 2	320: 320: 320: 320:
438/499 0.206G 0.01505 0.007167 0.01713 2 320: 10% # 4/40 [00:00<00:05, 6.03it/s] 438/499 0.206G 0.01592 0.007625 0.01693 2 320: 10% # 4/40 [00:00<00:05, 6.03it/s] 438/499 0.206G 0.01592 0.007625 0.01693 2 320:	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5 438/499 5% 5 438/499 8% 7	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848 00<00:06, 0.01848 00<00:06, 0.01742 00<00:06, 0.01742	0.01051 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s] 0.006916 6.18it/s]	0.0174 0.01763 0.01763 0.01686 0.01686	2 2 2 1	320: 320: 320: 320: 320:
438/499 0.206G 0.01592 0.007625 0.01693 2 320: 10% # 4/40 [00:00<00:05, 6.03it/s] 438/499 0.206G 0.01592 0.007625 0.01693 2 320:	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5 438/499 5% 5 438/499 8% 7 438/499	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848 00<00:06, 0.01742 00<00:06, 0.01742 00<00:05, 0.01505	0.01051 s] 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s] 0.006916 6.18it/s] 0.007167	0.0174 0.01763 0.01763 0.01686 0.01686	2 2 2 1	320: 320: 320: 320: 320:
10% # 4/40 [00:00<00:05, 6.03it/s] 438/499 0.206G 0.01592 0.007625 0.01693 2 320:	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5 438/499 8% 7 438/499 8% 7 438/499	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848 00<00:06, 0.01742 00<00:06, 0.01742 00<00:05, 0.01505 00<00:05, 0.01505	0.01051 s] 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s] 0.006916 6.18it/s] 0.007167 6.18it/s] 0.007167	0.0174 0.01763 0.01763 0.01686 0.01686 0.01713	2 2 2 1 1 2	320: 320: 320: 320: 320:
438/499 0.206G 0.01592 0.007625 0.01693 2 320:	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5 438/499 5% 5 438/499 8% 7 438/499 10% #	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0	0.02715 00 , ?it/<br 0.02715 00<00:06, 0.01848 00<00:06, 0.01742 00<00:06, 0.01742 00<00:05, 0.01505 00<00:05, 0.01505 :00<00:05,	0.01051 s] 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s] 0.006916 6.18it/s] 0.007167 6.18it/s] 0.007167 6.03it/s]	0.0174 0.01763 0.01763 0.01686 0.01686 0.01713	2 2 2 1 1 2 2	320: 320: 320: 320: 320: 320:
	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5 438/499 5% 5 438/499 8% 7 438/499 8% 7 438/499 10% # 438/499	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00	0.02715 00 , ?it/ 0.02715 00<00:06, 0.01848 00<00:06, 0.01742 00<00:06, 0.01742 00<00:05, 0.01505 00<00:05, 0.01505 :00<00:05, 0.01505</td <td>0.01051 s] 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s] 0.006916 6.18it/s] 0.007167 6.18it/s] 0.007167 6.03it/s] 0.007625</td> <td>0.0174 0.01763 0.01763 0.01686 0.01686 0.01713</td> <td>2 2 2 1 1 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	0.01051 s] 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s] 0.006916 6.18it/s] 0.007167 6.18it/s] 0.007167 6.03it/s] 0.007625	0.0174 0.01763 0.01763 0.01686 0.01686 0.01713	2 2 2 1 1 2 2	320: 320: 320: 320: 320: 320:
	0% 438/499 2% 2 438/499 2% 2 438/499 5% 5 438/499 5% 5 438/499 8% 7 438/499 10% # 438/499 10% #	0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00 0.206G 4/40 [00	0.02715 00 , ?it/ 0.02715 00<00:06, 0.01848 00<00:06, 0.01742 00<00:06, 0.01742 00<00:05, 0.01505 00<00:05, 0.01592 :00<00:05,</td <td>0.01051 s] 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s] 0.006916 6.18it/s] 0.007167 6.18it/s] 0.007625 6.03it/s]</td> <td>0.0174 0.01763 0.01763 0.01686 0.01686 0.01713 0.01713</td> <td>2 2 2 1 1 2 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	0.01051 s] 0.01051 6.41it/s] 0.008443 6.41it/s] 0.008443 6.00it/s] 0.006916 6.00it/s] 0.006916 6.18it/s] 0.007167 6.18it/s] 0.007625 6.03it/s]	0.0174 0.01763 0.01763 0.01686 0.01686 0.01713 0.01713	2 2 2 1 1 2 2	320: 320: 320: 320: 320: 320: 320:

438/499	0.206G 0.01985 0	.01003 0.01774	4 3	320:
12% #2	5/40 [00:01<00:05, 5.5			
438/499	0.206G 0.01985 0		4 3	320:
15% #5	6/40 [00:01<00:06, 5.			
438/499		0.0177	1 3	320:
15% #5	6/40 [00:01<00:06, 5.			
438/499		0.0177	1 3	320:
18% #7	7/40 [00:01<00:05, 5.			
438/499		0.01815	1 3	320:
18% #7	·	63it/s]		
438/499		008504 0.01815	1 3	320:
20% ##	8/40 [00:01<00:05, 5.0			
438/499		008604 0.02119	2 3	320:
20% ##	8/40 [00:01<00:05, 5.			
438/499		008604 0.02119	2 3	320:
22% ##2	9/40 [00:01<00:05, 5.			
438/499		0.02066	2 3	320:
22% ##2	9/40 [00:01<00:05, 5.			
438/499	0.206G 0.02023 0.		2 3	320:
25% ##5	10/40 [00:01<00:05, 5	· -		
·	0.206G 0.01934 0.		1 3	320:
25% ##5	10/40 [00:01<00:05, 5			
438/499	0.206G 0.01934 0.		1 3	320:
28% ##7	11/40 [00:01<00:05, 5			
438/499		0.02063	4 3	320:
28% ##7	11/40 [00:02<00:05, 5			
438/499	0.206G 0.01972 0.		4 3	320:
30% ###	12/40 [00:02<00:05, 5			
438/499	0.206G 0.01954 0.		4 3	320:
30% ###	12/40 [00:02<00:05, 5	· -		
438/499	0.206G 0.01954 0.		4 3	320:
32% ###2	13/40 [00:02<00:04, 5			
438/499	0.206G 0.01969 0		4 3	320:
32% ###2	13/40 [00:02<00:04, 5			
438/499		.01052 0.02068	4 3	320:
35% ###5	·	.48it/s]		
438/499		.01062 0.02231	2 3	320:
35% ###5	14/40 [00:02<00:04, 5			
438/499	0.206G 0.02031 0		2 3	320:
38% ###7	15/40 [00:02<00:04, 5			
438/499	0.206G 0.02021		4 3	320:
38% ###7	15/40 [00:02<00:04, 5			
438/499	0.206G 0.02021		4 3	320:
40% ####		.31it/s]		
438/499		.01067 0.02184	2 3	320:
40% ####	16/40 [00:03<00:04, 5			
438/499	0.206G 0.01973 0		2 3	320:
42% ####2	17/40 [00:03<00:04, 5	.43it/s]		

438/499	0.206G 0.01917 0.01043	0.02157	2	320:
42% ####2	17/40 [00:03<00:04, 5.43it/s]			
438/499	0.206G 0.01917 0.01043	0.02157	2	320:
45% ####5	18/40 [00:03<00:04, 5.40it/s]	0.00440	•	000
438/499	0.206G 0.01905 0.01037	0.02119	2	320:
45% ####5 438/499	18/40 [00:03<00:04, 5.40it/s] 0.206G	0.02119	2	320:
430/499	19/40 [00:03<00:03, 5.52it/s]	0.02119	2	320:
438/499	0.206G 0.01882 0.01007	0.02078	1	320:
48% ####7	19/40 [00:03<00:03, 5.52it/s]	0.02010	1	520.
438/499	0.206G 0.01882 0.01007	0.02078	1	320:
50% #####	20/40 [00:03<00:03, 5.18it/s]	0.02010	-	020.
438/499	0.206G 0.01818 0.009712	0.02048	1	320:
50% #####	20/40 [00:03<00:03, 5.18it/s]			
438/499	0.206G 0.01818 0.009712	0.02048	1	320:
52% #####2	21/40 [00:03<00:03, 5.36it/s]			
438/499	0.206G 0.01779 0.009598	0.02043	2	320:
52% #####2	21/40 [00:03<00:03, 5.36it/s]			
438/499	0.206G 0.01779 0.009598	0.02043	2	320:
55% #####5	22/40 [00:03<00:03, 5.34it/s]			
438/499	0.206G 0.01745 0.009409	0.02017	1	320:
55% #####5	22/40 [00:04<00:03, 5.34it/s]			
438/499	0.206G 0.01745 0.009409	0.02017	1	320:
57% #####7	23/40 [00:04<00:03, 5.47it/s]			
438/499	0.206G 0.0175 0.009243	0.02002	2	320:
57% #####7	23/40 [00:04<00:03, 5.47it/s]			
438/499	0.206G 0.0175 0.009243	0.02002	2	320:
60% ######	24/40 [00:04<00:02, 5.57it/s]			
438/499	0.206G 0.018 0.009223	0.01978	2	320:
60% ######	24/40 [00:04<00:02, 5.57it/s]		_	
438/499	0.206G 0.018 0.009223	0.01978	2	320:
62% ######2	25/40 [00:04<00:02, 5.64it/s]	0.04050		000
438/499	0.206G 0.01767 0.009079	0.01952	2	320:
62% ######2	25/40 [00:04<00:02, 5.64it/s]	0.04050	•	000
438/499	0.206G 0.01767 0.009079	0.01952	2	320:
	26/40 [00:04<00:02, 5.68it/s]	0.04044	0	200
438/499	0.206G 0.01906 0.008913	0.01944	2	320:
65% ######5	26/40 [00:04<00:02, 5.68it/s]	0.01044	0	200.
438/499	0.206G 0.01906 0.008913	0.01944	2	320:
68% ######7 438/499	27/40 [00:04<00:02, 5.72it/s]	0.01926	2	220.
438/499 68% #####7	0.206G 0.01875 0.008767 27/40 [00:05<00:02, 5.72it/s]	0.01920	2	320:
438/499	0.206G 0.01875 0.008767	0.01926	2	320:
70% ######	28/40 [00:05<00:02, 5.74it/s]	0.01320	4	J∠U.
438/499	0.206G 0.01904 0.008936	0.01922	4	320:
70% ######	28/40 [00:05<00:02, 5.74it/s]	0.01022	- T	020.
438/499	0.206G 0.01904 0.008936	0.01922	4	320:
72% #######2	29/40 [00:05<00:01, 5.75it/s]	0.01022	•	020.
_,,,	, 1, 11 [11.00 00.01, 0.1010/b]			

	0.206G 0.01885		0.01908	1	320:
	29/40 [00:05<00:01,		0.04000	4	200
438/499	*		0.01908	1	320:
	30/40 [00:05<00:01, 0.206G 0.01949		0 01061	0	200.
438/499 75% ######5	0.206G 0.01949 30/40 [00:05<00:01,		0.01961	2	320:
438/499			0.01961	2	320:
	31/40 [00:05<00:01,		0.01901	2	520.
	0.206G 0.0192		0.01945	2	320:
	31/40 [00:05<00:01,		0.01516	2	020.
438/499			0.01945	2	320:
•	32/40 [00:05<00:01,		0.01010	_	0_0.
	0.206G 0.01941		0.01932	2	320:
	32/40 [00:05<00:01,				
438/499	•	0.008553	0.01932	2	320:
82% ########	33/40 [00:05<00:01,				
	0.206G 0.01908		0.01931	1	320:
82% ########2	33/40 [00:06<00:01,	5.58it/s]			
438/499	0.206G 0.01908	0.008416	0.01931	1	320:
85% #######5	34/40 [00:06<00:01,	5.65it/s]			
438/499	0.206G 0.01892	0.008286	0.01915	1	320:
85% #######5	34/40 [00:06<00:01,	5.65it/s]			
438/499	0.206G 0.01892	0.008286	0.01915	1	320:
88% #######7	35/40 [00:06<00:00,	5.67it/s			
438/499	0.206G 0.01886	0.008225	0.01904	1	320:
88% #######7	35/40 [00:06<00:00,	5.67it/s]			
438/499	0.206G 0.01886	0.008225	0.01904	1	320:
90% #######	36/40 [00:06<00:00,	5.71it/s]			
438/499	0.206G 0.01963		0.019	4	320:
	36/40 [00:06<00:00,				
438/499		0.008358	0.019	4	320:
	37/40 [00:06<00:00,				
438/499	0.206G 0.01952	0.008332	0.01899	2	320:
	37/40 [00:06<00:00,			_	
	0.206G 0.01952		0.01899	2	320:
	38/40 [00:06<00:00,		0.04004	_	000
438/499		0.008221	0.01901	1	320:
	38/40 [00:06<00:00,		0.01001	4	200.
438/499	0.206G 0.01922 39/40 [00:06<00:00,	0.008221	0.01901	1	320:
438/499			0.0189	1	320:
	39/40 [00:07<00:00,		0.0109	1	320.
		0.008098	0.0189	1	320:
	40/40 [00:07<00:00		0.0105	1	020.
438/499		0.008098	0.0189	1	320:
	40/40 [00:07<00:00		0.0100	-	
	Class Images	Instances	Р	R	mAP50
	9				

mAP50-95:	0%	1 0/20 [0	0:00 , ?it/</th <th>al</th> <th></th> <th></th>	al		
MAP50-95.	Class		Instances		R	mAP50
mAP50-95:	10% #	•	0:00<00:01,		10	mai oo
miii co oc.	Class		Instances		R	mAP50
mAP50-95:	20% ##	_	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	30% ###	•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	40% ####	8/20 [0	0:00<00:00,	15.16it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	50% #####	10/20 [00:00<00:00,	14.77it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	60% #####	12/20 [00:00<00:00,	14.58it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:			00:01<00:00,			
1750 05	Class		Instances		R	mAP50
mAP50-95:	90% #########					1750
ADEO OF .	Class	_	Instances		R	mAP50
mAP50-95:	100% ##########					ADEO
∞	Class 100% ##########	_	Instances		R	mAP50
MAP50-95:	all	40 - 40	40	0.982	0.988	0.995
0.808	all	40	40	0.902	0.900	0.995
Epoc	h GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
-			0 –			
0%1	0/40 [00):00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
439/49	9 0.206G	0.02264	0.0153	0.02439	4	320:
0%	0/40 [00:0	0 , ?it/</td <td>s]</td> <td></td> <td></td> <td></td>	s]			
439/49			0.0153	0.02439	4	320:
2% 2	1/40 [00:0	00<00:07,	5.32it/s			
	9 0.206G		0.009607	0.02056	1	320:
	1/40 [00:0					
439/49			0.009607	0.02056	1	320:
5% 5						
439/49				0.02026	2	320:
5% 5						
439/49			0.008396	0.02026	2	320:
8% 7						
439/49			0.01116	0.02019	4	320:
8% 7		-				
439/49			0.01116	0.02019	4	320:
10% #						
	9 0.206G			0.02	1	320:
10% #	Ι 4/40 Γ00.	00200.07	4 02:+/~1			
439/49	4/40 [00: 9			0.02	1	320:

12% #2	5/40 [00:00<00:06, 5.05it/s]			
439/499	0.206G 0.02074 0.01091	0.0207	4	320:
12% #2	5/40 [00:01<00:06, 5.05it/s]			
		0.0207	4	320:
15% #5	6/40 [00:01<00:06, 5.00it/s]		_	
439/499	0.206G 0.02547 0.01055	0.02053	3	320:
15% #5	6/40 [00:01<00:06, 5.00it/s]			
439/499	0.206G 0.02547 0.01055	0.02053	3	320:
18% #7	7/40 [00:01<00:06, 4.98it/s]		_	
439/499	0.206G 0.02482 0.01077	0.02038	4	320:
18% #7	7/40 [00:01<00:06, 4.98it/s]		_	
- · ·	0.206G 0.02482 0.01077	0.02038	4	320:
20% ##	8/40 [00:01<00:06, 4.83it/s]		_	
439/499	0.206G 0.02521 0.01054	0.02088	2	320:
20% ##	8/40 [00:01<00:06, 4.83it/s]			
439/499	0.206G 0.02521 0.01054	0.02088	2	320:
22% ##2	9/40 [00:01<00:06, 4.97it/s]			
439/499	0.206G 0.02752 0.0106	0.02037	3	320:
22% ##2	9/40 [00:02<00:06, 4.97it/s]			
439/499	0.206G 0.02752 0.0106	0.02037	3	320:
25% ##5	10/40 [00:02<00:06, 4.96it/s]			
439/499	0.206G 0.02566 0.009865	0.02051	1	320:
25% ##5	10/40 [00:02<00:06, 4.96it/s]			
439/499	0.206G 0.02566 0.009865	0.02051	1	320:
28% ##7	11/40 [00:02<00:05, 5.05it/s]			
439/499	0.206G 0.02689 0.009639	0.021	2	320:
28% ##7	11/40 [00:02<00:05, 5.05it/s]			
439/499	0.206G 0.02689 0.009639	0.021	2	320:
30% ###	12/40 [00:02<00:05, 5.14it/s]			
439/499	0.206G 0.02554 0.00916	0.02029	1	320:
30% ###	12/40 [00:02<00:05, 5.14it/s]			
439/499	0.206G 0.02554 0.00916	0.02029	1	320:
32% ###2	13/40 [00:02<00:05, 5.25it/s]			
439/499	0.206G 0.027 0.009016	0.02021	2	320:
32% ###2	13/40 [00:02<00:05, 5.25it/s]			
439/499	0.206G 0.027 0.009016	0.02021	2	320:
35% ###5	14/40 [00:02<00:04, 5.20it/s]			
439/499	0.206G 0.02726 0.009476	0.021	3	320:
35% ###5	14/40 [00:02<00:04, 5.20it/s]			
439/499	0.206G 0.02726 0.009476	0.021	3	320:
38% ###7	15/40 [00:02<00:04, 5.24it/s]			
439/499	0.206G 0.02644 0.009135	0.02058	1	320:
38% ###7	15/40 [00:03<00:04, 5.24it/s]			
439/499	0.206G 0.02644 0.009135	0.02058	1	320:
40% ####	16/40 [00:03<00:04, 5.25it/s]			
439/499	0.206G 0.0254 0.008906	0.02025	2	320:
40% ####	16/40 [00:03<00:04, 5.25it/s]			
439/499	0.206G 0.0254 0.008906	0.02025	2	320:

42% ####2	I	17/40 [00:03<00:04,				
439/499		0.206G 0.0251		0.02014	4	320:
42% ####2	١	17/40 [00:03<00:04,				
439/499		0.206G 0.0251	0.008995	0.02014	4	320:
45% ####5	١	18/40 [00:03<00:04,				
439/499		0.206G 0.02611		0.02001	2	320:
45% ####5	ı	18/40 [00:03<00:04,				
439/499		0.206G 0.02611		0.02001	2	320:
48% ####7	ı	19/40 [00:03<00:03,				
439/499		0.206G 0.02548		0.01988	1	320:
48% ####7	ı	19/40 [00:03<00:03,				
439/499		0.206G 0.02548	0.008898	0.01988	1	320:
50% #####	ı	20/40 [00:03<00:03,				
439/499		0.206G 0.02489		0.01967	1	320:
50% #####	ı	20/40 [00:04<00:03,				
439/499		0.206G 0.02489		0.01967	1	320:
52% #####2	ı	21/40 [00:04<00:03,				
439/499		0.206G 0.02517		0.01989	2	320:
52% #####2	١	21/40 [00:04<00:03,				
439/499		0.206G 0.02517	0.008552	0.01989	2	320:
55% #####5	١	22/40 [00:04<00:03,				
439/499		0.206G 0.02511		0.01988	4	320:
55% #####5		22/40 [00:04<00:03,				
439/499		0.206G 0.02511	0.008971	0.01988	4	320:
57% #####7		23/40 [00:04<00:03,	5.41it/s			
439/499		0.206G 0.02447		0.01961	1	320:
57% #####7		23/40 [00:04<00:03,	5.41it/s			
439/499		0.206G 0.02447	0.00878	0.01961	1	320:
60% ######		24/40 [00:04<00:02,	5.53it/s			
439/499		0.206G 0.02421		0.01963	4	320:
60% ######	- 1	24/40 [00:04<00:02,	5.53it/s			
439/499		0.206G 0.02421		0.01963	4	320:
62% #####2	- 1	25/40 [00:04<00:02,	5.48it/s			
439/499		0.206G 0.02392	0.009039	0.02009	4	320:
62% #####2	- 1	25/40 [00:04<00:02,	5.48it/s			
439/499		0.206G 0.02392	0.009039	0.02009	4	320:
65% #####5	-	26/40 [00:04<00:02,	5.43it/s			
439/499		0.206G 0.02376	0.00923	0.02021	4	320:
65% #####5	-	26/40 [00:05<00:02,	5.43it/s			
439/499		0.206G 0.02376	0.00923	0.02021	4	320:
68% #####7	- 1	27/40 [00:05<00:02,	5.55it/s]			
439/499		0.206G 0.02365	0.00916	0.02034	2	320:
68% ######7	- 1	27/40 [00:05<00:02,	5.55it/s]			
439/499		0.206G 0.02365	0.00916	0.02034	2	320:
70% #######	- 1	28/40 [00:05<00:02,	5.45it/s			
439/499		0.206G 0.02327	0.00896	0.02025	1	320:
70% #######	- 1	28/40 [00:05<00:02,	5.45it/s			
439/499		0.206G 0.02327	0.00896	0.02025	1	320:

72% #######2	29/40 [00:05<00:02,	5.42it/s]			
439/499	0.206G 0.0233		0.02128	2	320:
72% #######2	29/40 [00:05<00:02,	5.42it/s			
439/499	0.206G 0.0233	0.008887	0.02128	2	320:
75% ######5	30/40 [00:05<00:01,	5.53it/s			
439/499	0.206G 0.02279	0.00872	0.02102	1	320:
75% ######5	30/40 [00:05<00:01,	5.53it/s			
439/499			0.02102	1	320:
	31/40 [00:05<00:01,				
439/499			0.02094	1	320:
	31/40 [00:06<00:01,				
439/499			0.02094	1	320:
	32/40 [00:06<00:01,		0.00444	0	000
439/499			0.02116	2	320:
	32/40 [00:06<00:01,		0.00116	0	200.
439/499		0.008529	0.02116	2	320:
	33/40 [00:06<00:01,		0 00007	1	320:
	0.206G 0.02216 33/40 [00:06<00:01,		0.02097	1	320:
439/499	0.206G 0.02216		0.02097	1	320:
	34/40 [00:06<00:01,		0.02091	1	320.
439/499		0.008278	0.02085	2	320:
	34/40 [00:06<00:01,		0.02000	2	020.
439/499		0.008278	0.02085	2	320:
	35/40 [00:06<00:00,			_	
439/499	0.206G 0.02177		0.02066	1	320:
	35/40 [00:06<00:00,				
439/499	0.206G 0.02177	0.008178	0.02066	1	320:
90% ########	36/40 [00:06<00:00,	5.60it/s]			
439/499	0.206G 0.0213	0.008047	0.02059	1	320:
90% ########	36/40 [00:06<00:00,	5.60it/s]			
439/499	0.206G 0.0213	0.008047	0.02059	1	320:
92% ########2	37/40 [00:06<00:00,	5.65it/s]			
439/499	0.206G 0.02214		0.02123	2	320:
	37/40 [00:07<00:00,				
	0.206G 0.02214		0.02123	2	320:
	38/40 [00:07<00:00,			_	
439/499		0.007929	0.02107	2	320:
	38/40 [00:07<00:00,		0.00407	0	200
439/499	0.206G 0.02271		0.02107	2	320:
	39/40 [00:07<00:00,		0 00005	4	200.
•	0.206G 0.02265 39/40 [00:07<00:00,		0.02095	1	320:
	0.206G 0.02265		0.02095	1	320:
	40/40 [00:07<00:00		0.02030	1	J∠U.
439/499		0.007818	0.02095	1	320:
	40/40 [00:07<00:00			-	020.
/ -	. 10, 10 [00:01 100:00	, [

mAP50-95: 10% # 2/20 [00:00<00:01, 16.08it/s] Class Images Instances P R mAP50-95: MAP50-95: 20% ## 4/20 [00:00<00:00, 16.03it/s] R mAP50-95: MAP50-95: 30% ### 6/20 [00:00<00:00, 16.81it/s] R mAP50-95: MAP50-95: 40% #### 8/20 [00:00<00:00, 16.51it/s] R mAP50-95: Class Images Instances P R mAP50-95:	.P50 .P50 .P50
mAP50-95: 10% # 2/20 [00:00<00:01, 16.08it/s]	.P50 .P50 .P50
Class Images Instances P R mAP50-95: 20% ## 4/20 [00:00<00:00, 16.03it/s] Class Images Instances P R mAP50-95: 30% ### 6/20 [00:00<00:00, 16.81it/s] Class Images Instances P R mAP50-95: 40% #### 8/20 [00:00<00:00, 16.51it/s] Class Images Instances P R mAP50-95: 40% #### 8/20 [00:00<00:00, 16.51it/s]	.P50 .P50
Class Images Instances P R mAP50-95: 30% ### 6/20 [00:00<00:00, 16.81it/s] Class Images Instances P R mAP50-95: 40% #### 8/20 [00:00<00:00, 16.51it/s] Class Images Instances P R mAP50-95: P R MA	.P50
mAP50-95: 30% ### 6/20 [00:00<00:00, 16.81it/s]	.P50
Class Images Instances P R mA mAP50-95: 40% #### 8/20 [00:00<00:00, 16.51it/s] Class Images Instances P R mA	
mAP50-95: 40% #### 8/20 [00:00<00:00, 16.51it/s] Class Images Instances P R mA	
Class Images Instances P R mA	
<u> </u>	P50
mAP50-95: 50% ##### 10/20 [00:00<00:00, 15.61it/s]	100
	.P50
mAP50-95: 60% ###### 12/20 [00:00<00:00, 16.42it/s]	
Class Images Instances P R mA	.P50
mAP50-95: 75% #######5 15/20 [00:00<00:00, 17.35it/s]	
0	P50
mAP50-95: 85% #######5 17/20 [00:01<00:00, 16.94it/s]	
8	.P50
mAP50-95: 95% #######5 19/20 [00:01<00:00, 17.31it/s]	DEO
Class Images Instances P R mA mAP50-95: 100% ######## 20/20 [00:01<00:00, 16.99it/s]	.P50
	995
0.808	990
Epoch GPU_mem box_loss obj_loss cls_loss Instances S	lize
0% 0/40 [00:00 , ?it/s]</td <td>200</td>	200
440/499 0.206G 0.03264 0.009068 0.02244 3 0% 0/40 [00:00 , ?it/s]</td <td>320:</td>	320:
•	320:
2% 2 1/40 [00:00<00:07, 4.91it/s]	020.
440/499 0.206G 0.02132 0.0059 0.02009 1	320:
2% 2 1/40 [00:00<00:07, 4.91it/s]	
440/499 0.206G 0.02132 0.0059 0.02009 1	320:
5% 5 2/40 [00:00<00:06, 5.69it/s]	
440/499 0.206G 0.03177 0.005542 0.01988 2	320:
5% 5 2/40 [00:00<00:06, 5.69it/s]	
440/499 0.206G 0.03177 0.005542 0.01988 2	320:
440/499 0.206G 0.03177 0.005542 0.01988 2 8% 7 3/40 [00:00<00:06, 5.74it/s]	
440/499 0.206G 0.03177 0.005542 0.01988 2 8% 7 3/40 [00:00<00:06, 5.74it/s] 440/499 0.206G 0.02757 0.00538 0.02 2	320: 320:
440/499 0.206G 0.03177 0.005542 0.01988 2 8% 7 3/40 [00:00<00:06, 5.74it/s] 440/499 0.206G 0.02757 0.00538 0.02 2 8% 7 3/40 [00:00<00:06, 5.74it/s]	320:
440/499	
440/499	320:
440/499	320: 320:
440/499	320: 320:

440/400	0.0060 0.00207	0 004650	0.01001	4	200
	0.206G 0.02327		0.01881	1	320:
12% #2	5/40 [00:01<00:06,		0 01001	4	200.
440/499	0.206G 0.02327		0.01881	1	320:
15% #5	6/40 [00:01<00:06,		0.04000	0	000
440/499		0.005082	0.01936	3	320:
15% #5	6/40 [00:01<00:06,		0.04000		000
440/499		0.005082	0.01936	3	320:
18% #7	7/40 [00:01<00:05,			_	
440/499		0.005198	0.01912	2	320:
18% #7	· · · · · · · · · · · · · · · · · · ·				
440/499	0.206G 0.02887		0.01912	2	320:
20% ##	8/40 [00:01<00:05,				
440/499	0.206G 0.02674		0.01893	1	320:
20% ##	8/40 [00:01<00:05,	5.72it/s]			
440/499	0.206G 0.02674	0.00503	0.01893	1	320:
22% ##2	9/40 [00:01<00:05,	5.74it/s]			
440/499	0.206G 0.02652	0.005493	0.0185	2	320:
22% ##2	9/40 [00:01<00:05,	5.74it/s]			
440/499	0.206G 0.02652	0.005493	0.0185	2	320:
25% ##5	10/40 [00:01<00:05,	5.61it/s]			
440/499	0.206G 0.0257	0.006136	0.0191	4	320:
25% ##5	10/40 [00:01<00:05,	5.61it/s]			
440/499	0.206G 0.0257	0.006136	0.0191	4	320:
28% ##7	11/40 [00:01<00:05,	5.36it/s]			
440/499	0.206G 0.02443	0.006058	0.01851	1	320:
28% ##7	11/40 [00:02<00:05,	5.36it/s]			
440/499	0.206G 0.02443		0.01851	1	320:
30% ###	12/40 [00:02<00:05,				
440/499		0.007068	0.01872	4	320:
30% ###	12/40 [00:02<00:05,				
440/499	0.206G 0.02459		0.01872	4	320:
32% ###2	13/40 [00:02<00:04,				
440/499	0.206G 0.02503	· -	0.01859	2	320:
32% ###2	13/40 [00:02<00:04,			_	
440/499		0.007496	0.01859	2	320:
35% ###5	14/40 [00:02<00:04,		0.01000	-	020.
440/499		0.007154	0.01802	1	320:
35% ###5	14/40 [00:02<00:04,		0.01002	-	020.
440/499	0.206G 0.02434		0.01802	1	320:
38% ###7	15/40 [00:02<00:04,		0.01002	-	020.
440/499		0.007167	0.01827	2	320:
38% ###7	15/40 [00:02<00:04,		0.01027	2	520.
			0 01997	n	220.
440/499	0.206G 0.02583 16/40 [00:02<00:04,		0.01827	2	320:
40% ####	· · · · · · · · · · · · · · · · · · ·	0.006973	0 01007	1	300.
440/499			0.01807	1	320:
40% ####	16/40 [00:03<00:04,		0 01007	4	200.
440/499	0.206G 0.02514		0.01807	1	320:
42% ####2	17/40 [00:03<00:04,	5.481t/s]			

440/499	0.206G 0.0247 0.007221	0.01837	4	320:
42% ####2	17/40 [00:03<00:04, 5.48it/s]			
440/499	0.206G 0.0247 0.007221	0.01837	4	320:
45% ####5	18/40 [00:03<00:04, 5.41it/s]			
440/499	0.206G 0.0258 0.007212	0.01811	2	320:
45% ####5	18/40 [00:03<00:04, 5.41it/s]			
440/499	0.206G 0.0258 0.007212	0.01811	2	320:
48% ####7	19/40 [00:03<00:03, 5.38it/s]	0.04045	4	200
440/499	0.206G 0.0255 0.007575	0.01845	4	320:
48% ####7	19/40 [00:03<00:03, 5.38it/s]	0.01045	4	220.
440/499 50% ####	0.206G 0.0255 0.007575 20/40 [00:03<00:03, 5.35it/s]	0.01845	4	320:
440/499	0.206G 0.02562 0.008062	0.01842	4	320:
50% #####	20/40 [00:03<00:03, 5.35it/s]	0.01042	4	320.
440/499	0.206G 0.02562 0.008062	0.01842	4	320:
52% #####2	21/40 [00:03<00:03, 5.34it/s]	0.01042	4	320.
440/499	0.206G 0.0248 0.007904	0.01833	1	320:
52% #####2	21/40 [00:04<00:03, 5.34it/s]	0.01000	1	020.
440/499	0.206G 0.0248 0.007904	0.01833	1	320:
55% #####5	22/40 [00:04<00:03, 5.34it/s]	0.01000	_	020.
440/499	0.206G 0.02459 0.007856	0.01818	2	320:
55% #####5	22/40 [00:04<00:03, 5.34it/s]	0.01010	_	020.
440/499	0.206G 0.02459 0.007856	0.01818	2	320:
57% #####7	23/40 [00:04<00:03, 5.47it/s]		_	
440/499	0.206G 0.02411 0.007838	0.01801	1	320:
57% #####7	23/40 [00:04<00:03, 5.47it/s]			
440/499	0.206G 0.02411 0.007838	0.01801	1	320:
60% ######	24/40 [00:04<00:02, 5.57it/s]			
440/499	0.206G 0.02356 0.008105	0.01766	1	320:
60% ######	24/40 [00:04<00:02, 5.57it/s]			
440/499	0.206G 0.02356 0.008105	0.01766	1	320:
62% #####2	25/40 [00:04<00:02, 5.64it/s]			
440/499	0.206G 0.02303 0.007955	0.01749	1	320:
62% #####2	25/40 [00:04<00:02, 5.64it/s]			
440/499	0.206G 0.02303 0.007955	0.01749	1	320:
65% #####5	26/40 [00:04<00:02, 5.67it/s]			
440/499	0.206G 0.02259 0.007816	0.01736	1	320:
65% #####5	26/40 [00:04<00:02, 5.67it/s]			
440/499	0.206G 0.02259 0.007816	0.01736	1	320:
68% #####7	27/40 [00:04<00:02, 5.72it/s]			
440/499	0.206G 0.02214 0.007776	0.01722	2	320:
68% #####7	27/40 [00:05<00:02, 5.72it/s]			
440/499	0.206G 0.02214 0.007776	0.01722	2	320:
70% #######	28/40 [00:05<00:02, 5.75it/s]			
440/499	0.206G 0.02218 0.008008	0.0172	4	320:
70% #######	28/40 [00:05<00:02, 5.75it/s]			
440/499	0.206G 0.02218 0.008008	0.0172	4	320:
72% ######2	29/40 [00:05<00:02, 5.45it/s]			

				0.007879	0.01716	1	320:
				5.45it/s]			
,		0.206G	0.02177		0.01716	1	320:
75% #######5 440/499	ı	30/40 [00 0.206G	=	5.55it/s] 0.008308	0 0172	4	320:
	ı			5.55it/s]	0.0173	4	320:
440/499			0.02217		0.0173	4	320:
78% ######7					0.0170	-	020.
			=	0.008253	0.01719	2	320:
78% ######7							
440/499		0.206G	0.02185	0.008253	0.01719	2	320:
80% ########		32/40 [00	:05<00:01,	5.39it/s			
440/499				0.008404	0.01734	3	320:
80% #######							
440/499				0.008404	0.01734	3	320:
82% #######2					0.04550		200
		0.206G			0.01752	4	320:
82% ########2 440/499	ı	33/40 [00 0.206G	•		0.01750	4	200.
440/499 85% #######5	ı		0.02221		0.01752	4	320:
			0.02194		0.01745	2	320:
85% #######5					0.01740	2	020.
440/499				0.008675	0.01745	2	320:
88% #######7	I						
440/499			0.02167		0.01734	2	320:
88% #######7	1	35/40 [00	:06<00:00,	5.07it/s]			
440/499		0.206G	0.02167	0.008598	0.01734	2	320:
90% ########			:06<00:00,	5.02it/s			
440/499		0.206G		0.008641	0.01756	2	320:
90% #########			=				
440/499		0.206G		0.008641	0.01756	2	320:
92% #########2	2				0.04750	0	200
440/499	s I	0.206G	0.02155	0.008614	0.01758	2	320:
92% #########2 440/499				4.981t/s] 0.008614	0.01758	2	320:
95% ########					0.01730	2	520.
	′ '		0.02148		0.01782	4	320:
95% ########							
440/499		0.206G	0.02148	0.008717	0.01782	4	320:
98% ########7	1	39/40 [00	:07<00:00,	4.95it/s]			
440/499		0.206G	0.02134	0.008694	0.01777	1	320:
98% ########7							
				0.008694	0.01777	1	320:
100% #########	#			-			
440/499		0.206G	0.02134		0.01777	1	320:
100% ########	#	40/40 L00	J:07<00:00	, 5.38it/s]			
		G3	- -	. .	ъ	ъ	ADEC

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mAP50

R

Images Instances

Class

mAP50-95:	0%	1 0/20 [0	0:00 , ?it/</th <th>al</th> <th></th> <th></th>	al		
MAF 30-93.			Instances		R	mAP50
mAP50-95:	10% #	_	0:00<00:01,		10	mm 00
	Class		Instances		R	mAP50
mAP50-95:	20% ##	_	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	30% ###	6/20 [0	0:00<00:00,	14.62it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	40% ####	8/20 [0	0:00<00:00,	13.60it/s]		
	Class	•	Instances		R	mAP50
mAP50-95:	50% #####		00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:	60% ######		00:00<00:00,			
ADEA 05	Class		Instances		R	mAP50
mAP50-95:			00:00<00:00,			ADEO
mAP50-95:	Class 80% #######	_	Instances 00:01<00:00,		R	mAP50
MAP50-95.	Class		Instances		R	mAP50
m∆P50-95•	90% ########	0				mai 50
mm 00 30.	Class		Instances		R	mAP50
mAP50-95:	100% #########	_				
	Class		Instances			mAP50
mAP50-95:	100% ##########	_				
	all	40	40	0.975	0.975	0.989
0.807						
_					_	
Epoc	h GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
0% I	0/40 [00	· 00/2 2i	+ /a]			
441/49			0.005773	0.03418	2	320:
0%				0.00110	2	020.
441/49			0.005773	0.03418	2	320:
	1/40 [00:0					
	9 0.206G		0.0121	0.02954	4	320:
2% 2	1/40 [00:0	0<00:06,	5.83it/s]			
441/49	9 0.206G	0.02604	0.0121	0.02954	4	320:
5% 5	2/40 [00:0	0<00:06,	5.65it/s]			
441/49	9 0.206G	0.02159	0.009749	0.02583	1	320:
5% 5	2/40 [00:0	0<00:06,	5.65it/s]			
441/49			0.009749	0.02583	1	320:
8% 7						
441/49				0.02501	4	320:
8% 7		-		0 00504	4	200
441/49			0.01006	0.02501	4	320:
10% # 441/49				0 00504	0	200 -
	9 0.206G 4/40 [00:			0.02594	2	320:
441/49				0.02594	2	320:
11 1/43	0.2000	0.02300	0.003121	0.02034	Z	520.

12% #2	5/40 [00:00<00:06, 5.58it/s]			
441/499	0.206G 0.02669 0.008666	0.02348	1	320:
12% #2	5/40 [00:01<00:06, 5.58it/s]			
	0.206G 0.02669 0.008666	0.02348	1	320:
15% #5	6/40 [00:01<00:05, 5.80it/s]		_	
441/499	0.206G 0.02483 0.008197	0.02264	2	320:
15% #5	6/40 [00:01<00:05, 5.80it/s]		_	
441/499	0.206G 0.02483 0.008197	0.02264	2	320:
18% #7	7/40 [00:01<00:05, 5.81it/s]		_	
441/499	0.206G 0.02576 0.00791	0.02405	2	320:
18% #7	7/40 [00:01<00:05, 5.81it/s]		_	
•	0.206G 0.02576 0.00791	0.02405	2	320:
20% ##	8/40 [00:01<00:05, 5.47it/s]		_	
441/499	0.206G 0.02763 0.008873	0.02361	4	320:
20% ##	8/40 [00:01<00:05, 5.47it/s]			
441/499	0.206G 0.02763 0.008873	0.02361	4	320:
22% ##2	9/40 [00:01<00:05, 5.43it/s]			
441/499	0.206G 0.02597 0.008632	0.02292	2	320:
22% ##2	9/40 [00:01<00:05, 5.43it/s]			
,	0.206G 0.02597 0.008632	0.02292	2	320:
25% ##5	10/40 [00:01<00:05, 5.40it/s]			
441/499	0.206G 0.02457 0.00825	0.02203	1	320:
25% ##5	10/40 [00:01<00:05, 5.40it/s]			
441/499	0.206G 0.02457 0.00825	0.02203	1	320:
28% ##7	11/40 [00:01<00:05, 5.50it/s]			
441/499	0.206G 0.02313 0.007758	0.02158	1	320:
28% ##7	11/40 [00:02<00:05, 5.50it/s]			
441/499	0.206G 0.02313 0.007758	0.02158	1	320:
30% ###	12/40 [00:02<00:04, 5.75it/s]			
441/499	0.206G 0.02251 0.007809	0.02154	2	320:
30% ###	12/40 [00:02<00:04, 5.75it/s]			
441/499	0.206G 0.02251 0.007809	0.02154	2	320:
32% ###2	13/40 [00:02<00:04, 5.62it/s]			
441/499	0.206G 0.02478 0.008076	0.02161	4	320:
32% ###2	13/40 [00:02<00:04, 5.62it/s]			
441/499	0.206G 0.02478 0.008076	0.02161	4	320:
35% ###5	14/40 [00:02<00:04, 5.50it/s]			
441/499	0.206G 0.0239 0.00798	0.02152	2	320:
35% ###5	14/40 [00:02<00:04, 5.50it/s]			
441/499	0.206G 0.0239 0.00798	0.02152	2	320:
38% ###7	15/40 [00:02<00:04, 5.74it/s]			
441/499	0.206G 0.02298 0.007718	0.02136	1	320:
38% ###7	15/40 [00:02<00:04, 5.74it/s]			
441/499	0.206G 0.02298 0.007718	0.02136	1	320:
40% ####	16/40 [00:02<00:04, 5.77it/s]			
441/499	0.206G 0.02238 0.007414	0.02101	1	320:
40% ####	16/40 [00:03<00:04, 5.77it/s]			
441/499	0.206G 0.02238 0.007414	0.02101	1	320:

42% ####2	-	17/40 [00:03<00:03,	5.78it/s]			
441/499		0.206G 0.02274	0.007418	0.02111	2	320:
42% ####2	-	17/40 [00:03<00:03,	5.78it/s]			
441/499		0.206G 0.02274	0.007418	0.02111	2	320:
45% ####5	- 1	18/40 [00:03<00:03,	5.79it/s]			
441/499		0.206G 0.02227	0.007309	0.02087	1	320:
45% ####5	- 1	18/40 [00:03<00:03,	5.79it/s			
441/499		0.206G 0.02227	0.007309	0.02087	1	320:
48% ####7	-	19/40 [00:03<00:03,	5.80it/s			
441/499		0.206G 0.02331	0.007894	0.02088	3	320:
48% ####7	- 1	19/40 [00:03<00:03,	5.80it/s			
441/499		0.206G 0.02331	0.007894	0.02088	3	320:
50% #####	- 1	20/40 [00:03<00:03,	5.69it/s]			
441/499		0.206G 0.02318	0.00799	0.02056	2	320:
50% #####	-	20/40 [00:03<00:03,	5.69it/s]			
441/499		0.206G 0.02318	0.00799	0.02056	2	320:
52% #####2	- 1	21/40 [00:03<00:03,	5.81it/s			
441/499		0.206G 0.02368	0.008291	0.02069	3	320:
52% #####2	- 1	21/40 [00:03<00:03,	5.81it/s			
441/499		0.206G 0.02368	0.008291	0.02069	3	320:
55% #####5	- 1	22/40 [00:03<00:03,	5.66it/s]			
441/499		0.206G 0.02314		0.02007	1	320:
55% #####5		22/40 [00:04<00:03,				
441/499		0.206G 0.02314		0.02007	1	320:
57% #####7		23/40 [00:04<00:02,	5.79it/s			
441/499		0.206G 0.02283		0.0198	1	320:
57% #####7	I	23/40 [00:04<00:02,				
441/499		0.206G 0.02283	0.007971	0.0198	1	320:
60% ######	١	24/40 [00:04<00:02,				
441/499		0.206G 0.02309		0.01993	4	320:
60% ######	١	24/40 [00:04<00:02,				
,		***		0.01993	4	320:
62% ######2	ı	25/40 [00:04<00:02,				
441/499		0.206G 0.02257		0.01969	4	320:
62% ######2	ı	25/40 [00:04<00:02,			_	
441/499			0.008246	0.01969	4	320:
65% ######5	ı	26/40 [00:04<00:02,			_	
441/499		0.206G 0.02233		0.01971	4	320:
65% ######5	ı	26/40 [00:04<00:02,		0.04054		222
441/499		0.206G 0.02233		0.01971	4	320:
68% ######7	ı	27/40 [00:04<00:02,		0.04005		222
441/499		0.206G 0.02193		0.01965	3	320:
68% ######7	ı	27/40 [00:04<00:02,		0.04025	2	202
441/499		0.206G 0.02193	0.008539	0.01965	3	320:
70% #######	ı	28/40 [00:04<00:02,		0.0405	4	200
441/499		0.206G 0.02166		0.0195	1	320:
70% #######	I	28/40 [00:05<00:02,		0.0105	4	200
441/499		0.206G 0.02166	0.008424	0.0195	1	320:

701/1	00/40 [00 05 400 00	5 40·· / J			
	29/40 [00:05<00:02,		0.04004		
441/499			0.01931	1	320:
	29/40 [00:05<00:02,				
	0.206G 0.02129		0.01931	1	320:
	30/40 [00:05<00:01,			_	
441/499			0.01944	3	320:
	30/40 [00:05<00:01,				
441/499			0.01944	3	320:
	31/40 [00:05<00:01,				
441/499			0.01934	1	320:
	31/40 [00:05<00:01,				
441/499	0.206G 0.02142	0.008165	0.01934	1	320:
80% #######	32/40 [00:05<00:01,	5.41it/s			
441/499	0.206G 0.0221	0.008398	0.01976	2	320:
80% #######	32/40 [00:05<00:01,	5.41it/s			
441/499	0.206G 0.0221	0.008398	0.01976	2	320:
82% ########2	33/40 [00:05<00:01,	5.52it/s			
441/499	0.206G 0.02198	0.008372	0.0199	2	320:
82% ########2	33/40 [00:06<00:01,	5.52it/s			
441/499	0.206G 0.02198	0.008372	0.0199	2	320:
85% ########5	34/40 [00:06<00:01,	5.76it/s			
441/499	0.206G 0.02171	0.008217	0.01975	1	320:
85% ########5	34/40 [00:06<00:01,	5.76it/s			
441/499	0.206G 0.02171	0.008217	0.01975	1	320:
88% #######7	35/40 [00:06<00:00,	5.61it/s]			
441/499	0.206G 0.02197	0.008319	0.02	4	320:
88% ########7	35/40 [00:06<00:00,	5.61it/s]			
441/499			0.02	4	320:
90% ########	36/40 [00:06<00:00,	5.38it/s]			
441/499	0.206G 0.0216	0.00817	0.01984	1	320:
90% ########	36/40 [00:06<00:00,	5.38it/s]			
441/499	•	0.00817	0.01984	1	320:
92% ########2	37/40 [00:06<00:00,	5.51it/s]			
441/499		0.008512	0.01988	4	320:
	37/40 [00:06<00:00,				
	0.206G 0.02178		0.01988	4	320:
	38/40 [00:06<00:00,				
441/499		0.008491	0.01974	2	320:
	38/40 [00:06<00:00,				
441/499		0.008491	0.01974	2	320:
	39/40 [00:06<00:00,				
441/499		0.008661	0.01986	4	320:
	39/40 [00:07<00:00,			-	
	0.206G 0.0215		0.01986	4	320:
	40/40 [00:07<00:00		1.01000	-	020.
441/499		0.008661	0.01986	4	320:
	40/40 [00:07<00:00		2.0200	-	520.
	. 10, 10 [00.01 100.00	, 0.0110/6]			

	- 04 1	Class	•	Instances		R	mAP50
mAP50-95:	0%	Class		00:00 , ?it,<br Instances		R	mAP50
mAP50-95:	10% #		•	00:00<00:01,		10	mai oo
	7,0,1	Class			P	R	mAP50
mAP50-95:	20% ##	#	4/20 [0	00:00<00:00,	18.10it/s]		
		Class	_	Instances		R	mAP50
mAP50-95:	30% ##			00:00<00:00,		_	
ADEO 05	409/144	Class	_	Instances		R	mAP50
mAP50-95:	40% #7	### Class		00:00<00:00,		R	ADEO
mAP50-95:	50% l ##		•	Instances [00:00<00:00		ĸ	mAP50
MAI 50 95.	30 / ₀ #+	Class		Instances		R	mAP50
mAP50-95:	60% ##		_	[00:00<00:00		10	111111111111111111111111111111111111111
		Class		Instances		R	mAP50
mAP50-95:	70% ##	#####	_	[00:00<00:00			
		Class	Images	Instances	P	R	mAP50
mAP50-95:	80% ##	######	16/20	00:00<00:00	, 17.33it/s]		
		Class	_	Instances		R	mAP50
mAP50-95:	95% ##			[00:01<00:00			
		Class	_	Instances		R	mAP50
mAP50-95:	100% ##			[00:01<00:00			0.000
0.809		all	40	40	0.978	0.975	0.988
0.609							
Epoc	h GI	PU_mem	box_loss	obj_loss	cls_loss	Instances	Size
_				-	cls_loss	Instances	Size
0%	1	0/40 [00	:00 , ?:</td <td>it/s]</td> <td></td> <td></td> <td></td>	it/s]			
0% 442/49) 9 (0/40 [00 0.206G	:00 , ?:</td <td>it/s] 0.009625</td> <td></td> <td>Instances</td> <td>Size 320:</td>	it/s] 0.009625		Instances	Size 320:
0% 442/49	9 (0,	0/40 [00 0.206G /40 [00:0	:00 , ?;<br 0.04056 0 , ?it,</td <td>it/s] 0.009625</td> <td></td> <td></td> <td></td>	it/s] 0.009625			
0% 442/49 0% 442/49	9 (9 (9 (0/40 [00 0.206G /40 [00:0 0.206G	:00 , ?:<br 0.04056 0 , ?it,</td <td>it/s] 0.009625 /s]</td> <td>0.02011</td> <td>3</td> <td>320:</td>	it/s] 0.009625 /s]	0.02011	3	320:
0% 442/49 0% 442/49 2% 2	9 (0, 9 (1,	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?:<br 0.04056 0 , ?it,<br 0.04056 0<00:06,	it/s] 0.009625 /s] 0.009625	0.02011	3	320:
0% 442/49 0% 442/49 2% 2 442/49	9 (0, 9 (1, 9 (0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?:<br 0.04056 0 , ?it,<br 0.04056 0<00:06, 0.02621 0<00:06,	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s]	0.02011 0.02011 0.01703	3	320: 320: 320:
0% 442/49 0% 442/49 2% 2 442/49 2% 2 442/49	9 (0, 9 (1, 9 (1,	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?:<br 0.04056 0 , ?it,<br 0.04056 0<00:06, 0.02621 0<00:06, 0.02621	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535	0.02011 0.02011 0.01703	3	320: 320:
0% 442/49 0% 442/49 2% 2 442/49 2% 2 442/49 5% 5	9 (9 (9 (11, 9 (11, 9 (12,	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02621 0<00:06,</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s]</td> <td>0.02011 0.02011 0.01703 0.01703</td> <td>3 3 1</td> <td>320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s]	0.02011 0.02011 0.01703 0.01703	3 3 1	320: 320: 320: 320:
0% 442/49 0% 442/49 2% 2 442/49 2% 2 442/49 5% 5 442/49	9 (9 (9 (1 1, 9 (1 1, 9 (9 (9 (9 (0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02621 0<00:06, 0.02621</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216</td> <td>0.02011 0.02011 0.01703</td> <td>3 3 1</td> <td>320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216	0.02011 0.02011 0.01703	3 3 1	320: 320: 320:
0% 442/49' 0% 442/49' 2% 2 442/49' 2% 2 442/49' 5% 5 442/49'	9 (9 (9 (1 1, 9 (1 2, 9 (1 2,	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02621 0<00:06, 0.02096</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s]</td> <td>0.02011 0.02011 0.01703 0.01703 0.01586</td> <td>3 3 1 1 2</td> <td>320: 320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s]	0.02011 0.02011 0.01703 0.01703 0.01586	3 3 1 1 2	320: 320: 320: 320: 320:
0% 442/49 0% 442/49 2% 2 442/49 5% 5 442/49 5% 5 442/49	9 (9 (9 (1 1, 9 (9 (2, 9 (9 (2, 9 (0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02621 0<00:06, 0.02096</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216</td> <td>0.02011 0.02011 0.01703 0.01703</td> <td>3 3 1</td> <td>320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216	0.02011 0.02011 0.01703 0.01703	3 3 1	320: 320: 320: 320:
0% 442/49' 0% 442/49' 2% 2 442/49' 5% 5 442/49' 5% 5 442/49' 8% 7	9 (9 (9 (1 1, 9 (1 2, 9 (1 2, 9 (1 3,	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02621 0<00:06, 0.02096 0<00:06, 0.02096</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s]</td> <td>0.02011 0.02011 0.01703 0.01703 0.01586 0.01586</td> <td>3 3 1 1 2 2</td> <td>320: 320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s]	0.02011 0.02011 0.01703 0.01703 0.01586 0.01586	3 3 1 1 2 2	320: 320: 320: 320: 320:
0% 442/49' 0% 442/49' 2% 2 442/49' 5% 5 442/49' 5% 5 442/49' 8% 7 442/49'	9 (0 9 (1) 9 (1) 9 (1) 9 (2) 9 (2) 9 (2) 9 (3)	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02621 0<00:06, 0.02096 0<00:06, 0.02096</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672</td> <td>0.02011 0.02011 0.01703 0.01703 0.01586 0.01586</td> <td>3 3 1 1 2</td> <td>320: 320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672	0.02011 0.02011 0.01703 0.01703 0.01586 0.01586	3 3 1 1 2	320: 320: 320: 320: 320:
0% 442/49' 0% 442/49' 2% 2 442/49' 5% 5 442/49' 5% 5 442/49' 8% 7	9 (9 (9 (1 1, 9 (1 2, 9 (1 2, 9 (1 3, 9 (1 3,	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02621 0<00:06, 0.02096 0<00:06, 0.02555 0<00:06,</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s]</td> <td>0.02011 0.02011 0.01703 0.01703 0.01586 0.01586 0.01985</td> <td>3 3 1 1 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s]	0.02011 0.02011 0.01703 0.01703 0.01586 0.01586 0.01985	3 3 1 1 2 2	320: 320: 320: 320: 320: 320:
0% 442/49' 0% 442/49' 2% 2 442/49' 5% 5 442/49' 5% 5 442/49' 8% 7 442/49' 8% 7 442/49'	9 (0 0,0 9 (1 1,0 9 (1 2,0 9 (1 3,0 9	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02621 0<00:06, 0.02096 0<00:06, 0.02555 0<00:06, 0.02555</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672 5.79it/s]</td> <td>0.02011 0.02011 0.01703 0.01703 0.01586 0.01586</td> <td>3 3 1 1 2 2</td> <td>320: 320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672 5.79it/s]	0.02011 0.02011 0.01703 0.01703 0.01586 0.01586	3 3 1 1 2 2	320: 320: 320: 320: 320:
0% 442/49' 0% 442/49' 2% 2 442/49' 2% 5 5% 5 442/49' 5% 5 442/49' 8% 7 442/49' 10% # 442/49'	9 (0 0,0 9 (1 1,0 9 (1 2,0 9 (1 3,0 9 (1 3,0 9 (1 4,0 9	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02696 0<00:06, 0.02096 0<00:06, 0.02555 0<00:06, 0.02555</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672 5.79it/s] 0.007672 5.42it/s] 0.007419</td> <td>0.02011 0.02011 0.01703 0.01703 0.01586 0.01586 0.01985</td> <td>3 3 1 1 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672 5.79it/s] 0.007672 5.42it/s] 0.007419	0.02011 0.02011 0.01703 0.01703 0.01586 0.01586 0.01985	3 3 1 1 2 2	320: 320: 320: 320: 320: 320:
0% 442/49' 0% 442/49' 2% 2 442/49' 2% 5 5% 5 442/49' 5% 5 442/49' 8% 7 442/49' 10% # 442/49'	9 (0 0,0 9 (1 1,0 9 (1 2,0 9 (1 3,0 9 (1 3,0 9 (1 4,0 9	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02621 0<00:06, 0.02096 0<00:06, 0.02555 0<00:06, 0.02555 0<00:06, 0.02555</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672 5.79it/s] 0.007672 5.42it/s] 0.007419 5.42it/s]</td> <td>0.02011 0.02011 0.01703 0.01703 0.01586 0.01586 0.01985 0.01985</td> <td>3 3 1 1 2 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672 5.79it/s] 0.007672 5.42it/s] 0.007419 5.42it/s]	0.02011 0.02011 0.01703 0.01703 0.01586 0.01586 0.01985 0.01985	3 3 1 1 2 2 2 2	320: 320: 320: 320: 320: 320: 320:
0%	9 (0 0,0	0/40 [00 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0 0.206G /40 [00:0	:00 , ?: 0.04056 0<?, ?it, 0.04056 0<00:06, 0.02621 0<00:06, 0.02696 0<00:06, 0.02096 0<00:06, 0.02555 0<00:06, 0.02555 0<00:06 0.03201 00<00:06</td <td>it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672 5.79it/s] 0.007672 5.42it/s] 0.007419</td> <td>0.02011 0.02011 0.01703 0.01703 0.01586 0.01586 0.01985 0.01985</td> <td>3 3 1 1 2 2 2 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	it/s] 0.009625 /s] 0.009625 5.82it/s] 0.006535 5.82it/s] 0.006535 5.77it/s] 0.007216 5.77it/s] 0.007216 5.79it/s] 0.007672 5.79it/s] 0.007672 5.42it/s] 0.007419	0.02011 0.02011 0.01703 0.01703 0.01586 0.01586 0.01985 0.01985	3 3 1 1 2 2 2 2	320: 320: 320: 320: 320: 320: 320:

12%	442/499	0.206G 0.03042	0.007546	0.02012	2	320:
15% #5						
15 16 16 16 16 16 16 16	442/499	0.206G 0.03042	0.007546	0.02012	2	320:
15% #5						
442/499				0.02059	2	320:
18% #7		•		0.00050		000
442/499				0.02059	2	320:
18% #7				0.01007	4	200.
442/499				0.01997	1	320:
20% ##		· · · · · · · · · · · · · · · · · · ·	· -	0 01007	1	320.
442/499				0.01997	1	320.
20% ##				0 01998	2	320.
442/499				0.01330	2	020.
22% ##2				0.01998	2	320:
442/499				0.01000	_	0201
22% ##2				0.02024	4	320:
442/499						
442/499	442/499			0.02024	4	320:
25% ##5	25% ##5	10/40 [00:01<00:05,	5.58it/s			
442/499 0.206G 0.02371 0.008139 0.02002 2 320: 28% ##7 11/40 [00:01<00:05, 5.48it/s]	442/499	0.206G 0.02371	0.008139	0.02002	2	320:
28% ##7	25% ##5	10/40 [00:01<00:05,	5.58it/s]			
442/499 0.206G 0.02322 0.00777 0.01951 1 320: 28% ##7 11/40 [00:02<00:05, 5.48it/s]	442/499	0.206G 0.02371	0.008139	0.02002	2	320:
28% ##7 11/40 [00:02<00:05, 5.48it/s]	28% ##7	11/40 [00:01<00:05,	5.48it/s			
442/499 0.206G 0.02322 0.00777 0.01951 1 320: 30% ### 12/40 [00:02<00:04, 5.73it/s]	442/499			0.01951	1	320:
30% ###						
442/499 0.206G 0.02231 0.007535 0.01891 1 320: 30% ### 12/40 [00:02<00:04, 5.73it/s]				0.01951	1	320:
30% ### 12/40 [00:02<00:04, 5.73it/s]						
442/499 0.206G 0.0231 0.007535 0.01891 1 320: 32% ###2 13/40 [00:02<00:04, 5.61it/s]				0.01891	1	320:
32% ###2 13/40 [00:02<00:04, 5.61it/s]						
442/499				0.01891	1	320:
32% ###2 13/40 [00:02<00:04, 5.61it/s]				0.04000	4	000
442/499				0.01866	1	320:
35% ###5 14/40 [00:02<00:04, 5.66it/s]				0.01066	4	200.
442/499				0.01866	1	320:
35% ###5 14/40 [00:02<00:04, 5.66it/s]				0 01850	2	320.
442/499 0.206G 0.0208 0.00734 0.01859 2 320: 38% ###7 15/40 [00:02<00:04, 5.87it/s]				0.01039	2	320.
38% ###7 15/40 [00:02<00:04, 5.87it/s]		•	· -	0 01859	2	320.
442/499				0.01003	2	020.
38% ###7 15/40 [00:02<00:04, 5.87it/s] 442/499 0.206G 0.01975 0.007096 0.01826 1 320: 40% #### 16/40 [00:02<00:04, 5.69it/s] 442/499 0.206G 0.01935 0.006881 0.01808 1 320: 40% #### 16/40 [00:03<00:04, 5.69it/s] 442/499 0.206G 0.01935 0.006881 0.01808 1 320:				0.01826	1	320:
442/499 0.206G 0.01975 0.007096 0.01826 1 320: 40% #### 16/40 [00:02<00:04, 5.69it/s] 442/499 0.206G 0.01935 0.006881 0.01808 1 320: 40% #### 16/40 [00:03<00:04, 5.69it/s] 442/499 0.206G 0.01935 0.006881 0.01808 1 320:				0.01020	-	020.
40% #### 16/40 [00:02<00:04, 5.69it/s] 442/499				0.01826	1	320:
442/499 0.206G 0.01935 0.006881 0.01808 1 320: 40% #### 16/40 [00:03<00:04, 5.69it/s] 442/499 0.206G 0.01935 0.006881 0.01808 1 320:				 	-	
40% #### 16/40 [00:03<00:04, 5.69it/s] 442/499 0.206G 0.01935 0.006881 0.01808 1 320:				0.01808	1	320:
442/499 0.206G 0.01935 0.006881 0.01808 1 320:						
				0.01808	1	320:
	42% ####2	17/40 [00:03<00:04,	5.71it/s]			

442/499	0.206G 0.02065 0.007108	0.01815	3	320:
42% ####2	17/40 [00:03<00:04, 5.71it/s]			
442/499	0.206G 0.02065 0.007108	0.01815	3	320:
45% ####5	18/40 [00:03<00:03, 5.59it/s]	0.04040	4	000
442/499	0.206G 0.02133 0.00764	0.01843	4	320:
45% ####5 442/499	18/40 [00:03<00:03, 5.59it/s] 0.206G	0 010/12	4	320:
442/499	19/40 [00:03<00:03, 5.36it/s]	0.01843	4	320:
442/499	0.206G 0.02171 0.007814	0.01842	2	320:
48% ####7	19/40 [00:03<00:03, 5.36it/s]	0.01042	2	320.
442/499	0.206G 0.02171 0.007814	0.01842	2	320:
50% #####	20/40 [00:03<00:03, 5.35it/s]	0.01012	_	020.
442/499	0.206G 0.02156 0.007768	0.01839	2	320:
50% #####	20/40 [00:03<00:03, 5.35it/s]		_	
442/499	0.206G 0.02156 0.007768	0.01839	2	320:
52% #####2	21/40 [00:03<00:03, 5.63it/s]			
442/499	0.206G 0.0224 0.00775	0.01896	2	320:
52% #####2	21/40 [00:03<00:03, 5.63it/s]			
442/499	0.206G 0.0224 0.00775	0.01896	2	320:
55% #####5	22/40 [00:03<00:03, 5.40it/s]			
442/499	0.206G 0.02177 0.007588	0.01896	1	320:
55% #####5	22/40 [00:04<00:03, 5.40it/s]			
442/499	0.206G 0.02177 0.007588	0.01896	1	320:
57% #####7	23/40 [00:04<00:03, 5.49it/s]			
442/499	0.206G 0.02157 0.007752	0.01887	4	320:
57% #####7	23/40 [00:04<00:03, 5.49it/s]			
442/499	0.206G 0.02157 0.007752	0.01887	4	320:
60% ######	24/40 [00:04<00:03, 5.18it/s]			
442/499	0.206G 0.02131 0.007813	0.01909	4	320:
60% ######	24/40 [00:04<00:03, 5.18it/s]			
442/499	0.206G 0.02131 0.007813	0.01909	4	320:
62% #####2	25/40 [00:04<00:02, 5.08it/s]			
442/499	0.206G 0.02149 0.008163	0.01937	4	320:
62% #####2	25/40 [00:04<00:02, 5.08it/s]			
442/499	0.206G 0.02149 0.008163	0.01937	4	320:
	26/40 [00:04<00:02, 5.03it/s]			
442/499	0.206G 0.0211 0.008034	0.01928	1	320:
65% ######5	26/40 [00:04<00:02, 5.03it/s]			
442/499	0.206G 0.0211 0.008034	0.01928	1	320:
68% ######7	27/40 [00:04<00:02, 4.89it/s]			
442/499	0.206G 0.02132 0.008348	0.01953	4	320:
68% ######7	27/40 [00:05<00:02, 4.89it/s]			
442/499	0.206G 0.02132 0.008348	0.01953	4	320:
70% #######	28/40 [00:05<00:02, 4.88it/s]	0.04044	4	000
442/499	0.206G 0.02132 0.008502	0.01944	4	320:
70% #######	28/40 [00:05<00:02, 4.88it/s]	0.01044	4	200
442/499	0.206G 0.02132 0.008502	0.01944	4	320:
72% ######2	29/40 [00:05<00:02, 4.78it/s]			

442/499		0.206G	0.02114	0.008666	0.01959	4	320:
			-	4.78it/s]			
442/499		0.206G	0.02114	0.008666	0.01959	4	320:
				4.81it/s]			
		0.206G	0.02068	0.008512	0.01931	1	320:
	١		-	4.81it/s]			
442/499		0.206G	0.02068		0.01931	1	320:
78% ######7							
		0.206G	0.02039	0.008523	0.01915	4	320:
	ı		-	4.96it/s]	0 04045	4	000
442/499		0.206G	0.02039	0.008523	0.01915	4	320:
_			-	5.06it/s]	0.01006	0	200.
442/499 80% #######		0.206G	0.02038	0.008511	0.01906	2	320:
442/499		0.206G	-	0.008511	0.01906	2	320:
82% #######2					0.01900	2	320.
_	'	0.206G	0.02017	0.008402	0.01885	1	320:
82% #######2					0.01005	1	520.
	'	0.206G	0.02017		0.01885	1	320:
85% #######5					0.01000	•	020.
_	•	0.206G	0.02068		0.01901	2	320:
85% #######5						_	
442/499		0.206G			0.01901	2	320:
88% #######7	1	35/40 [00:					
442/499		0.206G	0.02032	0.008252	0.01886	1	320:
88% #######7	1	35/40 [00:	:06<00:01,	4.77it/s]			
442/499		0.206G	0.02032	0.008252	0.01886	1	320:
90% ########		36/40 [00:	:06<00:00,	4.93it/s			
442/499		0.206G	0.02011	0.008351	0.01888	2	320:
90% ########		36/40 [00:	:06<00:00,	4.93it/s			
442/499		0.206G	0.02011	0.008351	0.01888	2	320:
92% ########2	2	37/40 [00:	:06<00:00,	5.04it/s]			
442/499			0.01975		0.01879	2	320:
92% #########				5.04it/s]			
		0.206G		0.008334	0.01879	2	320:
95% ########	5		-				
442/499		0.206G	0.01951		0.01883	2	320:
95% ########	5					_	
•			0.01951		0.01883	2	320:
98% ########7					0.04005		000
•	7 1	0.206G	0.01933		0.01885	2	320:
98% ########7	'				0.04005	0	200
442/499	ш	0.206G			0.01885	2	320:
100% #########	ŧ#				0 0100E	0	200.
442/499	+++	0.206G	0.01933		0.01885	2	320:
100% #########	+#	1 40/40 [00	J.01\00:00;	, U.ZOIU/S]			
			_	_		_	

P

mAP50

R

Images Instances

Class

mAP50-95:	0%	I 0/20 [0	0:00 , ?it/</th <th>al</th> <th></th> <th></th>	al		
MAF 30-93.			Instances		R	mAP50
mAP50-95:	10% #	_	0:00<00:00,		10	mm 00
	Class		Instances		R	mAP50
mAP50-95:	20% ##	_	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	30% ###	•	0:00<00:00,			
	Class	Images	Instances	P	R	mAP50
mAP50-95:	40% ####	8/20 [0	0:00<00:00,	15.32it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	50% #####	10/20 [00:00<00:00,	16.13it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	60% #####		00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00,			1750
ADEA OF	Class	•	Instances		R	mAP50
mAP50-95:	90% #########					ADEO
ADEO OE.	Class	_	Instances		R	mAP50
MAP50-95:	100% ######### Class		Instances			mAP50
m1D50-05.	100% ##########	_				MAPSO
MAI 30 33.	all	40 40	40	0.978	0.975	0.988
0.809	dii	10	10	0.510	0.510	0.500
Epoc	h GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
0%1		' -				
443/49				0.0174	2	320:
0%						
				0.0174	2	320:
	1/40 [00:0					
443/49			0.008935	0.01737	4	320:
2% 2		-				
443/49			0.008935	0.01737	4	320:
5% 5						
443/49				0.01685	4	320:
5% 5	2/40 [00:0				_	
443/49			0.009311	0.01685	4	320:
8% 7						
443/49				0.01984	3	320:
8% 7				0.04004	-	222
443/49			0.009378	0.01984	3	320:
10% #				0.04000	a.	200
443/49			0.008104	0.01892	1	320:
	4/40 [00:			0.04000	,a	200
443/49	9 0.206G	0.02082	0.008104	0.01892	1	320:

12% #2	5/40 [00:00<00:06, 5.49it/s]			
443/499	0.206G 0.01952 0.007788	0.01867	2	320:
12% #2	5/40 [00:01<00:06, 5.49it/s]			
443/499	0.206G 0.01952 0.007788		2	320:
15% #5	6/40 [00:01<00:05, 5.77it/s]			
443/499	0.206G 0.01774 0.00714	0.01794	1	320:
15% #5	6/40 [00:01<00:05, 5.77it/s]			
443/499	0.206G 0.01774 0.00714	0.01794	1	320:
18% #7	7/40 [00:01<00:05, 5.78it/s]			
443/499	0.206G 0.01767 0.007723	0.01777	2	320:
18% #7	7/40 [00:01<00:05, 5.78it/s]			
443/499	0.206G 0.01767 0.007723	0.01777	2	320:
20% ##	8/40 [00:01<00:05, 5.79it/s]			
443/499	0.206G 0.01714 0.008176	0.01767	4	320:
20% ##	8/40 [00:01<00:05, 5.79it/s]			
443/499	0.206G 0.01714 0.008176	0.01767	4	320:
22% ##2	9/40 [00:01<00:05, 5.49it/s]			
443/499	0.206G 0.01638 0.008137	0.01745	2	320:
22% ##2	9/40 [00:01<00:05, 5.49it/s]			
443/499	0.206G 0.01638 0.008137	0.01745	2	320:
25% ##5	10/40 [00:01<00:05, 5.72it/s	3]		
443/499	0.206G 0.01688 0.008608	0.01741	4	320:
25% ##5	10/40 [00:01<00:05, 5.72it/s	3]		
443/499	0.206G 0.01688 0.008608	0.01741	4	320:
28% ##7	11/40 [00:01<00:05, 5.59it/s	:]		
443/499	0.206G 0.01617 0.008194	0.01699	1	320:
28% ##7	11/40 [00:02<00:05, 5.59it/s	:]		
443/499	0.206G 0.01617 0.008194	0.01699	1	320:
30% ###	12/40 [00:02<00:05, 5.37it/s	:]		
443/499	0.206G 0.01671 0.008284		2	320:
30% ###	12/40 [00:02<00:05, 5.37it/s			
443/499	0.206G 0.01671 0.008284		2	320:
32% ###2	13/40 [00:02<00:05, 5.34it/s			
443/499	0.206G 0.01674 0.008181	0.01899	2	320:
32% ###2	13/40 [00:02<00:05, 5.34it/s			
443/499	0.206G 0.01674 0.008181	0.01899	2	320:
35% ###5	14/40 [00:02<00:04, 5.48it/s			
443/499	0.206G 0.0168 0.008085	0.01877	1	320:
35% ###5	14/40 [00:02<00:04, 5.48it/s		_	0201
443/499	0.206G 0.0168 0.008085	0.01877	1	320:
38% ###7	15/40 [00:02<00:04, 5.58it/s		-	020.
443/499	0.206G 0.01636 0.007953	0.01861	2	320:
38% ###7	15/40 [00:02<00:04, 5.58it/s		2	020.
443/499	0.206G 0.01636 0.007953	0.01861	2	320:
40% ####	16/40 [00:02<00:04, 5.62it/s		4	020.
443/499	0.206G 0.01637 0.007663	0.01849	1	320:
40% ####	16/40 [00:03<00:04, 5.62it/s		1	020.
443/499	0.206G 0.01637 0.007663	0.01849	1	320:
770/ 4 <i>33</i>	0.2000 0.01001 0.001003	0.01043	1	JZU.

42% ####2		17/40 [00:03<00:04,				
443/499		0.206G 0.01844		0.01861	2	320:
42% ####2	١	17/40 [00:03<00:04,				
443/499		0.206G 0.01844		0.01861	2	320:
45% ####5	١	18/40 [00:03<00:03,				
443/499		0.206G 0.01834		0.01838	2	320:
45% ####5	١	18/40 [00:03<00:03,			_	
443/499		0.206G 0.01834	0.007906	0.01838	2	320:
48% ####7	١	19/40 [00:03<00:03,			_	
443/499		0.206G 0.01967		0.0185	4	320:
48% ####7	١	19/40 [00:03<00:03,			_	
443/499		0.206G 0.01967	0.008231	0.0185	4	320:
50% #####	١	20/40 [00:03<00:03,				
443/499			0.00797	0.01831	1	320:
50% #####	١	20/40 [00:03<00:03,				
443/499		0.206G 0.01902		0.01831	1	320:
52% #####2	١	21/40 [00:03<00:03,				
443/499		0.206G 0.01845		0.01801	1	320:
52% #####2	١	21/40 [00:03<00:03,				
443/499		0.206G 0.01845	0.007807	0.01801	1	320:
55% #####5	١	22/40 [00:03<00:03,				
443/499			0.00815	0.01841	4	320:
55% #####5	١	22/40 [00:04<00:03,				
443/499		0.206G 0.01856	0.00815	0.01841	4	320:
57% #####7	١	23/40 [00:04<00:03,				
443/499		0.206G 0.01882		0.01866	4	320:
57% #####7		23/40 [00:04<00:03,				
443/499		0.206G 0.01882		0.01866	4	320:
60% ######	١	24/40 [00:04<00:02,				
443/499		0.206G 0.01944		0.01938	2	320:
60% ######		24/40 [00:04<00:02,				
443/499		0.206G 0.01944		0.01938	2	320:
		25/40 [00:04<00:02,				
443/499		0.206G 0.01921		0.01918	1	320:
62% ######2		25/40 [00:04<00:02,				
443/499		0.206G 0.01921		0.01918	1	320:
65% ######5		26/40 [00:04<00:02,				
443/499		0.206G 0.01927		0.01907	4	320:
65% ######5	١	26/40 [00:04<00:02,				
443/499			0.008532	0.01907	4	320:
68% ######7		27/40 [00:04<00:02,				
443/499		0.206G 0.01953		0.01924	2	320:
68% ######7		27/40 [00:05<00:02,				
443/499		0.206G 0.01953	0.008478	0.01924	2	320:
70% #######	- 1	28/40 [00:05<00:02,			_	
443/499		0.206G 0.01914		0.01913	2	320:
70% #######	- 1	28/40 [00:05<00:02,			_	
443/499		0.206G 0.01914	0.008405	0.01913	2	320:

72% #######2	29/40 [00:05<00:02,	5.39it/s]			
443/499	0.206G 0.02028	0.008308	0.01915	2	320:
72% #######2	29/40 [00:05<00:02,	5.39it/s]			
443/499	0.206G 0.02028	0.008308	0.01915	2	320:
75% ######5	30/40 [00:05<00:01,	5.36it/s]			
443/499	0.206G 0.02138	0.008364	0.01909	2	320:
	30/40 [00:05<00:01,				
443/499		0.008364	0.01909	2	320:
	31/40 [00:05<00:01,				
	0.206G 0.02182		0.01901	2	320:
	31/40 [00:05<00:01,		0.04004		000
443/499		0.008319	0.01901	2	320:
	32/40 [00:05<00:01,		0.01000	0	200.
	0.206G 0.02261		0.01898	2	320:
443/499	32/40 [00:05<00:01, 0.206G 0.02261	0.008235	0.01898	2	320:
	33/40 [00:05<00:01,		0.01090	2	320:
	0.206G 0.02228		0.01885	1	320:
	33/40 [00:06<00:01,		0.01003	1	520.
443/499	0.206G 0.02228		0.01885	1	320:
	34/40 [00:06<00:01,		0.01000	-	020.
	0.206G 0.02237		0.01886	4	320:
	34/40 [00:06<00:01,				
443/499		0.008224	0.01886	4	320:
88% #######7	35/40 [00:06<00:00,	5.63it/s]			
443/499	0.206G 0.02219	0.008119	0.0192	1	320:
88% #######7	35/40 [00:06<00:00,	5.63it/s]			
443/499	0.206G 0.02219	0.008119	0.0192	1	320:
90% #######	36/40 [00:06<00:00,	5.67it/s]			
443/499	0.206G 0.02173	0.008001	0.01912	1	320:
	36/40 [00:06<00:00,				
443/499		0.008001	0.01912	1	320:
	37/40 [00:06<00:00,				
443/499	0.206G 0.02142		0.01894	1	320:
	37/40 [00:06<00:00,		0.04004		000
443/499			0.01894	1	320:
	38/40 [00:06<00:00,		0.04000	4	200.
443/499	0.206G 0.02112 38/40 [00:06<00:00,	0.007789	0.01883	1	320:
443/499	0.206G 0.02112		0.01883	1	320:
	39/40 [00:06<00:00,		0.01003	1	520.
443/499			0.01881	2	320:
	39/40 [00:07<00:00,		0.01001	4	020.
	0.206G 0.02091		0.01881	2	320:
	40/40 [00:07<00:00				
443/499		0.007728	0.01881	2	320:
100% ##########	40/40 [00:07<00:00				

		_	Instances		R	mAP50
mAP50-95:	0% 		00:00 , ?it/<br Instances		R	mAP50
mAP50-95: 1		2/20 [0	00:00<00:01,			
mAP50-95: 2	Class 0% ##		Instances 00:00<00:00,	P 17.26it/sl	R	mAP50
20	Class		Instances		R	mAP50
mAP50-95: 3			00:00<00:00, Instances		R	A DE O
mAP50-95: 4	Class 0% ####	_	00:00<00:00,		r.	mAP50
	Class	Images	Instances	P	R	mAP50
mAP50-95: 5	5% #####5 Class		[00:00<00:00, Instances		R	mAP50
mAP50-95: 6		0	[00:00<00:00,		r.	MAPSO
	Class	Images	Instances	Р	R	mAP50
mAP50-95: 7	5% #######5 Class		[00:00<00:00, Instances		R	mAP50
mAP50-95: 8	5% ########5	•			16	mai 50
	Class	•	Instances		R	mAP50
mAP50-95: 9	5% ########5 Class		[00:01<00:00, Instances		R	mAP50
mAP50-95: 10	0% ###########	_			It.	IIIAF 30
	all	40	40	0.97	0.972	0.989
0.805						
Epoch	GPU_mem b	oox_loss	obj_loss	cls_loss	Instances	Size
-	_		-	cls_loss	Instances	Size
0% 444/499	0/40 [00:	00 , ?i</td <td>it/s] 0.003674</td> <td></td> <td>Instances</td> <td>Size 320:</td>	it/s] 0.003674		Instances	Size 320:
0% 444/499 0%	0/40 [00: 0.206G 0/40 [00:00	00 , ?i<br 0.01397) , ?it/</td <td>it/s] 0.003674 /s]</td> <td>0.02288</td> <td>1</td> <td>320:</td>	it/s] 0.003674 /s]	0.02288	1	320:
0% 444/499 0% 444/499	0/40 [00: 0.206G 0/40 [00:00 0.206G	00 , ?i<br 0.01397) , ?it/<br 0.01397	it/s] 0.003674 /s] 0.003674			
0% 444/499 0% 444/499 2% 2	0/40 [00: 0.206G 0/40 [00:00	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06,	it/s] 0.003674 /s] 0.003674 6.40it/s]	0.02288	1	320:
0% 444/499 0% 444/499 2% 2 444/499	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06, 0.01561 0<00:06,	0.003674 (s) 0.003674 6.40it/s) 0.009258 6.40it/s]	0.02288 0.02288 0.02768	1 1 4	320: 320: 320:
0% 444/499 0% 444/499 2% 2 444/499 2% 2 444/499	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06, 0.01561 0<00:06, 0.01561	0.003674 /s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258	0.02288	1	320: 320:
0% 444/499 0% 444/499 2% 2 444/499 2% 2 444/499 5% 5	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06, 0.01561 0<00:06, 0.01561	0.003674 (s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s]	0.02288 0.02288 0.02768 0.02768	1 1 4	320: 320: 320: 320:
0% 444/499 0% 444/499 2% 2 444/499 2% 2 444/499 5% 5 444/499	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06, 0.01561 0<00:06, 0.01561 0<00:06,	0.003674 (s) 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701	0.02288 0.02288 0.02768	1 1 4 4	320: 320: 320: 320: 320:
0% 444/499 0% 444/499 2% 2 444/499 2% 2 444/499 5% 5 444/499 5% 5 444/499	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06, 0.01561 0<00:06, 0.01561 0<00:06, 0.0199 0<00:06,	0.003674 (s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701 6.04it/s] 0.008701	0.02288 0.02288 0.02768 0.02768	1 1 4 4	320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06, 0.01561 0<00:06, 0.01561 0<00:06, 0.0199 0<00:06,	0.003674 (s) 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701 6.04it/s] 0.008701 5.26it/s]	0.02288 0.02288 0.02768 0.02768 0.02864 0.02864	1 1 4 4 2	320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06, 0.01561 0<00:06, 0.01561 0<00:06, 0.0199 0<00:06, 0.0199	it/s] 0.003674 /s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701 6.04it/s] 0.008701 5.26it/s] 0.01005	0.02288 0.02288 0.02768 0.02768 0.02864	1 1 4 4	320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06, 0.01561 0<00:06, 0.01561 0<00:06, 0.0199 0<00:07, 0.02108 0<00:07,	it/s] 0.003674 /s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701 6.04it/s] 0.008701 5.26it/s] 0.01005 5.26it/s] 0.01005	0.02288 0.02288 0.02768 0.02768 0.02864 0.02864	1 1 4 4 2	320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:00	00 , ?i<br 0.01397 0 , ?it/<br 0.01397 0<00:06, 0.01561 0<00:06, 0.0199 0<00:06, 0.0199 0<00:07, 0.02108 0<00:07, 0.02108 0<00:06,	it/s] 0.003674 /s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701 6.04it/s] 0.008701 5.26it/s] 0.01005 5.26it/s] 0.01005	0.02288 0.02288 0.02768 0.02768 0.02864 0.02864 0.02714	1 1 4 4 2 2 2 4	320: 320: 320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G	00 , ?i 0.01397 0<?, ?it/ 0.01397 0<00:06, 0.01561 0<00:06, 0.0199 0<00:06, 0.0199 0<00:07, 0.02108 0<00:07, 0.02108 0<00:06, 0.0198</td <td>it/s] 0.003674 /s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701 6.04it/s] 0.008701 5.26it/s] 0.01005 5.26it/s] 0.01005 5.29it/s] 0.008605</td> <td>0.02288 0.02288 0.02768 0.02768 0.02864 0.02864</td> <td>1 4 4 2 2 4</td> <td>320: 320: 320: 320: 320: 320:</td>	it/s] 0.003674 /s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701 6.04it/s] 0.008701 5.26it/s] 0.01005 5.26it/s] 0.01005 5.29it/s] 0.008605	0.02288 0.02288 0.02768 0.02768 0.02864 0.02864	1 4 4 2 2 4	320: 320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G	00 , ?i 0.01397 0<?, ?it/ 0.01397 0<00:06, 0.01561 0<00:06, 0.01561 0<00:06, 0.0199 0<00:07, 0.02108 0<00:07, 0.02108 0<00:06, 0.01828</td <td>it/s] 0.003674 /s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701 6.04it/s] 0.008701 5.26it/s] 0.01005 5.26it/s] 0.01005 5.29it/s] 0.008605 0.008605</td> <td>0.02288 0.02288 0.02768 0.02768 0.02864 0.02864 0.02714</td> <td>1 1 4 4 2 2 2 4</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	it/s] 0.003674 /s] 0.003674 6.40it/s] 0.009258 6.40it/s] 0.009258 6.04it/s] 0.008701 6.04it/s] 0.008701 5.26it/s] 0.01005 5.26it/s] 0.01005 5.29it/s] 0.008605 0.008605	0.02288 0.02288 0.02768 0.02768 0.02864 0.02864 0.02714	1 1 4 4 2 2 2 4	320: 320: 320: 320: 320: 320: 320:

444/499	0.206G 0.01741		0.02341	2	320:
12% #2	5/40 [00:01<00:06,				
444/499	0.206G 0.01741		0.02341	2	320:
15% #5	6/40 [00:01<00:06,				
444/499		0.007555	0.02213	1	320:
15% #5	6/40 [00:01<00:06,				
444/499		0.007555	0.02213	1	320:
18% #7	7/40 [00:01<00:05,				
444/499	0.206G 0.01479		0.02094	1	320:
18% #7	7/40 [00:01<00:05,				
444/499	0.206G 0.01479		0.02094	1	320:
20% ##	8/40 [00:01<00:05,				
444/499		0.007875	0.02076	4	320:
20% ##	8/40 [00:01<00:05,				
444/499		0.007875	0.02076	4	320:
22% ##2	9/40 [00:01<00:05,				
444/499		0.008555	0.02186	4	320:
22% ##2	9/40 [00:01<00:05,				
444/499	0.206G 0.01712		0.02186	4	320:
25% ##5	10/40 [00:01<00:05,			_	
·		0.008198	0.02134	2	320:
25% ##5	10/40 [00:01<00:05,			_	
444/499	0.206G 0.01638		0.02134	2	320:
28% ##7	11/40 [00:01<00:05,				
444/499		0.007805	0.02064	1	320:
28% ##7	11/40 [00:02<00:05,				
444/499	0.206G 0.01615		0.02064	1	320:
30% ###	12/40 [00:02<00:04,				
444/499		0.00868	0.02069	4	320:
30% ###	12/40 [00:02<00:04,				
444/499	0.206G 0.01671		0.02069	4	320:
32% ###2	13/40 [00:02<00:04,				
444/499	0.206G 0.01627		0.02017	1	320:
32% ###2	13/40 [00:02<00:04,				
444/499	0.206G 0.01627		0.02017	1	320:
35% ###5	14/40 [00:02<00:04,				
444/499		0.008069	0.01957	1	320:
35% ###5	14/40 [00:02<00:04,	· -			
444/499	0.206G 0.01565		0.01957	1	320:
38% ###7	15/40 [00:02<00:04,				
444/499	0.206G 0.01619		0.01939	3	320:
38% ###7	15/40 [00:02<00:04,				
444/499	0.206G 0.01619		0.01939	3	320:
40% ####	16/40 [00:02<00:04,			_	
444/499		0.008154	0.01962	2	320:
40% ####	16/40 [00:03<00:04,				
444/499	0.206G 0.01753		0.01962	2	320:
42% ####2	17/40 [00:03<00:04,	4.98it/s]			

444/499	0.206G 0.01768 0.008574	0.01973	4	320:
42% ####2	17/40 [00:03<00:04, 4.98it/s]			
444/499	0.206G 0.01768 0.008574	0.01973	4	320:
45% ####5	18/40 [00:03<00:04, 4.96it/s]			
444/499	0.206G 0.01734 0.008266	0.01947	1	320:
45% ####5	18/40 [00:03<00:04, 4.96it/s]	0.04045		000
444/499	0.206G 0.01734 0.008266	0.01947	1	320:
48% ####7	19/40 [00:03<00:04, 4.86it/s]	0.00041	0	200.
444/499 48% ####7	0.206G 0.01953 0.008033	0.02041	2	320:
444/499	19/40 [00:03<00:04, 4.86it/s] 0.206G	0.02041	2	320:
50% #####	20/40 [00:03<00:04, 4.85it/s]	0.02041	2	320:
444/499	0.206G 0.01956 0.008338	0.02065	4	320:
50% #####	20/40 [00:03<00:04, 4.85it/s]	0.02005	4	320.
444/499	0.206G 0.01956 0.008338	0.02065	4	320:
52% #####2	21/40 [00:03<00:03, 4.76it/s]	0.02003	4	320.
444/499	0.206G 0.01951 0.008155	0.02043	2	320:
52% #####2	21/40 [00:04<00:03, 4.76it/s]	0.02040	2	520.
444/499	0.206G 0.01951 0.008155	0.02043	2	320:
55% #####5	22/40 [00:04<00:03, 4.90it/s]	0.02040	2	520.
444/499	0.206G 0.01866 0.007931	0.01955	0	320:
55% #####5	22/40 [00:04<00:03, 4.90it/s]	0.01300	V	020.
444/499	0.206G 0.01866 0.007931	0.01955	0	320:
57% #####7	23/40 [00:04<00:03, 5.27it/s]	0.01000		020.
444/499	0.206G 0.01906 0.007975	0.01947	2	320:
57% #####7	23/40 [00:04<00:03, 5.27it/s]			
444/499	0.206G 0.01906 0.007975	0.01947	2	320:
60% ######	24/40 [00:04<00:03, 5.16it/s]			
444/499	0.206G 0.01863 0.007811	0.0193	1	320:
60% ######	24/40 [00:04<00:03, 5.16it/s]			
444/499	0.206G 0.01863 0.007811	0.0193	1	320:
62% ######2	25/40 [00:04<00:02, 5.08it/s]			
444/499	0.206G 0.01854 0.007684	0.01906	1	320:
62% #####2	25/40 [00:04<00:02, 5.08it/s]			
444/499	0.206G 0.01854 0.007684	0.01906	1	320:
65% ######5	26/40 [00:04<00:02, 5.15it/s]			
444/499	0.206G 0.01897 0.007575	0.01883	1	320:
65% ######5	26/40 [00:05<00:02, 5.15it/s]			
444/499	0.206G 0.01897 0.007575	0.01883	1	320:
68% #####7	27/40 [00:05<00:02, 5.06it/s]			
444/499	0.206G 0.01861 0.007404	0.01861	1	320:
68% ######7	27/40 [00:05<00:02, 5.06it/s]			
444/499	0.206G 0.01861 0.007404	0.01861	1	320:
70% ######	28/40 [00:05<00:02, 5.14it/s]			
444/499	0.206G 0.01834 0.007331	0.01851	2	320:
70% ######	28/40 [00:05<00:02, 5.14it/s]			
444/499	0.206G 0.01834 0.007331	0.01851	2	320:
72% ######2	29/40 [00:05<00:02, 5.47it/s]			

	0.206G 0.01809		0.01835	2	320:
72% #######2 444/499	29/40 [00:05<00:02, 0.206G 0.01809		0.01835	2	320:
	30/40 [00:05<00:01,		0.01033	2	320.
444/499		0.007707	0.01842	4	320:
	30/40 [00:05<00:01,		0.01042	-1	020.
444/499			0.01842	4	320:
	31/40 [00:05<00:01,			_	
444/499			0.0185	4	320:
	31/40 [00:06<00:01,				
444/499	•		0.0185	4	320:
80% #######	32/40 [00:06<00:01,	5.45it/s]			
444/499			0.0183	1	320:
80% #######	32/40 [00:06<00:01,	5.45it/s			
444/499	0.206G 0.01885	0.007926	0.0183	1	320:
82% #######2	33/40 [00:06<00:01,	5.53it/s			
444/499	0.206G 0.0195	0.008025	0.01844	4	320:
82% #######2	33/40 [00:06<00:01,	5.53it/s			
444/499	0.206G 0.0195	0.008025	0.01844	4	320:
85% #######5	34/40 [00:06<00:01,	5.61it/s]			
444/499	0.206G 0.01933	0.007987	0.01846	2	320:
85% #######5	34/40 [00:06<00:01,	5.61it/s]			
444/499	0.206G 0.01933	0.007987	0.01846	2	320:
88% #######7	35/40 [00:06<00:00,	5.52it/s			
444/499	0.206G 0.01934	0.007901	0.01833	1	320:
88% #######7	35/40 [00:06<00:00,	5.52it/s			
444/499	0.206G 0.01934	0.007901	0.01833	1	320:
90% ########	36/40 [00:06<00:00,	5.18it/s]			
444/499	0.206G 0.01939	0.008025	0.01852	4	320:
90% ########	36/40 [00:06<00:00,	5.18it/s			
444/499	0.206G 0.01939	0.008025	0.01852	4	320:
92% ########2	37/40 [00:06<00:00,	5.36it/s]			
444/499	0.206G 0.01952	0.008207	0.01865	4	320:
92% ########2	37/40 [00:07<00:00,	5.36it/s]			
444/499	0.206G 0.01952	0.008207	0.01865	4	320:
	38/40 [00:07<00:00,	5.35it/s]			
444/499	0.206G 0.01926		0.01864	1	320:
	38/40 [00:07<00:00,				
444/499	0.206G 0.01926		0.01864	1	320:
	39/40 [00:07<00:00,				
444/499			0.0185	2	320:
	39/40 [00:07<00:00,				
444/499	0.206G 0.01904		0.0185	2	320:
	40/40 [00:07<00:00			_	
444/499	0.206G 0.01904		0.0185	2	320:
100% ##########	40/40 [00:07<00:00	, b.33it/s]			
	Q1 T	T.,	T.	ъ	ADEO
	Class Images	Instances	Р	R	mAP50

mAP50-95:	0%	I 0/20 [0	0:00 , ?it/</th <th>'al</th> <th></th> <th></th>	'al		
MAP50-95.			Instances		R	mAP50
mAP50-95:		_	0:00<00:01,		10	mai oo
MAT 00 50.	Class		Instances		R	mAP50
mAP50-95:		_	0:00<00:01,		10	mm 00
	Class		Instances		R	mAP50
mAP50-95:		_	0:00<00:00,		10	mm 00
	Class		Instances		R	mAP50
mAP50-95:	40% ####	•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	50% #####	•	00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	65% ######5	_	00:00<00:00,			
	Class	Images	Instances	P	R	mAP50
mAP50-95:	75% ######5	15/20 [00:00<00:00,	17.17it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	85% #######5	17/20 [00:01<00:00,	17.48it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	95% ########5	19/20 [00:01<00:00,	16.37it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########	20/20 [
	all	40	40	0.966	0.975	0.992
0.813						
Epocl	and an area					
			ohiloga	ala laga	Tnatancoa	Ciro
Бросі	n GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
-	_		-	cls_loss	Instances	Size
0%	0/40 [00	:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
0% 445/499	0/40 [00 9 0.206G	:00 , ?i</td <td>t/s] 0.01219</td> <td></td> <td>Instances 4</td> <td>320:</td>	t/s] 0.01219		Instances 4	320:
0% 445/499	0/40 [00 9	:00 , ?i<br 0.01705 0 , ?it/</td <td>t/s] 0.01219 s]</td> <td>0.01906</td> <td>4</td> <td>320:</td>	t/s] 0.01219 s]	0.01906	4	320:
0% 445/499 0% 445/499	0/40 [00 9	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705	t/s] 0.01219 s] 0.01219			
0% 445/499 0% 445/499 2% 2	0/40 [00 9	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705 0<00:06,	t/s] 0.01219 s] 0.01219 5.82it/s]	0.01906 0.01906	4	320: 320:
0% 445/499 0% 445/499 2% 2 445/499	0/40 [00 9	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705 0<00:06, 0.01333	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744	0.01906	4	320:
0% 445/499 0% 445/499 2% 2 445/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705 0<00:06, 0.01333 0<00:06,	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s]	0.01906 0.01906 0.01507	4	320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 2% 2	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705 0<00:06, 0.01333 0<00:06, 0.01333	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744	0.01906 0.01906	4 4 1	320: 320:
0% 445/499 0% 445/499 2% 2 445/499 2% 2	0/40 [00 9	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705 0<00:06, 0.01333 0<00:06, 0.01333	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744	0.01906 0.01906 0.01507	4 4 1	320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 2% 2 445/499 5% 5	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705 0<00:06, 0.01333 0<00:06, 0.01333 0<00:06,	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318	0.01906 0.01906 0.01507 0.01507	4 4 1	320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 2% 2 445/499 5% 5 445/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705 0<00:06, 0.01333 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06,	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s]	0.01906 0.01906 0.01507 0.01507	4 4 1	320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 2% 2 445/499 5% 5 445/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705 0<00:06, 0.01333 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06, 0.01974	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318	0.01906 0.01906 0.01507 0.01507 0.01756	4 4 1 1 4	320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 2% 2 445/499 5% 5 445/499 5% 5	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0	:00 , ?i<br 0.01705 0 , ?it/<br 0.01705 0<00:06, 0.01333 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06, 0.01974	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318	0.01906 0.01906 0.01507 0.01507 0.01756	4 4 1 1 4	320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 5% 5 445/499 5% 5 445/499 8% 7	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0	:00 , ?i 0.01705 0<?, ?it/ 0.01705 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06, 0.01974 0<00:06, 0.01974</td <td>t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732</td> <td>0.01906 0.01906 0.01507 0.01507 0.01756</td> <td>4 4 1 1 4</td> <td>320: 320: 320: 320: 320:</td>	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732	0.01906 0.01906 0.01507 0.01507 0.01756	4 4 1 1 4	320: 320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 5% 5 445/499 5% 5 445/499 8% 7 445/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0	:00 , ?i 0.01705 0<?, ?it/ 0.01705 0<00:06, 0.01333 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06, 0.01974 0<00:06, 0.01701 0<00:06,</td <td>t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732</td> <td>0.01906 0.01906 0.01507 0.01507 0.01756</td> <td>4 4 1 1 4</td> <td>320: 320: 320: 320: 320:</td>	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732	0.01906 0.01906 0.01507 0.01507 0.01756	4 4 1 1 4	320: 320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 5% 5 445/499 5% 5 445/499 8% 7 445/499 8% 7 445/499 10% #	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0	:00 , ?i 0.01705 0<?, ?it/ 0.01705 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06, 0.01974 0<00:06, 0.01701 0<00:06, 0.01701 0<00:06,</td <td>t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s]</td> <td>0.01906 0.01906 0.01507 0.01507 0.01756 0.01756 0.01816</td> <td>4 4 1 1 4 4 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s]	0.01906 0.01906 0.01507 0.01507 0.01756 0.01756 0.01816	4 4 1 1 4 4 1	320: 320: 320: 320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 2% 2 445/499 5% 5 445/499 8% 7 445/499 8% 7 445/499 10% # 445/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00:0 0.206G	:00 , ?i 0.01705 0<?, ?it/ 0.01705 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06, 0.01974 0<00:06, 0.01701 0<00:06, 0.01701 00<00:06, 0.01701</td <td>t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s] 0.008165</td> <td>0.01906 0.01906 0.01507 0.01507 0.01756 0.01756</td> <td>4 4 1 1 4 4</td> <td>320: 320: 320: 320: 320: 320:</td>	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s] 0.008165	0.01906 0.01906 0.01507 0.01507 0.01756 0.01756	4 4 1 1 4 4	320: 320: 320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 5% 5 445/499 5% 5 445/499 8% 7 445/499 10% # 445/499 10% #	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0	:00 , ?i 0.01705 0<?, ?it/ 0.01705 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06, 0.01974 0<00:06, 0.01701 0<00:06, 0.01701 0<00:06, 0.01701 0<00:06, 0.02217 00<00:06,</td <td>t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s] 0.008165 5.80it/s]</td> <td>0.01906 0.01906 0.01507 0.01507 0.01756 0.01756 0.01816 0.01816</td> <td>4 4 1 1 4 4 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s] 0.008165 5.80it/s]	0.01906 0.01906 0.01507 0.01507 0.01756 0.01756 0.01816 0.01816	4 4 1 1 4 4 1 1	320: 320: 320: 320: 320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 5% 5 445/499 5% 5 445/499 8% 7 445/499 10% # 445/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0 0.206G	:00 , ?i 0.01705 0<?, ?it/ 0.01705 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06, 0.01974 0<00:06, 0.01701 0<00:06, 0.01701 0<00:06, 0.02217</td <td>t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s] 0.008165 5.80it/s] 0.008165</td> <td>0.01906 0.01906 0.01507 0.01507 0.01756 0.01756 0.01816</td> <td>4 4 1 1 4 4 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s] 0.008165 5.80it/s] 0.008165	0.01906 0.01906 0.01507 0.01507 0.01756 0.01756 0.01816	4 4 1 1 4 4 1	320: 320: 320: 320: 320: 320: 320:
0% 445/499 0% 445/499 2% 2 445/499 5% 5 445/499 5% 5 445/499 8% 7 445/499 10% # 445/499	0/40 [00 0.206G 0/40 [00:0 0.206G 1/40 [00:0 0.206G 1/40 [00:0 0.206G 2/40 [00:0 0.206G 2/40 [00:0 0.206G 3/40 [00:0 0.206G 3/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0 0.206G 4/40 [00:0	:00 , ?i 0.01705 0<?, ?it/ 0.01705 0<0:06, 0.01333 0<00:06, 0.01333 0<00:06, 0.01974 0<00:06, 0.01974 0<00:06, 0.01701 0<00:06, 0.01701 00<00:06, 0.02217 00<00:06, 0.02217</td <td>t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s] 0.008165 5.80it/s] 0.008165</td> <td>0.01906 0.01906 0.01507 0.01507 0.01756 0.01756 0.01816 0.01816</td> <td>4 4 1 1 4 4 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.01219 s] 0.01219 5.82it/s] 0.007744 5.82it/s] 0.007744 5.79it/s] 0.009318 5.79it/s] 0.009318 5.79it/s] 0.007732 5.79it/s] 0.007732 5.80it/s] 0.008165 5.80it/s] 0.008165	0.01906 0.01906 0.01507 0.01507 0.01756 0.01756 0.01816 0.01816	4 4 1 1 4 4 1 1	320: 320: 320: 320: 320: 320: 320: 320:

12% #2	5/40 [00:01<00:06, 5.			
445/499	0.206G 0.02369 0		4 33	20:
15% #5	6/40 [00:01<00:05, 5.			
445/499		0.01839	0 33	20:
15% #5		67it/s]		
445/499		0.01839	0 33	20:
18% #7	7/40 [00:01<00:05, 6.			
445/499		0.01763	1 33	20:
18% #7	7/40 [00:01<00:05, 6.			
445/499		0.01763	1 33	20:
20% ##	8/40 [00:01<00:05, 5.			
445/499		0.01775	1 32	20:
20% ##	8/40 [00:01<00:05, 5.			
445/499		0.01775	1 32	20:
22% ##2	9/40 [00:01<00:05, 5.	· -		
445/499		0.01766	4 32	20:
22% ##2	9/40 [00:01<00:05, 5.			
445/499		0.01766	4 32	20:
25% ##5	10/40 [00:01<00:05, 5	· -		
445/499	0.206G 0.01881 0.	0.01884	2 33	20:
25% ##5	10/40 [00:01<00:05, 5	.72it/s]		
445/499	0.206G 0.01881 0.	0.01884	2 33	20:
28% ##7	11/40 [00:01<00:05, 5	.58it/s]		
445/499	0.206G 0.01839 0.	0.01912	1 33	20:
28% ##7	11/40 [00:02<00:05, 5	.58it/s]		
445/499	0.206G 0.01839 0.	0.01912	1 33	20:
30% ###	12/40 [00:02<00:05, 5	.51it/s]		
445/499	0.206G 0.02089 0	.00759 0.01876	2 33	20:
30% ###	12/40 [00:02<00:05, 5	.51it/s]		
445/499	0.206G 0.02089 0	.00759 0.01876	2 33	20:
32% ###2	13/40 [00:02<00:04, 5	.60it/s]		
445/499	0.206G 0.02059 0	.00751 0.01841	1 33	20:
32% ###2	13/40 [00:02<00:04, 5	.60it/s]		
445/499	0.206G 0.02059 0	.00751 0.01841	1 33	20:
35% ###5	14/40 [00:02<00:04, 5	.63it/s]		
445/499	0.206G 0.01987 0.	0.01791	1 33	20:
35% ###5	14/40 [00:02<00:04, 5	.63it/s]		
445/499	0.206G 0.01987 0.	0.01791	1 33	20:
38% ###7	15/40 [00:02<00:04, 5	.70it/s]		
445/499	0.206G 0.01915 0	.00697 0.01777	1 33	20:
38% ###7	15/40 [00:02<00:04, 5	.70it/s]		
445/499	0.206G 0.01915 0	.00697 0.01777	1 33	20:
40% ####	16/40 [00:02<00:04, 5	.72it/s]		
445/499		006866 0.01798	2 33	20:
40% ####	16/40 [00:02<00:04, 5	.72it/s]		
445/499		006866 0.01798	2 33	20:
42% ####2	17/40 [00:02<00:04, 5			
445/499		006671 0.01817	1 33	20:

42% ####2		17/40 [00:03<00:04,				
445/499		0.206G 0.02131		0.01817	1	320:
45% ####5	١	18/40 [00:03<00:03,	· -			
445/499		0.206G 0.02101	0.006951	0.01835	4	320:
45% ####5		18/40 [00:03<00:03,				
445/499		0.206G 0.02101		0.01835	4	320:
48% ####7		19/40 [00:03<00:03,				
445/499		0.206G 0.02111		0.01837	4	320:
48% ####7	١	19/40 [00:03<00:03,				
445/499		0.206G 0.02111	0.007313	0.01837	4	320:
50% #####		20/40 [00:03<00:03,				
445/499		0.206G 0.02113		0.01852	4	320:
50% #####	١	20/40 [00:03<00:03,				
445/499		0.206G 0.02113		0.01852	4	320:
52% #####2		21/40 [00:03<00:03,				
445/499		0.206G 0.02049		0.01827	1	320:
52% #####2		21/40 [00:03<00:03,				
445/499			0.00732	0.01827	1	320:
55% #####5		22/40 [00:03<00:03,	5.68it/s]			
445/499		0.206G 0.02009	0.007181	0.01811	1	320:
55% #####5		22/40 [00:04<00:03,	5.68it/s]			
445/499		0.206G 0.02009	0.007181	0.01811	1	320:
57% #####7		23/40 [00:04<00:03,	5.57it/s			
445/499		0.206G 0.02023	0.007602	0.01814	4	320:
57% #####7	-	23/40 [00:04<00:03,	5.57it/s			
445/499		0.206G 0.02023	0.007602	0.01814	4	320:
60% ######		24/40 [00:04<00:02,	5.63it/s]			
445/499		0.206G 0.02059	0.007654	0.018	2	320:
60% ######		24/40 [00:04<00:02,	5.63it/s]			
445/499		0.206G 0.02059	0.007654	0.018	2	320:
62% ######2		25/40 [00:04<00:02,	5.54it/s			
445/499		0.206G 0.02047	0.007516	0.01809	1	320:
62% ######2	-	25/40 [00:04<00:02,	5.54it/s			
445/499		0.206G 0.02047	0.007516	0.01809	1	320:
65% ######5	-	26/40 [00:04<00:02,	5.47it/s]			
445/499		0.206G 0.02024	0.007748	0.01882	4	320:
65% ######5	-	26/40 [00:04<00:02,	5.47it/s]			
445/499		0.206G 0.02024	0.007748	0.01882	4	320:
68% #####7	-	27/40 [00:04<00:02,	5.57it/s			
445/499		0.206G 0.0206	0.007737	0.01885	2	320:
68% #####7	-	27/40 [00:04<00:02,	5.57it/s			
445/499		0.206G 0.0206	0.007737	0.01885	2	320:
70% ######	-	28/40 [00:04<00:02,	5.50it/s]			
445/499		0.206G 0.02019	0.007636	0.01871	1	320:
70% ######	-	28/40 [00:05<00:02,	5.50it/s]			
445/499		0.206G 0.02019	0.007636	0.01871	1	320:
72% #######2	1	29/40 [00:05<00:01,				
445/499		0.206G 0.01997	0.007485	0.01862	1	320:

	_				
	29/40 [00:05<00:01,				
445/499		0.007485	0.01862	1	320:
	30/40 [00:05<00:01,				
445/499	0.206G 0.01968	0.007449	0.0185	1	320:
75% ######5	30/40 [00:05<00:01,	5.78it/s			
445/499	0.206G 0.01968	0.007449	0.0185	1	320:
78% ######7	31/40 [00:05<00:01,	5.63it/s]			
445/499	0.206G 0.01968	0.007677	0.0187	4	320:
78% ######7	31/40 [00:05<00:01,	5.63it/s			
445/499	0.206G 0.01968	0.007677	0.0187	4	320:
80% #######	32/40 [00:05<00:01,	5.64it/s]			
445/499	0.206G 0.01949	0.00788	0.01864	4	320:
80% #######	32/40 [00:05<00:01,	5.64it/s]			
445/499			0.01864	4	320:
82% ########	33/40 [00:05<00:01,				
445/499	0.206G 0.01933	0.007862	0.01863	2	320:
	33/40 [00:05<00:01,				
445/499	•		0.01863	2	320:
	34/40 [00:05<00:01,		0.02000	_	0201
445/499	•	0.007731	0.01849	1	320:
	34/40 [00:06<00:01,		0.01010	-	020.
445/499	0.206G 0.01909	0.007731	0.01849	1	320:
	35/40 [00:06<00:00,		0.01045	1	020.
445/499	0.206G 0.0195	0.007927	0.01864	4	320:
	35/40 [00:06<00:00,		0.01004	7	520.
_		0.007927	0.01864	4	320:
	36/40 [00:06<00:00,		0.01004	4	320:
			0.0106	4	200.
445/499		0.00817	0.0186	4	320:
	36/40 [00:06<00:00,		0.0400	4	000
445/499	0.206G 0.01957		0.0186	4	320:
	37/40 [00:06<00:00,		0.04044		000
445/499	0.206G 0.01924	0.008024	0.01841	1	320:
	37/40 [00:06<00:00,				
445/499	0.206G 0.01924		0.01841	1	320:
	38/40 [00:06<00:00,				
		0.007988	0.01837	3	320:
	38/40 [00:06<00:00,				
	0.206G 0.01971		0.01837	3	320:
	39/40 [00:06<00:00,				
		0.007916	0.01838	2	320:
98% ########7	39/40 [00:07<00:00,	5.63it/s]			
445/499		0.007916	0.01838	2	320:
100% ##########	40/40 [00:07<00:00,	, 5.84it/s]			
	0.206G 0.0196		0.01838	2	320:
100% #########	40/40 [00:07<00:00,	, 5.68it/s]			
	Class Images 1		P	R	mAP50
mAP50-95: 0%	0/20 [00:	:00 , ?it/s]</td <td></td> <td></td> <td></td>			

mAP50-95: 25% ##5 5/20 [00:00<00:00, 16.50it/s] Class Images Instances P R mA mAP50-95: 35% ###5 7/20 [00:00<00:00, 17.16it/s] Class Images Instances P R mA mAP50-95: 45% ####5 9/20 [00:00<00:00, 17.55it/s] 17.55it/s] Images Instances P R MA	.P50
mAP50-95: 25% ##5 5/20 [00:00<00:00, 16.50it/s]	
Class Images Instances P R mA mAP50-95: 35% ###5 7/20 [00:00<00:00, 17.16it/s] Class Images Instances P R mA mAP50-95: 45% ####5 9/20 [00:00<00:00, 17.55it/s]	
mAP50-95: 35% ###5 7/20 [00:00<00:00, 17.16it/s] Class Images Instances P R mA mAP50-95: 45% ####5 9/20 [00:00<00:00, 17.55it/s]	P50
Class Images Instances P R mA mAP50-95: 45% ####5 9/20 [00:00<00:00, 17.55it/s]	00
	P50
Class Images Instances P R mA	
-	P50
mAP50-95: 55% #####5 11/20 [00:00<00:00, 17.79it/s]	
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mAP50-95: 65% #####5 13/20 [00:00<00:00, 17.78it/s]	D = 0
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mAP50-95: 75% #######5 15/20 [00:00<00:00, 16.47it/s] Class Images Instances P R mA	DEO
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mAP50-95: 95% #######5 19/20 [00:01<00:00, 16.65it/s]	.1 00
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mAP50-95: 100% ######## 20/20 [00:01<00:00, 17.01it/s]	
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446/499	0.206G 0.02226	0.008544	0.02152	2	320:
15% #5	6/40 [00:01<00:06,	5.03it/s			
446/499	0.206G 0.02226	0.008544	0.02152	2	320:
18% #7	7/40 [00:01<00:06,				
,		0.008422	0.02053	2	320:
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446/499	0.206G 0.02053	0.007923	0.0198	1	320:
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446/499	0.206G 0.02053	0.007923	0.0198	1	320:
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446/499	0.206G 0.02052		0.01977	4	320:
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446/499	0.206G 0.01992		0.01951	1	320:
25% ##5	10/40 [00:02<00:06,				
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28% ##7	11/40 [00:02<00:05,				
110, 100		0.007875	0.01964	2	320:
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446/499	0.206G 0.02065		0.01964	2	320:
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446/499	0.206G 0.02069		0.0198	4	320:
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446/499	0.206G 0.01979	0.00801	0.01965	1	320:
35% ###5	14/40 [00:02<00:05,				
446/499		0.00769	0.01936	1	320:
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446/499	0.206G 0.01923		0.01936	1	320:
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446/499	0.206G 0.01842		0.01908	1	320:
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446/499	0.206G 0.02019		0.01897	3	320:
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446/499	0.206G 0.02019 0.007411 0	.01897 3	320:
45% ####5	18/40 [00:03<00:04, 5.07it/s]		
446/499		.01875 1	320:
45% ####5	18/40 [00:03<00:04, 5.07it/s]		
446/499		.01875 1	320:
48% ####7	19/40 [00:03<00:03, 5.27it/s]		
446/499		.01866 4	320:
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446/499		0.0188 2	320:
52% #####2	21/40 [00:04<00:03, 5.16it/s]	0 0101 1	200
446/499		0.0191 4	320:
52% #####2	21/40 [00:04<00:03, 5.16it/s]	0 0101 1	200
446/499		0.0191 4	320:
55% #####5	22/40 [00:04<00:03, 5.34it/s]	04000	200
446/499		.01896 2	320:
55% #####5	22/40 [00:04<00:03, 5.34it/s]	01000	200
446/499		.01896 2	320:
57% #####7	23/40 [00:04<00:03, 5.31it/s]	01005	200.
446/499		.01885 2	320:
57% #####7	23/40 [00:04<00:03, 5.31it/s]	01005	200
446/499		.01885 2	320:
60% ######	24/40 [00:04<00:02, 5.59it/s]	04000	200
446/499		.01922 4	320:
60% ######	24/40 [00:04<00:02, 5.59it/s]	01000	200
446/499		.01922 4	320:
62% ######2	25/40 [00:04<00:02, 5.51it/s]	01005	200
446/499		.01905 1	320:
62% ######2	25/40 [00:05<00:02, 5.51it/s]	01005	200
446/499		.01905 1	320:
65% ######5	26/40 [00:05<00:02, 5.48it/s]	04000	200
446/499		.01902 4	320:
	26/40 [00:05<00:02, 5.48it/s]	01000	200.
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446/499		.01885 1	320:
68% ######7	27/40 [00:05<00:02, 5.27it/s]	0100E 1	200.
446/499		.01885 1	320:
70% #######	28/40 [00:05<00:02, 5.42it/s]	01005	200.
446/499		.01905 2	320:
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		.01905 2	320:
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72% #######2		.01030 2	320:
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	0.206G 0.02093		0.01895	2	320:
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446/499		0.008454	0.01913	4	320:
75% #######5 446/499	30/40 [00:05<00:01, 0.206G 0.02111		0.01913	4	200.
	31/40 [00:05<00:01,		0.01913	4	320:
446/499		0.008277	0.01899	1	320:
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446/499			0.01899	1	320:
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446/499		0.00807	0.01889	1	320:
82% ########	33/40 [00:06<00:01,	, 5.65it/s]			
446/499		0.00807	0.01889	1	320:
85% #######5	34/40 [00:06<00:01,	, 5.70it/s]			
446/499	0.206G 0.02015	0.008317	0.01887	4	320:
85% #######5	34/40 [00:06<00:01,	, 5.70it/s]			
	0.206G 0.02015		0.01887	4	320:
88% #######7	35/40 [00:06<00:00,	, 5.72it/s]			
446/499	0.206G 0.02073	0.008343	0.0188	2	320:
88% #######7	35/40 [00:06<00:00,	, 5.72it/s]			
446/499	0.206G 0.02073		0.0188	2	320:
90% ########	36/40 [00:06<00:00,	, 5.46it/s]			
446/499	0.206G 0.02041	0.008232	0.01876	1	320:
90% ########	36/40 [00:07<00:00,	, 5.46it/s]			
446/499	0.206G 0.02041	0.008232	0.01876	1	320:
92% ########2	37/40 [00:07<00:00,	, 5.57it/s]			
446/499	0.206G 0.02088	0.008308	0.01881	3	320:
92% ########2	37/40 [00:07<00:00,	, 5.57it/s]			
446/499	0.206G 0.02088	0.008308	0.01881	3	320:
95% ########5	38/40 [00:07<00:00,	, 5.57it/s]			
446/499	0.206G 0.02097	0.008445	0.01881	4	320:
95% ########5	38/40 [00:07<00:00,	, 5.57it/s]			
446/499	0.206G 0.02097	0.008445	0.01881	4	320:
98% ########7	39/40 [00:07<00:00,	5.64it/s			
446/499	0.206G 0.02131	0.008475	0.01933	2	320:
98% ########7	39/40 [00:07<00:00,	5.64it/s			
446/499	0.206G 0.02131	0.008475	0.01933	2	320:
100% ##########	40/40 [00:07<00:00), 5.41it/s]			
446/499	0.206G 0.02131	0.008475	0.01933	2	320:
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	Class Images		P	R	mAP50
mAP50-95: 0%		0:00 , ?it/s</td <td>]</td> <td></td> <td></td>]		
	Class Images	Instances	P	R	mAP50

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mAP50-95:	40% ####	_	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	50% #####	_	00:00<00:00,			
	Class	Images	Instances	P	R	mAP50
mAP50-95:	60% #####	12/20 [00:00<00:00,	, 16.03it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	75% ######5	15/20 [00:00<00:00,	, 17.23it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:						
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	all	40	40	0.961	0.963	0.991
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Г	h (IDII	1	.1.4.7	-1- 1	T.,	Q:
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447/499	0.206G 0.01548 0.009754		4	320:
15% #5	6/40 [00:01<00:05, 5.75it/s]			
447/499	0.206G 0.01548 0.009754		4	320:
18% #7	7/40 [00:01<00:05, 5.59it/s]			
447/499	0.206G 0.01355 0.008761	0.01533	0	320:
18% #7	7/40 [00:01<00:05, 5.59it/s]			
447/499	0.206G 0.01355 0.008761		0	320:
20% ##	8/40 [00:01<00:05, 6.00it/s]			
447/499	0.206G 0.01295 0.008148	0.01642	1	320:
20% ##	8/40 [00:01<00:05, 6.00it/s]			
447/499	0.206G 0.01295 0.008148	0.01642	1	320:
22% ##2	9/40 [00:01<00:05, 5.94it/s]			
447/499	0.206G 0.01308 0.007712	0.01609	1	320:
22% ##2	9/40 [00:01<00:05, 5.94it/s]			
447/499	0.206G 0.01308 0.007712	0.01609	1	320:
25% ##5	10/40 [00:01<00:05, 5.72it/s	:]		
447/499	0.206G 0.01277 0.007562	0.01597	2	320:
25% ##5	10/40 [00:01<00:05, 5.72it/s	3]		
447/499	0.206G 0.01277 0.007562	0.01597	2	320:
28% ##7	11/40 [00:01<00:05, 5.74it/s	3]		
447/499	0.206G 0.01264 0.00729	0.01624	1	320:
28% ##7	11/40 [00:02<00:05, 5.74it/s	:]		
447/499	0.206G 0.01264 0.00729	0.01624	1	320:
30% ###	12/40 [00:02<00:04, 5.76it/s	:]		
447/499	0.206G 0.01287 0.008066	0.01695	4	320:
30% ###	12/40 [00:02<00:04, 5.76it/s	:]		
447/499	0.206G 0.01287 0.008066	0.01695	4	320:
32% ###2	13/40 [00:02<00:04, 5.78it/s	:]		
447/499	0.206G 0.01531 0.007934		2	320:
32% ###2	13/40 [00:02<00:04, 5.78it/s	3]		
447/499	0.206G 0.01531 0.007934	0.01697	2	320:
35% ###5	14/40 [00:02<00:04, 5.63it/s	3]		
447/499	0.206G 0.01596 0.008215	0.01735	3	320:
35% ###5	14/40 [00:02<00:04, 5.63it/s			
447/499	0.206G 0.01596 0.008215	0.01735	3	320:
38% ###7	15/40 [00:02<00:04, 5.68it/s			
447/499	0.206G 0.01704 0.008572	0.01826	4	320:
38% ###7	15/40 [00:02<00:04, 5.68it/s			
447/499	0.206G 0.01704 0.008572	0.01826	4	320:
40% ####	16/40 [00:02<00:04, 5.56it/s			
447/499	0.206G 0.01676 0.008455	0.01831	2	320:
40% ####	16/40 [00:02<00:04, 5.56it/s		_	
447/499	0.206G 0.01676 0.008455	0.01831	2	320:
42% ####2	17/40 [00:02<00:04, 5.65it/s		_	
447/499	0.206G 0.01622 0.008304		1	320:
42% ####2	17/40 [00:03<00:04, 5.65it/s		_	••
447/499	0.206G 0.01622 0.008304	0.0182	1	320:

45% ####5		18/40 [00:03<00:03,				
447/499		0.206G 0.0162		0.01802	1	320:
45% ####5		18/40 [00:03<00:03,				
447/499		0.206G 0.0162	0.008146	0.01802	1	320:
48% ####7	١	19/40 [00:03<00:03,				
447/499		0.206G 0.01604		0.01807	1	320:
48% ####7	١	19/40 [00:03<00:03,				
447/499		0.206G 0.01604		0.01807	1	320:
50% #####	١	20/40 [00:03<00:03,				
447/499		0.206G 0.0157		0.01793	2	320:
50% #####		20/40 [00:03<00:03,				
447/499		0.206G 0.0157		0.01793	2	320:
52% #####2		21/40 [00:03<00:03,				
447/499		0.206G 0.01587		0.01845	4	320:
52% #####2		21/40 [00:03<00:03,				
447/499		0.206G 0.01587		0.01845	4	320:
55% #####5		22/40 [00:03<00:03,	5.61it/s]			
447/499		0.206G 0.01621	0.008161	0.01883	2	320:
55% #####5		22/40 [00:03<00:03,	5.61it/s			
447/499		0.206G 0.01621	0.008161	0.01883	2	320:
57% #####7	-	23/40 [00:03<00:02,	5.67it/s]			
447/499		0.206G 0.01643	0.008476	0.01914	4	320:
57% #####7	- 1	23/40 [00:04<00:02,	5.67it/s]			
447/499		0.206G 0.01643	0.008476	0.01914	4	320:
60% ######	-	24/40 [00:04<00:02,	5.42it/s			
447/499		0.206G 0.01671	0.008796	0.01902	4	320:
60% ######	-	24/40 [00:04<00:02,	5.42it/s			
447/499		0.206G 0.01671	0.008796	0.01902	4	320:
62% ######2	-	25/40 [00:04<00:02,	5.41it/s]			
447/499		0.206G 0.01645	0.008623	0.0189	1	320:
62% ######2	- 1	25/40 [00:04<00:02,				
447/499		0.206G 0.01645	0.008623	0.0189	1	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.64it/s]			
447/499		0.206G 0.01702		0.01888	4	320:
65% ######5	- 1	26/40 [00:04<00:02,				
447/499	•	0.206G 0.01702		0.01888	4	320:
68% ######7	- 1	27/40 [00:04<00:02,				
447/499	·	0.206G 0.01709		0.01871	2	320:
68% ######7	- 1	27/40 [00:04<00:02,				
447/499	·	0.206G 0.01709	. –	0.01871	2	320:
70% #######	- 1	28/40 [00:04<00:02,				
447/499	•	0.206G 0.01687	0.008731	0.0189	2	320:
70% #######	ı	28/40 [00:05<00:02,			_	
447/499	'	0.206G 0.01687		0.0189	2	320:
72% #######2	I	29/40 [00:05<00:02,		0.0200	_	020.
447/499	'	0.206G 0.01697	0.008529	0.01861	1	320:
72% #######2	I	29/40 [00:05<00:02,			-	020.
447/499	'	0.206G 0.01697	0.008529	0.01861	1	320:
, 100					-	220.

	_				
	30/40 [00:05<00:01,				
447/499		0.008807	0.01862	4	320:
	30/40 [00:05<00:01,				
447/499		0.008807	0.01862	4	320:
	31/40 [00:05<00:01,				
447/499			0.01856	2	320:
	31/40 [00:05<00:01,				
447/499	0.206G 0.01825	0.008816	0.01856	2	320:
80% #######	32/40 [00:05<00:01,	5.35it/s			
447/499	0.206G 0.01798	0.008653	0.01843	1	320:
80% #######	32/40 [00:05<00:01,	5.35it/s			
447/499	0.206G 0.01798	0.008653	0.01843	1	320:
82% #######2	33/40 [00:05<00:01,	5.63it/s]			
447/499	0.206G 0.01766	0.008474	0.01841	1	320:
82% ########	33/40 [00:05<00:01,	5.63it/s]			
447/499	0.206G 0.01766	0.008474	0.01841	1	320:
85% #######5	34/40 [00:05<00:01,	5.65it/s]			
447/499	0.206G 0.01764	0.008602	0.0184	4	320:
85% ########5	34/40 [00:06<00:01,	5.65it/s]			
447/499	0.206G 0.01764	0.008602	0.0184	4	320:
88% #######7	35/40 [00:06<00:00,	5.41it/s]			
447/499	0.206G 0.0174	0.008443	0.0182	1	320:
88% #######7	35/40 [00:06<00:00,	5.41it/s]			
447/499	0.206G 0.0174	0.008443	0.0182	1	320:
90% ########	36/40 [00:06<00:00,	5.39it/s]			
447/499		0.008473	0.01819	3	320:
	36/40 [00:06<00:00,				
447/499		0.008473	0.01819	3	320:
	37/40 [00:06<00:00,				
447/499	0.206G 0.01814		0.01807	1	320:
	37/40 [00:06<00:00,				
447/499	0.206G 0.01814		0.01807	1	320:
	38/40 [00:06<00:00,				
447/499			0.01829	4	320:
	38/40 [00:06<00:00,			_	
447/499	=	0.008636	0.01829	4	320:
•	39/40 [00:06<00:00,			_	
	0.206G 0.01855		0.01822	2	320:
	39/40 [00:07<00:00,		0.01022	-	020.
447/499			0.01822	2	320:
	40/40 [00:07<00:00		***************************************	_	0201
447/499	0.206G 0.01855	-	0.01822	2	320:
	40/40 [00:07<00:00		0.01022	-	020.
_ 3 0 70 1	, _3, _0 _00.01 .00.00	, 0:0110,0]			
	Class Images	Instances	Р	R n	nAP50
mAP50-95: 0%	•	:00 , ?it/s]</td <td></td> <td></td> <td></td>			
		Instances	P	R n	nAP50
mAP50-95: 10%	•	:00<00:00, 18		. .	- •
	, , ,	, -	· -		

	_	Instances		R	mAP50
mAP50-95: 20% ## Class		0:00<00:01, Instances		R	mAP50
		0:00<00:00,	15.79it/s]	D	ADEO
Class mAP50-95: 40% ####	Images 8/20 [0	Instances 0:00<00:00,	15.80it/s]	R	mAP50
Class	•	Instances		R	mAP50
mAP50-95: 50% ##### Class		00:00<00:00, Instances		R	mAP50
mAP50-95: 60% ######	12/20 [00:00<00:00	, 15.91it/s]		
Class mAP50-95: 70% #######	•	Instances 00:00<00:00		R	mAP50
Class	Images	Instances	P	R	mAP50
mAP50-95: 80% #######					ADEO
Class mAP50-95: 90% ########	_	Instances 00:01<00:00		R	mAP50
Class	Images	Instances	P	R	mAP50
mAP50-95: 100% ######### Class		00:01<00:00, Instances		R	mAP50
mAP50-95: 100% ##########	_				MAFSO
all	40	40	0.961	0.963	0.991
0.809					
Epoch GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00:	00 . ?i</td <td>t/sl</td> <td></td> <td></td> <td></td>	t/sl			
448/499 0.206G C	.009403	0.01078	0.01328	2	320:
0% 0/40 [00:00			0 01200	0	200.
448/499 0.206G 0 2% 2 1/40 [00:00		0.01078 4.92it/sl	0.01328	2	320:
448/499 0.206G			0.01954	4	320:
2% 2 1/40 [00:00					
448/499 0.206G			0.01954	4	320:
5% 5 2/40 [00:00	-				
		0.01097	0.01999	2	320:
5% 5 2/40 [00:00 448/499 0.206G			0.01999	0	200.
8% 7 3/40 [00:00			0.01999	2	320:
		0.01002	0.01963	1	320:
8% 7 3/40 [00:00			0.01000	_	020.
		0.01002	0.01963	1	320:
10% # 4/40 [00:0					
		0.009496	0.0184	2	320:
10% # 4/40 [00:0					
448/499 0.206G			0.0184	2	320:
12% #2 5/40 [00:0			0.01551	_	
448/499 0.206G			0.01834	4	320:
12% #2 5/40 [00:0	17/00:07,	4./11t/S]			

448/499	0.206G 0.01642		0.01834	4	320:
15% #5	6/40 [00:01<00:07,				
448/499	0.206G 0.01773		0.01968	4	320:
15% #5	6/40 [00:01<00:07,				
448/499	0.206G 0.01773		0.01968	4	320:
18% #7	7/40 [00:01<00:06,				
448/499	0.206G 0.01889		0.02081	4	320:
18% #7	7/40 [00:01<00:06,			_	
448/499	0.206G 0.01889		0.02081	4	320:
20% ##	8/40 [00:01<00:06,			_	
448/499	0.206G 0.01965		0.02094	3	320:
20% ##	8/40 [00:01<00:06,				
448/499	0.206G 0.01965		0.02094	3	320:
22% ##2	9/40 [00:01<00:05,				
448/499	0.206G 0.01892		0.02105	1	320:
22% ##2	9/40 [00:02<00:05,				
448/499		0.01087	0.02105	1	320:
25% ##5	10/40 [00:02<00:05,				
448/499		0.01063	0.0211	2	320:
25% ##5	10/40 [00:02<00:05,				
•		0.01063	0.0211	2	320:
28% ##7	11/40 [00:02<00:05,			_	
448/499	0.206G 0.0194		0.02107	4	320:
28% ##7	11/40 [00:02<00:05,			_	
448/499	0.206G 0.0194		0.02107	4	320:
30% ###	12/40 [00:02<00:05,				
448/499	0.206G 0.01988		0.02105	4	320:
30% ###	12/40 [00:02<00:05,				
448/499		0.01092	0.02105	4	320:
32% ###2	13/40 [00:02<00:05,				
448/499	0.206G 0.01916		0.02048	2	320:
32% ###2	13/40 [00:02<00:05,				
448/499	0.206G 0.01916		0.02048	2	320:
35% ###5	14/40 [00:02<00:04,				
448/499	0.206G 0.01909		0.02022	1	320:
35% ###5	14/40 [00:02<00:04,				
448/499	0.206G 0.01909		0.02022	1	320:
38% ###7	15/40 [00:02<00:04,				
448/499	0.206G 0.02123		0.02161	2	320:
38% ###7	15/40 [00:03<00:04,				
448/499	0.206G 0.02123		0.02161	2	320:
40% ####	16/40 [00:03<00:04,			_	
448/499	0.206G 0.02173		0.02197	4	320:
40% ####	16/40 [00:03<00:04,			_	
448/499	0.206G 0.02173		0.02197	4	320:
42% ####2	17/40 [00:03<00:04,		0.05:-		
448/499	0.206G 0.02101		0.0215	1	320:
42% ####2	17/40 [00:03<00:04,	5.09it/s]			

448/499	0.206G 0.02101 0.01024	0.0215	1 320:
45% ####5	18/40 [00:03<00:04, 5.19it/s]	0.0213	1 320.
448/499	-	0.02143	2 320:
45% ####5	18/40 [00:03<00:04, 5.19it/s]	0.02140	2 020.
448/499		0.02143	2 320:
48% ####7	19/40 [00:03<00:03, 5.31it/s]	0.02140	2 020.
448/499	-	0.02105	1 320:
48% ####7	19/40 [00:03<00:03, 5.31it/s]	0.02100	020.
448/499	-	0.02105	1 320:
50% #####	20/40 [00:03<00:03, 5.32it/s]	0.02100	020.
448/499		0.02124	4 320:
50% #####	20/40 [00:04<00:03, 5.32it/s]	0.02124	1 020.
448/499	-	0.02124	4 320:
52% #####2	21/40 [00:04<00:03, 5.17it/s]	0.02124	1 020.
448/499		0.02122	4 320:
52% #####2	21/40 [00:04<00:03, 5.17it/s]	0.02122	1 020.
448/499		0.02122	4 320:
55% #####5	22/40 [00:04<00:03, 5.35it/s]	0.02122	1 020.
448/499		0.02138	2 320:
55% #####5	22/40 [00:04<00:03, 5.35it/s]	0.02130	2 320.
448/499		0.02138	2 320:
57% #####7	23/40 [00:04<00:03, 5.34it/s]	0.02130	2 320.
448/499		0.02097	1 320:
57% #####7	23/40 [00:04<00:03, 5.34it/s]	0.02031	520.
448/499		0.02097	1 320:
60% ######	24/40 [00:04<00:02, 5.48it/s]	0.02031	520.
448/499	-	0.02059	1 320:
60% ######	24/40 [00:04<00:02, 5.48it/s]	0.02039	1 320.
448/499		0.02059	1 320:
62% ######2	25/40 [00:04<00:02, 5.58it/s]	0.02039	1 320.
448/499	-	0.02034	1 320:
62% ######2	25/40 [00:05<00:02, 5.58it/s]	0.02034	1 320.
448/499	-	0.02034	1 320:
	26/40 [00:05<00:02, 5.36it/s]	0.02034	1 320.
448/499		0.02012	2 320:
	26/40 [00:05<00:02, 5.36it/s]	0.02012	2 320.
448/499		0.02012	2 320:
68% ######7	27/40 [00:05<00:02, 5.47it/s]	0.02012	2 320.
448/499		0.02008	1 320:
		0.02006	320.
	27/40 [00:05<00:02, 5.47it/s] 0.206G	0 00000	1 220.
448/499 70% ######	0.206G 0.01994 0.00935 28/40 [00:05<00:02, 5.57it/s]	0.02008	1 320:
	-	0.0100	ე ვეტ.
448/499	0.206G 0.01952 0.009261	0.0199	2 320:
	28/40 [00:05<00:02, 5.57it/s]	0.0100	0 200
448/499	0.206G 0.01952 0.009261	0.0199	2 320:
72% #######2		0 01072	1 200:
448/499		0.01973	1 320:
72% ######2	29/40 [00:05<00:02, 5.50it/s]		

448/499	0.206G 0.01922	0.009091	0.01973	1	320:
	30/40 [00:05<00:01,		0.00050	•	000
448/499 75% ######5	0.206G 0.02033 30/40 [00:05<00:01,		0.02058	2	320:
448/499	0.206G 0.02033		0.02058	2	320:
	31/40 [00:05<00:01,		0.02000	2	020.
448/499		0.009143	0.02062	4	320:
	31/40 [00:06<00:01,				
448/499	0.206G 0.02027	0.009143	0.02062	4	320:
80% #######	32/40 [00:06<00:01,	5.44it/s]			
448/499	0.206G 0.01988	0.009053	0.02049	2	320:
80% #######	32/40 [00:06<00:01,	5.44it/s]			
448/499	0.206G 0.01988	0.009053	0.02049	2	320:
	33/40 [00:06<00:01,	5.68it/s]			
448/499		0.009246	0.02052	4	320:
	33/40 [00:06<00:01,				
448/499			0.02052	4	320:
	34/40 [00:06<00:01,				
448/499	0.206G 0.02094		0.02039	2	320:
	34/40 [00:06<00:01,			•	000
	0.206G 0.02094		0.02039	2	320:
	35/40 [00:06<00:00,		0.00040	2	200.
448/499	0.206G 0.02136 35/40 [00:06<00:00,	0.009309	0.02048	3	320:
448/499			0.02048	3	320:
	36/40 [00:06<00:00,		0.02040	3	320.
448/499	0.206G 0.02126	0.009129	0.02024	1	320:
	36/40 [00:06<00:00,		0.02024	1	020.
448/499	0.206G 0.02126		0.02024	1	320:
	37/40 [00:06<00:00,		0.02021	_	0_0.
448/499	-	0.009114	0.02031	3	320:
92% ########2	37/40 [00:07<00:00,				
448/499	0.206G 0.02131	0.009114	0.02031	3	320:
95% ########5	38/40 [00:07<00:00,	5.60it/s]			
448/499	0.206G 0.02179	0.009136	0.02023	2	320:
95% ########5	38/40 [00:07<00:00,	5.60it/s]			
448/499	0.206G 0.02179	0.009136	0.02023	2	320:
98% ########7	39/40 [00:07<00:00,	5.67it/s]			
448/499		0.009027	0.02006	1	320:
	39/40 [00:07<00:00,				
448/499			0.02006	1	320:
	40/40 [00:07<00:00				
448/499	0.206G 0.02159		0.02006	1	320:
100% ##########	40/40 [00:07<00:00), b.341t/s]			
	Class Images	Instances	Р	R	m / DEA
mAP50-95: 0%	•	<pre>Instances):00<?, ?it/s]</pre></pre>		r,	mAP50
mai 00 00. 0/ ₀		Instances	J P	R	mAP50
	11455 1ma60b		-		

mAP50-95:	10% #	I 2/20 F0	0.00<00.01	1E 00:+/al		
	10% # Class		0:00<00:01, Instances		R	mAP50
mAP50-95:		_	0:00<00:00,		11	IIIAF 30
MAI 00 50.	Class	Images			R	mAP50
mAP50-95:		_	0:00<00:00,		10	mai oo
	Class		Instances		R	mAP50
mAP50-95:		_	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	55% #####5	_	00:00<00:00			
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	65% #####5	13/20 [00:00<00:00	, 17.91it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	75% ######5	15/20 [00:00<00:00	, 18.09it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	85% #######5					
	Class	•	Instances		R	mAP50
mAP50-95:	100% ##########					
	Class	•	Instances		R	mAP50
mAP50-95:	100% ##########					
	all	40	40	0.961	0.952	0.991
0.817						
Epoc	h GPU_mem 1	box loss	obj loss	cls_loss	Instances	Size
1	-	_	3-	_		
0%1	0/40 [00	:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
449/49						
/	9 0.206G	0.009266	0.006802	0.01532	1	320:
0%	9 0.206G 0			0.01532	1	320:
	0/40 [00:00	0 , ?it/</td <td></td> <td>0.01532 0.01532</td> <td>1</td> <td>320: 320:</td>		0.01532 0.01532	1	320: 320:
0%	0/40 [00:00 9	0 , ?it/<br 0.009266	s] 0.006802			
0% 449/49	9 0.206G 0 1 1/40 [00:00	0 , ?it/<br 0.009266 0<00:06,	s] 0.006802 6.42it/s]			
0% 449/49 2% 2 449/49 2% 2	9 0.206G (9 0.206G (1/40 [00:00]	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06,	s] 0.006802 6.42it/s] 0.01048	0.01532	1	320:
0% 449/49 2% 2 449/49 2% 2	0/40 [00:00 9	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06,	s] 0.006802 6.42it/s] 0.01048 6.42it/s]	0.01532	1	320:
0% 449/49 2% 2 449/49 2% 2 449/49	9 0.206G (9 0.206G (1/40 [00:00]	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048	0.01532 0.01646	1	320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49	9 0.206G (9 0.206G (1/40 [00:00] 9 0.206G (1/40 [00:00] 9 0.206G (1/40 [00:00]	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048	0.01532 0.01646	1	320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5	0/40 [00:00 9	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191	0.01532 0.01646 0.01646	1 4 4	320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49	0/40 [00:00 9	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191	0.01532 0.01646 0.01646	1 4 4	320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5	0/40 [00:00 9	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:06,	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191	0.01532 0.01646 0.01646 0.01559	1 4 4	320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49	0/40 [00:00 9	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:06, 0.02095	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s]	0.01532 0.01646 0.01646 0.01559	1 4 4	320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49 8% 7	0/40 [00:00 9	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:06, 0.02095 0<00:05, 0.01859	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143	0.01532 0.01646 0.01646 0.01559 0.01559	1 4 4 1	320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49 8% 7 449/49	0/40 [00:00 9	0 , ?it/ 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:06, 0.02095 0<00:05, 0.01859 0<00:05,</td <td>s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143</td> <td>0.01532 0.01646 0.01646 0.01559 0.01559</td> <td>1 4 4 1</td> <td>320: 320: 320: 320:</td>	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143	0.01532 0.01646 0.01646 0.01559 0.01559	1 4 4 1	320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49 8% 7 449/49	0/40 [00:00 9	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:06, 0.02095 0<00:05, 0.01859 0<01859	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007143	0.01532 0.01646 0.01646 0.01559 0.01559	1 4 4 1 1	320: 320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49 8% 7 449/49	0/40 [00:00 9	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:05, 0.01859 0<00:05, 0.01859 0<00:06,	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007143	0.01532 0.01646 0.01646 0.01559 0.01559	1 4 4 1 1	320: 320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49 8% 7 449/49 8% 7 449/49 10% #	0/40 [00:00 9	0 , ?it/ 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:05, 0.01859 0<00:05, 0.01859 00<00:06,</td <td>s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007143 5.82it/s] 0.007443</td> <td>0.01532 0.01646 0.01646 0.01559 0.01559 0.01443</td> <td>1 4 4 1 1</td> <td>320: 320: 320: 320: 320: 320:</td>	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007143 5.82it/s] 0.007443	0.01532 0.01646 0.01646 0.01559 0.01559 0.01443	1 4 4 1 1	320: 320: 320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49 8% 7 449/49 10% # 449/49	0/40 [00:00] 9	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:05, 0.01859 0<00:05, 0.01859 0<00:06, 0.01764 00<00:06, 0.01764	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007143 5.82it/s] 0.007443 5.82it/s] 0.007443	0.01532 0.01646 0.01646 0.01559 0.01559 0.01443	1 4 4 1 1	320: 320: 320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49 8% 7 449/49 10% # 449/49 10% # 449/49 12% #2	0/40 [00:00] 0.206G 1/40 [00:00] 0.206G 1/40 [00:00] 0.206G 2/40 [00:00] 0.206G 2/40 [00:00] 0.206G 3/40 [00:00] 0.206G 3/40 [00:00] 0.206G 4/40 [00:00]	0 , ?it/<br 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:05, 0.01859 0<00:05, 0.01859 0<00:06, 0.01764 00<00:06, 0.01764	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007443 5.82it/s] 0.007443 5.82it/s]	0.01532 0.01646 0.01646 0.01559 0.01559 0.01443 0.01443	1 4 4 1 1 1 2	320: 320: 320: 320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49 8% 7 449/49 10% # 449/49 10% # 449/49 12% #2 449/49	0/40 [00:00 9	0 , ?it/ 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:05, 0.01859 0<00:05, 0.01859 0<00:06, 0.01764 00<00:06, 0.01764 00<00:06, 0.01846</td <td>s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007443 5.82it/s] 0.007443 5.82it/s] 0.007443</td> <td>0.01532 0.01646 0.01646 0.01559 0.01559 0.01443 0.01443</td> <td>1 4 4 1 1 1 2</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007443 5.82it/s] 0.007443 5.82it/s] 0.007443	0.01532 0.01646 0.01646 0.01559 0.01559 0.01443 0.01443	1 4 4 1 1 1 2	320: 320: 320: 320: 320: 320: 320:
0% 449/49 2% 2 449/49 2% 2 449/49 5% 5 449/49 5% 5 449/49 8% 7 449/49 10% # 449/49 10% # 449/49 12% #2	0/40 [00:00] 0.206G 1/40 [00:00] 1/40 [00:00] 0.206G 1/40 [00:00] 0.206G 2/40 [00:00] 0.206G 2/40 [00:00] 0.206G 3/40 [00:00] 0.206G 3/40 [00:00] 0.206G 4/40 [00:00] 0.206G 4/40 [00:00] 0.206G 5/40 [00:00] 5/40 [00:00]	0 , ?it/ 0.009266 0<00:06, 0.02526 0<00:06, 0.02526 0<00:06, 0.02095 0<00:05, 0.01859 0<00:05, 0.01859 0<00:06, 0.01764 00<00:06, 0.01764 00<00:06, 0.01846</td <td>s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007443 5.82it/s] 0.007443 5.82it/s] 0.007443</td> <td>0.01532 0.01646 0.01646 0.01559 0.01559 0.01443 0.01441 0.01471</td> <td>1 4 4 1 1 1 2 2</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	s] 0.006802 6.42it/s] 0.01048 6.42it/s] 0.01048 6.01it/s] 0.008191 6.01it/s] 0.008191 6.18it/s] 0.007143 6.18it/s] 0.007443 5.82it/s] 0.007443 5.82it/s] 0.007443	0.01532 0.01646 0.01646 0.01559 0.01559 0.01443 0.01441 0.01471	1 4 4 1 1 1 2 2	320: 320: 320: 320: 320: 320: 320: 320:

15% #5	6/40 [00:01<00:05, 5.82it/s]			
449/499	0.206G 0.01583 0.007115	0.01369	0	320:
15% #5	6/40 [00:01<00:05, 5.82it/s]		_	
449/499	0.206G 0.01583 0.007115	0.01369	0	320:
18% #7	7/40 [00:01<00:05, 5.99it/s]			
449/499	0.206G 0.01539 0.007218	0.01374	1	320:
18% #7	7/40 [00:01<00:05, 5.99it/s]	0.04074		222
449/499	0.206G 0.01539 0.007218	0.01374	1	320:
20% ##	8/40 [00:01<00:05, 5.91it/s]	0 0447	0	000
449/499	0.206G 0.01506 0.007369	0.0147	2	320:
20% ##	8/40 [00:01<00:05, 5.91it/s]	0 0447	0	000
449/499	0.206G 0.01506 0.007369	0.0147	2	320:
22% ##2	9/40 [00:01<00:05, 6.05it/s]	0.04450	_	000
449/499	0.206G 0.01439 0.006879	0.01459	1	320:
22% ##2	9/40 [00:01<00:05, 6.05it/s]	0.04450		222
449/499	0.206G 0.01439 0.006879		1	320:
25% ##5	10/40 [00:01<00:05, 5.98it/s]		_	
449/499	0.206G 0.0175 0.006904		2	320:
25% ##5	10/40 [00:01<00:05, 5.98it/s]		_	
449/499	0.206G 0.0175 0.006904		2	320:
28% ##7	11/40 [00:01<00:04, 5.91it/s]		_	
	0.206G 0.0195 0.007776		3	320:
28% ##7	11/40 [00:02<00:04, 5.91it/s]		_	
449/499	0.206G 0.0195 0.007776		3	320:
30% ###	12/40 [00:02<00:04, 5.72it/s]			
449/499	0.206G 0.02082 0.007609		2	320:
30% ###	12/40 [00:02<00:04, 5.72it/s]			
449/499	0.206G 0.02082 0.007609		2	320:
32% ###2	13/40 [00:02<00:04, 5.75it/s]			
449/499	0.206G 0.02029 0.007318		1	320:
32% ###2	13/40 [00:02<00:04, 5.75it/s]			
449/499	0.206G 0.02029 0.007318		1	320:
35% ###5	14/40 [00:02<00:04, 5.75it/s]			
449/499	0.206G 0.0214 0.007367	0.01609	3	320:
35% ###5	14/40 [00:02<00:04, 5.75it/s]			
449/499	0.206G 0.0214 0.007367		3	320:
38% ###7	15/40 [00:02<00:04, 5.61it/s]			
449/499	0.206G 0.02057 0.007116	0.01614	1	320:
38% ###7	15/40 [00:02<00:04, 5.61it/s]			
449/499	0.206G 0.02057 0.007116	0.01614	1	320:
40% ####	16/40 [00:02<00:04, 5.83it/s]			
449/499	0.206G 0.02008 0.006887	0.01607	1	320:
40% ####	16/40 [00:02<00:04, 5.83it/s]			
449/499	0.206G 0.02008 0.006887	0.01607	1	320:
42% ####2	17/40 [00:02<00:03, 5.81it/s]			
449/499	0.206G 0.01935 0.006652	0.01597	1	320:
42% ####2	17/40 [00:03<00:03, 5.81it/s]			
449/499	0.206G 0.01935 0.006652	0.01597	1	320:

4E8/ ####E		10/40 [00:02:00:02				
45% ####5	ı	18/40 [00:03<00:03,		0.01647	4	200.
449/499		0.206G 0.02024		0.01647	4	320:
45% ####5	ı	18/40 [00:03<00:03,		0.01647	4	200
449/499			0.007133	0.01647	4	320:
48% ####7	ı	19/40 [00:03<00:03,		0.01654	2	200.
449/499		0.206G 0.02162		0.01654	3	320:
48% ####7	ı	19/40 [00:03<00:03,		0.01654	2	200
449/499		0.206G 0.02162		0.01654	3	320:
50% #####	ı	20/40 [00:03<00:03,		0.01640	4	200.
449/499		0.206G 0.02117		0.01643	1	320:
50% #####	ı	20/40 [00:03<00:03,		0.04040		000
449/499			0.00712	0.01643	1	320:
52% #####2	ı	21/40 [00:03<00:03,		0.01010	4	000
449/499		0.206G 0.021		0.01646	4	320:
52% #####2	ı	21/40 [00:03<00:03,		0.01010	4	000
449/499		0.206G 0.021		0.01646	4	320:
55% #####5	ı	22/40 [00:03<00:03,				
449/499		0.206G 0.02072		0.0165	2	320:
55% #####5	١	22/40 [00:04<00:03,	· -			
449/499		0.206G 0.02072		0.0165	2	320:
57% #####7		23/40 [00:04<00:03,				
449/499		0.206G 0.021	0.007425	0.01655	2	320:
57% #####7		23/40 [00:04<00:03,				
449/499			0.007425	0.01655	2	320:
60% ######	١	24/40 [00:04<00:03,				
449/499		0.206G 0.02075		0.01669	4	320:
60% ######		24/40 [00:04<00:03,				
449/499		0.206G 0.02075		0.01669	4	320:
62% ######2		25/40 [00:04<00:02,				
449/499		0.206G 0.02113		0.01686	2	320:
62% ######2		25/40 [00:04<00:02,	5.17it/s]			
449/499		0.206G 0.02113	0.007822	0.01686	2	320:
65% ######5		26/40 [00:04<00:02,	5.24it/s			
449/499		0.206G 0.02112	0.008015	0.01687	4	320:
65% ######5		26/40 [00:04<00:02,	5.24it/s			
449/499		0.206G 0.02112	0.008015	0.01687	4	320:
68% ######7		27/40 [00:04<00:02,	5.27it/s			
449/499		0.206G 0.02085	0.008068	0.01675	2	320:
68% ######7	-	27/40 [00:05<00:02,	5.27it/s			
449/499		0.206G 0.02085	0.008068	0.01675	2	320:
70% #######		28/40 [00:05<00:02,	5.14it/s			
449/499		0.206G 0.02097	0.008202	0.0168	4	320:
70% #######	-	28/40 [00:05<00:02,	5.14it/s			
449/499		0.206G 0.02097	0.008202	0.0168	4	320:
72% ######2	-	29/40 [00:05<00:02,	5.20it/s]			
449/499		0.206G 0.02056	0.00802	0.01668	1	320:
72% ######2		29/40 [00:05<00:02,	5.20it/s]			
449/499		0.206G 0.02056	0.00802	0.01668	1	320:

75% ######5		30/40	[00:05<00:01,	5.51it/s]			
449/499		0.206G	0.02103	0.008184	0.01681	4	320:
75% ######5	١	30/40	[00:05<00:01,	5.51it/s]			
449/499					0.01681	4	320:
78% ######7			[00:05<00:01,				
449/499		0.206G			0.01709	4	320:
78% ######7							
449/499					0.01709	4	320:
80% #######							
			0.02071		0.01696	1	320:
80% #######							
		0.206G	-		0.01696	1	320:
82% ########2					0.0200	_	0_0.
449/499					0.01709	4	320:
82% ########2					0.02.00	-	0_0.
		0.206G			0.01709	4	320:
85% #######5					0.01700	-	020.
			0.02123		0 0171	2	320:
85% #######5					0.0171	2	020.
449/499		0.206G			0.0171	2	320:
88% #######7					0.0171	2	020.
			0.02109		0.01706	1	320:
88% #######7					0.01700	1	520.
449/499				0.008418	0.01706	1	320:
90% ########					0.01700	1	320.
449/499			0.02094		0.01736	4	320:
90% ########					0.01730	4	320.
449/499	ı	0.206G			0.01736	4	320:
92% ########2	ı				0.01730	4	320.
449/499	ı	0.206G			0.01773	2	320:
92% ########2	ı				0.01773	2	320:
449/499	ı	0.206G			0.01773	2	200.
95% ########5	ı				0.01773	2	320:
	ı		-		0.01764	0	200.
449/499		0.206G			0.01764	2	320:
95% ########5					0.04764	0	200
449/499		0.206G			0.01764	2	320:
98% ########7					0.0177	4	200
449/499		0.206G			0.0177	4	320:
98% ########7	ı				0.0177	4	200
449/499	ш.	0.206G			0.0177	4	320:
100% #########	#				0.0477	4	200
449/499			0.02083		0.0177	4	320:
100% ########	Ħ	1 40/40	[00:07<00:00	, 5.391t/S]			
		Cl - a -	Tmamag	Tnatonasa	ת	מ	m A DE O
ADEO OF: 09/	ı	Class	_	Instances	P 1	R	mAP50
mAP50-95: 0%	1	01		:00 , ?it/s</td <td></td> <td>TD.</td> <td> ADEA</td>		TD.	ADEA
ADEO OF: 10%	1.4	Class		Instances	P	R	mAP50
mAP50-95: 10%	13	+	2/20 L00	:00<00:01, 1	4.221T/S]		

	_	Instances		R	mAP50
mAP50-95: 20% ## Class		0:00<00:01, Instances		R	mAP50
mAP50-95: 30% ###	6/20 [0	0:00<00:01,	13.95it/s]		
Class	•	Instances		R	mAP50
		0:00<00:00,			1750
Class	Images			R	mAP50
mAP50-95: 50% ##### Class		00:00<00:00, Instances		R	mAP50
	_	00:00<00:00;			MAPSO
Class		Instances		R	mAP50
	0	(00:00<00:00			mm 00
Class		Instances		R	mAP50
	•	00:01<00:00			
Class		Instances		R	mAP50
mAP50-95: 90% #######	_				
Class	Images	Instances	Р	R	mAP50
mAP50-95: 100% #########	20/20 [00:01<00:00	, 15.20it/s]		
all	40	40	0.964	0.969	0.992
0.811					
Epoch GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
01/1	00.40	. /]			
0% 0/40 [00:			0.01060	4	200.
450/499 0.206G 0% 0/40 [00:00		0.01326	0.01868	4	320:
	0.02121		0.01868	4	320:
2% 2 1/40 [00:00			0.01666	4	320.
		0.008618	0.0168	1	320:
2% 2 1/40 [00:00			0.0100	1	020.
		0.008618	0.0168	1	320:
5% 5 2/40 [00:00			0.0100	_	020.
	0.01648	0.0116	0.01842	4	320:
5% 5 2/40 [00:00					
		0.0116	0.01842	4	320:
8% 7 3/40 [00:00					
		0.01015	0.01669	1	320:
8% 7 3/40 [00:00	<00:06,	5.79it/s			
450/499 0.206G	0.01398	0.01015	0.01669	1	320:
10% # 4/40 [00:0	0<00:06,	5.84it/s			
450/499 0.206G	0.01367	0.009646	0.01669	2	320:
10% # 4/40 [00:0	0<00:06,	5.84it/s]			
450/499 0.206G	0.01367	0.009646	0.01669	2	320:
12% #2 5/40 [00:0	0<00:05,	5.97it/s]			
	0.01463		0.0165	2	320:
12% #2 5/40 [00:0					
		0.009762	0.0165	2	320:
15% #5 6/40 [00:0	1<00:05,	5.91it/s]			

450/499	0.206G 0.0141 0.009	211 0.01612	1	320:
15% #5	6/40 [00:01<00:05, 5.91i		4	200
450/499 18% #7	0.206G 0.0141 0.009 7/40 [00:01<00:05, 5.66i		1	320:
450/499	0.206G 0.01477 0.008		1	320:
18% #7	7/40 [00:01<00:05, 5.66i			
450/499	0.206G 0.01477 0.008	514 0.01604	1	320:
20% ##	8/40 [00:01<00:05, 5.74i			
450/499	0.206G 0.01554 0.008		4	320:
20% ##	8/40 [00:01<00:05, 5.74i		4	200
450/499	0.206G 0.01554 0.008 9/40 [00:01<00:05, 5.76i		4	320:
22% ##2 450/499	0.206G 0.01458 0.008		1	320:
22% ##2	9/40 [00:01<00:05, 5.76i		1	320.
450/499	0.206G 0.01458 0.008		1	320:
25% ##5	10/40 [00:01<00:05, 5.65		-	020.
450/499		325 0.01707	2	320:
25% ##5	10/40 [00:01<00:05, 5.65	it/s]		
450/499	0.206G 0.01426 0.008	325 0.01707	2	320:
28% ##7	11/40 [00:01<00:04, 5.80	it/s]		
450/499	0.206G 0.01588 0.008	396 0.01778	2	320:
28% ##7	11/40 [00:02<00:04, 5.80			
450/499	0.206G 0.01588 0.008		2	320:
30% ###	12/40 [00:02<00:04, 5.65			
450/499		0.01765	2	320:
30% ###	12/40 [00:02<00:04, 5.65		•	
450/499	0.206G 0.01585 0.008		2	320:
32% ###2	13/40 [00:02<00:04, 5.72		0	200
450/499 32% ###2	0.206G 0.01869 0.008 13/40 [00:02<00:04, 5.72		2	320:
450/499	0.206G 0.01869 0.008	· =	2	320:
35% ###5	14/40 [00:02<00:04, 5.72		2	020.
450/499	0.206G 0.01958 0.009		4	320:
35% ###5	14/40 [00:02<00:04, 5.72			
450/499	0.206G 0.01958 0.009		4	320:
38% ###7	15/40 [00:02<00:04, 5.60	it/s]		
450/499	0.206G 0.02013 0.008	898 0.01855	2	320:
38% ###7	15/40 [00:02<00:04, 5.60	it/s]		
450/499	0.206G 0.02013 0.008	898 0.01855	2	320:
40% ####	16/40 [00:02<00:04, 5.54			
450/499	0.206G 0.02041 0.008		2	320:
40% ####	16/40 [00:03<00:04, 5.54		_	
450/499	0.206G 0.02041 0.008		2	320:
42% ####2	17/40 [00:03<00:04, 5.40		0	200
450/499 42% ####2	0.206G 0.02134 0.00 17/40 [00:03<00:04, 5.40		2	320:
42%1####2	0.206G 0.02134 0.00		2	320:
45% ####5	18/40 [00:03<00:03, 5.56		2	020.
	, =3, =0 [00.00.00, 0.00	, ~		

450/499	0.206G 0.0213 0.008666	0.01861	2	320:
45% ####5	18/40 [00:03<00:03, 5.56it/s]			
450/499	0.206G 0.0213 0.008666	0.01861	2	320:
48% ####7	19/40 [00:03<00:03, 5.47it/s]			
450/499	0.206G 0.0207 0.008565	0.01847	2	320:
48% ####7	19/40 [00:03<00:03, 5.47it/s]	0.04047	0	800
450/499	0.206G 0.0207 0.008565	0.01847	2	320:
50% #####	20/40 [00:03<00:03, 5.72it/s]	0.01063	4	200.
450/499 50% ####	0.206G 0.02195 0.00885 20/40 [00:03<00:03, 5.72it/s]	0.01863	4	320:
450/499	0.206G 0.02195 0.00885	0.01863	4	320:
52% #####2	21/40 [00:03<00:03, 5.60it/s]	0.01003	4	320.
450/499	0.206G 0.02161 0.008674	0.01837	2	320:
52% #####2	21/40 [00:03<00:03, 5.60it/s]	0.01037	2	520.
450/499	0.206G 0.02161 0.008674	0.01837	2	320:
55% #####5	22/40 [00:03<00:03, 5.50it/s]	0.01007	2	020.
450/499	0.206G 0.02192 0.008752	0.01875	1	320:
55% #####5	22/40 [00:04<00:03, 5.50it/s]	0.010.0	-	020.
450/499	0.206G 0.02192 0.008752	0.01875	1	320:
57% #####7	23/40 [00:04<00:03, 5.31it/s]	0.020.0	_	0201
450/499	0.206G 0.02168 0.008943	0.01879	4	320:
57% #####7	23/40 [00:04<00:03, 5.31it/s]			
450/499	0.206G 0.02168 0.008943	0.01879	4	320:
60% ######	24/40 [00:04<00:02, 5.45it/s]			
450/499	0.206G 0.02233 0.008916	0.01906	3	320:
60% ######	24/40 [00:04<00:02, 5.45it/s]			
450/499	0.206G 0.02233 0.008916	0.01906	3	320:
62% #####2	25/40 [00:04<00:02, 5.39it/s]			
450/499	0.206G 0.02185 0.008684	0.01879	1	320:
62% #####2	25/40 [00:04<00:02, 5.39it/s]			
450/499	0.206G 0.02185 0.008684	0.01879	1	320:
65% ######5	26/40 [00:04<00:02, 5.51it/s]			
450/499	0.206G 0.02185 0.008991	0.01898	4	320:
65% #####5	26/40 [00:04<00:02, 5.51it/s]			
450/499	0.206G 0.02185 0.008991	0.01898	4	320:
	27/40 [00:04<00:02, 5.46it/s]			
450/499	0.206G 0.02163 0.008943	0.01889	1	320:
68% ######7	27/40 [00:04<00:02, 5.46it/s]			
450/499	0.206G 0.02163 0.008943	0.01889	1	320:
70% #######	28/40 [00:04<00:02, 5.57it/s]			
450/499	0.206G 0.02172 0.00919	0.0188	4	320:
70% ######	28/40 [00:05<00:02, 5.57it/s]			
450/499	0.206G 0.02172 0.00919	0.0188	4	320:
72% #######2	•	0.04075	<u>.</u>	222
450/499	0.206G 0.02134 0.008982	0.01875	1	320:
72% #######2	-	0.04075	4	200
450/499		0.01875	1	320:
75% ######5	30/40 [00:05<00:01, 5.63it/s]			

			_	
	0.206G 0.02126		4	320:
	30/40 [00:05<00:01,			
450/499			4	320:
	31/40 [00:05<00:01,			
450/499		0.009321 0.01885	4	320:
78% ######7	31/40 [00:05<00:01,	5.51it/s]		
450/499	0.206G 0.02115	0.009321 0.01885	4	320:
80% #######	32/40 [00:05<00:01,	5.60it/s]		
450/499	0.206G 0.02173	0.009355 0.01948	3	320:
80% #######	32/40 [00:05<00:01,	5.60it/s]		
450/499	0.206G 0.02173	0.009355 0.01948	3	320:
82% ########	33/40 [00:05<00:01,	5.67it/s]		
450/499	0.206G 0.02169	0.00951 0.01936	4	320:
	33/40 [00:06<00:01,			
450/499		0.00951 0.01936	4	320:
	34/40 [00:06<00:01,			
450/499			4	320:
	34/40 [00:06<00:01,		_	3201
	0.206G 0.02181		4	320:
·	35/40 [00:06<00:00,		1	020.
450/499	·	· -	1	320:
	35/40 [00:06<00:00,		1	320.
	•		1	200.
	0.206G 0.02144		1	320:
	36/40 [00:06<00:00,		4	200
450/499	0.206G 0.02118		1	320:
	36/40 [00:06<00:00,			
450/499		0.009382 0.01912	1	320:
	37/40 [00:06<00:00,			
450/499		0.009444 0.01923	4	320:
92% ########2	37/40 [00:06<00:00,			
450/499	0.206G 0.02138	0.009444 0.01923	4	320:
95% ########5	38/40 [00:06<00:00,	5.59it/s]		
450/499	0.206G 0.02101	0.009277 0.0191	1	320:
95% ########5	38/40 [00:06<00:00,	5.59it/s]		
450/499	0.206G 0.02101	0.009277 0.0191	1	320:
98% ########7	39/40 [00:06<00:00,	5.66it/s]		
450/499	0.206G 0.0216	0.009225 0.01925	2	320:
98% ########7	39/40 [00:07<00:00,	5.66it/s]		
450/499			2	320:
	40/40 [00:07<00:00			
450/499		0.009225 0.01925	2	320:
	40/40 [00:07<00:00		_	3201
100/81 ####################################	10/10/2010100	, 0.0010/0]		
	Class Images	Instances P	R	mAP50
mAP50-95: 0%	•	:00 , ?it/s]</td <td>10</td> <td>mni 00</td>	10	mni 00
00 00. 0/01		Instances P	R	mAP50
mAP50-95: 10%	•	:00<00:00, 18.29it/s]		mai 50
mai 00 30. 10%				m / D ∈ ∩
	Class Images	Instances P	R	mAP50

ADEO OF:	00%144	4/00 [0	0.00.00.00	10 00:+/-1		
mAP50-95:			0:00<00:00,		D	ADEO
mAP50-95:	Class 30% ###	•	Instances 0:00<00:00,		R	mAP50
MAP50-95.	Class	Images			R	mAP50
mAP50-95:		_	0:00<00:00,		ı	MAF 50
MAI 00 50.	Class		Instances		R	mAP50
mAP50-95:		_	00:00<00:00			mai oo
mm 00 00.	Class		Instances		R	mAP50
mAP50-95:		_	00:00<00:00			
	Class		Instances		R	mAP50
mAP50-95:		•	00:00<00:00			
	Class		Instances		R	mAP50
mAP50-95:		_				
	Class		Instances		R	mAP50
mAP50-95:	95% ########5	19/20 [00:01<00:00	, 17.44it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	100% ##########	20/20 [00:01<00:00	, 17.71it/s]		
	all	40	40	0.964	0.969	0.992
0.811						
Epoc	h GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
0%						
451/49		0.01327		0.01571	2	320:
0%					_	
	9 0.206G			0.01571	2	320:
2% 2	1/40 [00:00				_	
451/49			0.006836	0.02442	2	320:
2% 2				0.00440	0	200
451/49				0.02442	2	320:
	2/40 [00:00 9			0.02706	2	200.
		0.01965		0.02706	3	320:
	2/40 [00:00			0 00706	2	200.
451/49 8% 7			0.00935 5.59it/s]	0.02706	3	320:
451/49		0.0205		0.02378	1	320:
431/49 8% 7				0.02376	1	320.
451/49				0.02378	1	320:
10% #	4/40 [00:0			0.02010	1	020.
451/49			0.00728	0.02295	1	320:
10% #	4/40 [00:0			0.02200	_	0_0.
451/49			0.00728	0.02295	1	320:
12% #2	5/40 [00:0					
451/49		0.02046		0.02353	4	320:
12% #2	5/40 [00:0					
451/49		0.02046		0.02353	4	320:
15% #5	6/40 [00:0	1<00:05,	5.70it/s]			
451/49	9 0.206G	0.02115	0.008582	0.02354	4	320:

15% #5	6/40 [00:01<00:05, 5.70it/s]			
451/499	0.206G 0.02115 0.008582	0.02354	4	320:
18% #7	7/40 [00:01<00:05, 5.74it/s]		_	
,	0.206G 0.02592 0.008122	0.02407	2	320:
18% #7	7/40 [00:01<00:05, 5.74it/s]			
451/499	0.206G 0.02592 0.008122	0.02407	2	320:
20% ##	8/40 [00:01<00:05, 5.61it/s]	0.00040	4	000
451/499	0.206G 0.02522 0.008908	0.02343	4	320:
20% ##	8/40 [00:01<00:05, 5.61it/s]	0.00040	4	000
451/499	0.206G 0.02522 0.008908	0.02343	4	320:
22% ##2	9/40 [00:01<00:05, 5.56it/s]	0.00000	4	200
451/499	0.206G 0.02388 0.008302	0.02223	1	320:
22% ##2	9/40 [00:01<00:05, 5.56it/s]	0.00000	4	200
451/499	0.206G 0.02388 0.008302	0.02223	1	320:
25% ##5	10/40 [00:01<00:05, 5.59it/s]	0.00146	4	200
451/499	0.206G 0.02255 0.008074	0.02146	1	320:
25% ##5	10/40 [00:01<00:05, 5.59it/s]	0.00146	4	200
451/499	0.206G 0.02255 0.008074	0.02146	1	320:
28% ##7	11/40 [00:01<00:05, 5.66it/s]	0.00007	4	200.
451/499	0.206G 0.0221 0.00778 11/40 [00:02<00:05, 5.66it/s]	0.02087	1	320:
28% ##7		0 00007	1	200.
451/499		0.02087	1	320:
30% ### 451/499	12/40 [00:02<00:05, 5.40it/s] 0.206G	0.02065	2	320:
451/499 30% ###	0.206G 0.02253 0.007858 12/40 [00:02<00:05, 5.40it/s]	0.02065	2	320:
451/499	0.206G 0.02253 0.007858	0 00065	2	200.
	13/40 [00:02<00:04, 5.51it/s]	0.02065	2	320:
32% ###2 451/499	0.206G 0.02346 0.007831	0.02034	2	320:
	13/40 [00:02<00:04, 5.51it/s]	0.02034	2	320:
32% ###2 451/499	0.206G 0.02346 0.007831	0.02034	2	320:
451/499 35% ###5	14/40 [00:02<00:04, 5.45it/s]	0.02034	2	320.
451/499	0.206G 0.02269 0.007714	0.01984	2	320:
	14/40 [00:02<00:04, 5.45it/s]	0.01964	۷	320.
451/499	0.206G 0.02269 0.007714	0 01004	2	320:
431/499 38% ###7	15/40 [00:02<00:04, 5.54it/s]	0.01984	2	320.
451/499	0.206G 0.02202 0.007648	0.01989	2	320:
38% ###7	15/40 [00:02<00:04, 5.54it/s]	0.01909	2	320.
451/499	0.206G 0.02202 0.007648	0.01989	2	320:
40% ####	16/40 [00:02<00:04, 5.62it/s]	0.01909	2	320.
451/499	0.206G 0.0218 0.007452	0.01958	1	320:
40% ####	16/40 [00:03<00:04, 5.62it/s]	0.01936	1	320.
451/499	0.206G 0.0218 0.007452	0.01958	1	320:
42% ####2	17/40 [00:03<00:04, 5.53it/s]	0.01930	1	520.
451/499	0.206G 0.02233 0.00773	0.02008	4	320:
42% ####2	17/40 [00:03<00:04, 5.53it/s]	0.02000	I	UZU.
451/499	0.206G 0.02233 0.00773	0.02008	4	320:
45% ####5	18/40 [00:03<00:03, 5.58it/s]	0.02000	-1	020.
451/499	0.206G 0.02169 0.007526	0.01968	1	320:
TO1/ TJJ	0.200d 0.02100 0.001020	0.01000	_	020.

45% ####5		18/40 [00:03<00:03,				
451/499		0.206G 0.02169		0.01968	1	320:
48% ####7		19/40 [00:03<00:03,				
451/499		0.206G 0.02106		0.01938	2	320:
48% ####7		19/40 [00:03<00:03,				
451/499		0.206G 0.02106		0.01938	2	320:
50% #####		20/40 [00:03<00:03,				
451/499		0.206G 0.02093		0.01939	4	320:
50% #####		20/40 [00:03<00:03,				
451/499			0.00766	0.01939	4	320:
52% #####2		21/40 [00:03<00:03,	5.58it/s			
451/499		0.206G 0.02059	0.007704	0.01923	2	320:
52% #####2	- 1	21/40 [00:03<00:03,	5.58it/s]			
451/499		0.206G 0.02059	0.007704	0.01923	2	320:
55% #####5	-	22/40 [00:03<00:03,	5.46it/s]			
451/499		0.206G 0.02211	0.00777	0.01921	2	320:
55% #####5	-	22/40 [00:04<00:03,	5.46it/s]			
451/499		0.206G 0.02211	0.00777	0.01921	2	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.32it/s			
451/499		0.206G 0.02194	0.008266	0.0191	4	320:
57% #####7	-	23/40 [00:04<00:03,	5.32it/s			
451/499		0.206G 0.02194	0.008266	0.0191	4	320:
60% ######	- 1	24/40 [00:04<00:03,	5.08it/s			
451/499		0.206G 0.02246	0.008237	0.0194	2	320:
60% ######	-	24/40 [00:04<00:03,	5.08it/s			
451/499		0.206G 0.02246	0.008237	0.0194	2	320:
62% ######2	-	25/40 [00:04<00:02,	5.03it/s]			
451/499		0.206G 0.02313	0.008179	0.01931	2	320:
62% ######2	-	25/40 [00:04<00:02,	5.03it/s]			
451/499		0.206G 0.02313	0.008179	0.01931	2	320:
65% ######5	- 1	26/40 [00:04<00:02,	4.84it/s]			
451/499		0.206G 0.02317	0.008373	0.01935	4	320:
65% ######5	- 1	26/40 [00:04<00:02,	4.84it/s]			
451/499		0.206G 0.02317		0.01935	4	320:
68% #####7	- 1	27/40 [00:04<00:02,				
451/499		0.206G 0.02361	0.008325	0.01916	2	320:
68% ######7	- 1	27/40 [00:05<00:02,				
451/499		0.206G 0.02361	0.008325	0.01916	2	320:
70% ######	- 1	28/40 [00:05<00:02,				
451/499	•	0.206G 0.02347		0.01913	4	320:
70% #######	- 1	28/40 [00:05<00:02,				
451/499	•	0.206G 0.02347		0.01913	4	320:
72% #######2	I	29/40 [00:05<00:02,			-	
451/499	•	0.206G 0.02364	0.008734	0.01911	4	320:
72% #######2	I	29/40 [00:05<00:02,		· · · ·	_	
451/499	•	0.206G 0.02364	0.008734	0.01911	4	320:
75% #######5	ı	30/40 [00:05<00:02,		· · · ·	_	
451/499	•	0.206G 0.02391	0.008944	0.01952	4	320:
•						

75% ######5	30/40 [00:05<00:02,	4.71it/s]		
451/499	0.206G 0.02391	0.008944 0.01952	4	320:
	31/40 [00:05<00:01,			
451/499			0	320:
	31/40 [00:05<00:01,			
451/499	•		0	320:
80% #######	32/40 [00:05<00:01,	5.18it/s]		
451/499	0.206G 0.02285	0.008876 0.01879	2	320:
80% #######	32/40 [00:06<00:01,	5.18it/s]		
451/499	0.206G 0.02285	0.008876 0.01879	2	320:
82% ########	33/40 [00:06<00:01,	5.22it/s]		
451/499	0.206G 0.02252	0.008892 0.01865	1	320:
82% #######2	33/40 [00:06<00:01,	5.22it/s]		
451/499	0.206G 0.02252	0.008892 0.01865	1	320:
85% #######5	34/40 [00:06<00:01,	4.99it/s]		
451/499	0.206G 0.0221	0.008729 0.01842	1	320:
85% #######5	34/40 [00:06<00:01,	4.99it/s]		
451/499	0.206G 0.0221	0.008729 0.01842	1	320:
88% #######7	35/40 [00:06<00:00,	5.08it/s]		
451/499	0.206G 0.02184	0.008578 0.01828	1	320:
88% #######7	35/40 [00:06<00:00,	5.08it/s]		
451/499	0.206G 0.02184	0.008578 0.01828	1	320:
90% #######	36/40 [00:06<00:00,	5.15it/s]		
451/499	0.206G 0.02222	0.008537 0.01822	2	320:
90% ########	36/40 [00:06<00:00,	5.15it/s]		
451/499	0.206G 0.02222	0.008537 0.01822	2	320:
92% ########2	37/40 [00:06<00:00,	5.22it/s]		
451/499	0.206G 0.02216	0.008661 0.01831	4	320:
92% ########2	37/40 [00:07<00:00,	5.22it/s]		
451/499	0.206G 0.02216	0.008661 0.01831	4	320:
95% ########5	38/40 [00:07<00:00,	5.38it/s]		
451/499	0.206G 0.02232	0.009076 0.01859	4	320:
95% ########5	38/40 [00:07<00:00,	5.38it/s]		
451/499	0.206G 0.02232	0.009076 0.01859	4	320:
98% #######7	39/40 [00:07<00:00,	5.51it/s]		
451/499	0.206G 0.02303		2	320:
	39/40 [00:07<00:00,	5.51it/s]		
451/499	0.206G 0.02303	0.008984 0.0186	2	320:
	40/40 [00:07<00:00	, 5.43it/s]		
451/499	0.206G 0.02303		2	320:
100% #########	40/40 [00:07<00:00	, 5.34it/s]		
	•	Instances P	R	mAP50
mAP50-95: 0%		:00 , ?it/s]</td <td></td> <td></td>		
	•	Instances P	R	mAP50
mAP50-95: 10%		:00<00:01, 15.97it/s]		
	•	Instances P	R	mAP50
mAP50-95: 20%	## 4/20 [00	:00<00:00, 17.25it/s]		

Class	_	Instances		R	mAP50
mAP50-95: 30% ### Class		0:00<00:00, Instances		R	mAP50
		0:00<00:00,			
Class	•	Instances		R	mAP50
mAP50-95: 50% ##### Class	Images	00:00<00:00 Instances	, 17.331t/s] D	R	mAP50
	_	00:00<00:00	r . 17.65it/sl		IIIAF 30
Class		Instances		R	mAP50
mAP50-95: 70% ######	14/20 [00:00<00:00	, 17.07it/s]		
Class	Images	Instances	Р	R	mAP50
		00:00<00:00			
Class	•	Instances		R	mAP50
mAP50-95: 90% ########					1550
Class		Instances		R	mAP50
mAP50-95: 100% ######### Class		Instances		R	mAP50
mAP50-95: 100% ##########	_				MAPSO
all	20/20 L		0.955	0.929	0.994
0.816	10	10	0.566	0.020	0.551
Epoch GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00:	00 . ?i</td <td>t/sl</td> <td></td> <td></td> <td></td>	t/sl			
		0.01397	0.02227	4	320:
0% 0/40 [00:00) , ?it/</td <td>s]</td> <td></td> <td></td> <td></td>	s]			
452/499 0.206G	0.02492	0.01397	0.02227	4	320:
2% 2 1/40 [00:00	0<00:06,	5.70it/s			
452/499 0.206G	0.02183	0.01198	0.01825	2	320:
2% 2 1/40 [00:00	0<00:06,	5.70it/s			
	0.02183		0.01825	2	320:
5% 5 2/40 [00:00					
	0.03273	0.01148	0.01822	3	320:
5% 5 2/40 [00:00				_	
		0.01148	0.01822	3	320:
8% 7 3/40 [00:00			0.01040	4	200
		0.01258	0.01948	4	320:
8% 7 3/40 [00:00 452/499 0.206G	•	5.51it/s] 0.01258	0.01948	4	320:
10% # 4/40 [00:0			0.01946	4	320.
		0.01167	0.02058	3	320:
10% # 4/40 [00:0			0.02000	J	020.
452/499 0.206G			0.02058	3	320:
12% #2 5/40 [00:0				J	
		0.01069	0.02048	2	320:
12% #2 5/40 [00:0					
452/499 0.206G			0.02048	2	320:
15% #5 6/40 [00:0	1<00:06,	5.57it/s]			

452/499	0.206G 0.02554 0.0108		4	320:
15% #5	6/40 [00:01<00:06, 5.57it/		_	
452/499	0.206G 0.02554 0.0108		4	320:
18% #7 452/499	7/40 [00:01<00:05, 5.64it/ 0.206G 0.02356 0.00989	_	1	200.
452/499 18% #7	7/40 [00:01<00:05, 5.64it/		1	320:
452/499	0.206G 0.02356 0.00989		1	320:
20% ##	8/40 [00:01<00:05, 5.70it/		1	020.
452/499	0.206G 0.02367 0.0105		4	320:
20% ##			-	020.
452/499	0.206G 0.02367 0.0105		4	320:
22% ##2	9/40 [00:01<00:05, 5.56it/			
452/499	0.206G 0.02259 0.0103		2	320:
22% ##2	9/40 [00:01<00:05, 5.56it/	s]		
452/499	0.206G 0.02259 0.0103	1 0.02008	2	320:
25% ##5	10/40 [00:01<00:05, 5.63it	/s]		
452/499	0.206G 0.02198 0.0100	6 0.01945	2	320:
25% ##5	10/40 [00:01<00:05, 5.63it	/s]		
452/499	0.206G 0.02198 0.0100		2	320:
28% ##7	11/40 [00:01<00:05, 5.54it			
452/499	0.206G 0.0255 0.00974		2	320:
28% ##7	11/40 [00:02<00:05, 5.54it			
452/499	0.206G 0.0255 0.00974		2	320:
30% ###	12/40 [00:02<00:05, 5.42it			
452/499	0.206G 0.02411 0.0092		1	320:
30% ###	12/40 [00:02<00:05, 5.42it			
452/499	0.206G 0.02411 0.0092		1	320:
32% ###2	13/40 [00:02<00:04, 5.42it			
452/499	0.206G 0.0242 0.00895		2	320:
32% ###2	13/40 [00:02<00:04, 5.42it			
452/499	0.206G 0.0242 0.00895		2	320:
35% ###5	14/40 [00:02<00:04, 5.53it		_	
452/499	0.206G 0.02426 0.00977		4	320:
35% ###5	14/40 [00:02<00:04, 5.53it		_	
452/499	0.206G 0.02426 0.00977		4	320:
38% ###7	15/40 [00:02<00:04, 5.45it		0	000
452/499	0.206G 0.02422 0.00982		2	320:
38% ###7	15/40 [00:02<00:04, 5.45it	· =	0	200
452/499	0.206G 0.02422 0.00982		2	320:
40% ####	16/40 [00:02<00:04, 5.57it		4	200.
452/499	0.206G 0.0247 0.010		4	320:
40% ####	16/40 [00:03<00:04, 5.57it		4	200.
452/499	0.206G 0.0247 0.010 17/40 [00:03<00:04, 5.36it		4	320:
42% ####2 452/499	0.206G 0.02387 0.0101		2	320:
452/499 42% ####2	17/40 [00:03<00:04, 5.36it		2	320:
42%1####2	0.206G 0.02387 0.0101		2	320:
452/499 45% ####5	18/40 [00:03<00:04, 5.49it		2	320:
±0% ####0	1 10/40 [00.03\00.04, 3.4910	/ 6J		

452/499	0.206G 0.02423 0.01011	0.01978	2	320:
45% ####5	18/40 [00:03<00:04, 5.49it/s]		_	
452/499	0.206G 0.02423 0.01011		2	320:
48% ####7	19/40 [00:03<00:03, 5.44it/s]			000
452/499	0.206G 0.02592 0.01002	0.01975	3	320:
48% ####7 452/499	19/40 [00:03<00:03, 5.44it/s] 0.206G		3	200.
452/499 50% #####	0.206G 0.02592 0.01002 20/40 [00:03<00:03, 5.27it/s]	0.01975	3	320:
452/499	0.206G 0.02625 0.009858	0.01955	2	320:
50% #####	20/40 [00:03<00:03, 5.27it/s]	0.01955	۷	520.
452/499	0.206G 0.02625 0.009858	0.01955	2	320:
52% #####2	21/40 [00:03<00:03, 5.40it/s]		_	020.
452/499	0.206G 0.02728 0.009846	0.01946	3	320:
52% #####2	21/40 [00:04<00:03, 5.40it/s]			
452/499	0.206G 0.02728 0.009846		3	320:
55% #####5	22/40 [00:04<00:03, 5.25it/s]			
452/499	0.206G 0.02734 0.01	0.01936	4	320:
55% #####5	22/40 [00:04<00:03, 5.25it/s]			
452/499	0.206G 0.02734 0.01	0.01936	4	320:
57% #####7	23/40 [00:04<00:03, 5.27it/s]			
452/499	0.206G 0.02654 0.009681	0.01918	1	320:
57% #####7	23/40 [00:04<00:03, 5.27it/s]			
452/499	0.206G 0.02654 0.009681	0.01918	1	320:
60% ######	24/40 [00:04<00:02, 5.40it/s]			
452/499	0.206G 0.02598 0.009575	0.01903	2	320:
60% ######	24/40 [00:04<00:02, 5.40it/s]			
452/499	0.206G 0.02598 0.009575	0.01903	2	320:
62% ######2	25/40 [00:04<00:02, 5.56it/s]			
452/499	0.206G 0.02623 0.009434	0.01886	2	320:
62% ######2	25/40 [00:04<00:02, 5.56it/s]		_	
452/499	0.206G 0.02623 0.009434	0.01886	2	320:
65% ######5	26/40 [00:04<00:02, 5.63it/s]	0.04040		000
452/499	0.206G 0.02598 0.009263	0.01948	2	320:
	26/40 [00:04<00:02, 5.63it/s]	0.04040	0	200
452/499	0.206G 0.02598 0.009263	0.01948	2	320:
	27/40 [00:04<00:02, 5.31it/s] 0.206G 0.02654 0.009557	0.01976	1	200.
452/499 68% #####7	0.206G 0.02654 0.009557 27/40 [00:05<00:02, 5.31it/s]	0.01976	4	320:
452/499	0.206G 0.02654 0.009557	0.01976	4	320:
70% ######	28/40 [00:05<00:02, 5.23it/s]	0.01970	4	320.
452/499	0.206G 0.02617 0.009716	0.01969	4	320:
	28/40 [00:05<00:02, 5.23it/s]	0.01000	-1	020.
452/499	0.206G 0.02617 0.009716	0.01969	4	320:
72% #######2		0.01000	-	520.
452/499	0.206G 0.02687 0.009594	0.0201	2	320:
72% #######2			_	
452/499		0.0201	2	320:
75% ######5				

452/499	0.206G 0.02623	0.009388 0.01984	1	320:
	30/40 [00:05<00:01,			
452/499	0.206G 0.02623	0.009388 0.01984	1	320:
78% ######7	31/40 [00:05<00:01,	5.49it/s]		
452/499	0.206G 0.02566	0.0092 0.01966	1	320:
78% ######7	31/40 [00:05<00:01,	5.49it/s]		
452/499		0.0092 0.01966	1	320:
	32/40 [00:05<00:01,			
452/499		0.00918 0.01961	2	320:
	32/40 [00:06<00:01,			
452/499		0.00918 0.01961	2	320:
_	33/40 [00:06<00:01,			
452/499		0.009448 0.01982	2	320:
	33/40 [00:06<00:01,			
	0.206G 0.02607		2	320:
	34/40 [00:06<00:01,			
452/499			2	320:
	34/40 [00:06<00:01,			
		0.009346 0.01965	2	320:
	35/40 [00:06<00:00,			
452/499			1	320:
	35/40 [00:06<00:00,			
	0.206G 0.02505		1	320:
	36/40 [00:06<00:00,			
452/499	0.206G 0.02481		2	320:
	36/40 [00:06<00:00,			
452/499	0.206G 0.02481		2	320:
	37/40 [00:06<00:00,			
452/499		0.009066 0.01937	2	320:
	37/40 [00:06<00:00,			
452/499		0.009066 0.01937	2	320:
	38/40 [00:06<00:00,			
452/499	0.206G 0.02447		2	320:
	38/40 [00:07<00:00,			
452/499		0.009052 0.0194	2	320:
	39/40 [00:07<00:00,			
452/499		0.009184 0.01941	4	320:
	39/40 [00:07<00:00,			
452/499	*		4	320:
	40/40 [00:07<00:00		_	
452/499		0.009184 0.01941	4	320:
100% #########	40/40 [00:07<00:00	, 5.47it/s]		
	a -	-	_	
ADEO 05 691	•	Instances P	R	mAP50
mAP50-95: 0%		:00 , ?it/s]</td <td>_</td> <td>1050</td>	_	1050
ADEO 05 40%	•	Instances P		mAP50
mAP50-95: 10%		:00<00:00, 18.28it/s		1050
	Class Images	Instances P	R	mAP50

mAP50-95:	20% ##	I 4/20 F0	0.00<00.00	10 10:+/al		
	20% ## Class		0:00<00:00, Instances		R	mAP50
mAP50-95:	30% ###	_	0:00<00:00,		It.	IIIAF 30
MAI 00 50.	Class	Images			R	mAP50
mAP50-95:	40% ####	_	0:00<00:00,		10	mai 00
	Class		Instances		R	mAP50
mAP50-95:	50% #####	_	00:00<00:00			
	Class		Instances		R	mAP50
mAP50-95:	60% ######	_	00:00<00:00			
	Class	Images	Instances	P	R	mAP50
mAP50-95:	70% ######	14/20 [00:00<00:00	, 17.87it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	80% #######	16/20 [00:00<00:00	, 18.00it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	90% ########					
	Class	•	Instances		R	mAP50
mAP50-95:	100% #########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########					
	all	40	40	0.972	0.975	0.991
0.79						
Ерос	h GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
0%1	0/40 [00		t/s]			
453/49			0.01039	0.02102	4	320:
0%	0/40 [00:0					
453/49						
01/10				0.02102	4	320:
2% 2	1/40 [00:0	0<00:06,	5.84it/s]		4	
453/49	1/40 [00:0 9	0<00:06, 0.01776	5.84it/s] 0.00643	0.02102	1	320: 320:
453/49 2% 2	1/40 [00:0 9	0<00:06, 0.01776 0<00:06,	5.84it/s] 0.00643 5.84it/s]			
453/49 2% 2 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776	5.84it/s] 0.00643 5.84it/s] 0.00643			
453/49 2% 2 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06,	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s]	0.01706	1	320:
453/49 2% 2 453/49 5% 5 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071	0.01706	1	320:
453/49 2% 2 453/49 5% 5	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06,	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s]	0.01706 0.01706	1	320: 320:
453/49 2% 2 453/49 5% 5 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02296	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071	0.01706 0.01706	1	320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02296 0<00:06,	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s]	0.01706 0.01706 0.01847 0.01847	1 1 4 4	320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02296 0<00:06, 0.02693	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123	0.01706 0.01706 0.01847	1 1 4	320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02296 0<00:06, 0.02693 0<00:06,	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123 5.57it/s]	0.01706 0.01706 0.01847 0.01847 0.02101	1 1 4 4	320: 320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49 8% 7 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02296 0<00:06, 0.02693 0<00:06,	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123 5.57it/s] 0.01123	0.01706 0.01706 0.01847 0.01847	1 1 4 4	320: 320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49 8% 7 453/49 10% #	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02296 0<00:06, 0.02693 0<00:06, 0.02693	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123 5.57it/s] 0.01123 5.47it/s]	0.01706 0.01706 0.01847 0.01847 0.02101	1 1 4 4	320: 320: 320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49 10% # 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02296 0<00:06, 0.02693 0<00:06, 0.02693 0<00:06, 0.02566	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123 5.57it/s] 0.01123 5.47it/s] 0.01165	0.01706 0.01706 0.01847 0.01847 0.02101	1 1 4 4	320: 320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49 10% # 453/49 10% #	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02693 0<00:06, 0.02693 0<00:06, 0.02566 0<00:06,	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123 5.57it/s] 0.01123 5.47it/s] 0.01165 5.47it/s]	0.01706 0.01706 0.01847 0.01847 0.02101 0.02101 0.02027	1 1 4 4 4 4	320: 320: 320: 320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49 10% # 453/49 10% # 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.025693 0<00:06, 0.02693 0<00:06, 0.02566 00<00:06, 0.02566	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123 5.57it/s] 0.01123 5.47it/s] 0.01165 5.47it/s]	0.01706 0.01706 0.01847 0.01847 0.02101	1 1 4 4 4	320: 320: 320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49 10% # 453/49 10% # 453/49 12% #2	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02296 0<00:06, 0.02693 0<00:06, 0.02566 00<00:06, 0.02566	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123 5.57it/s] 0.01165 5.47it/s] 0.01165 5.57it/s]	0.01706 0.01706 0.01847 0.01847 0.02101 0.02101 0.02027	1 1 4 4 4 4	320: 320: 320: 320: 320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49 10% # 453/49 10% # 453/49 12% #2 453/49	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02693 0<00:06, 0.02693 0<00:06, 0.02566 00<00:06, 0.02566	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123 5.57it/s] 0.01123 5.47it/s] 0.01165 5.47it/s] 0.01165 5.57it/s] 0.01165 0.01102	0.01706 0.01706 0.01847 0.01847 0.02101 0.02101 0.02027	1 1 4 4 4 4	320: 320: 320: 320: 320: 320:
453/49 2% 2 453/49 5% 5 453/49 5% 5 453/49 8% 7 453/49 10% # 453/49 10% # 453/49 12% #2	1/40 [00:0 9	0<00:06, 0.01776 0<00:06, 0.01776 0<00:06, 0.02296 0<00:06, 0.02296 0<00:06, 0.02693 0<00:06, 0.02566 00<00:06, 0.02566 00<00:06, 0.02566	5.84it/s] 0.00643 5.84it/s] 0.00643 5.78it/s] 0.01071 5.78it/s] 0.01071 5.57it/s] 0.01123 5.57it/s] 0.01123 5.47it/s] 0.01165 5.47it/s] 0.01165 5.57it/s] 0.01165 0.01102	0.01706 0.01706 0.01847 0.01847 0.02101 0.02101 0.02027	1 1 4 4 4 4	320: 320: 320: 320: 320: 320: 320:

15% #5	6/40 [00:01<00:06, 5.33it/s]			
453/499	0.206G 0.02566 0.01119	0.01971	4	320:
15% #5	6/40 [00:01<00:06, 5.33it/s]			
	0.206G 0.02566 0.01119	0.01971	4	320:
18% #7	7/40 [00:01<00:06, 5.48it/s]			
453/499	0.206G 0.02376 0.01116	0.01899	4	320:
18% #7	7/40 [00:01<00:06, 5.48it/s]			
453/499	0.206G 0.02376 0.01116	0.01899	4	320:
20% ##	8/40 [00:01<00:05, 5.56it/s]			
453/499	0.206G 0.02263 0.01051	0.01877	1	320:
20% ##	8/40 [00:01<00:05, 5.56it/s]			
453/499	0.206G 0.02263 0.01051	0.01877	1	320:
22% ##2	9/40 [00:01<00:05, 5.80it/s]		_	
453/499	0.206G 0.02156 0.01004	0.01957	2	320:
22% ##2	9/40 [00:01<00:05, 5.80it/s]			
453/499	0.206G 0.02156 0.01004	0.01957	2	320:
25% ##5	10/40 [00:01<00:05, 5.81it/s]			
453/499	0.206G 0.02111 0.01011	0.0194	2	320:
25% ##5	10/40 [00:01<00:05, 5.81it/s]			
453/499	0.206G 0.02111 0.01011	0.0194	2	320:
28% ##7	11/40 [00:01<00:05, 5.79it/s]			
453/499	0.206G 0.02165 0.01057	0.02018	4	320:
28% ##7	11/40 [00:02<00:05, 5.79it/s]			
453/499	0.206G 0.02165 0.01057	0.02018	4	320:
30% ###	12/40 [00:02<00:05, 5.49it/s]			
453/499	0.206G 0.0225 0.01028	0.01978	2	320:
30% ###	12/40 [00:02<00:05, 5.49it/s]			
453/499	0.206G 0.0225 0.01028	0.01978	2	320:
32% ###2	13/40 [00:02<00:05, 5.29it/s]			
453/499	0.206G 0.02377 0.01015	0.02111	2	320:
32% ###2	13/40 [00:02<00:05, 5.29it/s]			
453/499	0.206G 0.02377 0.01015	0.02111	2	320:
35% ###5	14/40 [00:02<00:05, 5.07it/s]			
453/499	0.206G 0.02332 0.009965	0.02069	2	320:
35% ###5	14/40 [00:02<00:05, 5.07it/s]			
453/499	0.206G 0.02332 0.009965	0.02069	2	320:
38% ###7	15/40 [00:02<00:04, 5.02it/s]			
453/499	0.206G 0.02322 0.01029	0.02043	4	320:
38% ###7	15/40 [00:02<00:04, 5.02it/s]			
453/499	0.206G 0.02322 0.01029	0.02043	4	320:
40% ####	16/40 [00:02<00:04, 4.98it/s]			
453/499	0.206G 0.02304 0.0103	0.02024	2	320:
40% ####	16/40 [00:03<00:04, 4.98it/s]			
453/499	0.206G 0.02304 0.0103	0.02024	2	320:
42% ####2	17/40 [00:03<00:04, 5.08it/s]			
453/499	0.206G 0.02251 0.01007	0.0199	2	320:
42% ####2	17/40 [00:03<00:04, 5.08it/s]			
453/499	0.206G 0.02251 0.01007	0.0199	2	320:
·				

45% ####5		18/40 [00:03<00:04,				
453/499		0.206G 0.02183	0.009729	0.01948	1	320:
45% ####5		18/40 [00:03<00:04,				
453/499		0.206G 0.02183	0.009729	0.01948	1	320:
48% ####7		19/40 [00:03<00:04,				
453/499		0.206G 0.02129	0.009586	0.01925	2	320:
48% ####7		19/40 [00:03<00:04,				
453/499		0.206G 0.02129	0.009586	0.01925	2	320:
50% #####	١	20/40 [00:03<00:04,				
453/499		0.206G 0.02108	0.009766	0.01932	4	320:
50% #####		20/40 [00:04<00:04,				
453/499		0.206G 0.02108	0.009766	0.01932	4	320:
52% #####2		21/40 [00:04<00:03,				
453/499		0.206G 0.02133	0.009804	0.0195	4	320:
52% #####2		21/40 [00:04<00:03,				
453/499		0.206G 0.02133		0.0195	4	320:
55% #####5		22/40 [00:04<00:03,	4.80it/s]			
453/499		0.206G 0.02107	0.009687	0.0193	2	320:
55% #####5		22/40 [00:04<00:03,	4.80it/s			
453/499		0.206G 0.02107	0.009687	0.0193	2	320:
57% #####7		23/40 [00:04<00:03,	4.95it/s]			
453/499		0.206G 0.02123	0.009805	0.01956	4	320:
57% #####7	-	23/40 [00:04<00:03,	4.95it/s]			
453/499		0.206G 0.02123	0.009805	0.01956	4	320:
60% ######		24/40 [00:04<00:03,	4.82it/s			
453/499		0.206G 0.02071	0.009559	0.01963	1	320:
60% ######		24/40 [00:04<00:03,	4.82it/s			
453/499		0.206G 0.02071	0.009559	0.01963	1	320:
62% ######2		25/40 [00:04<00:03,	4.97it/s			
453/499		0.206G 0.02073	0.009734	0.01958	4	320:
62% #####2	-	25/40 [00:05<00:03,	4.97it/s			
453/499		0.206G 0.02073	0.009734	0.01958	4	320:
65% ######5	-	26/40 [00:05<00:02,	4.97it/s			
453/499		0.206G 0.0214	0.009823	0.02001	4	320:
65% ######5	-	26/40 [00:05<00:02,	4.97it/s			
453/499		0.206G 0.0214	0.009823	0.02001	4	320:
68% #####7	-	27/40 [00:05<00:02,	4.94it/s			
453/499		0.206G 0.02141	0.01002	0.01986	2	320:
68% #####7		27/40 [00:05<00:02,	4.94it/s			
453/499		0.206G 0.02141	0.01002	0.01986	2	320:
70% ######		28/40 [00:05<00:02,	5.17it/s]			
453/499		0.206G 0.02124	0.009961	0.01979	2	320:
70% #######	-	28/40 [00:05<00:02,	5.17it/s]			
453/499		0.206G 0.02124	0.009961	0.01979	2	320:
72% #######2	-	29/40 [00:05<00:02,	5.22it/s]			
453/499		0.206G 0.02134	0.009924	0.02001	2	320:
72% #######2	1	29/40 [00:05<00:02,				
453/499		0.206G 0.02134	0.009924	0.02001	2	320:

	30/40 [00:05<00:01, 5.37it/s]		
453/499		0.02024	2 320:
	30/40 [00:05<00:01, 5.37it/s]		
453/499		0.02024	2 320:
78% ######7	31/40 [00:05<00:01, 5.49it/s]		
453/499	0.206G 0.02099 0.009767 0	0.02009	1 320:
78% ######7	31/40 [00:06<00:01, 5.49it/s]		
453/499	0.206G 0.02099 0.009767 0	.02009	1 320:
80% #######	32/40 [00:06<00:01, 5.50it/s]		
453/499	0.206G 0.02066 0.00972 0	0.01994	2 320:
80% #######	32/40 [00:06<00:01, 5.50it/s]		
453/499	0.206G 0.02066 0.00972 0	0.01994	2 320:
82% #######2	33/40 [00:06<00:01, 5.50it/s]		
453/499		0.01935	0 320:
82% #######2	33/40 [00:06<00:01, 5.50it/s]		
453/499		0.01935	320:
	34/40 [00:06<00:01, 5.89it/s]		
453/499		0.01946	1 320:
	34/40 [00:06<00:01, 5.89it/s]		
453/499	-	0.01946	1 320:
	35/40 [00:06<00:00, 5.80it/s]		020.
453/499		0.0194	3 320:
	35/40 [00:06<00:00, 5.80it/s]	0.0101	020.
453/499	•	0.0194	3 320:
	36/40 [00:06<00:00, 5.86it/s]	0.0131	020.
453/499	•	0.01933	2 320:
	36/40 [00:06<00:00, 5.86it/s]	7.01933	2 520.
453/499	-	0.01933	2 320:
	0.200G 0.01902 0.009271 0 37/40 [00:06<00:00, 5.69it/s]	7.01933	2 320.
453/499	•	0.01022	2 320:
		0.01933	2 320:
	37/40 [00:07<00:00, 5.69it/s]	0.01022	200
453/499		0.01933	2 320:
	38/40 [00:07<00:00, 5.70it/s]		
453/499		0.01932	2 320:
	38/40 [00:07<00:00, 5.70it/s]		
453/499		0.01932	2 320:
	39/40 [00:07<00:00, 5.75it/s]		
453/499		0.01921	1 320:
	39/40 [00:07<00:00, 5.75it/s]		
453/499		0.01921	1 320:
	# 40/40 [00:07<00:00, 5.93it/s]		
453/499		0.01921	1 320:
100% #########	# 40/40 [00:07<00:00, 5.36it/s]		
	Class Images Instances	P 1	R mAP50
mAP50-95: 0%	-		
	Class Images Instances		R mAP50
mAP50-95: 10%	# 2/20 [00:00<00:00, 18.	28it/s]	

mAP50-95: 20% ##			_	Instances		R	mAP50
mAP50-95: 30% ### 6/20 [00:00<00:00], 18.24it/s] mAP50 mAP50-95: Class Instances P R MAP50 mAP50 R MAP50 mAP50-95: 40% #### 8 8/20 [00:00<00:00], 15.62it/s] R MAP50 mAP50-95: 50% ###### 10/20 [00:00<00:00], 16.48it/s] R MAP50 mAP50-95: 60% ###### 12/20 [00:00<00:00], 16.04it/s] R MAP50 mAP50-95: 70% ####### 14/20 [00:00<00:00], 16.16it/s] R MAP50 mAP50-95: 70% ############# 16/20 [00:00<00:00], 16.16it/s] R MAP50 mAP50-95: 80% ####################################	mAP50-95:					R	mAP50
mAP50-95: 40% #### 8/20 [00:00<00:00, 15.62it/s] mAP50 mAP50-95: 50% #### 10/20 [00:00<00:00, 16.48it/s] mAP50 mAP50-95: 50% ##### 10/20 [00:00<00:00, 16.48it/s] mAP50 mAP50-95: 60% ###### 14/20 [00:00<00:00, 16.04it/s] mAP50 mAP50-95: 70% ####### 14/20 [00:00<00:00, 16.16it/s] mAP50 mAP50-95: 80% ######## 16/20 [00:00<00:00, 16.16it/s] mAP50 mAP50-95: 80% ######### 16/20 [00:00<00:00, 16.78it/s] mAP50 mAP50-95: 80% ######### 18/20 [00:01<00:00, 16.53it/s] mAP50 mAP50-95: 90% ########## 18/20 [00:01<00:00, 16.53it/s] mAP50 mAP50-95: 90% ########## 18/20 [00:01<00:00, 17.01it/s] mAP50 mAP50-95: 100% ########## 14/20 [00:01<00:00, 17.01it/s] mAP50 mAP50-95: 100% ##################################	mAP50-95:		•				
Class			•			R	mAP50
mAP50-95: 50% ##### 10/20 [00:00<00:00, 16.48it/s] mapes Instances P R mAP50 mAP50-95: 60% ####### 12/20 [00:00<00:00, 16.04it/s] Class Images Instances P R mAP50 mAP50-95: 70% ####### 14/20 [00:00<00:00, 16.16it/s] Class Images Instances P R mAP50 mAP50-95: 80% ######### 16/20 [00:00<00:00, 16.78it/s] R mAP50 mAP50-95: 90% ######### 18/20 [00:01<00:00, 16.53it/s] R mAP50 mAP50-95: 90% ########### 18/20 [00:01<00:00, 17.01it/s] R mAP50 mAP50-95: 100% ################# 20/20 [00:01<00:00, 17.01it/s] R mAP50 mAP50-95: 100% ###################################	mAP50-95:					_	
Class	ADEO 05		_				mAP50
mAP50-95: 60% ###### 12/20 [00:00<00:00, 16.04it/s] Class Images Instances P R MAP50 mAP50 mAP50-95: 70% ####### 14/20 [00:00<00:00, 16.16it/s]	mAP50-95:						m
Class	mAP50-95:		_				IIIAF 50
mAP50-95: 70% ####### 14/20 100:00 16.16it/s 16.20 16.78it/s 16.720 16.53it/s 16.720 16.53it/s 16.720 17.01it/s 17.0	mm 00 00.						mAP50
mAP50-95: 80% ######## 16/20 [00:00<00:00, 16.78it/s] map50 mAP50-95: 90% ######## 18/20 [00:01<00:00, 16.53it/s] mAP50 mAP50-95: 90% ######### 18/20 [00:01 16.53it/s] mAP50 mAP50-95: 100% ########## 20/20 [00:01 17.01it/s] mAP50 mAP50-95: 100% ########## 20/20 [00:01 0.070 17.01it/s] 0.991 column and process P	mAP50-95:		_				
MAP50-95: 90% ######### 18/20 [00:01<00:00, 16.53it/s] mAP50 mAP50-95: 100% ########## 18/20 [00:01<00:00, 17.01it/s] R mAP50 mAP50-95: 100% ########### 20/20 [00:01<00:00, 17.01it/s] 0.991 0.79 0.79 all 40 40 0.972 0.975 0.991 Epoch GPU_mem box_loss obj_loss cls_loss Instances Instances Size 0% 0/40 [00:00 0.00							mAP50
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	mAP50-95:	80% #######	16/20 [00:00<00:00	, 16.78it/s]		
Class							mAP50
mAP50-95: 100% ######## 20/20 [00:01<00:01, 17.01it/s]	mAP50-95:						
Epoch GPU_mem box_loss obj_loss cls_loss Instances Size N			-				mAP50
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	mAP50-95:						
Epoch GPU_mem box_loss obj_loss cls_loss Instances Size 0%		all	40	40	0.972	0.975	0.991
0%	0.79						
0%	Enoc	ch CDII mom b	ov 1000	obi logg	ala loga	Tnatancoa	Sizo
454/499	Ерос	n Gro_mem b	OX_IOSS	00]_1088	CIS_IOSS	Instances	2176
454/499	0%1	Ι 0/40 Γ00:	00 . ?i</td <td>t/sl</td> <td></td> <td></td> <td></td>	t/sl			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					0.01128	1	320:
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	454/49	99 0.206G	0.00983	0.00399	0.01128	1	320:
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2% 2	1/40 [00:00	<00:06,	6.44it/s]			
454/499	454/49	99 0.206G 0	.009654	0.004511	0.01233	1	320:
5% 5 2/40 [00:00<00:05, 6.34it/s]	2% 2	1/40 [00:00	<00:06,	6.44it/s]			
454/499					0.01233	1	320:
5% 5							
454/499					0.01362	4	320:
8% 7							
454/499					0.01362	4	320:
8% 7					0.04804	4	000
454/499					0.01381	1	320:
10% #			•		0 01301	4	200.
454/499					0.01381	1	320:
10% #			-		0 01633	1	320.
454/499 0.206G 0.01739 0.008917 0.01633 4 320: 12% #2 5/40 [00:00<00:06, 5.74it/s] 454/499 0.206G 0.01842 0.01044 0.01719 4 320: 12% #2 5/40 [00:01<00:06, 5.74it/s]					0.01033	-	320.
12% #2 5/40 [00:00<00:06, 5.74it/s] 454/499 0.206G 0.01842 0.01044 0.01719 4 320: 12% #2 5/40 [00:01<00:06, 5.74it/s]					0 01633	4	320.
454/499 0.206G 0.01842 0.01044 0.01719 4 320: 12% #2 5/40 [00:01<00:06, 5.74it/s]					0.01000	-	020.
12% #2 5/40 [00:01<00:06, 5.74it/s]					0 01710	4	320.
					0.01/19		UZU.
					0.01719	•	020.
15% #5 6/40 [00:01<00:06, 5.43it/s]		5/40 [00:0	1<00:06,	5.74it/s]	0.01719	4	320:

454/499	0.206G 0.01851 0.009	81 0.01704	2	320:
15% #5	6/40 [00:01<00:06, 5.43it	/s]		
454/499	0.206G 0.01851 0.009	81 0.01704	2	320:
18% #7	7/40 [00:01<00:06, 5.40it	/s]		
454/499	0.206G 0.01997 0.011	09 0.01799	4	320:
18% #7	7/40 [00:01<00:06, 5.40it	/s]		
454/499	0.206G 0.01997 0.011	09 0.01799	4	320:
20% ##	8/40 [00:01<00:05, 5.53it	/s]		
454/499	0.206G 0.01886 0.010	26 0.01726	1	320:
20% ##	8/40 [00:01<00:05, 5.53it	/s]		
454/499	0.206G 0.01886 0.010	26 0.01726	1	320:
22% ##2	9/40 [00:01<00:05, 5.57it	/s]		
454/499	0.206G 0.02174 0.010		2	320:
22% ##2	9/40 [00:01<00:05, 5.57it	/s]		
454/499	0.206G 0.02174 0.010		2	320:
25% ##5	10/40 [00:01<00:05, 5.52i			
454/499	0.206G 0.02072 0.0097		1	320:
25% ##5	10/40 [00:01<00:05, 5.52i			
454/499	0.206G 0.02072 0.0097		1	320:
28% ##7	11/40 [00:01<00:05, 5.61i		_	
_	0.206G 0.01982 0.009		1	320:
28% ##7	11/40 [00:02<00:05, 5.61i		_	0_0.
454/499	0.206G 0.01982 0.009		1	320:
30% ###	12/40 [00:02<00:05, 5.52i		-	020.
454/499	0.206G 0.02048 0.0091		2	320:
30% ###	12/40 [00:02<00:05, 5.52i		2	020.
454/499	0.206G 0.02048 0.0091		2	320:
32% ###2	13/40 [00:02<00:04, 5.58i		2	020.
454/499	0.206G 0.02155 0.0090		2	320:
32% ###2	13/40 [00:02<00:04, 5.58i		2	520.
454/499	0.206G 0.02155 0.0090		2	320:
35% ###5	14/40 [00:02<00:04, 5.23i		Z	320.
	0.206G 0.02113 0.0092		1	220.
454/499			4	320:
35% ###5	14/40 [00:02<00:04, 5.23i		4	200.
454/499	0.206G 0.02113 0.0092		4	320:
38% ###7	15/40 [00:02<00:04, 5.13i		0	200
454/499	0.206G 0.0207 0.0091		2	320:
38% ###7	15/40 [00:02<00:04, 5.13i	· -	0	200
454/499	0.206G 0.0207 0.0091		2	320:
40% ####	16/40 [00:02<00:04, 5.31i		_	000
454/499	0.206G 0.01999 0.0087		1	320:
40% ####	16/40 [00:03<00:04, 5.31i			0.00
454/499	0.206G 0.01999 0.0087		1	320:
42% ####2	17/40 [00:03<00:04, 5.45i		_	
454/499	0.206G 0.02003 0.008		2	320:
42% ####2	17/40 [00:03<00:04, 5.45i			
454/499	0.206G 0.02003 0.008		2	320:
45% ####5	18/40 [00:03<00:04, 5.42i	t/s]		

454/499	0.206G 0.02021 0.008876 0.019	12 4 320:
45% ####5	18/40 [00:03<00:04, 5.42it/s]	
454/499	0.206G 0.02021 0.008876 0.0193	12 4 320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]	
454/499	0.206G 0.01995 0.008894 0.0193	18 4 320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]	
454/499	0.206G 0.01995 0.008894 0.0193	18 4 320:
50% #####	20/40 [00:03<00:03, 5.19it/s]	0 0 200
454/499	0.206G 0.01945 0.008728 0.0189	98 2 320:
50% ##### 454/499	20/40 [00:03<00:03, 5.19it/s] 0.206G	98 2 320:
454/499 52% #####2	21/40 [00:03<00:03, 5.24it/s]	96 2 320:
454/499	0.206G 0.02004 0.008819 0.03	19 4 320:
52% #####2	21/40 [00:04<00:03, 5.24it/s]	19 4 320.
454/499	0.206G 0.02004 0.008819 0.03	19 4 320:
55% #####5	22/40 [00:04<00:03, 5.26it/s]	19 4 320.
454/499	0.206G 0.01997 0.008757 0.0187	79 2 320:
55% #####5	22/40 [00:04<00:03, 5.26it/s]	79 2 520.
454/499	0.206G 0.01997 0.008757 0.0187	79 2 320:
57% #####7	23/40 [00:04<00:03, 5.28it/s]	79 2 520.
454/499	0.206G 0.01984 0.008521 0.0189	97 1 320:
57% #####7	23/40 [00:04<00:03, 5.28it/s]	57 1 020.
454/499	0.206G 0.01984 0.008521 0.0189	97 1 320:
60% ######	24/40 [00:04<00:02, 5.46it/s]	1 320.
454/499	0.206G 0.01935 0.008433 0.0187	76 2 320:
60% ######	24/40 [00:04<00:02, 5.46it/s]	
454/499	0.206G 0.01935 0.008433 0.0187	76 2 320:
62% ######2	25/40 [00:04<00:02, 5.66it/s]	
454/499	0.206G 0.02017 0.008347 0.0189	91 2 320:
62% ######2	25/40 [00:04<00:02, 5.66it/s]	
454/499	0.206G 0.02017 0.008347 0.0189	91 2 320:
65% ######5	26/40 [00:04<00:02, 5.56it/s]	
454/499	0.206G 0.0198 0.008335 0.018	72 2 320:
65% ######5	26/40 [00:04<00:02, 5.56it/s]	
454/499	0.206G 0.0198 0.008335 0.018	72 2 320:
68% #####7	27/40 [00:04<00:02, 5.38it/s]	
454/499	0.206G 0.0193 0.008174 0.018	53 1 320:
68% #####7	27/40 [00:05<00:02, 5.38it/s]	
454/499	0.206G 0.0193 0.008174 0.018	53 1 320:
70% ######	28/40 [00:05<00:02, 5.45it/s]	
454/499	0.206G 0.02082 0.008194 0.0189	57 2 320:
70% ######	28/40 [00:05<00:02, 5.45it/s]	
454/499	0.206G 0.02082 0.008194 0.018	57 2 320:
72% ######2	29/40 [00:05<00:02, 5.41it/s]	
454/499	0.206G 0.02108 0.008669 0.0189	92 4 320:
72% ######2	29/40 [00:05<00:02, 5.41it/s]	
454/499		92 4 320:
75% ######5	30/40 [00:05<00:01, 5.37it/s]	

454/499	0.206G 0.02171	0.00877	0.01893	4	320:
	30/40 [00:05<00:01,			_	
454/499			0.01893	4	320:
78% ######7	31/40 [00:05<00:01,	5.45it/s]			
454/499	0.206G 0.02134	0.00866	0.01881	2	320:
78% ######7	31/40 [00:05<00:01,	5.45it/s			
454/499	0.206G 0.02134	0.00866	0.01881	2	320:
80% #######	32/40 [00:05<00:01,	5.60it/s]			
454/499			0.01885	2	320:
	32/40 [00:06<00:01,	5.60it/s]			
	0.206G 0.02145		0.01885	2	320:
82% #######2	33/40 [00:06<00:01,	5.66it/s]			
454/499			0.01943	2	320:
82% #######2	33/40 [00:06<00:01,	5.66it/s]			
	0.206G 0.02221		0.01943	2	320:
	34/40 [00:06<00:01,				
454/499	0.206G 0.02296	0.008708	0.01989	2	320:
	34/40 [00:06<00:01,	5.70it/s]			
454/499	0.206G 0.02296	0.008708	0.01989	2	320:
88% #######7	35/40 [00:06<00:00,	5.59it/s			
454/499	0.206G 0.02289	0.008918	0.01999	4	320:
88% #######7	35/40 [00:06<00:00,	5.59it/s			
454/499	0.206G 0.02289	0.008918	0.01999	4	320:
90% #######	36/40 [00:06<00:00,	5.65it/s			
454/499	0.206G 0.02265	0.008791	0.01983	1	320:
90% ########	36/40 [00:06<00:00,	5.65it/s]			
454/499	0.206G 0.02265	0.008791	0.01983	1	320:
92% ########2	37/40 [00:06<00:00,	5.70it/s			
454/499		0.008757	0.0198	2	320:
92% ########2	37/40 [00:06<00:00,	5.70it/s			
454/499	0.206G 0.023	0.008757	0.0198	2	320:
95% ########5	38/40 [00:06<00:00,	5.73it/s			
454/499	0.206G 0.02263	0.008618	0.01959	1	320:
95% ########5	38/40 [00:07<00:00,	5.73it/s			
454/499	0.206G 0.02263	0.008618	0.01959	1	320:
98% ########7	39/40 [00:07<00:00,	5.74it/s			
454/499	0.206G 0.02309	0.008745	0.01976	3	320:
98% ########7	39/40 [00:07<00:00,	5.74it/s			
454/499	0.206G 0.02309	0.008745	0.01976	3	320:
100% ##########	40/40 [00:07<00:00	, 5.77it/s]			
454/499	0.206G 0.02309	0.008745	0.01976	3	320:
100% ##########	40/40 [00:07<00:00	, 5.52it/s			
	Class Images	Instances	P	R	mAP50
mAP50-95: 0%	0/20 [00	:00 , ?it/s]</td <td></td> <td></td> <td></td>			
	•	Instances	P	R	mAP50
mAP50-95: 10%	# 2/20 [00	:00<00:01, 16	.08it/s]		
	Class Images	Instances	P	R	mAP50

mAP50-95:	20% ##	4/20 [00	0:00<00:00,	17.31it/s]		
	Class		Instances		R	mAP50
mAP50-95:	30% ###	6/20 [00	0:00<00:00,	17.51it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	40% ####	8/20 [00	0:00<00:00,	16.82it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	50% #####	10/20 [0	00:00<00:00,	17.32it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	60% #####	12/20 [0	00:00<00:00,	16.85it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	75% ######5	15/20 [0	00:00<00:00,	16.41it/s]		
	Class	0	Instances		R	mAP50
mAP50-95:	85% #######5	17/20 [0	00:01<00:00,	16.29it/s]		
	Class	•	Instances		R	mAP50
mAP50-95:	100% #########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########					
	all	40	40	0.98	0.975	0.991
0.787						
Epoc	ch GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
-0/1	L 0/40 F00					
	0/40 [00:	-				
	99 0.206G		0.01413	0.02029	4	320:
0%	0/40 [00:00			0 00000	4	200
	99 0.206G			0.02029	4	320:
2% 2		-		0.0160	4	200
	99 0.206G			0.0168	1	320:
2% 2				0.0168	1	200.
	99 0.206G 2/40 [00:00			0.0100	1	320:
			0.01018	0.01982	3	320:
5% 5			5.17it/s]	0.01902	3	320.
	99 0.206G			0.01982	3	320:
8% 7				0.01902	3	320.
		=	0.01032	0.01837	2	320:
8% 7				0.01007	2	020.
	99 0.206G	=	0.01032	0.01837	2	320:
10% #				0.01001	2	020.
455/49				0.02088	4	320:
10% #	4/40 [00:0			0102000	_	0_0.
	99 0.206G		0.01106	0.02088	4	320:
12% #2	5/40 [00:0			110200	-	320.
455/49			0.009809	0.02052	1	320:
12% #2					_	33
455/49		0.01922		0.02052	1	320:
	6/40 [00:0					
455/49			0.01003	0.02232	3	320:
400/48	0.2004					

15% #5	6/40 [00:01<00:06, 4.88it/s]			
455/499	0.206G 0.02079 0.01003		3	320:
18% #7	7/40 [00:01<00:06, 4.90it/s]			
455/499	0.206G 0.01944 0.009365		1	320:
18% #7	7/40 [00:01<00:06, 4.90it/s]			
455/499	0.206G 0.01944 0.009365	0.02186	1	320:
20% ##	8/40 [00:01<00:06, 5.00it/s]			
455/499	0.206G 0.02282 0.008937		2	320:
20% ##	8/40 [00:01<00:06, 5.00it/s]			
455/499	0.206G 0.02282 0.008937		2	320:
22% ##2	9/40 [00:01<00:06, 4.86it/s]			
455/499	0.206G 0.02159 0.008505	0.02185	1	320:
22% ##2	9/40 [00:02<00:06, 4.86it/s]			
455/499	0.206G 0.02159 0.008505	0.02185	1	320:
25% ##5	10/40 [00:02<00:06, 4.87it/s	3]		
455/499	0.206G 0.02427 0.008571	0.02147	4	320:
25% ##5	10/40 [00:02<00:06, 4.87it/s	3]		
455/499	0.206G 0.02427 0.008571	0.02147	4	320:
28% ##7	11/40 [00:02<00:06, 4.77it/s	s]		
455/499	0.206G 0.02329 0.008811	0.02199	4	320:
28% ##7	11/40 [00:02<00:06, 4.77it/s	3]		
455/499	0.206G 0.02329 0.008811	0.02199	4	320:
30% ###	12/40 [00:02<00:05, 4.71it/s	s]		
455/499	0.206G 0.02207 0.008346		1	320:
30% ###	12/40 [00:02<00:05, 4.71it/s	s]		
455/499	0.206G 0.02207 0.008346		1	320:
32% ###2	13/40 [00:02<00:05, 4.87it/s			
455/499	0.206G 0.02246 0.008087		1	320:
32% ###2	13/40 [00:02<00:05, 4.87it/s			
455/499	0.206G 0.02246 0.008087		1	320:
35% ###5	14/40 [00:02<00:05, 5.00it/s			
455/499	0.206G 0.02243 0.008084		2	320:
35% ###5	14/40 [00:03<00:05, 5.00it/s			
455/499	0.206G 0.02243 0.008084		2	320:
38% ###7	15/40 [00:03<00:05, 4.91it/s			
455/499	0.206G 0.02156 0.007815	0.0206	1	320:
38% ###7	15/40 [00:03<00:05, 4.91it/s			
455/499	0.206G 0.02156 0.007815	0.0206	1	320:
40% ####	16/40 [00:03<00:04, 5.08it/s			
455/499	0.206G 0.02252 0.007846	0.02256	2	320:
40% ####	16/40 [00:03<00:04, 5.08it/s			
455/499	0.206G 0.02252 0.007846	0.02256	2	320:
42% ####2	17/40 [00:03<00:04, 5.03it/s		_	0201
455/499	0.206G 0.02334 0.007775	0.02433	2	320:
42% ####2	17/40 [00:03<00:04, 5.03it/s		-	220.
455/499	0.206G 0.02334 0.007775	0.02433	2	320:
45% ####5	18/40 [00:03<00:04, 5.24it/s		-	220.
455/499	0.206G 0.02279 0.007535	0.02361	1	320:
, 100	3.222.3 3.001000		_	

45% ####5		18/40 [00:03<00:04,				
455/499		0.206G 0.02279		0.02361	1	320:
48% ####7	١	19/40 [00:03<00:03,				
455/499		0.206G 0.02201	0.007319	0.02303	1	320:
48% ####7	١	19/40 [00:03<00:03,				
455/499		0.206G 0.02201		0.02303	1	320:
50% #####	ı	20/40 [00:03<00:03,			_	
455/499		0.206G 0.02141		0.02314	2	320:
50% #####	ı	20/40 [00:04<00:03,			_	
455/499		0.206G 0.02141		0.02314	2	320:
52% #####2	١	21/40 [00:04<00:03,				
455/499		0.206G 0.02153		0.02302	4	320:
52% #####2	ı	21/40 [00:04<00:03,				
455/499		0.206G 0.02153		0.02302	4	320:
55% #####5	ı	22/40 [00:04<00:03,				
455/499		0.206G 0.02091		0.02255	1	320:
55% #####5	ı	22/40 [00:04<00:03,				
455/499		0.206G 0.02091		0.02255	1	320:
57% #####7	I	23/40 [00:04<00:03,				
455/499		0.206G 0.02155		0.02226	2	320:
57% #####7		23/40 [00:04<00:03,	· -			
455/499		0.206G 0.02155		0.02226	2	320:
60% ######	I	24/40 [00:04<00:03,	5.30it/s			
455/499		0.206G 0.02118	0.007274	0.02198	1	320:
60% ######	I	24/40 [00:04<00:03,	5.30it/s			
455/499		0.206G 0.02118	0.007274	0.02198	1	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.45it/s			
455/499		0.206G 0.02076	0.007128	0.02168	1	320:
62% #####2	- 1	25/40 [00:05<00:02,	5.45it/s			
455/499		0.206G 0.02076	0.007128	0.02168	1	320:
65% ######5	- 1	26/40 [00:05<00:02,	5.55it/s]			
455/499		0.206G 0.02072	0.007526	0.02149	4	320:
65% ######5	- 1	26/40 [00:05<00:02,	5.55it/s]			
455/499		0.206G 0.02072	0.007526	0.02149	4	320:
68% ######7	- 1	27/40 [00:05<00:02,	5.46it/s]			
455/499		0.206G 0.02036	0.007375	0.02121	1	320:
68% ######7	- 1	27/40 [00:05<00:02,	5.46it/s]			
455/499		0.206G 0.02036	0.007375	0.02121	1	320:
70% ######	- 1	28/40 [00:05<00:02,	5.42it/s			
455/499		0.206G 0.02051	0.007533	0.02094	2	320:
70% ######	- 1	28/40 [00:05<00:02,	5.42it/s			
455/499		0.206G 0.02051	0.007533	0.02094	2	320:
72% ######2		29/40 [00:05<00:01,	5.54it/s]			
455/499		0.206G 0.02041	0.007432	0.02081	2	320:
72% ######2		29/40 [00:05<00:01,	5.54it/s]			
455/499		0.206G 0.02041	0.007432	0.02081	2	320:
75% ######5		30/40 [00:05<00:01,	5.62it/s]			
455/499		0.206G 0.02062	0.007484	0.02104	2	320:

75% ######5	30/40 [00:05<00:01, 5.62it/s]		
455/499	0.206G 0.02062 0.007484 0.02104	2	320:
78% ######7	31/40 [00:05<00:01, 5.53it/s]		
455/499	0.206G 0.02022 0.007336 0.02079	1	320:
78% ######7	31/40 [00:06<00:01, 5.53it/s]		
455/499	0.206G 0.02022 0.007336 0.02079	1	320:
	32/40 [00:06<00:01, 5.77it/s]		
455/499		1	320:
80% #######	32/40 [00:06<00:01, 5.77it/s]		
	0.206G 0.01984 0.007249 0.02073	1	320:
	33/40 [00:06<00:01, 5.76it/s]	_	
455/499	•	2	320:
	33/40 [00:06<00:01, 5.76it/s]	2	020.
455/499	·	2	320:
	34/40 [00:06<00:01, 5.62it/s]	2	020.
	0.206G 0.01962 0.007159 0.02107	2	320:
	34/40 [00:06<00:01, 5.62it/s]	2	320.
	•	0	200
455/499		2	320:
	35/40 [00:06<00:00, 5.68it/s]	_	
	0.206G 0.01951 0.007093 0.02085	2	320:
	35/40 [00:06<00:00, 5.68it/s]		
455/499		2	320:
90% #######	36/40 [00:06<00:00, 5.69it/s]		
455/499	0.206G 0.01942 0.007213 0.02076	4	320:
90% ########	36/40 [00:06<00:00, 5.69it/s]		
455/499	0.206G 0.01942 0.007213 0.02076	4	320:
92% ########2	37/40 [00:06<00:00, 5.58it/s]		
455/499	0.206G 0.01946 0.00727 0.02067	2	320:
92% ########2	37/40 [00:07<00:00, 5.58it/s]		
455/499	0.206G 0.01946 0.00727 0.02067	2	320:
95% ########5	38/40 [00:07<00:00, 5.80it/s]		
455/499	0.206G 0.01948 0.00751 0.02063	4	320:
	38/40 [00:07<00:00, 5.80it/s]		
455/499		4	320:
	39/40 [00:07<00:00, 5.79it/s]	-	020.
	0.206G 0.01967 0.007664 0.02062	3	320:
	39/40 [00:07<00:00, 5.79it/s]	3	020.
455/499	0.206G 0.01967 0.007664 0.02062	3	320:
		3	320.
	40/40 [00:07<00:00, 5.64it/s]	2	200.
455/499	0.206G 0.01967 0.007664 0.02062	3	320:
100% ##########	40/40 [00:07<00:00, 5.33it/s]		
		ъ	4550
ADEO 05 0011	Class Images Instances P	R	mAP50
mAP50-95: 0%	0/20 [00:00 , ?it/s]</td <td>_</td> <td>4550</td>	_	4550
ADEO 05 (2011)	Class Images Instances P	R	mAP50
mAP50-95: 10%	-	_	.==-
	Class Images Instances P	R	mAP50
mAP50-95: 20%	## 4/20 [00:00<00:01, 14.78it/s]		

mAP50-95: 3	Class	_	Instances 0:00<00:00,		R	mAP50
	Class	Images	Instances	P	R	mAP50
mAP50-95: 4			0:00<00:00,		_	1750
ADEO OF	Class	•	Instances		R	mAP50
mAP50-95: 5	50% ##### Class		00:00<00:00, Instances		R	mAP50
mAP50-95: 6		_	00:00<00:00,			MAPSO
MAI 50 95.	Class		Instances		R	mAP50
mAP50-95: 7		_	00:00<00:00			mai 00
	Class		Instances		R	mAP50
mAP50-95: 8			00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95: 9	90% ########	_				
	Class		Instances		R	mAP50
mAP50-95: 10	00% #########	20/20 [00:01<00:00,	17.75it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95: 10	00% #########	20/20 [00:01<00:00,	17.23it/s]		
	all	40	40	0.98	0.975	0.991
0.787						
Epoch	GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
0%	0/40 [00:	00<2 2i	+/al			
456/499				0.04184	2	320:
0%	0/40 [00:00			0.04104	2	320.
456/499	0.206G	=		0.04184	2	320:
2% 2	1/40 [00:00			0.01101	2	020.
456/499			0.007232	0.04962	2	320:
2% 2	1/40 [00:00			0.01002	_	0201
456/499			0.007232	0.04962	2	320:
5% 5				0.01002	_	0_0.
456/499	0.206G			0.03763	2	320:
5% 5	2/40 [00:00					
456/499			0.007378	0.03763	2	320:
8% 7	3/40 [00:00					
456/499			0.008185	0.03471	4	320:
8% 7	3/40 [00:00					
456/499		-	0.008185	0.03471	4	320:
10% #	4/40 [00:0					
456/499	0.206G	0.02879	0.008346	0.03451	2	320:
10% #	4/40 [00:0	0<00:06,	5.29it/s]			
456/499	0.206G	0.02879	0.008346	0.03451	2	320:
12% #2	5/40 [00:0	0<00:06,	5.28it/s			
456/499	0.206G	0.02603	0.008422	0.03126	2	320:
12% #2	5/40 [00:0	1<00:06,	5.28it/s]			
456/499	0.206G	0.02603	0.008422	0.03126	2	320:
15% #5	6/40 [00:0	1<00:06,	5.62it/s]			

	0.206G 0.02368		0.02921	2	320:
15% #5 456/499	6/40 [00:01<00:06, 0.206G 0.02368	5.62it/s] 0.007918	0.02921	2	320:
18% #7		5.52it/s]	0.02321	2	520.
456/499	0.206G 0.02282	0.007583	0.02743	1	320:
18% #7	7/40 [00:01<00:05,				
	•	0.007583	0.02743	1	320:
20% ##	8/40 [00:01<00:05,	5.47it/s]			
456/499	0.206G 0.02413	0.008464	0.02793	4	320:
20% ##	8/40 [00:01<00:05,	5.47it/s			
456/499	0.206G 0.02413	0.008464	0.02793	4	320:
22% ##2	9/40 [00:01<00:05,	5.55it/s]			
456/499	0.206G 0.02612	0.008252	0.02659	2	320:
22% ##2	9/40 [00:01<00:05,				
456/499		0.008252	0.02659	2	320:
25% ##5	10/40 [00:01<00:05,				
456/499	0.206G 0.02703	0.008351	0.02687	2	320:
25% ##5	10/40 [00:02<00:05,	5.48it/s			
456/499	0.206G 0.02703	0.008351	0.02687	2	320:
28% ##7	11/40 [00:02<00:05,	5.28it/s			
456/499	0.206G 0.02584	0.007999	0.02618	1	320:
28% ##7	11/40 [00:02<00:05,	5.28it/s			
456/499	0.206G 0.02584	0.007999	0.02618	1	320:
30% ###	12/40 [00:02<00:05,	5.43it/s			
456/499	0.206G 0.02477	0.007925	0.02572	2	320:
30% ###	12/40 [00:02<00:05,	5.43it/s			
456/499	0.206G 0.02477	0.007925	0.02572	2	320:
32% ###2	13/40 [00:02<00:04,	5.69it/s]			
456/499	0.206G 0.02468	0.007856	0.02508	2	320:
32% ###2	13/40 [00:02<00:04,	5.69it/s]			
456/499	0.206G 0.02468	0.007856	0.02508	2	320:
35% ###5	14/40 [00:02<00:04,	5.67it/s]			
456/499	0.206G 0.02553	0.007823	0.02492	2	320:
35% ###5	14/40 [00:02<00:04,	5.67it/s]			
456/499	0.206G 0.02553	0.007823	0.02492	2	320:
38% ###7	15/40 [00:02<00:04,	5.77it/s]			
456/499	0.206G 0.02497	0.00778	0.02413	2	320:
38% ###7	15/40 [00:02<00:04,	5.77it/s			
456/499	0.206G 0.02497	0.00778	0.02413	2	320:
40% ####	16/40 [00:02<00:04,	5.78it/s]			
456/499	0.206G 0.02463	0.007845	0.02497	2	320:
40% ####	16/40 [00:03<00:04,	5.78it/s]			
456/499	0.206G 0.02463		0.02497	2	320:
42% ####2	17/40 [00:03<00:04,				
456/499	0.206G 0.02479		0.02465	4	320:
42% ####2	17/40 [00:03<00:04,				
456/499	0.206G 0.02479		0.02465	4	320:
45% ####5	18/40 [00:03<00:03,	5.54it/s			

45% ####5 18/40 [00:03<00:03, 5.54it/s]
48% ####7 19/40 [00:03<00:03, 5.77it/s]
456/499
######################################
456/499
50% ##### 20/40 [00:03<00:03, 5.47it/s]
456/499
50% ##### 20/40 [00:03<00:03, 5.47it/s]
456/499
52% #####2 21/40 [00:03<00:03, 5.57it/s]
456/499
52% #####2 21/40 [00:03<00:03, 5.57it/s]
456/499
55% ####5 22/40 [00:03<00:03, 5.47it/s]
456/499
456/499
57% ####7 23/40 [00:04<00:03, 5.43it/s] 1 320:
456/499
57% ####7 23/40 [00:04<00:03, 5.43it/s] 1 320: 456/499 0.206G 0.02391 0.008056 0.02349 1 320: 60% ###### 24/40 [00:04<00:02, 5.40it/s] 256/499 0.206G 0.02503 0.008097 0.02322 2 320: 60% ###### 24/40 [00:04<00:02, 5.40it/s] 456/499 0.206G 0.02503 0.008097 0.02322 2 320:
456/499 0.206G 0.02391 0.008056 0.02349 1 320: 60% ###### 24/40 [00:04<00:02, 5.40it/s] 456/499 0.206G 0.02503 0.008097 0.02322 2 320: 60% ###### 24/40 [00:04<00:02, 5.40it/s] 456/499 0.206G 0.02503 0.008097 0.02322 2 320:
60% ##### 24/40 [00:04<00:02, 5.40it/s] 456/499
456/499 0.206G 0.02503 0.008097 0.02322 2 320: 60% ###### 24/40 [00:04<00:02, 5.40it/s] 456/499 0.206G 0.02503 0.008097 0.02322 2 320:
60% ###### 24/40 [00:04<00:02, 5.40it/s] 456/499
456/499 0.206G 0.02503 0.008097 0.02322 2 320:
62% ######2 25/40 [00:04<00:02, 5.52it/s]
456/499 0.206G 0.02492 0.008411 0.02329 4 320:
62% ######2 25/40 [00:04<00:02, 5.52it/s]
456/499 0.206G 0.02492 0.008411 0.02329 4 320:
65% ######5 26/40 [00:04<00:02, 5.46it/s]
456/499 0.206G 0.02488 0.008547 0.02327 3 320:
65% ######5 26/40 [00:04<00:02, 5.46it/s]
456/499 0.206G 0.02488 0.008547 0.02327 3 320:
68% ######7 27/40 [00:04<00:02, 5.56it/s] 456/499 0.206G 0.02451 0.008368 0.02319 1 320:
456/499 0.206G 0.02451 0.008368 0.02319 1 320: 68% ######7 27/40 [00:05<00:02, 5.56it/s]
456/499 0.206G 0.02451 0.008368 0.02319 1 320:
70% ###### 28/40 [00:05<00:02, 5.64it/s]
456/499 0.206G 0.02417 0.008492 0.02313 4 320:
70% ###### 28/40 [00:05<00:02, 5.64it/s]
456/499 0.206G 0.02417 0.008492 0.02313 4 320:
72% #######2 29/40 [00:05<00:01, 5.67it/s]
456/499 0.206G 0.02437 0.008442 0.02295 2 320:
72% #######2 29/40 [00:05<00:01, 5.67it/s]
456/499 0.206G 0.02437 0.008442 0.02295 2 320:
75% ######5 30/40 [00:05<00:01, 5.56it/s]

456/499	0.206G 0.02413	0.008403 0	0.0227	2 32	20:
	30/40 [00:05<00:01,				
456/499	0.206G 0.02413	0.008403 0	0.0227	2 32	20:
78% ######7	31/40 [00:05<00:01,	5.64it/s]			
456/499	0.206G 0.02391	0.008606 0.	02263	4 32	20:
	31/40 [00:05<00:01,				
456/499			02263	4 32	20:
	32/40 [00:05<00:01,				
456/499			02228	2 32	20:
	32/40 [00:05<00:01,				
456/499			02228	2 32	20:
	33/40 [00:05<00:01,				
456/499			02208	4 32	20:
	33/40 [00:06<00:01,				
456/499			02208	4 32	20:
	34/40 [00:06<00:01,			_	
456/499			02192	2 32	20:
	34/40 [00:06<00:01,				
456/499	0.206G 0.02342		02192	2 32	20:
	35/40 [00:06<00:00,				
	0.206G 0.02311		02175	2 32	20:
	35/40 [00:06<00:00,				
456/499			02175	2 32	20:
	36/40 [00:06<00:00,				
456/499	0.206G 0.02329		02154	2 32	20:
	36/40 [00:06<00:00,				
456/499	0.206G 0.02329		02154	2 32	20:
	37/40 [00:06<00:00,				
456/499	0.206G 0.02295		02165	1 32	20:
	37/40 [00:06<00:00,				
456/499			02165	1 32	20:
	38/40 [00:06<00:00,				
456/499	0.206G 0.02355		02169	4 32	20:
	38/40 [00:06<00:00,				
456/499			02169	4 32	20:
	39/40 [00:06<00:00,				
456/499			02166	2 32	20:
	39/40 [00:07<00:00,				
456/499			02166	2 32	20:
	40/40 [00:07<00:00				
456/499	0.206G 0.02338		02166	2 32	20:
100% #########	40/40 [00:07<00:00	, 5.55it/s]			
		_	_	_	
	Class Images		P	R mAP5	o0
mAP50-95: 0%		:00 , ?it/s]</td <td>_</td> <td></td> <td></td>	_		
	•	Instances		R mAP5	o0
mAP50-95: 10%		:00<00:01, 14.0		_	
	Class Images	Instances	Р	R mAP5	o0

MAP50-95:	20%1##	I 4/20 [0	0.00<00.01	1E 00:+/al		
			0:00<00:01, Instances		R	mAP50
mAP50-95:		_	0:00<00:00,		It.	IIIAF 30
MAI 00 00.	Class	Images			R	mAP50
mAP50-95:		_	0:00<00:00,		10	mai 00
	Class		Instances		R	mAP50
mAP50-95:		_	00:00<00:00			
	Class		Instances		R	mAP50
mAP50-95:	60% #####	_	00:00<00:00			
	Class	Images	Instances	P	R	mAP50
mAP50-95:	70% ######	14/20 [00:00<00:00	, 14.08it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	80% #######	16/20 [00:01<00:00	, 13.64it/s]		
	${\tt Class}$	_	Instances		R	mAP50
mAP50-95:	90% ########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########					
	Class	•	Instances		R	mAP50
mAP50-95:	100% #########					
	all	40	40	0.965	0.964	0.988
0.783						
Fnog	h CDII mom k	.ov 1000	obi loga	ala loga	Tnatancoa	Size
Epoc	h GPU_mem b	DOX_IOSS	00]_1088	CIS_IOSS	Instances	2176
0%1	0/40 [00:	:00<7. ?i	t/sl			
457/49			0.002607	0.0124	1	320:
0%	0/40 [00:00			0.0121	-	020.
457/49			ומ			
				0.0124	1	320:
2% 2	9 0.206G 0	0.007889	0.002607	0.0124	1	320:
	9 0.206G 0 1/40 [00:00	0.007889	0.002607 5.33it/s]	0.0124	1	320: 320:
2% 2 457/49	9 0.206G 0 1/40 [00:00 9 0.206G	0.007889 0<00:07, 0.01226	0.002607 5.33it/s] 0.003487			
2% 2 457/49 2% 2	9 0.206G 0	0.007889 0<00:07, 0.01226 0<00:07,	0.002607 5.33it/s] 0.003487			
2% 2 457/49 2% 2 457/49	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G	0.007889 0<00:07, 0.01226 0<00:07, 0.01226	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487	0.0132	1	320:
2% 2 457/49 2% 2 457/49	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07,	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487	0.0132	1	320:
2% 2 457/49 2% 2 457/49 5% 5	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423	0.0132	1	320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s]	0.0132	1	320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 5% 5	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01244	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423	0.0132 0.0132 0.01398	1 1 2	320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 5% 5 457/49	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01244	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s]	0.0132 0.0132 0.01398	1 1 2	320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 5% 5 457/49 8% 7	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01244 0<00:07,	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s] 0.005037	0.0132 0.0132 0.01398 0.01398	1 1 2 2	320: 320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 5% 5 457/49	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01244 0<00:07, 0.01301	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s] 0.005037	0.0132 0.0132 0.01398 0.01398	1 1 2 2	320: 320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 5% 7 457/49 8% 7	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01244 0<00:07, 0.01301	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s] 0.005037 5.16it/s] 0.005037	0.0132 0.0132 0.01398 0.01398 0.01437	1 1 2 2 2	320: 320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 8% 7 457/49 8% 7 457/49	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 4/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01244 0<00:07, 0.01301	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s] 0.005037 5.16it/s] 0.005037 5.23it/s]	0.0132 0.0132 0.01398 0.01398 0.01437	1 1 2 2 2	320: 320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 5% 7 457/49 8% 7 457/49 10% #	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 4/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01301 0<00:07, 0.01301 0<00:06, 0.01696	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s] 0.005037 5.16it/s] 0.005037 5.23it/s] 0.007175	0.0132 0.0132 0.01398 0.01398 0.01437 0.01437	1 1 2 2 2 2	320: 320: 320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 8% 7 457/49 8% 7 457/49 10% # 457/49	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 4/40 [00:00 9 0.206G 4/40 [00:00 9 0.206G 4/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01301 0<00:07, 0.01301 0<00:06, 0.01696	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s] 0.005037 5.16it/s] 0.005037 5.23it/s]	0.0132 0.0132 0.01398 0.01398 0.01437 0.01437	1 1 2 2 2 2	320: 320: 320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 8% 7 457/49 8% 7 457/49 10% # 457/49	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 4/40 [00:00 9 0.206G 4/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01244 0<00:07, 0.01301 0<00:07, 0.01301 0<00:06, 0.01696	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s] 0.005037 5.16it/s] 0.005037 5.23it/s] 0.007175 5.23it/s]	0.0132 0.0132 0.01398 0.01398 0.01437 0.01437	1 1 2 2 2 2 2	320: 320: 320: 320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 5% 5 457/49 8% 7 457/49 10% # 457/49 10% # 457/49	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 4/40 [00:00 9 0.206G 4/40 [00:00 9 0.206G 4/40 [00:00 9 0.206G 5/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01301 0<00:07, 0.01301 0<00:06, 0.01696 00<00:06,	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s] 0.005037 5.16it/s] 0.005037 5.23it/s] 0.007175 5.23it/s]	0.0132 0.0132 0.01398 0.01398 0.01437 0.01437	1 1 2 2 2 2 2	320: 320: 320: 320: 320: 320:
2% 2 457/49 2% 2 457/49 5% 5 457/49 5% 5 457/49 8% 7 457/49 10% # 457/49 10% # 457/49 10% #	9 0.206G 0 1/40 [00:00 9 0.206G 1/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 2/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 3/40 [00:00 9 0.206G 4/40 [00:00 9 0.206G 4/40 [00:00 9 0.206G 4/40 [00:00 9 0.206G 5/40 [00:00	0.007889 0<00:07, 0.01226 0<00:07, 0.01226 0<00:07, 0.01244 0<00:07, 0.01301 0<00:07, 0.01301 0<00:06, 0.01696 00<00:06, 0.01696	0.002607 5.33it/s] 0.003487 5.33it/s] 0.003487 5.18it/s] 0.00423 5.18it/s] 0.00423 5.16it/s] 0.005037 5.16it/s] 0.005037 5.23it/s] 0.007175 5.23it/s] 0.007175 5.24it/s] 0.006545	0.0132 0.0132 0.01398 0.01398 0.01437 0.01437 0.01632	1 1 2 2 2 2 4 4	320: 320: 320: 320: 320: 320: 320:

15% #5	6/40 [00:01<00:06, 5.42it/s]			
457/499	0.206G 0.01628 0.00723	0.01653	4	320:
15% #5	6/40 [00:01<00:06, 5.42it/s]			
457/499	0.206G 0.01628 0.00723	0.01653	4	320:
18% #7	7/40 [00:01<00:06, 5.39it/s]			
457/499	0.206G 0.01548 0.006922	0.01681	1	320:
18% #7	7/40 [00:01<00:06, 5.39it/s]			
457/499	0.206G 0.01548 0.006922	0.01681	1	320:
20% ##	8/40 [00:01<00:05, 5.36it/s]			
457/499	0.206G 0.01483 0.00672	0.0164	1	320:
20% ##	8/40 [00:01<00:05, 5.36it/s]			
457/499	0.206G 0.01483 0.00672	0.0164	1	320:
22% ##2	9/40 [00:01<00:05, 5.65it/s]			
457/499	0.206G 0.01411 0.006521	0.01594	1	320:
22% ##2	9/40 [00:01<00:05, 5.65it/s]			
457/499	0.206G 0.01411 0.006521	0.01594	1	320:
25% ##5	10/40 [00:01<00:05, 5.55it/s]			
457/499	0.206G 0.01476 0.007168	0.01662	4	320:
25% ##5	10/40 [00:02<00:05, 5.55it/s]			
457/499	0.206G 0.01476 0.007168	0.01662	4	320:
28% ##7	11/40 [00:02<00:05, 5.32it/s]]		
457/499	0.206G 0.015 0.007354	0.01647	2	320:
28% ##7	11/40 [00:02<00:05, 5.32it/s]]		
457/499	0.206G 0.015 0.007354	0.01647	2	320:
30% ###	12/40 [00:02<00:05, 5.46it/s]			
457/499	0.206G 0.01753 0.00748	0.01676	2	320:
30% ###	12/40 [00:02<00:05, 5.46it/s]]		
457/499	0.206G 0.01753 0.00748	0.01676	2	320:
32% ###2	13/40 [00:02<00:04, 5.42it/s]]		
457/499	0.206G 0.01721 0.007327	0.01651	1	320:
32% ###2	13/40 [00:02<00:04, 5.42it/s]]		
457/499	0.206G 0.01721 0.007327	0.01651	1	320:
35% ###5	14/40 [00:02<00:04, 5.52it/s]]		
457/499	0.206G 0.01654 0.00723	0.01666	1	320:
35% ###5	14/40 [00:02<00:04, 5.52it/s]]		
457/499	0.206G 0.01654 0.00723	0.01666	1	320:
38% ###7	15/40 [00:02<00:04, 5.46it/s]]		
457/499	0.206G 0.01879 0.007482	0.01693	4	320:
38% ###7	15/40 [00:02<00:04, 5.46it/s]]		
457/499	0.206G 0.01879 0.007482	0.01693	4	320:
40% ####	16/40 [00:02<00:04, 5.42it/s]			
457/499	0.206G 0.01828 0.007457	0.01696	2	320:
40% ####	16/40 [00:03<00:04, 5.42it/s]			
457/499	0.206G 0.01828 0.007457		2	320:
42% ####2	17/40 [00:03<00:04, 5.52it/s]			
457/499	0.206G 0.01826 0.007343	0.01678	1	320:
42% ####2	17/40 [00:03<00:04, 5.52it/s]			
457/499	0.206G 0.01826 0.007343	0.01678	1	320:

45% ####5		18/40 [00:03<00:03,				
457/499		0.206G 0.01775		0.01684	1	320:
45% ####5	ı	18/40 [00:03<00:03,				
457/499		0.206G 0.01775		0.01684	1	320:
48% ####7	ı	19/40 [00:03<00:03,				
457/499		0.206G 0.01784		0.01685	2	320:
48% ####7	ı	19/40 [00:03<00:03,				
457/499		0.206G 0.01784		0.01685	2	320:
50% #####	ı	20/40 [00:03<00:03,				
457/499		0.206G 0.01795	0.007566	0.01713	4	320:
50% #####	ı	20/40 [00:03<00:03,				
457/499		0.206G 0.01795		0.01713	4	320:
52% #####2	١	21/40 [00:03<00:03,				
457/499		0.206G 0.01828		0.01712	2	320:
52% #####2	I	21/40 [00:03<00:03,				
457/499		0.206G 0.01828		0.01712	2	320:
55% #####5	١	22/40 [00:03<00:03,				
457/499		0.206G 0.01812	0.007664	0.01712	2	320:
55% #####5	-	22/40 [00:04<00:03,	5.80it/s]			
457/499		0.206G 0.01812		0.01712	2	320:
57% #####7	-	23/40 [00:04<00:03,	5.65it/s]			
457/499		0.206G 0.01823	0.008273	0.01713	4	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.65it/s]			
457/499		0.206G 0.01823	0.008273	0.01713	4	320:
60% ######	- 1	24/40 [00:04<00:02,	5.70it/s]			
457/499		0.206G 0.01845	0.008292	0.01734	3	320:
60% ######	- 1	24/40 [00:04<00:02,	5.70it/s			
457/499		0.206G 0.01845	0.008292	0.01734	3	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.73it/s			
457/499		0.206G 0.01905	0.008342	0.01761	3	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.73it/s			
457/499		0.206G 0.01905	0.008342	0.01761	3	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.59it/s]			
457/499		0.206G 0.0192	0.008564	0.01787	4	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.59it/s			
457/499		0.206G 0.0192	0.008564	0.01787	4	320:
68% #####7	- 1	27/40 [00:04<00:02,	5.51it/s			
457/499		0.206G 0.01964	0.008923	0.01833	4	320:
68% #####7	- 1	27/40 [00:05<00:02,	5.51it/s			
457/499		0.206G 0.01964	0.008923	0.01833	4	320:
70% ######		28/40 [00:05<00:02,	5.29it/s]			
457/499		0.206G 0.02031	0.008857	0.01943	2	320:
70% ######		28/40 [00:05<00:02,	5.29it/s]			
457/499		0.206G 0.02031	0.008857	0.01943	2	320:
72% #######2		29/40 [00:05<00:02,	5.19it/s]			
457/499		0.206G 0.02056	0.008828	0.0202	2	320:
72% #######2		29/40 [00:05<00:02,	5.19it/s]			
457/499		0.206G 0.02056	0.008828	0.0202	2	320:

	30/40 [00:05<00:01,				
457/499		0.008689	0.02005	1	320:
	30/40 [00:05<00:01,				
457/499		0.008689	0.02005	1	320:
	31/40 [00:05<00:01,				
457/499		0.008562	0.02004	1	320:
78% #######7	31/40 [00:05<00:01,	5.39it/s			
457/499	0.206G 0.0203	0.008562	0.02004	1	320:
80% #######	32/40 [00:05<00:01,	5.59it/s			
457/499	0.206G 0.02082	0.008495	0.01994	2	320:
80% #######	32/40 [00:06<00:01,	5.59it/s			
457/499	0.206G 0.02082	0.008495	0.01994	2	320:
82% ########	33/40 [00:06<00:01,	5.51it/s			
457/499	0.206G 0.0217	0.008517	0.02011	2	320:
82% ########	33/40 [00:06<00:01,	5.51it/s			
457/499	0.206G 0.0217	0.008517	0.02011	2	320:
85% ########	34/40 [00:06<00:01,	5.47it/s]			
457/499			0.0199	1	320:
85% ######## I	34/40 [00:06<00:01,				
457/499		0.008367	0.0199	1	320:
	35/40 [00:06<00:00,				
457/499	·	0.008289	0.01971	2	320:
	35/40 [00:06<00:00,			_	0_0.
457/499		0.008289	0.01971	2	320:
	36/40 [00:06<00:00,		0.01011	_	020.
457/499		0.00814	0.01961	1	320:
	36/40 [00:06<00:00,		0.01001	_	020.
457/499	0.206G 0.02088		0.01961	1	320:
	37/40 [00:06<00:00,		0.01301	1	020.
457/499		0.008321	0.01958	4	320:
·	37/40 [00:06<00:00,		0.01950	I	520.
457/499		0.008321	0.01958	4	320:
			0.01956	4	320.
	38/40 [00:06<00:00,		0.01050	4	200.
457/499			0.01952	4	320:
	38/40 [00:07<00:00,		0.04050	4	200.
457/499			0.01952	4	320:
	39/40 [00:07<00:00,		0.04040	0	200
	0.206G 0.02097		0.01942	2	320:
	39/40 [00:07<00:00,		0.04040	•	000
457/499			0.01942	2	320:
	40/40 [00:07<00:00,				
457/499	0.206G 0.02097		0.01942	2	320:
100% #########	40/40 [00:07<00:00,	5.49it/s]			
	a		-	D	AD= 6
ADEC 05 5011	Class Images I		P	R m	AP50
mAP50-95: 0%		00 , ?it/s]</td <td></td> <td>_</td> <td></td>		_	
4DE0 05 1501	•	nstances	P	R m	AP50
mAP50-95: 10%	# 2/20 [00:	00<00:01, 16	5.00it/s]		

Class Image			R	mAP50
	[00:00<00:00, s Instances		R	mAP50
9	[00:00<00:00,			
•	s Instances		R	mAP50
	[00:00<00:00,			
Class Image			R	mAP50
	[00:00<00:00			1750
•	s Instances		R	mAP50
	[00:00<00:00 s Instances		R	mAP50
S	[00:00<00:00			MAPSO
	s Instances		R	mAP50
mAP50-95: 85% #######5 17/20				mm 00
	s Instances		R	mAP50
mAP50-95: 95% #######5 19/20				
	s Instances		R	mAP50
mAP50-95: 100% ######## 20/20	[00:01<00:00	, 16.56it/s]		
all	0 40	0.965	0.975	0.991
0.809				
Epoch GPU_mem box_los	s obj_loss	cls_loss	Instances	Size
0// 0 // 0 500 00 00	0/]			
0% 0/40 [00:00 ,<br 458/499	9 0.01477	0.01653	4	320:
0.200G 0.0212 0% 0/40 [00:00 , ?i</td <td></td> <td>0.01655</td> <td>4</td> <td>320:</td>		0.01655	4	320:
458/499 0.206G 0.0212		0.01653	4	320:
2% 2 1/40 [00:00<00:06		0.01033	-	520.
458/499 0.206G 0.0212		0.01528	1	320:
2% 2 1/40 [00:00<00:06		0.01020	-	0201
458/499 0.206G 0.0212		0.01528	1	320:
5% 5 2/40 [00:00<00:06				
458/499 0.206G 0.0203	5 0.01161	0.01571	4	320:
5% 5 2/40 [00:00<00:06	, 5.78it/s]			
458/499 0.206G 0.0203	5 0.01161	0.01571	4	320:
8% 7 3/40 [00:00<00:06	, 5.36it/s]			
	9 0.01283	0.01717	4	320:
8% 7 3/40 [00:00<00:06	•			
	9 0.01283	0.01717	4	320:
10% # 4/40 [00:00<00:0				
	5 0.01102	0.01636	1	320:
10% # 4/40 [00:00<00:0		0.04.000		800
	5 0.01102	0.01636	1	320:
12% #2 5/40 [00:00<00:0		0 01666	4	200 -
458/499 0.206G 0.0194 12% #2 5/40 [00:01<00:0		0.01666	1	320:
458/499 0.206G 0.0194		0.01666	1	320:
15% #5 6/40 [00:01<00:0		0.01000	1	520.
1 O/ 10 [OO.OI (OO.(-,			

458/499	0.206G 0.01865		0.01661	2	320:
15% #5 458/499	6/40 [00:01<00:05, 0.206G 0.01865	5.69it/s] 0.009246	0.01661	2	320:
18% #7	7/40 [00:01<00:05,	5.88it/s]	0.01001	2	520.
458/499	0.206G 0.01832	0.008567	0.01644	1	320:
18% #7	7/40 [00:01<00:05,			_	
	0.206G 0.01832	0.008567	0.01644	1	320:
20% ##	8/40 [00:01<00:05,				
458/499		0.007962	0.01616	1	320:
20% ##	8/40 [00:01<00:05,	5.86it/s]			
458/499	0.206G 0.01705	0.007962	0.01616	1	320:
22% ##2	9/40 [00:01<00:05,	6.02it/s]			
458/499	0.206G 0.01662	0.00777	0.01622	2	320:
22% ##2	9/40 [00:01<00:05,	6.02it/s]			
458/499	0.206G 0.01662	0.00777	0.01622	2	320:
25% ##5	10/40 [00:01<00:05,	5.93it/s			
458/499	0.206G 0.01639	0.007558	0.01642	1	320:
25% ##5	10/40 [00:01<00:05,	5.93it/s			
458/499	0.206G 0.01639	0.007558	0.01642	1	320:
28% ##7	11/40 [00:01<00:04,	5.90it/s]			
458/499	0.206G 0.01586	0.007206	0.01687	1	320:
28% ##7	11/40 [00:02<00:04,	5.90it/s			
458/499	0.206G 0.01586	0.007206	0.01687	1	320:
30% ###	12/40 [00:02<00:04,	5.87it/s			
458/499	0.206G 0.01599	0.006991	0.01637	1	320:
30% ###	12/40 [00:02<00:04,	5.87it/s]			
458/499	0.206G 0.01599	0.006991	0.01637	1	320:
32% ###2	13/40 [00:02<00:04,	5.82it/s			
458/499	0.206G 0.01574	0.006791	0.01705	1	320:
32% ###2	13/40 [00:02<00:04,	5.82it/s			
458/499	0.206G 0.01574	0.006791	0.01705	1	320:
35% ###5	14/40 [00:02<00:04,	5.82it/s			
458/499	0.206G 0.01531	0.006537	0.01684	1	320:
35% ###5	14/40 [00:02<00:04,				
458/499		0.006537	0.01684	1	320:
38% ###7	15/40 [00:02<00:04,	5.98it/s]			
458/499		0.006591	0.01686	2	320:
38% ###7	15/40 [00:02<00:04,				
458/499	0.206G 0.01547		0.01686	2	320:
40% ####	16/40 [00:02<00:04,				
458/499	0.206G 0.01764		0.01695	2	320:
40% ####	16/40 [00:02<00:04,				
458/499	0.206G 0.01764		0.01695	2	320:
42% ####2	17/40 [00:02<00:04,				
458/499	0.206G 0.0186		0.01778	4	320:
42% ####2	17/40 [00:03<00:04,				
458/499	0.206G 0.0186		0.01778	4	320:
45% ####5	18/40 [00:03<00:04,	5.38it/s			

458/499	0.206G 0.01826 0.007145	0.01785	2	320:
45% ####5	18/40 [00:03<00:04, 5.38it/s]			
458/499	0.206G 0.01826 0.007145	0.01785	2	320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]			
458/499	0.206G 0.01856 0.007495	0.01774	4	320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]			
458/499	0.206G 0.01856 0.007495	0.01774	4	320:
50% #####	20/40 [00:03<00:03, 5.32it/s]			
458/499	0.206G 0.01802 0.00728	0.01751	1	320:
50% #####	20/40 [00:03<00:03, 5.32it/s]			
458/499	0.206G 0.01802 0.00728	0.01751	1	320:
52% #####2	21/40 [00:03<00:03, 5.40it/s]			
458/499	0.206G 0.01758 0.007156	0.0173	1	320:
52% #####2	21/40 [00:03<00:03, 5.40it/s]			
458/499	0.206G 0.01758 0.007156	0.0173	1	320:
55% #####5	22/40 [00:03<00:03, 5.55it/s]			
458/499	0.206G 0.01749 0.00712	0.01742	2	320:
55% #####5	22/40 [00:04<00:03, 5.55it/s]			
458/499	0.206G 0.01749 0.00712	0.01742	2	320:
57% #####7	23/40 [00:04<00:03, 5.63it/s]			
458/499	0.206G 0.01837 0.007361	0.01746	4	320:
57% #####7	23/40 [00:04<00:03, 5.63it/s]			
458/499	0.206G 0.01837 0.007361	0.01746	4	320:
60% ######	24/40 [00:04<00:02, 5.50it/s]			
458/499	0.206G 0.01872 0.007616	0.01774	4	320:
60% ######	24/40 [00:04<00:02, 5.50it/s]			
458/499	0.206G 0.01872 0.007616	0.01774	4	320:
62% ######2	25/40 [00:04<00:02, 5.62it/s]			
458/499	0.206G 0.01827 0.007411	0.01752	1	320:
62% ######2	25/40 [00:04<00:02, 5.62it/s]			
458/499	0.206G 0.01827 0.007411	0.01752	1	320:
65% ######5	26/40 [00:04<00:02, 5.53it/s]			
458/499	0.206G 0.01821 0.007398	0.01765	2	320:
65% ######5	26/40 [00:04<00:02, 5.53it/s]			
458/499	0.206G 0.01821 0.007398	0.01765	2	320:
	27/40 [00:04<00:02, 5.56it/s]			
458/499	0.206G 0.01836 0.007564	0.01797	3	320:
68% ######7	27/40 [00:04<00:02, 5.56it/s]			
458/499	0.206G 0.01836 0.007564	0.01797	3	320:
70% ######	28/40 [00:04<00:02, 5.39it/s]			
458/499	0.206G 0.01838 0.007823	0.01814	4	320:
70% #######	28/40 [00:05<00:02, 5.39it/s]			
458/499	0.206G 0.01838 0.007823	0.01814	4	320:
72% ######2	29/40 [00:05<00:02, 5.24it/s]			
458/499	0.206G 0.01904 0.007829	0.01813	2	320:
72% ######2	29/40 [00:05<00:02, 5.24it/s]			
458/499	0.206G 0.01904 0.007829	0.01813	2	320:
75% ######5	30/40 [00:05<00:01, 5.12it/s]			

458/499 0.206G 0.01902 0.008069 0.0181 4 320 75% ######5 30/40 [00:05<00:01, 5.12it/s] 458/499 0.206G 0.01902 0.008069 0.0181 4 320	
/E8//00 0.206C 0.01002 0.00060 0.0191 / 220	Λ.
458/499 0.206G 0.01902 0.008069 0.0181 4 320	υ:
78% #######7 31/40 [00:05<00:01, 5.06it/s]	
458/499 0.206G 0.01895 0.008322 0.01813 4 320	0:
78% #######7 31/40 [00:05<00:01, 5.06it/s]	
458/499 0.206G 0.01895 0.008322 0.01813 4 320	0:
80% ####### 32/40 [00:05<00:01, 4.89it/s]	
458/499 0.206G 0.01913 0.008596 0.01836 4 320	0:
80% ####### 32/40 [00:06<00:01, 4.89it/s]	
458/499 0.206G 0.01913 0.008596 0.01836 4 320	0:
82% ########2 33/40 [00:06<00:01, 4.80it/s]	
458/499 0.206G 0.01891 0.008537 0.0183 2 320	0:
82% ########2 33/40 [00:06<00:01, 4.80it/s]	
458/499 0.206G 0.01891 0.008537 0.0183 2 320	0:
85% #######5 34/40 [00:06<00:01, 4.95it/s]	
458/499 0.206G 0.01874 0.008497 0.01835 2 320	0:
85% #######5 34/40 [00:06<00:01, 4.95it/s]	
458/499 0.206G 0.01874 0.008497 0.01835 2 320	0:
88% #######7 35/40 [00:06<00:01, 4.92it/s]	
458/499 0.206G 0.01859 0.008378 0.01829 1 320	0:
88% #######7 35/40 [00:06<00:01, 4.92it/s]	
458/499 0.206G 0.01859 0.008378 0.01829 1 320	0:
90% ######## 36/40 [00:06<00:00, 4.92it/s]	
458/499 0.206G 0.01903 0.008357 0.01822 2 320	0:
90% ######## 36/40 [00:06<00:00, 4.92it/s]	
458/499 0.206G 0.01903 0.008357 0.01822 2 320	0:
92% ########2 37/40 [00:06<00:00, 4.79it/s]	
458/499 0.206G 0.01873 0.008197 0.01813 1 320	0:
92% ########2 37/40 [00:07<00:00, 4.79it/s]	
458/499 0.206G 0.01873 0.008197 0.01813 1 320	0:
95% ########5 38/40 [00:07<00:00, 4.95it/s]	
458/499 0.206G 0.01928 0.00816 0.01819 2 320	0:
95% #######5 38/40 [00:07<00:00, 4.95it/s]	
458/499 0.206G 0.01928 0.00816 0.01819 2 320	0:
98% ########7 39/40 [00:07<00:00, 4.83it/s]	
458/499 0.206G 0.01961 0.008128 0.01808 2 320	0:
98% ########7 39/40 [00:07<00:00, 4.83it/s]	
458/499 0.206G 0.01961 0.008128 0.01808 2 320	0:
100% ######## 40/40 [00:07<00:00, 4.63it/s]	
458/499 0.206G 0.01961 0.008128 0.01808 2 320	0:
100% ######## 40/40 [00:07<00:00, 5.35it/s]	
Class Images Instances P R mAP50	0
mAP50-95: 0% 0/20 [00:00 , ?it/s]</td <td></td>	
Class Images Instances P R mAP50	0
mAP50-95: 10% # 2/20 [00:00<00:00, 18.29it/s]	
Class Images Instances P R mAP50	0

mAP50-95:	20% ##	Ι 4/20 Γο	0:00<00:01,	15 65;+/al		
MAP50-95.	Class		Instances		R	mAP50
mAP50-95:	30% ###	•	0:00<00:00,		10	IIIAI 00
MAT 00 50.	Class	Images			R	mAP50
mAP50-95:	40% ####	_	0:00<00:00,		10	mili 00
mm 00 00.	Class		Instances		R	mAP50
mAP50-95:	50% #####	•	00:00<00:00			
	Class		Instances		R	mAP50
mAP50-95:	60% ######	_	00:00<00:00			
	Class		Instances		R	mAP50
mAP50-95:	70% ######	•	00:00<00:00			
			Instances		R	mAP50
mAP50-95:	80% #######	_				
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	90% ########	18/20 [00:01<00:00	, 16.90it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	100% #########	1 20/20 [00:01<00:00	, 16.61it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	100% #########	1 20/20 [00:01<00:00	, 16.16it/s]		
	all	40	40	0.965	0.975	0.991
0.809						
Epoc	ch GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
09/ 1	L 0/40 F00					
	0/40 [00			0.00104	4	200
459/49			0.01527	0.03134	4	320:
0%	0/40 [00:0 9			0 02124	4	200.
459/49 2% 2				0.03134	4	320:
459/49				0.0361	2	320:
	1/40 [00:0			0.0301	2	320.
	9 0.206G			0.0361	2	320:
	2/40 [00:0			0.0301	2	320.
459/49			0.009432	0.02818	2	320:
5% 5				0.02010	2	320.
459/49		-	0.009432	0.02818	2	320:
8% 7				0.02010	2	020.
459/49			0.008914	0.02575	2	320:
8% 7	3/40 [00:0			0.020.0	_	0_0.
459/49			0.008914	0.02575	2	320:
10% #			5.91it/s]			
459/49			0.008979	0.02426	3	320:
10% #	4/40 [00:					
459/49		0.02668		0.02426	3	320:
12% #2		00<00:06,	5.69it/s			
	5/40 [00:		5.69it/s] 0.01003	0.02377	4	320:
12% #2	5/40 [00:	0.02802	0.01003	0.02377	4	320:

15% #5	6/40 [00:01<00:06, 5.54it/s]			
459/499	0.206G 0.02722 0.01232	0.02404	4	320:
15% #5	6/40 [00:01<00:06, 5.54it/s]			
	0.206G 0.02722 0.01232	0.02404	4	320:
18% #7	7/40 [00:01<00:06, 5.47it/s]		_	
459/499	0.206G 0.03002 0.01179	0.02321	2	320:
18% #7	7/40 [00:01<00:06, 5.47it/s]		_	
459/499	0.206G 0.03002 0.01179	0.02321	2	320:
20% ##	8/40 [00:01<00:05, 5.57it/s]			
459/499	0.206G 0.02889 0.01093	0.02207	1	320:
20% ##	8/40 [00:01<00:05, 5.57it/s]			
459/499	0.206G 0.02889 0.01093	0.02207	1	320:
22% ##2	9/40 [00:01<00:05, 5.65it/s]			
459/499	0.206G 0.02835 0.01141	0.02256	4	320:
22% ##2	9/40 [00:01<00:05, 5.65it/s]			
459/499	0.206G 0.02835 0.01141		4	320:
25% ##5	10/40 [00:01<00:05, 5.55it/s]			
459/499	0.206G 0.03021 0.01103		2	320:
25% ##5	10/40 [00:01<00:05, 5.55it/s]			
459/499	0.206G 0.03021 0.01103		2	320:
28% ##7	11/40 [00:01<00:05, 5.48it/s]			
459/499	0.206G 0.02963 0.01116	0.02232	4	320:
28% ##7	11/40 [00:02<00:05, 5.48it/s]]		
459/499	0.206G 0.02963 0.01116	0.02232	4	320:
30% ###	12/40 [00:02<00:05, 5.28it/s]]		
459/499	0.206G 0.02902 0.0109	0.02245	3	320:
30% ###	12/40 [00:02<00:05, 5.28it/s]]		
459/499	0.206G 0.02902 0.0109	0.02245	3	320:
32% ###2	13/40 [00:02<00:05, 5.17it/s]]		
459/499	0.206G 0.0278 0.01079	0.02254	3	320:
32% ###2	13/40 [00:02<00:05, 5.17it/s]]		
459/499	0.206G 0.0278 0.01079	0.02254	3	320:
35% ###5	14/40 [00:02<00:05, 5.09it/s]]		
459/499	0.206G 0.02709 0.01041	0.02208	2	320:
35% ###5	14/40 [00:02<00:05, 5.09it/s]]		
459/499	0.206G 0.02709 0.01041	0.02208	2	320:
38% ###7	15/40 [00:02<00:04, 5.27it/s]]		
459/499	0.206G 0.02595 0.01018	0.02204	1	320:
38% ###7	15/40 [00:02<00:04, 5.27it/s]]		
459/499	0.206G 0.02595 0.01018	0.02204	1	320:
40% ####	16/40 [00:02<00:04, 5.28it/s]]		
459/499	0.206G 0.02529 0.01025	0.02181	4	320:
40% ####	16/40 [00:03<00:04, 5.28it/s]]		
459/499	0.206G 0.02529 0.01025	0.02181	4	320:
42% ####2	17/40 [00:03<00:04, 5.28it/s]			
459/499	0.206G 0.02611 0.01002	0.02334	2	320:
42% ####2	17/40 [00:03<00:04, 5.28it/s]			
459/499	0.206G 0.02611 0.01002	0.02334	2	320:

45% ####5		18/40 [00:03<00:04,				
459/499		0.206G 0.02683	0.009851	0.02323	2	320:
45% ####5	١	18/40 [00:03<00:04,				
459/499		0.206G 0.02683	0.009851	0.02323	2	320:
48% ####7	ı	19/40 [00:03<00:04,				
459/499		0.206G 0.02647		0.02284	2	320:
48% ####7	ı	19/40 [00:03<00:04,				
459/499		0.206G 0.02647		0.02284	2	320:
50% #####	ı	20/40 [00:03<00:03,				
459/499		0.206G 0.02585	0.009499	0.02243	1	320:
50% #####	ı	20/40 [00:03<00:03,	· -			
459/499		0.206G 0.02585		0.02243	1	320:
52% #####2	ı	21/40 [00:03<00:03,				
459/499		0.206G 0.02537		0.02219	1	320:
52% #####2	I	21/40 [00:04<00:03,				
459/499		0.206G 0.02537		0.02219	1	320:
55% #####5	I	22/40 [00:04<00:03,				
459/499		0.206G 0.0252	0.009002	0.02157	1	320:
55% #####5	-	22/40 [00:04<00:03,				
459/499		0.206G 0.0252		0.02157	1	320:
57% #####7	-	23/40 [00:04<00:02,	5.67it/s]			
459/499		0.206G 0.02575	0.009284	0.02156	2	320:
57% #####7	- 1	23/40 [00:04<00:02,	5.67it/s]			
459/499		0.206G 0.02575	0.009284	0.02156	2	320:
60% ######	- 1	24/40 [00:04<00:02,	5.43it/s			
459/499		0.206G 0.02631	0.009239	0.02139	2	320:
60% ######	- 1	24/40 [00:04<00:02,	5.43it/s			
459/499		0.206G 0.02631	0.009239	0.02139	2	320:
62% #####2	- 1	25/40 [00:04<00:02,	5.50it/s			
459/499		0.206G 0.0259	0.009004	0.02118	1	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.50it/s]			
459/499		0.206G 0.0259	0.009004	0.02118	1	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.47it/s			
459/499		0.206G 0.02544	0.008856	0.02099	1	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.47it/s			
459/499		0.206G 0.02544	0.008856	0.02099	1	320:
68% #####7	- 1	27/40 [00:04<00:02,	5.57it/s			
459/499		0.206G 0.02558	0.008811	0.02099	2	320:
68% #####7	- 1	27/40 [00:05<00:02,	5.57it/s			
459/499		0.206G 0.02558	0.008811	0.02099	2	320:
70% ######	- 1	28/40 [00:05<00:02,	5.64it/s			
459/499		0.206G 0.02538	0.008821	0.02132	2	320:
70% ######		28/40 [00:05<00:02,	5.64it/s]			
459/499		0.206G 0.02538	0.008821	0.02132	2	320:
72% #######2		29/40 [00:05<00:01,	5.52it/s]			
459/499		0.206G 0.02543	0.008792	0.02216	2	320:
72% #######2		29/40 [00:05<00:01,	5.52it/s]			
459/499		0.206G 0.02543	0.008792	0.02216	2	320:

	30/40 [00:05<00:01,				
459/499	0.206G 0.02558		0.02202	2	320:
	30/40 [00:05<00:01,				
459/499			0.02202	2	320:
	31/40 [00:05<00:01,				
459/499	0.206G 0.02505	0.008582	0.02192	1	320:
78% ######7	31/40 [00:05<00:01,	5.42it/s			
459/499	0.206G 0.02505	0.008582	0.02192	1	320:
80% #######	32/40 [00:05<00:01,	5.52it/s			
459/499	0.206G 0.02573	0.008637	0.02182	3	320:
80% #######	32/40 [00:06<00:01,	5.52it/s			
459/499	0.206G 0.02573	0.008637	0.02182	3	320:
82% ########	33/40 [00:06<00:01,	5.46it/s]			
459/499	0.206G 0.02518	0.008501	0.02168	1	320:
82% ########2	33/40 [00:06<00:01,	5.46it/s]			
459/499	0.206G 0.02518	0.008501	0.02168	1	320:
85% #######5	34/40 [00:06<00:01,	5.71it/s]			
459/499	0.206G 0.02498	0.008643	0.02145	2	320:
85% ########	34/40 [00:06<00:01,	5.71it/s]			
459/499	0.206G 0.02498	0.008643	0.02145	2	320:
88% #######7	35/40 [00:06<00:00,				
459/499			0.02128	2	320:
	35/40 [00:06<00:00,				
459/499	0.206G 0.02465	0.008655	0.02128	2	320:
	36/40 [00:06<00:00,				
459/499	0.206G 0.02449		0.02122	4	320:
	36/40 [00:06<00:00,				
459/499	0.206G 0.02449		0.02122	4	320:
	37/40 [00:06<00:00,				
459/499	0.206G 0.02421		0.02113	2	320:
	37/40 [00:06<00:00,				
459/499	0.206G 0.02421	0.008639	0.02113	2	320:
	38/40 [00:06<00:00,			_	
459/499	0.206G 0.02415		0.02096	4	320:
	38/40 [00:07<00:00,		0.02000	-	020.
459/499	=	0.008752	0.02096	4	320:
	39/40 [00:07<00:00,		0.02000	-	020.
459/499			0.02087	4	320:
	39/40 [00:07<00:00,		0.02001	-	020.
459/499			0.02087	4	320:
	40/40 [00:07<00:00		0.02001	-	020.
459/499	0.206G 0.02455		0.02087	4	320:
	40/40 [00:07<00:00		0.02001	1	020.
100/8 11111111111111111111111111111111111	1 10/ 10 [00:07 (00:00	, 0.1010/6]			
	Class Images	Instances	Р	R 1	mAP50
mAP50-95: 0%	•	:00 , ?it/s</td <td></td> <td></td> <td></td>			
00 00. 0/61		Instances	P	R 1	mAP50
mAP50-95: 10%	•	:00<00:01, 1			
00 00. 10/61	2/20 [00				

	_	Instances		R	mAP50
mAP50-95: 20% ## Class		0:00<00:00, Instances		R	mAP50
		0:00<00:00,			
Class	_	Instances		R	mAP50
mAP50-95: 40% #### Class	8/20 [0 Images	0:00<00:00, Instances		R	mAP50
	_	00:00<00:00			MAPSO
Class		Instances		R	mAP50
	_	00:00<00:00			
Class	Images	Instances	P	R	mAP50
mAP50-95: 75% ######5		00:00<00:00			
Class	•	Instances		R	mAP50
mAP50-95: 85% #######5					
Class	_	Instances		R	mAP50
mAP50-95: 100% ######### Class				R	ADEO
Class mAP50-95: 100% ##########	_	Instances			mAP50
all	40		0.971	0.974	0.99
0.816	10	-10	0.571	0.311	0.00
Epoch GPU_mem h	ox_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00:	00<7 7i	t/s]			
		0.01083	0.01588	2	320:
0% 0/40 [00:00					
460/499 0.206G	0.05064		0.01588	2	320:
2% 2 1/40 [00:00	0<00:07,	5.31it/s]			
460/499 0.206G	0.03839	0.01159	0.01786	4	320:
2% 2 1/40 [00:00					
460/499 0.206G	0.03839		0.01786	4	320:
5% 5 2/40 [00:00					
460/499 0.206G	0.03126	0.01176	0.01855	4	320:
5% 5 2/40 [00:00				_	
460/499 0.206G		0.01176	0.01855	4	320:
8% 7 3/40 [00:00			0.01005	0	200
460/499 0.206G 8% 7 3/40 [00:00		0.01003 5.70it/s]	0.01805	2	320:
		0.01003	0.01805	2	320:
10% # 4/40 [00:0			0.01803	Z	320.
			0.01942	2	320:
10% # 4/40 [00:0			0.01012	_	0201
		0.009248	0.01942	2	320:
12% #2 5/40 [00:0					
460/499 0.206G		0.008895	0.02184	2	320:
12% #2 5/40 [00:0	1<00:06,	5.75it/s]			
460/499 0.206G	0.02717	0.008895	0.02184	2	320:
15% #5 6/40 [00:0	1<00:05,	5.77it/s			

			_	
460/499	0.206G 0.02514 (5 1	320:
15% #5	6/40 [00:01<00:05, 5			
460/499		0.0208	5 1	320:
18% #7	7/40 [00:01<00:05, 5			
460/499		0.0200	9 1	320:
18% #7	7/40 [00:01<00:05, 5			
460/499		0.0200	9 1	320:
20% ##	8/40 [00:01<00:05, 5	5.79it/s]		
460/499	0.206G 0.02204 0	0.007186 0.0193	1 1	320:
20% ##	8/40 [00:01<00:05, 5	5.79it/s]		
460/499	0.206G 0.02204 0	0.007186 0.0193	1 1	320:
22% ##2	9/40 [00:01<00:05, 5	5.64it/s]		
460/499	0.206G 0.02382 0	0.007442 0.0191	7 3	320:
22% ##2	9/40 [00:01<00:05, 5	5.64it/s]		
460/499	0.206G 0.02382 0	0.007442 0.0191	7 3	320:
25% ##5	10/40 [00:01<00:05,	5.51it/s]		
460/499	0.206G 0.02279 0	0.007229 0.0192	4 1	320:
25% ##5	10/40 [00:01<00:05,	5.51it/s]		
460/499	0.206G 0.02279 0		4 1	320:
28% ##7	11/40 [00:01<00:05,			
	0.206G 0.02224 0		1 4	320:
28% ##7	11/40 [00:02<00:05,			
460/499	0.206G 0.02224 0		1 4	320:
30% ###	12/40 [00:02<00:05,			0_0.
460/499		0.007708 0.0194	1 2	320:
30% ###	12/40 [00:02<00:05,			020.
460/499	0.206G 0.02168 (1 2	320:
32% ###2	13/40 [00:02<00:04,			020.
460/499	0.206G 0.02405		8 2	320:
32% ###2	13/40 [00:02<00:04,		0 2	020.
460/499	0.206G 0.02405		8 2	320:
35% ###5	14/40 [00:02<00:04,		2	320.
	0.206G 0.02411		1 1	220.
460/499			1 1	320:
35% ###5	14/40 [00:02<00:04,			200
460/499	0.206G 0.02411		1 1	320:
38% ###7	15/40 [00:02<00:04,			222
460/499		0.0185	9 1	320:
38% ###7	15/40 [00:02<00:04,			222
460/499	0.206G 0.02305 (9 1	320:
40% ####	16/40 [00:02<00:04,		_	
460/499	0.206G 0.02241 0		5 1	320:
40% ####	16/40 [00:03<00:04,			
460/499	0.206G 0.02241 (5 1	320:
42% ####2	17/40 [00:03<00:04,			
460/499		0.007105 0.0184	2 2	320:
42% ####2	17/40 [00:03<00:04,			
460/499	0.206G 0.02219 0		2 2	320:
45% ####5	18/40 [00:03<00:03,	5.62it/s]		

460/499	0.206G 0.02298 0.007494	0.01868	4	320:
45% ####5	18/40 [00:03<00:03, 5.62it/s]			
460/499	0.206G 0.02298 0.007494	0.01868	4	320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]			
460/499	0.206G 0.02294 0.007408	0.01873	1	320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]			
460/499	0.206G 0.02294 0.007408	0.01873	1	320:
50% #####	20/40 [00:03<00:03, 5.46it/s]	0.0405		
460/499	0.206G 0.02217 0.007185	0.0185	1	320:
50% #####	20/40 [00:03<00:03, 5.46it/s]	0.0405	4	200
460/499	0.206G 0.02217 0.007185	0.0185	1	320:
52% #####2	21/40 [00:03<00:03, 5.16it/s]	0.01000	1	200.
460/499	0.206G 0.02163 0.007036	0.01829	1	320:
52% #####2 460/499	21/40 [00:03<00:03, 5.16it/s] 0.206G	0 01900	1	220.
55% #####5	22/40 [00:03<00:03, 5.20it/s]	0.01829	1	320:
460/499	0.206G 0.02129 0.00705	0.01828	2	320:
55% #####5	22/40 [00:04<00:03, 5.20it/s]	0.01020	2	320.
460/499	0.206G 0.02129 0.00705	0.01828	2	320:
57% #####7	23/40 [00:04<00:03, 4.99it/s]	0.01020	2	320.
460/499	0.206G 0.02074 0.006987	0.01808	2	320:
57% #####7	23/40 [00:04<00:03, 4.99it/s]	0.01000	2	520.
460/499	0.206G 0.02074 0.006987	0.01808	2	320:
60% ######	24/40 [00:04<00:03, 5.08it/s]	0.01000	2	020.
460/499	0.206G 0.02224 0.006947	0.01818	3	320:
60% ######	24/40 [00:04<00:03, 5.08it/s]	0.02020		0_01
460/499	0.206G 0.02224 0.006947	0.01818	3	320:
62% ######2	25/40 [00:04<00:02, 5.03it/s]			
460/499	0.206G 0.02294 0.00697	0.01884	2	320:
62% #####2	25/40 [00:04<00:02, 5.03it/s]			
460/499	0.206G 0.02294 0.00697	0.01884	2	320:
65% ######5	26/40 [00:04<00:02, 5.00it/s]			
460/499	0.206G 0.02311 0.007288	0.01902	4	320:
65% ######5	26/40 [00:05<00:02, 5.00it/s]			
460/499	0.206G 0.02311 0.007288	0.01902	4	320:
68% #####7	27/40 [00:05<00:02, 4.96it/s]			
460/499	0.206G 0.02293 0.007506	0.01914	4	320:
68% #####7	27/40 [00:05<00:02, 4.96it/s]			
460/499	0.206G 0.02293 0.007506	0.01914	4	320:
70% ######	28/40 [00:05<00:02, 4.95it/s]			
460/499	0.206G 0.02309 0.00746	0.01905	2	320:
70% ######	28/40 [00:05<00:02, 4.95it/s]			
460/499	0.206G 0.02309 0.00746	0.01905	2	320:
72% ######2				
460/499	0.206G 0.02248 0.007311	0.01876	1	320:
72% #######2	-			
460/499		0.01876	1	320:
75% ######5	30/40 [00:05<00:02, 4.96it/s]			

460/499	0.206G 0.02355	0.007379 0.01884	4	320:
75% ######5	30/40 [00:05<00:02,	4.96it/s]		
460/499	0.206G 0.02355	0.007379 0.01884	4	320:
78% #######7	31/40 [00:05<00:01,	4.83it/s]		
460/499	0.206G 0.02348	0.007215 0.01848	1	320:
78% #######7	31/40 [00:06<00:01,	4.83it/s]		
460/499	0.206G 0.02348	0.007215 0.01848	1	320:
80% #######	32/40 [00:06<00:01,	5.08it/s]		
460/499			2	320:
80% #######	32/40 [00:06<00:01,	5.08it/s]		
460/499	0.206G 0.02376	0.007148 0.01858	2	320:
82% ########	33/40 [00:06<00:01,			
460/499	0.206G 0.02339		1	320:
	33/40 [00:06<00:01,			
460/499		0.007079 0.01849	1	320:
	34/40 [00:06<00:01,			
460/499	•	0.007383 0.01859	4	320:
	34/40 [00:06<00:01,		-	0_0.
460/499			4	320:
	35/40 [00:06<00:00,		-	020.
460/499	0.206G 0.02366		4	320:
	35/40 [00:06<00:00,		-	020.
460/499			4	320:
	36/40 [00:06<00:00,		-	020.
460/499			2	320:
	36/40 [00:06<00:00,		2	320.
460/499	0.206G 0.02329		2	320:
	37/40 [00:06<00:00,		2	320.
460/499	0.206G 0.02334		n	320:
	37/40 [00:07<00:00,		2	320:
460/499	0.206G 0.02334		2	320:
			2	320:
	38/40 [00:07<00:00, 0.206G 0.02307		1	200.
460/499		0.00111 0.01012	1	320:
	38/40 [00:07<00:00,		4	200.
460/499		0.00741 0.01912	1	320:
	39/40 [00:07<00:00,		0	200.
		0.007486 0.01908	2	320:
	39/40 [00:07<00:00,		0	200.
460/499		0.007486 0.01908	2	320:
	40/40 [00:07<00:00		0	200.
460/499	0.206G 0.02374		2	320:
100% ##########	40/40 [00:07<00:00	, 5.311t/s]		
	01 T	T.,	D	ADEO
ADEO OF: 00/1	•	Instances P	R	mAP50
mAP50-95: 0%		:00 , ?it/s]</td <td>ъ</td> <td> ADEO</td>	ъ	ADEO
ADEO OE . 400/1	•	Instances P	R	mAP50
mAP50-95: 10%		:00<00:00, 18.28it/s]	5	ADE 0
	Class Images	Instances P	R	mAP50

mAP50-95: 20% ##	4/20 [0	0:00<00:00,	16.87it/sl		
Class				R	mAP50
mAP50-95: 30% ###	6/20 [0	0:00<00:00,	17.49it/s]		
Class	Images	Instances	Р	R	mAP50
mAP50-95: 40% ####	8/20 [0	0:00<00:00,	17.77it/s]		
Class		Instances		R	mAP50
mAP50-95: 50% ####		00:00<00:00			
Class	•	Instances		R	mAP50
mAP50-95: 60% #####		00:00<00:00			
	_	Instances		R	mAP50
		00:00<00:00			ADEO
Class	_	Instances		R	mAP50
mAP50-95: 80% ######## Class		Instances		R	mAP50
mAP50-95: 90% ########	_				IIIAF 50
		Instances		R	mAP50
mAP50-95: 100% ########	•				11111 00
all	40		0.965	0.965	0.992
0.812	10	10	0.000	0.000	0.002
3.322					
Epoch GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
01/1					
0% 0/40 [0			0.04500		000
		0.006946	0.01723	2	320:
0% 0/40 [00:			0.01702	0	200
461/499 0.206G		0.006946	0.01723	2	320:
2% 2 1/40 [00: 461/499			0.02054	3	200.
461/499 0.206G 2% 2 1/40 [00:			0.02054	3	320:
461/499 0.206G		0.009397	0.02054	3	320:
5% 5 2/40 [00:			0.02034	3	320.
461/499 0.206G	•	· -	0.02087	1	320:
5% 5 2/40 [00:			0.02007	1	320.
461/499 0.206G	0.02584	0.00832	0.02087	1	320:
8% 7 3/40 [00:			0.02001	-	020.
		0.009368	0.02021	4	320:
8% 7 3/40 [00:			0.02021	-	020.
461/499 0.206G		0.009368	0.02021	4	320:
		5.72it/s]			
461/499 0.206G	0.02193		0.01953	2	320:
10% # 4/40 [00	:00<00:06,	5.72it/s]			
461/499 0.206G	0.02193	0.008834	0.01953	2	320:
12% #2 5/40 [00	:00<00:06,	5.57it/s]			
461/499 0.206G	0.02325	0.00857	0.01897	2	320:
12% #2 5/40 [00	:01<00:06,	5.57it/s			
461/499 0.206G	0.02325	0.00857	0.01897	2	320:
15% #5 6/40 [00	:01<00:06,	5.65it/s]			
461/499 0.206G	0.02307	0.009299	0.01989	4	320:

15% #5	6/40 [00:01<00:06, 5.65it/s]		_	
461/499	0.206G 0.02307 0.009299	0.01989	4	320:
18% #7	7/40 [00:01<00:06, 5.49it/s]			
461/499	0.206G 0.02289 0.0101	0.01982	4	320:
18% #7	7/40 [00:01<00:06, 5.49it/s]			
461/499	0.206G 0.02289 0.0101	0.01982	4	320:
20% ##	8/40 [00:01<00:05, 5.35it/s]			
461/499	0.206G 0.02087 0.009237	0.01916	1	320:
20% ##	8/40 [00:01<00:05, 5.35it/s]			
461/499	0.206G 0.02087 0.009237	0.01916	1	320:
22% ##2	9/40 [00:01<00:05, 5.41it/s]			
461/499	0.206G 0.01878 0.008429	0.01725	0	320:
22% ##2	9/40 [00:01<00:05, 5.41it/s]			
461/499	0.206G 0.01878 0.008429	0.01725	0	320:
25% ##5	10/40 [00:01<00:05, 5.72it/s]			
461/499	0.206G 0.01865 0.008713	0.01794	4	320:
25% ##5	10/40 [00:01<00:05, 5.72it/s]			
461/499	0.206G 0.01865 0.008713	0.01794	4	320:
28% ##7	11/40 [00:01<00:05, 5.31it/s]			
461/499	0.206G 0.02027 0.00867	0.01866	2	320:
28% ##7	11/40 [00:02<00:05, 5.31it/s]			
461/499	0.206G 0.02027 0.00867	0.01866	2	320:
30% ###	12/40 [00:02<00:05, 5.45it/s]			
461/499	0.206G 0.02226 0.008646	0.01871	2	320:
30% ###	12/40 [00:02<00:05, 5.45it/s]			
461/499	0.206G 0.02226 0.008646	0.01871	2	320:
32% ###2	13/40 [00:02<00:05, 5.39it/s]			
461/499	0.206G 0.02206 0.009257	0.01934	4	320:
32% ###2	13/40 [00:02<00:05, 5.39it/s]			
461/499	0.206G 0.02206 0.009257	0.01934	4	320:
35% ###5	14/40 [00:02<00:04, 5.24it/s]			
461/499	0.206G 0.02166 0.00902	0.01917	2	320:
35% ###5	14/40 [00:02<00:04, 5.24it/s]			
461/499	0.206G 0.02166 0.00902	0.01917	2	320:
38% ###7	15/40 [00:02<00:04, 5.29it/s]			
461/499	0.206G 0.02082 0.008602	0.01884	1	320:
38% ###7	15/40 [00:02<00:04, 5.29it/s]			
461/499	0.206G 0.02082 0.008602	0.01884	1	320:
40% ####	16/40 [00:02<00:04, 5.55it/s]			
461/499	0.206G 0.02305 0.008446	0.02047	2	320:
40% ####	16/40 [00:03<00:04, 5.55it/s]			
461/499	0.206G 0.02305 0.008446	0.02047	2	320:
42% ####2	17/40 [00:03<00:04, 5.62it/s]			
461/499	0.206G 0.02402 0.008779	0.02074	4	320:
42% ####2	17/40 [00:03<00:04, 5.62it/s]			
461/499	0.206G 0.02402 0.008779	0.02074	4	320:
45% ####5	18/40 [00:03<00:03, 5.54it/s]			
461/499	0.206G 0.02341 0.008513	0.02023	1	320:

45% ####5		18/40 [00:03<00:03,				
461/499		0.206G 0.02341		0.02023	1	320:
48% ####7	ı	19/40 [00:03<00:03,	· -		_	
461/499		0.206G 0.02294		0.01991	2	320:
48% ####7	ı	19/40 [00:03<00:03,			_	
461/499		0.206G 0.02294		0.01991	2	320:
50% #####	ı	20/40 [00:03<00:03,		0.04000		222
461/499			0.00827	0.01968	1	320:
50% #####	ı	20/40 [00:03<00:03,		0.04000		222
461/499			0.00827	0.01968	1	320:
52% #####2	ı	21/40 [00:03<00:03,	· -	0.0400	4	000
461/499		0.206G 0.02211		0.0196	4	320:
52% #####2	ı	21/40 [00:03<00:03,		0.0400	•	222
461/499		0.206G 0.02211	0.008515	0.0196	4	320:
55% #####5	ı	22/40 [00:03<00:03,		0.04045		222
461/499		0.206G 0.02167		0.01945	1	320:
55% #####5	ı	22/40 [00:04<00:03,				
461/499		0.206G 0.02167	0.008418	0.01945	1	320:
57% #####7	ı	23/40 [00:04<00:02,				
461/499		0.206G 0.02115		0.01925	1	320:
57% #####7	ı	23/40 [00:04<00:02,	· -			
461/499		0.206G 0.02115		0.01925	1	320:
60% ######	ı	24/40 [00:04<00:02,				
461/499		0.206G 0.02126		0.01933	4	320:
60% ######	ı	24/40 [00:04<00:02,				
461/499		0.206G 0.02126		0.01933	4	320:
62% ######2	١	25/40 [00:04<00:02,				
461/499		0.206G 0.02232		0.01925	2	320:
62% ######2	١	25/40 [00:04<00:02,				
461/499		0.206G 0.02232		0.01925	2	320:
65% ######5	١	26/40 [00:04<00:02,				
461/499		0.206G 0.02218		0.0193	2	320:
65% #####5	١	26/40 [00:04<00:02,	5.81it/s]			
461/499		0.206G 0.02218		0.0193	2	320:
68% ######7		27/40 [00:04<00:02,	5.81it/s]			
461/499		0.206G 0.02192		0.01918	1	320:
68% ######7		27/40 [00:04<00:02,	5.81it/s]			
461/499		0.206G 0.02192	0.008306	0.01918	1	320:
70% #######		28/40 [00:04<00:02,	5.80it/s			
461/499		0.206G 0.02179		0.01896	2	320:
70% #######		28/40 [00:05<00:02,	5.80it/s			
461/499		0.206G 0.02179	0.008352	0.01896	2	320:
72% ######2		29/40 [00:05<00:01,	5.80it/s]			
461/499		0.206G 0.02147		0.019	2	320:
72% ######2	-	29/40 [00:05<00:01,	5.80it/s]			
461/499		0.206G 0.02147	0.008349	0.019	2	320:
75% ######5	-	30/40 [00:05<00:01,	5.81it/s]			
461/499		0.206G 0.02209	0.008852	0.01934	2	320:

	30/40 [00:05<00:01, 5.81it/s]		
461/499		2	320:
	31/40 [00:05<00:01, 5.65it/s]		
461/499		2	320:
78% ######7	31/40 [00:05<00:01, 5.65it/s]		
461/499	0.206G 0.02306 0.008766 0.01994	2	320:
80% #######	32/40 [00:05<00:01, 5.55it/s]		
461/499	0.206G 0.02259 0.008621 0.01972	1	320:
80% #######	32/40 [00:05<00:01, 5.55it/s]		
461/499	0.206G 0.02259 0.008621 0.01972	1	320:
82% ########	33/40 [00:05<00:01, 5.48it/s]		
461/499	0.206G 0.02233 0.008506 0.01959	1	320:
82% ########	33/40 [00:06<00:01, 5.48it/s]		
461/499		1	320:
	34/40 [00:06<00:01, 5.45it/s]		
461/499	-	1	320:
	34/40 [00:06<00:01, 5.45it/s]		
461/499		1	320:
·	35/40 [00:06<00:00, 5.66it/s]	-	020.
461/499	•	4	320:
	35/40 [00:06<00:00, 5.66it/s]	-	020.
461/499		4	320:
	36/40 [00:06<00:00, 5.27it/s]	4	320.
461/499		1	220.
		1	320:
	36/40 [00:06<00:00, 5.27it/s]		000
461/499	0.206G 0.02166 0.008427 0.01955	1	320:
	37/40 [00:06<00:00, 5.42it/s]	_	
461/499	0.206G 0.02167 0.008433 0.01942	2	320:
	37/40 [00:06<00:00, 5.42it/s]		
461/499	0.206G 0.02167 0.008433 0.01942	2	320:
	38/40 [00:06<00:00, 5.54it/s]		
461/499	0.206G 0.02129 0.008312 0.01931	1	320:
95% ########5	38/40 [00:06<00:00, 5.54it/s]		
461/499		1	320:
98% ########7	39/40 [00:06<00:00, 5.62it/s]		
461/499	0.206G 0.02156 0.008457 0.01938	4	320:
98% ########7	39/40 [00:07<00:00, 5.62it/s]		
461/499	0.206G 0.02156 0.008457 0.01938	4	320:
100% #########	40/40 [00:07<00:00, 5.66it/s]		
461/499	0.206G 0.02156 0.008457 0.01938	4	320:
100% ##########	40/40 [00:07<00:00, 5.62it/s]		
	Class Images Instances P	R	mAP50
mAP50-95: 0%	3		
	Class Images Instances P	R	mAP50
mAP50-95: 10%	3		
•	Class Images Instances P	R	mAP50
mAP50-95: 20%	•	•	
	, _, [,,,,,,		

mAP50-95: 30% ### 6/20 [00:00<00:00, 15.46it/s]
mAP50-95: 40% #### 8/20 [00:00<00:00, 16.74it/s] R mAP50 mAP50-96: 55% ######5 11/20 [00:00<00:00, 17.79it/s] R mAP50 mAP50-95: 55% ######5 11/20 [00:00<00:00, 17.79it/s] R mAP50 mAP50-95: 65% ######## 13/20 [00:00<00:00, 18.08it/s] R mAP50 mAP50-95: 80% ######### 16/20 [00:00<00:00, 18.08it/s] R mAP50 mAP50-95: 90% ######### 18/20 [00:01<00:00, 18.43it/s] R mAP50 mAP50-95: 90% ####################################
Class
mAP50-95: 55% ######5 11/20 00:00<00:00, 17.79it/s MaP50 mAP50-95: 65% ####### 13/20 00:00<00:00, 17.93it/s Rap50 mAP50-95: 65% ######## 13/20 00:00<00:00, 17.93it/s Rap50 mAP50-95: 80% ######### 16/20 00:00<00:00, 18.08it/s Rap50 mAP50-95: 90% ######### 18/20 00:01<00:00, 18.43it/s Rap50 mAP50-95: 100% ######## 18/20 00:01<00:00, 18.38it/s Rap50 mAP50-95: 100% ######## 20/20 00:01<00:00, 18.38it/s Rap50 mAP50-95: 100% ######## 20/20 00:01<00:00, 17.80it/s Rap50 mAP50-95: 00% ######### 20/20 00:01<00:00, 17.80it/s Rap50 mAP50-95: 00% ########## 20/20 00:01<00:00, 17.80it/s Rap50 mAP50 Rap50 Rap50 Rap50 mAP50 Rap50 Rap50 Rap50 mAP50 Rap50
Class
mAP50-95: 65% ######5 13/20 100:00 17.93it/s 17.93it/s 17.93it/s 18.00 maP50 mAP50-95: 80% ######## 16/20 100:00 100:00 18.08it/s 18.08it/s 18.00 maP50 mAP50-95: 90% ######### 18/20 100:01 100:01 18.43it/s 18.33it/s 18.33it/s 18.30it/s 18.33it/s 18.30it/s 18.33it/s 18.30it/s 18.33it/s 18.30it/s 18.33it/s 18.30it/s 18.30it/s 18.33it/s 18.30it/s 18.30it/s 18.30it/s 19.00it/s 19.00it/
Class
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Class
mAP50-95: 90% ######### 18/20 [00:01<00:00, 18.43it/s] mAP50 Class Images Instances P R mAP50 mAP50-95: 100% ###################################
Class
mAP50-95: 100% ######## 20/20 [00:01<00:00, 18.38it/s] Class Images Instances P R mAP50 mAP50-95: 100% ######### 20/20 [00:01<00:00, 17.80it/s] all 40 40 0.965 0.965 0.992 0.812 Epoch GPU_mem box_loss obj_loss cls_loss Instances Size 0%
MAP50-95: 100% ######### 20/20 [00:01<00:00, 17.80it/s] mAP50 mAP50 nanable P R mAP50 0.812 all 40 40 0.965 0.965 0.992 0.812 Epoch GPU_mem box_loss obj_loss cls_loss Instances Size 0%
mAP50-95: 100% ######### 20/20 [00:01<00:00, 17.80it/s] all 40 40 0.965 0.965 0.992 0.812 Epoch GPU_mem box_loss obj_loss cls_loss Instances Size 0%
Epoch GPU_mem box_loss obj_loss cls_loss Instances Size
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Epoch GPU_mem box_loss obj_loss cls_loss Instances Size 0%
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462/499
462/499
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
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2% 2
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462/499
10% #
462/499 0.206G 0.02795 0.006413 0.01886 2 320: 10% # 4/40 [00:00<00:06, 5.79it/s] 462/499 0.206G 0.02795 0.006413 0.01886 2 320: 12% #2 5/40 [00:00<00:06, 5.80it/s]
10% # 4/40 [00:00<00:06, 5.79it/s] 462/499
462/499 0.206G 0.02795 0.006413 0.01886 2 320: 12% #2 5/40 [00:00<00:06, 5.80it/s]
12% #2 5/40 [00:00<00:06, 5.80it/s]
462/499 0.206G 0.02792 0.00745 0.01956 4 320:
12% #2 5/40 [00:01<00:06, 5.80it/s]
462/499 0.206G 0.02792 0.00745 0.01956 4 320:
15% #5 6/40 [00.01<00.06 5/5±/-]
15% #5 6/40 [00:01<00:06, 5.45it/s]
15% #5 6/40 [00:01<00:06, 5.451t/s] 462/499 0.206G 0.02779 0.007526 0.02224

462/499	0.206G 0.02779 0.007526		2	320:
18% #7	7/40 [00:01<00:06, 5.41it/s			
462/499		0.0221	4	320:
18% #7	7/40 [00:01<00:06, 5.41it/s	_		
,	0.206G 0.02922 0.008761		4	320:
20% ##	8/40 [00:01<00:05, 5.38it/s			
462/499	0.206G 0.02728 0.008467		2	320:
20% ##	8/40 [00:01<00:05, 5.38it/s			
462/499	0.206G 0.02728 0.008467		2	320:
22% ##2	9/40 [00:01<00:05, 5.51it/s			
462/499	0.206G 0.02525 0.008049		1	320:
22% ##2	9/40 [00:01<00:05, 5.51it/s			
102, 100	0.206G 0.02525 0.008049		1	320:
25% ##5	10/40 [00:01<00:05, 5.31it/			
462/499	0.206G 0.0235 0.007583		1	320:
25% ##5	10/40 [00:01<00:05, 5.31it/			
462/499	0.206G 0.0235 0.007583	3 0.02029	1	320:
28% ##7	11/40 [00:01<00:05, 5.32it/	/s]		
462/499	0.206G 0.02477 0.007432	0.0198	2	320:
28% ##7	11/40 [00:02<00:05, 5.32it/	/s]		
462/499	0.206G 0.02477 0.007432	0.0198	2	320:
30% ###	12/40 [00:02<00:05, 5.06it/	's]		
462/499	0.206G 0.02347 0.007083	0.01949	1	320:
30% ###	12/40 [00:02<00:05, 5.06it/	's]		
462/499	0.206G 0.02347 0.007083	0.01949	1	320:
32% ###2	13/40 [00:02<00:05, 5.02it/	's]		
462/499	0.206G 0.02318 0.006884	0.01914	1	320:
32% ###2	13/40 [00:02<00:05, 5.02it/	's]		
462/499	0.206G 0.02318 0.006884	0.01914	1	320:
35% ###5	14/40 [00:02<00:05, 4.98it/	's]		
462/499	0.206G 0.02315 0.006841	0.0188	2	320:
35% ###5	14/40 [00:02<00:05, 4.98it/	/s]		
462/499	0.206G 0.02315 0.006841	0.0188	2	320:
38% ###7	15/40 [00:02<00:05, 4.94it/	's]		
462/499	0.206G 0.02262 0.006713	0.01906	1	320:
38% ###7	15/40 [00:03<00:05, 4.94it/	's]		
462/499	0.206G 0.02262 0.006713	0.01906	1	320:
40% ####	16/40 [00:03<00:04, 5.06it/	′s]		
462/499	0.206G 0.02219 0.006683		2	320:
40% ####	16/40 [00:03<00:04, 5.06it/			
462/499	0.206G 0.02219 0.006683		2	320:
42% ####2	17/40 [00:03<00:04, 4.99it/			
462/499	0.206G 0.02338 0.007063		3	320:
42% ####2	17/40 [00:03<00:04, 4.99it/		•	
462/499	0.206G 0.02338 0.007063		3	320:
45% ####5	18/40 [00:03<00:04, 4.86it/		-	
462/499	0.206G 0.02262 0.007059		2	320:
45% ####5	18/40 [00:03<00:04, 4.86it/		_	
· · · · · · · · · · · · · ·		-		

462/499	0.206G 0.02262 0.007059	0.01873	2	320:
48% ####7	19/40 [00:03<00:04, 4.99it/s]			
462/499	0.206G 0.02299 0.007186	0.01906	3	320:
48% ####7	19/40 [00:03<00:04, 4.99it/s]	0.04000		
462/499	0.206G 0.02299 0.007186	0.01906	3	320:
50% #####	20/40 [00:03<00:04, 4.74it/s]	0.010	4	200.
462/499	0.206G 0.02389 0.00758 20/40 [00:04<00:04, 4.74it/s]	0.019	4	320:
50% ##### 462/499	0.206G 0.02389 0.00758	0.019	4	320:
52% #####2	21/40 [00:04<00:03, 4.79it/s]	0.019	4	320.
462/499	0.206G 0.0234 0.007533	0.01876	1	320:
52% #####2	21/40 [00:04<00:03, 4.79it/s]	0.01070	1	520.
462/499	0.206G 0.0234 0.007533	0.01876	1	320:
55% #####5	22/40 [00:04<00:03, 4.84it/s]	0.01010	-	020.
462/499	0.206G 0.02428 0.007679	0.01927	4	320:
55% #####5	22/40 [00:04<00:03, 4.84it/s]	0.01021	-	020.
462/499	0.206G 0.02428 0.007679	0.01927	4	320:
57% #####7	23/40 [00:04<00:03, 4.86it/s]		_	
462/499	0.206G 0.02385 0.007492	0.01903	1	320:
57% #####7	23/40 [00:04<00:03, 4.86it/s]			
462/499	0.206G 0.02385 0.007492	0.01903	1	320:
60% ######	24/40 [00:04<00:03, 5.11it/s]			
462/499	0.206G 0.02359 0.007639	0.01902	4	320:
60% ######	24/40 [00:04<00:03, 5.11it/s]			
462/499	0.206G 0.02359 0.007639	0.01902	4	320:
62% #####2	25/40 [00:04<00:02, 5.16it/s]			
462/499	0.206G 0.02336 0.007819	0.01928	4	320:
62% #####2	25/40 [00:05<00:02, 5.16it/s]			
462/499	0.206G 0.02336 0.007819	0.01928	4	320:
65% #####5	26/40 [00:05<00:02, 5.21it/s]			
462/499	0.206G 0.02299 0.008178	0.01963	4	320:
65% ######5	26/40 [00:05<00:02, 5.21it/s]			
462/499	0.206G 0.02299 0.008178	0.01963	4	320:
68% #####7	27/40 [00:05<00:02, 5.25it/s]			
462/499	0.206G 0.02235 0.007971	0.01938	1	320:
68% #####7	27/40 [00:05<00:02, 5.25it/s]			
462/499	0.206G 0.02235 0.007971	0.01938	1	320:
70% #######	28/40 [00:05<00:02, 5.38it/s]			
462/499	0.206G 0.02213 0.007945	0.01922	2	320:
70% ######	28/40 [00:05<00:02, 5.38it/s]			
462/499	0.206G 0.02213 0.007945	0.01922	2	320:
72% ######2	•			
	0.206G 0.02175 0.007902	0.01909	2	320:
72% #######2	·			
462/499	0.206G 0.02175 0.007902	0.01909	2	320:
75% #######5	·	0.01555		
462/499		0.01905	1	320:
75% ######5	30/40 [00:05<00:01, 5.50it/s]			

	0.206G 0.02137		0.01905	1	320:
	31/40 [00:05<00:01, 0.206G 0.02163	, 5.56it/s] 0.00798	0.01944	4	320:
•	31/40 [00:06<00:01		0.01544	-	020.
	0.206G 0.02163		0.01944	4	320:
	32/40 [00:06<00:01		0.01011	-	020.
	0.206G 0.02133		0.01931	1	320:
	32/40 [00:06<00:01				
	0.206G 0.02133		0.01931	1	320:
82% #######2	33/40 [00:06<00:01				
	0.206G 0.02175		0.0194	4	320:
82% ########	33/40 [00:06<00:01	, 5.54it/s]			
		0.008077	0.0194	4	320:
85% #######5	34/40 [00:06<00:01	, 5.47it/s]			
462/499	0.206G 0.02202	0.008196	0.01969	4	320:
85% #######5	34/40 [00:06<00:01	, 5.47it/s]			
462/499	0.206G 0.02202	0.008196	0.01969	4	320:
88% #######7	35/40 [00:06<00:00	, 5.43it/s]			
462/499	0.206G 0.02254	0.008199	0.01961	2	320:
88% #######7	35/40 [00:06<00:00	, 5.43it/s]			
462/499	0.206G 0.02254	0.008199	0.01961	2	320:
90% #######	36/40 [00:06<00:00	, 5.54it/s]			
462/499	0.206G 0.0222	0.008177	0.01966	2	320:
90% #######	36/40 [00:07<00:00	, 5.54it/s]			
462/499	0.206G 0.0222	0.008177	0.01966	2	320:
92% ########2	37/40 [00:07<00:00	, 5.46it/s]			
462/499	0.206G 0.02197	0.008181	0.0197	2	320:
92% ########2	37/40 [00:07<00:00	, 5.46it/s]			
462/499	0.206G 0.02197	0.008181	0.0197	2	320:
95% ########5	38/40 [00:07<00:00	, 5.71it/s]			
462/499	0.206G 0.02181	0.008415	0.01957	4	320:
95% ########5	38/40 [00:07<00:00	, 5.71it/s]			
462/499	0.206G 0.02181	0.008415	0.01957	4	320:
98% ########7	39/40 [00:07<00:00	, 5.56it/s]			
462/499	0.206G 0.02232	0.00843	0.01962	2	320:
98% ########7	39/40 [00:07<00:00	, 5.56it/s]			
462/499	0.206G 0.02232	0.00843	0.01962	2	320:
100% #########	40/40 [00:07<00:00), 5.52it/s]			
462/499	0.206G 0.02232	0.00843	0.01962	2	320:
100% #########	40/40 [00:07<00:00), 5.30it/s]			
		_			
ADEO 05 - 2011	•	Instances	P	R	mAP50
mAP50-95: 0%):00 , ?it/s</td <td></td> <td>-</td> <td>1550</td>		-	1550
ADEO OF 40%1"	•	Instances	P	R	mAP50
mAP50-95: 10% #		0:00<00:01, 1		ъ	ADEA
mADEO. OE	Class Images	Instances	P	R	mAP50
mAP50-95: 20% #		0:00<00:01, 1		מ	m A DEO
	Class Images	Instances	P	R	mAP50

mAP50-95: 30% ###	I 6/20 [0	0:00<00:00,	16.11it/sl		
Class			P	R	mAP50
mAP50-95: 40% ####	_	0:00<00:00,	16.07it/s]		
Class	Images	Instances	P	R	mAP50
mAP50-95: 50% ####	10/20 [00:00<00:00,	16.04it/s]		
Class		Instances		R	mAP50
mAP50-95: 60% #####		00:00<00:00,			
Class	•	Instances		R	mAP50
mAP50-95: 70% ######		00:00<00:00,			
	_	Instances		R	mAP50
		00:00<00:00,			ADEO
Class mAP50-95: 90% ########		Instances		R	mAP50
		Instances		R	mAP50
mAP50-95: 100% ##########	_				IIIAI 50
Class		Instances		R	mAP50
mAP50-95: 100% #########	•				
all	40		0.97	0.975	0.993
0.806					
Epoch GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
01/1					
0% 0/40 [00			0.00040	4	200
463/499 0.206G 0% 0/40 [00:0		0.0107	0.02019	4	320:
463/499 0.206G		0.0107	0.02019	4	320:
2% 2 1/40 [00:0			0.02019	4	320.
463/499 0.206G			0.02269	3	320:
2% 2 1/40 [00:0			0.02200	· ·	020.
463/499 0.206G			0.02269	3	320:
5% 5 2/40 [00:0					
463/499 0.206G	0.03704		0.02127	3	320:
5% 5 2/40 [00:0	0<00:06,	5.52it/s			
463/499 0.206G	0.03704	0.01163	0.02127	3	320:
8% 7 3/40 [00:0	0<00:06,	5.41it/s]			
463/499 0.206G	0.02977	0.009661	0.01983	1	320:
8% 7 3/40 [00:0	0<00:06,	5.41it/s]			
463/499 0.206G		0.009661	0.01983	1	320:
		5.56it/s]			
463/499 0.206G	0.02714		0.01924	1	320:
		5.56it/s]			
463/499 0.206G	0.02714		0.01924	1	320:
12% #2 5/40 [00:			0.00000		222
463/499 0.206G	0.02663	0.009711	0.02006	4	320:
12% #2 5/40 [00:			0 00006	Λ	200.
463/499 0.206G	0.02663	0.009711 5.58it/s]	0.02006	4	320:
15% #5 6/40 [00: 463/499 0.206G	0.02586		0.01917	1	320:

15% #5	6/40 [00:01<00:06, 5.58it/s]			
463/499	0.206G 0.02586 0.008937	0.01917	1	320:
18% #7	7/40 [00:01<00:06, 5.50it/s]		_	
463/499	0.206G 0.0249 0.009773	0.01913	4	320:
18% #7	7/40 [00:01<00:06, 5.50it/s]	0.01010	4	000
463/499		0.01913	4	320:
20% ##	8/40 [00:01<00:05, 5.60it/s]	0.01007	4	200.
463/499	0.206G 0.02455 0.01062	0.01927	4	320:
20% ##	8/40 [00:01<00:05, 5.60it/s]	0.01007	4	200
463/499	0.206G 0.02455 0.01062	0.01927	4	320:
22% ##2	9/40 [00:01<00:05, 5.64it/s]	0.01016	0	200
463/499	0.206G 0.02749 0.009849	0.01916	2	320:
22% ##2	9/40 [00:01<00:05, 5.64it/s]	0.01016	0	200
463/499	0.206G 0.02749 0.009849	0.01916	2	320:
25% ##5	10/40 [00:01<00:05, 5.54it/s]	0.01040	4	200
463/499	0.206G 0.02563 0.009301	0.01942	1	320:
25% ##5	10/40 [00:01<00:05, 5.54it/s]	0.01040	4	200
463/499	0.206G 0.02563 0.009301	0.01942	1	320:
28% ##7	11/40 [00:01<00:05, 5.62it/s]	0.010	0	200
463/499	0.206G 0.02444 0.009452	0.019	2	320:
28% ##7	11/40 [00:02<00:05, 5.62it/s]	0.010	0	200
463/499	0.206G 0.02444 0.009452	0.019	2	320:
30% ###	12/40 [00:02<00:04, 5.66it/s]	0.01020	4	200
463/499	0.206G 0.02331 0.008986	0.01838	1	320:
30% ###	12/40 [00:02<00:04, 5.66it/s]	0.04000		000
463/499	0.206G 0.02331 0.008986	0.01838	1	320:
32% ###2	13/40 [00:02<00:04, 5.71it/s]	0.04007	4	200
463/499	0.206G 0.02334 0.009217	0.01897	4	320:
32% ###2	13/40 [00:02<00:04, 5.71it/s]	0.04007	4	200
463/499	0.206G 0.02334 0.009217	0.01897	4	320:
35% ###5	14/40 [00:02<00:04, 5.59it/s]	0.0100	4	200
463/499	0.206G 0.02356 0.00952	0.0192	4	320:
35% ###5	14/40 [00:02<00:04, 5.59it/s]	0.0400	4	200
463/499	0.206G 0.02356 0.00952	0.0192	4	320:
38% ###7	15/40 [00:02<00:04, 5.64it/s]	0.04000	0	200
463/499	0.206G 0.02278 0.009391	0.01893	2	320:
38% ###7	15/40 [00:02<00:04, 5.64it/s]	0.04000	0	200
463/499	0.206G 0.02278 0.009391	0.01893	2	320:
40% ####	16/40 [00:02<00:04, 5.85it/s]	0.04064	4	200
463/499	0.206G 0.02207 0.009185	0.01861	1	320:
40% ####	16/40 [00:03<00:04, 5.85it/s]	0.04004		000
463/499	0.206G 0.02207 0.009185	0.01861	1	320:
42% ####2	17/40 [00:03<00:03, 5.84it/s]	0.04004		000
463/499	0.206G 0.0215 0.009012	0.01824	2	320:
42% ####2	17/40 [00:03<00:03, 5.84it/s]	0.01004	•	200
463/499	0.206G 0.0215 0.009012	0.01824	2	320:
45% ####5	18/40 [00:03<00:03, 5.82it/s]	0.01700	a a	200
463/499	0.206G 0.02087 0.008825	0.01796	1	320:

45% ####5		18/40 [00:03<00:03,				
463/499		0.206G 0.02087		0.01796	1	320:
48% ####7	١	19/40 [00:03<00:03,				
463/499		0.206G 0.02094	0.009007	0.01921	2	320:
48% ####7	١	19/40 [00:03<00:03,	· -			
463/499		0.206G 0.02094		0.01921	2	320:
50% #####	١	20/40 [00:03<00:03,				
463/499		0.206G 0.02039	0.008807	0.01896	1	320:
50% #####	ı	20/40 [00:03<00:03,				
463/499		0.206G 0.02039		0.01896	1	320:
52% #####2	١	21/40 [00:03<00:03,				
463/499		0.206G 0.01989	0.008537	0.01879	1	320:
52% #####2	١	21/40 [00:03<00:03,				
463/499		0.206G 0.01989		0.01879	1	320:
55% #####5	١	22/40 [00:03<00:03,				
463/499		0.206G 0.01959	0.008403	0.01858	2	320:
55% #####5	ı	22/40 [00:04<00:03,				
463/499		0.206G 0.01959		0.01858	2	320:
57% #####7	١	23/40 [00:04<00:02,	· -			
463/499		0.206G 0.01938	0.008214	0.01865	1	320:
57% #####7		23/40 [00:04<00:02,				
463/499		0.206G 0.01938	0.008214	0.01865	1	320:
60% ######	-	24/40 [00:04<00:02,	5.71it/s]			
463/499		0.206G 0.01908	0.008081	0.01843	1	320:
60% ######	-	24/40 [00:04<00:02,	5.71it/s]			
463/499		0.206G 0.01908	0.008081	0.01843	1	320:
62% ######2	-	25/40 [00:04<00:02,	5.74it/s			
463/499		0.206G 0.0202	0.008036	0.01881	2	320:
62% ######2	-	25/40 [00:04<00:02,	5.74it/s			
463/499		0.206G 0.0202	0.008036	0.01881	2	320:
65% ######5	-	26/40 [00:04<00:02,	5.61it/s]			
463/499		0.206G 0.01982	0.007957	0.0186	1	320:
65% ######5	- [26/40 [00:04<00:02,	5.61it/s]			
463/499		0.206G 0.01982	0.007957	0.0186	1	320:
68% ######7	-	27/40 [00:04<00:02,	5.66it/s]			
463/499		0.206G 0.01948	0.007785	0.01846	1	320:
68% ######7	-	27/40 [00:04<00:02,	5.66it/s]			
463/499		0.206G 0.01948	0.007785	0.01846	1	320:
70% ######	-	28/40 [00:04<00:02,	5.70it/s]			
463/499		0.206G 0.01915	0.007617	0.01851	1	320:
70% ######	-	28/40 [00:05<00:02,	5.70it/s]			
463/499		0.206G 0.01915	0.007617	0.01851	1	320:
72% ######2	- 1	29/40 [00:05<00:01,	5.59it/s]			
463/499		0.206G 0.01892	0.007457	0.01866	1	320:
72% ######2	1	29/40 [00:05<00:01,				
463/499	•	0.206G 0.01892		0.01866	1	320:
75% ######5	1	30/40 [00:05<00:01,				
463/499		0.206G 0.01854		0.01841	1	320:
•						

75% ######5	30/40 [00:05<00:01,	5.48it/s]		
463/499	0.206G 0.01854	0.007313 0.01841	1	320:
	31/40 [00:05<00:01,			
463/499			1	320:
	31/40 [00:05<00:01,			
463/499	•		1	320:
80% #######	32/40 [00:05<00:01,			
463/499			2	320:
	32/40 [00:05<00:01,	5.50it/s]		
	0.206G 0.01802		2	320:
82% ########	33/40 [00:05<00:01,	5.58it/s]		
463/499	0.206G 0.01793	0.007335 0.01847	2	320:
82% ########	33/40 [00:06<00:01,			
463/499	0.206G 0.01793	0.007335 0.01847	2	320:
85% #######5	34/40 [00:06<00:01,	5.50it/s]		
463/499	0.206G 0.01808	0.007417 0.01848	2	320:
85% #######5	34/40 [00:06<00:01,	5.50it/s]		
	0.206G 0.01808		2	320:
88% #######7	35/40 [00:06<00:00,	5.43it/s]		
463/499			1	320:
88% #######7	35/40 [00:06<00:00,			
	0.206G 0.01788		1	320:
	36/40 [00:06<00:00,			
463/499		0.007654 0.01826	4	320:
	36/40 [00:06<00:00,			
463/499			4	320:
92% ########2	37/40 [00:06<00:00,			
463/499	0.206G 0.01845		2	320:
	37/40 [00:06<00:00,			
463/499	·		2	320:
	38/40 [00:06<00:00,			
463/499		0.0076 0.01849	1	320:
95% ########5	38/40 [00:06<00:00,			
463/499	•	0.0076 0.01849	1	320:
	39/40 [00:06<00:00,			
463/499		0.007727 0.01862	4	320:
	39/40 [00:07<00:00,			
463/499		0.007727 0.01862	4	320:
	40/40 [00:07<00:00			
463/499		0.007727 0.01862	4	320:
	40/40 [00:07<00:00			
, , , ,		,		
	Class Images	Instances P	R	mAP50
mAP50-95: 0%	•	:00 , ?it/s]</td <td>10</td> <td></td>	10	
		Instances P	R	mAP50
mAP50-95: 10%	•	:00<00:01, 15.96it/s]	10	
		Instances P	R	mAP50
mAP50-95: 20%	•	:00<00:00, 16.19it/s]		
	, - = = = = = = = = = = = = = = = = =			

Class	•	Instances		R	mAP50
mAP50-95: 30% ### Class	Images	0:00<00:00, Instances		R	mAP50
		0:00<00:00,			
Class	•	Instances		R	mAP50
mAP50-95: 50% ##### Class	Inages	00:00<00:00, Instances	, 1/.3/1t/s] D	R	mAP50
	_	00:00<00:00,	. 17.48it/sl		mai 50
Class		Instances		R	mAP50
mAP50-95: 70% ######	_	00:00<00:00			
Class	Images	Instances	P	R	mAP50
		00:00<00:00			
Class	•	Instances		R	mAP50
mAP50-95: 90% ########					1550
Class mAP50-95: 100% #########		Instances		R	mAP50
maP50-95: 100% ########## Class		Instances		R	mAP50
mAP50-95: 100% #########	_				MAPSO
all	40		0.97	0.975	0.993
0.806	10	10	0.01	0.010	0.000
Epoch GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00:	00<2 7i	+ /el			
		0.007788	0.01084	1	320:
0% 0/40 [00:00			0.02002	_	0_01
	0.01415		0.01084	1	320:
2% 2 1/40 [00:00	<00:07,	5.33it/s]			
464/499 0.206G	0.01472	0.008611	0.01987	4	320:
2% 2 1/40 [00:00					
•		0.008611	0.01987	4	320:
5% 5 2/40 [00:00					
	0.01274	0.006612	0.01753	1	320:
5% 5 2/40 [00:00	-		0.04550		000
		0.006612	0.01753	1	320:
8% 7 3/40 [00:00 464/499 0.206G		0.009222	0.01745	4	320:
8% 7 3/40 [00:00			0.01745	4	320.
464/499 0.206G	•		0.01745	4	320:
10% # 4/40 [00:0			0.01710	-	020.
464/499 0.206G	-		0.01758	4	320:
10% # 4/40 [00:0					
464/499 0.206G	-		0.01758	4	320:
12% #2 5/40 [00:0	1<00:07,	4.50it/s]			
464/499 0.206G	0.01378	0.0101	0.01702	4	320:
12% #2 5/40 [00:0					
464/499 0.206G			0.01702	4	320:
15% #5 6/40 [00:0	1<00:07,	4.73it/s			

464/499	0.206G 0.01618 0.	009719 0.01665	2	320:
15% #5	6/40 [00:01<00:07, 4.		-	020.
464/499	•	009719 0.01665	2	320:
18% #7	7/40 [00:01<00:07, 4.	69it/s]		
464/499		009805 0.01847	2	320:
18% #7	7/40 [00:01<00:07, 4.	69it/s]		
464/499	0.206G 0.01699 0.	009805 0.01847	2	320:
20% ##	8/40 [00:01<00:06, 4.	65it/s]		
464/499	0.206G 0.01708 0	.01004 0.01825	4	320:
20% ##	8/40 [00:01<00:06, 4.	65it/s]		
464/499	0.206G 0.01708 0		4	320:
22% ##2	9/40 [00:01<00:06, 4.			
464/499		009296 0.01841	1	320:
22% ##2	9/40 [00:02<00:06, 4.			
464/499	0.206G 0.0166 0.		1	320:
25% ##5	10/40 [00:02<00:06, 4			
464/499		009096 0.01811	2	320:
25% ##5	10/40 [00:02<00:06, 4			
464/499	0.206G 0.01641 0.		2	320:
28% ##7	11/40 [00:02<00:05, 4			
464/499	0.206G 0.01616 0.		2	320:
28% ##7	11/40 [00:02<00:05, 4			
464/499	0.206G 0.01616 0.		2	320:
30% ###	12/40 [00:02<00:05, 4			
464/499		009059 0.01862	2	320:
30% ###	12/40 [00:02<00:05, 4	.86it/s]		
464/499	0.206G 0.01843 0.	009059 0.01862	2	320:
32% ###2	13/40 [00:02<00:05, 4			
464/499	0.206G 0.0187 0.		4	320:
32% ###2	13/40 [00:02<00:05, 4	.88it/s]		
464/499	0.206G 0.0187 0.		4	320:
35% ###5	14/40 [00:02<00:05, 5			
464/499	0.206G 0.02051 0.		2	320:
35% ###5	14/40 [00:03<00:05, 5	.01it/s]		
464/499		0.01877	2	320:
38% ###7	15/40 [00:03<00:05, 4	.98it/s]		
464/499	0.206G 0.01997 0		3	320:
38% ###7	15/40 [00:03<00:05, 4	· -		
464/499	0.206G 0.01997 0	.00927 0.01846	3	320:
40% ####	16/40 [00:03<00:04, 5	.21it/s]		
464/499		0.01838	2	320:
40% ####	16/40 [00:03<00:04, 5	.21it/s]		
464/499	0.206G 0.02001 0.	0.01838	2	320:
42% ####2	17/40 [00:03<00:04, 5			
464/499		009073 0.01818	2	320:
42% ####2	17/40 [00:03<00:04, 5			
464/499	0.206G 0.0195 0.		2	320:
45% ####5	18/40 [00:03<00:04, 5	.29it/s]		

464/499	0.206G 0.01902 0.008949 0.	01794 2 320:
45% ####5	18/40 [00:03<00:04, 5.29it/s]	
464/499		01794 2 320:
48% ####7	19/40 [00:03<00:03, 5.44it/s]	
464/499		01781 2 320:
48% ####7	19/40 [00:04<00:03, 5.44it/s]	04.704
464/499		01781 2 320:
50% ##### 464/499	20/40 [00:04<00:03, 5.52it/s] 0.206G	01758 2 320:
404/499 50% #####	20/40 [00:04<00:03, 5.52it/s]	01758 2 320:
464/499	·	01758 2 320:
52% #####2	21/40 [00:04<00:03, 5.47it/s]	2 320.
464/499	•	01785 1 320:
52% #####2	21/40 [00:04<00:03, 5.47it/s]	1 020.
464/499		01785 1 320:
55% #####5	22/40 [00:04<00:03, 5.42it/s]	1 0201
464/499	·	01766 1 320:
55% #####5	22/40 [00:04<00:03, 5.42it/s]	
464/499		01766 1 320:
57% #####7	23/40 [00:04<00:03, 5.53it/s]	
464/499	-	01778 3 320:
57% #####7	23/40 [00:04<00:03, 5.53it/s]	
464/499	0.206G 0.02004 0.008485 0.	01778 3 320:
60% #####	24/40 [00:04<00:03, 5.33it/s]	
464/499	0.206G 0.01976 0.008493 0.	01795 2 320:
60% ######	24/40 [00:04<00:03, 5.33it/s]	
464/499	0.206G 0.01976 0.008493 0.	01795 2 320:
62% #####2	25/40 [00:04<00:02, 5.61it/s]	
464/499	0.206G 0.02005 0.008448 0	.0178 2 320:
62% #####2	25/40 [00:05<00:02, 5.61it/s]	
464/499	0.206G 0.02005 0.008448 0	.0178 2 320:
65% #####5	26/40 [00:05<00:02, 5.50it/s]	
464/499	0.206G 0.01998 0.008387 0.	01787 1 320:
65% ######5	26/40 [00:05<00:02, 5.50it/s]	
464/499		01787 1 320:
	27/40 [00:05<00:02, 5.59it/s]	
464/499		01792 2 320:
68% ######7	27/40 [00:05<00:02, 5.59it/s]	
464/499		01792 2 320:
70% #######	28/40 [00:05<00:02, 5.37it/s]	
464/499		01811 3 320:
70% #######	28/40 [00:05<00:02, 5.37it/s]	
464/499		01811 3 320:
72% #######2	•	0400
464/499		.0182 2 320:
72% #######2	-	0100 0 000
464/499		.0182 2 320:
75% ######5	30/40 [00:05<00:01, 5.44it/s]	

464/499	0.206G 0.02184	0.00875 0.018	313 4	320:
	30/40 [00:06<00:01,		710 4	520.
464/499	-		313 4	320:
	31/40 [00:06<00:01,		1	020.
464/499		0.00857 0.017	791 1	320:
·	31/40 [00:06<00:01,		31 1	520.
464/499	-	0.00857 0.017	791 1	320:
	32/40 [00:06<00:01,		91 1	320.
464/499			319 2	320:
	32/40 [00:06<00:01,		019 2	320:
		· -	210 0	200.
	0.206G 0.02213		319 2	320:
	33/40 [00:06<00:01,		.45	000
464/499		0.008767 0.018	345 4	320:
	33/40 [00:06<00:01,			
464/499		0.008767 0.018	345 4	320:
	34/40 [00:06<00:01,			
464/499			339 2	320:
	34/40 [00:06<00:01,			
		0.008678 0.018	339 2	320:
88% #######7	35/40 [00:06<00:00,	5.71it/s]		
464/499	0.206G 0.02145	0.008605 0.018	326 2	320:
88% #######7	35/40 [00:06<00:00,	5.71it/s]		
464/499	0.206G 0.02145	0.008605 0.018	326 2	320:
90% #######	36/40 [00:06<00:00,	5.74it/s]		
464/499	0.206G 0.02136	0.008582 0.018	312 2	320:
90% #######	36/40 [00:07<00:00,	5.74it/s		
464/499	0.206G 0.02136	0.008582 0.018	312 2	320:
92% ########2	37/40 [00:07<00:00,	5.76it/s]		
464/499	0.206G 0.02098	0.00843 0.018	311 1	320:
92% ########2	37/40 [00:07<00:00,			
464/499	· · · · · · · · · · · · · · · · · · ·	0.00843 0.018	311 1	320:
	38/40 [00:07<00:00,			
464/499	0.206G 0.02113		324 4	320:
	38/40 [00:07<00:00,			
	0.206G 0.02113		324 4	320:
	39/40 [00:07<00:00,		,21 1	020.
464/499		0.008845 0.018	334 4	320:
	39/40 [00:07<00:00,		7	520.
464/499			334 4	320:
	40/40 [00:07<00:00		554 4	320.
464/499	0.206G 0.02122		334 4	320:
			334 4	320.
TOO! ##################################	1 40/40 [00:07<00:00	, 0.201t/SJ		
	Class Two we	Tnatonaca	ת ת	ADEO
ADEO OF	•	Instances	P R	mAP50
mAP50-95: 0%		:00 , ?it/s]</td <td>ת ת</td> <td> ADEO</td>	ת ת	ADEO
ADEO OE: 400/1	•	Instances	P R	mAP50
mAP50-95: 10%		:00<00:01, 15.75it		. 4050
	Class Images	Instances	P R	mAP50

mAP50-95: 20% ##	1 4/20 [0	0:00<00:00,	17.15it/sl		
Class			P	R	mAP50
mAP50-95: 30% ###	6/20 [0	0:00<00:00,	17.65it/s]		
Class	_	Instances		R	mAP50
mAP50-95: 40% ####		0:00<00:00,			
Class		Instances		R	mAP50
mAP50-95: 50% ##### Class		00:00<00:00, Instances		R	ADEO
mAP50-95: 60% #####	_	onstances 00:00<00:00,			mAP50
47		Instances		R	mAP50
	_	00:00<00:00,			
Class		Instances		R	mAP50
mAP50-95: 80% #######	16/20 [00:00<00:00,	16.79it/s]		
	_	Instances		R	mAP50
mAP50-95: 95% ########					
V —	•	Instances		R	mAP50
mAP50-95: 100% ########					
all	40	40	0.976	0.975	0.994
0.814					
Epoch GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [0					
465/499 0.206G		0.01594	0.03253	4	320:
0% 0/40 [00:					
465/499 0.206G		0.01594	0.03253	4	320:
2% 2 1/40 [00:			0.00000	4	200
465/499 0.206G 2% 2 1/40 [00:			0.02829	4	320:
2% 2 1/40 [00: 465/499			0.02829	4	320:
5% 5 2/40 [00:			0.02629	4	320.
465/499 0.206G	•		0.02659	2	320:
5% 5 2/40 [00:			0.02000	2	020.
465/499 0.206G					
	U UZIDZ	0 01105	0 02659	2	320
8%17 3/40 [00:	0.02162	0.01105 5.82it/sl	0.02659	2	320:
8% 7 3/40 [00: 465/499 0.206G	00<00:06,	5.82it/s]			
465/499 0.206G	00<00:06, 0.01834	5.82it/s] 0.009466	0.02659	2	320: 320:
465/499 0.206G 8% 7 3/40 [00:	00<00:06, 0.01834	5.82it/s] 0.009466 5.82it/s]	0.02331		320:
465/499 0.206G 8% 7 3/40 [00: 465/499 0.206G	00<00:06, 0.01834 00<00:06, 0.01834	5.82it/s] 0.009466 5.82it/s]		1	
465/499 0.206G 8% 7 3/40 [00: 465/499 0.206G	00<00:06, 0.01834 00<00:06, 0.01834	5.82it/s] 0.009466 5.82it/s] 0.009466	0.02331	1	320:
465/499 0.206G 8% 7 3/40 [00: 465/499 0.206G 10% # 4/40 [00	00<00:06, 0.01834 00<00:06, 0.01834 :00<00:06, 0.01605	5.82it/s] 0.009466 5.82it/s] 0.009466 5.80it/s] 0.008286	0.02331	1	320: 320:
465/499 0.206G 8% 7 3/40 [00: 465/499 0.206G 10% # 4/40 [00 465/499 0.206G	00<00:06, 0.01834 00<00:06, 0.01834 :00<00:06, 0.01605	5.82it/s] 0.009466 5.82it/s] 0.009466 5.80it/s] 0.008286	0.02331	1	320: 320:
465/499 0.206G 8% 7 3/40 [00: 465/499 0.206G 10% # 4/40 [00 465/499 0.206G 10% # 4/40 [00 465/499 0.206G 12% #2 5/40 [00	00<00:06, 0.01834 00<00:06, 0.01834 :00<00:06, 0.01605 :00<00:06, 0.01605 :00<00:06,	5.82it/s] 0.009466 5.82it/s] 0.009466 5.80it/s] 0.008286 5.80it/s] 0.008286 5.62it/s]	0.02331 0.02331 0.02115 0.02115	1 1 1	320: 320: 320: 320:
465/499	00<00:06, 0.01834 00<00:06, 0.01834 :00<00:06, 0.01605 :00<00:06, 0.01605 :00<00:06, 0.01686	5.82it/s] 0.009466 5.82it/s] 0.009466 5.80it/s] 0.008286 5.80it/s] 0.008286 5.62it/s] 0.009178	0.02331 0.02331 0.02115	1 1 1	320: 320: 320:
465/499	00<00:06, 0.01834 00<00:06, 0.01834 :00<00:06, 0.01605 :00<00:06, 0.01605 :00<00:06, 0.01686 :01<00:06,	5.82it/s] 0.009466 5.82it/s] 0.009466 5.80it/s] 0.008286 5.80it/s] 0.008286 5.62it/s] 0.009178 5.62it/s]	0.02331 0.02331 0.02115 0.02115 0.0207	1 1 1 1	320: 320: 320: 320: 320:
465/499	00<00:06, 0.01834 00<00:06, 0.01834 :00<00:06, 0.01605 :00<00:06, 0.01605 :00<00:06, 0.01686 :01<00:06, 0.01686	5.82it/s] 0.009466 5.82it/s] 0.009466 5.80it/s] 0.008286 5.80it/s] 0.008286 5.62it/s] 0.009178 5.62it/s]	0.02331 0.02331 0.02115 0.02115	1 1 1	320: 320: 320: 320:
465/499	00<00:06, 0.01834 00<00:06, 0.01834 :00<00:06, 0.01605 :00<00:06, 0.01605 :00<00:06, 0.01686 :01<00:06, 0.01686 :01<00:05,	5.82it/s] 0.009466 5.82it/s] 0.009466 5.80it/s] 0.008286 5.80it/s] 0.008286 5.62it/s] 0.009178 5.62it/s]	0.02331 0.02331 0.02115 0.02115 0.0207	1 1 1 1	320: 320: 320: 320: 320:

15% #5	6/40 [00:01<00:05, 5.69it/s			
465/499	0.206G 0.01652 0.00883		1	320:
18% #7	7/40 [00:01<00:05, 5.71it/s			
465/499	0.206G 0.01671 0.008844		4	320:
18% #7	7/40 [00:01<00:05, 5.71it/s			
465/499	0.206G 0.01671 0.008844		4	320:
20% ##	8/40 [00:01<00:05, 5.43it/s			
465/499	0.206G 0.01914 0.008948		2	320:
20% ##	8/40 [00:01<00:05, 5.43it/s]		
465/499	0.206G 0.01914 0.008948	0.02004	2	320:
22% ##2	9/40 [00:01<00:05, 5.47it/s]		
465/499	0.206G 0.02114 0.009301	0.01989	4	320:
22% ##2	9/40 [00:01<00:05, 5.47it/s]		
465/499	0.206G 0.02114 0.009301	0.01989	4	320:
25% ##5	10/40 [00:01<00:05, 5.49it/	s]		
465/499	0.206G 0.02103 0.008911	0.01927	1	320:
25% ##5	10/40 [00:01<00:05, 5.49it/	s]		
465/499	0.206G 0.02103 0.008911	0.01927	1	320:
28% ##7	11/40 [00:01<00:05, 5.59it/	s]		
465/499	0.206G 0.02076 0.009142	0.01966	4	320:
28% ##7	11/40 [00:02<00:05, 5.59it/			
465/499	0.206G 0.02076 0.009142		4	320:
30% ###	12/40 [00:02<00:05, 5.53it/			
465/499	0.206G 0.01986 0.009287		2	320:
30% ###	12/40 [00:02<00:05, 5.53it/			
465/499	0.206G 0.01986 0.009287		2	320:
32% ###2	13/40 [00:02<00:04, 5.71it/			
465/499	0.206G 0.02179 0.009976		4	320:
32% ###2	13/40 [00:02<00:04, 5.71it/			
465/499	0.206G 0.02179 0.009976		4	320:
35% ###5	14/40 [00:02<00:04, 5.74it/			
465/499	0.206G 0.02097 0.009579		1	320:
35% ###5	14/40 [00:02<00:04, 5.74it/			
465/499	0.206G 0.02097 0.009579		1	320:
38% ###7	15/40 [00:02<00:04, 5.73it/		_	0201
465/499	0.206G 0.02083 0.009354		2	320:
38% ###7	15/40 [00:02<00:04, 5.73it/		_	0201
465/499	0.206G 0.02083 0.009354	_	2	320:
40% ####	16/40 [00:02<00:04, 5.63it/		-	020.
465/499	0.206G 0.02048 0.009175		1	320:
40% ####	16/40 [00:03<00:04, 5.63it/		-	020.
465/499	0.206G 0.02048 0.009175		1	320:
42% ####2	17/40 [00:03<00:04, 5.68it/		1	020.
465/499	0.206G 0.02 0.008873		1	320:
42% ####2	17/40 [00:03<00:04, 5.68it/		1	020.
465/499	0.206G 0.02 0.008873		1	320:
45% ####5	18/40 [00:03<00:03, 5.70it/		1	020.
465/499	0.206G 0.0202 0.009223		4	320:
400/4 <i>33</i>	0.200u 0.0202 0.009223	0.01323	-	020.

45% ####5	18/40 [00:03<00:03, 5.70it/s]		
465/499	0.206G 0.0202 0.009223	0.01929	320:
48% ####7	19/40 [00:03<00:03, 5.44it/s]		
465/499	0.206G 0.02032 0.009352	0.01949	320:
48% ####7	19/40 [00:03<00:03, 5.44it/s]		
465/499	0.206G 0.02032 0.009352	0.01949	320:
50% #####	20/40 [00:03<00:03, 5.40it/s]		
465/499	0.206G 0.01992 0.009133	0.01898	320:
50% #####	20/40 [00:03<00:03, 5.40it/s]		
465/499	0.206G 0.01992 0.009133	0.01898	320:
52% #####2	21/40 [00:03<00:03, 5.58it/s]		
465/499	0.206G 0.0207 0.009092	0.01892	320:
52% #####2	21/40 [00:03<00:03, 5.58it/s]		
465/499	0.206G 0.0207 0.009092	0.01892	320:
55% #####5	22/40 [00:03<00:03, 5.58it/s]		
465/499	0.206G 0.02032 0.008826	0.01877	320:
55% #####5	22/40 [00:04<00:03, 5.58it/s]		
465/499	0.206G 0.02032 0.008826	0.01877	320:
57% #####7	23/40 [00:04<00:02, 5.80it/s]		
465/499	0.206G 0.02001 0.008581	0.01882	320:
57% #####7	23/40 [00:04<00:02, 5.80it/s]		
465/499	0.206G 0.02001 0.008581	0.01882	320:
60% ######	24/40 [00:04<00:02, 5.67it/s]		
465/499	0.206G 0.01955 0.008387	0.01884	320:
60% ######	24/40 [00:04<00:02, 5.67it/s]		
465/499	0.206G 0.01955 0.008387	0.01884	320:
62% ######2	25/40 [00:04<00:02, 5.68it/s]		
465/499	0.206G 0.01925 0.00862	0.01864	320:
62% #####2	25/40 [00:04<00:02, 5.68it/s]		
465/499	0.206G 0.01925 0.00862	0.01864	320:
65% ######5	26/40 [00:04<00:02, 5.57it/s]		
465/499	0.206G 0.01884 0.008435	0.01842	320:
65% ######5	26/40 [00:04<00:02, 5.57it/s]		
465/499	0.206G 0.01884 0.008435	0.01842	320:
68% #####7	27/40 [00:04<00:02, 5.66it/s]		
465/499	0.206G 0.01858 0.008256	0.01829	320:
68% #####7	27/40 [00:05<00:02, 5.66it/s]		
465/499	0.206G 0.01858 0.008256	0.01829	320:
70% ######	28/40 [00:05<00:02, 5.39it/s]		
465/499	0.206G 0.01873 0.008449	0.0183	320:
70% ######	28/40 [00:05<00:02, 5.39it/s]		
465/499	0.206G 0.01873 0.008449	0.0183	320:
72% ######2	29/40 [00:05<00:01, 5.51it/s]		
465/499	0.206G 0.0187 0.008411	0.01828	320:
72% ######2	29/40 [00:05<00:01, 5.51it/s]		
465/499	0.206G 0.0187 0.008411	0.01828	320:
75% ######5	30/40 [00:05<00:01, 5.57it/s]		
465/499	0.206G 0.01835 0.00834	0.01813	320:
•			

75% ######5	30/40 [00:05<00:01,	5.57it/s]		
465/499		0.00834 0.01813	2	320:
	31/40 [00:05<00:01,			
465/499			2	320:
	31/40 [00:05<00:01,			
465/499	0.206G 0.01853		2	320:
80% #######	32/40 [00:05<00:01,			
465/499	0.206G 0.01834	0.008211 0.01808	1	320:
80% #######	32/40 [00:05<00:01,	5.55it/s]		
465/499	0.206G 0.01834	0.008211 0.01808	1	320:
82% #######2	33/40 [00:05<00:01,	5.61it/s]		
465/499	0.206G 0.01906	0.008294 0.0183	4	320:
82% #######2	33/40 [00:06<00:01,	5.61it/s]		
465/499	0.206G 0.01906	0.008294 0.0183	4	320:
85% #######5	34/40 [00:06<00:01,	5.68it/s]		
465/499	0.206G 0.01921	0.008302 0.01829	2	320:
85% #######5	34/40 [00:06<00:01,	5.68it/s]		
465/499	0.206G 0.01921	0.008302 0.01829	2	320:
88% #######7	35/40 [00:06<00:00,	5.57it/s]		
465/499	0.206G 0.01948	0.008427 0.01844	3	320:
88% #######7	35/40 [00:06<00:00,	5.57it/s		
465/499	0.206G 0.01948	0.008427 0.01844	3	320:
90% #######	36/40 [00:06<00:00,	5.48it/s]		
465/499	0.206G 0.01927	0.00831 0.01834	1	320:
90% #######	36/40 [00:06<00:00,	5.48it/s]		
465/499	0.206G 0.01927	0.00831 0.01834	1	320:
92% ########2	37/40 [00:06<00:00,	5.57it/s]		
465/499	0.206G 0.0193	0.008457 0.01836	4	320:
92% ########2	37/40 [00:06<00:00,	5.57it/s		
465/499		0.008457 0.01836	4	320:
	38/40 [00:06<00:00,			
465/499		0.008534 0.01829	4	320:
95% ########5	38/40 [00:07<00:00,	5.23it/s]		
465/499	0.206G 0.01924	0.008534 0.01829	4	320:
	39/40 [00:07<00:00,			
465/499	0.206G 0.01925		4	320:
	39/40 [00:07<00:00,	5.13it/s]		
465/499	0.206G 0.01925		4	320:
	40/40 [00:07<00:00			
465/499	0.206G 0.01925		4	320:
100% ##########	40/40 [00:07<00:00	, 5.51it/s]		
	•	Instances P	R	mAP50
mAP50-95: 0%		:00 , ?it/s]</td <td>_</td> <td></td>	_	
1950 ST 15611	•	Instances P	R	mAP50
mAP50-95: 10%		:00<00:00, 18.29it/s]	_	
ADEO 05 000''	•	Instances P	R	mAP50
mAP50-95: 20%	## 4/20 L00	:00<00:01, 15.51it/s]		

	_	Instances		R	mAP50
		0:00<00:00, Instances		R	mAP50
		0:00<00:00,		_	
	•	Instances		R	mAP50
	Images	00:00<00:00, Instances	13.421T/SJ P	R	mAP50
	_	00:00<00:00,	13.57it/sl		IIIAI 00
		Instances		R	mAP50
mAP50-95: 70% ######	14/20 [0	00:00<00:00,	14.28it/s]		
	Images			R	mAP50
		00:01<00:00,			
	•	Instances		R	mAP50
mAP50-95: 90% ########					ADEO
Class mAP50-95: 100% ########	_	Instances		R	mAP50
		Instances		R	mAP50
mAP50-95: 100% ########	•				IIIAI 50
all	40		0.962	0.965	0.994
0.805					
Epoch GPU_mem bo	x_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00:0)∩ ?i:</td <td>+ /el</td> <td></td> <td></td> <td></td>	+ /el			
		0.01644	0.02025	2	320:
0% 0/40 [00:00<			0102020	_	0_0.
	.02492		0.02025	2	320:
2% 2 1/40 [00:00<	00:07,	5.35it/s]			
466/499 0.206G 0	0.01462	0.009543	0.01721	1	320:
2% 2 1/40 [00:00<					
		0.009543	0.01721	1	320:
5% 5 2/40 [00:00<		5.34it/s]			
	0.01242	0.007952	0.01617	1	320:
5% 5 2/40 [00:00<			0.04045		000
		0.007952	0.01617	1	320:
8% 7 3/40 [00:00< 466/499 0.206G 0		5.32it/s] 0.007726	0.01547	2	320:
8% 7 3/40 [00:00<			0.01547	2	320.
-	•	0.007726	0.01547	2	320:
10% # 4/40 [00:00			0.01017	2	020.
466/499 0.206G 0		0.007652	0.015	2	320:
10% # 4/40 [00:00					
466/499 0.206G 0			0.015	2	320:
12% #2 5/40 [00:00	<00:06,	5.33it/s]			
466/499 0.206G	0.0113	0.007037	0.01437	1	320:
12% #2 5/40 [00:01	<00:06,	5.33it/s]			
466/499 0.206G			0.01437	1	320:
15% #5 6/40 [00:01	<00:06,	5.46it/s]			

466/499	0.206G 0.01074 () 1	320:
15% #5 466/499	6/40 [00:01<00:06, 8 0.206G 0.01074 0	5.46it/s]).006533 0.01379	9 1	320:
18% #7	·	5.57it/s]		200
466/499 18% #7	0.206G 0.01012 (7/40 [00:01<00:05, 8	0.006008 0.01353 5.57it/s]	1	320:
466/499	0.206G 0.01012 0	0.006008 0.01353	1	320:
20% ## 466/499	8/40 [00:01<00:05, 5	5.65it/s] 0.005763 0.01351	l 1	320:
20% ##		5.65it/s]	_	020.
466/499		0.005763 0.01353	1	320:
22% ##2	9/40 [00:01<00:05, 5			200.
466/499 22% ##2	0.206G 0.01244 (0.006862 0.01363	3 2	320:
466/499	0.206G 0.01244 (3 2	320:
25% ##5	10/40 [00:01<00:05,		2	020.
466/499		0.007166 0.01509	5 2	320:
25% ##5	10/40 [00:01<00:05,			
466/499	0.206G 0.01483 (5 2	320:
28% ##7	11/40 [00:01<00:05,	5.59it/s]		
466/499	0.206G 0.01539 (0.007611 0.01589	9 4	320:
28% ##7	11/40 [00:02<00:05,	5.59it/s]		
466/499	0.206G 0.01539 (9 4	320:
30% ###	12/40 [00:02<00:05,			
466/499		0.007787 0.01644	1 4	320:
30% ###	12/40 [00:02<00:05,			
466/499	0.206G 0.01571 (1 4	320:
32% ###2	13/40 [00:02<00:04, 0.206G 0.01547 0			200.
466/499 32% ###2	0.206G 0.01547 (13/40 [00:02<00:04,		1 2	320:
466/499	0.206G 0.01547 (· =	1 2	320:
35% ###5	14/40 [00:02<00:04,		. 2	020.
466/499	0.206G 0.01549 (2 1	320:
35% ###5	14/40 [00:02<00:04,	5.59it/s]		
466/499	0.206G 0.01549 (2 1	320:
38% ###7	15/40 [00:02<00:04,	5.64it/s]		
466/499	0.206G 0.01512 0	0.007544 0.01643	L 2	320:
38% ###7	15/40 [00:02<00:04,	5.64it/s]		
466/499	0.206G 0.01512 (l 2	320:
40% ####	16/40 [00:02<00:04,		_	
466/499	0.206G 0.01668 (7 3	320:
40% ####	16/40 [00:03<00:04,		7	200
466/499 42% ####2	0.206G 0.01668 (17/40 [00:03<00:04,		7 3	320:
42% ####2		5.5811/8] 0.008011 0.01736	3 4	320:
42% ####2	17/40 [00:03<00:04,		, <u> </u>	020.
466/499	0.206G 0.01671 (3 4	320:
45% ####5	18/40 [00:03<00:04,			

45%	466/499	0.206G 0.01687 0.008389	0.01738	4	320:
48%		18/40 [00:03<00:04, 5.50it/s]			
466/499			0.01738	4	320:
48% #####					
466/499			0.01724	1	320:
50% ##### 20/40 [00:03<00:03, 5.66it/s] 466/499 0.206G			0.01704	4	200.
466/499			0.01724	1	320:
SON #####			0 017/10	1	320.
466/499			0.01749	4	320.
52% #########		•	0 01749	4	320.
A66/499			0.01745	4	020.
\$2\			0.01752	2	320:
466/499			0.02.02	_	0_0.
55% #####5			0.01752	2	320:
466/499	466/499	0.206G 0.01688 0.008716	0.01787	4	320:
57% #####7	55% #####5	22/40 [00:04<00:03, 5.28it/s]			
A66/499	466/499	0.206G 0.01688 0.008716	0.01787	4	320:
S7% #####7	57% #####7	23/40 [00:04<00:03, 5.21it/s]			
466/499	466/499	0.206G 0.01667 0.008565	0.01776	2	320:
Color	57% #####7	23/40 [00:04<00:03, 5.21it/s]			
466/499			0.01776	2	320:
60% ##### 24/40 [00:04<00:03, 5.31it/s]		•			
466/499			0.01759	1	320:
62% #####2 25/40 [00:04<00:02, 5.46it/s]					
466/499			0.01759	1	320:
62% ######2 25/40 [00:04<00:02, 5.46it/s] 466/499		•			
466/499			0.01768	4	320:
65% #####5 26/40 [00:04<00:02, 5.49it/s] 466/499 0.206G 0.01617 0.008559 0.01757 2 320: 65% #####5 26/40 [00:04<00:02, 5.49it/s] 466/499 0.206G 0.01617 0.008559 0.01757 2 320: 68% #####7 27/40 [00:04<00:02, 5.48it/s] 466/499 0.206G 0.01587 0.008385 0.01741 1 320: 68% #####7 27/40 [00:05<00:02, 5.48it/s] 466/499 0.206G 0.01587 0.008385 0.01741 1 320: 70% ####### 28/40 [00:05<00:02, 5.58it/s] 466/499 0.206G 0.01611 0.008231 0.0174 1 320: 70% ###### 28/40 [00:05<00:02, 5.58it/s] 466/499 0.206G 0.01611 0.008231 0.0174 1 320: 72% ####### 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320: 72% #######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320:					
466/499			0.01768	4	320:
65% #####5 26/40 [00:04<00:02, 5.49it/s] 466/499 0.206G 0.01617 0.008559 0.01757 2 320: 68% #####7 27/40 [00:04<00:02, 5.48it/s] 466/499 0.206G 0.01587 0.008385 0.01741 1 320: 68% #####7 27/40 [00:05<00:02, 5.48it/s] 466/499 0.206G 0.01587 0.008385 0.01741 1 320: 70% ###### 28/40 [00:05<00:02, 5.58it/s] 466/499 0.206G 0.01611 0.008231 0.0174 1 320: 70% ###### 28/40 [00:05<00:02, 5.58it/s] 466/499 0.206G 0.01611 0.008231 0.0174 1 320: 72% ######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320: 72% ######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320:		•	0.04757	0	000
466/499 0.206G 0.01617 0.008559 0.01757 2 320: 68% #####7 27/40 [00:04<00:02, 5.48it/s] 466/499 0.206G 0.01587 0.008385 0.01741 1 320: 68% #####7 27/40 [00:05<00:02, 5.48it/s] 466/499 0.206G 0.01587 0.008385 0.01741 1 320: 70% ####### 28/40 [00:05<00:02, 5.58it/s] 466/499 0.206G 0.01611 0.008231 0.0174 1 320: 70% ####### 28/40 [00:05<00:02, 5.58it/s] 466/499 0.206G 0.01611 0.008231 0.0174 1 320: 72% ####### 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320: 72% #######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320:			0.01757	2	320:
68% #####7 27/40 [00:04<00:02, 5.48it/s] 466/499 0.206G 0.01587 0.008385 0.01741 1 320: 68% #####7 27/40 [00:05<00:02, 5.48it/s] 466/499 0.206G 0.01587 0.008385 0.01741 1 320: 70% ###### 28/40 [00:05<00:02, 5.58it/s] 466/499 0.206G 0.01611 0.008231 0.0174 1 320: 70% ###### 28/40 [00:05<00:02, 5.58it/s] 466/499 0.206G 0.01611 0.008231 0.0174 1 320: 72% ####### 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320: 72% #######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320:			0.04757	0	000
466/499			0.01/5/	2	320:
68% #####7 27/40 [00:05<00:02, 5.48it/s] 466/499 0.206G 0.01587 0.008385 0.01741 1 320: 70% ######			0 01741	4	200.
466/499			0.01741	1	320:
70% ###### 28/40 [00:05<00:02, 5.58it/s] 466/499			0 017/11	1	320.
466/499			0.01741	1	320.
70% ###### 28/40 [00:05<00:02, 5.58it/s] 466/499		•	0 0174	1	320.
466/499 0.206G 0.01611 0.008231 0.0174 1 320: 72% ######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320: 72% #######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320:			0.0174	1	020.
72% #######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320: 72% ######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320:			0 0174	1	320
466/499 0.206G 0.0162 0.008193 0.01732 2 320: 72% ######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320:			0.0111	-	020.
72% #######2 29/40 [00:05<00:01, 5.60it/s] 466/499 0.206G 0.0162 0.008193 0.01732 2 320:			0.01732	2	320:
466/499 0.206G 0.0162 0.008193 0.01732 2 320:			-	_	
			0.01732	2	320:

466/499	0.206G 0.01616	0 008164	0.01741	2	320:
	30/40 [00:05<00:01,		0.01741	2	320.
466/499			0.01741	2	320:
·	31/40 [00:05<00:01,		0.01741	2	320.
_			0 0172	1	200.
466/499			0.0173	1	320:
	31/40 [00:05<00:01,		0.0470		000
466/499		0.008001	0.0173	1	320:
	32/40 [00:05<00:01,				
466/499			0.01751	4	320:
	32/40 [00:05<00:01,				
466/499	* * * * * * * * * * * * * * * * * *		0.01751	4	320:
	33/40 [00:05<00:01,				
466/499	0.206G 0.01597	0.00815	0.01745	2	320:
82% #######2	33/40 [00:06<00:01,	5.79it/s			
466/499	0.206G 0.01597	0.00815	0.01745	2	320:
85% #######5	34/40 [00:06<00:01,	5.80it/s			
466/499	0.206G 0.01604	0.008273	0.01749	4	320:
85% #######5	34/40 [00:06<00:01,	5.80it/s]			
466/499	0.206G 0.01604	0.008273	0.01749	4	320:
88% #######7	35/40 [00:06<00:00,	5.60it/s]			
466/499	0.206G 0.0161	0.008397	0.01756	4	320:
88% #######7	35/40 [00:06<00:00,				
	0.206G 0.0161		0.01756	4	320:
	36/40 [00:06<00:00,				
466/499			0.01742	2	320:
	36/40 [00:06<00:00,			_	0_0.
466/499	-		0.01742	2	320:
	37/40 [00:06<00:00,		0.01742	2	020.
466/499			0.01759	4	320:
·	37/40 [00:06<00:00,		0.01759	4	320.
466/499			0 01750	4	320:
	38/40 [00:06<00:00,		0.01759	4	320.
			0 01757	4	200.
466/499	0.206G 0.01603		0.01757	4	320:
	38/40 [00:07<00:00,		0.04858		222
466/499	0.206G 0.01603		0.01757	4	320:
	39/40 [00:07<00:00,				
466/499			0.01777	3	320:
	39/40 [00:07<00:00,	· -			
466/499			0.01777	3	320:
	40/40 [00:07<00:00				
466/499			0.01777	3	320:
100% #########	40/40 [00:07<00:00	, 5.53it/s]			
	•	Instances	P	R 1	mAP50
mAP50-95: 0%	0/20 [00	:00 , ?it/s]</td <td></td> <td></td> <td></td>			
	Class Images	Instances	P	R 1	mAP50
mAP50-95: 10%	# 2/20 [00	:00<00:01, 13	.46it/s]		
	Class Images	Instances	P	R 1	mAP50

MAP50-95:	2011##	Ι 4/20 Γο	0.00<00.01	14 05:+/al		
			0:00<00:01, Instances		R	mAP50
mAP50-95:		•	0:00<00:00,		16	IIIAI 50
MAI 50 55.	Class	Images			R	mAP50
mAP50-95:		_	0:00<00:00,		10	mai 00
	Class		Instances		R	mAP50
mAP50-95:		_	00:00<00:00			
	Class		Instances		R	mAP50
mAP50-95:	60% #####		00:00<00:00			
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	70% ######	14/20 [00:00<00:00	, 17.74it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	80% #######	16/20 [00:00<00:00	, 15.80it/s]		
	Class	•	Instances		R	mAP50
mAP50-95:	90% ########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########					
	all	40	40	0.962	0.965	0.994
0.805						
Fnoc	h CDII mom	how load	obi loga	ala loga	Tnatanaaa	Size
Epoc	h GPU_mem	DOX_TOSS	00]_1088	CIS_IOSS	Instances	2176
0%1	0/40 [00	:00 . ?i</td <td>t./sl</td> <td></td> <td></td> <td></td>	t./sl			
467/49			0.01287	0.0231	4	320:
0%	0.2004	0.02020				
9 / 0	Ι 0/40 Γ00:0	0 . ?it/</td <td></td> <td>0.0201</td> <td>-</td> <td></td>		0.0201	-	
467/49	0/40 [00:0 0.206G		s]			
467/49 2% 2	9 0.206G	0.02823	s] 0.01287		4	320:
2% 2	9 0.206G 1/40 [00:0	0.02823 0<00:06,	s] 0.01287 5.78it/s]	0.0231	4	320:
2% 2 467/49	9 0.206G 1/40 [00:0 9 0.206G	0.02823 0<00:06, 0.02669	s] 0.01287 5.78it/s] 0.01419			
2% 2 467/49 2% 2	9 0.206G 1/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06,	s] 0.01287 5.78it/s] 0.01419 5.78it/s]	0.0231	4	320: 320:
2% 2 467/49 2% 2 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G	0.02823 0<00:06, 0.02669 0<00:06, 0.02669	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419	0.0231	4	320:
2% 2 467/49 2% 2 467/49 5% 5	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06,	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s]	0.0231 0.02553 0.02553	4 4 4	320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188	0.0231	4	320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06,	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s]	0.0231 0.02553 0.02553 0.02144	4 4 4	320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 5% 5 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.02034	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188	0.0231 0.02553 0.02553	4 4 4	320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 5% 5 467/49 8% 7	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.02034	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s]	0.0231 0.02553 0.02553 0.02144 0.02144	4 4 4	320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 5% 5 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.02034 0<00:06,	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s] 0.01002	0.0231 0.02553 0.02553 0.02144	4 4 4 2 2	320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 8% 7 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.02034 0<00:06,	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s] 0.01002	0.0231 0.02553 0.02553 0.02144 0.02144	4 4 4 2 2	320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 8% 7 467/49 8% 7 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.02034 0<00:06, 0.01794 0<00:06, 0.01794	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s] 0.01002 5.63it/s]	0.0231 0.02553 0.02553 0.02144 0.02144 0.0199	4 4 4 2 2	320: 320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 8% 7 467/49 8% 7	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.02034 0<00:06, 0.01794 0<00:06, 0.01794	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s] 0.01002 5.63it/s] 0.01002 5.64it/s]	0.0231 0.02553 0.02553 0.02144 0.02144 0.0199	4 4 4 2 2	320: 320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 8% 7 467/49 8% 7 467/49 10% #	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.01794 0<00:06, 0.01794 00<00:06, 0.01794	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s] 0.01002 5.63it/s] 0.01002 5.64it/s] 0.008715	0.0231 0.02553 0.02553 0.02144 0.02144 0.0199 0.0199	4 4 2 2 1	320: 320: 320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 8% 7 467/49 8% 7 467/49 10% # 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.01794 0<00:06, 0.01794 00<00:06, 0.01794	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s] 0.01002 5.63it/s] 0.01002 5.64it/s] 0.008715 5.64it/s]	0.0231 0.02553 0.02553 0.02144 0.02144 0.0199 0.0199	4 4 2 2 1	320: 320: 320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 8% 7 467/49 8% 7 467/49 10% # 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.02034 0<00:06, 0.01794 0<00:06, 0.01794 00<00:06, 0.0168	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s] 0.01002 5.63it/s] 0.01002 5.64it/s] 0.008715 5.64it/s] 0.008715	0.0231 0.02553 0.02553 0.02144 0.02144 0.0199 0.0199	4 4 2 2 1 1	320: 320: 320: 320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 8% 7 467/49 8% 7 467/49 10% # 467/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 5/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.02034 0<00:06, 0.01794 0<00:06, 0.01794 00<00:06, 0.0168 00<00:06, 0.0168	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s] 0.01002 5.63it/s] 0.01002 5.64it/s] 0.008715 5.64it/s] 0.008715	0.0231 0.02553 0.02553 0.02144 0.02144 0.0199 0.0199	4 4 2 2 1 1	320: 320: 320: 320: 320: 320: 320:
2% 2 467/49 2% 2 467/49 5% 5 467/49 8% 7 467/49 8% 7 467/49 10% # 467/49 10% # 467/49 12% #2	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 5/40 [00:0	0.02823 0<00:06, 0.02669 0<00:06, 0.02669 0<00:06, 0.02034 0<00:06, 0.01794 0<00:06, 0.01794 00<00:06, 0.0168 00<00:06, 0.0168	s] 0.01287 5.78it/s] 0.01419 5.78it/s] 0.01419 5.47it/s] 0.01188 5.47it/s] 0.01188 5.63it/s] 0.01002 5.63it/s] 0.01002 5.64it/s] 0.008715 5.64it/s] 0.008715 5.76it/s] 0.008996	0.0231 0.02553 0.02553 0.02144 0.02144 0.0199 0.0199 0.01861 0.01861	4 4 4 2 2 1 1 1	320: 320: 320: 320: 320: 320: 320: 320:

15% #5				
467/499	0.206G 0.01677 0.008506	0.02052	1	320:
15% #5	6/40 [00:01<00:06, 5.61it/s]			
467/499	0.206G 0.01677 0.008506	0.02052	1	320:
18% #7	7/40 [00:01<00:05, 5.61it/s]	0.01050	0	200
,	0.206G 0.01769 0.008117 7/40 [00:01<00:05, 5.61it/s]	0.01959	2	320:
18% #7 467/499	0.206G 0.01769 0.008117	0.01959	2	320:
20% ##	8/40 [00:01<00:05, 5.51it/s]	0.01959	2	320.
467/499	0.206G 0.01698 0.007558	0.01939	1	320:
20% ##	8/40 [00:01<00:05, 5.51it/s]	0.01565	_	020.
467/499	0.206G 0.01698 0.007558	0.01939	1	320:
22% ##2	9/40 [00:01<00:05, 5.65it/s]	0.01000	_	020.
	0.206G 0.0165 0.007254	0.01943	1	320:
22% ##2	9/40 [00:01<00:05, 5.65it/s]		_	
467/499	0.206G 0.0165 0.007254	0.01943	1	320:
25% ##5	10/40 [00:01<00:05, 5.63it/s]			
467/499	0.206G 0.01547 0.006874	0.01881	1	320:
25% ##5	10/40 [00:01<00:05, 5.63it/s]			
467/499	0.206G 0.01547 0.006874	0.01881	1	320:
28% ##7	11/40 [00:01<00:05, 5.74it/s]			
	0.206G 0.01623 0.007425	0.0191	4	320:
28% ##7	11/40 [00:02<00:05, 5.74it/s]			
467/499	0.206G 0.01623 0.007425	0.0191	4	320:
30% ###	12/40 [00:02<00:05, 5.19it/s]			
467/499	0.206G 0.0176 0.008056	0.01952	4	320:
30% ###	12/40 [00:02<00:05, 5.19it/s]			
467/499	0.206G 0.0176 0.008056	0.01952	4	320:
32% ###2	13/40 [00:02<00:05, 5.36it/s]			
467/499	0.206G 0.01687 0.007759	0.01905	1	320:
32% ###2	13/40 [00:02<00:05, 5.36it/s]			
467/499	0.206G 0.01687 0.007759	0.01905	1	320:
35% ###5	14/40 [00:02<00:04, 5.49it/s]			
467/499	0.206G 0.01688 0.008158	0.01933	4	320:
35% ###5	14/40 [00:02<00:04, 5.49it/s]			
467/499	0.206G 0.01688 0.008158	0.01933	4	320:
38% ###7	15/40 [00:02<00:04, 5.31it/s]			
467/499	0.206G 0.01677 0.007962	0.01896	1	320:
38% ###7	15/40 [00:02<00:04, 5.31it/s]			
467/499	0.206G 0.01677 0.007962	0.01896	1	320:
40% ####	16/40 [00:02<00:04, 5.56it/s]			
467/499	0.206G 0.01669 0.008374	0.01908	4	320:
40% ####	16/40 [00:03<00:04, 5.56it/s]			
467/499	0.206G 0.01669 0.008374	0.01908	4	320:
42% ####2	17/40 [00:03<00:04, 5.49it/s]			
467/499	0.206G 0.0163 0.008176	0.01875	2	320:
42% ####2	17/40 [00:03<00:04, 5.49it/s]			
467/499	0.206G 0.0163 0.008176	0.01875	2	320:

45% ####5		18/40 [00:03<00:03,				
467/499		0.206G 0.01808		0.01901	2	320:
45% ####5	١	18/40 [00:03<00:03,				
467/499		0.206G 0.01808		0.01901	2	320:
48% ####7	ı	19/40 [00:03<00:03,				
467/499		0.206G 0.02001	0.008171	0.01913	3	320:
48% ####7	ı	19/40 [00:03<00:03,				
467/499		0.206G 0.02001	0.008171	0.01913	3	320:
50% #####	ı	20/40 [00:03<00:03,				
467/499		0.206G 0.01949	0.007904	0.01972	1	320:
50% #####	ı	20/40 [00:03<00:03,				
467/499		0.206G 0.01949		0.01972	1	320:
52% #####2	ı	21/40 [00:03<00:03,				
467/499		0.206G 0.0193		0.01943	1	320:
52% #####2	I	21/40 [00:03<00:03,				
467/499			0.007777	0.01943	1	320:
55% #####5	ı	22/40 [00:03<00:03,				
467/499		0.206G 0.0191	0.007594	0.01924	1	320:
55% #####5	-	22/40 [00:04<00:03,	· -			
467/499			0.007594	0.01924	1	320:
57% #####7	-	23/40 [00:04<00:03,	5.56it/s]			
467/499		0.206G 0.0201	0.007652	0.01909	2	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.56it/s]			
467/499		0.206G 0.0201	0.007652	0.01909	2	320:
60% ######	- 1	24/40 [00:04<00:02,	5.63it/s]			
467/499		0.206G 0.01963	0.00753	0.01879	1	320:
60% ######	- 1	24/40 [00:04<00:02,	5.63it/s]			
467/499		0.206G 0.01963	0.00753	0.01879	1	320:
62% #####2	- 1	25/40 [00:04<00:02,	5.67it/s]			
467/499		0.206G 0.01933	0.007475	0.0192	1	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.67it/s]			
467/499		0.206G 0.01933	0.007475	0.0192	1	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.71it/s			
467/499		0.206G 0.02	0.007517	0.01906	2	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.71it/s			
467/499		0.206G 0.02	0.007517	0.01906	2	320:
68% #####7	- 1	27/40 [00:04<00:02,	5.18it/s			
467/499		0.206G 0.01968	0.007487	0.01894	2	320:
68% #####7	- 1	27/40 [00:05<00:02,	5.18it/s			
467/499		0.206G 0.01968	0.007487	0.01894	2	320:
70% ######	- 1	28/40 [00:05<00:02,	5.35it/s			
467/499		0.206G 0.01965	0.007678	0.01898	4	320:
70% ######		28/40 [00:05<00:02,	5.35it/s]			
467/499		0.206G 0.01965	0.007678	0.01898	4	320:
72% #######2		29/40 [00:05<00:02,	5.09it/s]			
467/499		0.206G 0.02025	0.007724	0.01904	3	320:
72% #######2		29/40 [00:05<00:02,	5.09it/s]			
467/499		0.206G 0.02025	0.007724	0.01904	3	320:

75% ######5 30/40 [00:05<00:01, 5.03it/s] 467/499
75% ######5 30/40 [00:05<00:01, 5.03it/s] 467/499
467/499
78% ######7 31/40 [00:05<00:01, 4.99it/s] 467/499 0.206G 0.0209 0.007611 0.01866 1 320: 78% ######7 31/40 [00:05<00:01, 4.99it/s] 467/499 0.206G 0.0209 0.007611 0.01866 1 320:
467/499 0.206G 0.0209 0.007611 0.01866 1 320: 78% ######7 31/40 [00:05<00:01, 4.99it/s] 467/499 0.206G 0.0209 0.007611 0.01866 1 320:
78% ######7 31/40 [00:05<00:01, 4.99it/s] 467/499 0.206G 0.0209 0.007611 0.01866 1 320:
467/499 0.206G 0.0209 0.007611 0.01866 1 320:
·
00%
80% ####### 32/40 [00:05<00:01, 4.97it/s]
467/499 0.206G 0.02115 0.007829 0.01898 3 320:
80% ####### 32/40 [00:06<00:01, 4.97it/s]
467/499 0.206G 0.02115 0.007829 0.01898 3 320:
82% ######## 33/40 [00:06<00:01, 4.94it/s]
467/499 0.206G 0.02073 0.007689 0.0188 1 320:
82% ######## 33/40 [00:06<00:01, 4.94it/s]
467/499 0.206G 0.02073 0.007689 0.0188 1 320:
85% #######5 34/40 [00:06<00:01, 5.05it/s]
467/499 0.206G 0.02031 0.007586 0.01861 1 320:
85% #######5 34/40 [00:06<00:01, 5.05it/s]
467/499 0.206G 0.02031 0.007586 0.01861 1 320:
88% #######7 35/40 [00:06<00:01, 4.91it/s]
467/499 0.206G 0.02 0.007556 0.01847 2 320:
88% #######7 35/40 [00:06<00:01, 4.91it/s]
467/499 0.206G 0.02 0.007556 0.01847 2 320:
90% ####### 36/40 [00:06<00:00, 5.00it/s]
467/499 0.206G 0.0198 0.007465 0.01831 1 320:
90% ####### 36/40 [00:06<00:00, 5.00it/s]
467/499 0.206G 0.0198 0.007465 0.01831 1 320:
92% ########2 37/40 [00:06<00:00, 4.98it/s]
467/499 0.206G 0.02056 0.007549 0.01835 2 320:
92% ########2 37/40 [00:07<00:00, 4.98it/s]
467/499 0.206G 0.02056 0.007549 0.01835 2 320:
95% #######5 38/40 [00:07<00:00, 4.95it/s]
467/499 0.206G 0.02054 0.007772 0.01834 4 320:
95% #######5 38/40 [00:07<00:00, 4.95it/s]
467/499 0.206G 0.02054 0.007772 0.01834 4 320:
98% ########7 39/40 [00:07<00:00, 4.83it/s]
467/499 0.206G 0.02039 0.007656 0.01828 1 320:
98% #######7 39/40 [00:07<00:00, 4.83it/s]
467/499 0.206G 0.02039 0.007656 0.01828 1 320:
100% ######## 40/40 [00:07<00:00, 4.97it/s]
467/499 0.206G 0.02039 0.007656 0.01828 1 320:
100% ######## 40/40 [00:07<00:00, 5.30it/s]
Class Images Instances P R mAP50
mAP50-95: 0% 0/20 [00:00 , ?it/s]</td
Class Images Instances P R mAP50
mAP50-95: 10% # 2/20 [00:00<00:01, 14.55it/s]

	_	Instances		R	mAP50
mAP50-95: 20% ## Class		0:00<00:01, Instances		R	mAP50
		0:00<00:00, Instances	15.06it/s]	D	ADEO
Class mAP50-95: 40% ####	Images 8/20 [0	0:00<00:00,	16.19it/s]	R	mAP50
Class	•	Instances		R	mAP50
mAP50-95: 50% ##### Class		00:00<00:00, Instances		R	mAP50
		00:00<00:00,			
Class mAP50-95: 70% #######	•	Instances 00:00<00:00,		R	mAP50
Class	Images	Instances	Р	R	mAP50
mAP50-95: 80% ####### Class		00:01<00:00, Instances		R	mAP50
mAP50-95: 90% ########	_				
Class mAP50-95: 100% #########	•	Instances		R	mAP50
Class		Instances		R	mAP50
mAP50-95: 100% #########					
all 0.807	40	40	0.973	0.971	0.993
Epoch GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00:	00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
		0.01154	0.02176	4	320:
0% 0/40 [00:00 468/499		s] 0.01154	0.02176	4	320:
2% 2 1/40 [00:00			0.02170	T	320.
468/499 0.206G			0.01841	1	320:
2% 2 1/40 [00:00	<00:06,	6.31it/s]			
468/499 0.206G	0.03257	0.007866	0.01841	1	320:
5% 5 2/40 [00:00	<00:06,	5.70it/s			
468/499 0.206G	0.02421	0.007109	0.01903	2	320:
5% 5 2/40 [00:00	<00:06,	5.70it/s			
468/499 0.206G	0.02421	0.007109	0.01903	2	320:
8% 7 3/40 [00:00	<00:06,	5.75it/s			
468/499 0.206G	0.02171	0.007318	0.01752	2	320:
8% 7 3/40 [00:00					
		0.007318	0.01752	2	320:
10% # 4/40 [00:0					
		0.00888	0.01837	4	320:
10% # 4/40 [00:0					
468/499 0.206G			0.01837	4	320:
12% #2 5/40 [00:0			0.04772	_	200
468/499 0.206G			0.01776	2	320:
12% #2 5/40 [00:0	1700:00,	5.4/1t/S]			

468/499	0.206G 0.02085	0.008352	0.01776	2	320:
15% #5	6/40 [00:01<00:06,				
468/499		0.007699	0.01833	1	320:
15% #5 468/499	6/40 [00:01<00:06, 0.206G 0.02107	0.007699	0.01833	1	320:
18% #7	7/40 [00:01<00:05,		0.01000	1	020.
468/499		0.007722	0.01779	3	320:
18% #7	7/40 [00:01<00:05,				
468/499	0.206G 0.02005	0.007722	0.01779	3	320:
20% ##	8/40 [00:01<00:05,	5.87it/s]			
468/499	0.206G 0.01904	0.007199	0.01736	1	320:
20% ##	8/40 [00:01<00:05,				
468/499	0.206G 0.01904	0.007199	0.01736	1	320:
22% ##2	9/40 [00:01<00:05,				
468/499		0.006993	0.01702	1	320:
22% ##2	9/40 [00:01<00:05,				
468/499	0.206G 0.0183	0.006993	0.01702	1	320:
25% ##5	10/40 [00:01<00:05,		0.04775	0	200
468/499	0.206G 0.01937 10/40 [00:01<00:05,		0.01775	2	320:
25% ##5 468/499	•	0.007261	0 01775	2	320:
466/499 28% ##7	0.206G 0.01937 11/40 [00:01<00:05,		0.01775	2	320:
468/499	0.206G 0.01986		0.01812	3	320:
28% ##7	11/40 [00:02<00:05,		0.01012	3	020.
468/499		0.00818	0.01812	3	320:
30% ###	12/40 [00:02<00:04,		0.01011	•	0201
468/499	0.206G 0.01991		0.01769	2	320:
30% ###	12/40 [00:02<00:04,				
468/499	0.206G 0.01991		0.01769	2	320:
32% ###2	13/40 [00:02<00:04,	5.77it/s]			
468/499	0.206G 0.01954	0.008521	0.01749	2	320:
32% ###2	13/40 [00:02<00:04,	5.77it/s]			
468/499	0.206G 0.01954	0.008521	0.01749	2	320:
35% ###5	14/40 [00:02<00:04,	5.63it/s]			
468/499		0.008354	0.01745	2	320:
35% ###5	14/40 [00:02<00:04,				
468/499	0.206G 0.01879		0.01745	2	320:
38% ###7	15/40 [00:02<00:04,				
468/499	0.206G 0.01915		0.01747	1	320:
38% ###7	15/40 [00:02<00:04,		0 01747	4	200
468/499	0.206G 0.01915		0.01747	1	320:
40% ####	16/40 [00:02<00:04,		0 01700	1	200.
468/499 40% ####	0.206G 0.01863 16/40 [00:02<00:04,		0.01729	1	320:
468/499	0.206G 0.01863		0.01729	1	320:
408/499	17/40 [00:02<00:04,		0.01123	1	JZU.
468/499	0.206G 0.01806		0.01698	1	320:
42% ####2	17/40 [00:03<00:04,			_	2 -3.
	-				

468/499	0.206G 0.01806 0.007533	0.01698	1	320:
45% ####5	18/40 [00:03<00:03, 5.76it/s]			
468/499	0.206G 0.01845 0.007803	0.01755	4	320:
45% ####5	18/40 [00:03<00:03, 5.76it/s]			
468/499	0.206G 0.01845 0.007803	0.01755	4	320:
48% ####7	19/40 [00:03<00:03, 5.76it/s]	0.04754	0	200
468/499	0.206G 0.01868 0.007896	0.01751	2	320:
48% ####7 468/499	19/40 [00:03<00:03, 5.76it/s] 0.206G	0 01751	2	320:
50% #####	20/40 [00:03<00:03, 5.48it/s]	0.01751	2	320:
468/499	0.206G 0.01885 0.008143	0.01771	4	320:
50% #####	20/40 [00:03<00:03, 5.48it/s]	0.01771	4	320.
468/499	0.206G 0.01885 0.008143	0.01771	4	320:
52% #####2	21/40 [00:03<00:03, 5.43it/s]	0.01771	T	020.
468/499	0.206G 0.01868 0.008208	0.01749	2	320:
52% #####2	21/40 [00:03<00:03, 5.43it/s]	0.01740	2	020.
468/499	0.206G 0.01868 0.008208	0.01749	2	320:
55% #####5	22/40 [00:03<00:03, 5.54it/s]	0.01710	_	020.
468/499	0.206G 0.01917 0.008378	0.01768	4	320:
55% #####5	22/40 [00:04<00:03, 5.54it/s]	0.01700	-	020.
468/499	0.206G 0.01917 0.008378	0.01768	4	320:
57% #####7	23/40 [00:04<00:03, 5.34it/s]		_	
468/499	0.206G 0.02055 0.008467	0.01826	4	320:
57% #####7	23/40 [00:04<00:03, 5.34it/s]			
468/499	0.206G 0.02055 0.008467	0.01826	4	320:
60% ######	24/40 [00:04<00:02, 5.46it/s]			
468/499	0.206G 0.02005 0.008525	0.0181	2	320:
60% ######	24/40 [00:04<00:02, 5.46it/s]			
468/499	0.206G 0.02005 0.008525	0.0181	2	320:
62% #####2	25/40 [00:04<00:02, 5.41it/s]			
468/499	0.206G 0.02079 0.008524	0.01828	3	320:
62% #####2	25/40 [00:04<00:02, 5.41it/s]			
468/499	0.206G 0.02079 0.008524	0.01828	3	320:
65% #####5	26/40 [00:04<00:02, 5.25it/s]			
468/499	0.206G 0.02106 0.008743	0.01834	4	320:
65% ######5	26/40 [00:04<00:02, 5.25it/s]			
468/499	0.206G 0.02106 0.008743	0.01834	4	320:
68% #####7	27/40 [00:04<00:02, 5.27it/s]			
468/499	0.206G 0.02118 0.008747	0.01823	2	320:
68% ######7	27/40 [00:05<00:02, 5.27it/s]			
468/499	0.206G 0.02118 0.008747	0.01823	2	320:
70% #######	28/40 [00:05<00:02, 5.41it/s]			
468/499	0.206G 0.02166 0.008928	0.01876	2	320:
	28/40 [00:05<00:02, 5.41it/s]		_	
468/499	0.206G 0.02166 0.008928	0.01876	2	320:
72% #######2		0.04004		0.00
468/499	0.206G 0.02253 0.008818	0.01861	2	320:
72% ######2	29/40 [00:05<00:02, 5.39it/s]			

468/499	0.206G 0.02253	0.008818	0.01861	2	320:
75% ######5	30/40 [00:05<00:01,	5.49it/s]			
468/499	0.206G 0.02249		0.01872	4	320:
	30/40 [00:05<00:01,				
468/499			0.01872	4	320:
	31/40 [00:05<00:01,		0.01001	•	000
468/499			0.01881	2	320:
	31/40 [00:05<00:01,		0.04004	0	200
468/499			0.01881	2	320:
468/499	32/40 [00:05<00:01, 0.206G 0.02309		0.01875	2	320:
	32/40 [00:05<00:01,		0.01075	۷	320.
	0.206G 0.02309		0.01875	2	320:
	33/40 [00:05<00:01,		0.01073	۷	520.
	0.206G 0.02277		0.01864	2	320:
	33/40 [00:06<00:01,		0.01001	2	020.
468/499			0.01864	2	320:
	34/40 [00:06<00:01,		0.01001	_	020.
	0.206G 0.02308		0.01892	4	320:
·	34/40 [00:06<00:01,		0.01002	-	020.
468/499	•		0.01892	4	320:
	35/40 [00:06<00:00,		0.02002	-	0_0.
	0.206G 0.02265		0.01887	2	320:
	35/40 [00:06<00:00,				
468/499	0.206G 0.02265		0.01887	2	320:
90% ########	36/40 [00:06<00:00,				
468/499	-	0.009143	0.01875	4	320:
90% ########	36/40 [00:06<00:00,				
468/499		0.009143	0.01875	4	320:
92% ########2	37/40 [00:06<00:00,	5.32it/s			
468/499	0.206G 0.02254	0.009109	0.01864	2	320:
92% ########2	37/40 [00:06<00:00,	5.32it/s			
468/499	0.206G 0.02254	0.009109	0.01864	2	320:
95% ########5	38/40 [00:06<00:00,	5.46it/s]			
468/499	0.206G 0.02252	0.009075	0.01876	2	320:
95% ########5	38/40 [00:07<00:00,	5.46it/s]			
468/499	0.206G 0.02252	0.009075	0.01876	2	320:
98% ########7	39/40 [00:07<00:00,	5.26it/s]			
468/499	0.206G 0.02257	0.009036	0.01872	2	320:
98% ########7	39/40 [00:07<00:00,	5.26it/s			
468/499	0.206G 0.02257	0.009036	0.01872	2	320:
100% #########	40/40 [00:07<00:00	, 5.41it/s]			
468/499	0.206G 0.02257		0.01872	2	320:
100% ##########	40/40 [00:07<00:00	, 5.52it/s]			
	•	Instances	Р.	R	mAP50
mAP50-95: 0%		:00 , ?it/s]</td <td></td> <td></td> <td></td>			
	Class Images	Instances	Р	R	mAP50

	100/14	I 0/00 F0	0.00<00.00	10 07:+/~]		
mAP50-95:	10% # Class		0:00<00:00, Instances		R	mAP50
mAP50-95:		•	0:00<00:00,		It	MAF 50
MAI 00 30.	Class	Images			R	mAP50
mAP50-95:		_	0:00<00:00,		10	mm 00
	Class		Instances		R	mAP50
mAP50-95:		•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	50% #####	10/20 [00:00<00:00,	15.94it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	60% #####	12/20 [00:00<00:00,	15.82it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00,		_	
	Class	•	Instances		R	mAP50
mAP50-95:	90% ########					1750
ADEO OF	Class	•	Instances		R	mAP50
maP50-95:	100% ##########				D	ADEO
~ADEO 05.	Class 100% ##########	_	Instances		R	mAP50
MAP50-95:	all	40	40	0.985	0.975	0.993
0.807	all	40	40	0.905	0.915	0.993
0.001						
Epoc	h GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
	0/40 [00					
	9 0.206G	0.02322		0.01808	4	320:
0%	0/40 [00:0	=		0.04000	4	200
469/49				0.01808	4	320:
	1/40 [00:00 9			0.01688	2	320:
•	1 1/40 [00:0			0.01600	2	320:
	9 0.206G			0.01688	2	320:
	2/40 [00:0			0.01688	2	320.
469/49			0.0138	0.02043	4	320:
	2/40 [00:0			0.02043	-	320.
469/49				0.02043	4	320:
8% 7				0.02040	1	020.
			0.01216	0.02626	2	320:
469/49:	0.200		0.0			
469/49 8%17		0<00:06.	5.29it/sl			0201
8% 7	3/40 [00:0	-			2	
8% 7 469/49	3/40 [00:0	0.02711	0.01216	0.02626	2	320:
8% 7 469/49	3/40 [00:00 9	0.02711 00<00:07,	0.01216		2	
8% 7 469/49 10% #	3/40 [00:00 9	0.02711 00<00:07, 0.02314	0.01216 5.14it/s] 0.01024	0.02626		320:
8% 7 469/49 10% # 469/49	3/40 [00:00 9	0.02711 00<00:07, 0.02314 00<00:07,	0.01216 5.14it/s] 0.01024 5.14it/s]	0.02626		320:
8% 7 469/49 10% # 469/49 10% # 469/49	3/40 [00:00 9	0.02711 00<00:07, 0.02314 00<00:07, 0.02314	0.01216 5.14it/s] 0.01024 5.14it/s] 0.01024	0.02626	1	320: 320:

12% #2	5/40 [00:01<00:06, 5.34it/s			
469/499	0.206G 0.02081 0.00916		1	320:
15% #5	6/40 [00:01<00:06, 5.66it/s			
469/499	0.206G 0.02066 0.009977		4	320:
15% #5	6/40 [00:01<00:06, 5.66it/s			
469/499	0.206G 0.02066 0.009977		4	320:
18% #7	7/40 [00:01<00:06, 5.39it/s]		
469/499	0.206G 0.0196 0.009659		2	320:
18% #7	7/40 [00:01<00:06, 5.39it/s]		
469/499	0.206G 0.0196 0.009659	0.02066	2	320:
20% ##	8/40 [00:01<00:05, 5.50it/s]		
469/499	0.206G 0.019 0.009353	0.02029	2	320:
20% ##	8/40 [00:01<00:05, 5.50it/s]		
469/499	0.206G 0.019 0.009353	0.02029	2	320:
22% ##2	9/40 [00:01<00:05, 5.60it/s]		
469/499	0.206G 0.01866 0.009193	0.0198	2	320:
22% ##2	9/40 [00:01<00:05, 5.60it/s]		
469/499	0.206G 0.01866 0.009193	0.0198	2	320:
25% ##5	10/40 [00:01<00:05, 5.66it/	s]		
469/499	0.206G 0.01811 0.009476		4	320:
25% ##5	10/40 [00:01<00:05, 5.66it/	s]		
	0.206G 0.01811 0.009476		4	320:
28% ##7	11/40 [00:01<00:05, 5.69it/			
469/499	0.206G 0.01731 0.009047		1	320:
28% ##7	11/40 [00:02<00:05, 5.69it/			
469/499	0.206G 0.01731 0.009047		1	320:
30% ###	12/40 [00:02<00:05, 5.58it/			
469/499	0.206G 0.01651 0.008574		1	320:
30% ###	12/40 [00:02<00:05, 5.58it/			
469/499	0.206G 0.01651 0.008574		1	320:
32% ###2	13/40 [00:02<00:04, 5.50it/			
469/499	0.206G 0.0159 0.00824	_	1	320:
32% ###2	13/40 [00:02<00:04, 5.50it/			
469/499	0.206G 0.0159 0.00824		1	320:
35% ###5	14/40 [00:02<00:04, 5.57it/		_	
469/499	0.206G 0.01819 0.008234		2	320:
35% ###5	14/40 [00:02<00:04, 5.57it/		_	0201
469/499	0.206G 0.01819 0.008234		2	320:
38% ###7	15/40 [00:02<00:04, 5.49it/		_	020.
469/499	0.206G 0.01809 0.008532		4	320:
38% ###7	15/40 [00:02<00:04, 5.49it/		-	020.
469/499	0.206G 0.01809 0.008532		4	320:
40% ####	16/40 [00:02<00:04, 5.44it/		T	020.
469/499	0.206G 0.01765 0.008298		1	320:
40% ####	16/40 [00:03<00:04, 5.44it/		1	020.
469/499	0.206G 0.01765 0.008298		1	320:
42% ####2	17/40 [00:03<00:04, 5.28it/		1	020.
469/499	0.206G 0.01898 0.008211		4	320:
100/ 100	0.2000 0.01000 0.000211	0.02040	T	020.

42% ####2		17/40 [00:03<00:04,				
469/499		0.206G 0.01898		0.02046	4	320:
45% ####5	١	18/40 [00:03<00:04,				
469/499		0.206G 0.01831	0.007969	0.02004	1	320:
45% ####5	١	18/40 [00:03<00:04,				
469/499		0.206G 0.01831		0.02004	1	320:
48% ####7		19/40 [00:03<00:04,				
469/499		0.206G 0.01787		0.01966	1	320:
48% ####7	١	19/40 [00:03<00:04,				
469/499		0.206G 0.01787		0.01966	1	320:
50% #####		20/40 [00:03<00:03,				
469/499		0.206G 0.01734		0.01942	1	320:
50% #####	١	20/40 [00:03<00:03,				
469/499		0.206G 0.01734		0.01942	1	320:
52% #####2		21/40 [00:03<00:03,				
469/499		0.206G 0.01694		0.01916	1	320:
52% #####2		21/40 [00:04<00:03,				
469/499		0.206G 0.01694		0.01916	1	320:
55% #####5		22/40 [00:04<00:03,	5.04it/s			
469/499		0.206G 0.01885	0.007325	0.01965	3	320:
55% #####5		22/40 [00:04<00:03,	5.04it/s			
469/499		0.206G 0.01885	0.007325	0.01965	3	320:
57% #####7		23/40 [00:04<00:03,	5.01it/s			
469/499		0.206G 0.01843	0.007305	0.01937	2	320:
57% #####7	-	23/40 [00:04<00:03,	5.01it/s			
469/499		0.206G 0.01843	0.007305	0.01937	2	320:
60% ######		24/40 [00:04<00:03,	4.98it/s]			
469/499		0.206G 0.01851	0.007297	0.01944	2	320:
60% ######		24/40 [00:04<00:03,	4.98it/s]			
469/499		0.206G 0.01851	0.007297	0.01944	2	320:
62% ######2		25/40 [00:04<00:02,	5.07it/s			
469/499		0.206G 0.01846	0.007203	0.01954	2	320:
62% ######2	-	25/40 [00:04<00:02,	5.07it/s			
469/499		0.206G 0.01846	0.007203	0.01954	2	320:
65% ######5	-	26/40 [00:04<00:02,	5.14it/s			
469/499		0.206G 0.01805	0.007086	0.01957	1	320:
65% ######5	-	26/40 [00:05<00:02,	5.14it/s			
469/499		0.206G 0.01805	0.007086	0.01957	1	320:
68% #####7	-	27/40 [00:05<00:02,	5.07it/s			
469/499		0.206G 0.01771	0.007034	0.01938	2	320:
68% ######7	-	27/40 [00:05<00:02,	5.07it/s			
469/499		0.206G 0.01771	0.007034	0.01938	2	320:
70% ######	-	28/40 [00:05<00:02,	5.02it/s]			
469/499		0.206G 0.01738	0.006889	0.01929	1	320:
70% ######	-	28/40 [00:05<00:02,	5.02it/s]			
469/499		0.206G 0.01738	0.006889	0.01929	1	320:
72% #######2	1	29/40 [00:05<00:02,				
469/499		0.206G 0.0176	0.007083	0.01925	4	320:

	29/40 [00:05<00:02,				
469/499	0.206G 0.0176	0.007083	0.01925	4	320:
	30/40 [00:05<00:02,				
469/499	0.206G 0.01735		0.01904	2	320:
_	30/40 [00:05<00:02,				
469/499		0.007203	0.01904	2	320:
	31/40 [00:05<00:01,				
469/499		0.007332	0.01918	2	320:
	31/40 [00:06<00:01,				
469/499			0.01918	2	320:
80% #######	32/40 [00:06<00:01,	4.84it/s]			
469/499		0.00724	0.01903	1	320:
80% #######	32/40 [00:06<00:01,	4.84it/s]			
		0.00724	0.01903	1	320:
82% ########2	33/40 [00:06<00:01,	5.18it/s			
469/499	0.206G 0.0182	0.007128	0.01877	1	320:
82% ########2	33/40 [00:06<00:01,	5.18it/s			
469/499	0.206G 0.0182	0.007128	0.01877	1	320:
85% #######5	34/40 [00:06<00:01,	5.36it/s]			
469/499	0.206G 0.01903	0.007141	0.01864	2	320:
85% #######5	34/40 [00:06<00:01,	5.36it/s			
469/499	0.206G 0.01903	0.007141	0.01864	2	320:
88% #######7	35/40 [00:06<00:00,	5.47it/s			
469/499	0.206G 0.01878	0.007054	0.01863	2	320:
88% #######7	35/40 [00:06<00:00,	5.47it/s			
469/499	0.206G 0.01878	0.007054	0.01863	2	320:
90% ########	36/40 [00:06<00:00,	5.57it/s]			
469/499	0.206G 0.01882	0.007349	0.01859	4	320:
90% ########	36/40 [00:07<00:00,	5.57it/s]			
469/499	0.206G 0.01882	0.007349	0.01859	4	320:
92% ########2	37/40 [00:07<00:00,	5.31it/s]			
469/499	0.206G 0.01882	0.007444	0.01867	4	320:
92% ########2	37/40 [00:07<00:00,	5.31it/s]			
469/499		0.007444	0.01867	4	320:
	38/40 [00:07<00:00,				
469/499		0.007335	0.01852	1	320:
	38/40 [00:07<00:00,				
469/499	0.206G 0.01865		0.01852	1	320:
	39/40 [00:07<00:00,				
	0.206G 0.01855		0.01888	4	320:
	39/40 [00:07<00:00,				
469/499		0.007467	0.01888	4	320:
	40/40 [00:07<00:00			=	
		0.007467	0.01888	4	320:
	40/40 [00:07<00:00				
	Class Images	Instances	Р	R	mAP50
mAP50-95: 0%	•	:00 , ?it/s</td <td></td> <td></td> <td></td>			
	,	, ,,	_		

		_	Instances		R	mAP50
mAP50-95: 10%	# Class		00:00<00:01, Instances		R	mAP50
mAP50-95: 20%			00:00<00:00, Instances	16.26it/s]	D	ADEO
mAP50-95: 30%	Class	Images 6/20 [00:00<00:00,	16.14it/s]	R	mAP50
ADEO OF : 40%	Class	_	Instances 00:00<00:00,		R	mAP50
mAP50-95: 40%	#### Class		Instances		R	mAP50
mAP50-95: 50%			[00:00<00:00			ADEO
mAP50-95: 60%	Class #####	•	Instances [00:00<00:00		R	mAP50
ADEO OF : 70%	Class	_	Instances		R	mAP50
mAP50-95: 70%	###### Class		[00:00<00:00] Instances		R	mAP50
mAP50-95: 80%			[00:00<00:00			ADEO
mAP50-95: 90%	Class #######	_	Instances [00:01<00:00		R	mAP50
	Class	_	Instances		R	mAP50
mAP50-95: 100%	######### Class		[00:01<00:00] Instances		R	mAP50
mAP50-95: 100%	########	20/20	[00:01<00:00	, 16.98it/s]		
0.807	all	40	40	0.985	0.975	0.993
Epoch	GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
Epoch			-	cls_loss	Instances	Size
0% 470/499	0/40 [00: 0.206G	00 , ?<br 0.00934	it/s] 0.004615	o.0144	Instances	Size 320:
0% 470/499 0%	0/40 [00:	00 , ?<br 0.00934 , ?it</td <td>it/s] 0.004615 /s]</td> <td></td> <td></td> <td></td>	it/s] 0.004615 /s]			
0% 470/499 0%	0/40 [00: 0.206G 0/40 [00:00 0.206G	00 , ?<br 0.00934 , ?it<br 0.00934	it/s] 0.004615 /s] 0.004615	0.0144	1	320:
0% 470/499 0% 470/499	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00	00 , ?<br 0.00934 , ?it<br 0.00934 <00:06,	it/s] 0.004615 /s] 0.004615 6.40it/s]	0.0144	1	320:
0% 470/499 0% 470/499 2% 2 470/499 2% 2	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0	00 , ?<br 0.00934 , ?it<br 0.00934 <00:06, .009674 <00:06,	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s]	0.0144 0.0144 0.01384	1 1 1	320: 320: 320:
0% 470/499 0% 470/499 2% 2 470/499 2% 2 470/499	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0	00 , ?<br 0.00934 , ?it<br 0.00934 <00:06, .009674 <00:06,	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146	0.0144	1	320: 320:
0% 470/499 0% 470/499 2% 2 470/499 2% 2 470/499 5% 5	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, .009674 <00:06,</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s]</td> <td>0.0144 0.0144 0.01384 0.01384</td> <td>1 1 1</td> <td>320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s]	0.0144 0.0144 0.01384 0.01384	1 1 1	320: 320: 320: 320:
0% 470/499 0% 470/499 2% 2 470/499 2% 2 470/499 5% 5 470/499	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0 2/40 [00:00 0.206G	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, .009674 <00:06, 0.01374</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764</td> <td>0.0144 0.0144 0.01384</td> <td>1 1 1</td> <td>320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764	0.0144 0.0144 0.01384	1 1 1	320: 320: 320:
0% 470/499 0% 470/499 2% 2 470/499 2% 2 470/499 5% 5 470/499 5% 5	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0 2/40 [00:00 0.206G 2/40 [00:00	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, .009674 <00:06, 0.01374 <00:06,</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s]</td> <td>0.0144 0.0144 0.01384 0.01384 0.01545</td> <td>1 1 1 1</td> <td>320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s]	0.0144 0.0144 0.01384 0.01384 0.01545	1 1 1 1	320: 320: 320: 320:
0% 470/499 0% 470/499 2% 2 470/499 2% 2 470/499 5% 5 470/499 5% 5 470/499	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0 2/40 [00:00 0.206G 2/40 [00:00 0.206G	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, .009674 <00:06, 0.01374 <00:06, 0.01374</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764</td> <td>0.0144 0.0144 0.01384 0.01384</td> <td>1 1 1</td> <td>320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764	0.0144 0.0144 0.01384 0.01384	1 1 1	320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, 0.01374 <00:06, 0.01374 <00:06,</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s]</td> <td>0.0144 0.0144 0.01384 0.01384 0.01545</td> <td>1 1 1 4 4</td> <td>320: 320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s]	0.0144 0.0144 0.01384 0.01384 0.01545	1 1 1 4 4	320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, 0.01374 <00:06, 0.01374 <00:06, 0.01374</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726</td> <td>0.0144 0.0144 0.01384 0.01384 0.01545</td> <td>1 1 1 1</td> <td>320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726	0.0144 0.0144 0.01384 0.01384 0.01545	1 1 1 1	320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, 0.01374 <00:06, 0.01374 <00:06, 0.01414 <00:06,</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726</td> <td>0.0144 0.0144 0.01384 0.01384 0.01545</td> <td>1 1 1 4 4</td> <td>320: 320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726	0.0144 0.0144 0.01384 0.01384 0.01545	1 1 1 4 4	320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, 0.01374 <00:06, 0.01374 <00:06, 0.01414 <00:06, 0.01414</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726 5.55it/s] 0.006726</td> <td>0.0144 0.0144 0.01384 0.01384 0.01545 0.01545</td> <td>1 1 1 4 4</td> <td>320: 320: 320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726 5.55it/s] 0.006726	0.0144 0.0144 0.01384 0.01384 0.01545 0.01545	1 1 1 4 4	320: 320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, 0.01374 <00:06, 0.01374 <00:06, 0.01414 <00:06, 0.01414 0<00:06</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726 5.55it/s] 0.006726 , 5.65it/s]</td> <td>0.0144 0.0144 0.01384 0.01384 0.01545 0.01545</td> <td>1 1 1 4 4</td> <td>320: 320: 320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726 5.55it/s] 0.006726 , 5.65it/s]	0.0144 0.0144 0.01384 0.01384 0.01545 0.01545	1 1 1 4 4	320: 320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G 0/40 [00:00 0.206G 1/40 [00:00 0.206G 0 1/40 [00:00 0.206G 0 2/40 [00:00 0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 1/40 [00:00 0.206G 1/40 [00:00 0.206G	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, 0.01374 <00:06, 0.01374 <00:06, 0.01414 <00:06, 0.01414 0<00:06 0.01337 0<00:06</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726 5.55it/s] 0.006726 , 5.65it/s] 0.006479 , 5.65it/s]</td> <td>0.0144 0.0144 0.01384 0.01384 0.01545 0.01545 0.01537 0.01537</td> <td>1 1 1 4 4 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726 5.55it/s] 0.006726 , 5.65it/s] 0.006479 , 5.65it/s]	0.0144 0.0144 0.01384 0.01384 0.01545 0.01545 0.01537 0.01537	1 1 1 4 4 1	320: 320: 320: 320: 320: 320: 320: 320:
0%	0/40 [00: 0.206G	00 , ? 0.00934 <?, ?it 0.00934 <00:06, .009674 <00:06, 0.01374 <00:06, 0.01374 <00:06, 0.01414 <00:06, 0.01414 0<00:06 0.01337 0<00:06</td <td>it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726 5.55it/s] 0.006726 , 5.65it/s] 0.006479 , 5.65it/s]</td> <td>0.0144 0.0144 0.01384 0.01384 0.01545 0.01545 0.01537</td> <td>1 1 1 4 4 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	it/s] 0.004615 /s] 0.004615 6.40it/s] 0.004146 6.40it/s] 0.004146 5.64it/s] 0.007764 5.64it/s] 0.007764 5.55it/s] 0.006726 5.55it/s] 0.006726 , 5.65it/s] 0.006479 , 5.65it/s]	0.0144 0.0144 0.01384 0.01384 0.01545 0.01545 0.01537	1 1 1 4 4 1	320: 320: 320: 320: 320: 320: 320:

	0.206G 0.01453		0.01465	1	320:
12% #2 470/499	5/40 [00:01<00:05, 0.206G	5.86it/s] 0.006377	0.01465	1	320:
15% #5	6/40 [00:01<00:05,				
470/499			0.0148	1	320:
15% #5 470/499	6/40 [00:01<00:05, 0.206G	0.006068	0.0148	1	320:
18% #7	7/40 [00:01<00:05,		010220	_	0201
470/499	0.206G 0.01597	0.005756	0.01463	1	320:
18% #7	7/40 [00:01<00:05,				
470/499	0.206G 0.01597		0.01463	1	320:
20% ##	8/40 [00:01<00:05,		0.04400	•	000
470/499		0.006126	0.01469	2	320:
20% ##	8/40 [00:01<00:05, 0.206G 0.0166		0.01460	2	200.
470/499		0.006126	0.01469	2	320:
22% ##2	9/40 [00:01<00:05, 0.206G 0.01718		0.01520	4	320:
470/499	9/40 [00:01<00:05,	0.006632	0.01539	4	320:
22% ##2 470/499	0.206G 0.01718		0.01520	4	320:
470/499 25% ##5	10/40 [00:01<00:05,		0.01539	4	320:
_	0.206G 0.0188		0.01634	2	320:
25% ##5	10/40 [00:01<00:05,		0.01034	2	320.
470/499	0.206G 0.0188		0.01634	2	320:
28% ##7	11/40 [00:01<00:05,		0.01034	Z	320.
470/499		0.006464	0.01633	1	320:
28% ##7	11/40 [00:02<00:05,		0.01033	1	320.
470/499	0.206G 0.01797		0.01633	1	320:
30% ###	12/40 [00:02<00:04,		0.01033	1	520.
470/499		0.006871	0.01702	2	320:
30% ###	12/40 [00:02<00:04,		0.01702	2	020.
470/499	0.206G 0.01953		0.01702	2	320:
32% ###2	13/40 [00:02<00:04,		0.01102	_	020.
470/499	0.206G 0.0196		0.01807	2	320:
32% ###2	13/40 [00:02<00:04,		0.0000	_	0201
470/499		0.006879	0.01807	2	320:
35% ###5	14/40 [00:02<00:04,				
470/499		0.00687	0.01817	1	320:
35% ###5	14/40 [00:02<00:04,				
470/499	0.206G 0.01967	0.00687	0.01817	1	320:
38% ###7	15/40 [00:02<00:04,	5.44it/s]			
470/499	0.206G 0.01998	0.006887	0.01829	2	320:
38% ###7	15/40 [00:02<00:04,	5.44it/s]			
470/499	0.206G 0.01998	0.006887	0.01829	2	320:
40% ####	16/40 [00:02<00:04,	5.40it/s]			
470/499	0.206G 0.02054	0.007216	0.01864	4	320:
40% ####	16/40 [00:03<00:04,	5.40it/s]			
470/499	0.206G 0.02054	0.007216	0.01864	4	320:
42% ####2	17/40 [00:03<00:04,	5.52it/s]			

470/499	0.206G 0.02109 0.007666	0.01892	4	320:
42% ####2	17/40 [00:03<00:04, 5.52it/s]			
470/499	0.206G 0.02109 0.007666	0.01892	4	320:
45% ####5	18/40 [00:03<00:03, 5.60it/s]			
470/499	0.206G 0.021 0.007986	0.01884	4	320:
45% ####5	18/40 [00:03<00:03, 5.60it/s]	0.04004		200
470/499	0.206G 0.021 0.007986	0.01884	4	320:
48% ####7	19/40 [00:03<00:03, 5.35it/s]	0.01044	4	200.
470/499 48% ####7	0.206G 0.02028 0.007712 19/40 [00:03<00:03, 5.35it/s]	0.01844	1	320:
470/499	0.206G 0.02028 0.007712	0.01844	1	320:
50% #####	20/40 [00:03<00:03, 5.10it/s]	0.01044	1	320.
470/499	0.206G 0.01974 0.007472	0.01831	1	320:
50% #####	20/40 [00:03<00:03, 5.10it/s]	0.01031	1	320.
470/499	0.206G 0.01974 0.007472	0.01831	1	320:
52% #####2	21/40 [00:03<00:03, 5.43it/s]	0.01001	•	020.
470/499	0.206G 0.02049 0.007802	0.01857	3	320:
52% #####2	21/40 [00:03<00:03, 5.43it/s]	0.01001	Ü	020.
470/499	0.206G 0.02049 0.007802	0.01857	3	320:
55% #####5	22/40 [00:03<00:03, 5.26it/s]	0.0200.		0_0.
470/499	0.206G 0.02102 0.00782	0.01879	3	320:
55% #####5	22/40 [00:04<00:03, 5.26it/s]			
470/499	0.206G 0.02102 0.00782	0.01879	3	320:
57% #####7	23/40 [00:04<00:03, 5.41it/s]			
470/499	0.206G 0.02061 0.007647	0.01852	1	320:
57% #####7	23/40 [00:04<00:03, 5.41it/s]			
470/499	0.206G 0.02061 0.007647	0.01852	1	320:
60% ######	24/40 [00:04<00:02, 5.52it/s]			
470/499	0.206G 0.02034 0.007691	0.01825	2	320:
60% ######	24/40 [00:04<00:02, 5.52it/s]			
470/499	0.206G 0.02034 0.007691	0.01825	2	320:
62% #####2	25/40 [00:04<00:02, 5.61it/s]			
470/499	0.206G 0.02011 0.00755	0.01814	1	320:
62% #####2	25/40 [00:04<00:02, 5.61it/s]			
470/499	0.206G 0.02011 0.00755	0.01814	1	320:
65% #####5	26/40 [00:04<00:02, 5.52it/s]			
470/499	0.206G 0.01997 0.007778	0.01812	4	320:
65% ######5	26/40 [00:04<00:02, 5.52it/s]			
470/499	0.206G 0.01997 0.007778	0.01812	4	320:
68% ######7	27/40 [00:04<00:02, 5.61it/s]			
470/499	0.206G 0.02012 0.007729	0.01843	2	320:
68% ######7	27/40 [00:05<00:02, 5.61it/s]			
470/499	0.206G 0.02012 0.007729	0.01843	2	320:
70% #######	28/40 [00:05<00:02, 5.49it/s]		_	
470/499	0.206G 0.01975 0.00768	0.01833	2	320:
70% #######	28/40 [00:05<00:02, 5.49it/s]	0.04000		0.00
470/499	0.206G 0.01975 0.00768	0.01833	2	320:
72% ######2	29/40 [00:05<00:01, 5.59it/s]			

470/499	0.206G 0.01992	0.008072	0.01835	4	320:
	29/40 [00:05<00:01,		0.01000	-	020.
470/499	0.206G 0.01992		0.01835	4	320:
	30/40 [00:05<00:01,				
470/499	-	0.00799	0.01833	2	320:
75% ######5	30/40 [00:05<00:01,	5.37it/s]			
470/499	-		0.01833	2	320:
78% #######7	31/40 [00:05<00:01,	5.47it/s]			
470/499	0.206G 0.02021	0.008285	0.01858	4	320:
78% ######7	31/40 [00:05<00:01,	5.47it/s]			
470/499	0.206G 0.02021	0.008285	0.01858	4	320:
80% #######	32/40 [00:05<00:01,	5.57it/s			
470/499	0.206G 0.02073	0.008411	0.01856	4	320:
80% #######	32/40 [00:05<00:01,	5.57it/s			
470/499	0.206G 0.02073	0.008411	0.01856	4	320:
82% #######2	33/40 [00:05<00:01,	5.49it/s			
470/499	0.206G 0.02043		0.01846	1	320:
	33/40 [00:06<00:01,				
470/499			0.01846	1	320:
	34/40 [00:06<00:01,				
470/499		0.008272	0.01832	2	320:
	34/40 [00:06<00:01,				
470/499	0.206G 0.02038		0.01832	2	320:
	35/40 [00:06<00:00,				
470/499	0.206G 0.02013	0.008149	0.01822	1	320:
	35/40 [00:06<00:00,				
470/499			0.01822	1	320:
	36/40 [00:06<00:00,		0.04040		000
470/499		0.0083	0.01819	4	320:
	36/40 [00:06<00:00,		0.01010	4	200
470/499		0.0083	0.01819	4	320:
	37/40 [00:06<00:00,		0 010/1	1	200.
	0.206G 0.02063 37/40 [00:06<00:00,		0.01041	4	320:
470/499		0.0086	0.01841	4	320:
	38/40 [00:06<00:00,		0.01041	4	320.
470/499		0.008531	0.01834	1	320:
	38/40 [00:07<00:00,		0.01004	_	020.
470/499		0.008531	0.01834	1	320:
	39/40 [00:07<00:00,		0.01001	-	020.
	0.206G 0.02018		0.01834	2	320:
	39/40 [00:07<00:00,		0.0000	_	0201
470/499	0.206G 0.02018		0.01834	2	320:
	40/40 [00:07<00:00			_	
470/499	0.206G 0.02018		0.01834	2	320:
	40/40 [00:07<00:00				
		_			
	Class Images	Instances	P	R	mAP50

mAP50-95:	0%	I 0/20 [0	0.00<2 2i+/	'al		
			Instances		R	mAP50
mAP50-95:	10% #	_	0:00<00:00,		10	mm 00
	Class	_	Instances		R	mAP50
mAP50-95:	20% ##	_	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	30% ###	•	0:00<00:00,			
	Class	Images	Instances	P	R	mAP50
mAP50-95:	40% ####	8/20 [0	0:00<00:00,	18.12it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	50% #####	10/20 [00:00<00:00,	15.76it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	60% ######	12/20 [00:00<00:00,	16.52it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	70% ######	14/20 [00:00<00:00,	16.35it/s]		
		•	Instances		R	mAP50
mAP50-95:						
	Class	•	Instances		R	mAP50
mAP50-95:	95% #########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% ########					
	all	40	40	0.98	0.975	0.992
0.791						
Ерос	h GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
0%	Ι 0/40 Γο	0.00/2 2:	+ /-1			
	9 0.206G			0 04100	2	320:
471/49 0%				0.04122	2	320:
	9 0.206G			0.04122	2	320:
	1/40 [00:			0.04122	Z	320.
	9 0.206G					
		0.00000	0 007212	0 02763	1	320.
2/0 2	1 1/40 100.0	00<00.06		0.02763	1	320:
471/40	9 0 2066		5.84it/s]			
	9 0.206G	0.03599	5.84it/s] 0.007212	0.02763	1	320: 320:
5% 5	9 0.206G 2/40 [00:	0.03599 00<00:06,	5.84it/s] 0.007212 5.83it/s]	0.02763	1	320:
5% 5 471/49	9 0.206G 2/40 [00: 9 0.206G	0.03599 00<00:06, 0.03049	5.84it/s] 0.007212 5.83it/s] 0.006985			
5% 5 471/49 5% 5	9 0.206G 2/40 [00: 9 0.206G 2/40 [00:	0.03599 00<00:06, 0.03049 00<00:06,	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s]	0.02763	1 2	320: 320:
5% 5 471/49 5% 5 471/49	9 0.206G 2/40 [00: 9 0.206G 2/40 [00: 9 0.206G	0.03599 00<00:06, 0.03049 00<00:06, 0.03049	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s] 0.006985	0.02763	1	320:
5% 5 471/49 5% 5	9 0.206G 2/40 [00: 9 0.206G 2/40 [00: 9 0.206G 3/40 [00:	0.03599 00<00:06, 0.03049 00<00:06, 0.03049 00<00:06,	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s] 0.006985 5.56it/s]	0.02763 0.02374 0.02374	1 2 2	320: 320: 320:
5% 5 471/49 5% 5 471/49 8% 7 471/49	9 0.206G 2/40 [00: 9 0.206G 2/40 [00: 9 0.206G 3/40 [00: 9 0.206G	0.03599 00<00:06, 0.03049 00<00:06, 0.03049 00<00:06, 0.02577	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s] 0.006985 5.56it/s] 0.006171	0.02763	1 2	320: 320:
5% 5 471/49 5% 5 471/49 8% 7 471/49	9 0.206G 2/40 [00:0] 9 0.206G 2/40 [00:0] 9 0.206G 3/40 [00:0] 9 0.206G	0.03599 00<00:06, 0.03049 00<00:06, 0.03049 00<00:06, 0.02577	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s] 0.006985 5.56it/s] 0.006171	0.02763 0.02374 0.02374 0.02197	1 2 2	320: 320: 320: 320:
5% 5 471/49 5% 5 471/49 8% 7 471/49	9 0.206G 2/40 [00:0] 9 0.206G 2/40 [00:0] 9 0.206G 3/40 [00:0] 9 0.206G 3/40 [00:0]	0.03599 00<00:06, 0.03049 00<00:06, 0.03049 00<00:06, 0.02577 00<00:06, 0.02577	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s] 0.006985 5.56it/s] 0.006171 5.56it/s]	0.02763 0.02374 0.02374	1 2 2 1	320: 320: 320:
5% 5 471/49 5% 5 471/49 8% 7 471/49 8% 7 471/49	9 0.206G 2/40 [00: 9 0.206G 2/40 [00: 9 0.206G 3/40 [00: 9 0.206G 3/40 [00: 9 0.206G 4/40 [00	0.03599 00<00:06, 0.03049 00<00:06, 0.03049 00<00:06, 0.02577 00<00:06, 0.02577	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s] 0.006985 5.56it/s] 0.006171 5.56it/s] 0.006171 5.66it/s]	0.02763 0.02374 0.02374 0.02197	1 2 2 1	320: 320: 320: 320:
5% 5 471/49 5% 5 471/49 8% 7 471/49 10% #	9 0.206G 2/40 [00:4] 9 0.206G 2/40 [00:4] 9 0.206G 3/40 [00:4] 9 0.206G 3/40 [00:4] 9 0.206G 4/40 [00] 9 0.206G	0.03599 00<00:06, 0.03049 00<00:06, 0.03049 00<00:06, 0.02577 00<00:06, 0.02577:00<00:06, 0.02577	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s] 0.006985 5.56it/s] 0.006171 5.56it/s] 0.006171 5.66it/s]	0.02763 0.02374 0.02374 0.02197 0.02197	1 2 2 1	320: 320: 320: 320:
5% 5 471/49 5% 5 471/49 8% 7 471/49 10% # 471/49	9 0.206G 2/40 [00:4] 9 0.206G 2/40 [00:4] 9 0.206G 3/40 [00:4] 9 0.206G 3/40 [00:4] 9 0.206G 4/40 [00] 9 0.206G 4/40 [00]	0.03599 00<00:06, 0.03049 00<00:06, 0.03577 00<00:06, 0.02577 :00<00:06, 0.02577 :00<00:06,	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s] 0.006985 5.56it/s] 0.006171 5.56it/s] 0.006171 5.66it/s] 0.00769 5.66it/s]	0.02763 0.02374 0.02374 0.02197 0.02197	1 2 2 1	320: 320: 320: 320:
5% 5 471/49 5% 5 471/49 8% 7 471/49 10% # 471/49 10% # 471/49	9 0.206G 2/40 [00:4] 9 0.206G 2/40 [00:4] 9 0.206G 3/40 [00:4] 9 0.206G 3/40 [00:4] 9 0.206G 4/40 [00] 9 0.206G 4/40 [00]	0.03599 00<00:06, 0.03049 00<00:06, 0.03049 00<00:06, 0.02577 00<00:06, 0.02577 :00<00:06, 0.0262	5.84it/s] 0.007212 5.83it/s] 0.006985 5.83it/s] 0.006985 5.56it/s] 0.006171 5.56it/s] 0.006171 5.66it/s] 0.00769 5.66it/s] 0.00769	0.02763 0.02374 0.02374 0.02197 0.02197	1 2 2 1 1 4	320: 320: 320: 320: 320:

12% #2	5/40 [00:01<00:06, 5.72it/s]			
471/499	0.206G 0.02531 0.008819	0.02054	4	320:
15% #5	6/40 [00:01<00:06, 5.42it/s]			
471/499	0.206G 0.02423 0.01009	0.0197	4	320:
15% #5	6/40 [00:01<00:06, 5.42it/s]			
471/499		0.0197	4	320:
18% #7	7/40 [00:01<00:06, 4.98it/s]			
471/499	0.206G 0.02366 0.01011	0.01995	2	320:
18% #7	7/40 [00:01<00:06, 4.98it/s]			
471/499	0.206G 0.02366 0.01011	0.01995	2	320:
20% ##	8/40 [00:01<00:06, 4.94it/s]			
471/499	0.206G 0.02376 0.01088	0.02071	4	320:
20% ##	8/40 [00:01<00:06, 4.94it/s]			
471/499	0.206G 0.02376 0.01088	0.02071	4	320:
22% ##2	9/40 [00:01<00:06, 4.82it/s]			
471/499	0.206G 0.02336 0.01106	0.02056	4	320:
22% ##2	9/40 [00:01<00:06, 4.82it/s]			
471/499	0.206G 0.02336 0.01106	0.02056	4	320:
25% ##5	10/40 [00:01<00:06, 4.97it/s]			
471/499	0.206G 0.02214 0.0105	0.02008	1	320:
25% ##5	10/40 [00:02<00:06, 4.97it/s]			
471/499	0.206G 0.02214 0.0105	0.02008	1	320:
28% ##7	11/40 [00:02<00:05, 4.93it/s]			
471/499	0.206G 0.02133 0.01018		2	320:
28% ##7	11/40 [00:02<00:05, 4.93it/s]			
471/499	0.206G 0.02133 0.01018		2	320:
30% ###	12/40 [00:02<00:05, 4.93it/s]			
471/499	0.206G 0.0204 0.009605	0.01975	1	320:
30% ###	12/40 [00:02<00:05, 4.93it/s]			
471/499	0.206G 0.0204 0.009605		1	320:
32% ###2	13/40 [00:02<00:05, 5.13it/s]			
471/499	0.206G 0.02003 0.009434		2	320:
32% ###2	13/40 [00:02<00:05, 5.13it/s]			
471/499	0.206G 0.02003 0.009434	0.01925	2	320:
35% ###5	14/40 [00:02<00:05, 5.07it/s]			
471/499	0.206G 0.01982 0.00943	0.02002	4	320:
35% ###5	14/40 [00:02<00:05, 5.07it/s]			
471/499	0.206G 0.01982 0.00943	0.02002	4	320:
38% ###7	15/40 [00:02<00:04, 5.15it/s]			
471/499	0.206G 0.01954 0.00923	0.01942	1	320:
38% ###7	15/40 [00:03<00:04, 5.15it/s]			
471/499	0.206G 0.01954 0.00923	0.01942	1	320:
40% ####	16/40 [00:03<00:04, 5.08it/s]	0.01011	_	0_0.
471/499	0.206G 0.0195 0.009506	0.01954	4	320:
40% ####	16/40 [00:03<00:04, 5.08it/s]	0.02001	-	220.
471/499	0.206G 0.0195 0.009506	0.01954	4	320:
42% ####2	17/40 [00:03<00:04, 5.02it/s]		-	
471/499	0.206G 0.02061 0.009406	0.01961	2	320:
, 100			_	

42% ####2		17/40 [00:03<00:04,				
471/499		0.206G 0.02061	0.009406	0.01961	2	320:
45% ####5	ı	18/40 [00:03<00:04,				
471/499		0.206G 0.02027	0.00972	0.01938	4	320:
45% ####5	١	18/40 [00:03<00:04,				
471/499		0.206G 0.02027	0.00972	0.01938	4	320:
48% ####7		19/40 [00:03<00:04,				
471/499		0.206G 0.02026	0.01009	0.0197	4	320:
48% ####7		19/40 [00:03<00:04,	4.97it/s			
471/499		0.206G 0.02026	0.01009	0.0197	4	320:
50% #####		20/40 [00:03<00:04,	4.73it/s			
471/499		0.206G 0.02061	0.01024	0.01969	4	320:
50% #####	- 1	20/40 [00:04<00:04,	4.73it/s			
471/499		0.206G 0.02061	0.01024	0.01969	4	320:
52% #####2	- 1	21/40 [00:04<00:03,	4.90it/s			
471/499		0.206G 0.02045	0.01035	0.01989	4	320:
52% #####2	- 1	21/40 [00:04<00:03,	4.90it/s]			
471/499		0.206G 0.02045	0.01035	0.01989	4	320:
55% #####5	- 1	22/40 [00:04<00:03,	5.01it/s]			
471/499		0.206G 0.02072	0.01037	0.01988	3	320:
55% #####5	- 1	22/40 [00:04<00:03,				
471/499		0.206G 0.02072		0.01988	3	320:
57% #####7	- 1	23/40 [00:04<00:03,				
471/499		0.206G 0.0204		0.0197	1	320:
57% #####7	- 1	23/40 [00:04<00:03,				
471/499	·	0.206G 0.0204	0.01006	0.0197	1	320:
60% ######	- 1	24/40 [00:04<00:03,				
471/499	•	0.206G 0.01987		0.01943	1	320:
60% ######	- 1	24/40 [00:04<00:03,				
471/499	•	0.206G 0.01987		0.01943	1	320:
62% ######2	1	25/40 [00:04<00:02,			_	
471/499	•	0.206G 0.01944		0.01921	1	320:
62% ######2	- 1	25/40 [00:05<00:02,	5.33it/s]	0.01011	_	0_0.
471/499	'	0.206G 0.01944	0.009584	0.01921	1	320:
65% ######5	- 1	26/40 [00:05<00:02,		0.01021	-	020.
471/499	'	0.206G 0.01917		0.01903	1	320:
65% ######5	- 1	26/40 [00:05<00:02,		0.01000	-	020.
471/499	'	0.206G 0.01917	0.00935	0.01903	1	320:
68% ######7	1	27/40 [00:05<00:02,		0.01000	-	020.
471/499	'	0.206G 0.02048	0.009358	0.01902	3	320:
68% ######7	1	27/40 [00:05<00:02,		0.01002	Ü	020.
471/499	'	0.206G 0.02048	0.009358	0.01902	3	320:
70% ######	ı	28/40 [00:05<00:02,		0.01002	3	020.
471/499	'	0.206G 0.02041	0.009446	0.01895	4	320:
70% ######	ı	28/40 [00:05<00:02,		3.01000	ュ	020.
471/499	1	0.206G 0.02041	0.009446	0.01895	4	320:
72% #######2	ı	29/40 [00:05<00:02,		0.01030	ュ	JZU.
471/499	ı	0.206G 0.02042	0.009605	0.01894	4	320:
エ11/433		0.2000 0.02042	0.000000	0.01094	7	JZU.

	29/40 [00:05<00:02,				
471/499			0.01894	4	320:
	30/40 [00:05<00:01,				
471/499		0.009662	0.01916	2	320:
75% ######5	30/40 [00:05<00:01,	5.35it/s			
471/499	0.206G 0.02115	0.009662	0.01916	2	320:
78% #######7	31/40 [00:05<00:01,	5.48it/s]			
471/499	0.206G 0.02192	0.009595	0.0191	2	320:
78% ######7	31/40 [00:06<00:01,	5.48it/s]			
471/499	0.206G 0.02192	0.009595	0.0191	2	320:
80% #######	32/40 [00:06<00:01,	5.44it/s			
471/499	0.206G 0.02319	0.009485	0.0191	2	320:
80% #######	32/40 [00:06<00:01,	5.44it/s]			
471/499	0.206G 0.02319	0.009485	0.0191	2	320:
82% ########2	33/40 [00:06<00:01,				
471/499	· · · · · · · · · · · · · · · · · · ·	0.009406	0.01946	2	320:
	33/40 [00:06<00:01,				
471/499	·	· -	0.01946	2	320:
	34/40 [00:06<00:01,			_	
471/499		0.009558	0.01946	4	320:
·	34/40 [00:06<00:01,		0.01010	-	020.
471/499		0.009558	0.01946	4	320:
	35/40 [00:06<00:00,		0.01540	1	020.
471/499			0.01933	2	320:
	35/40 [00:06<00:00,		0.01955	2	520.
			0.01933	2	320:
	0.206G 0.02258 36/40 [00:06<00:00,		0.01933	2	320:
	· · · · · · · · · · · · · · · · · · ·		0.01006	0	200.
471/499		0.009423	0.01926	2	320:
	36/40 [00:07<00:00,		0.04006	0	200
471/499		0.009423	0.01926	2	320:
	37/40 [00:07<00:00,		0.04004		000
471/499		0.009252	0.01924	1	320:
	37/40 [00:07<00:00,				
471/499		0.009252	0.01924	1	320:
	38/40 [00:07<00:00,				
		0.009102	0.01917	1	320:
	38/40 [00:07<00:00,				
			0.01917	1	320:
	39/40 [00:07<00:00,				
		0.009018	0.01903	2	320:
	39/40 [00:07<00:00,				
471/499			0.01903	2	320:
100% ##########	40/40 [00:07<00:00,	, 5.70it/s]			
471/499	0.206G 0.02199		0.01903	2	320:
100% #########	40/40 [00:07<00:00,	, 5.27it/s]			
	Class Images I		P	R	mAP50
mAP50-95: 0%	0/20 [00:	:00 , ?it/s]</td <td></td> <td></td> <td></td>			

		•	THECHICES		16	IIIAI 50
mAP50-95:	10% #	2/20 [00	:00<00:01,	16.00it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	20% ##	•				
MAI 50 95.					ъ	ADEO
	Class	_	Instances		R	mAP50
mAP50-95:	30% ###	6/20 [00	:00<00:00,	15.01it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	40% ####	l 8/20 Γ00	:00<00:00.	15.39it/s]		
	Class		Instances		R	mAP50
ADEO OF						IIIAI 50
mAP50-95:				, 15.60it/s]		
	Class	0	Instances		R	mAP50
mAP50-95:	60% ######	12/20 [0	0:00<00:00	, 15.10it/s]		
	Class	Images	Instances	P	R	mAP50
mΔP50-95·		•		, 15.96it/s]		
mii co oo.	Class		Instances			ADEO
1550 05					R	mAP50
mAP50-95:	80% #######					
	${ t Class}$	Images	Instances	P	R	mAP50
mAP50-95:	90% ########	18/20 [0	0:01<00:00	, 17.12it/s]		
	Class			P	R	mAP50
mΔP50-95•	100% #########					
IIIAI 30 33.						0.000
	all	40	40	0.98	0.975	0.992
0.791						
Epocl	h GPU_mem b	oox_loss	obj_loss	cls_loss	Instances	Size
-	_	_	<i>3</i> –	_		
0%	I 0/40 [00:	.00<2 2i+	/el			
	0/40 [00			0.04004	4	200
472/499	9 0.206G (0.005587	0.002557	0.01384	1	320:
472/499 0%	9 0.206G 0 0/40 [00:00	0.005587 0 , ?it/s</td <td>0.002557]</td> <td></td> <td>1</td> <td>320:</td>	0.002557]		1	320:
472/499 0%	9 0.206G (0.005587 0 , ?it/s</td <td>0.002557]</td> <td></td> <td>1</td> <td>320: 320:</td>	0.002557]		1	320: 320:
472/499 0% 472/499	9 0.206G 0 0/40 [00:00	0.005587 0 , ?it/s<br 0.005587	0.002557] 0.002557			
472/499 0% 472/499 2% 2	9 0.206G 0 0/40 [00:00 9 0.206G 0 1/40 [00:00	0.005587 0 , ?it/s<br 0.005587 0<00:06,	0.002557] 0.002557 5.81it/s]	0.01384	1	320:
472/499 0% 472/499 2% 2 472/499	9 0.206G 0 0/40 [00:00 9 0.206G 0 1/40 [00:00 9 0.206G 0	0.005587 0 , ?it/s<br 0.005587 0<00:06,	0.002557] 0.002557 5.81it/s] 0.004682			
472/499 0% 472/499 2% 2 472/499 2% 2	9 0.206G 0 0/40 [00:00 9 0.206G 0 1/40 [00:00 9 0.206G 0	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06,	0.002557] 0.002557 5.81it/s] 0.004682 5.81it/s]	0.01384	1	320: 320:
472/499 0% 472/499 2% 2 472/499 472/499	9 0.206G 0 0/40 [00:00 9 0.206G 0 1/40 [00:00 9 0.206G 0 1/40 [00:00 9 0.206G 0	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506	0.002557] 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682	0.01384	1	320:
472/499 0% 472/499 2% 2 472/499 2% 2 472/499 5% 5	9 0.206G (0 0/40 [00:00 0.206G (0 1/40 [00:00 1/40 [00:00 0.206G (0 1/40 [00:00 1/40	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s]	0.01384 0.0164 0.0164	1	320: 320: 320:
472/499 0% 472/499 2% 2 472/499 2% 2 472/499 5% 5	9 0.206G 0 0/40 [00:00 9 0.206G 0 1/40 [00:00 9 0.206G 0 1/40 [00:00 9 0.206G 0	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s]	0.01384 0.0164 0.0164	1	320: 320:
472/499 0% 472/499 2% 2 472/499 2% 2 472/499 5% 5	9 0.206G (0 0/40 [00:00 0.206G (0 1/40 [00:00 1/40 [00:00 0.206G (0 1/40 [00:0	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171	0.01384 0.0164 0.0164	1 2 2	320: 320: 320:
472/499 0% 472/499 2% 2 472/499 2% 2 472/499 5% 5 472/499 5% 5	9 0.206G 0 0/40 [00:00 9 0.206G 0 1/40 [00:00 9 0.206G 0 1/40 [00:00 9 0.206G 0 2/40 [00:00 9 0.206G	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s]	0.01384 0.0164 0.0164 0.01317	1 2 2	320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499	9 0.206G (0 0/40 [00:00 0.206G (0 1/40 [00:00 0.206G (0 1/40 [00:00 0.206G (0 0.206G 0.206G 0.206G 0.206G 0.206G 0.206G 0.206G	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06,	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171	0.01384 0.0164 0.0164	1 2 2	320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7	9 0.206G (0 0/40 [00:00 0.206G (0 1/40 [00:00 0.206G (0 1/40 [00:00 0.206G (0 2/40 [00:00 0.206G 1/40 [00:00 0.206G	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06,	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s]	0.01384 0.0164 0.0164 0.01317 0.01317	1 2 2 1	320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499	9 0.206G (0 0/40 [00:00 0 0.206G (0 1/40 [00:00 0 0 0 0 0 0 0 0	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017	0.002557] 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894	0.01384 0.0164 0.0164 0.01317	1 2 2	320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499 8% 7	9 0.206G (0 0/40 [00:00 0.206G (0 1/40 [00:00 0.206G (0 1/40 [00:00 0.206G (0 2/40 [00:00 0.206G 1.2/40 [00:00 0.206G 0.206G 1.2/40 [00:00 0.206G 0.206G 1.2/40 [00:00 0.206G 0.206G 0.206G 1.2/40 [00:00 0.206G 0.206G	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06,	0.002557] 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s]	0.01384 0.0164 0.0164 0.01317 0.01317	1 2 2 1 1	320: 320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499	9 0.206G (0 0/40 [00:00 0.206G (0 1/40	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06, 0.009686	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s] 0.003894	0.01384 0.0164 0.0164 0.01317 0.01317	1 2 2 1	320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499	9 0.206G (0 0/40 [00:00 0.206G (0 1/40 [00:00 0.206G (0 1/40 [00:00 0.206G (0 2/40 [00:00 0.206G 1.2/40 [00:00 0.206G 0.206G 1.2/40 [00:00 0.206G 0.206G 1.2/40 [00:00 0.206G 0.206G 0.206G 1.2/40 [00:00 0.206G 0.206G	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06, 0.009686	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s] 0.003894	0.01384 0.0164 0.0164 0.01317 0.01317	1 2 2 1 1	320: 320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499 8% 7 472/499 10% #	9 0.206G (0 0/40 [00:00 0.206G (0 1/40	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06, 0.009686 0<00:06,	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s] 0.003894 5.54it/s]	0.01384 0.0164 0.0164 0.01317 0.01317	1 2 2 1 1	320: 320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499 10% # 472/499	9 0.206G (0 0/40 [00:00 0 0.206G (0 1/40 [00:00 0 0.206G (0 0.206G 0 0.206G 0 0.206G (0 0.	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06, 0.009686 0<00:06, 0.009686	0.002557] 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s] 0.003894 5.54it/s] 0.004833	0.01384 0.0164 0.0164 0.01317 0.01317 0.01413	1 2 2 1 1 1	320: 320: 320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499 10% # 472/499 10% #	9 0.206G (0 0/40 [00:00 0.206G (0 1/40 [00:00	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06, 0.009686 0<00:06, 0.009686 0<00:06, 0.01082	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s] 0.003894 5.54it/s] 0.004833 5.54it/s]	0.01384 0.0164 0.0164 0.01317 0.01317 0.01413 0.01413	1 2 2 1 1 1 1 2	320: 320: 320: 320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499 10% # 472/499 10% # 472/499	9 0.206G (0 0/40 [00:00 0.206G (0 1/40 [00:00 0.206G (0 1/40 [00:00 0.206G 0.20	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06, 0.009686 0<00:06, 0.009686 0<00:06, 0.01082	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s] 0.003894 5.54it/s] 0.004833 5.54it/s] 0.004833	0.01384 0.0164 0.0164 0.01317 0.01317 0.01413 0.01413	1 2 2 1 1 1	320: 320: 320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499 10% # 472/499 10% # 472/499 12% #2	9 0.206G (0 0/40 [00:00 0 0.206G (0 1/40 [00:00 0 0.206G (0 0 0.206G 0 0.206G (0 0.206G 0 0.206G (0 0.206G (0	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06, 0.009686 0<00:06, 0.009686 0<00:06, 0.01082 0<00:06,	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s] 0.003894 5.54it/s] 0.004833 5.54it/s] 0.004833 5.62it/s]	0.01384 0.0164 0.0164 0.01317 0.01317 0.01413 0.01413 0.01542 0.01542	1 2 2 1 1 1 1 2	320: 320: 320: 320: 320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499 10% # 472/499 10% # 472/499 12% #2 472/499	9 0.206G (0 0/40 [00:00 0.206G (0 1/40	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06, 0.09686 0<00:06, 0.09686 0<00:06, 0.01082 00<00:06, 0.01082 00<00:06, 0.01082	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s] 0.003894 5.54it/s] 0.004833 5.54it/s] 0.004833 5.62it/s] 0.004464	0.01384 0.0164 0.0164 0.01317 0.01317 0.01413 0.01413 0.01542 0.01542	1 2 2 1 1 1 1 2	320: 320: 320: 320: 320: 320: 320:
472/499 0% 472/499 2% 2 472/499 5% 5 472/499 5% 5 472/499 8% 7 472/499 10% # 472/499 10% # 472/499 12% #2	9 0.206G (0 0/40 [00:00 0 0.206G (0 1/40 [00:00 0 0.206G (0 0 0.206G 0 0.206G (0 0.206G 0 0.206G (0 0.206G (0	0.005587 0 , ?it/s<br 0.005587 0<00:06, 0.008506 0<00:06, 0.01017 0<00:06, 0.01017 0<00:06, 0.09686 0<00:06, 0.09686 0<00:06, 0.01082 00<00:06, 0.01082 00<00:06, 0.01082	0.002557 0.002557 5.81it/s] 0.004682 5.81it/s] 0.004682 5.76it/s] 0.004171 5.76it/s] 0.004171 6.04it/s] 0.003894 6.04it/s] 0.003894 5.54it/s] 0.004833 5.54it/s] 0.004833 5.62it/s] 0.004464	0.01384 0.0164 0.0164 0.01317 0.01317 0.01413 0.01413 0.01542 0.01542	1 2 2 1 1 1 1 2	320: 320: 320: 320: 320: 320: 320: 320:

Images Instances

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Class

472/499	0.206G 0.01029 0.00	4464 0.01481	1	320:
472/499 15% #5	6/40 [00:01<00:06, 5.36		1	320:
472/499	0.206G 0.0115 0.0		1	320:
4727499 15% #5	6/40 [00:01<00:06, 5.36		1	320.
472/499	0.206G 0.0115 0.0		1	320:
4727499 18% #7	7/40 [00:01<00:05, 5.66		1	320.
472/499	0.206G 0.01278 0.00		2	320:
	7/40 [00:01<00:05, 5.66		2	320.
18% #7 472/499	0.206G 0.01278 0.00		2	320:
20% ##	8/40 [00:01<00:05, 5.35		2	320.
472/499		4958 0.01866	1	320:
20% ##	8/40 [00:01<00:05, 5.35		1	320.
472/499	•		1	320:
	0.206G 0.01434 0.00 9/40 [00:01<00:05, 5.66		1	320:
22% ##2			1	200.
472/499	0.206G 0.01384 0.00		1	320:
22% ##2	9/40 [00:01<00:05, 5.66		4	200.
472/499		5019 0.01885	1	320:
25% ##5	10/40 [00:01<00:05, 5.7		4	200
472/499	0.206G 0.01336 0.00		1	320:
25% ##5	10/40 [00:01<00:05, 5.7		4	200
·	0.206G 0.01336 0.00		1	320:
28% ##7	11/40 [00:01<00:05, 5.4		4	200
472/499	0.206G 0.0157 0.00		4	320:
28% ##7	11/40 [00:02<00:05, 5.4			222
472/499		5393 0.01837	4	320:
30% ###	12/40 [00:02<00:05, 5.5			
472/499	0.206G 0.01515 0.00		1	320:
30% ###	12/40 [00:02<00:05, 5.5			
472/499	0.206G 0.01515 0.00		1	320:
32% ###2	13/40 [00:02<00:04, 5.6			
472/499	0.206G 0.01623 0.00		4	320:
32% ###2	13/40 [00:02<00:04, 5.6			
472/499	0.206G 0.01623 0.00		4	320:
35% ###5	14/40 [00:02<00:04, 5.3			
472/499	0.206G 0.01702 0.00		4	320:
35% ###5	14/40 [00:02<00:04, 5.3			
472/499		0.0194	4	320:
38% ###7	15/40 [00:02<00:04, 5.5	· =		
472/499	0.206G 0.0167 0.00		1	320:
38% ###7	15/40 [00:02<00:04, 5.5			
472/499	0.206G 0.0167 0.00		1	320:
40% ####	16/40 [00:02<00:04, 5.6			
472/499		6507 0.01881	2	320:
40% ####	16/40 [00:03<00:04, 5.6			
472/499		6507 0.01881	2	320:
42% ####2	17/40 [00:03<00:04, 5.5			
472/499	0.206G 0.01589 0.00		2	320:
42% ####2	17/40 [00:03<00:04, 5.5	Oit/s]		

472/499	0.206G 0.01589 0.006507	0.01858	2	320:
45% ####5	18/40 [00:03<00:03, 5.74it/s]			
472/499	0.206G 0.01611 0.006953	0.01848	2	320:
45% ####5	18/40 [00:03<00:03, 5.74it/s]			
472/499	0.206G 0.01611 0.006953	0.01848	2	320:
48% ####7	19/40 [00:03<00:03, 5.61it/s]			
472/499	0.206G 0.01561 0.006722	0.01811	1	320:
48% ####7	19/40 [00:03<00:03, 5.61it/s]	0.04044		200
472/499	0.206G 0.01561 0.006722	0.01811	1	320:
50% #####	20/40 [00:03<00:03, 5.65it/s]	0.01014	0	200
472/499	0.206G 0.01529 0.006697	0.01814	2	320:
50% #####	20/40 [00:03<00:03, 5.65it/s]	0 01014	0	200.
472/499	0.206G 0.01529 0.006697 21/40 [00:03<00:03, 5.70it/s]	0.01814	2	320:
52% #####2 472/499	0.206G 0.01591 0.006779	0.01825	2	320:
472/499 52% #####2	21/40 [00:03<00:03, 5.70it/s]	0.01025	2	320:
472/499	0.206G 0.01591 0.006779	0.01825	2	320:
472/499 55% #####5	22/40 [00:03<00:03, 5.30it/s]	0.01025	2	320:
472/499	0.206G 0.017 0.007033	0.01875	2	320:
55% #####5	22/40 [00:04<00:03, 5.30it/s]	0.01075	۷	320.
472/499	0.206G 0.017 0.007033	0.01875	2	320:
57% #####7	23/40 [00:04<00:03, 5.43it/s]	0.01075	2	320.
472/499	0.206G 0.01845 0.007124	0.01866	2	320:
57% #####7	23/40 [00:04<00:03, 5.43it/s]	0.01000	2	520.
472/499	0.206G 0.01845 0.007124	0.01866	2	320:
60% ######	24/40 [00:04<00:02, 5.40it/s]	0.01000	2	020.
472/499	0.206G 0.01813 0.007055	0.01856	1	320:
60% ######	24/40 [00:04<00:02, 5.40it/s]	0.01000	_	020.
472/499	0.206G 0.01813 0.007055	0.01856	1	320:
62% ######2	25/40 [00:04<00:02, 5.51it/s]	0.01000	-	020.
472/499	0.206G 0.01782 0.006922	0.01842	1	320:
62% ######2	25/40 [00:04<00:02, 5.51it/s]	0.01012	-	020.
472/499	0.206G 0.01782 0.006922	0.01842	1	320:
65% ######5	26/40 [00:04<00:02, 5.59it/s]	***************************************	_	0201
472/499	0.206G 0.01747 0.006783	0.01846	1	320:
	26/40 [00:04<00:02, 5.59it/s]	0.01010	_	0201
472/499	0.206G 0.01747 0.006783	0.01846	1	320:
68% #####7	27/40 [00:04<00:02, 5.66it/s]			
472/499	0.206G 0.01721 0.00663	0.01816	1	320:
68% ######7	27/40 [00:05<00:02, 5.66it/s]			
472/499	0.206G 0.01721 0.00663	0.01816	1	320:
70% ######	28/40 [00:05<00:02, 5.70it/s]			
472/499	0.206G 0.01728 0.006808	0.01815	4	320:
70% ######	28/40 [00:05<00:02, 5.70it/s]			
472/499	0.206G 0.01728 0.006808	0.01815	4	320:
72% ######2	29/40 [00:05<00:01, 5.58it/s]			
472/499	0.206G 0.01694 0.006697	0.01793	1	320:
72% ######2	29/40 [00:05<00:01, 5.58it/s]			

472/499	0.206G 0.01694	0.006697	0.01793	1	320:
	30/40 [00:05<00:01,				
472/499	0.206G 0.01721		0.01795	4	320:
	30/40 [00:05<00:01,		0.04505		000
472/499	0.206G 0.01721		0.01795	4	320:
	31/40 [00:05<00:01,		0.01004	4	200.
472/499	0.206G 0.01753 31/40 [00:05<00:01,	0.007321	0.01824	4	320:
			0.01824	4	320:
	32/40 [00:05<00:01,		0.01024	4	320.
472/499			0.01822	4	320:
·	32/40 [00:05<00:01,		0.01022	-	520.
472/499	0.206G 0.01813		0.01822	4	320:
	33/40 [00:05<00:01,		0.01022	-	020.
472/499	-	0.007434	0.01809	1	320:
	33/40 [00:06<00:01,				
472/499			0.01809	1	320:
	34/40 [00:06<00:01,				
472/499	0.206G 0.01759	0.007356	0.01807	1	320:
	34/40 [00:06<00:01,				
472/499			0.01807	1	320:
88% #######7	35/40 [00:06<00:00,	5.66it/s]			
472/499	-	0.007376	0.01824	2	320:
88% #######7	35/40 [00:06<00:00,				
472/499	0.206G 0.01759		0.01824	2	320:
90% ########	36/40 [00:06<00:00,	5.71it/s]			
472/499	0.206G 0.01736	0.007449	0.01815	4	320:
90% ########	36/40 [00:06<00:00,	5.71it/s]			
472/499	0.206G 0.01736	0.007449	0.01815	4	320:
92% ########2	37/40 [00:06<00:00,	5.74it/s]			
472/499	0.206G 0.01719	0.007424	0.01829	2	320:
92% ########2	37/40 [00:06<00:00,	5.74it/s]			
472/499	0.206G 0.01719	0.007424	0.01829	2	320:
95% ########5	38/40 [00:06<00:00,	5.59it/s			
472/499	0.206G 0.01761	0.007558	0.01825	4	320:
95% ########5	38/40 [00:07<00:00,	5.59it/s			
472/499	0.206G 0.01761	0.007558	0.01825	4	320:
98% ########7	39/40 [00:07<00:00,	5.33it/s			
472/499	0.206G 0.01756	0.007639	0.01835	4	320:
98% ########7	39/40 [00:07<00:00,	5.33it/s			
472/499			0.01835	4	320:
100% #########	40/40 [00:07<00:00), 5.37it/s]			
472/499		0.007639	0.01835	4	320:
100% #########	40/40 [00:07<00:00), 5.56it/s]			
	Class Images	Instances	P	R	mAP50
mAP50-95: 0%):00 , ?it/s</td <td></td> <td></td> <td></td>			
	Class Images	Instances	P	R	mAP50

mAP50-95:	10% #	l 2/20 [0	0:00<00:01,	15 90i+/al		
MAP50-95.	Class		Instances		R	mAP50
mAP50-95:		_	0:00<00:00,		10	mai oo
mm 00 00.	Class	Images			R	mAP50
mAP50-95:		_	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:		•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	50% #####	10/20 [00:00<00:00	, 16.96it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	60% ######	12/20 [00:00<00:00	, 16.43it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	70% ######	14/20 [00:00<00:00	, 16.29it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00			
	Class	•	Instances		R	mAP50
mAP50-95:	90% ########					
	Class	•	Instances		R	mAP50
mAP50-95:	100% ##########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% ##########					
0.70	all	40	40	0.98	0.975	0.993
0.79						
Epocl	h GPU_mem 1	oox_loss	obj_loss	cls_loss	Instances	Size
-	_		-	cls_loss	Instances	Size
0%	0/40 [00	:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
0% 473/499	0/40 [00 9 0.206G	:00 , ?i<br 0.03503	t/s] 0.008045	0.0316	Instances 3	Size 320:
0% 473/499	0/40 [00 9	:00 , ?i<br 0.03503 O , ?it/</td <td>t/s] 0.008045 s]</td> <td>0.0316</td> <td>3</td> <td>320:</td>	t/s] 0.008045 s]	0.0316	3	320:
0% 473/499 0% 473/499	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503	t/s] 0.008045 s] 0.008045			
0% 473/499 0% 473/499 2% 2	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07,	t/s] 0.008045 s] 0.008045 5.44it/s]	0.0316 0.0316	3	320: 320:
0% 473/499 0% 473/499 2% 2 473/499	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243	0.0316	3	320:
0% 473/499 0% 473/499 2% 2 473/499 2% 2	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07,	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s]	0.0316 0.0316 0.02551	3	320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 2% 2 473/499	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02859	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243	0.0316 0.0316	3 3 1	320: 320:
0% 473/499 0% 473/499 2% 2 473/499 2% 2 473/499	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02859	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s]	0.0316 0.0316 0.02551 0.02551	3 3 1	320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 2% 2 473/499 5% 5 473/499	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02859 0<00:07,	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833	0.0316 0.0316 0.02551	3 3 1	320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 2% 2 473/499 5% 5	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02859 0<00:07, 0.02263	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s]	0.0316 0.0316 0.02551 0.02551	3 3 1	320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 5% 5 473/499 5% 5	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02859 0<00:07, 0.02263	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833	0.0316 0.0316 0.02551 0.02551 0.02184	3 3 1 1 4	320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 2% 2 473/499 5% 5 473/499	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02859 0<00:07, 0.02263 0<00:07,	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833	0.0316 0.0316 0.02551 0.02551 0.02184	3 3 1 1 4	320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 5% 5 473/499 5% 5 473/499 8% 7	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02263 0<00:07, 0.02263 0<00:07, 0.02263	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884	0.0316 0.0316 0.02551 0.02551 0.02184 0.02184	3 3 1 1 4 4	320: 320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 5% 5 473/499 5% 5 473/499 8% 7 473/499	0/40 [00 9	:00 , ?i 0.03503 0<?, ?it/ 0.03503 0<00:07, 0.02859 0<00:07, 0.02263 0<00:07, 0.02263 0<00:07, 0.02263 0<00:07, 0.0289 0<00:07,</td <td>t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884</td> <td>0.0316 0.0316 0.02551 0.02551 0.02184 0.02184</td> <td>3 3 1 1 4 4</td> <td>320: 320: 320: 320: 320:</td>	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884	0.0316 0.0316 0.02551 0.02551 0.02184 0.02184	3 3 1 1 4 4	320: 320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 5% 5 473/499 5% 5 473/499 8% 7 473/499 8% 7 473/499	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02263 0<00:07, 0.02263 0<00:07, 0.02263 0<00:07, 0.0289 0<00:07, 0.0289	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884 5.19it/s] 0.008884	0.0316 0.0316 0.02551 0.02551 0.02184 0.02184	3 3 1 1 4 4 3	320: 320: 320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 5% 5 473/499 5% 5 473/499 8% 7 473/499 8% 7 473/499	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02263 0<00:07, 0.02263 0<00:07, 0.0289 0<00:07, 0.0289 0<00:07,	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884 5.19it/s] 0.008884 5.08it/s]	0.0316 0.0316 0.02551 0.02551 0.02184 0.02184	3 3 1 1 4 4 3	320: 320: 320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 5% 5 473/499 5% 5 473/499 8% 7 473/499 8% 7 473/499 10% #	0/40 [00 9	:00 , ?i 0.03503 0<?, ?it/ 0.03503 0<00:07, 0.02859 0<00:07, 0.02263 0<00:07, 0.02263 0<00:07, 0.0289 0<00:07, 0.0289 0<00:07, 0.0289</td <td>t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884 5.19it/s] 0.008884 5.08it/s] 0.01011</td> <td>0.0316 0.0316 0.02551 0.02551 0.02184 0.02184 0.02136</td> <td>3 3 1 1 4 4 3</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884 5.19it/s] 0.008884 5.08it/s] 0.01011	0.0316 0.0316 0.02551 0.02551 0.02184 0.02184 0.02136	3 3 1 1 4 4 3	320: 320: 320: 320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 2% 2 473/499 5% 5 473/499 8% 7 473/499 8% 7 473/499 10% # 473/499	0/40 [00 9	:00 , ?i<br 0.03503 0 , ?it/<br 0.03503 0<00:07, 0.02859 0<00:07, 0.02263 0<00:07, 0.02263 0<00:07, 0.0289 0<00:07, 0.0289 0<00:07, 0.0289 0<00:07,	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884 5.19it/s] 0.008884 5.08it/s] 0.01011	0.0316 0.0316 0.02551 0.02551 0.02184 0.02184 0.02136	3 3 1 1 4 4 3	320: 320: 320: 320: 320: 320: 320:
0% 473/499 0% 473/499 2% 2 473/499 5% 5 473/499 5% 5 473/499 8% 7 473/499 10% # 473/499	0/40 [00 9	:00 , ?i 0.03503 0<?, ?it/ 0.03503 0<00:07, 0.02859 0<00:07, 0.02263 0<00:07, 0.02263 0<00:07, 0.0289 0<00:07, 0.0289 0<00:07, 0.0266 00<00:07, 0.0266</td <td>t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884 5.19it/s] 0.008884 5.08it/s] 0.01011 5.08it/s] 0.01011</td> <td>0.0316 0.0316 0.02551 0.02551 0.02184 0.02184 0.02136 0.02136</td> <td>3 1 1 4 4 3 3 4</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.008045 s] 0.008045 5.44it/s] 0.006243 5.44it/s] 0.006243 5.12it/s] 0.007833 5.12it/s] 0.007833 5.19it/s] 0.008884 5.19it/s] 0.008884 5.08it/s] 0.01011 5.08it/s] 0.01011	0.0316 0.0316 0.02551 0.02551 0.02184 0.02184 0.02136 0.02136	3 1 1 4 4 3 3 4	320: 320: 320: 320: 320: 320: 320: 320:

12% #2	5/40 [00:01<00:07, 4.88it/s]			
473/499	0.206G 0.03051 0.01057	0.0199	4	320:
15% #5	6/40 [00:01<00:06, 4.89it/s]	0.04000	0	200
473/499	0.206G 0.02749 0.009836	0.01929	2	320:
15% #5	6/40 [00:01<00:06, 4.89it/s] 0.206G	0.01929	2	200.
473/499 18% #7	0.206G 0.02749 0.009836 7/40 [00:01<00:06, 4.90it/s]	0.01929	2	320:
473/499	0.206G 0.0253 0.009084	0.01875	1	320:
18% #7	7/40 [00:01<00:06, 4.90it/s]	0.01075	1	020.
473/499	0.206G 0.0253 0.009084	0.01875	1	320:
20% ##	8/40 [00:01<00:06, 4.91it/s]	0.020.0	_	0201
473/499	0.206G 0.02469 0.01026	0.01879	4	320:
20% ##	8/40 [00:01<00:06, 4.91it/s]			
473/499		0.01879	4	320:
22% ##2	9/40 [00:01<00:06, 4.91it/s]			
473/499	0.206G 0.02434 0.01016	0.01938	2	320:
22% ##2	9/40 [00:01<00:06, 4.91it/s]			
473/499	0.206G 0.02434 0.01016	0.01938	2	320:
25% ##5	10/40 [00:01<00:05, 5.03it/s]			
473/499	0.206G 0.02297 0.009755	0.01897	2	320:
25% ##5	10/40 [00:02<00:05, 5.03it/s]			
473/499	0.206G 0.02297 0.009755	0.01897	2	320:
28% ##7	11/40 [00:02<00:05, 5.11it/s]			
473/499	0.206G 0.02227 0.009226	0.01878	1	320:
28% ##7	11/40 [00:02<00:05, 5.11it/s]			
473/499	0.206G 0.02227 0.009226	0.01878	1	320:
30% ###	12/40 [00:02<00:05, 5.30it/s]			
473/499	0.206G 0.02419 0.009316	0.0186	3	320:
30% ###	12/40 [00:02<00:05, 5.30it/s]			
473/499	0.206G 0.02419 0.009316	0.0186	3	320:
32% ###2	13/40 [00:02<00:05, 5.31it/s]			
473/499	0.206G 0.0251 0.01004	0.01852	4	320:
32% ###2	13/40 [00:02<00:05, 5.31it/s]		_	
473/499	0.206G 0.0251 0.01004	0.01852	4	320:
35% ###5	14/40 [00:02<00:04, 5.30it/s]	0.04074	4	000
473/499	0.206G 0.02467 0.01026	0.01876	4	320:
35% ###5	14/40 [00:02<00:04, 5.30it/s]	0.04076	4	200
473/499	0.206G 0.02467 0.01026	0.01876	4	320:
38% ###7	15/40 [00:02<00:04, 5.31it/s]	0 01071	0	200.
473/499	0.206G 0.02406 0.01024 15/40 [00:03<00:04, 5.31it/s]	0.01871	2	320:
38% ###7	• • • •	0.01871	0	220.
473/499		0.01071	2	320:
40% #### 473/499	16/40 [00:03<00:04, 5.32it/s] 0.206G	0.01873	4	320:
473/499	16/40 [00:03<00:04, 5.32it/s]	0.010/3	+	320:
473/499	0.206G 0.02387 0.01071	0.01873	4	320:
42% ####2	17/40 [00:03<00:04, 5.30it/s]	0.01070	- I	020.
473/499	0.206G 0.02341 0.01044	0.01845	1	320:
, 100			_	

42% ####2		17/40 [00:03<00:04,				
473/499		0.206G 0.02341	0.01044	0.01845	1	320:
45% ####5	١	18/40 [00:03<00:04,	. –			
473/499		0.206G 0.0243	0.01072	0.01881	3	320:
45% ####5	ı	18/40 [00:03<00:04,				
473/499		0.206G 0.0243	0.01072	0.01881	3	320:
48% ####7	١	19/40 [00:03<00:03,				
473/499		0.206G 0.02605		0.02026	2	320:
48% ####7	ı	19/40 [00:03<00:03,				
473/499		0.206G 0.02605		0.02026	2	320:
50% #####	ı	20/40 [00:03<00:03,				
473/499		0.206G 0.02541		0.01986	1	320:
50% #####	ı	20/40 [00:04<00:03,				
473/499		0.206G 0.02541		0.01986	1	320:
52% #####2	١	21/40 [00:04<00:03,				
473/499		0.206G 0.02491		0.01973	2	320:
52% #####2	١	21/40 [00:04<00:03,				
473/499		0.206G 0.02491	0.009977	0.01973	2	320:
55% #####5	-	22/40 [00:04<00:03,				
473/499		0.206G 0.02435		0.01944	2	320:
55% #####5	-	22/40 [00:04<00:03,	5.64it/s]			
473/499		0.206G 0.02435	0.009791	0.01944	2	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.55it/s]			
473/499		0.206G 0.02414	0.009697	0.01931	2	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.55it/s]			
473/499		0.206G 0.02414	0.009697	0.01931	2	320:
60% ######	- 1	24/40 [00:04<00:02,	5.63it/s			
473/499		0.206G 0.02369	0.009611	0.01913	2	320:
60% ######	- 1	24/40 [00:04<00:02,	5.63it/s			
473/499		0.206G 0.02369	0.009611	0.01913	2	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.84it/s]			
473/499		0.206G 0.02313	0.009372	0.01895	1	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.84it/s]			
473/499		0.206G 0.02313	0.009372	0.01895	1	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.81it/s			
473/499		0.206G 0.02252	0.009257	0.01894	2	320:
65% ######5	- 1	26/40 [00:05<00:02,	5.81it/s			
473/499		0.206G 0.02252	0.009257	0.01894	2	320:
68% #####7	- 1	27/40 [00:05<00:02,	5.81it/s			
473/499		0.206G 0.02193	0.00904	0.01867	1	320:
68% #####7	- 1	27/40 [00:05<00:02,	5.81it/s]			
473/499		0.206G 0.02193	0.00904	0.01867	1	320:
70% ######		28/40 [00:05<00:02,	5.24it/s]			
473/499		0.206G 0.02173	0.00926	0.01866	4	320:
70% ######		28/40 [00:05<00:02,	5.24it/s]			
473/499		0.206G 0.02173	0.00926	0.01866	4	320:
72% #######2		29/40 [00:05<00:01,	5.51it/s]			
473/499		0.206G 0.02148	0.009098	0.0184	1	320:

		29/40 [00:05<0					
473/499				0.009098	0.0184	1	320:
	ı	30/40 [00:05<0	•	· -	0.04040		000
473/499		0.206G 0.02		0.009013	0.01846	2	320:
_		30/40 [00:05<0	-		0.01010	0	000
		0.206G 0.02		0.009013	0.01846	2	320:
		31/40 [00:05<0	-		0.01011		000
473/499				0.008869	0.01841	1	320:
		31/40 [00:05<0			0.01011		000
				0.008869	0.01841	1	320:
		32/40 [00:05<0	-		0.0405	0	000
2.0, 200				0.008775	0.0185	2	320:
		32/40 [00:06<0	-		0.0405		
				0.008775	0.0185	2	320:
		33/40 [00:06<0	-		0.04055	•	
				0.008883	0.01855	4	320:
		33/40 [00:06<0	-			_	
·					0.01855	4	320:
		34/40 [00:06<0	-				
473/499				0.008714	0.01842	1	320:
	ı	34/40 [00:06<0					
·				0.008714	0.01842	1	320:
		35/40 [00:06<0					
473/499				0.008901	0.01845	4	320:
	ı	35/40 [00:06<0	-				
473/499		0.206G 0.02		0.008901	0.01845	4	320:
		36/40 [00:06<0	-				
473/499				0.008871	0.01835	2	320:
		36/40 [00:06<0					
473/499				0.008871	0.01835	2	320:
	2	37/40 [00:06<0	0:00,	5.46it/s			
473/499				0.009018	0.01833	4	320:
92% ########2	2	37/40 [00:07<0	0:00,	5.46it/s]			
473/499					0.01833	4	320:
95% #######5	5	38/40 [00:07<0	0:00,	5.42it/s			
473/499		0.206G 0.02	307	0.008972	0.0183	2	320:
95% #######5	5	38/40 [00:07<0	0:00,	5.42it/s			
473/499		0.206G 0.02	307	0.008972	0.0183	2	320:
98% #######7	1	39/40 [00:07<0	0:00,	5.39it/s			
473/499		0.206G 0.02	292	0.008932	0.01829	2	320:
98% #######7	1	39/40 [00:07<0	0:00,	5.39it/s			
473/499					0.01829	2	320:
100% ########	#	40/40 [00:07<	00:00,	5.64it/s]			
					0.01829	2	320:
100% ########	#	40/40 [00:07<	00:00,	5.37it/s]			
			_	nstances	P	R	mAP50
mAP50-95: 0%	.	0/2	0 [00:	00 , ?it/s]</td <td></td> <td></td> <td></td>			

	Class Images			R	mAP50
mAP50-95: 10% # C		00:00<00:01, Instances		R	mAP50
mAP50-95: 20% ##	4/20 [Class Images	00:00<00:01, Instances	15.53it/s] P	R	mAP50
mAP50-95: 30% ###	6/20 [0	0:00<00:00,			
C mAP50-95: 40% ###		Instances 00:00<00:00,		R	mAP50
C	Class Images	Instances	P	R	mAP50
mAP50-95: 50% ###		00:00<00:00, Instances		R	mAP50
mAP50-95: 60% ###	#### 12/20 [Class Images	00:00<00:00, Instances		R	mAP50
	##### 14/20 [r.	MAPSO
MAP50-95: 80% ###		Instances		R	mAP50
C	Class Images	Instances	P	R	mAP50
mAP50-95: 90% ###		00:01<00:00, Instances		R	mAP50
mAP50-95: 100% ###	###### 20/20 [00:01<00:00,	17.70it/s]		
0.796	all 40	40	0.979	0.975	0.992
					g .
Epoch GPU	J_mem box_loss	obj_loss	cls_loss	Instances	Size
0% 0 474/499 0.	0/40 [00:00 , ?i<br 206G 0.02608	1t/s] 0.005533	0 0175	2	320:
	0.02008 0 [00:00 , ?it/</td <td></td> <td>0.0175</td> <td>Z</td> <td>320.</td>		0.0175	Z	320.
•	206G 0.02608 40 [00:00<00:06,		0.0175	2	320:
	206G 0.03531		0.01693	2	320:
2% 2 1/4	0 [00:00<00:06,	5.74it/s]			
474/499 0.	206G 0.03531	0.006746	0.01693	2	320:
5% 5 2/4					
474/499 0.		0.006716	0.01844	2	320:
5% 5 2/4				_	
	206G 0.04418		0.01844	2	320:
8% 7 3/4			0.01704	4	200.
474/499 0. 8% 7 3/4		0.00595 5.80it/s]	0.01704	1	320:
474/499 0.		0.00595	0.01704	1	320:
	40 [00:00<00:06,		0.01701	-	020.
474/499 0.		0.007026	0.01714	4	320:
10% # 4/					
474/499 0.	206G 0.03226	0.007026	0.01714	4	320:
	40 [00:00<00:06,				
	206G 0.03165		0.01922	4	320:
12% #2 5/	40 [00:01<00:06,	5.63it/s]			

474/499	0.206G 0.03165 0	0.008069 0.01922	4 3	20:
15% #5	6/40 [00:01<00:05, 5			
474/499		0.008275 0.02026	4 3	20:
15% #5 474/499	6/40 [00:01<00:05, 5 0.206G 0.03074 0	0.691t/s] 0.008275	4 3	20:
18% #7	7/40 [00:01<00:05, 5		4 3	20.
474/499	·	0.008635 0.01977	2 3	20:
18% #7	7/40 [00:01<00:05, 5			
474/499	•	0.008635 0.01977	2 3	20:
20% ##	8/40 [00:01<00:05, 5	5.63it/s]		
474/499	0.206G 0.03292 0	0.009178 0.01983	4 3	20:
20% ##	8/40 [00:01<00:05, 5	5.63it/s]		
474/499	0.206G 0.03292 0	0.009178 0.01983	4 3	20:
22% ##2	9/40 [00:01<00:05, 5			
474/499		0.009052 0.01943	2 3	20:
22% ##2	9/40 [00:01<00:05, 5			
474/499		0.009052 0.01943	2 3	20:
25% ##5	10/40 [00:01<00:05,			
474/499	0.206G 0.03129 0		2 3	20:
25% ##5	10/40 [00:01<00:05,		0 0	.00
•	0.206G 0.03129 0		2 3	20:
28% ##7 474/499	11/40 [00:01<00:05,		2 3	20.
4747499 28% ##7	0.206G 0.03295 0 11/40 [00:02<00:05,		2 3	20:
474/499		0.008874 0.02039	2 3	20:
30% ###	12/40 [00:02<00:04,		2 3	20.
474/499	0.206G 0.03104 0		1 3	20:
30% ###	12/40 [00:02<00:04,		1 0	20.
474/499	0.206G 0.03104 0		1 3	20:
32% ###2	13/40 [00:02<00:04,			
474/499	0.206G 0.03009 0		2 3	20:
32% ###2	13/40 [00:02<00:04,	5.58it/s]		
474/499	0.206G 0.03009 0	0.008325 0.01946	2 3	20:
35% ###5	14/40 [00:02<00:04,	5.36it/s]		
474/499		0.008908 0.02005	4 3	20:
35% ###5	14/40 [00:02<00:04,	5.36it/s]		
474/499		0.008908 0.02005	4 3	20:
38% ###7	15/40 [00:02<00:04,			
474/499	0.206G 0.03015 0		2 3	20:
38% ###7	15/40 [00:02<00:04,			
474/499	0.206G 0.03015 0		2 3	20:
40% ####	16/40 [00:02<00:04,		4	.00
474/499	0.206G 0.02876 0		1 3	20:
40% ####	16/40 [00:03<00:04, 0.206G 0.02876 0		1 2	20.
474/499 42% ####2	0.206G 0.02876 0 17/40 [00:03<00:04,	0.008553 0.01927	1 3	20:
474/499	0.206G 0.02778 0		2 3	20:
42% ####2	17/40 [00:03<00:04,		۷ 3	20.
12/0 ####2	1 11/10 [00.00000.01,	0.1010/03		

474/499	0.206G 0.02778 0.008397	0.01925	2	320:
45% ####5	18/40 [00:03<00:03, 5.54it/s]			
474/499	0.206G 0.02704 0.008149	0.01933	1	320:
45% ####5	18/40 [00:03<00:03, 5.54it/s]			
474/499	0.206G 0.02704 0.008149	0.01933	1	320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]		_	
474/499	0.206G 0.02698 0.008409	0.01913	4	320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]	0.04040	4	200
474/499	0.206G 0.02698 0.008409	0.01913	4	320:
50% #####	20/40 [00:03<00:03, 5.46it/s]	0.01000	4	200
474/499	0.206G 0.0266 0.008459	0.01922	4	320:
50% #####	20/40 [00:03<00:03, 5.46it/s] 0.206G	0.01000	1	200.
474/499	0.206G 0.0266 0.008459 21/40 [00:03<00:03, 5.42it/s]	0.01922	4	320:
52% #####2 474/499	0.206G 0.02694 0.00841	0.01931	2	320:
52% #####2	21/40 [00:03<00:03, 5.42it/s]	0.01931	2	320:
474/499	0.206G 0.02694 0.00841	0.01931	2	320:
55% #####5	22/40 [00:03<00:03, 5.51it/s]	0.01931	2	320.
474/499	0.206G 0.02642 0.008157	0.01916	1	320:
55% #####5	22/40 [00:04<00:03, 5.51it/s]	0.01910	1	320.
474/499	0.206G 0.02642 0.008157	0.01916	1	320:
57% #####7	23/40 [00:04<00:02, 5.75it/s]	0.01910	1	520.
474/499	0.206G 0.02723 0.008171	0.01909	2	320:
57% #####7	23/40 [00:04<00:02, 5.75it/s]	0.01303	2	020.
474/499	0.206G 0.02723 0.008171	0.01909	2	320:
60% ######	24/40 [00:04<00:03, 5.31it/s]	0.01000	_	020.
474/499	0.206G 0.02748 0.008431	0.01903	4	320:
60% ######	24/40 [00:04<00:03, 5.31it/s]	0.01000	•	020.
474/499	0.206G 0.02748 0.008431	0.01903	4	320:
62% ######2	25/40 [00:04<00:02, 5.31it/s]	0.02000	-	0201
474/499	0.206G 0.02675 0.008243	0.01889	1	320:
62% ######2	25/40 [00:04<00:02, 5.31it/s]			
474/499	0.206G 0.02675 0.008243	0.01889	1	320:
65% ######5	26/40 [00:04<00:02, 5.46it/s]			
474/499	0.206G 0.02603 0.008056	0.01858	1	320:
	26/40 [00:04<00:02, 5.46it/s]			
474/499	0.206G 0.02603 0.008056	0.01858	1	320:
68% ######7	27/40 [00:04<00:02, 5.55it/s]			
474/499	0.206G 0.02671 0.008023	0.01843	2	320:
68% #####7	27/40 [00:05<00:02, 5.55it/s]			
474/499	0.206G 0.02671 0.008023	0.01843	2	320:
70% ######	28/40 [00:05<00:02, 5.48it/s]			
474/499	0.206G 0.02612 0.007854	0.01827	1	320:
70% ######	28/40 [00:05<00:02, 5.48it/s]			
474/499	0.206G 0.02612 0.007854	0.01827	1	320:
72% ######2	29/40 [00:05<00:01, 5.58it/s]			
474/499	0.206G 0.02562 0.00771	0.01812	1	320:
72% ######2	29/40 [00:05<00:01, 5.58it/s]			

474/499	0.206G 0.02562	0.00771	0.01812	1	320:
	30/40 [00:05<00:01,				
474/499	0.206G 0.02516	0.007549	0.01806	1	320:
	30/40 [00:05<00:01,	· -	0.04000		000
474/499	0.206G 0.02516		0.01806	1	320:
	31/40 [00:05<00:01,		0.01700	4	200.
474/499	0.206G 0.02505 31/40 [00:05<00:01,	0.007495	0.01789	1	320:
/		0.007495	0.01789	1	320:
·	32/40 [00:05<00:01,		0.01769	1	320.
474/499	0.206G 0.02467	0.00748	0.01774	2	320:
	32/40 [00:05<00:01,		0.01774	2	520.
474/499	0.206G 0.02467		0.01774	2	320:
	33/40 [00:05<00:01,		0.01//1	2	020.
474/499	-	0.00747	0.01768	2	320:
•	33/40 [00:06<00:01,				
474/499			0.01768	2	320:
	34/40 [00:06<00:01,				
474/499	0.206G 0.02434	0.007436	0.01756	2	320:
	34/40 [00:06<00:01,	5.67it/s]			
474/499		· -	0.01756	2	320:
88% #######7	35/40 [00:06<00:00,				
474/499	· · · · · · · · · · · · · · · · · · ·		0.01755	4	320:
88% #######7	35/40 [00:06<00:00,				
474/499	0.206G 0.02408		0.01755	4	320:
90% ########	36/40 [00:06<00:00,	5.28it/s]			
474/499	0.206G 0.02396	0.007687	0.01764	4	320:
90% ########	36/40 [00:06<00:00,	5.28it/s]			
474/499	0.206G 0.02396	0.007687	0.01764	4	320:
92% ########2	37/40 [00:06<00:00,	5.05it/s]			
474/499	0.206G 0.02359	0.007568	0.01745	1	320:
92% ########2	37/40 [00:06<00:00,	5.05it/s			
474/499	0.206G 0.02359	0.007568	0.01745	1	320:
95% ########5	38/40 [00:06<00:00,	5.13it/s]			
474/499	0.206G 0.02329	0.007526	0.01734	1	320:
95% ########5	38/40 [00:07<00:00,	5.13it/s]			
474/499	0.206G 0.02329	0.007526	0.01734	1	320:
98% ########7	39/40 [00:07<00:00,	5.05it/s			
474/499	0.206G 0.02329	0.00751	0.01732	2	320:
98% ########7	39/40 [00:07<00:00,	5.05it/s]			
474/499	0.206G 0.02329	0.00751	0.01732	2	320:
	40/40 [00:07<00:00				
474/499		0.00751	0.01732	2	320:
100% #########	40/40 [00:07<00:00), 5.44it/s]			
	Class Images	Instances	P	R	mAP50
mAP50-95: 0%):00 , ?it/s</td <td></td> <td>_</td> <td></td>		_	
	Class Images	Instances	P	R	mAP50

mAP50-95:	10% #	I 2/20 [0	0:00<00:01,	12 70i+/al		
MAP50-95.	Class		Instances		R	mAP50
mAP50-95:		_	0:00<00:01,		10	mai oo
mm 00 00.	Class	Images			R	mAP50
mAP50-95:		_	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:		•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	50% #####	10/20 [00:00<00:00	, 14.65it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	60% #####	12/20 [00:00<00:00	, 14.89it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	70% ######	14/20 [00:00<00:00	, 14.66it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:			00:01<00:00			
	Class	•	Instances		R	mAP50
mAP50-95:	90% ########					
	Class	•	Instances		R	mAP50
mAP50-95:	100% ##########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########					
0.706	all	40	40	0.979	0.975	0.992
0.796						
Epoc	ı apıı	_				~ .
Брос	n GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
-	_		-	cls_loss	Instances	Size
0%	0/40 [00	:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
0% 475/49	0/40 [00 9 0.206G	:00 , ?i<br 0.01711	t/s] 0.004888		Instances	320:
0% 475/49 0%	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/</td <td>t/s] 0.004888</td> <td>0.01416</td> <td>1</td> <td>320:</td>	t/s] 0.004888	0.01416	1	320:
0% 475/49 0% 475/49	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711	t/s] 0.004888 s] 0.004888			
0% 475/49 0% 475/49 2% 2	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06,	t/s] 0.004888 s] 0.004888 6.40it/s]	0.01416 0.01416	1	320:
0% 475/49 0% 475/49 2% 2 475/49	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383	t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421	0.01416	1	320: 320:
0% 475/49 0% 475/49 2% 2 475/49	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06,	0.004888 (s) 0.004888 6.40it/s] 0.005421 6.40it/s]	0.01416 0.01416 0.0132	1	320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06, 0.01383	0.004888 (s) 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421	0.01416 0.01416	1 1 2	320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06, 0.01383	0.004888 (s) 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421	0.01416 0.01416 0.0132	1 1 2	320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06, 0.01383 0<00:06,	0.004888 (s) 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631	0.01416 0.01416 0.0132 0.0132	1 1 2 2	320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06, 0.01383 0<00:06, 0.01566	0.004888 (s) 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s]	0.01416 0.01416 0.0132 0.0132	1 1 2 2	320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49 5% 5	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06, 0.01383 0<00:06, 0.01566	t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631	0.01416 0.01416 0.0132 0.0132 0.01697	1 1 2 2 2	320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49 5% 5 475/49	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06, 0.01383 0<00:06, 0.01566	t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s]	0.01416 0.01416 0.0132 0.0132 0.01697	1 1 2 2 2	320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49 5% 5 475/49 8% 7	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06, 0.01566 0<00:06, 0.01566 0<00:06, 0.01566	0.004888 (s) 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584	0.01416 0.01416 0.0132 0.0132 0.01697	1 1 2 2 2 2	320: 320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49 5% 5 475/49 8% 7 475/49	0/40 [00 9	:00 , ?i 0.01711 0<?, ?it/ 0.01711 0<00:06, 0.01383 0<00:06, 0.01566 0<00:06, 0.01566 0<00:06, 0.01566</td <td>0.004888 (s) 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584</td> <td>0.01416 0.01416 0.0132 0.0132 0.01697</td> <td>1 1 2 2 2 2</td> <td>320: 320: 320: 320: 320:</td>	0.004888 (s) 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584	0.01416 0.01416 0.0132 0.0132 0.01697	1 1 2 2 2 2	320: 320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49 5% 5 475/49 8% 7 475/49	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06, 0.01566 0<00:06, 0.01566 0<00:06, 0.01566	t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584 5.90it/s] 0.005584	0.01416 0.01416 0.0132 0.0132 0.01697 0.01697	1 1 2 2 2 2 2	320: 320: 320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49 5% 5 475/49 8% 7 475/49	0/40 [00 9	:00 , ?i<br 0.01711 0 , ?it/<br 0.01711 0<00:06, 0.01383 0<00:06, 0.01566 0<00:06, 0.01566 0<00:06, 0.01566	t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584 5.90it/s] 0.005584 5.86it/s]	0.01416 0.01416 0.0132 0.0132 0.01697 0.01697	1 1 2 2 2 2 2	320: 320: 320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49 5% 5 475/49 8% 7 475/49 8% 7 475/49 10% #	0/40 [00 9	:00 , ?i 0.01711 0<?, ?it/ 0.01711 0<00:06, 0.01383 0<00:06, 0.01566 0<00:06, 0.01566 0<00:06, 0.0134 0<00:06, 0.0134 0<00:06, 0.0134</td <td>t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584 5.90it/s] 0.005584 5.86it/s] 0.006061</td> <td>0.01416 0.01416 0.0132 0.0132 0.01697 0.01697 0.01562</td> <td>1 1 2 2 2 2 1 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584 5.90it/s] 0.005584 5.86it/s] 0.006061	0.01416 0.01416 0.0132 0.0132 0.01697 0.01697 0.01562	1 1 2 2 2 2 1 1	320: 320: 320: 320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49 5% 5 475/49 8% 7 475/49 10% # 475/49 10% # 475/49	0/40 [00 9	:00 , ?i 0.01711 0<?, ?it/ 0.01711 0<00:06, 0.01383 0<00:06, 0.01566 0<00:06, 0.01566 0<00:06, 0.0134 0<00:06, 0.0134 0<00:06, 0.0134 0<00:06, 0.01399</td <td>t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584 5.90it/s] 0.005584 5.86it/s] 0.006061 5.86it/s]</td> <td>0.01416 0.01416 0.0132 0.0132 0.01697 0.01697 0.01562</td> <td>1 1 2 2 2 2 1 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584 5.90it/s] 0.005584 5.86it/s] 0.006061 5.86it/s]	0.01416 0.01416 0.0132 0.0132 0.01697 0.01697 0.01562	1 1 2 2 2 2 1 1	320: 320: 320: 320: 320: 320: 320:
0% 475/49 0% 475/49 2% 2 475/49 2% 2 475/49 5% 5 475/49 5% 5 475/49 8% 7 475/49 10% # 475/49 10% # 475/49	0/40 [00 9	:00 , ?i 0.01711 0<?, ?it/ 0.01711 0<00:06, 0.01383 0<00:06, 0.01566 0<00:06, 0.01566 0<00:06, 0.0134 0<00:06, 0.0134 00<00:06, 0.01399 00<00:06, 0.01399</td <td>t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584 5.90it/s] 0.005584 5.86it/s] 0.006061 5.86it/s] 0.006061 5.85it/s]</td> <td>0.01416 0.01416 0.0132 0.0132 0.01697 0.01697 0.01562 0.01562</td> <td>1 1 2 2 2 2 1 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	t/s] 0.004888 s] 0.004888 6.40it/s] 0.005421 6.40it/s] 0.005421 6.04it/s] 0.006631 6.04it/s] 0.006631 5.90it/s] 0.005584 5.90it/s] 0.005584 5.86it/s] 0.006061 5.86it/s] 0.006061 5.85it/s]	0.01416 0.01416 0.0132 0.0132 0.01697 0.01697 0.01562 0.01562	1 1 2 2 2 2 1 1 1	320: 320: 320: 320: 320: 320: 320: 320:

12% #2	5/40 [00:01<00:05, 5.85			
475/499		5523 0.01542	1	320:
15% #5	6/40 [00:01<00:05, 5.81			
475/499		5921 0.01533	2	320:
15% #5	-	it/s]		
475/499		5921 0.01533	2	320:
18% #7	7/40 [00:01<00:05, 5.81			
475/499	0.206G 0.01394 0.0		3	320:
18% #7	7/40 [00:01<00:05, 5.81			
475/499	0.206G 0.01394 0.0		3	320:
20% ##		it/s]		
475/499	0.206G 0.01534 0.00		4	320:
20% ##	8/40 [00:01<00:05, 5.65			
475/499		6909 0.01665	4	320:
22% ##2	9/40 [00:01<00:05, 5.69			
475/499		6777 0.01642	1	320:
22% ##2	9/40 [00:01<00:05, 5.69			
475/499		6777 0.01642	1	320:
25% ##5	10/40 [00:01<00:05, 5.7	· =		
475/499	0.206G 0.0157 0.00	7291 0.01691	4	320:
25% ##5	10/40 [00:01<00:05, 5.7	3it/s]		
475/499	0.206G 0.0157 0.00	7291 0.01691	4	320:
28% ##7	11/40 [00:01<00:05, 5.6	0it/s]		
475/499	0.206G 0.01616 0.00	7696 0.01732	4	320:
28% ##7	11/40 [00:02<00:05, 5.6	0it/s]		
475/499	0.206G 0.01616 0.00	7696 0.01732	4	320:
30% ###	12/40 [00:02<00:05, 5.1	1it/s]		
475/499	0.206G 0.01627 0.00	7679 0.01741	2	320:
30% ###	12/40 [00:02<00:05, 5.1	1it/s]		
475/499	0.206G 0.01627 0.00	7679 0.01741	2	320:
32% ###2	13/40 [00:02<00:05, 5.1	8it/s]		
475/499	0.206G 0.01567 0.00	7601 0.01703	2	320:
32% ###2	13/40 [00:02<00:05, 5.1	8it/s]		
475/499	0.206G 0.01567 0.00	7601 0.01703	2	320:
35% ###5	14/40 [00:02<00:04, 5.3	8it/s]		
475/499	0.206G 0.01781 0.00	7733 0.01832	2	320:
35% ###5	14/40 [00:02<00:04, 5.3	8it/s]		
475/499	0.206G 0.01781 0.00	7733 0.01832	2	320:
38% ###7	15/40 [00:02<00:04, 5.3	2it/s]		
475/499	0.206G 0.0172 0.00	7597 0.01809	1	320:
38% ###7	15/40 [00:02<00:04, 5.3	2it/s]		
475/499	0.206G 0.0172 0.00	7597 0.01809	1	320:
40% ####	16/40 [00:02<00:04, 5.3			
475/499		7345 0.01782	1	320:
40% ####	16/40 [00:03<00:04, 5.3			
475/499		7345 0.01782	1	320:
42% ####2	17/40 [00:03<00:04, 5.5			
475/499		7374 0.01785	2	320:

42% ####2		17/40 [00:03<00:04,				
475/499		0.206G 0.01666		0.01785	2	320:
45% ####5		18/40 [00:03<00:03,				
475/499		0.206G 0.01623		0.0176	1	320:
45% ####5		18/40 [00:03<00:03,				
475/499		0.206G 0.01623		0.0176	1	320:
48% ####7		19/40 [00:03<00:03,				
475/499		0.206G 0.01584		0.01746	1	320:
48% ####7		19/40 [00:03<00:03,				
475/499		0.206G 0.01584	0.006966	0.01746	1	320:
50% #####		20/40 [00:03<00:03,	5.63it/s]			
475/499		0.206G 0.01542	0.006774	0.01727	1	320:
50% #####		20/40 [00:03<00:03,	5.63it/s]			
475/499		0.206G 0.01542		0.01727	1	320:
52% #####2		21/40 [00:03<00:03,	· –			
475/499		0.206G 0.01539	0.006915	0.0171	2	320:
52% #####2		21/40 [00:03<00:03,	5.69it/s			
475/499		0.206G 0.01539	0.006915	0.0171	2	320:
55% #####5	-	22/40 [00:03<00:03,	5.73it/s			
475/499		0.206G 0.01668	0.006961	0.01716	3	320:
55% #####5		22/40 [00:04<00:03,	5.73it/s			
475/499		0.206G 0.01668	0.006961	0.01716	3	320:
57% #####7	-	23/40 [00:04<00:03,	5.66it/s]			
475/499		0.206G 0.01646	0.007117	0.017	2	320:
57% #####7	-	23/40 [00:04<00:03,	5.66it/s]			
475/499		0.206G 0.01646	0.007117	0.017	2	320:
60% ######		24/40 [00:04<00:02,	5.64it/s]			
475/499		0.206G 0.01647	0.007372	0.01694	4	320:
60% ######	-	24/40 [00:04<00:02,	5.64it/s]			
475/499		0.206G 0.01647	0.007372	0.01694	4	320:
62% ######2	-	25/40 [00:04<00:02,	5.54it/s			
475/499		0.206G 0.01656	0.007303	0.01697	2	320:
62% ######2	-	25/40 [00:04<00:02,	5.54it/s			
475/499		0.206G 0.01656	0.007303	0.01697	2	320:
65% ######5	١	26/40 [00:04<00:02,	5.48it/s			
475/499		0.206G 0.01657	0.007244	0.01684	2	320:
65% ######5	١	26/40 [00:04<00:02,	5.48it/s]			
475/499		0.206G 0.01657	0.007244	0.01684	2	320:
68% ######7	- 1	27/40 [00:04<00:02,	5.43it/s			
475/499		0.206G 0.01637	0.007143	0.01701	1	320:
68% ######7	-	27/40 [00:05<00:02,				
475/499		0.206G 0.01637	0.007143	0.01701	1	320:
70% ######	١	28/40 [00:05<00:02,				
475/499	•	0.206G 0.01639	0.007359	0.01703	4	320:
70% #######	ı	28/40 [00:05<00:02,				
475/499	•	0.206G 0.01639	0.007359	0.01703	4	320:
72% #######2	ı	29/40 [00:05<00:02,				
475/499	•	0.206G 0.01618	0.007228	0.01681	1	320:

70% #######	20/40 [00.05<00.02	E 45:+/al		
72% #######2 475/499	29/40 [00:05<00:02, 0.206G 0.01618 0		81 1	200.
		0.007228 0.016	01 1	320:
	30/40 [00:05<00:01,		71 1	320:
475/499			71 1	320:
	30/40 [00:05<00:01,		71 1	200.
475/499		0.007163 0.016	71 1	320:
	31/40 [00:05<00:01,		101	200.
475/499		0.00705 0.016	61 1	320:
	31/40 [00:05<00:01,		101	200.
475/499			61 1	320:
	32/40 [00:05<00:01,		77 0	200.
475/499			2	320:
	32/40 [00:05<00:01,		77 0	200
475/499		0.007083 0.016	2	320:
	33/40 [00:05<00:01,		74	200
475/499		0.007133 0.016	2	320:
_	33/40 [00:06<00:01,			000
475/499		0.007133 0.016	2	320:
	34/40 [00:06<00:01,		17.0	000
	0.206G 0.01753 0		2	320:
	34/40 [00:06<00:01,	· –		000
475/499		0.007097 0.016	2	320:
	35/40 [00:06<00:00,			
475/499	******		81 1	320:
	35/40 [00:06<00:00,			
475/499		.007073 0.016	81 1	320:
	36/40 [00:06<00:00,			
475/499		0.006999 0.016	72 1	320:
	36/40 [00:06<00:00,			
475/499		0.006999 0.016	72 1	320:
	37/40 [00:06<00:00,			
475/499		0.007159 0.016	373 4	320:
	37/40 [00:06<00:00,			
475/499		0.007159 0.016	73 4	320:
	38/40 [00:06<00:00,			
475/499	******		669 1	320:
	38/40 [00:06<00:00,			
475/499			669 1	320:
	39/40 [00:06<00:00,			
475/499	*		668 1	320:
	39/40 [00:07<00:00,			
475/499	0.206G 0.01706 0		668 1	320:
	40/40 [00:07<00:00,			
475/499	0.206G 0.01706 0		68 1	320:
100% ##########	40/40 [00:07<00:00,	5.591t/s]		
	(1) T T	-4		4550
ADEO OF	Class Images In		P R	mAP50
mAP50-95: 0%	0/20 [00:0	u , !lt/s]</td <td></td> <td></td>		

		_	Instances		R	mAP50
mAP50-95: 10%	t Class		0:00<00:01, Instances		R	mAP50
mAP50-95: 20% \$	## Class	4/20 [0 Images	0:00<00:00, Instances		R	mAP50
mAP50-95: 30%	### Class		0:00<00:00, Instances		R	mAP50
mAP50-95: 40%	####	8/20 [0	0:00<00:00,	15.75it/s]		
mAP50-95: 50% #	Class #####	_	Instances 00:00<00:00,		R	mAP50
mAP50-95: 60% \$	Class #####	•	Instances 00:00<00:00,		R	mAP50
	Class	Images	Instances	P	R	mAP50
mAP50-95: 75% ‡	######5 Class		00:00<00:00, Instances		R	mAP50
mAP50-95: 85% #	#######5 Class		00:01<00:00, Instances		R	mAP50
mAP50-95: 95%	########5	19/20 [00:01<00:00,	, 17.61it/s]		
mAP50-95: 100% #	Class ##########	•	Instances 00:01<00:00,		R	mAP50
0.799	all	40	40	0.979	0.975	0.993
Epoch (GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
0%	0/40 [00:	00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
476/499 0% (0.206G 0 0/40 [00:00		0.004711	0.01716	1	320:
476/499	0.206G 0	.008232	0.004711	0.01716	1	320:
	1/40 [00:00					
			0.00531	0.01462	2	320:
2% 2 1 :						
476/499				0.01462	2	320:
5% 5 2		-				
476/499		0.01743		0.01651	2	320:
5% 5 2		· ·		0.04054		200
			0.006266	0.01651	2	320:
	3/40 [00:00	· ·		0.04000	0	200
476/499			0.005742	0.01998	2	320:
	3/40 [00:00	· ·		0.01009	0	200.
			0.005742	0.01998	2	320:
			5.73it/s] 0.006279	0.01891	2	320.
10% #				0.01091	2	320:
			0.006279	0.01891	2	320:
			5.74it/s]	0.01001	4	020.
			0.005716	0.02064	2	320:
			5.74it/s]		_	

476/499	0.206G 0.02962 (0.02064	2	320:
15% #5	6/40 [00:01<00:06, 8 0.206G 0.02872 0		0.02074	2	320:
476/499 15% #5		0.005853 5.60it/s]	0.02074	2	320.
476/499			0.02074	2	320:
18% #7	7/40 [00:01<00:05, 5				
476/499	•		0.02035	2	320:
18% #7	7/40 [00:01<00:05, 8	5.67it/s]			
476/499			0.02035	2	320:
20% ##	8/40 [00:01<00:05, 5				
476/499			0.01939	1	320:
20% ##	8/40 [00:01<00:05, 8				
476/499			0.01939	1	320:
22% ##2	9/40 [00:01<00:05, 5		0.04000	0	000
476/499	0.206G 0.02781 (0.01893	2	320:
22% ##2	9/40 [00:01<00:05, § 0.206G 0.02781 0		0.01893	2	320:
476/499 25% ##5	10/40 [00:01<00:05,		0.01093	2	320:
476/499	0.206G 0.02749 (0.01897	4	320:
25% ##5	10/40 [00:01<00:05,		0.01097	4	320.
,	0.206G 0.02749 (0.01897	4	320:
28% ##7	11/40 [00:01<00:05,		0.01001	-	020.
476/499	0.206G 0.02642 (0.01904	4	320:
28% ##7	11/40 [00:02<00:05,				
476/499	0.206G 0.02642 (0.007229	0.01904	4	320:
30% ###	12/40 [00:02<00:05,	5.36it/s]			
476/499	0.206G 0.02548 0	0.007282	0.01894	2	320:
30% ###	12/40 [00:02<00:05,	5.36it/s]			
476/499	0.206G 0.02548 0	0.007282	0.01894	2	320:
32% ###2	13/40 [00:02<00:05,				
476/499	0.206G 0.02505		0.0191	4	320:
32% ###2	13/40 [00:02<00:05,				
476/499	0.206G 0.02505		0.0191	4	320:
35% ###5	14/40 [00:02<00:04,		0.04054		000
476/499	0.206G 0.02388		0.01871	1	320:
35% ###5	14/40 [00:02<00:04,		0 01071	1	200.
476/499 38% ###7	0.206G 0.02388 15/40 [00:02<00:04,		0.01871	1	320:
476/499	0.206G 0.02367 (0.01863	2	320:
38% ###7	15/40 [00:02<00:04,		0.01000	2	020.
476/499			0.01863	2	320:
40% ####	16/40 [00:02<00:04,			_	0_0.
476/499	· · · · · · · · · · · · · · · · · · ·		0.01872	2	320:
40% ####	16/40 [00:03<00:04,				
476/499	· · · · · · · · · · · · · · · · · · ·		0.01872	2	320:
42% ####2	17/40 [00:03<00:04,	5.52it/s]			
476/499	0.206G 0.02278	0.0083	0.01966	4	320:
42% ####2	17/40 [00:03<00:04,	5.52it/s			

476/499	0.206G 0.02278 0.0083	0.01966	4	320:
45% ####5	18/40 [00:03<00:03, 5.61it/s]			
476/499	0.206G 0.02271 0.00868	0.02039	4	320:
45% ####5	18/40 [00:03<00:03, 5.61it/s]	0.0000	4	000
476/499	0.206G 0.02271 0.00868	0.02039	4	320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]	0.00000	4	200.
476/499	0.206G 0.02317 0.008973	0.02032	4	320:
48% ####7	19/40 [00:03<00:03, 5.51it/s]	0.00000	4	200.
476/499 50% ####	0.206G 0.02317 0.008973	0.02032	4	320:
476/499	20/40 [00:03<00:03, 5.32it/s] 0.206G	0.02045	4	200.
50% #####	20/40 [00:03<00:03, 5.32it/s]	0.02045	4	320:
476/499	0.206G 0.02379 0.009208	0 00045	4	320:
52% #####2	21/40 [00:03<00:03, 5.45it/s]	0.02045	4	320:
476/499	0.206G 0.0231 0.00905	0.0202	2	320:
52% #####2	21/40 [00:03<00:03, 5.45it/s]	0.0202	2	320:
476/499	0.206G 0.0231 0.00905	0.0202	2	320:
55% #####5	22/40 [00:03<00:03, 5.40it/s]	0.0202	2	320.
476/499	0.206G 0.02359 0.008985	0.0215	2	200.
4767499 55% #####5	22/40 [00:04<00:03, 5.40it/s]	0.0215	۷	320:
476/499		0.0215	2	320:
57% #####7	0.206G 0.02359 0.008985 23/40 [00:04<00:03, 5.25it/s]	0.0215	2	320.
476/499	0.206G 0.0235 0.0094	0.0213	4	320:
57% #####7	23/40 [00:04<00:03, 5.25it/s]	0.0213	4	320.
476/499	0.206G 0.0235 0.0094	0.0213	4	320:
60% ######	24/40 [00:04<00:03, 5.15it/s]	0.0213	4	320.
476/499	0.206G 0.02392 0.009605	0.02125	4	320:
60% ######	24/40 [00:04<00:03, 5.15it/s]	0.02125	4	320.
476/499	0.206G 0.02392 0.009605	0.02125	4	320:
62% ######2	25/40 [00:04<00:02, 5.03it/s]	0.02125	4	320.
476/499	0.206G 0.02349 0.009432	0.02109	2	320:
62% ######2	25/40 [00:04<00:02, 5.03it/s]	0.02109	۷	320.
476/499	0.206G 0.02349 0.009432	0.02109	2	320:
65% ######5	26/40 [00:04<00:02, 5.03it/s]	0.02109	۷	320.
476/499	0.206G 0.02396 0.009621	0.02091	4	320:
	26/40 [00:05<00:02, 5.03it/s]	0.02091	4	320.
476/499	0.206G 0.02396 0.009621	0.02091	4	320:
68% ######7	27/40 [00:05<00:02, 4.99it/s]	0.02091	7	520.
476/499	0.206G 0.02349 0.009399	0.02039	1	320:
68% ######7	27/40 [00:05<00:02, 4.99it/s]	0.02000	-	020.
476/499	0.206G 0.02349 0.009399	0.02039	1	320:
70% #######	28/40 [00:05<00:02, 5.21it/s]	0.02000	-	020.
476/499	0.206G 0.02292 0.009155	0.02017	1	320:
70% #######	28/40 [00:05<00:02, 5.21it/s]	J. J	-	020.
476/499	0.206G 0.02292 0.009155	0.02017	1	320:
72% #######2	29/40 [00:05<00:02, 5.12it/s]		_	
476/499	0.206G 0.02241 0.008932	0.01987	1	320:
72% #######2			_	

476/499	0.206G 0.02241	0.008932	0.01987	1	320:
	30/40 [00:05<00:01,		0.04005		000
476/499	0.206G 0.02274		0.01985	2	320:
75% #######5 476/499	30/40 [00:05<00:01, 0.206G 0.02274		0.01005	2	200.
·	31/40 [00:05<00:01,		0.01985	2	320:
476/499	· · · · · · · · · · · · · · · · · · ·		0.0197	2	320:
	31/40 [00:05<00:01,		0.0137	2	520.
476/499			0.0197	2	320:
	32/40 [00:05<00:01,		0.0101	2	020.
476/499			0.02014	4	320:
	32/40 [00:06<00:01,		0102021	_	0201
476/499	0.206G 0.02242		0.02014	4	320:
	33/40 [00:06<00:01,				
476/499			0.02016	2	320:
82% ########2	33/40 [00:06<00:01,	4.90it/s]			
476/499	0.206G 0.02332	0.008915	0.02016	2	320:
85% #######5	34/40 [00:06<00:01,	4.91it/s]			
476/499	0.206G 0.02291	0.008776	0.0199	1	320:
85% #######5	34/40 [00:06<00:01,	4.91it/s]			
476/499	0.206G 0.02291	0.008776	0.0199	1	320:
88% #######7	35/40 [00:06<00:00,	5.02it/s]			
476/499	0.206G 0.02338	0.008782	0.02	4	320:
88% #######7	35/40 [00:06<00:00,	5.02it/s			
476/499	0.206G 0.02338	0.008782	0.02	4	320:
90% ########	36/40 [00:06<00:00,	4.77it/s			
476/499	0.206G 0.02354	0.008885	0.02008	4	320:
90% ########	36/40 [00:07<00:00,	4.77it/s			
476/499	0.206G 0.02354	0.008885	0.02008	4	320:
92% ########2	37/40 [00:07<00:00,	4.81it/s			
476/499	0.206G 0.02307	0.008748	0.02004	1	320:
92% ########2	37/40 [00:07<00:00,	4.81it/s]			
476/499	0.206G 0.02307	0.008748	0.02004	1	320:
95% ########5	38/40 [00:07<00:00,	4.73it/s			
476/499	0.206G 0.0231	0.008937	0.02008	4	320:
95% ########5	38/40 [00:07<00:00,	4.73it/s]			
476/499	0.206G 0.0231	0.008937	0.02008	4	320:
98% ########7	39/40 [00:07<00:00,	4.89it/s]			
476/499	0.206G 0.02275	0.008783	0.02009	1	320:
98% ########7	39/40 [00:07<00:00,	, 4.89it/s]			
476/499			0.02009	1	320:
	# 40/40 [00:07<00:00	•			
476/499		0.008783	0.02009	1	320:
100% #########	# 40/40 [00:07<00:00), 5.24it/s]			
	Class Images	Instances	P	R	mAP50
mAP50-95: 0%):00 , ?it/s</td <td></td> <td>_</td> <td></td>		_	
	Class Images	Instances	P	R	mAP50

mAP50-95:	15%	#5	3/20 [0	0:00<00:00,	18.48it/s]		
		Class	Images	Instances	Р	R	mAP50
mAP50-95:	25%	##5	5/20 [0	0:00<00:00,	17.17it/s]		
		Class		Instances		R	mAP50
mAP50-95:	35%	###5	_	0:00<00:00,			
		Class		Instances		R	mAP50
mAP50-95:	45%		_	0:00<00:00,			
		Class		Instances		R	mAP50
mAP50-95:	55%	#####5	•	00:00<00:00,			
		Class		Instances		R	mAP50
mAP50-95:	65%		•	00:00<00:00,			
		Class		Instances		R	mAP50
mAP50-95:	75%	######5	_	00:00<00:00,			
		Class		Instances		R	mAP50
mAP50-95:	85%		•	00:01<00:00,			
		Class		Instances		R	mAP50
mAP50-95:	95%		•	00:01<00:00,			
	70	Class		Instances		R	mAP50
mAP50-95:	100%		•	00:01<00:00,			
	10070	all	40	40	0.979	0.975	0.994
0.797		Q11	10	10	0.0.0	0.010	0.001
Epoc	:h	GPU mem b	ox loss	obj_loss	cls loss	Instances	Size
_p -		01 0 0		00500	010_1000		222
0%1		0/40 [00:	00 . ?i</td <td>t/sl</td> <td></td> <td></td> <td></td>	t/sl			
477/49				0.01175	0.01865	4	320:
0%		0/40 [00:00			010200	_	0_0.
477/49		0.206G			0.01865	4	320:
2% 2		1/40 [00:00			0.01000	-	020.
477/49		0.206G		0.008954	0.01527	2	320:
2% 2		1/40 [00:00			0.01021	_	020.
				0.008954	0.04507	0	320:
•			0.011		0 01527	,	
477/49			<00.06		0.01527	2	
			<00:06,	5.59it/s]			
5% 5	9	0.206G	0.01638	5.59it/s] 0.008427	0.01527	2	320:
5% 5 477/40	99 	0.206G 2/40 [00:00	0.01638 <00:06,	5.59it/s] 0.008427 5.59it/s]	0.01578	2	320:
477/49	99 99	0.206G 2/40 [00:00 0.206G	0.01638 <00:06, 0.01638	5.59it/s] 0.008427 5.59it/s] 0.008427			
477/49 8% 7	99 99 	0.206G 2/40 [00:00 0.206G 3/40 [00:00	0.01638 <00:06, 0.01638 <00:06,	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s]	0.01578 0.01578	2	320: 320:
477/49 8% 7 477/49	99 99 	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G	0.01638 <00:06, 0.01638 <00:06, 0.0196	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083	0.01578	2	320:
477/49 8% 7 477/49 8% 7	99 99 99	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00	0.01638 <00:06, 0.01638 <00:06, 0.0196 <00:06,	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083 5.75it/s]	0.01578 0.01578 0.01555	2 2 2	320: 320: 320:
477/49 8% 7 477/49 8% 7 477/49	99 99 99 99	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G	0.01638 <00:06, 0.01638 <00:06, 0.0196 <00:06, 0.0196	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083 5.75it/s] 0.0083	0.01578 0.01578	2	320: 320:
477/49 8% 7 477/49 8% 7 477/49 10% #	99 99 99 	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:0	0.01638 <00:06, 0.01638 <00:06, 0.0196 <00:06, 0.0196	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083 5.75it/s] 0.0083 5.58it/s]	0.01578 0.01578 0.01555 0.01555	2 2 2 2	320: 320: 320: 320:
477/49 8% 7 477/49 8% 7 477/49 10% # 477/49	99 99 99 99	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:0	0.01638 <00:06, 0.01638 <00:06, 0.0196 <00:06, 0.0196 0<00:06,	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083 5.75it/s] 0.0083 5.58it/s] 0.007381	0.01578 0.01578 0.01555	2 2 2	320: 320: 320:
477/49 8% 7 477/49 8% 7 477/49 10% # 477/49	99 99 99 99	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:0 0.206G 4/40 [00:0	0.01638 <00:06, 0.01638 <00:06, 0.0196 <00:06, 0.0196 0<00:06,	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083 5.75it/s] 0.0083 5.58it/s] 0.007381 5.58it/s]	0.01578 0.01578 0.01555 0.01555 0.01539	2 2 2 2	320: 320: 320: 320:
477/49 8% 7 477/49 8% 7 477/49 10% # 477/49	99 99 99 99 99	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:0 0.206G 4/40 [00:0	0.01638 <00:06, 0.01638 <00:06, 0.0196 <00:06, 0.0196 0<00:06, 0.01747 0<00:06,	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083 5.75it/s] 0.0083 5.58it/s] 0.007381 5.58it/s] 0.007381	0.01578 0.01578 0.01555 0.01555	2 2 2 2	320: 320: 320: 320:
477/49 8% 7 477/49 8% 7 477/49 10% # 477/49 10% # 477/49 12% #2	99 99 99 99 99	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:0 0.206G 4/40 [00:0 0.206G 5/40 [00:0	0.01638 <00:06, 0.01638 <00:06, 0.0196 <00:06, 0.0196 0<00:06, 0.01747 0<00:06, 0.01747	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083 5.75it/s] 0.0083 5.58it/s] 0.007381 5.58it/s] 0.007381 5.66it/s]	0.01578 0.01578 0.01555 0.01555 0.01539 0.01539	2 2 2 2 1	320: 320: 320: 320: 320:
477/49 8% 7 477/49 8% 7 477/49 10% # 477/49 10% # 477/49 12% #2 477/49	99 99 99 99 99	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:0 0.206G 4/40 [00:0 0.206G 5/40 [00:0 0.206G	0.01638 <00:06, 0.01638 <00:06, 0.0196 <00:06, 0.01747 0<00:06, 0.01747 0<00:06,	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083 5.75it/s] 0.0083 5.58it/s] 0.007381 5.58it/s] 0.007381 5.66it/s] 0.006779	0.01578 0.01578 0.01555 0.01555 0.01539	2 2 2 2	320: 320: 320: 320:
477/49 8% 7 477/49 8% 7 477/49 10% # 477/49 10% # 477/49 12% #2	99 99 99 99 99	0.206G 2/40 [00:00 0.206G 3/40 [00:00 0.206G 3/40 [00:00 0.206G 4/40 [00:0 0.206G 4/40 [00:0 0.206G 5/40 [00:0	0.01638 <00:06, 0.01638 <00:06, 0.0196 <00:06, 0.01747 0<00:06, 0.01747 0<00:06,	5.59it/s] 0.008427 5.59it/s] 0.008427 5.75it/s] 0.0083 5.75it/s] 0.0083 5.58it/s] 0.007381 5.58it/s] 0.007381 5.66it/s] 0.006779	0.01578 0.01578 0.01555 0.01555 0.01539 0.01539	2 2 2 2 1	320: 320: 320: 320: 320:

15% #5	6/40 [00:01<00:05, 5.89it/s]			
477/499	0.206G 0.01494 0.007385	0.01487	4	320:
15% #5	6/40 [00:01<00:05, 5.89it/s]			
477/499	0.206G 0.01494 0.007385	0.01487	4	320:
18% #7	7/40 [00:01<00:05, 5.53it/s]		_	
477/499	0.206G 0.01423 0.007375	0.01463	2	320:
18% #7	7/40 [00:01<00:05, 5.53it/s]	0.04400	•	222
477/499	0.206G 0.01423 0.007375	0.01463	2	320:
20% ##	8/40 [00:01<00:05, 5.62it/s]	0.04470	0	000
477/499	0.206G 0.01566 0.00808	0.01479	2	320:
20% ##	8/40 [00:01<00:05, 5.62it/s]	0.04470	0	000
477/499	0.206G 0.01566 0.00808	0.01479	2	320:
22% ##2	9/40 [00:01<00:05, 5.52it/s]	0.04540	4	000
477/499	0.206G 0.0156 0.008746	0.01548	4	320:
22% ##2	9/40 [00:01<00:05, 5.52it/s]	0.04540		222
477/499	0.206G 0.0156 0.008746		4	320:
25% ##5	10/40 [00:01<00:05, 5.44it/s]		_	
477/499	0.206G 0.01664 0.00929		2	320:
25% ##5	10/40 [00:01<00:05, 5.44it/s]		_	
477/499	0.206G 0.01664 0.00929		2	320:
28% ##7	11/40 [00:01<00:05, 5.41it/s]			
•	0.206G 0.0158 0.008791	0.01656	1	320:
28% ##7	11/40 [00:02<00:05, 5.41it/s]			
477/499	0.206G 0.0158 0.008791		1	320:
30% ###	12/40 [00:02<00:05, 5.36it/s]			
477/499	0.206G 0.01679 0.009391		4	320:
30% ###	12/40 [00:02<00:05, 5.36it/s]			
477/499	0.206G 0.01679 0.009391		4	320:
32% ###2	13/40 [00:02<00:05, 5.23it/s]			
477/499	0.206G 0.01755 0.009306	0.0181	2	320:
32% ###2	13/40 [00:02<00:05, 5.23it/s]			
477/499	0.206G 0.01755 0.009306	0.0181	2	320:
35% ###5	14/40 [00:02<00:04, 5.39it/s]			
477/499	0.206G 0.0187 0.009545	0.01827	4	320:
35% ###5	14/40 [00:02<00:04, 5.39it/s]			
477/499	0.206G 0.0187 0.009545	0.01827	4	320:
38% ###7	15/40 [00:02<00:04, 5.35it/s]			
477/499	0.206G 0.0186 0.009762	0.01851	4	320:
38% ###7	15/40 [00:02<00:04, 5.35it/s]			
477/499	0.206G 0.0186 0.009762	0.01851	4	320:
40% ####	16/40 [00:02<00:04, 5.34it/s]			
477/499	0.206G 0.01863 0.01006	0.01862	4	320:
40% ####	16/40 [00:03<00:04, 5.34it/s]			
477/499	0.206G 0.01863 0.01006	0.01862	4	320:
42% ####2	17/40 [00:03<00:04, 5.34it/s]			
477/499	0.206G 0.01992 0.009977	0.01845	3	320:
42% ####2	17/40 [00:03<00:04, 5.34it/s]			
477/499	0.206G 0.01992 0.009977	0.01845	3	320:

45% ####5		18/40 [00:03<00:04,				
477/499		0.206G 0.02093		0.01883	4	320:
45% ####5	١	18/40 [00:03<00:04,				
477/499		0.206G 0.02093		0.01883	4	320:
48% ####7	١	19/40 [00:03<00:03,				
477/499		0.206G 0.0207		0.01822	1	320:
48% ####7	ı	19/40 [00:03<00:03,				
477/499		0.206G 0.0207	0.01011	0.01822	1	320:
50% #####	ı	20/40 [00:03<00:03,			_	
477/499		0.206G 0.02135		0.0182	2	320:
50% #####	ı	20/40 [00:03<00:03,			_	
477/499		0.206G 0.02135	0.009963	0.0182	2	320:
52% #####2	ı	21/40 [00:03<00:03,				
477/499			0.01019	0.01858	4	320:
52% #####2	ı	21/40 [00:03<00:03,				
477/499		0.206G 0.02196		0.01858	4	320:
55% #####5	١	22/40 [00:03<00:03,				
477/499		0.206G 0.02179		0.01855	4	320:
55% #####5		22/40 [00:04<00:03,				
477/499		0.206G 0.02179		0.01855	4	320:
57% #####7		23/40 [00:04<00:03,				
477/499		0.206G 0.02182		0.01875	4	320:
57% #####7	١	23/40 [00:04<00:03,				
477/499		0.206G 0.02182	0.01039	0.01875	4	320:
60% ######		24/40 [00:04<00:03,	4.95it/s			
477/499		0.206G 0.02265	0.01027	0.0193	2	320:
60% ######		24/40 [00:04<00:03,				
477/499		0.206G 0.02265	0.01027	0.0193	2	320:
62% ######2		25/40 [00:04<00:03,	4.94it/s			
477/499		0.206G 0.02342	0.01025	0.01944	2	320:
62% ######2		25/40 [00:04<00:03,	4.94it/s			
477/499		0.206G 0.02342	0.01025	0.01944	2	320:
65% ######5		26/40 [00:04<00:02,	4.99it/s			
477/499		0.206G 0.02308	0.01031	0.01932	4	320:
65% ######5		26/40 [00:05<00:02,	4.99it/s]			
477/499		0.206G 0.02308	0.01031	0.01932	4	320:
68% ######7		27/40 [00:05<00:02,	5.02it/s			
477/499		0.206G 0.02341	0.01023	0.02013	2	320:
68% ######7		27/40 [00:05<00:02,	5.02it/s			
477/499		0.206G 0.02341	0.01023	0.02013	2	320:
70% #######		28/40 [00:05<00:02,	5.11it/s			
477/499		0.206G 0.02311	0.01007	0.01992	1	320:
70% ######	1	28/40 [00:05<00:02,	5.11it/s]			
477/499		0.206G 0.02311	0.01007	0.01992	1	320:
72% ######2	1	29/40 [00:05<00:02,	5.30it/s			
477/499		0.206G 0.02349	0.01007	0.01989	3	320:
72% ######2	-	29/40 [00:05<00:02,	5.30it/s]			
477/499		0.206G 0.02349	0.01007	0.01989	3	320:

	30/40 [00:05<00:01,			_	
477/499	0.206G 0.02301		0.01972	4	320:
	30/40 [00:05<00:01,				
477/499		0.01001	0.01972	4	320:
	31/40 [00:05<00:01,				
477/499	0.206G 0.0228	0.009873	0.01956	2	320:
78% ######7	31/40 [00:05<00:01,	5.36it/s			
477/499	0.206G 0.0228	0.009873	0.01956	2	320:
80% #######	32/40 [00:05<00:01,	5.34it/s			
477/499	0.206G 0.02248	0.009717	0.01942	2	320:
80% #######	32/40 [00:06<00:01,	5.34it/s			
477/499	0.206G 0.02248	0.009717	0.01942	2	320:
82% ########	33/40 [00:06<00:01,	5.33it/s			
477/499	· · · · · · · · · · · · · · · · · · ·		0.01927	2	320:
	33/40 [00:06<00:01,				
477/499	-	0.00967	0.01927	2	320:
	34/40 [00:06<00:01,		0.0000	_	0_0.
477/499			0.01907	2	320:
	34/40 [00:06<00:01,		0.01007	2	020.
477/499			0.01907	2	320:
•	35/40 [00:06<00:00,		0.01907	2	320.
	-		0.0100	4	320:
477/499			0.0192	4	320:
	35/40 [00:06<00:00,		0.0400	4	200
477/499		0.009723	0.0192	4	320:
	36/40 [00:06<00:00,				
477/499			0.01937	1	320:
	36/40 [00:06<00:00,				
477/499	0.206G 0.02198		0.01937	1	320:
	37/40 [00:06<00:00,	5.49it/s			
477/499	0.206G 0.02206	0.009409	0.01926	1	320:
92% ########2	37/40 [00:07<00:00,	5.49it/s			
477/499	0.206G 0.02206	0.009409	0.01926	1	320:
95% ########5	38/40 [00:07<00:00,	5.56it/s			
477/499	0.206G 0.02196	0.009549	0.01922	4	320:
95% ########5	38/40 [00:07<00:00,	5.56it/s			
477/499	0.206G 0.02196	0.009549	0.01922	4	320:
98% ########7	39/40 [00:07<00:00,	5.48it/s]			
	0.206G 0.02249		0.01925	2	320:
	39/40 [00:07<00:00,				
477/499		0.009507	0.01925	2	320:
	40/40 [00:07<00:00				
477/499		0.009507	0.01925	2	320:
	40/40 [00:07<00:00		0.01020	2	020.
±00/01	1 10/10 [00:01 (00:00	, 0.0010/6]			
	Class Images	Instances	Р	R	mAP50
mAP50-95: 0%	•):00 , ?it/s</td <td></td> <td>16</td> <td>mni oo</td>		16	mni oo
mm 00 30. 0%		Instances	л Р	R	mAP50
mADE0_0E. 10%I	•	:00<00:01, 1		r.	IIIAF OU
mAP50-95: 10%	# 2/20 [00	7.00\00:01, I	4.ZUIU/S]		

	_	Instances		R	mAP50
mAP50-95: 20% ## Class		0:00<00:00, Instances		R	mAP50
mAP50-95: 30% ###		0:00<00:00,			
Class	•	Instances		R	mAP50
		0:00<00:00,		_	1550
Class	Images			R	mAP50
		00:00<00:00			ADEO
Class mAP50-95: 65% #####5	_	Instances [00:00<00:00]		R	mAP50
Class		Instances		R	mAP50
	0	00:00<00:00			mAI 00
Class		Instances		R	mAP50
mAP50-95: 85% #######5	•				
Class		Instances		R	mAP50
mAP50-95: 95% #######5					
Class		Instances		R	mAP50
mAP50-95: 100% #########	20/20 [00:01<00:00	, 17.46it/s]		
all	40	40	0.979	0.975	0.994
0.797					
Epoch GPU_mem 1	oox_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00			0.04.000		000
478/499 0.206G		0.009446	0.01682	2	320:
0% 0/40 [00:00	-		0.01600	0	200
478/499 0.206G 2% 2 1/40 [00:00	0.03883		0.01682	2	320:
2% 2 1/40 [00:00 478/499	0.03486		0.01747	2	320:
2% 2 1/40 [00:00			0.01747	2	320.
478/499 0.206G			0.01747	2	320:
5% 5 2/40 [00:00			0.01717	2	020.
478/499 0.206G	0.02746	0.008429	0.01566	2	320:
5% 5 2/40 [00:00					
478/499 0.206G	-	0.008429	0.01566	2	320:
8% 7 3/40 [00:00	0<00:06,	5.81it/s]			
478/499 0.206G	0.03206	0.009212	0.0157	3	320:
8% 7 3/40 [00:00	0<00:06,	5.81it/s			
478/499 0.206G	0.03206	0.009212	0.0157	3	320:
10% # 4/40 [00:0	00<00:06,	5.57it/s]			
478/499 0.206G	0.03748	0.01042	0.01592	4	320:
10% # 4/40 [00:0	-				
478/499 0.206G		0.01042	0.01592	4	320:
12% #2 5/40 [00:0					
478/499 0.206G		0.009385	0.01558	1	320:
12% #2 5/40 [00:0			0.04550		200
		0.009385	0.01558	1	320:
15% #5 6/40 [00:0	11<00:06,	5.591t/s]			

478/499	0.206G 0.03525 0.0		2	320:
15% #5 478/499	6/40 [00:01<00:06, 5.8 0.206G 0.03525 0.0	59it/s] 008976 0.01545	2	320:
18% #7		19it/s]	0	000
478/499 18% #7	0.206G 0.03676 0.0 7/40 [00:01<00:06, 5.4	0.01562 19it/sl	2	320:
478/499	0.206G 0.03676 0.0	0.01562	2	320:
20% ## 478/499	8/40 [00:01<00:05, 5.4 0.206G	14it/s] 008284 0.0154	1	320:
20% ##	8/40 [00:01<00:05, 5.4		1	320.
478/499		0.0154	1	320:
22% ##2	9/40 [00:01<00:05, 5.5			
478/499		0.01527	1	320:
22% ##2	9/40 [00:01<00:05, 5.5		4	200
478/499	0.206G 0.03105 0.0		1	320:
25% ##5	10/40 [00:01<00:05, 5:0.206G 0.03002 0.0	0.01626	4	320:
478/499 25% ##5	10/40 [00:01<00:05, 5		4	320:
478/499	0.206G 0.03002 0.0		4	320:
28% ##7	11/40 [00:01<00:05, 5		-	520.
	0.206G 0.02845 0.0		2	320:
28% ##7	11/40 [00:02<00:05, 5			020.
478/499	0.206G 0.02845 0.0		2	320:
30% ###	12/40 [00:02<00:05, 5		_	
478/499	•	0.01642	1	320:
30% ###	12/40 [00:02<00:05, 5			
478/499	0.206G 0.02687 0.0		1	320:
32% ###2	13/40 [00:02<00:04, 5	.44it/s]		
478/499	0.206G 0.02666 0.0	0.01624	1	320:
32% ###2	13/40 [00:02<00:04, 5	.44it/s]		
478/499	0.206G 0.02666 0.0	0.01624	1	320:
35% ###5	14/40 [00:02<00:04, 5	.45it/s]		
478/499	0.206G 0.02625 0.0	0.01651	4	320:
35% ###5	14/40 [00:02<00:04, 5	.45it/s]		
478/499	0.206G 0.02625 0.0		4	320:
38% ###7	15/40 [00:02<00:04, 5			
478/499		0.01635	1	320:
38% ###7	15/40 [00:02<00:04, 5			
478/499	0.206G 0.02532 0.0		1	320:
40% ####	16/40 [00:02<00:04, 5		0	200
478/499		0.01635	2	320:
40% ####	16/40 [00:03<00:04, 5		0	200.
478/499 42% ####2	0.206G 0.02464 0.0 17/40 [00:03<00:04, 5	0.01635 14i+/sl	2	320:
478/499		0.01817	2	320:
42% ####2	17/40 [00:03<00:04, 5		2	JZU.
478/499	0.206G 0.02508 0.0		2	320:
45% ####5	18/40 [00:03<00:04, 4			
		· =		

478/499	0.206G 0.02477 0.008476	0.01874	4 320:
45% ####5	18/40 [00:03<00:04, 4.97it/s]		
478/499	0.206G 0.02477 0.008476	0.01874	4 320:
48% ####7	19/40 [00:03<00:04, 4.93it/s]		
478/499		0.01841	1 320:
48% ####7	19/40 [00:03<00:04, 4.93it/s]	0.04044	
478/499		0.01841	1 320:
50% #####	20/40 [00:03<00:04, 4.71it/s]	0 01007	1 200.
478/499 50% ####	0.206G 0.02323 0.008139 (20/40 [00:03<00:04, 4.71it/s]	0.01827	1 320:
478/499	•	0.01827	1 320:
52% #####2	21/40 [00:03<00:03, 4.87it/s]	0.01021	1 320.
478/499	•	0.01845	4 320:
52% #####2	21/40 [00:04<00:03, 4.87it/s]	0.01040	520.
478/499		0.01845	4 320:
55% #####5	22/40 [00:04<00:03, 4.88it/s]		- 0201
478/499		0.01853	4 320:
55% #####5	22/40 [00:04<00:03, 4.88it/s]		
478/499	0.206G 0.02335 0.008611	0.01853	4 320:
57% #####7	23/40 [00:04<00:03, 4.73it/s]		
478/499	0.206G 0.02341 0.009131	0.01864	4 320:
57% #####7	23/40 [00:04<00:03, 4.73it/s]		
478/499	0.206G 0.02341 0.009131	0.01864	4 320:
60% ######	24/40 [00:04<00:03, 4.83it/s]		
478/499		0.01844	2 320:
60% ######	24/40 [00:04<00:03, 4.83it/s]		
478/499		0.01844	2 320:
62% #####2	25/40 [00:04<00:03, 4.97it/s]		
478/499		0.01815	1 320:
62% ######2	25/40 [00:05<00:03, 4.97it/s]	0.04045	
478/499		0.01815	1 320:
65% ######5	26/40 [00:05<00:02, 4.94it/s]	0 01010	200
478/499		0.01849	2 320:
65% ######5	26/40 [00:05<00:02, 4.94it/s] 0.206G	0 01040	200.
478/499 68% #####7	0.206G 0.02332 0.008738 (27/40 [00:05<00:02, 5.05it/s]	0.01849	2 320:
478/499		0.01833	1 320:
68% ######7	27/40 [00:05<00:02, 5.05it/s]	0.01000	020.
478/499		0.01833	1 320:
70% #######	28/40 [00:05<00:02, 5.13it/s]		020.
478/499	•	0.01821	1 320:
70% ######	28/40 [00:05<00:02, 5.13it/s]		
478/499		0.01821	1 320:
72% ######2	29/40 [00:05<00:02, 5.30it/s]		
478/499		0.01842	4 320:
72% ######2	29/40 [00:05<00:02, 5.30it/s]		
478/499	0.206G 0.02227 0.008597	0.01842	4 320:
75% ######5	30/40 [00:05<00:01, 5.18it/s]		

478/499	0.206G 0.02192	0.008543 0.01831	. 2	320:
75% ######5	30/40 [00:05<00:01,	5.18it/s]		
478/499	0.206G 0.02192	0.008543 0.01831	. 2	320:
78% ######7	31/40 [00:05<00:01,	5.36it/s]		
478/499	0.206G 0.02168		1	320:
	31/40 [00:06<00:01,			
478/499			1	320:
	32/40 [00:06<00:01,		_	
478/499			2	320:
	32/40 [00:06<00:01,		_	
478/499	*		2	320:
	33/40 [00:06<00:01,			000
478/499		0.008414 0.01858	3	320:
	33/40 [00:06<00:01,			000
478/499		0.008414 0.01858	3	320:
	34/40 [00:06<00:01,			000
478/499			5 2	320:
	34/40 [00:06<00:01,			
478/499	0.206G 0.02166	0.008381 0.01855	5 2	320:
	35/40 [00:06<00:00,			
478/499			4	320:
	35/40 [00:06<00:00,			
478/499		0.008494 0.01857	4	320:
	36/40 [00:06<00:00,		_	
478/499	0.206G 0.02185		2	320:
	36/40 [00:07<00:00,			
478/499	0.206G 0.02185	0.008463 0.01857	2	320:
	37/40 [00:07<00:00,			
478/499	0.206G 0.02215		9 4	320:
	37/40 [00:07<00:00,			
478/499		0.008624 0.01889	9 4	320:
	38/40 [00:07<00:00,			
478/499	0.206G 0.02177	0.008551 0.01889	2	320:
	38/40 [00:07<00:00,			
478/499		0.008551 0.01889	2	320:
	39/40 [00:07<00:00,			
478/499		0.008551 0.01879	2	320:
	39/40 [00:07<00:00,			
478/499		0.008551 0.01879	2	320:
	40/40 [00:07<00:00			
478/499	0.206G 0.02219		2	320:
100% #########	40/40 [00:07<00:00	, 5.29it/s]		
	•	Instances F	R	mAP50
mAP50-95: 0%		:00 , ?it/s]</td <td></td> <td></td>		
	•	Instances F		mAP50
mAP50-95: 10%		:00<00:01, 13.37it/s		
	Class Images	Instances F	P R	mAP50

mAP50-95:	20% ##	4/20 [00	0:00<00:01,	15.80it/s]		
	Class		Instances		R	mAP50
mAP50-95:	30% ###	•	0:00<00:00,			
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	40% ####	8/20 [00	0:00<00:00,	17.37it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	50% #####	10/20 [0	00:00<00:00,	17.64it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	60% ######	12/20 [0	00:00<00:00,	17.85it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	70% ######	14/20 [0	00:00<00:00,	17.20it/s]		
	Class	•	Instances		R	mAP50
mAP50-95:						
	Class	•	Instances		R	mAP50
mAP50-95:	95% ########5		-			
	Class	_	Instances		R	mAP50
mAP50-95:	100% ########					
	all	40	40	0.976	0.975	0.993
0.798						
Epoc	ch GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
-0/1	l 0/40 F00					
	0/40 [00:	=				
		.008067	0.004623	0.01443	1	320:
0%	0/40 [00:00			0 04440	4	200
479/49				0.01443	1	320:
2% 2		-		0.01505	0	200
479/49			0.006674	0.01535	2	320:
2% 2			6.35it/s] 0.006674	0.01535	2	200.
5% 5				0.01555	2	320:
		-	0.01004	0.01519	4	320:
5% 5			6.02it/s]	0.01519	4	320.
479/49		-		0.01519	4	320:
8% 7	3/40 [00:00			0.01519	4	320.
			0.01113	0.01647	3	320:
8% 7	3/40 [00:00			0.01047	9	020.
479/49			0.01113	0.01647	3	320:
10% #				0.01017	G	020.
479/49			0.01078	0.01599	2	320:
10% #	4/40 [00:0			010200	_	0_0.
479/49			0.01078	0.01599	2	320:
12% #2	5/40 [00:0				_	
479/49			0.01141	0.01664	4	320:
12% #2				. , -	_	
479/49			0.01141	0.01664	4	320:
15% #5	6/40 [00:0					
479/49				0.01766	2	320:

15% #5	6/40 [00:01<00:06, 5.66it/s]			
479/499	0.206G 0.01798 0.01066	0.01766	2	320:
18% #7	7/40 [00:01<00:06, 5.39it/s]			
479/499	0.206G 0.01698 0.009789	0.01764	1	320:
18% #7	7/40 [00:01<00:06, 5.39it/s]			
479/499	0.206G 0.01698 0.009789	0.01764	1	320:
20% ##	8/40 [00:01<00:05, 5.68it/s]			
479/499	0.206G 0.01855 0.009642	0.01831	2	320:
20% ##	8/40 [00:01<00:05, 5.68it/s]		_	
479/499	0.206G 0.01855 0.009642	0.01831	2	320:
22% ##2	9/40 [00:01<00:05, 5.56it/s]		_	
479/499	0.206G 0.0194 0.01048	0.0189	4	320:
22% ##2	9/40 [00:01<00:05, 5.56it/s]			
479/499	0.206G 0.0194 0.01048	0.0189	4	320:
25% ##5	10/40 [00:01<00:05, 5.60it/s]			
479/499	0.206G 0.0196 0.01017	0.01903	2	320:
25% ##5	10/40 [00:01<00:05, 5.60it/s]			
479/499	0.206G 0.0196 0.01017	0.01903	2	320:
28% ##7	11/40 [00:01<00:05, 5.67it/s]			
479/499	0.206G 0.01853 0.009591	0.01924	1	320:
28% ##7	11/40 [00:02<00:05, 5.67it/s]			
479/499	0.206G 0.01853 0.009591	0.01924	1	320:
30% ###	12/40 [00:02<00:05, 5.42it/s]			
479/499	0.206G 0.01769 0.00912	0.01948	1	320:
30% ###	12/40 [00:02<00:05, 5.42it/s]			
479/499	0.206G 0.01769 0.00912	0.01948	1	320:
32% ###2	13/40 [00:02<00:04, 5.67it/s]			
479/499	0.206G 0.01799 0.008853	0.01967	2	320:
32% ###2	13/40 [00:02<00:04, 5.67it/s]			
479/499	0.206G 0.01799 0.008853	0.01967	2	320:
35% ###5	14/40 [00:02<00:04, 5.71it/s]			
479/499	0.206G 0.01824 0.008877	0.02012	2	320:
35% ###5	14/40 [00:02<00:04, 5.71it/s]			
479/499	0.206G 0.01824 0.008877	0.02012	2	320:
38% ###7	15/40 [00:02<00:04, 5.59it/s]			
479/499	0.206G 0.01805 0.008896	0.01974	2	320:
38% ###7	15/40 [00:02<00:04, 5.59it/s]			
479/499	0.206G 0.01805 0.008896	0.01974	2	320:
40% ####	16/40 [00:02<00:04, 5.64it/s]	0.010.1	_	0_0.
479/499	0.206G 0.01775 0.009019	0.02016	4	320:
40% ####	16/40 [00:03<00:04, 5.64it/s]	0.02010	-	020.
479/499	0.206G 0.01775 0.009019	0.02016	4	320:
42% ####2	17/40 [00:03<00:04, 5.55it/s]	0.02010	T	020.
479/499	0.206G 0.0176 0.008769	0.01982	2	320:
42% ####2	17/40 [00:03<00:04, 5.55it/s]	0.01002	2	020.
479/499	0.206G 0.0176 0.008769	0.01982	2	320:
479/499	18/40 [00:03<00:03, 5.78it/s]	0.01302	2	JZU.
479/499	0.206G 0.01726 0.008673	0.01957	2	320:
±13/433	0.2000 0.01120 0.000013	0.01301	2	520.

45% ####5	١	18/40 [00:03<00:03,				
479/499		0.206G 0.01726	0.008673	0.01957	2	320:
48% ####7	ı	19/40 [00:03<00:03,				
479/499		0.206G 0.01895	0.008597	0.01948	2	320:
48% ####7	ı	19/40 [00:03<00:03,				
479/499		0.206G 0.01895	0.008597	0.01948	2	320:
50% #####	ı	20/40 [00:03<00:03,				
479/499		0.206G 0.02031		0.02003	2	320:
50% #####	ı	20/40 [00:03<00:03,				
479/499		0.206G 0.02031		0.02003	2	320:
52% #####2	١	21/40 [00:03<00:03,				
479/499		0.206G 0.02002	0.008563	0.02042	3	320:
52% #####2	ı	21/40 [00:03<00:03,				
479/499		0.206G 0.02002	0.008563	0.02042	3	320:
55% #####5	I	22/40 [00:03<00:03,	· -			
479/499		0.206G 0.0202		0.02028	4	320:
55% #####5	١	22/40 [00:04<00:03,				
479/499		0.206G 0.0202	0.008759	0.02028	4	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.23it/s			
479/499		0.206G 0.02016	0.008665	0.02009	2	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.23it/s			
479/499		0.206G 0.02016	0.008665	0.02009	2	320:
60% ######	- 1	24/40 [00:04<00:03,	5.19it/s			
479/499		0.206G 0.02055	0.008667	0.01981	2	320:
60% ######	-	24/40 [00:04<00:03,	5.19it/s			
479/499		0.206G 0.02055	0.008667	0.01981	2	320:
62% ######2	- 1	25/40 [00:04<00:02,	5.17it/s]			
479/499		0.206G 0.02039	0.008447	0.01956	1	320:
62% ######2		25/40 [00:04<00:02,	5.17it/s]			
479/499		0.206G 0.02039	0.008447	0.01956	1	320:
65% ######5		26/40 [00:04<00:02,	5.34it/s			
479/499		0.206G 0.02056	0.008425	0.01961	3	320:
65% ######5	-	26/40 [00:04<00:02,	5.34it/s			
479/499		0.206G 0.02056	0.008425	0.01961	3	320:
68% ######7	-	27/40 [00:04<00:02,	5.33it/s]			
479/499		0.206G 0.02014		0.0193	1	320:
68% ######7	- 1	27/40 [00:05<00:02,	5.33it/s]			
479/499		0.206G 0.02014	0.00824	0.0193	1	320:
70% ######	- 1	28/40 [00:05<00:02,	5.47it/s]			
479/499		0.206G 0.01974	0.008048	0.01907	1	320:
70% ######	- 1	28/40 [00:05<00:02,	5.47it/s]			
479/499		0.206G 0.01974	0.008048	0.01907	1	320:
72% ######2	١	29/40 [00:05<00:01,				
479/499	•	0.206G 0.01948	0.007958	0.01903	1	320:
72% #######2	ı	29/40 [00:05<00:01,				
479/499	•	0.206G 0.01948	0.007958	0.01903	1	320:
75% #######5	ı	30/40 [00:05<00:01,				
479/499	•	0.206G 0.0194	0.008038	0.01916	4	320:
•						

	30/40 [00:05<00:01, 5.52it/s]		
479/499	0.206G 0.0194 0.008038 0.019	16 4	320:
	31/40 [00:05<00:01, 5.56it/s]		
479/499		397 2	320:
	31/40 [00:05<00:01, 5.56it/s]		
479/499		397 2	320:
	32/40 [00:05<00:01, 5.63it/s]		
479/499		393 4	320:
80% #######	32/40 [00:05<00:01, 5.63it/s]		
479/499	0.206G 0.01982 0.00812 0.018	393 4	320:
82% ########2	33/40 [00:05<00:01, 5.67it/s]		
479/499	0.206G 0.01964 0.008221 0.019	001 4	320:
82% ########2	33/40 [00:06<00:01, 5.67it/s]		
479/499	0.206G 0.01964 0.008221 0.019	001 4	320:
85% ########	34/40 [00:06<00:01, 5.56it/s]		
479/499	0.206G 0.0198 0.008344 0.019	004 4	320:
85% ########	34/40 [00:06<00:01, 5.56it/s]		
479/499	0.206G 0.0198 0.008344 0.019	004 4	320:
88% #######7	35/40 [00:06<00:00, 5.64it/s]		
479/499	0.206G 0.02008 0.00853 0.019	23 4	320:
88% #######7	35/40 [00:06<00:00, 5.64it/s]		
479/499	0.206G 0.02008 0.00853 0.019	23 4	320:
90% ########	36/40 [00:06<00:00, 5.54it/s]		
479/499	0.206G 0.02106 0.008552 0.019	21 2	320:
90% ########	36/40 [00:06<00:00, 5.54it/s]		
479/499	0.206G 0.02106 0.008552 0.019	21 2	320:
92% ########2	37/40 [00:06<00:00, 5.48it/s]		
479/499	0.206G 0.02085 0.00848 0.019	2	320:
92% ########2	37/40 [00:06<00:00, 5.48it/s]		
479/499	0.206G 0.02085 0.00848 0.019	2	320:
95% ########5	38/40 [00:06<00:00, 5.43it/s]		
479/499	0.206G 0.02058 0.008373 0.018	394 1	320:
95% ########5	38/40 [00:07<00:00, 5.43it/s]		
479/499	0.206G 0.02058 0.008373 0.018	394 1	320:
	39/40 [00:07<00:00, 5.52it/s]		
479/499	0.206G 0.02051 0.008542 0.01	.89 4	320:
98% ########7	39/40 [00:07<00:00, 5.52it/s]		
479/499		.89 4	320:
	40/40 [00:07<00:00, 5.60it/s]		
479/499	0.206G 0.02051 0.008542 0.01	.89 4	320:
	40/40 [00:07<00:00, 5.55it/s]		
	•		
	Class Images Instances	P R	mAP50
mAP50-95: 0%	_		
•	Class Images Instances	P R	mAP50
mAP50-95: 10%	G		
- 701	Class Images Instances	P R	mAP50
mAP50-95: 20%	<u>o</u>		
	, . <u>-</u> ,	. =	

	Class	Images	Instances	P	R	mAP50
mAP50-95: 30	% ###	6/20 [0	0:00<00:00,	14.84it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95: 40	% ####	8/20 [0	0:00<00:00,	16.04it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95: 50	% #####	10/20 [00:00<00:00,	16.02it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95: 60	% #####	12/20 [00:00<00:00,	16.73it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95: 70	% ######	14/20 [00:00<00:00,	15.08it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95: 80	% #######	16/20 [00:01<00:00,	15.95it/s]		
	Class	_	Instances		R	mAP50
mAP50-95: 95	% ########5	19/20 [00:01<00:00,	17.15it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95: 100	% #########	20/20 [00:01<00:00,	16.34it/s]		
	all	40	40	0.976	0.975	0.993
0.798						
Epoch	GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
	0/40 [00:					
480/499			0.007108	0.03285	2	320:
	0/40 [00:00					
480/499			0.007108	0.03285	2	320:
	1/40 [00:00	-				
	0.206G			0.02488	2	320:
	1/40 [00:00					
		0.02507		0.02488	2	320:
	2/40 [00:00					
			0.009643	0.02343	4	320:
	2/40 [00:00	-				
480/499	0.206G	0.02508	0.009643	0.02343	4	320:
8% 7	3/40 [00:00	<00:06,	5.32it/s			
480/499		0.02423		0.02285	4	320:
8% 7	3/40 [00:00	<00:06,	5.32it/s			
480/499	0.206G	0.02423	0.0108	0.02285	4	320:
10% #	4/40 [00:0					
480/499	0.206G	0.02194	0.01018	0.02242	1	320:
10% #	4/40 [00:0					
480/499	0.206G	0.02194	0.01018	0.02242	1	320:
12% #2	5/40 [00:0	1<00:07,	4.66it/s]			
480/499	0.206G	0.02208	0.01196	0.02193	4	320:
12% #2	5/40 [00:0					
480/499			0.01196	0.02193	4	320:
15% #5	6/40 [00:0	1<00:07,	4.75it/s]			
480/499	0.206G	0.02739	0.01094	0.02333	2	320:
15% #5	6/40 [00:0	1<00:07,	4.75it/s]			

480/499	0.206G 0.02739 0.0	01094 0.02333	2	320:
18% #7	7/40 [00:01<00:06, 4.99			
480/499	0.206G 0.02961 0.0		2	320:
18% #7	7/40 [00:01<00:06, 4.99		_	
480/499	0.206G 0.02961 0.0		2	320:
20% ##	8/40 [00:01<00:06, 4.80		_	000
480/499		0.02282	1	320:
20% ## 480/499	8/40 [00:01<00:06, 4.80 0.206G 0.0274 0.00		1	220.
22% ##2	9/40 [00:01<00:06, 4.84	0.02282	1	320:
480/499	0.206G 0.02894 0.0		4	320:
22% ##2	9/40 [00:02<00:06, 4.84		4	320.
480/499	0.206G 0.02894 0.0		4	320:
25% ##5	1 10/40 [00:02<00:06, 4.8		1	020.
480/499	0.206G 0.02806 0.00		2	320:
25% ##5	10/40 [00:02<00:06, 4.8		-	020.
480/499		09897 0.02231	2	320:
28% ##7	11/40 [00:02<00:06, 4.			
480/499	0.206G 0.02696 0.00		1	320:
28% ##7	11/40 [00:02<00:06, 4.			
480/499	0.206G 0.02696 0.00	09353 0.02179	1	320:
30% ###	12/40 [00:02<00:05, 4.8	85it/s]		
480/499	0.206G 0.02534 0.00	08853 0.02129	1	320:
30% ###	12/40 [00:02<00:05, 4.8	85it/s]		
480/499	0.206G 0.02534 0.0	08853 0.02129	1	320:
32% ###2	13/40 [00:02<00:05, 4.9	95it/s]		
480/499	0.206G 0.02579 0.0	09268 0.02122	4	320:
32% ###2	13/40 [00:02<00:05, 4.9	95it/s]		
480/499	0.206G 0.02579 0.00	09268 0.02122	4	320:
35% ###5	14/40 [00:02<00:05, 4.9	94it/s]		
480/499	0.206G 0.02499 0.00	08859 0.02084	1	320:
35% ###5	14/40 [00:03<00:05, 4.9			
480/499	0.206G 0.02499 0.00	08859 0.02084	1	320:
38% ###7	15/40 [00:03<00:05, 4.9	92it/s]		
480/499		0.0204	1	320:
38% ###7	15/40 [00:03<00:05, 4.9			
480/499		0.0204	1	320:
40% ####	16/40 [00:03<00:04, 5.0	· =		
480/499	0.206G 0.02403 0.00		4	320:
40% ####	16/40 [00:03<00:04, 5.0			
480/499		0.02034	4	320:
42% ####2	17/40 [00:03<00:04, 5.0		_	
480/499		0.02003	4	320:
42% ####2	17/40 [00:03<00:04, 5.0		•	000
480/499		0.02003	4	320:
45% ####5	18/40 [00:03<00:04, 5.0		4	200
480/499	0.206G 0.02306 0.00		1	320:
45% ####5	18/40 [00:03<00:04, 5.0	Jölt/SJ		

480/499	0.206G 0.02306 0.009112	0.01966	1	320:
48% ####7	19/40 [00:03<00:03, 5.28it/s]			
480/499	0.206G 0.02289 0.009203	0.01963	2	320:
48% ####7	19/40 [00:04<00:03, 5.28it/s]			
480/499	0.206G 0.02289 0.009203	0.01963	2	320:
50% #####	20/40 [00:04<00:03, 5.30it/s]			
480/499	0.206G 0.02252 0.009157	0.01952	2	320:
50% #####	20/40 [00:04<00:03, 5.30it/s]			
480/499	0.206G 0.02252 0.009157	0.01952	2	320:
52% #####2	21/40 [00:04<00:03, 5.16it/s]			
480/499	0.206G 0.02218 0.008954	0.01937	1	320:
52% #####2	21/40 [00:04<00:03, 5.16it/s]	0.04000		000
480/499	0.206G 0.02218 0.008954	0.01937	1	320:
55% #####5	22/40 [00:04<00:03, 5.34it/s]	0.04000	4	000
480/499	0.206G 0.02247 0.009378	0.01933	4	320:
55% #####5	22/40 [00:04<00:03, 5.34it/s]	0.04022	4	200
480/499	0.206G 0.02247 0.009378	0.01933	4	320:
57% #####7	23/40 [00:04<00:03, 5.27it/s]	0.01006	0	200.
480/499	0.206G 0.02214 0.009189	0.01926	2	320:
57% #####7 480/499	23/40 [00:04<00:03, 5.27it/s] 0.206G	0 01006	2	200.
60% ######	0.206G 0.02214 0.009189 24/40 [00:04<00:02, 5.47it/s]	0.01926	2	320:
480/499	0.206G 0.02158 0.008913	0.01896	1	320:
60% #####	24/40 [00:04<00:02, 5.47it/s]	0.01090	1	320.
480/499	0.206G 0.02158 0.008913	0.01896	1	320:
62% ######2	25/40 [00:04<00:02, 5.72it/s]	0.01030	1	520.
480/499	0.206G 0.0223 0.008997	0.01976	2	320:
62% ######2	25/40 [00:05<00:02, 5.72it/s]	0.01970	Z	520.
480/499	0.206G 0.0223 0.008997	0.01976	2	320:
65% ######5	26/40 [00:05<00:02, 5.32it/s]	0.01570	2	020.
480/499	0.206G 0.02263 0.009102	0.01993	3	320:
65% ######5	26/40 [00:05<00:02, 5.32it/s]	0.01000	Ü	020.
480/499	0.206G 0.02263 0.009102	0.01993	3	320:
	27/40 [00:05<00:02, 5.33it/s]	0.0200		0201
480/499	0.206G 0.02354 0.00907	0.01983	3	320:
	27/40 [00:05<00:02, 5.33it/s]		_	
480/499	0.206G 0.02354 0.00907	0.01983	3	320:
70% ######	28/40 [00:05<00:02, 5.46it/s]			
480/499	0.206G 0.02396 0.009192	0.01997	2	320:
70% ######	28/40 [00:05<00:02, 5.46it/s]			
480/499	0.206G 0.02396 0.009192	0.01997	2	320:
72% #######2	29/40 [00:05<00:02, 5.41it/s]			
480/499	0.206G 0.02354 0.008997	0.01977	1	320:
72% ######2	29/40 [00:05<00:02, 5.41it/s]			
480/499	0.206G 0.02354 0.008997	0.01977	1	320:
75% ######5	30/40 [00:05<00:01, 5.52it/s]			
480/499	0.206G 0.02316 0.008873	0.01973	1	320:
75% ######5	30/40 [00:06<00:01, 5.52it/s]			

	0.206G C			0.01973	1	320:
78% ######7						
480/499		0.0232	0.009021	0.0199	3	320:
	31/40 [00:0				_	
480/499		0.0232	0.009021	0.0199	3	320:
	32/40 [00:0					
480/499		0.02314		0.01992	4	320:
80% #######						
480/499		0.02314		0.01992	4	320:
82% #######2						
480/499		0.02363		0.01982	2	320:
82% #######2						
480/499		0.02363		0.01982	2	320:
85% #######5						
480/499			0.009372	0.01978	4	320:
85% #######5						
480/499		0.02383		0.01978	4	320:
88% #######7	35/40 [00:0	06<00:00,	5.34it/s			
480/499		0.02434		0.01994	3	320:
88% #######7	35/40 [00:0	06<00:00,	5.34it/s			
480/499	0.206G C	0.02434	0.009432	0.01994	3	320:
90% #######	36/40 [00:0	06<00:00,	5.47it/s			
480/499	0.206G C	0.02464	0.009515	0.0199	4	320:
90% #######	36/40 [00:0	07<00:00,	5.47it/s			
480/499	0.206G C	0.02464	0.009515	0.0199	4	320:
92% ########2	37/40 [00:0	07<00:00,	5.43it/s			
480/499	0.206G C	0.02419	0.009342	0.01969	1	320:
92% ########2	37/40 [00:0	07<00:00,	5.43it/s			
480/499	0.206G C	0.02419	0.009342	0.01969	1	320:
95% ########5	38/40 [00:0	07<00:00,	5.52it/s			
480/499	0.206G C	0.02375	0.009163	0.01946	1	320:
95% ########5	38/40 [00:0	07<00:00,	5.52it/s			
480/499	0.206G C	0.02375	0.009163	0.01946	1	320:
98% ########7	39/40 [00:0	07<00:00,	5.61it/s]			
480/499	0.206G C	0.02388	0.009269	0.01945	4	320:
98% ########7	39/40 [00:0	07<00:00,	5.61it/s]			
480/499	0.206G C	0.02388	0.009269	0.01945	4	320:
100% ##########	40/40 [00:	:07<00:00	, 5.52it/s]			
480/499	0.206G C	0.02388	0.009269	0.01945	4	320:
100% ##########	40/40 [00:	:07<00:00	, 5.22it/s]			
	Class	Images 1	Instances	P	R	mAP50
mAP50-95: 0%		•	:00 , ?it/s]</td <td></td> <td></td> <td></td>			
			Instances	Р	R	mAP50
mAP50-95: 10%		•	:00<00:01, 16	8.71it/s]		
	Class		Instances	P	R	mAP50
mAP50-95: 20%		•	:00<00:00, 17	7.60it/s]		
	Class		Instances	Р	R	mAP50
		-				

mAP50-95: 30% ### 6/20 [00:00<00:00,	17 Q1i+/al		
Class Images Instances		R	mAP50
mAP50-95: 40% #### 8/20 [00:00<00:00,		16	MAI 00
Class Images Instances		R	mAP50
mAP50-95: 50% ##### 10/20 [00:00<00:00,			MAI 00
Class Images Instances		R	mAP50
mAP50-95: 60% ##### 12/20 [00:00<00:00,			MAI 00
Class Images Instances		R	mAP50
mAP50-95: 70% ###### 14/20 [00:00<00:00,			MAI 00
Class Images Instances		R	mAP50
mAP50-95: 80% ####### 16/20 [00:00<00:00,			mAI 00
Class Images Instances		R	mAP50
mAP50-95: 95% #######5 19/20 [00:01<00:00,			MAI 00
Class Images Instances		R	mAP50
mAP50-95: 100% ######## 20/20 [00:01<00:00,			MAI 00
all 40 40		0.975	0.991
0.8	0.919	0.913	0.551
0.0			
Epoch GPU_mem box_loss obj_loss	cle lose	Instances	Size
Epoch Gro_mem box_10ss obj_10ss	CIS_IUSS	Instances	SIZE
0% 0/40 [00:00 , ?it/s]</td <td></td> <td></td> <td></td>			
481/499 0.206G 0.01065 0.003918	0 0107	1	320:
0% 0/40 [00:00 , ?it/s]</td <td>0.0107</td> <td>1</td> <td>520.</td>	0.0107	1	520.
481/499 0.206G 0.01065 0.003918	0.0107	1	320:
2% 2 1/40 [00:00<00:06, 5.71it/s]	0.0107	1	020.
481/499 0.206G 0.009096 0.00327	0.01309	1	320:
2% 2 1/40 [00:00<00:06, 5.71it/s]	0.01505	1	020.
481/499 0.206G 0.009096 0.00327	0.01309	1	320:
5% 5 2/40 [00:00<00:06, 5.50it/s]	0.01505	1	020.
	0.0157	2	320:
5% 5 2/40 [00:00<00:06, 5.50it/s]	0.0101	2	020.
481/499 0.206G 0.01859 0.004795	0.0157	2	320:
8/17 3/40 [00:00<00:06	0.0101	2	020.
481/499 0.206G 0.0188 0.00481	0.01516	1	320:
8% 7 3/40 [00:00<00:06, 5.64it/s]	0.01510	1	520.
481/499 0.206G 0.0188 0.00481	0.01516	1	320:
10% # 4/40 [00:00<00:06, 5.61it/s]	0.01510	1	520.
481/499 0.206G 0.01613 0.004622	0.01543	1	320:
10% # 4/40 [00:00<00:06, 5.61it/s]	0.01545	1	520.
481/499 0.206G 0.01613 0.004622	0.01543	1	320:
12% #2 5/40 [00:00<00:06, 5.75it/s]	0.01040	1	020.
481/499 0.206G 0.01512 0.004407	0.01512	1	320:
12% #2 5/40 [00:01<00:06, 5.75it/s]	0.01012	1	520.
481/499 0.206G 0.01512 0.004407	0.01512	1	320:
15% #5 6/40 [00:01<00:05, 5.95it/s]	0.01012	1	520.
481/499 0.206G 0.01394 0.004233	0.01509	1	320:
15% #5 6/40 [00:01<00:05, 5.95it/s]	0.01009	1	320:
481/499 0.206G 0.01394 0.004233	0.01509	1	320:
±01/±33 0.200G 0.0133± 0.004233	0.01003	1	320.

18% #7	1 1/ 20 [00102 00100, 010020/2]			
481/499	0.206G 0.01735 0.004563	0.0157	2	320:
18% #7	7/40 [00:01<00:05, 5.83it/s]	0.0455		222
		0.0157	2	320:
20% ##	8/40 [00:01<00:05, 5.71it/s]	0.04500		222
481/499	0.206G 0.01643 0.004873	0.01593	2	320:
20% ##	8/40 [00:01<00:05, 5.71it/s]	0.04500		000
481/499	0.206G 0.01643 0.004873	0.01593	2	320:
22% ##2	9/40 [00:01<00:05, 5.59it/s]	0 04747	4	000
481/499	0.206G 0.01855 0.005642	0.01717	4	320:
22% ##2	9/40 [00:01<00:05, 5.59it/s]	0 04747	4	000
	0.206G 0.01855 0.005642	0.01717	4	320:
25% ##5	10/40 [00:01<00:05, 5.51it/s]	0.0460	0	200
481/499	0.206G 0.01821 0.005745	0.0169	2	320:
25% ##5	10/40 [00:01<00:05, 5.51it/s]	0.0460	0	200
481/499	0.206G 0.01821 0.005745	0.0169	2	320:
28% ##7	11/40 [00:01<00:05, 5.60it/s]	0.04500		222
481/499	0.206G 0.01945 0.006197	0.01708	4	320:
28% ##7	11/40 [00:02<00:05, 5.60it/s]			
,	0.206G 0.01945 0.006197	0.01708	4	320:
30% ###	12/40 [00:02<00:05, 5.37it/s]		_	
481/499	0.206G 0.02022 0.006545	0.01833	2	320:
30% ###	12/40 [00:02<00:05, 5.37it/s]		_	
481/499	0.206G 0.02022 0.006545	0.01833	2	320:
32% ###2	13/40 [00:02<00:05, 5.34it/s]			
481/499	0.206G 0.02014 0.006837	0.01972	4	320:
32% ###2	13/40 [00:02<00:05, 5.34it/s]			
481/499	0.206G 0.02014 0.006837	0.01972	4	320:
35% ###5	14/40 [00:02<00:04, 5.48it/s]			
481/499	0.206G 0.01941 0.006835	0.01936	2	320:
35% ###5	14/40 [00:02<00:04, 5.48it/s]			
481/499	0.206G 0.01941 0.006835	0.01936	2	320:
	15/40 [00:02<00:04, 5.43it/s]			
481/499	0.206G 0.0192 0.006858	0.01906	2	320:
38% ###7	15/40 [00:02<00:04, 5.43it/s]			
481/499	0.206G 0.0192 0.006858	0.01906	2	320:
40% ####	16/40 [00:02<00:04, 5.67it/s]			
481/499	0.206G 0.01837 0.006661	0.01871	1	320:
40% ####	16/40 [00:03<00:04, 5.67it/s]			
481/499	0.206G 0.01837 0.006661	0.01871	1	320:
42% ####2	17/40 [00:03<00:04, 5.57it/s]			
481/499	0.206G 0.01885 0.007273	0.01881	4	320:
42% ####2	17/40 [00:03<00:04, 5.57it/s]			
481/499	0.206G 0.01885 0.007273	0.01881	4	320:
45% ####5	18/40 [00:03<00:03, 5.64it/s]			
481/499	0.206G 0.01827 0.007248	0.01845	2	320:
45% ####5	18/40 [00:03<00:03, 5.64it/s]		_	
481/499	0.206G 0.01827 0.007248	0.01845	2	320:

48% ####7		19/40 [00:03<00:03,				
481/499		0.206G 0.01774		0.01878	2	320:
48% ####7	١	19/40 [00:03<00:03,				
481/499		0.206G 0.01774		0.01878	2	320:
50% #####	ı	20/40 [00:03<00:03,				
481/499		0.206G 0.01839		0.01885	4	320:
50% #####	ı	20/40 [00:03<00:03,				
481/499		0.206G 0.01839		0.01885	4	320:
52% #####2	ı	21/40 [00:03<00:03,				
481/499			0.00782	0.01878	2	320:
52% #####2	ı	21/40 [00:03<00:03,				
481/499			0.00782	0.01878	2	320:
55% #####5	١	22/40 [00:03<00:03,				
481/499		0.206G 0.01944		0.01851	1	320:
55% #####5	I	22/40 [00:04<00:03,				
481/499		0.206G 0.01944		0.01851	1	320:
57% #####7	١	23/40 [00:04<00:03,				
481/499		0.206G 0.01902		0.01868	2	320:
57% #####7		23/40 [00:04<00:03,	5.33it/s			
481/499		0.206G 0.01902		0.01868	2	320:
60% ######		24/40 [00:04<00:02,				
481/499		0.206G 0.01863	0.007555	0.01857	2	320:
60% ######		24/40 [00:04<00:02,	5.47it/s			
481/499		0.206G 0.01863	0.007555	0.01857	2	320:
62% #####2		25/40 [00:04<00:02,	5.43it/s			
481/499		0.206G 0.01831	0.007606	0.01836	2	320:
62% ######2		25/40 [00:04<00:02,	5.43it/s			
481/499		0.206G 0.01831	0.007606	0.01836	2	320:
65% ######5		26/40 [00:04<00:02,	5.50it/s			
481/499		0.206G 0.01876	0.007619	0.01897	2	320:
65% ######5		26/40 [00:04<00:02,	5.50it/s]			
481/499		0.206G 0.01876	0.007619	0.01897	2	320:
68% ######7		27/40 [00:04<00:02,	5.63it/s]			
481/499		0.206G 0.01838	0.007452	0.01881	1	320:
68% ######7		27/40 [00:05<00:02,	5.63it/s]			
481/499		0.206G 0.01838	0.007452	0.01881	1	320:
70% ######		28/40 [00:05<00:02,	5.38it/s			
481/499		0.206G 0.01977	0.007436	0.01896	2	320:
70% ######		28/40 [00:05<00:02,	5.38it/s			
481/499		0.206G 0.01977	0.007436	0.01896	2	320:
72% ######2	- 1	29/40 [00:05<00:01,	5.50it/s			
481/499		0.206G 0.01946	0.007359	0.01898	2	320:
72% #######2	1	29/40 [00:05<00:01,	5.50it/s]			
481/499		0.206G 0.01946	0.007359	0.01898	2	320:
75% #######5	-	30/40 [00:05<00:01,	5.45it/s]			
481/499		0.206G 0.01926	0.007244	0.01889	1	320:
75% #######5	-	30/40 [00:05<00:01,	5.45it/s]			
481/499		0.206G 0.01926	0.007244	0.01889	1	320:

78% ######7	31/40 [00:05<00:01, 5.68it/s]		
481/499	0.206G 0.01902 0.007318 0.01983	2	320:
78% ######7	31/40 [00:05<00:01, 5.68it/s]		
481/499	0.206G 0.01902 0.007318 0.01983	2	320:
80% #######	32/40 [00:05<00:01, 5.57it/s]		
481/499	0.206G 0.01917 0.007497 0.02017	4	320:
80% #######	32/40 [00:05<00:01, 5.57it/s]		
481/499	•	4	320:
82% ########	33/40 [00:05<00:01, 5.50it/s]		
	0.206G 0.0189 0.007363 0.01988	1	320:
•	33/40 [00:06<00:01, 5.50it/s]		
481/499	• • •	1	320:
	34/40 [00:06<00:01, 5.73it/s]	_	020.
481/499		4	320:
	34/40 [00:06<00:01, 5.73it/s]	-	020.
	0.206G 0.01903 0.007531 0.01995	4	320:
	35/40 [00:06<00:00, 5.32it/s]	4	520.
		4	320:
•		4	320:
	35/40 [00:06<00:00, 5.32it/s]	4	000
	0.206G 0.01928 0.007714 0.01997	4	320:
	36/40 [00:06<00:00, 5.46it/s]	_	
481/499		4	320:
	36/40 [00:06<00:00, 5.46it/s]		
481/499		4	320:
	37/40 [00:06<00:00, 5.54it/s]		
481/499	0.206G 0.01981 0.008059 0.01989	2	320:
92% ########2	37/40 [00:06<00:00, 5.54it/s]		
481/499	0.206G 0.01981 0.008059 0.01989	2	320:
95% ########5	38/40 [00:06<00:00, 5.47it/s]		
481/499	0.206G 0.02066 0.008149 0.01987	2	320:
95% ########5	38/40 [00:07<00:00, 5.47it/s]		
481/499	0.206G 0.02066 0.008149 0.01987	2	320:
98% ########7	39/40 [00:07<00:00, 5.24it/s]		
481/499	0.206G 0.02038 0.008021 0.0197	1	320:
98% ########7	39/40 [00:07<00:00, 5.24it/s]		
481/499	0.206G 0.02038 0.008021 0.0197	1	320:
	40/40 [00:07<00:00, 5.32it/s]		
481/499	0.206G 0.02038 0.008021 0.0197	1	320:
	40/40 [00:07<00:00, 5.52it/s]		
	,, ,,,,		
	Class Images Instances P	R	mAP50
mAP50-95: 0%	0/20 [00:00 , ?it/s]</td <td></td> <td></td>		
00 00. 0/61	Class Images Instances P	R	mAP50
mAP50-95: 10%	•	10	
00 00. 10/0 1	Class Images Instances P	R	mAP50
mAP50-95: 20%	9	16	IIIAI OO
mai 00 90. 20/6 1	Class Images Instances P	R	mAP50
mAP50-95: 30%	•	n	шагоо
mwego-89: 90% -	### 0/20 [00.00\00:00, 14.0916/S]		

Class Images I	nstances	P	R r	mAP50
mAP50-95: 40% #### 8/20 [00:	00<00:00, 14.7	78it/s]		
Class Images I	nstances	P	R r	mAP50
mAP50-95: 50% ##### 10/20 [00	:00<00:00, 14	.57it/s]		
	nstances		R r	mAP50
mAP50-95: 60% ###### 12/20 [00	:00<00:00, 14	.14it/s]		
	nstances		R r	mAP50
mAP50-95: 70% ###### 14/20 [00	:00<00:00, 14	.92it/s]		
Class Images I	nstances	P	R r	mAP50
mAP50-95: 80% ####### 16/20 [00	:01<00:00, 14	.71it/s]		
Class Images I	nstances	P	R r	mAP50
mAP50-95: 90% ######## 18/20 [00	:01<00:00, 15	.67it/s]		
Class Images I	nstances	P	R r	mAP50
mAP50-95: 100% ######## 20/20 [00	:01<00:00, 15	.77it/s]		
	nstances		R r	mAP50
mAP50-95: 100% ######### 20/20 [00				
all 40			975	0.99
0.794				
Epoch GPU_mem box_loss	obj loss cla	s loss Instan	.ces	Size
	<i>3</i> –	_		
0% 0/40 [00:00 , ?it/</td <td>s]</td> <td></td> <td></td> <td></td>	s]			
		.01507	2	320:
0% 0/40 [00:00 , ?it/s]</td <td></td> <td></td> <td></td> <td></td>				
482/499 0.206G 0.01086		.01507	2	320:
2% 2 1/40 [00:00<00:07, 5	.28it/s]			
482/499 0.206G 0.0265		.02546	3	320:
	.28it/s]			
482/499 0.206G 0.0265		.02546	3	320:
	.06it/s]			
482/499 0.206G 0.02433		0.0222	4	320:
	.06it/s]			
482/499 0.206G 0.02433	· =	0.0222	4	320:
	.99it/s]			
		.02137	2	320:
	.99it/s]			
-		.02137	2	320:
10% # 4/40 [00:00<00:07,				
-		.02114	1	320:
10% # 4/40 [00:00<00:07,				
		.02114	1	320:
	5.09it/s]			
		.02108	4	320:
	5.09it/s]	, 02100	-	020.
		.02108	4	320:
15% #5 6/40 [00:01<00:06,			-	520.
		.02149	2	320:
	5.17it/s]		-	020.
1 0/ 20 200.02 .00.00,	/ ~]			

482/499	0.206G 0.02068	0.008738	0.02149	2	320:
18% #7	7/40 [00:01<00:06,				
482/499		0.007749	0.01881	0	320:
18% #7	· · · · · · · · · · · · · · · · · · ·	5.07it/s]	0.04004	^	200
482/499		0.007749	0.01881	0	320:
20% ##	·	5.43it/s]	0 01021	1	220.
482/499 20% ##	0.206G 0.01709 8/40 [00:01<00:05,	0.007231	0.01831	1	320:
482/499		0.007231	0.01831	1	320:
22% ##2	9/40 [00:01<00:05,		0.01031	1	320.
482/499		0.006809	0.01793	1	320:
22% ##2	9/40 [00:01<00:05,		0.01795	1	520.
482/499	0.206G 0.01656		0.01793	1	320:
25% ##5	10/40 [00:01<00:05,		0.01733	1	020.
482/499	·	0.007363	0.01782	4	320:
25% ##5	10/40 [00:02<00:05,		0.01702	1	020.
482/499	0.206G 0.01708		0.01782	4	320:
28% ##7	11/40 [00:02<00:05,		0.01102	-	020.
482/499		0.007469	0.01746	2	320:
28% ##7	11/40 [00:02<00:05,		0.01110	_	020.
482/499	0.206G 0.01707		0.01746	2	320:
30% ###	12/40 [00:02<00:04,			_	
482/499	·	0.007411	0.01754	2	320:
30% ###	12/40 [00:02<00:04,				
482/499		0.007411	0.01754	2	320:
32% ###2	13/40 [00:02<00:04,				
482/499	0.206G 0.01604		0.01629	0	320:
32% ###2	13/40 [00:02<00:04,	5.71it/s]			
482/499		0.00694	0.01629	0	320:
35% ###5	14/40 [00:02<00:04,	5.90it/s]			
482/499	0.206G 0.01651	0.007551	0.01635	4	320:
35% ###5	14/40 [00:02<00:04,	5.90it/s]			
482/499	0.206G 0.01651	0.007551	0.01635	4	320:
38% ###7	15/40 [00:02<00:04,	5.88it/s]			
482/499	0.206G 0.01614	0.007237	0.01609	1	320:
38% ###7	15/40 [00:02<00:04,	5.88it/s]			
482/499	0.206G 0.01614	0.007237	0.01609	1	320:
40% ####	16/40 [00:02<00:04,	5.84it/s]			
482/499	0.206G 0.01691	0.007954	0.01633	4	320:
40% ####	16/40 [00:03<00:04,	5.84it/s			
482/499	0.206G 0.01691	0.007954	0.01633	4	320:
42% ####2	17/40 [00:03<00:03,	5.83it/s]			
482/499	0.206G 0.01735		0.01642	2	320:
42% ####2	17/40 [00:03<00:03,				
482/499		0.00793	0.01642	2	320:
45% ####5	18/40 [00:03<00:03,				
482/499	0.206G 0.01757		0.01658	4	320:
45% ####5	18/40 [00:03<00:03,	5.83it/s			

482/499	0.206G 0.01757 0.008179	0.01658	4	320:
48% ####7	19/40 [00:03<00:03, 5.52it/s]		_	
482/499	0.206G 0.01749 0.00811	0.01656	2	320:
48% ####7	19/40 [00:03<00:03, 5.52it/s]	0.04656	0	200
482/499	0.206G 0.01749 0.00811	0.01656	2	320:
50% ##### 482/499	20/40 [00:03<00:03, 5.61it/s] 0.206G	0.01651	2	200.
402/499 50% #####	0.206G 0.01828 0.008014 20/40 [00:03<00:03, 5.61it/s]	0.01651	2	320:
482/499	0.206G 0.01828 0.008014	0.01651	2	320:
52% #####2	21/40 [00:03<00:03, 5.38it/s]	0.01031	2	520.
482/499	0.206G 0.01843 0.008154	0.0173	4	320:
52% #####2	21/40 [00:03<00:03, 5.38it/s]	0.0170	1	020.
482/499	0.206G 0.01843 0.008154	0.0173	4	320:
55% #####5	22/40 [00:03<00:03, 5.48it/s]	0.0110	-	020.
482/499	0.206G 0.01781 0.007952	0.0171	1	320:
55% #####5	22/40 [00:04<00:03, 5.48it/s]	0.02.12	_	0_0.
482/499	0.206G 0.01781 0.007952	0.0171	1	320:
57% #####7	23/40 [00:04<00:03, 5.44it/s]			
482/499	0.206G 0.01762 0.007846	0.0171	2	320:
57% #####7	23/40 [00:04<00:03, 5.44it/s]			
482/499	0.206G 0.01762 0.007846	0.0171	2	320:
60% ######	24/40 [00:04<00:02, 5.69it/s]			
482/499	0.206G 0.01752 0.008098	0.01716	4	320:
60% ######	24/40 [00:04<00:02, 5.69it/s]			
482/499	0.206G 0.01752 0.008098	0.01716	4	320:
62% ######2	25/40 [00:04<00:02, 5.55it/s]			
482/499	0.206G 0.01767 0.008471	0.01714	4	320:
62% #####2	25/40 [00:04<00:02, 5.55it/s]			
482/499	0.206G 0.01767 0.008471	0.01714	4	320:
65% ######5	26/40 [00:04<00:02, 5.48it/s]			
482/499	0.206G 0.01747 0.008293	0.01706	1	320:
65% #####5	26/40 [00:04<00:02, 5.48it/s]			
482/499	0.206G 0.01747 0.008293	0.01706	1	320:
68% #####7	27/40 [00:04<00:02, 5.42it/s]			
482/499	0.206G 0.0183 0.008331	0.01747	2	320:
68% #####7	27/40 [00:05<00:02, 5.42it/s]			
482/499	0.206G 0.0183 0.008331	0.01747	2	320:
70% ######	28/40 [00:05<00:02, 5.53it/s]			
482/499	0.206G 0.01804 0.008302	0.01728	2	320:
70% #######	28/40 [00:05<00:02, 5.53it/s]			
482/499	0.206G 0.01804 0.008302	0.01728	2	320:
72% ######2	•			
482/499	0.206G 0.01806 0.00826	0.01729	1	320:
72% #######2	•			
482/499	0.206G 0.01806 0.00826	0.01729	1	320:
75% #######5	•		_	
482/499	0.206G 0.01835 0.008217	0.01722	2	320:
75% ######5	30/40 [00:05<00:01, 5.66it/s]			

482/499		0.01835			2	320:
78% #######7 482/499		0.0184 0.0184			2	320:
·		0.0104			2	020.
482/499		0.0184		0.01756	2	320:
		0:05<00:01,			2	020.
482/499			0.008107		1	320:
80% #######					-	020.
482/499					1	320:
82% ########					-	020.
482/499		0.01782			1	320:
82% ########					-	020.
482/499		0.01782		0.01728	1	320:
85% #######5					-	020.
482/499			0.008002		2	320:
85% #######5					-	020.
482/499		0.01801			2	320:
88% #######7					-	020.
482/499					2	320:
88% #######7					-	020.
482/499		0.01899		0.01748	2	320:
90% ########					_	0_0.
482/499			0.008222		4	320:
90% ########					_	
482/499	0.206G	0.01954	0.008222		4	320:
92% ########2					_	
482/499	0.206G	0.01938			1	320:
92% ########2						
482/499	0.206G	0.01938			1	320:
95% ########5						
482/499	0.206G		0.008099		2	320:
95% ########5						
482/499		0.01933		0.01812	2	320:
98% ########7	39/40 [0	00:07<00:00,	5.51it/s]		
	0.206G		0.008268	0.01818	4	320:
98% ########7	39/40 [0					
482/499	0.206G		0.008268		4	320:
100% ##########	40/40					
482/499		0.01935	-	0.01818	4	320:
100% ##########				s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95: 0%		•	:00 , ?it/</td <td>/s]</td> <td></td> <td></td>	/s]		
	Class		Instances	P	R	mAP50
mAP50-95: 10%	#	2/20 [00	:00<00:00,	18.29it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95: 20%	##	4/20 [00	:00<00:00,	16.86it/s]		
	Class	Images	Instances	Р	R	mAP50

mAP50-95: 30% ### 6/20 [00:00<00:00,	17 34i+/sl		
Class Images Instances		R	mAP50
mAP50-95: 40% #### 8/20 [00:00<00:00,		10	min oo
Class Images Instances		R	mAP50
mAP50-95: 50% ##### 10/20 [00:00<00:00			
Class Images Instances		R	mAP50
mAP50-95: 60% ##### 12/20 [00:00<00:00			
Class Images Instances		R	mAP50
mAP50-95: 70% ###### 14/20 [00:00<00:00			
Class Images Instances		R	mAP50
mAP50-95: 80% ####### 16/20 [00:00<00:00]	
Class Images Instances		R	mAP50
mAP50-95: 90% ######## 18/20 [00:01<00:00]	
Class Images Instances		R	mAP50
mAP50-95: 100% ######### 20/20 [00:01<00:00]	
all 40 40		0.975	0.99
0.794			
Epoch GPU_mem box_loss obj_loss	cls_loss	Instances	Size
0% 0/40 [00:00 , ?it/s]</td <td></td> <td></td> <td></td>			
483/499 0.206G 0.00871 0.007754	0.01351	2	320:
0% 0/40 [00:00 , ?it/s]</td <td></td> <td></td> <td></td>			
483/499 0.206G 0.00871 0.007754	0.01351	2	320:
2% 2 1/40 [00:00<00:06, 6.39it/s]			
483/499 0.206G 0.007544 0.00528	0.01313	1	320:
2% 2 1/40 [00:00<00:06, 6.39it/s]			
483/499 0.206G 0.007544 0.00528	0.01313	1	320:
5% 5 2/40 [00:00<00:06, 6.04it/s]			
483/499 0.206G 0.008668 0.004645	0.0127	1	320:
5% 5 2/40 [00:00<00:06, 6.04it/s]			
483/499 0.206G 0.008668 0.004645	0.0127	1	320:
8% 7 3/40 [00:00<00:06, 6.15it/s]			
483/499 0.206G 0.01228 0.005379	0.01541	2	320:
8% 7 3/40 [00:00<00:06, 6.15it/s]			
483/499 0.206G 0.01228 0.005379	0.01541	2	320:
10% # 4/40 [00:00<00:05, 6.02it/s]			
483/499 0.206G 0.01234 0.004927	0.01546	1	320:
10% # 4/40 [00:00<00:05, 6.02it/s]			
483/499 0.206G 0.01234 0.004927	0.01546	1	320:
12% #2 5/40 [00:00<00:06, 5.75it/s]			
483/499 0.206G 0.01557 0.005601	0.0155	2	320:
12% #2 5/40 [00:01<00:06, 5.75it/s]		_	
483/499 0.206G 0.01557 0.005601	0.0155	2	320:
15% #5 6/40 [00:01<00:06, 5.58it/s]		-	222
483/499 0.206G 0.01446 0.005652	0.01537	2	320:
15% #5 6/40 [00:01<00:06, 5.58it/s]		-	222
483/499 0.206G 0.01446 0.005652	0.01537	2	320:

0/ 1				
18% #7	7/40 [00:01<00:05, 5.82it/s]		_	
483/499	0.206G 0.01955 0.005555	0.01589	2	320:
18% #7	7/40 [00:01<00:05, 5.82it/s]		_	
483/499	0.206G 0.01955 0.005555	0.01589	2	320:
20% ##	8/40 [00:01<00:05, 5.50it/s]			
483/499	0.206G 0.02003 0.006379	0.01631	4	320:
20% ##	8/40 [00:01<00:05, 5.50it/s]	0.01001	4	000
483/499	0.206G 0.02003 0.006379	0.01631	4	320:
22% ##2	9/40 [00:01<00:05, 5.57it/s]	0 01011		000
483/499	0.206G 0.01871 0.006048	0.01611	1	320:
22% ##2	9/40 [00:01<00:05, 5.57it/s]	0 01011		000
483/499	0.206G 0.01871 0.006048	0.01611	1	320:
25% ##5	10/40 [00:01<00:05, 5.64it/s]	0.04.005	0	000
483/499	0.206G 0.02028 0.006466	0.01665	2	320:
25% ##5	10/40 [00:01<00:05, 5.64it/s]		_	
483/499	0.206G 0.02028 0.006466	0.01665	2	320:
28% ##7	11/40 [00:01<00:05, 5.41it/s]		_	
483/499		0.01691	4	320:
28% ##7	11/40 [00:02<00:05, 5.41it/s]			
483/499	0.206G 0.02036 0.007174	0.01691	4	320:
30% ###	12/40 [00:02<00:05, 5.13it/s]			
483/499	0.206G 0.01981 0.007515	0.01685	4	320:
30% ###	12/40 [00:02<00:05, 5.13it/s]			
483/499	0.206G 0.01981 0.007515	0.01685	4	320:
32% ###2	13/40 [00:02<00:05, 5.19it/s]			
483/499	0.206G 0.0199 0.007205	0.01702	1	320:
32% ###2	13/40 [00:02<00:05, 5.19it/s]			
483/499	0.206G 0.0199 0.007205	0.01702	1	320:
35% ###5	14/40 [00:02<00:04, 5.33it/s]			
483/499	0.206G 0.01903 0.007072	0.01706	1	320:
35% ###5	14/40 [00:02<00:04, 5.33it/s]			
483/499	0.206G 0.01903 0.007072	0.01706	1	320:
38% ###7	15/40 [00:02<00:04, 5.45it/s]			
483/499	0.206G 0.0184 0.007037	0.01689	2	320:
38% ###7	15/40 [00:02<00:04, 5.45it/s]			
483/499	0.206G 0.0184 0.007037	0.01689	2	320:
40% ####	16/40 [00:02<00:04, 5.56it/s]			
483/499	0.206G 0.0187 0.007523	0.01708	4	320:
40% ####	16/40 [00:03<00:04, 5.56it/s]			
483/499	0.206G 0.0187 0.007523	0.01708	4	320:
42% ####2	17/40 [00:03<00:04, 5.35it/s]			
483/499	0.206G 0.01948 0.008124	0.01741	4	320:
42% ####2	17/40 [00:03<00:04, 5.35it/s]			
483/499	0.206G 0.01948 0.008124	0.01741	4	320:
45% ####5	18/40 [00:03<00:04, 5.48it/s]			
483/499	0.206G 0.01923 0.007971	0.01762	1	320:
45% ####5	18/40 [00:03<00:04, 5.48it/s]			
483/499	0.206G 0.01923 0.007971	0.01762	1	320:
• -				

48% ####7		19/40 [00:03<00:03,				
483/499		0.206G 0.01886		0.01746	2	320:
48% ####7	١	19/40 [00:03<00:03,				
483/499		0.206G 0.01886		0.01746	2	320:
50% #####	١	20/40 [00:03<00:03,				
483/499		0.206G 0.01844		0.01719	1	320:
50% #####	ı	20/40 [00:03<00:03,				
483/499		0.206G 0.01844		0.01719	1	320:
52% #####2	ı	21/40 [00:03<00:03,				
483/499		0.206G 0.01854		0.01755	4	320:
52% #####2	ı	21/40 [00:03<00:03,				
483/499		0.206G 0.01854		0.01755	4	320:
55% #####5	١	22/40 [00:03<00:03,				
483/499		0.206G 0.01859		0.01747	2	320:
55% #####5	١	22/40 [00:04<00:03,				
483/499		0.206G 0.01859		0.01747	2	320:
57% #####7	١	23/40 [00:04<00:03,				
483/499		0.206G 0.01884	0.008001	0.01741	1	320:
57% #####7		23/40 [00:04<00:03,	5.55it/s			
483/499		0.206G 0.01884		0.01741	1	320:
60% ######		24/40 [00:04<00:02,	5.63it/s]			
483/499		0.206G 0.01858	0.00791	0.01727	2	320:
60% ######		24/40 [00:04<00:02,	5.63it/s			
483/499		0.206G 0.01858	0.00791	0.01727	2	320:
62% #####2		25/40 [00:04<00:02,	5.69it/s]			
483/499		0.206G 0.01869	0.008021	0.0174	4	320:
62% #####2		25/40 [00:04<00:02,	5.69it/s]			
483/499		0.206G 0.01869	0.008021	0.0174	4	320:
65% ######5		26/40 [00:04<00:02,	5.71it/s]			
483/499		0.206G 0.01993	0.008034	0.01791	4	320:
65% ######5		26/40 [00:04<00:02,	5.71it/s			
483/499		0.206G 0.01993	0.008034	0.01791	4	320:
68% ######7		27/40 [00:04<00:02,	5.45it/s			
483/499		0.206G 0.01969	0.007843	0.01773	1	320:
68% ######7		27/40 [00:05<00:02,	5.45it/s			
483/499		0.206G 0.01969	0.007843	0.01773	1	320:
70% ######		28/40 [00:05<00:02,	5.55it/s]			
483/499		0.206G 0.01965	0.008057	0.01795	4	320:
70% ######		28/40 [00:05<00:02,	5.55it/s			
483/499		0.206G 0.01965	0.008057	0.01795	4	320:
72% ######2	- 1	29/40 [00:05<00:01,	5.61it/s]			
483/499		0.206G 0.01953	0.008116	0.01799	2	320:
72% #######2	1	29/40 [00:05<00:01,	5.61it/s]			
483/499		0.206G 0.01953	0.008116	0.01799	2	320:
75% #######5	-	30/40 [00:05<00:01,	5.52it/s]			
483/499		0.206G 0.01934	0.008052	0.01784	1	320:
75% #######5	-	30/40 [00:05<00:01,	5.52it/s]			
483/499		0.206G 0.01934	0.008052	0.01784	1	320:

78% ######7	31/40 [00:05<00:01, 5.47it/s]		
483/499	0.206G 0.01909 0.007902 0.0177	1	320:
78% ######7	31/40 [00:05<00:01, 5.47it/s]		
483/499	0.206G 0.01909 0.007902 0.0177	1	320:
80% #######	32/40 [00:05<00:01, 5.41it/s]		
483/499	0.206G 0.0188 0.007733 0.01755	1	320:
	32/40 [00:05<00:01, 5.41it/s]		
483/499	•	1	320:
82% #######2	33/40 [00:05<00:01, 5.39it/s]		
	0.206G 0.01845 0.007591 0.01739	1	320:
•	33/40 [00:06<00:01, 5.39it/s]		
483/499	• • • •	1	320:
	34/40 [00:06<00:01, 5.24it/s]	-	020.
483/499		4	320:
	34/40 [00:06<00:01, 5.24it/s]	_	020.
	0.206G 0.01847 0.00773 0.01756	4	320:
	35/40 [00:06<00:00, 5.00it/s]	7	520.
		1	320:
		1	320:
	35/40 [00:06<00:00, 5.00it/s]	4	000
	0.206G 0.01827 0.007657 0.01743	1	320:
	36/40 [00:06<00:00, 4.87it/s]		
483/499		1	320:
	36/40 [00:06<00:00, 4.87it/s]		
483/499		1	320:
	37/40 [00:06<00:00, 4.98it/s]		
483/499	0.206G 0.01808 0.007585 0.0172	2	320:
92% ########2	37/40 [00:06<00:00, 4.98it/s]		
483/499	0.206G 0.01808 0.007585 0.0172	2	320:
95% ########5	38/40 [00:06<00:00, 5.08it/s]		
483/499	0.206G 0.01851 0.00763 0.01717	1	320:
95% ########5	38/40 [00:07<00:00, 5.08it/s]		
483/499	0.206G 0.01851 0.00763 0.01717	1	320:
98% ########7	39/40 [00:07<00:00, 5.03it/s]		
483/499	0.206G 0.01835 0.007551 0.01707	1	320:
98% ########7	39/40 [00:07<00:00, 5.03it/s]		
483/499	0.206G 0.01835 0.007551 0.01707	1	320:
	40/40 [00:07<00:00, 4.86it/s]		
483/499	0.206G 0.01835 0.007551 0.01707	1	320:
	40/40 [00:07<00:00, 5.41it/s]	_	
	1 10, 10 [00.00, 00.000, 00.1110, 2]		
	Class Images Instances P	R	mAP50
mAP50-95: 0%	0/20 [00:00 , ?it/s]</td <td>20</td> <td></td>	20	
00 00. 0/61	Class Images Instances P	R	mAP50
mAP50-95: 10%	•	16	IIIAI OO
mai 50 50. 10%	Class Images Instances P	R	mAP50
mAP50-95: 20%	•	n	шагоо
mAP50-95: 20%		D	m A DEA
ADEO OF - 20% I		R	mAP50
mAP50-95: 30%	### 6/20 [00:00<00:01, 13.38it/s]		

	Class	Images	Instances	P	R	mAP50
mAP50-95: 40%	####	8/20 [0	00:00<00:00,	14.30it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95: 50%	#####	10/20	[00:00<00:00,	14.27it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95: 60%	#####	12/20	[00:00<00:00,	15.42it/s]		
	Class		Instances		R	mAP50
mAP50-95: 70%	######	14/20	[00:00<00:00,	14.98it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95: 80%	#######	16/20	[00:01<00:00,	14.73it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95: 90%	#######	18/20	[00:01<00:00,	15.68it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100%	########	20/20	[00:01<00:00,	16.40it/s]		
	Class		Instances		R	mAP50
mAP50-95: 100%	########	•				
	all	40	40	0.98	0.975	0.992
0.789						
Epoch	GPU mem be	ox loss	obj_loss	cls loss	Instances	Size
•	_	_	3 =	_		
0%	0/40 [00:0	00 , ?</td <td>it/s]</td> <td></td> <td></td> <td></td>	it/s]			
			0.01519	0.02085	4	320:
	0/40 [00:00					
484/499		0.02612		0.02085	4	320:
	1/40 [00:00					
	0.206G	-		0.0229	1	320:
	1/40 [00:00					
		0.03566		0.0229	1	320:
	2/40 [00:00				_	
484/499			0.01364	0.02158	1	320:
•	2/40 [00:00			0.02200	_	0_0.
	0.206G			0.02158	1	320:
	3/40 [00:00			0.02200	_	0_0.
		0.02346		0.01909	2	320:
	3/40 [00:00			0.01000	2	020.
484/499		0.02346		0.01909	2	320:
			, 5.43it/s]	0.01000	2	020.
			0.01258	0.01843	4	320:
			, 5.43it/s]	0.01040	-	020.
484/499			0.01258	0.01843	4	320:
			, 5.37it/s]	0.01040	7	020.
484/499			0.01165	0 0231	2	320.
			0.01165 , 5.37it/s]	0.0231	2	320:
				0 0021	2	200.
484/499			0.01165 , 5.36it/s]	0.0231	2	320:
				0 00150	4	200.
484/499			0.01043	0.02158	1	320:
15% #5	0/40 [00:0]	1<00:06	, 5.36it/s]			

484/499	0.206G 0.02391 0.01043	0.02158	1	320:
18% #7	7/40 [00:01<00:05, 5.50it/s]		_	
484/499	0.206G 0.02311 0.01029	0.02058	2	320:
18% #7	7/40 [00:01<00:05, 5.50it/s]	0.00050	0	000
484/499	0.206G 0.02311 0.01029	0.02058	2	320:
20% ## 484/499	8/40 [00:01<00:05, 5.43it/s]	0.02025	4	320:
20% ##	0.206G 0.02249 0.01096 8/40 [00:01<00:05, 5.43it/s]	0.02025	4	320:
484/499	0.206G 0.02249 0.01096	0.02025	4	320:
22% ##2	9/40 [00:01<00:05, 5.54it/s]	0.02023	4	320.
484/499	0.206G 0.02164 0.01064	0.01967	2	320:
22% ##2	9/40 [00:01<00:05, 5.54it/s]	0.01307	2	020.
484/499	0.206G 0.02164 0.01064	0.01967	2	320:
25% ##5	10/40 [00:01<00:05, 5.62it/s]	0.01001	2	020.
484/499	0.206G 0.02248 0.01107	0.02017	4	320:
25% ##5	10/40 [00:02<00:05, 5.62it/s]	0.0202.	_	0_0.
484/499	0.206G 0.02248 0.01107	0.02017	4	320:
28% ##7	11/40 [00:02<00:05, 5.53it/s]			
484/499	0.206G 0.02213 0.01056	0.02036	1	320:
28% ##7	11/40 [00:02<00:05, 5.53it/s]			
_	0.206G 0.02213 0.01056	0.02036	1	320:
30% ###	12/40 [00:02<00:04, 5.61it/s]			
484/499	0.206G 0.02204 0.01071	0.02047	4	320:
30% ###	12/40 [00:02<00:04, 5.61it/s]			
484/499	0.206G 0.02204 0.01071	0.02047	4	320:
32% ###2	13/40 [00:02<00:05, 5.38it/s]			
484/499	0.206G 0.02161 0.01077	0.02014	2	320:
32% ###2	13/40 [00:02<00:05, 5.38it/s]			
484/499	0.206G 0.02161 0.01077	0.02014	2	320:
35% ###5	14/40 [00:02<00:04, 5.49it/s]			
484/499	0.206G 0.02277 0.01058	0.02059	2	320:
35% ###5	14/40 [00:02<00:04, 5.49it/s]			
484/499	0.206G 0.02277 0.01058	0.02059	2	320:
38% ###7	15/40 [00:02<00:04, 5.44it/s]			
484/499	0.206G 0.02188 0.01032	0.02048	2	320:
38% ###7	15/40 [00:02<00:04, 5.44it/s]			
484/499	0.206G 0.02188 0.01032	0.02048	2	320:
40% ####	16/40 [00:02<00:04, 5.41it/s]			
484/499	0.206G 0.022 0.01023	0.02027	2	320:
40% ####	16/40 [00:03<00:04, 5.41it/s]			
484/499	0.206G 0.022 0.01023	0.02027	2	320:
42% ####2	17/40 [00:03<00:04, 5.37it/s]			
484/499	0.206G 0.02176 0.009818	0.01975	1	320:
42% ####2	17/40 [00:03<00:04, 5.37it/s]	0.04075	,	200
484/499	0.206G 0.02176 0.009818	0.01975	1	320:
45% ####5	18/40 [00:03<00:04, 5.45it/s]	0.04077	0	200
484/499	0.206G 0.02136 0.009571	0.01977	2	320:
45% ####5	18/40 [00:03<00:04, 5.45it/s]			

484/499	0.206G 0.02136 0.009571 0.01977	2	320:
48% ####7	19/40 [00:03<00:03, 5.60it/s]		
484/499	0.206G 0.0213 0.009972 0.01977	4	320:
48% ####7	19/40 [00:03<00:03, 5.60it/s]		
484/499	0.206G 0.0213 0.009972 0.01977	4	320:
50% #####	20/40 [00:03<00:03, 5.37it/s]		
484/499	0.206G 0.02065 0.009612 0.01931	1	320:
50% #####	20/40 [00:03<00:03, 5.37it/s]	4	200
484/499	0.206G 0.02065 0.009612 0.01931	1	320:
52% #####2	21/40 [00:03<00:03, 5.64it/s]	0	200.
484/499	0.206G 0.02031 0.009638 0.01925	2	320:
52% #####2	21/40 [00:03<00:03, 5.64it/s]	2	200.
484/499	0.206G 0.02031 0.009638 0.01925 22/40 [00:03<00:03, 5.67it/s]	2	320:
55% #####5 484/499	0.206G 0.01967 0.009355 0.01896	1	320:
55% #####5	22/40 [00:04<00:03, 5.67it/s]	1	320:
484/499	0.206G 0.01967 0.009355 0.01896	1	320:
404/499 57% #####7	23/40 [00:04<00:03, 5.58it/s]	1	320:
484/499	0.206G 0.01964 0.009239 0.0187	1	320:
57% #####7	23/40 [00:04<00:03, 5.58it/s]	1	320.
484/499	0.206G 0.01964 0.009239 0.0187	1	320:
60% ######	24/40 [00:04<00:02, 5.65it/s]	1	320.
484/499	0.206G 0.01947 0.009047 0.01849	1	320:
60% ######	24/40 [00:04<00:02, 5.65it/s]	1	520.
484/499	0.206G 0.01947 0.009047 0.01849	1	320:
62% ######2	25/40 [00:04<00:02, 5.67it/s]	1	020.
484/499	0.206G 0.01914 0.008885 0.01831	2	320:
62% ######2	25/40 [00:04<00:02, 5.67it/s]	2	020.
484/499	0.206G 0.01914 0.008885 0.01831	2	320:
65% ######5	26/40 [00:04<00:02, 5.57it/s]	2	020.
484/499	0.206G 0.0188 0.008663 0.01814	1	320:
65% ######5	26/40 [00:04<00:02, 5.57it/s]	-	020.
484/499	0.206G 0.0188 0.008663 0.01814	1	320:
	27/40 [00:04<00:02, 5.79it/s]		
484/499	0.206G 0.01927 0.008889 0.01831	4	320:
	27/40 [00:05<00:02, 5.79it/s]		
484/499	0.206G 0.01927 0.008889 0.01831	4	320:
70% ######	28/40 [00:05<00:02, 5.63it/s]		
484/499	0.206G 0.01889 0.008742 0.01816	1	320:
70% ######	28/40 [00:05<00:02, 5.63it/s]		
484/499	0.206G 0.01889 0.008742 0.01816	1	320:
72% ######2	29/40 [00:05<00:01, 5.68it/s]		
484/499	0.206G 0.01849 0.008534 0.01799	1	320:
72% ######2	29/40 [00:05<00:01, 5.68it/s]		
484/499	0.206G 0.01849 0.008534 0.01799	1	320:
75% ######5	30/40 [00:05<00:01, 5.72it/s]		
484/499	0.206G 0.01863 0.008634 0.01812	3	320:
75% ######5	30/40 [00:05<00:01, 5.72it/s]		

	0.206G 0.01863		0.01812	3	320:
	31/40 [00:05<00:01, 0.206G 0.01837		0.01906	1	200.
	31/40 [00:05<00:01,		0.01806	1	320:
484/499	•		0.01806	1	320:
	32/40 [00:05<00:01,		0.01000	-	020.
484/499			0.01805	4	320:
	32/40 [00:05<00:01,				
484/499			0.01805	4	320:
82% ########2	33/40 [00:05<00:01,	5.61it/s]			
484/499	0.206G 0.01907	0.008689	0.01811	2	320:
82% ########2	33/40 [00:06<00:01,	5.61it/s]			
484/499	0.206G 0.01907	0.008689	0.01811	2	320:
85% #######5	34/40 [00:06<00:01,	5.67it/s			
484/499		0.008656	0.0181	2	320:
85% #######5	34/40 [00:06<00:01,	5.67it/s]			
484/499	0.206G 0.01929	0.008656	0.0181	2	320:
88% #######7	35/40 [00:06<00:00,	5.55it/s			
484/499	0.206G 0.01901	0.008581	0.01798	2	320:
88% #######7	35/40 [00:06<00:00,	5.55it/s]			
484/499	0.206G 0.01901	0.008581	0.01798	2	320:
90% ########	36/40 [00:06<00:00,	5.35it/s			
484/499			0.01806	3	320:
90% #######	36/40 [00:06<00:00,	5.35it/s			
484/499	0.206G 0.01975	0.008557	0.01806	3	320:
92% ########2	37/40 [00:06<00:00,	5.21it/s			
484/499	0.206G 0.01998	0.008758	0.01814	4	320:
92% ########2	37/40 [00:06<00:00,	5.21it/s			
484/499	0.206G 0.01998	0.008758	0.01814	4	320:
95% ########5	38/40 [00:06<00:00,	5.12it/s			
484/499	0.206G 0.02061	0.008661	0.01816	2	320:
95% ########5	38/40 [00:07<00:00,				
484/499	0.206G 0.02061	0.008661	0.01816	2	320:
	39/40 [00:07<00:00,				
484/499			0.01813	2	320:
	39/40 [00:07<00:00,				
484/499			0.01813	2	320:
	40/40 [00:07<00:00	=			
484/499			0.01813	2	320:
100% #########	40/40 [00:07<00:00	, 5.51it/s]			
	01 T	T t	D	D	ADE0
ADEO OF: 00/1	•	Instances	Р	R	mAP50
mAP50-95: 0%		:00 , ?it/s]</td <td></td> <td>D</td> <td> ADEC</td>		D	ADEC
ADEO OF: 40%1	9	Instances	P	R	mAP50
mAP50-95: 10%		:00<00:00, 18		D	~ ∧ D ∈ O
mAP50-95: 20%	•	Instances :00<00:00, 16	P : 97:+/al	R	mAP50
ш мг 50-35. ZU/6		Instances	P	R	m / DEO
	craps illiages	THPOUNCER	Г	n	mAP50

mAP50-95: 30% ### 6/20 [00:00<00:00,	16 46i+/sl		
Class Images Instances		R	mAP50
mAP50-95: 40% #### 8/20 [00:00<00:00,		10	min oo
Class Images Instances		R	mAP50
mAP50-95: 55% #####5 11/20 [00:00<00:00			mm co
Class Images Instances		r R	mAP50
mAP50-95: 65% #####5 13/20 [00:00<00:00			mm co
Class Images Instances		r R	mAP50
mAP50-95: 75% ######5 15/20 [00:00<00:00			mm co
Class Images Instances		r R	mAP50
mAP50-95: 90% ######## 18/20 [00:01<00:00			mm co
Class Images Instances		r R	mAP50
mAP50-95: 100% ######## 20/20 [00:01<00:00			mai oo
Class Images Instances		r R	mAP50
mAP50-95: 100% ######## 20/20 [00:01<00:00			mai oo
	0.983	0.992	0.995
0.807	0.905	0.332	0.995
0.007			
Epoch GPU_mem box_loss obj_loss	cla loga	Ingtoncog	Size
Epoch Gro_mem box_10ss obj_10ss	CIS_IUSS	Instances	2176
0% 0/40 [00:00 , ?it/s]</td <td></td> <td></td> <td></td>			
485/499 0.206G 0.01616 0.006929	0 0220	2	320:
0% 0/40 [00:00 , ?it/s]</td <td>0.0229</td> <td>2</td> <td>520.</td>	0.0229	2	520.
485/499 0.206G 0.01616 0.006929	0.0229	2	320:
2% 2 1/40 [00:00<00:06, 5.79it/s]	0.0223	2	020.
485/499 0.206G 0.03019 0.00937	0.02123	4	320:
2% 2 1/40 [00:00<00:06, 5.79it/s]	0.02125	4	520.
485/499 0.206G 0.03019 0.00937	0.02123	4	320:
5% 5 2/40 [00:00<00:07, 5.25it/s]	0.02125	4	520.
485/499 0.206G 0.03304 0.008665	0.02156	2	320:
5% 5 2/40 [00:00<00:07, 5.25it/s]	0.02130	2	520.
485/499 0.206G 0.03304 0.008665	0.02156	2	320:
8% 7 3/40 [00:00<00:07, 5.17it/s]	0.02130	2	520.
485/499 0.206G 0.03671 0.007852	0.01996	2	320:
8% 7 3/40 [00:00<00:07, 5.17it/s]	0.01990	2	320.
485/499 0.206G 0.03671 0.007852	0.01996	2	320:
10% # 4/40 [00:00<00:06, 5.16it/s]		2	320.
485/499 0.206G 0.03233 0.007591	0.02043	2	320:
10% # 4/40 [00:00<00:06, 5.16it/s]		2	320.
485/499 0.206G 0.03233 0.007591	0.02043	2	320:
12% #2 5/40 [00:00<00:06, 5.55it/s]		2	320.
·		4	200.
485/499 0.206G 0.031 0.008897	0.01997	4	320:
12% #2 5/40 [00:01<00:06, 5.55it/s]		4	200
485/499 0.206G 0.031 0.008897	0.01997	4	320:
15% #5 6/40 [00:01<00:06, 5.28it/s]		4	200
485/499 0.206G 0.02947 0.01015	0.0196	4	320:
15% #5 6/40 [00:01<00:06, 5.28it/s]			200
485/499 0.206G 0.02947 0.01015	0.0196	4	320:

18% #7	7/40 [00:01<00:06, 5.30it/s]			
485/499	0.206G 0.02655 0.009267	0.01937	1	320:
18% #7	7/40 [00:01<00:06, 5.30it/s]			
485/499	0.206G 0.02655 0.009267	0.01937	1	320:
20% ##	8/40 [00:01<00:06, 5.31it/s]			
485/499	0.206G 0.02645 0.009653	0.02077	4	320:
20% ##	8/40 [00:01<00:06, 5.31it/s]			
485/499	0.206G 0.02645 0.009653	0.02077	4	320:
22% ##2	9/40 [00:01<00:05, 5.45it/s]			
485/499	0.206G 0.02488 0.009328	0.02095	2	320:
22% ##2	9/40 [00:01<00:05, 5.45it/s]			
485/499	0.206G 0.02488 0.009328	0.02095	2	320:
25% ##5	10/40 [00:01<00:05, 5.56it/s]			
485/499	0.206G 0.02685 0.009266	0.0209	2	320:
25% ##5	10/40 [00:02<00:05, 5.56it/s]			
485/499	0.206G 0.02685 0.009266	0.0209	2	320:
28% ##7	11/40 [00:02<00:05, 5.49it/s]			
485/499	0.206G 0.02845 0.00897	0.02209	2	320:
28% ##7	11/40 [00:02<00:05, 5.49it/s]			
485/499	0.206G 0.02845 0.00897	0.02209	2	320:
30% ###	12/40 [00:02<00:05, 5.56it/s]			
485/499	0.206G 0.02721 0.008504	0.02129	1	320:
30% ###	12/40 [00:02<00:05, 5.56it/s]			
485/499	0.206G 0.02721 0.008504	0.02129	1	320:
32% ###2	13/40 [00:02<00:04, 5.49it/s]			
485/499	0.206G 0.027 0.008753	0.02088	4	320:
32% ###2	13/40 [00:02<00:04, 5.49it/s]			
485/499	0.206G 0.027 0.008753	0.02088	4	320:
35% ###5	14/40 [00:02<00:04, 5.59it/s]			
485/499	0.206G 0.026 0.008761	0.02031	2	320:
35% ###5	14/40 [00:02<00:04, 5.59it/s]			
485/499	0.206G 0.026 0.008761	0.02031	2	320:
38% ###7	15/40 [00:02<00:04, 5.64it/s]			
485/499	0.206G 0.02496 0.00862	0.02003	2	320:
38% ###7	15/40 [00:02<00:04, 5.64it/s]			
485/499	0.206G 0.02496 0.00862	0.02003	2	320:
40% ####	16/40 [00:02<00:04, 5.69it/s]			
485/499	0.206G 0.0251 0.008786	0.01973	4	320:
40% ####	16/40 [00:03<00:04, 5.69it/s]			
485/499	0.206G 0.0251 0.008786	0.01973	4	320:
42% ####2	17/40 [00:03<00:04, 5.43it/s]			
485/499	0.206G 0.02442 0.008679	0.0194	2	320:
42% ####2	17/40 [00:03<00:04, 5.43it/s]			
485/499	0.206G 0.02442 0.008679	0.0194	2	320:
45% ####5	18/40 [00:03<00:03, 5.54it/s]			
485/499	0.206G 0.02367 0.008663	0.01917	4	320:
45% ####5	18/40 [00:03<00:03, 5.54it/s]			
485/499	0.206G 0.02367 0.008663	0.01917	4	320:
·				

48% ####7		19/40 [00:03<00:03,				
485/499		0.206G 0.02349		0.01919	4	320:
48% ####7	ı	19/40 [00:03<00:03,				
485/499		0.206G 0.02349		0.01919	4	320:
50% #####	ı	20/40 [00:03<00:03,				
485/499		0.206G 0.02266		0.01881	1	320:
50% #####	ı	20/40 [00:03<00:03,		0.04004		000
485/499		0.206G 0.02266		0.01881	1	320:
52% #####2	ı	21/40 [00:03<00:03,		0.04000	•	000
485/499		0.206G 0.02245	0.008426	0.01868	2	320:
52% #####2	ı	21/40 [00:04<00:03,		0.04000		000
485/499		0.206G 0.02245		0.01868	2	320:
55% #####5	ı	22/40 [00:04<00:03,		0.04054		000
485/499		0.206G 0.02282		0.01871	4	320:
55% #####5	ı	22/40 [00:04<00:03,		0.04054		000
485/499		0.206G 0.02282		0.01871	4	320:
57% #####7	ı	23/40 [00:04<00:03,				
485/499		0.206G 0.02383	0.008672	0.01855	2	320:
57% #####7	ı	23/40 [00:04<00:03,				
485/499		0.206G 0.02383		0.01855	2	320:
60% ######	ı	24/40 [00:04<00:03,			_	
485/499		0.206G 0.02427		0.0185	2	320:
60% ######	ı	24/40 [00:04<00:03,			_	
485/499		0.206G 0.02427		0.0185	2	320:
62% ######2	ı	25/40 [00:04<00:03,				
485/499		0.206G 0.02441	0.008744	0.01843	4	320:
62% ######2	١	25/40 [00:04<00:03,				
485/499		0.206G 0.02441		0.01843	4	320:
65% ######5	ı	26/40 [00:04<00:02,				
485/499			0.008761	0.01837	2	320:
65% ######5	ı	26/40 [00:05<00:02,				
485/499		0.206G 0.025		0.01837	2	320:
68% ######7	ı	27/40 [00:05<00:02,	4.69it/s]			
485/499		0.206G 0.02486		0.01848	4	320:
68% ######7	١	27/40 [00:05<00:02,				
485/499		0.206G 0.02486	0.00901	0.01848	4	320:
70% #######	١	28/40 [00:05<00:02,				
485/499		0.206G 0.02425	0.008832	0.0182	1	320:
70% #######	١	28/40 [00:05<00:02,				
485/499		0.206G 0.02425		0.0182	1	320:
72% #######2	١	29/40 [00:05<00:02,	4.79it/s			
485/499		0.206G 0.02363	0.008607	0.01819	1	320:
72% ######2	-	29/40 [00:05<00:02,				
485/499		0.206G 0.02363	0.008607	0.01819	1	320:
75% ######5	-	30/40 [00:05<00:02,				
485/499		0.206G 0.02359	0.008763	0.01817	4	320:
75% ######5	-	30/40 [00:05<00:02,				
485/499		0.206G 0.02359	0.008763	0.01817	4	320:

78% ######7	31/40 [00:05<00:01, 4.97it/s]		
485/499	0.206G 0.02336 0.008606 0.01803	1	320:
78% ######7	31/40 [00:06<00:01, 4.97it/s]		
485/499	0.206G 0.02336 0.008606 0.01803	1	320:
80% #######	32/40 [00:06<00:01, 4.95it/s]		
485/499	0.206G 0.02349 0.008677 0.01837	4	320:
80% #######	32/40 [00:06<00:01, 4.95it/s]		
485/499		4	320:
82% #######2	33/40 [00:06<00:01, 4.93it/s]		
	0.206G 0.02339 0.008842 0.01839	4	320:
•	33/40 [00:06<00:01, 4.93it/s]		
485/499	·	4	320:
	34/40 [00:06<00:01, 4.91it/s]	-	020.
485/499	·	4	320:
	34/40 [00:06<00:01, 4.91it/s]	1	020.
485/499	•	4	320:
	35/40 [00:06<00:00, 5.03it/s]	-	520.
		2	320:
		2	320:
	35/40 [00:06<00:00, 5.03it/s]	•	000
	0.206G 0.02286 0.008834 0.01843	2	320:
	36/40 [00:06<00:00, 5.11it/s]	_	
485/499		4	320:
	36/40 [00:07<00:00, 5.11it/s]	_	
485/499		4	320:
	37/40 [00:07<00:00, 5.18it/s]		
485/499	0.206G 0.02249 0.00887 0.01833	2	320:
	37/40 [00:07<00:00, 5.18it/s]		
485/499	0.206G 0.02249 0.00887 0.01833	2	320:
95% ########5	38/40 [00:07<00:00, 5.10it/s]		
485/499	0.206G 0.02248 0.008868 0.01831	2	320:
95% ########5	38/40 [00:07<00:00, 5.10it/s]		
485/499	0.206G 0.02248 0.008868 0.01831	2	320:
98% ########7	39/40 [00:07<00:00, 5.28it/s]		
485/499	0.206G 0.02245 0.009009 0.0184	4	320:
98% ########7	39/40 [00:07<00:00, 5.28it/s]		
485/499	0.206G 0.02245 0.009009 0.0184	4	320:
100% ##########	40/40 [00:07<00:00, 5.29it/s]		
485/499	0.206G 0.02245 0.009009 0.0184	4	320:
	40/40 [00:07<00:00, 5.20it/s]		
	, , ,		
	Class Images Instances P	R	mAP50
mAP50-95: 0%	0/20 [00:00 , ?it/s]</td <td>-</td> <td>-· -</td>	-	-· -
	Class Images Instances P	R	mAP50
mAP50-95: 10% :	3	••	
00 00. 10/6	Class Images Instances P	R	mAP50
mAP50-95: 20%	3	10	00
mm 00 00. 20/6	Class Images Instances P	R	mAP50
mAP50-95: 30%	•	16	mai 00
mur 20 30. 20%	πππ 0/20 [00.00\00.00, 11.2/1b/8]		

mAP50-95: 40	Class	_	Instances 00:00<00:00,	P 17 65i+/sl	R	mAP50
	Class	Images	Instances	P	R	mAP50
mAP50-95: 50			[00:00<00:00,			
	Class	•	Instances		R	mAP50
mAP50-95: 60			[00:00<00:00,			ADEO
ADEO OF - 70'	Class	_	Instances		R	mAP50
mAP50-95: 70°	###### Class		[00:00<00:00, Instances		R	mAP50
mAP50-95: 80°		_	[00:00<00:00,			MAPSO
MAF 30 - 93. 00	Class		Instances		R	mAP50
mAP50-95: 90		_				IIIAI 50
mai 50 55. 50	Class		Instances		R	mAP50
mAP50-95: 100		_				mni oo
mm 00 30. 100	Class		Instances		R	mAP50
mAP50-95: 100		•				mni oo
mm100 30: 100	all	40	40	0.983	0.992	0.995
0.807	all	10	-10	0.500	0.332	0.550
0.001						
Epoch	GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
0%	L 0/40 F00.	0042 24	: 4 / - 7			
	0.206G 0	.00 , !]</td <td></td> <td>0.01443</td> <td>1</td> <td>320:</td>		0.01443	1	320:
	0.2000 0			0.01443	1	320.
	0.206G 0			0.01443	1	320:
	1/40 [00:00			0.01443	1	320.
			0.004293	0.01307	2	320:
	1/40 [00:00			0.01307	2	320.
			0.004293	0.01307	2	320:
	1 2/40 [00:00			0.01307	2	320.
486/499			0.004707	0.01289	2	320:
	1 2/40 [00:00			0.01203	2	020.
		.008579	0.004707	0.01289	2	320:
	3/40 [00:00			0.01203	2	020.
486/499			0.007297	0.01603	3	320:
	3/40 [00:00			0.01000	G	020.
486/499			0.007297	0.01603	3	320:
10% #	4/40 [00:0			0.01000	G	020.
			0.00708	0.01635	1	320:
10% #	4/40 [00:0			0.01000	-	020.
486/499			0.00708	0.01635	1	320:
12% #2	5/40 [00:0			0.02000	_	0_0.
486/499		0.01719		0.01646	2	320:
12% #2	5/40 [00:0				2	323.
486/499			0.006918	0.01646	2	320:
15% #5	6/40 [00:0			 	_	5_5.
486/499	0.206G		0.007877	0.01786	4	320:
15% #5	6/40 [00:0					
	-		• •			

486/499	0.206G 0.0168 0.007	0.01786	4	320:
18% #7	7/40 [00:01<00:06, 5.21i		4	200.
486/499 18% #7	0.206G 0.01628 0.007 7/40 [00:01<00:06, 5.21i		1	320:
486/499	0.206G 0.01628 0.007		1	320:
20% ##	8/40 [00:01<00:06, 5.25i			
486/499	0.206G 0.01605 0.007	248 0.01784	1	320:
20% ##	8/40 [00:01<00:06, 5.25i			
486/499	0.206G 0.01605 0.007		1	320:
22% ##2	9/40 [00:01<00:05, 5.42i		_	
486/499		292 0.01761	2	320:
22% ##2	9/40 [00:01<00:05, 5.42i		0	200.
486/499 25% ##5	0.206G 0.0194 0.007 10/40 [00:01<00:05, 5.41		2	320:
486/499	0.206G 0.01875 0.006		1	320:
25% ##5	1 10/40 [00:01<00:05, 5.41		1	520.
486/499		931 0.01711	1	320:
28% ##7	11/40 [00:01<00:05, 5.50		_	0201
486/499	0.206G 0.01924 0.007		4	320:
28% ##7	11/40 [00:02<00:05, 5.50	it/s]		
486/499	0.206G 0.01924 0.007	499 0.01743	4	320:
30% ###	12/40 [00:02<00:05, 5.60	it/s]		
486/499	0.206G 0.02107 0.007	489 0.01737	2	320:
30% ###	12/40 [00:02<00:05, 5.60			
486/499		489 0.01737	2	320:
32% ###2	13/40 [00:02<00:04, 5.47			
486/499	0.206G 0.02274 0.007		2	320:
32% ###2	13/40 [00:02<00:04, 5.47			222
486/499	0.206G 0.02274 0.007		2	320:
35% ###5	14/40 [00:02<00:04, 5.44		2	200.
486/499 35% ###5	0.206G 0.02225 0.007 14/40 [00:02<00:04, 5.44		2	320:
486/499	0.206G 0.0225 0.007		2	320:
38% ###7	15/40 [00:02<00:04, 5.41		2	020.
486/499		0.01667	1	320:
38% ###7	15/40 [00:02<00:04, 5.41			
486/499		0.01667	1	320:
40% ####	16/40 [00:02<00:04, 5.51	it/s]		
486/499	0.206G 0.02163 0.007	488 0.01817	4	320:
40% ####	16/40 [00:03<00:04, 5.51	it/s]		
486/499	0.206G 0.02163 0.007		4	320:
42% ####2	17/40 [00:03<00:04, 5.46			
486/499	0.206G 0.02081 0.007		1	320:
42% ####2	17/40 [00:03<00:04, 5.46		4	200
486/499		7216 0.01776	1	320:
45% ####5 486/499	18/40 [00:03<00:03, 5.56 0.206G 0.02043 0.007		4	320:
486/499 45% ####5	18/40 [00:03<00:03, 5.56		4	320:
10/01####0	1 10/ 40 [00.00\00.00, 5.50	T 0 \ D]		

486/499	0.206G 0.02043 0.007398	0.01795	4	320:
48% ####7	19/40 [00:03<00:03, 5.34it/s]			
486/499	0.206G 0.01983 0.007571	0.01776	4	320:
48% ####7	19/40 [00:03<00:03, 5.34it/s]			
486/499	0.206G 0.01983 0.007571	0.01776	4	320:
50% #####	20/40 [00:03<00:03, 5.20it/s]			
486/499	0.206G 0.01954 0.007641	0.01767	1	320:
50% #####	20/40 [00:03<00:03, 5.20it/s]			
486/499	0.206G 0.01954 0.007641	0.01767	1	320:
52% #####2	21/40 [00:03<00:03, 5.37it/s]		_	
486/499	0.206G 0.01991 0.007643	0.01762	3	320:
52% #####2	21/40 [00:04<00:03, 5.37it/s]	0.04700		000
486/499	0.206G 0.01991 0.007643	0.01762	3	320:
55% #####5	22/40 [00:04<00:03, 5.35it/s]	0.04744		000
486/499	0.206G 0.0196 0.007458	0.01744	1	320:
55% #####5	22/40 [00:04<00:03, 5.35it/s]	0.04544		222
486/499	0.206G 0.0196 0.007458	0.01744	1	320:
57% #####7	23/40 [00:04<00:03, 5.48it/s]		_	
486/499	0.206G 0.02081 0.007439	0.01749	2	320:
57% #####7	23/40 [00:04<00:03, 5.48it/s]		_	
486/499	0.206G 0.02081 0.007439	0.01749	2	320:
60% ######	24/40 [00:04<00:02, 5.58it/s]			
486/499	0.206G 0.02049 0.007289	0.01761	1	320:
60% ######	24/40 [00:04<00:02, 5.58it/s]			
486/499	0.206G 0.02049 0.007289	0.01761	1	320:
62% ######2	25/40 [00:04<00:02, 5.50it/s]			
486/499	0.206G 0.02054 0.007331	0.01755	2	320:
62% ######2	25/40 [00:04<00:02, 5.50it/s]			
486/499	0.206G 0.02054 0.007331	0.01755	2	320:
65% ######5	26/40 [00:04<00:02, 5.59it/s]			
486/499	0.206G 0.02032 0.007271	0.0175	2	320:
65% ######5	26/40 [00:04<00:02, 5.59it/s]			
486/499	0.206G 0.02032 0.007271	0.0175	2	320:
	27/40 [00:04<00:02, 5.66it/s]			
486/499	0.206G 0.0196 0.007069	0.01687	0	320:
	27/40 [00:05<00:02, 5.66it/s]			
486/499	0.206G 0.0196 0.007069	0.01687	0	320:
70% #######	28/40 [00:05<00:02, 5.83it/s]			
486/499	0.206G 0.01938 0.007145	0.01673	2	320:
70% #######	28/40 [00:05<00:02, 5.83it/s]			
486/499	0.206G 0.01938 0.007145	0.01673	2	320:
72% #######2	29/40 [00:05<00:01, 5.83it/s]			
486/499	0.206G 0.01928 0.007207	0.01669	3	320:
72% #######2	29/40 [00:05<00:01, 5.83it/s]			
486/499	0.206G 0.01928 0.007207	0.01669	3	320:
75% #######5				
486/499	0.206G 0.01903 0.007098	0.01653	1	320:
75% ######5	30/40 [00:05<00:01, 5.82it/s]			

	0.206G 0.01903		0.01653	1	320:
78% #######7 486/499	31/40 [00:05<00:01, 0.206G 0.01862		0.01652	1	320:
	31/40 [00:05<00:01,		0.01052	1	320.
486/499	0.206G 0.01862		0.01652	1	320:
	32/40 [00:05<00:01,		0.01002	-	020.
486/499	·		0.01664	1	320:
80% #######	32/40 [00:05<00:01,				
486/499		0.006917	0.01664	1	320:
82% ########	33/40 [00:05<00:01,	5.73it/s]			
486/499	0.206G 0.01846	0.00685	0.01652	1	320:
82% #######2	33/40 [00:06<00:01,	5.73it/s			
486/499	0.206G 0.01846	0.00685	0.01652	1	320:
85% #######5	34/40 [00:06<00:01,	5.74it/s			
486/499		0.006953	0.01655	3	320:
85% #######5	34/40 [00:06<00:01,	5.74it/s			
486/499	0.206G 0.01899	0.006953	0.01655	3	320:
	35/40 [00:06<00:00,	5.61it/s]			
486/499	0.206G 0.0186	0.006853	0.01651	1	320:
88% #######7	35/40 [00:06<00:00,	5.61it/s]			
486/499	0.206G 0.0186	0.006853	0.01651	1	320:
90% #######	36/40 [00:06<00:00,	5.67it/s]			
486/499			0.01702	4	320:
90% #######	36/40 [00:06<00:00,	5.67it/s]			
486/499	0.206G 0.01852		0.01702	4	320:
92% ########2	37/40 [00:06<00:00,	5.70it/s			
486/499	0.206G 0.01825	0.006857	0.01684	1	320:
	37/40 [00:06<00:00,				
486/499	0.206G 0.01825		0.01684	1	320:
	38/40 [00:06<00:00,				
486/499		0.006872	0.01675	2	320:
	38/40 [00:07<00:00,				
486/499	0.206G 0.01828	0.006872	0.01675	2	320:
	39/40 [00:07<00:00,				
486/499		0.006842	0.01696	2	320:
	39/40 [00:07<00:00,				
486/499		0.006842	0.01696	2	320:
	40/40 [00:07<00:00	-			
486/499		0.006842	0.01696	2	320:
100% ##########	40/40 [00:07<00:00), 5.56it/s]			
	G 3 T	T .	_	-	4550
ADEO OF 09/1	•	Instances	P	R	mAP50
mAP50-95: 0%		0:00 , ?it/s</td <td></td> <td>ъ</td> <td> ADEO</td>		ъ	ADEO
ADEO OF: 400/1	•	Instances	P	R	mAP50
mAP50-95: 10%		0:00<00:01, 15	_	מ	m ADE ○
mAP50-95: 20%	•	Instances 0:00<00:00, 17	P 7 97i+/al	R	mAP50
ш мг 50-35. ZU%		Instances	7.271t/SJ P	R	mAP50
	orass illiakes	THPOUNCED	Г	11	mar ou

mAP50-95: 35% ###5 7/20 [00:	00<00.00	18 20i+/al		
	instances		R	mAP50
mAP50-95: 45% ####5 9/20 [00:			11	IIIAF 30
	-		D	ADEO
•	instances		R	mAP50
		16.59it/s]		4550
<u> </u>	nstances		R	mAP50
mAP50-95: 65% #####5 13/20 [00				
<u> </u>	nstances		R	mAP50
mAP50-95: 80% ####### 16/20 [00				
_	nstances		R	mAP50
mAP50-95: 90% ######## 18/20 [00	0:01<00:00,	17.25it/s]		
Class Images I	nstances	P	R	mAP50
mAP50-95: 100% ######### 20/20 [00	0:01<00:00,	17.56it/s]		
Class Images I	nstances	P	R	mAP50
mAP50-95: 100% ######## 20/20 [00	0:01<00:00,	17.46it/s]		
all 40		0.986	0.992	0.995
0.813				
Epoch GPU_mem box_loss	ohi logg	cla losa	Instances	Size
HPOCH dro_mem box_robb	00]_1000	C1D_10DD	Instances	DIZC
0% 0/40 [00:00 , ?it/</td <td>'al</td> <td></td> <td></td> <td></td>	'al			
	0.007112	0.01220	0	200.
		0.01339	2	320:
0% 0/40 [00:00 , ?it/s]</td <td></td> <td>0.04000</td> <td>0</td> <td>800</td>		0.04000	0	800
487/499 0.206G 0.02313		0.01339	2	320:
2% 2 1/40 [00:00<00:06, 5				
487/499 0.206G 0.02067		0.01772	2	320:
•	5.73it/s]			
487/499 0.206G 0.02067	0.007111	0.01772	2	320:
5% 5 2/40 [00:00<00:06, 6	5.11it/s]			
487/499 0.206G 0.01625	0.005765	0.01982	1	320:
5% 5 2/40 [00:00<00:06, 6	3.11it/s]			
487/499 0.206G 0.01625	0.005765	0.01982	1	320:
8% 7 3/40 [00:00<00:06, 5	5.97it/s]			
487/499 0.206G 0.01609		0.01931	2	320:
	5.97it/s]			
	0.006604	0.01931	2	320:
10% # 4/40 [00:00<00:06,		0.01001	2	020.
-	0.006907	0.01883	2	320:
		0.01005	2	320.
-		0.01002	0	200.
	0.006907	0.01883	2	320:
12% #2 5/40 [00:00<00:06,				
	0.006727	0.02096	2	320:
12% #2 5/40 [00:01<00:06,				
	0.006727	0.02096	2	320:
15% #5 6/40 [00:01<00:06,	5.44it/s]			
487/499 0.206G 0.02549	0.006877	0.02008	2	320:
15% #5 6/40 [00:01<00:06,	5.44it/s]			
487/499 0.206G 0.02549	0.006877	0.02008	2	320:

18% #7	7/40 [00:01<00:05, 5.56it/s]			
487/499	0.206G 0.02343 0.006463	0.01904	1	320:
18% #7	7/40 [00:01<00:05, 5.56it/s]			
487/499	0.206G 0.02343 0.006463	0.01904	1	320:
20% ##	8/40 [00:01<00:05, 5.49it/s]			
487/499	0.206G 0.02194 0.006263	0.01802	1	320:
20% ##	8/40 [00:01<00:05, 5.49it/s]			
487/499	0.206G 0.02194 0.006263	0.01802	1	320:
22% ##2	9/40 [00:01<00:05, 5.25it/s]		_	
487/499	0.206G 0.02309 0.006516	0.01762	2	320:
22% ##2	9/40 [00:01<00:05, 5.25it/s]		_	
487/499	0.206G 0.02309 0.006516	0.01762	2	320:
25% ##5	10/40 [00:01<00:05, 5.17it/s]		_	
487/499	0.206G 0.02157 0.006497	0.01729	2	320:
25% ##5	10/40 [00:02<00:05, 5.17it/s]		_	
487/499	0.206G 0.02157 0.006497	0.01729	2	320:
28% ##7	11/40 [00:02<00:05, 5.22it/s]			
487/499	0.206G 0.02266 0.007751	0.01764	4	320:
28% ##7	11/40 [00:02<00:05, 5.22it/s]			
487/499	0.206G 0.02266 0.007751	0.01764	4	320:
30% ###	12/40 [00:02<00:05, 4.97it/s]			
487/499	0.206G 0.02183 0.007406	0.01732	1	320:
30% ###	12/40 [00:02<00:05, 4.97it/s]			
487/499	0.206G 0.02183 0.007406	0.01732	1	320:
32% ###2	13/40 [00:02<00:05, 5.08it/s]			
487/499	0.206G 0.02076 0.007086	0.01736	1	320:
32% ###2	13/40 [00:02<00:05, 5.08it/s]			
487/499	0.206G 0.02076 0.007086	0.01736	1	320:
35% ###5	14/40 [00:02<00:05, 5.15it/s]			
487/499	0.206G 0.01999 0.007241	0.01784	2	320:
35% ###5	14/40 [00:02<00:05, 5.15it/s]			
487/499	0.206G 0.01999 0.007241	0.01784	2	320:
38% ###7	15/40 [00:02<00:04, 5.07it/s]			
487/499	0.206G 0.0201 0.007751	0.01847	4	320:
38% ###7	15/40 [00:03<00:04, 5.07it/s]			
487/499	0.206G 0.0201 0.007751	0.01847	4	320:
40% ####	16/40 [00:03<00:04, 5.03it/s]			
487/499	0.206G 0.01993 0.007781	0.01811	2	320:
40% ####	16/40 [00:03<00:04, 5.03it/s]			
487/499	0.206G 0.01993 0.007781	0.01811	2	320:
42% ####2	17/40 [00:03<00:04, 5.10it/s]			
487/499	0.206G 0.01938 0.007569	0.01782	1	320:
42% ####2	17/40 [00:03<00:04, 5.10it/s]			
487/499	0.206G 0.01938 0.007569	0.01782	1	320:
45% ####5	18/40 [00:03<00:04, 5.17it/s]			
487/499	0.206G 0.01836 0.007452	0.01689	0	320:
45% ####5	18/40 [00:03<00:04, 5.17it/s]			
487/499	0.206G 0.01836 0.007452	0.01689	0	320:

48% ####7		19/40 [00:03<00:03,				
487/499		0.206G 0.01796		0.01688	2	320:
48% ####7	ı	19/40 [00:03<00:03,			_	
487/499		0.206G 0.01796		0.01688	2	320:
50% #####	ı	20/40 [00:03<00:03,				
487/499		0.206G 0.0177		0.01662	1	320:
50% #####	ı	20/40 [00:03<00:03,		0.04000		000
487/499			0.007483	0.01662	1	320:
52% #####2	ı	21/40 [00:03<00:03,		0 04747	4	000
487/499			0.00779	0.01717	4	320:
52% #####2	ı	21/40 [00:04<00:03,		0.04747	4	000
487/499		0.206G 0.01835		0.01717	4	320:
55% #####5	ı	22/40 [00:04<00:03,		0.04884		000
487/499		0.206G 0.0183		0.01774	4	320:
55% #####5	ı	22/40 [00:04<00:03,		0.04884		000
487/499		0.206G 0.0183		0.01774	4	320:
57% #####7	ı	23/40 [00:04<00:03,			_	
487/499		0.206G 0.01795	0.008103	0.01764	2	320:
57% #####7	ı	23/40 [00:04<00:03,			_	
487/499		0.206G 0.01795		0.01764	2	320:
60% ######	ı	24/40 [00:04<00:03,				
487/499		0.206G 0.01763		0.01761	1	320:
60% ######	ı	24/40 [00:04<00:03,				
487/499		0.206G 0.01763		0.01761	1	320:
62% ######2	ı	25/40 [00:04<00:02,				
487/499		0.206G 0.01737	0.007848	0.01757	2	320:
62% ######2	ı	25/40 [00:04<00:02,				
487/499		0.206G 0.01737		0.01757	2	320:
65% ######5	ı	26/40 [00:04<00:02,				
487/499		0.206G 0.01712		0.01761	2	320:
65% ######5	ı	26/40 [00:05<00:02,				
487/499		0.206G 0.01712		0.01761	2	320:
68% ######7	ı	27/40 [00:05<00:02,	5.50it/s]			
487/499		0.206G 0.01727		0.01807	4	320:
68% ######7	١	27/40 [00:05<00:02,				
487/499		0.206G 0.01727		0.01807	4	320:
70% #######	١	28/40 [00:05<00:02,				
487/499		0.206G 0.01716	0.008012	0.01791	1	320:
70% #######	١	28/40 [00:05<00:02,				
487/499		0.206G 0.01716	0.008012	0.01791	1	320:
72% #######2	١	29/40 [00:05<00:02,	5.45it/s			
487/499		0.206G 0.01696	0.008115	0.01779	2	320:
72% ######2	-	29/40 [00:05<00:02,				
487/499		0.206G 0.01696	0.008115	0.01779	2	320:
75% ######5	-	30/40 [00:05<00:01,				
487/499		0.206G 0.01743	0.008227	0.01796	3	320:
75% ######5	-	30/40 [00:05<00:01,				
487/499		0.206G 0.01743	0.008227	0.01796	3	320:

78% ######7	31/40 [00:05<00:01, 5.20it/s]		
487/499	0.206G 0.01743 0.008152 0.01781	1	320:
78% ######7	31/40 [00:06<00:01, 5.20it/s]		
487/499	0.206G 0.01743 0.008152 0.01781	1	320:
80% #######	32/40 [00:06<00:01, 5.51it/s]		
487/499	0.206G 0.01836 0.008095 0.01774	2	320:
	32/40 [00:06<00:01, 5.51it/s]		
	0.206G 0.01836 0.008095 0.01774	2	320:
	33/40 [00:06<00:01, 5.45it/s]		
	0.206G 0.01838 0.008221 0.0177	4	320:
•	33/40 [00:06<00:01, 5.45it/s]		
487/499	·	4	320:
	34/40 [00:06<00:01, 5.39it/s]	-	020.
487/499	-	4	320:
	34/40 [00:06<00:01, 5.39it/s]	1	020.
	0.206G 0.01881 0.008404 0.01784	4	320:
	35/40 [00:06<00:00, 5.41it/s]	7	520.
	-	4	320:
		4	320:
	35/40 [00:06<00:00, 5.41it/s]	4	000
	0.206G 0.01931 0.008604 0.01799	4	320:
	36/40 [00:06<00:00, 5.52it/s]		
487/499		1	320:
	36/40 [00:06<00:00, 5.52it/s]		
487/499		1	320:
	37/40 [00:06<00:00, 5.50it/s]		
487/499	0.206G 0.01996 0.008495 0.01794	3	320:
	37/40 [00:07<00:00, 5.50it/s]		
487/499	0.206G 0.01996 0.008495 0.01794	3	320:
95% ########5	38/40 [00:07<00:00, 5.53it/s]		
487/499	0.206G 0.02024 0.008657 0.01806	4	320:
95% ########5	38/40 [00:07<00:00, 5.53it/s]		
487/499	0.206G 0.02024 0.008657 0.01806	4	320:
98% ########7	39/40 [00:07<00:00, 5.33it/s]		
487/499	0.206G 0.02047 0.008742 0.01815	4	320:
98% ########7	39/40 [00:07<00:00, 5.33it/s]		
487/499	0.206G 0.02047 0.008742 0.01815	4	320:
100% ##########	40/40 [00:07<00:00, 5.18it/s]		
487/499	0.206G 0.02047 0.008742 0.01815	4	320:
	40/40 [00:07<00:00, 5.31it/s]		
	,,,,,		
	Class Images Instances P	R	mAP50
mAP50-95: 0%	0/20 [00:00 , ?it/s]</td <td></td> <td></td>		
00 00. 0/61	Class Images Instances P	R	mAP50
mAP50-95: 10% :	3	10	
00 00. 10/6	Class Images Instances P	R	mAP50
mAP50-95: 20%	9	16	mni oo
mm 00 00. 20/6	Class Images Instances P	R	mAP50
mAP50-95: 30%	•	16	IIIAI OO
mur 20 30. 20%	πππ 0/20 [00.00\00.00, 14.001b/8]		

Cl: mAP50-95: 40% ####	•	s Instances [00:00<00:00,		R	mAP50
Cla	ass Image	s Instances	P	R	mAP50
mAP50-95: 50% ####		[00:00<00:00]		R	ADEO
mAP50-95: 60% ####	O	s Instances [00:00<00:00]			mAP50
		s Instances		R	mAP50
mAP50-95: 70% ####	0	[00:00<00:00			
		s Instances		R	mAP50
mAP50-95: 80% ####	#### 16/20	[00:01<00:00	, 15.61it/s]		
Cla	ass Image	s Instances	P	R	mAP50
mAP50-95: 90% ####	##### 18/20	[00:01<00:00	, 15.37it/s]		
		s Instances		R	mAP50
mAP50-95: 100% ####					
	•	s Instances		R	mAP50
mAP50-95: 100% ####	##### 20/20	[00:01<00:00	, 15.94it/s]		
	all 4	0 40	0.986	0.992	0.995
0.813					
Epoch GPU_1	mem box_los	s obj_loss	cls_loss	Instances	Size
-	_	3-	_		
0% 0/4	40 [00:00 ,</td <td>?it/s]</td> <td></td> <td></td> <td></td>	?it/s]			
488/499 0.20	0.0675	6 0.008855	0.01823	3	320:
	[00:00 , ?i</td <td></td> <td></td> <td></td> <td></td>				
	0.0675		0.01823	3	320:
	[00:00<00:07	=			
488/499 0.20			0.01539	2	320:
	[00:00<00:07				
488/499 0.20		6 0.00739	0.01539	2	320:
	[00:00<00:07				
488/499 0.20		4 0.006583	0.01488	1	320:
	[00:00<00:07	=			
488/499 0.20	0.0292	4 0.006583	0.01488	1	320:
	[00:00<00:06				
488/499 0.20		4 0.007796	0.01733	4	320:
	[00:00<00:06				
		4 0.007796	0.01733	4	320:
	0:00>00:00	-			
488/499 0.20		6 0.008683	0.01746	4	320:
	0 [00:00<00:0				
488/499 0.20		6 0.008683	0.01746	4	320:
	0 [00:00<00:0				
488/499 0.20		8 0.007644	0.0168	1	320:
	0 [00:01<00:0				
		8 0.007644	0.0168	1	320:
	0 [00:01<00:0				
488/499 0.20		8 0.007113	0.01633	1	320:
15% #5 6/40	0 [00:01<00:0	6, 5.34it/s]			

488/499	0.206G 0.02068	0.007113	0.01633	1	320:
18% #7	7/40 [00:01<00:06,		0.04700	4	200
488/499	0.206G 0.02123 7/40 [00:01<00:06,	0.007533	0.01703	4	320:
18% #7 488/499	0.206G 0.02123	5.49it/s] 0.007533	0.01703	4	320:
20% ##	8/40 [00:01<00:05,		0.01703	7	520.
	0.206G 0.0198	0.007012	0.01716	1	320:
20% ##	8/40 [00:01<00:05,			_	
488/499	0.206G 0.0198	0.007012	0.01716	1	320:
22% ##2	9/40 [00:01<00:05,	5.64it/s]			
488/499	0.206G 0.01846	0.006857	0.01671	2	320:
22% ##2	9/40 [00:01<00:05,	5.64it/s]			
488/499	0.206G 0.01846	0.006857	0.01671	2	320:
25% ##5	10/40 [00:01<00:05,	5.54it/s			
488/499	0.206G 0.01895		0.01705	4	320:
25% ##5	10/40 [00:02<00:05,				
488/499	0.206G 0.01895		0.01705	4	320:
28% ##7	11/40 [00:02<00:05,				
488/499		0.007648	0.01672	1	320:
28% ##7	11/40 [00:02<00:05,				
488/499	0.206G 0.01827		0.01672	1	320:
30% ###	12/40 [00:02<00:05,				
488/499		0.007582	0.01686	1	320:
30% ###	12/40 [00:02<00:05,				
488/499	0.206G 0.01839		0.01686	1	320:
32% ###2	13/40 [00:02<00:04,			_	
488/499		0.007942	0.01703	4	320:
32% ###2	13/40 [00:02<00:04,		0.04700		
488/499	0.206G 0.01831		0.01703	4	320:
	14/40 [00:02<00:04,		0.04.004		000
488/499		0.007807	0.01694	1	320:
35% ###5	14/40 [00:02<00:04,		0.01604	4	200
488/499	0.206G 0.01767	0.007807	0.01694	1	320:
38% ###7 488/499	15/40 [00:02<00:04, 0.206G 0.01733	0.007641	0 01694	1	200.
38% ###7	15/40 [00:02<00:04,		0.01684	1	320:
488/499	0.206G 0.01733		0.01684	1	320:
40% ####	16/40 [00:02<00:04,		0.01004	1	320.
488/499		0.00752	0.0167	2	320:
40% ####	16/40 [00:03<00:04,		0.0101	2	020.
488/499		0.00752	0.0167	2	320:
42% ####2	17/40 [00:03<00:04,		0.0101	2	020.
488/499	0.206G 0.01759		0.0166	3	320:
42% ####2	17/40 [00:03<00:04,			-	2_0.
488/499	0.206G 0.01759		0.0166	3	320:
45% ####5	18/40 [00:03<00:04,			-	
488/499	0.206G 0.01702		0.01647	1	320:
45% ####5	18/40 [00:03<00:04,				

488/499	0.206G 0.01702 0.00735	0.01647	1 320:
48% ####7	19/40 [00:03<00:03, 5.54it/s]		
488/499	0.206G 0.01676 0.00739	0.01626	2 320:
48% ####7	19/40 [00:03<00:03, 5.54it/s]		
488/499	0.206G 0.01676 0.00739	0.01626	2 320:
50% #####	20/40 [00:03<00:03, 5.39it/s]		
488/499		0.01648	4 320:
50% #####	20/40 [00:03<00:03, 5.39it/s]		
488/499		0.01648	4 320:
52% #####2	21/40 [00:03<00:03, 5.57it/s]		
488/499	0.206G 0.01656 0.007597	0.0162	1 320:
52% #####2	21/40 [00:04<00:03, 5.57it/s]	0.0400	
488/499	0.206G 0.01656 0.007597	0.0162	1 320:
55% #####5	22/40 [00:04<00:03, 5.64it/s]	0.04004	4 000
488/499		0.01604	1 320:
55% #####5	22/40 [00:04<00:03, 5.64it/s]	0.04004	4 000
488/499		0.01604	1 320:
57% #####7	23/40 [00:04<00:03, 5.65it/s]	0.04.000	0 000
488/499		0.01608	2 320:
57% #####7	23/40 [00:04<00:03, 5.65it/s]	0.04.000	0 000
488/499		0.01608	2 320:
60% ######	24/40 [00:04<00:02, 5.74it/s]	0.01000	1 200.
488/499		0.01606	1 320:
60% ######	24/40 [00:04<00:02, 5.74it/s]	0.01606	1 200
488/499		0.01606	1 320:
62% ######2	25/40 [00:04<00:02, 5.77it/s]	0.046	4 200
488/499	0.206G 0.01518 0.007042	0.016	1 320:
62% ######2	25/40 [00:04<00:02, 5.77it/s]	0.016	1 200.
488/499	0.206G 0.01518 0.007042	0.016	1 320:
65% ######5	26/40 [00:04<00:02, 5.74it/s]	0.0160	0 200
488/499	0.206G 0.01666 0.007017	0.0168	2 320:
65% ######5	26/40 [00:04<00:02, 5.74it/s]	0.0160	0 200.
488/499	0.206G 0.01666 0.007017	0.0168	2 320:
	27/40 [00:04<00:02, 5.77it/s]	0.01672	0 200.
488/499	0.206G 0.01644 0.007009 27/40 [00:05<00:02, 5.77it/s]	0.01673	2 320:
68% ######7 488/499		0.01673	2 320:
70% ######	28/40 [00:05<00:02, 5.78it/s]	0.01073	2 320.
488/499		0.01683	2 320:
	28/40 [00:05<00:02, 5.78it/s]	0.01003	2 320.
		0.01683	2 320:
72% #######2		0.01005	2 020.
488/499	0.206G 0.01768 0.007259	0.0169	4 320:
72% #######2		0.0103	- 520.
488/499	0.206G 0.01768 0.007259	0.0169	4 320:
75% ######5		0.0100	. 020.
488/499		0.01695	4 320:
75% #######5			- 020.
-,,,	,, [

188/100	0.206G 0.01788 0.007401	0.01695 4	320:
	31/40 [00:05<00:01, 5.57it/s]	0.01035	520.
488/499	· · · · · · · · · · · · · · · · · · ·	0.01722 4	320:
		0.01722 4	320.
	31/40 [00:05<00:01, 5.57it/s]	0 04700	200
488/499		0.01722 4	320:
	32/40 [00:05<00:01, 5.48it/s]		
488/499		0.01734 2	320:
	32/40 [00:05<00:01, 5.48it/s]		
		0.01734 2	320:
82% ########2	33/40 [00:05<00:01, 5.72it/s]		
488/499	0.206G 0.01817 0.007898	0.01734 4	320:
82% ########	33/40 [00:06<00:01, 5.72it/s]		
488/499	0.206G 0.01817 0.007898	0.01734 4	320:
85% #######5	34/40 [00:06<00:01, 5.46it/s]		
488/499	0.206G 0.01808 0.007909	0.0175	320:
85% #######5	34/40 [00:06<00:01, 5.46it/s]		
	0.206G 0.01808 0.007909	0.0175	320:
	35/40 [00:06<00:00, 5.55it/s]		
488/499		0.01743 2	320:
	35/40 [00:06<00:00, 5.55it/s]	0.01740	020.
488/499	· · · · · · · · · · · · · · · · · · ·	0.01743 2	2 320:
		0.01743	320.
	36/40 [00:06<00:00, 5.61it/s]	0 01761	200
488/499		0.01761 2	320:
	36/40 [00:06<00:00, 5.61it/s]		
488/499		0.01761 2	320:
	37/40 [00:06<00:00, 5.39it/s]		
488/499	0.206G 0.0189 0.007763	0.01743 1	320:
92% ########2	37/40 [00:06<00:00, 5.39it/s]		
488/499	0.206G 0.0189 0.007763	0.01743 1	320:
95% ########5	38/40 [00:06<00:00, 5.64it/s]		
488/499	0.206G 0.01893 0.007657	0.01761 1	320:
95% ########5	38/40 [00:07<00:00, 5.64it/s]		
488/499	0.206G 0.01893 0.007657	0.01761 1	320:
	39/40 [00:07<00:00, 5.54it/s]		
488/499		0.01757 4	320:
	39/40 [00:07<00:00, 5.54it/s]	-	. 0_0
488/499	· · · · · · · · · · · · · · · · · · ·	0.01757 4	320:
	40/40 [00:07<00:00, 5.48it/s]	0.01101	520.
488/499		0.01757 4	320:
		0.01757 4	320.
100% #########	40/40 [00:07<00:00, 5.52it/s]		
	01 T T T	D ~	1000
ADEO 05 00''	Class Images Instances	P R	R mAP50
mAP50-95: 0%	0/20 [00:00 , ?it/s]</td <td>_</td> <td></td>	_	
	Class Images Instances	P R	R mAP50
mAP50-95: 10%	-		
	Class Images Instances	P R	mAP50
mAP50-95: 20%	-	.25it/s]	
	Class Images Instances	P R	mAP50

mAP50-95:	30% ###	6/20 [0	0:00<00:00,	18.25it/s]		
	Class			Р	R	mAP50
mAP50-95:	40% ####	8/20 [0	0:00<00:00,	18.27it/s]		
	Class	-	Instances		R	mAP50
mAP50-95:	50% #####		00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:			00:00<00:00,			
	Class	_	Instances		R	mAP50
mAP50-95:	~ 7		00:00<00:00,			1750
ADEO OF	Class	_	Instances		R	mAP50
mAP50-95:			00:00<00:00,			ADEO
mADE0_05.	Class 90% ########		Instances		R	mAP50
MAP50-95:	~-		Instances		R	mAP50
mAD50-05.	C1ass 100% #########		00:01<00:00,			MAPSO
MAI 50 95.	Class		Instances		R	mAP50
mΔP50-95·	100% ##########	•				mai oo
MAI 00 30.	all	40	-	0.98	0.975	0.991
0.801	all	40	40	0.50	0.575	0.331
0.001						
Epoc	h GPU_mem k	oox_loss	obj_loss	cls_loss	Instances	Size
0%1	L 0/40 F00	.00.42 24.	- /-7			
489/49	0/40 [00: 0.206G (0.01217	1	320:
0%	9 0.200G 0 0/40 [00:00			0.01217	1	320.
489/49			0.003236	0.01217	1	320:
2% 2				0.01217	1	520.
489/49		=		0.01426	1	320:
2% 2				0.01120	_	020.
489/49			0.003236	0.01426	1	320:
5% 5				0.01120	_	020.
489/49		=	0.004235	0.01617	2	320:
5% 5	2/40 [00:00				_	
489/49			0.004235	0.01617	2	320:
8% 7						
489/49			0.0073	0.01801	4	320:
8% 7	3/40 [00:00					
489/49			0.0073	0.01801	4	320:
10% #	4/40 [00:0	00<00:07,	4.87it/s]			
489/49	9 0.206G	0.02806	0.007216	0.01863	2	320:
10% #	4/40 [00:0	00<00:07,	4.87it/s]			
489/49	9 0.206G	0.02806	0.007216	0.01863	2	320:
12% #2	5/40 [00:0	00<00:06,	5.03it/s]			
489/49	9 0.206G	0.02479	0.006519	0.01863	1	320:
12% #2	5/40 [00:0	01<00:06,	5.03it/s]			
489/49		0.02479		0.01863	1	320:
15% #5	6/40 [00:0					
489/49	9 0.206G	0.02893	0.00651	0.0183	2	320:

15% #5	6/40 [00:01<00:06, 5.12it/			
489/499	0.206G 0.02893 0.0065		2	320:
18% #7	7/40 [00:01<00:06, 5.05it/	_		
489/499	0.206G 0.02751 0.00613		1	320:
18% #7	7/40 [00:01<00:06, 5.05it/			
489/499	0.206G 0.02751 0.00613		1	320:
20% ##	8/40 [00:01<00:06, 5.14it/			
489/499	0.206G 0.02673 0.00631		2	320:
20% ##	8/40 [00:01<00:06, 5.14it/			
489/499	0.206G 0.02673 0.00631		2	320:
22% ##2	9/40 [00:01<00:06, 4.94it/	_		
489/499	0.206G 0.02501 0.00637		2	320:
22% ##2	9/40 [00:01<00:06, 4.94it/			
•	0.206G 0.02501 0.00637		2	320:
	10/40 [00:01<00:05, 5.06it			
489/499	0.206G 0.02653 0.00661		3	320:
25% ##5	10/40 [00:02<00:05, 5.06it	/s]		
489/499	0.206G 0.02653 0.00661	9 0.01816	3	320:
28% ##7	11/40 [00:02<00:06, 4.72it	/s]		
489/499	0.206G 0.02516 0.00631	9 0.01767	1	320:
28% ##7	11/40 [00:02<00:06, 4.72it	/s]		
489/499	0.206G 0.02516 0.00631	9 0.01767	1	320:
30% ###	12/40 [00:02<00:05, 4.83it	/s]		
489/499	0.206G 0.02411 0.00620	1 0.01731	1	320:
30% ###	12/40 [00:02<00:05, 4.83it	/s]		
489/499	0.206G 0.02411 0.00620	1 0.01731	1	320:
32% ###2	13/40 [00:02<00:05, 5.09it	/s]		
489/499	0.206G 0.02287 0.0059	6 0.01701	1	320:
32% ###2	13/40 [00:02<00:05, 5.09it	/s]		
489/499	0.206G 0.02287 0.0059	6 0.01701	1	320:
35% ###5	14/40 [00:02<00:05, 5.15it	/s]		
489/499	0.206G 0.02214 0.00596	4 0.01667	2	320:
35% ###5	14/40 [00:02<00:05, 5.15it	/s]		
489/499	0.206G 0.02214 0.00596	4 0.01667	2	320:
38% ###7	15/40 [00:02<00:05, 4.96it			
489/499	0.206G 0.02316 0.00641		4	320:
38% ###7	15/40 [00:03<00:05, 4.96it	/s]		
489/499	0.206G 0.02316 0.00641		4	320:
40% ####	16/40 [00:03<00:04, 5.07it	/s]		
489/499	0.206G 0.02328 0.00643		2	320:
40% ####	16/40 [00:03<00:04, 5.07it			
489/499	0.206G 0.02328 0.00643		2	320:
42% ####2	17/40 [00:03<00:04, 5.12it			
489/499	0.206G 0.02255 0.00641		2	320:
42% ####2	17/40 [00:03<00:04, 5.12it			
489/499	0.206G 0.02255 0.00641		2	320:
45% ####5	18/40 [00:03<00:04, 5.19it			
489/499	0.206G 0.02304 0.00649		2	320:
•				

45% ####5		18/40 [00:03<00:04,				
489/499		0.206G 0.02304		0.01852	2	320:
48% ####7	١	19/40 [00:03<00:04,				
489/499		0.206G 0.02293	0.006483	0.01832	1	320:
48% ####7	١	19/40 [00:03<00:04,				
489/499		0.206G 0.02293		0.01832	1	320:
50% #####	ı	20/40 [00:03<00:03,				
489/499		0.206G 0.02227		0.01848	1	320:
50% #####	ı	20/40 [00:04<00:03,				
489/499		0.206G 0.02227		0.01848	1	320:
52% #####2	١	21/40 [00:04<00:03,				
489/499		0.206G 0.02218		0.01847	4	320:
52% #####2	ı	21/40 [00:04<00:03,				
489/499		0.206G 0.02218		0.01847	4	320:
55% #####5	I	22/40 [00:04<00:03,				
489/499		0.206G 0.02388		0.01849	2	320:
55% #####5	ı	22/40 [00:04<00:03,				
489/499		0.206G 0.02388	0.006868	0.01849	2	320:
57% #####7		23/40 [00:04<00:03,				
489/499		0.206G 0.0244		0.01875	4	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.21it/s			
489/499		0.206G 0.0244	0.007082	0.01875	4	320:
60% ######	- 1	24/40 [00:04<00:02,	5.38it/s			
489/499		0.206G 0.02521	0.007067	0.01854	2	320:
60% ######	-	24/40 [00:04<00:02,	5.38it/s			
489/499		0.206G 0.02521	0.007067	0.01854	2	320:
62% ######2	-	25/40 [00:04<00:02,	5.42it/s			
489/499		0.206G 0.02608	0.007229	0.01947	2	320:
62% ######2	-	25/40 [00:05<00:02,	5.42it/s			
489/499		0.206G 0.02608	0.007229	0.01947	2	320:
65% ######5	-	26/40 [00:05<00:02,	5.31it/s			
489/499		0.206G 0.02565	0.007187	0.01937	2	320:
65% ######5	- 1	26/40 [00:05<00:02,	5.31it/s			
489/499		0.206G 0.02565	0.007187	0.01937	2	320:
68% #####7		27/40 [00:05<00:02,	5.46it/s			
489/499		0.206G 0.02552	0.007575	0.01941	4	320:
68% #####7		27/40 [00:05<00:02,	5.46it/s			
489/499		0.206G 0.02552	0.007575	0.01941	4	320:
70% ######		28/40 [00:05<00:02,	5.27it/s			
489/499		0.206G 0.02507	0.007457	0.01925	1	320:
70% ######	- 1	28/40 [00:05<00:02,	5.27it/s			
489/499		0.206G 0.02507	0.007457	0.01925	1	320:
72% #######2	-	29/40 [00:05<00:02,	5.42it/s]			
489/499		0.206G 0.02479	0.007493	0.01927	2	320:
72% #######2	-	29/40 [00:05<00:02,	5.42it/s]			
489/499		0.206G 0.02479	0.007493	0.01927	2	320:
75% #######5	1	30/40 [00:05<00:01,				
489/499		0.206G 0.02484	0.007552	0.01933	2	320:

75% ######5	30/40 [00:05<00:01, 5.68it/s]		
489/499	0.206G 0.02484 0.007552 0.01933	2	320:
78% ######7	31/40 [00:05<00:01, 5.41it/s]		
489/499	0.206G 0.02455 0.007544 0.01931	2	320:
78% ######7	31/40 [00:06<00:01, 5.41it/s]		
489/499	0.206G 0.02455 0.007544 0.01931	2	320:
	32/40 [00:06<00:01, 5.68it/s]		
489/499	-	1	320:
	32/40 [00:06<00:01, 5.68it/s]		
489/499		1	320:
	33/40 [00:06<00:01, 5.57it/s]	_	
489/499	•	2	320:
	33/40 [00:06<00:01, 5.57it/s]	_	020.
	0.206G 0.02399 0.007429 0.01899	2	320:
	34/40 [00:06<00:01, 5.34it/s]	2	020.
	0.206G 0.02369 0.007312 0.01884	1	320:
	34/40 [00:06<00:01, 5.34it/s]	1	320.
	-	4	200
489/499		1	320:
	35/40 [00:06<00:00, 5.62it/s]	_	
	0.206G 0.02379 0.007236 0.01867	1	320:
	35/40 [00:06<00:00, 5.62it/s]		
489/499		1	320:
90% #######	36/40 [00:06<00:00, 5.68it/s]		
489/499	0.206G 0.02344 0.00712 0.0185	1	320:
90% ########	36/40 [00:07<00:00, 5.68it/s]		
489/499	0.206G 0.02344 0.00712 0.0185	1	320:
92% ########2	37/40 [00:07<00:00, 5.71it/s]		
489/499	0.206G 0.0237 0.007104 0.01838	2	320:
92% ########2	37/40 [00:07<00:00, 5.71it/s]		
489/499	0.206G 0.0237 0.007104 0.01838	2	320:
95% ########5	38/40 [00:07<00:00, 5.75it/s]		
489/499	0.206G 0.02333 0.006987 0.01819	1	320:
	38/40 [00:07<00:00, 5.75it/s]		
489/499		1	320:
	39/40 [00:07<00:00, 5.77it/s]	-	020.
	0.206G 0.02315 0.00725 0.01822	4	320:
•	39/40 [00:07<00:00, 5.77it/s]	1	020.
489/499	0.206G 0.02315 0.00725 0.01822	4	320:
	40/40 [00:07<00:00, 5.46it/s]	4	520.
489/499		4	320:
	0.206G 0.02315 0.00725 0.01822	4	320:
100% ##########	40/40 [00:07<00:00, 5.29it/s]		
		_	1550
ADEO 05 500	Class Images Instances P	R	mAP50
mAP50-95: 0%	0/20 [00:00 , ?it/s]</td <td>_</td> <td>. = = =</td>	_	. = = =
	Class Images Instances P	R	mAP50
mAP50-95: 10%	•		
	Class Images Instances P	R	mAP50
mAP50-95: 20%	## 4/20 [00:00<00:00, 16.36it/s]		

Clas	s Images	Instances	P	R	mAP50
mAP50-95: 30% ###	6/20 [0	00:00<00:00,	17.19it/s]		
Clas	s Images	Instances	P	R	mAP50
mAP50-95: 40% ####	8/20 [0	00:00<00:00,	16.73it/s]		
Clas	s Images	Instances	P	R	mAP50
mAP50-95: 50% #####	10/20	[00:00<00:00]	, 16.26it/s]		
Clas	s Images	Instances	P	R	mAP50
mAP50-95: 60% ######	12/20	[00:00<00:00]	, 16.90it/s]		
Clas	s Images	Instances	Р	R	mAP50
mAP50-95: 70% ######	# 14/20	[00:00<00:00]	, 17.32it/s]		
Clas	s Images	Instances	P	R	mAP50
mAP50-95: 85% ######	##5 17/20	[00:01<00:00,	, 17.48it/s]		
Clas	0	Instances		R	mAP50
mAP50-95: 100% ######	#### 20/20	[00:01<00:00,	, 17.89it/s]		
Clas	s Images	Instances	Р	R	mAP50
mAP50-95: 100% ######	#### 20/20	[00:01<00:00,	, 17.21it/s]		
al	1 40	40	0.981	0.975	0.992
0.799					
Epoch GPU_me	m box_loss	obj_loss	cls_loss	Instances	Size
0% 0/40					
490/499 0.206		0.01045	0.01517	2	320:
	00:00 , ?it</td <td></td> <td></td> <td></td> <td></td>				
490/499 0.206			0.01517	2	320:
	00:00<00:06,				
	G 0.03623		0.0148	2	320:
	00:00<00:06,				
	G 0.03623		0.0148	2	320:
	00:00<00:07,				
490/499 0.206		0.00722	0.0133	1	320:
	00:00<00:07,				
	G 0.02855		0.0133	1	320:
	00:00<00:07,				
490/499 0.206			0.01337	1	320:
8% 7 3/40 [00:00<00:07,				
490/499 0.206		0.006559	0.01337	1	320:
10% # 4/40	[00:00<00:06	, 5.49it/s			
490/499 0.206	G 0.0228	0.007274	0.01517	4	320:
10% # 4/40	[00:00<00:06				
490/499 0.206	G 0.0228	0.007274	0.01517	4	320:
12% #2 5/40	[00:00<00:06	, 5.43it/s]			
490/499 0.206			0.01491	1	320:
12% #2 5/40	[00:01<00:06	, 5.43it/s]			
490/499 0.206			0.01491	1	320:
15% #5 6/40	[00:01<00:06	, 5.36it/s]			
490/499 0.206	G 0.02412	0.00693	0.01696	3	320:
15% #5 6/40	[00:01<00:06	, 5.36it/s]			

490/499	0.206G 0.02412 0.00699		3	320:
18% #7 490/499	7/40 [00:01<00:06, 5.49it/s 0.206G 0.0259 0.007640		4	320:
18% #7	7/40 [00:01<00:06, 5.49it/s		4	520.
490/499	0.206G 0.0259 0.00764		4	320:
20% ##	8/40 [00:01<00:06, 5.30it/s		-	020.
490/499	0.206G 0.0261 0.008403		4	320:
20% ##	8/40 [00:01<00:06, 5.30it/s			
490/499	0.206G 0.0261 0.00840		4	320:
22% ##2	9/40 [00:01<00:05, 5.45it/s	3]		
490/499	0.206G 0.02495 0.00854	0.01845	2	320:
22% ##2	9/40 [00:01<00:05, 5.45it/s	s]		
490/499	0.206G 0.02495 0.00854	0.01845	2	320:
25% ##5	10/40 [00:01<00:05, 5.28it			
490/499	0.206G 0.0237 0.00804	7 0.0179	1	320:
25% ##5	10/40 [00:02<00:05, 5.28it	/s]		
490/499	0.206G 0.0237 0.00804		1	320:
28% ##7	11/40 [00:02<00:05, 5.29it			
490/499	0.206G 0.02255 0.008129		4	320:
28% ##7	11/40 [00:02<00:05, 5.29it			
•	0.206G 0.02255 0.00812		4	320:
30% ###	12/40 [00:02<00:05, 5.42it			
490/499	0.206G 0.02129 0.00777		1	320:
30% ###	12/40 [00:02<00:05, 5.42it			
490/499	0.206G 0.02129 0.00777		1	320:
32% ###2	13/40 [00:02<00:04, 5.53it			
490/499	0.206G 0.02152 0.007593		2	320:
32% ###2	13/40 [00:02<00:04, 5.53it			
490/499	0.206G 0.02152 0.007593		2	320:
35% ###5	14/40 [00:02<00:04, 5.47it			
490/499	0.206G 0.02075 0.007423		2	320:
35% ###5	14/40 [00:02<00:04, 5.47it			
490/499	0.206G 0.02075 0.007423		2	320:
38% ###7	15/40 [00:02<00:04, 5.71it,			
490/499	0.206G 0.02011 0.0071		1	320:
38% ###7	15/40 [00:02<00:04, 5.71it,			
490/499	0.206G 0.02011 0.0071		1	320:
40% ####	16/40 [00:02<00:04, 5.74it,	_		222
490/499	0.206G 0.01947 0.006936		1	320:
40% ####	16/40 [00:03<00:04, 5.74it,			000
490/499	0.206G 0.01947 0.006936		1	320:
42% ####2	17/40 [00:03<00:03, 5.77it,			000
490/499	0.206G 0.01897 0.00679		1	320:
42% ####2	17/40 [00:03<00:03, 5.77it,		a.	200
490/499	0.206G 0.01897 0.0067		1	320:
45% ####5	18/40 [00:03<00:03, 5.78it,		0	200
490/499	0.206G 0.01944 0.006854		2	320:
45% ####5	18/40 [00:03<00:03, 5.78it,	/ S J		

490/499		0.206G 0.01944	0.006854	0.01789	2	320:
48% ####7	١	19/40 [00:03<00:03,			_	
490/499		0.206G 0.01952	0.006916	0.01819	2	320:
48% ####7		19/40 [00:03<00:03,	5.64it/s]			
490/499		0.206G 0.01952	0.006916	0.01819	2	320:
50% #####		20/40 [00:03<00:03,	5.69it/s]			
490/499		0.206G 0.02116	0.006987	0.01811	3	320:
50% #####		20/40 [00:03<00:03,	5.69it/s]			
490/499		0.206G 0.02116	0.006987	0.01811	3	320:
52% #####2		21/40 [00:03<00:03,	5.55it/s			
490/499		0.206G 0.02074	0.006839	0.01809	1	320:
52% #####2		21/40 [00:04<00:03,	5.55it/s			
490/499		0.206G 0.02074		0.01809	1	320:
55% #####5		22/40 [00:04<00:03,	5.35it/s			
490/499		0.206G 0.0214	0.007028	0.01826	2	320:
55% #####5		22/40 [00:04<00:03,				
490/499		0.206G 0.0214		0.01826	2	320:
57% #####7		23/40 [00:04<00:03,				
490/499			0.007255	0.01805	4	320:
57% #####7		23/40 [00:04<00:03,				
490/499		0.206G 0.02094		0.01805	4	320:
60% ######		24/40 [00:04<00:03,				
490/499		0.206G 0.02111		0.01814	4	320:
60% ######		24/40 [00:04<00:03,	5.28it/s]			
490/499		0.206G 0.02111	0.007483	0.01814	4	320:
62% ######2		25/40 [00:04<00:02,				
490/499		0.206G 0.02102		0.01796	1	320:
62% ######2		25/40 [00:04<00:02,				
490/499		0.206G 0.02102		0.01796	1	320:
65% ######5		26/40 [00:04<00:02,	· -			
490/499			0.007581	0.01804	4	320:
65% ######5		26/40 [00:04<00:02,				
490/499		0.206G 0.02129		0.01804	4	320:
		27/40 [00:04<00:02,				
490/499			0.007867	0.0182	4	320:
		27/40 [00:05<00:02,				
490/499		0.206G 0.0212		0.0182	4	320:
70% #######		28/40 [00:05<00:02,				
490/499		0.206G 0.021		0.01824	4	320:
70% #######	١	28/40 [00:05<00:02,				
490/499			0.008211	0.01824	4	320:
72% #######2		29/40 [00:05<00:01,				
490/499		0.206G 0.02061		0.01805	2	320:
72% #######2		29/40 [00:05<00:01,		0.04555	-	 .
490/499		0.206G 0.02061		0.01805	2	320:
75% #######5		30/40 [00:05<00:01,		0.04700		000
490/499				0.01783	1	320:
/5% ######5	I	30/40 [00:05<00:01,	5.59it/s]			

	0.206G 0.02031		1	320:
	31/40 [00:05<00:01,			
490/499	* * * * * * * * * * * * * * * * * * * *		2	320:
	31/40 [00:05<00:01,		0	200
490/499	0.206G 0.0208	0.008016 0.0179	2	320:
	32/40 [00:05<00:01,		2	200.
490/499	0.206G 0.02129 32/40 [00:06<00:01,		3	320:
490/499			3	320:
	33/40 [00:06<00:01,		3	320.
490/499	0.206G 0.02089		1	320:
·	33/40 [00:06<00:01,		1	320.
490/499		0.007896 0.0179	1	320:
	34/40 [00:06<00:01,		1	320.
490/499		0.008016 0.01827	3	320:
·	34/40 [00:06<00:01,		3	320.
490/499			3	320:
	35/40 [00:06<00:00,		3	320.
490/499	0.206G 0.02065	· -	1	320:
·	35/40 [00:06<00:00,		1	320.
490/499			1	320:
	36/40 [00:06<00:00,		1	320.
490/499		0.007774 0.01794	1	320:
	36/40 [00:06<00:00,		1	320.
490/499	0.206G 0.02049		1	320:
	37/40 [00:06<00:00,		1	320.
490/499	0.206G 0.02035		4	220.
	37/40 [00:06<00:00,		4	320:
490/499	0.206G 0.02035		4	200.
			4	320:
490/499	38/40 [00:06<00:00, 0.206G 0.02013		1	320:
	38/40 [00:07<00:00,		1	320:
490/499	0.206G 0.02013		1	220.
			1	320:
490/499	39/40 [00:07<00:00, 0.206G 0.02077		0	200.
	39/40 [00:07<00:00,		2	320:
490/499		0.007863 0.0179	2	320:
	40/40		2	320:
490/499		0.007863 0.0179	2	320:
	40/40 [00:07<00:00		2	320.
100/0 #########	1 40/40 [00.07\00.00	, 5.4210/5]		
	Class Images	Instances P	R	mAP50
mAP50-95: 0%	0	:00 , ?it/s]</td <td>n</td> <td>шагоо</td>	n	шагоо
шкі ОО ЭО. О/₀		Instances P	R	mAP50
mAP50-95: 10%	•	:00<00:01, 11.48it/s]	16	mai 50
00 00. 10/01		Instances P	R	mAP50
mAP50-95: 20%	•	:00<00:01, 13.74it/s]	16	mai oo
00 00. 20/01		Instances P	R	mAP50

mAP50-95:	30% ###	6/20 [00	0:00<00:01,	13.95it/s]		
	Class		Instances	Р	R	mAP50
mAP50-95:	40% ####	8/20 [00	0:00<00:00,	14.53it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	50% #####	10/20 [0	00:00<00:00,	15.13it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	60% ######	12/20 [0	00:00<00:00,	14.81it/s]		
	Class	•	Instances		R	mAP50
mAP50-95:	70% ######	14/20 [0	00:00<00:00,	14.99it/s]		
	Class	•	Instances		R	mAP50
mAP50-95:			00:01<00:00,			
	Class	•	Instances		R	mAP50
mAP50-95:	90% ########					
	Class	•	Instances		R	mAP50
mAP50-95:	100% #########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########					
	all	40	40	0.981	0.975	0.992
0.799						
Epoc	ch GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
	0/40 [00:	=				
		0.01447		0.01583	2	320:
0%	0/40 [00:00			0.04500	•	000
491/49				0.01583	2	320:
2% 2		=		0.04770	4	200
		0.01865		0.01779	4	320:
2% 2	· · · · · · -			0.01770	4	200
	99 0.206G			0.01779	4	320:
5% 5		0.02039		0 01000	4	200.
5% 5				0.01889	4	320:
				0.01889	4	320:
8% 7	0.206G 3/40 [00:00			0.01009	4	320.
			0.0108	0.01865	2	320:
8% 7				0.01003	2	320.
	99 0.206G		0.0108	0.01865	2	320:
10% #				0.01000	2	020.
491/49				0.01864	4	320:
10% #				0.01001	-	020.
			0.01175	0.01864	4	320:
12% #2	5/40 [00:0			0.01001	-	020.
491/49			0.01032	0.01871	1	320:
12% #2					-	5_4.
491/49			0.01032	0.01871	1	320:
15% #5					_	3_4,
491/49			0.009359	0.01781	1	320:
,					-	

15% #5				
491/499	0.206G 0.02154 0.009359	0.01781	1	320:
18% #7 491/499	7/40 [00:01<00:06, 5.40it/s] 0.206G 0.02105 0.01024	0.01763	4	320:
491/499 18% #7	7/40 [00:01<00:06, 5.40it/s]	0.01765	4	320:
491/499		0.01763	4	320:
20% ##	8/40 [00:01<00:05, 5.50it/s]	0.01703	4	520.
491/499	0.206G 0.02131 0.01076	0.01812	4	320:
20% ##	8/40 [00:01<00:05, 5.50it/s]	0.01012	-	020.
491/499	0.206G 0.02131 0.01076	0.01812	4	320:
22% ##2	9/40 [00:01<00:05, 5.31it/s]			
491/499	0.206G 0.0203 0.01007	0.01763	1	320:
22% ##2	9/40 [00:01<00:05, 5.31it/s]			
491/499	0.206G 0.0203 0.01007	0.01763	1	320:
25% ##5	10/40 [00:01<00:05, 5.46it/s]			
491/499	0.206G 0.0215 0.009928	0.01729	2	320:
25% ##5	10/40 [00:02<00:05, 5.46it/s]			
491/499	0.206G 0.0215 0.009928	0.01729	2	320:
28% ##7	11/40 [00:02<00:05, 5.56it/s]			
491/499	0.206G 0.02053 0.009338	0.01716	1	320:
28% ##7	11/40 [00:02<00:05, 5.56it/s]			
491/499	0.206G 0.02053 0.009338	0.01716	1	320:
30% ###	12/40 [00:02<00:05, 5.35it/s]			
491/499	0.206G 0.02108 0.009848	0.0178	4	320:
30% ###	12/40 [00:02<00:05, 5.35it/s]			
491/499	0.206G 0.02108 0.009848	0.0178	4	320:
32% ###2	13/40 [00:02<00:05, 5.34it/s]			
491/499	0.206G 0.02117 0.009586	0.01753	2	320:
32% ###2	13/40 [00:02<00:05, 5.34it/s]			
491/499	0.206G 0.02117 0.009586	0.01753	2	320:
35% ###5	14/40 [00:02<00:04, 5.32it/s]			
491/499	0.206G 0.02174 0.009923	0.01805	4	320:
35% ###5	14/40 [00:02<00:04, 5.32it/s]			
491/499	0.206G 0.02174 0.009923	0.01805	4	320:
38% ###7	15/40 [00:02<00:04, 5.33it/s]			
491/499	0.206G 0.02101 0.009902	0.01797	3	320:
38% ###7	15/40 [00:02<00:04, 5.33it/s]			
491/499	0.206G 0.02101 0.009902	0.01797	3	320:
40% ####	16/40 [00:02<00:04, 5.33it/s]			
491/499	0.206G 0.02022 0.009459	0.01759	1	320:
40% ####	16/40 [00:03<00:04, 5.33it/s]			
491/499	0.206G 0.02022 0.009459	0.01759	1	320:
42% ####2	17/40 [00:03<00:04, 5.44it/s]			
491/499	0.206G 0.02137 0.00948	0.0189	2	320:
42% ####2	17/40 [00:03<00:04, 5.44it/s]			
491/499	0.206G 0.02137 0.00948	0.0189	2	320:
45% ####5	18/40 [00:03<00:03, 5.55it/s]			
491/499	0.206G 0.02241 0.00938	0.02038	2	320:

45% ####5		18/40 [00:03<00:03,				
491/499		0.206G 0.02241		0.02038	2	320:
48% ####7	١	19/40 [00:03<00:03,	· -			
491/499		0.206G 0.02235	0.009093	0.02051	1	320:
48% ####7	ı	19/40 [00:03<00:03,				
491/499		0.206G 0.02235	0.009093	0.02051	1	320:
50% #####	ı	20/40 [00:03<00:03,			_	
491/499		0.206G 0.02165	0.008771	0.02026	1	320:
50% #####	ı	20/40 [00:03<00:03,				
491/499		0.206G 0.02165	0.008771	0.02026	1	320:
52% #####2	١	21/40 [00:03<00:03,				
491/499		0.206G 0.0231		0.02001	2	320:
52% #####2	ı	21/40 [00:04<00:03,				
491/499			0.008625	0.02001	2	320:
55% #####5	ı	22/40 [00:04<00:03,				
491/499			0.0089	0.01995	4	320:
55% #####5	١	22/40 [00:04<00:03,				
491/499			0.0089	0.01995	4	320:
57% #####7		23/40 [00:04<00:03,				
491/499		0.206G 0.02348	0.008829	0.02101	2	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.59it/s			
491/499		0.206G 0.02348	0.008829	0.02101	2	320:
60% ######	-	24/40 [00:04<00:02,	5.66it/s]			
491/499		0.206G 0.02292	0.008632	0.02066	1	320:
60% ######		24/40 [00:04<00:02,	5.66it/s]			
491/499		0.206G 0.02292	0.008632	0.02066	1	320:
62% ######2	-	25/40 [00:04<00:02,	5.70it/s			
491/499		0.206G 0.02332	0.009122	0.02069	4	320:
62% ######2	-	25/40 [00:04<00:02,	5.70it/s			
491/499		0.206G 0.02332	0.009122	0.02069	4	320:
65% ######5	-	26/40 [00:04<00:02,	5.44it/s			
491/499		0.206G 0.02303	0.00895	0.0205	1	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.44it/s			
491/499		0.206G 0.02303	0.00895	0.0205	1	320:
68% #####7		27/40 [00:04<00:02,	5.55it/s			
491/499		0.206G 0.02372	0.008946	0.02041	2	320:
68% #####7		27/40 [00:05<00:02,	5.55it/s			
491/499		0.206G 0.02372	0.008946	0.02041	2	320:
70% ######		28/40 [00:05<00:02,	5.48it/s			
491/499		0.206G 0.02328	0.008788	0.02012	1	320:
70% ######	- 1	28/40 [00:05<00:02,	5.48it/s			
491/499		0.206G 0.02328	0.008788	0.02012	1	320:
72% #######2	-	29/40 [00:05<00:01,	5.55it/s]			
491/499		0.206G 0.02276	0.008684	0.01986	2	320:
72% #######2	-	29/40 [00:05<00:01,	5.55it/s]			
491/499		0.206G 0.02276	0.008684	0.01986	2	320:
75% #######5	1	30/40 [00:05<00:01,				
491/499		0.206G 0.02266	0.008585	0.02013	2	320:

	30/40 [00:05<00:01, 5.63it/s]		
491/499		2	320:
	31/40 [00:05<00:01, 5.69it/s]		
491/499		1	320:
	31/40 [00:05<00:01, 5.69it/s]		
491/499		1	320:
	32/40 [00:05<00:01, 5.71it/s]		
491/499		2	320:
	32/40 [00:05<00:01, 5.71it/s]		
491/499	0.206G 0.02208 0.008319 0.01987	2	320:
	33/40 [00:05<00:01, 5.74it/s]		
491/499		4	320:
	33/40 [00:06<00:01, 5.74it/s]		
491/499		4	320:
	34/40 [00:06<00:01, 5.76it/s]		
491/499		1	320:
85% #######5	34/40 [00:06<00:01, 5.76it/s]		
491/499		1	320:
88% #######7	35/40 [00:06<00:00, 5.76it/s]		
491/499	0.206G 0.02136 0.008267 0.01955	1	320:
88% #######7	35/40 [00:06<00:00, 5.76it/s]		
491/499	0.206G 0.02136 0.008267 0.01955	1	320:
90% ########	36/40 [00:06<00:00, 5.78it/s]		
491/499	0.206G 0.02119 0.008383 0.01945	4	320:
90% ########	36/40 [00:06<00:00, 5.78it/s]		
491/499	0.206G 0.02119 0.008383 0.01945	4	320:
92% ########2	37/40 [00:06<00:00, 5.49it/s]		
491/499	0.206G 0.02091 0.008261 0.01932	1	320:
92% ########2	37/40 [00:06<00:00, 5.49it/s]		
491/499	0.206G 0.02091 0.008261 0.01932	1	320:
95% ########5	38/40 [00:06<00:00, 5.57it/s]		
491/499	0.206G 0.02067 0.008131 0.01914	1	320:
95% ########5	38/40 [00:07<00:00, 5.57it/s]		
491/499	0.206G 0.02067 0.008131 0.01914	1	320:
98% ########7	39/40 [00:07<00:00, 5.64it/s]		
491/499	0.206G 0.02051 0.008126 0.01904	2	320:
98% ########7	39/40 [00:07<00:00, 5.64it/s]		
491/499	0.206G 0.02051 0.008126 0.01904	2	320:
100% ##########	40/40 [00:07<00:00, 5.69it/s]		
491/499	0.206G 0.02051 0.008126 0.01904	2	320:
100% ##########	40/40 [00:07<00:00, 5.53it/s]		
	Class Images Instances P	R m	AP50
mAP50-95: 0%	0/20 [00:00 , ?it/s]</td <td></td> <td></td>		
	Class Images Instances P	R m	AP50
mAP50-95: 10%	# 2/20 [00:00<00:01, 12.72it/s]		
	Class Images Instances P	R m	AP50
mAP50-95: 20%	## 4/20 [00:00<00:01, 15.50it/s]		

Class	_	Instances		R	mAP50
mAP50-95: 30% ### Class	Images	0:00<00:00, Instances		R	mAP50
		0:00<00:00,			
Class	•	Instances		R	mAP50
mAP50-95: 50% ##### Class	Images	00:00<00:00, Instances	, 15.6/1t/s] p	R	mAP50
	_	00:00<00:00,	r . 15.78it/sl		IIIAF 50
Class		Instances		R	mAP50
mAP50-95: 70% ######	_	00:00<00:00,			
Class	Images	Instances	P	R	mAP50
		00:01<00:00,			
Class	•	Instances		R	mAP50
mAP50-95: 90% ########					4750
Class		Instances		R	mAP50
mAP50-95: 100% ######### Class		Instances		R	mAP50
mAP50-95: 100% #########	_				MAPSO
all	40		0.981	0.975	0.991
0.802	10	10	0.001	0.010	0.001
Epoch GPU_mem b	ox_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00:	00<2 2i	+/al			
		0.007078	0.01894	2	320:
0% 0/40 [00:00			0.01001	_	0_0.
	-	0.007078	0.01894	2	320:
2% 2 1/40 [00:00	<00:06,	5.76it/s]			
492/499 0.206G	0.0191	0.008255	0.01873	2	320:
2% 2 1/40 [00:00					
492/499 0.206G		0.008255	0.01873	2	320:
5% 5 2/40 [00:00					
492/499 0.206G		0.01064	0.02125	4	320:
5% 5 2/40 [00:00			0 00405		000
		0.01064	0.02125	4	320:
8% 7 3/40 [00:00 492/499 0.206G	<00:06, 0.01991		0.01918	1	200.
8% 7 3/40 [00:00			0.01916	1	320:
		0.009069	0.01918	1	320:
10% # 4/40 [00:0			0.01010	-	020.
		0.01075	0.02013	4	320:
10% # 4/40 [00:0					
		0.01075	0.02013	4	320:
12% #2 5/40 [00:0	0<00:06,	5.51it/s			
492/499 0.206G	0.02337	0.01034	0.01913	2	320:
12% #2 5/40 [00:0					
		0.01034	0.01913	2	320:
15% #5 6/40 [00:0	1<00:06,	5.62it/s			

492/499	0.206G 0.02206 0.01043		4	320:
15% #5	6/40 [00:01<00:06, 5.62it/s]			222
492/499	0.206G 0.02206 0.01043		4	320:
18% #7 492/499	7/40 [00:01<00:05, 5.69it/s] 0.206G 0.02051 0.009807	0.01985	2	320:
4 <i>92</i> /4 <i>99</i> 18% #7	7/40 [00:01<00:05, 5.69it/s]		2	320.
492/499	0.206G 0.02051 0.009807		2	320:
20% ##	8/40 [00:01<00:05, 5.57it/s]		-	020.
492/499	0.206G 0.01974 0.009503	0.01948	1	320:
20% ##	8/40 [00:01<00:05, 5.57it/s]			
492/499	0.206G 0.01974 0.009503	0.01948	1	320:
22% ##2	9/40 [00:01<00:05, 5.64it/s]			
492/499	0.206G 0.01957 0.01011	0.01944	4	320:
22% ##2	9/40 [00:01<00:05, 5.64it/s]			
492/499	0.206G 0.01957 0.01011		4	320:
25% ##5	10/40 [00:01<00:05, 5.68it/s			
492/499	0.206G 0.01961 0.01003		3	320:
25% ##5	10/40 [00:01<00:05, 5.68it/s			
492/499	0.206G 0.01961 0.01003		3	320:
28% ##7	11/40 [00:01<00:05, 5.57it/s		_	
•	0.206G 0.0193 0.009883		2	320:
28% ##7	11/40 [00:02<00:05, 5.57it/s		0	200
492/499	0.206G 0.0193 0.009883		2	320:
30% ### 492/499	12/40 [00:02<00:05, 5.49it/s 0.206G		2	320:
492/499 30% ###	12/40 [00:02<00:05, 5.49it/s		2	320:
492/499	0.206G 0.02054 0.009614		2	320:
32% ###2	13/40 [00:02<00:04, 5.56it/s		2	320.
492/499	0.206G 0.01951 0.009142		1	320:
32% ###2	13/40 [00:02<00:04, 5.56it/s		-	020.
492/499	0.206G 0.01951 0.009142		1	320:
35% ###5	14/40 [00:02<00:04, 5.49it/s			
492/499	0.206G 0.01975 0.009379	0.01992	4	320:
35% ###5	14/40 [00:02<00:04, 5.49it/s]		
492/499	0.206G 0.01975 0.009379	0.01992	4	320:
38% ###7	15/40 [00:02<00:04, 5.54it/s]		
492/499	0.206G 0.02056 0.009683	0.02001	4	320:
38% ###7	15/40 [00:02<00:04, 5.54it/s	3]		
492/499	0.206G 0.02056 0.009683		4	320:
40% ####	16/40 [00:02<00:04, 5.49it/s			
492/499	0.206G 0.02085 0.01042	0.02069	4	320:
40% ####	16/40 [00:03<00:04, 5.49it/s		_	
492/499	0.206G 0.02085 0.01042		4	320:
42% ####2	17/40 [00:03<00:04, 5.59it/s		4	202
492/499	0.206G 0.02089 0.01065	0.02066	4	320:
42% ####2	17/40 [00:03<00:04, 5.59it/s		4	200.
492/499	0.206G 0.02089 0.01065 18/40 [00:03<00:03, 5.64it/s	0.02066	4	320:
45% ####5	18/40 [00:03<00:03, 5.64it/s	r)		

492/499	0.206G 0.02088 0.		4	320:
45% ####5	-	4it/s]		
492/499	0.206G 0.02088 0.		4	320:
48% ####7	-	1it/s]		
492/499		1064 0.02009	2	320:
48% ####7	-	1it/s]		
492/499	0.206G 0.02031 0.0	1064 0.02009	2	320:
50% #####	20/40 [00:03<00:03, 5.6	4it/s]		
492/499	0.206G 0.02038 0.0	1117 0.02022	4	320:
50% #####	20/40 [00:03<00:03, 5.6	4it/s]		
492/499	0.206G 0.02038 0.0	1117 0.02022	4	320:
52% #####2	21/40 [00:03<00:03, 5.5	Oit/s]		
492/499	0.206G 0.01995 0.0	1091 0.01995	1	320:
52% #####2	21/40 [00:03<00:03, 5.5	Oit/s]		
492/499	0.206G 0.01995 0.0	1091 0.01995	1	320:
55% #####5	22/40 [00:03<00:03, 5.7	9it/s]		
492/499	0.206G 0.02124 0.0	1073 0.02055	2	320:
55% #####5		9it/s]		
492/499	0.206G 0.02124 0.0	1073 0.02055	2	320:
57% #####7		0it/s]		
492/499	-	1049 0.02015	1	320:
57% #####7		0it/s]	_	0201
492/499	-	1049 0.02015	1	320:
60% ######		9it/s]	-	020.
492/499	-	1056 0.02022	4	320:
60% ######		9it/s]	-	020.
492/499	-	1056 0.02022	4	320:
62% ######2		4it/s]	7	520.
492/499	-	1053 0.02029	2	320:
62% ######2			2	320.
	25/40 [00:04<00:02, 5.6 0.206G 0.02076 0.0		0	200.
492/499		1053 0.02029	2	320:
65% ######5	•	4it/s]	0	200
492/499		1037 0.02009	2	320:
65% ######5	26/40 [00:04<00:02, 5.5			200
492/499		1037 0.02009	2	320:
68% ######7		5it/s]	_	
492/499		1061 0.02002	4	320:
68% ######7	·	5it/s]		
492/499		1061 0.02002	4	320:
70% #######		9it/s]		
492/499		1081 0.01987	4	320:
70% ######	28/40 [00:05<00:02, 5.1			
492/499		1081 0.01987	4	320:
72% ######2		Oit/s]		
492/499	0.206G 0.02134 0.0	1086 0.01973	2	320:
72% ######2	29/40 [00:05<00:02, 5.1	Oit/s]		
492/499	0.206G 0.02134 0.0	1086 0.01973	2	320:
75% ######5	30/40 [00:05<00:01, 5.0	2it/s]		

492/499			.0196	4	320:
	30/40 [00:05<00:01,				
492/499	0.206G 0.02118		.0196	4	320:
	31/40 [00:05<00:01,	· –			
492/499	0.206G 0.02172	0.01072 0.	.0199	2	320:
78% ######7	31/40 [00:05<00:01,	4.88it/s]			
492/499	0.206G 0.02172	0.01072 0.	.0199	2	320:
80% #######	32/40 [00:05<00:01,	4.82it/s]			
492/499	0.206G 0.02214	0.01085 0.0	01987	4	320:
80% #######	32/40 [00:06<00:01,	4.82it/s]			
492/499	0.206G 0.02214	0.01085 0.0)1987	4	320:
82% ########2	33/40 [00:06<00:01,	4.92it/s]			
492/499	0.206G 0.02214	0.0108 0.0	01994	2	320:
82% ########	33/40 [00:06<00:01,	4.92it/s]			
492/499	-		01994	2	320:
	34/40 [00:06<00:01,				
492/499			01977	2	320:
	34/40 [00:06<00:01,			_	0_0.
492/499	0.206G 0.02175		01977	2	320:
	35/40 [00:06<00:00,		71377	2	020.
492/499			01983	1	320:
	35/40 [00:06<00:00,		71900	1	520.
492/499	-		01983	1	220.
	36/40 [00:06<00:00,		71903	1	320:
			20000	4	200.
492/499	0.206G 0.02107		02002	1	320:
	36/40 [00:06<00:00,			à	
492/499	0.206G 0.02107		02002	1	320:
	37/40 [00:06<00:00,				
492/499			02004	1	320:
	37/40 [00:07<00:00,				
492/499			02004	1	320:
	38/40 [00:07<00:00,				
492/499	0.206G 0.02055	0.009962 0.0	01994	1	320:
95% ########5	38/40 [00:07<00:00,	4.98it/s]			
492/499	0.206G 0.02055	0.009962 0.0	01994	1	320:
98% ########7	39/40 [00:07<00:00,	4.96it/s]			
492/499	0.206G 0.02019	0.009866 0.0	01979	2	320:
98% ########7	39/40 [00:07<00:00,	4.96it/s]			
492/499	0.206G 0.02019	0.009866 0.0)1979	2	320:
100% ##########	40/40 [00:07<00:00	, 5.05it/s]			
492/499)1979	2	320:
100% ##########	40/40 [00:07<00:00	, 5.34it/s]			
	_	· -			
	Class Images	Instances	P	R mA	AP50
mAP50-95: 0%	•	:00 , ?it/s]</td <td></td> <td></td> <td></td>			
		Instances	P	R mA	AP50
mAP50-95: 10%	•	:00<00:01, 16.00			
		Instances		R mA	AP50
		· · · · · · · · · · · · · · · · · · ·			

mAP50-95: 20%	##	4/20 [0	0:00<00:01,	14.89it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95: 30%	###	_	0:00<00:00,	16.27it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95: 40%	####	•	0:00<00:00,			
	Class	Images			R	mAP50
mAP50-95: 50%	#####	_	00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95: 60%	#####	12/20 [00:00<00:00,	14.84it/s]		
	Class		Instances		R	mAP50
mAP50-95: 70%	######	_	00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95: 80%	#######	_	00:01<00:00,			
	Class	Images			R	mAP50
mAP50-95: 90%	#######	_				
	Class		Instances		R	mAP50
mAP50-95: 100%		_				
	Class		Instances		R	mAP50
mAP50-95: 100%		_				
	all	40	40	0.98	0.975	0.992
0.802						
Epoch	GPU_mem b	ox loss	obj loss	cls loss	Instances	Size
•	_	-	3 –	_		
0%	0/40 [00:	00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
		0.00483	0.002363	0.01437	1	320:
0%	0/40 [00:00	, ?it/</td <td>s]</td> <td></td> <td></td> <td></td>	s]			
	0.206G			0.01437	1	320:
2% 2	1/40 [00:00	<00:05,	6.60it/s]			
493/499	0.206G 0	.007682	0.006017	0.01667	2	320:
2% 2	1/40 [00:00	<00:05,	6.60it/s]			
			0.006017	0.01667	2	320:
5% 5	2/40 [00:00	<00:06,	5.79it/s			
493/499	0.206G 0	.008226	0.00503	0.01473	1	320:
	2/40 [00:00	<00:06,				
		.008226	0.00503	0.01473	1	320:
	3/40 [00:00	<00:06,				
493/499	0.206G 0	.007685	0.004796	0.01583	1	320:
	3/40 [00:00	<00:06,	5.57it/s]			
493/499		.007685	0.004796	0.01583	1	320:
	4/40 [00:0					
493/499			0.004318	0.01492	1	320:
	4/40 [00:0			·	_	-
493/499		.007345	0.004318	0.01492	1	320:
	5/40 [00:0				_	
493/499	0.206G 0	-	0.005405	0.01457	4	320:
	5/40 [00:0				-	220.
493/499		.007708	0.005405	0.01457	4	320:
,					_	

15% #5	6/40 [00:01<00:06, 5.14it/s]			
493/499	0.206G 0.008016 0.005115	0.01404	1	320:
15% #5	6/40 [00:01<00:06, 5.14it/s]			
·	0.206G 0.008016 0.005115	0.01404	1	320:
18% #7	7/40 [00:01<00:06, 5.34it/s]			
493/499	0.206G 0.009215 0.006116	0.01451	4	320:
18% #7	7/40 [00:01<00:06, 5.34it/s]			
493/499	0.206G 0.009215 0.006116	0.01451	4	320:
20% ##	8/40 [00:01<00:06, 5.20it/s]			
493/499	0.206G 0.009578 0.005927	0.01443	2	320:
20% ##	8/40 [00:01<00:06, 5.20it/s]			
493/499	0.206G 0.009578 0.005927	0.01443	2	320:
22% ##2	9/40 [00:01<00:05, 5.35it/s]			
493/499	0.206G 0.01101 0.006567	0.01487	4	320:
22% ##2	9/40 [00:01<00:05, 5.35it/s]			
493/499	0.206G 0.01101 0.006567	0.01487	4	320:
25% ##5	10/40 [00:01<00:05, 5.21it/s]		_	
493/499	0.206G 0.01148 0.007078	0.01488	4	320:
25% ##5	10/40 [00:02<00:05, 5.21it/s]		_	
493/499	0.206G 0.01148 0.007078	0.01488	4	320:
28% ##7	11/40 [00:02<00:05, 5.25it/s]		_	
493/499	0.206G 0.01397 0.00779	0.01607	4	320:
28% ##7	11/40 [00:02<00:05, 5.25it/s]		_	
493/499	0.206G 0.01397 0.00779	0.01607	4	320:
30% ###	12/40 [00:02<00:05, 5.39it/s]		_	
493/499	0.206G 0.01465 0.007862	0.01617	2	320:
30% ###	12/40 [00:02<00:05, 5.39it/s]		_	
493/499	0.206G 0.01465 0.007862	0.01617	2	320:
32% ###2	13/40 [00:02<00:05, 5.24it/s]	0.04040	•	000
493/499	0.206G 0.01603 0.008431	0.01646	4	320:
32% ###2	13/40 [00:02<00:05, 5.24it/s]	0.01010	4	000
493/499	0.206G 0.01603 0.008431	0.01646	4	320:
	14/40 [00:02<00:05, 5.16it/s]	0.04640	4	200
493/499	0.206G 0.0154 0.008102	0.01642	1	320:
35% ###5	14/40 [00:02<00:05, 5.16it/s]	0.04640	4	200
493/499	0.206G 0.0154 0.008102	0.01642	1	320:
38% ###7	15/40 [00:02<00:04, 5.33it/s]	0.01696	4	200
493/499	0.206G 0.01548 0.007922	0.01636	1	320:
38% ###7	15/40 [00:02<00:04, 5.33it/s]	0.01606	4	200
493/499	0.206G 0.01548 0.007922	0.01636	1	320:
40% ####	16/40 [00:02<00:04, 5.46it/s]	0.01670	4	200
493/499	0.206G 0.01599 0.008634	0.01678	4	320:
40% ####	16/40 [00:03<00:04, 5.46it/s]	0.04670	4	200
493/499	0.206G 0.01599 0.008634	0.01678	4	320:
42% ####2	17/40 [00:03<00:04, 5.53it/s]	0 01715	2	200.
493/499	0.206G 0.01602 0.008561	0.01715	2	320:
42% ####2	17/40 [00:03<00:04, 5.53it/s]	0 01715	2	200.
493/499	0.206G 0.01602 0.008561	0.01715	2	320:

45% ####5		18/40 [00:03<00:03,				
493/499		0.206G 0.0161		0.01738	2	320:
45% ####5		18/40 [00:03<00:03,	· -			
493/499		0.206G 0.0161	0.008412	0.01738	2	320:
48% ####7	I	19/40 [00:03<00:03,				
493/499			0.00834	0.01754	2	320:
48% ####7	I	19/40 [00:03<00:03,				
493/499		0.206G 0.01574		0.01754	2	320:
50% #####	ı	20/40 [00:03<00:03,				
493/499		0.206G 0.01649		0.01733	2	320:
50% #####	I	20/40 [00:03<00:03,				
493/499		0.206G 0.01649		0.01733	2	320:
52% #####2	١	21/40 [00:03<00:03,				
493/499		0.206G 0.01655	0.008436	0.01783	3	320:
52% #####2		21/40 [00:04<00:03,				
493/499		0.206G 0.01655		0.01783	3	320:
55% #####5		22/40 [00:04<00:03,				
493/499		0.206G 0.01735	0.00843	0.01818	2	320:
55% #####5	- 1	22/40 [00:04<00:03,	5.50it/s			
493/499		0.206G 0.01735	0.00843	0.01818	2	320:
57% #####7	-	23/40 [00:04<00:03,	5.35it/s]			
493/499		0.206G 0.01724	0.00845	0.01811	4	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.35it/s			
493/499		0.206G 0.01724	0.00845	0.01811	4	320:
60% ######	-	24/40 [00:04<00:02,	5.57it/s			
493/499		0.206G 0.01698	0.008397	0.01788	1	320:
60% ######		24/40 [00:04<00:02,	5.57it/s			
493/499		0.206G 0.01698	0.008397	0.01788	1	320:
62% ######2		25/40 [00:04<00:02,	5.36it/s			
493/499		0.206G 0.01896	0.008307	0.0178	2	320:
62% ######2		25/40 [00:04<00:02,	5.36it/s			
493/499		0.206G 0.01896	0.008307	0.0178	2	320:
65% ######5		26/40 [00:04<00:02,	5.08it/s			
493/499		0.206G 0.01851	0.008229	0.01763	2	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.08it/s			
493/499		0.206G 0.01851	0.008229	0.01763	2	320:
68% ######7	- 1	27/40 [00:04<00:02,	5.41it/s]			
493/499		0.206G 0.01939	0.008167	0.01757	2	320:
68% ######7	-	27/40 [00:05<00:02,	5.41it/s]			
493/499		0.206G 0.01939	0.008167	0.01757	2	320:
70% ######	-	28/40 [00:05<00:02,	5.53it/s			
493/499		0.206G 0.01982	0.008536	0.01803	4	320:
70% ######	١	28/40 [00:05<00:02,				
493/499	•	0.206G 0.01982	0.008536	0.01803	4	320:
72% #######2	ı	29/40 [00:05<00:02,				
493/499	•	0.206G 0.01949	0.008332	0.01799	1	320:
72% #######2	ı	29/40 [00:05<00:02,				
493/499	•	0.206G 0.01949	0.008332	0.01799	1	320:

	30/40 [00:05<00:01,				
493/499		0.008328	0.01821	2	320:
	30/40 [00:05<00:01,				
493/499	0.206G 0.01927		0.01821	2	320:
	31/40 [00:05<00:01,				
493/499	0.206G 0.0202		0.01819	2	320:
	31/40 [00:05<00:01,				
493/499		0.00829	0.01819	2	320:
80% #######	32/40 [00:05<00:01,				
493/499			0.01819	4	320:
80% #######	32/40 [00:06<00:01,	5.66it/s]			
493/499	0.206G 0.02004	0.008365	0.01819	4	320:
	33/40 [00:06<00:01,	5.71it/s]			
493/499	0.206G 0.01974		0.01809	1	320:
82% #######2	33/40 [00:06<00:01,	5.71it/s]			
493/499			0.01809	1	320:
85% #######5	34/40 [00:06<00:01,	5.75it/s			
493/499	0.206G 0.01978	0.008513	0.01811	4	320:
85% #######5	34/40 [00:06<00:01,	5.75it/s			
493/499	0.206G 0.01978	0.008513	0.01811	4	320:
88% #######7	35/40 [00:06<00:00,	5.75it/s			
493/499	0.206G 0.01951	0.008411	0.01798	1	320:
88% #######7	35/40 [00:06<00:00,	5.75it/s			
493/499	0.206G 0.01951	0.008411	0.01798	1	320:
90% ########	36/40 [00:06<00:00,	5.77it/s			
493/499	0.206G 0.01951	0.008326	0.01787	2	320:
90% ########	36/40 [00:06<00:00,	5.77it/s			
493/499	0.206G 0.01951	0.008326	0.01787	2	320:
92% ########2	37/40 [00:06<00:00,	5.63it/s]			
493/499	0.206G 0.01927	0.008194	0.01786	1	320:
92% ########2	37/40 [00:06<00:00,	5.63it/s]			
493/499	0.206G 0.01927	0.008194	0.01786	1	320:
95% ########5	38/40 [00:06<00:00,	5.67it/s]			
493/499	0.206G 0.01961	0.0082	0.01779	2	320:
95% ########5	38/40 [00:07<00:00,	5.67it/s]			
493/499	0.206G 0.01961	0.0082	0.01779	2	320:
98% ########7	39/40 [00:07<00:00,	5.71it/s			
493/499	0.206G 0.02052	0.008187	0.01781	3	320:
98% ########7	39/40 [00:07<00:00,	5.71it/s]			
493/499	0.206G 0.02052	0.008187	0.01781	3	320:
100% ##########	40/40 [00:07<00:00	, 5.59it/s]			
493/499	0.206G 0.02052	0.008187	0.01781	3	320:
100% ##########	40/40 [00:07<00:00	, 5.49it/s]			
	Class Images	Instances	P	R	mAP50
mAP50-95: 0%	0/20 [00	:00 , ?it/s]</td <td>]</td> <td></td> <td></td>]		
	Class Images	Instances	P	R	mAP50
mAP50-95: 10%	# 2/20 [00	:00<00:01, 1	5.72it/s]		

	Class	Images	Instances	P	R	mAP50
mAP50-95: 2	20% ##	4/20 [0	0:00<00:00,	17.18it/s]		
	Class	Images	Instances	Р	R	mAP50
mAP50-95: 3	30% ###	6/20 [0	0:00<00:00,	15.69it/s]		
	Class		Instances		R	mAP50
mAP50-95: 4	l0% ####	•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95: 5	50% #####	•	00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95: 6	50% ######	•	00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95: 7	70% #######	14/20 [00:00<00:00,	16.71it/s]		
	Class		Instances		R	mAP50
mAP50-95: 8	30% ########	_	00:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95: 9	00% ########	_				
	Class		Instances		R	mAP50
mAP50-95: 10	00% ##########	_				
	Class		Instances		R	mAP50
mAP50-95: 10	00% ##########	_				
	all	40	40	0.98	0.975	0.992
0.802						
Epoch	GPU mem	box loss	obj_loss	cls loss	Instances	Size
1	_	_	3-	-		
0%	0/40 [00	:00 , ?i</td <td>t/sl</td> <td></td> <td></td> <td></td>	t/sl			
494/499			0.002578	0.006492	1	320:
0%	0/40 [00:0					
494/499	0.206G		0.002578	0.006492	1	320:
2% 2	1/40 [00:0					
	0.206G		0.009023	0.01227	3	320:
2% 2	1/40 [00:0					
494/499	0.206G		0.009023	0.01227	3	320:
5% 5	2/40 [00:0					
494/499	0.206G		0.007818	0.01259	1	320:
5% 5	2/40 [00:0				_	
494/499	0.206G		0.007818	0.01259	1	320:
8% 7						
494/499	I 3/40 [00:0	0<00:06.	5.91it/s]			
	3/40 [00:0 0.206G			0.01629	4	320:
8%17	0.206G	0.02423	0.00984	0.01629	4	320:
8% 7 494/499	0.206G 3/40 [00:0	0.02423 0<00:06,	0.00984 5.91it/s]			
494/499	0.206G 3/40 [00:0 0.206G	0.02423 0<00:06, 0.02423	0.00984 5.91it/s] 0.00984	0.01629	4	320: 320:
494/499 10% #	0.206G 3/40 [00:0 0.206G 4/40 [00:	0.02423 0<00:06, 0.02423 00<00:06,	0.00984 5.91it/s] 0.00984 5.62it/s]	0.01629	4	320:
494/499 10% # 494/499	0.206G 3/40 [00:0 0.206G 4/40 [00: 0.206G	0.02423 0<00:06, 0.02423 00<00:06, 0.02136	0.00984 5.91it/s] 0.00984 5.62it/s] 0.008505			
494/499 10% # 494/499 10% #	0.206G 3/40 [00:0 0.206G 4/40 [00: 4/40 [00:	0.02423 0<00:06, 0.02423 00<00:06, 0.02136 00<00:06,	0.00984 5.91it/s] 0.00984 5.62it/s] 0.008505 5.62it/s]	0.01629	4	320: 320:
494/499 10% # 494/499 10% # 494/499	0.206G 3/40 [00:0 0.206G 4/40 [00: 0.206G 4/40 [00: 0.206G	0.02423 0<00:06, 0.02423 00<00:06, 0.02136 00<00:06, 0.02136	0.00984 5.91it/s] 0.00984 5.62it/s] 0.008505 5.62it/s] 0.008505	0.01629	4	320:
494/499 10% # 494/499 10% # 494/499 12% #2	0.206G 3/40 [00:0 0.206G 4/40 [00: 0.206G 4/40 [00: 5/40 [00:	0.02423 0<00:06, 0.02423 00<00:06, 0.02136 00<00:06, 0.02136	0.00984 5.91it/s] 0.00984 5.62it/s] 0.008505 5.62it/s] 0.008505 5.72it/s]	0.01629 0.01641 0.01641	4 1 1	320: 320: 320:
494/499 10% # 494/499 10% # 494/499	0.206G 3/40 [00:0 0.206G 4/40 [00: 0.206G 4/40 [00: 0.206G 5/40 [00:	0.02423 0<00:06, 0.02423 00<00:06, 0.02136 00<00:06, 0.02136 00<00:06,	0.00984 5.91it/s] 0.00984 5.62it/s] 0.008505 5.62it/s] 0.008505 5.72it/s]	0.01629	4	320: 320:

494/499	0.206G 0.02063 0.0		4	320:
15% #5	6/40 [00:01<00:06, 5.8 0.206G		2	200.
494/499 15% #5		0.0168 58it/s]	2	320:
494/499	•	009034 0.0168	2	320:
18% #7	7/40 [00:01<00:05, 5.6			
494/499		0.01669	1	320:
18% #7	7/40 [00:01<00:05, 5.6			
494/499		0.01669	1	320:
20% ##	•	69it/s]		
494/499		008939 0.01729	4	320:
20% ## 494/499	8/40 [00:01<00:05, 5.6 0.206G 0.01999 0.6		4	320:
494/499	0.206G 0.01999 0.0 9/40 [00:01<00:05, 5.7		4	320:
494/499	•	008839 0.01716	2	320:
22% ##2	9/40 [00:01<00:05, 5.7		2	520.
494/499		008839 0.01716	2	320:
25% ##5	10/40 [00:01<00:05, 5		-	020.
494/499	0.206G 0.0186 0.0		2	320:
25% ##5	10/40 [00:01<00:05, 5			
494/499	0.206G 0.0186 0.0	0.01675	2	320:
28% ##7	11/40 [00:01<00:05, 5	.76it/s]		
494/499	0.206G 0.01849 0.0	0.01707	3	320:
28% ##7	11/40 [00:02<00:05, 5	.76it/s]		
494/499	0.206G 0.01849 0.0	0.01707	3	320:
30% ###	12/40 [00:02<00:05, 5			
494/499	0.206G 0.01867 0.0		4	320:
30% ###	12/40 [00:02<00:05, 5			
494/499	0.206G 0.01867 0.0		4	320:
32% ###2	13/40 [00:02<00:05, 5			
494/499	0.206G 0.01804 0.0		1	320:
32% ###2	13/40 [00:02<00:05, 5		4	200.
494/499	0.206G 0.01804 0.0		1	320:
35% ###5 494/499	14/40 [00:02<00:04, 5 0.206G 0.01725 0		2	320:
35% ###5	14/40 [00:02<00:04, 5		2	320.
494/499		.00885 0.01735	2	320:
38% ###7	15/40 [00:02<00:04, 5		2	020.
494/499	0.206G 0.01704 0.0		2	320:
38% ###7	15/40 [00:02<00:04, 5			
494/499	0.206G 0.01704 0.0		2	320:
40% ####	16/40 [00:02<00:04, 5	.26it/s]		
494/499	0.206G 0.01669 0.0	0.01698	2	320:
40% ####	16/40 [00:03<00:04, 5	.26it/s]		
494/499		0.01698	2	320:
42% ####2	17/40 [00:03<00:04, 5			
494/499	0.206G 0.01654 0.0		1	320:
42% ####2	17/40 [00:03<00:04, 5	.27it/s]		

494/499	0.206G 0.01654 0.008519	0.01677	1	320:
45% ####5	18/40 [00:03<00:04, 5.17it/s]			
494/499	0.206G 0.01686 0.009189	0.01679	4	320:
45% ####5	18/40 [00:03<00:04, 5.17it/s]	0.04070		000
494/499	0.206G 0.01686 0.009189	0.01679	4	320:
48% ####7	19/40 [00:03<00:04, 5.08it/s]	0.01667	1	200.
494/499	0.206G 0.01662 0.009244 19/40 [00:03<00:04, 5.08it/s]	0.01667	4	320:
48% ####7 494/499	0.206G 0.01662 0.009244	0.01667	4	320:
50% #####	20/40 [00:03<00:04, 4.81it/s]	0.01007	4	320.
494/499	0.206G 0.01645 0.009248	0.01679	2	320:
50% #####	20/40 [00:03<00:04, 4.81it/s]	0.01073	2	020.
494/499	0.206G 0.01645 0.009248	0.01679	2	320:
52% #####2	21/40 [00:03<00:03, 4.81it/s]	0.01070	_	020.
494/499	0.206G 0.01607 0.009241	0.01682	2	320:
52% #####2	21/40 [00:04<00:03, 4.81it/s]	0.01002	-	020.
494/499	0.206G 0.01607 0.009241	0.01682	2	320:
55% #####5	22/40 [00:04<00:03, 4.84it/s]			
494/499	0.206G 0.01739 0.009236	0.01695	3	320:
55% #####5	22/40 [00:04<00:03, 4.84it/s]			
494/499	0.206G 0.01739 0.009236	0.01695	3	320:
57% #####7	23/40 [00:04<00:03, 4.87it/s]			
494/499	0.206G 0.01777 0.009474	0.01708	4	320:
57% #####7	23/40 [00:04<00:03, 4.87it/s]			
494/499	0.206G 0.01777 0.009474	0.01708	4	320:
60% ######	24/40 [00:04<00:03, 4.78it/s]			
494/499	0.206G 0.01746 0.009444	0.01699	2	320:
60% ######	24/40 [00:04<00:03, 4.78it/s]			
494/499	0.206G 0.01746 0.009444	0.01699	2	320:
62% #####2	25/40 [00:04<00:03, 4.82it/s]			
494/499	0.206G 0.01761 0.009627	0.0173	4	320:
62% #####2	25/40 [00:04<00:03, 4.82it/s]			
494/499	0.206G 0.01761 0.009627	0.0173	4	320:
65% #####5	26/40 [00:04<00:02, 4.80it/s]			
494/499	0.206G 0.01778 0.009485	0.01729	1	320:
	26/40 [00:05<00:02, 4.80it/s]			
494/499	0.206G 0.01778 0.009485	0.01729	1	320:
68% ######7	27/40 [00:05<00:02, 4.99it/s]			
494/499	0.206G 0.01826 0.009937	0.01736	4	320:
68% ######7	27/40 [00:05<00:02, 4.99it/s]			
494/499	0.206G 0.01826 0.009937	0.01736	4	320:
70% ######	28/40 [00:05<00:02, 4.86it/s]			
494/499	0.206G 0.01881 0.009901	0.01743	2	320:
	28/40 [00:05<00:02, 4.86it/s]	0.04740	0	000
494/499	0.206G 0.01881 0.009901	0.01743	2	320:
72% #######2	-	0.01740	0	200
494/499	0.206G 0.01862 0.009821	0.01748	2	320:
72% ######2	29/40 [00:05<00:02, 4.75it/s]			

494/499	0.206G 0.01862	0.009821	0.01748	2	320:
75% ######5	30/40 [00:05<00:01,	5.03it/s]			
494/499	0.206G 0.01828		0.01726	1	320:
	30/40 [00:05<00:01,				
494/499			0.01726	1	320:
	31/40 [00:05<00:01,			_	
494/499		0.009753	0.01727	4	320:
	31/40 [00:06<00:01,		0.04707	4	200
494/499			0.01727	4	320:
80% ####### 494/499	32/40 [00:06<00:01,		0.01716	0	200.
	0.206G 0.01819 32/40 [00:06<00:01,		0.01716	2	320:
494/499	•	0.009696	0.01716	2	320:
	33/40 [00:06<00:01,		0.01710	2	320.
	0.206G 0.01815		0.01717	4	320:
	33/40 [00:06<00:01,		0.01/1/	4	320.
494/499			0.01717	4	320:
	34/40 [00:06<00:01,		0.01/1/	-	020.
494/499			0.01755	2	320:
	34/40 [00:06<00:01,		0.01700	2	020.
494/499			0.01755	2	320:
	35/40 [00:06<00:00,		0.01700	_	020.
	0.206G 0.01845		0.01813	2	320:
	35/40 [00:06<00:00,			_	0201
494/499	0.206G 0.01845	0.009944	0.01813	2	320:
	36/40 [00:06<00:00,				
494/499	0.206G 0.01848		0.01805	4	320:
	36/40 [00:06<00:00,				
494/499		0.01004	0.01805	4	320:
92% ########2	37/40 [00:06<00:00,	5.57it/s]			
494/499	0.206G 0.01914	0.01005	0.01835	4	320:
92% ########2	37/40 [00:07<00:00,	5.57it/s]			
494/499	0.206G 0.01914	0.01005	0.01835	4	320:
95% ########5	38/40 [00:07<00:00,	5.36it/s]			
494/499	0.206G 0.01905	0.01008	0.01873	4	320:
95% ########5	38/40 [00:07<00:00,	5.36it/s]			
494/499	0.206G 0.01905	0.01008	0.01873	4	320:
98% ########7	39/40 [00:07<00:00,	5.35it/s			
494/499	0.206G 0.01915	0.01014	0.01876	4	320:
98% ########7	39/40 [00:07<00:00,	5.35it/s			
494/499	0.206G 0.01915	0.01014	0.01876	4	320:
100% ##########	40/40 [00:07<00:00	, 5.15it/s]			
494/499	0.206G 0.01915		0.01876	4	320:
100% #########	40/40 [00:07<00:00	, 5.27it/s]			
	•	Instances	. P	R r	nAP50
mAP50-95: 0%		:00 , ?it/s]</td <td></td> <td></td> <td></td>			
	Class Images	Instances	P	R r	nAP50

ADEO OF.	10% #	I 0/00 [0	0.00<00.01	16 60:+/a]		
mAP50-95:	10% # Class		0:00<00:01, Instances		R	mAP50
mAP50-95:		_	0:00<00:00,		It	IIIAF 30
MAI 00 50.	Class	Images			R	mAP50
mAP50-95:		_	0:00<00:00,		10	mai 00
	Class		Instances		R	mAP50
mAP50-95:		•	0:00<00:00,			
	Class		Instances		R	mAP50
mAP50-95:	50% #####	_	00:00<00:00			
	Class	Images	Instances	P	R	mAP50
mAP50-95:	65% ######5	13/20 [00:00<00:00	, 17.96it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	75% ######5	15/20 [00:00<00:00	, 18.06it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:						
	Class	_	Instances		R	mAP50
mAP50-95:	95% ########5					
	Class	•	Instances		R	mAP50
mAP50-95:	100% #########					
	all	40	40	0.98	0.975	0.99
0.803						
Epoc	h GPU_mem	how load	obj_loss	cla loga	Ingtoneog	Size
Ерос	n Gro_mem	DOX_1022	00]_1055	CIS_IOSS	Instances	2176
0%1	0/40 [00	:00 . ?i</td <td>t/sl</td> <td></td> <td></td> <td></td>	t/sl			
495/49			0.009463	0.02391	1	320:
0%	0/40 [00:0			0.02001	_	0_0.
495/49			0.009463	0.02391	1	320:
2% 2						
495/49				0.02013	1	320:
2% 2	1/40 [00:0	0<00:06,	5.76it/s]			
495/49	9 0.206G	0.02002	0.007271	0.02013	1	320:
5% 5	2/40 [00:0	0<00:06,	5.80it/s			
495/49		0.02021		0.01858	1	320:
5% 5	2/40 [00:0	0<00:06,				
495/49	9 0.206G	0.02021	0.009461	0.01858	1	320:
0417				0.01000		
8% 7	3/40 [00:0	0<00:06,	6.05it/s]	0.01000		
495/49			6.05it/s] 0.00978	0.01773	4	320:
		0.01854	0.00978			320:
495/49	9 0.206G 3/40 [00:0	0.01854 0<00:06,	0.00978			320: 320:
495/49 8% 7	9 0.206G 3/40 [00:0	0.01854 0<00:06, 0.01854	0.00978 6.05it/s] 0.00978	0.01773	4	
495/49 8% 7 495/49	9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:	0.01854 0<00:06, 0.01854	0.00978 6.05it/s] 0.00978	0.01773	4	
495/49 8% 7 495/49 10% #	9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:	0.01854 0<00:06, 0.01854 00<00:06, 0.01738	0.00978 6.05it/s] 0.00978 5.96it/s] 0.009818	0.01773	4	320:
495/49 8% 7 495/49 10% # 495/49	9 0.206G 3/40 [00:0 9 0.206G 4/40 [00: 9 0.206G 4/40 [00:	0.01854 0<00:06, 0.01854 00<00:06, 0.01738	0.00978 6.05it/s] 0.00978 5.96it/s] 0.009818 5.96it/s]	0.01773	4	320:
495/49 8% 7 495/49 10% # 495/49	9 0.206G 3/40 [00:0 9 0.206G 4/40 [00: 9 0.206G 4/40 [00:	0.01854 0<00:06, 0.01854 00<00:06, 0.01738 00<00:06, 0.01738	0.00978 6.05it/s] 0.00978 5.96it/s] 0.009818 5.96it/s] 0.009818	0.01773 0.01773 0.01763	4 4 2	320: 320:
495/49 8% 7 495/49 10% # 495/49 10% # 495/49	9 0.206G 3/40 [00:0 9 0.206G 4/40 [00: 9 0.206G 4/40 [00: 9 0.206G 5/40 [00:	0.01854 0<00:06, 0.01854 00<00:06, 0.01738 00<00:06, 0.01738	0.00978 6.05it/s] 0.00978 5.96it/s] 0.009818 5.96it/s] 0.009818	0.01773 0.01773 0.01763	4 4 2	320: 320:
495/49 8% 7 495/49 10% # 495/49 10% # 495/49 12% #2	9 0.206G 3/40 [00:0 9 0.206G 4/40 [00: 9 0.206G 4/40 [00: 9 0.206G 5/40 [00:	0.01854 0<00:06, 0.01854 00<00:06, 0.01738 00<00:06, 0.01738 00<00:05, 0.01631	0.00978 6.05it/s] 0.00978 5.96it/s] 0.009818 5.96it/s] 0.009818 5.91it/s] 0.01051	0.01773 0.01773 0.01763 0.01763	4 4 2 2	320: 320: 320:

15% #5	6/40 [00:01<00:05, 5.69it/s]			
495/499	0.206G 0.02151 0.01011	0.01713	2	320:
15% #5	6/40 [00:01<00:05, 5.69it/s]		_	
495/499	0.206G 0.02151 0.01011	0.01713	2	320:
18% #7	7/40 [00:01<00:05, 5.71it/s]		_	
495/499	0.206G 0.02062 0.009521	0.01695	2	320:
18% #7	7/40 [00:01<00:05, 5.71it/s]		_	
495/499	0.206G 0.02062 0.009521	0.01695	2	320:
20% ##	8/40 [00:01<00:05, 5.75it/s]			
495/499	0.206G 0.02153 0.01034	0.0184	4	320:
20% ##	8/40 [00:01<00:05, 5.75it/s]			
495/499	0.206G 0.02153 0.01034	0.0184	4	320:
22% ##2	9/40 [00:01<00:05, 5.61it/s]		_	
495/499	0.206G 0.02092 0.009874	0.01806	2	320:
22% ##2	9/40 [00:01<00:05, 5.61it/s]			
495/499	0.206G 0.02092 0.009874	0.01806	2	320:
25% ##5	10/40 [00:01<00:05, 5.65it/s]			
495/499	0.206G 0.0201 0.009283	0.01804	1	320:
25% ##5	10/40 [00:01<00:05, 5.65it/s]			
495/499	0.206G 0.0201 0.009283	0.01804	1	320:
28% ##7	11/40 [00:01<00:04, 5.86it/s]			
495/499	0.206G 0.01903 0.008814	0.01765	1	320:
28% ##7	11/40 [00:02<00:04, 5.86it/s]			
495/499	0.206G 0.01903 0.008814	0.01765	1	320:
30% ###	12/40 [00:02<00:04, 5.69it/s]			
495/499	0.206G 0.02092 0.009119	0.01817	4	320:
30% ###	12/40 [00:02<00:04, 5.69it/s]			
495/499	0.206G 0.02092 0.009119	0.01817	4	320:
32% ###2	13/40 [00:02<00:04, 5.41it/s]			
495/499	0.206G 0.02284 0.008905	0.01888	2	320:
32% ###2	13/40 [00:02<00:04, 5.41it/s]			
495/499	0.206G 0.02284 0.008905	0.01888	2	320:
35% ###5	14/40 [00:02<00:04, 5.39it/s]			
495/499	0.206G 0.0221 0.008743	0.01851	2	320:
35% ###5	14/40 [00:02<00:04, 5.39it/s]			
495/499	0.206G 0.0221 0.008743	0.01851	2	320:
38% ###7	15/40 [00:02<00:04, 5.66it/s]			
495/499	0.206G 0.0211 0.008387	0.01836	1	320:
38% ###7	15/40 [00:02<00:04, 5.66it/s]			
495/499	0.206G 0.0211 0.008387	0.01836	1	320:
40% ####	16/40 [00:02<00:04, 5.54it/s]			
495/499	0.206G 0.02048 0.008236	0.01816	2	320:
40% ####	16/40 [00:03<00:04, 5.54it/s]			
495/499	0.206G 0.02048 0.008236	0.01816	2	320:
42% ####2	17/40 [00:03<00:04, 5.47it/s]			
495/499	0.206G 0.02005 0.008074	0.01794	1	320:
42% ####2	17/40 [00:03<00:04, 5.47it/s]			
495/499	0.206G 0.02005 0.008074	0.01794	1	320:
•				

45% ####5		18/40 [00:03<00:04,				
495/499		0.206G 0.01953	0.007971	0.01764	1	320:
45% ####5		18/40 [00:03<00:04,				
495/499		0.206G 0.01953	0.007971	0.01764	1	320:
48% ####7	I	19/40 [00:03<00:03,				
495/499		0.206G 0.02008	0.008355	0.01793	4	320:
48% ####7	ı	19/40 [00:03<00:03,				
495/499		0.206G 0.02008		0.01793	4	320:
50% #####	ı	20/40 [00:03<00:03,				
495/499		0.206G 0.01952	0.008104	0.01787	1	320:
50% #####	I	20/40 [00:03<00:03,				
495/499		0.206G 0.01952	0.008104	0.01787	1	320:
52% #####2	١	21/40 [00:03<00:03,				
495/499		0.206G 0.01899		0.01765	1	320:
52% #####2		21/40 [00:03<00:03,				
495/499		0.206G 0.01899		0.01765	1	320:
55% #####5		22/40 [00:03<00:03,				
495/499		0.206G 0.01947		0.01817	4	320:
55% #####5		22/40 [00:04<00:03,	5.76it/s]			
495/499		0.206G 0.01947	0.008345	0.01817	4	320:
57% #####7		23/40 [00:04<00:03,	5.62it/s			
495/499		0.206G 0.01914	0.008255	0.01816	2	320:
57% #####7	- 1	23/40 [00:04<00:03,	5.62it/s]			
495/499		0.206G 0.01914	0.008255	0.01816	2	320:
60% ######		24/40 [00:04<00:02,	5.84it/s]			
495/499		0.206G 0.01883	0.008166	0.01783	1	320:
60% ######	-	24/40 [00:04<00:02,	5.84it/s]			
495/499		0.206G 0.01883	0.008166	0.01783	1	320:
62% ######2	-	25/40 [00:04<00:02,	5.80it/s]			
495/499		0.206G 0.01954	0.008097	0.01775	2	320:
62% ######2	-	25/40 [00:04<00:02,	5.80it/s			
495/499		0.206G 0.01954	0.008097	0.01775	2	320:
65% ######5	- 1	26/40 [00:04<00:02,	5.81it/s			
495/499		0.206G 0.01932	0.008241	0.0182	4	320:
65% ######5		26/40 [00:04<00:02,	5.81it/s			
495/499		0.206G 0.01932	0.008241	0.0182	4	320:
68% #####7		27/40 [00:04<00:02,	5.81it/s			
495/499		0.206G 0.01945	0.008183	0.01871	2	320:
68% #####7		27/40 [00:04<00:02,	5.81it/s			
495/499		0.206G 0.01945	0.008183	0.01871	2	320:
70% ######		28/40 [00:04<00:02,	5.64it/s			
495/499		0.206G 0.0205	0.008262	0.01861	2	320:
70% #######		28/40 [00:05<00:02,	5.64it/s]			
495/499		0.206G 0.0205	0.008262	0.01861	2	320:
72% #######2		29/40 [00:05<00:01,	5.54it/s]			
495/499		0.206G 0.0203	0.008371	0.01886	3	320:
72% #######2	1	29/40 [00:05<00:01,				
495/499		0.206G 0.0203	0.008371	0.01886	3	320:

	30/40 [00:05<00:01,				
495/499			0.01883	2	320:
	30/40 [00:05<00:01,				
495/499	0.206G 0.0206		0.01883	2	320:
	31/40 [00:05<00:01,				
495/499	0.206G 0.02074		0.01888	4	320:
	31/40 [00:05<00:01,				
495/499	0.206G 0.02074		0.01888	4	320:
	32/40 [00:05<00:01,				
495/499			0.01903	2	320:
	32/40 [00:05<00:01,				
495/499			0.01903	2	320:
	33/40 [00:05<00:01,				
495/499	0.206G 0.02096		0.01905	4	320:
	33/40 [00:06<00:01,				
495/499			0.01905	4	320:
85% #######5	34/40 [00:06<00:01,	5.43it/s]			
495/499		0.008897	0.01896	2	320:
85% #######5	34/40 [00:06<00:01,	5.43it/s			
495/499	0.206G 0.02075	0.008897	0.01896	2	320:
88% #######7	35/40 [00:06<00:00,	5.54it/s			
495/499	0.206G 0.02048	0.008717	0.01877	1	320:
88% #######7	35/40 [00:06<00:00,	5.54it/s			
495/499	0.206G 0.02048	0.008717	0.01877	1	320:
90% #######	36/40 [00:06<00:00,	5.62it/s			
495/499	0.206G 0.02026	0.008621	0.01867	1	320:
90% ########	36/40 [00:06<00:00,	5.62it/s			
495/499	0.206G 0.02026	0.008621	0.01867	1	320:
92% ########2	37/40 [00:06<00:00,	5.51it/s			
495/499	0.206G 0.02051	0.008575	0.01877	1	320:
92% ########2	37/40 [00:06<00:00,	5.51it/s			
495/499	0.206G 0.02051	0.008575	0.01877	1	320:
95% ########5	38/40 [00:06<00:00,	5.60it/s]			
495/499	0.206G 0.02033	0.008525	0.01865	2	320:
95% ########5	38/40 [00:06<00:00,	5.60it/s]			
495/499	0.206G 0.02033	0.008525	0.01865	2	320:
98% ########7	39/40 [00:06<00:00,	5.52it/s			
495/499	0.206G 0.02025	0.008457	0.01851	1	320:
98% ########7	39/40 [00:07<00:00,	5.52it/s			
495/499	0.206G 0.02025	0.008457	0.01851	1	320:
100% ##########	40/40 [00:07<00:00	, 5.58it/s]			
495/499	0.206G 0.02025	0.008457	0.01851	1	320:
100% ##########	40/40 [00:07<00:00	, 5.62it/s]			
	Class Images	Instances	P	R	mAP50
mAP50-95: 0%	0/20 [00	:00 , ?it/s</td <td>]</td> <td></td> <td></td>]		
	Class Images	Instances	P	R	mAP50
mAP50-95: 10%	# 2/20 [00	:00<00:00, 1	8.28it/s]		

	_	Instances		R	mAP50
mAP50-95: 20% ## Class		0:00<00:00, Instances		R	mAP50
mAP50-95: 35% ###5	_	0:00<00:00,			
Class	•	Instances		R	mAP50
		0:00<00:00,	17.11it/s]		
Class	Images		P	R	mAP50
		(00:00<00:00			
Class	_	Instances		R	mAP50
		00:00<00:00			1750
Class	Images			R	mAP50
		(00:00<00:00			ADEO
Class mAP50-95: 85% #######5	•	Instances		R	mAP50
Class		Instances		R	mAP50
mAP50-95: 95% #######5					mai 50
Class		Instances		R	mAP50
mAP50-95: 100% #########	_				mm 00
all	40		0.98	0.975	0.99
0.803				0.0.0	
Epoch GPU_mem 1	oox_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00	.00/2 2:	+ /al			
496/499 0.206G	-	0.006414	0.01317	2	320:
0% 0/40 [00:00			0.01517	2	020.
496/499 0.206G	-		0.01317	2	320:
2% 2 1/40 [00:00			0.01017	2	020.
496/499 0.206G		0.009769	0.01599	4	320:
2% 2 1/40 [00:00					
496/499 0.206G		0.009769	0.01599	4	320:
5% 5 2/40 [00:00	0<00:07,	5.43it/s			
496/499 0.206G	0.03032	0.009373	0.01713	3	320:
5% 5 2/40 [00:00	0<00:07,	5.43it/s			
496/499 0.206G	0.03032	0.009373	0.01713	3	320:
8% 7 3/40 [00:00	0<00:06,	5.60it/s]			
496/499 0.206G	0.02565	0.008559	0.01663	2	320:
8% 7 3/40 [00:00	0<00:06,	5.60it/s]			
496/499 0.206G	0.02565	0.008559	0.01663	2	320:
10% # 4/40 [00:0					
496/499 0.206G		0.00773	0.01611	1	320:
10% # 4/40 [00:0					
496/499 0.206G		0.00773	0.01611	1	320:
12% #2 5/40 [00:0					
496/499 0.206G	0.02049		0.01552	1	320:
12% #2 5/40 [00:0			0 0 1		
		0.006998	0.01552	1	320:
15% #5 6/40 [00:0	01<00:06,	5.16it/s]			

496/499	0.206G 0.01906 0.	006402 0.01508	1	320:
15% #5	6/40 [00:01<00:06, 5.		4	200.
496/499 18% #7	0.206G 0.01906 0. 7/40 [00:01<00:06, 5.	006402 0.01508	1	320:
496/499	•	0.00745 0.01563	3	320:
18% #7	7/40 [00:01<00:06, 5.			520.
496/499	0.206G 0.01999 0		3	320:
20% ##	8/40 [00:01<00:06, 5.	01it/s]		
496/499	0.206G 0.02136 0.	008391 0.01665	4	320:
20% ##	8/40 [00:01<00:06, 5.	01it/s]		
496/499		008391 0.01665	4	320:
22% ##2	9/40 [00:01<00:06, 4.			
496/499		0.01652	2	320:
22% ##2	9/40 [00:01<00:06, 4.		_	
496/499	0.206G 0.02205 0.		2	320:
25% ##5	10/40 [00:01<00:06, 4		2	000
496/499		0.01639	2	320:
25% ##5 496/499	10/40 [00:02<00:06, 4		0	200.
496/499 28% ##7	0.206G 0.02145 0. 11/40 [00:02<00:05, 4		2	320:
	0.206G 0.02221 0.		4	320:
28% ##7	11/40 [00:02<00:05, 4		4	320.
496/499	0.206G 0.02221 0.		4	320:
30% ###	12/40 [00:02<00:05, 4		<u>-</u>	320.
496/499	•	008739 0.01725	2	320:
30% ###	12/40 [00:02<00:05, 4			
496/499	0.206G 0.02183 0.		2	320:
32% ###2	13/40 [00:02<00:05, 4	l.89it/s]		
496/499	0.206G 0.02179 0.	008652 0.01705	2	320:
32% ###2	13/40 [00:02<00:05, 4	l.89it/s]		
496/499	0.206G 0.02179 0.	008652 0.01705	2	320:
35% ###5	14/40 [00:02<00:05, 5	5.02it/s]		
496/499	0.206G 0.02138	0.0084 0.0169	1	320:
35% ###5	14/40 [00:02<00:05, 5			
496/499	0.206G 0.02138		1	320:
38% ###7		5.11it/s]	_	
496/499		0.01903	2	320:
38% ###7	15/40 [00:03<00:04, 5	· =	2	000
496/499	0.206G 0.02093 0		2	320:
40% #### 496/499	16/40 [00:03<00:05, 4		4	200.
	0.206G 0.0209 0. 16/40 [00:03<00:05, 4		4	320:
40% #### 496/499		008651 0.01926	4	320:
496/499	17/40 [00:03<00:04, 4		'1	JZU:
496/499	•	008541 0.01952	2	320:
42% ####2	17/40 [00:03<00:04, 4		4	J20.
496/499	0.206G 0.02149 0.		2	320:
45% ####5	18/40 [00:03<00:04, 4			
	•			

496/499	0.206G 0.02102 0.008371 0.	01966 2	320:
45% ####5	18/40 [00:03<00:04, 4.79it/s]		
496/499		01966 2	320:
48% ####7	19/40 [00:03<00:04, 4.94it/s]	04.000	200
496/499	0.206G 0.02142 0.008674 0. 19/40 [00:03<00:04, 4.94it/s]	01983 4	320:
48% ####7 496/499	·	01983 4	320:
50% #####	20/40 [00:03<00:03, 5.05it/s]	01905 4	320.
496/499		.0197 4	320:
50% #####	20/40 [00:04<00:03, 5.05it/s]	.0101	020.
496/499	·	.0197 4	320:
52% #####2	21/40 [00:04<00:03, 5.25it/s]		
496/499	0.206G 0.02135 0.008874 0.	01952 1	320:
52% #####2	21/40 [00:04<00:03, 5.25it/s]		
496/499	0.206G 0.02135 0.008874 0.	01952 1	320:
55% #####5	22/40 [00:04<00:03, 5.41it/s]		
496/499	0.206G 0.02085 0.008898 0.	01956 4	320:
55% #####5	22/40 [00:04<00:03, 5.41it/s]		
496/499		01956 4	320:
57% #####7	23/40 [00:04<00:03, 5.38it/s]		
496/499		02051 3	320:
57% #####7	23/40 [00:04<00:03, 5.38it/s]		
496/499		02051 3	320:
60% ######	24/40 [00:04<00:02, 5.47it/s]	00000	000
496/499		02033 2	320:
60% ######	24/40 [00:04<00:02, 5.47it/s]	00000	200
496/499		02033 2	320:
62% ######2 496/499	25/40 [00:04<00:02, 5.58it/s] 0.206G 0.02141 0.009172 0.	02016 4	320:
62% ######2	0.200G 0.02141 0.009172 0. 25/40 [00:05<00:02, 5.58it/s]	02010 4	320.
496/499	· ·	02016 4	320:
65% ######5	26/40 [00:05<00:02, 5.50it/s]	02010 4	520.
496/499	·	02011 2	320:
65% ######5	26/40 [00:05<00:02, 5.50it/s]	2	020.
496/499		02011 2	320:
	27/40 [00:05<00:02, 5.60it/s]		
496/499		01984 4	320:
68% ######7	27/40 [00:05<00:02, 5.60it/s]		
496/499	0.206G 0.02072 0.009308 0.	01984 4	320:
70% ######	28/40 [00:05<00:02, 5.66it/s]		
496/499	0.206G 0.02035 0.009166 0.	01958 2	320:
70% ######	28/40 [00:05<00:02, 5.66it/s]		
496/499		01958 2	320:
72% ######2	29/40 [00:05<00:01, 5.71it/s]		
496/499		01968 3	320:
72% #######2			
496/499		01968 3	320:
75% ######5	30/40 [00:05<00:01, 5.57it/s]		

496/499	0.206G 0.02159	0.009235 0.0198	3 4	320:
75% ######5	30/40 [00:05<00:01,	5.57it/s]		
496/499	0.206G 0.02159	0.009235 0.0198	3 4	320:
78% ######7	31/40 [00:05<00:01,	5.50it/s]		
496/499		0.00917 0.0197	9 2	320:
	31/40 [00:06<00:01,			
496/499		0.00917 0.0197	9 2	320:
	32/40 [00:06<00:01,			
496/499			9 2	320:
	32/40 [00:06<00:01,			
496/499	*		9 2	320:
	33/40 [00:06<00:01,			
496/499		0.008941 0.0194	8 1	320:
	33/40 [00:06<00:01,			
496/499		0.008941 0.0194	8 1	320:
	34/40 [00:06<00:01,			
496/499			3 2	320:
	34/40 [00:06<00:01,			
496/499	0.206G 0.02168		3 2	320:
	35/40 [00:06<00:00,	· -		
496/499			6 2	320:
	35/40 [00:06<00:00,			
496/499	*		6 2	320:
	36/40 [00:06<00:00,			
496/499	0.206G 0.0214		8 1	320:
	36/40 [00:07<00:00,			
496/499	0.206G 0.0214	0.008686 0.0192	8 1	320:
	37/40 [00:07<00:00,			
496/499	0.206G 0.02156		6 3	320:
	37/40 [00:07<00:00,			
496/499		0.008728 0.0194	6 3	320:
	38/40 [00:07<00:00,			
496/499	0.206G 0.02129	0.008576 0.0192	8 1	320:
	38/40 [00:07<00:00,			
496/499		0.008576 0.0192	8 1	320:
	39/40 [00:07<00:00,			
496/499		0.008752 0.0194	3 4	320:
	39/40 [00:07<00:00,	· -		
496/499		0.008752 0.0194	3 4	320:
	40/40 [00:07<00:00			
496/499		0.008752 0.0194	3 4	320:
100% #########	40/40 [00:07<00:00	, 5.26it/s]		
	•		P R	mAP50
mAP50-95: 0%		:00 , ?it/s]</td <td>_</td> <td></td>	_	
	•		P R	mAP50
mAP50-95: 10%		:00<00:01, 16.00it/		
	Class Images	Instances	P R	mAP50

mAP50-95: 20% ## 4/20 [00:00<00:00	0. 17.28it/sl
Class Images Instance	•
mAP50-95: 30% ### 6/20 [00:00<00:00	0, 17.72it/s]
Class Images Instance	s P R mAP50
mAP50-95: 45% ####5 9/20 [00:00<00:0	0, 18.43it/s]
Class Images Instance	
mAP50-95: 55% #####5 11/20 [00:00<00:	
Class Images Instance	
mAP50-95: 65% #####5 13/20 [00:00<00:	
Class Images Instance	
mAP50-95: 75% ######5 15/20 [00:00<00:	
Class Images Instance	
mAP50-95: 85% #######5 17/20 [00:00<00:00 Class Images Instance	
Class Images Instance: mAP50-95: 95% #######5 19/20 [00:01<00:0	
Class Images Instance	
mAP50-95: 100% ######## 20/20 [00:01<00:0	
	0 0.982 0.973 0.992
0.811	0 0.302 0.370 0.332
01011	
Epoch GPU_mem box_loss obj_los	s cls_loss Instances Size
0% 0/40 [00:00 , ?it/s]</td <td></td>	
497/499 0.206G 0.03782 0.006603	3 0.02479 2 320:
0% 0/40 [00:00 , ?it/s]</td <td>0 0 00470</td>	0 0 00470
497/499 0.206G 0.03782 0.00660	
2% 2 1/40 [00:00<00:06, 5.82it/s]	
497/499 0.206G 0.02259 0.00493	
2% 2 1/40 [00:00<00:06, 5.82it/s] 497/499	
5% 5 2/40 [00:00<00:06, 6.10it/s]	
497/499 0.206G 0.01851 0.00474	
5% 5 2/40 [00:00<00:06, 6.10it/s]	
497/499 0.206G 0.01851 0.004743	
8% 7 3/40 [00:00<00:06, 5.97it/s]	
497/499 0.206G 0.01942 0.006174	_
8% 7 3/40 [00:00<00:06, 5.97it/s]	
497/499 0.206G 0.01942 0.006174	
10% # 4/40 [00:00<00:06, 5.91it/s	
497/499 0.206G 0.02449 0.00628	
10% # 4/40 [00:00<00:06, 5.91it/s	
497/499 0.206G 0.02449 0.00628	4 0.02169 2 320:
12% #2 5/40 [00:00<00:06, 5.61it/s	
497/499 0.206G 0.02702 0.00666	
12% #2 5/40 [00:01<00:06, 5.61it/s	s]
497/499 0.206G 0.02702 0.00666	1 0.02061 2 320:
15% #5 6/40 [00:01<00:05, 5.73it/s	s]
497/499 0.206G 0.03151 0.006473	3 0.02004 2 320:

15% #5	6/40 [00:01<00:05, 5.73it/s]			
497/499	0.206G 0.03151 0.006473	0.02004	2	320:
18% #7	7/40 [00:01<00:05, 5.59it/s]			
497/499	0.206G 0.02872 0.006893	0.01986	4	320:
18% #7	7/40 [00:01<00:05, 5.59it/s]			
497/499	0.206G 0.02872 0.006893	0.01986	4	320:
20% ##	8/40 [00:01<00:05, 5.50it/s]	0.04004		222
497/499	0.206G 0.02727 0.007445	0.01991	4	320:
20% ##	8/40 [00:01<00:05, 5.50it/s]	0.04004	4	000
497/499	0.206G 0.02727 0.007445	0.01991	4	320:
22% ##2	9/40 [00:01<00:05, 5.30it/s]	0.0400	•	000
497/499	0.206G 0.02642 0.007492	0.0196	2	320:
22% ##2	9/40 [00:01<00:05, 5.30it/s]	0.0400	•	000
497/499	0.206G 0.02642 0.007492	0.0196	2	320:
25% ##5	10/40 [00:01<00:05, 5.45it/s]			222
497/499	0.206G 0.02504 0.007127		1	320:
25% ##5	10/40 [00:01<00:05, 5.45it/s]			
497/499	0.206G 0.02504 0.007127		1	320:
28% ##7	11/40 [00:01<00:05, 5.54it/s]			
497/499	0.206G 0.02506 0.007387		4	320:
28% ##7	11/40 [00:02<00:05, 5.54it/s]		_	
497/499	0.206G 0.02506 0.007387		4	320:
30% ###	12/40 [00:02<00:05, 5.58it/s]			
497/499	0.206G 0.02393 0.007311		1	320:
30% ###	12/40 [00:02<00:05, 5.58it/s]			
497/499	0.206G 0.02393 0.007311		1	320:
32% ###2	13/40 [00:02<00:04, 5.54it/s]			
497/499	0.206G 0.02676 0.00719	0.01906	2	320:
32% ###2	13/40 [00:02<00:04, 5.54it/s]			
497/499	0.206G 0.02676 0.00719		2	320:
35% ###5	14/40 [00:02<00:04, 5.47it/s]			
497/499	0.206G 0.02565 0.006913		1	320:
35% ###5	14/40 [00:02<00:04, 5.47it/s]			
497/499	0.206G 0.02565 0.006913	0.01888	1	320:
38% ###7	15/40 [00:02<00:04, 5.57it/s]			
497/499	0.206G 0.02728 0.007141		3	320:
38% ###7	15/40 [00:02<00:04, 5.57it/s]			
497/499	0.206G 0.02728 0.007141	0.01883	3	320:
40% ####	16/40 [00:02<00:04, 5.50it/s]			
497/499	0.206G 0.02661 0.007779	0.0186	4	320:
40% ####	16/40 [00:03<00:04, 5.50it/s]]		
497/499	0.206G 0.02661 0.007779	0.0186	4	320:
42% ####2	17/40 [00:03<00:04, 5.29it/s]			
497/499	0.206G 0.02588 0.007629		1	320:
42% ####2	17/40 [00:03<00:04, 5.29it/s]			
497/499	0.206G 0.02588 0.007629	0.01841	1	320:
45% ####5	18/40 [00:03<00:04, 5.30it/s]			
497/499	0.206G 0.02699 0.007825	0.01829	2	320:

45% ####5	-	18/40 [00:03<00:04,				
497/499		0.206G 0.02699		0.01829	2	320:
48% ####7	١	19/40 [00:03<00:03,				
497/499		0.206G 0.02613		0.01801	2	320:
48% ####7	١	19/40 [00:03<00:03,				
497/499		0.206G 0.02613	0.007801	0.01801	2	320:
50% #####	١	20/40 [00:03<00:03,				
497/499		0.206G 0.02592		0.01897	2	320:
50% #####	١	20/40 [00:03<00:03,				
497/499		0.206G 0.02592		0.01897	2	320:
52% #####2	١	21/40 [00:03<00:03,			_	
497/499		0.206G 0.02652		0.01913	4	320:
52% #####2	١	21/40 [00:03<00:03,			_	
497/499			0.008078	0.01913	4	320:
55% #####5	١	22/40 [00:03<00:03,			_	
497/499		0.206G 0.02613		0.01904	4	320:
55% #####5	١	22/40 [00:04<00:03,			_	
497/499		0.206G 0.02613		0.01904	4	320:
57% #####7	١	23/40 [00:04<00:03,				
497/499		0.206G 0.02633		0.01994	2	320:
57% #####7	١	23/40 [00:04<00:03,				
497/499		0.206G 0.02633		0.01994	2	320:
60% ######	١	24/40 [00:04<00:02,			_	
497/499		0.206G 0.0267		0.02009	4	320:
60% ######	١	24/40 [00:04<00:02,				
497/499		0.206G 0.0267	0.008442	0.02009	4	320:
62% ######2	١	25/40 [00:04<00:02,				
497/499		0.206G 0.02682		0.0203	2	320:
62% ######2	١	25/40 [00:04<00:02,				
497/499			0.00844	0.0203	2	320:
65% ######5	١	26/40 [00:04<00:02,				
497/499		0.206G 0.02707		0.02046	3	320:
65% ######5		26/40 [00:04<00:02,				
497/499		0.206G 0.02707		0.02046	3	320:
	١	27/40 [00:04<00:02,				
497/499		0.206G 0.02642		0.02022	1	320:
	١	27/40 [00:05<00:02,				
497/499		0.206G 0.02642		0.02022	1	320:
70% ######	١	28/40 [00:05<00:02,				
497/499		0.206G 0.02624		0.02015	4	320:
	١	28/40 [00:05<00:02,				
497/499		0.206G 0.02624		0.02015	4	320:
72% #######2		29/40 [00:05<00:02,				
497/499		0.206G 0.02638		0.01993	2	320:
72% #######2		29/40 [00:05<00:02,				
497/499		0.206G 0.02638		0.01993	2	320:
75% #######5		30/40 [00:05<00:01,				
497/499		0.206G 0.02675	0.008713	0.01971	2	320:

75% ######5		30/40 [00:05<00:01,				
497/499		0.206G	0.02675			2	320:
78% ######7		31/40 [00:05<00:01,	5.43it/s]			
497/499		0.206G	0.02648	0.008838	0.0197	4	320:
78% ######7		31/40 [00:05<00:01,	5.43it/s			
497/499		0.206G	0.02648	0.008838	0.0197	4	320:
80% #######		32/40 [00:05<00:01,	5.40it/s			
497/499		0.206G	0.02599	0.008669	0.01957	1	320:
80% #######		32/40 [00:06<00:01,	5.40it/s			
497/499		0.206G	0.02599	0.008669	0.01957	1	320:
82% #######2		33/40 [00:06<00:01,	5.52it/s			
497/499		0.206G	0.02624	0.008813	0.02006	4	320:
82% #######2	1	33/40 [00:06<00:01,	5.52it/s			
497/499		0.206G	0.02624	0.008813	0.02006	4	320:
85% #######5		34/40 [00:06<00:01,	5.32it/s			
497/499		0.206G	0.02616	0.008736	0.01991	2	320:
85% #######5	I	34/40 [00:06<00:01,	5.32it/s]			
497/499		0.206G	0.02616	0.008736	0.01991	2	320:
88% #######7	ı	35/40 [00:06<00:00,	5.19it/s]			
497/499		0.206G	0.02645		0.01972	2	320:
88% #######7							
497/499		0.206G				2	320:
90% ########						_	
497/499	•	0.206G	0.02649		0.01955	2	320:
90% ########	ı					_	
497/499		0.206G	0.02649		0.01955	2	320:
92% ########2						-	020.
497/499	•	0.206G	0.02672			4	320:
92% ########2	1					-	020.
497/499	'	0.206G				4	320:
95% ########5	. 1				0.01010	-	020.
497/499	'	0.206G	0.02628	0.008663	0.01934	2	320:
95% ########5	. 1					2	020.
497/499		0.206G	0.02628		0.01934	2	320:
98% ########7					0.01301	2	020.
497/499		0.206G		0.008549	0.01918	1	320:
98% ########7						1	520.
497/499			0.02592			1	320:
100% #########						1	520.
497/499		0.206G	0.02592		0.01918	1	320:
100% #########						1	320.
100% #########	.#	40/40	[00.07<00.00	, 5.4/16/8	J		
		Claga	Tmogog	Tnatonaca	D	ם	m A D E O
mAP50-95: 0%		Class	•	Instances :00 , ?it/</td <td>P</td> <td>R</td> <td>mAP50</td>	P	R	mAP50
marou-90: 0%	1	Class		Instances	sj P	R	mAP50
mAD50_05 10%	' +		•			n	MAPSU
mAP50-95: 10%) f i			:00<00:01,		מ	m A D E O
mADEO OE - 00%	۰, ۱	Class	_	Instances	P	R	mAP50
mAP50-95: 20%	, Ŧ	t#f	4/20 [00	:00<00:01,	14.9U1T/S]		

Class	_	Instances		R	mAP50
mAP50-95: 30% ### Class	Images	0:00<00:00, Instances		R	mAP50
		0:00<00:00,			
Class	_	Instances		R	mAP50
mAP50-95: 50% ##### Class	Inages	00:00<00:00, Instances	, 14.851t/s] D	R	mAP50
	_	00:00<00:00	. 14.63it/sl		mai 50
Class		Instances		R	mAP50
mAP50-95: 70% ######	14/20 [00:00<00:00	, 14.98it/s]		
Class	Images	Instances	Р	R	mAP50
		00:01<00:00			
Class	•	Instances		R	mAP50
mAP50-95: 90% ########					1550
Class	_	Instances		R	mAP50
mAP50-95: 100% ######### Class		Instances		R	mAP50
mAP50-95: 100% #########	•				MAPSO
all	40		0.97	0.935	0.995
0.804	10	10	0.01	0.000	0.000
Epoch GPU_mem b	oox_loss	obj_loss	cls_loss	Instances	Size
0% 0/40 [00:	00<2 2i	+ /el			
		0.01552	0.02948	4	320:
0% 0/40 [00:00			0.02010	-	0_0.
	0.02039		0.02948	4	320:
2% 2 1/40 [00:00	0<00:07,	5.03it/s]			
498/499 0.206G	0.0151	0.01035	0.02129	1	320:
2% 2 1/40 [00:00					
498/499 0.206G			0.02129	1	320:
5% 5 2/40 [00:00					
	0.01455	0.008955	0.01938	2	320:
5% 5 2/40 [00:00			0.04000	•	000
			0.01938	2	320:
8% 7 3/40 [00:00	· ·	0.01111	0.010	4	200.
498/499 0.206G 8% 7 3/40 [00:00			0.018	4	320:
498/499 0.206G	· ·		0.018	4	320:
10% # 4/40 [00:0			0.010	-	020.
498/499 0.206G			0.02009	4	320:
10% # 4/40 [00:0					
498/499 0.206G	-		0.02009	4	320:
12% #2 5/40 [00:0					
498/499 0.206G	0.01805	0.01173	0.01995	4	320:
12% #2 5/40 [00:0)1<00:07,	4.95it/s]			
498/499 0.206G	0.01805	0.01173	0.01995	4	320:
15% #5 6/40 [00:0	01<00:06,	4.94it/s			

498/499	0.206G 0.01663 0.01103	0.01931	2	320:
15% #5	6/40 [00:01<00:06, 4.94it/s]			
498/499	0.206G 0.01663 0.01103	0.01931	2	320:
18% #7	7/40 [00:01<00:06, 4.91it/s]			
498/499	0.206G 0.02125 0.01061	0.01906	3	320:
18% #7	7/40 [00:01<00:06, 4.91it/s]			
498/499	0.206G 0.02125 0.01061	0.01906	3	320:
20% ##	8/40 [00:01<00:06, 5.04it/s]			
498/499	0.206G 0.02018 0.01019	0.01863	2	320:
20% ##	8/40 [00:01<00:06, 5.04it/s]			
498/499	0.206G 0.02018 0.01019	0.01863	2	320:
22% ##2	9/40 [00:01<00:05, 5.24it/s]			
498/499	0.206G 0.02068 0.01078	0.01846	4	320:
22% ##2	9/40 [00:01<00:05, 5.24it/s]			
498/499	0.206G 0.02068 0.01078		4	320:
25% ##5	10/40 [00:01<00:05, 5.27it/s]			
498/499	0.206G 0.01943 0.01011	0.0183	1	320:
25% ##5	10/40 [00:02<00:05, 5.27it/s]			
498/499	0.206G 0.01943 0.01011		1	320:
28% ##7	11/40 [00:02<00:05, 5.57it/s]			
•	0.206G 0.02076 0.00977		3	320:
28% ##7	11/40 [00:02<00:05, 5.57it/s]			
498/499	0.206G 0.02076 0.00977	0.01859	3	320:
30% ###	12/40 [00:02<00:04, 5.65it/s]			
498/499	0.206G 0.02029 0.0097	0.01861	2	320:
30% ###	12/40 [00:02<00:04, 5.65it/s]			
498/499	0.206G 0.02029 0.0097		2	320:
32% ###2	13/40 [00:02<00:04, 5.68it/s]			
498/499	0.206G 0.02302 0.009456		2	320:
32% ###2	13/40 [00:02<00:04, 5.68it/s]			
498/499	0.206G 0.02302 0.009456	0.01839	2	320:
35% ###5	14/40 [00:02<00:04, 5.43it/s]			
498/499	0.206G 0.0231 0.009335	0.01852	2	320:
35% ###5	14/40 [00:02<00:04, 5.43it/s]			
498/499	0.206G 0.0231 0.009335	0.01852	2	320:
38% ###7	15/40 [00:02<00:04, 5.13it/s]			
498/499	0.206G 0.02378 0.00962	0.01865	4	320:
38% ###7	15/40 [00:03<00:04, 5.13it/s]			
498/499	0.206G 0.02378 0.00962	0.01865	4	320:
40% ####	16/40 [00:03<00:04, 5.19it/s]			
498/499	0.206G 0.02334 0.009539	0.02017	2	320:
40% ####	16/40 [00:03<00:04, 5.19it/s]			
498/499	0.206G 0.02334 0.009539	0.02017	2	320:
42% ####2	17/40 [00:03<00:04, 5.11it/s]			
498/499	0.206G 0.02243 0.009153		1	320:
42% ####2	17/40 [00:03<00:04, 5.11it/s]			
498/499	0.206G 0.02243 0.009153	0.01993	1	320:
45% ####5	18/40 [00:03<00:04, 5.41it/s]			

498/499	0.206G 0.02399 0.009279 0.02059	2	320:
45% ####5	18/40 [00:03<00:04, 5.41it/s]		
498/499	0.206G 0.02399 0.009279 0.02059	2	320:
48% ####7	19/40 [00:03<00:03, 5.40it/s]		
498/499	0.206G 0.02456 0.009791 0.0211	4	320:
48% ####7	19/40 [00:03<00:03, 5.40it/s]	_	
498/499	0.206G 0.02456 0.009791 0.0211	4	320:
50% #####	20/40 [00:03<00:03, 5.52it/s]	4	200
498/499	0.206G 0.02418 0.009972 0.02097	4	320:
50% #####	20/40 [00:03<00:03, 5.52it/s]	4	200
498/499	0.206G 0.02418 0.009972 0.02097	4	320:
52% #####2	21/40 [00:03<00:03, 5.58it/s]	4	200.
498/499	0.206G 0.02524 0.01014 0.02091	4	320:
52% #####2 498/499	21/40 [00:04<00:03, 5.58it/s] 0.206G	4	320:
	0.206G 0.02524 0.01014 0.02091 22/40 [00:04<00:03, 5.50it/s]	4	320:
55% #####5 498/499	0.206G 0.02459 0.01007 0.02053	2	320:
490/499 55% #####5	0.206G 0.02459 0.01007 0.02055 22/40 [00:04<00:03, 5.50it/s]	2	320:
498/499	0.206G 0.02459 0.01007 0.02053	2	320:
490/499 57% #####7	23/40 [00:04<00:03, 5.59it/s]	2	320.
498/499	0.206G 0.02404 0.009818 0.0202	1	320:
57% #####7	23/40 [00:04<00:03, 5.59it/s]	1	320.
498/499	0.206G 0.02404 0.009818 0.0202	1	320:
60% ######	24/40 [00:04<00:02, 5.78it/s]	1	520.
498/499	0.206G 0.02399 0.01005 0.02021	4	320:
60% ######	24/40 [00:04<00:02, 5.78it/s]	-	020.
498/499	0.206G 0.02399 0.01005 0.02021	4	320:
62% ######2	25/40 [00:04<00:02, 5.79it/s]	-	020.
498/499	0.206G 0.02413 0.01022 0.02048	4	320:
62% ######2	25/40 [00:04<00:02, 5.79it/s]	-	020.
498/499	0.206G 0.02413 0.01022 0.02048	4	320:
65% ######5	26/40 [00:04<00:02, 5.65it/s]	-	020.
498/499	0.206G 0.02507 0.01031 0.02081	2	320:
65% ######5	26/40 [00:05<00:02, 5.65it/s]		
498/499	0.206G 0.02507 0.01031 0.02081	2	320:
	27/40 [00:05<00:02, 5.54it/s]		
498/499	0.206G 0.02604 0.01014 0.02068	2	320:
68% ######7	27/40 [00:05<00:02, 5.54it/s]		
498/499	0.206G 0.02604 0.01014 0.02068	2	320:
70% ######	28/40 [00:05<00:02, 5.48it/s]		
498/499	0.206G 0.02578 0.01008 0.02099	3	320:
70% ######	28/40 [00:05<00:02, 5.48it/s]		
498/499	0.206G 0.02578 0.01008 0.02099	3	320:
72% #######2	29/40 [00:05<00:02, 5.30it/s]		
498/499	0.206G 0.02527 0.009929 0.02078	1	320:
72% ######2	29/40 [00:05<00:02, 5.30it/s]		
498/499	0.206G 0.02527 0.009929 0.02078	1	320:
75% ######5	30/40 [00:05<00:01, 5.43it/s]		

498/499	0.206G 0.02542	0.009907	0.0207	2	320:
	30/40 [00:05<00:01,			_	
498/499	0.206G 0.02542		0.0207	2	320:
78% ######7	31/40 [00:05<00:01,	5.26it/s]			
498/499	0.206G 0.02626	0.00976	0.02055	2	320:
78% ######7	31/40 [00:05<00:01,	5.26it/s]			
498/499		0.00976	0.02055	2	320:
	32/40 [00:05<00:01,				
498/499			0.02068	2	320:
	32/40 [00:06<00:01,				
498/499	0.206G 0.02638		0.02068	2	320:
	33/40 [00:06<00:01,				
498/499		0.00954	0.02063	2	320:
	33/40 [00:06<00:01,				
498/499		0.00954	0.02063	2	320:
	34/40 [00:06<00:01,				
498/499			0.02097	4	320:
	34/40 [00:06<00:01,				
498/499	*		0.02097	4	320:
	35/40 [00:06<00:00,				
498/499		0.00997	0.02095	4	320:
	35/40 [00:06<00:00,				
498/499			0.02095	4	320:
	36/40 [00:06<00:00,				
498/499	0.206G 0.02657	0.009778	0.02083	1	320:
	36/40 [00:06<00:00,				
498/499	0.206G 0.02657		0.02083	1	320:
	37/40 [00:06<00:00,				
498/499	0.206G 0.02614		0.02056	1	320:
	37/40 [00:07<00:00,				
498/499	0.206G 0.02614		0.02056	1	320:
	38/40 [00:07<00:00,				
498/499	0.206G 0.02569		0.02039	1	320:
	38/40 [00:07<00:00,				
498/499	0.206G 0.02569		0.02039	1	320:
	39/40 [00:07<00:00,				
498/499		0.009554	0.02062	4	320:
	39/40 [00:07<00:00,				
498/499	0.206G 0.02555		0.02062	4	320:
	40/40 [00:07<00:00			_	
498/499		0.009554	0.02062	4	320:
100% ##########	40/40 [00:07<00:00	, 5.38it/s]			
	Class Trans	Tnatonasa	D	D	~
mADE0-05. 0%!	•	Instances	P 1	R	mAP50
mAP50-95: 0%		:00 , ?it/s</td <td></td> <td>D</td> <td>m A D E O</td>		D	m A D E O
mADE0-05. 10%	•	Instances	P 9 20i+/al	R	mAP50
mAP50-95: 10%		:00<00:00, 18		σ	m / DE /
	Class Images	Instances	Р	R	mAP50

mAP50-95:	20%1##	I 4/20 F0	0.00<00.00	10 20:+/a]		
	20% ## Class		0:00<00:00, Instances		R	mAP50
mAP50-95:		•	0:00<00:00,		It	IIIAF 30
MAI 00 50.	Class	Images			R	mAP50
mAP50-95:		_	0:00<00:00,		10	mai oo
	Class		Instances		R	mAP50
mAP50-95:		_	00:00<00:00			
	Class		Instances		R	mAP50
mAP50-95:	60% #####	_	00:00<00:00			
	Class	Images	Instances	Р	R	mAP50
mAP50-95:	70% ######	14/20 [00:00<00:00	, 16.92it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	80% #######	16/20 [00:00<00:00	, 17.33it/s]		
	Class	_	Instances		R	mAP50
mAP50-95:	90% ########					
	Class	_	Instances		R	mAP50
mAP50-95:	100% #########					
	Class	•	Instances		R	mAP50
mAP50-95:	100% #########					
	all	40	40	0.97	0.935	0.995
0.804						
Epoc	h GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
-	_	_	0 –	_		
0%	0/40 [00	:00 , ?i</td <td>t/s]</td> <td></td> <td></td> <td></td>	t/s]			
499/49	9 0.206G	0.02556	0.009209	0.01567	2	320:
0%			0.005205	0.01567	2	020.
O 70 1	0/40 [00:0			0.01567	2	020.
499/49		0 , ?it/</td <td></td> <td>0.01567</td> <td>2</td> <td>320:</td>		0.01567	2	320:
	9 0.206G	0 , ?it/<br 0.02556	s] 0.009209			
499/49	9 0.206G 1/40 [00:0	0 , ?it/<br 0.02556 0<00:06,	s] 0.009209 6.40it/s]			
499/49 2% 2 499/49 2% 2	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0	0 , ?it/<br 0.02556 0<00:06, 0.02893 0<00:06,	s] 0.009209 6.40it/s] 0.01158	0.01567	2	320:
499/49 2% 2 499/49 2% 2 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G	0 , ?it/<br 0.02556 0<00:06, 0.02893 0<00:06, 0.02893	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158	0.01567	2	320:
499/49 2% 2 499/49 2% 2 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0	0 , ?it/<br 0.02556 0<00:06, 0.02893 0<00:06, 0.02893	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158	0.01567	2	320: 320:
499/49 2% 2 499/49 2% 2 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0	0 , ?it/<br 0.02556 0<00:06, 0.02893 0<00:06, 0.02893	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s]	0.01567	2	320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G	0 , ?it/<br 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s]	0.01567 0.0183 0.0183	2 4 4	320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03137</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144</td> <td>0.01567 0.0183 0.0183</td> <td>2 4 4</td> <td>320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144	0.01567 0.0183 0.0183	2 4 4	320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G	0 , ?it/<br 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03137	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s]	0.01567 0.0183 0.0183 0.02529	2 4 4 3	320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03137</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015</td> <td>0.01567 0.0183 0.0183 0.02529</td> <td>2 4 4 3</td> <td>320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015	0.01567 0.0183 0.0183 0.02529	2 4 4 3	320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03137 0<00:06,</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s]</td> <td>0.01567 0.0183 0.0183 0.02529 0.02529 0.02401</td> <td>2 4 4 3</td> <td>320: 320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s]	0.01567 0.0183 0.0183 0.02529 0.02529 0.02401	2 4 4 3	320: 320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03137 0<00:06, 0.02752 0<00:06, 0.02752</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015</td> <td>0.01567 0.0183 0.0183 0.02529 0.02529</td> <td>2 4 4 3</td> <td>320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015	0.01567 0.0183 0.0183 0.02529 0.02529	2 4 4 3	320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7 499/49 10% #	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03137 0<00:06, 0.02752 0<00:06, 0.02752</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.92it/s]</td> <td>0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401</td> <td>2 4 4 3 3</td> <td>320: 320: 320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.92it/s]	0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401	2 4 4 3 3	320: 320: 320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7 499/49 10% # 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.02752 0<00:06, 0.02752 00<00:06, 0.02752</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709</td> <td>0.01567 0.0183 0.0183 0.02529 0.02529 0.02401</td> <td>2 4 4 3 3</td> <td>320: 320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709	0.01567 0.0183 0.0183 0.02529 0.02529 0.02401	2 4 4 3 3	320: 320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7 499/49 10% # 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03137 0<00:06, 0.02752 0<00:06, 0.02752 0<00:06, 0.02294 00<00:06,</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s]</td> <td>0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401</td> <td>2 4 4 3 3 2 2 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s]	0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401	2 4 4 3 3 2 2 1	320: 320: 320: 320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7 499/49 10% # 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03137 0<00:06, 0.02752 0<00:06, 0.02752 0<00:06, 0.02294</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s] 0.008709</td> <td>0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401</td> <td>2 4 4 3 3 2 2</td> <td>320: 320: 320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s] 0.008709	0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401	2 4 4 3 3 2 2	320: 320: 320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7 499/49 10% # 499/49 10% # 499/49 12% #2	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 5/40 [00:0	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03752 0<00:06, 0.02752 0<00:06, 0.02752 0<00:06, 0.02294 00<00:06, 0.02294</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s] 0.008709 5.71it/s]</td> <td>0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401 0.02215 0.02215</td> <td>2 4 4 3 3 2 2 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s] 0.008709 5.71it/s]	0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401 0.02215 0.02215	2 4 4 3 3 2 2 1 1	320: 320: 320: 320: 320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7 499/49 10% # 499/49 10% # 499/49 12% #2 499/49	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 5/40 [00:0 9 0.206G	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.02752 0<00:06, 0.02752 0<00:06, 0.02294 00<00:06, 0.02294</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s] 0.008709 5.71it/s] 0.009716</td> <td>0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401</td> <td>2 4 4 3 3 2 2 1</td> <td>320: 320: 320: 320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s] 0.008709 5.71it/s] 0.009716	0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401	2 4 4 3 3 2 2 1	320: 320: 320: 320: 320: 320: 320:
499/49 2% 2 499/49 2% 2 499/49 5% 5 499/49 5% 5 499/49 8% 7 499/49 10% # 499/49 10% # 499/49 12% #2	9 0.206G 1/40 [00:0 9 0.206G 1/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 2/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 3/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 4/40 [00:0 9 0.206G 5/40 [00:0 9 0.206G	0 , ?it/ 0.02556 0<00:06, 0.02893 0<00:06, 0.03137 0<00:06, 0.03137 0<00:06, 0.02752 0<00:06, 0.02752 0<00:06, 0.02294 00<00:06, 0.02294 00<00:06, 0.0239 01<00:06,</td <td>s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s] 0.008709 5.71it/s] 0.009716 5.71it/s]</td> <td>0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401 0.02215 0.02215</td> <td>2 4 4 3 3 2 2 1 1</td> <td>320: 320: 320: 320: 320: 320: 320: 320:</td>	s] 0.009209 6.40it/s] 0.01158 6.40it/s] 0.01158 5.87it/s] 0.01144 5.87it/s] 0.01144 5.92it/s] 0.01015 5.92it/s] 0.01015 5.67it/s] 0.008709 5.67it/s] 0.008709 5.71it/s] 0.009716 5.71it/s]	0.01567 0.0183 0.0183 0.02529 0.02529 0.02401 0.02401 0.02215 0.02215	2 4 4 3 3 2 2 1 1	320: 320: 320: 320: 320: 320: 320: 320:

15% #5	6/40 [00:01<00:05, 5.75it/s]			
499/499	0.206G 0.02192 0.00884	0.02063	1	320:
15% #5	6/40 [00:01<00:05, 5.75it/s]	0.00060	4	200
499/499	0.206G 0.02192 0.00884	0.02063	1	320:
18% #7 499/499	7/40 [00:01<00:05, 5.77it/s] 0.206G 0.02108 0.00822	0.02005	1	200.
499/499 18% #7	7/40 [00:01<00:05, 5.77it/s]	0.02005	1	320:
499/499	0.206G 0.02108 0.00822	0.02005	1	320:
20% ##	8/40 [00:01<00:05, 5.77it/s]	0.02003	1	520.
499/499	0.206G 0.01966 0.00795	0.01967	2	320:
20% ##	8/40 [00:01<00:05, 5.77it/s]	0.01001	-	020.
499/499	0.206G 0.01966 0.00795	0.01967	2	320:
22% ##2	9/40 [00:01<00:05, 5.95it/s]		_	
	0.206G 0.01769 0.007306	0.0177	0	320:
22% ##2	9/40 [00:01<00:05, 5.95it/s]		-	
499/499	0.206G 0.01769 0.007306	0.0177	0	320:
25% ##5	10/40 [00:01<00:04, 6.27it/s]		-	
499/499	0.206G 0.01792 0.00797	0.01755	4	320:
25% ##5	10/40 [00:01<00:04, 6.27it/s]			
499/499	0.206G 0.01792 0.00797	0.01755	4	320:
28% ##7	11/40 [00:01<00:04, 5.94it/s]	0.02.00	-	0_0.
	0.206G 0.01821 0.00866	0.01774	4	320:
28% ##7	11/40 [00:02<00:04, 5.94it/s]			
499/499	0.206G 0.01821 0.00866	0.01774	4	320:
30% ###	12/40 [00:02<00:05, 5.28it/s]			
499/499	0.206G 0.01752 0.008263	0.01742	1	320:
30% ###	12/40 [00:02<00:05, 5.28it/s]			
499/499	0.206G 0.01752 0.008263	0.01742	1	320:
32% ###2	13/40 [00:02<00:04, 5.43it/s]			
499/499	0.206G 0.01719 0.008073	0.01723	2	320:
32% ###2	13/40 [00:02<00:04, 5.43it/s]			
499/499	0.206G 0.01719 0.008073	0.01723	2	320:
35% ###5	14/40 [00:02<00:04, 5.55it/s]			
499/499	0.206G 0.01673 0.007793	0.01706	1	320:
35% ###5	14/40 [00:02<00:04, 5.55it/s]			
499/499	0.206G 0.01673 0.007793	0.01706	1	320:
38% ###7	15/40 [00:02<00:04, 5.47it/s]			
499/499	0.206G 0.01732 0.007514	0.01694	1	320:
38% ###7	15/40 [00:02<00:04, 5.47it/s]			
499/499	0.206G 0.01732 0.007514	0.01694	1	320:
40% ####	16/40 [00:02<00:04, 5.29it/s]			
499/499	0.206G 0.0172 0.007461	0.0168	1	320:
40% ####	16/40 [00:03<00:04, 5.29it/s]			
499/499	0.206G 0.0172 0.007461	0.0168	1	320:
42% ####2	17/40 [00:03<00:04, 5.30it/s]			
499/499	0.206G 0.01731 0.007802	0.01721	4	320:
42% ####2	17/40 [00:03<00:04, 5.30it/s]			
499/499	0.206G 0.01731 0.007802	0.01721	4	320:

45% ####5		18/40 [00:03<00:04,				
499/499		0.206G 0.01725		0.01723	4	320:
45% ####5	١	18/40 [00:03<00:04,				
499/499		0.206G 0.01725	0.008092	0.01723	4	320:
48% ####7	١	19/40 [00:03<00:04,			_	
499/499		0.206G 0.01797		0.01728	4	320:
48% ####7	١	19/40 [00:03<00:04,				
499/499		0.206G 0.01797	0.008724	0.01728	4	320:
50% #####	ı	20/40 [00:03<00:03,				
499/499		0.206G 0.01749		0.01707	1	320:
50% #####	ı	20/40 [00:03<00:03,				
499/499		0.206G 0.01749		0.01707	1	320:
52% #####2	١	21/40 [00:03<00:03,				
499/499		0.206G 0.01733		0.01697	2	320:
52% #####2	١	21/40 [00:03<00:03,				
499/499		0.206G 0.01733		0.01697	2	320:
55% #####5	١	22/40 [00:03<00:03,				
499/499		0.206G 0.01746		0.017	4	320:
55% #####5	١	22/40 [00:04<00:03,				
499/499		0.206G 0.01746		0.017	4	320:
57% #####7	١	23/40 [00:04<00:03,				
499/499		0.206G 0.01707		0.017	2	320:
57% #####7	١	23/40 [00:04<00:03,				
499/499		0.206G 0.01707	0.008747	0.017	2	320:
60% ######		24/40 [00:04<00:02,	5.46it/s]			
499/499		0.206G 0.01734		0.01683	2	320:
60% ######		24/40 [00:04<00:02,	5.46it/s]			
499/499		0.206G 0.01734	0.008857	0.01683	2	320:
62% ######2		25/40 [00:04<00:02,	5.40it/s			
499/499		0.206G 0.01697	0.008636	0.01672	1	320:
62% ######2		25/40 [00:04<00:02,	5.40it/s			
499/499		0.206G 0.01697	0.008636	0.01672	1	320:
65% ######5		26/40 [00:04<00:02,	5.24it/s			
499/499		0.206G 0.01749	0.008598	0.01676	2	320:
65% ######5		26/40 [00:04<00:02,	5.24it/s			
499/499		0.206G 0.01749	0.008598	0.01676	2	320:
68% ######7		27/40 [00:04<00:02,	5.14it/s			
499/499		0.206G 0.01784	0.008985	0.01681	4	320:
68% ######7	-	27/40 [00:05<00:02,	5.14it/s			
499/499		0.206G 0.01784	0.008985	0.01681	4	320:
70% ######	-	28/40 [00:05<00:02,	5.20it/s			
499/499		0.206G 0.01811	0.008952	0.01701	2	320:
70% #######	-	28/40 [00:05<00:02,	5.20it/s]			
499/499		0.206G 0.01811	0.008952	0.01701	2	320:
72% ######2	-	29/40 [00:05<00:02,	5.24it/s			
499/499		0.206G 0.0194	0.008954	0.01717	2	320:
72% ######2		29/40 [00:05<00:02,	5.24it/s]			
499/499		0.206G 0.0194	0.008954	0.01717	2	320:

T5K		_				
75% ######## 30/40 [00:05<00:01, 5.27it/s]						
A99/499				0.01711	2	320:
78% ######## 31/40 00:05<00:01, 5.26it/s 320: 499/499 0.206G 0.0194 0.008965 0.01708 4 320: 320: 499/499 0.206G 0.0194 0.008965 0.01708 4 320:						
499/499				0.01711	2	320:
Ref		•	· -			
A99/499				0.01708	4	320:
80% ######## 32/40 [00:05<00:01, 5.15it/s]		· · · · · · · · · · · · · · · · · · ·				
499/499	·			0.01708	4	320:
80% ######### 32/40 [00:06<00:01, 5.15it/s] 499/499		· · · · · · · · · · · · · · · · · · ·				
499/499 0.206G 0.01968 0.09119 0.01733 4 320: 82%				0.01733	4	320:
82% ############## 33/40 [00:06<00:01, 4.79it/s] 499/499		32/40 [00:06<00:01,	5.15it/s			
A99/499				0.01733	4	320:
82% ######### 33/40 [00:06<00:01, 4.79it/s] 499/499		· · · · · · · · · · · · · · · · · · ·				
########### 34/40 [00:06<00:01, 4.89it/s] 499/499				0.01735	3	320:
85% ########5 34/40 [00:06<00:01, 4.89it/s] 499/499		33/40 [00:06<00:01,	4.79it/s			
A99/499	499/499	0.206G 0.02024	0.009237	0.01735	3	320:
85% ######### 34/40 [00:06<00:01, 4.89it/s]	85% #######5	34/40 [00:06<00:01,	4.89it/s]			
########## 35/40 [00:06<00:00, 5.01it/s] 320: 88% ######## 35/40 [00:06<00:00, 5.01it/s] 320: 90% ######## 36/40 [00:06<00:00, 4.86it/s] 320: 90% ######## 36/40 [00:06<00:00, 4.86it/s] 320: 90% ######### 36/40 [00:06<00:00, 4.86it/s] 320: 90% ######### 37/40 [00:06<00:00, 4.86it/s] 320: 92% ######### 37/40 [00:06<00:00, 4.88it/s] 320: 92% ######### 37/40 [00:06<00:00, 4.88it/s] 320: 92% ######## 37/40 [00:07<00:00, 4.88it/s] 320: 95% ######### 38/40 [00:07<00:00, 4.88it/s] 320: 98% ######### 39/40 [00:07<00:00, 4.79it/s] 320: 98% ######### 39/40 [00:07<00:00, 4.79it/s] 499/499 0.206G 0.02137 0.009015 0.01766 3 320: 98% ########### 39/40 [00:07<00:00, 4.79it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ########## 40/40 [00:07<00:00, 4.79it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ########## 40/40 [00:07<00:00, 4.79it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ########## 40/40 [00:07<00:00, 4.73it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ###################################	499/499	0.206G 0.02007	0.009137	0.01728	1	320:
88% ######## 35/40 [00:06<00:00, 5.01it/s] 499/499	85% #######5	34/40 [00:06<00:01,	4.89it/s]			
##########	499/499	0.206G 0.02007	0.009137	0.01728	1	320:
88% ######## 35/40 [00:06<00:00, 5.01it/s] 499/499	88% #######7	35/40 [00:06<00:00,	5.01it/s			
499/499	499/499	0.206G 0.02093	0.009107	0.01726	2	320:
90% ######## 36/40 [00:06<00:00, 4.86it/s] 499/499	88% #######7	35/40 [00:06<00:00,	5.01it/s			
499/499 0.206G 0.02081 0.00907 0.01742 2 320: 90% ######### 36/40 [00:06<00:00, 4.86it/s] 499/499 0.206G 0.02081 0.00907 0.01742 2 320: 92% #########2 37/40 [00:06<00:00, 4.88it/s] 499/499 0.206G 0.02059 0.008975 0.01752 1 320: 92% #########2 37/40 [00:07<00:00, 4.88it/s] 499/499 0.206G 0.02059 0.008975 0.01752 1 320: 95% ########5 38/40 [00:07<00:00, 4.88it/s] 499/499 0.206G 0.02059 0.008975 0.01752 1 320: 95% ########5 38/40 [00:07<00:00, 4.88it/s] 499/499 0.206G 0.02137 0.009015 0.01766 3 320: 95% #########5 38/40 [00:07<00:00, 4.88it/s] 499/499 0.206G 0.02137 0.009015 0.01766 3 320: 98% ########7 39/40 [00:07<00:00, 4.79it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 98% ########7 39/40 [00:07<00:00, 4.79it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ######### 40/40 [00:07<00:00, 4.73it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ###################################	499/499	0.206G 0.02093	0.009107	0.01726	2	320:
90% ######## 36/40 [00:06<00:00, 4.86it/s] 499/499	90% #######	36/40 [00:06<00:00,	4.86it/s]			
499/499	499/499	0.206G 0.02081	0.00907	0.01742	2	320:
92% ########2 37/40 [00:06<00:00, 4.88it/s] 499/499	90% ########	36/40 [00:06<00:00,	4.86it/s]			
499/499	499/499	0.206G 0.02081	0.00907	0.01742	2	320:
92% ########2 37/40 [00:07<00:00, 4.88it/s] 499/499	92% ########2	37/40 [00:06<00:00,	4.88it/s]			
499/499	499/499	0.206G 0.02059	0.008975	0.01752	1	320:
95% ########5 38/40 [00:07<00:00, 4.88it/s] 499/499	92% ########2	37/40 [00:07<00:00,	4.88it/s]			
499/499	499/499	0.206G 0.02059	0.008975	0.01752	1	320:
95% ########5 38/40 [00:07<00:00, 4.88it/s] 499/499	95% ########5	38/40 [00:07<00:00,	4.88it/s]			
499/499	499/499	0.206G 0.02137	0.009015	0.01766	3	320:
98% ########7 39/40 [00:07<00:00, 4.79it/s] 499/499	95% ########5	38/40 [00:07<00:00,	4.88it/s]			
499/499 0.206G 0.02164 0.009109 0.01782 4 320: 98% ########7 39/40 [00:07<00:00, 4.79it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ######## 40/40 [00:07<00:00, 4.73it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ######### 40/40 [00:07<00:00, 5.28it/s] Class Images Instances P R mAP50 mAP50-95: 0% 0/20 [00:00 , ?it/s] Class Images Instances P R mAP50</td <td>499/499</td> <td>0.206G 0.02137</td> <td>0.009015</td> <td>0.01766</td> <td>3</td> <td>320:</td>	499/499	0.206G 0.02137	0.009015	0.01766	3	320:
98% ########7 39/40 [00:07<00:00, 4.79it/s] 499/499	98% ########7	39/40 [00:07<00:00,	4.79it/s			
499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ######### 40/40 [00:07<00:00, 4.73it/s] 499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ######### 40/40 [00:07<00:00, 5.28it/s] Class Images Instances P R mAP50 mAP50-95: 0% 0/20 [00:00 , ?it/s] Class Images Instances P R mAP50</td <td>499/499</td> <td>0.206G 0.02164</td> <td>0.009109</td> <td>0.01782</td> <td>4</td> <td>320:</td>	499/499	0.206G 0.02164	0.009109	0.01782	4	320:
100% ######### 40/40 [00:07<00:00, 4.73it/s] 499/499	98% ########7	39/40 [00:07<00:00,	4.79it/s			
499/499 0.206G 0.02164 0.009109 0.01782 4 320: 100% ######### 40/40 [00:07<00:00, 5.28it/s] Class Images Instances P R mAP50 mAP50-95: 0% 0/20 [00:00 , ?it/s] Class Images Instances P R mAP50</td <td>499/499</td> <td>0.206G 0.02164</td> <td>0.009109</td> <td>0.01782</td> <td>4</td> <td>320:</td>	499/499	0.206G 0.02164	0.009109	0.01782	4	320:
100% ######### 40/40 [00:07<00:00, 5.28it/s] MAP50-95: 0% Class Images Instances P R mAP50 Olass Images Instances P R mAP50 R mAP50	100% ##########	40/40 [00:07<00:00	, 4.73it/s]			
Class Images Instances P R mAP50 mAP50-95: 0% 0/20 [00:00 , ?it/s] Class Images Instances P R mAP50</td <td>499/499</td> <td>0.206G 0.02164</td> <td>0.009109</td> <td>0.01782</td> <td>4</td> <td>320:</td>	499/499	0.206G 0.02164	0.009109	0.01782	4	320:
mAP50-95: 0% 0/20 [00:00 , ?it/s] Class Images Instances P R mAP50</td <td>100% ##########</td> <td> 40/40 [00:07<00:00</td> <td>, 5.28it/s]</td> <td></td> <td></td> <td></td>	100% ##########	40/40 [00:07<00:00	, 5.28it/s]			
mAP50-95: 0% 0/20 [00:00 , ?it/s] Class Images Instances P R mAP50</td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Class Images Instances P R mAP50		•			R	mAP50
<u> </u>	mAP50-95: 0%	0/20 [00	:00 , ?it/s]</td <td>]</td> <td></td> <td></td>]		
mAP50-95: 10% # 2/20 [00:00<00:01, 15.26it/s]		Class Images	Instances	P	R	mAP50
	mAP50-95: 10%	# 2/20 [00	:00<00:01, 15	5.26it/s]		

	Class	Images	Instances	P	R	mAP50
mAP50-95:	20% ##	4/20 [00	0:00<00:01,	14.91it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	30% ###	6/20 [00	0:00<00:00,	15.38it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	40% ####	8/20 [00	0:00<00:00,	16.41it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	50% #####	10/20 [0	00:00<00:00,	14.65it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	60% ######	12/20 [0	00:00<00:00,	15.22it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	70% ######	14/20 [0	00:00<00:00,	15.47it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	80% #######	16/20 [0	00:01<00:00,	15.63it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	90% ########	18/20 [0	00:01<00:00,	15.55it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	100% #########	20/20 [0	00:01<00:00,	16.43it/s]		
	Class	Images	Instances	P	R	mAP50
mAP50-95:	100% #########	20/20 [0	00:01<00:00,	15.72it/s]		
	all	40	40	0.978	0.969	0.99
0.803						

500 epochs completed in 1.260 hours.

Optimizer stripped from runs\train\exp5\weights\last.pt, 14.4MB Optimizer stripped from runs\train\exp5\weights\best.pt, 14.4MB

Fusing layers...

Model summary: 157 layers, 7055974 parameters, 0 gradients, 15.9 GFLOPs

	Class		Images Instances	P	R	mAP50
mAP50-95:	0%	-	0/20 [00:00 , ?it/</td <td>s]</td> <td></td> <td></td>	s]		
	Class		Images Instances	P	R	mAP50
mAP50-95:	5% 5	-	1/20 [00:00<00:03,	4.92it/s]		
	Class		Images Instances	P	R	mAP50
mAP50-95:	15% #5	-	3/20 [00:00<00:01,	8.60it/s]		
	Class		Images Instances	P	R	mAP50
mAP50-95:	25% ##5	-	5/20 [00:00<00:01,	11.25it/s]		
	Class		Images Instances	P	R	mAP50
mAP50-95:	35% ###5		7/20 [00:00<00:01,	12.86it/s]		
	Class		Images Instances	P	R	mAP50
mAP50-95:	45% ####5	-	9/20 [00:00<00:00,	14.48it/s]		
	Class		Images Instances	P	R	mAP50
mAP50-95:	60% ######		12/20 [00:00<00:00,	16.27it/s]		
	Class		Images Instances	P	R	mAP50
mAP50-95:	70% ######	-	14/20 [00:01<00:00,	16.31it/s]		
	Class		Images Instances	P	R	mAP50

```
mAP50-95: 80%|####### | 16/20 [00:01<00:00, 16.02it/s]
                           Images Instances
                                                                        mAP50
                 Class
                                                                 R.
mAP50-95: 90%|######## | 18/20 [00:01<00:00, 16.62it/s]
                           Images Instances
                                                                 R
                                                                        mAP50
                 Class
mAP50-95: 100%|########| 20/20 [00:01<00:00, 17.06it/s]
                           Images Instances
                                                                 R
                                                                        mAP50
                 Class
mAP50-95: 100%|#########| 20/20 [00:01<00:00, 14.67it/s]
                   all
                               40
                                          40
                                                  0.961
                                                             0.951
                                                                        0.991
0.817
                               40
                                          20
                                                             0.903
                                                                        0.987
                 awake
                                                      1
0.761
                               40
                                          20
                                                  0.921
                                                                        0.995
                drowsy
                                                                 1
0.873
```

Results saved to runs\train\exp5

```
[59]: model = torch.hub.load('ultralytics/yolov5','custom',path = 'yolov5/runs/train/

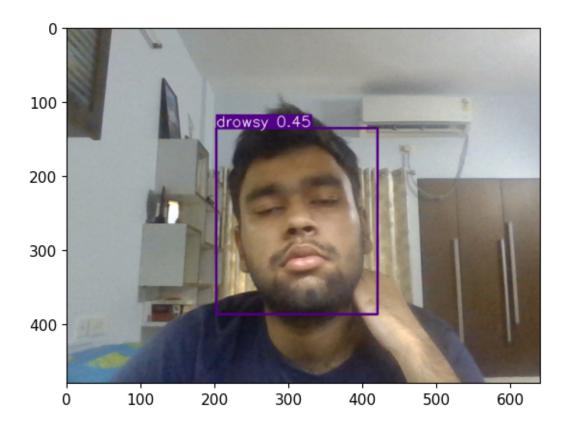
exp5/weights/last.pt',force_reload = True)
```

```
Downloading: "https://github.com/ultralytics/yolov5/zipball/master" to C:\Users\KIIT/.cache\torch\hub\master.zip
YOLOv5 2023-7-11 Python-3.9.13 torch-2.0.1+cu117 CUDA:0 (GeForce MX330, 2048MiB)
```

Fusing layers...

Model summary: 157 layers, 7055974 parameters, 0 gradients, 15.9 GFLOPs Adding AutoShape...

[66]: <function matplotlib.pyplot.show(close=None, block=None)>



```
[69]: #real time detections
#if you want ot use any other video you can add the path in videocapture
cap = cv2.VideoCapture(0)
while cap.isOpened():
    ret,frame = cap.read()
    #make detections
    results = model(frame)

    cv2.imshow('Detection',np.squeeze(results.render()))
    if cv2.waitKey(10) & OxFF == ord('q'):
        break
cap.release()
cv2.destroyAllWindows()
```

[]: