

# Instrumentation



Version:MKII



Spectrum Analyzer



Geophone

*A. Acquisition and analysis parameters:*

*Geophones GURALP CMG-6T*

Link: (<http://www.guralp.com/>)

	SN T6946	SN T6945
Vertical	2 x 998 V/(m/s)	2 x 996
North/South	2 x 998 V/(m/s)	2 x 1016
East/West	2 x 1003 V/(m/s)	2 x 991

*Acquisition and Analysis Parameters:*

Sampling Rate: 1024 Hz  
Measurement length: 1108s  
Block duration: 64s  
Overlap: 66.7%  
Window: Hanning  
Averaging: Linear

# Machine tunnel vs. Experimental cavern floor

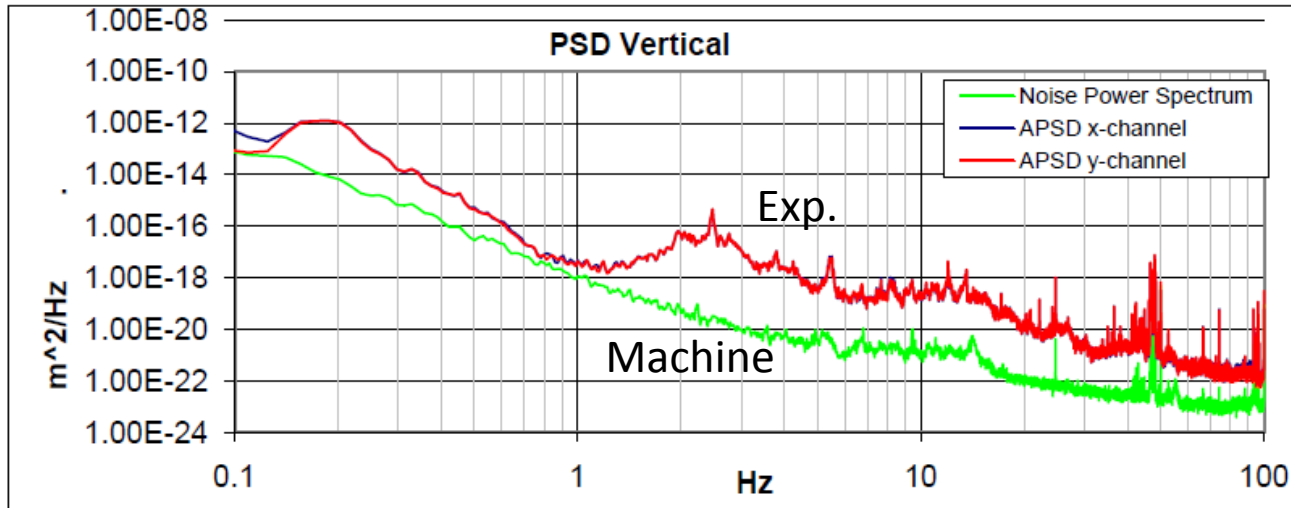


Figure B2

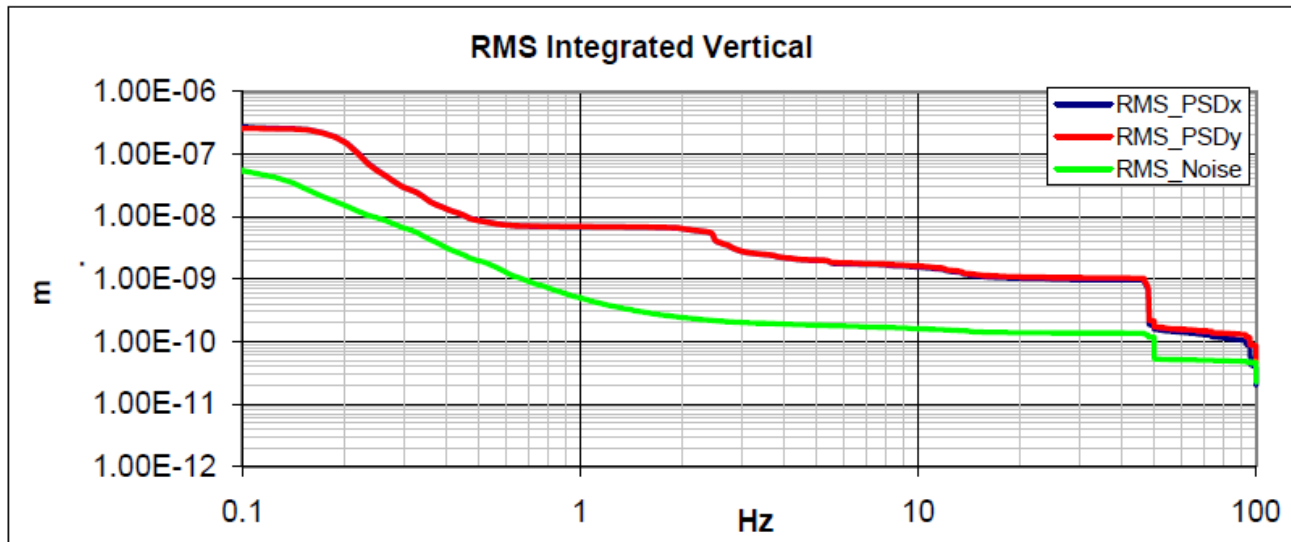
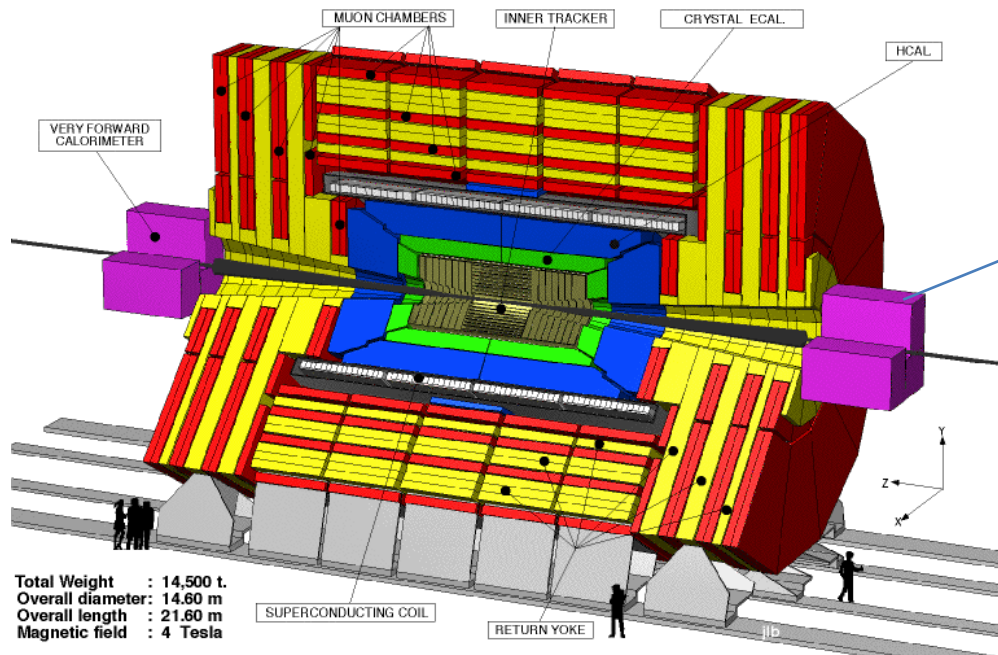


Figure B3



HF

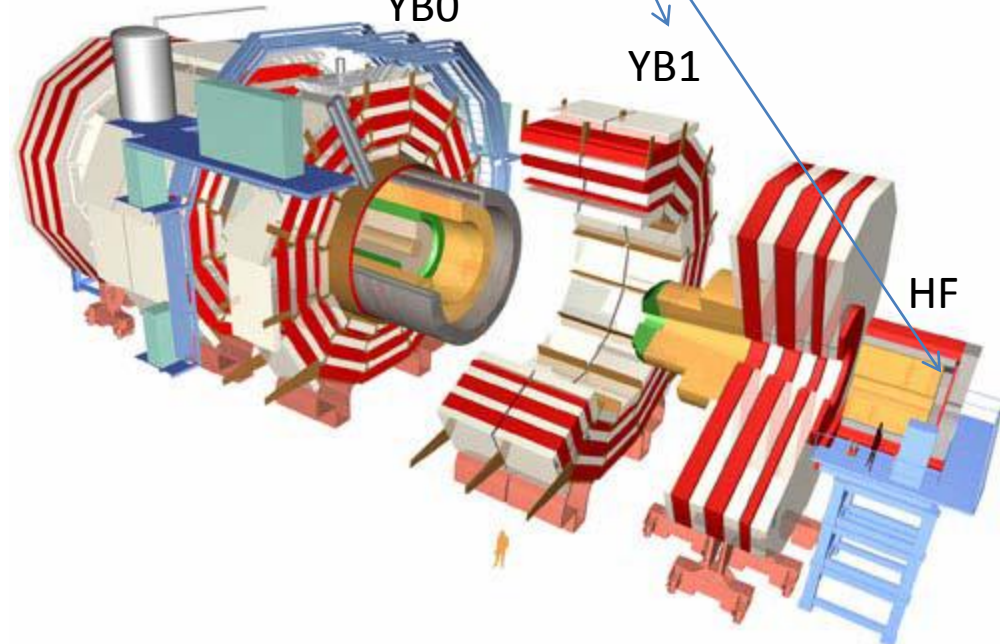


Geophones

YB0

YB1

HF



Pacmen



C. *YB0 motion measurement.*

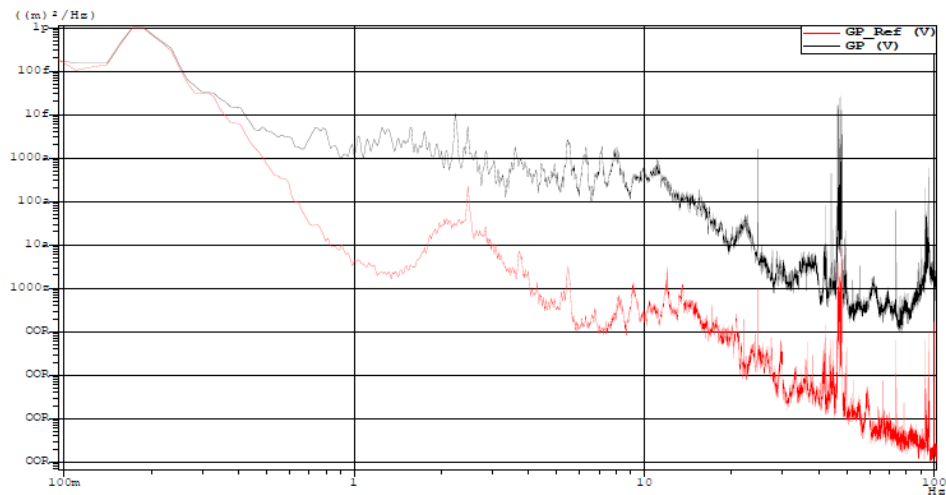
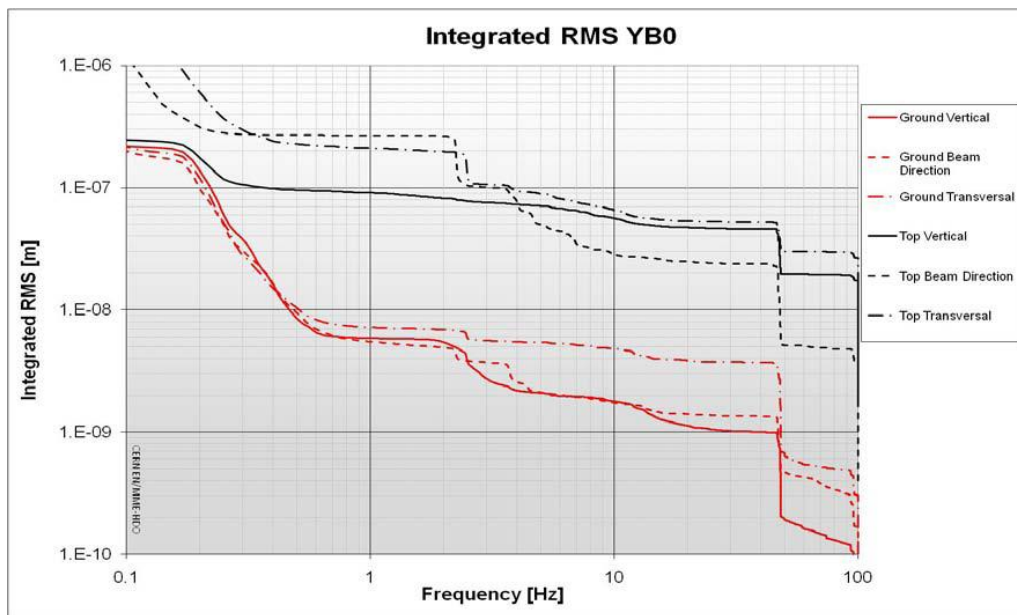
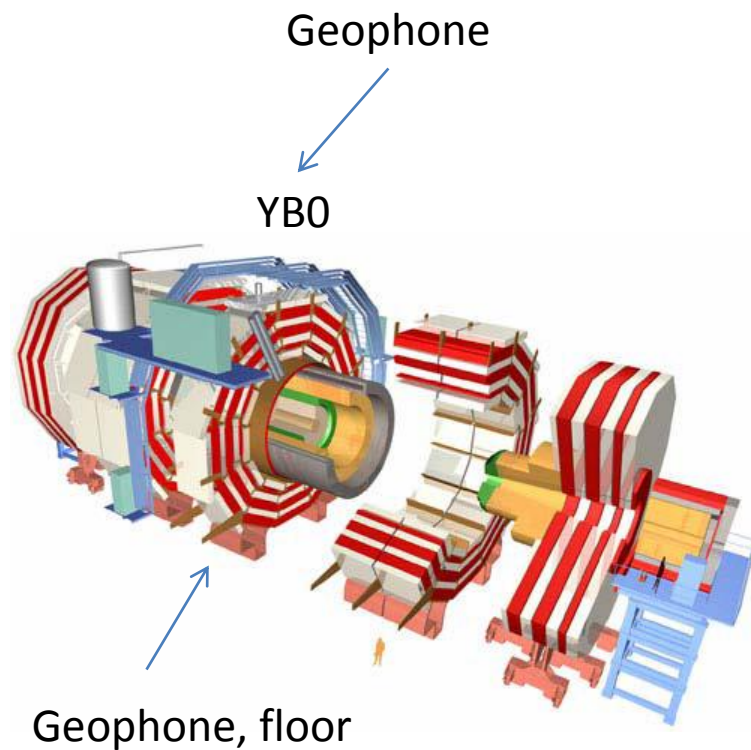


Figure C1. PSD of the signal Vertical direction.



C. *YB0 motion measurement.*

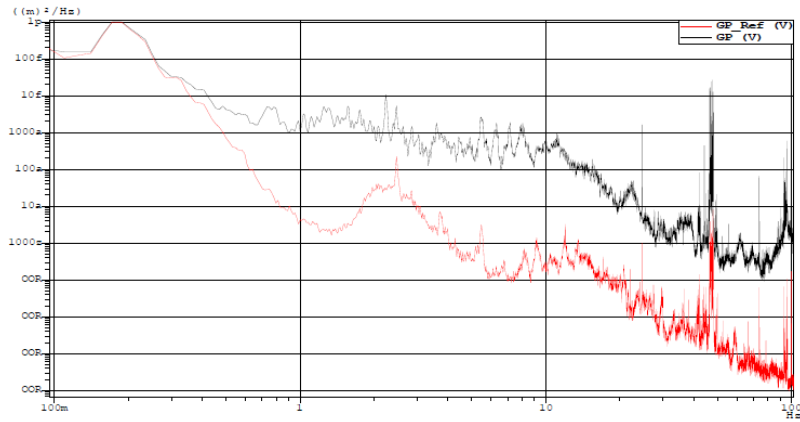


Figure C1. PSD of the signal Vertical direction.

D. *YB1 motion measurement.*

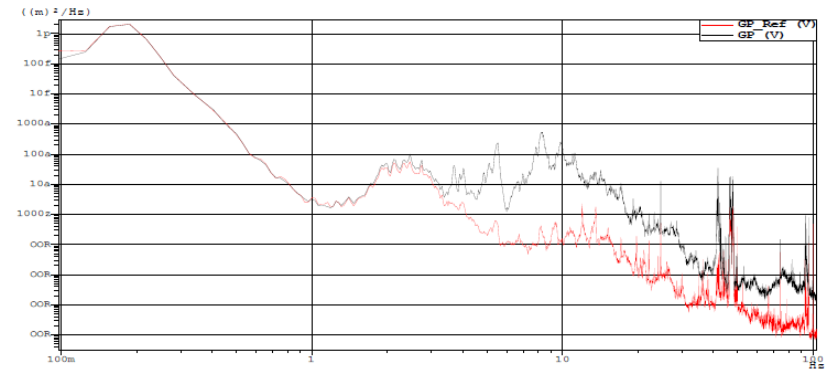
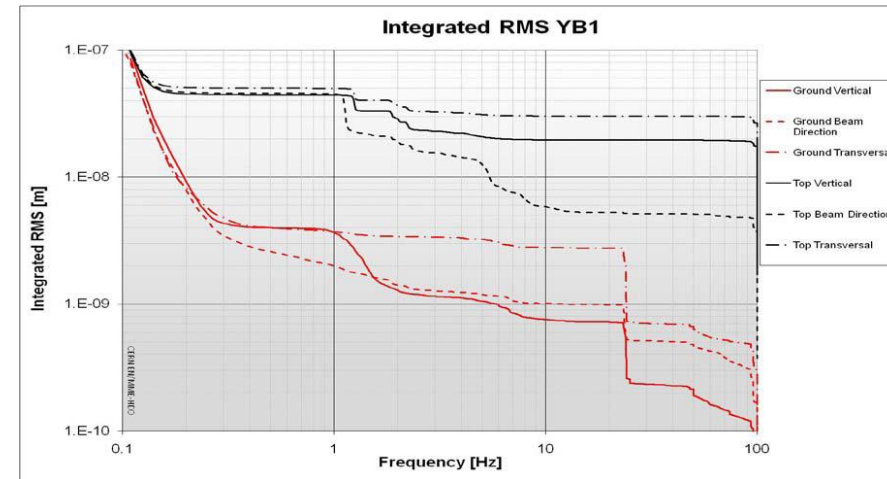
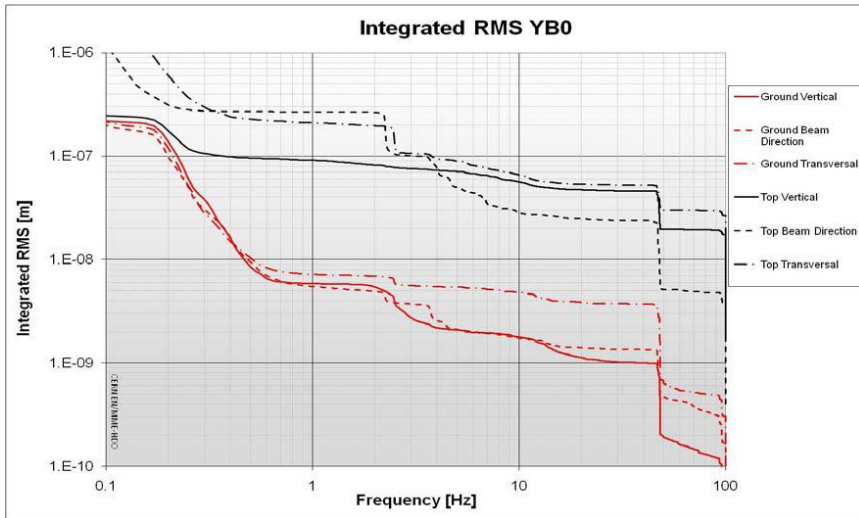


Figure D1. PSD of the signal Vertical direction.



# HF Tower

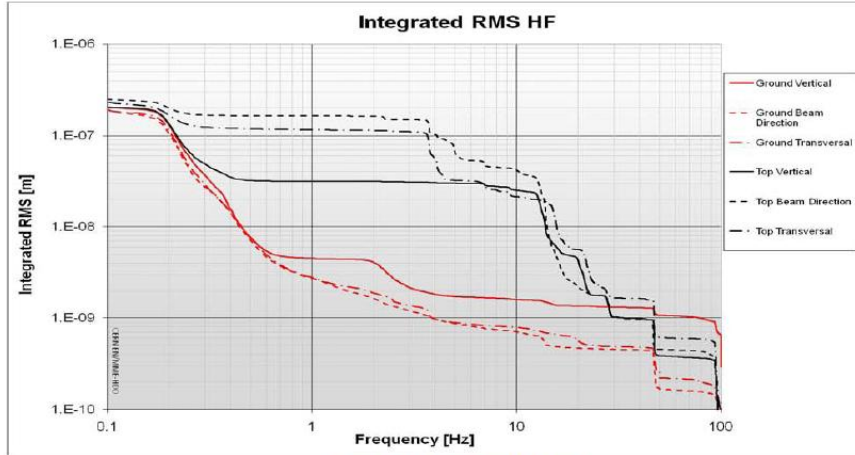


Figure 8. RMS Integrated HF Tower.

# PACMEN

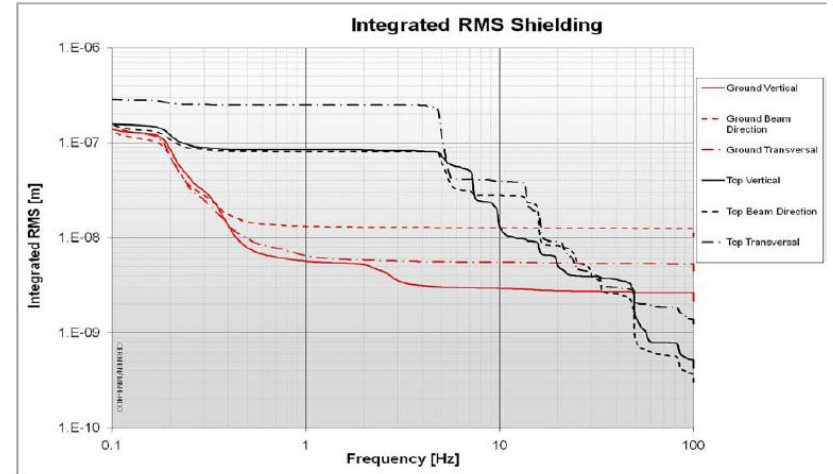


Figure 12. RMS Integrated Rotating Shielding.

## E. HF Tower motion measurement.

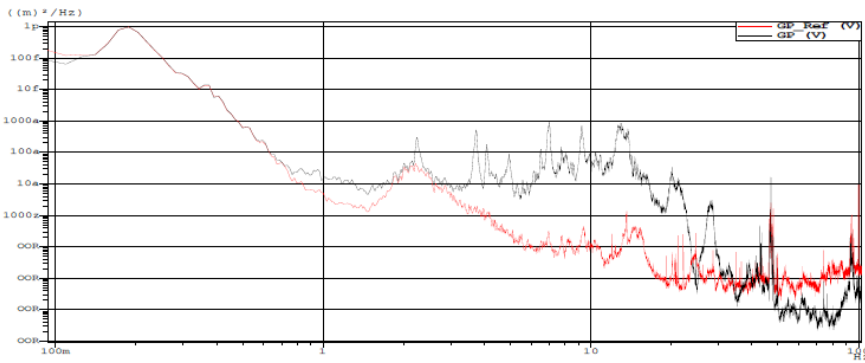


Figure E1. PSD of the signal Vertical direction.

## F. Rotating Shielding motion measurement.

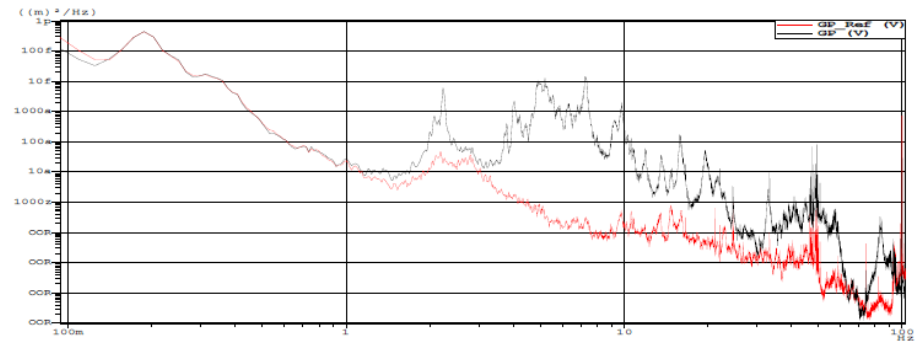


Figure F1. PSD of the signal Vertical direction.

Platform

Ref. Geophone  
on the rail

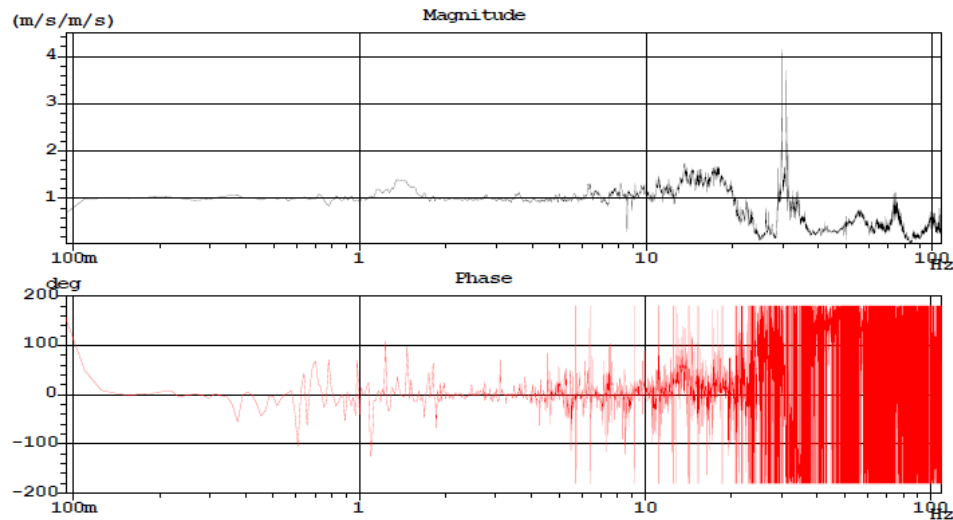


Figure 14. Transfer function in the vertical direction. Reference geophone is above the rail.

Ref. Geophone  
on the floor

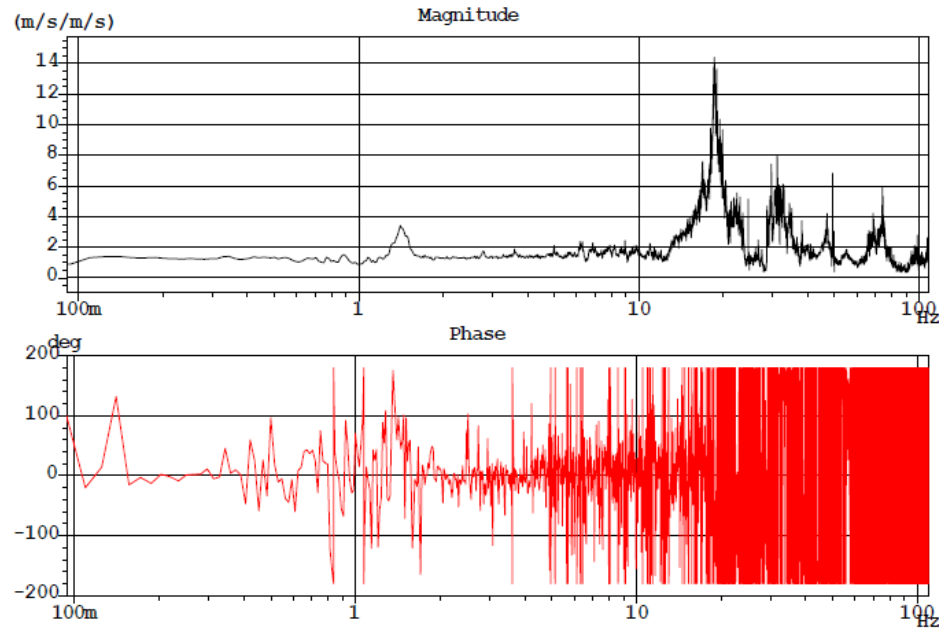


Figure 15. Transfer function in the vertical direction. Reference geophone on the floor.

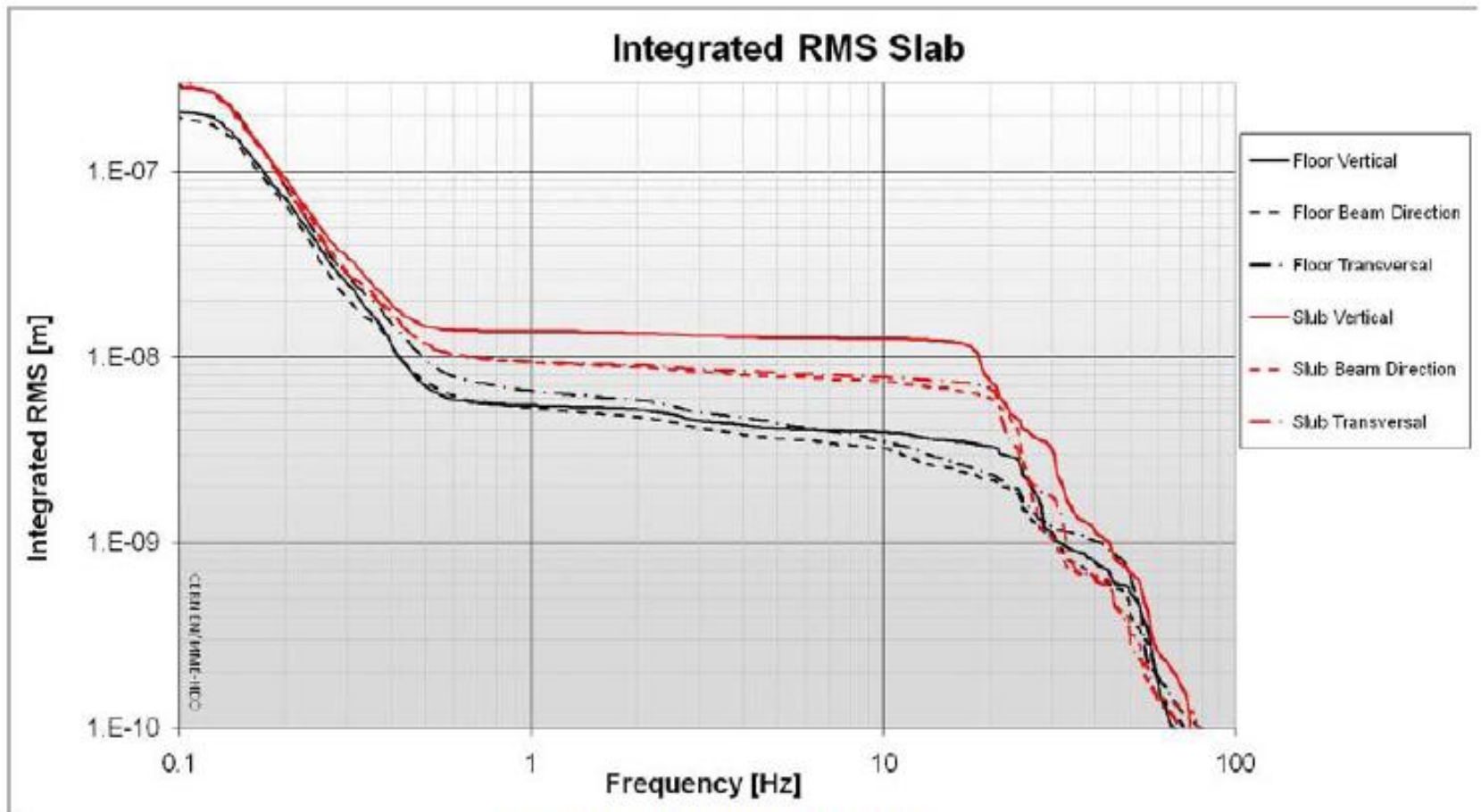


Figure 16. Integrated RMS Slab.