

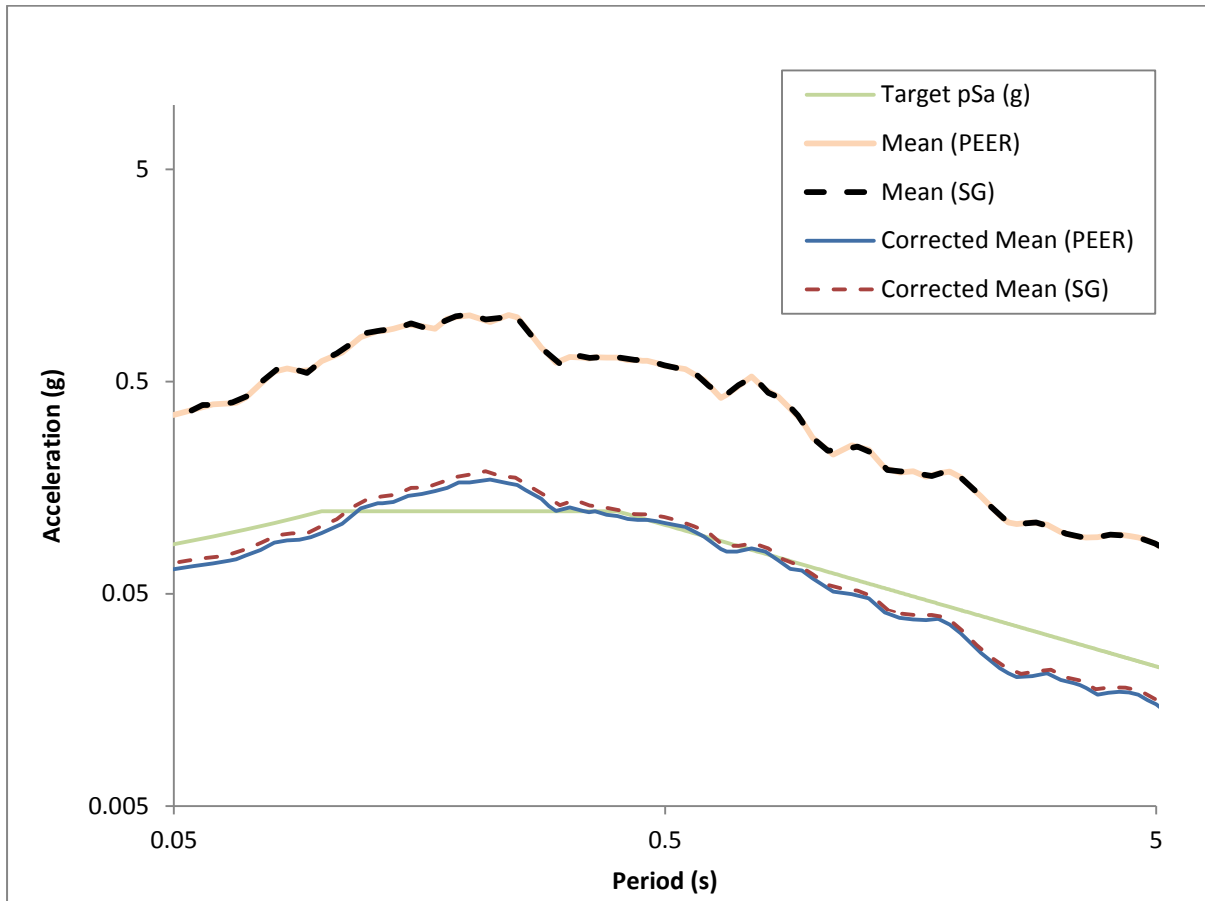
SEISMOGRAPH

Verification Examples (AI)

Scale Tool

Example 1 – Min MSE Method

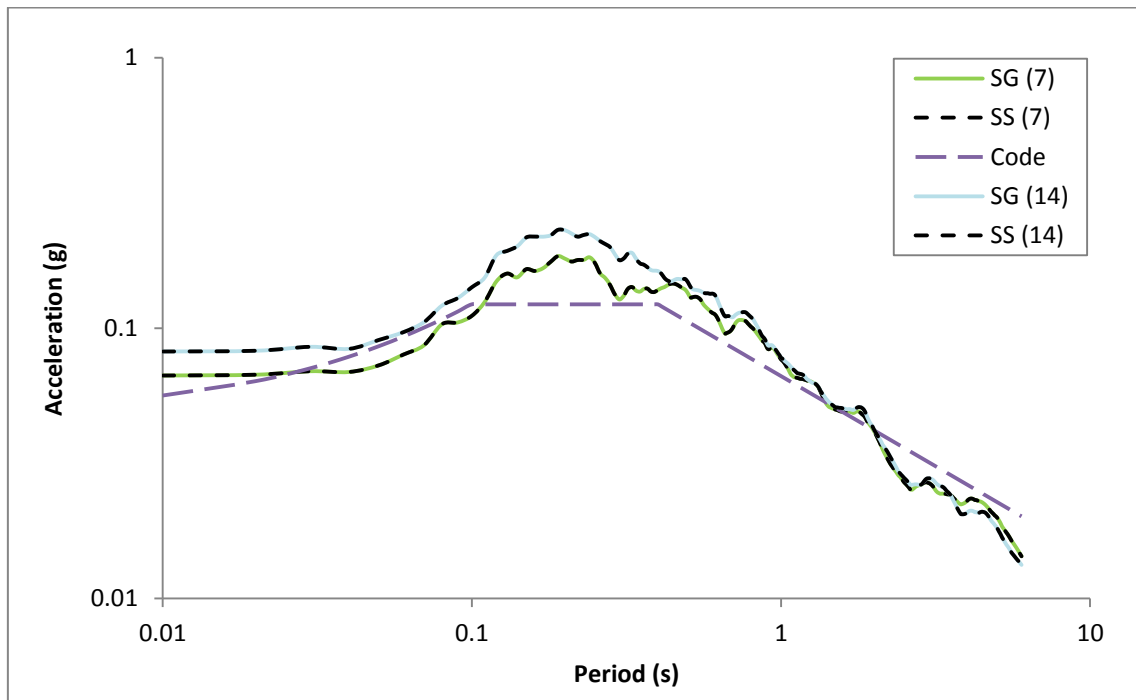
A comparison between the PEER NGA results and SG results. (See *Example 1.x/sx* file for more information)



Station	Mean Squared Error		Scale Factor	
	PEER	SG	PEER	SG
"Bajestan"	0.41	0.43	0.780	0.846
"Boshrooyeh"	0.02	0.02	0.313	0.330
"Dayhook"	0.06	0.05	0.128	0.138
"Ferdows"	0.19	0.21	0.519	0.574
"Kashmar"	0.09	0.10	0.715	0.725
"Sedeh"	0.08	0.07	1.377	1.409
"Tabas"	0.07	0.08	0.044	0.046

Example 2 – Free Adjustment Tool

A comparison between the Seismosignal results and SG results.



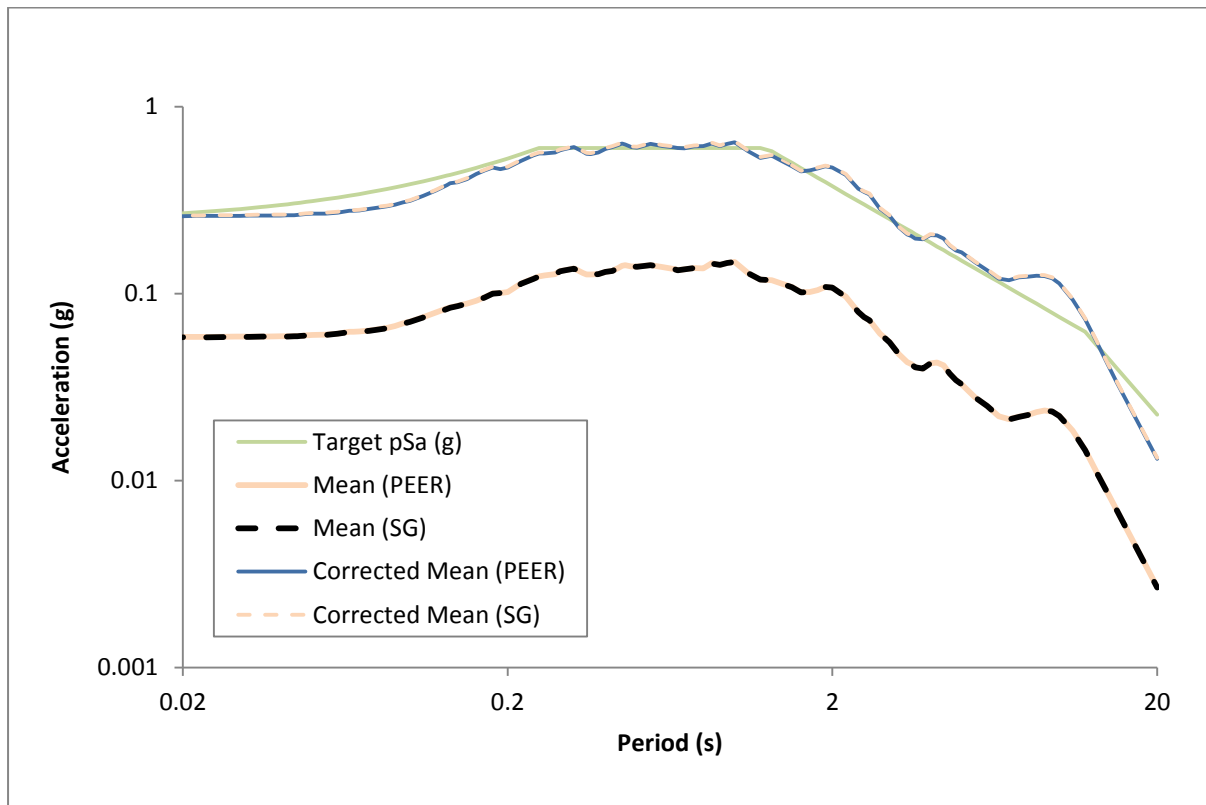
(Note: for each file sample Scale Factors have been determined manually using the Free Adjustment Tool. See *Example 2.xlsx* file for more information)

	Exempla 2-A	
	L	T
"Bajestan"	0.264268	0.278683
"Boshrooyeh"	0.433922	0.531556
"Dayhook"	0.065966	0.144759
"Ferdows"	0.40532	0.844415
"Kashmar"	0.784442	0.873343
"Sedeh"	1.77242	2.33462
"Tabas"	0.05986	0.084

	Exempla 2-B
"Bajestan L"	0.236401
"Bajestan R"	1.92639
"Boshrooyeh L"	0.242293
"Boshrooyeh R"	0.40068
"Dayhook L"	0.488495
"Dayhook R"	0.261278
"Ferdows L"	1.97283
"FerdowsR"	0.902616
"Kashmar L"	1.51866
"Kashmar R"	1.95969
"Sedeh L"	3.43071
"Sedeh R"	2.00968
"Tabas L"	0.0360928
"Tabas R"	0.0909542

Example 3 – Min MSE Method (11 Records)

A comparison between the PEER NGA results and SG results for RotD100 (Arithmetic suite average).

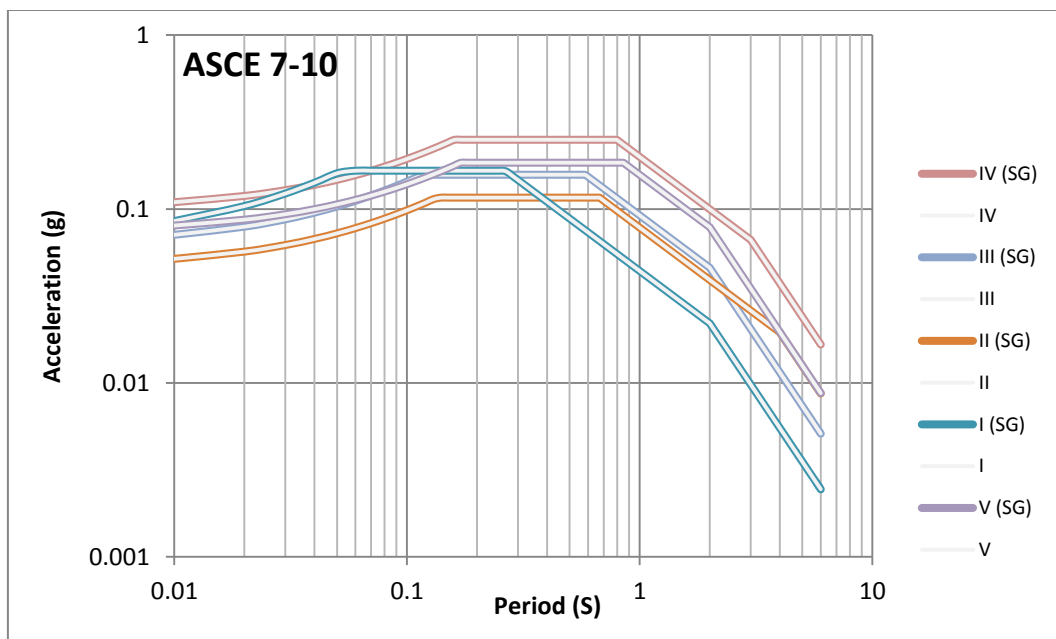
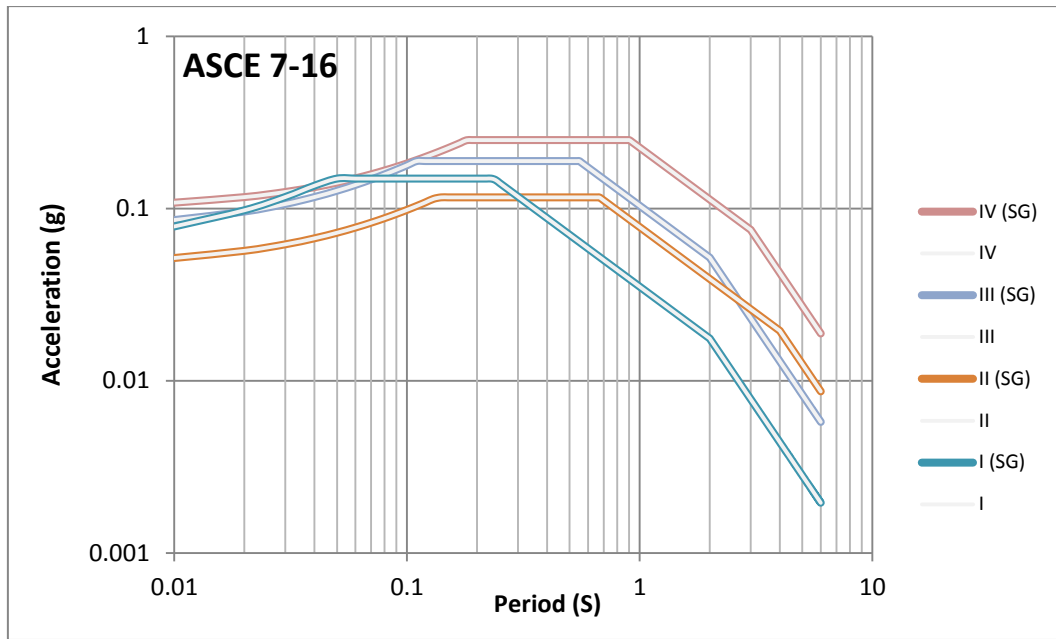


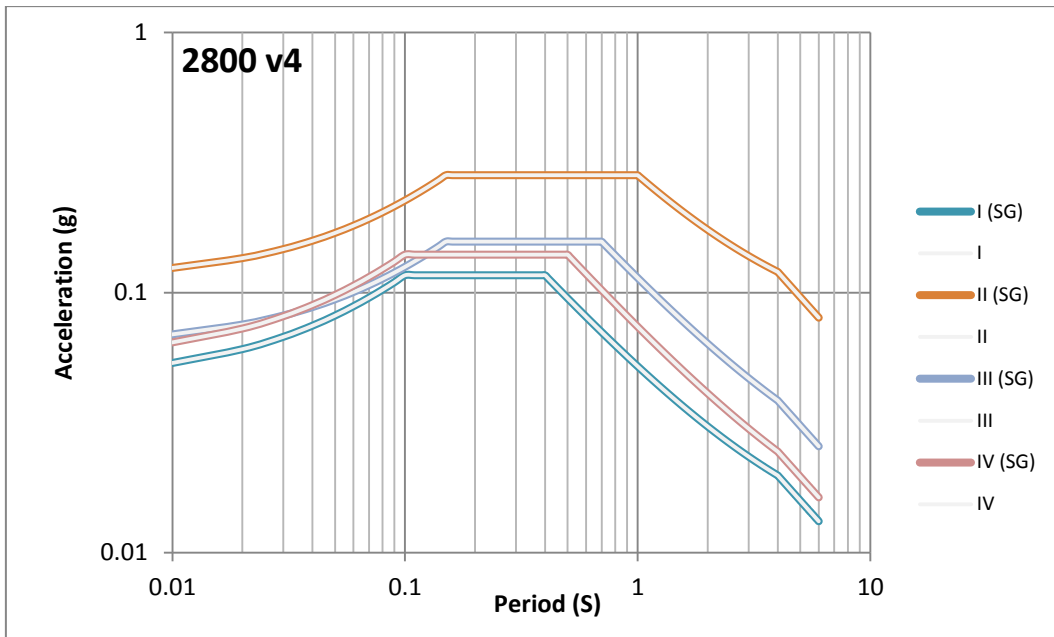
For other results (SRSS, RotD50 and Geomean) see *Example 3.xlsx*

Station	Mean Squared Error		Scale Factor	
	PEER	SG	PEER	SG
"Santa Barbara Courthouse"	0.021	0.021	2.234	2.259
"Kashmar"	0.028	0.027	5.694	5.720
"Bell Gardens - Jaboneria"	0.023	0.020	5.513	5.595
"Buena Park - La Palma"	0.020	0.017	4.879	4.873
"Compton - Castlegate St"	0.017	0.015	3.074	3.156
"Downey - Co Maint Bldg"	0.019	0.016	5.033	5.111
"Hacienda Heights - Colima"	0.023	0.021	4.387	4.486
"Inglewood - Union Oil"	0.020	0.017	5.419	5.453
"Lakewood - Del Amo Blvd"	0.019	0.015	3.517	3.543
"Sun Valley - Roscoe Blvd"	0.022	0.019	6.735	6.793
"Sun Valley - Sunland"	0.018	0.018	11.306	11.526

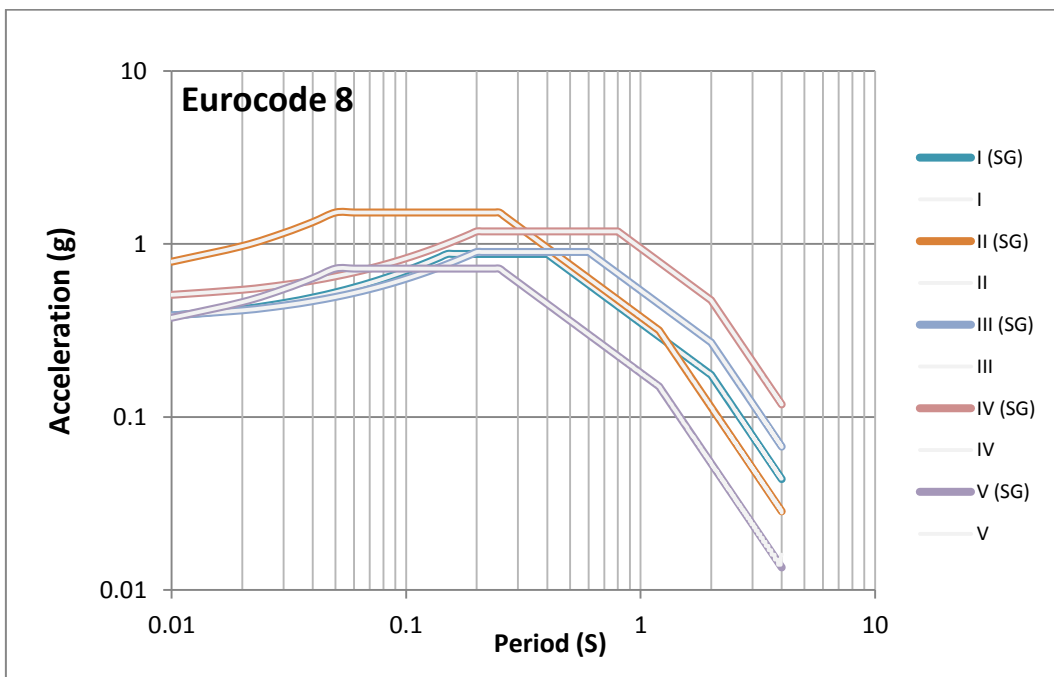
Example 4 – Code Spectrums Example

A comparison between the independent results and SG results for all available soil types of the three Code Spectrums. (See *Example 4.xlsx* file for more information)





For Eurocode 8, SG results are compared with the results taken from the eurocodeapplied.com.



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