Interactive comment on “Site effect classification based on microtremor data analysis using concentration–area fractal model” by A. Adib et al.

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Dear Dr. Yasrebi Thank you very much for your valuable comments. The answer of your questions and corrections are follow: 1. Frequency, amplification and k-g are different variables which reveal various characteristics of soils in the urban areas. The frequency and k-g show velocity of the wave and power of destruction. Combination of the three parameters cannot be possible. 2. The microtremor data used for classification of different grounds of an urban area (may relates to different compaction or density and etc.) not just for lithological separation. The study area is located on a silty and clayey plain (quaternary units), so we describe about soil types derived via the boreholes (Section 2). Based on the resulted frequencies, the most parts of the city contain soft soils. As it is mentioned in the Section 2, there is not any major variation in
the composition of sediment in the area, except for some variation of clay and silt contents in the eastern part based on boreholes data. However, shear wave velocity data shows that there are differences in soil hardness values within the area. Consequently, one can concludes that the different category of frequency, amplification or k-g value may relate to variation of soil hardness in different places of the city. 3.Figure 1 was replaced but we recommend the earlier.

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