

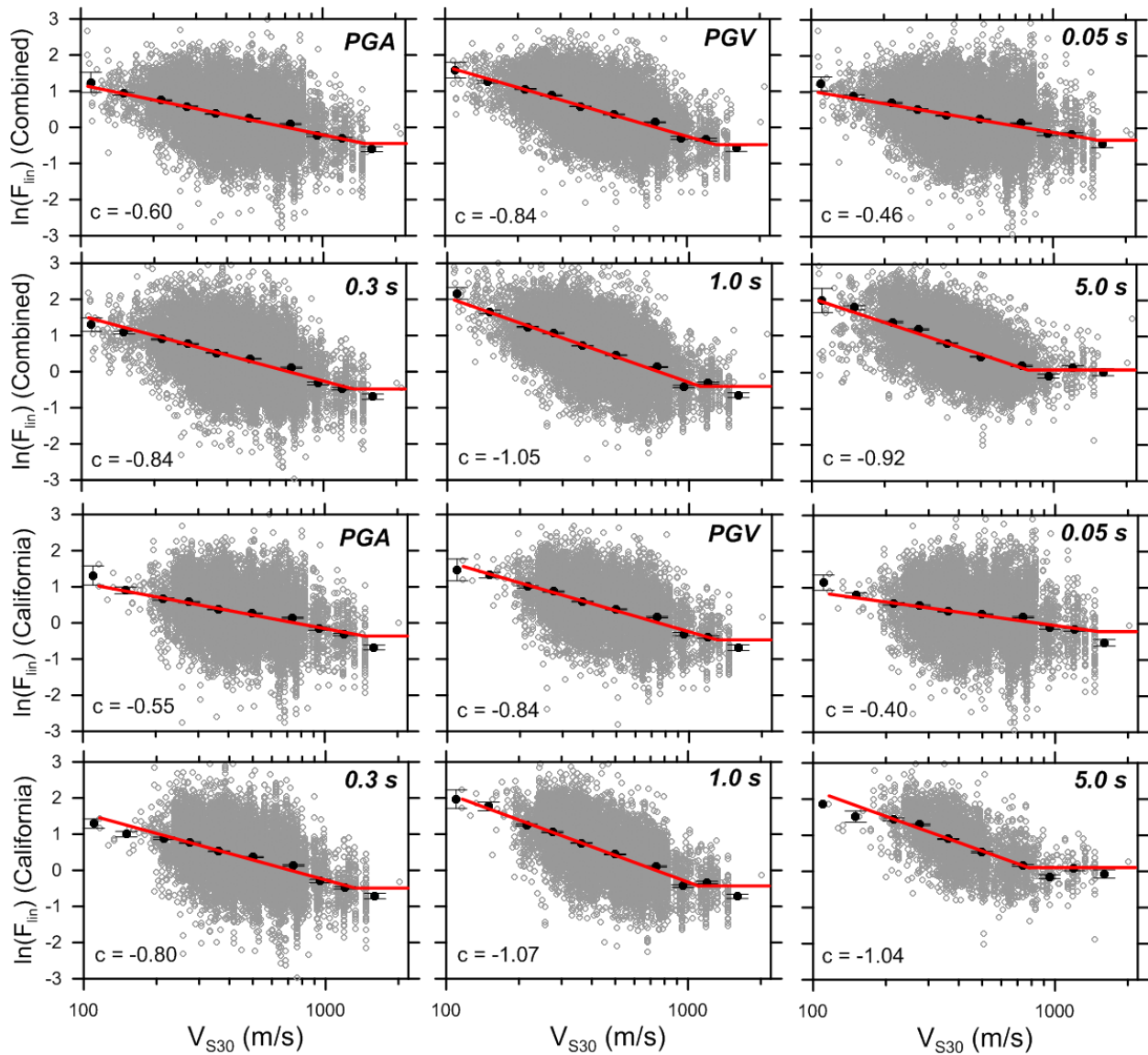
**ERRATA**  
**PEER Report No. 2013-05**

**NGA-West 2 Equations for Predicting Response Spectral Accelerations for Shallow  
Crustal Earthquakes**

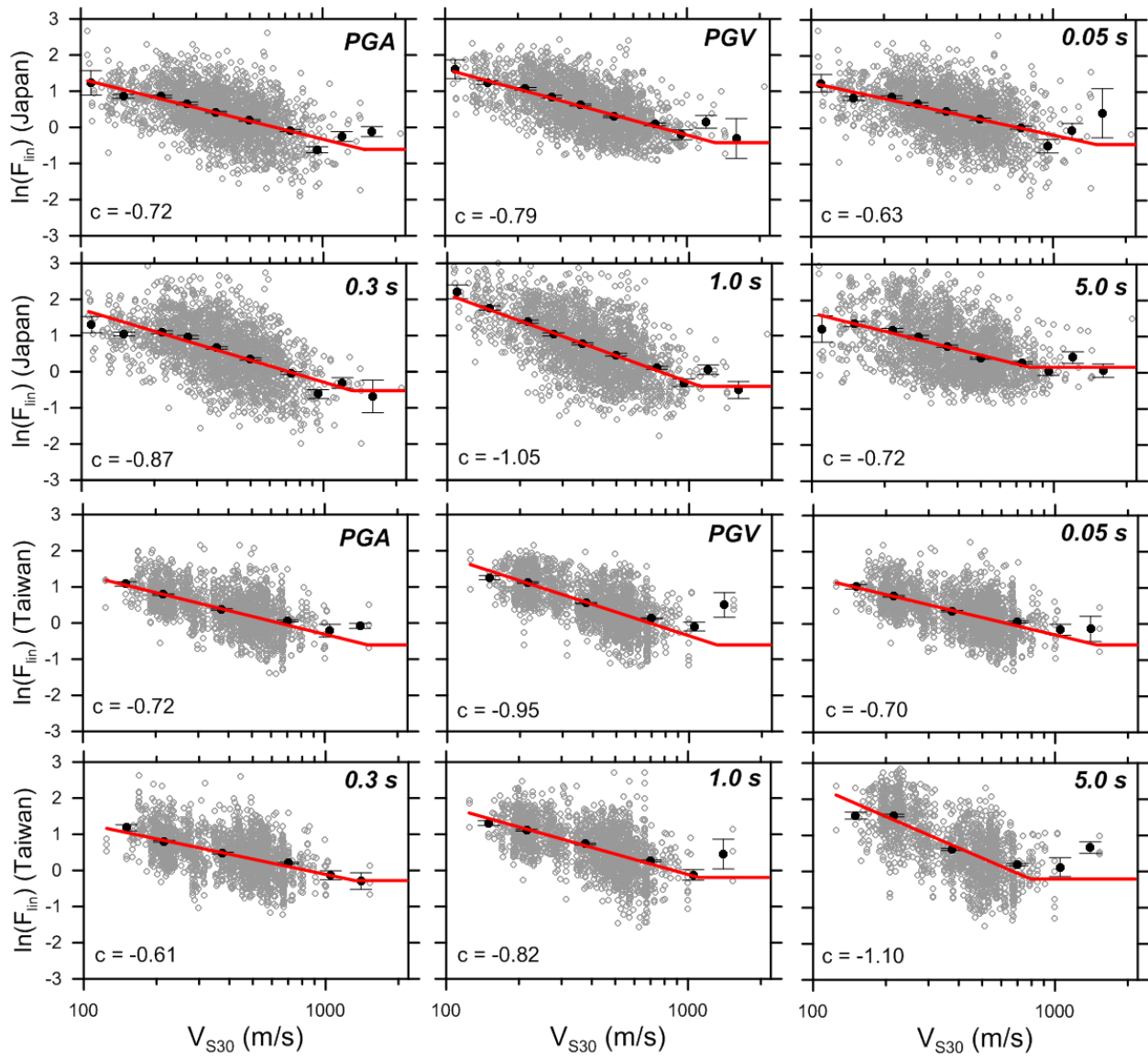
**July 10, 2013**

In the site amplification model presented in Section 4.2.2, we have a maximum velocity (denoted  $V_c$ ) beyond which there is no scaling of ground motion with  $V_{S30}$ . The selection of  $V_c$  is based on plots of site amplification from data against  $V_{S30}$ , as shown in Figure 4.8 of the report. Upon further inspection of these plots, we have increased  $V_c$  for short periods. Updated plots of Figure 4.8 reflecting these changes are given below.

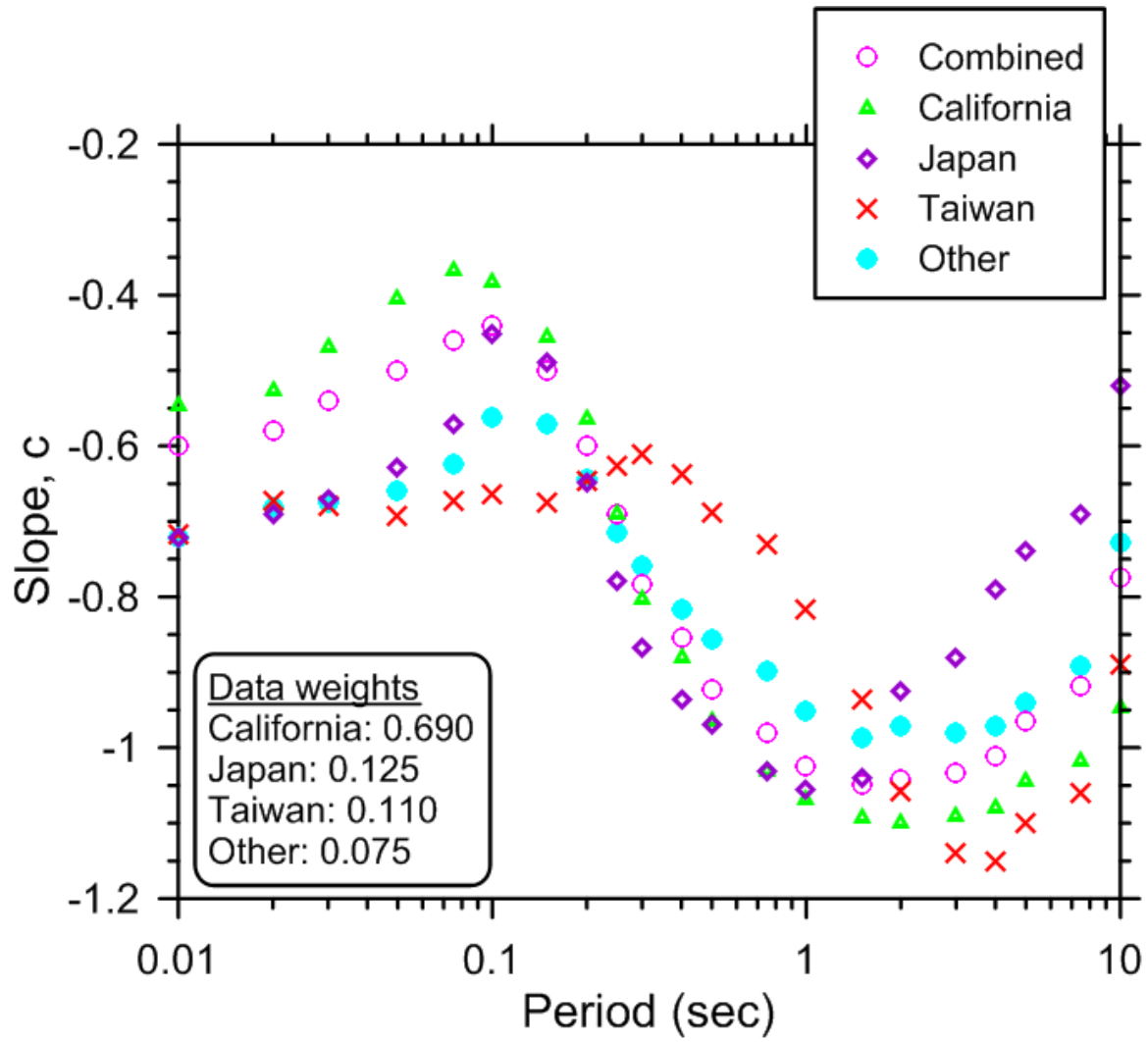
The increase of  $V_c$  also increases the amount of data used to constrain the  $V_{S30}$ -scaling parameter  $c$ . The resulting change in slope was small, but was consistently in the direction of stronger scaling (i.e., values of  $c$  became more negative). Updated plots of  $c$  vs. period are given below (Figure 4.9). Coefficient tables for these two parameters, originally presented in the appendix, are also updated as part of this erratum.



**Figure 4.8a** Variation of linearized site amplification [Equation (4.3)] with  $V_{S30}$  for combined data set and subset from California. Red line indicates model prediction, black dots are binned means and their 95% confidence intervals.



**Figure 4.8b** Variation of linearized site amplification [Equation [4.3)] with  $V_{S30}$  for subset of data from Japan and Taiwan.



**Figure 4.9** Variation of slope ( $c$ ) within spectral periods for combined data set and various regions. Data weights refer to the relative contributions to the 'combined' slope.

## Updated Coefficients

Period(sec)	c	V <sub>c</sub> (m/s)
-1	-0.8400	1300.00
0	-0.6000	1500.00
0.01	-0.6037	1500.20
0.02	-0.5739	1500.36
0.022	-0.5668	1500.68
0.025	-0.5552	1501.04
0.029	-0.5385	1501.26
0.03	-0.5341	1502.95
0.032	-0.5253	1503.12
0.035	-0.5119	1503.24
0.036	-0.5075	1503.32
0.04	-0.4906	1503.35
0.042	-0.4829	1503.34
0.044	-0.4757	1503.13
0.045	-0.4724	1502.84
0.046	-0.4691	1502.47
0.048	-0.4632	1502.01
0.05	-0.4580	1501.42
0.055	-0.4479	1500.71
0.06	-0.4419	1499.83
0.065	-0.4395	1498.74
0.067	-0.4395	1497.42
0.07	-0.4404	1495.85
0.075	-0.4441	1494.00
0.08	-0.4502	1491.82
0.085	-0.4581	1489.29
0.09	-0.4673	1486.36
0.095	-0.4772	1482.98
0.1	-0.4872	1479.12
0.11	-0.5063	1474.74
0.12	-0.5244	1469.75
0.13	-0.5421	1464.09
0.133	-0.5475	1457.76
0.14	-0.5603	1450.71
0.15	-0.5796	1442.85
0.16	-0.6005	1434.22

0.17	-0.6225	1424.85
0.18	-0.6449	1414.77
0.19	-0.6668	1403.99
0.2	-0.6876	1392.61
0.22	-0.7243	1380.72
0.24	-0.7565	1368.51
0.25	-0.7718	1356.21
0.26	-0.7870	1343.89
0.28	-0.8161	1331.67
0.29	-0.8295	1319.83
0.3	-0.8417	1308.47
0.32	-0.8618	1297.65
0.34	-0.8773	1287.50
0.35	-0.8838	1278.06
0.36	-0.8896	1269.19
0.38	-0.9004	1260.74
0.4	-0.9109	1252.66
0.42	-0.9224	1244.80
0.44	-0.9346	1237.03
0.45	-0.9408	1229.23
0.46	-0.9469	1221.16
0.48	-0.9586	1212.74
0.5	-0.9693	1203.91
0.55	-0.9892	1194.59
0.6	-1.0012	1184.93
0.65	-1.0078	1175.19
0.667	-1.0093	1165.69
0.7	-1.0117	1156.46
0.75	-1.0154	1147.59
0.8	-1.0210	1139.21
0.85	-1.0282	1131.34
0.9	-1.0360	1123.91
0.95	-1.0436	1116.83
1	-1.0500	1109.95
1.1	-1.0573	1103.07
1.2	-1.0584	1096.04
1.3	-1.0554	1088.67
1.4	-1.0504	1080.77
1.5	-1.0454	1072.39
1.6	-1.0421	1061.77
1.7	-1.0404	1049.29

1.8	-1.0397	1036.42
1.9	-1.0395	1023.14
2	-1.0392	1009.49
2.2	-1.0368	995.52
2.4	-1.0323	981.33
2.5	-1.0294	966.94
2.6	-1.0262	952.34
2.8	-1.0190	937.52
3	-1.0112	922.43
3.2	-1.0032	908.79
3.4	-0.9951	896.15
3.5	-0.9910	883.16
3.6	-0.9868	870.05
3.8	-0.9783	857.07
4	-0.9694	844.48
4.2	-0.9601	832.45
4.4	-0.9505	821.18
4.6	-0.9405	810.79
4.8	-0.9302	801.41
5	-0.9195	793.13
5.5	-0.8918	785.73
6	-0.8629	779.91
6.5	-0.8335	775.60
7	-0.8046	772.68
7.5	-0.7766	771.01
8	-0.7503	760.81
8.5	-0.7254	764.50
9	-0.7016	768.07
9.5	-0.6785	771.55
10	-0.6558	775.00