

AVANTIX

Avancement Simulateur IQ

NVIDIA DGX Spark

Architecture	NVIDIA Grace Blackwell
GPU	Architecture Blackwell
CPU	Arm à 20 cœurs, 10 Cortex-X925 + 10 Cortex-A725
Cœurs CUDA	Génération Blackwell
Cœurs Tensor	5 ^e génération
Cœurs RT	4 ^e génération
Performances de Tensor ¹	1 000 TOPS IA
Mémoire système	128 Go LPDDR5x, mémoire système unifiée
Interface mémoire	256 bits
Bande passante mémoire	273 Go/s
Stockage	NVME M2 1 ou 4 To avec auto-chiffrement

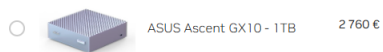
Sélectionner un produit

NVIDIA Founders Edition



NVIDIA DGX Spark - 4TB 3 689 €

Partner Products



ASUS Ascent GX10 - 1TB 2 760 €

Cette réservation vous donne la possibilité d'acheter le produit lorsque les stocks seront disponibles. Des instructions détaillées vous seront envoyées par courrier électronique à ce moment-là. En fonction de la disponibilité, vous aurez peut-être la possibilité de modifier votre sélection au moment de l'achat.

USB	4 ports USB4 Type C (jusqu'à 40 Go/s)
Ethernet	1 connecteur RJ-45 10 GbE
NIC	ConnectX-7 Smart NIC
Wi-Fi	Wi-Fi 7
Bluetooth	BT 5.3
Sortie audio	Sortie audio HDMI multicanal
Consommation	170 W
Connecteurs d'affichage	1 port HDMI 2.1a
NVENC NVDEC	1x 1x
Système d'exploitation	NVIDIA DGX™ Base OS, Ubuntu Linux
Dimensions système	150 mm L x 150 mm L x 50,5 mm H
Poids	1,2 kg

* Spécifications préliminaires sujettes à changement

1 TOPS théorique FP4 utilisant la fonctionnalité de dispersion.

<https://www.nvidia.com/fr-fr/products/workstations/dgx-spark/>

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Par branche

OLD : Performances par branches

nperseg	Nombre de couches	Num_params (≈num_kernels)	PR-AUC (%)	
256	4	373 4945	93,2 94,7	Peu d'intérêt à passer à un modèle plus gros
512	3	225 2625	85,3 92,4	
1024	2	305	76,4	
4096	2 4	305 4945	75,7 90,9	Gain notable en perf avec un modèle plus gros
16384	2 2	305	72,4	
131072	5 5	521 7625	91,4 95,4	Peu d'intérêt à passer à un modèle plus gros

Il semble que les performances sont corrélées au nombre de couches plutôt qu'au nombre de paramètres

Performances par branches bt603

nperseg	Nombre de couches	num_kernels (num_params)	PR-AUC (%)
256	4	4	93,5
		8	95
512	4	4	92,6
		8	95,8
1024	4	4	91,2
		8	94,4
4096	4	4	92,2
		8	94,8
16384	4	4	91,5
		8	93,6
131072	5	4	94,4
		8	96,1

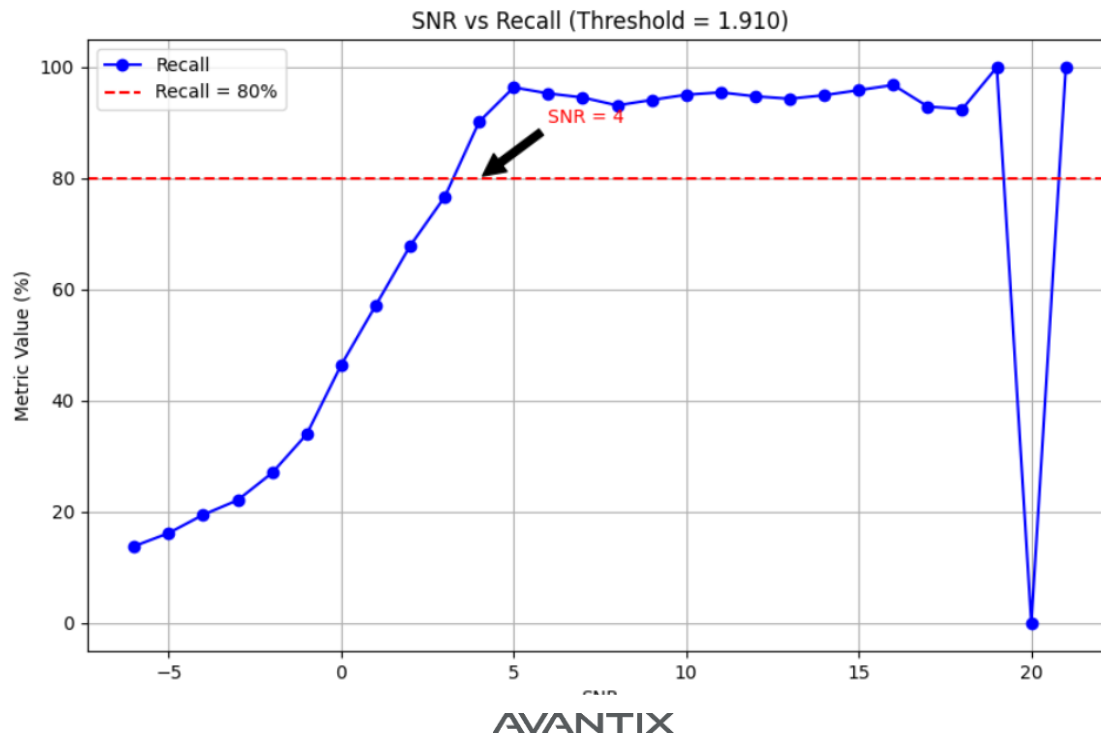
Performances par branches bt603 + High SNR + Clamp max @17dB

nperseg	Nombre de couches	num_kernels (num_params)	PR-AUC (%)
256	6	4	97,6
		<u>2</u>	<u>96,6</u>
		1	84,1
512	6	4	97,0
		<u>2</u>	<u>94,8</u>
		1	87,4
1024	6	<u>4</u>	<u>95,4</u>
		2	91,3
		1	59,8
4096	6	<u>4</u>	<u>96,2</u>
		2	89,7
		1	77,7
16384	6	<u>4</u>	<u>95,8</u>
		2	86,3
		1	53,5
131072	6	4	96,8
		<u>2</u>	<u>95,4</u>
		1	90,6

NPERSEG = 256 bt603 + High SNR + Clamp max @17dB

snr_vs_recall_curve_nperseg=256.png 38.57KB

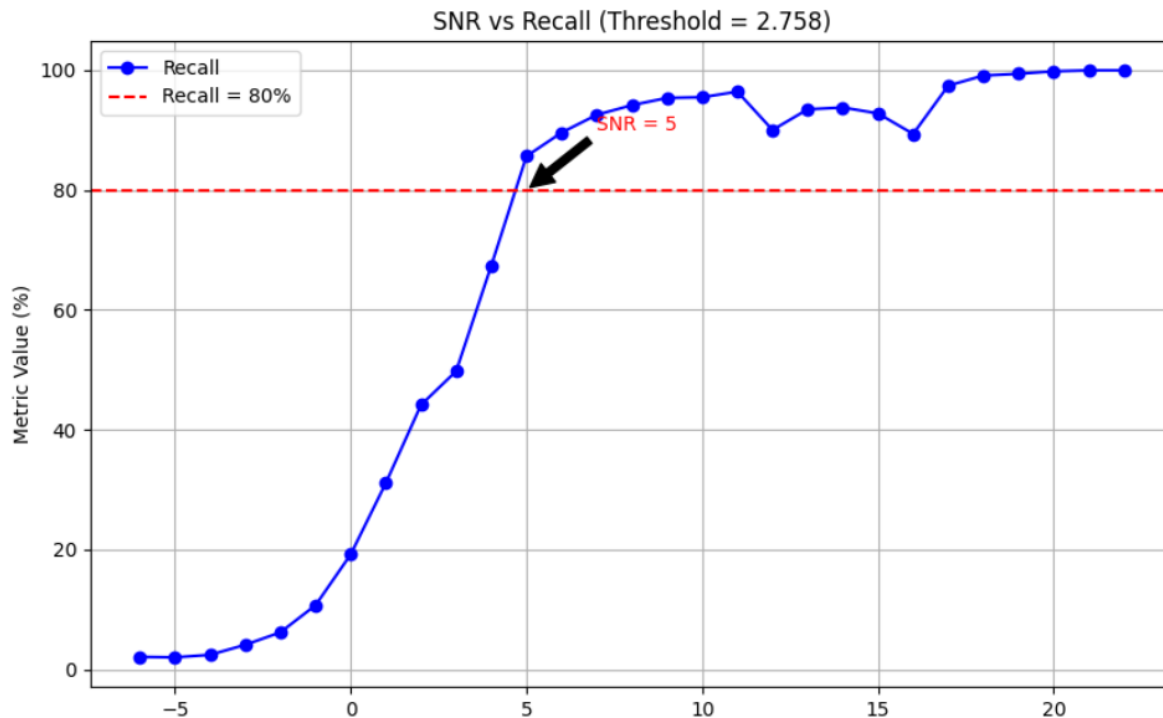
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NPERSEG = 512 bt603 + High SNR + Clamp max @17dB

snr_vs_recall_curve_nperseg=512.png 35.54KB

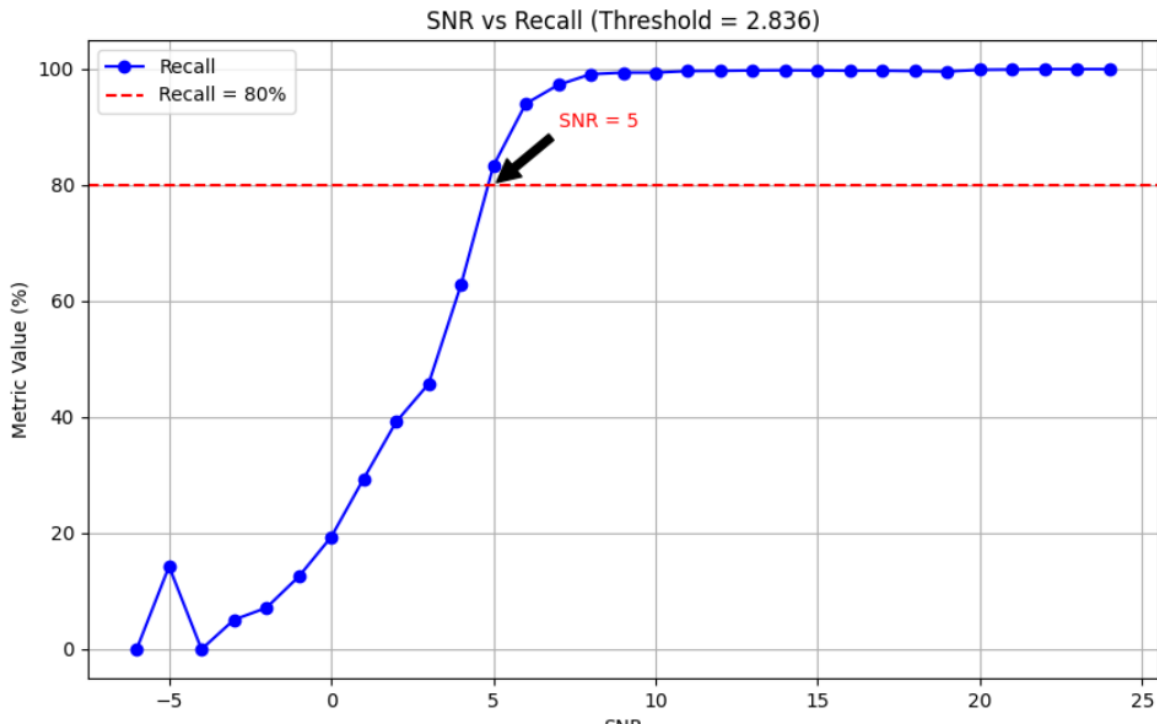
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NPERSEG = 1024 bt603 + High SNR + Clamp max @17dB

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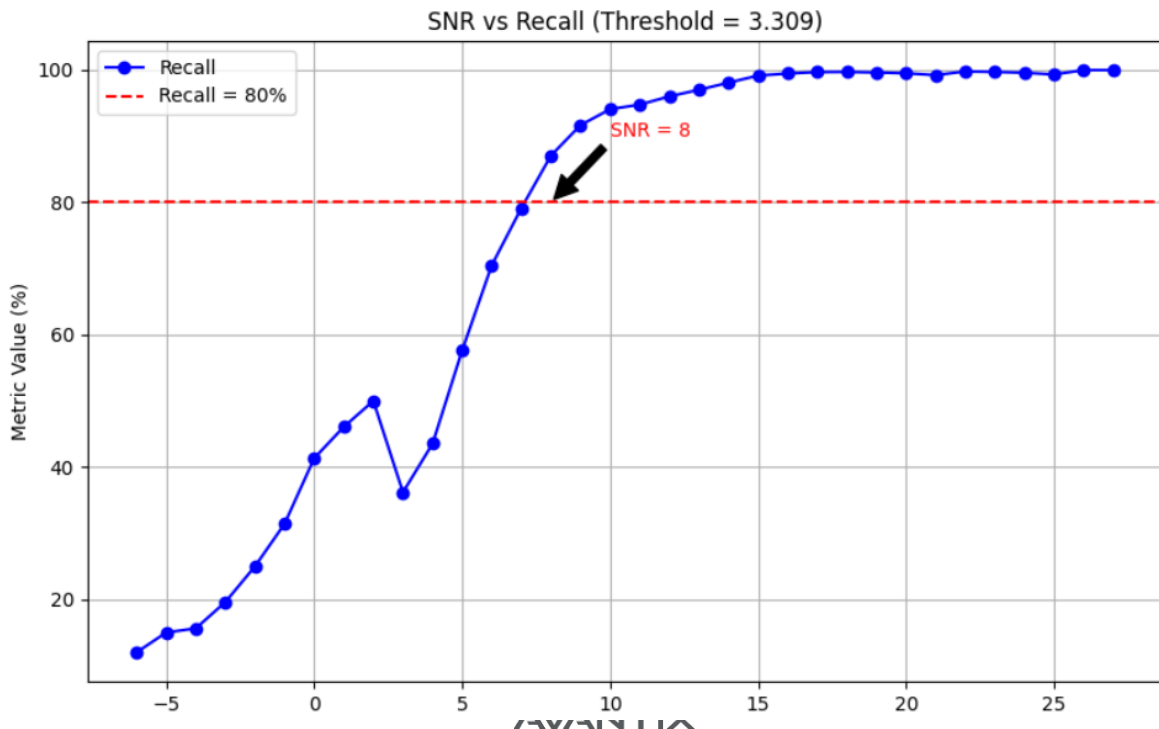
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NPERSEG = 4096 bt603 + High SNR + Clamp max @17dB

snr_vs_recall_curve_nperseg=4096.png 36.77KB

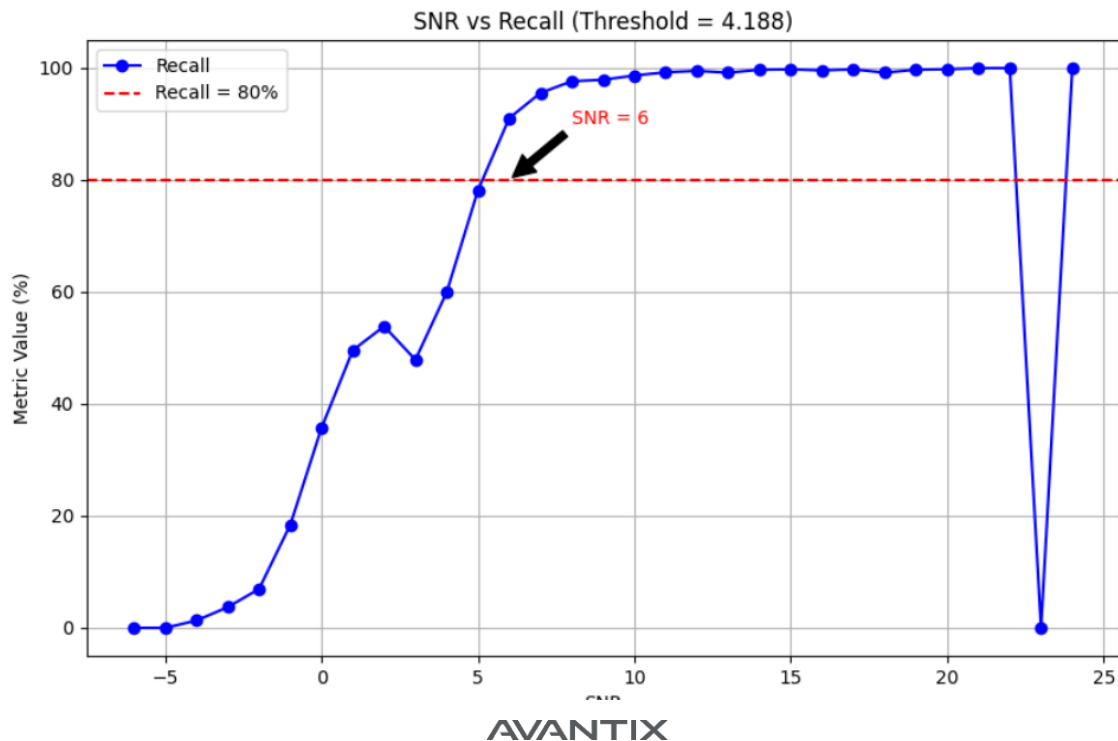
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NPERSEG = 16384 bt603 + High SNR + Clamp max @17dB

snr_vs_recall_curve_nperseg=16384.png 39.35KB

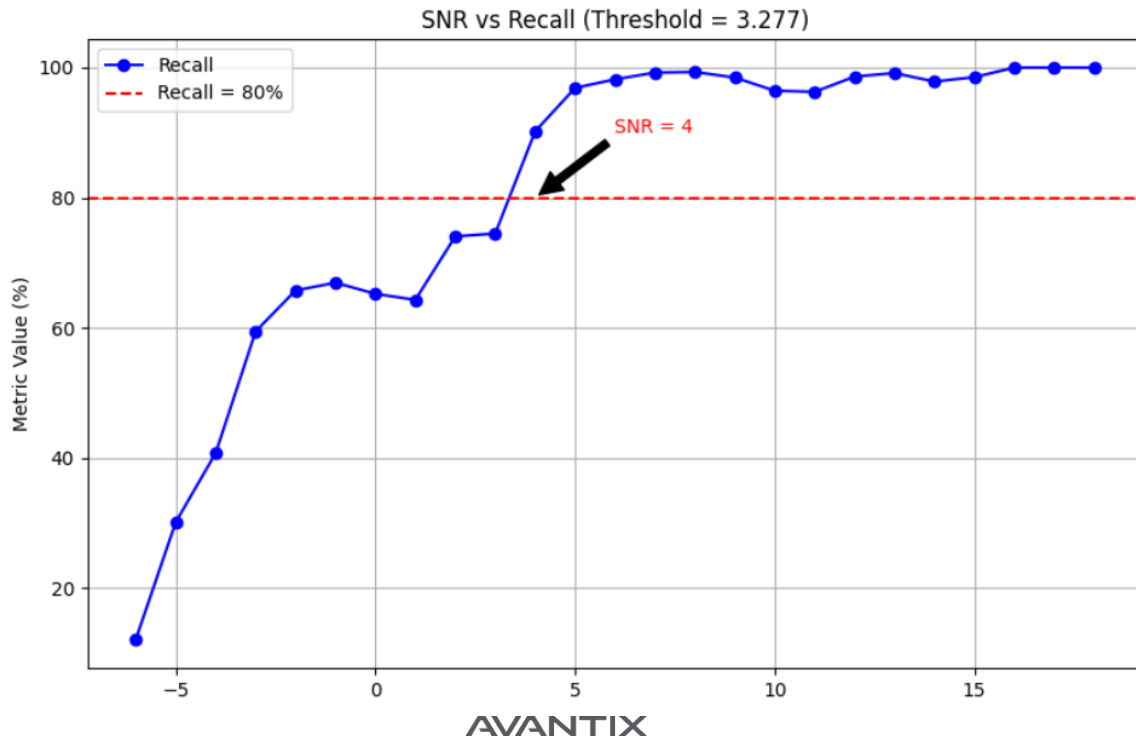
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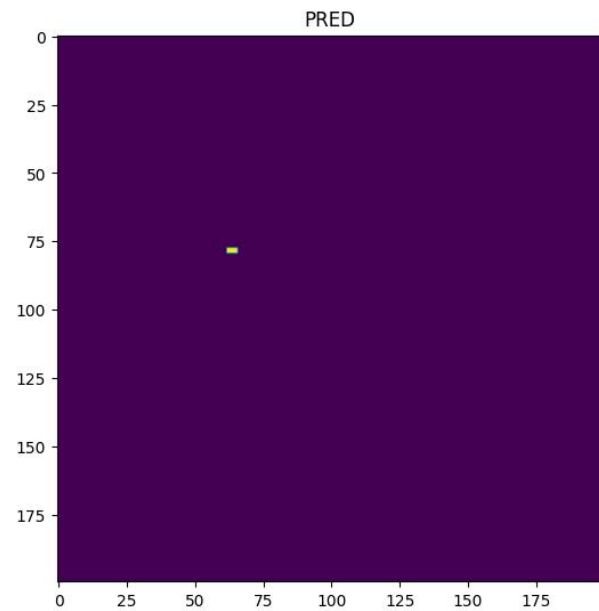
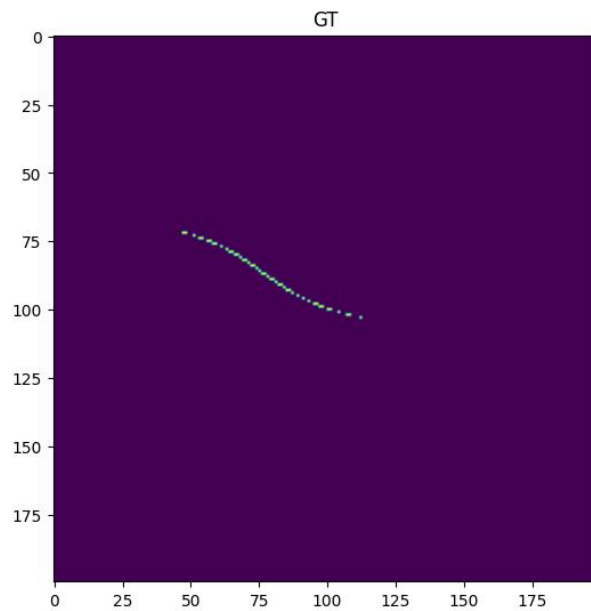
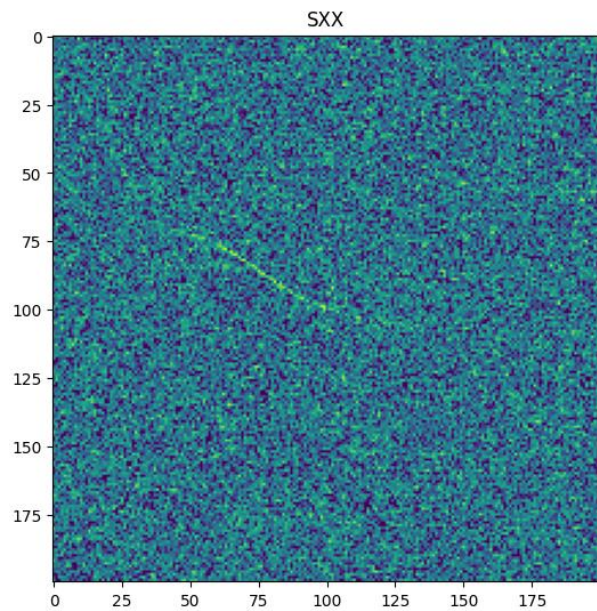
NPERSEG = 131072 bt603 + High SNR + Clamp max @17dB

snr_vs_recall_curve_nperseg=131072.png 34.34KB

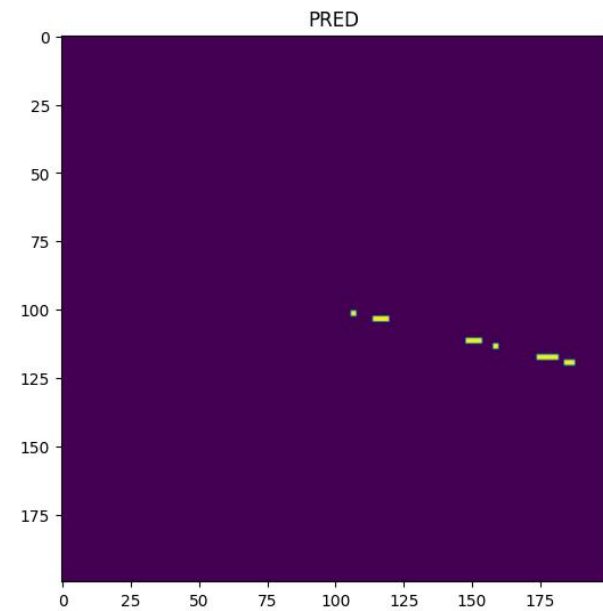
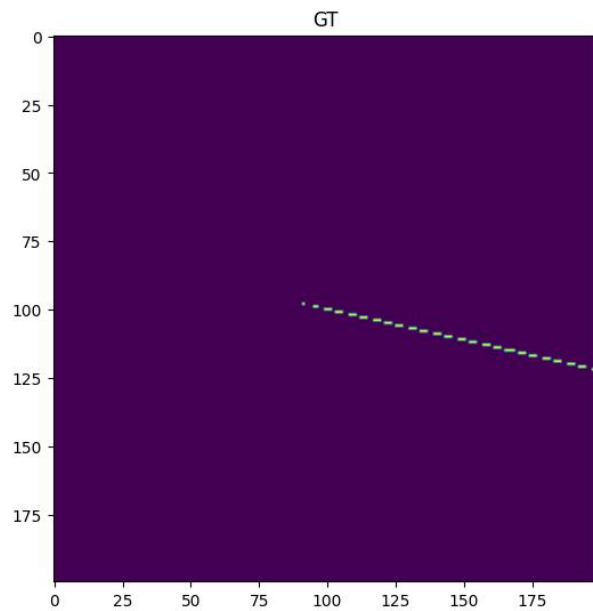
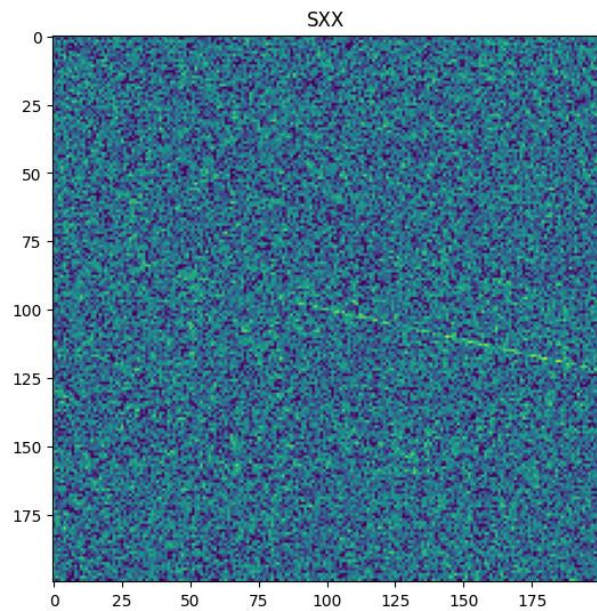
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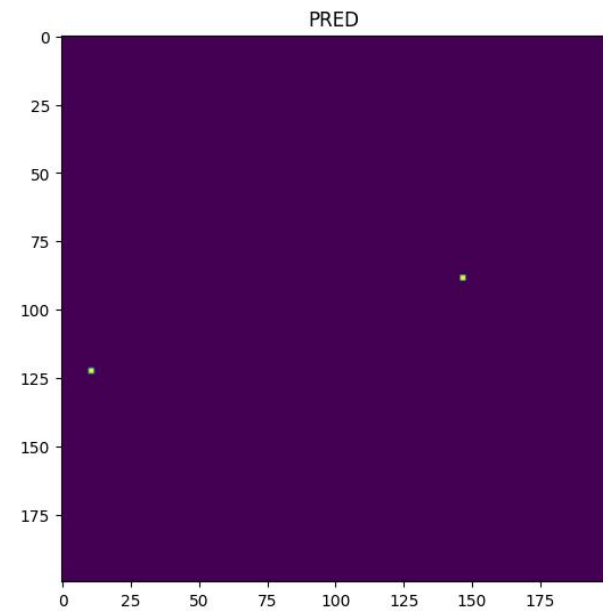
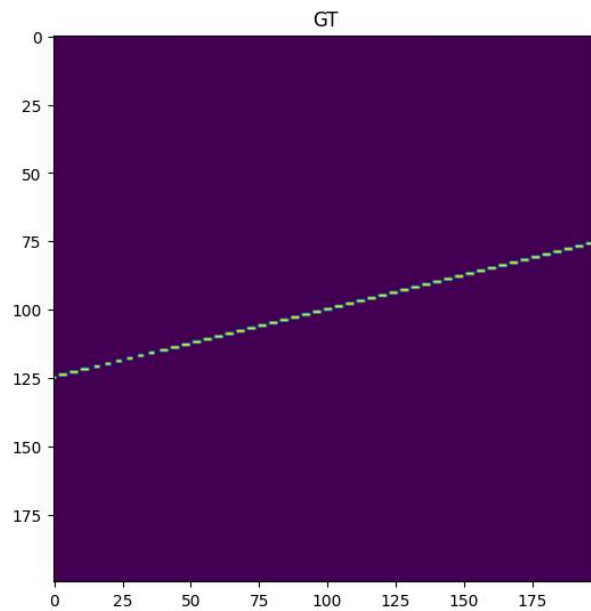
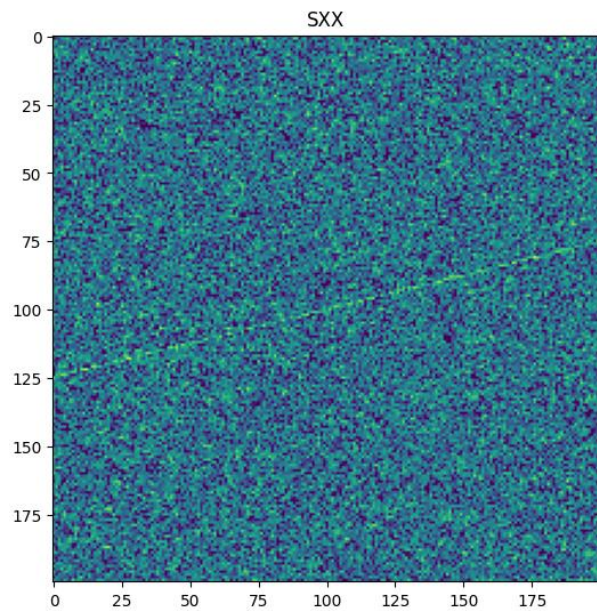
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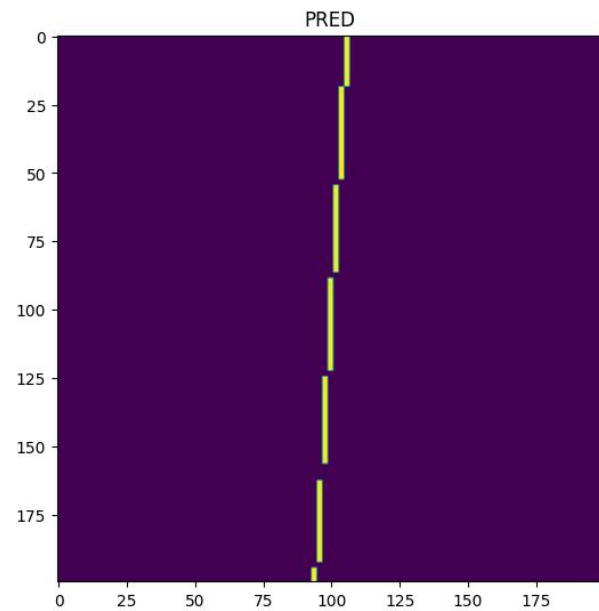
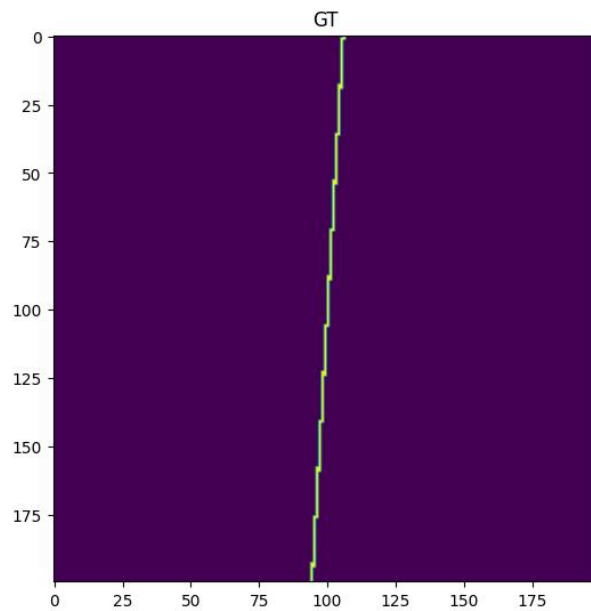
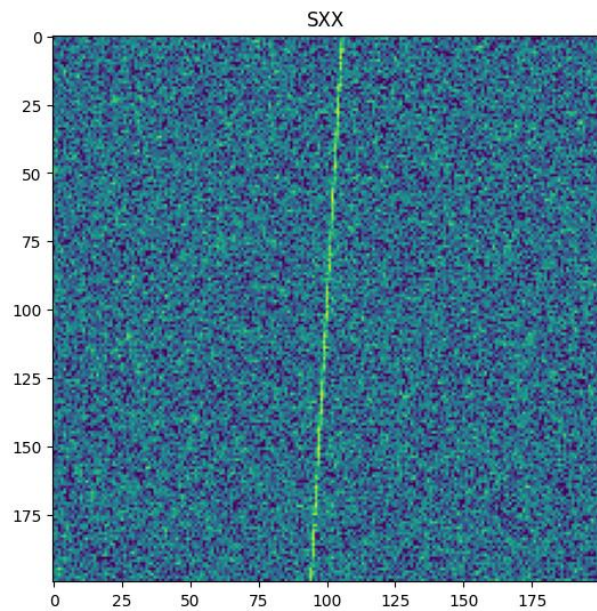
nperseg=4096 | target_dB=8



nperseg=4096 | target_dB=8

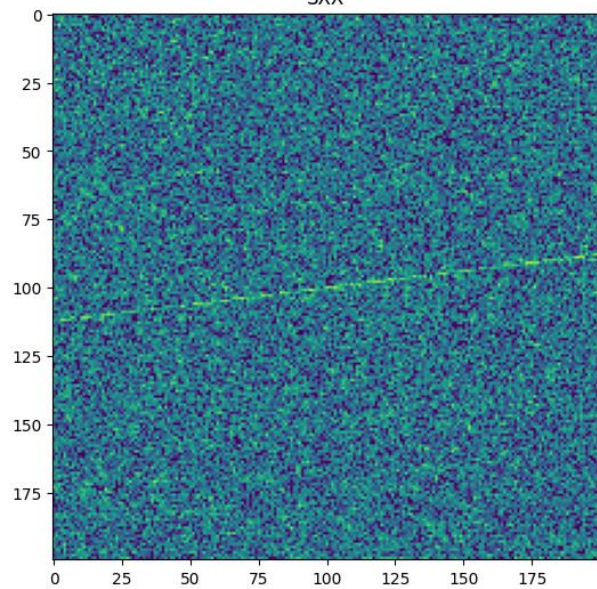


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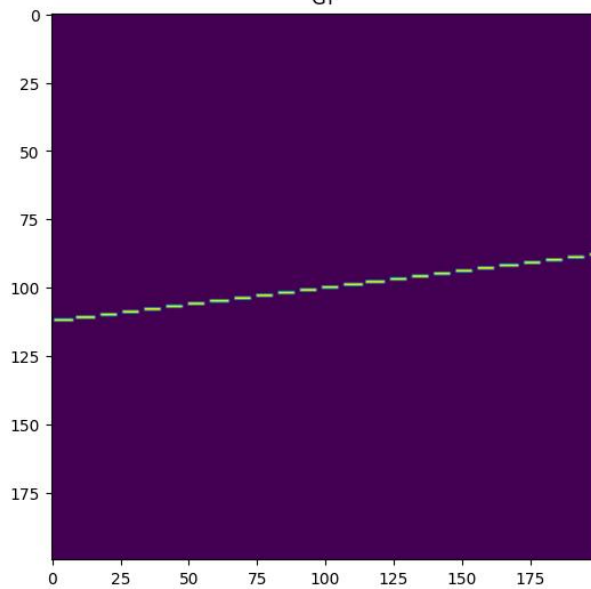


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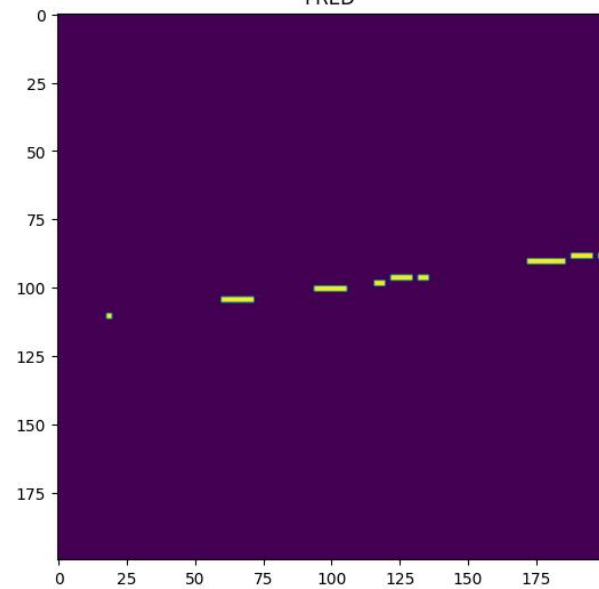
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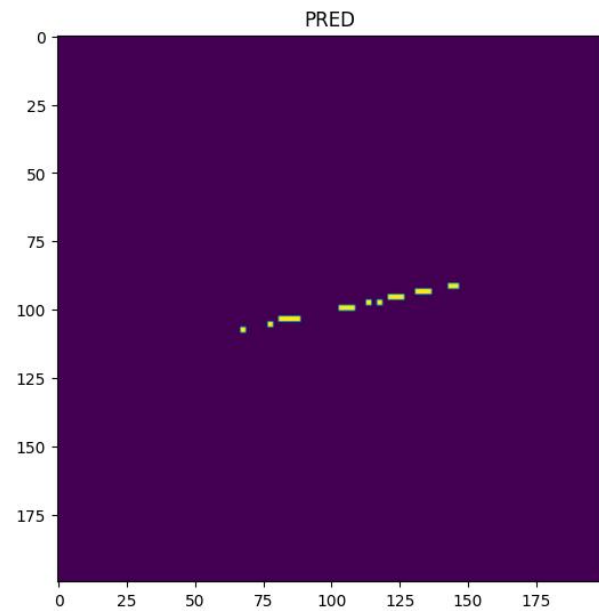
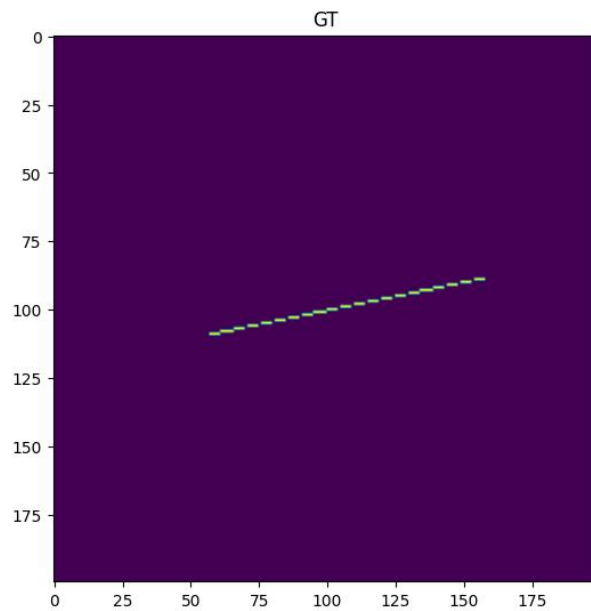
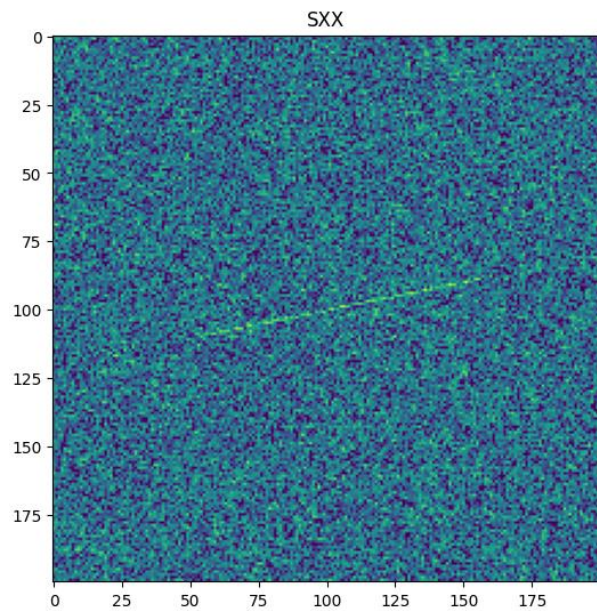
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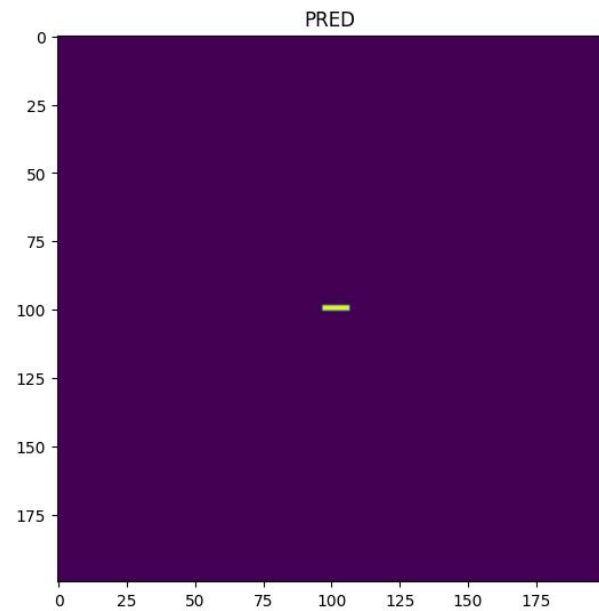
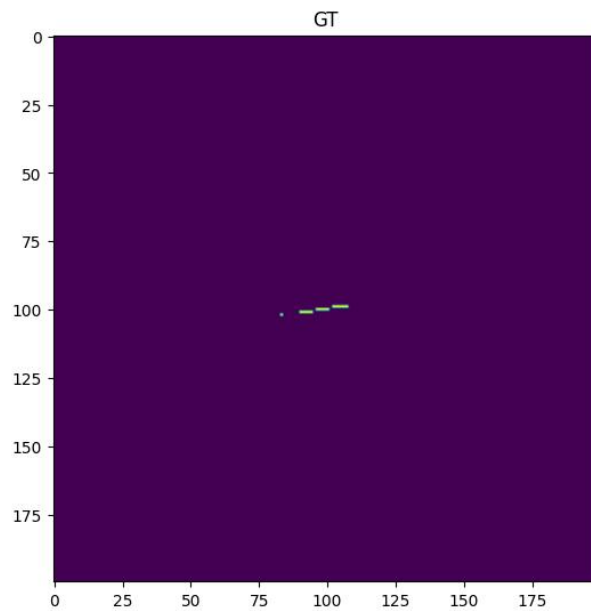
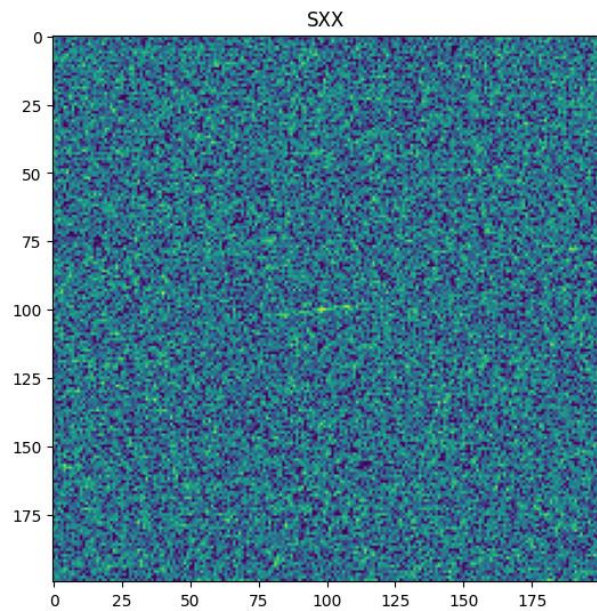
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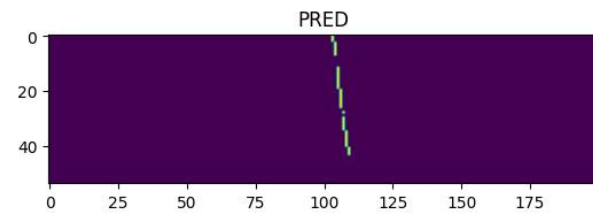
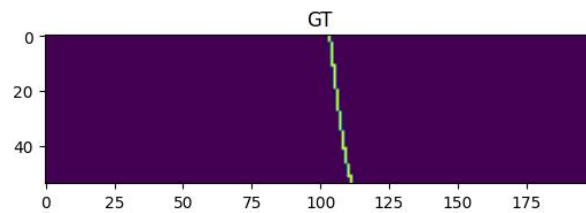
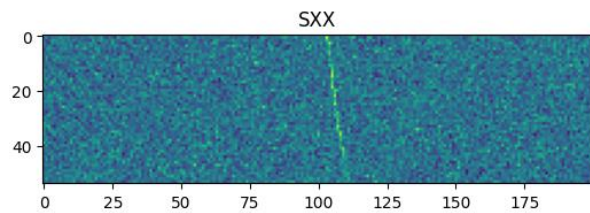
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nperseg=4096 | target_dB=10

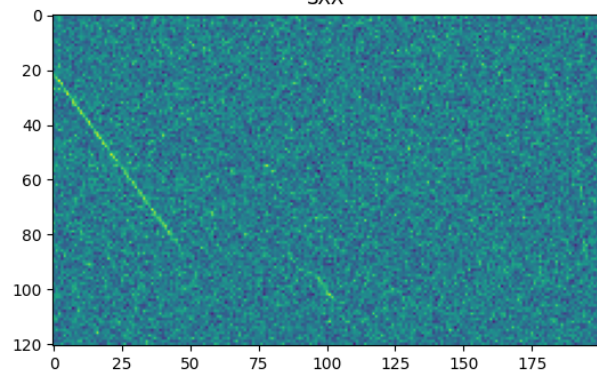


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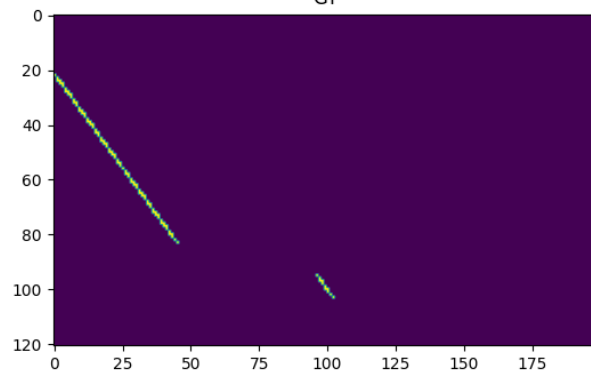


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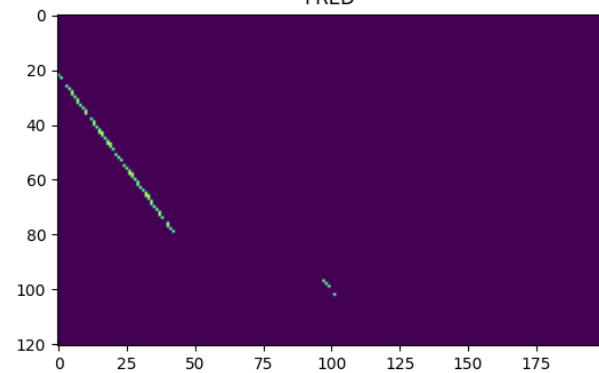
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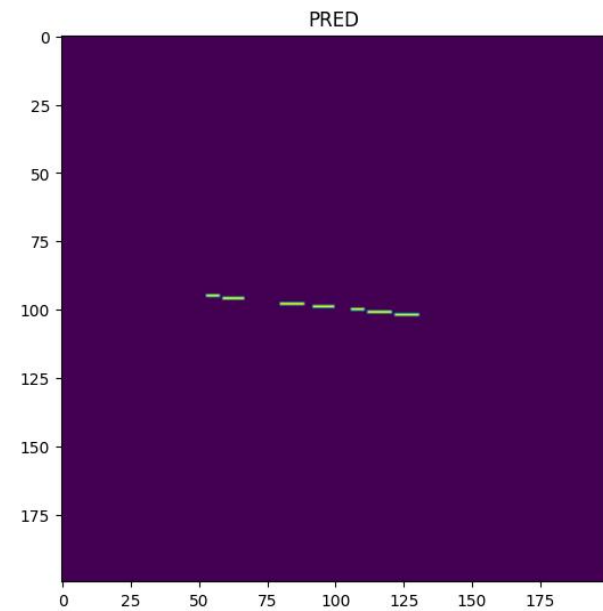
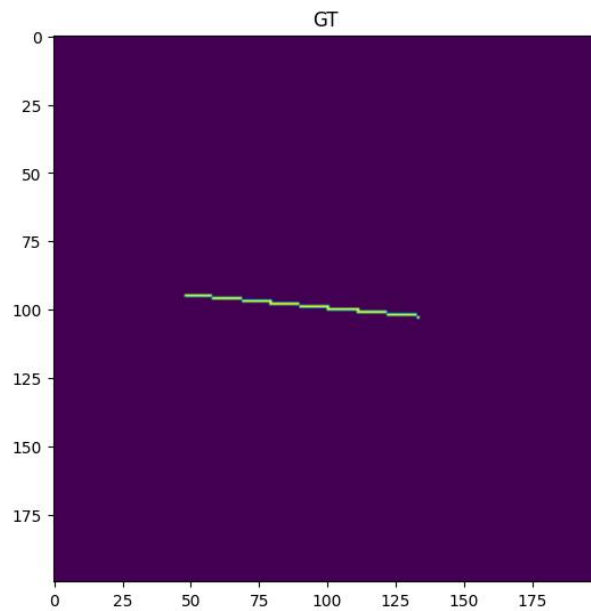
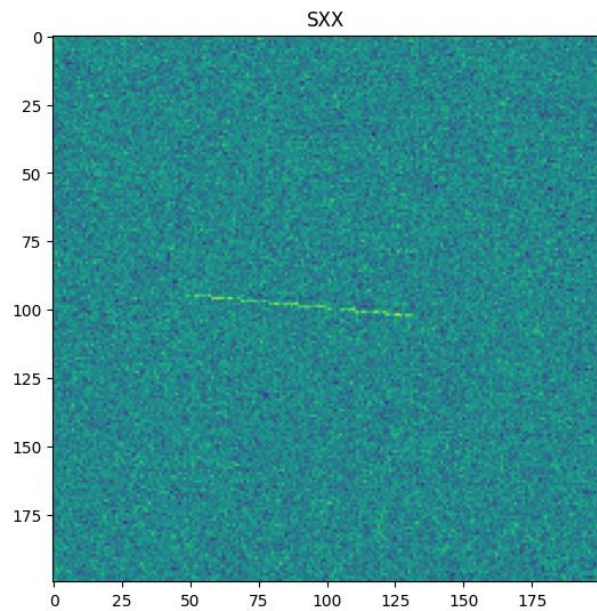
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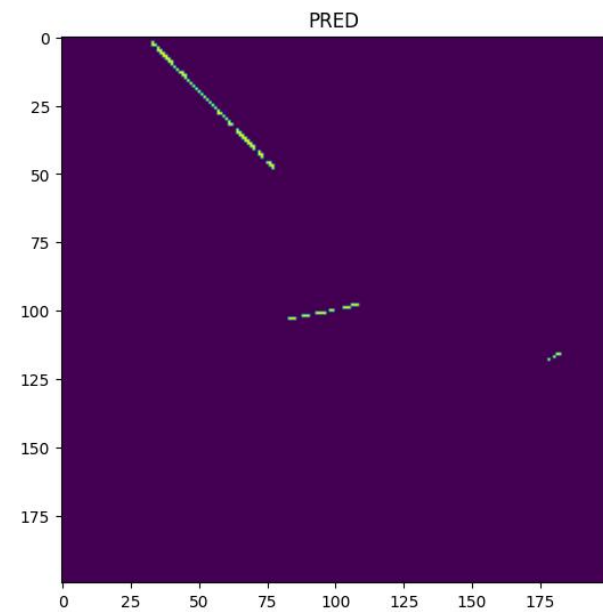
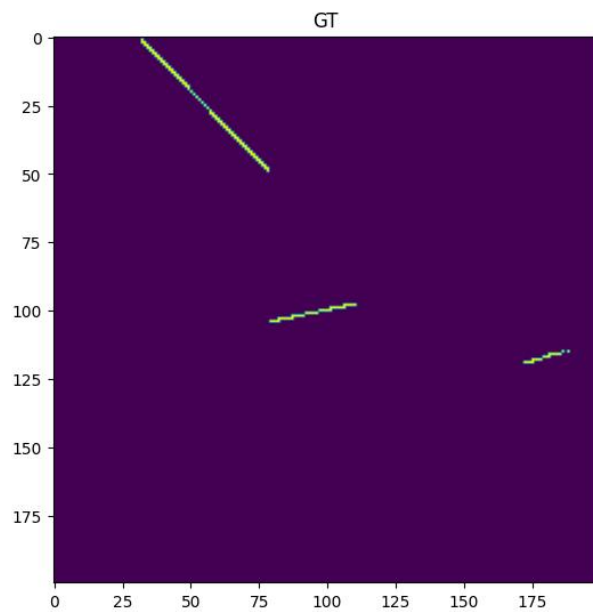
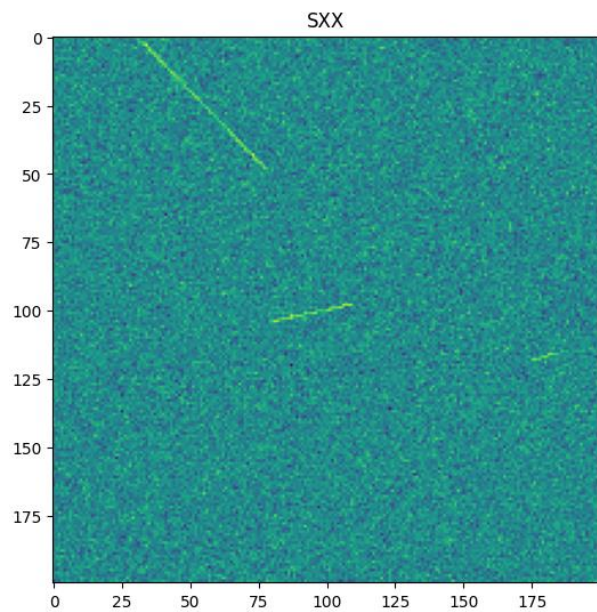
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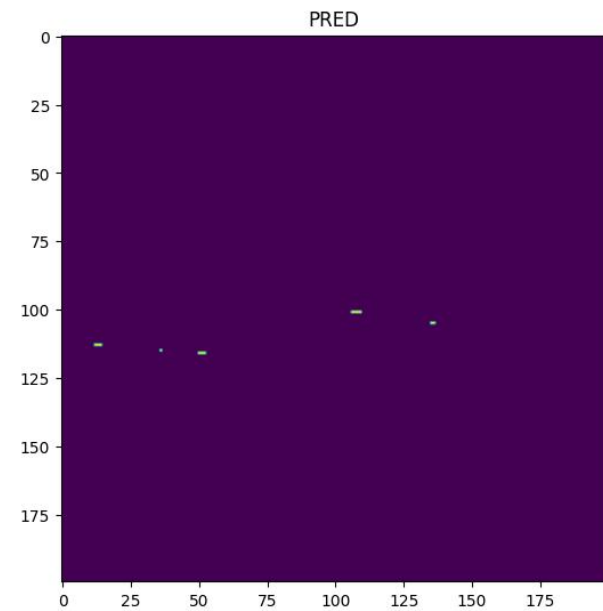
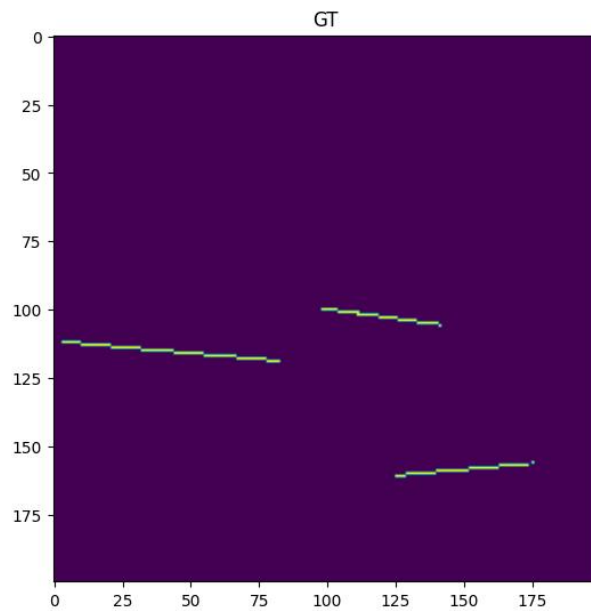
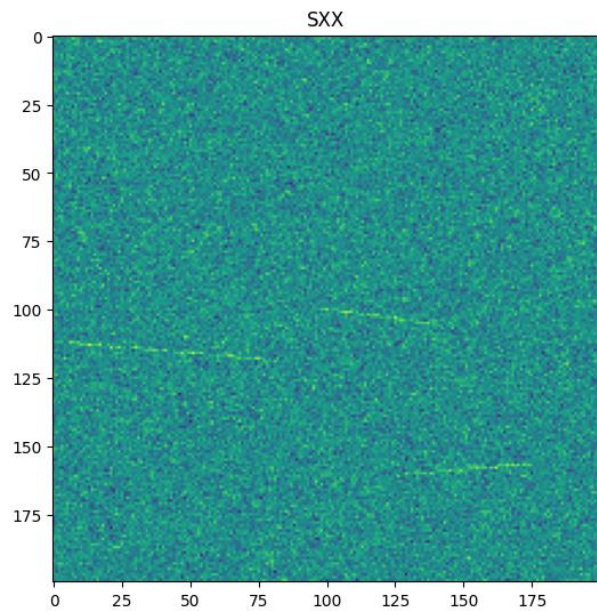
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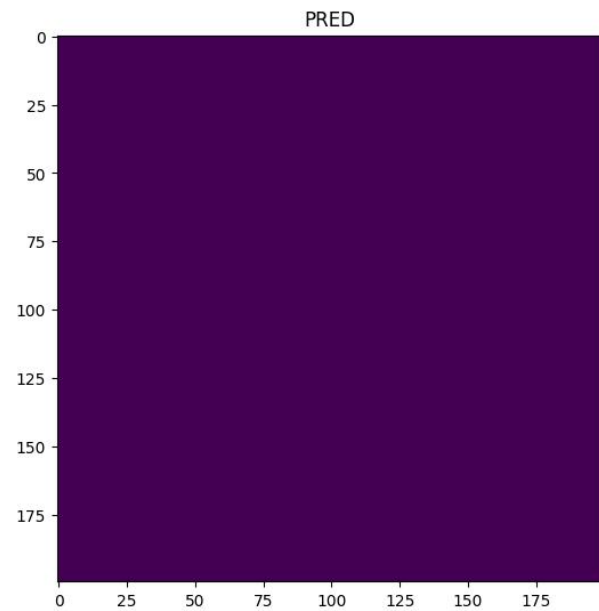
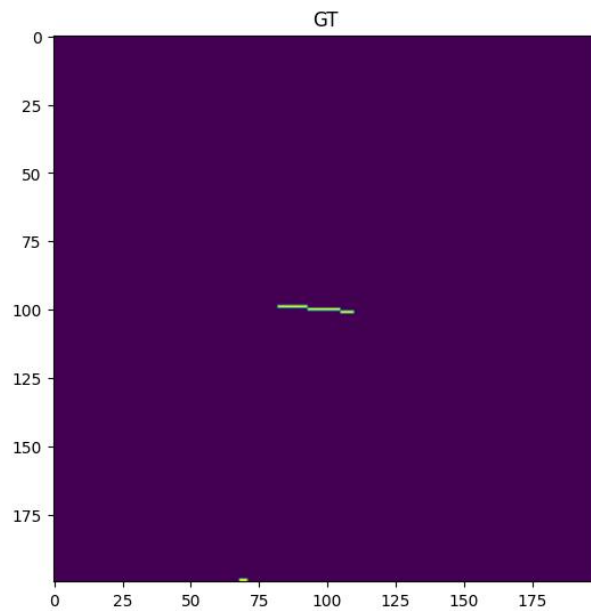
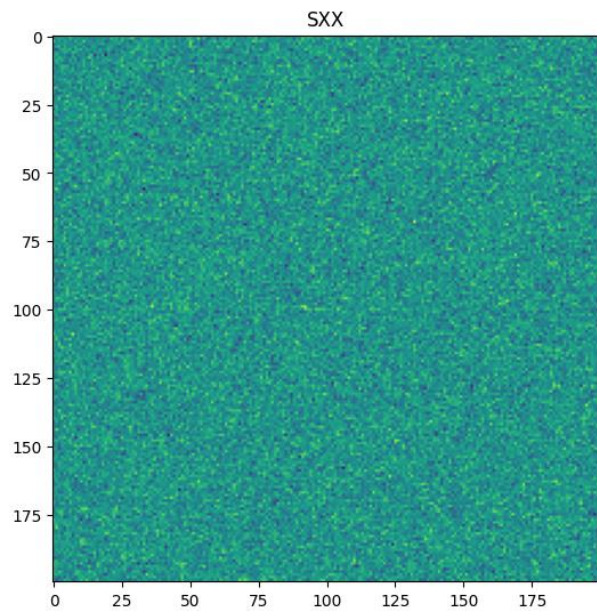
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nperseg=512 | target_dB=8

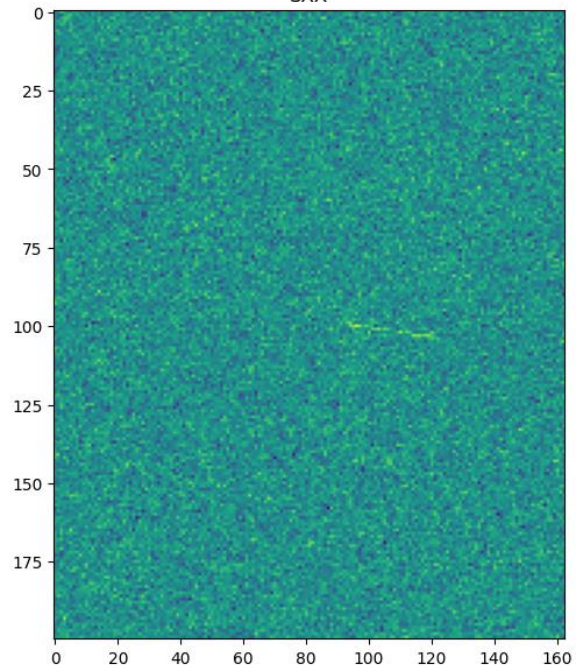


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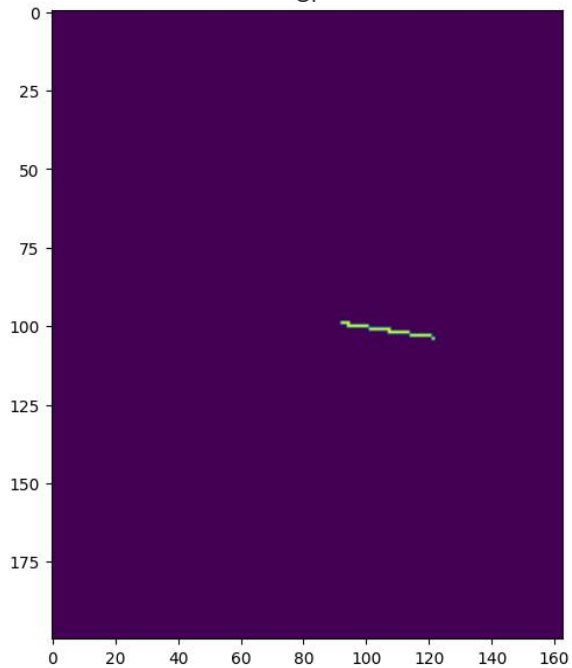


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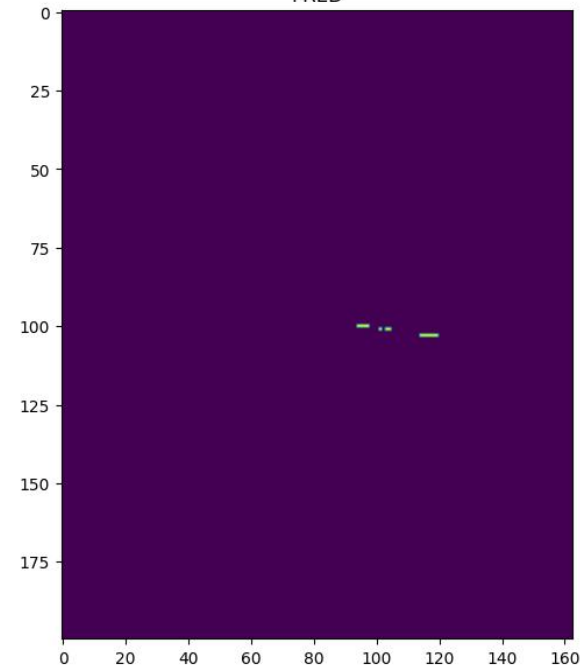
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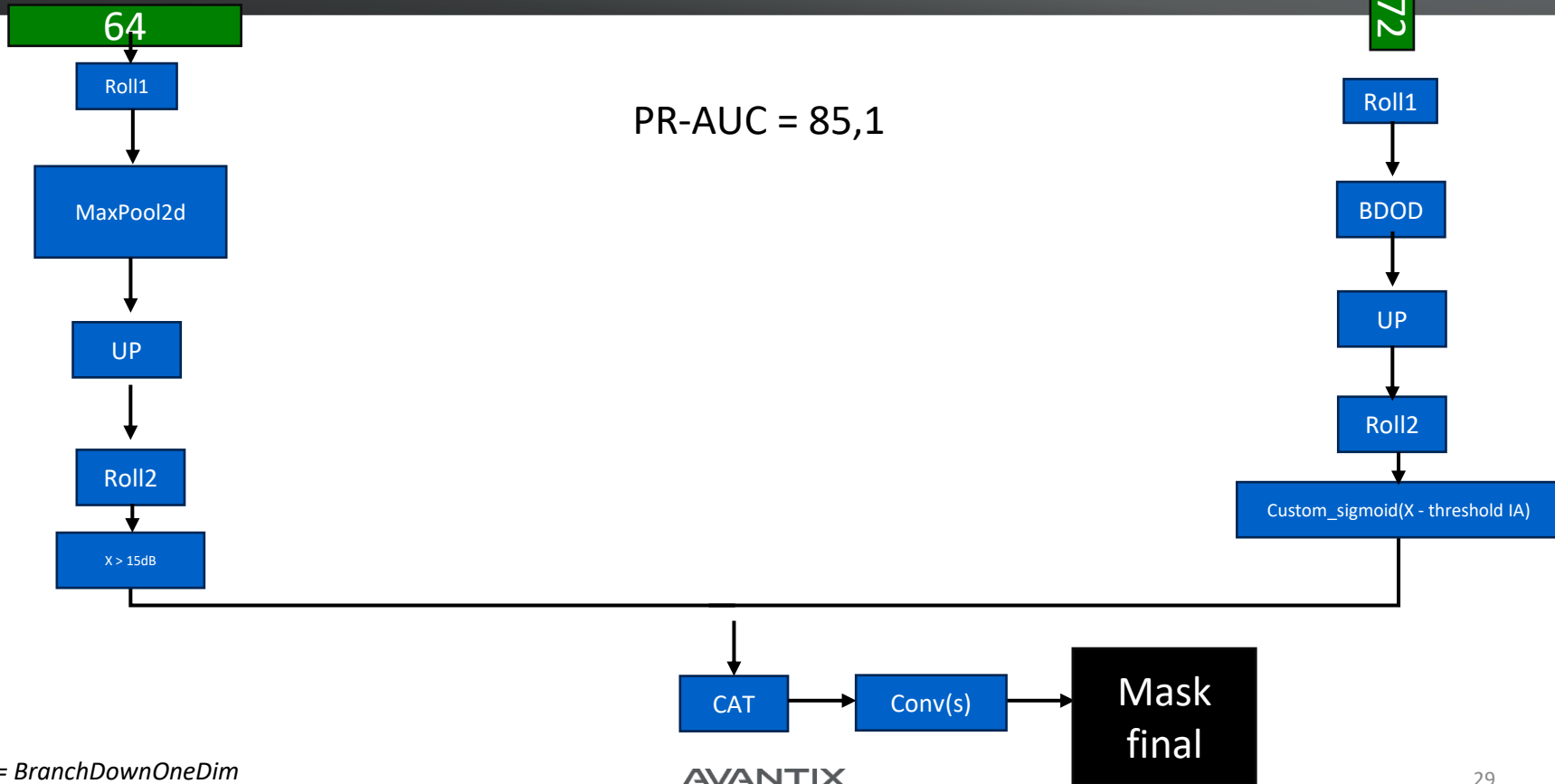
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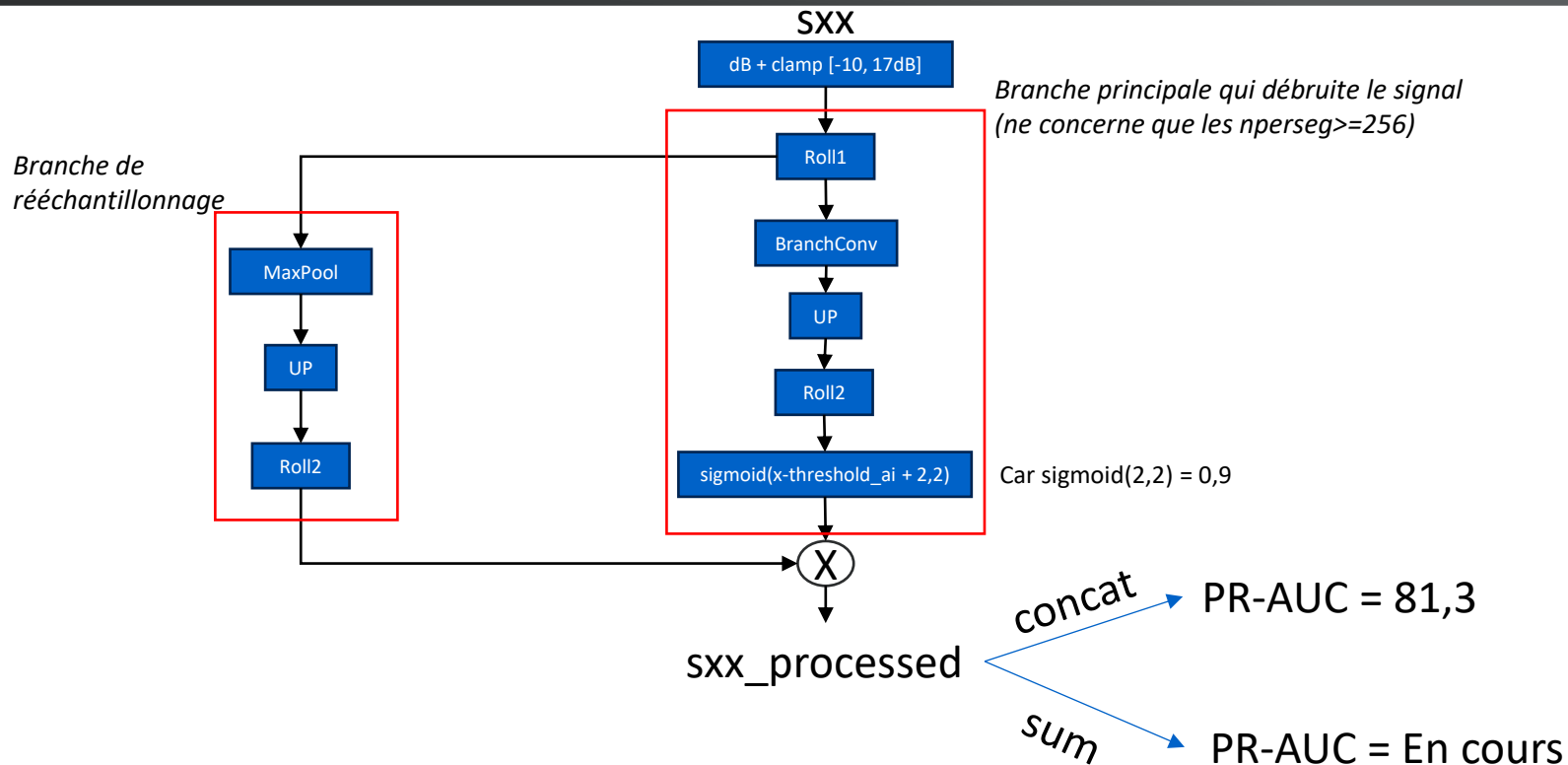
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Fusion des branches

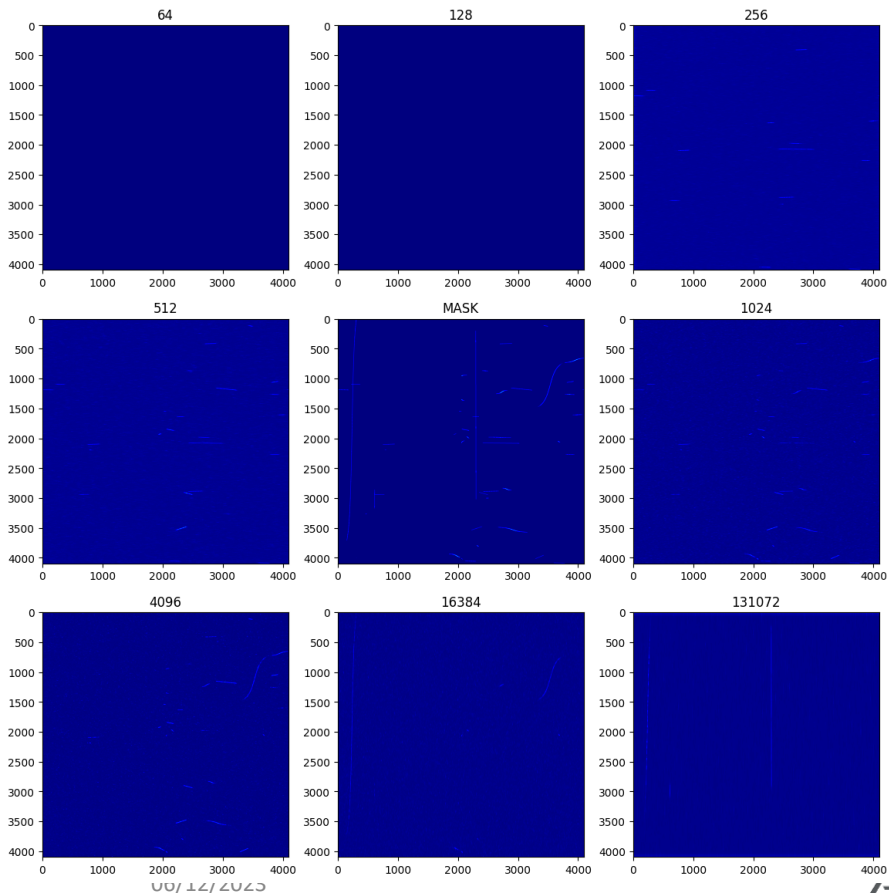
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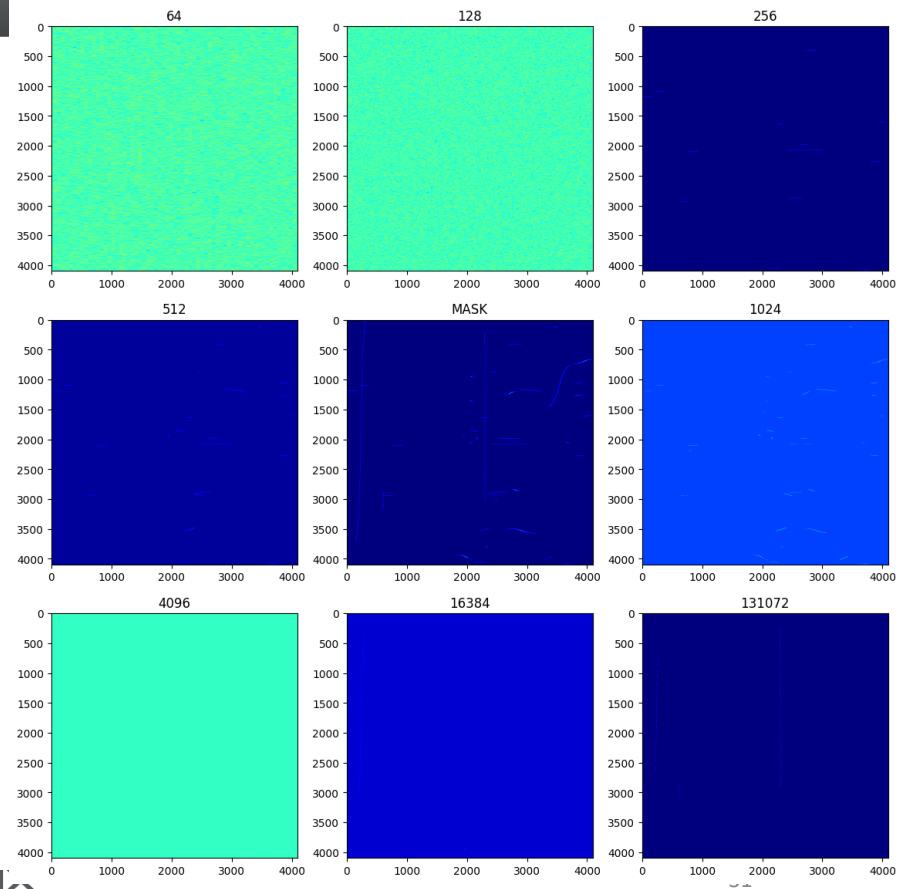
Construction INPUT V2



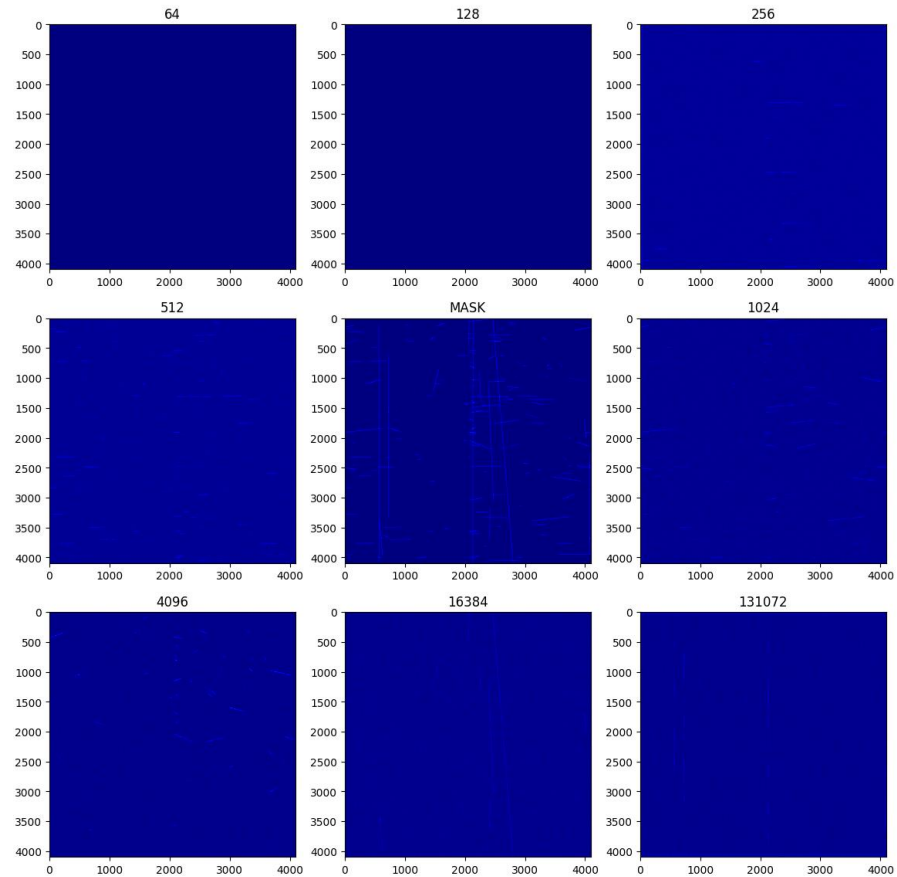
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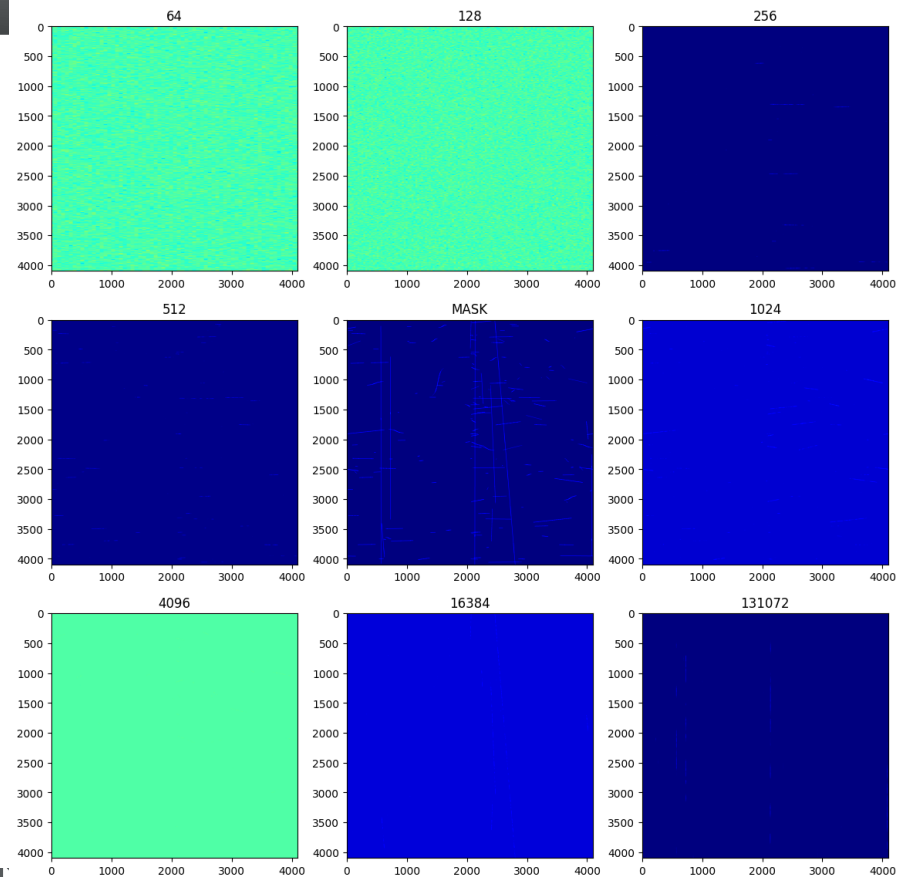
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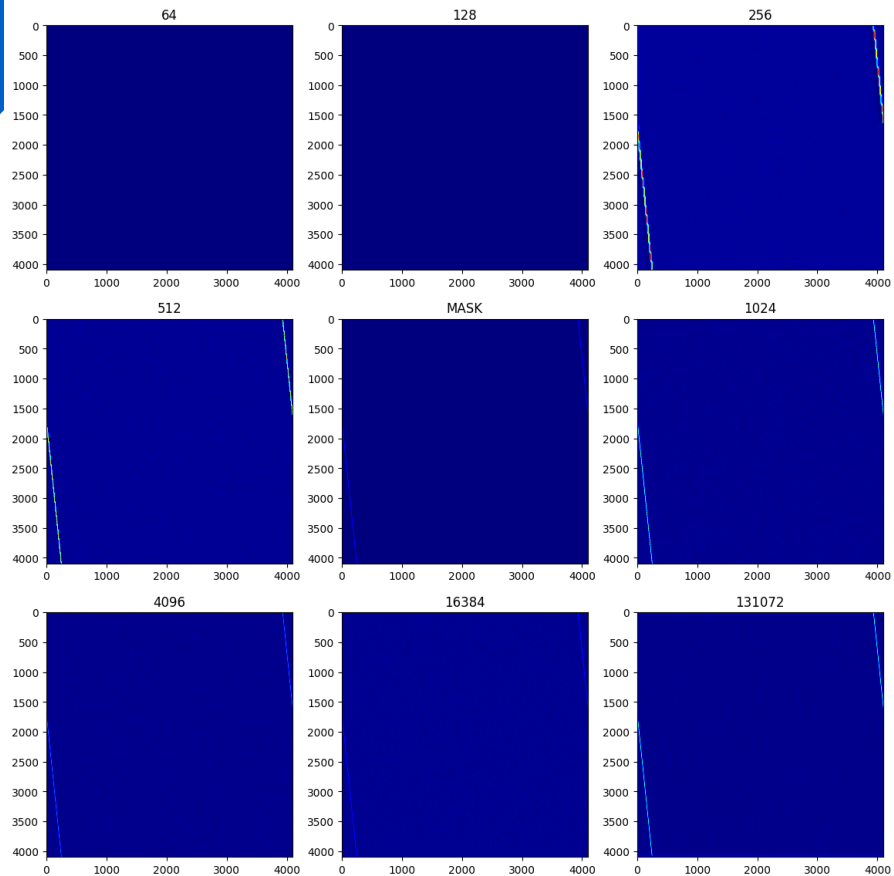
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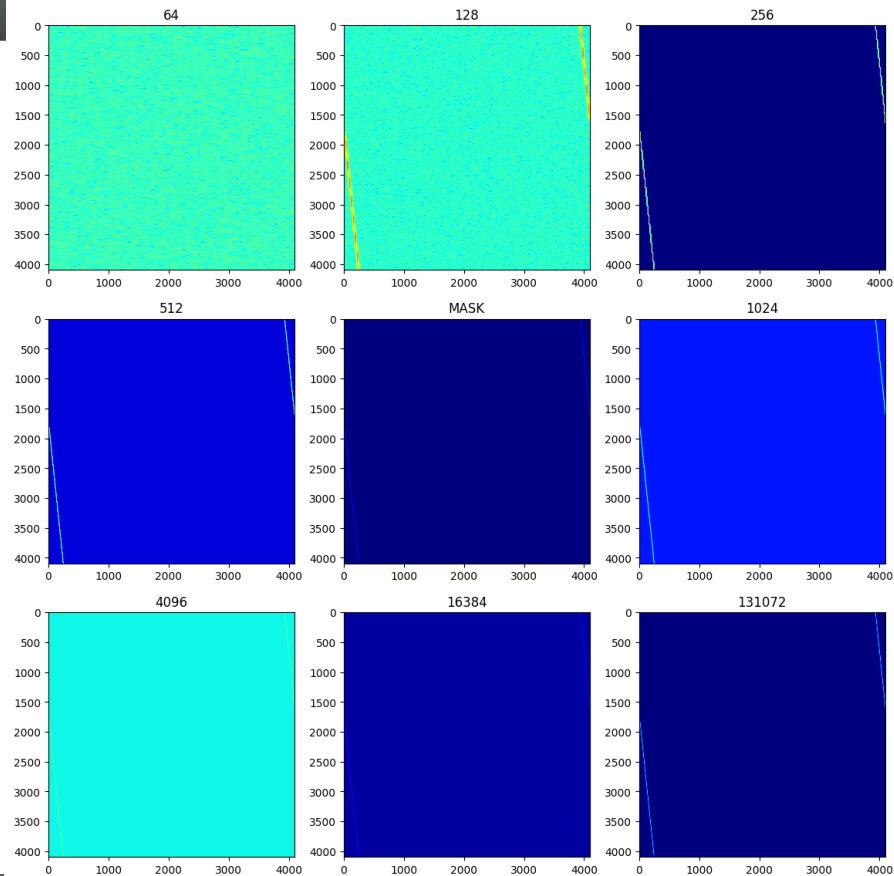
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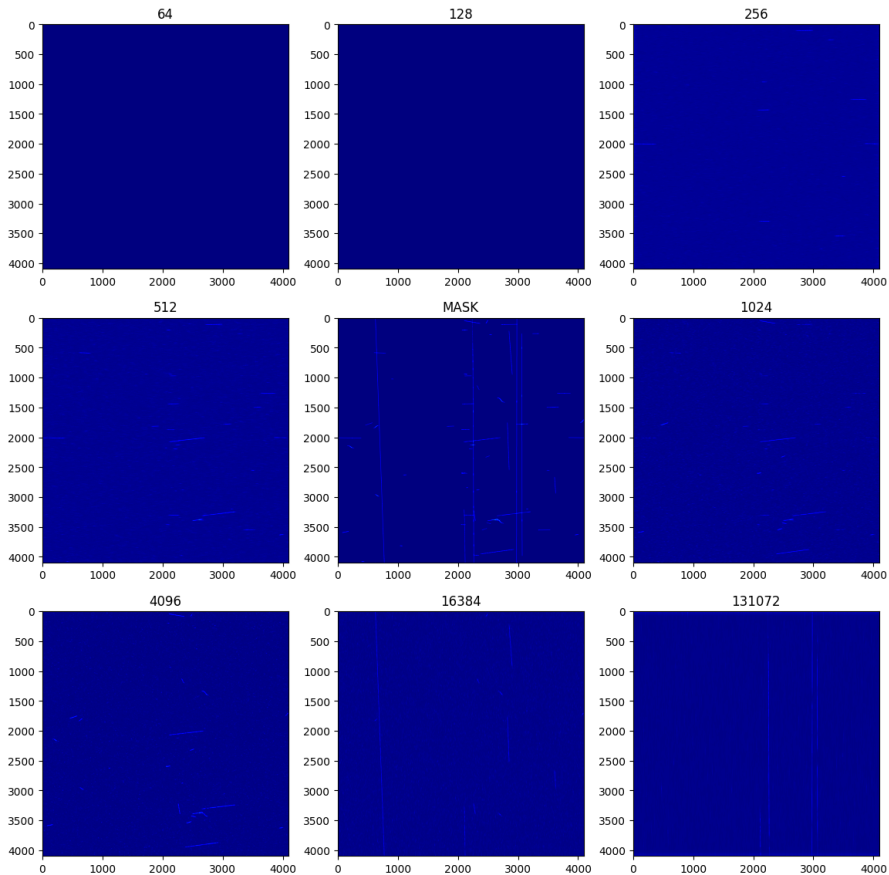
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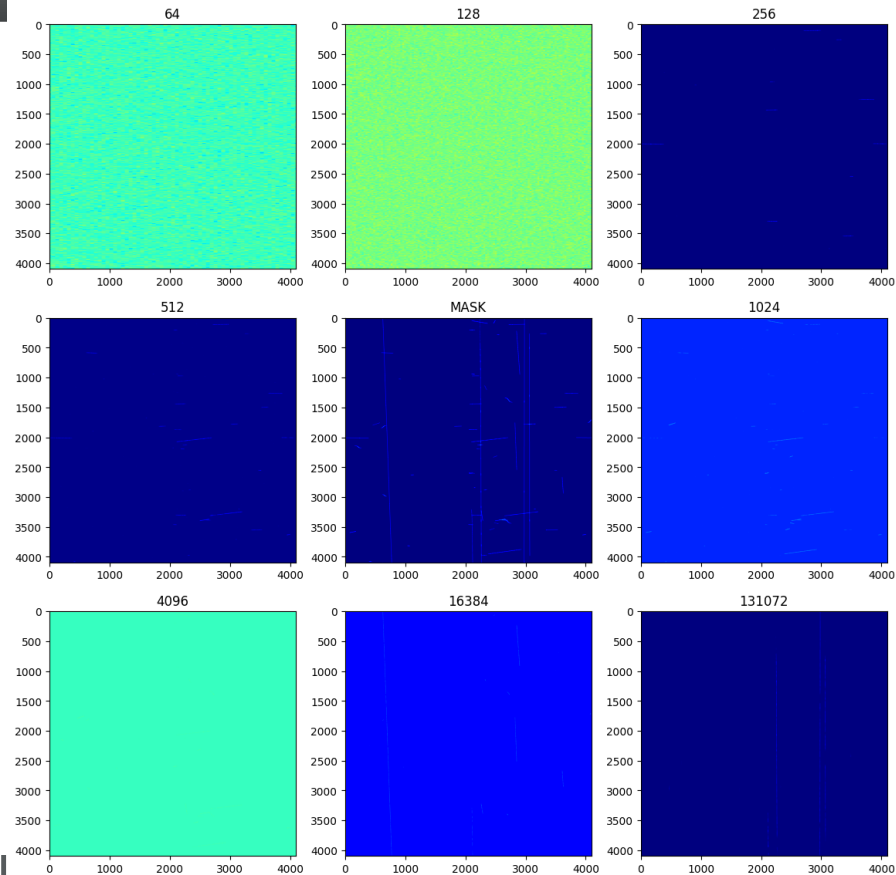
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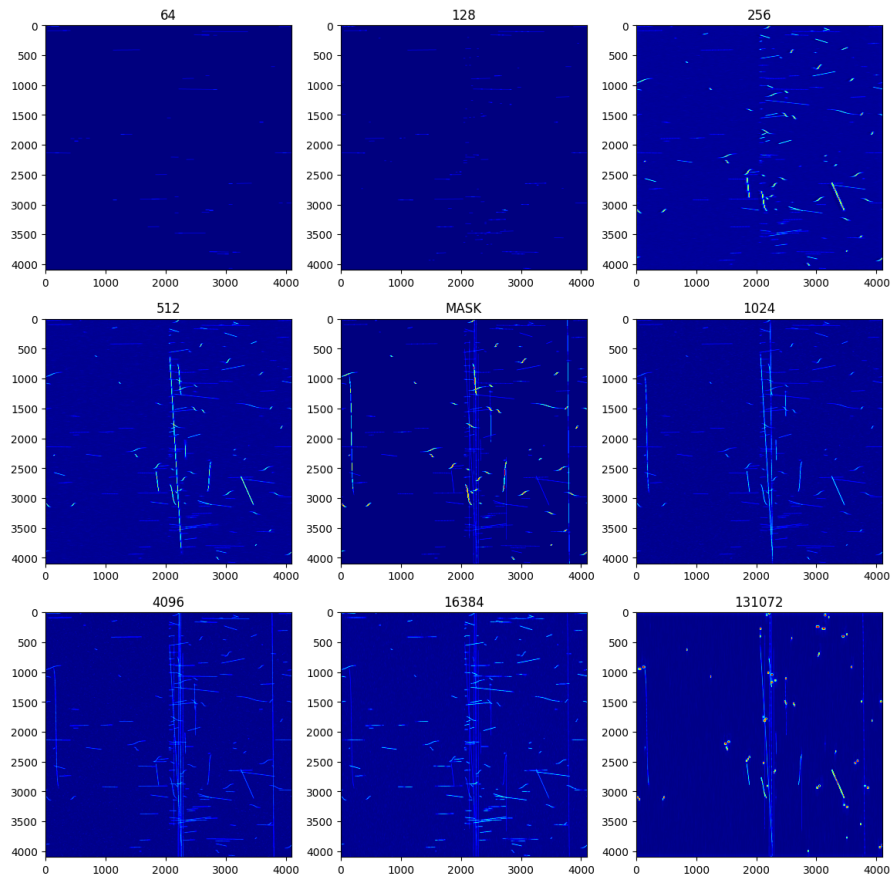
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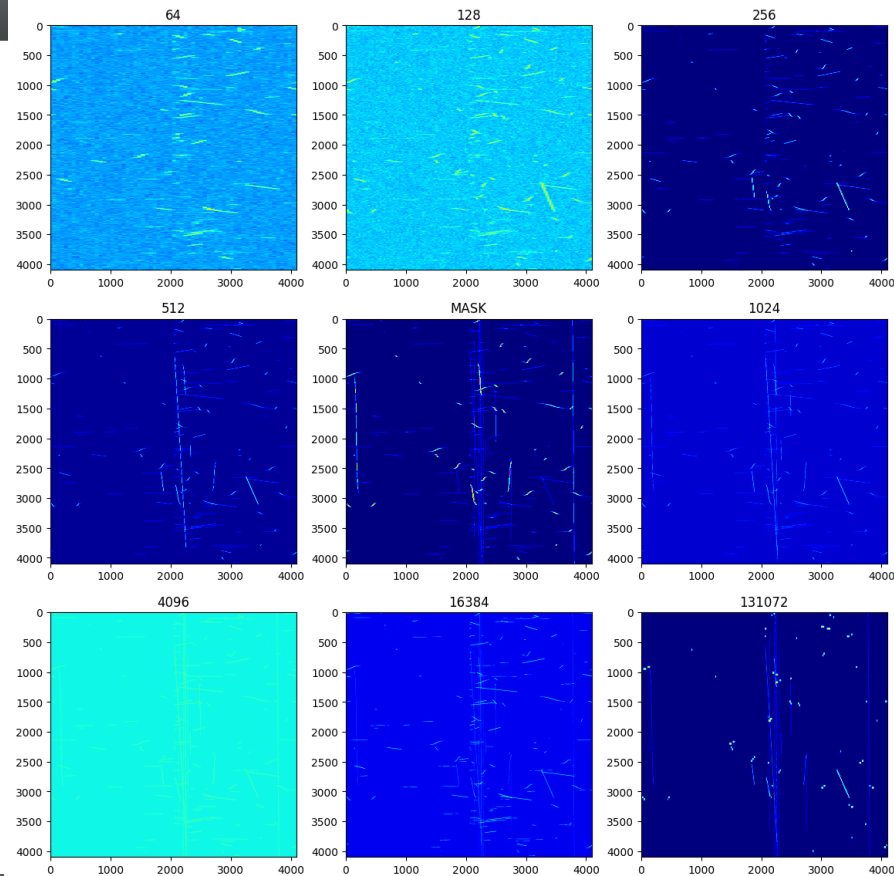
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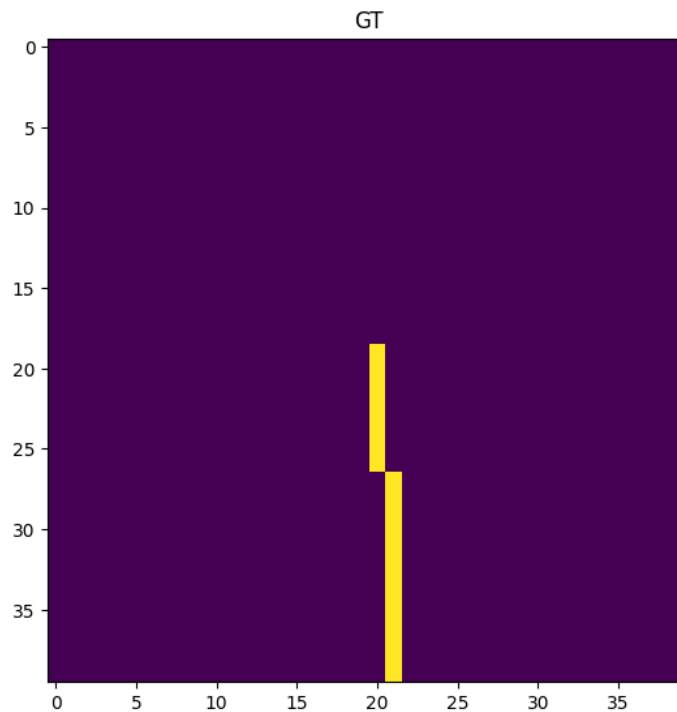
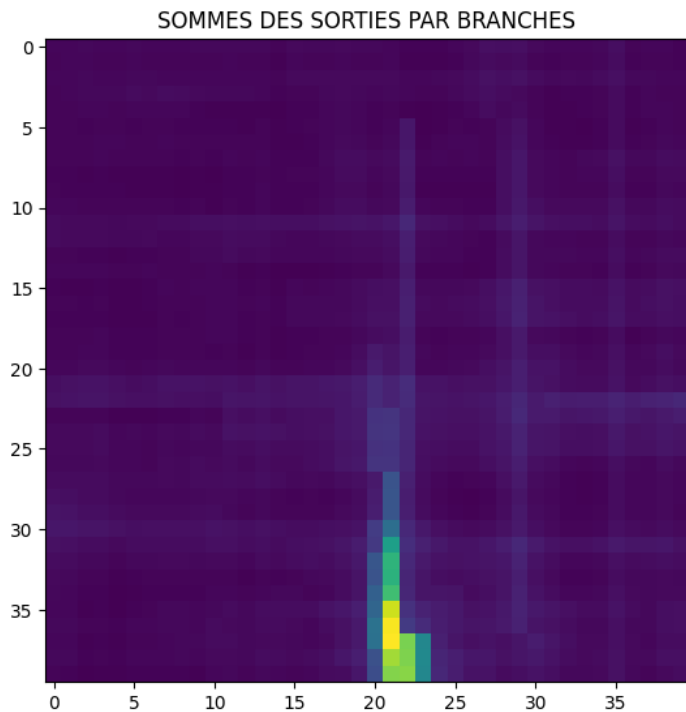


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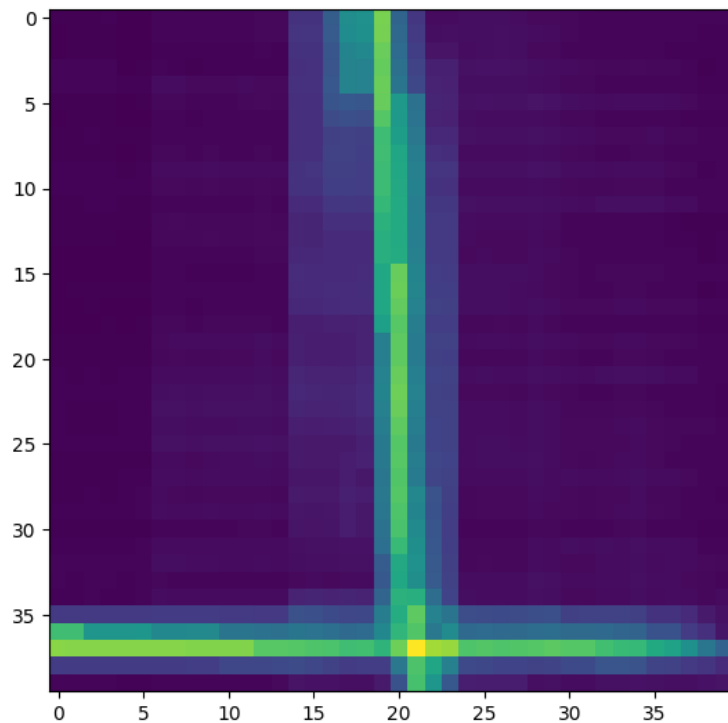


merged_sxxs_targeted_snr=21dB_302.pt V2

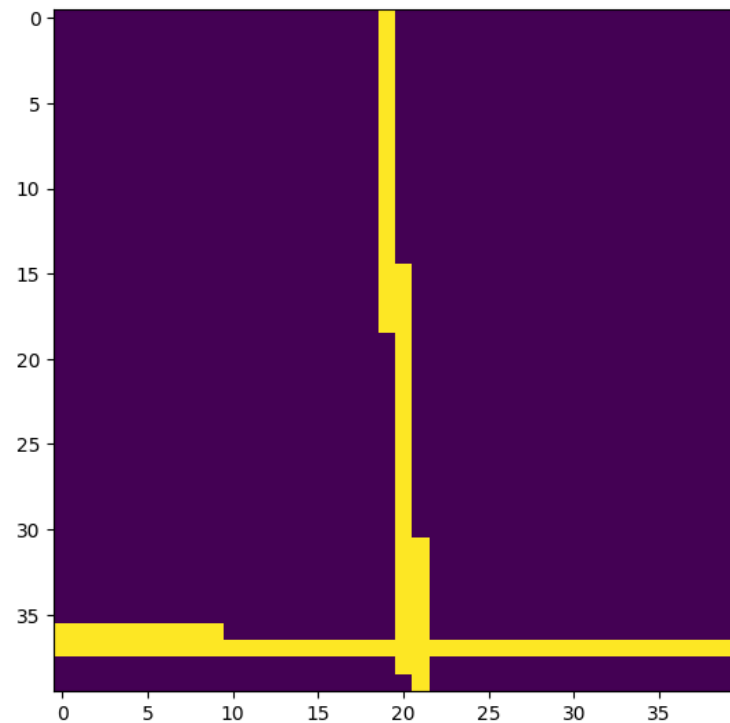


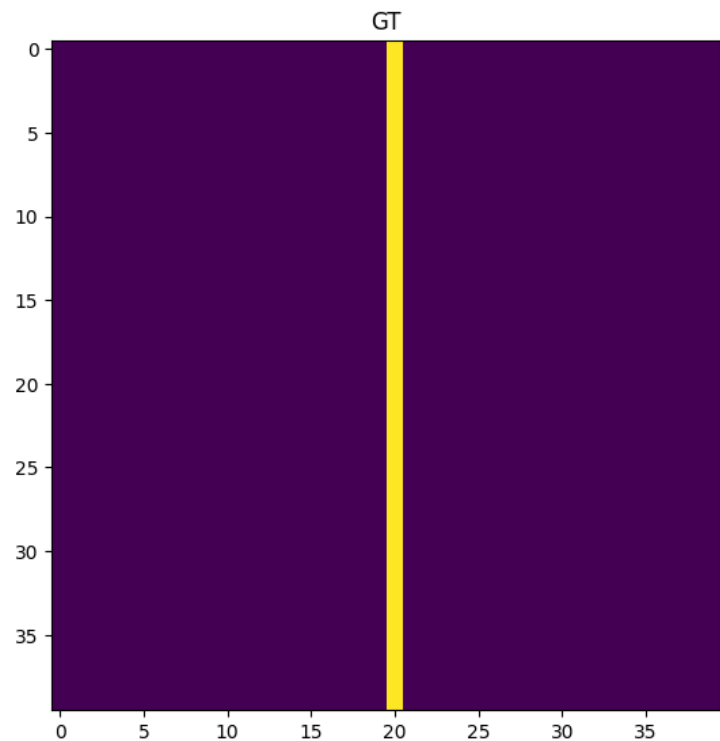
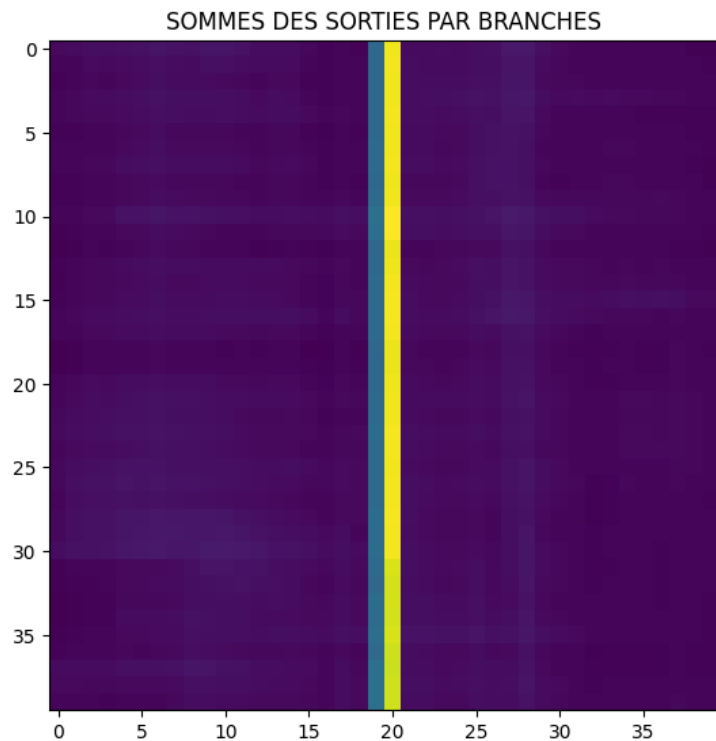


SOMMES DES SORTIES PAR BRANCHES

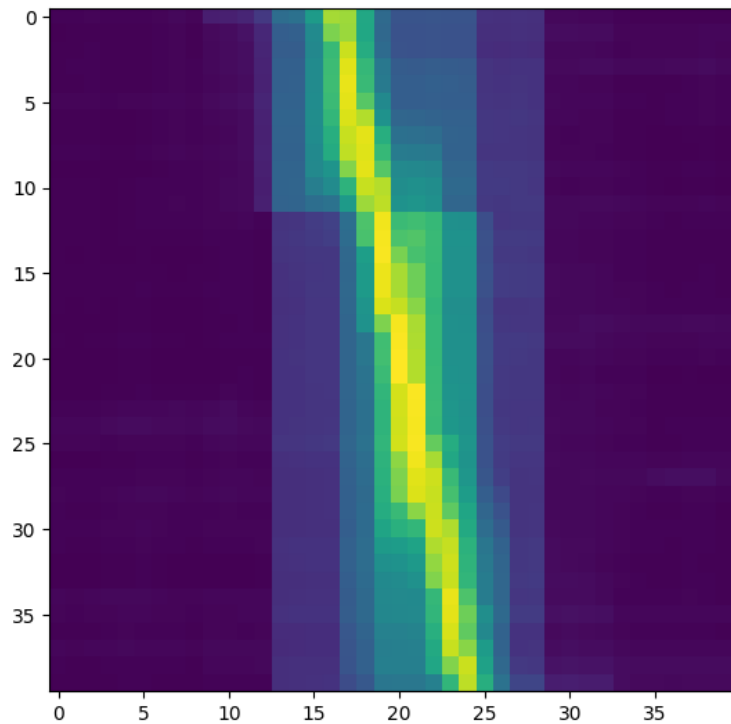


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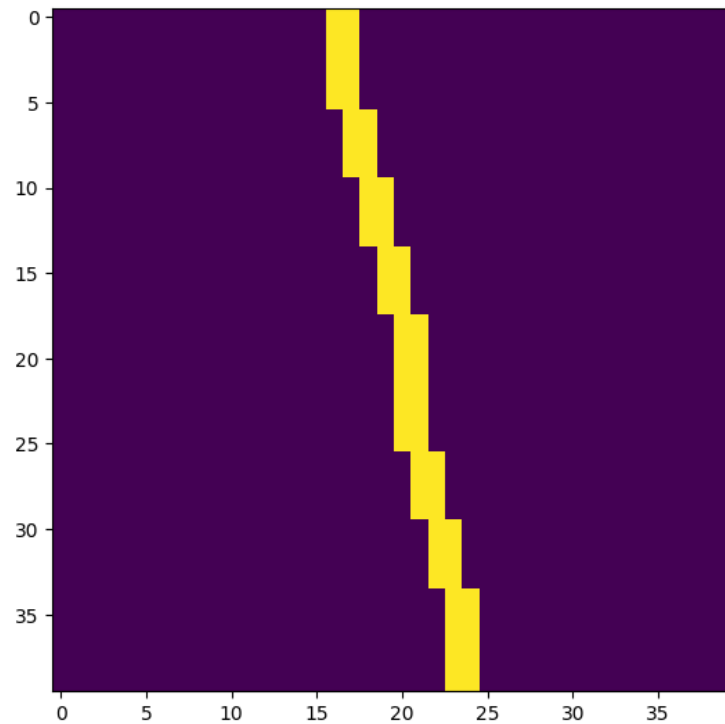




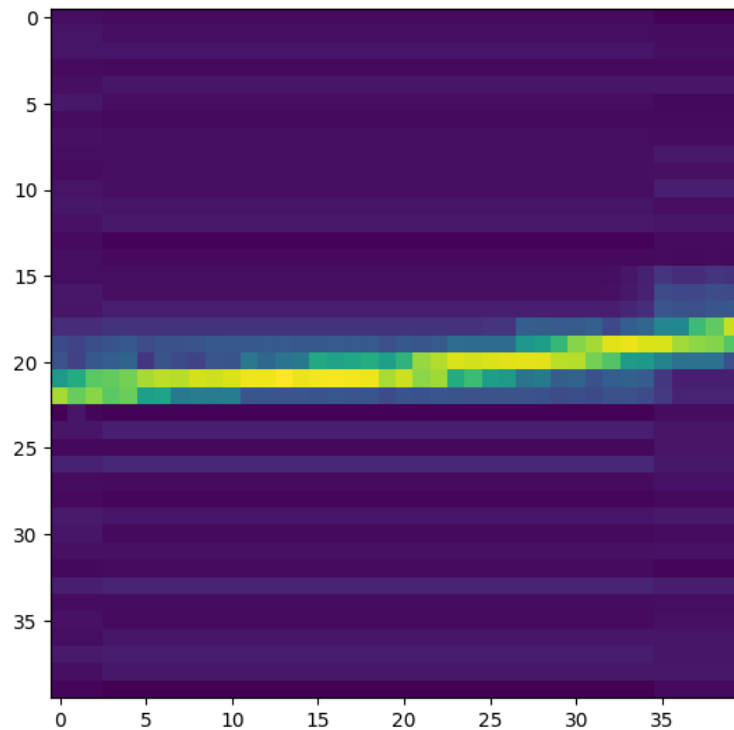
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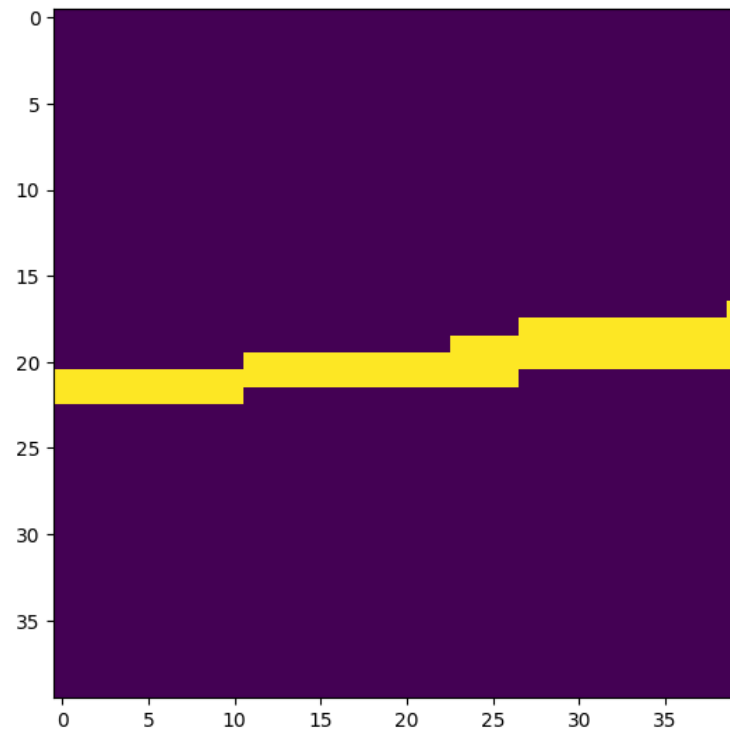
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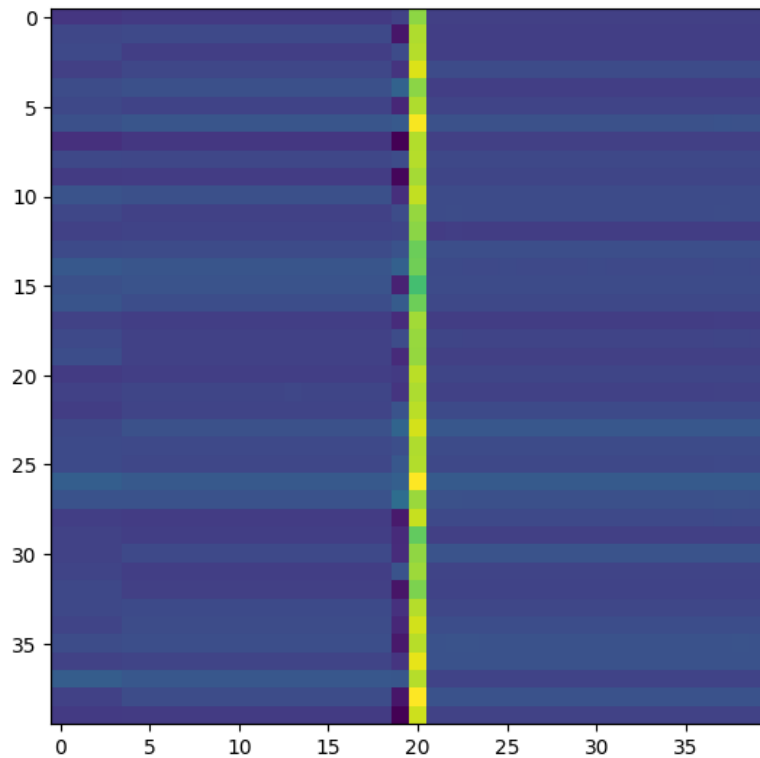
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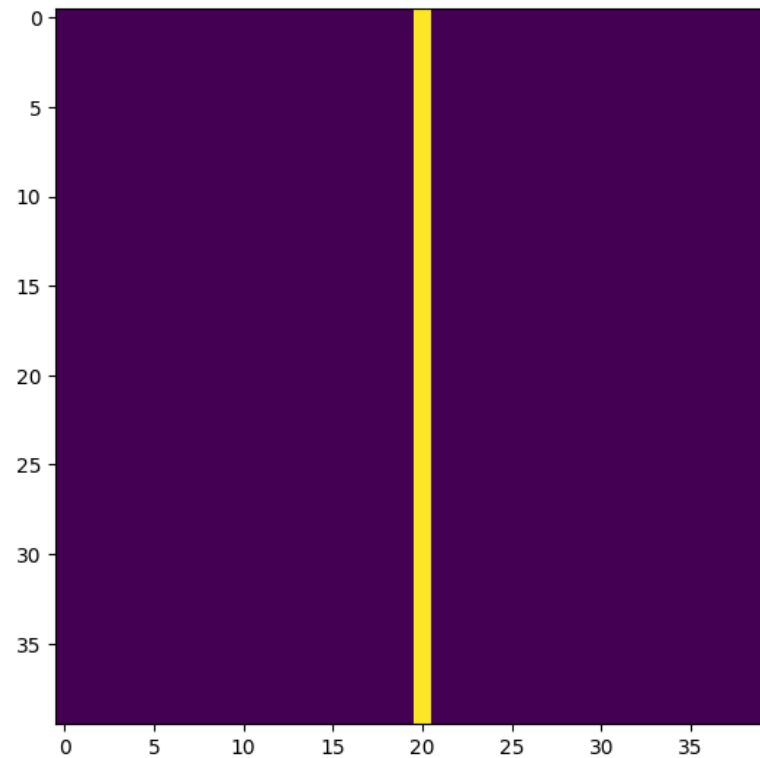
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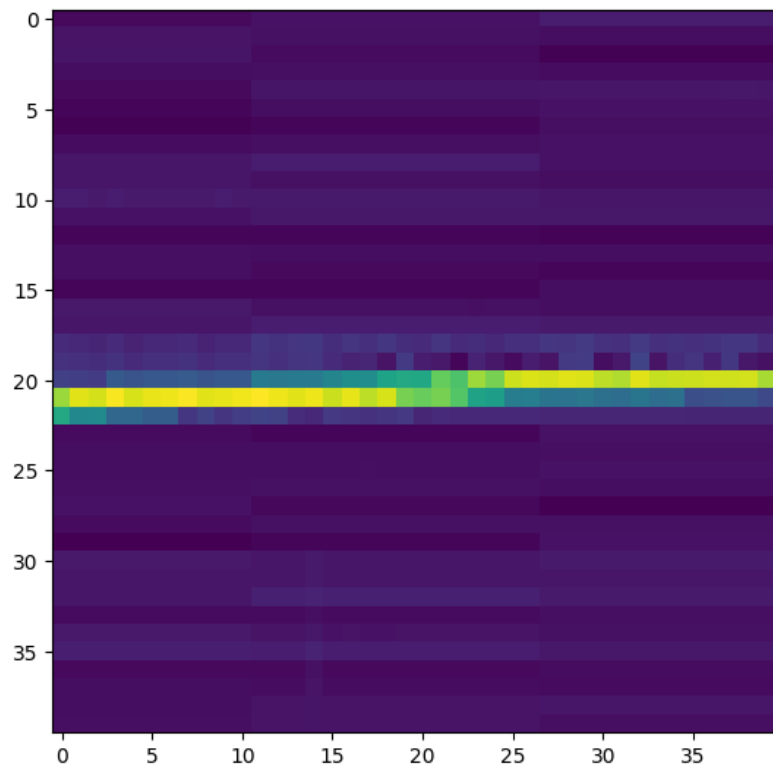
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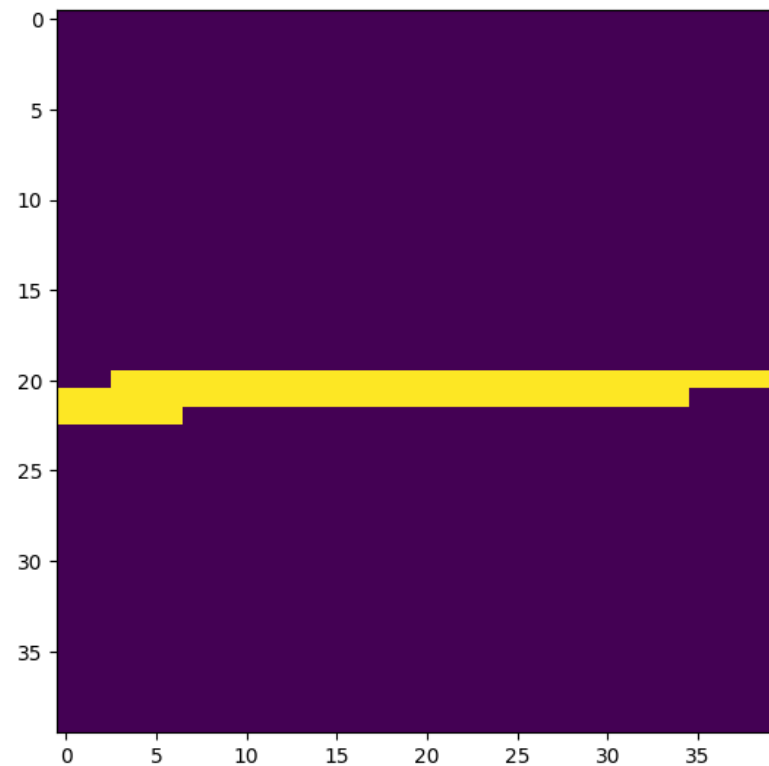
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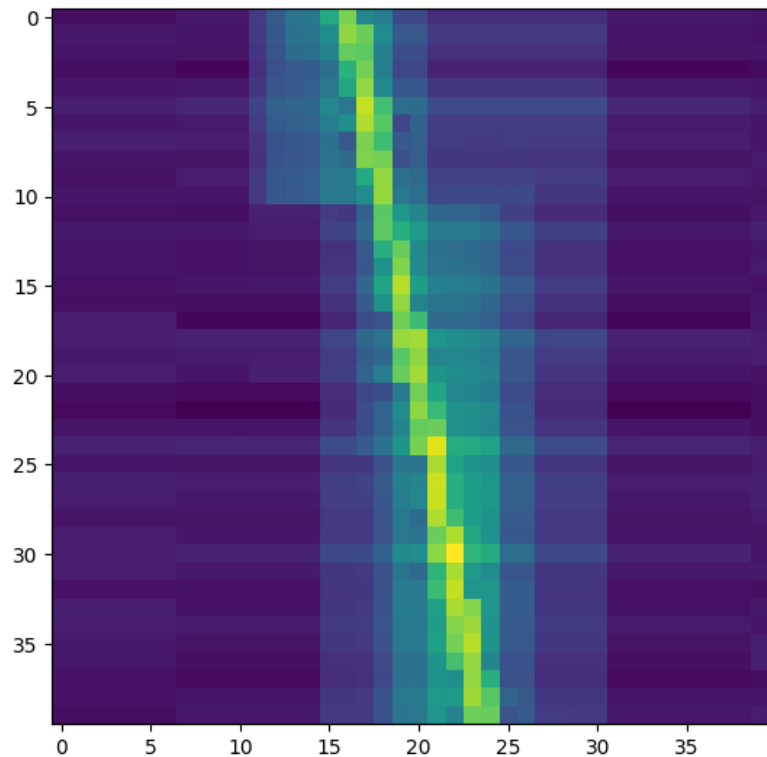
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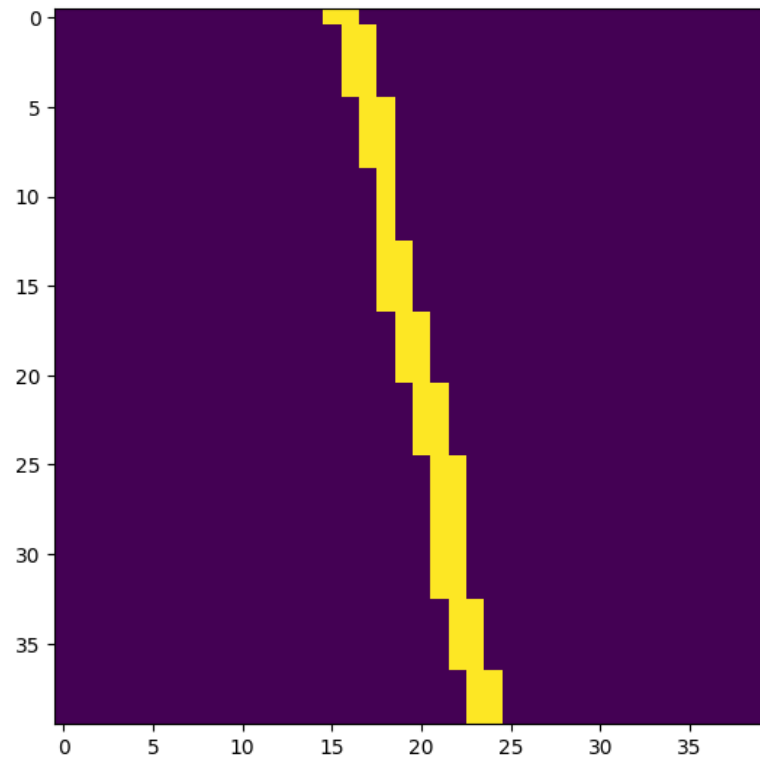
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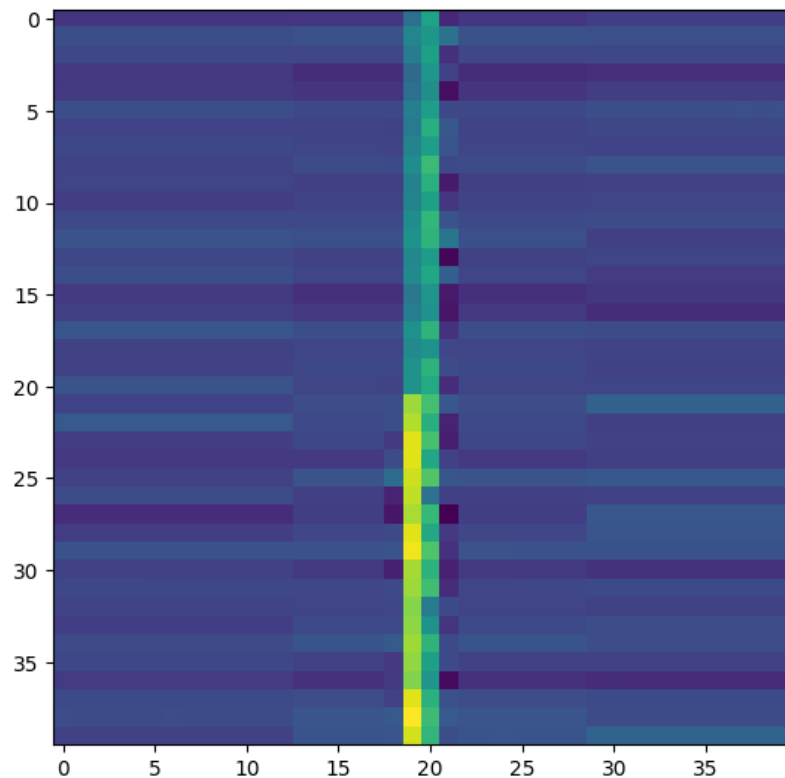


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V2

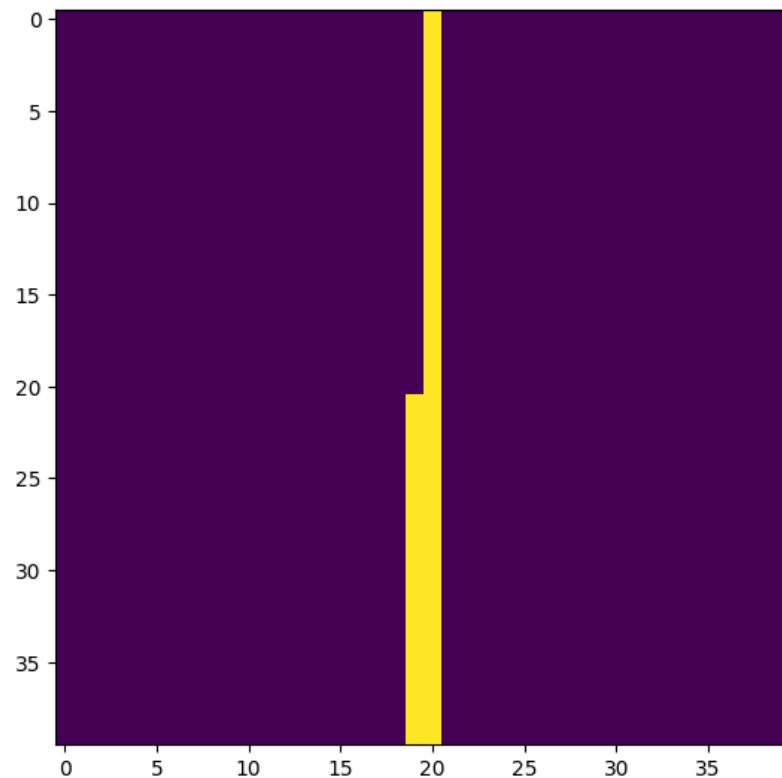
SOMMES DES SORTIES PAR BRANCHES



06/12/2023

AVANTIX

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AVANTIX

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