Aero2Astro
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Today i had trained Faster rcnn upto 12000 ierations. And also evaluated with both training and test dataset.

Val dataset:

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[10/08 02:29:38 d2.evaluation.fast_eval_api]: COCOeval_opt.accumulate() finished in 0.02 seconds.
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.001
 Average Precision  (AP) @[ IoU=0.50      | area=   all | maxDets=100 ] = 0.006
 Average Precision  (AP) @[ IoU=0.75      | area=   all | maxDets=100 ] = 0.000
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.000
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.002
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=  1 ] = 0.017
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets= 10 ] = 0.044
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.105
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.021
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.061
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.140
[10/08 02:29:38 d2.evaluation.coco_evaluation]: Evaluation results for bbox:
|   AP   |  AP50  |  AP75  |  APs   |  APm   |  APl   |
|:------:|:------:|:------:|:------:|:------:|:------:|
| 0.108  | 0.588  | 0.010  | 0.009  | 0.023  | 0.244  |
[10/08 02:29:38 d2.evaluation.coco_evaluation]: Per-category bbox AP:
| category      | AP    | category     | AP    | category     | AP    |
|:--------------|:------|:-------------|:------|:-------------|:------|
| tower_lattice | 0.257 | tower_tucohy | 0.000 | tower_wooden | 0.068 |
[10/08 02:29:38 d2.engine.defaults]: Evaluation results for my_dataset_val in csv format:
[10/08 02:29:38 d2.evaluation.testing]: copypaste: Task: bbox
[10/08 02:29:38 d2.evaluation.testing]: copypaste: AP,AP50,AP75,APs,APm,APl
[10/08 02:29:38 d2.evaluation.testing]: copypaste: 0.1080,0.5884,0.0097,0.0087,0.0227,0.2442
[10/08 02:29:38 d2.utils.events]:  iter: 12001    lr: N/A  max mem: 659M
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Test :

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[10/08 02:38:43 d2.evaluation.fast_eval_api]: COCOeval_opt.accumulate() finished in 0.04 seconds.
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.002
 Average Precision  (AP) @[ IoU=0.50      | area=   all | maxDets=100 ] = 0.009
 Average Precision  (AP) @[ IoU=0.75      | area=   all | maxDets=100 ] = 0.000
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.000
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.004
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=  1 ] = 0.025
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets= 10 ] = 0.058
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.109
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.029
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.093
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.142
[10/08 02:38:43 d2.evaluation.coco_evaluation]: Evaluation results for bbox:
|   AP   |  AP50  |  AP75  |  APs   |  APm   |  APl   |
|:------:|:------:|:------:|:------:|:------:|:------:|
| 0.184  | 0.897  | 0.005  | 0.033  | 0.033  | 0.398  |
[10/08 02:38:43 d2.evaluation.coco_evaluation]: Per-category bbox AP:
| category      | AP    | category     | AP    | category     | AP    |
|:--------------|:------|:-------------|:------|:-------------|:------|
| tower_lattice | 0.278 | tower_tucohy | 0.000 | tower_wooden | 0.273 |
OrderedDict([('bbox',
```

Train:

```
[10/08 02:47:52 d2.evaluation.fast_eval_api]: Accumulating evaluation results...
[10/08 02:47:52 d2.evaluation.fast_eval_api]: COCOeval_opt.accumulate() finished in 0.24 seconds.
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.001
 Average Precision  (AP) @[ IoU=0.50      | area=   all | maxDets=100 ] = 0.004
 Average Precision  (AP) @[ IoU=0.75      | area=   all | maxDets=100 ] = 0.000
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.001
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.002
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=  1 ] = 0.022
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets= 10 ] = 0.082
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.134
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.040
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.102
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.156
[10/08 02:47:52 d2.evaluation.coco_evaluation]: Evaluation results for bbox:
|   AP   |  AP50  |  AP75  |  APs   |  APm   |  APl   |
|:------:|:------:|:------:|:------:|:------:|:------:|
| 0.118  | 0.442  | 0.013  | 0.009  | 0.067  | 0.209  |
[10/08 02:47:52 d2.evaluation.coco_evaluation]: Per-category bbox AP:
| category      | AP    | category     | AP    | category     | AP    |
|:--------------|:------|:-------------|:------|:-------------|:------|
| tower_lattice | 0.313 | tower_tucohy | 0.000 | tower_wooden | 0.041 |
OrderedDict([('bbox',
```

Yolo v4 Evaluation:

Ground Truth :
https://drive.google.com/drive/folders/1nlVuaMudkmGxHV_B2CK5PIotIEi1qtIc?usp=sharing

Detected results:

https://drive.google.com/file/d/17SBKRZxIWco1jdf7KFBTE4QNm62mqHus/view?usp=sharing