

AVANTIX

Avancement Simulateur IQ

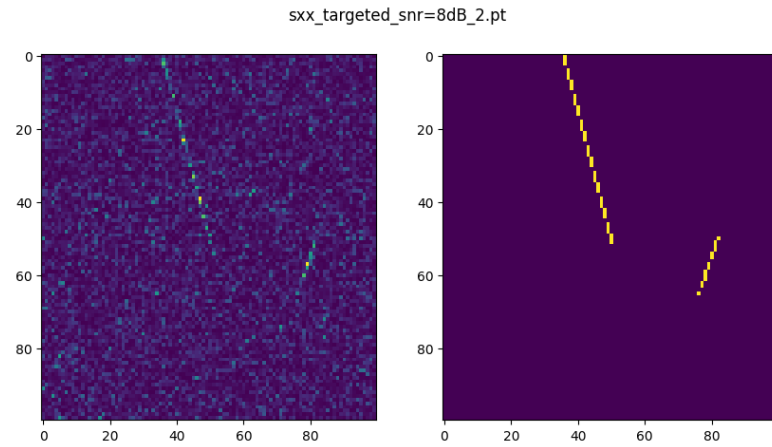
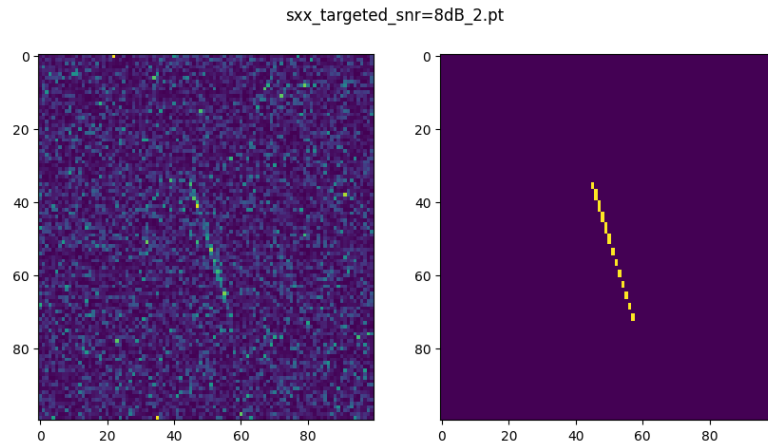
AVANTIX

Par branche

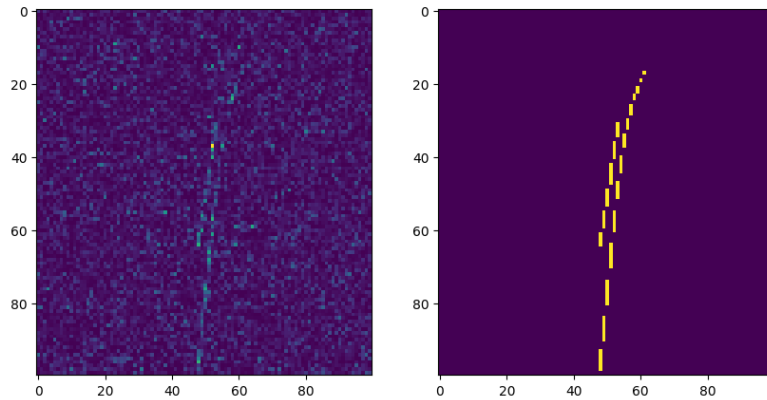
BT700

- Création nouvelle bt avec threshold = 3dB
- Filtrage des impulsions par nperseg opt
- $nperseg_opt / 2 < nperseg < nperseg_opt \times 2$
- CW présent uniquement dans 131072

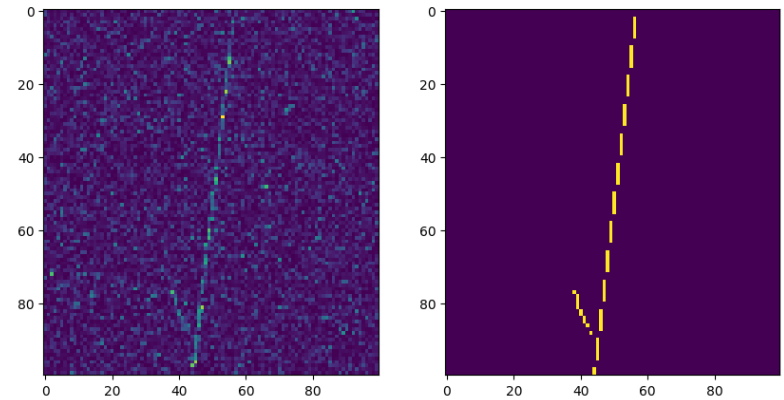
nperseg	Nombre de couches	num_kernels (num_params)	PR-AUC (%) bt603	PR-AUC (%) bt700
256	6	4	97,6	
		2	96,6	96,6
		1	84,1	
512	6	4	97,0	
		2	94,8	93,6
		1	87,4	
1024	6	4	95,4	98,3
		2	91,3	
		1	59,8	
4096	6	4	96,2	97,4
		2	89,7	
		1	77,7	
16384	6	4	95,8	96,8
		2	86,3	
		1	53,5	
131072	6	4	96,8	
		2	95,4	95,5
		1	90,6	



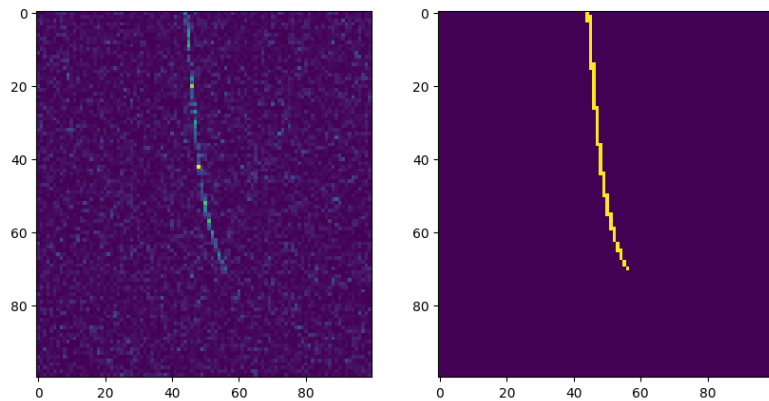
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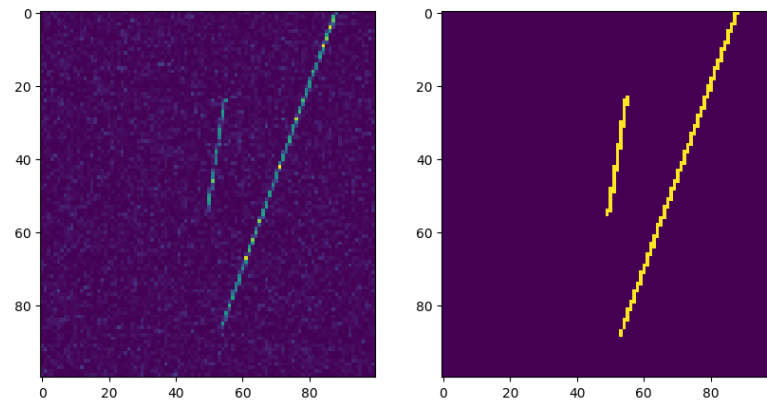
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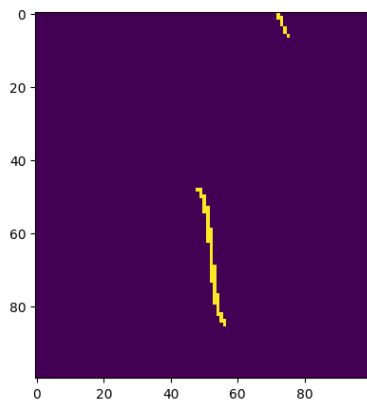
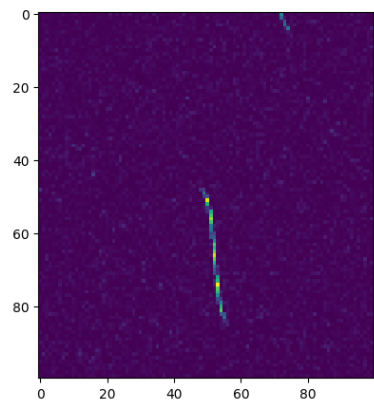
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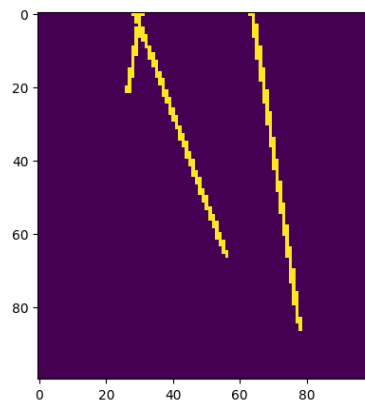
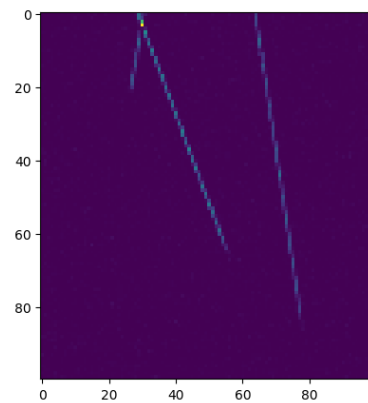
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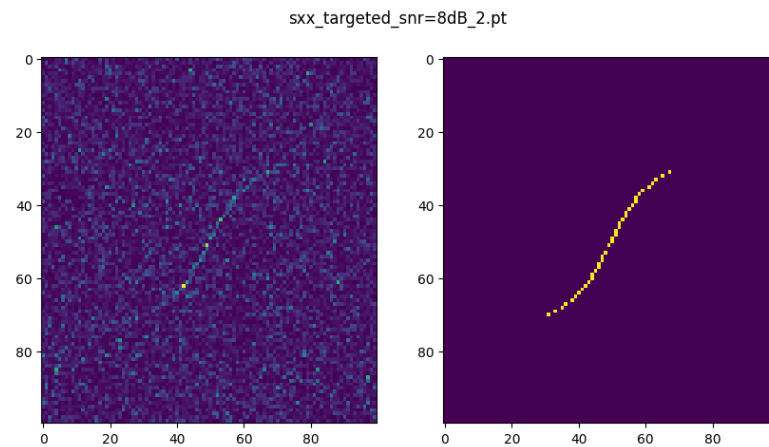
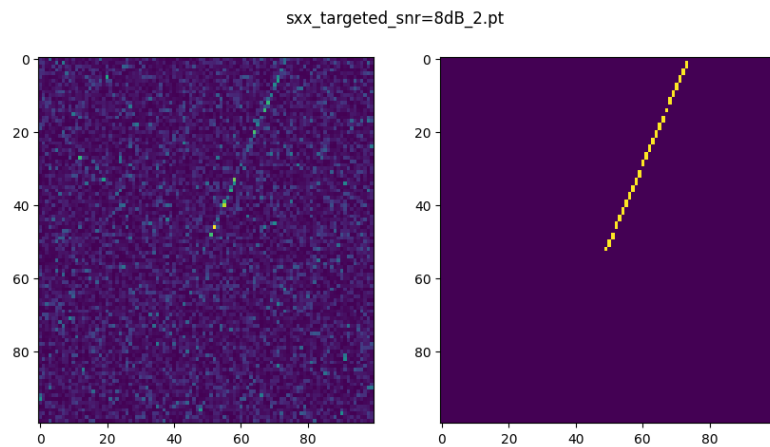


sxx_targeted_snr=21dB_38.pt

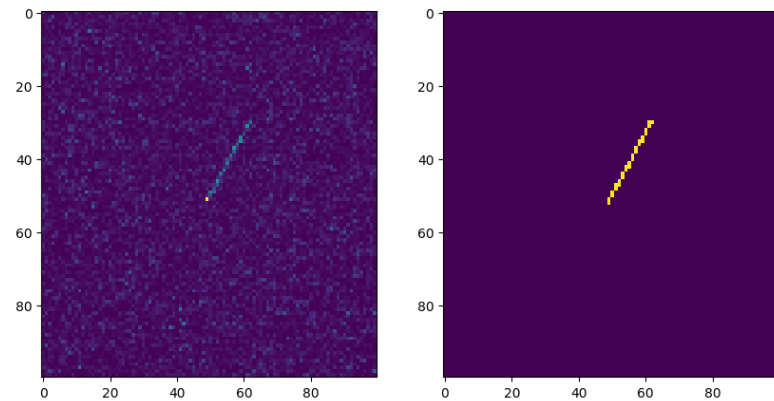


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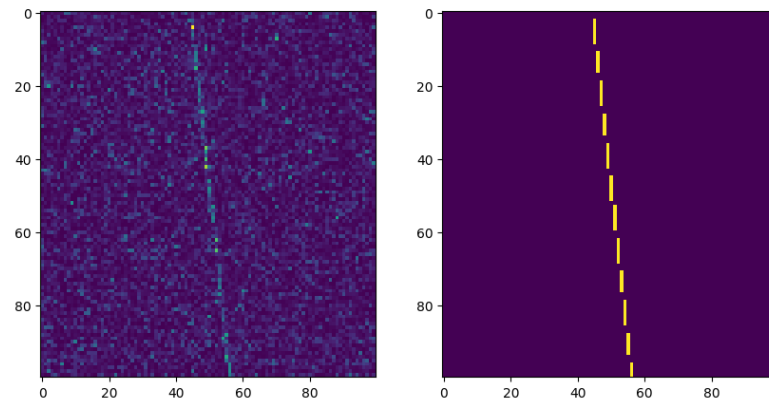




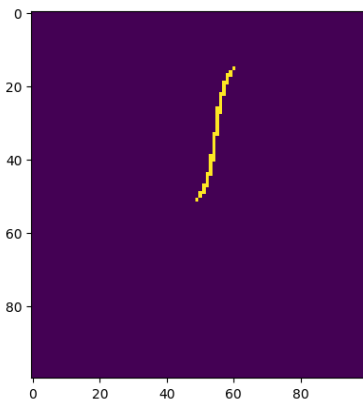
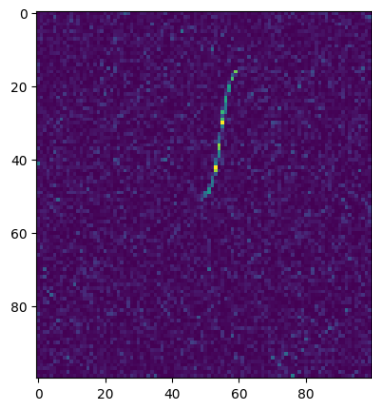
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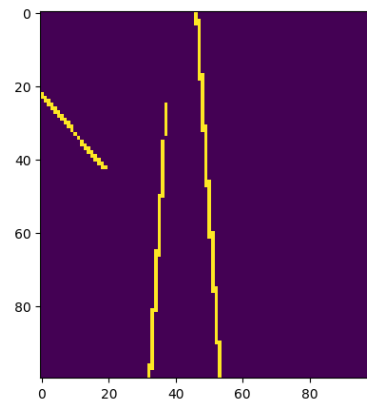
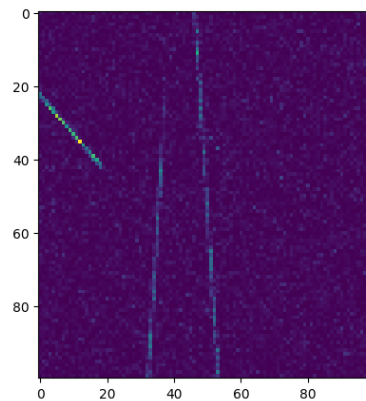
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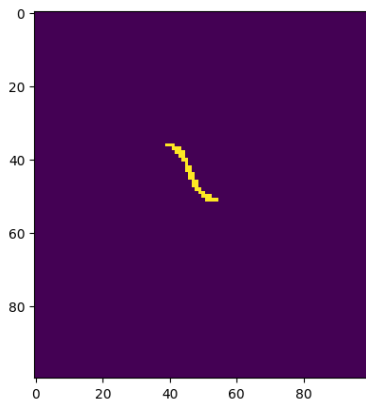
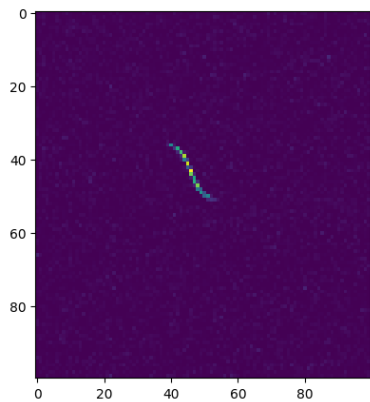
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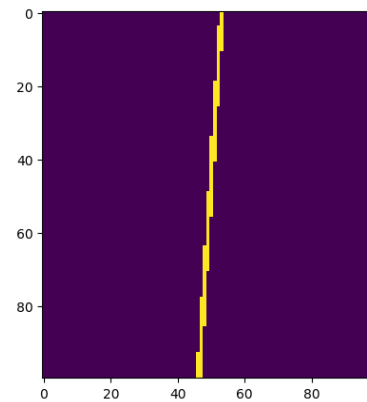
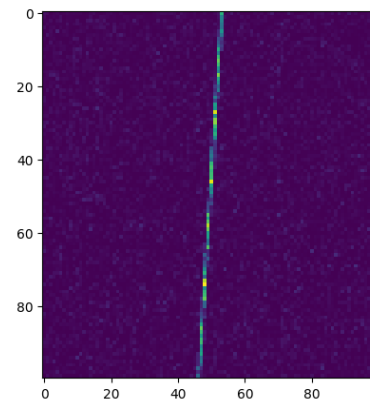
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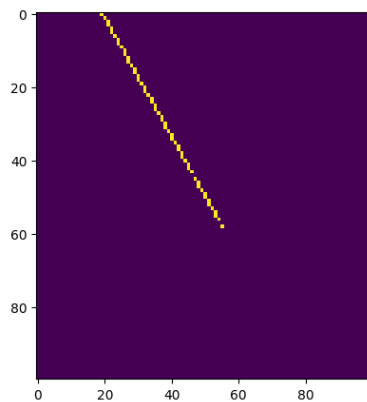
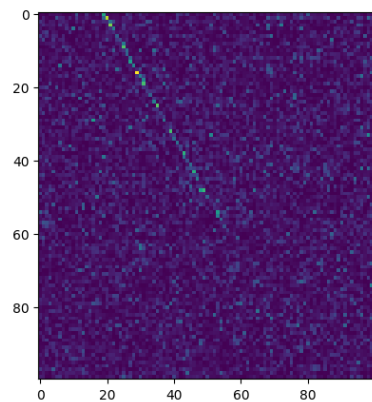
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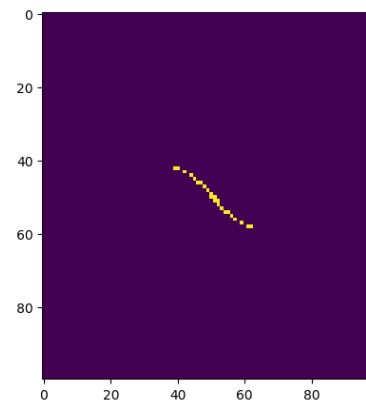
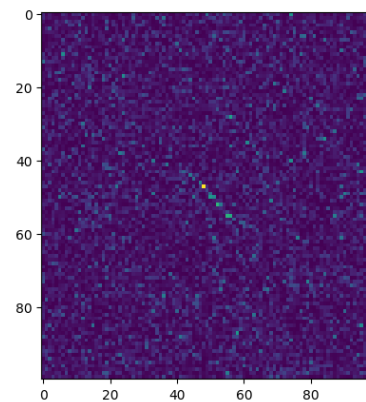
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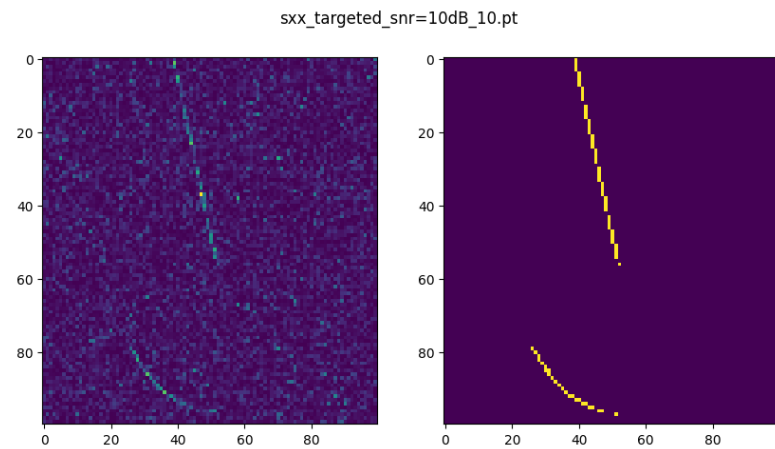
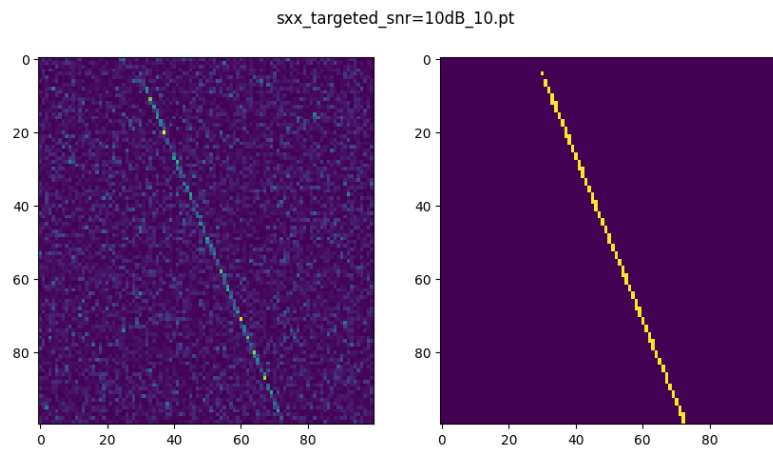


sxx_targeted_snr=8dB_0.pt

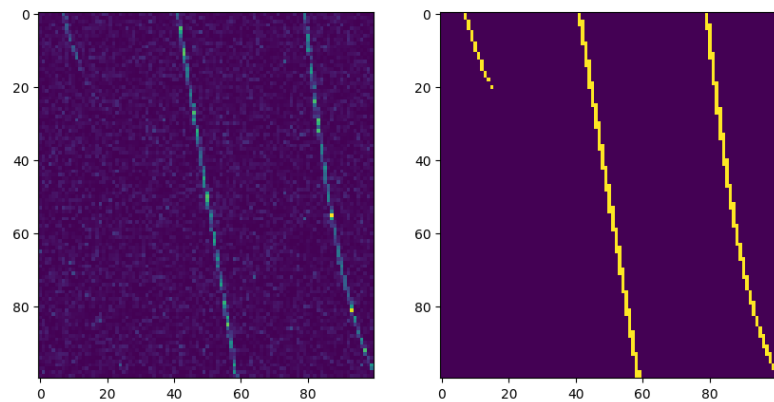


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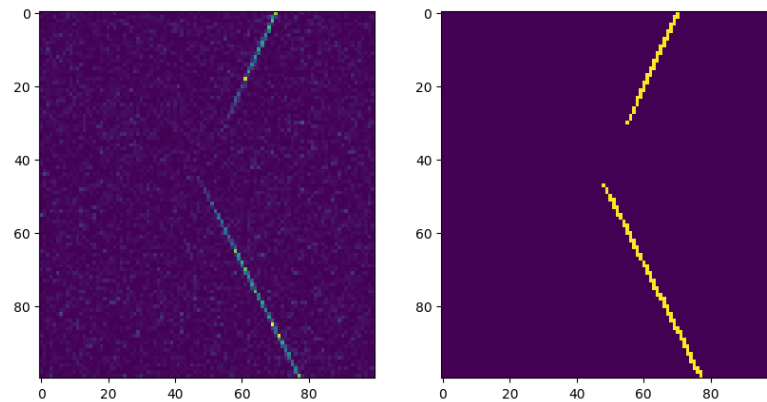




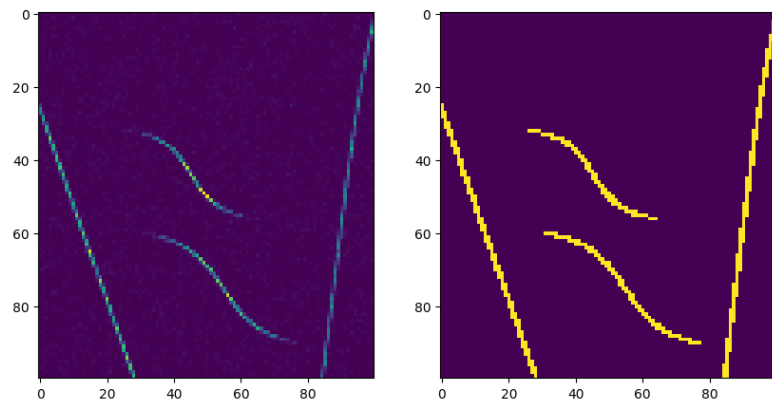
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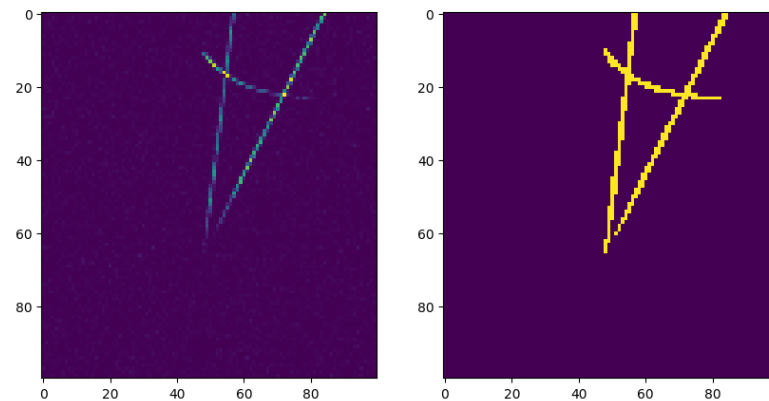
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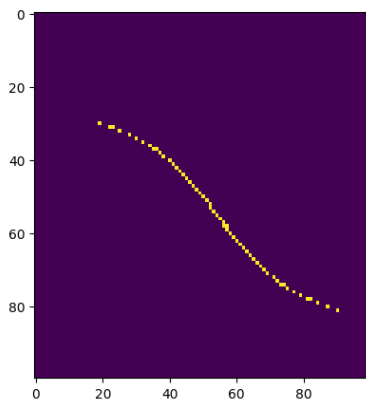
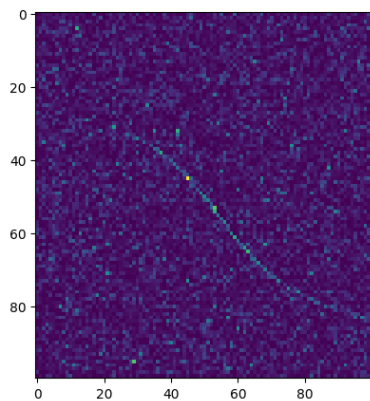
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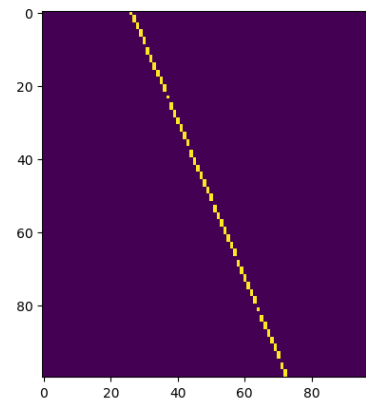
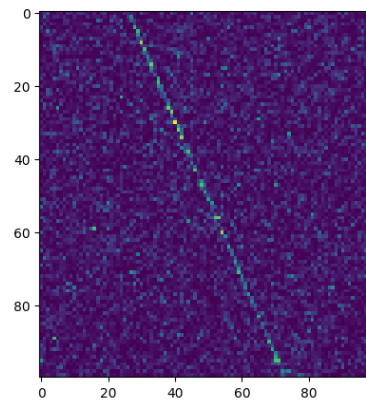
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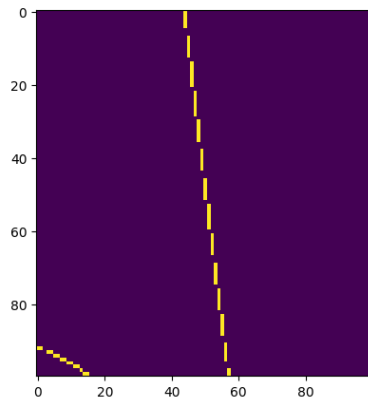
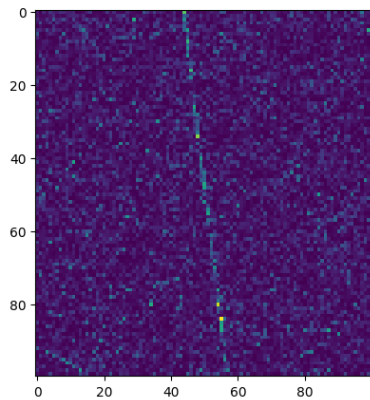
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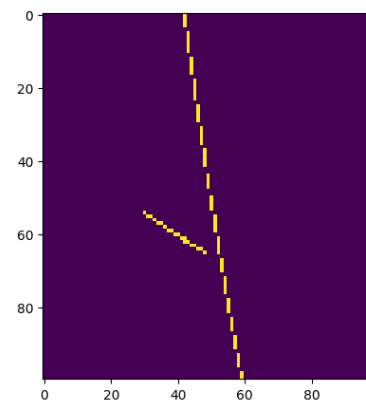
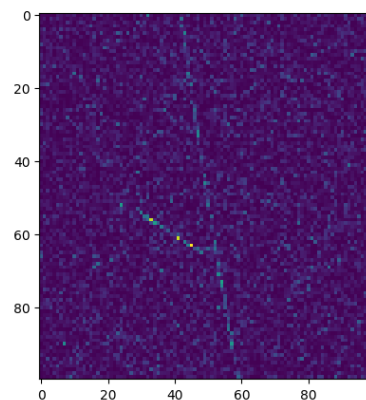
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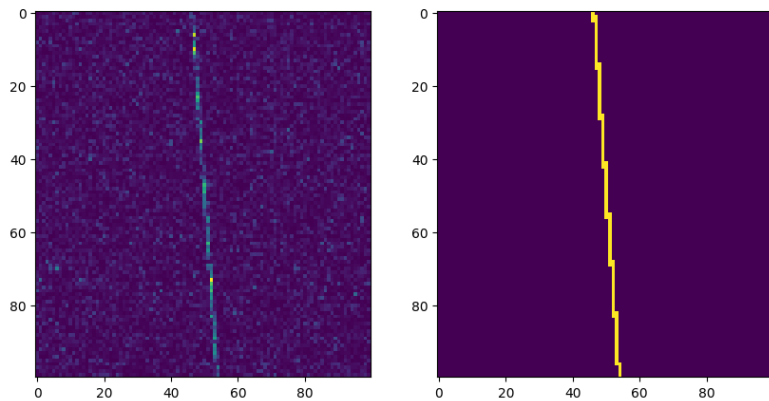
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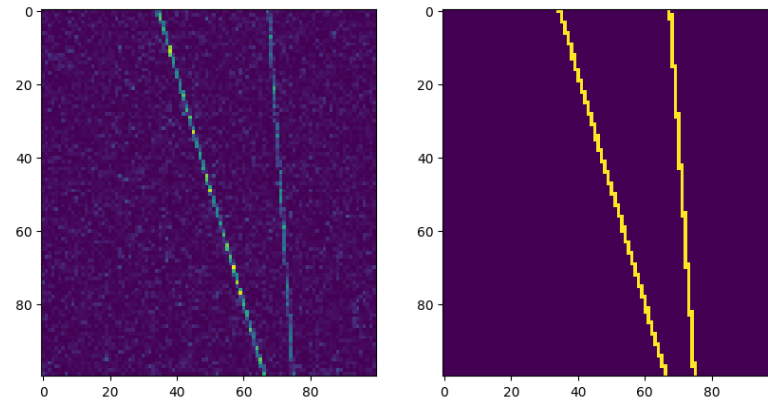
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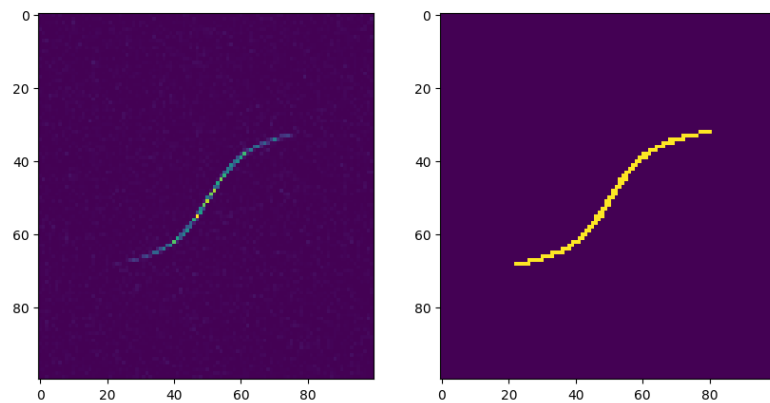
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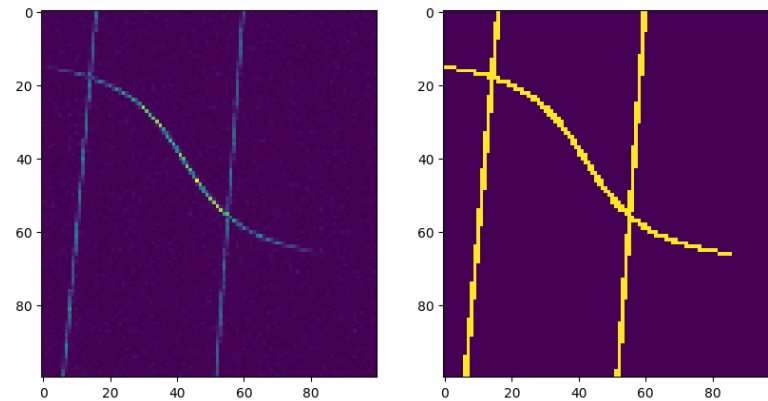
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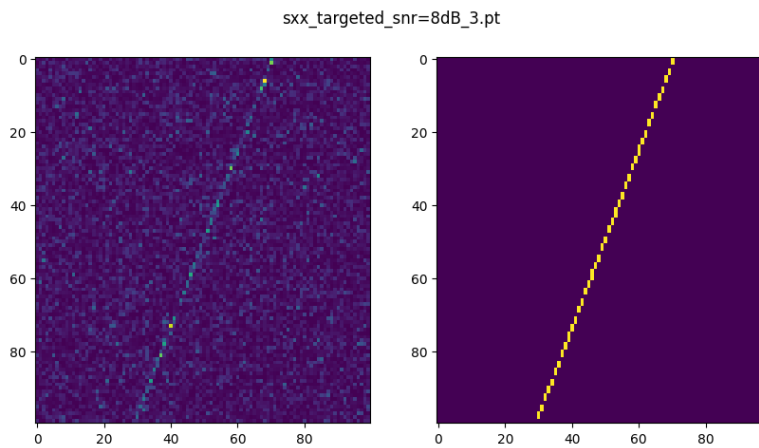
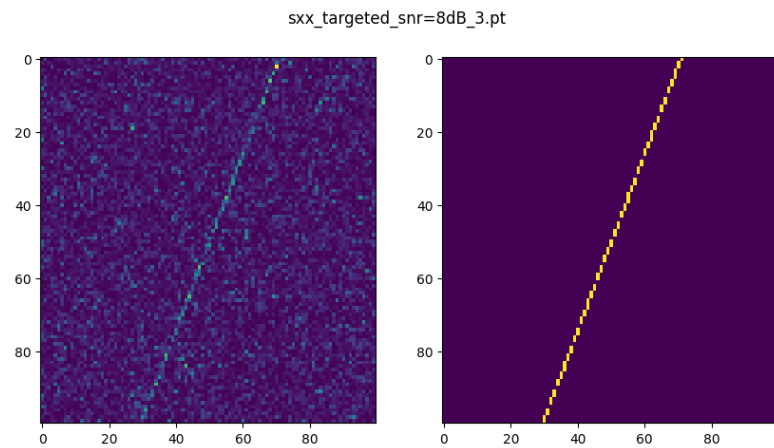


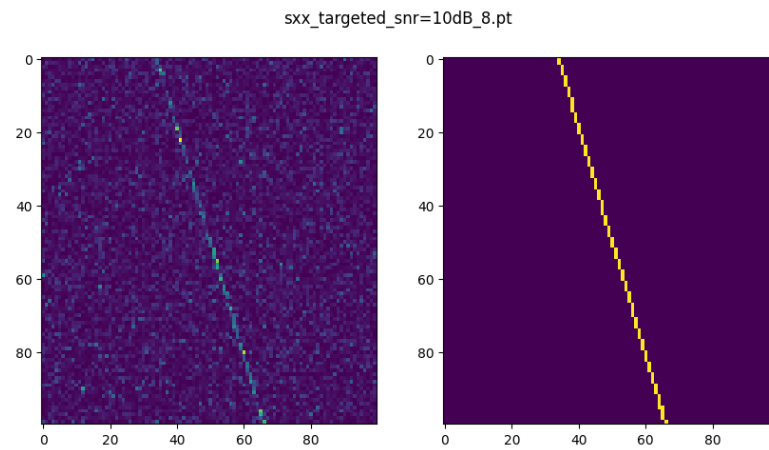
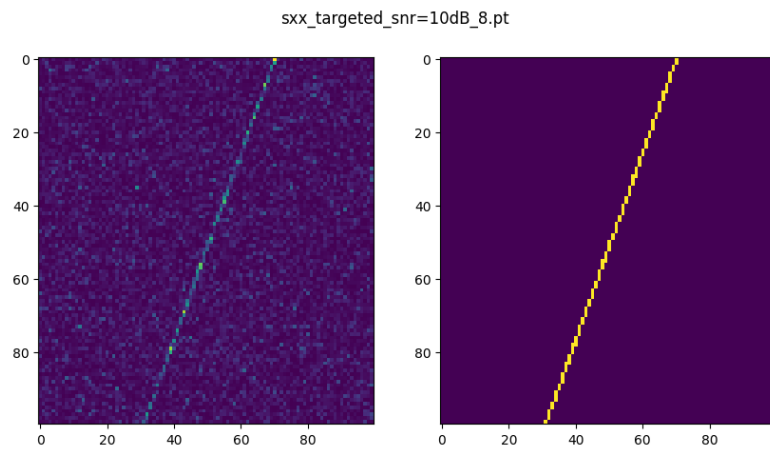
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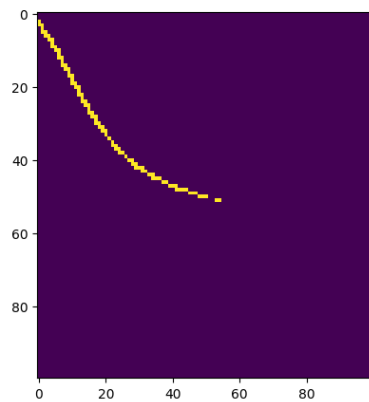
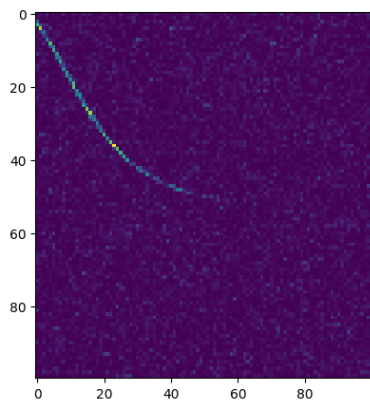
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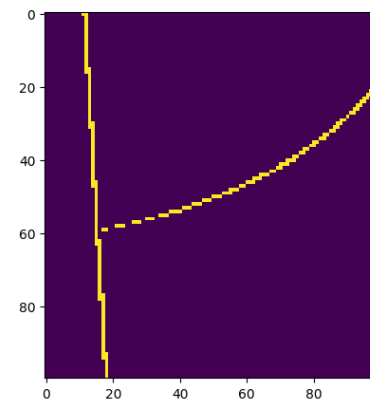
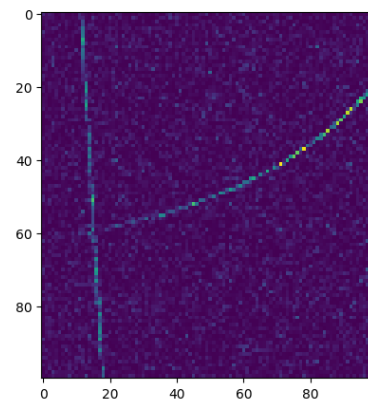


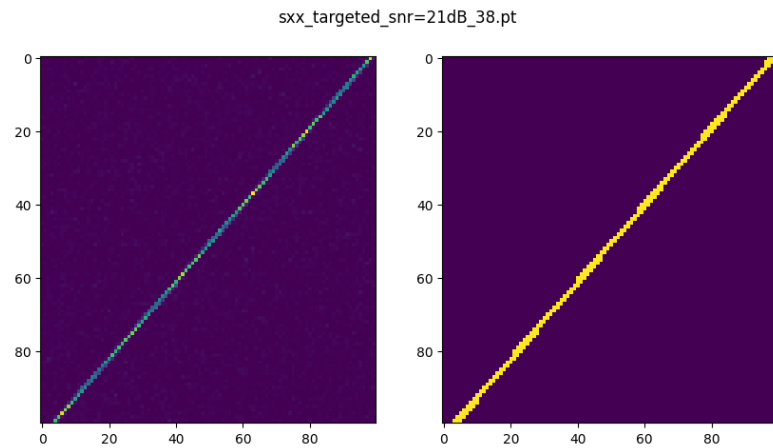
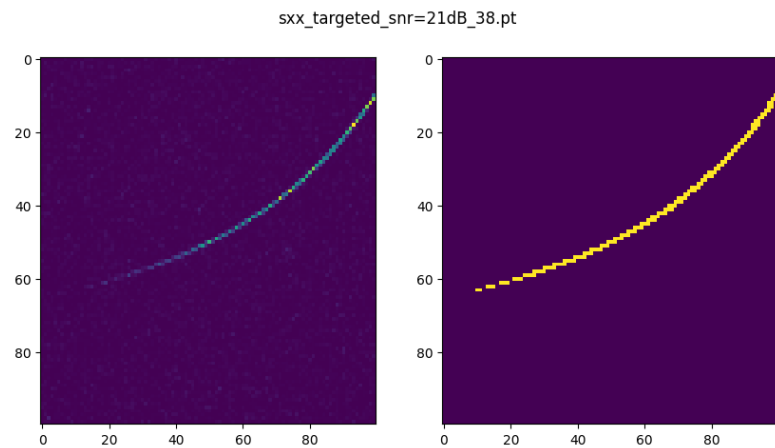


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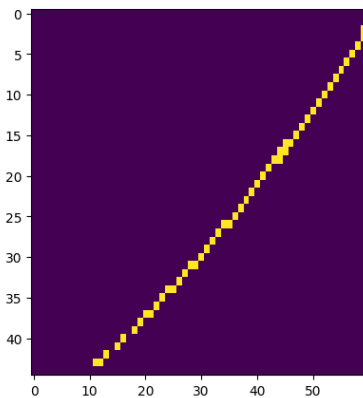
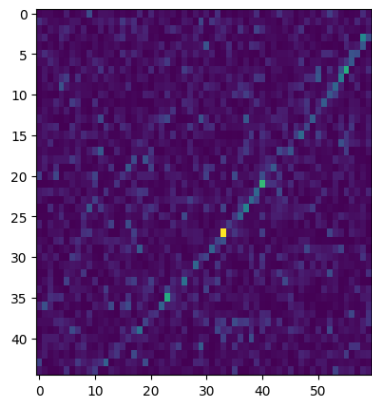


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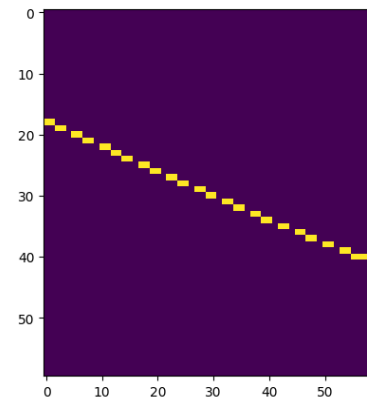
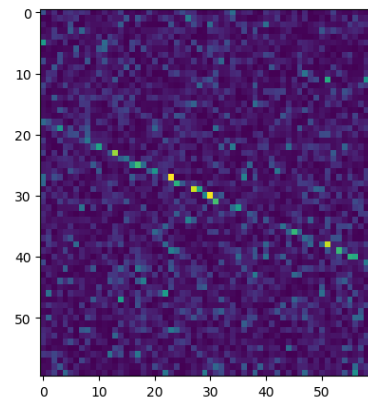




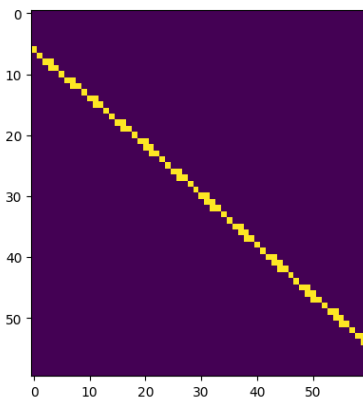
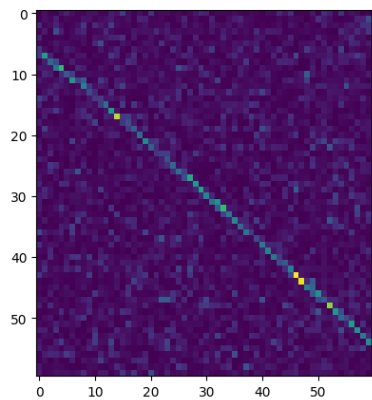
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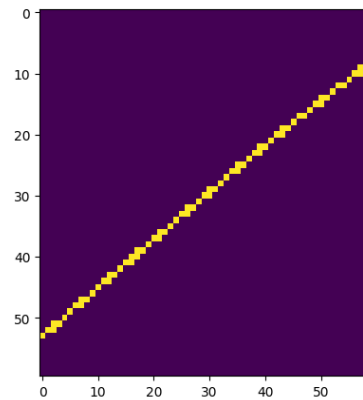
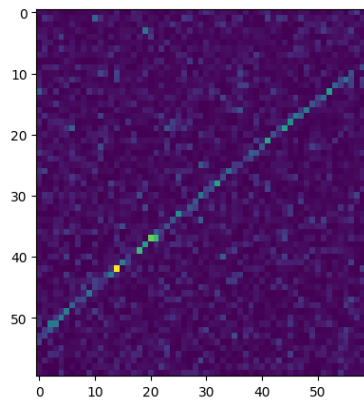
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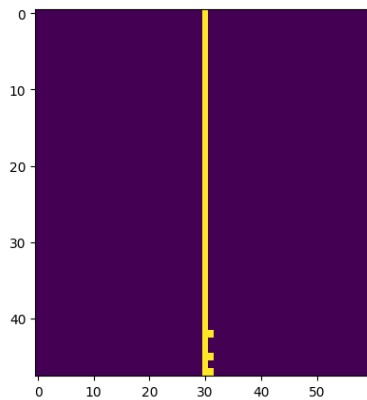
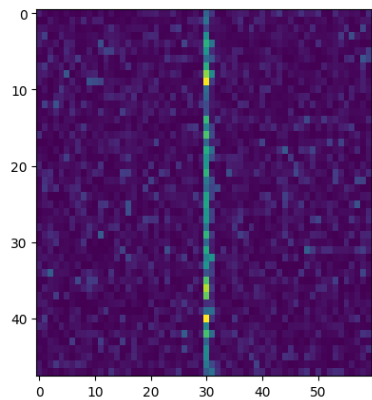
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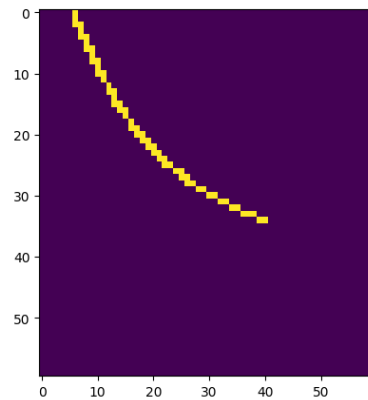
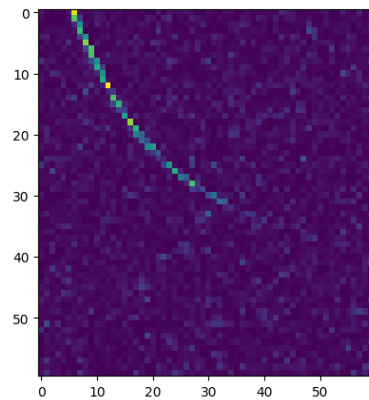
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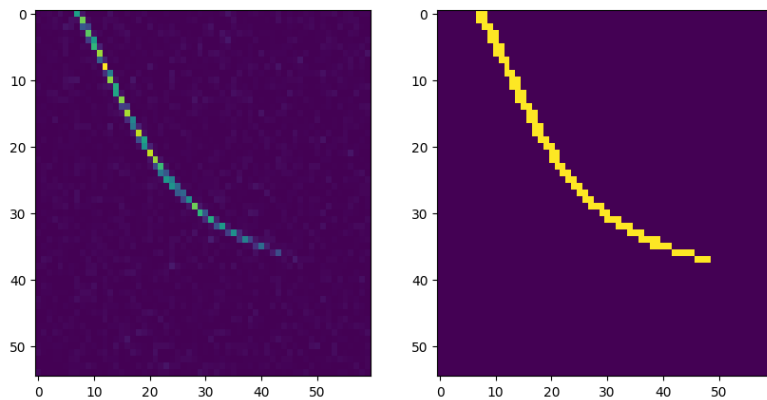
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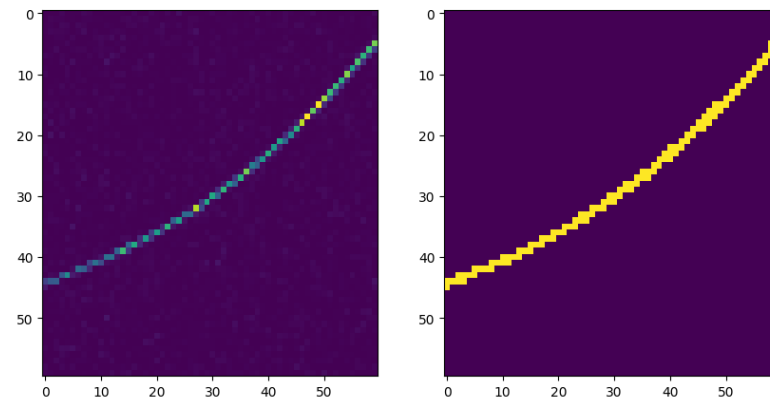
sxx_targeted_snr=15dB_30.pt



sxx_targeted_snr=21dB_38.pt



sxx_targeted_snr=21dB_38.pt



Etude élargie sur 1024

- Influence n_convs
- Influence num_kernels

Ratio x4 de gain

http://localhost:8585/#/experiments/227542618430827343?searchFilter=&orderByKey=metrics.%60val_pr_auc_nperseg_1024%60&orderByAsc=false&startTime=ALL&lifecycleFilter=Active&modelVersionFilter=All+Runs&datasetsFilter=W10%3D

bt700_nperseg_1024

Provide Feedback

Add Description

Runs

Evaluation

Experimental

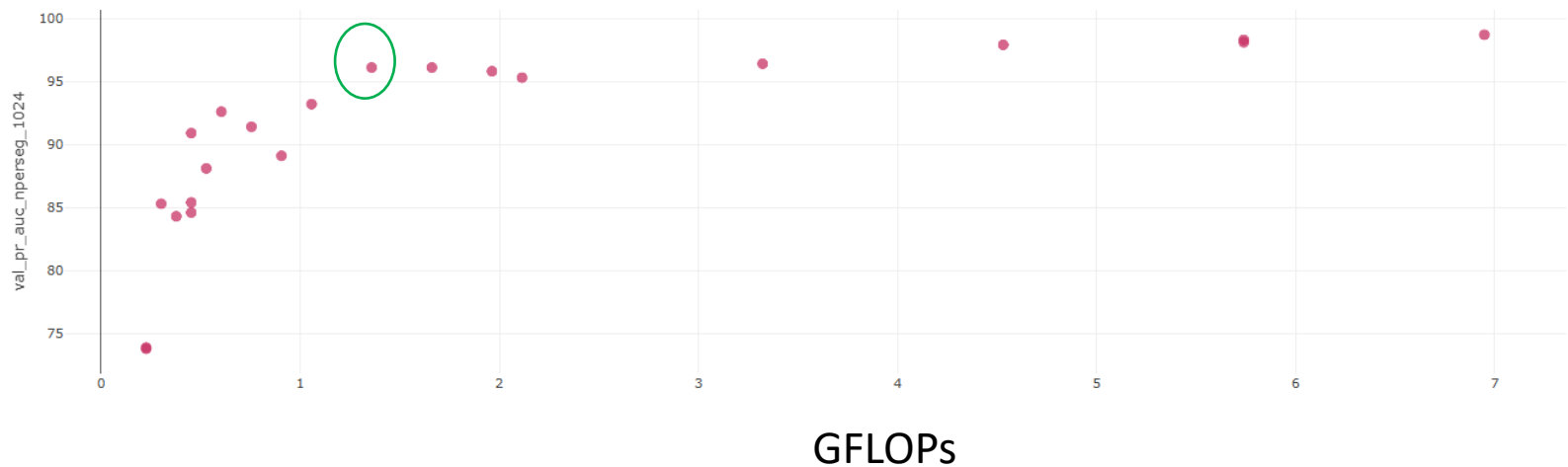
Traces

Experimental

				Metrics		Parameters		
	Run Name	Created	Duration	val_loss	val_pr_auc_nper	GFLOPs	num_kernels	target_n_convs
☐	run_2025-03-28_14-31-0...	2 days ago	2.9d	0.38607418...	73.9	0.226492416	1	2
☐	run_2025-03-28_16-54-0...	2 days ago	2.8d	0.25165964...	85.3	0.301989888	1	3
☐	run_2025-03-28_18-50-3...	2 days ago	2.7d	0.27120718...	84.3	0.37748736	1	4
☐	run_2025-03-28_21-08-1...	2 days ago	2.7d	0.17253544...	90.9	0.452984832	1	5
☐	run_2025-03-28_14-31-0...	2 days ago	2.9d	0.27332878...	85.4	0.452984832	2	2
☐	run_2025-03-28_22-59-2...	2 days ago	2.6d	0.16735913...	88.1	0.528482304	1	6
☐	run_2025-03-29_00-39-1...	2 days ago	2.5d	0.14012814...	92.6	0.603979776	1	7
☐	run_2025-03-28_15-51-4...	2 days ago	2.9d	0.17692894...	91.4	0.75497472	2	3
☐	run_2025-03-28_14-30-4...	2 days ago	2.9d	0.22057667...	89.1	0.905969664	4	2
☐	run_2025-03-28_18-08-3...	2 days ago	2.8d	0.13011441...	93.2	1.056964608	2	4
☐	run_2025-03-28_20-27-1...	2 days ago	2.7d	0.09327379...	96.1	1.358954496	2	5
☐	run_2025-03-28_22-38-2...	2 days ago	2.6d	0.09100858...	96.1	1.660944384	2	6
☐	run_2025-03-29_00-47-3...	2 days ago	2.5d	0.09052420...	95.8	1.962934272	2	7
☐	run_2025-03-28_16-00-4...	2 days ago	2.9d	0.11061747...	95.3	2.113929216	4	3
☐	run_2025-03-28_18-16-3...	2 days ago	2.8d	0.08382103...	96.4	3.321888768	4	4
☐	run_2025-03-28_20-25-2...	2 days ago	2.7d	0.06125207...	97.9	4.52984832	4	5
☐	run_2025-03-28_22-34-3...	2 days ago	2.6d	0.05498975...	98.1	5.737807872	4	6
☐	run_2025-03-28_13-45-5...	2 days ago	2.9d	0.05620261...	98.3	5.737807872	4	6
☐	run_2025-03-29_00-25-2...	2 days ago	2.5d	0.04777385...	98.7	6.945767424	4	7

référence

Etude élargie sur 1024



Etude élargie sur 256

bt700_nperseg_256 [Provide Feedback](#) [Add Description](#)

8% de gain

Runs Evaluation **Experimental** Traces **Experimental**

metrics.rmse < 1 and params.model = "tree" Time created State: Active Datasets

Sort: val_pr_auc_nperseg_256 Columns Group by

				Metrics		Parameters		
☐	Run Name	Created	Duration	val_loss	val_pr_auc_nperseg_256 	GFLOPs	num_kernels	target_n_convs
☐	  run_2025-03-28_10-02-3...	 4 days ago	3.0d	0.06966648318550804	96.6	0.9437184	2	6
☐	 run_2025-03-31_19-48-1...	 1 day ago	2.0h	0.0419552055272189	98.4	3.095396352	4	6
☐	 run_2025-03-31_18-09-4...	 1 day ago	1.6h	0.04443256963383068	98.4	2.793406464	4	5
☐	 run_2025-03-31_16-38-3...	 1 day ago	1.5h	0.07606994563883002	96	2.491416576	4	4
☐	 run_2025-04-01_19-24-4...	 15 hours ago	1.7h	0.08021592552011664	95.8	0.9437184	2	6
☐	 run_2025-04-01_16-01-2...	 18 hours ago	1.6h	0.08166711980646307	95.7	0.868220928	2	5
☐	  run_2025-04-01_13-05-3...	 21 hours ago	1.4h	0.13045391169461337	91.9	0.792723456	2	4
☐	 run_2025-04-01_17-37-1...	 16 hours ago	1.8h	0.14167516881769354	90.3	0.320864256	1	6
☐	 run_2025-04-01_11-36-5...	 23 hours ago	1.5h	0.16192122481086038	89.7	0.28311552	1	4
☐	 run_2025-04-01_14-27-4...	 20 hours ago	1.6h	0.41932545466856525	60.3	0.301989888	1	5

Etude élargie sur 512

bt700_nperseg_512  [Provide Feedback](#)  [Add Description](#)

13% de gain

Runs Evaluation **Experimental** Traces **Experimental**

				Metrics		Parameters		
		metrics.rmse < 1 and params.model = 'tree'		Time created ▾	State: Active ▾	Datasets ▾	Sort: val_pr_auc_nperseg_512 ▾	
☐	Run Name	Created	Duration	val_loss	val_pr_auc_nperseg_512 	GFLOPs	num_kernels	target_n_convs
☐	  run_2025-03-28_11-54-0...	 4 days ago	3.0d	0.14876661517403342	93.6	1.13246208	2	6
☐	 run_2025-03-31_21-14-3...	 1 day ago	1.5h	0.06127004731785168	98.2	3.7748736	4	6
☐	 run_2025-03-31_19-34-3...	 1 day ago	1.7h	0.07478231733495538	97.5	3.170893824	4	5
☐	 run_2025-04-01_22-04-1...	 12 hours ago	1.6h	0.10247289592569525	96.2	1.13246208	2	6
☐	 run_2025-04-01_19-21-3...	 15 hours ago	1.3h	0.1098597754131664	96	0.981467136	2	5
☐	 run_2025-03-31_17-58-4...	 1 day ago	1.6h	0.10915767062794078	95.9	2.566914048	4	4
☐	 run_2025-03-31_16-38-1...	 1 day ago	1.3h	0.13922017270868475	93.9	1.962934272	4	3
☐	 run_2025-04-01_16-03-2...	 18 hours ago	1.6h	0.17757384343580765	92	0.830472192	2	4
☐	 run_2025-04-01_20-38-5...	 14 hours ago	1.4h	0.17436988245357166	90.9	0.37748736	1	6
☐	 run_2025-04-01_13-07-5...	 21 hours ago	1.4h	0.2248791672966697	88	0.679477248	2	3
☐	 run_2025-04-01_17-42-1...	 16 hours ago	1.7h	0.3737982294776223	74.5	0.339738624	1	5
☐	 run_2025-04-01_14-29-4...	 20 hours ago	1.6h	0.3928938562219793	71.8	0.301989888	1	4
☐	 run_2025-04-01_11-37-1...	 23 hours ago	1.5h	0.4266306595368819	66.9	0.264241152	1	3

Etude élargie sur 4096

% de gain



Etude élargie sur 16384

bt700_nperseg_16384 ⓘ Provide Feedback ↗ Add Description

21% de gain

Runs Evaluation **Experimental** Traces **Experimental**

⌵ ⌵ ⓘ Time created ▾ State: Active ▾ Datasets ▾ ⌵ Sort: val_pr_auc_nperseg_16384

Metrics				Parameters				
☐	Run Name	Created	Duration	val_loss	val_pr_auc_nperseg_16384	GFLOPs	num_kernels	target_n_convs
☐	📌 run_2025-03-28_10-02-1...	✓ 4 days ago	3.1d	0.06537914817983453	96.8	5.737807872	4	6
☐	run_2025-04-02_03-46-5...	✓ 6 hours ago	1.7h	0.07932757247578014	96.3	4.52984832	4	5
☐	run_2025-04-02_07-26-3...	✓ 3 hours ago	2.1h	0.09807522730393843	94.3	1.660944384	2	6
☐	run_2025-04-01_23-23-4...	✓ 11 hours ago	1.7h	0.10736905444752086	94	3.321888768	4	4
☐	run_2025-04-01_21-47-4...	✓ 12 hours ago	1.6h	0.13209418275139548	92.5	1.056964608	2	4
☐	run_2025-04-01_19-28-5...	✓ 15 hours ago	1.2h	0.14986959370699796	91.4	2.113929216	4	3
☐	run_2025-04-02_02-13-0...	✓ 8 hours ago	1.6h	0.18715062466534702	88.1	1.358954496	2	5
☐	run_2025-04-01_15-03-0...	✓ 19 hours ago	1.9h	0.2267046245661649	86	0.905969664	4	2
☐	run_2025-04-02_05-26-5...	✓ 5 hours ago	2.0h	0.2608463059772145	83	0.528482304	1	6
☐	run_2025-04-02_09-31-0...	✓ 1 hour ago	1.0h	0.29092815247449005	82.1	5.737807872	4	6
☐	run_2025-04-02_01-06-3...	✓ 9 hours ago	1.1h	0.28866515918211505	79.7	0.452984832	1	5
☐	run_2025-04-01_18-08-3...	✓ 16 hours ago	1.3h	0.324678973718123	78.5	0.75497472	2	3
☐	run_2025-04-01_20-42-4...	✓ 14 hours ago	1.1h	0.3233063925396312	76.1	0.37748736	1	4
☐	run_2025-04-01_13-59-5...	✓ 20 hours ago	1.1h	0.396646418354728	72.3	0.452984832	2	2
☐	run_2025-04-01_12-05-4...	✓ 22 hours ago	1.9h	0.4014269221912731	71.4	0.226492416	1	2
☐	run_2025-04-01_16-59-0...	✓ 17 hours ago	1.2h	0.5750589533285662	52.4	0.301989888	1	3

Etude élargie sur 131072

bt700_nperseg_131072 ⓘ [Provide Feedback](#) [Add Description](#)

Runs Evaluation **Experimental** Traces **Experimental**

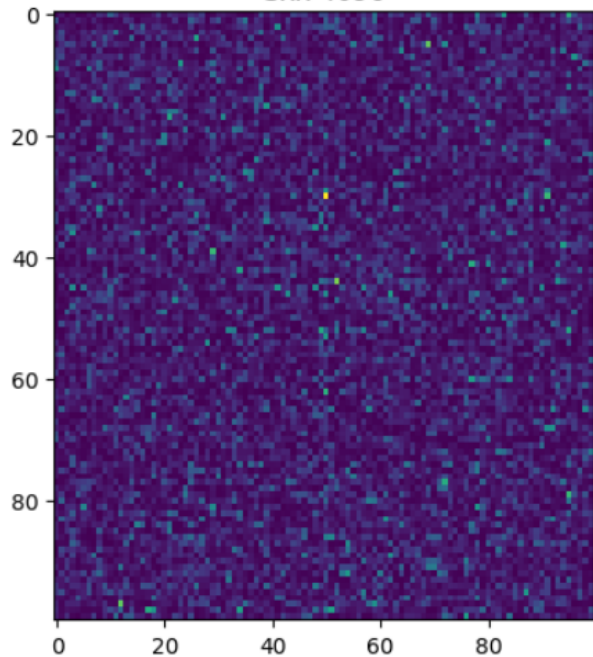
0% de gain

  ⓘ ▾ ▾ ▾ ▾

 Group by ▾

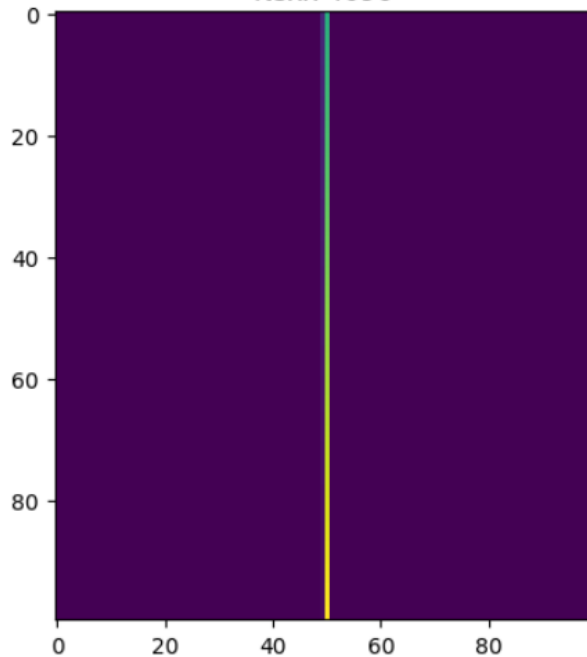
			Metrics			Parameters		
☐	Run Name	Created	Duration	val_loss	val_pr_auc_nper	GFLOPs	num_kernels	target_n_convs
☐	  run_2025-04-02_11-13-5...	 6 hours ago	2.4h	0.06840557...	96.6	1.13246208	2	6
☐	  run_2025-03-31_10-34-0...	 2 days ago	2.1d	0.08244532...	95.5	1.13246208	2	6
☐	 run_2025-04-02_13-35-2...	 3 hours ago	2.6h	0.05191082...	97.4	3.7748736	4	6
☐	 run_2025-04-02_06-36-0...	 10 hours ago	2.1h	0.06492787...	96.9	3.170893824	4	5
☐	 run_2025-04-02_01-41-1...	 15 hours ago	2.2h	0.07796844...	95.6	2.566914048	4	4
☐	 run_2025-04-02_04-25-5...	 12 hours ago	2.2h	0.09546569...	94.4	0.981467136	2	5
☐	 run_2025-04-01_19-09-5...	 22 hours ago	2.3h	0.13954186...	91.5	1.962934272	4	3
☐	 run_2025-04-01_16-53-2...	 1 day ago	2.3h	0.14741028...	90.6	0.679477248	2	3
☐	 run_2025-04-01_23-39-5...	 17 hours ago	2.0h	0.16702786...	88.5	0.830472192	2	4
☐	 run_2025-03-28_17-49-1...	 4 days ago	4.7d	0.10425577...	87.8	0.905859072	2	6
☐	 run_2025-04-02_08-44-1...	 8 hours ago	2.5h	0.17525845...	87.7	0.37748736	1	6
☐	 run_2025-04-01_15-39-3...	 1 day ago	1.2h	0.25149128...	81.7	0.264241152	1	3
☐	 run_2025-03-28_14-26-1...	 5 days ago	29.8min	0.44613457...	41.2	-	2	6
☐	 run_2025-04-01_21-26-5...	 19 hours ago	2.2h	0.55992550...	40.1	0.301989888	1	4
☐	 run_2025-04-02_03-54-1...	 13 hours ago	31.8min	0.72816438...	21.2	0.339738624	1	5

Sxx 4096

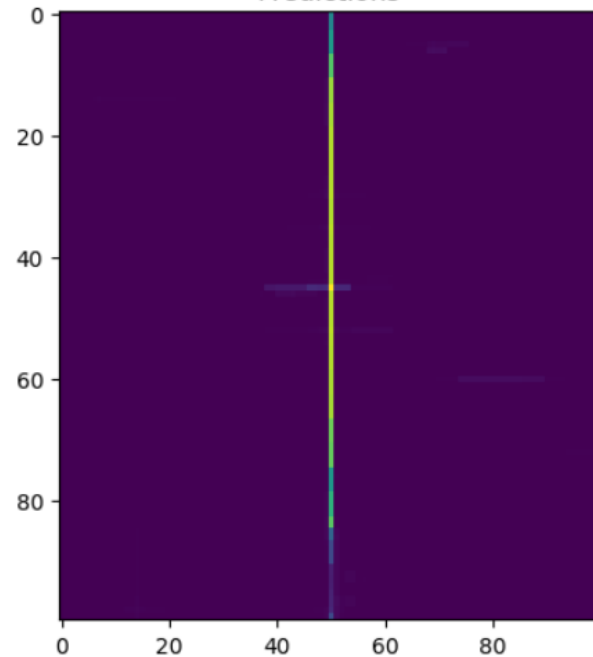


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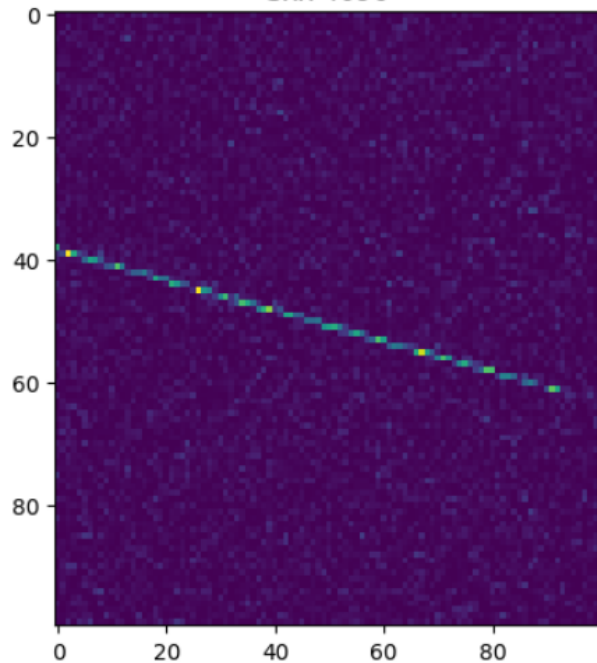
Nsxx 4096



Predictions

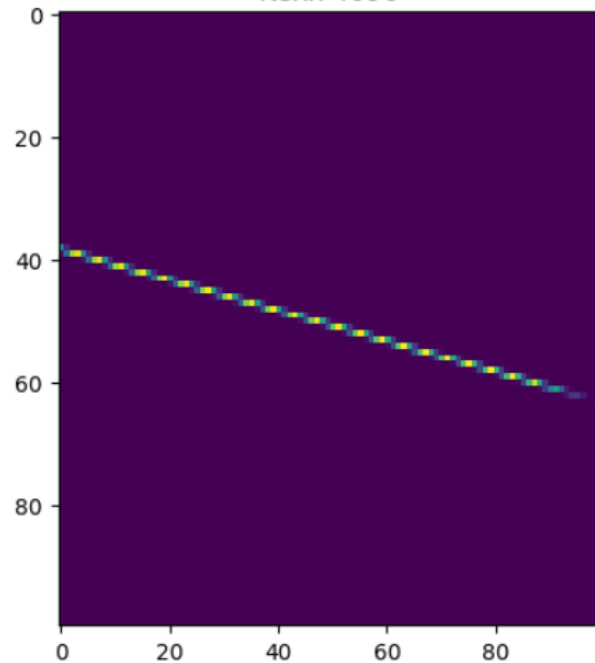


Sxx 4096

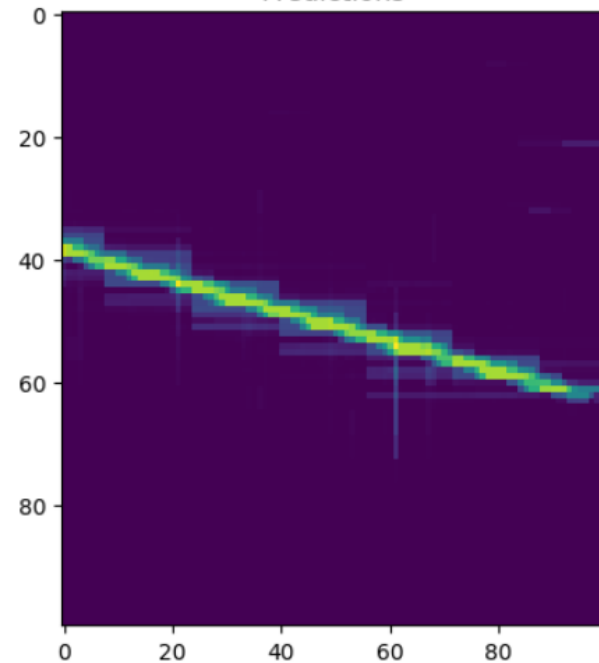


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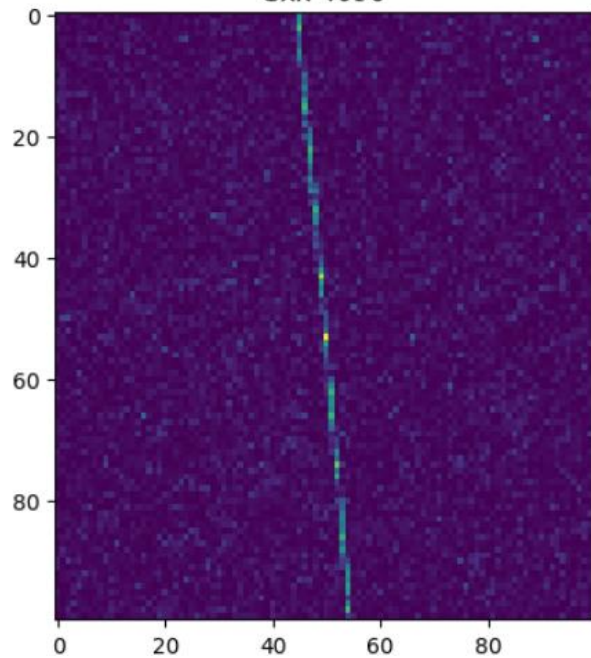
Nsxx 4096



Predictions

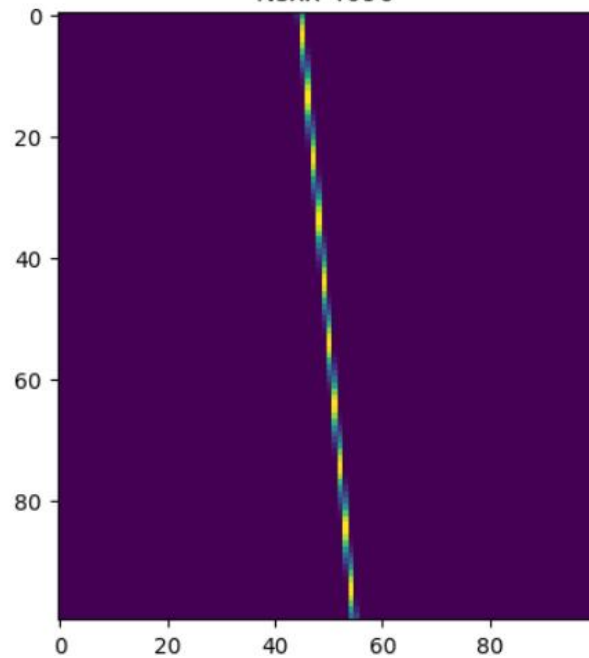


Sxx 4096

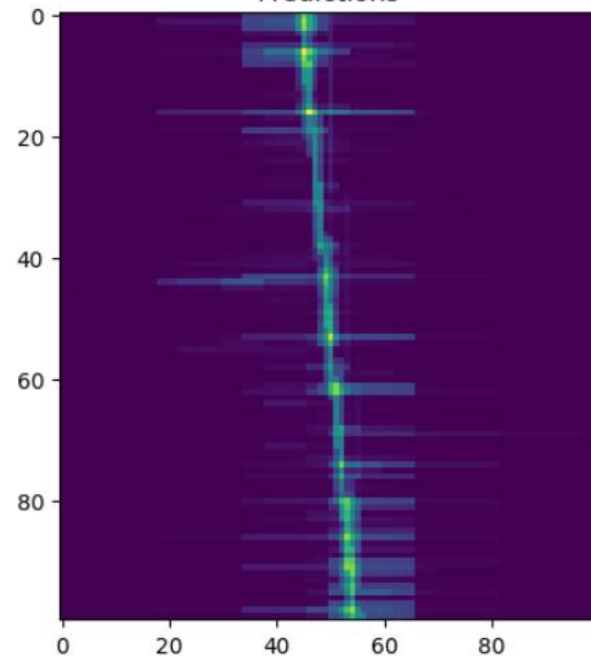


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Nsxx 4096

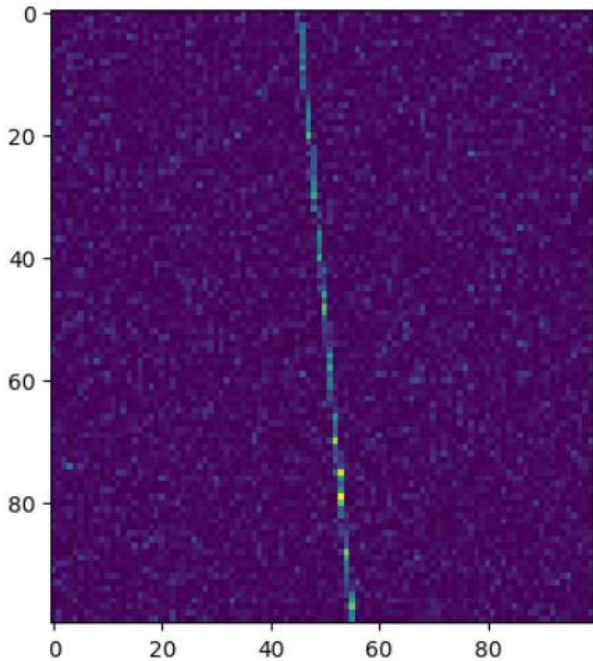


Predictions

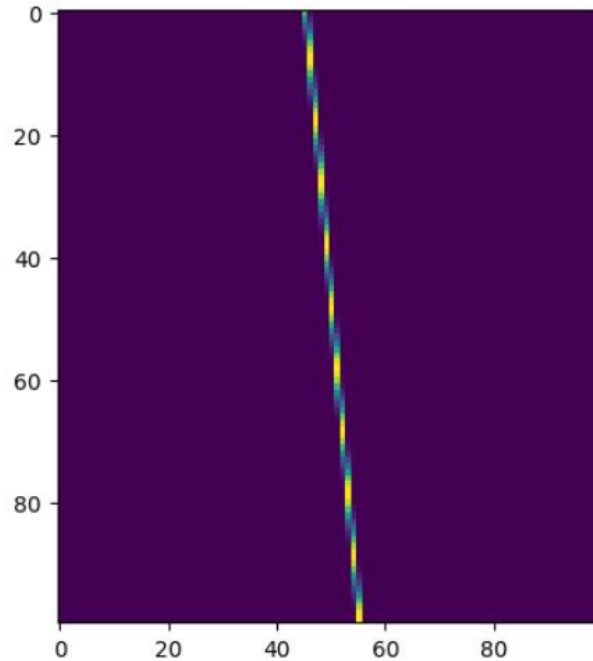


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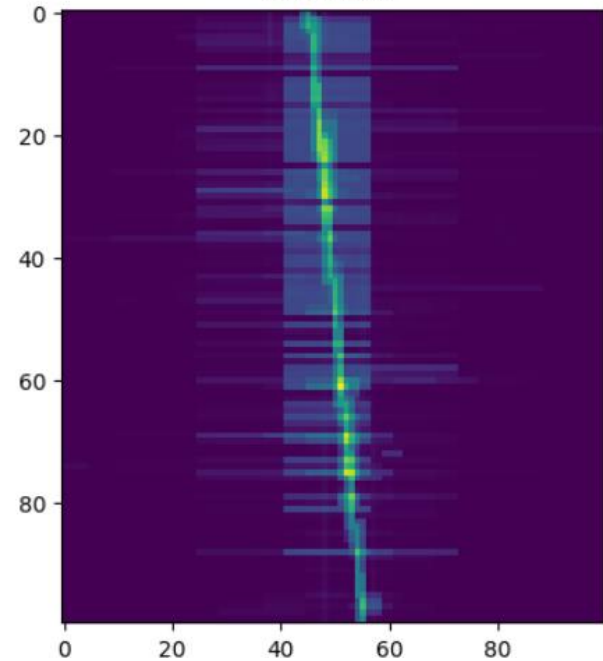
Sxx 4096



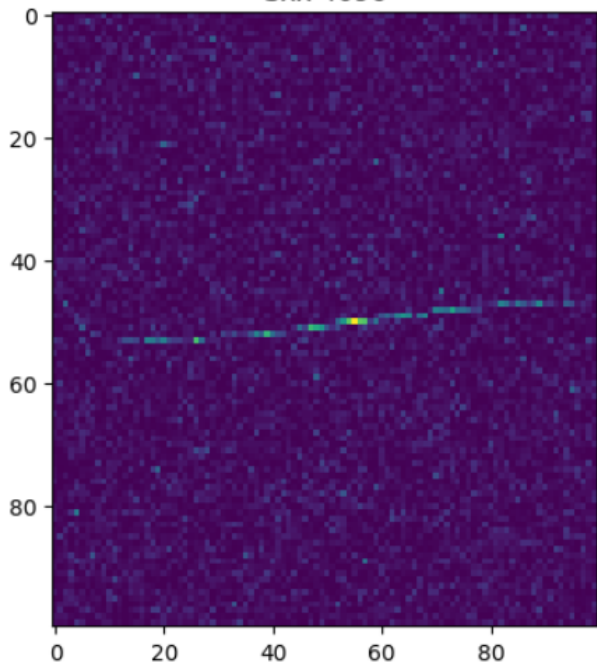
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Predictions

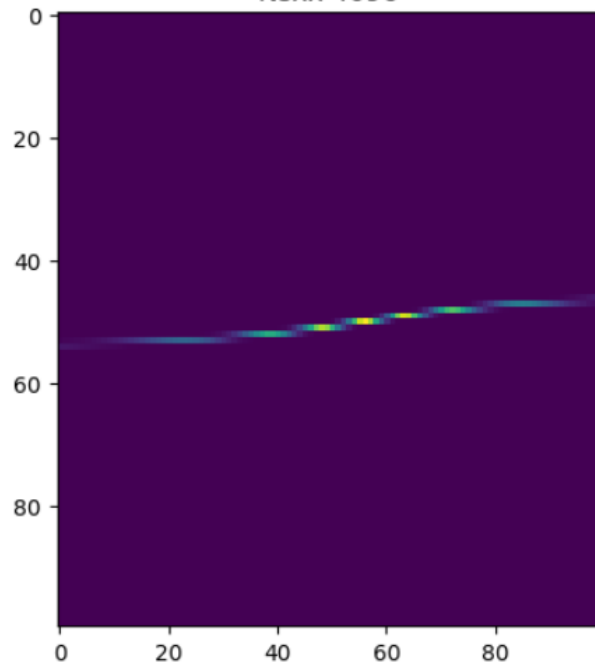


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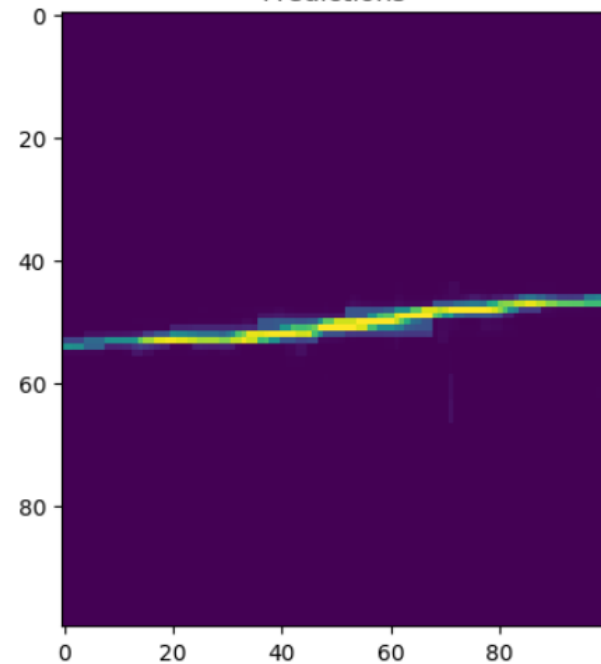


snropt=15

Nsxx 4096



Predictions



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