

# Bellefonte (34.71° N, 85.93° E), Control Point Hazard

SA (g)	AFE 0.5 Hz	AFE 1 Hz	AFE 2.5 Hz	AFE 5 Hz	AFE 10 Hz	AFE 25 Hz	AFE 100 Hz
0.001000	1.036940e-02	1.760401e-02	2.635982e-02	2.807766e-02	2.840702e-02	2.779682e-02	2.602971e-02
0.001122	9.764001e-03	1.667430e-02	2.573509e-02	2.787347e-02	2.828233e-02	2.748759e-02	2.546070e-02
0.001259	9.176823e-03	1.576977e-02	2.510806e-02	2.757249e-02	2.803998e-02	2.711937e-02	2.477352e-02
0.001413	8.618685e-03	1.487887e-02	2.441501e-02	2.719785e-02	2.775669e-02	2.669310e-02	2.402962e-02
0.001585	8.088001e-03	1.400192e-02	2.365616e-02	2.676115e-02	2.741884e-02	2.619997e-02	2.321630e-02
0.001778	7.583569e-03	1.314763e-02	2.283519e-02	2.625506e-02	2.701763e-02	2.564128e-02	2.233988e-02
0.001995	7.104405e-03	1.231758e-02	2.196020e-02	2.567948e-02	2.655002e-02	2.501514e-02	2.140917e-02
0.002239	6.649065e-03	1.151753e-02	2.103760e-02	2.503205e-02	2.601349e-02	2.432174e-02	2.043478e-02
0.002512	6.216292e-03	1.074651e-02	2.007095e-02	2.431286e-02	2.540480e-02	2.356275e-02	1.942202e-02
0.002818	5.804759e-03	1.000850e-02	1.907069e-02	2.352248e-02	2.472283e-02	2.274331e-02	1.838418e-02
0.003162	5.413674e-03	9.303061e-03	1.804437e-02	2.266570e-02	2.396952e-02	2.187046e-02	1.733011e-02
0.003548	5.041515e-03	8.632372e-03	1.700405e-02	2.174822e-02	2.314934e-02	2.095052e-02	1.627431e-02
0.003981	4.687553e-03	7.995168e-03	1.595527e-02	2.077674e-02	2.226715e-02	1.999390e-02	1.522339e-02
0.004467	4.349759e-03	7.392532e-03	1.491123e-02	1.976054e-02	2.133057e-02	1.900782e-02	1.419087e-02
0.005012	4.027622e-03	6.822872e-03	1.387603e-02	1.870782e-02	2.034746e-02	1.800460e-02	1.318151e-02
0.005623	3.718476e-03	6.286227e-03	1.286286e-02	1.763072e-02	1.932814e-02	1.699176e-02	1.220627e-02
0.006310	3.422259e-03	5.780968e-03	1.187450e-02	1.653846e-02	1.828270e-02	1.598135e-02	1.126793e-02
0.007079	3.136041e-03	5.305686e-03	1.092274e-02	1.544434e-02	1.722260e-02	1.497955e-02	1.037337e-02
0.007943	2.860118e-03	4.858807e-03	1.000823e-02	1.435687e-02	1.615803e-02	1.399650e-02	9.523104e-03
0.008913	2.592442e-03	4.437319e-03	9.140768e-03	1.328888e-02	1.509974e-02	1.303699e-02	8.719628e-03
0.010000	2.333948e-03	4.040220e-03	8.319465e-03	1.224765e-02	1.405723e-02	1.210798e-02	7.962040e-03
0.011220	2.084156e-03	3.663182e-03	7.550331e-03	1.124361e-02	1.303917e-02	1.121209e-02	7.246010e-03
0.012589	1.844162e-03	3.305900e-03	6.830914e-03	1.028144e-02	1.205253e-02	1.035341e-02	6.573281e-03
0.014125	1.615918e-03	2.964862e-03	6.163032e-03	9.368166e-03	1.110323e-02	9.530282e-03	5.940496e-03
0.015849	1.399734e-03	2.639785e-03	5.542930e-03	8.505251e-03	1.019526e-02	8.728789e-03	5.345226e-03
0.017783	1.198794e-03	2.329438e-03	4.967741e-03	7.694939e-03	9.330695e-03	7.967912e-03	4.785358e-03
0.019953	1.013638e-03	2.035589e-03	4.435380e-03	6.937079e-03	8.511540e-03	7.248037e-03	4.260525e-03
0.022387	8.469956e-04	1.759432e-03	3.940282e-03	6.230247e-03	7.737921e-03	6.566974e-03	3.770454e-03
0.025119	6.975861e-04	1.501122e-03	3.480370e-03	5.571944e-03	7.008913e-03	5.923431e-03	3.314083e-03
0.028184	5.673970e-04	1.264206e-03	3.051039e-03	4.959728e-03	6.323270e-03	5.316778e-03	2.892916e-03
0.031623	4.546542e-04	1.048760e-03	2.652055e-03	4.390798e-03	5.678952e-03	4.746862e-03	2.506798e-03
0.035481	3.599197e-04	8.582884e-04	2.282608e-03	3.862396e-03	5.074574e-03	4.213320e-03	2.157444e-03
0.039811	2.806215e-04	6.908813e-04	1.942367e-03	3.372807e-03	4.508934e-03	3.716900e-03	1.843604e-03
0.044668	2.162685e-04	5.486208e-04	1.633820e-03	2.921820e-03	3.981683e-03	3.257415e-03	1.565685e-03
0.050119	1.641846e-04	4.282706e-04	1.355620e-03	2.508604e-03	3.492337e-03	2.835905e-03	1.321372e-03
0.056234	1.233016e-04	3.300593e-04	1.111124e-03	2.134333e-03	3.041339e-03	2.451941e-03	1.109334e-03
0.063096	9.128099e-05	2.501890e-04	8.974533e-04	1.798129e-03	2.628671e-03	2.105809e-03	9.255818e-04
0.070795	6.692402e-05	1.874933e-04	7.163570e-04	1.500789e-03	2.254698e-03	1.796273e-03	7.687837e-04
0.079433	4.842162e-05	1.383818e-04	5.634936e-04	1.240364e-03	1.918898e-03	1.522475e-03	6.361026e-04
0.089125	3.475005e-05	1.011795e-04	4.386490e-04	1.016131e-03	1.620690e-03	1.282812e-03	5.245933e-04
0.100000	2.465916e-05	7.304197e-05	3.370596e-04	8.249502e-04	1.358658e-03	1.076641e-03	4.312744e-04
0.112202	1.739506e-05	5.238384e-05	2.568544e-04	6.644628e-04	1.131001e-03	9.007504e-04	3.535844e-04
0.125893	1.216861e-05	3.722711e-05	1.936901e-04	5.310718e-04	9.351420e-04	7.500126e-04	2.891617e-04
0.141254	8.488368e-06	2.637892e-05	1.452558e-04	4.218513e-04	7.682714e-04	6.215356e-04	2.360281e-04
0.158489	5.897427e-06	1.861615e-05	1.081658e-04	3.331505e-04	6.275436e-04	5.128721e-04	1.921796e-04

0.177828	4.100978e-06	1.315289e-05	8.033372e-05	2.619184e-04	5.100552e-04	4.215939e-04	1.561228e-04
0.199526	2.855443e-06	9.307910e-06	5.947938e-05	2.050890e-04	4.128010e-04	3.454834e-04	1.265839e-04
0.223872	1.997327e-06	6.617984e-06	4.404964e-05	1.601362e-04	3.328908e-04	2.823825e-04	1.024436e-04
0.251189	1.406442e-06	4.737240e-06	3.264054e-05	1.247319e-04	2.675909e-04	2.302029e-04	8.274341e-05
0.281838	9.975163e-07	3.413897e-06	2.423996e-05	9.699112e-05	2.145233e-04	1.872015e-04	6.668224e-05
0.316228	7.145144e-07	2.482631e-06	1.805734e-05	7.531800e-05	1.716141e-04	1.518975e-04	5.358591e-05
0.354813	5.154570e-07	1.816199e-06	1.348839e-05	5.843669e-05	1.370398e-04	1.229935e-04	4.291422e-05
0.398107	3.754877e-07	1.339383e-06	1.011181e-05	4.530039e-05	1.092570e-04	9.938653e-05	3.423727e-05
0.446684	2.748232e-07	9.909986e-07	7.593692e-06	3.508318e-05	8.696299e-05	8.013772e-05	2.719180e-05
0.501187	2.024402e-07	7.364534e-07	5.715114e-06	2.713811e-05	6.909245e-05	6.445751e-05	2.147858e-05
0.562341	1.493023e-07	5.472469e-07	4.299982e-06	2.095818e-05	5.478105e-05	5.169327e-05	1.686059e-05
0.630957	1.102908e-07	4.065957e-07	3.233358e-06	1.615026e-05	4.332388e-05	4.130947e-05	1.314130e-05
0.707946	8.129184e-08	3.011525e-07	2.425046e-06	1.240963e-05	3.415293e-05	3.286900e-05	1.015891e-05
0.794328	5.973626e-08	2.221068e-07	1.812119e-06	9.500784e-06	2.681997e-05	2.601756e-05	7.780593e-06
0.891251	4.367498e-08	1.628907e-07	1.347459e-06	7.240507e-06	2.095907e-05	2.046255e-05	5.900130e-06
1.000000	3.171236e-08	1.185529e-07	9.952710e-07	5.485755e-06	1.628269e-05	1.596934e-05	4.427712e-06
1.122019	2.285617e-08	8.561813e-08	7.298495e-07	4.129614e-06	1.255875e-05	1.234929e-05	3.283096e-06
1.258925	1.630356e-08	6.117008e-08	5.299558e-07	3.083825e-06	9.605196e-06	9.444747e-06	2.401945e-06
1.412538	1.151665e-08	4.327052e-08	3.810697e-07	2.282254e-06	7.275272e-06	7.125345e-06	1.731696e-06
1.584893	8.019879e-09	3.016833e-08	2.702107e-07	1.670368e-06	5.443824e-06	5.284816e-06	1.227382e-06
1.778279	5.507556e-09	2.074199e-08	1.890385e-07	1.207035e-06	4.014263e-06	3.834917e-06	8.530949e-07
1.995262	3.706438e-09	1.397111e-08	1.297825e-07	8.584100e-07	2.906305e-06	2.700574e-06	5.788513e-07
2.238721	2.439372e-09	9.201794e-09	8.717431e-08	5.988203e-07	2.056002e-06	1.819879e-06	3.809454e-07
2.511886	1.548329e-09	5.843750e-09	5.660083e-08	4.067638e-07	1.408619e-06	1.141995e-06	2.406632e-07
2.818383	9.349214e-10	3.530043e-09	3.507783e-08	2.662428e-07	9.208732e-07	6.251116e-07	1.435309e-07
3.162278	5.825293e-10	2.199551e-09	2.232868e-08	1.784053e-07	6.067703e-07	3.470079e-07	8.989487e-08
3.548134	2.301372e-10	8.690592e-10	9.579544e-09	9.056782e-08	2.926673e-07	6.890427e-08	3.625881e-08

## Bellefonte (34.71° N, 85.93° E), Response Spectra

Frequency (Hz)	UHSR 1E-4 (g)	GMRS (g)	UHSR 1E-5 (g)
0.500000	0.060930	0.068694	0.134044
0.561009	0.065564	0.073913	0.144226
0.629463	0.070288	0.079077	0.154225
0.706269	0.074962	0.084223	0.164206
0.792447	0.079735	0.089407	0.174226
0.889140	0.084506	0.094632	0.184348
0.997631	0.089397	0.099940	0.194605
1.000000	0.089495	0.100049	0.194818
1.122019	0.097857	0.112642	0.220947
1.258925	0.106598	0.125102	0.246577
1.412538	0.115599	0.137459	0.271825
1.584893	0.124760	0.149790	0.296923
1.778279	0.134099	0.162159	0.322018
1.995262	0.143654	0.174677	0.347357
2.238721	0.153418	0.187549	0.373454
2.500000	0.163378	0.200606	0.399891
2.805046	0.177583	0.226475	0.455761

3.147313	0.193429	0.253469	0.513554
3.531344	0.211036	0.281709	0.573420
3.962233	0.230892	0.311993	0.637000
4.445698	0.253294	0.344740	0.705130
4.988156	0.277925	0.379549	0.776987
5.000000	0.278455	0.380290	0.778513
5.610092	0.302521	0.421270	0.866609
6.294627	0.328501	0.464036	0.958001
7.062688	0.354403	0.505369	1.045798
7.924466	0.378828	0.543241	1.125749
8.891397	0.399402	0.573441	1.188692
9.976312	0.415958	0.596615	1.236421
10.000000	0.416290	0.597064	1.237337
11.220185	0.406816	0.586088	1.215947
12.589254	0.396646	0.573485	1.190865
14.125375	0.383230	0.557011	1.158180
15.848932	0.373715	0.545990	1.136729
17.782794	0.370824	0.544375	1.134729
19.952623	0.376476	0.555288	1.158843
22.387211	0.396786	0.587950	1.228422
25.000000	0.419483	0.621282	1.297905
28.050461	0.444082	0.657337	1.373031
31.473135	0.462902	0.685606	1.432293
35.313439	0.472558	0.698633	1.458842
39.622330	0.462703	0.684478	1.429503
44.456985	0.441273	0.652027	1.361338
49.881558	0.415545	0.614137	1.282296
55.968028	0.389449	0.576838	1.205078
62.797161	0.364994	0.541677	1.132178
70.459573	0.340309	0.506510	1.059442
79.056942	0.311771	0.465315	0.973948
88.703347	0.279282	0.417515	0.874260
99.526793	0.249806	0.373753	0.782782
100.000000	0.226805	0.340131	0.712780