

Corrected on 2016.5.24

Status report : about the Monolithic Accelerometers(ACCs) Test

☐ Next : 2016.5.23 - 2016.5.27

☐ 2 or 3 days are to be used for measurements of current PR3 system

* Spectra, Force TF, OpenLoop-TF, Mechanical Q factors are to be measured.

☐ About ACCs :

~~* Update the calibration result on 2016.5.20.~~

* Measure the ACC TFs. → I seemed to miss the cabling in somewhere,,

* Complete the calibration of the ACC signals with using shims.

* Plot the ACC spectra in [m/rtHz], again.

* ---- check with Joris about above results -----

* Do the 3-channel correlation measurements.

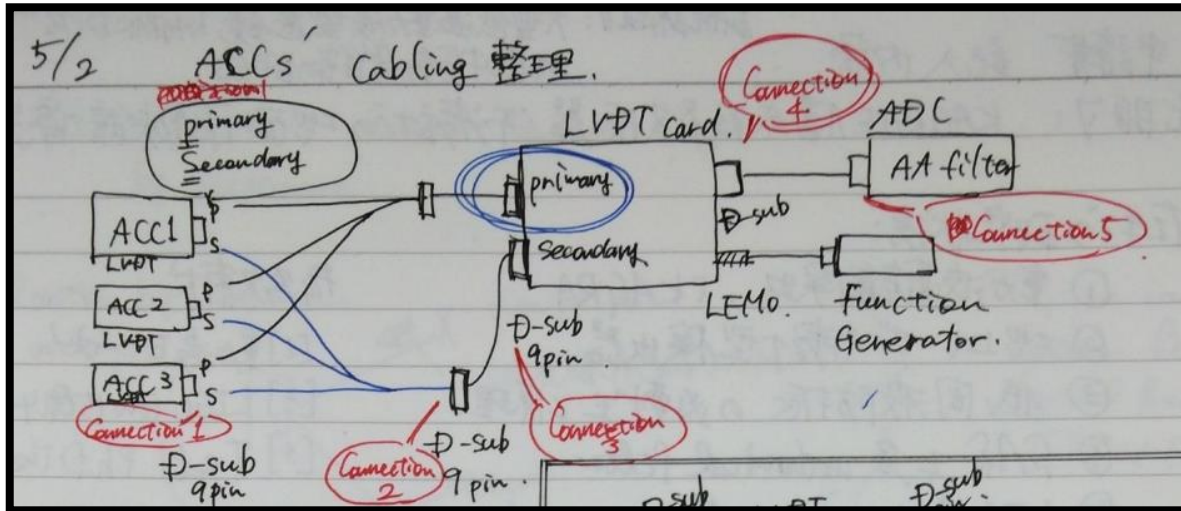
(* Measure IP TFs to determine the resonance frequencies of IP.)

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❖ 2016.5.23

At connection 1

* Some resistances at "connection 1" are measured.



* Do you find any strange resistances?

I would like to know

- 1) the numbers which you expect, and
- 2) in which situation they should be measured.

① With Power supply, With modulation

Resistance [Ohm]	(Not used)		(Not used) (Not used)	
	1-6 pin	2-7 pin	3-8 pin	4-9 pin
ACC_H1	966	O.F.	O.F.	O.F.
ACC_H2	972	O.F.	O.F.	O.F.
ACC_H3	971	O.F.	O.F.	O.F.

② With Power supply, Without modulation

Resistance [Ohm]	1-6 pin	2-7 pin	3-8 pin	4-9 pin
ACC_H1	966	O.F.	185.1	O.F.
ACC_H2	972	O.F.	198.2	O.F.
ACC_H3	972	O.F.	212.9	O.F.

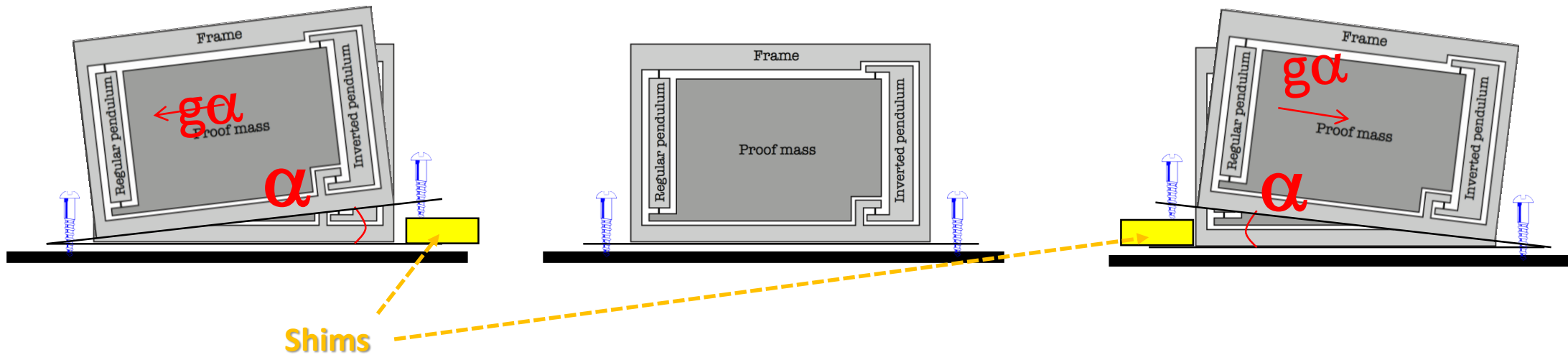
③ Without Power supply, Without modulation

Resistance [Ohm]	1-6 pin	2-7 pin	3-8 pin	4-9 pin
ACC_H1	994	O.F.	4740	O.F.
ACC_H2	993	O.F.	4650	O.F.
ACC_H3	994	O.F.	4700	O.F.

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☐ 2016.5.19 - 2016.5.21

☐ ACC_H3 is calibrated, with using 20 um shims.



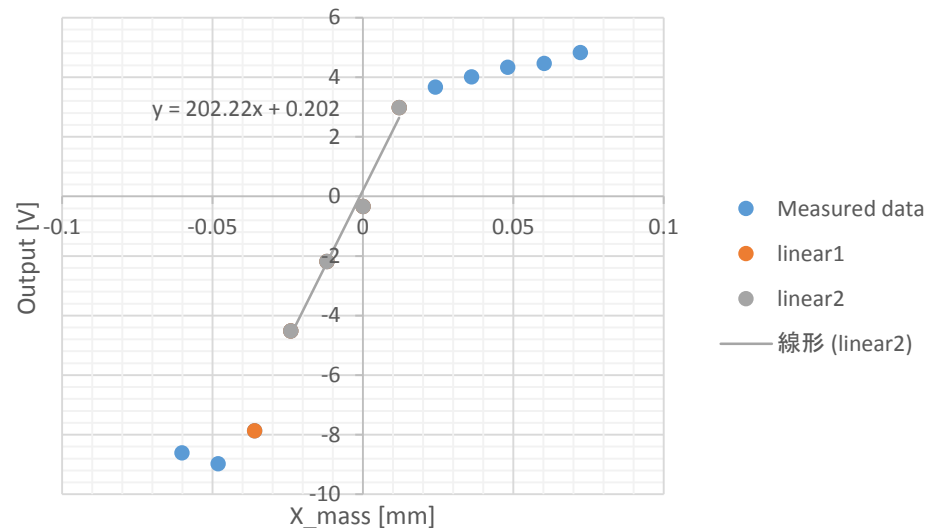
~~(On Friday, I forgot to pick up the information from a notebook, which stays in a clean booth.
So, I will update the results tomorrow 23th May.)~~



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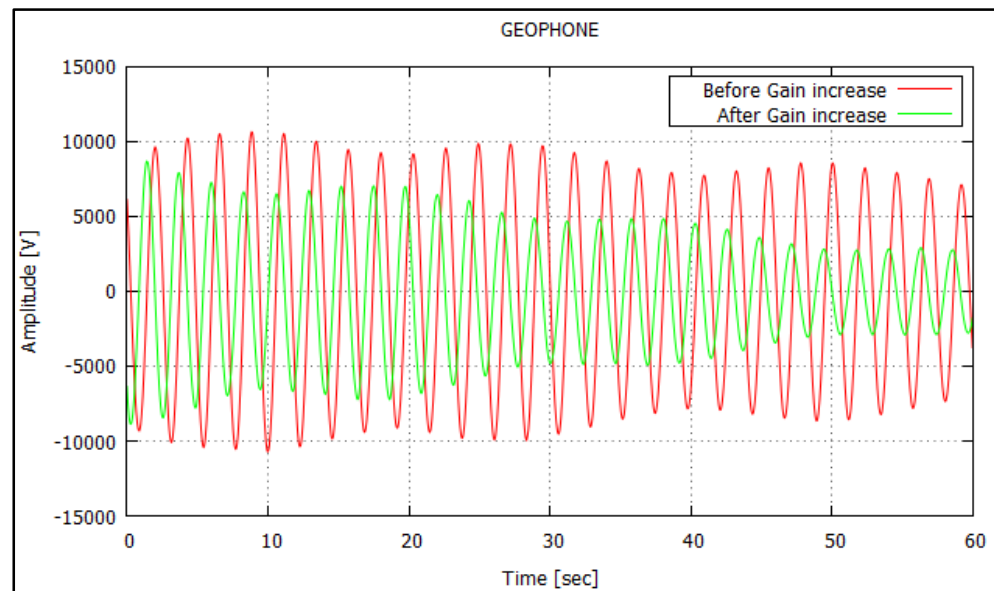
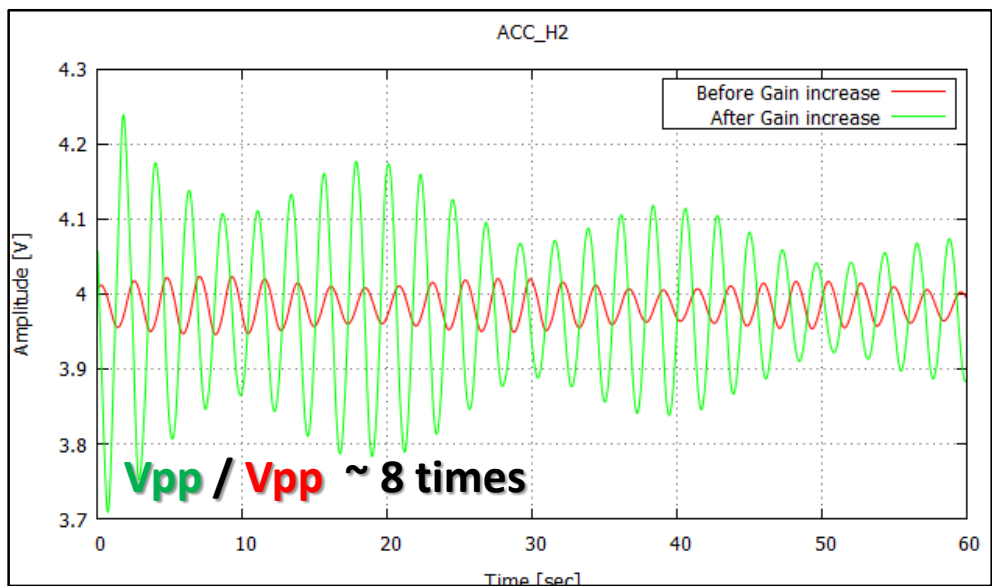
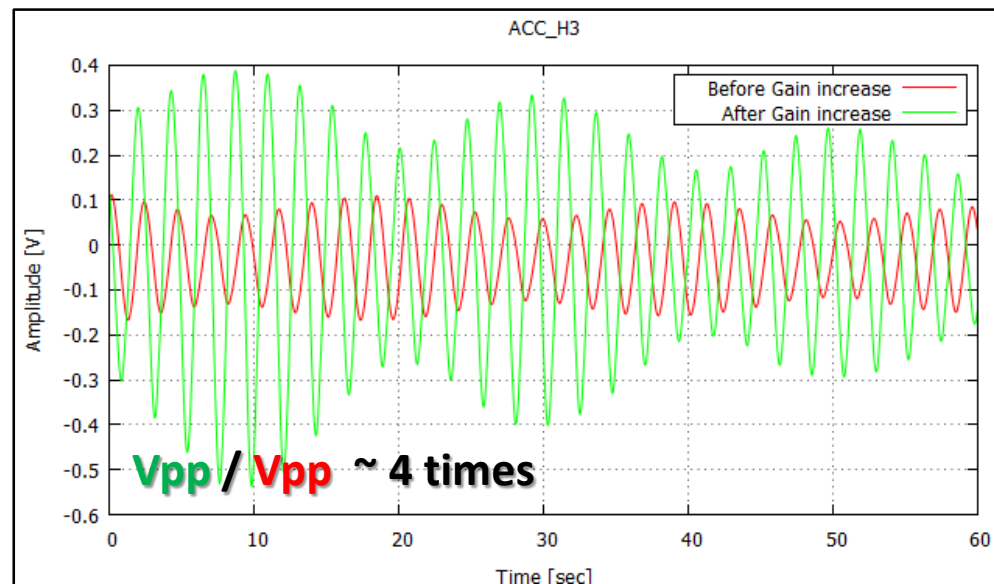
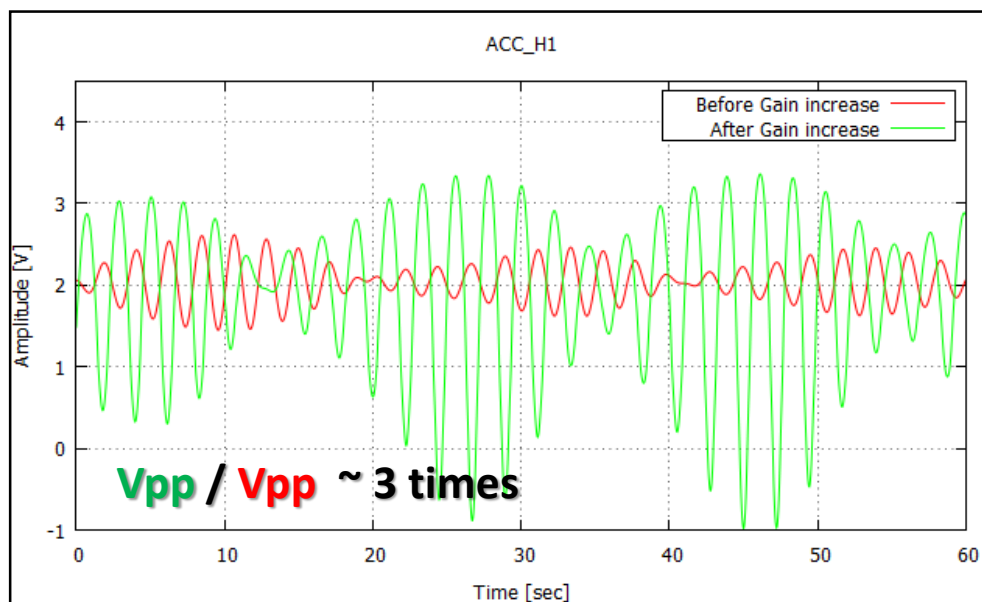
☐ 2016.5.23

☐ ACC_H3 is calibrated, with using 20 um shims.



**If I didn't take any mis-calculation,
The measured calibration factor is 202 V/mm.
(→ Please see and check my excel sheet, just in case.)**

* Confirmation about the gain



* I didn't measure any other ACC, geophone other than drawn above, before increasing the gains. Though from this plot, it is not so clear to say the factors are increased by 5, at least the amplitudes are increased by more than factor 3.