

# Hatch (31.93° N, 82.34° 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	6.940776e-03	1.059251e-02	1.510342e-02	1.591825e-02	1.605500e-02	1.587410e-02	1.495367e-02
0.001122	6.940216e-03	1.059251e-02	1.510342e-02	1.591825e-02	1.605500e-02	1.587410e-02	1.495367e-02
0.001259	6.936746e-03	1.059251e-02	1.510342e-02	1.591825e-02	1.605500e-02	1.587410e-02	1.495367e-02
0.001413	6.919801e-03	1.059247e-02	1.510342e-02	1.591824e-02	1.605493e-02	1.587410e-02	1.495367e-02
0.001585	6.856577e-03	1.059205e-02	1.510341e-02	1.591819e-02	1.605311e-02	1.587392e-02	1.495367e-02
0.001778	6.715471e-03	1.058922e-02	1.510339e-02	1.591728e-02	1.604157e-02	1.586905e-02	1.495367e-02
0.001995	6.513215e-03	1.057690e-02	1.510291e-02	1.590972e-02	1.600847e-02	1.583860e-02	1.495364e-02
0.002239	6.276048e-03	1.054109e-02	1.509836e-02	1.587729e-02	1.594142e-02	1.574684e-02	1.495015e-02
0.002512	6.021108e-03	1.046823e-02	1.507389e-02	1.579650e-02	1.583059e-02	1.559463e-02	1.488332e-02
0.002818	5.761403e-03	1.035381e-02	1.499304e-02	1.566150e-02	1.568590e-02	1.541392e-02	1.462168e-02
0.003162	5.504375e-03	1.018794e-02	1.481871e-02	1.548382e-02	1.551244e-02	1.520197e-02	1.427190e-02
0.003548	5.251918e-03	9.940154e-03	1.455124e-02	1.527112e-02	1.530605e-02	1.495440e-02	1.388588e-02
0.003981	5.002959e-03	9.596922e-03	1.422035e-02	1.502235e-02	1.506319e-02	1.466892e-02	1.345637e-02
0.004467	4.755433e-03	9.189757e-03	1.384773e-02	1.473492e-02	1.478117e-02	1.434379e-02	1.298372e-02
0.005012	4.507347e-03	8.759181e-03	1.343996e-02	1.440683e-02	1.445741e-02	1.397705e-02	1.247134e-02
0.005623	4.256925e-03	8.328489e-03	1.299944e-02	1.403646e-02	1.409015e-02	1.356812e-02	1.192230e-02
0.006310	4.002929e-03	7.907078e-03	1.252882e-02	1.362288e-02	1.367863e-02	1.311783e-02	1.134002e-02
0.007079	3.744638e-03	7.497844e-03	1.203109e-02	1.316626e-02	1.322358e-02	1.262852e-02	1.073024e-02
0.007943	3.482084e-03	7.101287e-03	1.150968e-02	1.266791e-02	1.272673e-02	1.210335e-02	1.009991e-02
0.008913	3.216081e-03	6.716964e-03	1.096847e-02	1.213009e-02	1.219115e-02	1.154691e-02	9.457395e-03
0.010000	2.948441e-03	6.343899e-03	1.041151e-02	1.155619e-02	1.162122e-02	1.096475e-02	8.810077e-03
0.011220	2.682185e-03	5.980737e-03	9.842748e-03	1.095084e-02	1.102256e-02	1.036345e-02	8.167109e-03
0.012589	2.421081e-03	5.625885e-03	9.265949e-03	1.031993e-02	1.040197e-02	9.750210e-03	7.535393e-03
0.014125	2.167976e-03	5.277687e-03	8.684765e-03	9.670558e-03	9.766848e-03	9.132268e-03	6.923049e-03
0.015849	1.924838e-03	4.934615e-03	8.102821e-03	9.010724e-03	9.125157e-03	8.516817e-03	6.335157e-03
0.017783	1.693721e-03	4.595474e-03	7.523814e-03	8.348954e-03	8.484656e-03	7.910324e-03	5.777018e-03
0.019953	1.476356e-03	4.259580e-03	6.951566e-03	7.693915e-03	7.852997e-03	7.318833e-03	5.250996e-03
0.022387	1.274284e-03	3.926903e-03	6.390065e-03	7.053906e-03	7.236851e-03	6.746913e-03	4.758984e-03
0.025119	1.088631e-03	3.598158e-03	5.843464e-03	6.436322e-03	6.642052e-03	6.195120e-03	4.293191e-03
0.028184	9.202777e-04	3.274844e-03	5.315921e-03	5.847248e-03	6.073002e-03	5.640543e-03	3.806231e-03
0.031623	7.698028e-04	2.958997e-03	4.811360e-03	5.291197e-03	5.532637e-03	5.047559e-03	3.301419e-03
0.035481	6.373334e-04	2.652751e-03	4.333193e-03	4.770992e-03	5.018296e-03	4.428838e-03	2.839036e-03
0.039811	5.223416e-04	2.358078e-03	3.884037e-03	4.287791e-03	4.522621e-03	3.847818e-03	2.425530e-03
0.044668	4.238728e-04	2.076861e-03	3.465301e-03	3.840782e-03	4.044880e-03	3.322543e-03	2.056862e-03
0.050119	3.406591e-04	1.811084e-03	3.076830e-03	3.426266e-03	3.588110e-03	2.850384e-03	1.729184e-03
0.056234	2.712187e-04	1.562980e-03	2.717504e-03	3.039130e-03	3.158912e-03	2.428097e-03	1.439406e-03
0.063096	2.139604e-04	1.334777e-03	2.386525e-03	2.677708e-03	2.764079e-03	2.052650e-03	1.185232e-03
0.070795	1.672879e-04	1.128051e-03	2.083402e-03	2.344060e-03	2.404426e-03	1.721101e-03	9.642679e-04
0.079433	1.296733e-04	9.434033e-04	1.807576e-03	2.039478e-03	2.078256e-03	1.430473e-03	7.733335e-04
0.089125	9.968183e-05	7.805550e-04	1.558371e-03	1.762955e-03	1.783676e-03	1.178039e-03	6.104211e-04
0.100000	7.601615e-05	6.385789e-04	1.334512e-03	1.512739e-03	1.518765e-03	9.611665e-04	4.723351e-04
0.112202	5.751333e-05	5.161911e-04	1.134300e-03	1.287292e-03	1.281292e-03	7.765988e-04	3.569445e-04
0.125893	4.316101e-05	4.120884e-04	9.560222e-04	1.085298e-03	1.069564e-03	6.209407e-04	2.634651e-04
0.141254	3.211042e-05	3.248674e-04	7.981109e-04	9.053137e-04	8.833514e-04	4.911750e-04	1.910881e-04
0.158489	2.368155e-05	2.527715e-04	6.592295e-04	7.458196e-04	7.218005e-04	3.844677e-04	1.364847e-04

0.177828	1.731829e-05	1.939484e-04	5.380485e-04	6.059267e-04	5.824882e-04	2.972630e-04	9.598352e-05
0.199526	1.256335e-05	1.467834e-04	4.332100e-04	4.850073e-04	4.635689e-04	2.268621e-04	6.643167e-05
0.223872	9.049907e-06	1.096781e-04	3.438043e-04	3.819709e-04	3.637911e-04	1.715727e-04	4.532763e-05
0.251189	6.483567e-06	8.091016e-05	2.689753e-04	2.958786e-04	2.810774e-04	1.286267e-04	3.051314e-05
0.281838	4.625464e-06	5.888551e-05	2.072332e-04	2.256819e-04	2.131649e-04	9.503674e-05	2.029895e-05
0.316228	3.290358e-06	4.226993e-05	1.569409e-04	1.694679e-04	1.587835e-04	6.897104e-05	1.338526e-05
0.354813	2.336763e-06	2.994463e-05	1.168297e-04	1.250821e-04	1.165799e-04	4.956136e-05	8.743244e-06
0.398107	1.658132e-06	2.095253e-05	8.560686e-05	9.075779e-05	8.420221e-05	3.526604e-05	5.660524e-06
0.446684	1.176063e-06	1.448970e-05	6.180133e-05	6.479157e-05	5.979501e-05	2.468404e-05	3.636905e-06
0.501187	8.341779e-07	9.909955e-06	4.398111e-05	4.547817e-05	4.188715e-05	1.702324e-05	2.326318e-06
0.562341	5.920233e-07	6.711665e-06	3.086809e-05	3.137219e-05	2.904794e-05	1.165875e-05	1.477349e-06
0.630957	4.203562e-07	4.509928e-06	2.136018e-05	2.129401e-05	1.992101e-05	7.951963e-06	9.331392e-07
0.707946	2.982770e-07	3.011985e-06	1.456403e-05	1.424512e-05	1.347252e-05	5.344839e-06	5.848561e-07
0.794328	2.113257e-07	2.002497e-06	9.779784e-06	9.419707e-06	8.974979e-06	3.534566e-06	3.631682e-07
0.891251	1.495754e-07	1.328701e-06	6.458099e-06	6.171800e-06	5.883493e-06	2.316151e-06	2.228046e-07
1.000000	1.059531e-07	8.830293e-07	4.193029e-06	4.010303e-06	3.816994e-06	1.488721e-06	1.347801e-07
1.122019	7.525080e-08	5.894630e-07	2.685080e-06	2.586310e-06	2.459605e-06	9.340555e-07	7.993438e-08
1.258925	5.364605e-08	3.958207e-07	1.702284e-06	1.654220e-06	1.573225e-06	5.657379e-07	4.643180e-08
1.412538	3.839795e-08	2.678464e-07	1.072336e-06	1.051985e-06	9.952746e-07	3.266672e-07	2.629939e-08
1.584893	2.759073e-08	1.829561e-07	6.729998e-07	6.667410e-07	6.149979e-07	1.786881e-07	1.449763e-08
1.778279	1.990178e-08	1.261245e-07	4.215613e-07	4.212849e-07	3.712792e-07	9.130983e-08	7.716512e-09
1.995262	1.440703e-08	8.760906e-08	2.646483e-07	2.617537e-07	2.162541e-07	4.214362e-08	3.904919e-09
2.238721	1.044820e-08	6.116312e-08	1.671991e-07	1.582682e-07	1.209641e-07	1.695811e-08	1.846011e-09
2.511886	7.569471e-09	4.292369e-08	1.064165e-07	9.464831e-08	6.495741e-08	5.665627e-09	7.689877e-10
2.818383	5.468489e-09	3.009582e-08	6.794723e-08	5.623950e-08	3.304067e-08	1.391766e-09	2.557892e-10
3.162278	3.939634e-09	2.089860e-08	4.342386e-08	3.278971e-08	1.579632e-08	2.124640e-10	5.077530e-11
3.548134	2.830400e-09	1.437501e-08	2.781220e-08	1.841760e-08	6.807000e-09	1.737610e-11	3.683191e-12
3.981072	2.024954e-09	9.837509e-09	1.786076e-08	9.823844e-09	2.410790e-09	6.894073e-13	6.913223e-14
4.466836	1.439670e-09	6.713048e-09	1.146226e-08	4.870541e-09	6.275041e-10	1.254333e-14	2.854310e-16
5.011872	1.015496e-09	4.584485e-09	7.296839e-09	2.165208e-09	1.088914e-10	1.019472e-16	2.470917e-19
5.623413	7.533000e-10	3.377876e-09	5.064703e-09	1.209461e-09	5.482479e-11	5.097391e-17	1.235515e-19
6.309573	4.911041e-10	2.171267e-09	2.832567e-09	2.537146e-10	7.582224e-13	6.400220e-22	1.126503e-23

## Hatch (31.93° N, 82.34° E), Response Spectra

Frequency (Hz)	UHRS 1E-4 (g)	GMRS (g)	UHRS 1E-5 (g)
0.500000	0.089001	0.108607	0.216164
0.561009	0.107815	0.131166	0.260867
0.629463	0.133811	0.160106	0.317101
0.706269	0.159066	0.186896	0.368482
0.792447	0.184275	0.212502	0.417011
0.889140	0.210180	0.237497	0.463699
0.997631	0.231417	0.256796	0.499112
1.000000	0.231837	0.257179	0.499815
1.122019	0.254899	0.288525	0.563570
1.258925	0.280506	0.319020	0.623876
1.412538	0.301488	0.341891	0.668119
1.584893	0.321468	0.362011	0.706203

1.778279	0.337046	0.376498	0.732981
1.995262	0.351723	0.387409	0.751577
2.238721	0.367304	0.400763	0.775647
2.500000	0.375847	0.408241	0.789231
2.805046	0.376367	0.409800	0.792726
3.147313	0.378516	0.408129	0.787566
3.531344	0.376999	0.402587	0.774999
3.962233	0.377718	0.401082	0.771011
4.445698	0.379068	0.401268	0.770769
4.988156	0.384489	0.406768	0.781220
5.000000	0.384694	0.406998	0.781669
5.610092	0.389767	0.414580	0.797297
6.294627	0.384492	0.413157	0.796587
7.062688	0.382394	0.408991	0.787636
7.924466	0.377828	0.403406	0.776543
8.891397	0.376189	0.401849	0.773638
9.976312	0.374648	0.400192	0.770443
10.000000	0.374606	0.400145	0.770351
11.220185	0.359726	0.387576	0.747764
12.589254	0.347446	0.377830	0.730650
14.125375	0.333205	0.365260	0.707759
15.848932	0.317336	0.348620	0.675884
17.782794	0.302053	0.330902	0.641082
19.952623	0.288671	0.316837	0.614123
22.387211	0.276433	0.303748	0.588917
25.000000	0.264879	0.289532	0.560621
28.050461	0.255331	0.277665	0.536955
31.473135	0.245085	0.264664	0.510916
35.313439	0.236417	0.252639	0.486427
39.622330	0.229178	0.242535	0.465838
44.456985	0.223952	0.234875	0.450110
49.881558	0.219574	0.227983	0.435806
55.968028	0.215252	0.221650	0.422823
62.797161	0.210733	0.215769	0.411020
70.459573	0.205866	0.209996	0.399649
79.056942	0.200086	0.203562	0.387149
88.703347	0.193148	0.196756	0.374323
99.526793	0.186581	0.190832	0.363420
100.000000	0.175460	0.179627	0.342162