

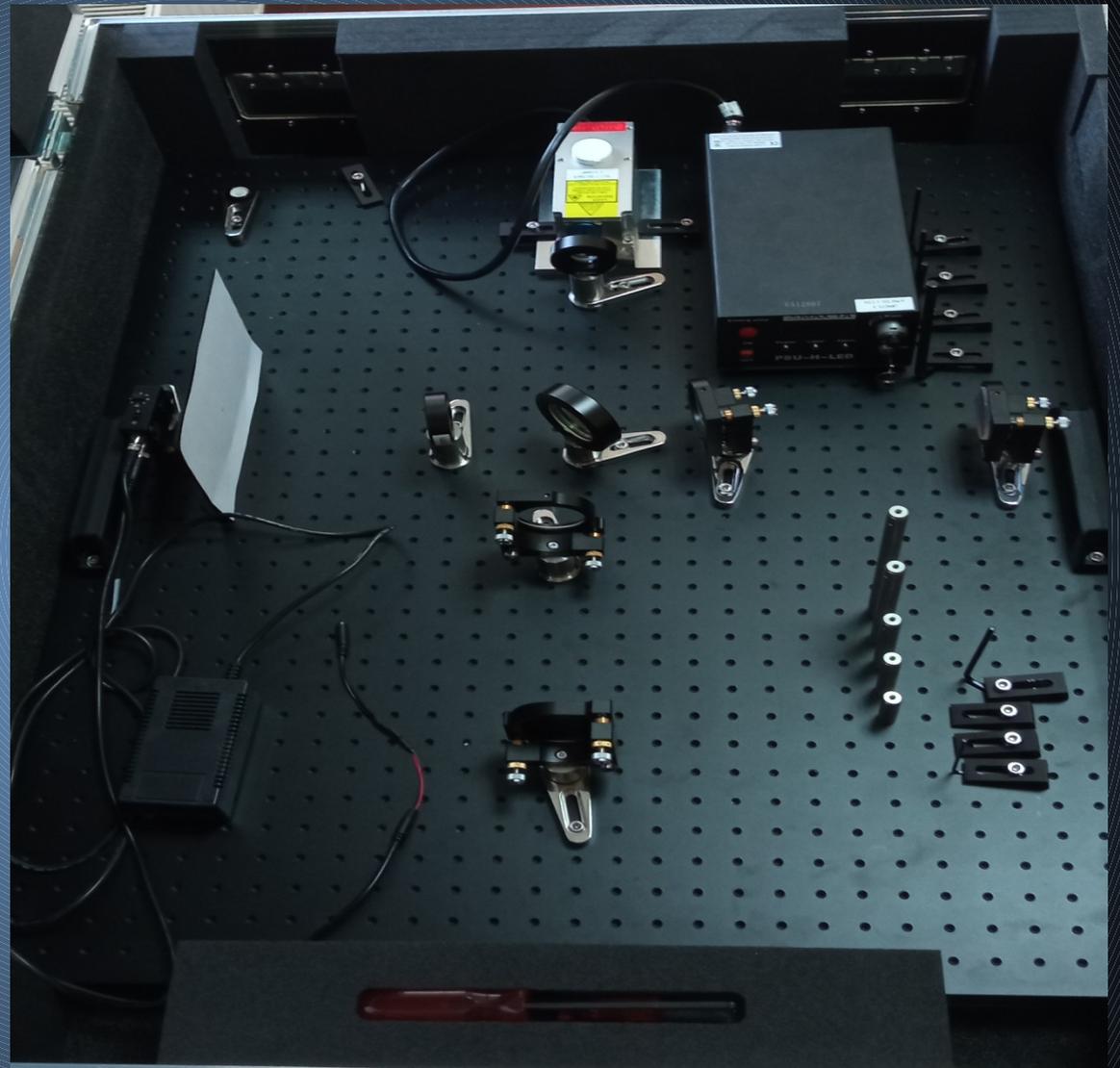


Traitement du signal d'un interféromètre de Michelson soumis à des perturbations

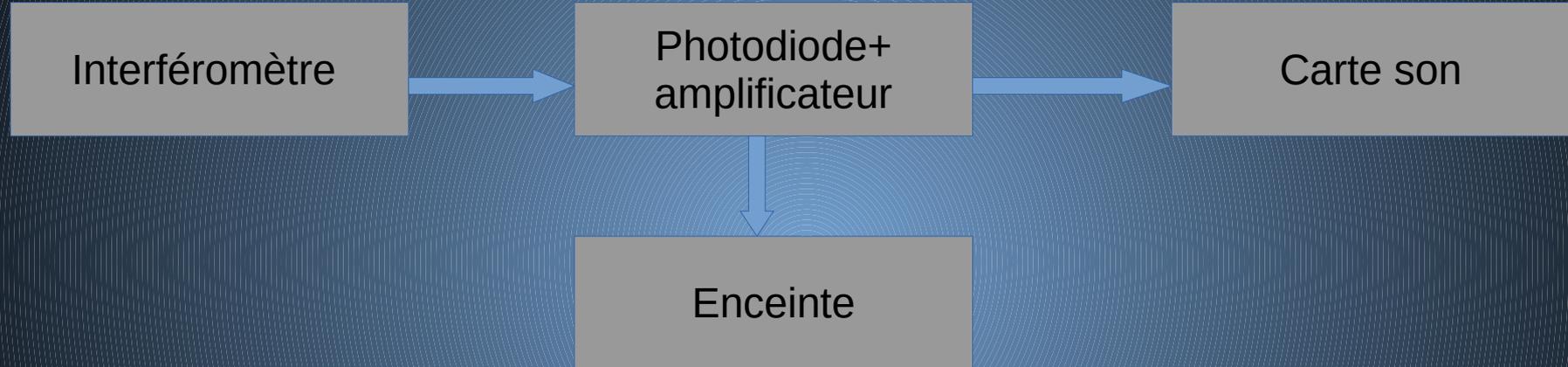
Boismard tom

Tuteurs :
Viola Sordini
Jerome Degallaix

L'interféromètre de Michelson



Récupération des données



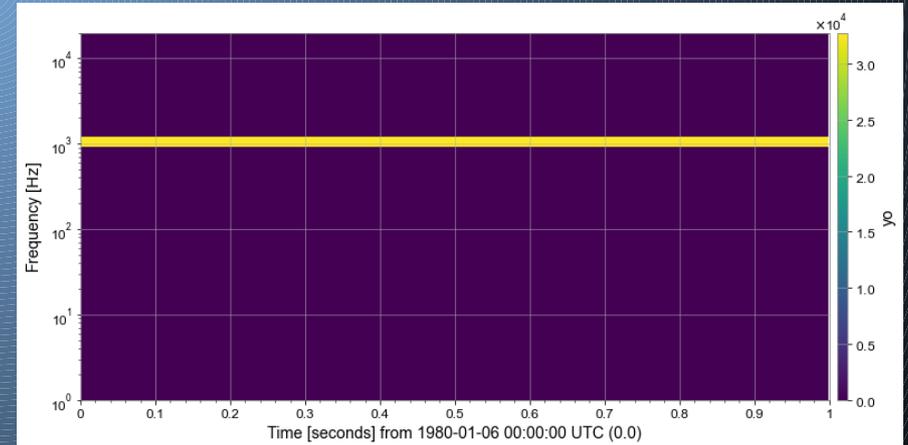
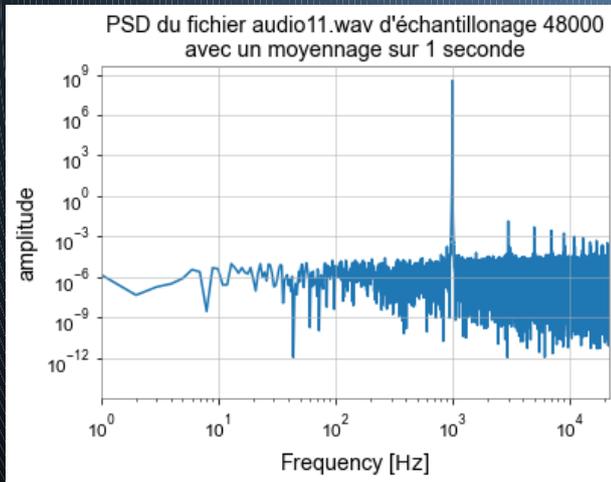
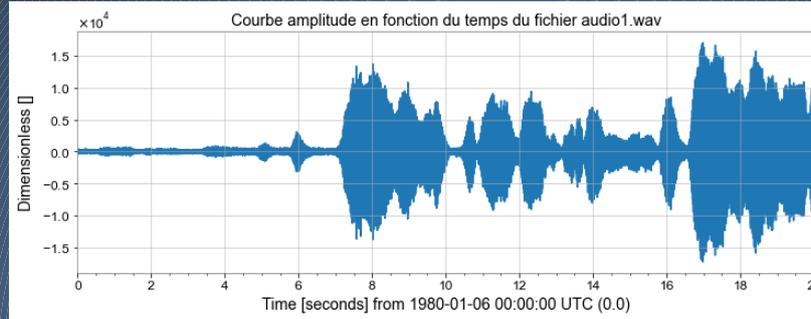
Traitement des données

Utilisation de bibliothèque python :

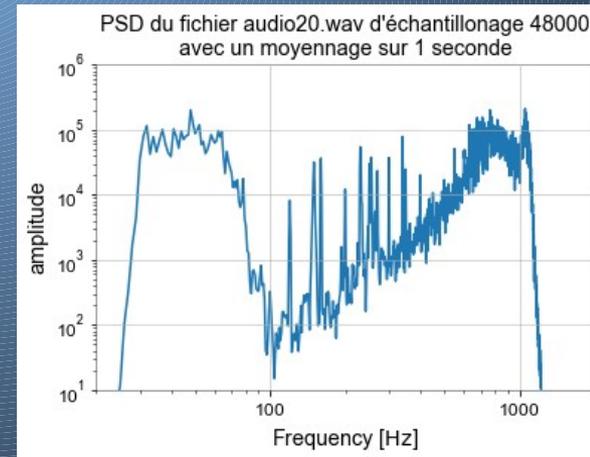
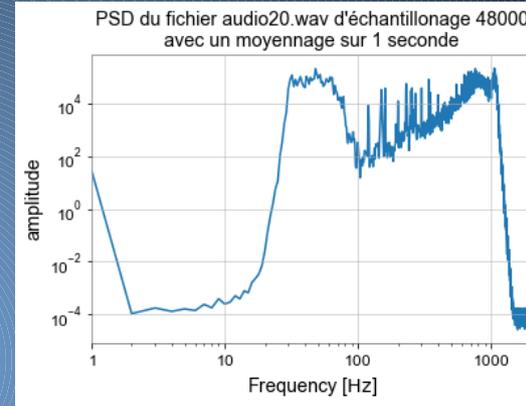
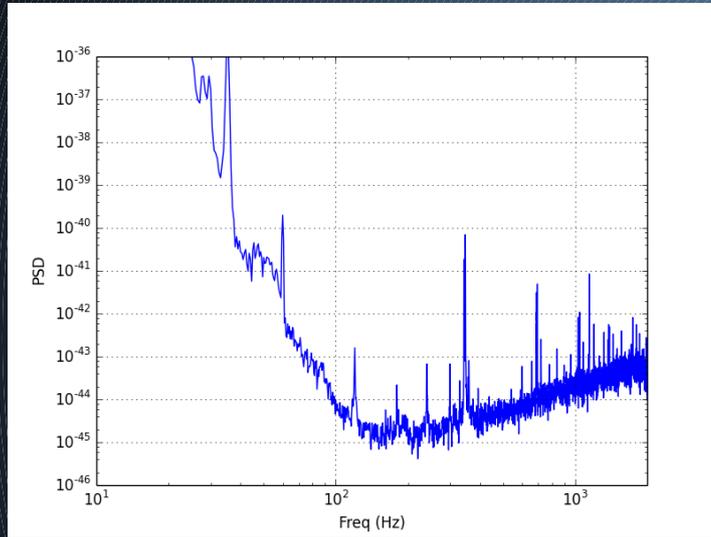
- gwpv
- wave
- librosa
- etc..

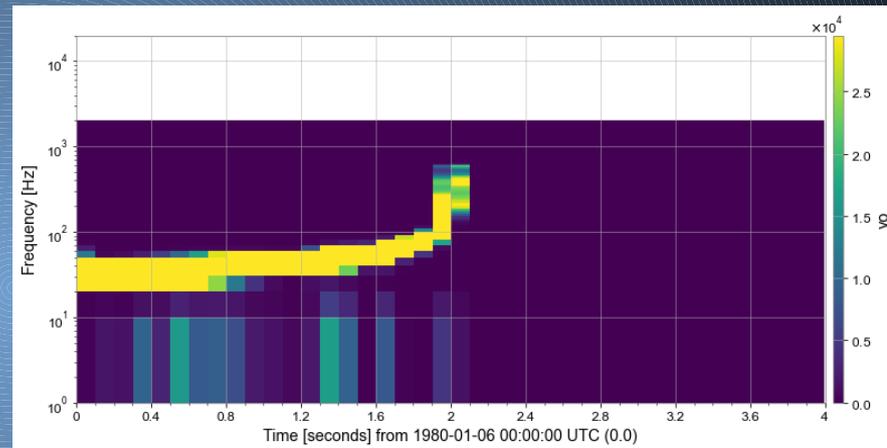
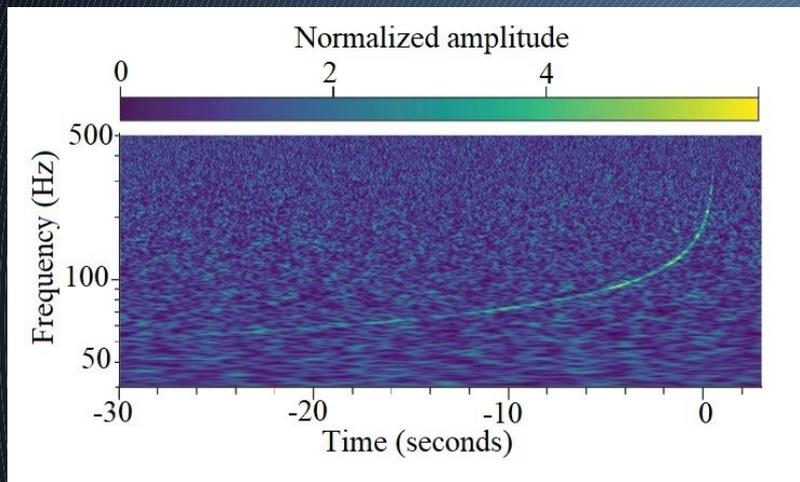
Afin créer un objet « Timeséries » à partir d'un WAV

L'objectif étant de sortir ces 3 Graphiques :

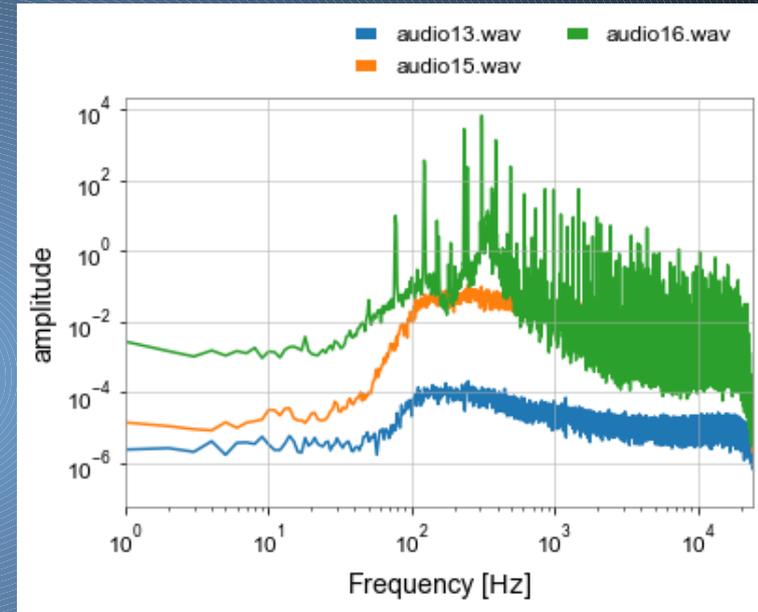
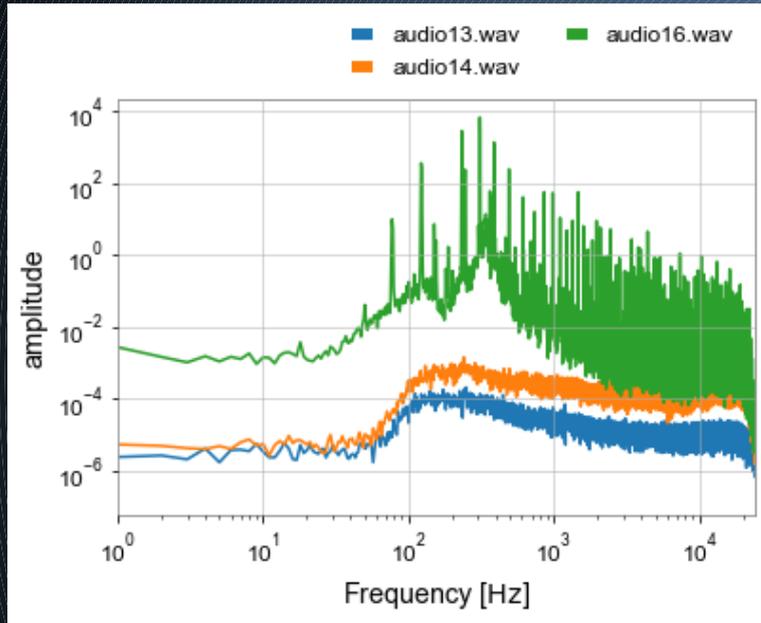


Afin de tester mes graphique, j'utilise des donnée réels





Le bruit de mon système d'acquisition



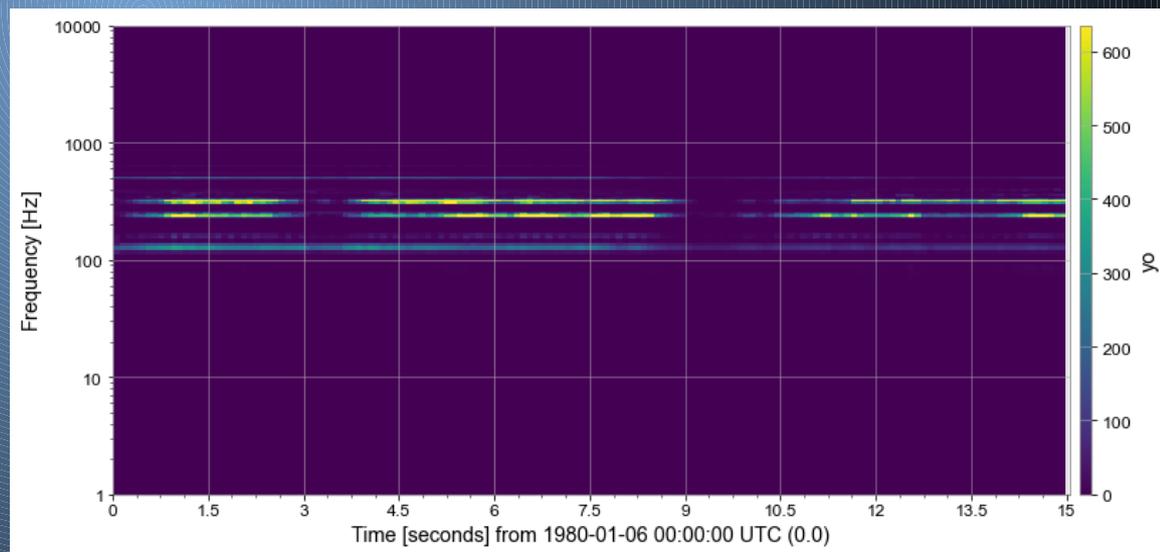
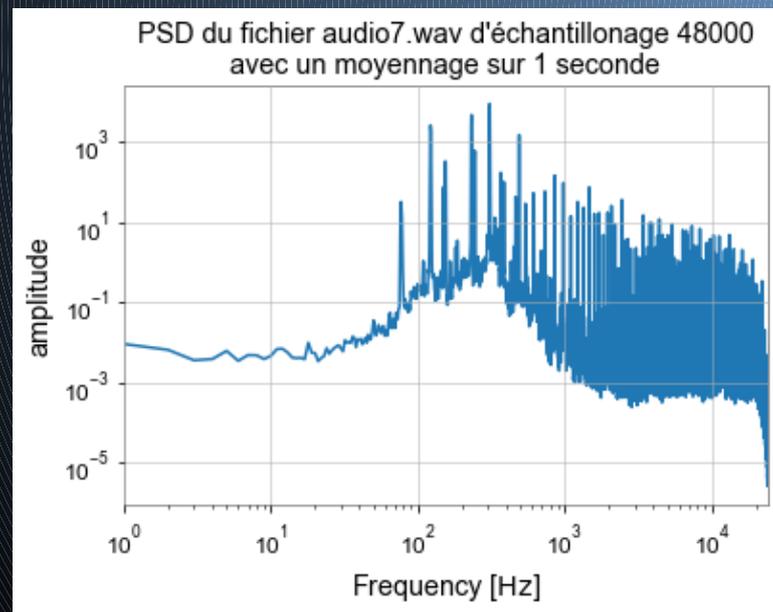
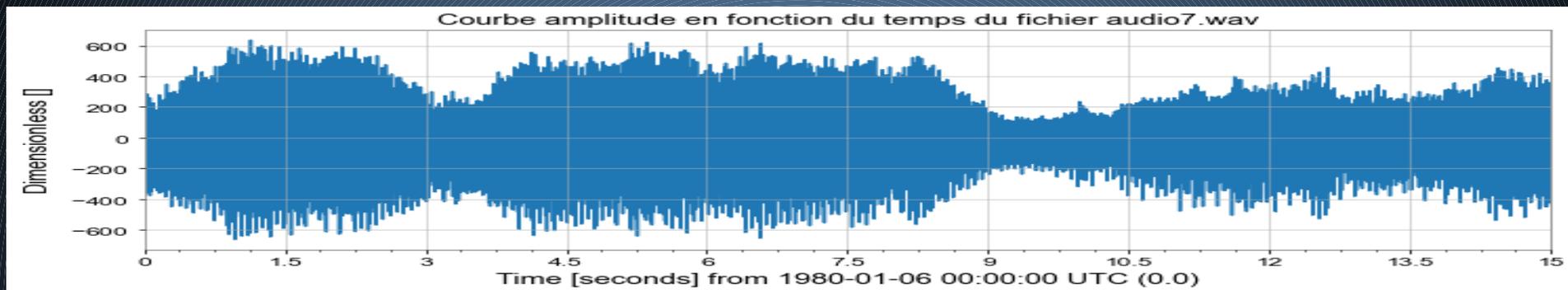
Audio13: bruit de la carte son

Audio14: Avec la photodiode éteinte mais branché

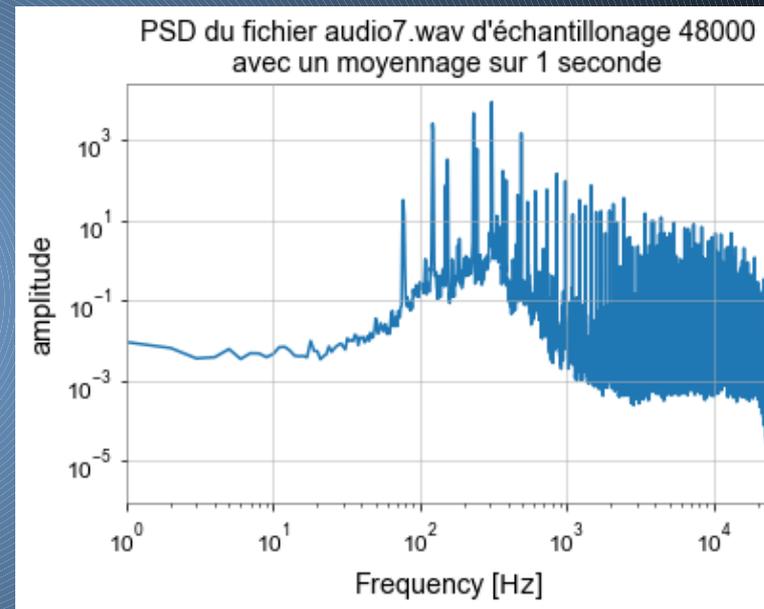
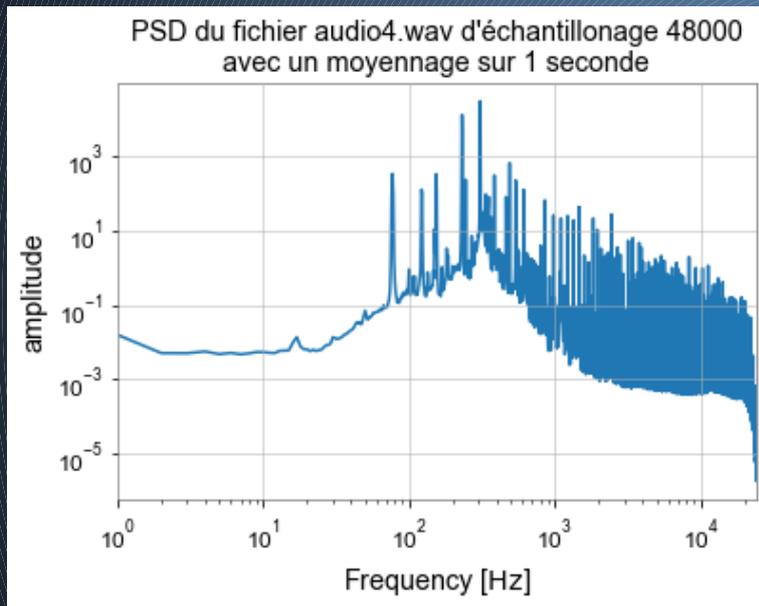
Audio15: idem audio14 mais amplifié

Audio16: Avec le laser allumé sans perturbation volontaire

Bruit du Michelson(20sec)



Comparaison du bruit du Michelson(11min)



Essai de perturbation

