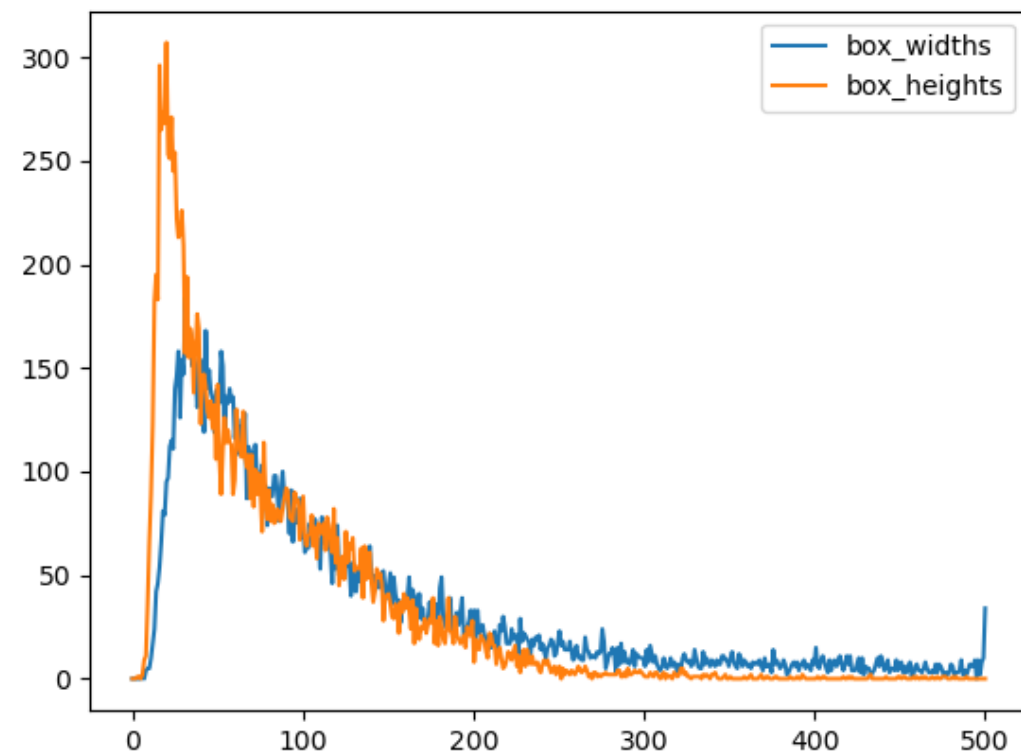
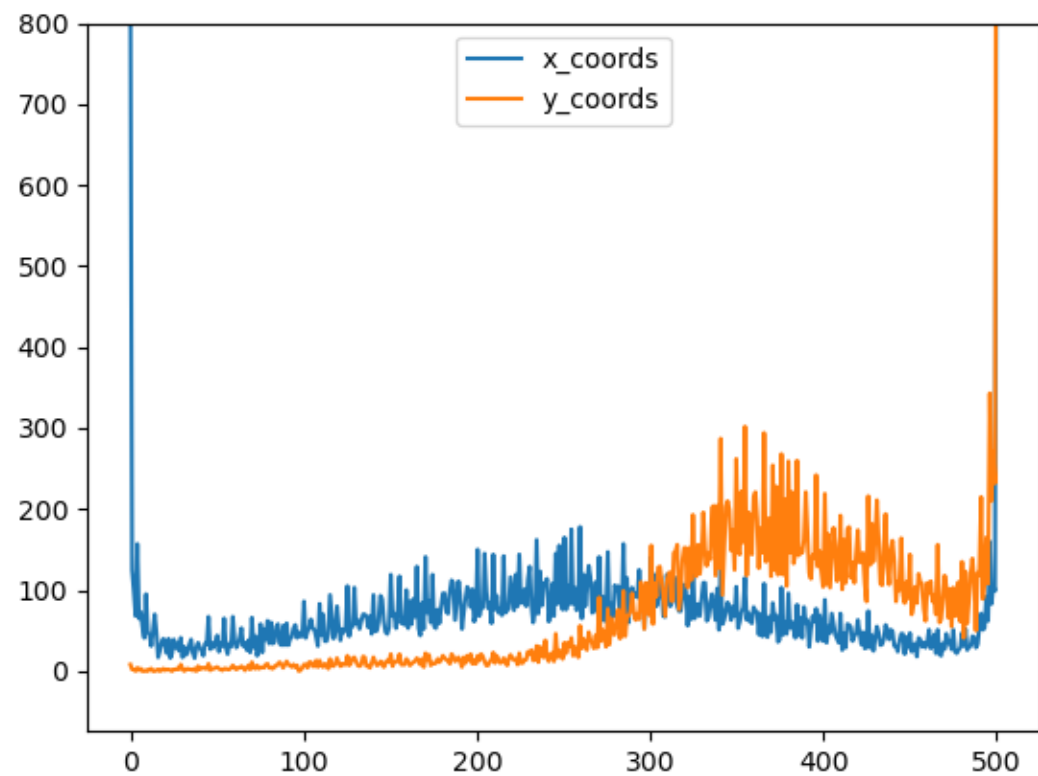
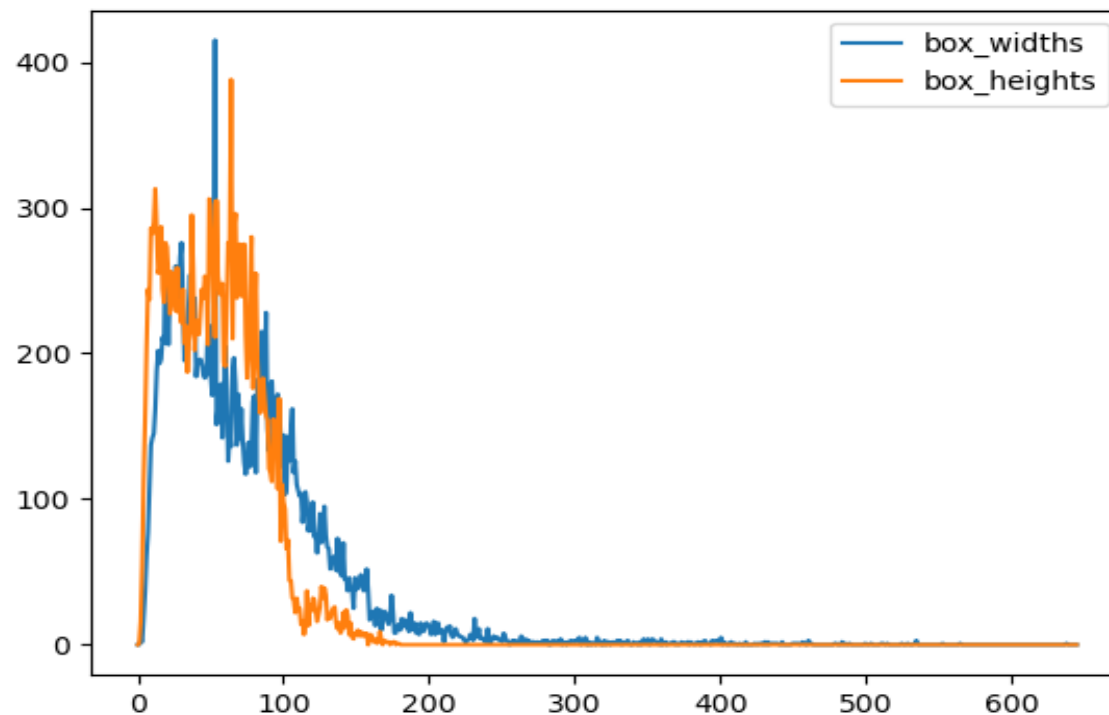
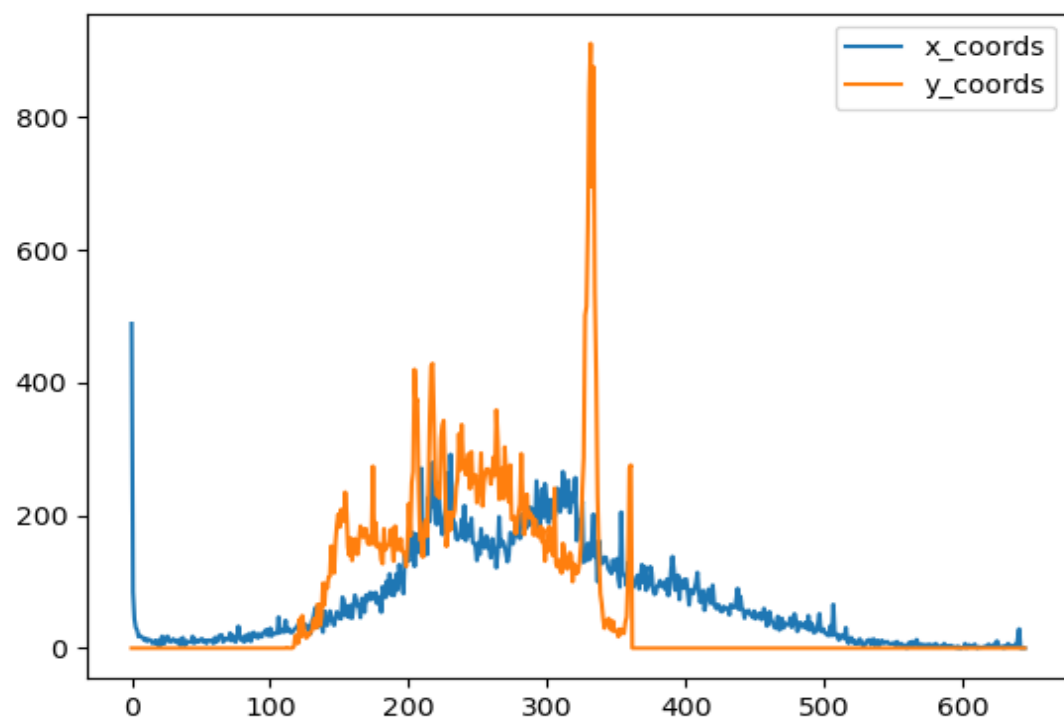


RDD project

# Dataset: RDD2020



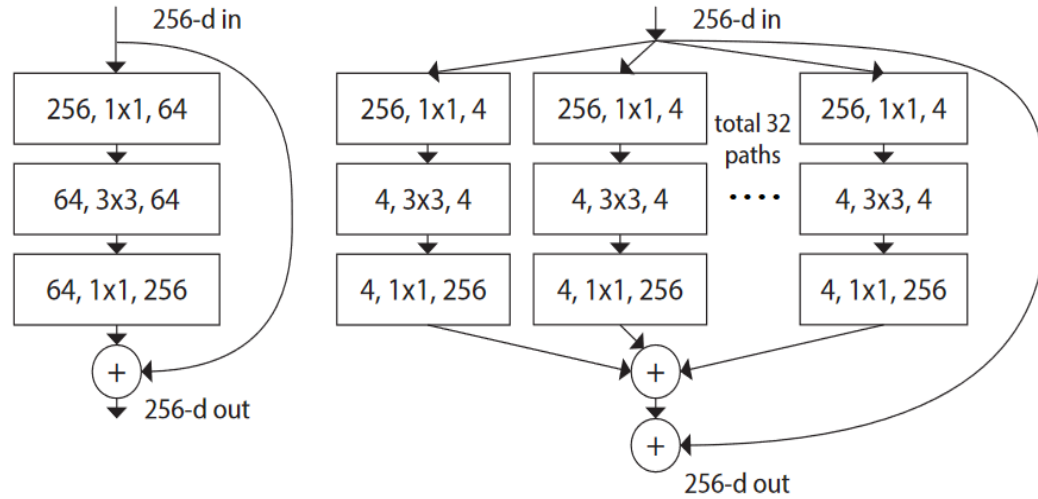
# Dataset: TDT4265



# Datasets: Classes

	RDD2020		TDT4265	
class	#	%	#	%
D00	4692	0.27	17969	0.78
D10	2544	0.15	2484	0.11
D30	5463	0.32	1831	0.08
D40	4580	0.27	844	0.04
sum	17279		23128	

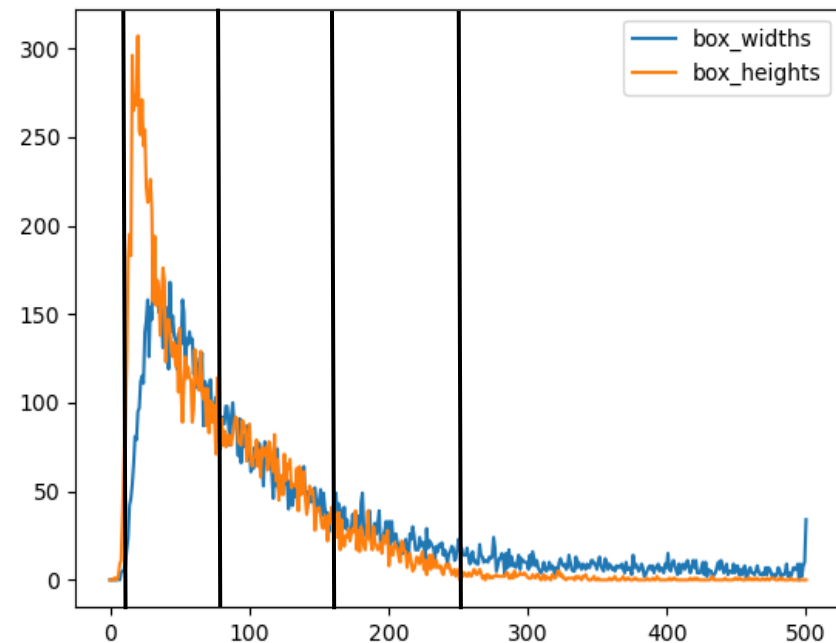
# Backbone: ResNext50



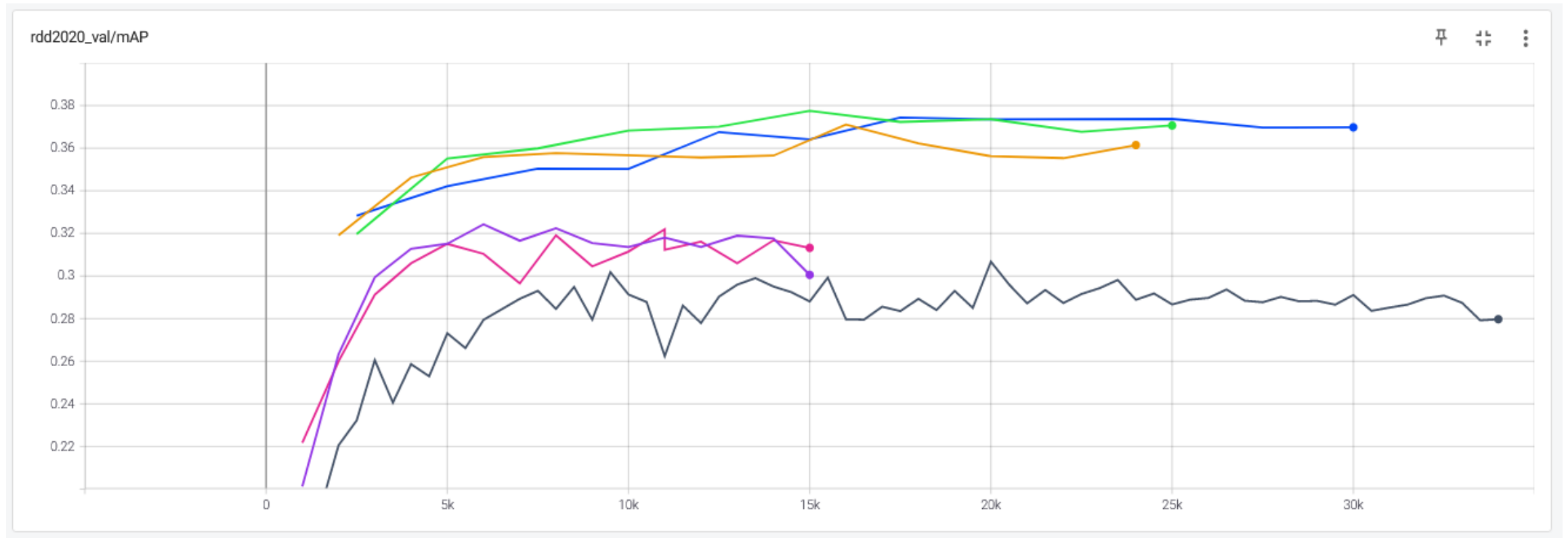
Output size	# block	
250x250x64	0	Conv2d
	1	BatchNorm2d
	2	ReLU
125x125x64	3	MaxPool2d
125x125x256	4	Bottleneck0
		Bottleneck1
		Bottleneck2
63x63x512	5	Bottleneck0
		Bottleneck1
		Bottleneck2
		Bottleneck3
32x32x1024	6	Bottleneck0
		Bottleneck1
		Bottleneck2
		Bottleneck3
		Bottleneck4
		Bottleneck5
16x16x2048	7	Bottleneck0
		Bottleneck1
		Bottleneck2

# RDD2020: Training

- Optimizer
- Image size
- Data augmentation
- Priors settings
- Weighted loss

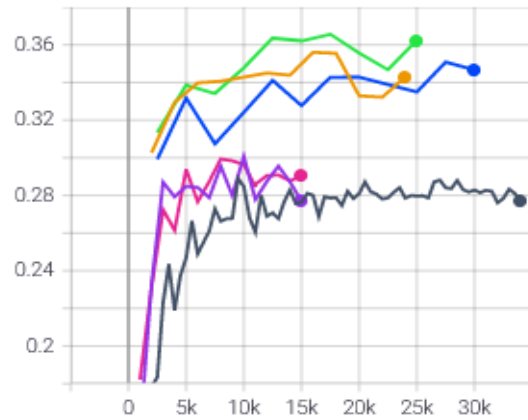


# RDD2020: Results

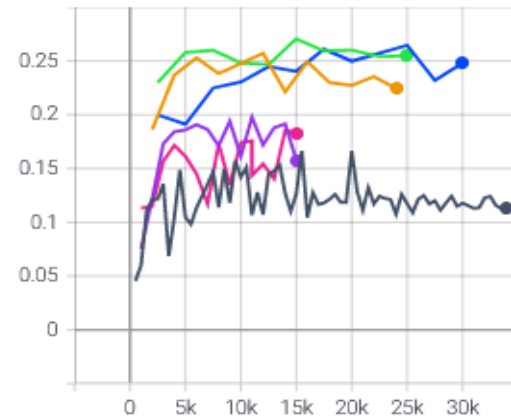


# RDD2020: Results

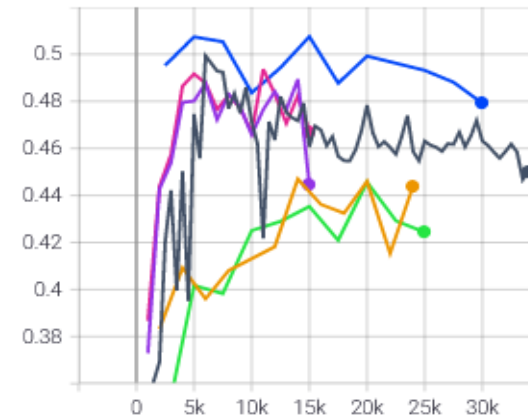
rdd2020\_val/D00



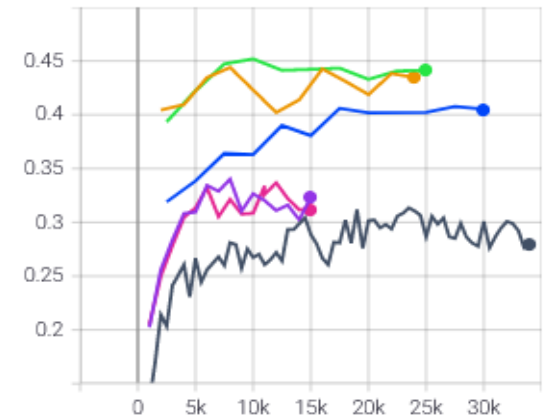
rdd2020\_val/D10



rdd2020\_val/D20



rdd2020\_val/D40

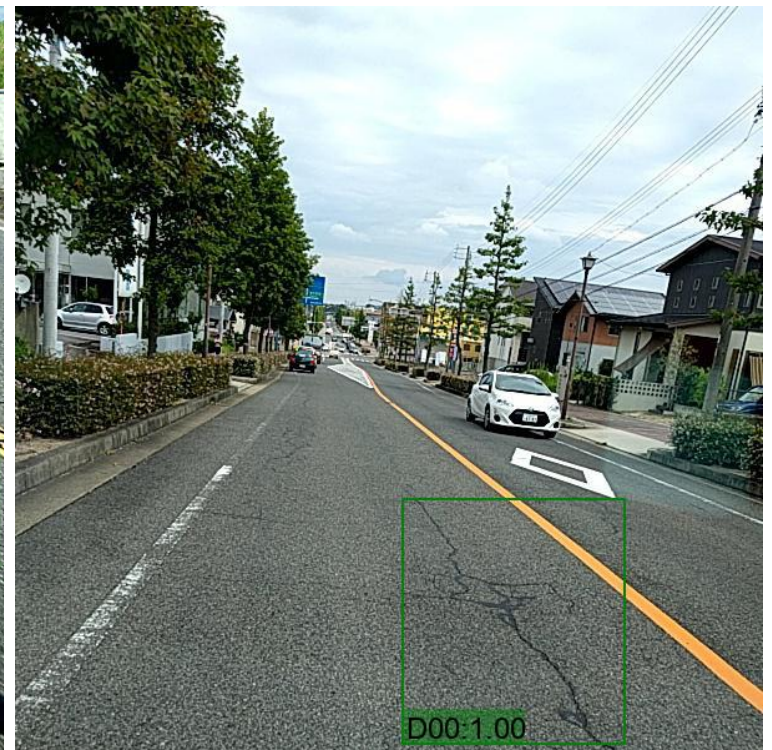
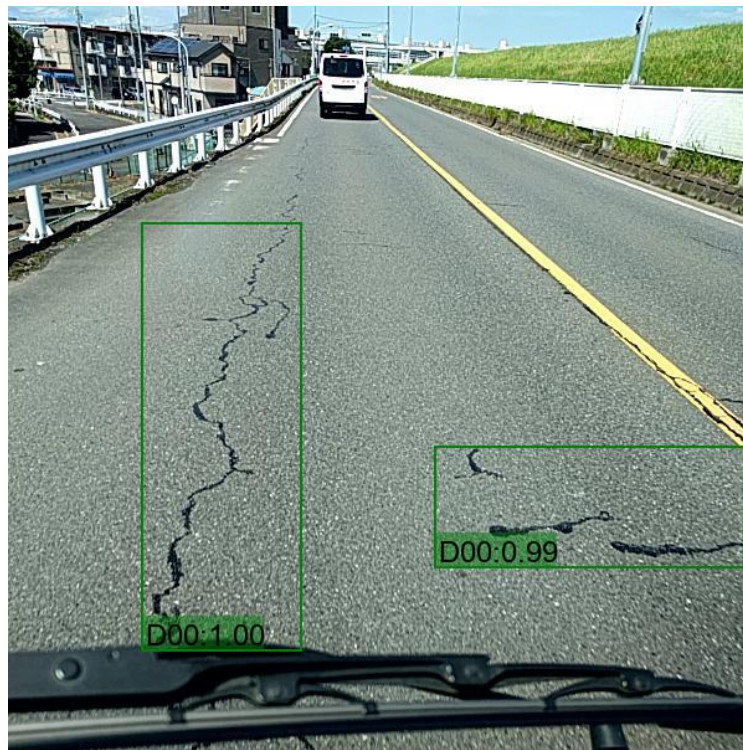


Total runtime: 27.05731749534607

FPS: 3.6958578771602273



# RDD2020: Results



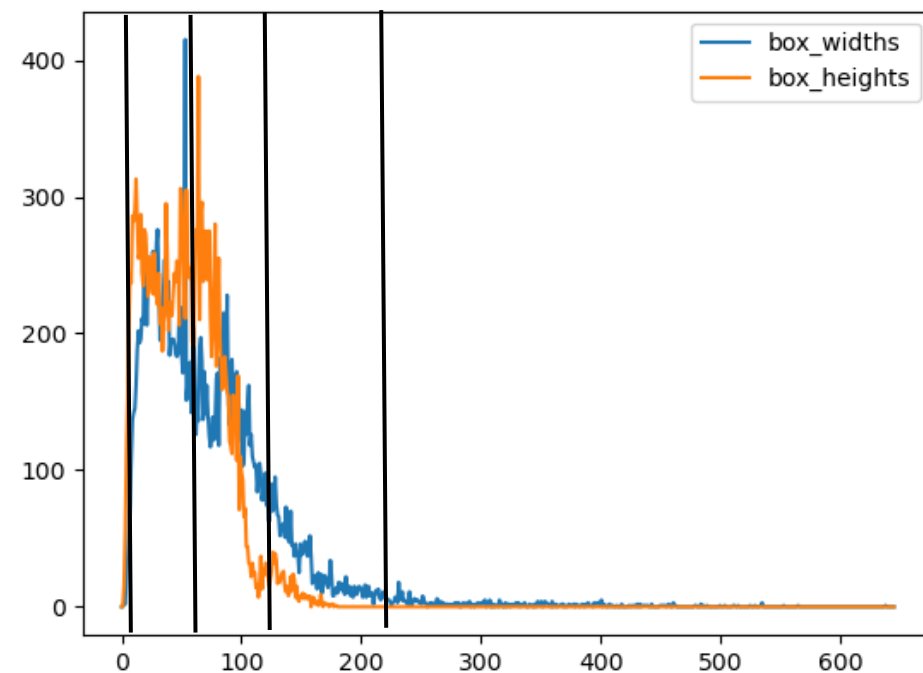


# RDD2020: Results



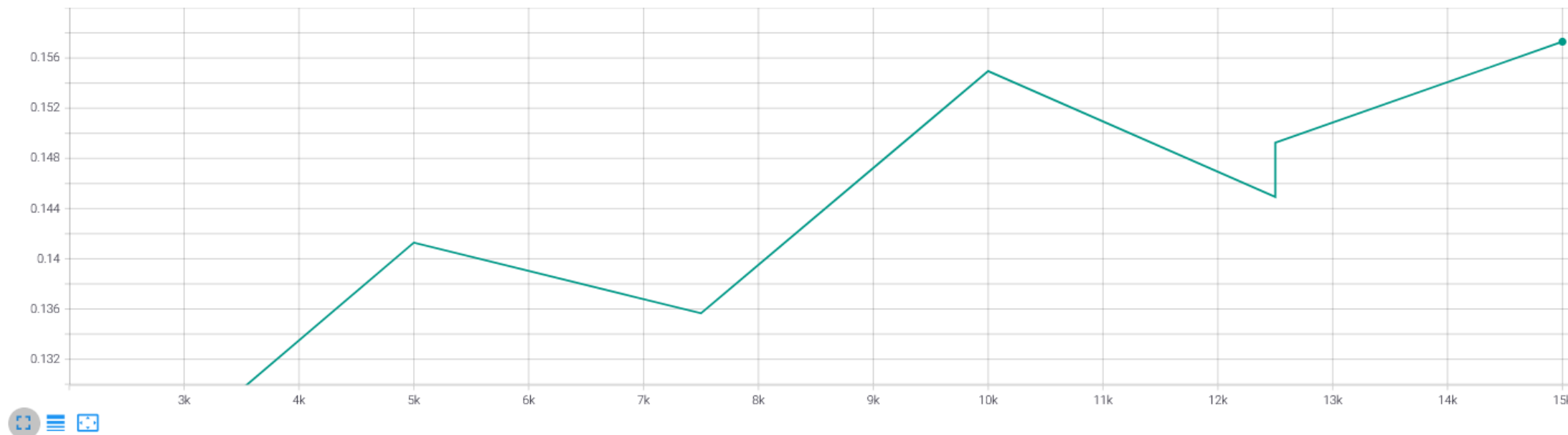
# TDT4265: Training

- Image size
- Data augmentation
- Priors settings
- Weighted loss



# TDT4265 Result

tdt4265\_val/mAP  
tag: metrics/tdt4265\_val/mAP



# TDT4265 Result





# TDT4265 Result



# Further work

- Cropping
- Tiling
- Augmentation
- Backbone model
- More testing on TDT4265

# Sources

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