

APPENDIX

Table A1. Interface earthquakes used in this study

Event	Date (year/month/day)	Magnitude, M_w	Focus location			Number of records
			Latitude (°)	Longitude (°)	Depth (km)	
1	85/09/19	8.0	18.14	102.71	17	10
2	85/09/21	7.6	17.62	101.82	22	8
3	88/02/08	5.8	17.45	101.19	22	9
4	89/03/10	5.4	17.45	101.19	20	6
5	89/04/25	6.9	16.61	99.43	16	10
6	89/05/02	5.5	16.68	99.41	15	5
7	90/01/13	5.3	16.82	99.64	16	8
8	90/05/11	5.5	17.12	100.87	21	6
9	90/05/31	5.9	17.12	100.88	18	9
10	93/05/15	5.5	16.47	98.72	16	6
11	93/10/24	6.6	16.65	98.87	26	12
12	95/09/14	7.3	16.48	98.76	16	15
13	96/03/13	5.1	16.59	99.12	25	10
14	96/03/27	5.4	16.36	98.3	18	9
15	96/07/15	6.6	17.33	101.21	27	17
16	96/07/18	5.4	17.44	101.21	25	10
17	97/01/21	5.4	16.42	98.21	28	12
18	97/12/16	5.9	16.04	99.41	27	7
19	98/05/09	5.2	17.5	101.24	23	12
20	98/05/16	5.2	17.27	101.34	28	10
21	98/07/05	5.3	16.81	100.14	25	15
22	98/07/11	5.4	17.35	101.41	29	12
23	98/07/12	5.5	16.85	100.47	26	14
24	01/09/04	5.2	16.29	98.37	20	10
25	01/11/10	5.4	16.09	98.32	17	11
26	02/06/07	5.2	15.99	96.92	20	10
27	02/06/07	5.5	15.96	96.93	19	12
28	02/06/19	5.3	16.29	98.02	20	12
29	02/08/05	5.4	15.94	96.26	15	7
30	02/08/27	5.0	16.16	97.54	15	10
31	02/08/30	5.2	16.76	100.95	15	6
32	02/09/25	5.3	16.8	100.12	12	15
33	02/11/08	5.2	16.28	98.12	16	10
34	02/12/10	5.4	17.36	101.25	24	8
35	03/01/10	5.2	17.01	100.35	28	15
36	03/01/22	7.5	18.62	104.12	10	8

(continued)

Table A1. *(continued)*

Event	Date (year/month/day)	Magnitude, M_w	Focus location			Number of records
			Latitude (°)	Longitude (°)	Depth (km)	
37	04/01/01	6.0	17.27	101.54	17	15
38	04/01/01	5.6	17.32	101.47	27	11
39	04/02/06	5.1	18.16	102.83	12	8
40	04/06/14	5.9	16.19	98.13	20	18

Table A2. Total correlation coefficients for Mexican interface earthquakes

T (sec.)	PGV	PGA	0.01	0.02	0.06	0.08	0.1	0.2	0.3	0.5	0.7	0.8	0.9	1	2	3	4	5
PGV	1.000	0.859	0.854	0.827	0.732	0.741	0.735	0.812	0.856	0.857	0.865	0.872	0.863	0.862	0.815	0.802	0.792	0.776
PGA	0.859	1.000	0.999	0.988	0.942	0.953	0.938	0.878	0.819	0.732	0.682	0.678	0.662	0.651	0.597	0.598	0.602	0.579
0.01	0.854	0.999	1.000	0.991	0.946	0.954	0.937	0.873	0.814	0.727	0.677	0.672	0.657	0.646	0.593	0.595	0.600	0.578
0.02	0.827	0.988	0.991	1.000	0.958	0.946	0.921	0.838	0.782	0.696	0.646	0.643	0.628	0.616	0.570	0.576	0.585	0.564
0.06	0.732	0.942	0.946	0.958	1.000	0.946	0.907	0.761	0.671	0.583	0.540	0.538	0.523	0.515	0.502	0.502	0.513	0.492
0.08	0.741	0.953	0.954	0.946	0.946	1.000	0.968	0.815	0.712	0.606	0.545	0.542	0.528	0.519	0.490	0.486	0.490	0.470
0.1	0.735	0.938	0.937	0.921	0.907	0.968	1.000	0.838	0.720	0.620	0.556	0.551	0.540	0.533	0.483	0.475	0.485	0.465
0.2	0.812	0.878	0.873	0.838	0.761	0.815	0.838	1.000	0.887	0.763	0.702	0.692	0.678	0.665	0.565	0.566	0.548	0.523
0.3	0.856	0.819	0.814	0.782	0.671	0.712	0.720	0.887	1.000	0.868	0.806	0.788	0.768	0.761	0.651	0.656	0.634	0.603
0.5	0.857	0.732	0.727	0.696	0.583	0.606	0.620	0.763	0.868	1.000	0.902	0.871	0.842	0.821	0.703	0.706	0.695	0.667
0.7	0.865	0.682	0.677	0.646	0.540	0.545	0.556	0.702	0.806	0.902	1.000	0.962	0.912	0.890	0.768	0.760	0.739	0.711
0.8	0.872	0.678	0.672	0.643	0.538	0.542	0.551	0.692	0.788	0.871	0.962	1.000	0.966	0.928	0.787	0.769	0.744	0.723
0.9	0.863	0.662	0.657	0.628	0.523	0.528	0.540	0.678	0.768	0.842	0.912	0.966	1.000	0.969	0.797	0.769	0.738	0.723
1	0.862	0.651	0.646	0.616	0.515	0.519	0.533	0.665	0.761	0.821	0.890	0.928	0.969	1.000	0.824	0.785	0.749	0.735
2	0.815	0.597	0.593	0.570	0.502	0.490	0.483	0.565	0.651	0.703	0.768	0.787	0.797	0.824	1.000	0.897	0.844	0.811
3	0.802	0.598	0.595	0.576	0.502	0.486	0.475	0.566	0.656	0.706	0.760	0.769	0.769	0.785	0.897	1.000	0.936	0.891
4	0.792	0.602	0.600	0.585	0.513	0.490	0.485	0.548	0.634	0.695	0.739	0.744	0.738	0.749	0.844	0.936	1.000	0.955
5	0.776	0.579	0.578	0.564	0.492	0.470	0.465	0.523	0.603	0.667	0.711	0.723	0.723	0.735	0.811	0.891	0.955	1.000

Table A3. Within-event correlation coefficients for Mexican interface earthquakes

T (sec.)	PGV	PGA	0.01	0.02	0.06	0.08	0.1	0.2	0.3	0.5	0.7	0.8	0.9	1	2	3	4	5
PGV	1.000	0.853	0.848	0.820	0.728	0.727	0.716	0.790	0.835	0.840	0.852	0.858	0.850	0.850	0.818	0.811	0.798	0.795
PGA	0.853	1.000	0.999	0.985	0.943	0.944	0.923	0.860	0.790	0.711	0.672	0.666	0.651	0.641	0.594	0.602	0.608	0.600
0.01	0.848	0.999	1.000	0.989	0.945	0.944	0.920	0.854	0.784	0.706	0.668	0.661	0.646	0.636	0.591	0.600	0.606	0.600
0.02	0.820	0.985	0.989	1.000	0.949	0.932	0.899	0.815	0.750	0.677	0.641	0.633	0.619	0.607	0.570	0.584	0.596	0.589
0.06	0.728	0.943	0.945	0.949	1.000	0.956	0.905	0.758	0.650	0.563	0.521	0.516	0.507	0.501	0.496	0.508	0.518	0.512
0.08	0.727	0.944	0.944	0.932	0.956	1.000	0.957	0.790	0.672	0.576	0.530	0.524	0.512	0.503	0.485	0.488	0.493	0.490
0.1	0.716	0.923	0.920	0.899	0.905	0.957	1.000	0.814	0.675	0.586	0.538	0.531	0.524	0.520	0.472	0.469	0.483	0.479
0.2	0.790	0.860	0.854	0.815	0.758	0.790	0.814	1.000	0.868	0.733	0.681	0.669	0.656	0.647	0.547	0.553	0.537	0.524
0.3	0.835	0.790	0.784	0.750	0.650	0.672	0.675	0.868	1.000	0.847	0.789	0.766	0.743	0.739	0.631	0.643	0.614	0.588
0.5	0.840	0.711	0.706	0.677	0.563	0.576	0.586	0.733	0.847	1.000	0.886	0.851	0.816	0.798	0.676	0.688	0.680	0.666
0.7	0.852	0.672	0.668	0.641	0.521	0.530	0.538	0.681	0.789	0.886	1.000	0.956	0.897	0.874	0.742	0.731	0.713	0.698
0.8	0.858	0.666	0.661	0.633	0.516	0.524	0.531	0.669	0.766	0.851	0.956	1.000	0.960	0.915	0.759	0.744	0.718	0.711
0.9	0.850	0.651	0.646	0.619	0.507	0.512	0.524	0.656	0.743	0.816	0.897	0.960	1.000	0.963	0.771	0.746	0.710	0.709
1	0.850	0.641	0.636	0.607	0.501	0.503	0.520	0.647	0.739	0.798	0.874	0.915	0.963	1.000	0.803	0.762	0.718	0.718
2	0.818	0.594	0.591	0.570	0.496	0.485	0.472	0.547	0.631	0.676	0.742	0.759	0.771	0.803	1.000	0.885	0.821	0.800
3	0.811	0.602	0.600	0.584	0.508	0.488	0.469	0.553	0.643	0.688	0.731	0.744	0.746	0.762	0.885	1.000	0.920	0.885
4	0.798	0.608	0.606	0.596	0.518	0.493	0.483	0.537	0.614	0.680	0.713	0.718	0.710	0.718	0.821	0.920	1.000	0.951
5	0.795	0.600	0.600	0.589	0.512	0.490	0.479	0.524	0.588	0.666	0.698	0.711	0.709	0.718	0.800	0.885	0.951	1.000

Table A4. Between-event correlation coefficients for Mexican interface earthquakes

T (sec.)	PGV	PGA	0.01	0.02	0.06	0.08	0.1	0.2	0.3	0.5	0.7	0.8	0.9	1	2	3	4	5
PGV	1.000	0.894	0.890	0.866	0.798	0.800	0.811	0.894	0.937	0.926	0.918	0.924	0.915	0.910	0.813	0.797	0.816	0.771
PGA	0.894	1.000	1.000	0.996	0.977	0.979	0.980	0.937	0.903	0.797	0.718	0.725	0.706	0.695	0.604	0.587	0.593	0.541
0.01	0.890	1.000	1.000	0.997	0.979	0.980	0.980	0.935	0.899	0.792	0.712	0.719	0.701	0.690	0.599	0.584	0.590	0.538
0.02	0.866	0.996	0.997	1.000	0.986	0.984	0.979	0.913	0.874	0.756	0.673	0.684	0.666	0.657	0.572	0.556	0.566	0.516
0.06	0.798	0.977	0.979	0.986	1.000	0.993	0.983	0.874	0.814	0.676	0.586	0.597	0.577	0.570	0.508	0.492	0.501	0.450
0.08	0.800	0.979	0.980	0.984	0.993	1.000	0.995	0.894	0.828	0.695	0.600	0.607	0.585	0.576	0.504	0.484	0.487	0.433
0.1	0.811	0.980	0.980	0.979	0.983	0.995	1.000	0.912	0.849	0.721	0.619	0.622	0.600	0.586	0.513	0.492	0.495	0.438
0.2	0.894	0.937	0.935	0.913	0.874	0.894	0.912	1.000	0.950	0.862	0.778	0.775	0.755	0.735	0.622	0.610	0.592	0.537
0.3	0.937	0.903	0.899	0.874	0.814	0.828	0.849	0.950	1.000	0.934	0.864	0.868	0.858	0.842	0.712	0.697	0.693	0.654
0.5	0.926	0.797	0.792	0.756	0.676	0.695	0.721	0.862	0.934	1.000	0.960	0.948	0.934	0.908	0.784	0.762	0.747	0.690
0.7	0.918	0.718	0.712	0.673	0.586	0.600	0.619	0.778	0.864	0.960	1.000	0.986	0.969	0.955	0.857	0.858	0.834	0.777
0.8	0.924	0.725	0.719	0.684	0.597	0.607	0.622	0.775	0.868	0.948	0.986	1.000	0.991	0.979	0.887	0.862	0.850	0.793
0.9	0.915	0.706	0.701	0.666	0.577	0.585	0.600	0.755	0.858	0.934	0.969	0.991	1.000	0.991	0.887	0.854	0.847	0.795
1	0.910	0.695	0.690	0.657	0.570	0.576	0.586	0.735	0.842	0.908	0.955	0.979	0.991	1.000	0.902	0.875	0.869	0.822
2	0.813	0.604	0.599	0.572	0.508	0.504	0.513	0.622	0.712	0.784	0.857	0.887	0.887	0.902	1.000	0.932	0.908	0.849
3	0.797	0.587	0.584	0.556	0.492	0.484	0.492	0.610	0.697	0.762	0.858	0.862	0.854	0.875	0.932	1.000	0.971	0.909
4	0.816	0.593	0.590	0.566	0.501	0.487	0.495	0.592	0.693	0.747	0.834	0.850	0.847	0.869	0.908	0.971	1.000	0.963
5	0.771	0.541	0.538	0.516	0.450	0.433	0.438	0.537	0.654	0.690	0.777	0.793	0.795	0.822	0.849	0.909	0.963	1.000