

# update1-yolov5

December 7, 2023

[1]: !nvidia-smi

```
Thu Dec  7 16:09:17 2023
+-----+
| NVIDIA-SMI 525.105.17    Driver Version: 525.105.17    CUDA Version: 12.0      |
|-----+-----+-----+
| GPU  Name      Persistence-M| Bus-Id     Disp.A | Volatile Uncorr. ECC | |
| Fan  Temp  Perf  Pwr:Usage/Cap|      Memory-Usage | GPU-Util  Compute M. |
|                               |              |             | MIG M. |
|-----+-----+-----+-----+
|  0  Tesla T4           Off  | 00000000:00:04.0 Off |                  0 | |
| N/A   44C     P8    9W /  70W |      0MiB / 15360MiB |      0%     Default |
|                               |              |             | N/A |
+-----+-----+-----+
+-----+
| Processes:
| GPU  GI  CI      PID  Type  Process name          GPU Memory |
|       ID  ID
|-----+-----+-----+-----+-----+-----+
|  No running processes found
+-----+
```

[2]: !pip install torch torchvision

```
Requirement already satisfied: torch in /usr/local/lib/python3.10/dist-packages
(2.1.0+cu118)
Requirement already satisfied: torchvision in /usr/local/lib/python3.10/dist-
packages (0.16.0+cu118)
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-
packages (from torch) (3.13.1)
Requirement already satisfied: typing-extensions in
/usr/local/lib/python3.10/dist-packages (from torch) (4.5.0)
Requirement already satisfied: sympy in /usr/local/lib/python3.10/dist-packages
(from torch) (1.12)
Requirement already satisfied: networkx in /usr/local/lib/python3.10/dist-
packages (from torch) (3.2.1)
Requirement already satisfied: jinja2 in /usr/local/lib/python3.10/dist-packages
```

```
(from torch) (3.1.2)
Requirement already satisfied: fsspec in /usr/local/lib/python3.10/dist-packages
(from torch) (2023.6.0)
Requirement already satisfied: triton==2.1.0 in /usr/local/lib/python3.10/dist-
packages (from torch) (2.1.0)
Requirement already satisfied: numpy in /usr/local/lib/python3.10/dist-packages
(from torchvision) (1.23.5)
Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-
packages (from torchvision) (2.31.0)
Requirement already satisfied: pillow!=8.3.*,>=5.3.0 in
/usr/local/lib/python3.10/dist-packages (from torchvision) (9.4.0)
Requirement already satisfied: MarkupSafe>=2.0 in
/usr/local/lib/python3.10/dist-packages (from jinja2->torch) (2.1.3)
Requirement already satisfied: charset-normalizer<4,>=2 in
/usr/local/lib/python3.10/dist-packages (from requests->torchvision) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-
packages (from requests->torchvision) (3.6)
Requirement already satisfied: urllib3<3,>=1.21.1 in
/usr/local/lib/python3.10/dist-packages (from requests->torchvision) (2.0.7)
Requirement already satisfied: certifi>=2017.4.17 in
/usr/local/lib/python3.10/dist-packages (from requests->torchvision)
(2023.11.17)
Requirement already satisfied: mpmath>=0.19 in /usr/local/lib/python3.10/dist-
packages (from sympy->torch) (1.3.0)
```

```
[3]: from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive

```
[4]: import zipfile
import os

# Path to the zip file (you can use the file browser to get this path)
zip_file_path = '/content/drive/MyDrive/Dataset_Potholes/Pothole_Images_'
    ↴(2)-20231121T011908Z-001.zip'

# Destination directory where you want to extract the files
destination_folder = '/content/potholedetection/dataset'

# Create the destination folder if it does not exist
if not os.path.exists(destination_folder):
    os.makedirs(destination_folder)

# Unzipping the file
with zipfile.ZipFile(zip_file_path, 'r') as zip_ref:
    zip_ref.extractall(destination_folder)
```

```
print(f"Files extracted to: {destination_folder}")
```

Files extracted to: /content/potholedetection/dataset

```
[5]: import os
import shutil
import random

# Set the root directory containing images and labels
root_dir = '/content/potholedetection/dataset/Pothole_Images (2)/'

# Set the name of the dataset folder to create
dataset_name = '/content/potholedetection/dataset/data_ready_for_training/'

# Set the ratios for splitting the dataset
train_ratio = 0.8
val_ratio = 0.1 # 10% for validation

# Set the names of the subdirectories for images and labels
image_subdir = 'images'
label_subdir = 'labels'

# Create the dataset folder structure
dataset_dir = os.path.join(root_dir, dataset_name)
os.makedirs(os.path.join(dataset_dir, 'train', image_subdir), exist_ok=True)
os.makedirs(os.path.join(dataset_dir, 'train', label_subdir), exist_ok=True)
os.makedirs(os.path.join(dataset_dir, 'test', image_subdir), exist_ok=True)
os.makedirs(os.path.join(dataset_dir, 'test', label_subdir), exist_ok=True)
os.makedirs(os.path.join(dataset_dir, 'val', image_subdir), exist_ok=True)
os.makedirs(os.path.join(dataset_dir, 'val', label_subdir), exist_ok=True)

# List and shuffle all image files
image_files = [f for f in os.listdir(root_dir) if f.endswith('.jpg')] # List
# all .jpg files
random.shuffle(image_files)

# Calculate the number of files for train, test, and val sets
num_images = len(image_files)
num_train_files = int(train_ratio * num_images)
num_val_files = int(val_ratio * num_images)
num_test_files = num_images - num_train_files - num_val_files

# Function to copy files to a specific dataset
def copy_files(start_index, end_index, dataset_type):
    for i in range(start_index, end_index):
        image_name = image_files[i]
```

```

label_name = os.path.splitext(image_name)[0] + '.txt' # Assuming label file has .txt extension

src_image_path = os.path.join(root_dir, image_name)
dst_image_path = os.path.join(dataset_dir, dataset_type, image_subdir, image_name)
shutil.copy(src_image_path, dst_image_path)

src_label_path = os.path.join(root_dir, label_name)
dst_label_path = os.path.join(dataset_dir, dataset_type, label_subdir, label_name)
shutil.copy(src_label_path, dst_label_path)

# Copy files to train, test, and val directories
copy_files(0, num_train_files, 'train')
copy_files(num_train_files, num_train_files + num_test_files, 'test')
copy_files(num_train_files + num_test_files, num_images, 'val')

```

[6]: import yaml

```

def create_custom_yaml(path, nm_cls, classes):
    train_path = f"{path}/train"
    test_path = f"{path}/test"
    val_path = f"{path}/val"

    num_classes = nm_cls

    data = {
        'train': train_path,
        'test': test_path,
        'val': val_path,
        'nc': num_classes,
        'names': classes
    }

    with open('/content/potholes_data.yaml', 'w') as yaml_file:
        yaml.dump(data, yaml_file)

    print("YAML file created successfully.")

```

[7]: create\_custom\_yaml('/content/potholedetection/dataset/  
↳data\_ready\_for\_training', 1, ['potholes'])

YAML file created successfully.

[8]: !git clone https://github.com/ultralytics/yolov5 # clone  
%cd yolov5

```
!pip install -r requirements.txt # install
```

```
Cloning into 'yolov5'...
remote: Enumerating objects: 16088, done.
remote: Counting objects: 100% (32/32), done.
remote: Compressing objects: 100% (30/30), done.
remote: Total 16088 (delta 10), reused 14 (delta 2), pack-reused 16056
Receiving objects: 100% (16088/16088), 14.72 MiB | 15.03 MiB/s, done.
Resolving deltas: 100% (11042/11042), done.
/content/yolov5
Collecting gitpython>=3.1.30 (from -r requirements.txt (line 5))
  Downloading GitPython-3.1.40-py3-none-any.whl (190 kB)
    190.6/190.6 kB 4.7 MB/s eta 0:00:00
Requirement already satisfied: matplotlib>=3.3 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 6))
(3.7.1)
Requirement already satisfied: numpy>=1.22.2 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 7)) (1.23.5)
Requirement already satisfied: opencv-python>=4.1.1 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 8))
(4.8.0.76)
Collecting Pillow>=10.0.1 (from -r requirements.txt (line 9))
  Downloading Pillow-10.1.0-cp310-cp310-manylinux_2_28_x86_64.whl (3.6 MB)
    3.6/3.6 kB 67.1 MB/s eta 0:00:00
Requirement already satisfied: psutil in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 10)) (5.9.5)
Requirement already satisfied: PyYAML>=5.3.1 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 11)) (6.0.1)
Requirement already satisfied: requests>=2.23.0 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 12))
(2.31.0)
Requirement already satisfied: scipy>=1.4.1 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 13)) (1.11.4)
Collecting thop>=0.1.1 (from -r requirements.txt (line 14))
  Downloading thop-0.1.1.post2209072238-py3-none-any.whl (15 kB)
Requirement already satisfied: torch>=1.8.0 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 15)) (2.1.0+cu118)
Requirement already satisfied: torchvision>=0.9.0 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 16))
(0.16.0+cu118)
Requirement already satisfied: tqdm>=4.64.0 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 17)) (4.66.1)
Collecting ultralytics>=8.0.147 (from -r requirements.txt (line 18))
  Downloading ultralytics-8.0.223-py3-none-any.whl (659 kB)
```

659.4/659.4

kB 52.2 MB/s eta 0:00:00

Requirement already satisfied: pandas>=1.1.4 in  
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 27))  
(1.5.3)

Requirement already satisfied: seaborn>=0.11.0 in  
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 28))  
(0.12.2)

Requirement already satisfied: setuptools>=65.5.1 in  
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 42))  
(67.7.2)

Collecting gitdb<5,>=4.0.1 (from gitpython>=3.1.30->-r requirements.txt (line 5))

  Downloading gitdb-4.0.11-py3-none-any.whl (62 kB)

  62.7/62.7 kB

7.9 MB/s eta 0:00:00

Requirement already satisfied: contourpy>=1.0.1 in  
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r  
requirements.txt (line 6)) (1.2.0)

Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.10/dist-  
packages (from matplotlib>=3.3->-r requirements.txt (line 6)) (0.12.1)

Requirement already satisfied: fonttools>=4.22.0 in  
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r  
requirements.txt (line 6)) (4.45.1)

Requirement already satisfied: kiwisolver>=1.0.1 in  
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r  
requirements.txt (line 6)) (1.4.5)

Requirement already satisfied: packaging>=20.0 in  
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r  
requirements.txt (line 6)) (23.2)

Requirement already satisfied: pyparsing>=2.3.1 in  
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r  
requirements.txt (line 6)) (3.1.1)

Requirement already satisfied: python-dateutil>=2.7 in  
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r  
requirements.txt (line 6)) (2.8.2)

Requirement already satisfied: charset-normalizer<4,>=2 in  
/usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->-r  
requirements.txt (line 12)) (3.3.2)

Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-  
packages (from requests>=2.23.0->-r requirements.txt (line 12)) (3.6)

Requirement already satisfied: urllib3<3,>=1.21.1 in  
/usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->-r  
requirements.txt (line 12)) (2.0.7)

Requirement already satisfied: certifi>=2017.4.17 in  
/usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->-r  
requirements.txt (line 12)) (2023.11.17)

```
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-
packages (from torch>=1.8.0->-r requirements.txt (line 15)) (3.13.1)
Requirement already satisfied: typing-extensions in
/usr/local/lib/python3.10/dist-packages (from torch>=1.8.0->-r requirements.txt
(line 15)) (4.5.0)
Requirement already satisfied: sympy in /usr/local/lib/python3.10/dist-packages
(from torch>=1.8.0->-r requirements.txt (line 15)) (1.12)
Requirement already satisfied: networkx in /usr/local/lib/python3.10/dist-
packages (from torch>=1.8.0->-r requirements.txt (line 15)) (3.2.1)
Requirement already satisfied: jinja2 in /usr/local/lib/python3.10/dist-packages
(from torch>=1.8.0->-r requirements.txt (line 15)) (3.1.2)
Requirement already satisfied: fsspec in /usr/local/lib/python3.10/dist-packages
(from torch>=1.8.0->-r requirements.txt (line 15)) (2023.6.0)
Requirement already satisfied: triton==2.1.0 in /usr/local/lib/python3.10/dist-
packages (from torch>=1.8.0->-r requirements.txt (line 15)) (2.1.0)
Requirement already satisfied: py-cpuinfo in /usr/local/lib/python3.10/dist-
packages (from ultralytics>=8.0.147->-r requirements.txt (line 18)) (9.0.0)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-
packages (from pandas>=1.1.4->-r requirements.txt (line 27)) (2023.3.post1)
Collecting smmap<6,>=3.0.1 (from gitdb<5,>=4.0.1->gitpython>=3.1.30->-r
requirements.txt (line 5))
    Downloading smmap-5.0.1-py3-none-any.whl (24 kB)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-
packages (from python-dateutil>=2.7->matplotlib>=3.3->-r requirements.txt (line
6)) (1.16.0)
Requirement already satisfied: MarkupSafe>=2.0 in
/usr/local/lib/python3.10/dist-packages (from jinja2->torch>=1.8.0->-r
requirements.txt (line 15)) (2.1.3)
Requirement already satisfied: mpmath>=0.19 in /usr/local/lib/python3.10/dist-
packages (from sympy->torch>=1.8.0->-r requirements.txt (line 15)) (1.3.0)
Installing collected packages: smmap, Pillow, gitdb, thop, gitpython,
ultralytics
Attempting uninstall: Pillow
    Found existing installation: Pillow 9.4.0
    Uninstalling Pillow-9.4.0:
        Successfully uninstalled Pillow-9.4.0
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.
imageio 2.31.6 requires pillow<10.1.0,>=8.3.2, but you have pillow 10.1.0 which
is incompatible.
Successfully installed Pillow-10.1.0 gitdb-4.0.11 gitpython-3.1.40
smmap-5.0.1 thop-0.1.1.post2209072238 ultralytics-8.0.223
Training the model from scratch
```

```
[9]: !python train.py --batch 8 --epochs 300 --data '/content/potholes_data.yaml' --weights '' --cfg '/content/yolov5/models/yolov5m.yaml' --project 'Train_scratch' --cache
```

```
2023-12-07 16:14:10.107209: E
tensorflow/compiler/xla/stream_executor/cuda/cuda_dnn.cc:9342] Unable to
register cuDNN factory: Attempting to register factory for plugin cuDNN when one
has already been registered
2023-12-07 16:14:10.107257: E
tensorflow/compiler/xla/stream_executor/cuda/cuda_fft.cc:609] Unable to register
cuFFT factory: Attempting to register factory for plugin cuFFT when one has
already been registered
2023-12-07 16:14:10.107288: E
tensorflow/compiler/xla/stream_executor/cuda/cuda_blas.cc:1518] Unable to
register cuBLAS factory: Attempting to register factory for plugin cuBLAS when
one has already been registered
train: weights=, cfg=/content/yolov5/models/yolov5m.yaml,
data=/content/potholes_data.yaml, hyp=data/hyps.scratch-low.yaml,
epochs=300, batch_size=8, imgsz=640, rect=False, resume=False, nosave=False,
noval=False, noautoanchor=False, noplots=False, evolve=None, bucket=, cache=ram,
image_weights=False, device=, multi_scale=False, single_cls=False,
optimizer=SGD, sync_bn=False, workers=8, project=Train_scratch, 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 v7.0-247-g3f02fde Python-3.10.12 torch-2.1.0+cu118 CUDA:0 (Tesla T4,
15102MiB)
```

```
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 Train_scratch', view
at http://localhost:6006/
Downloading https://ultralytics.com/assets/Arial.ttf to
/root/.config/Ultralytics/Arial.ttf...
100% 755k/755k [00:00<00:00, 76.2MB/s]
Overriding model.yaml nc=80 with nc=1
```

```
from    n      params   module
arguments
  0          -1    1      5280  models.common.Conv
```

[3,

```

48, 6, 2, 2]
 1           -1  1    41664  models.common.Conv      [48,
96, 3, 2]
 2           -1  2    65280  models.common.C3      [96,
96, 2]
 3           -1  1   166272  models.common.Conv      [96,
192, 3, 2]
 4           -1  4   444672  models.common.C3
[192, 192, 4]
 5           -1  1   664320  models.common.Conv
[192, 384, 3, 2]
 6           -1  6  2512896  models.common.C3
[384, 384, 6]
 7           -1  1  2655744  models.common.Conv
[384, 768, 3, 2]
 8           -1  2  4134912  models.common.C3
[768, 768, 2]
 9           -1  1  1476864  models.common.SPPF
[768, 768, 5]
10          -1  1   295680  models.common.Conv
[768, 384, 1, 1]
11          -1  1       0  torch.nn.modules.upsampling.Upsample
[None, 2, 'nearest']
12          [-1, 6]  1       0  models.common.Concat      [1]
13          -1  2  1182720  models.common.C3
[768, 384, 2, False]
14          -1  1   74112  models.common.Conv
[384, 192, 1, 1]
15          -1  1       0  torch.nn.modules.upsampling.Upsample
[None, 2, 'nearest']
16          [-1, 4]  1       0  models.common.Concat      [1]
17          -1  2   296448  models.common.C3
[384, 192, 2, False]
18          -1  1   332160  models.common.Conv
[192, 192, 3, 2]
19          [-1, 14] 1       0  models.common.Concat      [1]
20          -1  2  1035264  models.common.C3
[384, 384, 2, False]
21          -1  1  1327872  models.common.Conv
[384, 384, 3, 2]
22          [-1, 10] 1       0  models.common.Concat      [1]
23          -1  2  4134912  models.common.C3
[768, 768, 2, False]
24          [17, 20, 23] 1   24246  models.yolo.Detect      [1,
[[10, 13, 16, 30, 33, 23], [30, 61, 62, 45, 59, 119], [116, 90, 156, 198, 373,
326]], [192, 384, 768]]
YOLOv5m summary: 291 layers, 20871318 parameters, 20871318 gradients, 48.2
GFLOPs

```

```
AMP: checks passed
optimizer: SGD(lr=0.01) with parameter groups 79 weight(decay=0.0),
82 weight(decay=0.0005), 82 bias
albumentations: Blur(p=0.01, blur_limit=(3, 7)), MedianBlur(p=0.01,
blur_limit=(3, 7)), ToGray(p=0.01), CLAHE(p=0.01, clip_limit=(1, 4.0),
tile_grid_size=(8, 8))
train: Scanning
/content/potholedetection/dataset/data_ready_for_training/train/labels... 144
images, 0 backgrounds, 0 corrupt: 100% 144/144 [00:03<00:00, 38.00it/s]
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/1.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/142.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/143.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/144.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/145.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/146.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/147.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/148.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/150.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/151.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/152.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/153.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/155.jpg:
```

```
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/156.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/158.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/159.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/160.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/161.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/162.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/163.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/164.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/165.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/167.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/168.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/169.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/170.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/171.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/172.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/173.jpg:
```

```
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/174.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/176.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/177.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/178.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/180.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/181.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/182.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/183.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/185.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/186.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/187.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/188.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/189.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/190.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/191.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/192.jpg:
```

```
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/193.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/195.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/196.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/197.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/198.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/2.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/200.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/3.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/4.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/5.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/6.jpg:
corrupt JPEG restored and saved
train: WARNING
/content/potholedetection/dataset/data_ready_for_training/train/images/9.jpg:
corrupt JPEG restored and saved
train: New cache created:
/content/potholedetection/dataset/data_ready_for_training/train/labels.cache
train: Caching images (0.1GB ram): 100% 144/144 [00:08<00:00,
17.89it/s]
val: Scanning
/content/potholedetection/dataset/data_ready_for_training/val/labels... 18
images, 0 backgrounds, 0 corrupt: 100% 18/18 [00:00<00:00, 37.20it/s]
val: WARNING
/content/potholedetection/dataset/data_ready_for_training/val/images/154.jpg:
corrupt JPEG restored and saved
val: WARNING
```

```

/content/potholedetection/dataset/data_ready_for_training/val/images/175.jpg:
corrupt JPEG restored and saved
val: WARNING
/content/potholedetection/dataset/data_ready_for_training/val/images/184.jpg:
corrupt JPEG restored and saved
val: WARNING
/content/potholedetection/dataset/data_ready_for_training/val/images/7.jpg:
corrupt JPEG restored and saved
val: New cache created:
/content/potholedetection/dataset/data_ready_for_training/val/labels.cache
val: Caching images (0.0GB ram): 100% 18/18 [00:01<00:00,
14.63it/s]

```

**AutoAnchor:** 3.99 anchors/target, 1.000 Best Possible Recall (BPR).

Current anchors are a good fit to dataset  
 Plotting labels to Train\_scratch/exp/labels.jpg...  
 Image sizes 640 train, 640 val  
 Using 8 dataloader workers  
 Logging results to Train\_scratch/exp  
 Starting training for 300 epochs...

Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size	
0/299	3.12G	0.1088	0.03452	0	22	640:	
100% 18/18 [00:08<00:00,	2.17it/s]						
		Class	Images	Instances	P	R	mAP50
mAP50-95: 100%	2/2 [00:02<00:00,	1.28s/it]					
		all	18	25	0.00148	0.32	0.0012
0.000443							

Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size	
1/299	3.73G	0.1094	0.03313	0	22	640:	
100% 18/18 [00:03<00:00,	4.93it/s]						
		Class	Images	Instances	P	R	mAP50
mAP50-95: 100%	2/2 [00:01<00:00,	1.61it/s]					
		all	18	25	0.00167	0.36	0.00156
0.00054							

Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size	
2/299	3.74G	0.1045	0.03298	0	18	640:	
100% 18/18 [00:03<00:00,	5.00it/s]						
		Class	Images	Instances	P	R	mAP50
mAP50-95: 100%	2/2 [00:01<00:00,	1.57it/s]					
		all	18	25	0.00167	0.36	0.00146
0.000497							

Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
3/299	3.74G	0.1026	0.03396	0	25	640:
100% 18/18 [00:03<00:00,	5.04it/s]					

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:01<00:00, 1.66it/s]						
all	18	25	0.00167	0.36	0.00162	
0.000547						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
4/299	3.74G	0.1012	0.03308	0	25	640:
100% 18/18 [00:03<00:00, 5.02it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:01<00:00, 1.62it/s]						
all	18	25	0.00167	0.36	0.00156	
0.000535						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
5/299	3.74G	0.09957	0.03483	0	25	640:
100% 18/18 [00:03<00:00, 4.98it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:01<00:00, 1.64it/s]						
all	18	25	0.00185	0.4	0.00253	
0.000856						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
6/299	3.74G	0.1012	0.03464	0	24	640:
100% 18/18 [00:03<00:00, 4.99it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 2.14it/s]						
all	18	25	0.00241	0.52	0.00262	
0.000524						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
7/299	3.74G	0.09832	0.0348	0	36	640:
100% 18/18 [00:03<00:00, 5.03it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 2.40it/s]						
all	18	25	0.00222	0.48	0.00203	
0.000549						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
8/299	3.74G	0.09855	0.03338	0	22	640:
100% 18/18 [00:03<00:00, 5.02it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 3.48it/s]						
all	18	25	0.00755	0.04	0.00075	
0.000181						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
9/299	3.74G	0.09692	0.03601	0	22	640:
100% 18/18 [00:03<00:00, 4.97it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 5.29it/s]						
all	18	25	0.00742	0.04	0.000906	
0.000169						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
10/299	3.74G	0.09351	0.03514	0	25	640:
100% 18/18 [00:03<00:00, 5.02it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 5.61it/s]						
all	18	25	0.000559	0.12	0.000389	
6.1e-05						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
11/299	3.74G	0.09095	0.03317	0	24	640:
100% 18/18 [00:03<00:00, 4.99it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 4.14it/s]						
all	18	25	0.000936	0.2	0.00081	
0.000241						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
12/299	3.74G	0.08692	0.03338	0	26	640:
100% 18/18 [00:03<00:00, 5.01it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 3.51it/s]						
all	18	25	0.00148	0.32	0.0011	
0.000319						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
13/299	3.74G	0.08985	0.03551	0	22	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 4.42it/s]						
all	18	25	0.0015	0.32	0.00171	
0.000401						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
14/299	3.74G	0.08801	0.03691	0	31	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.79it/s]						
all	18	25	0.000578	0.12	0.000393	
0.000127						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
15/299	3.74G	0.08418	0.03451	0	19	640:
100% 18/18 [00:03<00:00, 4.93it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.34it/s]						
	all	18	25	0.000578	0.12	0.000395
8.9e-05						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
16/299	3.74G	0.08388	0.03391	0	23	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.62it/s]						
	all	18	25	0.000775	0.16	0.000683
0.000269						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
17/299	3.74G	0.08345	0.03332	0	19	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.37it/s]						
	all	18	25	0.00174	0.36	0.00754
0.00191						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
18/299	3.74G	0.08107	0.03258	0	25	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.77it/s]						
	all	18	25	0.00155	0.32	0.00626
0.00119						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
19/299	3.74G	0.08336	0.03213	0	18	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.50it/s]						
	all	18	25	0.00136	0.28	0.0019
0.000383						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
20/299	3.74G	0.08347	0.03441	0	22	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.57it/s]						
	all	18	25	0.00213	0.44	0.00513
0.000953						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
21/299	3.74G	0.0759	0.03386	0	22	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.40it/s]						
all	18	25	0.00194	0.4	0.0019	
0.000426						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
22/299	3.74G	0.07666	0.03267	0	19	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.36it/s]						
all	18	25	0.00174	0.36	0.00204	
0.000669						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
23/299	3.74G	0.0777	0.03312	0	17	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.44it/s]						
all	18	25	0.00224	0.48	0.00529	
0.00102						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
24/299	3.74G	0.08099	0.03357	0	30	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.25it/s]						
all	18	25	0.00204	0.44	0.00316	
0.000922						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
25/299	3.74G	0.07762	0.03391	0	19	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.14it/s]						
all	18	25	0.00241	0.52	0.00495	
0.000972						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
26/299	3.74G	0.08184	0.03402	0	19	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.07it/s]						
all	18	25	0.00222	0.48	0.0046	
0.00106						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
27/299	3.74G	0.07937	0.0337	0	21	640:
100% 18/18 [00:03<00:00, 4.91it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.16it/s]						
all	18	25	0.00241	0.52	0.00541	
0.00131						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
28/299	3.74G	0.07964	0.03431	0	26	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.98it/s]						
all	18	25	0.00204	0.44	0.00398	
0.00111						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
29/299	3.74G	0.08062	0.03328	0	29	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.03it/s]						
all	18	25	0.00278	0.6	0.00618	
0.00165						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
30/299	3.74G	0.0793	0.03578	0	21	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.05it/s]						
all	18	25	0.00222	0.48	0.00559	
0.00157						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
31/299	3.74G	0.07832	0.03283	0	24	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.85it/s]						
all	18	25	0.00204	0.44	0.00432	
0.00144						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
32/299	3.74G	0.0754	0.0312	0	19	640:
100% 18/18 [00:03<00:00, 4.95it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.14it/s]						
all	18	25	0.00222	0.48	0.00402	
0.00113						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
33/299	3.74G	0.07822	0.03398	0	27	640:
100% 18/18 [00:03<00:00, 4.92it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.05it/s]						
all	18	25	0.00259	0.56	0.00724	
0.00217						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
34/299	3.74G	0.07525	0.03361	0	17	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.06it/s]						
all	18	25	0.00259	0.56	0.00748	
0.0018						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
35/299	3.74G	0.07557	0.03325	0	25	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.07it/s]						
all	18	25	0.00204	0.44	0.00571	
0.00145						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
36/299	3.74G	0.08051	0.03013	0	21	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.80it/s]						
all	18	25	0.00222	0.48	0.00445	
0.00144						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
37/299	3.74G	0.07995	0.03189	0	17	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.95it/s]						
all	18	25	0.00241	0.52	0.00647	
0.00186						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
38/299	3.74G	0.07728	0.03403	0	20	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.08it/s]						
all	18	25	0.00259	0.56	0.00721	
0.00167						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
39/299	3.74G	0.07891	0.03235	0	18	640:
100% 18/18 [00:03<00:00, 4.94it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.14it/s]						
all	18	25	0.00259	0.56	0.00818	
0.00236						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
40/299	3.74G	0.07579	0.03415	0	23	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.84it/s]						
all	18	25	0.00241	0.52	0.0177	
0.00463						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
41/299	3.74G	0.07531	0.03296	0	27	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.19it/s]						
all	18	25	0.00241	0.52	0.0168	
0.00397						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
42/299	3.74G	0.08173	0.03295	0	24	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.11it/s]						
all	18	25	0.00241	0.52	0.0135	
0.00346						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
43/299	3.74G	0.07833	0.03321	0	28	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.00it/s]						
all	18	25	0.00241	0.52	0.0117	
0.00262						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
44/299	3.74G	0.07714	0.03395	0	20	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.04it/s]						
all	18	25	0.00241	0.52	0.00876	
0.00255						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
45/299	3.74G	0.07775	0.03303	0	21	640:
100% 18/18 [00:03<00:00, 4.90it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.05it/s]						
all	18	25	0.00278	0.6	0.0105	
0.00242						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
46/299	3.74G	0.07379	0.03156	0	24	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.98it/s]						
all	18	25	0.00259	0.56	0.012	
0.00311						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
47/299	3.74G	0.08071	0.0309	0	19	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.00it/s]						
all	18	25	0.00241	0.52	0.00817	
0.00212						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
48/299	3.74G	0.0751	0.03089	0	18	640:
100% 18/18 [00:03<00:00, 4.95it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.93it/s]						
all	18	25	0.00259	0.56	0.0125	
0.00258						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
49/299	3.74G	0.07433	0.03302	0	25	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.99it/s]						
all	18	25	0.00259	0.56	0.0133	
0.00388						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
50/299	3.74G	0.0754	0.03154	0	26	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.85it/s]						
all	18	25	0.00278	0.6	0.0181	
0.0048						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
51/299	3.74G	0.07392	0.03385	0	20	640:
100% 18/18 [00:03<00:00, 4.94it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.01it/s]						
all	18	25	0.00241	0.52	0.0106	
0.00289						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
52/299	3.74G	0.07609	0.03227	0	23	640:
100% 18/18 [00:03<00:00, 4.95it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.13it/s]						
all	18	25	0.00259	0.56	0.0133	
0.00301						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
53/299	3.74G	0.07913	0.03123	0	13	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.98it/s]						
all	18	25	0.00278	0.6	0.0472	
0.00694						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
54/299	3.74G	0.07558	0.0323	0	25	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.22it/s]						
all	18	25	0.00278	0.6	0.0229	
0.00431						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
55/299	3.74G	0.07588	0.03403	0	24	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.17it/s]						
all	18	25	0.00278	0.6	0.0298	
0.00477						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
56/299	3.74G	0.07605	0.0353	0	26	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.82it/s]						
all	18	25	0.00278	0.6	0.0196	
0.00294						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
57/299	3.74G	0.07455	0.03107	0	21	640:
100% 18/18 [00:03<00:00, 4.89it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.01it/s]						
all	18	25	0.00259	0.56	0.00692	
0.00186						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
58/299	3.74G	0.07724	0.03397	0	15	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.22it/s]						
all	18	25	0.00259	0.56	0.00731	
0.00174						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
59/299	3.74G	0.07609	0.03704	0	33	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.10it/s]						
all	18	25	0.00296	0.64	0.0127	
0.00266						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
60/299	3.74G	0.07441	0.0365	0	16	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.07it/s]						
all	18	25	0.00259	0.56	0.0121	
0.00248						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
61/299	3.74G	0.07107	0.03454	0	22	640:
100% 18/18 [00:03<00:00, 4.65it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.97it/s]						
all	18	25	0.00278	0.6	0.0127	
0.00359						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
62/299	3.74G	0.07531	0.03611	0	28	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.01it/s]						
all	18	25	0.00259	0.56	0.015	
0.00492						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
63/299	3.74G	0.07874	0.03231	0	30	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.11it/s]						
all	18	25	0.00315	0.68	0.0299	
0.00578						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
64/299	3.74G	0.07439	0.03201	0	20	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.16it/s]						
all	18	25	0.00296	0.64	0.0279	
0.00541						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
65/299	3.74G	0.07634	0.03282	0	22	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.28it/s]						
all	18	25	0.00296	0.64	0.0151	
0.00316						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
66/299	3.74G	0.07346	0.03515	0	27	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.24it/s]						
all	18	25	0.00315	0.68	0.0153	
0.00287						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
67/299	3.74G	0.07381	0.03361	0	24	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.22it/s]						
all	18	25	0.00296	0.64	0.01	
0.0022						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
68/299	3.74G	0.07466	0.02969	0	18	640:
100% 18/18 [00:03<00:00, 4.96it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.16it/s]						
all	18	25	0.00315	0.68	0.0118	
0.00224						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
69/299	3.74G	0.07562	0.02988	0	22	640:
100% 18/18 [00:03<00:00, 4.90it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.22it/s]						
all	18	25	0.00315	0.68	0.0139	
0.00261						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
70/299	3.74G	0.07181	0.03346	0	31	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.27it/s]						
all	18	25	0.00315	0.68	0.0129	
0.00227						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
71/299	3.74G	0.07219	0.03191	0	23	640:
100% 18/18 [00:03<00:00, 4.97it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.34it/s]						
all	18	25	0.00296	0.64	0.014	
0.00203						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
72/299	3.74G	0.07587	0.03598	0	21	640:
100% 18/18 [00:03<00:00, 4.96it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.34it/s]						
all	18	25	0.00278	0.6	0.012	
0.00184						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
73/299	3.74G	0.0743	0.03173	0	22	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.29it/s]						
all	18	25	0.00296	0.64	0.00847	
0.00157						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
74/299	3.74G	0.07388	0.0331	0	20	640:
100% 18/18 [00:03<00:00, 4.95it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.35it/s]						
all	18	25	0.00315	0.68	0.0102	
0.00215						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
75/299	3.74G	0.07292	0.03363	0	32	640:
100% 18/18 [00:03<00:00, 4.95it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.26it/s]						
all	18	25	0.00296	0.64	0.0085	
0.00184						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
76/299	3.74G	0.07558	0.03154	0	25	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.00it/s]						
all	18	25	0.00278	0.6	0.00865	
0.00195						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
77/299	3.74G	0.07523	0.03212	0	20	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.18it/s]						
all	18	25	0.00259	0.56	0.00647	
0.00153						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
78/299	3.74G	0.07409	0.0311	0	19	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.05it/s]						
all	18	25	0.00278	0.6	0.00545	
0.00154						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
79/299	3.74G	0.07516	0.03498	0	26	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.24it/s]						
all	18	25	0.00259	0.56	0.0097	
0.00214						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
80/299	3.74G	0.07609	0.03369	0	28	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.32it/s]						
all	18	25	0.00241	0.52	0.0109	
0.00219						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
81/299	3.74G	0.07404	0.03309	0	21	640:
100% 18/18 [00:03<00:00, 4.92it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.31it/s]						
all	18	25	0.00278	0.6	0.047	
0.00591						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
82/299	3.74G	0.07845	0.03198	0	20	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.31it/s]						
all	18	25	0.00259	0.56	0.025	
0.00446						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
83/299	3.74G	0.07154	0.03147	0	29	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.37it/s]						
all	18	25	0.00278	0.6	0.0202	
0.00437						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
84/299	3.74G	0.07542	0.03623	0	29	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.27it/s]						
all	18	25	0.00278	0.6	0.0185	
0.00454						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
85/299	3.74G	0.07831	0.034	0	24	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.09it/s]						
all	18	25	0.00296	0.64	0.0238	
0.00437						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
86/299	3.74G	0.07172	0.03345	0	23	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.03it/s]						
all	18	25	0.00278	0.6	0.0209	
0.00424						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
87/299	3.74G	0.07548	0.03737	0	24	640:
100% 18/18 [00:03<00:00, 4.91it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.43it/s]						
all	18	25	0.00296	0.64	0.0152	
0.0037						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
88/299	3.74G	0.07356	0.03352	0	21	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.42it/s]						
all	18	25	0.00352	0.76	0.0241	
0.00481						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
89/299	3.74G	0.07087	0.03182	0	19	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.35it/s]						
all	18	25	0.00296	0.64	0.0257	
0.00481						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
90/299	3.74G	0.07648	0.03122	0	23	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.43it/s]						
all	18	25	0.00315	0.68	0.0222	
0.00564						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
91/299	3.74G	0.07084	0.03271	0	26	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.47it/s]						
all	18	25	0.00333	0.72	0.0234	
0.00501						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
92/299	3.74G	0.07375	0.03408	0	15	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.31it/s]						
all	18	25	0.00315	0.68	0.0182	
0.00353						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
93/299	3.74G	0.07279	0.03206	0	22	640:
100% 18/18 [00:03<00:00, 4.86it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.28it/s]						
all	18	25	0.00278	0.6	0.0203	
0.00391						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
94/299	3.74G	0.07333	0.03239	0	19	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.30it/s]						
all	18	25	0.00278	0.6	0.0394	
0.00919						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
95/299	3.74G	0.07428	0.03323	0	22	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.11it/s]						
all	18	25	0.00296	0.64	0.0458	
0.00903						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
96/299	3.74G	0.07488	0.03529	0	32	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.14it/s]						
all	18	25	0.00333	0.72	0.0481	
0.0111						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
97/299	3.74G	0.07564	0.03229	0	26	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.19it/s]						
all	18	25	0.00389	0.84	0.0492	
0.00952						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
98/299	3.74G	0.07435	0.03252	0	26	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.24it/s]						
all	18	25	0.00389	0.84	0.0393	
0.0106						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
99/299	3.74G	0.0715	0.03395	0	26	640:
100% 18/18 [00:03<00:00, 4.90it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 6.99it/s]						
all	18	25	0.00389	0.84	0.0361	
0.0086						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
100/299	3.74G	0.07402	0.03684	0	27	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.28it/s]						
all	18	25	0.0037	0.8	0.0501	
0.0106						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
101/299	3.74G	0.07196	0.03449	0	19	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.31it/s]						
all	18	25	0.00389	0.84	0.0476	
0.00933						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
102/299	3.74G	0.07275	0.03509	0	19	640:
100% 18/18 [00:03<00:00, 4.86it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.27it/s]						
all	18	25	0.00407	0.88	0.0515	
0.00886						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
103/299	3.74G	0.07099	0.03237	0	24	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.31it/s]						
all	18	25	0.00389	0.84	0.0244	
0.00499						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
104/299	3.74G	0.06987	0.03339	0	24	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.37it/s]						
all	18	25	0.00389	0.84	0.0433	
0.008						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
105/299	3.74G	0.07012	0.0339	0	30	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.35it/s]						
all	18	25	0.00689	0.64	0.0775	
0.0143						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
106/299	3.74G	0.06967	0.03262	0	20	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.41it/s]						
all	18	25	0.00874	0.52	0.0366	
0.00939						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
107/299	3.74G	0.07123	0.03541	0	26	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.28it/s]						
all	18	25	0.00666	0.56	0.0337	
0.0082						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
108/299	3.74G	0.07235	0.03341	0	26	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.27it/s]						
all	18	25	0.00906	0.48	0.0293	
0.00904						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
109/299	3.74G	0.07118	0.03551	0	25	640:
100% 18/18 [00:03<00:00, 4.85it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.10it/s]						
all	18	25	0.0213	0.44	0.0273	
0.00801						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
110/299	3.74G	0.06956	0.03263	0	23	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.22it/s]						
all	18	25	0.0168	0.52	0.0345	
0.00719						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
111/299	3.74G	0.0718	0.03358	0	23	640:
100% 18/18 [00:03<00:00, 4.91it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.29it/s]						
all	18	25	0.0191	0.48	0.0309	
0.00608						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
112/299	3.74G	0.07404	0.03205	0	23	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.26it/s]						
all	18	25	0.0258	0.48	0.038	
0.00712						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
113/299	3.74G	0.06898	0.03177	0	24	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.23it/s]						
all	18	25	0.0137	0.48	0.0373	
0.00665						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
114/299	3.74G	0.07121	0.03305	0	34	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.24it/s]						
all	18	25	0.0155	0.68	0.0308	
0.00557						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
115/299	3.74G	0.07306	0.03421	0	29	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.30it/s]						
all	18	25	0.0229	0.44	0.0567	
0.0104						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
116/299	3.74G	0.0687	0.03402	0	24	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.38it/s]						
all	18	25	0.0256	0.52	0.0847	
0.0138						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
117/299	3.74G	0.06782	0.03166	0	17	640:
100% 18/18 [00:03<00:00, 4.90it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.46it/s]						
all	18	25	0.0709	0.24	0.0738	
0.0194						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
118/299	3.74G	0.06935	0.03229	0	22	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.49it/s]						
all	18	25	0.0853	0.16	0.0708	
0.0178						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
119/299	3.74G	0.07327	0.02937	0	15	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.59it/s]						
all	18	25	0.147	0.16	0.0819	
0.0224						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
120/299	3.74G	0.07129	0.03247	0	15	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.64it/s]						
all	18	25	0.144	0.12	0.0827	
0.0249						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
121/299	3.74G	0.06822	0.03457	0	24	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.58it/s]						
all	18	25	0.0886	0.12	0.0807	
0.0183						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
122/299	3.74G	0.06547	0.03297	0	27	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.35it/s]						
all	18	25	0.187	0.12	0.13	
0.02						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
123/299	3.74G	0.06812	0.03192	0	26	640:
100% 18/18 [00:03<00:00, 4.94it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.98it/s]						
all	18	25	0.18	0.24	0.0879	
0.0132						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
124/299	3.74G	0.06785	0.0326	0	27	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.89it/s]						
all	18	25	0.0588	0.2	0.0364	
0.00972						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
125/299	3.74G	0.06856	0.03384	0	24	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.72it/s]						
all	18	25	0.0521	0.36	0.0497	
0.0135						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
126/299	3.74G	0.06998	0.03524	0	20	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.72it/s]						
all	18	25	0.0476	0.32	0.0417	
0.0115						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
127/299	3.74G	0.06758	0.03221	0	18	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.48it/s]						
all	18	25	0.0496	0.28	0.0378	
0.00872						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
128/299	3.74G	0.06417	0.03201	0	28	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.57it/s]						
all	18	25	0.0357	0.4	0.0427	
0.00968						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
129/299	3.74G	0.06895	0.03365	0	27	640:
100% 18/18 [00:03<00:00, 4.85it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.59it/s]						
all	18	25	0.0212	0.32	0.0224	
0.00474						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
130/299	3.74G	0.0691	0.03344	0	33	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.51it/s]						
all	18	25	0.0381	0.28	0.0348	
0.00787						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
131/299	3.74G	0.06903	0.03352	0	30	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.62it/s]						
all	18	25	0.095	0.12	0.0606	
0.0123						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
132/299	3.74G	0.06754	0.03305	0	19	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.51it/s]						
all	18	25	0.052	0.36	0.0506	
0.011						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
133/299	3.74G	0.07068	0.03328	0	20	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.39it/s]						
all	18	25	0.0868	0.24	0.0517	
0.011						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
134/299	3.74G	0.06711	0.03305	0	28	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.48it/s]						
all	18	25	0.0685	0.28	0.0496	
0.0118						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
135/299	3.74G	0.06595	0.03445	0	23	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.64it/s]						
all	18	25	0.0969	0.36	0.0694	
0.0133						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
136/299	3.74G	0.06428	0.03515	0	25	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.75it/s]						
all	18	25	0.0792	0.28	0.065	
0.0125						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
137/299	3.74G	0.06495	0.03398	0	25	640:
100% 18/18 [00:03<00:00, 4.86it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.50it/s]						
all	18	25	0.0974	0.24	0.0706	
0.0136						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
138/299	3.74G	0.06654	0.03564	0	30	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.86it/s]						
all	18	25	0.186	0.12	0.0526	
0.00934						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
139/299	3.74G	0.06292	0.03275	0	25	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.49it/s]						
all	18	25	0.124	0.12	0.0678	
0.0172						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
140/299	3.74G	0.06564	0.03547	0	21	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.90it/s]						
all	18	25	0.121	0.16	0.0727	
0.0214						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
141/299	3.74G	0.06642	0.03258	0	21	640:
100% 18/18 [00:03<00:00, 4.86it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.91it/s]						
all	18	25	0.157	0.12	0.0775	
0.0225						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
142/299	3.74G	0.06669	0.0325	0	20	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.95it/s]						
all	18	25	0.866	0.08	0.0949	
0.0257						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
143/299	3.74G	0.06694	0.03266	0	31	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.78it/s]						
all	18	25	0.239	0.12	0.12	
0.0362						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
144/299	3.74G	0.06628	0.03549	0	39	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.92it/s]						
all	18	25	0.0608	0.08	0.0588	
0.0135						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
145/299	3.74G	0.06643	0.03622	0	28	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.96it/s]						
all	18	25	0.0869	0.2	0.0496	
0.0105						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
146/299	3.74G	0.06544	0.03466	0	28	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.53it/s]						
all	18	25	0.116	0.24	0.052	
0.0114						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
147/299	3.74G	0.06629	0.0335	0	20	640:
100% 18/18 [00:03<00:00, 4.89it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.20it/s]						
all	18	25	0.0502	0.08	0.045	
0.0114						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
148/299	3.74G	0.06802	0.03115	0	21	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.37it/s]						
all	18	25	0.0657	0.08	0.0546	
0.0125						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
149/299	3.74G	0.06718	0.03409	0	27	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.14it/s]						
all	18	25	0.0975	0.16	0.0533	
0.0189						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
150/299	3.74G	0.06759	0.03591	0	19	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.33it/s]						
all	18	25	0.101	0.2	0.0515	
0.0166						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
151/299	3.74G	0.06749	0.03325	0	26	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.45it/s]						
all	18	25	0.0789	0.08	0.0466	
0.0179						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
152/299	3.74G	0.06463	0.03433	0	25	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.64it/s]						
all	18	25	0.0472	0.32	0.0314	
0.00643						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
153/299	3.74G	0.06533	0.03567	0	25	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.26it/s]						
all	18	25	0.00137	0.2	0.00101	
0.000299						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
154/299	3.74G	0.06194	0.0312	0	23	640:
100% 18/18 [00:03<00:00, 4.94it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.31it/s]						
all	18	25	0.000926	0.2	0.000623	
0.000164						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
155/299	3.74G	0.06667	0.03514	0	24	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.36it/s]						
all	18	25	0.000557	0.12	0.000362	
0.000129						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
156/299	3.74G	0.06664	0.03219	0	22	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.00it/s]						
all	18	25	0.000741	0.16	0.000577	
0.000102						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
157/299	3.74G	0.06576	0.03495	0	27	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.96it/s]						
all	18	25	0.0342	0.12	0.0166	
0.00346						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
158/299	3.74G	0.06399	0.03296	0	20	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.57it/s]						
all	18	25	0.0559	0.16	0.0353	
0.0067						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
159/299	3.74G	0.06845	0.03267	0	28	640:
100% 18/18 [00:03<00:00, 4.91it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.47it/s]						
all	18	25	0.0873	0.12	0.0671	
0.0139						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
160/299	3.74G	0.06499	0.03136	0	22	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.47it/s]						
all	18	25	0.078	0.12	0.0833	
0.0204						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
161/299	3.74G	0.06426	0.03367	0	28	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.47it/s]						
all	18	25	0.128	0.234	0.0808	
0.0191						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
162/299	3.74G	0.06251	0.03271	0	21	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.40it/s]						
all	18	25	0.149	0.08	0.117	
0.0365						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
163/299	3.74G	0.06473	0.03378	0	28	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.59it/s]						
all	18	25	0.0578	0.2	0.0374	
0.00903						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
164/299	3.74G	0.06692	0.03303	0	29	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.77it/s]						
all	18	25	0.224	0.12	0.0824	
0.0143						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
165/299	3.74G	0.06328	0.03325	0	28	640:
100% 18/18 [00:03<00:00, 4.89it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.03it/s]						
all	18	25	0.00123	0.24	0.0013	
0.000301						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
166/299	3.74G	0.06445	0.03247	0	23	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.24it/s]						
all	18	25	0.00107	0.16	0.00354	
0.000484						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
167/299	3.74G	0.0681	0.03137	0	17	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.45it/s]						
all	18	25	0.00193	0.28	0.0109	
0.00154						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
168/299	3.74G	0.0638	0.03199	0	24	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.87it/s]						
all	18	25	0.174	0.12	0.0587	
0.0202						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
169/299	3.74G	0.06171	0.03251	0	27	640:
100% 18/18 [00:03<00:00, 4.86it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.57it/s]						
all	18	25	0.113	0.16	0.096	
0.0256						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
170/299	3.74G	0.06087	0.0309	0	22	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.59it/s]						
all	18	25	0.116	0.2	0.125	
0.0335						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
171/299	3.74G	0.06374	0.03253	0	23	640:
100% 18/18 [00:03<00:00, 4.91it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.59it/s]						
all	18	25	0.131	0.16	0.111	
0.0264						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
172/299	3.74G	0.06204	0.03423	0	30	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.71it/s]						
all	18	25	0.0688	0.12	0.0721	
0.0151						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
173/299	3.74G	0.06378	0.03064	0	20	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.71it/s]						
all	18	25	0.0906	0.12	0.0432	
0.0113						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
174/299	3.74G	0.0655	0.03302	0	13	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.73it/s]						
all	18	25	0.0668	0.12	0.0704	
0.0175						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
175/299	3.74G	0.06646	0.03352	0	30	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.58it/s]						
all	18	25	0.101	0.16	0.075	
0.0149						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
176/299	3.74G	0.06499	0.03061	0	19	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.69it/s]						
all	18	25	0.224	0.16	0.121	
0.0253						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
177/299	3.74G	0.06588	0.03121	0	24	640:
100% 18/18 [00:03<00:00, 4.87it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.06it/s]						
all	18	25	0.182	0.16	0.15	0.0391
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
178/299	3.74G	0.06187	0.03356	0	20	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.24it/s]						
all	18	25	0.368	0.12	0.117	0.0281
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
179/299	3.74G	0.06118	0.03206	0	20	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.47it/s]						
all	18	25	0.124	0.2	0.136	0.041
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
180/299	3.74G	0.06229	0.03226	0	28	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.49it/s]						
all	18	25	0.134	0.2	0.112	0.0308
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
181/299	3.74G	0.06224	0.03425	0	28	640:
100% 18/18 [00:03<00:00, 4.85it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.63it/s]						
all	18	25	0.151	0.24	0.0963	0.0287
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
182/299	3.74G	0.05969	0.03035	0	32	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.57it/s]						
all	18	25	0.148	0.2	0.0965	0.0247
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
183/299	3.74G	0.06348	0.03314	0	29	640:
100% 18/18 [00:03<00:00, 4.90it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.37it/s]						
all	18	25	0.147	0.2	0.154	
0.0522						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
184/299	3.74G	0.0623	0.0328	0	21	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.46it/s]						
all	18	25	0.151	0.16	0.131	
0.0372						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
185/299	3.74G	0.06235	0.03399	0	28	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.68it/s]						
all	18	25	0.201	0.24	0.0951	
0.0263						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
186/299	3.74G	0.06268	0.02956	0	22	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.46it/s]						
all	18	25	0.188	0.36	0.126	
0.0334						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
187/299	3.74G	0.06354	0.03358	0	32	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.64it/s]						
all	18	25	0.127	0.28	0.108	
0.0354						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
188/299	3.74G	0.06193	0.03389	0	19	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.66it/s]						
all	18	25	0.0903	0.2	0.077	
0.0219						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
189/299	3.74G	0.06308	0.03122	0	29	640:
100% 18/18 [00:03<00:00, 4.86it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.60it/s]						
all	18	25	0.17	0.16	0.118	
0.0393						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
190/299	3.74G	0.06324	0.0327	0	19	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.48it/s]						
all	18	25	0.338	0.16	0.135	
0.0507						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
191/299	3.74G	0.05866	0.02907	0	25	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.48it/s]						
all	18	25	0.372	0.12	0.134	
0.042						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
192/299	3.74G	0.06456	0.03239	0	27	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.63it/s]						
all	18	25	0.345	0.16	0.124	
0.0361						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
193/299	3.74G	0.06197	0.03259	0	20	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.62it/s]						
all	18	25	0.33	0.2	0.209	
0.0619						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
194/299	3.74G	0.06303	0.02995	0	33	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.38it/s]						
all	18	25	0.435	0.24	0.142	
0.0426						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
195/299	3.74G	0.06151	0.03182	0	22	640:
100% 18/18 [00:03<00:00, 4.91it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.49it/s]						
all	18	25	0.337	0.2	0.15	0.0461
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
196/299	3.74G	0.06272	0.03202	0	29	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.54it/s]						
all	18	25	0.224	0.2	0.113	0.0338
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
197/299	3.74G	0.05972	0.03242	0	25	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.51it/s]						
all	18	25	0.195	0.2	0.117	0.0311
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
198/299	3.74G	0.06314	0.03221	0	20	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.61it/s]						
all	18	25	0.196	0.24	0.147	0.0304
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
199/299	3.74G	0.06006	0.0337	0	32	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.62it/s]						
all	18	25	0.143	0.16	0.099	0.026
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
200/299	3.74G	0.06302	0.03185	0	25	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.71it/s]						
all	18	25	0.183	0.24	0.156	0.0332
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
201/299	3.74G	0.06219	0.02888	0	18	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.71it/s]						
all	18	25	0.103	0.24	0.111	
0.0354						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
202/299	3.74G	0.05922	0.03231	0	25	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.78it/s]						
all	18	25	0.156	0.08	0.104	
0.037						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
203/299	3.74G	0.0604	0.03022	0	20	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.02it/s]						
all	18	25	0.118	0.08	0.0551	
0.00959						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
204/299	3.74G	0.05913	0.0311	0	23	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.74it/s]						
all	18	25	0.0918	0.28	0.0528	
0.0125						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
205/299	3.74G	0.05958	0.03297	0	23	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.44it/s]						
all	18	25	0.0931	0.28	0.0964	
0.021						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
206/299	3.74G	0.06176	0.02971	0	19	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.60it/s]						
all	18	25	0.176	0.28	0.161	
0.0304						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
207/299	3.74G	0.058	0.02998	0	27	640:
100% 18/18 [00:03<00:00, 4.91it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.53it/s]						
all	18	25	0.186	0.28	0.16	0.0375
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
208/299	3.74G	0.06275	0.03577	0	21	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.48it/s]						
all	18	25	0.124	0.24	0.118	0.0325
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
209/299	3.74G	0.0607	0.03175	0	21	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.69it/s]						
all	18	25	0.193	0.24	0.132	0.0314
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
210/299	3.74G	0.06326	0.03439	0	25	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.66it/s]						
all	18	25	0.15	0.2	0.162	0.0303
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
211/299	3.74G	0.05994	0.03265	0	31	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.60it/s]						
all	18	25	0.112	0.28	0.0537	0.0112
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
212/299	3.74G	0.05959	0.03314	0	20	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.63it/s]						
all	18	25	0.217	0.24	0.186	0.0299
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
213/299	3.74G	0.059	0.03204	0	24	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.62it/s]						
all	18	25	0.212	0.2	0.133	
0.0319						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
214/299	3.74G	0.06057	0.03218	0	22	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.31it/s]						
all	18	25	0.139	0.24	0.146	
0.0422						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
215/299	3.74G	0.06186	0.03294	0	26	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.75it/s]						
all	18	25	0.443	0.08	0.123	
0.032						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
216/299	3.74G	0.06161	0.03169	0	25	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.67it/s]						
all	18	25	0.083	0.2	0.0715	
0.0247						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
217/299	3.74G	0.06251	0.03259	0	25	640:
100% 18/18 [00:03<00:00, 4.86it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.46it/s]						
all	18	25	0.478	0.12	0.184	
0.0339						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
218/299	3.74G	0.06087	0.03283	0	17	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.88it/s]						
all	18	25	0.0935	0.2	0.0723	
0.0115						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
219/299	3.74G	0.06321	0.03045	0	27	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.28it/s]						
all	18	25	0.0663	0.08	0.0294	
0.00437						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
220/299	3.74G	0.0606	0.03116	0	26	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.24it/s]						
all	18	25	0.166	0.08	0.022	
0.00318						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
221/299	3.74G	0.06062	0.0315	0	26	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.82it/s]						
all	18	25	0.128	0.04	0.0613	
0.00879						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
222/299	3.74G	0.06241	0.03315	0	24	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.79it/s]						
all	18	25	0.102	0.08	0.0531	
0.0123						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
223/299	3.74G	0.05954	0.03354	0	25	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.58it/s]						
all	18	25	0.364	0.12	0.107	
0.0201						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
224/299	3.74G	0.06156	0.03151	0	21	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.60it/s]						
all	18	25	0.194	0.12	0.096	
0.0249						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
225/299	3.74G	0.0575	0.03248	0	29	640:
100% 18/18 [00:03<00:00, 4.87it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.69it/s]						
all	18	25	0.339	0.08	0.0956	
0.0151						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
226/299	3.74G	0.06209	0.03302	0	24	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.78it/s]						
all	18	25	0.108	0.121	0.0849	
0.0156						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
227/299	3.74G	0.0592	0.03079	0	18	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.69it/s]						
all	18	25	0.0742	0.12	0.0697	
0.0168						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
228/299	3.74G	0.05951	0.03406	0	24	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.66it/s]						
all	18	25	0.108	0.28	0.0921	
0.0208						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
229/299	3.74G	0.06208	0.03098	0	21	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.62it/s]						
all	18	25	0.143	0.2	0.101	
0.0178						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
230/299	3.74G	0.06133	0.03086	0	18	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.62it/s]						
all	18	25	0.328	0.12	0.172	
0.0243						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
231/299	3.74G	0.0575	0.03162	0	27	640:
100% 18/18 [00:03<00:00, 4.91it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.81it/s]						
all	18	25	0.0987	0.12	0.0629	
0.0133						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
232/299	3.74G	0.05963	0.03159	0	20	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.93it/s]						
all	18	25	0.18	0.12	0.0385	
0.00931						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
233/299	3.74G	0.05932	0.03264	0	24	640:
100% 18/18 [00:03<00:00, 4.86it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.66it/s]						
all	18	25	0.251	0.12	0.129	
0.0249						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
234/299	3.74G	0.06073	0.03259	0	27	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.70it/s]						
all	18	25	0.443	0.16	0.18	
0.0388						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
235/299	3.74G	0.0585	0.03197	0	35	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.56it/s]						
all	18	25	0.24	0.24	0.188	
0.0433						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
236/299	3.74G	0.05976	0.03238	0	25	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.54it/s]						
all	18	25	0.416	0.12	0.153	
0.0437						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
237/299	3.74G	0.05817	0.03194	0	25	640:
100% 18/18 [00:03<00:00, 4.86it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.45it/s]						
all	18	25	0.226	0.12	0.128	
0.04						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
238/299	3.74G	0.05503	0.02942	0	19	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.78it/s]						
all	18	25	0.256	0.12	0.112	
0.0409						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
239/299	3.74G	0.05956	0.03093	0	15	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.54it/s]						
all	18	25	0.184	0.12	0.108	
0.0463						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
240/299	3.74G	0.05831	0.03391	0	22	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.57it/s]						
all	18	25	0.184	0.2	0.0918	
0.0303						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
241/299	3.74G	0.05684	0.03011	0	17	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.52it/s]						
all	18	25	0.198	0.24	0.114	
0.0381						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
242/299	3.74G	0.05819	0.03227	0	27	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.71it/s]						
all	18	25	0.211	0.2	0.137	
0.0373						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
243/299	3.74G	0.05824	0.03055	0	21	640:
100% 18/18 [00:03<00:00, 4.89it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.78it/s]						
all	18	25	0.263	0.24	0.149	0.0414
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
244/299	3.74G	0.06027	0.03257	0	15	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.49it/s]						
all	18	25	0.208	0.2	0.141	0.0374
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
245/299	3.74G	0.05776	0.03189	0	23	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.49it/s]						
all	18	25	0.227	0.32	0.154	0.0378
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
246/299	3.74G	0.05674	0.03168	0	17	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.57it/s]						
all	18	25	0.212	0.32	0.16	0.0311
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
247/299	3.74G	0.05965	0.03178	0	23	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.48it/s]						
all	18	25	0.2	0.32	0.106	0.0214
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
248/299	3.74G	0.05637	0.03449	0	18	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.75it/s]						
all	18	25	0.183	0.28	0.0941	0.0235
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
249/299	3.74G	0.05406	0.0315	0	27	640:
100% 18/18 [00:03<00:00, 4.86it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.61it/s]						
all	18	25	0.199	0.24	0.0937	
0.0208						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
250/299	3.74G	0.05715	0.02999	0	20	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.83it/s]						
all	18	25	0.158	0.16	0.0485	
0.00866						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
251/299	3.74G	0.05563	0.02959	0	31	640:
100% 18/18 [00:03<00:00, 4.93it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 8.07it/s]						
all	18	25	0.0804	0.12	0.0211	
0.00344						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
252/299	3.74G	0.05799	0.03004	0	21	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.79it/s]						
all	18	25	0.0973	0.08	0.0318	
0.00521						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
253/299	3.74G	0.05899	0.03088	0	18	640:
100% 18/18 [00:03<00:00, 4.87it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.68it/s]						
all	18	25	0.419	0.08	0.0717	
0.0182						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
254/299	3.74G	0.05885	0.03303	0	21	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.75it/s]						
all	18	25	0.624	0.12	0.156	
0.029						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
255/299	3.74G	0.05827	0.03192	0	30	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.63it/s]						
all	18	25	0.669	0.12	0.173	
0.0393						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
256/299	3.74G	0.05603	0.03099	0	28	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.70it/s]						
all	18	25	0.147	0.36	0.143	
0.0342						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
257/299	3.74G	0.05657	0.03146	0	26	640:
100% 18/18 [00:03<00:00, 4.85it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.66it/s]						
all	18	25	0.153	0.12	0.0924	
0.0258						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
258/299	3.74G	0.05728	0.03087	0	29	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.70it/s]						
all	18	25	0.122	0.24	0.0926	
0.0281						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
259/299	3.74G	0.05495	0.02894	0	20	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.59it/s]						
all	18	25	0.179	0.28	0.12	
0.0374						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
260/299	3.74G	0.0569	0.02908	0	20	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.57it/s]						
all	18	25	0.15	0.2	0.103	
0.0316						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
261/299	3.74G	0.0574	0.03061	0	26	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.66it/s]						
all	18	25	0.157	0.28	0.113	
0.0303						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
262/299	3.74G	0.05673	0.03013	0	26	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.47it/s]						
all	18	25	0.0672	0.16	0.0882	
0.0284						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
263/299	3.74G	0.05823	0.02968	0	22	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.75it/s]						
all	18	25	0.0962	0.16	0.125	
0.0417						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
264/299	3.74G	0.0585	0.03296	0	19	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.64it/s]						
all	18	25	0.198	0.16	0.131	
0.0367						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
265/299	3.74G	0.05738	0.02912	0	27	640:
100% 18/18 [00:03<00:00, 4.86it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.76it/s]						
all	18	25	0.26	0.253	0.172	
0.0395						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
266/299	3.74G	0.05749	0.0322	0	21	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.70it/s]						
all	18	25	0.246	0.2	0.18	
0.0407						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
267/299	3.74G	0.05454	0.02956	0	18	640:
100% 18/18 [00:03<00:00, 4.90it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.59it/s]						
all	18	25	0.19	0.16	0.137	
0.0336						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
268/299	3.74G	0.0557	0.03192	0	16	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.72it/s]						
all	18	25	0.176	0.188	0.138	
0.0359						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
269/299	3.74G	0.0586	0.03062	0	16	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.77it/s]						
all	18	25	0.189	0.32	0.155	
0.041						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
270/299	3.74G	0.05704	0.03122	0	18	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.66it/s]						
all	18	25	0.22	0.35	0.148	
0.04						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
271/299	3.74G	0.05784	0.0311	0	25	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.72it/s]						
all	18	25	0.225	0.32	0.156	
0.0407						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
272/299	3.74G	0.05541	0.0317	0	27	640:
100% 18/18 [00:03<00:00, 4.92it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.58it/s]						
all	18	25	0.228	0.28	0.161	
0.039						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
273/299	3.74G	0.05598	0.02963	0	18	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.49it/s]						
all	18	25	0.174	0.28	0.127	
0.037						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
274/299	3.74G	0.05521	0.02985	0	17	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.80it/s]						
all	18	25	0.196	0.32	0.142	
0.0378						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
275/299	3.74G	0.05757	0.03037	0	28	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.52it/s]						
all	18	25	0.177	0.24	0.148	
0.0383						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
276/299	3.74G	0.05496	0.03123	0	25	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.70it/s]						
all	18	25	0.198	0.28	0.144	
0.0326						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
277/299	3.74G	0.05773	0.03492	0	23	640:
100% 18/18 [00:03<00:00, 4.86it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.44it/s]						
all	18	25	0.222	0.24	0.136	
0.0321						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
278/299	3.74G	0.05612	0.03138	0	20	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.57it/s]						
all	18	25	0.158	0.28	0.128	
0.0341						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
279/299	3.74G	0.05612	0.03072	0	33	640:
100% 18/18 [00:03<00:00, 4.90it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.60it/s]						
all	18	25	0.139	0.2	0.137	
0.0388						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
280/299	3.74G	0.05637	0.03032	0	21	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.73it/s]						
all	18	25	0.157	0.28	0.167	
0.045						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
281/299	3.74G	0.05803	0.03198	0	30	640:
100% 18/18 [00:03<00:00, 4.86it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.59it/s]						
all	18	25	0.173	0.2	0.177	
0.052						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
282/299	3.74G	0.05474	0.03028	0	30	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.79it/s]						
all	18	25	0.174	0.16	0.164	
0.0548						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
283/299	3.74G	0.05591	0.03268	0	20	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.51it/s]						
all	18	25	0.174	0.28	0.169	
0.0555						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
284/299	3.74G	0.05315	0.03129	0	23	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.62it/s]						
all	18	25	0.195	0.32	0.154	
0.0451						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
285/299	3.74G	0.05692	0.0301	0	22	640:
100% 18/18 [00:03<00:00, 4.88it/s]						

	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.73it/s]						
all	18	25	0.183	0.2	0.122	
0.035						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
286/299	3.74G	0.056	0.03348	0	24	640:
100% 18/18 [00:03<00:00, 4.89it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.71it/s]						
all	18	25	0.213	0.227	0.124	
0.0297						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
287/299	3.74G	0.05654	0.03262	0	23	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.76it/s]						
all	18	25	0.25	0.2	0.143	
0.0266						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
288/299	3.74G	0.05501	0.0309	0	25	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.60it/s]						
all	18	25	0.217	0.24	0.149	
0.0292						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
289/299	3.74G	0.05709	0.03361	0	20	640:
100% 18/18 [00:03<00:00, 4.85it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.51it/s]						
all	18	25	0.175	0.32	0.143	
0.0362						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
290/299	3.74G	0.05586	0.03003	0	13	640:
100% 18/18 [00:03<00:00, 4.90it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.68it/s]						
all	18	25	0.149	0.32	0.138	
0.0339						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
291/299	3.74G	0.05635	0.03257	0	22	640:
100% 18/18 [00:03<00:00, 4.90it/s]						

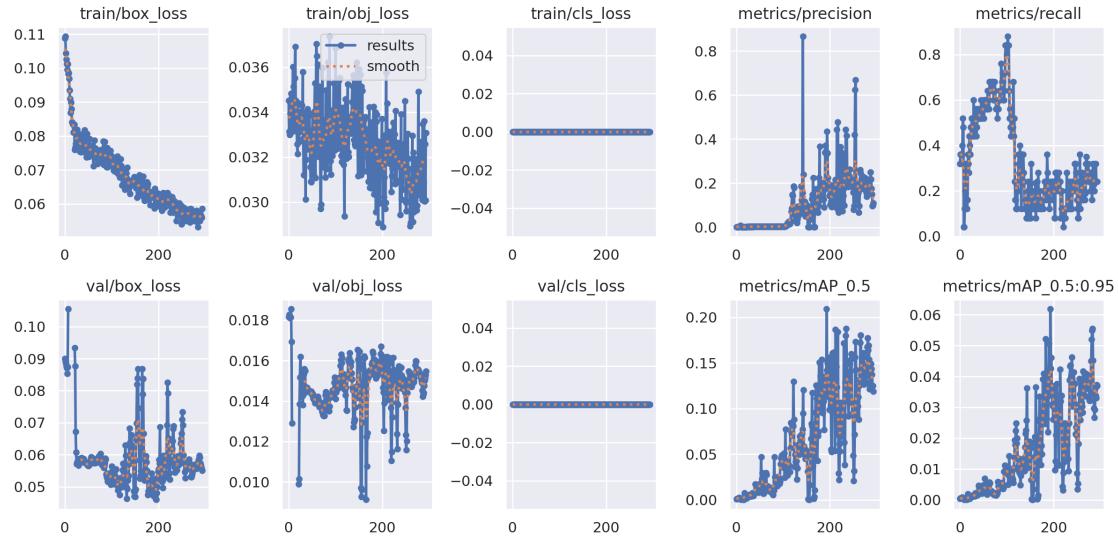
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.60it/s]						
	all	18	25	0.096	0.24	0.125
0.0331						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
292/299	3.74G	0.05596	0.03007	0	20	640:
100% 18/18 [00:03<00:00, 4.91it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.48it/s]						
	all	18	25	0.0987	0.24	0.125
0.0373						
Epoch	GPU_mem	box_loss	obj_loss	cls_loss	Instances	Size
293/299	3.74G	0.05858	0.03307	0	30	640:
100% 18/18 [00:03<00:00, 4.88it/s]						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 7.67it/s]						
	all	18	25	0.108	0.24	0.119
0.037						
Stopping training early as no improvement observed in last 100 epochs. Best results observed at epoch 193, best model saved as best.pt.						
To update EarlyStopping(patience=100) pass a new patience value, i.e. `python train.py --patience 300` or use `--patience 0` to disable EarlyStopping.						
294 epochs completed in 0.384 hours.						
Optimizer stripped from Train_scratch/exp/weights/last.pt, 42.2MB						
Optimizer stripped from Train_scratch/exp/weights/best.pt, 42.2MB						
Validating Train_scratch/exp/weights/best.pt...						
Fusing layers...						
YOLOv5m summary: 212 layers, 20852934 parameters, 0 gradients, 47.9 GFLOPs						
	Class	Images	Instances	P	R	mAP50
mAP50-95: 100% 2/2 [00:00<00:00, 5.96it/s]						
	all	18	25	0.33	0.2	0.209
0.0619						
Results saved to Train_scratch/exp						

```
[14]: !pip install Pillow
from PIL import Image
from IPython import display

# Display the training results
display.Image(f"/content/yolov5/Train_scratch/exp/results.png")
```

Requirement already satisfied: Pillow in /usr/local/lib/python3.10/dist-packages  
(10.1.0)

[14]:



```
[15]: from IPython.display import Image, display
import os

folder_path = '/content/yolov5/Train_scratch/exp'

# List all files in the folder
image_names = [file for file in os.listdir(folder_path) if file.
    ↪startswith('train_batch') and file.endswith('.jpg')]

# Display each image
for img_name in image_names:
    img_path = os.path.join(folder_path, img_name)
    display(Image(filename=img_path))
```



