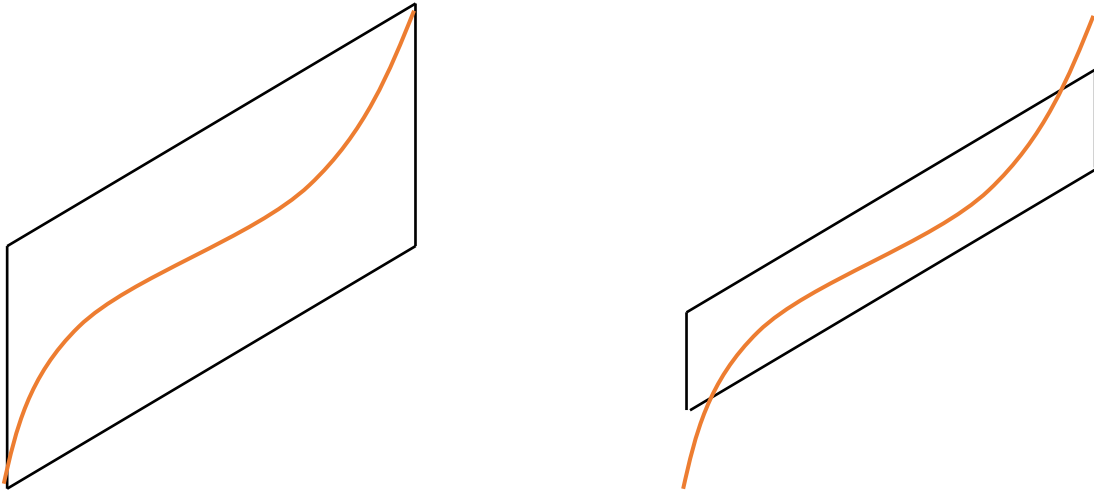


AVANTIX

Avancement Simulateur IQ

Filtrage adaptatif

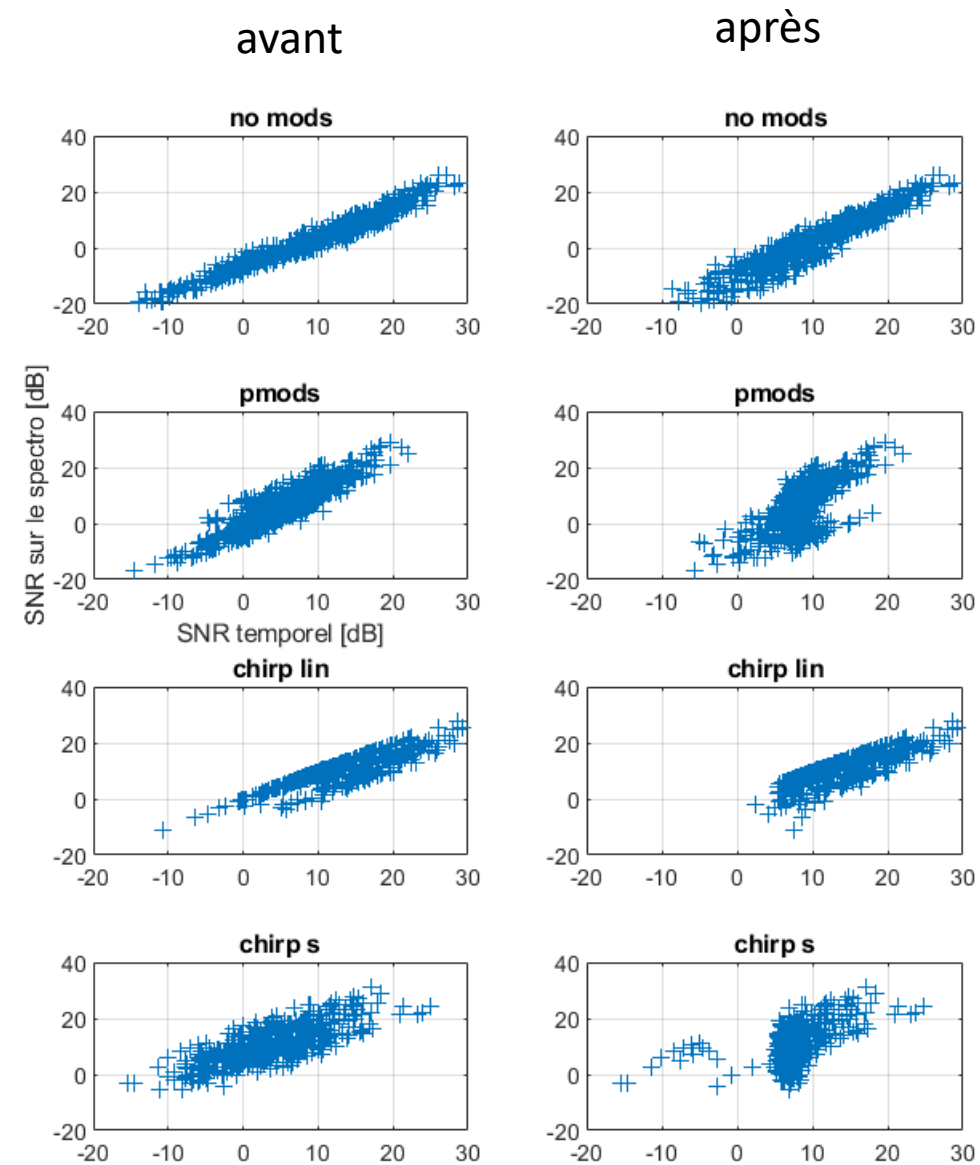
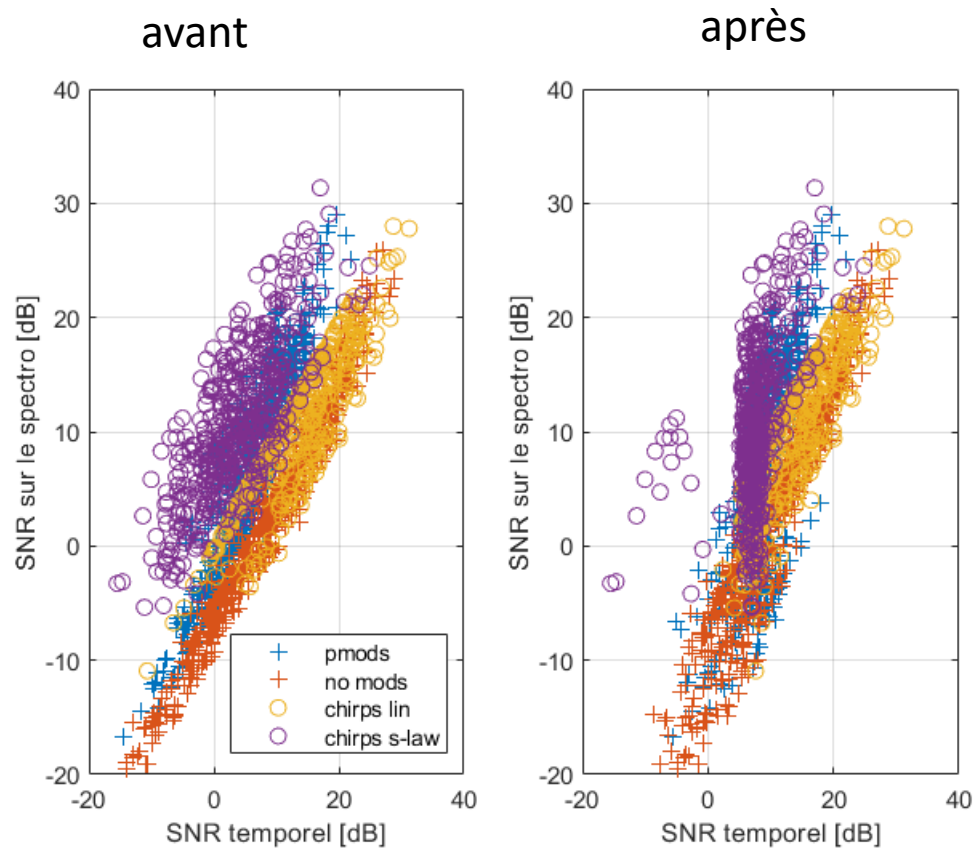


- On connaît σ et le filtre, on estime l'amplitude du signal avec un filtre médian
- On peut estimer le SNR et filtrer plus fin tant que le SNR de 6dB n'est pas atteint (en temporel)
- Si le signal est trop court pour être filtré assez finement, on renonce

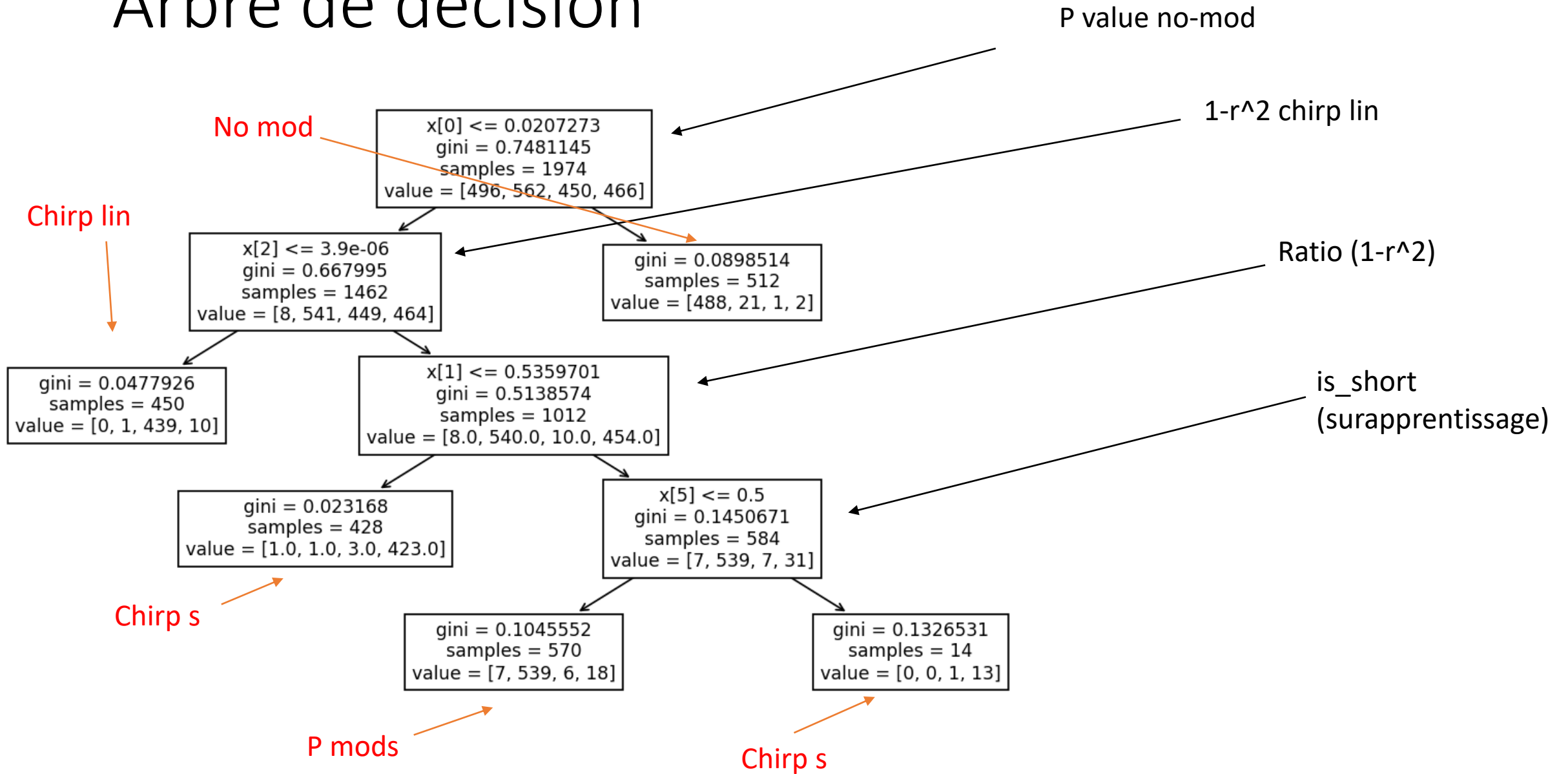
Donne un meilleur SNR temporel (traitement très hasardeux sous 6 dB)

On perd des infos sur la dynamique que YOLO a jugé importantes

Effet sur le SNR



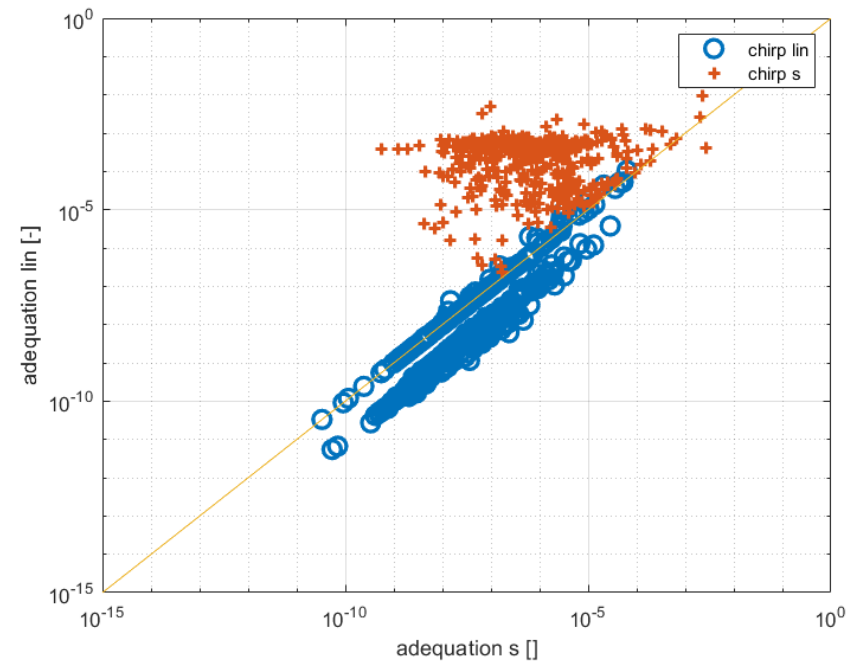
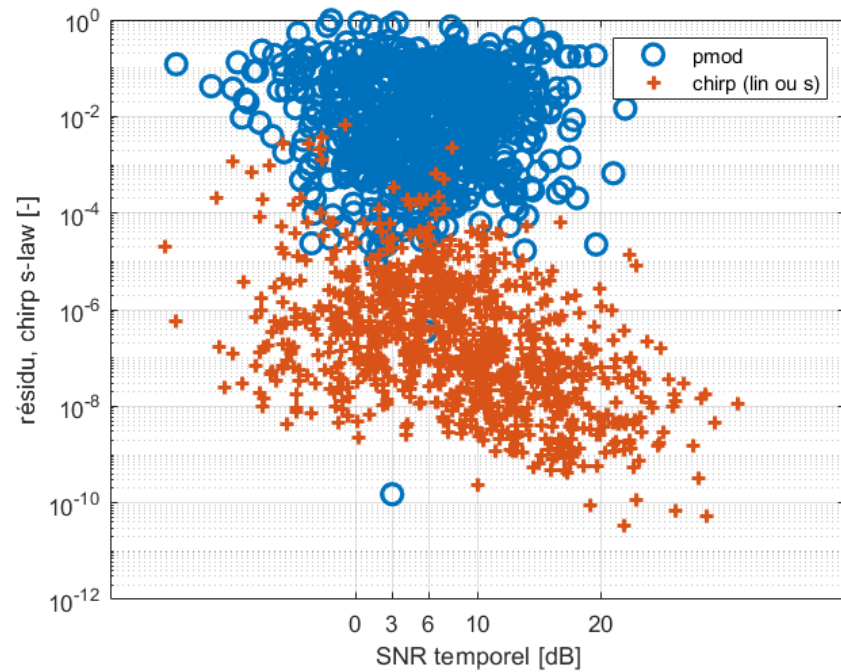
Arbre de décision



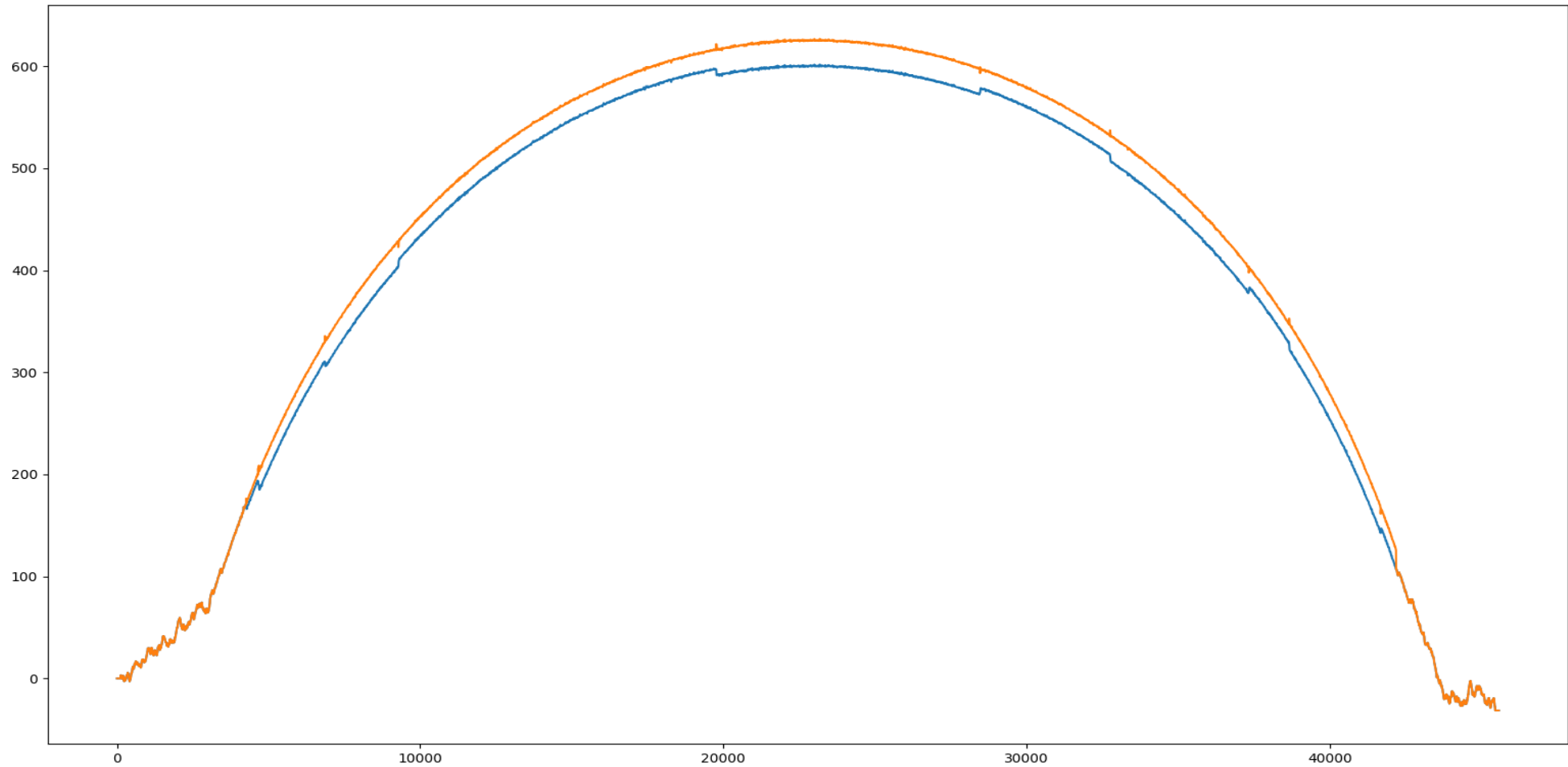
Performances

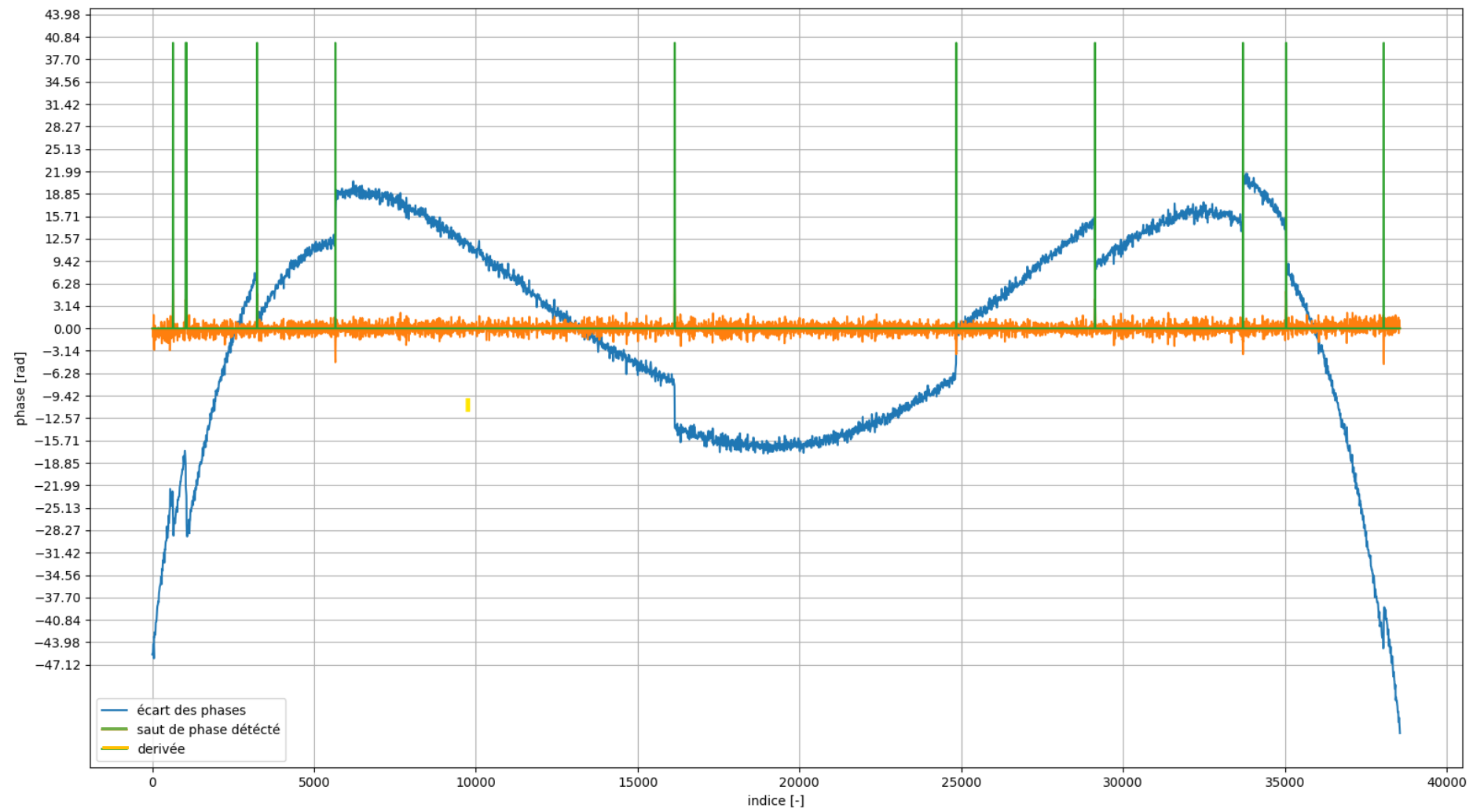
	train	test
$SNR_{tmp}^0 > 6dB$	$\begin{pmatrix} 462 & 8 & 7 & 0 \\ 10 & 332 & 2 & 11 \\ 0 & 0 & 384 & 1 \\ 0 & 1 & 1 & 162 \end{pmatrix}$	$\begin{pmatrix} 183 & 8 & 2 & 0 \\ 3 & 129 & 3 & 3 \\ 0 & 0 & 167 & 0 \\ 2 & 4 & 6 & 79 \end{pmatrix}$
$SNR_{tmp}^1 > 6dB$	$\begin{pmatrix} 488 & 21 & 1 & 2 \\ 7 & 539 & 6 & 18 \\ 0 & 1 & 439 & 10 \\ 1 & 1 & 4 & 436 \end{pmatrix}$	$\begin{pmatrix} 197 & 17 & 1 & 0 \\ 2 & 211 & 4 & 6 \\ 0 & 0 & 197 & 5 \\ 2 & 4 & 6 & 179 \end{pmatrix}$

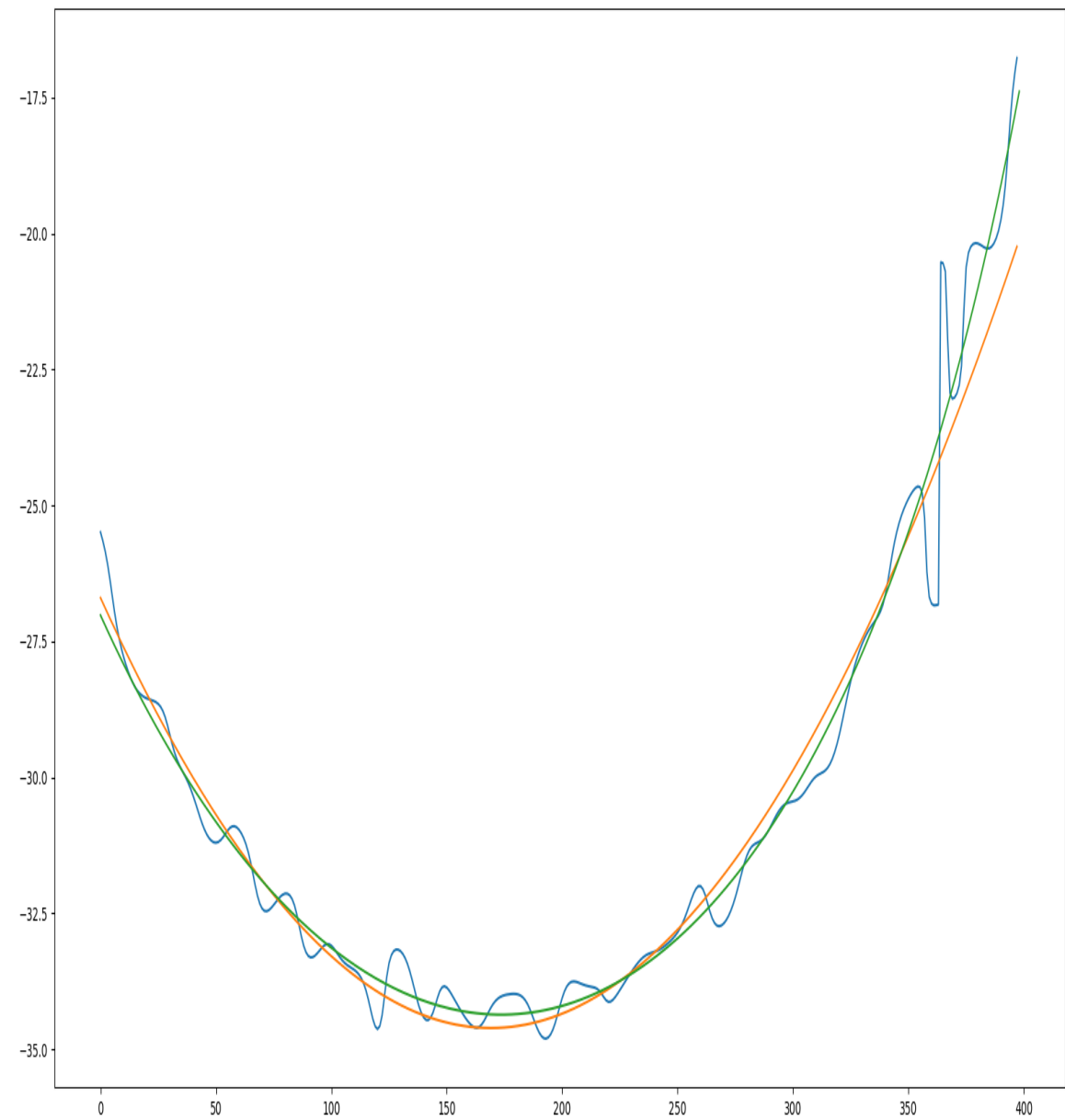
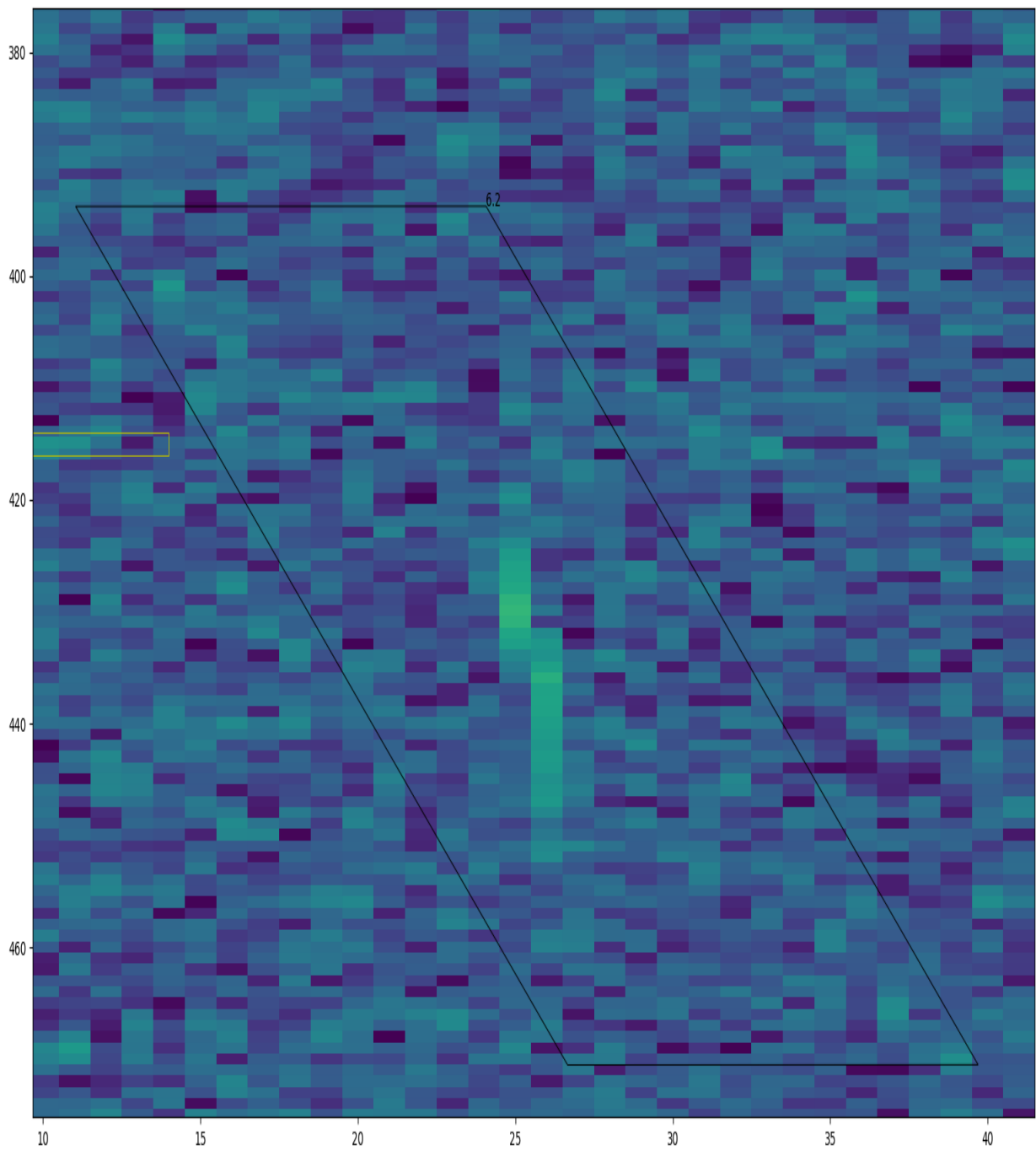
Statistiques perfectibles



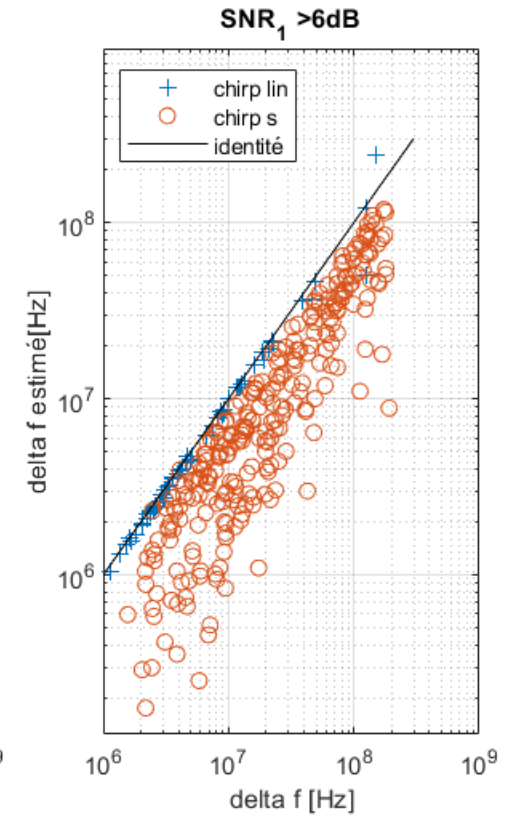
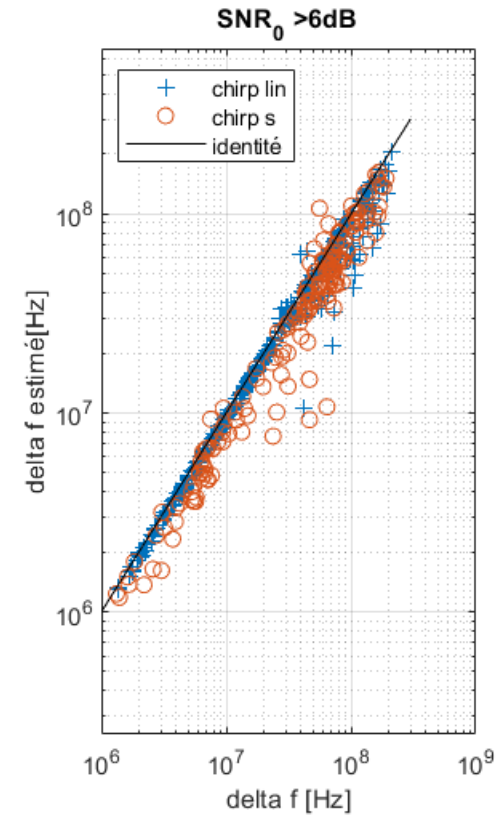
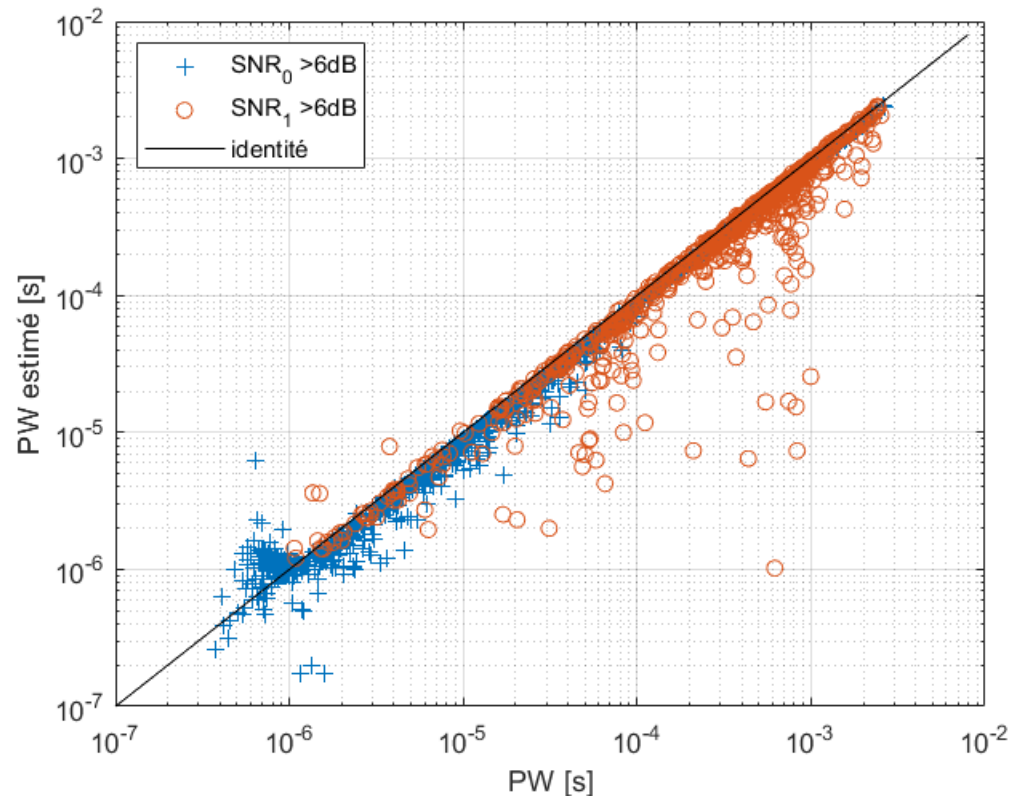
Correction des erreurs d'unwrapping







Extraction de features



Le filtrage adaptatif nous fait perdre l'info sur les s law (soluble)

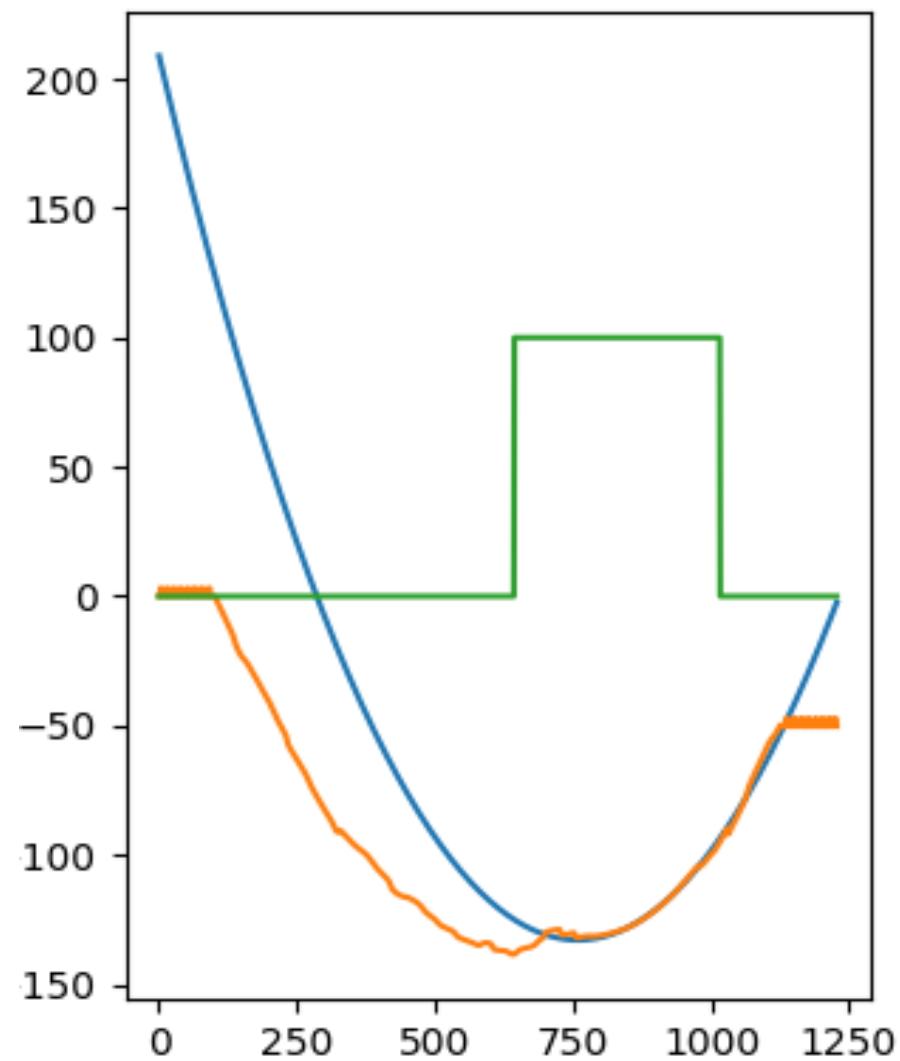
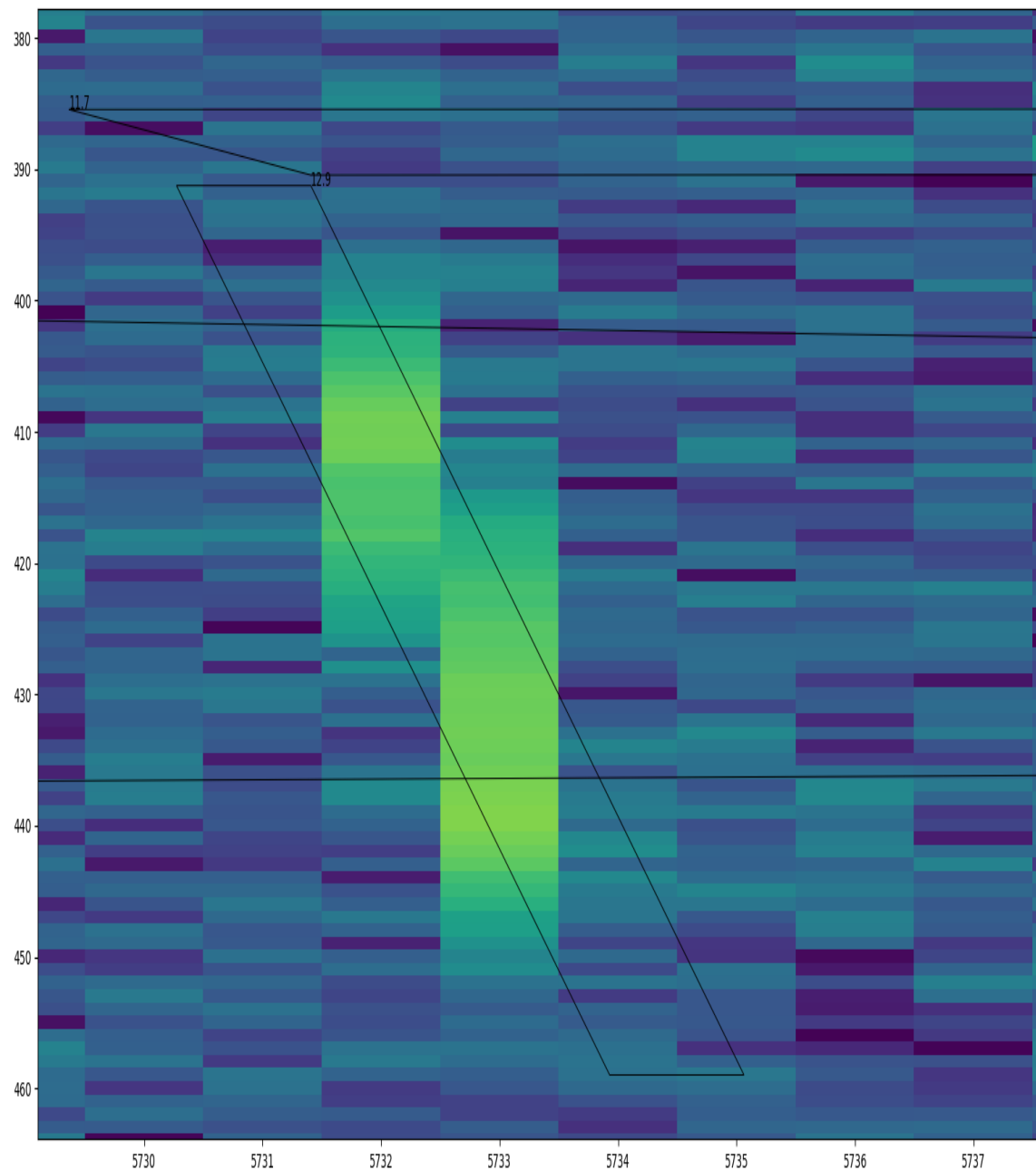
AVANTIX

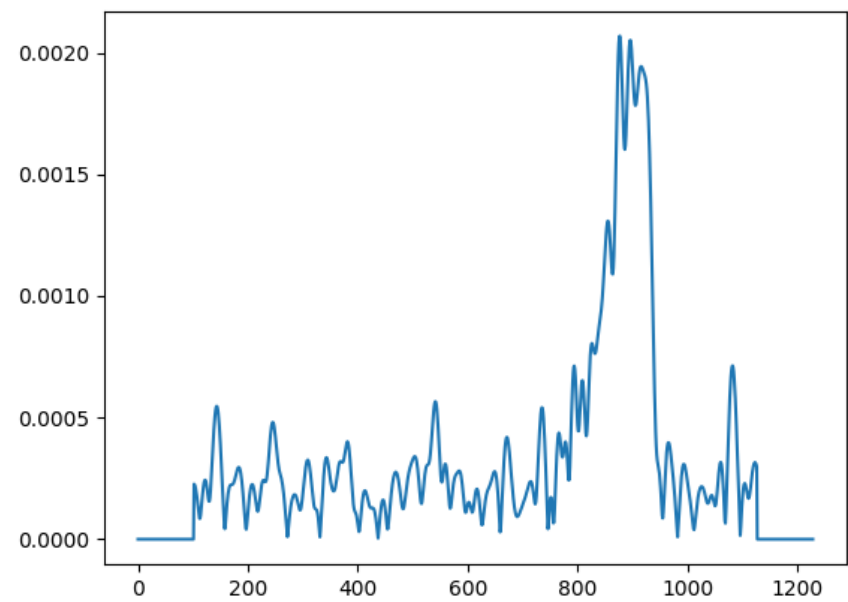
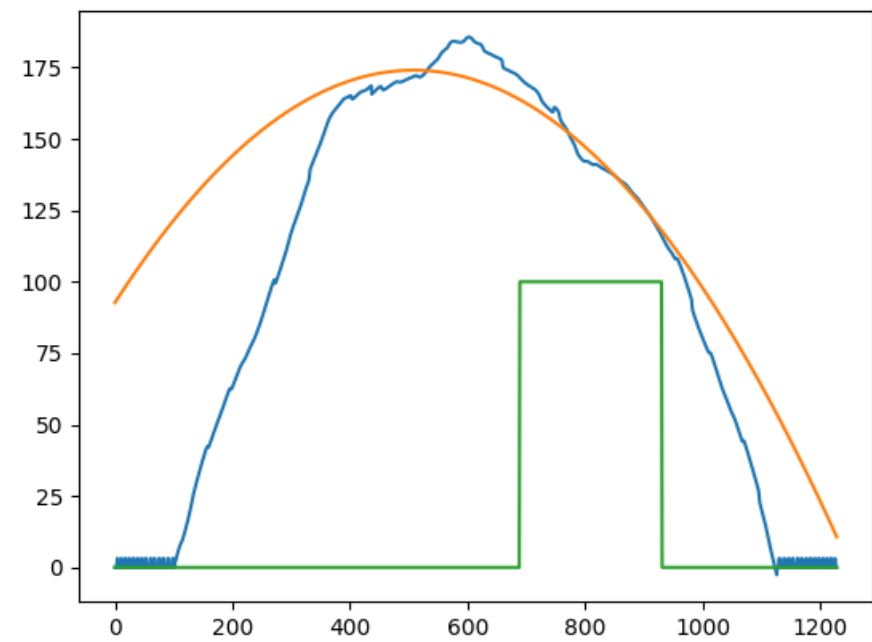
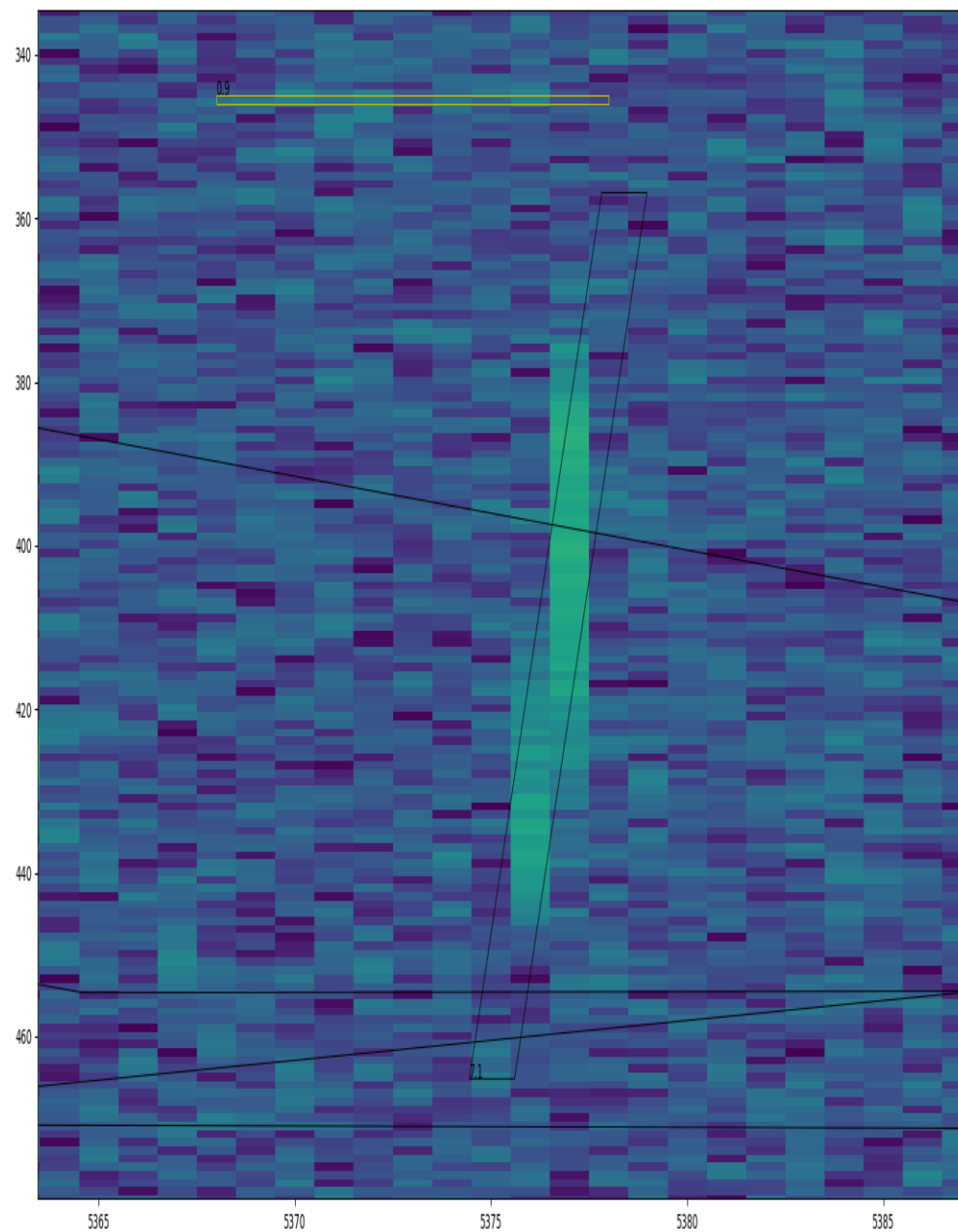
MERCI

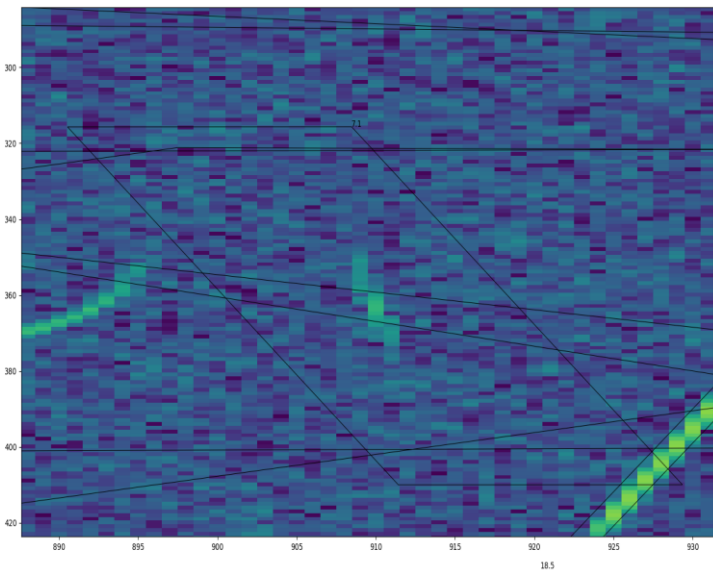
```
print(np.transpose(conf
[[462  8  7  0]
 [ 10 331  7 10]
 [  0  2 379  0]
 [  0  0  1 164]])
[[488 21  1  2]
 [  7 533 11 16]
 [  0  5 436  5]
 [  1  3  2 443]])
```

$$\begin{pmatrix} 462 & 8 & 7 & 0 \\ 10 & 332 & 2 & 11 \\ 0 & 0 & 384 & 1 \\ 0 & 1 & 1 & 162 \end{pmatrix}$$

$$\begin{pmatrix} 488 & 21 & 1 & 2 \\ 7 & 539 & 6 & 18 \\ 0 & 1 & 439 & 10 \\ 1 & 1 & 4 & 436 \end{pmatrix}$$







slaw

