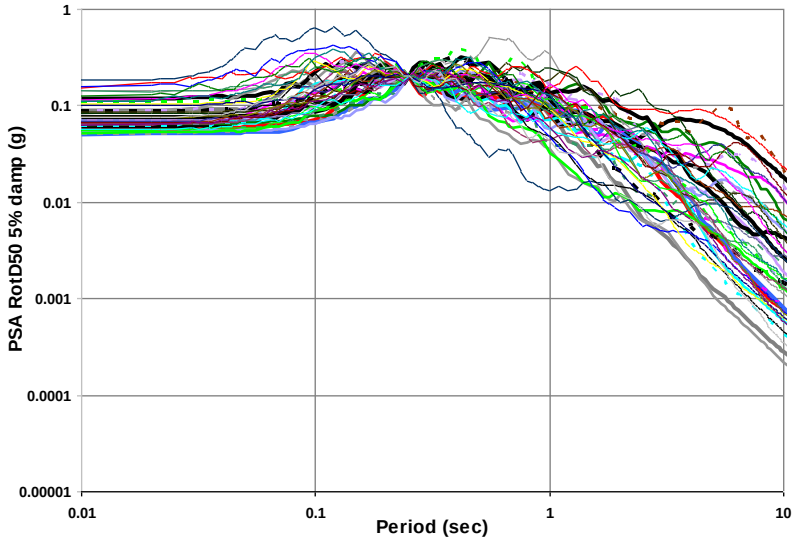
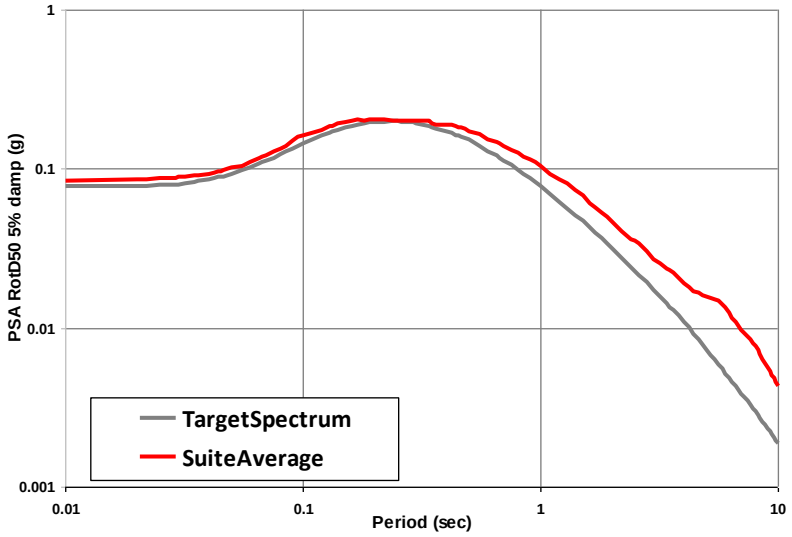
Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	0.83	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.18	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
102	Northern Calif-07 Ferndale City Hall 1975	5.2	8.2	219.31	strike slip	8.1	0.98	RSN102_NCALIF.AG_D-FRN224.AT2 RSN102_NCALIF.AG_D-FRN314.AT2 RSN102_NCALIF.AG_D-FRN-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	1.54	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
328	Coalinga-01 Parkfield - Cholame 3W 1983	6.36	44.82	230.57	Reverse	7.1	1.21	RSN328_COALINGA.H_H-C03000.AT2 RSN328_COALINGA.H_H-C03090.AT2 RSN328_COALINGA.H_H-C03-UP.AT2
363	Coalinga-01 Parkfield - Vineyard Cany 3W 1983	6.36	30.91	308.87	Reverse	7.1	1.17	RSN363_COALINGA.H_H-VYC020.AT2 RSN363_COALINGA.H_H-VYC110.AT2 RSN363_COALINGA.H_H-VYC-UP.AT2
447	Morgan Hill Agnews State Hospital 1984	6.19	24.48	239.69	strike slip	22.6	2.58	RSN447_MORGAN_AGW240.AT2 RSN447_MORGAN_AGW330.AT2 RSN447_MORGAN_AGW-UP.AT2
462	Morgan Hill Hollister City Hall 1984	6.19	30.76	198.77	strike slip	12.1	1.22	RSN462_MORGAN_HCH001.AT2 RSN462_MORGAN_HCH271.AT2 RSN462_MORGAN_HCH-UP.AT2
599	Whittier Narrows-01 Brea - S Flower Av 1987	5.99	18.39	322.75	Reverse O	3.3	0.72	
719	Superstition Hills-02 Brawley Airport 1987	6.54	17.03	208.71	strike slip	10.5	0.91	
737	Loma Prieta Agnews State Hospital 1989	6.93	24.27	239.69	Reverse O	8.2	0.35	RSN737_LOMAP_AGW000.AT2 RSN737_LOMAP_AGW090.AT2 RSN737_LOMAP_AGW-UP.AT2
880	Landers Mission Creek Fault 1992	7.28	26.96	355.42	strike slip	26.6	1.01	RSN880_LANDERS_MCF000.AT2 RSN880_LANDERS_MCF090.AT2 RSN880_LANDERS_MCF-UP.AT2

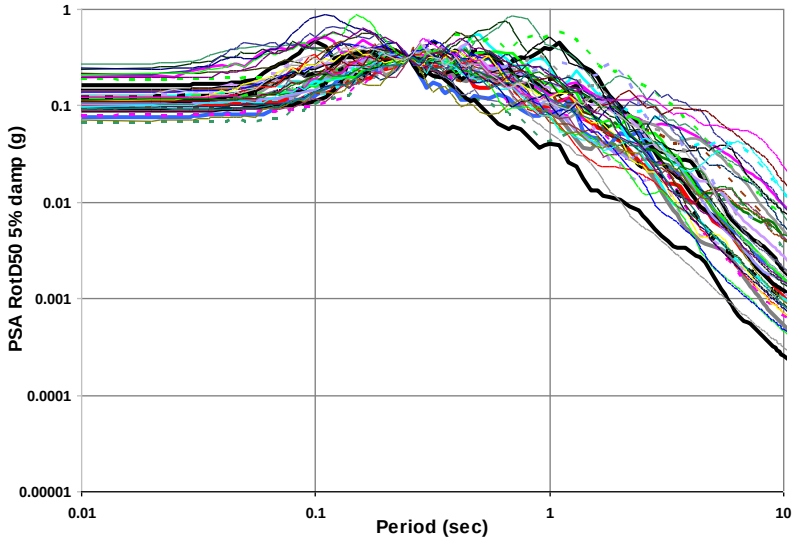
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
947	Northridge-01 Arcadia - Arcadia Av 1994	6.69	39.41	330.5	Reverse	9	0.83	RSN947_NORTHR_ARC172.AT2 RSN947_NORTHR_ARC262.AT2 RSN947_NORTHR_ARC-UP.AT2
981	Northridge-01 Inglewood - Union Oil 1994	6.69	37.18	316.02	Reverse	10.7	1.14	RSN981_NORTHR_ING000.AT2 RSN981_NORTHR_ING090.AT2 RSN981_NORTHR_ING-UP.AT2
990	Northridge-01 LA - City Terrace 1994	6.69	35.03	365.22	Reverse	6	0.28	RSN990_NORTHR_LAC090.AT2 RSN990_NORTHR_LAC180.AT2 RSN990_NORTHR_LAC-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	1.47	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.18	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1161	Kocaeli, Turkey Gebze 1999	7.51	7.57	792	strike slip	5.8	0.61	RSN1161_KOCAELI_GBZ000.AT2 RSN1161_KOCAELI_GBZ270.AT2 RSN1161_KOCAELI_GBZ-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.31	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1228	Chi-Chi, Taiwan CHY076 1999	7.62	42.15	169.84	Reverse O	28.6	1.04	RSN1228_CHICHI_CHY076-E.AT2 RSN1228_CHICHI_CHY076-N.AT2 RSN1228_CHICHI_CHY076-V.AT2
1232	Chi-Chi, Taiwan CHY081 1999	7.62	41.36	573.04	Reverse O	18.4	1.35	RSN1232_CHICHI_CHY081-E.AT2 RSN1232_CHICHI_CHY081-N.AT2 RSN1232_CHICHI_CHY081-V.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	0.4	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1594	Chi-Chi, Taiwan TTN051 1999	7.62	30.77	665.2	Reverse O	23.9	2.08	RSN1594_CHICHI_TTN051-E.AT2 RSN1594_CHICHI_TTN051-N.AT2 RSN1594_CHICHI_TTN051-V.AT2
2238	Chi-Chi, Taiwan-02 HWA031 1999	5.9	44.29	602.29	Reverse	10	3.2	RSN2238_CHICHI.02_HWA031N.AT2 RSN2238_CHICHI.02_HWA031E.AT2 RSN2238_CHICHI.02_HWA031V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	1.48	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2

Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
2426	Chi-Chi, Taiwan-02 TCU137 1999	5.9	22.53	635.31	Reverse	3	2.76	RSN2426_CHICHI.02_TCU137N.AT2 RSN2426_CHICHI.02_TCU137W.AT2 RSN2426_CHICHI.02_TCU137V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	1	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2607	Chi-Chi, Taiwan-03 TCU051 1999	6.2	37.14	350.06	Reverse	7.5	2.33	RSN2607_CHICHI.03_TCU051N.AT2 RSN2607_CHICHI.03_TCU051E.AT2 RSN2607_CHICHI.03_TCU051V.AT2
2608	Chi-Chi, Taiwan-03 TCU052 1999	6.2	38.99	579.1	Reverse	9.9	1.65	RSN2608_CHICHI.03_TCU052N.AT2 RSN2608_CHICHI.03_TCU052E.AT2 RSN2608_CHICHI.03_TCU052V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.22	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3029	Chi-Chi, Taiwan-05 HWA044 1999	6.2	44.01	534.41	Reverse	8.6	1.48	RSN3029_CHICHI.05_HWA044N.AT2 RSN3029_CHICHI.05_HWA044E.AT2 RSN3029_CHICHI.05_HWA044V.AT2
3348	Chi-Chi, Taiwan-06 HWA036 1999	6.3	40.12	503.04	Reverse	14.4	3	RSN3348_CHICHI.06_HWA036N.AT2 RSN3348_CHICHI.06_HWA036E.AT2 RSN3348_CHICHI.06_HWA036V.AT2
3362	Chi-Chi, Taiwan-06 HWA059 1999	6.3	42.79	208.56	Reverse	7.3	1.79	RSN3362_CHICHI.06_HWA059N.AT2 RSN3362_CHICHI.06_HWA059E.AT2 RSN3362_CHICHI.06_HWA059V.AT2
3481	Chi-Chi, Taiwan-06 TCU087 1999	6.3	41.15	538.69	Reverse	13.6	3.04	RSN3481_CHICHI.06_TCU087N.AT2 RSN3481_CHICHI.06_TCU087E.AT2 RSN3481_CHICHI.06_TCU087V.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	0.43	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	0.36	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.27	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
5815	Iwate Yuzawa 2008	6.9	22.41	655.45	Reverse	7.2	0.32	RSN5815_IWATE_44BC1NS.AT2 RSN5815_IWATE_44BC1EW.AT2 RSN5815_IWATE_44BC1UD.AT2

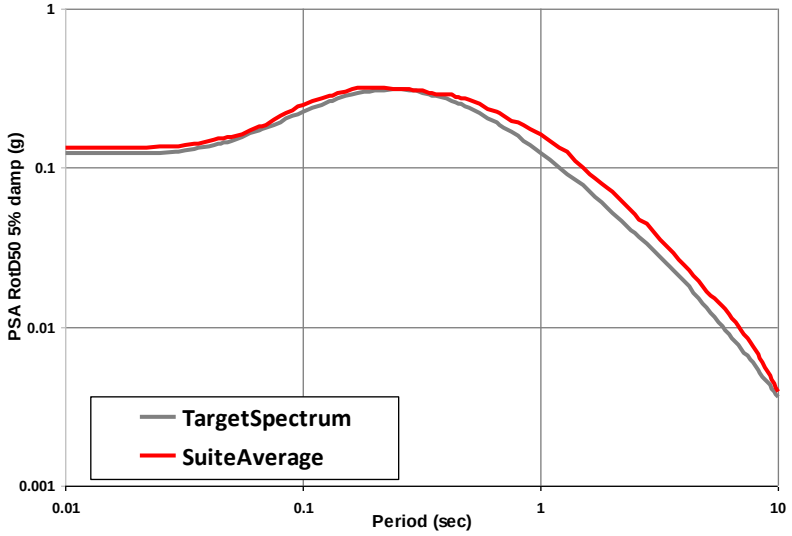
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
5988	El Mayor-Cucapah Meloland, E Holton Rd. 2010	7.2	30.18	196	strike slip	20.9	0.3	RSN5988_SIERRA.MEX_DRE360.AT2 RSN5988_SIERRA.MEX_DRE-90.AT2 RSN5988_SIERRA.MEX_DRE-UP.AT2
6962	Darfield, New Zealand ROLC 2010	7	0	295.74	strike slip	6.3	0.4	RSN6962_DARFIELD_ROLCS29E.AT2 RSN6962_DARFIELD_ROLCS61W.AT2 RSN6962_DARFIELD_ROLCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0.35	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
7054	Wenchuan, China-02 Maoxiannanxin 2008	6.1	34.09	429.97	strike slip	2.7	1.43	RSN7054_WENCHUAN.02_51MXNNS RSN7054_WENCHUAN.02_51MXNEW RSN7054_WENCHUAN.02_51MXNUD
7108	Wenchuan, China-04 Anxiantashui 2008	5.5	40.88	376.1	Reverse	8.7	3.51	RSN7108_WENCHUAN.04_51AXTNS.. RSN7108_WENCHUAN.04_51AXTEW RSN7108_WENCHUAN.04_51AXTUD.
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.2	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8833	14383980 Puddingstone Reservoir 2008	5.39	14.6	462.66	Reverse O	1.3	0.9	RSN8833_14383980_CIPSRHNN.AT2 RSN8833_14383980_CIPSRHNE.AT2 RSN8833_14383980_CIPSRHNZ.AT2

Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.18	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
183	Imperial Valley-06 El Centro Array #8 1979	6.53	3.86	206.08	strike slip	2.9	0.37	RSN183_IMPVALL.H_H-E08140.AT2 RSN183_IMPVALL.H_H-E08230.AT2 RSN183_IMPVALL.H_H-E08-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	0.8	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
336	Coalinga-01 Parkfield - Fault Zone 11 1983	6.36	27.1	541.73	Reverse	4.1	1.51	RSN336_COALINGA.H_H-Z11000.AT2 RSN336_COALINGA.H_H-Z11090.AT2 RSN336_COALINGA.H_H-Z11-UP.AT2
347	Coalinga-01 Parkfield - Fault Zone 9 1983	6.36	30.43	372.26	Reverse	7.9	3.68	RSN347_COALINGA.H_H-Z09000.AT2 RSN347_COALINGA.H_H-Z09090.AT2 RSN347_COALINGA.H_H-Z09-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.42	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
393	Coalinga-03 Sulphur Baths (temp) 1983	5.38	12.77	617.43	Reverse	6.5	2.67	RSN393_COALINGA_B-CSU000.AT2 RSN393_COALINGA_B-CSU090.AT2 RSN393_COALINGA_B-CSU-UP.AT2
488	Taiwan SMART1(33) SMART1 I07 1985	5.8	41.51	309.41	Normal	6.4	4.9	RSN488_SMART1.33_33I07EW.AT2 RSN488_SMART1.33_33I07NS.AT2 RSN488_SMART1.33_33I07DN.AT2
599	Whittier Narrows-01 Brea - S Flower Av 1987	5.99	18.39	322.75	Reverse O	3.3	1.12	
641	Whittier Narrows-01 LA - Saturn St 1987	5.99	20.35	308.71	Reverse O	3.5	1.54	RSN641_WHITTIER.A_A-STN020.AT2 RSN641_WHITTIER.A_A-STN110.AT2 RSN641_WHITTIER.A_A-STN-UP.AT2
673	Whittier Narrows-01 Panorama City - Roscoe 1987	5.99	32.13	318.16	Reverse O	5.7	1.3	RSN673_WHITTIER.A_A-RO2090.AT2 RSN673_WHITTIER.A_A-RO2180.AT2 RSN673_WHITTIER.A_A-RO2-UP.AT2
684	Whittier Narrows-01 Playa Del Rey - Saran 1987	5.99	29.42	345.72	Reverse O	14.2	3.79	RSN684_WHITTIER.A_A-SAR000.AT2 RSN684_WHITTIER.A_A-SAR270.AT2 RSN684_WHITTIER.A_A-SAR-UP.AT2

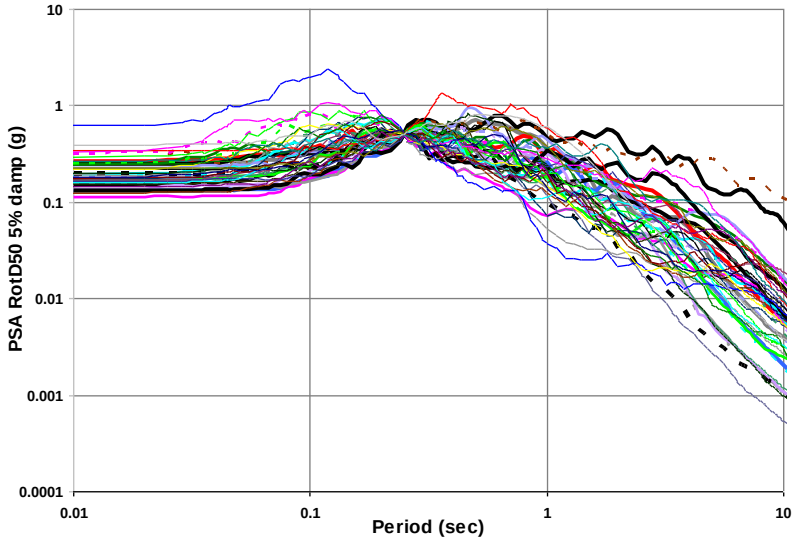
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
850	Landers Desert Hot Springs 1992	7.28	21.78	359	strike slip	21.7	0.75	RSN850_LANDERS_DSP000.AT2 RSN850_LANDERS_DSP090.AT2 RSN850_LANDERS_DSP-UP.AT2
910	Big Bear-01 Joshua Tree 1992	6.46	40.99	379.32	strike slip	9.8	1.46	RSN910_BIGBEAR_JOS090.AT2 RSN910_BIGBEAR_JOS360.AT2 RSN910_BIGBEAR_JOS-UP.AT2
985	Northridge-01 LA - Baldwin Hills 1994	6.69	23.5	297.07	Reverse	7.8	0.68	RSN985_NORTHR_BLD090.AT2 RSN985_NORTHR_BLD360.AT2 RSN985_NORTHR_BLD-UP.AT2
1032	Northridge-01 Leona Valley #6 1994	6.69	37.7	327.44	Reverse	4.9	0.7	RSN1032_NORTHR_LV6090.AT2 RSN1032_NORTHR_LV6360.AT2 RSN1032_NORTHR_LV6-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	0.43	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.28	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1053	Northridge-01 Palmdale - Hwy 14 & Palmdale 1994	6.69	41.37	551.56	Reverse	9.1	2.4	RSN1053_NORTHR_PHP000.AT2 RSN1053_NORTHR_PHP270.AT2 RSN1053_NORTHR_PHP-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	2.3	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.48	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1184	Chi-Chi, Taiwan CHY010 1999	7.62	19.93	538.69	Reverse O	6.1	0.58	RSN1184_CHICHI_CHY010-N.AT2 RSN1184_CHICHI_CHY010-W.AT2 RSN1184_CHICHI_CHY010-V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	2.03	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2410	Chi-Chi, Taiwan-02 TCU110 1999	5.9	40.03	212.72	Reverse	7.4	2.29	RSN2410_CHICHI.02_TCU110N.AT2 RSN2410_CHICHI.02_TCU110E.AT2 RSN2410_CHICHI.02_TCU110V.AT2
2620	Chi-Chi, Taiwan-03 TCU068 1999	6.2	47.55	487.34	Reverse	10.6	4.95	RSN2620_CHICHI.03_TCU068N.AT2 RSN2620_CHICHI.03_TCU068E.AT2 RSN2620_CHICHI.03_TCU068V.AT2

Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
2752	Chi-Chi, Taiwan-04 CHY101 1999	6.2	21.62	258.89	strike slip	8.1	0.66	RSN2752_CHICHI.04_CHY101N.AT2 RSN2752_CHICHI.04_CHY101E.AT2 RSN2752_CHICHI.04_CHY101V.AT2
3011	Chi-Chi, Taiwan-05 HWA024 1999	6.2	48	671.52	Reverse	8.1	4.36	RSN3011_CHICHI.05_HWA024N.AT2 RSN3011_CHICHI.05_HWA024E.AT2 RSN3011_CHICHI.05_HWA024V.AT2
3035	Chi-Chi, Taiwan-05 HWA051 1999	6.2	46.92	440.5	Reverse	9.5	1.96	RSN3035_CHICHI.05_HWA051N.AT2 RSN3035_CHICHI.05_HWA051W.AT2 RSN3035_CHICHI.05_HWA051V.AT2
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	1.63	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3349	Chi-Chi, Taiwan-06 HWA037 1999	6.3	44.77	469.64	Reverse	12.6	2.59	RSN3349_CHICHI.06_HWA037N.AT2 RSN3349_CHICHI.06_HWA037E.AT2 RSN3349_CHICHI.06_HWA037V.AT2
3624	Taiwan SMART1(33) SMART1 M11 1985	5.8	42.42	300.22	Normal	3.3	1.38	RSN3624_SMART1.33_33M11EW.AT RSN3624_SMART1.33_33M11NS.AT2 RSN3624_SMART1.33_33M11DN.AT2
4105	Parkfield-02, CA Parkfield - Cholame 6W 2004	6	8.16	251.57	strike slip	2.3	0.45	RSN4105_PARK2004_C06090.AT2 RSN4105_PARK2004_C06360.AT2 RSN4105_PARK2004_C06-UP.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	0.85	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4861	Chuetsu-oki Nakanoshima Nagaoka 2007	6.8	10.73	319	Reverse	10.3	0.81	RSN4861_CHUETSU_65034NS.AT2 RSN4861_CHUETSU_65034EW.AT2 RSN4861_CHUETSU_65034UD.AT2
4876	Chuetsu-oki Kashiwazaki Nishiyamacho Ikeura 2007	6.8	0	655.45	Reverse	4.9	0.28	RSN4876_CHUETSU_65059NS.AT2 RSN4876_CHUETSU_65059EW.AT2 RSN4876_CHUETSU_65059UD.AT2
5272	Chuetsu-oki NIG026 2007	6.8	39.71	277.29	Reverse	5	1.22	RSN5272_CHUETSU_NIG026NS.AT2 RSN5272_CHUETSU_NIG026EW.AT2 RSN5272_CHUETSU_NIG026UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	0.89	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5668	Iwate MYG009 2008	6.9	43.16	540.42	Reverse	14.2	2.25	RSN5668_IWATE_MYG009NS.AT2 RSN5668_IWATE_MYG009EW.AT2 RSN5668_IWATE_MYG009UD.AT2

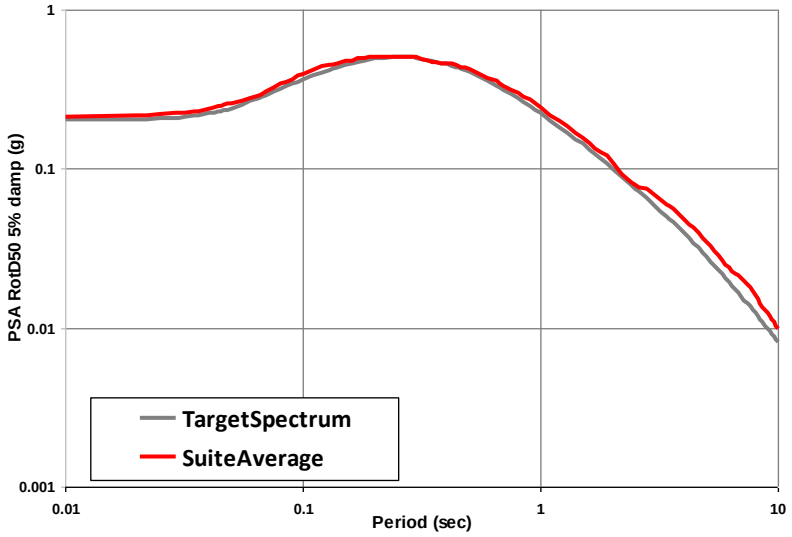
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
5787	Iwate Ishinomaki 2008	6.9	48.23	530.83	Reverse	10	1.63	RSN5787_IWATE_54042NS.AT2 RSN5787_IWATE_54042EW.AT2 RSN5787_IWATE_54042UD.AT2
6960	Darfield, New Zealand Riccarton High School 2010	7	13.64	293	strike slip	9.5	0.58	RSN6960_DARFIELD_RHSCN86W.AT2 RSN6960_DARFIELD_RHSCS04W.AT2 RSN6960_DARFIELD_RHSCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	0.62	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
8167	San Simeon, CA Diablo Canyon Power Plant 2003	6.52	37.92	1100	Reverse	7	2.81	RSN8167_SANSIMEO_DCPP337.AT2 RSN8167_SANSIMEO_DCPP247.AT2 RSN8167_SANSIMEO_DCPP-UP.AT2
8625	40204628 San Jose; Fire Station 26 East; Tully R 2007	5.45	14.06	272.63	strike slip	4.5	2.06	RSN8625_40204628_N1783HNN.AT2 RSN8625_40204628_N1783HNE.AT2 RSN8625_40204628_N1783HNZ.AT2
8634	40204628 Campbell; Westmont High Sch 2007	5.45	25.39	365.78	strike slip	8	3.27	RSN8634_40204628_N1799HNN.AT2 RSN8634_40204628_N1799HNE.AT2 RSN8634_40204628_N1799HNZ.AT2
8958	14383980 Compton; Cressey Park Fire Station 3 2008	5.39	41.89	334.78	Reverse O	8.1	4.98	RSN8958_14383980_N5429360.AT2 RSN8958_14383980_N5429090.AT2 RSN8958_14383980_N5429-UP.AT2

Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	2.11	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	1.1	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.3	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
183	Imperial Valley-06 El Centro Array #8 1979	6.53	3.86	206.08	strike slip	2.9	0.6	RSN183_IMPVALL.H_H-E08140.AT2 RSN183_IMPVALL.H_H-E08230.AT2 RSN183_IMPVALL.H_H-E08-UP.AT2
188	Imperial Valley-06 Plaster City 1979	6.53	30.33	316.64	strike slip	6.1	3.82	RSN188_IMPVALL.H_H-PLS045.AT2 RSN188_IMPVALL.H_H-PLS135.AT2 RSN188_IMPVALL.H_H-PLS-UP.AT2
213	Livermore-01 Fremont - Mission San Jose 1980	5.8	34.66	367.57	strike slip	6.1	3.89	RSN213_LIVERMOR_A-FRE075.AT2 RSN213_LIVERMOR_A-FRE345.AT2 RSN213_LIVERMOR_A-FRE-UP.AT2
471	Morgan Hill San Justo Dam (L Abut) 1984	6.19	31.88	543.63	strike slip	10.3	2.02	RSN471_MORGAN_SJL270.AT2 RSN471_MORGAN_SJL360.AT2 RSN471_MORGAN_SJL-UP.AT2
630	Whittier Narrows-01 LA - Century City CC South 1987	5.99	25.95	277.98	Reverse O	6.7	3.84	RSN630_WHITTIER.A_A-CTS000.AT2 RSN630_WHITTIER.A_A-CTS090.AT2 RSN630_WHITTIER.A_A-CTS-UP.AT2
739	Loma Prieta Anderson Dam (Downstream) 1989	6.93	19.9	488.77	Reverse O	5.2	0.76	RSN739_LOMAP_AND250.AT2 RSN739_LOMAP_AND340.AT2 RSN739_LOMAP_AND-UP.AT2
778	Loma Prieta Hollister Differential Array 1989	6.93	24.52	215.54	Reverse O	3.7	0.8	RSN778_LOMAP_HDA165.AT2 RSN778_LOMAP_HDA255.AT2 RSN778_LOMAP_HDA-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	1.85	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
1052	Northridge-01 Pacoima Kagel Canyon 1994	6.69	5.26	508.08	Reverse	5.7	0.69	RSN1052_NORTHR_PKC090.AT2 RSN1052_NORTHR_PKC360.AT2 RSN1052_NORTHR_PKC-UP.AT2

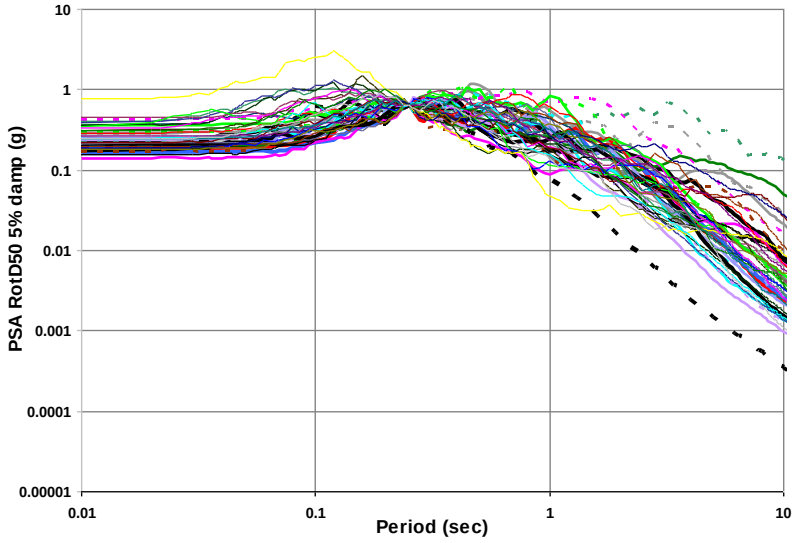
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
1085	Northridge-01 Sylmar - Converter Sta East 1994	6.69	0	370.52	Reverse	3.6	0.39	RSN1085_NORTHR_SCE011.AT2 RSN1085_NORTHR_SCE281.AT2 RSN1085_NORTHR_SCE-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.46	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.78	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1199	Chi-Chi, Taiwan CHY032 1999	7.62	35.43	192.71	Reverse O	27.4	2.81	RSN1199_CHICHI_CHY032-E.AT2 RSN1199_CHICHI_CHY032-N.AT2 RSN1199_CHICHI_CHY032-V.AT2
1497	Chi-Chi, Taiwan TCU057 1999	7.62	11.83	555.23	Reverse O	20.4	2.21	RSN1497_CHICHI_TCU057-E.AT2 RSN1497_CHICHI_TCU057-N.AT2 RSN1497_CHICHI_TCU057-V.AT2
1511	Chi-Chi, Taiwan TCU076 1999	7.62	2.74	614.98	Reverse O	17	0.62	RSN1511_CHICHI_TCU076-E.AT2 RSN1511_CHICHI_TCU076-N.AT2 RSN1511_CHICHI_TCU076-V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	3.3	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	3.76	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2408	Chi-Chi, Taiwan-02 TCU107 1999	5.9	46.88	409	Reverse	14.4	3.82	RSN2408_CHICHI.02_TCU107N.AT2 RSN2408_CHICHI.02_TCU107E.AT2 RSN2408_CHICHI.02_TCU107V.AT2
2708	Chi-Chi, Taiwan-04 CHY034 1999	6.2	28.45	378.75	strike slip	5.4	2.33	RSN2708_CHICHI.04_CHY034N.AT2 RSN2708_CHICHI.04_CHY034W.AT2 RSN2708_CHICHI.04_CHY034V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.55	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	2.65	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3180	Chi-Chi, Taiwan-05 TCU054 1999	6.2	45.29	460.69	Reverse	9.1	4.62	RSN3180_CHICHI.05_TCU054N.AT2 RSN3180_CHICHI.05_TCU054E.AT2 RSN3180_CHICHI.05_TCU054V.AT2

Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
3311	Chi-Chi, Taiwan-06 CHY092 1999	6.3	42.77	253.72	Reverse	15.1	1.72	RSN3311_CHICHI.06_CHY092N.AT2 RSN3311_CHICHI.06_CHY092W.AT2 RSN3311_CHICHI.06_CHY092V.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	0.96	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
3621	Taiwan SMART1(33) SMART1 M06 1985	5.8	40.95	308.39	Normal	3.9	2.95	RSN3621_SMART1.33_33M06EW.AT RSN3621_SMART1.33_33M06NS.AT2 RSN3621_SMART1.33_33M06DN.AT2
3966	Tottori, Japan TTR009 2000	6.61	8.82	420.2	strike slip	4.3	0.3	RSN3966_TOTTORI_TTR009NS.AT2 RSN3966_TOTTORI_TTR009EW.AT2 RSN3966_TOTTORI_TTR009UD.AT2
4206	Niigata, Japan NIG016 2004	6.63	26.53	370.03	Reverse	6.8	1.83	RSN4206_NIIGATA_NIG016NS.AT2 RSN4206_NIIGATA_NIG016EW.AT2 RSN4206_NIIGATA_NIG016UD.AT2
4366	Umbria Marche (aftershock 1), Italy Gubbio-Piana 1997	5.5	35.83	492	Normal	7.8	2.62	RSN4366_UBMARCHE.P_E-GBP000.A RSN4366_UBMARCHE.P_E-GBP090.A RSN4366_UBMARCHE.P_E-GBP-UP.A
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	0.54	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.21	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.68	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4840	Chuetsu-oki Joetsu Kita 2007	6.8	28.97	334.01	Reverse	14.9	1.24	RSN4840_CHUETSU_65003NS.AT2 RSN4840_CHUETSU_65003EW.AT2 RSN4840_CHUETSU_65003UD.AT2
4843	Chuetsu-oki Matsushiro Tokamachi 2007	6.8	18.16	640.14	Reverse	6.5	1.13	RSN4843_CHUETSU_65006NS.AT2 RSN4843_CHUETSU_65006EW.AT2 RSN4843_CHUETSU_65006UD.AT2
4862	Chuetsu-oki Shiura Nagaoka 2007	6.8	10.61	336.93	Reverse	8.5	1.54	RSN4862_CHUETSU_65035NS.AT2 RSN4862_CHUETSU_65035EW.AT2 RSN4862_CHUETSU_65035UD.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	0.73	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2

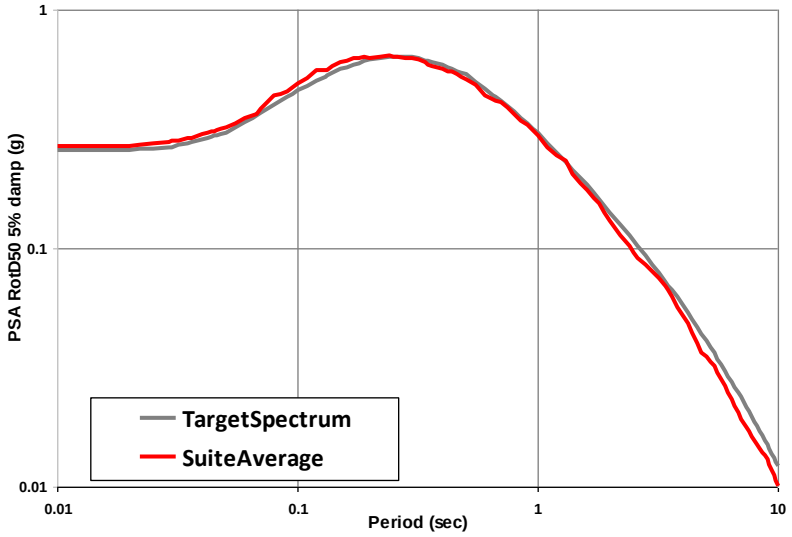
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	2.67	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
5666	Iwate MYG007 2008	6.9	45.55	166.75	Reverse	11.7	1.69	RSN5666_IWATE_MYG007NS.AT2 RSN5666_IWATE_MYG007EW.AT2 RSN5666_IWATE_MYG007UD.AT2
5668	Iwate MYG009 2008	6.9	43.16	540.42	Reverse	14.2	3.65	RSN5668_IWATE_MYG009NS.AT2 RSN5668_IWATE_MYG009EW.AT2 RSN5668_IWATE_MYG009UD.AT2
5815	Iwate Yuzawa 2008	6.9	22.41	655.45	Reverse	7.2	0.8	RSN5815_IWATE_44BC1NS.AT2 RSN5815_IWATE_44BC1EW.AT2 RSN5815_IWATE_44BC1UD.AT2
5985	El Mayor-Cucapah El Centro Differential Array 2010	7.2	22.83	202.26	strike slip	8.3	0.35	RSN5985_SIERRA.MEX_EDA360.AT2 RSN5985_SIERRA.MEX_EDA090.AT2 RSN5985_SIERRA.MEX_EDA-UP.AT2
8102	Christchurch, New Zealand LINC 2011	6.2	18.47	263.2	Reverse O	5.9	2.11	RSN8102_CCHURCH_LINCN23E.AT2 RSN8102_CCHURCH_LINCN67W.AT2 RSN8102_CCHURCH_LINCUP.AT2
8967	14383980 Yorba Linda; Diemer Filtration Plant 2008	5.39	4.55	374.19	Reverse O	2.6	3.38	RSN8967_14383980_NS698011.AT2 RSN8967_14383980_NS698281.AT2 RSN8967_14383980_NS698-UP.AT2

Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
20	Northern Calif-03 Ferndale City Hall 1954	6.5	26.72	219.31	strike slip	6.3	2.27	RSN20_NCALIF.FH_H-FRN044.AT2 RSN20_NCALIF.FH_H-FRN314.AT2 RSN20_NCALIF.FH_H-FRN-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	3.99	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.2	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.37	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
290	Irpinia, Italy-01 Mercato San Severino 1980	6.9	29.79	428.57	Normal	12.7	1.73	RSN290_ITALY_A-MER000.AT2 RSN290_ITALY_A-MER270.AT2 RSN290_ITALY_A-MER-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	1.85	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	2.98	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
326	Coalinga-01 Parkfield - Cholame 2WA 1983	6.36	43.83	173.02	Reverse	7.6	2.13	RSN326_COALINGA.H_H-C02000.AT2 RSN326_COALINGA.H_H-C02090.AT2 RSN326_COALINGA.H_H-C02-UP.AT2
339	Coalinga-01 Parkfield - Fault Zone 15 1983	6.36	28	307.59	Reverse	7.5	2.24	RSN339_COALINGA.H_H-Z15000.AT2 RSN339_COALINGA.H_H-Z15090.AT2 RSN339_COALINGA.H_H-Z15-UP.AT2
342	Coalinga-01 Parkfield - Fault Zone 3 1983	6.36	36.14	211.74	Reverse	6.7	1.94	RSN342_COALINGA.H_H-COH000.AT RSN342_COALINGA.H_H-COH090.AT RSN342_COALINGA.H_H-COH-UP.AT
362	Coalinga-01 Parkfield - Vineyard Cany 2W 1983	6.36	29.01	438.74	Reverse	7.9	2.54	RSN362_COALINGA.H_H-VC2000.AT2 RSN362_COALINGA.H_H-VC2090.AT2 RSN362_COALINGA.H_H-VC2-UP.AT2
599	Whittier Narrows-01 Brea - S Flower Av 1987	5.99	18.39	322.75	Reverse O	3.3	2.3	

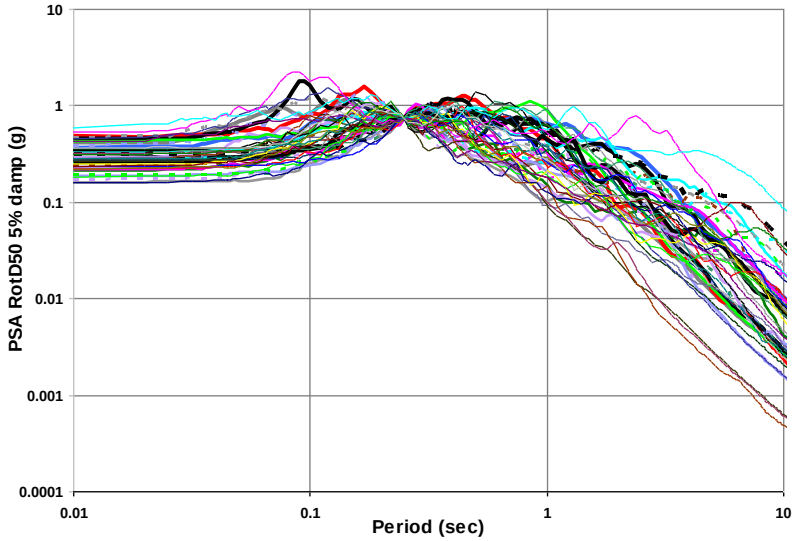
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
630	Whittier Narrows-01 LA - Century City CC South 1987	5.99	25.95	277.98	Reverse O	6.7	4.83	RSN630_WHITTIER.A_A-CTS000.AT2 RSN630_WHITTIER.A_A-CTS090.AT2 RSN630_WHITTIER.A_A-CTS-UP.AT2
947	Northridge-01 Arcadia - Arcadia Av 1994	6.69	39.41	330.5	Reverse	9	2.64	RSN947_NORTHR_ARC172.AT2 RSN947_NORTHR_ARC262.AT2 RSN947_NORTHR_ARC-UP.AT2
990	Northridge-01 LA - City Terrace 1994	6.69	35.03	365.22	Reverse	6	0.89	RSN990_NORTHR_LAC090.AT2 RSN990_NORTHR_LAC180.AT2 RSN990_NORTHR_LAC-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.51	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	4.69	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.58	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	1	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2
1303	Chi-Chi, Taiwan HWA058 1999	7.62	41.17	529.54	Reverse O	9	2.41	RSN1303_CHICHI_HWA058-E.AT2 RSN1303_CHICHI_HWA058-N.AT2 RSN1303_CHICHI_HWA058-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.52	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1538	Chi-Chi, Taiwan TCU112 1999	7.62	27.48	190.54	Reverse O	33.2	2.92	RSN1538_CHICHI_TCU112-E.AT2 RSN1538_CHICHI_TCU112-N.AT2 RSN1538_CHICHI_TCU112-V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	4.72	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2708	Chi-Chi, Taiwan-04 CHY034 1999	6.2	28.45	378.75	strike slip	5.4	2.92	RSN2708_CHICHI.04_CHY034N.AT2 RSN2708_CHICHI.04_CHY034W.AT2 RSN2708_CHICHI.04_CHY034V.AT2
2744	Chi-Chi, Taiwan-04 CHY088 1999	6.2	48.38	318.52	strike slip	11.7	3.92	RSN2744_CHICHI.04_CHY088N.AT2 RSN2744_CHICHI.04_CHY088E.AT2 RSN2744_CHICHI.04_CHY088V.AT2

Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
3709	Whittier Narrows-02 LA - Cypress Ave 1987	5.27	10.22	366.71	Reverse O	2	2.57	RSN3709_WHITTIER.B_B-CYP053.AT2 RSN3709_WHITTIER.B_B-CYP143.AT2 RSN3709_WHITTIER.B_B-CYP-UP.AT2
3765	Northridge-04 Pacoima Kagel Canyon 1994	5.93	25.63	508.08	Reverse O	5.6	4.43	RSN3765_NORTH142_PKC090.AT2 RSN3765_NORTH142_PKC360.AT2 RSN3765_NORTH142_PKC-UP.AT2
3943	Tottori, Japan SMN015 2000	6.61	9.1	616.55	strike slip	3.5	1	RSN3943_TOTTORI_SMN015NS.AT2 RSN3943_TOTTORI_SMN015EW.AT2 RSN3943_TOTTORI_SMN015UD.AT2
4098	Parkfield-02, CA Parkfield - Cholame 1E 2004	6	1.66	326.64	strike slip	1.9	0.94	RSN4098_PARK2004_C01090.AT2 RSN4098_PARK2004_C01360.AT2 RSN4098_PARK2004_C01-UP.AT2
4106	Parkfield-02, CA Parkfield - Cholame 12W 2004	6	15.49	359.03	strike slip	9.2	4.71	RSN4106_PARK2004_C12090.AT2 RSN4106_PARK2004_C12360.AT2 RSN4106_PARK2004_C12-UP.AT2
4128	Parkfield-02, CA Parkfield - Stone Corral 3E 2004	6	7.68	565.08	strike slip	2.1	1.77	RSN4128_PARK2004_SC3090.AT2 RSN4128_PARK2004_SC3360.AT2 RSN4128_PARK2004_SC3-UP.AT2
4193	Niigata, Japan NGNH29 2004	6.63	45.39	464.92	Reverse	8.4	2.57	RSN4193_NIIGATA_NGNH29NS.AT2 RSN4193_NIIGATA_NGNH29EW.AT2 RSN4193_NIIGATA_NGNH29UD.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	1.73	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	1.16	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4329	Potenza, Italy Rionero In Vulture 1990	5.8	34.5	574.88	strike slip	4.5	4.21	RSN4329_POTENZA.P_A-VLT000.AT2 RSN4329_POTENZA.P_A-VLT270.AT2 RSN4329_POTENZA.P_A-VLT-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.26	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4863	Chuetsu-oki Nagaoka 2007	6.8	3.97	514.3	Reverse	9.5	0.92	RSN4863_CHUETSU_65036NS.AT2 RSN4863_CHUETSU_65036EW.AT2 RSN4863_CHUETSU_65036UD.AT2
4870	Chuetsu-oki Horinouchi Uonuma City 2007	6.8	29.9	561.59	Reverse	8.1	1.71	RSN4870_CHUETSU_65043NS.AT2 RSN4870_CHUETSU_65043EW.AT2 RSN4870_CHUETSU_65043UD.AT2

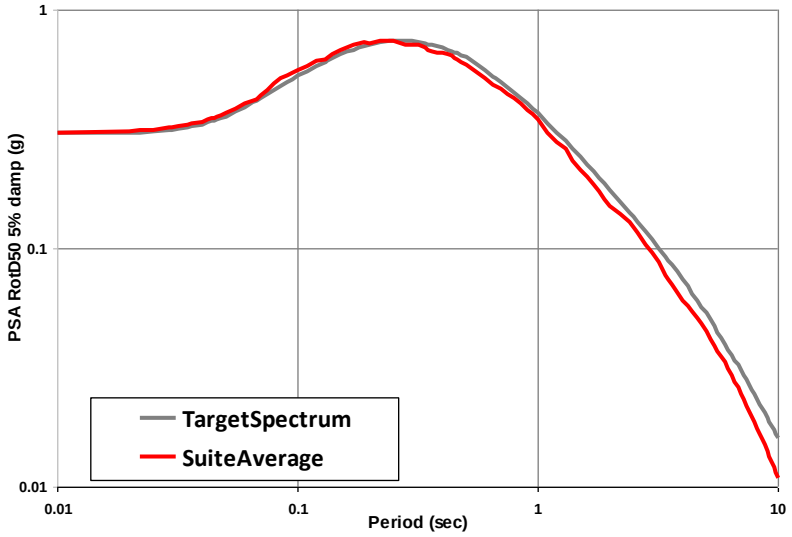
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	0.91	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	3.35	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
5809	Iwate Minase Yuzawa 2008	6.9	17.34	655.45	Reverse	7.6	1.33	RSN5809_IWATE_55465NS.AT2 RSN5809_IWATE_55465EW.AT2 RSN5809_IWATE_55465UD.AT2
5990	El Mayor-Cucapah El Centro Array #7 2010	7.2	27.42	210.51	strike slip	16.5	0.88	RSN5990_SIERRA.MEX_E07360.AT2 RSN5990_SIERRA.MEX_E07090.AT2 RSN5990_SIERRA.MEX_E07-UP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	0.91	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	1.12	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8124	Christchurch, New Zealand Riccarton High School 2011	6.2	9.43	293	Reverse O	4.9	0.92	RSN8124_CCHURCH_RHSCN86W.AT2 RSN8124_CCHURCH_RHSCS04W.AT2 RSN8124_CCHURCH_RHSCUP.AT2

Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
1	Helena, Montana-01 Carroll College 1935	6	2.07	593.35	strike slip	1.2	2.54	RSN1_HELENA.A_A-HMC180.AT2 RSN1_HELENA.A_A-HMC270.AT2 RSN1_HELENA.A_A-HMCDWN.AT2
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	3.08	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
138	Tabas, Iran Boshrooyeh 1978	7.35	24.07	324.57	Reverse	14.6	3.19	RSN138_TABAS_BOS-L1.AT2 RSN138_TABAS_BOS-T1.AT2 RSN138_TABAS_BOS-V1.AT2
163	Imperial Valley-06 Calipatria Fire Station 1979	6.53	23.17	205.78	strike slip	11.9	2.69	RSN163_IMPVALL.H_H-CAL225.AT2 RSN163_IMPVALL.H_H-CAL315.AT2 RSN163_IMPVALL.H_H-CAL-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.43	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
183	Imperial Valley-06 El Centro Array #8 1979	6.53	3.86	206.08	strike slip	2.9	0.88	RSN183_IMPVALL.H_H-E08140.AT2 RSN183_IMPVALL.H_H-E08230.AT2 RSN183_IMPVALL.H_H-E08-UP.AT2
191	Imperial Valley-06 Victoria 1979	6.53	31.92	242.05	strike slip	9.6	2.11	RSN191_IMPVALL.H_H-VCT075.AT2 RSN191_IMPVALL.H_H-VCT345.AT2 RSN191_IMPVALL.H_H-VCT-UP.AT2
236	Mammoth Lakes-03 Convict Creek 1980	5.91	2.67	382.12	strike slip	2.4	1.86	RSN236_MAMMOTH.AH_A-CVK090.A RSN236_MAMMOTH.AH_A-CVK180.A RSN236_MAMMOTH.AH_A-CVK-UP.A
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	1.91	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
326	Coalinga-01 Parkfield - Cholame 2WA 1983	6.36	43.83	173.02	Reverse	7.6	2.47	RSN326_COALINGA.H_H-C02000.AT2 RSN326_COALINGA.H_H-C02090.AT2 RSN326_COALINGA.H_H-C02-UP.AT2
337	Coalinga-01 Parkfield - Fault Zone 12 1983	6.36	27.96	265.21	Reverse	8.7	3.01	RSN337_COALINGA.H_H-PRK090.AT2 RSN337_COALINGA.H_H-PRK180.AT2 RSN337_COALINGA.H_H-PRK-UP.AT2
471	Morgan Hill San Justo Dam (L Abut) 1984	6.19	31.88	543.63	strike slip	10.3	2.94	RSN471_MORGAN_SJL270.AT2 RSN471_MORGAN_SJL360.AT2 RSN471_MORGAN_SJL-UP.AT2

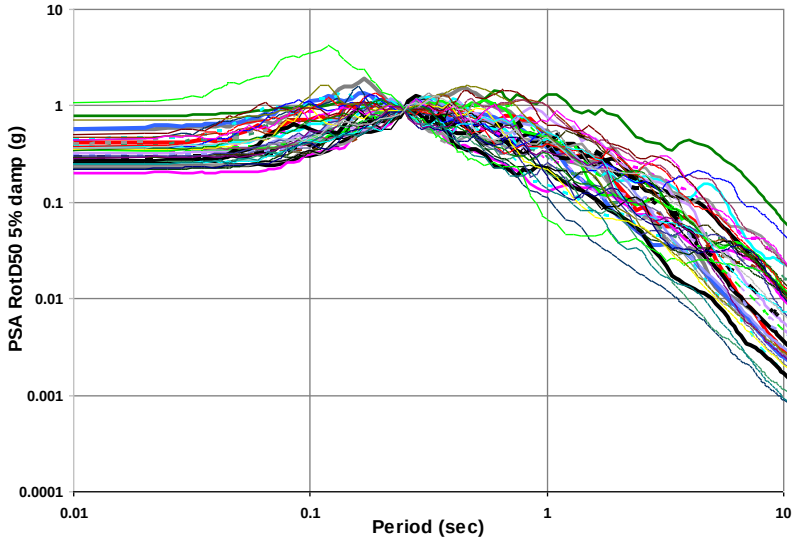
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
751	Loma Prieta Calaveras Reservoir 1989	6.93	35.28	571.99	Reverse O	7.2	3.6	RSN751_LOMAP_CLR090.AT2 RSN751_LOMAP_CLR180.AT2 RSN751_LOMAP_CLR-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	2.17	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
825	Cape Mendocino Cape Mendocino 1992	7.01	0	567.78	Reverse	2.7	0.3	RSN825_CAPEMEND_CPM000.AT2 RSN825_CAPEMEND_CPM090.AT2 RSN825_CAPEMEND_CPM-UP.AT2
947	Northridge-01 Arcadia - Arcadia Av 1994	6.69	39.41	330.5	Reverse	9	3.06	RSN947_NORTHR_ARC172.AT2 RSN947_NORTHR_ARC262.AT2 RSN947_NORTHR_ARC-UP.AT2
984	Northridge-01 LA - 116th St School 1994	6.69	36.39	301	Reverse	7.4	2.11	RSN984_NORTHR_116090.AT2 RSN984_NORTHR_116360.AT2 RSN984_NORTHR_116-UP.AT2
1003	Northridge-01 LA - Saturn St 1994	6.69	21.17	308.71	Reverse	5.3	1.07	RSN1003_NORTHR_STN020.AT2 RSN1003_NORTHR_STN110.AT2 RSN1003_NORTHR_STN-UP.AT2
1013	Northridge-01 LA Dam 1994	6.69	0	628.99	Reverse	3.9	1.04	RSN1013_NORTHR_LDM064.AT2 RSN1013_NORTHR_LDM334.AT2 RSN1013_NORTHR_LDM-UP.AT2
1026	Northridge-01 Lawndale - Osage Ave 1994	6.69	34.31	311.86	Reverse	14.2	4.23	RSN1026_NORTHR_LOA092.AT2 RSN1026_NORTHR_LOA182.AT2 RSN1026_NORTHR_LOA-UP.AT2
1031	Northridge-01 Leona Valley #5 - Ritter 1994	6.69	37.47	375.22	Reverse	6.7	2.26	RSN1031_NORTHR_LV5000.AT2 RSN1031_NORTHR_LV5090.AT2 RSN1031_NORTHR_LV5-UP.AT2
1115	Kobe, Japan Sakai 1995	6.9	28.08	256	strike slip	11.6	1.6	RSN1115_KOBE_SKI000.AT2 RSN1115_KOBE_SKI090.AT2 RSN1115_KOBE_SKI-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	0.85	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.68	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.13	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2

Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
1259	Chi-Chi, Taiwan HWA006 1999	7.62	43.49	559.11	Reverse O	9.6	2.85	RSN1259_CHICHI_HWA006-N.AT2 RSN1259_CHICHI_HWA006-W.AT2 RSN1259_CHICHI_HWA006-V.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	4.42	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	4.81	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2382	Chi-Chi, Taiwan-02 TCU065 1999	5.9	32.84	305.85	Reverse	4.9	2.82	RSN2382_CHICHI.02_TCU065N.AT2 RSN2382_CHICHI.02_TCU065E.AT2 RSN2382_CHICHI.02_TCU065V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	3.71	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2615	Chi-Chi, Taiwan-03 TCU061 1999	6.2	39.93	379.64	Reverse	12.9	4.65	RSN2615_CHICHI.03_TCU061N.AT2 RSN2615_CHICHI.03_TCU061E.AT2 RSN2615_CHICHI.03_TCU061V.AT2
2623	Chi-Chi, Taiwan-03 TCU072 1999	6.2	21.18	468.14	Reverse	6.2	1.83	RSN2623_CHICHI.03_TCU072N.AT2 RSN2623_CHICHI.03_TCU072E.AT2 RSN2623_CHICHI.03_TCU072V.AT2
3717	Whittier Narrows-02 LA - W 70th St 1987	5.27	18.58	241.41	Reverse O	1.7	2.65	RSN3717_WHITTIER.B_B-W70000.AT RSN3717_WHITTIER.B_B-W70270.AT RSN3717_WHITTIER.B_B-W70-UP.AT
3721	Whittier Narrows-02 La Puente - Rimgrove Av 1987	5.27	16.06	339.52	Reverse O	2.9	3.61	RSN3721_WHITTIER.B_B-RIM015.AT2 RSN3721_WHITTIER.B_B-RIM105.AT2 RSN3721_WHITTIER.B_B-RIM-UP.AT2
4278	Friuli (aftershock 9), Italy San Rocco 1976	5.5	11.92	649.67	Reverse	1.1	3.12	RSN4278_FRIULI.P_W-SRO000.AT2 RSN4278_FRIULI.P_W-SRO090.AT2 RSN4278_FRIULI.P_W-SRO-UP.AT2
4280	Calabria, Italy Ferruzzano 1978	5.2	8.13	525.6	Normal	2.3	4.19	RSN4280_CALABRIA.P_FRR000.AT2 RSN4280_CALABRIA.P_FRR090.AT2 RSN4280_CALABRIA.P_FRR-UP.AT2
4329	Potenza, Italy Rionero In Vulture 1990	5.8	34.5	574.88	strike slip	4.5	4.89	RSN4329_POTENZA.P_A-VLT000.AT2 RSN4329_POTENZA.P_A-VLT270.AT2 RSN4329_POTENZA.P_A-VLT-UP.AT2
4346	Umbria Marche, Italy Bevagna 1997	6	18.86	401.34	Normal	10.6	4.29	RSN4346_UBMARCHE.P_A-BEV000.A RSN4346_UBMARCHE.P_A-BEV270.A RSN4346_UBMARCHE.P_A-BEV-DN.A

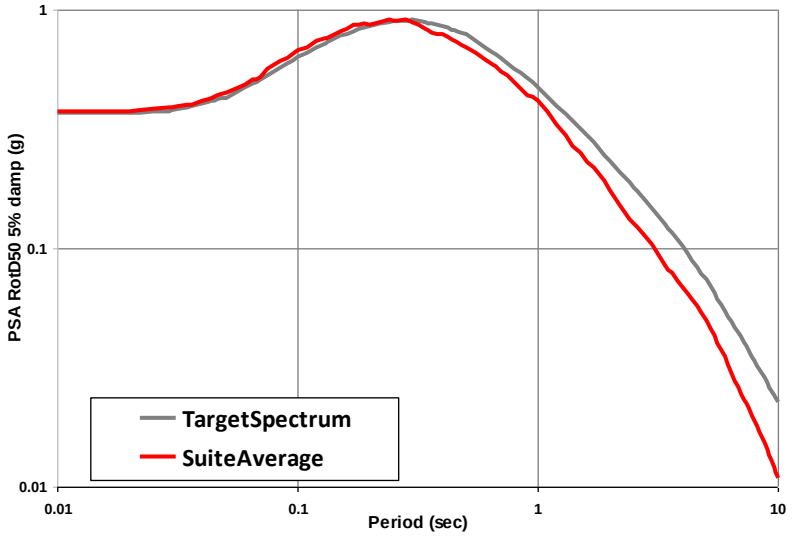
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.31	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	1.72	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	1.11	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5664	Iwate MYG005 2008	6.9	10.71	361.24	Reverse	11.9	1.17	RSN5664_IWATE_MYG005NS.AT2 RSN5664_IWATE_MYG005EW.AT2 RSN5664_IWATE_MYG005UD.AT2
6962	Darfield, New Zealand ROLC 2010	7	0	295.74	strike slip	6.3	1.5	RSN6962_DARFIELD_ROLCS29E.AT2 RSN6962_DARFIELD_ROLCS61W.AT2 RSN6962_DARFIELD_ROLCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	1.47	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
8133	Christchurch, New Zealand SLRC 2011	6.2	31.81	249.28	Reverse O	5.9	2.6	RSN8133_CCHURCH_SLRCS28E.AT2 RSN8133_CCHURCH_SLRCS62W.AT2 RSN8133_CCHURCH_SLRCUP.AT2

Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.53	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
178	Imperial Valley-06 El Centro Array #3 1979	6.53	10.79	162.94	strike slip	4.7	1.19	RSN178_IMPVALL.H_H-E03140.AT2 RSN178_IMPVALL.H_H-E03230.AT2 RSN178_IMPVALL.H_H-E03-UP.AT2
186	Imperial Valley-06 Niland Fire Station 1979	6.53	35.64	212	strike slip	10.1	4.28	RSN186_IMPVALL.H_H-NIL090.AT2 RSN186_IMPVALL.H_H-NIL360.AT2 RSN186_IMPVALL.H_H-NIL-UP.AT2
232	Mammoth Lakes-01 Mammoth Lakes H. S. 1980	6.06	4.48	346.82	Normal O	5.3	1.61	RSN232_MAMMOTH.I_I-MLS254.AT2 RSN232_MAMMOTH.I_I-MLS344.AT2 RSN232_MAMMOTH.I_I-MLS-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	2.31	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	4.19	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.29	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
336	Coalinga-01 Parkfield - Fault Zone 11 1983	6.36	27.1	541.73	Reverse	4.1	4.33	RSN336_COALINGA.H_H-Z11000.AT2 RSN336_COALINGA.H_H-Z11090.AT2 RSN336_COALINGA.H_H-Z11-UP.AT2
358	Coalinga-01 Parkfield - Stone Corral 4E 1983	6.36	30.3	492.43	Reverse	5.4	4.4	RSN358_COALINGA.H_H-SC4000.AT2 RSN358_COALINGA.H_H-SC4090.AT2 RSN358_COALINGA.H_H-SC4-UP.AT2
362	Coalinga-01 Parkfield - Vineyard Cany 2W 1983	6.36	29.01	438.74	Reverse	7.9	3.57	RSN362_COALINGA.H_H-VC2000.AT2 RSN362_COALINGA.H_H-VC2090.AT2 RSN362_COALINGA.H_H-VC2-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	1.2	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
599	Whittier Narrows-01 Brea - S Flower Av 1987	5.99	18.39	322.75	Reverse O	3.3	3.23	

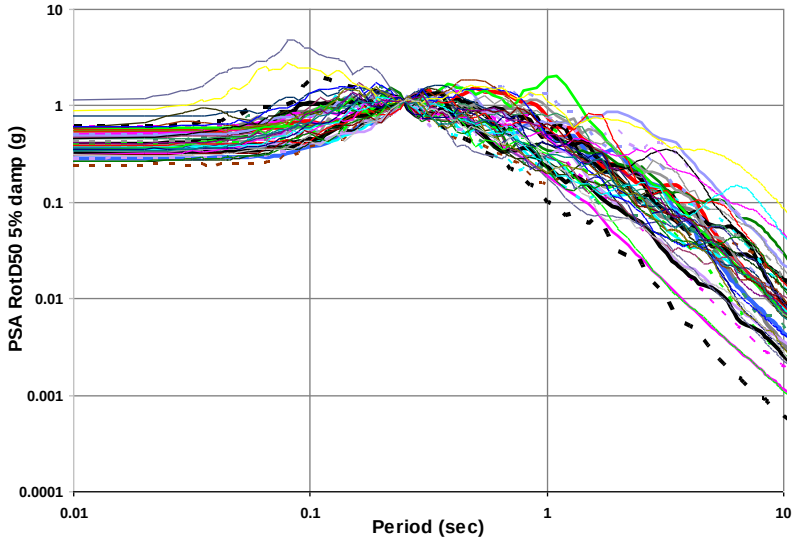
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
779	Loma Prieta LGPC 1989	6.93	0	594.83	Reverse O	5.5	0.84	RSN779_LOMAP_LGP000.AT2 RSN779_LOMAP_LGP090.AT2 RSN779_LOMAP_LGP-UP.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	3.22	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2
952	Northridge-01 Beverly Hills - 12520 Mulhol 1994	6.69	12.39	545.66	Reverse	4.9	0.46	RSN952_NORTHR_MU2035.AT2 RSN952_NORTHR_MU2125.AT2 RSN952_NORTHR_MU2-UP.AT2
983	Northridge-01 Jensen Filter Plant Generator Buildin 1994	6.69	0	525.79	Reverse	3.9	0.48	RSN983_NORTHR_JGB022.AT2 RSN983_NORTHR_JGB292.AT2 RSN983_NORTHR_JGB-UP.AT2
1003	Northridge-01 LA - Saturn St 1994	6.69	21.17	308.71	Reverse	5.3	1.29	RSN1003_NORTHR_STN020.AT2 RSN1003_NORTHR_STN110.AT2 RSN1003_NORTHR_STN-UP.AT2
1005	Northridge-01 LA - Temple & Hope 1994	6.69	28.82	452.15	Reverse	7	2.37	RSN1005_NORTHR_TEM090.AT2 RSN1005_NORTHR_TEM180.AT2 RSN1005_NORTHR_TEM-UP.AT2
1051	Northridge-01 Pacoima Dam (upper left) 1994	6.69	4.92	2016.13	Reverse	3.1	0.41	RSN1051_NORTHR_PUL104.AT2 RSN1051_NORTHR_PUL194.AT2 RSN1051_NORTHR_PUL-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.82	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.37	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1258	Chi-Chi, Taiwan HWA005 1999	7.62	43.17	459.32	Reverse O	11.8	2.15	RSN1258_CHICHI_HWA005-N.AT2 RSN1258_CHICHI_HWA005-W.AT2 RSN1258_CHICHI_HWA005-V.AT2
1503	Chi-Chi, Taiwan TCU065 1999	7.62	0.57	305.85	Reverse O	20	1.13	RSN1503_CHICHI_TCU065-E.AT2 RSN1503_CHICHI_TCU065-N.AT2 RSN1503_CHICHI_TCU065-V.AT2
1549	Chi-Chi, Taiwan TCU129 1999	7.62	1.83	511.18	Reverse O	16.6	0.5	RSN1549_CHICHI_TCU129-E.AT2 RSN1549_CHICHI_TCU129-N.AT2 RSN1549_CHICHI_TCU129-V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	4.49	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2

Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
2619	Chi-Chi, Taiwan-03 TCU067 1999	6.2	27.66	433.63	Reverse	5.2	2.13	RSN2619_CHICHI.03_TCU067N.AT2 RSN2619_CHICHI.03_TCU067E.AT2 RSN2619_CHICHI.03_TCU067V.AT2
3026	Chi-Chi, Taiwan-05 HWA039 1999	6.2	47.45	459.67	Reverse	3.8	4.29	RSN3026_CHICHI.05_HWA039N.AT2 RSN3026_CHICHI.05_HWA039E.AT2 RSN3026_CHICHI.05_HWA039V.AT2
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	4.68	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3574	Taiwan SMART1(5) SMART1 O05 1981	5.9	23.75	286.03	Reverse	3.1	2.7	RSN3574_SMART1.05_05O05EW.AT2 RSN3574_SMART1.05_05O05NS.AT2 RSN3574_SMART1.05_05O05DN.AT2
4112	Parkfield-02, CA Parkfield - Fault Zone 8 2004	6	3.05	308.84	strike slip	2.7	0.93	RSN4112_PARK2004_Z08090.AT2 RSN4112_PARK2004_Z08360.AT2 RSN4112_PARK2004_Z08-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	2.49	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.37	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4840	Chuetsu-oki Joetsu Kita 2007	6.8	28.97	334.01	Reverse	14.9	2.19	RSN4840_CHUETSU_65003NS.AT2 RSN4840_CHUETSU_65003EW.AT2 RSN4840_CHUETSU_65003UD.AT2
4850	Chuetsu-oki Yoshikawaku Joetsu City 2007	6.8	13.68	561.59	Reverse	4.1	1.33	RSN4850_CHUETSU_65013NS.AT2 RSN4850_CHUETSU_65013EW.AT2 RSN4850_CHUETSU_65013UD.AT2
5260	Chuetsu-oki NIG014 2007	6.8	21.37	128.12	Reverse	18.7	3.33	RSN5260_CHUETSU_NIG014NS.AT2 RSN5260_CHUETSU_NIG014EW.AT2 RSN5260_CHUETSU_NIG014UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	1.34	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	2.56	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5619	Iwate IWT011 2008	6.9	8.41	279.36	Reverse	13.7	1.97	RSN5619_IWATE_IWT011NS.AT2 RSN5619_IWATE_IWT011EW.AT2 RSN5619_IWATE_IWT011UD.AT2

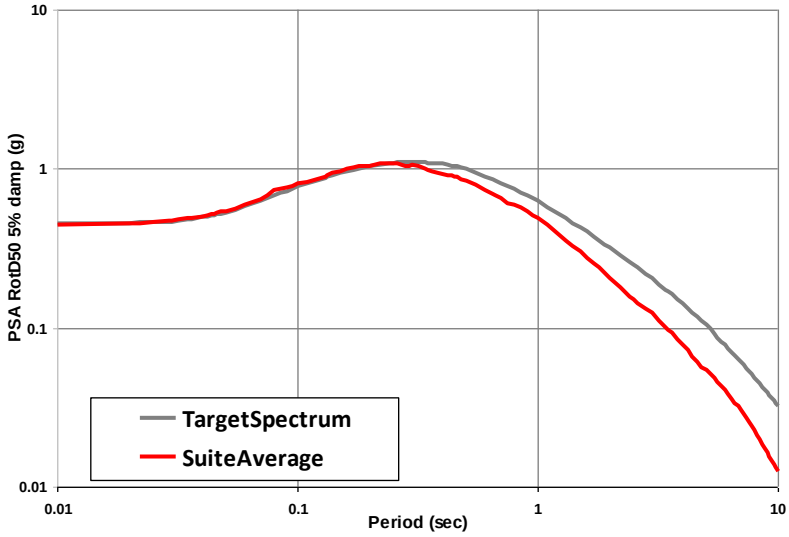
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	4.71	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
5838	El Mayor-Cucapah El Centro - Meloland Geotechnic 2010	7.2	28.53	186.21	strike slip	12.7	1.85	RSN5838_SIERRA.MEX_01794360.AT RSN5838_SIERRA.MEX_01794270.AT RSN5838_SIERRA.MEX_01794-UP.AT
6930	Darfield, New Zealand LRSC 2010	7	9.38	295.74	strike slip	12.2	4.7	RSN6930_DARFIELD_LRSCN49W.AT2 RSN6930_DARFIELD_LRSCS41W.AT2 RSN6930_DARFIELD_LRSCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	1.57	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8062	Christchurch, New Zealand Canterbury Aero Club 2011	6.2	14.41	280.26	Reverse O	3.8	1.84	RSN8062_CCHURCH_CACSN40E.AT2 RSN8062_CCHURCH_CACSN50W.AT2 RSN8062_CCHURCH_CACSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.07	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8897	14383980 Covina - Cypress & Azusa 2008	5.39	18.61	295.71	Reverse O	3.5	4.84	RSN8897_14383980_23179360.AT2 RSN8897_14383980_23179090.AT2 RSN8897_14383980_23179-UP.AT2

Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	2.36	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.64	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
176	Imperial Valley-06 El Centro Array #13 1979	6.53	21.98	249.92	strike slip	8.5	3.16	RSN176_IMPVALL.H_H-E13140.AT2 RSN176_IMPVALL.H_H-E13230.AT2 RSN176_IMPVALL.H_H-E13-UP.AT2
191	Imperial Valley-06 Victoria 1979	6.53	31.92	242.05	strike slip	9.6	3.12	RSN191_IMPVALL.H_H-VCT075.AT2 RSN191_IMPVALL.H_H-VCT345.AT2 RSN191_IMPVALL.H_H-VCT-UP.AT2
205	Imperial Valley-07 El Centro Array #7 1979	5.01	7.32	210.51	strike slip	0.5	2.78	RSN205_IMPVALL.A_A-E07140.AT2 RSN205_IMPVALL.A_A-E07230.AT2 RSN205_IMPVALL.A_A-E07-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	2.82	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.57	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
337	Coalinga-01 Parkfield - Fault Zone 12 1983	6.36	27.96	265.21	Reverse	8.7	4.44	RSN337_COALINGA.H_H-PRK090.AT2 RSN337_COALINGA.H_H-PRK180.AT2 RSN337_COALINGA.H_H-PRK-UP.AT2
338	Coalinga-01 Parkfield - Fault Zone 14 1983	6.36	28.11	246.07	Reverse	4.6	2.24	RSN338_COALINGA.H_H-Z14000.AT2 RSN338_COALINGA.H_H-Z14090.AT2 RSN338_COALINGA.H_H-Z14-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	2.45	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
397	Coalinga-04 Coalinga-14th & Elm (Old CHP) 1983	5.18	10.04	286.41	Reverse	2.1	3.68	RSN397_COALINGA_C-CHP000.AT2 RSN397_COALINGA_C-CHP090.AT2 RSN397_COALINGA_C-CHP-UP.AT2
465	Morgan Hill Hollister Diff Array #4 1984	6.19	26.42	-999	strike slip	10.4	4.81	RSN465_MORGAN_HD4255.AT2 RSN465_MORGAN_HD4345.AT2 RSN465_MORGAN_HD4-UP.AT2

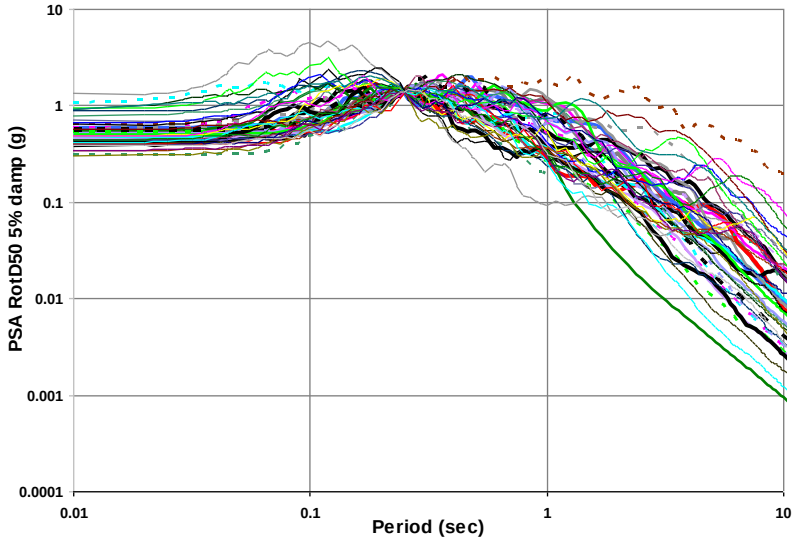
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
589	Whittier Narrows-01 Alhambra - Fremont School 1987	5.99	1.67	549.75	Reverse O	2.1	1.12	RSN589_WHITTIER.A_A-ALH180.AT2 RSN589_WHITTIER.A_A-ALH270.AT2 RSN589_WHITTIER.A_A-ALH-UP.AT2
690	Whittier Narrows-01 San Gabriel - E Grand Ave 1987	5.99	0	401.37	Reverse O	2.5	2.32	RSN690_WHITTIER.A_A-GRN180.AT2 RSN690_WHITTIER.A_A-GRN270.AT2 RSN690_WHITTIER.A_A-GRN-UP.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	3.93	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2
950	Northridge-01 Baldwin Park - N Holly 1994	6.69	47.72	544.68	Reverse	6.3	4.37	RSN950_NORTHR_NHO180.AT2 RSN950_NORTHR_NHO270.AT2 RSN950_NORTHR_NHO-UP.AT2
962	Northridge-01 Carson - Water St 1994	6.69	45.44	160.58	Reverse	14.2	4.55	RSN962_NORTHR_WAT180.AT2 RSN962_NORTHR_WAT270.AT2 RSN962_NORTHR_WAT-UP.AT2
964	Northridge-01 Compton - Castlegate St 1994	6.69	42.96	266.9	Reverse	11.4	3.37	RSN964_NORTHR_CAS000.AT2 RSN964_NORTHR_CAS270.AT2 RSN964_NORTHR_CAS-UP.AT2
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	2.24	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
1005	Northridge-01 LA - Temple & Hope 1994	6.69	28.82	452.15	Reverse	7	2.89	RSN1005_NORTHR_TEM090.AT2 RSN1005_NORTHR_TEM180.AT2 RSN1005_NORTHR_TEM-UP.AT2
1052	Northridge-01 Pacoima Kagel Canyon 1994	6.69	5.26	508.08	Reverse	5.7	1.48	RSN1052_NORTHR_PKC090.AT2 RSN1052_NORTHR_PKC360.AT2 RSN1052_NORTHR_PKC-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1258	Chi-Chi, Taiwan HWA005 1999	7.62	43.17	459.32	Reverse O	11.8	2.62	RSN1258_CHICHI_HWA005-N.AT2 RSN1258_CHICHI_HWA005-W.AT2 RSN1258_CHICHI_HWA005-V.AT2
2383	Chi-Chi, Taiwan-02 TCU067 1999	5.9	32.51	433.63	Reverse	3.1	4.18	RSN2383_CHICHI.02_TCU067N.AT2 RSN2383_CHICHI.02_TCU067E.AT2 RSN2383_CHICHI.02_TCU067V.AT2
2469	Chi-Chi, Taiwan-03 CHY041 1999	6.2	40.79	492.26	Reverse	3.7	3.22	RSN2469_CHICHI.03_CHY041N.AT2 RSN2469_CHICHI.03_CHY041E.AT2 RSN2469_CHICHI.03_CHY041V.AT2

Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
2703	Chi-Chi, Taiwan-04 CHY028 1999	6.2	17.63	542.61	strike slip	4.6	2.34	RSN2703_CHICHI.04_CHY028N.AT2 RSN2703_CHICHI.04_CHY028E.AT2 RSN2703_CHICHI.04_CHY028V.AT2
3278	Chi-Chi, Taiwan-06 CHY041 1999	6.3	45.68	492.26	Reverse	3.2	1.84	RSN3278_CHICHI.06_CHY041N.AT2 RSN3278_CHICHI.06_CHY041E.AT2 RSN3278_CHICHI.06_CHY041V.AT2
3311	Chi-Chi, Taiwan-06 CHY092 1999	6.3	42.77	253.72	Reverse	15.1	3.71	RSN3311_CHICHI.06_CHY092N.AT2 RSN3311_CHICHI.06_CHY092W.AT2 RSN3311_CHICHI.06_CHY092V.AT2
3317	Chi-Chi, Taiwan-06 CHY101 1999	6.3	34.55	258.89	Reverse	9	3.53	RSN3317_CHICHI.06_CHY101N.AT2 RSN3317_CHICHI.06_CHY101E.AT2 RSN3317_CHICHI.06_CHY101V.AT2
3564	Taiwan SMART1(5) SMART1 M05 1981	5.9	24.67	306.38	Reverse	2.9	3.08	RSN3564_SMART1.05_05M05EW.AT RSN3564_SMART1.05_05M05NS.AT2 RSN3564_SMART1.05_05M05DN.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	2.88	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	2.97	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	1.98	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.45	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4870	Chuetsu-oki Horinouchi Uonuma City 2007	6.8	29.9	561.59	Reverse	8.1	2.93	RSN4870_CHUETSU_65043NS.AT2 RSN4870_CHUETSU_65043EW.AT2 RSN4870_CHUETSU_65043UD.AT2
4889	Chuetsu-oki Joetsu Otemachi 2007	6.8	32.14	314.57	Reverse	3.1	2.27	RSN4889_CHUETSU_6E1C1NS.AT2 RSN4889_CHUETSU_6E1C1EW.AT2 RSN4889_CHUETSU_6E1C1UD.AT2
5239	Chuetsu-oki NGNH29 2007	6.8	43.54	464.92	Reverse	5.7	4.51	RSN5239_CHUETSU_NGNH29NS.AT2 RSN5239_CHUETSU_NGNH29EW.AT2 RSN5239_CHUETSU_NGNH29UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	1.64	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2

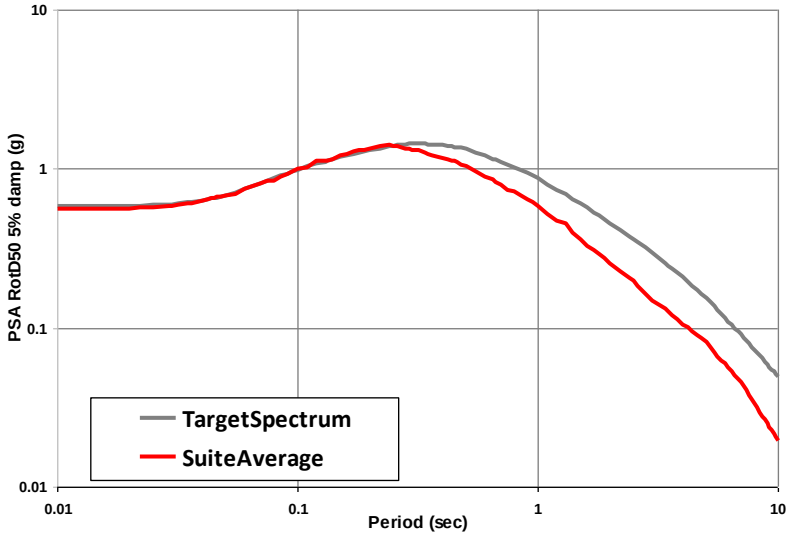
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
5776	Iwate Kami, Miyagi Miyazaki City 2008	6.9	25.15	477.55	Reverse	7.6	3.16	RSN5776_IWATE_54010NS.AT2 RSN5776_IWATE_54010EW.AT2 RSN5776_IWATE_54010UD.AT2
5816	Iwate Shinmachi Wakayu 2008	6.9	42.02	359.13	Reverse	14.5	2.3	RSN5816_IWATE_48A41NS.AT2 RSN5816_IWATE_48A41EW.AT2 RSN5816_IWATE_48A41UD.AT2
6927	Darfield, New Zealand LINC 2010	7	5.07	263.2	strike slip	8	1.98	RSN6927_DARFIELD_LINCN23E.AT2 RSN6927_DARFIELD_LINCN67W.AT2 RSN6927_DARFIELD_LINCUP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	1.56	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	2.17	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	1.92	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.31	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2

Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.82	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
233	Mammoth Lakes-02 Convict Creek 1980	5.69	2.91	382.12	strike slip	2.6	3.52	RSN233_MAMMOTH.J_J-CVK090.AT2 RSN233_MAMMOTH.J_J-CVK180.AT2 RSN233_MAMMOTH.J_J-CVK-UP.AT2
265	Victoria, Mexico Cerro Prieto 1980	6.33	13.8	471.53	strike slip	4.3	1.71	RSN265_VICT_CPE045.AT2 RSN265_VICT_CPE315.AT2 RSN265_VICT_CPE-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	3.6	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
292	Irpinia, Italy-01 Sturno (STN) 1980	6.9	6.78	382	Normal	6.5	2.02	RSN292_ITALY_A-STU000.AT2 RSN292_ITALY_A-STU270.AT2 RSN292_ITALY_A-STU-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	4.06	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	2.01	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
326	Coalinga-01 Parkfield - Cholame 2WA 1983	6.36	43.83	173.02	Reverse	7.6	4.66	RSN326_COALINGA.H_H-C02000.AT2 RSN326_COALINGA.H_H-C02090.AT2 RSN326_COALINGA.H_H-C02-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	3.14	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
346	Coalinga-01 Parkfield - Fault Zone 8 1983	6.36	28.58	308.84	Reverse	5.1	4.1	RSN346_COALINGA.H_H-Z08000.AT2 RSN346_COALINGA.H_H-Z08090.AT2 RSN346_COALINGA.H_H-Z08-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	1.87	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	2.23	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2

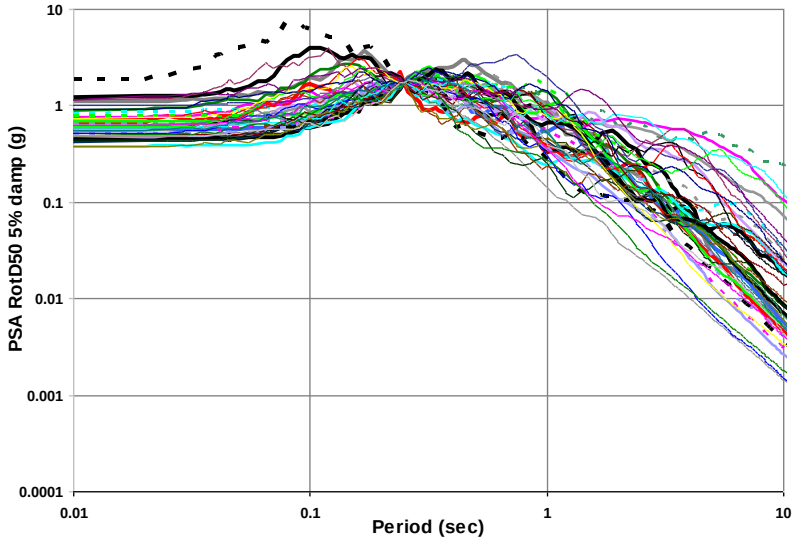
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.86	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	2.86	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
1083	Northridge-01 Sunland - Mt Gleason Ave 1994	6.69	12.38	402.16	Reverse	6	3.59	RSN1083_NORTHR_GLE170.AT2 RSN1083_NORTHR_GLE260.AT2 RSN1083_NORTHR_GLE-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	1.6	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.9	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	2.18	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	1.13	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1534	Chi-Chi, Taiwan TCU107 1999	7.62	15.99	409	Reverse O	24.1	4.76	RSN1534_CHICHI_TCU107-E.AT2 RSN1534_CHICHI_TCU107-N.AT2 RSN1534_CHICHI_TCU107-V.AT2
1737	Northridge-06 Sylmar - Converter Sta East 1994	5.28	6.79	370.52	Reverse	1.5	3.91	RSN1737_NORTH392_SCE011.AT2 RSN1737_NORTH392_SCE281.AT2 RSN1737_NORTH392_SCE-UP.AT2
1794	Hector Mine Joshua Tree 1999	7.13	31.06	379.32	strike slip	7	3.5	RSN1794_HECTOR_JOS090.AT2 RSN1794_HECTOR_JOS360.AT2 RSN1794_HECTOR_JOS-UP.AT2
2469	Chi-Chi, Taiwan-03 CHY041 1999	6.2	40.79	492.26	Reverse	3.7	4.13	RSN2469_CHICHI.03_CHY041N.AT2 RSN2469_CHICHI.03_CHY041E.AT2 RSN2469_CHICHI.03_CHY041V.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	2.65	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
3574	Taiwan SMART1(5) SMART1 O05 1981	5.9	23.75	286.03	Reverse	3.1	4.21	RSN3574_SMART1.05_05O05EW.AT2 RSN3574_SMART1.05_05O05NS.AT2 RSN3574_SMART1.05_05O05DN.AT2

Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
3760	Landers Big Bear Lake - Civic Center 1992	7.28	45.48	430.36	strike slip	17.3	3.84	RSN3760_LANDERS_BLC360.AT2 RSN3760_LANDERS_BLC270.AT2 RSN3760_LANDERS_BLC-UP.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	3.04	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
4085	Parkfield-02, CA Shandon-1-story High School Bldg 2004	6	12.59	357.35	strike slip	3.7	4.53	RSN4085_PARK2004_36535180.AT2 RSN4085_PARK2004_36535270.AT2 RSN4085_PARK2004_36535-UP.AT2
4107	Parkfield-02, CA Parkfield - Fault Zone 1 2004	6	0.02	178.27	strike slip	2.4	1.21	RSN4107_PARK2004_COW090.AT2 RSN4107_PARK2004_COW360.AT2 RSN4107_PARK2004_COW-UP.AT2
4116	Parkfield-02, CA Parkfield - Fault Zone 14 2004	6	8.45	246.07	strike slip	2.2	0.88	RSN4116_PARK2004_Z14090.AT2 RSN4116_PARK2004_Z14360.AT2 RSN4116_PARK2004_Z14-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	3.89	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.58	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4855	Chuetsu-oki Sanjo 2007	6.8	21.4	245.45	Reverse	13.7	3.8	RSN4855_CHUETSU_65024NS.AT2 RSN4855_CHUETSU_65024EW.AT2 RSN4855_CHUETSU_65024UD.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	3.24	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5266	Chuetsu-oki NIG020 2007	6.8	32.93	331.63	Reverse	9.5	4.8	RSN5266_CHUETSU_NIG020NS.AT2 RSN5266_CHUETSU_NIG020EW.AT2 RSN5266_CHUETSU_NIG020UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	4	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5775	Iwate Tamati Ono 2008	6.9	28.9	561.59	Reverse	8	3.53	RSN5775_IWATE_54009NS.AT2 RSN5775_IWATE_54009EW.AT2 RSN5775_IWATE_54009UD.AT2
5972	El Mayor-Cucapah Brawley Airport 2010	7.2	41.15	208.71	strike slip	12.8	3.4	RSN5972_SIERRA.MEX_BRA360.AT2 RSN5972_SIERRA.MEX_BRA090.AT2 RSN5972_SIERRA.MEX_BRA-UP.AT2

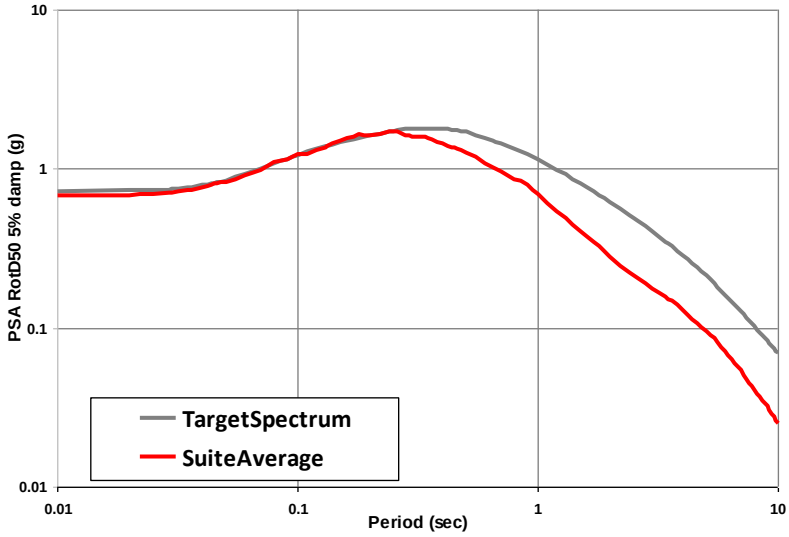
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
5985	El Mayor-Cucapah El Centro Differential Array 2010	7.2	22.83	202.26	strike slip	8.3	0.96	RSN5985_SIERRA.MEX_EDA360.AT2 RSN5985_SIERRA.MEX_EDA090.AT2 RSN5985_SIERRA.MEX_EDA-UP.AT2
5988	El Mayor-Cucapah Meloland, E Holton Rd. 2010	7.2	30.18	196	strike slip	20.9	2.13	RSN5988_SIERRA.MEX_DRE360.AT2 RSN5988_SIERRA.MEX_DRE-90.AT2 RSN5988_SIERRA.MEX_DRE-UP.AT2
6912	Darfield, New Zealand Hulverstone Drive Pumping Station 2010	7	25.4	206	strike slip	10	4.05	RSN6912_DARFIELD_HPSCN04W.AT2 RSN6912_DARFIELD_HPSCS86W.AT2 RSN6912_DARFIELD_HPSCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	2.77	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	2.45	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.67	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8119	Christchurch, New Zealand Pages Road Pumping Station 2011	6.2	1.92	206	Reverse O	2.5	1.42	RSN8119_CCHURCH_PRPCS.AT2 RSN8119_CCHURCH_PRPCW.AT2 RSN8119_CCHURCH_PRPCUP.AT2

Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.57	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
148	Coyote Lake Gilroy Array #3 1979	5.74	6.75	349.85	strike slip	2.1	3.63	RSN148_COYOTELK_G03050.AT2 RSN148_COYOTELK_G03140.AT2 RSN148_COYOTELK_G03-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.01	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	3.25	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	2.49	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	3.88	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	2.32	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
369	Coalinga-01 Slack Canyon 1983	6.36	25.98	648.09	Reverse	4.3	4.92	RSN369_COALINGA.H_H-SCN045.AT2 RSN369_COALINGA.H_H-SCN315.AT2 RSN369_COALINGA.H_H-SCN-UP.AT2
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	4.18	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2
418	Coalinga-07 Coalinga-14th & Elm (Old CHP) 1983	5.21	7.31	286.41	Reverse	0.4	0.95	RSN418_COALINGA_F-CHP000.AT2 RSN418_COALINGA_F-CHP090.AT2 RSN418_COALINGA_F-CHP-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	2.76	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
634	Whittier Narrows-01 LA - Fletcher Dr 1987	5.99	11.07	329.06	Reverse O	2.8	3.65	RSN634_WHITTIER.A_A-FLE144.AT2 RSN634_WHITTIER.A_A-FLE234.AT2 RSN634_WHITTIER.A_A-FLE-UP.AT2

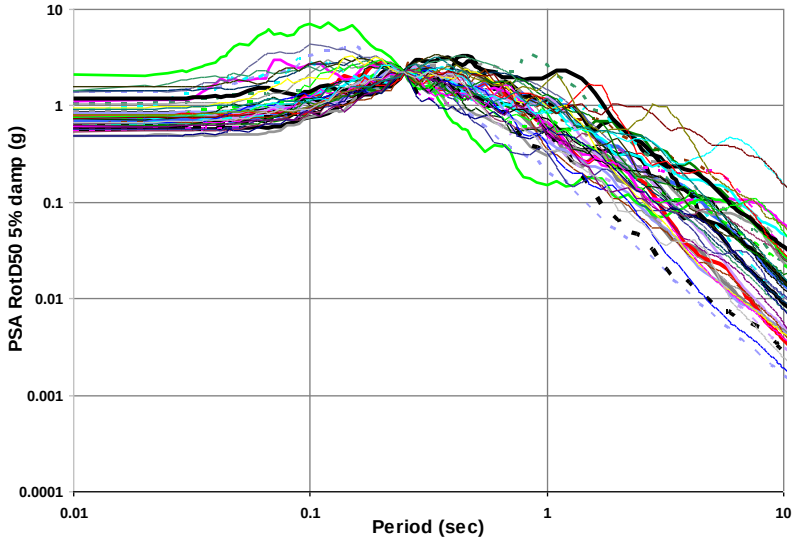
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
692	Whittier Narrows-01 Santa Fe Springs - E.Joslin 1987	5.99	11.47	339.06	Reverse O	1.6	1.38	RSN692_WHITTIER.A_A-EJS048.AT2 RSN692_WHITTIER.A_A-EJS318.AT2 RSN692_WHITTIER.A_A-EJS-UP.AT2
716	Whittier Narrows-02 San Marino - SW Academy 1987	5.27	4.42	379.43	Reverse O	0.6	2.76	RSN716_WHITTIER.B_B-SMA270.AT2 RSN716_WHITTIER.B_B-SMA360.AT2 RSN716_WHITTIER.B_B-SMA-UP.AT2
730	Spitak, Armenia Gukasian 1988	6.77	23.99	343.53	Reverse O	5.1	4.86	RSN730_SPITAK_GUK000.AT2 RSN730_SPITAK_GUK090.AT2 RSN730_SPITAK_GUK-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	2.3	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	3.54	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
1003	Northridge-01 LA - Saturn St 1994	6.69	21.17	308.71	Reverse	5.3	2.49	RSN1003_NORTHR_STN020.AT2 RSN1003_NORTHR_STN110.AT2 RSN1003_NORTHR_STN-UP.AT2
1006	Northridge-01 LA - UCLA Grounds 1994	6.69	13.8	398.42	Reverse	5.5	1.7	RSN1006_NORTHR_UCL090.AT2 RSN1006_NORTHR_UCL360.AT2 RSN1006_NORTHR_UCL-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	2.36	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.58	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	3.48	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1258	Chi-Chi, Taiwan HWA005 1999	7.62	43.17	459.32	Reverse O	11.8	4.15	RSN1258_CHICHI_HWA005-N.AT2 RSN1258_CHICHI_HWA005-W.AT2 RSN1258_CHICHI_HWA005-V.AT2
1490	Chi-Chi, Taiwan TCU050 1999	7.62	9.49	542.41	Reverse O	18.4	4.46	RSN1490_CHICHI_TCU050-E.AT2 RSN1490_CHICHI_TCU050-N.AT2 RSN1490_CHICHI_TCU050-V.AT2
1510	Chi-Chi, Taiwan TCU075 1999	7.62	0.89	573.02	Reverse O	19.4	2.54	RSN1510_CHICHI_TCU075-E.AT2 RSN1510_CHICHI_TCU075-N.AT2 RSN1510_CHICHI_TCU075-V.AT2

Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	4.08	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
2626	Chi-Chi, Taiwan-03 TCU075 1999	6.2	18.47	573.02	Reverse	2	4.61	RSN2626_CHICHI.03_TCU075N.AT2 RSN2626_CHICHI.03_TCU075E.AT2 RSN2626_CHICHI.03_TCU075V.AT2
3264	Chi-Chi, Taiwan-06 CHY024 1999	6.3	29.49	427.73	Reverse	8.2	4.4	RSN3264_CHICHI.06_CHY024N.AT2 RSN3264_CHICHI.06_CHY024E.AT2 RSN3264_CHICHI.06_CHY024V.AT2
3561	Taiwan SMART1(5) SMART1 M02 1981	5.9	26.06	306.78	Reverse	2.9	4.08	RSN3561_SMART1.05_05M02EW.AT RSN3561_SMART1.05_05M02NS.AT2 RSN3561_SMART1.05_05M02DN.AT2
3564	Taiwan SMART1(5) SMART1 M05 1981	5.9	24.67	306.38	Reverse	2.9	4.87	RSN3564_SMART1.05_05M05EW.AT RSN3564_SMART1.05_05M05NS.AT2 RSN3564_SMART1.05_05M05DN.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	4.56	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4132	Parkfield-02, CA Parkfield - Vineyard Cany 2E 2004	6	3.69	467.76	strike slip	2.7	2.32	RSN4132_PARK2004_PGD090.AT2 RSN4132_PARK2004_PGD360.AT2 RSN4132_PARK2004_PGD-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.71	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.48	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5267	Chuetsu-oki NIG021 2007	6.8	24.31	418.5	Reverse	3.5	1.69	RSN5267_CHUETSU_NIG021NS.AT2 RSN5267_CHUETSU_NIG021EW.AT2 RSN5267_CHUETSU_NIG021UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	4.95	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5623	Iwate IWT015 2008	6.9	17.05	567.45	Reverse	6.2	2.68	RSN5623_IWATE_IWT015NS.AT2 RSN5623_IWATE_IWT015EW.AT2 RSN5623_IWATE_IWT015UD.AT2
5775	Iwate Tamati Ono 2008	6.9	28.9	561.59	Reverse	8	4.36	RSN5775_IWATE_54009NS.AT2 RSN5775_IWATE_54009EW.AT2 RSN5775_IWATE_54009UD.AT2

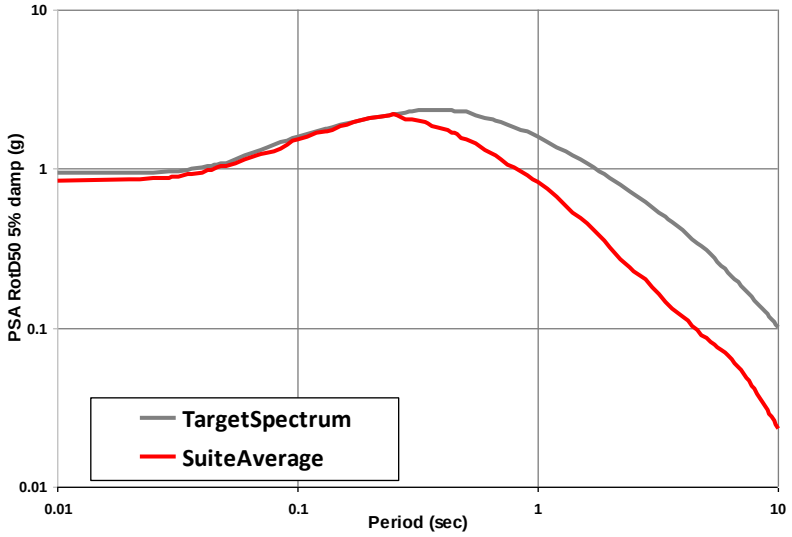
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
5778	Iwate Matsuyama City 2008	6.9	40.98	436.34	Reverse	6.3	4.02	RSN5778_IWATE_54012NS.AT2 RSN5778_IWATE_54012EW.AT2 RSN5778_IWATE_54012UD.AT2
5798	Iwate Takanashi Daisen 2008	6.9	44.75	217.1	Reverse	9.7	4.59	RSN5798_IWATE_55429NS.AT2 RSN5798_IWATE_55429EW.AT2 RSN5798_IWATE_55429UD.AT2
5799	Iwate Misato, Akita City - Tsuchizaki 2008	6.9	39.86	552.38	Reverse	6.5	4.21	RSN5799_IWATE_55432NS.AT2 RSN5799_IWATE_55432EW.AT2 RSN5799_IWATE_55432UD.AT2
5988	El Mayor-Cucapah Meloland, E Holton Rd. 2010	7.2	30.18	196	strike slip	20.9	2.64	RSN5988_SIERRA.MEX_DRE360.AT2 RSN5988_SIERRA.MEX_DRE-90.AT2 RSN5988_SIERRA.MEX_DRE-UP.AT2
6966	Darfield, New Zealand Shirley Library 2010	7	22.33	207	strike slip	11	3.35	RSN6966_DARFIELD_SHLCS40W.AT2 RSN6966_DARFIELD_SHLCS50E.AT2 RSN6966_DARFIELD_SHLCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	3.03	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8119	Christchurch, New Zealand Pages Road Pumping Station 2011	6.2	1.92	206	Reverse O	2.5	1.75	RSN8119_CCHURCH_PRPCS.AT2 RSN8119_CCHURCH_PRPCW.AT2 RSN8119_CCHURCH_PRPCUP.AT2

Site	**01 Oakland**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	01 Oakland	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.68	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
158	Imperial Valley-06 Aeropuerto Mexicali 1979	6.53	0	259.86	strike slip	5.8	3.05	RSN158_IMPVALL.H_H-AEP045.AT2 RSN158_IMPVALL.H_H-AEP315.AT2 RSN158_IMPVALL.H_H-AEP-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.29	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	3.18	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	4.94	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	2.12	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.87	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	3.52	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
634	Whittier Narrows-01 LA - Fletcher Dr 1987	5.99	11.07	329.06	Reverse O	2.8	4.65	RSN634_WHITTIER.A_A-FLE144.AT2 RSN634_WHITTIER.A_A-FLE234.AT2 RSN634_WHITTIER.A_A-FLE-UP.AT2
674	Whittier Narrows-01 Pasadena - Brown Gym 1987	5.99	4.3	341.14	Reverse O	3.3	4.27	RSN674_WHITTIER.A_A-BRG180.AT2 RSN674_WHITTIER.A_A-BRG270.AT2 RSN674_WHITTIER.A_A-BRG-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	2.93	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
786	Loma Prieta Palo Alto - 1900 Embarc. 1989	6.93	30.56	209.87	Reverse O	9.6	4.02	RSN786_LOMAP_PAE055.AT2 RSN786_LOMAP_PAE325.AT2 RSN786_LOMAP_PAE-UP.AT2

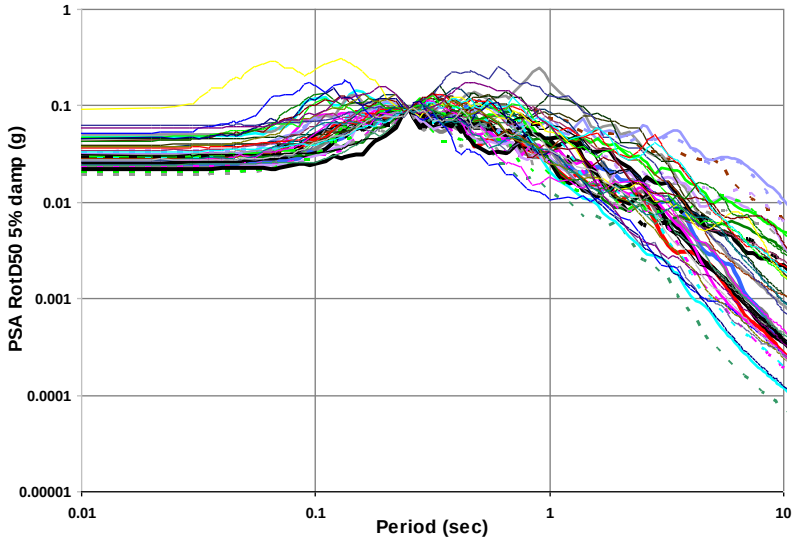
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	4.51	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
983	Northridge-01 Jensen Filter Plant Generator Buildin 1994	6.69	0	525.79	Reverse	3.9	1.19	RSN983_NORTHR_JGB022.AT2 RSN983_NORTHR_JGB292.AT2 RSN983_NORTHR_JGB-UP.AT2
998	Northridge-01 LA - N Westmoreland 1994	6.69	23.4	315.06	Reverse	5.5	1.91	RSN998_NORTHR_WST000.AT2 RSN998_NORTHR_WST270.AT2 RSN998_NORTHR_WST-UP.AT2
1001	Northridge-01 LA - S Grand Ave 1994	6.69	29.52	285.28	Reverse	5.4	2.95	RSN1001_NORTHR_GR2090.AT2 RSN1001_NORTHR_GR2180.AT2 RSN1001_NORTHR_GR2-UP.AT2
1032	Northridge-01 Leona Valley #6 1994	6.69	37.7	327.44	Reverse	4.9	4.98	RSN1032_NORTHR_LV6090.AT2 RSN1032_NORTHR_LV6360.AT2 RSN1032_NORTHR_LV6-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	1.06	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	1.75	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	2.01	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	3.37	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	3.44	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2
1231	Chi-Chi, Taiwan CHY080 1999	7.62	0.11	496.21	Reverse O	6.4	1.25	RSN1231_CHICHI_CHY080-E.AT2 RSN1231_CHICHI_CHY080-N.AT2 RSN1231_CHICHI_CHY080-V.AT2
1402	Chi-Chi, Taiwan NST 1999	7.62	38.36	491.08	Reverse O	8.5	3.01	RSN1402_CHICHI_NST-E.AT2 RSN1402_CHICHI_NST-N.AT2 RSN1402_CHICHI_NST-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	2.41	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**01 Oakland** **270** **2500**							**CS Set**
3570	Taiwan SMART1(5) SMART1 M12 1981	5.9	26.5	275.82	Reverse	2	4.53	RSN3570_SMART1.05_05M12EW.AT RSN3570_SMART1.05_05M12NS.AT2 RSN3570_SMART1.05_05M12DN.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	4.18	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
3733	Whittier Narrows-02 Pasadena - Old House Rd 1987	5.27	9.95	397.27	Reverse O	0.4	3.56	RSN3733_WHITTIER.B_B-OLD000.AT2 RSN3733_WHITTIER.B_B-OLD090.AT2 RSN3733_WHITTIER.B_B-OLD-UP.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	4.79	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
3943	Tottori, Japan SMN015 2000	6.61	9.1	616.55	strike slip	3.5	3.45	RSN3943_TOTTORI_SMN015NS.AT2 RSN3943_TOTTORI_SMN015EW.AT2 RSN3943_TOTTORI_SMN015UD.AT2
3965	Tottori, Japan TTR008 2000	6.61	6.86	139.21	strike slip	5.3	3.05	RSN3965_TOTTORI_TTR008NS.AT2 RSN3965_TOTTORI_TTR008EW.AT2 RSN3965_TOTTORI_TTR008UD.AT2
4065	Parkfield-02, CA PARKFIELD - EADES 2004	6	1.37	383.9	strike slip	2.8	3.83	RSN4065_PARK2004_EADES-90.AT2 RSN4065_PARK2004_EADES360.AT2 RSN4065_PARK2004_EADES-UP.AT2
4081	Parkfield-02, CA Parkfield - Cholame 5W 2004	6	6.27	236.59	strike slip	2.9	4.43	RSN4081_PARK2004_C05090.AT2 RSN4081_PARK2004_C05360.AT2 RSN4081_PARK2004_C05-UP.AT2
4102	Parkfield-02, CA Parkfield - Cholame 3W 2004	6	2.55	230.57	strike slip	1.6	3.46	RSN4102_PARK2004_C03090.AT2 RSN4102_PARK2004_C03360.AT2 RSN4102_PARK2004_C03-UP.AT2
4116	Parkfield-02, CA Parkfield - Fault Zone 14 2004	6	8.45	246.07	strike slip	2.2	1.39	RSN4116_PARK2004_Z14090.AT2 RSN4116_PARK2004_Z14360.AT2 RSN4116_PARK2004_Z14-UP.AT2
4207	Niigata, Japan NIG017 2004	6.63	4.22	274.17	Reverse	6	1.64	RSN4207_NIIGATA_NIG017NS.AT2 RSN4207_NIIGATA_NIG017EW.AT2 RSN4207_NIIGATA_NIG017UD.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	4	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4223	Niigata, Japan NIGH06 2004	6.63	30.18	493.27	Reverse	4.9	1.74	RSN4223_NIIGATA_NIGH06NS.AT2 RSN4223_NIIGATA_NIGH06EW.AT2 RSN4223_NIIGATA_NIGH06UD.AT2

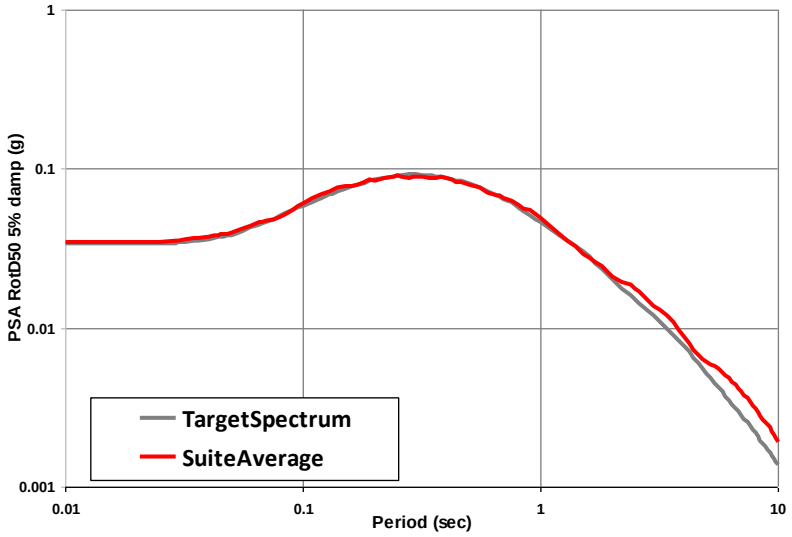
Site	01 Oakland							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.91	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
5267	Chuetsu-oki NIG021 2007	6.8	24.31	418.5	Reverse	3.5	2.16	RSN5267_CHUETSU_NIG021NS.AT2 RSN5267_CHUETSU_NIG021EW.AT2 RSN5267_CHUETSU_NIG021UD.AT2
5816	Iwate Shinmachi Wakayu 2008	6.9	42.02	359.13	Reverse	14.5	4.64	RSN5816_IWATE_48A41NS.AT2 RSN5816_IWATE_48A41EW.AT2 RSN5816_IWATE_48A41UD.AT2
5985	El Mayor-Cucapah El Centro Differential Array 2010	7.2	22.83	202.26	strike slip	8.3	1.51	RSN5985_SIERRA.MEX_EDA360.AT2 RSN5985_SIERRA.MEX_EDA090.AT2 RSN5985_SIERRA.MEX_EDA-UP.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	3.02	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6966	Darfield, New Zealand Shirley Library 2010	7	22.33	207	strike slip	11	4.27	RSN6966_DARFIELD_SHLCS40W.AT2 RSN6966_DARFIELD_SHLCS50E.AT2 RSN6966_DARFIELD_SHLCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	3.87	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
334	Coalinga-01 Parkfield - Fault Zone 1 1983	6.36	41.04	178.27	Reverse	12.7	0.37	RSN334_COALINGA.H_H-COW000.AT RSN334_COALINGA.H_H-COW090.AT RSN334_COALINGA.H_H-COW-UP.AT
570	Taiwan SMART1(45) SMART1 C00 1986	7.3	56.01	309.41	Reverse	12.1	0.24	RSN570_SMART1.45_45C00EW.AT2 RSN570_SMART1.45_45C00NS.AT2 RSN570_SMART1.45_45C00DN.AT2
698	Whittier Narrows-01 Sylmar - Olive View Med FF 1987	5.99	38.55	440.54	Reverse O	6.3	0.67	RSN698_WHITTIER.A_A-SYL000.AT2 RSN698_WHITTIER.A_A-SYL090.AT2 RSN698_WHITTIER.A_A-SYL-UP.AT2
910	Big Bear-01 Joshua Tree 1992	6.46	40.99	379.32	strike slip	9.8	0.43	RSN910_BIGBEAR_JOS090.AT2 RSN910_BIGBEAR_JOS360.AT2 RSN910_BIGBEAR_JOS-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	0.34	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.2	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	0.52	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	0.33	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	0.67	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1215	Chi-Chi, Taiwan CHY058 1999	7.62	59.79	269.28	Reverse O	29.9	0.62	RSN1215_CHICHI_CHY058-E.AT2 RSN1215_CHICHI_CHY058-N.AT2 RSN1215_CHICHI_CHY058-V.AT2
1427	Chi-Chi, Taiwan TAP035 1999	7.62	87.67	438.13	Reverse O	14.4	0.38	RSN1427_CHICHI_TAP035-E.AT2 RSN1427_CHICHI_TAP035-N.AT2 RSN1427_CHICHI_TAP035-V.AT2
2194	Chi-Chi, Taiwan-02 CHY079 1999	5.9	89.06	573.04	Reverse	6.6	2.62	RSN2194_CHICHI.02_CHY079N.AT2 RSN2194_CHICHI.02_CHY079E.AT2 RSN2194_CHICHI.02_CHY079V.AT2

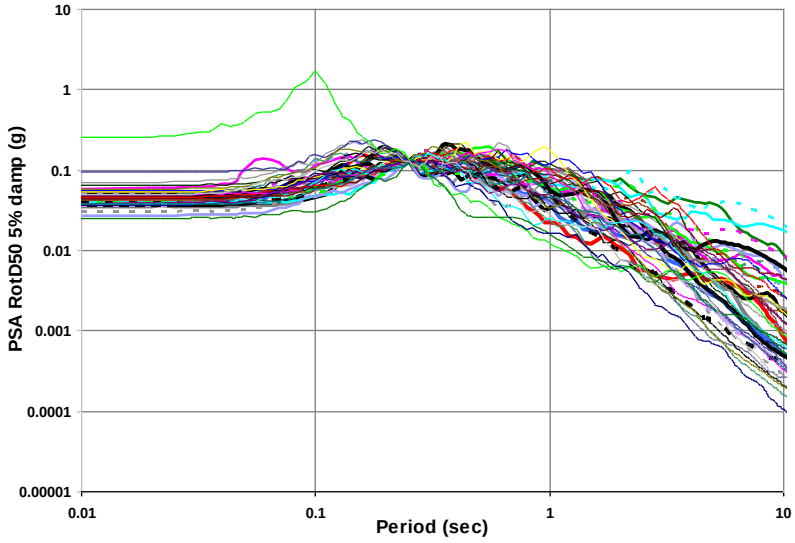
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
2238	Chi-Chi, Taiwan-02 HWA031 1999	5.9	44.29	602.29	Reverse	10	1.45	RSN2238_CHICHI.02_HWA031N.AT2 RSN2238_CHICHI.02_HWA031E.AT2 RSN2238_CHICHI.02_HWA031V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	0.59	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2299	Chi-Chi, Taiwan-02 ILA067 1999	5.9	55.69	665.2	Reverse	4.4	1.03	RSN2299_CHICHI.02_ILA067N.AT2 RSN2299_CHICHI.02_ILA067E.AT2 RSN2299_CHICHI.02_ILA067V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	0.67	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2411	Chi-Chi, Taiwan-02 TCU111 1999	5.9	53.75	237.53	Reverse	18.4	1.91	RSN2411_CHICHI.02_TCU111N.AT2 RSN2411_CHICHI.02_TCU111E.AT2 RSN2411_CHICHI.02_TCU111V.AT2
2518	Chi-Chi, Taiwan-03 HWA011 1999	6.2	72.23	355.76	Reverse	16	1.81	RSN2518_CHICHI.03_HWA011N.AT2 RSN2518_CHICHI.03_HWA011E.AT2 RSN2518_CHICHI.03_HWA011V.AT2
2548	Chi-Chi, Taiwan-03 HWA048 1999	6.2	71.21	345.89	Reverse	15.2	1.76	RSN2548_CHICHI.03_HWA048N.AT2 RSN2548_CHICHI.03_HWA048W.AT2 RSN2548_CHICHI.03_HWA048V.AT2
2668	Chi-Chi, Taiwan-03 TTN004 1999	6.2	97.61	463.59	Reverse	15.2	4.17	RSN2668_CHICHI.03_TTN004N.AT2 RSN2668_CHICHI.03_TTN004W.AT2 RSN2668_CHICHI.03_TTN004V.AT2
2696	Chi-Chi, Taiwan-04 CHY017 1999	6.2	69.99	190.57	strike slip	28.7	1.4	RSN2696_CHICHI.04_CHY017N.AT2 RSN2696_CHICHI.04_CHY017W.AT2 RSN2696_CHICHI.04_CHY017V.AT2
2719	Chi-Chi, Taiwan-04 CHY055 1999	6.2	66.69	225.77	strike slip	23.5	0.9	RSN2719_CHICHI.04_CHY055N.AT2 RSN2719_CHICHI.04_CHY055W.AT2 RSN2719_CHICHI.04_CHY055V.AT2
2732	Chi-Chi, Taiwan-04 CHY070 1999	6.2	88.91	265.45	strike slip	17.1	1.75	RSN2732_CHICHI.04_CHY070N.AT2 RSN2732_CHICHI.04_CHY070E.AT2 RSN2732_CHICHI.04_CHY070V.AT2
2790	Chi-Chi, Taiwan-04 HWA044 1999	6.2	67.93	534.41	strike slip	10.9	1.93	RSN2790_CHICHI.04_HWA044N.AT2 RSN2790_CHICHI.04_HWA044E.AT2 RSN2790_CHICHI.04_HWA044V.AT2
2863	Chi-Chi, Taiwan-04 TCU059 1999	6.2	70.02	272.67	strike slip	18.3	0.69	RSN2863_CHICHI.04_TCU059N.AT2 RSN2863_CHICHI.04_TCU059E.AT2 RSN2863_CHICHI.04_TCU059V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**02 Sacramento** **270** **15**							**CS Set**
2903	Chi-Chi, Taiwan-04 TTN003 1999	6.2	99.07	506.64	strike slip	16.7	2.94	RSN2903_CHICHI.04_TTN003N.AT2 RSN2903_CHICHI.04_TTN003W.AT2 RSN2903_CHICHI.04_TTN003V.AT2
3033	Chi-Chi, Taiwan-05 HWA049 1999	6.2	51.43	508.61	Reverse	7.8	0.43	RSN3033_CHICHI.05_HWA049N.AT2 RSN3033_CHICHI.05_HWA049W.AT2 RSN3033_CHICHI.05_HWA049V.AT2
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	0.48	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3327	Chi-Chi, Taiwan-06 HWA009 1999	6.3	53.55	373.23	Reverse	9.6	1.19	RSN3327_CHICHI.06_HWA009N.AT2 RSN3327_CHICHI.06_HWA009E.AT2 RSN3327_CHICHI.06_HWA009V.AT2
3333	Chi-Chi, Taiwan-06 HWA019 1999	6.3	52.4	494.82	Reverse	7.3	0.45	RSN3333_CHICHI.06_HWA019N.AT2 RSN3333_CHICHI.06_HWA019E.AT2 RSN3333_CHICHI.06_HWA019V.AT2
3358	Chi-Chi, Taiwan-06 HWA055 1999	6.3	52.89	369.75	Reverse	12.2	0.92	RSN3358_CHICHI.06_HWA055N.AT2 RSN3358_CHICHI.06_HWA055W.AT2 RSN3358_CHICHI.06_HWA055V.AT2
3448	Chi-Chi, Taiwan-06 TCU036 1999	6.3	54.5	478.07	Reverse	11.8	0.93	RSN3448_CHICHI.06_TCU036N.AT2 RSN3448_CHICHI.06_TCU036E.AT2 RSN3448_CHICHI.06_TCU036V.AT2
3457	Chi-Chi, Taiwan-06 TCU050 1999	6.3	35.18	542.41	Reverse	8.5	0.92	RSN3457_CHICHI.06_TCU050N.AT2 RSN3457_CHICHI.06_TCU050E.AT2 RSN3457_CHICHI.06_TCU050V.AT2
3580	Taiwan SMART1(25) SMART1 I03 1983	6.5	95.53	314.88	Reverse	5.6	2.14	RSN3580_SMART1.25_25I03EW.AT2 RSN3580_SMART1.25_25I03NS.AT2 RSN3580_SMART1.25_25I03DN.AT2
3598	Taiwan SMART1(25) SMART1 O04 1983	6.5	94.27	288.24	Reverse	6.4	1.02	RSN3598_SMART1.25_25O04EW.AT2 RSN3598_SMART1.25_25O04NS.AT2 RSN3598_SMART1.25_25O04DN.AT2
3674	Taiwan SMART1(45) SMART1 M04 1986	7.3	55.55	306.38	Reverse	10.6	0.24	RSN3674_SMART1.45_45M04EW.AT RSN3674_SMART1.45_45M04NS.AT2 RSN3674_SMART1.45_45M04DN.AT2
4503	L'Aquila, Italy Sulmona 2009	6.3	39.04	612.78	Normal	6.5	1.7	RSN4503_L-AQUILA_CR003XTE.AT2 RSN4503_L-AQUILA_CR003YLN.AT2 RSN4503_L-AQUILA_CR003ZUP.AT2
4522	L'Aquila (aftershock 1), Italy Scanno 2009	5.6	48.49	638.39	Normal O	5	2.82	RSN4522_L-AQUILA.A_AJ003XTE.AT2 RSN4522_L-AQUILA.A_AJ003YLN.AT2 RSN4522_L-AQUILA.A_AJ003ZUP.AT2

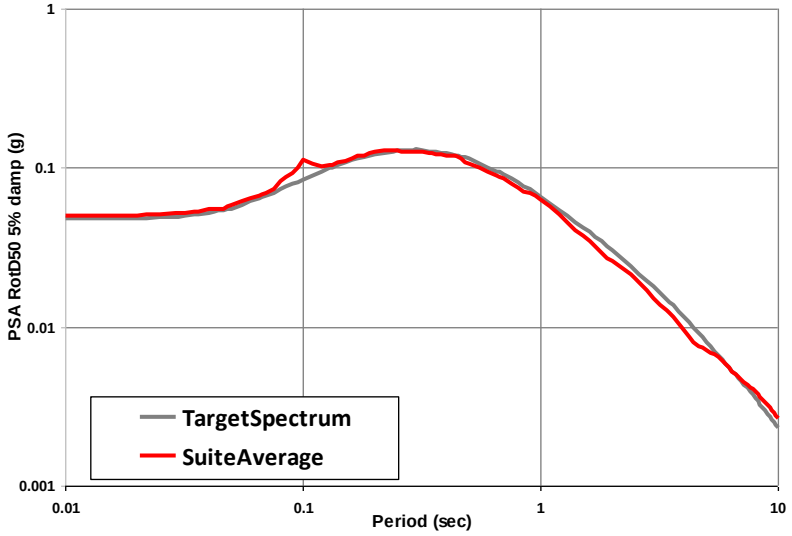
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
5288	Chuetsu-oki NIGH15 2007	6.8	47.04	685.78	Reverse	9.4	1.81	RSN5288_CHUETSU_NIGH15NS.AT2 RSN5288_CHUETSU_NIGH15EW.AT2 RSN5288_CHUETSU_NIGH15UD.AT2
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	0.13	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
5969	El Mayor-Cucapah Bonds Corner 2010	7.2	30.75	223.03	strike slip	18	0.18	RSN5969_SIERRA.MEX_BCR360.AT2 RSN5969_SIERRA.MEX_BCR090.AT2 RSN5969_SIERRA.MEX_BCR-UP.AT2
5972	El Mayor-Cucapah Brawley Airport 2010	7.2	41.15	208.71	strike slip	12.8	0.22	RSN5972_SIERRA.MEX_BRA360.AT2 RSN5972_SIERRA.MEX_BRA090.AT2 RSN5972_SIERRA.MEX_BRA-UP.AT2
6058	Big Bear-01 Fun Valley 1992	6.46	49.35	388.63	strike slip	7.8	0.42	RSN6058_BIGBEAR_FRV045.AT2 RSN6058_BIGBEAR_FRV135.AT2 RSN6058_BIGBEAR_FRV-UP.AT2
7053	Wenchuan, China-02 Maoxiandiexi 2008	6.1	80.16	299.37	strike slip	6.9	0.96	RSN7053_WENCHUAN.02_51MXDNS RSN7053_WENCHUAN.02_51MXDEW RSN7053_WENCHUAN.02_51MXDUD
8133	Christchurch, New Zealand SLRC 2011	6.2	31.81	249.28	Reverse O	5.9	0.32	RSN8133_CCHURCH_SLRCS28E.AT2 RSN8133_CCHURCH_SLRCS62W.AT2 RSN8133_CCHURCH_SLRCUP.AT2

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
354	Coalinga-01 Parkfield - Gold Hill 5W 1983	6.36	42.72	441.37	Reverse	12.2	0.76	RSN354_COALINGA.H_H-PG5000.AT2 RSN354_COALINGA.H_H-PG5090.AT2 RSN354_COALINGA.H_H-PG5-UP.AT2
462	Morgan Hill Hollister City Hall 1984	6.19	30.76	198.77	strike slip	12.1	0.78	RSN462_MORGAN_HCH001.AT2 RSN462_MORGAN_HCH271.AT2 RSN462_MORGAN_HCH-UP.AT2
478	Lazio-Abruzzo, Italy Garigliano-Centrale Nucleare 1984	5.8	49.33	266.41	Normal	5.7	0.79	RSN478_ABRUZZO_GCN-NS.AT2 RSN478_ABRUZZO_GCN-WE.AT2 RSN478_ABRUZZO_GCN-UP.AT2
667	Whittier Narrows-01 Northridge - 17645 Saticoy St 1987	5.99	38.04	280.86	Reverse O	7	0.28	RSN667_WHITTIER.A_A-STC090.AT2 RSN667_WHITTIER.A_A-STC180.AT2 RSN667_WHITTIER.A_A-STC-UP.AT2
673	Whittier Narrows-01 Panorama City - Roscoe 1987	5.99	32.13	318.16	Reverse O	5.7	0.54	RSN673_WHITTIER.A_A-RO2090.AT2 RSN673_WHITTIER.A_A-RO2180.AT2 RSN673_WHITTIER.A_A-RO2-UP.AT2
910	Big Bear-01 Joshua Tree 1992	6.46	40.99	379.32	strike slip	9.8	0.6	RSN910_BIGBEAR_JOS090.AT2 RSN910_BIGBEAR_JOS360.AT2 RSN910_BIGBEAR_JOS-UP.AT2
990	Northridge-01 LA - City Terrace 1994	6.69	35.03	365.22	Reverse	6	0.18	RSN990_NORTHR_LAC090.AT2 RSN990_NORTHR_LAC180.AT2 RSN990_NORTHR_LAC-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	0.74	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.3	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	0.47	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1093	Northridge-01 Villa Park - Serrano Ave 1994	6.69	76.38	416.93	Reverse	8.8	1.15	RSN1093_NORTHR_SER000.AT2 RSN1093_NORTHR_SER270.AT2 RSN1093_NORTHR_SER-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	0.94	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2

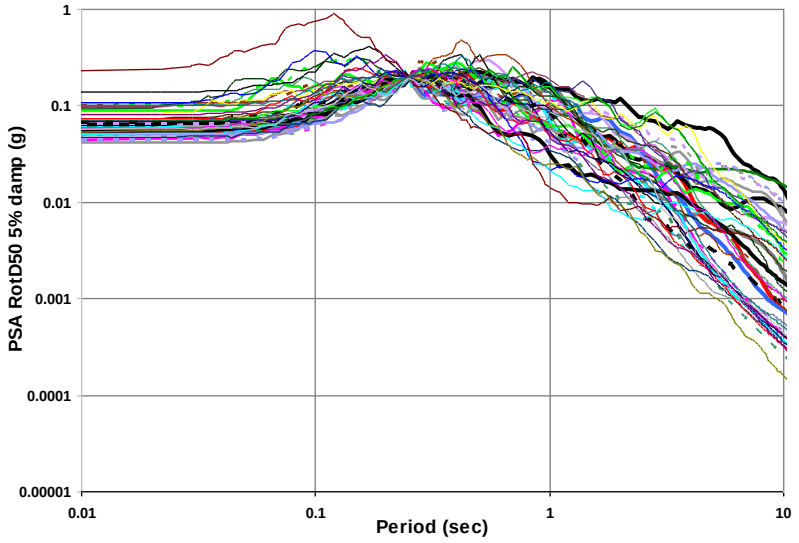
Site Site Vs30 (m/s) Return Period (yr)	**02 Sacramento** **270** **25**							**CS Set**
1144	Gulf of Aqaba Eilat 1995	7.2	43.29	354.88	strike slip	13.1	0.5	RSN1144_AQABA_EIL-EW.AT2 RSN1144_AQABA_EIL-NS.AT2 RSN1144_AQABA_EIL-UP.AT2
1215	Chi-Chi, Taiwan CHY058 1999	7.62	59.79	269.28	Reverse O	29.9	0.87	RSN1215_CHICHI_CHY058-E.AT2 RSN1215_CHICHI_CHY058-N.AT2 RSN1215_CHICHI_CHY058-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	0.7	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1284	Chi-Chi, Taiwan HWA035 1999	7.62	44.02	677.49	Reverse O	10.7	0.75	RSN1284_CHICHI_HWA035-E.AT2 RSN1284_CHICHI_HWA035-N.AT2 RSN1284_CHICHI_HWA035-V.AT2
1426	Chi-Chi, Taiwan TAP034 1999	7.62	90.59	538.69	Reverse O	15.8	0.96	RSN1426_CHICHI_TAP034-E.AT2 RSN1426_CHICHI_TAP034-N.AT2 RSN1426_CHICHI_TAP034-V.AT2
1470	Chi-Chi, Taiwan TCU014 1999	7.62	92.26	496.47	Reverse O	15.9	0.58	RSN1470_CHICHI_TCU014-E.AT2 RSN1470_CHICHI_TCU014-N.AT2 RSN1470_CHICHI_TCU014-V.AT2
1526	Chi-Chi, Taiwan TCU098 1999	7.62	47.67	346.56	Reverse O	17.6	0.45	RSN1526_CHICHI_TCU098-E.AT2 RSN1526_CHICHI_TCU098-N.AT2 RSN1526_CHICHI_TCU098-V.AT2
1794	Hector Mine Joshua Tree 1999	7.13	31.06	379.32	strike slip	7	0.32	RSN1794_HECTOR_JOS090.AT2 RSN1794_HECTOR_JOS360.AT2 RSN1794_HECTOR_JOS-UP.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	0.77	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2224	Chi-Chi, Taiwan-02 HWA015 1999	5.9	43.12	453.05	Reverse	7.3	1.69	RSN2224_CHICHI.02_HWA015N.AT2 RSN2224_CHICHI.02_HWA015E.AT2 RSN2224_CHICHI.02_HWA015V.AT2
2380	Chi-Chi, Taiwan-02 TCU061 1999	5.9	49.58	379.64	Reverse	10.9	1.11	RSN2380_CHICHI.02_TCU061N.AT2 RSN2380_CHICHI.02_TCU061E.AT2 RSN2380_CHICHI.02_TCU061V.AT2
2518	Chi-Chi, Taiwan-03 HWA011 1999	6.2	72.23	355.76	Reverse	16	2.55	RSN2518_CHICHI.03_HWA011N.AT2 RSN2518_CHICHI.03_HWA011E.AT2 RSN2518_CHICHI.03_HWA011V.AT2
2697	Chi-Chi, Taiwan-04 CHY019 1999	6.2	54.43	497.53	strike slip	8.4	1.74	RSN2697_CHICHI.04_CHY019N.AT2 RSN2697_CHICHI.04_CHY019W.AT2 RSN2697_CHICHI.04_CHY019V.AT2

Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
2727	Chi-Chi, Taiwan-04 CHY063 1999	6.2	76.29	246.88	strike slip	12.6	1.97	RSN2727_CHICHI.04_CHY063N.AT2 RSN2727_CHICHI.04_CHY063E.AT2 RSN2727_CHICHI.04_CHY063V.AT2
2845	Chi-Chi, Taiwan-04 TCU031 1999	6.2	99.48	489.22	strike slip	17.6	2.62	RSN2845_CHICHI.04_TCU031N.AT2 RSN2845_CHICHI.04_TCU031E.AT2 RSN2845_CHICHI.04_TCU031V.AT2
2921	Chi-Chi, Taiwan-04 TTN027 1999	6.2	80.04	428.95	strike slip	14.2	3.31	RSN2921_CHICHI.04_TTN027N.AT2 RSN2921_CHICHI.04_TTN027E.AT2 RSN2921_CHICHI.04_TTN027V.AT2
3033	Chi-Chi, Taiwan-05 HWA049 1999	6.2	51.43	508.61	Reverse	7.8	0.61	RSN3033_CHICHI.05_HWA049N.AT2 RSN3033_CHICHI.05_HWA049W.AT2 RSN3033_CHICHI.05_HWA049V.AT2
3073	Chi-Chi, Taiwan-05 ILA064 1999	6.2	97.09	488.61	Reverse	12.6	2.11	RSN3073_CHICHI.05_ILA064N.AT2 RSN3073_CHICHI.05_ILA064W.AT2 RSN3073_CHICHI.05_ILA064V.AT2
3164	Chi-Chi, Taiwan-05 TCU031 1999	6.2	81.34	489.22	Reverse	9.2	2.23	RSN3164_CHICHI.05_TCU031N.AT2 RSN3164_CHICHI.05_TCU031E.AT2 RSN3164_CHICHI.05_TCU031V.AT2
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	0.67	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3198	Chi-Chi, Taiwan-05 TCU095 1999	6.2	88.38	446.63	Reverse	11.7	0.84	RSN3198_CHICHI.05_TCU095N.AT2 RSN3198_CHICHI.05_TCU095E.AT2 RSN3198_CHICHI.05_TCU095V.AT2
3240	Chi-Chi, Taiwan-05 TTN023 1999	6.2	76.36	527.54	Reverse	13.3	0.93	RSN3240_CHICHI.05_TTN023N.AT2 RSN3240_CHICHI.05_TTN023E.AT2 RSN3240_CHICHI.05_TTN023V.AT2
3327	Chi-Chi, Taiwan-06 HWA009 1999	6.3	53.55	373.23	Reverse	9.6	1.67	RSN3327_CHICHI.06_HWA009N.AT2 RSN3327_CHICHI.06_HWA009E.AT2 RSN3327_CHICHI.06_HWA009V.AT2
3481	Chi-Chi, Taiwan-06 TCU087 1999	6.3	41.15	538.69	Reverse	13.6	1.95	RSN3481_CHICHI.06_TCU087N.AT2 RSN3481_CHICHI.06_TCU087E.AT2 RSN3481_CHICHI.06_TCU087V.AT2
3623	Taiwan SMART1(33) SMART1 M10 1985	5.8	42.42	321.63	Normal	5.7	1.88	RSN3623_SMART1.33_33M10EW.AT RSN3623_SMART1.33_33M10NS.AT2 RSN3623_SMART1.33_33M10DN.AT2
3633	Taiwan SMART1(33) SMART1 O12 1985	5.8	42.67	303.36	Normal	6	1.76	RSN3633_SMART1.33_33O12EW.AT2 RSN3633_SMART1.33_33O12NS.AT2 RSN3633_SMART1.33_33O12DN.AT2

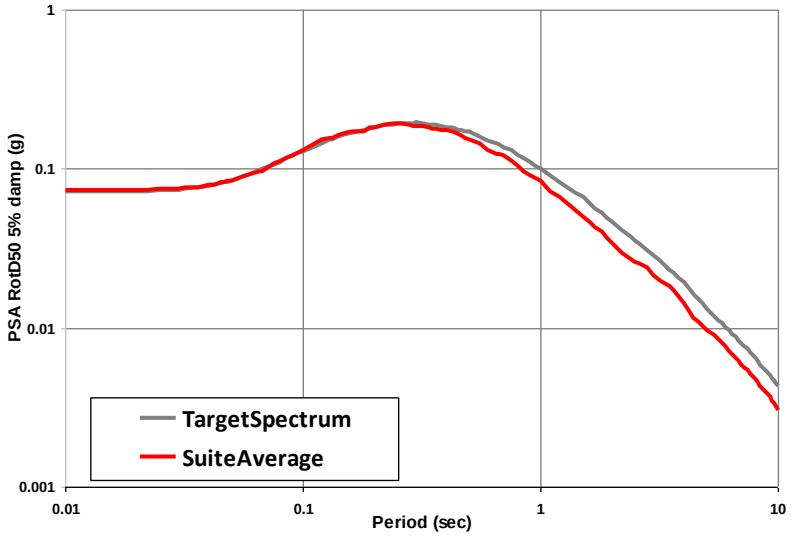
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
3665	Taiwan SMART1(45) SMART1 I04 1986	7.3	55.91	314.88	Reverse	11.6	0.33	RSN3665_SMART1.45_45I04EW.AT2 RSN3665_SMART1.45_45I04NS.AT2 RSN3665_SMART1.45_45I04DN.AT2
4160	Niigata, Japan FKS029 2004	6.63	51.73	431.98	Reverse	9.4	1.26	RSN4160_NIIGATA_FKS029NS.AT2 RSN4160_NIIGATA_FKS029EW.AT2 RSN4160_NIIGATA_FKS029UD.AT2
4741	Wenchuan, China Maoxiandiexi 2008	7.9	44.73	299.37	Reverse O	35.9	0.25	RSN4741_WENCHUAN_UA0854.AT2 RSN4741_WENCHUAN_UA0853.AT2 RSN4741_WENCHUAN_UA0855.AT2
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	0.18	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
5746	Iwate YMT003 2008	6.9	79.22	368.93	Reverse	22.8	1.71	RSN5746_IWATE_YMT003NS.AT2 RSN5746_IWATE_YMT003EW.AT2 RSN5746_IWATE_YMT003UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0.17	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
8133	Christchurch, New Zealand SLRC 2011	6.2	31.81	249.28	Reverse O	5.9	0.45	RSN8133_CCHURCH_SLRCS28E.AT2 RSN8133_CCHURCH_SLRCS62W.AT2 RSN8133_CCHURCH_SLRCUP.AT2

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
56	San Fernando Carbon Canyon Dam 1971	6.61	61.79	235	Reverse	8.4	0.71	RSN56_SFERN_CND130.AT2 RSN56_SFERN_CND220.AT2 RSN56_SFERN_CNDDWN.AT2
332	Coalinga-01 Parkfield - Cholame 6W 1983	6.36	49.4	251.57	Reverse	5.9	0.88	RSN332_COALINGA.H_H-C06000.AT2 RSN332_COALINGA.H_H-C06090.AT2 RSN332_COALINGA.H_H-C06-UP.AT2
570	Taiwan SMART1(45) SMART1 C00 1986	7.3	56.01	309.41	Reverse	12.1	0.5	RSN570_SMART1.45_45C00EW.AT2 RSN570_SMART1.45_45C00NS.AT2 RSN570_SMART1.45_45C00DN.AT2
609	Whittier Narrows-01 Castaic - Hasley Canyon 1987	5.99	62.56	421.05	Reverse O	8.2	1.82	RSN609_WHITTIER.A_A-CSH000.AT2 RSN609_WHITTIER.A_A-CSH090.AT2 RSN609_WHITTIER.A_A-CSH-UP.AT2
667	Whittier Narrows-01 Northridge - 17645 Saticoy St 1987	5.99	38.04	280.86	Reverse O	7	0.42	RSN667_WHITTIER.A_A-STC090.AT2 RSN667_WHITTIER.A_A-STC180.AT2 RSN667_WHITTIER.A_A-STC-UP.AT2
819	Georgia, USSR Oni 1991	6.2	42.19	392.67	Reverse	8.2	1.44	RSN819_GEORGIA_ONI--X.AT2 RSN819_GEORGIA_ONI--Y.AT2 RSN819_GEORGIA_ONI--Z.AT2
902	Big Bear-01 Desert Hot Springs 1992	6.46	39.52	359	strike slip	6.1	0.49	RSN902_BIGBEAR_DSP090.AT2 RSN902_BIGBEAR_DSP360.AT2 RSN902_BIGBEAR_DSP-UP.AT2
905	Big Bear-01 Featherly Park - Maint 1992	6.46	78.81	367.54	strike slip	9.6	1.64	RSN905_BIGBEAR_FEA090.AT2 RSN905_BIGBEAR_FEA360.AT2 RSN905_BIGBEAR_FEA-UP.AT2
1019	Northridge-01 Lake Hughes #1 1994	6.69	35.46	425.34	Reverse	7.9	0.78	RSN1019_NORTHR_L01000.AT2 RSN1019_NORTHR_L01090.AT2 RSN1019_NORTHR_L01-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	1.11	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	1.42	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1215	Chi-Chi, Taiwan CHY058 1999	7.62	59.79	269.28	Reverse O	29.9	1.3	RSN1215_CHICHI_CHY058-E.AT2 RSN1215_CHICHI_CHY058-N.AT2 RSN1215_CHICHI_CHY058-V.AT2

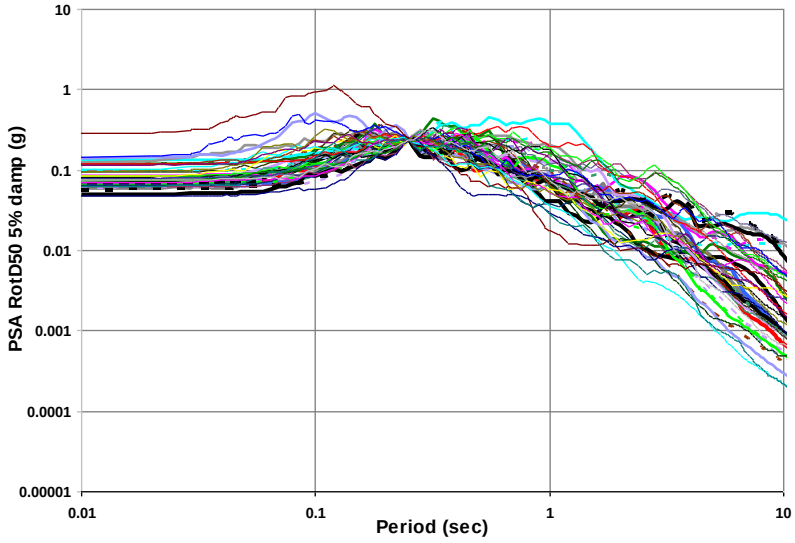
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	1.06	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1406	Chi-Chi, Taiwan SSD 1999	7.62	83.38	535.13	Reverse O	22.3	4.25	RSN1406_CHICHI_SSD-E.AT2 RSN1406_CHICHI_SSD-N.AT2 RSN1406_CHICHI_SSD-V.AT2
1474	Chi-Chi, Taiwan TCU025 1999	7.62	52.18	665.2	Reverse O	12.2	0.85	RSN1474_CHICHI_TCU025-E.AT2 RSN1474_CHICHI_TCU025-N.AT2 RSN1474_CHICHI_TCU025-V.AT2
2215	Chi-Chi, Taiwan-02 HWA002 1999	5.9	56.46	789.18	Reverse	10.2	3.71	RSN2215_CHICHI.02_HWA002N.AT2 RSN2215_CHICHI.02_HWA002W.AT2 RSN2215_CHICHI.02_HWA002V.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	1.15	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2227	Chi-Chi, Taiwan-02 HWA019 1999	5.9	48.4	494.82	Reverse	8.8	1.36	RSN2227_CHICHI.02_HWA019N.AT2 RSN2227_CHICHI.02_HWA019E.AT2 RSN2227_CHICHI.02_HWA019V.AT2
2247	Chi-Chi, Taiwan-02 HWA041 1999	5.9	69.99	484.97	Reverse	14.3	3.91	RSN2247_CHICHI.02_HWA041N.AT2 RSN2247_CHICHI.02_HWA041E.AT2 RSN2247_CHICHI.02_HWA041V.AT2
2427	Chi-Chi, Taiwan-02 TCU138 1999	5.9	36.72	652.85	Reverse	7.6	1.6	RSN2427_CHICHI.02_TCU138N.AT2 RSN2427_CHICHI.02_TCU138W.AT2 RSN2427_CHICHI.02_TCU138V.AT2
2518	Chi-Chi, Taiwan-03 HWA011 1999	6.2	72.23	355.76	Reverse	16	3.84	RSN2518_CHICHI.03_HWA011N.AT2 RSN2518_CHICHI.03_HWA011E.AT2 RSN2518_CHICHI.03_HWA011V.AT2
2548	Chi-Chi, Taiwan-03 HWA048 1999	6.2	71.21	345.89	Reverse	15.2	3.73	RSN2548_CHICHI.03_HWA048N.AT2 RSN2548_CHICHI.03_HWA048W.AT2 RSN2548_CHICHI.03_HWA048V.AT2
2727	Chi-Chi, Taiwan-04 CHY063 1999	6.2	76.29	246.88	strike slip	12.6	2.97	RSN2727_CHICHI.04_CHY063N.AT2 RSN2727_CHICHI.04_CHY063E.AT2 RSN2727_CHICHI.04_CHY063V.AT2
2732	Chi-Chi, Taiwan-04 CHY070 1999	6.2	88.91	265.45	strike slip	17.1	3.71	RSN2732_CHICHI.04_CHY070N.AT2 RSN2732_CHICHI.04_CHY070E.AT2 RSN2732_CHICHI.04_CHY070V.AT2
2770	Chi-Chi, Taiwan-04 HWA019 1999	6.2	90.18	494.82	strike slip	14.3	3.46	RSN2770_CHICHI.04_HWA019N.AT2 RSN2770_CHICHI.04_HWA019E.AT2 RSN2770_CHICHI.04_HWA019V.AT2

Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
2790	Chi-Chi, Taiwan-04 HWA044 1999	6.2	67.93	534.41	strike slip	10.9	4.1	RSN2790_CHICHI.04_HWA044N.AT2 RSN2790_CHICHI.04_HWA044E.AT2 RSN2790_CHICHI.04_HWA044V.AT2
2924	Chi-Chi, Taiwan-04 TTN032 1999	6.2	60.66	734.26	strike slip	11.3	4.54	RSN2924_CHICHI.04_TTN032N.AT2 RSN2924_CHICHI.04_TTN032E.AT2 RSN2924_CHICHI.04_TTN032V.AT2
2949	Chi-Chi, Taiwan-05 CHY033 1999	6.2	87.23	197.63	Reverse	10.4	1.41	RSN2949_CHICHI.05_CHY033N.AT2 RSN2949_CHICHI.05_CHY033E.AT2 RSN2949_CHICHI.05_CHY033V.AT2
2995	Chi-Chi, Taiwan-05 HWA002 1999	6.2	44.36	789.18	Reverse	11.7	1.67	RSN2995_CHICHI.05_HWA002N.AT2 RSN2995_CHICHI.05_HWA002W.AT2 RSN2995_CHICHI.05_HWA002V.AT2
3005	Chi-Chi, Taiwan-05 HWA016 1999	6.2	50.79	576.55	Reverse	7	1.85	RSN3005_CHICHI.05_HWA016N.AT2 RSN3005_CHICHI.05_HWA016E.AT2 RSN3005_CHICHI.05_HWA016V.AT2
3033	Chi-Chi, Taiwan-05 HWA049 1999	6.2	51.43	508.61	Reverse	7.8	0.92	RSN3033_CHICHI.05_HWA049N.AT2 RSN3033_CHICHI.05_HWA049W.AT2 RSN3033_CHICHI.05_HWA049V.AT2
3073	Chi-Chi, Taiwan-05 ILA064 1999	6.2	97.09	488.61	Reverse	12.6	3.17	RSN3073_CHICHI.05_ILA064N.AT2 RSN3073_CHICHI.05_ILA064W.AT2 RSN3073_CHICHI.05_ILA064V.AT2
3095	Chi-Chi, Taiwan-05 KAU054 1999	6.2	60.86	497.22	Reverse	3.1	0.62	RSN3095_CHICHI.05_KAU054N.AT2 RSN3095_CHICHI.05_KAU054E.AT2 RSN3095_CHICHI.05_KAU054V.AT2
3202	Chi-Chi, Taiwan-05 TCU102 1999	6.2	49.66	714.27	Reverse	10.6	1.93	RSN3202_CHICHI.05_TCU102N.AT2 RSN3202_CHICHI.05_TCU102E.AT2 RSN3202_CHICHI.05_TCU102V.AT2
3211	Chi-Chi, Taiwan-05 TCU115 1999	6.2	54.72	215.34	Reverse	9.1	0.99	RSN3211_CHICHI.05_TCU115N.AT2 RSN3211_CHICHI.05_TCU115E.AT2 RSN3211_CHICHI.05_TCU115V.AT2
3224	Chi-Chi, Taiwan-05 TTN001 1999	6.2	58.74	484.6	Reverse	10.5	2.24	RSN3224_CHICHI.05_TTN001N.AT2 RSN3224_CHICHI.05_TTN001W.AT2 RSN3224_CHICHI.05_TTN001V.AT2
3456	Chi-Chi, Taiwan-06 TCU049 1999	6.3	30.44	487.27	Reverse	9.6	2.56	RSN3456_CHICHI.06_TCU049N.AT2 RSN3456_CHICHI.06_TCU049E.AT2 RSN3456_CHICHI.06_TCU049V.AT2
3504	Chi-Chi, Taiwan-06 TCU123 1999	6.3	38.26	270.22	Reverse	19.3	1	RSN3504_CHICHI.06_TCU123N.AT2 RSN3504_CHICHI.06_TCU123E.AT2 RSN3504_CHICHI.06_TCU123V.AT2

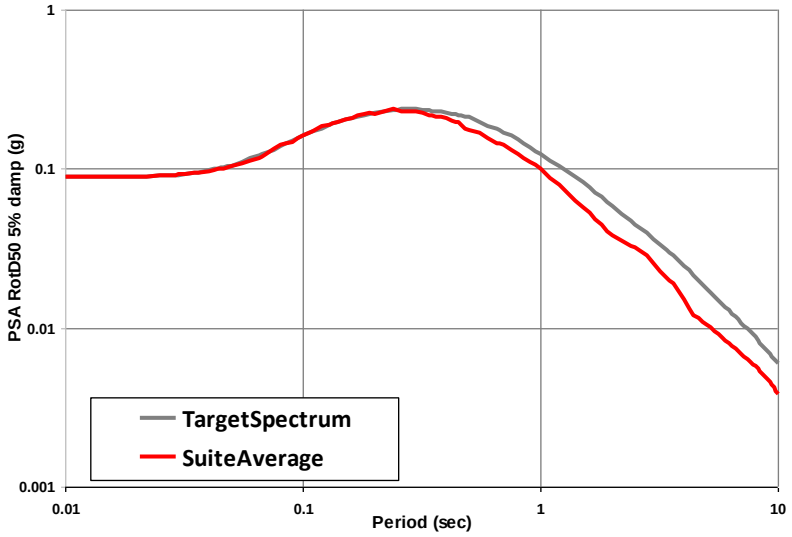
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
3622	Taiwan SMART1(33) SMART1 M09 1985	5.8	42.32	321.63	Normal	5.3	2.41	RSN3622_SMART1.33_33M09EW.AT RSN3622_SMART1.33_33M09NS.AT2 RSN3622_SMART1.33_33M09DN.AT2
3633	Taiwan SMART1(33) SMART1 O12 1985	5.8	42.67	303.36	Normal	6	2.65	RSN3633_SMART1.33_33O12EW.AT2 RSN3633_SMART1.33_33O12NS.AT2 RSN3633_SMART1.33_33O12DN.AT2
3665	Taiwan SMART1(45) SMART1 I04 1986	7.3	55.91	314.88	Reverse	11.6	0.5	RSN3665_SMART1.45_45I04EW.AT2 RSN3665_SMART1.45_45I04NS.AT2 RSN3665_SMART1.45_45I04DN.AT2
3872	Tottori, Japan HRS003 2000	6.61	65.8	335.55	strike slip	10.2	0.94	RSN3872_TOTTORI_HRS003NS.AT2 RSN3872_TOTTORI_HRS003EW.AT2 RSN3872_TOTTORI_HRS003UD.AT2
5261	Chuetsu-oki NIG015 2007	6.8	41.99	488.65	Reverse	19.7	2.59	RSN5261_CHUETSU_NIG015NS.AT2 RSN5261_CHUETSU_NIG015EW.AT2 RSN5261_CHUETSU_NIG015UD.AT2
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	0.28	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	1.01	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
11	Northwest Calif-03 Ferndale City Hall 1951	5.8	53.73	219.31	strike slip	5.4	1.1	RSN11_NWCALIF.AB_B-FRN224.AT2 RSN11_NWCALIF.AB_B-FRN314.AT2 RSN11_NWCALIF.AB_B-FRN-UP.AT2
91	San Fernando Upland - San Antonio Dam 1971	6.61	61.72	487.23	Reverse	6.7	0.97	RSN91_SFERN_SOD015.AT2 RSN91_SFERN_SOD285.AT2 RSN91_SFERN_SODDWN.AT2
513	N. Palm Springs Anza Fire Station 1986	6.06	42.17	360.45	Reverse O	4.3	1.02	RSN513_PALMSPR_AZF225.AT2 RSN513_PALMSPR_AZF315.AT2 RSN513_PALMSPR_AZF-UP.AT2
573	Taiwan SMART1(45) SMART1 I01 1986	7.3	56.18	275.82	Reverse	11.6	0.55	RSN573_SMART1.45_45I01EW.AT2 RSN573_SMART1.45_45I01NS.AT2 RSN573_SMART1.45_45I01DN.AT2
624	Whittier Narrows-01 Huntington Beach - Lake St 1987	5.99	42.16	315.52	Reverse O	9	2.12	RSN624_WHITTIER.A_A-HNT270.AT2 RSN624_WHITTIER.A_A-HNT360.AT2 RSN624_WHITTIER.A_A-HNT-UP.AT2
973	Northridge-01 Garden Grove - Santa Rita 1994	6.69	63.73	301.11	Reverse	8.9	0.69	
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	0.87	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.51	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	1.36	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.56	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	0.86	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1112	Kobe, Japan OKA 1995	6.9	86.93	609	strike slip	9.3	1.75	RSN1112_KOBE_OKA000.AT2 RSN1112_KOBE_OKA090.AT2 RSN1112_KOBE_OKA-UP.AT2

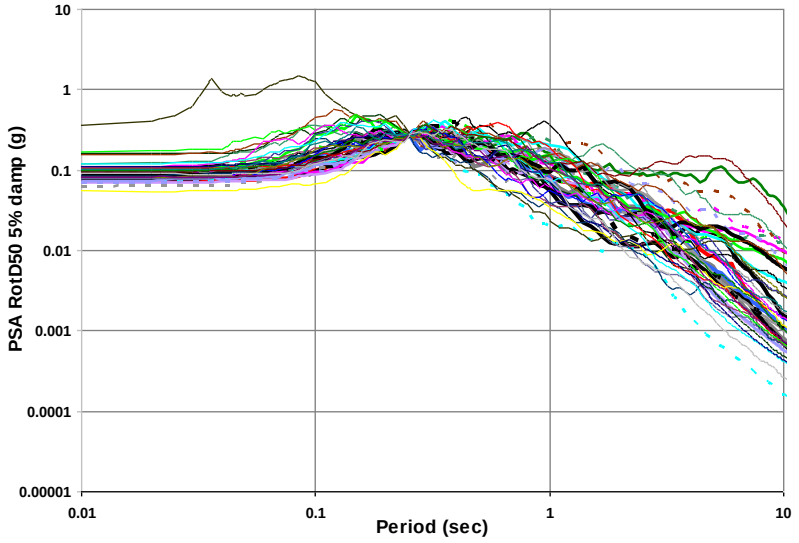
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	1.74	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1144	Gulf of Aqaba Eilat 1995	7.2	43.29	354.88	strike slip	13.1	0.92	RSN1144_AQABA_EIL-EW.AT2 RSN1144_AQABA_EIL-NS.AT2 RSN1144_AQABA_EIL-UP.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	1.29	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1345	Chi-Chi, Taiwan ILA061 1999	7.62	75.96	497.73	Reverse O	14.1	2.77	RSN1345_CHICHI_ILA061-N.AT2 RSN1345_CHICHI_ILA061-W.AT2 RSN1345_CHICHI_ILA061-V.AT2
1349	Chi-Chi, Taiwan ILA066 1999	7.62	67.44	481.17	Reverse O	14.7	1.11	RSN1349_CHICHI_ILA066-N.AT2 RSN1349_CHICHI_ILA066-W.AT2 RSN1349_CHICHI_ILA066-V.AT2
1487	Chi-Chi, Taiwan TCU047 1999	7.62	35	520.37	Reverse O	9.7	0.34	RSN1487_CHICHI_TCU047-E.AT2 RSN1487_CHICHI_TCU047-N.AT2 RSN1487_CHICHI_TCU047-V.AT2
1576	Chi-Chi, Taiwan TTN024 1999	7.62	56.58	671.52	Reverse O	25.2	3.06	RSN1576_CHICHI_TTN024-E.AT2 RSN1576_CHICHI_TTN024-N.AT2 RSN1576_CHICHI_TTN024-V.AT2
2220	Chi-Chi, Taiwan-02 HWA011 1999	5.9	46.46	355.76	Reverse	9.3	2.01	RSN2220_CHICHI.02_HWA011N.AT2 RSN2220_CHICHI.02_HWA011E.AT2 RSN2220_CHICHI.02_HWA011V.AT2
2227	Chi-Chi, Taiwan-02 HWA019 1999	5.9	48.4	494.82	Reverse	8.8	1.66	RSN2227_CHICHI.02_HWA019N.AT2 RSN2227_CHICHI.02_HWA019E.AT2 RSN2227_CHICHI.02_HWA019V.AT2
2239	Chi-Chi, Taiwan-02 HWA032 1999	5.9	41.08	573.04	Reverse	6.8	3.01	RSN2239_CHICHI.02_HWA032N.AT2 RSN2239_CHICHI.02_HWA032E.AT2 RSN2239_CHICHI.02_HWA032V.AT2
2247	Chi-Chi, Taiwan-02 HWA041 1999	5.9	69.99	484.97	Reverse	14.3	4.78	RSN2247_CHICHI.02_HWA041N.AT2 RSN2247_CHICHI.02_HWA041E.AT2 RSN2247_CHICHI.02_HWA041V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	1.75	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2408	Chi-Chi, Taiwan-02 TCU107 1999	5.9	46.88	409	Reverse	14.4	1.78	RSN2408_CHICHI.02_TCU107N.AT2 RSN2408_CHICHI.02_TCU107E.AT2 RSN2408_CHICHI.02_TCU107V.AT2

Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
2518	Chi-Chi, Taiwan-03 HWA011 1999	6.2	72.23	355.76	Reverse	16	4.7	RSN2518_CHICHI.03_HWA011N.AT2 RSN2518_CHICHI.03_HWA011E.AT2 RSN2518_CHICHI.03_HWA011V.AT2
2548	Chi-Chi, Taiwan-03 HWA048 1999	6.2	71.21	345.89	Reverse	15.2	4.56	RSN2548_CHICHI.03_HWA048N.AT2 RSN2548_CHICHI.03_HWA048W.AT2 RSN2548_CHICHI.03_HWA048V.AT2
2732	Chi-Chi, Taiwan-04 CHY070 1999	6.2	88.91	265.45	strike slip	17.1	4.54	RSN2732_CHICHI.04_CHY070N.AT2 RSN2732_CHICHI.04_CHY070E.AT2 RSN2732_CHICHI.04_CHY070V.AT2
2738	Chi-Chi, Taiwan-04 CHY079 1999	6.2	50.26	573.04	strike slip	9.9	3.33	RSN2738_CHICHI.04_CHY079N.AT2 RSN2738_CHICHI.04_CHY079E.AT2 RSN2738_CHICHI.04_CHY079V.AT2
2929	Chi-Chi, Taiwan-04 TTN042 1999	6.2	68.95	845.34	strike slip	8.7	2.38	RSN2929_CHICHI.04_TTN042N.AT2 RSN2929_CHICHI.04_TTN042W.AT2 RSN2929_CHICHI.04_TTN042V.AT2
2999	Chi-Chi, Taiwan-05 HWA009 1999	6.2	57.13	373.23	Reverse	7.4	1.54	RSN2999_CHICHI.05_HWA009N.AT2 RSN2999_CHICHI.05_HWA009E.AT2 RSN2999_CHICHI.05_HWA009V.AT2
3073	Chi-Chi, Taiwan-05 ILA064 1999	6.2	97.09	488.61	Reverse	12.6	3.88	RSN3073_CHICHI.05_ILA064N.AT2 RSN3073_CHICHI.05_ILA064W.AT2 RSN3073_CHICHI.05_ILA064V.AT2
3195	Chi-Chi, Taiwan-05 TCU087 1999	6.2	56.63	538.69	Reverse	10.8	2.86	RSN3195_CHICHI.05_TCU087N.AT2 RSN3195_CHICHI.05_TCU087E.AT2 RSN3195_CHICHI.05_TCU087V.AT2
3302	Chi-Chi, Taiwan-06 CHY076 1999	6.3	69.66	169.84	Reverse	10.9	0.79	RSN3302_CHICHI.06_CHY076N.AT2 RSN3302_CHICHI.06_CHY076E.AT2 RSN3302_CHICHI.06_CHY076V.AT2
3311	Chi-Chi, Taiwan-06 CHY092 1999	6.3	42.77	253.72	Reverse	15.1	0.8	RSN3311_CHICHI.06_CHY092N.AT2 RSN3311_CHICHI.06_CHY092W.AT2 RSN3311_CHICHI.06_CHY092V.AT2
3352	Chi-Chi, Taiwan-06 HWA043 1999	6.3	48.43	543.06	Reverse	10.6	3.32	RSN3352_CHICHI.06_HWA043N.AT2 RSN3352_CHICHI.06_HWA043E.AT2 RSN3352_CHICHI.06_HWA043V.AT2
3356	Chi-Chi, Taiwan-06 HWA050 1999	6.3	50.25	313.9	Reverse	7.2	2.84	RSN3356_CHICHI.06_HWA050N.AT2 RSN3356_CHICHI.06_HWA050W.AT2 RSN3356_CHICHI.06_HWA050V.AT2
3589	Taiwan SMART1(25) SMART1 M04 1983	6.5	94.88	306.38	Reverse	8.6	4.19	RSN3589_SMART1.25_25M04EW.AT RSN3589_SMART1.25_25M04NS.AT2 RSN3589_SMART1.25_25M04DN.AT2

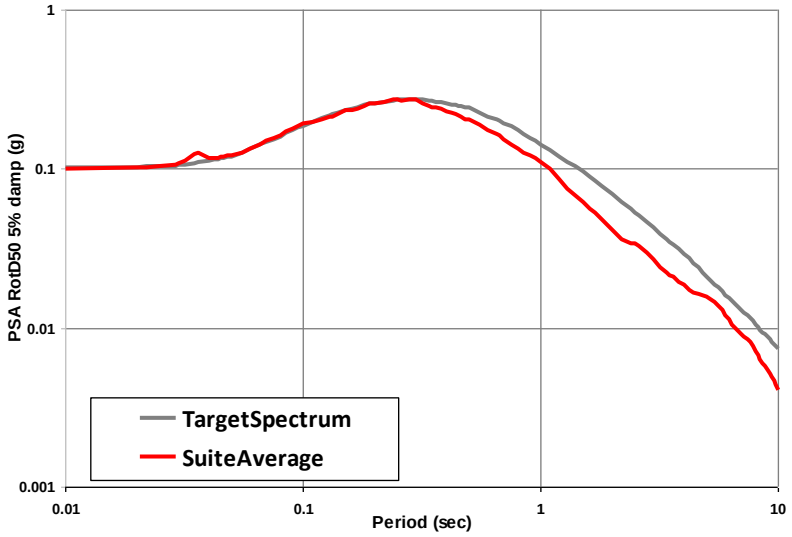
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
3665	Taiwan SMART1(45) SMART1 I04 1986	7.3	55.91	314.88	Reverse	11.6	0.61	RSN3665_SMART1.45_45I04EW.AT2 RSN3665_SMART1.45_45I04NS.AT2 RSN3665_SMART1.45_45I04DN.AT2
3888	Tottori, Japan HRSH04 2000	6.61	84.18	447.75	strike slip	13.6	4.83	RSN3888_TOTTORI_HRSH04NS.AT2 RSN3888_TOTTORI_HRSH04EW.AT2 RSN3888_TOTTORI_HRSH04UD.AT2
3946	Tottori, Japan SMN018 2000	6.61	85.31	271.29	strike slip	11.2	1.2	RSN3946_TOTTORI_SMN018NS.AT2 RSN3946_TOTTORI_SMN018EW.AT2 RSN3946_TOTTORI_SMN018UD.AT2
4234	Niigata, Japan NIGH18 2004	6.63	53.99	311.1	Reverse	9.2	0.68	RSN4234_NIIGATA_NIGH18NS.AT2 RSN4234_NIIGATA_NIGH18EW.AT2 RSN4234_NIIGATA_NIGH18UD.AT2
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	1.24	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0.32	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
8115	Christchurch, New Zealand OXZ 2011	6.2	57.72	481.62	Reverse O	5.7	2.28	RSN8115_CCHURCH_OXZE.AT2 RSN8115_CCHURCH_OXZN.AT2 RSN8115_CCHURCH_OXZUP.AT2

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
8	Northern Calif-01 Ferndale City Hall 1941	6.4	44.52	219.31	strike slip	4.1	0.95	RSN8_NCALIF.FH_F-FRN225.AT2 RSN8_NCALIF.FH_F-FRN315.AT2 RSN8_NCALIF.FH_F-FRN-UP.AT2
69	San Fernando LB - Terminal Island 1971	6.61	58.99	217.92	Reverse	37.2	3.3	RSN69_SFERN_TLI249.AT2 RSN69_SFERN_TLI339.AT2 RSN69_SFERN_TLI-UP.AT2
478	Lazio-Abruzzo, Italy Garigliano-Centrale Nucleare 1984	5.8	49.33	266.41	Normal	5.7	1.68	RSN478_ABRUZZO_GCN-NS.AT2 RSN478_ABRUZZO_GCN-WE.AT2 RSN478_ABRUZZO_GCN-UP.AT2
535	N. Palm Springs San Jacinto - Valley Cemetary 1986	6.06	30.71	330.74	Reverse O	7.7	2.57	RSN535_PALMSPR_H06270.AT2 RSN535_PALMSPR_H06360.AT2 RSN535_PALMSPR_H06-UP.AT2
624	Whittier Narrows-01 Huntington Beach - Lake St 1987	5.99	42.16	315.52	Reverse O	9	2.44	RSN624_WHITTIER.A_A-HNT270.AT2 RSN624_WHITTIER.A_A-HNT360.AT2 RSN624_WHITTIER.A_A-HNT-UP.AT2
673	Whittier Narrows-01 Panorama City - Roscoe 1987	5.99	32.13	318.16	Reverse O	5.7	1.13	RSN673_WHITTIER.A_A-RO2090.AT2 RSN673_WHITTIER.A_A-RO2180.AT2 RSN673_WHITTIER.A_A-RO2-UP.AT2
701	Whittier Narrows-01 Terminal Island - S Seaside 1987	5.99	37.67	260.6	Reverse O	11.7	2.19	RSN701_WHITTIER.A_A-SSE252.AT2 RSN701_WHITTIER.A_A-SSE342.AT2 RSN701_WHITTIER.A_A-SSE-UP.AT2
910	Big Bear-01 Joshua Tree 1992	6.46	40.99	379.32	strike slip	9.8	1.28	RSN910_BIGBEAR_JOS090.AT2 RSN910_BIGBEAR_JOS360.AT2 RSN910_BIGBEAR_JOS-UP.AT2
962	Northridge-01 Carson - Water St 1994	6.69	45.44	160.58	Reverse	14.2	1.13	RSN962_NORTHR_WAT180.AT2 RSN962_NORTHR_WAT270.AT2 RSN962_NORTHR_WAT-UP.AT2
972	Northridge-01 Featherly Park - Maint 1994	6.69	82.01	367.54	Reverse	5.8	0.91	RSN972_NORTHR_FEA000.AT2 RSN972_NORTHR_FEA090.AT2 RSN972_NORTHR_FEA-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.59	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	1.56	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2

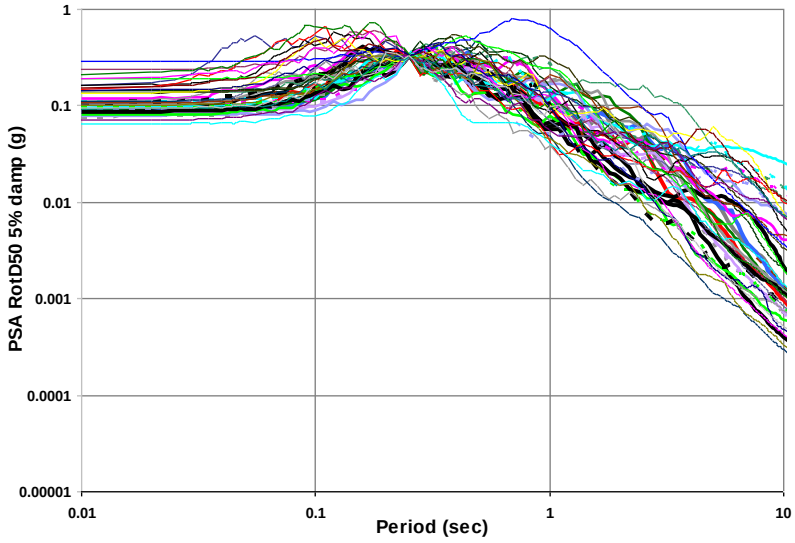
Site Site Vs30 (m/s) Return Period (yr)	**02 Sacramento** **270** **100**							**CS Set**
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	0.99	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1088	Northridge-01 Terminal Island - S Seaside 1994	6.69	53.43	260.6	Reverse	6.3	0.48	RSN1088_NORTHR_SSE240.AT2 RSN1088_NORTHR_SSE330.AT2 RSN1088_NORTHR_SSE-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	0.31	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1232	Chi-Chi, Taiwan CHY081 1999	7.62	41.36	573.04	Reverse O	18.4	1.84	RSN1232_CHICHI_CHY081-E.AT2 RSN1232_CHICHI_CHY081-N.AT2 RSN1232_CHICHI_CHY081-V.AT2
1250	Chi-Chi, Taiwan CHY116 1999	7.62	81.31	195.38	Reverse O	61.2	1.65	RSN1250_CHICHI_CHY116-N.AT2 RSN1250_CHICHI_CHY116-W.AT2 RSN1250_CHICHI_CHY116-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	1.49	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1427	Chi-Chi, Taiwan TAP035 1999	7.62	87.67	438.13	Reverse O	14.4	1.14	RSN1427_CHICHI_TAP035-E.AT2 RSN1427_CHICHI_TAP035-N.AT2 RSN1427_CHICHI_TAP035-V.AT2
1576	Chi-Chi, Taiwan TTN024 1999	7.62	56.58	671.52	Reverse O	25.2	3.52	RSN1576_CHICHI_TTN024-E.AT2 RSN1576_CHICHI_TTN024-N.AT2 RSN1576_CHICHI_TTN024-V.AT2
1794	Hector Mine Joshua Tree 1999	7.13	31.06	379.32	strike slip	7	0.68	RSN1794_HECTOR_JOS090.AT2 RSN1794_HECTOR_JOS360.AT2 RSN1794_HECTOR_JOS-UP.AT2
2175	Chi-Chi, Taiwan-02 CHY047 1999	5.9	67.81	169.52	Reverse	5.9	1.36	RSN2175_CHICHI.02_CHY047N.AT2 RSN2175_CHICHI.02_CHY047W.AT2 RSN2175_CHICHI.02_CHY047V.AT2
2220	Chi-Chi, Taiwan-02 HWA011 1999	5.9	46.46	355.76	Reverse	9.3	2.31	RSN2220_CHICHI.02_HWA011N.AT2 RSN2220_CHICHI.02_HWA011E.AT2 RSN2220_CHICHI.02_HWA011V.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	1.62	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	1.77	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2

Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	2.01	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2408	Chi-Chi, Taiwan-02 TCU107 1999	5.9	46.88	409	Reverse	14.4	2.04	RSN2408_CHICHI.02_TCU107N.AT2 RSN2408_CHICHI.02_TCU107E.AT2 RSN2408_CHICHI.02_TCU107V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	1.36	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2697	Chi-Chi, Taiwan-04 CHY019 1999	6.2	54.43	497.53	strike slip	8.4	3.68	RSN2697_CHICHI.04_CHY019N.AT2 RSN2697_CHICHI.04_CHY019W.AT2 RSN2697_CHICHI.04_CHY019V.AT2
2782	Chi-Chi, Taiwan-04 HWA034 1999	6.2	51.5	379.18	strike slip	6.3	3.72	RSN2782_CHICHI.04_HWA034N.AT2 RSN2782_CHICHI.04_HWA034E.AT2 RSN2782_CHICHI.04_HWA034V.AT2
2784	Chi-Chi, Taiwan-04 HWA036 1999	6.2	49.55	503.04	strike slip	11.5	4.31	RSN2784_CHICHI.04_HWA036N.AT2 RSN2784_CHICHI.04_HWA036E.AT2 RSN2784_CHICHI.04_HWA036V.AT2
2999	Chi-Chi, Taiwan-05 HWA009 1999	6.2	57.13	373.23	Reverse	7.4	1.77	RSN2999_CHICHI.05_HWA009N.AT2 RSN2999_CHICHI.05_HWA009E.AT2 RSN2999_CHICHI.05_HWA009V.AT2
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	1.96	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3328	Chi-Chi, Taiwan-06 HWA011 1999	6.3	50.43	355.76	Reverse	10.3	2.08	RSN3328_CHICHI.06_HWA011N.AT2 RSN3328_CHICHI.06_HWA011E.AT2 RSN3328_CHICHI.06_HWA011V.AT2
3359	Chi-Chi, Taiwan-06 HWA056 1999	6.3	47.41	511.3	Reverse	9.8	2.46	RSN3359_CHICHI.06_HWA056N.AT2 RSN3359_CHICHI.06_HWA056E.AT2 RSN3359_CHICHI.06_HWA056V.AT2
3498	Chi-Chi, Taiwan-06 TCU113 1999	6.3	53.02	230.3	Reverse	22.2	2.38	RSN3498_CHICHI.06_TCU113N.AT2 RSN3498_CHICHI.06_TCU113E.AT2 RSN3498_CHICHI.06_TCU113V.AT2
3617	Taiwan SMART1(33) SMART1 M02 1985	5.8	41.1	306.78	Normal	5.9	2.12	RSN3617_SMART1.33_33M02EW.AT RSN3617_SMART1.33_33M02NS.AT2 RSN3617_SMART1.33_33M02DN.AT2
4167	Niigata, Japan FKSH07 2004	6.63	52.15	828.95	Reverse	9.6	3.2	RSN4167_NIIGATA_FKSH07NS.AT2 RSN4167_NIIGATA_FKSH07EW.AT2 RSN4167_NIIGATA_FKSH07UD.AT2

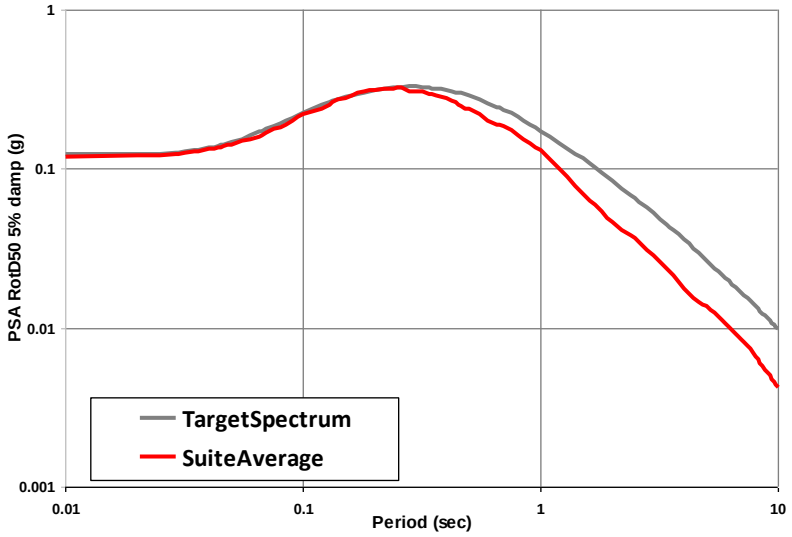
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
4199	Niigata, Japan NIG009 2004	6.63	71.02	179.6	Reverse	14	4.84	RSN4199_NIIGATA_NIG009NS.AT2 RSN4199_NIIGATA_NIG009EW.AT2 RSN4199_NIIGATA_NIG009UD.AT2
4202	Niigata, Japan NIG012 2004	6.63	56.07	229.95	Reverse	4.3	0.35	RSN4202_NIIGATA_NIG012NS.AT2 RSN4202_NIIGATA_NIG012EW.AT2 RSN4202_NIIGATA_NIG012UD.AT2
4206	Niigata, Japan NIG016 2004	6.63	26.53	370.03	Reverse	6.8	0.98	RSN4206_NIIGATA_NIG016NS.AT2 RSN4206_NIIGATA_NIG016EW.AT2 RSN4206_NIIGATA_NIG016UD.AT2
4741	Wenchuan, China Maoxiandiexi 2008	7.9	44.73	299.37	Reverse O	35.9	0.52	RSN4741_WENCHUAN_UA0854.AT2 RSN4741_WENCHUAN_UA0853.AT2 RSN4741_WENCHUAN_UA0855.AT2
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	0.39	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0.37	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
8133	Christchurch, New Zealand SLRC 2011	6.2	31.81	249.28	Reverse O	5.9	0.95	RSN8133_CCHURCH_SLRCS28E.AT2 RSN8133_CCHURCH_SLRCS62W.AT2 RSN8133_CCHURCH_SLRCUP.AT2

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
329	Coalinga-01 Parkfield - Cholame 4AW 1983	6.36	46.73	283.38	Reverse	7.6	2.27	RSN329_COALINGA.H_H-C4A000.AT2 RSN329_COALINGA.H_H-C4A090.AT2 RSN329_COALINGA.H_H-C4A-UP.AT2
439	Borah Peak, ID-01 TAN-719 1983	6.88	84.8	279.97	Normal	10.6	3.89	
507	Taiwan SMART1(40) SMART1 M01 1986	6.32	59.64	268.37	Reverse	1.7	1.8	RSN507_SMART1.40_40M01EW.AT2 RSN507_SMART1.40_40M01NS.AT2 RSN507_SMART1.40_40M01DN.AT2
542	N. Palm Springs Winchester Page Bros R 1986	6.06	38.01	287.87	Reverse O	4	1.78	RSN542_PALMSPR_H04000.AT2 RSN542_PALMSPR_H04090.AT2 RSN542_PALMSPR_H04-UP.AT2
628	Whittier Narrows-01 LA - Centinela St 1987	5.99	28	321.91	Reverse O	7.4	3.59	RSN628_WHITTIER.A_A-CEN155.AT2 RSN628_WHITTIER.A_A-CEN245.AT2 RSN628_WHITTIER.A_A-CEN-UP.AT2
658	Whittier Narrows-01 Malibu - Point Dume Sch 1987	5.99	61.54	349.54	Reverse O	5.5	3.26	RSN658_WHITTIER.A_A-MAL180.AT2 RSN658_WHITTIER.A_A-MAL270.AT2 RSN658_WHITTIER.A_A-MAL-UP.AT2
666	Whittier Narrows-01 Newhall - W Pico Canyon Rd. 1987	5.99	55.93	285.93	Reverse O	6.2	1.49	RSN666_WHITTIER.A_A-WPI046.AT2 RSN666_WHITTIER.A_A-WPI316.AT2 RSN666_WHITTIER.A_A-WPI-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	0.96	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	1.19	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
976	Northridge-01 Hacienda Heights - Colima 1994	6.69	56.55	337	Reverse	10.4	1.5	RSN976_NORTHR_COM140.AT2 RSN976_NORTHR_COM230.AT2 RSN976_NORTHR_COM-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	1.21	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.71	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2

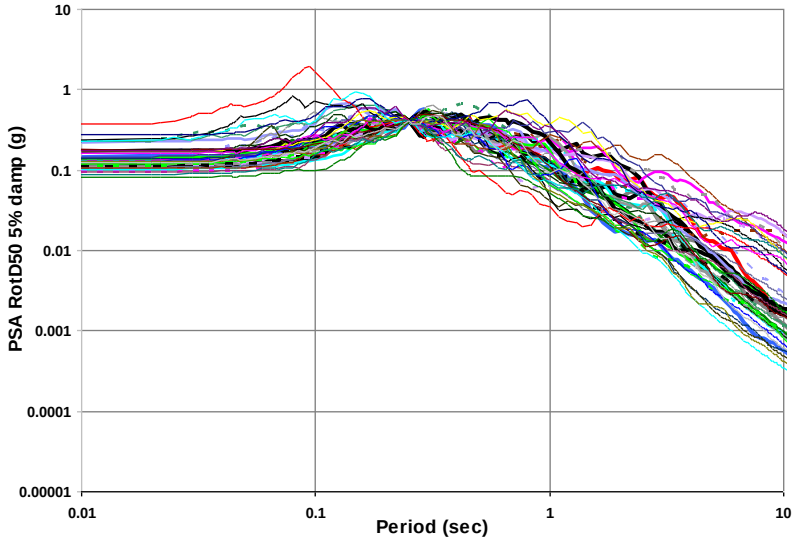
Site Site Vs30 (m/s) Return Period (yr)	**02 Sacramento** **270** **150**							**CS Set**
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	1.88	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1066	Northridge-01 Rosamond - Airport 1994	6.69	64.6	320.75	Reverse	11	1.69	RSN1066_NORTHR_RMA000.AT2 RSN1066_NORTHR_RMA090.AT2 RSN1066_NORTHR_RMA-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.78	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	1.2	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	2.41	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	1.79	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1303	Chi-Chi, Taiwan HWA058 1999	7.62	41.17	529.54	Reverse O	9	1.24	RSN1303_CHICHI_HWA058-E.AT2 RSN1303_CHICHI_HWA058-N.AT2 RSN1303_CHICHI_HWA058-V.AT2
1427	Chi-Chi, Taiwan TAP035 1999	7.62	87.67	438.13	Reverse O	14.4	1.38	RSN1427_CHICHI_TAP035-E.AT2 RSN1427_CHICHI_TAP035-N.AT2 RSN1427_CHICHI_TAP035-V.AT2
1474	Chi-Chi, Taiwan TCU025 1999	7.62	52.18	665.2	Reverse O	12.2	1.44	RSN1474_CHICHI_TCU025-E.AT2 RSN1474_CHICHI_TCU025-N.AT2 RSN1474_CHICHI_TCU025-V.AT2
1576	Chi-Chi, Taiwan TTN024 1999	7.62	56.58	671.52	Reverse O	25.2	4.24	RSN1576_CHICHI_TTN024-E.AT2 RSN1576_CHICHI_TTN024-N.AT2 RSN1576_CHICHI_TTN024-V.AT2
2220	Chi-Chi, Taiwan-02 HWA011 1999	5.9	46.46	355.76	Reverse	9.3	2.78	RSN2220_CHICHI.02_HWA011N.AT2 RSN2220_CHICHI.02_HWA011E.AT2 RSN2220_CHICHI.02_HWA011V.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	1.96	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2227	Chi-Chi, Taiwan-02 HWA019 1999	5.9	48.4	494.82	Reverse	8.8	2.31	RSN2227_CHICHI.02_HWA019N.AT2 RSN2227_CHICHI.02_HWA019E.AT2 RSN2227_CHICHI.02_HWA019V.AT2

Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	2.13	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2863	Chi-Chi, Taiwan-04 TCU059 1999	6.2	70.02	272.67	strike slip	18.3	2.49	RSN2863_CHICHI.04_TCU059N.AT2 RSN2863_CHICHI.04_TCU059E.AT2 RSN2863_CHICHI.04_TCU059V.AT2
2929	Chi-Chi, Taiwan-04 TTN042 1999	6.2	68.95	845.34	strike slip	8.7	3.3	RSN2929_CHICHI.04_TTN042N.AT2 RSN2929_CHICHI.04_TTN042W.AT2 RSN2929_CHICHI.04_TTN042V.AT2
3000	Chi-Chi, Taiwan-05 HWA011 1999	6.2	54.22	355.76	Reverse	6.4	1.03	RSN3000_CHICHI.05_HWA011N.AT2 RSN3000_CHICHI.05_HWA011E.AT2 RSN3000_CHICHI.05_HWA011V.AT2
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	2.37	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	1.1	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3031	Chi-Chi, Taiwan-05 HWA046 1999	6.2	63.27	617.52	Reverse	9.9	3.58	RSN3031_CHICHI.05_HWA046N.AT2 RSN3031_CHICHI.05_HWA046W.AT2 RSN3031_CHICHI.05_HWA046V.AT2
3171	Chi-Chi, Taiwan-05 TCU044 1999	6.2	62.87	512.88	Reverse	12.4	2.56	RSN3171_CHICHI.05_TCU044N.AT2 RSN3171_CHICHI.05_TCU044E.AT2 RSN3171_CHICHI.05_TCU044V.AT2
3182	Chi-Chi, Taiwan-05 TCU056 1999	6.2	49.06	403.2	Reverse	6.4	0.98	RSN3182_CHICHI.05_TCU056N.AT2 RSN3182_CHICHI.05_TCU056E.AT2 RSN3182_CHICHI.05_TCU056V.AT2
3250	Chi-Chi, Taiwan-05 TTN041 1999	6.2	66.89	418.24	Reverse	8.5	0.84	RSN3250_CHICHI.05_TTN041N.AT2 RSN3250_CHICHI.05_TTN041W.AT2 RSN3250_CHICHI.05_TTN041V.AT2
3260	Chi-Chi, Taiwan-06 CHY016 1999	6.3	95.51	200.86	Reverse	23	2.49	RSN3260_CHICHI.06_CHY016N.AT2 RSN3260_CHICHI.06_CHY016W.AT2 RSN3260_CHICHI.06_CHY016V.AT2
3327	Chi-Chi, Taiwan-06 HWA009 1999	6.3	53.55	373.23	Reverse	9.6	4.27	RSN3327_CHICHI.06_HWA009N.AT2 RSN3327_CHICHI.06_HWA009E.AT2 RSN3327_CHICHI.06_HWA009V.AT2
3481	Chi-Chi, Taiwan-06 TCU087 1999	6.3	41.15	538.69	Reverse	13.6	4.98	RSN3481_CHICHI.06_TCU087N.AT2 RSN3481_CHICHI.06_TCU087E.AT2 RSN3481_CHICHI.06_TCU087V.AT2

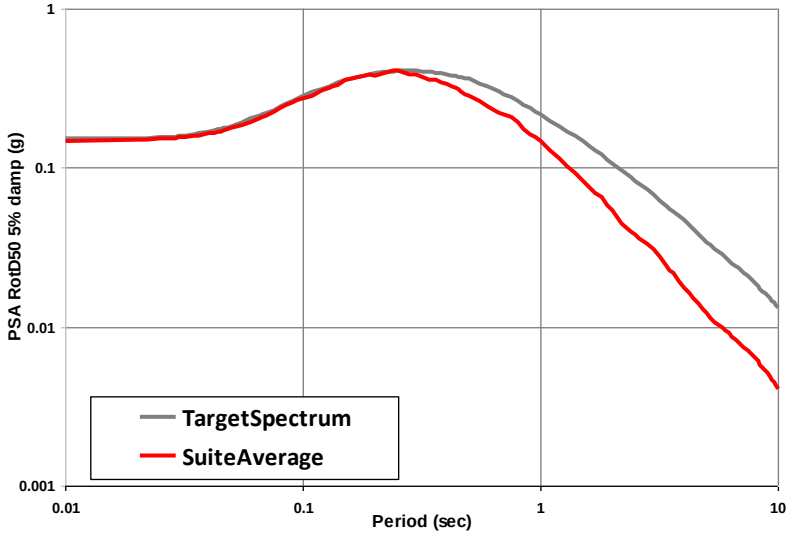
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
3623	Taiwan SMART1(33) SMART1 M10 1985	5.8	42.42	321.63	Normal	5.7	4.8	RSN3623_SMART1.33_33M10EW.AT RSN3623_SMART1.33_33M10NS.AT2 RSN3623_SMART1.33_33M10DN.AT2
3931	Tottori, Japan OKYH13 2000	6.61	87.38	598.28	strike slip	15.6	4.9	RSN3931_TOTTORI_OKYH13NS.AT2 RSN3931_TOTTORI_OKYH13EW.AT2 RSN3931_TOTTORI_OKYH13UD.AT2
4755	Wenchuan, China Xiaojindiban 2008	7.9	69.81	363.9	Reverse O	29.8	2.08	RSN4755_WENCHUAN_UA0908.AT2 RSN4755_WENCHUAN_UA0907.AT2 RSN4755_WENCHUAN_UA0909.AT2
4893	Chuetsu-oki Toyotsu Nakano 2007	6.8	61.16	561.59	Reverse	3.1	0.84	RSN4893_CHUETSU_70031NS.AT2 RSN4893_CHUETSU_70031EW.AT2 RSN4893_CHUETSU_70031UD.AT2
5277	Chuetsu-oki NIGH03 2007	6.8	89.37	251.4	Reverse	18.8	4.92	RSN5277_CHUETSU_NIGH03NS.AT2 RSN5277_CHUETSU_NIGH03EW.AT2 RSN5277_CHUETSU_NIGH03UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0.44	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5972	El Mayor-Cucapah Brawley Airport 2010	7.2	41.15	208.71	strike slip	12.8	0.8	RSN5972_SIERRA.MEX_BRA360.AT2 RSN5972_SIERRA.MEX_BRA090.AT2 RSN5972_SIERRA.MEX_BRA-UP.AT2

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
449	Morgan Hill Capitola 1984	6.19	39.08	288.62	strike slip	5	1.11	RSN449_MORGAN_CAP042.AT2 RSN449_MORGAN_CAP132.AT2 RSN449_MORGAN_CAP-UP.AT2
462	Morgan Hill Hollister City Hall 1984	6.19	30.76	198.77	strike slip	12.1	2.48	RSN462_MORGAN_HCH001.AT2 RSN462_MORGAN_HCH271.AT2 RSN462_MORGAN_HCH-UP.AT2
511	N. Palm Springs Anza - Red Mountain 1986	6.06	38.22	680.37	Reverse O	2.5	1.93	RSN511_PALMSPR_ARM270.AT2 RSN511_PALMSPR_ARM360.AT2 RSN511_PALMSPR_ARM-UP.AT2
666	Whittier Narrows-01 Newhall - W Pico Canyon Rd. 1987	5.99	55.93	285.93	Reverse O	6.2	1.86	RSN666_WHITTIER.A_A-WPI046.AT2 RSN666_WHITTIER.A_A-WPI316.AT2 RSN666_WHITTIER.A_A-WPI-UP.AT2
751	Loma Prieta Calaveras Reservoir 1989	6.93	35.28	571.99	Reverse O	7.2	1.98	RSN751_LOMAP_CLR090.AT2 RSN751_LOMAP_CLR180.AT2 RSN751_LOMAP_CLR-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	1.19	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
925	Big Bear-01 Rancho Cucamonga - Deer Can 1992	6.46	59.74	509.1	strike slip	12.5	2.83	RSN925_BIGBEAR_CUC090.AT2 RSN925_BIGBEAR_CUC180.AT2 RSN925_BIGBEAR_CUC-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.88	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	2.34	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1073	Northridge-01 San Pedro - Palos Verdes 1994	6.69	53.24	477.92	Reverse	6.9	1.52	RSN1073_NORTHR_SAP000.AT2 RSN1073_NORTHR_SAP090.AT2 RSN1073_NORTHR_SAP-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	1.49	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	3	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2

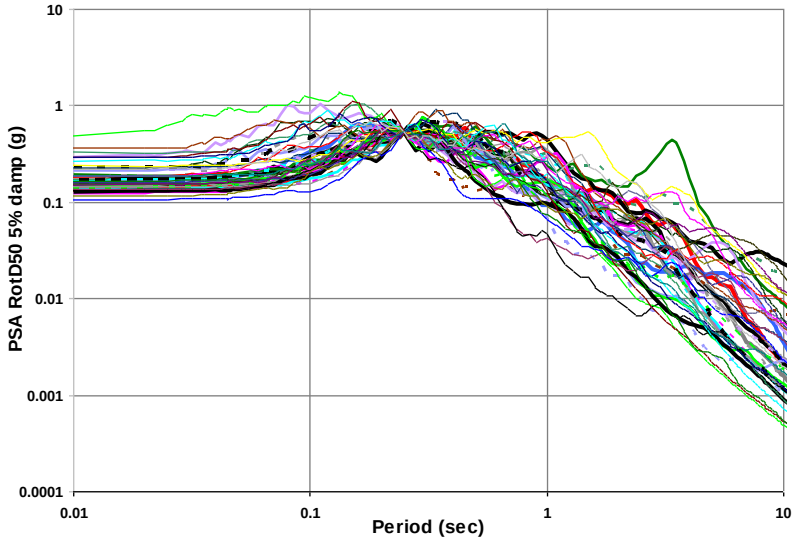
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
1346	Chi-Chi, Taiwan ILA062 1999	7.62	70.43	447.51	Reverse O	14.7	1.74	RSN1346_CHICHI_ILA062-N.AT2 RSN1346_CHICHI_ILA062-W.AT2 RSN1346_CHICHI_ILA062-V.AT2
1750	Northwest China-02 Jiashi 1997	5.93	17.9	240.09	Normal	3	0.89	RSN1750_NWCHINA2_JIA000.AT2 RSN1750_NWCHINA2_JIA270.AT2 RSN1750_NWCHINA2_JIA-UP.AT2
1755	Northwest China-04 Xiker 1997	5.8	35.6	341.56	Normal O	5.5	2.28	RSN1755_NWCHINA4_XIK000.AT2 RSN1755_NWCHINA4_XIK270.AT2 RSN1755_NWCHINA4_XIK-UP.AT2
1816	Hector Mine North Palm Springs Fire Sta #36 1999	7.13	61.86	367.84	strike slip	13.8	2.03	RSN1816_HECTOR_NPF180.AT2 RSN1816_HECTOR_NPF270.AT2 RSN1816_HECTOR_NPF-UP.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	2.43	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	2.65	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	3.02	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2408	Chi-Chi, Taiwan-02 TCU107 1999	5.9	46.88	409	Reverse	14.4	3.06	RSN2408_CHICHI.02_TCU107N.AT2 RSN2408_CHICHI.02_TCU107E.AT2 RSN2408_CHICHI.02_TCU107V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	2.04	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2609	Chi-Chi, Taiwan-03 TCU053 1999	6.2	40.04	454.55	Reverse	6.9	3.91	RSN2609_CHICHI.03_TCU053N.AT2 RSN2609_CHICHI.03_TCU053E.AT2 RSN2609_CHICHI.03_TCU053V.AT2
2929	Chi-Chi, Taiwan-04 TTN042 1999	6.2	68.95	845.34	strike slip	8.7	4.1	RSN2929_CHICHI.04_TTN042N.AT2 RSN2929_CHICHI.04_TTN042W.AT2 RSN2929_CHICHI.04_TTN042V.AT2
2940	Chi-Chi, Taiwan-05 CHY019 1999	6.2	84.45	497.53	Reverse	7.3	3.45	RSN2940_CHICHI.05_CHY019N.AT2 RSN2940_CHICHI.05_CHY019W.AT2 RSN2940_CHICHI.05_CHY019V.AT2
2982	Chi-Chi, Taiwan-05 CHY088 1999	6.2	76.09	318.52	Reverse	6.9	1.94	RSN2982_CHICHI.05_CHY088N.AT2 RSN2982_CHICHI.05_CHY088E.AT2 RSN2982_CHICHI.05_CHY088V.AT2

Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
3005	Chi-Chi, Taiwan-05 HWA016 1999	6.2	50.79	576.55	Reverse	7	3.9	RSN3005_CHICHI.05_HWA016N.AT2 RSN3005_CHICHI.05_HWA016E.AT2 RSN3005_CHICHI.05_HWA016V.AT2
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	2.94	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3016	Chi-Chi, Taiwan-05 HWA029 1999	6.2	51.01	614.05	Reverse	6.3	3.91	RSN3016_CHICHI.05_HWA029N.AT2 RSN3016_CHICHI.05_HWA029E.AT2 RSN3016_CHICHI.05_HWA029V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	1.37	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3029	Chi-Chi, Taiwan-05 HWA044 1999	6.2	44.01	534.41	Reverse	8.6	3.02	RSN3029_CHICHI.05_HWA044N.AT2 RSN3029_CHICHI.05_HWA044E.AT2 RSN3029_CHICHI.05_HWA044V.AT2
3035	Chi-Chi, Taiwan-05 HWA051 1999	6.2	46.92	440.5	Reverse	9.5	2.56	RSN3035_CHICHI.05_HWA051N.AT2 RSN3035_CHICHI.05_HWA051W.AT2 RSN3035_CHICHI.05_HWA051V.AT2
3072	Chi-Chi, Taiwan-05 ILA062 1999	6.2	97.53	447.51	Reverse	14.3	4.62	RSN3072_CHICHI.05_ILA062N.AT2 RSN3072_CHICHI.05_ILA062W.AT2 RSN3072_CHICHI.05_ILA062V.AT2
3169	Chi-Chi, Taiwan-05 TCU040 1999	6.2	72.59	362.03	Reverse	6	2.36	RSN3169_CHICHI.05_TCU040N.AT2 RSN3169_CHICHI.05_TCU040E.AT2 RSN3169_CHICHI.05_TCU040V.AT2
3170	Chi-Chi, Taiwan-05 TCU042 1999	6.2	77.15	578.98	Reverse	7.1	2.48	RSN3170_CHICHI.05_TCU042N.AT2 RSN3170_CHICHI.05_TCU042E.AT2 RSN3170_CHICHI.05_TCU042V.AT2
3257	Chi-Chi, Taiwan-05 TTN051 1999	6.2	60.49	665.2	Reverse	9.9	1.73	RSN3257_CHICHI.05_TTN051N.AT2 RSN3257_CHICHI.05_TTN051E.AT2 RSN3257_CHICHI.05_TTN051V.AT2
3311	Chi-Chi, Taiwan-06 CHY092 1999	6.3	42.77	253.72	Reverse	15.1	1.38	RSN3311_CHICHI.06_CHY092N.AT2 RSN3311_CHICHI.06_CHY092W.AT2 RSN3311_CHICHI.06_CHY092V.AT2
3404	Chi-Chi, Taiwan-06 KAU054 1999	6.3	55.12	497.22	Reverse	4.6	2.12	RSN3404_CHICHI.06_KAU054N.AT2 RSN3404_CHICHI.06_KAU054E.AT2 RSN3404_CHICHI.06_KAU054V.AT2
3504	Chi-Chi, Taiwan-06 TCU123 1999	6.3	38.26	270.22	Reverse	19.3	2.12	RSN3504_CHICHI.06_TCU123N.AT2 RSN3504_CHICHI.06_TCU123E.AT2 RSN3504_CHICHI.06_TCU123V.AT2

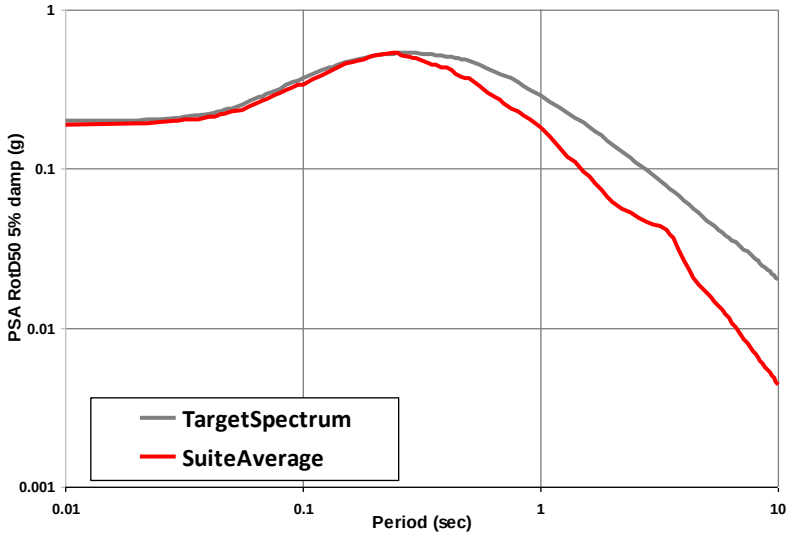
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
3877	Tottori, Japan HRS008 2000	6.61	88.4	538.73	strike slip	13.7	2.82	RSN3877_TOTTORI_HRS008NS.AT2 RSN3877_TOTTORI_HRS008EW.AT2 RSN3877_TOTTORI_HRS008UD.AT2
3884	Tottori, Japan HRS021 2000	6.61	36.32	409.29	strike slip	9.6	1.41	RSN3884_TOTTORI_HRS021NS.AT2 RSN3884_TOTTORI_HRS021EW.AT2 RSN3884_TOTTORI_HRS021UD.AT2
4223	Niigata, Japan NIGH06 2004	6.63	30.18	493.27	Reverse	4.9	0.32	RSN4223_NIIGATA_NIGH06NS.AT2 RSN4223_NIIGATA_NIGH06EW.AT2 RSN4223_NIIGATA_NIGH06UD.AT2
4854	Chuetsu-oki Nadachiku Joetsu City 2007	6.8	35.79	570.62	Reverse	5.3	1.06	RSN4854_CHUETSU_65020NS.AT2 RSN4854_CHUETSU_65020EW.AT2 RSN4854_CHUETSU_65020UD.AT2
5788	Iwate Masuda Natori 2008	6.9	74.08	319.66	Reverse	5.1	0.51	RSN5788_IWATE_54056NS.AT2 RSN5788_IWATE_54056EW.AT2 RSN5788_IWATE_54056UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0.55	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5821	Iwate Sendai Airport 2008	6.9	78.05	311.6	Reverse	7.8	1.97	RSN5821_IWATE_4DF11NS.AT2 RSN5821_IWATE_4DF11EW.AT2 RSN5821_IWATE_4DF11UD.AT2

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
291	Irpinia, Italy-01 Rionero In Vulture 1980	6.9	27.49	574.88	Normal	18.3	1.9	RSN291_ITALY_A-VLT000.AT2 RSN291_ITALY_A-VLT270.AT2 RSN291_ITALY_A-VLT-UP.AT2
536	N. Palm Springs Santa Rosa Mountain 1986	6.06	38.94	678.69	Reverse O	6.2	4.77	RSN536_PALMSPR_ARS270.AT2 RSN536_PALMSPR_ARS360.AT2 RSN536_PALMSPR_ARS-UP.AT2
661	Whittier Narrows-01 Mill Creek, Angeles Nat For 1987	5.99	32.36	569.84	Reverse O	4.8	3.28	RSN661_WHITTIER.A_A-ANG000.AT2 RSN661_WHITTIER.A_A-ANG090.AT2 RSN661_WHITTIER.A_A-ANG-UP.AT2
666	Whittier Narrows-01 Newhall - W Pico Canyon Rd. 1987	5.99	55.93	285.93	Reverse O	6.2	2.43	RSN666_WHITTIER.A_A-WPI046.AT2 RSN666_WHITTIER.A_A-WPI316.AT2 RSN666_WHITTIER.A_A-WPI-UP.AT2
671	Whittier Narrows-01 Pacoima Kagel Canyon 1987	5.99	31.59	508.08	Reverse O	4	1.84	RSN671_WHITTIER.A_A-PKC000.AT2 RSN671_WHITTIER.A_A-PKC090.AT2 RSN671_WHITTIER.A_A-PKC-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	1.56	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	1.94	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
941	Big Bear-01 Yermo Fire Station 1992	6.46	70.42	353.63	strike slip	14.2	4.26	RSN941_BIGBEAR_YER000.AT2 RSN941_BIGBEAR_YER270.AT2 RSN941_BIGBEAR_YER-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	1.15	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	3.07	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	1.26	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	1.95	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2

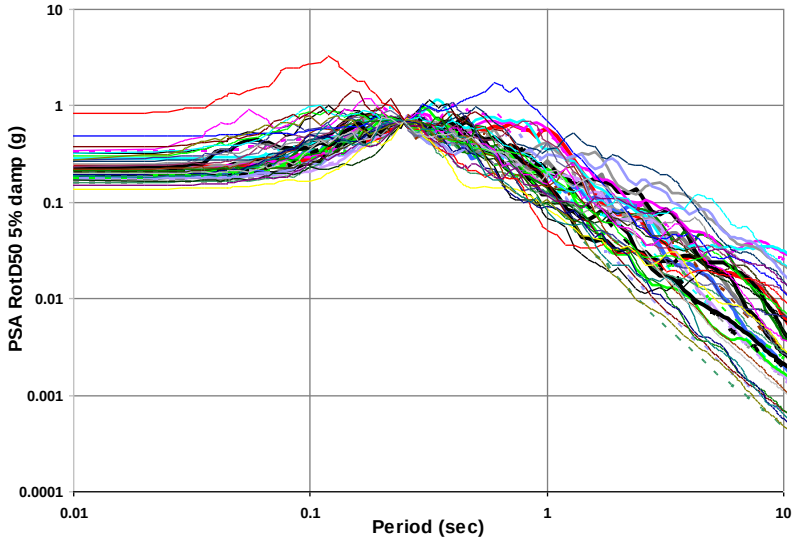
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	2.92	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1392	Chi-Chi, Taiwan KAU078 1999	7.62	86.72	531.85	Reverse O	23.6	3.62	RSN1392_CHICHI_KAU078-E.AT2 RSN1392_CHICHI_KAU078-N.AT2 RSN1392_CHICHI_KAU078-V.AT2
1634	Manjil, Iran Abhar 1990	7.37	75.58	302.64	strike slip	15.6	1.04	RSN1634_MANJIL_184057.AT2 RSN1634_MANJIL_184327.AT2 RSN1634_MANJIL_184-UP.AT2
1816	Hector Mine North Palm Springs Fire Sta #36 1999	7.13	61.86	367.84	strike slip	13.8	2.65	RSN1816_HECTOR_NPF180.AT2 RSN1816_HECTOR_NPF270.AT2 RSN1816_HECTOR_NPF-UP.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	3.18	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2227	Chi-Chi, Taiwan-02 HWA019 1999	5.9	48.4	494.82	Reverse	8.8	3.76	RSN2227_CHICHI.02_HWA019N.AT2 RSN2227_CHICHI.02_HWA019E.AT2 RSN2227_CHICHI.02_HWA019V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	3.46	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	3.95	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2408	Chi-Chi, Taiwan-02 TCU107 1999	5.9	46.88	409	Reverse	14.4	4.01	RSN2408_CHICHI.02_TCU107N.AT2 RSN2408_CHICHI.02_TCU107E.AT2 RSN2408_CHICHI.02_TCU107V.AT2
2945	Chi-Chi, Taiwan-05 CHY027 1999	6.2	78.15	210.01	Reverse	7.1	3.35	RSN2945_CHICHI.05_CHY027N.AT2 RSN2945_CHICHI.05_CHY027E.AT2 RSN2945_CHICHI.05_CHY027V.AT2
2957	Chi-Chi, Taiwan-05 CHY052 1999	6.2	74.33	573.04	Reverse	5	2.81	RSN2957_CHICHI.05_CHY052N.AT2 RSN2957_CHICHI.05_CHY052W.AT2 RSN2957_CHICHI.05_CHY052V.AT2
3008	Chi-Chi, Taiwan-05 HWA020 1999	6.2	34	626.43	Reverse	7.9	3.77	RSN3008_CHICHI.05_HWA020N.AT2 RSN3008_CHICHI.05_HWA020E.AT2 RSN3008_CHICHI.05_HWA020V.AT2
3013	Chi-Chi, Taiwan-05 HWA026 1999	6.2	61.4	457.49	Reverse	5.3	3.84	RSN3013_CHICHI.05_HWA026N.AT2 RSN3013_CHICHI.05_HWA026E.AT2 RSN3013_CHICHI.05_HWA026V.AT2

Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	3.85	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	1.8	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3095	Chi-Chi, Taiwan-05 KAU054 1999	6.2	60.86	497.22	Reverse	3.1	1.71	RSN3095_CHICHI.05_KAU054N.AT2 RSN3095_CHICHI.05_KAU054E.AT2 RSN3095_CHICHI.05_KAU054V.AT2
3170	Chi-Chi, Taiwan-05 TCU042 1999	6.2	77.15	578.98	Reverse	7.1	3.24	RSN3170_CHICHI.05_TCU042N.AT2 RSN3170_CHICHI.05_TCU042E.AT2 RSN3170_CHICHI.05_TCU042V.AT2
3283	Chi-Chi, Taiwan-06 CHY050 1999	6.3	71.64	538.93	Reverse	7.8	3.69	RSN3283_CHICHI.06_CHY050N.AT2 RSN3283_CHICHI.06_CHY050E.AT2 RSN3283_CHICHI.06_CHY050V.AT2
3333	Chi-Chi, Taiwan-06 HWA019 1999	6.3	52.4	494.82	Reverse	7.3	2.66	RSN3333_CHICHI.06_HWA019N.AT2 RSN3333_CHICHI.06_HWA019E.AT2 RSN3333_CHICHI.06_HWA019V.AT2
3362	Chi-Chi, Taiwan-06 HWA059 1999	6.3	42.79	208.56	Reverse	7.3	4.78	RSN3362_CHICHI.06_HWA059N.AT2 RSN3362_CHICHI.06_HWA059E.AT2 RSN3362_CHICHI.06_HWA059V.AT2
3611	Taiwan SMART1(33) SMART1 I05 1985	5.8	41.32	309.41	Normal	4	4.63	RSN3611_SMART1.33_33I05EW.AT2 RSN3611_SMART1.33_33I05NS.AT2 RSN3611_SMART1.33_33I05DN.AT2
3858	Chi-Chi (aftershock 4), Taiwan CHY004 1999	6.2	89.76	271.3	Reverse	9.4	3.65	RSN3858_CHICHI.05_CHY004N.AT2 RSN3858_CHICHI.05_CHY004W.AT2 RSN3858_CHICHI.05_CHY004V.AT2
4047	Bam, Iran Jiroft 2003	6.6	69.28	302.64	strike slip	13.4	4.53	RSN4047_BAM_JIR-L.AT2 RSN4047_BAM_JIR-T.AT2 RSN4047_BAM_JIR-V.AT2
4159	Niigata, Japan FKS028 2004	6.63	30.11	305.54	Reverse	6.7	2.17	RSN4159_NIIGATA_FKS028NS.AT2 RSN4159_NIIGATA_FKS028EW.AT2 RSN4159_NIIGATA_FKS028UD.AT2
4178	Niigata, Japan GNM013 2004	6.63	98.85	258.27	Reverse	5.2	1.54	RSN4178_NIIGATA_GNM013NS.AT2 RSN4178_NIIGATA_GNM013EW.AT2 RSN4178_NIIGATA_GNM013UD.AT2
4234	Niigata, Japan NIGH18 2004	6.63	53.99	311.1	Reverse	9.2	1.53	RSN4234_NIIGATA_NIGH18NS.AT2 RSN4234_NIIGATA_NIGH18EW.AT2 RSN4234_NIIGATA_NIGH18UD.AT2

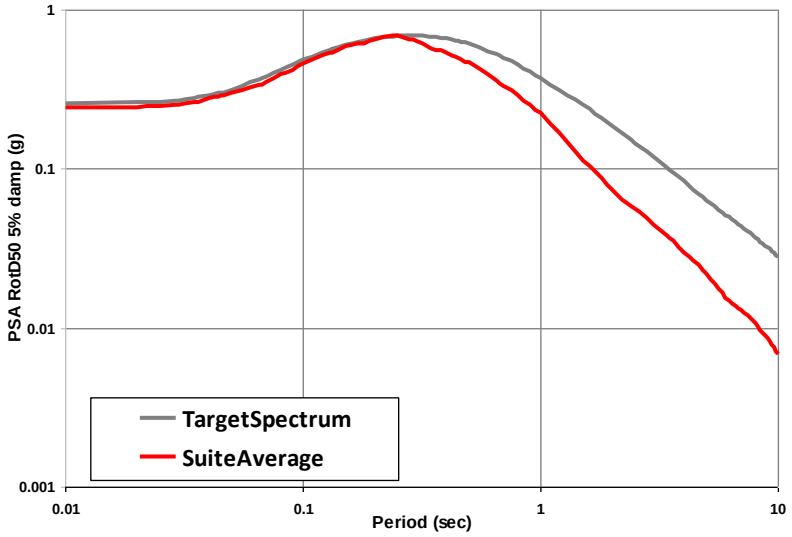
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
4240	Niigata, Japan TCG009 2004	6.63	94.26	225.04	Reverse	16.4	1.38	RSN4240_NIIGATA_TCG009NS.AT2 RSN4240_NIIGATA_TCG009EW.AT2 RSN4240_NIIGATA_TCG009UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	1.07	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0.72	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5796	Iwate Yokote Central City 2008	6.9	31.64	531.68	Reverse	8.9	3.02	RSN5796_IWATE_55203NS.AT2 RSN5796_IWATE_55203EW.AT2 RSN5796_IWATE_55203UD.AT2
5798	Iwate Takanashi Daisen 2008	6.9	44.75	217.1	Reverse	9.7	1.42	RSN5798_IWATE_55429NS.AT2 RSN5798_IWATE_55429EW.AT2 RSN5798_IWATE_55429UD.AT2
6058	Big Bear-01 Fun Valley 1992	6.46	49.35	388.63	strike slip	7.8	2.45	RSN6058_BIGBEAR_FRV045.AT2 RSN6058_BIGBEAR_FRV135.AT2 RSN6058_BIGBEAR_FRV-UP.AT2
8098	Christchurch, New Zealand KOWC 2011	6.2	71.47	485.04	Reverse O	5	2.58	RSN8098_CCHURCH_KOWCN70E.AT2 RSN8098_CCHURCH_KOWCS20E.AT2 RSN8098_CCHURCH_KOWCUP.AT2

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
91	San Fernando Upland - San Antonio Dam 1971	6.61	61.72	487.23	Reverse	6.7	2.83	RSN91_SFERN_SOD015.AT2 RSN91_SFERN_SOD285.AT2 RSN91_SFERN_SODDWN.AT2
301	Irpinia, Italy-02 Mercato San Severino 1980	6.2	43.51	428.57	Normal	9.1	4.86	RSN301_ITALY_B-MER000.AT2 RSN301_ITALY_B-MER270.AT2 RSN301_ITALY_B-MER-UP.AT2
449	Morgan Hill Capitola 1984	6.19	39.08	288.62	strike slip	5	1.88	RSN449_MORGAN_CAP042.AT2 RSN449_MORGAN_CAP132.AT2 RSN449_MORGAN_CAP-UP.AT2
661	Whittier Narrows-01 Mill Creek, Angeles Nat For 1987	5.99	32.36	569.84	Reverse O	4.8	4.23	RSN661_WHITTIER.A_A-ANG000.AT2 RSN661_WHITTIER.A_A-ANG090.AT2 RSN661_WHITTIER.A_A-ANG-UP.AT2
666	Whittier Narrows-01 Newhall - W Pico Canyon Rd. 1987	5.99	55.93	285.93	Reverse O	6.2	3.13	RSN666_WHITTIER.A_A-WPI046.AT2 RSN666_WHITTIER.A_A-WPI316.AT2 RSN666_WHITTIER.A_A-WPI-UP.AT2
667	Whittier Narrows-01 Northridge - 17645 Saticoy St 1987	5.99	38.04	280.86	Reverse O	7	1.5	RSN667_WHITTIER.A_A-STC090.AT2 RSN667_WHITTIER.A_A-STC180.AT2 RSN667_WHITTIER.A_A-STC-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	2.01	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
976	Northridge-01 Hacienda Heights - Colima 1994	6.69	56.55	337	Reverse	10.4	3.16	RSN976_NORTHR_COM140.AT2 RSN976_NORTHR_COM230.AT2 RSN976_NORTHR_COM-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	2.54	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1019	Northridge-01 Lake Hughes #1 1994	6.69	35.46	425.34	Reverse	7.9	2.79	RSN1019_NORTHR_L01000.AT2 RSN1019_NORTHR_L01090.AT2 RSN1019_NORTHR_L01-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	1.49	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	3.95	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2

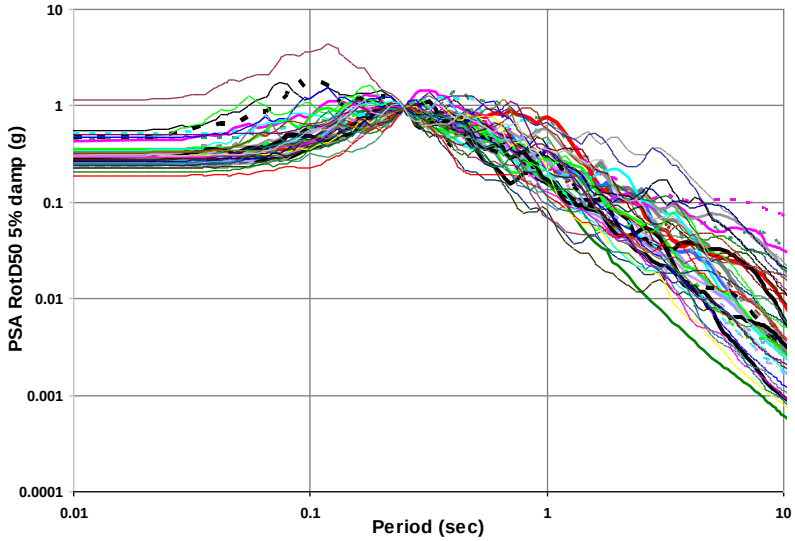
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	1.63	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	2.51	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	0.79	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1139	Dinar, Turkey Cardak 1995	6.4	43.13	428.57	Normal	7.9	3.18	RSN1139_DINAR_CAR076.AT2 RSN1139_DINAR_CAR346.AT2 RSN1139_DINAR_CAR-UP.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	3.77	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1293	Chi-Chi, Taiwan HWA046 1999	7.62	47.79	617.52	Reverse O	8.2	3.64	RSN1293_CHICHI_HWA046-N.AT2 RSN1293_CHICHI_HWA046-W.AT2 RSN1293_CHICHI_HWA046-V.AT2
1349	Chi-Chi, Taiwan ILA066 1999	7.62	67.44	481.17	Reverse O	14.7	3.22	RSN1349_CHICHI_ILA066-N.AT2 RSN1349_CHICHI_ILA066-W.AT2 RSN1349_CHICHI_ILA066-V.AT2
1750	Northwest China-02 Jiashi 1997	5.93	17.9	240.09	Normal	3	1.51	RSN1750_NWCHINA2_JIA000.AT2 RSN1750_NWCHINA2_JIA270.AT2 RSN1750_NWCHINA2_JIA-UP.AT2
1816	Hector Mine North Palm Springs Fire Sta #36 1999	7.13	61.86	367.84	strike slip	13.8	3.42	RSN1816_HECTOR_NPF180.AT2 RSN1816_HECTOR_NPF270.AT2 RSN1816_HECTOR_NPF-UP.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	4.11	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2227	Chi-Chi, Taiwan-02 HWA019 1999	5.9	48.4	494.82	Reverse	8.8	4.85	RSN2227_CHICHI.02_HWA019N.AT2 RSN2227_CHICHI.02_HWA019E.AT2 RSN2227_CHICHI.02_HWA019V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	4.47	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	3.44	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2

Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	4.97	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	2.32	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3021	Chi-Chi, Taiwan-05 HWA034 1999	6.2	32.57	379.18	Reverse	6	2.75	RSN3021_CHICHI.05_HWA034N.AT2 RSN3021_CHICHI.05_HWA034E.AT2 RSN3021_CHICHI.05_HWA034V.AT2
3033	Chi-Chi, Taiwan-05 HWA049 1999	6.2	51.43	508.61	Reverse	7.8	3.27	RSN3033_CHICHI.05_HWA049N.AT2 RSN3033_CHICHI.05_HWA049W.AT2 RSN3033_CHICHI.05_HWA049V.AT2
3215	Chi-Chi, Taiwan-05 TCU123 1999	6.2	48.86	270.22	Reverse	8.8	2.24	RSN3215_CHICHI.05_TCU123N.AT2 RSN3215_CHICHI.05_TCU123E.AT2 RSN3215_CHICHI.05_TCU123V.AT2
3306	Chi-Chi, Taiwan-06 CHY082 1999	6.3	60.95	193.69	Reverse	4	1.34	RSN3306_CHICHI.06_CHY082N.AT2 RSN3306_CHICHI.06_CHY082E.AT2 RSN3306_CHICHI.06_CHY082V.AT2
3310	Chi-Chi, Taiwan-06 CHY090 1999	6.3	87.26	180.33	Reverse	13.8	3.71	RSN3310_CHICHI.06_CHY090N.AT2 RSN3310_CHICHI.06_CHY090E.AT2 RSN3310_CHICHI.06_CHY090V.AT2
3404	Chi-Chi, Taiwan-06 KAU054 1999	6.3	55.12	497.22	Reverse	4.6	3.59	RSN3404_CHICHI.06_KAU054N.AT2 RSN3404_CHICHI.06_KAU054E.AT2 RSN3404_CHICHI.06_KAU054V.AT2
4154	Niigata, Japan FKS023 2004	6.63	85.01	182.3	Reverse	13.5	2.91	RSN4154_NIIGATA_FKS023NS.AT2 RSN4154_NIIGATA_FKS023EW.AT2 RSN4154_NIIGATA_FKS023UD.AT2
4234	Niigata, Japan NIGH18 2004	6.63	53.99	311.1	Reverse	9.2	1.98	RSN4234_NIIGATA_NIGH18NS.AT2 RSN4234_NIIGATA_NIGH18EW.AT2 RSN4234_NIIGATA_NIGH18UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	1.38	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4735	Wenchuan, China Lixianmuka 2008	7.9	29.05	325.54	Reverse O	29.2	0.83	RSN4735_WENCHUAN_UA0836.AT2 RSN4735_WENCHUAN_UA0835.AT2 RSN4735_WENCHUAN_UA0837.AT2
5615	Iwate IWT006 2008	6.9	86.78	229.89	Reverse	11.5	2.76	RSN5615_IWATE_IWT006NS.AT2 RSN5615_IWATE_IWT006EW.AT2 RSN5615_IWATE_IWT006UD.AT2

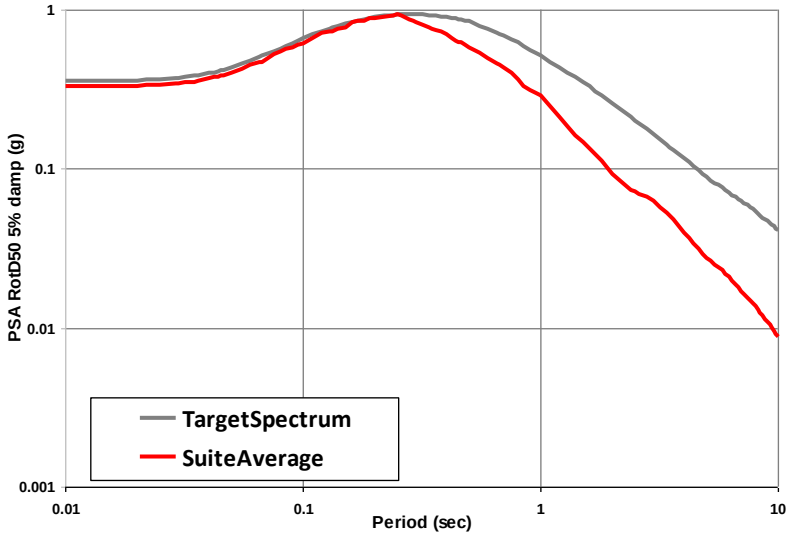
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	3.61	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
5666	Iwate MYG007 2008	6.9	45.55	166.75	Reverse	11.7	2.29	RSN5666_IWATE_MYG007NS.AT2 RSN5666_IWATE_MYG007EW.AT2 RSN5666_IWATE_MYG007UD.AT2
5792	Iwate Rifu Town 2008	6.9	57.77	520.7	Reverse	5.4	3.58	RSN5792_IWATE_54071NS.AT2 RSN5792_IWATE_54071EW.AT2 RSN5792_IWATE_54071UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0.93	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5802	Iwate Yokote O Morimachi 2008	6.9	43.15	346.81	Reverse	6.8	1.78	RSN5802_IWATE_55444NS.AT2 RSN5802_IWATE_55444EW.AT2 RSN5802_IWATE_55444UD.AT2
5972	El Mayor-Cucapah Brawley Airport 2010	7.2	41.15	208.71	strike slip	12.8	1.67	RSN5972_SIERRA.MEX_BRA360.AT2 RSN5972_SIERRA.MEX_BRA090.AT2 RSN5972_SIERRA.MEX_BRA-UP.AT2
7089	Wenchuan, China-03 Maoxiannanxin 2008	6.3	21.99	429.97	Reverse	4.7	4.04	RSN7089_WENCHUAN.03_51MXNNS RSN7089_WENCHUAN.03_51MXNEV RSN7089_WENCHUAN.03_51MXNUD

Site	**02 Sacramento**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	02 Sacramento	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
91	San Fernando Upland - San Antonio Dam 1971	6.61	61.72	487.23	Reverse	6.7	3.86	RSN91_SFERN_SOD015.AT2 RSN91_SFERN_SOD285.AT2 RSN91_SFERN_SODDWN.AT2
573	Taiwan SMART1(45) SMART1 I01 1986	7.3	56.18	275.82	Reverse	11.6	2.16	RSN573_SMART1.45_45I01EW.AT2 RSN573_SMART1.45_45I01NS.AT2 RSN573_SMART1.45_45I01DN.AT2
610	Whittier Narrows-01 Castaic - Old Ridge Route 1987	5.99	70.04	450.28	Reverse O	6.9	4.33	RSN610_WHITTIER.A_A-ORR000.AT2 RSN610_WHITTIER.A_A-ORR090.AT2 RSN610_WHITTIER.A_A-ORR-UP.AT2
666	Whittier Narrows-01 Newhall - W Pico Canyon Rd. 1987	5.99	55.93	285.93	Reverse O	6.2	4.27	RSN666_WHITTIER.A_A-WPI046.AT2 RSN666_WHITTIER.A_A-WPI316.AT2 RSN666_WHITTIER.A_A-WPI-UP.AT2
733	Loma Prieta APEEL 2E Hayward Muir Sch 1989	6.93	52.53	271.06	Reverse O	7.2	1.75	RSN733_LOMAP_A2E000.AT2 RSN733_LOMAP_A2E090.AT2 RSN733_LOMAP_A2E-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	2.74	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	3.41	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
818	Georgia, USSR Iri 1991	6.2	31.38	437.72	Reverse	3.8	4.55	RSN818_GEORGIA_IRI--X.AT2 RSN818_GEORGIA_IRI--Y.AT2 RSN818_GEORGIA_IRI--Z.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	3.37	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	3.46	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1019	Northridge-01 Lake Hughes #1 1994	6.69	35.46	425.34	Reverse	7.9	3.8	RSN1019_NORTHR_L01000.AT2 RSN1019_NORTHR_L01090.AT2 RSN1019_NORTHR_L01-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	2.03	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2

Site Site Vs30 (m/s) Return Period (yr)	**02 Sacramento** **270** **2500**							**CS Set**
1037	Northridge-01 Mojave - Oak Creek Canyon 1994	6.69	75.64	422.73	Reverse	7.2	4.95	RSN1037_NORTHR_MJO000.AT2 RSN1037_NORTHR_MJO090.AT2 RSN1037_NORTHR_MJO-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	2.22	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	3.42	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1139	Dinar, Turkey Cardak 1995	6.4	43.13	428.57	Normal	7.9	4.33	RSN1139_DINAR_CAR076.AT2 RSN1139_DINAR_CAR346.AT2 RSN1139_DINAR_CAR-UP.AT2
1293	Chi-Chi, Taiwan HWA046 1999	7.62	47.79	617.52	Reverse O	8.2	4.96	RSN1293_CHICHI_HWA046-N.AT2 RSN1293_CHICHI_HWA046-W.AT2 RSN1293_CHICHI_HWA046-V.AT2
1301	Chi-Chi, Taiwan HWA056 1999	7.62	35.9	511.3	Reverse O	9.4	4.11	RSN1301_CHICHI_HWA056-E.AT2 RSN1301_CHICHI_HWA056-N.AT2 RSN1301_CHICHI_HWA056-V.AT2
1474	Chi-Chi, Taiwan TCU025 1999	7.62	52.18	665.2	Reverse O	12.2	4.11	RSN1474_CHICHI_TCU025-E.AT2 RSN1474_CHICHI_TCU025-N.AT2 RSN1474_CHICHI_TCU025-V.AT2
1636	Manjil, Iran Qazvin 1990	7.37	49.97	302.64	strike slip	8.6	1.61	RSN1636_MANJIL_185066.AT2 RSN1636_MANJIL_185336.AT2 RSN1636_MANJIL_185-UP.AT2
2383	Chi-Chi, Taiwan-02 TCU067 1999	5.9	32.51	433.63	Reverse	3.1	3.58	RSN2383_CHICHI.02_TCU067N.AT2 RSN2383_CHICHI.02_TCU067E.AT2 RSN2383_CHICHI.02_TCU067V.AT2
2714	Chi-Chi, Taiwan-04 CHY046 1999	6.2	38.11	442.15	strike slip	5.4	2.95	RSN2714_CHICHI.04_CHY046N.AT2 RSN2714_CHICHI.04_CHY046E.AT2 RSN2714_CHICHI.04_CHY046V.AT2
2950	Chi-Chi, Taiwan-05 CHY035 1999	6.2	52.61	573.04	Reverse	6.1	3.35	RSN2950_CHICHI.05_CHY035N.AT2 RSN2950_CHICHI.05_CHY035E.AT2 RSN2950_CHICHI.05_CHY035V.AT2
2997	Chi-Chi, Taiwan-05 HWA005 1999	6.2	32.71	459.32	Reverse	7.7	3.62	RSN2997_CHICHI.05_HWA005N.AT2 RSN2997_CHICHI.05_HWA005W.AT2 RSN2997_CHICHI.05_HWA005V.AT2
3000	Chi-Chi, Taiwan-05 HWA011 1999	6.2	54.22	355.76	Reverse	6.4	2.95	RSN3000_CHICHI.05_HWA011N.AT2 RSN3000_CHICHI.05_HWA011E.AT2 RSN3000_CHICHI.05_HWA011V.AT2

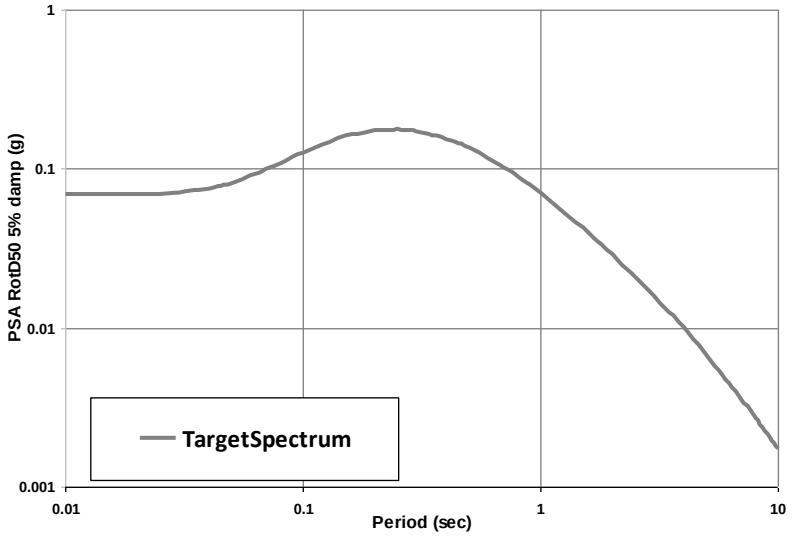
Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	3.16	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3033	Chi-Chi, Taiwan-05 HWA049 1999	6.2	51.43	508.61	Reverse	7.8	4.45	RSN3033_CHICHI.05_HWA049N.AT2 RSN3033_CHICHI.05_HWA049W.AT2 RSN3033_CHICHI.05_HWA049V.AT2
3093	Chi-Chi, Taiwan-05 KAU050 1999	6.2	69.83	665.2	Reverse	11.8	4.69	RSN3093_CHICHI.05_KAU050N.AT2 RSN3093_CHICHI.05_KAU050E.AT2 RSN3093_CHICHI.05_KAU050V.AT2
3188	Chi-Chi, Taiwan-05 TCU067 1999	6.2	36.73	433.63	Reverse	4.4	2.75	RSN3188_CHICHI.05_TCU067N.AT2 RSN3188_CHICHI.05_TCU067E.AT2 RSN3188_CHICHI.05_TCU067V.AT2
3205	Chi-Chi, Taiwan-05 TCU105 1999	6.2	59.83	575.54	Reverse	5.3	3.69	RSN3205_CHICHI.05_TCU105N.AT2 RSN3205_CHICHI.05_TCU105E.AT2 RSN3205_CHICHI.05_TCU105V.AT2
3220	Chi-Chi, Taiwan-05 TCU138 1999	6.2	41.46	652.85	Reverse	5.1	2.59	RSN3220_CHICHI.05_TCU138N.AT2 RSN3220_CHICHI.05_TCU138W.AT2 RSN3220_CHICHI.05_TCU138V.AT2
3257	Chi-Chi, Taiwan-05 TTN051 1999	6.2	60.49	665.2	Reverse	9.9	3.98	RSN3257_CHICHI.05_TTN051N.AT2 RSN3257_CHICHI.05_TTN051E.AT2 RSN3257_CHICHI.05_TTN051V.AT2
3311	Chi-Chi, Taiwan-06 CHY092 1999	6.3	42.77	253.72	Reverse	15.1	3.18	RSN3311_CHICHI.06_CHY092N.AT2 RSN3311_CHICHI.06_CHY092W.AT2 RSN3311_CHICHI.06_CHY092V.AT2
3949	Tottori, Japan SMNH03 2000	6.61	52.3	439.68	strike slip	10.2	1.51	RSN3949_TOTTORI_SMNH03NS.AT2 RSN3949_TOTTORI_SMNH03EW.AT2 RSN3949_TOTTORI_SMNH03UD.AT2
4154	Niigata, Japan FKS023 2004	6.63	85.01	182.3	Reverse	13.5	3.96	RSN4154_NIIGATA_FKS023NS.AT2 RSN4154_NIIGATA_FKS023EW.AT2 RSN4154_NIIGATA_FKS023UD.AT2
4234	Niigata, Japan NIGH18 2004	6.63	53.99	311.1	Reverse	9.2	2.69	RSN4234_NIIGATA_NIGH18NS.AT2 RSN4234_NIIGATA_NIGH18EW.AT2 RSN4234_NIIGATA_NIGH18UD.AT2
4240	Niigata, Japan TCG009 2004	6.63	94.26	225.04	Reverse	16.4	2.42	RSN4240_NIIGATA_TCG009NS.AT2 RSN4240_NIIGATA_TCG009EW.AT2 RSN4240_NIIGATA_TCG009UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	1.88	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2

Site	02 Sacramento							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	4.92	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
5773	Iwate Miyagi Great Village 2008	6.9	41.12	531.25	Reverse	8.9	2.68	RSN5773_IWATE_54007NS.AT2 RSN5773_IWATE_54007EW.AT2 RSN5773_IWATE_54007UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	1.27	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5802	Iwate Yokote O Morimachi 2008	6.9	43.15	346.81	Reverse	6.8	2.42	RSN5802_IWATE_55444NS.AT2 RSN5802_IWATE_55444EW.AT2 RSN5802_IWATE_55444UD.AT2
6058	Big Bear-01 Fun Valley 1992	6.46	49.35	388.63	strike slip	7.8	4.3	RSN6058_BIGBEAR_FRV045.AT2 RSN6058_BIGBEAR_FRV135.AT2 RSN6058_BIGBEAR_FRV-UP.AT2
7032	Wenchuan, China-01 Wudu 2008	6	87.44	227.8	strike slip	6.6	4.71	RSN7032_WENCHUAN.01_62WUDNS RSN7032_WENCHUAN.01_62WUDEV RSN7032_WENCHUAN.01_62WUDUD
8098	Christchurch, New Zealand KOWC 2011	6.2	71.47	485.04	Reverse O	5	4.53	RSN8098_CCHURCH_KOWCN70E.AT2 RSN8098_CCHURCH_KOWCS20E.AT2 RSN8098_CCHURCH_KOWCUP.AT2

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records

Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
10	Imperial Valley-03 El Centro Array #9 1951	5.6	24.58	213.44	strike slip	14.5	0	RSN10_IMPVALL.BG_C-ELC000.AT2 RSN10_IMPVALL.BG_C-ELC090.AT2 RSN10_IMPVALL.BG_C-ELC-UP.AT2
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	0	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	0	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
231	Mammoth Lakes-01 Long Valley Dam (Upr L Abut) 1980	6.06	12.56	537.16	Normal O	7.2	0	RSN231_MAMMOTH.I_I-LUL000.AT2 RSN231_MAMMOTH.I_I-LUL090.AT2 RSN231_MAMMOTH.I_I-LUL-UP.AT2
268	Victoria, Mexico SAHOP Casa Flores 1980	6.33	39.1	259.59	strike slip	6.8	0	RSN268_VICT_SHP010.AT2 RSN268_VICT_SHP280.AT2 RSN268_VICT_SHP-UP.AT2
296	Irpinia, Italy-02 Bagnoli Irpinio 1980	6.2	17.79	649.67	Normal	6.1	0	RSN296_ITALY_B-BAG000.AT2 RSN296_ITALY_B-BAG270.AT2 RSN296_ITALY_B-BAG-UP.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	0	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
329	Coalinga-01 Parkfield - Cholame 4AW 1983	6.36	46.73	283.38	Reverse	7.6	0	RSN329_COALINGA.H_H-C4A000.AT2 RSN329_COALINGA.H_H-C4A090.AT2 RSN329_COALINGA.H_H-C4A-UP.AT2
334	Coalinga-01 Parkfield - Fault Zone 1 1983	6.36	41.04	178.27	Reverse	12.7	0	RSN334_COALINGA.H_H-COW000.AT RSN334_COALINGA.H_H-COW090.AT RSN334_COALINGA.H_H-COW-UP.AT
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	0	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2

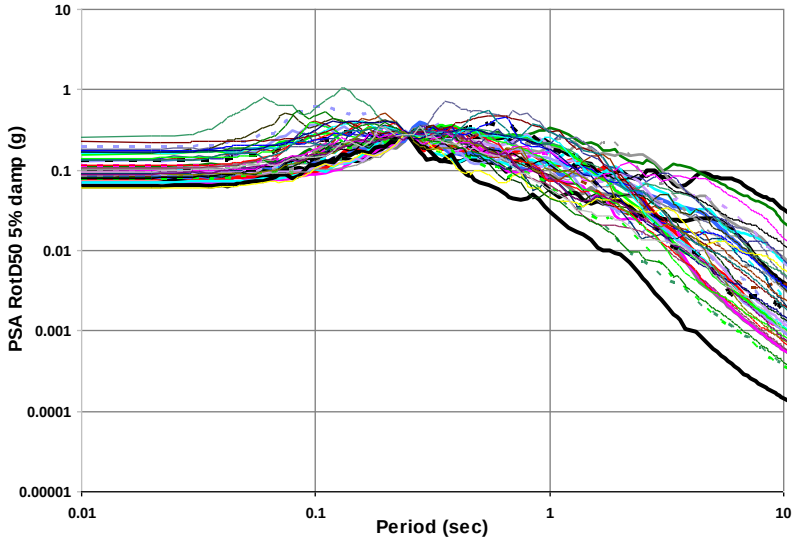
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
462	Morgan Hill Hollister City Hall 1984	6.19	30.76	198.77	strike slip	12.1	0	RSN462_MORGAN_HCH001.AT2 RSN462_MORGAN_HCH271.AT2 RSN462_MORGAN_HCH-UP.AT2
463	Morgan Hill Hollister Diff Array #1 1984	6.19	26.42	-999	strike slip	9.3	0	RSN463_MORGAN_HD1255.AT2 RSN463_MORGAN_HD1345.AT2 RSN463_MORGAN_HD1-UP.AT2
529	N. Palm Springs North Palm Springs 1986	6.06	0	344.67	Reverse O	1.7	0	RSN529_PALMSPR_NPS210.AT2 RSN529_PALMSPR_NPS300.AT2 RSN529_PALMSPR_NPS-UP.AT2
545	Chalfant Valley-01 Bishop - Paradise Lodge 1986	5.77	14.99	585.12	strike slip	2.3	0	RSN545_CHALFANT.B_B-BPL070.AT2 RSN545_CHALFANT.B_B-BPL160.AT2 RSN545_CHALFANT.B_B-BPL-UP.AT2
690	Whittier Narrows-01 San Gabriel - E Grand Ave 1987	5.99	0	401.37	Reverse O	2.5	0	RSN690_WHITTIER.A_A-GRN180.AT2 RSN690_WHITTIER.A_A-GRN270.AT2 RSN690_WHITTIER.A_A-GRN-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	0	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
945	Northridge-01 Anaverde Valley - City R 1994	6.69	37.67	349.6	Reverse	7.8	0	RSN945_NORTHR_ANA090.AT2 RSN945_NORTHR_ANA180.AT2 RSN945_NORTHR_ANA-UP.AT2
985	Northridge-01 LA - Baldwin Hills 1994	6.69	23.5	297.07	Reverse	7.8	0	RSN985_NORTHR_BLD090.AT2 RSN985_NORTHR_BLD360.AT2 RSN985_NORTHR_BLD-UP.AT2
1026	Northridge-01 Lawndale - Osage Ave 1994	6.69	34.31	311.86	Reverse	14.2	0	RSN1026_NORTHR_LOA092.AT2 RSN1026_NORTHR_LOA182.AT2 RSN1026_NORTHR_LOA-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1115	Kobe, Japan Sakai 1995	6.9	28.08	256	strike slip	11.6	0	RSN1115_KOBE_SKI000.AT2 RSN1115_KOBE_SKI090.AT2 RSN1115_KOBE_SKI-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	0	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2

Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
1614	Duzce, Turkey Lamont 1061 1999	7.14	11.46	481	strike slip	9.3	0	RSN1614_DUZCE_1061-N.AT2 RSN1614_DUZCE_1061-E.AT2 RSN1614_DUZCE_1061-V.AT2
1626	Sitka, Alaska Sitka Observatory 1972	7.68	34.61	649.67	strike slip	12.6	0	RSN1626_SITKA_212V5090.AT2 RSN1626_SITKA_212V5180.AT2 RSN1626_SITKA_212V5-UP.AT2
2238	Chi-Chi, Taiwan-02 HWA031 1999	5.9	44.29	602.29	Reverse	10	0	RSN2238_CHICHI.02_HWA031N.AT2 RSN2238_CHICHI.02_HWA031E.AT2 RSN2238_CHICHI.02_HWA031V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	0	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	0	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	0	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3273	Chi-Chi, Taiwan-06 CHY034 1999	6.3	43.53	378.75	Reverse	7.3	0	RSN3273_CHICHI.06_CHY034N.AT2 RSN3273_CHICHI.06_CHY034W.AT2 RSN3273_CHICHI.06_CHY034V.AT2
3505	Chi-Chi, Taiwan-06 TCU125 1999	6.3	23.63	397.57	Reverse	9.8	0	RSN3505_CHICHI.06_TCU125N.AT2 RSN3505_CHICHI.06_TCU125E.AT2 RSN3505_CHICHI.06_TCU125V.AT2
3744	Cape Mendocino Bunker Hill FAA 1992	7.01	8.49	566.42	Reverse	3.6	0	RSN3744_CAPEMEND_BNH270.AT2 RSN3744_CAPEMEND_BNH360.AT2 RSN3744_CAPEMEND_BNH-UP.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	0	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4206	Niigata, Japan NIG016 2004	6.63	26.53	370.03	Reverse	6.8	0	RSN4206_NIIGATA_NIG016NS.AT2 RSN4206_NIIGATA_NIG016EW.AT2 RSN4206_NIIGATA_NIG016UD.AT2

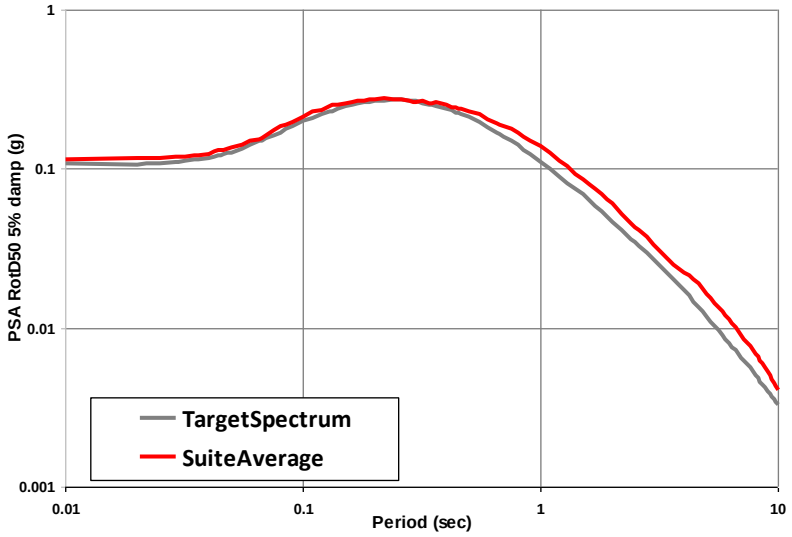
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4856	Chuetsu-oki Kashiwazaki City Center 2007	6.8	0	294.38	Reverse	5	0	RSN4856_CHUETSU_65025NS.AT2 RSN4856_CHUETSU_65025EW.AT2 RSN4856_CHUETSU_65025UD.AT2
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	0	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
5816	Iwate Shinmachi Wakayu 2008	6.9	42.02	359.13	Reverse	14.5	0	RSN5816_IWATE_48A41NS.AT2 RSN5816_IWATE_48A41EW.AT2 RSN5816_IWATE_48A41UD.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8627	40204628 Milpitas Fire Station 4 2007	5.45	11.22	263.76	strike slip	5	0	RSN8627_40204628_N1788HNN.AT2 RSN8627_40204628_N1788HNE.AT2 RSN8627_40204628_N1788HNZ.AT2
18069	14519780 Cerro Gordo 2009	5.19	15.29	715	strike slip	3.5	0	RSN18069_14519780_CICGOHNN.AT RSN18069_14519780_CICGOHNE.AT RSN18069_14519780_CICGOHNZ.AT

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	1.13	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
44	Lytle Creek Colton - So Cal Edison 1970	5.33	29.18	301.95	Reverse O	6	2.24	RSN44_LYTLECR_CLN090.AT2 RSN44_LYTLECR_CLN180.AT2 RSN44_LYTLECR_CLN-UP.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.25	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.08	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
218	Livermore-02 Antioch - 510 G St 1980	5.42	29.31	304.68	strike slip	3.7	1.29	RSN218_LIVERMOR_B-ANT270.AT2 RSN218_LIVERMOR_B-ANT360.AT2 RSN218_LIVERMOR_B-ANT-UP.AT2
409	Coalinga-05 Oil Fields Fire Station - Pad 1983	5.77	6.27	474.15	Reverse	3.6	0.61	RSN409_COALINGA_D-OLP270.AT2 RSN409_COALINGA_D-OLP360.AT2 RSN409_COALINGA_D-OLP-UP.AT2
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	0.66	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2
461	Morgan Hill Halls Valley 1984	6.19	3.45	281.61	strike slip	8.9	0.56	RSN461_MORGAN_HVR150.AT2 RSN461_MORGAN_HVR240.AT2 RSN461_MORGAN_HVR-UP.AT2
545	Chalfant Valley-01 Bishop - Paradise Lodge 1986	5.77	14.99	585.12	strike slip	2.3	3.78	RSN545_CHALFANT.B_B-BPL070.AT2 RSN545_CHALFANT.B_B-BPL160.AT2 RSN545_CHALFANT.B_B-BPL-UP.AT2
599	Whittier Narrows-01 Brea - S Flower Av 1987	5.99	18.39	322.75	Reverse O	3.3	0.98	
698	Whittier Narrows-01 Sylmar - Olive View Med FF 1987	5.99	38.55	440.54	Reverse O	6.3	2.01	RSN698_WHITTIER.A_A-SYL000.AT2 RSN698_WHITTIER.A_A-SYL090.AT2 RSN698_WHITTIER.A_A-SYL-UP.AT2
755	Loma Prieta Coyote Lake Dam - Southwest Abut 1989	6.93	19.97	561.43	Reverse O	5.1	0.5	RSN755_LOMAP_CYC195.AT2 RSN755_LOMAP_CYC285.AT2 RSN755_LOMAP_CYC-UP.AT2

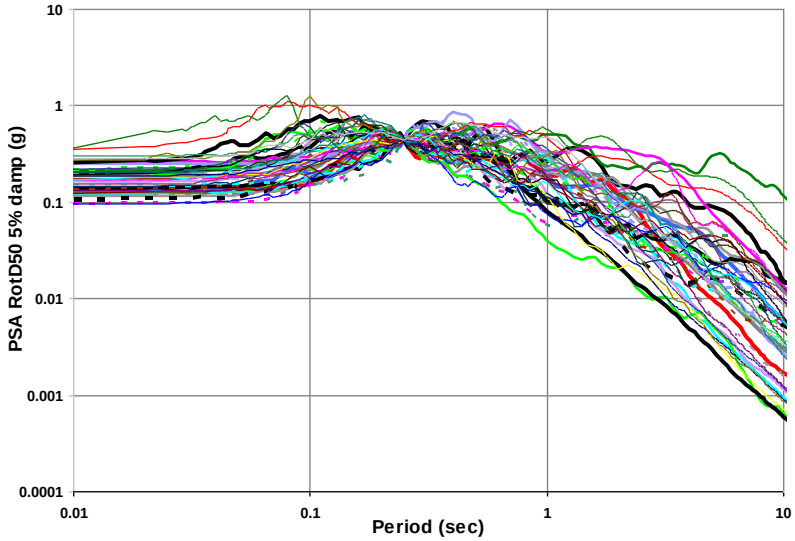
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	0.8	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	0.98	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	0.3	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	0.67	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1034	Northridge-01 Malibu - Point Dume Sch 1994	6.69	26.77	349.54	Reverse	7.8	0.79	RSN1034_NORTHR_MAL090.AT2 RSN1034_NORTHR_MAL360.AT2 RSN1034_NORTHR_MAL-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	2	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.42	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	0.65	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.22	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	0.71	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	1.77	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2253	Chi-Chi, Taiwan-02 HWA049 1999	5.9	43.6	508.61	Reverse	8.1	2.6	RSN2253_CHICHI.02_HWA049N.AT2 RSN2253_CHICHI.02_HWA049W.AT2 RSN2253_CHICHI.02_HWA049V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	1.36	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2

Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
3270	Chi-Chi, Taiwan-06 CHY030 1999	6.3	44.17	204.71	Reverse	12.8	0.99	RSN3270_CHICHI.06_CHY030N.AT2 RSN3270_CHICHI.06_CHY030E.AT2 RSN3270_CHICHI.06_CHY030V.AT2
3349	Chi-Chi, Taiwan-06 HWA037 1999	6.3	44.77	469.64	Reverse	12.6	2.26	RSN3349_CHICHI.06_HWA037N.AT2 RSN3349_CHICHI.06_HWA037E.AT2 RSN3349_CHICHI.06_HWA037V.AT2
3765	Northridge-04 Pacoima Kagel Canyon 1994	5.93	25.63	508.08	Reverse O	5.6	1.89	RSN3765_NORTH142_PKC090.AT2 RSN3765_NORTH142_PKC360.AT2 RSN3765_NORTH142_PKC-UP.AT2
3852	Chi-Chi (aftershock 3), Taiwan CHY006 1999	6.2	24.58	438.19	strike slip	5.8	0.76	RSN3852_CHICHI.04_CHY006N.AT2 RSN3852_CHICHI.04_CHY006E.AT2 RSN3852_CHICHI.04_CHY006V.AT2
4107	Parkfield-02, CA Parkfield - Fault Zone 1 2004	6	0.02	178.27	strike slip	2.4	0.24	RSN4107_PARK2004_COW090.AT2 RSN4107_PARK2004_COW360.AT2 RSN4107_PARK2004_COW-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	0.76	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4862	Chuetsu-oki Shiura Nagaoka 2007	6.8	10.61	336.93	Reverse	8.5	0.83	RSN4862_CHUETSU_65035NS.AT2 RSN4862_CHUETSU_65035EW.AT2 RSN4862_CHUETSU_65035UD.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	0.63	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.41	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	0.39	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
5773	Iwate Miyagi Great Village 2008	6.9	41.12	531.25	Reverse	8.9	0.78	RSN5773_IWATE_54007NS.AT2 RSN5773_IWATE_54007EW.AT2 RSN5773_IWATE_54007UD.AT2
5817	Iwate Tome City, Nakadacho 2008	6.9	37.72	284.45	Reverse	12.4	0.69	RSN5817_IWATE_48A51NS.AT2 RSN5817_IWATE_48A51EW.AT2 RSN5817_IWATE_48A51UD.AT2
6930	Darfield, New Zealand LRSC 2010	7	9.38	295.74	strike slip	12.2	1.43	RSN6930_DARFIELD_LRSCN49W.AT2 RSN6930_DARFIELD_LRSCS41W.AT2 RSN6930_DARFIELD_LRSCUP.AT2

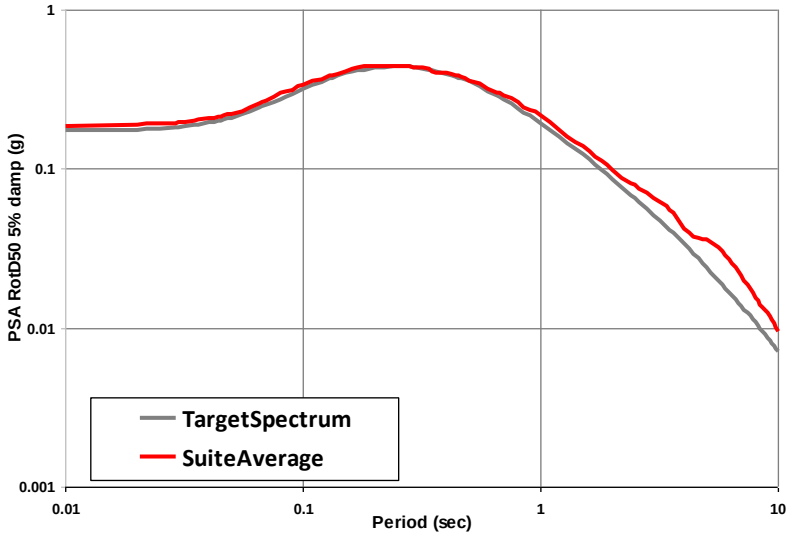
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	0.39	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
7108	Wenchuan, China-04 Anxiantashui 2008	5.5	40.88	376.1	Reverse	8.7	4.78	RSN7108_WENCHUAN.04_51AXTNS. RSN7108_WENCHUAN.04_51AXTEW RSN7108_WENCHUAN.04_51AXTUD.
8167	San Simeon, CA Diablo Canyon Power Plant 2003	6.52	37.92	1100	Reverse	7	2.45	RSN8167_SANSIMEO_DCPP337.AT2 RSN8167_SANSIMEO_DCPP247.AT2 RSN8167_SANSIMEO_DCPP-UP.AT2
8622	40204628 San Jose; Fire Station 09 Southwest; 2007	5.45	21.48	339.94	strike slip	4.7	4.39	RSN8622_40204628_N1780HNN.AT2 RSN8622_40204628_N1780HNE.AT2 RSN8622_40204628_N1780HNZ.AT2
8795	14383980 Fullerton 2008	5.39	14.46	351.22	Reverse O	7.1	2.75	RSN8795_14383980_CIFULHNN.AT2 RSN8795_14383980_CIFULHNE.AT2 RSN8795_14383980_CIFULHNZ.AT2
8841	14383980 Rush 2008	5.39	28.85	278.64	Reverse O	2.8	1.25	RSN8841_14383980_CIRUSHNN.AT2 RSN8841_14383980_CIRUSHNE.AT2 RSN8841_14383980_CIRUSHNZ.AT2
8937	14383980 Costa Mesa; Fire Station 4 Placentia 2008	5.39	34.4	325.62	Reverse O	6.2	3.39	RSN8937_14383980_U5286360.AT2 RSN8937_14383980_U5286090.AT2 RSN8937_14383980_U5286-UP.AT2

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
8	Northern Calif-01 Ferndale City Hall 1941	6.4	44.52	219.31	strike slip	4.1	1.55	RSN8_NCALIF.FH_F-FRN225.AT2 RSN8_NCALIF.FH_F-FRN315.AT2 RSN8_NCALIF.FH_F-FRN-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	2.77	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
97	Point Mugu Port Hueneme 1973	5.65	15.48	248.98	Reverse	4.7	2.95	RSN97_PTMUGU_PHN180.AT2 RSN97_PTMUGU_PHN270.AT2 RSN97_PTMUGU_PHN-UP.AT2
171	Imperial Valley-06 El Centro - Meloland Geot. Array 1979	6.53	0.07	264.57	strike slip	2.2	0.83	RSN171_IMPVALL.H_H-EMO000.AT2 RSN171_IMPVALL.H_H-EMO270.AT2 RSN171_IMPVALL.H_H-EMO-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.26	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
308	Taiwan SMART1(5) SMART1 I12 1981	5.9	25.7	275.82	Reverse	3	1.34	RSN308_SMART1.05_05I12EW.AT2 RSN308_SMART1.05_05I12NS.AT2 RSN308_SMART1.05_05I12DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.64	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
328	Coalinga-01 Parkfield - Cholame 3W 1983	6.36	44.82	230.57	Reverse	7.1	2.67	RSN328_COALINGA.H_H-C03000.AT2 RSN328_COALINGA.H_H-C03090.AT2 RSN328_COALINGA.H_H-C03-UP.AT2
329	Coalinga-01 Parkfield - Cholame 4AW 1983	6.36	46.73	283.38	Reverse	7.6	3.07	RSN329_COALINGA.H_H-C4A000.AT2 RSN329_COALINGA.H_H-C4A090.AT2 RSN329_COALINGA.H_H-C4A-UP.AT2
403	Coalinga-04 Sulphur Baths (temp) 1983	5.18	12.53	617.43	Reverse	2.2	3.48	RSN403_COALINGA_C-CSU000.AT2 RSN403_COALINGA_C-CSU090.AT2 RSN403_COALINGA_C-CSU-UP.AT2
654	Whittier Narrows-01 Lawndale - Osage Ave 1987	5.99	26.31	311.86	Reverse O	8.1	4	RSN654_WHITTIER.A_A-LOA092.AT2 RSN654_WHITTIER.A_A-LOA182.AT2 RSN654_WHITTIER.A_A-LOA-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	1.3	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2

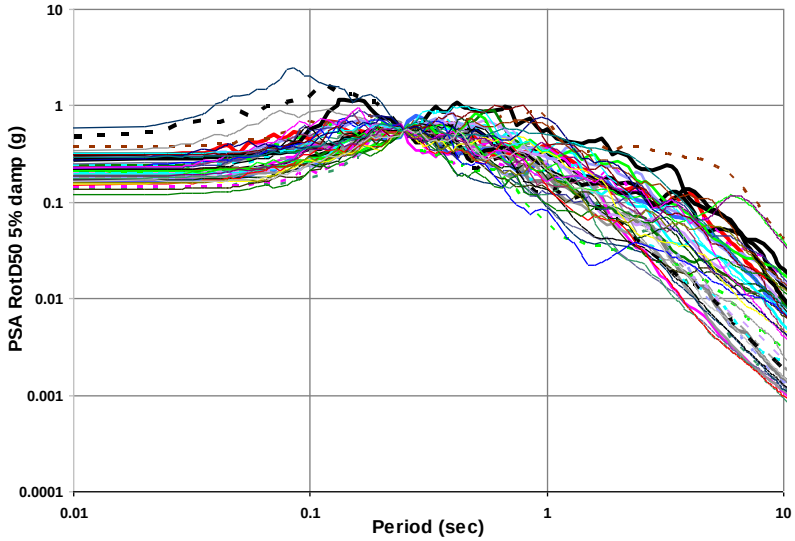
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
806	Loma Prieta Sunnyvale - Colton Ave. 1989	6.93	23.92	267.71	Reverse O	9.8	0.82	RSN806_LOMAP_SVL270.AT2 RSN806_LOMAP_SVL360.AT2 RSN806_LOMAP_SVL-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	1.61	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
906	Big Bear-01 Hemet Fire Station 1992	6.46	47.6	328.09	strike slip	10.4	3.01	RSN906_BIGBEAR_H05090.AT2 RSN906_BIGBEAR_H05360.AT2 RSN906_BIGBEAR_H05-UP.AT2
910	Big Bear-01 Joshua Tree 1992	6.46	40.99	379.32	strike slip	9.8	2.08	RSN910_BIGBEAR_JOS090.AT2 RSN910_BIGBEAR_JOS360.AT2 RSN910_BIGBEAR_JOS-UP.AT2
930	Big Bear-01 San Bernardino - 2nd & Arrowhead 1992	6.46	33.56	325.83	strike slip	10.8	1.99	RSN930_BIGBEAR_SB2270.AT2 RSN930_BIGBEAR_SB2360.AT2 RSN930_BIGBEAR_SB2-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.28	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	3.26	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.68	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1232	Chi-Chi, Taiwan CHY081 1999	7.62	41.36	573.04	Reverse O	18.4	2.99	RSN1232_CHICHI_CHY081-E.AT2 RSN1232_CHICHI_CHY081-N.AT2 RSN1232_CHICHI_CHY081-V.AT2
1301	Chi-Chi, Taiwan HWA056 1999	7.62	35.9	511.3	Reverse O	9.4	1.94	RSN1301_CHICHI_HWA056-E.AT2 RSN1301_CHICHI_HWA056-N.AT2 RSN1301_CHICHI_HWA056-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.36	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1531	Chi-Chi, Taiwan TCU104 1999	7.62	12.87	410.45	Reverse O	19.6	2.11	RSN1531_CHICHI_TCU104-E.AT2 RSN1531_CHICHI_TCU104-N.AT2 RSN1531_CHICHI_TCU104-V.AT2
1619	Duzce, Turkey Mudurnu 1999	7.14	34.3	535.24	strike slip	9.1	1.27	RSN1619_DUZCE_MDR000.AT2 RSN1619_DUZCE_MDR090.AT2 RSN1619_DUZCE_MDR-UP.AT2

Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
2408	Chi-Chi, Taiwan-02 TCU107 1999	5.9	46.88	409	Reverse	14.4	3.33	RSN2408_CHICHI.02_TCU107N.AT2 RSN2408_CHICHI.02_TCU107E.AT2 RSN2408_CHICHI.02_TCU107V.AT2
2469	Chi-Chi, Taiwan-03 CHY041 1999	6.2	40.79	492.26	Reverse	3.7	1.31	RSN2469_CHICHI.03_CHY041N.AT2 RSN2469_CHICHI.03_CHY041E.AT2 RSN2469_CHICHI.03_CHY041V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	2.22	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.5	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4547	L'Aquila (aftershock 2), Italy L'Aquila - V. Aterno - Centro Valle 2009	5.4	10.22	475	Normal	2.9	2.03	RSN4547_L-AQUILA.B_GX401XTE.AT2 RSN4547_L-AQUILA.B_GX401YLN.AT2 RSN4547_L-AQUILA.B_GX401ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.18	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4781	Wenchuan, China Jiangyouchonghua 2008	7.9	27.23	430.47	Reverse O	18.4	0.67	RSN4781_WENCHUAN_UA1027.AT2 RSN4781_WENCHUAN_UA1028.AT2 RSN4781_WENCHUAN_UA1029.AT2
4872	Chuetsu-oki Sawa Mizuguti Tokamachi 2007	6.8	21.17	640.14	Reverse	8	1.36	RSN4872_CHUETSU_65053NS.AT2 RSN4872_CHUETSU_65053EW.AT2 RSN4872_CHUETSU_65053UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.66	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5268	Chuetsu-oki NIG022 2007	6.8	37.79	193.2	Reverse	8.3	2.25	RSN5268_CHUETSU_NIG022NS.AT2 RSN5268_CHUETSU_NIG022EW.AT2 RSN5268_CHUETSU_NIG022UD.AT2
5272	Chuetsu-oki NIG026 2007	6.8	39.71	277.29	Reverse	5	1.74	RSN5272_CHUETSU_NIG026NS.AT2 RSN5272_CHUETSU_NIG026EW.AT2 RSN5272_CHUETSU_NIG026UD.AT2
5768	Iwate YMTH09 2008	6.9	47.01	291.48	Reverse	15.3	3.57	RSN5768_IWATE_YMTH09NS.AT2 RSN5768_IWATE_YMTH09EW.AT2 RSN5768_IWATE_YMTH09UD.AT2
5779	Iwate Sanbongi Osaki City 2008	6.9	36.33	539.87	Reverse	13.7	1.36	RSN5779_IWATE_54013NS.AT2 RSN5779_IWATE_54013EW.AT2 RSN5779_IWATE_54013UD.AT2

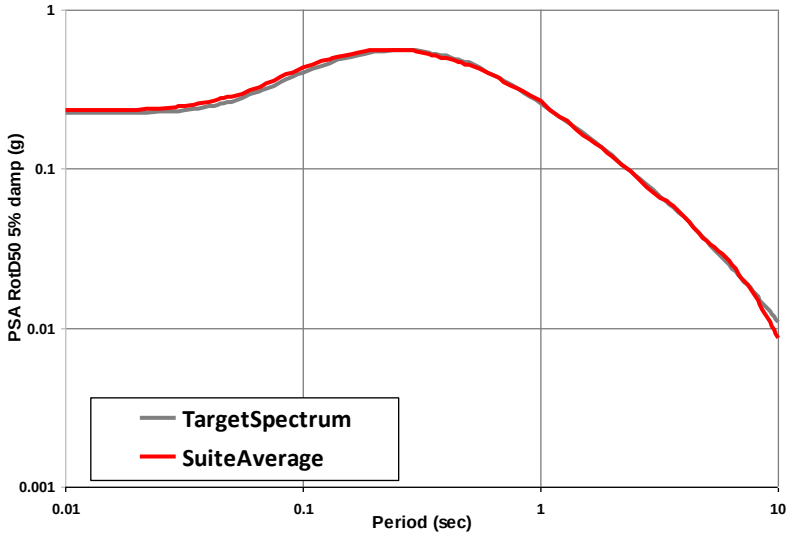
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
5798	Iwate Takanashi Daisen 2008	6.9	44.75	217.1	Reverse	9.7	1.17	RSN5798_IWATE_55429NS.AT2 RSN5798_IWATE_55429EW.AT2 RSN5798_IWATE_55429UD.AT2
6893	Darfield, New Zealand DFHS 2010	7	11.86	344.02	strike slip	14.3	0.43	RSN6893_DARFIELD_DFHSS17E.AT2 RSN6893_DARFIELD_DFHSS73W.AT2 RSN6893_DARFIELD_DFHSUP.AT2
6927	Darfield, New Zealand LINC 2010	7	5.07	263.2	strike slip	8	0.8	RSN6927_DARFIELD_LINCN23E.AT2 RSN6927_DARFIELD_LINCN67W.AT2 RSN6927_DARFIELD_LINCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0.78	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8062	Christchurch, New Zealand Canterbury Aero Club 2011	6.2	14.41	280.26	Reverse O	3.8	0.91	RSN8062_CCHURCH_CACSN40E.AT2 RSN8062_CCHURCH_CACSN50W.AT2 RSN8062_CCHURCH_CACSUP.AT2
8090	Christchurch, New Zealand Hulverstone Drive Pumping Station 2011	6.2	4.32	206	Reverse O	3.8	1.41	RSN8090_CCHURCH_HPSCN04W.AT2 RSN8090_CCHURCH_HPSCS86W.AT2 RSN8090_CCHURCH_HPSCUP.AT2
8843	14383980 Santa Ana 2008	5.39	27.93	222	Reverse O	5.8	1.98	RSN8843_14383980_CISANHNN.AT2 RSN8843_14383980_CISANHNE.AT2 RSN8843_14383980_CISANHNZ.AT2

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	2.32	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	1.62	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	2.61	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.8	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
326	Coalinga-01 Parkfield - Cholame 2WA 1983	6.36	43.83	173.02	Reverse	7.6	1.86	RSN326_COALINGA.H_H-C02000.AT2 RSN326_COALINGA.H_H-C02090.AT2 RSN326_COALINGA.H_H-C02-UP.AT2
362	Coalinga-01 Parkfield - Vineyard Cany 2W 1983	6.36	29.01	438.74	Reverse	7.9	2.22	RSN362_COALINGA.H_H-VC2000.AT2 RSN362_COALINGA.H_H-VC2090.AT2 RSN362_COALINGA.H_H-VC2-UP.AT2
449	Morgan Hill Capitola 1984	6.19	39.08	288.62	strike slip	5	1.52	RSN449_MORGAN_CAP042.AT2 RSN449_MORGAN_CAP132.AT2 RSN449_MORGAN_CAP-UP.AT2
471	Morgan Hill San Justo Dam (L Abut) 1984	6.19	31.88	543.63	strike slip	10.3	2.22	RSN471_MORGAN_SJL270.AT2 RSN471_MORGAN_SJL360.AT2 RSN471_MORGAN_SJL-UP.AT2
599	Whittier Narrows-01 Brea - S Flower Av 1987	5.99	18.39	322.75	Reverse O	3.3	2.01	
674	Whittier Narrows-01 Pasadena - Brown Gym 1987	5.99	4.3	341.14	Reverse O	3.3	1.08	RSN674_WHITTIER.A_A-BRG180.AT2 RSN674_WHITTIER.A_A-BRG270.AT2 RSN674_WHITTIER.A_A-BRG-UP.AT2
718	Superstition Hills-01 Imperial Valley Wildlife Liquefaction 1987	6.22	17.59	179	strike slip	7.2	1.72	RSN718_SUPER.A_A-IVW090.AT2 RSN718_SUPER.A_A-IVW360.AT2 RSN718_SUPER.A_A-IVW-UP.AT2
768	Loma Prieta Gilroy Array #4 1989	6.93	13.81	221.78	Reverse O	4.5	1.04	RSN768_LOMAP_G04000.AT2 RSN768_LOMAP_G04090.AT2 RSN768_LOMAP_G04-UP.AT2

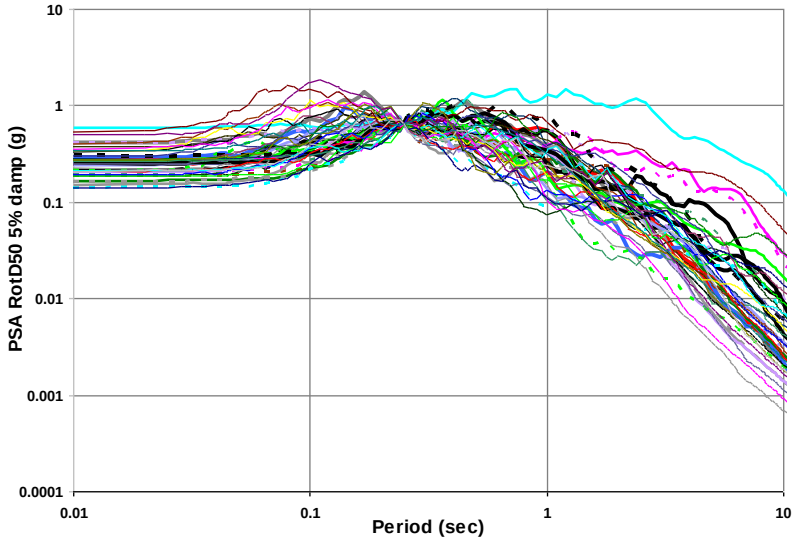
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
772	Loma Prieta Halls Valley 1989	6.93	30.25	281.61	Reverse O	7.9	2.66	RSN772_LOMAP_HVR000.AT2 RSN772_LOMAP_HVR090.AT2 RSN772_LOMAP_HVR-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	1.63	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	2.03	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
821	Erzican, Turkey Erzincan 1992	6.69	0	352.05	strike slip	2	0.66	RSN821_ERZINCAN_ERZ-NS.AT2 RSN821_ERZINCAN_ERZ-EW.AT2 RSN821_ERZINCAN_ERZ-UP.AT2
910	Big Bear-01 Joshua Tree 1992	6.46	40.99	379.32	strike slip	9.8	2.62	RSN910_BIGBEAR_JOS090.AT2 RSN910_BIGBEAR_JOS360.AT2 RSN910_BIGBEAR_JOS-UP.AT2
1002	Northridge-01 LA - S. Vermont Ave 1994	6.69	27.89	301.93	Reverse	9.6	1.75	RSN1002_NORTHR_VRM000.AT2 RSN1002_NORTHR_VRM090.AT2 RSN1002_NORTHR_VRM-UP.AT2
1100	Kobe, Japan Abeno 1995	6.9	24.85	256	strike slip	12	1.43	RSN1100_KOBE_ABN000.AT2 RSN1100_KOBE_ABN090.AT2 RSN1100_KOBE_ABN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.85	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1187	Chi-Chi, Taiwan CHY015 1999	7.62	38.13	228.66	Reverse O	22.2	1.92	RSN1187_CHICHI_CHY015-N.AT2 RSN1187_CHICHI_CHY015-W.AT2 RSN1187_CHICHI_CHY015-V.AT2
1230	Chi-Chi, Taiwan CHY079 1999	7.62	46.59	573.04	Reverse O	21	4.68	RSN1230_CHICHI_CHY079-E.AT2 RSN1230_CHICHI_CHY079-N.AT2 RSN1230_CHICHI_CHY079-V.AT2
1244	Chi-Chi, Taiwan CHY101 1999	7.62	9.94	258.89	Reverse O	11.8	0.98	RSN1244_CHICHI_CHY101-E.AT2 RSN1244_CHICHI_CHY101-N.AT2 RSN1244_CHICHI_CHY101-V.AT2
1283	Chi-Chi, Taiwan HWA034 1999	7.62	39.55	379.18	Reverse O	10.3	1.75	RSN1283_CHICHI_HWA034-E.AT2 RSN1283_CHICHI_HWA034-N.AT2 RSN1283_CHICHI_HWA034-V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	3.62	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2

Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
2427	Chi-Chi, Taiwan-02 TCU138 1999	5.9	36.72	652.85	Reverse	7.6	4.62	RSN2427_CHICHI.02_TCU138N.AT2 RSN2427_CHICHI.02_TCU138W.AT2 RSN2427_CHICHI.02_TCU138V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	2.79	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
3018	Chi-Chi, Taiwan-05 HWA031 1999	6.2	39.29	602.29	Reverse	7.4	3.41	RSN3018_CHICHI.05_HWA031N.AT2 RSN3018_CHICHI.05_HWA031E.AT2 RSN3018_CHICHI.05_HWA031V.AT2
3495	Chi-Chi, Taiwan-06 TCU109 1999	6.3	36.58	535.13	Reverse	16.6	3.48	RSN3495_CHICHI.06_TCU109N.AT2 RSN3495_CHICHI.06_TCU109E.AT2 RSN3495_CHICHI.06_TCU109V.AT2
3747	Cape Mendocino College of the Redwoods 1992	7.01	29.22	492.74	Reverse	8.3	1.32	RSN3747_CAPEMEND_CRW270.AT2 RSN3747_CAPEMEND_CRW360.AT2 RSN3747_CAPEMEND_CRW-UP.AT2
3966	Tottori, Japan TTR009 2000	6.61	8.82	420.2	strike slip	4.3	0.33	RSN3966_TOTTORI_TTR009NS.AT2 RSN3966_TOTTORI_TTR009EW.AT2 RSN3966_TOTTORI_TTR009UD.AT2
3994	San Simeon, CA San Luis Obispo - Lopez Lake Ground 2003	6.52	48.07	365.15	Reverse	8.6	2.21	RSN3994_SANSIMEO_36153090.AT2 RSN3994_SANSIMEO_36153360.AT2 RSN3994_SANSIMEO_36153-UP.AT2
4066	Parkfield-02, CA PARKFIELD - FROELICH 2004	6	1.85	226.63	strike slip	3	1.14	RSN4066_PARK2004_FROEL-90.AT2 RSN4066_PARK2004_FROEL360.AT2 RSN4066_PARK2004_FROEL-UP.AT2
4083	Parkfield-02, CA PARKFIELD - TURKEY FLAT #1 (0M) 2004	6	4.66	906.96	strike slip	2.6	1.25	RSN4083_PARK2004_36529270.AT2 RSN4083_PARK2004_36529360.AT2 RSN4083_PARK2004_36529-UP.AT2
4106	Parkfield-02, CA Parkfield - Cholame 12W 2004	6	15.49	359.03	strike slip	9.2	4.12	RSN4106_PARK2004_C12090.AT2 RSN4106_PARK2004_C12360.AT2 RSN4106_PARK2004_C12-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	1.47	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.23	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
5260	Chuetsu-oki NIG014 2007	6.8	21.37	128.12	Reverse	18.7	2.07	RSN5260_CHUETSU_NIG014NS.AT2 RSN5260_CHUETSU_NIG014EW.AT2 RSN5260_CHUETSU_NIG014UD.AT2

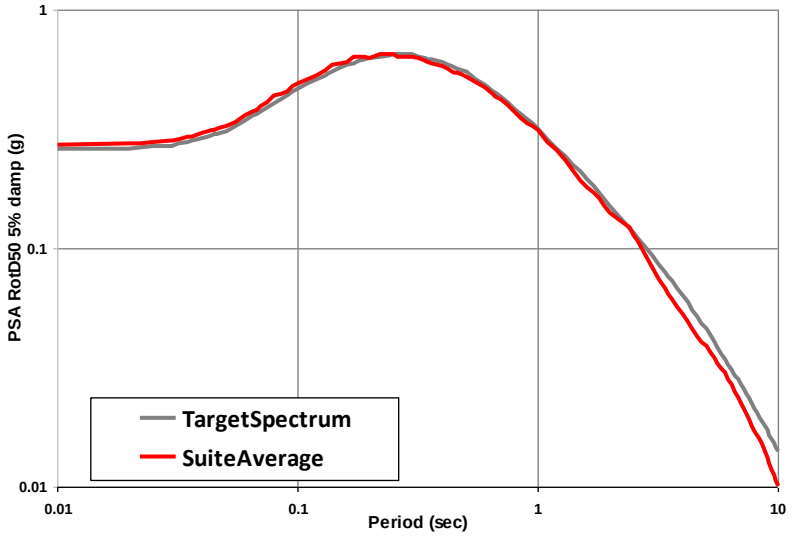
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
5274	Chuetsu-oki NIG028 2007	6.8	15.32	430.71	Reverse	11.1	1.65	RSN5274_CHUETSU_NIG028NS.AT2 RSN5274_CHUETSU_NIG028EW.AT2 RSN5274_CHUETSU_NIG028UD.AT2
5768	Iwate YMTH09 2008	6.9	47.01	291.48	Reverse	15.3	4.5	RSN5768_IWATE_YMTH09NS.AT2 RSN5768_IWATE_YMTH09EW.AT2 RSN5768_IWATE_YMTH09UD.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	0.76	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6915	Darfield, New Zealand Heathcote Valley Primary School 2010	7	24.36	422	strike slip	8.3	0.4	RSN6915_DARFIELD_HVSCS26W.AT2 RSN6915_DARFIELD_HVSCS64E.AT2 RSN6915_DARFIELD_HVSCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0.98	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8067	Christchurch, New Zealand Christchurch Cashmere High School 2011	6.2	4.44	204	Reverse O	3.1	0.74	RSN8067_CCHURCH_CMHSN10E.AT2 RSN8067_CCHURCH_CMHSS80E.AT2 RSN8067_CCHURCH_CMHSUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.57	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.38	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
268	Victoria, Mexico SAHOP Casa Flores 1980	6.33	39.1	259.59	strike slip	6.8	3.07	RSN268_VICT_SHP010.AT2 RSN268_VICT_SHP280.AT2 RSN268_VICT_SHP-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.94	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
337	Coalinga-01 Parkfield - Fault Zone 12 1983	6.36	27.96	265.21	Reverse	8.7	2.64	RSN337_COALINGA.H_H-PRK090.AT2 RSN337_COALINGA.H_H-PRK180.AT2 RSN337_COALINGA.H_H-PRK-UP.AT2
681	Whittier Narrows-01 Pasadena - CIT Lura St 1987	5.99	4.3	341.14	Reverse O	2.8	1.01	RSN681_WHITTIER.A_A-LUR090.AT2 RSN681_WHITTIER.A_A-LUR180.AT2 RSN681_WHITTIER.A_A-LUR-UP.AT2
751	Loma Prieta Calaveras Reservoir 1989	6.93	35.28	571.99	Reverse O	7.2	3.15	RSN751_LOMAP_CLR090.AT2 RSN751_LOMAP_CLR180.AT2 RSN751_LOMAP_CLR-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	1.9	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	2.34	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2
1003	Northridge-01 LA - Saturn St 1994	6.69	21.17	308.71	Reverse	5.3	0.93	RSN1003_NORTHR_STN020.AT2 RSN1003_NORTHR_STN110.AT2 RSN1003_NORTHR_STN-UP.AT2
1031	Northridge-01 Leona Valley #5 - Ritter 1994	6.69	37.47	375.22	Reverse	6.7	1.99	RSN1031_NORTHR_LV5000.AT2 RSN1031_NORTHR_LV5090.AT2 RSN1031_NORTHR_LV5-UP.AT2
1070	Northridge-01 San Gabriel - E Grand Ave 1994	6.69	38.86	401.37	Reverse	6.4	1.4	RSN1070_NORTHR_GRN180.AT2 RSN1070_NORTHR_GRN270.AT2 RSN1070_NORTHR_GRN-UP.AT2
1083	Northridge-01 Sunland - Mt Gleason Ave 1994	6.69	12.38	402.16	Reverse	6	1.67	RSN1083_NORTHR_GLE170.AT2 RSN1083_NORTHR_GLE260.AT2 RSN1083_NORTHR_GLE-UP.AT2

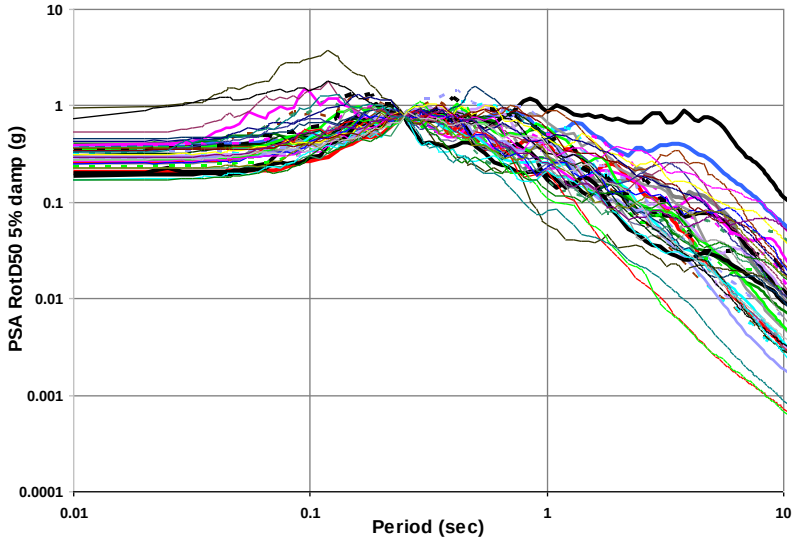
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
1115	Kobe, Japan Sakai 1995	6.9	28.08	256	strike slip	11.6	1.4	RSN1115_KOBE_SKI000.AT2 RSN1115_KOBE_SKI090.AT2 RSN1115_KOBE_SKI-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	4.78	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.59	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.99	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1183	Chi-Chi, Taiwan CHY008 1999	7.62	40.43	210.73	Reverse O	26.8	2.13	RSN1183_CHICHI_CHY008-N.AT2 RSN1183_CHICHI_CHY008-W.AT2 RSN1183_CHICHI_CHY008-V.AT2
1232	Chi-Chi, Taiwan CHY081 1999	7.62	41.36	573.04	Reverse O	18.4	4.39	RSN1232_CHICHI_CHY081-E.AT2 RSN1232_CHICHI_CHY081-N.AT2 RSN1232_CHICHI_CHY081-V.AT2
1529	Chi-Chi, Taiwan TCU102 1999	7.62	1.49	714.27	Reverse O	14.2	2.2	RSN1529_CHICHI_TCU102-E.AT2 RSN1529_CHICHI_TCU102-N.AT2 RSN1529_CHICHI_TCU102-V.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	3.88	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2252	Chi-Chi, Taiwan-02 HWA048 1999	5.9	45.08	345.89	Reverse	10	4.22	RSN2252_CHICHI.02_HWA048N.AT2 RSN2252_CHICHI.02_HWA048W.AT2 RSN2252_CHICHI.02_HWA048V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	4.81	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2618	Chi-Chi, Taiwan-03 TCU065 1999	6.2	25.17	305.85	Reverse	3.6	1.3	RSN2618_CHICHI.03_TCU065N.AT2 RSN2618_CHICHI.03_TCU065E.AT2 RSN2618_CHICHI.03_TCU065V.AT2
2628	Chi-Chi, Taiwan-03 TCU078 1999	6.2	0	443.04	Reverse	2.2	0.55	RSN2628_CHICHI.03_TCU078N.AT2 RSN2628_CHICHI.03_TCU078E.AT2 RSN2628_CHICHI.03_TCU078V.AT2
2717	Chi-Chi, Taiwan-04 CHY052 1999	6.2	45.33	573.04	strike slip	6	4.91	RSN2717_CHICHI.04_CHY052N.AT2 RSN2717_CHICHI.04_CHY052W.AT2 RSN2717_CHICHI.04_CHY052V.AT2

Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
3021	Chi-Chi, Taiwan-05 HWA034 1999	6.2	32.57	379.18	Reverse	6	2.6	RSN3021_CHICHI.05_HWA034N.AT2 RSN3021_CHICHI.05_HWA034E.AT2 RSN3021_CHICHI.05_HWA034V.AT2
3572	Taiwan SMART1(5) SMART1 O03 1981	5.9	25.47	278.32	Reverse	2.1	1.54	RSN3572_SMART1.05_05O03EW.AT2 RSN3572_SMART1.05_05O03NS.AT2 RSN3572_SMART1.05_05O03DN.AT2
3621	Taiwan SMART1(33) SMART1 M06 1985	5.8	40.95	308.39	Normal	3.9	3.78	RSN3621_SMART1.33_33M06EW.AT RSN3621_SMART1.33_33M06NS.AT2 RSN3621_SMART1.33_33M06DN.AT2
3745	Cape Mendocino Butler Valley Station 2 1992	7.01	43.82	525.26	Reverse	5.2	1.9	RSN3745_CAPEMEND_BVS060.AT2 RSN3745_CAPEMEND_BVS330.AT2 RSN3745_CAPEMEND_BVS-UP.AT2
3856	Chi-Chi (aftershock 3), Taiwan CHY014 1999	6.2	37.89	347.63	strike slip	5.3	2.1	RSN3856_CHICHI.04_CHY014N.AT2 RSN3856_CHICHI.04_CHY014W.AT2 RSN3856_CHICHI.04_CHY014V.AT2
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	0.91	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
4098	Parkfield-02, CA Parkfield - Cholame 1E 2004	6	1.66	326.64	strike slip	1.9	0.96	RSN4098_PARK2004_C01090.AT2 RSN4098_PARK2004_C01360.AT2 RSN4098_PARK2004_C01-UP.AT2
4106	Parkfield-02, CA Parkfield - Cholame 12W 2004	6	15.49	359.03	strike slip	9.2	4.8	RSN4106_PARK2004_C12090.AT2 RSN4106_PARK2004_C12360.AT2 RSN4106_PARK2004_C12-UP.AT2
4230	Niigata, Japan NIGH13 2004	6.63	36.76	461.1	Reverse	9.4	3.67	RSN4230_NIIGATA_NIGH13NS.AT2 RSN4230_NIIGATA_NIGH13EW.AT2 RSN4230_NIIGATA_NIGH13UD.AT2
4457	Montenegro, Yugo. Ulcinj - Hotel Albatros 1979	7.1	1.52	410.35	Reverse	7.7	1.39	RSN4457_MONTENE.GRO_ULA000.A RSN4457_MONTENE.GRO_ULA090.A RSN4457_MONTENE.GRO_ULA-V.AT2
4513	L'Aquila (aftershock 1), Italy L'Aquila - Parking 2009	5.6	5.07	717	Normal O	3.7	3.82	RSN4513_L-AQUILA.A_AM383XTE.AT RSN4513_L-AQUILA.A_AM383YLN.AT RSN4513_L-AQUILA.A_AM383ZUP.AT
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.18	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	1.86	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2

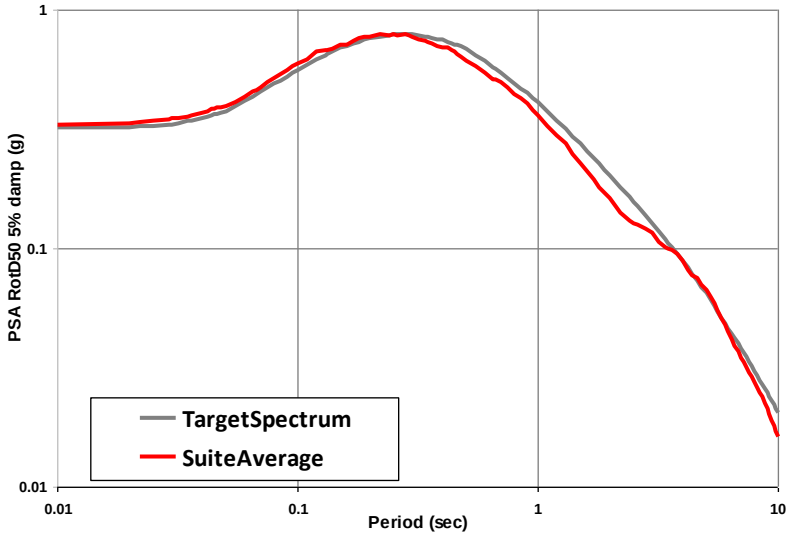
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	0.93	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
5657	Iwate IWTH25 2008	6.9	0	506.44	Reverse	6.9	0.25	RSN5657_IWATE_IWTH25NS.AT2 RSN5657_IWATE_IWTH25EW.AT2 RSN5657_IWATE_IWTH25UD.AT2
6891	Darfield, New Zealand CSHS 2010	7	43.6	638.39	strike slip	15	1.97	RSN6891_DARFIELD_CSHSN76W.AT2 RSN6891_DARFIELD_CSHSS14W.AT2 RSN6891_DARFIELD_CSHSUP.AT2
6927	Darfield, New Zealand LINC 2010	7	5.07	263.2	strike slip	8	1.18	RSN6927_DARFIELD_LINCN23E.AT2 RSN6927_DARFIELD_LINCN67W.AT2 RSN6927_DARFIELD_LINCUP.AT2
8623	40204628 San Jose; Fire Station 06 Central; Che 2007	5.45	17.66	282.81	strike slip	3.6	4.91	RSN8623_40204628_N1781HNN.AT2 RSN8623_40204628_N1781HNE.AT2 RSN8623_40204628_N1781HNZ.AT2
8625	40204628 San Jose; Fire Station 26 East; Tully R 2007	5.45	14.06	272.63	strike slip	4.5	4.29	RSN8625_40204628_N1783HNN.AT2 RSN8625_40204628_N1783HNE.AT2 RSN8625_40204628_N1783HNZ.AT2
8886	14383980 Olinda - Carbon Canyon Rd 2008	5.39	2.3	378.17	Reverse O	1.9	3.22	RSN8886_14383980_13882360.AT2 RSN8886_14383980_13882090.AT2 RSN8886_14383980_13882-UP.AT2

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	4.93	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.24	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
147	Coyote Lake Gilroy Array #2 1979	5.74	8.47	270.84	strike slip	1.4	1.42	RSN147_COYOTELK_G02050.AT2 RSN147_COYOTELK_G02140.AT2 RSN147_COYOTELK_G02-UP.AT2
172	Imperial Valley-06 El Centro Array #1 1979	6.53	19.76	237.33	strike slip	6.1	2.7	RSN172_IMPVALL.H_H-E01140.AT2 RSN172_IMPVALL.H_H-E01230.AT2 RSN172_IMPVALL.H_H-E01-UP.AT2
212	Livermore-01 Del Valle Dam (Toe) 1980	5.8	23.92	403.37	strike slip	3.2	1.92	RSN212_LIVERMOR_A-DVD156.AT2 RSN212_LIVERMOR_A-DVD246.AT2 RSN212_LIVERMOR_A-DVD-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	2.03	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.13	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
326	Coalinga-01 Parkfield - Cholame 2WA 1983	6.36	43.83	173.02	Reverse	7.6	2.62	RSN326_COALINGA.H_H-C02000.AT2 RSN326_COALINGA.H_H-C02090.AT2 RSN326_COALINGA.H_H-C02-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	1.76	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
471	Morgan Hill San Justo Dam (L Abut) 1984	6.19	31.88	543.63	strike slip	10.3	3.13	RSN471_MORGAN_SJL270.AT2 RSN471_MORGAN_SJL360.AT2 RSN471_MORGAN_SJL-UP.AT2
558	Chalfant Valley-02 Zack Brothers Ranch 1986	6.19	6.44	316.19	strike slip	2.4	0.75	RSN558_CHALFANT.A_A-ZAK270.AT2 RSN558_CHALFANT.A_A-ZAK360.AT2 RSN558_CHALFANT.A_A-ZAK-UP.AT2
585	Baja California Cerro Prieto 1987	5.5	3.43	471.53	strike slip	1.5	0.64	RSN585_BAJA_CPE161.AT2 RSN585_BAJA_CPE251.AT2 RSN585_BAJA_CPE-UP.AT2

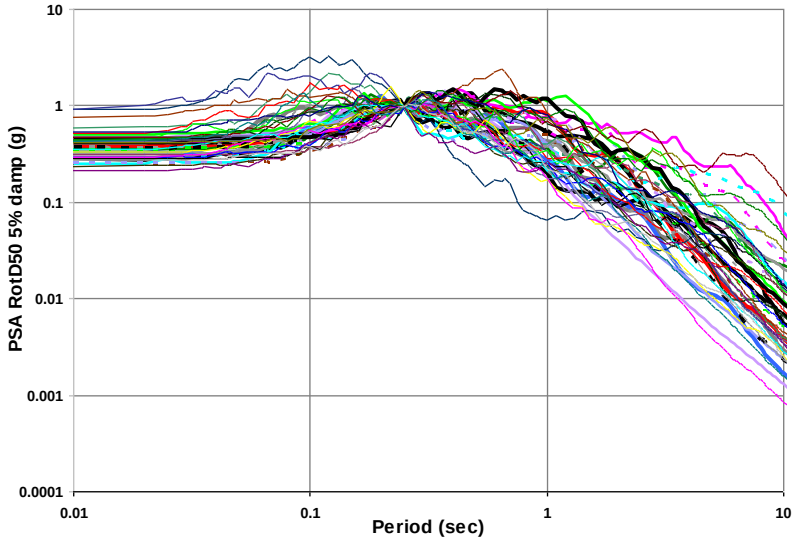
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
591	Whittier Narrows-01 Anaheim - W Ball Rd 1987	5.99	25.81	269.29	Reverse O	6.2	4.53	RSN591_WHITTIER.A_A-WBA000.AT2 RSN591_WHITTIER.A_A-WBA090.AT2 RSN591_WHITTIER.A_A-WBA-UP.AT2
604	Whittier Narrows-01 Canoga Park - Topanga Can 1987	5.99	45.98	267.49	Reverse O	5.3	2.05	RSN604_WHITTIER.A_A-CNP106.AT2 RSN604_WHITTIER.A_A-CNP196.AT2 RSN604_WHITTIER.A_A-CNP-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.05	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
778	Loma Prieta Hollister Differential Array 1989	6.93	24.52	215.54	Reverse O	3.7	1.24	RSN778_LOMAP_HDA165.AT2 RSN778_LOMAP_HDA255.AT2 RSN778_LOMAP_HDA-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	2.3	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
802	Loma Prieta Saratoga - Aloha Ave 1989	6.93	7.58	380.89	Reverse O	3.9	1.15	RSN802_LOMAP_STG000.AT2 RSN802_LOMAP_STG090.AT2 RSN802_LOMAP_STG-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	2.87	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
963	Northridge-01 Castaic - Old Ridge Route 1994	6.69	20.11	450.28	Reverse	5.1	0.54	RSN963_NORTHR_ORR090.AT2 RSN963_NORTHR_ORR360.AT2 RSN963_NORTHR_ORR-UP.AT2
1115	Kobe, Japan Sakai 1995	6.9	28.08	256	strike slip	11.6	1.7	RSN1115_KOBE_SKI000.AT2 RSN1115_KOBE_SKI090.AT2 RSN1115_KOBE_SKI-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.72	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1176	Kocaeli, Turkey Yarimca 1999	7.51	1.38	297	strike slip	6.5	1.32	RSN1176_KOCAELI_YPT060.AT2 RSN1176_KOCAELI_YPT150.AT2 RSN1176_KOCAELI_YPT-UP.AT2
1238	Chi-Chi, Taiwan CHY092 1999	7.62	22.69	253.72	Reverse O	25.8	3.85	RSN1238_CHICHI_CHY092-N.AT2 RSN1238_CHICHI_CHY092-W.AT2 RSN1238_CHICHI_CHY092-V.AT2
1602	Duzce, Turkey Bolu 1999	7.14	12.02	293.57	strike slip	2	0.51	RSN1602_DUZCE_BOL000.AT2 RSN1602_DUZCE_BOL090.AT2 RSN1602_DUZCE_BOL-UP.AT2

Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
1626	Sitka, Alaska Sitka Observatory 1972	7.68	34.61	649.67	strike slip	12.6	3.57	RSN1626_SITKA_212V5090.AT2 RSN1626_SITKA_212V5180.AT2 RSN1626_SITKA_212V5-UP.AT2
2111	Denali, Alaska R109 (temp) 2002	7.9	42.99	341.56	strike slip	11.5	4.91	RSN2111_DENALI_R109-90.AT2 RSN2111_DENALI_R109360.AT2 RSN2111_DENALI_R109-UP.AT2
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	4.11	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3745	Cape Mendocino Butler Valley Station 2 1992	7.01	43.82	525.26	Reverse	5.2	2.31	RSN3745_CAPEMEND_BVS060.AT2 RSN3745_CAPEMEND_BVS330.AT2 RSN3745_CAPEMEND_BVS-UP.AT2
4117	Parkfield-02, CA Parkfield - Fault Zone 15 2004	6	0.8	307.59	strike slip	4.1	1.7	RSN4117_PARK2004_Z15090.AT2 RSN4117_PARK2004_Z15360.AT2 RSN4117_PARK2004_Z15-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.32	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4781	Wenchuan, China Jiangyouchonghua 2008	7.9	27.23	430.47	Reverse O	18.4	1.19	RSN4781_WENCHUAN_UA1027.AT2 RSN4781_WENCHUAN_UA1028.AT2 RSN4781_WENCHUAN_UA1029.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.22	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	1.18	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5286	Chuetsu-oki NIGH13 2007	6.8	29.84	461.1	Reverse	3	1.81	RSN5286_CHUETSU_NIGH13NS.AT2 RSN5286_CHUETSU_NIGH13EW.AT2 RSN5286_CHUETSU_NIGH13UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	2.25	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	4.14	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
5665	Iwate MYG006 2008	6.9	30.38	146.72	Reverse	14.2	1.5	RSN5665_IWATE_MYG006NS.AT2 RSN5665_IWATE_MYG006EW.AT2 RSN5665_IWATE_MYG006UD.AT2

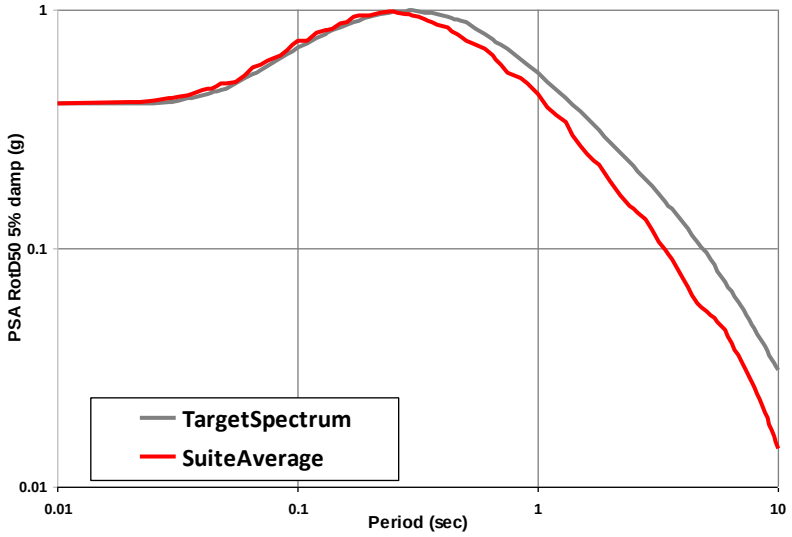
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
5775	Iwate Tamati Ono 2008	6.9	28.9	561.59	Reverse	8	1.98	RSN5775_IWATE_54009NS.AT2 RSN5775_IWATE_54009EW.AT2 RSN5775_IWATE_54009UD.AT2
5776	Iwate Kami, Miyagi Miyazaki City 2008	6.9	25.15	477.55	Reverse	7.6	2.28	RSN5776_IWATE_54010NS.AT2 RSN5776_IWATE_54010EW.AT2 RSN5776_IWATE_54010UD.AT2
6879	Darfield, New Zealand ADCS 2010	7	28.46	249.28	strike slip	16.5	2.64	RSN6879_DARFIELD_ADCSN42W.AT2 RSN6879_DARFIELD_ADCSN48E.AT2 RSN6879_DARFIELD_ADCSUP.AT2
6959	Darfield, New Zealand Christchurch Resthaven 2010	7	19.48	141	strike slip	11.4	1.18	RSN6959_DARFIELD_REHSN02E.AT2 RSN6959_DARFIELD_REHSS88E.AT2 RSN6959_DARFIELD_REHSUP.AT2
6966	Darfield, New Zealand Shirley Library 2010	7	22.33	207	strike slip	11	1.52	RSN6966_DARFIELD_SHLCS40W.AT2 RSN6966_DARFIELD_SHLCS50E.AT2 RSN6966_DARFIELD_SHLCUP.AT2
8597	El Mayor-Cucapah Sam W. Stewart 2010	7.2	31.79	503	strike slip	8.7	3.69	RSN8597_SIERRA.MEX_CISWSHNN.A RSN8597_SIERRA.MEX_CISWSHNE.A RSN8597_SIERRA.MEX_CISWSHNZ.A
8671	40204628 Calaveras Reservoir #2 2007	5.45	0.58	519	strike slip	1.7	3.85	RSN8671_40204628_NCCALHNN.AT2 RSN8671_40204628_NCCALHNE.AT2 RSN8671_40204628_NCCALHNZ.AT2

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
65	San Fernando Gormon - Oso Pump Plant 1971	6.61	43.95	308.35	Reverse	3.5	4.21	RSN65_SFERN_OPP000.AT2 RSN65_SFERN_OPP270.AT2 RSN65_SFERN_OPP-UP.AT2
138	Tabas, Iran Boshrooyeh 1978	7.35	24.07	324.57	Reverse	14.6	4.21	RSN138_TABAS_BOS-L1.AT2 RSN138_TABAS_BOS-T1.AT2 RSN138_TABAS_BOS-V1.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.3	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
167	Imperial Valley-06 Compuertas 1979	6.53	13.52	259.86	strike slip	12.7	2.43	RSN167_IMPVALL.H_H-CMP015.AT2 RSN167_IMPVALL.H_H-CMP285.AT2 RSN167_IMPVALL.H_H-CMPDWN.AT
223	Livermore-02 San Ramon - Eastman Kodak 1980	5.42	14.31	377.51	strike slip	2.1	2.25	RSN223_LIVERMOR_B-KOD180.AT2 RSN223_LIVERMOR_B-KOD270.AT2 RSN223_LIVERMOR_B-KOD-UP.AT2
300	Irpinia, Italy-02 Calitri 1980	6.2	8.81	455.93	Normal	7.1	2.95	RSN300_ITALY_B-CTR000.AT2 RSN300_ITALY_B-CTR270.AT2 RSN300_ITALY_B-CTR-UP.AT2
337	Coalinga-01 Parkfield - Fault Zone 12 1983	6.36	27.96	265.21	Reverse	8.7	3.97	RSN337_COALINGA.H_H-PRK090.AT2 RSN337_COALINGA.H_H-PRK180.AT2 RSN337_COALINGA.H_H-PRK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	2.19	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
362	Coalinga-01 Parkfield - Vineyard Cany 2W 1983	6.36	29.01	438.74	Reverse	7.9	3.9	RSN362_COALINGA.H_H-VC2000.AT2 RSN362_COALINGA.H_H-VC2090.AT2 RSN362_COALINGA.H_H-VC2-UP.AT2
461	Morgan Hill Halls Valley 1984	6.19	3.45	281.61	strike slip	8.9	2.02	RSN461_MORGAN_HVR150.AT2 RSN461_MORGAN_HVR240.AT2 RSN461_MORGAN_HVR-UP.AT2
495	Nahanni, Canada Site 1 1985	6.76	2.48	605.04	Reverse	7.1	0.77	RSN495_NAHANNI_S1010.AT2 RSN495_NAHANNI_S1280.AT2 RSN495_NAHANNI_S1-UP.AT2
601	Whittier Narrows-01 Brea Dam (L Abut) 1987	5.99	19.12	437.5	Reverse O	3.5	2.5	RSN601_WHITTIER.A_A-BRL040.AT2 RSN601_WHITTIER.A_A-BRL130.AT2 RSN601_WHITTIER.A_A-BRL-UP.AT2

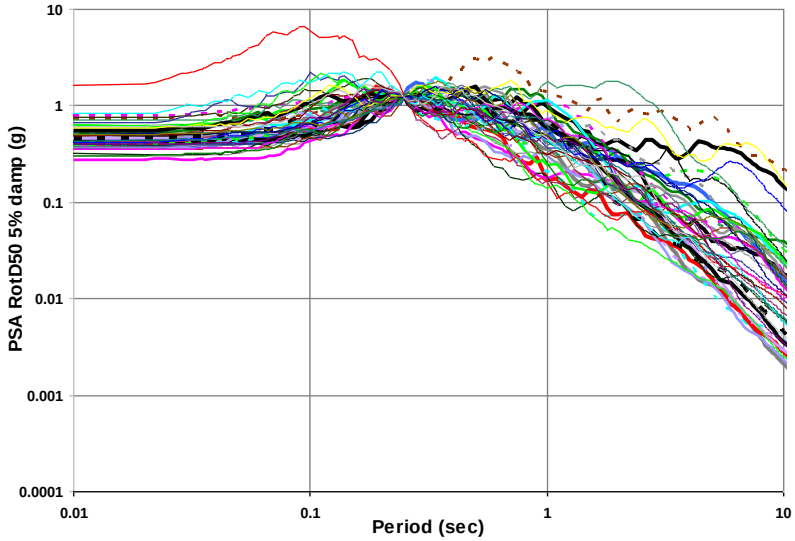
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	1.56	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
728	Superstition Hills-02 Westmorland Fire Sta 1987	6.54	13.03	193.67	strike slip	10.9	2.13	RSN728_SUPER.B_B-WSM090.AT2 RSN728_SUPER.B_B-WSM180.AT2 RSN728_SUPER.B_B-WSM-UP.AT2
730	Spitak, Armenia Gukasian 1988	6.77	23.99	343.53	Reverse O	5.1	2.75	RSN730_SPITAK_GUK000.AT2 RSN730_SPITAK_GUK090.AT2 RSN730_SPITAK_GUK-UP.AT2
736	Loma Prieta APEEL 9 - Crystal Springs Res 1989	6.93	40.85	449.64	Reverse O	8.4	3.74	RSN736_LOMAP_A09137.AT2 RSN736_LOMAP_A09227.AT2 RSN736_LOMAP_A09-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.3	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	2	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
1011	Northridge-01 LA - Wonderland Ave 1994	6.69	15.11	1222.52	Reverse	5.1	3	RSN1011_NORTHR_WON095.AT2 RSN1011_NORTHR_WON185.AT2 RSN1011_NORTHR_WON-UP.AT2
1031	Northridge-01 Leona Valley #5 - Ritter 1994	6.69	37.47	375.22	Reverse	6.7	2.99	RSN1031_NORTHR_LV5000.AT2 RSN1031_NORTHR_LV5090.AT2 RSN1031_NORTHR_LV5-UP.AT2
1032	Northridge-01 Leona Valley #6 1994	6.69	37.7	327.44	Reverse	4.9	2.21	RSN1032_NORTHR_LV6090.AT2 RSN1032_NORTHR_LV6360.AT2 RSN1032_NORTHR_LV6-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	1.12	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.63	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.89	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1144	Gulf of Aqaba Eilat 1995	7.2	43.29	354.88	strike slip	13.1	3.8	RSN1144_AQABA_EIL-EW.AT2 RSN1144_AQABA_EIL-NS.AT2 RSN1144_AQABA_EIL-UP.AT2

Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.5	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1212	Chi-Chi, Taiwan CHY054 1999	7.62	48.49	172.1	Reverse O	26.1	4.48	RSN1212_CHICHI_CHY054-E.AT2 RSN1212_CHICHI_CHY054-N.AT2 RSN1212_CHICHI_CHY054-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	2.33	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	1.07	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1704	Northridge-06 Jensen Filter Plant Generator Buildin 1994	5.28	6.99	525.79	Reverse	1.6	1.92	RSN1704_NORTH392_JGB022.AT2 RSN1704_NORTH392_JGB292.AT2 RSN1704_NORTH392_JGB-UP.AT2
1794	Hector Mine Joshua Tree 1999	7.13	31.06	379.32	strike slip	7	2.45	RSN1794_HECTOR_JOS090.AT2 RSN1794_HECTOR_JOS360.AT2 RSN1794_HECTOR_JOS-UP.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	4.9	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
3026	Chi-Chi, Taiwan-05 HWA039 1999	6.2	47.45	459.67	Reverse	3.8	4.69	RSN3026_CHICHI.05_HWA039N.AT2 RSN3026_CHICHI.05_HWA039E.AT2 RSN3026_CHICHI.05_HWA039V.AT2
3507	Chi-Chi, Taiwan-06 TCU129 1999	6.3	22.69	511.18	Reverse	6.5	1.64	RSN3507_CHICHI.06_TCU129N.AT2 RSN3507_CHICHI.06_TCU129E.AT2 RSN3507_CHICHI.06_TCU129V.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	2.12	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
4136	Parkfield-02, CA Parkfield - Vineyard Cany 5W 2004	6	9.2	320.39	strike slip	4.3	3.39	RSN4136_PARK2004_VC5090.AT2 RSN4136_PARK2004_VC5360.AT2 RSN4136_PARK2004_VC5-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.4	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4876	Chuetsu-oki Kashiwazaki Nishiyamacho Ikeura 2007	6.8	0	655.45	Reverse	4.9	0.88	RSN4876_CHUETSU_65059NS.AT2 RSN4876_CHUETSU_65059EW.AT2 RSN4876_CHUETSU_65059UD.AT2

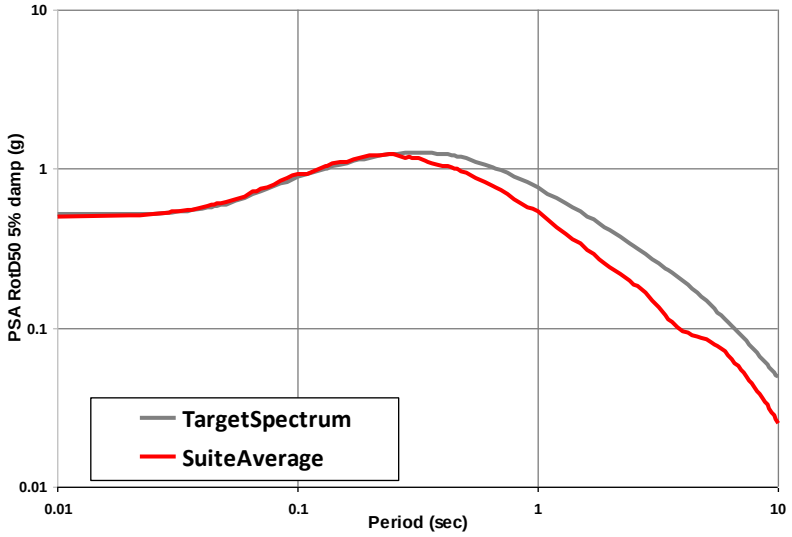
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	2.27	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	2.8	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5657	Iwate IWTH25 2008	6.9	0	506.44	Reverse	6.9	0.38	RSN5657_IWATE_IWTH25NS.AT2 RSN5657_IWATE_IWTH25EW.AT2 RSN5657_IWATE_IWTH25UD.AT2
5813	Iwate Mizusawaku Interior O ganecho 2008	6.9	7.82	413.04	Reverse	11.8	1.41	RSN5813_IWATE_44B71NS.AT2 RSN5813_IWATE_44B71EW.AT2 RSN5813_IWATE_44B71UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.49	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
6969	Darfield, New Zealand Styx Mill Transfer Station 2010	7	20.86	247.5	strike slip	12.2	2.71	RSN6969_DARFIELD_SMTCN88W.AT2 RSN6969_DARFIELD_SMTCS02W.AT2 RSN6969_DARFIELD_SMTCUP.AT2
8822	14383980 Orange (Chapman) 2008	5.39	17.87	318.11	Reverse O	2.6	4.26	RSN8822_14383980_CIOGCHNN.AT2 RSN8822_14383980_CIOGCHNE.AT2 RSN8822_14383980_CIOGCHNZ.AT2

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
72	San Fernando Lake Hughes #4 1971	6.61	19.45	600.06	Reverse	3.9	4.54	RSN72_SFERN_L04111.AT2 RSN72_SFERN_L04201.AT2 RSN72_SFERN_L04DWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.73	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.79	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	2.78	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	1.66	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
450	Morgan Hill Corralitos 1984	6.19	23.23	462.24	strike slip	3.8	4.71	RSN450_MORGAN_CLS220.AT2 RSN450_MORGAN_CLS310.AT2 RSN450_MORGAN_CLS-UP.AT2
471	Morgan Hill San Justo Dam (L Abut) 1984	6.19	31.88	543.63	strike slip	10.3	4.93	RSN471_MORGAN_SJL270.AT2 RSN471_MORGAN_SJL360.AT2 RSN471_MORGAN_SJL-UP.AT2
529	N. Palm Springs North Palm Springs 1986	6.06	0	344.67	Reverse O	1.7	1.09	RSN529_PALMSPR_NPS210.AT2 RSN529_PALMSPR_NPS300.AT2 RSN529_PALMSPR_NPS-UP.AT2
622	Whittier Narrows-01 Hacienda Heights - Colima 1987	5.99	9.6	337	Reverse O	2.9	3.08	RSN622_WHITTIER.A_A-COM140.AT2 RSN622_WHITTIER.A_A-COM230.AT2 RSN622_WHITTIER.A_A-COM-UP.AT2
767	Loma Prieta Gilroy Array #3 1989	6.93	12.23	349.85	Reverse O	2.3	0.99	RSN767_LOMAP_G03000.AT2 RSN767_LOMAP_G03090.AT2 RSN767_LOMAP_G03-UP.AT2
848	Landers Coolwater 1992	7.28	19.74	352.98	strike slip	4.8	1.43	RSN848_LANDERS_CLW-LN.AT2 RSN848_LANDERS_CLW-TR.AT2 RSN848_LANDERS_CLW-UP.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	4.46	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2

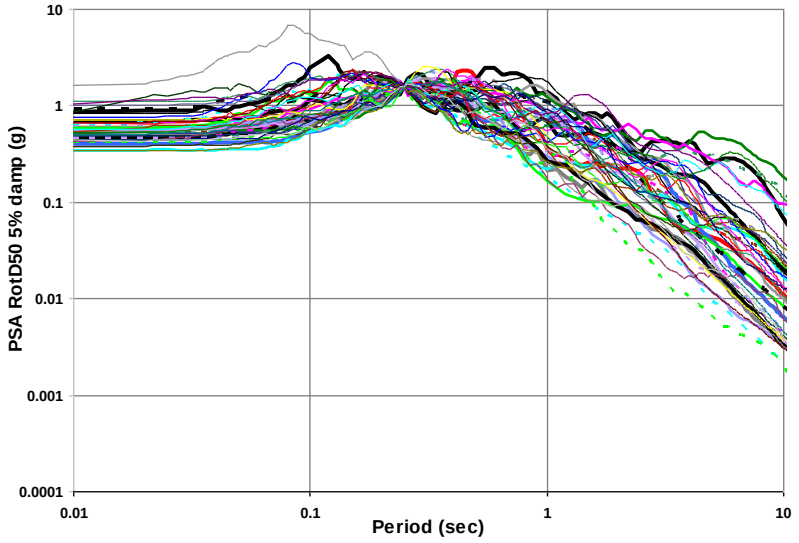
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
963	Northridge-01 Castaic - Old Ridge Route 1994	6.69	20.11	450.28	Reverse	5.1	0.85	RSN963_NORTHR_ORR090.AT2 RSN963_NORTHR_ORR360.AT2 RSN963_NORTHR_ORR-UP.AT2
984	Northridge-01 LA - 116th St School 1994	6.69	36.39	301	Reverse	7.4	3.53	RSN984_NORTHR_116090.AT2 RSN984_NORTHR_116360.AT2 RSN984_NORTHR_116-UP.AT2
1032	Northridge-01 Leona Valley #6 1994	6.69	37.7	327.44	Reverse	4.9	2.8	RSN1032_NORTHR_LV6090.AT2 RSN1032_NORTHR_LV6360.AT2 RSN1032_NORTHR_LV6-UP.AT2
1049	Northridge-01 Pacific Palisades - Sunset 1994	6.69	13.34	191.06	Reverse	5.8	1.12	RSN1049_NORTHR_SUN190.AT2 RSN1049_NORTHR_SUN280.AT2 RSN1049_NORTHR_SUN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.9	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1258	Chi-Chi, Taiwan HWA005 1999	7.62	43.17	459.32	Reverse O	11.8	2.98	RSN1258_CHICHI_HWA005-N.AT2 RSN1258_CHICHI_HWA005-W.AT2 RSN1258_CHICHI_HWA005-V.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	2.97	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1506	Chi-Chi, Taiwan TCU070 1999	7.62	19	401.26	Reverse O	19.9	3.92	RSN1506_CHICHI_TCU070-E.AT2 RSN1506_CHICHI_TCU070-N.AT2 RSN1506_CHICHI_TCU070-V.AT2
1508	Chi-Chi, Taiwan TCU072 1999	7.62	0	468.14	Reverse O	14.7	1.21	RSN1508_CHICHI_TCU072-E.AT2 RSN1508_CHICHI_TCU072-N.AT2 RSN1508_CHICHI_TCU072-V.AT2
1549	Chi-Chi, Taiwan TCU129 1999	7.62	1.83	511.18	Reverse O	16.6	0.69	RSN1549_CHICHI_TCU129-E.AT2 RSN1549_CHICHI_TCU129-N.AT2 RSN1549_CHICHI_TCU129-V.AT2
2618	Chi-Chi, Taiwan-03 TCU065 1999	6.2	25.17	305.85	Reverse	3.6	2.48	RSN2618_CHICHI.03_TCU065N.AT2 RSN2618_CHICHI.03_TCU065E.AT2 RSN2618_CHICHI.03_TCU065V.AT2
2709	Chi-Chi, Taiwan-04 CHY035 1999	6.2	25.01	573.04	strike slip	4.1	3.96	RSN2709_CHICHI.04_CHY035N.AT2 RSN2709_CHICHI.04_CHY035E.AT2 RSN2709_CHICHI.04_CHY035V.AT2
3188	Chi-Chi, Taiwan-05 TCU067 1999	6.2	36.73	433.63	Reverse	4.4	3.64	RSN3188_CHICHI.05_TCU067N.AT2 RSN3188_CHICHI.05_TCU067E.AT2 RSN3188_CHICHI.05_TCU067V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**03 SanFrancisco** **270** **500**							**CS Set**
3264	Chi-Chi, Taiwan-06 CHY024 1999	6.3	29.49	427.73	Reverse	8.2	3.16	RSN3264_CHICHI.06_CHY024N.AT2 RSN3264_CHICHI.06_CHY024E.AT2 RSN3264_CHICHI.06_CHY024V.AT2
3564	Taiwan SMART1(5) SMART1 M05 1981	5.9	24.67	306.38	Reverse	2.9	3.5	RSN3564_SMART1.05_05M05EW.AT RSN3564_SMART1.05_05M05NS.AT2 RSN3564_SMART1.05_05M05DN.AT2
3574	Taiwan SMART1(5) SMART1 O05 1981	5.9	23.75	286.03	Reverse	3.1	3.73	RSN3574_SMART1.05_05O05EW.AT2 RSN3574_SMART1.05_05O05NS.AT2 RSN3574_SMART1.05_05O05DN.AT2
3760	Landers Big Bear Lake - Civic Center 1992	7.28	45.48	430.36	strike slip	17.3	3.41	RSN3760_LANDERS_BLC360.AT2 RSN3760_LANDERS_BLC270.AT2 RSN3760_LANDERS_BLC-UP.AT2
3852	Chi-Chi (aftershock 3), Taiwan CHY006 1999	6.2	24.58	438.19	strike slip	5.8	3.46	RSN3852_CHICHI.04_CHY006N.AT2 RSN3852_CHICHI.04_CHY006E.AT2 RSN3852_CHICHI.04_CHY006V.AT2
4074	Parkfield-02, CA PARKFIELD - VINEYARD CANYON 2004	6	4.36	340.45	strike slip	4	2.26	RSN4074_PARK2004_VINEY-90.AT2 RSN4074_PARK2004_VINEY360.AT2 RSN4074_PARK2004_VINEY-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.51	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	2.88	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
4896	Chuetsu-oki Kashiwazaki NPP, Service Hall Array 2007	6.8	0	201	Reverse	7	1.83	RSN4896_CHUETSU_SG01NS.AT2 RSN4896_CHUETSU_SG01EW.AT2 RSN4896_CHUETSU_SG01UD.AT2
5267	Chuetsu-oki NIG021 2007	6.8	24.31	418.5	Reverse	3.5	1.21	RSN5267_CHUETSU_NIG021NS.AT2 RSN5267_CHUETSU_NIG021EW.AT2 RSN5267_CHUETSU_NIG021UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	3.55	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5623	Iwate IWT015 2008	6.9	17.05	567.45	Reverse	6.2	1.92	RSN5623_IWATE_IWT015NS.AT2 RSN5623_IWATE_IWT015EW.AT2 RSN5623_IWATE_IWT015UD.AT2
5657	Iwate IWTH25 2008	6.9	0	506.44	Reverse	6.9	0.48	RSN5657_IWATE_IWTH25NS.AT2 RSN5657_IWATE_IWTH25EW.AT2 RSN5657_IWATE_IWTH25UD.AT2

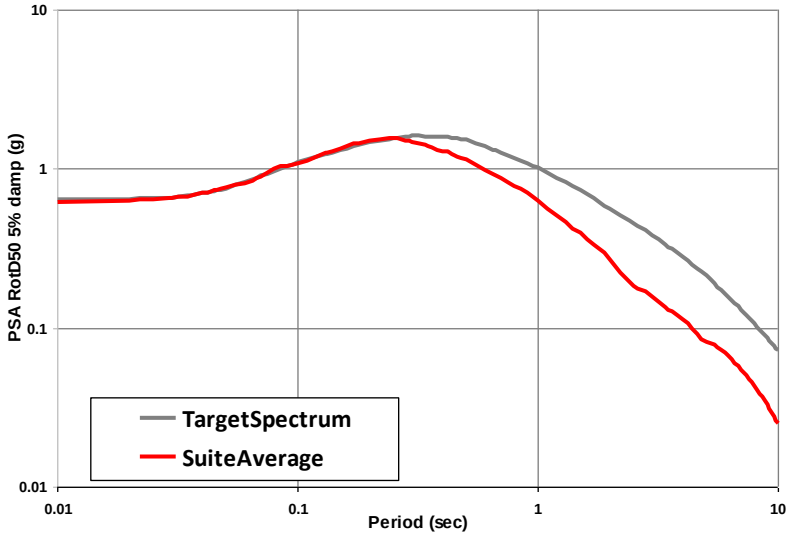
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
5779	Iwate Sanbongi Osaki City 2008	6.9	36.33	539.87	Reverse	13.7	3.81	RSN5779_IWATE_54013NS.AT2 RSN5779_IWATE_54013EW.AT2 RSN5779_IWATE_54013UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	4.66	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	1.7	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6969	Darfield, New Zealand Styx Mill Transfer Station 2010	7	20.86	247.5	strike slip	12.2	3.44	RSN6969_DARFIELD_SMTCN88W.AT2 RSN6969_DARFIELD_SMTCS02W.AT2 RSN6969_DARFIELD_SMTCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	2.18	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.48	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8124	Christchurch, New Zealand Riccarton High School 2011	6.2	9.43	293	Reverse O	4.9	1.79	RSN8124_CCHURCH_RHSCN86W.AT2 RSN8124_CCHURCH_RHSCS04W.AT2 RSN8124_CCHURCH_RHSCUP.AT2

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.42	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.91	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
235	Mammoth Lakes-02 Mammoth Lakes H. S. 1980	5.69	1.45	346.82	strike slip	1.2	1.49	RSN235_MAMMOTH.J_J-MLS254.AT2 RSN235_MAMMOTH.J_J-MLS344.AT2 RSN235_MAMMOTH.J_J-MLS-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	4.01	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	2.24	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	3.49	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	2.09	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	1.5	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
565	Kalamata, Greece-02 Kalamata (bsmt) (1st trigger) 1986	5.4	4	382.21	Normal	0.9	3.75	RSN565_GREECE_J-KAL-NS.AT2 RSN565_GREECE_J-KAL-WE.AT2 RSN565_GREECE_J-KAL-UP.AT2
587	New Zealand-02 Matahina Dam 1987	6.6	16.09	551.3	Normal	3.8	2.66	RSN587_NEWZEAL_A-MAT083.AT2 RSN587_NEWZEAL_A-MAT353.AT2 RSN587_NEWZEAL_A-MAT-UP.AT2
634	Whittier Narrows-01 LA - Fletcher Dr 1987	5.99	11.07	329.06	Reverse O	2.8	3.28	RSN634_WHITTIER.A_A-FLE144.AT2 RSN634_WHITTIER.A_A-FLE234.AT2 RSN634_WHITTIER.A_A-FLE-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	4.56	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2

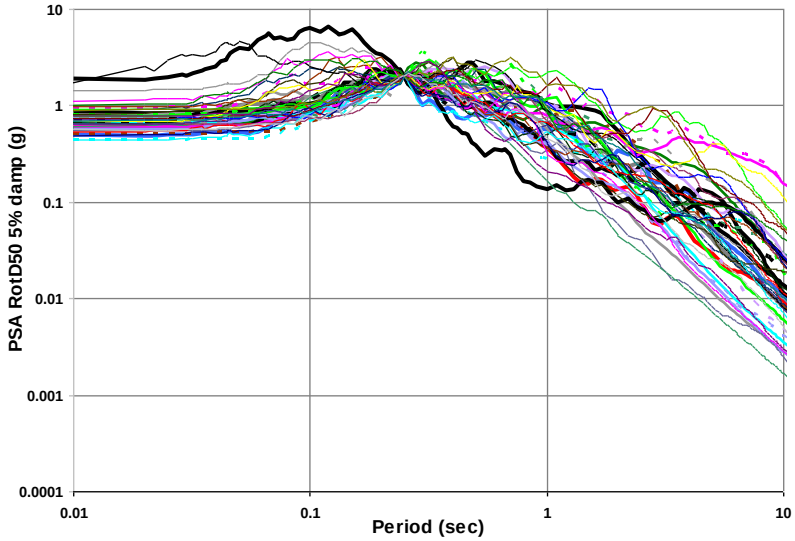
Site Site Vs30 (m/s) Return Period (yr)	**03 SanFrancisco** **270** **1000**							**CS Set**
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	3.19	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
1049	Northridge-01 Pacific Palisades - Sunset 1994	6.69	13.34	191.06	Reverse	5.8	1.41	RSN1049_NORTHR_SUN190.AT2 RSN1049_NORTHR_SUN280.AT2 RSN1049_NORTHR_SUN-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	1.24	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.42	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	2.38	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1203	Chi-Chi, Taiwan CHY036 1999	7.62	16.04	233.14	Reverse O	10.4	2.79	RSN1203_CHICHI_CHY036-E.AT2 RSN1203_CHICHI_CHY036-N.AT2 RSN1203_CHICHI_CHY036-V.AT2
1258	Chi-Chi, Taiwan HWA005 1999	7.62	43.17	459.32	Reverse O	11.8	3.73	RSN1258_CHICHI_HWA005-N.AT2 RSN1258_CHICHI_HWA005-W.AT2 RSN1258_CHICHI_HWA005-V.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	3.72	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	3.71	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1495	Chi-Chi, Taiwan TCU055 1999	7.62	6.34	359.13	Reverse O	19.1	2.68	RSN1495_CHICHI_TCU055-E.AT2 RSN1495_CHICHI_TCU055-N.AT2 RSN1495_CHICHI_TCU055-V.AT2
1636	Manjil, Iran Qazvin 1990	7.37	49.97	302.64	strike slip	8.6	2.69	RSN1636_MANJIL_185066.AT2 RSN1636_MANJIL_185336.AT2 RSN1636_MANJIL_185-UP.AT2
3564	Taiwan SMART1(5) SMART1 M05 1981	5.9	24.67	306.38	Reverse	2.9	4.39	RSN3564_SMART1.05_05M05EW.AT RSN3564_SMART1.05_05M05NS.AT2 RSN3564_SMART1.05_05M05DN.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	2.95	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2

Site Site Vs30 (m/s) Return Period (yr)	**03 SanFrancisco** **270** **1000**							**CS Set**
3966	Tottori, Japan TTR009 2000	6.61	8.82	420.2	strike slip	4.3	0.93	RSN3966_TOTTORI_TTR009NS.AT2 RSN3966_TOTTORI_TTR009EW.AT2 RSN3966_TOTTORI_TTR009UD.AT2
4064	Parkfield-02, CA PARKFIELD - DONNA LEE 2004	6	4.25	656.75	strike slip	2.3	2.57	RSN4064_PARK2004_DONNA-90.AT2 RSN4064_PARK2004_DONNA360.AT2 RSN4064_PARK2004_DONNA-UP.AT2
4098	Parkfield-02, CA Parkfield - Cholame 1E 2004	6	1.66	326.64	strike slip	1.9	2.3	RSN4098_PARK2004_C01090.AT2 RSN4098_PARK2004_C01360.AT2 RSN4098_PARK2004_C01-UP.AT2
4102	Parkfield-02, CA Parkfield - Cholame 3W 2004	6	2.55	230.57	strike slip	1.6	2.45	RSN4102_PARK2004_C03090.AT2 RSN4102_PARK2004_C03360.AT2 RSN4102_PARK2004_C03-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	4.1	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	4.23	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	2.83	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4481	L'Aquila, Italy L'Aquila - V. Aterno -Colle Grilli 2009	6.3	0	685	Normal	4.3	1.85	RSN4481_L-AQUILA_FA030XTE.AT2 RSN4481_L-AQUILA_FA030YLN.AT2 RSN4481_L-AQUILA_FA030ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.64	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4787	Wenchuan, China Jiangyoudizhentai 2008	7.9	22.63	475.59	Reverse O	27.2	1.12	RSN4787_WENCHUAN_UA1048.AT2 RSN4787_WENCHUAN_UA1049.AT2 RSN4787_WENCHUAN_UA1050.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.56	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
4840	Chuetsu-oki Joetsu Kita 2007	6.8	28.97	334.01	Reverse	14.9	3.81	RSN4840_CHUETSU_65003NS.AT2 RSN4840_CHUETSU_65003EW.AT2 RSN4840_CHUETSU_65003UD.AT2
4850	Chuetsu-oki Yoshikawaku Joetsu City 2007	6.8	13.68	561.59	Reverse	4.1	2.31	RSN4850_CHUETSU_65013NS.AT2 RSN4850_CHUETSU_65013EW.AT2 RSN4850_CHUETSU_65013UD.AT2

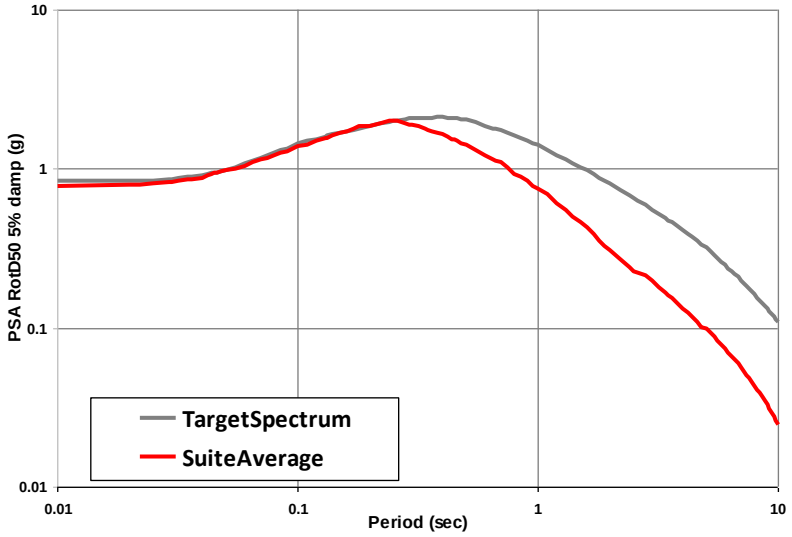
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
5274	Chuetsu-oki NIG028 2007	6.8	15.32	430.71	Reverse	11.1	4.62	RSN5274_CHUETSU_NIG028NS.AT2 RSN5274_CHUETSU_NIG028EW.AT2 RSN5274_CHUETSU_NIG028UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	4.45	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5472	Iwate AKT017 2008	6.9	31.44	643.62	Reverse	7.8	3.94	RSN5472_IWATE_AKT017NS.AT2 RSN5472_IWATE_AKT017EW.AT2 RSN5472_IWATE_AKT017UD.AT2
6013	El Mayor-Cucapah El Centro - Meadows Union School 2010	7.2	27.81	276.25	strike slip	15.3	2.95	RSN6013_SIERRA.MEX_2027B360.AT RSN6013_SIERRA.MEX_2027A090.AT RSN6013_SIERRA.MEX_2027C-UP.AT
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	2.13	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	2.73	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8119	Christchurch, New Zealand Pages Road Pumping Station 2011	6.2	1.92	206	Reverse O	2.5	1.58	RSN8119_CCHURCH_PRPCS.AT2 RSN8119_CCHURCH_PRPCW.AT2 RSN8119_CCHURCH_PRPCUP.AT2

Site	**03 SanFrancisco**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	03 SanFrancisco	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.18	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
204	Imperial Valley-07 El Centro Array #6 1979	5.01	7.4	203.22	strike slip	0.8	3.51	RSN204_IMPVALL.A_A-E06140.AT2 RSN204_IMPVALL.A_A-E06230.AT2 RSN204_IMPVALL.A_A-E06-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	2.89	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	4.5	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	2.69	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	1.93	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	4.85	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2
418	Coalinga-07 Coalinga-14th & Elm (Old CHP) 1983	5.21	7.31	286.41	Reverse	0.4	1.1	RSN418_COALINGA_F-CHP000.AT2 RSN418_COALINGA_F-CHP090.AT2 RSN418_COALINGA_F-CHP-UP.AT2
496	Nahanni, Canada Site 2 1985	6.76	0	605.04	Reverse	4.3	4.07	
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.61	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
681	Whittier Narrows-01 Pasadena - CIT Lura St 1987	5.99	4.3	341.14	Reverse O	2.8	3.13	RSN681_WHITTIER.A_A-LUR090.AT2 RSN681_WHITTIER.A_A-LUR180.AT2 RSN681_WHITTIER.A_A-LUR-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	2.67	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2

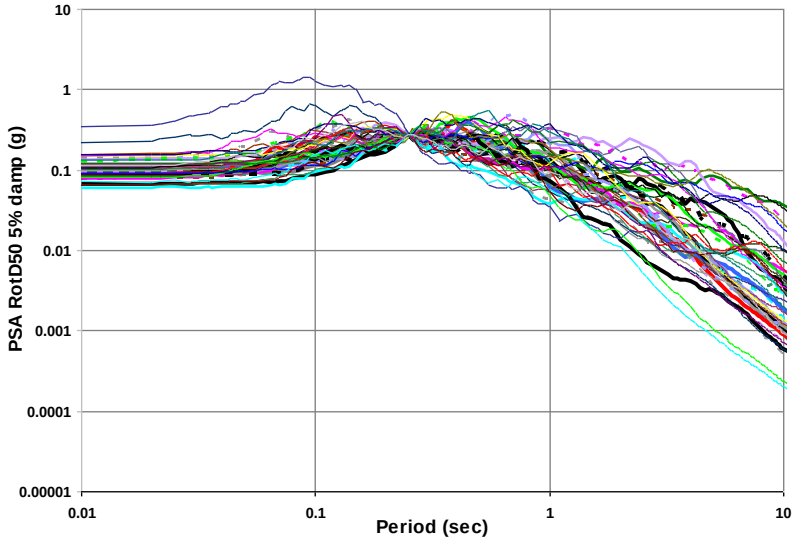
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
786	Loma Prieta Palo Alto - 1900 Embarc. 1989	6.93	30.56	209.87	Reverse O	9.6	3.65	RSN786_LOMAP_PAE055.AT2 RSN786_LOMAP_PAE325.AT2 RSN786_LOMAP_PAE-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	3.61	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
901	Big Bear-01 Big Bear Lake - Civic Center 1992	6.46	7.31	430.36	strike slip	5.9	1.47	RSN901_BIGBEAR_BLC360.AT2 RSN901_BIGBEAR_BLC270.AT2 RSN901_BIGBEAR_BLC-UP.AT2
963	Northridge-01 Castaic - Old Ridge Route 1994	6.69	20.11	450.28	Reverse	5.1	1.37	RSN963_NORTHR_ORR090.AT2 RSN963_NORTHR_ORR360.AT2 RSN963_NORTHR_ORR-UP.AT2
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	4.1	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
1004	Northridge-01 LA - Sepulveda VA Hospital 1994	6.69	0	380.06	Reverse	4.5	1.02	RSN1004_NORTHR_SPV270.AT2 RSN1004_NORTHR_SPV360.AT2 RSN1004_NORTHR_SPV-UP.AT2
1038	Northridge-01 Montebello - Bluff Rd. 1994	6.69	43.22	316.01	Reverse	6.5	3.79	RSN1038_NORTHR_BLF206.AT2 RSN1038_NORTHR_BLF296.AT2 RSN1038_NORTHR_BLF-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	1.82	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	2.3	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	1.29	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.83	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	3.07	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1258	Chi-Chi, Taiwan HWA005 1999	7.62	43.17	459.32	Reverse O	11.8	4.81	RSN1258_CHICHI_HWA005-N.AT2 RSN1258_CHICHI_HWA005-W.AT2 RSN1258_CHICHI_HWA005-V.AT2

Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	4.78	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1546	Chi-Chi, Taiwan TCU122 1999	7.62	9.34	475.46	Reverse O	17.9	4.17	RSN1546_CHICHI_TCU122-E.AT2 RSN1546_CHICHI_TCU122-N.AT2 RSN1546_CHICHI_TCU122-V.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	4.73	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
2655	Chi-Chi, Taiwan-03 TCU122 1999	6.2	18.1	475.46	Reverse	2.8	3.42	RSN2655_CHICHI.03_TCU122N.AT2 RSN2655_CHICHI.03_TCU122E.AT2 RSN2655_CHICHI.03_TCU122V.AT2
3570	Taiwan SMART1(5) SMART1 M12 1981	5.9	26.5	275.82	Reverse	2	4.12	RSN3570_SMART1.05_05M12EW.AT RSN3570_SMART1.05_05M12NS.AT2 RSN3570_SMART1.05_05M12DN.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	3.8	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
3753	Landers Fun Valley 1992	7.28	25.02	388.63	strike slip	22.4	3.87	RSN3753_LANDERS_FVR045.AT2 RSN3753_LANDERS_FVR135.AT2 RSN3753_LANDERS_FVR-UP.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	4.36	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
3943	Tottori, Japan SMN015 2000	6.61	9.1	616.55	strike slip	3.5	3.13	RSN3943_TOTTORI_SMN015NS.AT2 RSN3943_TOTTORI_SMN015EW.AT2 RSN3943_TOTTORI_SMN015UD.AT2
4111	Parkfield-02, CA Parkfield - Fault Zone 7 2004	6	0.95	297.46	strike slip	5.7	3.65	RSN4111_PARK2004_Z07090.AT2 RSN4111_PARK2004_Z07360.AT2 RSN4111_PARK2004_Z07-UP.AT2
4207	Niigata, Japan NIG017 2004	6.63	4.22	274.17	Reverse	6	1.49	RSN4207_NIIGATA_NIG017NS.AT2 RSN4207_NIIGATA_NIG017EW.AT2 RSN4207_NIIGATA_NIG017UD.AT2
4735	Wenchuan, China Lixianmuka 2008	7.9	29.05	325.54	Reverse O	29.2	2.42	RSN4735_WENCHUAN_UA0836.AT2 RSN4735_WENCHUAN_UA0835.AT2 RSN4735_WENCHUAN_UA0837.AT2
4852	Chuetsu-oki Joetsu, Aramaki District 2007	6.8	30.26	605.71	Reverse	3.7	4.21	RSN4852_CHUETSU_65018NS.AT2 RSN4852_CHUETSU_65018EW.AT2 RSN4852_CHUETSU_65018UD.AT2

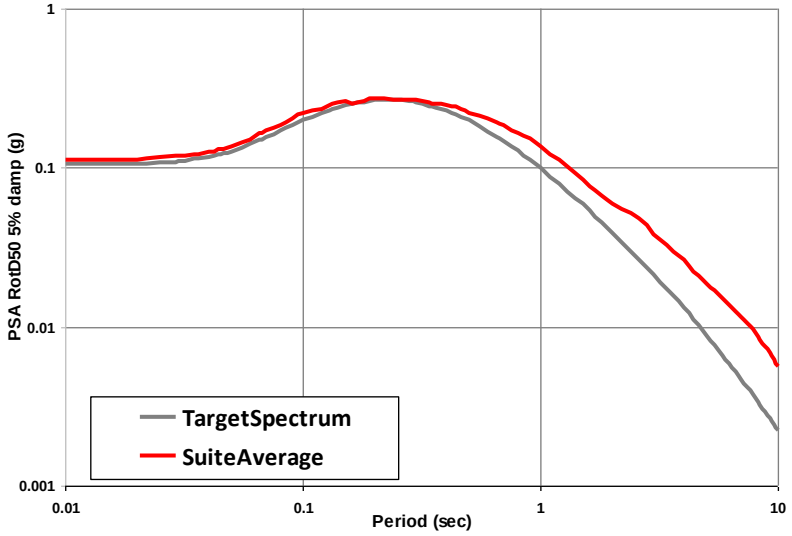
Site	03 SanFrancisco							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	4.65	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.56	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5665	Iwate MYG006 2008	6.9	30.38	146.72	Reverse	14.2	3.81	RSN5665_IWATE_MYG006NS.AT2 RSN5665_IWATE_MYG006EW.AT2 RSN5665_IWATE_MYG006UD.AT2
5816	Iwate Shinmachi Wakayu 2008	6.9	42.02	359.13	Reverse	14.5	4.22	RSN5816_IWATE_48A41NS.AT2 RSN5816_IWATE_48A41EW.AT2 RSN5816_IWATE_48A41UD.AT2
5988	El Mayor-Cucapah Meloland, E Holton Rd. 2010	7.2	30.18	196	strike slip	20.9	3.05	RSN5988_SIERRA.MEX_DRE360.AT2 RSN5988_SIERRA.MEX_DRE-90.AT2 RSN5988_SIERRA.MEX_DRE-UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	2.4	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	4.35	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
18	Imperial Valley-04 El Centro Array #9 1953	5.5	15.11	213.44	strike slip	10.9	3.4	RSN18_IMPVALL.BG_G-ELC000.AT2 RSN18_IMPVALL.BG_G-ELC090.AT2 RSN18_IMPVALL.BG_G-ELC-UP.AT2
80	San Fernando Pasadena - Old Seismo Lab 1971	6.61	21.5	969.07	Reverse	4.4	0.49	RSN80_SFERN_PSL180.AT2 RSN80_SFERN_PSL270.AT2 RSN80_SFERN_PSLDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.16	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	2.06	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
232	Mammoth Lakes-01 Mammoth Lakes H. S. 1980	6.06	4.48	346.82	Normal O	5.3	0.48	RSN232_MAMMOTH.I_I-MLS254.AT2 RSN232_MAMMOTH.I_I-MLS344.AT2 RSN232_MAMMOTH.I_I-MLS-UP.AT2
369	Coalinga-01 Slack Canyon 1983	6.36	25.98	648.09	Reverse	4.3	0.76	RSN369_COALINGA.H_H-SCN045.AT2 RSN369_COALINGA.H_H-SCN315.AT2 RSN369_COALINGA.H_H-SCN-UP.AT2
447	Morgan Hill Agnews State Hospital 1984	6.19	24.48	239.69	strike slip	22.6	3.45	RSN447_MORGAN_AGW240.AT2 RSN447_MORGAN_AGW330.AT2 RSN447_MORGAN_AGW-UP.AT2
450	Morgan Hill Corralitos 1984	6.19	23.23	462.24	strike slip	3.8	1.02	RSN450_MORGAN_CLS220.AT2 RSN450_MORGAN_CLS310.AT2 RSN450_MORGAN_CLS-UP.AT2
529	N. Palm Springs North Palm Springs 1986	6.06	0	344.67	Reverse O	1.7	0.23	RSN529_PALMSPR_NPS210.AT2 RSN529_PALMSPR_NPS300.AT2 RSN529_PALMSPR_NPS-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	0.43	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
724	Superstition Hills-02 Plaster City 1987	6.54	22.25	316.64	strike slip	9	0.82	
779	Loma Prieta LGPC 1989	6.93	0	594.83	Reverse O	5.5	0.25	RSN779_LOMAP_LGP000.AT2 RSN779_LOMAP_LGP090.AT2 RSN779_LOMAP_LGP-UP.AT2

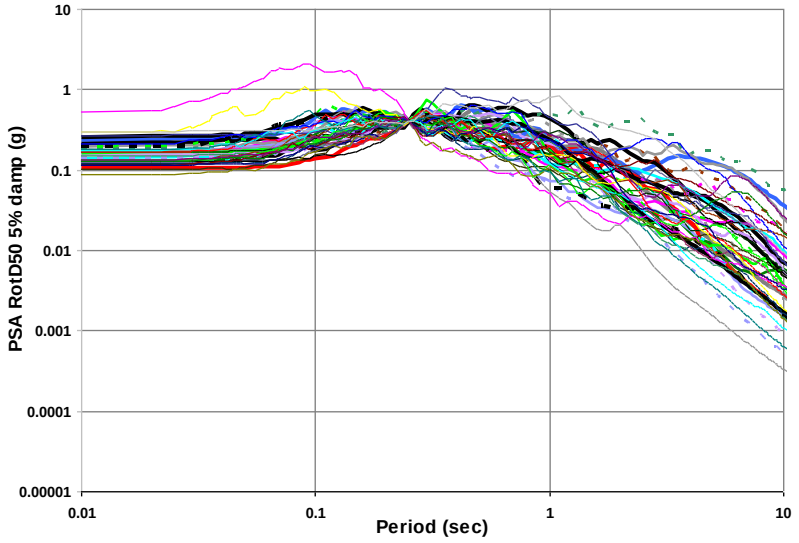
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	0.3	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
987	Northridge-01 LA - Centinela St 1994	6.69	20.36	321.91	Reverse	5.5	0.35	RSN987_NORTHR_CEN155.AT2 RSN987_NORTHR_CEN245.AT2 RSN987_NORTHR_CEN-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	0.37	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1091	Northridge-01 Vasquez Rocks Park 1994	6.69	23.1	996.43	Reverse	4.1	0.67	RSN1091_NORTHR_VAS000.AT2 RSN1091_NORTHR_VAS090.AT2 RSN1091_NORTHR_VAS-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.21	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1115	Kobe, Japan Sakai 1995	6.9	28.08	256	strike slip	11.6	0.58	RSN1115_KOBE_SKI000.AT2 RSN1115_KOBE_SKI090.AT2 RSN1115_KOBE_SKI-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.24	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.41	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1490	Chi-Chi, Taiwan TCU050 1999	7.62	9.49	542.41	Reverse O	18.4	0.69	RSN1490_CHICHI_TCU050-E.AT2 RSN1490_CHICHI_TCU050-N.AT2 RSN1490_CHICHI_TCU050-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.22	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.29	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	0.7	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
2458	Chi-Chi, Taiwan-03 CHY025 1999	6.2	27.88	277.5	Reverse	8.9	1.16	RSN2458_CHICHI.03_CHY025N.AT2 RSN2458_CHICHI.03_CHY025E.AT2 RSN2458_CHICHI.03_CHY025V.AT2

Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
3560	Taiwan SMART1(5) SMART1 I09 1981	5.9	25.51	309.41	Reverse	5	1.07	RSN3560_SMART1.05_05I09EW.AT2 RSN3560_SMART1.05_05I09NS.AT2 RSN3560_SMART1.05_05I09DN.AT2
3697	Whittier Narrows-02 Carson - Water St 1987	5.27	26.14	160.58	Reverse O	7.3	3.1	RSN3697_WHITTIER.B_B-WAT180.AT RSN3697_WHITTIER.B_B-WAT270.AT RSN3697_WHITTIER.B_B-WAT-UP.AT
3749	Cape Mendocino Fortuna Fire Station 1992	7.01	16.54	355.18	Reverse	4.8	0.38	RSN3749_CAPEMEND_FFT270.AT2 RSN3749_CAPEMEND_FFT360.AT2 RSN3749_CAPEMEND_FFT-UP.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.3	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	0.37	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	0.73	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4549	L'Aquila (aftershock 2), Italy L'Aquila - V. Aterno - Il Moro 2009	5.4	9.98	563.74	Normal	2.7	2.59	RSN4549_L-AQUILA.B_BO311XTE.AT RSN4549_L-AQUILA.B_BO311YLN.AT RSN4549_L-AQUILA.B_BO311ZUP.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.11	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.36	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4843	Chuetsu-oki Matsushiro Tokamachi 2007	6.8	18.16	640.14	Reverse	6.5	0.6	RSN4843_CHUETSU_65006NS.AT2 RSN4843_CHUETSU_65006EW.AT2 RSN4843_CHUETSU_65006UD.AT2
5815	Iwate Yuzawa 2008	6.9	22.41	655.45	Reverse	7.2	0.42	RSN5815_IWATE_44BC1NS.AT2 RSN5815_IWATE_44BC1EW.AT2 RSN5815_IWATE_44BC1UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	1.01	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
5823	El Mayor-Cucapah Chihuahua 2010	7.2	18.21	242.05	strike slip	25.1	0.5	RSN5823_SIERRA.MEX_CHI000.AT2 RSN5823_SIERRA.MEX_CHI090.AT2 RSN5823_SIERRA.MEX_CHI--V.AT2

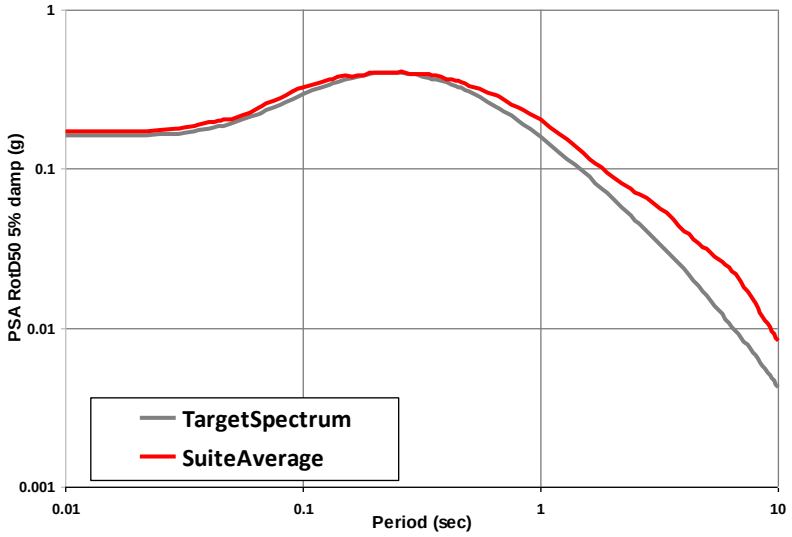
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
5985	El Mayor-Cucapah El Centro Differential Array 2010	7.2	22.83	202.26	strike slip	8.3	0.18	RSN5985_SIERRA.MEX_EDA360.AT2 RSN5985_SIERRA.MEX_EDA090.AT2 RSN5985_SIERRA.MEX_EDA-UP.AT2
6966	Darfield, New Zealand Shirley Library 2010	7	22.33	207	strike slip	11	0.52	RSN6966_DARFIELD_SHLCS40W.AT2 RSN6966_DARFIELD_SHLCS50E.AT2 RSN6966_DARFIELD_SHLCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.32	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	0.58	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2
8134	Christchurch, New Zealand Styx Mill Transfer Station 2011	6.2	11.24	247.5	Reverse O	5.6	0.96	RSN8134_CCHURCH_SMTCN88W.AT RSN8134_CCHURCH_SMTCS02W.AT2 RSN8134_CCHURCH_SMTCUP.AT2
8606	El Mayor-Cucapah Westside Elementary School 2010	7.2	10.31	242	strike slip	9.3	0.44	RSN8606_SIERRA.MEX_CIWESHNN.A RSN8606_SIERRA.MEX_CIWESHNE.A RSN8606_SIERRA.MEX_CIWESHNZ.A
8630	40204628 Mt. Pleasant High School 2007	5.45	8.33	377	strike slip	3.6	1.26	RSN8630_40204628_N1793HNN.AT2 RSN8630_40204628_N1793HNE.AT2 RSN8630_40204628_N1793HNZ.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
162	Imperial Valley-06 Calexico Fire Station 1979	6.53	10.45	231.23	strike slip	6.4	0.72	RSN162_IMPVALL.H_H-CXO225.AT2 RSN162_IMPVALL.H_H-CXO315.AT2 RSN162_IMPVALL.H_H-CXO-UP.AT2
163	Imperial Valley-06 Calipatria Fire Station 1979	6.53	23.17	205.78	strike slip	11.9	1.46	RSN163_IMPVALL.H_H-CAL225.AT2 RSN163_IMPVALL.H_H-CAL315.AT2 RSN163_IMPVALL.H_H-CAL-UP.AT2
178	Imperial Valley-06 El Centro Array #3 1979	6.53	10.79	162.94	strike slip	4.7	0.53	RSN178_IMPVALL.H_H-E03140.AT2 RSN178_IMPVALL.H_H-E03230.AT2 RSN178_IMPVALL.H_H-E03-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	3.09	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	1.04	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.58	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	0.9	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
412	Coalinga-05 Pleasant Valley P.P. - yard 1983	5.77	13.16	257.38	Reverse	2.6	0.45	RSN412_COALINGA_D-PVY045.AT2 RSN412_COALINGA_D-PVY135.AT2 RSN412_COALINGA_D-PVY-UP.AT2
450	Morgan Hill Corralitos 1984	6.19	23.23	462.24	strike slip	3.8	1.53	RSN450_MORGAN_CLS220.AT2 RSN450_MORGAN_CLS310.AT2 RSN450_MORGAN_CLS-UP.AT2
465	Morgan Hill Hollister Diff Array #4 1984	6.19	26.42	-999	strike slip	10.4	1.77	RSN465_MORGAN_HD4255.AT2 RSN465_MORGAN_HD4345.AT2 RSN465_MORGAN_HD4-UP.AT2
499	Hollister-04 Hollister Differential Array #3 1986	5.45	13.11	215.54	strike slip	8.1	1.69	RSN499_HOLLISTR_D-HD3255.AT2 RSN499_HOLLISTR_D-HD3345.AT2 RSN499_HOLLISTR_D-HD3-UP.AT2
676	Whittier Narrows-01 Pasadena - CIT Bridge Lab 1987	5.99	4.3	341.14	Reverse O	3.2	1.02	RSN676_WHITTIER.A_A-BRI090.AT2 RSN676_WHITTIER.A_A-BRI360.AT2 RSN676_WHITTIER.A_A-BRI-UP.AT2

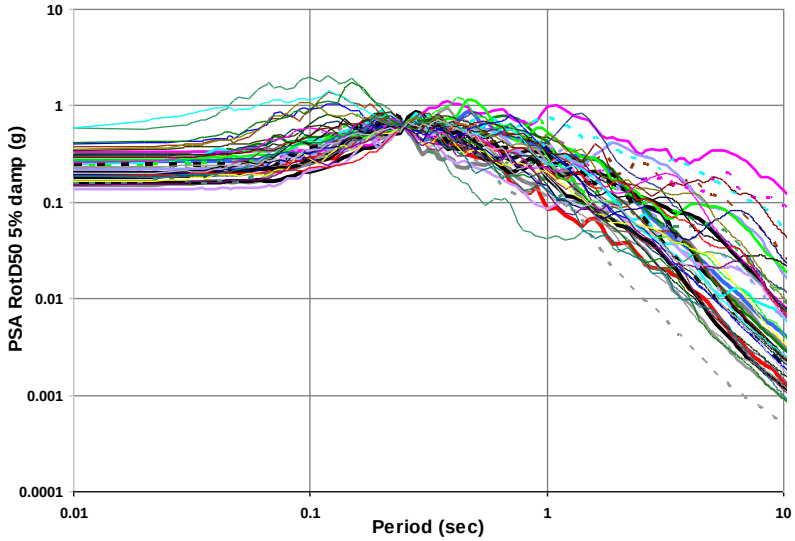
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.54	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
982	Northridge-01 Jensen Filter Plant Administrative Bui 1994	6.69	0	373.07	Reverse	3.5	0.57	RSN982_NORTHR_JEN022.AT2 RSN982_NORTHR_JEN292.AT2 RSN982_NORTHR_JEN-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.26	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.37	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1161	Kocaeli, Turkey Gebze 1999	7.51	7.57	792	strike slip	5.8	1.23	RSN1161_KOCAELI_GBZ000.AT2 RSN1161_KOCAELI_GBZ270.AT2 RSN1161_KOCAELI_GBZ-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.62	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1182	Chi-Chi, Taiwan CHY006 1999	7.62	9.76	438.19	Reverse O	5.1	0.6	RSN1182_CHICHI_CHY006-N.AT2 RSN1182_CHICHI_CHY006-W.AT2 RSN1182_CHICHI_CHY006-V.AT2
1193	Chi-Chi, Taiwan CHY024 1999	7.62	9.62	427.73	Reverse O	12.6	0.61	RSN1193_CHICHI_CHY024-E.AT2 RSN1193_CHICHI_CHY024-N.AT2 RSN1193_CHICHI_CHY024-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.33	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1534	Chi-Chi, Taiwan TCU107 1999	7.62	15.99	409	Reverse O	24.1	1.37	RSN1534_CHICHI_TCU107-E.AT2 RSN1534_CHICHI_TCU107-N.AT2 RSN1534_CHICHI_TCU107-V.AT2
2700	Chi-Chi, Taiwan-04 CHY025 1999	6.2	29.2	277.5	strike slip	12.8	2.94	RSN2700_CHICHI.04_CHY025N.AT2 RSN2700_CHICHI.04_CHY025E.AT2 RSN2700_CHICHI.04_CHY025V.AT2
3507	Chi-Chi, Taiwan-06 TCU129 1999	6.3	22.69	511.18	Reverse	6.5	0.67	RSN3507_CHICHI.06_TCU129N.AT2 RSN3507_CHICHI.06_TCU129E.AT2 RSN3507_CHICHI.06_TCU129V.AT2
3563	Taiwan SMART1(5) SMART1 M04 1981	5.9	24.96	306.38	Reverse	1.9	0.94	RSN3563_SMART1.05_05M04EW.AT RSN3563_SMART1.05_05M04NS.AT2 RSN3563_SMART1.05_05M04DN.AT

Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
3753	Landers Fun Valley 1992	7.28	25.02	388.63	strike slip	22.4	0.78	RSN3753_LANDERS_FVR045.AT2 RSN3753_LANDERS_FVR135.AT2 RSN3753_LANDERS_FVR-UP.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.45	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4102	Parkfield-02, CA Parkfield - Cholame 3W 2004	6	2.55	230.57	strike slip	1.6	0.63	RSN4102_PARK2004_C03090.AT2 RSN4102_PARK2004_C03360.AT2 RSN4102_PARK2004_C03-UP.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	1.09	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4280	Calabria, Italy Ferruzzano 1978	5.2	8.13	525.6	Normal	2.3	2.28	RSN4280_CALABRIA.P_FRR000.AT2 RSN4280_CALABRIA.P_FRR090.AT2 RSN4280_CALABRIA.P_FRR-UP.AT2
4320	Lazio Abruzzo (aftershock 1), Italy Cassino-Sant' Elia 1984	5.5	21.59	436.79	Normal	5	3.24	RSN4320_ABRUZZO.P_A-CSS000.AT2 RSN4320_ABRUZZO.P_A-CSS090.AT2 RSN4320_ABRUZZO.P_A-CSS-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.17	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.54	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4841	Chuetsu-oki Joetsu Yasuzukaku Yasuzuka 2007	6.8	20.65	655.45	Reverse	6.4	0.64	RSN4841_CHUETSU_65004NS.AT2 RSN4841_CHUETSU_65004EW.AT2 RSN4841_CHUETSU_65004UD.AT2
4862	Chuetsu-oki Shiura Nagaoka 2007	6.8	10.61	336.93	Reverse	8.5	1.22	RSN4862_CHUETSU_65035NS.AT2 RSN4862_CHUETSU_65035EW.AT2 RSN4862_CHUETSU_65035UD.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	0.93	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.6	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5774	Iwate Nakashinden Town 2008	6.9	29.37	276.3	Reverse	11	1.17	RSN5774_IWATE_54008NS.AT2 RSN5774_IWATE_54008EW.AT2 RSN5774_IWATE_54008UD.AT2

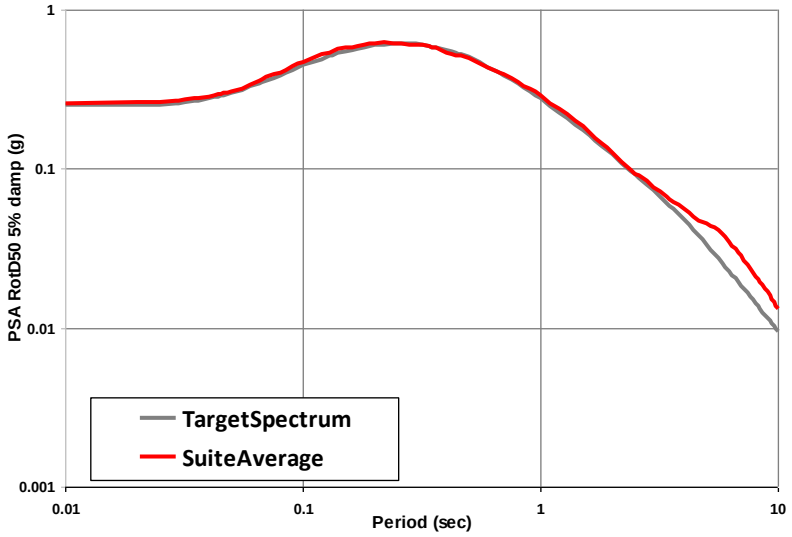
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
5807	Iwate Yuzama Yokobori 2008	6.9	27.1	570.62	Reverse	7.8	0.95	RSN5807_IWATE_55462NS.AT2 RSN5807_IWATE_55462EW.AT2 RSN5807_IWATE_55462UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	1.51	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	0.57	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	0.8	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0.71	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.41	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8822	14383980 Orange (Chapman) 2008	5.39	17.87	318.11	Reverse O	2.6	1.75	RSN8822_14383980_CIOGCHNN.AT2 RSN8822_14383980_CIOGCHNE.AT2 RSN8822_14383980_CIOGCHNZ.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	2.57	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.56	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
130	Friuli, Italy-02 Buia 1976	5.91	10.99	310.68	Reverse	4.5	2.85	RSN130_FRIULI.B_B-BUI000.AT2 RSN130_FRIULI.B_B-BUI270.AT2 RSN130_FRIULI.B_B-BUI-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.19	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.36	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	4.74	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	1.8	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	2.89	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
518	N. Palm Springs Fun Valley 1986	6.06	12.79	388.63	Reverse O	6.1	3.22	RSN518_PALMSPR_FVR045.AT2 RSN518_PALMSPR_FVR135.AT2 RSN518_PALMSPR_FVR-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.8	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
585	Baja California Cerro Prieto 1987	5.5	3.43	471.53	strike slip	1.5	0.5	RSN585_BAJA_CPE161.AT2 RSN585_BAJA_CPE251.AT2 RSN585_BAJA_CPE-UP.AT2
641	Whittier Narrows-01 LA - Saturn St 1987	5.99	20.35	308.71	Reverse O	3.5	3.04	RSN641_WHITTIER.A_A-STN020.AT2 RSN641_WHITTIER.A_A-STN110.AT2 RSN641_WHITTIER.A_A-STN-UP.AT2

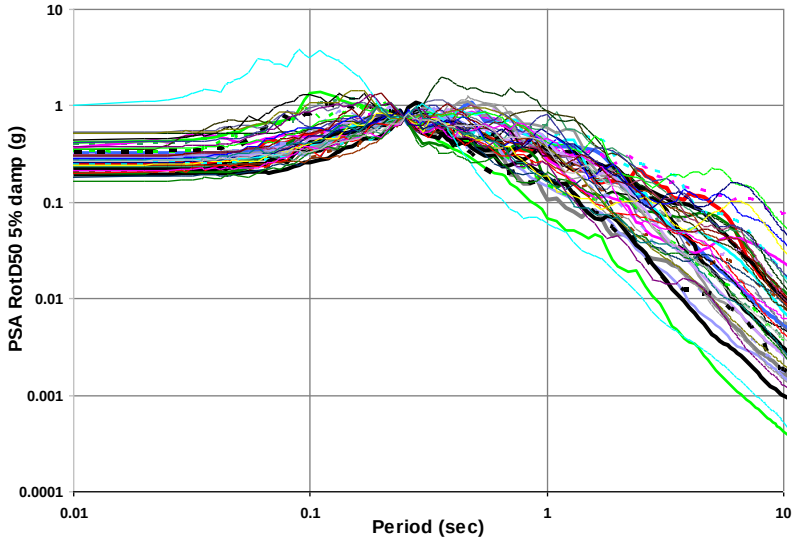
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
719	Superstition Hills-02 Brawley Airport 1987	6.54	17.03	208.71	strike slip	10.5	2.81	
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.56	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1049	Northridge-01 Pacific Palisades - Sunset 1994	6.69	13.34	191.06	Reverse	5.8	0.56	RSN1049_NORTHR_SUN190.AT2 RSN1049_NORTHR_SUN280.AT2 RSN1049_NORTHR_SUN-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.4	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.56	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.94	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1193	Chi-Chi, Taiwan CHY024 1999	7.62	9.62	427.73	Reverse O	12.6	0.94	RSN1193_CHICHI_CHY024-E.AT2 RSN1193_CHICHI_CHY024-N.AT2 RSN1193_CHICHI_CHY024-V.AT2
1498	Chi-Chi, Taiwan TCU059 1999	7.62	17.11	272.67	Reverse O	21.8	2.08	RSN1498_CHICHI_TCU059-E.AT2 RSN1498_CHICHI_TCU059-N.AT2 RSN1498_CHICHI_TCU059-V.AT2
1499	Chi-Chi, Taiwan TCU060 1999	7.62	8.51	375.42	Reverse O	19.1	1.7	RSN1499_CHICHI_TCU060-E.AT2 RSN1499_CHICHI_TCU060-N.AT2 RSN1499_CHICHI_TCU060-V.AT2
1513	Chi-Chi, Taiwan TCU079 1999	7.62	0	363.99	Reverse O	19.2	0.54	RSN1513_CHICHI_TCU079-E.AT2 RSN1513_CHICHI_TCU079-N.AT2 RSN1513_CHICHI_TCU079-V.AT2
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	1.62	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
1671	Northridge-03 Pacoima Kagel Canyon 1994	5.2	20.08	508.08	Reverse	3.2	4.92	RSN1671_NORTH009_PKC090.AT2 RSN1671_NORTH009_PKC360.AT2 RSN1671_NORTH009_PKC-UP.AT2
1683	Northridge-05 Castaic - Old Ridge Route 1994	5.13	19.88	450.28	Reverse O	3.8	2.67	RSN1683_NORTH151_ORR090.AT2 RSN1683_NORTH151_ORR360.AT2 RSN1683_NORTH151_ORR-UP.AT2

Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
2507	Chi-Chi, Taiwan-03 CHY101 1999	6.2	24.4	258.89	Reverse	8.7	1.59	RSN2507_CHICHI.03_CHY101N.AT2 RSN2507_CHICHI.03_CHY101E.AT2 RSN2507_CHICHI.03_CHY101V.AT2
2708	Chi-Chi, Taiwan-04 CHY034 1999	6.2	28.45	378.75	strike slip	5.4	2.83	RSN2708_CHICHI.04_CHY034N.AT2 RSN2708_CHICHI.04_CHY034W.AT2 RSN2708_CHICHI.04_CHY034V.AT2
2739	Chi-Chi, Taiwan-04 CHY080 1999	6.2	12.44	496.21	strike slip	5.7	1.99	RSN2739_CHICHI.04_CHY080N.AT2 RSN2739_CHICHI.04_CHY080E.AT2 RSN2739_CHICHI.04_CHY080V.AT2
3564	Taiwan SMART1(5) SMART1 M05 1981	5.9	24.67	306.38	Reverse	2.9	1.74	RSN3564_SMART1.05_05M05EW.AT RSN3564_SMART1.05_05M05NS.AT2 RSN3564_SMART1.05_05M05DN.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	1.17	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
3710	Whittier Narrows-02 LA - E Vernon Ave 1987	5.27	12.37	283.14	Reverse O	4.7	2.78	RSN3710_WHITTIER.B_B-VER083.AT2 RSN3710_WHITTIER.B_B-VER173.AT2 RSN3710_WHITTIER.B_B-VER-UP.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	1.34	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
4104	Parkfield-02, CA Parkfield - Cholame 4AW 2004	6	4.81	283.38	strike slip	1.6	1.06	RSN4104_PARK2004_C4A090.AT2 RSN4104_PARK2004_C4A360.AT2 RSN4104_PARK2004_C4A-UP.AT2
4107	Parkfield-02, CA Parkfield - Fault Zone 1 2004	6	0.02	178.27	strike slip	2.4	0.53	RSN4107_PARK2004_COW090.AT2 RSN4107_PARK2004_COW360.AT2 RSN4107_PARK2004_COW-UP.AT2
4136	Parkfield-02, CA Parkfield - Vineyard Cany 5W 2004	6	9.2	320.39	strike slip	4.3	2.14	RSN4136_PARK2004_VC5090.AT2 RSN4136_PARK2004_VC5360.AT2 RSN4136_PARK2004_VC5-UP.AT2
4410	Umbria Marche (aftershock 17), Italy Gubbio-Piana 1998	5.1	18.3	492	Normal	6.6	3.96	RSN4410_UBMARCHE.P_R-GBP000.A RSN4410_UBMARCHE.P_R-GBP090.A RSN4410_UBMARCHE.P_R-GBP-UP.A
4462	L'Aquila, Italy Avezzano 2009	6.3	23.67	199	Normal	7.1	4.55	RSN4462_L-AQUILA_BI016XTE.AT2 RSN4462_L-AQUILA_BI016YLN.AT2 RSN4462_L-AQUILA_BI016ZUP.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.83	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2

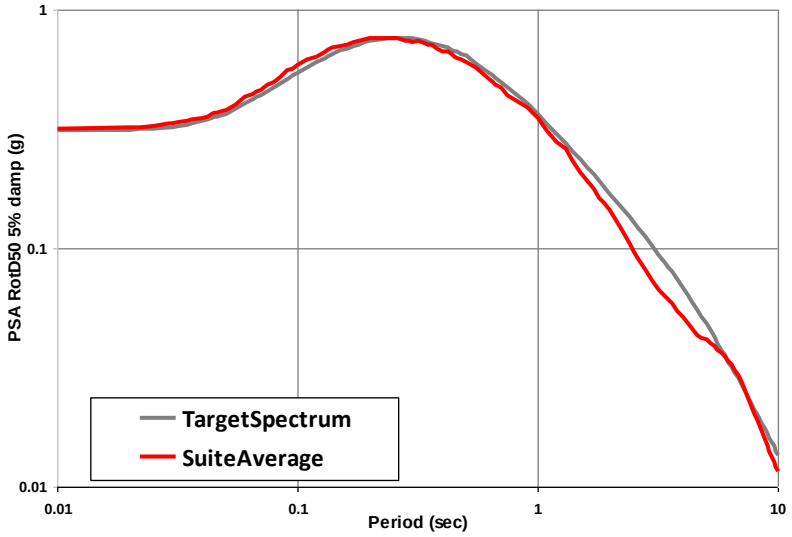
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	1.43	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
4886	Chuetsu-oki Tamati Yone Izumozaki 2007	6.8	0	338.32	Reverse	6.3	0.53	RSN4886_CHUETSU_6CB51NS.AT2 RSN4886_CHUETSU_6CB51EW.AT2 RSN4886_CHUETSU_6CB51UD.AT2
5776	Iwate Kami, Miyagi Miyazaki City 2008	6.9	25.15	477.55	Reverse	7.6	1.79	RSN5776_IWATE_54010NS.AT2 RSN5776_IWATE_54010EW.AT2 RSN5776_IWATE_54010UD.AT2
5975	El Mayor-Cucapah Calexico Fire Station 2010	7.2	19.12	231.23	strike slip	18.6	1.05	RSN5975_SIERRA.MEX_CXO360.AT2 RSN5975_SIERRA.MEX_CXO090.AT2 RSN5975_SIERRA.MEX_CXO-UP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	1.22	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.74	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8627	40204628 Milpitas Fire Station 4 2007	5.45	11.22	263.76	strike slip	5	2.68	RSN8627_40204628_N1788HNN.AT2 RSN8627_40204628_N1788HNE.AT2 RSN8627_40204628_N1788HNZ.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	3.17	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	4.77	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.24	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
148	Coyote Lake Gilroy Array #3 1979	5.74	6.75	349.85	strike slip	2.1	1.6	RSN148_COYOTELK_G03050.AT2 RSN148_COYOTELK_G03140.AT2 RSN148_COYOTELK_G03-UP.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	3.56	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.1	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
397	Coalinga-04 Coalinga-14th & Elm (Old CHP) 1983	5.18	10.04	286.41	Reverse	2.1	2.56	RSN397_COALINGA_C-CHP000.AT2 RSN397_COALINGA_C-CHP090.AT2 RSN397_COALINGA_C-CHP-UP.AT2
414	Coalinga-05 Sulphur Baths (temp) 1983	5.77	9.75	617.43	Reverse	2.6	2.86	RSN414_COALINGA_D-CSU000.AT2 RSN414_COALINGA_D-CSU090.AT2 RSN414_COALINGA_D-CSU-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.99	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
754	Loma Prieta Coyote Lake Dam (Downst) 1989	6.93	20.44	295.01	Reverse O	4.8	1.84	RSN754_LOMAP_CLD195.AT2 RSN754_LOMAP_CLD285.AT2 RSN754_LOMAP_CLD-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.01	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	1.78	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2

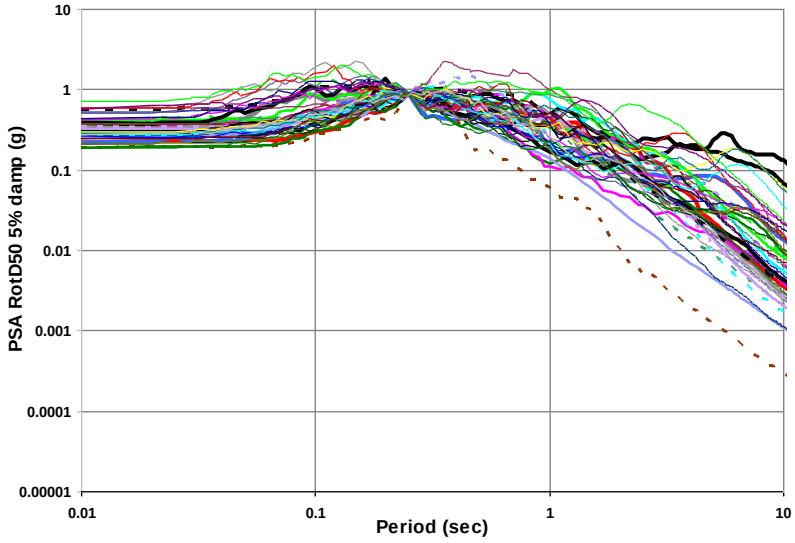
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	1.89	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
963	Northridge-01 Castaic - Old Ridge Route 1994	6.69	20.11	450.28	Reverse	5.1	0.52	RSN963_NORTHR_ORR090.AT2 RSN963_NORTHR_ORR360.AT2 RSN963_NORTHR_ORR-UP.AT2
1049	Northridge-01 Pacific Palisades - Sunset 1994	6.69	13.34	191.06	Reverse	5.8	0.69	RSN1049_NORTHR_SUN190.AT2 RSN1049_NORTHR_SUN280.AT2 RSN1049_NORTHR_SUN-UP.AT2
1115	Kobe, Japan Sakai 1995	6.9	28.08	256	strike slip	11.6	1.65	RSN1115_KOBE_SKI000.AT2 RSN1115_KOBE_SKI090.AT2 RSN1115_KOBE_SKI-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.49	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.69	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.17	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	1.53	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1485	Chi-Chi, Taiwan TCU045 1999	7.62	26	704.64	Reverse O	8.1	0.75	RSN1485_CHICHI_TCU045-E.AT2 RSN1485_CHICHI_TCU045-N.AT2 RSN1485_CHICHI_TCU045-V.AT2
1491	Chi-Chi, Taiwan TCU051 1999	7.62	7.64	350.06	Reverse O	18.7	1.42	RSN1491_CHICHI_TCU051-E.AT2 RSN1491_CHICHI_TCU051-N.AT2 RSN1491_CHICHI_TCU051-V.AT2
2650	Chi-Chi, Taiwan-03 TCU116 1999	6.2	21.09	493.09	Reverse	4.7	2.04	RSN2650_CHICHI.03_TCU116N.AT2 RSN2650_CHICHI.03_TCU116E.AT2 RSN2650_CHICHI.03_TCU116V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.83	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	1.44	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2

Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
3575	Taiwan SMART1(5) SMART1 O06 1981	5.9	23.48	293.46	Reverse	2.5	2.75	RSN3575_SMART1.05_05O06EW.AT2 RSN3575_SMART1.05_05O06NS.AT2 RSN3575_SMART1.05_05O06DN.AT2
4096	Parkfield-02, CA Bear Valley Ranch, Parkfield, CA, USA 2004	6	3.38	527.95	strike slip	2.3	2.04	RSN4096_PARK2004_61022-90.AT2 RSN4096_PARK2004_61022360.AT2 RSN4096_PARK2004_61022-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	2.12	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	1.38	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	0.81	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.31	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	1.81	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
4862	Chuetsu-oki Shiura Nagaoka 2007	6.8	10.61	336.93	Reverse	8.5	2.31	RSN4862_CHUETSU_65035NS.AT2 RSN4862_CHUETSU_65035EW.AT2 RSN4862_CHUETSU_65035UD.AT2
4879	Chuetsu-oki Yan Sakuramachi City watershed 2007	6.8	12.98	265.82	Reverse	6.1	1.72	RSN4879_CHUETSU_65084NS.AT2 RSN4879_CHUETSU_65084EW.AT2 RSN4879_CHUETSU_65084UD.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	1.76	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5259	Chuetsu-oki NIG013 2007	6.8	27.92	174.55	Reverse	12.3	2.21	RSN5259_CHUETSU_NIG013NS.AT2 RSN5259_CHUETSU_NIG013EW.AT2 RSN5259_CHUETSU_NIG013UD.AT2
5284	Chuetsu-oki NIGH11 2007	6.8	21.19	375	Reverse	9.2	2.93	RSN5284_CHUETSU_NIGH11NS.AT2 RSN5284_CHUETSU_NIGH11EW.AT2 RSN5284_CHUETSU_NIGH11UD.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	1.1	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2

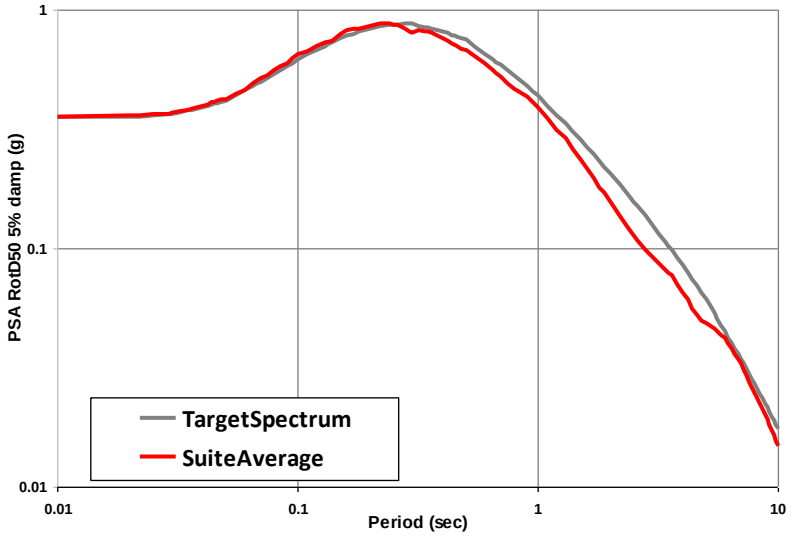
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
5975	El Mayor-Cucapah Calexico Fire Station 2010	7.2	19.12	231.23	strike slip	18.6	1.29	RSN5975_SIERRA.MEX_CXO360.AT2 RSN5975_SIERRA.MEX_CXO090.AT2 RSN5975_SIERRA.MEX_CXO-UP.AT2
6013	El Mayor-Cucapah El Centro - Meadows Union School 2010	7.2	27.81	276.25	strike slip	15.3	1.44	RSN6013_SIERRA.MEX_2027B360.AT RSN6013_SIERRA.MEX_2027A090.AT RSN6013_SIERRA.MEX_2027C-UP.AT
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	1.51	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	1.34	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
7232	Wenchuan, China-08 Anxianyongan 2008	5.2	22.15	511.16	Reverse	2.8	4.98	RSN7232_WENCHUAN.08_51AXYNS. RSN7232_WENCHUAN.08_51AXYEW RSN7232_WENCHUAN.08_51AXYUD.
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.78	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8896	14383980 Azusa - Foothill & San Gabriel 2008	5.39	22.19	363.11	Reverse O	1.5	4.05	RSN8896_14383980_23178360.AT2 RSN8896_14383980_23178090.AT2 RSN8896_14383980_23178-UP.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.79	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.27	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.51	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
223	Livermore-02 San Ramon - Eastman Kodak 1980	5.42	14.31	377.51	strike slip	2.1	2	RSN223_LIVERMOR_B-KOD180.AT2 RSN223_LIVERMOR_B-KOD270.AT2 RSN223_LIVERMOR_B-KOD-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	2.24	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	2.53	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	4.06	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.25	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	1.95	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	1.16	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
529	N. Palm Springs North Palm Springs 1986	6.06	0	344.67	Reverse O	1.7	0.76	RSN529_PALMSPR_NPS210.AT2 RSN529_PALMSPR_NPS300.AT2 RSN529_PALMSPR_NPS-UP.AT2
553	Chalfant Valley-02 Long Valley Dam (Downst) 1986	6.19	18.3	537.16	strike slip	6	3.93	RSN553_CHALFANT.A_A-LVD000.AT2 RSN553_CHALFANT.A_A-LVD090.AT2 RSN553_CHALFANT.A_A-LVD-UP.AT2

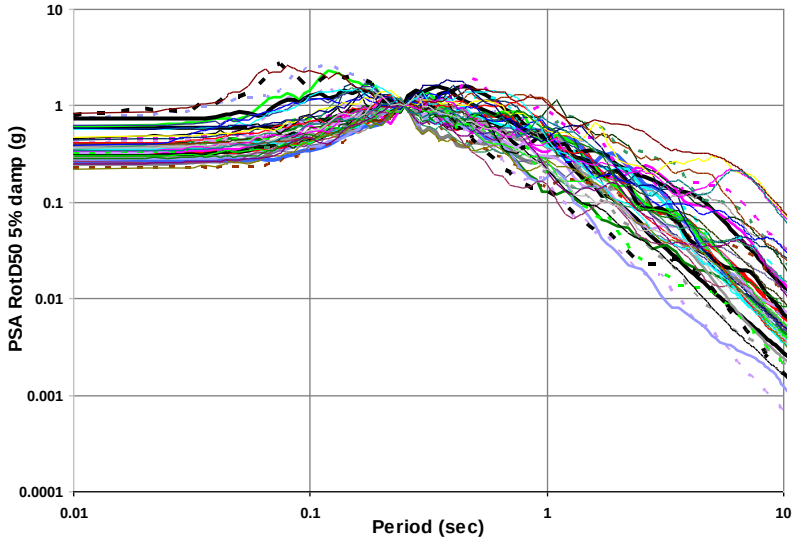
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.16	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	1.56	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
1011	Northridge-01 LA - Wonderland Ave 1994	6.69	15.11	1222.52	Reverse	5.1	2.67	RSN1011_NORTHR_WON095.AT2 RSN1011_NORTHR_WON185.AT2 RSN1011_NORTHR_WON-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.79	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	2.07	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1499	Chi-Chi, Taiwan TCU060 1999	7.62	8.51	375.42	Reverse O	19.1	2.39	RSN1499_CHICHI_TCU060-E.AT2 RSN1499_CHICHI_TCU060-N.AT2 RSN1499_CHICHI_TCU060-V.AT2
1674	Northridge-03 Tarzana - Cedar Hill A 1994	5.2	18.46	257.21	Reverse	8.2	3.07	RSN1674_NORTH009_TAR090.AT2 RSN1674_NORTH009_TAR360.AT2 RSN1674_NORTH009_TAR-UP.AT2
2623	Chi-Chi, Taiwan-03 TCU072 1999	6.2	21.18	468.14	Reverse	6.2	2.15	RSN2623_CHICHI.03_TCU072N.AT2 RSN2623_CHICHI.03_TCU072E.AT2 RSN2623_CHICHI.03_TCU072V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.94	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3691	Whittier Narrows-02 Buena Park - La Palma 1987	5.27	22.93	270.96	Reverse O	0.8	1.78	RSN3691_WHITTIER.B_B-BPK090.AT2 RSN3691_WHITTIER.B_B-BPK180.AT2 RSN3691_WHITTIER.B_B-BPK-UP.AT2
3749	Cape Mendocino Fortuna Fire Station 1992	7.01	16.54	355.18	Reverse	4.8	1.22	RSN3749_CAPEMEND_FFT270.AT2 RSN3749_CAPEMEND_FFT360.AT2 RSN3749_CAPEMEND_FFT-UP.AT2
4013	San Simeon, CA San Antonio Dam - Toe 2003	6.52	16.17	509.04	Reverse	6.6	3.69	RSN4013_SANSIMEO_36258021.AT2 RSN4013_SANSIMEO_36258111.AT2 RSN4013_SANSIMEO_36258-UP.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.98	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2

Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
4096	Parkfield-02, CA Bear Valley Ranch, Parkfield, CA, USA 2004	6	3.38	527.95	strike slip	2.3	2.33	RSN4096_PARK2004_61022-90.AT2 RSN4096_PARK2004_61022360.AT2 RSN4096_PARK2004_61022-UP.AT2
4102	Parkfield-02, CA Parkfield - Cholame 3W 2004	6	2.55	230.57	strike slip	1.6	1.37	RSN4102_PARK2004_C03090.AT2 RSN4102_PARK2004_C03360.AT2 RSN4102_PARK2004_C03-UP.AT2
4121	Parkfield-02, CA Parkfield - Gold Hill 3E 2004	6	5.79	450.61	strike slip	4.7	3.06	RSN4121_PARK2004_GH3090.AT2 RSN4121_PARK2004_GH3360.AT2 RSN4121_PARK2004_GH3-UP.AT2
4127	Parkfield-02, CA Parkfield - Stone Corral 2E 2004	6	5.23	566.33	strike slip	2.2	3.16	RSN4127_PARK2004_SC2090.AT2 RSN4127_PARK2004_SC2360.AT2 RSN4127_PARK2004_SC2-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	2.42	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	1	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.36	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4840	Chuetsu-oki Joetsu Kita 2007	6.8	28.97	334.01	Reverse	14.9	2.12	RSN4840_CHUETSU_65003NS.AT2 RSN4840_CHUETSU_65003EW.AT2 RSN4840_CHUETSU_65003UD.AT2
4843	Chuetsu-oki Matsushiro Tokamachi 2007	6.8	18.16	640.14	Reverse	6.5	1.94	RSN4843_CHUETSU_65006NS.AT2 RSN4843_CHUETSU_65006EW.AT2 RSN4843_CHUETSU_65006UD.AT2
4862	Chuetsu-oki Shiura Nagaoka 2007	6.8	10.61	336.93	Reverse	8.5	2.64	RSN4862_CHUETSU_65035NS.AT2 RSN4862_CHUETSU_65035EW.AT2 RSN4862_CHUETSU_65035UD.AT2
5775	Iwate Tamati Ono 2008	6.9	28.9	561.59	Reverse	8	2.19	RSN5775_IWATE_54009NS.AT2 RSN5775_IWATE_54009EW.AT2 RSN5775_IWATE_54009UD.AT2
5780	Iwate Iwadeyama 2008	6.9	20.77	345.55	Reverse	7.2	2.1	RSN5780_IWATE_54015NS.AT2 RSN5780_IWATE_54015EW.AT2 RSN5780_IWATE_54015UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.44	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2

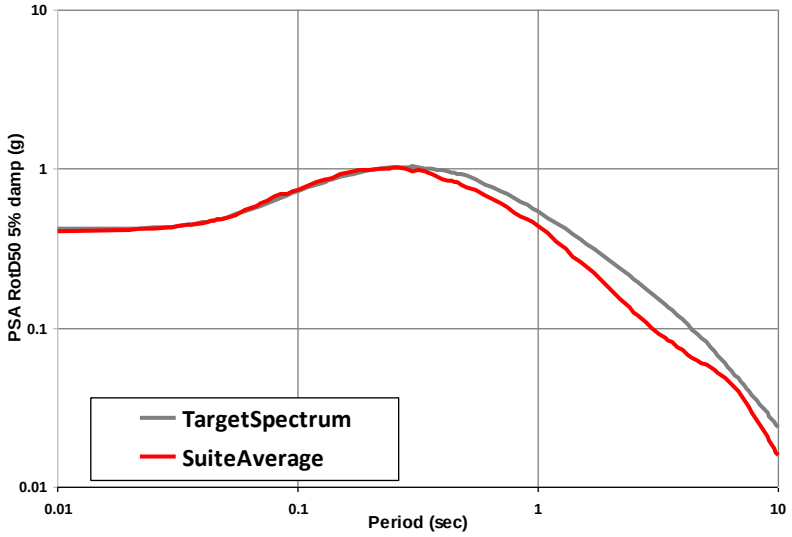
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	1.19	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6928	Darfield, New Zealand LPCC 2010	7	25.21	649.67	strike slip	7.5	1.41	RSN6928_DARFIELD_LPCCN80E.AT2 RSN6928_DARFIELD_LPCCS10E.AT2 RSN6928_DARFIELD_LPCCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	1.72	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	1.52	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.04	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8119	Christchurch, New Zealand Pages Road Pumping Station 2011	6.2	1.92	206	Reverse O	2.5	0.88	RSN8119_CCHURCH_PRPCS.AT2 RSN8119_CCHURCH_PRPCW.AT2 RSN8119_CCHURCH_PRPCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.88	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.6	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	1.4	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.47	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	2.29	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
400	Coalinga-04 Oil Fields Fire Station - Pad 1983	5.18	6.7	474.15	Reverse	2.6	4.08	RSN400_COALINGA_C-OLP270.AT2 RSN400_COALINGA_C-OLP360.AT2 RSN400_COALINGA_C-OLP-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	0.98	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
529	N. Palm Springs North Palm Springs 1986	6.06	0	344.67	Reverse O	1.7	0.9	RSN529_PALMSPR_NPS210.AT2 RSN529_PALMSPR_NPS300.AT2 RSN529_PALMSPR_NPS-UP.AT2
540	N. Palm Springs Whitewater Trout Farm 1986	6.06	0	425.02	Reverse O	1.8	0.75	RSN540_PALMSPR_WWT180.AT2 RSN540_PALMSPR_WWT270.AT2 RSN540_PALMSPR_WWT-UP.AT2
558	Chalfant Valley-02 Zack Brothers Ranch 1986	6.19	6.44	316.19	strike slip	2.4	0.98	RSN558_CHALFANT.A_A-ZAK270.AT2 RSN558_CHALFANT.A_A-ZAK360.AT2 RSN558_CHALFANT.A_A-ZAK-UP.AT2
690	Whittier Narrows-01 San Gabriel - E Grand Ave 1987	5.99	0	401.37	Reverse O	2.5	2.17	RSN690_WHITTIER.A_A-GRN180.AT2 RSN690_WHITTIER.A_A-GRN270.AT2 RSN690_WHITTIER.A_A-GRN-UP.AT2
724	Superstition Hills-02 Plaster City 1987	6.54	22.25	316.64	strike slip	9	3.14	
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.36	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2

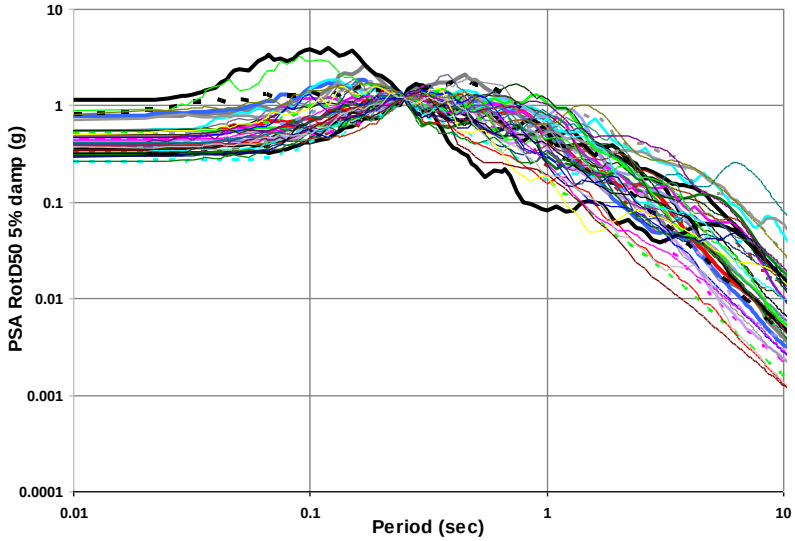
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	2.53	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.93	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.49	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.93	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.56	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1670	Northridge-03 Newhall - Fire Sta 1994	5.2	7.65	269.14	Reverse	1.5	3.44	RSN1670_NORTH009_NWH090.AT2 RSN1670_NORTH009_NWH180.AT2 RSN1670_NORTH009_NWH-UP.AT2
2623	Chi-Chi, Taiwan-03 TCU072 1999	6.2	21.18	468.14	Reverse	6.2	2.53	RSN2623_CHICHI.03_TCU072N.AT2 RSN2623_CHICHI.03_TCU072E.AT2 RSN2623_CHICHI.03_TCU072V.AT2
2650	Chi-Chi, Taiwan-03 TCU116 1999	6.2	21.09	493.09	Reverse	4.7	2.75	RSN2650_CHICHI.03_TCU116N.AT2 RSN2650_CHICHI.03_TCU116E.AT2 RSN2650_CHICHI.03_TCU116V.AT2
2655	Chi-Chi, Taiwan-03 TCU122 1999	6.2	18.1	475.46	Reverse	2.8	1.74	RSN2655_CHICHI.03_TCU122N.AT2 RSN2655_CHICHI.03_TCU122E.AT2 RSN2655_CHICHI.03_TCU122V.AT2
2708	Chi-Chi, Taiwan-04 CHY034 1999	6.2	28.45	378.75	strike slip	5.4	4.69	RSN2708_CHICHI.04_CHY034N.AT2 RSN2708_CHICHI.04_CHY034W.AT2 RSN2708_CHICHI.04_CHY034V.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	1.94	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
3979	San Simeon, CA Cambria - Hwy 1 Caltrans Bridge 2003	6.52	6.97	362.42	Reverse	6.3	1.98	RSN3979_SANSIMEO_37737090.AT2 RSN3979_SANSIMEO_37737360.AT2 RSN3979_SANSIMEO_37737-UP.AT2
4110	Parkfield-02, CA Parkfield - Fault Zone 6 2004	6	0.87	266.65	strike slip	3.2	3.59	RSN4110_PARK2004_Z06090.AT2 RSN4110_PARK2004_Z06360.AT2 RSN4110_PARK2004_Z06-UP.AT2

Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
4136	Parkfield-02, CA Parkfield - Vineyard Cany 5W 2004	6	9.2	320.39	strike slip	4.3	3.55	RSN4136_PARK2004_VC5090.AT2 RSN4136_PARK2004_VC5360.AT2 RSN4136_PARK2004_VC5-UP.AT2
4139	Parkfield-02, CA PARKFIELD - UPSAR 02 2004	6	9.49	416.82	strike slip	5.4	1.33	RSN4139_PARK2004_UP02090.AT2 RSN4139_PARK2004_UP02360.AT2 RSN4139_PARK2004_UP02-UP.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	1.86	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4336	Umbria Marche (foreshock), Italy Borgo-Cerreto Torre 1997	5.7	19.65	519	Normal	2.2	4.18	RSN4336_UBMARCHE.P_B-BCT000.A RSN4336_UBMARCHE.P_B-BCT090.A RSN4336_UBMARCHE.P_B-BCT-UP.A
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.42	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4757	Wenchuan, China Dayiyinping 2008	7.9	28.59	378.93	Reverse O	53.2	2.07	RSN4757_WENCHUAN_UA0921.AT2 RSN4757_WENCHUAN_UA0920.AT2 RSN4757_WENCHUAN_UA0919.AT2
4781	Wenchuan, China Jiangyouchonghua 2008	7.9	27.23	430.47	Reverse O	18.4	1.55	RSN4781_WENCHUAN_UA1027.AT2 RSN4781_WENCHUAN_UA1028.AT2 RSN4781_WENCHUAN_UA1029.AT2
4787	Wenchuan, China Jiangyoudizhentai 2008	7.9	22.63	475.59	Reverse O	27.2	0.73	RSN4787_WENCHUAN_UA1048.AT2 RSN4787_WENCHUAN_UA1049.AT2 RSN4787_WENCHUAN_UA1050.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	2.43	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
4866	Chuetsu-oki Kawanishi Izumozaki 2007	6.8	0	338.32	Reverse	6.5	1.1	RSN4866_CHUETSU_65039NS.AT2 RSN4866_CHUETSU_65039EW.AT2 RSN4866_CHUETSU_65039UD.AT2
5260	Chuetsu-oki NIG014 2007	6.8	21.37	128.12	Reverse	18.7	3.8	RSN5260_CHUETSU_NIG014NS.AT2 RSN5260_CHUETSU_NIG014EW.AT2 RSN5260_CHUETSU_NIG014UD.AT2
5267	Chuetsu-oki NIG021 2007	6.8	24.31	418.5	Reverse	3.5	1	RSN5267_CHUETSU_NIG021NS.AT2 RSN5267_CHUETSU_NIG021EW.AT2 RSN5267_CHUETSU_NIG021UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.51	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2

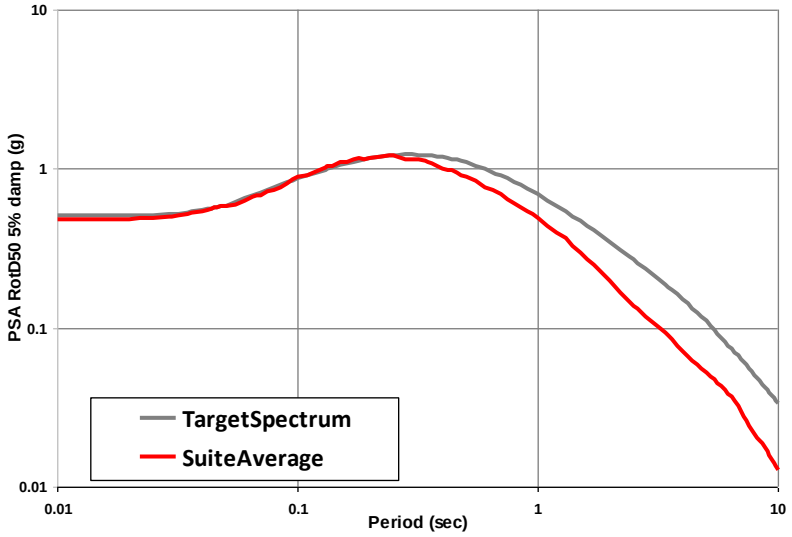
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
5829	El Mayor-Cucapah RIITO 2010	7.2	13.7	242.05	strike slip	15.6	0.99	RSN5829_SIERRA.MEX_RII000.AT2 RSN5829_SIERRA.MEX_RII090.AT2 RSN5829_SIERRA.MEX_RII--V.AT2
5975	El Mayor-Cucapah Calexico Fire Station 2010	7.2	19.12	231.23	strike slip	18.6	1.73	RSN5975_SIERRA.MEX_CXO360.AT2 RSN5975_SIERRA.MEX_CXO090.AT2 RSN5975_SIERRA.MEX_CXO-UP.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	1.4	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6927	Darfield, New Zealand LINC 2010	7	5.07	263.2	strike slip	8	1.85	RSN6927_DARFIELD_LINCN23E.AT2 RSN6927_DARFIELD_LINCN67W.AT2 RSN6927_DARFIELD_LINCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	1.79	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.22	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	1.04	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.38	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	2.63	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
169	Imperial Valley-06 Delta 1979	6.53	22.03	242.05	strike slip	23.4	2.1	RSN169_IMPVALL.H_H-DLT262.AT2 RSN169_IMPVALL.H_H-DLT352.AT2 RSN169_IMPVALL.H_H-DLTDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.71	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
187	Imperial Valley-06 Parachute Test Site 1979	6.53	12.69	348.69	strike slip	6.5	4.26	RSN187_IMPVALL.H_H-PTS225.AT2 RSN187_IMPVALL.H_H-PTS315.AT2 RSN187_IMPVALL.H_H-PTS-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	3.53	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	2.73	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
346	Coalinga-01 Parkfield - Fault Zone 8 1983	6.36	28.58	308.84	Reverse	5.1	3.56	RSN346_COALINGA.H_H-Z08000.AT2 RSN346_COALINGA.H_H-Z08090.AT2 RSN346_COALINGA.H_H-Z08-UP.AT2
369	Coalinga-01 Slack Canyon 1983	6.36	25.98	648.09	Reverse	4.3	3.46	RSN369_COALINGA.H_H-SCN045.AT2 RSN369_COALINGA.H_H-SCN315.AT2 RSN369_COALINGA.H_H-SCN-UP.AT2
389	Coalinga-02 VEW (temp) 1983	5.09	1.89	456.13	Reverse	0.3	4.22	RSN389_COALINGA_A-VEW005.AT2 RSN389_COALINGA_A-VEW095.AT2 RSN389_COALINGA_A-VEW-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.58	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
559	Chalfant Valley-03 Bishop - LADWP South St 1986	5.65	24.3	303.47	strike slip	3	4.03	RSN559_CHALFANT.B_C-LAD180.AT2 RSN559_CHALFANT.B_C-LAD270.AT2 RSN559_CHALFANT.B_C-LAD-UP.AT2

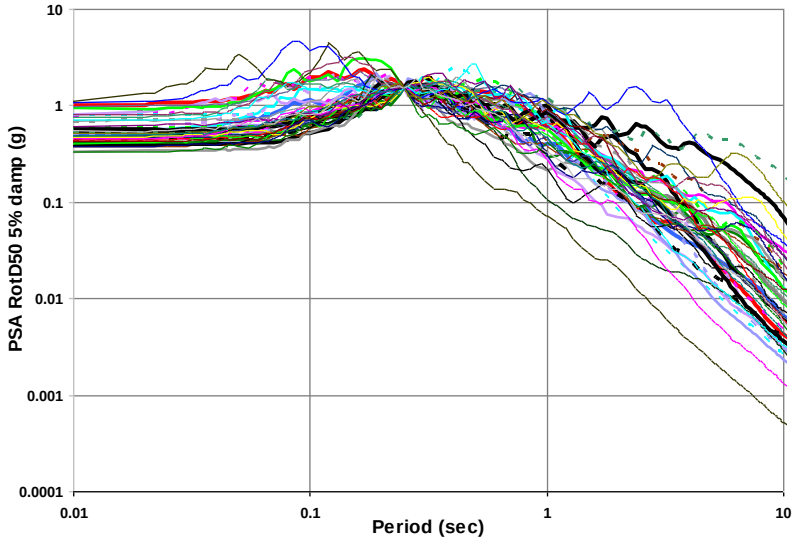
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
599	Whittier Narrows-01 Brea - S Flower Av 1987	5.99	18.39	322.75	Reverse O	3.3	4.38	
692	Whittier Narrows-01 Santa Fe Springs - E.Joslin 1987	5.99	11.47	339.06	Reverse O	1.6	0.97	RSN692_WHITTIER.A_A-EJS048.AT2 RSN692_WHITTIER.A_A-EJS318.AT2 RSN692_WHITTIER.A_A-EJS-UP.AT2
716	Whittier Narrows-02 San Marino - SW Academy 1987	5.27	4.42	379.43	Reverse O	0.6	1.94	RSN716_WHITTIER.B_B-SMA270.AT2 RSN716_WHITTIER.B_B-SMA360.AT2 RSN716_WHITTIER.B_B-SMA-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.62	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
998	Northridge-01 LA - N Westmoreland 1994	6.69	23.4	315.06	Reverse	5.5	1.05	RSN998_NORTHR_WST000.AT2 RSN998_NORTHR_WST270.AT2 RSN998_NORTHR_WST-UP.AT2
1003	Northridge-01 LA - Saturn St 1994	6.69	21.17	308.71	Reverse	5.3	1.75	RSN1003_NORTHR_STN020.AT2 RSN1003_NORTHR_STN110.AT2 RSN1003_NORTHR_STN-UP.AT2
1004	Northridge-01 LA - Sepulveda VA Hospital 1994	6.69	0	380.06	Reverse	4.5	0.62	RSN1004_NORTHR_SPV270.AT2 RSN1004_NORTHR_SPV360.AT2 RSN1004_NORTHR_SPV-UP.AT2
1051	Northridge-01 Pacoima Dam (upper left) 1994	6.69	4.92	2016.13	Reverse	3.1	0.56	RSN1051_NORTHR_PUL104.AT2 RSN1051_NORTHR_PUL194.AT2 RSN1051_NORTHR_PUL-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.11	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.86	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	2.44	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.98	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	2.87	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2

Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
2650	Chi-Chi, Taiwan-03 TCU116 1999	6.2	21.09	493.09	Reverse	4.7	3.26	RSN2650_CHICHI.03_TCU116N.AT2 RSN2650_CHICHI.03_TCU116E.AT2 RSN2650_CHICHI.03_TCU116V.AT2
3576	Taiwan SMART1(5) SMART1 O09 1981	5.9	25.59	329.08	Reverse	2.4	4.79	RSN3576_SMART1.05_05O09EW.AT2 RSN3576_SMART1.05_05O09NS.AT2 RSN3576_SMART1.05_05O09DN.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	2.64	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
4116	Parkfield-02, CA Parkfield - Fault Zone 14 2004	6	8.45	246.07	strike slip	2.2	0.77	RSN4116_PARK2004_Z14090.AT2 RSN4116_PARK2004_Z14360.AT2 RSN4116_PARK2004_Z14-UP.AT2
4130	Parkfield-02, CA Parkfield - Vineyard Cany 1E 2004	6	1.59	381.27	strike slip	2.6	1.88	RSN4130_PARK2004_PV1090.AT2 RSN4130_PARK2004_PV1360.AT2 RSN4130_PARK2004_PV1-UP.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	1.3	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.5	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4840	Chuetsu-oki Joetsu Kita 2007	6.8	28.97	334.01	Reverse	14.9	2.97	RSN4840_CHUETSU_65003NS.AT2 RSN4840_CHUETSU_65003EW.AT2 RSN4840_CHUETSU_65003UD.AT2
4863	Chuetsu-oki Nagaoka 2007	6.8	3.97	514.3	Reverse	9.5	1.75	RSN4863_CHUETSU_65036NS.AT2 RSN4863_CHUETSU_65036EW.AT2 RSN4863_CHUETSU_65036UD.AT2
4878	Chuetsu-oki Yahiko Village Yahagi 2007	6.8	19.73	223.12	Reverse	12.6	3.4	RSN4878_CHUETSU_65083NS.AT2 RSN4878_CHUETSU_65083EW.AT2 RSN4878_CHUETSU_65083UD.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	2.82	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.34	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	1.82	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2

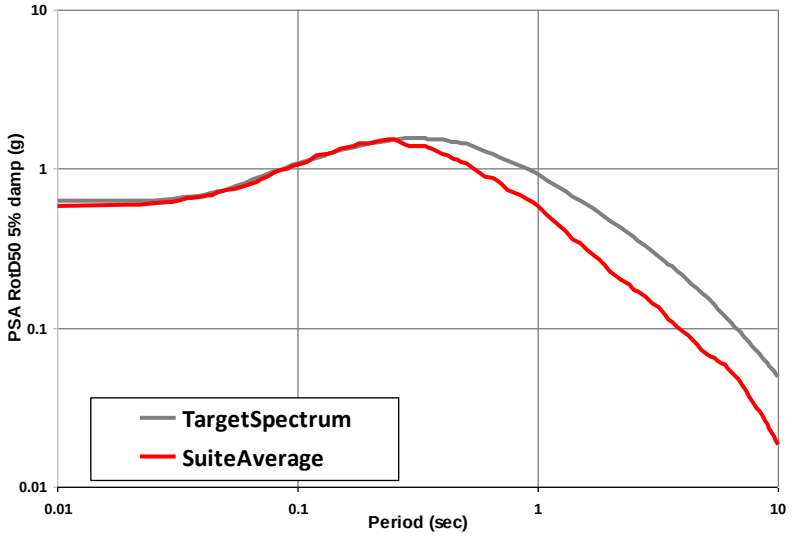
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
5807	Iwate Yuzama Yokobori 2008	6.9	27.1	570.62	Reverse	7.8	2.87	RSN5807_IWATE_55462NS.AT2 RSN5807_IWATE_55462EW.AT2 RSN5807_IWATE_55462UD.AT2
6915	Darfield, New Zealand Heathcote Valley Primary School 2010	7	24.36	422	strike slip	8.3	0.87	RSN6915_DARFIELD_HVSCS26W.AT2 RSN6915_DARFIELD_HVSCS64E.AT2 RSN6915_DARFIELD_HVSCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	2.13	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.45	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8119	Christchurch, New Zealand Pages Road Pumping Station 2011	6.2	1.92	206	Reverse O	2.5	1.23	RSN8119_CCHURCH_PRPCS.AT2 RSN8119_CCHURCH_PRPCW.AT2 RSN8119_CCHURCH_PRPCUP.AT2
8130	Christchurch, New Zealand Shirley Library 2011	6.2	5.58	207	Reverse O	4.3	1.22	RSN8130_CCHURCH_SHLCS40W.AT2 RSN8130_CCHURCH_SHLCS50E.AT2 RSN8130_CCHURCH_SHLCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	1.24	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
31	Parkfield Cholame - Shandon Array #8 1966	6.19	12.9	256.82	strike slip	4.7	3.72	RSN31_PARKF_C08050.AT2 RSN31_PARKF_C08320.AT2 RSN31_PARKF_C08DWN.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.39	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
156	Norcia, Italy Cascia 1979	5.9	1.41	585.04	Normal	2.5	4.34	RSN156_ITALY_F-CSC-NS.AT2 RSN156_ITALY_F-CSC-EW.AT2 RSN156_ITALY_F-CSC-UP.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	3.3	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.9	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
212	Livermore-01 Del Valle Dam (Toe) 1980	5.8	23.92	403.37	strike slip	3.2	3.73	RSN212_LIVERMOR_A-DVD156.AT2 RSN212_LIVERMOR_A-DVD246.AT2 RSN212_LIVERMOR_A-DVD-UP.AT2
239	Mammoth Lakes-03 Long Valley Dam (Upr L Abut) 1980	5.91	10.31	537.16	strike slip	4	2.36	RSN239_MAMMOTH.AH_A-LUL000.A RSN239_MAMMOTH.AH_A-LUL090.A RSN239_MAMMOTH.AH_A-LUL-UP.A
288	Irpinia, Italy-01 Brienza 1980	6.9	22.54	561.04	Normal	4.8	2.89	RSN288_ITALY_A-BRZ000.AT2 RSN288_ITALY_A-BRZ270.AT2 RSN288_ITALY_A-BRZ-UP.AT2
290	Irpinia, Italy-01 Mercato San Severino 1980	6.9	29.79	428.57	Normal	12.7	4.14	RSN290_ITALY_A-MER000.AT2 RSN290_ITALY_A-MER270.AT2 RSN290_ITALY_A-MER-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	4.44	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	2.2	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	3.43	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2

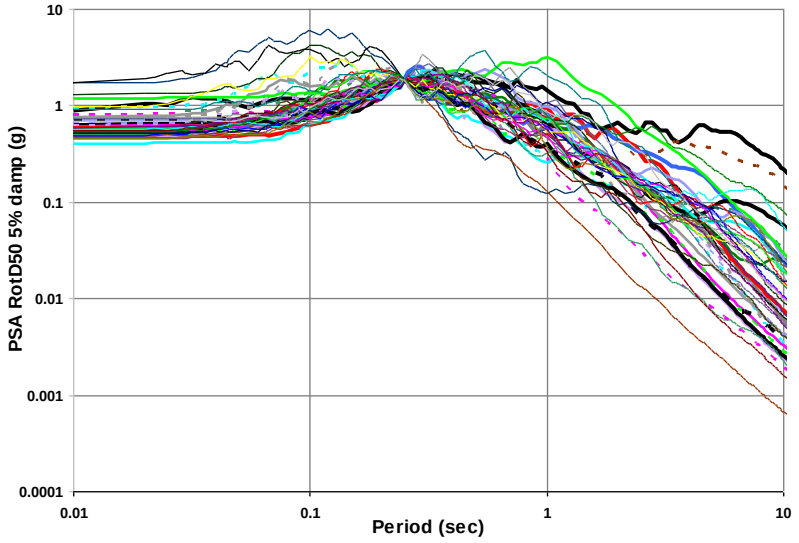
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
544	Chalfant Valley-01 Bishop - LADWP South St 1986	5.77	23.38	303.47	strike slip	10	4.5	RSN544_CHALFANT.B_B-LAD180.AT2 RSN544_CHALFANT.B_B-LAD270.AT2 RSN544_CHALFANT.B_B-LAD-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.99	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	2.44	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
637	Whittier Narrows-01 LA - N Figueroa St 1987	5.99	6	364.91	Reverse O	3.2	4.5	RSN637_WHITTIER.A_A-FIG058.AT2 RSN637_WHITTIER.A_A-FIG328.AT2 RSN637_WHITTIER.A_A-FIG-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	2.03	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
848	Landers Coolwater 1992	7.28	19.74	352.98	strike slip	4.8	1.76	RSN848_LANDERS_CLW-LN.AT2 RSN848_LANDERS_CLW-TR.AT2 RSN848_LANDERS_CLW-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	3.78	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.73	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1051	Northridge-01 Pacoima Dam (upper left) 1994	6.69	4.92	2016.13	Reverse	3.1	0.71	RSN1051_NORTHR_PUL104.AT2 RSN1051_NORTHR_PUL194.AT2 RSN1051_NORTHR_PUL-UP.AT2
1078	Northridge-01 Santa Susana Ground 1994	6.69	1.69	715.12	Reverse	4.1	1.86	
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.39	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1193	Chi-Chi, Taiwan CHY024 1999	7.62	9.62	427.73	Reverse O	12.6	2.32	RSN1193_CHICHI_CHY024-E.AT2 RSN1193_CHICHI_CHY024-N.AT2 RSN1193_CHICHI_CHY024-V.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	2.39	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2

Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	3.07	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	3.65	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	1.67	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1703	Northridge-06 Jensen Filter Plant Administrative Bui 1994	5.28	6.85	373.07	Reverse	1.6	3.33	RSN1703_NORTH392_JEN022.AT2 RSN1703_NORTH392_JEN292.AT2 RSN1703_NORTH392_JEN-UP.AT2
3564	Taiwan SMART1(5) SMART1 M05 1981	5.9	24.67	306.38	Reverse	2.9	4.3	RSN3564_SMART1.05_05M05EW.AT RSN3564_SMART1.05_05M05NS.AT2 RSN3564_SMART1.05_05M05DN.AT2
4102	Parkfield-02, CA Parkfield - Cholame 3W 2004	6	2.55	230.57	strike slip	1.6	2.4	RSN4102_PARK2004_C03090.AT2 RSN4102_PARK2004_C03360.AT2 RSN4102_PARK2004_C03-UP.AT2
4117	Parkfield-02, CA Parkfield - Fault Zone 15 2004	6	0.8	307.59	strike slip	4.1	3.29	RSN4117_PARK2004_Z15090.AT2 RSN4117_PARK2004_Z15360.AT2 RSN4117_PARK2004_Z15-UP.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	4.15	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4228	Niigata, Japan NIGH11 2004	6.63	6.27	375	Reverse	3.1	1.48	RSN4228_NIIGATA_NIGH11NS.AT2 RSN4228_NIIGATA_NIGH11EW.AT2 RSN4228_NIIGATA_NIGH11UD.AT2
4345	Umbria Marche, Italy Assisi-Stallone 1997	6	16.55	376.6	Normal	2.3	2.83	RSN4345_UBMARCHE.P_A-AAL018.A RSN4345_UBMARCHE.P_A-AAL108.A RSN4345_UBMARCHE.P_A-AAL-UP.A
4356	Umbria Marche (aftershock 3), Italy Nocera Umbra 1997	5.3	7.67	428	Normal	1.7	4.21	RSN4356_UBMARCHE.P_C-NCR000.A RSN4356_UBMARCHE.P_C-NCR270.A RSN4356_UBMARCHE.P_C-NCR-DN.A
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.63	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4881	Chuetsu-oki Nagaoka Kouiti Town 2007	6.8	11.61	294.38	Reverse	8.2	4.24	RSN4881_CHUETSU_65301NS.AT2 RSN4881_CHUETSU_65301EW.AT2 RSN4881_CHUETSU_65301UD.AT2

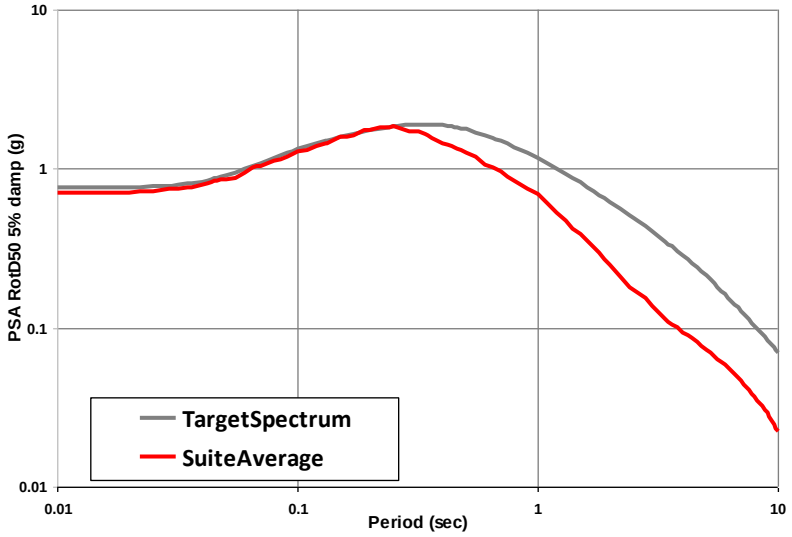
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.42	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5267	Chuetsu-oki NIG021 2007	6.8	24.31	418.5	Reverse	3.5	1.49	RSN5267_CHUETSU_NIG021NS.AT2 RSN5267_CHUETSU_NIG021EW.AT2 RSN5267_CHUETSU_NIG021UD.AT2
5664	Iwate MYG005 2008	6.9	10.71	361.24	Reverse	11.9	2.42	RSN5664_IWATE_MYG005NS.AT2 RSN5664_IWATE_MYG005EW.AT2 RSN5664_IWATE_MYG005UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.93	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	2.68	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.83	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	1.56	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.68	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.08	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
232	Mammoth Lakes-01 Mammoth Lakes H. S. 1980	6.06	4.48	346.82	Normal O	5.3	3.32	RSN232_MAMMOTH.I_I-MLS254.AT2 RSN232_MAMMOTH.I_I-MLS344.AT2 RSN232_MAMMOTH.I_I-MLS-UP.AT2
233	Mammoth Lakes-02 Convict Creek 1980	5.69	2.91	382.12	strike slip	2.6	4.65	RSN233_MAMMOTH.J_J-CVK090.AT2 RSN233_MAMMOTH.J_J-CVK180.AT2 RSN233_MAMMOTH.J_J-CVK-UP.AT2
288	Irpinia, Italy-01 Brienza 1980	6.9	22.54	561.04	Normal	4.8	3.49	RSN288_ITALY_A-BRZ000.AT2 RSN288_ITALY_A-BRZ270.AT2 RSN288_ITALY_A-BRZ-UP.AT2
309	Taiwan SMART1(5) SMART1 M01 1981	5.9	26.31	268.37	Reverse	3	3.42	RSN309_SMART1.05_05M01EW.AT2 RSN309_SMART1.05_05M01NS.AT2 RSN309_SMART1.05_05M01DN.AT2
317	Westmorland Salton Sea Wildlife Refuge 1981	5.9	7.57	191.14	strike slip	5	3.2	RSN317_WESMORL_WLF225.AT2 RSN317_WESMORL_WLF315.AT2 RSN317_WESMORL_WLF-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	2.66	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	4.14	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	2.47	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	1.77	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	4.46	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2

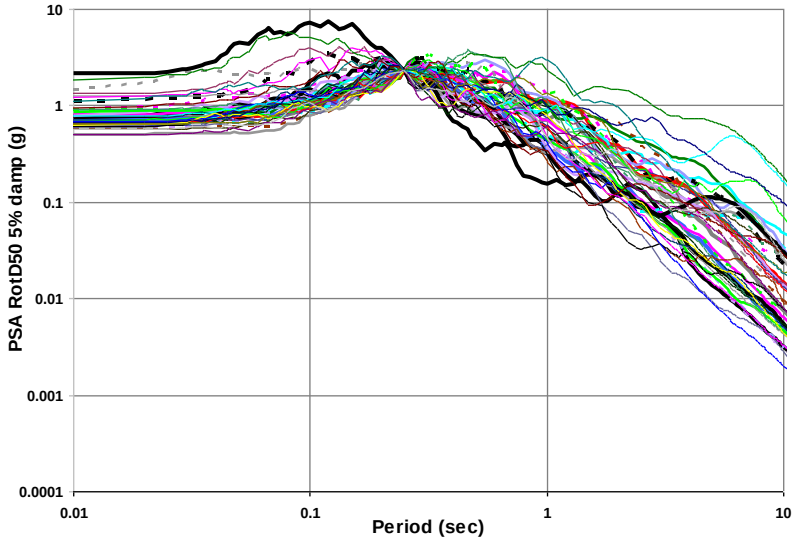
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
495	Nahanni, Canada Site 1 1985	6.76	2.48	605.04	Reverse	7.1	1.46	RSN495_NAHANNI_S1010.AT2 RSN495_NAHANNI_S1280.AT2 RSN495_NAHANNI_S1-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.4	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	2.94	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	2.06	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
986	Northridge-01 LA - Brentwood VA Hospital 1994	6.69	12.92	416.58	Reverse	6	3.82	RSN986_NORTHR_BVA195.AT2 RSN986_NORTHR_BVA285.AT2 RSN986_NORTHR_BVA-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	2.52	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.68	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	2.82	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	4.41	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1485	Chi-Chi, Taiwan TCU045 1999	7.62	26	704.64	Reverse O	8.1	1.82	RSN1485_CHICHI_TCU045-E.AT2 RSN1485_CHICHI_TCU045-N.AT2 RSN1485_CHICHI_TCU045-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	4.4	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	1.49	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1549	Chi-Chi, Taiwan TCU129 1999	7.62	1.83	511.18	Reverse O	16.6	1.02	RSN1549_CHICHI_TCU129-E.AT2 RSN1549_CHICHI_TCU129-N.AT2 RSN1549_CHICHI_TCU129-V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**04 SanJose** **270** **1000**							**CS Set**
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	4.35	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
1723	Northridge-06 Pacoima Kagel Canyon 1994	5.28	10.21	508.08	Reverse	2.4	4.23	RSN1723_NORTH392_PKC090.AT2 RSN1723_NORTH392_PKC360.AT2 RSN1723_NORTH392_PKC-UP.AT2
3548	Loma Prieta Los Gatos - Lexington Dam 1989	6.93	3.22	1070.34	Reverse O	2	2.71	RSN3548_LOMAP_LEX000.AT2 RSN3548_LOMAP_LEX090.AT2 RSN3548_LOMAP_LEX-UP.AT2
3561	Taiwan SMART1(5) SMART1 M02 1981	5.9	26.06	306.78	Reverse	2.9	4.35	RSN3561_SMART1.05_05M02EW.AT RSN3561_SMART1.05_05M02NS.AT2 RSN3561_SMART1.05_05M02DN.AT2
3570	Taiwan SMART1(5) SMART1 M12 1981	5.9	26.5	275.82	Reverse	2	3.79	RSN3570_SMART1.05_05M12EW.AT RSN3570_SMART1.05_05M12NS.AT2 RSN3570_SMART1.05_05M12DN.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	3.5	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
3753	Landers Fun Valley 1992	7.28	25.02	388.63	strike slip	22.4	3.56	RSN3753_LANDERS_FVR045.AT2 RSN3753_LANDERS_FVR135.AT2 RSN3753_LANDERS_FVR-UP.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	4.01	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	2.53	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4362	Umbria Marche (aftershock 1), Italy Assisi-Stallone 1997	5.5	16.84	376.6	Normal	1.4	3.36	RSN4362_UBMARCHE.P_E-AAL018.A RSN4362_UBMARCHE.P_E-AAL108.A RSN4362_UBMARCHE.P_E-AAL-DN.A
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.76	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.51	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	2.76	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2

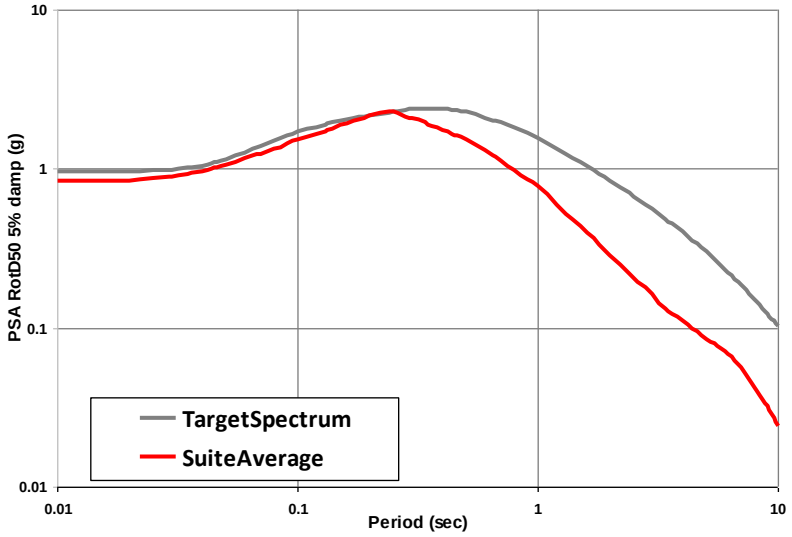
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
5270	Chuetsu-oki NIG024 2007	6.8	20.6	375.22	Reverse	4.2	3.29	RSN5270_CHUETSU_NIG024NS.AT2 RSN5270_CHUETSU_NIG024EW.AT2 RSN5270_CHUETSU_NIG024UD.AT2
5657	Iwate IWTH25 2008	6.9	0	506.44	Reverse	6.9	0.71	RSN5657_IWATE_IWTH25NS.AT2 RSN5657_IWATE_IWTH25EW.AT2 RSN5657_IWATE_IWTH25UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.93	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	1.12	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	2.63	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	3.24	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	2.2	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2

Site	**04 SanJose**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	04 SanJose	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
125	Friuli, Italy-01 Tolmezzo 1976	6.5	14.97	505.23	Reverse	2.5	2.5	RSN125_FRIULI.A_A-TMZ000.AT2 RSN125_FRIULI.A_A-TMZ270.AT2 RSN125_FRIULI.A_A-TMZ-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.35	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
231	Mammoth Lakes-01 Long Valley Dam (Upr L Abut) 1980	6.06	12.56	537.16	Normal O	7.2	3.93	RSN231_MAMMOTH.I_I-LUL000.AT2 RSN231_MAMMOTH.I_I-LUL090.AT2 RSN231_MAMMOTH.I_I-LUL-UP.AT2
309	Taiwan SMART1(5) SMART1 M01 1981	5.9	26.31	268.37	Reverse	3	4.25	RSN309_SMART1.05_05M01EW.AT2 RSN309_SMART1.05_05M01NS.AT2 RSN309_SMART1.05_05M01DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	3.31	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	3.08	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	2.2	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
459	Morgan Hill Gilroy Array #6 1984	6.19	9.85	663.31	strike slip	3.7	2.41	RSN459_MORGAN_G06000.AT2 RSN459_MORGAN_G06090.AT2 RSN459_MORGAN_G06-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.99	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	3.66	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
646	Whittier Narrows-01 LB - Rancho Los Cerritos 1987	5.99	24.61	302.73	Reverse O	2.1	3.53	RSN646_WHITTIER.A_A-LBR000.AT2 RSN646_WHITTIER.A_A-LBR090.AT2 RSN646_WHITTIER.A_A-LBR-UP.AT2
683	Whittier Narrows-01 Pasadena - Old House Rd 1987	5.99	8.03	397.27	Reverse O	2.2	4.46	RSN683_WHITTIER.A_A-OLD000.AT2 RSN683_WHITTIER.A_A-OLD090.AT2 RSN683_WHITTIER.A_A-OLD-UP.AT2

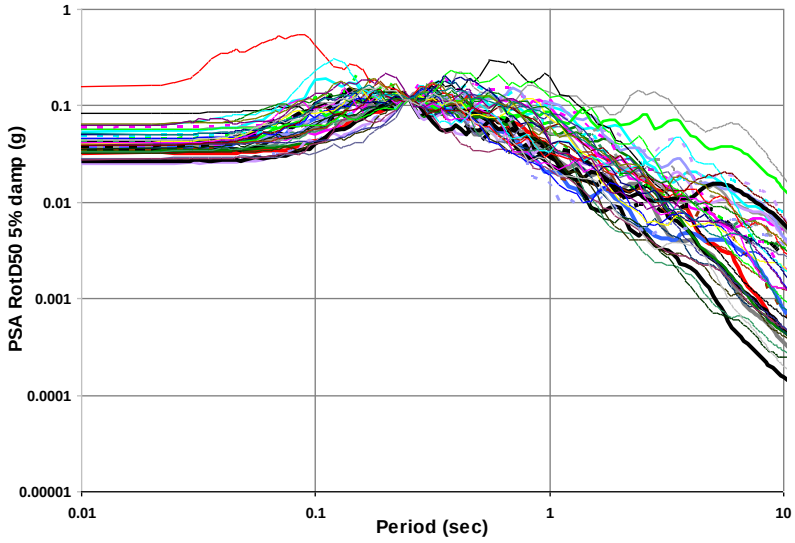
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	3.05	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	3.13	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	1.1	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1049	Northridge-01 Pacific Palisades - Sunset 1994	6.69	13.34	191.06	Reverse	5.8	2.08	RSN1049_NORTHR_SUN190.AT2 RSN1049_NORTHR_SUN280.AT2 RSN1049_NORTHR_SUN-UP.AT2
1089	Northridge-01 Topanga - Fire Sta 1994	6.69	10.31	505.97	Reverse	5.1	2.9	RSN1089_NORTHR_TPF360.AT2 RSN1089_NORTHR_TPF270.AT2 RSN1089_NORTHR_TPF-UP.AT2
1126	Kozani, Greece-01 Kozani 1995	6.4	14.13	649.67	Normal	2.9	4.88	RSN1126_KOZANI_KOZ--L.AT2 RSN1126_KOZANI_KOZ--T.AT2 RSN1126_KOZANI_KOZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	2.09	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	3.51	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	4.62	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1513	Chi-Chi, Taiwan TCU079 1999	7.62	0	363.99	Reverse O	19.2	2	RSN1513_CHICHI_TCU079-E.AT2 RSN1513_CHICHI_TCU079-N.AT2 RSN1513_CHICHI_TCU079-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	2.51	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	4.19	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
2629	Chi-Chi, Taiwan-03 TCU079 1999	6.2	0.03	363.99	Reverse	3.1	2.45	RSN2629_CHICHI.03_TCU079N.AT2 RSN2629_CHICHI.03_TCU079E.AT2 RSN2629_CHICHI.03_TCU079V.AT2

Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
3570	Taiwan SMART1(5) SMART1 M12 1981	5.9	26.5	275.82	Reverse	2	4.71	RSN3570_SMART1.05_05M12EW.AT RSN3570_SMART1.05_05M12NS.AT2 RSN3570_SMART1.05_05M12DN.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	4.36	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	4.99	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	2.59	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4103	Parkfield-02, CA Parkfield - Cholame 4W 2004	6	3.3	410.4	strike slip	1.6	2.26	RSN4103_PARK2004_C04090.AT2 RSN4103_PARK2004_C04360.AT2 RSN4103_PARK2004_C04-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	3.15	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	2.45	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.95	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.83	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	3.31	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2
5620	Iwate IWT012 2008	6.9	20.47	264.48	Reverse	11.1	2.33	RSN5620_IWATE_IWT012NS.AT2 RSN5620_IWATE_IWT012EW.AT2 RSN5620_IWATE_IWT012UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	1.15	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	1.39	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2

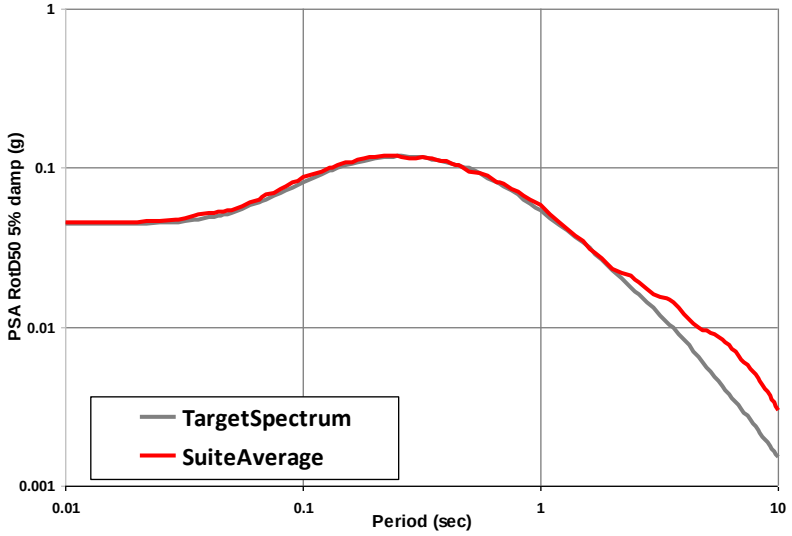
Site	04 SanJose							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	3.14	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6915	Darfield, New Zealand Heathcote Valley Primary School 2010	7	24.36	422	strike slip	8.3	1.65	RSN6915_DARFIELD_HVSCS26W.AT2 RSN6915_DARFIELD_HVSCS64E.AT2 RSN6915_DARFIELD_HVSCUP.AT2
6927	Darfield, New Zealand LINC 2010	7	5.07	263.2	strike slip	8	4.16	RSN6927_DARFIELD_LINCN23E.AT2 RSN6927_DARFIELD_LINCN67W.AT2 RSN6927_DARFIELD_LINCUP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	3.27	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	4.03	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8067	Christchurch, New Zealand Christchurch Cashmere High School 2011	6.2	4.44	204	Reverse O	3.1	3.04	RSN8067_CCHURCH_CMHSN10E.AT2 RSN8067_CCHURCH_CMHSS80E.AT2 RSN8067_CCHURCH_CMHSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	2.74	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
83	San Fernando Puddingstone Dam (Abutment) 1971	6.61	52.64	421.44	Reverse	5.9	1.04	RSN83_SFERN_PUD055.AT2 RSN83_SFERN_PUD325.AT2 RSN83_SFERN_PUDDWN.AT2
363	Coalinga-01 Parkfield - Vineyard Cany 3W 1983	6.36	30.91	308.87	Reverse	7.1	0.69	RSN363_COALINGA.H_H-VYC020.AT2 RSN363_COALINGA.H_H-VYC110.AT2 RSN363_COALINGA.H_H-VYC-UP.AT2
425	Taiwan SMART1(25) SMART1 C00 1983	6.5	95.57	309.41	Reverse	9.3	2.11	RSN425_SMART1.25_25C00EW.AT2 RSN425_SMART1.25_25C00NS.AT2 RSN425_SMART1.25_25C00DN.AT2
436	Borah Peak, ID-01 CPP-601 1983	6.88	82.6	279.97	Normal	9.7	1.09	
743	Loma Prieta Bear Valley #10, Webb Residence 1989	6.93	66.89	304.08	Reverse O	8.5	0.53	RSN743_LOMAP_BVR220.AT2 RSN743_LOMAP_BVR310.AT2 RSN743_LOMAP_BVR-UP.AT2
762	Loma Prieta Fremont - Mission San Jose 1989	6.93	39.32	367.57	Reverse O	7.9	0.49	RSN762_LOMAP_FRE000.AT2 RSN762_LOMAP_FRE090.AT2 RSN762_LOMAP_FRE-UP.AT2
951	Northridge-01 Bell Gardens - Jaboneria 1994	6.69	41.27	267.13	Reverse	9.6	0.63	RSN951_NORTHR_JAB220.AT2 RSN951_NORTHR_JAB310.AT2 RSN951_NORTHR_JAB-UP.AT2
990	Northridge-01 LA - City Terrace 1994	6.69	35.03	365.22	Reverse	6	0.16	RSN990_NORTHR_LAC090.AT2 RSN990_NORTHR_LAC180.AT2 RSN990_NORTHR_LAC-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.26	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	0.68	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.28	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	0.43	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2

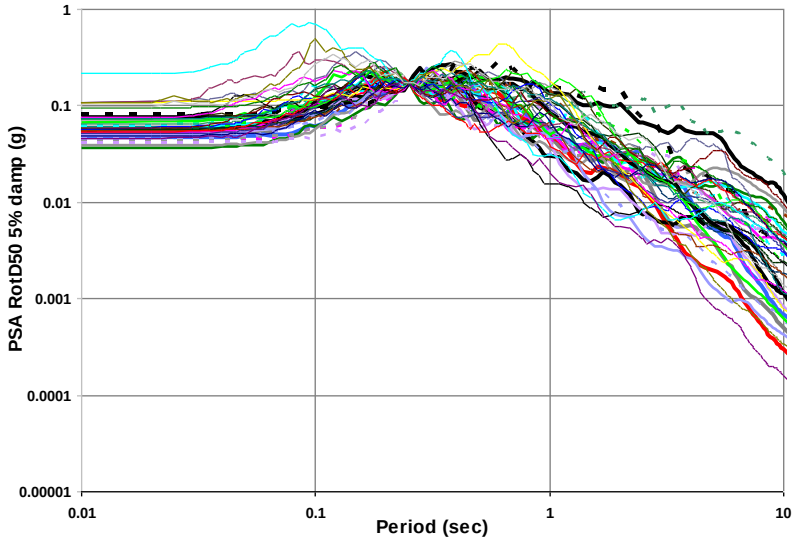
Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **15**							**CS Set**
1098	Northridge-01 Wrightwood - Swarthout 1994	6.69	71.51	476.64	Reverse	10.3	0.71	RSN1098_NORTHR_WRI090.AT2 RSN1098_NORTHR_WRI180.AT2 RSN1098_NORTHR_WRI-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	0.14	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	0.87	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1274	Chi-Chi, Taiwan HWA025 1999	7.62	49.93	494.32	Reverse O	10.8	0.65	RSN1274_CHICHI_HWA025-E.AT2 RSN1274_CHICHI_HWA025-N.AT2 RSN1274_CHICHI_HWA025-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	0.65	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1297	Chi-Chi, Taiwan HWA051 1999	7.62	49.69	440.5	Reverse O	11.1	0.39	RSN1297_CHICHI_HWA051-N.AT2 RSN1297_CHICHI_HWA051-W.AT2 RSN1297_CHICHI_HWA051-V.AT2
1377	Chi-Chi, Taiwan KAU050 1999	7.62	35.68	665.2	Reverse O	22.9	1.36	RSN1377_CHICHI_KAU050-E.AT2 RSN1377_CHICHI_KAU050-N.AT2 RSN1377_CHICHI_KAU050-V.AT2
1426	Chi-Chi, Taiwan TAP034 1999	7.62	90.59	538.69	Reverse O	15.8	0.89	RSN1426_CHICHI_TAP034-E.AT2 RSN1426_CHICHI_TAP034-N.AT2 RSN1426_CHICHI_TAP034-V.AT2
1576	Chi-Chi, Taiwan TTN024 1999	7.62	56.58	671.52	Reverse O	25.2	1.53	RSN1576_CHICHI_TTN024-E.AT2 RSN1576_CHICHI_TTN024-N.AT2 RSN1576_CHICHI_TTN024-V.AT2
1816	Hector Mine North Palm Springs Fire Sta #36 1999	7.13	61.86	367.84	strike slip	13.8	0.59	RSN1816_HECTOR_NPF180.AT2 RSN1816_HECTOR_NPF270.AT2 RSN1816_HECTOR_NPF-UP.AT2
2518	Chi-Chi, Taiwan-03 HWA011 1999	6.2	72.23	355.76	Reverse	16	2.35	RSN2518_CHICHI.03_HWA011N.AT2 RSN2518_CHICHI.03_HWA011E.AT2 RSN2518_CHICHI.03_HWA011V.AT2
2520	Chi-Chi, Taiwan-03 HWA013 1999	6.2	72.32	330.55	Reverse	19.3	3.79	RSN2520_CHICHI.03_HWA013N.AT2 RSN2520_CHICHI.03_HWA013E.AT2 RSN2520_CHICHI.03_HWA013V.AT2
2540	Chi-Chi, Taiwan-03 HWA037 1999	6.2	60.49	469.64	Reverse	13	2.98	RSN2540_CHICHI.03_HWA037N.AT2 RSN2540_CHICHI.03_HWA037E.AT2 RSN2540_CHICHI.03_HWA037V.AT2

Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
2677	Chi-Chi, Taiwan-03 TTN025 1999	6.2	96.98	704.96	Reverse	17.2	3.74	RSN2677_CHICHI.03_TTN025N.AT2 RSN2677_CHICHI.03_TTN025E.AT2 RSN2677_CHICHI.03_TTN025V.AT2
2696	Chi-Chi, Taiwan-04 CHY017 1999	6.2	69.99	190.57	strike slip	28.7	1.82	RSN2696_CHICHI.04_CHY017N.AT2 RSN2696_CHICHI.04_CHY017W.AT2 RSN2696_CHICHI.04_CHY017V.AT2
2697	Chi-Chi, Taiwan-04 CHY019 1999	6.2	54.43	497.53	strike slip	8.4	1.6	RSN2697_CHICHI.04_CHY019N.AT2 RSN2697_CHICHI.04_CHY019W.AT2 RSN2697_CHICHI.04_CHY019V.AT2
2790	Chi-Chi, Taiwan-04 HWA044 1999	6.2	67.93	534.41	strike slip	10.9	2.51	RSN2790_CHICHI.04_HWA044N.AT2 RSN2790_CHICHI.04_HWA044E.AT2 RSN2790_CHICHI.04_HWA044V.AT2
2832	Chi-Chi, Taiwan-04 KAU077 1999	6.2	85.44	665.2	strike slip	17	3.88	RSN2832_CHICHI.04_KAU077N.AT2 RSN2832_CHICHI.04_KAU077E.AT2 RSN2832_CHICHI.04_KAU077V.AT2
2863	Chi-Chi, Taiwan-04 TCU059 1999	6.2	70.02	272.67	strike slip	18.3	0.9	RSN2863_CHICHI.04_TCU059N.AT2 RSN2863_CHICHI.04_TCU059E.AT2 RSN2863_CHICHI.04_TCU059V.AT2
2889	Chi-Chi, Taiwan-04 TCU117 1999	6.2	60.77	198.58	strike slip	26.6	2.34	RSN2889_CHICHI.04_TCU117N.AT2 RSN2889_CHICHI.04_TCU117E.AT2 RSN2889_CHICHI.04_TCU117V.AT2
2999	Chi-Chi, Taiwan-05 HWA009 1999	6.2	57.13	373.23	Reverse	7.4	0.77	RSN2999_CHICHI.05_HWA009N.AT2 RSN2999_CHICHI.05_HWA009E.AT2 RSN2999_CHICHI.05_HWA009V.AT2
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	0.85	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3073	Chi-Chi, Taiwan-05 ILA064 1999	6.2	97.09	488.61	Reverse	12.6	1.94	RSN3073_CHICHI.05_ILA064N.AT2 RSN3073_CHICHI.05_ILA064W.AT2 RSN3073_CHICHI.05_ILA064V.AT2
3340	Chi-Chi, Taiwan-06 HWA027 1999	6.3	51.46	437.8	Reverse	8.2	0.86	RSN3340_CHICHI.06_HWA027N.AT2 RSN3340_CHICHI.06_HWA027E.AT2 RSN3340_CHICHI.06_HWA027V.AT2
3352	Chi-Chi, Taiwan-06 HWA043 1999	6.3	48.43	543.06	Reverse	10.6	1.66	RSN3352_CHICHI.06_HWA043N.AT2 RSN3352_CHICHI.06_HWA043E.AT2 RSN3352_CHICHI.06_HWA043V.AT2
3404	Chi-Chi, Taiwan-06 KAU054 1999	6.3	55.12	497.22	Reverse	4.6	0.62	RSN3404_CHICHI.06_KAU054N.AT2 RSN3404_CHICHI.06_KAU054E.AT2 RSN3404_CHICHI.06_KAU054V.AT2

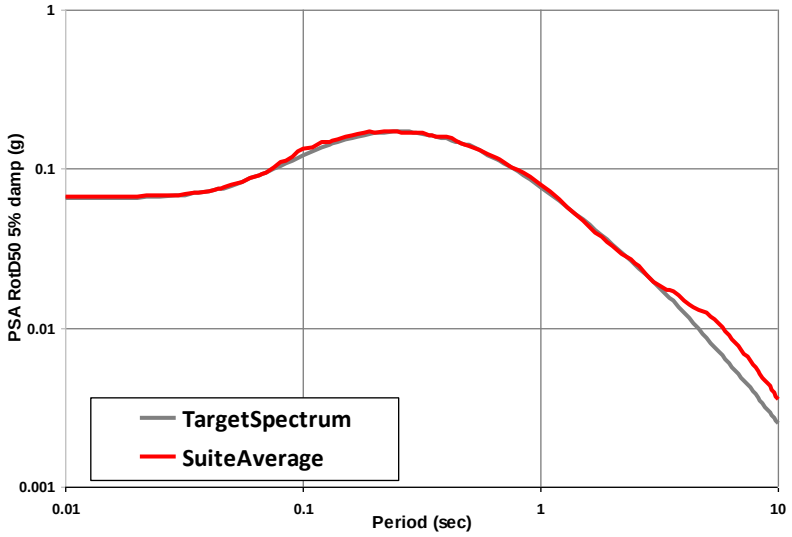
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
3598	Taiwan SMART1(25) SMART1 O04 1983	6.5	94.27	288.24	Reverse	6.4	1.33	RSN3598_SMART1.25_25O04EW.AT2 RSN3598_SMART1.25_25O04NS.AT2 RSN3598_SMART1.25_25O04DN.AT2
3895	Tottori, Japan HYG007 2000	6.61	99.64	760.54	strike slip	13.2	4.27	RSN3895_TOTTORI_HYG007NS.AT2 RSN3895_TOTTORI_HYG007EW.AT2 RSN3895_TOTTORI_HYG007UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	0.24	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4990	Chuetsu-oki FKS021 2007	6.8	98.16	370.4	Reverse	12.1	1.51	RSN4990_CHUETSU_FKS021NS.AT2 RSN4990_CHUETSU_FKS021EW.AT2 RSN4990_CHUETSU_FKS021UD.AT2
5492	Iwate AKTH16 2008	6.9	61.19	375	Reverse	13.8	0.57	RSN5492_IWATE_AKTH16NS.AT2 RSN5492_IWATE_AKTH16EW.AT2 RSN5492_IWATE_AKTH16UD.AT2
5989	El Mayor-Cucapah El Centro Array #3 2010	7.2	40.96	162.94	strike slip	17.1	0.24	RSN5989_SIERRA.MEX_E03360.AT2 RSN5989_SIERRA.MEX_E03270.AT2 RSN5989_SIERRA.MEX_E03-UP.AT2
6948	Darfield, New Zealand OXZ 2010	7	30.63	481.62	strike slip	17.7	0.46	RSN6948_DARFIELD_OXZE.AT2 RSN6948_DARFIELD_OXZN.AT2 RSN6948_DARFIELD_OXZUP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
91	San Fernando Upland - San Antonio Dam 1971	6.61	61.72	487.23	Reverse	6.7	0.71	RSN91_SFERN_SOD015.AT2 RSN91_SFERN_SOD285.AT2 RSN91_SFERN_SODDWN.AT2
282	Trinidad Rio Dell Overpass, W Ground 1980	7.2	76.06	311.75	strike slip	6.7	0.33	RSN282_TRINIDAD.B_B-RDW000.AT2 RSN282_TRINIDAD.B_B-RDW270.AT2 RSN282_TRINIDAD.B_B-RDW-UP.AT2
329	Coalinga-01 Parkfield - Cholame 4AW 1983	6.36	46.73	283.38	Reverse	7.6	1.19	RSN329_COALINGA.H_H-C4A000.AT2 RSN329_COALINGA.H_H-C4A090.AT2 RSN329_COALINGA.H_H-C4A-UP.AT2
462	Morgan Hill Hollister City Hall 1984	6.19	30.76	198.77	strike slip	12.1	1.04	RSN462_MORGAN_HCH001.AT2 RSN462_MORGAN_HCH271.AT2 RSN462_MORGAN_HCH-UP.AT2
762	Loma Prieta Fremont - Mission San Jose 1989	6.93	39.32	367.57	Reverse O	7.9	0.71	RSN762_LOMAP_FRE000.AT2 RSN762_LOMAP_FRE090.AT2 RSN762_LOMAP_FRE-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	0.62	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
906	Big Bear-01 Hemet Fire Station 1992	6.46	47.6	328.09	strike slip	10.4	1.17	RSN906_BIGBEAR_H05090.AT2 RSN906_BIGBEAR_H05360.AT2 RSN906_BIGBEAR_H05-UP.AT2
951	Northridge-01 Bell Gardens - Jaboneria 1994	6.69	41.27	267.13	Reverse	9.6	0.91	RSN951_NORTHR_JAB220.AT2 RSN951_NORTHR_JAB310.AT2 RSN951_NORTHR_JAB-UP.AT2
981	Northridge-01 Inglewood - Union Oil 1994	6.69	37.18	316.02	Reverse	10.7	0.98	RSN981_NORTHR_ING000.AT2 RSN981_NORTHR_ING090.AT2 RSN981_NORTHR_ING-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.37	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1032	Northridge-01 Leona Valley #6 1994	6.69	37.7	327.44	Reverse	4.9	0.39	RSN1032_NORTHR_LV6090.AT2 RSN1032_NORTHR_LV6360.AT2 RSN1032_NORTHR_LV6-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	0.99	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2

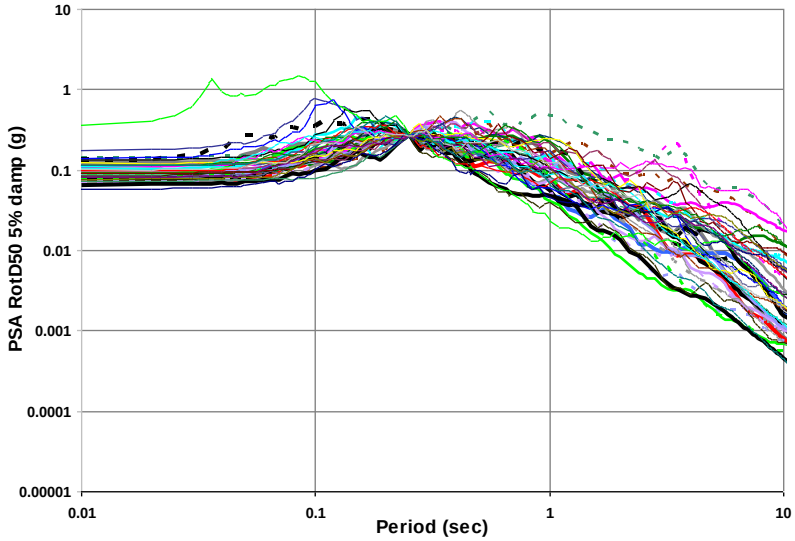
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.41	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1215	Chi-Chi, Taiwan CHY058 1999	7.62	59.79	269.28	Reverse O	29.9	1.16	RSN1215_CHICHI_CHY058-E.AT2 RSN1215_CHICHI_CHY058-N.AT2 RSN1215_CHICHI_CHY058-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	0.94	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
2518	Chi-Chi, Taiwan-03 HWA011 1999	6.2	72.23	355.76	Reverse	16	3.41	RSN2518_CHICHI.03_HWA011N.AT2 RSN2518_CHICHI.03_HWA011E.AT2 RSN2518_CHICHI.03_HWA011V.AT2
2696	Chi-Chi, Taiwan-04 CHY017 1999	6.2	69.99	190.57	strike slip	28.7	2.64	RSN2696_CHICHI.04_CHY017N.AT2 RSN2696_CHICHI.04_CHY017W.AT2 RSN2696_CHICHI.04_CHY017V.AT2
2738	Chi-Chi, Taiwan-04 CHY079 1999	6.2	50.26	573.04	strike slip	9.9	2.42	RSN2738_CHICHI.04_CHY079N.AT2 RSN2738_CHICHI.04_CHY079E.AT2 RSN2738_CHICHI.04_CHY079V.AT2
2770	Chi-Chi, Taiwan-04 HWA019 1999	6.2	90.18	494.82	strike slip	14.3	3.08	RSN2770_CHICHI.04_HWA019N.AT2 RSN2770_CHICHI.04_HWA019E.AT2 RSN2770_CHICHI.04_HWA019V.AT2
2781	Chi-Chi, Taiwan-04 HWA033 1999	6.2	63.86	395.57	strike slip	9.9	2.75	RSN2781_CHICHI.04_HWA033N.AT2 RSN2781_CHICHI.04_HWA033E.AT2 RSN2781_CHICHI.04_HWA033V.AT2
2788	Chi-Chi, Taiwan-04 HWA041 1999	6.2	49.62	484.97	strike slip	13.7	2.36	RSN2788_CHICHI.04_HWA041N.AT2 RSN2788_CHICHI.04_HWA041E.AT2 RSN2788_CHICHI.04_HWA041V.AT2
2790	Chi-Chi, Taiwan-04 HWA044 1999	6.2	67.93	534.41	strike slip	10.9	3.64	RSN2790_CHICHI.04_HWA044N.AT2 RSN2790_CHICHI.04_HWA044E.AT2 RSN2790_CHICHI.04_HWA044V.AT2
2793	Chi-Chi, Taiwan-04 HWA048 1999	6.2	89.12	345.89	strike slip	14.9	2.82	RSN2793_CHICHI.04_HWA048N.AT2 RSN2793_CHICHI.04_HWA048W.AT2 RSN2793_CHICHI.04_HWA048V.AT2
2863	Chi-Chi, Taiwan-04 TCU059 1999	6.2	70.02	272.67	strike slip	18.3	1.31	RSN2863_CHICHI.04_TCU059N.AT2 RSN2863_CHICHI.04_TCU059E.AT2 RSN2863_CHICHI.04_TCU059V.AT2
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	1.24	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **25**							**CS Set**
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	0.58	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3195	Chi-Chi, Taiwan-05 TCU087 1999	6.2	56.63	538.69	Reverse	10.8	2.08	RSN3195_CHICHI.05_TCU087N.AT2 RSN3195_CHICHI.05_TCU087E.AT2 RSN3195_CHICHI.05_TCU087V.AT2
3264	Chi-Chi, Taiwan-06 CHY024 1999	6.3	29.49	427.73	Reverse	8.2	0.44	RSN3264_CHICHI.06_CHY024N.AT2 RSN3264_CHICHI.06_CHY024E.AT2 RSN3264_CHICHI.06_CHY024V.AT2
3293	Chi-Chi, Taiwan-06 CHY063 1999	6.3	97.88	246.88	Reverse	12.9	2.49	RSN3293_CHICHI.06_CHY063N.AT2 RSN3293_CHICHI.06_CHY063E.AT2 RSN3293_CHICHI.06_CHY063V.AT2
3312	Chi-Chi, Taiwan-06 CHY093 1999	6.3	76.89	190.49	Reverse	17.4	1.04	RSN3312_CHICHI.06_CHY093N.AT2 RSN3312_CHICHI.06_CHY093W.AT2 RSN3312_CHICHI.06_CHY093V.AT2
3327	Chi-Chi, Taiwan-06 HWA009 1999	6.3	53.55	373.23	Reverse	9.6	2.24	RSN3327_CHICHI.06_HWA009N.AT2 RSN3327_CHICHI.06_HWA009E.AT2 RSN3327_CHICHI.06_HWA009V.AT2
3352	Chi-Chi, Taiwan-06 HWA043 1999	6.3	48.43	543.06	Reverse	10.6	2.41	RSN3352_CHICHI.06_HWA043N.AT2 RSN3352_CHICHI.06_HWA043E.AT2 RSN3352_CHICHI.06_HWA043V.AT2
3457	Chi-Chi, Taiwan-06 TCU050 1999	6.3	35.18	542.41	Reverse	8.5	1.73	RSN3457_CHICHI.06_TCU050N.AT2 RSN3457_CHICHI.06_TCU050E.AT2 RSN3457_CHICHI.06_TCU050V.AT2
3481	Chi-Chi, Taiwan-06 TCU087 1999	6.3	41.15	538.69	Reverse	13.6	2.61	RSN3481_CHICHI.06_TCU087N.AT2 RSN3481_CHICHI.06_TCU087E.AT2 RSN3481_CHICHI.06_TCU087V.AT2
3493	Chi-Chi, Taiwan-06 TCU107 1999	6.3	39.36	409	Reverse	14.6	1.06	RSN3493_CHICHI.06_TCU107N.AT2 RSN3493_CHICHI.06_TCU107E.AT2 RSN3493_CHICHI.06_TCU107V.AT2
3532	Chi-Chi, Taiwan-06 TTN025 1999	6.3	91.9	704.96	Reverse	16.8	3.07	RSN3532_CHICHI.06_TTN025N.AT2 RSN3532_CHICHI.06_TTN025E.AT2 RSN3532_CHICHI.06_TTN025V.AT2
3888	Tottori, Japan HRSH04 2000	6.61	84.18	447.75	strike slip	13.6	3.51	RSN3888_TOTTORI_HRSH04NS.AT2 RSN3888_TOTTORI_HRSH04EW.AT2 RSN3888_TOTTORI_HRSH04UD.AT2
3959	Tottori, Japan TTR002 2000	6.61	80.17	260.41	strike slip	10.8	0.91	RSN3959_TOTTORI_TTR002NS.AT2 RSN3959_TOTTORI_TTR002EW.AT2 RSN3959_TOTTORI_TTR002UD.AT2

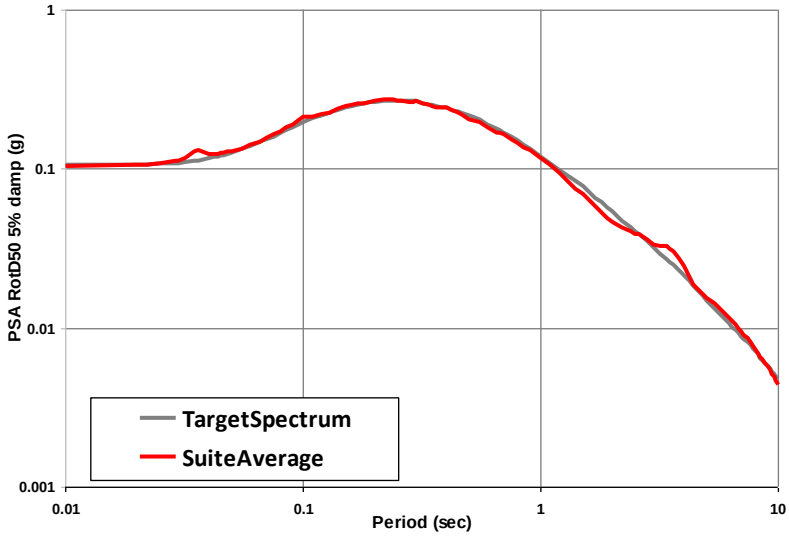
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
3962	Tottori, Japan TTR005 2000	6.61	45.98	169.16	strike slip	5.4	0.43	RSN3962_TOTTORI_TTR005NS.AT2 RSN3962_TOTTORI_TTR005EW.AT2 RSN3962_TOTTORI_TTR005UD.AT2
4200	Niigata, Japan NIG010 2004	6.63	55.9	173.09	Reverse	17.4	0.59	RSN4200_NIIGATA_NIG010NS.AT2 RSN4200_NIIGATA_NIG010EW.AT2 RSN4200_NIIGATA_NIG010UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	0.34	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4891	Chuetsu-oki Iizuna Imokawa 2007	6.8	64.2	591.2	Reverse	3	0.19	RSN4891_CHUETSU_70026NS.AT2 RSN4891_CHUETSU_70026EW.AT2 RSN4891_CHUETSU_70026UD.AT2
4991	Chuetsu-oki FKS022 2007	6.8	78.49	211.76	Reverse	15.1	1.57	RSN4991_CHUETSU_FKS022NS.AT2 RSN4991_CHUETSU_FKS022EW.AT2 RSN4991_CHUETSU_FKS022UD.AT2
5621	Iwate IWT013 2008	6.9	46.73	494.39	Reverse	13.3	1.22	RSN5621_IWATE_IWT013NS.AT2 RSN5621_IWATE_IWT013EW.AT2 RSN5621_IWATE_IWT013UD.AT2
5988	El Mayor-Cucapah Meloland, E Holton Rd. 2010	7.2	30.18	196	strike slip	20.9	0.26	RSN5988_SIERRA.MEX_DRE360.AT2 RSN5988_SIERRA.MEX_DRE-90.AT2 RSN5988_SIERRA.MEX_DRE-UP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
331	Coalinga-01 Parkfield - Cholame 5W 1983	6.36	47.88	236.59	Reverse	5.5	0.97	RSN331_COALINGA.H_H-C05270.AT2 RSN331_COALINGA.H_H-C05360.AT2 RSN331_COALINGA.H_H-C05-UP.AT2
551	Chalfant Valley-02 Convict Creek 1986	6.19	29.35	382.12	strike slip	7.4	1.86	RSN551_CHALFANT.A_A-CVK000.AT2 RSN551_CHALFANT.A_A-CVK090.AT2 RSN551_CHALFANT.A_A-CVK-UP.AT2
751	Loma Prieta Calaveras Reservoir 1989	6.93	35.28	571.99	Reverse O	7.2	1.31	RSN751_LOMAP_CLR090.AT2 RSN751_LOMAP_CLR180.AT2 RSN751_LOMAP_CLR-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	0.79	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	0.98	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
819	Georgia, USSR Oni 1991	6.2	42.19	392.67	Reverse	8.2	2.01	RSN819_GEORGIA_ONI--X.AT2 RSN819_GEORGIA_ONI--Y.AT2 RSN819_GEORGIA_ONI--Z.AT2
962	Northridge-01 Carson - Water St 1994	6.69	45.44	160.58	Reverse	14.2	1.12	RSN962_NORTHR_WAT180.AT2 RSN962_NORTHR_WAT270.AT2 RSN962_NORTHR_WAT-UP.AT2
1005	Northridge-01 LA - Temple & Hope 1994	6.69	28.82	452.15	Reverse	7	0.71	RSN1005_NORTHR_TEM090.AT2 RSN1005_NORTHR_TEM180.AT2 RSN1005_NORTHR_TEM-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.58	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.64	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	0.99	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	0.31	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2

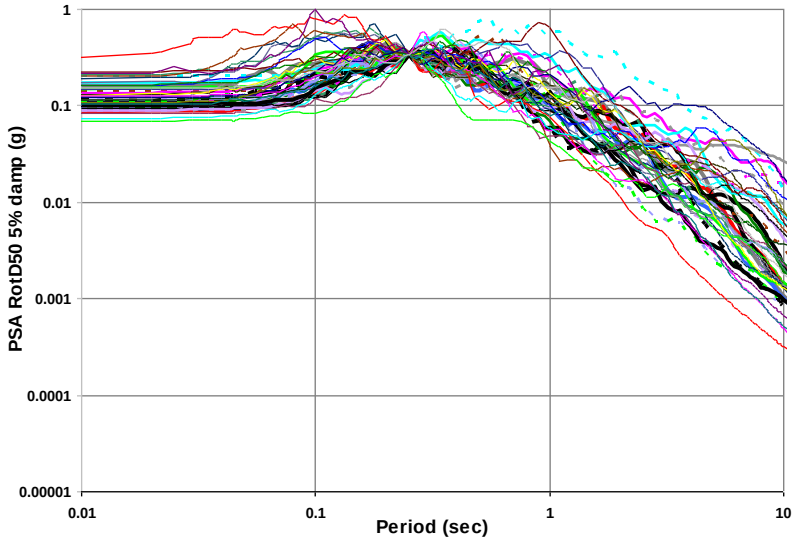
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
1232	Chi-Chi, Taiwan CHY081 1999	7.62	41.36	573.04	Reverse O	18.4	1.82	RSN1232_CHICHI_CHY081-E.AT2 RSN1232_CHICHI_CHY081-N.AT2 RSN1232_CHICHI_CHY081-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	1.48	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1396	Chi-Chi, Taiwan KAU085 1999	7.62	85.95	260.75	Reverse O	33.2	2.83	RSN1396_CHICHI_KAU085-N.AT2 RSN1396_CHICHI_KAU085-W.AT2 RSN1396_CHICHI_KAU085-V.AT2
1426	Chi-Chi, Taiwan TAP034 1999	7.62	90.59	538.69	Reverse O	15.8	2.03	RSN1426_CHICHI_TAP034-E.AT2 RSN1426_CHICHI_TAP034-N.AT2 RSN1426_CHICHI_TAP034-V.AT2
1634	Manjil, Iran Abhar 1990	7.37	75.58	302.64	strike slip	15.6	0.53	RSN1634_MANJIL_184057.AT2 RSN1634_MANJIL_184327.AT2 RSN1634_MANJIL_184-UP.AT2
2697	Chi-Chi, Taiwan-04 CHY019 1999	6.2	54.43	497.53	strike slip	8.4	3.65	RSN2697_CHICHI.04_CHY019N.AT2 RSN2697_CHICHI.04_CHY019W.AT2 RSN2697_CHICHI.04_CHY019V.AT2
2727	Chi-Chi, Taiwan-04 CHY063 1999	6.2	76.29	246.88	strike slip	12.6	4.15	RSN2727_CHICHI.04_CHY063N.AT2 RSN2727_CHICHI.04_CHY063E.AT2 RSN2727_CHICHI.04_CHY063V.AT2
2852	Chi-Chi, Taiwan-04 TCU042 1999	6.2	98.43	578.98	strike slip	12	3.23	RSN2852_CHICHI.04_TCU042N.AT2 RSN2852_CHICHI.04_TCU042E.AT2 RSN2852_CHICHI.04_TCU042V.AT2
2997	Chi-Chi, Taiwan-05 HWA005 1999	6.2	32.71	459.32	Reverse	7.7	1.04	RSN2997_CHICHI.05_HWA005N.AT2 RSN2997_CHICHI.05_HWA005W.AT2 RSN2997_CHICHI.05_HWA005V.AT2
2999	Chi-Chi, Taiwan-05 HWA009 1999	6.2	57.13	373.23	Reverse	7.4	1.75	RSN2999_CHICHI.05_HWA009N.AT2 RSN2999_CHICHI.05_HWA009E.AT2 RSN2999_CHICHI.05_HWA009V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	0.91	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3027	Chi-Chi, Taiwan-05 HWA041 1999	6.2	56.65	484.97	Reverse	9.1	1.34	RSN3027_CHICHI.05_HWA041N.AT2 RSN3027_CHICHI.05_HWA041E.AT2 RSN3027_CHICHI.05_HWA041V.AT2
3031	Chi-Chi, Taiwan-05 HWA046 1999	6.2	63.27	617.52	Reverse	9.9	2.95	RSN3031_CHICHI.05_HWA046N.AT2 RSN3031_CHICHI.05_HWA046W.AT2 RSN3031_CHICHI.05_HWA046V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **50**							**CS Set**
3038	Chi-Chi, Taiwan-05 HWA058 1999	6.2	43.39	529.54	Reverse	9.1	1.72	RSN3038_CHICHI.05_HWA058N.AT2 RSN3038_CHICHI.05_HWA058E.AT2 RSN3038_CHICHI.05_HWA058V.AT2
3073	Chi-Chi, Taiwan-05 ILA064 1999	6.2	97.09	488.61	Reverse	12.6	4.43	RSN3073_CHICHI.05_ILA064N.AT2 RSN3073_CHICHI.05_ILA064W.AT2 RSN3073_CHICHI.05_ILA064V.AT2
3095	Chi-Chi, Taiwan-05 KAU054 1999	6.2	60.86	497.22	Reverse	3.1	0.87	RSN3095_CHICHI.05_KAU054N.AT2 RSN3095_CHICHI.05_KAU054E.AT2 RSN3095_CHICHI.05_KAU054V.AT2
3211	Chi-Chi, Taiwan-05 TCU115 1999	6.2	54.72	215.34	Reverse	9.1	1.38	RSN3211_CHICHI.05_TCU115N.AT2 RSN3211_CHICHI.05_TCU115E.AT2 RSN3211_CHICHI.05_TCU115V.AT2
3283	Chi-Chi, Taiwan-06 CHY050 1999	6.3	71.64	538.93	Reverse	7.8	1.87	RSN3283_CHICHI.06_CHY050N.AT2 RSN3283_CHICHI.06_CHY050E.AT2 RSN3283_CHICHI.06_CHY050V.AT2
3327	Chi-Chi, Taiwan-06 HWA009 1999	6.3	53.55	373.23	Reverse	9.6	3.52	RSN3327_CHICHI.06_HWA009N.AT2 RSN3327_CHICHI.06_HWA009E.AT2 RSN3327_CHICHI.06_HWA009V.AT2
3333	Chi-Chi, Taiwan-06 HWA019 1999	6.3	52.4	494.82	Reverse	7.3	1.35	RSN3333_CHICHI.06_HWA019N.AT2 RSN3333_CHICHI.06_HWA019E.AT2 RSN3333_CHICHI.06_HWA019V.AT2
3352	Chi-Chi, Taiwan-06 HWA043 1999	6.3	48.43	543.06	Reverse	10.6	3.79	RSN3352_CHICHI.06_HWA043N.AT2 RSN3352_CHICHI.06_HWA043E.AT2 RSN3352_CHICHI.06_HWA043V.AT2
3359	Chi-Chi, Taiwan-06 HWA056 1999	6.3	47.41	511.3	Reverse	9.8	2.45	RSN3359_CHICHI.06_HWA056N.AT2 RSN3359_CHICHI.06_HWA056E.AT2 RSN3359_CHICHI.06_HWA056V.AT2
3362	Chi-Chi, Taiwan-06 HWA059 1999	6.3	42.79	208.56	Reverse	7.3	2.42	RSN3362_CHICHI.06_HWA059N.AT2 RSN3362_CHICHI.06_HWA059E.AT2 RSN3362_CHICHI.06_HWA059V.AT2
3665	Taiwan SMART1(45) SMART1 I04 1986	7.3	55.91	314.88	Reverse	11.6	0.7	RSN3665_SMART1.45_45I04EW.AT2 RSN3665_SMART1.45_45I04NS.AT2 RSN3665_SMART1.45_45I04DN.AT2
3969	Tottori, Japan TTRH04 2000	6.61	32.75	254.26	strike slip	5.7	0.91	RSN3969_TOTTORI_TTRH04NS.AT2 RSN3969_TOTTORI_TTRH04EW.AT2 RSN3969_TOTTORI_TTRH04UD.AT2
3994	San Simeon, CA San Luis Obispo - Lopez Lake Ground 2003	6.52	48.07	365.15	Reverse	8.6	1.07	RSN3994_SANSIMEO_36153090.AT2 RSN3994_SANSIMEO_36153360.AT2 RSN3994_SANSIMEO_36153-UP.AT2

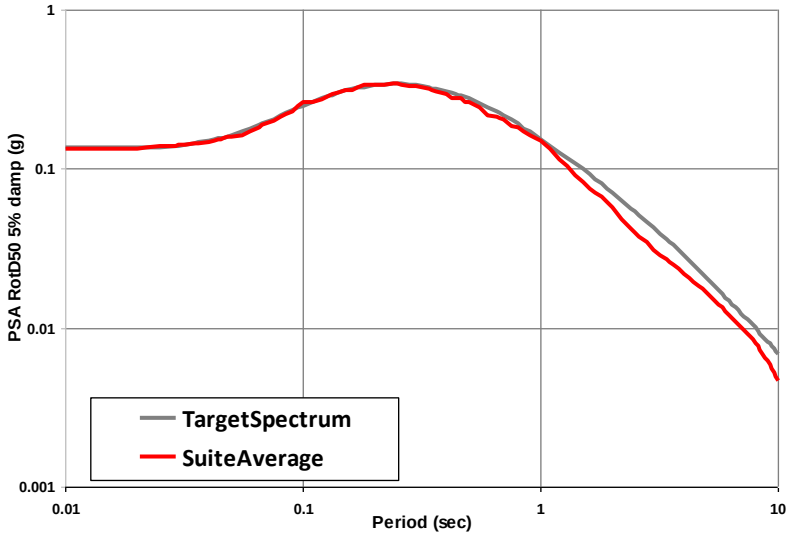
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
4016	San Simeon, CA San Luis Obispo 2003	6.52	31.33	493.5	Reverse	4.4	0.78	RSN4016_SANSIMEO_SLO090.AT2 RSN4016_SANSIMEO_SLO360.AT2 RSN4016_SANSIMEO_SLO-UP.AT2
4167	Niigata, Japan FKSH07 2004	6.63	52.15	828.95	Reverse	9.6	3.18	RSN4167_NIIGATA_FKSH07NS.AT2 RSN4167_NIIGATA_FKSH07EW.AT2 RSN4167_NIIGATA_FKSH07UD.AT2
4221	Niigata, Japan NIGH04 2004	6.63	97.5	392.08	Reverse	12.2	2.53	RSN4221_NIIGATA_NIGH04NS.AT2 RSN4221_NIIGATA_NIGH04EW.AT2 RSN4221_NIIGATA_NIGH04UD.AT2
5193	Chuetsu-oki NGN001 2007	6.8	51.48	303.73	Reverse	4.4	0.74	RSN5193_CHUETSU_NGN001NS.AT2 RSN5193_CHUETSU_NGN001EW.AT2 RSN5193_CHUETSU_NGN001UD.AT2
5256	Chuetsu-oki NIG010 2007	6.8	48.1	173.09	Reverse	59.3	2.33	RSN5256_CHUETSU_NIG010NS.AT2 RSN5256_CHUETSU_NIG010EW.AT2 RSN5256_CHUETSU_NIG010UD.AT2
5746	Iwate YMT003 2008	6.9	79.22	368.93	Reverse	22.8	3.61	RSN5746_IWATE_YMT003NS.AT2 RSN5746_IWATE_YMT003EW.AT2 RSN5746_IWATE_YMT003UD.AT2
8133	Christchurch, New Zealand SLRC 2011	6.2	31.81	249.28	Reverse O	5.9	0.95	RSN8133_CCHURCH_SLRCS28E.AT2 RSN8133_CCHURCH_SLRCS62W.AT2 RSN8133_CCHURCH_SLRCUP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
9	Borrego El Centro Array #9 1942	6.5	56.88	213.44	strike slip	20.5	2.07	RSN9_BORREGO_B-ELC000.AT2 RSN9_BORREGO_B-ELC090.AT2 RSN9_BORREGO_B-ELC-UP.AT2
62	San Fernando Colton - So Cal Edison 1971	6.61	96.81	301.95	Reverse	5	3.27	RSN62_SFERN_CLN090.AT2 RSN62_SFERN_CLN180.AT2 RSN62_SFERN_CLN-UP.AT2
462	Morgan Hill Hollister City Hall 1984	6.19	30.76	198.77	strike slip	12.1	2.09	RSN462_MORGAN_HCH001.AT2 RSN462_MORGAN_HCH271.AT2 RSN462_MORGAN_HCH-UP.AT2
536	N. Palm Springs Santa Rosa Mountain 1986	6.06	38.94	678.69	Reverse O	6.2	3.07	RSN536_PALMSPR_ARS270.AT2 RSN536_PALMSPR_ARS360.AT2 RSN536_PALMSPR_ARS-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	1	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
790	Loma Prieta Richmond City Hall 1989	6.93	87.78	259.9	Reverse O	4.9	1.85	RSN790_LOMAP_RCH190.AT2 RSN790_LOMAP_RCH280.AT2 RSN790_LOMAP_RCH-UP.AT2
906	Big Bear-01 Hemet Fire Station 1992	6.46	47.6	328.09	strike slip	10.4	2.34	RSN906_BIGBEAR_H05090.AT2 RSN906_BIGBEAR_H05360.AT2 RSN906_BIGBEAR_H05-UP.AT2
925	Big Bear-01 Rancho Cucamonga - Deer Can 1992	6.46	59.74	509.1	strike slip	12.5	2.38	RSN925_BIGBEAR_CUC090.AT2 RSN925_BIGBEAR_CUC180.AT2 RSN925_BIGBEAR_CUC-UP.AT2
965	Northridge-01 Covina - S Grand Ave 1994	6.69	57.29	346.62	Reverse	10.6	2.25	RSN965_NORTHR_GRA074.AT2 RSN965_NORTHR_GRA344.AT2 RSN965_NORTHR_GRA-UP.AT2
1005	Northridge-01 LA - Temple & Hope 1994	6.69	28.82	452.15	Reverse	7	0.91	RSN1005_NORTHR_TEM090.AT2 RSN1005_NORTHR_TEM180.AT2 RSN1005_NORTHR_TEM-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	1.27	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.74	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2

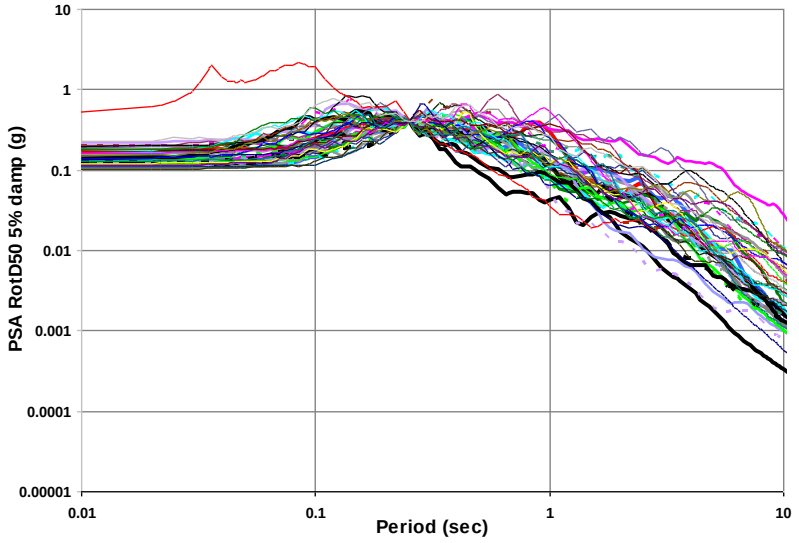
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	1.97	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.81	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1109	Kobe, Japan MZH 1995	6.9	69.04	609	strike slip	13.4	2.33	RSN1109_KOBE_MZH000.AT2 RSN1109_KOBE_MZH090.AT2 RSN1109_KOBE_MZH-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	0.39	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	2.52	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1214	Chi-Chi, Taiwan CHY057 1999	7.62	56.67	411.46	Reverse O	25.2	3.17	RSN1214_CHICHI_CHY057-E.AT2 RSN1214_CHICHI_CHY057-N.AT2 RSN1214_CHICHI_CHY057-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	1.88	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1297	Chi-Chi, Taiwan HWA051 1999	7.62	49.69	440.5	Reverse O	11.1	1.13	RSN1297_CHICHI_HWA051-N.AT2 RSN1297_CHICHI_HWA051-W.AT2 RSN1297_CHICHI_HWA051-V.AT2
1300	Chi-Chi, Taiwan HWA055 1999	7.62	43.04	369.75	Reverse O	19.8	2.27	RSN1300_CHICHI_HWA055-N.AT2 RSN1300_CHICHI_HWA055-W.AT2 RSN1300_CHICHI_HWA055-V.AT2
1474	Chi-Chi, Taiwan TCU025 1999	7.62	52.18	665.2	Reverse O	12.2	1.5	RSN1474_CHICHI_TCU025-E.AT2 RSN1474_CHICHI_TCU025-N.AT2 RSN1474_CHICHI_TCU025-V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	1.72	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2852	Chi-Chi, Taiwan-04 TCU042 1999	6.2	98.43	578.98	strike slip	12	4.1	RSN2852_CHICHI.04_TCU042N.AT2 RSN2852_CHICHI.04_TCU042E.AT2 RSN2852_CHICHI.04_TCU042V.AT2
2999	Chi-Chi, Taiwan-05 HWA009 1999	6.2	57.13	373.23	Reverse	7.4	2.23	RSN2999_CHICHI.05_HWA009N.AT2 RSN2999_CHICHI.05_HWA009E.AT2 RSN2999_CHICHI.05_HWA009V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **75**							**CS Set**
3001	Chi-Chi, Taiwan-05 HWA012 1999	6.2	57.81	414.42	Reverse	8.6	3.41	RSN3001_CHICHI.05_HWA012N.AT2 RSN3001_CHICHI.05_HWA012E.AT2 RSN3001_CHICHI.05_HWA012V.AT2
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	2.48	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3018	Chi-Chi, Taiwan-05 HWA031 1999	6.2	39.29	602.29	Reverse	7.4	2.1	RSN3018_CHICHI.05_HWA031N.AT2 RSN3018_CHICHI.05_HWA031E.AT2 RSN3018_CHICHI.05_HWA031V.AT2
3031	Chi-Chi, Taiwan-05 HWA046 1999	6.2	63.27	617.52	Reverse	9.9	3.75	RSN3031_CHICHI.05_HWA046N.AT2 RSN3031_CHICHI.05_HWA046W.AT2 RSN3031_CHICHI.05_HWA046V.AT2
3033	Chi-Chi, Taiwan-05 HWA049 1999	6.2	51.43	508.61	Reverse	7.8	1.63	RSN3033_CHICHI.05_HWA049N.AT2 RSN3033_CHICHI.05_HWA049W.AT2 RSN3033_CHICHI.05_HWA049V.AT2
3203	Chi-Chi, Taiwan-05 TCU103 1999	6.2	56.03	494.1	Reverse	5.3	1.93	RSN3203_CHICHI.05_TCU103N.AT2 RSN3203_CHICHI.05_TCU103E.AT2 RSN3203_CHICHI.05_TCU103V.AT2
3206	Chi-Chi, Taiwan-05 TCU106 1999	6.2	50.78	451.37	Reverse	7.8	1.44	RSN3206_CHICHI.05_TCU106N.AT2 RSN3206_CHICHI.05_TCU106E.AT2 RSN3206_CHICHI.05_TCU106V.AT2
3215	Chi-Chi, Taiwan-05 TCU123 1999	6.2	48.86	270.22	Reverse	8.8	1.12	RSN3215_CHICHI.05_TCU123N.AT2 RSN3215_CHICHI.05_TCU123E.AT2 RSN3215_CHICHI.05_TCU123V.AT2
3219	Chi-Chi, Taiwan-05 TCU136 1999	6.2	54.91	462.1	Reverse	10.7	3.01	RSN3219_CHICHI.05_TCU136N.AT2 RSN3219_CHICHI.05_TCU136W.AT2 RSN3219_CHICHI.05_TCU136V.AT2
3223	Chi-Chi, Taiwan-05 TCU145 1999	6.2	68.39	240.43	Reverse	6	1.51	RSN3223_CHICHI.05_TCU145N.AT2 RSN3223_CHICHI.05_TCU145W.AT2 RSN3223_CHICHI.05_TCU145V.AT2
3352	Chi-Chi, Taiwan-06 HWA043 1999	6.3	48.43	543.06	Reverse	10.6	4.82	RSN3352_CHICHI.06_HWA043N.AT2 RSN3352_CHICHI.06_HWA043E.AT2 RSN3352_CHICHI.06_HWA043V.AT2
3752	Landers Forest Falls Post Office 1992	7.28	45.34	436.14	strike slip	17.8	1.2	RSN3752_LANDERS_FFP210.AT2 RSN3752_LANDERS_FFP300.AT2 RSN3752_LANDERS_FFP-UP.AT2
3877	Tottori, Japan HRS008 2000	6.61	88.4	538.73	strike slip	13.7	2.38	RSN3877_TOTTORI_HRS008NS.AT2 RSN3877_TOTTORI_HRS008EW.AT2 RSN3877_TOTTORI_HRS008UD.AT2

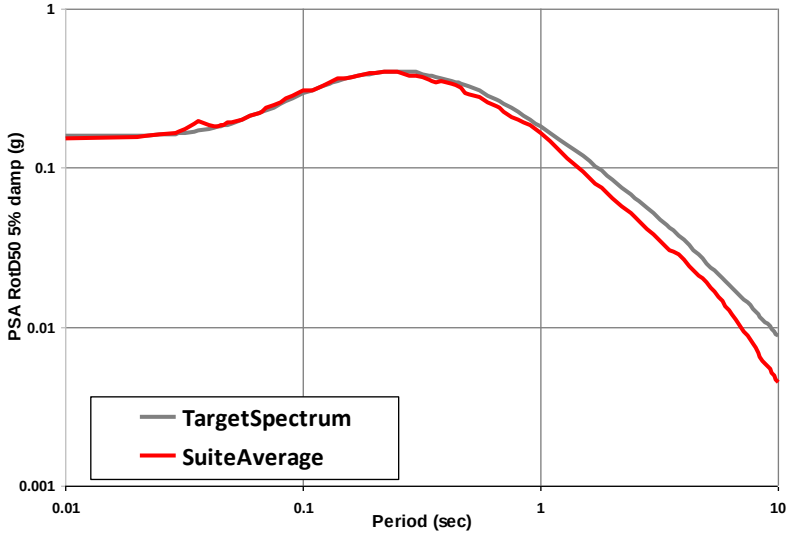
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
4154	Niigata, Japan FKS023 2004	6.63	85.01	182.3	Reverse	13.5	1.45	RSN4154_NIIGATA_FKS023NS.AT2 RSN4154_NIIGATA_FKS023EW.AT2 RSN4154_NIIGATA_FKS023UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	0.98	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0.47	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5972	El Mayor-Cucapah Brawley Airport 2010	7.2	41.15	208.71	strike slip	12.8	0.83	RSN5972_SIERRA.MEX_BRA360.AT2 RSN5972_SIERRA.MEX_BRA090.AT2 RSN5972_SIERRA.MEX_BRA-UP.AT2
6060	Big Bear-01 North Palm Springs Fire Sta #36 1992	6.46	40.87	367.84	strike slip	8	0.95	RSN6060_BIGBEAR_NPF090.AT2 RSN6060_BIGBEAR_NPF180.AT2 RSN6060_BIGBEAR_NPF-UP.AT2
8115	Christchurch, New Zealand OXZ 2011	6.2	57.72	481.62	Reverse O	5.7	3.31	RSN8115_CCHURCH_OXZE.AT2 RSN8115_CCHURCH_OXZN.AT2 RSN8115_CCHURCH_OXZUP.AT2
8167	San Simeon, CA Diablo Canyon Power Plant 2003	6.52	37.92	1100	Reverse	7	3.09	RSN8167_SANSIMEO_DCPP337.AT2 RSN8167_SANSIMEO_DCPP247.AT2 RSN8167_SANSIMEO_DCPP-UP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
62	San Fernando Colton - So Cal Edison 1971	6.61	96.81	301.95	Reverse	5	3.84	RSN62_SFERN_CLN090.AT2 RSN62_SFERN_CLN180.AT2 RSN62_SFERN_CLN-UP.AT2
191	Imperial Valley-06 Victoria 1979	6.53	31.92	242.05	strike slip	9.6	1.15	RSN191_IMPVALL.H_H-VCT075.AT2 RSN191_IMPVALL.H_H-VCT345.AT2 RSN191_IMPVALL.H_H-VCT-UP.AT2
291	Irpinia, Italy-01 Rionero In Vulture 1980	6.9	27.49	574.88	Normal	18.3	1.44	RSN291_ITALY_A-VLT000.AT2 RSN291_ITALY_A-VLT270.AT2 RSN291_ITALY_A-VLT-UP.AT2
471	Morgan Hill San Justo Dam (L Abut) 1984	6.19	31.88	543.63	strike slip	10.3	1.6	RSN471_MORGAN_SJL270.AT2 RSN471_MORGAN_SJL360.AT2 RSN471_MORGAN_SJL-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	1.47	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	1.45	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2
981	Northridge-01 Inglewood - Union Oil 1994	6.69	37.18	316.02	Reverse	10.7	2.3	RSN981_NORTHR_ING000.AT2 RSN981_NORTHR_ING090.AT2 RSN981_NORTHR_ING-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.87	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1033	Northridge-01 Littlerock - Brainard Can 1994	6.69	46.31	485.67	Reverse	7	2.49	RSN1033_NORTHR_LIT090.AT2 RSN1033_NORTHR_LIT180.AT2 RSN1033_NORTHR_LIT-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	2.32	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1064	Northridge-01 Riverside Airport 1994	6.69	98.83	389.95	Reverse	6.2	1.98	RSN1064_NORTHR_RIV180.AT2 RSN1064_NORTHR_RIV270.AT2 RSN1064_NORTHR_RIV-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	1.47	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2

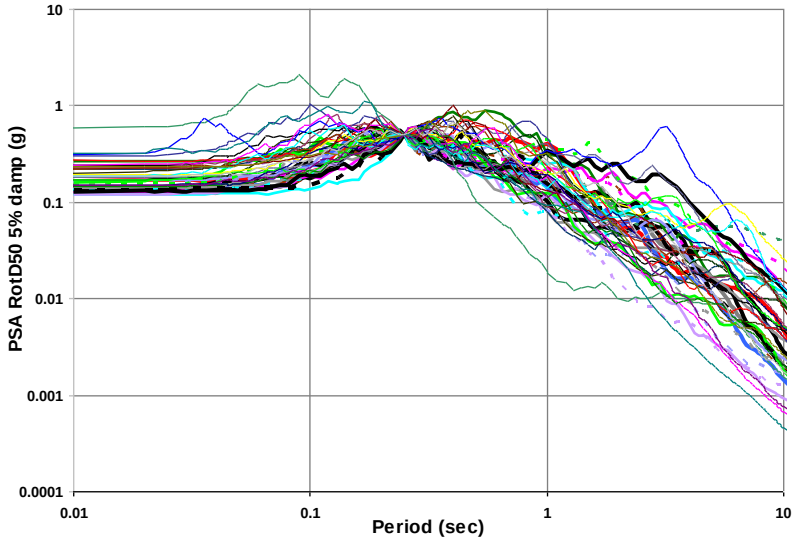
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
1112	Kobe, Japan OKA 1995	6.9	86.93	609	strike slip	9.3	2.98	RSN1112_KOBE_OKA000.AT2 RSN1112_KOBE_OKA090.AT2 RSN1112_KOBE_OKA-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	0.46	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	2.97	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1215	Chi-Chi, Taiwan CHY058 1999	7.62	59.79	269.28	Reverse O	29.9	2.72	RSN1215_CHICHI_CHY058-E.AT2 RSN1215_CHICHI_CHY058-N.AT2 RSN1215_CHICHI_CHY058-V.AT2
1350	Chi-Chi, Taiwan ILA067 1999	7.62	33.27	665.2	Reverse O	7.8	0.97	RSN1350_CHICHI_ILA067-E.AT2 RSN1350_CHICHI_ILA067-N.AT2 RSN1350_CHICHI_ILA067-V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	2.02	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2852	Chi-Chi, Taiwan-04 TCU042 1999	6.2	98.43	578.98	strike slip	12	4.82	RSN2852_CHICHI.04_TCU042N.AT2 RSN2852_CHICHI.04_TCU042E.AT2 RSN2852_CHICHI.04_TCU042V.AT2
2940	Chi-Chi, Taiwan-05 CHY019 1999	6.2	84.45	497.53	Reverse	7.3	3.41	RSN2940_CHICHI.05_CHY019N.AT2 RSN2940_CHICHI.05_CHY019W.AT2 RSN2940_CHICHI.05_CHY019V.AT2
3013	Chi-Chi, Taiwan-05 HWA026 1999	6.2	61.4	457.49	Reverse	5.3	2.9	RSN3013_CHICHI.05_HWA026N.AT2 RSN3013_CHICHI.05_HWA026E.AT2 RSN3013_CHICHI.05_HWA026V.AT2
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	2.91	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3168	Chi-Chi, Taiwan-05 TCU039 1999	6.2	71.17	540.66	Reverse	10.4	2.23	RSN3168_CHICHI.05_TCU039N.AT2 RSN3168_CHICHI.05_TCU039E.AT2 RSN3168_CHICHI.05_TCU039V.AT2
3171	Chi-Chi, Taiwan-05 TCU044 1999	6.2	62.87	512.88	Reverse	12.4	3.14	RSN3171_CHICHI.05_TCU044N.AT2 RSN3171_CHICHI.05_TCU044E.AT2 RSN3171_CHICHI.05_TCU044V.AT2
3203	Chi-Chi, Taiwan-05 TCU103 1999	6.2	56.03	494.1	Reverse	5.3	2.27	RSN3203_CHICHI.05_TCU103N.AT2 RSN3203_CHICHI.05_TCU103E.AT2 RSN3203_CHICHI.05_TCU103V.AT2

Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
3209	Chi-Chi, Taiwan-05 TCU112 1999	6.2	61.7	190.54	Reverse	6.2	1.3	RSN3209_CHICHI.05_TCU112N.AT2 RSN3209_CHICHI.05_TCU112E.AT2 RSN3209_CHICHI.05_TCU112V.AT2
3278	Chi-Chi, Taiwan-06 CHY041 1999	6.3	45.68	492.26	Reverse	3.2	0.68	RSN3278_CHICHI.06_CHY041N.AT2 RSN3278_CHICHI.06_CHY041E.AT2 RSN3278_CHICHI.06_CHY041V.AT2
3319	Chi-Chi, Taiwan-06 CHY107 1999	6.3	79.2	175.68	Reverse	14	2.71	RSN3319_CHICHI.06_CHY107N.AT2 RSN3319_CHICHI.06_CHY107W.AT2 RSN3319_CHICHI.06_CHY107V.AT2
3331	Chi-Chi, Taiwan-06 HWA015 1999	6.3	47.12	453.05	Reverse	8.6	4.84	RSN3331_CHICHI.06_HWA015N.AT2 RSN3331_CHICHI.06_HWA015E.AT2 RSN3331_CHICHI.06_HWA015V.AT2
3333	Chi-Chi, Taiwan-06 HWA019 1999	6.3	52.4	494.82	Reverse	7.3	2.01	RSN3333_CHICHI.06_HWA019N.AT2 RSN3333_CHICHI.06_HWA019E.AT2 RSN3333_CHICHI.06_HWA019V.AT2
3334	Chi-Chi, Taiwan-06 HWA020 1999	6.3	36.5	626.43	Reverse	8.3	4.76	RSN3334_CHICHI.06_HWA020N.AT2 RSN3334_CHICHI.06_HWA020E.AT2 RSN3334_CHICHI.06_HWA020V.AT2
3362	Chi-Chi, Taiwan-06 HWA059 1999	6.3	42.79	208.56	Reverse	7.3	3.61	RSN3362_CHICHI.06_HWA059N.AT2 RSN3362_CHICHI.06_HWA059E.AT2 RSN3362_CHICHI.06_HWA059V.AT2
3454	Chi-Chi, Taiwan-06 TCU046 1999	6.3	52.15	465.55	Reverse	8.9	4.73	RSN3454_CHICHI.06_TCU046N.AT2 RSN3454_CHICHI.06_TCU046E.AT2 RSN3454_CHICHI.06_TCU046V.AT2
3502	Chi-Chi, Taiwan-06 TCU120 1999	6.3	30.88	459.34	Reverse	12.2	3.09	RSN3502_CHICHI.06_TCU120N.AT2 RSN3502_CHICHI.06_TCU120E.AT2 RSN3502_CHICHI.06_TCU120V.AT2
3756	Landers Morongo Valley Hall (GEOS #58) 1992	7.28	40.67	368.2	strike slip	21.7	1.24	RSN3756_LANDERS_MVP000.AT2 RSN3756_LANDERS_MVP090.AT2 RSN3756_LANDERS_MVP-UP.AT2
3866	Chi-Chi (aftershock 5), Taiwan CHY008 1999	6.3	70.03	210.73	Reverse	16	0.92	RSN3866_CHICHI.06_CHY008N.AT2 RSN3866_CHICHI.06_CHY008W.AT2 RSN3866_CHICHI.06_CHY008V.AT2
3994	San Simeon, CA San Luis Obispo - Lopez Lake Ground 2003	6.52	48.07	365.15	Reverse	8.6	1.59	RSN3994_SANSIMEO_36153090.AT2 RSN3994_SANSIMEO_36153360.AT2 RSN3994_SANSIMEO_36153-UP.AT2
4167	Niigata, Japan FKSH07 2004	6.63	52.15	828.95	Reverse	9.6	4.75	RSN4167_NIIGATA_FKSH07NS.AT2 RSN4167_NIIGATA_FKSH07EW.AT2 RSN4167_NIIGATA_FKSH07UD.AT2

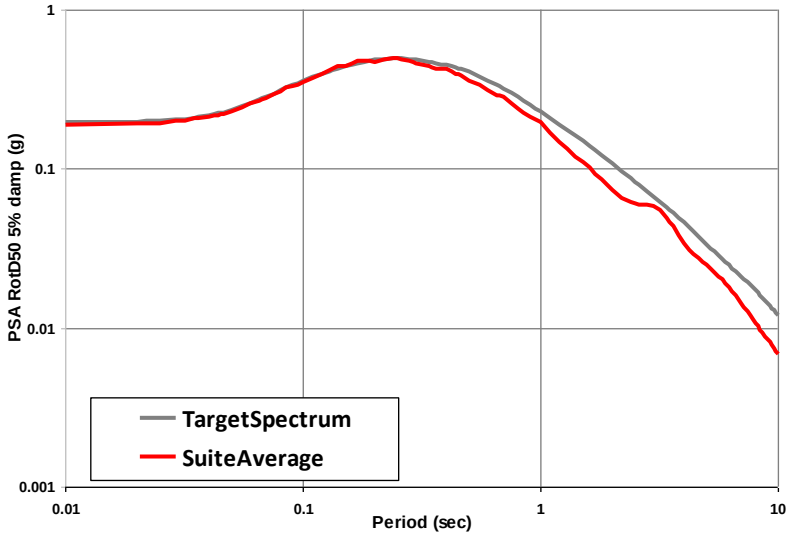
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
4234	Niigata, Japan NIGH18 2004	6.63	53.99	311.1	Reverse	9.2	1.16	RSN4234_NIIGATA_NIGH18NS.AT2 RSN4234_NIIGATA_NIGH18EW.AT2 RSN4234_NIIGATA_NIGH18UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	0.81	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4741	Wenchuan, China Maoxiandiexi 2008	7.9	44.73	299.37	Reverse O	35.9	0.77	RSN4741_WENCHUAN_UA0854.AT2 RSN4741_WENCHUAN_UA0853.AT2 RSN4741_WENCHUAN_UA0855.AT2
4991	Chuetsu-oki FKS022 2007	6.8	78.49	211.76	Reverse	15.1	3.69	RSN4991_CHUETSU_FKS022NS.AT2 RSN4991_CHUETSU_FKS022EW.AT2 RSN4991_CHUETSU_FKS022UD.AT2
5193	Chuetsu-oki NGN001 2007	6.8	51.48	303.73	Reverse	4.4	1.1	RSN5193_CHUETSU_NGN001NS.AT2 RSN5193_CHUETSU_NGN001EW.AT2 RSN5193_CHUETSU_NGN001UD.AT2
5469	Iwate AKT014 2008	6.9	53.15	452.15	Reverse	10.8	2.93	RSN5469_IWATE_AKT014NS.AT2 RSN5469_IWATE_AKT014EW.AT2 RSN5469_IWATE_AKT014UD.AT2
6933	Darfield, New Zealand MAYC 2010	7	33.54	342.7	strike slip	15	2.31	RSN6933_DARFIELD_MAYCN14E.AT2 RSN6933_DARFIELD_MAYCN76W.AT RSN6933_DARFIELD_MAYCUP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
745	Loma Prieta Bear Valley #14, Upper Butts Rn 1989	6.93	71.28	422.79	Reverse O	8.3	2.34	RSN745_LOMAP_BVU220.AT2 RSN745_LOMAP_BVU310.AT2 RSN745_LOMAP_BVU-UP.AT2
925	Big Bear-01 Rancho Cucamonga - Deer Can 1992	6.46	59.74	509.1	strike slip	12.5	3.44	RSN925_BIGBEAR_CUC090.AT2 RSN925_BIGBEAR_CUC180.AT2 RSN925_BIGBEAR_CUC-UP.AT2
934	Big Bear-01 Silent Valley - Poppet Flat 1992	6.46	34.43	659.09	strike slip	8.6	4.79	RSN934_BIGBEAR_SIL090.AT2 RSN934_BIGBEAR_SIL360.AT2 RSN934_BIGBEAR_SIL-UP.AT2
947	Northridge-01 Arcadia - Arcadia Av 1994	6.69	39.41	330.5	Reverse	9	2.05	RSN947_NORTHR_ARC172.AT2 RSN947_NORTHR_ARC262.AT2 RSN947_NORTHR_ARC-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	1.83	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1019	Northridge-01 Lake Hughes #1 1994	6.69	35.46	425.34	Reverse	7.9	2.01	RSN1019_NORTHR_L01000.AT2 RSN1019_NORTHR_L01090.AT2 RSN1019_NORTHR_L01-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	1.07	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	2.85	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	0.57	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	3.65	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1304	Chi-Chi, Taiwan HWA059 1999	7.62	44.89	208.56	Reverse O	9.9	2	RSN1304_CHICHI_HWA059-E.AT2 RSN1304_CHICHI_HWA059-N.AT2 RSN1304_CHICHI_HWA059-V.AT2
1474	Chi-Chi, Taiwan TCU025 1999	7.62	52.18	665.2	Reverse O	12.2	2.17	RSN1474_CHICHI_TCU025-E.AT2 RSN1474_CHICHI_TCU025-N.AT2 RSN1474_CHICHI_TCU025-V.AT2

Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	2.48	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2609	Chi-Chi, Taiwan-03 TCU053 1999	6.2	40.04	454.55	Reverse	6.9	4.75	RSN2609_CHICHI.03_TCU053N.AT2 RSN2609_CHICHI.03_TCU053E.AT2 RSN2609_CHICHI.03_TCU053V.AT2
2863	Chi-Chi, Taiwan-04 TCU059 1999	6.2	70.02	272.67	strike slip	18.3	3.77	RSN2863_CHICHI.04_TCU059N.AT2 RSN2863_CHICHI.04_TCU059E.AT2 RSN2863_CHICHI.04_TCU059V.AT2
2929	Chi-Chi, Taiwan-04 TTN042 1999	6.2	68.95	845.34	strike slip	8.7	4.99	RSN2929_CHICHI.04_TTN042N.AT2 RSN2929_CHICHI.04_TTN042W.AT2 RSN2929_CHICHI.04_TTN042V.AT2
2995	Chi-Chi, Taiwan-05 HWA002 1999	6.2	44.36	789.18	Reverse	11.7	4.29	RSN2995_CHICHI.05_HWA002N.AT2 RSN2995_CHICHI.05_HWA002W.AT2 RSN2995_CHICHI.05_HWA002V.AT2
2997	Chi-Chi, Taiwan-05 HWA005 1999	6.2	32.71	459.32	Reverse	7.7	1.91	RSN2997_CHICHI.05_HWA005N.AT2 RSN2997_CHICHI.05_HWA005W.AT2 RSN2997_CHICHI.05_HWA005V.AT2
3000	Chi-Chi, Taiwan-05 HWA011 1999	6.2	54.22	355.76	Reverse	6.4	1.56	RSN3000_CHICHI.05_HWA011N.AT2 RSN3000_CHICHI.05_HWA011E.AT2 RSN3000_CHICHI.05_HWA011V.AT2
3038	Chi-Chi, Taiwan-05 HWA058 1999	6.2	43.39	529.54	Reverse	9.1	3.16	RSN3038_CHICHI.05_HWA058N.AT2 RSN3038_CHICHI.05_HWA058E.AT2 RSN3038_CHICHI.05_HWA058V.AT2
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	2.59	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3188	Chi-Chi, Taiwan-05 TCU067 1999	6.2	36.73	433.63	Reverse	4.4	1.45	RSN3188_CHICHI.05_TCU067N.AT2 RSN3188_CHICHI.05_TCU067E.AT2 RSN3188_CHICHI.05_TCU067V.AT2
3210	Chi-Chi, Taiwan-05 TCU113 1999	6.2	62.51	230.3	Reverse	6.6	1.26	RSN3210_CHICHI.05_TCU113N.AT2 RSN3210_CHICHI.05_TCU113E.AT2 RSN3210_CHICHI.05_TCU113V.AT2
3265	Chi-Chi, Taiwan-06 CHY025 1999	6.3	39.07	277.5	Reverse	9.9	1.56	RSN3265_CHICHI.06_CHY025N.AT2 RSN3265_CHICHI.06_CHY025E.AT2 RSN3265_CHICHI.06_CHY025V.AT2
3311	Chi-Chi, Taiwan-06 CHY092 1999	6.3	42.77	253.72	Reverse	15.1	1.68	RSN3311_CHICHI.06_CHY092N.AT2 RSN3311_CHICHI.06_CHY092W.AT2 RSN3311_CHICHI.06_CHY092V.AT2

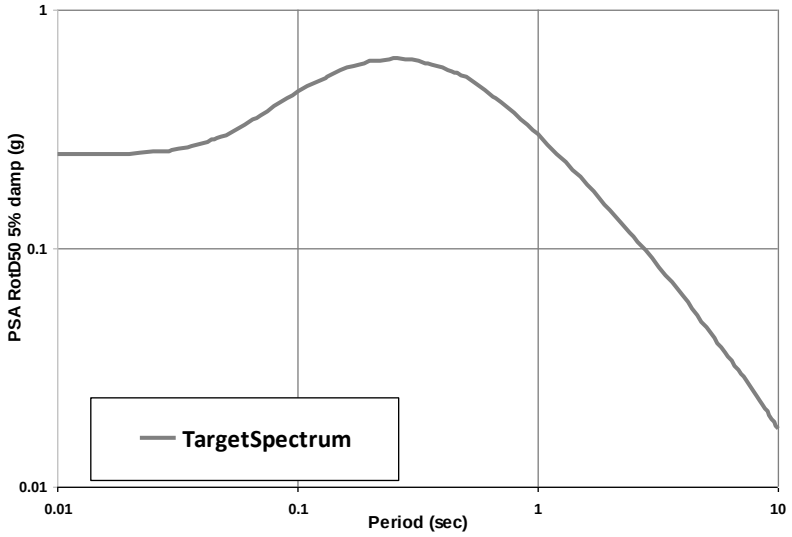
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
3333	Chi-Chi, Taiwan-06 HWA019 1999	6.3	52.4	494.82	Reverse	7.3	2.47	RSN3333_CHICHI.06_HWA019N.AT2 RSN3333_CHICHI.06_HWA019E.AT2 RSN3333_CHICHI.06_HWA019V.AT2
3665	Taiwan SMART1(45) SMART1 I04 1986	7.3	55.91	314.88	Reverse	11.6	1.28	RSN3665_SMART1.45_45I04EW.AT2 RSN3665_SMART1.45_45I04NS.AT2 RSN3665_SMART1.45_45I04DN.AT2
3959	Tottori, Japan TTR002 2000	6.61	80.17	260.41	strike slip	10.8	2.64	RSN3959_TOTTORI_TTR002NS.AT2 RSN3959_TOTTORI_TTR002EW.AT2 RSN3959_TOTTORI_TTR002UD.AT2
4152	Niigata, Japan FKS021 2004	6.63	84.17	370.4	Reverse	4.5	1.78	RSN4152_NIIGATA_FKS021NS.AT2 RSN4152_NIIGATA_FKS021EW.AT2 RSN4152_NIIGATA_FKS021UD.AT2
4170	Niigata, Japan GNM002 2004	6.63	47.45	442.51	Reverse	3.8	1.83	RSN4170_NIIGATA_GNM002NS.AT2 RSN4170_NIIGATA_GNM002EW.AT2 RSN4170_NIIGATA_GNM002UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	0.99	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4735	Wenchuan, China Lixianmuka 2008	7.9	29.05	325.54	Reverse O	29.2	0.6	RSN4735_WENCHUAN_UA0836.AT2 RSN4735_WENCHUAN_UA0835.AT2 RSN4735_WENCHUAN_UA0837.AT2
4785	Wenchuan, China Hongyatai 2008	7.9	97.64	477.35	Reverse O	37.3	1.65	
4852	Chuetsu-oki Joetsu, Aramaki District 2007	6.8	30.26	605.71	Reverse	3.7	1.04	RSN4852_CHUETSU_65018NS.AT2 RSN4852_CHUETSU_65018EW.AT2 RSN4852_CHUETSU_65018UD.AT2
5062	Chuetsu-oki GNM003 2007	6.8	83.91	373.23	Reverse	13.9	4.43	RSN5062_CHUETSU_GNM003NS.AT2 RSN5062_CHUETSU_GNM003EW.AT2 RSN5062_CHUETSU_GNM003UD.AT2
5622	Iwate IWT014 2008	6.9	36.75	314.6	Reverse	11.3	2.29	RSN5622_IWATE_IWT014NS.AT2 RSN5622_IWATE_IWT014EW.AT2 RSN5622_IWATE_IWT014UD.AT2
5794	Iwate Wakabayashi-ku Sendai Tomizuka 2008	6.9	66.18	295.35	Reverse	7.4	1.37	RSN5794_IWATE_54081NS.AT2 RSN5794_IWATE_54081EW.AT2 RSN5794_IWATE_54081UD.AT2
5798	Iwate Takanashi Daisen 2008	6.9	44.75	217.1	Reverse	9.7	1.31	RSN5798_IWATE_55429NS.AT2 RSN5798_IWATE_55429EW.AT2 RSN5798_IWATE_55429UD.AT2

Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
5801	Iwate Hirakamachi Asamai Yokote 2008	6.9	34.76	325.79	Reverse	15.9	1.85	RSN5801_IWATE_55442NS.AT2 RSN5801_IWATE_55442EW.AT2 RSN5801_IWATE_55442UD.AT2
6005	El Mayor-Cucapah Holtville Post Office 2010	7.2	36.15	202.89	strike slip	16.2	1.03	RSN6005_SIERRA.MEX_HVP360.AT2 RSN6005_SIERRA.MEX_HVP090.AT2 RSN6005_SIERRA.MEX_HVP-UP.AT2
6058	Big Bear-01 Fun Valley 1992	6.46	49.35	388.63	strike slip	7.8	2.27	RSN6058_BIGBEAR_FRV045.AT2 RSN6058_BIGBEAR_FRV135.AT2 RSN6058_BIGBEAR_FRV-UP.AT2
6933	Darfield, New Zealand MAYC 2010	7	33.54	342.7	strike slip	15	2.84	RSN6933_DARFIELD_MAYCN14E.AT2 RSN6933_DARFIELD_MAYCN76W.AT RSN6933_DARFIELD_MAYCUP.AT2
8128	Christchurch, New Zealand SCAC 2011	6.2	66.53	561.03	Reverse O	9.2	2.83	RSN8128_CCHURCH_SCACN10W.AT2 RSN8128_CCHURCH_SCACS80W.AT2 RSN8128_CCHURCH_SCACUP.AT2
8133	Christchurch, New Zealand SLRC 2011	6.2	31.81	249.28	Reverse O	5.9	1.74	RSN8133_CCHURCH_SLRCS28E.AT2 RSN8133_CCHURCH_SLRCS62W.AT2 RSN8133_CCHURCH_SLRCUP.AT2
8159	Christchurch, New Zealand SPFS 2011	6.2	65.17	389.54	Reverse O	6.1	3.39	RSN8159_CCHURCH_SPFSN17E.AT2 RSN8159_CCHURCH_SPFSN73W.AT2 RSN8159_CCHURCH_SPFSUP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records

Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
56	San Fernando Carbon Canyon Dam 1971	6.61	61.79	235	Reverse	8.4	0	RSN56_SFERN_CND130.AT2 RSN56_SFERN_CND220.AT2 RSN56_SFERN_CNDDWN.AT2
329	Coalinga-01 Parkfield - Cholame 4AW 1983	6.36	46.73	283.38	Reverse	7.6	0	RSN329_COALINGA.H_H-C4A000.AT2 RSN329_COALINGA.H_H-C4A090.AT2 RSN329_COALINGA.H_H-C4A-UP.AT2
526	N. Palm Springs Landers Fire Station 1986	6.06	32.65	331.02	Reverse O	4.4	0	RSN526_PALMSPR_LDR000.AT2 RSN526_PALMSPR_LDR090.AT2 RSN526_PALMSPR_LDR-UP.AT2
542	N. Palm Springs Winchester Page Bros R 1986	6.06	38.01	287.87	Reverse O	4	0	RSN542_PALMSPR_H04000.AT2 RSN542_PALMSPR_H04090.AT2 RSN542_PALMSPR_H04-UP.AT2
773	Loma Prieta Hayward - BART Sta 1989	6.93	54.01	337.88	Reverse O	6.5	0	RSN773_LOMAP_HWB220.AT2 RSN773_LOMAP_HWB310.AT2 RSN773_LOMAP_HWB-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	0	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
855	Landers Fort Irwin 1992	7.28	62.98	367.43	strike slip	7.8	0	RSN855_LANDERS_FTI000.AT2 RSN855_LANDERS_FTI090.AT2 RSN855_LANDERS_FTI-UP.AT2
964	Northridge-01 Compton - Castlegate St 1994	6.69	42.96	266.9	Reverse	11.4	0	RSN964_NORTHR_CAS000.AT2 RSN964_NORTHR_CAS270.AT2 RSN964_NORTHR_CAS-UP.AT2
969	Northridge-01 Duarte - Mel Canyon Rd. 1994	6.69	48.37	459.14	Reverse	8.3	0	RSN969_NORTHR_MEL090.AT2 RSN969_NORTHR_MEL180.AT2 RSN969_NORTHR_MEL-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	0	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	0	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2

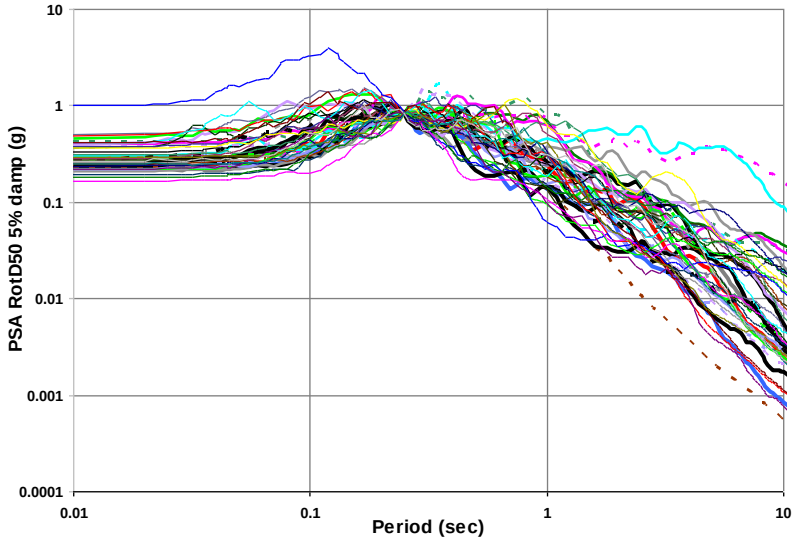
Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **250**							**CS Set**
1055	Northridge-01 Pasadena - N Sierra Madre 1994	6.69	35.77	397.27	Reverse	6	0	RSN1055_NORTHR_SMV180.AT2 RSN1055_NORTHR_SMV270.AT2 RSN1055_NORTHR_SMV-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	0	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	0	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	0	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1147	Kocaeli, Turkey Ambarli 1999	7.51	68.09	175	strike slip	9.5	0	RSN1147_KOCAELI_ATS000.AT2 RSN1147_KOCAELI_ATS090.AT2 RSN1147_KOCAELI_ATS-UP.AT2
1232	Chi-Chi, Taiwan CHY081 1999	7.62	41.36	573.04	Reverse O	18.4	0	RSN1232_CHICHI_CHY081-E.AT2 RSN1232_CHICHI_CHY081-N.AT2 RSN1232_CHICHI_CHY081-V.AT2
1243	Chi-Chi, Taiwan CHY100 1999	7.62	53.46	230.11	Reverse O	28.7	0	RSN1243_CHICHI_CHY100-N.AT2 RSN1243_CHICHI_CHY100-W.AT2 RSN1243_CHICHI_CHY100-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	0	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1303	Chi-Chi, Taiwan HWA058 1999	7.62	41.17	529.54	Reverse O	9	0	RSN1303_CHICHI_HWA058-E.AT2 RSN1303_CHICHI_HWA058-N.AT2 RSN1303_CHICHI_HWA058-V.AT2
1402	Chi-Chi, Taiwan NST 1999	7.62	38.36	491.08	Reverse O	8.5	0	RSN1402_CHICHI_NST-E.AT2 RSN1402_CHICHI_NST-N.AT2 RSN1402_CHICHI_NST-V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	0	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2949	Chi-Chi, Taiwan-05 CHY033 1999	6.2	87.23	197.63	Reverse	10.4	0	RSN2949_CHICHI.05_CHY033N.AT2 RSN2949_CHICHI.05_CHY033E.AT2 RSN2949_CHICHI.05_CHY033V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **250**							**CS Set**
3000	Chi-Chi, Taiwan-05 HWA011 1999	6.2	54.22	355.76	Reverse	6.4	0	RSN3000_CHICHI.05_HWA011N.AT2 RSN3000_CHICHI.05_HWA011E.AT2 RSN3000_CHICHI.05_HWA011V.AT2
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	0	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	0	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3036	Chi-Chi, Taiwan-05 HWA056 1999	6.2	54.98	511.3	Reverse	8.3	0	RSN3036_CHICHI.05_HWA056N.AT2 RSN3036_CHICHI.05_HWA056E.AT2 RSN3036_CHICHI.05_HWA056V.AT2
3093	Chi-Chi, Taiwan-05 KAU050 1999	6.2	69.83	665.2	Reverse	11.8	0	RSN3093_CHICHI.05_KAU050N.AT2 RSN3093_CHICHI.05_KAU050E.AT2 RSN3093_CHICHI.05_KAU050V.AT2
3198	Chi-Chi, Taiwan-05 TCU095 1999	6.2	88.38	446.63	Reverse	11.7	0	RSN3198_CHICHI.05_TCU095N.AT2 RSN3198_CHICHI.05_TCU095E.AT2 RSN3198_CHICHI.05_TCU095V.AT2
3404	Chi-Chi, Taiwan-06 KAU054 1999	6.3	55.12	497.22	Reverse	4.6	0	RSN3404_CHICHI.06_KAU054N.AT2 RSN3404_CHICHI.06_KAU054E.AT2 RSN3404_CHICHI.06_KAU054V.AT2
4154	Niigata, Japan FKS023 2004	6.63	85.01	182.3	Reverse	13.5	0	RSN4154_NIIGATA_FKS023NS.AT2 RSN4154_NIIGATA_FKS023EW.AT2 RSN4154_NIIGATA_FKS023UD.AT2
4159	Niigata, Japan FKS028 2004	6.63	30.11	305.54	Reverse	6.7	0	RSN4159_NIIGATA_FKS028NS.AT2 RSN4159_NIIGATA_FKS028EW.AT2 RSN4159_NIIGATA_FKS028UD.AT2
4234	Niigata, Japan NIGH18 2004	6.63	53.99	311.1	Reverse	9.2	0	RSN4234_NIIGATA_NIGH18NS.AT2 RSN4234_NIIGATA_NIGH18EW.AT2 RSN4234_NIIGATA_NIGH18UD.AT2
4720	Wenchuan, China Heishuidiban 2008	7.9	90.35	366.63	Reverse O	36.5	0	RSN4720_WENCHUAN_UA0788.AT2 RSN4720_WENCHUAN_UA0787.AT2 RSN4720_WENCHUAN_UA0789.AT2
4870	Chuetsu-oki Horinouchi Uonuma City 2007	6.8	29.9	561.59	Reverse	8.1	0	RSN4870_CHUETSU_65043NS.AT2 RSN4870_CHUETSU_65043EW.AT2 RSN4870_CHUETSU_65043UD.AT2
5273	Chuetsu-oki NIG027 2007	6.8	60.82	366.98	Reverse	7.6	0	RSN5273_CHUETSU_NIG027NS.AT2 RSN5273_CHUETSU_NIG027EW.AT2 RSN5273_CHUETSU_NIG027UD.AT2

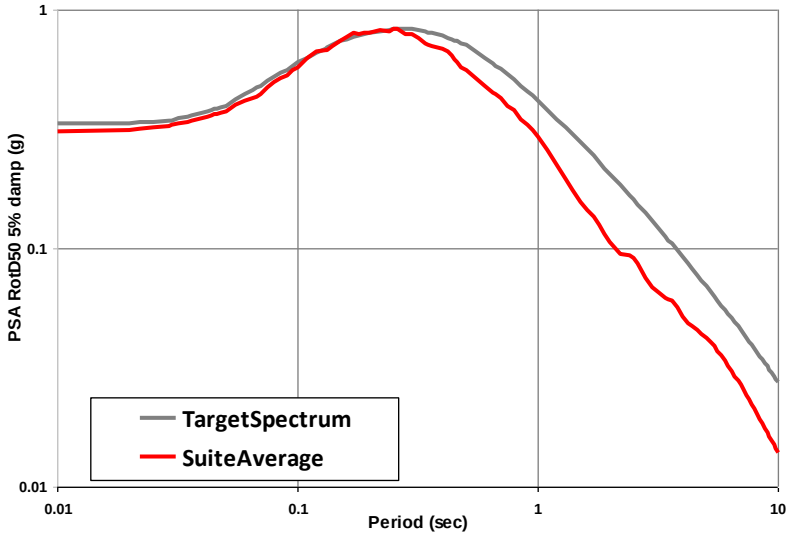
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
5475	Iwate AKT020 2008	6.9	75.91	213.11	Reverse	23.9	0	RSN5475_IWATE_AKT020NS.AT2 RSN5475_IWATE_AKT020EW.AT2 RSN5475_IWATE_AKT020UD.AT2
5622	Iwate IWT014 2008	6.9	36.75	314.6	Reverse	11.3	0	RSN5622_IWATE_IWT014NS.AT2 RSN5622_IWATE_IWT014EW.AT2 RSN5622_IWATE_IWT014UD.AT2
5668	Iwate MYG009 2008	6.9	43.16	540.42	Reverse	14.2	0	RSN5668_IWATE_MYG009NS.AT2 RSN5668_IWATE_MYG009EW.AT2 RSN5668_IWATE_MYG009UD.AT2
5792	Iwate Rifu Town 2008	6.9	57.77	520.7	Reverse	5.4	0	RSN5792_IWATE_54071NS.AT2 RSN5792_IWATE_54071EW.AT2 RSN5792_IWATE_54071UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5798	Iwate Takanashi Daisen 2008	6.9	44.75	217.1	Reverse	9.7	0	RSN5798_IWATE_55429NS.AT2 RSN5798_IWATE_55429EW.AT2 RSN5798_IWATE_55429UD.AT2
8098	Christchurch, New Zealand KOWC 2011	6.2	71.47	485.04	Reverse O	5	0	RSN8098_CCHURCH_KOWCN70E.AT2 RSN8098_CCHURCH_KOWCS20E.AT2 RSN8098_CCHURCH_KOWCUP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
56	San Fernando Carbon Canyon Dam 1971	6.61	61.79	235	Reverse	8.4	3.06	RSN56_SFERN_CND130.AT2 RSN56_SFERN_CND220.AT2 RSN56_SFERN_CNDDWN.AT2
91	San Fernando Upland - San Antonio Dam 1971	6.61	61.72	487.23	Reverse	6.7	3.42	RSN91_SFERN_SOD015.AT2 RSN91_SFERN_SOD285.AT2 RSN91_SFERN_SODDWN.AT2
291	Irpinia, Italy-01 Rionero In Vulture 1980	6.9	27.49	574.88	Normal	18.3	2.96	RSN291_ITALY_A-VLT000.AT2 RSN291_ITALY_A-VLT270.AT2 RSN291_ITALY_A-VLT-UP.AT2
354	Coalinga-01 Parkfield - Gold Hill 5W 1983	6.36	42.72	441.37	Reverse	12.2	4.94	RSN354_COALINGA.H_H-PG5000.AT2 RSN354_COALINGA.H_H-PG5090.AT2 RSN354_COALINGA.H_H-PG5-UP.AT2
542	N. Palm Springs Winchester Page Bros R 1986	6.06	38.01	287.87	Reverse O	4	4.51	RSN542_PALMSPR_H04000.AT2 RSN542_PALMSPR_H04090.AT2 RSN542_PALMSPR_H04-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	2.43	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	3.03	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
910	Big Bear-01 Joshua Tree 1992	6.46	40.99	379.32	strike slip	9.8	3.9	RSN910_BIGBEAR_JOS090.AT2 RSN910_BIGBEAR_JOS360.AT2 RSN910_BIGBEAR_JOS-UP.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	2.99	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	3.07	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	1.8	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1037	Northridge-01 Mojave - Oak Creek Canyon 1994	6.69	75.64	422.73	Reverse	7.2	4.39	RSN1037_NORTHR_MJO000.AT2 RSN1037_NORTHR_MJO090.AT2 RSN1037_NORTHR_MJO-UP.AT2

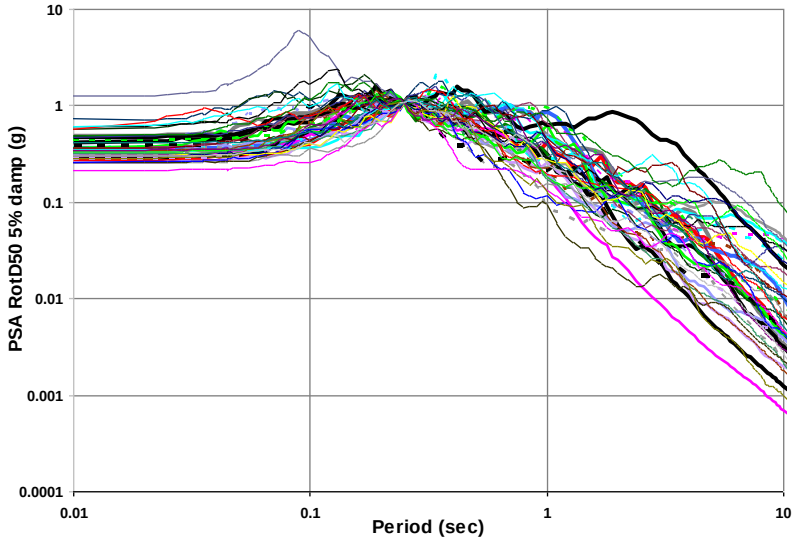
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	4.77	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	1.97	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1139	Dinar, Turkey Cardak 1995	6.4	43.13	428.57	Normal	7.9	3.84	RSN1139_DINAR_CAR076.AT2 RSN1139_DINAR_CAR346.AT2 RSN1139_DINAR_CAR-UP.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	4.55	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1276	Chi-Chi, Taiwan HWA027 1999	7.62	47.58	437.8	Reverse O	8	3.9	RSN1276_CHICHI_HWA027-E.AT2 RSN1276_CHICHI_HWA027-N.AT2 RSN1276_CHICHI_HWA027-V.AT2
1293	Chi-Chi, Taiwan HWA046 1999	7.62	47.79	617.52	Reverse O	8.2	4.4	RSN1293_CHICHI_HWA046-N.AT2 RSN1293_CHICHI_HWA046-W.AT2 RSN1293_CHICHI_HWA046-V.AT2
1466	Chi-Chi, Taiwan TCU008 1999	7.62	84.95	441.58	Reverse O	21.1	4.33	RSN1466_CHICHI_TCU008-E.AT2 RSN1466_CHICHI_TCU008-N.AT2 RSN1466_CHICHI_TCU008-V.AT2
1539	Chi-Chi, Taiwan TCU113 1999	7.62	31.05	230.3	Reverse O	27.5	4.13	RSN1539_CHICHI_TCU113-E.AT2 RSN1539_CHICHI_TCU113-N.AT2 RSN1539_CHICHI_TCU113-V.AT2
1770	Hector Mine Big Bear Lake - Fire Station 1999	7.13	61.85	406.7	strike slip	8.2	1.74	RSN1770_HECTOR_BBL016.AT2 RSN1770_HECTOR_BBL106.AT2 RSN1770_HECTOR_BBL-UP.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	4.16	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
2946	Chi-Chi, Taiwan-05 CHY029 1999	6.2	54.31	544.74	Reverse	6.7	4.72	RSN2946_CHICHI.05_CHY029N.AT2 RSN2946_CHICHI.05_CHY029E.AT2 RSN2946_CHICHI.05_CHY029V.AT2
3007	Chi-Chi, Taiwan-05 HWA019 1999	6.2	55.56	494.82	Reverse	5.2	3.29	RSN3007_CHICHI.05_HWA019N.AT2 RSN3007_CHICHI.05_HWA019E.AT2 RSN3007_CHICHI.05_HWA019V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	2.8	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **500**							**CS Set**
3033	Chi-Chi, Taiwan-05 HWA049 1999	6.2	51.43	508.61	Reverse	7.8	3.95	RSN3033_CHICHI.05_HWA049N.AT2 RSN3033_CHICHI.05_HWA049W.AT2 RSN3033_CHICHI.05_HWA049V.AT2
3169	Chi-Chi, Taiwan-05 TCU040 1999	6.2	72.59	362.03	Reverse	6	4.8	RSN3169_CHICHI.05_TCU040N.AT2 RSN3169_CHICHI.05_TCU040E.AT2 RSN3169_CHICHI.05_TCU040V.AT2
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	4.34	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3208	Chi-Chi, Taiwan-05 TCU109 1999	6.2	49.08	535.13	Reverse	6.6	1.52	RSN3208_CHICHI.05_TCU109N.AT2 RSN3208_CHICHI.05_TCU109E.AT2 RSN3208_CHICHI.05_TCU109V.AT2
3210	Chi-Chi, Taiwan-05 TCU113 1999	6.2	62.51	230.3	Reverse	6.6	2.11	RSN3210_CHICHI.05_TCU113N.AT2 RSN3210_CHICHI.05_TCU113E.AT2 RSN3210_CHICHI.05_TCU113V.AT2
3223	Chi-Chi, Taiwan-05 TCU145 1999	6.2	68.39	240.43	Reverse	6	3.67	RSN3223_CHICHI.05_TCU145N.AT2 RSN3223_CHICHI.05_TCU145W.AT2 RSN3223_CHICHI.05_TCU145V.AT2
3278	Chi-Chi, Taiwan-06 CHY041 1999	6.3	45.68	492.26	Reverse	3.2	1.4	RSN3278_CHICHI.06_CHY041N.AT2 RSN3278_CHICHI.06_CHY041E.AT2 RSN3278_CHICHI.06_CHY041V.AT2
3404	Chi-Chi, Taiwan-06 KAU054 1999	6.3	55.12	497.22	Reverse	4.6	4.33	RSN3404_CHICHI.06_KAU054N.AT2 RSN3404_CHICHI.06_KAU054E.AT2 RSN3404_CHICHI.06_KAU054V.AT2
3861	Chi-Chi (aftershock 4), Taiwan CHY010 1999	6.2	59.1	538.69	Reverse	8.6	3.85	RSN3861_CHICHI.05_CHY010N.AT2 RSN3861_CHICHI.05_CHY010W.AT2 RSN3861_CHICHI.05_CHY010V.AT2
4216	Niigata, Japan NIG026 2004	6.63	49.69	277.29	Reverse	8.9	3.56	RSN4216_NIIGATA_NIG026NS.AT2 RSN4216_NIIGATA_NIG026EW.AT2 RSN4216_NIIGATA_NIG026UD.AT2
4234	Niigata, Japan NIGH18 2004	6.63	53.99	311.1	Reverse	9.2	2.39	RSN4234_NIIGATA_NIGH18NS.AT2 RSN4234_NIIGATA_NIGH18EW.AT2 RSN4234_NIIGATA_NIGH18UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	1.66	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4785	Wenchuan, China Hongyatai 2008	7.9	97.64	477.35	Reverse O	37.3	2.76	

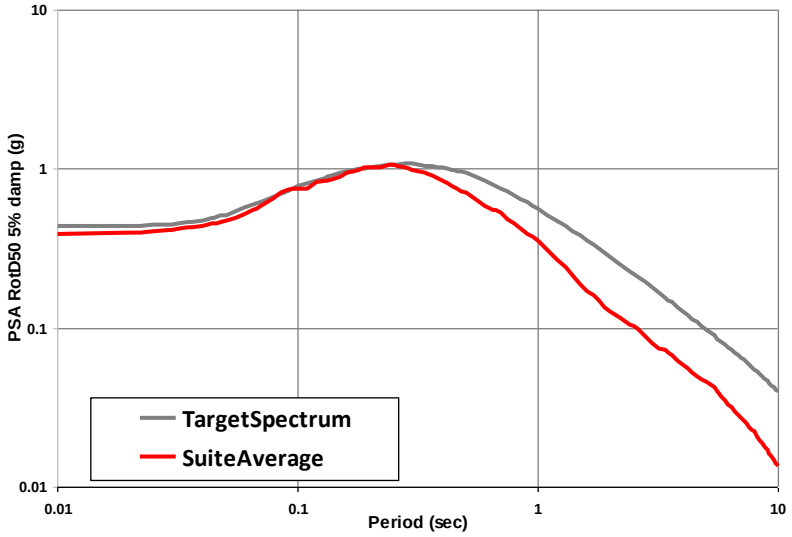
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
4808	Wenchuan, China Lushanfenghe 2008	7.9	91.92	648.51	Reverse O	32.4	3.78	RSN4808_WENCHUAN_UA1115.AT2 RSN4808_WENCHUAN_UA1114.AT2 RSN4808_WENCHUAN_UA1116.AT2
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	4.36	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
5793	Iwate Amamiya, Aobaku, Sendai 2008	6.9	62.39	349.12	Reverse	8.5	4.34	RSN5793_IWATE_54080NS.AT2 RSN5793_IWATE_54080EW.AT2 RSN5793_IWATE_54080UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	1.13	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5802	Iwate Yokote O Morimachi 2008	6.9	43.15	346.81	Reverse	6.8	2.15	RSN5802_IWATE_55444NS.AT2 RSN5802_IWATE_55444EW.AT2 RSN5802_IWATE_55444UD.AT2
6058	Big Bear-01 Fun Valley 1992	6.46	49.35	388.63	strike slip	7.8	3.81	RSN6058_BIGBEAR_FRV045.AT2 RSN6058_BIGBEAR_FRV135.AT2 RSN6058_BIGBEAR_FRV-UP.AT2
8098	Christchurch, New Zealand KOWC 2011	6.2	71.47	485.04	Reverse O	5	4.02	RSN8098_CCHURCH_KOWCN70E.AT2 RSN8098_CCHURCH_KOWCS20E.AT2 RSN8098_CCHURCH_KOWCUP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
91	San Fernando Upland - San Antonio Dam 1971	6.61	61.72	487.23	Reverse	6.7	4.39	RSN91_SFERN_SOD015.AT2 RSN91_SFERN_SOD285.AT2 RSN91_SFERN_SODDWN.AT2
449	Morgan Hill Capitola 1984	6.19	39.08	288.62	strike slip	5	2.91	RSN449_MORGAN_CAP042.AT2 RSN449_MORGAN_CAP132.AT2 RSN449_MORGAN_CAP-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	3.88	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	3.83	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2
956	Northridge-01 Buena Park - La Palma 1994	6.69	59.35	270.96	Reverse	9.2	3.35	RSN956_NORTHR_BPK090.AT2 RSN956_NORTHR_BPK180.AT2 RSN956_NORTHR_BPK-UP.AT2
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	2.18	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
1005	Northridge-01 LA - Temple & Hope 1994	6.69	28.82	452.15	Reverse	7	2.82	RSN1005_NORTHR_TEM090.AT2 RSN1005_NORTHR_TEM180.AT2 RSN1005_NORTHR_TEM-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	3.94	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1019	Northridge-01 Lake Hughes #1 1994	6.69	35.46	425.34	Reverse	7.9	4.33	RSN1019_NORTHR_L01000.AT2 RSN1019_NORTHR_L01090.AT2 RSN1019_NORTHR_L01-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	2.31	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1072	Northridge-01 San Marino - SW Academy 1994	6.69	34.55	379.43	Reverse	5.5	3.04	RSN1072_NORTHR_SMA090.AT2 RSN1072_NORTHR_SMA360.AT2 RSN1072_NORTHR_SMA-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	2.53	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2

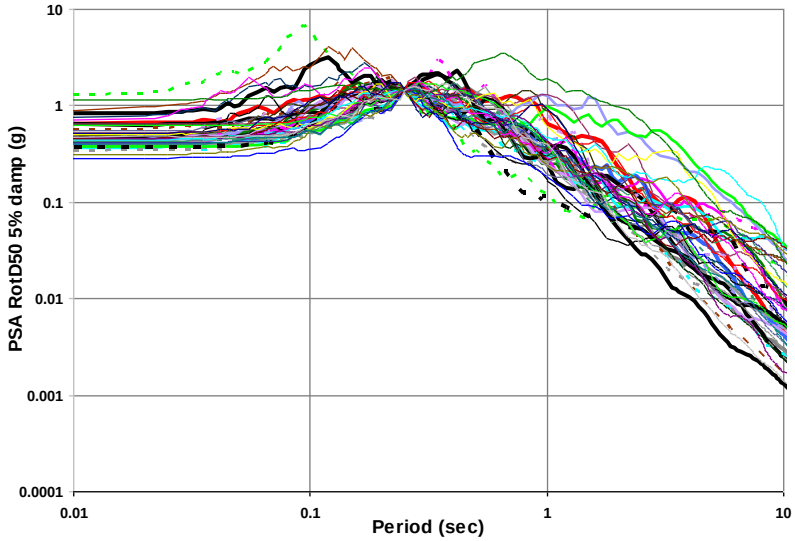
Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **1000**							**CS Set**
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	3.9	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	1.22	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1139	Dinar, Turkey Cardak 1995	6.4	43.13	428.57	Normal	7.9	4.93	RSN1139_DINAR_CAR076.AT2 RSN1139_DINAR_CAR346.AT2 RSN1139_DINAR_CAR-UP.AT2
1346	Chi-Chi, Taiwan ILA062 1999	7.62	70.43	447.51	Reverse O	14.7	4.56	RSN1346_CHICHI_ILA062-N.AT2 RSN1346_CHICHI_ILA062-W.AT2 RSN1346_CHICHI_ILA062-V.AT2
1427	Chi-Chi, Taiwan TAP035 1999	7.62	87.67	438.13	Reverse O	14.4	4.48	RSN1427_CHICHI_TAP035-E.AT2 RSN1427_CHICHI_TAP035-N.AT2 RSN1427_CHICHI_TAP035-V.AT2
1770	Hector Mine Big Bear Lake - Fire Station 1999	7.13	61.85	406.7	strike slip	8.2	2.23	RSN1770_HECTOR_BBL016.AT2 RSN1770_HECTOR_BBL106.AT2 RSN1770_HECTOR_BBL-UP.AT2
1786	Hector Mine Heart Bar State Park 1999	7.13	61.21	624.94	strike slip	11.2	3.82	RSN1786_HECTOR_HBS090.AT2 RSN1786_HECTOR_HBS180.AT2 RSN1786_HECTOR_HBS-UP.AT2
2955	Chi-Chi, Taiwan-05 CHY047 1999	6.2	66.53	169.52	Reverse	6.3	1.64	RSN2955_CHICHI.05_CHY047N.AT2 RSN2955_CHICHI.05_CHY047W.AT2 RSN2955_CHICHI.05_CHY047V.AT2
3000	Chi-Chi, Taiwan-05 HWA011 1999	6.2	54.22	355.76	Reverse	6.4	3.35	RSN3000_CHICHI.05_HWA011N.AT2 RSN3000_CHICHI.05_HWA011E.AT2 RSN3000_CHICHI.05_HWA011V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	3.6	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3205	Chi-Chi, Taiwan-05 TCU105 1999	6.2	59.83	575.54	Reverse	5.3	4.2	RSN3205_CHICHI.05_TCU105N.AT2 RSN3205_CHICHI.05_TCU105E.AT2 RSN3205_CHICHI.05_TCU105V.AT2
3207	Chi-Chi, Taiwan-05 TCU107 1999	6.2	51.35	409	Reverse	10	4.69	RSN3207_CHICHI.05_TCU107N.AT2 RSN3207_CHICHI.05_TCU107E.AT2 RSN3207_CHICHI.05_TCU107V.AT2
3215	Chi-Chi, Taiwan-05 TCU123 1999	6.2	48.86	270.22	Reverse	8.8	3.47	RSN3215_CHICHI.05_TCU123N.AT2 RSN3215_CHICHI.05_TCU123E.AT2 RSN3215_CHICHI.05_TCU123V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **1000**							**CS Set**
3308	Chi-Chi, Taiwan-06 CHY087 1999	6.3	55.44	505.2	Reverse	5.2	4.87	RSN3308_CHICHI.06_CHY087N.AT2 RSN3308_CHICHI.06_CHY087E.AT2 RSN3308_CHICHI.06_CHY087V.AT2
3317	Chi-Chi, Taiwan-06 CHY101 1999	6.3	34.55	258.89	Reverse	9	3.45	RSN3317_CHICHI.06_CHY101N.AT2 RSN3317_CHICHI.06_CHY101E.AT2 RSN3317_CHICHI.06_CHY101V.AT2
3919	Tottori, Japan OKYH01 2000	6.61	80.12	238.49	strike slip	10.5	2.64	RSN3919_TOTTORI_OKYH01NS.AT2 RSN3919_TOTTORI_OKYH01EW.AT2 RSN3919_TOTTORI_OKYH01UD.AT2
3963	Tottori, Japan TTR006 2000	6.61	35.15	352.65	strike slip	5.5	4.32	RSN3963_TOTTORI_TTR006NS.AT2 RSN3963_TOTTORI_TTR006EW.AT2 RSN3963_TOTTORI_TTR006UD.AT2
4154	Niigata, Japan FKS023 2004	6.63	85.01	182.3	Reverse	13.5	4.51	RSN4154_NIIGATA_FKS023NS.AT2 RSN4154_NIIGATA_FKS023EW.AT2 RSN4154_NIIGATA_FKS023UD.AT2
4159	Niigata, Japan FKS028 2004	6.63	30.11	305.54	Reverse	6.7	4.34	RSN4159_NIIGATA_FKS028NS.AT2 RSN4159_NIIGATA_FKS028EW.AT2 RSN4159_NIIGATA_FKS028UD.AT2
4223	Niigata, Japan NIGH06 2004	6.63	30.18	493.27	Reverse	4.9	0.84	RSN4223_NIIGATA_NIGH06NS.AT2 RSN4223_NIIGATA_NIGH06EW.AT2 RSN4223_NIIGATA_NIGH06UD.AT2
4227	Niigata, Japan NIGH10 2004	6.63	39.17	653.28	Reverse	5.4	3.4	RSN4227_NIIGATA_NIGH10NS.AT2 RSN4227_NIIGATA_NIGH10EW.AT2 RSN4227_NIIGATA_NIGH10UD.AT2
4240	Niigata, Japan TCG009 2004	6.63	94.26	225.04	Reverse	16.4	2.76	RSN4240_NIIGATA_TCG009NS.AT2 RSN4240_NIIGATA_TCG009EW.AT2 RSN4240_NIIGATA_TCG009UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	2.13	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4785	Wenchuan, China Hongyatai 2008	7.9	97.64	477.35	Reverse O	37.3	3.55	
4793	Wenchuan, China Mingshan 2008	7.9	83.79	600.39	Reverse O	41.8	3.55	RSN4793_WENCHUAN_UA1067.AT2 RSN4793_WENCHUAN_UA1066.AT2 RSN4793_WENCHUAN_UA1068.AT2
4870	Chuetsu-oki Horinouchi Uonuma City 2007	6.8	29.9	561.59	Reverse	8.1	2.86	RSN4870_CHUETSU_65043NS.AT2 RSN4870_CHUETSU_65043EW.AT2 RSN4870_CHUETSU_65043UD.AT2

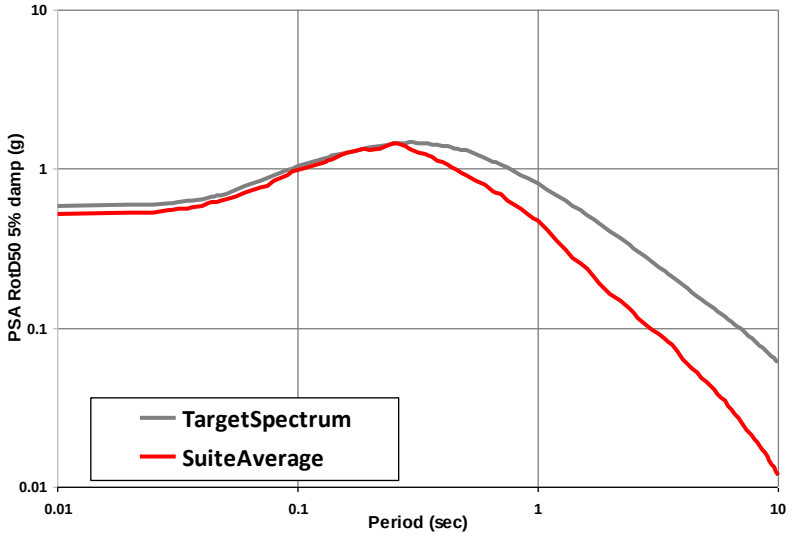
Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **1000**							**CS Set**
5279	Chuetsu-oki NIGH05 2007	6.8	67.6	244.84	Reverse	13.9	4.33	RSN5279_CHUETSU_NIGH05NS.AT2 RSN5279_CHUETSU_NIGH05EW.AT2 RSN5279_CHUETSU_NIGH05UD.AT2
5280	Chuetsu-oki NIGH06 2007	6.8	30.53	493.27	Reverse	10.6	1.74	RSN5280_CHUETSU_NIGH06NS.AT2 RSN5280_CHUETSU_NIGH06EW.AT2 RSN5280_CHUETSU_NIGH06UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	3.05	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	1.45	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5797	Iwate Oomagari Hanazono-cho, Daisen 2008	6.9	46.32	262.25	Reverse	9.4	4.84	RSN5797_IWATE_55208NS.AT2 RSN5797_IWATE_55208EW.AT2 RSN5797_IWATE_55208UD.AT2
5798	Iwate Takanashi Daisen 2008	6.9	44.75	217.1	Reverse	9.7	2.83	RSN5798_IWATE_55429NS.AT2 RSN5798_IWATE_55429EW.AT2 RSN5798_IWATE_55429UD.AT2
5859	El Mayor-Cucapah Westmorland Fire Sta 2010	7.2	42.29	193.67	strike slip	16.5	3.08	RSN5859_SIERRA.MEX_WSM360.AT2 RSN5859_SIERRA.MEX_WSM090.AT2 RSN5859_SIERRA.MEX_WSM-UP.AT2

Site	**05 Bakersfield**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	05 Bakersfield	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
449	Morgan Hill Capitola 1984	6.19	39.08	288.62	strike slip	5	3.91	RSN449_MORGAN_CAP042.AT2 RSN449_MORGAN_CAP132.AT2 RSN449_MORGAN_CAP-UP.AT2
738	Loma Prieta Alameda Naval Air Stn Hanger 1989	6.93	70.9	190	Reverse O	2.8	4.98	RSN738_LOMAP_NAS180.AT2 RSN738_LOMAP_NAS270.AT2 RSN738_LOMAP_NAS-UP.AT2
773	Loma Prieta Hayward - BART Sta 1989	6.93	54.01	337.88	Reverse O	6.5	3.24	RSN773_LOMAP_HWB220.AT2 RSN773_LOMAP_HWB310.AT2 RSN773_LOMAP_HWB-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	4.2	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
955	Northridge-01 Brea - S Flower Av 1994	6.69	64.63	322.75	Reverse	6.7	4.58	RSN955_NORTHR_FLO020.AT2 RSN955_NORTHR_FLO290.AT2 RSN955_NORTHR_FLO-UP.AT2
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	2.93	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
972	Northridge-01 Featherly Park - Maint 1994	6.69	82.01	367.54	Reverse	5.8	4.82	RSN972_NORTHR_FEA000.AT2 RSN972_NORTHR_FEA090.AT2 RSN972_NORTHR_FEA-UP.AT2
1001	Northridge-01 LA - S Grand Ave 1994	6.69	29.52	285.28	Reverse	5.4	1.92	RSN1001_NORTHR_GR2090.AT2 RSN1001_NORTHR_GR2180.AT2 RSN1001_NORTHR_GR2-UP.AT2
1005	Northridge-01 LA - Temple & Hope 1994	6.69	28.82	452.15	Reverse	7	3.79	RSN1005_NORTHR_TEM090.AT2 RSN1005_NORTHR_TEM180.AT2 RSN1005_NORTHR_TEM-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	3.1	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1032	Northridge-01 Leona Valley #6 1994	6.69	37.7	327.44	Reverse	4.9	3.24	RSN1032_NORTHR_LV6090.AT2 RSN1032_NORTHR_LV6360.AT2 RSN1032_NORTHR_LV6-UP.AT2
1055	Northridge-01 Pasadena - N Sierra Madre 1994	6.69	35.77	397.27	Reverse	6	2.75	RSN1055_NORTHR_SMV180.AT2 RSN1055_NORTHR_SMV270.AT2 RSN1055_NORTHR_SMV-UP.AT2

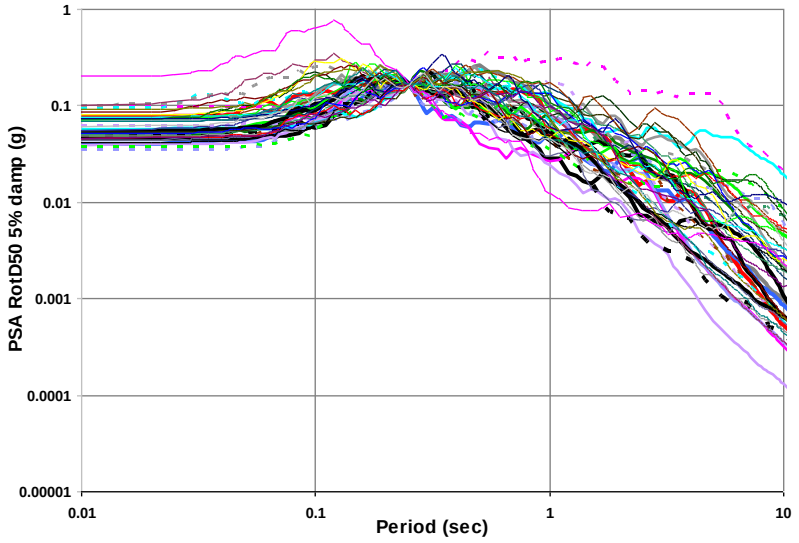
Site Site Vs30 (m/s) Return Period (yr)	**05 Bakersfield** **270** **2500**							**CS Set**
1072	Northridge-01 San Marino - SW Academy 1994	6.69	34.55	379.43	Reverse	5.5	4.09	RSN1072_NORTHR_SMA090.AT2 RSN1072_NORTHR_SMA360.AT2 RSN1072_NORTHR_SMA-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	3.4	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1088	Northridge-01 Terminal Island - S Seaside 1994	6.69	53.43	260.6	Reverse	6.3	2.55	RSN1088_NORTHR_SSE240.AT2 RSN1088_NORTHR_SSE330.AT2 RSN1088_NORTHR_SSE-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	1.64	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1770	Hector Mine Big Bear Lake - Fire Station 1999	7.13	61.85	406.7	strike slip	8.2	3.01	RSN1770_HECTOR_BBL016.AT2 RSN1770_HECTOR_BBL106.AT2 RSN1770_HECTOR_BBL-UP.AT2
1795	Hector Mine Joshua Tree N.M. - Keys View 1999	7.13	50.42	686.12	strike slip	11.4	4.66	RSN1795_HECTOR_JTN090.AT2 RSN1795_HECTOR_JTN180.AT2 RSN1795_HECTOR_JTN-UP.AT2
3000	Chi-Chi, Taiwan-05 HWA011 1999	6.2	54.22	355.76	Reverse	6.4	4.51	RSN3000_CHICHI.05_HWA011N.AT2 RSN3000_CHICHI.05_HWA011E.AT2 RSN3000_CHICHI.05_HWA011V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	4.84	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3095	Chi-Chi, Taiwan-05 KAU054 1999	6.2	60.86	497.22	Reverse	3.1	4.61	RSN3095_CHICHI.05_KAU054N.AT2 RSN3095_CHICHI.05_KAU054E.AT2 RSN3095_CHICHI.05_KAU054V.AT2
3188	Chi-Chi, Taiwan-05 TCU067 1999	6.2	36.73	433.63	Reverse	4.4	4.21	RSN3188_CHICHI.05_TCU067N.AT2 RSN3188_CHICHI.05_TCU067E.AT2 RSN3188_CHICHI.05_TCU067V.AT2
3215	Chi-Chi, Taiwan-05 TCU123 1999	6.2	48.86	270.22	Reverse	8.8	4.67	RSN3215_CHICHI.05_TCU123N.AT2 RSN3215_CHICHI.05_TCU123E.AT2 RSN3215_CHICHI.05_TCU123V.AT2
3265	Chi-Chi, Taiwan-06 CHY025 1999	6.3	39.07	277.5	Reverse	9.9	4.53	RSN3265_CHICHI.06_CHY025N.AT2 RSN3265_CHICHI.06_CHY025E.AT2 RSN3265_CHICHI.06_CHY025V.AT2
3278	Chi-Chi, Taiwan-06 CHY041 1999	6.3	45.68	492.26	Reverse	3.2	2.42	RSN3278_CHICHI.06_CHY041N.AT2 RSN3278_CHICHI.06_CHY041E.AT2 RSN3278_CHICHI.06_CHY041V.AT2

Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
3311	Chi-Chi, Taiwan-06 CHY092 1999	6.3	42.77	253.72	Reverse	15.1	4.87	RSN3311_CHICHI.06_CHY092N.AT2 RSN3311_CHICHI.06_CHY092W.AT2 RSN3311_CHICHI.06_CHY092V.AT2
3884	Tottori, Japan HRS021 2000	6.61	36.32	409.29	strike slip	9.6	4.95	RSN3884_TOTTORI_HRS021NS.AT2 RSN3884_TOTTORI_HRS021EW.AT2 RSN3884_TOTTORI_HRS021UD.AT2
4169	Niigata, Japan FKSH21 2004	6.63	30.55	364.91	Reverse	5.4	2.52	RSN4169_NIIGATA_FKSH21NS.AT2 RSN4169_NIIGATA_FKSH21EW.AT2 RSN4169_NIIGATA_FKSH21UD.AT2
4178	Niigata, Japan GNM013 2004	6.63	98.85	258.27	Reverse	5.2	4.15	RSN4178_NIIGATA_GNM013NS.AT2 RSN4178_NIIGATA_GNM013EW.AT2 RSN4178_NIIGATA_GNM013UD.AT2
4202	Niigata, Japan NIG012 2004	6.63	56.07	229.95	Reverse	4.3	1.85	RSN4202_NIIGATA_NIG012NS.AT2 RSN4202_NIIGATA_NIG012EW.AT2 RSN4202_NIIGATA_NIG012UD.AT2
4223	Niigata, Japan NIGH06 2004	6.63	30.18	493.27	Reverse	4.9	1.13	RSN4223_NIIGATA_NIGH06NS.AT2 RSN4223_NIIGATA_NIGH06EW.AT2 RSN4223_NIIGATA_NIGH06UD.AT2
4227	Niigata, Japan NIGH10 2004	6.63	39.17	653.28	Reverse	5.4	4.57	RSN4227_NIIGATA_NIGH10NS.AT2 RSN4227_NIIGATA_NIGH10EW.AT2 RSN4227_NIIGATA_NIGH10UD.AT2
4234	Niigata, Japan NIGH18 2004	6.63	53.99	311.1	Reverse	9.2	4.13	RSN4234_NIIGATA_NIGH18NS.AT2 RSN4234_NIIGATA_NIGH18EW.AT2 RSN4234_NIIGATA_NIGH18UD.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	2.87	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4737	Wenchuan, China Lixiantaoping 2008	7.9	19.39	350.82	Reverse O	35.2	2.68	RSN4737_WENCHUAN_UA0842.AT2 RSN4737_WENCHUAN_UA0841.AT2 RSN4737_WENCHUAN_UA0843.AT2
5193	Chuetsu-oki NGN001 2007	6.8	51.48	303.73	Reverse	4.4	3.92	RSN5193_CHUETSU_NGN001NS.AT2 RSN5193_CHUETSU_NGN001EW.AT2 RSN5193_CHUETSU_NGN001UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	4.1	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5673	Iwate MYG014 2008	6.9	59.67	362.37	Reverse	7.6	2.73	RSN5673_IWATE_MYG014NS.AT2 RSN5673_IWATE_MYG014EW.AT2 RSN5673_IWATE_MYG014UD.AT2

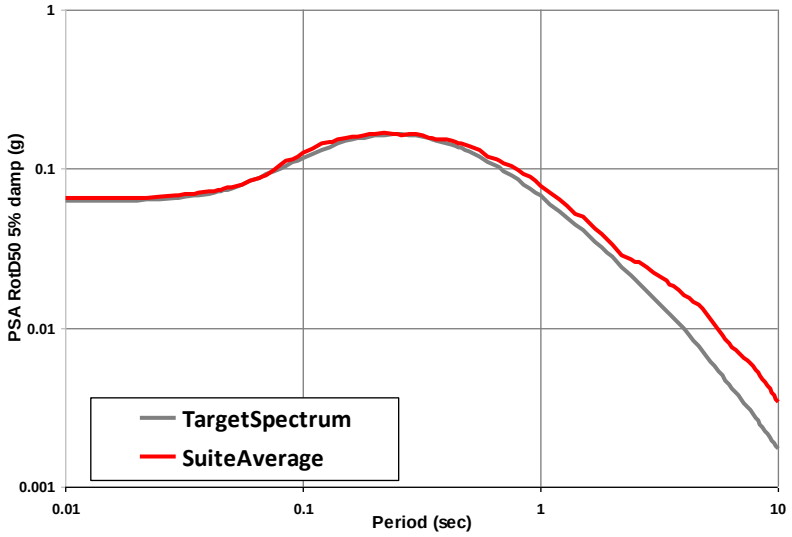
Site	05 Bakersfield							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
5674	Iwate MYG015 2008	6.9	80.97	211.2	Reverse	11.1	3.77	RSN5674_IWATE_MYG015NS.AT2 RSN5674_IWATE_MYG015EW.AT2 RSN5674_IWATE_MYG015UD.AT2
5788	Iwate Masuda Natori 2008	6.9	74.08	319.66	Reverse	5.1	1.79	RSN5788_IWATE_54056NS.AT2 RSN5788_IWATE_54056EW.AT2 RSN5788_IWATE_54056UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	1.95	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5798	Iwate Takanashi Daisen 2008	6.9	44.75	217.1	Reverse	9.7	3.81	RSN5798_IWATE_55429NS.AT2 RSN5798_IWATE_55429EW.AT2 RSN5798_IWATE_55429UD.AT2
5802	Iwate Yokote O Morimachi 2008	6.9	43.15	346.81	Reverse	6.8	3.71	RSN5802_IWATE_55444NS.AT2 RSN5802_IWATE_55444EW.AT2 RSN5802_IWATE_55444UD.AT2
5857	El Mayor-Cucapah Niland Fire Station 2010	7.2	66.71	212	strike slip	24.7	4.62	RSN5857_SIERRA.MEX_NIL360.AT2 RSN5857_SIERRA.MEX_NIL090.AT2 RSN5857_SIERRA.MEX_NIL-UP.AT2
5863	El Mayor-Cucapah Salton City 2010	7.2	72.44	324.5	strike slip	7	3.28	RSN5863_SIERRA.MEX_SAC090.AT2 RSN5863_SIERRA.MEX_SAC180.AT2 RSN5863_SIERRA.MEX_SAC-UP.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
10	Imperial Valley-03 El Centro Array #9 1951	5.6	24.58	213.44	strike slip	14.5	2.57	RSN10_IMPVALL.BG_C-ELC000.AT2 RSN10_IMPVALL.BG_C-ELC090.AT2 RSN10_IMPVALL.BG_C-ELC-UP.AT2
94	San Fernando Wrightwood - 6074 Park Dr 1971	6.61	61.64	486	Reverse	7.1	1.27	RSN94_SFERN_WTW025.AT2 RSN94_SFERN_WTW295.AT2 RSN94_SFERN_WTWDWN.AT2
133	Friuli, Italy-02 San Rocco 1976	5.91	14.37	649.67	Reverse	2.5	0.47	RSN133_FRIULI.B_B-SRO000.AT2 RSN133_FRIULI.B_B-SRO270.AT2 RSN133_FRIULI.B_B-SRO-UP.AT2
153	Coyote Lake San Juan Bautista - Hwy 101/156 Ov 1979	5.74	20.44	362.98	strike slip	3.5	0.99	RSN153_COYOTELK_SJ5067.AT2 RSN153_COYOTELK_SJ5337.AT2 RSN153_COYOTELK_SJ5-UP.AT2
183	Imperial Valley-06 El Centro Array #8 1979	6.53	3.86	206.08	strike slip	2.9	0.19	RSN183_IMPVALL.H_H-E08140.AT2 RSN183_IMPVALL.H_H-E08230.AT2 RSN183_IMPVALL.H_H-E08-UP.AT2
572	Taiwan SMART1(45) SMART1 E02 1986	7.3	51.35	671.52	Reverse	7.1	0.53	RSN572_SMART1.45_45EO2EW.AT2 RSN572_SMART1.45_45EO2NS.AT2 RSN572_SMART1.45_45EO2DN.AT2
690	Whittier Narrows-01 San Gabriel - E Grand Ave 1987	5.99	0	401.37	Reverse O	2.5	0.35	RSN690_WHITTIER.A_A-GRN180.AT2 RSN690_WHITTIER.A_A-GRN270.AT2 RSN690_WHITTIER.A_A-GRN-UP.AT2
698	Whittier Narrows-01 Sylmar - Olive View Med FF 1987	5.99	38.55	440.54	Reverse O	6.3	1.22	RSN698_WHITTIER.A_A-SYL000.AT2 RSN698_WHITTIER.A_A-SYL090.AT2 RSN698_WHITTIER.A_A-SYL-UP.AT2
1005	Northridge-01 LA - Temple & Hope 1994	6.69	28.82	452.15	Reverse	7	0.44	RSN1005_NORTHR_TEM090.AT2 RSN1005_NORTHR_TEM180.AT2 RSN1005_NORTHR_TEM-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.15	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	0.95	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.39	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2

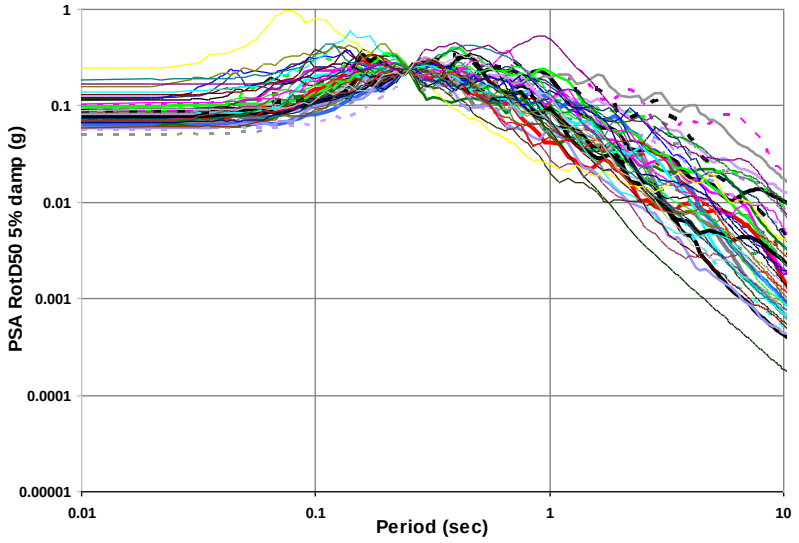
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	0.6	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.25	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	0.9	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1336	Chi-Chi, Taiwan ILA048 1999	7.62	86.67	199.59	Reverse O	20.1	1.16	RSN1336_CHICHI_ILA048-N.AT2 RSN1336_CHICHI_ILA048-W.AT2 RSN1336_CHICHI_ILA048-V.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	0.39	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1768	Hector Mine Barstow 1999	7.13	61.2	370.08	strike slip	10.1	1.15	RSN1768_HECTOR_BRS090.AT2 RSN1768_HECTOR_BRS360.AT2 RSN1768_HECTOR_BRS-UP.AT2
2194	Chi-Chi, Taiwan-02 CHY079 1999	5.9	89.06	573.04	Reverse	6.6	4.74	RSN2194_CHICHI.02_CHY079N.AT2 RSN2194_CHICHI.02_CHY079E.AT2 RSN2194_CHICHI.02_CHY079V.AT2
2285	Chi-Chi, Taiwan-02 ILA046 1999	5.9	97.53	396.93	Reverse	7.5	4.18	RSN2285_CHICHI.02_ILA046N.AT2 RSN2285_CHICHI.02_ILA046E.AT2 RSN2285_CHICHI.02_ILA046V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	1.22	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2518	Chi-Chi, Taiwan-03 HWA011 1999	6.2	72.23	355.76	Reverse	16	3.28	RSN2518_CHICHI.03_HWA011N.AT2 RSN2518_CHICHI.03_HWA011E.AT2 RSN2518_CHICHI.03_HWA011V.AT2
2786	Chi-Chi, Taiwan-04 HWA038 1999	6.2	47.48	642.73	strike slip	10.4	4.33	RSN2786_CHICHI.04_HWA038N.AT2 RSN2786_CHICHI.04_HWA038E.AT2 RSN2786_CHICHI.04_HWA038V.AT2
2790	Chi-Chi, Taiwan-04 HWA044 1999	6.2	67.93	534.41	strike slip	10.9	3.5	RSN2790_CHICHI.04_HWA044N.AT2 RSN2790_CHICHI.04_HWA044E.AT2 RSN2790_CHICHI.04_HWA044V.AT2
2997	Chi-Chi, Taiwan-05 HWA005 1999	6.2	32.71	459.32	Reverse	7.7	0.64	RSN2997_CHICHI.05_HWA005N.AT2 RSN2997_CHICHI.05_HWA005W.AT2 RSN2997_CHICHI.05_HWA005V.AT2

Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
3014	Chi-Chi, Taiwan-05 HWA027 1999	6.2	56.48	437.8	Reverse	6.4	1.19	RSN3014_CHICHI.05_HWA027N.AT2 RSN3014_CHICHI.05_HWA027E.AT2 RSN3014_CHICHI.05_HWA027V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	0.56	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3033	Chi-Chi, Taiwan-05 HWA049 1999	6.2	51.43	508.61	Reverse	7.8	0.78	RSN3033_CHICHI.05_HWA049N.AT2 RSN3033_CHICHI.05_HWA049W.AT2 RSN3033_CHICHI.05_HWA049V.AT2
3327	Chi-Chi, Taiwan-06 HWA009 1999	6.3	53.55	373.23	Reverse	9.6	2.15	RSN3327_CHICHI.06_HWA009N.AT2 RSN3327_CHICHI.06_HWA009E.AT2 RSN3327_CHICHI.06_HWA009V.AT2
3448	Chi-Chi, Taiwan-06 TCU036 1999	6.3	54.5	478.07	Reverse	11.8	1.68	RSN3448_CHICHI.06_TCU036N.AT2 RSN3448_CHICHI.06_TCU036E.AT2 RSN3448_CHICHI.06_TCU036V.AT2
3498	Chi-Chi, Taiwan-06 TCU113 1999	6.3	53.02	230.3	Reverse	22.2	1.44	RSN3498_CHICHI.06_TCU113N.AT2 RSN3498_CHICHI.06_TCU113E.AT2 RSN3498_CHICHI.06_TCU113V.AT2
3679	Taiwan SMART1(45) SMART1 M11 1986	7.3	56.84	300.22	Reverse	10.8	0.43	RSN3679_SMART1.45_45M11EW.AT RSN3679_SMART1.45_45M11NS.AT2 RSN3679_SMART1.45_45M11DN.AT
3681	Taiwan SMART1(45) SMART1 O03 1986	7.3	56.16	278.32	Reverse	10.8	0.51	RSN3681_SMART1.45_45O03EW.AT2 RSN3681_SMART1.45_45O03NS.AT2 RSN3681_SMART1.45_45O03DN.AT2
4329	Potenza, Italy Rionero In Vulture 1990	5.8	34.5	574.88	strike slip	4.5	1.09	RSN4329_POTENZA.P_A-VLT000.AT2 RSN4329_POTENZA.P_A-VLT270.AT2 RSN4329_POTENZA.P_A-VLT-UP.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	0.33	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.07	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4757	Wenchuan, China Dayiyinping 2008	7.9	28.59	378.93	Reverse O	53.2	0.33	RSN4757_WENCHUAN_UA0921.AT2 RSN4757_WENCHUAN_UA0920.AT2 RSN4757_WENCHUAN_UA0919.AT2
4781	Wenchuan, China Jiangyouchonghua 2008	7.9	27.23	430.47	Reverse O	18.4	0.25	RSN4781_WENCHUAN_UA1027.AT2 RSN4781_WENCHUAN_UA1028.AT2 RSN4781_WENCHUAN_UA1029.AT2

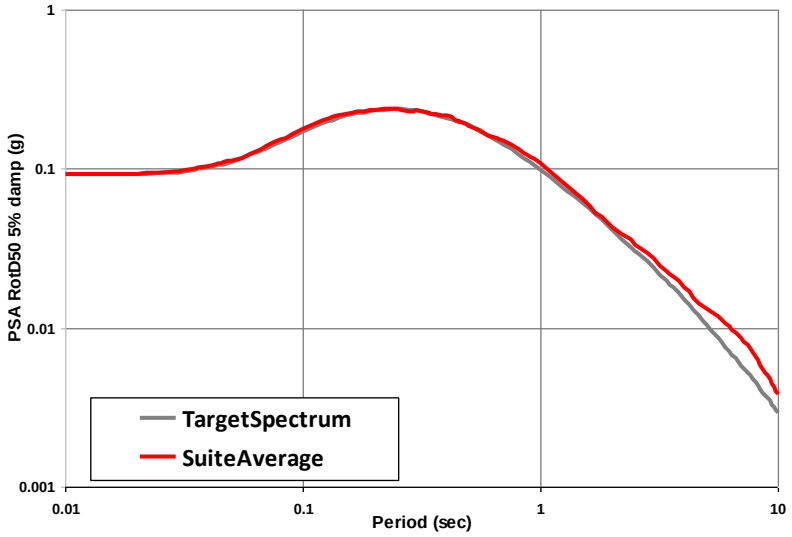
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
4855	Chuetsu-oki Sanjo 2007	6.8	21.4	245.45	Reverse	13.7	0.45	RSN4855_CHUETSU_65024NS.AT2 RSN4855_CHUETSU_65024EW.AT2 RSN4855_CHUETSU_65024UD.AT2
5003	Chuetsu-oki FKSH04 2007	6.8	93.48	245.88	Reverse	20.5	3	RSN5003_CHUETSU_FKSH04NS.AT2 RSN5003_CHUETSU_FKSH04EW.AT2 RSN5003_CHUETSU_FKSH04UD.AT2
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	0.87	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
5809	Iwate Minase Yuzawa 2008	6.9	17.34	655.45	Reverse	7.6	0.34	RSN5809_IWATE_55465NS.AT2 RSN5809_IWATE_55465EW.AT2 RSN5809_IWATE_55465UD.AT2
5837	El Mayor-Cucapah El Centro - Imperial & Ross 2010	7.2	19.39	229.25	strike slip	15	0.2	RSN5837_SIERRA.MEX_01711360.AT RSN5837_SIERRA.MEX_01711-90.AT2 RSN5837_SIERRA.MEX_01711-UP.AT
6027	El Mayor-Cucapah Ocotillo Wells - Veh. Rec. Area 2010	7.2	67.71	361.22	strike slip	10.1	0.98	RSN6027_SIERRA.MEX_0522A360.AT RSN6027_SIERRA.MEX_0522C090.AT RSN6027_SIERRA.MEX_0522B-UP.AT
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0.29	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
72	San Fernando Lake Hughes #4 1971	6.61	19.45	600.06	Reverse	3.9	0.87	RSN72_SFERN_L04111.AT2 RSN72_SFERN_L04201.AT2 RSN72_SFERN_L04DWN.AT2
123	Friuli, Italy-01 Conegliano 1976	6.5	80.37	352.05	Reverse	7.3	1.52	RSN123_FRIULI.A_A-CLV000.AT2 RSN123_FRIULI.A_A-CLV270.AT2 RSN123_FRIULI.A_A-CLV-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.07	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	0.51	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
493	Drama, Greece Drama 1985	5.2	11.61	324.55	Normal O	2	1.78	RSN493_GREECE_F-DRA-NS.AT2 RSN493_GREECE_F-DRA-WE.AT2 RSN493_GREECE_F-DRA-UP.AT2
547	Chalfant Valley-01 Zack Brothers Ranch 1986	5.77	6.07	316.19	strike slip	3	0.47	RSN547_CHALFANT.B_B-ZAK270.AT2 RSN547_CHALFANT.B_B-ZAK360.AT2 RSN547_CHALFANT.B_B-ZAK-UP.AT2
558	Chalfant Valley-02 Zack Brothers Ranch 1986	6.19	6.44	316.19	strike slip	2.4	0.23	RSN558_CHALFANT.A_A-ZAK270.AT2 RSN558_CHALFANT.A_A-ZAK360.AT2 RSN558_CHALFANT.A_A-ZAK-UP.AT2
636	Whittier Narrows-01 LA - N Faring Rd 1987	5.99	27.94	255	Reverse O	4.3	2.48	RSN636_WHITTIER.A_A-FAR000.AT2 RSN636_WHITTIER.A_A-FAR090.AT2 RSN636_WHITTIER.A_A-FAR-UP.AT2
671	Whittier Narrows-01 Pacoima Kagel Canyon 1987	5.99	31.59	508.08	Reverse O	4	0.82	RSN671_WHITTIER.A_A-PKC000.AT2 RSN671_WHITTIER.A_A-PKC090.AT2 RSN671_WHITTIER.A_A-PKC-UP.AT2
750	Loma Prieta Berkeley LBL 1989	6.93	79.16	623.52	Reverse O	3.7	1.82	RSN750_LOMAP_BRK000.AT2 RSN750_LOMAP_BRK090.AT2 RSN750_LOMAP_BRK-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.51	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.56	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2

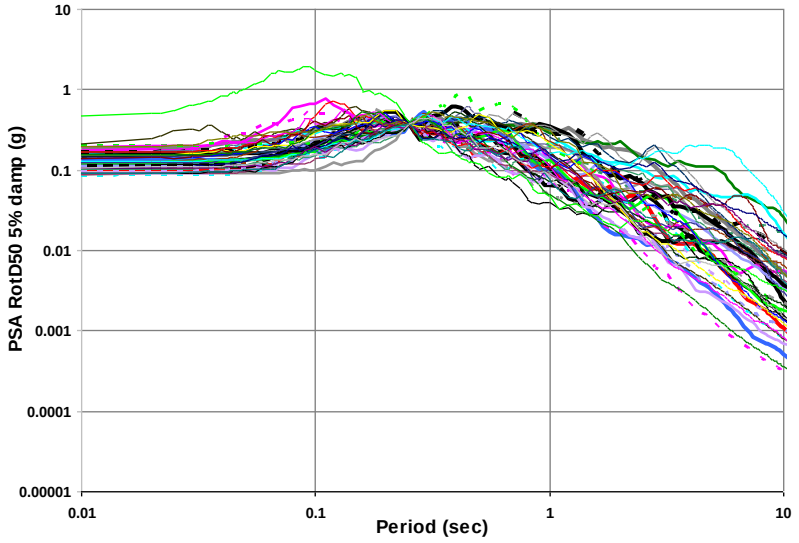
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.22	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	1.3	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1303	Chi-Chi, Taiwan HWA058 1999	7.62	41.17	529.54	Reverse O	9	0.9	RSN1303_CHICHI_HWA058-E.AT2 RSN1303_CHICHI_HWA058-N.AT2 RSN1303_CHICHI_HWA058-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.19	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1824	Hector Mine San Bernardino - Del Rosa Wk Sta 1999	7.13	96.91	642.83	strike slip	8.3	3.52	RSN1824_HECTOR_DRW016.AT2 RSN1824_HECTOR_DRW106.AT2 RSN1824_HECTOR_DRW-UP.AT2
2238	Chi-Chi, Taiwan-02 HWA031 1999	5.9	44.29	602.29	Reverse	10	3.8	RSN2238_CHICHI.02_HWA031N.AT2 RSN2238_CHICHI.02_HWA031E.AT2 RSN2238_CHICHI.02_HWA031V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	1.76	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2481	Chi-Chi, Taiwan-03 CHY060 1999	6.2	90.25	228.92	Reverse	23.8	4.59	RSN2481_CHICHI.03_CHY060N.AT2 RSN2481_CHICHI.03_CHY060E.AT2 RSN2481_CHICHI.03_CHY060V.AT2
2518	Chi-Chi, Taiwan-03 HWA011 1999	6.2	72.23	355.76	Reverse	16	4.73	RSN2518_CHICHI.03_HWA011N.AT2 RSN2518_CHICHI.03_HWA011E.AT2 RSN2518_CHICHI.03_HWA011V.AT2
2732	Chi-Chi, Taiwan-04 CHY070 1999	6.2	88.91	265.45	strike slip	17.1	4.57	RSN2732_CHICHI.04_CHY070N.AT2 RSN2732_CHICHI.04_CHY070E.AT2 RSN2732_CHICHI.04_CHY070V.AT2
2863	Chi-Chi, Taiwan-04 TCU059 1999	6.2	70.02	272.67	strike slip	18.3	1.81	RSN2863_CHICHI.04_TCU059N.AT2 RSN2863_CHICHI.04_TCU059E.AT2 RSN2863_CHICHI.04_TCU059V.AT2
3000	Chi-Chi, Taiwan-05 HWA011 1999	6.2	54.22	355.76	Reverse	6.4	0.75	RSN3000_CHICHI.05_HWA011N.AT2 RSN3000_CHICHI.05_HWA011E.AT2 RSN3000_CHICHI.05_HWA011V.AT2
3224	Chi-Chi, Taiwan-05 TTN001 1999	6.2	58.74	484.6	Reverse	10.5	2.76	RSN3224_CHICHI.05_TTN001N.AT2 RSN3224_CHICHI.05_TTN001W.AT2 RSN3224_CHICHI.05_TTN001V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**06 LongBeach** **270** **25**							**CS Set**
3327	Chi-Chi, Taiwan-06 HWA009 1999	6.3	53.55	373.23	Reverse	9.6	3.1	RSN3327_CHICHI.06_HWA009N.AT2 RSN3327_CHICHI.06_HWA009E.AT2 RSN3327_CHICHI.06_HWA009V.AT2
3511	Chi-Chi, Taiwan-06 TCU140 1999	6.3	56.38	223.6	Reverse	16.9	1.74	RSN3511_CHICHI.06_TCU140N.AT2 RSN3511_CHICHI.06_TCU140W.AT2 RSN3511_CHICHI.06_TCU140V.AT2
3532	Chi-Chi, Taiwan-06 TTN025 1999	6.3	91.9	704.96	Reverse	16.8	4.25	RSN3532_CHICHI.06_TTN025N.AT2 RSN3532_CHICHI.06_TTN025E.AT2 RSN3532_CHICHI.06_TTN025V.AT2
3665	Taiwan SMART1(45) SMART1 I04 1986	7.3	55.91	314.88	Reverse	11.6	0.61	RSN3665_SMART1.45_45I04EW.AT2 RSN3665_SMART1.45_45I04NS.AT2 RSN3665_SMART1.45_45I04DN.AT2
4047	Bam, Iran Jiroft 2003	6.6	69.28	302.64	strike slip	13.4	2.02	RSN4047_BAM_JIR-L.AT2 RSN4047_BAM_JIR-T.AT2 RSN4047_BAM_JIR-V.AT2
4195	Niigata, Japan NIG002 2004	6.63	82.44	248.01	Reverse	13.3	2.38	RSN4195_NIIGATA_NIG002NS.AT2 RSN4195_NIIGATA_NIG002EW.AT2 RSN4195_NIIGATA_NIG002UD.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	0.65	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4234	Niigata, Japan NIGH18 2004	6.63	53.99	311.1	Reverse	9.2	0.68	RSN4234_NIIGATA_NIGH18NS.AT2 RSN4234_NIIGATA_NIGH18EW.AT2 RSN4234_NIIGATA_NIGH18UD.AT2
4352	Umbria Marche, Italy Nocera Umbra 1997	6	8.29	428	Normal	2.8	0.19	RSN4352_UBMARCHE.P_A-NCR000.A RSN4352_UBMARCHE.P_A-NCR270.A RSN4352_UBMARCHE.P_A-NCR-DN.A
4386	Umbria Marche (aftershock 2), Italy Colfiorito-Casermette 1997	5.6	9.68	405	Normal	3.7	1.68	RSN4386_UBMARCHE.P_J-CLC180.AT RSN4386_UBMARCHE.P_J-CLC270.AT RSN4386_UBMARCHE.P_J-CLCDWN.A
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.1	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.09	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	0.34	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2

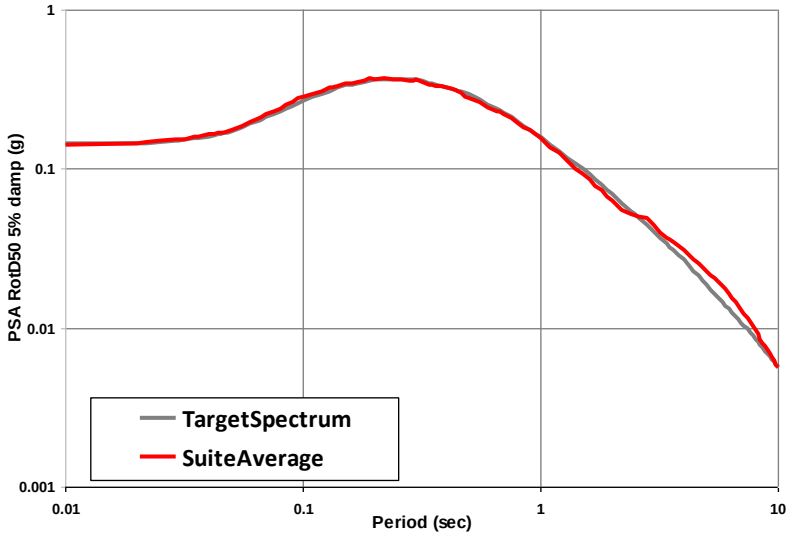
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
5618	Iwate IWT010 2008	6.9	16.26	825.83	Reverse	8.5	0.44	RSN5618_IWATE_IWT010NS.AT2 RSN5618_IWATE_IWT010EW.AT2 RSN5618_IWATE_IWT010UD.AT2
5763	Iwate YMTH04 2008	6.9	95.69	247.62	Reverse	9.4	4.02	RSN5763_IWATE_YMTH04NS.AT2 RSN5763_IWATE_YMTH04EW.AT2 RSN5763_IWATE_YMTH04UD.AT2
5835	El Mayor-Cucapah Winterhaven -Sheriff Substation 2010	7.2	72.75	229.92	strike slip	25.2	1.74	RSN5835_SIERRA.MEX_00022360.AT RSN5835_SIERRA.MEX_00022-90.AT2 RSN5835_SIERRA.MEX_00022-UP.AT
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	0.34	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0.42	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8897	14383980 Covina - Cypress & Azusa 2008	5.39	18.61	295.71	Reverse O	3.5	1.28	RSN8897_14383980_23179360.AT2 RSN8897_14383980_23179090.AT2 RSN8897_14383980_23179-UP.AT2
8956	14383980 Granada Hills; Knollwood FS 18 2008	5.39	75.35	397.99	Reverse O	9.1	4.19	RSN8956_14383980_N5426360.AT2 RSN8956_14383980_N5426090.AT2 RSN8956_14383980_N5426-UP.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
69	San Fernando LB - Terminal Island 1971	6.61	58.99	217.92	Reverse	37.2	4.47	RSN69_SFERN_TLI249.AT2 RSN69_SFERN_TLI339.AT2 RSN69_SFERN_TLI-UP.AT2
157	Norcia, Italy Spoleto 1979	5.9	13.21	535.24	Normal	5.3	3.52	RSN157_ITALY_F-SPO-NS.AT2 RSN157_ITALY_F-SPO-EW.AT2 RSN157_ITALY_F-SPO-UP.AT2
175	Imperial Valley-06 El Centro Array #12 1979	6.53	17.94	196.88	strike slip	9.7	1.12	RSN175_IMPVALL.H_H-E12140.AT2 RSN175_IMPVALL.H_H-E12230.AT2 RSN175_IMPVALL.H_H-E12-UP.AT2
332	Coalinga-01 Parkfield - Cholame 6W 1983	6.36	49.4	251.57	Reverse	5.9	1.69	RSN332_COALINGA.H_H-C06000.AT2 RSN332_COALINGA.H_H-C06090.AT2 RSN332_COALINGA.H_H-C06-UP.AT2
642	Whittier Narrows-01 LA - W 70th St 1987	5.99	16.77	241.41	Reverse O	3.5	0.97	RSN642_WHITTIER.A_A-W70000.AT2 RSN642_WHITTIER.A_A-W70270.AT2 RSN642_WHITTIER.A_A-W70-UP.AT2
671	Whittier Narrows-01 Pacoima Kagel Canyon 1987	5.99	31.59	508.08	Reverse O	4	1.27	RSN671_WHITTIER.A_A-PKC000.AT2 RSN671_WHITTIER.A_A-PKC090.AT2 RSN671_WHITTIER.A_A-PKC-UP.AT2
695	Whittier Narrows-01 Sun Valley - Roscoe Blvd 1987	5.99	30.33	320.93	Reverse O	2.9	0.77	RSN695_WHITTIER.A_A-RO3000.AT2 RSN695_WHITTIER.A_A-RO3090.AT2 RSN695_WHITTIER.A_A-RO3-UP.AT2
730	Spitak, Armenia Gukasian 1988	6.77	23.99	343.53	Reverse O	5.1	1.04	RSN730_SPITAK_GUK000.AT2 RSN730_SPITAK_GUK090.AT2 RSN730_SPITAK_GUK-UP.AT2
807	Loma Prieta Sunol - Forest Fire Station 1989	6.93	47.41	400.62	Reverse O	7.7	1.34	RSN807_LOMAP_SUF090.AT2 RSN807_LOMAP_SUF180.AT2 RSN807_LOMAP_SUF-UP.AT2
1013	Northridge-01 LA Dam 1994	6.69	0	628.99	Reverse	3.9	0.52	RSN1013_NORTHR_LDM064.AT2 RSN1013_NORTHR_LDM334.AT2 RSN1013_NORTHR_LDM-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0.8	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1073	Northridge-01 San Pedro - Palos Verdes 1994	6.69	53.24	477.92	Reverse	6.9	1.38	RSN1073_NORTHR_SAP000.AT2 RSN1073_NORTHR_SAP090.AT2 RSN1073_NORTHR_SAP-UP.AT2

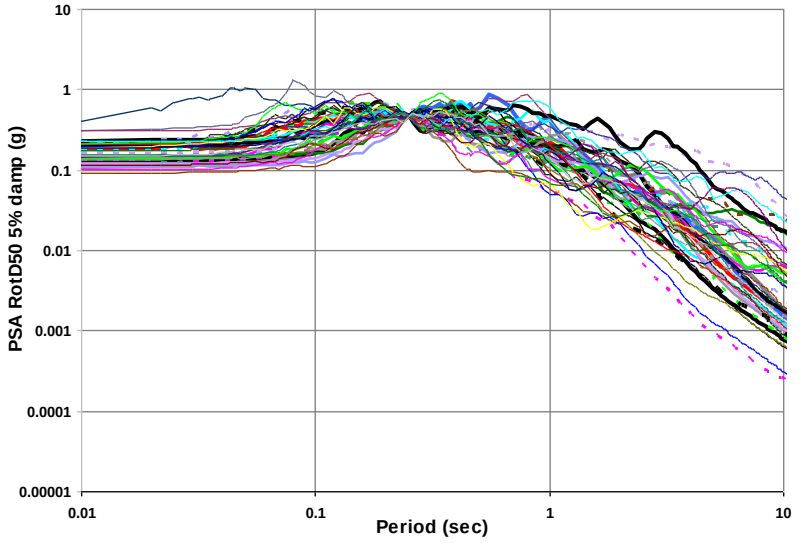
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	0.87	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	1.35	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.56	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1215	Chi-Chi, Taiwan CHY058 1999	7.62	59.79	269.28	Reverse O	29.9	2.49	RSN1215_CHICHI_CHY058-E.AT2 RSN1215_CHICHI_CHY058-N.AT2 RSN1215_CHICHI_CHY058-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	2.02	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1281	Chi-Chi, Taiwan HWA032 1999	7.62	42.87	573.04	Reverse O	8.3	1.34	RSN1281_CHICHI_HWA032-E.AT2 RSN1281_CHICHI_HWA032-N.AT2 RSN1281_CHICHI_HWA032-V.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	2.2	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2863	Chi-Chi, Taiwan-04 TCU059 1999	6.2	70.02	272.67	strike slip	18.3	2.81	RSN2863_CHICHI.04_TCU059N.AT2 RSN2863_CHICHI.04_TCU059E.AT2 RSN2863_CHICHI.04_TCU059V.AT2
2956	Chi-Chi, Taiwan-05 CHY050 1999	6.2	82.15	538.93	Reverse	12.7	2.85	RSN2956_CHICHI.05_CHY050N.AT2 RSN2956_CHICHI.05_CHY050E.AT2 RSN2956_CHICHI.05_CHY050V.AT2
3000	Chi-Chi, Taiwan-05 HWA011 1999	6.2	54.22	355.76	Reverse	6.4	1.16	RSN3000_CHICHI.05_HWA011N.AT2 RSN3000_CHICHI.05_HWA011E.AT2 RSN3000_CHICHI.05_HWA011V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	1.24	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3025	Chi-Chi, Taiwan-05 HWA038 1999	6.2	39.93	642.73	Reverse	6.4	3.43	RSN3025_CHICHI.05_HWA038N.AT2 RSN3025_CHICHI.05_HWA038E.AT2 RSN3025_CHICHI.05_HWA038V.AT2
3033	Chi-Chi, Taiwan-05 HWA049 1999	6.2	51.43	508.61	Reverse	7.8	1.75	RSN3033_CHICHI.05_HWA049N.AT2 RSN3033_CHICHI.05_HWA049W.AT2 RSN3033_CHICHI.05_HWA049V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**06 LongBeach** **270** **50**							**CS Set**
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	1.93	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3327	Chi-Chi, Taiwan-06 HWA009 1999	6.3	53.55	373.23	Reverse	9.6	4.81	RSN3327_CHICHI.06_HWA009N.AT2 RSN3327_CHICHI.06_HWA009E.AT2 RSN3327_CHICHI.06_HWA009V.AT2
3493	Chi-Chi, Taiwan-06 TCU107 1999	6.3	39.36	409	Reverse	14.6	2.28	RSN3493_CHICHI.06_TCU107N.AT2 RSN3493_CHICHI.06_TCU107E.AT2 RSN3493_CHICHI.06_TCU107V.AT2
3503	Chi-Chi, Taiwan-06 TCU122 1999	6.3	29.64	475.46	Reverse	8	1.36	RSN3503_CHICHI.06_TCU122N.AT2 RSN3503_CHICHI.06_TCU122E.AT2 RSN3503_CHICHI.06_TCU122V.AT2
3671	Taiwan SMART1(45) SMART1 I12 1986	7.3	56.2	275.82	Reverse	12	1.19	RSN3671_SMART1.45_45I12EW.AT2 RSN3671_SMART1.45_45I12NS.AT2 RSN3671_SMART1.45_45I12DN.AT2
3674	Taiwan SMART1(45) SMART1 M04 1986	7.3	55.55	306.38	Reverse	10.6	0.99	RSN3674_SMART1.45_45M04EW.AT RSN3674_SMART1.45_45M04NS.AT2 RSN3674_SMART1.45_45M04DN.AT2
3866	Chi-Chi (aftershock 5), Taiwan CHY008 1999	6.3	70.03	210.73	Reverse	16	0.84	RSN3866_CHICHI.06_CHY008N.AT2 RSN3866_CHICHI.06_CHY008W.AT2 RSN3866_CHICHI.06_CHY008V.AT2
4153	Niigata, Japan FKS022 2004	6.63	64.25	211.76	Reverse	6.2	1.14	RSN4153_NIIGATA_FKS022NS.AT2 RSN4153_NIIGATA_FKS022EW.AT2 RSN4153_NIIGATA_FKS022UD.AT2
4551	L'Aquila (aftershock 2), Italy L'Aquila - V. Aterno -Colle Grilli 2009	5.4	10.76	685	Normal	3	2.76	RSN4551_L-AQUILA.B_FA237XTE.AT2 RSN4551_L-AQUILA.B_FA237YLN.AT2 RSN4551_L-AQUILA.B_FA237ZUP.AT2
4678	Wenchuan, China Wudu 2008	7.9	82.86	227.8	Reverse O	23.8	0.74	RSN4678_WENCHUAN_UA0616.AT2 RSN4678_WENCHUAN_UA0618.AT2 RSN4678_WENCHUAN_UA0617.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.15	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.55	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5280	Chuetsu-oki NIGH06 2007	6.8	30.53	493.27	Reverse	10.6	0.6	RSN5280_CHUETSU_NIGH06NS.AT2 RSN5280_CHUETSU_NIGH06EW.AT2 RSN5280_CHUETSU_NIGH06UD.AT2

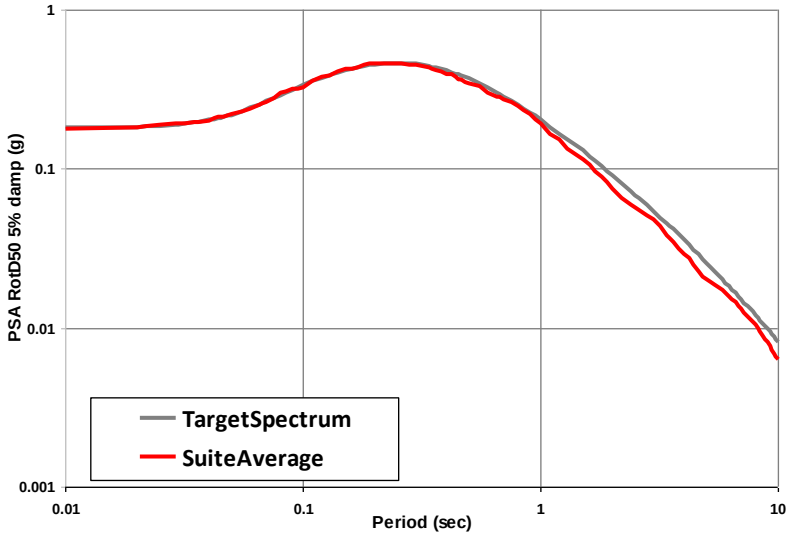
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
5493	Iwate AKTH17 2008	6.9	46.55	288.82	Reverse	15.2	2.14	RSN5493_IWATE_AKTH17NS.AT2 RSN5493_IWATE_AKTH17EW.AT2 RSN5493_IWATE_AKTH17UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	1.38	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
6060	Big Bear-01 North Palm Springs Fire Sta #36 1992	6.46	40.87	367.84	strike slip	8	1.02	RSN6060_BIGBEAR_NPF090.AT2 RSN6060_BIGBEAR_NPF180.AT2 RSN6060_BIGBEAR_NPF-UP.AT2
6933	Darfield, New Zealand MAYC 2010	7	33.54	342.7	strike slip	15	2.12	RSN6933_DARFIELD_MAYCN14E.AT2 RSN6933_DARFIELD_MAYCN76W.AT RSN6933_DARFIELD_MAYCUP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	0.53	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.44	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8128	Christchurch, New Zealand SCAC 2011	6.2	66.53	561.03	Reverse O	9.2	2.11	RSN8128_CCHURCH_SCACN10W.AT2 RSN8128_CCHURCH_SCACS80W.AT2 RSN8128_CCHURCH_SCACUP.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
9	Borrego El Centro Array #9 1942	6.5	56.88	213.44	strike slip	20.5	2.8	RSN9_BORREGO_B-ELC000.AT2 RSN9_BORREGO_B-ELC090.AT2 RSN9_BORREGO_B-ELC-UP.AT2
11	Northwest Calif-03 Ferndale City Hall 1951	5.8	53.73	219.31	strike slip	5.4	2.17	RSN11_NWCALIF.AB_B-FRN224.AT2 RSN11_NWCALIF.AB_B-FRN314.AT2 RSN11_NWCALIF.AB_B-FRN-UP.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.42	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
188	Imperial Valley-06 Plaster City 1979	6.53	30.33	316.64	strike slip	6.1	3.49	RSN188_IMPVALL.H_H-PLS045.AT2 RSN188_IMPVALL.H_H-PLS135.AT2 RSN188_IMPVALL.H_H-PLS-UP.AT2
496	Nahanni, Canada Site 2 1985	6.76	0	605.04	Reverse	4.3	0.94	
543	Chalfant Valley-01 Benton 1986	5.77	24.25	370.94	strike slip	5.3	3.69	RSN543_CHALFANT.B_B-BEN270.AT2 RSN543_CHALFANT.B_B-BEN360.AT2 RSN543_CHALFANT.B_B-BEN-UP.AT2
611	Whittier Narrows-01 Compton - Castlegate St 1987	5.99	18.32	266.9	Reverse O	1.9	0.65	RSN611_WHITTIER.A_A-CAS000.AT2 RSN611_WHITTIER.A_A-CAS270.AT2 RSN611_WHITTIER.A_A-CAS-UP.AT2
612	Whittier Narrows-01 Covina - S Grand Ave 1987	5.99	13.58	346.62	Reverse O	6.8	3.19	RSN612_WHITTIER.A_A-GRA015.AT2 RSN612_WHITTIER.A_A-GRA105.AT2 RSN612_WHITTIER.A_A-GRA-UP.AT2
656	Whittier Narrows-01 Leona Valley #6 1987	5.99	56.97	327.44	Reverse O	6.5	4.79	RSN656_WHITTIER.A_A-LV6000.AT2 RSN656_WHITTIER.A_A-LV6090.AT2 RSN656_WHITTIER.A_A-LV6-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	1.36	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
791	Loma Prieta SAGO South - Surface 1989	6.93	33.94	608.67	Reverse O	6.6	3.25	RSN791_LOMAP_SG3261.AT2 RSN791_LOMAP_SG3351.AT2 RSN791_LOMAP_SG3-UP.AT2
942	Northridge-01 Alhambra - Fremont School 1994	6.69	35.66	549.75	Reverse	9.2	1.67	RSN942_NORTHR_ALH090.AT2 RSN942_NORTHR_ALH360.AT2 RSN942_NORTHR_ALH-UP.AT2

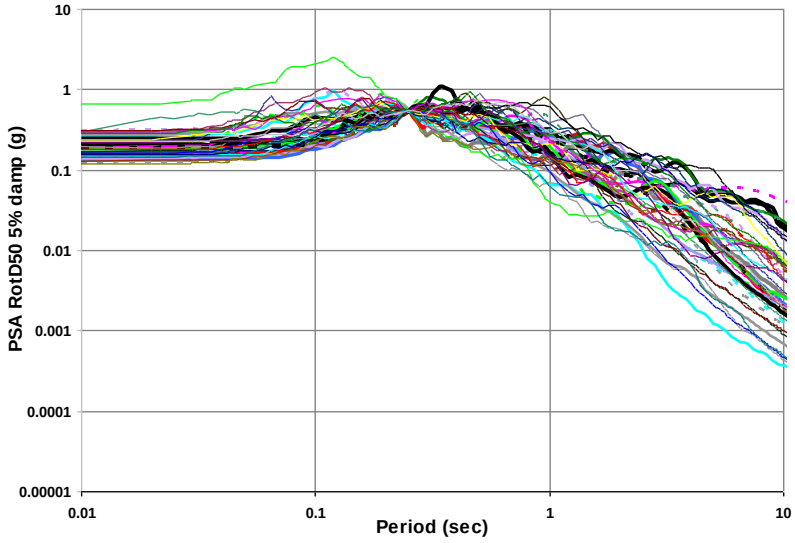
Site Site Vs30 (m/s) Return Period (yr)	**06 LongBeach** **270** **75**							**CS Set**
1046	Northridge-01 Newport Bch - Irvine Ave. F.S 1994	6.69	83.01	339.6	Reverse	12	2.66	RSN1046_NORTHR_NBI000.AT2 RSN1046_NORTHR_NBI090.AT2 RSN1046_NORTHR_NBI-UP.AT2
1091	Northridge-01 Vasquez Rocks Park 1994	6.69	23.1	996.43	Reverse	4.1	1.17	RSN1091_NORTHR_VAS000.AT2 RSN1091_NORTHR_VAS090.AT2 RSN1091_NORTHR_VAS-UP.AT2
1096	Northridge-01 Wrightwood - Jackson Flat 1994	6.69	64.46	662.7	Reverse	8.5	4.58	RSN1096_NORTHR_WWJ090.AT2 RSN1096_NORTHR_WWJ180.AT2 RSN1096_NORTHR_WWJ-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	3.41	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1315	Chi-Chi, Taiwan ILA010 1999	7.62	77.64	573.04	Reverse O	14.5	2.64	RSN1315_CHICHI_ILA010-N.AT2 RSN1315_CHICHI_ILA010-W.AT2 RSN1315_CHICHI_ILA010-V.AT2
1427	Chi-Chi, Taiwan TAP035 1999	7.62	87.67	438.13	Reverse O	14.4	1.95	RSN1427_CHICHI_TAP035-E.AT2 RSN1427_CHICHI_TAP035-N.AT2 RSN1427_CHICHI_TAP035-V.AT2
1507	Chi-Chi, Taiwan TCU071 1999	7.62	0	624.85	Reverse O	15.6	0.19	RSN1507_CHICHI_TCU071-E.AT2 RSN1507_CHICHI_TCU071-N.AT2 RSN1507_CHICHI_TCU071-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.37	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1665	Northridge-02 Newhall - Fire Sta 1994	6.05	7.36	269.14	Reverse	3.1	3.09	RSN1665_NORTH001_NWH090.AT2 RSN1665_NORTH001_NWH360.AT2 RSN1665_NORTH001_NWH-UP.AT2
1756	San Juan Bautista Hollister - City Hall Annex 1998	5.17	11.64	272.8	strike slip	8	4.73	RSN1756_SANJUAN_CHA090.AT2 RSN1756_SANJUAN_CHA180.AT2 RSN1756_SANJUAN_CHA-UP.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	2.77	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2223	Chi-Chi, Taiwan-02 HWA014 1999	5.9	47.84	277.28	Reverse	11.2	4.51	RSN2223_CHICHI.02_HWA014N.AT2 RSN2223_CHICHI.02_HWA014E.AT2 RSN2223_CHICHI.02_HWA014V.AT2
2227	Chi-Chi, Taiwan-02 HWA019 1999	5.9	48.4	494.82	Reverse	8.8	3.27	RSN2227_CHICHI.02_HWA019N.AT2 RSN2227_CHICHI.02_HWA019E.AT2 RSN2227_CHICHI.02_HWA019V.AT2

Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
2746	Chi-Chi, Taiwan-04 CHY092 1999	6.2	33.02	253.72	strike slip	14.9	3.21	RSN2746_CHICHI.04_CHY092N.AT2 RSN2746_CHICHI.04_CHY092W.AT2 RSN2746_CHICHI.04_CHY092V.AT2
2863	Chi-Chi, Taiwan-04 TCU059 1999	6.2	70.02	272.67	strike slip	18.3	3.53	RSN2863_CHICHI.04_TCU059N.AT2 RSN2863_CHICHI.04_TCU059E.AT2 RSN2863_CHICHI.04_TCU059V.AT2
3180	Chi-Chi, Taiwan-05 TCU054 1999	6.2	45.29	460.69	Reverse	9.1	4.22	RSN3180_CHICHI.05_TCU054N.AT2 RSN3180_CHICHI.05_TCU054E.AT2 RSN3180_CHICHI.05_TCU054V.AT2
3283	Chi-Chi, Taiwan-06 CHY050 1999	6.3	71.64	538.93	Reverse	7.8	3.21	RSN3283_CHICHI.06_CHY050N.AT2 RSN3283_CHICHI.06_CHY050E.AT2 RSN3283_CHICHI.06_CHY050V.AT2
3629	Taiwan SMART1(33) SMART1 O05 1985	5.8	39.67	286.03	Normal	5.4	4.99	RSN3629_SMART1.33_33O05EW.AT2 RSN3629_SMART1.33_33O05NS.AT2 RSN3629_SMART1.33_33O05DN.AT2
3670	Taiwan SMART1(45) SMART1 I11 1986	7.3	56.15	309.41	Reverse	11.4	1.83	RSN3670_SMART1.45_45I11EW.AT2 RSN3670_SMART1.45_45I11NS.AT2 RSN3670_SMART1.45_45I11DN.AT2
4108	Parkfield-02, CA Parkfield - Fault Zone 3 2004	6	1.1	211.74	strike slip	3.5	0.55	RSN4108_PARK2004_COH090.AT2 RSN4108_PARK2004_COH360.AT2 RSN4108_PARK2004_COH-UP.AT2
4225	Niigata, Japan NIGH08 2004	6.63	54.19	326.88	Reverse	7.1	2.35	RSN4225_NIIGATA_NIGH08NS.AT2 RSN4225_NIIGATA_NIGH08EW.AT2 RSN4225_NIIGATA_NIGH08UD.AT2
4320	Lazio Abruzzo (aftershock 1), Italy Cassino-Sant' Elia 1984	5.5	21.59	436.79	Normal	5	3.72	RSN4320_ABRUZZO.P_A-CSS000.AT2 RSN4320_ABRUZZO.P_A-CSS090.AT2 RSN4320_ABRUZZO.P_A-CSS-UP.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.69	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5619	Iwate IWT011 2008	6.9	8.41	279.36	Reverse	13.7	1.02	RSN5619_IWATE_IWT011NS.AT2 RSN5619_IWATE_IWT011EW.AT2 RSN5619_IWATE_IWT011UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	0.63	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5821	Iwate Sendai Airport 2008	6.9	78.05	311.6	Reverse	7.8	2.24	RSN5821_IWATE_4DF11NS.AT2 RSN5821_IWATE_4DF11EW.AT2 RSN5821_IWATE_4DF11UD.AT2

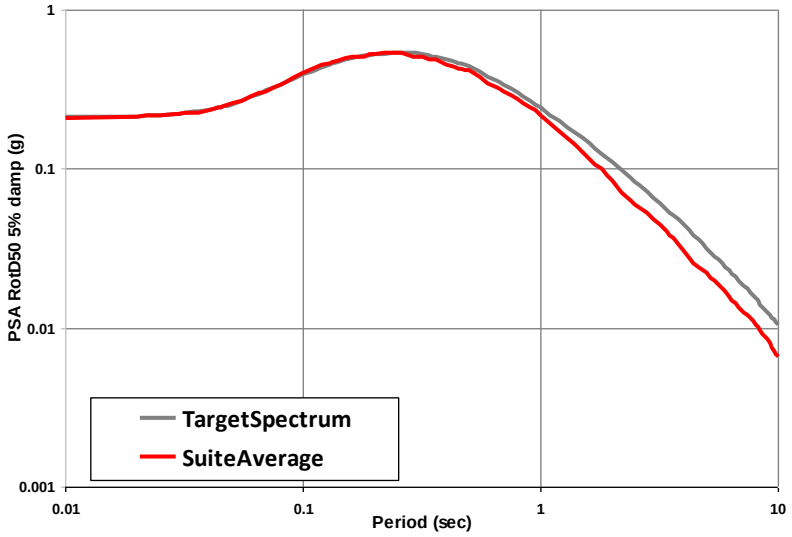
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
6036	El Mayor-Cucapah Rock Hill 2010	7.2	58.24	309	strike slip	23.6	4.37	RSN6036_SIERRA.MEX_RXH360.AT2 RSN6036_SIERRA.MEX_RXH-90.AT2 RSN6036_SIERRA.MEX_RXH-UP.AT2
6058	Big Bear-01 Fun Valley 1992	6.46	49.35	388.63	strike slip	7.8	2.13	RSN6058_BIGBEAR_FRV045.AT2 RSN6058_BIGBEAR_FRV135.AT2 RSN6058_BIGBEAR_FRV-UP.AT2
6915	Darfield, New Zealand Heathcote Valley Primary School 2010	7	24.36	422	strike slip	8.3	0.33	RSN6915_DARFIELD_HVSCS26W.AT2 RSN6915_DARFIELD_HVSCS64E.AT2 RSN6915_DARFIELD_HVSCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.55	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8136	Christchurch, New Zealand SWNC 2011	6.2	25.45	295.74	Reverse O	2.7	0.87	RSN8136_CCHURCH_SWNCN24E.AT2 RSN8136_CCHURCH_SWNCN66W.AT RSN8136_CCHURCH_SWNCUP.AT2
8147	Christchurch, New Zealand WAKC 2011	6.2	62.48	484.49	Reverse O	8.2	2.43	RSN8147_CCHURCH_WAKCN80E.AT2 RSN8147_CCHURCH_WAKCS10E.AT2 RSN8147_CCHURCH_WAKCUP.AT2
8808	14383980 Los Angeles Filtration Plant 2008	5.39	75.15	370.36	Reverse O	4.3	3.49	RSN8808_14383980_CILFPHNN.AT2 RSN8808_14383980_CILFPHNE.AT2 RSN8808_14383980_CILFPHNZ.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
91	San Fernando Upland - San Antonio Dam 1971	6.61	61.72	487.23	Reverse	6.7	2.22	RSN91_SFERN_SOD015.AT2 RSN91_SFERN_SOD285.AT2 RSN91_SFERN_SODDWN.AT2
203	Imperial Valley-07 El Centro Array #5 1979	5.01	8.56	205.63	strike slip	0.6	1.25	RSN203_IMPVALL.A_A-E05140.AT2 RSN203_IMPVALL.A_A-E05230.AT2 RSN203_IMPVALL.A_A-E05-UP.AT2
449	Morgan Hill Capitola 1984	6.19	39.08	288.62	strike slip	5	1.47	RSN449_MORGAN_CAP042.AT2 RSN449_MORGAN_CAP132.AT2 RSN449_MORGAN_CAP-UP.AT2
498	Hollister-04 Hollister Diff Array #1 1986	5.45	13.11	-999	strike slip	9.7	2.35	RSN498_HOLLISTR_D-HD1255.AT2 RSN498_HOLLISTR_D-HD1345.AT2 RSN498_HOLLISTR_D-HD1-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	0.86	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
690	Whittier Narrows-01 San Gabriel - E Grand Ave 1987	5.99	0	401.37	Reverse O	2.5	1.14	RSN690_WHITTIER.A_A-GRN180.AT2 RSN690_WHITTIER.A_A-GRN270.AT2 RSN690_WHITTIER.A_A-GRN-UP.AT2
713	Whittier Narrows-02 LA - Hollywood Stor FF 1987	5.27	20.99	316.46	Reverse O	5	4.26	RSN713_WHITTIER.B_B-PEL090.AT2 RSN713_WHITTIER.B_B-PEL360.AT2 RSN713_WHITTIER.B_B-PEL-UP.AT2
725	Superstition Hills-02 Poe Road (temp) 1987	6.54	11.16	316.64	strike slip	10.5	0.83	
737	Loma Prieta Agnews State Hospital 1989	6.93	24.27	239.69	Reverse O	8.2	0.94	RSN737_LOMAP_AGW000.AT2 RSN737_LOMAP_AGW090.AT2 RSN737_LOMAP_AGW-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.72	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
989	Northridge-01 LA - Chalon Rd 1994	6.69	9.87	740.05	Reverse	5.3	1.11	RSN989_NORTHR_CHL070.AT2 RSN989_NORTHR_CHL160.AT2 RSN989_NORTHR_CHL-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.49	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2

Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	3.96	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.49	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1191	Chi-Chi, Taiwan CHY022 1999	7.62	63.21	564.07	Reverse O	23.6	3.43	RSN1191_CHICHI_CHY022-N.AT2 RSN1191_CHICHI_CHY022-W.AT2 RSN1191_CHICHI_CHY022-V.AT2
1230	Chi-Chi, Taiwan CHY079 1999	7.62	46.59	573.04	Reverse O	21	4.52	RSN1230_CHICHI_CHY079-E.AT2 RSN1230_CHICHI_CHY079-N.AT2 RSN1230_CHICHI_CHY079-V.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	1.08	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1261	Chi-Chi, Taiwan HWA009 1999	7.62	52.37	373.23	Reverse O	11.2	1.98	RSN1261_CHICHI_HWA009-E.AT2 RSN1261_CHICHI_HWA009-N.AT2 RSN1261_CHICHI_HWA009-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	2.95	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1303	Chi-Chi, Taiwan HWA058 1999	7.62	41.17	529.54	Reverse O	9	2.03	RSN1303_CHICHI_HWA058-E.AT2 RSN1303_CHICHI_HWA058-N.AT2 RSN1303_CHICHI_HWA058-V.AT2
1474	Chi-Chi, Taiwan TCU025 1999	7.62	52.18	665.2	Reverse O	12.2	2.36	RSN1474_CHICHI_TCU025-E.AT2 RSN1474_CHICHI_TCU025-N.AT2 RSN1474_CHICHI_TCU025-V.AT2
1648	Sierra Madre Tarzana - Cedar Hill A 1991	5.61	46.45	257.21	Reverse	5.2	2.81	RSN1648_SMADRE_TAR000.AT2 RSN1648_SMADRE_TAR090.AT2 RSN1648_SMADRE_TAR-UP.AT2
1750	Northwest China-02 Jiashi 1997	5.93	17.9	240.09	Normal	3	1.18	RSN1750_NWCHINA2_JIA000.AT2 RSN1750_NWCHINA2_JIA270.AT2 RSN1750_NWCHINA2_JIA-UP.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	3.21	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	2.7	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2

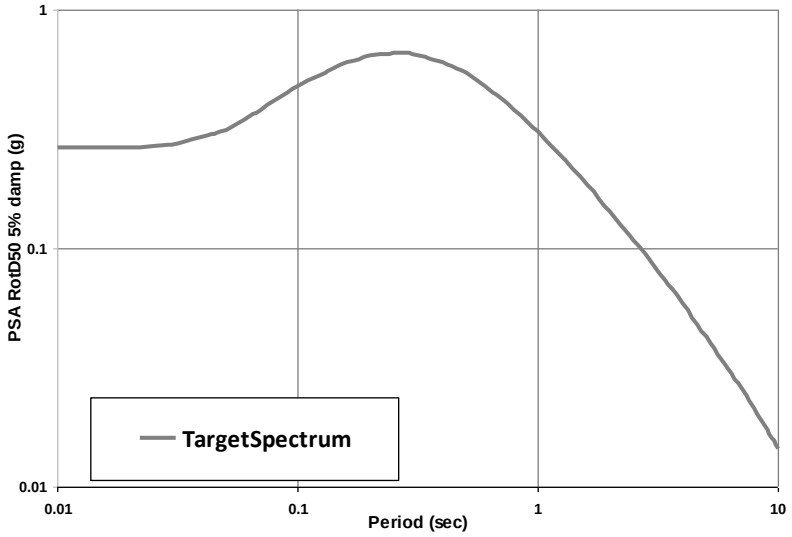
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
2959	Chi-Chi, Taiwan-05 CHY055 1999	6.2	94.31	225.77	Reverse	8.2	3.5	RSN2959_CHICHI.05_CHY055N.AT2 RSN2959_CHICHI.05_CHY055W.AT2 RSN2959_CHICHI.05_CHY055V.AT2
2997	Chi-Chi, Taiwan-05 HWA005 1999	6.2	32.71	459.32	Reverse	7.7	2.08	RSN2997_CHICHI.05_HWA005N.AT2 RSN2997_CHICHI.05_HWA005W.AT2 RSN2997_CHICHI.05_HWA005V.AT2
3004	Chi-Chi, Taiwan-05 HWA015 1999	6.2	50.41	453.05	Reverse	7.9	4.3	RSN3004_CHICHI.05_HWA015N.AT2 RSN3004_CHICHI.05_HWA015E.AT2 RSN3004_CHICHI.05_HWA015V.AT2
3178	Chi-Chi, Taiwan-05 TCU052 1999	6.2	43.94	579.1	Reverse	6.8	2.81	RSN3178_CHICHI.05_TCU052N.AT2 RSN3178_CHICHI.05_TCU052E.AT2 RSN3178_CHICHI.05_TCU052V.AT2
3179	Chi-Chi, Taiwan-05 TCU053 1999	6.2	48.25	454.55	Reverse	9.7	4.32	RSN3179_CHICHI.05_TCU053N.AT2 RSN3179_CHICHI.05_TCU053E.AT2 RSN3179_CHICHI.05_TCU053V.AT2
3216	Chi-Chi, Taiwan-05 TCU128 1999	6.2	64.09	599.64	Reverse	10.8	4.09	RSN3216_CHICHI.05_TCU128N.AT2 RSN3216_CHICHI.05_TCU128E.AT2 RSN3216_CHICHI.05_TCU128V.AT2
3239	Chi-Chi, Taiwan-05 TTN022 1999	6.2	72.58	398.81	Reverse	6.4	3.15	RSN3239_CHICHI.05_TTN022N.AT2 RSN3239_CHICHI.05_TTN022E.AT2 RSN3239_CHICHI.05_TTN022V.AT2
3330	Chi-Chi, Taiwan-06 HWA014 1999	6.3	51.84	277.28	Reverse	11.4	4.52	RSN3330_CHICHI.06_HWA014N.AT2 RSN3330_CHICHI.06_HWA014E.AT2 RSN3330_CHICHI.06_HWA014V.AT2
3624	Taiwan SMART1(33) SMART1 M11 1985	5.8	42.42	300.22	Normal	3.3	2.38	RSN3624_SMART1.33_33M11EW.AT RSN3624_SMART1.33_33M11NS.AT2 RSN3624_SMART1.33_33M11DN.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	1.46	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4481	L'Aquila, Italy L'Aquila - V. Aterno -Colle Grilli 2009	6.3	0	685	Normal	4.3	0.64	RSN4481_L-AQUILA_FA030XTE.AT2 RSN4481_L-AQUILA_FA030YLN.AT2 RSN4481_L-AQUILA_FA030ZUP.AT2
4741	Wenchuan, China Maoxiandiexi 2008	7.9	44.73	299.37	Reverse O	35.9	1.03	RSN4741_WENCHUAN_UA0854.AT2 RSN4741_WENCHUAN_UA0853.AT2 RSN4741_WENCHUAN_UA0855.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.22	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2

Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
4802	Wenchuan, China Baoxingdizhenju 2008	7.9	71.01	638.39	Reverse O	48.1	3.41	RSN4802_WENCHUAN_UA1097.AT2 RSN4802_WENCHUAN_UA1096.AT2 RSN4802_WENCHUAN_UA1098.AT2
5260	Chuetsu-oki NIG014 2007	6.8	21.37	128.12	Reverse	18.7	2	RSN5260_CHUETSU_NIG014NS.AT2 RSN5260_CHUETSU_NIG014EW.AT2 RSN5260_CHUETSU_NIG014UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.81	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5659	Iwate IWTH27 2008	6.9	43.58	670.31	Reverse	11.6	2.83	RSN5659_IWATE_IWTH27NS.AT2 RSN5659_IWATE_IWTH27EW.AT2 RSN5659_IWATE_IWTH27UD.AT2
6893	Darfield, New Zealand DFHS 2010	7	11.86	344.02	strike slip	14.3	0.52	RSN6893_DARFIELD_DFHSS17E.AT2 RSN6893_DARFIELD_DFHSS73W.AT2 RSN6893_DARFIELD_DFHSUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0.94	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8147	Christchurch, New Zealand WAKC 2011	6.2	62.48	484.49	Reverse O	8.2	2.83	RSN8147_CCHURCH_WAKCN80E.AT2 RSN8147_CCHURCH_WAKCS10E.AT2 RSN8147_CCHURCH_WAKCUP.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records

Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
5	Northwest Calif-01 Ferndale City Hall 1938	5.5	52.73	219.31	strike slip	4	0	RSN5_NWCALIF.AB_A-FRN045.AT2 RSN5_NWCALIF.AB_A-FRN135.AT2 RSN5_NWCALIF.AB_A-FRNDWN.AT2
152	Coyote Lake SJB Overpass, Bent 3 g.l. 1979	5.74	20.44	367.43	strike slip	3.5	0	RSN152_COYOTELK_SJ3067.AT2 RSN152_COYOTELK_SJ3337.AT2 RSN152_COYOTELK_SJ3-UP.AT2
232	Mammoth Lakes-01 Mammoth Lakes H. S. 1980	6.06	4.48	346.82	Normal O	5.3	0	RSN232_MAMMOTH.I_I-MLS254.AT2 RSN232_MAMMOTH.I_I-MLS344.AT2 RSN232_MAMMOTH.I_I-MLS-UP.AT2
329	Coalinga-01 Parkfield - Cholame 4AW 1983	6.36	46.73	283.38	Reverse	7.6	0	RSN329_COALINGA.H_H-C4A000.AT2 RSN329_COALINGA.H_H-C4A090.AT2 RSN329_COALINGA.H_H-C4A-UP.AT2
332	Coalinga-01 Parkfield - Cholame 6W 1983	6.36	49.4	251.57	Reverse	5.9	0	RSN332_COALINGA.H_H-C06000.AT2 RSN332_COALINGA.H_H-C06090.AT2 RSN332_COALINGA.H_H-C06-UP.AT2
389	Coalinga-02 VEW (temp) 1983	5.09	1.89	456.13	Reverse	0.3	0	RSN389_COALINGA_A-VEW005.AT2 RSN389_COALINGA_A-VEW095.AT2 RSN389_COALINGA_A-VEW-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
599	Whittier Narrows-01 Brea - S Flower Av 1987	5.99	18.39	322.75	Reverse O	3.3	0	
674	Whittier Narrows-01 Pasadena - Brown Gym 1987	5.99	4.3	341.14	Reverse O	3.3	0	RSN674_WHITTIER.A_A-BRG180.AT2 RSN674_WHITTIER.A_A-BRG270.AT2 RSN674_WHITTIER.A_A-BRG-UP.AT2
767	Loma Prieta Gilroy Array #3 1989	6.93	12.23	349.85	Reverse O	2.3	0	RSN767_LOMAP_G03000.AT2 RSN767_LOMAP_G03090.AT2 RSN767_LOMAP_G03-UP.AT2
781	Loma Prieta Lower Crystal Springs Dam dwnst 1989	6.93	48.24	586.08	Reverse O	5.9	0	RSN781_LOMAP_XSP000.AT2 RSN781_LOMAP_XSP090.AT2 RSN781_LOMAP_XSP-UP.AT2
1019	Northridge-01 Lake Hughes #1 1994	6.69	35.46	425.34	Reverse	7.9	0	RSN1019_NORTHR_L01000.AT2 RSN1019_NORTHR_L01090.AT2 RSN1019_NORTHR_L01-UP.AT2

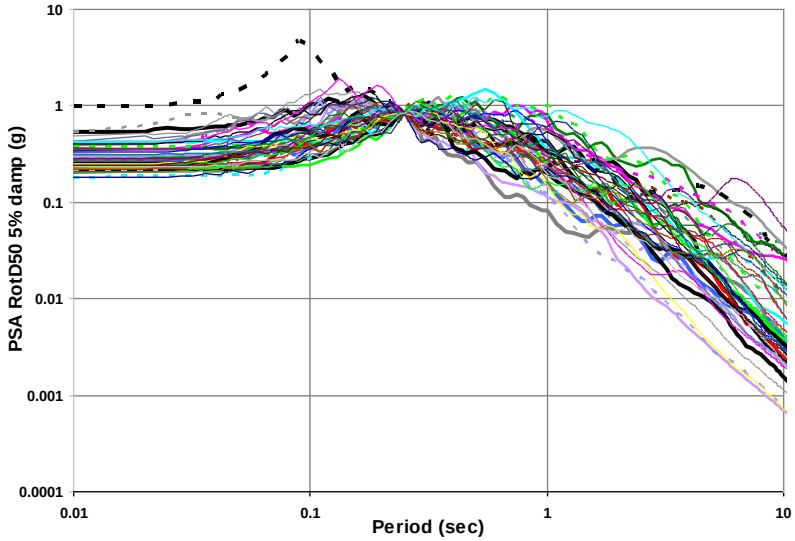
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	0	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1089	Northridge-01 Topanga - Fire Sta 1994	6.69	10.31	505.97	Reverse	5.1	0	RSN1089_NORTHR_TPF360.AT2 RSN1089_NORTHR_TPF270.AT2 RSN1089_NORTHR_TPF-UP.AT2
1137	Dinar, Turkey Burdur 1995	6.4	35.59	468.44	Normal	11.9	0	RSN1137_DINAR_BUD090.AT2 RSN1137_DINAR_BUD180.AT2 RSN1137_DINAR_BUD-UP.AT2
1149	Kocaeli, Turkey Atakoy 1999	7.51	56.49	310.01	strike slip	10.9	0	RSN1149_KOCAELI_ATK000.AT2 RSN1149_KOCAELI_ATK090.AT2 RSN1149_KOCAELI_ATK-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1274	Chi-Chi, Taiwan HWA025 1999	7.62	49.93	494.32	Reverse O	10.8	0	RSN1274_CHICHI_HWA025-E.AT2 RSN1274_CHICHI_HWA025-N.AT2 RSN1274_CHICHI_HWA025-V.AT2
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	0	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1474	Chi-Chi, Taiwan TCU025 1999	7.62	52.18	665.2	Reverse O	12.2	0	RSN1474_CHICHI_TCU025-E.AT2 RSN1474_CHICHI_TCU025-N.AT2 RSN1474_CHICHI_TCU025-V.AT2
1629	St Elias, Alaska Yakutat 1979	7.54	80	336.98	Reverse	23.1	0	RSN1629_STELIAS_059V3009.AT2 RSN1629_STELIAS_059V3279.AT2 RSN1629_STELIAS_059V30UP.AT2
1636	Manjil, Iran Qazvin 1990	7.37	49.97	302.64	strike slip	8.6	0	RSN1636_MANJIL_185066.AT2 RSN1636_MANJIL_185336.AT2 RSN1636_MANJIL_185-UP.AT2
1643	Sierra Madre LA - City Terrace 1991	5.61	23.67	365.22	Reverse	4	0	RSN1643_SMADRE_LAC090.AT2 RSN1643_SMADRE_LAC180.AT2 RSN1643_SMADRE_LAC-UP.AT2
1832	Hector Mine Seven Oaks Dam Project Office 1999	7.13	87.2	564.93	strike slip	11.9	0	RSN1832_HECTOR_SVD090.AT2 RSN1832_HECTOR_SVD360.AT2 RSN1832_HECTOR_SVD-UP.AT2
2222	Chi-Chi, Taiwan-02 HWA013 1999	5.9	46.98	330.55	Reverse	10.3	0	RSN2222_CHICHI.02_HWA013N.AT2 RSN2222_CHICHI.02_HWA013E.AT2 RSN2222_CHICHI.02_HWA013V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**06 LongBeach** **270** **150**							**CS Set**
2227	Chi-Chi, Taiwan-02 HWA019 1999	5.9	48.4	494.82	Reverse	8.8	0	RSN2227_CHICHI.02_HWA019N.AT2 RSN2227_CHICHI.02_HWA019E.AT2 RSN2227_CHICHI.02_HWA019V.AT2
2407	Chi-Chi, Taiwan-02 TCU106 1999	5.9	46.36	451.37	Reverse	11	0	RSN2407_CHICHI.02_TCU106N.AT2 RSN2407_CHICHI.02_TCU106E.AT2 RSN2407_CHICHI.02_TCU106V.AT2
2408	Chi-Chi, Taiwan-02 TCU107 1999	5.9	46.88	409	Reverse	14.4	0	RSN2408_CHICHI.02_TCU107N.AT2 RSN2408_CHICHI.02_TCU107E.AT2 RSN2408_CHICHI.02_TCU107V.AT2
2473	Chi-Chi, Taiwan-03 CHY047 1999	6.2	45.69	169.52	Reverse	12.8	0	RSN2473_CHICHI.03_CHY047N.AT2 RSN2473_CHICHI.03_CHY047W.AT2 RSN2473_CHICHI.03_CHY047V.AT2
3264	Chi-Chi, Taiwan-06 CHY024 1999	6.3	29.49	427.73	Reverse	8.2	0	RSN3264_CHICHI.06_CHY024N.AT2 RSN3264_CHICHI.06_CHY024E.AT2 RSN3264_CHICHI.06_CHY024V.AT2
3333	Chi-Chi, Taiwan-06 HWA019 1999	6.3	52.4	494.82	Reverse	7.3	0	RSN3333_CHICHI.06_HWA019N.AT2 RSN3333_CHICHI.06_HWA019E.AT2 RSN3333_CHICHI.06_HWA019V.AT2
3568	Taiwan SMART1(5) SMART1 M10 1981	5.9	25.96	321.63	Reverse	3	0	RSN3568_SMART1.05_05M10EW.AT RSN3568_SMART1.05_05M10NS.AT2 RSN3568_SMART1.05_05M10DN.AT2
3621	Taiwan SMART1(33) SMART1 M06 1985	5.8	40.95	308.39	Normal	3.9	0	RSN3621_SMART1.33_33M06EW.AT RSN3621_SMART1.33_33M06NS.AT2 RSN3621_SMART1.33_33M06DN.AT2
3666	Taiwan SMART1(45) SMART1 I05 1986	7.3	55.84	309.41	Reverse	11.4	0	RSN3666_SMART1.45_45I05EW.AT2 RSN3666_SMART1.45_45I05NS.AT2 RSN3666_SMART1.45_45I05DN.AT2
3685	Whittier Narrows-02 Arcadia - Campus Dr 1987	5.27	7.99	367.53	Reverse O	0.7	0	RSN3685_WHITTIER.B_B-CAM009.AT RSN3685_WHITTIER.B_B-CAM279.AT RSN3685_WHITTIER.B_B-CAM-UP.AT
3969	Tottori, Japan TTRH04 2000	6.61	32.75	254.26	strike slip	5.7	0	RSN3969_TOTTORI_TTRH04NS.AT2 RSN3969_TOTTORI_TTRH04EW.AT2 RSN3969_TOTTORI_TTRH04UD.AT2
4170	Niigata, Japan GNM002 2004	6.63	47.45	442.51	Reverse	3.8	0	RSN4170_NIIGATA_GNM002NS.AT2 RSN4170_NIIGATA_GNM002EW.AT2 RSN4170_NIIGATA_GNM002UD.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2

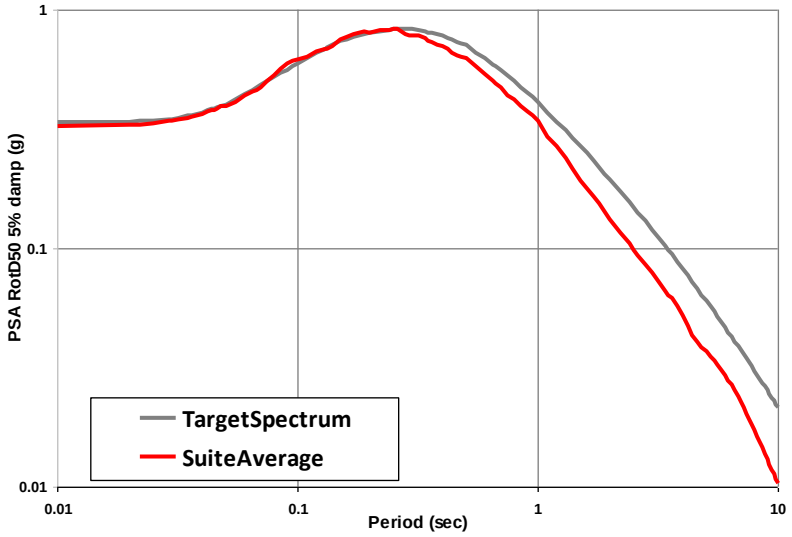
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
4785	Wenchuan, China Hongyatai 2008	7.9	97.64	477.35	Reverse O	37.3	0	
5657	Iwate IWTH25 2008	6.9	0	506.44	Reverse	6.9	0	RSN5657_IWATE_IWTH25NS.AT2 RSN5657_IWATE_IWTH25EW.AT2 RSN5657_IWATE_IWTH25UD.AT2
5815	Iwate Yuzawa 2008	6.9	22.41	655.45	Reverse	7.2	0	RSN5815_IWATE_44BC1NS.AT2 RSN5815_IWATE_44BC1EW.AT2 RSN5815_IWATE_44BC1UD.AT2
5823	El Mayor-Cucapah Chihuahua 2010	7.2	18.21	242.05	strike slip	25.1	0	RSN5823_SIERRA.MEX_CHI000.AT2 RSN5823_SIERRA.MEX_CHI090.AT2 RSN5823_SIERRA.MEX_CHI--V.AT2
6961	Darfield, New Zealand RKAC 2010	7	13.37	295.74	strike slip	12.7	0	RSN6961_DARFIELD_RKACN14E.AT2 RSN6961_DARFIELD_RKACS76E.AT2 RSN6961_DARFIELD_RKACUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8892	14383980 Long Beach - Los Coyotes & Palo Ver 2008	5.39	32.3	243.55	Reverse O	2	0	RSN8892_14383980_14869360.AT2 RSN8892_14383980_14869090.AT2 RSN8892_14383980_14869-UP.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
166	Imperial Valley-06 Coachella Canal #4 1979	6.53	49.1	336.49	strike slip	3.9	3.41	RSN166_IMPVALL.H_H-CC4045.AT2 RSN166_IMPVALL.H_H-CC4135.AT2 RSN166_IMPVALL.H_H-CC4-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.49	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
180	Imperial Valley-06 El Centro Array #5 1979	6.53	1.76	205.63	strike slip	3.7	0.95	RSN180_IMPVALL.H_H-E05140.AT2 RSN180_IMPVALL.H_H-E05230.AT2 RSN180_IMPVALL.H_H-E05-UP.AT2
231	Mammoth Lakes-01 Long Valley Dam (Upr L Abut) 1980	6.06	12.56	537.16	Normal O	7.2	1.42	RSN231_MAMMOTH.I_I-LUL000.AT2 RSN231_MAMMOTH.I_I-LUL090.AT2 RSN231_MAMMOTH.I_I-LUL-UP.AT2
308	Taiwan SMART1(5) SMART1 I12 1981	5.9	25.7	275.82	Reverse	3	2.52	RSN308_SMART1.05_05I12EW.AT2 RSN308_SMART1.05_05I12NS.AT2 RSN308_SMART1.05_05I12DN.AT2
337	Coalinga-01 Parkfield - Fault Zone 12 1983	6.36	27.96	265.21	Reverse	8.7	3.38	RSN337_COALINGA.H_H-PRK090.AT2 RSN337_COALINGA.H_H-PRK180.AT2 RSN337_COALINGA.H_H-PRK-UP.AT2
464	Morgan Hill Hollister Differential Array #3 1984	6.19	26.42	215.54	strike slip	10.8	4.61	RSN464_MORGAN_HD3255.AT2 RSN464_MORGAN_HD3345.AT2 RSN464_MORGAN_HD3-UP.AT2
548	Chalfant Valley-02 Benton 1986	6.19	21.55	370.94	strike slip	5.7	2.09	RSN548_CHALFANT.A_A-BEN270.AT2 RSN548_CHALFANT.A_A-BEN360.AT2 RSN548_CHALFANT.A_A-BEN-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.08	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
558	Chalfant Valley-02 Zack Brothers Ranch 1986	6.19	6.44	316.19	strike slip	2.4	0.79	RSN558_CHALFANT.A_A-ZAK270.AT2 RSN558_CHALFANT.A_A-ZAK360.AT2 RSN558_CHALFANT.A_A-ZAK-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	1.33	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
626	Whittier Narrows-01 LA - 116th St School 1987	5.99	18.23	301	Reverse O	1.6	1.38	RSN626_WHITTIER.A_A-116270.AT2 RSN626_WHITTIER.A_A-116360.AT2 RSN626_WHITTIER.A_A-116-UP.AT2

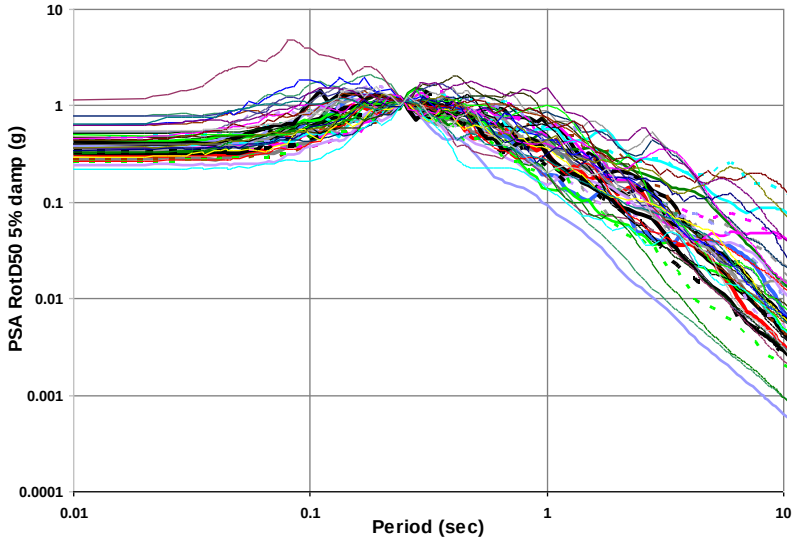
Site Site Vs30 (m/s) Return Period (yr)	**06 LongBeach** **270** **250**							**CS Set**
722	Superstition Hills-02 Kornbloom Road (temp) 1987	6.54	18.48	266.01	strike slip	9.1	3.56	
726	Superstition Hills-02 Salton Sea Wildlife Refuge 1987	6.54	25.88	191.14	strike slip	8.9	1.99	
734	Loma Prieta APEEL 3E Hayward CSUH 1989	6.93	52.39	517.06	Reverse O	7.8	3.49	RSN734_LOMAP_A3E000.AT2 RSN734_LOMAP_A3E090.AT2 RSN734_LOMAP_A3E-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.11	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
947	Northridge-01 Arcadia - Arcadia Av 1994	6.69	39.41	330.5	Reverse	9	3.44	RSN947_NORTHR_ARC172.AT2 RSN947_NORTHR_ARC262.AT2 RSN947_NORTHR_ARC-UP.AT2
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	1.7	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2
1020	Northridge-01 Lake Hughes #12A 1994	6.69	20.77	602.1	Reverse	5.1	1.32	RSN1020_NORTHR_H12090.AT2 RSN1020_NORTHR_H12180.AT2 RSN1020_NORTHR_H12-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	1.8	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1038	Northridge-01 Montebello - Bluff Rd. 1994	6.69	43.22	316.01	Reverse	6.5	1.57	RSN1038_NORTHR_BLF206.AT2 RSN1038_NORTHR_BLF296.AT2 RSN1038_NORTHR_BLF-UP.AT2
1051	Northridge-01 Pacoima Dam (upper left) 1994	6.69	4.92	2016.13	Reverse	3.1	0.38	RSN1051_NORTHR_PUL104.AT2 RSN1051_NORTHR_PUL194.AT2 RSN1051_NORTHR_PUL-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.76	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.27	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1269	Chi-Chi, Taiwan HWA019 1999	7.62	51.87	494.82	Reverse O	12.2	2.71	RSN1269_CHICHI_HWA019-E.AT2 RSN1269_CHICHI_HWA019-N.AT2 RSN1269_CHICHI_HWA019-V.AT2

Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
1275	Chi-Chi, Taiwan HWA026 1999	7.62	47.96	457.49	Reverse O	9.6	4.55	RSN1275_CHICHI_HWA026-E.AT2 RSN1275_CHICHI_HWA026-N.AT2 RSN1275_CHICHI_HWA026-V.AT2
1508	Chi-Chi, Taiwan TCU072 1999	7.62	0	468.14	Reverse O	14.7	0.81	RSN1508_CHICHI_TCU072-E.AT2 RSN1508_CHICHI_TCU072-N.AT2 RSN1508_CHICHI_TCU072-V.AT2
1511	Chi-Chi, Taiwan TCU076 1999	7.62	2.74	614.98	Reverse O	17	1.01	RSN1511_CHICHI_TCU076-E.AT2 RSN1511_CHICHI_TCU076-N.AT2 RSN1511_CHICHI_TCU076-V.AT2
2423	Chi-Chi, Taiwan-02 TCU129 1999	5.9	27.51	511.18	Reverse	4.6	2.47	RSN2423_CHICHI.02_TCU129N.AT2 RSN2423_CHICHI.02_TCU129E.AT2 RSN2423_CHICHI.02_TCU129V.AT2
3020	Chi-Chi, Taiwan-05 HWA033 1999	6.2	38.05	395.57	Reverse	8.9	2.8	RSN3020_CHICHI.05_HWA033N.AT2 RSN3020_CHICHI.05_HWA033E.AT2 RSN3020_CHICHI.05_HWA033V.AT2
3250	Chi-Chi, Taiwan-05 TTN041 1999	6.2	66.89	418.24	Reverse	8.5	2.13	RSN3250_CHICHI.05_TTN041N.AT2 RSN3250_CHICHI.05_TTN041W.AT2 RSN3250_CHICHI.05_TTN041V.AT2
3333	Chi-Chi, Taiwan-06 HWA019 1999	6.3	52.4	494.82	Reverse	7.3	4.15	RSN3333_CHICHI.06_HWA019N.AT2 RSN3333_CHICHI.06_HWA019E.AT2 RSN3333_CHICHI.06_HWA019V.AT2
3574	Taiwan SMART1(5) SMART1 O05 1981	5.9	23.75	286.03	Reverse	3.1	2.5	RSN3574_SMART1.05_05O05EW.AT2 RSN3574_SMART1.05_05O05NS.AT2 RSN3574_SMART1.05_05O05DN.AT2
3963	Tottori, Japan TTR006 2000	6.61	35.15	352.65	strike slip	5.5	3.37	RSN3963_TOTTORI_TTR006NS.AT2 RSN3963_TOTTORI_TTR006EW.AT2 RSN3963_TOTTORI_TTR006UD.AT2
4480	L'Aquila, Italy L'Aquila - V. Aterno - Centro Valle 2009	6.3	0	475	Normal	4.4	0.78	RSN4480_L-AQUILA_GX066XTE.AT2 RSN4480_L-AQUILA_GX066YLN.AT2 RSN4480_L-AQUILA_GX066ZUP.AT2
4547	L'Aquila (aftershock 2), Italy L'Aquila - V. Aterno - Centro Valle 2009	5.4	10.22	475	Normal	2.9	3.81	RSN4547_L-AQUILA.B_GX401XTE.AT2 RSN4547_L-AQUILA.B_GX401YLN.AT2 RSN4547_L-AQUILA.B_GX401ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.34	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4757	Wenchuan, China Dayiyinping 2008	7.9	28.59	378.93	Reverse O	53.2	1.68	RSN4757_WENCHUAN_UA0921.AT2 RSN4757_WENCHUAN_UA0920.AT2 RSN4757_WENCHUAN_UA0919.AT2

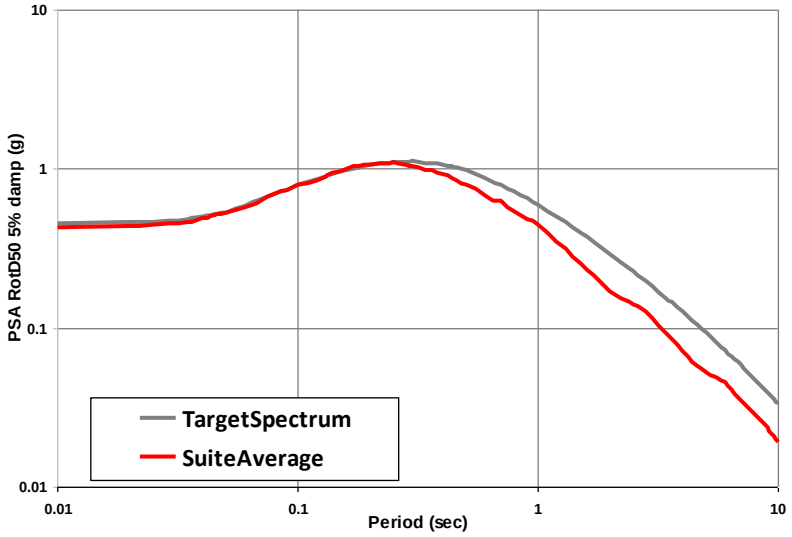
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
4843	Chuetsu-oki Matsushiro Tokamachi 2007	6.8	18.16	640.14	Reverse	6.5	1.86	RSN4843_CHUETSU_65006NS.AT2 RSN4843_CHUETSU_65006EW.AT2 RSN4843_CHUETSU_65006UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	1.24	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5274	Chuetsu-oki NIG028 2007	6.8	15.32	430.71	Reverse	11.1	2.46	RSN5274_CHUETSU_NIG028NS.AT2 RSN5274_CHUETSU_NIG028EW.AT2 RSN5274_CHUETSU_NIG028UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	2.38	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	1.19	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.99	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.85	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
23	San Francisco Golden Gate Park 1957	5.28	9.74	874.72	Reverse	1.2	4.45	RSN23_SANFRAN_GGP010.AT2 RSN23_SANFRAN_GGP100.AT2 RSN23_SANFRAN_GGP-UP.AT2
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	4.57	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.64	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
191	Imperial Valley-06 Victoria 1979	6.53	31.92	242.05	strike slip	9.6	3.14	RSN191_IMPVALL.H_H-VCT075.AT2 RSN191_IMPVALL.H_H-VCT345.AT2 RSN191_IMPVALL.H_H-VCT-UP.AT2
308	Taiwan SMART1(5) SMART1 I12 1981	5.9	25.7	275.82	Reverse	3	3.33	RSN308_SMART1.05_05I12EW.AT2 RSN308_SMART1.05_05I12NS.AT2 RSN308_SMART1.05_05I12DN.AT2
450	Morgan Hill Corralitos 1984	6.19	23.23	462.24	strike slip	3.8	4.17	RSN450_MORGAN_CLS220.AT2 RSN450_MORGAN_CLS310.AT2 RSN450_MORGAN_CLS-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.43	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	1.75	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
825	Cape Mendocino Cape Mendocino 1992	7.01	0	567.78	Reverse	2.7	0.45	RSN825_CAPEMEND_CPM000.AT2 RSN825_CAPEMEND_CPM090.AT2 RSN825_CAPEMEND_CPM-UP.AT2
950	Northridge-01 Baldwin Park - N Holly 1994	6.69	47.72	544.68	Reverse	6.3	4.39	RSN950_NORTHR_NHO180.AT2 RSN950_NORTHR_NHO270.AT2 RSN950_NORTHR_NHO-UP.AT2
1015	Northridge-01 LB - Rancho Los Cerritos 1994	6.69	47.79	302.73	Reverse	13	4.06	RSN1015_NORTHR_LBR000.AT2 RSN1015_NORTHR_LBR090.AT2 RSN1015_NORTHR_LBR-UP.AT2
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	2.38	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2

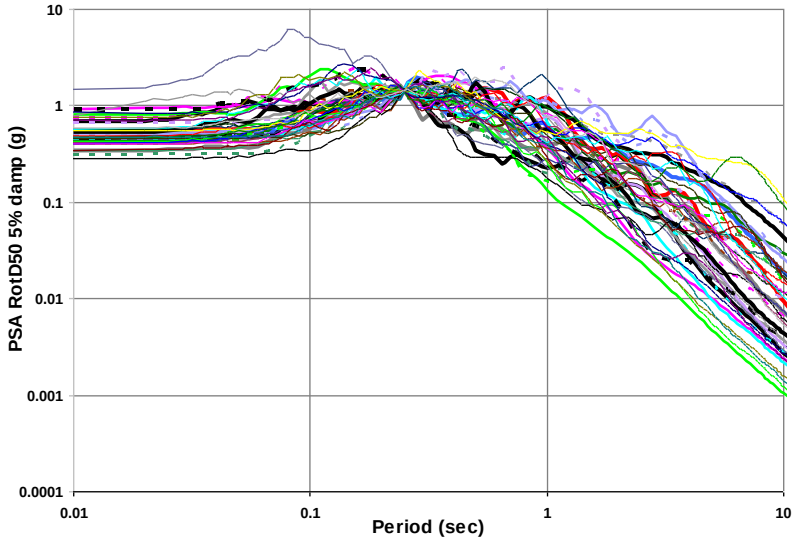
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	2.61	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1079	Northridge-01 Seal Beach - Office Bldg 1994	6.69	61.46	296.62	Reverse	10.5	4.01	RSN1079_NORTHR_SEA000.AT2 RSN1079_NORTHR_SEA090.AT2 RSN1079_NORTHR_SEA-UP.AT2
1082	Northridge-01 Sun Valley - Roscoe Blvd 1994	6.69	5.59	320.93	Reverse	5.8	1.25	RSN1082_NORTHR_RO3000.AT2 RSN1082_NORTHR_RO3090.AT2 RSN1082_NORTHR_RO3-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.68	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1303	Chi-Chi, Taiwan HWA058 1999	7.62	41.17	529.54	Reverse O	9	4.15	RSN1303_CHICHI_HWA058-E.AT2 RSN1303_CHICHI_HWA058-N.AT2 RSN1303_CHICHI_HWA058-V.AT2
1346	Chi-Chi, Taiwan ILA062 1999	7.62	70.43	447.51	Reverse O	14.7	4.7	RSN1346_CHICHI_ILA062-N.AT2 RSN1346_CHICHI_ILA062-W.AT2 RSN1346_CHICHI_ILA062-V.AT2
1427	Chi-Chi, Taiwan TAP035 1999	7.62	87.67	438.13	Reverse O	14.4	4.61	RSN1427_CHICHI_TAP035-E.AT2 RSN1427_CHICHI_TAP035-N.AT2 RSN1427_CHICHI_TAP035-V.AT2
1436	Chi-Chi, Taiwan TAP052 1999	7.62	98.51	433.88	Reverse O	11.1	3.57	RSN1436_CHICHI_TAP052-E.AT2 RSN1436_CHICHI_TAP052-N.AT2 RSN1436_CHICHI_TAP052-V.AT2
1493	Chi-Chi, Taiwan TCU053 1999	7.62	5.95	454.55	Reverse O	17.9	2.42	RSN1493_CHICHI_TCU053-E.AT2 RSN1493_CHICHI_TCU053-N.AT2 RSN1493_CHICHI_TCU053-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.89	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1586	Chi-Chi, Taiwan TTN041 1999	7.62	40.7	418.24	Reverse O	21.8	4.65	RSN1586_CHICHI_TTN041-N.AT2 RSN1586_CHICHI_TTN041-W.AT2 RSN1586_CHICHI_TTN041-V.AT2
2623	Chi-Chi, Taiwan-03 TCU072 1999	6.2	21.18	468.14	Reverse	6.2	2.72	RSN2623_CHICHI.03_TCU072N.AT2 RSN2623_CHICHI.03_TCU072E.AT2 RSN2623_CHICHI.03_TCU072V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**06 LongBeach** **270** **500**							**CS Set**
3000	Chi-Chi, Taiwan-05 HWA011 1999	6.2	54.22	355.76	Reverse	6.4	3.45	RSN3000_CHICHI.05_HWA011N.AT2 RSN3000_CHICHI.05_HWA011E.AT2 RSN3000_CHICHI.05_HWA011V.AT2
3564	Taiwan SMART1(5) SMART1 M05 1981	5.9	24.67	306.38	Reverse	2.9	3.09	RSN3564_SMART1.05_05M05EW.AT RSN3564_SMART1.05_05M05NS.AT2 RSN3564_SMART1.05_05M05DN.AT2
3568	Taiwan SMART1(5) SMART1 M10 1981	5.9	25.96	321.63	Reverse	3	4.39	RSN3568_SMART1.05_05M10EW.AT RSN3568_SMART1.05_05M10NS.AT2 RSN3568_SMART1.05_05M10DN.AT2
3665	Taiwan SMART1(45) SMART1 I04 1986	7.3	55.91	314.88	Reverse	11.6	2.84	RSN3665_SMART1.45_45I04EW.AT2 RSN3665_SMART1.45_45I04NS.AT2 RSN3665_SMART1.45_45I04DN.AT2
3679	Taiwan SMART1(45) SMART1 M11 1986	7.3	56.84	300.22	Reverse	10.8	2.87	RSN3679_SMART1.45_45M11EW.AT RSN3679_SMART1.45_45M11NS.AT2 RSN3679_SMART1.45_45M11DN.AT2
3704	Whittier Narrows-02 Glendale - Las Palmas 1987	5.27	17.44	371.07	Reverse O	1.1	4.09	RSN3704_WHITTIER.B_B-GLP177.AT2 RSN3704_WHITTIER.B_B-GLP267.AT2 RSN3704_WHITTIER.B_B-GLP-UP.AT2
3717	Whittier Narrows-02 LA - W 70th St 1987	5.27	18.58	241.41	Reverse O	1.7	3.92	RSN3717_WHITTIER.B_B-W70000.AT RSN3717_WHITTIER.B_B-W70270.AT RSN3717_WHITTIER.B_B-W70-UP.AT
3745	Cape Mendocino Butler Valley Station 2 1992	7.01	43.82	525.26	Reverse	5.2	3.22	RSN3745_CAPEMEND_BVS060.AT2 RSN3745_CAPEMEND_BVS330.AT2 RSN3745_CAPEMEND_BVS-UP.AT2
4098	Parkfield-02, CA Parkfield - Cholame 1E 2004	6	1.66	326.64	strike slip	1.9	1.62	RSN4098_PARK2004_C01090.AT2 RSN4098_PARK2004_C01360.AT2 RSN4098_PARK2004_C01-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	2.89	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	1.99	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.45	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
5193	Chuetsu-oki NGN001 2007	6.8	51.48	303.73	Reverse	4.4	3	RSN5193_CHUETSU_NGN001NS.AT2 RSN5193_CHUETSU_NGN001EW.AT2 RSN5193_CHUETSU_NGN001UD.AT2

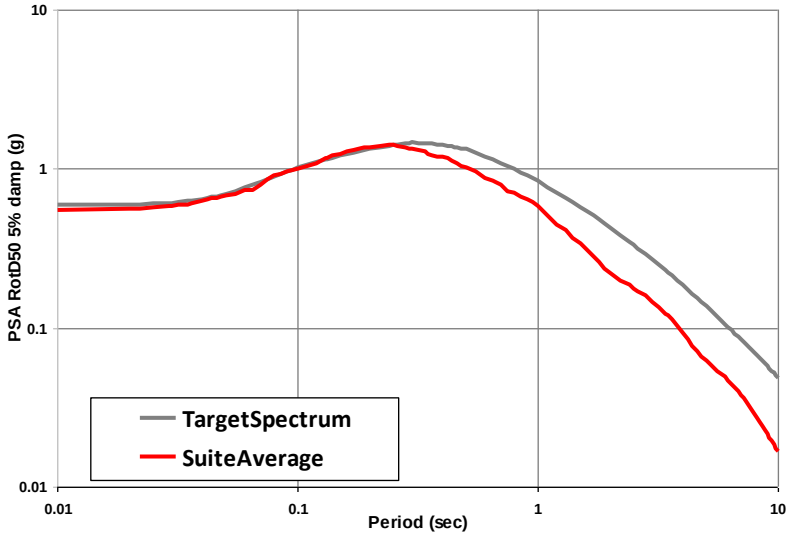
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	1.58	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2
5776	Iwate Kami, Miyagi Miyazaki City 2008	6.9	25.15	477.55	Reverse	7.6	3.18	RSN5776_IWATE_54010NS.AT2 RSN5776_IWATE_54010EW.AT2 RSN5776_IWATE_54010UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	1.49	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5823	El Mayor-Cucapah Chihuahua 2010	7.2	18.21	242.05	strike slip	25.1	2.07	RSN5823_SIERRA.MEX_CHI000.AT2 RSN5823_SIERRA.MEX_CHI090.AT2 RSN5823_SIERRA.MEX_CHI--V.AT2
6879	Darfield, New Zealand ADCS 2010	7	28.46	249.28	strike slip	16.5	3.68	RSN6879_DARFIELD_ADCSN42W.AT2 RSN6879_DARFIELD_ADCSN48E.AT2 RSN6879_DARFIELD_ADCSUP.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	1.5	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
8134	Christchurch, New Zealand Styx Mill Transfer Station 2011	6.2	11.24	247.5	Reverse O	5.6	3.92	RSN8134_CCHURCH_SMTCN88W.AT RSN8134_CCHURCH_SMTCS02W.AT2 RSN8134_CCHURCH_SMTCUP.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
133	Friuli, Italy-02 San Rocco 1976	5.91	14.37	649.67	Reverse	2.5	4.02	RSN133_FRIULI.B_B-SRO000.AT2 RSN133_FRIULI.B_B-SRO270.AT2 RSN133_FRIULI.B_B-SRO-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.83	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
199	Imperial Valley-07 El Centro Array #11 1979	5.01	13.61	196.25	strike slip	0.7	4.94	RSN199_IMPVALL.A_A-E11140.AT2 RSN199_IMPVALL.A_A-E11230.AT2 RSN199_IMPVALL.A_A-E11-UP.AT2
236	Mammoth Lakes-03 Convict Creek 1980	5.91	2.67	382.12	strike slip	2.4	3.57	RSN236_MAMMOTH.AH_A-CVK090.A RSN236_MAMMOTH.AH_A-CVK180.A RSN236_MAMMOTH.AH_A-CVK-UP.A
290	Irpinia, Italy-01 Mercato San Severino 1980	6.9	29.79	428.57	Normal	12.7	3.84	RSN290_ITALY_A-MER000.AT2 RSN290_ITALY_A-MER270.AT2 RSN290_ITALY_A-MER-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	4.12	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
308	Taiwan SMART1(5) SMART1 I12 1981	5.9	25.7	275.82	Reverse	3	4.29	RSN308_SMART1.05_05I12EW.AT2 RSN308_SMART1.05_05I12NS.AT2 RSN308_SMART1.05_05I12DN.AT2
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	2.66	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	3.18	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
342	Coalinga-01 Parkfield - Fault Zone 3 1983	6.36	36.14	211.74	Reverse	6.7	4.3	RSN342_COALINGA.H_H-COH000.AT RSN342_COALINGA.H_H-COH090.AT RSN342_COALINGA.H_H-COH-UP.AT
382	Coalinga-02 Palmer Ave 1983	5.09	1.98	458.09	Reverse	0.6	3.46	RSN382_COALINGA_A-PLM270.AT2 RSN382_COALINGA_A-PLM360.AT2 RSN382_COALINGA_A-PLM-UP.AT2
544	Chalfant Valley-01 Bishop - LADWP South St 1986	5.77	23.38	303.47	strike slip	10	4.17	RSN544_CHALFANT.B_B-LAD180.AT2 RSN544_CHALFANT.B_B-LAD270.AT2 RSN544_CHALFANT.B_B-LAD-UP.AT2

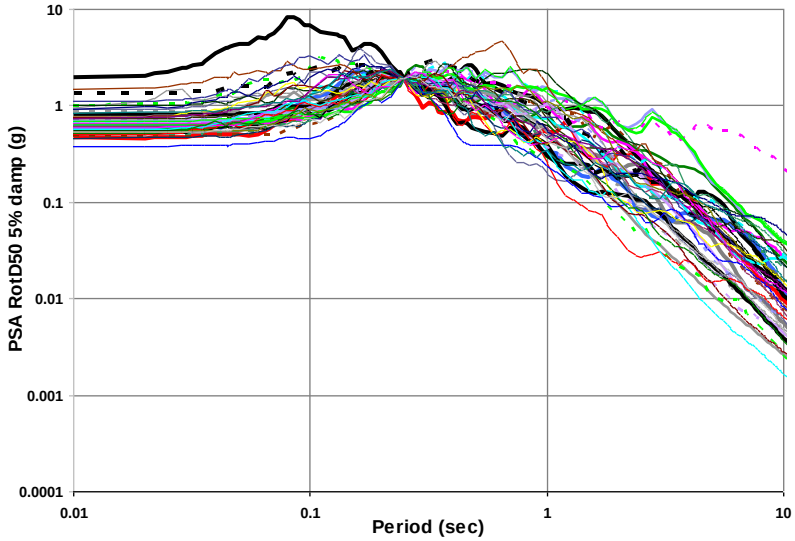
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	2.26	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
718	Superstition Hills-01 Imperial Valley Wildlife Liquefaction 1987	6.22	17.59	179	strike slip	7.2	4.37	RSN718_SUPER.A_A-IVW090.AT2 RSN718_SUPER.A_A-IVW360.AT2 RSN718_SUPER.A_A-IVW-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	3.31	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
972	Northridge-01 Featherly Park - Maint 1994	6.69	82.01	367.54	Reverse	5.8	4.76	RSN972_NORTHR_FEA000.AT2 RSN972_NORTHR_FEA090.AT2 RSN972_NORTHR_FEA-UP.AT2
989	Northridge-01 LA - Chalon Rd 1994	6.69	9.87	740.05	Reverse	5.3	2.92	RSN989_NORTHR_CHL070.AT2 RSN989_NORTHR_CHL160.AT2 RSN989_NORTHR_CHL-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	1.28	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1083	Northridge-01 Sunland - Mt Gleason Ave 1994	6.69	12.38	402.16	Reverse	6	3.64	RSN1083_NORTHR_GLE170.AT2 RSN1083_NORTHR_GLE260.AT2 RSN1083_NORTHR_GLE-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	2.17	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1511	Chi-Chi, Taiwan TCU076 1999	7.62	2.74	614.98	Reverse O	17	1.73	RSN1511_CHICHI_TCU076-E.AT2 RSN1511_CHICHI_TCU076-N.AT2 RSN1511_CHICHI_TCU076-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	1.14	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	1.55	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
3666	Taiwan SMART1(45) SMART1 I05 1986	7.3	55.84	309.41	Reverse	11.4	4.2	RSN3666_SMART1.45_45I05EW.AT2 RSN3666_SMART1.45_45I05NS.AT2 RSN3666_SMART1.45_45I05DN.AT2
3679	Taiwan SMART1(45) SMART1 M11 1986	7.3	56.84	300.22	Reverse	10.8	3.7	RSN3679_SMART1.45_45M11EW.AT RSN3679_SMART1.45_45M11NS.AT2 RSN3679_SMART1.45_45M11DN.AT2

Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	1.99	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
4068	Parkfield-02, CA PARKFIELD - HOG CANYON 2004	6	0.73	363.69	strike slip	4.2	2.11	RSN4068_PARK2004_HOG-90.AT2 RSN4068_PARK2004_HOG360.AT2 RSN4068_PARK2004_HOG-UP.AT2
4085	Parkfield-02, CA Shandon-1-story High School Bldg 2004	6	12.59	357.35	strike slip	3.7	4.59	RSN4085_PARK2004_36535180.AT2 RSN4085_PARK2004_36535270.AT2 RSN4085_PARK2004_36535-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	3.73	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4481	L'Aquila, Italy L'Aquila - V. Aterno -Colle Grilli 2009	6.3	0	685	Normal	4.3	1.68	RSN4481_L-AQUILA_FA030XTE.AT2 RSN4481_L-AQUILA_FA030YLN.AT2 RSN4481_L-AQUILA_FA030ZUP.AT2
4741	Wenchuan, China Maoxiandiexi 2008	7.9	44.73	299.37	Reverse O	35.9	2.72	RSN4741_WENCHUAN_UA0854.AT2 RSN4741_WENCHUAN_UA0853.AT2 RSN4741_WENCHUAN_UA0855.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.58	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4878	Chuetsu-oki Yahiko Village Yahagi 2007	6.8	19.73	223.12	Reverse	12.6	3.96	RSN4878_CHUETSU_65083NS.AT2 RSN4878_CHUETSU_65083EW.AT2 RSN4878_CHUETSU_65083UD.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	3.28	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5291	Chuetsu-oki NIGH18 2007	6.8	46.84	311.1	Reverse	8.8	4.05	RSN5291_CHUETSU_NIGH18NS.AT2 RSN5291_CHUETSU_NIGH18EW.AT2 RSN5291_CHUETSU_NIGH18UD.AT2
5495	Iwate AKTH19 2008	6.9	32.28	287.96	Reverse	7.4	2.02	RSN5495_IWATE_AKTH19NS.AT2 RSN5495_IWATE_AKTH19EW.AT2 RSN5495_IWATE_AKTH19UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	1.92	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5798	Iwate Takanashi Daisen 2008	6.9	44.75	217.1	Reverse	9.7	3.76	RSN5798_IWATE_55429NS.AT2 RSN5798_IWATE_55429EW.AT2 RSN5798_IWATE_55429UD.AT2

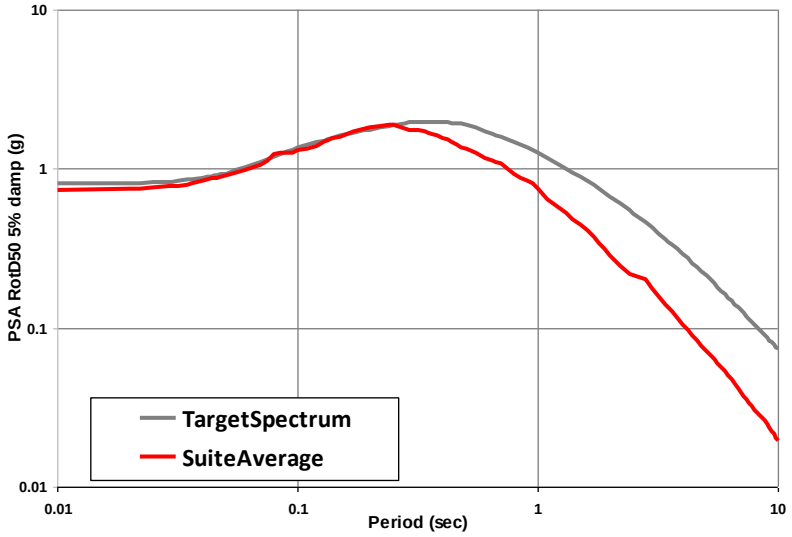
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	2.02	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6960	Darfield, New Zealand Riccarton High School 2010	7	13.64	293	strike slip	9.5	2.64	RSN6960_DARFIELD_RHSCN86W.AT2 RSN6960_DARFIELD_RHSCS04W.AT2 RSN6960_DARFIELD_RHSCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	2.48	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.69	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	1.44	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8876	14383980 Walnut 2008	5.39	16.03	342.64	Reverse O	2.2	4.26	RSN8876_14383980_CIWLTHNN.AT2 RSN8876_14383980_CIWLTHNE.AT2 RSN8876_14383980_CIWLTHNZ.AT2
9009	14151344 Anza, Mitchell Rd. 2005	5.2	5.08	361	strike slip	1.5	4.09	RSN9009_14151344_CIDNRHLN.AT2 RSN9009_14151344_CIDNRHLE.AT2 RSN9009_14151344_CIDNRHLZ.AT2

Site	**06 LongBeach**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	06 LongBeach	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
204	Imperial Valley-07 El Centro Array #6 1979	5.01	7.4	203.22	strike slip	0.8	3.32	RSN204_IMPVALL.A_A-E06140.AT2 RSN204_IMPVALL.A_A-E06230.AT2 RSN204_IMPVALL.A_A-E06-UP.AT2
223	Livermore-02 San Ramon - Eastman Kodak 1980	5.42	14.31	377.51	strike slip	2.1	4.36	RSN223_LIVERMOR_B-KOD180.AT2 RSN223_LIVERMOR_B-KOD270.AT2 RSN223_LIVERMOR_B-KOD-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	4.24	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	2.54	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
406	Coalinga-05 Coalinga-14th & Elm (Old CHP) 1983	5.77	7.02	286.41	Reverse	1.7	2.35	RSN406_COALINGA_D-CHP000.AT2 RSN406_COALINGA_D-CHP090.AT2 RSN406_COALINGA_D-CHP-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.46	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
570	Taiwan SMART1(45) SMART1 C00 1986	7.3	56.01	309.41	Reverse	12.1	4.96	RSN570_SMART1.45_45C00EW.AT2 RSN570_SMART1.45_45C00NS.AT2 RSN570_SMART1.45_45C00DN.AT2
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	3.02	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
627	Whittier Narrows-01 LA - Baldwin Hills 1987	5.99	21.51	297.07	Reverse O	3.9	4.92	RSN627_WHITTIER.A_A-BLD000.AT2 RSN627_WHITTIER.A_A-BLD090.AT2 RSN627_WHITTIER.A_A-BLD-UP.AT2
646	Whittier Narrows-01 LB - Rancho Los Cerritos 1987	5.99	24.61	302.73	Reverse O	2.1	2.91	RSN646_WHITTIER.A_A-LBR000.AT2 RSN646_WHITTIER.A_A-LBR090.AT2 RSN646_WHITTIER.A_A-LBR-UP.AT2
767	Loma Prieta Gilroy Array #3 1989	6.93	12.23	349.85	Reverse O	2.3	1.5	RSN767_LOMAP_G03000.AT2 RSN767_LOMAP_G03090.AT2 RSN767_LOMAP_G03-UP.AT2
971	Northridge-01 Elizabeth Lake 1994	6.69	36.2	326.19	Reverse	5.4	3.87	RSN971_NORTHR_ELL090.AT2 RSN971_NORTHR_ELL180.AT2 RSN971_NORTHR_ELL-UP.AT2

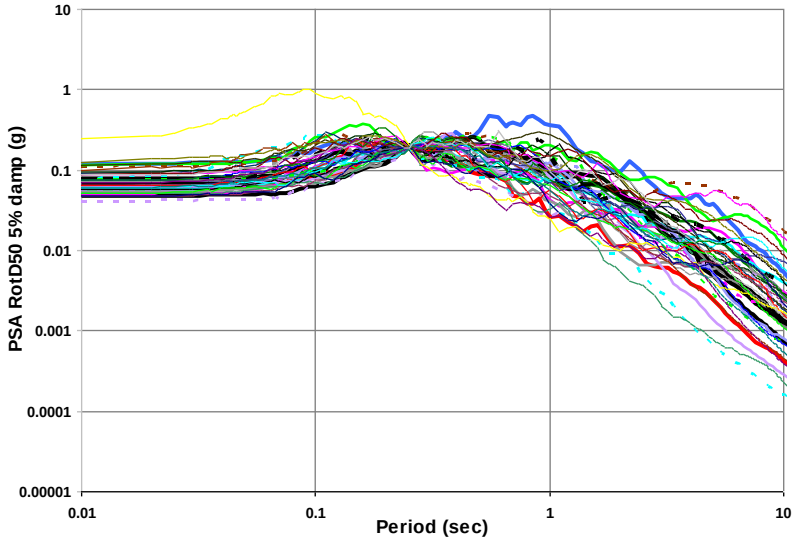
Site Site Vs30 (m/s) Return Period (yr)	**06 LongBeach** **270** **2500**							**CS Set**
1024	Northridge-01 Lakewood - Del Amo Blvd 1994	6.69	53.56	267.35	Reverse	11	4.09	RSN1024_NORTHR_DEL000.AT2 RSN1024_NORTHR_DEL090.AT2 RSN1024_NORTHR_DEL-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	1.72	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1076	Northridge-01 Santa Fe Springs - E.Joslin 1994	6.69	48.06	339.06	Reverse	7.2	4.49	RSN1076_NORTHR_EJS030.AT2 RSN1076_NORTHR_EJS120.AT2 RSN1076_NORTHR_EJS-UP.AT2
1118	Kobe, Japan Tadoka 1995	6.9	31.69	312	strike slip	7.4	2.17	RSN1118_KOBE_TDO000.AT2 RSN1118_KOBE_TDO090.AT2 RSN1118_KOBE_TDO-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	1.22	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.72	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	2.9	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	3.81	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1258	Chi-Chi, Taiwan HWA005 1999	7.62	43.17	459.32	Reverse O	11.8	4.54	RSN1258_CHICHI_HWA005-N.AT2 RSN1258_CHICHI_HWA005-W.AT2 RSN1258_CHICHI_HWA005-V.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	4.52	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	1.53	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1794	Hector Mine Joshua Tree 1999	7.13	31.06	379.32	strike slip	7	4.74	RSN1794_HECTOR_JOS090.AT2 RSN1794_HECTOR_JOS360.AT2 RSN1794_HECTOR_JOS-UP.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	3.59	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2

Site Site Vs30 (m/s) Return Period (yr)	**06 LongBeach** **270** **2500**							**CS Set**
3665	Taiwan SMART1(45) SMART1 I04 1986	7.3	55.91	314.88	Reverse	11.6	4.88	RSN3665_SMART1.45_45I04EW.AT2 RSN3665_SMART1.45_45I04NS.AT2 RSN3665_SMART1.45_45I04DN.AT2
3679	Taiwan SMART1(45) SMART1 M11 1986	7.3	56.84	300.22	Reverse	10.8	4.94	RSN3679_SMART1.45_45M11EW.AT RSN3679_SMART1.45_45M11NS.AT2 RSN3679_SMART1.45_45M11DN.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	4.99	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	3.44	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4226	Niigata, Japan NIGH09 2004	6.63	22.37	462.93	Reverse	4.6	2.36	RSN4226_NIIGATA_NIGH09NS.AT2 RSN4226_NIIGATA_NIGH09EW.AT2 RSN4226_NIIGATA_NIGH09UD.AT2
4337	Umbria Marche (foreshock), Italy Colfiorito 1997	5.7	0.58	317	Normal	2.6	3.15	RSN4337_UBMARCHE.P_B-CLF000.A RSN4337_UBMARCHE.P_B-CLF270.A RSN4337_UBMARCHE.P_B-CLF-DN.A
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.78	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4840	Chuetsu-oki Joetsu Kita 2007	6.8	28.97	334.01	Reverse	14.9	4.62	RSN4840_CHUETSU_65003NS.AT2 RSN4840_CHUETSU_65003EW.AT2 RSN4840_CHUETSU_65003UD.AT2
4850	Chuetsu-oki Yoshikawaku Joetsu City 2007	6.8	13.68	561.59	Reverse	4.1	2.8	RSN4850_CHUETSU_65013NS.AT2 RSN4850_CHUETSU_65013EW.AT2 RSN4850_CHUETSU_65013UD.AT2
4854	Chuetsu-oki Nadachiku Joetsu City 2007	6.8	35.79	570.62	Reverse	5.3	4.9	RSN4854_CHUETSU_65020NS.AT2 RSN4854_CHUETSU_65020EW.AT2 RSN4854_CHUETSU_65020UD.AT2
4876	Chuetsu-oki Kashiwazaki Nishiyamacho Ikeura 2007	6.8	0	655.45	Reverse	4.9	1.71	RSN4876_CHUETSU_65059NS.AT2 RSN4876_CHUETSU_65059EW.AT2 RSN4876_CHUETSU_65059UD.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.52	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	2.73	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2

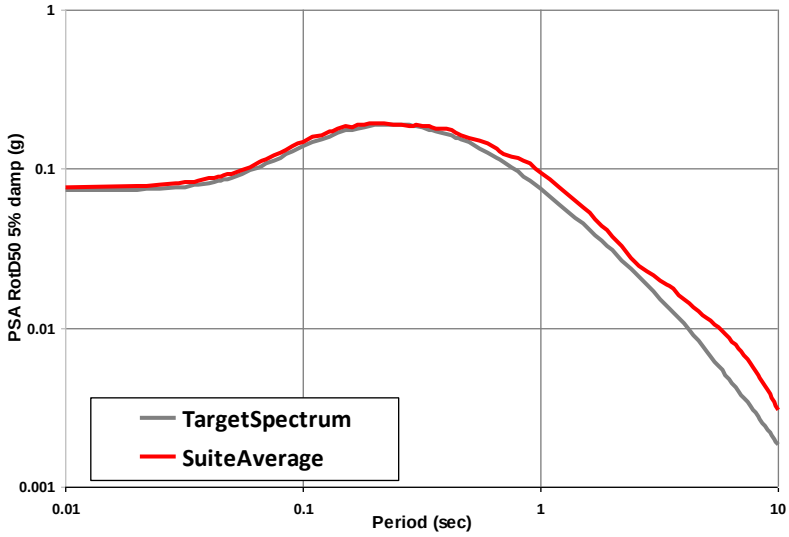
Site	06 LongBeach							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
5620	Iwate IWT012 2008	6.9	20.47	264.48	Reverse	11.1	1.92	RSN5620_IWATE_IWT012NS.AT2 RSN5620_IWATE_IWT012EW.AT2 RSN5620_IWATE_IWT012UD.AT2
5795	Iwate Izumi-ku Sendai Shogen 2008	6.9	55.62	502.99	Reverse	6.6	2.57	RSN5795_IWATE_54083NS.AT2 RSN5795_IWATE_54083EW.AT2 RSN5795_IWATE_54083UD.AT2
5812	Iwate Kitakami Yanagiharach 2008	6.9	16.44	348.99	Reverse	10.9	3.81	RSN5812_IWATE_44B61NS.AT2 RSN5812_IWATE_44B61EW.AT2 RSN5812_IWATE_44B61UD.AT2
5815	Iwate Yuzawa 2008	6.9	22.41	655.45	Reverse	7.2	2.99	RSN5815_IWATE_44BC1NS.AT2 RSN5815_IWATE_44BC1EW.AT2 RSN5815_IWATE_44BC1UD.AT2
6928	Darfield, New Zealand LPCC 2010	7	25.21	649.67	strike slip	7.5	3.07	RSN6928_DARFIELD_LPCCN80E.AT2 RSN6928_DARFIELD_LPCCS10E.AT2 RSN6928_DARFIELD_LPCCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	3.32	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8126	Christchurch, New Zealand ROLC 2011	6.2	24.25	295.74	Reverse O	3.8	4.76	RSN8126_CCHURCH_ROLCS29E.AT2 RSN8126_CCHURCH_ROLCS61W.AT2 RSN8126_CCHURCH_ROLCUP.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	0.79	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	1.19	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.17	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.06	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
157	Norcia, Italy Spoleto 1979	5.9	13.21	535.24	Normal	5.3	1.82	RSN157_ITALY_F-SPO-NS.AT2 RSN157_ITALY_F-SPO-EW.AT2 RSN157_ITALY_F-SPO-UP.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	0.41	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.11	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	1.46	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.27	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
368	Coalinga-01 Pleasant Valley P.P. - yard 1983	6.36	7.69	257.38	Reverse	4.2	0.14	RSN368_COALINGA.H_H-PVY045.AT2 RSN368_COALINGA.H_H-PVY135.AT2 RSN368_COALINGA.H_H-PVY-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	0.18	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.25	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2

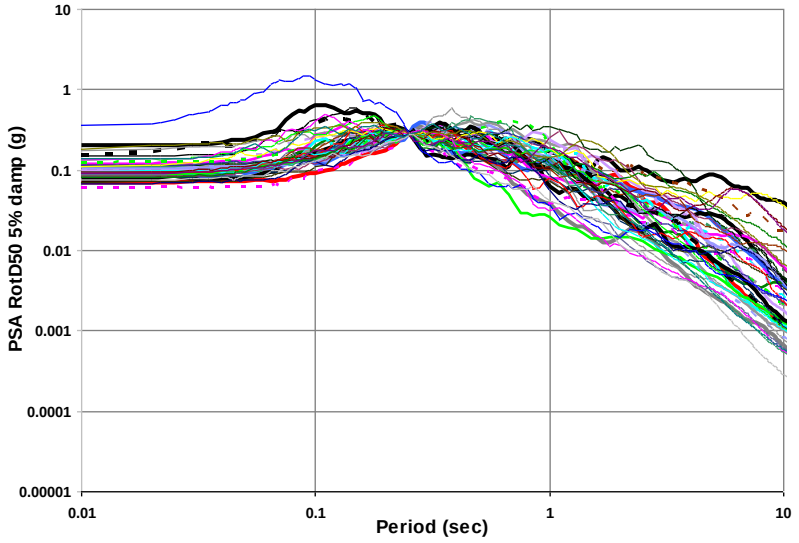
Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **15**							**CS Set**
558	Chalfant Valley-02 Zack Brothers Ranch 1986	6.19	6.44	316.19	strike slip	2.4	0.18	RSN558_CHALFANT.A_A-ZAK270.AT2 RSN558_CHALFANT.A_A-ZAK360.AT2 RSN558_CHALFANT.A_A-ZAK-UP.AT2
728	Superstition Hills-02 Westmorland Fire Sta 1987	6.54	13.03	193.67	strike slip	10.9	0.42	RSN728_SUPER.B_B-WSM090.AT2 RSN728_SUPER.B_B-WSM180.AT2 RSN728_SUPER.B_B-WSM-UP.AT2
754	Loma Prieta Coyote Lake Dam (Downst) 1989	6.93	20.44	295.01	Reverse O	4.8	0.46	RSN754_LOMAP_CLD195.AT2 RSN754_LOMAP_CLD285.AT2 RSN754_LOMAP_CLD-UP.AT2
959	Northridge-01 Canoga Park - Topanga Can 1994	6.69	0	267.49	Reverse	6.4	0.24	RSN959_NORTHR_CNP106.AT2 RSN959_NORTHR_CNP196.AT2 RSN959_NORTHR_CNP-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.09	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1049	Northridge-01 Pacific Palisades - Sunset 1994	6.69	13.34	191.06	Reverse	5.8	0.17	RSN1049_NORTHR_SUN190.AT2 RSN1049_NORTHR_SUN280.AT2 RSN1049_NORTHR_SUN-UP.AT2
1110	Kobe, Japan Morigawachi 1995	6.9	24.78	256	strike slip	13.2	0.72	RSN1110_KOBE_MRG000.AT2 RSN1110_KOBE_MRG090.AT2 RSN1110_KOBE_MRG-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.12	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.17	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1161	Kocaeli, Turkey Gebze 1999	7.51	7.57	792	strike slip	5.8	0.58	RSN1161_KOCAELI_GBZ000.AT2 RSN1161_KOCAELI_GBZ270.AT2 RSN1161_KOCAELI_GBZ-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.29	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1184	Chi-Chi, Taiwan CHY010 1999	7.62	19.93	538.69	Reverse O	6.1	0.36	RSN1184_CHICHI_CHY010-N.AT2 RSN1184_CHICHI_CHY010-W.AT2 RSN1184_CHICHI_CHY010-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.15	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **15**							**CS Set**
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.21	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	0.35	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1671	Northridge-03 Pacoima Kagel Canyon 1994	5.2	20.08	508.08	Reverse	3.2	1.52	RSN1671_NORTH009_PKC090.AT2 RSN1671_NORTH009_PKC360.AT2 RSN1671_NORTH009_PKC-UP.AT2
2654	Chi-Chi, Taiwan-03 TCU120 1999	6.2	22.89	459.34	Reverse	9.2	1.37	RSN2654_CHICHI.03_TCU120N.AT2 RSN2654_CHICHI.03_TCU120E.AT2 RSN2654_CHICHI.03_TCU120V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.21	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
2739	Chi-Chi, Taiwan-04 CHY080 1999	6.2	12.44	496.21	strike slip	5.7	0.62	RSN2739_CHICHI.04_CHY080N.AT2 RSN2739_CHICHI.04_CHY080E.AT2 RSN2739_CHICHI.04_CHY080V.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.21	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4078	Parkfield-02, CA Coalinga - Fire Station 39 2004	6	22.45	333.61	strike slip	10.9	1.63	RSN4078_PARK2004_COA090.AT2 RSN4078_PARK2004_COA360.AT2 RSN4078_PARK2004_COA-UP.AT2
4113	Parkfield-02, CA Parkfield - Fault Zone 9 2004	6	1.22	372.26	strike slip	3	0.89	RSN4113_PARK2004_Z09090.AT2 RSN4113_PARK2004_Z09360.AT2 RSN4113_PARK2004_Z09-UP.AT2
4480	L'Aquila, Italy L'Aquila - V. Aterno - Centro Valle 2009	6.3	0	475	Normal	4.4	0.18	RSN4480_L-AQUILA_GX066XTE.AT2 RSN4480_L-AQUILA_GX066YLN.AT2 RSN4480_L-AQUILA_GX066ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.08	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.26	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	0.45	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2

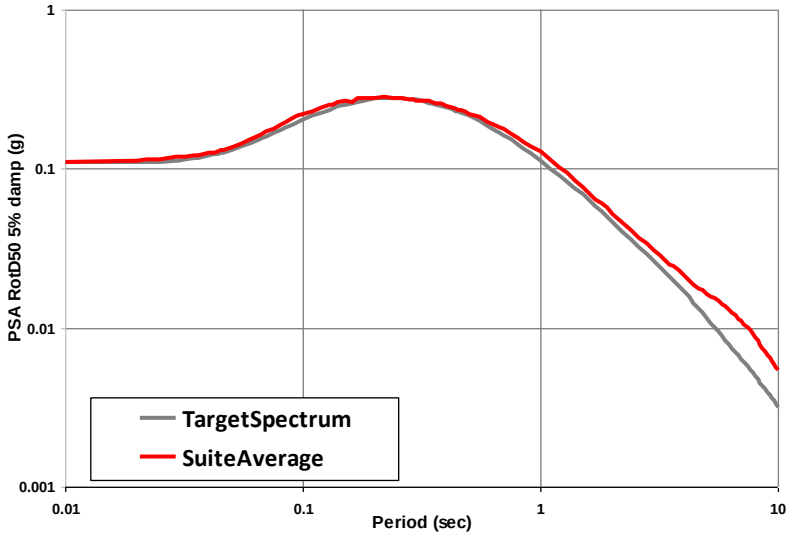
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.29	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	0.72	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
5975	El Mayor-Cucapah Calexico Fire Station 2010	7.2	19.12	231.23	strike slip	18.6	0.32	RSN5975_SIERRA.MEX_CXO360.AT2 RSN5975_SIERRA.MEX_CXO090.AT2 RSN5975_SIERRA.MEX_CXO-UP.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.12	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.23	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8119	Christchurch, New Zealand Pages Road Pumping Station 2011	6.2	1.92	206	Reverse O	2.5	0.19	RSN8119_CCHURCH_PRPCS.AT2 RSN8119_CCHURCH_PRPCW.AT2 RSN8119_CCHURCH_PRPCUP.AT2
8624	40204628 San Jose; Fire Station 10 Northwest; 2007	5.45	19.22	337.58	strike slip	3.7	0.95	RSN8624_40204628_N1782HNN.AT2 RSN8624_40204628_N1782HNE.AT2 RSN8624_40204628_N1782HNZ.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	1.16	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	1.75	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.09	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
162	Imperial Valley-06 Calexico Fire Station 1979	6.53	10.45	231.23	strike slip	6.4	0.5	RSN162_IMPVALL.H_H-CXO225.AT2 RSN162_IMPVALL.H_H-CXO315.AT2 RSN162_IMPVALL.H_H-CXO-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.16	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	2.15	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	0.72	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
302	Irpinia, Italy-02 Rionero In Vulture 1980	6.2	22.68	574.88	Normal	10.2	1.12	RSN302_ITALY_B-VLT000.AT2 RSN302_ITALY_B-VLT270.AT2 RSN302_ITALY_B-VLT-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.4	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.37	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	0.68	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2
447	Morgan Hill Agnews State Hospital 1984	6.19	24.48	239.69	strike slip	22.6	3.6	RSN447_MORGAN_AGW240.AT2 RSN447_MORGAN_AGW330.AT2 RSN447_MORGAN_AGW-UP.AT2

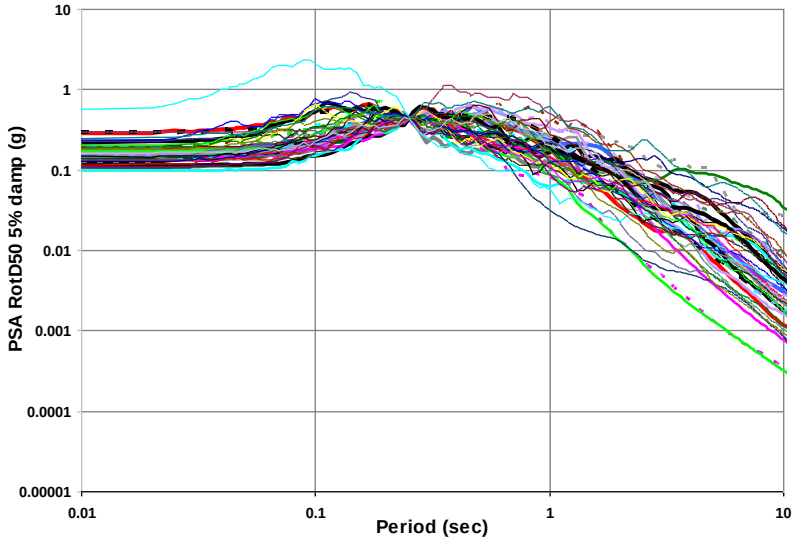
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
548	Chalfant Valley-02 Benton 1986	6.19	21.55	370.94	strike slip	5.7	0.7	RSN548_CHALFANT.A_A-BEN270.AT2 RSN548_CHALFANT.A_A-BEN360.AT2 RSN548_CHALFANT.A_A-BEN-UP.AT2
622	Whittier Narrows-01 Hacienda Heights - Colima 1987	5.99	9.6	337	Reverse O	2.9	0.69	RSN622_WHITTIER.A_A-COM140.AT2 RSN622_WHITTIER.A_A-COM230.AT2 RSN622_WHITTIER.A_A-COM-UP.AT2
645	Whittier Narrows-01 LB - Orange Ave 1987	5.99	19.8	344.72	Reverse O	2.9	0.45	RSN645_WHITTIER.A_A-OR2010.AT2 RSN645_WHITTIER.A_A-OR2280.AT2 RSN645_WHITTIER.A_A-OR2-UP.AT2
952	Northridge-01 Beverly Hills - 12520 Mulhol 1994	6.69	12.39	545.66	Reverse	4.9	0.14	RSN952_NORTHR_MU2035.AT2 RSN952_NORTHR_MU2125.AT2 RSN952_NORTHR_MU2-UP.AT2
1089	Northridge-01 Topanga - Fire Sta 1994	6.69	10.31	505.97	Reverse	5.1	0.35	RSN1089_NORTHR_TPF360.AT2 RSN1089_NORTHR_TPF270.AT2 RSN1089_NORTHR_TPF-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.25	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.43	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1490	Chi-Chi, Taiwan TCU050 1999	7.62	9.49	542.41	Reverse O	18.4	0.72	RSN1490_CHICHI_TCU050-E.AT2 RSN1490_CHICHI_TCU050-N.AT2 RSN1490_CHICHI_TCU050-V.AT2
1495	Chi-Chi, Taiwan TCU055 1999	7.62	6.34	359.13	Reverse O	19.1	0.48	RSN1495_CHICHI_TCU055-E.AT2 RSN1495_CHICHI_TCU055-N.AT2 RSN1495_CHICHI_TCU055-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.23	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.31	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.3	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3947	Tottori, Japan SMNH01 2000	6.61	5.83	446.34	strike slip	4.7	0.12	RSN3947_TOTTORI_SMNH01NS.AT2 RSN3947_TOTTORI_SMNH01EW.AT2 RSN3947_TOTTORI_SMNH01UD.AT2

Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **25**							**CS Set**
3968	Tottori, Japan TTRH02 2000	6.61	0.83	310.21	strike slip	5.4	0.15	RSN3968_TOTTORI_TTRH02NS.AT2 RSN3968_TOTTORI_TTRH02EW.AT2 RSN3968_TOTTORI_TTRH02UD.AT2
4135	Parkfield-02, CA Parkfield - Vineyard Cany 4W 2004	6	6.74	386.19	strike slip	3.1	1.44	RSN4135_PARK2004_VC4090.AT2 RSN4135_PARK2004_VC4360.AT2 RSN4135_PARK2004_VC4-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	0.38	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4147	Parkfield-02, CA PARKFIELD - UPSAR 11 2004	6	8.93	466.12	strike slip	5.1	0.47	RSN4147_PARK2004_UP11090.AT2 RSN4147_PARK2004_UP11360.AT2 RSN4147_PARK2004_UP11-UP.AT2
4320	Lazio Abruzzo (aftershock 1), Italy Cassino-Sant' Elia 1984	5.5	21.59	436.79	Normal	5	2.24	RSN4320_ABRUZZO.P_A-CSS000.AT2 RSN4320_ABRUZZO.P_A-CSS090.AT2 RSN4320_ABRUZZO.P_A-CSS-UP.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	0.3	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.12	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.37	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	0.66	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
4878	Chuetsu-oki Yahiko Village Yahagi 2007	6.8	19.73	223.12	Reverse	12.6	0.78	RSN4878_CHUETSU_65083NS.AT2 RSN4878_CHUETSU_65083EW.AT2 RSN4878_CHUETSU_65083UD.AT2
4881	Chuetsu-oki Nagaoka Kouiti Town 2007	6.8	11.61	294.38	Reverse	8.2	0.78	RSN4881_CHUETSU_65301NS.AT2 RSN4881_CHUETSU_65301EW.AT2 RSN4881_CHUETSU_65301UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.42	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	1.05	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2

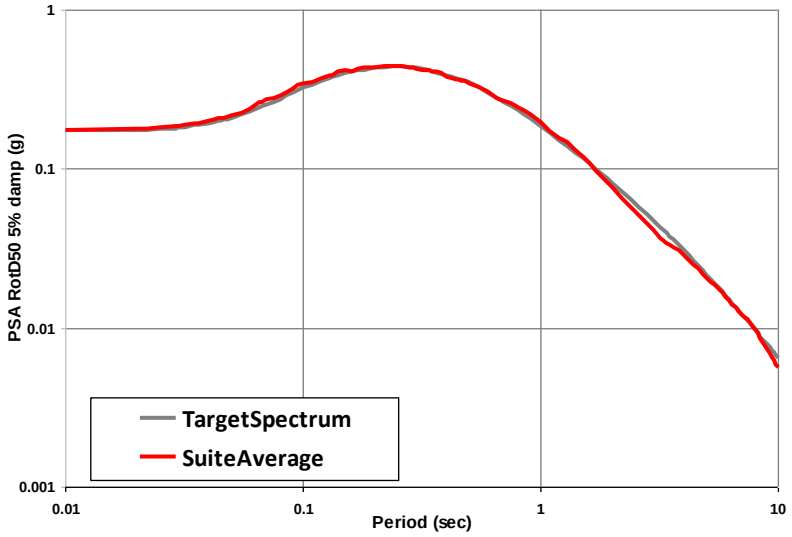
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
5823	El Mayor-Cucapah Chihuahua 2010	7.2	18.21	242.05	strike slip	25.1	0.53	RSN5823_SIERRA.MEX_CHI000.AT2 RSN5823_SIERRA.MEX_CHI090.AT2 RSN5823_SIERRA.MEX_CHI--V.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	0.38	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	0.4	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.33	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8119	Christchurch, New Zealand Pages Road Pumping Station 2011	6.2	1.92	206	Reverse O	2.5	0.28	RSN8119_CCHURCH_PRPCS.AT2 RSN8119_CCHURCH_PRPCW.AT2 RSN8119_CCHURCH_PRPCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.28	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8709	40204628 Lick Observatory, Mt. Hamiliton, CA, 2007	5.45	12.77	710.29	strike slip	2.6	2.22	RSN8709_40204628_BKMHCHLN.AT2 RSN8709_40204628_BKMHCHLE.AT2 RSN8709_40204628_BKMHCHLZ.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	1.83	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	2.76	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.26	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	3.38	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
266	Victoria, Mexico Chihuahua 1980	6.33	18.53	242.05	strike slip	9.1	1.47	RSN266_VICT_CHI102.AT2 RSN266_VICT_CHI192.AT2 RSN266_VICT_CHIDWN.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	1.13	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.63	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
457	Morgan Hill Gilroy Array #3 1984	6.19	13.01	349.85	strike slip	6.5	1.02	RSN457_MORGAN_G03000.AT2 RSN457_MORGAN_G03090.AT2 RSN457_MORGAN_G03-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.57	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
563	Chalfant Valley-04 Zack Brothers Ranch 1986	5.44	8.88	316.19	strike slip	7.3	3.38	RSN563_CHALFANT.B_D-ZAK270.AT2 RSN563_CHALFANT.B_D-ZAK360.AT2 RSN563_CHALFANT.B_D-ZAK-UP.AT2
676	Whittier Narrows-01 Pasadena - CIT Bridge Lab 1987	5.99	4.3	341.14	Reverse O	3.2	1.12	RSN676_WHITTIER.A_A-BRI090.AT2 RSN676_WHITTIER.A_A-BRI360.AT2 RSN676_WHITTIER.A_A-BRI-UP.AT2
709	Whittier Narrows-02 Downey - Co Maint Bldg 1987	5.27	14.37	271.9	Reverse O	5.8	2.99	RSN709_WHITTIER.B_B-DWN180.AT2 RSN709_WHITTIER.B_B-DWN270.AT2 RSN709_WHITTIER.B_B-DWN-UP.AT2

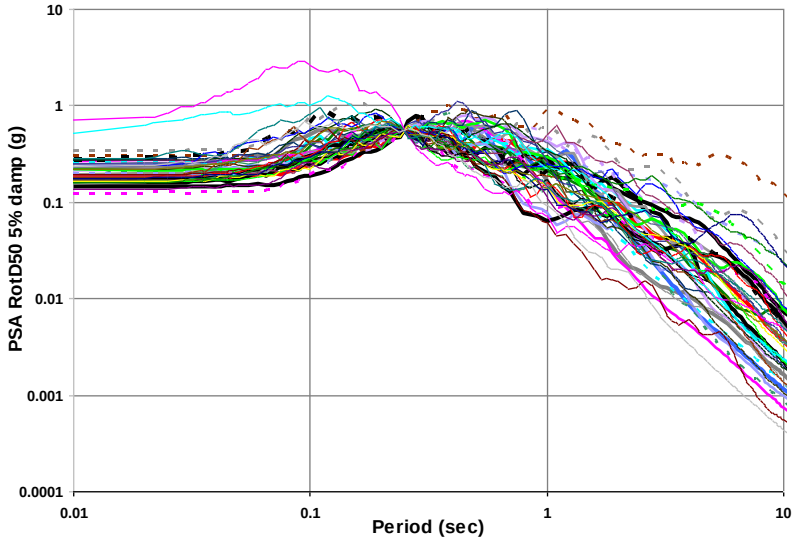
Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **50**							**CS Set**
986	Northridge-01 LA - Brentwood VA Hospital 1994	6.69	12.92	416.58	Reverse	6	0.91	RSN986_NORTHR_BVA195.AT2 RSN986_NORTHR_BVA285.AT2 RSN986_NORTHR_BVA-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.4	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1051	Northridge-01 Pacoima Dam (upper left) 1994	6.69	4.92	2016.13	Reverse	3.1	0.2	RSN1051_NORTHR_PUL104.AT2 RSN1051_NORTHR_PUL194.AT2 RSN1051_NORTHR_PUL-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.28	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.4	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.67	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1202	Chi-Chi, Taiwan CHY035 1999	7.62	12.6	573.04	Reverse O	7.6	0.74	RSN1202_CHICHI_CHY035-E.AT2 RSN1202_CHICHI_CHY035-N.AT2 RSN1202_CHICHI_CHY035-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.05	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.48	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	1.04	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
1683	Northridge-05 Castaic - Old Ridge Route 1994	5.13	19.88	450.28	Reverse O	3.8	1.9	RSN1683_NORTH151_ORR090.AT2 RSN1683_NORTH151_ORR360.AT2 RSN1683_NORTH151_ORR-UP.AT2
3470	Chi-Chi, Taiwan-06 TCU072 1999	6.3	8.34	468.14	Reverse	5.6	1.88	RSN3470_CHICHI.06_TCU072N.AT2 RSN3470_CHICHI.06_TCU072E.AT2 RSN3470_CHICHI.06_TCU072V.AT2
3767	Northridge-06 Sylmar - Olive View Med FF 1994	5.28	9.15	440.54	Reverse	3.6	1.08	RSN3767_NORTH392_SYL090.AT2 RSN3767_NORTH392_SYL180.AT2 RSN3767_NORTH392_SYL-UP.AT2

Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **50**							**CS Set**
3933	Tottori, Japan SMN001 2000	6.61	14.42	331	strike slip	5.4	0.74	RSN3933_TOTTORI_SMN001NS.AT2 RSN3933_TOTTORI_SMN001EW.AT2 RSN3933_TOTTORI_SMN001UD.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.5	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4102	Parkfield-02, CA Parkfield - Cholame 3W 2004	6	2.55	230.57	strike slip	1.6	0.69	RSN4102_PARK2004_C03090.AT2 RSN4102_PARK2004_C03360.AT2 RSN4102_PARK2004_C03-UP.AT2
4139	Parkfield-02, CA PARKFIELD - UPSAR 02 2004	6	9.49	416.82	strike slip	5.4	0.57	RSN4139_PARK2004_UP02090.AT2 RSN4139_PARK2004_UP02360.AT2 RSN4139_PARK2004_UP02-UP.AT2
4320	Lazio Abruzzo (aftershock 1), Italy Cassino-Sant' Elia 1984	5.5	21.59	436.79	Normal	5	3.54	RSN4320_ABRUZZO.P_A-CSS000.AT2 RSN4320_ABRUZZO.P_A-CSS090.AT2 RSN4320_ABRUZZO.P_A-CSS-UP.AT2
4345	Umbria Marche, Italy Assisi-Stallone 1997	6	16.55	376.6	Normal	2.3	0.82	RSN4345_UBMARCHE.P_A-AAL018.A RSN4345_UBMARCHE.P_A-AAL108.A RSN4345_UBMARCHE.P_A-AAL-UP.A
4384	Umbria Marche (aftershock 2), Italy Cascia 1997	5.6	19.92	585.04	Normal	2.2	2.19	RSN4384_UBMARCHE.P_J-CSC000.AT RSN4384_UBMARCHE.P_J-CSC270.AT RSN4384_UBMARCHE.P_J-CSCDWN.A
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.18	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	1.05	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
4862	Chuetsu-oki Shiura Nagaoka 2007	6.8	10.61	336.93	Reverse	8.5	1.34	RSN4862_CHUETSU_65035NS.AT2 RSN4862_CHUETSU_65035EW.AT2 RSN4862_CHUETSU_65035UD.AT2
4881	Chuetsu-oki Nagaoka Kouiti Town 2007	6.8	11.61	294.38	Reverse	8.2	1.22	RSN4881_CHUETSU_65301NS.AT2 RSN4881_CHUETSU_65301EW.AT2 RSN4881_CHUETSU_65301UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.66	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5657	Iwate IWTH25 2008	6.9	0	506.44	Reverse	6.9	0.17	RSN5657_IWATE_IWTH25NS.AT2 RSN5657_IWATE_IWTH25EW.AT2 RSN5657_IWATE_IWTH25UD.AT2

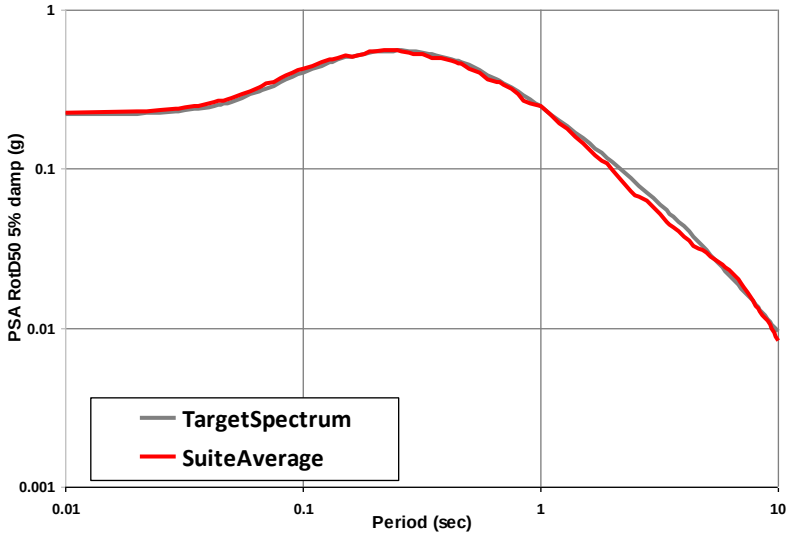
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
5678	Iwate MYGH02 2008	6.9	5.09	398.59	Reverse	3.7	0.71	RSN5678_IWATE_MYGH02NS.AT2 RSN5678_IWATE_MYGH02EW.AT2 RSN5678_IWATE_MYGH02UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.22	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	1.65	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
5991	El Mayor-Cucapah El Centro Array #10 2010	7.2	19.36	202.85	strike slip	10.6	0.48	RSN5991_SIERRA.MEX_E10320.AT2 RSN5991_SIERRA.MEX_E10230.AT2 RSN5991_SIERRA.MEX_E10-UP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	0.63	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.53	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8134	Christchurch, New Zealand Styx Mill Transfer Station 2011	6.2	11.24	247.5	Reverse O	5.6	1.57	RSN8134_CCHURCH_SMTCN88W.AT RSN8134_CCHURCH_SMTCS02W.AT2 RSN8134_CCHURCH_SMTCUP.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	2.31	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	3.47	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.33	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	4.26	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
223	Livermore-02 San Ramon - Eastman Kodak 1980	5.42	14.31	377.51	strike slip	2.1	1.28	RSN223_LIVERMOR_B-KOD180.AT2 RSN223_LIVERMOR_B-KOD270.AT2 RSN223_LIVERMOR_B-KOD-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	1.43	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
303	Irpinia, Italy-02 Sturno (STN) 1980	6.2	20.38	382	Normal	4.9	2.24	RSN303_ITALY_B-STU000.AT2 RSN303_ITALY_B-STU270.AT2 RSN303_ITALY_B-STU-UP.AT2
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	1.04	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.8	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
544	Chalfant Valley-01 Bishop - LADWP South St 1986	5.77	23.38	303.47	strike slip	10	1.64	RSN544_CHALFANT.B_B-LAD180.AT2 RSN544_CHALFANT.B_B-LAD270.AT2 RSN544_CHALFANT.B_B-LAD-UP.AT2
585	Baja California Cerro Prieto 1987	5.5	3.43	471.53	strike slip	1.5	0.45	RSN585_BAJA_CPE161.AT2 RSN585_BAJA_CPE251.AT2 RSN585_BAJA_CPE-UP.AT2
650	Whittier Narrows-01 La Puente - Rimgrove Av 1987	5.99	10.24	339.52	Reverse O	3.6	1.4	RSN650_WHITTIER.A_A-RIM015.AT2 RSN650_WHITTIER.A_A-RIM105.AT2 RSN650_WHITTIER.A_A-RIM-UP.AT2

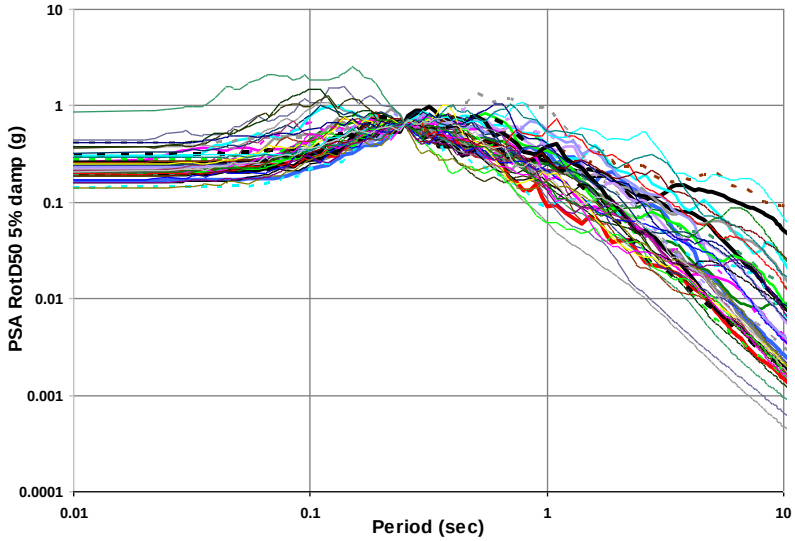
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
767	Loma Prieta Gilroy Array #3 1989	6.93	12.23	349.85	Reverse O	2.3	0.44	RSN767_LOMAP_G03000.AT2 RSN767_LOMAP_G03090.AT2 RSN767_LOMAP_G03-UP.AT2
1016	Northridge-01 La Crescenta - New York 1994	6.69	17.81	411.55	Reverse	5.5	1.24	RSN1016_NORTHR_NYA090.AT2 RSN1016_NORTHR_NYA180.AT2 RSN1016_NORTHR_NYA-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.27	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1099	Double Springs Woodfords 1994	5.9	12.48	392.97	strike slip	4.2	2.49	RSN1099_DOUBSPRG_WOO000.AT2 RSN1099_DOUBSPRG_WOO090.AT2 RSN1099_DOUBSPRG_WOO-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.51	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.85	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1498	Chi-Chi, Taiwan TCU059 1999	7.62	17.11	272.67	Reverse O	21.8	1.87	RSN1498_CHICHI_TCU059-E.AT2 RSN1498_CHICHI_TCU059-N.AT2 RSN1498_CHICHI_TCU059-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.45	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1671	Northridge-03 Pacoima Kagel Canyon 1994	5.2	20.08	508.08	Reverse	3.2	4.42	RSN1671_NORTH009_PKC090.AT2 RSN1671_NORTH009_PKC360.AT2 RSN1671_NORTH009_PKC-UP.AT2
1690	Northridge-05 Sylmar - County Hospital Grounds 1994	5.13	21.99	420.81	Reverse O	1.2	3.65	RSN1690_NORTH151_SYL090.AT2 RSN1690_NORTH151_SYL360.AT2 RSN1690_NORTH151_SYL-UP.AT2
2654	Chi-Chi, Taiwan-03 TCU120 1999	6.2	22.89	459.34	Reverse	9.2	3.99	RSN2654_CHICHI.03_TCU120N.AT2 RSN2654_CHICHI.03_TCU120E.AT2 RSN2654_CHICHI.03_TCU120V.AT2
3852	Chi-Chi (aftershock 3), Taiwan CHY006 1999	6.2	24.58	438.19	strike slip	5.8	1.55	RSN3852_CHICHI.04_CHY006N.AT2 RSN3852_CHICHI.04_CHY006E.AT2 RSN3852_CHICHI.04_CHY006V.AT2
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	0.78	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2

Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **75**							**CS Set**
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.63	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4117	Parkfield-02, CA Parkfield - Fault Zone 15 2004	6	0.8	307.59	strike slip	4.1	1.2	RSN4117_PARK2004_Z15090.AT2 RSN4117_PARK2004_Z15360.AT2 RSN4117_PARK2004_Z15-UP.AT2
4138	Parkfield-02, CA PARKFIELD - UPSAR 01 2004	6	9.63	357.79	strike slip	5.3	0.96	RSN4138_PARK2004_UP01090.AT2 RSN4138_PARK2004_UP01360.AT2 RSN4138_PARK2004_UP01-UP.AT2
4145	Parkfield-02, CA PARKFIELD - UPSAR 09 2004	6	8.86	466.12	strike slip	5.9	1.2	RSN4145_PARK2004_UP09090.AT2 RSN4145_PARK2004_UP09360.AT2 RSN4145_PARK2004_UP09-UP.AT2
4207	Niigata, Japan NIG017 2004	6.63	4.22	274.17	Reverse	6	0.41	RSN4207_NIIGATA_NIG017NS.AT2 RSN4207_NIIGATA_NIG017EW.AT2 RSN4207_NIIGATA_NIG017UD.AT2
4390	Umbria Marche (aftershock 2), Italy Norcia 1997	5.6	16.91	678	Normal	2.7	2.68	RSN4390_UBMARCHE.P_J-NRC000.A RSN4390_UBMARCHE.P_J-NRC270.A RSN4390_UBMARCHE.P_J-NRCDWN.
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	0.59	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4489	L'Aquila, Italy Montereale 2009	6.3	15.51	421.13	Normal	7	3.42	RSN4489_L-AQUILA_BY048XTE.AT2 RSN4489_L-AQUILA_BY048YLN.AT2 RSN4489_L-AQUILA_BY048ZUP.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	1.32	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
4886	Chuetsu-oki Tamati Yone Izumozaki 2007	6.8	0	338.32	Reverse	6.3	0.48	RSN4886_CHUETSU_6CB51NS.AT2 RSN4886_CHUETSU_6CB51EW.AT2 RSN4886_CHUETSU_6CB51UD.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.15	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.83	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5619	Iwate IWT011 2008	6.9	8.41	279.36	Reverse	13.7	1.22	RSN5619_IWATE_IWT011NS.AT2 RSN5619_IWATE_IWT011EW.AT2 RSN5619_IWATE_IWT011UD.AT2

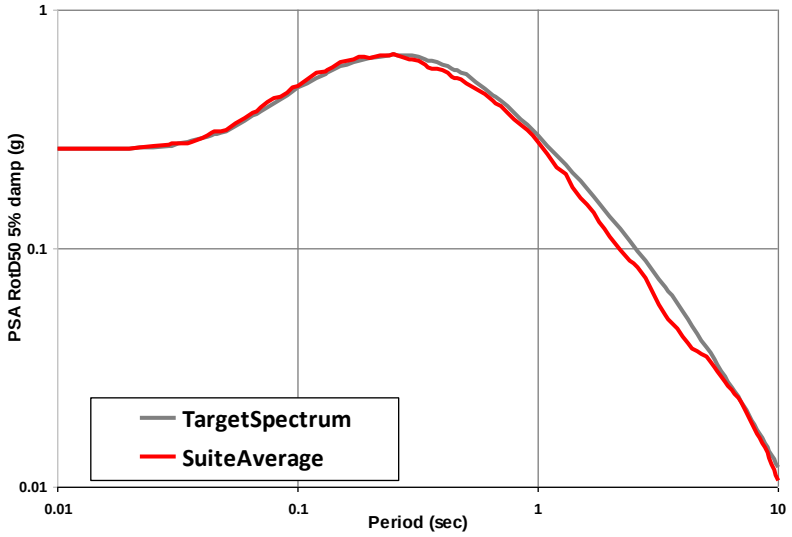
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.28	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	2.08	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	0.79	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	1.1	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.66	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8110	Christchurch, New Zealand MQZ 2011	6.2	13.91	649.67	Reverse O	3.1	2.31	RSN8110_CCHURCH_MQZE.AT2 RSN8110_CCHURCH_MQZN.AT2 RSN8110_CCHURCH_MQZUP.AT2
8815	14383980 Mira Loma, I-15 and Riverside 2008	5.39	17.35	335.43	Reverse O	4.7	4.46	RSN8815_14383980_CIMLSHNN.AT2 RSN8815_14383980_CIMLSHNE.AT2 RSN8815_14383980_CIMLSHNZ.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	2.69	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	4.06	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.59	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
160	Imperial Valley-06 Bonds Corner 1979	6.53	0.44	223.03	strike slip	5.3	0.38	RSN160_IMPVALL.H_H-BCR140.AT2 RSN160_IMPVALL.H_H-BCR230.AT2 RSN160_IMPVALL.H_H-BCR-UP.AT2
167	Imperial Valley-06 Compuertas 1979	6.53	13.52	259.86	strike slip	12.7	1.61	RSN167_IMPVALL.H_H-CMP015.AT2 RSN167_IMPVALL.H_H-CMP285.AT2 RSN167_IMPVALL.H_H-CMPDWN.AT
169	Imperial Valley-06 Delta 1979	6.53	22.03	242.05	strike slip	23.4	1.12	RSN169_IMPVALL.H_H-DLT262.AT2 RSN169_IMPVALL.H_H-DLT352.AT2 RSN169_IMPVALL.H_H-DLTDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.38	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
176	Imperial Valley-06 El Centro Array #13 1979	6.53	21.98	249.92	strike slip	8.5	1.87	RSN176_IMPVALL.H_H-E13140.AT2 RSN176_IMPVALL.H_H-E13230.AT2 RSN176_IMPVALL.H_H-E13-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	1.67	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	3.03	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.93	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.87	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2

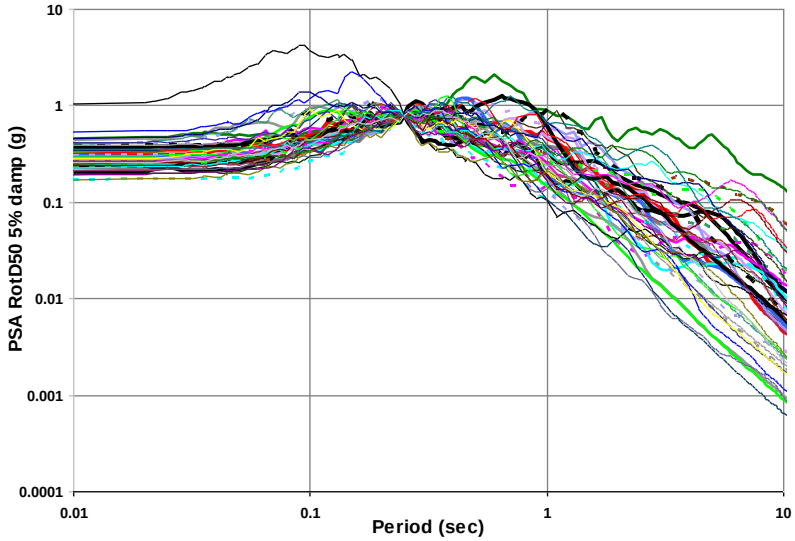
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
382	Coalinga-02 Palmer Ave 1983	5.09	1.98	458.09	Reverse	0.6	1.58	RSN382_COALINGA_A-PLM270.AT2 RSN382_COALINGA_A-PLM360.AT2 RSN382_COALINGA_A-PLM-UP.AT2
450	Morgan Hill Corralitos 1984	6.19	23.23	462.24	strike slip	3.8	2.46	RSN450_MORGAN_CLS220.AT2 RSN450_MORGAN_CLS310.AT2 RSN450_MORGAN_CLS-UP.AT2
546	Chalfant Valley-01 Lake Crowley - Shehorn Res. 1986	5.77	24.37	456.83	strike slip	3.7	4.33	RSN546_CHALFANT.B_B-SHE009.AT2 RSN546_CHALFANT.B_B-SHE099.AT2 RSN546_CHALFANT.B_B-SHE-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.84	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
613	Whittier Narrows-01 Covina - W Badillo 1987	5.99	9.49	324.79	Reverse O	4.2	2.4	RSN613_WHITTIER.A_A-BAD000.AT2 RSN613_WHITTIER.A_A-BAD270.AT2 RSN613_WHITTIER.A_A-BAD-UP.AT2
616	Whittier Narrows-01 El Monte - Fairview Av 1987	5.99	0.75	290.63	Reverse O	2.6	0.97	RSN616_WHITTIER.A_A-FAI095.AT2 RSN616_WHITTIER.A_A-FAI185.AT2 RSN616_WHITTIER.A_A-FAI-UP.AT2
755	Loma Prieta Coyote Lake Dam - Southwest Abut 1989	6.93	19.97	561.43	Reverse O	5.1	1.19	RSN755_LOMAP_CYC195.AT2 RSN755_LOMAP_CYC285.AT2 RSN755_LOMAP_CYC-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.86	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	0.88	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1049	Northridge-01 Pacific Palisades - Sunset 1994	6.69	13.34	191.06	Reverse	5.8	0.59	RSN1049_NORTHR_SUN190.AT2 RSN1049_NORTHR_SUN280.AT2 RSN1049_NORTHR_SUN-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.59	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.99	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.55	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2

Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
1490	Chi-Chi, Taiwan TCU050 1999	7.62	9.49	542.41	Reverse O	18.4	1.67	RSN1490_CHICHI_TCU050-E.AT2 RSN1490_CHICHI_TCU050-N.AT2 RSN1490_CHICHI_TCU050-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.52	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.71	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
2395	Chi-Chi, Taiwan-02 TCU084 1999	5.9	5.59	665.2	Reverse	4.9	4.72	RSN2395_CHICHI.02_TCU084N.AT2 RSN2395_CHICHI.02_TCU084E.AT2 RSN2395_CHICHI.02_TCU084V.AT2
3605	Lazio Abruzzo, Italy Cassino-Sant' Elia 1984	5.8	19.97	436.79	Normal	4.1	2.1	RSN3605_ABRUZZO.P_CSS000.AT2 RSN3605_ABRUZZO.P_CSS090.AT2 RSN3605_ABRUZZO.P_CSS-UP.AT2
3717	Whittier Narrows-02 LA - W 70th St 1987	5.27	18.58	241.41	Reverse O	1.7	2.31	RSN3717_WHITTIER.B_B-W70000.AT RSN3717_WHITTIER.B_B-W70270.AT RSN3717_WHITTIER.B_B-W70-UP.AT
3769	Northridge-06 LA - UCLA Grounds 1994	5.28	15.32	398.42	Reverse	2.5	4.1	RSN3769_NORTH392_UCL090.AT2 RSN3769_NORTH392_UCL360.AT2 RSN3769_NORTH392_UCL-UP.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.73	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4075	Parkfield-02, CA PARKFIELD - WORK RANCH 2004	6	10.33	446.5	strike slip	1.6	2.86	RSN4075_PARK2004_WORK-90.AT2 RSN4075_PARK2004_WORK360.AT2 RSN4075_PARK2004_WORK-UP.AT2
4120	Parkfield-02, CA Parkfield - Gold Hill 2W 2004	6	2.13	290.5	strike slip	5.7	1.69	RSN4120_PARK2004_PG2090.AT2 RSN4120_PARK2004_PG2360.AT2 RSN4120_PARK2004_PG2-UP.AT2
4128	Parkfield-02, CA Parkfield - Stone Corral 3E 2004	6	7.68	565.08	strike slip	2.1	1.79	RSN4128_PARK2004_SC3090.AT2 RSN4128_PARK2004_SC3360.AT2 RSN4128_PARK2004_SC3-UP.AT2
4140	Parkfield-02, CA PARKFIELD - UPSAR 03 2004	6	9.49	440.59	strike slip	6.1	1.24	RSN4140_PARK2004_UP03090.AT2 RSN4140_PARK2004_UP03360.AT2 RSN4140_PARK2004_UP03-UP.AT2
4489	L'Aquila, Italy Montereale 2009	6.3	15.51	421.13	Normal	7	3.99	RSN4489_L-AQUILA_BY048XTE.AT2 RSN4489_L-AQUILA_BY048YLN.AT2 RSN4489_L-AQUILA_BY048ZUP.AT2

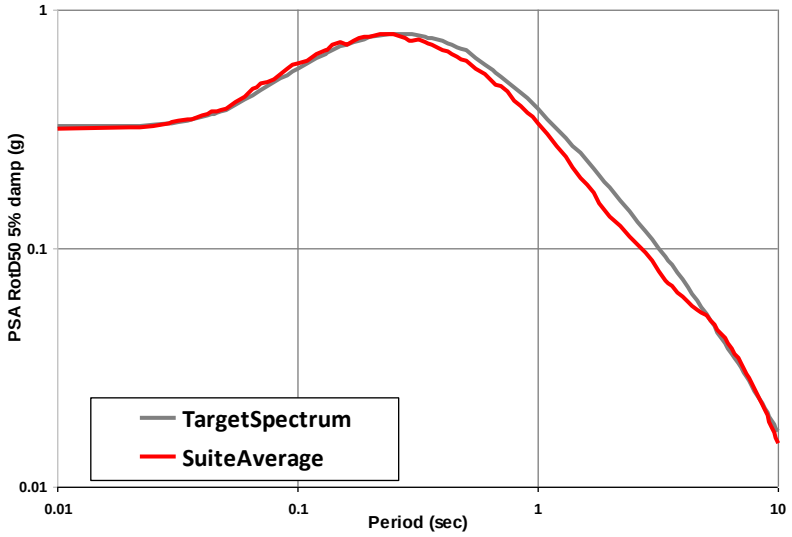
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.27	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	1.54	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
6952	Darfield, New Zealand Papanui High School 2010	7	18.73	263.2	strike slip	12.3	1.52	RSN6952_DARFIELD_PPHSS33W.AT2 RSN6952_DARFIELD_PPHSS57E.AT2 RSN6952_DARFIELD_PPHSUP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	0.92	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	1.28	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.77	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	1.41	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	3.29	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	4.96	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
57	San Fernando Castaic - Old Ridge Route 1971	6.61	19.33	450.28	Reverse	6.2	1.45	RSN57_SFERN_ORR021.AT2 RSN57_SFERN_ORR291.AT2 RSN57_SFERN_ORRDWN.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.72	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.25	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.46	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
206	Imperial Valley-07 El Centro Array #8 1979	5.01	8.18	206.08	strike slip	1.1	3.25	RSN206_IMPVALL.A_A-E08140.AT2 RSN206_IMPVALL.A_A-E08230.AT2 RSN206_IMPVALL.A_A-E08-UP.AT2
223	Livermore-02 San Ramon - Eastman Kodak 1980	5.42	14.31	377.51	strike slip	2.1	1.82	RSN223_LIVERMOR_B-KOD180.AT2 RSN223_LIVERMOR_B-KOD270.AT2 RSN223_LIVERMOR_B-KOD-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	2.04	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
315	Westmorland Niland Fire Station 1981	5.9	15.16	212	strike slip	4.8	2.77	RSN315_WESMORL_NIL000.AT2 RSN315_WESMORL_NIL090.AT2 RSN315_WESMORL_NIL-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	0.76	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.03	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2

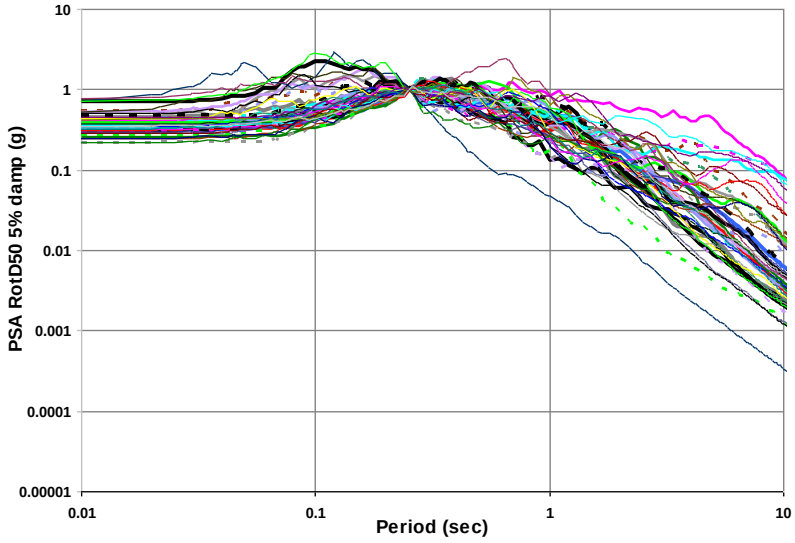
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
613	Whittier Narrows-01 Covina - W Badillo 1987	5.99	9.49	324.79	Reverse O	4.2	2.93	RSN613_WHITTIER.A_A-BAD000.AT2 RSN613_WHITTIER.A_A-BAD270.AT2 RSN613_WHITTIER.A_A-BAD-UP.AT2
641	Whittier Narrows-01 LA - Saturn St 1987	5.99	20.35	308.71	Reverse O	3.5	3.9	RSN641_WHITTIER.A_A-STN020.AT2 RSN641_WHITTIER.A_A-STN110.AT2 RSN641_WHITTIER.A_A-STN-UP.AT2
682	Whittier Narrows-01 Pasadena - CIT Mudd Lab 1987	5.99	4.3	341.14	Reverse O	3.2	1.74	RSN682_WHITTIER.A_A-MUD090.AT RSN682_WHITTIER.A_A-MUD360.AT RSN682_WHITTIER.A_A-MUD-UP.AT
719	Superstition Hills-02 Brawley Airport 1987	6.54	17.03	208.71	strike slip	10.5	3.6	
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.05	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.38	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1082	Northridge-01 Sun Valley - Roscoe Blvd 1994	6.69	5.59	320.93	Reverse	5.8	0.9	RSN1082_NORTHR_RO3000.AT2 RSN1082_NORTHR_RO3090.AT2 RSN1082_NORTHR_RO3-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.63	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.21	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.89	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1506	Chi-Chi, Taiwan TCU070 1999	7.62	19	401.26	Reverse O	19.9	2.5	RSN1506_CHICHI_TCU070-E.AT2 RSN1506_CHICHI_TCU070-N.AT2 RSN1506_CHICHI_TCU070-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.87	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1549	Chi-Chi, Taiwan TCU129 1999	7.62	1.83	511.18	Reverse O	16.6	0.44	RSN1549_CHICHI_TCU129-E.AT2 RSN1549_CHICHI_TCU129-N.AT2 RSN1549_CHICHI_TCU129-V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **150**							**CS Set**
1612	Duzce, Turkey Lamont 1059 1999	7.14	4.17	551.3	strike slip	10.3	1.78	RSN1612_DUZCE_1059-N.AT2 RSN1612_DUZCE_1059-E.AT2 RSN1612_DUZCE_1059-V.AT2
1615	Duzce, Turkey Lamont 1062 1999	7.14	9.14	338	strike slip	10.9	1.2	RSN1615_DUZCE_1062-N.AT2 RSN1615_DUZCE_1062-E.AT2 RSN1615_DUZCE_1062-V.AT2
3685	Whittier Narrows-02 Arcadia - Campus Dr 1987	5.27	7.99	367.53	Reverse O	0.7	1.96	RSN3685_WHITTIER.B_B-CAM009.AT RSN3685_WHITTIER.B_B-CAM279.AT RSN3685_WHITTIER.B_B-CAM-UP.AT
3852	Chi-Chi (aftershock 3), Taiwan CHY006 1999	6.2	24.58	438.19	strike slip	5.8	2.21	RSN3852_CHICHI.04_CHY006N.AT2 RSN3852_CHICHI.04_CHY006E.AT2 RSN3852_CHICHI.04_CHY006V.AT2
3968	Tottori, Japan TTRH02 2000	6.61	0.83	310.21	strike slip	5.4	0.44	RSN3968_TOTTORI_TTRH02NS.AT2 RSN3968_TOTTORI_TTRH02EW.AT2 RSN3968_TOTTORI_TTRH02UD.AT2
4013	San Simeon, CA San Antonio Dam - Toe 2003	6.52	16.17	509.04	Reverse	6.6	3.37	RSN4013_SANSIMEO_36258021.AT2 RSN4013_SANSIMEO_36258111.AT2 RSN4013_SANSIMEO_36258-UP.AT2
4104	Parkfield-02, CA Parkfield - Cholame 4AW 2004	6	4.81	283.38	strike slip	1.6	1.36	RSN4104_PARK2004_C4A090.AT2 RSN4104_PARK2004_C4A360.AT2 RSN4104_PARK2004_C4A-UP.AT2
4280	Calabria, Italy Ferruzzano 1978	5.2	8.13	525.6	Normal	2.3	4.48	RSN4280_CALABRIA.P_FRR000.AT2 RSN4280_CALABRIA.P_FRR090.AT2 RSN4280_CALABRIA.P_FRR-UP.AT2
4513	L'Aquila (aftershock 1), Italy L'Aquila - Parking 2009	5.6	5.07	717	Normal O	3.7	4.65	RSN4513_L-AQUILA.A_AM383XTE.AT RSN4513_L-AQUILA.A_AM383YLN.AT RSN4513_L-AQUILA.A_AM383ZUP.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.33	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	1.88	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	1.19	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	2.97	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2

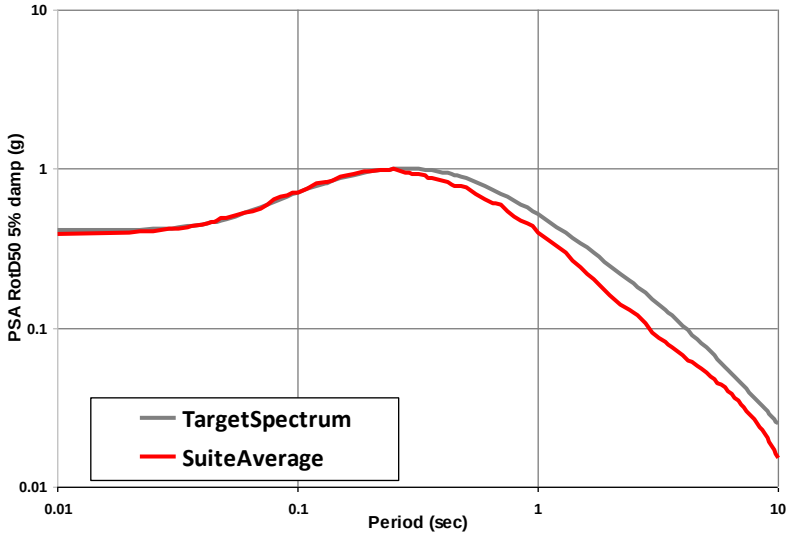
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
5991	El Mayor-Cucapah El Centro Array #10 2010	7.2	19.36	202.85	strike slip	10.6	0.87	RSN5991_SIERRA.MEX_E10320.AT2 RSN5991_SIERRA.MEX_E10230.AT2 RSN5991_SIERRA.MEX_E10-UP.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	1.08	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	1.13	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	1.57	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
6966	Darfield, New Zealand Shirley Library 2010	7	22.33	207	strike slip	11	1.53	RSN6966_DARFIELD_SHLCS40W.AT2 RSN6966_DARFIELD_SHLCS50E.AT2 RSN6966_DARFIELD_SHLCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.95	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	1.72	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.91	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
149	Coyote Lake Gilroy Array #4 1979	5.74	4.79	221.78	strike slip	4.8	1.83	RSN149_COYOTELK_G04270.AT2 RSN149_COYOTELK_G04360.AT2 RSN149_COYOTELK_G04-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.59	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
236	Mammoth Lakes-03 Convict Creek 1980	5.91	2.67	382.12	strike slip	2.4	2.51	RSN236_MAMMOTH.AH_A-CVK090.A RSN236_MAMMOTH.AH_A-CVK180.A RSN236_MAMMOTH.AH_A-CVK-UP.A
303	Irpinia, Italy-02 Sturno (STN) 1980	6.2	20.38	382	Normal	4.9	4.03	RSN303_ITALY_B-STU000.AT2 RSN303_ITALY_B-STU270.AT2 RSN303_ITALY_B-STU-UP.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	4.67	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
318	Westmorland Superstition Mtn Camera 1981	5.9	19.26	362.38	strike slip	3.7	4.25	RSN318_WESMORL_SUP045.AT2 RSN318_WESMORL_SUP135.AT2 RSN318_WESMORL_SUP-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.44	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	0.96	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	2.41	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2
450	Morgan Hill Corralitos 1984	6.19	23.23	462.24	strike slip	3.8	3.79	RSN450_MORGAN_CLS220.AT2 RSN450_MORGAN_CLS310.AT2 RSN450_MORGAN_CLS-UP.AT2
590	Whittier Narrows-01 Altadena - Eaton Canyon 1987	5.99	8.72	375.16	Reverse O	2.3	2.2	RSN590_WHITTIER.A_A-ALT000.AT2 RSN590_WHITTIER.A_A-ALT090.AT2 RSN590_WHITTIER.A_A-ALT-UP.AT2

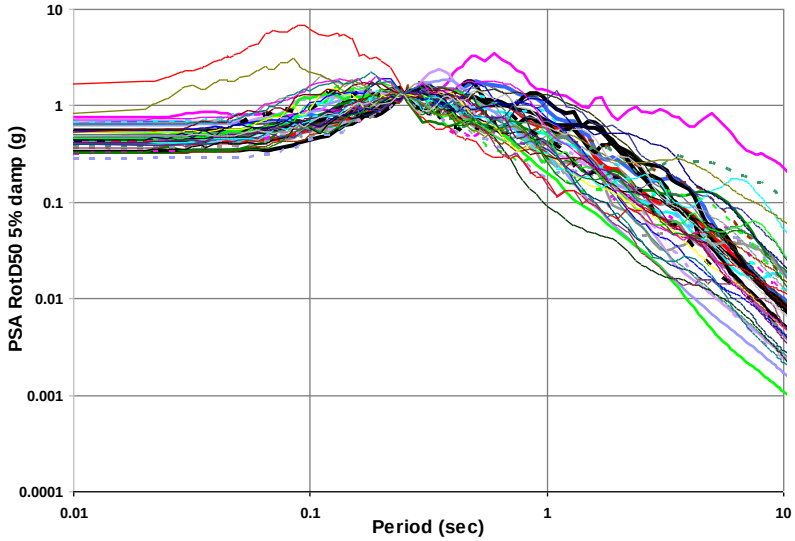
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
635	Whittier Narrows-01 LA - Hollywood Stor FF 1987	5.99	19.22	316.46	Reverse O	5.1	4.78	RSN635_WHITTIER.A_A-PEL000.AT2 RSN635_WHITTIER.A_A-PEL090.AT2 RSN635_WHITTIER.A_A-PEL-UP.AT2
645	Whittier Narrows-01 LB - Orange Ave 1987	5.99	19.8	344.72	Reverse O	2.9	1.62	RSN645_WHITTIER.A_A-OR2010.AT2 RSN645_WHITTIER.A_A-OR2280.AT2 RSN645_WHITTIER.A_A-OR2-UP.AT2
676	Whittier Narrows-01 Pasadena - CIT Bridge Lab 1987	5.99	4.3	341.14	Reverse O	3.2	2.53	RSN676_WHITTIER.A_A-BRI090.AT2 RSN676_WHITTIER.A_A-BRI360.AT2 RSN676_WHITTIER.A_A-BRI-UP.AT2
737	Loma Prieta Agnews State Hospital 1989	6.93	24.27	239.69	Reverse O	8.2	1.74	RSN737_LOMAP_AGW000.AT2 RSN737_LOMAP_AGW090.AT2 RSN737_LOMAP_AGW-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.33	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	1.55	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
900	Landers Yermo Fire Station 1992	7.28	23.62	353.63	strike slip	8.8	2.01	RSN900_LANDERS_YER270.AT2 RSN900_LANDERS_YER360.AT2 RSN900_LANDERS_YER-UP.AT2
963	Northridge-01 Castaic - Old Ridge Route 1994	6.69	20.11	450.28	Reverse	5.1	0.68	RSN963_NORTHR_ORR090.AT2 RSN963_NORTHR_ORR360.AT2 RSN963_NORTHR_ORR-UP.AT2
1012	Northridge-01 LA 00 1994	6.69	9.87	706.22	Reverse	5.1	1.29	RSN1012_NORTHR_LA0180.AT2 RSN1012_NORTHR_LA0270.AT2 RSN1012_NORTHR_LA0DWN.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	1.36	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.48	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1049	Northridge-01 Pacific Palisades - Sunset 1994	6.69	13.34	191.06	Reverse	5.8	0.9	RSN1049_NORTHR_SUN190.AT2 RSN1049_NORTHR_SUN280.AT2 RSN1049_NORTHR_SUN-UP.AT2
1099	Double Springs Woodfords 1994	5.9	12.48	392.97	strike slip	4.2	4.48	RSN1099_DOUBSPRG_WOO000.AT2 RSN1099_DOUBSPRG_WOO090.AT2 RSN1099_DOUBSPRG_WOO-UP.AT2

Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
1100	Kobe, Japan Abeno 1995	6.9	24.85	256	strike slip	12	2.57	RSN1100_KOBE_ABN000.AT2 RSN1100_KOBE_ABN090.AT2 RSN1100_KOBE_ABN-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.91	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.53	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1194	Chi-Chi, Taiwan CHY025 1999	7.62	19.07	277.5	Reverse O	20.6	2.62	RSN1194_CHICHI_CHY025-E.AT2 RSN1194_CHICHI_CHY025-N.AT2 RSN1194_CHICHI_CHY025-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	2.38	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1489	Chi-Chi, Taiwan TCU049 1999	7.62	3.76	487.27	Reverse O	17.1	1.4	RSN1489_CHICHI_TCU049-E.AT2 RSN1489_CHICHI_TCU049-N.AT2 RSN1489_CHICHI_TCU049-V.AT2
1633	Manjil, Iran Abbar 1990	7.37	12.55	723.95	strike slip	9	0.86	RSN1633_MANJIL_ABBAR--L.AT2 RSN1633_MANJIL_ABBAR--T.AT2 RSN1633_MANJIL_ABBAR--V.AT2
4117	Parkfield-02, CA Parkfield - Fault Zone 15 2004	6	0.8	307.59	strike slip	4.1	2.15	RSN4117_PARK2004_Z15090.AT2 RSN4117_PARK2004_Z15360.AT2 RSN4117_PARK2004_Z15-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	2.78	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	1.37	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4356	Umbria Marche (aftershock 3), Italy Nocera Umbra 1997	5.3	7.67	428	Normal	1.7	2.75	RSN4356_UBMARCHE.P_C-NCR000.A RSN4356_UBMARCHE.P_C-NCR270.A RSN4356_UBMARCHE.P_C-NCR-DN.A
4384	Umbria Marche (aftershock 2), Italy Cascia 1997	5.6	19.92	585.04	Normal	2.2	4.97	RSN4384_UBMARCHE.P_J-CSC000.AT RSN4384_UBMARCHE.P_J-CSC270.AT RSN4384_UBMARCHE.P_J-CSCDWN.A
4740	Wenchuan, China Maoxiandiban 2008	7.9	2.03	638.39	Reverse O	21.5	1.62	RSN4740_WENCHUAN_UA0851.AT2 RSN4740_WENCHUAN_UA0850.AT2 RSN4740_WENCHUAN_UA0852.AT2

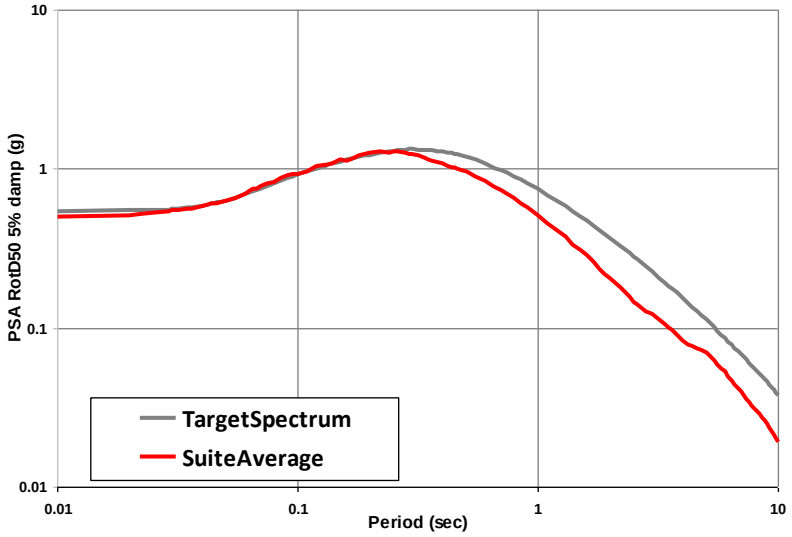
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.41	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4876	Chuetsu-oki Kashiwazaki Nishiyamacho Ikeura 2007	6.8	0	655.45	Reverse	4.9	0.9	RSN4876_CHUETSU_65059NS.AT2 RSN4876_CHUETSU_65059EW.AT2 RSN4876_CHUETSU_65059UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.5	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.61	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	1.98	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
6966	Darfield, New Zealand Shirley Library 2010	7	22.33	207	strike slip	11	1.93	RSN6966_DARFIELD_SHLCS40W.AT2 RSN6966_DARFIELD_SHLCS50E.AT2 RSN6966_DARFIELD_SHLCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.19	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.18	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.4	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.76	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	3.34	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
317	Westmorland Salton Sea Wildlife Refuge 1981	5.9	7.57	191.14	strike slip	5	2.25	RSN317_WESMORL_WLF225.AT2 RSN317_WESMORL_WLF315.AT2 RSN317_WESMORL_WLF-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.87	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.69	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
642	Whittier Narrows-01 LA - W 70th St 1987	5.99	16.77	241.41	Reverse O	3.5	3.41	RSN642_WHITTIER.A_A-W70000.AT2 RSN642_WHITTIER.A_A-W70270.AT2 RSN642_WHITTIER.A_A-W70-UP.AT2
649	Whittier Narrows-01 La Habra - Briarcliff 1987	5.99	14.17	338.27	Reverse O	3.7	3.42	RSN649_WHITTIER.A_A-BRC000.AT2 RSN649_WHITTIER.A_A-BRC090.AT2 RSN649_WHITTIER.A_A-BRC-UP.AT2
690	Whittier Narrows-01 San Gabriel - E Grand Ave 1987	5.99	0	401.37	Reverse O	2.5	2.75	RSN690_WHITTIER.A_A-GRN180.AT2 RSN690_WHITTIER.A_A-GRN270.AT2 RSN690_WHITTIER.A_A-GRN-UP.AT2
763	Loma Prieta Gilroy - Gavilan Coll. 1989	6.93	9.19	729.65	Reverse O	1.5	1.6	RSN763_LOMAP_GIL067.AT2 RSN763_LOMAP_GIL337.AT2 RSN763_LOMAP_GIL-UP.AT2
879	Landers Lucerne 1992	7.28	2.19	1369	strike slip	8.3	1.14	RSN879_LANDERS_LCN260.AT2 RSN879_LANDERS_LCN345.AT2 RSN879_LANDERS_LCN-UP.AT2

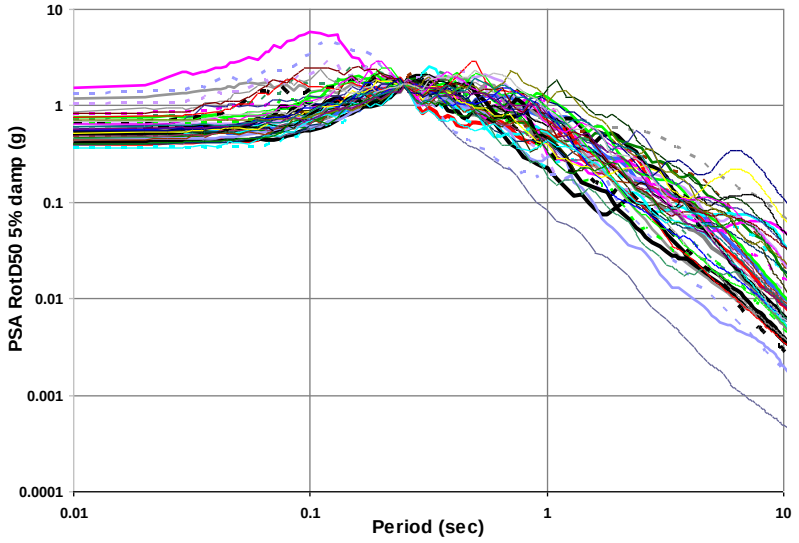
Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **500**							**CS Set**
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	3.04	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
986	Northridge-01 LA - Brentwood VA Hospital 1994	6.69	12.92	416.58	Reverse	6	2.69	RSN986_NORTHR_BVA195.AT2 RSN986_NORTHR_BVA285.AT2 RSN986_NORTHR_BVA-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	1.77	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.62	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1052	Northridge-01 Pacoima Kagel Canyon 1994	6.69	5.26	508.08	Reverse	5.7	1.75	RSN1052_NORTHR_PKC090.AT2 RSN1052_NORTHR_PKC360.AT2 RSN1052_NORTHR_PKC-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.83	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.18	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.98	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	3.09	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1506	Chi-Chi, Taiwan TCU070 1999	7.62	19	401.26	Reverse O	19.9	4.1	RSN1506_CHICHI_TCU070-E.AT2 RSN1506_CHICHI_TCU070-N.AT2 RSN1506_CHICHI_TCU070-V.AT2
1507	Chi-Chi, Taiwan TCU071 1999	7.62	0	624.85	Reverse O	15.6	0.54	RSN1507_CHICHI_TCU071-E.AT2 RSN1507_CHICHI_TCU071-N.AT2 RSN1507_CHICHI_TCU071-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	1.05	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1602	Duzce, Turkey Bolu 1999	7.14	12.02	293.57	strike slip	2	0.84	RSN1602_DUZCE_BOL000.AT2 RSN1602_DUZCE_BOL090.AT2 RSN1602_DUZCE_BOL-UP.AT2

Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **500**							**CS Set**
1615	Duzce, Turkey Lamont 1062 1999	7.14	9.14	338	strike slip	10.9	1.96	RSN1615_DUZCE_1062-N.AT2 RSN1615_DUZCE_1062-E.AT2 RSN1615_DUZCE_1062-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	2.36	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1646	Sierra Madre Pasadena - USGS/NSMP Office 1991	5.61	13.91	340	Reverse	1.2	2.75	RSN1646_SMADRE_SMP270.AT2 RSN1646_SMADRE_SMP360.AT2 RSN1646_SMADRE_SMP-UP.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	3.06	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
1704	Northridge-06 Jensen Filter Plant Generator Buildin 1994	5.28	6.99	525.79	Reverse	1.6	2.55	RSN1704_NORTH392_JGB022.AT2 RSN1704_NORTH392_JGB292.AT2 RSN1704_NORTH392_JGB-UP.AT2
1748	Northwest China-01 Jiashi 1997	5.9	12.62	240.09	strike slip	2.9	2.09	RSN1748_NWCHINA1_JIA000.AT2 RSN1748_NWCHINA1_JIA270.AT2 RSN1748_NWCHINA1_JIA-UP.AT2
2703	Chi-Chi, Taiwan-04 CHY028 1999	6.2	17.63	542.61	strike slip	4.6	2.78	RSN2703_CHICHI.04_CHY028N.AT2 RSN2703_CHICHI.04_CHY028E.AT2 RSN2703_CHICHI.04_CHY028V.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	1.46	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	1.78	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4285	Basso Tirreno, Italy Patti-Cabina Prima 1978	6	14.6	441.28	strike slip	3.4	3.66	RSN4285_BTIRRENO.P_PTT000.AT2 RSN4285_BTIRRENO.P_PTT090.AT2 RSN4285_BTIRRENO.P_PTT-UP.AT2
4345	Umbria Marche, Italy Assisi-Stallone 1997	6	16.55	376.6	Normal	2.3	2.41	RSN4345_UBMARCHE.P_A-AAL018.A RSN4345_UBMARCHE.P_A-AAL108.A RSN4345_UBMARCHE.P_A-AAL-UP.A
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	1.49	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.54	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2

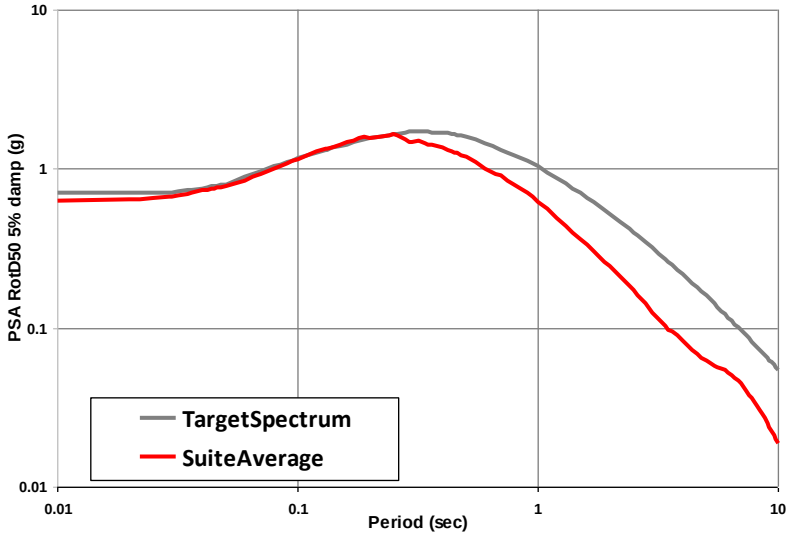
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.47	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	3.08	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	4.87	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
5985	El Mayor-Cucapah El Centro Differential Array 2010	7.2	22.83	202.26	strike slip	8.3	0.89	RSN5985_SIERRA.MEX_EDA360.AT2 RSN5985_SIERRA.MEX_EDA090.AT2 RSN5985_SIERRA.MEX_EDA-UP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	2.57	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.55	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8130	Christchurch, New Zealand Shirley Library 2011	6.2	5.58	207	Reverse O	4.3	1.3	RSN8130_CCHURCH_SHLCS40W.AT2 RSN8130_CCHURCH_SHLCS50E.AT2 RSN8130_CCHURCH_SHLCUP.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
147	Coyote Lake Gilroy Array #2 1979	5.74	8.47	270.84	strike slip	1.4	2.97	RSN147_COYOTELK_G02050.AT2 RSN147_COYOTELK_G02140.AT2 RSN147_COYOTELK_G02-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.97	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
250	Mammoth Lakes-06 Long Valley Dam (Upr L Abut) 1980	5.94	9.65	537.16	strike slip	2.7	1.63	RSN250_MAMMOTH.L_L-LUL000.AT2 RSN250_MAMMOTH.L_L-LUL090.AT2 RSN250_MAMMOTH.L_L-LUL-UP.AT2
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	3.1	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	2.38	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	1.58	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.15	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
637	Whittier Narrows-01 LA - N Figueroa St 1987	5.99	6	364.91	Reverse O	3.2	4.86	RSN637_WHITTIER.A_A-FIG058.AT2 RSN637_WHITTIER.A_A-FIG328.AT2 RSN637_WHITTIER.A_A-FIG-UP.AT2
642	Whittier Narrows-01 LA - W 70th St 1987	5.99	16.77	241.41	Reverse O	3.5	4.34	RSN642_WHITTIER.A_A-W70000.AT2 RSN642_WHITTIER.A_A-W70270.AT2 RSN642_WHITTIER.A_A-W70-UP.AT2
645	Whittier Narrows-01 LB - Orange Ave 1987	5.99	19.8	344.72	Reverse O	2.9	2.68	RSN645_WHITTIER.A_A-OR2010.AT2 RSN645_WHITTIER.A_A-OR2280.AT2 RSN645_WHITTIER.A_A-OR2-UP.AT2
754	Loma Prieta Coyote Lake Dam (Downst) 1989	6.93	20.44	295.01	Reverse O	4.8	3.98	RSN754_LOMAP_CLD195.AT2 RSN754_LOMAP_CLD285.AT2 RSN754_LOMAP_CLD-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	2.2	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2

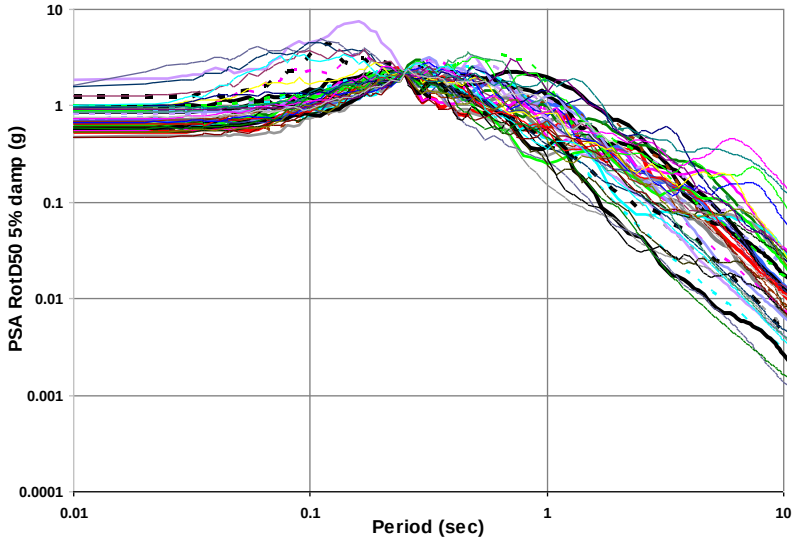
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	2.97	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	2.57	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
963	Northridge-01 Castaic - Old Ridge Route 1994	6.69	20.11	450.28	Reverse	5.1	1.13	RSN963_NORTHR_ORR090.AT2 RSN963_NORTHR_ORR360.AT2 RSN963_NORTHR_ORR-UP.AT2
986	Northridge-01 LA - Brentwood VA Hospital 1994	6.69	12.92	416.58	Reverse	6	3.42	RSN986_NORTHR_BVA195.AT2 RSN986_NORTHR_BVA285.AT2 RSN986_NORTHR_BVA-UP.AT2
989	Northridge-01 LA - Chalon Rd 1994	6.69	9.87	740.05	Reverse	5.3	3.41	RSN989_NORTHR_CHL070.AT2 RSN989_NORTHR_CHL160.AT2 RSN989_NORTHR_CHL-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	2.25	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	1.5	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.79	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1089	Northridge-01 Topanga - Fire Sta 1994	6.69	10.31	505.97	Reverse	5.1	2.08	RSN1089_NORTHR_TPF360.AT2 RSN1089_NORTHR_TPF270.AT2 RSN1089_NORTHR_TPF-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.5	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	2.52	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	2.58	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2
1520	Chi-Chi, Taiwan TCU088 1999	7.62	4.67	665.2	Reverse O	5.2	2.88	RSN1520_CHICHI_TCU088-N.AT2 RSN1520_CHICHI_TCU088-E.AT2 RSN1520_CHICHI_TCU088-V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **1000**							**CS Set**
1602	Duzce, Turkey Bolu 1999	7.14	12.02	293.57	strike slip	2	1.07	RSN1602_DUZCE_BOL000.AT2 RSN1602_DUZCE_BOL090.AT2 RSN1602_DUZCE_BOL-UP.AT2
1614	Duzce, Turkey Lamont 1061 1999	7.14	11.46	481	strike slip	9.3	4.34	RSN1614_DUZCE_1061-N.AT2 RSN1614_DUZCE_1061-E.AT2 RSN1614_DUZCE_1061-V.AT2
3964	Tottori, Japan TTR007 2000	6.61	11.28	469.79	strike slip	4	1.41	RSN3964_TOTTORI_TTR007NS.AT2 RSN3964_TOTTORI_TTR007EW.AT2 RSN3964_TOTTORI_TTR007UD.AT2
4073	Parkfield-02, CA PARKFIELD - STOCKDALE MTN 2004	6	4	393.56	strike slip	0.7	4.6	
4117	Parkfield-02, CA Parkfield - Fault Zone 15 2004	6	0.8	307.59	strike slip	4.1	3.56	RSN4117_PARK2004_Z15090.AT2 RSN4117_PARK2004_Z15360.AT2 RSN4117_PARK2004_Z15-UP.AT2
4140	Parkfield-02, CA PARKFIELD - UPSAR 03 2004	6	9.49	440.59	strike slip	6.1	3.16	RSN4140_PARK2004_UP03090.AT2 RSN4140_PARK2004_UP03360.AT2 RSN4140_PARK2004_UP03-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	2.26	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4218	Niigata, Japan NIG028 2004	6.63	0.46	430.71	Reverse	3.5	1.03	RSN4218_NIIGATA_NIG028NS.AT2 RSN4218_NIIGATA_NIG028EW.AT2 RSN4218_NIIGATA_NIG028UD.AT2
4335	Umbria Marche (foreshock), Italy Assisi-Stallone 1997	5.7	21.98	376.6	Normal	1.2	3.36	RSN4335_UBMARCHE.P_B-AAL018.A RSN4335_UBMARCHE.P_B-AAL108.A RSN4335_UBMARCHE.P_B-AAL-UP.A
4480	L'Aquila, Italy L'Aquila - V. Aterno - Centro Valle 2009	6.3	0	475	Normal	4.4	1.54	RSN4480_L-AQUILA_GX066XTE.AT2 RSN4480_L-AQUILA_GX066YLN.AT2 RSN4480_L-AQUILA_GX066ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.68	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.6	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	3.92	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2

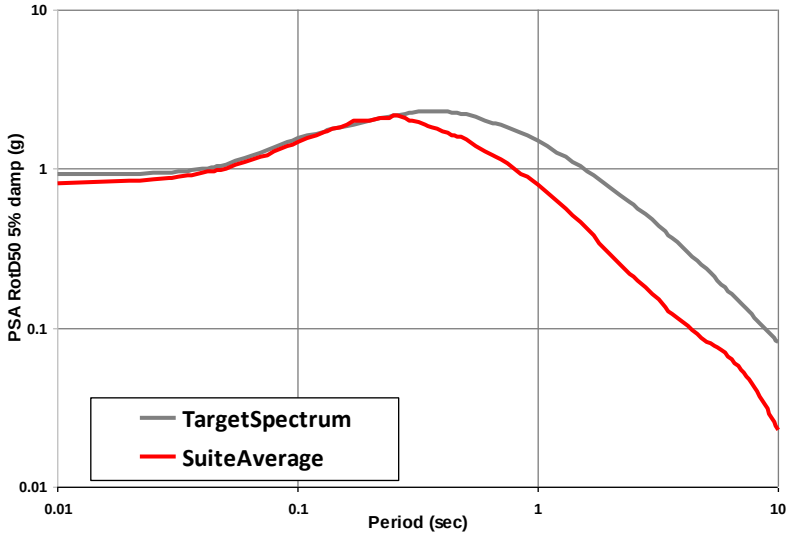
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	2.47	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.83	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5827	El Mayor-Cucapah MICHOACAN DE OCAMPO 2010	7.2	13.21	242.05	strike slip	21.2	1.42	RSN5827_SIERRA.MEX_MDO000.AT2 RSN5827_SIERRA.MEX_MDO090.AT2 RSN5827_SIERRA.MEX_MDO--V.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	1	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	3.27	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.97	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	1.68	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**07 LosAngeles**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	07 LosAngeles	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
80	San Fernando Pasadena - Old Seismo Lab 1971	6.61	21.5	969.07	Reverse	4.4	3.98	RSN80_SFERN_PSL180.AT2 RSN80_SFERN_PSL270.AT2 RSN80_SFERN_PSLDWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.67	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
147	Coyote Lake Gilroy Array #2 1979	5.74	8.47	270.84	strike slip	1.4	3.88	RSN147_COYOTELK_G02050.AT2 RSN147_COYOTELK_G02140.AT2 RSN147_COYOTELK_G02-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.27	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
223	Livermore-02 San Ramon - Eastman Kodak 1980	5.42	14.31	377.51	strike slip	2.1	4.97	RSN223_LIVERMOR_B-KOD180.AT2 RSN223_LIVERMOR_B-KOD270.AT2 RSN223_LIVERMOR_B-KOD-UP.AT2
249	Mammoth Lakes-06 Fish & Game (FIS) 1980	5.94	6.45	373.18	strike slip	2.4	4.81	RSN249_MAMMOTH.L_L-FIS000.AT2 RSN249_MAMMOTH.L_L-FIS090.AT2 RSN249_MAMMOTH.L_L-FIS-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	3.11	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	2.89	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	2.07	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.81	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
706	Whittier Narrows-01 Whittier Narrows Dam upstream 1987	5.99	2.6	298.68	Reverse O	2.5	3.91	RSN706_WHITTIER.A_A-WHD062.AT2 RSN706_WHITTIER.A_A-WHD152.AT2 RSN706_WHITTIER.A_A-WHD-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	2.87	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2

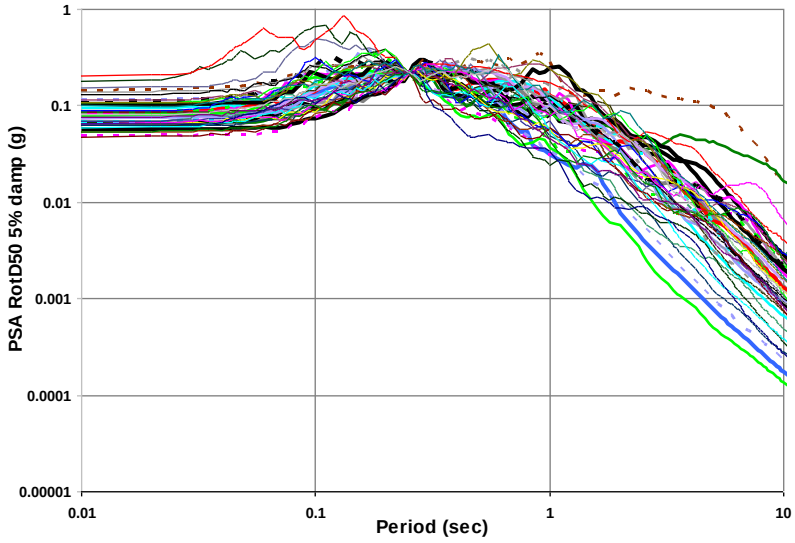
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	3.36	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
900	Landers Yermo Fire Station 1992	7.28	23.62	353.63	strike slip	8.8	4.34	RSN900_LANDERS_YER270.AT2 RSN900_LANDERS_YER360.AT2 RSN900_LANDERS_YER-UP.AT2
963	Northridge-01 Castaic - Old Ridge Route 1994	6.69	20.11	450.28	Reverse	5.1	1.47	RSN963_NORTHR_ORR090.AT2 RSN963_NORTHR_ORR360.AT2 RSN963_NORTHR_ORR-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	2.94	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	1.96	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	1.04	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1063	Northridge-01 Rinaldi Receiving Sta 1994	6.69	0	282.25	Reverse	3.9	1.37	RSN1063_NORTHR_RRS228.AT2 RSN1063_NORTHR_RRS318.AT2 RSN1063_NORTHR_RRS-UP.AT2
1082	Northridge-01 Sun Valley - Roscoe Blvd 1994	6.69	5.59	320.93	Reverse	5.8	2.46	RSN1082_NORTHR_RO3000.AT2 RSN1082_NORTHR_RO3090.AT2 RSN1082_NORTHR_RO3-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.97	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	3.3	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	3.37	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	3.93	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1736	Northridge-06 Sylmar - Converter Sta 1994	5.28	6.68	251.24	Reverse	1.4	4.32	RSN1736_NORTH392_SCS052.AT2 RSN1736_NORTH392_SCS142.AT2 RSN1736_NORTH392_SCS-UP.AT2

Site Site Vs30 (m/s) Return Period (yr)	**07 LosAngeles** **270** **2500**							**CS Set**
3943	Tottori, Japan SMN015 2000	6.61	9.1	616.55	strike slip	3.5	3.37	RSN3943_TOTTORI_SMN015NS.AT2 RSN3943_TOTTORI_SMN015EW.AT2 RSN3943_TOTTORI_SMN015UD.AT2
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	3.03	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
3968	Tottori, Japan TTRH02 2000	6.61	0.83	310.21	strike slip	5.4	1.19	RSN3968_TOTTORI_TTRH02NS.AT2 RSN3968_TOTTORI_TTRH02EW.AT2 RSN3968_TOTTORI_TTRH02UD.AT2
4064	Parkfield-02, CA PARKFIELD - DONNA LEE 2004	6	4.25	656.75	strike slip	2.3	3.56	RSN4064_PARK2004_DONNA-90.AT2 RSN4064_PARK2004_DONNA360.AT2 RSN4064_PARK2004_DONNA-UP.AT2
4114	Parkfield-02, CA Parkfield - Fault Zone 11 2004	6	3.12	541.73	strike slip	1.3	1.92	RSN4114_PARK2004_Z11090.AT2 RSN4114_PARK2004_Z11360.AT2 RSN4114_PARK2004_Z11-UP.AT2
4345	Umbria Marche, Italy Assisi-Stallone 1997	6	16.55	376.6	Normal	2.3	4	RSN4345_UBMARCHE.P_A-AAL018.A RSN4345_UBMARCHE.P_A-AAL108.A RSN4345_UBMARCHE.P_A-AAL-UP.A
4383	Umbria Marche (aftershock 2), Italy Borgo-Cerreto Torre 1997	5.6	8.3	519	Normal	2.6	4.71	RSN4383_UBMARCHE.P_J-BCT000.AT RSN4383_UBMARCHE.P_J-BCT090.AT RSN4383_UBMARCHE.P_J-BCT-UP.AT
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	2.3	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.89	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.78	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.6	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	3.11	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2
5620	Iwate IWT012 2008	6.9	20.47	264.48	Reverse	11.1	2.19	RSN5620_IWATE_IWT012NS.AT2 RSN5620_IWATE_IWT012EW.AT2 RSN5620_IWATE_IWT012UD.AT2

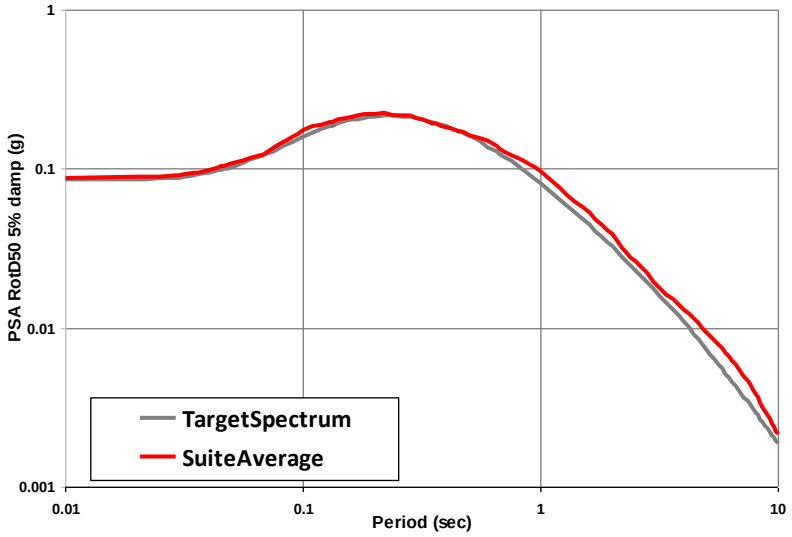
Site	07 LosAngeles							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	1.08	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5991	El Mayor-Cucapah El Centro Array #10 2010	7.2	19.36	202.85	strike slip	10.6	2.37	RSN5991_SIERRA.MEX_E10320.AT2 RSN5991_SIERRA.MEX_E10230.AT2 RSN5991_SIERRA.MEX_E10-UP.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	1.31	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6893	Darfield, New Zealand DFHS 2010	7	11.86	344.02	strike slip	14.3	2.1	RSN6893_DARFIELD_DFHSS17E.AT2 RSN6893_DARFIELD_DFHSS73W.AT2 RSN6893_DARFIELD_DFHSUP.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	2.95	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
8063	Christchurch, New Zealand Christchurch Botanical Gardens 2011	6.2	5.52	187	Reverse O	3.8	1.98	RSN8063_CCHURCH_CBGSN89W.AT2 RSN8063_CCHURCH_CBGSS01W.AT2 RSN8063_CCHURCH_CBGSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	2.58	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	0.9	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	1.35	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	0.47	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.13	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	1.66	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	0.3	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
374	Coalinga-02 Burnett Construction 1983	5.09	10.89	352.2	Reverse	2.9	1.37	RSN374_COALINGA_A-BNT270.AT2 RSN374_COALINGA_A-BNT360.AT2 RSN374_COALINGA_A-BNT-UP.AT2
390	Coalinga-02 YUB (temp) 1983	5.09	14.58	287.34	Reverse	4.1	3.13	
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	0.52	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2
529	N. Palm Springs North Palm Springs 1986	6.06	0	344.67	Reverse O	1.7	0.19	RSN529_PALMSPR_NPS210.AT2 RSN529_PALMSPR_NPS300.AT2 RSN529_PALMSPR_NPS-UP.AT2
545	Chalfant Valley-01 Bishop - Paradise Lodge 1986	5.77	14.99	585.12	strike slip	2.3	2.99	RSN545_CHALFANT.B_B-BPL070.AT2 RSN545_CHALFANT.B_B-BPL160.AT2 RSN545_CHALFANT.B_B-BPL-UP.AT2
567	Kalamata, Greece-02 Messinia - Old Townhall 1986	5.4	7.96	393.96	Normal	8.5	2.8	RSN567_GREECE_I-MES-NS.AT2 RSN567_GREECE_I-MES-WE.AT2 RSN567_GREECE_I-MES-UP.AT2

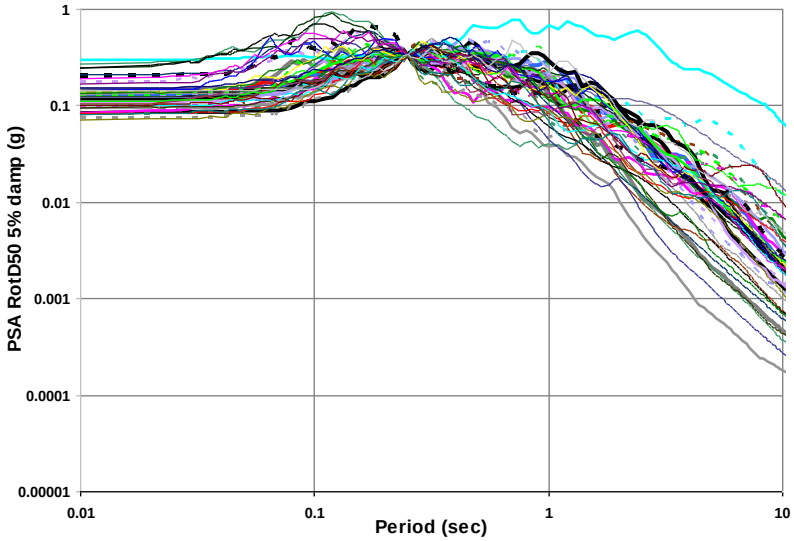
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
674	Whittier Narrows-01 Pasadena - Brown Gym 1987	5.99	4.3	341.14	Reverse O	3.3	0.42	RSN674_WHITTIER.A_A-BRG180.AT2 RSN674_WHITTIER.A_A-BRG270.AT2 RSN674_WHITTIER.A_A-BRG-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.29	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	0.24	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	0.53	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
959	Northridge-01 Canoga Park - Topanga Can 1994	6.69	0	267.49	Reverse	6.4	0.27	RSN959_NORTHR_CNP106.AT2 RSN959_NORTHR_CNP196.AT2 RSN959_NORTHR_CNP-UP.AT2
960	Northridge-01 Canyon Country - W Lost Cany 1994	6.69	11.39	325.6	Reverse	3.1	0.2	RSN960_NORTHR_LOS000.AT2 RSN960_NORTHR_LOS270.AT2 RSN960_NORTHR_LOS-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.1	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1082	Northridge-01 Sun Valley - Roscoe Blvd 1994	6.69	5.59	320.93	Reverse	5.8	0.25	RSN1082_NORTHR_RO3000.AT2 RSN1082_NORTHR_RO3090.AT2 RSN1082_NORTHR_RO3-UP.AT2
1134	Kozani, Greece-04 Grevena Posokemio 1995	5.1	11.9	503.83	Normal O	2.5	3.31	RSN1134_KOZANI_C-GRP--L.AT2 RSN1134_KOZANI_C-GRP--T.AT2 RSN1134_KOZANI_C-GRP--V.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.2	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.33	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1244	Chi-Chi, Taiwan CHY101 1999	7.62	9.94	258.89	Reverse O	11.8	0.38	RSN1244_CHICHI_CHY101-E.AT2 RSN1244_CHICHI_CHY101-N.AT2 RSN1244_CHICHI_CHY101-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	0.51	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2

Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.17	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1752	Northwest China-03 Jiashi 1997	6.1	9.98	240.09	Normal	2.7	0.33	RSN1752_NWCHINA3_JIA000.AT2 RSN1752_NWCHINA3_JIA270.AT2 RSN1752_NWCHINA3_JIA-UP.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.23	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3470	Chi-Chi, Taiwan-06 TCU072 1999	6.3	8.34	468.14	Reverse	5.6	0.92	RSN3470_CHICHI.06_TCU072N.AT2 RSN3470_CHICHI.06_TCU072E.AT2 RSN3470_CHICHI.06_TCU072V.AT2
3933	Tottori, Japan SMN001 2000	6.61	14.42	331	strike slip	5.4	0.36	RSN3933_TOTTORI_SMN001NS.AT2 RSN3933_TOTTORI_SMN001EW.AT2 RSN3933_TOTTORI_SMN001UD.AT2
4013	San Simeon, CA San Antonio Dam - Toe 2003	6.52	16.17	509.04	Reverse	6.6	0.92	RSN4013_SANSIMEO_36258021.AT2 RSN4013_SANSIMEO_36258111.AT2 RSN4013_SANSIMEO_36258-UP.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.24	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4102	Parkfield-02, CA Parkfield - Cholame 3W 2004	6	2.55	230.57	strike slip	1.6	0.34	RSN4102_PARK2004_C03090.AT2 RSN4102_PARK2004_C03360.AT2 RSN4102_PARK2004_C03-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	0.6	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	0.3	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4389	Umbria Marche (aftershock 2), Italy Nocera Umbra-Biscontini 1997	5.6	19.4	442	Normal	3.9	3.74	RSN4389_UBMARCHE.P_J-NCB000.A RSN4389_UBMARCHE.P_J-NCB090.A RSN4389_UBMARCHE.P_J-NCB-UP.A
4392	Umbria Marche (aftershock 2), Italy Norcia-Zona Industriale 1997	5.6	17.69	551	Normal	5.6	0.94	RSN4392_UBMARCHE.P_J-NZI000.AT RSN4392_UBMARCHE.P_J-NZI090.AT RSN4392_UBMARCHE.P_J-NZI-UP.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.09	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2

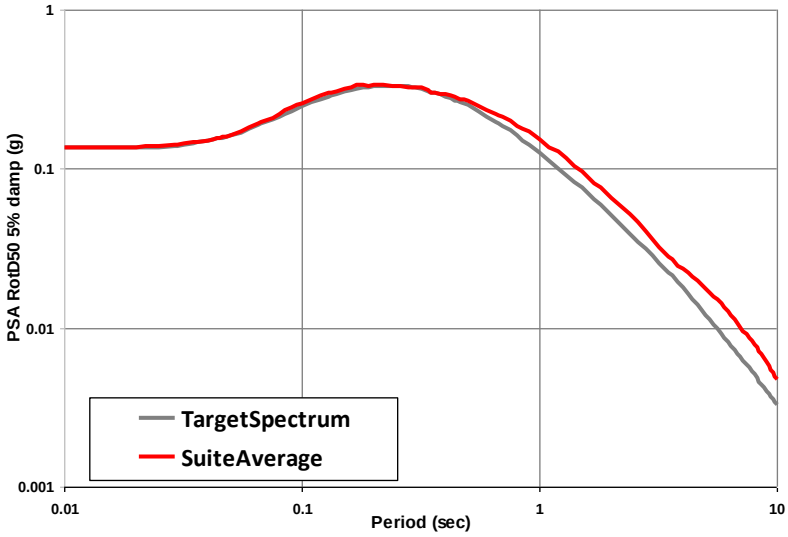
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
4850	Chuetsu-oki Yoshikawaku Joetsu City 2007	6.8	13.68	561.59	Reverse	4.1	0.32	RSN4850_CHUETSU_65013NS.AT2 RSN4850_CHUETSU_65013EW.AT2 RSN4850_CHUETSU_65013UD.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.06	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5678	Iwate MYGH02 2008	6.9	5.09	398.59	Reverse	3.7	0.35	RSN5678_IWATE_MYGH02NS.AT2 RSN5678_IWATE_MYGH02EW.AT2 RSN5678_IWATE_MYGH02UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.11	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.13	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.26	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8660	40204628 Santa Clara; Fire Station 05 Bowers A 2007	5.45	19.02	273.32	strike slip	3.8	0.7	RSN8660_40204628_N1841HNN.AT2 RSN8660_40204628_N1841HNE.AT2 RSN8660_40204628_N1841HNZ.AT2

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	1.39	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	2.09	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
31	Parkfield Cholame - Shandon Array #8 1966	6.19	12.9	256.82	strike slip	4.7	0.81	RSN31_PARKF_C08050.AT2 RSN31_PARKF_C08320.AT2 RSN31_PARKF_C08DWN.AT2
102	Northern Calif-07 Ferndale City Hall 1975	5.2	8.2	219.31	strike slip	8.1	1.63	RSN102_NCALIF.AG_D-FRN224.AT2 RSN102_NCALIF.AG_D-FRN314.AT2 RSN102_NCALIF.AG_D-FRN-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.1	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.2	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	2.56	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
236	Mammoth Lakes-03 Convict Creek 1980	5.91	2.67	382.12	strike slip	2.4	0.84	RSN236_MAMMOTH.AH_A-CVK090.A RSN236_MAMMOTH.AH_A-CVK180.A RSN236_MAMMOTH.AH_A-CVK-UP.A
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	0.86	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	0.63	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.45	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
498	Hollister-04 Hollister Diff Array #1 1986	5.45	13.11	-999	strike slip	9.7	1.46	RSN498_HOLLISTR_D-HD1255.AT2 RSN498_HOLLISTR_D-HD1345.AT2 RSN498_HOLLISTR_D-HD1-UP.AT2

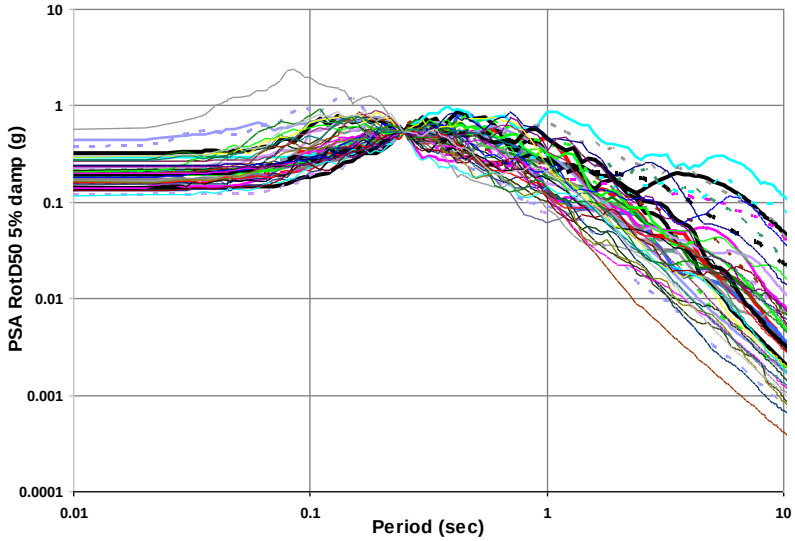
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
499	Hollister-04 Hollister Differential Array #3 1986	5.45	13.11	215.54	strike slip	8.1	1.4	RSN499_HOLLISTR_D-HD3255.AT2 RSN499_HOLLISTR_D-HD3345.AT2 RSN499_HOLLISTR_D-HD3-UP.AT2
709	Whittier Narrows-02 Downey - Co Maint Bldg 1987	5.27	14.37	271.9	Reverse O	5.8	2.26	RSN709_WHITTIER.B_B-DWN180.AT2 RSN709_WHITTIER.B_B-DWN270.AT2 RSN709_WHITTIER.B_B-DWN-UP.AT2
766	Loma Prieta Gilroy Array #2 1989	6.93	10.38	270.84	Reverse O	2.3	0.43	RSN766_LOMAP_G02000.AT2 RSN766_LOMAP_G02090.AT2 RSN766_LOMAP_G02-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.44	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	0.6	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	0.52	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
1082	Northridge-01 Sun Valley - Roscoe Blvd 1994	6.69	5.59	320.93	Reverse	5.8	0.38	RSN1082_NORTHR_RO3000.AT2 RSN1082_NORTHR_RO3090.AT2 RSN1082_NORTHR_RO3-UP.AT2
1083	Northridge-01 Sunland - Mt Gleason Ave 1994	6.69	12.38	402.16	Reverse	6	0.86	RSN1083_NORTHR_GLE170.AT2 RSN1083_NORTHR_GLE260.AT2 RSN1083_NORTHR_GLE-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.21	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.3	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.51	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1184	Chi-Chi, Taiwan CHY010 1999	7.62	19.93	538.69	Reverse O	6.1	0.62	RSN1184_CHICHI_CHY010-N.AT2 RSN1184_CHICHI_CHY010-W.AT2 RSN1184_CHICHI_CHY010-V.AT2
1507	Chi-Chi, Taiwan TCU071 1999	7.62	0	624.85	Reverse O	15.6	0.14	RSN1507_CHICHI_TCU071-E.AT2 RSN1507_CHICHI_TCU071-N.AT2 RSN1507_CHICHI_TCU071-V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**08 Northridget** **270** **25**							**CS Set**
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.36	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1529	Chi-Chi, Taiwan TCU102 1999	7.62	1.49	714.27	Reverse O	14.2	1.13	RSN1529_CHICHI_TCU102-E.AT2 RSN1529_CHICHI_TCU102-N.AT2 RSN1529_CHICHI_TCU102-V.AT2
1605	Duzce, Turkey Duzce 1999	7.14	0	281.86	strike slip	7.1	0.32	RSN1605_DUZCE_DZC180.AT2 RSN1605_DUZCE_DZC270.AT2 RSN1605_DUZCE_DZC-UP.AT2
1665	Northridge-02 Newhall - Fire Sta 1994	6.05	7.36	269.14	Reverse	3.1	2.23	RSN1665_NORTH001_NWH090.AT2 RSN1665_NORTH001_NWH360.AT2 RSN1665_NORTH001_NWH-UP.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.36	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
2739	Chi-Chi, Taiwan-04 CHY080 1999	6.2	12.44	496.21	strike slip	5.7	1.08	RSN2739_CHICHI.04_CHY080N.AT2 RSN2739_CHICHI.04_CHY080E.AT2 RSN2739_CHICHI.04_CHY080V.AT2
3713	Whittier Narrows-02 LA - N Figueroa St 1987	5.27	8	364.91	Reverse O	1.7	2.42	RSN3713_WHITTIER.B_B-FIG058.AT2 RSN3713_WHITTIER.B_B-FIG328.AT2 RSN3713_WHITTIER.B_B-FIG-UP.AT2
4073	Parkfield-02, CA PARKFIELD - STOCKDALE MTN 2004	6	4	393.56	strike slip	0.7	0.93	
4110	Parkfield-02, CA Parkfield - Fault Zone 6 2004	6	0.87	266.65	strike slip	3.2	1.17	RSN4110_PARK2004_Z06090.AT2 RSN4110_PARK2004_Z06360.AT2 RSN4110_PARK2004_Z06-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	0.93	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	0.46	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4207	Niigata, Japan NIG017 2004	6.63	4.22	274.17	Reverse	6	0.25	RSN4207_NIIGATA_NIG017NS.AT2 RSN4207_NIIGATA_NIG017EW.AT2 RSN4207_NIIGATA_NIG017UD.AT2
4280	Calabria, Italy Ferruzzano 1978	5.2	8.13	525.6	Normal	2.3	1.89	RSN4280_CALABRIA.P_FRR000.AT2 RSN4280_CALABRIA.P_FRR090.AT2 RSN4280_CALABRIA.P_FRR-UP.AT2

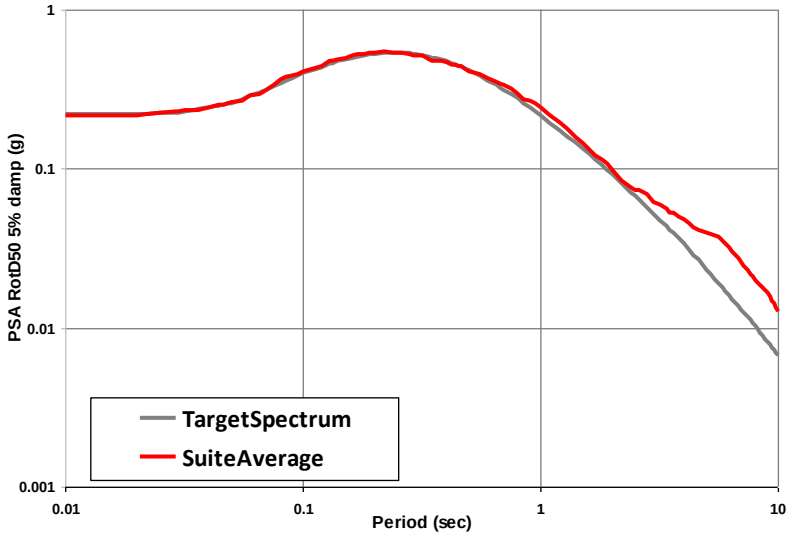
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
4383	Umbria Marche (aftershock 2), Italy Borgo-Cerreto Torre 1997	5.6	8.3	519	Normal	2.6	0.73	RSN4383_UBMARCHE.P_J-BCT000.AT RSN4383_UBMARCHE.P_J-BCT090.AT RSN4383_UBMARCHE.P_J-BCT-UP.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.14	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.45	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	0.48	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.17	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.2	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.4	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	2.24	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	3.36	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.17	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
162	Imperial Valley-06 Calexico Fire Station 1979	6.53	10.45	231.23	strike slip	6.4	0.96	RSN162_IMPVALL.H_H-CXO225.AT2 RSN162_IMPVALL.H_H-CXO315.AT2 RSN162_IMPVALL.H_H-CXO-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.32	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
193	Imperial Valley-07 Bonds Corner 1979	5.01	10.83	223.03	strike slip	3.2	4.26	RSN193_IMPVALL.A_A-BCR140.AT2 RSN193_IMPVALL.A_A-BCR230.AT2 RSN193_IMPVALL.A_A-BCR-UP.AT2
240	Mammoth Lakes-04 Convict Creek 1980	5.7	1.37	382.12	strike slip	2.3	0.78	RSN240_MAMMOTH.AH_B-CVK090.A RSN240_MAMMOTH.AH_B-CVK180.A RSN240_MAMMOTH.AH_B-CVK-UP.A
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	1.39	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	1.01	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
419	Coalinga-07 Sulphur Baths (temp) 1983	5.21	9.79	617.43	Reverse	0.7	1.53	RSN419_COALINGA_F-CSU000.AT2 RSN419_COALINGA_F-CSU090.AT2 RSN419_COALINGA_F-CSU-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.7	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
690	Whittier Narrows-01 San Gabriel - E Grand Ave 1987	5.99	0	401.37	Reverse O	2.5	1.14	RSN690_WHITTIER.A_A-GRN180.AT2 RSN690_WHITTIER.A_A-GRN270.AT2 RSN690_WHITTIER.A_A-GRN-UP.AT2

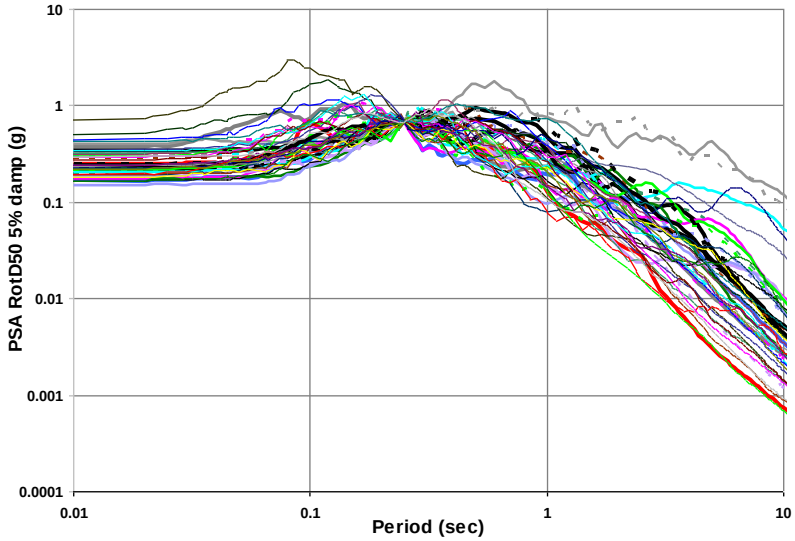
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
692	Whittier Narrows-01 Santa Fe Springs - E.Joslin 1987	5.99	11.47	339.06	Reverse O	1.6	0.43	RSN692_WHITTIER.A_A-EJS048.AT2 RSN692_WHITTIER.A_A-EJS318.AT2 RSN692_WHITTIER.A_A-EJS-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.72	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	0.84	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.26	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1083	Northridge-01 Sunland - Mt Gleason Ave 1994	6.69	12.38	402.16	Reverse	6	1.38	RSN1083_NORTHR_GLE170.AT2 RSN1083_NORTHR_GLE260.AT2 RSN1083_NORTHR_GLE-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.43	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.49	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1161	Kocaeli, Turkey Gebze 1999	7.51	7.57	792	strike slip	5.8	1.65	RSN1161_KOCAELI_GBZ000.AT2 RSN1161_KOCAELI_GBZ270.AT2 RSN1161_KOCAELI_GBZ-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.82	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1184	Chi-Chi, Taiwan CHY010 1999	7.62	19.93	538.69	Reverse O	6.1	1	RSN1184_CHICHI_CHY010-N.AT2 RSN1184_CHICHI_CHY010-W.AT2 RSN1184_CHICHI_CHY010-V.AT2
1193	Chi-Chi, Taiwan CHY024 1999	7.62	9.62	427.73	Reverse O	12.6	0.82	RSN1193_CHICHI_CHY024-E.AT2 RSN1193_CHICHI_CHY024-N.AT2 RSN1193_CHICHI_CHY024-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.28	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1498	Chi-Chi, Taiwan TCU059 1999	7.62	17.11	272.67	Reverse O	21.8	1.81	RSN1498_CHICHI_TCU059-E.AT2 RSN1498_CHICHI_TCU059-N.AT2 RSN1498_CHICHI_TCU059-V.AT2

Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
1499	Chi-Chi, Taiwan TCU060 1999	7.62	8.51	375.42	Reverse O	19.1	1.48	RSN1499_CHICHI_TCU060-E.AT2 RSN1499_CHICHI_TCU060-N.AT2 RSN1499_CHICHI_TCU060-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.43	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	1.41	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	0.75	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	1.42	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	1.49	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4137	Parkfield-02, CA Parkfield - Vineyard Cany 6W 2004	6	13.33	392.24	strike slip	4.6	1.88	RSN4137_PARK2004_VC6090.AT2 RSN4137_PARK2004_VC6360.AT2 RSN4137_PARK2004_VC6-UP.AT2
4140	Parkfield-02, CA PARKFIELD - UPSAR 03 2004	6	9.49	440.59	strike slip	6.1	1.03	RSN4140_PARK2004_UP03090.AT2 RSN4140_PARK2004_UP03360.AT2 RSN4140_PARK2004_UP03-UP.AT2
4352	Umbria Marche, Italy Nocera Umbra 1997	6	8.29	428	Normal	2.8	0.42	RSN4352_UBMARCHE.P_A-NCR000.A RSN4352_UBMARCHE.P_A-NCR270.A RSN4352_UBMARCHE.P_A-NCR-DN.A
4390	Umbria Marche (aftershock 2), Italy Norcia 1997	5.6	16.91	678	Normal	2.7	2.6	RSN4390_UBMARCHE.P_J-NRC000.A RSN4390_UBMARCHE.P_J-NRC270.A RSN4390_UBMARCHE.P_J-NRCDWN.
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.22	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.27	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5829	El Mayor-Cucapah RIITO 2010	7.2	13.7	242.05	strike slip	15.6	0.52	RSN5829_SIERRA.MEX_RII000.AT2 RSN5829_SIERRA.MEX_RII090.AT2 RSN5829_SIERRA.MEX_RII--V.AT2

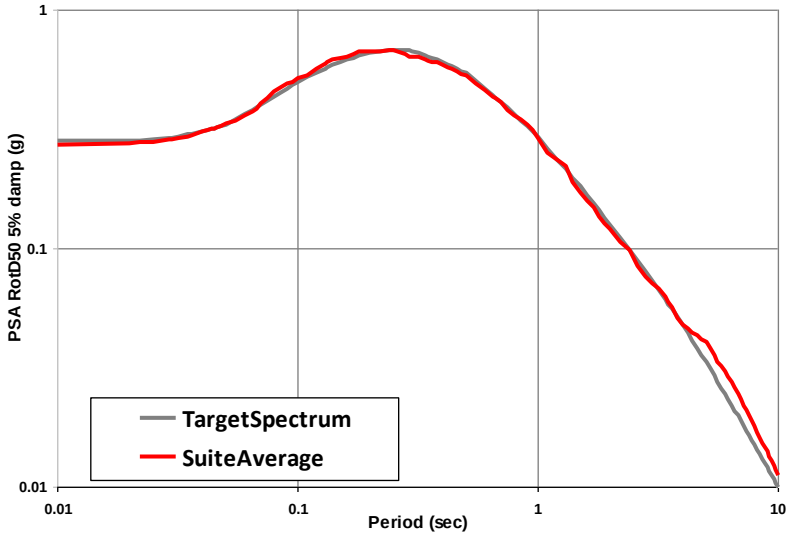
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	0.74	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.64	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8110	Christchurch, New Zealand MQZ 2011	6.2	13.91	649.67	Reverse O	3.1	2.24	RSN8110_CCHURCH_MQZE.AT2 RSN8110_CCHURCH_MQZN.AT2 RSN8110_CCHURCH_MQZUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	1.17	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2
8627	40204628 Milpitas Fire Station 4 2007	5.45	11.22	263.76	strike slip	5	2.33	RSN8627_40204628_N1788HNN.AT2 RSN8627_40204628_N1788HNE.AT2 RSN8627_40204628_N1788HNZ.AT2
8674	40204628 Mt. Hamilton Road 2007	5.45	4.29	471	strike slip	1.1	1.58	RSN8674_40204628_NCCHRHNN.AT2 RSN8674_40204628_NCCHRHNE.AT2 RSN8674_40204628_NCCHRHNZ.AT2
8742	40204628 Santa Clara Co. Comm. Cntr., Santa C 2007	5.45	16.57	463.82	strike slip	3.5	4.23	RSN8742_40204628_BSCCBHLN.AT2 RSN8742_40204628_BSCCBHLE.AT2 RSN8742_40204628_BSCCBHLZ.AT2

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
1	Helena, Montana-01 Carroll College 1935	6	2.07	593.35	strike slip	1.2	2.33	RSN1_HELENA.A_A-HMC180.AT2 RSN1_HELENA.A_A-HMC270.AT2 RSN1_HELENA.A_A-HMCDWN.AT2
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	2.82	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
50	Lytle Creek Wrightwood - 6074 Park Dr 1970	5.33	10.7	486	Reverse O	1.5	1.79	RSN50_LYTLECR_WTW115.AT2 RSN50_LYTLECR_WTW205.AT2 RSN50_LYTLECR_WTWDWN.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.62	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
97	Point Mugu Port Hueneme 1973	5.65	15.48	248.98	Reverse	4.7	4.52	RSN97_PTMUGU_PHN180.AT2 RSN97_PTMUGU_PHN270.AT2 RSN97_PTMUGU_PHN-UP.AT2
99	Hollister-03 Hollister City Hall 1974	5.14	8.85	198.77	strike slip	2.8	2.1	RSN99_HOLLISTR_A-HCH181.AT2 RSN99_HOLLISTR_A-HCH271.AT2 RSN99_HOLLISTR_A-HCH-UP.AT2
100	Hollister-03 San Juan Bautista, 24 Polk St 1974	5.14	8.56	335.5	strike slip	3.1	3.05	RSN100_HOLLISTR_A-SJB033.AT2 RSN100_HOLLISTR_A-SJB123.AT2 RSN100_HOLLISTR_A-SJBDWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.21	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
147	Coyote Lake Gilroy Array #2 1979	5.74	8.47	270.84	strike slip	1.4	1.22	RSN147_COYOTELK_G02050.AT2 RSN147_COYOTELK_G02140.AT2 RSN147_COYOTELK_G02-UP.AT2
149	Coyote Lake Gilroy Array #4 1979	5.74	4.79	221.78	strike slip	4.8	1.24	RSN149_COYOTELK_G04270.AT2 RSN149_COYOTELK_G04360.AT2 RSN149_COYOTELK_G04-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.4	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	1.75	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2

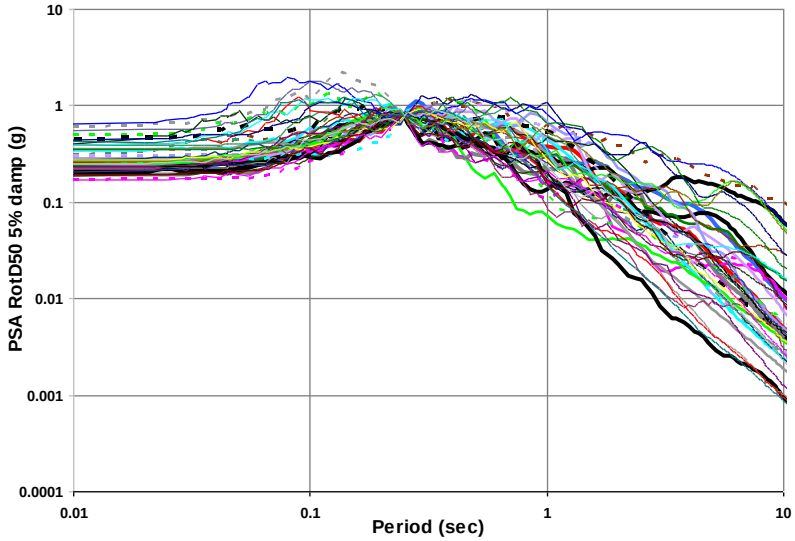
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	1.27	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
518	N. Palm Springs Fun Valley 1986	6.06	12.79	388.63	Reverse O	6.1	3.54	RSN518_PALMSPR_FVR045.AT2 RSN518_PALMSPR_FVR135.AT2 RSN518_PALMSPR_FVR-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.88	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
634	Whittier Narrows-01 LA - Fletcher Dr 1987	5.99	11.07	329.06	Reverse O	2.8	1.43	RSN634_WHITTIER.A_A-FLE144.AT2 RSN634_WHITTIER.A_A-FLE234.AT2 RSN634_WHITTIER.A_A-FLE-UP.AT2
705	Whittier Narrows-01 West Covina - S Orange Ave 1987	5.99	6.42	334.69	Reverse O	2.9	2.2	RSN705_WHITTIER.A_A-SOR225.AT2 RSN705_WHITTIER.A_A-SOR315.AT2 RSN705_WHITTIER.A_A-SOR-UP.AT2
709	Whittier Narrows-02 Downey - Co Maint Bldg 1987	5.27	14.37	271.9	Reverse O	5.8	4.6	RSN709_WHITTIER.B_B-DWN180.AT2 RSN709_WHITTIER.B_B-DWN270.AT2 RSN709_WHITTIER.B_B-DWN-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	1.68	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.62	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.33	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1052	Northridge-01 Pacoima Kagel Canyon 1994	6.69	5.26	508.08	Reverse	5.7	0.92	RSN1052_NORTHR_PKC090.AT2 RSN1052_NORTHR_PKC360.AT2 RSN1052_NORTHR_PKC-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.44	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.62	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.04	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2

Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.62	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1506	Chi-Chi, Taiwan TCU070 1999	7.62	19	401.26	Reverse O	19.9	2.14	RSN1506_CHICHI_TCU070-E.AT2 RSN1506_CHICHI_TCU070-N.AT2 RSN1506_CHICHI_TCU070-V.AT2
1534	Chi-Chi, Taiwan TCU107 1999	7.62	15.99	409	Reverse O	24.1	2.31	RSN1534_CHICHI_TCU107-E.AT2 RSN1534_CHICHI_TCU107-N.AT2 RSN1534_CHICHI_TCU107-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	1.24	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	1.6	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
2655	Chi-Chi, Taiwan-03 TCU122 1999	6.2	18.1	475.46	Reverse	2.8	1.16	RSN2655_CHICHI.03_TCU122N.AT2 RSN2655_CHICHI.03_TCU122E.AT2 RSN2655_CHICHI.03_TCU122V.AT2
2703	Chi-Chi, Taiwan-04 CHY028 1999	6.2	17.63	542.61	strike slip	4.6	1.45	RSN2703_CHICHI.04_CHY028N.AT2 RSN2703_CHICHI.04_CHY028E.AT2 RSN2703_CHICHI.04_CHY028V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.74	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3470	Chi-Chi, Taiwan-06 TCU072 1999	6.3	8.34	468.14	Reverse	5.6	2.9	RSN3470_CHICHI.06_TCU072N.AT2 RSN3470_CHICHI.06_TCU072E.AT2 RSN3470_CHICHI.06_TCU072V.AT2
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	0.95	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
4081	Parkfield-02, CA Parkfield - Cholame 5W 2004	6	6.27	236.59	strike slip	2.9	1.36	RSN4081_PARK2004_C05090.AT2 RSN4081_PARK2004_C05360.AT2 RSN4081_PARK2004_C05-UP.AT2
4110	Parkfield-02, CA Parkfield - Fault Zone 6 2004	6	0.87	266.65	strike slip	3.2	2.38	RSN4110_PARK2004_Z06090.AT2 RSN4110_PARK2004_Z06360.AT2 RSN4110_PARK2004_Z06-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	1.79	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2

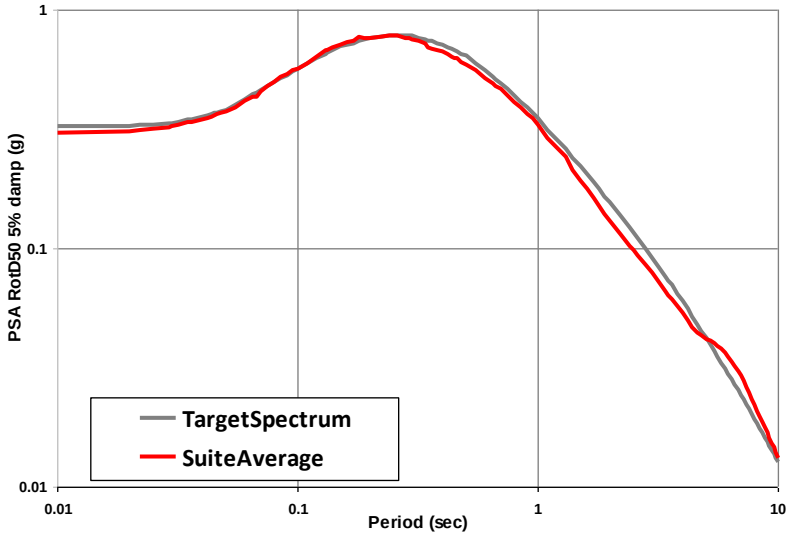
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	1.89	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4130	Parkfield-02, CA Parkfield - Vineyard Cany 1E 2004	6	1.59	381.27	strike slip	2.6	1.05	RSN4130_PARK2004_PV1090.AT2 RSN4130_PARK2004_PV1360.AT2 RSN4130_PARK2004_PV1-UP.AT2
4391	Umbria Marche (aftershock 2), Italy Norcia-Altavilla 1997	5.6	16.11	218	Normal	1.8	1.96	RSN4391_UBMARCHE.P_J-NRA000.A RSN4391_UBMARCHE.P_J-NRA090.A RSN4391_UBMARCHE.P_J-NRA-UP.A
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.28	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.25	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.81	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.69	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	3.25	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	4.89	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.71	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.24	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
160	Imperial Valley-06 Bonds Corner 1979	6.53	0.44	223.03	strike slip	5.3	0.46	RSN160_IMPVALL.H_H-BCR140.AT2 RSN160_IMPVALL.H_H-BCR230.AT2 RSN160_IMPVALL.H_H-BCR-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.46	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
223	Livermore-02 San Ramon - Eastman Kodak 1980	5.42	14.31	377.51	strike slip	2.1	1.8	RSN223_LIVERMOR_B-KOD180.AT2 RSN223_LIVERMOR_B-KOD270.AT2 RSN223_LIVERMOR_B-KOD-UP.AT2
248	Mammoth Lakes-06 Convict Creek 1980	5.94	6.44	382.12	strike slip	2.6	1.98	RSN248_MAMMOTH.L_L-CVK090.AT RSN248_MAMMOTH.L_L-CVK180.AT RSN248_MAMMOTH.L_L-CVK-UP.AT
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	2.02	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	0.75	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	1.89	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.02	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2

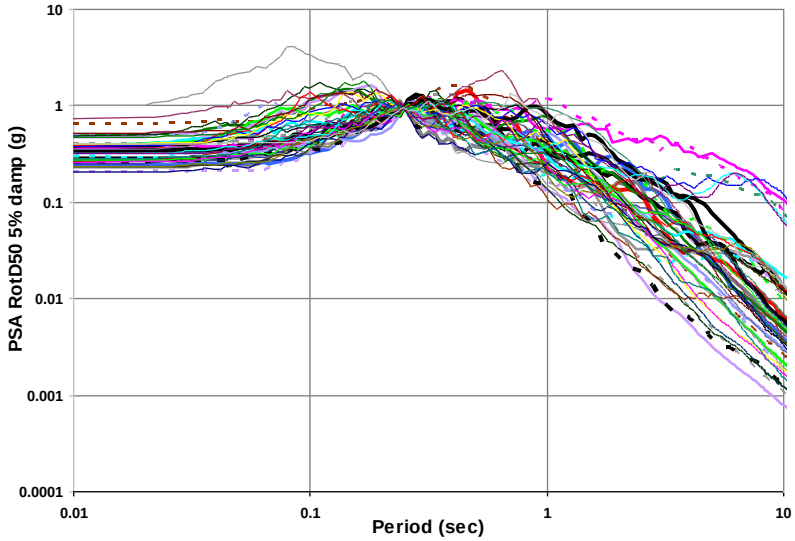
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
590	Whittier Narrows-01 Altadena - Eaton Canyon 1987	5.99	8.72	375.16	Reverse O	2.3	1.73	RSN590_WHITTIER.A_A-ALT000.AT2 RSN590_WHITTIER.A_A-ALT090.AT2 RSN590_WHITTIER.A_A-ALT-UP.AT2
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	0.54	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.04	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	1.41	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.71	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.38	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.2	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.87	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1515	Chi-Chi, Taiwan TCU082 1999	7.62	5.16	472.81	Reverse O	18.7	1.78	RSN1515_CHICHI_TCU082-E.AT2 RSN1515_CHICHI_TCU082-N.AT2 RSN1515_CHICHI_TCU082-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.85	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1615	Duzce, Turkey Lamont 1062 1999	7.14	9.14	338	strike slip	10.9	1.18	RSN1615_DUZCE_1062-N.AT2 RSN1615_DUZCE_1062-E.AT2 RSN1615_DUZCE_1062-V.AT2
1752	Northwest China-03 Jiashi 1997	6.1	9.98	240.09	Normal	2.7	1.2	RSN1752_NWCHINA3_JIA000.AT2 RSN1752_NWCHINA3_JIA270.AT2 RSN1752_NWCHINA3_JIA-UP.AT2
3473	Chi-Chi, Taiwan-06 TCU078 1999	6.3	5.72	443.04	Reverse	2.6	0.83	RSN3473_CHICHI.06_TCU078N.AT2 RSN3473_CHICHI.06_TCU078E.AT2 RSN3473_CHICHI.06_TCU078V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**08 Northridget** **270** **100**							**CS Set**
3947	Tottori, Japan SMNH01 2000	6.61	5.83	446.34	strike slip	4.7	0.34	RSN3947_TOTTORI_SMNH01NS.AT2 RSN3947_TOTTORI_SMNH01EW.AT2 RSN3947_TOTTORI_SMNH01UD.AT2
3964	Tottori, Japan TTR007 2000	6.61	11.28	469.79	strike slip	4	0.67	RSN3964_TOTTORI_TTR007NS.AT2 RSN3964_TOTTORI_TTR007EW.AT2 RSN3964_TOTTORI_TTR007UD.AT2
4098	Parkfield-02, CA Parkfield - Cholame 1E 2004	6	1.66	326.64	strike slip	1.9	1.15	RSN4098_PARK2004_C01090.AT2 RSN4098_PARK2004_C01360.AT2 RSN4098_PARK2004_C01-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	2.17	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4132	Parkfield-02, CA Parkfield - Vineyard Cany 2E 2004	6	3.69	467.76	strike slip	2.7	1.05	RSN4132_PARK2004_PGD090.AT2 RSN4132_PARK2004_PGD360.AT2 RSN4132_PARK2004_PGD-UP.AT2
4390	Umbria Marche (aftershock 2), Italy Norcia 1997	5.6	16.91	678	Normal	2.7	3.78	RSN4390_UBMARCHE.P_J-NRC000.A RSN4390_UBMARCHE.P_J-NRC270.A RSN4390_UBMARCHE.P_J-NRCDWN.
4483	L'Aquila, Italy L'Aquila - Parking 2009	6.3	0	717	Normal	5	1.15	RSN4483_L-AQUILA_AM043XTE.AT2 RSN4483_L-AQUILA_AM043YLN.AT2 RSN4483_L-AQUILA_AM043ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.32	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	1.05	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.28	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.39	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	1.07	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6927	Darfield, New Zealand LINC 2010	7	5.07	263.2	strike slip	8	1.42	RSN6927_DARFIELD_LINCN23E.AT2 RSN6927_DARFIELD_LINCN67W.AT2 RSN6927_DARFIELD_LINCUP.AT2

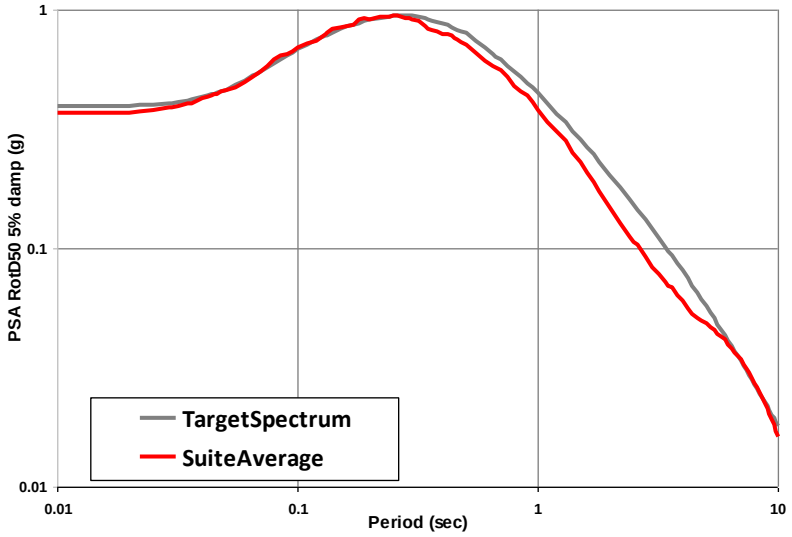
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.93	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	1.7	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2
8134	Christchurch, New Zealand Styx Mill Transfer Station 2011	6.2	11.24	247.5	Reverse O	5.6	2.79	RSN8134_CCHURCH_SMTCN88W.AT RSN8134_CCHURCH_SMTCS02W.AT2 RSN8134_CCHURCH_SMTCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.8	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8627	40204628 Milpitas Fire Station 4 2007	5.45	11.22	263.76	strike slip	5	3.39	RSN8627_40204628_N1788HNN.AT2 RSN8627_40204628_N1788HNE.AT2 RSN8627_40204628_N1788HNZ.AT2
9009	14151344 Anza, Mitchell Rd. 2005	5.2	5.08	361	strike slip	1.5	2.26	RSN9009_14151344_CIDNRHLN.AT2 RSN9009_14151344_CIDNRHLE.AT2 RSN9009_14151344_CIDNRHLZ.AT2
20125	40204628 Coe Ranch 2007	5.45	18.5	400	strike slip	2	2.58	

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	3.93	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
145	Coyote Lake Coyote Lake Dam - Southwest Abut 1979	5.74	5.3	561.43	strike slip	1.9	2.82	RSN145_COYOTELK_CYC160.AT2 RSN145_COYOTELK_CYC250.AT2 RSN145_COYOTELK_CYC-UP.AT2
148	Coyote Lake Gilroy Array #3 1979	5.74	6.75	349.85	strike slip	2.1	1.98	RSN148_COYOTELK_G03050.AT2 RSN148_COYOTELK_G03140.AT2 RSN148_COYOTELK_G03-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.55	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
232	Mammoth Lakes-01 Mammoth Lakes H. S. 1980	6.06	4.48	346.82	Normal O	5.3	1.7	RSN232_MAMMOTH.I_I-MLS254.AT2 RSN232_MAMMOTH.I_I-MLS344.AT2 RSN232_MAMMOTH.I_I-MLS-UP.AT2
233	Mammoth Lakes-02 Convict Creek 1980	5.69	2.91	382.12	strike slip	2.6	2.38	RSN233_MAMMOTH.J_J-CVK090.AT2 RSN233_MAMMOTH.J_J-CVK180.AT2 RSN233_MAMMOTH.J_J-CVK-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	2.43	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	0.91	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.23	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
558	Chalfant Valley-02 Zack Brothers Ranch 1986	6.19	6.44	316.19	strike slip	2.4	0.9	RSN558_CHALFANT.A_A-ZAK270.AT2 RSN558_CHALFANT.A_A-ZAK360.AT2 RSN558_CHALFANT.A_A-ZAK-UP.AT2
634	Whittier Narrows-01 LA - Fletcher Dr 1987	5.99	11.07	329.06	Reverse O	2.8	1.99	RSN634_WHITTIER.A_A-FLE144.AT2 RSN634_WHITTIER.A_A-FLE234.AT2 RSN634_WHITTIER.A_A-FLE-UP.AT2
674	Whittier Narrows-01 Pasadena - Brown Gym 1987	5.99	4.3	341.14	Reverse O	3.3	1.83	RSN674_WHITTIER.A_A-BRG180.AT2 RSN674_WHITTIER.A_A-BRG270.AT2 RSN674_WHITTIER.A_A-BRG-UP.AT2

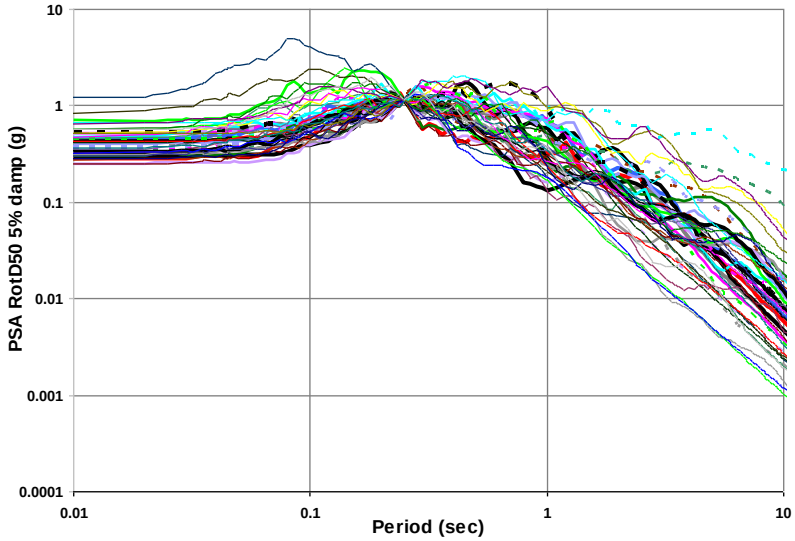
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
690	Whittier Narrows-01 San Gabriel - E Grand Ave 1987	5.99	0	401.37	Reverse O	2.5	2	RSN690_WHITTIER.A_A-GRN180.AT2 RSN690_WHITTIER.A_A-GRN270.AT2 RSN690_WHITTIER.A_A-GRN-UP.AT2
705	Whittier Narrows-01 West Covina - S Orange Ave 1987	5.99	6.42	334.69	Reverse O	2.9	3.06	RSN705_WHITTIER.A_A-SOR225.AT2 RSN705_WHITTIER.A_A-SOR315.AT2 RSN705_WHITTIER.A_A-SOR-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.26	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	1.47	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.86	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.75	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.86	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.44	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1184	Chi-Chi, Taiwan CHY010 1999	7.62	19.93	538.69	Reverse O	6.1	1.76	RSN1184_CHICHI_CHY010-N.AT2 RSN1184_CHICHI_CHY010-W.AT2 RSN1184_CHICHI_CHY010-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	2.25	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1500	Chi-Chi, Taiwan TCU061 1999	7.62	17.17	379.64	Reverse O	23.3	2.58	RSN1500_CHICHI_TCU061-E.AT2 RSN1500_CHICHI_TCU061-N.AT2 RSN1500_CHICHI_TCU061-V.AT2
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	2.48	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
1549	Chi-Chi, Taiwan TCU129 1999	7.62	1.83	511.18	Reverse O	16.6	0.52	RSN1549_CHICHI_TCU129-E.AT2 RSN1549_CHICHI_TCU129-N.AT2 RSN1549_CHICHI_TCU129-V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**08 Northridget** **270** **150**							**CS Set**
1615	Duzce, Turkey Lamont 1062 1999	7.14	9.14	338	strike slip	10.9	1.43	RSN1615_DUZCE_1062-N.AT2 RSN1615_DUZCE_1062-E.AT2 RSN1615_DUZCE_1062-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	1.72	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1641	Sierra Madre Altadena - Eaton Canyon 1991	5.61	8.57	375.16	Reverse	1.1	1.15	RSN1641_SMADRE_ALT000.AT2 RSN1641_SMADRE_ALT090.AT2 RSN1641_SMADRE_ALT-UP.AT2
1707	Northridge-06 LA - Century City CC North 1994	5.28	16.38	277.98	Reverse	3.4	3.67	RSN1707_NORTH392_CCN090.AT2 RSN1707_NORTH392_CCN360.AT2 RSN1707_NORTH392_CCN-UP.AT2
4068	Parkfield-02, CA PARKFIELD - HOG CANYON 2004	6	0.73	363.69	strike slip	4.2	1.4	RSN4068_PARK2004_HOG-90.AT2 RSN4068_PARK2004_HOG360.AT2 RSN4068_PARK2004_HOG-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	2.49	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	2.63	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	1.09	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT
4510	L'Aquila (aftershock 1), Italy L'Aquila - V. Aterno - Centro Valle 2009	5.6	10.95	475	Normal O	2.5	3.7	RSN4510_L-AQUILA.A_GX333XTE.AT RSN4510_L-AQUILA.A_GX333YLN.AT RSN4510_L-AQUILA.A_GX333ZUP.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.39	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.34	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
4876	Chuetsu-oki Kashiwazaki Nishiyamacho Ikeura 2007	6.8	0	655.45	Reverse	4.9	0.85	RSN4876_CHUETSU_65059NS.AT2 RSN4876_CHUETSU_65059EW.AT2 RSN4876_CHUETSU_65059UD.AT2
5678	Iwate MYGH02 2008	6.9	5.09	398.59	Reverse	3.7	1.52	RSN5678_IWATE_MYGH02NS.AT2 RSN5678_IWATE_MYGH02EW.AT2 RSN5678_IWATE_MYGH02UD.AT2

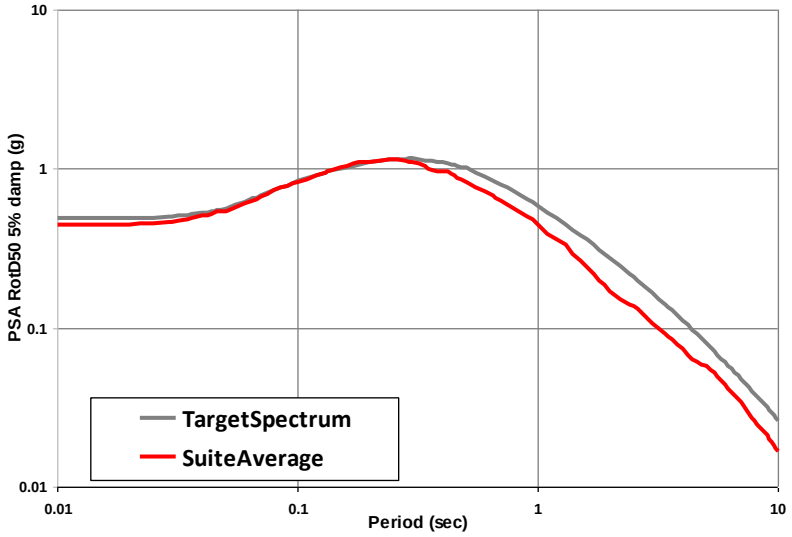
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.47	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5823	El Mayor-Cucapah Chihuahua 2010	7.2	18.21	242.05	strike slip	25.1	1.78	RSN5823_SIERRA.MEX_CHI000.AT2 RSN5823_SIERRA.MEX_CHI090.AT2 RSN5823_SIERRA.MEX_CHI--V.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	1.29	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.13	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.96	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8627	40204628 Milpitas Fire Station 4 2007	5.45	11.22	263.76	strike slip	5	4.1	RSN8627_40204628_N1788HNN.AT2 RSN8627_40204628_N1788HNE.AT2 RSN8627_40204628_N1788HNZ.AT2
20125	40204628 Coe Ranch 2007	5.45	18.5	400	strike slip	2	3.12	

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
26	Hollister-01 Hollister City Hall 1961	5.6	19.55	198.77	strike slip	9.3	4.77	RSN26_HOLLISTR_B-HCH181.AT2 RSN26_HOLLISTR_B-HCH271.AT2 RSN26_HOLLISTR_B-HCH-UP.AT2
31	Parkfield Cholame - Shandon Array #8 1966	6.19	12.9	256.82	strike slip	4.7	2.79	RSN31_PARKF_C08050.AT2 RSN31_PARKF_C08320.AT2 RSN31_PARKF_C08DWN.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.04	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.36	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
149	Coyote Lake Gilroy Array #4 1979	5.74	4.79	221.78	strike slip	4.8	2.1	RSN149_COYOTELK_G04270.AT2 RSN149_COYOTELK_G04360.AT2 RSN149_COYOTELK_G04-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.67	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
223	Livermore-02 San Ramon - Eastman Kodak 1980	5.42	14.31	377.51	strike slip	2.1	2.64	RSN223_LIVERMOR_B-KOD180.AT2 RSN223_LIVERMOR_B-KOD270.AT2 RSN223_LIVERMOR_B-KOD-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	1.54	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	1.1	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.49	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
692	Whittier Narrows-01 Santa Fe Springs - E.Joslin 1987	5.99	11.47	339.06	Reverse O	1.6	0.92	RSN692_WHITTIER.A_A-EJS048.AT2 RSN692_WHITTIER.A_A-EJS318.AT2 RSN692_WHITTIER.A_A-EJS-UP.AT2
708	Whittier Narrows-02 Altadena - Eaton Canyon 1987	5.27	10.77	375.16	Reverse O	0.6	2.53	RSN708_WHITTIER.B_B-ALT000.AT2 RSN708_WHITTIER.B_B-ALT090.AT2 RSN708_WHITTIER.B_B-ALT-UP.AT2

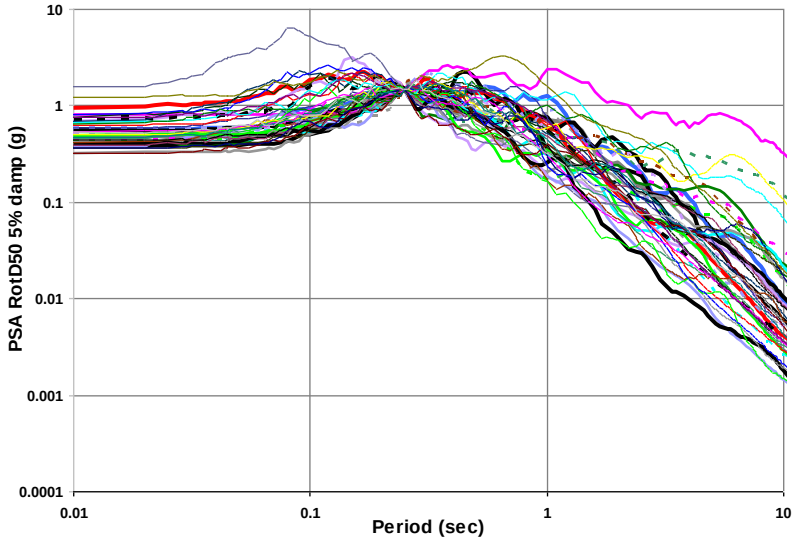
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
716	Whittier Narrows-02 San Marino - SW Academy 1987	5.27	4.42	379.43	Reverse O	0.6	1.83	RSN716_WHITTIER.B_B-SMA270.AT2 RSN716_WHITTIER.B_B-SMA360.AT2 RSN716_WHITTIER.B_B-SMA-UP.AT2
728	Superstition Hills-02 Westmorland Fire Sta 1987	6.54	13.03	193.67	strike slip	10.9	2.5	RSN728_SUPER.B_B-WSM090.AT2 RSN728_SUPER.B_B-WSM180.AT2 RSN728_SUPER.B_B-WSM-UP.AT2
763	Loma Prieta Gilroy - Gavilan Coll. 1989	6.93	9.19	729.65	Reverse O	1.5	1.42	RSN763_LOMAP_GIL067.AT2 RSN763_LOMAP_GIL337.AT2 RSN763_LOMAP_GIL-UP.AT2
768	Loma Prieta Gilroy Array #4 1989	6.93	13.81	221.78	Reverse O	4.5	2.14	RSN768_LOMAP_G04000.AT2 RSN768_LOMAP_G04090.AT2 RSN768_LOMAP_G04-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.53	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	2.06	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	2.69	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
1004	Northridge-01 LA - Sepulveda VA Hospital 1994	6.69	0	380.06	Reverse	4.5	0.58	RSN1004_NORTHR_SPV270.AT2 RSN1004_NORTHR_SPV360.AT2 RSN1004_NORTHR_SPV-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	1.04	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1082	Northridge-01 Sun Valley - Roscoe Blvd 1994	6.69	5.59	320.93	Reverse	5.8	1.31	RSN1082_NORTHR_RO3000.AT2 RSN1082_NORTHR_RO3090.AT2 RSN1082_NORTHR_RO3-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.91	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.05	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.76	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2

Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	2.74	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.93	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1513	Chi-Chi, Taiwan TCU079 1999	7.62	0	363.99	Reverse O	19.2	1	RSN1513_CHICHI_TCU079-E.AT2 RSN1513_CHICHI_TCU079-N.AT2 RSN1513_CHICHI_TCU079-V.AT2
1527	Chi-Chi, Taiwan TCU100 1999	7.62	11.37	535.13	Reverse O	19.4	4.18	RSN1527_CHICHI_TCU100-E.AT2 RSN1527_CHICHI_TCU100-N.AT2 RSN1527_CHICHI_TCU100-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	2.09	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	2.71	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
2655	Chi-Chi, Taiwan-03 TCU122 1999	6.2	18.1	475.46	Reverse	2.8	1.96	RSN2655_CHICHI.03_TCU122N.AT2 RSN2655_CHICHI.03_TCU122E.AT2 RSN2655_CHICHI.03_TCU122V.AT2
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	1.61	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
3968	Tottori, Japan TTRH02 2000	6.61	0.83	310.21	strike slip	5.4	0.63	RSN3968_TOTTORI_TTRH02NS.AT2 RSN3968_TOTTORI_TTRH02EW.AT2 RSN3968_TOTTORI_TTRH02UD.AT2
3979	San Simeon, CA Cambria - Hwy 1 Caltrans Bridge 2003	6.52	6.97	362.42	Reverse	6.3	2.22	RSN3979_SANSIMEO_37737090.AT2 RSN3979_SANSIMEO_37737360.AT2 RSN3979_SANSIMEO_37737-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	3.02	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4218	Niigata, Japan NIG028 2004	6.63	0.46	430.71	Reverse	3.5	0.71	RSN4218_NIIGATA_NIG028NS.AT2 RSN4218_NIIGATA_NIG028EW.AT2 RSN4218_NIIGATA_NIG028UD.AT2
4285	Basso Tirreno, Italy Patti-Cabina Prima 1978	6	14.6	441.28	strike slip	3.4	3.24	RSN4285_BTIRRENO.P_PTT000.AT2 RSN4285_BTIRRENO.P_PTT090.AT2 RSN4285_BTIRRENO.P_PTT-UP.AT2

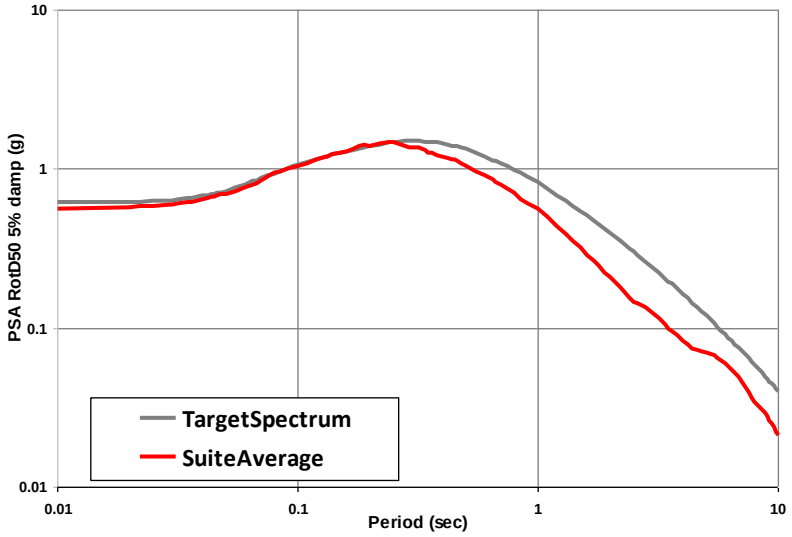
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
4383	Umbria Marche (aftershock 2), Italy Borgo-Cerreto Torre 1997	5.6	8.3	519	Normal	2.6	2.5	RSN4383_UBMARCHE.P_J-BCT000.AT RSN4383_UBMARCHE.P_J-BCT090.AT RSN4383_UBMARCHE.P_J-BCT-UP.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.47	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.42	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.58	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.37	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	2.49	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2
8134	Christchurch, New Zealand Styx Mill Transfer Station 2011	6.2	11.24	247.5	Reverse O	5.6	4.09	RSN8134_CCHURCH_SMTCN88W.AT RSN8134_CCHURCH_SMTCS02W.AT2 RSN8134_CCHURCH_SMTCUP.AT2

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.34	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.46	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.87	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	2.03	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	1.98	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
391	Coalinga-03 Burnett Construction 1983	5.38	12.89	352.2	Reverse	3.9	2.68	RSN391_COALINGA_B-BNT270.AT2 RSN391_COALINGA_B-BNT360.AT2 RSN391_COALINGA_B-BNT-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	1.42	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.92	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
558	Chalfant Valley-02 Zack Brothers Ranch 1986	6.19	6.44	316.19	strike slip	2.4	1.41	RSN558_CHALFANT.A_A-ZAK270.AT2 RSN558_CHALFANT.A_A-ZAK360.AT2 RSN558_CHALFANT.A_A-ZAK-UP.AT2
634	Whittier Narrows-01 LA - Fletcher Dr 1987	5.99	11.07	329.06	Reverse O	2.8	3.11	RSN634_WHITTIER.A_A-FLE144.AT2 RSN634_WHITTIER.A_A-FLE234.AT2 RSN634_WHITTIER.A_A-FLE-UP.AT2
650	Whittier Narrows-01 La Puente - Rimgrove Av 1987	5.99	10.24	339.52	Reverse O	3.6	3.73	RSN650_WHITTIER.A_A-RIM015.AT2 RSN650_WHITTIER.A_A-RIM105.AT2 RSN650_WHITTIER.A_A-RIM-UP.AT2
681	Whittier Narrows-01 Pasadena - CIT Lura St 1987	5.99	4.3	341.14	Reverse O	2.8	2.31	RSN681_WHITTIER.A_A-LUR090.AT2 RSN681_WHITTIER.A_A-LUR180.AT2 RSN681_WHITTIER.A_A-LUR-UP.AT2

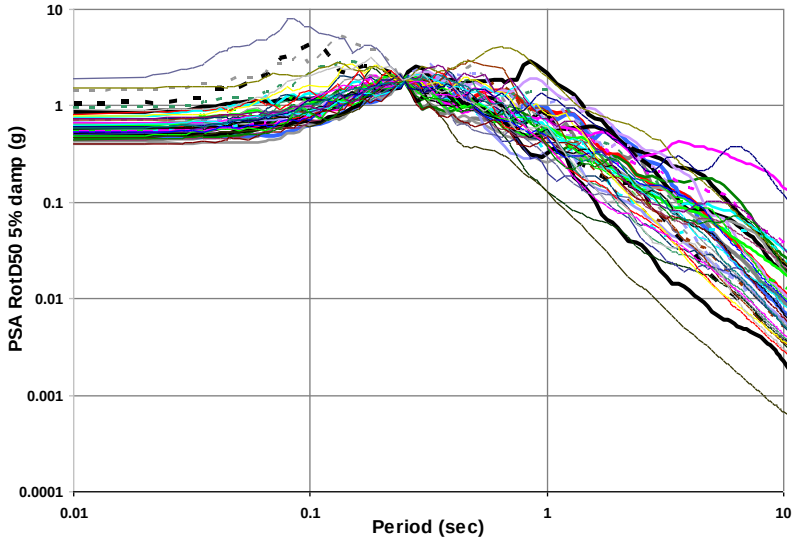
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
692	Whittier Narrows-01 Santa Fe Springs - E.Joslin 1987	5.99	11.47	339.06	Reverse O	1.6	1.18	RSN692_WHITTIER.A_A-EJS048.AT2 RSN692_WHITTIER.A_A-EJS318.AT2 RSN692_WHITTIER.A_A-EJS-UP.AT2
728	Superstition Hills-02 Westmorland Fire Sta 1987	6.54	13.03	193.67	strike slip	10.9	3.22	RSN728_SUPER.B_B-WSM090.AT2 RSN728_SUPER.B_B-WSM180.AT2 RSN728_SUPER.B_B-WSM-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.97	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
828	Cape Mendocino Petrolia 1992	7.01	0	422.17	Reverse	4.2	1.96	RSN828_CAPEMEND_PET000.AT2 RSN828_CAPEMEND_PET090.AT2 RSN828_CAPEMEND_PET-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	3.66	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.71	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1051	Northridge-01 Pacoima Dam (upper left) 1994	6.69	4.92	2016.13	Reverse	3.1	0.68	RSN1051_NORTHR_PUL104.AT2 RSN1051_NORTHR_PUL194.AT2 RSN1051_NORTHR_PUL-UP.AT2
1083	Northridge-01 Sunland - Mt Gleason Ave 1994	6.69	12.38	402.16	Reverse	6	3.79	RSN1083_NORTHR_GLE170.AT2 RSN1083_NORTHR_GLE260.AT2 RSN1083_NORTHR_GLE-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	1.18	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.35	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	2.26	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	3.52	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1498	Chi-Chi, Taiwan TCU059 1999	7.62	17.11	272.67	Reverse O	21.8	4.98	RSN1498_CHICHI_TCU059-E.AT2 RSN1498_CHICHI_TCU059-N.AT2 RSN1498_CHICHI_TCU059-V.AT2

Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	1.62	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	2.69	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	3.49	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
2622	Chi-Chi, Taiwan-03 TCU071 1999	6.2	15.04	624.85	Reverse	3.7	2.21	RSN2622_CHICHI.03_TCU071N.AT2 RSN2622_CHICHI.03_TCU071E.AT2 RSN2622_CHICHI.03_TCU071V.AT2
3474	Chi-Chi, Taiwan-06 TCU079 1999	6.3	1.04	363.99	Reverse	2.7	0.53	RSN3474_CHICHI.06_TCU079N.AT2 RSN3474_CHICHI.06_TCU079E.AT2 RSN3474_CHICHI.06_TCU079V.AT2
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	2.08	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
4104	Parkfield-02, CA Parkfield - Cholame 4AW 2004	6	4.81	283.38	strike slip	1.6	2.54	RSN4104_PARK2004_C4A090.AT2 RSN4104_PARK2004_C4A360.AT2 RSN4104_PARK2004_C4A-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	3.89	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	4.11	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4134	Parkfield-02, CA Parkfield - Vineyard Cany 3W 2004	6	4.43	308.87	strike slip	2.9	2.22	RSN4134_PARK2004_VYC090.AT2 RSN4134_PARK2004_VYC360.AT2 RSN4134_PARK2004_VYC-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	2.03	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4480	L'Aquila, Italy L'Aquila - V. Aterno - Centro Valle 2009	6.3	0	475	Normal	4.4	1.38	RSN4480_L-AQUILA_GX066XTE.AT2 RSN4480_L-AQUILA_GX066YLN.AT2 RSN4480_L-AQUILA_GX066ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.61	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2

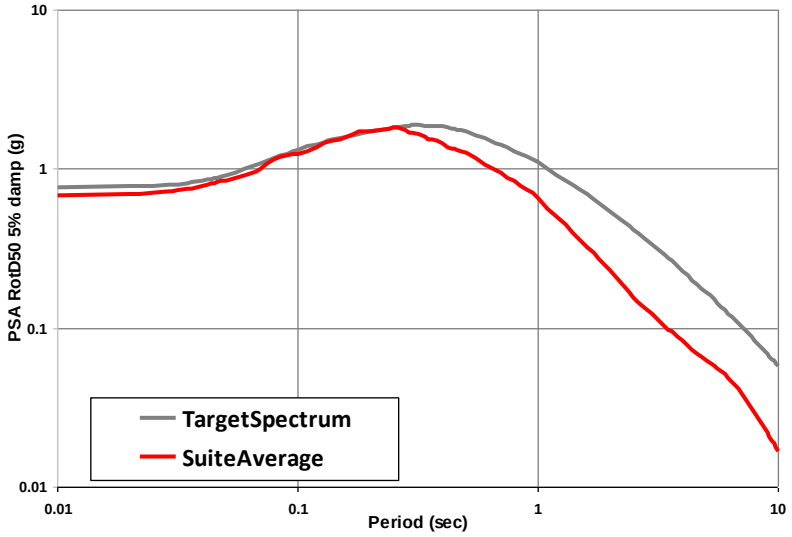
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.54	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.74	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	2.02	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
8063	Christchurch, New Zealand Christchurch Botanical Gardens 2011	6.2	5.52	187	Reverse O	3.8	1.36	RSN8063_CCHURCH_CBGSN89W.AT2 RSN8063_CCHURCH_CBGSS01W.AT2 RSN8063_CCHURCH_CBGSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.77	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8674	40204628 Mt. Hamilton Road 2007	5.45	4.29	471	strike slip	1.1	4.36	RSN8674_40204628_NCCHRHNN.AT2 RSN8674_40204628_NCCHRHNE.AT2 RSN8674_40204628_NCCHRHNZ.AT2
20125	40204628 Coe Ranch 2007	5.45	18.5	400	strike slip	2	4.88	

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
33	Parkfield Temblor pre-1969 1966	6.19	15.96	527.92	strike slip	1.3	2.27	RSN33_PARKF_TMB205.AT2 RSN33_PARKF_TMB295.AT2 RSN33_PARKF_TMBDWN.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.66	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
125	Friuli, Italy-01 Tolmezzo 1976	6.5	14.97	505.23	Reverse	2.5	1.99	RSN125_FRIULI.A_A-TMZ000.AT2 RSN125_FRIULI.A_A-TMZ270.AT2 RSN125_FRIULI.A_A-TMZ-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.56	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
148	Coyote Lake Gilroy Array #3 1979	5.74	6.75	349.85	strike slip	2.1	3.83	RSN148_COYOTELK_G03050.AT2 RSN148_COYOTELK_G03140.AT2 RSN148_COYOTELK_G03-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.07	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
248	Mammoth Lakes-06 Convict Creek 1980	5.94	6.44	382.12	strike slip	2.6	4.62	RSN248_MAMMOTH.L_L-CVK090.AT RSN248_MAMMOTH.L_L-CVK180.AT RSN248_MAMMOTH.L_L-CVK-UP.AT
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	4.69	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	2.5	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	2.44	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	1.75	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
540	N. Palm Springs Whitewater Trout Farm 1986	6.06	0	425.02	Reverse O	1.8	1.33	RSN540_PALMSPR_WWT180.AT2 RSN540_PALMSPR_WWT270.AT2 RSN540_PALMSPR_WWT-UP.AT2

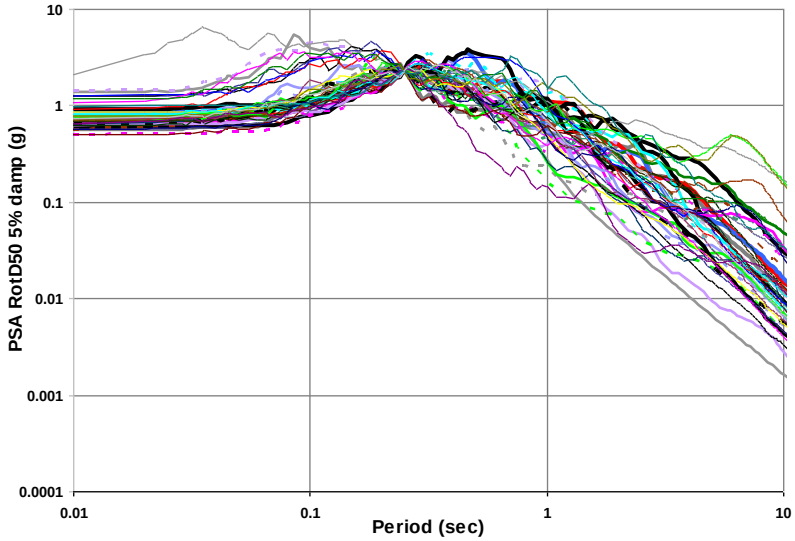
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.37	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
634	Whittier Narrows-01 LA - Fletcher Dr 1987	5.99	11.07	329.06	Reverse O	2.8	3.84	RSN634_WHITTIER.A_A-FLE144.AT2 RSN634_WHITTIER.A_A-FLE234.AT2 RSN634_WHITTIER.A_A-FLE-UP.AT2
692	Whittier Narrows-01 Santa Fe Springs - E.Joslin 1987	5.99	11.47	339.06	Reverse O	1.6	1.46	RSN692_WHITTIER.A_A-EJS048.AT2 RSN692_WHITTIER.A_A-EJS318.AT2 RSN692_WHITTIER.A_A-EJS-UP.AT2
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	1.26	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	2.42	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
828	Cape Mendocino Petrolia 1992	7.01	0	422.17	Reverse	4.2	2.42	RSN828_CAPEMEND_PET000.AT2 RSN828_CAPEMEND_PET090.AT2 RSN828_CAPEMEND_PET-UP.AT2
848	Landers Coolwater 1992	7.28	19.74	352.98	strike slip	4.8	2.09	RSN848_LANDERS_CLW-LN.AT2 RSN848_LANDERS_CLW-TR.AT2 RSN848_LANDERS_CLW-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	4.26	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	1.65	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.88	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.66	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	2.79	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1231	Chi-Chi, Taiwan CHY080 1999	7.62	0.11	496.21	Reverse O	6.4	1.03	RSN1231_CHICHI_CHY080-E.AT2 RSN1231_CHICHI_CHY080-N.AT2 RSN1231_CHICHI_CHY080-V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**08 Northridget** **270** **1000**							**CS Set**
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	4.34	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	1.99	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1549	Chi-Chi, Taiwan TCU129 1999	7.62	1.83	511.18	Reverse O	16.6	1.01	RSN1549_CHICHI_TCU129-E.AT2 RSN1549_CHICHI_TCU129-N.AT2 RSN1549_CHICHI_TCU129-V.AT2
1615	Duzce, Turkey Lamont 1062 1999	7.14	9.14	338	strike slip	10.9	2.75	RSN1615_DUZCE_1062-N.AT2 RSN1615_DUZCE_1062-E.AT2 RSN1615_DUZCE_1062-V.AT2
3943	Tottori, Japan SMN015 2000	6.61	9.1	616.55	strike slip	3.5	2.85	RSN3943_TOTTORI_SMN015NS.AT2 RSN3943_TOTTORI_SMN015EW.AT2 RSN3943_TOTTORI_SMN015UD.AT2
3979	San Simeon, CA Cambria - Hwy 1 Caltrans Bridge 2003	6.52	6.97	362.42	Reverse	6.3	3.53	RSN3979_SANSIMEO_37737090.AT2 RSN3979_SANSIMEO_37737360.AT2 RSN3979_SANSIMEO_37737-UP.AT2
4120	Parkfield-02, CA Parkfield - Gold Hill 2W 2004	6	2.13	290.5	strike slip	5.7	4.76	RSN4120_PARK2004_PG2090.AT2 RSN4120_PARK2004_PG2360.AT2 RSN4120_PARK2004_PG2-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	4.8	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4132	Parkfield-02, CA Parkfield - Vineyard Cany 2E 2004	6	3.69	467.76	strike slip	2.7	2.45	RSN4132_PARK2004_PGD090.AT2 RSN4132_PARK2004_PGD360.AT2 RSN4132_PARK2004_PGD-UP.AT2
4140	Parkfield-02, CA PARKFIELD - UPSAR 03 2004	6	9.49	440.59	strike slip	6.1	3.48	RSN4140_PARK2004_UP03090.AT2 RSN4140_PARK2004_UP03360.AT2 RSN4140_PARK2004_UP03-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	2.5	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4345	Umbria Marche, Italy Assisi-Stallone 1997	6	16.55	376.6	Normal	2.3	3.38	RSN4345_UBMARCHE.P_A-AAL018.A RSN4345_UBMARCHE.P_A-AAL108.A RSN4345_UBMARCHE.P_A-AAL-UP.A
4362	Umbria Marche (aftershock 1), Italy Assisi-Stallone 1997	5.5	16.84	376.6	Normal	1.4	3.32	RSN4362_UBMARCHE.P_E-AAL018.A RSN4362_UBMARCHE.P_E-AAL108.A RSN4362_UBMARCHE.P_E-AAL-DN.A

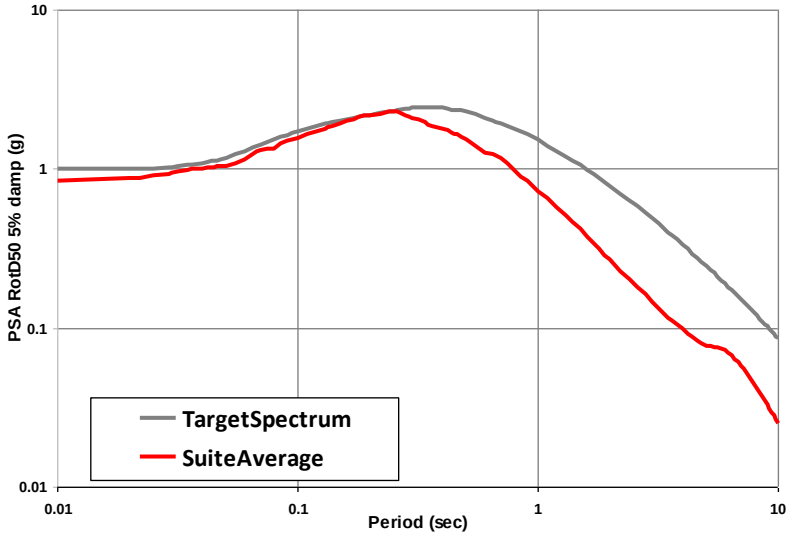
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	1.94	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.75	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.66	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.5	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.91	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	2.18	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	1.85	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**08 Northridget**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	08 Northridget	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	2.11	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.36	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	3.18	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	3.11	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	2.23	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
459	Morgan Hill Gilroy Array #6 1984	6.19	9.85	663.31	strike slip	3.7	2.44	RSN459_MORGAN_G06000.AT2 RSN459_MORGAN_G06090.AT2 RSN459_MORGAN_G06-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	3.02	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
616	Whittier Narrows-01 El Monte - Fairview Av 1987	5.99	0.75	290.63	Reverse O	2.6	3.47	RSN616_WHITTIER.A_A-FAI095.AT2 RSN616_WHITTIER.A_A-FAI185.AT2 RSN616_WHITTIER.A_A-FAI-UP.AT2
619	Whittier Narrows-01 Garvey Res. - Control Bldg 1987	5.99	0.36	468.18	Reverse O	2.2	2.86	RSN619_WHITTIER.A_A-GRV060.AT2 RSN619_WHITTIER.A_A-GRV330.AT2 RSN619_WHITTIER.A_A-GRV-UP.AT2
683	Whittier Narrows-01 Pasadena - Old House Rd 1987	5.99	8.03	397.27	Reverse O	2.2	4.5	RSN683_WHITTIER.A_A-OLD000.AT2 RSN683_WHITTIER.A_A-OLD090.AT2 RSN683_WHITTIER.A_A-OLD-UP.AT2
690	Whittier Narrows-01 San Gabriel - E Grand Ave 1987	5.99	0	401.37	Reverse O	2.5	4.91	RSN690_WHITTIER.A_A-GRN180.AT2 RSN690_WHITTIER.A_A-GRN270.AT2 RSN690_WHITTIER.A_A-GRN-UP.AT2
692	Whittier Narrows-01 Santa Fe Springs - E.Joslin 1987	5.99	11.47	339.06	Reverse O	1.6	1.86	RSN692_WHITTIER.A_A-EJS048.AT2 RSN692_WHITTIER.A_A-EJS318.AT2 RSN692_WHITTIER.A_A-EJS-UP.AT2

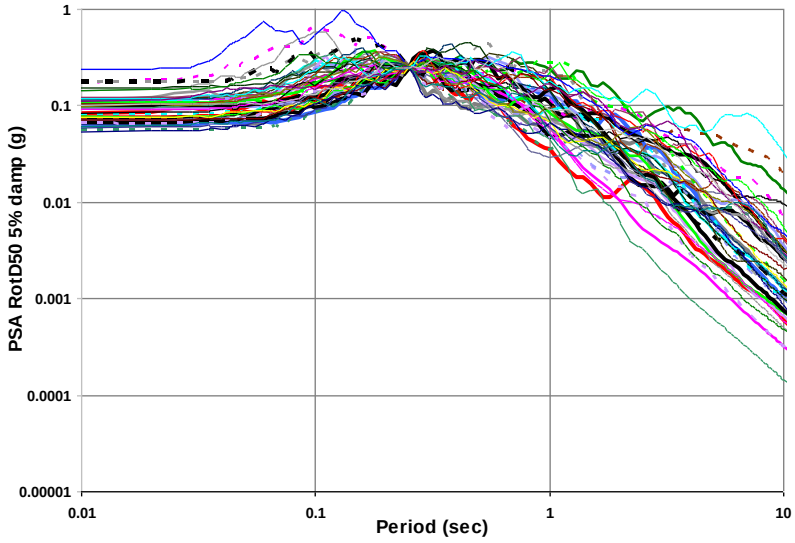
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
706	Whittier Narrows-01 Whittier Narrows Dam upstream 1987	5.99	2.6	298.68	Reverse O	2.5	4.21	RSN706_WHITTIER.A_A-WHD062.AT RSN706_WHITTIER.A_A-WHD152.AT RSN706_WHITTIER.A_A-WHD-UP.AT
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	1.61	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	3.08	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	4.17	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	3.61	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	2.1	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	1.12	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	1.84	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	2.11	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	3.55	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1507	Chi-Chi, Taiwan TCU071 1999	7.62	0	624.85	Reverse O	15.6	0.96	RSN1507_CHICHI_TCU071-E.AT2 RSN1507_CHICHI_TCU071-N.AT2 RSN1507_CHICHI_TCU071-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	2.53	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1615	Duzce, Turkey Lamont 1062 1999	7.14	9.14	338	strike slip	10.9	3.5	RSN1615_DUZCE_1062-N.AT2 RSN1615_DUZCE_1062-E.AT2 RSN1615_DUZCE_1062-V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**08 Northridget** **270** **2500**							**CS Set**
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	4.23	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
3776	Northridge-06 Studio City - Ventura & Coldwater Cy 1994	5.28	8.53	400.44	Reverse	1.4	4.99	RSN3776_NORTH392_CO2092.AT2 RSN3776_NORTH392_CO2182.AT2 RSN3776_NORTH392_CO2-UP.AT2
3947	Tottori, Japan SMNH01 2000	6.61	5.83	446.34	strike slip	4.7	1.02	RSN3947_TOTTORI_SMNH01NS.AT2 RSN3947_TOTTORI_SMNH01EW.AT2 RSN3947_TOTTORI_SMNH01UD.AT2
4065	Parkfield-02, CA PARKFIELD - EADES 2004	6	1.37	383.9	strike slip	2.8	4.03	RSN4065_PARK2004_EADES-90.AT2 RSN4065_PARK2004_EADES360.AT2 RSN4065_PARK2004_EADES-UP.AT2
4140	Parkfield-02, CA PARKFIELD - UPSAR 03 2004	6	9.49	440.59	strike slip	6.1	4.43	RSN4140_PARK2004_UP03090.AT2 RSN4140_PARK2004_UP03360.AT2 RSN4140_PARK2004_UP03-UP.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	3.18	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4212	Niigata, Japan NIG022 2004	6.63	17.57	193.2	Reverse	3.7	2.14	RSN4212_NIIGATA_NIG022NS.AT2 RSN4212_NIIGATA_NIG022EW.AT2 RSN4212_NIIGATA_NIG022UD.AT2
4345	Umbria Marche, Italy Assisi-Stallone 1997	6	16.55	376.6	Normal	2.3	4.3	RSN4345_UBMARCHE.P_A-AAL018.A RSN4345_UBMARCHE.P_A-AAL108.A RSN4345_UBMARCHE.P_A-AAL-UP.A
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	2.47	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.96	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4816	Wenchuan, China Mianzuqingping 2008	7.9	0	551.3	Reverse O	12.4	2.37	RSN4816_WENCHUAN_UA1143.AT2 RSN4816_WENCHUAN_UA1141.AT2 RSN4816_WENCHUAN_UA1142.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.84	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
4895	Chuetsu-oki Kashiwazaki NPP, Unit 5: ground surf 2007	6.8	0	265.5	Reverse	5.2	0.64	RSN4895_CHUETSU_5-G1NS.AT2 RSN4895_CHUETSU_5-G1EW.AT2 RSN4895_CHUETSU_5-G1UD.AT2

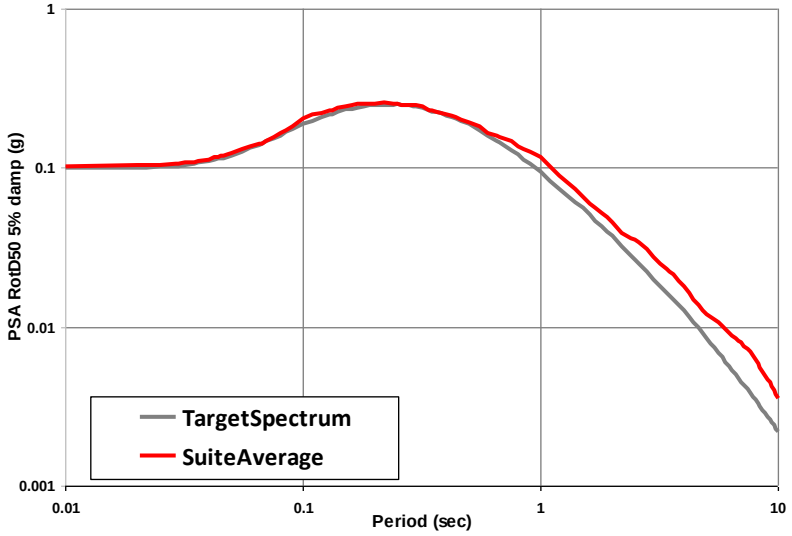
Site	08 Northridget							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	1.16	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	1.41	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6874	Joshua Tree, CA Thousand Palms Post Office 1992	6.1	17.15	333.89	strike slip	5.4	4.57	RSN6874_JOSHUA_5068045.AT2 RSN6874_JOSHUA_5068135.AT2 RSN6874_JOSHUA_5068_UP.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	3.17	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	2.77	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	2.36	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8165	Duzce, Turkey IRIGM 496 1999	7.14	4.21	760	strike slip	999	0.65	RSN8165_DUZCE_496-NS.AT2 RSN8165_DUZCE_496-EW.AT2 RSN8165_DUZCE_496-UP.AT2

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
21	Imperial Valley-05 El Centro Array #9 1955	5.4	13.78	213.44	strike slip	8	2.47	RSN21_IMPVALL.BG_E-ELC000.AT2 RSN21_IMPVALL.BG_E-ELC090.AT2 RSN21_IMPVALL.BG_E-ELC-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.15	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
201	Imperial Valley-07 El Centro Array #3 1979	5.01	14.54	162.94	strike slip	0.3	0.88	RSN201_IMPVALL.A_A-E03140.AT2 RSN201_IMPVALL.A_A-E03230.AT2 RSN201_IMPVALL.A_A-E03-UP.AT2
209	Imperial Valley-08 Westmorland Fire Sta 1979	5.62	9.39	193.67	strike slip	4.8	1.42	RSN209_IMPVALL.BG_F-WSM180.AT RSN209_IMPVALL.BG_F-WSM090.AT RSN209_IMPVALL.BG_F-WSM-UP.AT
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	1.93	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
296	Irpinia, Italy-02 Bagnoli Irpinio 1980	6.2	17.79	649.67	Normal	6.1	3.43	RSN296_ITALY_B-BAG000.AT2 RSN296_ITALY_B-BAG270.AT2 RSN296_ITALY_B-BAG-UP.AT2
308	Taiwan SMART1(5) SMART1 I12 1981	5.9	25.7	275.82	Reverse	3	0.76	RSN308_SMART1.05_05I12EW.AT2 RSN308_SMART1.05_05I12NS.AT2 RSN308_SMART1.05_05I12DN.AT2
309	Taiwan SMART1(5) SMART1 M01 1981	5.9	26.31	268.37	Reverse	3	0.46	RSN309_SMART1.05_05M01EW.AT2 RSN309_SMART1.05_05M01NS.AT2 RSN309_SMART1.05_05M01DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.36	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
360	Coalinga-01 Parkfield - Vineyard Cany 1W 1983	6.36	27.72	284.21	Reverse	8.6	1.2	RSN360_COALINGA.H_H-VC1000.AT2 RSN360_COALINGA.H_H-VC1090.AT2 RSN360_COALINGA.H_H-VC1-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.34	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
423	Coalinga-08 Coalinga-14th & Elm (Old CHP) 1983	5.23	12.68	286.41	strike slip	5	3.83	RSN423_COALINGA_G-CHP000.AT2 RSN423_COALINGA_G-CHP090.AT2 RSN423_COALINGA_G-CHP-UP.AT2

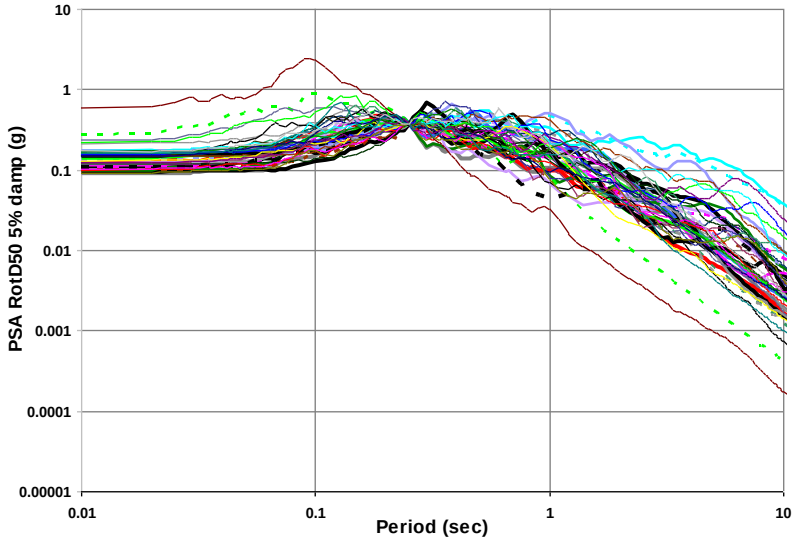
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
448	Morgan Hill Anderson Dam (Downstream) 1984	6.19	3.22	488.77	strike slip	2.1	0.43	RSN448_MORGAN_AND250.AT2 RSN448_MORGAN_AND340.AT2 RSN448_MORGAN_AND-UP.AT2
461	Morgan Hill Halls Valley 1984	6.19	3.45	281.61	strike slip	8.9	0.52	RSN461_MORGAN_HVR150.AT2 RSN461_MORGAN_HVR240.AT2 RSN461_MORGAN_HVR-UP.AT2
464	Morgan Hill Hollister Differential Array #3 1984	6.19	26.42	215.54	strike slip	10.8	1.39	RSN464_MORGAN_HD3255.AT2 RSN464_MORGAN_HD3345.AT2 RSN464_MORGAN_HD3-UP.AT2
470	Morgan Hill San Juan Bautista, 24 Polk St 1984	6.19	27.15	335.5	strike slip	14.7	3.32	RSN470_MORGAN_SJB213.AT2 RSN470_MORGAN_SJB303.AT2 RSN470_MORGAN_SJB-UP.AT2
545	Chalfant Valley-01 Bishop - Paradise Lodge 1986	5.77	14.99	585.12	strike slip	2.3	3.48	RSN545_CHALFANT.B_B-BPL070.AT2 RSN545_CHALFANT.B_B-BPL160.AT2 RSN545_CHALFANT.B_B-BPL-UP.AT2
692	Whittier Narrows-01 Santa Fe Springs - E.Joslin 1987	5.99	11.47	339.06	Reverse O	1.6	0.2	RSN692_WHITTIER.A_A-EJS048.AT2 RSN692_WHITTIER.A_A-EJS318.AT2 RSN692_WHITTIER.A_A-EJS-UP.AT2
713	Whittier Narrows-02 LA - Hollywood Stor FF 1987	5.27	20.99	316.46	Reverse O	5	1.99	RSN713_WHITTIER.B_B-PEL090.AT2 RSN713_WHITTIER.B_B-PEL360.AT2 RSN713_WHITTIER.B_B-PEL-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.33	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.23	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1089	Northridge-01 Topanga - Fire Sta 1994	6.69	10.31	505.97	Reverse	5.1	0.32	RSN1089_NORTHR_TPF360.AT2 RSN1089_NORTHR_TPF270.AT2 RSN1089_NORTHR_TPF-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.23	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.38	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	0.5	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	0.6	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1551	Chi-Chi, Taiwan TCU138 1999	7.62	9.78	652.85	Reverse O	19.6	0.55	RSN1551_CHICHI_TCU138-N.AT2 RSN1551_CHICHI_TCU138-W.AT2 RSN1551_CHICHI_TCU138-V.AT2
2619	Chi-Chi, Taiwan-03 TCU067 1999	6.2	27.66	433.63	Reverse	5.2	0.6	RSN2619_CHICHI.03_TCU067N.AT2 RSN2619_CHICHI.03_TCU067E.AT2 RSN2619_CHICHI.03_TCU067V.AT2
3507	Chi-Chi, Taiwan-06 TCU129 1999	6.3	22.69	511.18	Reverse	6.5	0.42	RSN3507_CHICHI.06_TCU129N.AT2 RSN3507_CHICHI.06_TCU129E.AT2 RSN3507_CHICHI.06_TCU129V.AT2
3576	Taiwan SMART1(5) SMART1 O09 1981	5.9	25.59	329.08	Reverse	2.4	0.99	RSN3576_SMART1.05_05O09EW.AT2 RSN3576_SMART1.05_05O09NS.AT2 RSN3576_SMART1.05_05O09DN.AT2
3686	Whittier Narrows-02 Baldwin Park - N Holly 1987	5.27	11.68	544.68	Reverse O	5.6	3.32	RSN3686_WHITTIER.B_B-NHO180.AT RSN3686_WHITTIER.B_B-NHO270.AT RSN3686_WHITTIER.B_B-NHO-UP.AT
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	0.35	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
4120	Parkfield-02, CA Parkfield - Gold Hill 2W 2004	6	2.13	290.5	strike slip	5.7	0.66	RSN4120_PARK2004_PG2090.AT2 RSN4120_PARK2004_PG2360.AT2 RSN4120_PARK2004_PG2-UP.AT2
4130	Parkfield-02, CA Parkfield - Vineyard Cany 1E 2004	6	1.59	381.27	strike slip	2.6	0.39	RSN4130_PARK2004_PV1090.AT2 RSN4130_PARK2004_PV1360.AT2 RSN4130_PARK2004_PV1-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.1	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.34	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4855	Chuetsu-oki Sanjo 2007	6.8	21.4	245.45	Reverse	13.7	0.68	RSN4855_CHUETSU_65024NS.AT2 RSN4855_CHUETSU_65024EW.AT2 RSN4855_CHUETSU_65024UD.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	0.6	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2

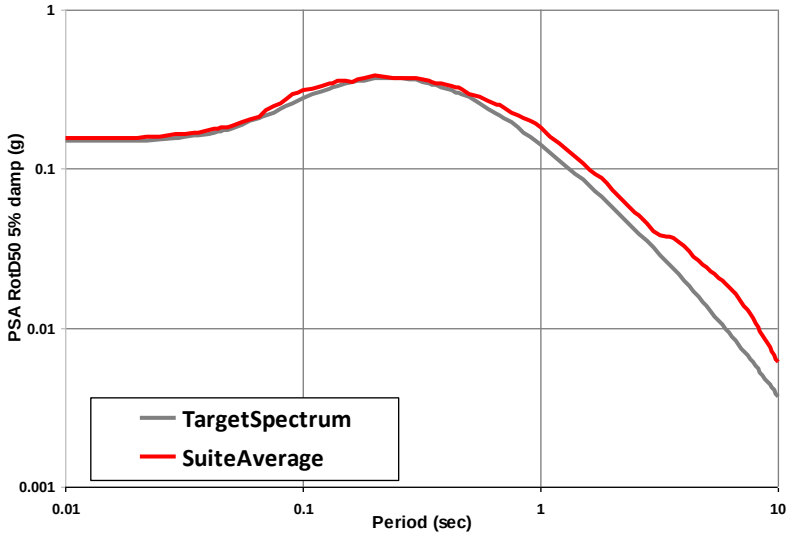
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.13	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
6969	Darfield, New Zealand Styx Mill Transfer Station 2010	7	20.86	247.5	strike slip	12.2	0.69	RSN6969_DARFIELD_SMTCN88W.AT2 RSN6969_DARFIELD_SMTCS02W.AT2 RSN6969_DARFIELD_SMTCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0.44	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8062	Christchurch, New Zealand Canterbury Aero Club 2011	6.2	14.41	280.26	Reverse O	3.8	0.52	RSN8062_CCHURCH_CACSN40E.AT2 RSN8062_CCHURCH_CACSN50W.AT2 RSN8062_CCHURCH_CACSUP.AT2
8063	Christchurch, New Zealand Christchurch Botanical Gardens 2011	6.2	5.52	187	Reverse O	3.8	0.23	RSN8063_CCHURCH_CBGSN89W.AT2 RSN8063_CCHURCH_CBGSS01W.AT2 RSN8063_CCHURCH_CBGSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.3	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8124	Christchurch, New Zealand Riccarton High School 2011	6.2	9.43	293	Reverse O	4.9	0.36	RSN8124_CCHURCH_RHSCN86W.AT2 RSN8124_CCHURCH_RHSCS04W.AT2 RSN8124_CCHURCH_RHSCUP.AT2

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
27	Hollister-02 Hollister City Hall 1961	5.5	17.2	198.77	strike slip	6.4	2.34	RSN27_HOLLISTR_C-HCH181.AT2 RSN27_HOLLISTR_C-HCH271.AT2 RSN27_HOLLISTR_C-HCH-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.12	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
149	Coyote Lake Gilroy Array #4 1979	5.74	4.79	221.78	strike slip	4.8	0.68	RSN149_COYOTELK_G04270.AT2 RSN149_COYOTELK_G04360.AT2 RSN149_COYOTELK_G04-UP.AT2
215	Livermore-01 San Ramon Fire Station 1980	5.8	15.84	384.47	strike slip	13.4	2.87	RSN215_LIVERMOR_A-SRM070.AT2 RSN215_LIVERMOR_A-SRM340.AT2 RSN215_LIVERMOR_A-SRM-UP.AT2
297	Irpinia, Italy-02 Bisaccia 1980	6.2	14.73	496.46	Normal	6.4	2.66	RSN297_ITALY_B-BIS000.AT2 RSN297_ITALY_B-BIS270.AT2 RSN297_ITALY_B-BIS-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	0.54	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
464	Morgan Hill Hollister Differential Array #3 1984	6.19	26.42	215.54	strike slip	10.8	2.07	RSN464_MORGAN_HD3255.AT2 RSN464_MORGAN_HD3345.AT2 RSN464_MORGAN_HD3-UP.AT2
499	Hollister-04 Hollister Differential Array #3 1986	5.45	13.11	215.54	strike slip	8.1	1.56	RSN499_HOLLISTR_D-HD3255.AT2 RSN499_HOLLISTR_D-HD3345.AT2 RSN499_HOLLISTR_D-HD3-UP.AT2
543	Chalfant Valley-01 Benton 1986	5.77	24.25	370.94	strike slip	5.3	2.97	RSN543_CHALFANT.B_B-BEN270.AT2 RSN543_CHALFANT.B_B-BEN360.AT2 RSN543_CHALFANT.B_B-BEN-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.49	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
645	Whittier Narrows-01 LB - Orange Ave 1987	5.99	19.8	344.72	Reverse O	2.9	0.61	RSN645_WHITTIER.A_A-OR2010.AT2 RSN645_WHITTIER.A_A-OR2280.AT2 RSN645_WHITTIER.A_A-OR2-UP.AT2
766	Loma Prieta Gilroy Array #2 1989	6.93	10.38	270.84	Reverse O	2.3	0.48	RSN766_LOMAP_G02000.AT2 RSN766_LOMAP_G02090.AT2 RSN766_LOMAP_G02-UP.AT2

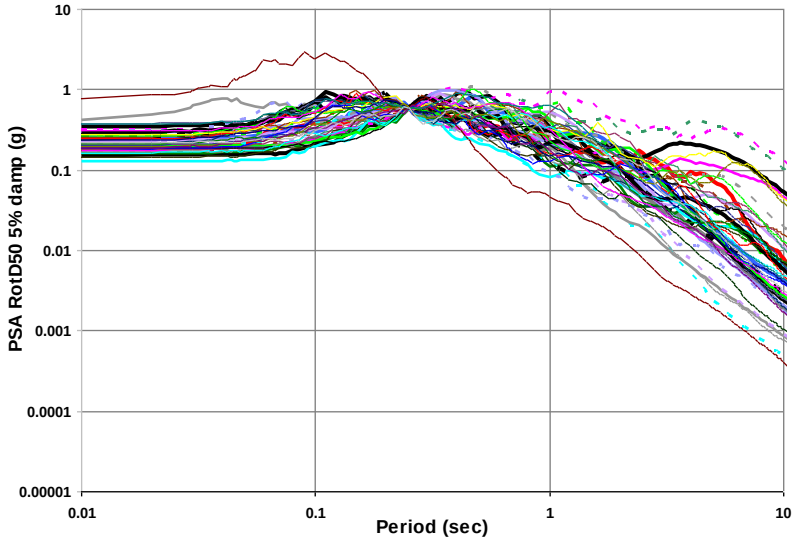
Site Site Vs30 (m/s) Return Period (yr)	**09 SanBernardino** **270** **25**							**CS Set**
767	Loma Prieta Gilroy Array #3 1989	6.93	12.23	349.85	Reverse O	2.3	0.3	RSN767_LOMAP_G03000.AT2 RSN767_LOMAP_G03090.AT2 RSN767_LOMAP_G03-UP.AT2
959	Northridge-01 Canoga Park - Topanga Can 1994	6.69	0	267.49	Reverse	6.4	0.47	RSN959_NORTHR_CNP106.AT2 RSN959_NORTHR_CNP196.AT2 RSN959_NORTHR_CNP-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.34	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1078	Northridge-01 Santa Susana Ground 1994	6.69	1.69	715.12	Reverse	4.1	0.46	
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.24	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.34	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.57	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	0.75	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.3	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.41	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1533	Chi-Chi, Taiwan TCU106 1999	7.62	14.97	451.37	Reverse O	23	1.03	RSN1533_CHICHI_TCU106-E.AT2 RSN1533_CHICHI_TCU106-N.AT2 RSN1533_CHICHI_TCU106-V.AT2
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	0.98	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
2703	Chi-Chi, Taiwan-04 CHY028 1999	6.2	17.63	542.61	strike slip	4.6	0.8	RSN2703_CHICHI.04_CHY028N.AT2 RSN2703_CHICHI.04_CHY028E.AT2 RSN2703_CHICHI.04_CHY028V.AT2

Site Site Vs30 (m/s) Return Period (yr)	**09 SanBernardino** **270** **25**							**CS Set**
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.41	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3473	Chi-Chi, Taiwan-06 TCU078 1999	6.3	5.72	443.04	Reverse	2.6	0.4	RSN3473_CHICHI.06_TCU078N.AT2 RSN3473_CHICHI.06_TCU078E.AT2 RSN3473_CHICHI.06_TCU078V.AT2
3553	Fruili, Italy-03 Tarcento 1976	5.5	3.76	629.08	Reverse	1.5	1.83	RSN3553_FRIULI.P_TRT000.AT2 RSN3553_FRIULI.P_TRT090.AT2 RSN3553_FRIULI.P_TRT-UP.AT2
3753	Landers Fun Valley 1992	7.28	25.02	388.63	strike slip	22.4	0.72	RSN3753_LANDERS_FVR045.AT2 RSN3753_LANDERS_FVR135.AT2 RSN3753_LANDERS_FVR-UP.AT2
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	0.52	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
4106	Parkfield-02, CA Parkfield - Cholame 12W 2004	6	15.49	359.03	strike slip	9.2	2.76	RSN4106_PARK2004_C12090.AT2 RSN4106_PARK2004_C12360.AT2 RSN4106_PARK2004_C12-UP.AT2
4351	Umbria Marche, Italy Matelica 1997	6	22.75	437	Normal	3.3	1.91	RSN4351_UBMARCHE.P_A-MTL000.A RSN4351_UBMARCHE.P_A-MTL270.A RSN4351_UBMARCHE.P_A-MTL-DN.A
4781	Wenchuan, China Jiangyouchonghua 2008	7.9	27.23	430.47	Reverse O	18.4	0.57	RSN4781_WENCHUAN_UA1027.AT2 RSN4781_WENCHUAN_UA1028.AT2 RSN4781_WENCHUAN_UA1029.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	0.87	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5260	Chuetsu-oki NIG014 2007	6.8	21.37	128.12	Reverse	18.7	1.39	RSN5260_CHUETSU_NIG014NS.AT2 RSN5260_CHUETSU_NIG014EW.AT2 RSN5260_CHUETSU_NIG014UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0.56	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5265	Chuetsu-oki NIG019 2007	6.8	15.78	372.33	Reverse	7.7	0.42	RSN5265_CHUETSU_NIG019NS.AT2 RSN5265_CHUETSU_NIG019EW.AT2 RSN5265_CHUETSU_NIG019UD.AT2
5836	El Mayor-Cucapah El Centro - Meloland Geot. Array 2010	7.2	28.53	264.57	strike slip	11	0.58	RSN5836_SIERRA.MEX_EMO360.AT2 RSN5836_SIERRA.MEX_EMO270.AT2 RSN5836_SIERRA.MEX_EMO-UP.AT2

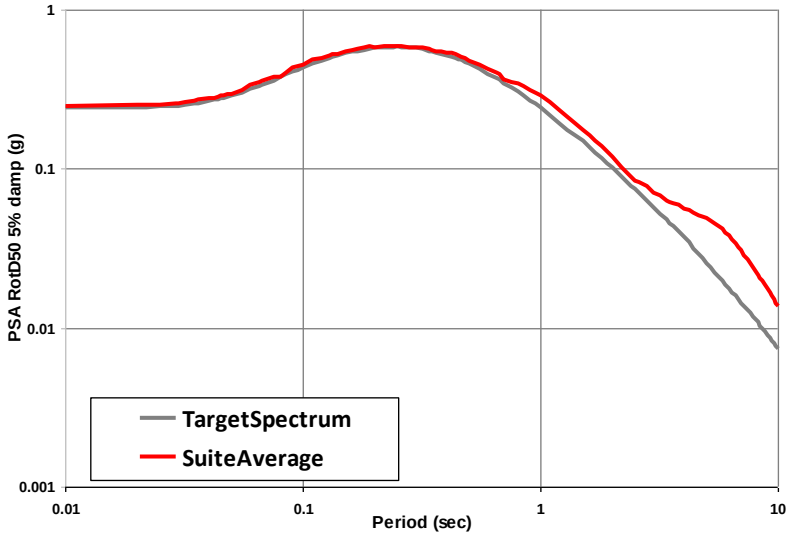
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
5991	El Mayor-Cucapah El Centro Array #10 2010	7.2	19.36	202.85	strike slip	10.6	0.41	RSN5991_SIERRA.MEX_E10320.AT2 RSN5991_SIERRA.MEX_E10230.AT2 RSN5991_SIERRA.MEX_E10-UP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0.65	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
6988	Darfield, New Zealand WSFC 2010	7	24.36	344.02	strike slip	14.8	2.5	RSN6988_DARFIELD_WSFCN38W.AT RSN6988_DARFIELD_WSFCS52W.AT2 RSN6988_DARFIELD_WSFCUP.AT2
7408	Wenchuan, China-17 Lixiantaoping 2008	5.1	26.27	350.82	strike slip	1.6	4.13	RSN7408_WENCHUAN.17_51LXTNS. RSN7408_WENCHUAN.17_51LXTEW. RSN7408_WENCHUAN.17_51LXTUD.
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.45	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.38	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8630	40204628 Mt. Pleasant High School 2007	5.45	8.33	377	strike slip	3.6	1.75	RSN8630_40204628_N1793HNN.AT2 RSN8630_40204628_N1793HNE.AT2 RSN8630_40204628_N1793HNZ.AT2

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.53	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
97	Point Mugu Port Hueneme 1973	5.65	15.48	248.98	Reverse	4.7	3.91	RSN97_PTMUGU_PHN180.AT2 RSN97_PTMUGU_PHN270.AT2 RSN97_PTMUGU_PHN-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.34	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
243	Mammoth Lakes-04 Long Valley Dam (Upr L Abut) 1980	5.7	12.75	537.16	strike slip	3.4	1.64	RSN243_MAMMOTH.AH_B-LUL000.A RSN243_MAMMOTH.AH_B-LUL090.A RSN243_MAMMOTH.AH_B-LUL-UP.A
290	Irpinia, Italy-01 Mercato San Severino 1980	6.9	29.79	428.57	Normal	12.7	1.59	RSN290_ITALY_A-MER000.AT2 RSN290_ITALY_A-MER270.AT2 RSN290_ITALY_A-MER-UP.AT2
311	Taiwan SMART1(5) SMART1 O01 1981	5.9	27.3	267.67	Reverse	2.3	2.69	RSN311_SMART1.05_05O01EW.AT2 RSN311_SMART1.05_05O01NS.AT2 RSN311_SMART1.05_05O01DN.AT2
315	Westmorland Niland Fire Station 1981	5.9	15.16	212	strike slip	4.8	2.06	RSN315_WESMORL_NIL000.AT2 RSN315_WESMORL_NIL090.AT2 RSN315_WESMORL_NIL-UP.AT2
614	Whittier Narrows-01 Downey - Birchdale 1987	5.99	14.9	245.06	Reverse O	1.7	0.97	RSN614_WHITTIER.A_A-BIR090.AT2 RSN614_WHITTIER.A_A-BIR180.AT2 RSN614_WHITTIER.A_A-BIR-UP.AT2
739	Loma Prieta Anderson Dam (Downstream) 1989	6.93	19.9	488.77	Reverse O	5.2	0.88	RSN739_LOMAP_AND250.AT2 RSN739_LOMAP_AND340.AT2 RSN739_LOMAP_AND-UP.AT2
767	Loma Prieta Gilroy Array #3 1989	6.93	12.23	349.85	Reverse O	2.3	0.47	RSN767_LOMAP_G03000.AT2 RSN767_LOMAP_G03090.AT2 RSN767_LOMAP_G03-UP.AT2
986	Northridge-01 LA - Brentwood VA Hospital 1994	6.69	12.92	416.58	Reverse	6	1.22	RSN986_NORTHR_BVA195.AT2 RSN986_NORTHR_BVA285.AT2 RSN986_NORTHR_BVA-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	0.8	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2

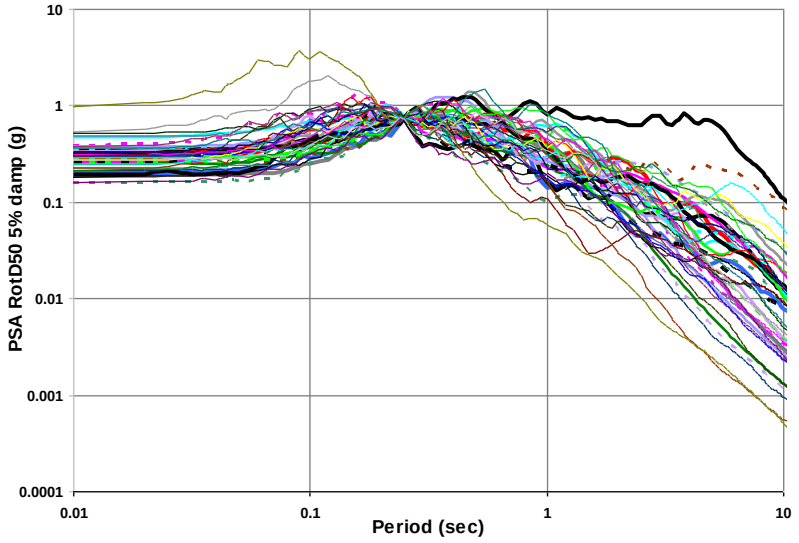
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
1115	Kobe, Japan Sakai 1995	6.9	28.08	256	strike slip	11.6	1.27	RSN1115_KOBE_SKI000.AT2 RSN1115_KOBE_SKI090.AT2 RSN1115_KOBE_SKI-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.38	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.54	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1161	Kocaeli, Turkey Gebze 1999	7.51	7.57	792	strike slip	5.8	1.8	RSN1161_KOCAELI_GBZ000.AT2 RSN1161_KOCAELI_GBZ270.AT2 RSN1161_KOCAELI_GBZ-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.9	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	1.18	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1480	Chi-Chi, Taiwan TCU036 1999	7.62	19.83	478.07	Reverse O	14.8	1.97	RSN1480_CHICHI_TCU036-E.AT2 RSN1480_CHICHI_TCU036-N.AT2 RSN1480_CHICHI_TCU036-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.4	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1498	Chi-Chi, Taiwan TCU059 1999	7.62	17.11	272.67	Reverse O	21.8	1.98	RSN1498_CHICHI_TCU059-E.AT2 RSN1498_CHICHI_TCU059-N.AT2 RSN1498_CHICHI_TCU059-V.AT2
2390	Chi-Chi, Taiwan-02 TCU078 1999	5.9	13.94	443.04	Reverse	4.1	3.83	RSN2390_CHICHI.02_TCU078N.AT2 RSN2390_CHICHI.02_TCU078E.AT2 RSN2390_CHICHI.02_TCU078V.AT2
2708	Chi-Chi, Taiwan-04 CHY034 1999	6.2	28.45	378.75	strike slip	5.4	2.69	RSN2708_CHICHI.04_CHY034N.AT2 RSN2708_CHICHI.04_CHY034W.AT2 RSN2708_CHICHI.04_CHY034V.AT2
2709	Chi-Chi, Taiwan-04 CHY035 1999	6.2	25.01	573.04	strike slip	4.1	1.87	RSN2709_CHICHI.04_CHY035N.AT2 RSN2709_CHICHI.04_CHY035E.AT2 RSN2709_CHICHI.04_CHY035V.AT2
3765	Northridge-04 Pacoima Kagel Canyon 1994	5.93	25.63	508.08	Reverse O	5.6	4.08	RSN3765_NORTH142_PKC090.AT2 RSN3765_NORTH142_PKC360.AT2 RSN3765_NORTH142_PKC-UP.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
4013	San Simeon, CA San Antonio Dam - Toe 2003	6.52	16.17	509.04	Reverse	6.6	2.49	RSN4013_SANSIMEO_36258021.AT2 RSN4013_SANSIMEO_36258111.AT2 RSN4013_SANSIMEO_36258-UP.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.66	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4096	Parkfield-02, CA Bear Valley Ranch, Parkfield, CA, USA 2004	6	3.38	527.95	strike slip	2.3	1.58	RSN4096_PARK2004_61022-90.AT2 RSN4096_PARK2004_61022360.AT2 RSN4096_PARK2004_61022-UP.AT2
4102	Parkfield-02, CA Parkfield - Cholame 3W 2004	6	2.55	230.57	strike slip	1.6	0.92	RSN4102_PARK2004_C03090.AT2 RSN4102_PARK2004_C03360.AT2 RSN4102_PARK2004_C03-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	1.63	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4137	Parkfield-02, CA Parkfield - Vineyard Cany 6W 2004	6	13.33	392.24	strike slip	4.6	2.05	RSN4137_PARK2004_VC6090.AT2 RSN4137_PARK2004_VC6360.AT2 RSN4137_PARK2004_VC6-UP.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	1.6	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4218	Niigata, Japan NIG028 2004	6.63	0.46	430.71	Reverse	3.5	0.37	RSN4218_NIIGATA_NIG028NS.AT2 RSN4218_NIIGATA_NIG028EW.AT2 RSN4218_NIIGATA_NIG028UD.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.24	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4781	Wenchuan, China Jiangyouchonghua 2008	7.9	27.23	430.47	Reverse O	18.4	0.89	RSN4781_WENCHUAN_UA1027.AT2 RSN4781_WENCHUAN_UA1028.AT2 RSN4781_WENCHUAN_UA1029.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	1.4	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
4880	Chuetsu-oki Hinodecho Yoshida Tsubame City 2007	6.8	20.44	261.55	Reverse	12	1.73	RSN4880_CHUETSU_65085NS.AT2 RSN4880_CHUETSU_65085EW.AT2 RSN4880_CHUETSU_65085UD.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	1.36	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2

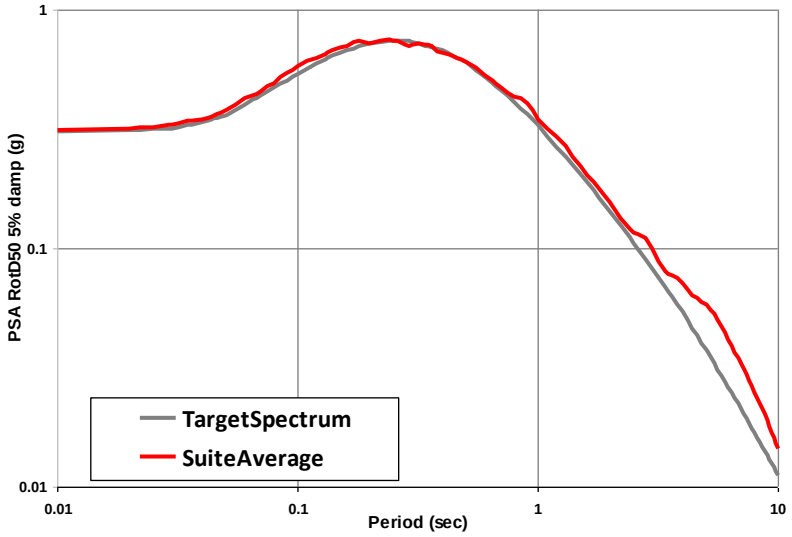
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
5274	Chuetsu-oki NIG028 2007	6.8	15.32	430.71	Reverse	11.1	1.74	RSN5274_CHUETSU_NIG028NS.AT2 RSN5274_CHUETSU_NIG028EW.AT2 RSN5274_CHUETSU_NIG028UD.AT2
5783	Iwate Semine Kurihara City 2008	6.9	28.9	362.57	Reverse	9.3	1.61	RSN5783_IWATE_54026NS.AT2 RSN5783_IWATE_54026EW.AT2 RSN5783_IWATE_54026UD.AT2
5815	Iwate Yuzawa 2008	6.9	22.41	655.45	Reverse	7.2	0.93	RSN5815_IWATE_44BC1NS.AT2 RSN5815_IWATE_44BC1EW.AT2 RSN5815_IWATE_44BC1UD.AT2
5975	El Mayor-Cucapah Calexico Fire Station 2010	7.2	19.12	231.23	strike slip	18.6	1	RSN5975_SIERRA.MEX_CXO360.AT2 RSN5975_SIERRA.MEX_CXO090.AT2 RSN5975_SIERRA.MEX_CXO-UP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	1.03	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
7232	Wenchuan, China-08 Anxianyongan 2008	5.2	22.15	511.16	Reverse	2.8	3.84	RSN7232_WENCHUAN.08_51AXYNS. RSN7232_WENCHUAN.08_51AXYEW RSN7232_WENCHUAN.08_51AXYUD.
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.6	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.23	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.43	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
178	Imperial Valley-06 El Centro Array #3 1979	6.53	10.79	162.94	strike slip	4.7	0.98	RSN178_IMPVALL.H_H-E03140.AT2 RSN178_IMPVALL.H_H-E03230.AT2 RSN178_IMPVALL.H_H-E03-UP.AT2
236	Mammoth Lakes-03 Convict Creek 1980	5.91	2.67	382.12	strike slip	2.4	1.86	RSN236_MAMMOTH.AH_A-CVK090.A RSN236_MAMMOTH.AH_A-CVK180.A RSN236_MAMMOTH.AH_A-CVK-UP.A
284	Irpinia, Italy-01 Auletta 1980	6.9	9.52	476.62	Normal	12.9	4.89	RSN284_ITALY_A-AUL000.AT2 RSN284_ITALY_A-AUL270.AT2 RSN284_ITALY_A-AUL-UP.AT2
290	Irpinia, Italy-01 Mercato San Severino 1980	6.9	29.79	428.57	Normal	12.7	2.01	RSN290_ITALY_A-MER000.AT2 RSN290_ITALY_A-MER270.AT2 RSN290_ITALY_A-MER-UP.AT2
311	Taiwan SMART1(5) SMART1 O01 1981	5.9	27.3	267.67	Reverse	2.3	3.39	RSN311_SMART1.05_05O01EW.AT2 RSN311_SMART1.05_05O01NS.AT2 RSN311_SMART1.05_05O01DN.AT2
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	1.39	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	1.07	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
346	Coalinga-01 Parkfield - Fault Zone 8 1983	6.36	28.58	308.84	Reverse	5.1	2.17	RSN346_COALINGA.H_H-Z08000.AT2 RSN346_COALINGA.H_H-Z08090.AT2 RSN346_COALINGA.H_H-Z08-UP.AT2
464	Morgan Hill Hollister Differential Array #3 1984	6.19	26.42	215.54	strike slip	10.8	4.11	RSN464_MORGAN_HD3255.AT2 RSN464_MORGAN_HD3345.AT2 RSN464_MORGAN_HD3-UP.AT2
562	Chalfant Valley-04 Bishop - LADWP South St 1986	5.44	23.99	303.47	strike slip	2	1.96	RSN562_CHALFANT.B_D-LAD180.AT2 RSN562_CHALFANT.B_D-LAD270.AT2 RSN562_CHALFANT.B_D-LAD-UP.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.99	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	0.83	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
986	Northridge-01 LA - Brentwood VA Hospital 1994	6.69	12.92	416.58	Reverse	6	1.53	RSN986_NORTHR_BVA195.AT2 RSN986_NORTHR_BVA285.AT2 RSN986_NORTHR_BVA-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.67	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1208	Chi-Chi, Taiwan CHY046 1999	7.62	24.1	442.15	Reverse O	19.1	1.63	RSN1208_CHICHI_CHY046-E.AT2 RSN1208_CHICHI_CHY046-N.AT2 RSN1208_CHICHI_CHY046-V.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	1.49	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1238	Chi-Chi, Taiwan CHY092 1999	7.62	22.69	253.72	Reverse O	25.8	3.62	RSN1238_CHICHI_CHY092-N.AT2 RSN1238_CHICHI_CHY092-W.AT2 RSN1238_CHICHI_CHY092-V.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	1.77	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	1.75	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
2618	Chi-Chi, Taiwan-03 TCU065 1999	6.2	25.17	305.85	Reverse	3.6	1.48	RSN2618_CHICHI.03_TCU065N.AT2 RSN2618_CHICHI.03_TCU065E.AT2 RSN2618_CHICHI.03_TCU065V.AT2
2635	Chi-Chi, Taiwan-03 TCU089 1999	6.2	5.93	671.52	Reverse	2.9	4.03	RSN2635_CHICHI.03_TCU089N.AT2 RSN2635_CHICHI.03_TCU089E.AT2 RSN2635_CHICHI.03_TCU089V.AT2
2708	Chi-Chi, Taiwan-04 CHY034 1999	6.2	28.45	378.75	strike slip	5.4	3.39	RSN2708_CHICHI.04_CHY034N.AT2 RSN2708_CHICHI.04_CHY034W.AT2 RSN2708_CHICHI.04_CHY034V.AT2
2752	Chi-Chi, Taiwan-04 CHY101 1999	6.2	21.62	258.89	strike slip	8.1	1.56	RSN2752_CHICHI.04_CHY101N.AT2 RSN2752_CHICHI.04_CHY101E.AT2 RSN2752_CHICHI.04_CHY101V.AT2

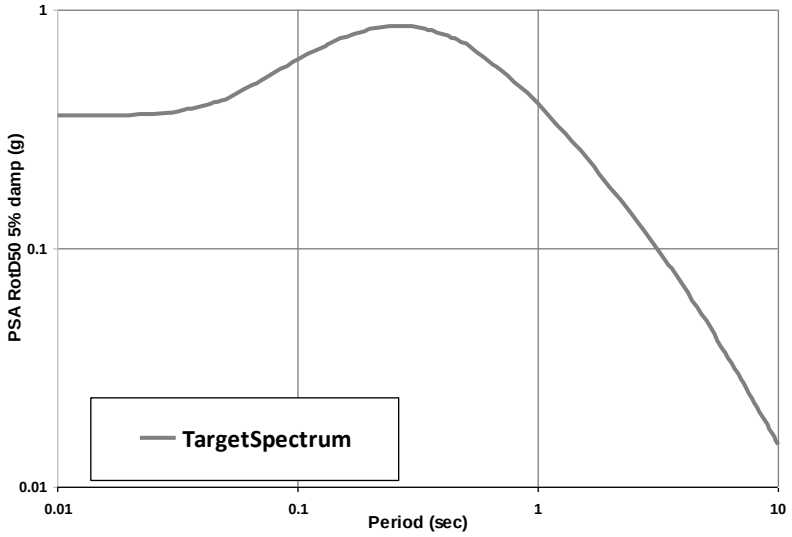
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
3749	Cape Mendocino Fortuna Fire Station 1992	7.01	16.54	355.18	Reverse	4.8	1.04	RSN3749_CAPEMEND_FFT270.AT2 RSN3749_CAPEMEND_FFT360.AT2 RSN3749_CAPEMEND_FFT-UP.AT2
3943	Tottori, Japan SMN015 2000	6.61	9.1	616.55	strike slip	3.5	1.16	RSN3943_TOTTORI_SMN015NS.AT2 RSN3943_TOTTORI_SMN015EW.AT2 RSN3943_TOTTORI_SMN015UD.AT2
4102	Parkfield-02, CA Parkfield - Cholame 3W 2004	6	2.55	230.57	strike slip	1.6	1.16	RSN4102_PARK2004_C03090.AT2 RSN4102_PARK2004_C03360.AT2 RSN4102_PARK2004_C03-UP.AT2
4110	Parkfield-02, CA Parkfield - Fault Zone 6 2004	6	0.87	266.65	strike slip	3.2	2.6	RSN4110_PARK2004_Z06090.AT2 RSN4110_PARK2004_Z06360.AT2 RSN4110_PARK2004_Z06-UP.AT2
4129	Parkfield-02, CA PARKFIELD - TEMBLOR 2004	6	12.29	524.69	strike slip	3.6	2.06	RSN4129_PARK2004_36510-90.AT2 RSN4129_PARK2004_36510360.AT2 RSN4129_PARK2004_36510-UP.AT2
4204	Niigata, Japan NIG014 2004	6.63	25.14	128.12	Reverse	18.5	2.01	RSN4204_NIIGATA_NIG014NS.AT2 RSN4204_NIIGATA_NIG014EW.AT2 RSN4204_NIIGATA_NIG014UD.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	1.34	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4218	Niigata, Japan NIG028 2004	6.63	0.46	430.71	Reverse	3.5	0.46	RSN4218_NIIGATA_NIG028NS.AT2 RSN4218_NIIGATA_NIG028EW.AT2 RSN4218_NIIGATA_NIG028UD.AT2
4455	Montenegro, Yugo. Herceg Novi - O.S.D. Paviviv 1979	7.1	23.59	585.04	Reverse	5	0.93	RSN4455_MONTENE.GRO_HRZ000.A RSN4455_MONTENE.GRO_HRZ090.A RSN4455_MONTENE.GRO_HRZ-V.AT
4513	L'Aquila (aftershock 1), Italy L'Aquila - Parking 2009	5.6	5.07	717	Normal O	3.7	4.35	RSN4513_L-AQUILA.A_AM383XTE.AT RSN4513_L-AQUILA.A_AM383YLN.AT RSN4513_L-AQUILA.A_AM383ZUP.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.31	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4781	Wenchuan, China Jiangyouchonghua 2008	7.9	27.23	430.47	Reverse O	18.4	1.12	RSN4781_WENCHUAN_UA1027.AT2 RSN4781_WENCHUAN_UA1028.AT2 RSN4781_WENCHUAN_UA1029.AT2
5260	Chuetsu-oki NIG014 2007	6.8	21.37	128.12	Reverse	18.7	2.75	RSN5260_CHUETSU_NIG014NS.AT2 RSN5260_CHUETSU_NIG014EW.AT2 RSN5260_CHUETSU_NIG014UD.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
6013	El Mayor-Cucapah El Centro - Meadows Union School 2010	7.2	27.81	276.25	strike slip	15.3	1.4	RSN6013_SIERRA.MEX_2027B360.AT RSN6013_SIERRA.MEX_2027A090.AT RSN6013_SIERRA.MEX_2027C-UP.AT
6059	Big Bear-01 Morongo Valley Fire Station 1992	6.46	27.96	396.41	strike slip	7.7	2.23	RSN6059_BIGBEAR_MVH045.AT2 RSN6059_BIGBEAR_MVH135.AT2 RSN6059_BIGBEAR_MVH-UP.AT2
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	1.01	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6915	Darfield, New Zealand Heathcote Valley Primary School 2010	7	24.36	422	strike slip	8.3	0.53	RSN6915_DARFIELD_HVSCS26W.AT2 RSN6915_DARFIELD_HVSCS64E.AT2 RSN6915_DARFIELD_HVSCUP.AT2
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	1.06	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6961	Darfield, New Zealand RKAC 2010	7	13.37	295.74	strike slip	12.7	1.89	RSN6961_DARFIELD_RKACN14E.AT2 RSN6961_DARFIELD_RKACS76E.AT2 RSN6961_DARFIELD_RKACUP.AT2
7232	Wenchuan, China-08 Anxianyongan 2008	5.2	22.15	511.16	Reverse	2.8	4.84	RSN7232_WENCHUAN.08_51AXYNS. RSN7232_WENCHUAN.08_51AXYEW RSN7232_WENCHUAN.08_51AXYUD.

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records

Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
1	Helena, Montana-01 Carroll College 1935	6	2.07	593.35	strike slip	1.2	0	RSN1_HELENA.A_A-HMC180.AT2 RSN1_HELENA.A_A-HMC270.AT2 RSN1_HELENA.A_A-HMCDWN.AT2
138	Tabas, Iran Boshrooyeh 1978	7.35	24.07	324.57	Reverse	14.6	0	RSN138_TABAS_BOS-L1.AT2 RSN138_TABAS_BOS-T1.AT2 RSN138_TABAS_BOS-V1.AT2
161	Imperial Valley-06 Brawley Airport 1979	6.53	8.54	208.71	strike slip	4	0	RSN161_IMPVALL.H_H-BRA225.AT2 RSN161_IMPVALL.H_H-BRA315.AT2 RSN161_IMPVALL.H_H-BRA-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
178	Imperial Valley-06 El Centro Array #3 1979	6.53	10.79	162.94	strike slip	4.7	0	RSN178_IMPVALL.H_H-E03140.AT2 RSN178_IMPVALL.H_H-E03230.AT2 RSN178_IMPVALL.H_H-E03-UP.AT2
187	Imperial Valley-06 Parachute Test Site 1979	6.53	12.69	348.69	strike slip	6.5	0	RSN187_IMPVALL.H_H-PTS225.AT2 RSN187_IMPVALL.H_H-PTS315.AT2 RSN187_IMPVALL.H_H-PTS-UP.AT2
232	Mammoth Lakes-01 Mammoth Lakes H. S. 1980	6.06	4.48	346.82	Normal O	5.3	0	RSN232_MAMMOTH.I_I-MLS254.AT2 RSN232_MAMMOTH.I_I-MLS344.AT2 RSN232_MAMMOTH.I_I-MLS-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	0	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	0	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	0	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
346	Coalinga-01 Parkfield - Fault Zone 8 1983	6.36	28.58	308.84	Reverse	5.1	0	RSN346_COALINGA.H_H-Z08000.AT2 RSN346_COALINGA.H_H-Z08090.AT2 RSN346_COALINGA.H_H-Z08-UP.AT2
529	N. Palm Springs North Palm Springs 1986	6.06	0	344.67	Reverse O	1.7	0	RSN529_PALMSPR_NPS210.AT2 RSN529_PALMSPR_NPS300.AT2 RSN529_PALMSPR_NPS-UP.AT2

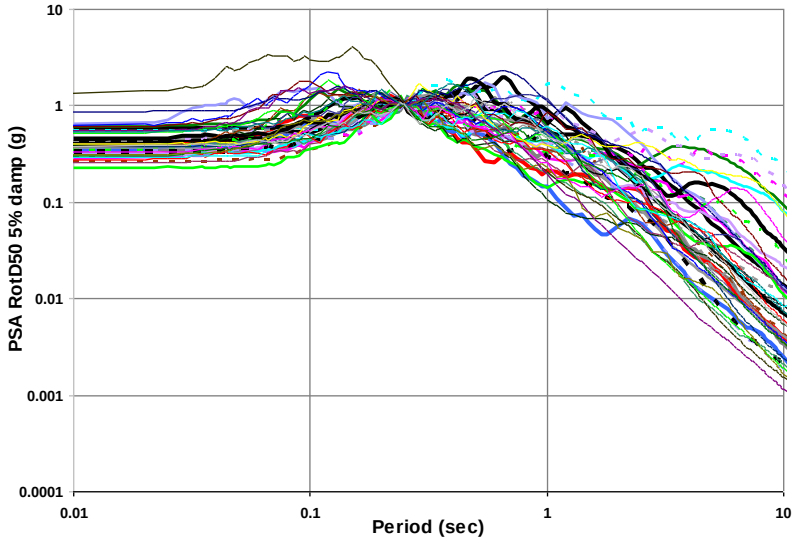
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	0	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
1077	Northridge-01 Santa Monica City Hall 1994	6.69	17.28	336.2	Reverse	5.7	0	RSN1077_NORTHR_STM090.AT2 RSN1077_NORTHR_STM360.AT2 RSN1077_NORTHR_STM-UP.AT2
1082	Northridge-01 Sun Valley - Roscoe Blvd 1994	6.69	5.59	320.93	Reverse	5.8	0	RSN1082_NORTHR_RO3000.AT2 RSN1082_NORTHR_RO3090.AT2 RSN1082_NORTHR_RO3-UP.AT2
1091	Northridge-01 Vasquez Rocks Park 1994	6.69	23.1	996.43	Reverse	4.1	0	RSN1091_NORTHR_VAS000.AT2 RSN1091_NORTHR_VAS090.AT2 RSN1091_NORTHR_VAS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1182	Chi-Chi, Taiwan CHY006 1999	7.62	9.76	438.19	Reverse O	5.1	0	RSN1182_CHICHI_CHY006-N.AT2 RSN1182_CHICHI_CHY006-W.AT2 RSN1182_CHICHI_CHY006-V.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	0	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	0	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1605	Duzce, Turkey Duzce 1999	7.14	0	281.86	strike slip	7.1	0	RSN1605_DUZCE_DZC180.AT2 RSN1605_DUZCE_DZC270.AT2 RSN1605_DUZCE_DZC-UP.AT2
2623	Chi-Chi, Taiwan-03 TCU072 1999	6.2	21.18	468.14	Reverse	6.2	0	RSN2623_CHICHI.03_TCU072N.AT2 RSN2623_CHICHI.03_TCU072E.AT2 RSN2623_CHICHI.03_TCU072V.AT2
2655	Chi-Chi, Taiwan-03 TCU122 1999	6.2	18.1	475.46	Reverse	2.8	0	RSN2655_CHICHI.03_TCU122N.AT2 RSN2655_CHICHI.03_TCU122E.AT2 RSN2655_CHICHI.03_TCU122V.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
2699	Chi-Chi, Taiwan-04 CHY024 1999	6.2	19.67	427.73	strike slip	7.8	0	RSN2699_CHICHI.04_CHY024N.AT2 RSN2699_CHICHI.04_CHY024E.AT2 RSN2699_CHICHI.04_CHY024V.AT2
3575	Taiwan SMART1(5) SMART1 O06 1981	5.9	23.48	293.46	Reverse	2.5	0	RSN3575_SMART1.05_05O06EW.AT2 RSN3575_SMART1.05_05O06NS.AT2 RSN3575_SMART1.05_05O06DN.AT2
3576	Taiwan SMART1(5) SMART1 O09 1981	5.9	25.59	329.08	Reverse	2.4	0	RSN3576_SMART1.05_05O09EW.AT2 RSN3576_SMART1.05_05O09NS.AT2 RSN3576_SMART1.05_05O09DN.AT2
3748	Cape Mendocino Ferndale Fire Station 1992	7.01	16.64	387.95	Reverse	5.8	0	RSN3748_CAPEMEND_FFS270.AT2 RSN3748_CAPEMEND_FFS360.AT2 RSN3748_CAPEMEND_FFS-UP.AT2
3753	Landers Fun Valley 1992	7.28	25.02	388.63	strike slip	22.4	0	RSN3753_LANDERS_FVR045.AT2 RSN3753_LANDERS_FVR135.AT2 RSN3753_LANDERS_FVR-UP.AT2
3774	Northridge-06 LA - Chalon Rd 1994	5.28	12.98	740.05	Reverse	1.5	0	RSN3774_NORTH392_CHL070.AT2 RSN3774_NORTH392_CHL160.AT2 RSN3774_NORTH392_CHL-UP.AT2
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	0	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	0	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
4862	Chuetsu-oki Shiura Nagaoka 2007	6.8	10.61	336.93	Reverse	8.5	0	RSN4862_CHUETSU_65035NS.AT2 RSN4862_CHUETSU_65035EW.AT2 RSN4862_CHUETSU_65035UD.AT2
4894	Chuetsu-oki Kashiwazaki NPP, Unit 1: ground surf 2007	6.8	0	329	Reverse	5.7	0	RSN4894_CHUETSU_1-G1NS.AT2 RSN4894_CHUETSU_1-G1EW.AT2 RSN4894_CHUETSU_1-G1UD.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	0	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5783	Iwate Semine Kurihara City 2008	6.9	28.9	362.57	Reverse	9.3	0	RSN5783_IWATE_54026NS.AT2 RSN5783_IWATE_54026EW.AT2 RSN5783_IWATE_54026UD.AT2

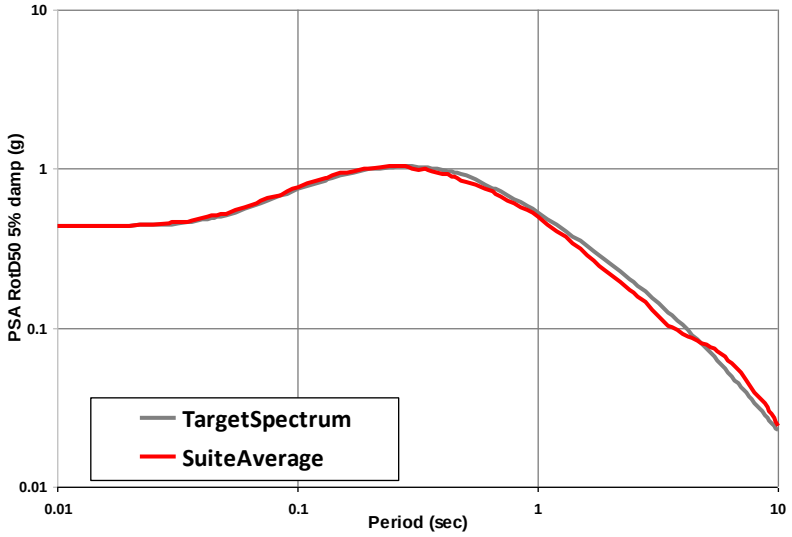
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	0	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
6966	Darfield, New Zealand Shirley Library 2010	7	22.33	207	strike slip	11	0	RSN6966_DARFIELD_SHLCS40W.AT2 RSN6966_DARFIELD_SHLCS50E.AT2 RSN6966_DARFIELD_SHLCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	0	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8110	Christchurch, New Zealand MQZ 2011	6.2	13.91	649.67	Reverse O	3.1	0	RSN8110_CCHURCH_MQZE.AT2 RSN8110_CCHURCH_MQZN.AT2 RSN8110_CCHURCH_MQZUP.AT2
8771	14383980 Barre Substation 2008	5.39	23.15	265.59	Reverse O	2.1	0	RSN8771_14383980_CIBREHNN.AT2 RSN8771_14383980_CIBREHNE.AT2 RSN8771_14383980_CIBREHNZ.AT2
8897	14383980 Covina - Cypress & Azusa 2008	5.39	18.61	295.71	Reverse O	3.5	0	RSN8897_14383980_23179360.AT2 RSN8897_14383980_23179090.AT2 RSN8897_14383980_23179-UP.AT2

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
96	Managua, Nicaragua-02 Managua, ESSO 1972	5.2	4.33	288.77	strike slip	2.5	2.34	RSN96_MANAGUA_B-ESO090.AT2 RSN96_MANAGUA_B-ESO180.AT2 RSN96_MANAGUA_B-ESODWN.AT2
150	Coyote Lake Gilroy Array #6 1979	5.74	0.42	663.31	strike slip	1	1.19	RSN150_COYOTELK_G06230.AT2 RSN150_COYOTELK_G06320.AT2 RSN150_COYOTELK_G06-UP.AT2
159	Imperial Valley-06 Agrarias 1979	6.53	0	242.05	strike slip	6.7	2.71	RSN159_IMPVALL.H_H-AGR003.AT2 RSN159_IMPVALL.H_H-AGR273.AT2 RSN159_IMPVALL.H_H-AGRDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.6	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
176	Imperial Valley-06 El Centro Array #13 1979	6.53	21.98	249.92	strike slip	8.5	2.98	RSN176_IMPVALL.H_H-E13140.AT2 RSN176_IMPVALL.H_H-E13230.AT2 RSN176_IMPVALL.H_H-E13-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	3	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
312	Taiwan SMART1(5) SMART1 O07 1981	5.9	23.77	314.33	Reverse	4.1	4.82	RSN312_SMART1.05_05O07EW.AT2 RSN312_SMART1.05_05O07NS.AT2 RSN312_SMART1.05_05O07DN.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	1.42	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	2.31	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.34	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
632	Whittier Narrows-01 LA - Cypress Ave 1987	5.99	8.56	366.71	Reverse O	3	3.63	RSN632_WHITTIER.A_A-CYP053.AT2 RSN632_WHITTIER.A_A-CYP143.AT2 RSN632_WHITTIER.A_A-CYP-UP.AT2
691	Whittier Narrows-01 San Marino - SW Academy 1987	5.99	1.57	379.43	Reverse O	2.9	3.59	RSN691_WHITTIER.A_A-SMA270.AT2 RSN691_WHITTIER.A_A-SMA360.AT2 RSN691_WHITTIER.A_A-SMA-UP.AT2

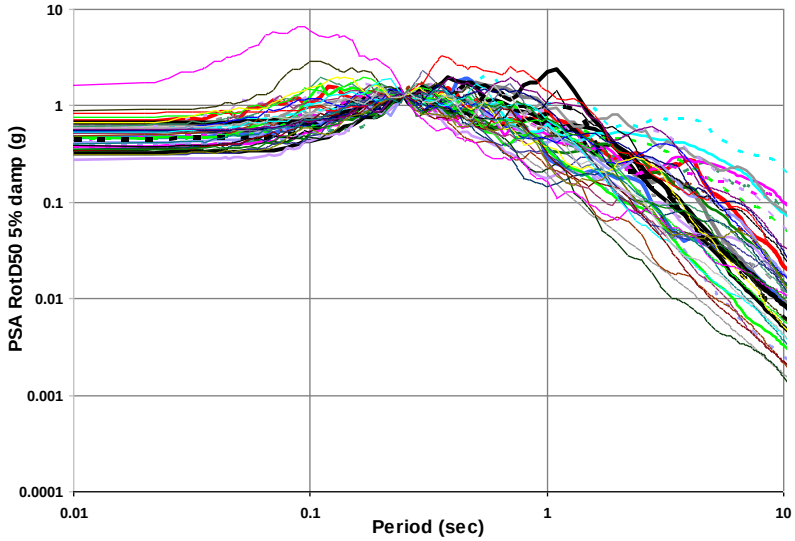
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
719	Superstition Hills-02 Brawley Airport 1987	6.54	17.03	208.71	strike slip	10.5	4.69	
726	Superstition Hills-02 Salton Sea Wildlife Refuge 1987	6.54	25.88	191.14	strike slip	8.9	2.46	
828	Cape Mendocino Petrolia 1992	7.01	0	422.17	Reverse	4.2	1.37	RSN828_CAPEMEND_PET000.AT2 RSN828_CAPEMEND_PET090.AT2 RSN828_CAPEMEND_PET-UP.AT2
986	Northridge-01 LA - Brentwood VA Hospital 1994	6.69	12.92	416.58	Reverse	6	2.14	RSN986_NORTHR_BVA195.AT2 RSN986_NORTHR_BVA285.AT2 RSN986_NORTHR_BVA-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	1.41	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1077	Northridge-01 Santa Monica City Hall 1994	6.69	17.28	336.2	Reverse	5.7	0.63	RSN1077_NORTHR_STM090.AT2 RSN1077_NORTHR_STM360.AT2 RSN1077_NORTHR_STM-UP.AT2
1089	Northridge-01 Topanga - Fire Sta 1994	6.69	10.31	505.97	Reverse	5.1	1.3	RSN1089_NORTHR_TPF360.AT2 RSN1089_NORTHR_TPF270.AT2 RSN1089_NORTHR_TPF-UP.AT2
1116	Kobe, Japan Shin-Osaka 1995	6.9	19.14	256	strike slip	4.1	2.53	RSN1116_KOBE_SHI000.AT2 RSN1116_KOBE_SHI090.AT2 RSN1116_KOBE_SHI-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.66	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.94	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1161	Kocaeli, Turkey Gebze 1999	7.51	7.57	792	strike slip	5.8	3.16	RSN1161_KOCAELI_GBZ000.AT2 RSN1161_KOCAELI_GBZ270.AT2 RSN1161_KOCAELI_GBZ-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.58	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	1.61	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	2.47	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	2.46	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1498	Chi-Chi, Taiwan TCU059 1999	7.62	17.11	272.67	Reverse O	21.8	3.48	RSN1498_CHICHI_TCU059-E.AT2 RSN1498_CHICHI_TCU059-N.AT2 RSN1498_CHICHI_TCU059-V.AT2
1513	Chi-Chi, Taiwan TCU079 1999	7.62	0	363.99	Reverse O	19.2	0.9	RSN1513_CHICHI_TCU079-E.AT2 RSN1513_CHICHI_TCU079-N.AT2 RSN1513_CHICHI_TCU079-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	1.13	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1530	Chi-Chi, Taiwan TCU103 1999	7.62	6.08	494.1	Reverse O	15	2.86	RSN1530_CHICHI_TCU103-E.AT2 RSN1530_CHICHI_TCU103-N.AT2 RSN1530_CHICHI_TCU103-V.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	2.43	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
2708	Chi-Chi, Taiwan-04 CHY034 1999	6.2	28.45	378.75	strike slip	5.4	4.73	RSN2708_CHICHI.04_CHY034N.AT2 RSN2708_CHICHI.04_CHY034W.AT2 RSN2708_CHICHI.04_CHY034V.AT2
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	1.96	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
3966	Tottori, Japan TTR009 2000	6.61	8.82	420.2	strike slip	4.3	0.61	RSN3966_TOTTORI_TTR009NS.AT2 RSN3966_TOTTORI_TTR009EW.AT2 RSN3966_TOTTORI_TTR009UD.AT2
4075	Parkfield-02, CA PARKFIELD - WORK RANCH 2004	6	10.33	446.5	strike slip	1.6	4.55	RSN4075_PARK2004_WORK-90.AT2 RSN4075_PARK2004_WORK360.AT2 RSN4075_PARK2004_WORK-UP.AT2
4137	Parkfield-02, CA Parkfield - Vineyard Cany 6W 2004	6	13.33	392.24	strike slip	4.6	3.61	RSN4137_PARK2004_VC6090.AT2 RSN4137_PARK2004_VC6360.AT2 RSN4137_PARK2004_VC6-UP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.43	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2

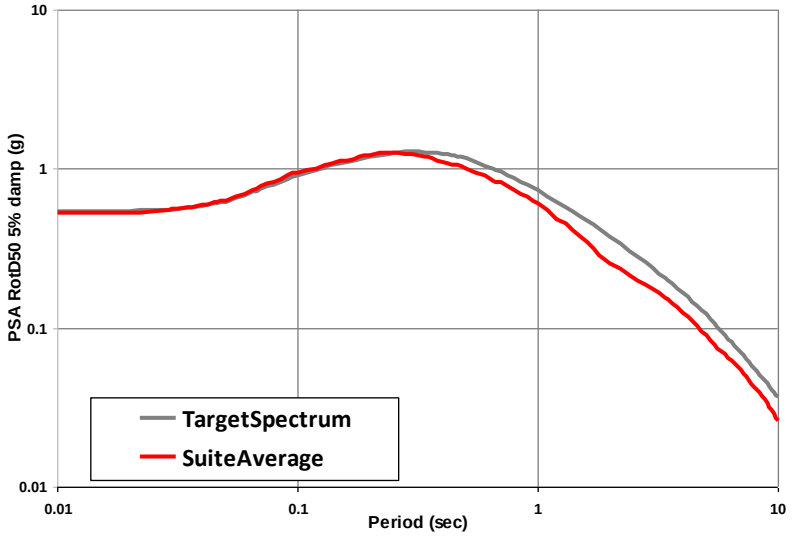
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
4850	Chuetsu-oki Yoshikawaku Joetsu City 2007	6.8	13.68	561.59	Reverse	4.1	1.53	RSN4850_CHUETSU_65013NS.AT2 RSN4850_CHUETSU_65013EW.AT2 RSN4850_CHUETSU_65013UD.AT2
4878	Chuetsu-oki Yahiko Village Yahagi 2007	6.8	19.73	223.12	Reverse	12.6	2.88	RSN4878_CHUETSU_65083NS.AT2 RSN4878_CHUETSU_65083EW.AT2 RSN4878_CHUETSU_65083UD.AT2
6960	Darfield, New Zealand Riccarton High School 2010	7	13.64	293	strike slip	9.5	1.93	RSN6960_DARFIELD_RHSCN86W.AT2 RSN6960_DARFIELD_RHSCS04W.AT2 RSN6960_DARFIELD_RHSCUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	2.05	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	1.81	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8627	40204628 Milpitas Fire Station 4 2007	5.45	11.22	263.76	strike slip	5	4.48	RSN8627_40204628_N1788HNN.AT2 RSN8627_40204628_N1788HNE.AT2 RSN8627_40204628_N1788HNZ.AT2
9009	14151344 Anza, Mitchell Rd. 2005	5.2	5.08	361	strike slip	1.5	2.98	RSN9009_14151344_CIDNRHLN.AT2 RSN9009_14151344_CIDNRHLE.AT2 RSN9009_14151344_CIDNRHLZ.AT2

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.15	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.74	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
180	Imperial Valley-06 El Centro Array #5 1979	6.53	1.76	205.63	strike slip	3.7	1.45	RSN180_IMPVALL.H_H-E05140.AT2 RSN180_IMPVALL.H_H-E05230.AT2 RSN180_IMPVALL.H_H-E05-UP.AT2
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	3.66	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
308	Taiwan SMART1(5) SMART1 I12 1981	5.9	25.7	275.82	Reverse	3	3.82	RSN308_SMART1.05_05I12EW.AT2 RSN308_SMART1.05_05I12NS.AT2 RSN308_SMART1.05_05I12DN.AT2
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	2.37	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
338	Coalinga-01 Parkfield - Fault Zone 14 1983	6.36	28.11	246.07	Reverse	4.6	2.58	RSN338_COALINGA.H_H-Z14000.AT2 RSN338_COALINGA.H_H-Z14090.AT2 RSN338_COALINGA.H_H-Z14-UP.AT2
346	Coalinga-01 Parkfield - Fault Zone 8 1983	6.36	28.58	308.84	Reverse	5.1	3.69	RSN346_COALINGA.H_H-Z08000.AT2 RSN346_COALINGA.H_H-Z08090.AT2 RSN346_COALINGA.H_H-Z08-UP.AT2
383	Coalinga-02 Pleasant Valley P.P. - yard 1983	5.09	6.51	257.38	Reverse	1.1	3.18	RSN383_COALINGA_A-PVY045.AT2 RSN383_COALINGA_A-PVY135.AT2 RSN383_COALINGA_A-PVY-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	1.21	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
410	Coalinga-05 Palmer Ave 1983	5.77	7.92	458.09	Reverse	1.8	3.04	RSN410_COALINGA_D-PLM270.AT2 RSN410_COALINGA_D-PLM360.AT2 RSN410_COALINGA_D-PLM-UP.AT2
413	Coalinga-05 Skunk Hollow 1983	5.77	7.27	480.32	Reverse	3.2	1.6	RSN413_COALINGA_D-SKH270.AT2 RSN413_COALINGA_D-SKH360.AT2 RSN413_COALINGA_D-SKH-UP.AT2

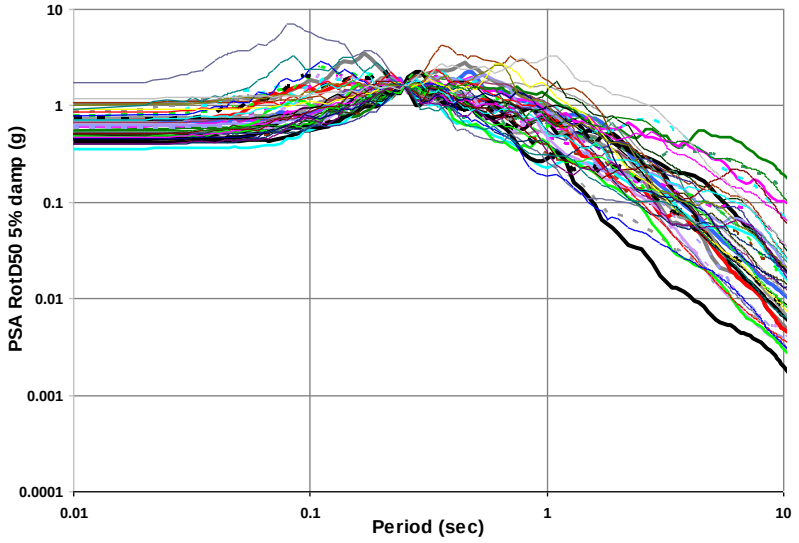
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
529	N. Palm Springs North Palm Springs 1986	6.06	0	344.67	Reverse O	1.7	1.1	RSN529_PALMSPR_NPS210.AT2 RSN529_PALMSPR_NPS300.AT2 RSN529_PALMSPR_NPS-UP.AT2
642	Whittier Narrows-01 LA - W 70th St 1987	5.99	16.77	241.41	Reverse O	3.5	3.32	RSN642_WHITTIER.A_A-W70000.AT2 RSN642_WHITTIER.A_A-W70270.AT2 RSN642_WHITTIER.A_A-W70-UP.AT2
674	Whittier Narrows-01 Pasadena - Brown Gym 1987	5.99	4.3	341.14	Reverse O	3.3	2.44	RSN674_WHITTIER.A_A-BRG180.AT2 RSN674_WHITTIER.A_A-BRG270.AT2 RSN674_WHITTIER.A_A-BRG-UP.AT2
778	Loma Prieta Hollister Differential Array 1989	6.93	24.52	215.54	Reverse O	3.7	1.98	RSN778_LOMAP_HDA165.AT2 RSN778_LOMAP_HDA255.AT2 RSN778_LOMAP_HDA-UP.AT2
996	Northridge-01 LA - N Faring Rd 1994	6.69	12.42	255	Reverse	5.2	2.17	RSN996_NORTHR_FAR000.AT2 RSN996_NORTHR_FAR090.AT2 RSN996_NORTHR_FAR-UP.AT2
1052	Northridge-01 Pacoima Kagel Canyon 1994	6.69	5.26	508.08	Reverse	5.7	1.7	RSN1052_NORTHR_PKC090.AT2 RSN1052_NORTHR_PKC360.AT2 RSN1052_NORTHR_PKC-UP.AT2
1100	Kobe, Japan Abeno 1995	6.9	24.85	256	strike slip	12	3.24	RSN1100_KOBE_ABN000.AT2 RSN1100_KOBE_ABN090.AT2 RSN1100_KOBE_ABN-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	1	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.81	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.15	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.93	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	1.97	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2
1484	Chi-Chi, Taiwan TCU042 1999	7.62	26.31	578.98	Reverse O	13.7	1.84	RSN1484_CHICHI_TCU042-E.AT2 RSN1484_CHICHI_TCU042-N.AT2 RSN1484_CHICHI_TCU042-V.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	3.01	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1489	Chi-Chi, Taiwan TCU049 1999	7.62	3.76	487.27	Reverse O	17.1	1.76	RSN1489_CHICHI_TCU049-E.AT2 RSN1489_CHICHI_TCU049-N.AT2 RSN1489_CHICHI_TCU049-V.AT2
1510	Chi-Chi, Taiwan TCU075 1999	7.62	0.89	573.02	Reverse O	19.4	1.85	RSN1510_CHICHI_TCU075-E.AT2 RSN1510_CHICHI_TCU075-N.AT2 RSN1510_CHICHI_TCU075-V.AT2
1519	Chi-Chi, Taiwan TCU087 1999	7.62	6.98	538.69	Reverse O	15.5	4.99	RSN1519_CHICHI_TCU087-E.AT2 RSN1519_CHICHI_TCU087-N.AT2 RSN1519_CHICHI_TCU087-V.AT2
1545	Chi-Chi, Taiwan TCU120 1999	7.62	7.4	459.34	Reverse O	20.7	2.54	RSN1545_CHICHI_TCU120-E.AT2 RSN1545_CHICHI_TCU120-N.AT2 RSN1545_CHICHI_TCU120-V.AT2
1602	Duzce, Turkey Bolu 1999	7.14	12.02	293.57	strike slip	2	0.81	RSN1602_DUZCE_BOL000.AT2 RSN1602_DUZCE_BOL090.AT2 RSN1602_DUZCE_BOL-UP.AT2
2655	Chi-Chi, Taiwan-03 TCU122 1999	6.2	18.1	475.46	Reverse	2.8	2.15	RSN2655_CHICHI.03_TCU122N.AT2 RSN2655_CHICHI.03_TCU122E.AT2 RSN2655_CHICHI.03_TCU122V.AT2
3753	Landers Fun Valley 1992	7.28	25.02	388.63	strike slip	22.4	2.43	RSN3753_LANDERS_FVR045.AT2 RSN3753_LANDERS_FVR135.AT2 RSN3753_LANDERS_FVR-UP.AT2
3954	Tottori, Japan SMNH10 2000	6.61	15.58	967.27	strike slip	2.9	1.77	RSN3954_TOTTORI_SMNH10NS.AT2 RSN3954_TOTTORI_SMNH10EW.AT2 RSN3954_TOTTORI_SMNH10UD.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	1.42	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4218	Niigata, Japan NIG028 2004	6.63	0.46	430.71	Reverse	3.5	0.79	RSN4218_NIIGATA_NIG028NS.AT2 RSN4218_NIIGATA_NIG028EW.AT2 RSN4218_NIIGATA_NIG028UD.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.52	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	2.99	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2

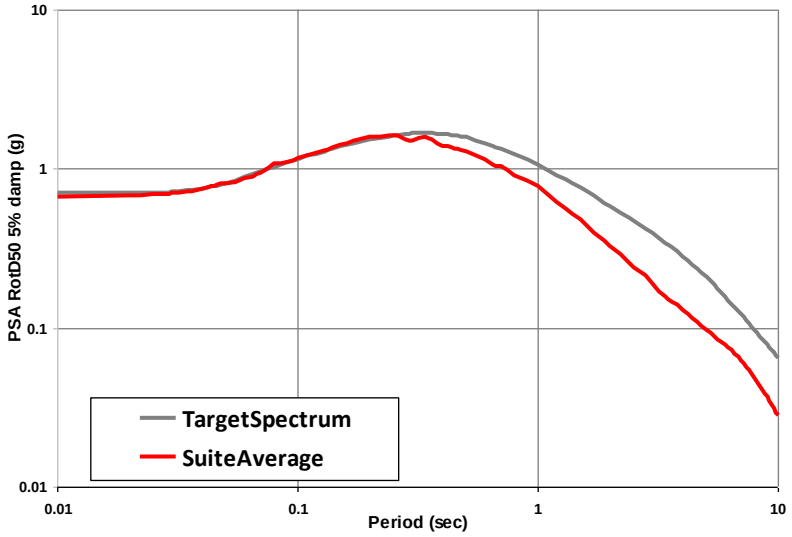
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
4862	Chuetsu-oki Shiura Nagaoka 2007	6.8	10.61	336.93	Reverse	8.5	3.82	RSN4862_CHUETSU_65035NS.AT2 RSN4862_CHUETSU_65035EW.AT2 RSN4862_CHUETSU_65035UD.AT2
5776	Iwate Kami, Miyagi Miyazaki City 2008	6.9	25.15	477.55	Reverse	7.6	3.65	RSN5776_IWATE_54010NS.AT2 RSN5776_IWATE_54010EW.AT2 RSN5776_IWATE_54010UD.AT2
5809	Iwate Minase Yuzawa 2008	6.9	17.34	655.45	Reverse	7.6	2.62	RSN5809_IWATE_55465NS.AT2 RSN5809_IWATE_55465EW.AT2 RSN5809_IWATE_55465UD.AT2
5819	Iwate Ichinoseki Maikawa 2008	6.9	23.01	640.14	Reverse	9.5	4.73	RSN5819_IWATE_4CA71NS.AT2 RSN5819_IWATE_4CA71EW.AT2 RSN5819_IWATE_4CA71UD.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	2.21	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.51	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	2.74	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
57	San Fernando Castaic - Old Ridge Route 1971	6.61	19.33	450.28	Reverse	6.2	2.97	RSN57_SFERN_ORR021.AT2 RSN57_SFERN_ORR291.AT2 RSN57_SFERN_ORRDWN.AT2
162	Imperial Valley-06 Calexico Fire Station 1979	6.53	10.45	231.23	strike slip	6.4	2.9	RSN162_IMPVALL.H_H-CXO225.AT2 RSN162_IMPVALL.H_H-CXO315.AT2 RSN162_IMPVALL.H_H-CXO-UP.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.95	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
180	Imperial Valley-06 El Centro Array #5 1979	6.53	1.76	205.63	strike slip	3.7	1.86	RSN180_IMPVALL.H_H-E05140.AT2 RSN180_IMPVALL.H_H-E05230.AT2 RSN180_IMPVALL.H_H-E05-UP.AT2
212	Livermore-01 Del Valle Dam (Toe) 1980	5.8	23.92	403.37	strike slip	3.2	3.96	RSN212_LIVERMOR_A-DVD156.AT2 RSN212_LIVERMOR_A-DVD246.AT2 RSN212_LIVERMOR_A-DVD-UP.AT2
239	Mammoth Lakes-03 Long Valley Dam (Upr L Abut) 1980	5.91	10.31	537.16	strike slip	4	2.5	RSN239_MAMMOTH.AH_A-LUL000.A RSN239_MAMMOTH.AH_A-LUL090.A RSN239_MAMMOTH.AH_A-LUL-UP.A
306	Taiwan SMART1(5) SMART1 C00 1981	5.9	25.5	309.41	Reverse	3.9	4.71	RSN306_SMART1.05_05C00EW.AT2 RSN306_SMART1.05_05C00NS.AT2 RSN306_SMART1.05_05C00DN.AT2
308	Taiwan SMART1(5) SMART1 I12 1981	5.9	25.7	275.82	Reverse	3	4.91	RSN308_SMART1.05_05I12EW.AT2 RSN308_SMART1.05_05I12NS.AT2 RSN308_SMART1.05_05I12DN.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	2.33	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	3.63	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	1.56	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
502	Mt. Lewis Halls Valley 1986	5.6	12.37	281.61	strike slip	1.8	4.91	RSN502_MTLEWIS_HVR000.AT2 RSN502_MTLEWIS_HVR090.AT2 RSN502_MTLEWIS_HVR-UP.AT2

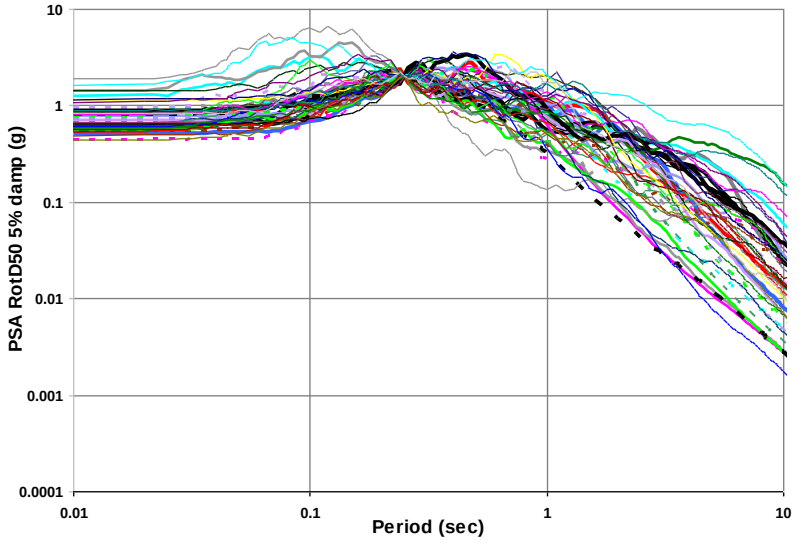
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
622	Whittier Narrows-01 Hacienda Heights - Colima 1987	5.99	9.6	337	Reverse O	2.9	4.02	RSN622_WHITTIER.A_A-COM140.AT2 RSN622_WHITTIER.A_A-COM230.AT2 RSN622_WHITTIER.A_A-COM-UP.AT2
755	Loma Prieta Coyote Lake Dam - Southwest Abut 1989	6.93	19.97	561.43	Reverse O	5.1	2.98	RSN755_LOMAP_CYC195.AT2 RSN755_LOMAP_CYC285.AT2 RSN755_LOMAP_CYC-UP.AT2
982	Northridge-01 Jensen Filter Plant Administrative Bui 1994	6.69	0	373.07	Reverse	3.5	2.28	RSN982_NORTHR_JEN022.AT2 RSN982_NORTHR_JEN292.AT2 RSN982_NORTHR_JEN-UP.AT2
1003	Northridge-01 LA - Saturn St 1994	6.69	21.17	308.71	Reverse	5.3	2.33	RSN1003_NORTHR_STN020.AT2 RSN1003_NORTHR_STN110.AT2 RSN1003_NORTHR_STN-UP.AT2
1011	Northridge-01 LA - Wonderland Ave 1994	6.69	15.11	1222.52	Reverse	5.1	4.98	RSN1011_NORTHR_WON095.AT2 RSN1011_NORTHR_WON185.AT2 RSN1011_NORTHR_WON-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	1.04	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.48	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	2.48	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	3.26	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2
1481	Chi-Chi, Taiwan TCU038 1999	7.62	25.42	297.86	Reverse O	14.4	3.87	RSN1481_CHICHI_TCU038-E.AT2 RSN1481_CHICHI_TCU038-N.AT2 RSN1481_CHICHI_TCU038-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	3.86	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1495	Chi-Chi, Taiwan TCU055 1999	7.62	6.34	359.13	Reverse O	19.1	2.79	RSN1495_CHICHI_TCU055-E.AT2 RSN1495_CHICHI_TCU055-N.AT2 RSN1495_CHICHI_TCU055-V.AT2
3574	Taiwan SMART1(5) SMART1 O05 1981	5.9	23.75	286.03	Reverse	3.1	4.87	RSN3574_SMART1.05_05O05EW.AT2 RSN3574_SMART1.05_05O05NS.AT2 RSN3574_SMART1.05_05O05DN.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	1.83	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4096	Parkfield-02, CA Bear Valley Ranch, Parkfield, CA, USA 2004	6	3.38	527.95	strike slip	2.3	4.35	RSN4096_PARK2004_61022-90.AT2 RSN4096_PARK2004_61022360.AT2 RSN4096_PARK2004_61022-UP.AT2
4123	Parkfield-02, CA Parkfield - Gold Hill 4W 2004	6	7.74	421.2	strike slip	1.8	4.27	RSN4123_PARK2004_PG4090.AT2 RSN4123_PARK2004_PG4360.AT2 RSN4123_PARK2004_PG4-UP.AT2
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	1.86	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.67	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4840	Chuetsu-oki Joetsu Kita 2007	6.8	28.97	334.01	Reverse	14.9	3.96	RSN4840_CHUETSU_65003NS.AT2 RSN4840_CHUETSU_65003EW.AT2 RSN4840_CHUETSU_65003UD.AT2
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	3.85	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
4860	Chuetsu-oki Sanjo Shinbori 2007	6.8	15.89	278.12	Reverse	10.5	1.73	RSN4860_CHUETSU_65033NS.AT2 RSN4860_CHUETSU_65033EW.AT2 RSN4860_CHUETSU_65033UD.AT2
4862	Chuetsu-oki Shiura Nagaoka 2007	6.8	10.61	336.93	Reverse	8.5	4.92	RSN4862_CHUETSU_65035NS.AT2 RSN4862_CHUETSU_65035EW.AT2 RSN4862_CHUETSU_65035UD.AT2
4878	Chuetsu-oki Yahiko Village Yahagi 2007	6.8	19.73	223.12	Reverse	12.6	4.53	RSN4878_CHUETSU_65083NS.AT2 RSN4878_CHUETSU_65083EW.AT2 RSN4878_CHUETSU_65083UD.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	3.75	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.81	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
6877	Joshua Tree, CA Indio - Jackson Road 1992	6.1	25.04	292.12	strike slip	4.2	2.93	RSN6877_JOSHUA_5294180.AT2 RSN6877_JOSHUA_5294090.AT2 RSN6877_JOSHUA_5294_UP.AT2

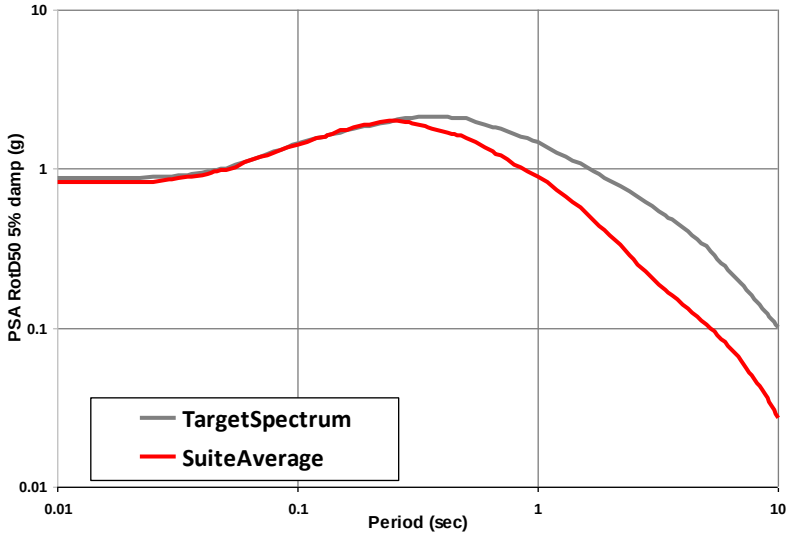
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
6953	Darfield, New Zealand Pages Road Pumping Station 2010	7	24.55	206	strike slip	11.2	2.31	RSN6953_DARFIELD_PRPCW.AT2 RSN6953_DARFIELD_PRPCS.AT2 RSN6953_DARFIELD_PRPCUP.AT2
6961	Darfield, New Zealand RKAC 2010	7	13.37	295.74	strike slip	12.7	4.14	RSN6961_DARFIELD_RKACN14E.AT2 RSN6961_DARFIELD_RKACS76E.AT2 RSN6961_DARFIELD_RKACUP.AT2
6965	Darfield, New Zealand SBRC 2010	7	21.31	263.2	strike slip	13.7	3.21	RSN6965_DARFIELD_SBRCS31E.AT2 RSN6965_DARFIELD_SBRCS59W.AT2 RSN6965_DARFIELD_SBRCUP.AT2
6966	Darfield, New Zealand Shirley Library 2010	7	22.33	207	strike slip	11	3.14	RSN6966_DARFIELD_SHLCS40W.AT2 RSN6966_DARFIELD_SHLCS50E.AT2 RSN6966_DARFIELD_SHLCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	2.84	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.94	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8158	Christchurch, New Zealand LPCC 2011	6.2	2.52	649.67	Reverse O	1.8	0.95	RSN8158_CCHURCH_LPCCN10W.AT2 RSN8158_CCHURCH_LPCCS80W.AT2 RSN8158_CCHURCH_LPCCUP.AT2

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
30	Parkfield Cholame - Shandon Array #5 1966	6.19	9.58	289.56	strike slip	2.3	2.54	RSN30_PARKF_C05085.AT2 RSN30_PARKF_C05355.AT2 RSN30_PARKF_C05DWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.18	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
183	Imperial Valley-06 El Centro Array #8 1979	6.53	3.86	206.08	strike slip	2.9	2.38	RSN183_IMPVALL.H_H-E08140.AT2 RSN183_IMPVALL.H_H-E08230.AT2 RSN183_IMPVALL.H_H-E08-UP.AT2
223	Livermore-02 San Ramon - Eastman Kodak 1980	5.42	14.31	377.51	strike slip	2.1	4.64	RSN223_LIVERMOR_B-KOD180.AT2 RSN223_LIVERMOR_B-KOD270.AT2 RSN223_LIVERMOR_B-KOD-UP.AT2
240	Mammoth Lakes-04 Convict Creek 1980	5.7	1.37	382.12	strike slip	2.3	2.9	RSN240_MAMMOTH.AH_B-CVK090.A RSN240_MAMMOTH.AH_B-CVK180.A RSN240_MAMMOTH.AH_B-CVK-UP.A
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	2.76	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
319	Westmorland Westmorland Fire Sta 1981	5.9	6.18	193.67	strike slip	3.6	2.28	RSN319_WESMORL_WSM090.AT2 RSN319_WESMORL_WSM180.AT2 RSN319_WESMORL_WSM-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	2.9	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
340	Coalinga-01 Parkfield - Fault Zone 16 1983	6.36	26.2	384.26	Reverse	6	4.51	RSN340_COALINGA.H_H-Z16000.AT2 RSN340_COALINGA.H_H-Z16090.AT2 RSN340_COALINGA.H_H-Z16-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	2.7	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
385	Coalinga-02 SUB (temp) 1983	5.09	6.35	270.41	Reverse	1	4.99	RSN385_COALINGA_A-SUB000.AT2 RSN385_COALINGA_A-SUB090.AT2 RSN385_COALINGA_A-SUB-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.62	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2

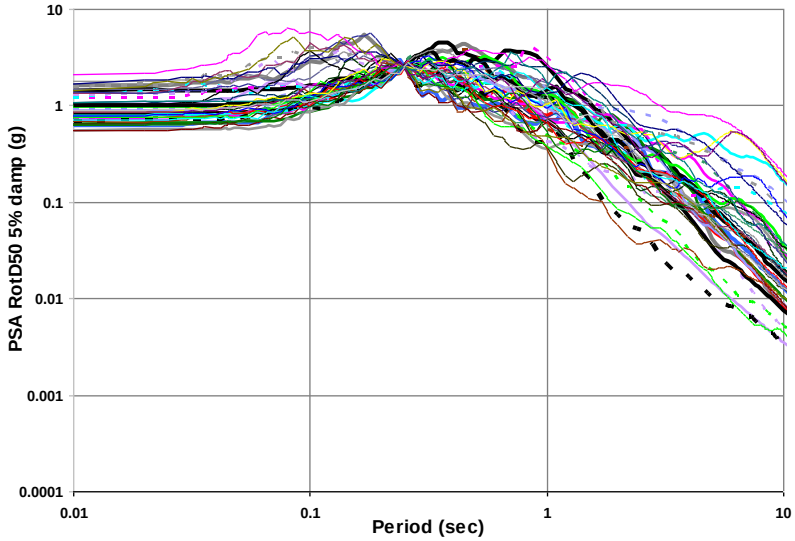
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
602	Whittier Narrows-01 Burbank - N Buena Vista 1987	5.99	20.37	320.57	Reverse O	3.2	3.21	RSN602_WHITTIER.A_A-BUE250.AT2 RSN602_WHITTIER.A_A-BUE340.AT2 RSN602_WHITTIER.A_A-BUE-UP.AT2
726	Superstition Hills-02 Salton Sea Wildlife Refuge 1987	6.54	25.88	191.14	strike slip	8.9	4.81	
768	Loma Prieta Gilroy Array #4 1989	6.93	13.81	221.78	Reverse O	4.5	3.76	RSN768_LOMAP_G04000.AT2 RSN768_LOMAP_G04090.AT2 RSN768_LOMAP_G04-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	2.68	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
802	Loma Prieta Saratoga - Aloha Ave 1989	6.93	7.58	380.89	Reverse O	3.9	2.95	RSN802_LOMAP_STG000.AT2 RSN802_LOMAP_STG090.AT2 RSN802_LOMAP_STG-UP.AT2
900	Landers Yermo Fire Station 1992	7.28	23.62	353.63	strike slip	8.8	4.05	RSN900_LANDERS_YER270.AT2 RSN900_LANDERS_YER360.AT2 RSN900_LANDERS_YER-UP.AT2
978	Northridge-01 Hollywood - Willoughby Ave 1994	6.69	17.82	347.7	Reverse	6.1	4.05	RSN978_NORTHR_WIL090.AT2 RSN978_NORTHR_WIL180.AT2 RSN978_NORTHR_WIL-UP.AT2
1115	Kobe, Japan Sakai 1995	6.9	28.08	256	strike slip	11.6	4.35	RSN1115_KOBE_SKI000.AT2 RSN1115_KOBE_SKI090.AT2 RSN1115_KOBE_SKI-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	1.3	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.83	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	3.08	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	3.14	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2
1235	Chi-Chi, Taiwan CHY087 1999	7.62	28.79	505.2	Reverse O	16.5	4.05	RSN1235_CHICHI_CHY087-E.AT2 RSN1235_CHICHI_CHY087-N.AT2 RSN1235_CHICHI_CHY087-V.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	4.8	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1681	Northridge-04 Moorpark - Fire Sta 1994	5.93	13.61	341.58	Reverse O	3.2	4.75	RSN1681_NORTH142_MRP090.AT2 RSN1681_NORTH142_MRP180.AT2 RSN1681_NORTH142_MRP-UP.AT2
1736	Northridge-06 Sylmar - Converter Sta 1994	5.28	6.68	251.24	Reverse	1.4	4.03	RSN1736_NORTH392_SCS052.AT2 RSN1736_NORTH392_SCS142.AT2 RSN1736_NORTH392_SCS-UP.AT2
3570	Taiwan SMART1(5) SMART1 M12 1981	5.9	26.5	275.82	Reverse	2	4.13	RSN3570_SMART1.05_05M12EW.AT RSN3570_SMART1.05_05M12NS.AT2 RSN3570_SMART1.05_05M12DN.AT2
3749	Cape Mendocino Fortuna Fire Station 1992	7.01	16.54	355.18	Reverse	4.8	2.83	RSN3749_CAPEMEND_FFT270.AT2 RSN3749_CAPEMEND_FFT360.AT2 RSN3749_CAPEMEND_FFT-UP.AT2
3933	Tottori, Japan SMN001 2000	6.61	14.42	331	strike slip	5.4	3.37	RSN3933_TOTTORI_SMN001NS.AT2 RSN3933_TOTTORI_SMN001EW.AT2 RSN3933_TOTTORI_SMN001UD.AT2
3935	Tottori, Japan SMN003 2000	6.61	25.52	343.97	strike slip	5.2	4.37	RSN3935_TOTTORI_SMN003NS.AT2 RSN3935_TOTTORI_SMN003EW.AT2 RSN3935_TOTTORI_SMN003UD.AT2
4142	Parkfield-02, CA PARKFIELD - UPSAR 06 2004	6	9.14	440.59	strike slip	6.9	2.76	RSN4142_PARK2004_UP06090.AT2 RSN4142_PARK2004_UP06360.AT2 RSN4142_PARK2004_UP06-UP.AT2
4207	Niigata, Japan NIG017 2004	6.63	4.22	274.17	Reverse	6	1.49	RSN4207_NIIGATA_NIG017NS.AT2 RSN4207_NIIGATA_NIG017EW.AT2 RSN4207_NIIGATA_NIG017UD.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	3.65	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	2.31	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.83	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4840	Chuetsu-oki Joetsu Kita 2007	6.8	28.97	334.01	Reverse	14.9	4.92	RSN4840_CHUETSU_65003NS.AT2 RSN4840_CHUETSU_65003EW.AT2 RSN4840_CHUETSU_65003UD.AT2

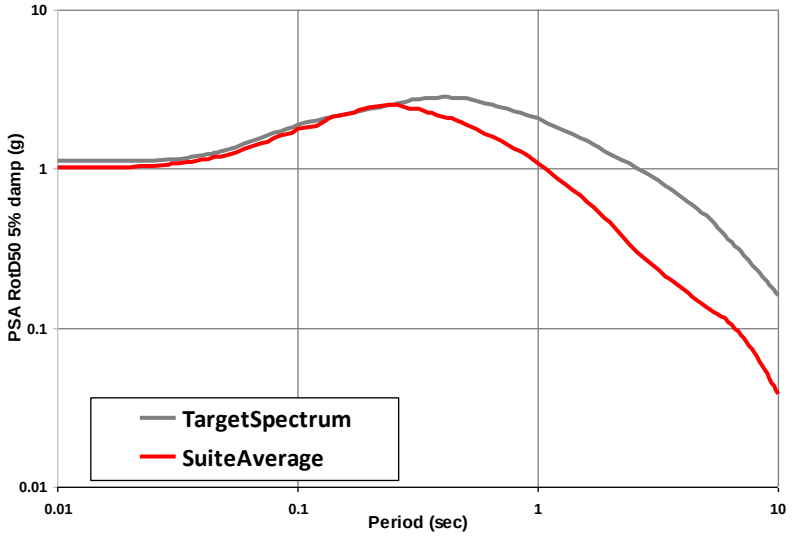
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
4859	Chuetsu-oki Mitsuke Kazuiti Arita Town 2007	6.8	11.35	274.23	Reverse	16.4	4.78	RSN4859_CHUETSU_65029NS.AT2 RSN4859_CHUETSU_65029EW.AT2 RSN4859_CHUETSU_65029UD.AT2
4883	Chuetsu-oki Niigata Nishi Kaba District 2007	6.8	27.83	254.68	Reverse	14.9	4.66	RSN4883_CHUETSU_690E1NS.AT2 RSN4883_CHUETSU_690E1EW.AT2 RSN4883_CHUETSU_690E1UD.AT2
5678	Iwate MYGH02 2008	6.9	5.09	398.59	Reverse	3.7	3.23	RSN5678_IWATE_MYGH02NS.AT2 RSN5678_IWATE_MYGH02EW.AT2 RSN5678_IWATE_MYGH02UD.AT2
6877	Joshua Tree, CA Indio - Jackson Road 1992	6.1	25.04	292.12	strike slip	4.2	3.64	RSN6877_JOSHUA_5294180.AT2 RSN6877_JOSHUA_5294090.AT2 RSN6877_JOSHUA_5294_UP.AT2
6890	Darfield, New Zealand Christchurch Cashmere High School 2010	7	17.64	204	strike slip	8.7	3.42	RSN6890_DARFIELD_CMHSN10E.AT2 RSN6890_DARFIELD_CMHSS80E.AT2 RSN6890_DARFIELD_CMHSUP.AT2
6927	Darfield, New Zealand LINC 2010	7	5.07	263.2	strike slip	8	3.64	RSN6927_DARFIELD_LINCN23E.AT2 RSN6927_DARFIELD_LINCN67W.AT2 RSN6927_DARFIELD_LINCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	3.53	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2

Site	**09 SanBernardino**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	09 SanBernardino	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	1.49	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
183	Imperial Valley-06 El Centro Array #8 1979	6.53	3.86	206.08	strike slip	2.9	3.01	RSN183_IMPVALL.H_H-E08140.AT2 RSN183_IMPVALL.H_H-E08230.AT2 RSN183_IMPVALL.H_H-E08-UP.AT2
204	Imperial Valley-07 El Centro Array #6 1979	5.01	7.4	203.22	strike slip	0.8	4.47	RSN204_IMPVALL.A_A-E06140.AT2 RSN204_IMPVALL.A_A-E06230.AT2 RSN204_IMPVALL.A_A-E06-UP.AT2
232	Mammoth Lakes-01 Mammoth Lakes H. S. 1980	6.06	4.48	346.82	Normal O	5.3	4.58	RSN232_MAMMOTH.I_I-MLS254.AT2 RSN232_MAMMOTH.I_I-MLS344.AT2 RSN232_MAMMOTH.I_I-MLS-UP.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	3.5	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
316	Westmorland Parachute Test Site 1981	5.9	16.54	348.69	strike slip	5.9	4.78	RSN316_WESMORL_PTS225.AT2 RSN316_WESMORL_PTS315.AT2 RSN316_WESMORL_PTS-UP.AT2
322	Coalinga-01 Cantua Creek School 1983	6.36	23.78	274.73	Reverse	4.4	3.67	RSN322_COALINGA.H_H-CAK270.AT2 RSN322_COALINGA.H_H-CAK360.AT2 RSN322_COALINGA.H_H-CAK-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	3.42	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
405	Coalinga-05 Burnett Construction 1983	5.77	8.3	352.2	Reverse	4.5	2.45	RSN405_COALINGA_D-BNT270.AT2 RSN405_COALINGA_D-BNT360.AT2 RSN405_COALINGA_D-BNT-UP.AT2
592	Whittier Narrows-01 Arcadia - Campus Dr 1987	5.99	4.53	367.53	Reverse O	2.1	2.69	RSN592_WHITTIER.A_A-CAM009.AT2 RSN592_WHITTIER.A_A-CAM279.AT2 RSN592_WHITTIER.A_A-CAM-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	3.39	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	3.97	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2

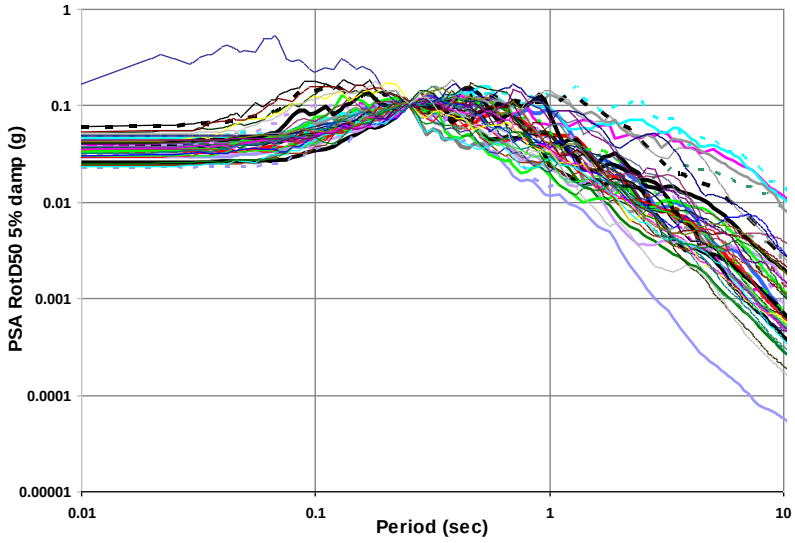
Site Site Vs30 (m/s) Return Period (yr)	**09 SanBernardino** **270** **2500**							**CS Set**
963	Northridge-01 Castaic - Old Ridge Route 1994	6.69	20.11	450.28	Reverse	5.1	1.74	RSN963_NORTHR_ORR090.AT2 RSN963_NORTHR_ORR360.AT2 RSN963_NORTHR_ORR-UP.AT2
1003	Northridge-01 LA - Saturn St 1994	6.69	21.17	308.71	Reverse	5.3	3.67	RSN1003_NORTHR_STN020.AT2 RSN1003_NORTHR_STN110.AT2 RSN1003_NORTHR_STN-UP.AT2
1039	Northridge-01 Moorpark - Fire Sta 1994	6.69	16.92	341.58	Reverse	7.5	3.48	RSN1039_NORTHR_MRP090.AT2 RSN1039_NORTHR_MRP180.AT2 RSN1039_NORTHR_MRP-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	2.31	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	1.23	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1106	Kobe, Japan KJMA 1995	6.9	0.94	312	strike slip	4.3	1.87	RSN1106_KOBE_KJM000.AT2 RSN1106_KOBE_KJM090.AT2 RSN1106_KOBE_KJM-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	2.03	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	2.32	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	3.9	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1209	Chi-Chi, Taiwan CHY047 1999	7.62	24.13	169.52	Reverse O	21.3	3.98	RSN1209_CHICHI_CHY047-N.AT2 RSN1209_CHICHI_CHY047-W.AT2 RSN1209_CHICHI_CHY047-V.AT2
1231	Chi-Chi, Taiwan CHY080 1999	7.62	0.11	496.21	Reverse O	6.4	1.45	RSN1231_CHICHI_CHY080-E.AT2 RSN1231_CHICHI_CHY080-N.AT2 RSN1231_CHICHI_CHY080-V.AT2
1484	Chi-Chi, Taiwan TCU042 1999	7.62	26.31	578.98	Reverse O	13.7	3.71	RSN1484_CHICHI_TCU042-E.AT2 RSN1484_CHICHI_TCU042-N.AT2 RSN1484_CHICHI_TCU042-V.AT2
1485	Chi-Chi, Taiwan TCU045 1999	7.62	26	704.64	Reverse O	8.1	2.51	RSN1485_CHICHI_TCU045-E.AT2 RSN1485_CHICHI_TCU045-N.AT2 RSN1485_CHICHI_TCU045-V.AT2

Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
3571	Taiwan SMART1(5) SMART1 O02 1981	5.9	26.47	285.09	Reverse	1.7	4.84	RSN3571_SMART1.05_05O02EW.AT2 RSN3571_SMART1.05_05O02NS.AT2 RSN3571_SMART1.05_05O02DN.AT2
4098	Parkfield-02, CA Parkfield - Cholame 1E 2004	6	1.66	326.64	strike slip	1.9	3.76	RSN4098_PARK2004_C01090.AT2 RSN4098_PARK2004_C01360.AT2 RSN4098_PARK2004_C01-UP.AT2
4213	Niigata, Japan NIG023 2004	6.63	25.33	654.76	Reverse	1.9	4.63	RSN4213_NIIGATA_NIG023NS.AT2 RSN4213_NIIGATA_NIG023EW.AT2 RSN4213_NIIGATA_NIG023UD.AT2
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	2.93	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	1.05	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
5263	Chuetsu-oki NIG017 2007	6.8	11.2	274.17	Reverse	8.6	3.82	RSN5263_CHUETSU_NIG017NS.AT2 RSN5263_CHUETSU_NIG017EW.AT2 RSN5263_CHUETSU_NIG017UD.AT2
5267	Chuetsu-oki NIG021 2007	6.8	24.31	418.5	Reverse	3.5	2.49	RSN5267_CHUETSU_NIG021NS.AT2 RSN5267_CHUETSU_NIG021EW.AT2 RSN5267_CHUETSU_NIG021UD.AT2
5620	Iwate IWT012 2008	6.9	20.47	264.48	Reverse	11.1	2.59	RSN5620_IWATE_IWT012NS.AT2 RSN5620_IWATE_IWT012EW.AT2 RSN5620_IWATE_IWT012UD.AT2
5657	Iwate IWTH25 2008	6.9	0	506.44	Reverse	6.9	0.98	RSN5657_IWATE_IWTH25NS.AT2 RSN5657_IWATE_IWTH25EW.AT2 RSN5657_IWATE_IWTH25UD.AT2
5663	Iwate MYG004 2008	6.9	20.17	479.37	Reverse	7	1.86	RSN5663_IWATE_MYG004NS.AT2 RSN5663_IWATE_MYG004EW.AT2 RSN5663_IWATE_MYG004UD.AT2
5678	Iwate MYGH02 2008	6.9	5.09	398.59	Reverse	3.7	4.09	RSN5678_IWATE_MYGH02NS.AT2 RSN5678_IWATE_MYGH02EW.AT2 RSN5678_IWATE_MYGH02UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	1.28	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	1.55	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2

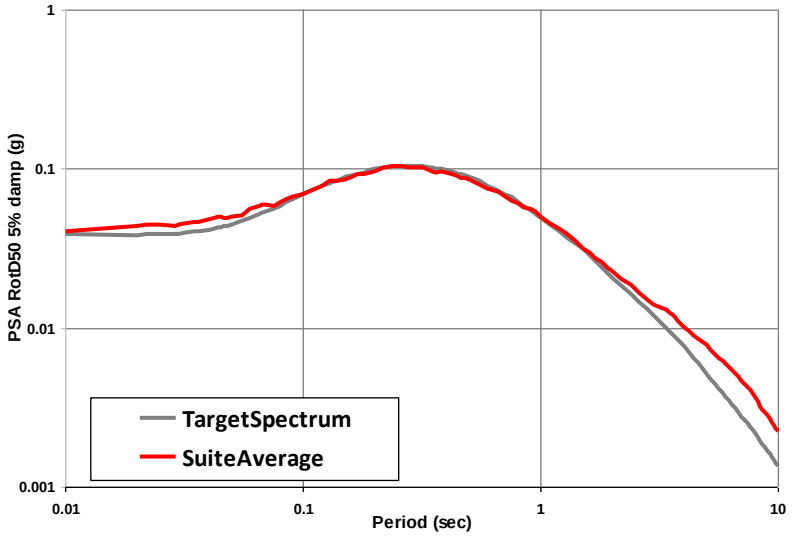
Site	09 SanBernardino							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
6897	Darfield, New Zealand DSLC 2010	7	5.28	295.74	strike slip	11.7	3.49	RSN6897_DARFIELD_DSLCN27W.AT2 RSN6897_DARFIELD_DSLCN63E.AT2 RSN6897_DARFIELD_DSLCUP.AT2
6927	Darfield, New Zealand LINC 2010	7	5.07	263.2	strike slip	8	4.62	RSN6927_DARFIELD_LINCN23E.AT2 RSN6927_DARFIELD_LINCN67W.AT2 RSN6927_DARFIELD_LINCUP.AT2
6971	Darfield, New Zealand SPFS 2010	7	29.86	389.54	strike slip	15.8	4.47	RSN6971_DARFIELD_SPFSN17E.AT2 RSN6971_DARFIELD_SPFSN73W.AT2 RSN6971_DARFIELD_SPFSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	3.05	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8119	Christchurch, New Zealand Pages Road Pumping Station 2011	6.2	1.92	206	Reverse O	2.5	2.58	RSN8119_CCHURCH_PRPCS.AT2 RSN8119_CCHURCH_PRPCW.AT2 RSN8119_CCHURCH_PRPCUP.AT2
8158	Christchurch, New Zealand LPCC 2011	6.2	2.52	649.67	Reverse O	1.8	1.49	RSN8158_CCHURCH_LPCCN10W.AT2 RSN8158_CCHURCH_LPCCS80W.AT2 RSN8158_CCHURCH_LPCCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	2.59	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**15**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	15	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.09	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
125	Friuli, Italy-01 Tolmezzo 1976	6.5	14.97	505.23	Reverse	2.5	0.11	RSN125_FRIULI.A_A-TMZ000.AT2 RSN125_FRIULI.A_A-TMZ270.AT2 RSN125_FRIULI.A_A-TMZ-UP.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	0.22	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.06	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
285	Irpinia, Italy-01 Bagnoli Irpinio 1980	6.9	8.14	649.67	Normal	5	0.39	RSN285_ITALY_A-BAG000.AT2 RSN285_ITALY_A-BAG270.AT2 RSN285_ITALY_A-BAG-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	0.27	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
297	Irpinia, Italy-02 Bisaccia 1980	6.2	14.73	496.46	Normal	6.4	0.75	RSN297_ITALY_B-BIS000.AT2 RSN297_ITALY_B-BIS270.AT2 RSN297_ITALY_B-BIS-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.14	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
497	Nahanni, Canada Site 3 1985	6.76	4.93	605.04	Reverse	4.9	0.82	RSN497_NAHANNI_S3270.AT2 RSN497_NAHANNI_S3360.AT2 RSN497_NAHANNI_S3-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.14	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	0.07	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.14	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2

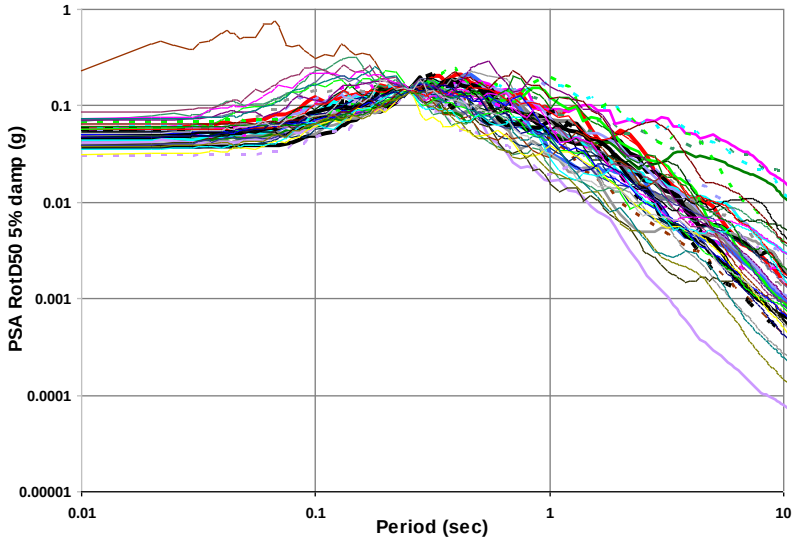
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	0.19	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
848	Landers Coolwater 1992	7.28	19.74	352.98	strike slip	4.8	0.12	RSN848_LANDERS_CLW-LN.AT2 RSN848_LANDERS_CLW-TR.AT2 RSN848_LANDERS_CLW-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	0.16	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	0.24	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.09	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.05	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1083	Northridge-01 Sunland - Mt Gleason Ave 1994	6.69	12.38	402.16	Reverse	6	0.27	RSN1083_NORTHR_GLE170.AT2 RSN1083_NORTHR_GLE260.AT2 RSN1083_NORTHR_GLE-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.08	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.09	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1184	Chi-Chi, Taiwan CHY010 1999	7.62	19.93	538.69	Reverse O	6.1	0.19	RSN1184_CHICHI_CHY010-N.AT2 RSN1184_CHICHI_CHY010-W.AT2 RSN1184_CHICHI_CHY010-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	0.25	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1500	Chi-Chi, Taiwan TCU061 1999	7.62	17.17	379.64	Reverse O	23.3	0.28	RSN1500_CHICHI_TCU061-E.AT2 RSN1500_CHICHI_TCU061-N.AT2 RSN1500_CHICHI_TCU061-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.08	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
1533	Chi-Chi, Taiwan TCU106 1999	7.62	14.97	451.37	Reverse O	23	0.29	RSN1533_CHICHI_TCU106-E.AT2 RSN1533_CHICHI_TCU106-N.AT2 RSN1533_CHICHI_TCU106-V.AT2
1534	Chi-Chi, Taiwan TCU107 1999	7.62	15.99	409	Reverse O	24.1	0.35	RSN1534_CHICHI_TCU107-E.AT2 RSN1534_CHICHI_TCU107-N.AT2 RSN1534_CHICHI_TCU107-V.AT2
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	0.27	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
1614	Duzce, Turkey Lamont 1061 1999	7.14	11.46	481	strike slip	9.3	0.27	RSN1614_DUZCE_1061-N.AT2 RSN1614_DUZCE_1061-E.AT2 RSN1614_DUZCE_1061-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	0.19	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1665	Northridge-02 Newhall - Fire Sta 1994	6.05	7.36	269.14	Reverse	3.1	0.7	RSN1665_NORTH001_NWH090.AT2 RSN1665_NORTH001_NWH360.AT2 RSN1665_NORTH001_NWH-UP.AT2
2703	Chi-Chi, Taiwan-04 CHY028 1999	6.2	17.63	542.61	strike slip	4.6	0.22	RSN2703_CHICHI.04_CHY028N.AT2 RSN2703_CHICHI.04_CHY028E.AT2 RSN2703_CHICHI.04_CHY028V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.11	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
2739	Chi-Chi, Taiwan-04 CHY080 1999	6.2	12.44	496.21	strike slip	5.7	0.34	RSN2739_CHICHI.04_CHY080N.AT2 RSN2739_CHICHI.04_CHY080E.AT2 RSN2739_CHICHI.04_CHY080V.AT2
3470	Chi-Chi, Taiwan-06 TCU072 1999	6.3	8.34	468.14	Reverse	5.6	0.44	RSN3470_CHICHI.06_TCU072N.AT2 RSN3470_CHICHI.06_TCU072E.AT2 RSN3470_CHICHI.06_TCU072V.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.12	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	0.11	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.04	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2

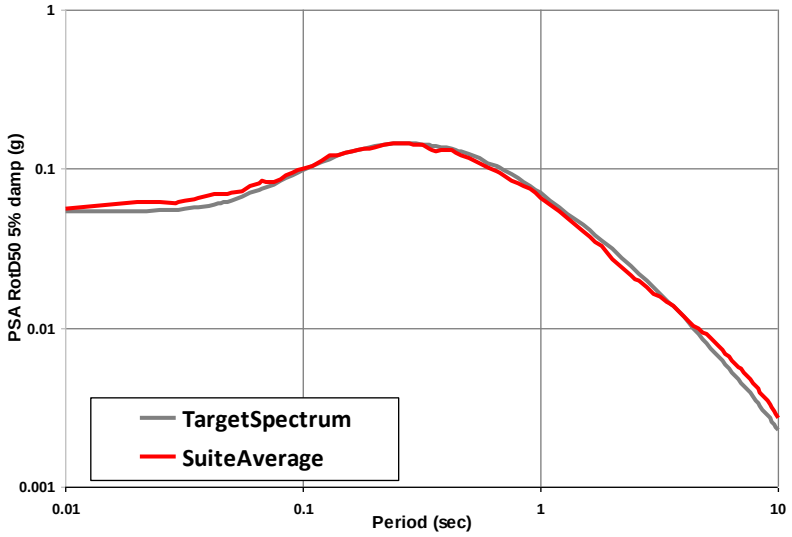
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	15							
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.14	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	0.15	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.05	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.06	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6874	Joshua Tree, CA Thousand Palms Post Office 1992	6.1	17.15	333.89	strike slip	5.4	0.21	RSN6874_JOSHUA_5068045.AT2 RSN6874_JOSHUA_5068135.AT2 RSN6874_JOSHUA_5068_UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.12	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	0.23	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**25**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	25	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
6	Imperial Valley-02 El Centro Array #9 1940	6.95	6.09	213.44	strike slip	14.7	0.24	RSN6_IMPVALL.I_I-ELC180.AT2 RSN6_IMPVALL.I_I-ELC270.AT2 RSN6_IMPVALL.I_I-ELC-UP.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.13	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
125	Friuli, Italy-01 Tolmezzo 1976	6.5	14.97	505.23	Reverse	2.5	0.16	RSN125_FRIULI.A_A-TMZ000.AT2 RSN125_FRIULI.A_A-TMZ270.AT2 RSN125_FRIULI.A_A-TMZ-UP.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	0.31	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.08	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	0.37	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
297	Irpinia, Italy-02 Bisaccia 1980	6.2	14.73	496.46	Normal	6.4	1.04	RSN297_ITALY_B-BIS000.AT2 RSN297_ITALY_B-BIS270.AT2 RSN297_ITALY_B-BIS-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.19	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
497	Nahanni, Canada Site 3 1985	6.76	4.93	605.04	Reverse	4.9	1.14	RSN497_NAHANNI_S3270.AT2 RSN497_NAHANNI_S3360.AT2 RSN497_NAHANNI_S3-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.19	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	0.1	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.19	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2

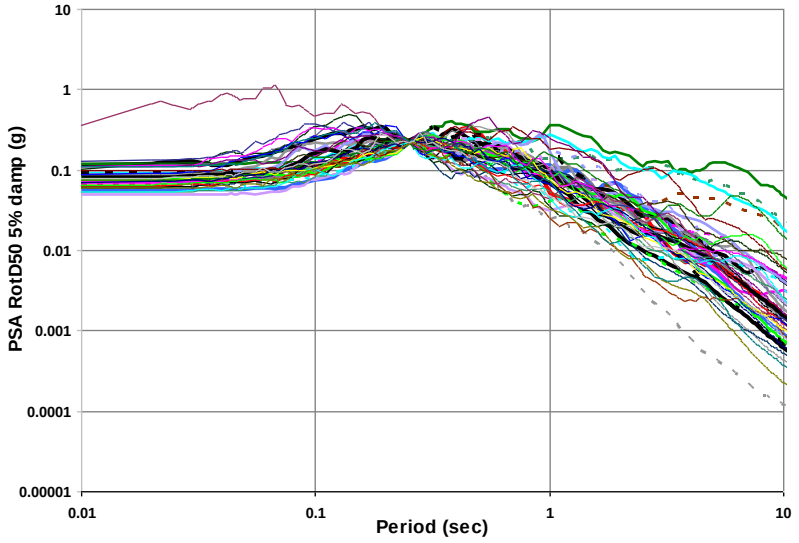
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	0.26	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	0.22	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
952	Northridge-01 Beverly Hills - 12520 Mulhol 1994	6.69	12.39	545.66	Reverse	4.9	0.07	RSN952_NORTHR_MU2035.AT2 RSN952_NORTHR_MU2125.AT2 RSN952_NORTHR_MU2-UP.AT2
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	0.16	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	0.34	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	0.36	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.07	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1048	Northridge-01 Northridge - 17645 Saticoy St 1994	6.69	0	280.86	Reverse	5.9	0.15	
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.11	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.13	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1184	Chi-Chi, Taiwan CHY010 1999	7.62	19.93	538.69	Reverse O	6.1	0.27	RSN1184_CHICHI_CHY010-N.AT2 RSN1184_CHICHI_CHY010-W.AT2 RSN1184_CHICHI_CHY010-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	0.34	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1490	Chi-Chi, Taiwan TCU050 1999	7.62	9.49	542.41	Reverse O	18.4	0.37	RSN1490_CHICHI_TCU050-E.AT2 RSN1490_CHICHI_TCU050-N.AT2 RSN1490_CHICHI_TCU050-V.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
1500	Chi-Chi, Taiwan TCU061 1999	7.62	17.17	379.64	Reverse O	23.3	0.4	RSN1500_CHICHI_TCU061-E.AT2 RSN1500_CHICHI_TCU061-N.AT2 RSN1500_CHICHI_TCU061-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.12	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.16	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	0.38	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	0.26	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1665	Northridge-02 Newhall - Fire Sta 1994	6.05	7.36	269.14	Reverse	3.1	0.97	RSN1665_NORTH001_NWH090.AT2 RSN1665_NORTH001_NWH360.AT2 RSN1665_NORTH001_NWH-UP.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.16	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
2739	Chi-Chi, Taiwan-04 CHY080 1999	6.2	12.44	496.21	strike slip	5.7	0.47	RSN2739_CHICHI.04_CHY080N.AT2 RSN2739_CHICHI.04_CHY080E.AT2 RSN2739_CHICHI.04_CHY080V.AT2
3470	Chi-Chi, Taiwan-06 TCU072 1999	6.3	8.34	468.14	Reverse	5.6	0.63	RSN3470_CHICHI.06_TCU072N.AT2 RSN3470_CHICHI.06_TCU072E.AT2 RSN3470_CHICHI.06_TCU072V.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.16	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	0.15	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.06	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4783	Wenchuan, China Jiangyouhanzeng 2008	7.9	11.44	322.81	Reverse O	18.5	0.15	RSN4783_WENCHUAN_UA1033.AT2 RSN4783_WENCHUAN_UA1034.AT2 RSN4783_WENCHUAN_UA1035.AT2

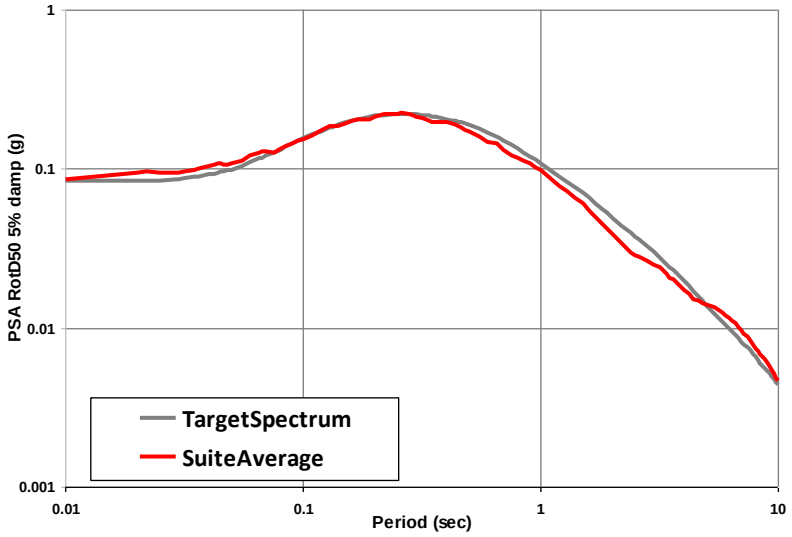
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	25							
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.19	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.05	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	0.21	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.09	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6874	Joshua Tree, CA Thousand Palms Post Office 1992	6.1	17.15	333.89	strike slip	5.4	0.28	RSN6874_JOSHUA_5068045.AT2 RSN6874_JOSHUA_5068135.AT2 RSN6874_JOSHUA_5068_UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.17	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	0.31	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**50**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	50	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
33	Parkfield Temblor pre-1969 1966	6.19	15.96	527.92	strike slip	1.3	0.28	RSN33_PARKF_TMB205.AT2 RSN33_PARKF_TMB295.AT2 RSN33_PARKF_TMBDWN.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.2	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
125	Friuli, Italy-01 Tolmezzo 1976	6.5	14.97	505.23	Reverse	2.5	0.24	RSN125_FRIULI.A_A-TMZ000.AT2 RSN125_FRIULI.A_A-TMZ270.AT2 RSN125_FRIULI.A_A-TMZ-UP.AT2
139	Tabas, Iran Dayhook 1978	7.35	0	471.53	Reverse	6.7	0.34	RSN139_TABAS_DAY-L1.AT2 RSN139_TABAS_DAY-T1.AT2 RSN139_TABAS_DAY-V1.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	0.48	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.13	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	0.57	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	0.3	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.3	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
459	Morgan Hill Gilroy Array #6 1984	6.19	9.85	663.31	strike slip	3.7	0.23	RSN459_MORGAN_G06000.AT2 RSN459_MORGAN_G06090.AT2 RSN459_MORGAN_G06-UP.AT2
497	Nahanni, Canada Site 3 1985	6.76	4.93	605.04	Reverse	4.9	1.73	RSN497_NAHANNI_S3270.AT2 RSN497_NAHANNI_S3360.AT2 RSN497_NAHANNI_S3-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.29	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2

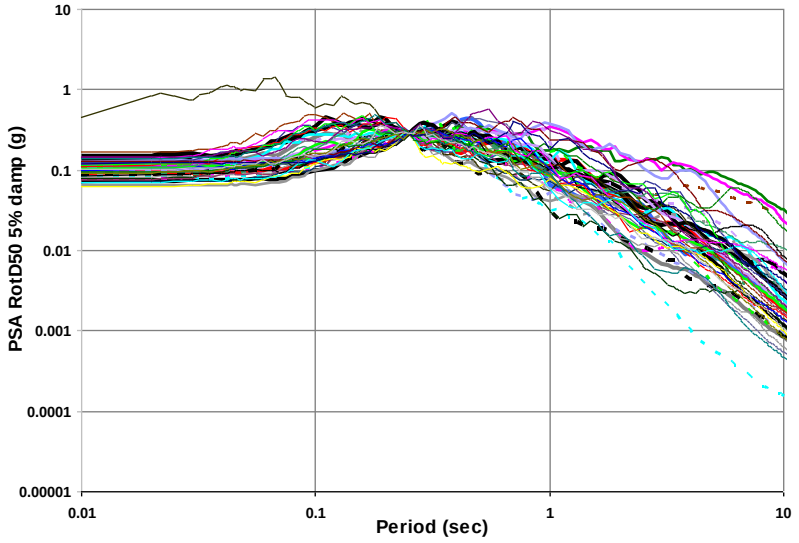
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	0.15	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	0.4	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
952	Northridge-01 Beverly Hills - 12520 Mulhol 1994	6.69	12.39	545.66	Reverse	4.9	0.11	RSN952_NORTHR_MU2035.AT2 RSN952_NORTHR_MU2125.AT2 RSN952_NORTHR_MU2-UP.AT2
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	0.25	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	0.52	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	0.55	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.11	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.18	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.2	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	0.53	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1498	Chi-Chi, Taiwan TCU059 1999	7.62	17.11	272.67	Reverse O	21.8	0.75	RSN1498_CHICHI_TCU059-E.AT2 RSN1498_CHICHI_TCU059-N.AT2 RSN1498_CHICHI_TCU059-V.AT2
1500	Chi-Chi, Taiwan TCU061 1999	7.62	17.17	379.64	Reverse O	23.3	0.61	RSN1500_CHICHI_TCU061-E.AT2 RSN1500_CHICHI_TCU061-N.AT2 RSN1500_CHICHI_TCU061-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.18	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.24	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	0.58	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	0.4	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1665	Northridge-02 Newhall - Fire Sta 1994	6.05	7.36	269.14	Reverse	3.1	1.48	RSN1665_NORTH001_NWH090.AT2 RSN1665_NORTH001_NWH360.AT2 RSN1665_NORTH001_NWH-UP.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.24	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
2739	Chi-Chi, Taiwan-04 CHY080 1999	6.2	12.44	496.21	strike slip	5.7	0.72	RSN2739_CHICHI.04_CHY080N.AT2 RSN2739_CHICHI.04_CHY080E.AT2 RSN2739_CHICHI.04_CHY080V.AT2
3473	Chi-Chi, Taiwan-06 TCU078 1999	6.3	5.72	443.04	Reverse	2.6	0.24	RSN3473_CHICHI.06_TCU078N.AT2 RSN3473_CHICHI.06_TCU078E.AT2 RSN3473_CHICHI.06_TCU078V.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.25	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	0.24	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.09	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4783	Wenchuan, China Jiangyouhanzeng 2008	7.9	11.44	322.81	Reverse O	18.5	0.23	RSN4783_WENCHUAN_UA1033.AT2 RSN4783_WENCHUAN_UA1034.AT2 RSN4783_WENCHUAN_UA1035.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.3	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.08	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2

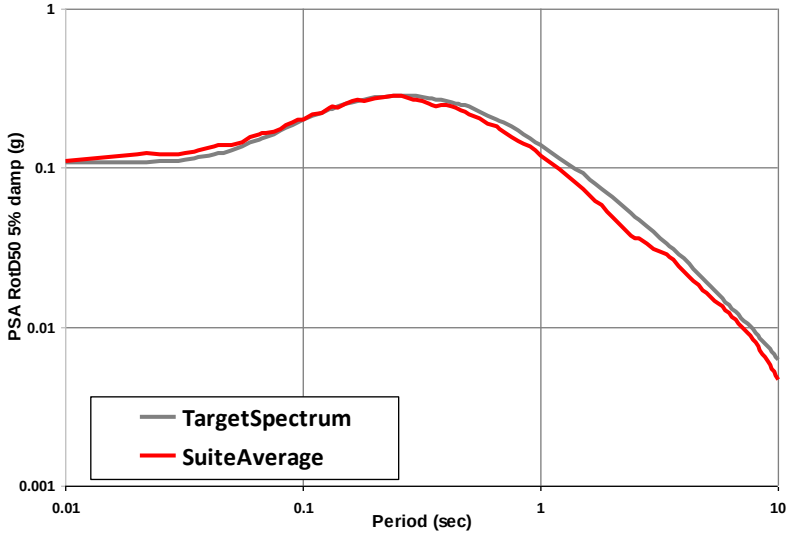
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	50							
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	0.32	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.11	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.13	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6874	Joshua Tree, CA Thousand Palms Post Office 1992	6.1	17.15	333.89	strike slip	5.4	0.44	RSN6874_JOSHUA_5068045.AT2 RSN6874_JOSHUA_5068135.AT2 RSN6874_JOSHUA_5068_UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.26	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	0.48	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.23	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**75**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	75	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
33	Parkfield Temblor pre-1969 1966	6.19	15.96	527.92	strike slip	1.3	0.35	RSN33_PARKF_TMB205.AT2 RSN33_PARKF_TMB295.AT2 RSN33_PARKF_TMBDWN.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.26	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
139	Tabas, Iran Dayhook 1978	7.35	0	471.53	Reverse	6.7	0.43	RSN139_TABAS_DAY-L1.AT2 RSN139_TABAS_DAY-T1.AT2 RSN139_TABAS_DAY-V1.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	0.61	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.17	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
297	Irpinia, Italy-02 Bisaccia 1980	6.2	14.73	496.46	Normal	6.4	2.02	RSN297_ITALY_B-BIS000.AT2 RSN297_ITALY_B-BIS270.AT2 RSN297_ITALY_B-BIS-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.38	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
458	Morgan Hill Gilroy Array #4 1984	6.19	11.53	221.78	strike slip	7.9	0.28	RSN458_MORGAN_G04270.AT2 RSN458_MORGAN_G04360.AT2 RSN458_MORGAN_G04-UP.AT2
497	Nahanni, Canada Site 3 1985	6.76	4.93	605.04	Reverse	4.9	2.22	RSN497_NAHANNI_S3270.AT2 RSN497_NAHANNI_S3360.AT2 RSN497_NAHANNI_S3-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.37	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
718	Superstition Hills-01 Imperial Valley Wildlife Liquefaction 1987	6.22	17.59	179	strike slip	7.2	0.88	RSN718_SUPER.A_A-IVW090.AT2 RSN718_SUPER.A_A-IVW360.AT2 RSN718_SUPER.A_A-IVW-UP.AT2
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	0.2	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2

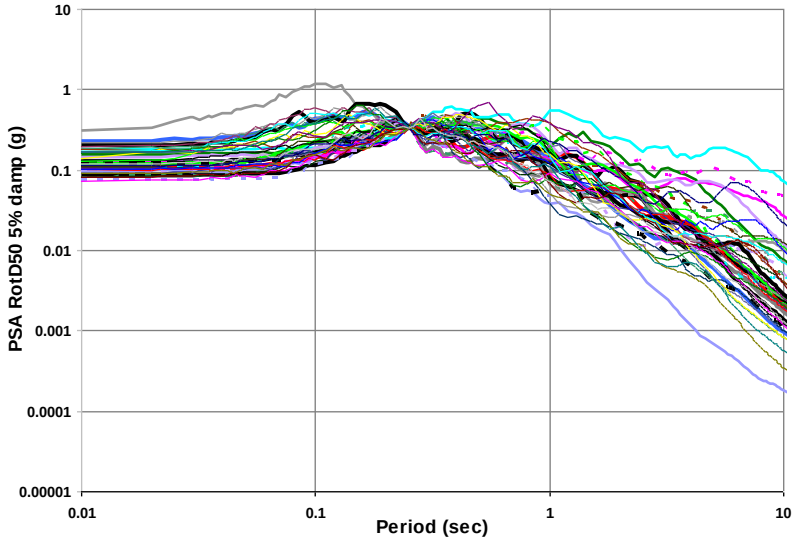
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.38	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	0.51	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	0.44	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	0.32	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	0.66	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	0.7	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1016	Northridge-01 La Crescenta - New York 1994	6.69	17.81	411.55	Reverse	5.5	0.63	RSN1016_NORTHR_NYA090.AT2 RSN1016_NORTHR_NYA180.AT2 RSN1016_NORTHR_NYA-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.14	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.23	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.26	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	0.68	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1500	Chi-Chi, Taiwan TCU061 1999	7.62	17.17	379.64	Reverse O	23.3	0.78	RSN1500_CHICHI_TCU061-E.AT2 RSN1500_CHICHI_TCU061-N.AT2 RSN1500_CHICHI_TCU061-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.23	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
1541	Chi-Chi, Taiwan TCU116 1999	7.62	12.38	493.09	Reverse O	17.4	0.74	RSN1541_CHICHI_TCU116-E.AT2 RSN1541_CHICHI_TCU116-N.AT2 RSN1541_CHICHI_TCU116-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	0.52	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1665	Northridge-02 Newhall - Fire Sta 1994	6.05	7.36	269.14	Reverse	3.1	1.89	RSN1665_NORTH001_NWH090.AT2 RSN1665_NORTH001_NWH360.AT2 RSN1665_NORTH001_NWH-UP.AT2
2703	Chi-Chi, Taiwan-04 CHY028 1999	6.2	17.63	542.61	strike slip	4.6	0.61	RSN2703_CHICHI.04_CHY028N.AT2 RSN2703_CHICHI.04_CHY028E.AT2 RSN2703_CHICHI.04_CHY028V.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.31	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
2739	Chi-Chi, Taiwan-04 CHY080 1999	6.2	12.44	496.21	strike slip	5.7	0.92	RSN2739_CHICHI.04_CHY080N.AT2 RSN2739_CHICHI.04_CHY080E.AT2 RSN2739_CHICHI.04_CHY080V.AT2
3473	Chi-Chi, Taiwan-06 TCU078 1999	6.3	5.72	443.04	Reverse	2.6	0.3	RSN3473_CHICHI.06_TCU078N.AT2 RSN3473_CHICHI.06_TCU078E.AT2 RSN3473_CHICHI.06_TCU078V.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	0.32	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4212	Niigata, Japan NIG022 2004	6.63	17.57	193.2	Reverse	3.7	0.26	RSN4212_NIIGATA_NIG022NS.AT2 RSN4212_NIIGATA_NIG022EW.AT2 RSN4212_NIIGATA_NIG022UD.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	0.3	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.12	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.38	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.1	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2

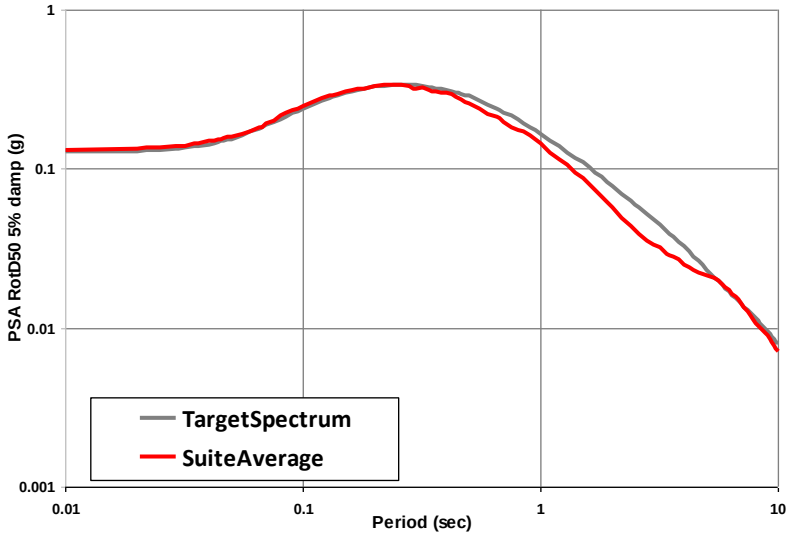
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	75							
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	0.41	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2
5656	Iwate IWTH24 2008	6.9	3.1	486.41	Reverse	8	0.26	RSN5656_IWATE_IWTH24NS.AT2 RSN5656_IWATE_IWTH24EW.AT2 RSN5656_IWATE_IWTH24UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.17	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6874	Joshua Tree, CA Thousand Palms Post Office 1992	6.1	17.15	333.89	strike slip	5.4	0.56	RSN6874_JOSHUA_5068045.AT2 RSN6874_JOSHUA_5068135.AT2 RSN6874_JOSHUA_5068_UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.34	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	0.62	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.29	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**100**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	100	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
31	Parkfield Cholame - Shandon Array #8 1966	6.19	12.9	256.82	strike slip	4.7	0.82	RSN31_PARKF_C08050.AT2 RSN31_PARKF_C08320.AT2 RSN31_PARKF_C08DWN.AT2
33	Parkfield Temblor pre-1969 1966	6.19	15.96	527.92	strike slip	1.3	0.42	RSN33_PARKF_TMB205.AT2 RSN33_PARKF_TMB295.AT2 RSN33_PARKF_TMBDWN.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.1	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.2	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	0.87	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.45	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.44	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
558	Chalfant Valley-02 Zack Brothers Ranch 1986	6.19	6.44	316.19	strike slip	2.4	0.32	RSN558_CHALFANT.A_A-ZAK270.AT2 RSN558_CHALFANT.A_A-ZAK360.AT2 RSN558_CHALFANT.A_A-ZAK-UP.AT2
741	Loma Prieta BRAN 1989	6.93	3.85	476.54	Reverse O	6.3	0.29	RSN741_LOMAP_BRN000.AT2 RSN741_LOMAP_BRN090.AT2 RSN741_LOMAP_BRN-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.45	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	0.61	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
810	Loma Prieta UCSC Lick Observatory 1989	6.93	12.04	713.59	Reverse O	6.1	0.36	RSN810_LOMAP_LOB000.AT2 RSN810_LOMAP_LOB090.AT2 RSN810_LOMAP_LOB-UP.AT2

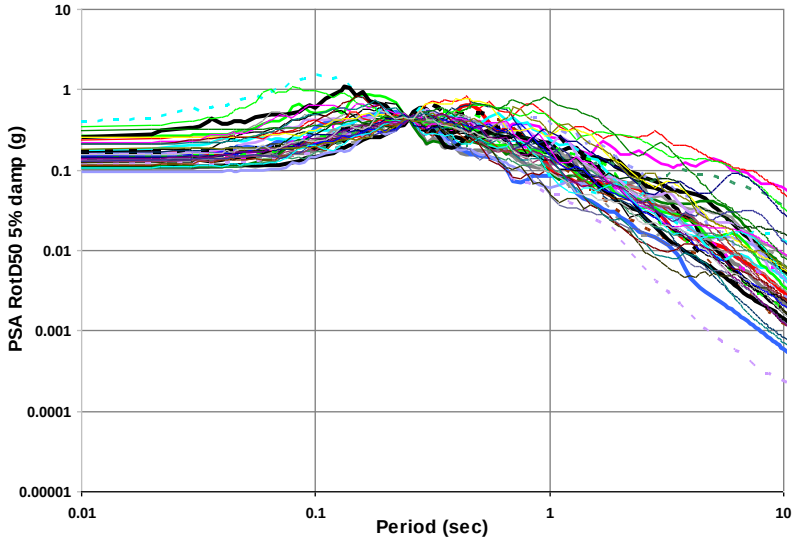
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
952	Northridge-01 Beverly Hills - 12520 Mulhol 1994	6.69	12.39	545.66	Reverse	4.9	0.17	RSN952_NORTHR_MU2035.AT2 RSN952_NORTHR_MU2125.AT2 RSN952_NORTHR_MU2-UP.AT2
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	0.38	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	0.79	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	0.84	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.31	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.16	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1051	Northridge-01 Pacoima Dam (upper left) 1994	6.69	4.92	2016.13	Reverse	3.1	0.16	RSN1051_NORTHR_PUL104.AT2 RSN1051_NORTHR_PUL194.AT2 RSN1051_NORTHR_PUL-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.27	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.31	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.52	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1227	Chi-Chi, Taiwan CHY074 1999	7.62	0.7	553.43	Reverse O	16.1	0.81	RSN1227_CHICHI_CHY074-E.AT2 RSN1227_CHICHI_CHY074-N.AT2 RSN1227_CHICHI_CHY074-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	0.81	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1490	Chi-Chi, Taiwan TCU050 1999	7.62	9.49	542.41	Reverse O	18.4	0.87	RSN1490_CHICHI_TCU050-E.AT2 RSN1490_CHICHI_TCU050-N.AT2 RSN1490_CHICHI_TCU050-V.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
1498	Chi-Chi, Taiwan TCU059 1999	7.62	17.11	272.67	Reverse O	21.8	1.14	RSN1498_CHICHI_TCU059-E.AT2 RSN1498_CHICHI_TCU059-N.AT2 RSN1498_CHICHI_TCU059-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.27	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1520	Chi-Chi, Taiwan TCU088 1999	7.62	4.67	665.2	Reverse O	5.2	0.59	RSN1520_CHICHI_TCU088-N.AT2 RSN1520_CHICHI_TCU088-E.AT2 RSN1520_CHICHI_TCU088-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.37	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1605	Duzce, Turkey Duzce 1999	7.14	0	281.86	strike slip	7.1	0.33	RSN1605_DUZCE_DZC180.AT2 RSN1605_DUZCE_DZC270.AT2 RSN1605_DUZCE_DZC-UP.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	0.62	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1665	Northridge-02 Newhall - Fire Sta 1994	6.05	7.36	269.14	Reverse	3.1	2.25	RSN1665_NORTH001_NWH090.AT2 RSN1665_NORTH001_NWH360.AT2 RSN1665_NORTH001_NWH-UP.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.37	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
3964	Tottori, Japan TTR007 2000	6.61	11.28	469.79	strike slip	4	0.29	RSN3964_TOTTORI_TTR007NS.AT2 RSN3964_TOTTORI_TTR007EW.AT2 RSN3964_TOTTORI_TTR007UD.AT2
4212	Niigata, Japan NIG022 2004	6.63	17.57	193.2	Reverse	3.7	0.31	RSN4212_NIIGATA_NIG022NS.AT2 RSN4212_NIIGATA_NIG022EW.AT2 RSN4212_NIIGATA_NIG022UD.AT2
4480	L'Aquila, Italy L'Aquila - V. Aterno - Centro Valle 2009	6.3	0	475	Normal	4.4	0.32	RSN4480_L-AQUILA_GX066XTE.AT2 RSN4480_L-AQUILA_GX066YLN.AT2 RSN4480_L-AQUILA_GX066ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.14	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.45	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2

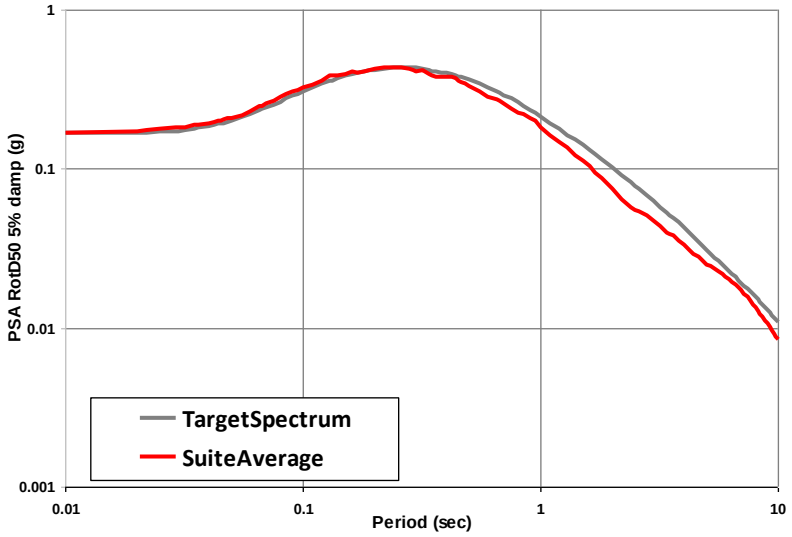
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	100							
4850	Chuetsu-oki Yoshikawaku Joetsu City 2007	6.8	13.68	561.59	Reverse	4.1	0.5	RSN4850_CHUETSU_65013NS.AT2 RSN4850_CHUETSU_65013EW.AT2 RSN4850_CHUETSU_65013UD.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	0.49	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.17	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5829	El Mayor-Cucapah RIITO 2010	7.2	13.7	242.05	strike slip	15.6	0.33	RSN5829_SIERRA.MEX_RII000.AT2 RSN5829_SIERRA.MEX_RII090.AT2 RSN5829_SIERRA.MEX_RII--V.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.2	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.4	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.34	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**150**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	150	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
31	Parkfield Cholame - Shandon Array #8 1966	6.19	12.9	256.82	strike slip	4.7	1.05	RSN31_PARKF_C08050.AT2 RSN31_PARKF_C08320.AT2 RSN31_PARKF_C08DWN.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.39	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
125	Friuli, Italy-01 Tolmezzo 1976	6.5	14.97	505.23	Reverse	2.5	0.47	RSN125_FRIULI.A_A-TMZ000.AT2 RSN125_FRIULI.A_A-TMZ270.AT2 RSN125_FRIULI.A_A-TMZ-UP.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.13	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	0.94	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.25	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	1.12	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.58	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.56	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	0.3	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2
768	Loma Prieta Gilroy Array #4 1989	6.93	13.81	221.78	Reverse O	4.5	0.81	RSN768_LOMAP_G04000.AT2 RSN768_LOMAP_G04090.AT2 RSN768_LOMAP_G04-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	0.78	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2

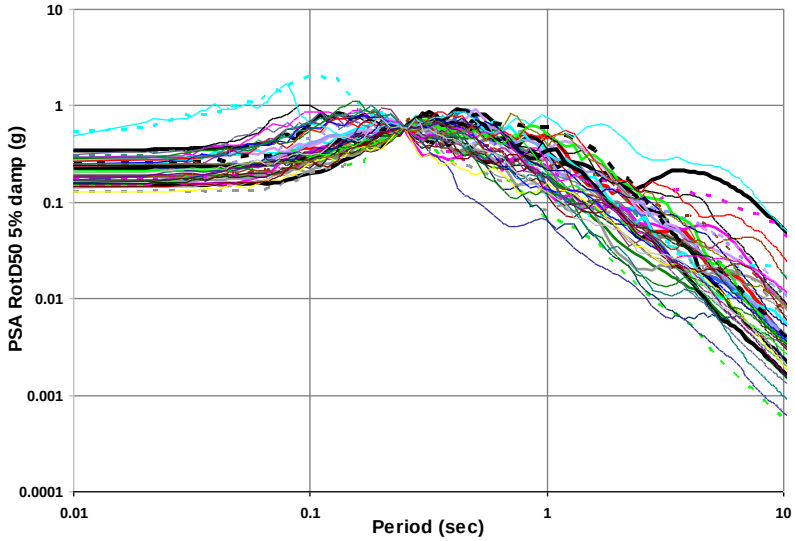
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
810	Loma Prieta UCSC Lick Observatory 1989	6.93	12.04	713.59	Reverse O	6.1	0.46	RSN810_LOMAP_LOB000.AT2 RSN810_LOMAP_LOB090.AT2 RSN810_LOMAP_LOB-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	0.67	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	1.01	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	1.07	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	0.39	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.34	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1126	Kozani, Greece-01 Kozani 1995	6.4	14.13	649.67	Normal	2.9	0.92	RSN1126_KOZANI_KOZ--L.AT2 RSN1126_KOZANI_KOZ--T.AT2 RSN1126_KOZANI_KOZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.39	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.66	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.03	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1490	Chi-Chi, Taiwan TCU050 1999	7.62	9.49	542.41	Reverse O	18.4	1.12	RSN1490_CHICHI_TCU050-E.AT2 RSN1490_CHICHI_TCU050-N.AT2 RSN1490_CHICHI_TCU050-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	0.35	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2
1513	Chi-Chi, Taiwan TCU079 1999	7.62	0	363.99	Reverse O	19.2	0.38	RSN1513_CHICHI_TCU079-E.AT2 RSN1513_CHICHI_TCU079-N.AT2 RSN1513_CHICHI_TCU079-V.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
1520	Chi-Chi, Taiwan TCU088 1999	7.62	4.67	665.2	Reverse O	5.2	0.76	RSN1520_CHICHI_TCU088-N.AT2 RSN1520_CHICHI_TCU088-E.AT2 RSN1520_CHICHI_TCU088-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.47	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	0.79	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1665	Northridge-02 Newhall - Fire Sta 1994	6.05	7.36	269.14	Reverse	3.1	2.89	RSN1665_NORTH001_NWH090.AT2 RSN1665_NORTH001_NWH360.AT2 RSN1665_NORTH001_NWH-UP.AT2
3470	Chi-Chi, Taiwan-06 TCU072 1999	6.3	8.34	468.14	Reverse	5.6	1.85	RSN3470_CHICHI.06_TCU072N.AT2 RSN3470_CHICHI.06_TCU072E.AT2 RSN3470_CHICHI.06_TCU072V.AT2
3475	Chi-Chi, Taiwan-06 TCU080 1999	6.3	0	489.32	Reverse	4.1	0.46	RSN3475_CHICHI.06_TCU080N.AT2 RSN3475_CHICHI.06_TCU080E.AT2 RSN3475_CHICHI.06_TCU080V.AT2
4212	Niigata, Japan NIG022 2004	6.63	17.57	193.2	Reverse	3.7	0.4	RSN4212_NIIGATA_NIG022NS.AT2 RSN4212_NIIGATA_NIG022EW.AT2 RSN4212_NIIGATA_NIG022UD.AT2
4228	Niigata, Japan NIGH11 2004	6.63	6.27	375	Reverse	3.1	0.42	RSN4228_NIIGATA_NIGH11NS.AT2 RSN4228_NIIGATA_NIGH11EW.AT2 RSN4228_NIIGATA_NIGH11UD.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	0.46	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.18	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4798	Wenchuan, China Anxiantashui 2008	7.9	0	376.1	Reverse O	27.3	0.58	RSN4798_WENCHUAN_UA1081.AT2 RSN4798_WENCHUAN_UA1082.AT2 RSN4798_WENCHUAN_UA1083.AT2
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.16	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.22	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2

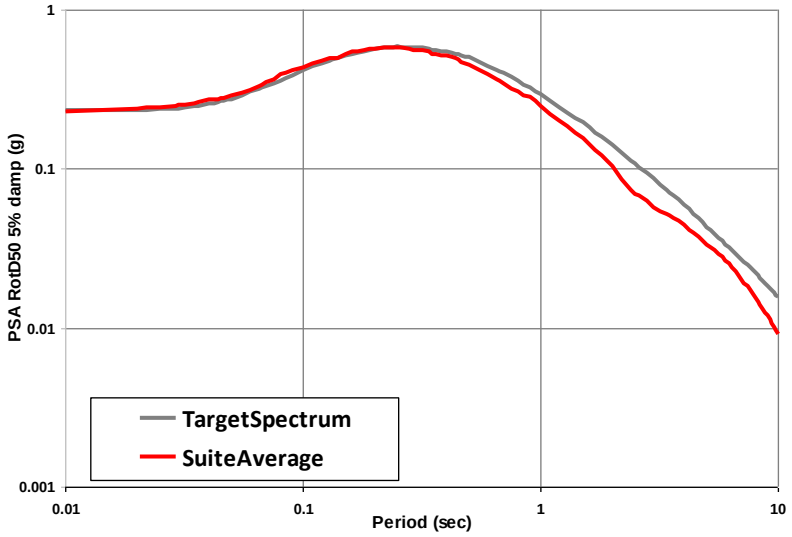
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	150							
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.26	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6874	Joshua Tree, CA Thousand Palms Post Office 1992	6.1	17.15	333.89	strike slip	5.4	0.85	RSN6874_JOSHUA_5068045.AT2 RSN6874_JOSHUA_5068135.AT2 RSN6874_JOSHUA_5068_UP.AT2
6887	Darfield, New Zealand Christchurch Botanical Gardens 2010	7	18.05	187	strike slip	10.8	1.48	RSN6887_DARFIELD_CBGSN89W.AT2 RSN6887_DARFIELD_CBGSS01W.AT2 RSN6887_DARFIELD_CBGSUP.AT2
6927	Darfield, New Zealand LINC 2010	7	5.07	263.2	strike slip	8	0.78	RSN6927_DARFIELD_LINCN23E.AT2 RSN6927_DARFIELD_LINCN67W.AT2 RSN6927_DARFIELD_LINCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.52	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8123	Christchurch, New Zealand Christchurch Resthaven 2011	6.2	5.11	141	Reverse O	4.3	0.6	RSN8123_CCHURCH_REHSN02E.AT2 RSN8123_CCHURCH_REHSS88E.AT2 RSN8123_CCHURCH_REHSUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.44	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**250**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	250	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
71	San Fernando Lake Hughes #12 1971	6.61	13.99	602.1	Reverse	2.6	0.52	RSN71_SFERN_L12021.AT2 RSN71_SFERN_L12291.AT2 RSN71_SFERN_L12DWN.AT2
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	0.53	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
125	Friuli, Italy-01 Tolmezzo 1976	6.5	14.97	505.23	Reverse	2.5	0.64	RSN125_FRIULI.A_A-TMZ000.AT2 RSN125_FRIULI.A_A-TMZ270.AT2 RSN125_FRIULI.A_A-TMZ-UP.AT2
139	Tabas, Iran Dayhook 1978	7.35	0	471.53	Reverse	6.7	0.89	RSN139_TABAS_DAY-L1.AT2 RSN139_TABAS_DAY-T1.AT2 RSN139_TABAS_DAY-V1.AT2
143	Tabas, Iran Tabas 1978	7.35	1.79	766.77	Reverse	8	0.18	RSN143_TABAS_TAB-L1.AT2 RSN143_TABAS_TAB-T1.AT2 RSN143_TABAS_TAB-V1.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.34	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
184	Imperial Valley-06 El Centro Differential Array 1979	6.53	5.09	202.26	strike slip	3.3	0.49	RSN184_IMPVALL.H_H-EDA270.AT2 RSN184_IMPVALL.H_H-EDA360.AT2 RSN184_IMPVALL.H_H-EDA-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	1.51	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	0.78	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
517	N. Palm Springs Desert Hot Springs 1986	6.06	0.99	359	Reverse O	3.4	0.83	
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	0.76	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
719	Superstition Hills-02 Brawley Airport 1987	6.54	17.03	208.71	strike slip	10.5	2.66	

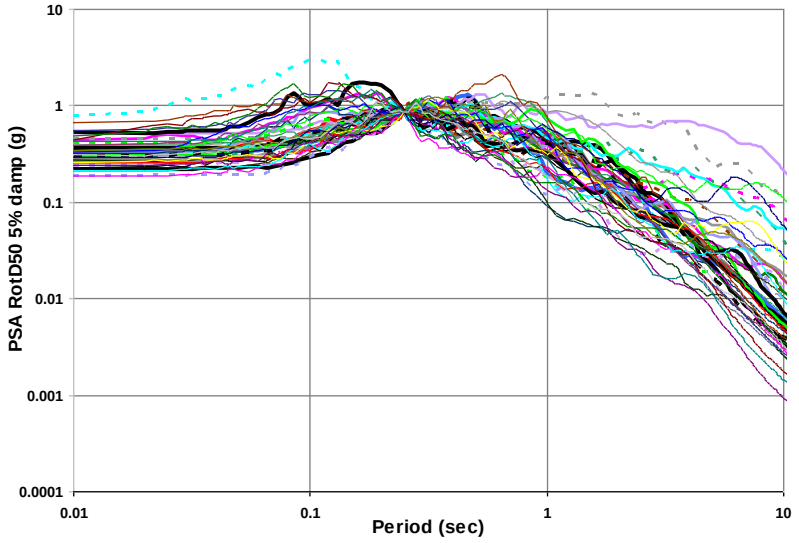
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
728	Superstition Hills-02 Westmorland Fire Sta 1987	6.54	13.03	193.67	strike slip	10.9	1.28	RSN728_SUPER.B_B-WSM090.AT2 RSN728_SUPER.B_B-WSM180.AT2 RSN728_SUPER.B_B-WSM-UP.AT2
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	0.41	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2
763	Loma Prieta Gilroy - Gavilan Coll. 1989	6.93	9.19	729.65	Reverse O	1.5	0.73	RSN763_LOMAP_GIL067.AT2 RSN763_LOMAP_GIL337.AT2 RSN763_LOMAP_GIL-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	0.78	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	1.05	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
810	Loma Prieta UCSC Lick Observatory 1989	6.93	12.04	713.59	Reverse O	6.1	0.63	RSN810_LOMAP_LOB000.AT2 RSN810_LOMAP_LOB090.AT2 RSN810_LOMAP_LOB-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	0.91	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	1.37	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	1.45	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.28	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1083	Northridge-01 Sunland - Mt Gleason Ave 1994	6.69	12.38	402.16	Reverse	6	1.5	RSN1083_NORTHR_GLE170.AT2 RSN1083_NORTHR_GLE260.AT2 RSN1083_NORTHR_GLE-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.47	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.53	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
1161	Kocaeli, Turkey Gebze 1999	7.51	7.57	792	strike slip	5.8	1.79	RSN1161_KOCAELI_GBZ000.AT2 RSN1161_KOCAELI_GBZ270.AT2 RSN1161_KOCAELI_GBZ-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	0.9	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	1.4	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1513	Chi-Chi, Taiwan TCU079 1999	7.62	0	363.99	Reverse O	19.2	0.51	RSN1513_CHICHI_TCU079-E.AT2 RSN1513_CHICHI_TCU079-N.AT2 RSN1513_CHICHI_TCU079-V.AT2
1520	Chi-Chi, Taiwan TCU088 1999	7.62	4.67	665.2	Reverse O	5.2	1.02	RSN1520_CHICHI_TCU088-N.AT2 RSN1520_CHICHI_TCU088-E.AT2 RSN1520_CHICHI_TCU088-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	1.07	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1787	Hector Mine Hector 1999	7.13	10.35	726	strike slip	7	0.9	RSN1787_HECTOR_HEC000.AT2 RSN1787_HECTOR_HEC090.AT2 RSN1787_HECTOR_HECVER.AT2
2734	Chi-Chi, Taiwan-04 CHY074 1999	6.2	6.02	553.43	strike slip	3.4	0.64	RSN2734_CHICHI.04_CHY074N.AT2 RSN2734_CHICHI.04_CHY074E.AT2 RSN2734_CHICHI.04_CHY074V.AT2
2739	Chi-Chi, Taiwan-04 CHY080 1999	6.2	12.44	496.21	strike slip	5.7	1.89	RSN2739_CHICHI.04_CHY080N.AT2 RSN2739_CHICHI.04_CHY080E.AT2 RSN2739_CHICHI.04_CHY080V.AT2
3474	Chi-Chi, Taiwan-06 TCU079 1999	6.3	1.04	363.99	Reverse	2.7	0.21	RSN3474_CHICHI.06_TCU079N.AT2 RSN3474_CHICHI.06_TCU079E.AT2 RSN3474_CHICHI.06_TCU079V.AT2
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	0.67	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT
4480	L'Aquila, Italy L'Aquila - V. Aterno - Centro Valle 2009	6.3	0	475	Normal	4.4	0.55	RSN4480_L-AQUILA_GX066XTE.AT2 RSN4480_L-AQUILA_GX066YLN.AT2 RSN4480_L-AQUILA_GX066ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.24	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2

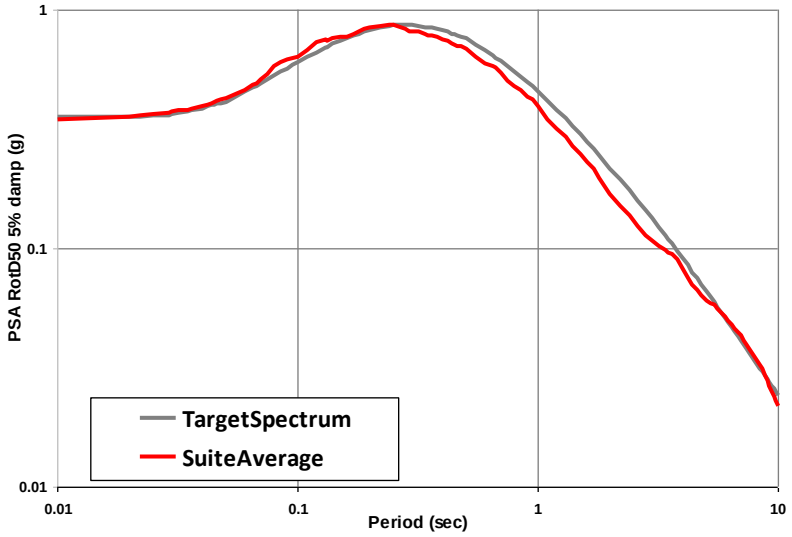
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	250							
4820	Wenchuan, China Wenchuanwolong 2008	7.9	0	511.16	Reverse O	24.4	0.21	RSN4820_WENCHUAN_UA1154.AT2 RSN4820_WENCHUAN_UA1153.AT2 RSN4820_WENCHUAN_UA1155.AT2
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.29	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.36	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6874	Joshua Tree, CA Thousand Palms Post Office 1992	6.1	17.15	333.89	strike slip	5.4	1.16	RSN6874_JOSHUA_5068045.AT2 RSN6874_JOSHUA_5068135.AT2 RSN6874_JOSHUA_5068_UP.AT2
8090	Christchurch, New Zealand Hulverstone Drive Pumping Station 2011	6.2	4.32	206	Reverse O	3.8	1.87	RSN8090_CCHURCH_HPSCN04W.AT2 RSN8090_CCHURCH_HPSCS86W.AT2 RSN8090_CCHURCH_HPSCUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	0.7	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8124	Christchurch, New Zealand Riccarton High School 2011	6.2	9.43	293	Reverse O	4.9	0.85	RSN8124_CCHURCH_RHSCN86W.AT2 RSN8124_CCHURCH_RHSCS04W.AT2 RSN8124_CCHURCH_RHSCUP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
30	Parkfield Cholame - Shandon Array #5 1966	6.19	9.58	289.56	strike slip	2.3	1.08	RSN30_PARKF_C05085.AT2 RSN30_PARKF_C05355.AT2 RSN30_PARKF_C05DWN.AT2
31	Parkfield Cholame - Shandon Array #8 1966	6.19	12.9	256.82	strike slip	4.7	2.1	RSN31_PARKF_C08050.AT2 RSN31_PARKF_C08320.AT2 RSN31_PARKF_C08DWN.AT2
139	Tabas, Iran Dayhook 1978	7.35	0	471.53	Reverse	6.7	1.31	RSN139_TABAS_DAY-L1.AT2 RSN139_TABAS_DAY-T1.AT2 RSN139_TABAS_DAY-V1.AT2
164	Imperial Valley-06 Cerro Prieto 1979	6.53	15.19	471.53	strike slip	18.1	1.86	RSN164_IMPVALL.H_H-CPE147.AT2 RSN164_IMPVALL.H_H-CPE237.AT2 RSN164_IMPVALL.H_H-CPEDWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.5	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	2.22	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	1.15	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
517	N. Palm Springs Desert Hot Springs 1986	6.06	0.99	359	Reverse O	3.4	1.21	
518	N. Palm Springs Fun Valley 1986	6.06	12.79	388.63	Reverse O	6.1	4.49	RSN518_PALMSPR_FVR045.AT2 RSN518_PALMSPR_FVR135.AT2 RSN518_PALMSPR_FVR-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.12	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.14	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
811	Loma Prieta WAHO 1989	6.93	11.03	388.33	Reverse O	7	0.82	RSN811_LOMAP_WAH000.AT2 RSN811_LOMAP_WAH090.AT2 RSN811_LOMAP_WAH-UP.AT2

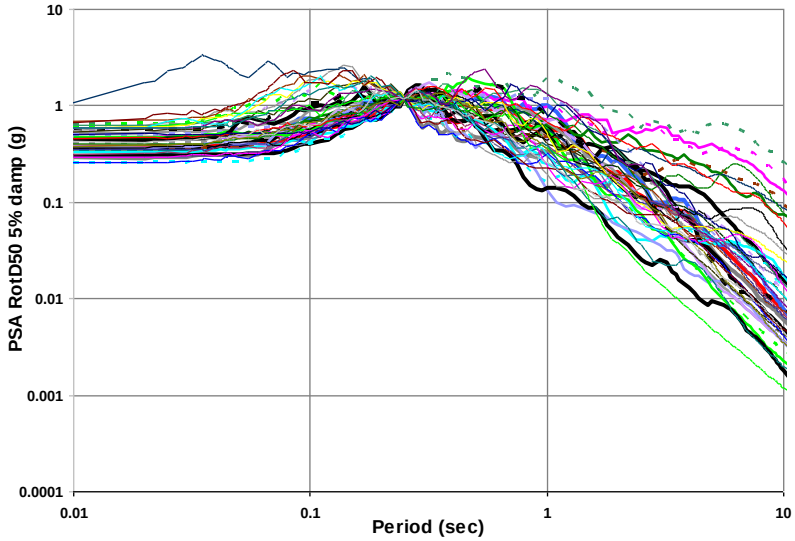
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
848	Landers Coolwater 1992	7.28	19.74	352.98	strike slip	4.8	0.99	RSN848_LANDERS_CLW-LN.AT2 RSN848_LANDERS_CLW-TR.AT2 RSN848_LANDERS_CLW-UP.AT2
952	Northridge-01 Beverly Hills - 12520 Mulhol 1994	6.69	12.39	545.66	Reverse	4.9	0.45	RSN952_NORTHR_MU2035.AT2 RSN952_NORTHR_MU2125.AT2 RSN952_NORTHR_MU2-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	2.01	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	2.13	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.41	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1082	Northridge-01 Sun Valley - Roscoe Blvd 1994	6.69	5.59	320.93	Reverse	5.8	0.98	RSN1082_NORTHR_RO3000.AT2 RSN1082_NORTHR_RO3090.AT2 RSN1082_NORTHR_RO3-UP.AT2
1111	Kobe, Japan Nishi-Akashi 1995	6.9	7.08	609	strike slip	4.2	0.68	RSN1111_KOBE_NIS000.AT2 RSN1111_KOBE_NIS090.AT2 RSN1111_KOBE_NIS-UP.AT2
1119	Kobe, Japan Takarazuka 1995	6.9	0	312	strike slip	2.1	0.55	RSN1119_KOBE_TAZ000.AT2 RSN1119_KOBE_TAZ090.AT2 RSN1119_KOBE_TAZ-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	0.78	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.32	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1184	Chi-Chi, Taiwan CHY010 1999	7.62	19.93	538.69	Reverse O	6.1	1.61	RSN1184_CHICHI_CHY010-N.AT2 RSN1184_CHICHI_CHY010-W.AT2 RSN1184_CHICHI_CHY010-V.AT2
1193	Chi-Chi, Taiwan CHY024 1999	7.62	9.62	427.73	Reverse O	12.6	1.31	RSN1193_CHICHI_CHY024-E.AT2 RSN1193_CHICHI_CHY024-N.AT2 RSN1193_CHICHI_CHY024-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	2.05	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
1495	Chi-Chi, Taiwan TCU055 1999	7.62	6.34	359.13	Reverse O	19.1	1.48	RSN1495_CHICHI_TCU055-E.AT2 RSN1495_CHICHI_TCU055-N.AT2 RSN1495_CHICHI_TCU055-V.AT2
1520	Chi-Chi, Taiwan TCU088 1999	7.62	4.67	665.2	Reverse O	5.2	1.5	RSN1520_CHICHI_TCU088-N.AT2 RSN1520_CHICHI_TCU088-E.AT2 RSN1520_CHICHI_TCU088-V.AT2
1521	Chi-Chi, Taiwan TCU089 1999	7.62	0	671.52	Reverse O	20.5	0.94	RSN1521_CHICHI_TCU089-E.AT2 RSN1521_CHICHI_TCU089-N.AT2 RSN1521_CHICHI_TCU089-V.AT2
1547	Chi-Chi, Taiwan TCU123 1999	7.62	14.91	270.22	Reverse O	24.9	3.11	RSN1547_CHICHI_TCU123-E.AT2 RSN1547_CHICHI_TCU123-N.AT2 RSN1547_CHICHI_TCU123-V.AT2
1548	Chi-Chi, Taiwan TCU128 1999	7.62	13.13	599.64	Reverse O	11.8	3.22	RSN1548_CHICHI_TCU128-E.AT2 RSN1548_CHICHI_TCU128-N.AT2 RSN1548_CHICHI_TCU128-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	1.57	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
3470	Chi-Chi, Taiwan-06 TCU072 1999	6.3	8.34	468.14	Reverse	5.6	3.67	RSN3470_CHICHI.06_TCU072N.AT2 RSN3470_CHICHI.06_TCU072E.AT2 RSN3470_CHICHI.06_TCU072V.AT2
3748	Cape Mendocino Ferndale Fire Station 1992	7.01	16.64	387.95	Reverse	5.8	1.32	RSN3748_CAPEMEND_FFS270.AT2 RSN3748_CAPEMEND_FFS360.AT2 RSN3748_CAPEMEND_FFS-UP.AT2
3966	Tottori, Japan TTR009 2000	6.61	8.82	420.2	strike slip	4.3	0.51	RSN3966_TOTTORI_TTR009NS.AT2 RSN3966_TOTTORI_TTR009EW.AT2 RSN3966_TOTTORI_TTR009UD.AT2
3968	Tottori, Japan TTRH02 2000	6.61	0.83	310.21	strike slip	5.4	0.47	RSN3968_TOTTORI_TTRH02NS.AT2 RSN3968_TOTTORI_TTRH02EW.AT2 RSN3968_TOTTORI_TTRH02UD.AT2
4212	Niigata, Japan NIG022 2004	6.63	17.57	193.2	Reverse	3.7	0.79	RSN4212_NIIGATA_NIG022NS.AT2 RSN4212_NIIGATA_NIG022EW.AT2 RSN4212_NIIGATA_NIG022UD.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.36	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4876	Chuetsu-oki Kashiwazaki Nishiyamacho Ikeura 2007	6.8	0	655.45	Reverse	4.9	0.78	RSN4876_CHUETSU_65059NS.AT2 RSN4876_CHUETSU_65059EW.AT2 RSN4876_CHUETSU_65059UD.AT2

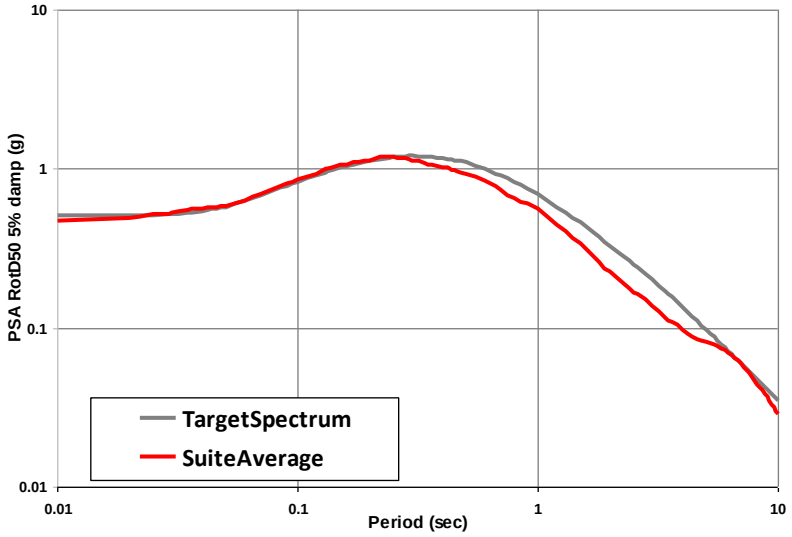
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	500							
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.43	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5823	El Mayor-Cucapah Chihuahua 2010	7.2	18.21	242.05	strike slip	25.1	1.62	RSN5823_SIERRA.MEX_CHI000.AT2 RSN5823_SIERRA.MEX_CHI090.AT2 RSN5823_SIERRA.MEX_CHI--V.AT2
5829	El Mayor-Cucapah RIITO 2010	7.2	13.7	242.05	strike slip	15.6	0.84	RSN5829_SIERRA.MEX_RII000.AT2 RSN5829_SIERRA.MEX_RII090.AT2 RSN5829_SIERRA.MEX_RII--V.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.52	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.03	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8158	Christchurch, New Zealand LPCC 2011	6.2	2.52	649.67	Reverse O	1.8	0.5	RSN8158_CCHURCH_LPCCN10W.AT2 RSN8158_CCHURCH_LPCCS80W.AT2 RSN8158_CCHURCH_LPCCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	0.88	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**1000**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	1000	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.08	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.69	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	1.62	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	1.58	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
460	Morgan Hill Gilroy Array #7 1984	6.19	12.06	333.85	strike slip	5.2	3.14	RSN460_MORGAN_GMR000.AT2 RSN460_MORGAN_GMR090.AT2 RSN460_MORGAN_GMR-UP.AT2
461	Morgan Hill Halls Valley 1984	6.19	3.45	281.61	strike slip	8.9	2.44	RSN461_MORGAN_HVR150.AT2 RSN461_MORGAN_HVR240.AT2 RSN461_MORGAN_HVR-UP.AT2
517	N. Palm Springs Desert Hot Springs 1986	6.06	0.99	359	Reverse O	3.4	1.67	
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	1.54	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
727	Superstition Hills-02 Superstition Mtn Camera 1987	6.54	5.61	362.38	strike slip	9	0.79	
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	1.57	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	2.13	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	1.84	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2

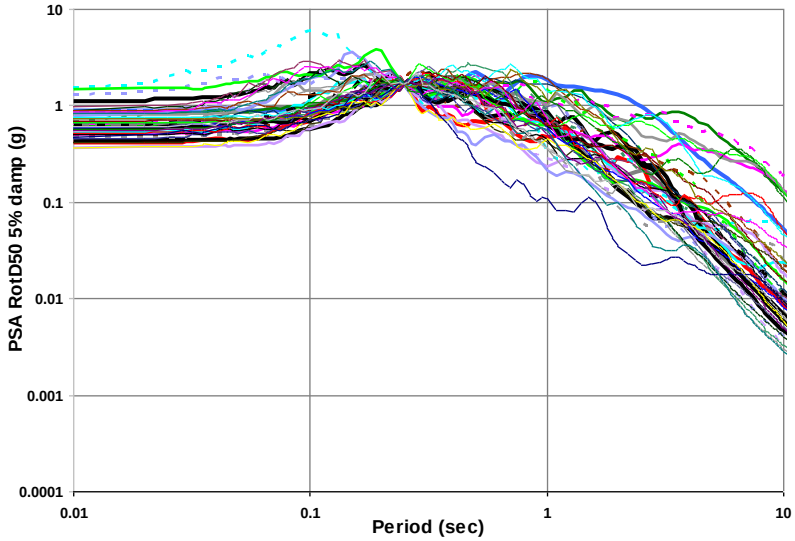
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
953	Northridge-01 Beverly Hills - 14145 Mulhol 1994	6.69	9.44	355.81	Reverse	5.4	1.32	RSN953_NORTHR_MUL009.AT2 RSN953_NORTHR_MUL279.AT2 RSN953_NORTHR_MUL-UP.AT2
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	2.77	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	2.93	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	1.07	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1044	Northridge-01 Newhall - Fire Sta 1994	6.69	3.16	269.14	Reverse	2.8	0.57	RSN1044_NORTHR_NWH090.AT2 RSN1044_NORTHR_NWH360.AT2 RSN1044_NORTHR_NWH-UP.AT2
1083	Northridge-01 Sunland - Mt Gleason Ave 1994	6.69	12.38	402.16	Reverse	6	3.04	RSN1083_NORTHR_GLE170.AT2 RSN1083_NORTHR_GLE260.AT2 RSN1083_NORTHR_GLE-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.08	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	1.81	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	2.82	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1495	Chi-Chi, Taiwan TCU055 1999	7.62	6.34	359.13	Reverse O	19.1	2.04	RSN1495_CHICHI_TCU055-E.AT2 RSN1495_CHICHI_TCU055-N.AT2 RSN1495_CHICHI_TCU055-V.AT2
1498	Chi-Chi, Taiwan TCU059 1999	7.62	17.11	272.67	Reverse O	21.8	3.99	RSN1498_CHICHI_TCU059-E.AT2 RSN1498_CHICHI_TCU059-N.AT2 RSN1498_CHICHI_TCU059-V.AT2
1500	Chi-Chi, Taiwan TCU061 1999	7.62	17.17	379.64	Reverse O	23.3	3.23	RSN1500_CHICHI_TCU061-E.AT2 RSN1500_CHICHI_TCU061-N.AT2 RSN1500_CHICHI_TCU061-V.AT2
1530	Chi-Chi, Taiwan TCU103 1999	7.62	6.08	494.1	Reverse O	15	3.28	RSN1530_CHICHI_TCU103-E.AT2 RSN1530_CHICHI_TCU103-N.AT2 RSN1530_CHICHI_TCU103-V.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	2.16	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
1752	Northwest China-03 Jiashi 1997	6.1	9.98	240.09	Normal	2.7	1.82	RSN1752_NWCHINA3_JIA000.AT2 RSN1752_NWCHINA3_JIA270.AT2 RSN1752_NWCHINA3_JIA-UP.AT2
4031	San Simeon, CA Templeton - 1-story Hospital 2003	6.52	5.07	410.66	Reverse	3.1	1.33	RSN4031_SANSIMEO_36695090.AT2 RSN4031_SANSIMEO_36695360.AT2 RSN4031_SANSIMEO_36695-UP.AT2
4212	Niigata, Japan NIG022 2004	6.63	17.57	193.2	Reverse	3.7	1.09	RSN4212_NIIGATA_NIG022NS.AT2 RSN4212_NIIGATA_NIG022EW.AT2 RSN4212_NIIGATA_NIG022UD.AT2
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	1.36	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	1.26	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4480	L'Aquila, Italy L'Aquila - V. Aterno - Centro Valle 2009	6.3	0	475	Normal	4.4	1.1	RSN4480_L-AQUILA_GX066XTE.AT2 RSN4480_L-AQUILA_GX066YLN.AT2 RSN4480_L-AQUILA_GX066ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.49	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4783	Wenchuan, China Jiangyouhanzeng 2008	7.9	11.44	322.81	Reverse O	18.5	1.23	RSN4783_WENCHUAN_UA1033.AT2 RSN4783_WENCHUAN_UA1034.AT2 RSN4783_WENCHUAN_UA1035.AT2
4816	Wenchuan, China Mianzuqingping 2008	7.9	0	551.3	Reverse O	12.4	1.21	RSN4816_WENCHUAN_UA1143.AT2 RSN4816_WENCHUAN_UA1141.AT2 RSN4816_WENCHUAN_UA1142.AT2
4850	Chuetsu-oki Yoshikawaku Joetsu City 2007	6.8	13.68	561.59	Reverse	4.1	1.75	RSN4850_CHUETSU_65013NS.AT2 RSN4850_CHUETSU_65013EW.AT2 RSN4850_CHUETSU_65013UD.AT2
4866	Chuetsu-oki Kawanishi Izumozaki 2007	6.8	0	338.32	Reverse	6.5	1.27	RSN4866_CHUETSU_65039NS.AT2 RSN4866_CHUETSU_65039EW.AT2 RSN4866_CHUETSU_65039UD.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	1.71	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2

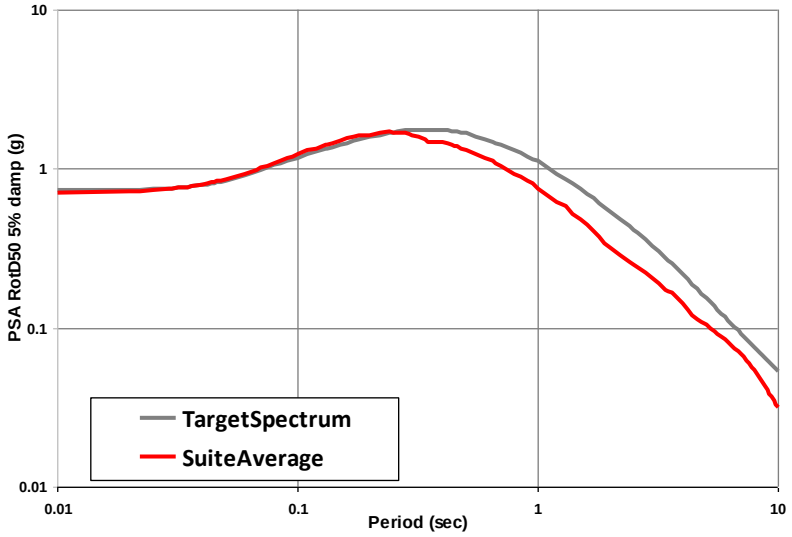
Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	1000							
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.59	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	0.72	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6959	Darfield, New Zealand Christchurch Resthaven 2010	7	19.48	141	strike slip	11.4	1.77	RSN6959_DARFIELD_REHSN02E.AT2 RSN6959_DARFIELD_REHSS88E.AT2 RSN6959_DARFIELD_REHSUP.AT2
8099	Christchurch, New Zealand Kaiapoi North School 2011	6.2	17.86	255	Reverse O	4.3	1.41	RSN8099_CCHURCH_KPOCN15E.AT2 RSN8099_CCHURCH_KPOCS75E.AT2 RSN8099_CCHURCH_KPOCUP.AT2
8110	Christchurch, New Zealand MQZ 2011	6.2	13.91	649.67	Reverse O	3.1	4.92	RSN8110_CCHURCH_MQZE.AT2 RSN8110_CCHURCH_MQZN.AT2 RSN8110_CCHURCH_MQZUP.AT2
8158	Christchurch, New Zealand LPCC 2011	6.2	2.52	649.67	Reverse O	1.8	0.69	RSN8158_CCHURCH_LPCCN10W.AT2 RSN8158_CCHURCH_LPCCS80W.AT2 RSN8158_CCHURCH_LPCCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	1.2	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2

Site	**10 SanDiego**	**CS Set**
Site Vs30 (m/s)	**270**	
Return Period (yr)	**2500**	

Ground-Motion Suite, Records



Ground-Motion Suite, Average



Site	10 SanDiego	CS Set
Site Vs30 (m/s)	270	
Return Period (yr)	2500	

RSN	Earthquake Name, Station Name, Earthquake Year	EQ Mag	JB Dist (km)	Station Vs30 (m/s)	Mechanism	Duration* (sec)	SF	Filenames: H1, H2, V
95	Managua, Nicaragua-01 Managua, ESSO 1972	6.24	3.51	288.77	strike slip	4.6	1.54	RSN95_MANAGUA_A-ESO090.AT2 RSN95_MANAGUA_A-ESO180.AT2 RSN95_MANAGUA_A-ESODWN.AT2
174	Imperial Valley-06 El Centro Array #11 1979	6.53	12.56	196.25	strike slip	4.6	0.99	RSN174_IMPVALL.H_H-E11140.AT2 RSN174_IMPVALL.H_H-E11230.AT2 RSN174_IMPVALL.H_H-E11-UP.AT2
232	Mammoth Lakes-01 Mammoth Lakes H. S. 1980	6.06	4.48	346.82	Normal O	5.3	3.05	RSN232_MAMMOTH.I_I-MLS254.AT2 RSN232_MAMMOTH.I_I-MLS344.AT2 RSN232_MAMMOTH.I_I-MLS-UP.AT2
265	Victoria, Mexico Cerro Prieto 1980	6.33	13.8	471.53	strike slip	4.3	2.07	RSN265_VICT_CPE045.AT2 RSN265_VICT_CPE315.AT2 RSN265_VICT_CPE-UP.AT2
289	Irpinia, Italy-01 Calitri 1980	6.9	13.34	455.93	Normal	14.4	4.37	RSN289_ITALY_A-CTR000.AT2 RSN289_ITALY_A-CTR270.AT2 RSN289_ITALY_A-CTR-UP.AT2
313	Corinth, Greece Corinth 1981	6.6	10.27	361.4	Normal O	5.2	2.33	RSN313_CORINTH_COR--L.AT2 RSN313_CORINTH_COR--T.AT2 RSN313_CORINTH_COR-UP.AT2
367	Coalinga-01 Pleasant Valley P.P. - bldg 1983	6.36	7.69	257.38	Reverse	4.8	2.27	RSN367_COALINGA.H_H-PVB045.AT2 RSN367_COALINGA.H_H-PVB135.AT2 RSN367_COALINGA.H_H-PVB-UP.AT2
549	Chalfant Valley-02 Bishop - LADWP South St 1986	6.19	14.38	303.47	strike slip	3.3	2.21	RSN549_CHALFANT.A_A-LAD180.AT2 RSN549_CHALFANT.A_A-LAD270.AT2 RSN549_CHALFANT.A_A-LAD-UP.AT2
753	Loma Prieta Corralitos 1989	6.93	0.16	462.24	Reverse O	4	1.18	RSN753_LOMAP_CLS000.AT2 RSN753_LOMAP_CLS090.AT2 RSN753_LOMAP_CLS-UP.AT2
769	Loma Prieta Gilroy Array #6 1989	6.93	17.92	663.31	Reverse O	4.5	2.25	RSN769_LOMAP_G06000.AT2 RSN769_LOMAP_G06090.AT2 RSN769_LOMAP_G06-UP.AT2
801	Loma Prieta San Jose - Santa Teresa Hills 1989	6.93	14.18	671.77	Reverse O	6.3	3.05	RSN801_LOMAP_SJTE225.AT2 RSN801_LOMAP_SJTE315.AT2 RSN801_LOMAP_SJTE-UP.AT2
864	Landers Joshua Tree 1992	7.28	11.03	379.32	strike slip	21.3	2.64	RSN864_LANDERS_JOS000.AT2 RSN864_LANDERS_JOS090.AT2 RSN864_LANDERS_JOS-UP.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
954	Northridge-01 Big Tujunga, Angeles Nat F 1994	6.69	19.1	550.11	Reverse	5.8	3.97	RSN954_NORTHR_TUJ262.AT2 RSN954_NORTHR_TUJ352.AT2 RSN954_NORTHR_TUJ-UP.AT2
957	Northridge-01 Burbank - Howard Rd. 1994	6.69	15.87	581.93	Reverse	5.5	4.2	RSN957_NORTHR_HOW060.AT2 RSN957_NORTHR_HOW330.AT2 RSN957_NORTHR_HOW-UP.AT2
1004	Northridge-01 LA - Sepulveda VA Hospital 1994	6.69	0	380.06	Reverse	4.5	0.86	RSN1004_NORTHR_SPV270.AT2 RSN1004_NORTHR_SPV360.AT2 RSN1004_NORTHR_SPV-UP.AT2
1042	Northridge-01 N Hollywood - Coldwater Can 1994	6.69	7.89	326.47	Reverse	6.5	1.54	RSN1042_NORTHR_CWC180.AT2 RSN1042_NORTHR_CWC270.AT2 RSN1042_NORTHR_CWC-UP.AT2
1045	Northridge-01 Newhall - W Pico Canyon Rd. 1994	6.69	2.11	285.93	Reverse	1.9	2.42	RSN1045_NORTHR_WPI046.AT2 RSN1045_NORTHR_WPI316.AT2 RSN1045_NORTHR_WPI-UP.AT2
1051	Northridge-01 Pacoima Dam (upper left) 1994	6.69	4.92	2016.13	Reverse	3.1	0.78	RSN1051_NORTHR_PUL104.AT2 RSN1051_NORTHR_PUL194.AT2 RSN1051_NORTHR_PUL-UP.AT2
1141	Dinar, Turkey Dinar 1995	6.4	0	219.75	Normal	10.2	1.54	RSN1141_DINAR_DIN090.AT2 RSN1141_DINAR_DIN180.AT2 RSN1141_DINAR_DIN-UP.AT2
1165	Kocaeli, Turkey Izmit 1999	7.51	3.62	811	strike slip	7.2	2.59	RSN1165_KOCAELI_IZT180.AT2 RSN1165_KOCAELI_IZT090.AT2 RSN1165_KOCAELI_IZT-UP.AT2
1176	Kocaeli, Turkey Yarimca 1999	7.51	1.38	297	strike slip	6.5	2.85	RSN1176_KOCAELI_YPT060.AT2 RSN1176_KOCAELI_YPT150.AT2 RSN1176_KOCAELI_YPT-UP.AT2
1197	Chi-Chi, Taiwan CHY028 1999	7.62	3.12	542.61	Reverse O	4.4	0.88	RSN1197_CHICHI_CHY028-E.AT2 RSN1197_CHICHI_CHY028-N.AT2 RSN1197_CHICHI_CHY028-V.AT2
1486	Chi-Chi, Taiwan TCU046 1999	7.62	16.74	465.55	Reverse O	10.8	4.04	RSN1486_CHICHI_TCU046-E.AT2 RSN1486_CHICHI_TCU046-N.AT2 RSN1486_CHICHI_TCU046-V.AT2
1500	Chi-Chi, Taiwan TCU061 1999	7.62	17.17	379.64	Reverse O	23.3	4.63	RSN1500_CHICHI_TCU061-E.AT2 RSN1500_CHICHI_TCU061-N.AT2 RSN1500_CHICHI_TCU061-V.AT2
1512	Chi-Chi, Taiwan TCU078 1999	7.62	0	443.04	Reverse O	17.8	1.37	RSN1512_CHICHI_TCU078-E.AT2 RSN1512_CHICHI_TCU078-N.AT2 RSN1512_CHICHI_TCU078-V.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
1520	Chi-Chi, Taiwan TCU088 1999	7.62	4.67	665.2	Reverse O	5.2	2.96	RSN1520_CHICHI_TCU088-N.AT2 RSN1520_CHICHI_TCU088-E.AT2 RSN1520_CHICHI_TCU088-V.AT2
1546	Chi-Chi, Taiwan TCU122 1999	7.62	9.34	475.46	Reverse O	17.9	3.52	RSN1546_CHICHI_TCU122-E.AT2 RSN1546_CHICHI_TCU122-N.AT2 RSN1546_CHICHI_TCU122-V.AT2
1618	Duzce, Turkey Lamont 531 1999	7.14	8.03	638.39	strike slip	10.6	3.09	RSN1618_DUZCE_531-N.AT2 RSN1618_DUZCE_531-E.AT2 RSN1618_DUZCE_531-V.AT2
2622	Chi-Chi, Taiwan-03 TCU071 1999	6.2	15.04	624.85	Reverse	3.7	2.53	RSN2622_CHICHI.03_TCU071N.AT2 RSN2622_CHICHI.03_TCU071E.AT2 RSN2622_CHICHI.03_TCU071V.AT2
2658	Chi-Chi, Taiwan-03 TCU129 1999	6.2	10.95	511.18	Reverse	2.2	2.15	RSN2658_CHICHI.03_TCU129N.AT2 RSN2658_CHICHI.03_TCU129E.AT2 RSN2658_CHICHI.03_TCU129V.AT2
3473	Chi-Chi, Taiwan-06 TCU078 1999	6.3	5.72	443.04	Reverse	2.6	1.8	RSN3473_CHICHI.06_TCU078N.AT2 RSN3473_CHICHI.06_TCU078E.AT2 RSN3473_CHICHI.06_TCU078V.AT2
4218	Niigata, Japan NIG028 2004	6.63	0.46	430.71	Reverse	3.5	1.06	RSN4218_NIIGATA_NIG028NS.AT2 RSN4218_NIIGATA_NIG028EW.AT2 RSN4218_NIIGATA_NIG028UD.AT2
4451	Montenegro, Yugo. Bar-Skupstina Opstine 1979	7.1	0	462.23	Reverse	8.3	1.95	RSN4451_MONTENE.GRO_BSO000.A RSN4451_MONTENE.GRO_BSO090.A RSN4451_MONTENE.GRO_BSO-V.AT2
4456	Montenegro, Yugo. Petrovac - Hotel Olivia 1979	7.1	0	543.26	Reverse	6.3	1.81	RSN4456_MONTENE.GRO_PHO000.A RSN4456_MONTENE.GRO_PHO090.A RSN4456_MONTENE.GRO_PHO-V.AT
4480	L'Aquila, Italy L'Aquila - V. Aterno - Centro Valle 2009	6.3	0	475	Normal	4.4	1.58	RSN4480_L-AQUILA_GX066XTE.AT2 RSN4480_L-AQUILA_GX066YLN.AT2 RSN4480_L-AQUILA_GX066ZUP.AT2
4744	Wenchuan, China Shifangbajiao 2008	7.9	1.56	379.28	Reverse O	22.8	0.7	RSN4744_WENCHUAN_UA0876.AT2 RSN4744_WENCHUAN_UA0874.AT2 RSN4744_WENCHUAN_UA0875.AT2
4850	Chuetsu-oki Yoshikawaku Joetsu City 2007	6.8	13.68	561.59	Reverse	4.1	2.51	RSN4850_CHUETSU_65013NS.AT2 RSN4850_CHUETSU_65013EW.AT2 RSN4850_CHUETSU_65013UD.AT2
5478	Iwate AKT023 2008	6.9	11.68	555.96	Reverse	6.7	2.44	RSN5478_IWATE_AKT023NS.AT2 RSN5478_IWATE_AKT023EW.AT2 RSN5478_IWATE_AKT023UD.AT2

Site	10 SanDiego							CS Set
Site Vs30 (m/s)	270							
Return Period (yr)	2500							
5818	Iwate Kurihara City 2008	6.9	12.83	512.26	Reverse	6.4	0.85	RSN5818_IWATE_48A61NS.AT2 RSN5818_IWATE_48A61EW.AT2 RSN5818_IWATE_48A61UD.AT2
5992	El Mayor-Cucapah El Centro Array #11 2010	7.2	15.36	196.25	strike slip	8.1	1.03	RSN5992_SIERRA.MEX_E11360.AT2 RSN5992_SIERRA.MEX_E11090.AT2 RSN5992_SIERRA.MEX_E11-UP.AT2
6960	Darfield, New Zealand Riccarton High School 2010	7	13.64	293	strike slip	9.5	3.16	RSN6960_DARFIELD_RHSCN86W.AT2 RSN6960_DARFIELD_RHSCS04W.AT2 RSN6960_DARFIELD_RHSCUP.AT2
8118	Christchurch, New Zealand Papanui High School 2011	6.2	9.05	263.2	Reverse O	5.8	3.68	RSN8118_CCHURCH_PPHSS33W.AT2 RSN8118_CCHURCH_PPHSS57E.AT2 RSN8118_CCHURCH_PPHSUP.AT2
8124	Christchurch, New Zealand Riccarton High School 2011	6.2	9.43	293	Reverse O	4.9	2.45	RSN8124_CCHURCH_RHSCN86W.AT2 RSN8124_CCHURCH_RHSCS04W.AT2 RSN8124_CCHURCH_RHSCUP.AT2
8161	El Mayor-Cucapah El Centro Array #12 2010	7.2	9.98	196.88	strike slip	13.2	1.73	RSN8161_SIERRA.MEX_E12360.AT2 RSN8161_SIERRA.MEX_E12090.AT2 RSN8161_SIERRA.MEX_E12-UP.AT2
8165	Duzce, Turkey IRIGM 496 1999	7.14	4.21	760	strike slip	999	0.48	RSN8165_DUZCE_496-NS.AT2 RSN8165_DUZCE_496-EW.AT2 RSN8165_DUZCE_496-UP.AT2