5

Period (s)	a	b_1	b_2	c_1	c_2	h	c_3	e_B	e_D	R^2	σ_{eve}	σ_{sta}	σ_T	RMSE
0.1	**0.859**	**0.053**	**0.079**	**-2.226**	**0.007**	**1.424**	**0.007**	**0.414**	**0.421**	**0.825**	**0.290**	**0.232**	**0.441**	**0.442**
CI95	-1.803	-1.371	-0.118	-2.533	-0.184	0.445	0.003	0.283	0.248					
	3.521	1.476	0.276	-1.919	0.197	3.293	0.011	0.544	0.594					
BS_{mean}	*0.849*	*0.051*	*0.080*	*-2.220*	*0.004*	*1.231*	*0.007*	*0.417*	*0.425*					
BS_σ	*1.141*	*0.609*	*0.087*	*0.155*	*0.089*	*2.865*	*0.002*	*0.089*	*0.100*					
0.2	**1.062**	**0.042**	**0.080**	**-2.268**	**0.019**	**2.697**	**0.007**	**0.472**	**0.567**	**0.858**	**0.245**	**0.224**	**0.395**	**0.396**
CI95	-1.343	-1.234	-0.096	-2.604	-0.156	1.130	0.003	0.354	0.409					
	3.466	1.318	0.257	-1.933	0.195	4.263	0.011	0.590	0.724					
BS_{mean}	*1.073*	*0.039*	*0.082*	*-2.285*	*0.014*	*2.596*	*0.007*	*0.472*	*0.568*					
BS_σ	*1.016*	*0.537*	*0.076*	*0.165*	*0.082*	*0.943*	*0.002*	*0.068*	*0.075*					
0.25	**0.993**	**0.032**	**0.090**	**-2.232**	**0.007**	**3.172**	**0.007**	**0.471**	**0.518**	**0.866**	**0.225**	**0.222**	**0.376**	**0.378**
CI95	-1.311	-1.187	-0.078	-2.578	-0.163	1.579	0.003	0.358	0.366					
	3.297	1.250	0.259	-1.886	0.176	4.765	0.011	0.584	0.669					
BS_{mean}	*0.999*	*0.029*	*0.091*	*-2.232*	*0.006*	*3.080*	*0.007*	*0.470*	*0.515*					
BS_σ	*1.035*	*0.551*	*0.077*	*0.176*	*0.079*	*0.910*	*0.002*	*0.064*	*0.075*					
0.4	**-1.803**	**1.427**	**-0.105**	**-1.941**	**0.050**	**3.061**	**0.005**	**0.491**	**0.546**	**0.883**	**0.163**	**0.220**	**0.334**	**0.335**
CI95	-3.847	0.347	-0.255	-2.243	-0.100	1.466	0.001	0.391	0.412					
	0.240	2.508	0.044	-1.639	0.200	4.655	0.008	0.591	0.680					
BS_{mean}	*-1.832*	*1.446*	*-0.108*	*-1.946*	*0.049*	*3.038*	*0.005*	*0.491*	*0.546*					
BS_σ	*0.928*	*0.505*	*0.072*	*0.146*	*0.074*	*0.558*	*0.002*	*0.063*	*0.068*					
0.5	**-1.491**	**1.239**	**-0.081**	**-1.929**	**0.123**	**3.392**	**0.005**	**0.485**	**0.509**	**0.878**	**0.148**	**0.236**	**0.339**	**0.340**
CI95	-3.574	0.143	-0.232	-2.252	-0.030	1.709	0.001	0.383	0.373					
	0.592	2.336	0.071	-1.607	0.277	5.075	0.008	0.587	0.646					
BS_{mean}	*-1.508*	*1.248*	*-0.081*	*-1.935*	*0.120*	*3.367*	*0.005*	*0.487*	*0.512*					
BS_σ	*0.999*	*0.529*	*0.074*	*0.157*	*0.072*	*0.620*	*0.002*	*0.065*	*0.069*					
1	**-0.628**	**0.308**	**0.064**	**-1.533**	**0.239**	**2.732**	**0.001**	**0.465**	**0.406**	**0.869**	**0.125**	**0.265**	**0.354**	**0.355**
CI95	-2.794	-0.835	-0.095	-1.837	0.082	0.722	-0.003	0.359	0.265					
	1.538	1.452	0.222	-1.229	0.397	4.742	0.004	0.571	0.547					
BS_{mean}	*-0.613*	*0.298*	*0.066*	*-1.540*	*0.233*	*2.674*	*0.001*	*0.463*	*0.405*					
BS_σ	*1.098*	*0.586*	*0.082*	*0.155*	*0.077*	*0.886*	*0.002*	*0.069*	*0.073*					
1.25	**-1.856**	**0.789**	**0.017**	**-1.487**	**0.188**	**3.052**	**-0.001**	**0.431**	**0.367**	**0.878**	**0.132**	**0.248**	**0.341**	**0.343**
CI95	-3.952	-0.315	-0.135	-1.798	0.035	0.989	-0.004	0.329	0.230					
	0.241	1.893	0.170	-1.177	0.341	5.116	0.003	0.534	0.504					

BS$_{mean}$	-1.805	0.771	0.020	-1.501	0.190	3.058	-0.001	0.432	0.368					
BSσ	0.983	0.512	0.072	0.170	0.075	1.001	0.002	0.066	0.072					
2	**-4.859**	**1.750**	**-0.061**	**-1.200**	**0.077**	**2.847**	**-0.004**	**0.368**	**0.349**	**0.870**	**0.156**	**0.252**	**0.355**	**0.357**
CI95	-7.033	0.601	-0.220	-1.516	-0.082	0.248	-0.008	0.262	0.207					
	-2.684	2.900	0.098	-0.884	0.235	5.446	-0.001	0.475	0.491					
BS$_{mean}$	-4.781	1.722	-0.057	-1.219	0.079	2.821	-0.004	0.369	0.349					
BSσ	1.070	0.580	0.082	0.182	0.082	1.368	0.002	0.068	0.073					
2.5	**-5.108**	**1.663**	**-0.042**	**-1.100**	**0.058**	**2.615**	**-0.005**	**0.336**	**0.333**	**0.862**	**0.158**	**0.256**	**0.359**	**0.360**
CI95	-7.299	0.503	-0.203	-1.408	-0.101	0.189	-0.009	0.228	0.190					
	-2.918	2.823	0.119	-0.791	0.218	5.420	-0.002	0.443	0.476					
BS$_{mean}$	-4.998	1.623	-0.036	-1.135	0.058	-2.675	-0.005	0.334	0.330					
BSσ	1.122	0.596	0.082	0.201	0.084	1.603	0.002	0.066	0.072					
5	**-3.239**	**0.339**	**0.115**	**-1.109**	**0.186**	**0.955**	**-0.003**	**0.290**	**0.221**	**0.840**	**0.165**	**0.265**	**0.364**	**0.365**
CI95	-5.438	-0.836	-0.048	-1.348	0.030	-2.690	-0.006	0.182	0.079					
	-1.041	1.514	0.278	-0.869	0.342	4.600	0.001	0.397	0.364					
BS$_{mean}$	-3.115	0.255	0.127	-1.086	0.189	0.420	-0.003	0.293	0.225					
BSσ	1.138	0.622	0.086	0.148	0.091	1.212	0.002	0.062	0.066					
10	**-4.009**	**0.512**	**0.087**	**-1.342**	**0.140**	**1.892**	**-0.001**	**0.357**	**0.320**	**0.862**	**0.166**	**0.245**	**0.352**	**0.353**
CI95	-6.146	-0.626	-0.071	-1.608	-0.013	0.356	-0.004	0.253	0.181					
	-1.871	1.649	0.244	-1.077	0.294	4.140	0.002	0.462	0.459					
BS$_{mean}$	-3.965	0.480	0.093	-1.346	0.134	1.509	-0.001	0.357	0.318					
BSσ	1.045	0.561	0.078	0.148	0.081	1.365	0.002	0.064	0.069					

Table ESM1: Regression coefficients for PSA (cm/s2) at the different periods. R^2 is the determination coefficient. CI95 indicates the confidence intervals at 95% confidence level. BS$_{mean}$ and BSσ are the mean value and the standard deviation of each coefficient, respectively, estimated by applying the bootstrap technique.
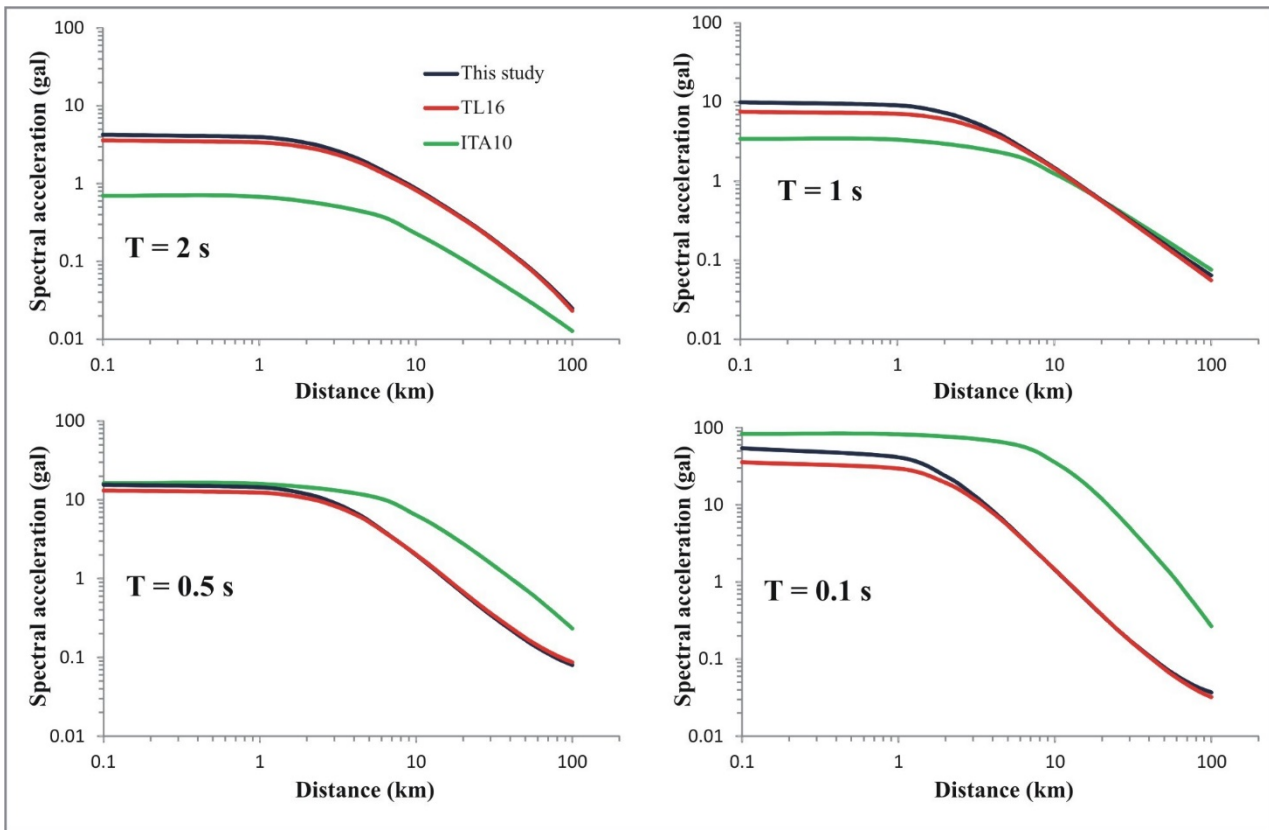
Figure ESM1: Comparison of the attenuation curves ITA10 (Bindi et al. 2011) and TL16 (Tusa and Langer, 2016) with the ones from this study for PSA considering M_L= 4 and several periods T.