Coil test
PEM injection

PEM meeting

Taiki tanaka

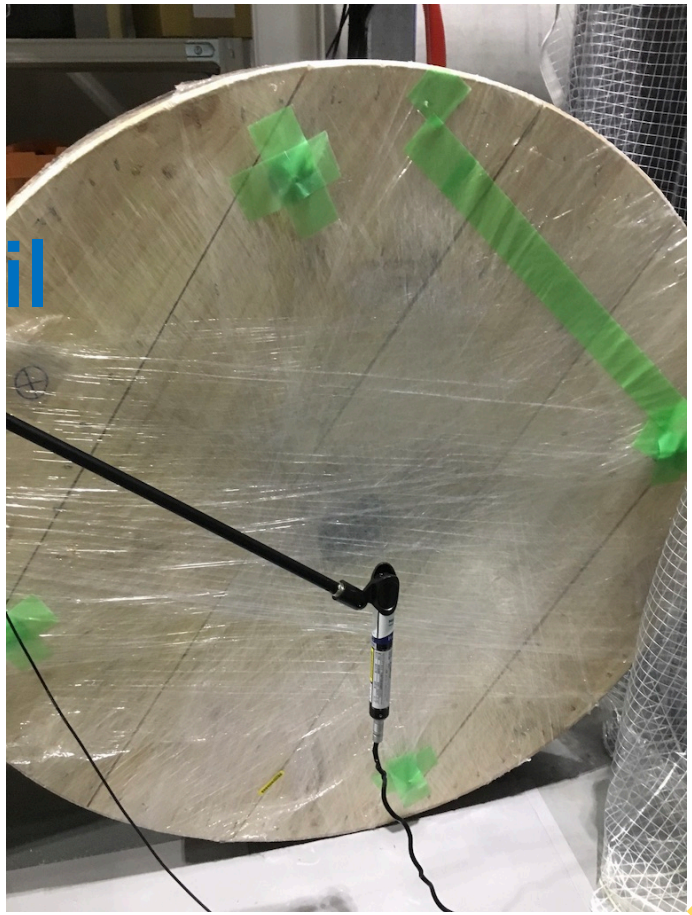
目次

Coil

- Test
  - B-kagra phase1で使用したコイルの性能評価及び動作確認を行いました

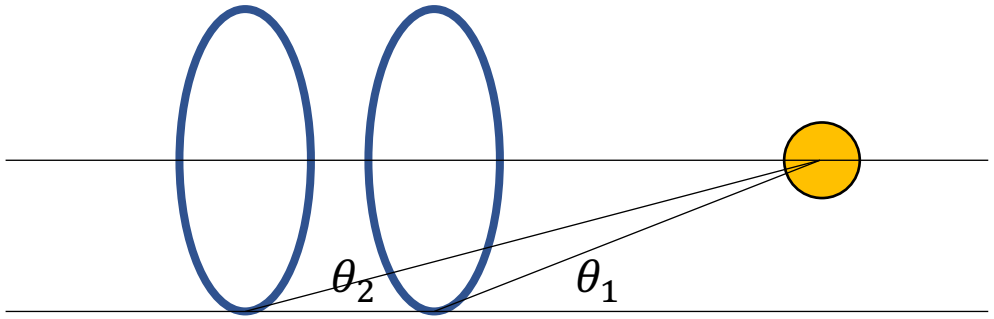
Magnetmeter

Coil



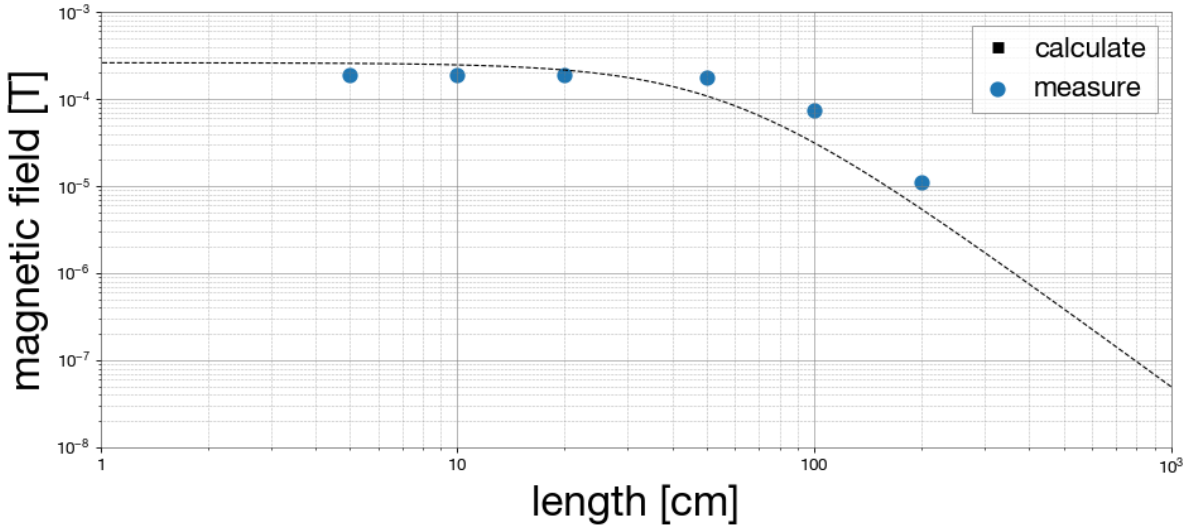
Coil Test

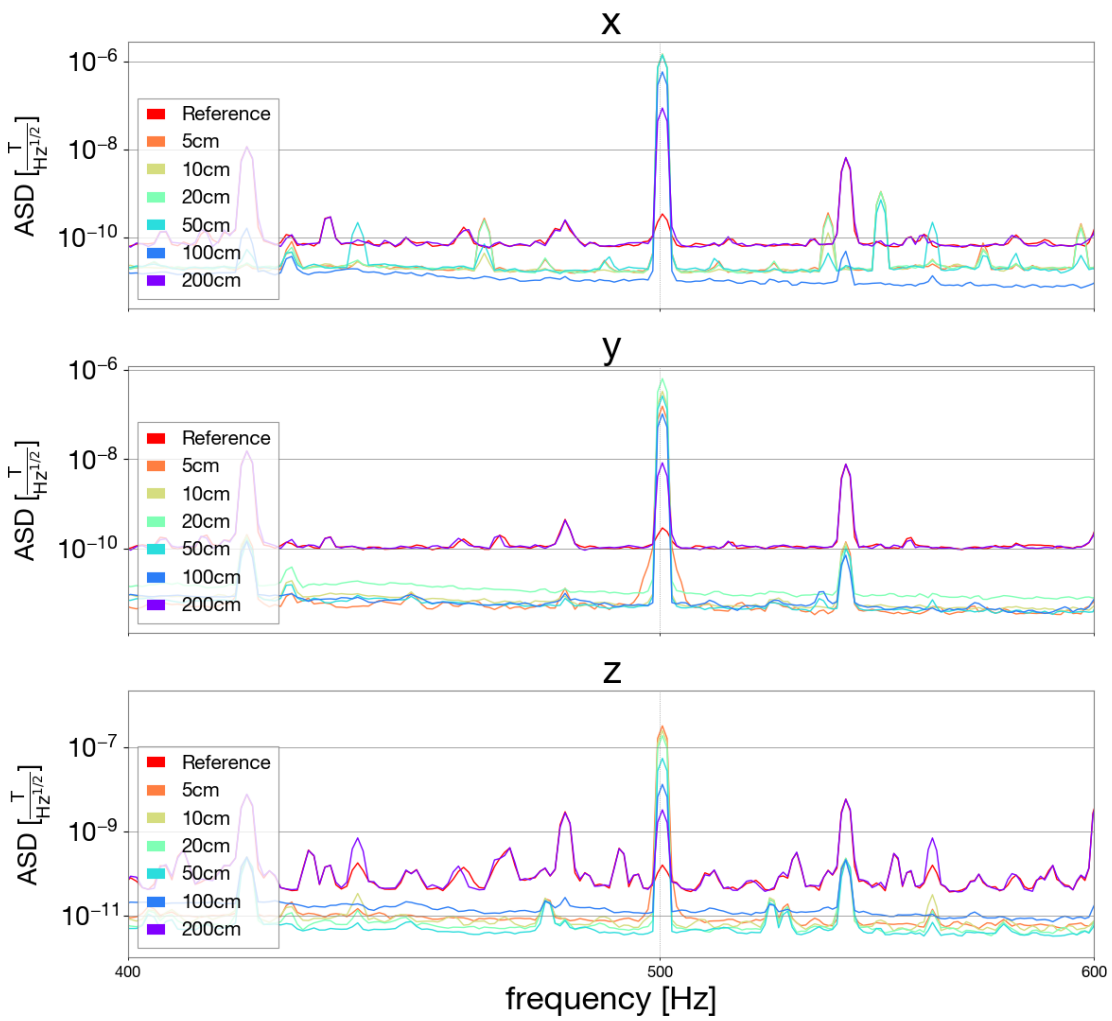
- 真空の透磁率
  - $\mu_0 = 1.257\times10^{-6}\ \mathrm{TA^{-1}\ m}$
  - $2r = 1.15\ \mathrm{m}$
  - $N = 24$
  - $w = 0.03\ \mathrm{m}$
  - $T = 1$
  - $B = \frac{\mu_0 nI(\cos\theta_1 - \cos\theta_2)}{2} = 1\times10^{-7}\ \mathrm{TA^{-1}}\times\frac{I(\cos\theta_1 - \cos\theta_2)}{2}$



Coil

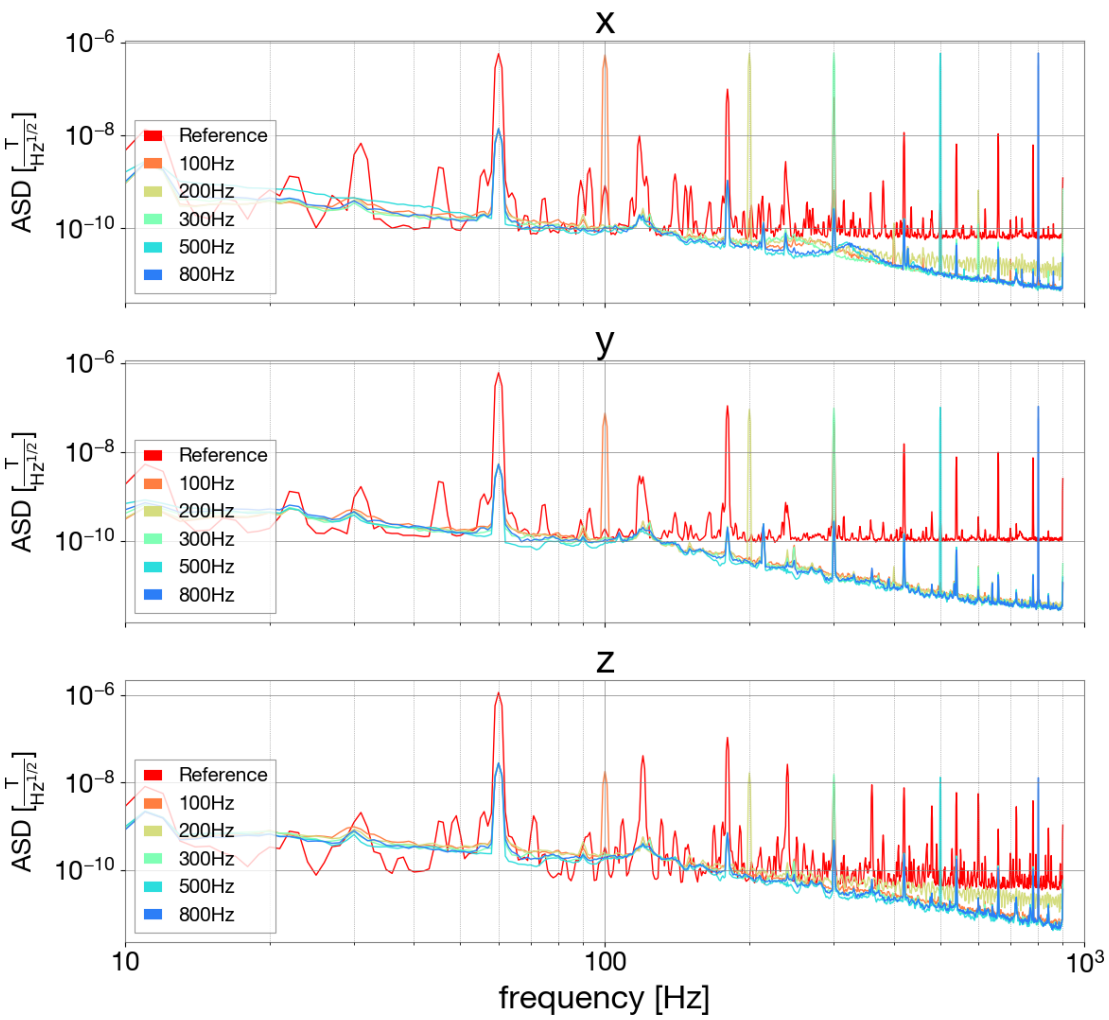
- Length
  - 100mA
  - 500 Hz
- Ref
  - 200 cm





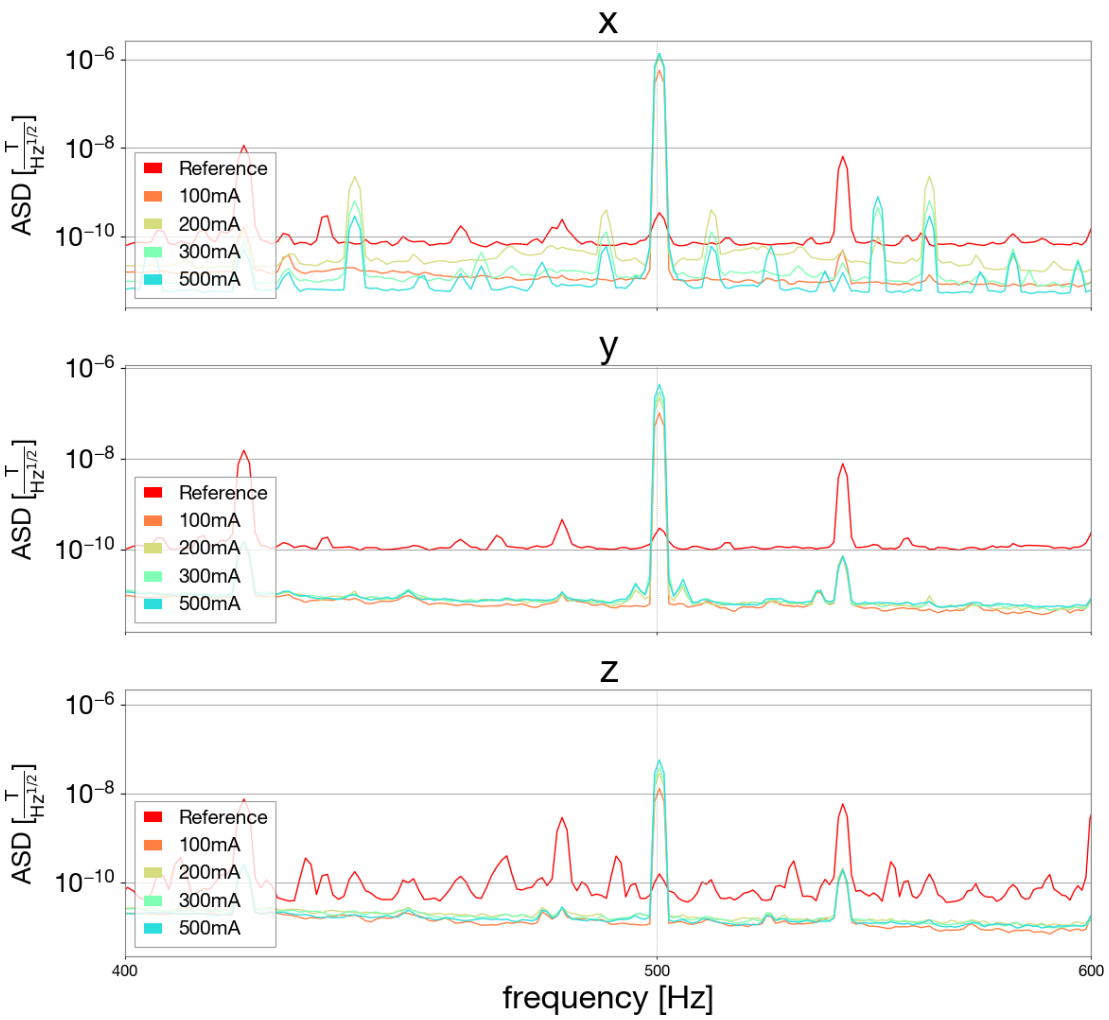
Coil

- Frequency
  - 100mA
  - 100 cm



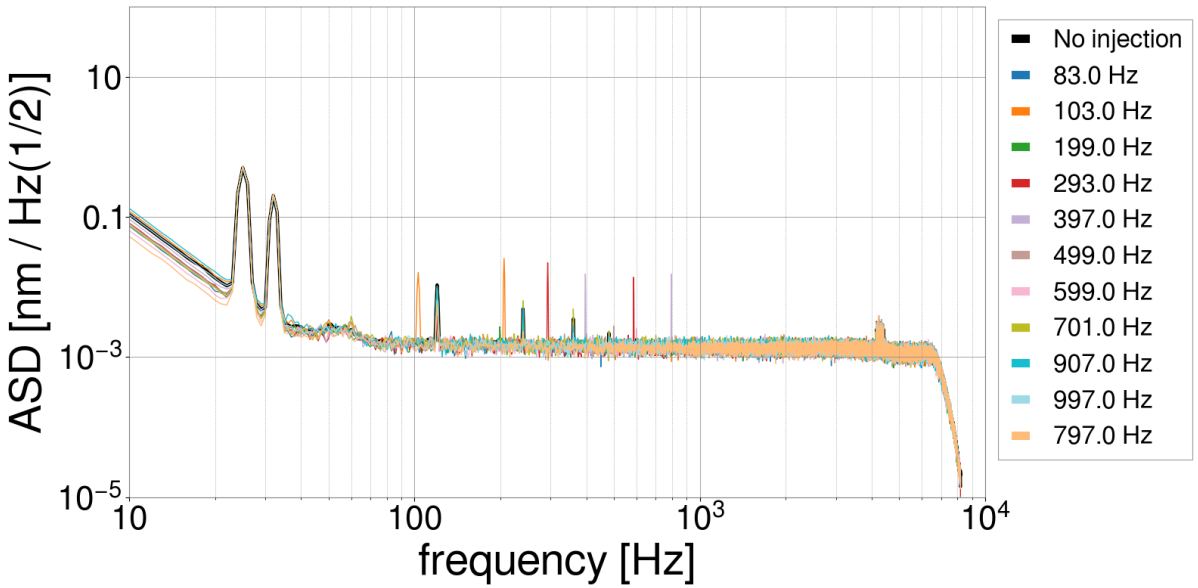
Coil

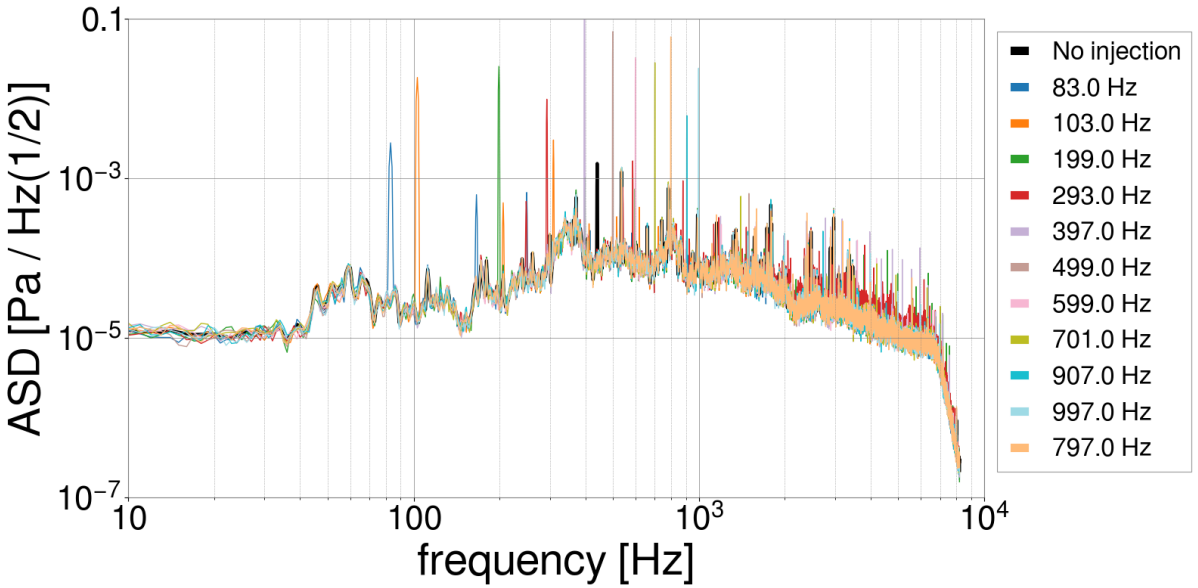
- Amplitude
  - 100 cm
  - 500 Hz



PEM Injection(20191006)

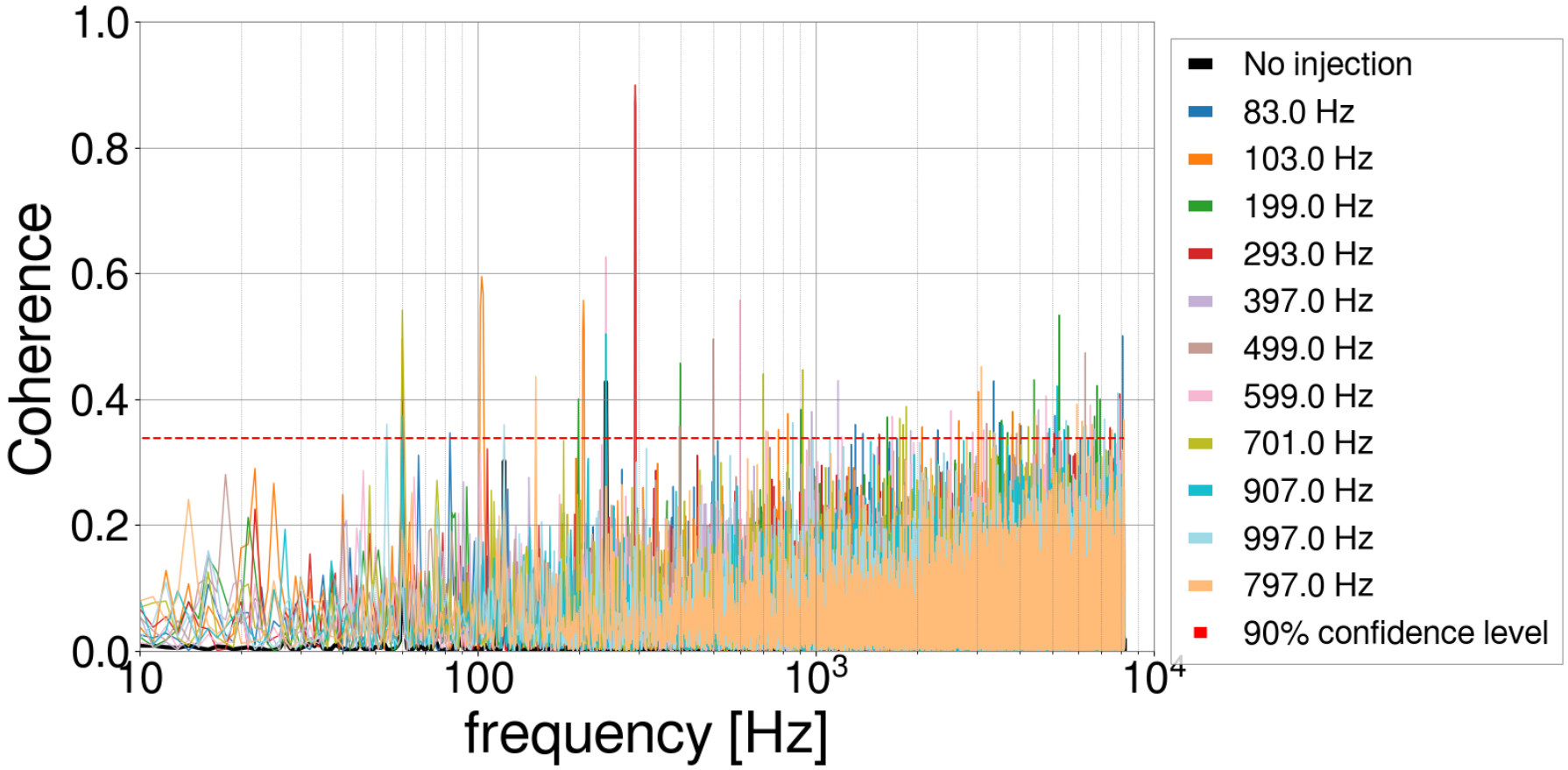
- ASD
  - MICH(REFL) and microphone signal





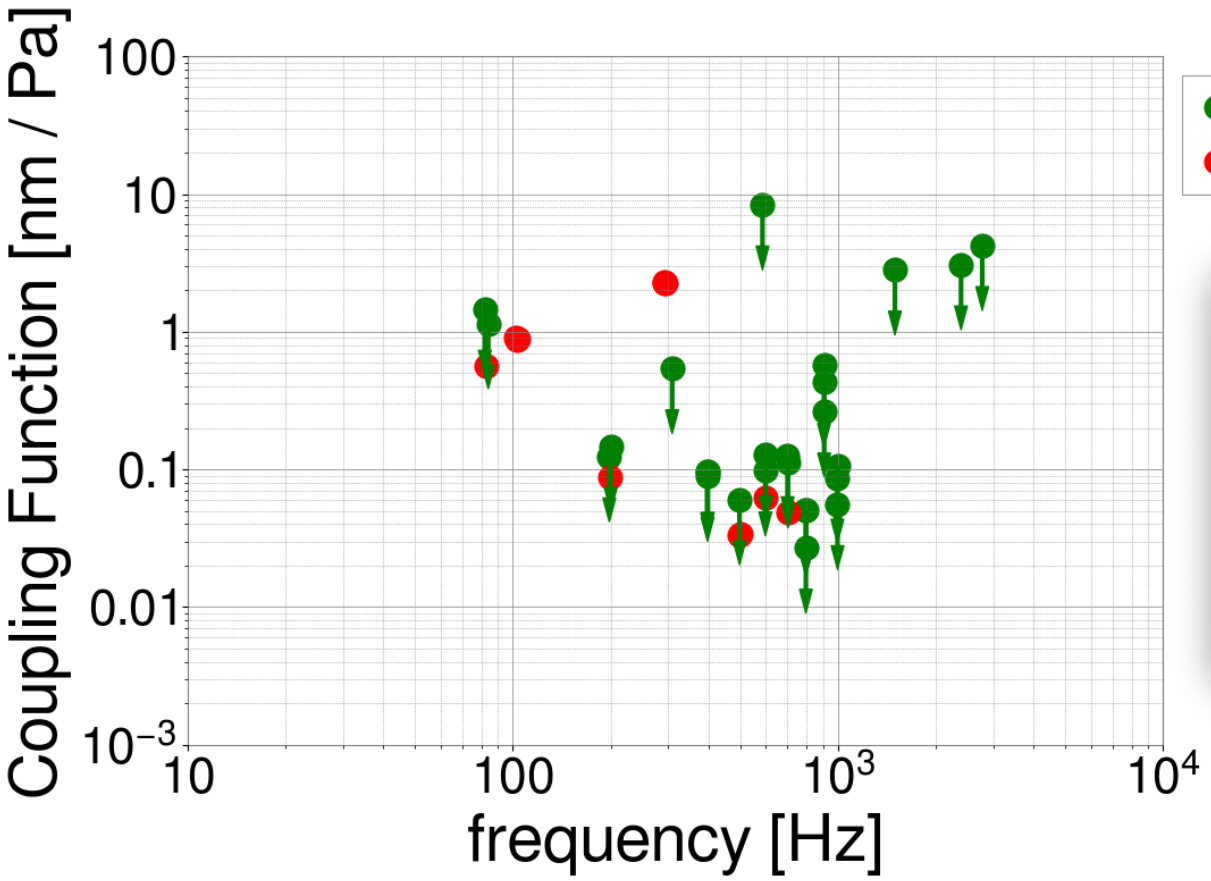
PEM Injection

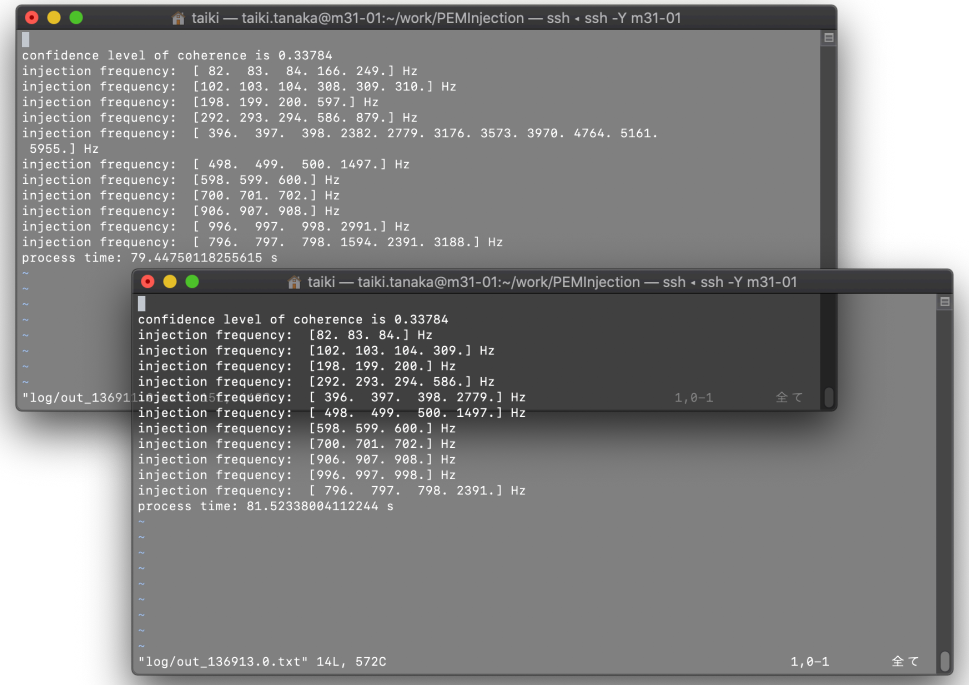
- coherence



PEM Injection

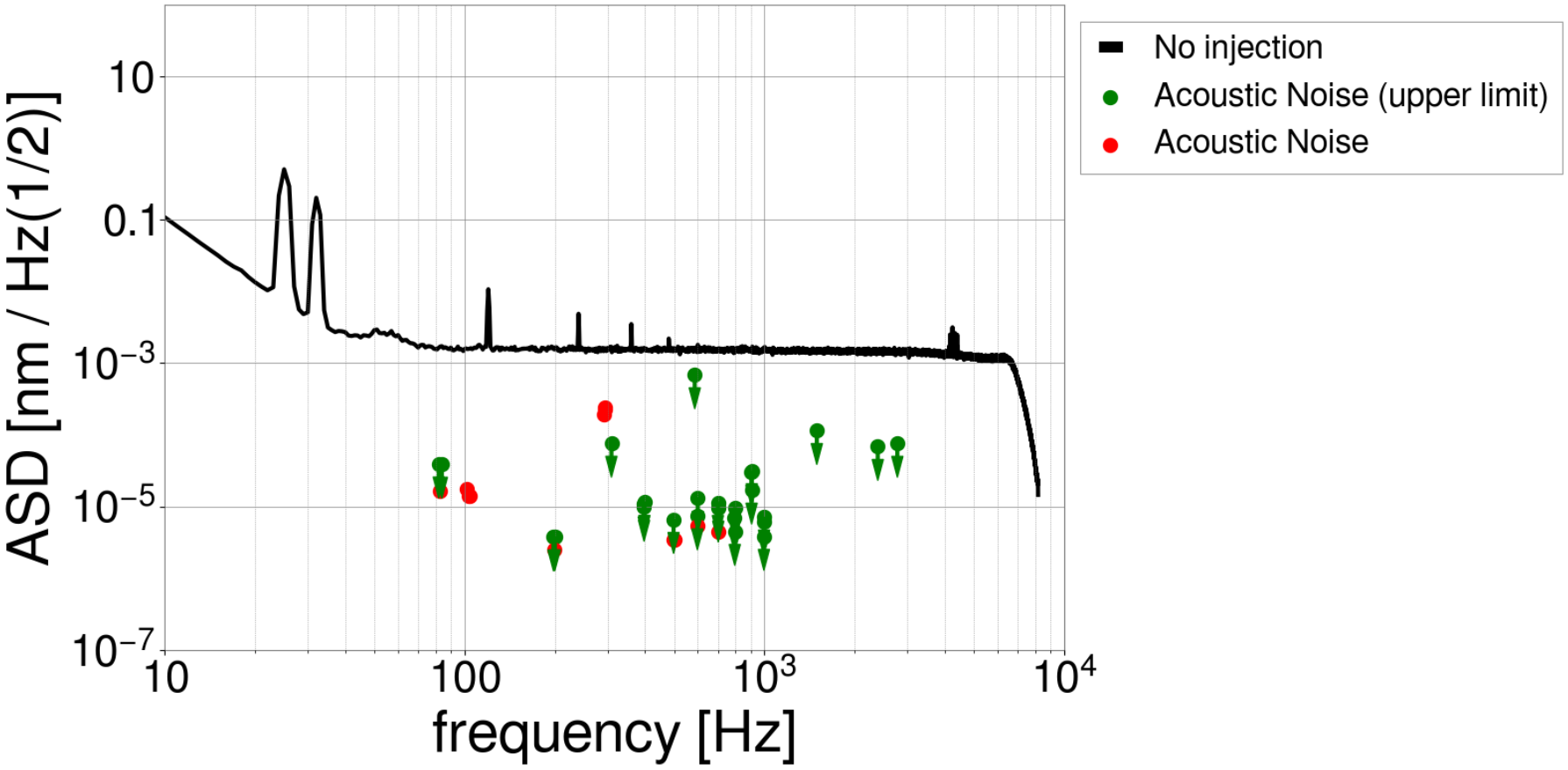
- Coupling Function





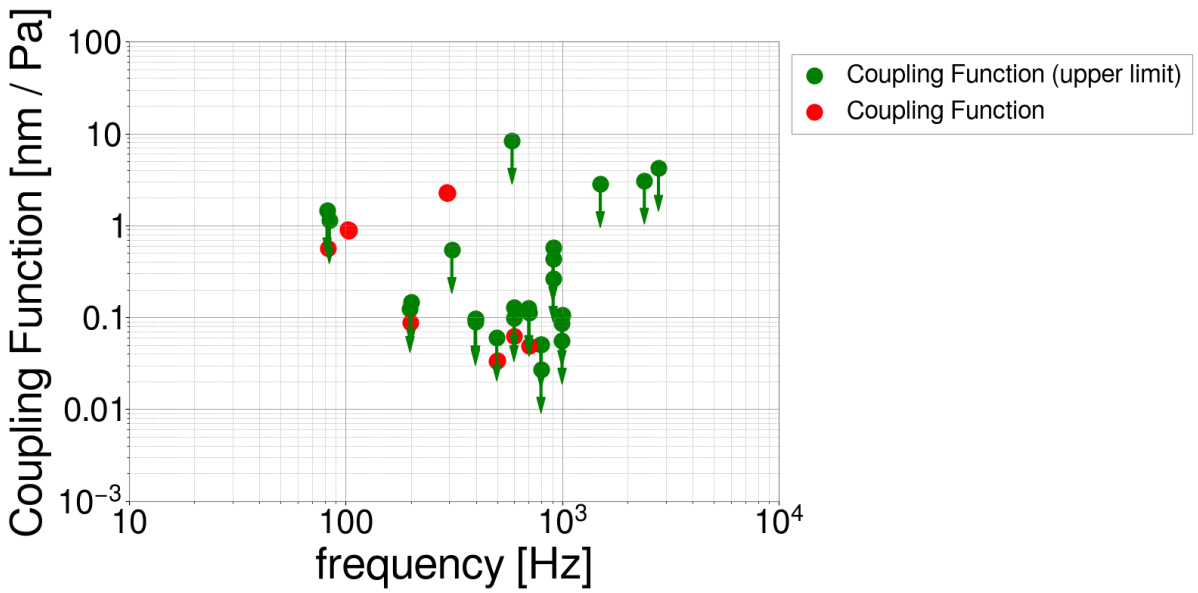
PEM Injection

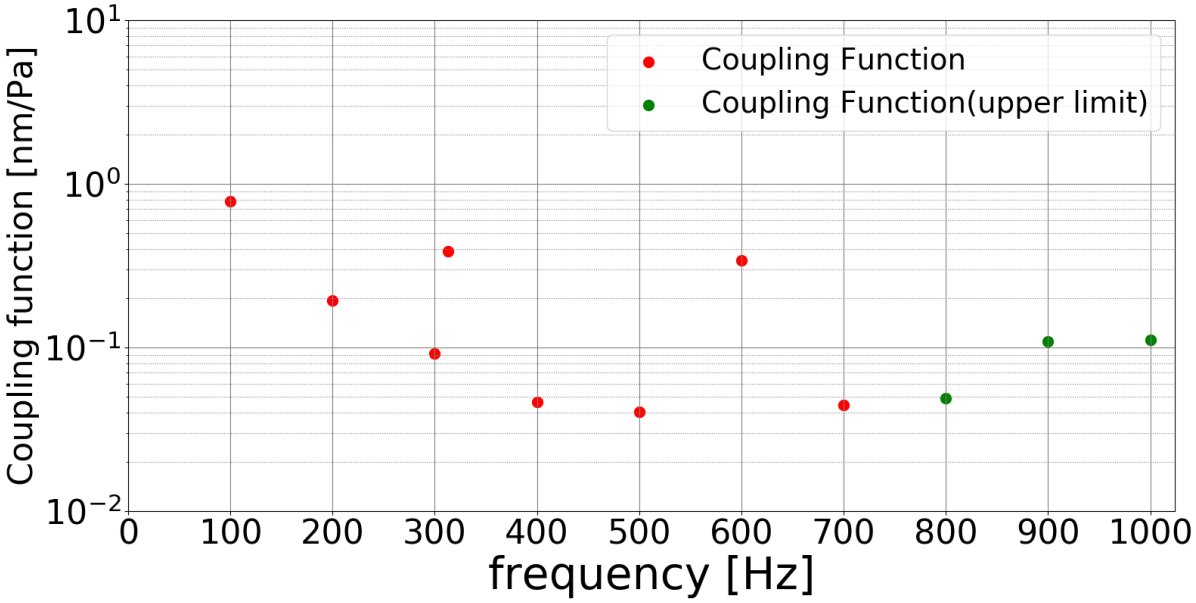
- Noise Projection



PEM Injection

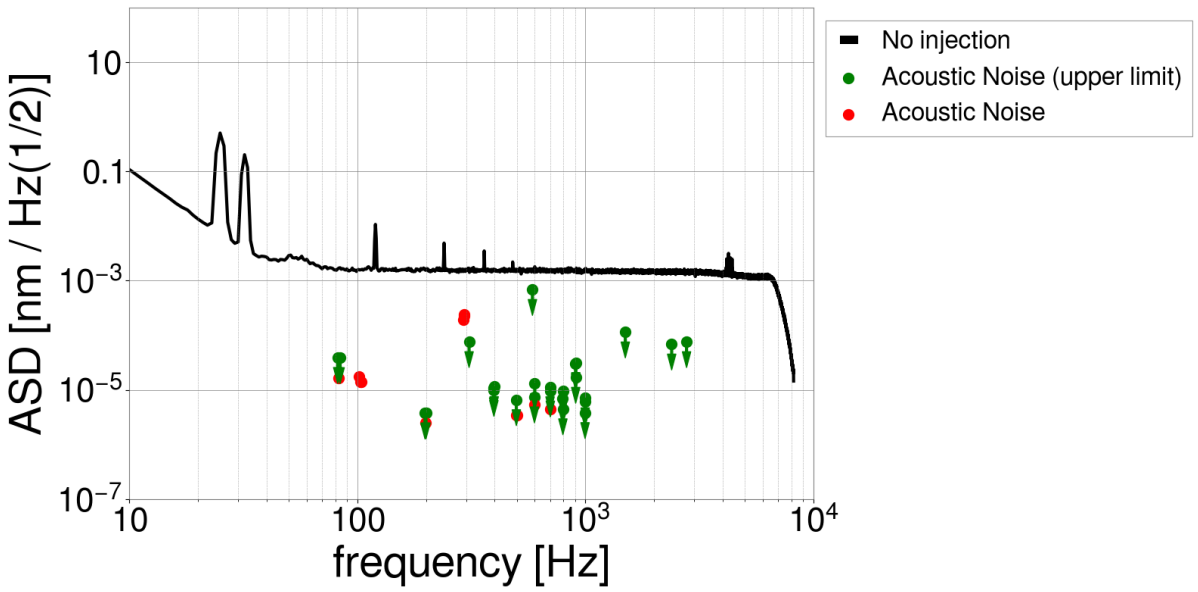
- Comparison with Engineering Run

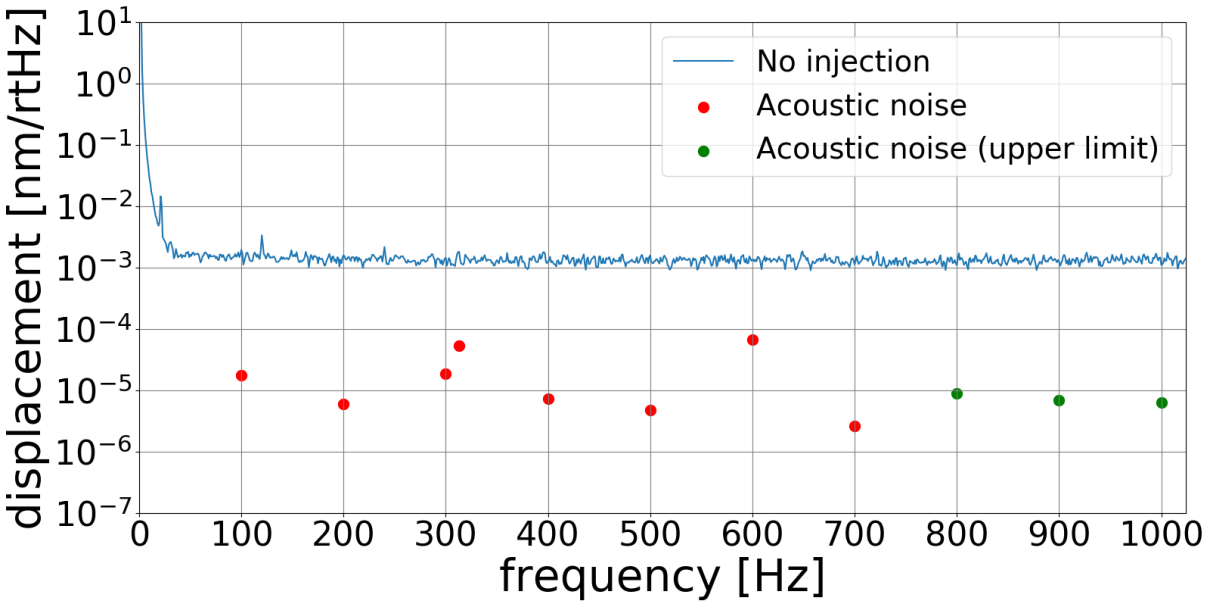


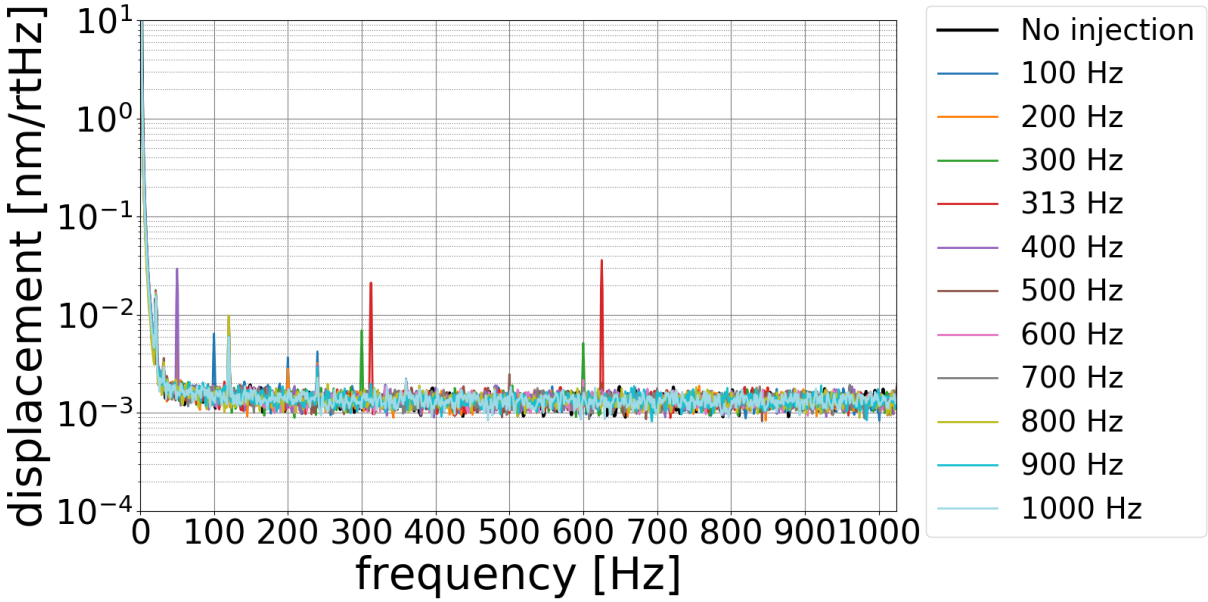
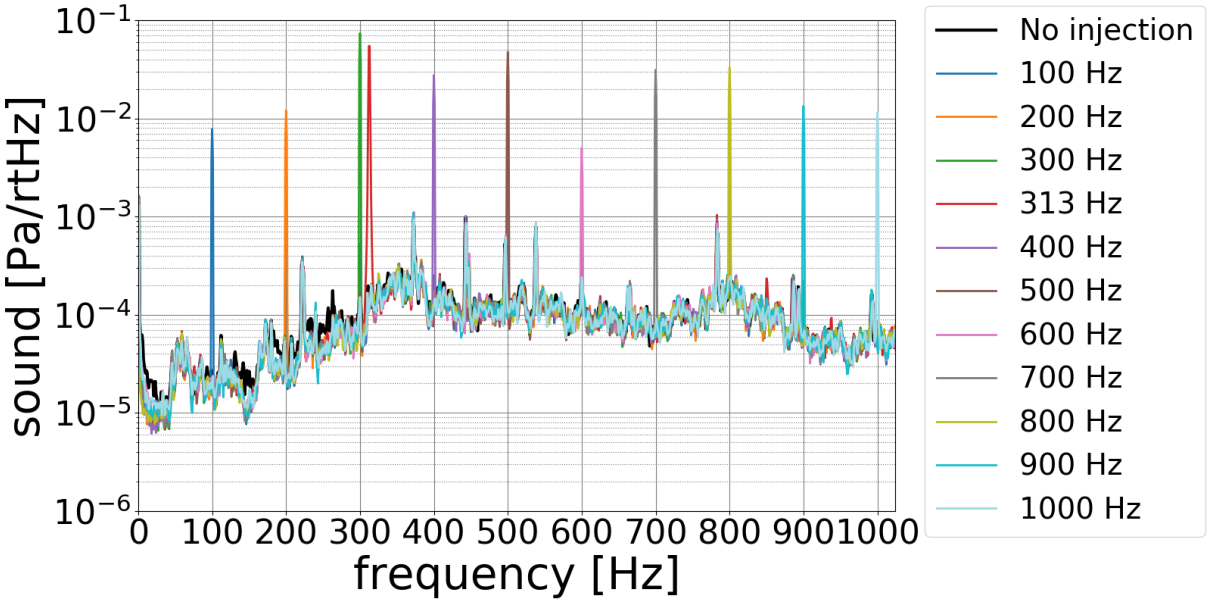


PEM Injection

- Comparison with Engineering Run





PEM Injection

- asd