

Aero2Astro
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Today i had trained Yolo v4 model upto 6200 epochs. And also evaluated with both training and test dataset.

Train :

```
calculation mAP (mean average precision)...
Detection layer: 139 - type = 28
Detection layer: 150 - type = 28
Detection layer: 161 - type = 28
396
detections_count = 1232, unique_truth_count = 663
class_id = 0, name = tower_lattice, ap = 98.77%      (TP = 271, FP = 11)
class_id = 1, name = tower_tucohy, ap = 93.55%      (TP = 157, FP = 20)
class_id = 2, name = tower_wooden, ap = 95.64%      (TP = 205, FP = 16)

for conf_thresh = 0.25, precision = 0.93, recall = 0.95, F1-score = 0.94
for conf_thresh = 0.25, TP = 633, FP = 47, FN = 30, average IoU = 81.93 %

IoU threshold = 60 %, used Area-Under-Curve for each unique Recall
mean average precision (mAP@0.60) = 0.959857, or 95.99 %
Total Detection Time: 52 Seconds
```

Test:

```
calculation mAP (mean average precision)...
Detection layer: 139 - type = 28
Detection layer: 150 - type = 28
Detection layer: 161 - type = 28
124
detections_count = 424, unique_truth_count = 202
class_id = 0, name = tower_lattice, ap = 76.97%      (TP = 67, FP = 14)
class_id = 1, name = tower_tucohy, ap = 80.61%      (TP = 37, FP = 11)
class_id = 2, name = tower_wooden, ap = 46.34%      (TP = 32, FP = 19)

for conf_thresh = 0.25, precision = 0.76, recall = 0.67, F1-score = 0.71
for conf_thresh = 0.25, TP = 136, FP = 44, FN = 66, average IoU = 63.97 %

IoU threshold = 60 %, used Area-Under-Curve for each unique Recall
mean average precision (mAP@0.60) = 0.679724, or 67.97 %
Total Detection Time: 16 Seconds
```