

Figure S1. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for $PGA = 0.15$ g and Soil C (i.e., $VS_1(z)$ for $H_{deposit}$ equal to 50 m).

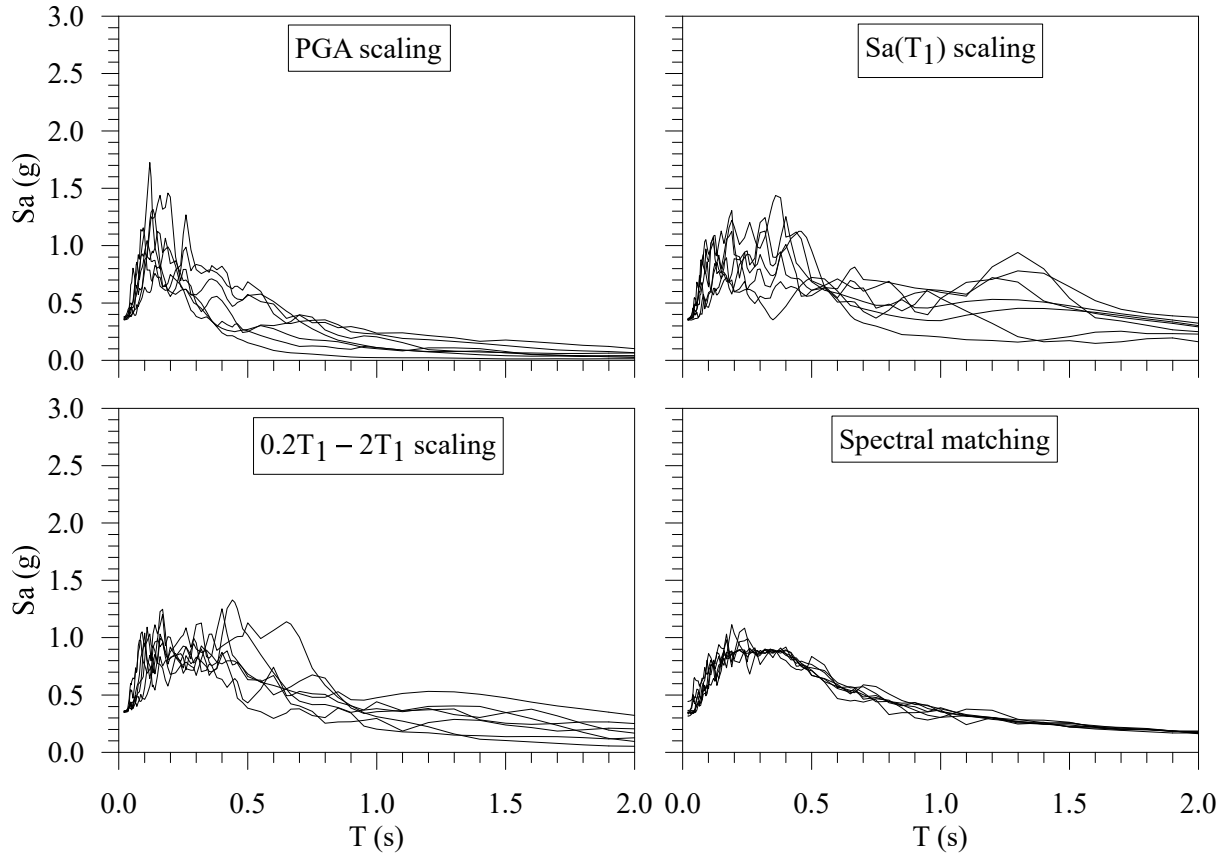


Figure S2. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for $PGA = 0.35$ g and Soil C (i.e., $VS_1(z)$ for $H_{deposit}$ equal to 50 m).

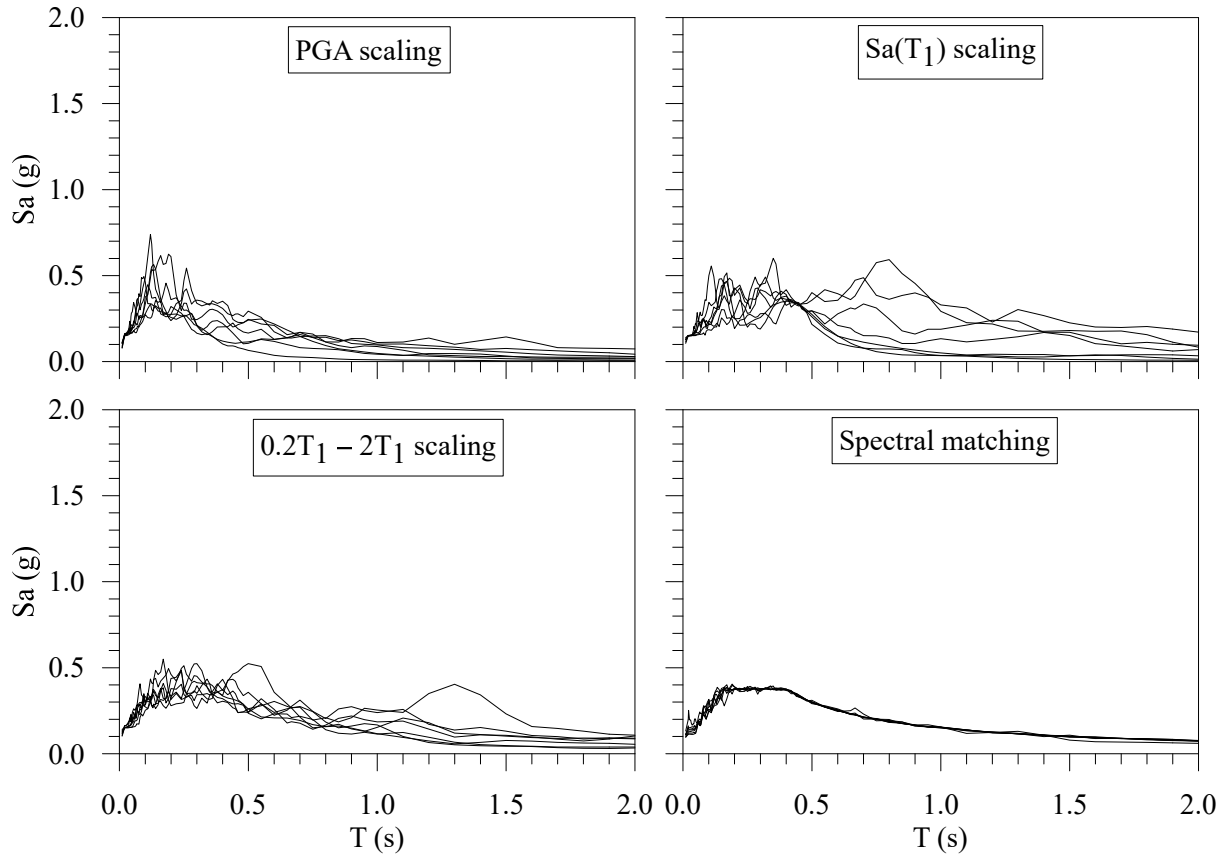


Figure S3. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for $PGA = 0.15$ g and Soil C (i.e., $VS_1(z)$ for $H_{deposit}$ equal to 30 m).

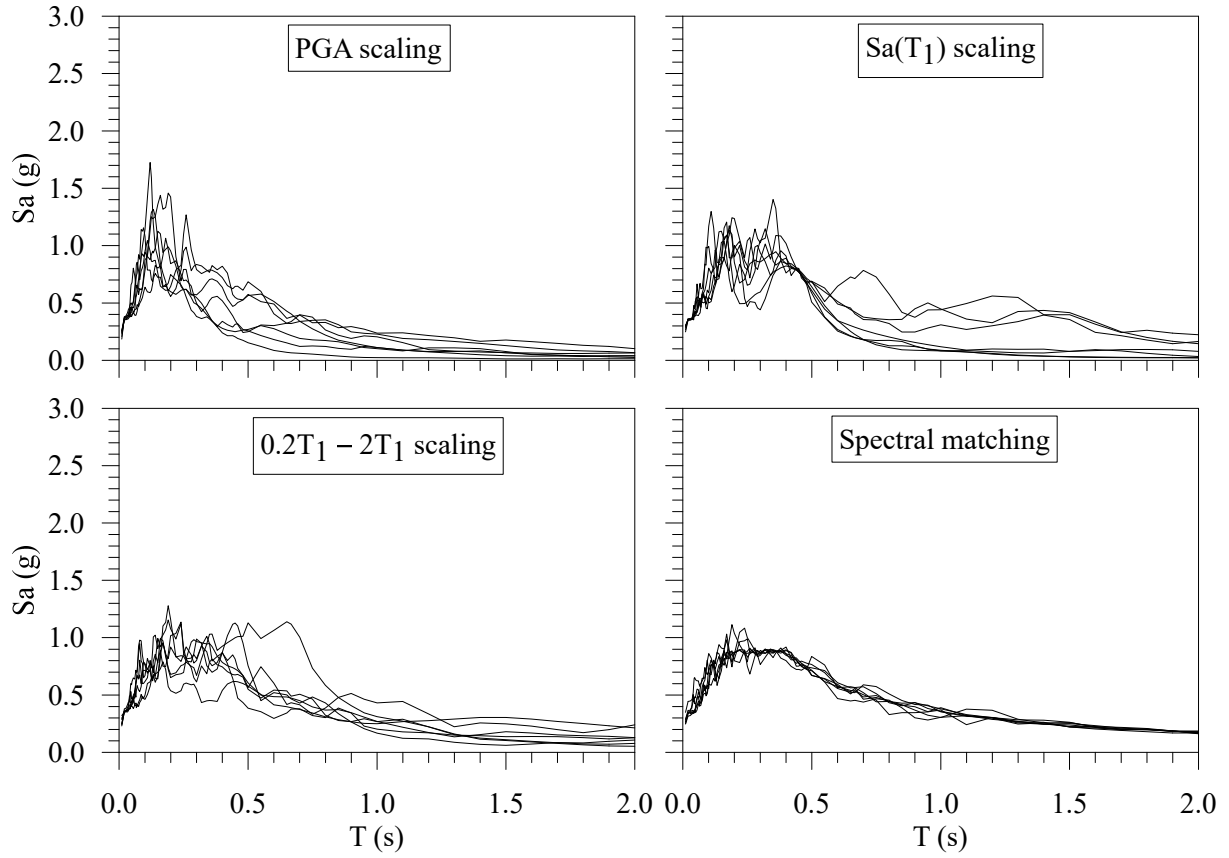


Figure S4. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for $PGA = 0.35$ g and Soil C (i.e., $VS_1(z)$ for $H_{deposit}$ equal to 30 m).

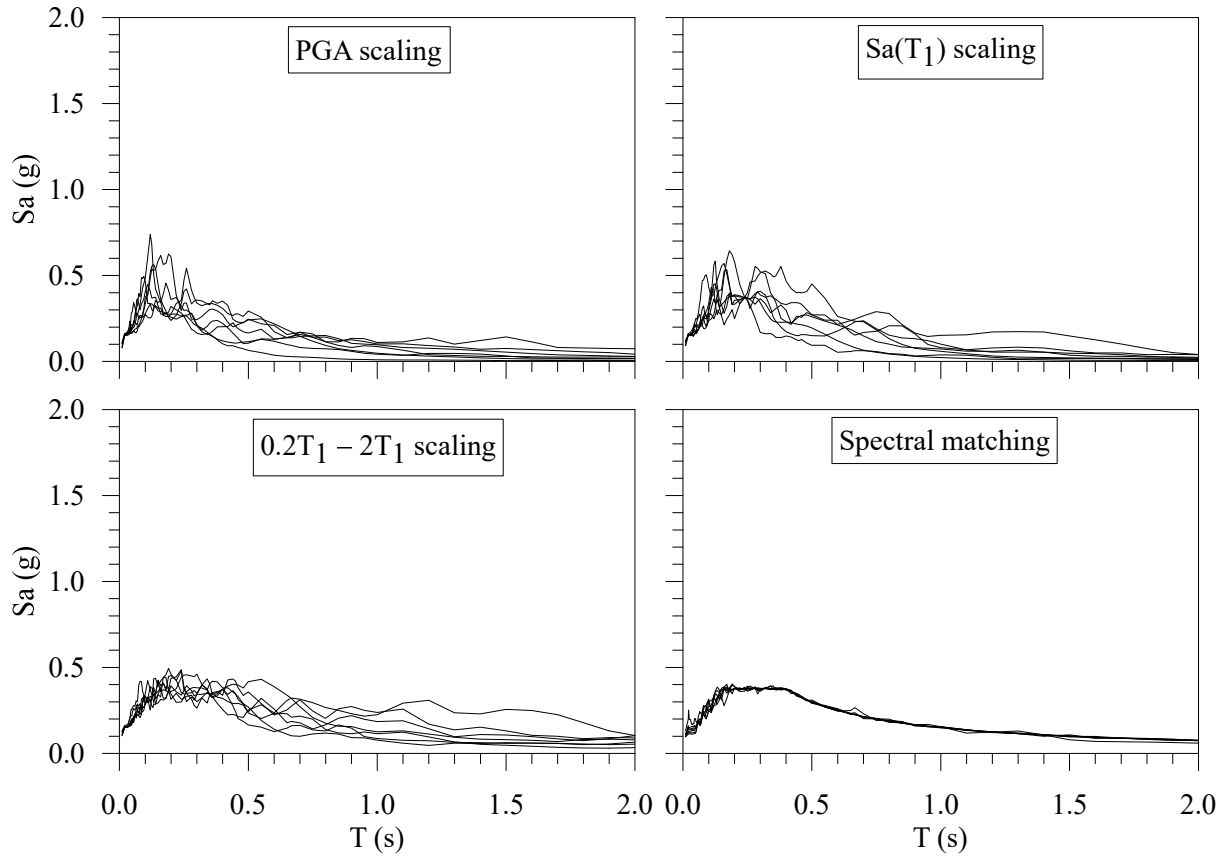


Figure S5. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for PGA = 0.15 g and Soil E (i.e., VS₁(z) for H_{deposit} equal to 15 m).

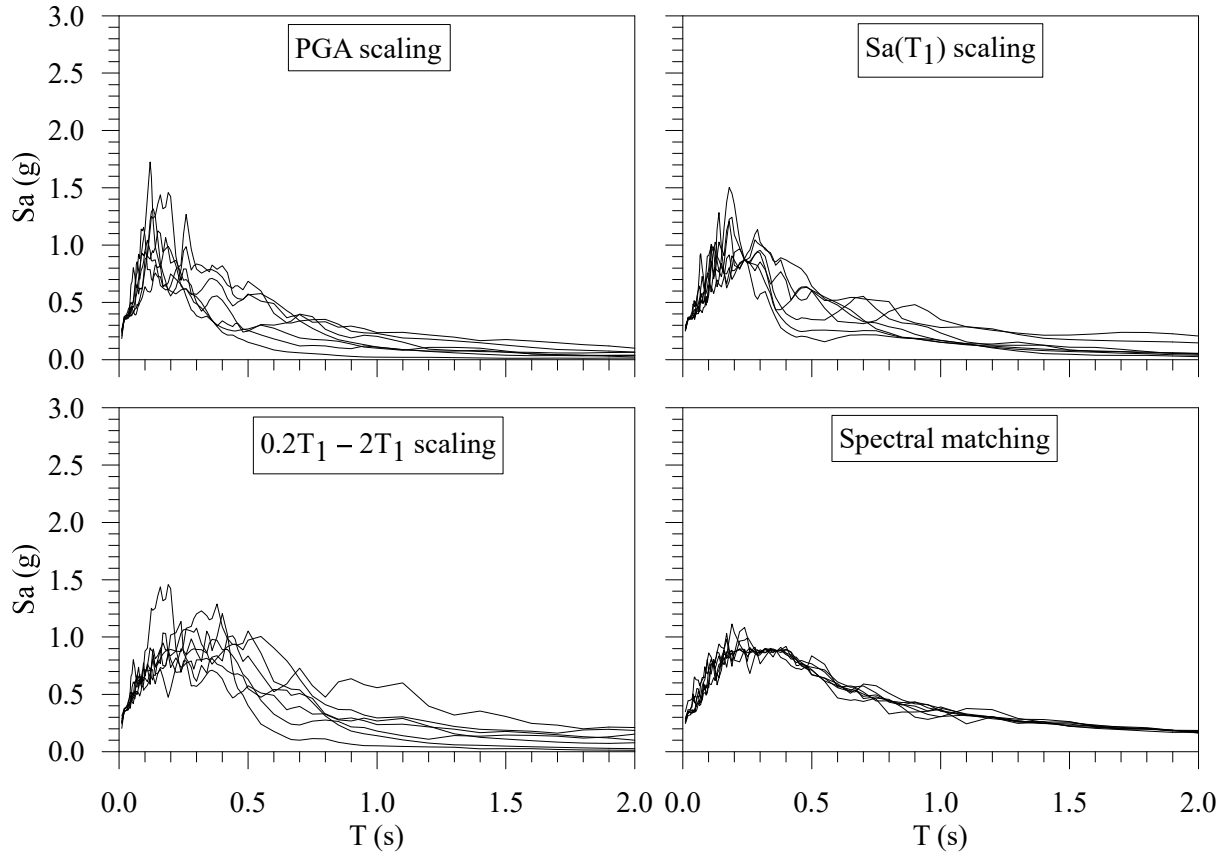


Figure S6. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for PGA = 0.35 g and Soil E (i.e., VS₁(z) for H_{deposit} equal to 15 m).

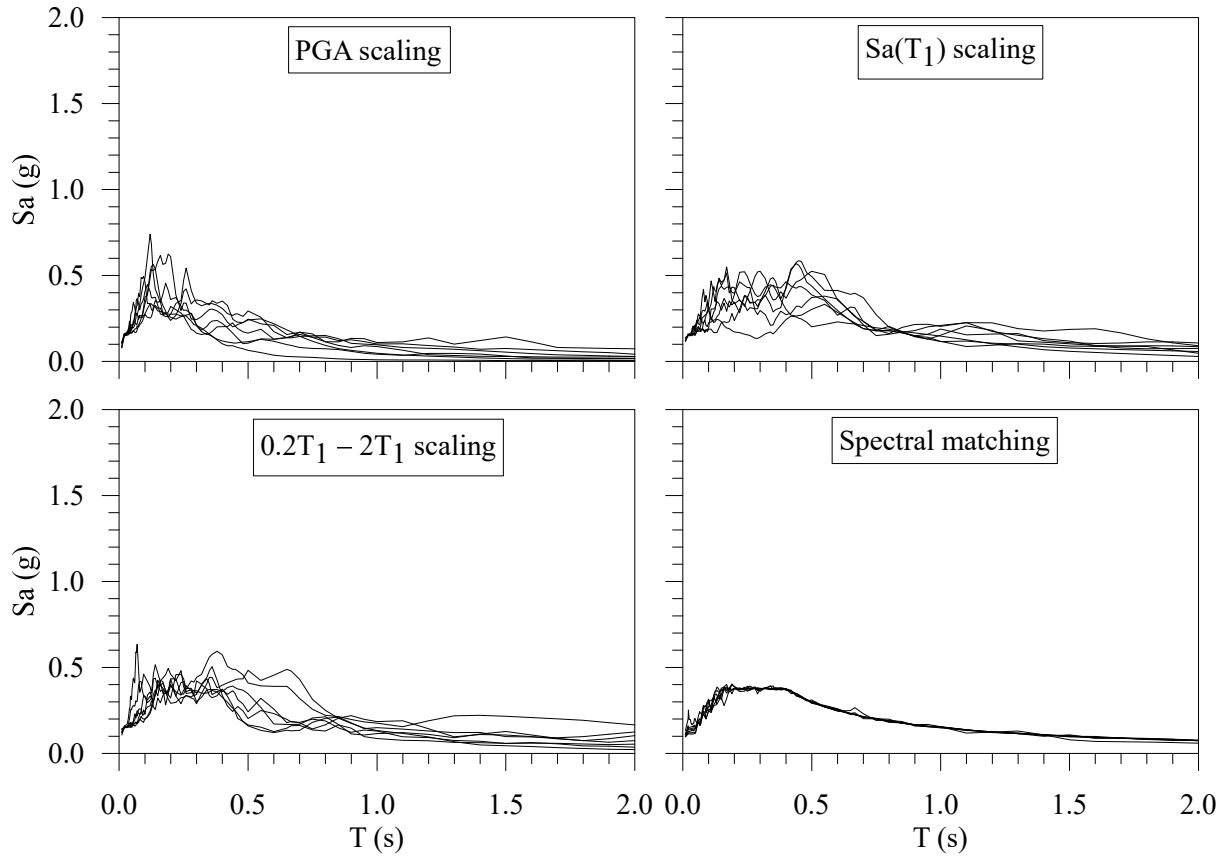


Figure S7. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for PGA = 0.15 g and Soil D (i.e., VS₂(z) for H_{deposit} equal to 50 m).

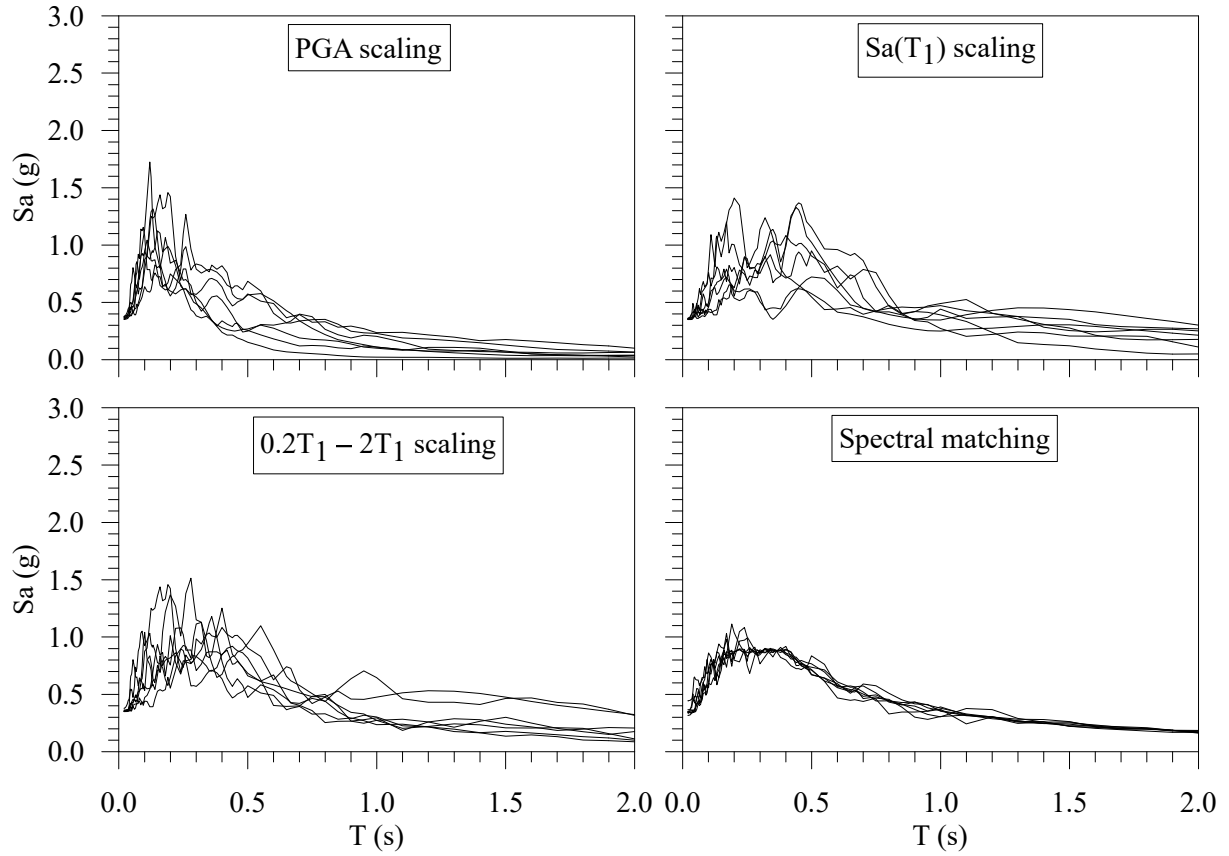


Figure S8. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for PGA = 0.35 g and Soil D (i.e., VS₂(z) for H_{deposit} equal to 50 m).

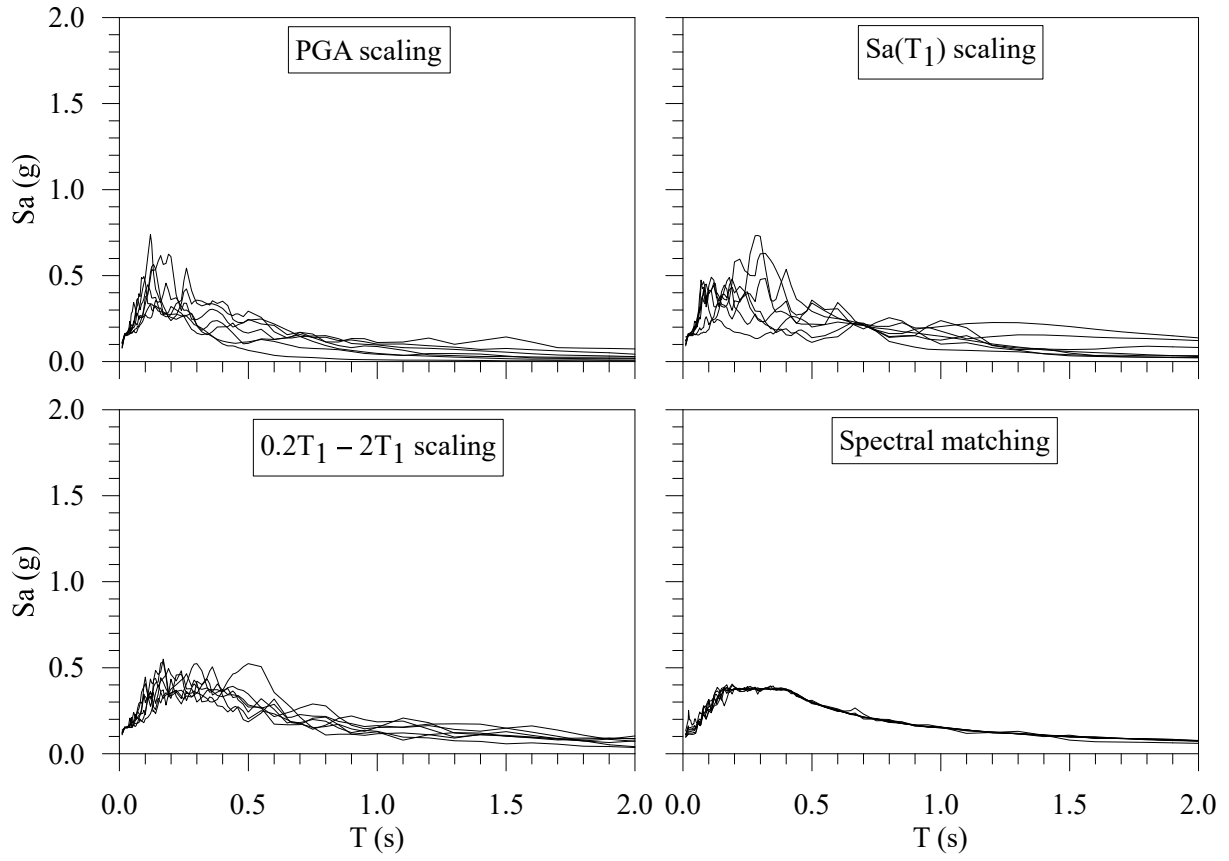


Figure S9. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for PGA = 0.15 g and Soil D (i.e., VS₂(z) for H_{deposit} equal to 30 m).

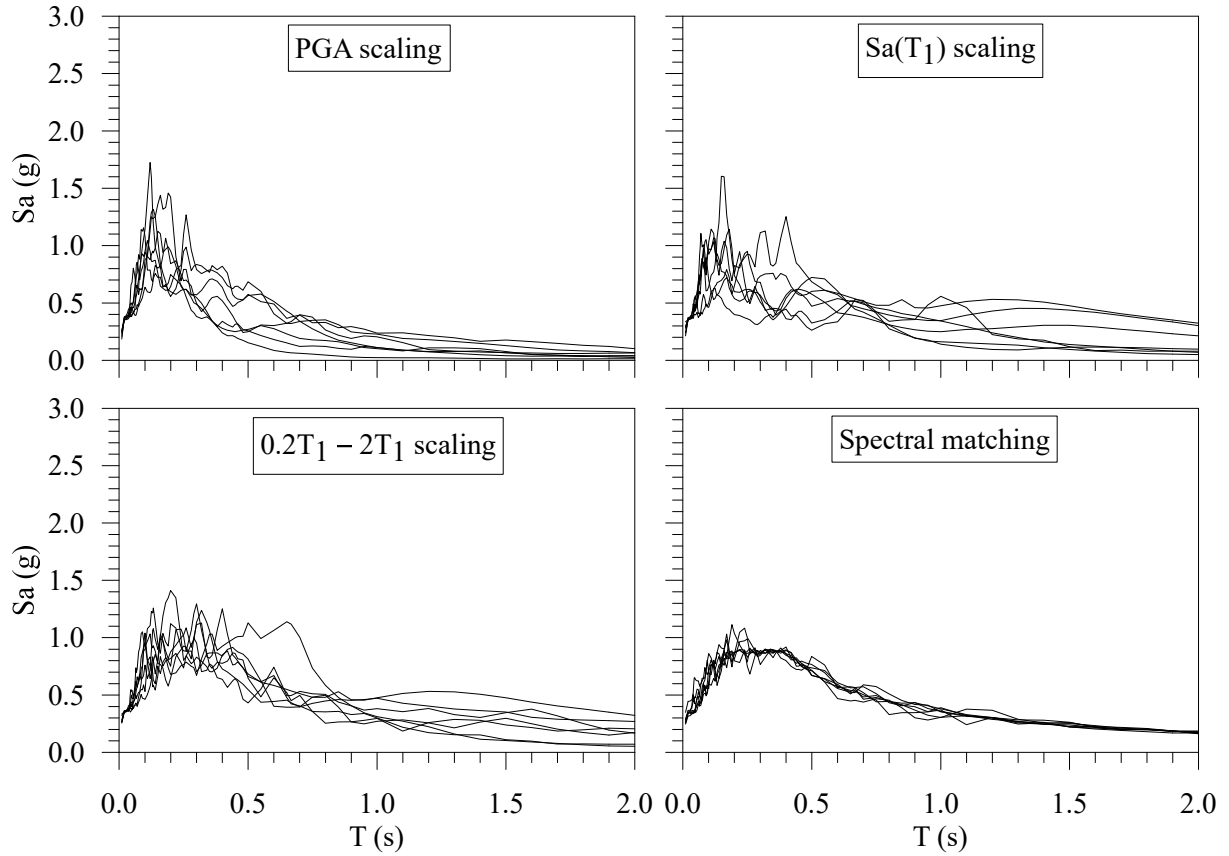


Figure S10. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for PGA = 0.35 g and Soil D (i.e., VS₂(z) for H_{deposit} equal to 30 m).

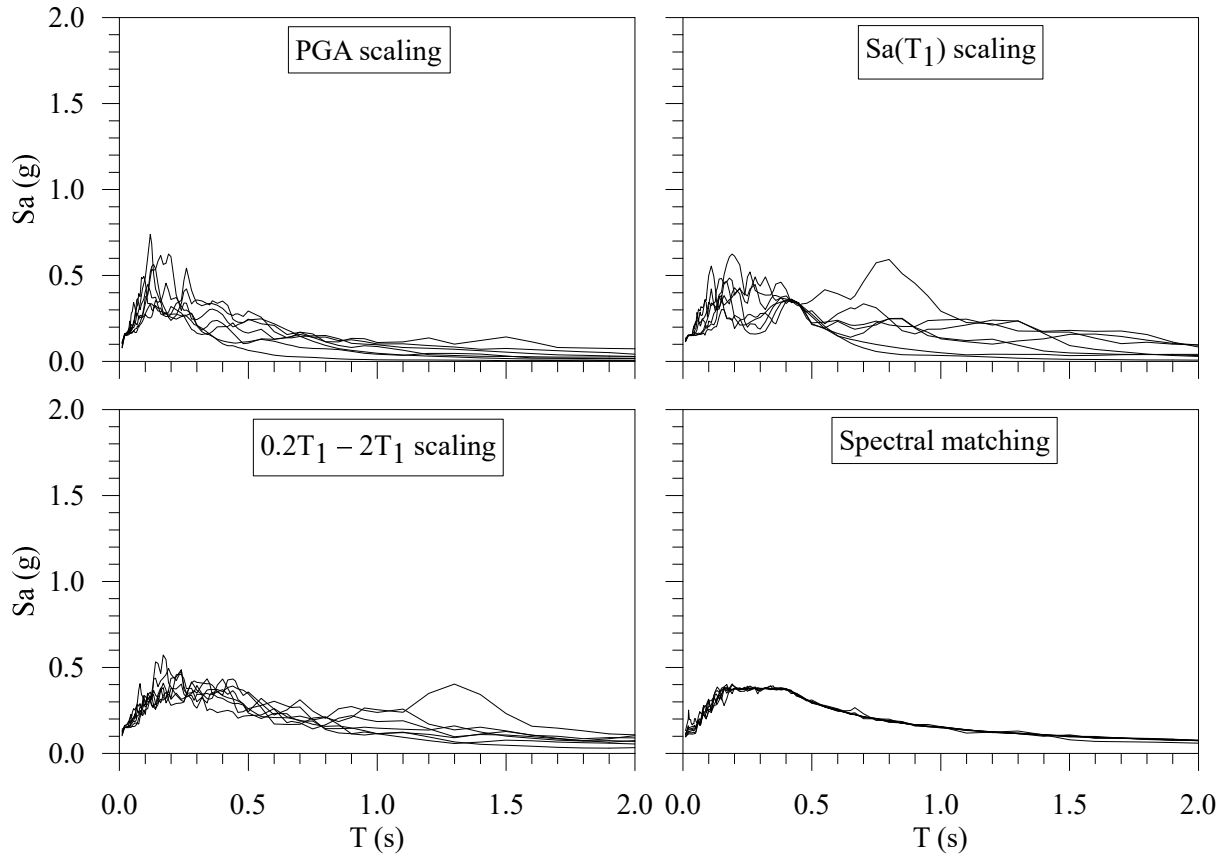


Figure S11. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for PGA = 0.15 g and Soil E (i.e., VS₂(z) for H_{deposit} equal to 15 m).

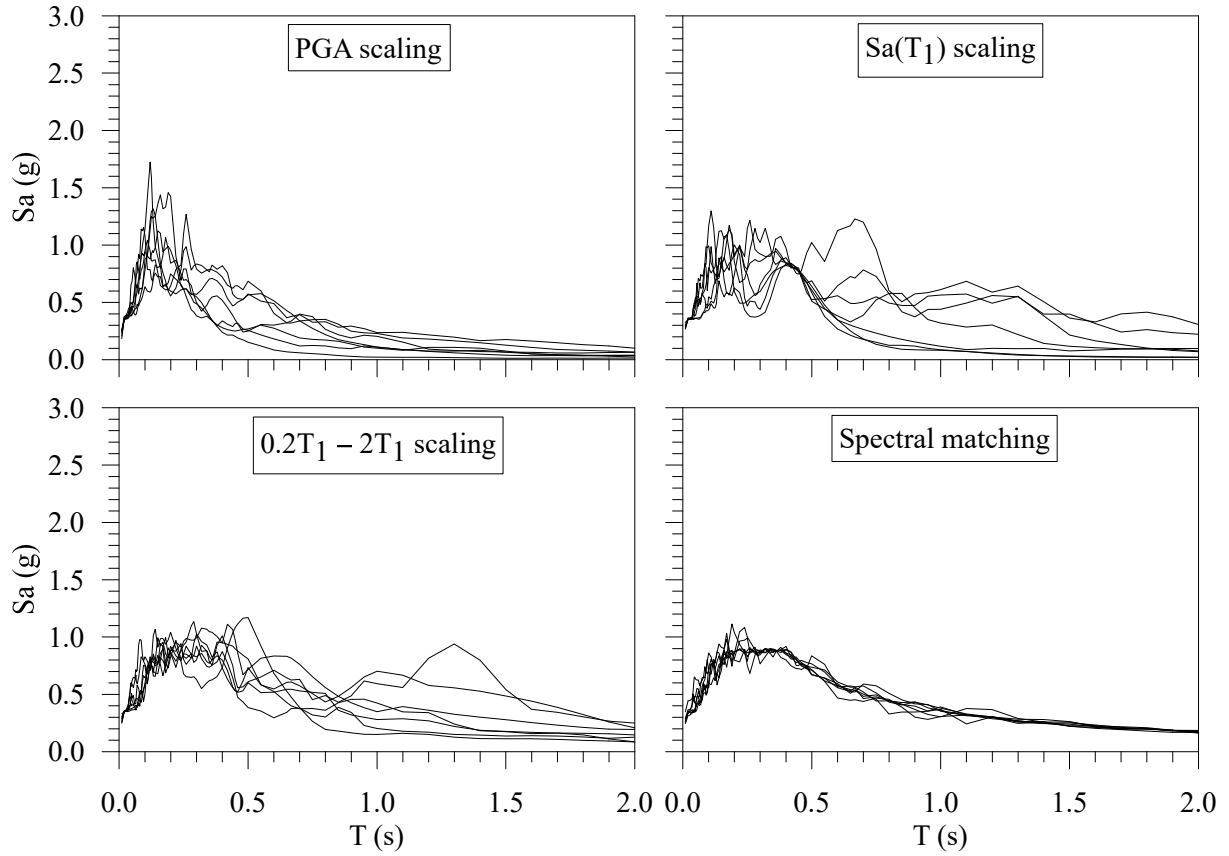


Figure S12. Response spectra in terms of pseudo-acceleration referred to input motions selected according to 4 selection strategies for PGA = 0.35 g and Soil E (i.e., VS₂(z) for H_{deposit} equal to 15 m).

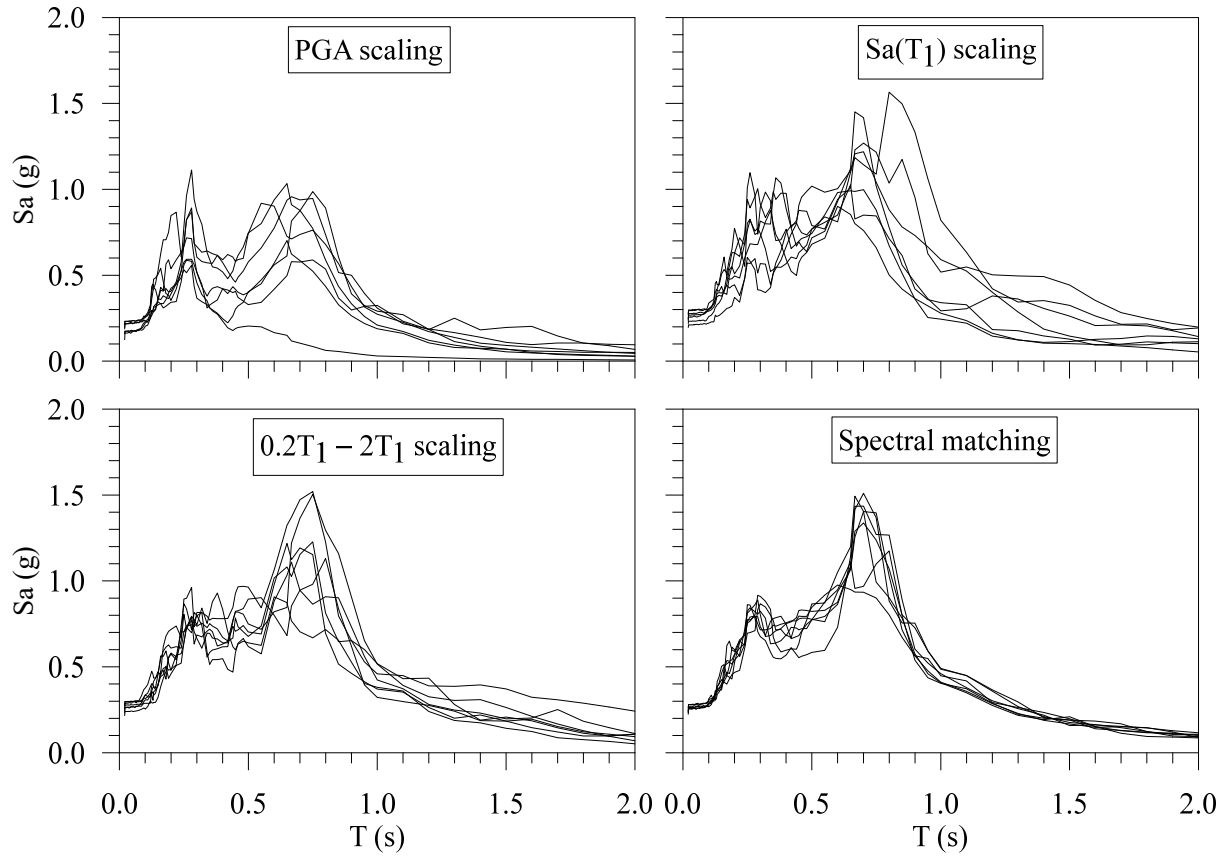


Figure S13. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.15 g and Soil C (i.e., $VS_1(z)$ for H_{deposit} equal to 50 m).

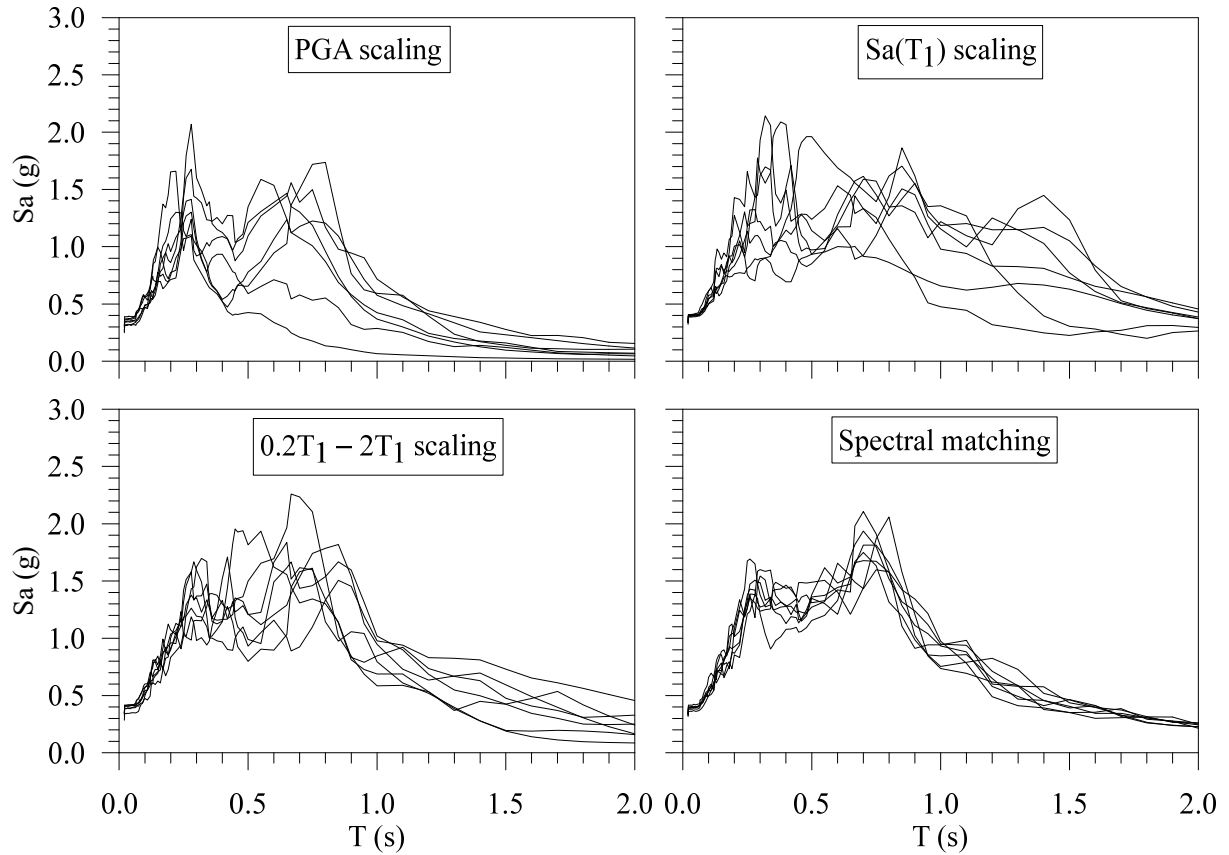


Figure S14. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.35 g and Soil C (i.e., $VS_1(z)$ for H_{deposit} equal to 50 m).

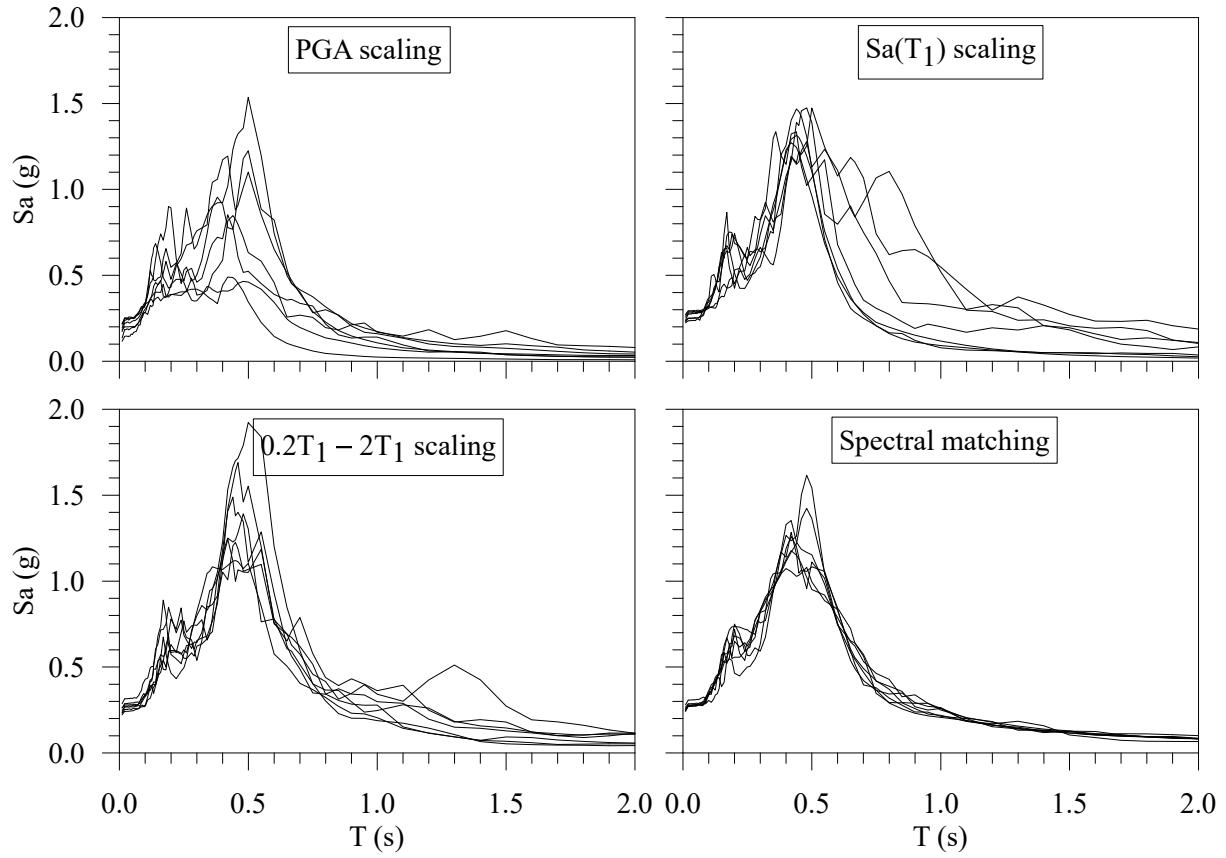


Figure S15. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.15 g and Soil C (i.e., VS₁(z) for H_{deposit} equal to 30 m).

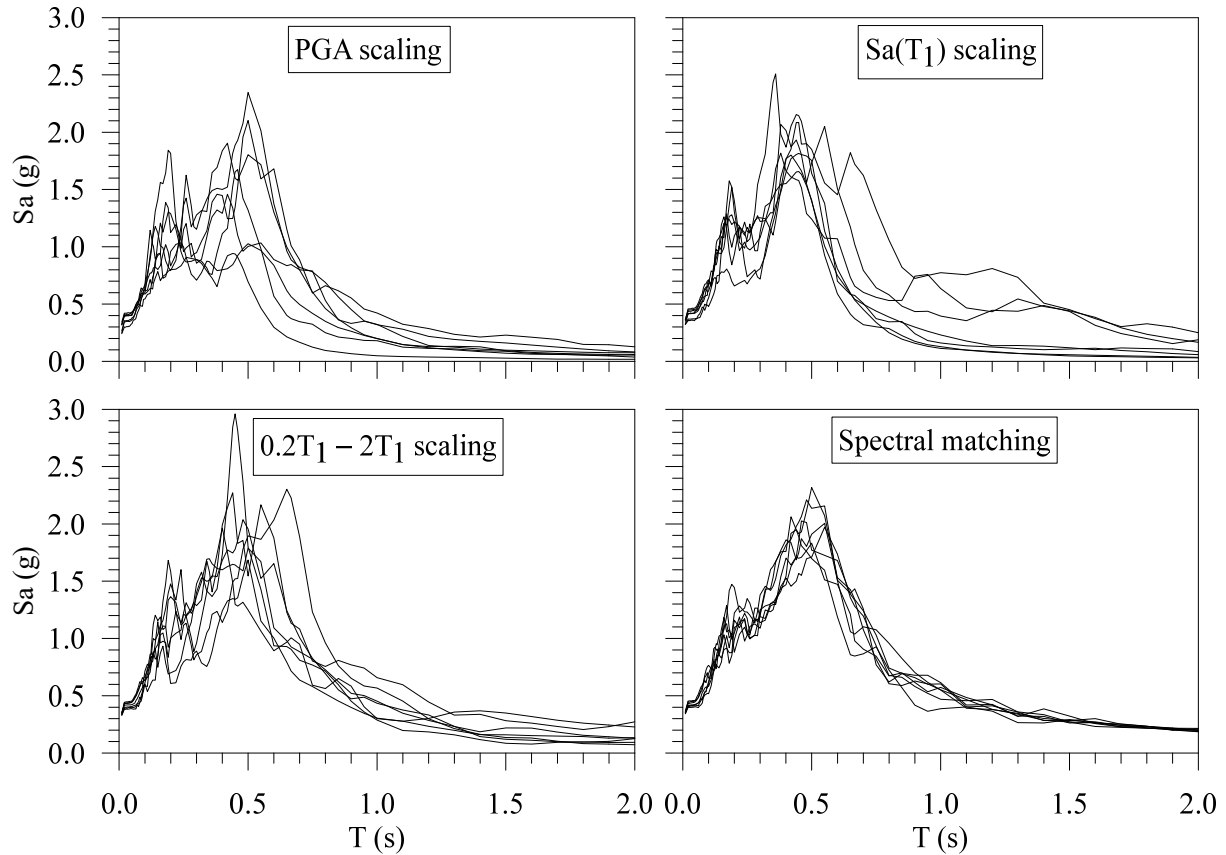


Figure S16. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.35 g and Soil C (i.e., VS₁(z) for H_{deposit} equal to 30 m).

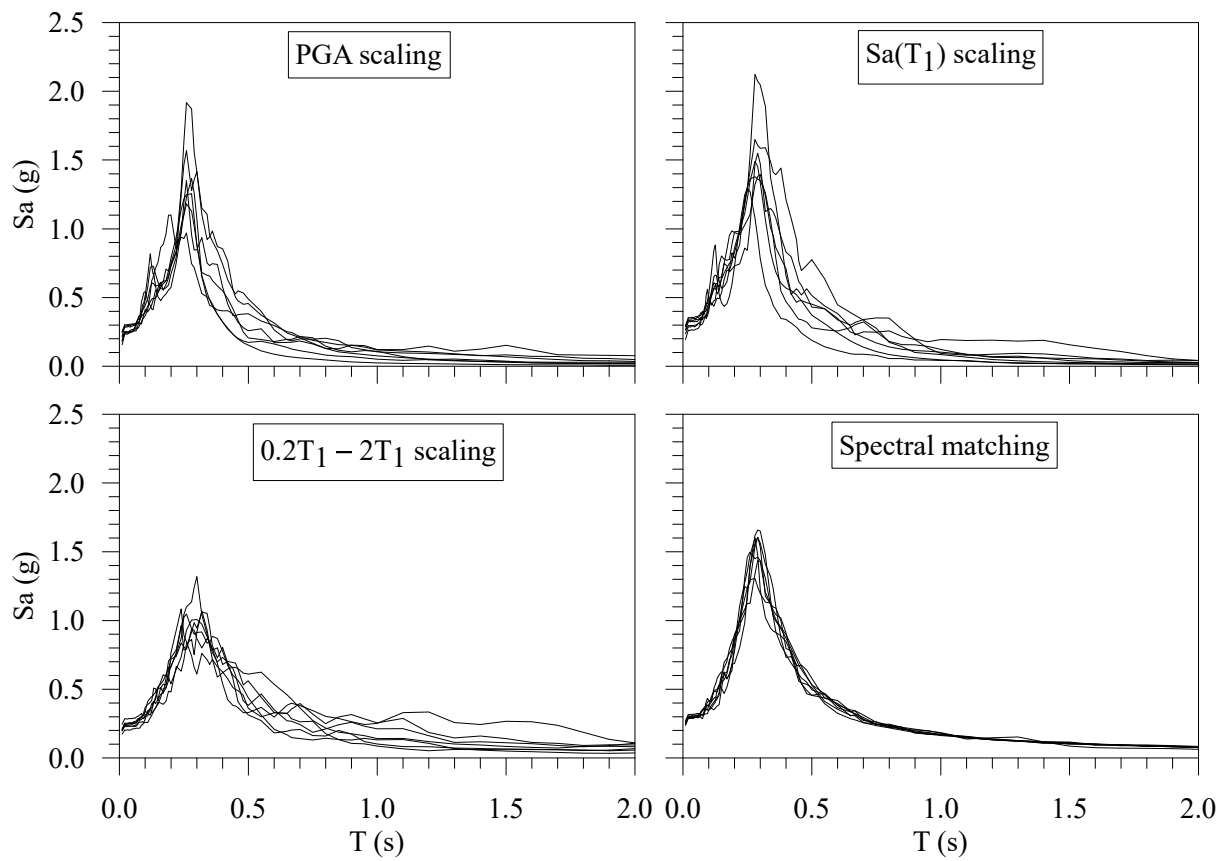


Figure S17. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.15 g and Soil E (i.e., VS₁(z) for H_{deposit} equal to 15 m).

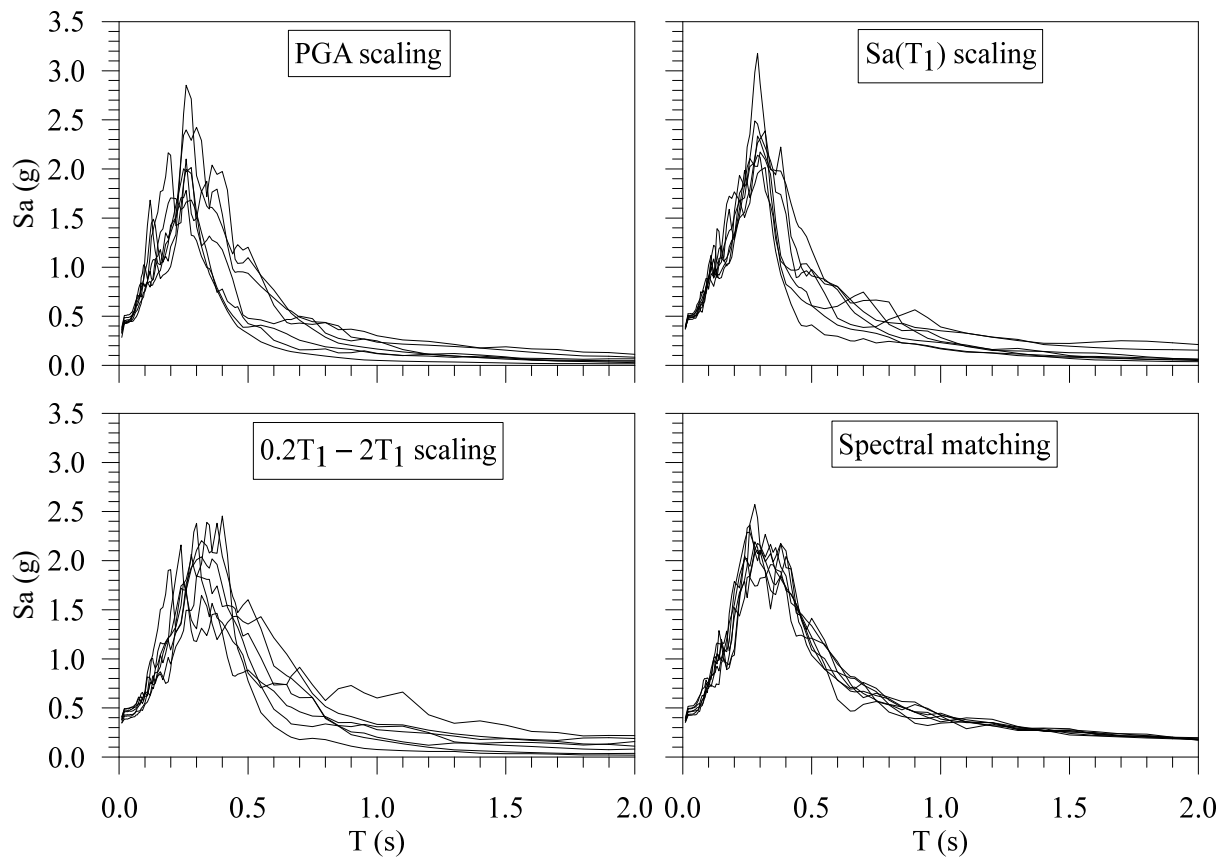


Figure S18. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.35 g and Soil E (i.e., VS₁(z) for H_{deposit} equal to 15 m).

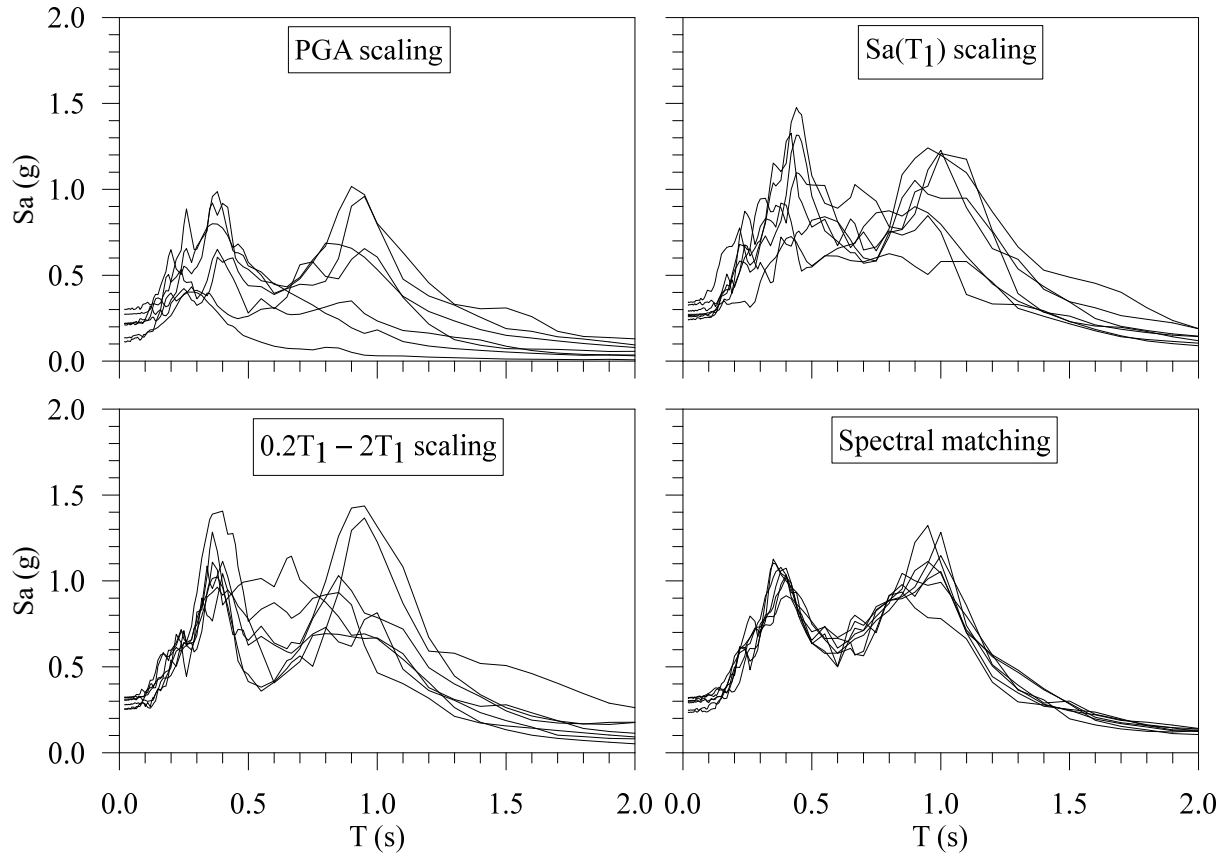


Figure S19. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.15 g and Soil D (i.e., VS₂(z) for H_{deposit} equal to 50 m).

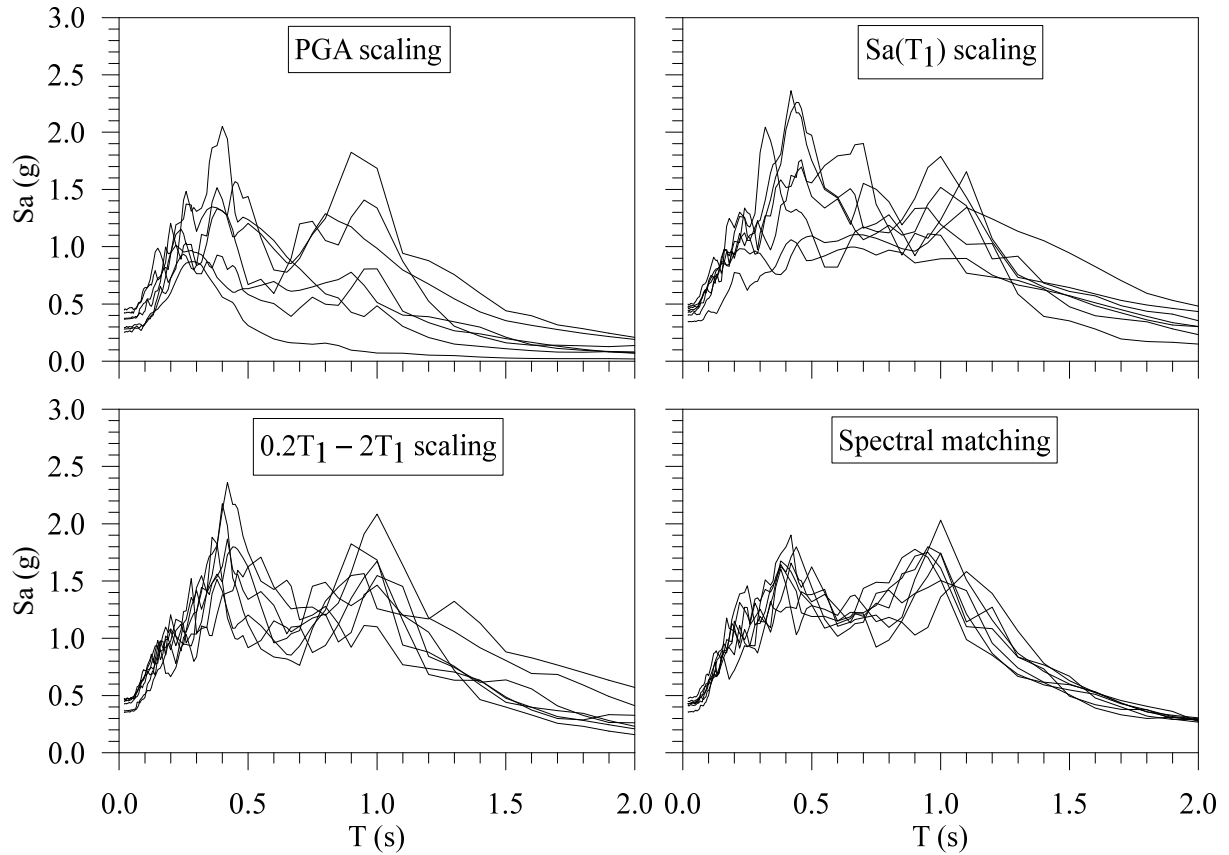


Figure S20. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.35 g and Soil D (i.e., VS₂(z) for H_{deposit} equal to 50 m).

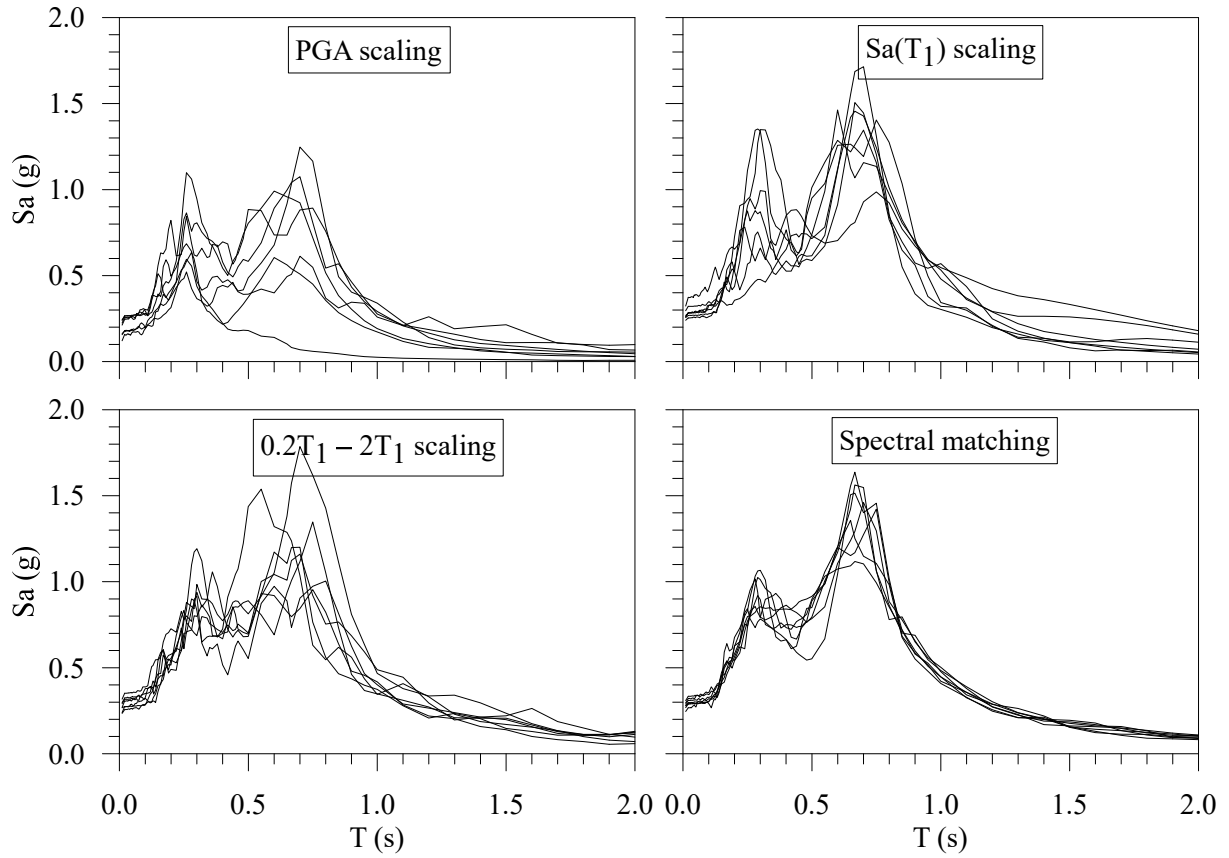


Figure S21. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.15 g and Soil D (i.e., VS₂(z) for H_{deposit} equal to 30 m).

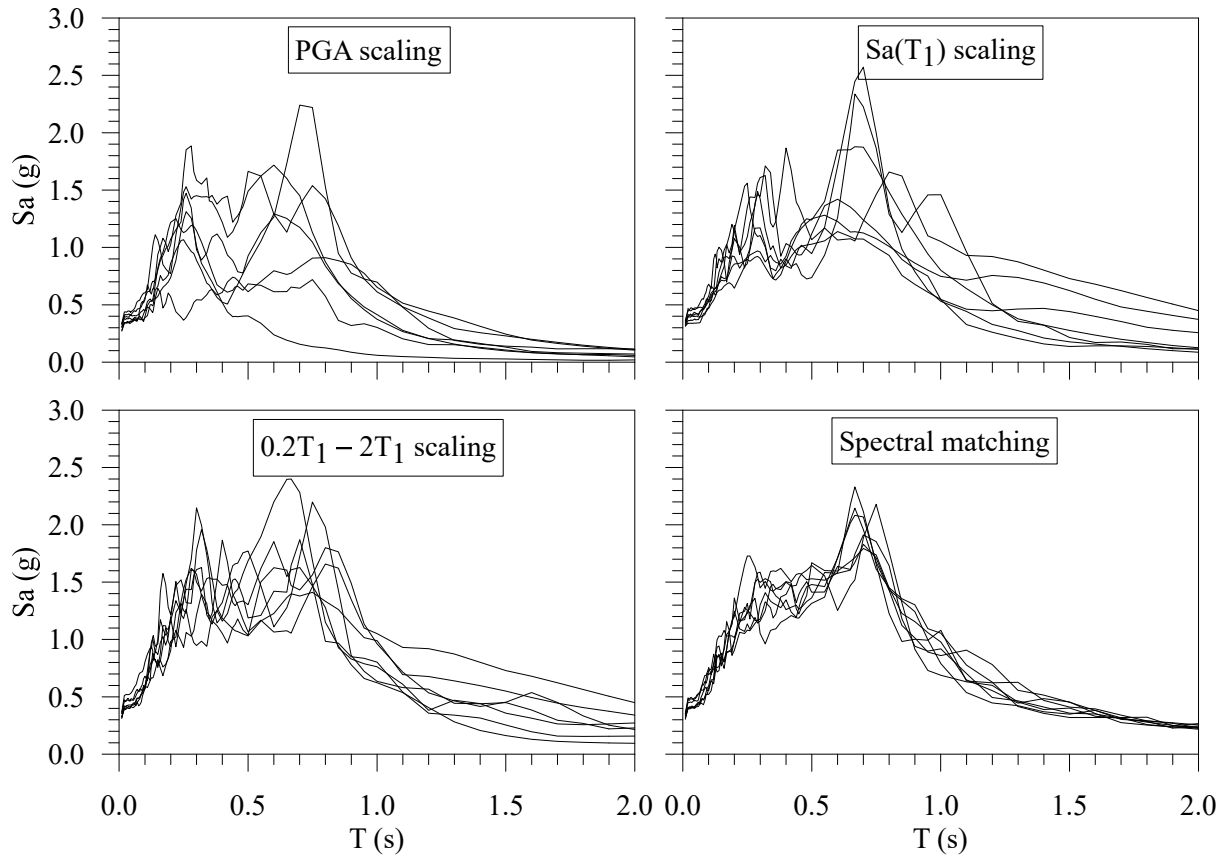


Figure S22. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.35 g and Soil D (i.e., VS₂(z) for H_{deposit} equal to 30 m).

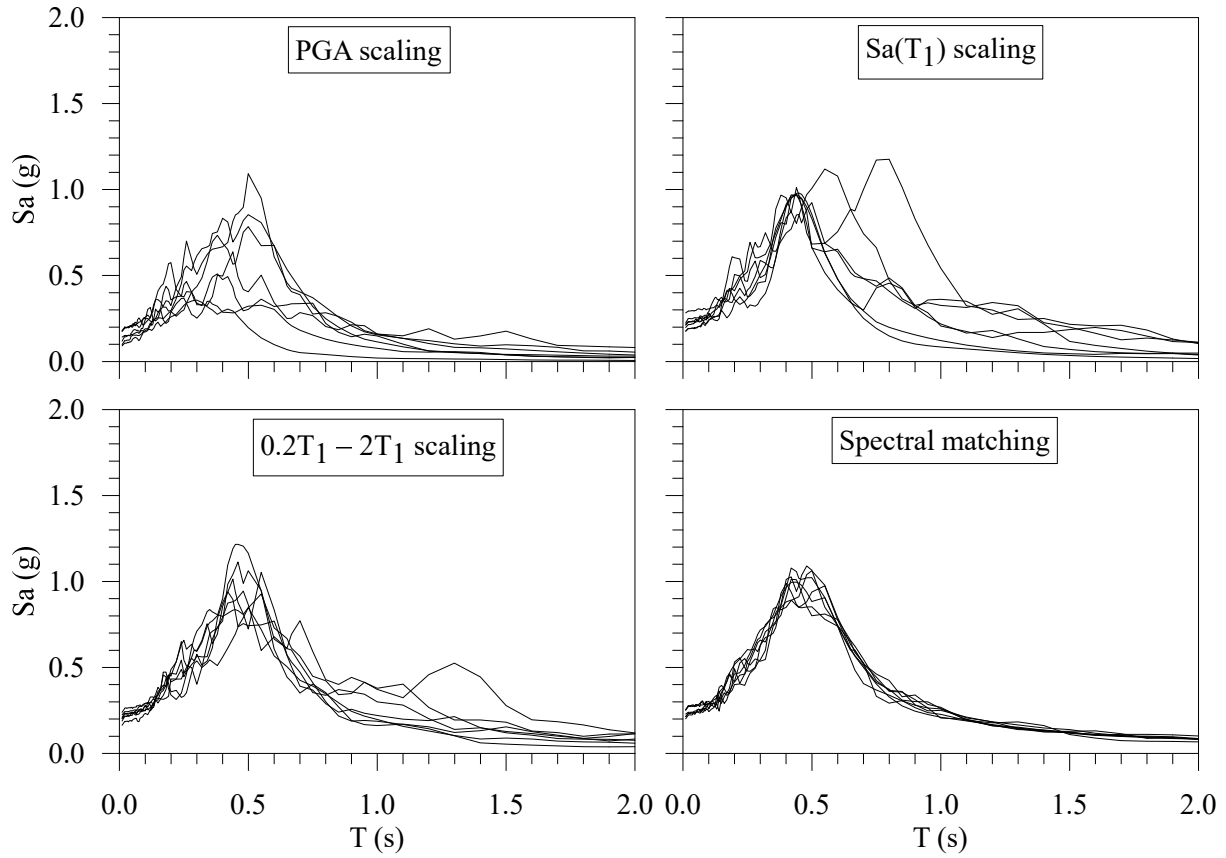


Figure S23. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.15 g and Soil E (i.e., VS₂(z) for H_{deposit} equal to 15 m).

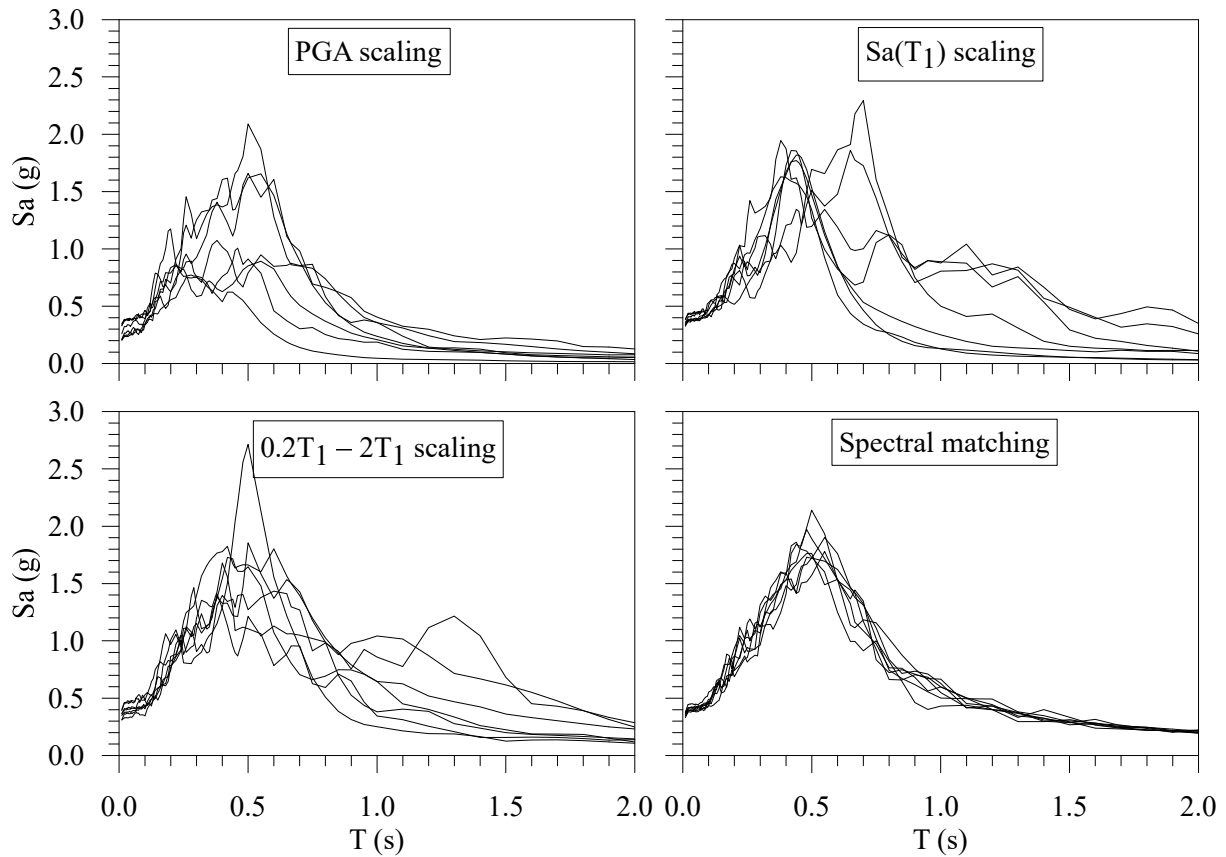


Figure S24. Response spectra in terms of pseudo-acceleration referred to the ground surface motions obtained by means of the LSSR analysis considering the input motions from the 4 selection strategies for PGA = 0.35 g and Soil E (i.e., VS₂(z) for H_{deposit} equal to 15 m).