

Canvas Panel (CP) vs Open Baffle(OB)

- * Canvas panel : 33cm x 41cm + Dayton Audio DAEX25FHE-4
- * Open Baffle : 33cm x 41cm + Visaton FRS8

Panel pictures

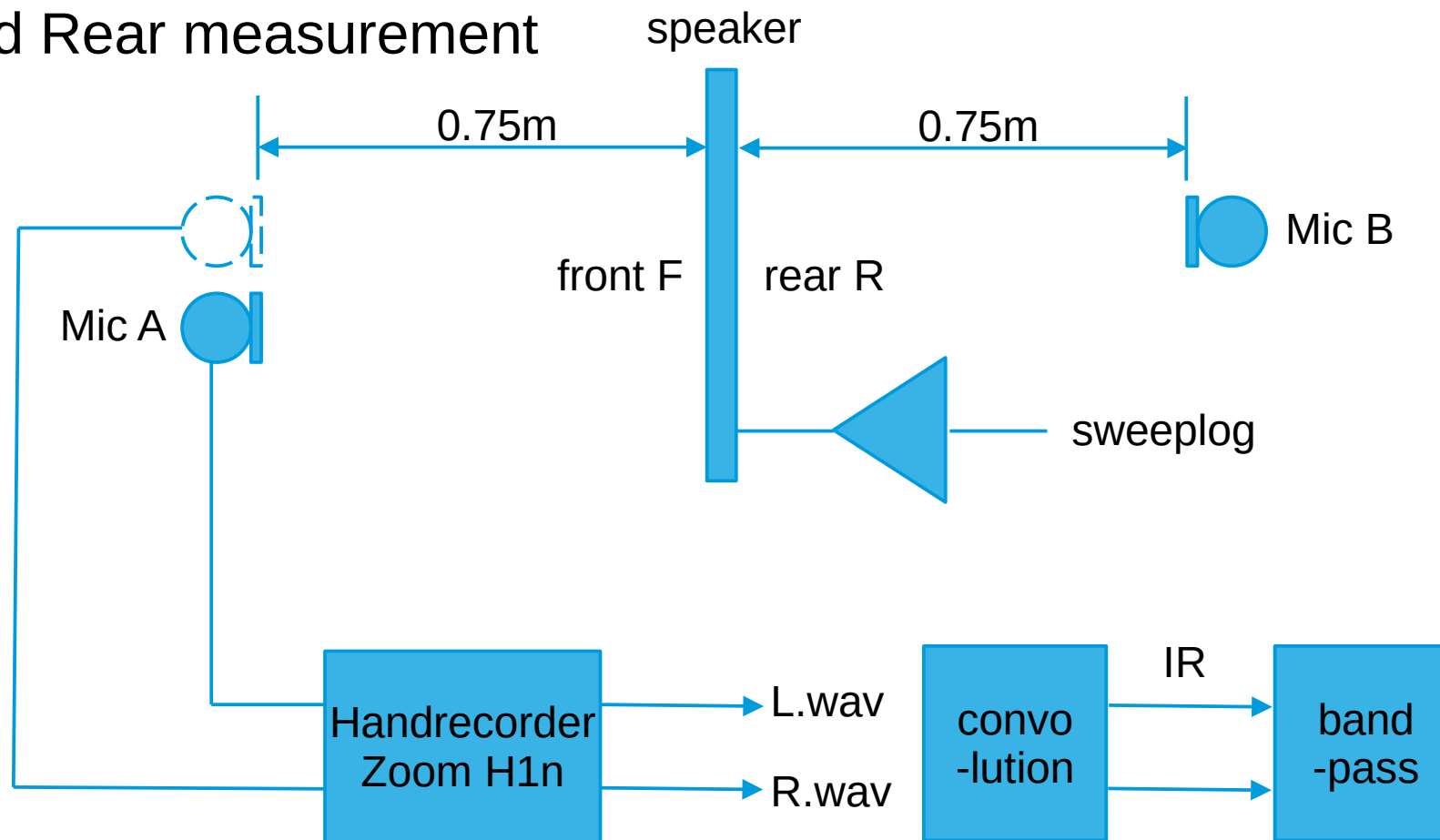


Measurement conditions

- Room : living room / kitchen
- Record techniques
 - Front & Rear : sweeplog mp3 + Zoom H1n + 2 omni
 - Front : umik1 + REW
- Position
 - 75cm from the speaker
 - speaker 1m above the floor

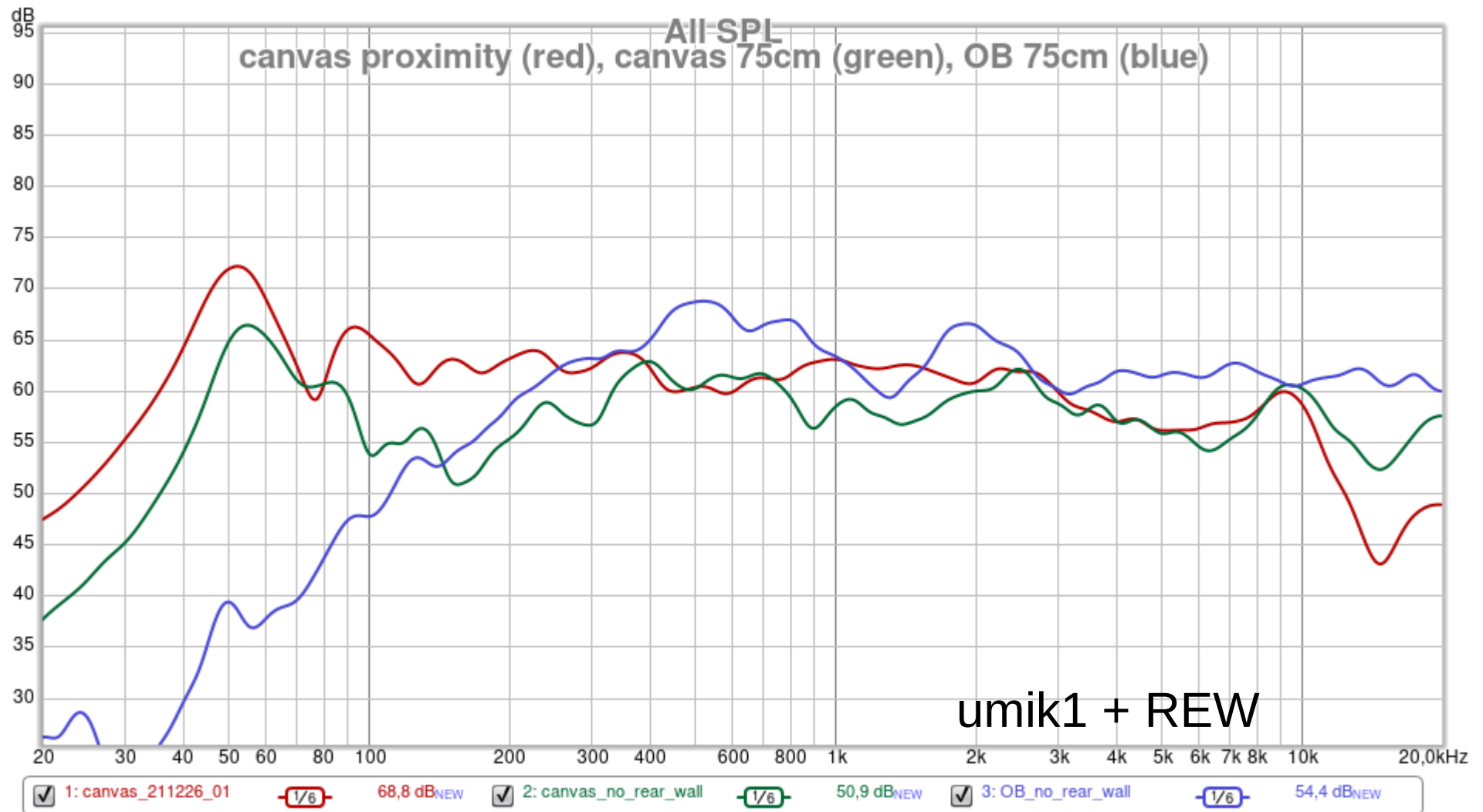
Measurement set up

Front and Rear measurement

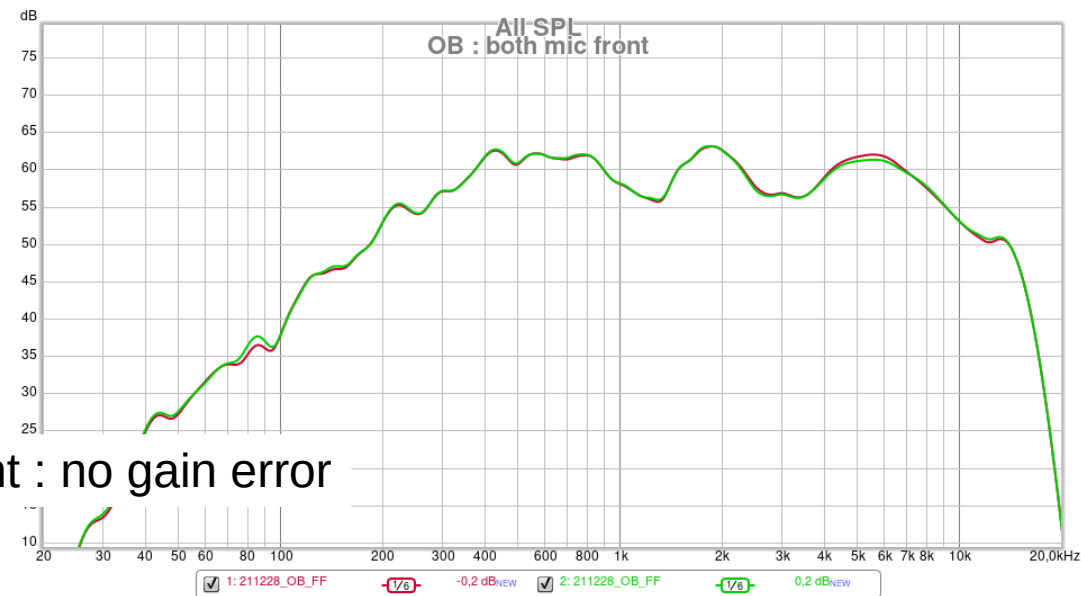
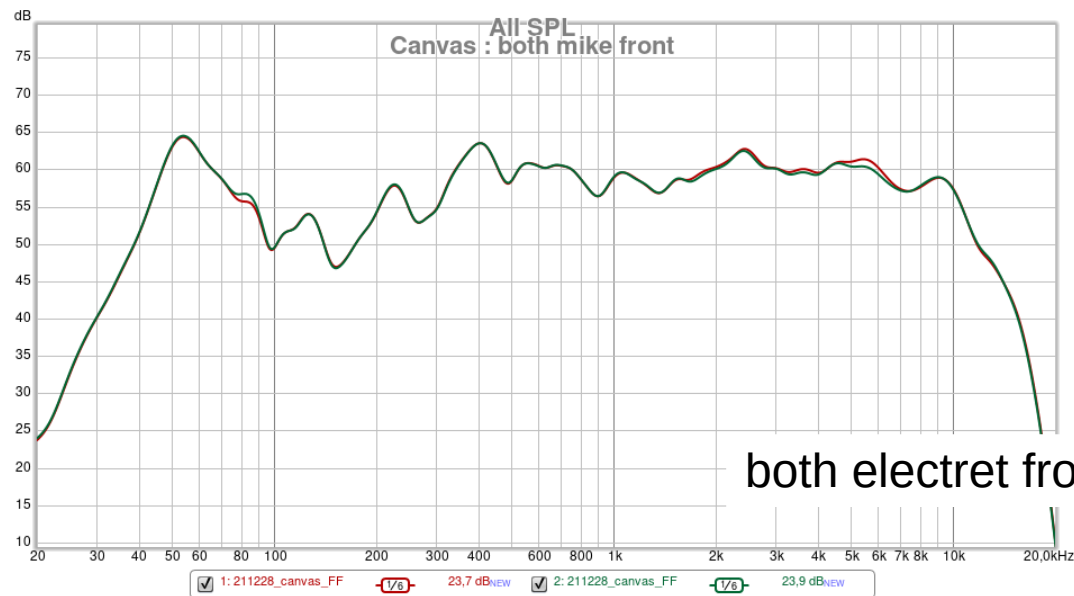
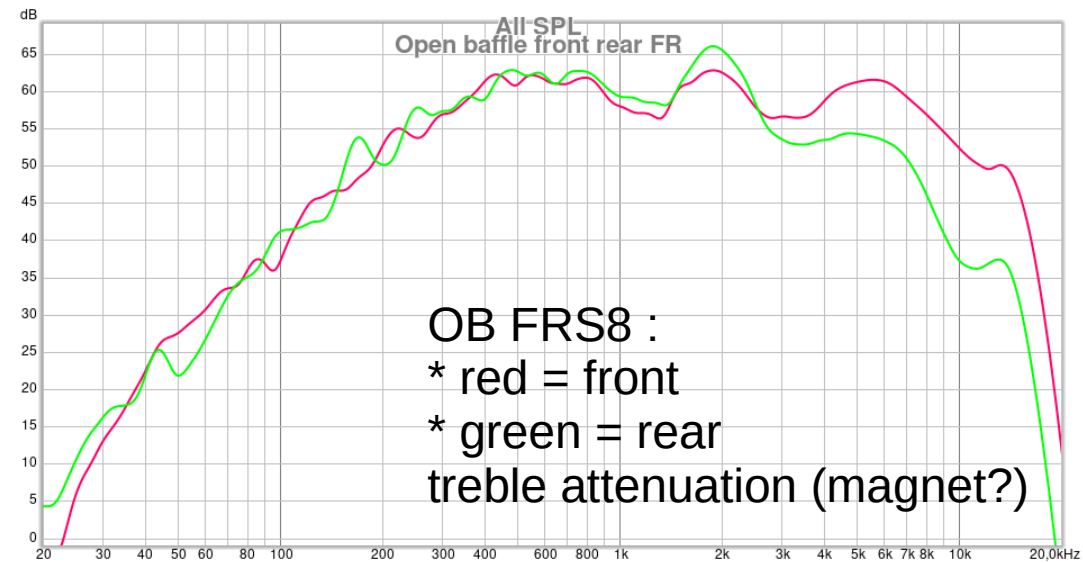
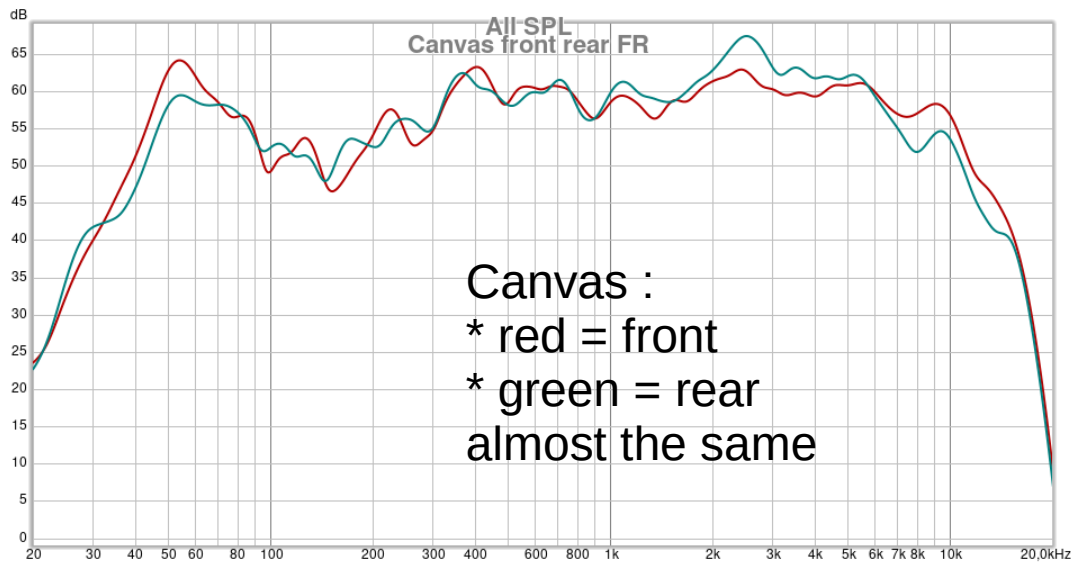


Front only : umik1 + REW

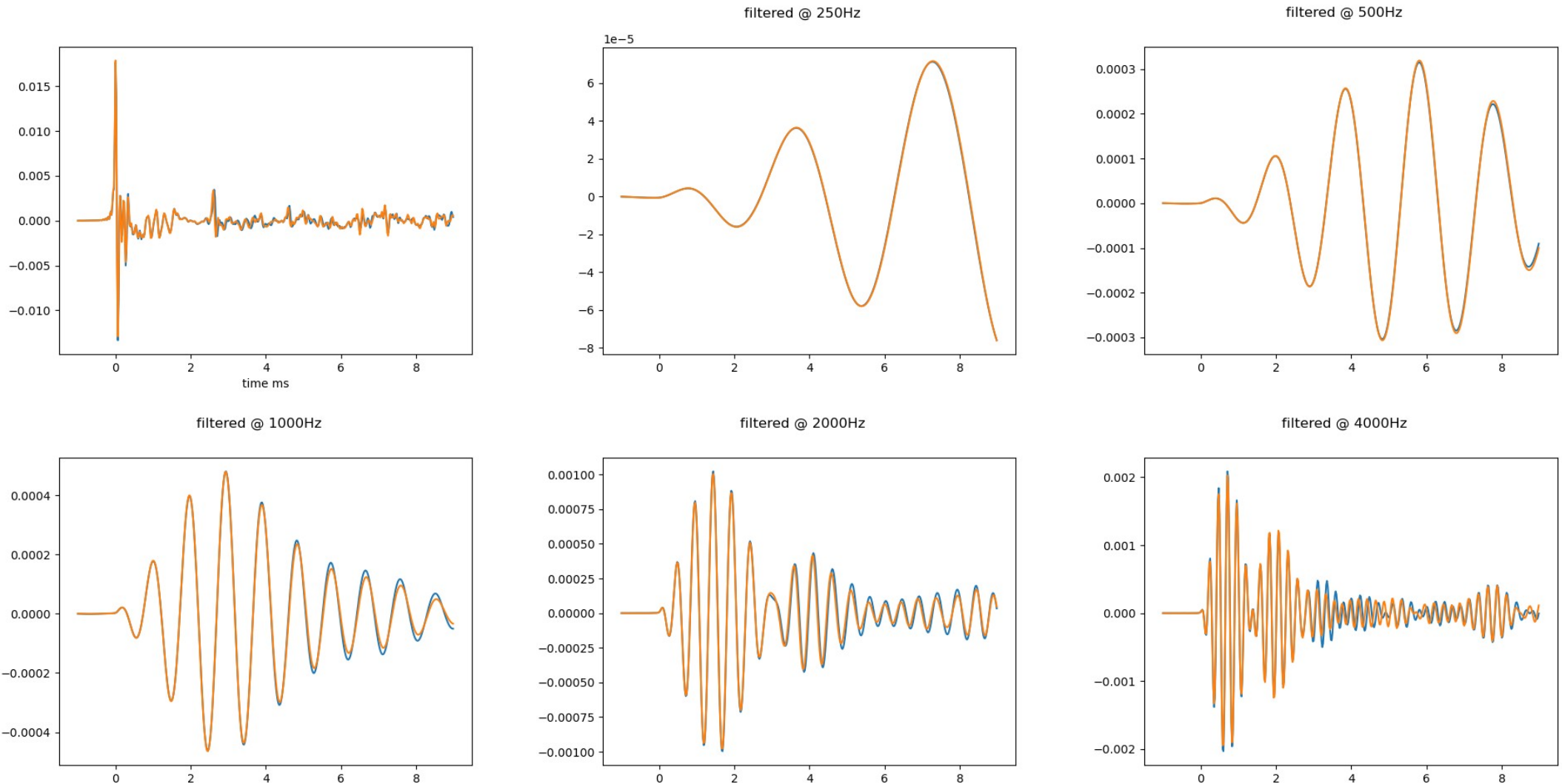
Canvas vs OB : frequency response



Canvas vs OB : frequency response

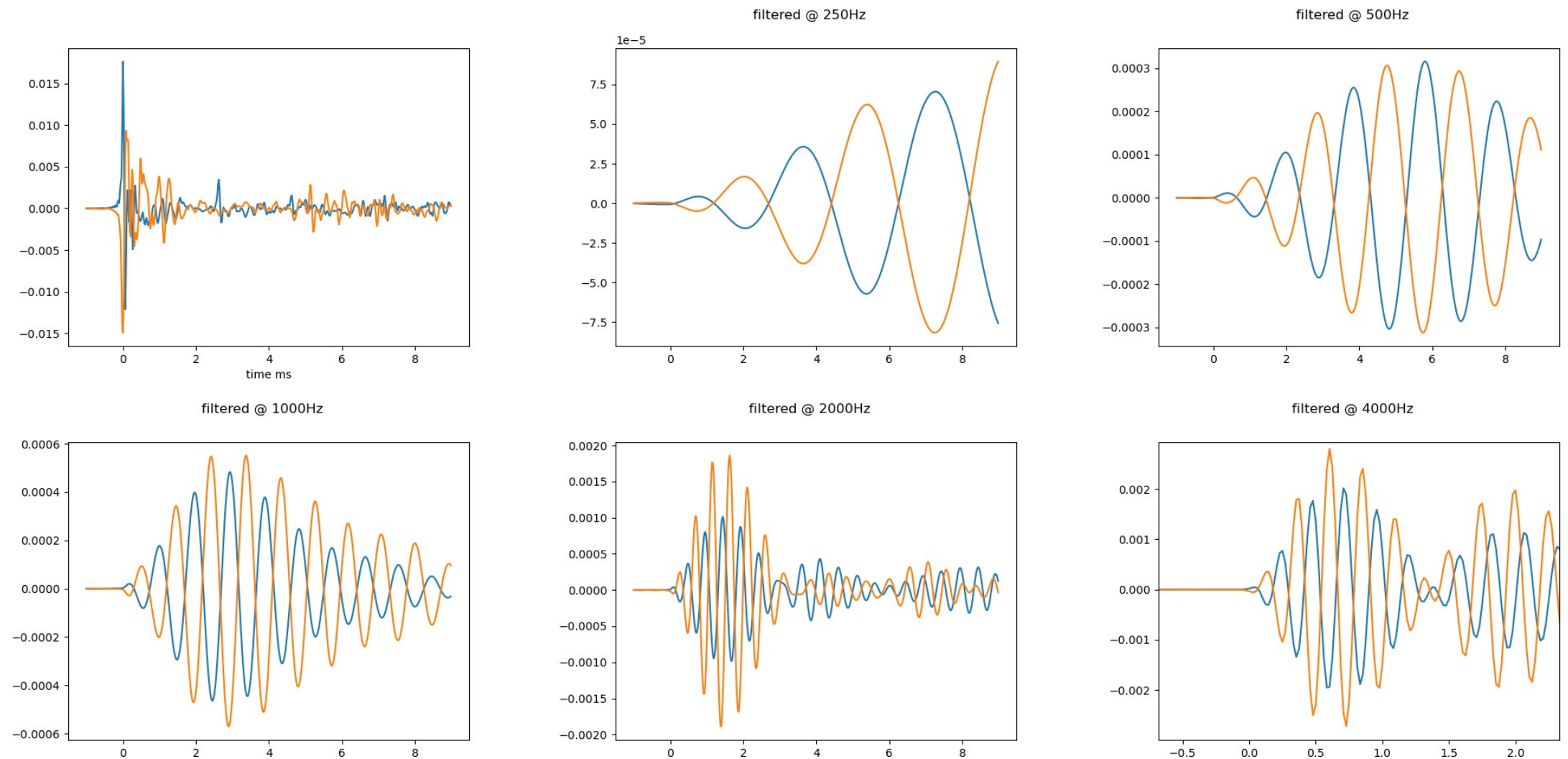


Canvas : both mic front



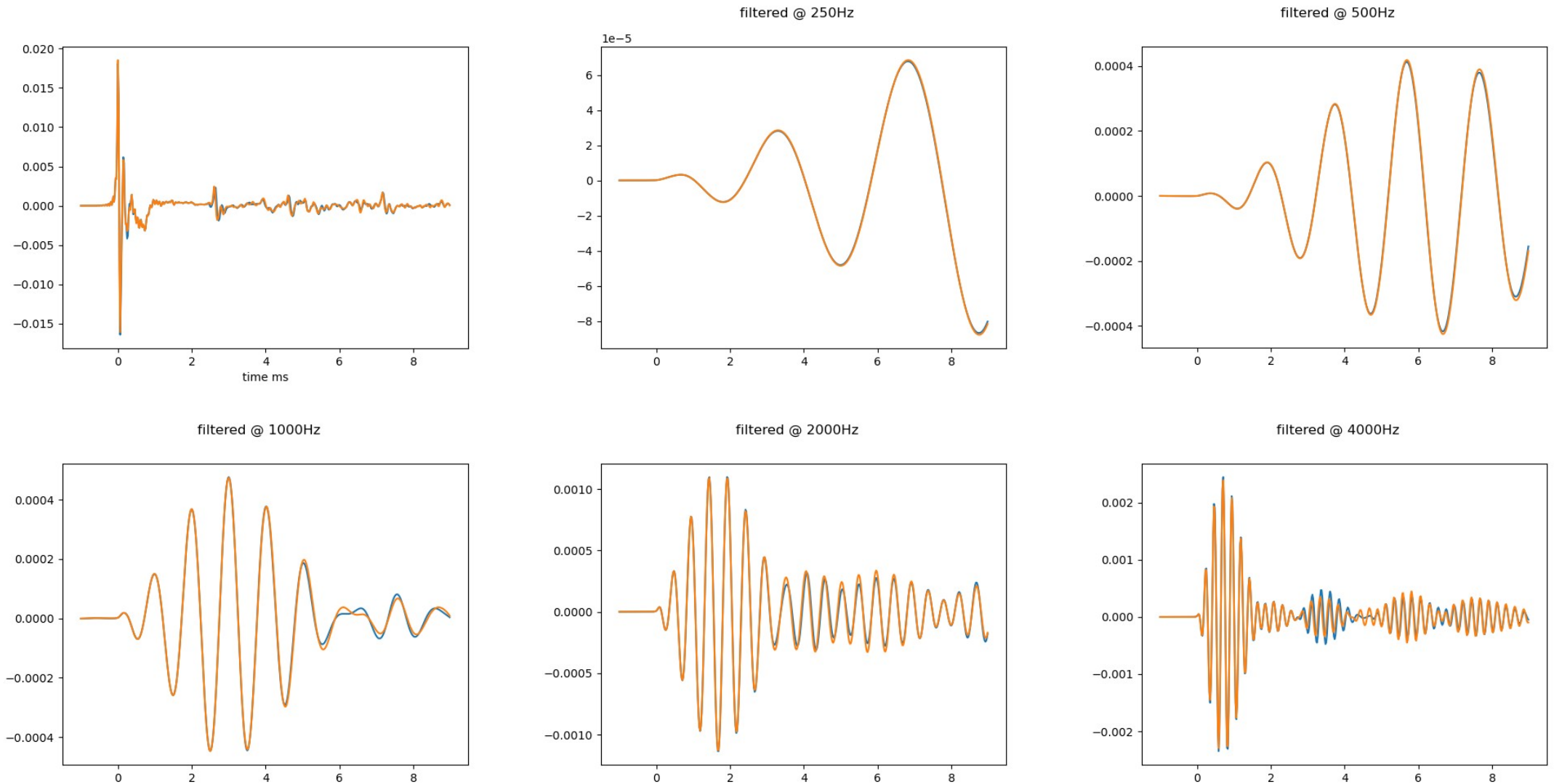
... in phase

Canvas : 1 mic front, 1 mic rear



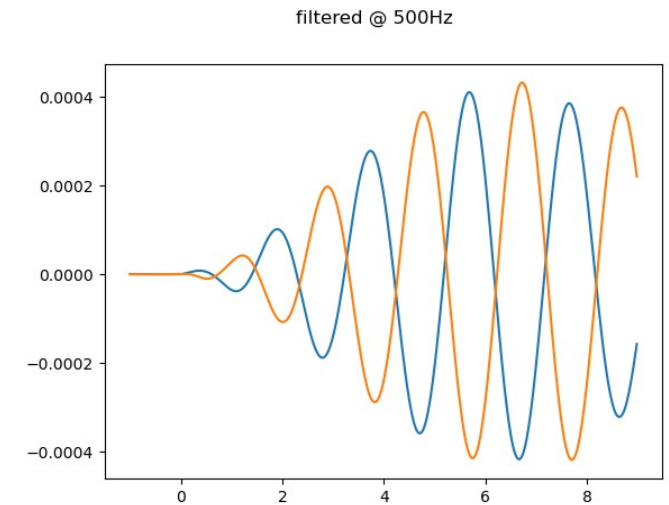
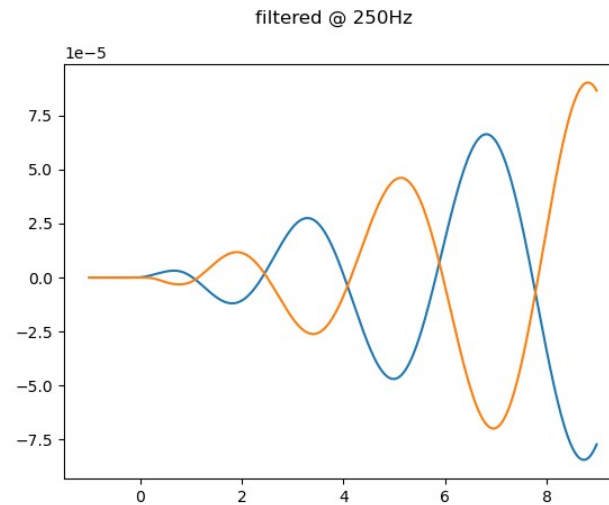
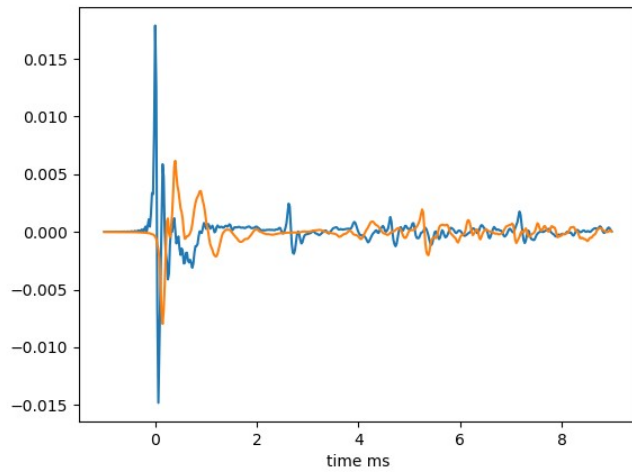
... out of phase

OB FRS8 : both mic front

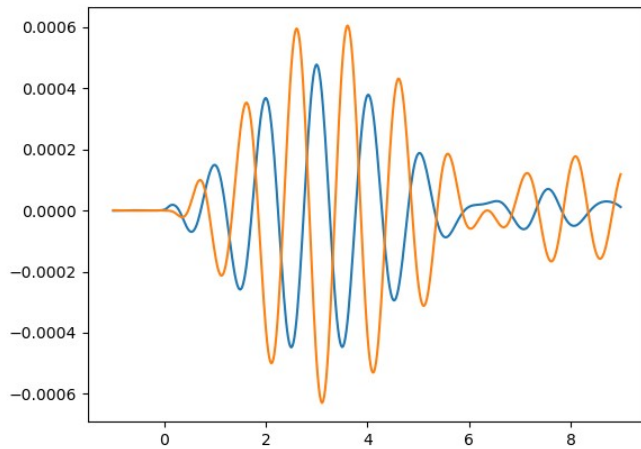


... in phase

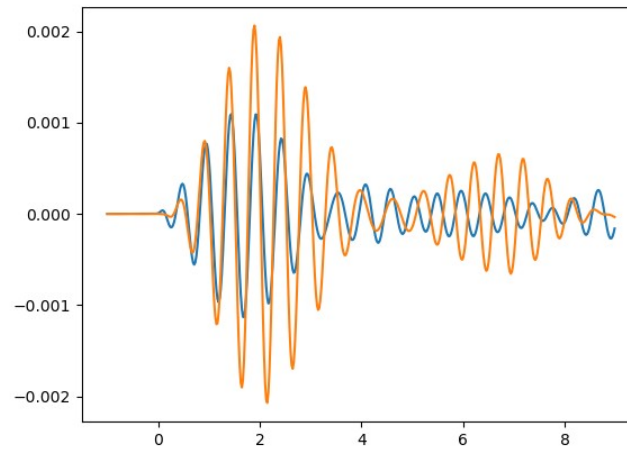
OB FRS8 : 1 mic front, 1 mic rear



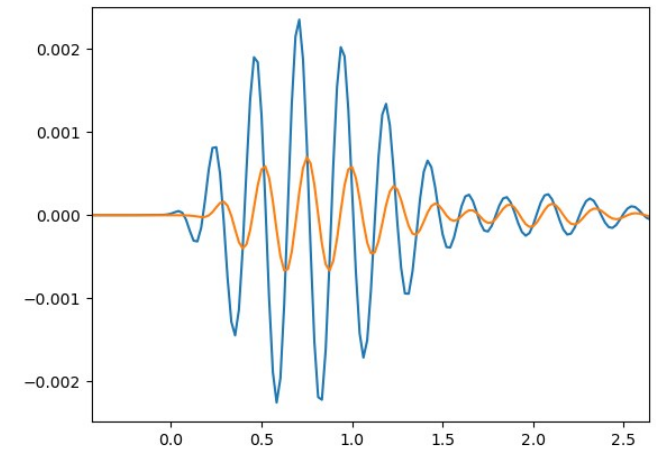
filtered @ 1000Hz



filtered @ 2000Hz

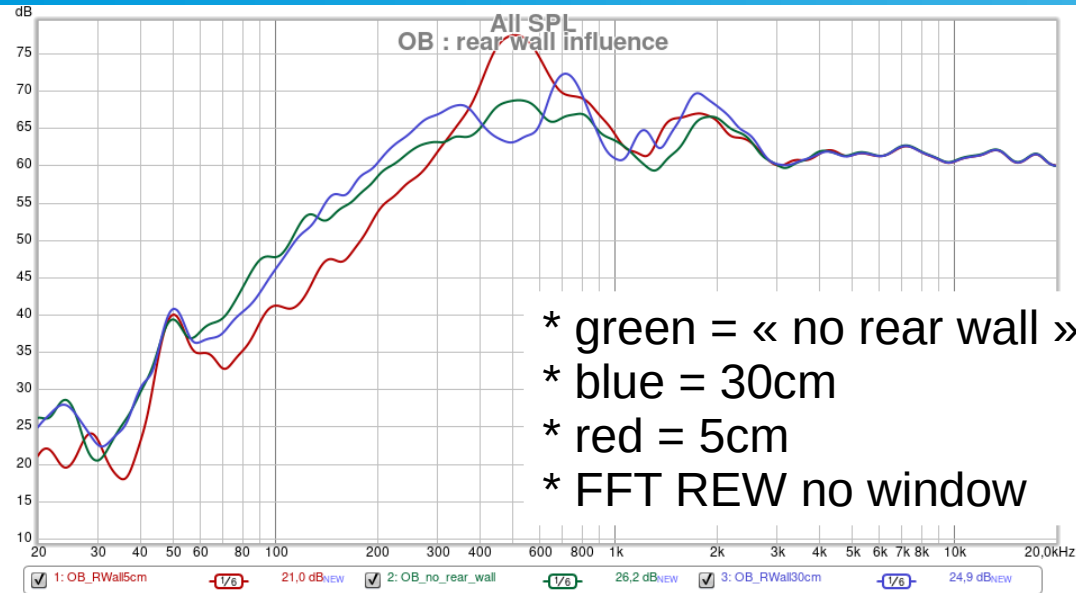


filtered @ 4000Hz



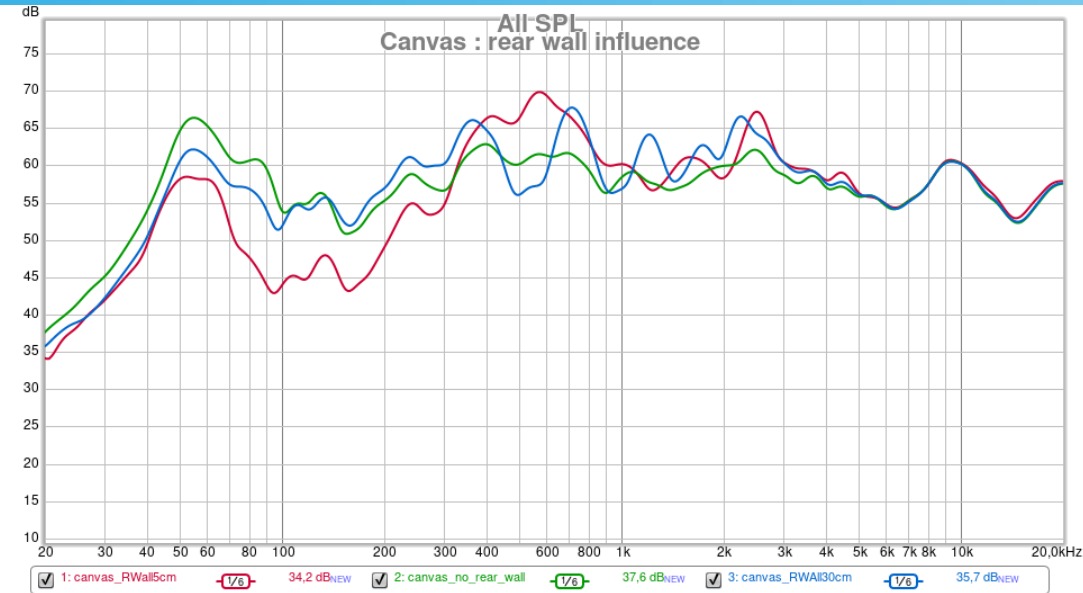
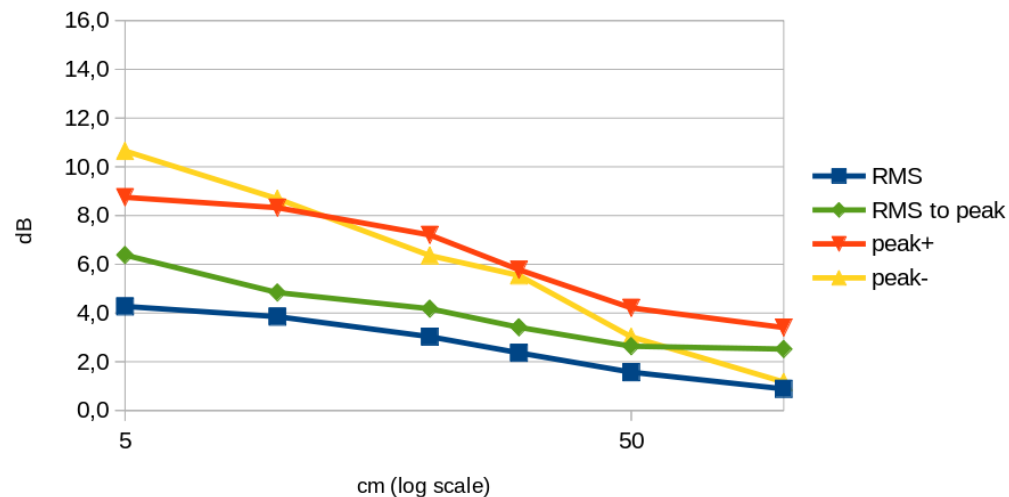
... almost out of phase... path error 0.16ms = 5.6cm due to the magnet ?

Canvas vs OB : rear wall influence



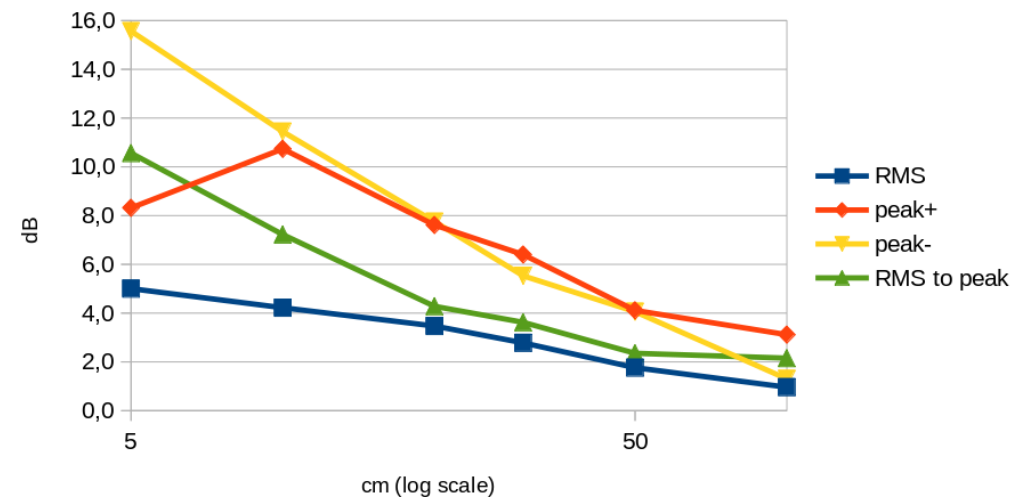
distance	100	50	30	20	10	5
RMS	0,9	1,6	2,4	3,0	3,9	4,3
peak+	3,4	4,2	5,8	7,2	8,3	8,7
peak-	1,2	3,0	5,5	6,4	8,7	10,6
RMS to peak	2,5	2,6	3,4	4,2	4,8	6,4

OB : peaks & standard deviation



distance	100	50	30	20	10	5
RMS	1,0	1,8	2,8	3,5	4,2	5,0
peak+	3,1	4,1	6,4	7,6	10,7	8,3
peak-	1,3	4,1	5,5	7,7	11,4	15,6
RMS to peak	2,2	2,4	3,6	4,3	7,2	10,6

Canvas vs rear wall : standard deviation

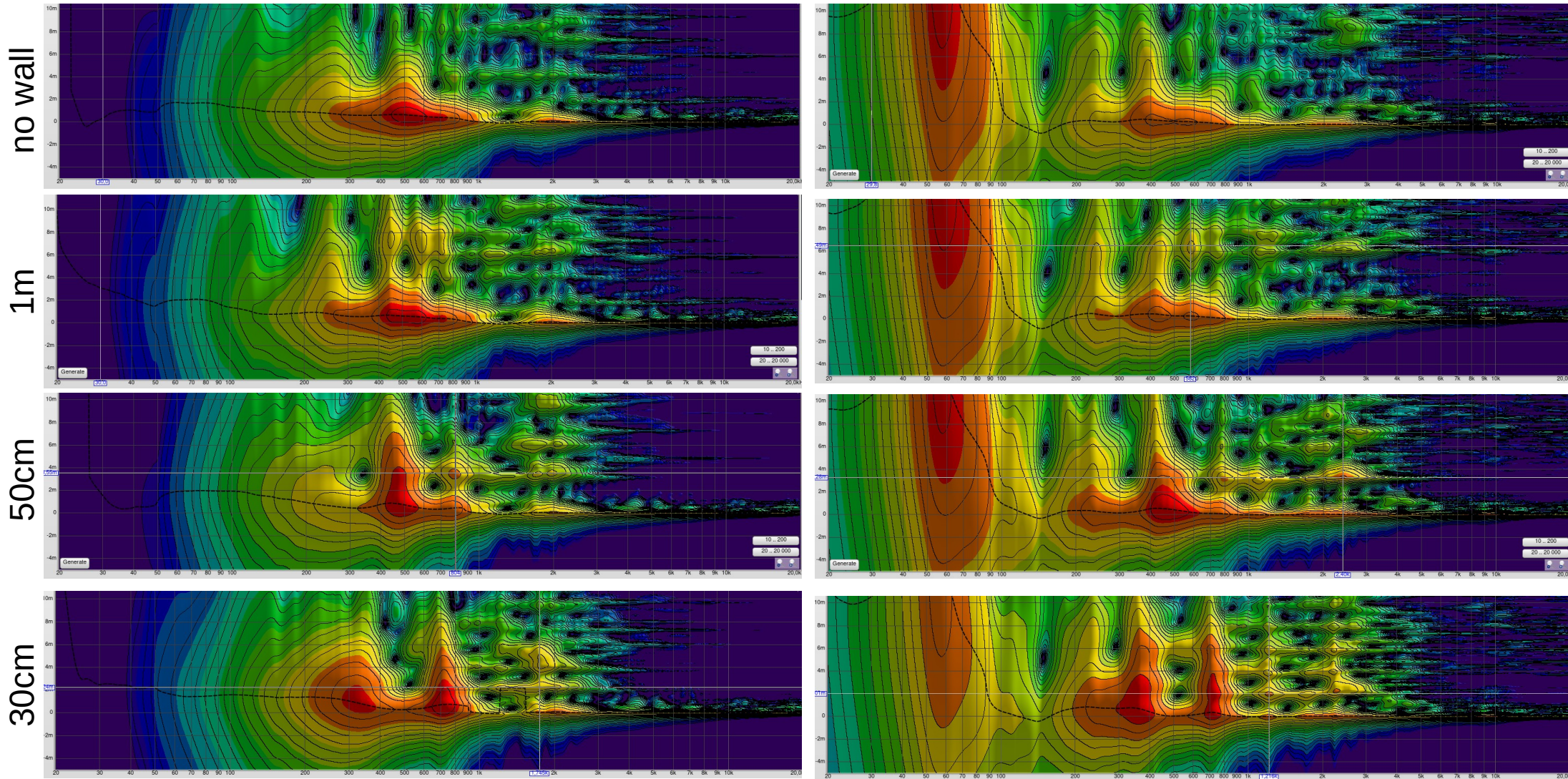


Canvas vs OB : rear wall influence

OB

REW wavelet 1/6 oct

Canvas

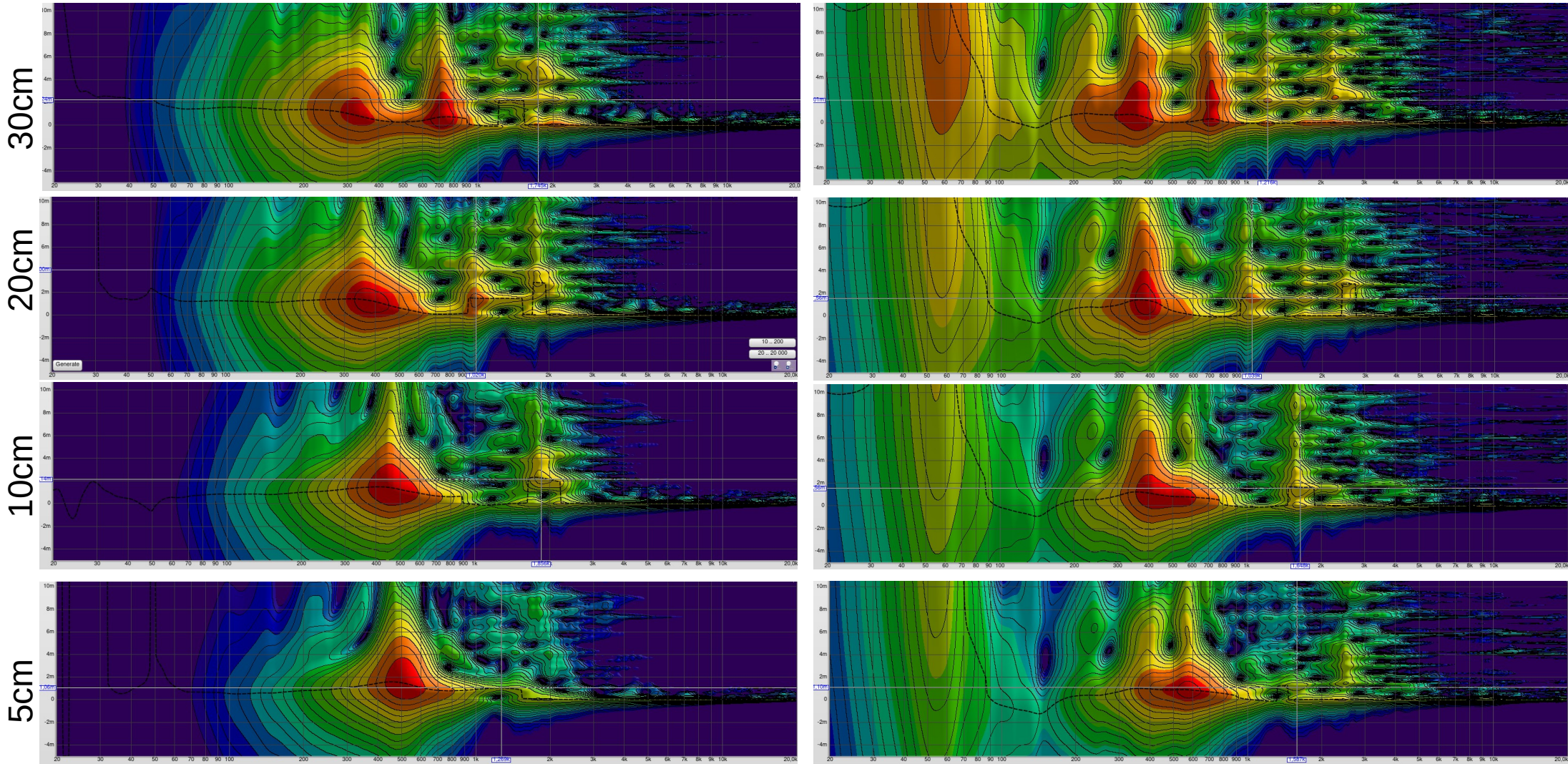


Canvas vs OB : rear wall influence

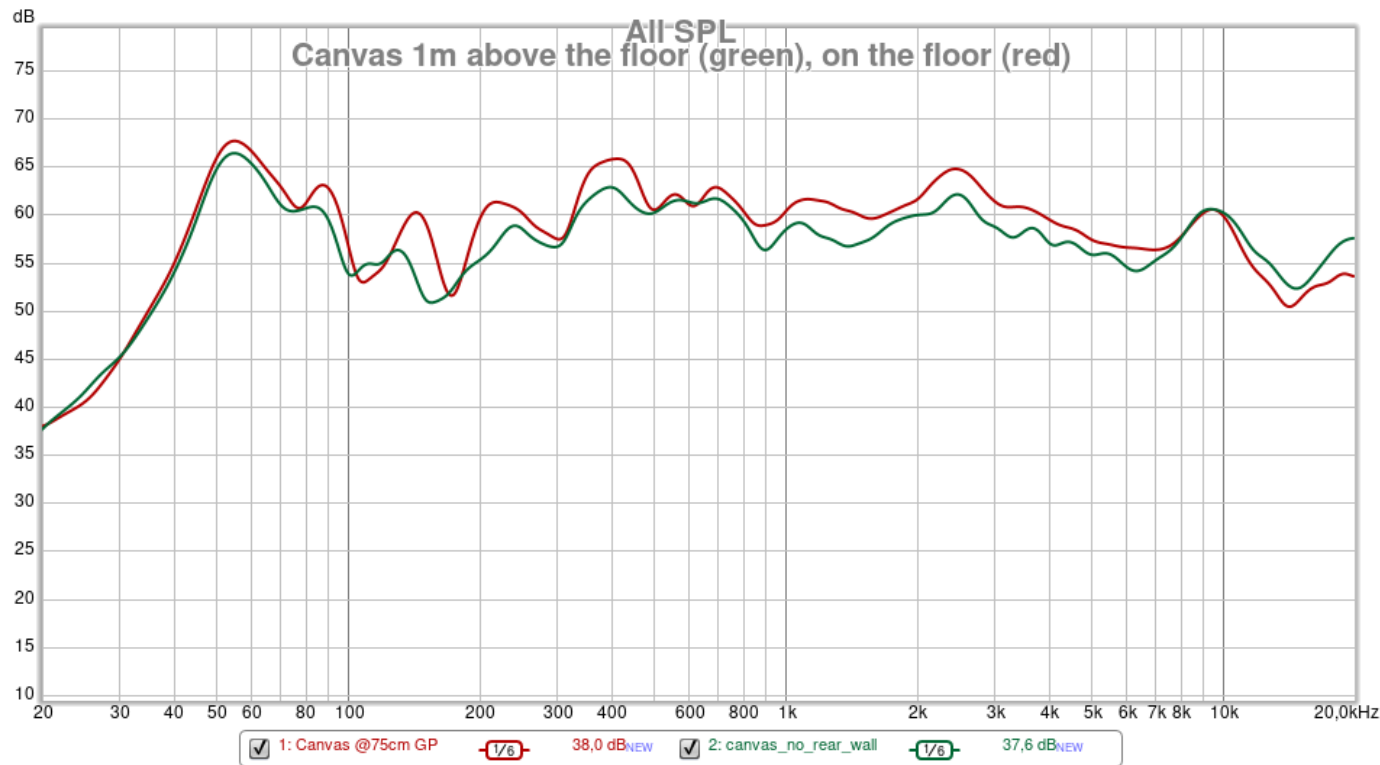
OB

REW wavelet 1/6 oct

Canvas

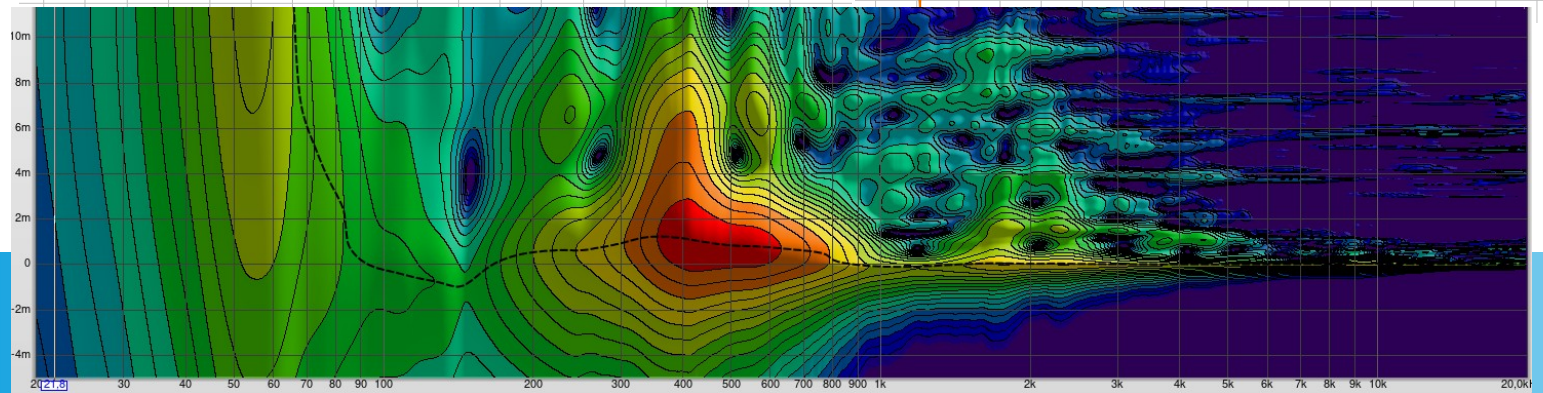
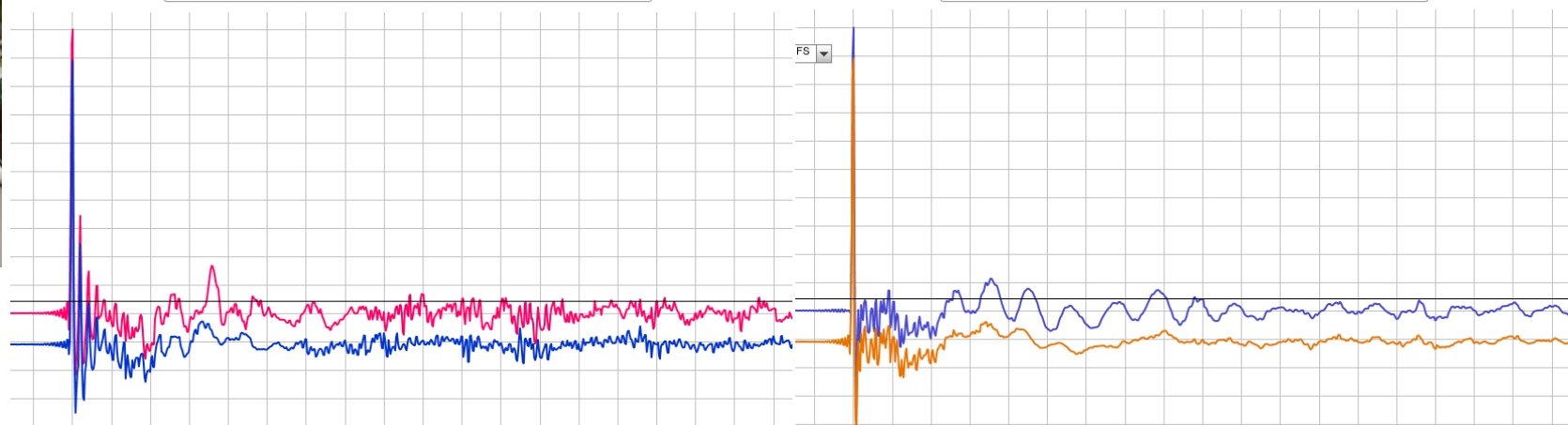
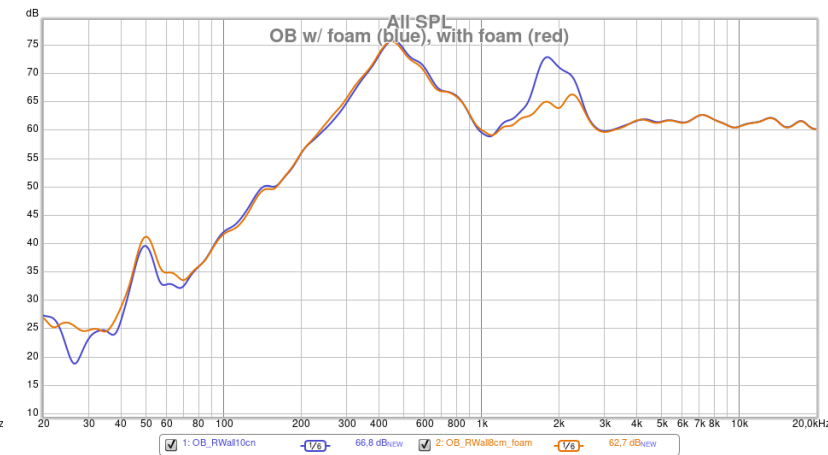
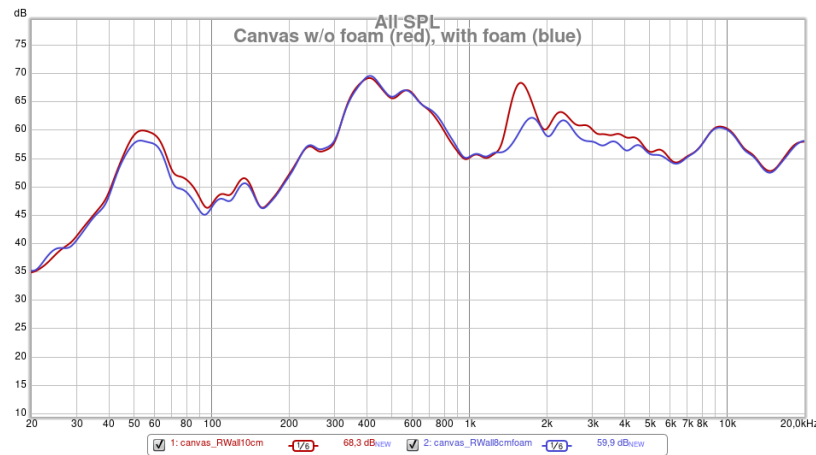


Extra : canvas on the floor



Seems no influence of the position (height above the floor) on the 150Hz deep

Extra : foam influence



The foam has some influence on the reflection @1500Hz