Peak seaching for IXV and power supply

mori 2019/10/15 PEMmeeting member: Yokozawa, Mori

day: 2019/10/11

area: around IXV

purpose

1, We searched the peak noise of the IXV seismometer.



19.25~20.25Hz, 23Hz, 24Hz, 26~32Hz

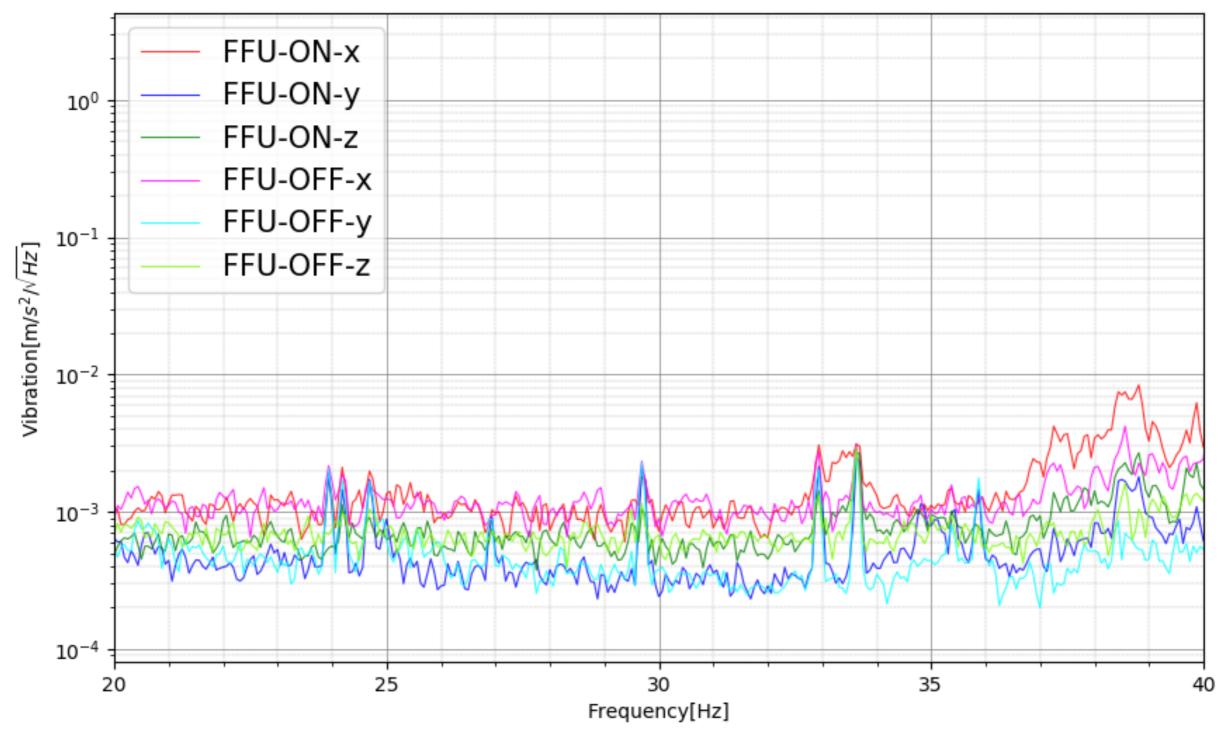
High coherence with interfering signals (Bruco)

2, We measured the vibration of Power supply, A/A chassis

method

We searched for noise using a portable microphone and accelerometer.

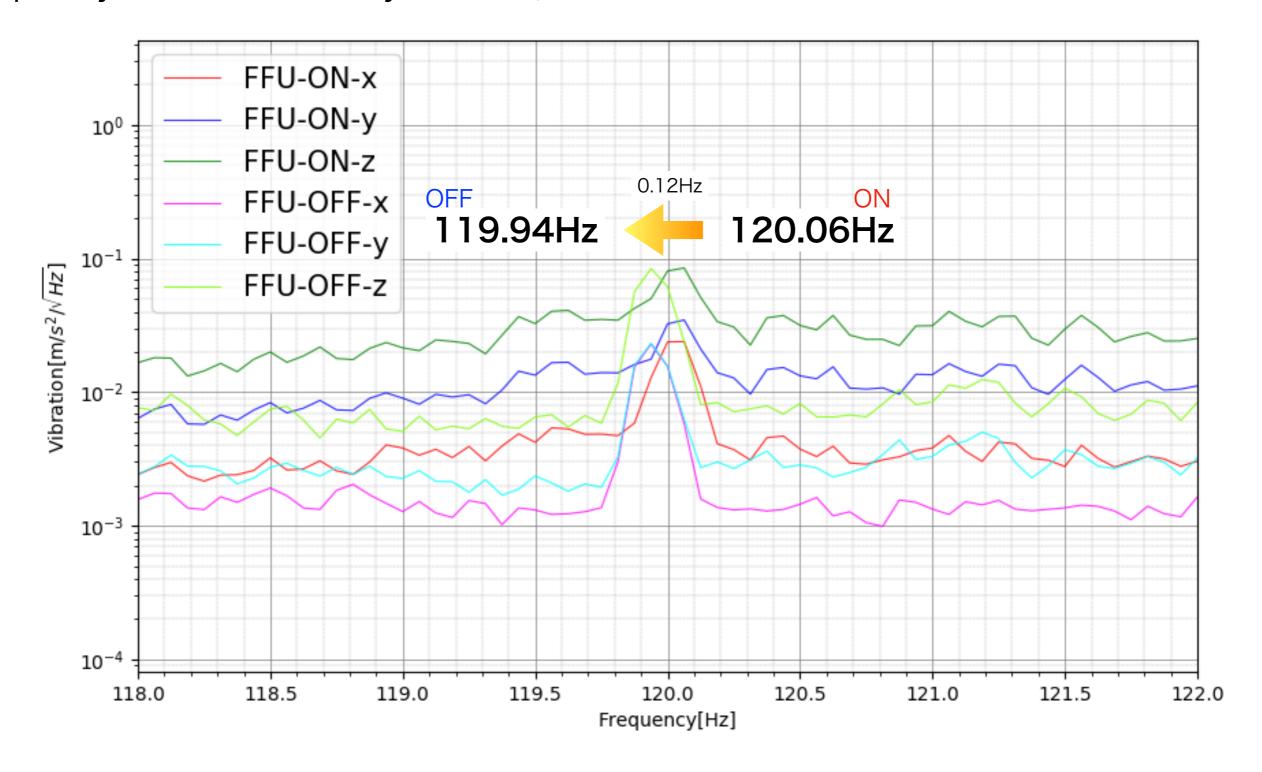
compare FFU ON and OFF



19.25~20.25Hz, 23Hz, 24Hz, 26~32Hz is not from FFU

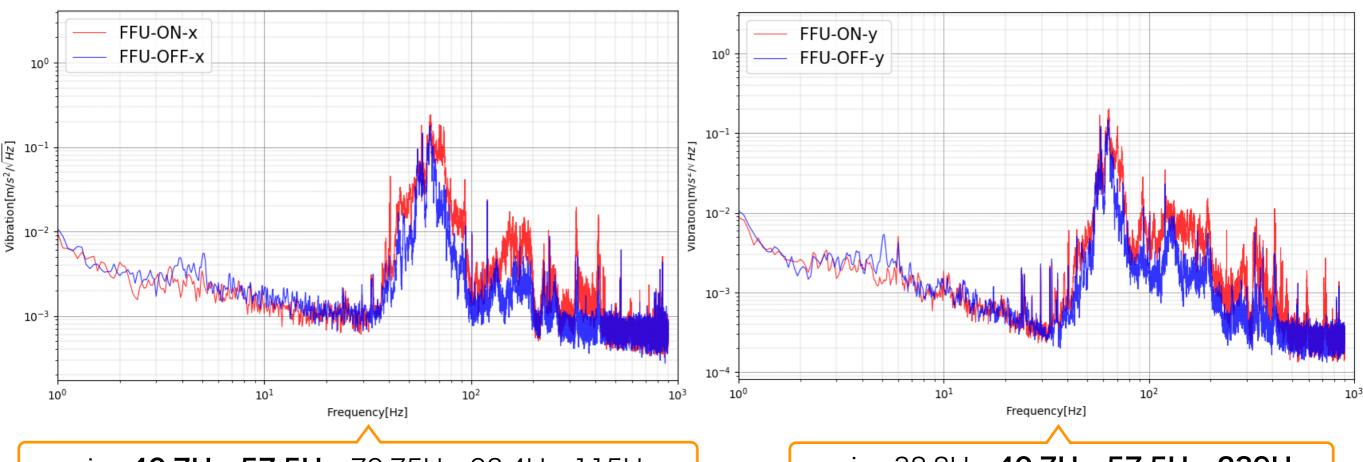
We couldn't find the noise source -> noise injection

Frequency shift at 120Hz by FFU ON/OFF



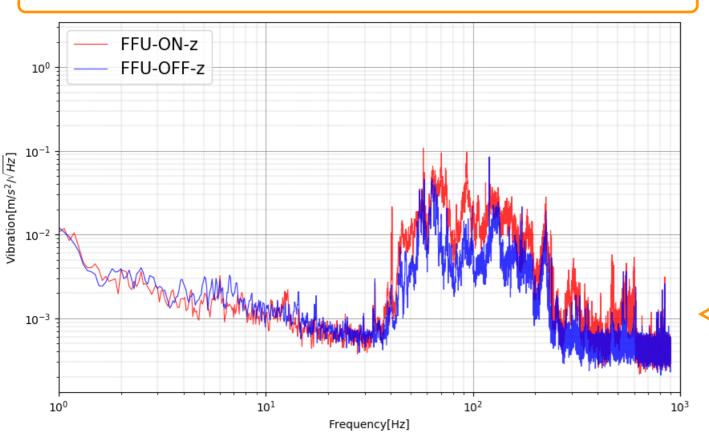
We will search the time variation of 120Hz using Fujimopy.

the seismometer of IXV



x axis : **40.7Hz**, **57.5Hz**, 79.75Hz, 93.4Hz, 115Hz, **237Hz**, 323Hz, **412Hz**, 434.8Hz, **438.5Hz**, **444Hz**

y axis : 38.8Hz, **40.7Hz**, **57.5Hz**, **239Hz**, **438.5Hz**, **444Hz**, **447.8Hz**,



Peak disappeared by FFU ON/OFF

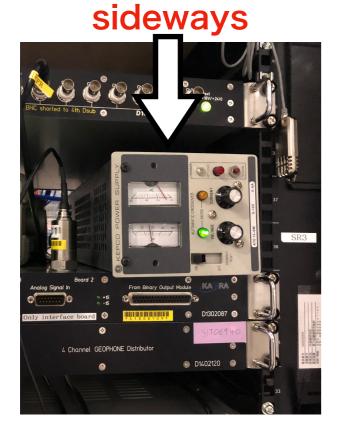
z axis : **40.7Hz**, **57.5Hz**, **237Hz**, **239Hz**, 242Hz, 244.2Hz, 375H, **412Hz**, **447.8Hz**

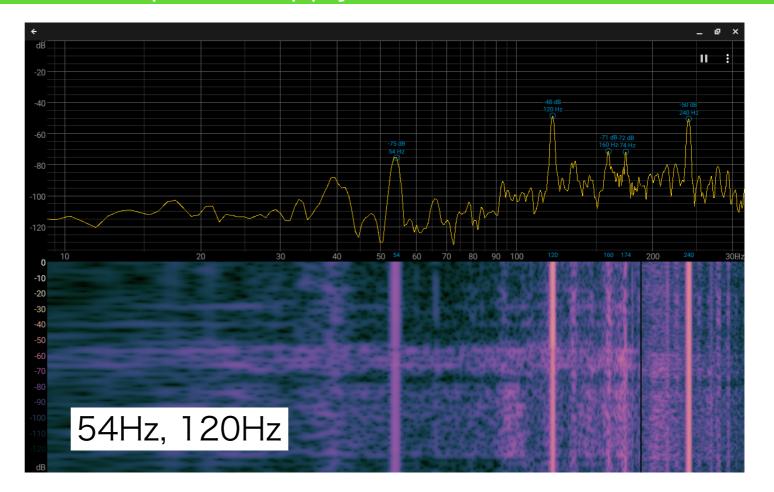
the vibration of power supply

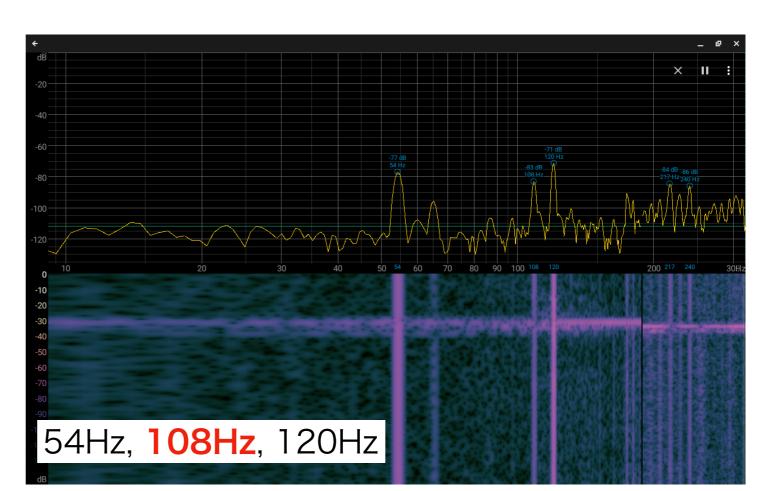
the power supply of BS rack







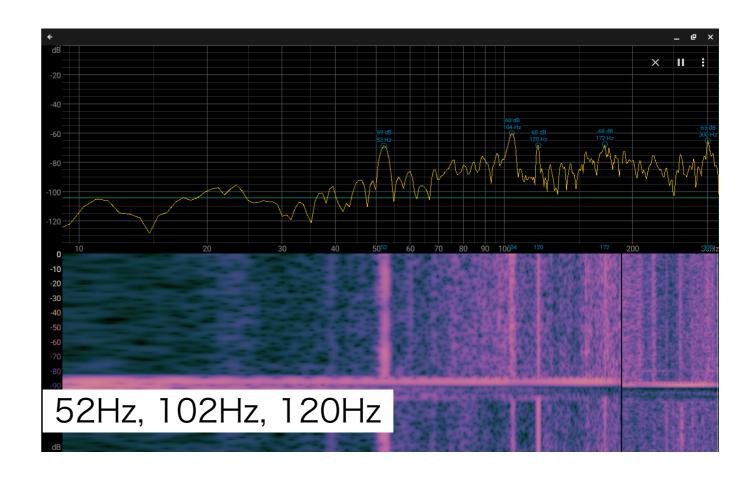




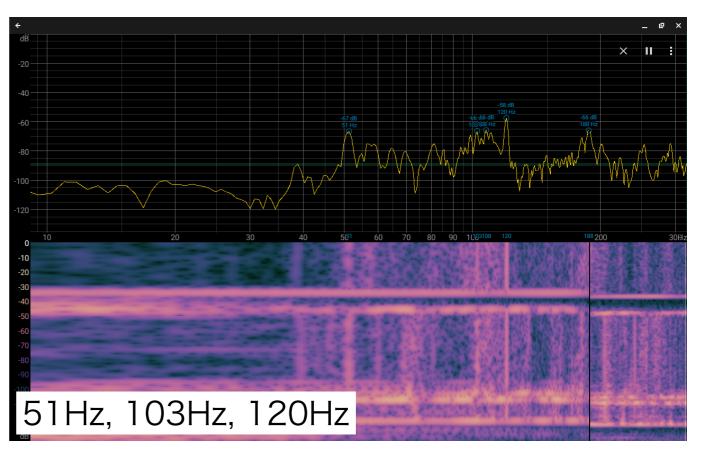
the vibration of power supply

the power supply of Computer room









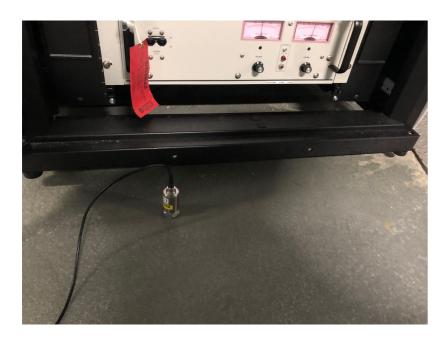
the vibration of power supply

The propagation of power supply vibration

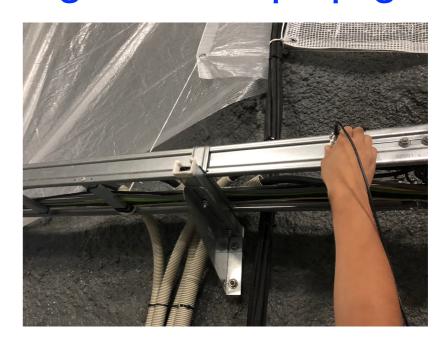
rack: propagating



ground: Not propagated



wiring rack: Not propagated



cable: Not propagated

