

AVANTIX

Avancement CBE

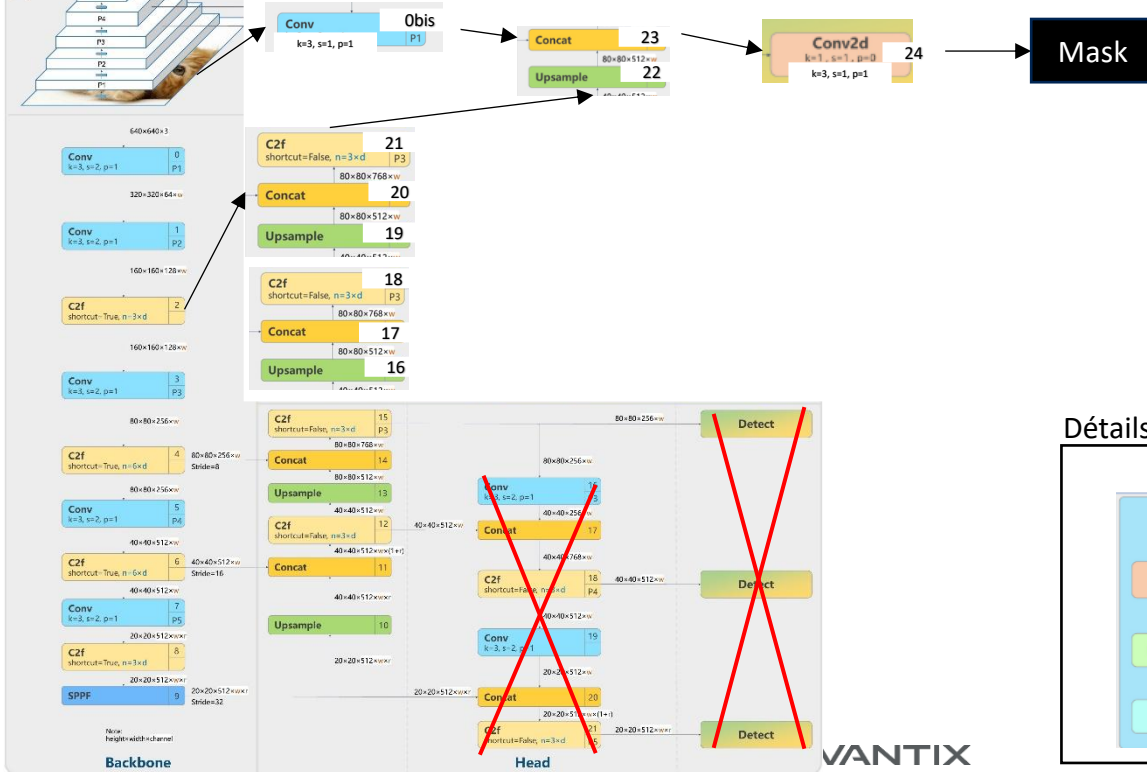
AVANTIX

YOLO

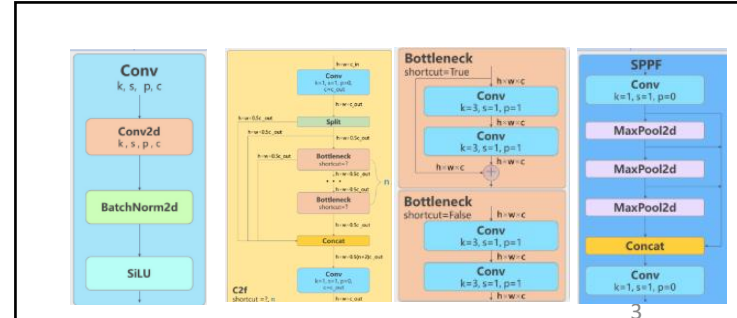
Architecture

YOLOv8

Backbone
YOLOv8
Backbone
(P5)



Détails des couches



FP par pixel-wise FixedConvs vs YOLO

Stats sur 10 runs de dt_iq = 16,777ms

FIXED CONVS

Min = 3 pixels FP

Max = 10 pixels FP

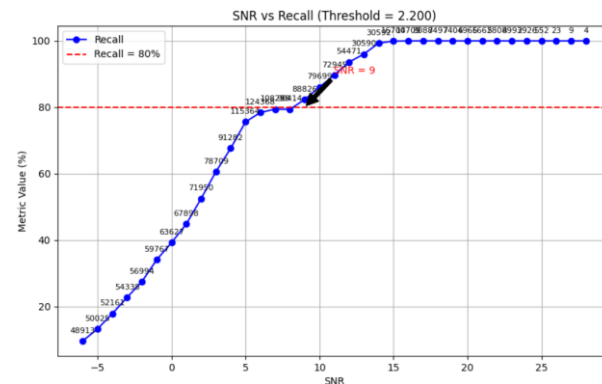
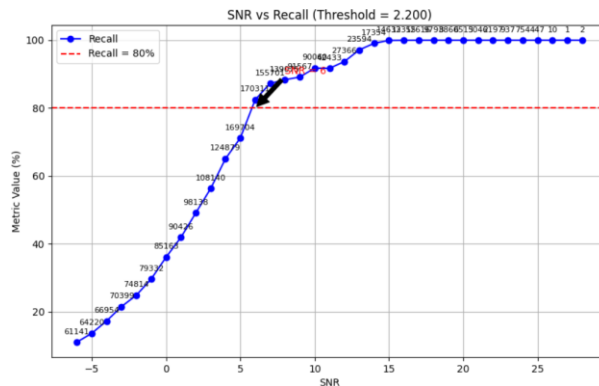
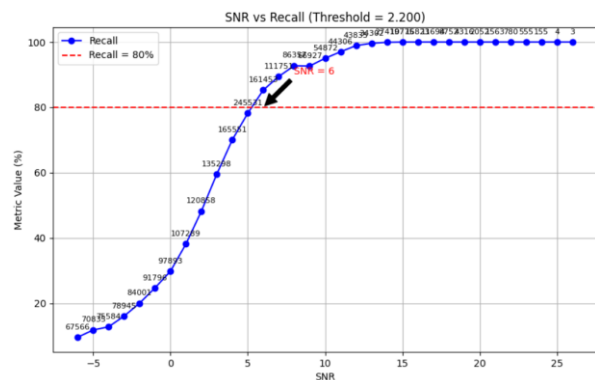
YOLO (threshold_nfa = 2,2)

Min = 0 pixels FP

Max = 8 pixels FP

Résultats par pixel-wise : 256, 512, 1024

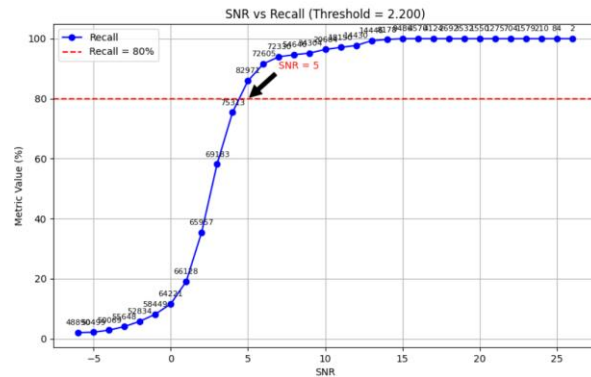
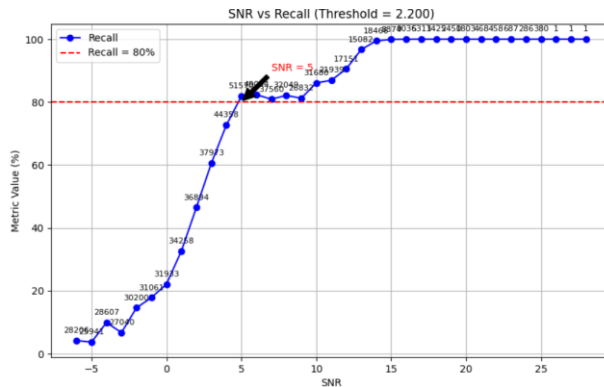
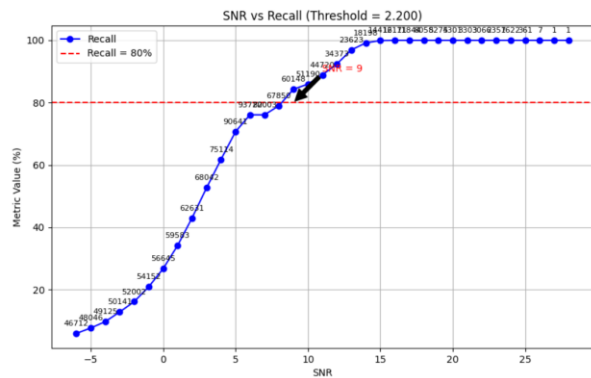
Résultats sur bt702 : snropt = 8 → 15 + 17 + 21 + 25dB
Chirps + pmod



<http://localhost:8585/#/experiments/796862986174420201/runs/d8fb35f1d5e3432d89a06e810bc38f37/artifacts>

Résultats par pixel-wise : 4096, 16384, 131072

Résultats sur bt702 : snropt = 8 → 15 + 17 + 21 + 25dB
Chirps + pmod

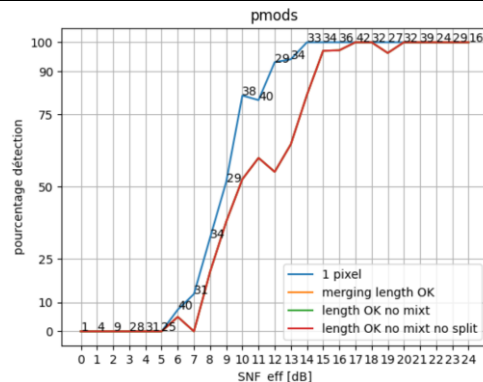
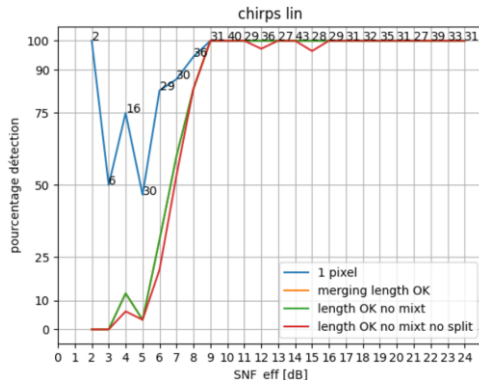
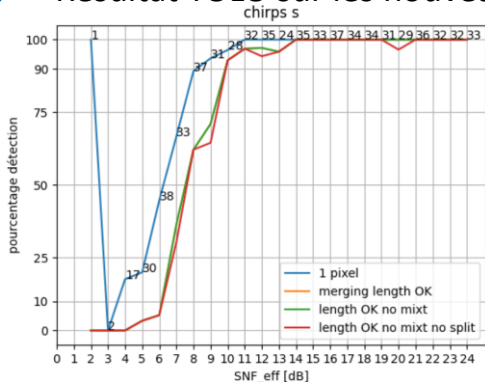


<http://localhost:8585/#/experiments/796862986174420201/runs/d8fb35f1d5e3432d89a06e810bc38f37/artifacts>

Résultats bout-en-bout

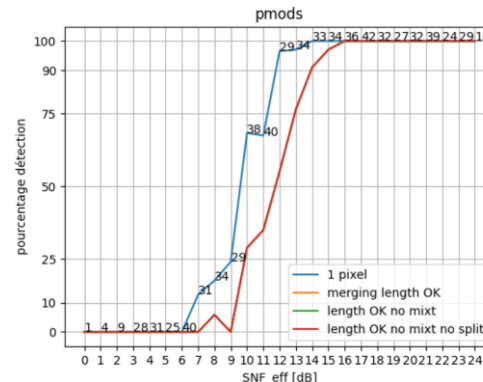
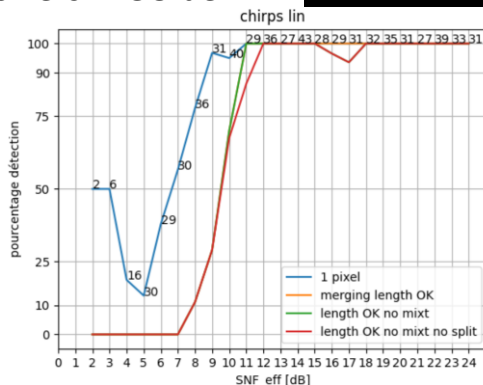
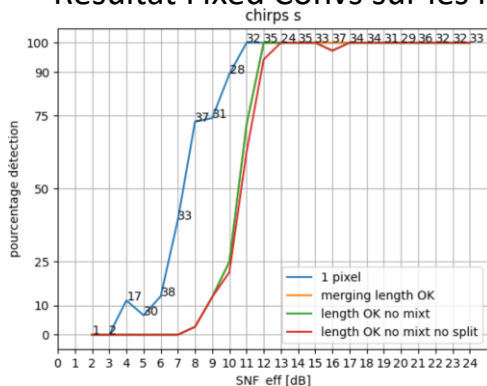
Résultat YOLO sur les nouveaux fichiers LEGO de FVE

```
> num_fp = tensor([0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 1],
```



Résultat Fixed Convs sur les nouveaux fichiers LEGO de FVE

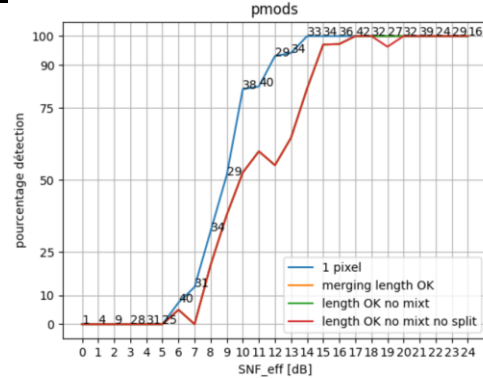
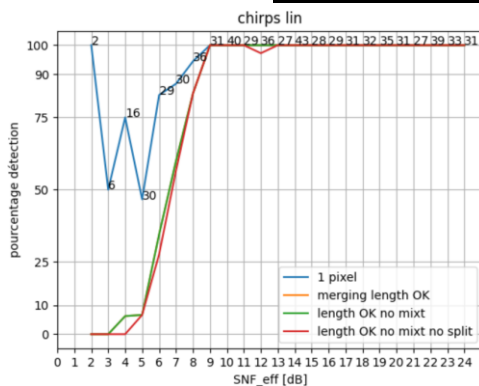
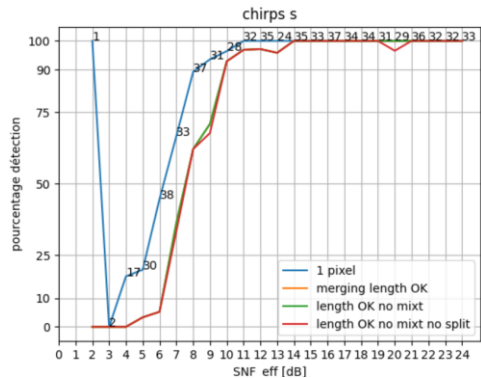
```
num_fp = tensor([0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0],
```



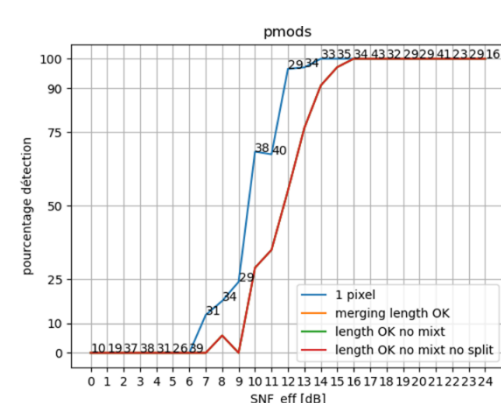
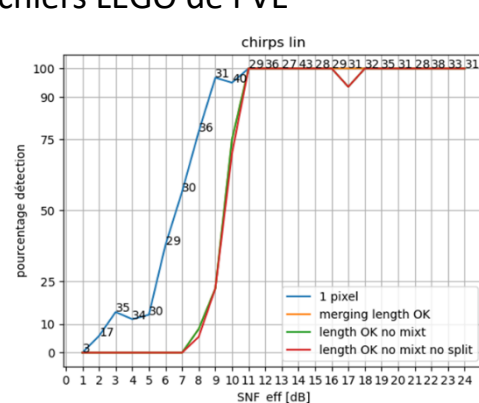
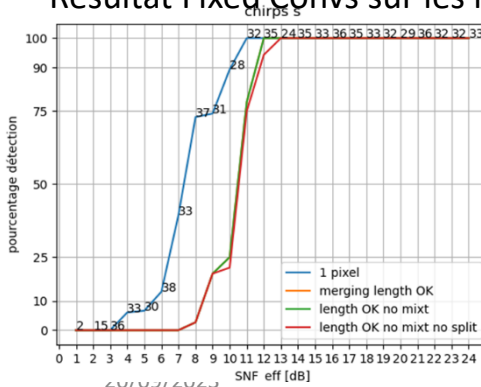
Résultats bout-en-bout - OLD

Résultat YOLO sur les nouveaux fichiers LEGO de FVE

```
num_fp
tensor([0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
      dtype=torch.int32)
```



Résultat Fixed Convs sur les nouveaux fichiers LEGO de FVE



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MERCI