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FINAL REPORT

**DEVELOPMENT OF ATTENUATION RELATIONS FOR
PEAK PARTICLE VELOCITY AND DISPLACEMENT**

A PEARL REPORT

to

PG&E/CEC/Caltrans

by

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1. INTRODUCTION

The estimation of peak ground motion parameters such as PGA, PGV, and PGD can provide significant information for estimating seismic demands on engineered structures. Several empirical attenuation relationships have been developed over the last 20 years to predict PGA and response spectral ordinates (for a review of a select number of attenuation relationships see Abrahamson and Shedlock, 1997), however the amount of published empirical attenuation relationships for PGV and PGD has not followed the development of the PGA and spectral models. This report presents the development of empirical attenuation models for peak ground motion parameters PGA, PGV, PGD, and the PGV/PGA and $PGA*PGD/PGV*PGV$ ratios. The ratios are intended for use in conjunction with existing Western United States (WUS) attenuation relations to produce estimates of PGV and PGD conditional on PGA, magnitude, earthquake rupture mechanism, rupture distance, and site condition. These models are developed for use in engineering applications.

The analyses presented in the following sections are based on regression results from two datasets of strong ground motion parameters. The first dataset is referred to as “dynamic” and consists of the PEER processed recorded strong ground motions from earthquakes that have occurred in active tectonic regions. This dataset includes the recently recorded 1999 Kocaeli Turkey (M=7.4), the 1999 Chi-Chi Taiwan (M=7.6), and the 1999 Duzce Turkey (M=7.1) earthquakes. The second dataset is termed “static” and is similar to the first but with the near source (i.e., rupture distances less than 20 km) strong ground motion time histories processed using a method designed to preserve the recorded static displacements. Only those time histories from the Kocaeli, Chi-Chi, and Duzce earthquake were processed with this newly developed procedure.

Given the suite of regression models for the two datasets, one will be able to estimate the peak ground motion parameters for a site location given a magnitude, distance, earthquake mechanism, and site classification. Values of PGV and PGD (both dynamic and static) may be estimated given an estimate of the PGA from published empirical attenuation relationships, numerical modeling, or probabilistic methods (with appropriate deaggregation).

2. BASELINE CORRECTION PROCEDURE

The recent occurrence of several large magnitude earthquakes (i.e., magnitude > 7.0) has greatly increased the number of near source (rupture distances less than 20 km) strong ground motion recordings. Specifically, the 1999 Kocaeli Turkey (M=7.4), the 1999 Chi-Chi Taiwan (M=7.6), and the 1999 Duzce Turkey (M=7.1) earthquakes have been well recorded on digital strong ground motion instruments in the near source region of the fault rupture. For these recent earthquakes, the near source recordings (i.e., distances less than 20 km) have been reprocessed using a procedure developed to preserve static (permanent or tectonic) displacements.

The standard procedure used to process strong ground motion time histories includes bandpass filtering of the recorded motions based on the frequency range with substantial signal to noise ratios. The PEER strong ground motion database consists of the resulting time histories based on this standard data processing procedure (Abrahamson and Silva, 1997).

Due to recent advances in instrumentation (digital recording) the ability exists to recover permanent or static displacements (i.e., tectonic displacements) recorded on strong ground motion instruments located close to the rupturing fault. The standard data processing procedure applied to the PEER strong ground motion database cannot preserve static displacements due to the application of the high pass filters. Caution must be used, however, when analyzing displacement time histories with apparent static displacements as they can be caused by non-seismic or non-tectonic effects (Boore, 2000) such as instrument malfunction as well as local tilts due to soil deformation.

In this study, to correct for instrument malfunctions that distort tectonic displacements, we have used the methodology suggested by Boore (1999,2000) to perform the baseline correction of the recorded motions. For this procedure, a least-squares fit is performed on the original integrated velocity time history using three different functional forms. The first functional form is a simple linear trend in velocity. The second function is a bilinear function which is piecewise continuous and the last function is a simple quadratic in velocity. The best fitting velocity function is then differentiated to produce an acceleration trace, which is then removed from the recorded acceleration time history.

The fitting process has been automated such that after the starting time point for the velocity fit has been selected, all linear, bilinear, and quadratic segments are fitted and their standard errors ranked. The “best fit” is then viewed for reasonableness. A suite of starting times is marched through resulting in a fairly rapid and exhaustive evaluation of the most appropriate correction function for each component. The corrected time histories are then low-pass filtered to remove potential high frequency noise. The low-pass filters are causal Butterworth, using the same corner frequencies as in the PEER processing (typically near 50 Hz).

An illustration of the static baseline correction procedure is given in Figures 1 to 3. The recorded velocity time history is TCU068 site (north-south component) from the 1999 ChiChi earthquake and is plotted in Figure 1a along with the least squares fit to this time history (dashed line). This station was located at a rupture distance of 1.1 km from the fault. The static baseline corrected acceleration, velocity, and displacement time histories are shown in Figure 1b. The maximum static displacement for this component is 883 cm. The least squares fit the east-west component is shown in Figure 2a with the corresponding static baseline corrected time histories plotted in Figure 2b, with a maximum static displacement of 707 cm. Figure 3 shows the vertical component of motion for the site. For comparison, the acceleration, velocity, and displacement time histories for the three components of motion for station TCU068 using the standard PEER database processing are shown in Figures 4a, b, and c. For this processing, the north-south and vertical components were bandpass filtered between 0.02 seconds and 50.0 Hz. The east-west component was filtered between 0.03 seconds and 50.0 Hz. This bandpass filtering of the time histories does not allow for the displacements to have a static offset (i.e., frequency=0 Hz) and the peak ground displacement values are lower than for the static baseline corrected cases. Interestingly, a comparison of the peak-to-peak value for the standard PEER processed time histories gives approximately the same zero to peak displacement values as the static baseline corrected time histories. This suggests that the standard processing, which does not preserve static fields, may result in the same dynamic loads to structures.

As noted by Boore (1999, 2000) the difference in the acceleration response spectra between time histories which have been processed using a standard approach compared to those using a static baseline correction approach are relative small, for periods less than about 20 seconds. For comparison, the acceleration response spectra (5% spectral damping) are shown for both the standard PEER processing and the static baseline correction for the three components of motion in Figure Set 5. These acceleration response spectra are very similar for the two different methods of data processing. This is not completely unexpected because of the large frequency range used in the standard processing (i.e., 0.02 seconds to 50 Hz).

The static baseline correction procedure was applied to all strong ground motion recordings with rupture distances of less than 20 km from the 1999 Kocaeli Turkey (M=7.4), 1999 Chi-Chi Taiwan (M=7.6), and the 1999 Duzce Turkey (M=7.1) earthquakes.

3. PEAK GROUND MOTION CATALOG

A comparison between the PGA, PGV, and PGD values for the dynamic and static datasets is shown in Figure Set 6. This comparison reflects those strong ground motion stations that were processed using both the standard and the static baseline correction procedures. As one would expect, the PGA values are very similar between the two processing procedures (i.e., the data points in Figure 6a generally fall along the 1:1 solid line). The PGV and especially the PGD values show a larger scatter with the static values being greater than the corresponding dynamic values.

For the regression analysis, each recording site was classified as either ‘soil’ or ‘rock’ site conditions. The ‘rock’ classification includes those sites that are located on shallow stiff soil deposits and the ‘soil’ classification includes those strong ground motion sites which are located on both deep broad and deep narrow soil deposits. For the regression models, which are presented in later sections, the site term was modeled as a constant scale term between ‘rock’ and ‘soil.’ A non-linear model for the site response term similar to the model used in the empirical relationship of Abrahamson and Silva (1997) was investigated, however, the resulting models did not improve the fit to the data.

The catalog of dynamic ground motion parameters is given in Appendix A of this report. Only these earthquakes and sites with complete information such as source mechanism, rupture distance, and site condition were used in the regression analyses. The subset of those stations that were processed using the static baseline correction procedure are listed in Appendix B. For the static regression results that are presented in later sections, the peak ground motion parameter values from the catalog in Appendix B was combined with those given in the catalog in Appendix A for other earthquakes and stations.

Table 1 gives the earthquake information for the events that were used in the regression analysis for both the dynamic and static cases. These two datasets have a range in magnitude of **M** 4.4 to **M** 7.6 and span a distance range of 0.1 km to 267.3 km. The earthquake number listed in the first column is used to identify the inter-event (η) term from the regression analyses given in Section 5 and corresponds to the earthquake numbers given in the strong ground motion database catalog in Appendix A.

4. PGV, PGD, AND SPECTRAL ACCELERATION CORRELATION

PGA is often associated with the spectral acceleration at a very high frequency (i.e., 33 to 100 Hz, depending on near surface damping; Silva and Darrah, 1995). However, the PGV and PGD peak ground motion values are not as well correlated with a specific frequency. Both the dynamic and static ground motion databases were analyzed to study the possible correlation between the PGV and PGD values and the corresponding 5% damped pseudo acceleration response spectral values using a Spearman rank-order correlation coefficient (RS; Numerical Recipes, 1992). This estimate of the correlation between two random variables allows a significance test that does not assume a binormal (linear or logarithmic) distribution for the two variables. Using this approach, the probability of the correlation (RS) is a significance test (two sided) of the null hypothesis that the correlation is different from zero. The goal was to develop an empirical model for engineering use that would allow for the estimate of PGV and or PGD given an estimate of spectral acceleration. The linear correlation between PGV and PGD and a corresponding spectral acceleration value was computed for a suite of 28 frequencies between the values of 100 Hz and 0.2 Hz (i.e., 5.0 seconds). The linear correlation was compute for the following combinations:

- PGV or PGD to SA
- PGV or PGD to 1/SA
- 1/PGV or 1/PGD to SA
- 1/PGV or 1/PGD to 1/SA

Only the spectral acceleration values which were within the bandpass frequency range of the processed time histories were used in the analyses. This restriction leads to a smaller number of data points used in the correlation for the longer period motions.

The linear correlation based on the four combinations listed above for PGV is plotted in Figure 7a as a function of period. These results are for the dynamic dataset including all sites (i.e., both rock and soil sites). The correlations of the ratio of the PGV to SA (dashed line) and the ratio of SA to PGV (dash-dot line) show an expected modest negative correlation as a function of spectral period. A value of 1.0 or -1.0 in Figure 7a would indicate complete positive or negative correlation between PGV and SA. However the two models based on the product of PGV and SA values show peaks in the linear correlation between 1.0 to 2.0 seconds. Significance tests for the correlation values are shown in Figure 7b for the four combinations. Small values of the probability of RS indicate that the correlation values are statistically significant, as is the case based on Figure 7b.

The correlation values for PGD are shown in Figure 8a. These results are also based on the dynamic dataset for all site conditions (i.e., rock and soil site conditions). The PGD and PGV give similar results, with the PGD case giving a correlation maximum at a longer spectral period (i.e., 3 to 5 seconds), as would be expected. The probability of RS is plotted in Figure 8b and indicates that the correlation values for PGD are statistically significant over the entire period range.

The linear correlations of the natural log values for PGV, PGD and SA were also analyzed. The correlation factors and probability of RS for the four combinations are shown in Figure Sets 9

and 10 for PGV and PGD, respectively. Unlike the previous case, taking the natural log values gives a larger variation in both the correlation factor and the probability of RS.

Unfortunately, the PGD correlations have a peak at the longest spectral period analyzed (5 seconds). Since recordings for M less than about M 6.5 generally have maximum reliable periods in the 1 to 5 second range, optimum regression models for PGD and S_a would likely necessitate a magnitude-period dependence. This approach, although probably workable, would be cumbersome to develop and implement, particularly when combined with a variety of empirical models for S_a . As a result, only PGV/ S_a models were perused (next section).

5. RANDOM EFFECTS REGRESSION

A random effects regression procedure (Abrahamson and Youngs, 1992) was applied to the dynamic dataset for the ratio of PGV to S_a . The S_a values were taken as the spectral acceleration values at a spectral period of 1.0 second. The following functional form was used in the regression:

$$PGV/S_a = \theta_1 + \theta_2 + [\theta_3 + \theta_4 * M] * \ln(D + \exp(\theta_5)) + \theta_6 * (1-S) + \theta_7 * (M-6)^2 \quad (1)$$

where S is the site term and is 1 for rock site conditions and 0 for soil site conditions, M is magnitude and D is distance. The model prediction values for M =5.5, 6.5, and 7.5 are shown in Figure 11a for rock site conditions for a distance range of 0.1 km to 300 km. The companion model curves for soil site conditions are plotted in Figure 11b. The residuals (i.e., observed values minus calculated values minus the inter-event terms) are plotted in Figure Set 12 both as a function of distance and magnitude for the two site conditions. These residual plots do not show a clear bias or trend of the residuals with either distance or magnitude and generally fall between within the range of -1.0 and 1.0 (natural log units). The residuals show little distance or magnitude bias but are large for a correlated ratio. Also the regression models cross with distance for different magnitudes. While constraints or coefficient smoothing could be applied to prohibit the crossing with distance or a different functional form developed, the use of PGV/ S_a is not considered worth pursuing, particularly since the development of a corresponding PGD model remains ambiguous.

The regression model predictions of $\ln(PGV)/\ln(S_a)$ at a spectral period of 1.0 second for a magnitude 5.5, 6.5, and 7.5 for rock site conditions are shown in Figure 13a. The set of soil site condition model curves are plotted in Figure 13b. The data were regressed using the functional form given in equation 1 above. These sets of curves are constant as a function of distance. The residual plots are given in Figure Set 14 and show both very large residuals as well as clear distance and magnitude biases. Clearly the functional form is inappropriate. As a result of this misfit, as well as the large residuals and crossing M -distance dependencies of the PGV/ S_a model, and the ambiguity of an appropriate magnitude dependent period for an accompanying PGD model, an alternative approach was considered.

As a preferred alternative to estimate peak particle velocities and displacements, regressions were performed on the following parameters

- PGA
- PGV

- PGD
- PGV/PGA
- (PGA*PGD)/(PGV*PGV)

Several different functional equations were analyzed during the study based on generic empirical functional forms and expected model shapes. The final sets of regression models were developed for four different functional forms as described below.

5.1 Model A

This model is a standard functional form for the attenuation of ground motion,

$$\ln(\text{GM}) = \theta_1 + \theta_2 * M + \theta_3 * \ln(D + \theta_4 * \exp(\theta_5 * M)) + \theta_6 * (1-S) + \theta_7 * F \quad (2)$$

where GM is the peak ground motion parameter (i.e., PGA, PGV, PGD, PGV/PGA, or PGA*PGD/PGV²), S is the site condition term and is equal to 1 for rock sites and 0 for soil sites, M is the earthquake magnitude, F is the rupture mechanism term and is equal to 0.0 for strike-slip, 0.5 for reverse/oblique and unknown, and 1.0 for thrust mechanisms (see table 1), and D is the closest rupture distance.

The inter-event terms (i.e., eta terms) from the regression results using Model A and the static dataset are given in Tables 2a and 2b for the horizontal and vertical components, respectively. The corresponding regression coefficients and sigma values are listed in Table 3. The median predicted peak ground motion values as a function of distance are plotted in Figure 15a. These plots are for magnitudes 5.5, 6.5, and 7.5 assuming a strike-slip mechanism (i.e., F=0 in equation 2). The main shapes and characteristics of the horizontal and vertical component results are similar. For short distances (distances less than 1-2 km), the PGA models saturate with magnitude. Both the PGV/PGA and PGA*PGD/PGV² ratios are nearly constant over the distance and magnitude range shown in Figure 15a. In general, for horizontal components, the effects of mechanism decrease in going from peak acceleration to peak particle velocity and displacement and are very small for the ratios. Interestingly, for the vertical components, mechanism effects are about the same for all regressed parameters, ranging around 20% (value of the coefficient).

The inter-event terms listed in Table 2 are plotted in Figure 15b as a function of magnitude. The residuals are shown in Figures 15c and 15d as a function of distance and magnitude. These residuals do not show a major trend or bias over the dataset with the possible exception of distances less than 1 km. The PGV/PGA horizontal and vertical component ratios show an underprediction at distances less than 1 km, suggesting a modification to the monotonic functional form at very close rupture distances. Interestingly the vertical PGV/PGA residuals show an increase at large distance (near 100 km), suggesting an underprediction beyond about 80 km. However, the limited number of data points, especially for larger magnitude events, could be the cause of the observed bias. The residuals over magnitude are largely unbiased (Figure 15d).

The companion figures for the regression results using Model A with the dynamic dataset are shown in Figure Set 16. The same characteristics as was noted for the static dataset can be observed for the dynamic results, with the exception of the vertical component PGV/PGA ratio

(lower left corner plot on Figure 16a). For the dynamic dataset this ratio has an increasing slope with distance, rather than a constant value as was estimated for the static dataset. A comparison of the residual plots with the static dataset indicates that the dynamic model regression show similar underprediction of PGV/PGA at very close distances (< 1 km) for both horizontal and vertical components but in this case the residuals for the vertical PGV/PGA ratios are less biased at large distance (near 100 km). The increasing slope in the vertical PGV/PGA regressions (Figure 16a) have reduced the underprediction. The dynamic results also predict lower PGD values than the static results, as would be expected. The other peak parameters values are similar between the static and dynamic cases. The inter-event regression terms are listed in Table 4 and the regression coefficients are given in Table 5.

5.2 Model B

The functional form for Model B is more flexible than model A (Equation 2). The model is defined as,

$$\begin{aligned} \text{Ln}(\text{GM}) = & \theta_1 + \theta_2 * M + (\theta_3 + \theta_4 * M) * \text{Ln}(D + \exp(\theta_5)) + \theta_6 * (1-S) + \theta_7 * (M-6)^2 \\ & + \theta_8 * F \end{aligned} \quad (3)$$

where GM is the peak ground motion parameter (i.e., PGA, PGV, PGD, PGV/PGA, or $\text{PGA} * \text{PGD} / \text{PGV}^2$), S is the site condition term and is equal to 1 for rock sites and 0 for soil sites, M is the earthquake magnitude, F is the mechanism term and is equal to 0.0 for strike-slip, 0.5 for reverse/oblique and unknown, and 1.0 for thrust mechanisms (see table 1), and D is the rupture distance. This model permits a quadratic in magnitude scaling as well as a magnitude dependent distance attenuation (far field fall off).

The regression results for the static dataset are listed in Tables 6 and 7 and are plotted in Figure Set 17. Although the functional form allows for the oversaturation of ground motion, the regression results predict oversaturation only for the horizontal and vertical component PGA. Both the V/A and AD/V^2 ratios are nearly constant as a function of distance, as was noted for Model A. In this case, with the more flexible functional form, the vertical component PGV/PGA ratios show an increase at large distance (beyond 100 km) for the static dataset. Also, comparing Figures 15a and 17a, the magnitude dependent distance attenuation is apparent in the steeper slope for smaller magnitude. The residual plots are generally unbiased, with the possible exception of short distances, as was discussed for the Model A results.

The results for Model B with the dynamic dataset are given in Tables 8 and 9 and are shown in Figure Set 18. Similar to the static results, the predicted median PGA values are oversaturated. The same conclusions that were discussed for the static cases for Model B about the nearly constant V/A and AD/V^2 ratios and the lack of substantial bias in the residual plots are applicable to these results for the dynamic dataset.

5.3 Model C

Model C is a modified version of Model A. An examination of PGV/PGA ratios for the few stations that were located very near to the fault (i.e., rupture distance less than about 1 km, Figure

15c), indicated the possible need for a functional form that could accommodate an increase in value with decreasing distance. To model this behavior in ground motion parameter with decreasing distance, a hyperbolic tangent term was added to Model A,

$$\begin{aligned} \text{Ln}(\text{GM}) = & \theta_1 + \theta_2 * M + \theta_3 * \text{Ln}(D + \theta_4 * \exp(\theta_5 * M)) + \theta_6 * (1-S) + \\ & + \theta_7 * F + \theta_8 / \text{Tanh}(D + \theta_9) \end{aligned} \quad (4)$$

where GM is the peak ground motion parameter (i.e., PGA, PGV, PGD, PGV/PGA, or PGA*PGD/PGV²), S is the site condition term and is equal to 1 for rock sites and 0 for soil sites, M is the earthquake magnitude, F is the mechanism term and is equal to 0.0 for strike-slip, 0.5 for reverse/oblique and unknown, and 1.0 for thrust mechanisms (see table 1), and D is the rupture distance. The hyperbolic tangent function will go to zero as the distance decreases which will allow for the increase of the ground motion parameter (e.g., V/A) with decreasing distance. For large distances, this function will approach one.

The regression results for the static dataset are listed in Tables 10 and 11 and are plotted in Figure Set 19. This functional form leads to a slight oversaturation of the horizontal PGA motion and a decrease in the vertical PGA and PGD models for distances less than 1 km. However, the model does predict an increase in the V/A ratio for distances less than 1 km. This increase is more pronounced on the horizontal component relative to the vertical component. For the horizontal component PGV/PGA ratio, the residuals at very close distances (< 1 km) are now unbiased (compare Figure 15c and 19c), with little change in the vertical components. The vertical PGD model predicts a decrease for distances less than about 0.3 km, largely controlled by the data point at 0.1 km (Figure 15c and 19c).

The results for Model C with the dynamic dataset are given in Tables 12 and 13 and are plotted in Figure Set 20. For the dynamic case, the V/A models for short distances increases for the horizontal component and is nearly constant for the vertical component. The vertical PGA and PGD models do not decrease for short distances, as was the case with the static dataset. For the AD/V² ratio, the dynamic dataset results predict a decrease in the value for distances less than 1 km resulting in less biased residuals (Figure 19c and 20c). The inter-event terms and the residual plots are again very similar to the previous models for distances exceeding 1 km.

5.4 Model D

Model D is a modification of Model B. This modification is the same as used in Model C where the hyperbolic tangent term is added to model the possible increase in ground motion parameters with decreasing distances. The model is defined as,

$$\begin{aligned} \text{Ln}(\text{GM}) = & \theta_1 + \theta_2 * M + (\theta_3 + \theta_4 * M) * \text{Ln}(D + \exp(\theta_5)) + \theta_6 * (1-S) + \theta_7 * (M-6)^2 \\ & + \theta_8 * F + \theta_9 / \text{Tanh}(D + \theta_{10}) \end{aligned} \quad (5)$$

where GM is the peak ground motion parameter (i.e., PGA, PGV, PGD, PGV/PGA, or PGA*PGD/PGV²), S is the site condition term and is equal to 1 for rock sites and 0 for soil sites, M is the earthquake magnitude, F is the mechanism term and is equal to 0.0 for strike-slip, 0.5 for

reverse/oblique and unknown, and 1.0 for thrust mechanisms (see table 1), and D is the rupture distance.

The regression results for the static dataset are given below in Tables 14 and 15 and Figure Set 21. Both the horizontal and vertical PGA models oversaturate slightly and the V/A ratios increase for distance less than 1 km. In this case the horizontal PGV estimates also increase at very close distances (< 0.4 km). The AD/V^2 ratios are nearly constant with a slight decrease for distances greater than 50 km. Similar inter-event terms and residual values were estimated for Model D using the static dataset as for the other cases.

The companion results for Model D using the dynamic dataset are listed in Tables 16 and 17 and plotted in Figure Set 22. The V/A median curves exhibit the increase in values with distances less than 1 km and are similar to the static data set (Figure 21a). However, the opposite is true for the AD/V^2 ratios, with a decrease in values for distances less than 1 km, reflected in less biased residuals (Figures 21c and 22c).

Comparison of the ground motions (PGA and response spectral acceleration values) recorded during the 1999 Chi-Chi earthquake and empirical attenuation models have indicated that the Chi-Chi earthquake ground motions may be anomalous at high frequency (≥ 1 Hz) compared to WUS empirical attenuation relationships (Boore, 2001; NUREG/CR-6728). The Chi-Chi ground motions tend to be lower at high frequency than the empirical model median predictions and are comparable to the WUS empirical models at low frequency (< 1 Hz). Because the Chi-Chi earthquake may be considered an anomalous earthquake (relative to California), a regression using the preferred model (Model D) was performed on both the dynamic and static datasets without the Chi-Chi earthquake data. The regression results are presented below in Tables 18-19 for the modified static dataset and Tables 20-21 for the modified dynamic dataset. Figures Sets 23 and 24 are the corresponding model and residual plots for the modified static and modified dynamic regressions, respectively.

For the static datasets, including the Chi-Chi data which impacts only $M 7.5$, results in lower PGA estimates, comparable PGV estimates at distances beyond 1 km, and higher PGD estimates, all within about 20 km. The PGV/PGA ratios are larger when including the Chi-Chi data, however the AD/VV ratios remain comparable.

For the dynamic datasets, similar trends are seen in Figures 22a and 24a for the estimates of PGA, PGV, PGD, and PGV/PGA. For the vertical AD/VV estimates, removing the Chi-Chi recordings results in larger close in (< 1 km) ratios at all magnitudes. This is clearly an artifact of data distribution with very few data controlling the regressions at distances within one km.

6. RECOMMENDATIONS

A total of 8 empirical models were developed based on the four functional models presented in the previous section and the two sets of data (i.e., dynamic and static). The differences in the functional forms of the four different models do not introduce any additional large bias in the residuals. The total sigma and residual plots from each of these models are similar for the different

datasets. In general the median estimates of the peak ground motion parameters are similar between different functional forms, as would be expected based on the comparison of the residuals.

As was noted earlier in this report, the main difference between Models A and B and C and D is the inclusion of the hyperbolic tangent ($1/\text{Tanh}$) term which allows for the empirical model to increase or decrease for very short distances (D generally < 1 km). Based on the functional form of Models A and B, the predicted values can saturate but not increase for short distances. This feature of Model C is observed in Figure 19a for the horizontal V/A ratio. For distances less than 1 km, the predicted V/A ratio shows an increase in values. In comparison, Model A predicts a constant V/A ratio for distances less than 1 km (see Figure 15a). The decrease in peak values at very close distances is also illustrated in Figure 19a for the vertical PGA and PGD models. This tendency is data driven by 1 or 2 points within about 0.3 km rupture distance, comparing Figures 15c and 19c. For distances greater than 1 km, the two model predict similar values.

Based on results of the analyses presented, Model D is recommended for use as the functional form accommodates a magnitude dependent distance attenuation as well as a very close distance increase in ratios. However the following caveats are recommended for consideration.

The PGA curves for both horizontal and vertical components of motion are oversaturated for large magnitudes at close distances (see Figure 21a). Although current empirical attenuation relationships for PGA are constrained not to oversaturate, this constraint was not included in the functional form of Model D. For engineering applications, this oversaturation of PGA is generally considered unacceptable for engineering design use as it is controlled by very few data. As a result, it is recommended that other published empirical attenuation relationships for PGA be used along with the model D estimates of the peak ratios to provide estimates of peak particle velocity and displacements.

The results for Model D using the dynamic dataset (shown in Figure 22) are similar to the static dataset results except for short distances and, more importantly, for PGD. The static dataset results give higher median PGD values than the dynamic case for large magnitudes at close distances ($D < 20$ km). This is an expected result, based on the differences between the dynamic and static datasets (see Figure 6c). For the smaller magnitudes, the median PGD curves are similar. For distances less than 1 km, the regression on the dynamic dataset predicts a decrease in the AD/V^2 ratio while the static case predicts a constant value. Unfortunately, the regression fit to the models for distances less than 1 km is based on a relative few number of recordings (i.e., approximately 10 values). For this reason, it is recommended that the dynamic AD/V^2 ratio model should be set equal to the value at 1 km for distances less than 1 km for both the horizontal and vertical components of motion. This restriction should also be applied to the dynamic vertical PGA model, which also decreases for distances less than 1 km. The model predictions using the static dataset does not require this distance restriction.

Based on results excluding the Chi-Chi earthquake data, as well as others (Boore, 2001; NUREG/CR-6278), we do not recommend using the PGA regressions which include the Chi-Chi data. Additionally, because the major emphasis of this study was on peak particle velocity and displacement, care should be exercised in using the PGA relationships developed without the Chi-Chi earthquake data due to the potential effects of oversaturation.

In using the results of this study to estimate peak particle velocities and displacements, regressions using the Chi-Chi earthquake data are recommended as this greatly increases the number of $M > 7$ recordings and, using low frequency motions (particle velocity and displacement) minimizes potential inconsistencies between this earthquake and WUS earthquakes at high frequencies.

For implementations with alternative WUS empirical attenuation relations or numerical modeling which provide estimates of peak accelerations, use of the ratios estimated using the Chi-Chi earthquake data is recommended.

To estimate the total uncertainty of the corresponding PGV and PGD values determined by applying the V/A and AD/V^2 ratios, the uncertainty in the V/A and AD/V^2 ratios should be combined with the uncertainty in the PGA value. Since the required covariances have not been estimated, one approach would be to use the uncertainty associated with the relation used for peak acceleration but for structural frequencies associated peak particle velocity and displacement. Based on the correlation analysis presented in the earlier sections of this report, it is recommended that the uncertainty for a spectral period of 1.0 second be used when estimating a PGV value and the uncertainty associated with the longest spectral period for a given empirical attenuation relationship (Abrahamson and Shedlock, 1997) be used for the estimate of uncertainty associated with the PGD value. If numerical modeling is used for a PGA estimate and combined with the AD/VV ratios for a semi-empirical estimate of peak particle displacement, the uncertainty in 5% damped response spectra at a structural period of five seconds should be used to estimate the uncertainty in the derived particle displacement. Alternatively, the uncertainties resulting from the PGV and PGD regressions may be used.

7. REFERENCES

Abrahamson, N. A. and K. M. Shedlock (1997). "Overview," *Seism. Res. Letters*, Vol. 68, No. 1, pp. 9-23.

Abrahamson, N. A. and W. J. Silva (1997). "Empirical Response Spectral Attenuation Relations for Shallow Crustal Earthquakes," *Seism. Res. Letters*, Vol. 68, No. 1, pp. 94-127.

Abrahamson, N. A. and R. R. Youngs (1992). "A Stable Algorithm for Regression Analyses using the Random Effects Model," *Bull. Seis. Soc. Am.*, Vol. 82, pp. 505-510.

Boore, D. M. (1999). Effect of Baseline Corrections on Response Spectra for Two Recordings of the 1999 Chi-Chi, Taiwan, Earthquake, U.S. G. S. Open File Report, 99-945.

Boore, D. M. (2000). Effect of Baseline Corrections on Displacements Response Spectra for Several Recordings of the 1999 Chi-Chi, Taiwan, Earthquake, *Bull. Seis. Soc. Am.*, Vol. 91, No. 5, pp. 1199-1211.

Boore, D. M. (2001). "Comparisons of ground motions from the 1999 Chi-Chi earthquake with empirical predictions largely based on data from California." *Bull. Seism. Soc. Am.*, 91(5), 1212-1217.

McGuire, R.K., W.J. Silva and C.J. Costantino (2001). "Technical basis for revision of regulatory guidance on design ground motions: hazard- and risk-consistent ground motions spectra guidelines." Prepared for Division of Engineering Technology, Washington, DC, *NUREG/CR-6728*.

Silva, W.J. and R. Darragh (1995). "Engineering characterization of earthquake strong ground motion recorded at rock sites." Palo Alto, Calif:Electric Power Research Institute, TR-102261.

Table 1. Earthquake parameters for the earthquakes used in the regression analysis.

Earthquake Number	Earthquake	Date	Magnitude	Mechanism ¹
1	Helena, Montana	1935 1031 1838	6.20	0.0
3	Humbolt Bay	1937 0207 0442	5.80	99.0
4	Imperial Valley	1938 0606 0242	5.00	99.0
5	Northwest Calif	1938 0912 0610	5.50	99.0
6	Imperial Valley	1940 0519 0437	7.00	0.0
7	Northwest Calif	1941 0209 0945	6.60	99.0
8	Northern Calif	1941 1003 1614	6.40	99.0
9	Borrego	1942 1021 1622	6.50	99.0
10	Imperial Valley	1951 0124 0717	5.60	99.0
11	Northwest Calif	1951 1008 0411	5.80	99.0
12	Kern County	1952 0721 1153	7.40	0.5
13	Northern Calif	1952 0922 1141	5.20	99.0
14	Southern Calif	1952 1122 0746	6.00	99.0
15	Imperial Valley	1953 0614 0417	5.50	99.0
16	Central Calif	1954 0425 2033	5.30	99.0
17	Northern Calif	1954 1221 1956	6.50	99.0
18	Imperial Valley	1955 1217 0607	5.40	99.0
19	El Alamo	1956 1217 1433	6.80	99.0
20	San Francisco	1957 0322 1944	5.30	1.0
21	Central Calif	1960 0120 0326	5.00	99.0
22	Northern Calif	1960 0606 0117	5.70	99.0
23	Hollister	1961 0409 0723	5.60	99.0
24	Hollister	1961 0409 0725	5.50	99.0
25	Parkfield	1966 0628 0426	6.10	0.0
26	Northern Calif	1967 1210 1206	5.60	99.0
27	Northern Calif	1967 1218 1725	5.20	99.0
28	Borrego Mtn	1968 0409 0230	6.80	0.0
29	Lytle Creek	1970 0912 1430	5.40	0.5
30	San Fernando	1971 0209 1400	6.60	1.0
33	Point Mugu	1973 0221 1445	5.80	1.0
34	Hollister	1974 1128 2301	5.20	0.0
35	Northern Calif	1975 0607 0846	5.20	99.0
36	Oroville	1975 0801 2020	6.00	0.0
37	Oroville	1975 0802 2022	5.00	0.0
38	Oroville	1975 0802 2059	4.40	0.0
39	Oroville	1975 0808 0700	4.70	0.0
40	Friuli, Italy	1976 0506 2000	6.50	99.0
41	Gazli, USSR	1976 0517	6.80	1.0
42	Fruili, Italy	1976 0911 1631	5.50	99.0
43	Friuli, Italy	1976 0915 0315	6.10	99.0
45	Santa Barbara	1978 0813	6.00	0.5
46	Tabas, Iran	1978 0916	7.40	1.0
48	Coyote Lake	1979 0806 1705	5.70	0.0
50	Imperial Valley	1979 1015 2316	6.50	0.0
51	Imperial Valley	1979 1015 2319	5.20	0.0
52	Imperial Valley	1979 1016 0658	5.50	0.0
53	Livermore	1980 0124 1900	5.80	0.0
54	Livermore	1980 0127 0233	5.40	0.0
55	Anza (Horse Cany)	1980 0225 1047	4.90	0.0
56	Mammoth Lakes	1980 0525 1634	6.30	0.5
57	Mammoth Lakes	1980 0525 1649	5.70	0.0

58	Mammoth Lakes	1980 0525 1944	6.00	0.0
59	Mammoth Lakes	1980 0525 2035	5.70	0.0
60	Mammoth Lakes	1980 0526 1858	6.10	0.0
61	Mammoth Lakes	1980 0527 1451	6.00	0.5

Table 1. Earthquake parameters for the earthquakes used in the regression analysis (cont.)

Earthquake Number	Earthquake	Date	Magnitude	Mechanism ¹
62	Mammoth Lakes	1980 0527 1901	4.90	0.0
63	Mammoth Lakes	1980 0531 1516	4.90	0.0
64	Victoria, Mexico	1980 0609 0328	6.10	0.0
65	Mammoth Lakes	1980 0611 0441	5.00	0.0
71	Taiwan SMART1(5)	1981 0129	6.30	1.0
73	Westmorland	1981 0426 1209	5.80	0.0
74	Mammoth Lakes	1983 0107 0138	5.20	99.0
75	Mammoth Lakes	1983 0107 0324	5.40	99.0
76	Coalinga	1983 0502 2342	6.40	0.5
77	Coalinga	1983 0509 0249	5.00	1.0
78	Coalinga	1983 0611 0309	5.30	1.0
79	Coalinga	1983 0709 0740	5.20	1.0
80	Coalinga	1983 0722 0239	5.80	1.0
81	Coalinga	1983 0722 0343	4.90	1.0
82	Coalinga	1983 0725 2231	5.20	1.0
84	Trinidad offshore	1983 0824 1336	5.50	99.0
85	Coalinga	1983 0909 0916	5.30	0.0
86	Taiwan SMART1(25)	1983 0921	6.50	0.5
90	Morgan Hill	1984 0424 2115	6.20	0.0
95	Bishop (Rnd Val)	1984 1123 1912	5.80	0.0
96	Taiwan SMART1(33)	1985 0612	6.50	99.0
99	Nahanni, Canada	1985 1223	6.80	0.5
100	Hollister	1986 0126 1920	5.40	0.0
101	Mt. Lewis	1986 0331 1155	5.60	99.0
102	Taiwan SMART1(40)	1986 0520	6.40	0.5
103	N. Palm Springs	1986 0708 0920	6.00	0.5
104	Chalfant Valley	1986 0720 1429	5.90	0.0
105	Chalfant Valley	1986 0721 1442	6.20	0.0
106	Chalfant Valley	1986 0721 1451	5.60	0.0
107	Chalfant Valley	1986 0731 0722	5.80	0.0
113	Taiwan SMART1(45)	1986 1114	7.30	1.0
114	Baja California	1987 0207 0345	5.40	99.0
117	Whittier Narrows	1987 1001 1442	6.00	1.0
118	Whittier Narrows	1987 1004 1059	5.30	0.5
119	Superstitn Hills(A)	1987 1124 0514	6.30	0.0
120	Superstitn Hills(B)	1987 1124 1316	6.70	0.0
121	Spitak, Armenia	1988 1207	6.80	0.5
122	Loma Prieta	1989 1018 0005	6.90	0.5
124	Georgia, USSR	1991 0615 0059	6.20	99.0
125	Erzican, Turkey	1992 0313	6.90	99.0
127	Cape Mendocino	1992 0425 1806	7.10	1.0
129	Landers	1992 0628 1158	7.30	0.0
131	Northridge	1994 0117 1231	6.70	1.0
133	Kobe	1995 0116 2046	6.90	0.0
141	Kocaeli, Turkey	1999 0817	7.40	0.0

142	Chi-Chi, Taiwan	1999 0920	7.60	1.0
143	Duzce, Turkey	1999 1112	7.10	0.0

¹ Mechanism: 0=strike-slip, 0.5=reverse/oblique, 1.0=reverse, 99=unknown

Table 2a. Eta (inter-event) terms for horizontal motion (static dataset) using the functional form of Model A

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.1909	-0.2332	-0.4749	-0.0284	-0.1170
3	5.80	0.1650	0.0831	-0.0986	-0.0480	-0.0689
4	5.00	-0.4658	-0.6107	-0.7690	-0.0782	0.0183
5	5.50	0.6682	0.5312	0.3929	-0.0780	-0.0132
6	7.00	-0.1023	-0.1487	-0.1295	-0.0286	0.0789
7	6.60	0.1096	-0.1575	-0.3942	-0.1825	0.0390
8	6.40	0.2810	-0.0474	-0.1288	-0.2246	0.1709
9	6.50	-0.1782	-0.3439	-0.2485	-0.1214	0.1852
10	5.60	-0.4790	-0.3077	-0.0839	0.1149	0.0479
11	5.80	0.5280	0.2781	0.0594	-0.1573	0.0174
12	7.40	0.0365	-0.1262	-0.5816	-0.2389	-0.1803
13	5.20	0.3082	0.4790	0.7904	0.1281	0.0792
14	6.00	0.1340	0.1425	0.2754	0.0069	0.0715
15	5.50	-0.7357	-0.5662	-0.4847	0.1154	-0.0336
16	5.30	-0.0903	0.1171	0.1228	0.1466	-0.1234
17	6.50	0.2171	0.5338	0.5728	0.1920	-0.1879
18	5.40	-0.1366	0.0088	0.2355	0.1035	0.0594
19	6.80	0.1067	0.0979	0.5053	-0.0155	0.2838
20	5.30	-0.3226	-0.3037	-0.4306	0.0133	-0.1222
21	5.00	-0.3179	-0.2392	0.1119	0.0608	0.1874
22	5.70	0.3520	0.1172	0.0086	-0.1461	0.0799
23	5.60	0.0825	0.1685	0.5177	0.0558	0.1714
24	5.50	-0.3741	-0.1140	0.0109	0.1688	-0.0863
25	6.10	-0.1809	-0.1858	0.1233	0.0733	0.2060
26	5.60	0.5406	0.4547	0.4249	-0.0509	0.0355
27	5.20	-0.5068	-0.1932	0.1715	0.2201	0.0336
28	6.80	-0.2580	0.1422	0.5800	0.3535	0.1868
29	5.40	-0.1110	-0.3460	-0.7222	-0.2242	-0.1380
30	6.60	-0.5392	-0.5889	-0.2634	-0.0819	0.3311
33	5.80	-0.0788	0.0526	0.1465	0.0843	-0.0424
34	5.20	-0.0177	-0.0983	-0.5320	-0.0747	-0.2837
35	5.20	0.7870	0.5979	0.0412	-0.1573	-0.3555
36	6.00	-0.4504	-0.6640	-1.3660	-0.1469	-0.2777
37	5.00	-1.1162	-0.8049	-0.0077	0.3336	0.5771
38	4.40	-0.3180	-0.0224	1.2120	0.3530	1.0251
39	4.70	0.0873	-0.4893	-0.9099	-0.5452	0.1978
40	6.50	0.0478	-0.2472	-0.3949	-0.3287	0.1653
41	6.80	0.0648	0.1116	0.1288	0.0834	-0.0715
42	5.50	-0.6413	-0.0975	0.1907	0.5408	-0.2350
43	6.10	-0.6253	-0.4903	-0.3289	0.1117	0.0240
45	6.00	-0.2624	-0.0935	0.0009	0.1503	-0.0645
46	7.40	-0.1336	-0.2100	0.2892	-0.1169	0.6458
48	5.70	-0.0905	0.0370	-0.0649	0.1538	-0.2660
50	6.50	0.1212	0.3010	0.5202	0.2051	0.0555
51	5.20	0.4409	0.4165	0.1235	-0.0079	-0.1755
52	5.50	-0.0508	-0.0647	0.0611	-0.0112	0.1120
53	5.80	-0.1722	0.1903	0.4436	0.3485	-0.0214
54	5.40	-0.0016	0.2105	0.1206	0.2291	-0.2632
55	4.90	0.1756	0.1146	-0.1403	-0.0297	-0.1387
56	6.30	0.4498	0.0880	-0.1874	-0.3875	0.0764

57	5.70	0.7090	0.5892	0.3345	-0.1330	-0.0454
58	6.00	0.3318	0.3092	0.2774	-0.0548	0.0791
59	5.70	0.1988	0.1159	-0.2840	-0.0672	-0.3298
60	6.10	-0.4212	-0.6160	-1.4131	-0.2228	-0.5373

Table 2a. Eta (inter-event) terms for horizontal motion (static dataset) using the functional form of Model A (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.9691	0.7881	0.5960	-0.1966	0.0032
62	4.90	-0.8570	-0.6081	-0.3173	0.3013	-0.1237
63	4.90	-0.0602	0.0091	-0.0910	0.0880	-0.1484
64	6.10	0.8142	1.0687	1.5443	0.2418	0.3030
65	5.00	-0.7423	-1.3343	-1.8527	-0.5753	0.1372
71	6.30	-0.5486	-0.5606	-0.8320	-0.0497	-0.3080
73	5.80	0.5582	0.6092	0.6032	0.0362	0.0268
74	5.20	0.0029	0.3907	0.6460	0.2586	-0.1122
75	5.40	-0.1369	-0.0679	0.0965	0.0455	0.0567
76	6.40	0.0288	0.3168	0.1580	0.2510	-0.4298
77	5.00	0.1700	0.2814	0.3306	0.1389	-0.1109
78	5.30	-0.9167	-0.3666	0.9537	0.5569	0.6782
79	5.20	0.1829	0.1286	0.1132	-0.0428	-0.0273
80	5.80	0.4243	0.4111	0.6680	-0.0232	0.1803
81	4.90	-0.3967	-0.4110	0.0845	0.0158	0.4550
82	5.20	0.9062	1.0191	1.1674	0.1266	-0.0185
84	5.50	1.7744	1.1886	1.4399	-0.5607	0.8188
85	5.30	-1.4189	-1.6188	-2.0296	-0.1936	-0.1180
86	6.50	-0.4873	-0.3168	-0.5252	0.1536	-0.3605
90	6.20	-0.1096	-0.1697	-0.2924	-0.0619	-0.0219
95	5.80	0.0285	-0.6825	-1.6691	-0.4740	-0.1082
96	6.50	-0.3356	-1.0101	-1.4102	-0.7111	-0.2485
99	6.80	0.2384	-0.3481	-0.5896	-0.5867	0.3354
100	5.40	0.0408	0.5293	0.9312	0.4900	0.0096
101	5.60	0.0791	0.2472	0.4884	0.1082	0.0438
102	6.40	1.1637	1.5080	1.3026	0.3270	-0.5361
103	6.00	0.3668	0.0074	-0.2740	-0.3643	0.0771
104	5.90	-0.1548	-0.2724	-0.1251	-0.1377	0.3504
105	6.20	0.2888	0.1834	0.1972	-0.1328	0.2006
106	5.60	-0.2558	-0.3861	-0.7220	-0.1404	-0.1184
107	5.80	-0.1811	-0.1407	-0.1093	0.0232	0.0759
113	7.30	-0.2084	-0.0599	-0.1609	0.0591	-0.2624
114	5.40	0.9673	1.0487	1.3670	0.0569	0.0988
117	6.00	-0.0720	-0.2909	-0.6212	-0.2314	-0.1707
118	5.30	0.5523	0.5878	0.4071	0.0538	-0.1906
119	6.30	0.1170	0.1769	0.4553	0.0246	0.1661
120	6.70	0.1685	0.1677	-0.0280	0.0008	-0.1385
121	6.80	0.1756	0.3359	0.3027	0.0811	-0.1261
122	6.90	0.2768	0.4111	0.2867	0.0812	-0.2280
124	6.20	-0.1740	-0.4329	-0.7459	-0.2710	-0.0441
125	6.90	-0.0712	-0.0455	-0.2941	0.0867	-0.1810
127	7.10	0.2395	0.0648	-0.2082	-0.2234	-0.1294
129	7.30	0.1201	0.1998	-0.0312	0.0235	-0.1120
131	6.70	0.1154	-0.0385	-0.3172	-0.1926	-0.1752

133	6.90	0.3049	0.1698	-0.1557	-0.1110	-0.0924
141	7.40	-0.0079	0.1648	0.4093	0.1142	0.2579
142	7.60	-0.6879	-0.2811	0.1504	0.3296	0.0933
143	7.10	-0.4859	-0.1681	0.3628	0.2823	0.3635

Table 2b. Eta (inter-event) terms for vertical motion (static dataset) using the functional form of Model A

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2847	0.0223	0.1890	0.1225	-0.0638
3	5.80	0.2307	0.0964	-0.2377	0.0968	-0.1716
4	5.00	-0.2037	-0.5415	-1.0645	-0.1334	-0.1913
5	5.50	0.4213	0.2188	0.0129	0.0313	-0.0324
6	7.00	-0.0971	-0.2442	0.0631	-0.2561	0.3633
7	6.60	0.0246	-0.1196	-0.4936	0.0255	-0.1770
8	6.40	0.0575	-0.0158	-0.5866	-0.0160	-0.3921
9	6.50	-0.0818	-0.5613	-0.6141	-0.3748	0.3123
10	5.60	-0.6282	-0.6273	-0.3600	0.0011	0.2234
11	5.80	0.3093	0.2765	-0.0346	0.1293	-0.2295
12	7.40	0.0751	-0.1990	-0.5301	-0.2114	0.0094
13	5.20	0.2627	0.4053	0.5689	0.2800	0.0125
14	6.00	0.3650	0.4089	0.5952	0.2208	0.1171
15	5.50	-0.2139	-0.5687	-0.7106	-0.2584	0.1437
16	5.30	-0.2448	0.0888	0.2550	0.3314	-0.1054
17	6.50	-0.2902	0.2606	0.2140	0.3999	-0.4049
18	5.40	-0.0780	-0.2850	-0.5322	-0.1168	-0.0493
19	6.80	0.0047	-0.0274	0.0121	0.1502	0.0861
20	5.30	-0.4708	-0.6136	-0.3085	-0.2421	0.3821
21	5.00	-0.3822	0.0046	0.2804	0.2952	-0.0440
22	5.70	-0.0007	-0.1137	-0.0514	0.0680	0.1264
23	5.60	-0.0687	0.3508	0.8338	0.3221	0.1021
24	5.50	-0.3385	-0.0402	0.1255	0.1573	-0.0533
25	6.10	-0.4648	-0.3012	0.1646	0.0553	0.2632
26	5.60	-0.0296	0.3625	0.3017	0.3742	-0.3246
27	5.20	-0.1936	-0.2760	-0.0118	0.0940	0.2564
28	6.80	-0.0084	-0.0298	0.3921	0.4373	0.5423
29	5.40	0.0793	-0.3385	-0.8874	-0.1161	-0.1220
30	6.60	-0.2054	-0.3533	-0.0874	-0.0181	0.4962
33	5.80	-0.0896	-0.1507	-0.1124	-0.0776	0.0973
34	5.20	-0.2429	0.0050	-0.2261	0.1533	-0.4564
35	5.20	0.8024	0.6548	0.3920	0.0178	-0.1259
37	5.00	-1.0684	-0.3708	0.5114	0.6965	0.1856
38	4.40	0.0324	0.2668	1.8659	0.3499	1.3258
39	4.70	0.1573	-0.3426	-0.9060	-0.5309	-0.0681
40	6.50	0.1308	0.0212	-0.0492	0.0054	0.0769
41	6.80	0.6970	0.3923	0.5979	-0.3358	0.3684
42	5.50	-0.8729	0.0725	0.1783	0.8753	-0.7964
43	6.10	-0.6546	0.1859	0.5423	0.6785	-0.4217
45	6.00	-0.3420	-0.2855	-0.0887	-0.0018	0.1855
46	7.40	0.0823	0.2877	0.4934	0.2041	0.0962
48	5.70	-0.1328	0.0383	0.0637	0.0138	-0.1394
50	6.50	0.1597	0.0211	0.3987	-0.2995	0.5186
51	5.20	0.0147	-0.6292	-1.1169	-0.6030	0.1552
52	5.50	0.1562	-0.2457	-0.5400	-0.3915	0.0653
53	5.80	-0.6060	0.0288	0.2924	0.6498	-0.3566
54	5.40	-0.5303	-0.1262	-0.1521	0.4252	-0.4355
55	4.90	-0.0406	-0.0195	0.2345	0.1076	0.2138
56	6.30	0.5234	0.5835	0.5299	-0.1893	-0.0396
57	5.70	0.5846	0.6701	0.6427	0.0327	-0.0880

58	6.00	0.4463	0.4846	-0.0051	-0.0491	-0.4915
59	5.70	0.3477	0.1322	-0.6282	-0.3598	-0.5327
60	6.10	-1.0197	-0.7687	-1.1606	0.0748	-0.5945

Table 2b. Eta (inter-event) terms for vertical motion (static dataset) using the functional form of Model A (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	1.0954	0.8137	0.5805	-0.2583	0.0822
62	4.90	-1.2832	-0.4925	-0.0769	0.6251	-0.3759
63	4.90	-0.1498	0.0347	0.0699	0.0843	-0.1373
64	6.10	0.9941	1.0343	1.4411	0.2130	0.3617
65	5.00	-0.7378	-1.1712	-1.5621	-0.4887	0.0533
71	6.30	-0.7368	-1.1906	-1.3300	-0.6482	0.4000
73	5.80	0.9188	0.3764	-0.0933	-0.6031	0.0977
74	5.20	0.0156	0.5492	0.9205	0.3647	-0.0637
75	5.40	-0.1541	0.3086	0.3518	0.2951	-0.2698
76	6.40	-0.1464	0.3628	0.3779	0.4811	-0.4529
77	5.00	0.2823	0.1648	-0.0920	-0.1632	-0.0960
78	5.30	-0.8609	0.1026	1.0219	0.7605	0.0312
79	5.20	0.2518	0.0920	-0.0271	-0.2802	0.1036
80	5.80	0.5544	0.5227	0.7841	-0.2706	0.3818
81	4.90	-0.0112	0.0077	0.2234	-0.0418	0.2404
82	5.20	1.1472	1.1330	0.6644	-0.1175	-0.3956
84	5.50	1.0201	0.7626	1.9764	0.2122	1.4590
85	5.30	-0.8612	-0.9566	-1.3631	-0.1030	-0.3002
86	6.50	-0.8463	-0.4861	-0.2112	0.6304	-0.7942
90	6.20	0.4206	0.1765	-0.0555	-0.2847	0.0153
95	5.80	0.3201	-0.1309	-1.2178	-0.3844	-0.5361
96	6.50	-0.8869	-1.5435	-0.9843	-0.6268	-0.3223
99	6.80	1.0168	0.3107	0.2790	-0.9811	0.7323
100	5.40	0.5550	0.7740	0.7251	0.1956	-0.2529
101	5.60	-0.0161	0.1407	0.1338	0.0755	-0.0955
102	6.40	0.5010	0.6289	0.3704	0.3170	-0.6013
103	6.00	0.7603	0.1784	-0.1278	-0.4684	0.2986
104	5.90	-0.0509	-0.1999	-0.1975	-0.1964	0.1759
105	6.20	0.4671	0.3072	0.4215	-0.1354	0.2896
106	5.60	-0.0440	-0.3823	-0.6880	-0.4081	0.0599
107	5.80	-0.2564	-0.3818	-0.1553	-0.2201	0.3839
113	7.30	-0.2030	-0.3044	-0.5640	-0.3113	-0.0755
114	5.40	0.9847	1.1706	0.9867	0.1127	-0.2650
117	6.00	0.1468	-0.3295	-0.9128	-0.5297	-0.0438
118	5.30	0.2784	0.1853	-0.0884	-0.0422	-0.1661
119	6.30	0.6249	0.1115	0.3996	-0.4279	0.6012
120	6.70	0.6388	-0.0135	0.3926	-0.8701	1.1105
121	6.80	0.2663	0.2700	0.3851	-0.0475	0.1126
122	6.90	0.2697	0.3388	0.3543	-0.0144	0.0031
124	6.20	-0.3722	-0.2388	-0.1656	0.2997	-0.0418
125	6.90	-0.3455	-0.3394	-0.3382	-0.1059	-0.0289
127	7.10	-0.2396	-0.1590	0.1019	-0.1891	0.2655
129	7.30	0.1729	0.0519	-0.5935	0.0892	-0.4642
131	6.70	0.2246	-0.0468	-0.4517	-0.3591	-0.0611

133	6.90	0.1959	-0.0595	-0.0820	-0.2368	0.2245
141	7.40	-0.0777	0.1469	0.3278	0.2161	-0.0038
142	7.60	-0.6982	-0.0341	0.2202	0.5527	-0.3282
143	7.10	-0.6114	-0.0092	0.5923	0.6870	0.0559

Table 3a. Regression coefficients for horizontal motion (static dataset) using the functional form of Model A

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	-3.30036	-1.93054	-7.35898	-2.61262	3.70363
θ_2	0.79535	1.09356	1.75448	-0.63411	0.06801
θ_3	-1.16127	-0.91979	-0.93032	1.64405	-0.54217
θ_4	0.05390	0.00542	18.81153	9.00508	8228.20400
θ_5	0.77260	0.96928	-0.29075	0.69634	-0.60904
θ_6	0.07028	0.31830	0.40105	0.24339	-0.16999
θ_7	0.36388	0.29681	0.00020	-0.07270	-0.08961
Sigma	0.5090	0.5112	0.6321	0.3785	0.4219
Tau	0.4297	0.4553	0.6213	0.2098	0.2044
Total Sigma	0.6661	0.6846	0.8863	0.4327	0.4688

Table 3b. Regression coefficients for vertical motion (static dataset) using the functional form of Model A

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	-3.37470	-2.61167	-9.00696	-0.04107	3.59247
θ_2	0.88212	1.07456	1.85388	1.32262	0.76945
θ_3	-1.42623	-0.89255	-0.84594	-0.07662	-1.32129
θ_4	0.19168	0.11208	2.63639	0.00009	25.54314
θ_5	0.59026	0.50370	0.01157	10.23598	0.29378
θ_6	0.06608	0.12265	0.16618	0.06970	-0.01089
θ_7	0.17577	0.25881	0.17231	0.15231	-0.21417
Sigma	0.4885	0.4559	0.6636	0.4540	0.5214
Tau	0.4791	0.4481	0.6037	0.3484	0.3083
Total Sigma	0.6842	0.6392	0.8971	0.5723	0.6057

Table 4a. Eta (inter-event) terms for horizontal motion (dynamic dataset) using the functional form of Model A

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.1891	-0.2392	-0.4318	-0.0265	-0.0923
3	5.80	0.1625	0.0876	-0.0869	-0.0415	-0.0598
4	5.00	-0.4691	-0.6018	-0.7550	-0.0671	0.0125
5	5.50	0.6643	0.5382	0.4170	-0.0691	-0.0064
6	7.00	-0.1008	-0.1458	0.0234	-0.0213	0.1272
7	6.60	0.1103	-0.1603	-0.4097	-0.1825	0.0336
8	6.40	0.2823	-0.0509	-0.1284	-0.2209	0.1831
9	6.50	-0.1758	-0.3487	-0.2503	-0.1190	0.1979
10	5.60	-0.4785	-0.3067	-0.0787	0.1147	0.0510
11	5.80	0.5258	0.2815	0.0724	-0.1511	0.0260
12	7.40	0.0440	-0.1390	-0.6114	-0.2448	-0.2417
13	5.20	0.3045	0.4876	0.8200	0.1344	0.0780
14	6.00	0.1324	0.1455	0.2918	0.0105	0.0840
15	5.50	-0.7352	-0.5646	-0.4832	0.1156	-0.0327
16	5.30	-0.0918	0.1220	0.1326	0.1474	-0.1272
17	6.50	0.2196	0.5291	0.5864	0.1910	-0.1679
18	5.40	-0.1376	0.0124	0.2460	0.1044	0.0581
19	6.80	0.1075	0.0947	0.4897	-0.0216	0.2614
20	5.30	-0.3205	-0.3087	-0.5451	0.0096	-0.1288
21	5.00	-0.3185	-0.2354	0.0846	0.0584	0.1689
22	5.70	0.3494	0.1217	0.0237	-0.1385	0.0882
23	5.60	0.0830	0.1680	0.5174	0.0545	0.1728
24	5.50	-0.3724	-0.1169	-0.0207	0.1642	-0.0897
25	6.10	-0.1799	-0.1969	0.1494	0.0759	0.2576
26	5.60	0.5392	0.4573	0.4378	-0.0484	0.0391
27	5.20	-0.5097	-0.1850	0.1973	0.2271	0.0346
28	6.80	-0.2586	0.1418	0.6374	0.3297	0.1116
29	5.40	-0.1155	-0.3354	-0.6985	-0.2038	-0.1210
30	6.60	-0.5351	-0.5996	-0.3549	-0.0859	0.3495
33	5.80	-0.0770	0.0488	0.0976	0.0832	-0.0347
34	5.20	-0.0190	-0.0934	-0.5186	-0.0826	-0.3202
35	5.20	0.7810	0.6125	0.0759	-0.1332	-0.3520
36	6.00	-0.4483	-0.6697	-1.3453	-0.1446	-0.2605
37	5.00	-1.1195	-0.7938	0.0209	0.3282	0.5212
38	4.40	-0.3262	0.0023	1.2157	0.3541	0.9158
39	4.70	0.0831	-0.4756	-0.9593	-0.5557	0.1105
40	6.50	0.0509	-0.2532	-0.3894	-0.3269	0.2002
41	6.80	0.0659	0.1129	0.2110	0.0881	-0.0203
42	5.50	-0.6405	-0.0980	0.1692	0.5383	-0.2333
43	6.10	-0.6214	-0.5005	-0.3314	0.1135	0.0736
45	6.00	-0.2598	-0.0994	0.0040	0.1524	-0.0248
46	7.40	-0.1268	-0.2141	0.2861	-0.1206	0.6311
48	5.70	-0.0892	0.0281	-0.0768	0.1495	-0.2550
50	6.50	0.1238	0.2946	0.6512	0.2127	0.1321
51	5.20	0.4379	0.4261	0.1825	-0.0080	-0.2064
52	5.50	-0.0503	-0.0658	0.0744	-0.0135	0.1078
53	5.80	-0.1724	0.1928	0.5417	0.3515	0.0060
54	5.40	-0.0037	0.2154	0.1630	0.2302	-0.2666
55	4.90	0.1704	0.1291	-0.1195	-0.0257	-0.1888
56	6.30	0.4549	0.0746	-0.1757	-0.3834	0.1446

57	5.70	0.7094	0.5900	0.4137	-0.1336	-0.0314
58	6.00	0.3336	0.3069	0.3760	-0.0523	0.1220
59	5.70	0.1999	0.1092	-0.2745	-0.0704	-0.3133
60	6.10	-0.4185	-0.6230	-1.3254	-0.2206	-0.4871

Table 4a. Eta (inter-event) terms for horizontal motion (dynamic dataset) using the functional form of Model A (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.9709	0.7848	0.6068	-0.1931	0.0410
62	4.90	-0.8575	-0.6126	-0.5508	0.2817	-0.2034
63	4.90	-0.0623	0.0161	-0.1560	0.0746	-0.2187
64	6.10	0.8137	1.0717	1.6499	0.2469	0.3348
65	5.00	-0.7449	-1.3254	-1.8559	-0.5837	0.0823
71	6.30	-0.5420	-0.5761	-0.9138	-0.0473	-0.2502
73	5.80	0.5591	0.6083	0.6831	0.0361	0.0470
74	5.20	0.0036	0.3896	0.5864	0.2509	-0.1272
75	5.40	-0.1356	-0.0708	0.0507	0.0417	0.0494
76	6.40	0.0329	0.3088	0.1717	0.2552	-0.3764
77	5.00	0.1693	0.2848	0.1870	0.1346	-0.1553
78	5.30	-0.9136	-0.3751	0.7629	0.5460	0.6523
79	5.20	0.1842	0.1261	-0.0435	-0.0501	-0.0535
80	5.80	0.4294	0.3963	0.5328	-0.0272	0.2078
81	4.90	-0.3975	-0.4071	-0.0806	0.0088	0.3971
82	5.20	0.9074	1.0172	1.0209	0.1199	-0.0472
84	5.50	1.7679	1.2020	1.4775	-0.5312	0.8447
85	5.30	-1.4209	-1.6113	-1.9681	-0.1959	-0.1375
86	6.50	-0.4858	-0.3211	-0.5363	0.1506	-0.3578
90	6.20	-0.1079	-0.1740	-0.2029	-0.0581	0.0255
95	5.80	0.0290	-0.6839	-1.6402	-0.4677	-0.1018
96	6.50	-0.3314	-1.0183	-1.4063	-0.7084	-0.2082
99	6.80	0.2426	-0.3532	-0.4659	-0.5709	0.4616
100	5.40	0.0396	0.5347	0.9967	0.4874	-0.0039
101	5.60	0.0800	0.2454	0.4770	0.1052	0.0444
102	6.40	1.1657	1.5035	1.3010	0.3276	-0.5145
103	6.00	0.3675	0.0052	-0.2676	-0.3596	0.1113
104	5.90	-0.1537	-0.2733	-0.0339	-0.1361	0.3811
105	6.20	0.2901	0.1821	0.3029	-0.1282	0.2473
106	5.60	-0.2556	-0.3849	-0.6547	-0.1427	-0.1139
107	5.80	-0.1797	-0.1429	-0.0352	0.0220	0.0938
113	7.30	-0.1986	-0.0748	-0.2229	0.0721	-0.1984
114	5.40	0.9669	1.0462	1.3159	0.0528	0.0947
117	6.00	-0.0682	-0.3008	-0.7120	-0.2299	-0.1341
118	5.30	0.5507	0.5934	0.3961	0.0563	-0.2046
119	6.30	0.1185	0.1744	0.5197	0.0257	0.1845
120	6.70	0.1718	0.1642	0.1425	0.0121	-0.0464
121	6.80	0.1787	0.3309	0.3257	0.0837	-0.0964
122	6.90	0.2825	0.4021	0.3240	0.0888	-0.1649
124	6.20	-0.1728	-0.4352	-0.7368	-0.2675	-0.0124
125	6.90	-0.0713	-0.0362	-0.1070	0.0920	-0.1296
127	7.10	0.2471	0.0557	-0.1979	-0.2076	-0.0199
129	7.30	0.1241	0.1954	0.0494	0.0088	-0.1970
131	6.70	0.1220	-0.0527	-0.3880	-0.1885	-0.1181

133	6.90	0.3067	0.1745	0.0550	-0.1040	-0.0326
141	7.40	-0.0048	0.1437	0.4507	0.0963	0.1817
142	7.60	-0.6778	-0.2922	0.0135	0.3318	-0.0110
143	7.10	-0.4871	-0.1742	0.3093	0.2756	0.1736

Table 4b. Eta (inter-event) terms for vertical motion (dynamic dataset) using the functional form of Model A

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2864	0.0223	0.1366	0.1908	-0.0618
3	5.80	0.2319	0.1013	-0.2015	0.0186	-0.1614
4	5.00	-0.2020	-0.5384	-1.0124	-0.1894	-0.1734
5	5.50	0.4228	0.2244	0.0659	-0.0363	-0.0105
6	7.00	-0.0982	-0.2352	0.0406	-0.1615	0.3995
7	6.60	0.0256	-0.1176	-0.5026	-0.0479	-0.1917
8	6.40	0.0590	-0.0145	-0.5908	-0.0501	-0.4108
9	6.50	-0.0804	-0.5622	-0.6232	-0.4067	0.3287
10	5.60	-0.6268	-0.6282	-0.3323	-0.0192	0.2390
11	5.80	0.3108	0.2811	0.0018	0.0698	-0.2276
12	7.40	0.0771	-0.1970	-0.5940	-0.3003	-0.0208
13	5.20	0.2643	0.4113	0.6416	0.2273	0.0362
14	6.00	0.3661	0.4142	0.6372	0.1458	0.1396
15	5.50	-0.2124	-0.5691	-0.6846	-0.2829	0.1567
16	5.30	-0.2432	0.0914	0.3077	0.3049	-0.1020
17	6.50	-0.2888	0.2618	0.2182	0.4014	-0.4238
18	5.40	-0.0764	-0.2840	-0.4984	-0.1434	-0.0446
19	6.80	0.0054	-0.0250	0.0027	0.0636	0.0752
20	5.30	-0.4695	-0.6244	-0.2644	-0.1959	0.3893
21	5.00	-0.3809	0.0039	0.3224	0.3023	-0.0522
22	5.70	0.0006	-0.1100	-0.0093	0.0018	0.1508
23	5.60	-0.0674	0.3515	0.8727	0.3286	0.1046
24	5.50	-0.3378	-0.0436	0.1381	0.1900	-0.0656
25	6.10	-0.4683	-0.3033	0.0397	0.2429	0.2707
26	5.60	-0.0281	0.3655	0.3433	0.3503	-0.3352
27	5.20	-0.1921	-0.2719	0.0535	0.0313	0.2980
28	6.80	-0.0096	-0.0188	0.2895	0.2194	0.5102
29	5.40	0.0812	-0.3321	-0.7933	-0.2335	-0.0696
30	6.60	-0.2019	-0.3561	0.0009	-0.0928	0.4896
33	5.80	-0.0870	-0.1544	-0.0451	-0.0744	0.0999
34	5.20	-0.2436	0.0046	-0.2878	0.1997	-0.4794
35	5.20	0.8050	0.6593	0.4893	-0.0484	-0.0998
37	5.00	-1.0684	-0.3673	0.4836	0.7024	0.1727
38	4.40	0.0329	0.2739	1.8820	0.3223	1.3264
39	4.70	0.1566	-0.3429	-0.9526	-0.5022	-0.0928
40	6.50	0.1328	0.0239	-0.0421	-0.0825	0.0839
41	6.80	0.6965	0.3990	0.6970	-0.1673	0.4018
42	5.50	-0.8712	0.0701	0.2201	0.8956	-0.8003
43	6.10	-0.6536	0.1828	0.5489	0.7426	-0.4199
45	6.00	-0.3403	-0.2864	-0.0651	0.0064	0.1911
46	7.40	0.0855	0.2930	0.5778	0.2164	0.0773
48	5.70	-0.1354	0.0331	-0.0538	0.1239	-0.1509
50	6.50	0.1577	0.0275	0.3107	-0.1579	0.5318
51	5.20	0.0148	-0.6240	-1.1419	-0.6186	0.1559
52	5.50	0.1556	-0.2472	-0.5920	-0.3624	0.0602
53	5.80	-0.6060	0.0348	0.2446	0.6200	-0.3422
54	5.40	-0.5312	-0.1239	-0.2060	0.4215	-0.4255
55	4.90	-0.0410	-0.0154	0.2122	0.0856	0.2248
56	6.30	0.5241	0.5803	0.5260	-0.0734	-0.0362
57	5.70	0.5844	0.6739	0.5876	0.0397	-0.0865

58	6.00	0.4460	0.4889	-0.0716	-0.0394	-0.4810
59	5.70	0.3454	0.1287	-0.7330	-0.2713	-0.5378
60	6.10	-1.0208	-0.7668	-1.2463	0.1443	-0.5890
61	6.00	1.0974	0.8148	0.6138	-0.2901	0.0929

Table 4b. Eta (inter-event) terms for vertical motion (dynamic dataset) using the functional form of Model A (cont)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
62	4.90	-1.2859	-0.5036	-0.2094	0.7347	-0.4228
63	4.90	-0.1511	0.0313	-0.0044	0.1426	-0.1692
64	6.10	0.9944	1.0437	1.3903	0.1112	0.3802
65	5.00	-0.7384	-1.1710	-1.6126	-0.4580	0.0339
71	6.30	-0.7329	-1.1979	-1.2371	-0.5833	0.3950
73	5.80	0.9186	0.3801	-0.1549	-0.5909	0.0989
74	5.20	0.0161	0.5461	0.9405	0.4085	-0.0828
75	5.40	-0.1536	0.3055	0.3636	0.3359	-0.2959
76	6.40	-0.1443	0.3639	0.3869	0.4581	-0.4448
77	5.00	0.2862	0.1568	0.0608	-0.1342	-0.1102
78	5.30	-0.8582	0.0881	1.1178	0.8635	-0.0029
79	5.20	0.2551	0.0812	0.0993	-0.2233	0.0840
80	5.80	0.5568	0.5099	0.8711	-0.1579	0.3660
81	4.90	-0.0073	-0.0011	0.3735	-0.0026	0.2191
82	5.20	1.1508	1.1234	0.7983	-0.0678	-0.4156
84	5.50	1.0221	0.7725	2.0805	0.0368	1.5265
85	5.30	-0.8613	-0.9526	-1.3978	-0.1075	-0.3009
86	6.50	-0.8444	-0.4819	-0.2030	0.4891	-0.7987
90	6.20	0.4196	0.1810	-0.1393	-0.2464	0.0255
95	5.80	0.3202	-0.1291	-1.2713	-0.3822	-0.5637
96	6.50	-0.8845	-1.5417	-0.9812	-0.6792	-0.3205
99	6.80	1.0167	0.3163	0.2996	-0.8076	0.7660
100	5.40	0.5550	0.7780	0.6852	0.1966	-0.2561
101	5.60	-0.0151	0.1393	0.1520	0.0968	-0.1066
102	6.40	0.5032	0.6325	0.3852	0.2071	-0.5992
103	6.00	0.7621	0.1808	-0.0906	-0.5297	0.3139
104	5.90	-0.0511	-0.1953	-0.2588	-0.1965	0.1830
105	6.20	0.4671	0.3141	0.3546	-0.1770	0.3055
106	5.60	-0.0443	-0.3795	-0.7441	-0.3900	0.0570
107	5.80	-0.2567	-0.3790	-0.2218	-0.1912	0.3802
113	7.30	-0.1985	-0.3073	-0.5150	-0.2724	-0.0656
114	5.40	0.9847	1.1684	0.9962	0.1644	-0.2889
117	6.00	0.1506	-0.3357	-0.7995	-0.5164	-0.0451
118	5.30	0.2806	0.1861	-0.0192	-0.0631	-0.1597
119	6.30	0.6251	0.1151	0.3647	-0.4288	0.6353
120	6.70	0.6382	-0.0063	0.3026	-0.7837	1.1301
121	6.80	0.2675	0.2717	0.3867	-0.0426	0.1281
122	6.90	0.2714	0.3418	0.3430	-0.0090	0.0155
124	6.20	-0.3700	-0.2352	-0.1354	0.2035	-0.0308
125	6.90	-0.3474	-0.3261	-0.2746	0.0919	-0.0155
127	7.10	-0.2361	-0.1580	0.1941	-0.0664	0.2888
129	7.30	0.1722	0.0626	-0.7248	-0.0388	-0.5005
131	6.70	0.2284	-0.0510	-0.3702	-0.3423	-0.0603
133	6.90	0.1942	-0.0426	-0.1368	-0.1450	0.2409

141	7.40	-0.0792	0.1579	0.1879	0.2049	-0.0316
142	7.60	-0.6938	-0.0374	0.2336	0.5681	-0.3636
143	7.10	-0.6172	-0.0022	0.4184	0.6557	-0.0208

Table 5a. Regression coefficients for horizontal motion (dynamic dataset) using the functional form of Model A

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	-3.26346	-2.03626	-8.08325	-9.10852	0.96603
θ_2	0.78394	1.11545	1.83487	-0.42949	0.50244
θ_3	-1.15339	-0.92821	-0.90563	2.31380	-0.51872
θ_4	0.05532	0.00260	0.00414	84.47478	17.00524
θ_5	0.76526	1.08806	1.00881	0.39521	0.43610
θ_6	0.06981	0.31993	0.41142	0.24542	-0.15808
θ_7	0.36070	0.30622	0.18687	-0.07086	-0.09241
Sigma	0.5095	0.5108	0.6259	0.3782	0.4079
Tau	0.4293	0.4561	0.6266	0.2083	0.1912
Total Sigma	0.6663	0.6848	0.8857	0.4318	0.4505

Table 5b. Regression coefficients for vertical motion (dynamic dataset) using the functional form of Model A

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	-3.38663	-2.65923	-9.64998	0.61773	1.35731
θ_2	0.88140	1.08402	1.97158	0.47449	1.03995
θ_3	-1.42288	-0.89789	-0.85624	0.14519	-1.24398
θ_4	0.18317	0.05620	0.01424	-3691.47600	3.75110
θ_5	0.59521	0.61382	0.82167	-279.40710	0.58255
θ_6	0.06579	0.12295	0.17014	0.05507	0.00150
θ_7	0.17185	0.27102	-0.00177	0.11345	-0.20196
Sigma	0.4887	0.4547	0.6627	0.4359	0.5075
Tau	0.4794	0.4477	0.6079	0.3383	0.3225
Total Sigma	0.6845	0.6381	0.8993	0.5518	0.6013

Table 6a. Eta (inter-event) terms for horizontal motion (static dataset) using the functional form of Model B

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2347	-0.2922	-0.4385	-0.0184	-0.0985
3	5.80	0.1363	0.1130	-0.0598	-0.0108	-0.0262
4	5.00	-0.3838	-0.4838	-0.7715	-0.0671	0.0069
5	5.50	0.6491	0.5938	0.4270	-0.0464	0.0124
6	7.00	-0.0664	-0.1268	-0.0721	-0.0279	0.0768
7	6.60	0.0846	-0.1786	-0.3743	-0.1645	0.0652
8	6.40	0.2228	-0.0846	-0.1094	-0.2036	0.1890
9	6.50	-0.2187	-0.3825	-0.2329	-0.1057	0.1998
10	5.60	-0.5256	-0.3280	-0.0764	0.1236	0.0599
11	5.80	0.4733	0.2881	0.0917	-0.1257	0.0485
12	7.40	0.2860	-0.0151	-0.6229	-0.3336	-0.2839
13	5.20	0.3293	0.5726	0.8092	0.1400	0.0786
14	6.00	0.0856	0.1415	0.3118	0.0362	0.1062
15	5.50	-0.7655	-0.5753	-0.4823	0.1226	-0.0214
16	5.30	-0.1016	0.1494	0.1237	0.1488	-0.1163
17	6.50	0.1649	0.4972	0.5885	0.1974	-0.1584
18	5.40	-0.1637	0.0223	0.2408	0.1092	0.0630
19	6.80	0.1051	0.0855	0.5250	-0.0121	0.2915
20	5.30	-0.3085	-0.3416	-0.5529	-0.0008	-0.1218
21	5.00	-0.2656	-0.1975	0.0628	0.0407	0.1526
22	5.70	0.3148	0.1446	0.0424	-0.1120	0.1078
23	5.60	0.0215	0.1314	0.5149	0.0599	0.1729
24	5.50	-0.4038	-0.1599	-0.0201	0.1623	-0.0806
25	6.10	-0.2418	-0.2271	0.1836	0.1062	0.2495
26	5.60	0.4764	0.4484	0.4393	-0.0364	0.0493
27	5.20	-0.4585	-0.0913	0.1917	0.2351	0.0387
28	6.80	-0.2545	0.1341	0.7130	0.3672	0.2541
29	5.40	-0.1081	-0.2587	-0.6993	-0.1598	-0.0896
30	6.60	-0.5897	-0.6512	-0.3381	-0.0526	0.4252
33	5.80	-0.1520	-0.0012	0.0957	0.0923	-0.0171
34	5.20	0.0106	-0.0931	-0.5231	-0.1102	-0.3432
35	5.20	0.8442	0.7531	0.0563	-0.1125	-0.3453
36	6.00	-0.4968	-0.7340	-1.3392	-0.1350	-0.2539
37	5.00	-1.0212	-0.7162	-0.0030	0.2800	0.4824
38	4.40	0.1421	0.3723	1.1184	0.1964	0.7711
39	4.70	0.3836	-0.2888	-0.9967	-0.6623	0.0229
40	6.50	-0.0297	-0.3065	-0.3626	-0.2901	0.2403
41	6.80	0.0638	0.0897	0.0679	0.0827	-0.0493
42	5.50	-0.7270	-0.1631	0.1569	0.5432	-0.2236
43	6.10	-0.7529	-0.6084	-0.3339	0.1422	0.0840
45	6.00	-0.3980	-0.1949	0.0101	0.1874	-0.0003
46	7.40	0.0934	-0.1203	0.1574	-0.2126	0.5807
48	5.70	-0.1312	-0.0248	-0.0323	0.1649	-0.2548
50	6.50	0.0588	0.2473	0.6184	0.2347	0.0969
51	5.20	0.4564	0.4648	0.1740	-0.0212	-0.2210
52	5.50	-0.0796	-0.1029	0.0832	-0.0125	0.1025
53	5.80	-0.3019	0.1211	0.5529	0.3854	0.0162
54	5.40	-0.0192	0.2187	0.1748	0.2347	-0.2757
55	4.90	0.3614	0.2898	-0.1447	-0.0800	-0.2459
56	6.30	0.3406	-0.0273	-0.1958	-0.3607	0.1345

57	5.70	0.5898	0.5122	0.4240	-0.1097	-0.0242
58	6.00	0.1879	0.2064	0.3827	-0.0202	0.1214
59	5.70	0.1373	0.0463	-0.2429	-0.0563	-0.3185
60	6.10	-0.5467	-0.7262	-1.3215	-0.1918	-0.4965

Table 6a. Eta (inter-event) terms for horizontal motion (static dataset) using the functional form of Model B (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.8344	0.7035	0.6190	-0.1512	0.0754
62	4.90	-0.5248	-0.4529	-0.4668	0.1999	-0.2585
63	4.90	0.1434	0.1115	-0.1631	-0.0010	-0.2765
64	6.10	0.6926	1.0238	1.6906	0.3041	0.3753
65	5.00	-0.6254	-1.2597	-1.8740	-0.6382	0.0374
71	6.30	-0.6765	-0.6860	-0.9251	-0.0219	-0.2295
73	5.80	0.4315	0.5248	0.6990	0.0658	0.0577
74	5.20	0.0305	0.3854	0.5846	0.2357	-0.1234
75	5.40	-0.1497	-0.1047	0.0523	0.0375	0.0498
76	6.40	-0.0774	0.2335	0.1817	0.2875	-0.3610
77	5.00	0.2594	0.3447	0.1330	0.0797	-0.1731
78	5.30	-0.9094	-0.4277	0.7503	0.5194	0.6636
79	5.20	0.2011	0.1069	-0.0785	-0.0843	-0.0542
80	5.80	0.3163	0.2727	0.5231	-0.0151	0.2313
81	4.90	-0.2540	-0.3204	-0.1400	-0.0646	0.3667
82	5.20	0.9153	1.0019	0.9857	0.0884	-0.0435
84	5.50	1.7980	1.3321	1.5077	-0.4504	0.9118
85	5.30	-1.4468	-1.6190	-1.9780	-0.2050	-0.1517
86	6.50	-0.5514	-0.3582	-0.4810	0.2009	-0.2719
90	6.20	-0.2218	-0.2398	-0.1807	-0.0192	0.0322
95	5.80	-0.0440	-0.7380	-1.6256	-0.4513	-0.0928
96	6.50	-0.4204	-1.0767	-1.3812	-0.6763	-0.1816
99	6.80	0.2367	-0.3761	-0.5941	-0.5780	0.3731
100	5.40	-0.0193	0.5034	0.9949	0.4889	-0.0080
101	5.60	0.0223	0.2014	0.4753	0.1081	0.0491
102	6.40	1.0750	1.4545	1.3459	0.3773	-0.4493
103	6.00	0.2521	-0.0537	-0.2443	-0.3085	0.1598
104	5.90	-0.2913	-0.3609	-0.0194	-0.1023	0.3904
105	6.20	0.1624	0.1086	0.3247	-0.0857	0.2592
106	5.60	-0.3564	-0.4563	-0.6473	-0.1272	-0.1109
107	5.80	-0.3082	-0.2334	-0.0190	0.0495	0.1039
113	7.30	0.0163	0.0468	-0.2925	0.0033	-0.3053
114	5.40	0.9527	1.0233	1.3154	0.0459	0.0882
117	6.00	-0.2048	-0.3977	-0.7092	-0.1931	-0.0857
118	5.30	0.5283	0.6079	0.3790	0.0548	-0.1977
119	6.30	0.0483	0.1316	0.5271	0.0375	0.1754
120	6.70	0.1416	0.1391	0.0773	0.0212	-0.1091
121	6.80	0.1699	0.3241	0.3079	0.0819	-0.1090
122	6.90	0.3084	0.4053	0.2900	0.0795	-0.2061
124	6.20	-0.2877	-0.4913	-0.7012	-0.2126	0.0472
125	6.90	-0.0600	-0.0541	-0.2902	0.0857	-0.1608
127	7.10	0.3513	0.1054	-0.3202	-0.2471	-0.1186
129	7.30	0.2990	0.2764	0.0473	-0.0571	-0.1936
131	6.70	0.0804	-0.1000	-0.4076	-0.1792	-0.1119

133	6.90	0.3338	0.1742	-0.0412	-0.1081	-0.0805
141	7.40	0.2401	0.3055	0.4847	0.0376	0.1620
142	7.60	-0.3132	-0.0898	-0.0079	0.2064	-0.0410
143	7.10	-0.3892	-0.1240	0.4636	0.2511	0.3474

Table 6b. Eta (inter-event) terms for vertical motion (static dataset) using the functional form of Model B

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.3375	-0.0160	0.1959	0.2280	-0.0337
3	5.80	0.2258	0.1153	-0.1770	-0.0017	-0.2105
4	5.00	-0.1103	-0.4709	-1.0465	-0.2383	-0.2382
5	5.50	0.4305	0.2525	0.0680	-0.0522	-0.0767
6	7.00	-0.0501	-0.2327	0.0777	-0.1360	0.3457
7	6.60	0.0161	-0.1305	-0.4692	-0.0774	-0.1891
8	6.40	0.0083	-0.0385	-0.5655	-0.0116	-0.3840
9	6.50	-0.1210	-0.5860	-0.5978	-0.3651	0.2979
10	5.60	-0.6779	-0.6430	-0.3432	0.0075	0.2108
11	5.80	0.2756	0.2822	0.0154	0.0765	-0.2506
12	7.40	0.3179	-0.1458	-0.6036	-0.4373	-0.0171
13	5.20	0.3023	0.4555	0.6092	0.1993	-0.0312
14	6.00	0.3320	0.4107	0.6531	0.1392	0.0873
15	5.50	-0.2549	-0.5761	-0.6977	-0.2633	0.1299
16	5.30	-0.2515	0.1035	0.2728	0.3007	-0.1194
17	6.50	-0.3369	0.2331	0.2293	0.4565	-0.3864
18	5.40	-0.1046	-0.2818	-0.5192	-0.1343	-0.0609
19	6.80	0.0212	-0.0345	0.0287	-0.0151	0.0673
20	5.30	-0.4731	-0.6496	-0.3730	-0.2150	0.3955
21	5.00	-0.3328	0.0240	0.2501	0.2617	-0.0486
22	5.70	-0.0133	-0.0986	0.0032	-0.0027	0.0850
23	5.60	-0.1346	0.3252	0.8436	0.3564	0.1070
24	5.50	-0.3826	-0.0729	0.1063	0.2040	-0.0339
25	6.10	-0.5280	-0.3356	0.1843	0.2256	0.3132
26	5.60	-0.0820	0.3550	0.3283	0.3727	-0.3220
27	5.20	-0.1328	-0.2193	0.0321	-0.0035	0.1953
28	6.80	0.0335	-0.0226	0.4596	-0.0101	0.4989
29	5.40	0.1163	-0.2857	-0.8144	-0.2944	-0.2124
30	6.60	-0.2449	-0.4010	-0.0838	-0.1258	0.4861
33	5.80	-0.1740	-0.1921	-0.1173	-0.0353	0.1028
34	5.20	-0.2171	0.0053	-0.2631	0.1687	-0.4362
35	5.20	0.8205	0.6976	0.4129	-0.0806	-0.1749
37	5.00	-0.9771	-0.3225	0.4753	0.6250	0.1705
38	4.40	0.4769	0.4819	1.7498	0.0194	1.2246
39	4.70	0.4395	-0.2327	-1.0152	-0.7027	-0.0945
40	6.50	0.0715	-0.0148	-0.0051	-0.0348	0.0664
41	6.80	0.6855	0.3651	0.5778	-0.1943	0.3737
42	5.50	-0.9635	0.0258	0.1622	0.9331	-0.7628
43	6.10	-0.7853	0.1073	0.5463	0.8452	-0.3737
45	6.00	-0.4734	-0.3508	-0.0657	0.1036	0.2142
46	7.40	0.3015	0.3232	0.3981	0.0346	0.0796
48	5.70	-0.1817	-0.0038	0.0551	0.1552	-0.0854
50	6.50	0.1034	-0.0152	0.4336	-0.0879	0.5464
51	5.20	0.0349	-0.6018	-1.1090	-0.6419	0.1379
52	5.50	0.1186	-0.2703	-0.5513	-0.3436	0.0802
53	5.80	-0.7222	-0.0076	0.3501	0.7109	-0.3397
54	5.40	-0.5439	-0.1221	-0.1357	0.4228	-0.4257
55	4.90	0.1441	0.0776	0.2037	-0.0464	0.1686
56	6.30	0.4072	0.5033	0.5247	0.0380	0.0142
57	5.70	0.4722	0.6271	0.6782	0.1232	-0.0604

58	6.00	0.3104	0.4269	0.0412	0.0806	-0.4527
59	5.70	0.2795	0.0869	-0.6314	-0.2297	-0.4749
60	6.10	-1.1431	-0.8347	-1.1308	0.2597	-0.5442

Table 6b. Eta (inter-event) terms for vertical motion (static dataset) using the functional form of Model B (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.9716	0.7606	0.6209	-0.2008	0.0926
62	4.90	-1.0290	-0.4283	-0.2035	0.5669	-0.3548
63	4.90	0.0368	0.0901	-0.0258	0.0045	-0.1296
64	6.10	0.9026	1.0172	1.5407	0.1936	0.3348
65	5.00	-0.6272	-1.1316	-1.6211	-0.5498	0.0573
71	6.30	-0.8734	-1.2811	-1.3497	-0.4598	0.4408
73	5.80	0.7999	0.3292	-0.0522	-0.4952	0.1248
74	5.20	0.0353	0.5390	0.8815	0.3820	-0.0462
75	5.40	-0.1784	0.2820	0.3237	0.3356	-0.2421
76	6.40	-0.2432	0.3100	0.4109	0.5673	-0.4404
77	5.00	0.3514	0.1779	-0.1944	-0.2342	-0.0937
78	5.30	-0.8794	0.0454	0.9123	0.8284	0.0852
79	5.20	0.2484	0.0584	-0.1250	-0.2744	0.1401
80	5.80	0.4257	0.4206	0.7208	-0.0995	0.4553
81	4.90	0.1073	0.0368	0.0988	-0.1362	0.2382
82	5.20	1.1365	1.1025	0.5748	-0.1118	-0.3677
84	5.50	1.0879	0.8447	2.1011	-0.0410	1.3120
85	5.30	-0.8866	-0.9569	-1.3586	-0.1035	-0.2901
86	6.50	-0.8815	-0.5082	-0.1502	0.4699	-0.8364
90	6.20	0.3226	0.1362	-0.0006	-0.1628	0.0366
95	5.80	0.2409	-0.1588	-1.2056	-0.3316	-0.5077
96	6.50	-0.9584	-1.5851	-0.9466	-0.5843	-0.3272
99	6.80	1.0139	0.2801	0.2710	-0.7423	0.7603
100	5.40	0.4985	0.7596	0.7391	0.2269	-0.2387
101	5.60	-0.0813	0.1074	0.1269	0.1239	-0.0774
102	6.40	0.4369	0.5985	0.4311	0.2466	-0.6315
103	6.00	0.6621	0.1414	-0.0719	-0.4708	0.2858
104	5.90	-0.1773	-0.2487	-0.1473	-0.0894	0.2028
105	6.20	0.3594	0.2688	0.4937	-0.0649	0.2982
106	5.60	-0.1410	-0.4223	-0.6664	-0.3241	0.0908
107	5.80	-0.3782	-0.4346	-0.1214	-0.0931	0.4164
113	7.30	0.0103	-0.2641	-0.6425	-0.2532	-0.1101
114	5.40	0.9663	1.1462	0.9517	0.1525	-0.2277
117	6.00	0.0125	-0.4069	-0.9167	-0.4371	-0.0208
118	5.30	0.2553	0.1883	-0.0906	-0.0711	-0.1787
119	6.30	0.5510	0.0855	0.4346	-0.3605	0.5884
120	6.70	0.6141	-0.0357	0.4288	-0.6595	1.1226
121	6.80	0.2622	0.2570	0.3906	0.0060	0.1139
122	6.90	0.3063	0.3272	0.3535	0.0406	0.0005
124	6.20	-0.4624	-0.2725	-0.0993	0.2640	-0.0666
125	6.90	-0.3254	-0.3535	-0.3436	0.0420	-0.0230
127	7.10	-0.1341	-0.1555	0.0498	-0.0199	0.2554
129	7.30	0.3608	0.0985	-0.6147	-0.2314	-0.4836
131	6.70	0.1883	-0.0989	-0.4717	-0.2815	-0.0507
133	6.90	0.2430	-0.0551	-0.0442	-0.1967	0.2143

141	7.40	0.1798	0.2297	0.3069	0.1090	-0.0448
142	7.60	-0.3395	0.0558	0.0938	0.4287	-0.3744
143	7.10	-0.4971	0.0196	0.6095	0.5536	0.0379

Table 7a. Regression coefficients for horizontal motion (static dataset) using the functional form of Model B

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	3.88714	2.58166	-6.98872	-6.69636	7.19866
θ_2	-0.22911	0.45466	1.69047	0.20129	0.23451
θ_3	-2.80889	-2.20979	-1.11580	1.18118	-1.36271
θ_4	0.24112	0.18933	0.02477	0.03756	0.01615
θ_5	2.35884	1.39049	1.01011	6.78373	5.86371
θ_6	0.06962	0.31667	0.39893	0.24242	-0.17023
θ_7	-0.28355	-0.22670	0.03007	0.06569	0.07799
θ_8	0.36799	0.33020	0.20865	-0.06352	-0.11991
Sigma	0.5101	0.5097	0.6316	0.3780	0.4234
Tau	0.4129	0.4586	0.6299	0.2047	0.1965
Total Sigma	0.6563	0.6857	0.8920	0.4299	0.4668

Table 7b. Regression coefficients for vertical motion (static dataset) using the functional form of Model B

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	4.81445	-0.06597	-7.40258	-7.69508	1.21128
θ_2	-0.27426	0.71747	1.62023	0.84505	1.33790
θ_3	-3.32784	-1.62505	-1.35363	1.76242	-0.40591
θ_4	0.27416	0.10629	0.07163	-0.08802	-0.16497
θ_5	2.42444	1.25945	1.10344	5.07158	5.54606
θ_6	0.06524	0.12166	0.16492	0.04784	0.00025
θ_7	-0.26903	-0.11746	0.03304	0.10901	0.05704
θ_8	0.19795	0.29735	0.24355	0.13245	-0.22963
Sigma	0.4896	0.4550	0.6628	0.4230	0.5223
Tau	0.4672	0.4467	0.6072	0.3260	0.3068
Total Sigma	0.6767	0.6376	0.8988	0.5340	0.6058

Table 8a. Eta (inter-event) terms for horizontal motion (dynamic dataset) using the functional form of Model B

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2303	-0.2882	-0.4402	-0.0167	-0.0641
3	5.80	0.1335	0.1185	0.0014	-0.0132	-0.0825
4	5.00	-0.3923	-0.4828	-0.6986	-0.0683	-0.0212
5	5.50	0.6434	0.5986	0.5139	-0.0484	-0.0300
6	7.00	-0.0597	-0.1194	0.0709	-0.0253	0.1448
7	6.60	0.0871	-0.1780	-0.3921	-0.1657	0.0141
8	6.40	0.2246	-0.0849	-0.1170	-0.2038	0.1801
9	6.50	-0.2157	-0.3834	-0.2453	-0.1059	0.1956
10	5.60	-0.5274	-0.3295	-0.0809	0.1222	0.0495
11	5.80	0.4705	0.2914	0.1336	-0.1272	0.0119
12	7.40	0.2964	-0.0261	-0.6423	-0.3302	-0.3012
13	5.20	0.3218	0.5749	0.9066	0.1381	0.0504
14	6.00	0.0842	0.1465	0.3614	0.0351	0.0635
15	5.50	-0.7678	-0.5770	-0.4917	0.1212	-0.0348
16	5.30	-0.1068	0.1482	0.1462	0.1473	-0.1336
17	6.50	0.1677	0.4965	0.5987	0.1970	-0.1490
18	5.40	-0.1678	0.0212	0.2592	0.1079	0.0494
19	6.80	0.1084	0.0851	0.5154	-0.0137	0.2228
20	5.30	-0.3142	-0.3470	-0.6720	0.0001	-0.1204
21	5.00	-0.2725	-0.2033	0.0340	0.0402	0.1522
22	5.70	0.3113	0.1487	0.0990	-0.1138	0.0668
23	5.60	0.0194	0.1288	0.4969	0.0591	0.1746
24	5.50	-0.4056	-0.1639	-0.0825	0.1615	-0.0764
25	6.10	-0.2355	-0.2140	0.2220	0.1086	0.3150
26	5.60	0.4729	0.4481	0.4561	-0.0374	0.0362
27	5.20	-0.4651	-0.0881	0.2908	0.2327	0.0034
28	6.80	-0.2445	0.1375	0.7230	0.3633	-0.0005
29	5.40	-0.1181	-0.2530	-0.6052	-0.1624	-0.1844
30	6.60	-0.5883	-0.6520	-0.3853	-0.0531	0.3184
33	5.80	-0.1546	-0.0045	0.0491	0.0914	-0.0256
34	5.20	0.0049	-0.0989	-0.5818	-0.1103	-0.3177
35	5.20	0.8307	0.7576	0.1818	-0.1150	-0.4291
36	6.00	-0.4931	-0.7325	-1.3890	-0.1334	-0.2298
37	5.00	-1.0308	-0.7239	-0.0230	0.2788	0.4940
38	4.40	0.1193	0.3599	1.1879	0.1982	0.7902
39	4.70	0.3684	-0.2992	-1.0386	-0.6610	0.0485
40	6.50	-0.0252	-0.3053	-0.3636	-0.2903	0.1955
41	6.80	0.0656	0.1033	0.1865	0.0859	0.0050
42	5.50	-0.7325	-0.1679	0.0895	0.5437	-0.2168
43	6.10	-0.7505	-0.6089	-0.3787	0.1438	0.1257
45	6.00	-0.3973	-0.1956	-0.0237	0.1877	0.0091
46	7.40	0.0994	-0.1251	0.1968	-0.2058	0.5759
48	5.70	-0.1290	-0.0215	-0.0808	0.1652	-0.2059
50	6.50	0.0688	0.2576	0.7091	0.2372	0.1975
51	5.20	0.4498	0.4609	0.1818	-0.0233	-0.2221
52	5.50	-0.0798	-0.1052	0.0457	-0.0128	0.1166
53	5.80	-0.3001	0.1230	0.5703	0.3856	0.0301
54	5.40	-0.0229	0.2202	0.1805	0.2353	-0.2662
55	4.90	0.3488	0.2866	-0.1076	-0.0797	-0.2469
56	6.30	0.3454	-0.0268	-0.2211	-0.3580	0.2125

57	5.70	0.5911	0.5113	0.4100	-0.1101	0.0011
58	6.00	0.1927	0.2077	0.3846	-0.0185	0.1683
59	5.70	0.1391	0.0493	-0.2849	-0.0545	-0.2671
60	6.10	-0.5402	-0.7241	-1.3251	-0.1898	-0.4251

Table 8a. Eta (inter-event) terms for horizontal motion (dynamic dataset) using the functional form of Model B (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.8345	0.7038	0.6041	-0.1518	0.0604
62	4.90	-0.5347	-0.4576	-0.6046	0.2005	-0.2192
63	4.90	0.1326	0.1030	-0.2482	-0.0001	-0.2459
64	6.10	0.6971	1.0286	1.7483	0.3012	0.3367
65	5.00	-0.6348	-1.2670	-1.9232	-0.6378	0.0600
71	6.30	-0.6759	-0.6915	-1.0053	-0.0212	-0.1971
73	5.80	0.4342	0.5245	0.6885	0.0649	0.0854
74	5.20	0.0257	0.3805	0.5206	0.2349	-0.1200
75	5.40	-0.1525	-0.1091	-0.0183	0.0371	0.0567
76	6.40	-0.0730	0.2331	0.1724	0.2883	-0.3464
77	5.00	0.2416	0.3327	0.0329	0.0804	-0.1924
78	5.30	-0.9207	-0.4387	0.5713	0.5198	0.6668
79	5.20	0.1873	0.0964	-0.2182	-0.0827	-0.0604
80	5.80	0.3119	0.2672	0.3818	-0.0132	0.2571
81	4.90	-0.2733	-0.3342	-0.2540	-0.0637	0.3521
82	5.20	0.9016	0.9907	0.8541	0.0888	-0.0551
84	5.50	1.7882	1.3438	1.6787	-0.4574	0.7492
85	5.30	-1.4516	-1.6224	-1.9918	-0.2052	-0.1373
86	6.50	-0.5472	-0.3563	-0.4836	0.1965	-0.3954
90	6.20	-0.2150	-0.2347	-0.1452	-0.0191	0.0672
95	5.80	-0.0425	-0.7394	-1.6788	-0.4506	-0.0849
96	6.50	-0.4151	-1.0781	-1.3919	-0.6773	-0.1903
99	6.80	0.2443	-0.3660	-0.4640	-0.5693	0.5245
100	5.40	-0.0223	0.5000	0.9762	0.4879	0.0074
101	5.60	0.0204	0.1983	0.4401	0.1073	0.0538
102	6.40	1.0787	1.4558	1.3459	0.3738	-0.5281
103	6.00	0.2518	-0.0511	-0.2395	-0.3105	0.1138
104	5.90	-0.2877	-0.3600	-0.0173	-0.1023	0.4198
105	6.20	0.1686	0.1121	0.3608	-0.0855	0.2766
106	5.60	-0.3564	-0.4583	-0.6746	-0.1276	-0.0837
107	5.80	-0.3052	-0.2346	-0.0416	0.0485	0.1380
113	7.30	0.0224	0.0383	-0.2591	0.0101	-0.1961
114	5.40	0.9481	1.0218	1.2715	0.0467	0.1012
117	6.00	-0.2081	-0.4012	-0.7846	-0.1941	-0.1098
118	5.30	0.5190	0.6036	0.3625	0.0533	-0.2210
119	6.30	0.0525	0.1321	0.5550	0.0374	0.1956
120	6.70	0.1528	0.1488	0.2053	0.0253	0.0156
121	6.80	0.1736	0.3242	0.3360	0.0837	-0.0819
122	6.90	0.3163	0.4054	0.3330	0.0841	-0.1479
124	6.20	-0.2861	-0.4891	-0.6918	-0.2155	-0.0186
125	6.90	-0.0556	-0.0356	-0.1043	0.0881	-0.0993
127	7.10	0.3565	0.1051	-0.2350	-0.2392	0.0128
129	7.30	0.3127	0.2717	0.0669	-0.0551	-0.2739
131	6.70	0.0835	-0.1029	-0.4412	-0.1770	-0.0970

133	6.90	0.3453	0.1879	0.1237	-0.1040	-0.0173
141	7.40	0.2523	0.2818	0.5018	0.0212	0.1489
142	7.60	-0.3057	-0.1040	-0.0582	0.2097	-0.0619
143	7.10	-0.3804	-0.1267	0.3648	0.2514	0.1414

Table 8b. Eta (inter-event) terms for vertical motion (dynamic dataset) using the functional form of Model B

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.3338	-0.0177	0.1886	0.2428	-0.0406
3	5.80	0.2154	0.1153	-0.1673	-0.0290	-0.2265
4	5.00	-0.1213	-0.4544	-1.0117	-0.2651	-0.2332
5	5.50	0.4196	0.2585	0.0904	-0.0786	-0.0802
6	7.00	-0.0485	-0.2290	0.1022	-0.1292	0.3868
7	6.60	0.0131	-0.1371	-0.4893	-0.0893	-0.2089
8	6.40	0.0078	-0.0449	-0.5817	-0.0169	-0.4160
9	6.50	-0.1206	-0.5946	-0.6150	-0.3714	0.3050
10	5.60	-0.6792	-0.6443	-0.3432	0.0020	0.2158
11	5.80	0.2682	0.2824	0.0218	0.0580	-0.2721
12	7.40	0.3243	-0.1376	-0.6242	-0.4247	0.0179
13	5.20	0.2921	0.4696	0.6458	0.1783	-0.0240
14	6.00	0.3239	0.4097	0.6626	0.1205	0.0844
15	5.50	-0.2578	-0.5750	-0.6968	-0.2722	0.1329
16	5.30	-0.2560	0.1125	0.2910	0.2925	-0.1239
17	6.50	-0.3343	0.2285	0.2212	0.4620	-0.4142
18	5.40	-0.1085	-0.2771	-0.5123	-0.1440	-0.0655
19	6.80	0.0187	-0.0399	0.0070	-0.0230	0.0659
20	5.30	-0.4709	-0.6435	-0.3658	-0.2057	0.4187
21	5.00	-0.3345	0.0409	0.2684	0.2617	-0.0393
22	5.70	-0.0219	-0.0983	0.0153	-0.0257	0.0849
23	5.60	-0.1342	0.3280	0.8479	0.3608	0.1058
24	5.50	-0.3802	-0.0696	0.1022	0.2127	-0.0411
25	6.10	-0.5254	-0.3355	0.1772	0.2439	0.2958
26	5.60	-0.0850	0.3582	0.3352	0.3680	-0.3462
27	5.20	-0.1440	-0.2078	0.0683	-0.0305	0.2165
28	6.80	0.0279	-0.0310	0.4022	-0.0262	0.5116
29	5.40	0.1006	-0.2724	-0.7700	-0.3408	-0.1976
30	6.60	-0.2473	-0.4103	-0.0850	-0.1330	0.4790
33	5.80	-0.1738	-0.1950	-0.1137	-0.0340	0.0987
34	5.20	-0.2160	0.0249	-0.2764	0.1766	-0.4295
35	5.20	0.8109	0.7180	0.4530	-0.1046	-0.1600
37	5.00	-0.9799	-0.2923	0.4842	0.6205	0.1974
38	4.40	0.4656	0.5555	1.8303	-0.0078	1.3380
39	4.70	0.4354	-0.1824	-0.9856	-0.7075	-0.0309
40	6.50	0.0699	-0.0247	-0.0242	-0.0456	0.0478
41	6.80	0.6843	0.3739	0.6438	-0.1797	0.4107
42	5.50	-0.9633	0.0327	0.1624	0.9413	-0.7723
43	6.10	-0.7817	0.1008	0.5338	0.8619	-0.3940
45	6.00	-0.4725	-0.3569	-0.0772	0.1091	0.1913

46	7.40	0.3049	0.3366	0.4357	0.0557	0.1391
48	5.70	-0.1781	0.0000	0.0304	0.1743	-0.1039
50	6.50	0.1073	-0.0180	0.4288	-0.0711	0.5419
51	5.20	0.0312	-0.5821	-1.1069	-0.6507	0.1478
52	5.50	0.1205	-0.2675	-0.5713	-0.3389	0.0791
53	5.80	-0.7229	-0.0092	0.3272	0.7094	-0.3601
54	5.40	-0.5468	-0.1092	-0.1399	0.4203	-0.4277
55	4.90	0.1361	0.1159	0.2367	-0.0638	0.2128
56	6.30	0.4128	0.4964	0.5172	0.0620	0.0014
57	5.70	0.4735	0.6277	0.6517	0.1289	-0.0796
58	6.00	0.3132	0.4214	0.0104	0.0905	-0.4746
59	5.70	0.2828	0.0905	-0.6550	-0.2107	-0.4920
60	6.10	-1.1382	-0.8405	-1.1613	0.2782	-0.5638

Table 8b. Eta (inter-event) terms for vertical motion (dynamic dataset) using the functional form of Model B (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.9702	0.7543	0.6114	-0.2047	0.0690
62	4.90	-1.0280	-0.3900	-0.2045	0.5790	-0.3196
63	4.90	0.0361	0.1272	-0.0204	0.0103	-0.0926
64	6.10	0.8983	1.0093	1.5121	0.1725	0.3080
65	5.00	-0.6286	-1.1008	-1.6169	-0.5473	0.0844
71	6.30	-0.8687	-1.2910	-1.3492	-0.4429	0.4225
73	5.80	0.8017	0.3271	-0.0817	-0.4891	0.1025
74	5.20	0.0366	0.5524	0.8893	0.3921	-0.0460
75	5.40	-0.1762	0.2892	0.3224	0.3461	-0.2585
76	6.40	-0.2417	0.3002	0.3943	0.5683	-0.4595
77	5.00	0.3476	0.2080	-0.1443	-0.2328	-0.0634
78	5.30	-0.8769	0.0602	0.9283	0.8494	0.0859
79	5.20	0.2479	0.0781	-0.0945	-0.2620	0.1512
80	5.80	0.4302	0.4193	0.7259	-0.0726	0.4365
81	4.90	0.1036	0.0727	0.1534	-0.1344	0.2786
82	5.20	1.1357	1.1216	0.6055	-0.1020	-0.3575
84	5.50	1.0662	0.8543	2.1518	-0.1124	1.3216
85	5.30	-0.8881	-0.9416	-1.3657	-0.1033	-0.2880
86	6.50	-0.8865	-0.5192	-0.1757	0.4448	-0.8611
90	6.20	0.3244	0.1301	-0.0255	-0.1579	0.0153
95	5.80	0.2417	-0.1610	-1.2326	-0.3312	-0.5456
96	6.50	-0.9574	-1.5957	-0.9687	-0.5896	-0.3478
99	6.80	1.0173	0.2825	0.3102	-0.7191	0.7891
100	5.40	0.4982	0.7702	0.7246	0.2287	-0.2444
101	5.60	-0.0798	0.1093	0.1226	0.1302	-0.0888
102	6.40	0.4333	0.5876	0.4095	0.2261	-0.6583
103	6.00	0.6576	0.1354	-0.0771	-0.4857	0.2629
104	5.90	-0.1758	-0.2528	-0.1770	-0.0845	0.1797
105	6.20	0.3596	0.2607	0.4627	-0.0685	0.2749
106	5.60	-0.1394	-0.4187	-0.6913	-0.3163	0.0750
107	5.80	-0.3753	-0.4369	-0.1537	-0.0836	0.3936
113	7.30	0.0163	-0.2565	-0.6113	-0.2446	-0.0536
114	5.40	0.9666	1.1584	0.9573	0.1651	-0.2418
117	6.00	0.0124	-0.4137	-0.9106	-0.4335	-0.0439

118	5.30	0.2505	0.2033	-0.0705	-0.0802	-0.1746
119	6.30	0.5522	0.0805	0.4188	-0.3605	0.6119
120	6.70	0.6196	-0.0401	0.4155	-0.6454	1.1315
121	6.80	0.2641	0.2555	0.3926	0.0104	0.1249
122	6.90	0.3095	0.3244	0.3526	0.0468	0.0143
124	6.20	-0.4668	-0.2820	-0.1130	0.2440	-0.0932
125	6.90	-0.3256	-0.3444	-0.2795	0.0553	-0.0040
127	7.10	-0.1301	-0.1503	0.1015	-0.0047	0.3050
129	7.30	0.3649	0.1038	-0.6579	-0.2196	-0.4586
131	6.70	0.1909	-0.1062	-0.4641	-0.2742	-0.0533
133	6.90	0.2438	-0.0514	-0.0315	-0.1917	0.2320
141	7.40	0.1823	0.2392	0.2691	0.1136	-0.0176
142	7.60	-0.3337	0.0714	0.0968	0.4374	-0.3236
143	7.10	-0.5006	0.0165	0.5132	0.5588	-0.0047

Table 9a. Regression coefficients for horizontal motion (dynamic dataset) using the functional form of Model B

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	3.87704	2.99693	-2.31654	-4.11740	2.73241
θ_2	-0.23071	0.39831	0.99516	0.28518	0.24744
θ_3	-2.78742	-2.32245	-2.47900	0.85680	-0.28722
θ_4	0.23821	0.20487	0.22874	0.02623	0.00002
θ_5	2.35590	1.48196	1.45354	6.36403	10.96848
θ_6	0.06904	0.31893	0.40966	0.24558	-0.16359
θ_7	-0.27937	-0.22641	-0.07684	0.06298	0.04487
θ_8	0.37558	0.33633	0.30855	-0.06379	-0.08906
Sigma	0.5106	0.5099	0.6230	0.3781	0.4100
Tau	0.4119	0.4590	0.6452	0.2042	0.1907
Total Sigma	0.6561	0.6861	0.8969	0.4297	0.4521

Table 9b. Regression coefficients for vertical motion (dynamic dataset) using the functional form of Model B

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	4.42819	-0.00985	-6.19197	-10.46398	56.01712
θ_2	-0.22686	0.71259	1.44530	1.38754	-1.86794
θ_3	-3.21308	-1.66520	-1.73767	2.41849	-7.98473
θ_4	0.25917	0.11220	0.13013	-0.20447	0.31844
θ_5	2.40065	1.30426	1.30897	4.80881	7.12845
θ_6	0.06432	0.12294	0.17090	0.04907	0.00397
θ_7	-0.26460	-0.14014	-0.01623	0.12225	-0.00161
θ_8	0.19774	0.29824	0.20815	0.12525	-0.23038

Sigma	0.4898	0.4538	0.6609	0.4211	0.5086
Tau	0.4661	0.4477	0.6082	0.3276	0.3173
Total Sigma	0.6761	0.6375	0.8982	0.5336	0.5995

Table 10a. Eta (inter-event) terms for horizontal motion (static dataset) using the functional form of Model C

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.1859	-0.2323	-0.4085	-0.0233	-0.1189
3	5.80	0.1588	0.0798	-0.1276	-0.0398	-0.0487
4	5.00	-0.4785	-0.6154	-0.8386	-0.0683	0.0250
5	5.50	0.6587	0.5274	0.3487	-0.0690	0.0019
6	7.00	-0.0962	-0.1460	-0.0229	-0.0174	0.0806
7	6.60	0.1125	-0.1591	-0.3814	-0.1809	0.0520
8	6.40	0.2836	-0.0491	-0.1261	-0.2215	0.1785
9	6.50	-0.1739	-0.3454	-0.2407	-0.1186	0.1915
10	5.60	-0.4824	-0.3109	-0.1221	0.1157	0.0530
11	5.80	0.5225	0.2750	0.0307	-0.1515	0.0316
12	7.40	0.0574	-0.1257	-0.4830	-0.2345	-0.2080
13	5.20	0.2968	0.4747	0.7315	0.1353	0.0877
14	6.00	0.1305	0.1395	0.2565	0.0131	0.0885
15	5.50	-0.7400	-0.5697	-0.5280	0.1165	-0.0286
16	5.30	-0.0980	0.1132	0.0696	0.1482	-0.1192
17	6.50	0.2222	0.5325	0.5812	0.1942	-0.1829
18	5.40	-0.1430	0.0051	0.1873	0.1050	0.0639
19	6.80	0.1111	0.0966	0.5290	-0.0168	0.2978
20	5.30	-0.3208	-0.3099	-0.5529	0.0087	-0.1209
21	5.00	-0.3253	-0.2434	0.0461	0.0580	0.1836
22	5.70	0.3452	0.1138	-0.0254	-0.1387	0.0955
23	5.60	0.0804	0.1655	0.4807	0.0550	0.1732
24	5.50	-0.3742	-0.1171	-0.0299	0.1657	-0.0872
25	6.10	-0.1740	-0.1850	0.2350	-0.0403	0.2035
26	5.60	0.5354	0.4514	0.3868	-0.0489	0.0415
27	5.20	-0.5178	-0.1977	0.1120	0.2293	0.0446
28	6.80	-0.2549	0.1445	0.7510	0.3566	0.2414
29	5.40	-0.1258	-0.3535	-0.8096	-0.1989	-0.1035
30	6.60	-0.5271	-0.5966	-0.3696	-0.0784	0.3809
33	5.80	-0.0773	0.0473	0.0465	0.0828	-0.0333
34	5.20	-0.0288	-0.1005	-0.5012	-0.0795	-0.3066
35	5.20	0.7673	0.5896	-0.0646	-0.1319	-0.3300
36	6.00	-0.4468	-0.6635	-1.3101	-0.1429	-0.2805
37	5.00	-1.1340	-0.8079	0.0048	0.3295	0.5524
38	4.40	-0.3503	-0.0280	1.1740	0.3531	0.9852
39	4.70	0.0667	-0.4934	-0.9195	-0.5546	0.1611
40	6.50	0.0546	-0.2502	-0.3813	-0.3203	0.1898
41	6.80	0.0752	0.1083	0.0807	0.0901	-0.0599
42	5.50	-0.6455	-0.1036	0.1156	0.5392	-0.2334
43	6.10	-0.6178	-0.4940	-0.3499	0.1172	0.0344
45	6.00	-0.2593	-0.0978	-0.0302	0.1554	-0.0503
46	7.40	-0.1112	-0.2143	0.2575	-0.1115	0.6560
48	5.70	-0.0883	0.0368	0.0116	0.1550	-0.2789
50	6.50	0.1303	0.3038	0.6661	0.1993	0.0552
51	5.20	0.4251	0.4142	0.1518	-0.0055	-0.1897
52	5.50	-0.0530	-0.0651	0.0932	-0.0122	0.1058
53	5.80	-0.1778	0.1899	0.5233	0.3577	-0.0219
54	5.40	-0.0117	0.2086	0.1669	0.2351	-0.2729
55	4.90	0.1548	0.1108	-0.1369	-0.0232	-0.1591
56	6.30	0.4617	0.0853	-0.1897	-0.3788	0.0861

57	5.70	0.7039	0.5888	0.4065	-0.1285	-0.0524
58	6.00	0.3317	0.3098	0.3757	-0.0450	0.0761
59	5.70	0.1998	0.1155	-0.2087	-0.0644	-0.3425
60	6.10	-0.4170	-0.6148	-1.3043	-0.2129	-0.5423

Table 10a. Eta (inter-event) terms for horizontal motion (static dataset) using the functional form of Model C (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.9700	0.7836	0.5642	-0.1901	0.0226
62	4.90	-0.8619	-0.6110	-0.3022	0.2802	-0.1615
63	4.90	-0.0739	0.0059	-0.0825	0.0768	-0.1820
64	6.10	0.8094	1.0692	1.6504	0.2541	0.3179
65	5.00	-0.7575	-1.3373	-1.8387	-0.5813	0.1095
71	6.30	-0.5351	-0.5682	-0.9645	-0.0479	-0.2830
73	5.80	0.5549	0.6092	0.6843	0.0414	0.0218
74	5.20	0.0009	0.3871	0.5922	0.2528	-0.1166
75	5.40	-0.1374	-0.0711	0.0515	0.0419	0.0542
76	6.40	0.0365	0.3139	0.1629	0.2597	-0.4132
77	5.00	0.1602	0.2685	0.0835	0.1290	-0.1079
78	5.30	-0.9147	-0.3779	0.7357	0.5419	0.6816
79	5.20	0.1797	0.1166	-0.1156	-0.0540	-0.0225
80	5.80	0.4344	0.4016	0.4922	-0.0284	0.1953
81	4.90	-0.4074	-0.4242	-0.1700	0.0028	0.4533
82	5.20	0.9020	1.0071	0.9382	0.1153	-0.0128
84	5.50	1.7567	1.1812	1.3603	-0.5261	0.8752
85	5.30	-1.4316	-1.6208	-1.9926	-0.1923	-0.1335
86	6.50	-0.4830	-0.3201	-0.5114	0.1577	-0.3255
90	6.20	-0.1071	-0.1684	-0.1750	-0.0757	-0.0192
95	5.80	0.0265	-0.6825	-1.6244	-0.4703	-0.1100
96	6.50	-0.3275	-1.0127	-1.3960	-0.7043	-0.2314
99	6.80	0.2540	-0.3491	-0.5473	-0.5624	0.3508
100	5.40	0.0300	0.5277	0.9770	0.4910	-0.0039
101	5.60	0.0783	0.2443	0.4520	0.1063	0.0444
102	6.40	1.1675	1.5046	1.3072	0.3325	-0.5069
103	6.00	0.3664	0.0027	-0.3058	-0.3559	0.1040
104	5.90	-0.1572	-0.2722	-0.0356	-0.1300	0.3480
105	6.20	0.2889	0.1845	0.3130	-0.1204	0.2060
106	5.60	-0.2618	-0.3869	-0.6583	-0.1379	-0.1289
107	5.80	-0.1834	-0.1405	-0.0277	0.0271	0.0690
113	7.30	-0.1839	-0.0639	-0.2010	0.0759	-0.2635
114	5.40	0.9671	1.0454	1.3233	0.0539	0.0954
117	6.00	-0.0655	-0.3001	-0.7816	-0.2310	-0.1396
118	5.30	0.5412	0.5808	0.3135	0.0555	-0.1859
119	6.30	0.1188	0.1779	0.5259	0.0284	0.1660
120	6.70	0.1787	0.1712	0.1353	-0.0006	-0.1390
121	6.80	0.1832	0.3351	0.3261	0.0871	-0.1230
122	6.90	0.2916	0.4100	0.3380	0.0965	-0.2199
124	6.20	-0.1731	-0.4370	-0.7600	-0.2634	-0.0139
125	6.90	-0.0637	-0.0460	-0.2647	0.0905	-0.1728
127	7.10	0.2609	0.0602	-0.2674	-0.2035	-0.1096
129	7.30	0.1337	0.2045	0.1870	0.0237	-0.1291
131	6.70	0.1321	-0.0451	-0.4135	-0.1861	-0.1483

133	6.90	0.3140	0.1734	0.0252	-0.1618	-0.0908
141	7.40	0.0061	0.1703	0.6362	0.1361	0.2358
142	7.60	-0.6621	-0.2844	0.1377	0.3401	0.0707
143	7.10	-0.4755	-0.1639	0.5617	0.2912	0.3707

Table 10b. Eta (inter-event) terms for vertical motion (static dataset) using the functional form of Model C

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.3047	0.0236	0.1816	0.1254	-0.0691
3	5.80	0.2295	0.0974	-0.2283	0.0977	-0.1616
4	5.00	-0.2005	-0.5379	-1.0508	-0.1372	-0.1792
5	5.50	0.4233	0.2208	0.0261	0.0305	-0.0204
6	7.00	-0.1111	-0.2448	0.0578	-0.2491	0.3621
7	6.60	0.0258	-0.1209	-0.4956	0.0313	-0.1757
8	6.40	0.0671	-0.0164	-0.5869	-0.0114	-0.3910
9	6.50	-0.0717	-0.5622	-0.6157	-0.3694	0.3159
10	5.60	-0.6209	-0.6254	-0.3531	0.0009	0.2285
11	5.80	0.3134	0.2776	-0.0253	0.1302	-0.2217
12	7.40	0.0914	-0.2055	-0.5513	-0.1885	-0.0009
13	5.20	0.2673	0.4082	0.5857	0.2773	0.0242
14	6.00	0.3653	0.4093	0.6043	0.2237	0.1260
15	5.50	-0.2060	-0.5666	-0.7037	-0.2591	0.1491
16	5.30	-0.2376	0.0915	0.2668	0.3293	-0.0997
17	6.50	-0.2795	0.2598	0.2139	0.4049	-0.4064
18	5.40	-0.0701	-0.2826	-0.5238	-0.1182	-0.0440
19	6.80	0.0017	-0.0294	0.0087	0.1571	0.0849
20	5.30	-0.4785	-0.6121	-0.3174	-0.2419	0.3788
21	5.00	-0.3772	0.0082	0.2861	0.2913	-0.0443
22	5.70	0.0010	-0.1123	-0.0407	0.0684	0.1374
23	5.60	-0.0615	0.3526	0.8406	0.3218	0.1028
24	5.50	-0.3385	-0.0380	0.1246	0.1564	-0.0568
25	6.10	-0.4002	-0.2985	0.2387	0.0153	0.2552
26	5.60	-0.0213	0.3642	0.3113	0.3738	-0.3211
27	5.20	-0.1920	-0.2731	0.0042	0.0913	0.2712
28	6.80	-0.0213	-0.0314	0.3885	0.4499	0.5312
29	5.40	0.0781	-0.3344	-0.8658	-0.1180	-0.1002
30	6.60	-0.2031	-0.3578	-0.0936	-0.0019	0.4967
33	5.80	-0.0804	-0.1506	-0.1096	-0.0753	0.0993
34	5.20	-0.2437	0.0126	-0.2268	0.1449	-0.4648
35	5.20	0.8137	0.6601	0.4140	0.0127	-0.1105
37	5.00	-1.0615	-0.3622	0.5203	0.6854	0.1831
38	4.40	0.0406	0.2785	1.8792	0.3316	1.3284
39	4.70	0.1542	-0.3326	-0.9106	-0.5451	-0.0766
40	6.50	0.1416	0.0194	-0.0488	0.0177	0.0821
41	6.80	0.6521	0.3900	0.5835	-0.3269	0.3656
42	5.50	-0.8663	0.0763	0.1836	0.8746	-0.7983
43	6.10	-0.6558	0.1866	0.5383	0.6853	-0.4262
45	6.00	-0.3352	-0.2844	-0.0859	0.0038	0.1866
46	7.40	0.0823	0.2795	0.4723	0.2304	0.0835
48	5.70	-0.1641	0.0431	0.0452	0.0122	-0.1498
50	6.50	0.1548	0.0221	0.3827	-0.2995	0.5122
51	5.20	0.0218	-0.6217	-1.1040	-0.6115	0.1578
52	5.50	0.1539	-0.2423	-0.5433	-0.3934	0.0616
53	5.80	-0.5977	0.0330	0.3028	0.6504	-0.3535
54	5.40	-0.5380	-0.1199	-0.1490	0.4208	-0.4342
55	4.90	-0.0439	-0.0106	0.2425	0.0962	0.2181
56	6.30	0.5164	0.5833	0.5208	-0.1801	-0.0475

57	5.70	0.5915	0.6750	0.6500	0.0313	-0.0895
58	6.00	0.4539	0.4879	-0.0001	-0.0459	-0.4937
59	5.70	0.3239	0.1370	-0.6419	-0.3607	-0.5421
60	6.10	-1.0240	-0.7659	-1.1636	0.0789	-0.6015

Table 10b. Eta (inter-event) terms for vertical motion (static dataset) using the functional form of Model C (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	1.1056	0.8148	0.5872	-0.2527	0.0877
62	4.90	-1.3138	-0.4836	-0.1096	0.6131	-0.3941
63	4.90	-0.1592	0.0437	0.0588	0.0726	-0.1496
64	6.10	1.0053	1.0369	1.4533	0.2166	0.3725
65	5.00	-0.7391	-1.1627	-1.5623	-0.4991	0.0459
71	6.30	-0.7233	-1.1930	-1.3346	-0.6367	0.3971
73	5.80	0.9248	0.3808	-0.0874	-0.6035	0.0962
74	5.20	0.0112	0.5522	0.9173	0.3619	-0.0691
75	5.40	-0.1569	0.3111	0.3491	0.2936	-0.2752
76	6.40	-0.1319	0.3618	0.3784	0.4917	-0.4502
77	5.00	0.2895	0.1690	-0.0881	-0.1676	-0.0970
78	5.30	-0.8672	0.1053	1.0093	0.7596	0.0200
79	5.20	0.2533	0.0951	-0.0302	-0.2817	0.0979
80	5.80	0.5460	0.5228	0.7724	-0.2646	0.3724
81	4.90	-0.0047	0.0125	0.2248	-0.0477	0.2372
82	5.20	1.1527	1.1363	0.6646	-0.1195	-0.3997
84	5.50	1.0151	0.7661	2.0027	0.2105	1.4924
85	5.30	-0.8547	-0.9497	-1.3530	-0.1093	-0.3011
86	6.50	-0.8411	-0.4879	-0.2097	0.6416	-0.7864
90	6.20	0.4405	0.1788	-0.0359	-0.2900	0.0145
95	5.80	0.3271	-0.1285	-1.2174	-0.3846	-0.5391
96	6.50	-0.8690	-1.5451	-0.9842	-0.6155	-0.3179
99	6.80	0.9953	0.3082	0.2651	-0.9643	0.7254
100	5.40	0.5629	0.7805	0.7351	0.1901	-0.2542
101	5.60	-0.0118	0.1426	0.1356	0.0753	-0.0977
102	6.40	0.5118	0.6277	0.3740	0.3269	-0.5922
103	6.00	0.7654	0.1794	-0.1202	-0.4630	0.3079
104	5.90	-0.0435	-0.1961	-0.1909	-0.1951	0.1757
105	6.20	0.4768	0.3093	0.4277	-0.1300	0.2934
106	5.60	-0.0389	-0.3769	-0.6820	-0.4108	0.0566
107	5.80	-0.2508	-0.3774	-0.1510	-0.2208	0.3804
113	7.30	-0.1757	-0.3121	-0.5839	-0.2869	-0.0783
114	5.40	0.9740	1.1729	0.9798	0.1120	-0.2721
117	6.00	0.1552	-0.3304	-0.9119	-0.5218	-0.0411
118	5.30	0.2875	0.1901	-0.0752	-0.0461	-0.1597
119	6.30	0.6352	0.1125	0.4027	-0.4251	0.6037
120	6.70	0.6424	-0.0136	0.3871	-0.8591	1.1055
121	6.80	0.2771	0.2682	0.3825	-0.0397	0.1126
122	6.90	0.2795	0.3352	0.3447	0.0030	0.0012
124	6.20	-0.3613	-0.2389	-0.1582	0.3073	-0.0310
125	6.90	-0.3916	-0.3404	-0.3543	-0.1008	-0.0333
127	7.10	-0.2325	-0.1653	0.0862	-0.1667	0.2618
129	7.30	0.1770	0.0480	-0.6092	0.1074	-0.4783
131	6.70	0.2346	-0.0515	-0.4613	-0.3419	-0.0617

133	6.90	0.2388	-0.0606	-0.1100	-0.2485	0.2204
141	7.40	-0.0722	0.1429	0.3135	0.2370	-0.0122
142	7.60	-0.6765	-0.0434	0.1943	0.5800	-0.3365
143	7.10	-0.6145	-0.0117	0.5814	0.7018	0.0461

Table 11a. Regression coefficients for horizontal motion (static dataset) using the functional form of Model C

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	-3.17782	-3.35340	-19.36038	-3.79278	1.62940
θ_2	0.76940	1.08906	1.65944	0.15559	0.15307
θ_3	-1.15403	-0.91848	-0.93010	0.81817	-1.86588
θ_4	0.06622	0.00533	22.62411	27.71679	1219.60700
θ_5	0.74049	0.97105	-0.31734	0.39716	-0.11604
θ_6	0.07005	0.31789	0.40017	0.24722	-0.16960
θ_7	0.35491	0.30647	0.25876	-0.06302	-0.11562
θ_8	0.01353	1.44489	12.47632	2.24805	10.63174
θ_9	7.30684	16.32732	2422.66700	0.87279	16553.75000
Sigma	0.5091	0.5110	0.6318	0.3757	0.4234
Tau	0.4285	0.4554	0.6254	0.2102	0.2021
Total Sigma	0.6654	0.6845	0.8890	0.4305	0.4692

Table 11b. Regression coefficients for vertical motion (static dataset) using the functional form of Model C

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	-1.85744	-3.35516	-9.23450	-2.29434	-1.88904
θ_2	0.85259	1.07992	1.88378	2.21424	0.78439
θ_3	-1.36153	-0.89214	-0.84358	-0.27002	-1.10135
θ_4	0.09293	0.10954	0.73745	0.14397	11.14645
θ_5	0.66193	0.50726	0.18817	6.25457	0.37809
θ_6	0.06299	0.12246	0.16628	0.07138	-0.01049
θ_7	0.17415	0.26303	0.17883	0.14668	-0.21384
θ_8	-1.64939	0.70678	0.01458	2.51398	3.95766
θ_9	0.78385	12.15520	-0.12436	1.39560	16.50333
Sigma	0.4874	0.4559	0.6633	0.4538	0.5215
Tau	0.4796	0.4480	0.6036	0.3491	0.3092
Total Sigma	0.6838	0.6392	0.8968	0.5726	0.6063

Table 12a. Eta (inter-event) terms for horizontal motion (dynamic dataset) using the functional form of Model C

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.1886	-0.2348	-0.3283	-0.0227	-0.0982
3	5.80	0.1609	0.0837	-0.1372	-0.0331	-0.0597
4	5.00	-0.4751	-0.6141	-0.9757	-0.0616	0.0118
5	5.50	0.6612	0.5317	0.3491	-0.0618	-0.0067
6	7.00	-0.0987	-0.1345	0.2805	-0.0151	0.1230
7	6.60	0.1116	-0.1565	-0.3599	-0.1794	0.0368
8	6.40	0.2813	-0.0488	-0.1021	-0.2193	0.1854
9	6.50	-0.1767	-0.3458	-0.2173	-0.1178	0.2004
10	5.60	-0.4829	-0.3125	-0.1751	0.1151	0.0514
11	5.80	0.5235	0.2778	0.0265	-0.1460	0.0264
12	7.40	0.0488	-0.1175	-0.2973	-0.2501	-0.2370
13	5.20	0.2995	0.4782	0.7274	0.1392	0.0784
14	6.00	0.1307	0.1434	0.2911	0.0177	0.0853
15	5.50	-0.7401	-0.5716	-0.6193	0.1162	-0.0334
16	5.30	-0.0972	0.1135	0.0054	0.1482	-0.1292
17	6.50	0.2184	0.5328	0.6650	0.1914	-0.1713
18	5.40	-0.1426	0.0048	0.1407	0.1051	0.0586
19	6.80	0.1103	0.1006	0.6298	-0.0191	0.2705
20	5.30	-0.3259	-0.3209	-0.8755	0.0039	-0.1273
21	5.00	-0.3253	-0.2470	-0.0998	0.0553	0.1721
22	5.70	0.3469	0.1169	-0.0386	-0.1320	0.0896
23	5.60	0.0787	0.1627	0.4524	0.0532	0.1752
24	5.50	-0.3765	-0.1232	-0.1395	0.1611	-0.0904
25	6.10	-0.1762	-0.1892	0.3619	-0.0245	0.3393
26	5.60	0.5352	0.4520	0.3748	-0.0474	0.0393
27	5.20	-0.5146	-0.1950	0.0686	0.2337	0.0343
28	6.80	-0.2517	0.1595	1.0623	0.3548	0.1268
29	5.40	-0.1235	-0.3500	-0.8909	-0.1827	-0.1212
30	6.60	-0.5354	-0.5992	-0.4818	-0.0830	0.3634
33	5.80	-0.0813	0.0416	-0.1050	0.0798	-0.0325
34	5.20	-0.0278	-0.1035	-0.5511	-0.0835	-0.3266
35	5.20	0.7711	0.5942	-0.1659	-0.1153	-0.3543
36	6.00	-0.4492	-0.6677	-1.3296	-0.1414	-0.2684
37	5.00	-1.1304	-0.8078	-0.0566	0.3267	0.5154
38	4.40	-0.3425	-0.0232	0.9891	0.3518	0.9105
39	4.70	0.0704	-0.4950	-1.1193	-0.5610	0.1062
40	6.50	0.0495	-0.2477	-0.3068	-0.3194	0.1998
41	6.80	0.0690	0.1152	0.1669	0.0883	-0.0204
42	5.50	-0.6495	-0.1100	-0.0228	0.5356	-0.2341
43	6.10	-0.6249	-0.5012	-0.3723	0.1143	0.0709
45	6.00	-0.2647	-0.1023	-0.0557	0.1546	-0.0271
46	7.40	-0.1234	-0.2007	0.3558	-0.1279	0.6440
48	5.70	-0.0898	0.0281	0.0194	0.1523	-0.2631
50	6.50	0.1270	0.3084	0.9591	0.2017	0.1327
51	5.20	0.4287	0.4157	0.1604	-0.0039	-0.2136
52	5.50	-0.0533	-0.0681	0.1048	-0.0136	0.1069
53	5.80	-0.1781	0.1930	0.6718	0.3624	-0.0048

54	5.40	-0.0104	0.2087	0.1895	0.2387	-0.2762
55	4.90	0.1596	0.1130	-0.2186	-0.0193	-0.1964
56	6.30	0.4533	0.0778	-0.1698	-0.3825	0.1410
57	5.70	0.7034	0.5888	0.5141	-0.1274	-0.0408
58	6.00	0.3291	0.3109	0.5505	-0.0425	0.1104
59	5.70	0.1977	0.1089	-0.1794	-0.0660	-0.3225
60	6.10	-0.4206	-0.6166	-1.1296	-0.2122	-0.4984

Table 12a. Eta (inter-event) terms for horizontal motion (dynamic dataset) using the functional form of Model C (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.9658	0.7816	0.5530	-0.1886	0.0389
62	4.90	-0.8613	-0.6266	-0.6659	0.2678	-0.2038
63	4.90	-0.0723	0.0007	-0.2690	0.0690	-0.2230
64	6.10	0.8111	1.0771	1.8717	0.2624	0.3255
65	5.00	-0.7554	-1.3393	-1.9388	-0.5857	0.0764
71	6.30	-0.5464	-0.5803	-1.1412	-0.0558	-0.2444
73	5.80	0.5543	0.6090	0.8097	0.0425	0.0376
74	5.20	-0.0010	0.3809	0.4573	0.2461	-0.1277
75	5.40	-0.1397	-0.0779	-0.0802	0.0381	0.0509
76	6.40	0.0301	0.3129	0.2184	0.2591	-0.3795
77	5.00	0.1554	0.2566	-0.3706	0.1195	-0.1456
78	5.30	-0.9231	-0.3970	0.2727	0.5273	0.6629
79	5.20	0.1723	0.1018	-0.5556	-0.0651	-0.0443
80	5.80	0.4234	0.3835	0.1701	-0.0390	0.2150
81	4.90	-0.4121	-0.4370	-0.6656	-0.0089	0.4078
82	5.20	0.8953	0.9930	0.5112	0.1043	-0.0376
84	5.50	1.7629	1.1891	1.3284	-0.5010	0.8455
85	5.30	-1.4300	-1.6200	-1.9696	-0.1919	-0.1458
86	6.50	-0.4848	-0.3155	-0.4401	0.1585	-0.3531
90	6.20	-0.1087	-0.1660	0.0330	-0.0696	0.0334
95	5.80	0.0262	-0.6841	-1.6659	-0.4652	-0.1065
96	6.50	-0.3331	-1.0125	-1.3278	-0.7058	-0.2097
99	6.80	0.2440	-0.3422	-0.3334	-0.5607	0.4532
100	5.40	0.0313	0.5279	1.0212	0.4909	-0.0119
101	5.60	0.0761	0.2403	0.4064	0.1031	0.0452
102	6.40	1.1648	1.5074	1.3653	0.3339	-0.5131
103	6.00	0.3637	0.0021	-0.3149	-0.3519	0.1104
104	5.90	-0.1583	-0.2710	0.1189	-0.1275	0.3707
105	6.20	0.2875	0.1894	0.5387	-0.1152	0.2360
106	5.60	-0.2621	-0.3879	-0.5817	-0.1381	-0.1227
107	5.80	-0.1844	-0.1420	0.0895	0.0267	0.0849
113	7.30	-0.1987	-0.0622	-0.1929	0.0677	-0.1958
114	5.40	0.9637	1.0400	1.2598	0.0501	0.0963
117	6.00	-0.0739	-0.3106	-1.0076	-0.2357	-0.1269
118	5.30	0.5406	0.5776	0.1625	0.0557	-0.2048
119	6.30	0.1173	0.1798	0.7058	0.0289	0.1831
120	6.70	0.1745	0.1809	0.4991	0.0029	-0.0474
121	6.80	0.1777	0.3370	0.4301	0.0862	-0.1001
122	6.90	0.2828	0.4147	0.4959	0.0946	-0.1689
124	6.20	-0.1756	-0.4350	-0.7270	-0.2598	-0.0126
125	6.90	-0.0666	-0.0295	-0.0057	0.0899	-0.1314

127	7.10	0.2466	0.0646	-0.2245	-0.2079	-0.0189
129	7.30	0.1312	0.2218	0.5856	0.0110	-0.1933
131	6.70	0.1205	-0.0503	-0.5044	-0.1926	-0.1121
133	6.90	0.3113	0.1939	0.4776	-0.1548	0.0022
141	7.40	-0.0004	0.1709	0.9944	0.1090	0.1726
142	7.60	-0.6758	-0.2755	0.1258	0.3203	-0.0023
143	7.10	-0.4820	-0.1516	0.8396	0.2850	0.1734

Table 12b. Eta (inter-event) terms for vertical motion (dynamic dataset) using the functional form of Model C

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2845	0.0176	0.1770	0.1239	-0.0627
3	5.80	0.2309	0.1047	-0.2132	0.0960	-0.1772
4	5.00	-0.2080	-0.5314	-1.0298	-0.1392	-0.1983
5	5.50	0.4199	0.2294	0.0469	0.0287	-0.0310
6	7.00	-0.0913	-0.2423	0.0918	-0.2498	0.3934
7	6.60	0.0289	-0.1187	-0.4990	0.0302	-0.1895
8	6.40	0.0605	-0.0147	-0.5900	-0.0126	-0.4113
9	6.50	-0.0783	-0.5633	-0.6206	-0.3701	0.3271
10	5.60	-0.6300	-0.6249	-0.3464	-0.0008	0.2326
11	5.80	0.3095	0.2845	-0.0120	0.1285	-0.2397
12	7.40	0.0893	-0.2062	-0.5737	-0.1897	-0.0001
13	5.20	0.2595	0.4180	0.6125	0.2750	0.0148
14	6.00	0.3659	0.4163	0.6211	0.2222	0.1249
15	5.50	-0.2160	-0.5652	-0.6971	-0.2606	0.1490
16	5.30	-0.2480	0.0970	0.2831	0.3269	-0.1122
17	6.50	-0.2871	0.2611	0.2131	0.4033	-0.4221
18	5.40	-0.0805	-0.2793	-0.5141	-0.1199	-0.0533
19	6.80	0.0100	-0.0270	0.0051	0.1560	0.0832
20	5.30	-0.4775	-0.6180	-0.3303	-0.2433	0.3967
21	5.00	-0.3878	0.0103	0.2932	0.2888	-0.0527
22	5.70	-0.0012	-0.1063	-0.0245	0.0666	0.1344
23	5.60	-0.0708	0.3552	0.8479	0.3197	0.1045
24	5.50	-0.3420	-0.0403	0.1188	0.1544	-0.0599
25	6.10	-0.4654	-0.3122	0.1182	0.0365	0.3707
26	5.60	-0.0311	0.3697	0.3232	0.3716	-0.3414
27	5.20	-0.1968	-0.2657	0.0297	0.0892	0.2721
28	6.80	0.0021	-0.0286	0.3833	0.4476	0.5281
29	5.40	0.0749	-0.3234	-0.8306	-0.1219	-0.1126
30	6.60	-0.2009	-0.3526	-0.0902	-0.0037	0.4984
33	5.80	-0.0915	-0.1485	-0.1062	-0.0766	0.1016
34	5.20	-0.2495	0.0072	-0.2411	0.1402	-0.4732
35	5.20	0.7963	0.6698	0.4456	0.0084	-0.1290
37	5.00	-1.0759	-0.3621	0.5237	0.6805	0.1678
38	4.40	0.0199	0.2849	1.9037	0.3260	1.3030
39	4.70	0.1459	-0.3361	-0.9208	-0.5503	-0.0924
40	6.50	0.1362	0.0223	-0.0474	0.0154	0.0778
41	6.80	0.6981	0.3985	0.6462	-0.3270	0.4019

42	5.50	-0.8781	0.0763	0.1859	0.8710	-0.8017
43	6.10	-0.6548	0.1833	0.5327	0.6825	-0.4172
45	6.00	-0.3422	-0.2844	-0.0847	0.0008	0.1875
46	7.40	0.0940	0.2901	0.5075	0.2298	0.1003
48	5.70	-0.1366	0.0290	0.0105	0.0084	-0.1447
50	6.50	0.1644	0.0177	0.3967	-0.2976	0.5479
51	5.20	0.0093	-0.6204	-1.0960	-0.6161	0.1434
52	5.50	0.1538	-0.2477	-0.5568	-0.3950	0.0635
53	5.80	-0.6061	0.0326	0.3082	0.6468	-0.3583
54	5.40	-0.5350	-0.1235	-0.1528	0.4167	-0.4417
55	4.90	-0.0494	-0.0098	0.2498	0.0914	0.2018
56	6.30	0.5247	0.5787	0.5157	-0.1827	-0.0300
57	5.70	0.5833	0.6725	0.6484	0.0275	-0.0931
58	6.00	0.4475	0.4846	-0.0021	-0.0492	-0.4903
59	5.70	0.3441	0.1247	-0.6693	-0.3643	-0.5364
60	6.10	-1.0183	-0.7726	-1.1731	0.0757	-0.5911

Table 12b. Eta (inter-event) terms for vertical motion (dynamic dataset) using the functional form of Model C (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	1.0958	0.8173	0.5940	-0.2557	0.0838
62	4.90	-1.2949	-0.5009	-0.1690	0.6081	-0.4017
63	4.90	-0.1600	0.0356	0.0340	0.0677	-0.1600
64	6.10	0.9981	1.0401	1.4624	0.2133	0.3599
65	5.00	-0.7463	-1.1668	-1.5719	-0.5039	0.0347
71	6.30	-0.7359	-1.1922	-1.3376	-0.6392	0.4071
73	5.80	0.9185	0.3779	-0.0911	-0.6073	0.0937
74	5.20	0.0102	0.5509	0.9097	0.3595	-0.0739
75	5.40	-0.1584	0.3093	0.3410	0.2914	-0.2878
76	6.40	-0.1423	0.3629	0.3785	0.4892	-0.4487
77	5.00	0.2710	0.1738	-0.0775	-0.1717	-0.1072
78	5.30	-0.8710	0.1010	0.9897	0.7558	0.0204
79	5.20	0.2415	0.0955	-0.0326	-0.2854	0.0944
80	5.80	0.5488	0.5181	0.7578	-0.2675	0.3829
81	4.90	-0.0236	0.0166	0.2323	-0.0520	0.2261
82	5.20	1.1373	1.1382	0.6661	-0.1233	-0.4053
84	5.50	1.0177	0.7813	2.0462	0.2065	1.4713
85	5.30	-0.8661	-0.9504	-1.3488	-0.1136	-0.3108
86	6.50	-0.8401	-0.4828	-0.2079	0.6391	-0.8005
90	6.20	0.4236	0.1745	-0.0625	-0.2874	0.0416
95	5.80	0.3202	-0.1302	-1.2259	-0.3859	-0.5639
96	6.50	-0.8812	-1.5430	-0.9868	-0.6180	-0.3216
99	6.80	1.0221	0.3103	0.3028	-0.9660	0.7587
100	5.40	0.5511	0.7794	0.7371	0.1859	-0.2630
101	5.60	-0.0186	0.1425	0.1339	0.0734	-0.1030
102	6.40	0.5062	0.6324	0.3770	0.3243	-0.6046
103	6.00	0.7609	0.1835	-0.1102	-0.4660	0.3002
104	5.90	-0.0503	-0.1984	-0.1921	-0.1986	0.1743
105	6.20	0.4711	0.3087	0.4297	-0.1330	0.2911
106	5.60	-0.0464	-0.3802	-0.6860	-0.4147	0.0530
107	5.80	-0.2569	-0.3813	-0.1579	-0.2246	0.3792
113	7.30	-0.1919	-0.3095	-0.5884	-0.2879	-0.0582

114	5.40	0.9799	1.1719	0.9686	0.1102	-0.2816
117	6.00	0.1452	-0.3273	-0.9083	-0.5246	-0.0409
118	5.30	0.2724	0.1950	-0.0597	-0.0502	-0.1723
119	6.30	0.6281	0.1118	0.4030	-0.4260	0.6311
120	6.70	0.6465	-0.0163	0.3917	-0.8616	1.1247
121	6.80	0.2708	0.2692	0.3846	-0.0404	0.1244
122	6.90	0.2781	0.3364	0.3486	0.0013	0.0135
124	6.20	-0.3691	-0.2336	-0.1494	0.3045	-0.0423
125	6.90	-0.3429	-0.3304	-0.2679	-0.1001	-0.0105
127	7.10	-0.2314	-0.1589	0.1148	-0.1679	0.2911
129	7.30	0.1877	0.0482	-0.6178	0.1064	-0.4787
131	6.70	0.2296	-0.0486	-0.4592	-0.3437	-0.0525
133	6.90	0.2053	-0.0546	-0.0408	-0.2362	0.2927
141	7.40	-0.0635	0.1429	0.2955	0.2314	-0.0337
142	7.60	-0.6839	-0.0419	0.1680	0.5737	-0.3473
143	7.10	-0.6040	-0.0152	0.5191	0.6990	-0.0127

Table 13a. Regression coefficients for horizontal motion (dynamic dataset) using the functional form of Model C

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	-4.41007	-3.67493	-6.71278	-31.83648	5.45317
θ_2	0.78093	1.09681	1.60012	0.34466	0.68995
θ_3	-1.16381	-0.92783	-0.94427	0.76012	-1.25136
θ_4	0.06624	0.00284	0.00782	122.28280	85.77624
θ_5	0.74373	1.07471	0.93756	0.16113	0.32362
θ_6	0.06884	0.31944	0.40868	0.24974	-0.16028
θ_7	0.36311	0.32008	0.66702	-0.05362	-0.10942
θ_8	1.21620	1.74623	-0.00004	29.44011	-0.42815
θ_9	175.77480	95.27812	-0.89997	2.14802	0.36605
Sigma	0.5095	0.5108	0.6234	0.3762	0.4064
Tau	0.4289	0.4566	0.6871	0.2084	0.1938
Total Sigma	0.6660	0.6851	0.9278	0.4300	0.4502

Table 13b. Regression coefficients for vertical motion (dynamic dataset) using the functional form of Model C

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	-3.82101	-3.91051	-9.27924	-1.78095	5.94127
θ_2	0.87356	1.09407	1.94252	1.12806	0.97218

θ_3	-1.42562	-0.89805	-0.85874	-0.11987	-1.53567
θ_4	0.18374	0.04854	0.01888	0.00001	15.65981
θ_5	0.59551	0.63448	0.78294	5.03993	0.40644
θ_6	0.06549	0.12227	0.17029	0.07172	-0.00724
θ_7	0.17941	0.25899	0.17660	0.14606	-0.21775
θ_8	0.49065	1.19385	-0.25416	1.09818	-2.21227
θ_9	183.55110	16.17360	46.00315	1.37907	0.95075
Sigma	0.4887	0.4547	0.6624	0.4539	0.5060
Tau	0.4787	0.4481	0.6050	0.3488	0.3231
Total Sigma	0.6841	0.6384	0.8971	0.5724	0.6003

Table 14a. Eta (inter-event) terms for horizontal motion (static dataset) using the functional form of Model D

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2265	-0.2808	-0.4418	-0.0146	-0.0949
3	5.80	0.1170	0.1166	-0.0597	-0.0078	-0.0334
4	5.00	-0.3909	-0.5092	-0.7776	-0.0661	-0.0012
5	5.50	0.6289	0.5895	0.4246	-0.0441	0.0049
6	7.00	-0.0762	-0.1137	-0.0628	-0.0273	0.0777
7	6.60	0.0686	-0.1656	-0.3662	-0.1646	0.0627
8	6.40	0.2144	-0.0762	-0.1038	-0.2037	0.1864
9	6.50	-0.2233	-0.3743	-0.2261	-0.1054	0.1975
10	5.60	-0.5204	-0.3348	-0.0793	0.1264	0.0568
11	5.80	0.4577	0.2901	0.0914	-0.1240	0.0429
12	7.40	0.2603	-0.0035	-0.5873	-0.3442	-0.2769
13	5.20	0.3170	0.5571	0.8046	0.1428	0.0713
14	6.00	0.0706	0.1483	0.3135	0.0406	0.1006
15	5.50	-0.7587	-0.5853	-0.4861	0.1254	-0.0246
16	5.30	-0.1014	0.1351	0.1187	0.1514	-0.1200
17	6.50	0.1613	0.5061	0.5953	0.1999	-0.1585
18	5.40	-0.1625	0.0109	0.2365	0.1118	0.0589
19	6.80	0.0866	0.1009	0.5359	-0.0114	0.2897
20	5.30	-0.2945	-0.3536	-0.5551	0.0026	-0.1241
21	5.00	-0.2552	-0.2223	0.0548	0.0417	0.1488
22	5.70	0.2982	0.1446	0.0414	-0.1101	0.1010
23	5.60	0.0273	0.1258	0.5116	0.0623	0.1707
24	5.50	-0.3902	-0.1669	-0.0251	0.1652	-0.0809
25	6.10	-0.2359	-0.2837	0.1762	-0.0102	0.2567
26	5.60	0.4715	0.4436	0.4366	-0.0345	0.0459
27	5.20	-0.4677	-0.1075	0.1871	0.2387	0.0304
28	6.80	-0.2883	0.1655	0.7233	0.3763	0.2608
29	5.40	-0.1251	-0.2749	-0.7061	-0.1485	-0.1089
30	6.60	-0.6136	-0.6305	-0.3148	-0.0446	0.4140
33	5.80	-0.1491	-0.0037	0.0994	0.0951	-0.0209
34	5.20	0.0345	-0.1192	-0.5450	-0.1055	-0.3406
35	5.20	0.8272	0.7234	0.0473	-0.1037	-0.3661
36	6.00	-0.4835	-0.7280	-1.3450	-0.1319	-0.2497
37	5.00	-1.0013	-0.7578	-0.0263	0.2815	0.4808
38	4.40	0.1551	0.2816	1.0911	0.1924	0.7592
39	4.70	0.4070	-0.3479	-1.0238	-0.6620	0.0194
40	6.50	-0.0449	-0.2882	-0.3506	-0.2837	0.2354
41	6.80	0.0497	0.1143	0.0837	0.0863	-0.0514
42	5.50	-0.7118	-0.1775	0.1487	0.5520	-0.2271
43	6.10	-0.7452	-0.5980	-0.3317	0.1510	0.0837
45	6.00	-0.3937	-0.1888	0.0109	0.1960	-0.0032
46	7.40	0.0586	-0.1063	0.2026	-0.2166	0.5805
48	5.70	-0.1131	-0.0157	-0.0476	0.1719	-0.2477
50	6.50	0.0566	0.2758	0.6207	0.2170	0.1036
51	5.20	0.4701	0.4359	0.1535	-0.0177	-0.2228
52	5.50	-0.0668	-0.1080	0.0731	-0.0109	0.1040
53	5.80	-0.2932	0.1215	0.5413	0.3947	0.0188
54	5.40	-0.0063	0.2058	0.1564	0.2437	-0.2749
55	4.90	0.3727	0.2443	-0.1685	-0.0758	-0.2519
56	6.30	0.3470	-0.0118	-0.1896	-0.3529	0.1357

57	5.70	0.6047	0.5087	0.4102	-0.1024	-0.0202
58	6.00	0.2000	0.2131	0.3743	-0.0107	0.1273
59	5.70	0.1565	0.0526	-0.2580	-0.0472	-0.3113
60	6.10	-0.5336	-0.7137	-1.3284	-0.1833	-0.4889

Table 14a. Eta (inter-event) terms for horizontal motion (static dataset) using the functional form of Model D (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.8333	0.7094	0.6203	-0.1427	0.0702
62	4.90	-0.4958	-0.4797	-0.4944	0.1972	-0.2558
63	4.90	0.1704	0.0704	-0.1891	0.0014	-0.2758
64	6.10	0.6837	1.0357	1.6855	0.3103	0.3739
65	5.00	-0.6018	-1.2983	-1.8982	-0.6346	0.0376
71	6.30	-0.6752	-0.6766	-0.9093	-0.0161	-0.2371
73	5.80	0.4445	0.5258	0.6870	0.0723	0.0621
74	5.20	0.0427	0.3727	0.5771	0.2385	-0.1239
75	5.40	-0.1370	-0.1134	0.0463	0.0394	0.0490
76	6.40	-0.0824	0.2477	0.1912	0.2937	-0.3639
77	5.00	0.2729	0.2990	0.1276	0.0851	-0.1887
78	5.30	-0.8887	-0.4493	0.7470	0.5258	0.6547
79	5.20	0.2188	0.0763	-0.0824	-0.0761	-0.0656
80	5.80	0.3309	0.2739	0.5278	-0.0050	0.2254
81	4.90	-0.2382	-0.3723	-0.1467	-0.0606	0.3508
82	5.20	0.9317	0.9700	0.9821	0.0950	-0.0557
84	5.50	1.7595	1.3245	1.5039	-0.4414	0.8845
85	5.30	-1.4287	-1.6422	-1.9977	-0.1986	-0.1504
86	6.50	-0.5771	-0.3361	-0.4686	0.2042	-0.2797
90	6.20	-0.2200	-0.2395	-0.1848	-0.0380	0.0366
95	5.80	-0.0365	-0.7399	-1.6328	-0.4522	-0.0909
96	6.50	-0.4308	-1.0608	-1.3692	-0.6734	-0.1855
99	6.80	0.2248	-0.3520	-0.5750	-0.5689	0.3724
100	5.40	-0.0016	0.4854	0.9765	0.4946	-0.0060
101	5.60	0.0304	0.1967	0.4716	0.1107	0.0481
102	6.40	1.0559	1.4727	1.3561	0.3810	-0.4567
103	6.00	0.2437	-0.0450	-0.2427	-0.3002	0.1519
104	5.90	-0.2806	-0.3567	-0.0295	-0.0945	0.3948
105	6.20	0.1624	0.1218	0.3210	-0.0781	0.2623
106	5.60	-0.3387	-0.4636	-0.6629	-0.1202	-0.1067
107	5.80	-0.2931	-0.2324	-0.0312	0.0553	0.1090
113	7.30	-0.0083	0.0532	-0.2500	-0.0023	-0.3150
114	5.40	0.9573	1.0201	1.3092	0.0497	0.0879
117	6.00	-0.2067	-0.3930	-0.6992	-0.1852	-0.0970
118	5.30	0.5355	0.5823	0.3691	0.0609	-0.2068
119	6.30	0.0501	0.1390	0.5261	0.0393	0.1764
120	6.70	0.1349	0.1657	0.0848	0.0022	-0.1032
121	6.80	0.1640	0.3330	0.3187	0.0846	-0.1090
122	6.90	0.2931	0.4230	0.3118	0.0824	-0.2076
124	6.20	-0.3025	-0.4779	-0.6953	-0.2063	0.0389
125	6.90	-0.0769	-0.0245	-0.2776	0.0829	-0.1608
127	7.10	0.3288	0.1185	-0.2834	-0.2456	-0.1285
129	7.30	0.2732	0.2968	0.0708	-0.0658	-0.1768
131	6.70	0.0661	-0.0833	-0.3821	-0.1751	-0.1208

133	6.90	0.3130	0.2061	-0.0281	-0.1767	-0.0748
141	7.40	0.2118	0.3207	0.5123	0.0328	0.1714
142	7.60	-0.3488	-0.0872	0.0439	0.1914	-0.0454
143	7.10	-0.4140	-0.0994	0.4820	0.2474	0.3572

Table 14b. Eta (inter-event) terms for vertical motion (static dataset) using the functional form of Model D

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.3641	-0.0077	0.1490	0.2295	-0.0546
3	5.80	0.1962	0.1294	-0.1602	0.0072	-0.2048
4	5.00	-0.1251	-0.4744	-1.0423	-0.2324	-0.2150
5	5.50	0.4084	0.2625	0.0866	-0.0448	-0.0651
6	7.00	-0.1171	-0.2363	0.0047	-0.1259	0.3569
7	6.60	-0.0017	-0.1206	-0.4674	-0.0732	-0.1885
8	6.40	0.0088	-0.0265	-0.5591	-0.0095	-0.3929
9	6.50	-0.1203	-0.5754	-0.5941	-0.3634	0.3014
10	5.60	-0.6641	-0.6335	-0.3260	0.0070	0.2122
11	5.80	0.2619	0.2958	0.0340	0.0817	-0.2507
12	7.40	0.3003	-0.1707	-0.6557	-0.4331	0.0388
13	5.20	0.2913	0.4584	0.6293	0.2047	-0.0134
14	6.00	0.3127	0.4257	0.6744	0.1473	0.0888
15	5.50	-0.2413	-0.5681	-0.6836	-0.2637	0.1327
16	5.30	-0.2407	0.1078	0.2925	0.3015	-0.1140
17	6.50	-0.3269	0.2436	0.2393	0.4585	-0.3984
18	5.40	-0.0921	-0.2755	-0.5044	-0.1343	-0.0580
19	6.80	0.0002	-0.0285	0.0280	-0.0115	0.0727
20	5.30	-0.3635	-0.6446	-0.2905	-0.2208	0.3920
21	5.00	-0.2972	0.0181	0.2666	0.2589	-0.0372
22	5.70	-0.0337	-0.0859	0.0218	0.0039	0.0942
23	5.60	-0.1046	0.3344	0.8704	0.3540	0.1018
24	5.50	-0.3399	-0.0663	0.1284	0.1995	-0.0433
25	6.10	-0.5816	-0.3198	0.0992	0.1113	0.2731
26	5.60	-0.0702	0.3652	0.3504	0.3732	-0.3285
27	5.20	-0.1543	-0.2164	0.0476	0.0037	0.2199
28	6.80	-0.1061	-0.0176	0.3371	0.0052	0.4993
29	5.40	0.0949	-0.2725	-0.7816	-0.2775	-0.1890
30	6.60	-0.1598	-0.3779	0.0468	-0.1184	0.4765
33	5.80	-0.0931	-0.1770	-0.0334	-0.0383	0.0949
34	5.20	-0.2369	-0.0015	-0.3487	0.1609	-0.4318
35	5.20	0.8391	0.7006	0.4431	-0.0777	-0.1511
37	5.00	-1.0096	-0.3393	0.3822	0.6205	0.2014
38	4.40	0.4281	0.4195	1.6233	0.0241	1.3445
39	4.70	0.4192	-0.2712	-1.1204	-0.7061	-0.0337
40	6.50	0.0669	0.0048	0.0095	-0.0266	0.0585
41	6.80	0.7428	0.3734	0.6484	-0.1890	0.3682
42	5.50	-0.9031	0.0385	0.1999	0.9278	-0.7843
43	6.10	-0.7385	0.1294	0.5785	0.8436	-0.4118
45	6.00	-0.4369	-0.3281	-0.0320	0.1032	0.1841
46	7.40	0.3693	0.3047	0.4664	0.0431	0.1200
48	5.70	-0.2101	0.0069	-0.0239	0.1495	-0.1187
50	6.50	0.0294	-0.0036	0.3314	-0.1022	0.5240
51	5.20	-0.0130	-0.6069	-1.1969	-0.6437	0.1545
52	5.50	0.1059	-0.2674	-0.5988	-0.3475	0.0734
53	5.80	-0.7822	0.0073	0.2656	0.7134	-0.3635
54	5.40	-0.5919	-0.1185	-0.2196	0.4235	-0.4346
55	4.90	0.0921	0.0554	0.1057	-0.0434	0.2139
56	6.30	0.4530	0.5237	0.5510	0.0378	-0.0245
57	5.70	0.4274	0.6394	0.5955	0.1212	-0.0839

58	6.00	0.2592	0.4432	-0.0458	0.0822	-0.4872
59	5.70	0.2512	0.0978	-0.7115	-0.2339	-0.5118
60	6.10	-1.1884	-0.8190	-1.2189	0.2603	-0.5827

Table 14b. Eta (inter-event) terms for vertical motion (static dataset) using the functional form of Model D (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.9950	0.7841	0.6537	-0.1987	0.0695
62	4.90	-1.0287	-0.4542	-0.2954	0.5572	-0.3274
63	4.90	0.0262	0.0653	-0.1203	-0.0024	-0.0992
64	6.10	0.8043	1.0360	1.4498	0.2022	0.3285
65	5.00	-0.6483	-1.1492	-1.7132	-0.5551	0.0800
71	6.30	-0.7376	-1.2539	-1.2037	-0.4635	0.4096
73	5.80	0.7516	0.3434	-0.1353	-0.4969	0.1001
74	5.20	0.0872	0.5384	0.9076	0.3766	-0.0481
75	5.40	-0.1309	0.2865	0.3473	0.3306	-0.2534
76	6.40	-0.2271	0.3308	0.4307	0.5714	-0.4586
77	5.00	0.5142	0.1733	-0.0467	-0.2423	-0.0745
78	5.30	-0.6960	0.0548	1.0709	0.8143	0.0677
79	5.20	0.4213	0.0641	0.0296	-0.2845	0.1320
80	5.80	0.5945	0.4454	0.8807	-0.1093	0.4088
81	4.90	0.2753	0.0254	0.2431	-0.1452	0.2682
82	5.20	1.3055	1.1084	0.7293	-0.1223	-0.3711
84	5.50	1.0255	0.8633	2.1341	-0.0173	1.3543
85	5.30	-0.9247	-0.9577	-1.4443	-0.1061	-0.2916
86	6.50	-0.9065	-0.4878	-0.1353	0.4788	-0.8300
90	6.20	0.2534	0.1528	-0.0921	-0.1859	0.0113
95	5.80	0.2129	-0.1509	-1.2594	-0.3331	-0.5259
96	6.50	-0.9531	-1.5659	-0.9314	-0.5801	-0.3328
99	6.80	1.0223	0.2886	0.2695	-0.7274	0.7420
100	5.40	0.4598	0.7628	0.6552	0.2233	-0.2455
101	5.60	-0.0438	0.1160	0.1489	0.1202	-0.0881
102	6.40	0.4239	0.6206	0.4506	0.2534	-0.6311
103	6.00	0.6690	0.1656	-0.0393	-0.4653	0.2713
104	5.90	-0.2315	-0.2329	-0.2323	-0.0890	0.1755
105	6.20	0.2815	0.2861	0.4005	-0.0587	0.2775
106	5.60	-0.1787	-0.4128	-0.7485	-0.3275	0.0692
107	5.80	-0.4212	-0.4208	-0.2041	-0.0964	0.3906
113	7.30	0.0925	-0.2759	-0.5653	-0.2395	-0.0582
114	5.40	1.0221	1.1507	0.9803	0.1482	-0.2445
117	6.00	0.1409	-0.3778	-0.7623	-0.4401	-0.0484
118	5.30	0.2958	0.1945	-0.0566	-0.0733	-0.1725
119	6.30	0.5118	0.0943	0.3862	-0.3593	0.5899
120	6.70	0.5335	-0.0296	0.3131	-0.6489	1.1142
121	6.80	0.2684	0.2622	0.3918	0.0114	0.1132
122	6.90	0.3038	0.3322	0.3439	0.0520	0.0069
124	6.20	-0.4681	-0.2480	-0.0724	0.2706	-0.0736
125	6.90	-0.3404	-0.3508	-0.3477	0.0438	-0.0261
127	7.10	-0.0474	-0.1549	0.1451	-0.0045	0.2755
129	7.30	0.2405	0.0749	-0.7773	-0.2281	-0.4471
131	6.70	0.2920	-0.0800	-0.3466	-0.2771	-0.0588

133	6.90	0.1301	-0.0557	-0.1722	-0.2475	0.2217
141	7.40	0.0499	0.1993	0.1330	0.1283	0.0104
142	7.60	-0.2755	0.0214	0.1397	0.4384	-0.2943
143	7.10	-0.6188	0.0088	0.4641	0.5638	0.0544

Table 15a. Regression coefficients for horizontal motion (static dataset) using the functional form of Model D

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	0.29782	2.98030	-6.99875	-2.35993	1.49077
θ_2	-0.09243	0.40322	1.66367	0.12824	1.09431
θ_3	-2.53623	-2.26404	-1.13282	0.21715	-0.49420
θ_4	0.20604	0.19460	0.02727	0.05635	-0.12788
θ_5	2.27035	1.52939	1.01010	5.79013	5.96487
θ_6	0.07028	0.31693	0.39879	0.24751	-0.16970
θ_7	-0.27120	-0.20600	0.02473	0.07030	0.08417
θ_8	0.37279	0.33404	0.19085	-0.06444	-0.10640
θ_9	2.50618	0.00242	0.18540	2.41641	0.63869
θ_{10}	11.93675	-0.09534	15.92010	0.89993	7.04173
Sigma	0.5105	0.5092	0.6316	0.3759	0.4229
Tau	0.4087	0.4602	0.6301	0.2052	0.1972
Total Sigma	0.6539	0.6864	0.8921	0.4282	0.4666

Table 15b. Regression coefficients for vertical motion (static dataset) using the functional form of Model D

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	-7.35982	7.91564	-10.50963	-5.62892	0.74987
θ_2	0.02476	0.70403	1.65005	0.28744	0.38505
θ_3	-2.73237	-1.64588	-1.33590	0.94930	-1.12657
θ_4	0.19523	0.10912	0.06883	0.01817	0.00714
θ_5	2.31756	1.26503	1.12501	4.95021	5.04564
θ_6	0.06555	0.12177	0.16397	0.05146	-0.00921
θ_7	-0.24129	-0.09051	0.06316	0.09845	-0.00047
θ_8	-0.00086	0.28547	0.00194	0.13897	-0.22217
θ_9	9.95510	-7.90433	3.01525	2.30319	3.96797
θ_{10}	9.42562	23.22377	70.51766	0.91330	64.38390
Sigma	0.4901	0.4550	0.6632	0.4215	0.5223
Tau	0.4673	0.4469	0.6104	0.3281	0.3046
Total Sigma	0.6772	0.6378	0.9013	0.5341	0.6047

Table 16a. Eta (inter-event) terms for horizontal motion (dynamic dataset) using the functional form of Model D

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2298	-0.2881	-0.4694	-0.0125	-0.0782
3	5.80	0.1244	0.1128	0.0277	-0.0131	-0.0668
4	5.00	-0.3860	-0.4824	-0.7070	-0.0691	-0.0143
5	5.50	0.6366	0.5928	0.5319	-0.0484	-0.0185
6	7.00	-0.0773	-0.1254	-0.0122	-0.0214	0.1161
7	6.60	0.0727	-0.1799	-0.3665	-0.1664	0.0343
8	6.40	0.2158	-0.0846	-0.0792	-0.2028	0.1856
9	6.50	-0.2231	-0.3819	-0.2100	-0.1045	0.1996
10	5.60	-0.5206	-0.3257	-0.0411	0.1237	0.0531
11	5.80	0.4633	0.2877	0.1658	-0.1269	0.0230
12	7.40	0.2595	-0.0236	-0.6919	-0.3314	-0.2848
13	5.20	0.3227	0.5717	0.9121	0.1383	0.0591
14	6.00	0.0758	0.1421	0.3944	0.0369	0.0804
15	5.50	-0.7590	-0.5725	-0.4558	0.1224	-0.0320
16	5.30	-0.0997	0.1503	0.1698	0.1481	-0.1315
17	6.50	0.1605	0.4970	0.6370	0.2000	-0.1585
18	5.40	-0.1613	0.0237	0.2887	0.1088	0.0542
19	6.80	0.0911	0.0824	0.5299	-0.0153	0.2582
20	5.30	-0.2976	-0.3287	-0.5339	0.0024	-0.1204
21	5.00	-0.2562	-0.1942	0.0506	0.0401	0.1561
22	5.70	0.3046	0.1446	0.1263	-0.1137	0.0803
23	5.60	0.0263	0.1339	0.5436	0.0607	0.1773
24	5.50	-0.3931	-0.1549	-0.0309	0.1633	-0.0794
25	6.10	-0.2381	-0.2189	0.1661	0.0067	0.3760
26	5.60	0.4737	0.4487	0.4936	-0.0364	0.0403
27	5.20	-0.4623	-0.0907	0.2931	0.2331	0.0130
28	6.80	-0.2791	0.1198	0.5933	0.3570	0.1144
29	5.40	-0.1166	-0.2549	-0.5680	-0.1593	-0.1546
30	6.60	-0.6094	-0.6414	-0.1806	-0.0493	0.3611
33	5.80	-0.1498	0.0060	0.1874	0.0933	-0.0242
34	5.20	0.0308	-0.0937	-0.6721	-0.1077	-0.3230
35	5.20	0.8362	0.7558	0.1961	-0.1132	-0.4038
36	6.00	-0.4876	-0.7299	-1.4141	-0.1299	-0.2429
37	5.00	-1.0029	-0.7198	-0.1456	0.2782	0.4912
38	4.40	0.1569	0.3664	0.9520	0.1928	0.7861
39	4.70	0.4051	-0.2897	-1.1983	-0.6626	0.0453
40	6.50	-0.0427	-0.3060	-0.3049	-0.2843	0.2110
41	6.80	0.0502	0.1092	0.2994	0.0909	-0.0178
42	5.50	-0.7148	-0.1556	0.1707	0.5498	-0.2158
43	6.10	-0.7489	-0.6000	-0.2825	0.1527	0.1091
45	6.00	-0.3956	-0.1890	0.0660	0.1953	0.0043
46	7.40	0.0593	-0.1130	0.2962	-0.2042	0.5895
48	5.70	-0.1169	-0.0198	-0.1324	0.1713	-0.2222
50	6.50	0.0541	0.2500	0.6285	0.2260	0.1687
51	5.20	0.4698	0.4606	0.0756	-0.0224	-0.2226
52	5.50	-0.0693	-0.1027	0.0093	-0.0115	0.1142
53	5.80	-0.2948	0.1175	0.5013	0.3928	0.0256
54	5.40	-0.0073	0.2185	0.0958	0.2409	-0.2657
55	4.90	0.3741	0.2875	-0.2529	-0.0792	-0.2437
56	6.30	0.3422	-0.0175	-0.1283	-0.3481	0.1799

57	5.70	0.6016	0.5094	0.3449	-0.1044	-0.0083
58	6.00	0.1959	0.2039	0.3246	-0.0096	0.1516
59	5.70	0.1521	0.0507	-0.3375	-0.0470	-0.2815
60	6.10	-0.5386	-0.7262	-1.3802	-0.1807	-0.4525

Table 16a. Eta (inter-event) terms for horizontal motion (dynamic dataset) using the functional form of Model D (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.8334	0.7077	0.6869	-0.1450	0.0638
62	4.90	-0.4992	-0.4447	-0.7132	0.1969	-0.2241
63	4.90	0.1670	0.1131	-0.3687	0.0004	-0.2503
64	6.10	0.6870	1.0157	1.6653	0.3056	0.3456
65	5.00	-0.6047	-1.2605	-2.0381	-0.6365	0.0570
71	6.30	-0.6787	-0.6718	-0.7648	-0.0134	-0.2149
73	5.80	0.4416	0.5218	0.6258	0.0705	0.0734
74	5.20	0.0407	0.3901	0.5609	0.2361	-0.1229
75	5.40	-0.1395	-0.0992	0.0316	0.0383	0.0560
76	6.40	-0.0836	0.2361	0.2446	0.2960	-0.3558
77	5.00	0.2718	0.3608	0.2181	0.0824	-0.1804
78	5.30	-0.8929	-0.4074	0.8060	0.5239	0.6706
79	5.20	0.2156	0.1256	-0.0010	-0.0779	-0.0511
80	5.80	0.3260	0.2936	0.6415	-0.0045	0.2508
81	4.90	-0.2397	-0.3039	-0.0792	-0.0627	0.3629
82	5.20	0.9290	1.0191	1.0683	0.0924	-0.0461
84	5.50	1.7754	1.3325	1.7015	-0.4580	0.7946
85	5.30	-1.4310	-1.6216	-2.0824	-0.2015	-0.1396
86	6.50	-0.5703	-0.3605	-0.4330	0.1974	-0.3520
90	6.20	-0.2214	-0.2423	-0.2148	-0.0343	0.0674
95	5.80	-0.0382	-0.7385	-1.7131	-0.4500	-0.0908
96	6.50	-0.4303	-1.0769	-1.3301	-0.6720	-0.1933
99	6.80	0.2214	-0.3627	-0.4199	-0.5548	0.4616
100	5.40	-0.0041	0.5003	0.8941	0.4914	0.0028
101	5.60	0.0287	0.2046	0.4911	0.1091	0.0530
102	6.40	1.0606	1.4534	1.4056	0.3767	-0.5039
103	6.00	0.2466	-0.0499	-0.1627	-0.3051	0.1271
104	5.90	-0.2834	-0.3642	-0.0804	-0.0955	0.4078
105	6.20	0.1615	0.1031	0.2868	-0.0780	0.2675
106	5.60	-0.3422	-0.4584	-0.7410	-0.1223	-0.0928
107	5.80	-0.2966	-0.2361	-0.1015	0.0537	0.1231
113	7.30	-0.0112	0.0527	-0.1397	0.0173	-0.2483
114	5.40	0.9564	1.0289	1.3241	0.0494	0.1016
117	6.00	-0.2069	-0.3834	-0.5438	-0.1878	-0.1041
118	5.30	0.5362	0.6127	0.4157	0.0559	-0.2129
119	6.30	0.0486	0.1281	0.5122	0.0399	0.1901
120	6.70	0.1321	0.1396	0.1040	0.0147	-0.0242
121	6.80	0.1624	0.3248	0.3594	0.0880	-0.0954
122	6.90	0.2914	0.4070	0.3597	0.0927	-0.1735
124	6.20	-0.2984	-0.4906	-0.6234	-0.2113	0.0007
125	6.90	-0.0753	-0.0382	-0.0927	0.0881	-0.1269
127	7.10	0.3261	0.1189	-0.0829	-0.2284	-0.0482
129	7.30	0.2746	0.2602	-0.1210	-0.0610	-0.2221
131	6.70	0.0653	-0.0884	-0.2372	-0.1694	-0.1071

133	6.90	0.3141	0.1735	-0.0091	-0.1597	0.0056
141	7.40	0.2098	0.2689	0.2903	0.0256	0.1216
142	7.60	-0.3493	-0.0907	0.0002	0.2096	-0.0896
143	7.10	-0.4162	-0.1401	0.2054	0.2493	0.1566

Table 16b. Eta (inter-event) terms for vertical motion (dynamic dataset) using the functional form of Model D

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.3490	-0.0103	0.1892	0.2195	-0.0637
3	5.80	0.2143	0.1328	-0.1380	0.0208	-0.1853
4	5.00	-0.1089	-0.4656	-1.0177	-0.2131	-0.2056
5	5.50	0.4247	0.2683	0.1120	-0.0291	-0.0396
6	7.00	-0.0637	-0.2275	0.1116	-0.1322	0.3860
7	6.60	0.0071	-0.1227	-0.4672	-0.0713	-0.1903
8	6.40	0.0106	-0.0307	-0.5667	-0.0064	-0.4028
9	6.50	-0.1181	-0.5816	-0.6014	-0.3609	0.3290
10	5.60	-0.6718	-0.6388	-0.3406	0.0113	0.2313
11	5.80	0.2716	0.2972	0.0449	0.0925	-0.2411
12	7.40	0.3213	-0.1637	-0.6279	-0.4414	0.0048
13	5.20	0.3029	0.4668	0.6555	0.2209	0.0073
14	6.00	0.3223	0.4273	0.6934	0.1566	0.1177
15	5.50	-0.2490	-0.5719	-0.6978	-0.2581	0.1479
16	5.30	-0.2456	0.1093	0.2907	0.3102	-0.1120
17	6.50	-0.3308	0.2393	0.2340	0.4571	-0.4133
18	5.40	-0.0987	-0.2769	-0.5143	-0.1271	-0.0531
19	6.80	0.0082	-0.0295	0.0296	-0.0181	0.0724
20	5.30	-0.4764	-0.6572	-0.3937	-0.2271	0.3960
21	5.00	-0.3266	0.0189	0.2423	0.2649	-0.0480
22	5.70	-0.0193	-0.0841	0.0395	0.0169	0.1265
23	5.60	-0.1281	0.3300	0.8488	0.3536	0.1060
24	5.50	-0.3801	-0.0735	0.0889	0.1958	-0.0558
25	6.10	-0.4629	-0.3193	0.1872	0.1245	0.3737
26	5.60	-0.0766	0.3641	0.3434	0.3786	-0.3375
27	5.20	-0.1352	-0.2087	0.0794	0.0223	0.2592
28	6.80	0.0047	-0.0108	0.4468	-0.0308	0.4751
29	5.40	0.1055	-0.2652	-0.7479	-0.2513	-0.1381
30	6.60	-0.2564	-0.3897	-0.0503	-0.1304	0.4864
33	5.80	-0.1675	-0.1877	-0.1103	-0.0404	0.1025
34	5.20	-0.2140	-0.0011	-0.3227	0.1649	-0.4600
35	5.20	0.8294	0.7052	0.4429	-0.0565	-0.1333
37	5.00	-0.9684	-0.3314	0.4307	0.6361	0.1802
38	4.40	0.4862	0.4518	1.7222	0.0682	1.3190
39	4.70	0.4397	-0.2561	-1.0767	-0.6838	-0.0723
40	6.50	0.0695	-0.0014	0.0094	-0.0233	0.0820
41	6.80	0.6487	0.3785	0.6602	-0.2049	0.3892
42	5.50	-0.9566	0.0287	0.1444	0.9245	-0.7968
43	6.10	-0.7856	0.1164	0.5395	0.8298	-0.4151
45	6.00	-0.4696	-0.3394	-0.0656	0.0978	0.1909
46	7.40	0.2884	0.3110	0.4373	0.0136	0.0834
48	5.70	-0.1964	0.0023	0.0151	0.1387	-0.1395
50	6.50	0.1004	-0.0004	0.4470	-0.1106	0.5491
51	5.20	0.0427	-0.6011	-1.1357	-0.6294	0.1494
52	5.50	0.1191	-0.2713	-0.5892	-0.3500	0.0670
53	5.80	-0.7161	0.0049	0.3344	0.7162	-0.3542
54	5.40	-0.5460	-0.1162	-0.1571	0.4305	-0.4387
55	4.90	0.1439	0.0707	0.1845	-0.0186	0.2056
56	6.30	0.4035	0.5115	0.5226	0.0178	-0.0301
57	5.70	0.4795	0.6354	0.6471	0.1202	-0.0869

58	6.00	0.3171	0.4376	0.0162	0.0764	-0.4854
59	5.70	0.2695	0.0929	-0.6703	-0.2446	-0.5317
60	6.10	-1.1438	-0.8252	-1.1589	0.2474	-0.5883

Table 16b. Eta (inter-event) terms for vertical motion (dynamic dataset) using the functional form of Model D (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.9757	0.7748	0.6309	-0.1979	0.0866
62	4.90	-1.0449	-0.4487	-0.2888	0.5641	-0.3787
63	4.90	0.0328	0.0721	-0.0978	0.0086	-0.1408
64	6.10	0.9041	1.0371	1.5472	0.2163	0.3643
65	5.00	-0.6249	-1.1434	-1.6784	-0.5442	0.0491
71	6.30	-0.8645	-1.2738	-1.3374	-0.4791	0.4119
73	5.80	0.8063	0.3389	-0.0810	-0.4988	0.0999
74	5.20	0.0341	0.5356	0.8656	0.3748	-0.0674
75	5.40	-0.1780	0.2810	0.3049	0.3269	-0.2807
76	6.40	-0.2371	0.3217	0.4182	0.5699	-0.4403
77	5.00	0.3586	0.1666	-0.1987	-0.2360	-0.1002
78	5.30	-0.8813	0.0369	0.8827	0.8027	0.0295
79	5.20	0.2513	0.0503	-0.1402	-0.2891	0.1014
80	5.80	0.4221	0.4229	0.7113	-0.1312	0.3846
81	4.90	0.1139	0.0206	0.0869	-0.1370	0.2362
82	5.20	1.1426	1.0952	0.5627	-0.1249	-0.3982
84	5.50	1.0679	0.8759	2.2026	0.0229	1.4383
85	5.30	-0.8788	-0.9561	-1.3940	-0.0989	-0.3035
86	6.50	-0.8926	-0.4916	-0.1302	0.4876	-0.8012
90	6.20	0.3401	0.1513	-0.0066	-0.1829	0.0472
95	5.80	0.2466	-0.1542	-1.2387	-0.3339	-0.5551
96	6.50	-0.9519	-1.5736	-0.9395	-0.5762	-0.3095
99	6.80	0.9946	0.2899	0.3233	-0.7480	0.7507
100	5.40	0.5075	0.7624	0.7030	0.2282	-0.2553
101	5.60	-0.0765	0.1097	0.1154	0.1172	-0.0990
102	6.40	0.4335	0.6152	0.4504	0.2637	-0.5988
103	6.00	0.6594	0.1591	-0.0485	-0.4588	0.2992
104	5.90	-0.1708	-0.2373	-0.1706	-0.0908	0.1799
105	6.20	0.3634	0.2840	0.4858	-0.0555	0.2977
106	5.60	-0.1344	-0.4167	-0.7041	-0.3290	0.0598
107	5.80	-0.3715	-0.4263	-0.1562	-0.1006	0.3860
113	7.30	0.0221	-0.2756	-0.6109	-0.2386	-0.0438
114	5.40	0.9592	1.1478	0.9391	0.1419	-0.2754
117	6.00	0.0156	-0.3958	-0.8957	-0.4473	-0.0397
118	5.30	0.2632	0.1924	-0.0873	-0.0629	-0.1708
119	6.30	0.5570	0.0925	0.4306	-0.3604	0.6287
120	6.70	0.6155	-0.0273	0.4297	-0.6582	1.1279
121	6.80	0.2665	0.2606	0.4029	0.0091	0.1267
122	6.90	0.3061	0.3310	0.3702	0.0477	0.0198
124	6.20	-0.4636	-0.2540	-0.0750	0.2808	-0.0391
125	6.90	-0.3638	-0.3387	-0.2614	0.0321	-0.0182
127	7.10	-0.1368	-0.1561	0.1110	-0.0161	0.2926
129	7.30	0.3533	0.0882	-0.6506	-0.2499	-0.4929
131	6.70	0.1886	-0.0927	-0.4426	-0.2860	-0.0473

133	6.90	0.2658	-0.0410	-0.0022	-0.2392	0.2933
141	7.40	0.1715	0.2160	0.2720	0.1169	-0.0364
142	7.60	-0.3351	0.0267	0.0824	0.4273	-0.3421
143	7.10	-0.5157	0.0155	0.5325	0.5413	-0.0317

Table 17a. Regression coefficients for horizontal motion (dynamic dataset) using the functional form of Model D

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	1.99571	1.22240	-14.18330	-5.40276	-0.93186
θ_2	-0.12862	0.44410	1.09634	0.13213	1.81902
θ_3	-2.62404	-2.22769	-2.25482	0.73125	0.66577
θ_4	0.21680	0.19216	0.19777	0.04971	-0.23609
θ_5	2.30550	1.44225	1.40082	6.31487	6.46934
θ_6	0.06961	0.31861	0.41038	0.24932	-0.15999
θ_7	-0.27353	-0.22441	0.00174	0.06480	0.06120
θ_8	0.37255	0.31118	-0.00169	-0.06430	-0.10097
θ_9	1.12369	1.43743	11.18856	2.14472	-4.01965
θ_{10}	7.36346	6.12565	53.39781	0.90198	1.30851
Sigma	0.5107	0.5100	0.6236	0.3761	0.4062
Tau	0.4101	0.4572	0.6439	0.2054	0.1930
Total Sigma	0.6550	0.6849	0.8963	0.4285	0.4497

Table 17b. Regression coefficients for vertical motion (dynamic dataset) using the functional form of Model D

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	4.11385	0.58235	0.02288	-6.68940	10.68444
θ_2	-0.14372	0.65709	1.31131	-0.63743	-0.49037
θ_3	-3.04284	-1.75457	-1.99236	0.93459	-2.02827
θ_4	0.24197	0.12420	0.16385	0.17497	0.19139
θ_5	2.23115	1.33680	1.43774	5.83899	4.51179
θ_6	0.06219	0.12202	0.16955	0.05016	-0.01006
θ_7	-0.26826	-0.10768	0.00360	0.08346	-0.00888
θ_8	0.19798	0.30097	0.21064	0.14878	-0.21522
θ_9	-0.50964	-0.21540	-5.23040	2.59781	-2.17190
θ_{10}	0.42290	998.99140	55.95305	1.08751	0.92210
Sigma	0.4890	0.4537	0.6606	0.4210	0.5071
Tau	0.4662	0.4476	0.6122	0.3267	0.3187
Total Sigma	0.6756	0.6373	0.9007	0.5329	0.5989

Table 18a. Eta (inter-event) terms for horizontal motion (static dataset without the Chi-Chi earthquake data) using the functional form of Model D

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2072	-0.2772	-0.4617	-0.0260	-0.0708
3	5.80	0.1049	0.1091	0.0260	0.0062	-0.0631
4	5.00	-0.4195	-0.4931	-0.6651	-0.0410	-0.0248
5	5.50	0.6163	0.6113	0.5580	-0.0287	-0.0190
6	7.00	-0.1266	-0.1115	0.0742	0.0146	0.1058
7	6.60	0.0509	-0.2160	-0.4097	-0.1654	0.0463
8	6.40	0.2113	-0.0988	-0.1256	-0.2033	0.1907
9	6.50	-0.2296	-0.4067	-0.2584	-0.1008	0.2038
10	5.60	-0.5140	-0.3346	-0.0760	0.1263	0.0485
11	5.80	0.4540	0.2926	0.1533	-0.1193	0.0258
12	7.40	0.1399	-0.1122	-0.6755	-0.2750	-0.3071
13	5.20	0.2999	0.5931	0.9642	0.1637	0.0555
14	6.00	0.0787	0.1466	0.4000	0.0447	0.1011
15	5.50	-0.7552	-0.5887	-0.4916	0.1271	-0.0411
16	5.30	-0.1043	0.1570	0.1682	0.1589	-0.1469
17	6.50	0.1582	0.5069	0.6033	0.2119	-0.1791
18	5.40	-0.1617	0.0262	0.2795	0.1157	0.0488
19	6.80	0.0590	0.0406	0.5093	-0.0164	0.2893
20	5.30	-0.2727	-0.3539	-0.6572	-0.0094	-0.1485
21	5.00	-0.2620	-0.2070	0.0447	0.0461	0.1484
22	5.70	0.2904	0.1459	0.1247	-0.1011	0.0867
23	5.60	0.0396	0.1382	0.5050	0.0556	0.1759
24	5.50	-0.3773	-0.1646	-0.0937	0.1569	-0.0961
25	6.10	-0.2126	-0.2111	0.1350	-0.0336	0.4524
26	5.60	0.4776	0.4639	0.4747	-0.0364	0.0358
27	5.20	-0.4904	-0.0898	0.3414	0.2664	0.0087
28	6.80	-0.3359	0.0627	0.6645	0.3359	0.2374
29	5.40	-0.1252	-0.2422	-0.5372	-0.1167	-0.1421
30	6.60	-0.6321	-0.6943	-0.3459	-0.0272	0.3337
33	5.80	-0.1392	-0.0058	0.0692	0.0941	-0.0524
34	5.20	0.0567	-0.0820	-0.6146	-0.1372	-0.3020
35	5.20	0.8111	0.7712	0.2626	-0.0583	-0.4034
36	6.00	-0.4566	-0.7331	-1.4348	-0.1515	-0.2410
37	5.00	-1.0086	-0.7124	-0.0471	0.2791	0.4984
38	4.40	0.0700	0.3627	1.2238	0.2843	0.7730
39	4.70	0.3794	-0.2980	-1.0437	-0.6402	0.0509
40	6.50	-0.0435	-0.3228	-0.3571	-0.2742	0.2222
41	6.80	0.0124	0.1047	0.2609	0.1181	-0.0580
42	5.50	-0.6707	-0.1466	0.1038	0.5193	-0.2269
43	6.10	-0.7138	-0.5929	-0.3790	0.1310	0.0886
45	6.00	-0.3610	-0.1822	-0.0182	0.1762	-0.0067
46	7.40	-0.0734	-0.1977	0.2432	-0.1272	0.5170
48	5.70	-0.0811	-0.0140	-0.1268	0.1232	-0.1986
50	6.50	0.0382	0.2619	0.6786	0.2334	0.1741
51	5.20	0.4734	0.4765	0.1589	-0.0273	-0.2059
52	5.50	-0.0518	-0.0999	0.0140	-0.0267	0.1252
53	5.80	-0.2483	0.1530	0.5514	0.3595	0.0733
54	5.40	0.0309	0.2454	0.1755	0.2102	-0.2188
55	4.90	0.3596	0.3015	-0.0931	-0.0585	-0.2192
56	6.30	0.3619	-0.0108	-0.2253	-0.3555	0.1421

57	5.70	0.6432	0.5371	0.3739	-0.1411	0.0229
58	6.00	0.2485	0.2413	0.3566	-0.0472	0.1925
59	5.70	0.2042	0.0695	-0.3167	-0.1010	-0.2443
60	6.10	-0.4973	-0.6951	-1.3641	-0.2147	-0.4269

Table 18a. Eta (inter-event) terms for horizontal motion (static dataset without the Chi-Chi earthquake data) using the functional form of Model D (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.8620	0.7131	0.6154	-0.1564	0.0602
62	4.90	-0.5080	-0.4908	-0.6504	0.1792	-0.2206
63	4.90	0.1692	0.1044	-0.2741	-0.0098	-0.2376
64	6.10	0.6968	1.0310	1.7196	0.3021	0.3955
65	5.00	-0.5942	-1.2533	-1.9428	-0.6493	0.0757
71	6.30	-0.6682	-0.6946	-0.9845	-0.0044	-0.3037
73	5.80	0.4776	0.5462	0.6460	0.0371	0.0999
74	5.20	0.0485	0.3882	0.5231	0.2345	-0.1441
75	5.40	-0.1256	-0.1108	-0.0290	0.0285	0.0453
76	6.40	-0.0719	0.2327	0.1731	0.3016	-0.3700
77	5.00	0.2734	0.3352	0.1028	0.0969	-0.2563
78	5.30	-0.8655	-0.4441	0.6014	0.5011	0.5911
79	5.20	0.2471	0.1033	-0.1599	-0.0928	-0.1157
80	5.80	0.3732	0.2756	0.4158	-0.0378	0.1828
81	4.90	-0.2478	-0.3370	-0.1864	-0.0412	0.2799
82	5.20	0.9504	0.9941	0.9056	0.0845	-0.1195
84	5.50	1.7203	1.3303	1.7480	-0.3739	0.8053
85	5.30	-1.3994	-1.5959	-2.0106	-0.2285	-0.1080
86	6.50	-0.6017	-0.4035	-0.4941	0.2153	-0.3339
90	6.20	-0.2027	-0.2254	-0.1948	-0.0513	0.1059
95	5.80	-0.0207	-0.7483	-1.7431	-0.4730	-0.0874
96	6.50	-0.4409	-1.0971	-1.4055	-0.6539	-0.2131
99	6.80	0.1911	-0.3407	-0.4141	-0.4990	0.4138
100	5.40	0.0266	0.5236	0.9455	0.4623	0.0287
101	5.60	0.0445	0.2094	0.4422	0.1025	0.0440
102	6.40	1.0431	1.4242	1.3383	0.3930	-0.5008
103	6.00	0.2602	-0.0522	-0.2254	-0.3051	0.1285
104	5.90	-0.2425	-0.3348	-0.0523	-0.1284	0.4421
105	6.20	0.1899	0.1288	0.3325	-0.0942	0.3117
106	5.60	-0.3003	-0.4327	-0.7116	-0.1614	-0.0635
107	5.80	-0.2628	-0.2147	-0.0925	0.0192	0.1425
113	7.30	-0.1236	-0.0073	-0.2229	0.1562	-0.3763
114	5.40	0.9843	1.0568	1.3029	0.0328	0.1032
117	6.00	-0.1882	-0.4060	-0.7483	-0.1890	-0.1691
118	5.30	0.5463	0.6158	0.3875	0.0566	-0.2336
119	6.30	0.0569	0.1435	0.5370	0.0383	0.2055
120	6.70	0.0987	0.1558	0.1828	0.0490	-0.0277
121	6.80	0.1594	0.3374	0.3560	0.1047	-0.1083
122	6.90	0.2538	0.3921	0.3439	0.1443	-0.2012
124	6.20	-0.2984	-0.5039	-0.6863	-0.2018	0.0046
125	6.90	-0.1426	-0.0480	-0.0616	0.1240	-0.1671
127	7.10	0.2410	0.0928	-0.1711	-0.1096	-0.1712
129	7.30	0.1735	0.1916	0.0011	-0.0583	-0.1570
131	6.70	0.0402	-0.1268	-0.4061	-0.1287	-0.1821

133	6.90	0.2539	0.1657	0.1884	-0.1239	0.0481
141	7.40	0.0884	0.2437	0.4868	0.1153	0.1322
143	7.10	-0.4911	-0.1599	0.3418	0.2801	0.2064

Table 18b. Eta (inter-event) terms for vertical motion (static dataset without the Chi-Chi earthquake data) using the functional form of Model D

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2934	-0.0049	0.1832	0.2013	-0.0470
3	5.80	0.1760	0.1306	-0.1826	0.0093	-0.1688
4	5.00	-0.1517	-0.4459	-1.0296	-0.1988	-0.2285
5	5.50	0.3779	0.2735	0.0596	-0.0357	-0.0443
6	7.00	-0.1377	-0.2095	0.0530	-0.0786	0.2974
7	6.60	-0.0373	-0.1384	-0.4635	-0.0694	-0.1595
8	6.40	-0.0103	-0.0389	-0.5709	-0.0053	-0.3774
9	6.50	-0.1388	-0.5888	-0.6023	-0.3497	0.3082
10	5.60	-0.6396	-0.6390	-0.3506	0.0076	0.2223
11	5.80	0.2430	0.2946	0.0042	0.0799	-0.2217
12	7.40	0.1077	-0.1741	-0.5706	-0.3131	-0.0792
13	5.20	0.2577	0.4788	0.5982	0.2197	-0.0133
14	6.00	0.3105	0.4348	0.6476	0.1346	0.1289
15	5.50	-0.2378	-0.5703	-0.6985	-0.2567	0.1406
16	5.30	-0.2439	0.1146	0.2635	0.3065	-0.1129
17	6.50	-0.3363	0.2349	0.2091	0.4665	-0.4003
18	5.40	-0.0982	-0.2735	-0.5202	-0.1263	-0.0527
19	6.80	-0.0525	-0.0504	0.0371	-0.0053	0.1018
20	5.30	-0.4154	-0.6492	-0.3383	-0.1877	0.3770
21	5.00	-0.3182	0.0230	0.2549	0.2754	-0.0608
22	5.70	-0.0410	-0.0838	-0.0064	0.0061	0.1213
23	5.60	-0.1071	0.3258	0.8209	0.3492	0.1072
24	5.50	-0.3401	-0.0808	0.0996	0.1988	-0.0438
25	6.10	-0.5004	-0.3287	0.1816	0.0957	0.3071
26	5.60	-0.0722	0.3632	0.3119	0.3683	-0.3145
27	5.20	-0.1695	-0.1944	0.0293	0.0241	0.2210
28	6.80	-0.0837	-0.0490	0.4627	-0.0454	0.6091
29	5.40	0.0921	-0.2380	-0.8079	-0.2607	-0.1488
30	6.60	-0.3143	-0.3920	-0.0589	-0.0333	0.4953
33	5.80	-0.1566	-0.1896	-0.1192	-0.0072	0.0963
34	5.20	-0.1740	-0.0144	-0.2753	0.1145	-0.4409
35	5.20	0.8193	0.7276	0.4157	-0.0531	-0.1585
37	5.00	-0.9603	-0.3311	0.4710	0.5957	0.1655
38	4.40	0.3941	0.4953	1.8076	0.0964	1.1702
39	4.70	0.4345	-0.2422	-0.9719	-0.6991	-0.1283
40	6.50	0.0457	-0.0022	-0.0105	-0.0216	0.0983
41	6.80	0.5735	0.4055	0.6009	-0.0993	0.3099
42	5.50	-0.8965	0.0381	0.1634	0.9206	-0.7699
43	6.10	-0.7461	0.1177	0.5284	0.8480	-0.3976
45	6.00	-0.4332	-0.3375	-0.0835	0.0973	0.2155
46	7.40	0.0622	0.3329	0.4611	0.2602	-0.0427
48	5.70	-0.1273	-0.0176	0.0403	0.0797	-0.0870
50	6.50	0.0665	-0.0077	0.3978	-0.1054	0.5075
51	5.20	0.0587	-0.6028	-1.1298	-0.6861	0.1547
52	5.50	0.1471	-0.2820	-0.5592	-0.3709	0.0809
53	5.80	-0.6525	0.0106	0.3180	0.6304	-0.3030
54	5.40	-0.4781	-0.1055	-0.1386	0.3502	-0.3983
55	4.90	0.1477	0.0932	0.2252	-0.0606	0.1727
56	6.30	0.4206	0.5133	0.5008	0.0676	-0.0401
57	5.70	0.5384	0.6300	0.6405	0.0468	-0.0398

58	6.00	0.3856	0.4425	0.0043	0.0053	-0.4379
59	5.70	0.3582	0.0871	-0.6405	-0.3127	-0.4727
60	6.10	-1.0867	-0.8278	-1.1712	0.1989	-0.5523

Table 18b. Eta (inter-event) terms for vertical motion (static dataset without the Chi-Chi earthquake data) using the functional form of Model D (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	1.0021	0.7775	0.6032	-0.2079	0.1122
62	4.90	-1.0130	-0.4683	-0.1613	0.5359	-0.3873
63	4.90	0.0632	0.0702	0.0030	-0.0252	-0.1535
64	6.10	0.9091	1.0266	1.4962	0.1267	0.4068
65	5.00	-0.5909	-1.1407	-1.6092	-0.5885	0.0467
71	6.30	-0.8791	-1.2772	-1.3639	-0.3701	0.3822
73	5.80	0.8557	0.3282	-0.0962	-0.5682	0.1443
74	5.20	0.0519	0.5267	0.8781	0.3807	-0.0622
75	5.40	-0.1460	0.2721	0.3191	0.3297	-0.2571
76	6.40	-0.2452	0.3219	0.3901	0.5843	-0.4425
77	5.00	0.3648	0.1916	-0.1405	-0.1399	-0.1471
78	5.30	-0.8398	0.0341	0.9503	0.8917	0.0268
79	5.20	0.2966	0.0690	-0.0756	-0.2079	0.0908
80	5.80	0.4813	0.4264	0.7396	-0.0478	0.4007
81	4.90	0.1075	0.0444	0.1602	-0.0293	0.1739
82	5.20	1.1710	1.1082	0.6139	-0.0395	-0.4159
84	5.50	0.9978	0.8878	2.0904	0.0093	1.4150
85	5.30	-0.8248	-0.9502	-1.3731	-0.1679	-0.2746
86	6.50	-0.9561	-0.5155	-0.1591	0.4819	-0.7650
90	6.20	0.3432	0.1420	-0.0375	-0.2346	0.0516
95	5.80	0.2607	-0.1618	-1.2159	-0.3593	-0.5061
96	6.50	-0.9944	-1.5863	-0.9723	-0.5597	-0.3190
99	6.80	0.9455	0.3330	0.2706	-0.6285	0.6490
100	5.40	0.5570	0.7596	0.7125	0.1597	-0.2219
101	5.60	-0.0520	0.1036	0.1153	0.1193	-0.0844
102	6.40	0.3878	0.5967	0.4128	0.2561	-0.5782
103	6.00	0.6691	0.1587	-0.0868	-0.4742	0.3262
104	5.90	-0.1171	-0.2416	-0.1892	-0.1638	0.2258
105	6.20	0.3931	0.2831	0.4538	-0.1297	0.3342
106	5.60	-0.0717	-0.4224	-0.6990	-0.4002	0.1064
107	5.80	-0.3249	-0.4420	-0.1695	-0.1638	0.4287
113	7.30	-0.1890	-0.2532	-0.6230	-0.0063	-0.2581
114	5.40	0.9719	1.1483	0.9566	0.1419	-0.2436
117	6.00	0.0222	-0.3970	-0.9179	-0.3731	-0.0382
118	5.30	0.2776	0.2023	-0.0909	-0.0593	-0.1747
119	6.30	0.5373	0.0856	0.3981	-0.3758	0.5978
120	6.70	0.5641	-0.0236	0.3730	-0.6330	1.0650
121	6.80	0.2330	0.2760	0.3835	0.0383	0.0921
122	6.90	0.2245	0.3467	0.3516	0.1263	-0.0517
124	6.20	-0.4810	-0.2630	-0.1189	0.2650	-0.0152
125	6.90	-0.4379	-0.3234	-0.3231	0.1209	-0.0900
127	7.10	-0.2933	-0.1180	0.0609	0.2137	0.1019
129	7.30	0.1814	0.0684	-0.5947	-0.2083	-0.4836
131	6.70	0.1196	-0.0870	-0.4632	-0.1600	-0.1053

133	6.90	0.1308	-0.0346	-0.0453	-0.2050	0.1833
141	7.40	-0.0254	0.2467	0.3190	0.2203	-0.1300
143	7.10	-0.6353	0.0303	0.6125	0.5930	0.0150

Table 19a. Regression coefficients for horizontal motion (static dataset without the Chi-Chi earthquake data) using the functional form of Model D

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	4.31964	4.79138	-5.72954	-3.60175	5.56453
θ_2	-0.00175	0.10700	1.35125	-0.43688	0.14628
θ_3	-2.40199	-2.91849	-1.81172	0.10445	-1.36058
θ_4	0.19029	0.29931	0.13228	0.14229	0.02981
θ_5	2.14088	1.34326	1.20488	5.97397	5.93034
θ_6	0.09754	0.33275	0.44462	0.23819	-0.13534
θ_7	-0.21015	-0.25171	-0.02981	0.02214	0.09213
θ_8	0.38884	0.37866	0.22487	-0.09658	-0.10285
θ_9	-2.29732	-0.00453	0.94330	4.54884	1.70241
θ_{10}	448.88360	-0.89612	242.91500	1.21212	11.36207
Sigma	0.5099	0.4985	0.6189	0.3627	0.4051
Tau	0.4083	0.4798	0.6454	0.2047	0.2055
Total Sigma	0.6532	0.6919	0.8942	0.4165	0.4543

Table 19b. Regression coefficients for vertical motion (static dataset without the Chi-Chi earthquake data) using the functional form of Model D

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	1.50813	-0.03001	-11.47518	2.20771	0.81701
θ_2	0.15024	0.56341	1.67087	-0.43961	0.87851
θ_3	-2.52562	-1.92233	-1.32600	-0.30237	-0.60371
θ_4	0.17143	0.15378	0.06055	0.16936	-0.08413
θ_5	2.12429	1.24225	1.40861	4.35141	4.78549
θ_6	0.10517	0.14773	0.18924	0.03310	0.00601
θ_7	-0.16655	-0.13670	0.00910	0.01054	0.10842
θ_8	0.22243	0.29318	0.19898	0.00151	-0.17541
θ_9	-0.11214	0.90219	3.96568	1.02055	0.76210
θ_{10}	19.85830	32.24052	10.06379	0.77914	9.37077
Sigma	0.5141	0.4649	0.6840	0.4224	0.5183
Tau	0.4546	0.4502	0.6036	0.3191	0.2981
Total Sigma	0.6863	0.6472	0.9122	0.5293	0.5979

Table 20a. Eta (inter-event) terms for horizontal motion (dynamic dataset without the Chi-Chi earthquake data) using the functional form of Model D

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2072	-0.2772	-0.4617	-0.0260	-0.0708
3	5.80	0.1049	0.1091	0.0260	0.0062	-0.0631
4	5.00	-0.4195	-0.4931	-0.6651	-0.0410	-0.0248
5	5.50	0.6163	0.6113	0.5580	-0.0287	-0.0190
6	7.00	-0.1266	-0.1115	0.0742	0.0146	0.1058
7	6.60	0.0509	-0.2160	-0.4097	-0.1654	0.0463
8	6.40	0.2113	-0.0988	-0.1256	-0.2033	0.1907
9	6.50	-0.2296	-0.4067	-0.2584	-0.1008	0.2038
10	5.60	-0.5140	-0.3346	-0.0760	0.1263	0.0485
11	5.80	0.4540	0.2926	0.1533	-0.1193	0.0258
12	7.40	0.1399	-0.1122	-0.6755	-0.2750	-0.3071
13	5.20	0.2999	0.5931	0.9642	0.1637	0.0555
14	6.00	0.0787	0.1466	0.4000	0.0447	0.1011
15	5.50	-0.7552	-0.5887	-0.4916	0.1271	-0.0411
16	5.30	-0.1043	0.1570	0.1682	0.1589	-0.1469
17	6.50	0.1582	0.5069	0.6033	0.2119	-0.1791
18	5.40	-0.1617	0.0262	0.2795	0.1157	0.0488
19	6.80	0.0590	0.0406	0.5093	-0.0164	0.2893
20	5.30	-0.2727	-0.3539	-0.6572	-0.0094	-0.1485
21	5.00	-0.2620	-0.2070	0.0447	0.0461	0.1484
22	5.70	0.2904	0.1459	0.1247	-0.1011	0.0867
23	5.60	0.0396	0.1382	0.5050	0.0556	0.1759
24	5.50	-0.3773	-0.1646	-0.0937	0.1569	-0.0961
25	6.10	-0.2126	-0.2111	0.1350	-0.0336	0.4524
26	5.60	0.4776	0.4639	0.4747	-0.0364	0.0358
27	5.20	-0.4904	-0.0898	0.3414	0.2664	0.0087
28	6.80	-0.3359	0.0627	0.6645	0.3359	0.2374
29	5.40	-0.1252	-0.2422	-0.5372	-0.1167	-0.1421
30	6.60	-0.6321	-0.6943	-0.3459	-0.0272	0.3337
33	5.80	-0.1392	-0.0058	0.0692	0.0941	-0.0524
34	5.20	0.0567	-0.0820	-0.6146	-0.1372	-0.3020
35	5.20	0.8111	0.7712	0.2626	-0.0583	-0.4034
36	6.00	-0.4566	-0.7331	-1.4348	-0.1515	-0.2410
37	5.00	-1.0086	-0.7124	-0.0471	0.2791	0.4984
38	4.40	0.0700	0.3627	1.2238	0.2843	0.7730
39	4.70	0.3794	-0.2980	-1.0437	-0.6402	0.0509
40	6.50	-0.0435	-0.3228	-0.3571	-0.2742	0.2222
41	6.80	0.0124	0.1047	0.2609	0.1181	-0.0580
42	5.50	-0.6707	-0.1466	0.1038	0.5193	-0.2269
43	6.10	-0.7138	-0.5929	-0.3790	0.1310	0.0886
45	6.00	-0.3610	-0.1822	-0.0182	0.1762	-0.0067
46	7.40	-0.0734	-0.1977	0.2432	-0.1272	0.5170
48	5.70	-0.0811	-0.0140	-0.1268	0.1232	-0.1986
50	6.50	0.0382	0.2619	0.6786	0.2334	0.1741
51	5.20	0.4734	0.4765	0.1589	-0.0273	-0.2059
52	5.50	-0.0518	-0.0999	0.0140	-0.0267	0.1252
53	5.80	-0.2483	0.1530	0.5514	0.3595	0.0733
54	5.40	0.0309	0.2454	0.1755	0.2102	-0.2188
55	4.90	0.3596	0.3015	-0.0931	-0.0585	-0.2192
56	6.30	0.3619	-0.0108	-0.2253	-0.3555	0.1421

57	5.70	0.6432	0.5371	0.3739	-0.1411	0.0229
58	6.00	0.2485	0.2413	0.3566	-0.0472	0.1925
59	5.70	0.2042	0.0695	-0.3167	-0.1010	-0.2443
60	6.10	-0.4973	-0.6951	-1.3641	-0.2147	-0.4269

Table 20a. Eta (inter-event) terms for horizontal motion (dynamic dataset without the Chi-Chi earthquake data) using the functional form of Model D (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.8620	0.7131	0.6154	-0.1564	0.0602
62	4.90	-0.5080	-0.4908	-0.6504	0.1792	-0.2206
63	4.90	0.1692	0.1044	-0.2741	-0.0098	-0.2376
64	6.10	0.6968	1.0310	1.7196	0.3021	0.3955
65	5.00	-0.5942	-1.2533	-1.9428	-0.6493	0.0757
71	6.30	-0.6682	-0.6946	-0.9845	-0.0044	-0.3037
73	5.80	0.4776	0.5462	0.6460	0.0371	0.0999
74	5.20	0.0485	0.3882	0.5231	0.2345	-0.1441
75	5.40	-0.1256	-0.1108	-0.0290	0.0285	0.0453
76	6.40	-0.0719	0.2327	0.1731	0.3016	-0.3700
77	5.00	0.2734	0.3352	0.1028	0.0969	-0.2563
78	5.30	-0.8655	-0.4441	0.6014	0.5011	0.5911
79	5.20	0.2471	0.1033	-0.1599	-0.0928	-0.1157
80	5.80	0.3732	0.2756	0.4158	-0.0378	0.1828
81	4.90	-0.2478	-0.3370	-0.1864	-0.0412	0.2799
82	5.20	0.9504	0.9941	0.9056	0.0845	-0.1195
84	5.50	1.7203	1.3303	1.7480	-0.3739	0.8053
85	5.30	-1.3994	-1.5959	-2.0106	-0.2285	-0.1080
86	6.50	-0.6017	-0.4035	-0.4941	0.2153	-0.3339
90	6.20	-0.2027	-0.2254	-0.1948	-0.0513	0.1059
95	5.80	-0.0207	-0.7483	-1.7431	-0.4730	-0.0874
96	6.50	-0.4409	-1.0971	-1.4055	-0.6539	-0.2131
99	6.80	0.1911	-0.3407	-0.4141	-0.4990	0.4138
100	5.40	0.0266	0.5236	0.9455	0.4623	0.0287
101	5.60	0.0445	0.2094	0.4422	0.1025	0.0440
102	6.40	1.0431	1.4242	1.3383	0.3930	-0.5008
103	6.00	0.2602	-0.0522	-0.2254	-0.3051	0.1285
104	5.90	-0.2425	-0.3348	-0.0523	-0.1284	0.4421
105	6.20	0.1899	0.1288	0.3325	-0.0942	0.3117
106	5.60	-0.3003	-0.4327	-0.7116	-0.1614	-0.0635
107	5.80	-0.2628	-0.2147	-0.0925	0.0192	0.1425
113	7.30	-0.1236	-0.0073	-0.2229	0.1562	-0.3763
114	5.40	0.9843	1.0568	1.3029	0.0328	0.1032
117	6.00	-0.1882	-0.4060	-0.7483	-0.1890	-0.1691
118	5.30	0.5463	0.6158	0.3875	0.0566	-0.2336
119	6.30	0.0569	0.1435	0.5370	0.0383	0.2055
120	6.70	0.0987	0.1558	0.1828	0.0490	-0.0277
121	6.80	0.1594	0.3374	0.3560	0.1047	-0.1083
122	6.90	0.2538	0.3921	0.3439	0.1443	-0.2012
124	6.20	-0.2984	-0.5039	-0.6863	-0.2018	0.0046
125	6.90	-0.1426	-0.0480	-0.0616	0.1240	-0.1671
127	7.10	0.2410	0.0928	-0.1711	-0.1096	-0.1712
129	7.30	0.1735	0.1916	0.0011	-0.0583	-0.1570
131	6.70	0.0402	-0.1268	-0.4061	-0.1287	-0.1821

133	6.90	0.2539	0.1657	0.1884	-0.1239	0.0481
141	7.40	0.0884	0.2437	0.4868	0.1153	0.1322
143	7.10	-0.4911	-0.1599	0.3418	0.2801	0.2064

Table 20b. Eta (inter-event) terms for vertical motion (dynamic dataset without the Chi-Chi earthquake data) using the functional form of Model D

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
1	6.20	-0.2882	-0.0020	0.1501	0.2105	-0.0449
3	5.80	0.1692	0.1219	-0.1278	0.0016	-0.1657
4	5.00	-0.1640	-0.4512	-0.9913	-0.2065	-0.2237
5	5.50	0.3680	0.2654	0.1184	-0.0428	-0.0396
6	7.00	-0.1209	-0.2069	0.0718	-0.0675	0.3123
7	6.60	-0.0338	-0.1420	-0.4455	-0.0745	-0.1625
8	6.40	-0.0099	-0.0422	-0.5605	-0.0067	-0.3805
9	6.50	-0.1367	-0.5912	-0.5939	-0.3491	0.3103
10	5.60	-0.6471	-0.6420	-0.3392	0.0003	0.2230
11	5.80	0.2360	0.2876	0.0476	0.0742	-0.2212
12	7.40	0.1383	-0.1662	-0.5553	-0.3139	-0.0824
13	5.20	0.2459	0.4726	0.6594	0.2109	-0.0086
14	6.00	0.3059	0.4269	0.7031	0.1267	0.1333
15	5.50	-0.2467	-0.5734	-0.6909	-0.2631	0.1412
16	5.30	-0.2543	0.1113	0.2927	0.2970	-0.1130
17	6.50	-0.3338	0.2332	0.2284	0.4606	-0.4027
18	5.40	-0.1081	-0.2768	-0.5070	-0.1335	-0.0530
19	6.80	-0.0457	-0.0526	0.0577	-0.0180	0.0980
20	5.30	-0.4289	-0.6502	-0.3035	-0.2295	0.3749
21	5.00	-0.3297	0.0247	0.2592	0.2635	-0.0623
22	5.70	-0.0485	-0.0914	0.0444	-0.0002	0.1256
23	5.60	-0.1151	0.3244	0.8392	0.3382	0.1055
24	5.50	-0.3481	-0.0797	0.0947	0.1859	-0.0479
25	6.10	-0.4941	-0.3261	0.1106	0.1293	0.3107
26	5.60	-0.0806	0.3593	0.3385	0.3597	-0.3173
27	5.20	-0.1807	-0.2015	0.0906	0.0160	0.2290
28	6.80	-0.0631	-0.0474	0.4033	-0.0428	0.6035
29	5.40	0.0751	-0.2501	-0.7168	-0.2870	-0.1349
30	6.60	-0.3163	-0.4040	0.0890	-0.1168	0.4909
33	5.80	-0.1677	-0.1954	-0.0573	-0.0427	0.0929
34	5.20	-0.1839	-0.0037	-0.3955	0.1491	-0.4439
35	5.20	0.7995	0.7219	0.4641	-0.0731	-0.1541
37	5.00	-0.9726	-0.3208	0.3638	0.6327	0.1672
38	4.40	0.3790	0.5112	1.7212	0.1336	1.1883
39	4.70	0.4212	-0.2264	-1.0921	-0.6649	-0.1223
40	6.50	0.0494	-0.0083	0.0294	-0.0304	0.0997
41	6.80	0.5780	0.3979	0.7677	-0.1505	0.3194
42	5.50	-0.9116	0.0368	0.1622	0.8947	-0.7747
43	6.10	-0.7504	0.1153	0.5463	0.8225	-0.3999
45	6.00	-0.4402	-0.3418	-0.0623	0.0771	0.2132
46	7.40	0.0858	0.3311	0.6322	0.1699	-0.0414
48	5.70	-0.1291	-0.0105	-0.0518	0.1099	-0.0901
50	6.50	0.0810	-0.0044	0.3418	-0.0705	0.5170
51	5.20	0.0480	-0.5967	-1.2196	-0.6479	0.1570
52	5.50	0.1435	-0.2769	-0.6311	-0.3541	0.0796
53	5.80	-0.6547	0.0120	0.2358	0.6704	-0.3000
54	5.40	-0.4854	-0.1015	-0.2236	0.3848	-0.3949
55	4.90	0.1352	0.1011	0.1451	-0.0259	0.1825
56	6.30	0.4211	0.5120	0.5291	0.0383	-0.0397
57	5.70	0.5347	0.6342	0.5447	0.0845	-0.0402

58	6.00	0.3873	0.4455	-0.0860	0.0428	-0.4352
59	5.70	0.3562	0.0934	-0.7364	-0.2832	-0.4742
60	6.10	-1.0822	-0.8230	-1.2579	0.2317	-0.5499

Table 20b. Eta (inter-event) terms for vertical motion (dynamic dataset without the Chi-Chi earthquake data) using the functional form of Model D (cont.)

Earthquake Number	Magnitude	PGA	PGV	PGD	V/A	AD/VV
61	6.00	0.9947	0.7713	0.6337	-0.2245	0.1114
62	4.90	-1.0238	-0.4509	-0.2967	0.5675	-0.3897
63	4.90	0.0515	0.0852	-0.1270	0.0075	-0.1531
64	6.10	0.9118	1.0246	1.4423	0.1783	0.4121
65	5.00	-0.6025	-1.1288	-1.7284	-0.5547	0.0476
71	6.30	-0.8885	-1.2856	-1.2424	-0.4494	0.3759
73	5.80	0.8536	0.3321	-0.1878	-0.5292	0.1438
74	5.20	0.0417	0.5298	0.8796	0.3662	-0.0667
75	5.40	-0.1549	0.2739	0.3146	0.3156	-0.2631
76	6.40	-0.2439	0.3173	0.4213	0.5740	-0.4414
77	5.00	0.3357	0.1882	-0.0429	-0.2274	-0.1530
78	5.30	-0.8651	0.0322	1.0279	0.8011	0.0129
79	5.20	0.2699	0.0653	0.0108	-0.2979	0.0813
80	5.80	0.4633	0.4203	0.8374	-0.1399	0.3891
81	4.90	0.0777	0.0430	0.2518	-0.1169	0.1682
82	5.20	1.1438	1.1042	0.7039	-0.1275	-0.4258
84	5.50	0.9816	0.8708	2.2245	-0.0103	1.4329
85	5.30	-0.8340	-0.9440	-1.4749	-0.1321	-0.2736
86	6.50	-0.9527	-0.5229	-0.1079	0.4744	-0.7674
90	6.20	0.3495	0.1439	-0.1050	-0.1922	0.0558
95	5.80	0.2589	-0.1595	-1.2876	-0.3394	-0.5104
96	6.50	-0.9912	-1.5906	-0.9387	-0.5624	-0.3192
99	6.80	0.9602	0.3301	0.3659	-0.6650	0.6679
100	5.40	0.5488	0.7656	0.6108	0.1967	-0.2225
101	5.60	-0.0599	0.1034	0.1154	0.1079	-0.0883
102	6.40	0.3886	0.5895	0.4602	0.2523	-0.5793
103	6.00	0.6617	0.1506	-0.0398	-0.4897	0.3270
104	5.90	-0.1175	-0.2387	-0.2762	-0.1240	0.2270
105	6.20	0.3985	0.2838	0.3840	-0.0830	0.3394
106	5.60	-0.0769	-0.4170	-0.8014	-0.3641	0.1051
107	5.80	-0.3270	-0.4371	-0.2660	-0.1257	0.4269
113	7.30	-0.1703	-0.2550	-0.4669	-0.0632	-0.2435
114	5.40	0.9622	1.1500	0.9609	0.1256	-0.2487
117	6.00	0.0065	-0.4081	-0.7901	-0.4527	-0.0457
118	5.30	0.2594	0.1995	-0.0687	-0.0814	-0.1758
119	6.30	0.5407	0.0874	0.3633	-0.3530	0.6039
120	6.70	0.5826	-0.0184	0.3261	-0.5943	1.0797
121	6.80	0.2396	0.2748	0.4113	0.0330	0.0977
122	6.90	0.2398	0.3454	0.4016	0.1153	-0.0419
124	6.20	-0.4847	-0.2714	-0.0697	0.2570	-0.0149
125	6.90	-0.4251	-0.3280	-0.1750	0.0971	-0.0806
127	7.10	-0.2798	-0.1241	0.2497	0.1344	0.1197
129	7.30	0.2176	0.0800	-0.6855	-0.1711	-0.4888
131	6.70	0.1204	-0.0959	-0.3189	-0.2323	-0.1056
133	6.90	0.1562	-0.0326	-0.1154	-0.1629	0.1984

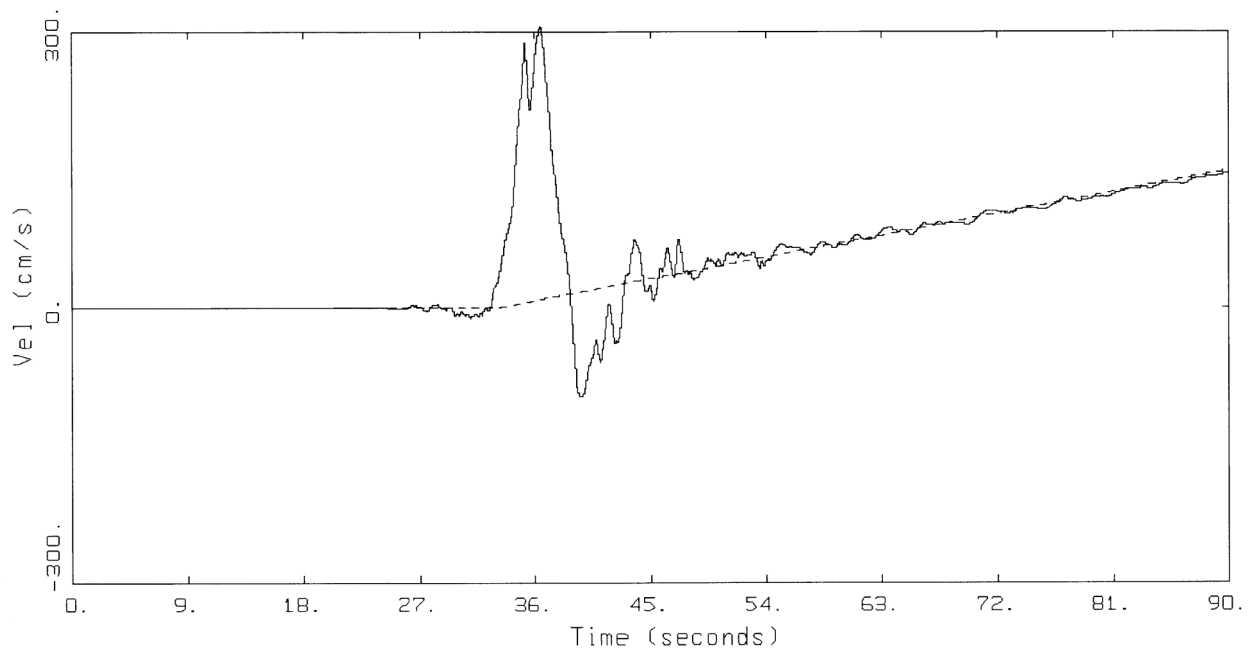
141	7.40	0.0141	0.2515	0.2470	0.2604	-0.1482
143	7.10	-0.6092	0.0292	0.4828	0.6157	-0.0510

Table 21a. Regression coefficients for horizontal motion (dynamic dataset without the Chi-Chi earthquake data) using the functional form of Model D

Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	0.20909	1.52844	-0.86165	3.16940	-3.17814
θ_2	0.12218	0.37453	0.78950	-4.52555	1.72414
θ_3	-2.13599	-2.33467	-2.92544	-4.75753	0.63646
θ_4	0.15273	0.21670	0.29531	0.83877	-0.23993
θ_5	2.09184	1.20976	1.57252	5.83234	5.86198
θ_6	0.09831	0.33688	0.44102	0.23576	-0.13022
θ_7	-0.20031	-0.21966	-0.11369	-0.01708	0.08864
θ_8	0.37902	0.35650	0.23653	-0.08204	0.00003
θ_9	0.91281	1.34040	-0.02610	26.47637	-1.38105
θ_{10}	7.23723	22.01490	-0.17274	2.06639	0.65921
Sigma	0.5104	0.5014	0.6195	0.3611	0.3989
Tau	0.4043	0.4670	0.6549	0.2045	0.2078
Total Sigma	0.6511	0.6852	0.9015	0.4150	0.4497

Table 21b. Regression coefficients for vertical motion (dynamic dataset without the Chi-Chi earthquake data) using the functional form of Model D

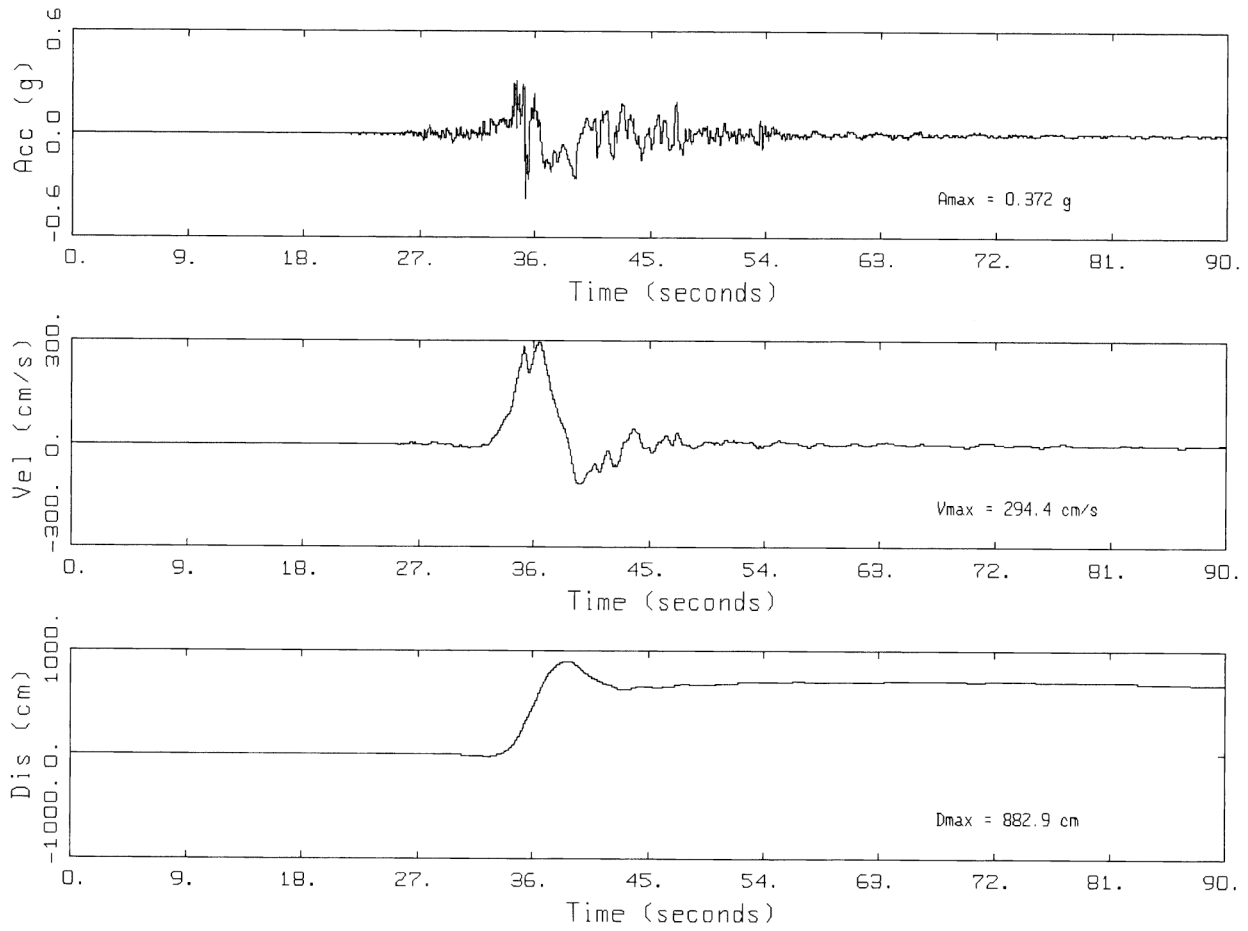
Coefficient	PGA	PGV	PGD	V/A	AD/VV
θ_1	0.49181	-0.33932	-4.53793	1.92853	-6.43103
θ_2	0.12669	0.59339	1.28037	-0.97928	0.39341
θ_3	-2.53362	-1.85395	-2.11218	-0.18830	-1.26641
θ_4	0.17233	0.14429	0.17182	0.24754	0.01222
θ_5	2.13576	1.21200	1.83275	5.20120	4.84636
θ_6	0.10574	0.14647	0.18887	0.02904	0.00954
θ_7	-0.17223	-0.13909	-0.02834	0.00989	0.09294
θ_8	0.23952	0.30557	-0.00159	0.12386	-0.16502
θ_9	1.05758	0.98865	-0.06906	0.88875	11.39740
θ_{10}	14.28830	6.00678	-1.33118	0.75767	284.23690
Sigma	0.5145	0.4642	0.6856	0.4228	0.5190
Tau	0.4538	0.4497	0.6128	0.3192	0.3005
Total Sigma	0.6860	0.6463	0.9195	0.5298	0.5997



CHICHI EQ: TCU068 (NORTH-SOUTH)

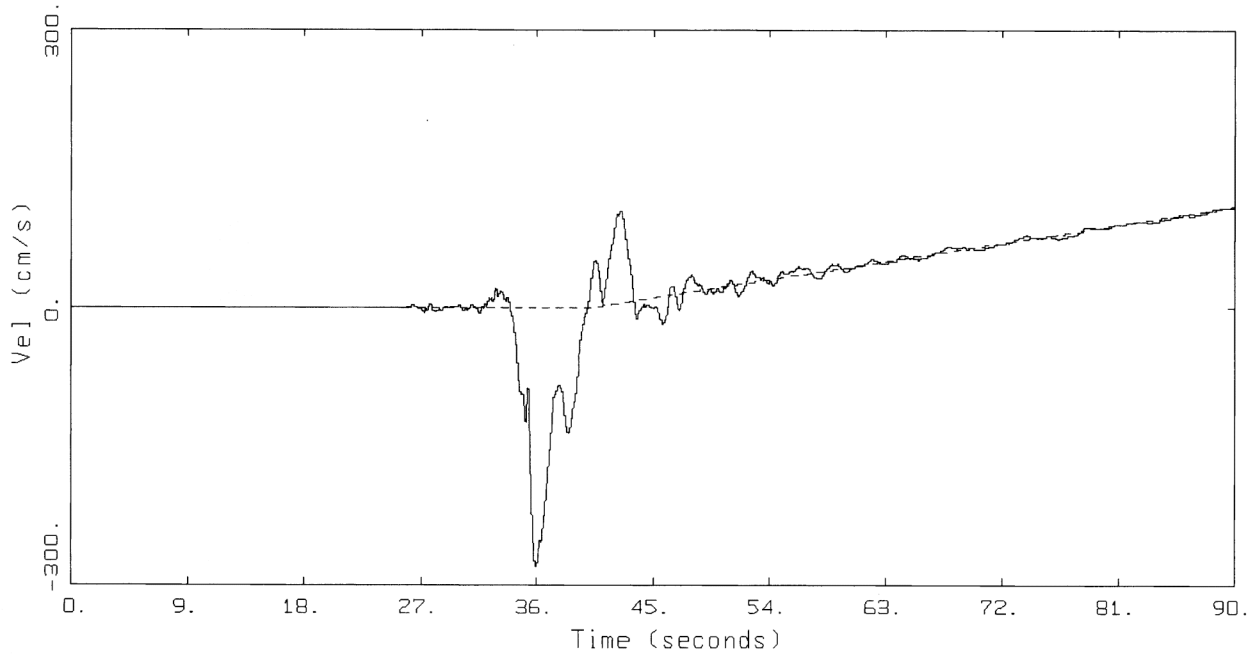
LEGEND
 ——— INPUT VEL DATA
 - - - - BEST FIT SINGLE MODEL: VEL

Figure 1a. Time history plot showing the observed velocity record (north-south component) for the TCU068 station from the 1999 ChiChi Earthquake and the least square fit using a linear function (dashed line).



CHICHI EQ: TCU068 (NORTH-SOUTH) STATIC TIME HISTORIES

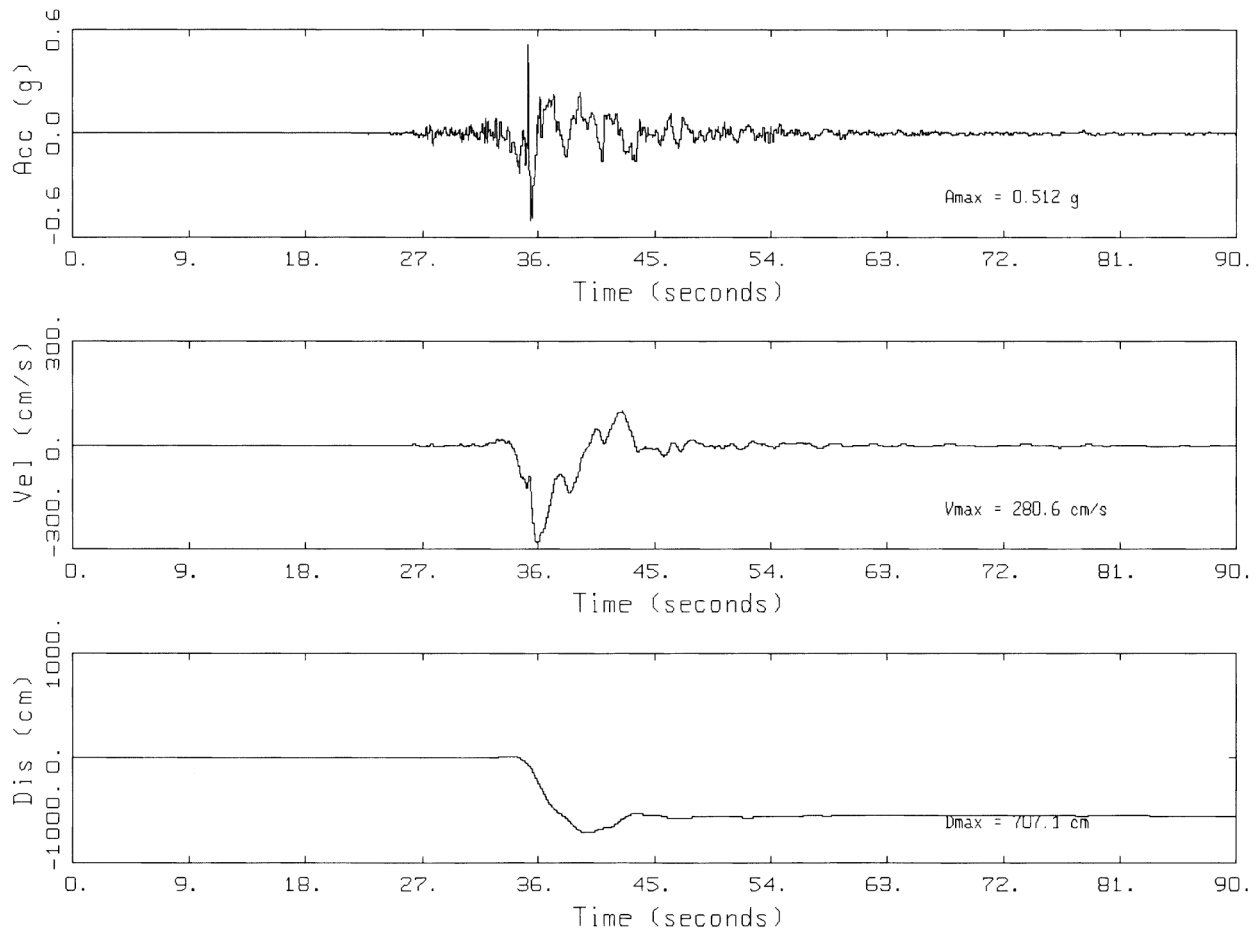
Figure 1b. Baseline corrected acceleration, velocity, and displacement time histories for the north-south component for the TCU068 station.



CHICHI EQ: TCU068 (EAST-WEST)

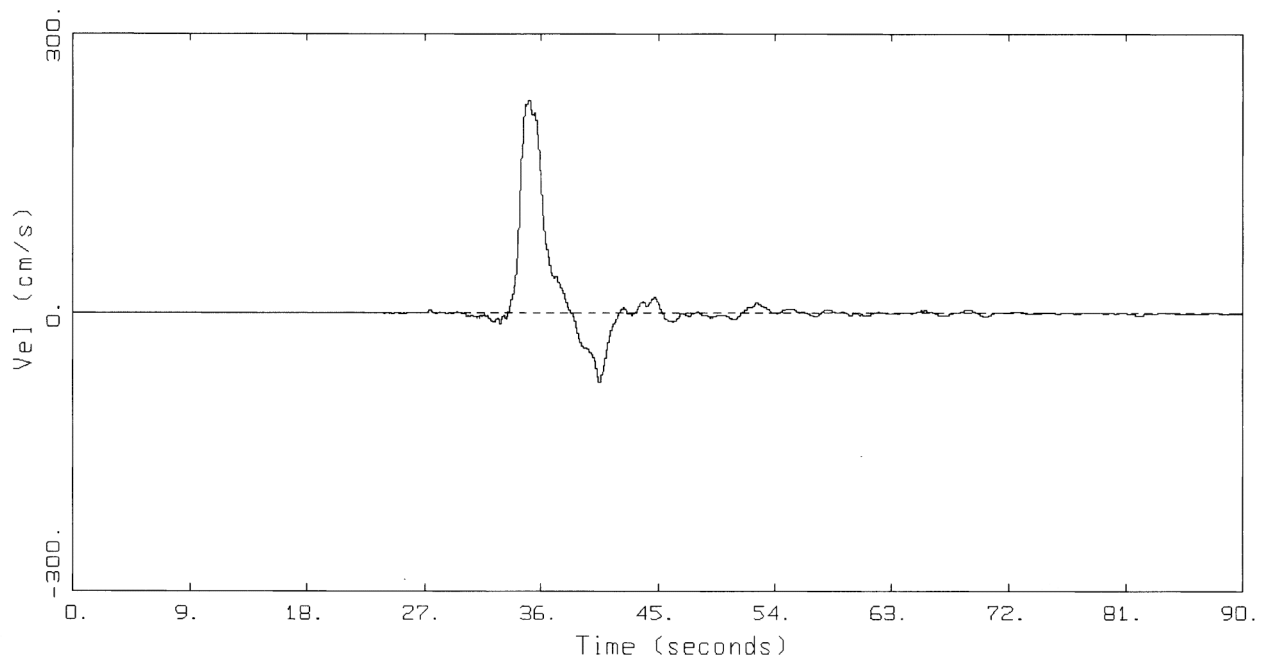
LEGEND
 — INPUT VEL DATA
 - - - - BEST FIT SINGLE MODEL: VEL

Figure 2a. Time history plot showing the observed velocity record (east-west component) for the TCU068 station from the 1999 ChiChi Earthquake and the least square fit using a linear function (dashed line).



CHICHI EQ: TCU068 (EAST-WEST) STATIC TIME HISTORIES

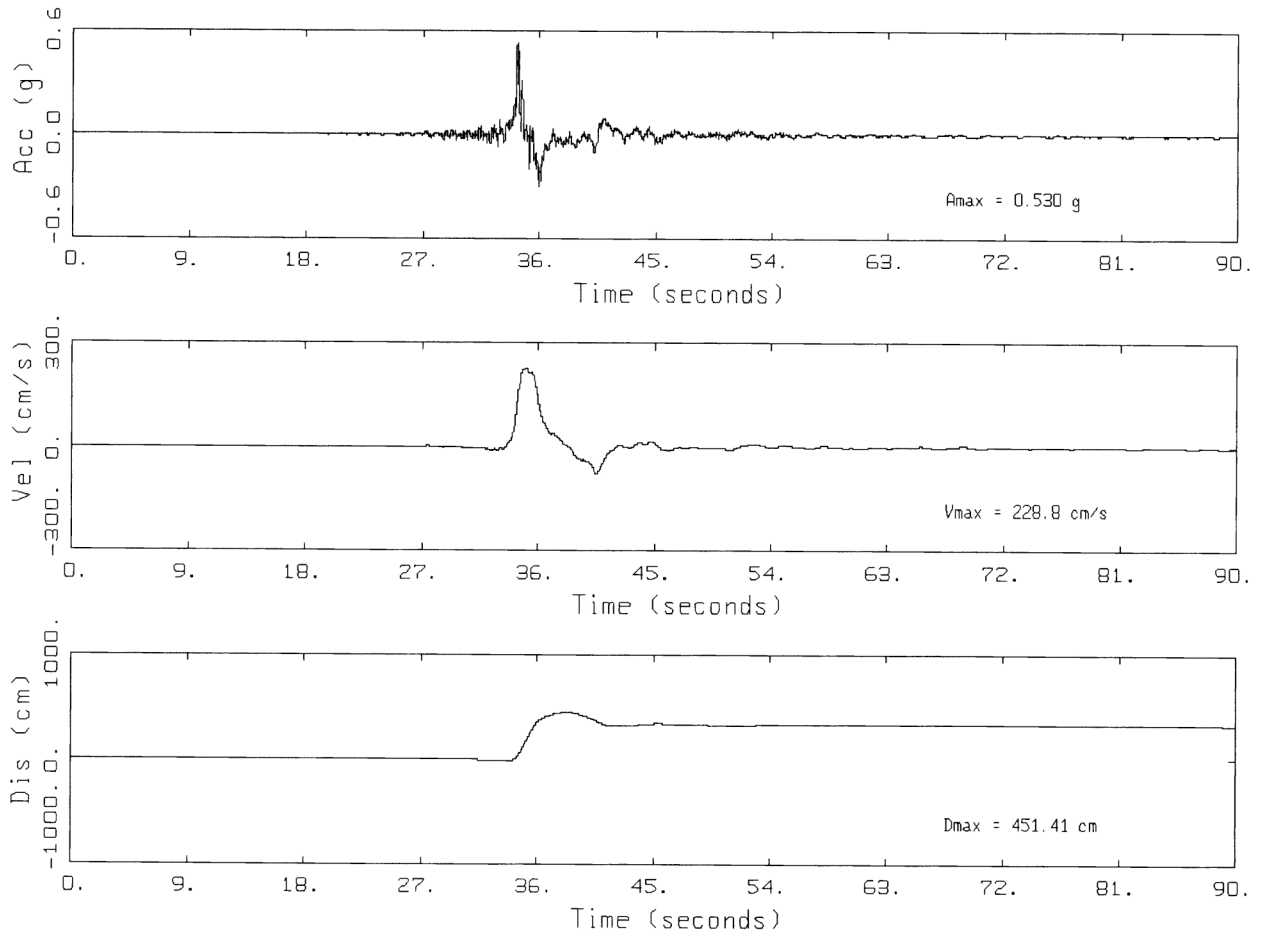
Figure 2b. Baseline corrected acceleration, velocity, and displacement time histories for the east-west component for the TCU068 station.



CHICHI EQ: TCU068 (VERTICAL)

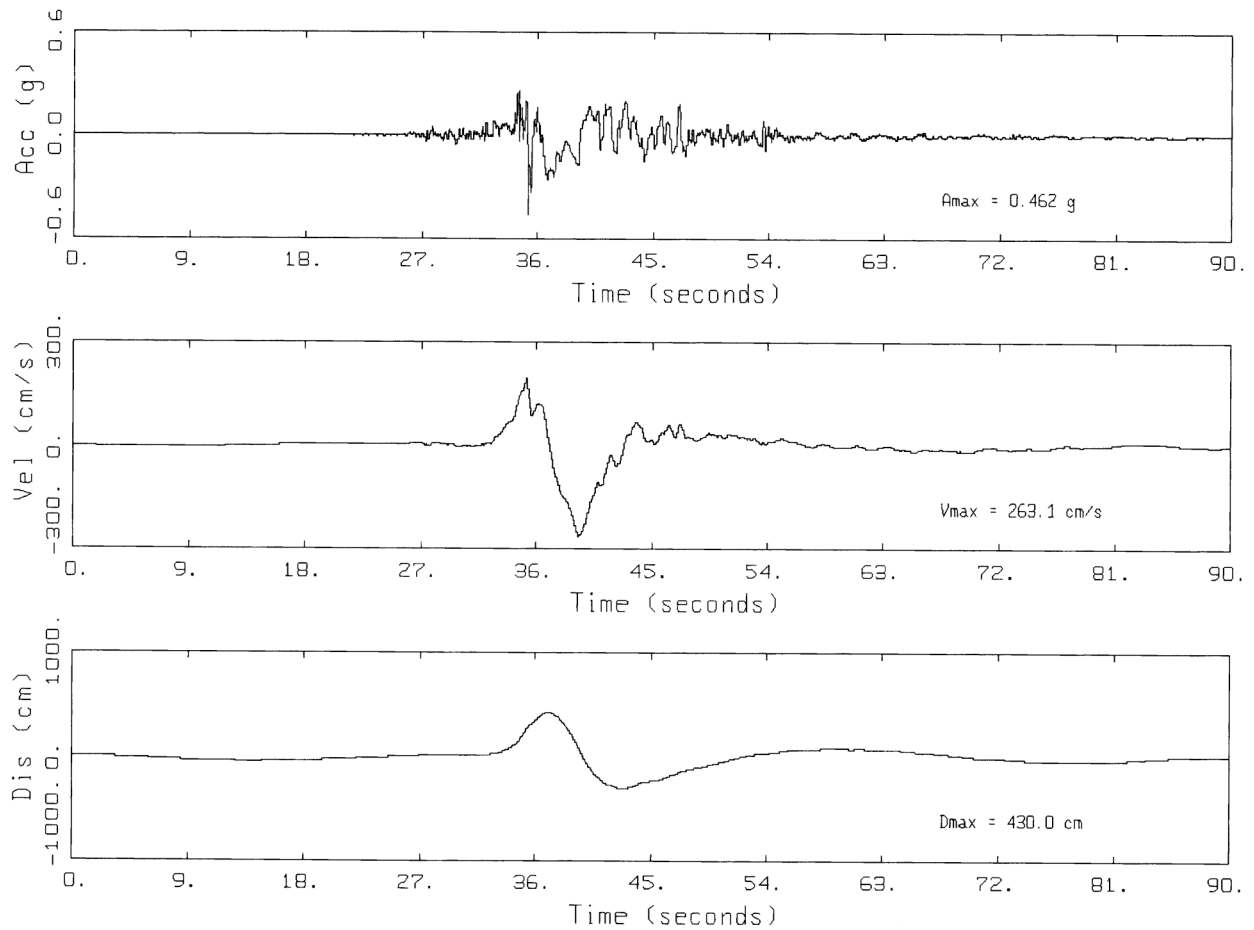
LEGEND
 ——— INPUT VEL DATA
 - - - - BEST FIT SINGLE MODEL: VEL

Figure 3a. Time history plot showing the observed velocity record (vertical component) for the TCU068 station from the 1999 ChiChi Earthquake and the least square fit using a linear function (dashed line).



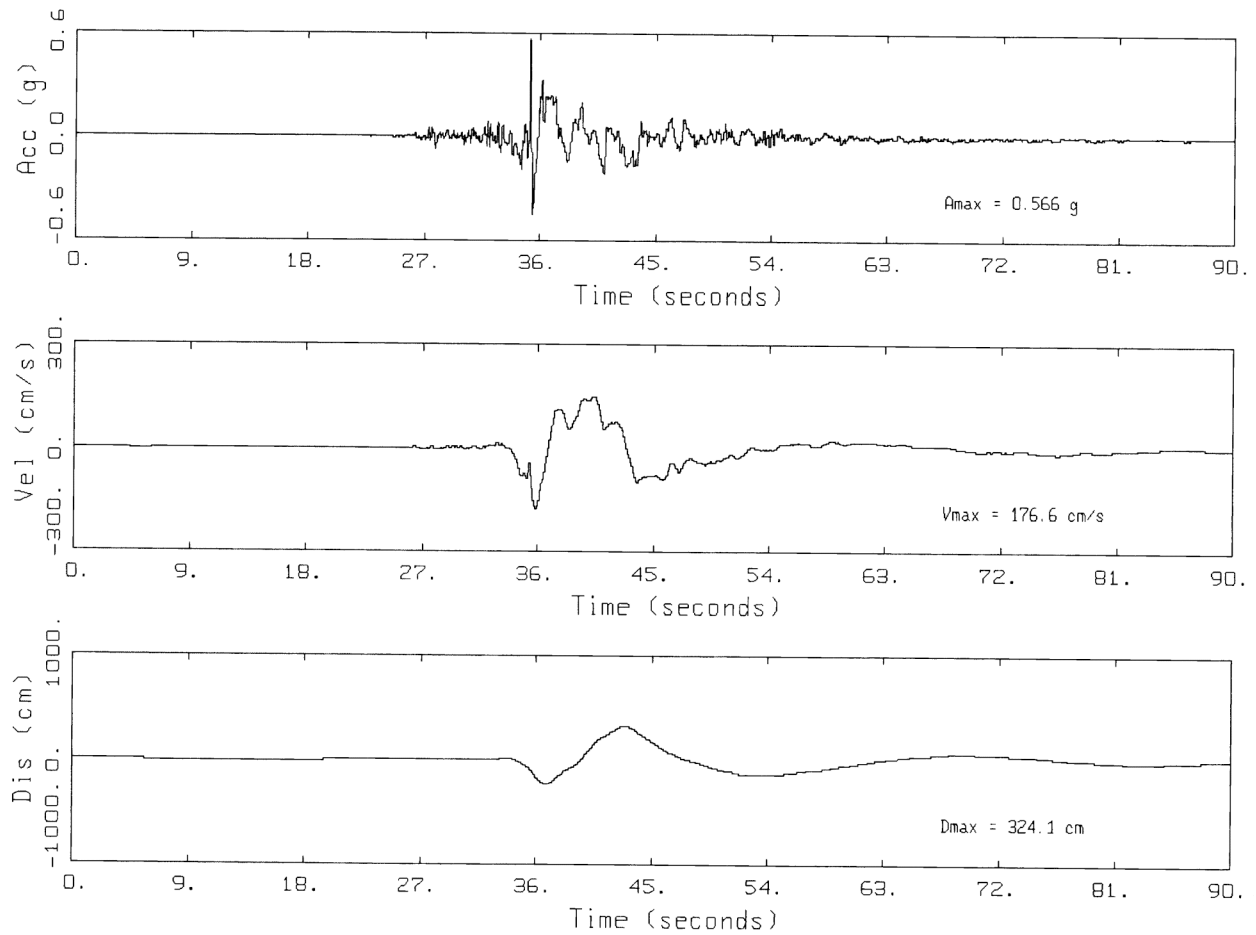
CHICHI EQ: TCU068 (VERTICAL) STATIC TIME HISTORIES

Figure 3b. Baseline corrected acceleration, velocity, and displacement time histories for the vertical component for the TCU068 station.



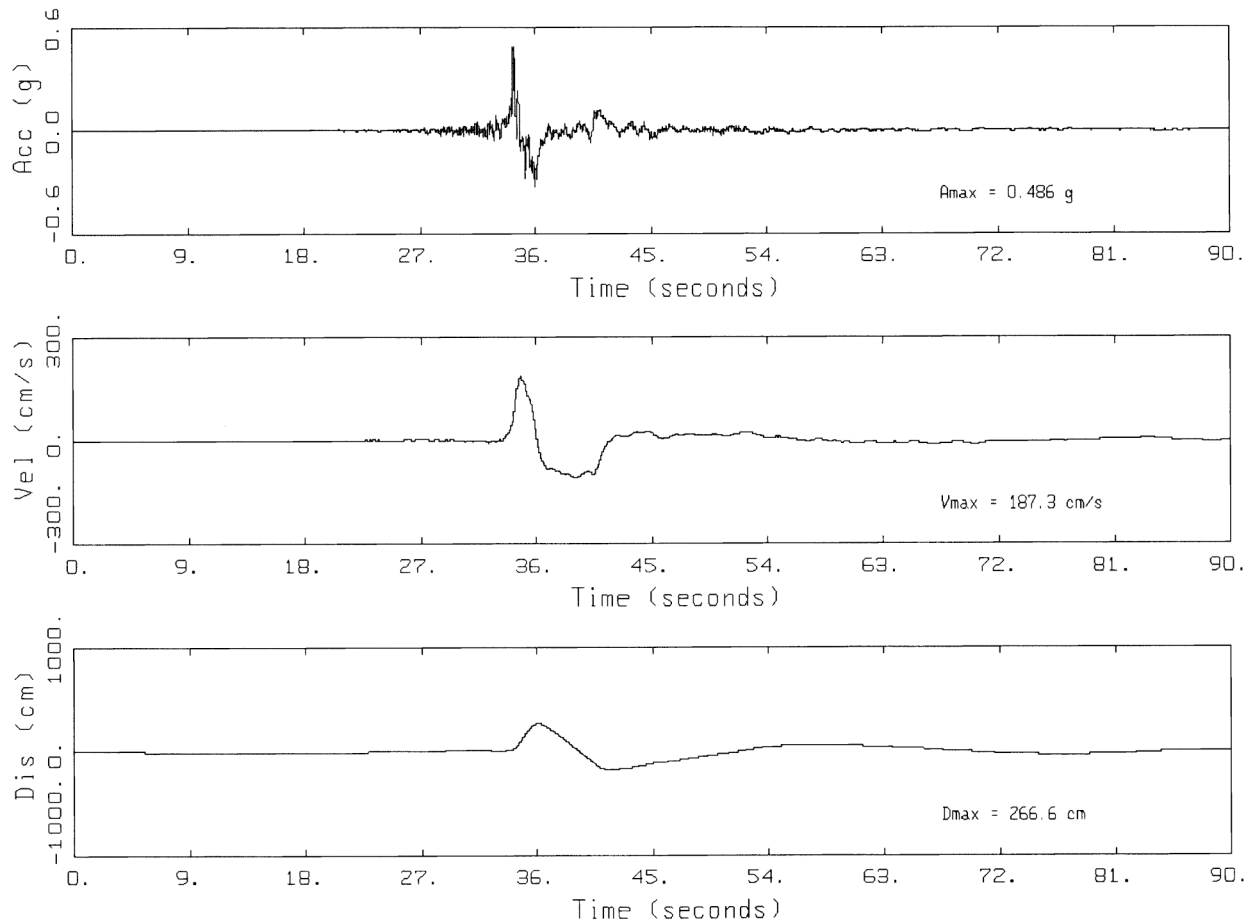
CHICHI EQ: TCU068 (NORTH-SOUTH) DYNAMIC TIME HISTORIES

Figure 4a. Acceleration, velocity, and displacement time histories for the TCU068 station (north-south component) based on the standard PEER strong ground motion database processing procedure.



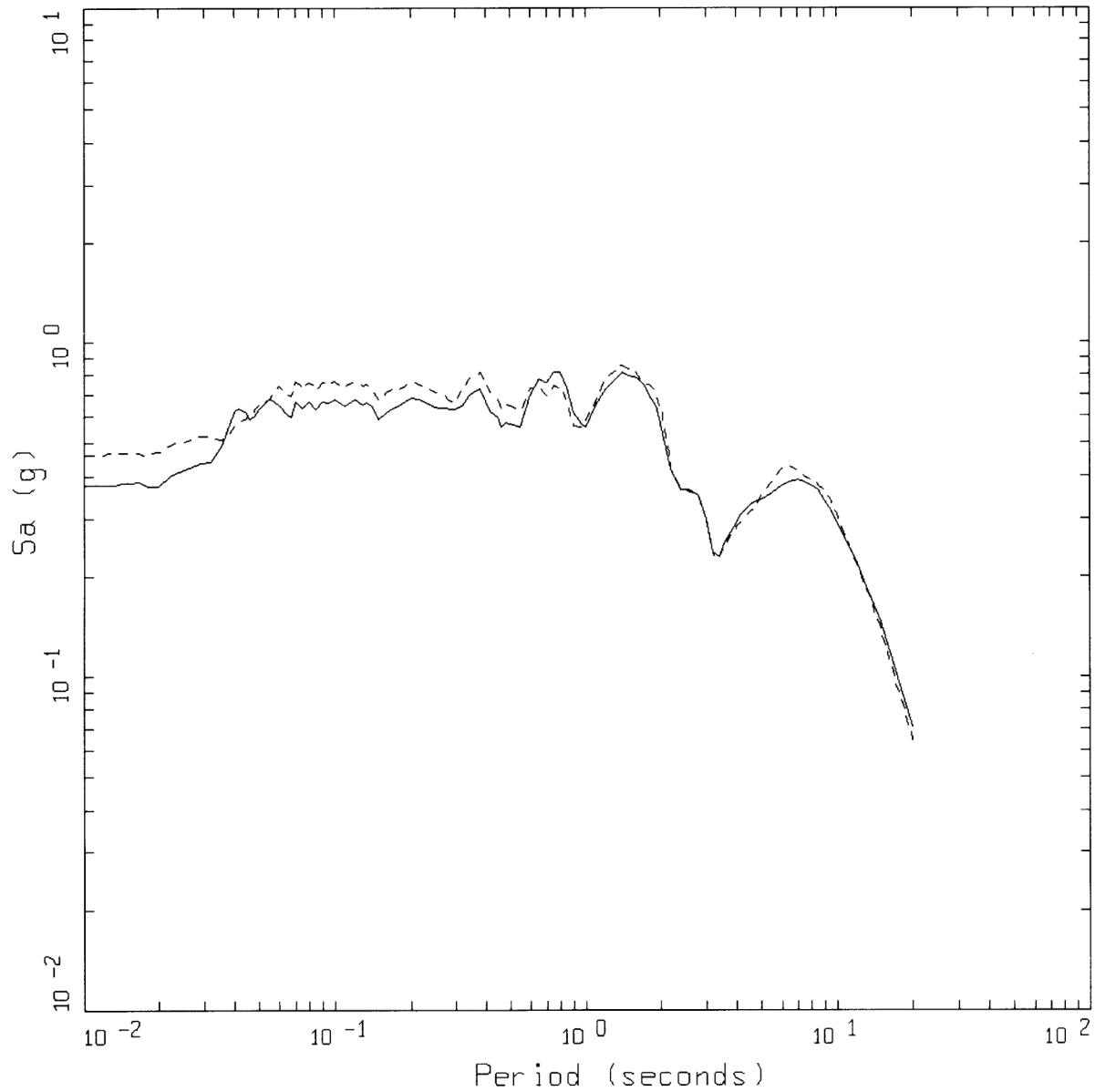
CHICHI EQ: TCU068 (EAST-WEST) DYNAMIC TIME HISTORIES

Figure 4b. Acceleration, velocity, and displacement time histories for the TCU068 station (east-west component) based on the standard PEER strong ground motion database processing procedure.



CHICHI EQ: TCU068 (VERTICAL) DYNAMIC TIME HISTORIES

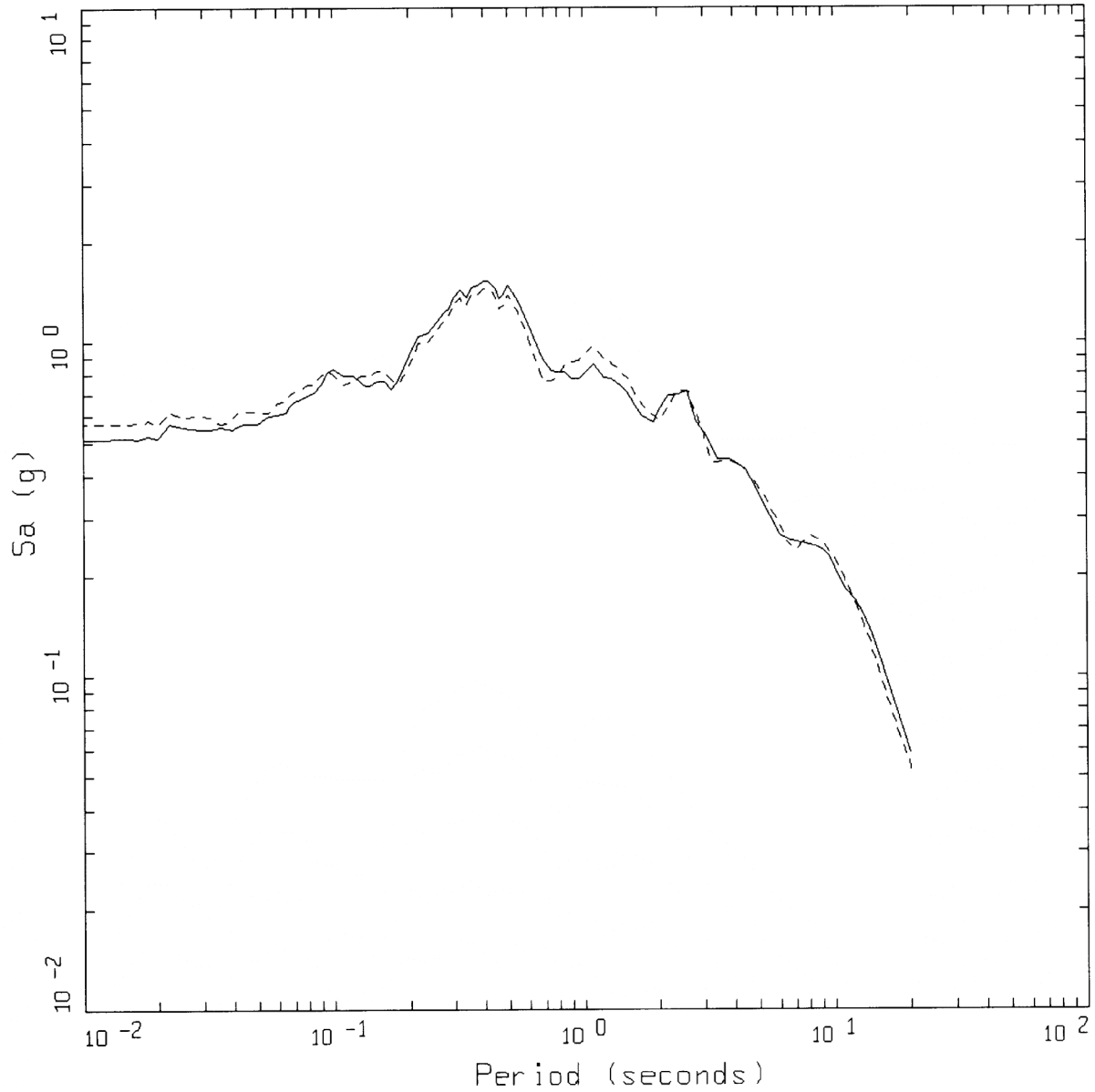
Figure 4c. Acceleration, velocity, and displacement time histories for the TCU068 station (vertical component) based on the standard PEER strong ground motion database processing procedure.



COMPARISON OF RESPONSE SPECTRA
TCU068: NORTH-SOUTH

LEGEND
 ——— 5 %, STATIC RESPONSE SPECTRUM
 - - - - 5 %, DYNAMIC RESPONSE SPECTRUM

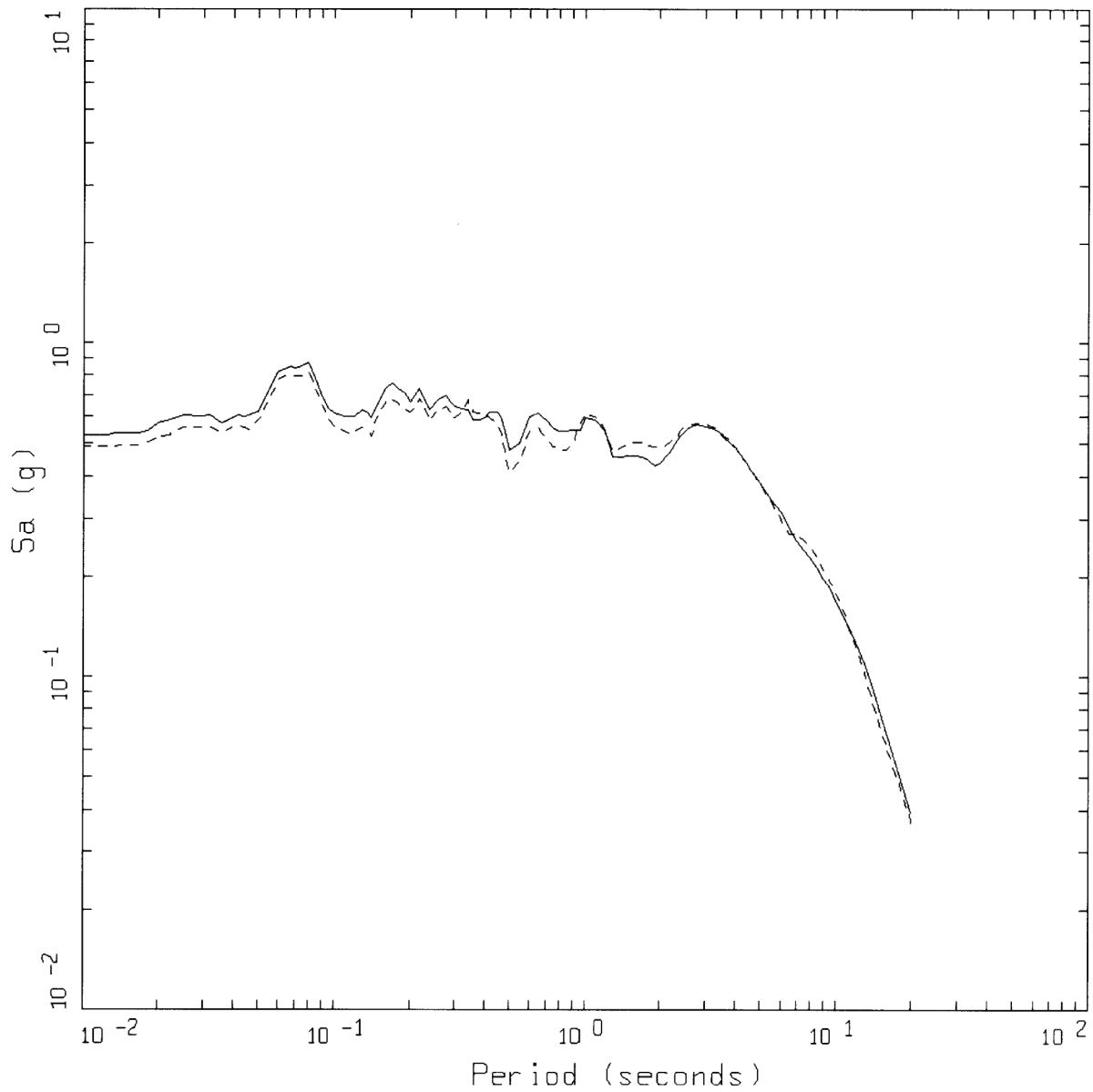
Figure 5a. Comparison between the acceleration response spectra (5% spectral damping) for the static baseline corrected time history (solid line) and the PEER database time history (dashed line) for the north-south component at the TCU068 station.



COMPARISON OF RESPONSE SPECTRA
 TCU068: EAST-WEST

LEGEND
 ——— 5 %, STATIC RESPONSE SPECTRUM
 - - - - 5 %, DYNAMIC RESPONSE SPECTRUM

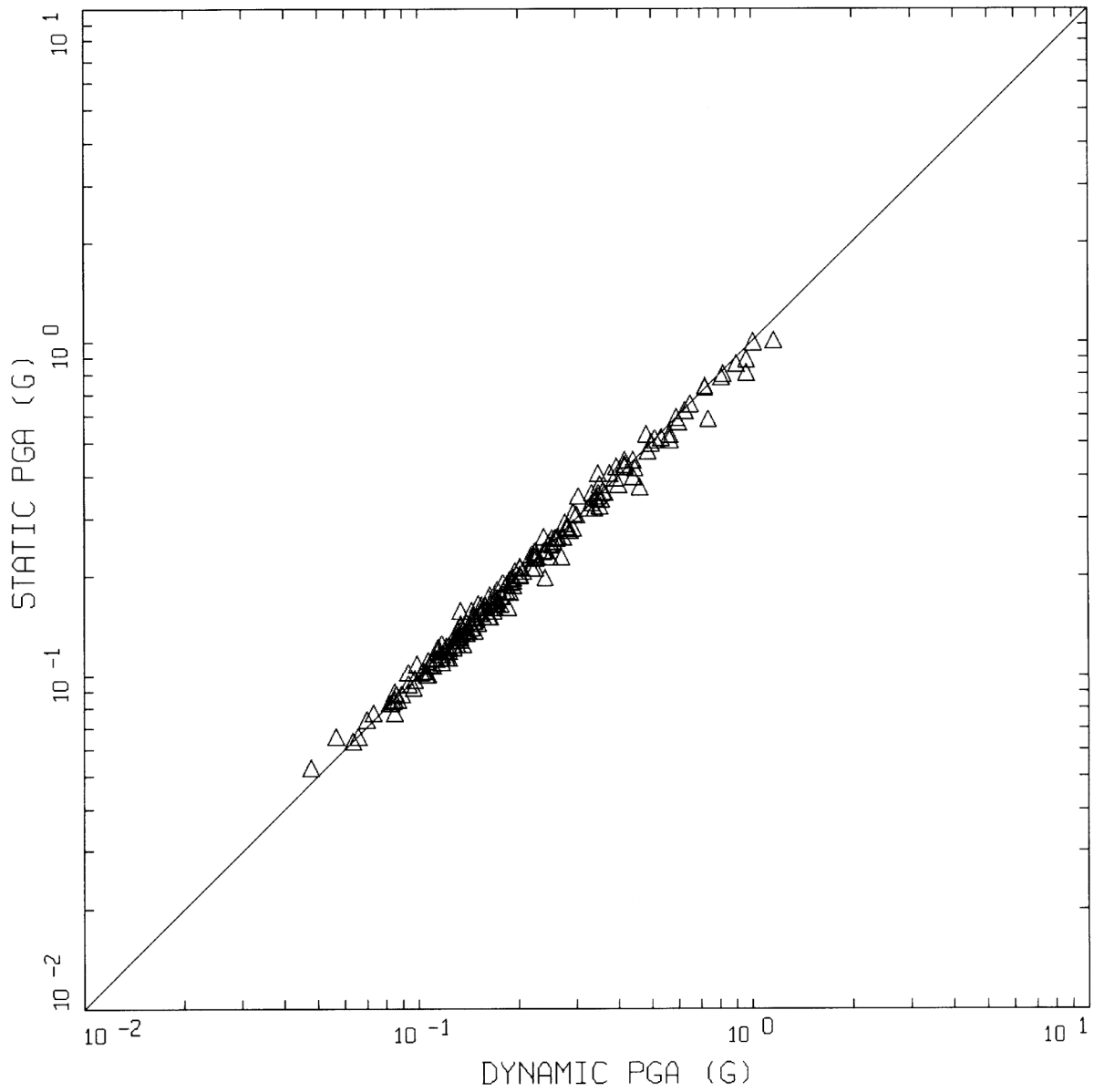
Figure 5b. Comparison between the acceleration response spectra (5% spectral damping) for the static baseline corrected time history (solid line) and the PEER database time history (dashed line) for the east-west component at the TCU068 station.



COMPARISON OF RESPONSE SPECTRA
TCU068: VERTICAL

LEGEND
 ——— 5 %, STATIC RESPONSE SPECTRUM
 - - - - 5 %, DYNAMIC RESPONSE SPECTRUM

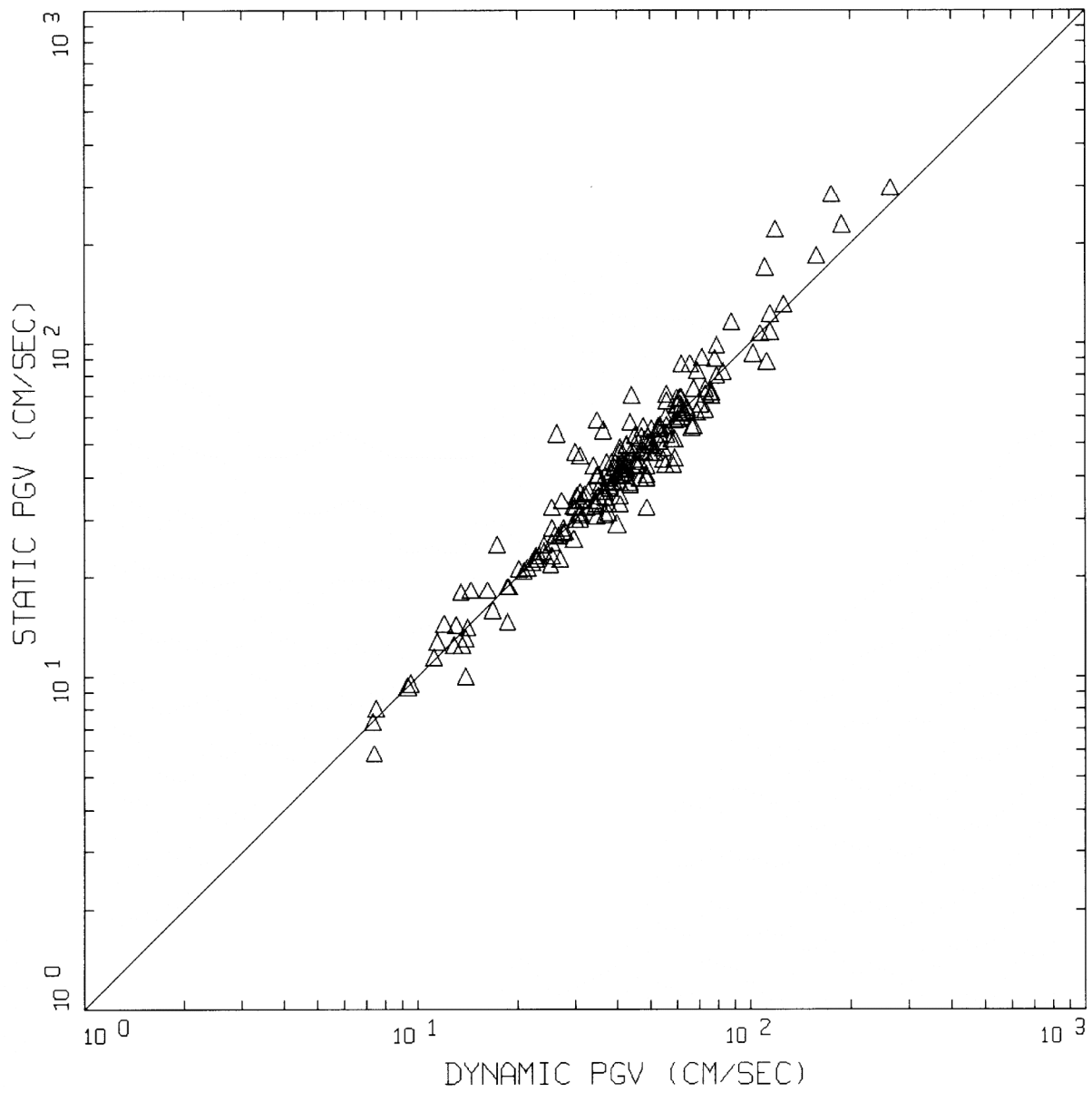
Figure 5c. Comparison between the acceleration response spectra (5% spectral damping) for the static baseline corrected time history (solid line) and the PEER database time history (dashed line) for the vertical component at the TCU068 station.



DYNAMIC AND STATIC: PGA

△ △ LEGEND
 — ONE-TO-ONE LINE

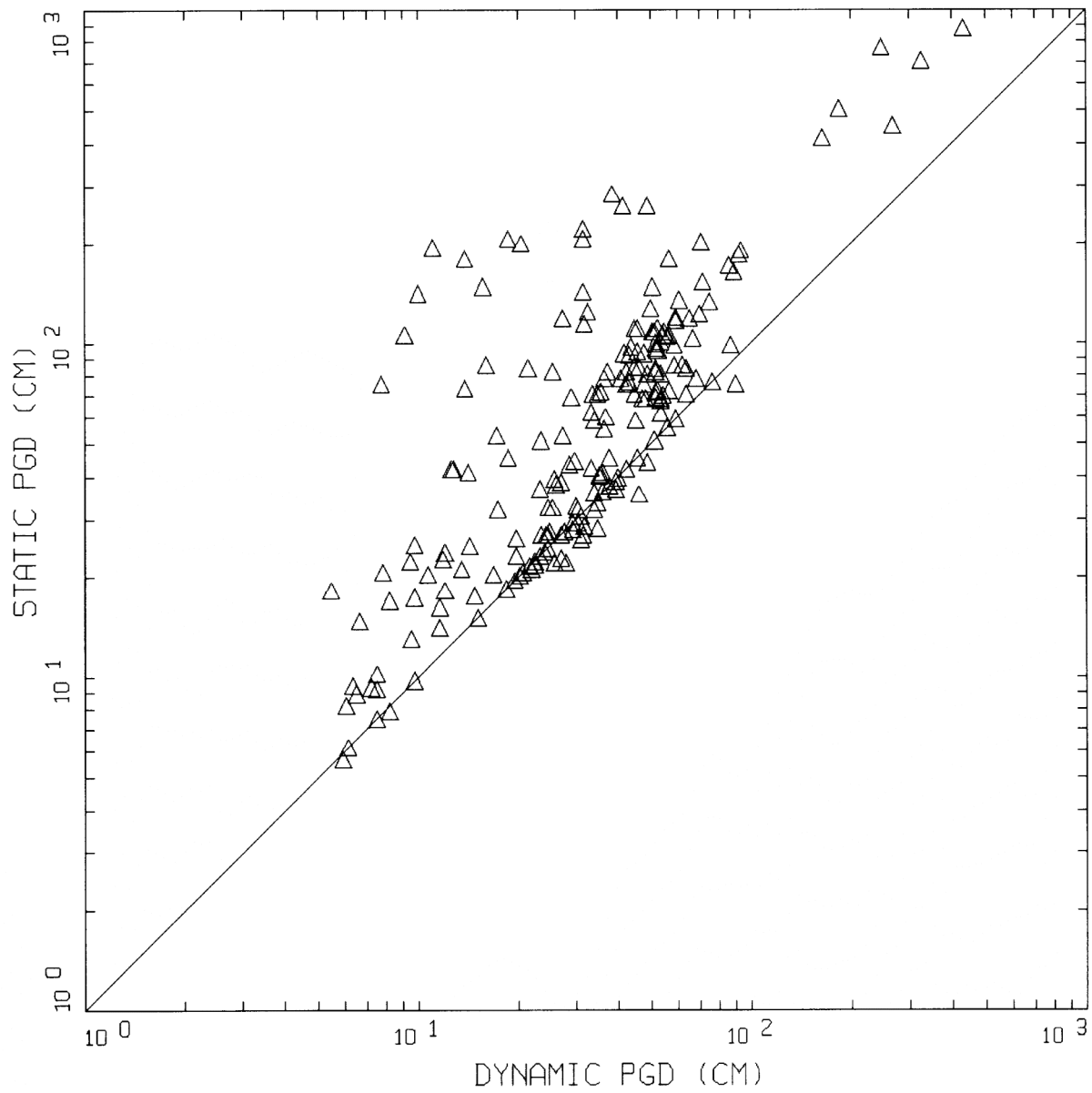
Figure 6a. Comparison between the PGA values for the static baseline corrected time histories and the PEER database time histories.



DYNAMIC AND STATIC: PGV

△ △ LEGEND
 ——— DYNAMIC PGV
 ONE-TO-ONE LINE

Figure 6b. Comparison between the PGV values for the static baseline corrected time histories and the PEER database time histories.



DYNAMIC AND STATIC: PGD

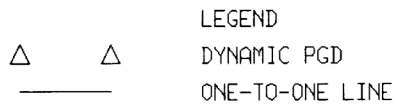
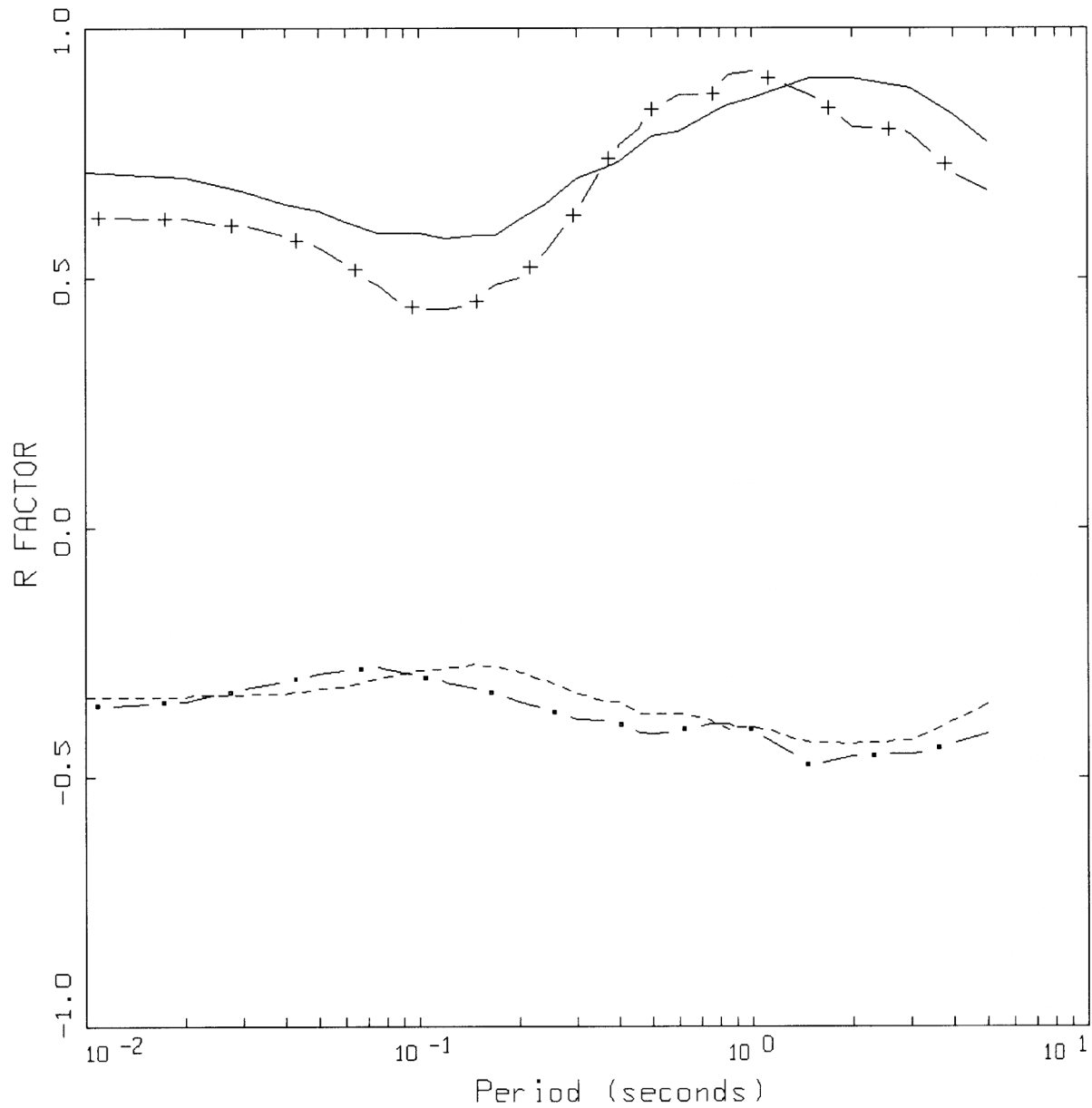


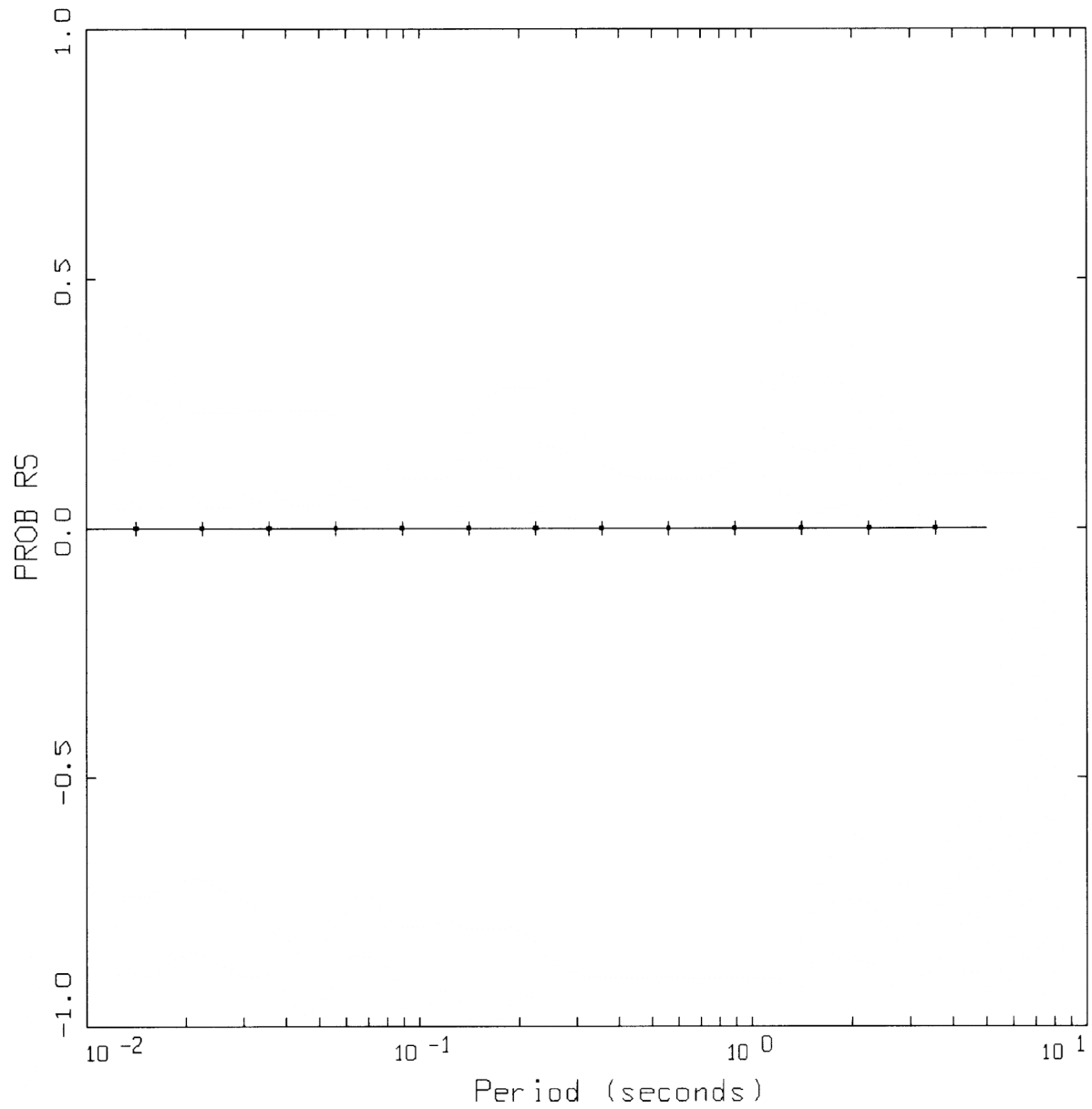
Figure 6c. Comparison between the PGD values for the static baseline corrected time histories and the PEER database time histories.



PEAK CORRELATIONS: PGV (DYNAM)
 HORIZONTAL: ROCK AND SOIL(LIN)

LEGEND
 — PGV:SA
 - - - PGV:1/SA
 - · - 1/PGV:SA
 - + - 1/PGV:1/SA

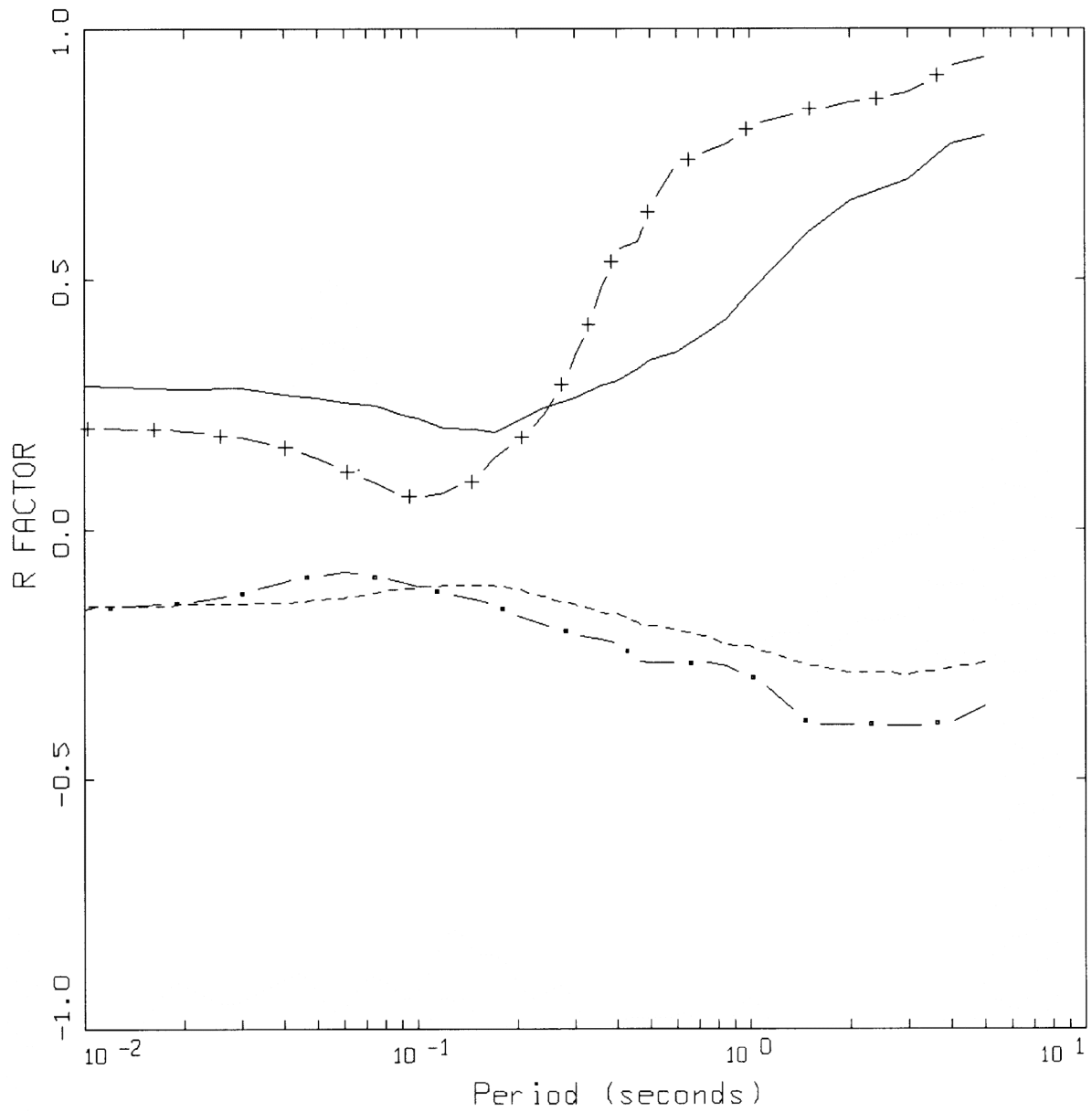
Figure 7a. Linear correlation values as a function of spectral period for the PGV values and the spectral acceleration response values.



PEAK CORRELATIONS: PGV (DYNAM)
 HORIZONTAL: ROCK AND SOIL(LIN)

LEGEND
 — PGV:SA
 - - - PGV:1/SA
 — • — 1/PGV:SA
 — + — 1/PGV:1/SA

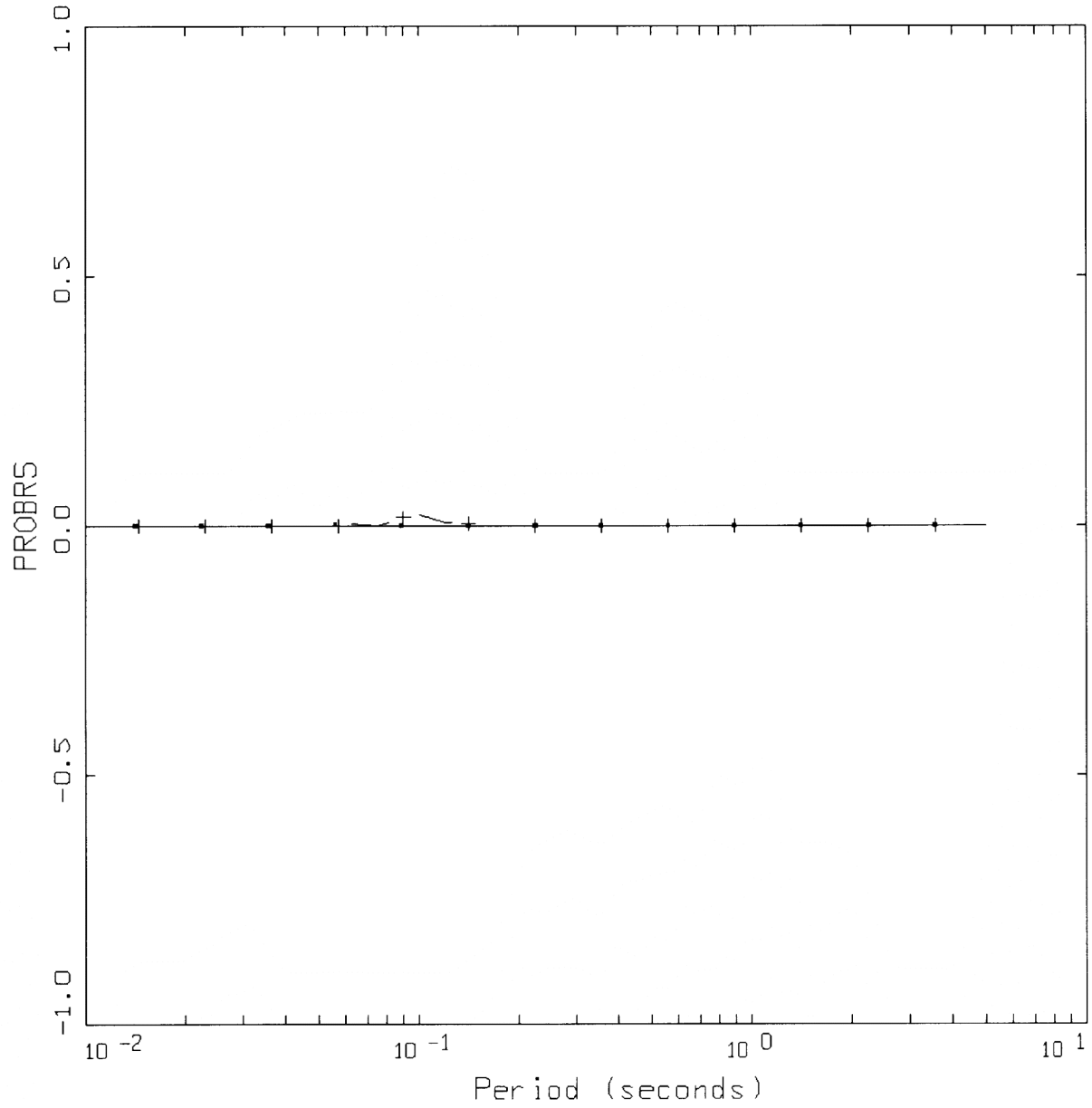
Figure 7b. Probability values for the linear correlation estimates between PGV and SA.



PEAK CORRELATIONS: PGD (DYNAM)
 HORIZONTAL: ROCK AND SOIL(LIN)

LEGEND
 — PGD:SA
 - - - PGD:1/SA
 - · - 1/PGD:SA
 - + - 1/PGD:1/SA

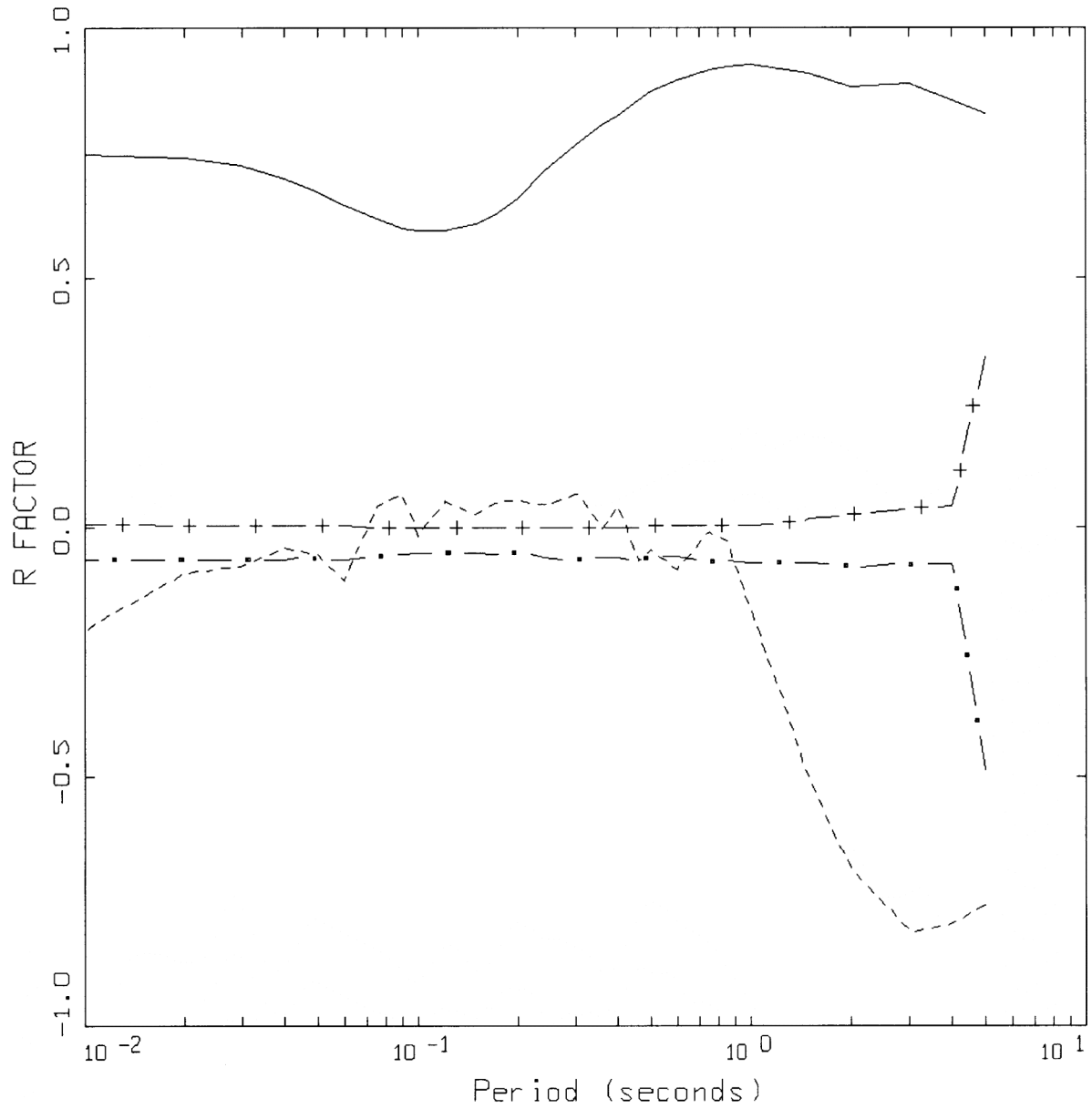
Figure 8a. Linear correlation values as a function of spectral period for the PGD values and the spectral acceleration response values.



PEAK CORRELATIONS: PGD (DYNAM)
 HORIZONTAL: ROCK AND SOIL(LIN)

LEGEND
 — PGD:SA
 - - - PGD:1/SA
 — • — 1/PGD:SA
 — + — 1/PGD:1/SA

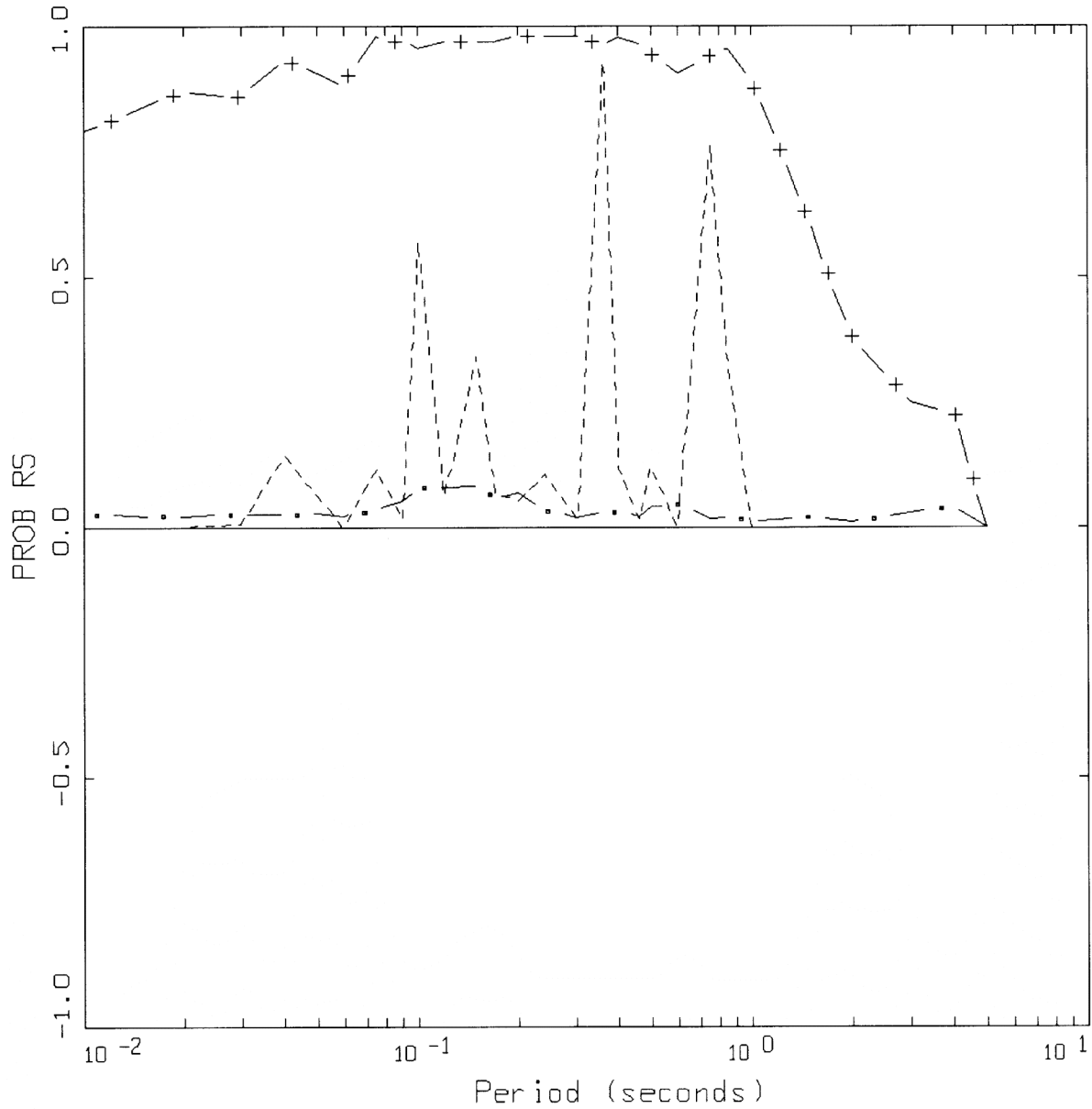
Figure 8b. Probability values for the linear correlation estimates between PGD and spectral acceleration.



PEAK CORRELATIONS: PGV (DYNAM)
 HORIZONTAL: ROCK AND SOIL (LOG)

- LEGEND
- LN(PGV):LN(SA)
 - LN(PGV):1/LN(SA)
 - · - 1/LN(PGV):LN(SA)
 - + - 1/LN(PGV):1/LN(SA)

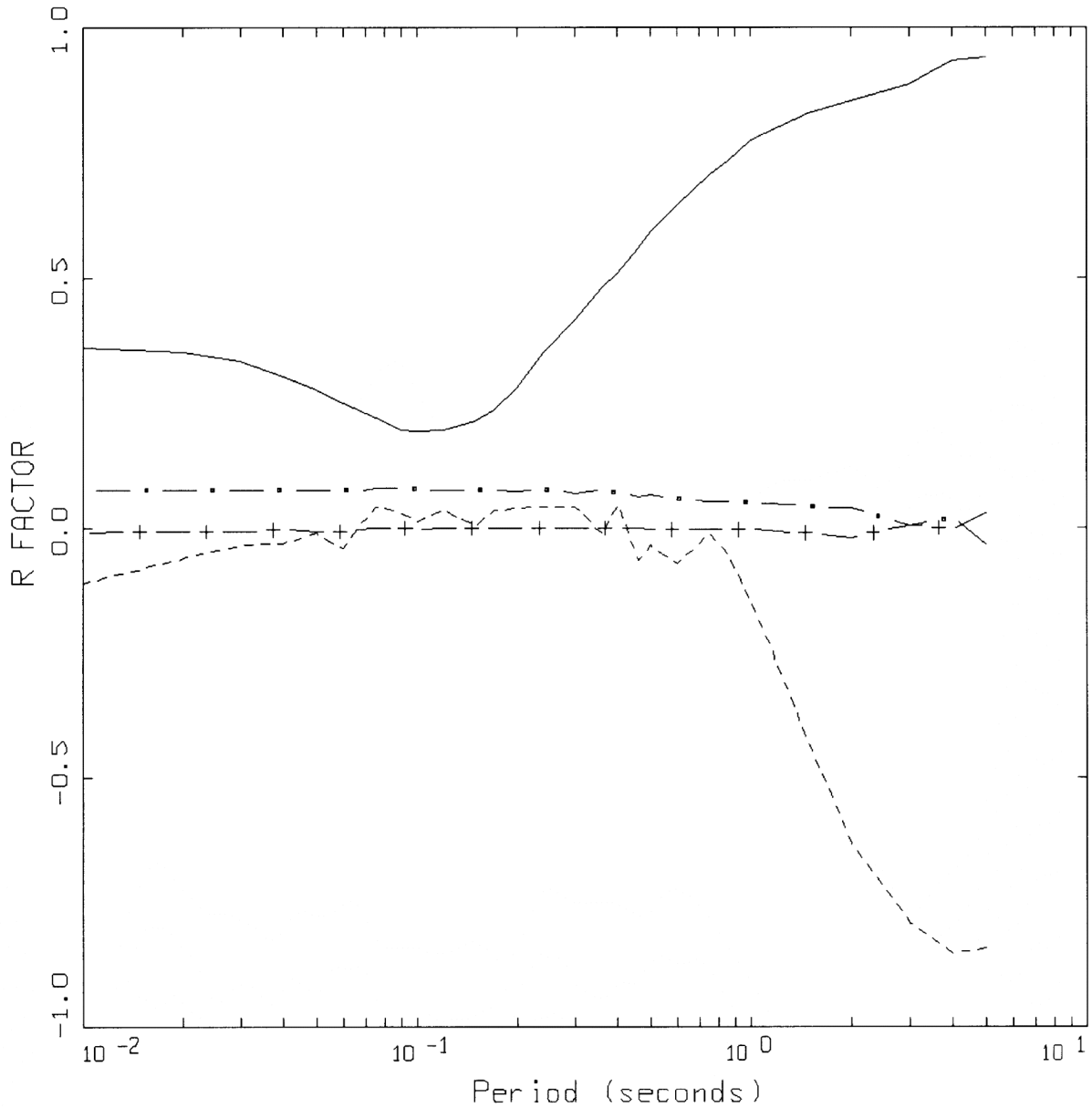
Figure 9a. Linear correlation values as a function of spectral period for the Ln(PGV) values and the natural log spectral acceleration response values.



PEAK CORRELATIONS: PGV (DYNAM)
 HORIZONTAL: ROCK AND SOIL (LOG)

- LEGEND
- + — LN(PGV) : LN(SA)
 - LN(PGV) : 1/LN(SA)
 - • — 1/LN(PGV) : LN(SA)
 - • — 1/LN(PGV) : 1/LN(SA)

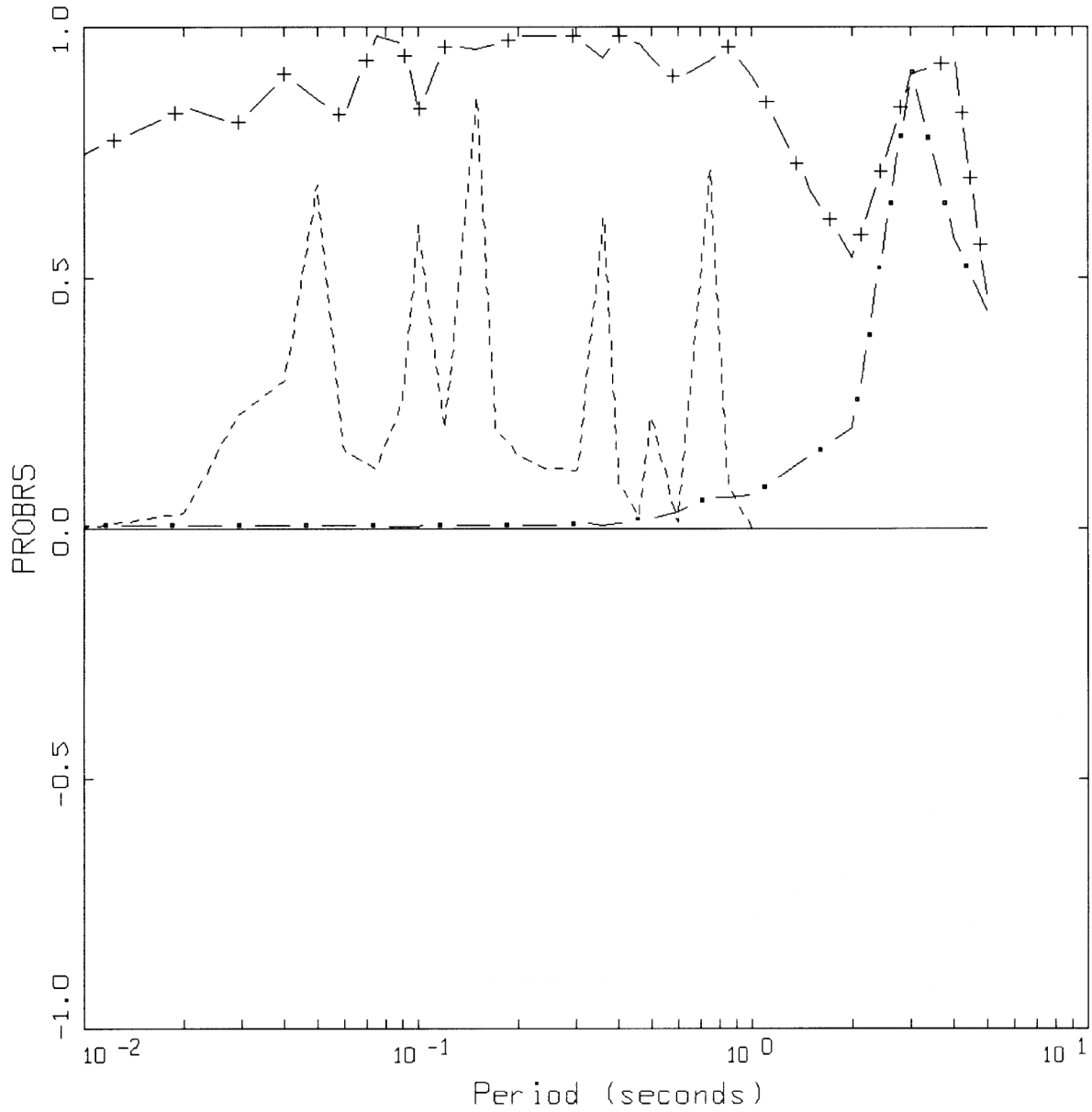
Figure 9b. Probability values for the linear correlation estimates between Ln(PGV) and Ln(SA).



PEAK CORRELATIONS: PGD (DYNAM)
 HORIZONTAL: ROCK AND SOIL (LOG)

- LEGEND
- LN(PGD):LN(SA)
 - - - LN(PGD):1/LN(SA)
 - · - 1/LN(PGD):LN(SA)
 - + - 1/LN(PGD):1/LN(SA)

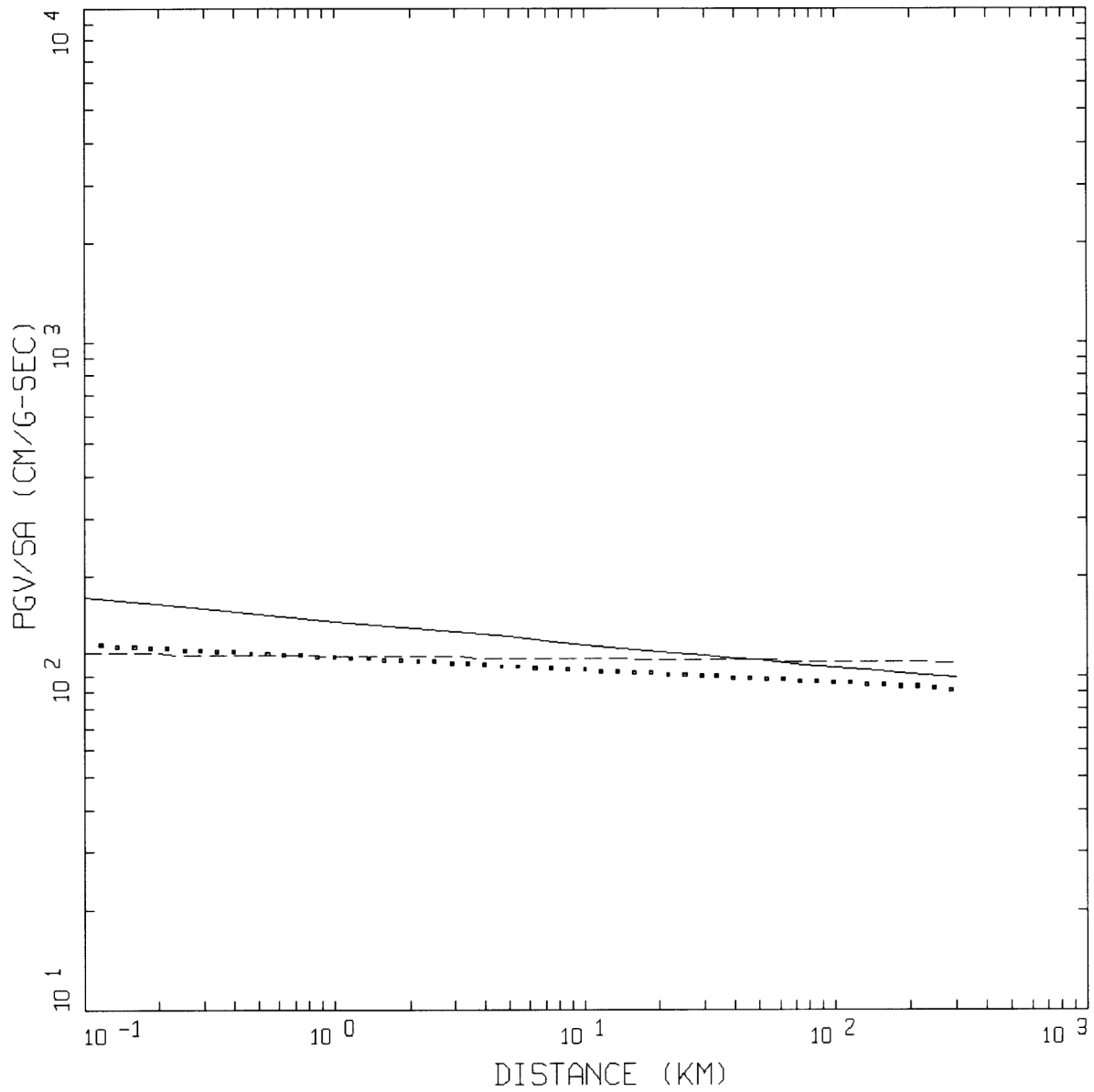
Figure 10a. Linear correlation values as a function of spectral period for the Ln(PGD) values and the natural log spectral acceleration response values.



PEAK CORRELATIONS: PGD (DYNAM)
 HORIZONTAL: ROCK AND SOIL (LOG)

- LEGEND
- LN(PGD) : LN(SA)
 - - - LN(PGD) : 1/LN(SA)
 - . - 1/LN(PGD) : LN(SA)
 - + - 1/LN(PGD) : 1/LN(SA)

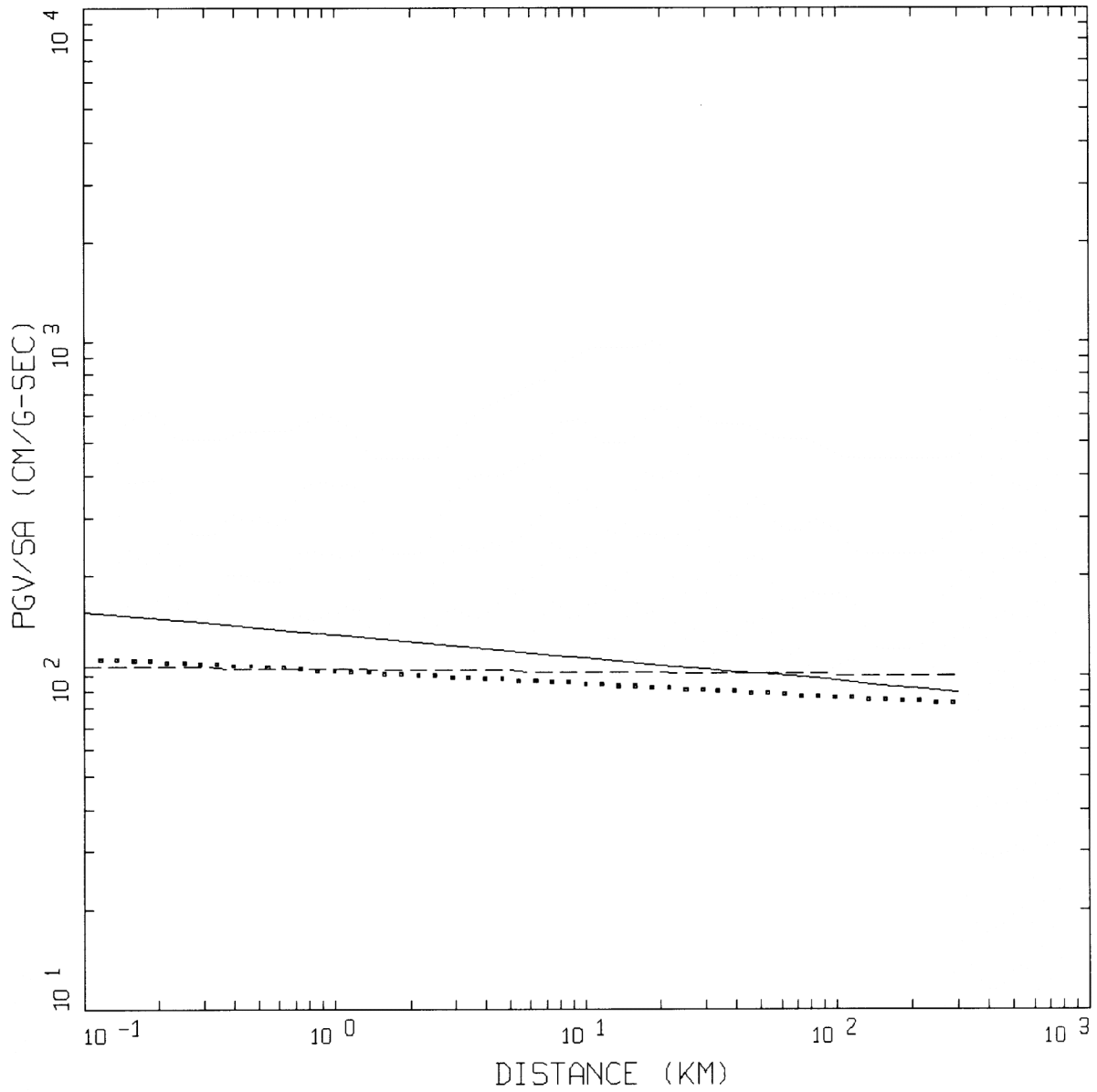
Figure 10b. Probability values for the linear correlation estimates between Ln(PGD) and Ln(SA).



PGV/SA(T=1s), HORIZONTAL, ROCK
 DYNAMIC DATASET (LINEAR)

- LEGEND
- M=7.5, ROCK, HORIZONTAL
 - M=6.5, ROCK, HORIZONTAL
 - - - M=5.5, ROCK, HORIZONTAL

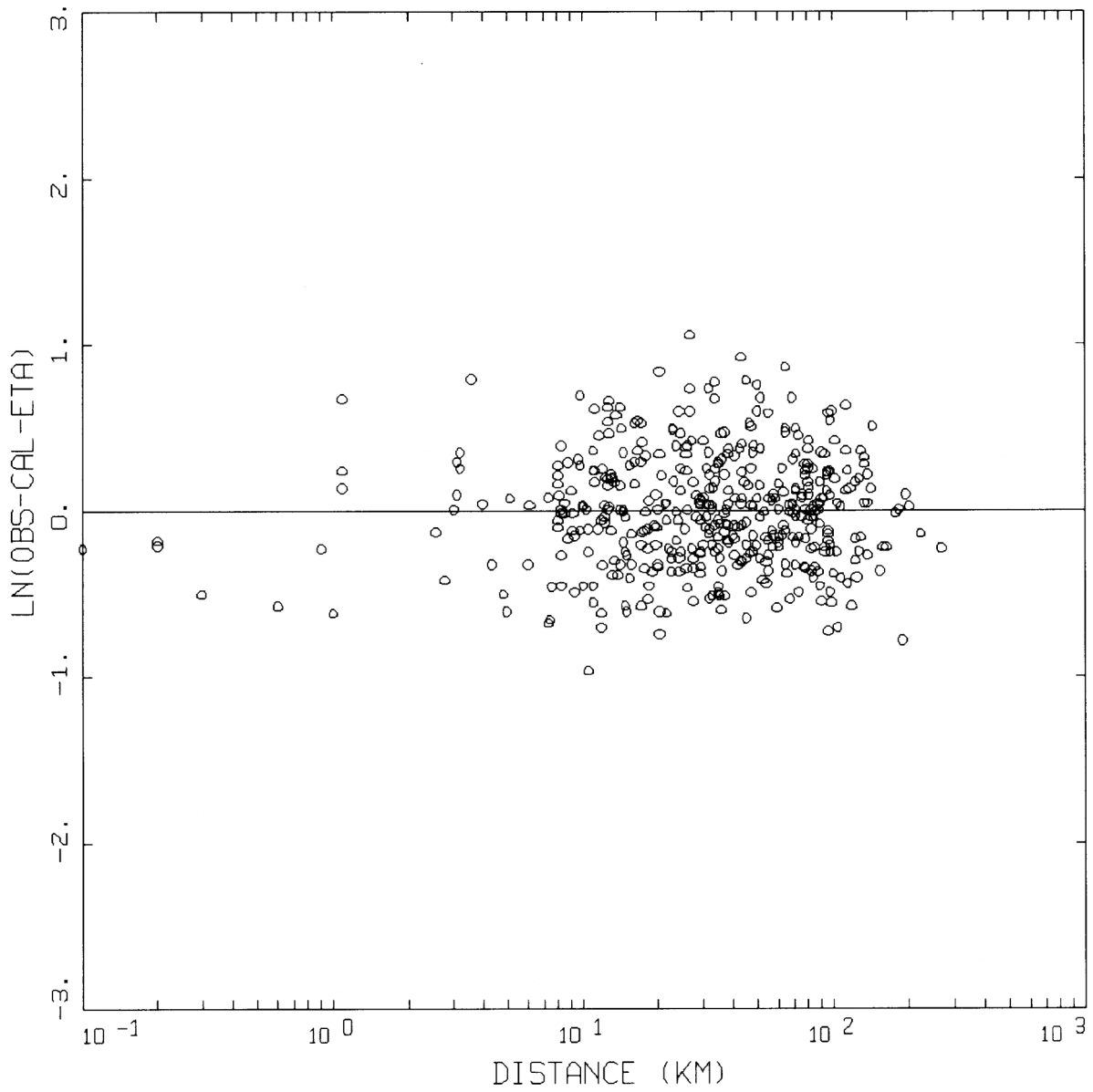
Figure 11a. Model estimates for M=5.5, 6.5, and 7.5 for the ratio of PGV to spectral acceleration at T=1.0 second period for the horizontal component on rock site conditions.



PGV/SA(T=1s), HORIZONTAL, SOIL
DYNAMIC DATASET (LINEAR)

- LEGEND
- M=7.5, SOIL, HORIZONTAL
 - M=6.5, SOIL, HORIZONTAL
 - - - M=5.5, SOIL, HORIZONTAL

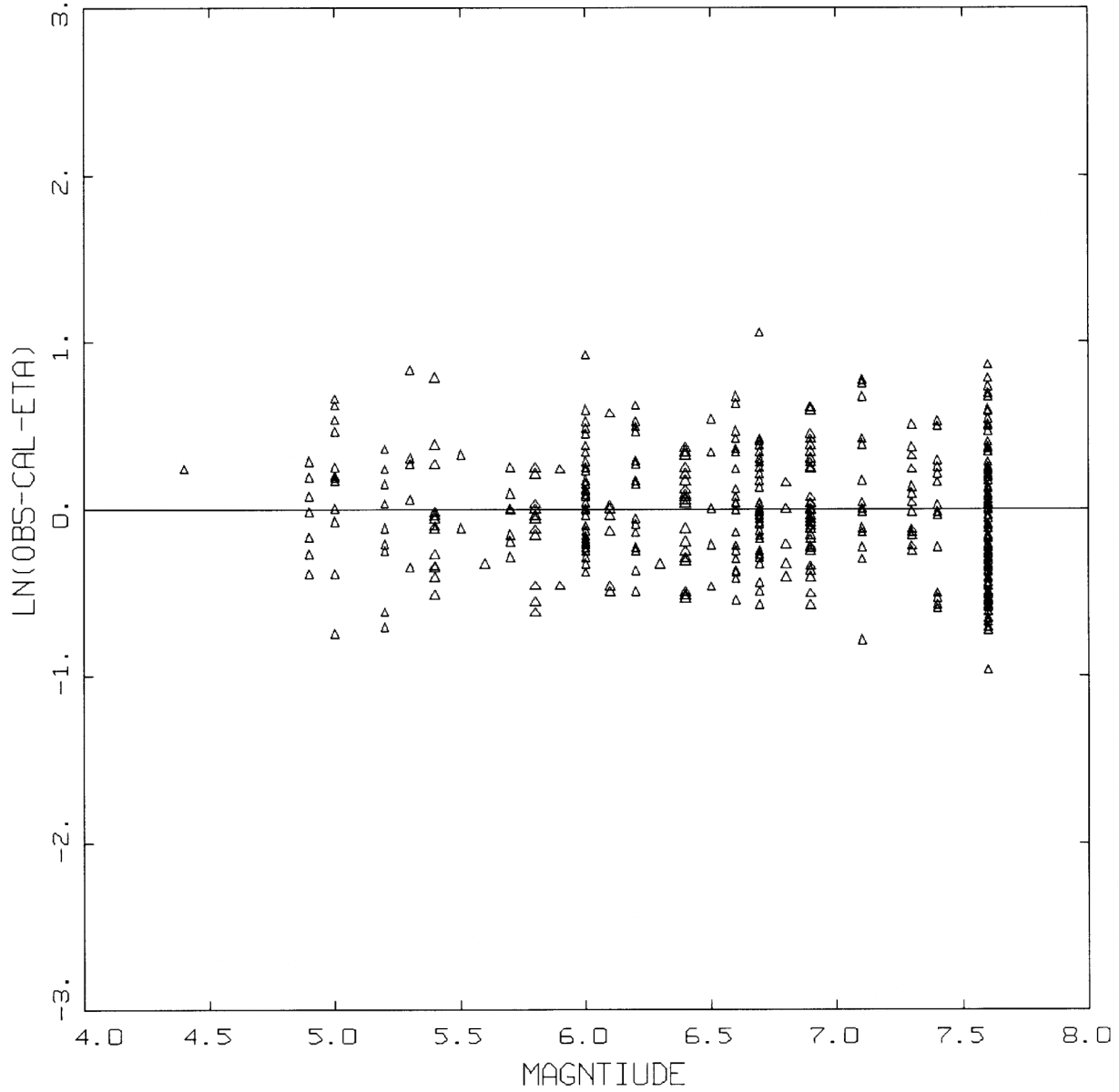
Figure 11b. Model estimates for $M=5.5, 6.5,$ and 7.5 for the ratio of PGV to spectral acceleration at $T=1.0$ second period for the horizontal component on soil site conditions.



PGV/SA(T=1s), HORIZONTAL, ROCK
DYNAMIC DATASET (LINEAR)

LEGEND
 ○ LN RESIDUALS, ROCK, HORIZONTAL
 — ZERO LINE

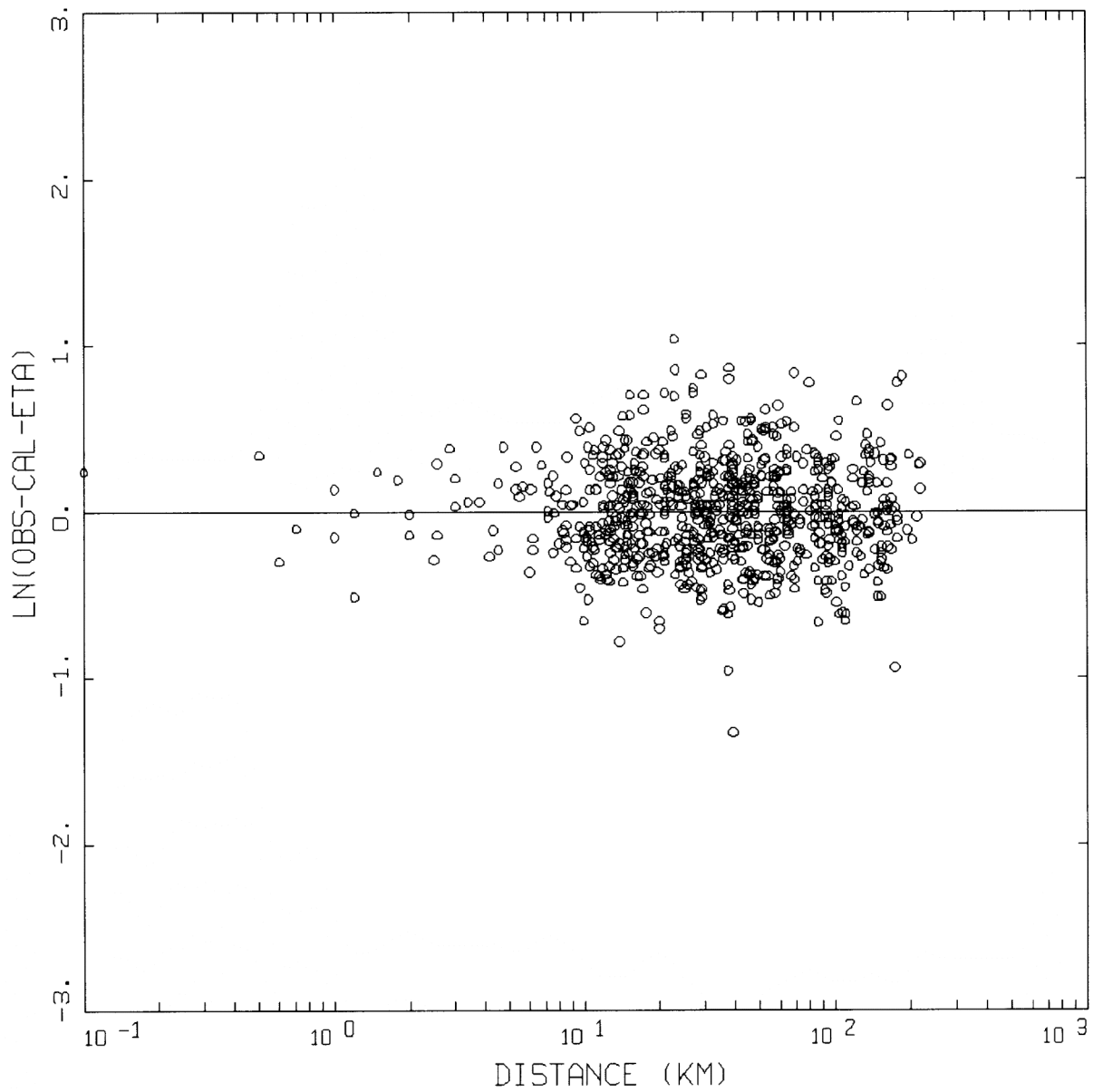
Figure 12a. Residual plots (natural log units) of the PGV/SA (T=1.0 sec) model as a functional of distance for the horizontal component on rock site conditions.



PGV/SA(T=1s), HORIZONTAL, ROCK
 DYNAMIC DATASET (LINEAR)

LEGEND
 △ LN RESIDUALS, ROCK, HORIZONTAL
 — ZERO LINE

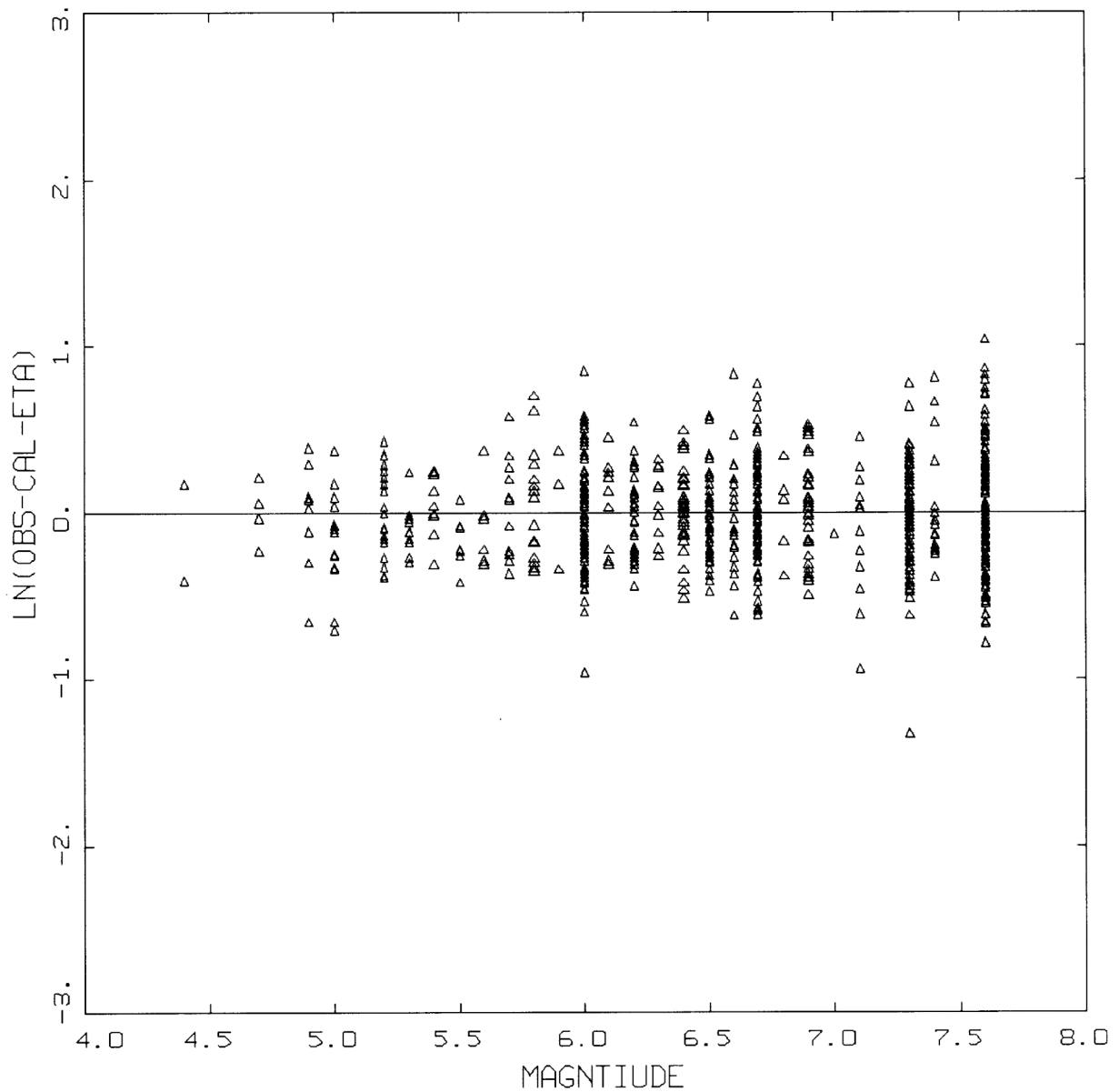
Figure 12b. Residual plots (natural log units) of the PGV/SA (T=1.0 sec) model as a functional of magnitude for the horizontal component on rock site conditions.



PGV/SA(T=1s), HORIZONTAL, SOIL
 DYNAMIC DATASET (LINEAR)

LEGEND
 ○ LN RESIDUALS, SOIL, HORIZONTAL
 — ZERO LINE

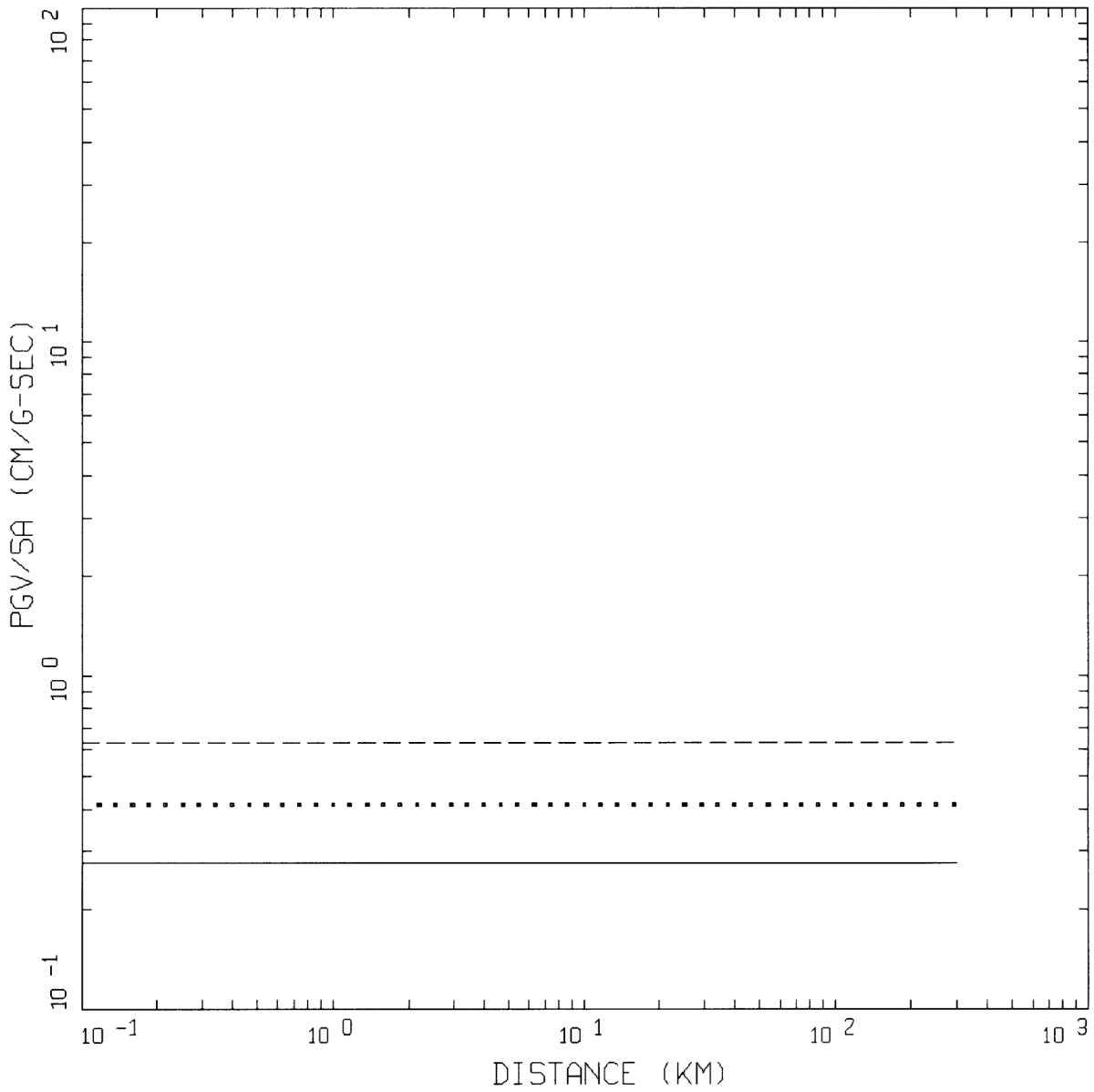
Figure 12c. Residual plots (natural log units) of the PGV/SA (T=1.0 sec) model as a functional of distance for the horizontal component on soil site conditions.



PGV/SA(T=1s), HORIZONTAL, SOIL
DYNAMIC DATASET (LINEAR)

LEGEND
 Δ LN RESIDUALS, SOIL, HORIZONTAL
 — ZERO LINE

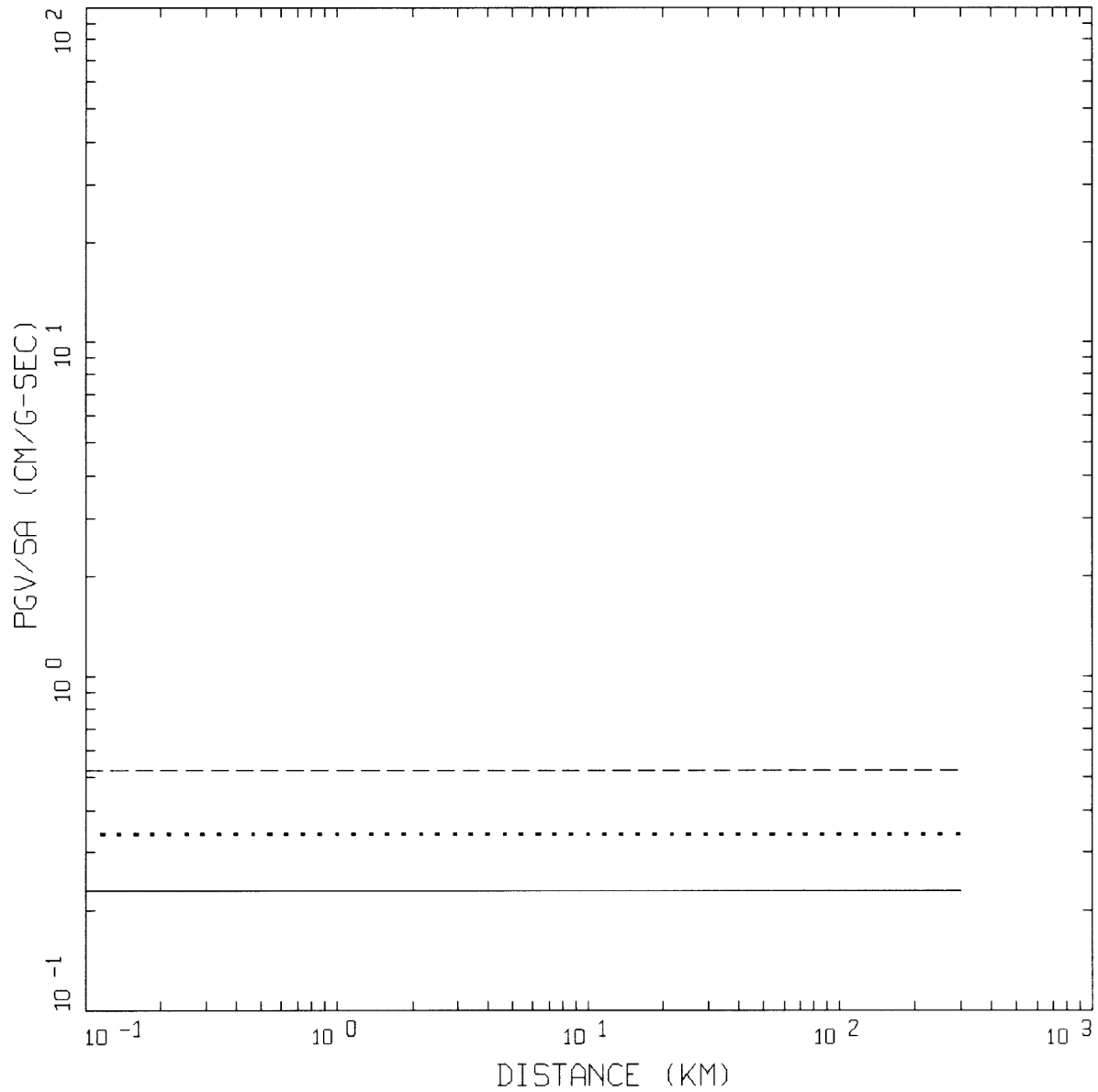
Figure 12d. Residual plots (natural log units) of the PGV/SA (T=1.0 sec) model as a functional of magnitude for the horizontal component on soil site conditions.



PGV/SA(T=1s), HORIZONTAL, ROCK
DYNAMIC DATASET (LOG)

- LEGEND
- M=7.5, ROCK, HORIZONTAL
 - M=6.5, ROCK, HORIZONTAL
 - - - M=5.5, ROCK, HORIZONTAL

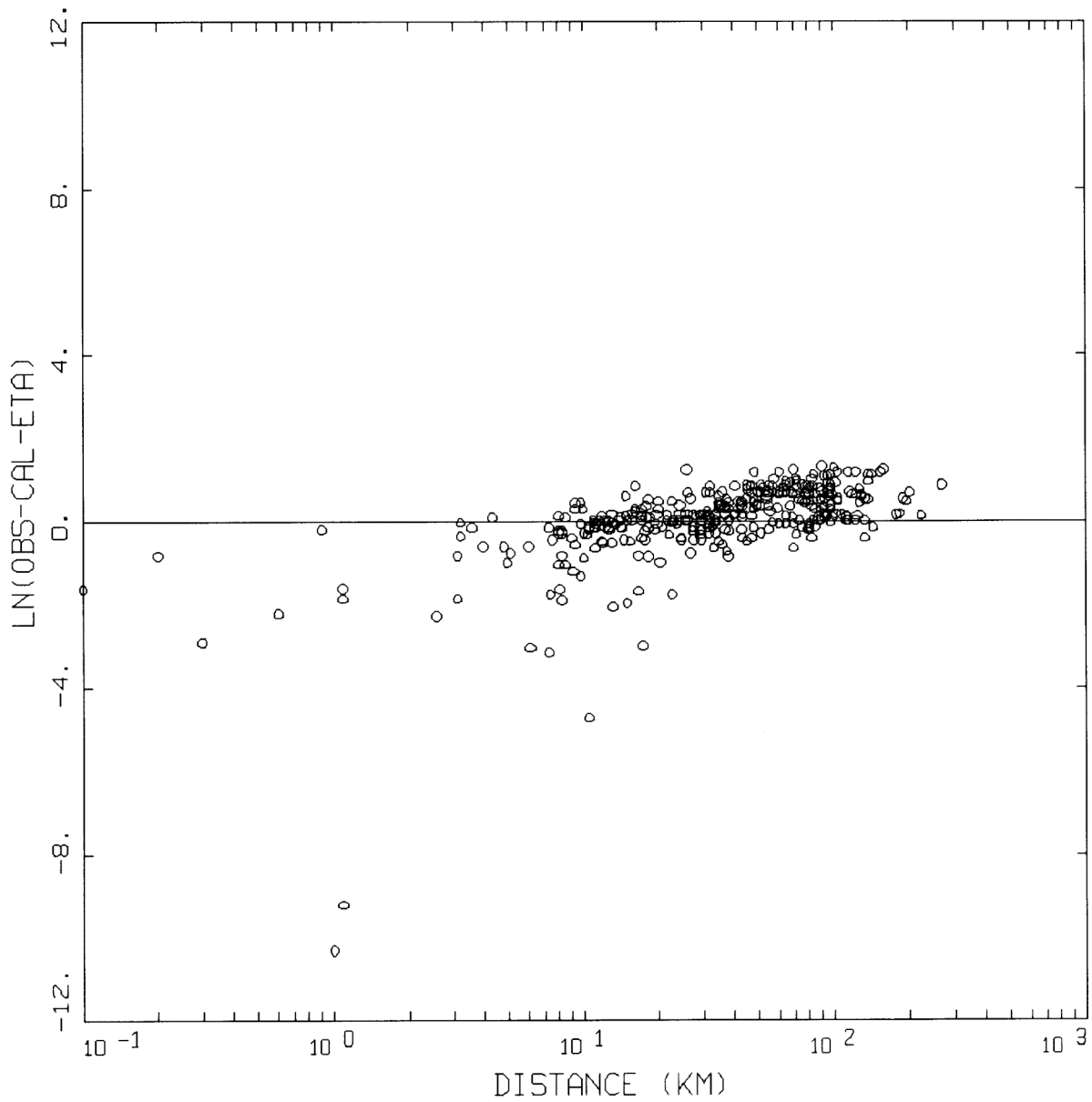
Figure 13a. Model estimates for $M=5.5, 6.5,$ and 7.5 for the ratio of $\ln(\text{PGV})$ to $\ln(\text{SA})$ $T=1.0$ second period for the horizontal component on rock site conditions.



PGV/SA(T=1s), HORIZONTAL, SOIL
 DYNAMIC DATASET (LOG)

LEGEND
 ——— M=7.5, SOIL, HORIZONTAL
 M=6.5, SOIL, HORIZONTAL
 - - - - M=5.5, SOIL, HORIZONTAL

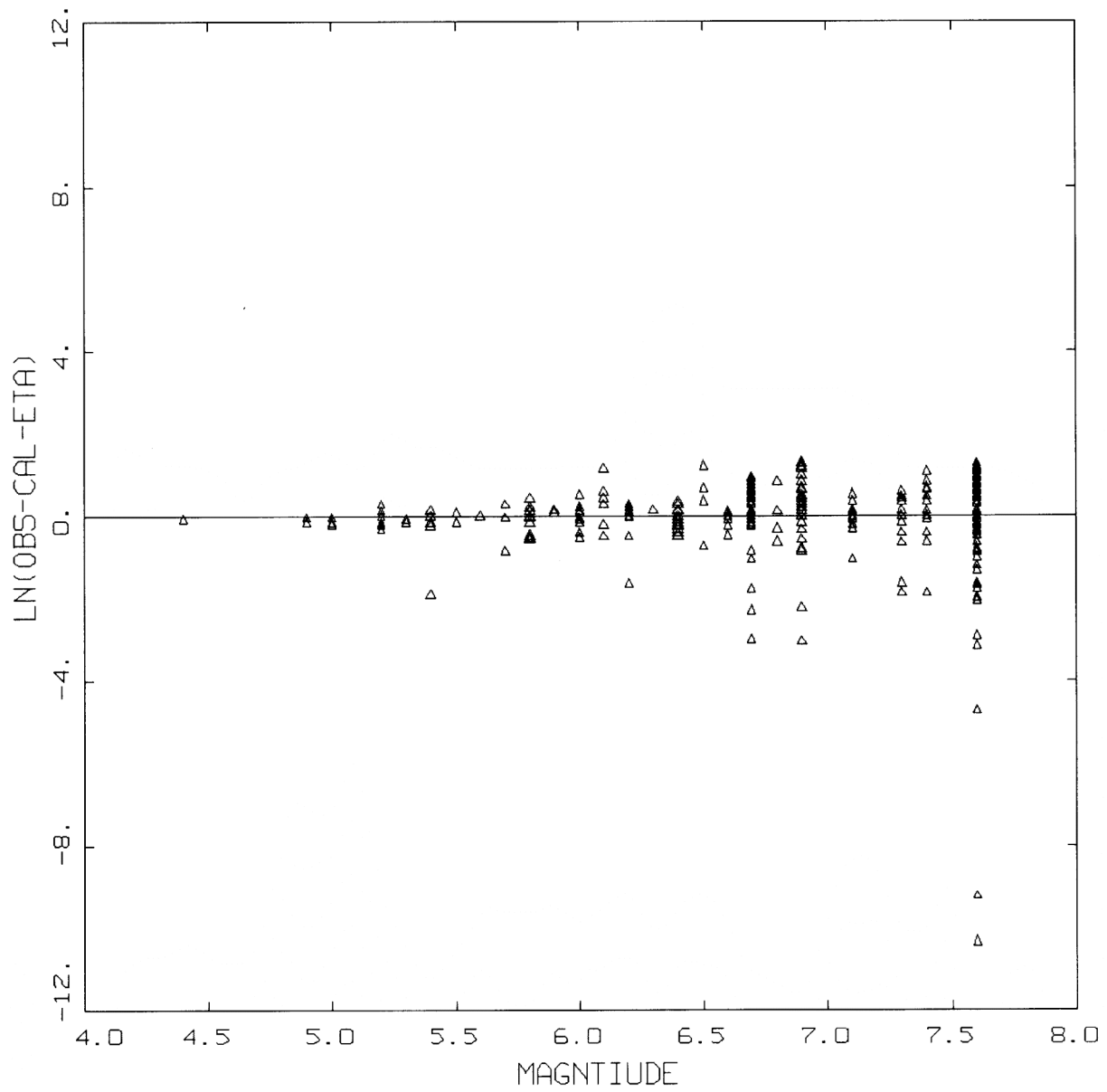
Figure 13b. Model estimates for M=5.5, 6.5, and 7.5 for the ratio of Ln(PGV) to Ln(SA) at T=1.0 second period for the horizontal component on soil site conditions.



PGV/SA(T=1s), HORIZONTAL, ROCK
 DYNAMIC DATASET (LOG)

- LEGEND
- LN RESIDUALS, ROCK, HORIZONTAL
- ZERO LINE

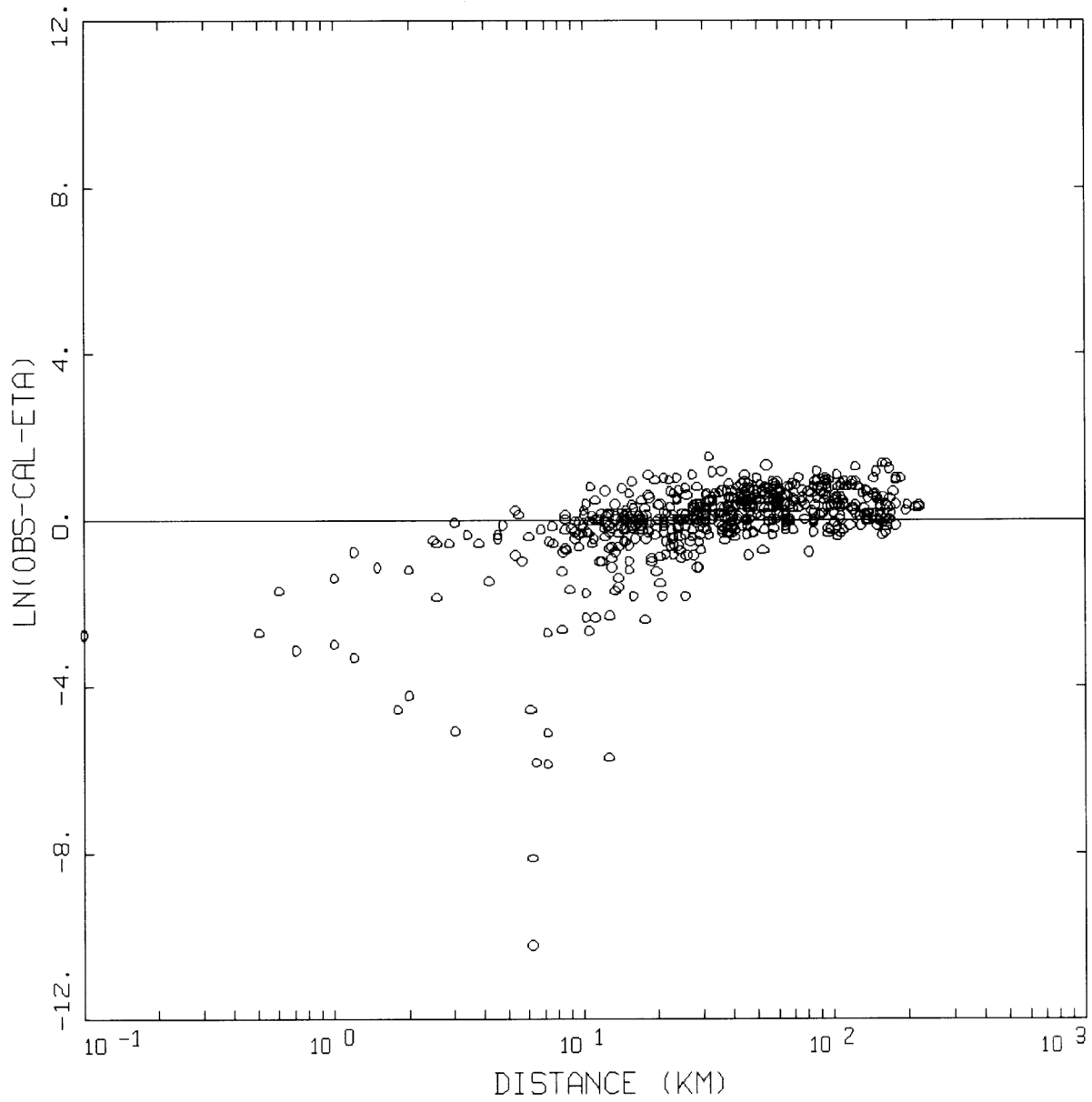
Figure 14a. Residual plots (natural log units) of the $\text{Ln}(\text{PGV})/\text{Ln}(\text{SA})$ (T=1.0 sec) model as a functional of distance for the horizontal component on rock site conditions.



PGV/SA(T=1s), HORIZONTAL, ROCK
DYNAMIC DATASET (LOG)

LEGEND
 ▲ LN RESIDUALS, ROCK, HORIZONTAL
 — ZERO LINE

Figure 14b. Residual plots (natural log units) of the $\text{Ln}(\text{PGV})/\text{Ln}(\text{SA})$ ($T=1.0$ sec) model as a functional of magnitude for the horizontal component on rock site conditions.



PGV/SA(T=1s), HORIZONTAL, SOIL
 DYNAMIC DATASET (LOG)

LEGEND
 ○ LN RESIDUALS, SOIL, HORIZONTAL
 — ZERO LINE

Figure 14c. Residual plots (natural log units) of the $\text{Ln}(\text{PGV})/\text{Ln}(\text{SA})$ (T=1.0 sec) model as a functional of distance for the horizontal component on soil site conditions.

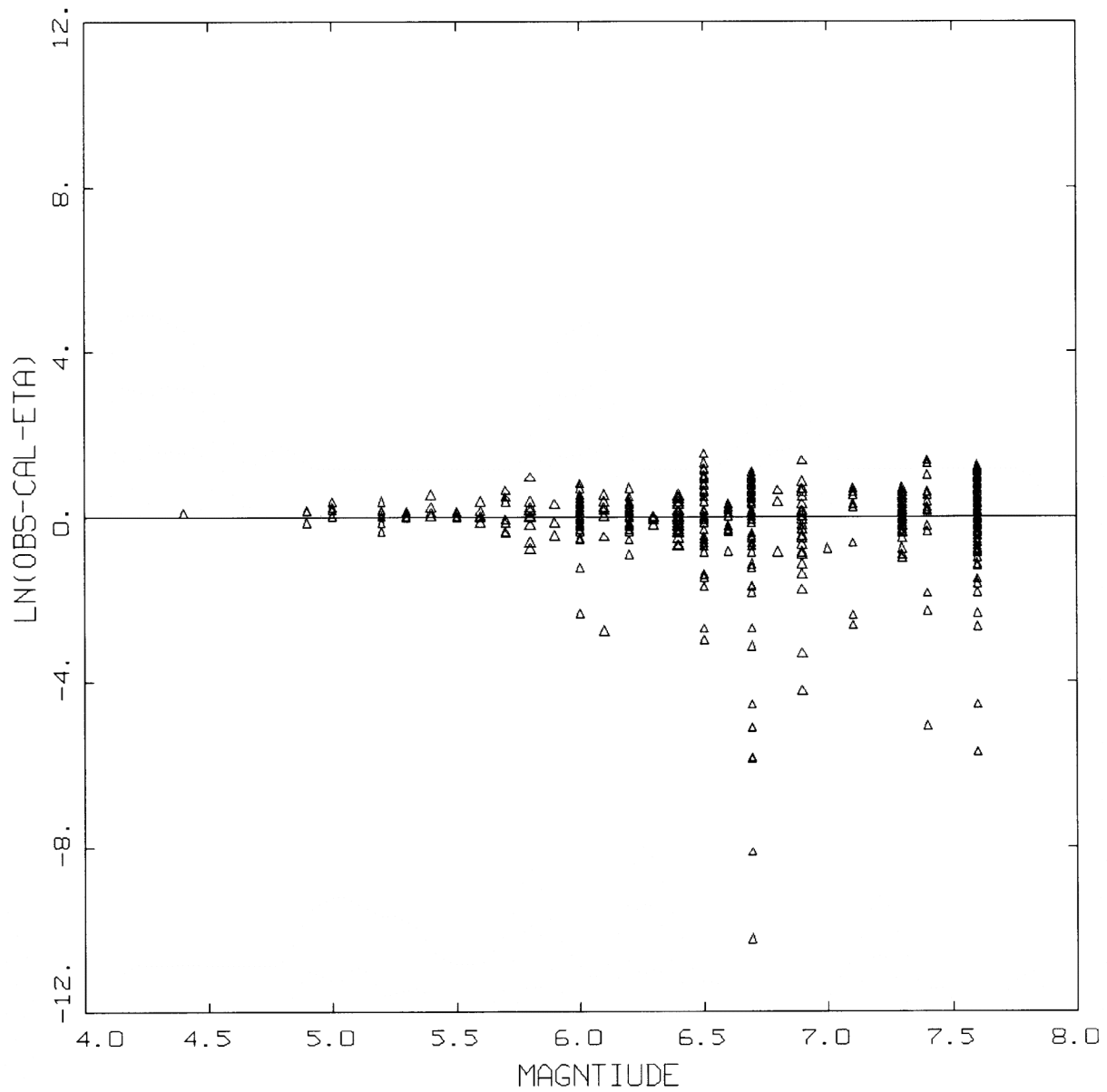


Figure 14d. Residual plots (natural log units) of the $\text{Ln}(\text{PGV})/\text{Ln}(\text{SA})$ ($T=1.0$ sec) model as a functional of magnitude for the horizontal component on soil site conditions.

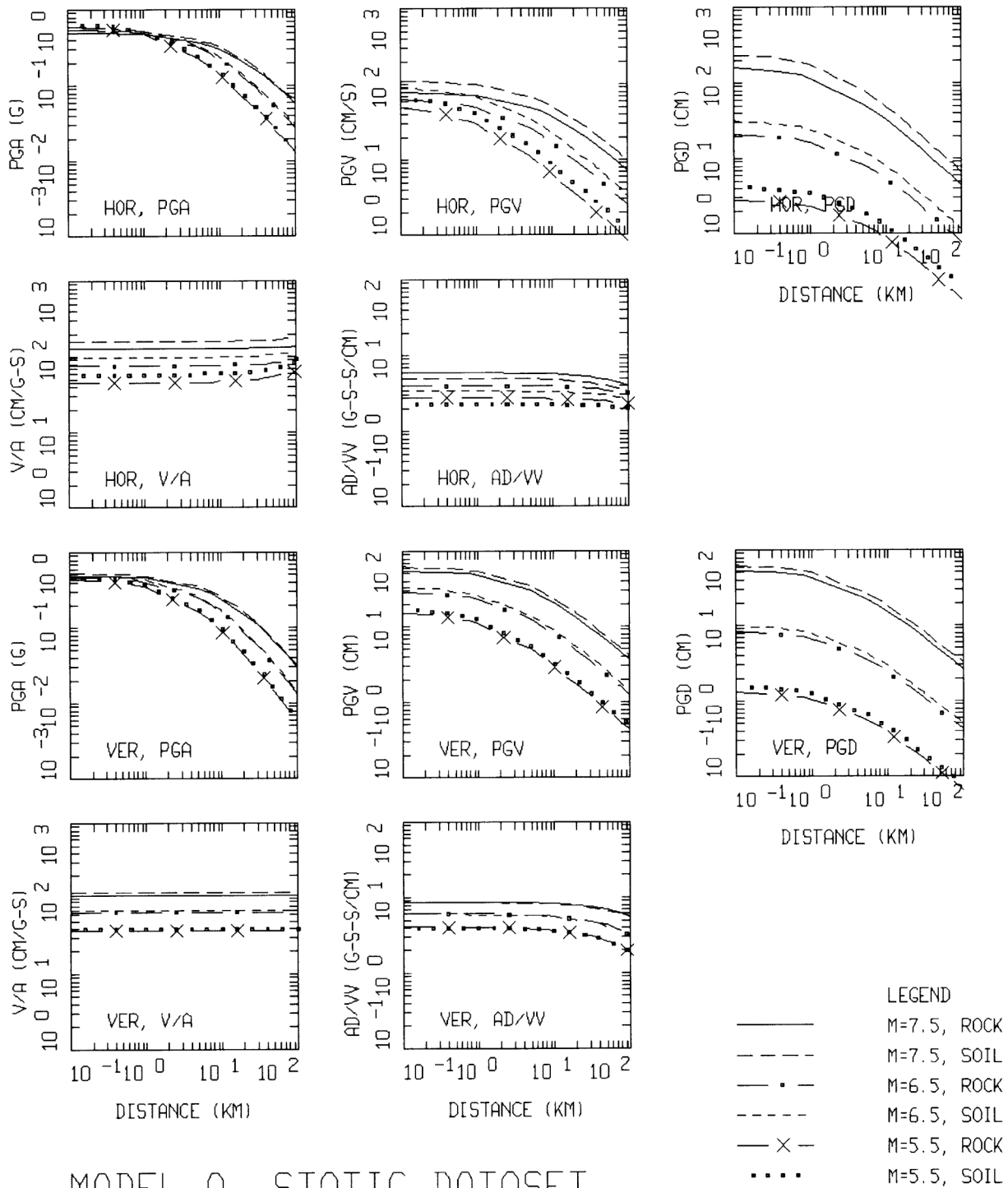
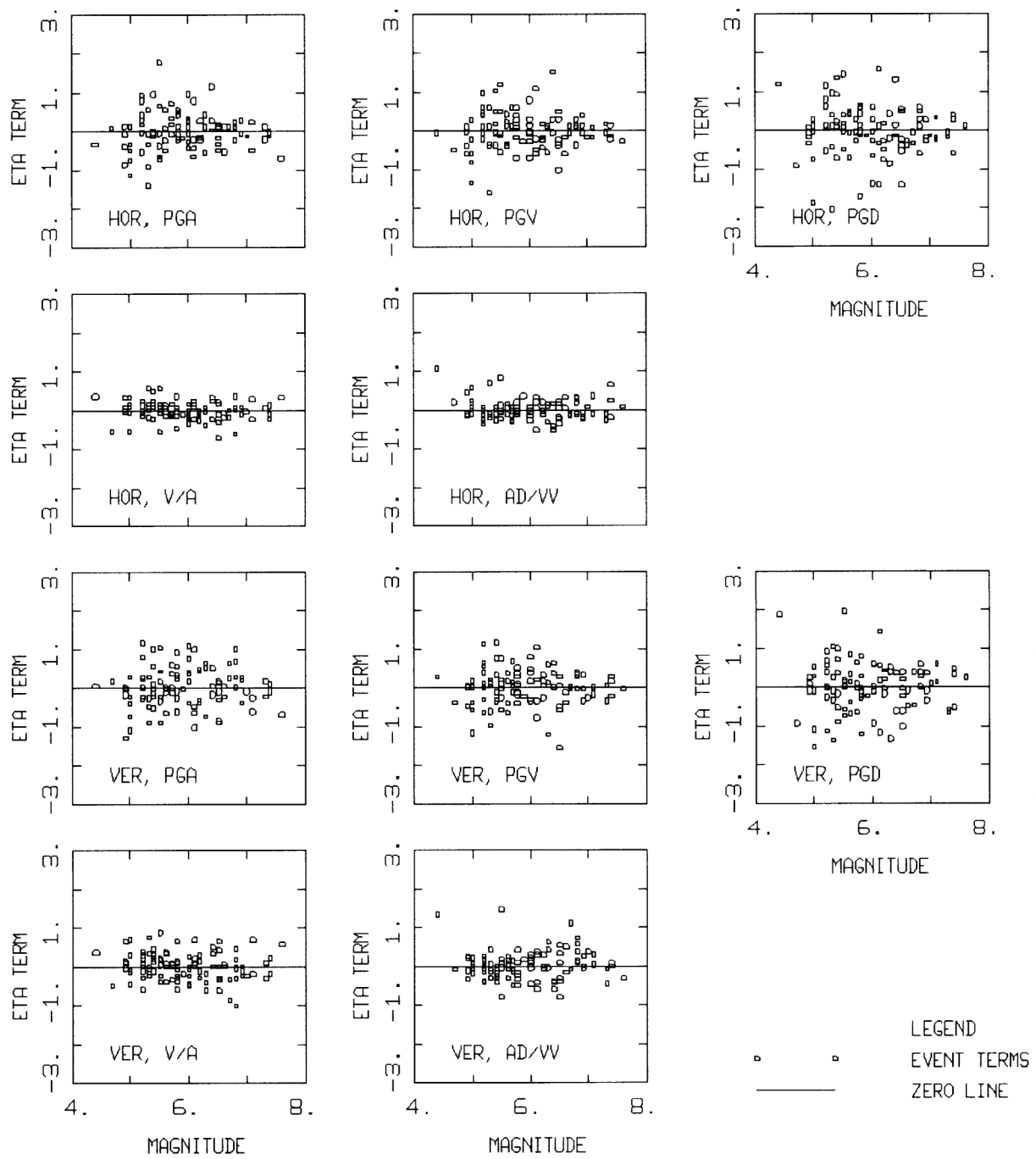
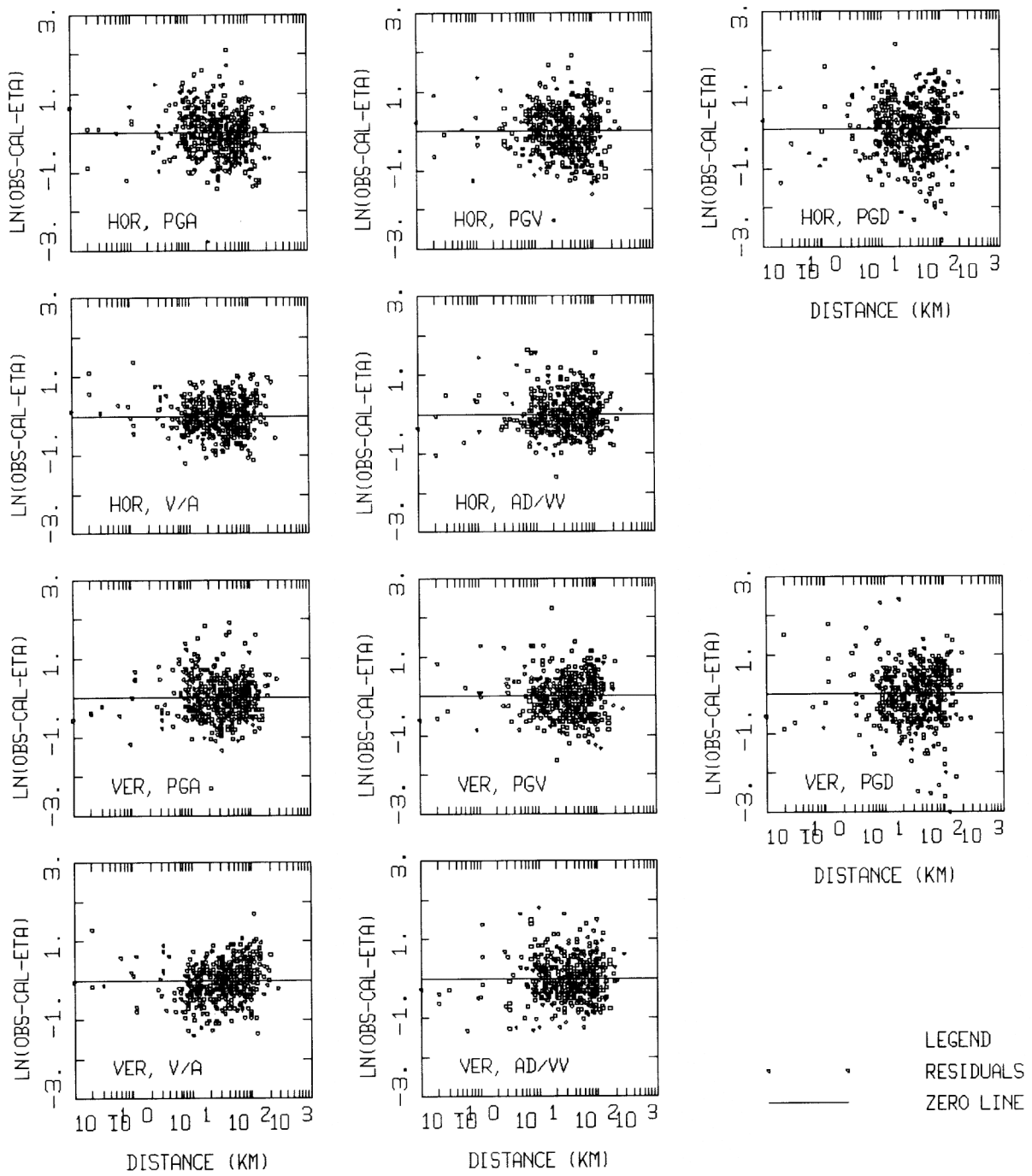


Figure 15a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model A form and the static dataset assuming a strike-slip mechanism.



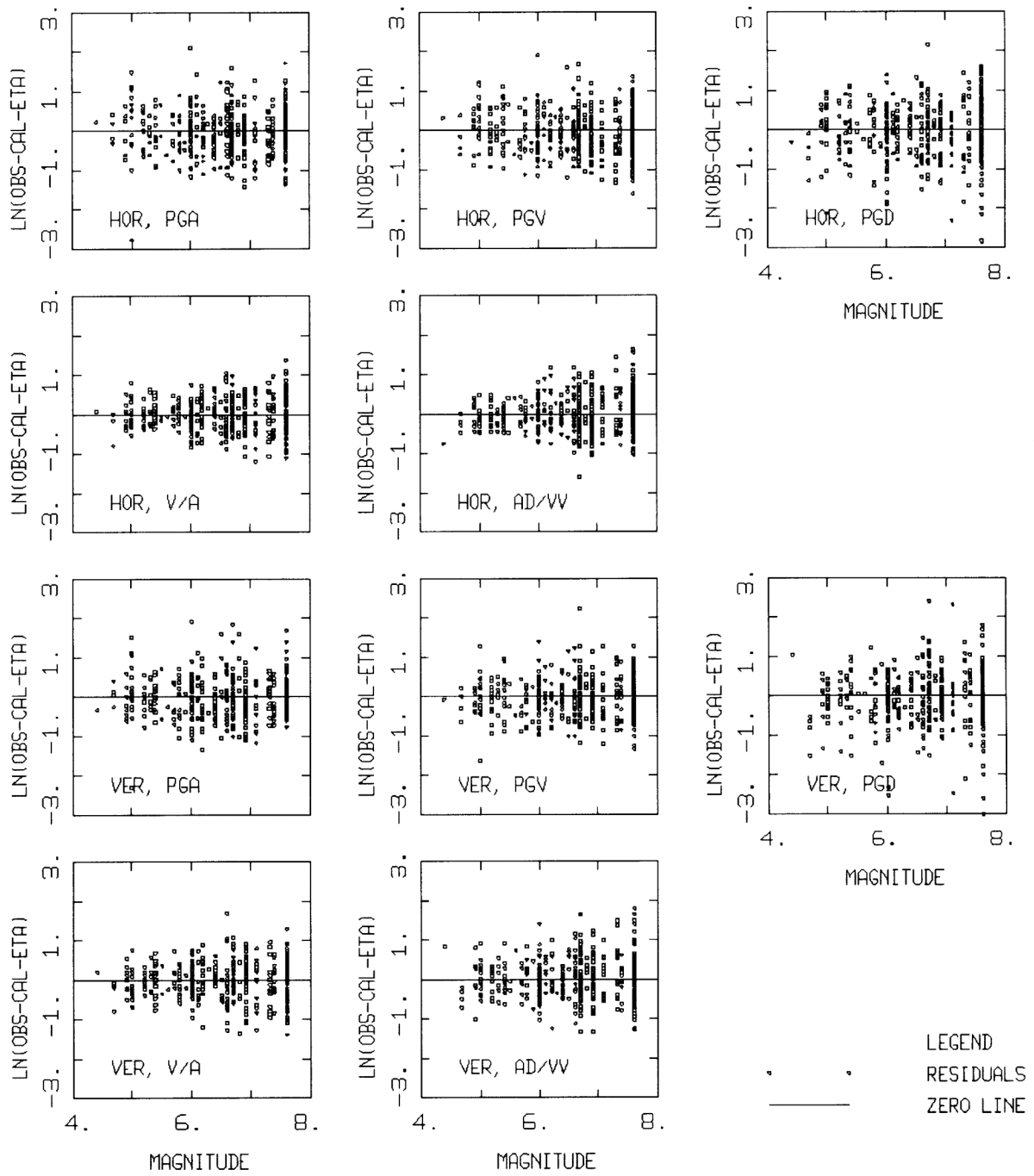
MODEL A, STATIC DATASET

Figure 15b. Eta terms as a function of magnitude for the regressions using Model A with the static dataset.



MODEL A, STATIC DATASET

Figure 15c. Residual plots for Model A with the static dataset as a function of distance.



MODEL A, STATIC DATASET

Figure 15d. Residual plots for Model A with the static dataset as a function of magnitude.

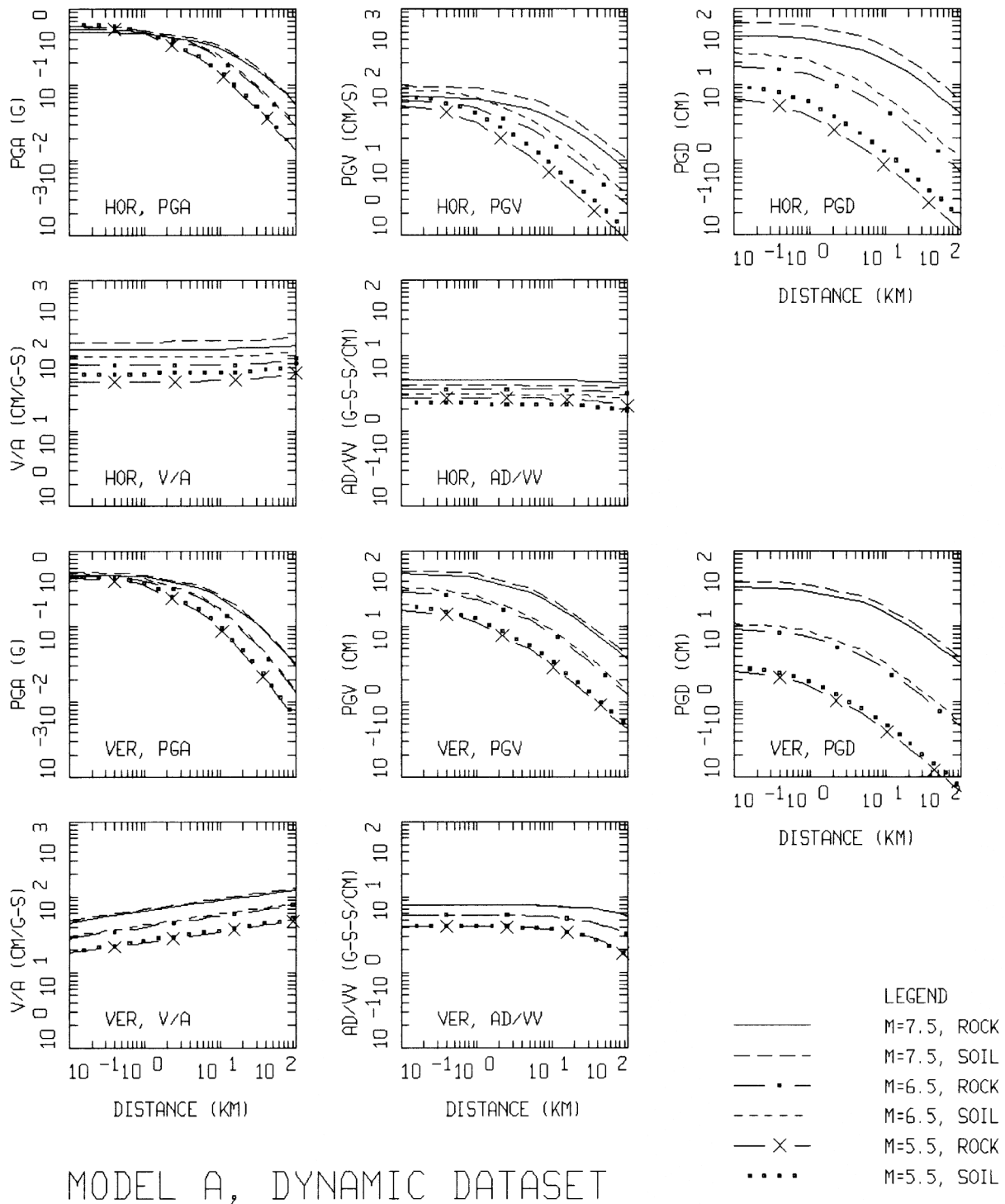
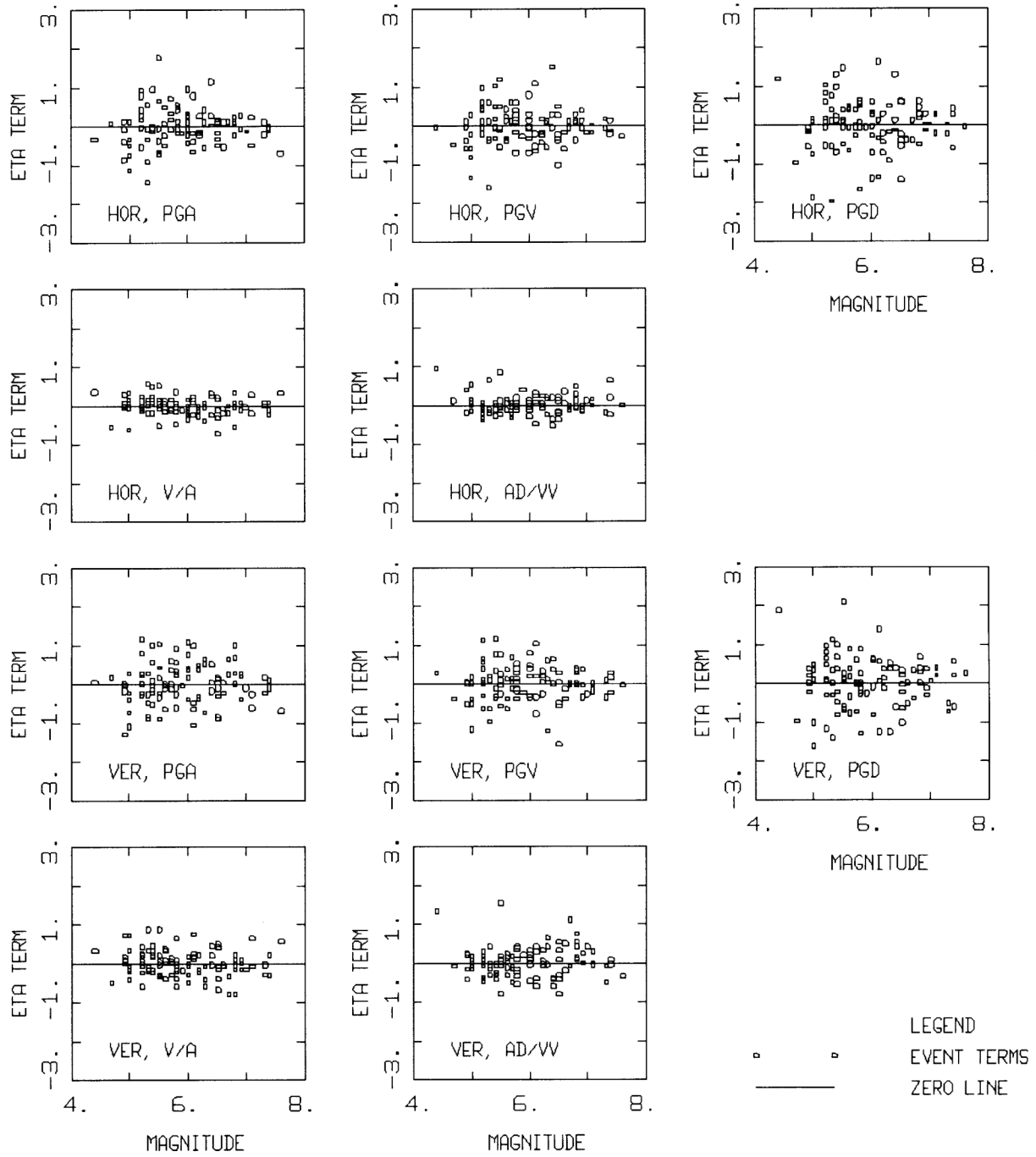
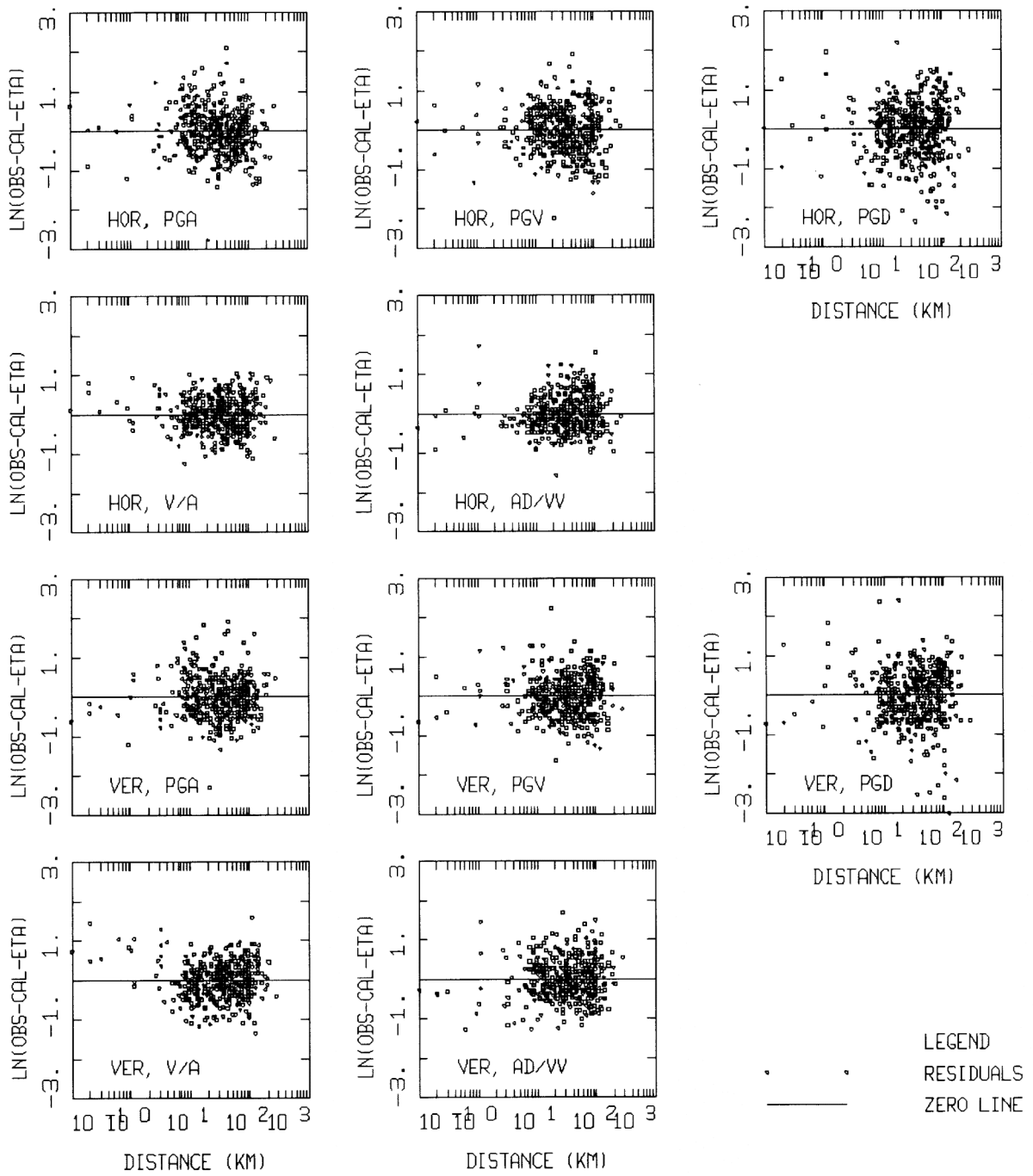


Figure 16a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model A form and the dynamic dataset assuming a strike-slip mechanism.



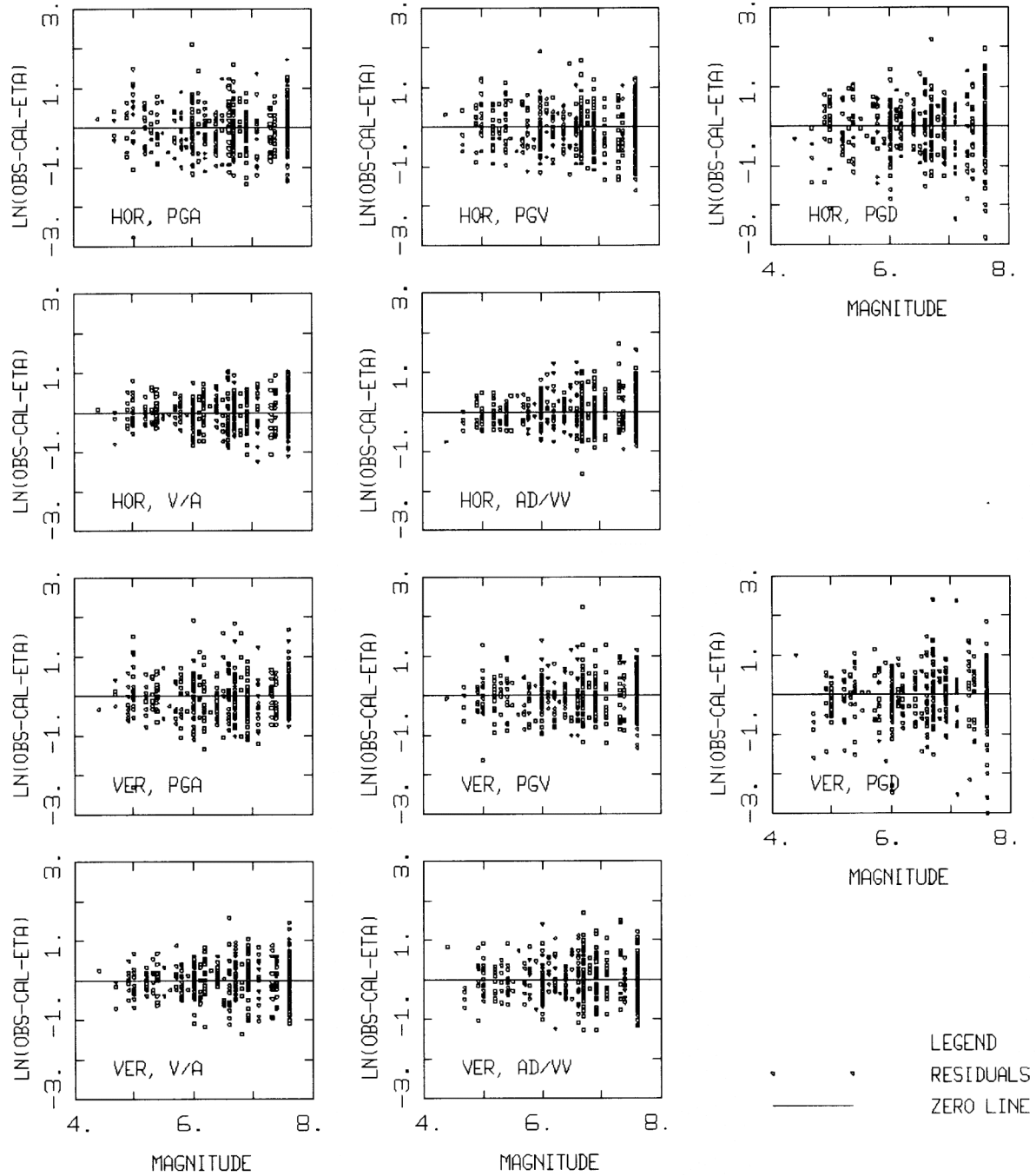
MODEL A, DYNAMIC DATASET

Figure 16b. Eta terms as a function of magnitude for the regressions using Model A with the dynamic dataset.



MODEL A, DYNAMIC DATASET

Figure 16c. Residual plots for Model A with the dynamic dataset as a function of distance.



MODEL A, DYNAMIC DATASET

Figure 16d. Residual plots for Model A with the dynamic dataset as a function of magnitude.

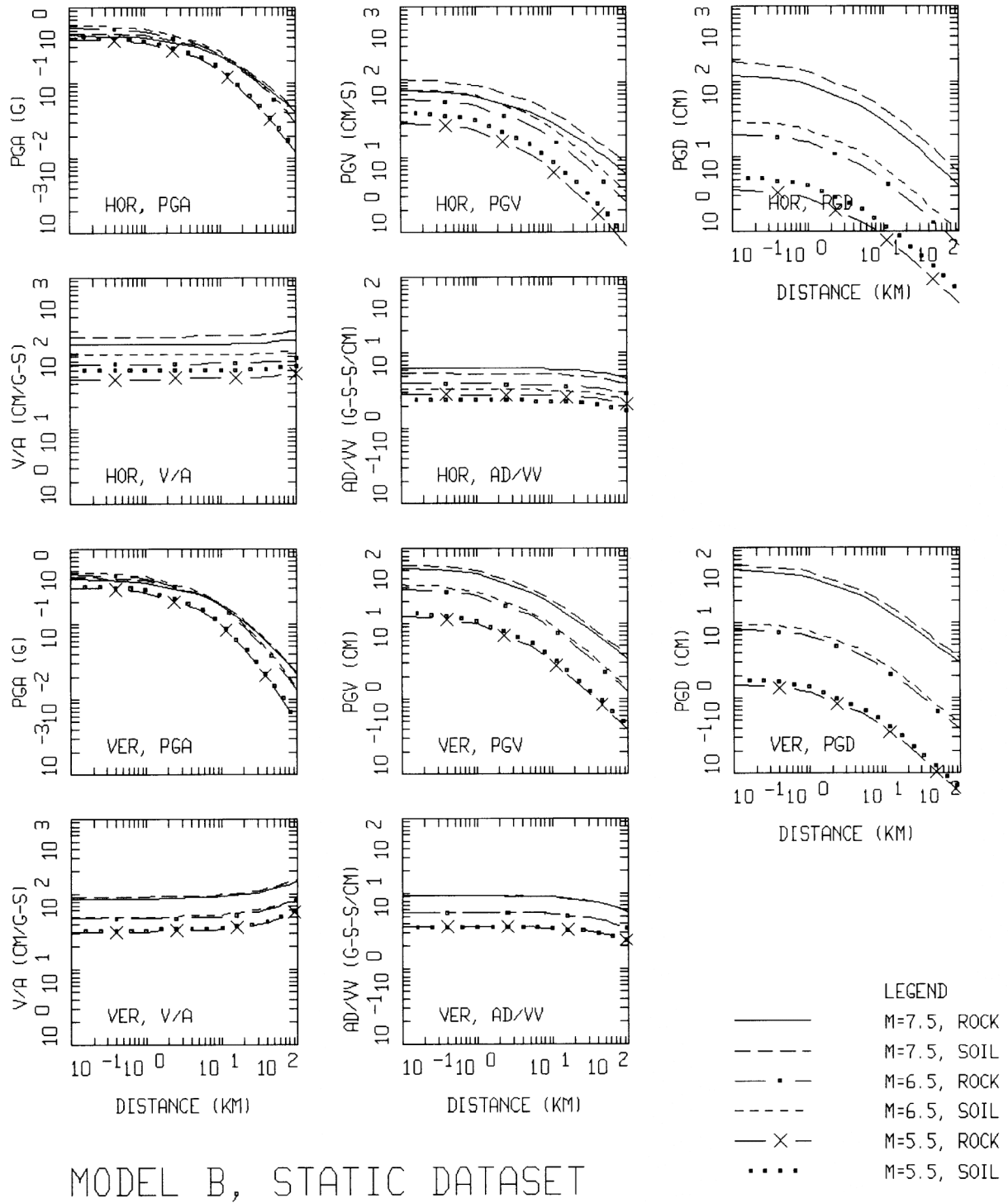
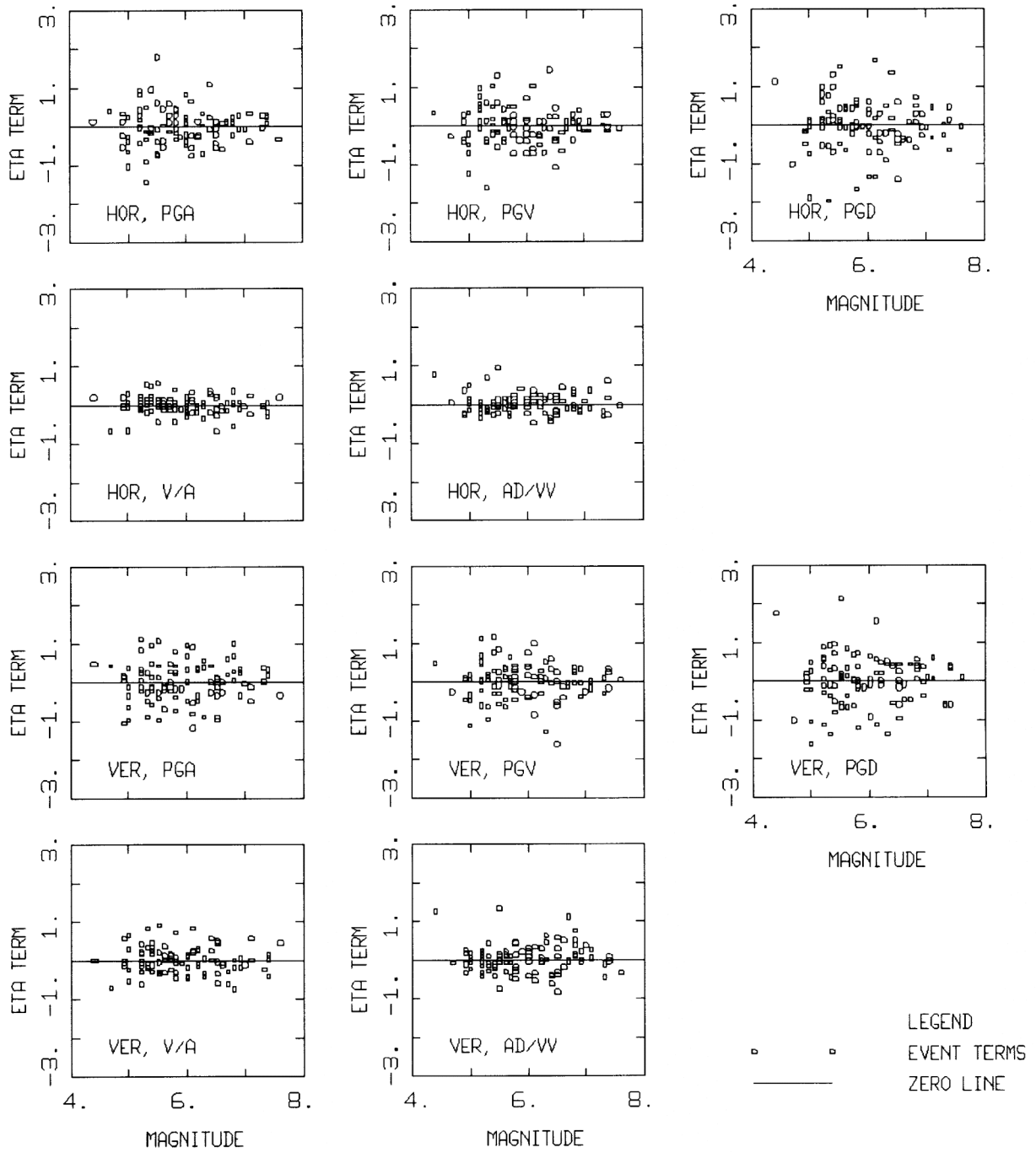
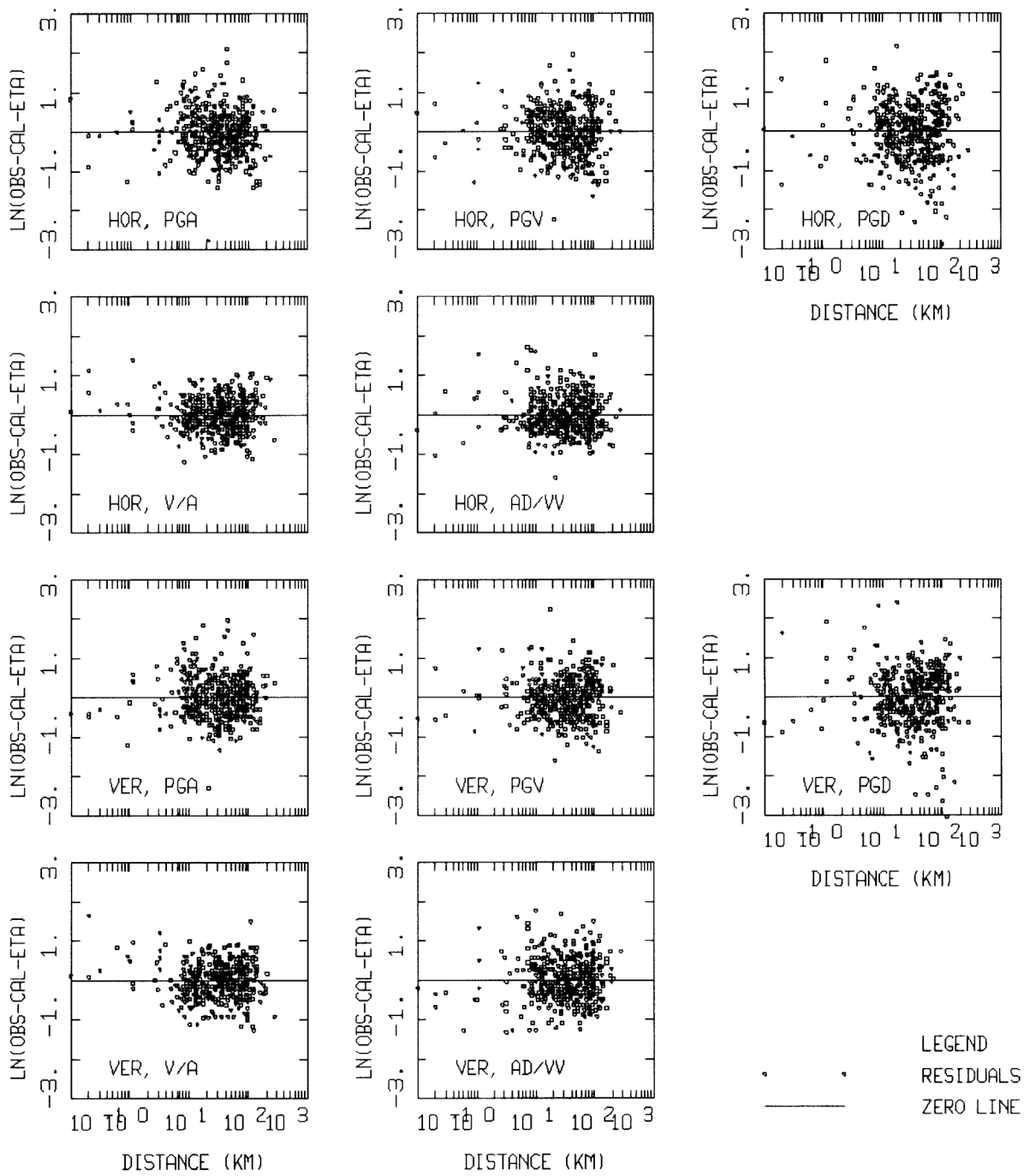


Figure 17a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model B form and the static dataset assuming a strike-slip mechanism.



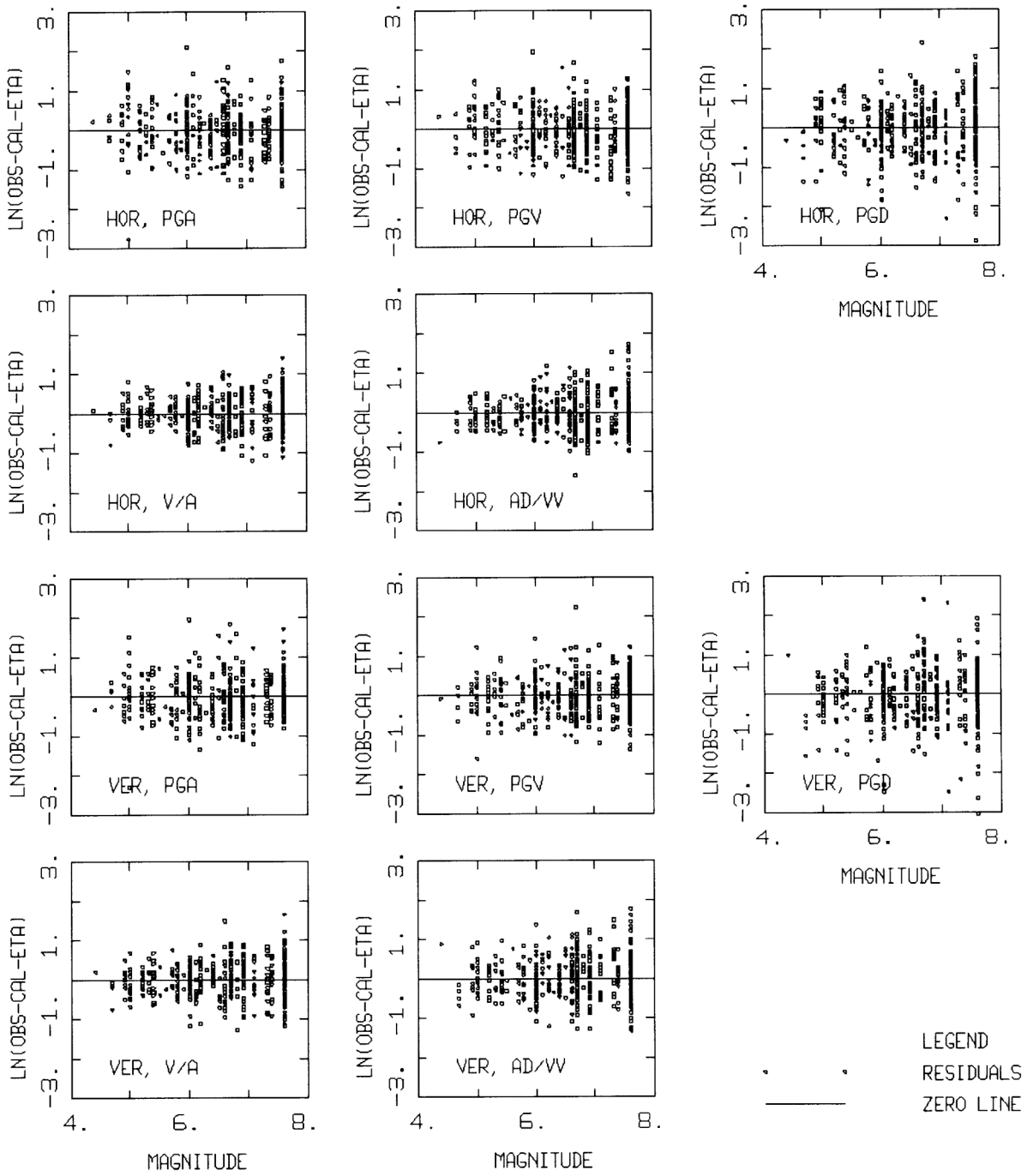
MODEL B, STATIC DATASET

Figure 17b. Eta terms as a function of magnitude for the regressions using Model B with the static dataset.



MODEL B, STATIC DATASET

Figure 17c. Residual plots for Model B with the static dataset as a function of distance.



MODEL B, STATIC DATASET

Figure 17d. Residual plots for Model B with the static dataset as a function of magnitude.

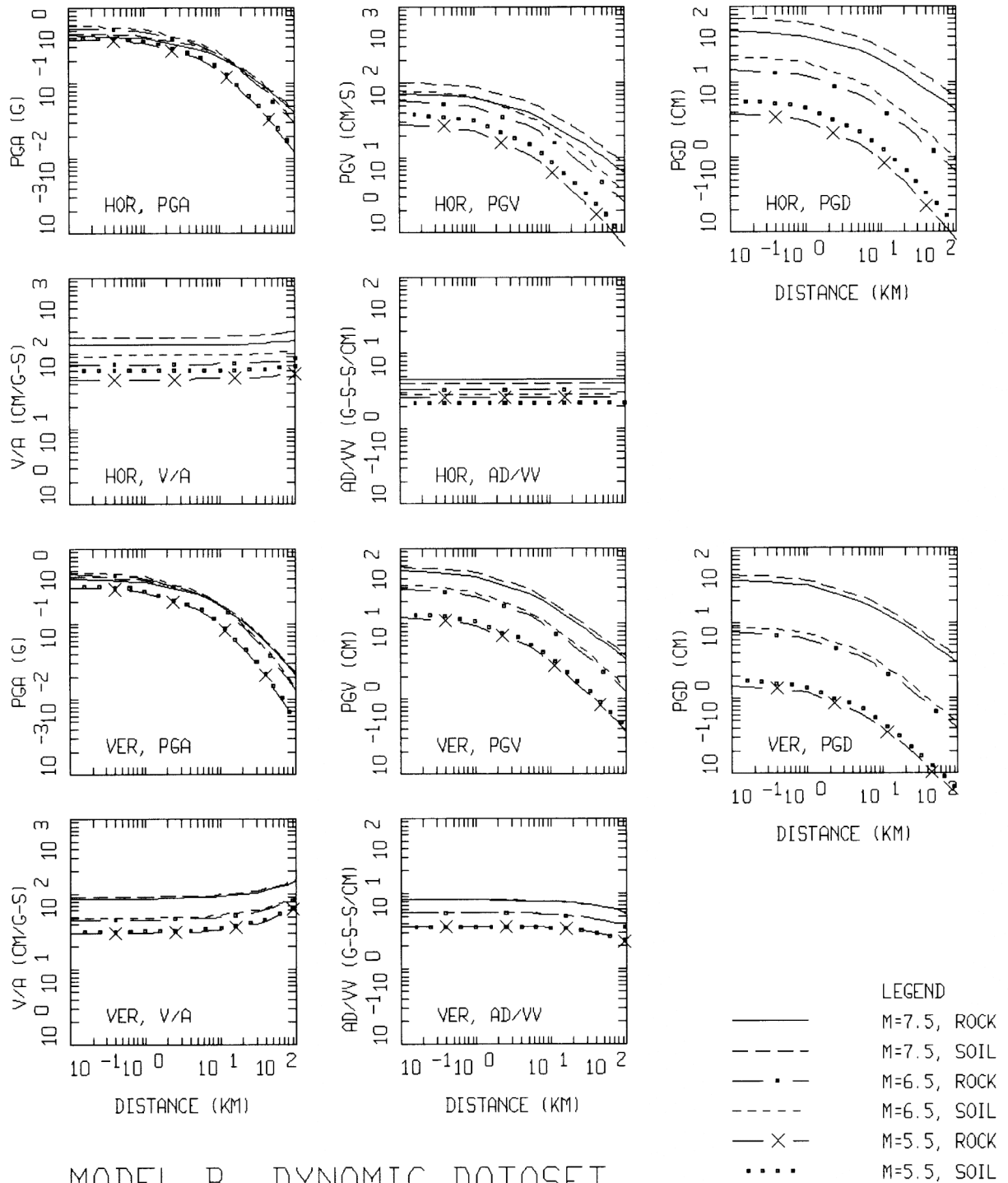
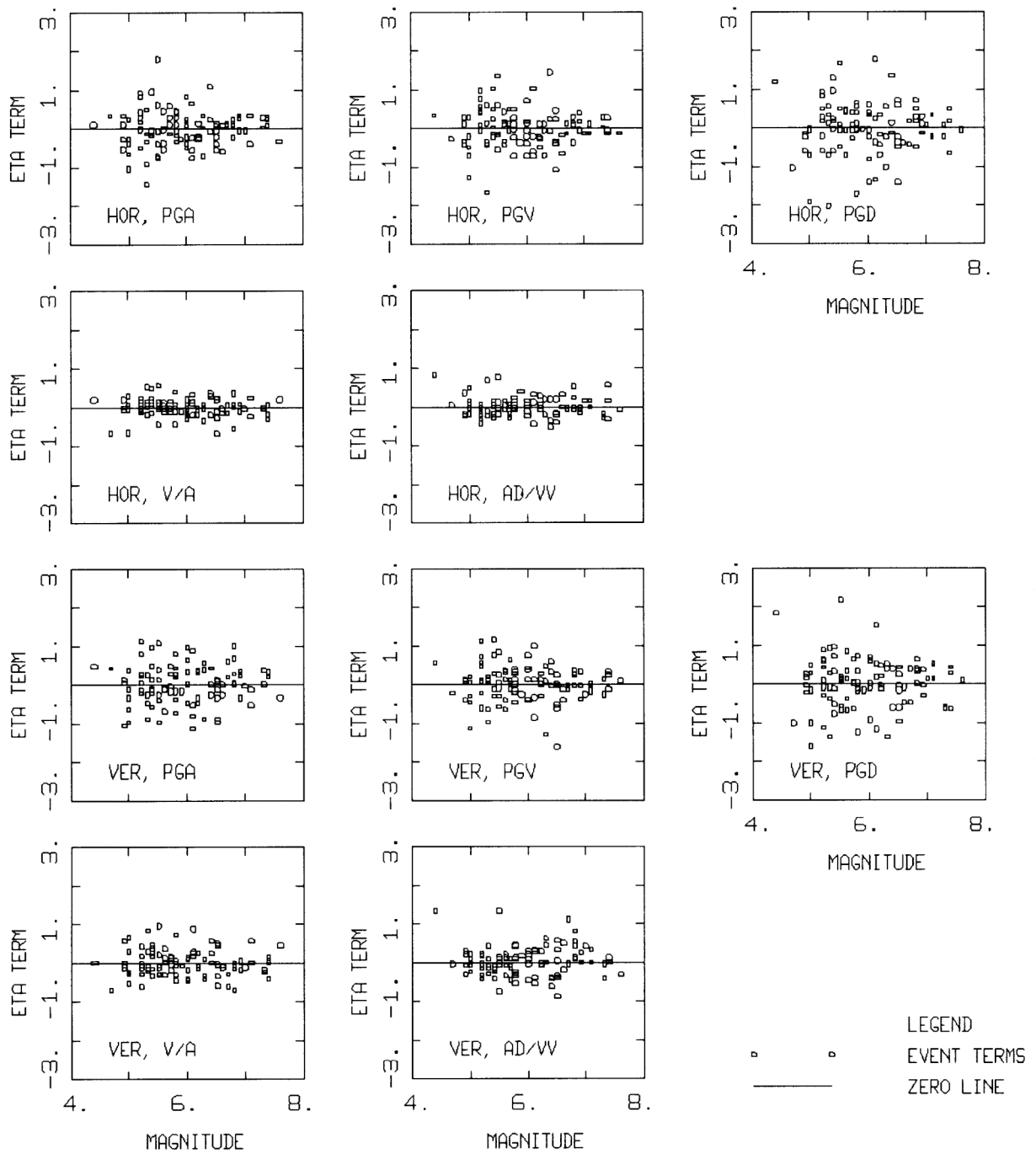
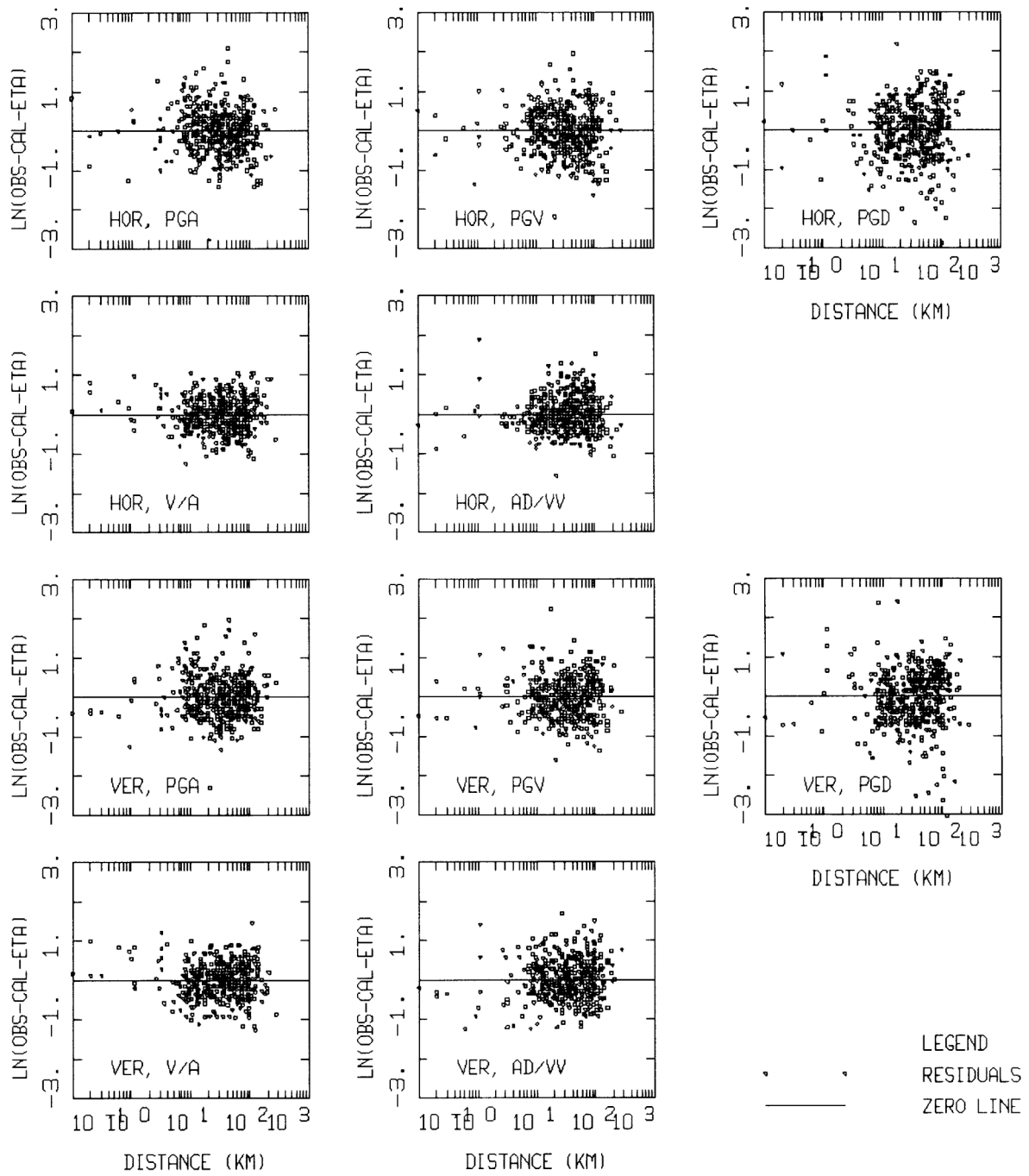


Figure 18a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model B form and the dynamic dataset assuming a strike-slip mechanism.



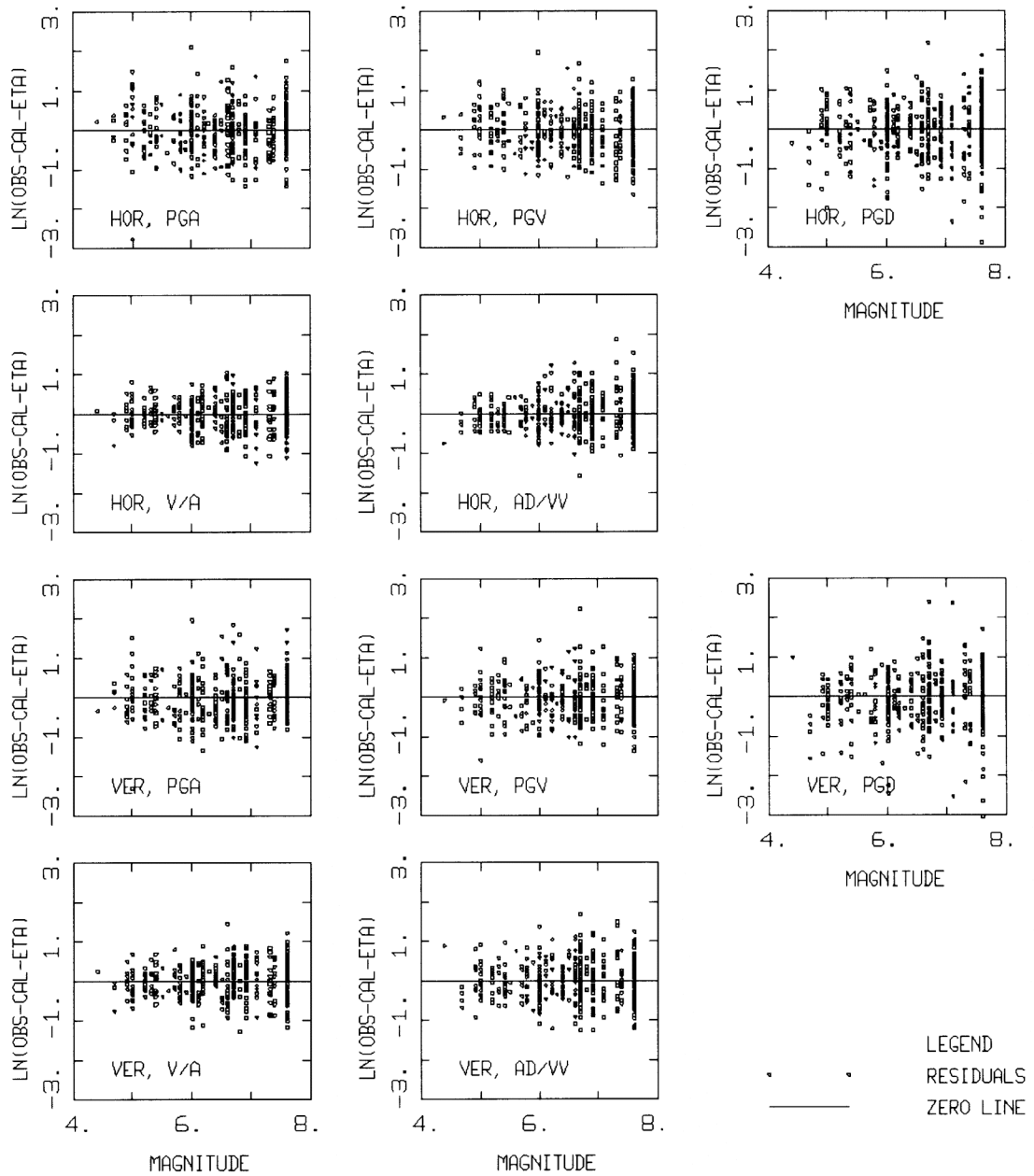
MODEL B, DYNAMIC DATASET

Figure 18b. Eta terms as a function of magnitude for the regressions using Model B with the dynamic dataset.



MODEL B, DYNAMIC DATASET

Figure 18c. Residual plots for Model B with the dynamic dataset as a function of distance.



MODEL B, DYNAMIC DATASET

Figure 18d. Residual plots for Model B with the dynamic dataset as a function of magnitude.

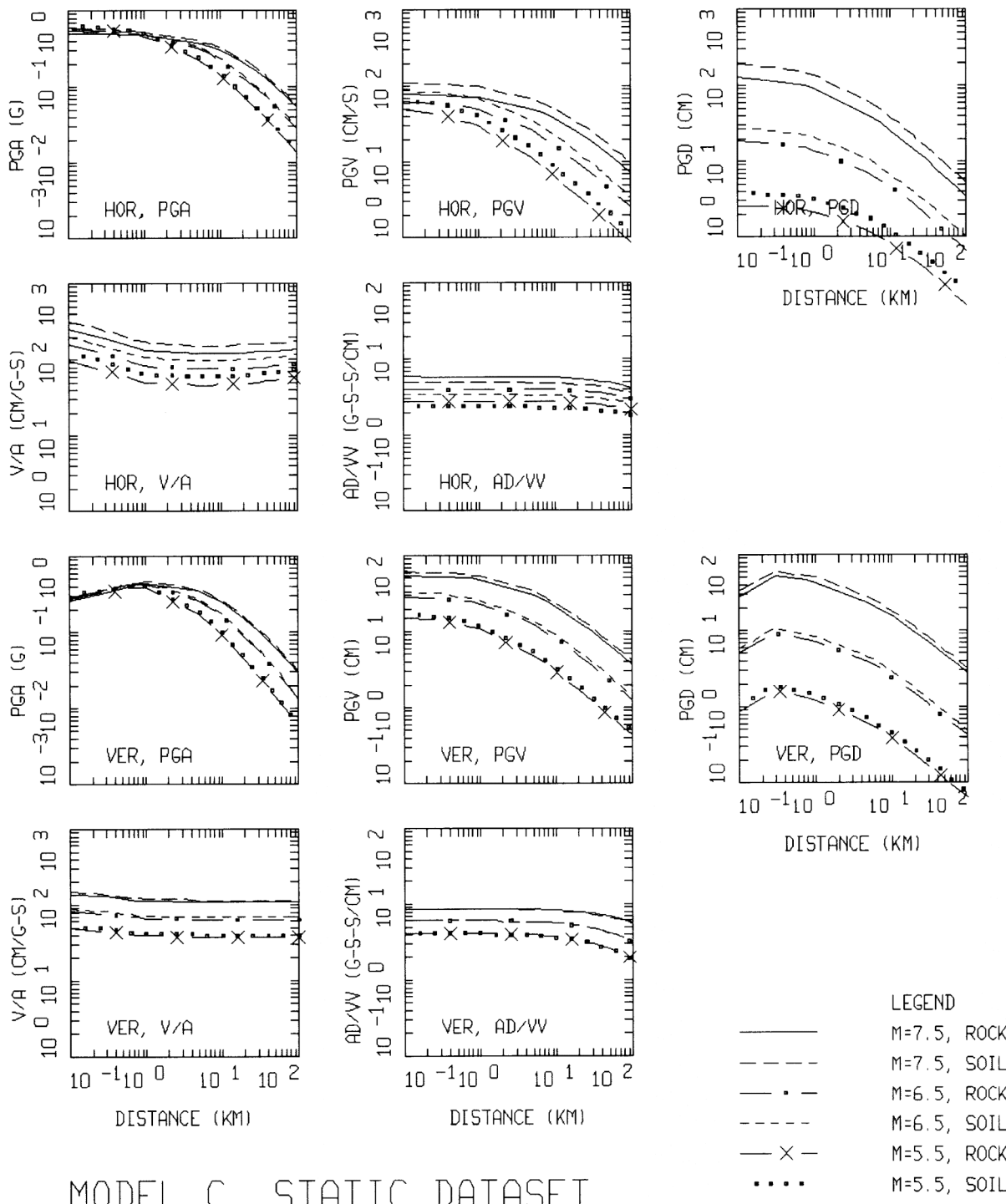
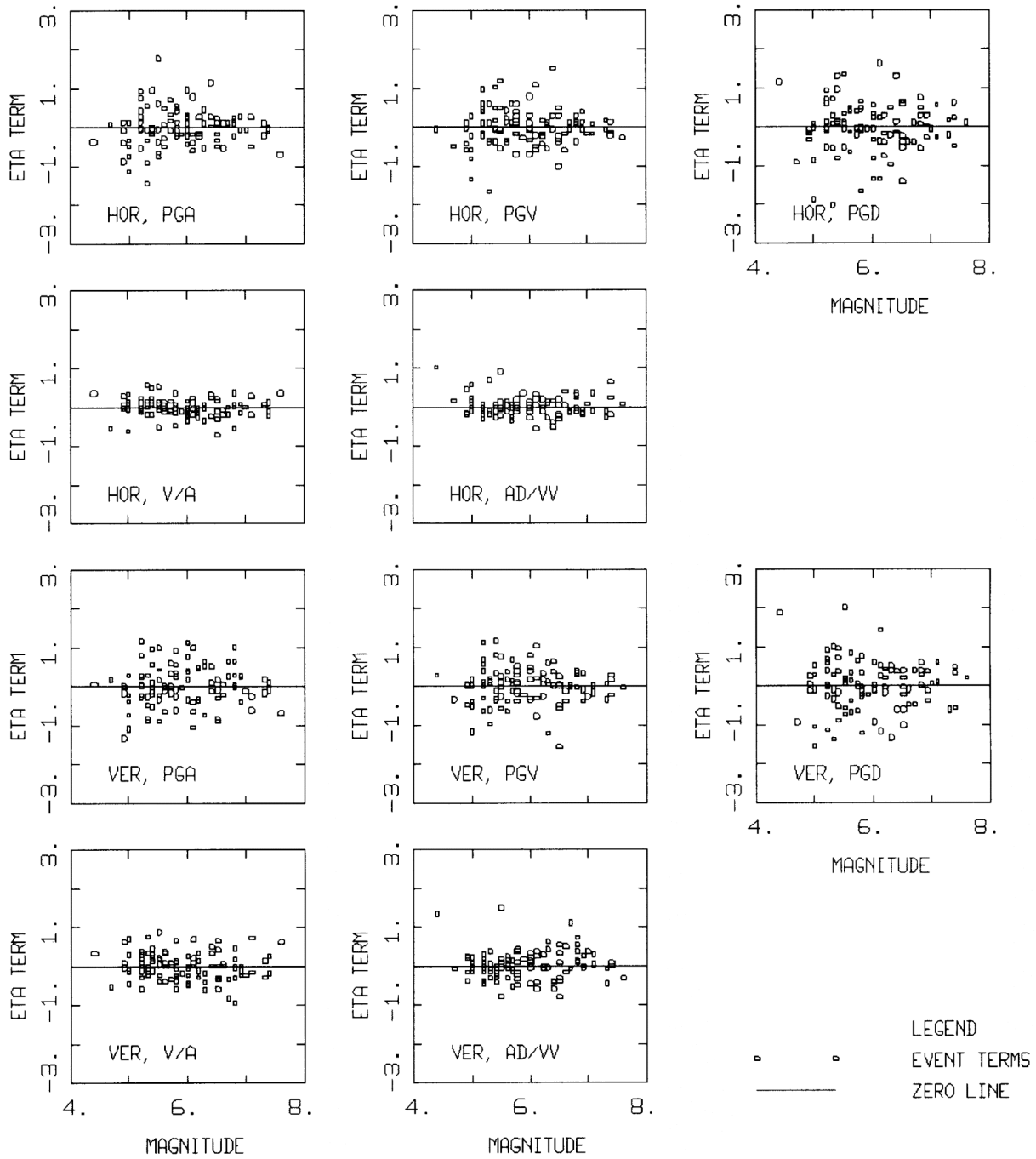
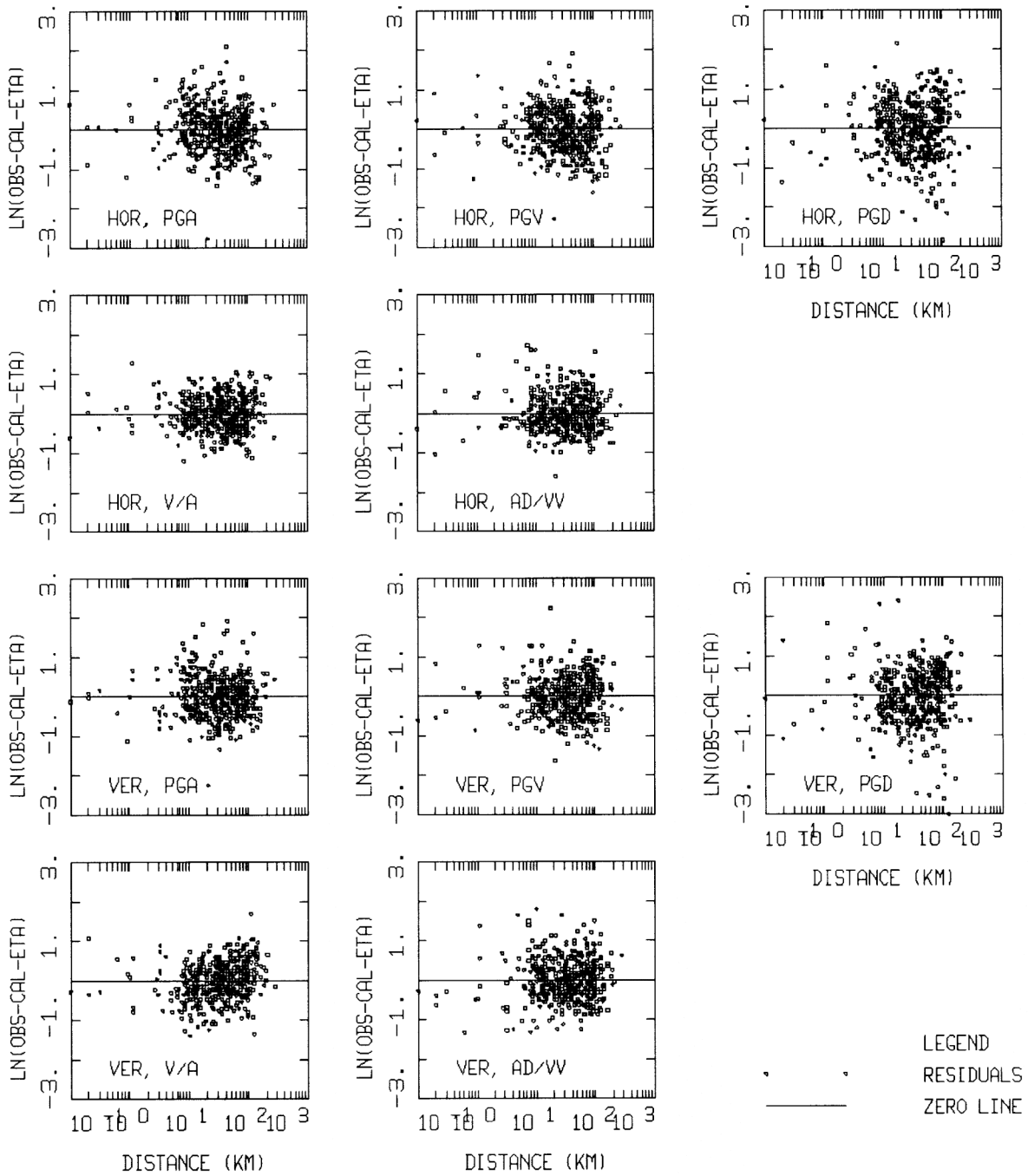


Figure 19a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model C form and the static dataset assuming a strike-slip mechanism.



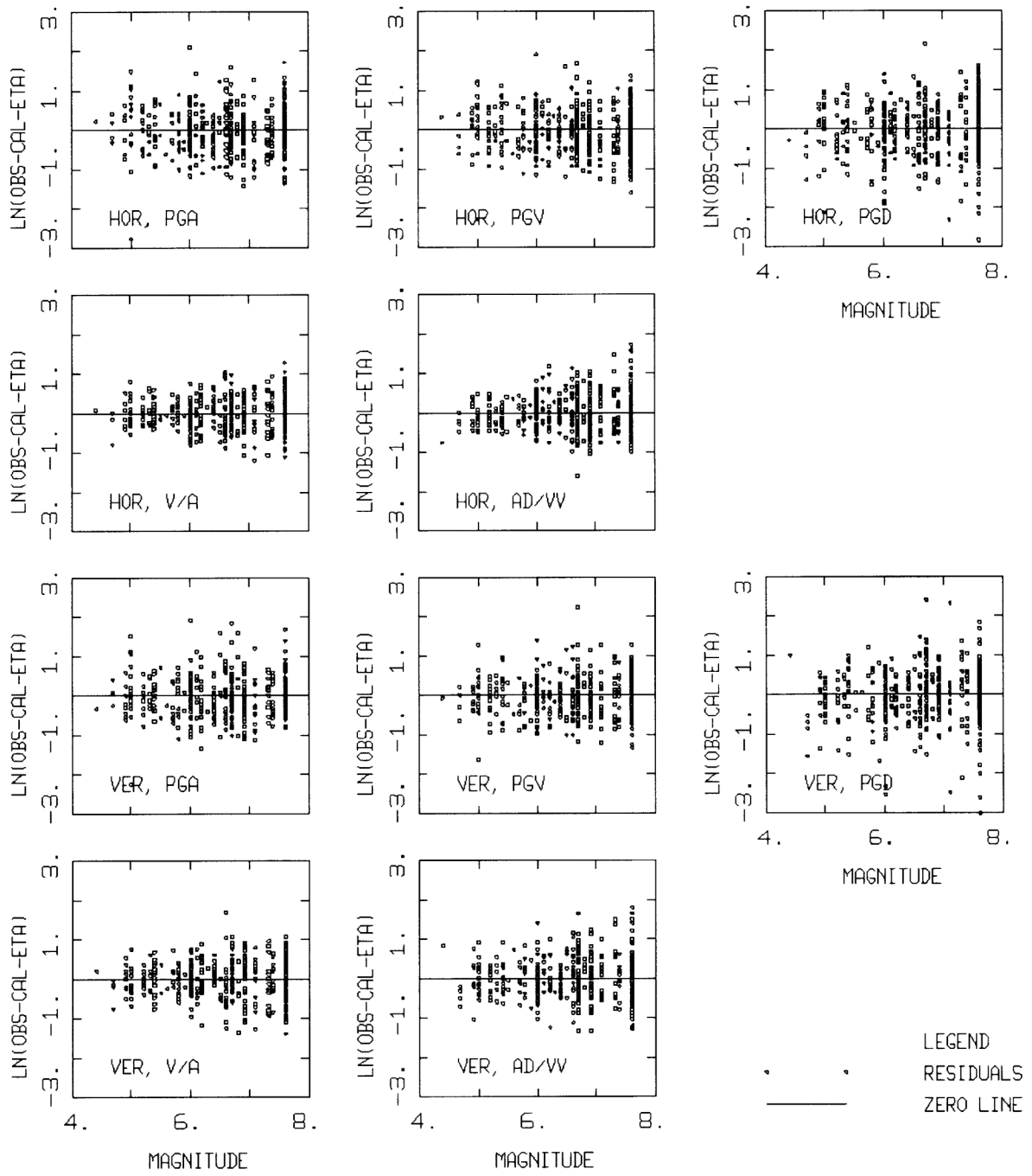
MODEL C, STATIC DATASET

Figure 19b. Eta terms as a function of magnitude for the regressions using Model C with the static dataset.



MODEL C, STATIC DATASET

Figure 19c. Residual plots for Model C with the static dataset as a function of distance.



MODEL C, STATIC DATASET

Figure 19d. Residual plots for Model C with the static dataset as a function of magnitude.

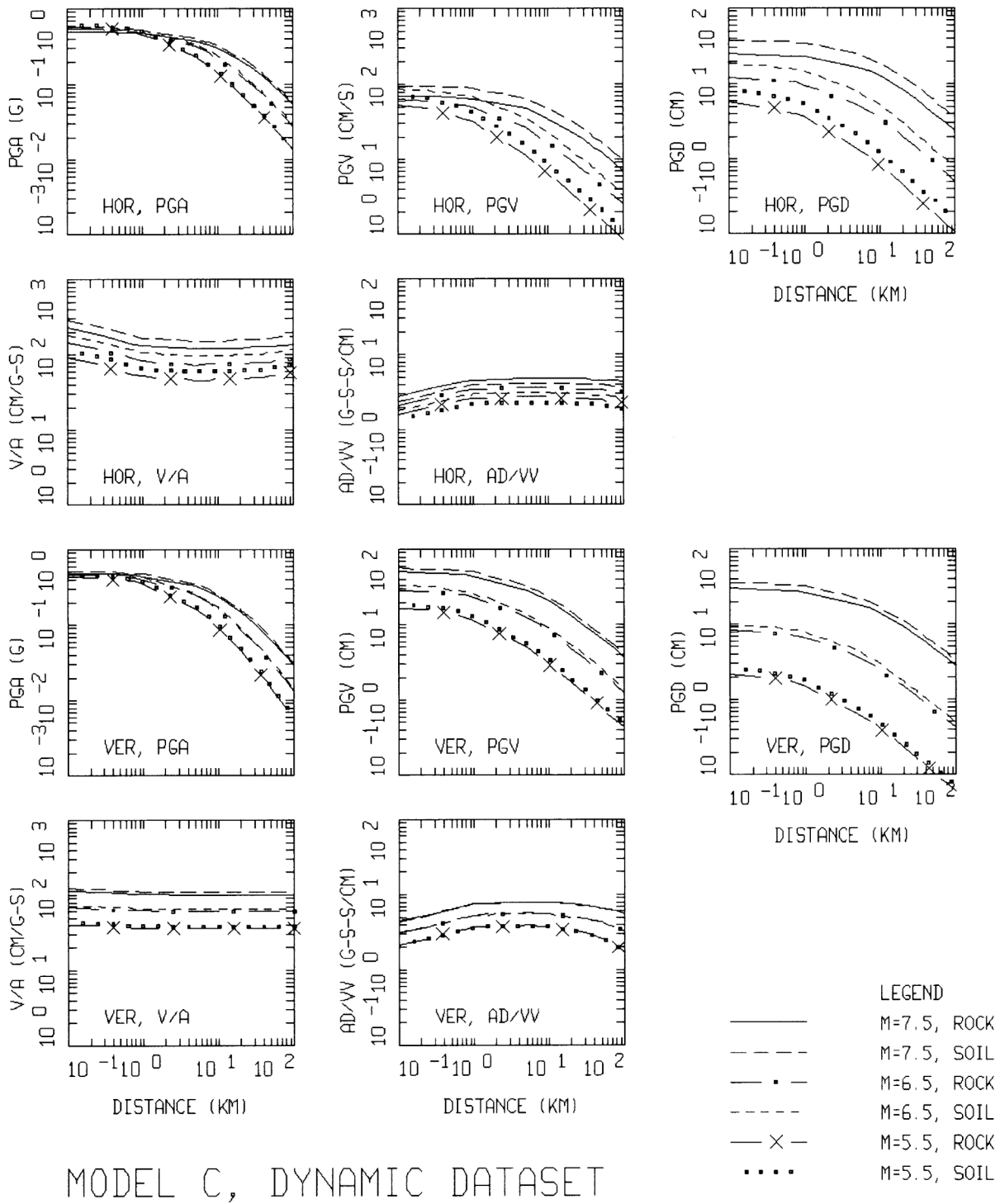
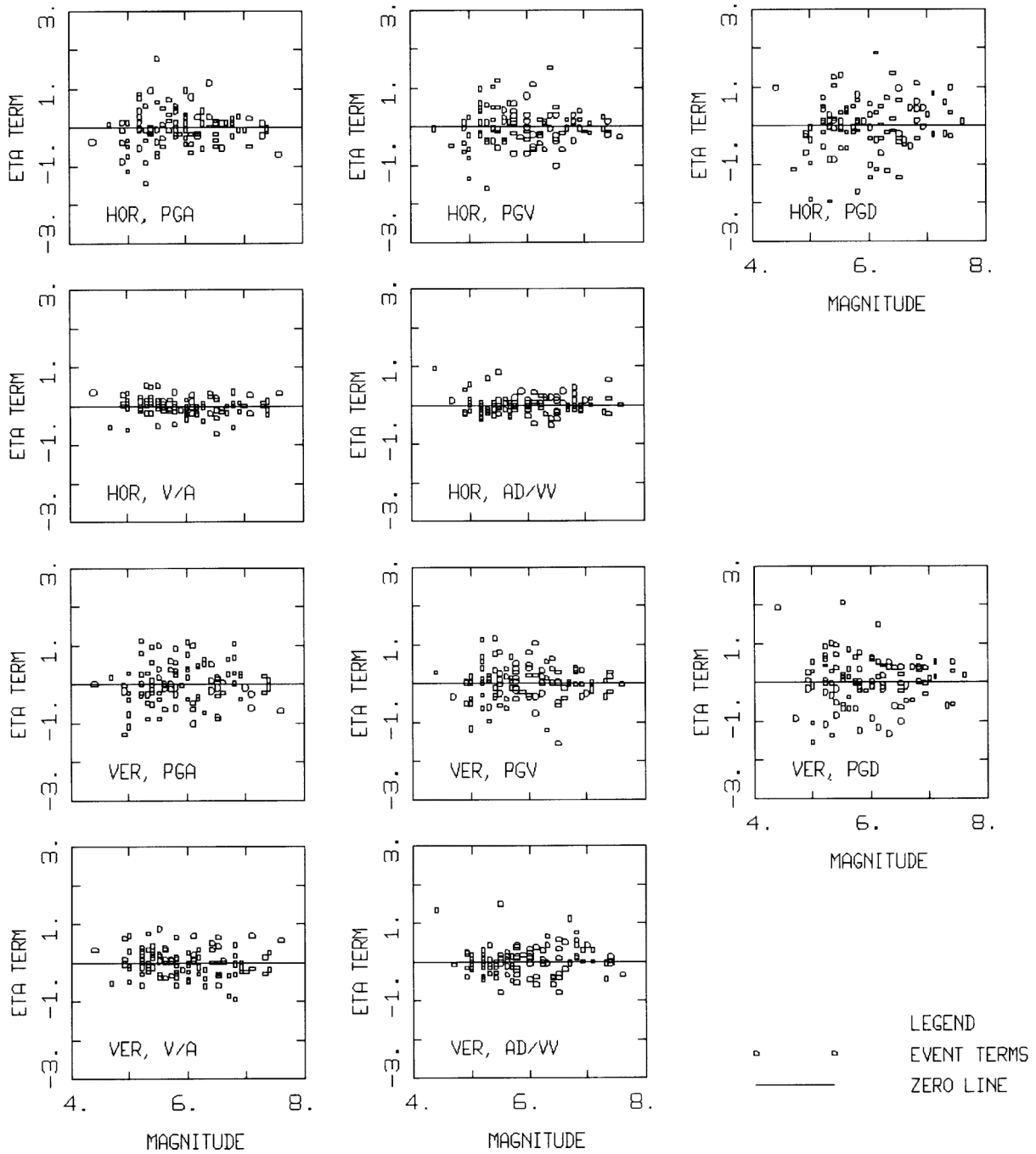
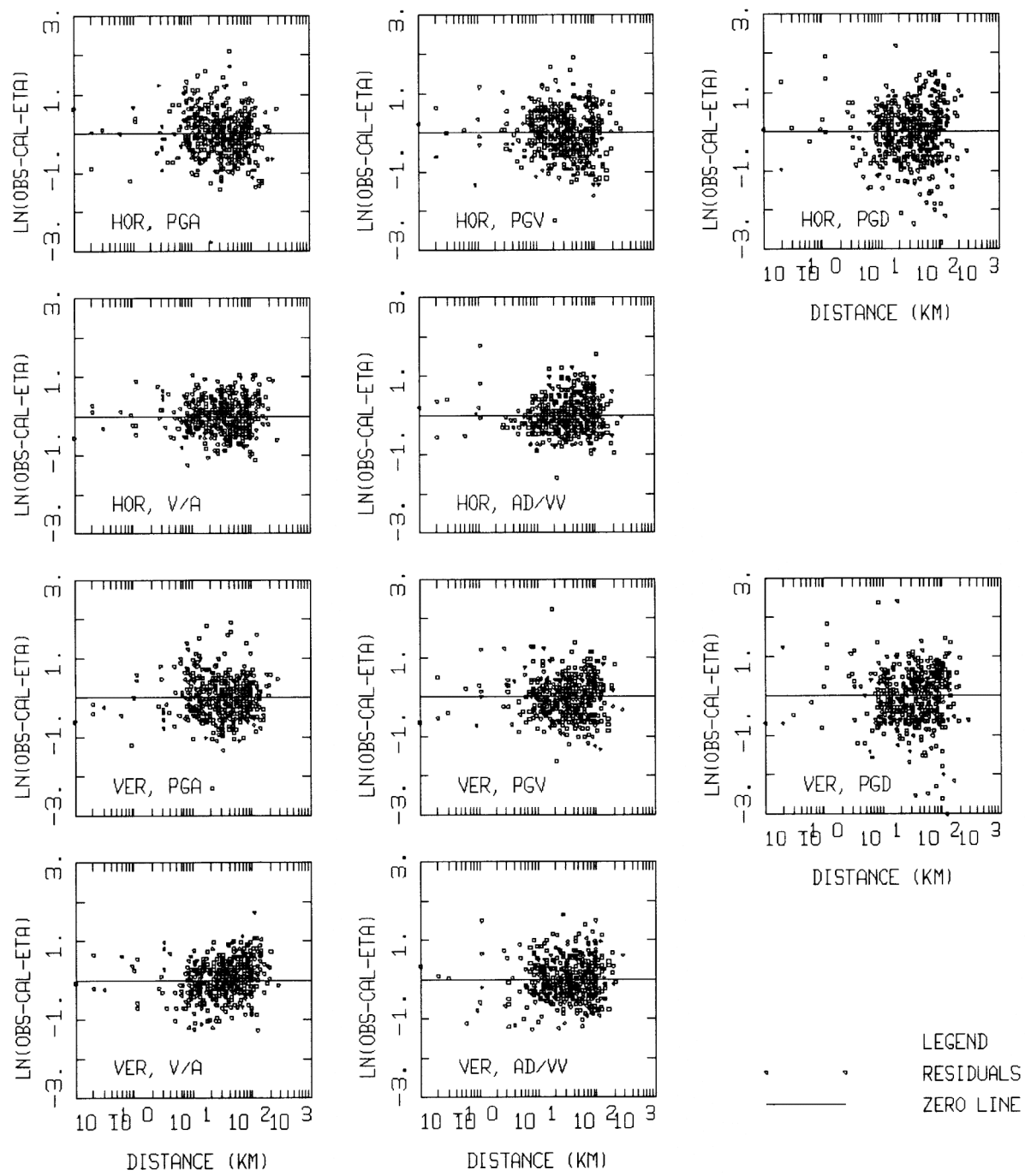


Figure 20a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model C form and the dynamic dataset assuming a strike-slip mechanism.



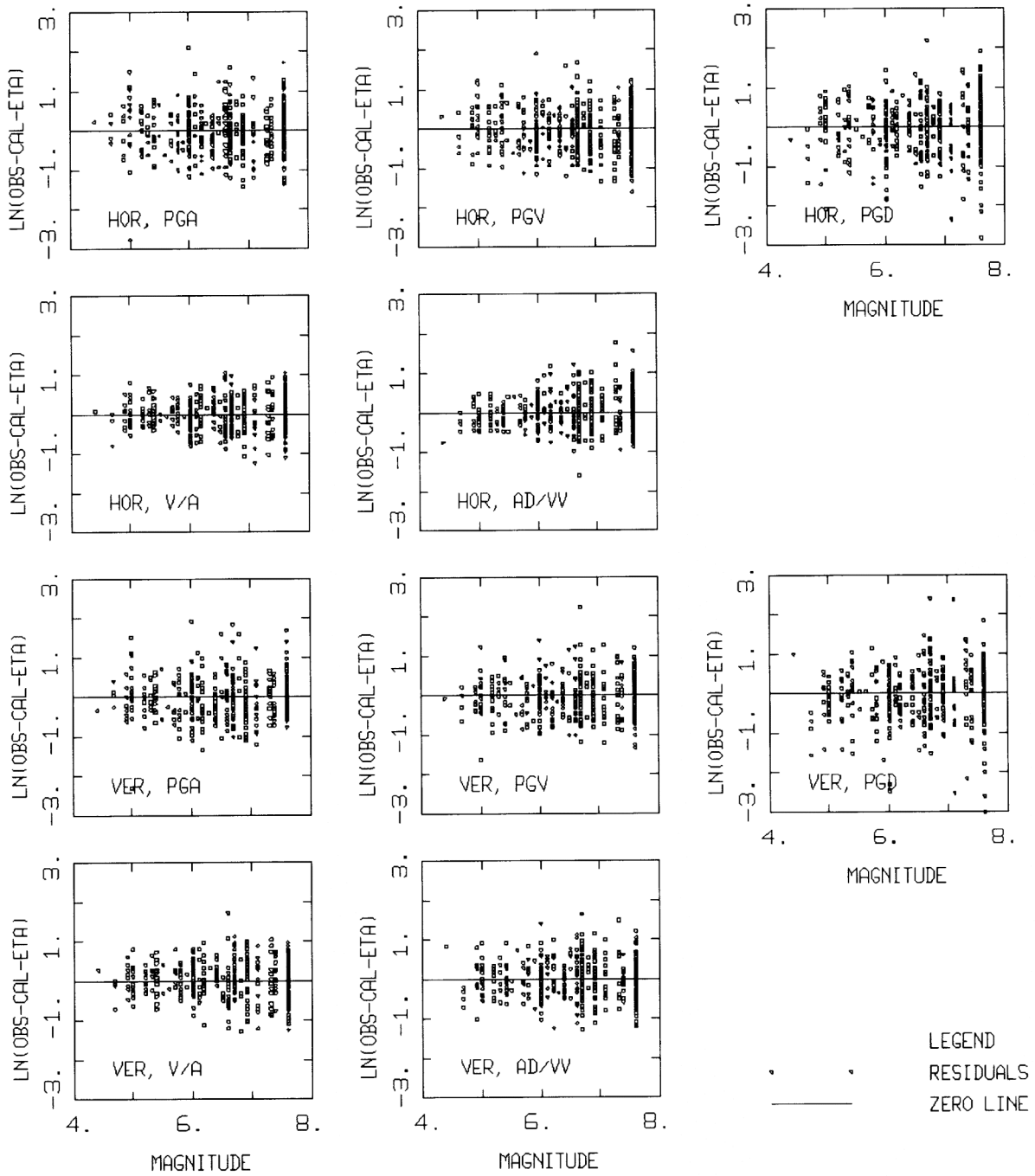
MODEL C, DYNAMIC DATASET

Figure 20b. Eta terms as a function of magnitude for the regressions using Model C with the dynamic dataset.



MODEL C, DYNAMIC DATASET

Figure 20c. Residual plots for Model C with the dynamic dataset as a function of distance.



MODEL C, DYNAMIC DATASET

Figure 20d. Residual plots for Model C with the dynamic dataset as a function of magnitude.

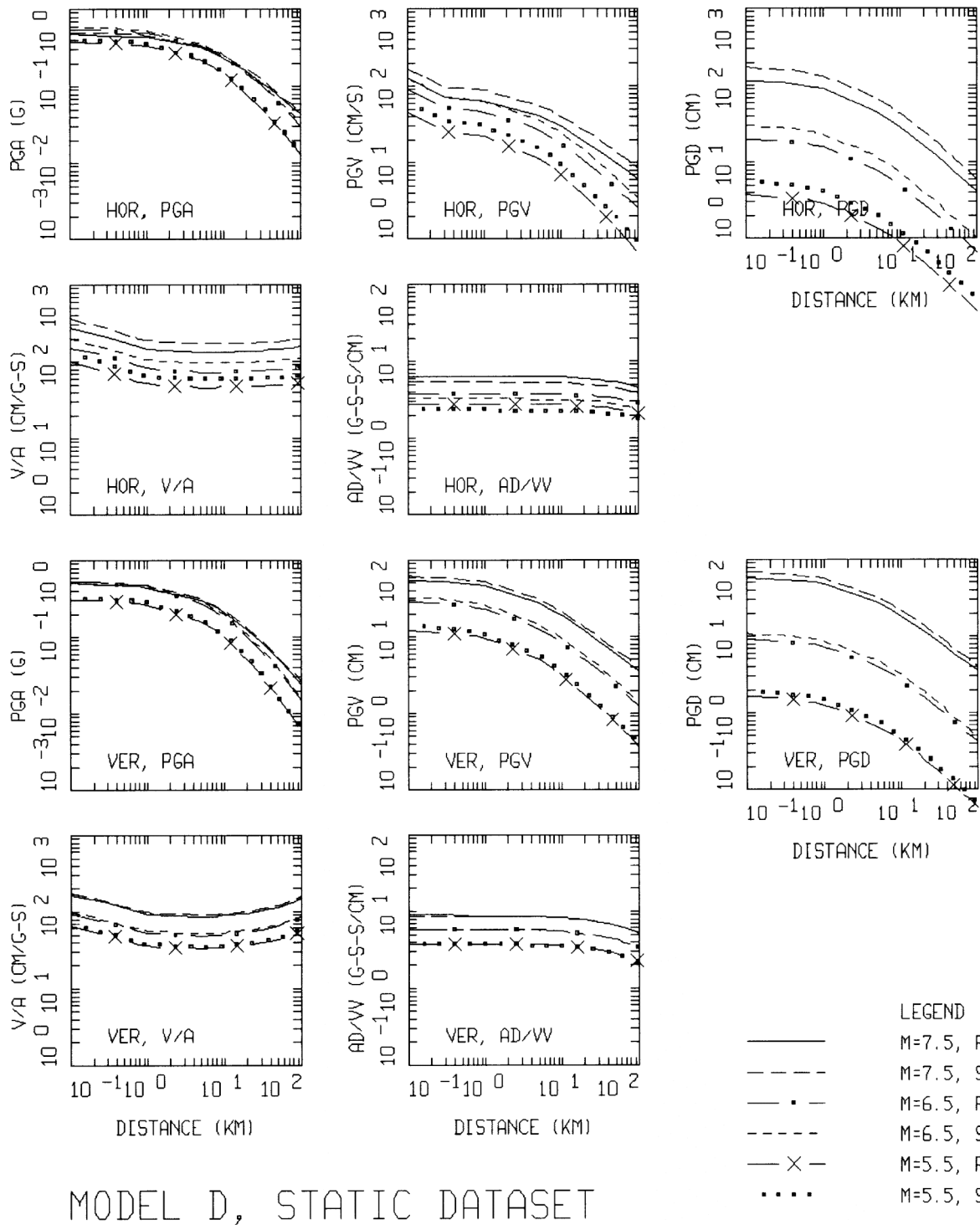
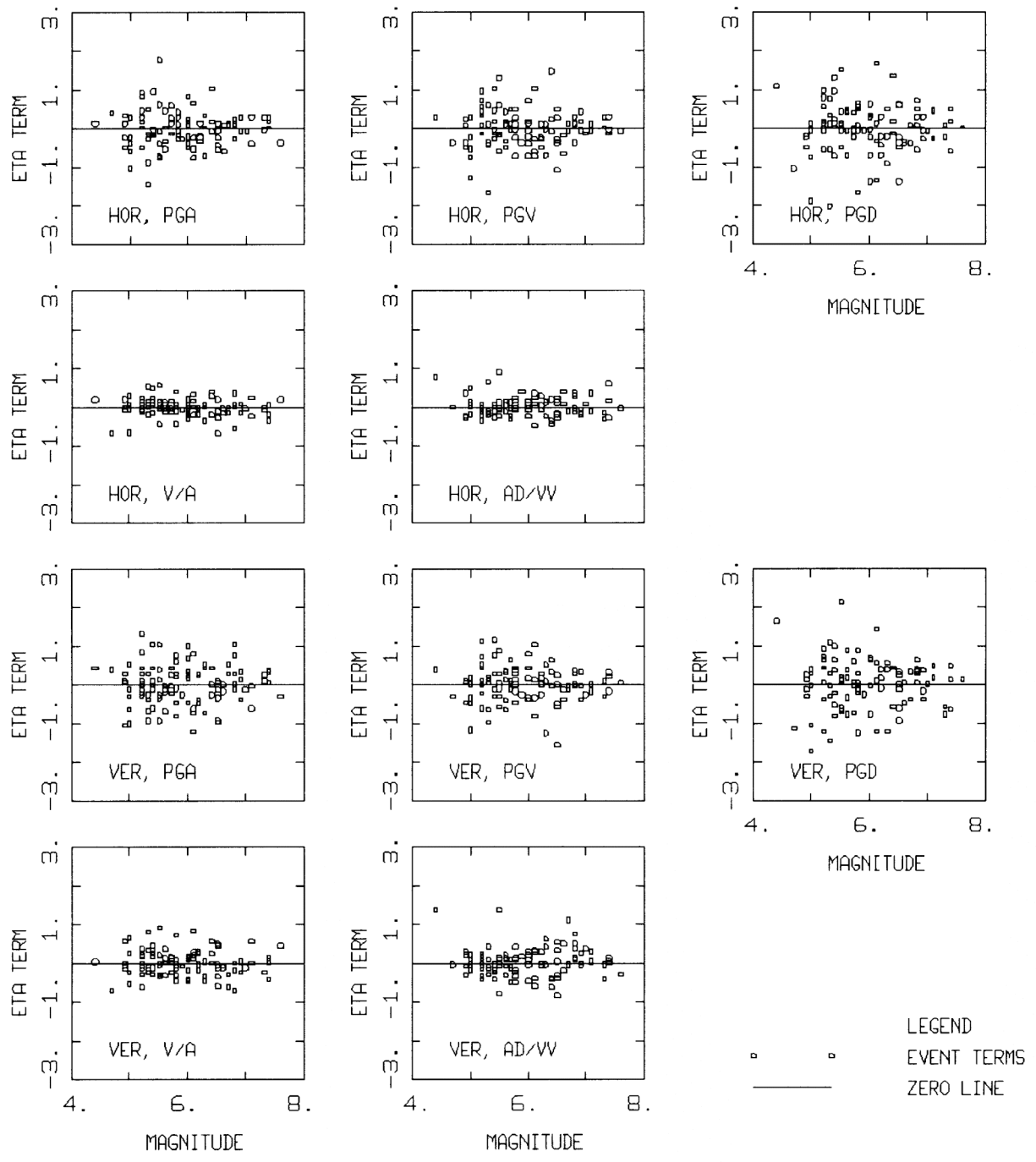
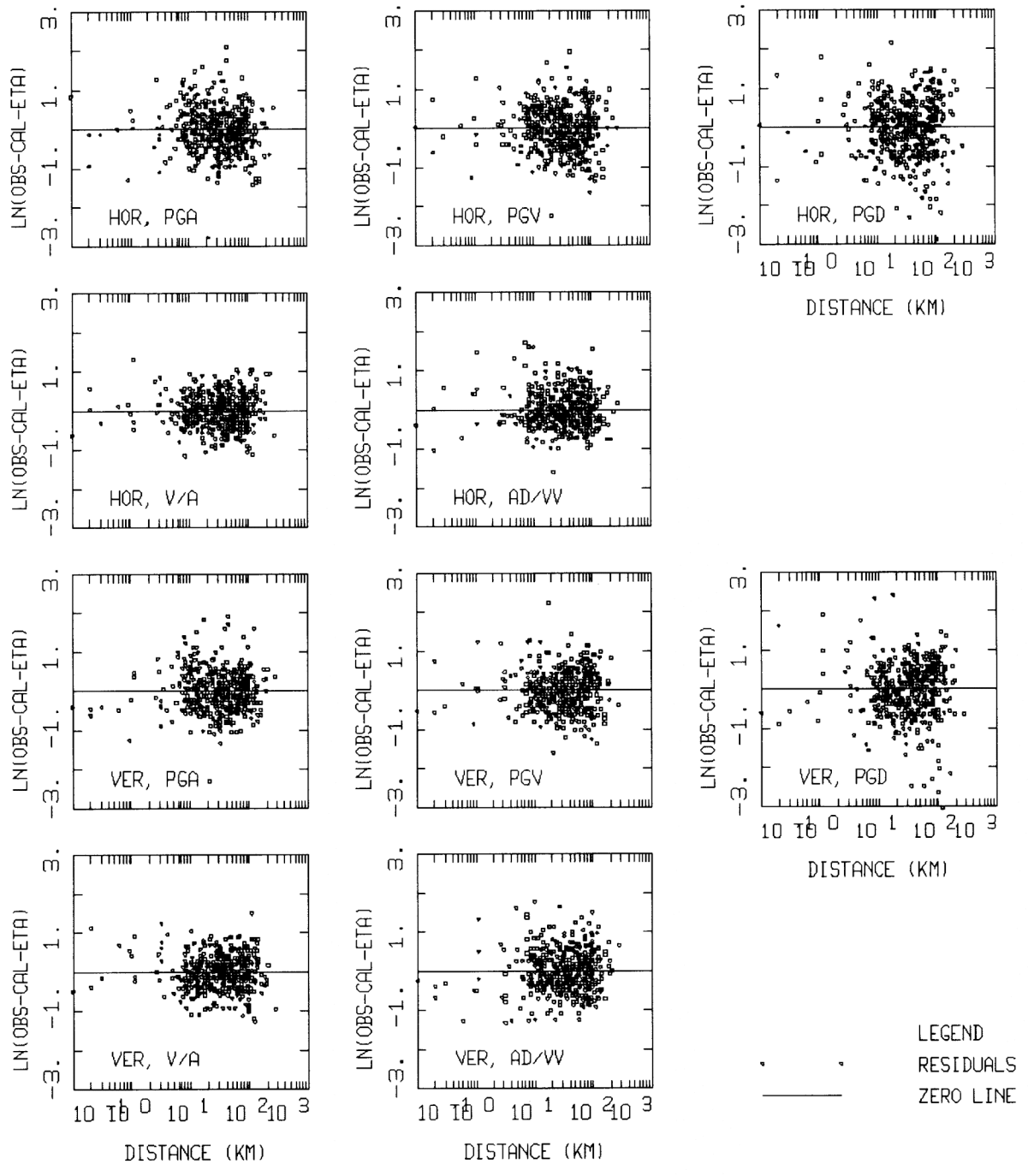


Figure 21a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model D form and the static dataset assuming a strike-slip mechanism.



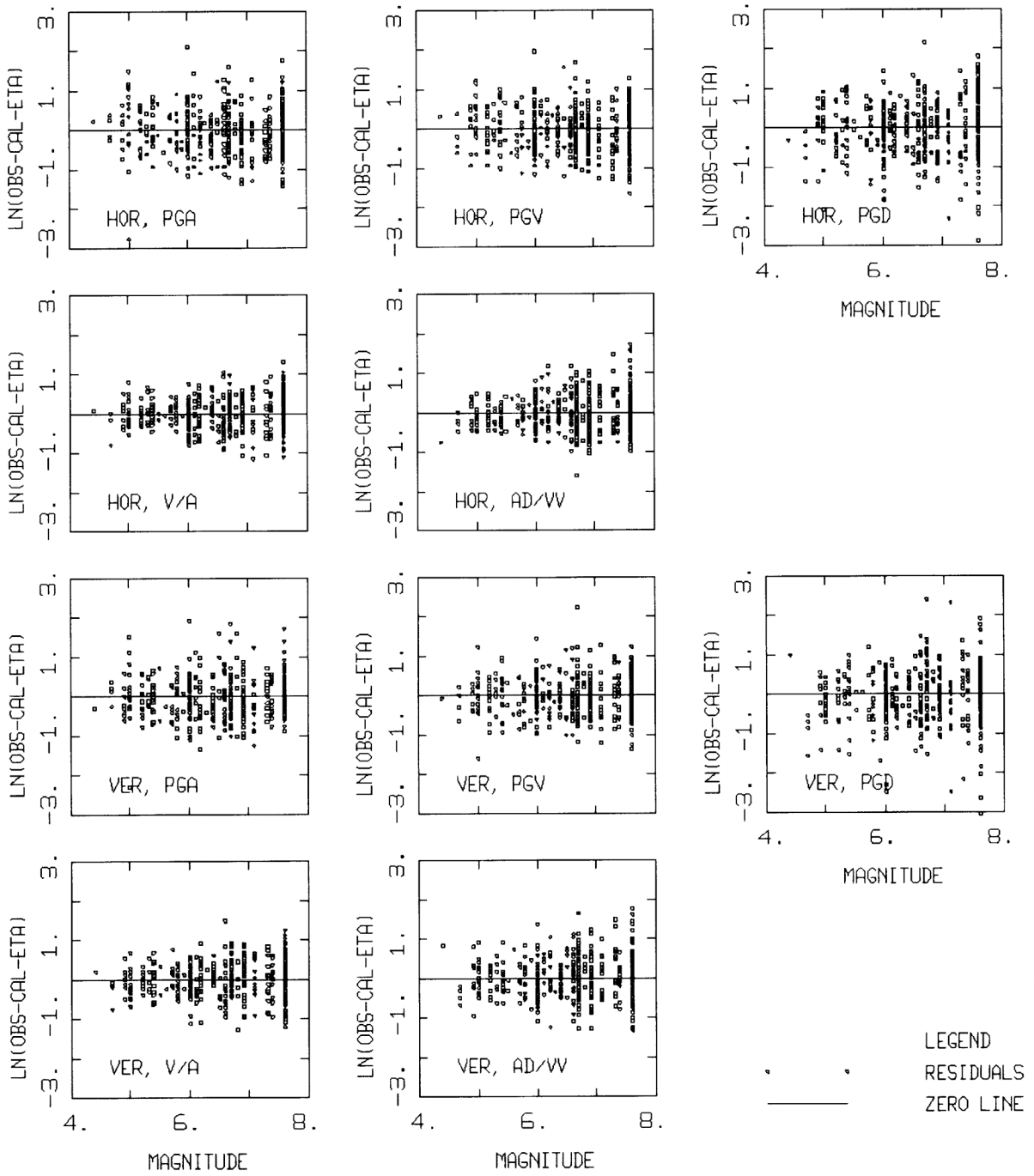
MODEL D, STATIC DATASET

Figure 21b. Eta terms as a function of magnitude for the regressions using Model D with the static dataset.



MODEL D, STATIC DATASET

Figure 21c. Residual plots for Model D with the static dataset as a function of distance.



MODEL D, STATIC DATASET

Figure 21d. Residual plots for Model D with the static dataset as a function of magnitude.

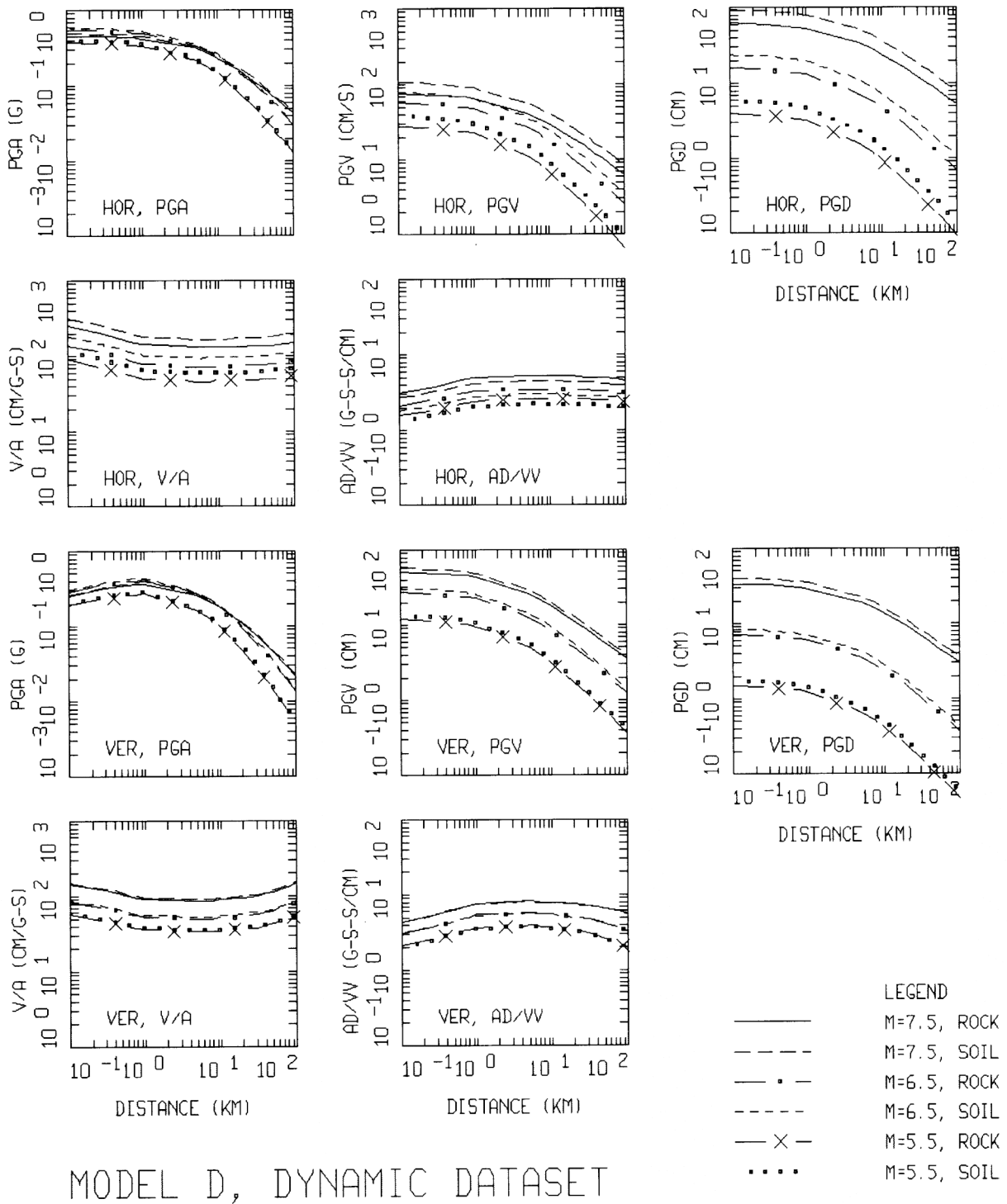
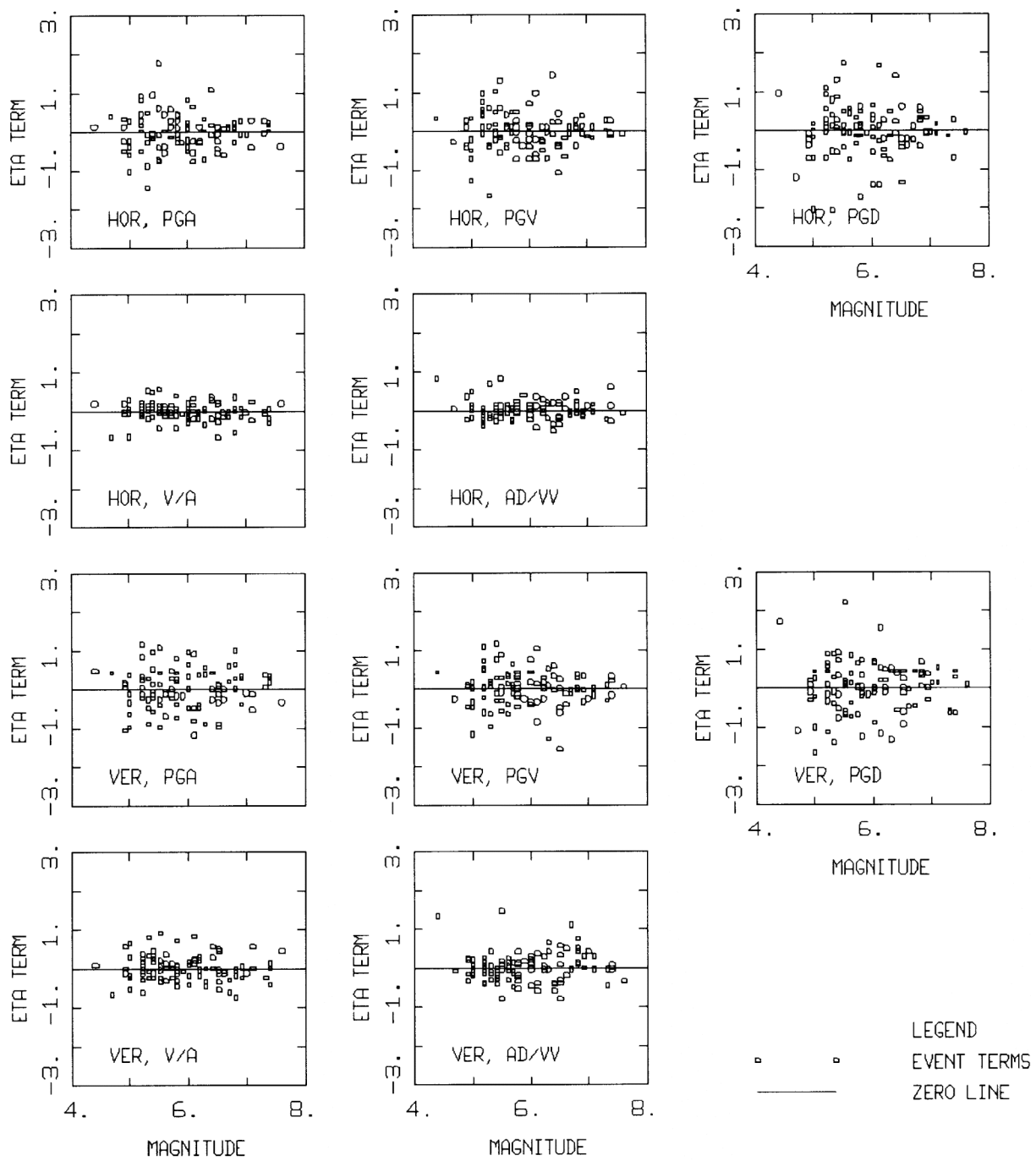
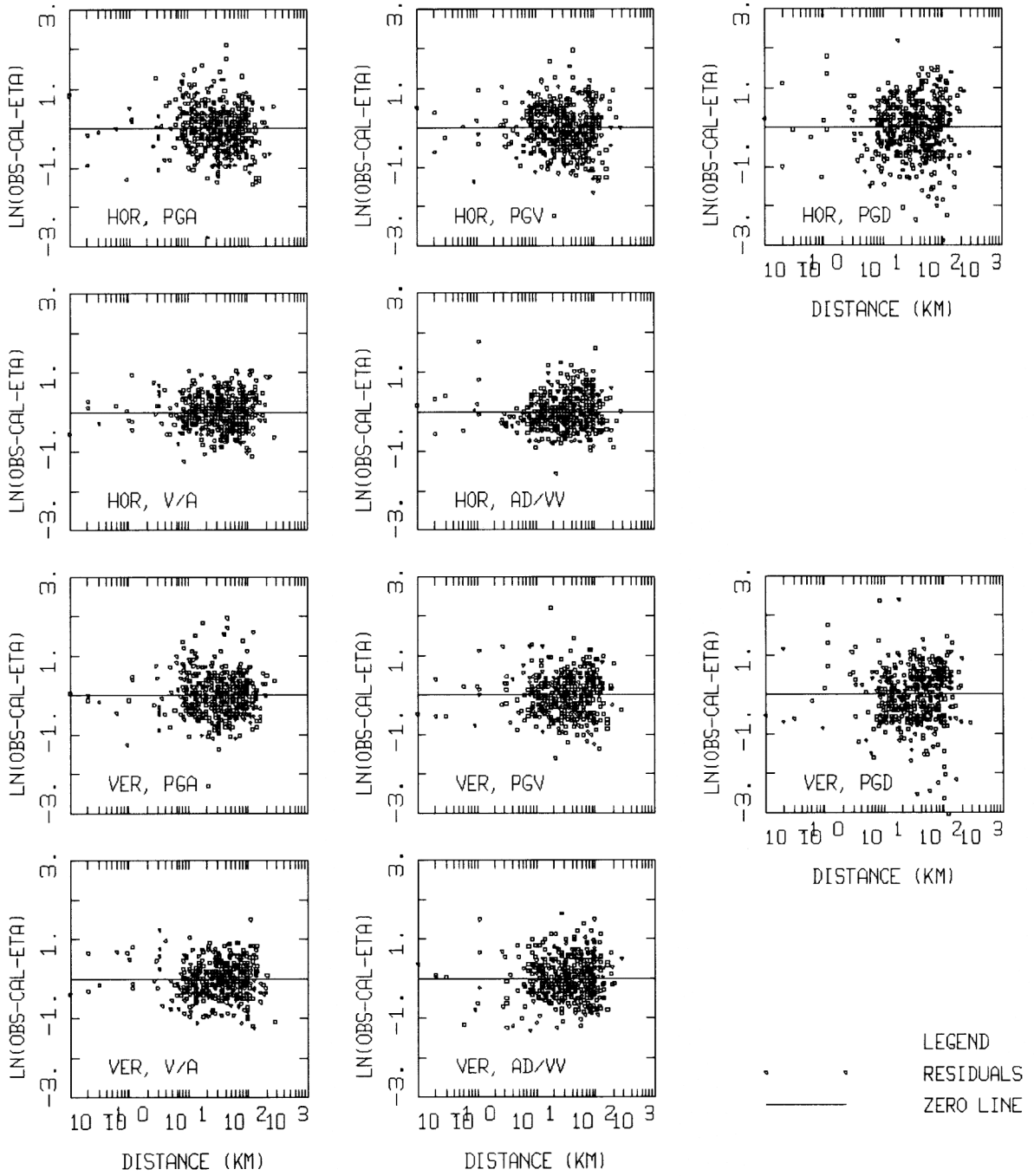


Figure 22a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model D form and the dynamic dataset assuming a strike-slip mechanism.



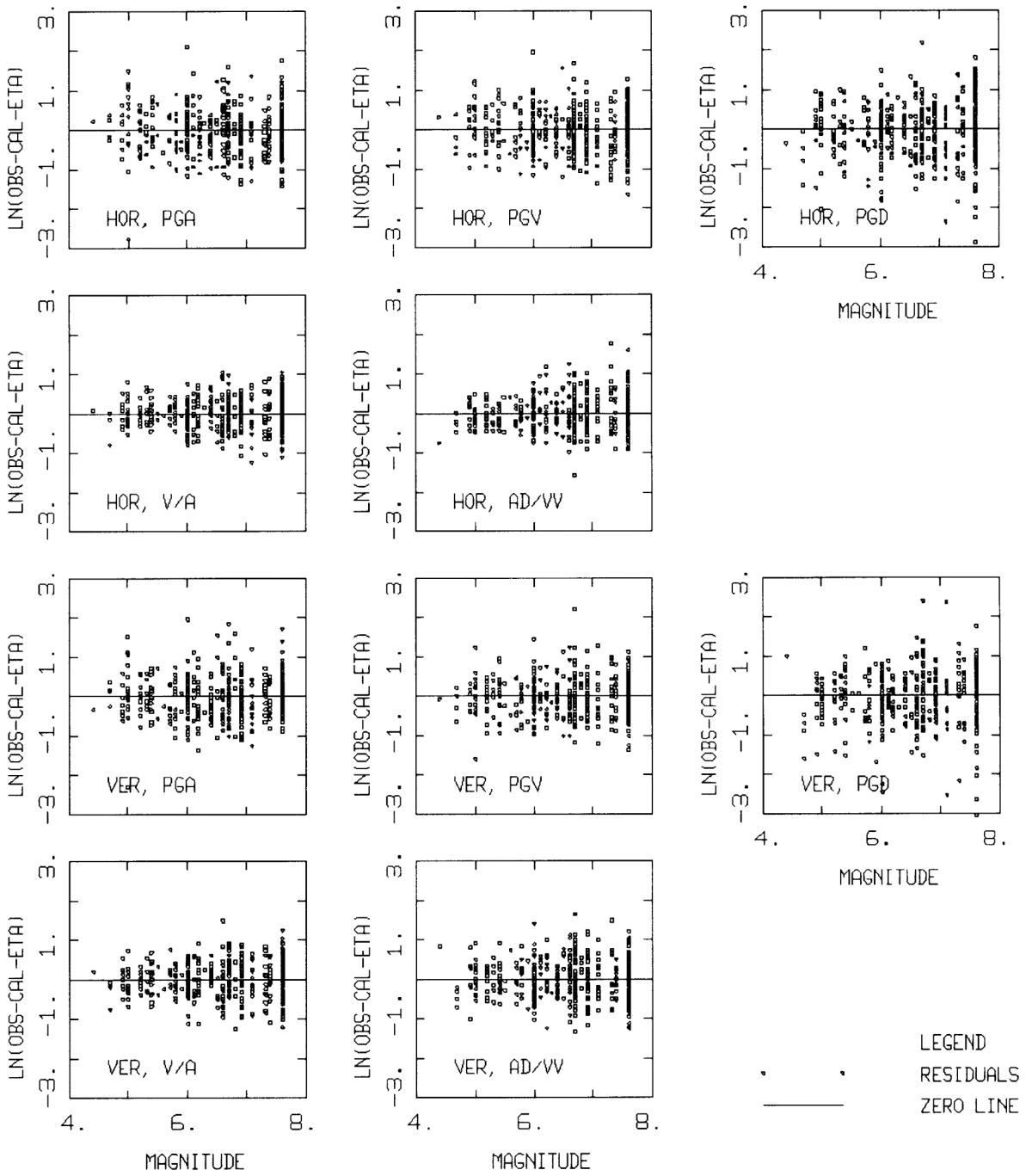
MODEL D, DYNAMIC DATASET

Figure 22b. Eta terms as a function of magnitude for the regressions using Model D with the dynamic dataset.



MODEL D, DYNAMIC DATASET

Figure 22c. Residual plots for Model D with the dynamic dataset as a function of distance.



MODEL D, DYNAMIC DATASET

Figure 22d. Residual plots for Model D with the dynamic dataset as a function of magnitude.

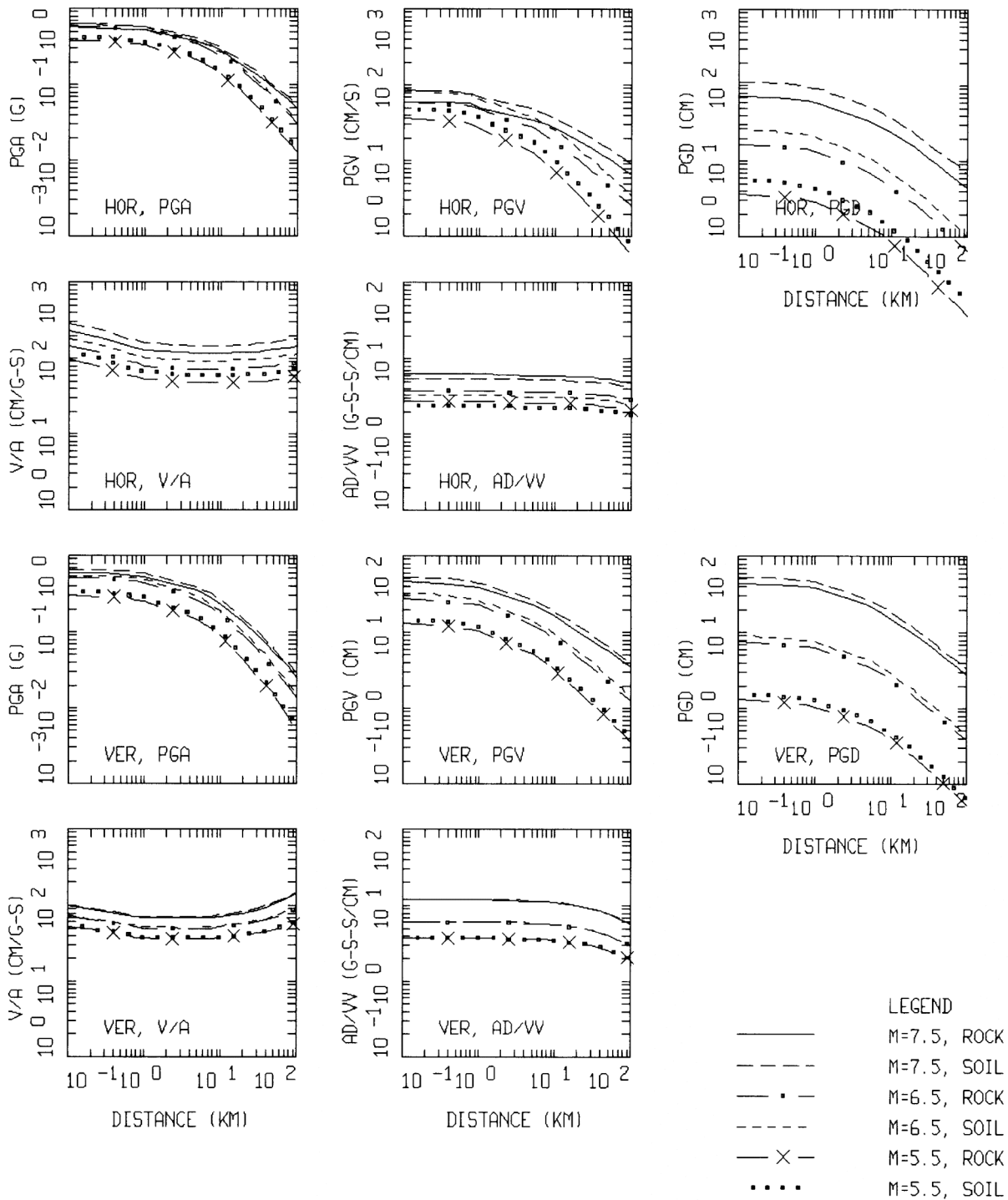
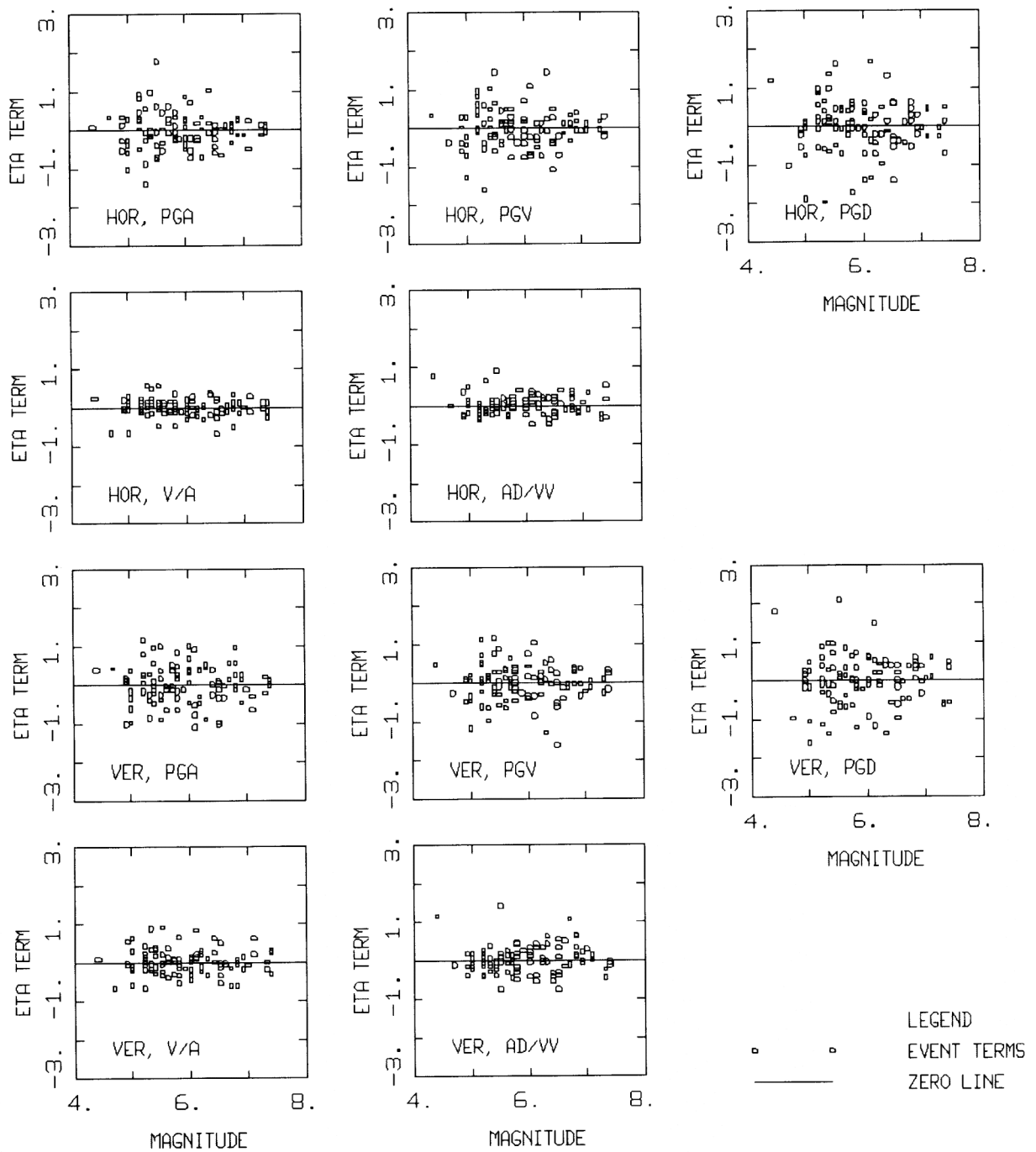
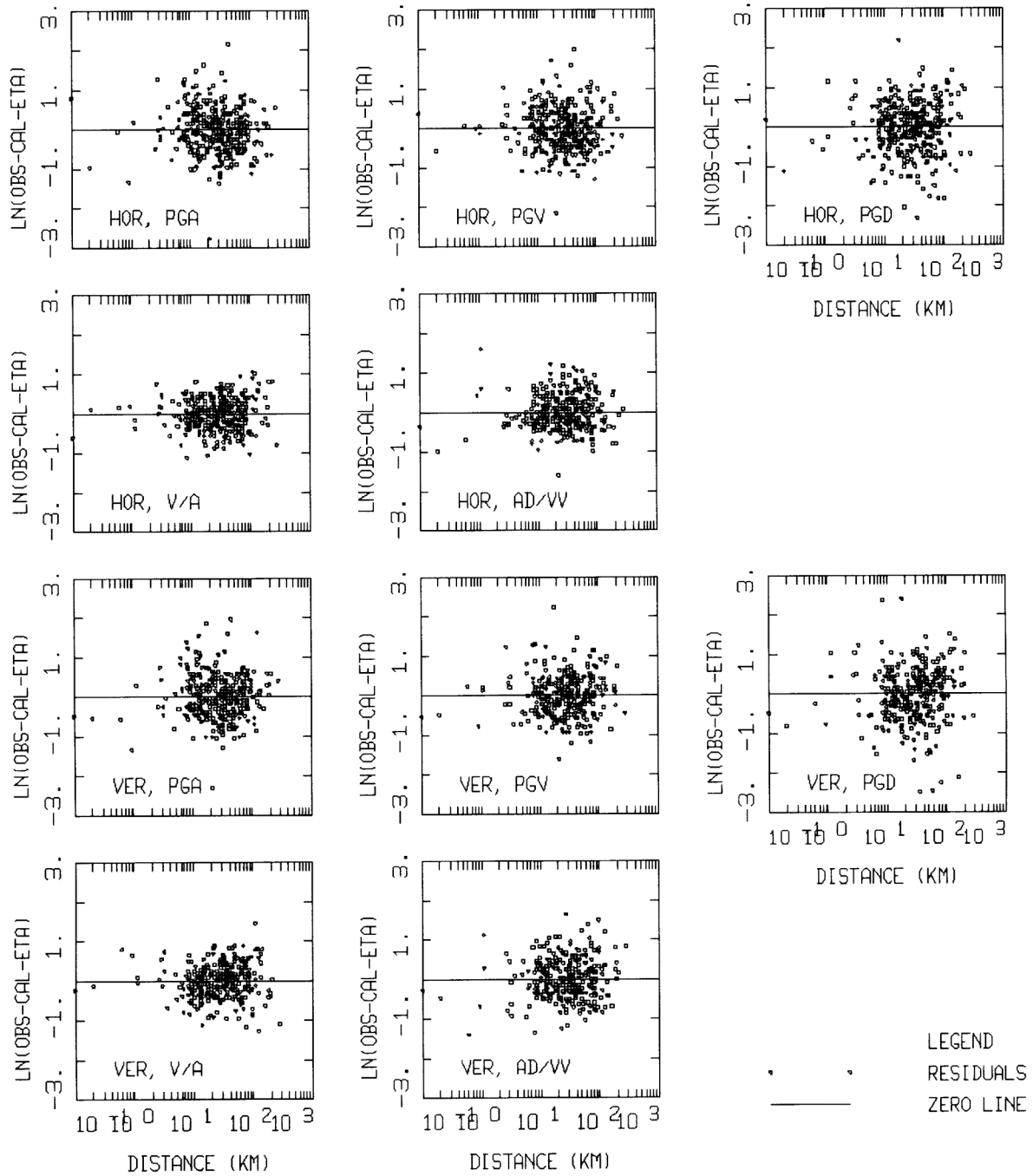


Figure 23a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model D form and the static dataset (without the Chi-Chi earthquake data) assuming a strike-slip mechanism.



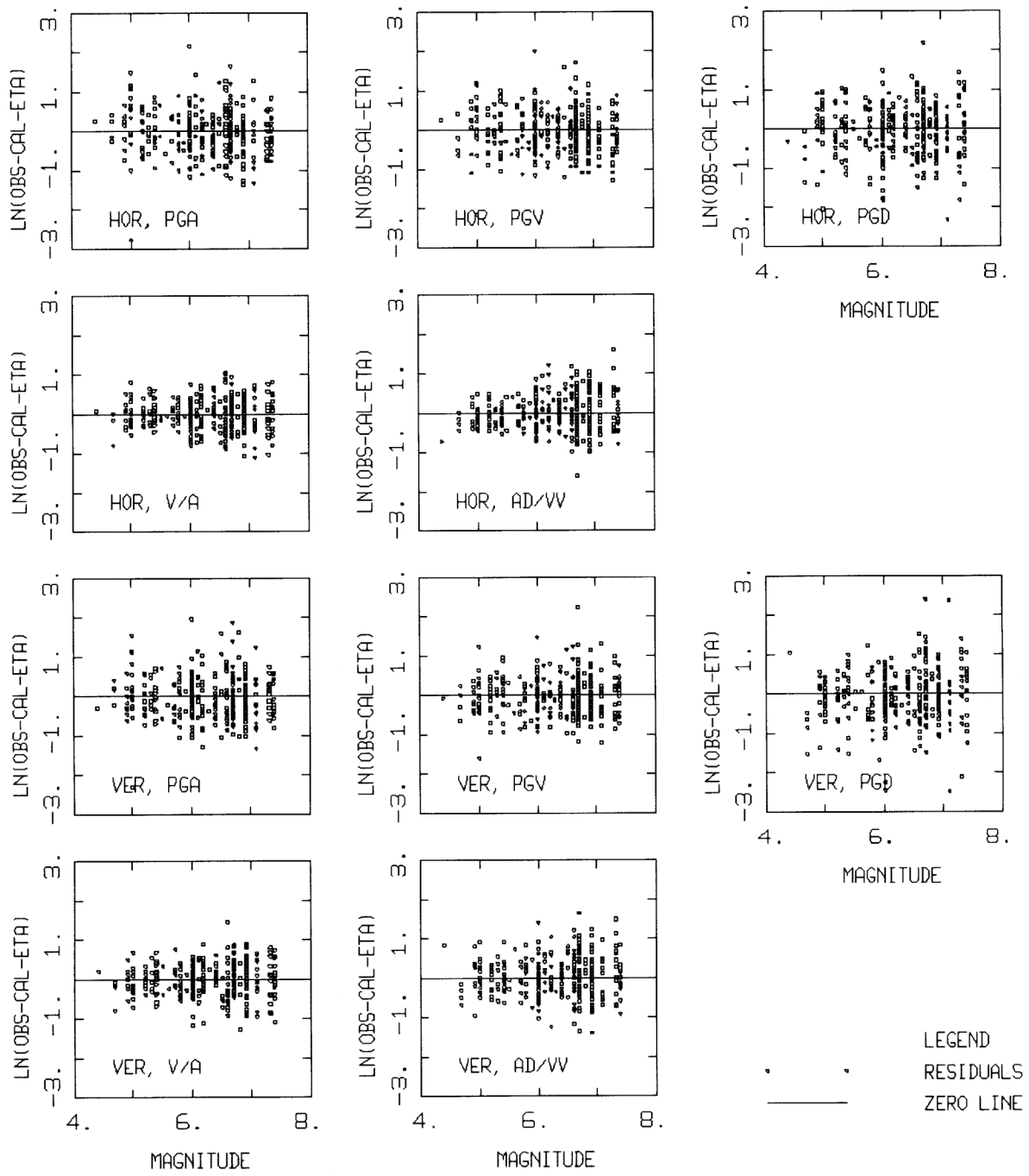
MODEL D (NO CHICHI DATA), STATIC DATASET

Figure 23b. Eta terms as a function of magnitude for the regressions using Model D with the static dataset (without the Chi-Chi earthquake data).



MODEL D (NO CHICHI DATA), STATIC DATASET

Figure 23c. Residual plots for Model D with the static dataset (without the Chi-Chi earthquake data) as a function of distance.



MODEL D (NO CHICHI DATA), STATIC DATASET

Figure 23d. Residual plots for Model D with the static dataset (without the Chi-Chi earthquake data) as a function of magnitude.

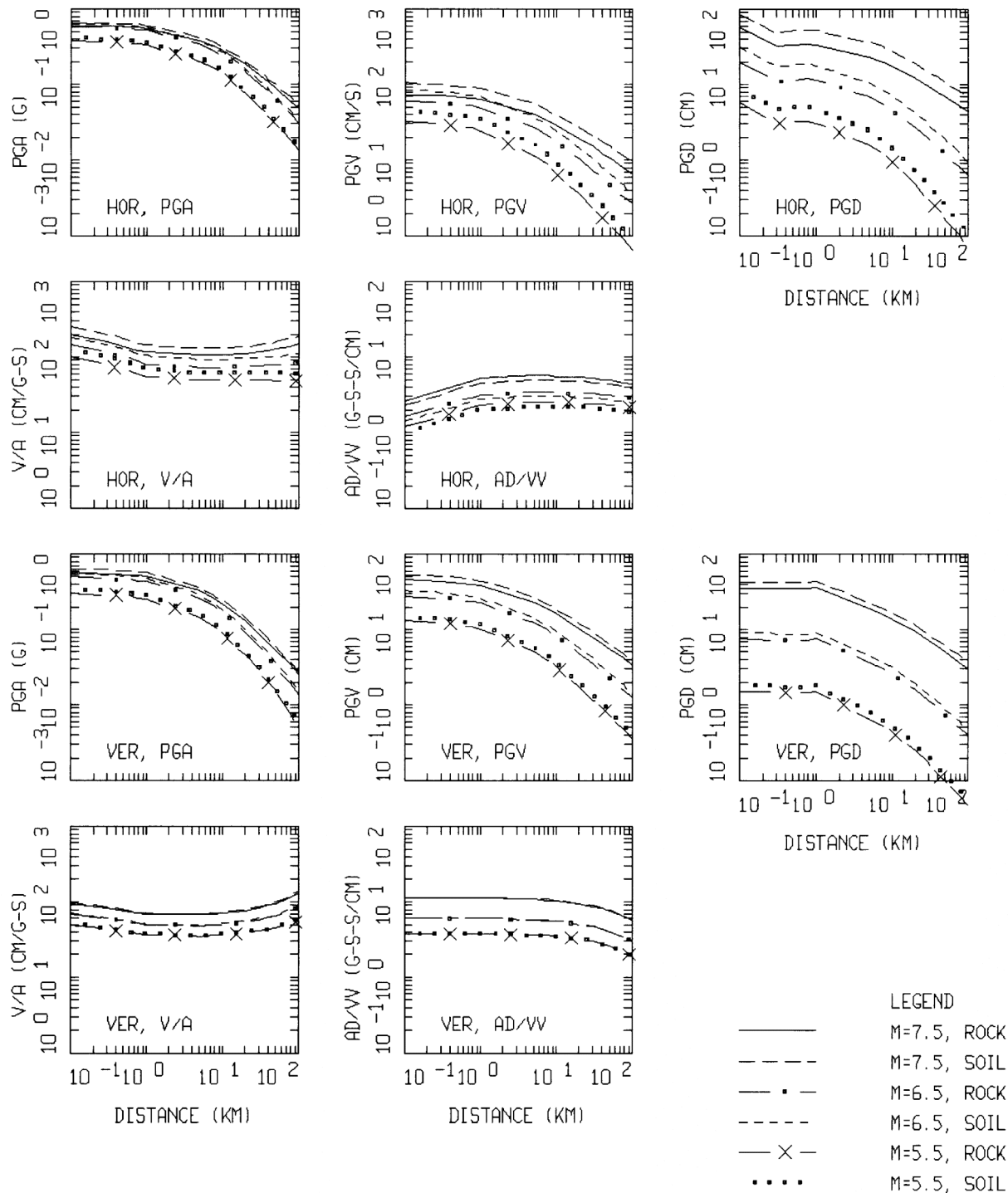
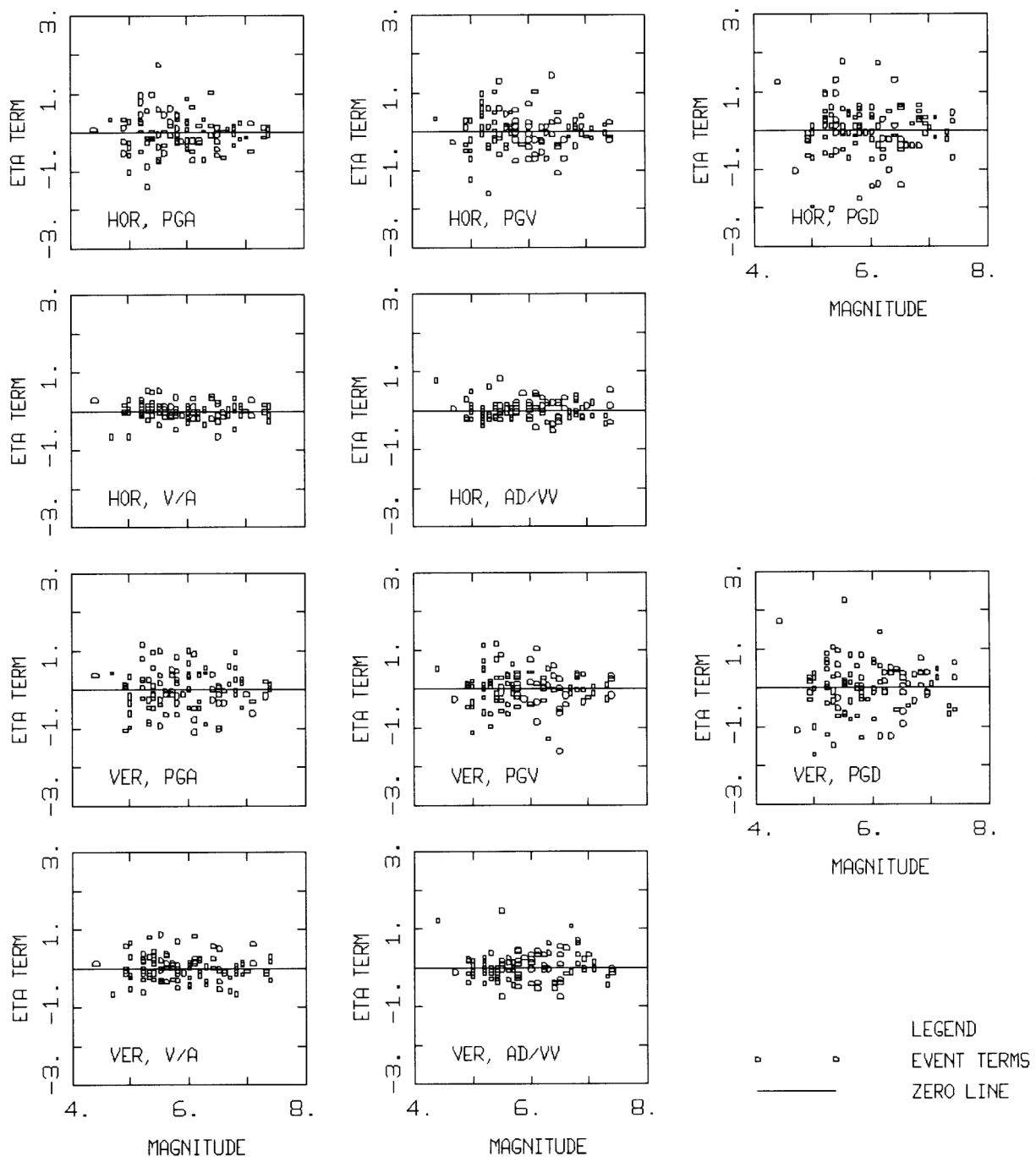
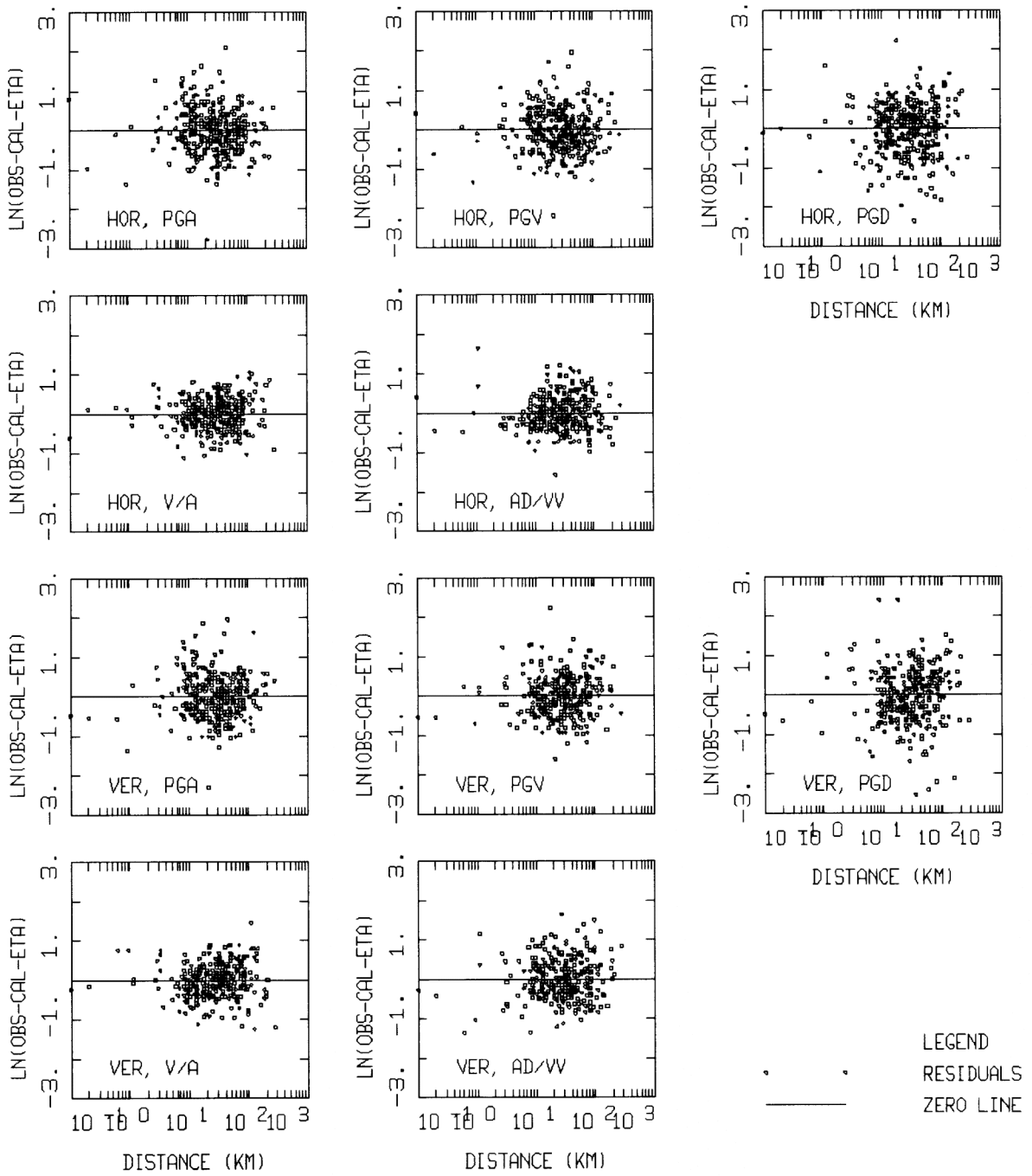


Figure 24a. Peak ground motion estimates for M=5.5, 6.5, and 7.5 based on the functional Model D form and the dynamic dataset (without the Chi-Chi earthquake data) assuming a strike-slip mechanism.



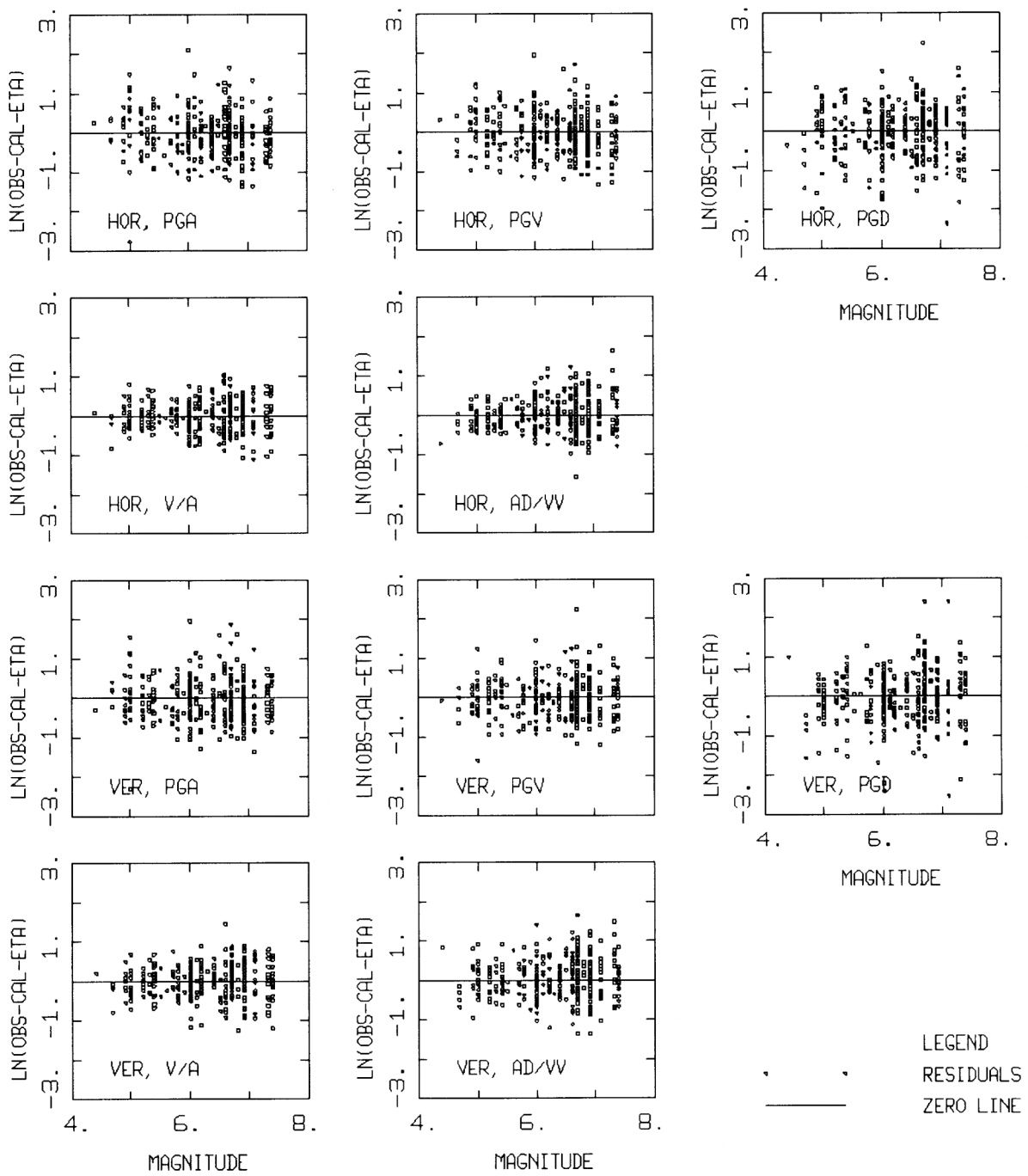
MODEL D (NO CHICHI DATA), DYNAMIC DATASET

Figure 24b. Eta terms as a function of magnitude for the regressions using Model D with the dynamic dataset (without the Chi-Chi earthquake data).



MODEL D (NO CHICHI DATA), DYNAMIC DATASET

Figure 24c. Residual plots for Model D with the dynamic dataset (without the Chi-Chi earthquake data) as a function of distance.



MODEL D (NO CHICHI DATA), DYNAMIC DATASET

Figure 24d. Residual plots for Model D with the dynamic dataset (without the Chi-Chi earthquake data) as a function of magnitude.

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time			Magnitude (2)				Station (3)		Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners		PGA (g)	PGV (cm/s)	PGD (cm)	
	YEAR	MODY	HRMN	M	ML	MS	OTH	No.	Description H/F					LP (hz)	HP (hz)				
Helena, Montana 00	1935	1031	1838	6.2	5.5	6.0	0.0	2022	Carroll College 99	8.0*	EZA	HELENA\A-HMCDWN	0.20	15.0	0.102	7.3	2.29		
										999.9	-	HELENA\A-HMC180	0.20	15.0	0.150	5.8	1.00		
												HELENA\A-HMC270	0.20	15.0	0.173	16.5	2.37		
Helena, Montana 01	1935	1031	1918	0.0	0.0	0.0	0.0	2229	Helena Fed Bldg 99	36.7*	EAA	HELENA\B-FEB-UP	0.50	20.0	0.012	0.3	0.57		
										999.9	-	HELENA\B-FEB000	1.00	20.0	0.047	0.7	0.23		
												HELENA\B-FEB090	0.50	20.0	0.041	0.7	0.45		
Humboldt Bay 99	1937	0207	0442	5.8	5.8	0.0	0.0	USGS	1023 99	73.7*	BQD	HUMBOLT\FRN-UP	0.60	10.0	0.019	1.2	0.12		
												HUMBOLT\FRN225	0.50	10.0	0.044	2.6	0.30		
												HUMBOLT\FRN315	0.30	10.0	0.038	3.2	0.45		
Imperial Valley 99	1938	0606	0242	0.0	0.0	0.0	5.0	USGS	117 99	36.7*	EQD	IMPVALL\B-ELC-UP	1.50	20.0	0.012	0.3	0.01		
												IMPVALL\B-ELC000	1.00	12.0	0.012	0.5	0.04		
												IMPVALL\B-ELC090	0.60	12.0	0.019	0.8	0.06		
Northwest Calif 99	1938	0912	0610	5.5	5.5	0.0	5.5	USGS	1023 99	55.0*	BQD	NWCALIF\A-FRNDWN	0.30	15.0	0.030	1.4	0.14		
												NWCALIF\A-FRN045	0.50	11.0	0.134	7.2	0.58		
												NWCALIF\A-FRN135	0.20	11.0	0.097	5.4	0.78		
Imperial Valley 00	1940	0519	0437	7.0	0.0	7.2	0.0	USGS	117 00	8.3	EQD	IMPVALL\I-ELC-UP	0.20	15.0	0.205	10.7	9.16		
												IMPVALL\I-ELC180	0.20	15.0	0.313	29.8	13.32		
												IMPVALL\I-ELC270	0.20	15.0	0.215	30.2	23.91		
Northwest Calif 99	1941	0209	0945	0.0	0.0	0.0	6.6	USGS	1023 99	97.2*	BQD	NWCALIF\C-FRN-UP	0.10	12.0	0.018	1.5	0.26		
												NWCALIF\C-FRN045	0.50	13.0	0.062	3.6	0.89		
												NWCALIF\C-FRN135	0.50	10.0	0.039	3.2	0.54		
Northern Calif 99	1941	1003	1614	0.0	0.0	0.0	6.4	USGS	1023 99	49.6*	BQD	NCALIF\F-FRN-UP	0.50	13.0	0.038	2.6	0.26		
												NCALIF\F-FRN225	0.20	13.0	0.114	5.9	1.77		
												NCALIF\F-FRN315	0.50	13.0	0.122	6.3	1.15		
Borrego 99	1942	1021	1622	0.0	0.0	0.0	6.5	USGS	117 99	49.0*	EQD	BORREGO\B-ELC-UP	0.20	20.0	0.033	1.1	0.30		
												BORREGO\B-ELC000	0.10	15.0	0.068	3.9	1.37		
												BORREGO\B-ELC090	0.10	15.0	0.044	4.0	1.41		
Imperial Valley 99	1951	0124	0717	0.0	0.0	0.0	5.6	USGS	117 99	28.5*	EQD	IMPVALL\C-ELC-UP	0.40	20.0	0.013	0.6	0.14		
												IMPVALL\C-ELC000	0.40	13.0	0.029	2.4	0.39		
												IMPVALL\C-ELC090	0.15	12.0	0.030	2.9	0.92		
Northwest Calif 99	1951	1008	0411	5.8	0.0	0.0	0.0	USGS	1023 99	56.0*	BQD	NWCALIF\B-FRN-UP	0.40	20.0	0.031	2.1	0.22		
												NWCALIF\B-FRN224	0.50	12.0	0.105	4.6	0.47		
												NWCALIF\B-FRN314	0.50	12.0	0.110	6.1	0.82		
Kern County 03	1952	0721	1153	7.4	0.0	7.7	0.0	USGS	135 99	120.5	IPD	KERN\PEL-UP	0.20	20.0	0.021	2.8	2.55		
												KERN\PEL090	0.20	15.0	0.042	7.5	4.79		
												KERN\PEL180	0.20	13.0	0.058	6.2	1.86		
								CDMG	80053 99	Pasadena - CIT Athenaeum	127.0	109.0	CQD	KERN\PAS-UP	0.50	12.5	0.027	2.9	0.86
														KERN\PAS180	0.50	12.5	0.045	5.6	1.25
														KERN\PAS270	0.20	12.1	0.053	9.2	2.53
								USGS	283 99	Santa Barbara Courthouse	87.0	85.0	CQD	KERN\SBA-UP	0.50	12.3	0.041	4.4	1.27
														KERN\SBA042	0.50	14.3	0.087	12.1	2.81
														KERN\SBA132	0.50	13.2	0.127	15.5	4.06
USGS	1095	Taft Lincoln School	41.0	FQD	KERN\TAF-UP	0.05	13.2	0.109	6.6	4.56									

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time			Magnitude (2)				Station (3)		Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
	YEAR	MODY	HRMN	M	ML	MS	OTH	No.	Description H/F								
								02		42.0	B	KERN\TAF021 KERN\TAF111	0.05 0.05	13.9 13.2	0.156 0.178	15.3 17.5	9.25 8.99
Northern Calif 99	1952	0922	1141	5.2	5.2	0.0	5.5	USGS 1023 99	Ferndale City Hall	39.3* 999.9	BQD C	NCALIF\A-FRN-UP NCALIF\A-FRN044 NCALIF\A-FRN134	0.40 0.30 0.30	10.0 12.0 10.0	0.028 0.062 0.074	1.9 5.6 5.5	0.30 1.17 0.98
Southern Calif 99	1952	1122	0746	0.0	0.0	0.0	6.0	USGS 1083 99	San Luis Obispo	70.0* 999.9	CBB -	SCALIF\SLO-UP SCALIF\SLO234 SCALIF\SLO324	0.20 0.20 0.50	13.0 13.0 13.0	0.028 0.036 0.054	2.4 2.8 3.3	0.74 0.93 0.55
Imperial Valley 99	1953	0614	0417	0.0	0.0	0.0	5.5	USGS 117 99	El Centro Array #9	28.5* 999.9	EQD C	IMPVALL\G-ELC-UP IMPVALL\G-ELC000 IMPVALL\G-ELC090	0.50 0.60 0.25	20.0 15.0 12.0	0.024 0.006 0.049	0.6 0.4 5.4	0.06 0.06 1.00
Central Calif 99	1954	0425	2033	0.0	0.0	0.0	5.3	USGS 1028 99	Hollister City Hall	28.0* 999.9	CHD C	CTRCALIF\A-HCH-UP CTRCALIF\A-HCH181 CTRCALIF\A-HCH271	0.30 0.40 0.50	11.0 10.0 10.0	0.020 0.049 0.051	1.6 4.7 3.9	0.26 0.63 0.42
Northern Calif 99	1954	1221	1956	0.0	0.0	0.0	6.5	USGS 1023 99	Ferndale City Hall	31.5* 999.9	BQD C	NCALIF\H-FRN-UP NCALIF\H-FRN044 NCALIF\H-FRN314	0.50 0.20 0.50	13.0 20.0 13.0	0.039 0.159 0.189	6.9 33.9 25.3	2.03 13.34 5.86
Imperial Valley 99	1955	1217	0607	0.0	0.0	0.0	5.4	USGS 117 99	El Centro Array #9	28.4* 999.9	EQD C	IMPVALL\E-ELC-UP IMPVALL\E-ELC000 IMPVALL\E-ELC090	0.60 0.23 0.20	15.0 12.0 15.0	0.028 0.056 0.042	0.9 4.0 3.7	0.07 0.79 0.70
El Alamo 99	1956	1217	1433	0.0	0.0	0.0	6.8	USGS 117 99	El Centro Array #9	130.0 999.9	EQD C	ELALAMO\ELC-UP ELALAMO\ELC180 ELALAMO\ELC270	0.50 0.10 0.10	20.0 15.0 15.0	0.014 0.033 0.052	1.7 4.1 6.6	0.77 2.89 4.93
San Francisco 02	1957	0322	1944	5.3	5.3	0.0	0.0	USGS 1117 02	Golden Gate Park	9.5* 8.0	IBA A	SANFRAN\GGP-UP SANFRAN\GGP010 SANFRAN\GGP100	0.30 0.80 0.30	25.0 20.0 20.0	0.047 0.095 0.112	1.1 3.9 4.6	0.18 0.19 0.43
Central Calif 99	1960	0120	0326	0.0	0.0	0.0	5.0	USGS 1028 99	Hollister City Hall	14.9* 999.9	CHD C	CTRCALIF\B-HCH-UP CTRCALIF\B-HCH181 CTRCALIF\B-HCH271	0.40 0.40 0.50	12.0 11.0 11.0	0.027 0.041 0.063	1.7 2.2 3.6	0.25 0.38 0.60
Northern Calif 99	1960	0606	0117	5.7	5.7	0.0	5.7	USGS 1023 99	Ferndale City Hall	58.9* 999.9	BQD C	NCALIF\B-FRN-UP NCALIF\B-FRN224 NCALIF\B-FRN314	0.30 0.30 0.40	15.0 15.0 15.0	0.016 0.072 0.065	0.9 3.8 3.0	0.17 0.59 0.35
Hollister 99	1961	0409	0723	0.0	0.0	0.0	5.6	USGS 1028 99	Hollister City Hall	19.6* 999.9	CHD C	HOLLISTR\B-HCH-UP HOLLISTR\B-HCH181 HOLLISTR\B-HCH271	0.11 0.25 0.11	11.0 11.0 11.0	0.051 0.074 0.196	4.7 6.3 12.4	1.77 1.31 4.29
Hollister 99	1961	0409	0725	0.0	0.0	0.0	5.5	USGS 1028 99	Hollister City Hall	12.6* 999.9	CHD C	HOLLISTR\C-HCH-UP HOLLISTR\C-HCH181 HOLLISTR\C-HCH271	0.30 0.40 0.30	13.0 12.0 11.0	0.049 0.072 0.075	3.0 4.9 9.7	0.53 0.71 1.75
Parkfield 00	1966	0628	0426	6.1	6.1	0.0	0.0	CDMG 1013 00	Cholame #2	0.1 6.6	IHD C	PARKF\C02DWN PARKF\C02065 PARKF\C02XXX	0.20 0.20 -99.	20.0 10.0	0.255 0.476	13.7 75.1	3.79 22.49

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 1014 Cholame #5	5.3	IHC	PARKF\C05DWN	0.20	21.0	0.138	6.9	2.66
			00	9.3	C	PARKF\C05085	0.20	17.4	0.442	24.7	5.15
						PARKF\C05355	0.20	20.0	0.367	21.8	3.83
			CDMG 1015 Cholame #8	9.2	ABB	PARKF\C08DWN	0.20	24.0	0.116	4.3	1.48
			00	13.0	C	PARKF\C08050	0.20	20.0	0.246	10.2	3.60
						PARKF\C08320	0.20	20.0	0.273	11.3	3.20
			CDMG 1016 Cholame #12	14.7	IBB	PARKF\C12DWN	0.20	20.0	0.053	4.6	2.10
			00	17.3	B	PARKF\C12050	0.20	20.0	0.059	5.8	2.56
						PARKF\C12320	0.20	20.0	0.063	6.8	3.55
			USGS 1083 San Luis Obispo	60.0	CBB	PARKF\SLO-UP	0.20	15.0	0.007	0.8	0.28
			00	63.6	-	PARKF\SLO234	0.20	15.0	0.012	1.0	0.30
						PARKF\SLO324	0.20	12.0	0.014	1.0	0.46
			CDMG 1438 Temblor pre-1969	9.9	IJA	PARKF\TMBDWN	0.20	16.9	0.136	4.4	1.10
			00	16.1	B	PARKF\TMB205	0.20	14.7	0.357	21.5	3.87
						PARKF\TMB295	0.20	15.1	0.272	15.0	3.40
Northern Calif 99	1967 1210 1206	5.6 5.6 0.0 5.8	USGS 1023 Ferndale City Hall	30.8*	BQD	NCALIF\C-FRN-UP	0.40	12.0	0.032	3.3	0.46
			99	999.9	C	NCALIF\C-FRN224	0.30	20.0	0.283	9.2	1.23
						NCALIF\C-FRN314	0.20	13.0	0.113	11.1	1.58
Northern Calif 99	1967 1218 1725	0.0 0.0 0.0 5.2	USGS 1028 Hollister City Hall	45.0*	CHD	NCALIF\E-HCH-UP	0.50	15.0	0.011	0.5	0.09
			99	999.9	C	NCALIF\E-HCH181	0.30	15.0	0.013	2.0	0.37
						NCALIF\E-HCH271	0.30	15.0	0.013	1.0	0.27
Borrego Mtn 00	1968 0409 0230	6.8 6.7 6.5 0.0	USGS 117 El Centro Array #9	46.0	EQD	BORREGO\A-ELC-UP	0.20	16.4	0.030	3.3	1.99
			00	45.0	C	BORREGO\A-ELC180	0.20	12.5	0.130	26.3	12.18
						BORREGO\A-ELC270	0.20	12.8	0.057	13.2	10.03
			USGS 135 LA - Hollywood Stor FF	217.4	IPD	BORREGO\A-PEL-UP	0.20	30.0	0.005	1.1	1.10
			00	211.0	C	BORREGO\A-PEL090	0.20	13.0	0.012	2.9	1.30
						BORREGO\A-PEL180	0.10	13.0	0.011	2.3	2.33
			USGS 130 LB - Terminal Island	195.0	CCD	BORREGO\A-TLI-UP	0.10	20.0	0.005	1.6	1.76
			00	187.0	C	BORREGO\A-TLI249	0.10	15.0	0.010	2.8	2.53
						BORREGO\A-TLI339	0.10	15.0	0.009	3.0	5.46
			CDMG 475 Pasadena - CIT Athenaeum	203.0	CQD	BORREGO\A-PAS-UP	0.50	13.0	0.004	0.5	0.38
			00	200.0	B	BORREGO\A-PAS180	0.50	13.0	0.007	1.4	0.82
						BORREGO\A-PAS270	0.50	13.0	0.009	1.8	0.64
			SCE 280 San Onofre - So Cal Edison	124.7	ABB	BORREGO\A-SON-UP	0.20	15.0	0.062	1.9	0.50
			00	122.0	-	BORREGO\A-SON033	0.10	20.0	0.041	3.7	1.72
						BORREGO\A-SON303	0.20	20.0	0.045	3.7	1.30
Lytle Creek 03	1970 0912 1430	5.4 5.4 0.0 0.0	CDMG 24278 Castaic - Old Ridge Route	107.8*	A-B	LYTLECR\ORRDWN	0.70	20.0	0.010	0.4	0.03
			99	999.9	B	LYTLECR\ORR021	0.50	20.0	0.021	0.9	0.07
						LYTLECR\ORR291	0.50	20.0	0.026	1.5	0.15
			CDWR 111 Cedar Springs, Allen Ranch	20.6*	AAA	LYTLECR\CSMXXX	-99.				
			99	999.9	A	LYTLECR\CSM095	0.60	15.0	0.071	1.8	0.11
						LYTLECR\CSM185	1.10	20.0	0.050	1.2	0.06
			CDWR 112 Cedar Springs Pumphouse	23.7*	AAB	LYTLECR\CSPDWN	1.00	15.0	0.037	1.3	0.08
			99	22.0	-	LYTLECR\CSP126	0.50	20.0	0.069	2.6	0.14
						LYTLECR\CSP216	0.40	15.0	0.077	3.7	0.39
			USGS 113 Colton - So Cal Edison	32.4*	ACD	LYTLECR\CLN-UP	0.60	15.0	0.035	1.3	0.11
			99	29.0	C	LYTLECR\CLN090	0.40	12.0	0.033	1.6	0.17
						LYTLECR\CLN180	0.50	11.0	0.038	1.3	0.14
			CDWR 620 Devil's Canyon	21.9*	CAA	LYTLECR\DCFDWN	1.10	30.0	0.084	1.8	0.10
			99	21.0	-	LYTLECR\DCF090	1.00	20.0	0.146	3.3	0.18

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			USGS 125 Lake Hughes #1	93.5*	APC	LYTLECR\DCFL180	1.00	30.0	0.151	5.6	0.23
			99	999.9	B	LYTLECR\L01DWN	1.10	15.0	0.006	0.3	0.02
						LYTLECR\L01021	0.80	10.0	0.009	0.7	0.08
						LYTLECR\L01291	0.35	20.0	0.008	0.6	0.10
			USGS 135 LA - Hollywood Stor FF	76.0*	IPD	LYTLECR\PEL-UP	0.90	20.0	0.007	0.3	0.02
			99	999.9	C	LYTLECR\PEL090	0.30	20.0	0.017	1.0	0.14
						LYTLECR\PEL180	0.40	20.0	0.018	0.7	0.06
			CDMG 278 Puddingstone Dam (Abutment)	32.8*	IVB	LYTLECR\PUDDWN	0.35	20.0	0.014	0.7	0.12
			99	999.9	-	LYTLECR\PUD055	0.50	20.0	0.018	0.9	0.09
						LYTLECR\PUD326	0.50	20.0	0.019	0.9	0.12
			LAFD 104 Santa Anita Dam	45.9*	IGA	LYTLECR\SADDWN	1.20	25.0	0.013	0.3	0.01
			99	999.9	-	LYTLECR\SAD003	1.00	25.0	0.042	1.6	0.10
						LYTLECR\SAD273	0.40	25.0	0.018	0.5	0.04
			USGS 290 Wrightwood - 6074 Park Dr	15.4*	BAB	LYTLECR\WTWDWN	0.60	40.0	0.078	2.3	0.25
			99	13.0	B	LYTLECR\WTW115	0.60	20.0	0.162	10.1	1.02
						LYTLECR\WTW205	0.70	30.0	0.200	10.5	0.62
San Fernando 02	1971 0209 1400	6.6 0.0 6.6 0.0	2 2516 Via Tejon PV	65.1	CBC	SFERN\PVEDWN	0.20	20.0	0.020	2.0	1.26
			99	999.9	-	SFERN\PVE065	0.20	20.0	0.026	3.8	2.19
						SFERN\PVE155	0.20	20.0	0.041	4.2	3.11
			CIT 103 Anza Post Office	169.0	AAC	SFERN\AZPDWN	0.50	35.0	0.015	0.7	0.20
			99	999.9	-	SFERN\AZP045	0.50	35.0	0.027	1.4	0.25
						SFERN\AZP315	0.50	35.0	0.037	2.2	0.30
			USGS 1004 Bakersfield - Harvey Aud	120.0	CCD	SFERN\BFA-UP	0.10	15.0	0.007	0.7	0.69
			99	999.9	-	SFERN\BFA180	0.10	13.0	0.007	1.4	1.08
						SFERN\BFA270	0.10	20.0	0.007	1.2	1.23
			USGS 105 Borrego Springs Fire Sta	212.0	AAC	SFERN\BSFDWN	0.10	30.0	0.005	1.2	1.13
			99	999.9	-	SFERN\BSF135	0.10	23.0	0.009	1.2	1.22
						SFERN\BSF225	0.10	30.0	0.009	1.2	0.90
			USGS 1 Buena Vista - Taft	118.0	AQD	SFERN\BVPDWN	0.20	20.0	0.007	0.6	0.41
			99	999.9	-	SFERN\BVP090	0.10	13.0	0.012	1.5	1.51
						SFERN\BVP180	0.10	15.0	0.012	1.3	0.68
			ACOE 108 Carbon Canyon Dam	66.4	AMA	SFERN\CNDDWN	0.50	35.0	0.043	1.6	0.93
			99	999.9	-	SFERN\CND130	0.50	35.0	0.070	2.7	1.27
						SFERN\CND220	0.50	35.0	0.071	3.9	0.85
			CDMG 24278 Castaic - Old Ridge Route	24.9	A-B	SFERN\ORRDWN	0.50	35.0	0.171	6.5	1.28
			99	24.2	B	SFERN\ORR021	0.50	35.0	0.324	15.6	2.31
						SFERN\ORR291	0.50	35.0	0.268	25.9	4.67
			CDWR 111 Cedar Springs, Allen Ranch	86.6	AAA	SFERN\CSMDWN	0.20	35.0	0.009	0.9	0.53
			99	999.9	A	SFERN\CSM095	0.20	35.0	0.020	1.7	0.49
						SFERN\CSM185	0.20	35.0	0.015	1.4	0.57
			CDWR 112 Cedar Springs Pumphouse	87.6	AAB	SFERN\CSPDWN	0.10	20.0	0.012	0.8	0.30
			99	88.0	-	SFERN\CSP126	0.10	20.0	0.027	2.0	0.31
						SFERN\CSP216	0.10	20.0	0.025	2.9	0.40
			USGS 1013 Cholame-Shandon Array #2 @	219.0	IHD	SFERN\C02DWN	0.10	50.0	0.004	1.3	1.18
			99	999.9	C	SFERN\C02051	0.10	20.0	0.004	1.2	1.31
						SFERN\C02321	0.10	30.0	0.005	1.1	0.92
			USGS 1015 Cholame-Shandon Array #8	223.0	ABB	SFERN\C08XXX	-99.				
			99	999.9	C	SFERN\C08051	0.10	23.0	0.005	1.0	0.75
						SFERN\C08321	0.10	23.0	0.006	1.6	0.97
			USGS 113 Colton - So Cal Edison @	89.6	ACD	SFERN\CLN-UP	0.10	15.0	0.023	1.1	0.16
			99	91.0	C	SFERN\CLN090	0.10	13.0	0.032	1.8	0.29
						SFERN\CLN180	0.10	13.0	0.039	2.2	0.32
			CDMG 121 Fairmont Dam	29.1	AGA	SFERN\FTR-UP	0.50	35.0	0.039	3.5	0.71

Appendix A

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	999.9	-	SFERN\FTR056	0.50	35.0	0.071	4.7	0.72
						SFERN\FTR326	0.50	35.0	0.109	6.5	1.10
USGS	998	Fort Tejon		64.1	AAB	SFERN\FTJ-UP	0.10	23.0	0.016	0.7	0.21
	99			64.0	B	SFERN\FTJ000	0.10	20.0	0.026	1.1	0.36
						SFERN\FTJ090	0.10	20.0	0.022	1.4	0.27
CDWR	994	Gormon - Oso Pump Plant		48.1	EBC	SFERN\OPP-UP	0.10	23.0	0.039	3.6	0.72
	99			46.7	C	SFERN\OPP000	0.10	23.0	0.084	7.9	1.27
						SFERN\OPP270	0.10	30.0	0.105	6.8	1.76
CDMG	12331	Hemet Fire Station		136.0	AQD	SFERN\H05DWN	0.50	35.0	0.026	1.5	0.32
	99			999.9	C	SFERN\H05135	0.50	35.0	0.033	2.2	0.38
						SFERN\H05225	0.50	35.0	0.047	2.6	0.33
ACOE	1035	Isabella Dam (Aux Abut)		113.0	AGA	SFERN\ISDDWN	0.10	20.0	0.006	1.3	1.33
	99			999.9	-	SFERN\ISD014	0.10	13.0	0.006	1.4	1.94
						SFERN\ISD284	0.10	13.0	0.009	1.6	2.03
USGS	135	LA - Hollywood Stor FF		21.2	IPD	SFERN\PEL-UP	0.50	35.0	0.136	4.3	1.52
	99			24.6	C	SFERN\PEL090	0.20	35.0	0.210	18.9	12.40
						SFERN\PEL180	0.20	35.0	0.174	14.9	6.25
USGS	125	Lake Hughes #1		25.8	APC	SFERN\L01DWN	0.20	35.0	0.098	11.4	2.76
	99			23.4	B	SFERN\L01021	0.50	35.0	0.145	17.3	2.88
						SFERN\L01111	0.50	35.0	0.110	14.0	1.93
USGS	126	Lake Hughes #4		24.2	IGB	SFERN\L04DWN	0.50	35.0	0.164	6.4	0.93
	99			19.6	B	SFERN\L04111	0.50	35.0	0.192	5.6	0.92
						SFERN\L04201	0.50	35.0	0.153	8.4	1.85
USGS	127	Lake Hughes #9		23.5	AGA	SFERN\L09DWN	0.50	35.0	0.088	2.3	0.87
	99			20.2	B	SFERN\L09021	0.50	35.0	0.157	4.5	1.28
						SFERN\L09291	0.50	35.0	0.134	3.9	1.12
USGS	128	Lake Hughes #12		20.3	AEB	SFERN\L12DWN	0.50	35.0	0.167	3.7	0.65
	99			17.0	B	SFERN\L12021	0.50	35.0	0.366	17.0	1.65
						SFERN\L12291	0.50	35.0	0.283	12.7	2.97
USGS	130	LB - Terminal Island		69.2	CCD	SFERN\TLI-UP	0.10	50.0	0.017	3.9	3.03
	99			61.4	C	SFERN\TLI249	0.10	20.0	0.029	9.6	8.25
						SFERN\TLI339	0.10	20.0	0.029	6.8	6.17
CDWR	1041	Maricopa Array #1		115.0	IBB	SFERN\MA1DWN	0.10	20.0	0.005	1.1	1.40
	99			999.9	-	SFERN\MA1130	0.10	13.0	0.007	1.7	1.53
						SFERN\MA1220	0.10	20.0	0.011	2.4	2.33
CDWR	1042	Maricopa Array #2		113.0	IBB	SFERN\MA2DWN	0.20	20.0	0.007	0.7	0.22
	99			999.9	-	SFERN\MA2130	0.10	20.0	0.009	1.3	1.03
						SFERN\MA2220	0.20	15.0	0.009	1.1	0.41
CDWR	1043	Maricopa Array #3		113.0	IBB	SFERN\MA3DWN	0.20	15.0	0.007	2.9	2.15
	99			999.9	-	SFERN\MA3130	0.20	20.0	0.008	2.2	1.85
						SFERN\MA3220	0.10	20.0	0.010	2.0	2.16
USGS	279	Pacoima Dam		2.8	AMB	SFERN\PULDWN	0.10	35.0	0.699	56.5	18.25
	02			999.9	A	SFERN\PUL164	0.10	35.0	1.226	112.5	35.50
						SFERN\PUL254	0.50	35.0	1.160	54.3	11.73
USGS	262	Palmdale Fire Station		25.4	AQD	SFERN\PDLXXX	-99.				
	99			28.6	B	SFERN\PDL120	0.50	35.0	0.121	12.3	2.65
						SFERN\PDL210	0.50	35.0	0.151	8.1	1.85
CDMG	80053	Pasadena - CIT Athenaeum		31.7	CQD	SFERN\PASDWN	0.50	35.0	0.095	4.5	0.70
	99			25.7	B	SFERN\PAS000	0.50	35.0	0.088	6.4	1.36
						SFERN\PAS090	0.20	35.0	0.110	13.3	7.78
USGS	266	Pasadena - Old Seismo Lab		19.1	CGA	SFERN\PSLDWN	0.50	35.0	0.090	4.4	1.40
	99			21.9	A	SFERN\PSL180	0.50	35.0	0.089	5.3	0.86
						SFERN\PSL270	0.50	35.0	0.202	10.9	2.39
CDWR	269	Pearblossom Pump		38.9	AGB	SFERN\PPPDWN	0.20	35.0	0.050	2.1	0.95

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			99	37.4	B	SFERN\PPP000	0.20	35.0	0.102	4.7	1.53
			CDMG 272 Port Hueneme	63.0	BBD	SFERN\PPP270	0.20	35.0	0.136	5.6	1.61
			99	62.0	C	SFERN\PHN-UP	0.50	35.0	0.011	3.0	1.78
						SFERN\PHN180	0.50	35.0	0.027	6.1	3.50
						SFERN\PHN270	0.50	35.0	0.025	3.9	2.65
			CDMG 278 Puddingstone Dam (Abutment)	50.4	IVD	SFERN\PUDDWN	0.50	35.0	0.036	1.6	0.51
			99	999.9	-	SFERN\PUD055	0.50	35.0	0.074	4.0	0.76
						SFERN\PUD325	0.50	35.0	0.065	3.1	0.43
			USGS 314 San Diego Gas & Electric	214.0	ABD	SFERN\SDCDWN	0.10	33.0	0.003	1.0	0.90
			99	999.9	-	SFERN\SDC000	0.10	30.0	0.006	1.5	1.16
						SFERN\SDC090	0.10	30.0	0.004	1.2	1.00
			USGS 465 San Juan Capistrano	104.0	ABC	SFERN\SJCDWN	0.50	35.0	0.021	2.0	0.67
			99	999.9	-	SFERN\SJC033	0.50	35.0	0.046	3.3	1.05
						SFERN\SJC303	0.50	35.0	0.035	3.7	0.79
			SCE 280 San Onofre - So Cal Edison	122.0	ABB	SFERN\SONDWN	0.10	23.0	0.011	0.8	0.77
			99	999.9	-	SFERN\SON033	0.10	20.0	0.013	1.7	0.74
						SFERN\SON303	0.20	20.0	0.016	1.8	0.63
			LAFC 104 Santa Anita Dam	27.0	IGA	SFERN\SADDWN	0.20	35.0	0.062	3.9	1.80
			99	999.9	-	SFERN\SAD003	0.20	35.0	0.151	4.7	2.30
						SFERN\SAD273	0.20	35.0	0.212	6.1	2.89
			CDMG 285 Santa Felita Dam (Outlet)	27.5	ABA	SFERN\FSD-UP	0.10	20.0	0.065	4.1	2.36
			99	999.9	-	SFERN\FSD172	0.10	20.0	0.148	9.4	7.02
						SFERN\FSD262	0.10	13.0	0.152	6.5	3.46
			CDWR 1027 Tehachapi Pump	68.0	AAA	SFERN\TEHDWN	0.20	35.0	0.045	1.7	0.28
			99	999.9	-	SFERN\TEH090	0.20	35.0	0.053	2.0	0.37
						SFERN\TEH180	0.20	35.0	0.025	1.0	0.13
			USGS 282 UCSB - Fluid Mech Lab	125.6	CPD	SFERN\SBF-UP	0.20	30.0	0.011	1.3	0.73
			99	999.9	-	SFERN\SBF042	0.20	30.0	0.017	2.7	1.41
						SFERN\SBF132	0.20	30.0	0.017	3.0	1.29
			ACOE 287 Upland - San Antonio Dam	58.1	AAA	SFERN\SODDWN	0.50	35.0	0.032	1.3	0.54
			99	999.9	B	SFERN\SOD015	0.50	35.0	0.058	2.9	0.55
						SFERN\SOD285	0.50	35.0	0.079	3.5	0.50
			CDWR 1102 Wheeler Ridge - Ground	81.6	IBD	SFERN\WRP-UP	0.10	30.0	0.014	1.4	1.46
			99	82.0	C	SFERN\WRP090	0.10	23.0	0.027	2.0	1.47
						SFERN\WRP180	0.10	23.0	0.031	1.7	1.23
			ACOE 289 Whittier Narrows Dam	45.1	IHD	SFERN\WNDDWN	0.10	30.0	0.032	3.7	2.61
			99	999.9	-	SFERN\WND143	0.10	20.0	0.100	9.3	5.79
						SFERN\WND233	0.10	20.0	0.107	9.7	5.04
			USGS 290 Wrightwood - 6074 Park Dr	60.3	BAB	SFERN\WTWDWN	0.20	40.0	0.028	1.6	0.78
			99	60.7	B	SFERN\WTW025	0.20	30.0	0.061	2.6	0.47
						SFERN\WTW295	0.20	30.0	0.044	3.3	0.68
Managua, Nicaragua 99	1972 1223 0629	0.0 0.0 6.2 0.0	99999 Managua, ESSO 99	999.9 999.9	--- C	MANAGUA\A-ESSDWN MANAGUA\A-ESS090 MANAGUA\A-ESS180	0.20 0.30 0.10	20.0 20.0 20.0	0.377 0.421 0.337	12.5 21.4 26.1	3.11 6.01 8.25
Managua, Nicaragua 99	1972 1223 0719	0.0 0.0 0.0 5.2	99999 Managua, ESSO 99	999.9 999.9	--- C	MANAGUA\B-ESSDWN MANAGUA\B-ESS090 MANAGUA\B-ESS180	0.30 0.10 0.01	30.0 30.0 20.0	0.200 0.271 0.337	5.9 33.7 24.7	0.78 6.61 4.95
Point Mugu 02	1973 0221 1445	5.8 5.9 5.2 0.0	CDMG 272 Port Hueneme 99	25.0* 16.0	BBD C	PTMUGU\PHN-UP PTMUGU\PHN180 PTMUGU\PHN270	0.15 0.20 0.20	30.0 25.0 30.0	0.047 0.112 0.083	2.2 14.8 4.6	0.39 2.59 0.80

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			99	999.9	-	OROVILLE\D-WR090	1.50	50.0	0.141	1.1	0.04
			CDMG 1493 Johnson Ranch	10.7*	AAB	OROVILLE\D-DJR090	3.00	40.0	0.209	1.8	0.02
			99	999.9	-	OROVILLE\D-DJR000	2.00	50.0	0.089	1.1	0.02
			99	999.9	-	OROVILLE\D-DJR000	1.00	45.0	0.191	3.9	0.10
			99	999.9	-	OROVILLE\D-DJR090	1.00	40.0	0.095	1.6	0.05
			CDMG 1496 Nelson Ranch (OR7)	6.7*	ABB	OROVILLE\D-OR7DWN	1.50	50.0	0.110	1.3	0.02
			99	999.9	-	OROVILLE\D-OR7180	1.00	40.0	0.088	1.3	0.05
			99	999.9	-	OROVILLE\D-OR7270	1.20	50.0	0.114	1.9	0.05
			CIT 1545 Oroville Airport	11.7*	ACD	OROVILLE\D-OAPDWN	0.80	50.0	0.072	1.1	0.07
			99	999.9	-	OROVILLE\D-OAP180	0.70	40.0	0.047	1.1	0.06
			99	999.9	-	OROVILLE\D-OAP270	0.35	30.0	0.065	2.4	0.27
			CDMG 1549 Pacific Heights Rd (OR4)	12.0*	ACD	OROVILLE\D-OR4DWN	0.80	40.0	0.042	1.0	0.09
			99	999.9	-	OROVILLE\D-OR4235	0.60	40.0	0.065	2.6	0.27
			99	999.9	-	OROVILLE\D-OR4325	1.00	40.0	0.069	2.1	0.11
			CDMG 1551 Summit Ave (OR6)	8.6*	AAA	OROVILLE\D-OR6DWN	1.50	40.0	0.059	0.8	0.02
			99	999.9	-	OROVILLE\D-OR6035	1.50	35.0	0.101	2.3	0.08
			99	999.9	-	OROVILLE\D-OR6125	1.30	35.0	0.081	1.2	0.04
			CDMG 1546 Up & Down Cafe (OR1)	13.3*	ADD	OROVILLE\D-OR1DWN	0.70	40.0	0.048	1.2	0.13
			99	999.9	-	OROVILLE\D-OR1000	0.50	40.0	0.152	3.9	0.20
			99	999.9	-	OROVILLE\D-OR1090	0.40	40.0	0.101	3.5	0.40
Friuli, Italy 99	1976 0506 2000	6.5 6.2 6.5 0.0	8002 Barcis	49.7*	ABB	FRIULI\A-BCS-UP	0.20	37.0	0.014	1.0	0.18
			99	999.9	-	FRIULI\A-BCS000	0.20	30.0	0.029	1.3	0.53
			99	999.9	-	FRIULI\A-BCS270	0.20	30.0	0.030	1.2	0.27
			8004 Codroipo	34.6*	ADD	FRIULI\A-COD-UP	0.10	30.0	0.035	5.9	3.33
			99	999.9	-	FRIULI\A-COD000	0.10	25.0	0.062	10.7	3.03
			99	999.9	-	FRIULI\A-COD270	0.10	25.0	0.090	8.5	3.09
			8005 Conegliano	73.7*	ADD	FRIULI\A-CLV-UP	0.50	25.0	0.025	2.4	0.70
			99	999.9	-	FRIULI\A-CLV000	0.50	20.0	0.049	3.5	0.76
			99	999.9	-	FRIULI\A-CLV270	0.50	20.0	0.069	4.2	1.03
			8007 Feltre	97.1*	ABA	FRIULI\A-FLT-UP	0.20	30.0	0.019	0.8	0.24
			99	999.9	-	FRIULI\A-FLT000	0.20	30.0	0.033	1.5	0.26
			99	999.9	-	FRIULI\A-FLT270	0.20	30.0	0.038	1.3	0.28
			8012 Tolmezzo	37.7*	ABB	FRIULI\A-TMZ-UP	0.10	45.0	0.268	10.7	2.50
			99	999.9	-	FRIULI\A-TMZ000	0.10	30.0	0.351	22.0	4.10
			99	999.9	-	FRIULI\A-TMZ270	0.10	30.0	0.315	30.8	5.10
Gazli, USSR 02	1976 0517	6.8 0.0 7.3 0.0	9201 Karakyr	3.0*	AAA	GAZLI\GAZ-UP	0.50	38.0	1.264	54.2	30.15
			01	999.9	-	GAZLI\GAZ000	0.50	38.0	0.608	65.4	25.29
			01	999.9	-	GAZLI\GAZ090	0.50	38.0	0.718	71.6	23.71
Fruili, Italy 99	1976 0911 1631	5.5 0.0 0.0 0.0	8023 Buia	13.6*	ABC	FRIULI\BUI-UP	0.40	20.0	0.029	3.1	0.68
			99	999.9	-	FRIULI\BUI-NS	0.20	12.0	0.041	6.2	1.18
			99	999.9	-	FRIULI\BUI-WE	0.13	20.0	0.041	3.9	1.02
			8014 Forgia Cornino	18.2*	ABB	FRIULI\FOC-UP	0.60	20.0	0.046	3.1	0.22
			99	999.9	B	FRIULI\FOC-NS	0.20	15.0	0.112	7.6	0.94
			99	999.9	-	FRIULI\FOC-WE	0.30	20.0	0.093	8.4	0.68
			8022 San Rocco	17.9*	ABA	FRIULI\SRO-UP	0.40	15.0	0.013	1.8	0.34
			99	999.9	-	FRIULI\SRO-NS	0.20	15.0	0.029	2.3	0.48
			99	999.9	-	FRIULI\SRO-WE	0.40	20.0	0.072	4.3	0.90
Friuli, Italy 99	1976 0915 0315	0.0 6.1 0.0 0.0	8023 Buia	10.8*	ABC	FRIULI\B-BUI-UP	0.50	48.0	0.074	6.5	1.58
			99	999.9	-	FRIULI\B-BUI000	0.50	30.0	0.110	10.2	2.22
			99	999.9	-	FRIULI\B-BUI270	0.50	33.0	0.091	10.6	1.61

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			8004 Codroipo	36.1*	ADD	FRIULI\B-COD-UP	0.10	32.0	0.013	4.0	1.74
			99	999.9	-	FRIULI\B-COD000	0.10	28.0	0.030	2.7	1.21
						FRIULI\B-COD270	0.10	25.0	0.019	3.7	1.90
			8014 Forgharia Cornino	13.5*	ABB	FRIULI\B-FOC-UP	0.50	48.0	0.095	5.6	1.35
			99	999.9	B	FRIULI\B-FOC000	0.50	40.0	0.260	9.3	1.07
						FRIULI\B-FOC270	0.20	42.0	0.212	9.7	1.83
			8022 San Rocco	12.7*	ABA	FRIULI\B-SRO-UP	0.10	38.0	0.058	6.3	2.12
			99	999.9	-	FRIULI\B-SRO000	0.10	32.0	0.060	4.8	1.14
						FRIULI\B-SRO270	0.10	33.0	0.134	7.6	1.99
Izmir, Turkey 99	1977 1216 0737	0.0 0.0 0.0 0.0	99999 Izmir	999.9	---	IZMIR\IZM-UP	3.00	30.0	0.075	2.4	0.07
			99	999.9	-	IZMIR\IZM--L	1.00	25.0	0.410	12.6	0.46
						IZMIR\IZM--T	1.00	20.0	0.146	5.4	0.29
Santa Barbara 03	1978 0813	6.0 5.1 6.0 0.0	USGS 106 Cachuma Dam Toe	36.6*	AAA	SBARB\CAD-UP	0.20	29.0	0.024	1.6	0.40
			99	999.9	-	SBARB\CAD250	0.10	36.0	0.072	6.3	1.26
						SBARB\CAD340	0.20	30.0	0.034	2.6	0.55
			USGS 283 Santa Barbara Courthouse	14.0*	CQD	SBARB\SBA-UP	0.10	30.0	0.077	3.5	0.83
			01	0.0	B	SBARB\SBA132	0.10	26.0	0.102	7.4	1.80
						SBARB\SBA222	0.10	30.0	0.203	16.3	2.99
Tabas, Iran 02	1978 0916	7.4 7.7 7.4 0.0	69 Bajestan	121.2	--C	TABAS\BAJ-V1	0.05		0.029	5.7	6.16
			99	999.9	-	TABAS\BAJ-L1	0.02	15.0	0.094	7.6	10.77
						TABAS\BAJ-T1	0.02	15.0	0.067	5.7	10.03
			70 Boshrooyeh	26.1	--C	TABAS\BOS-V1	0.06		0.085	11.6	8.36
			99	999.9	-	TABAS\BOS-L1	0.04	20.0	0.107	13.7	10.50
						TABAS\BOS-T1	0.04	20.0	0.089	18.0	18.27
			9102 Dayhook	17.0*	ABB	TABAS\DAY-UP	0.10		0.183	12.0	4.97
			01	999.9	-	TABAS\DAY-LN	0.10		0.328	20.6	12.56
						TABAS\DAY-TR	0.10		0.406	26.5	8.75
			71 Ferdows	94.4	--A	TABAS\FER-V1	0.04		0.053	7.6	6.78
			99	999.9	-	TABAS\FER-L1	0.02	20.0	0.087	5.7	4.61
						TABAS\FER-T1	0.04	20.0	0.108	8.6	9.69
			72 Kashmar	199.1	--B	TABAS\KSH-V1	0.05	20.0	0.026	7.4	6.78
			99	999.9	-	TABAS\KSH-L1	0.03	20.0	0.034	10.7	10.60
						TABAS\KSH-T1	0.02	20.0	0.037	11.4	7.10
			73 Sedeh	164.5	--D	TABAS\SED-V1	0.02	20.0	0.013	6.1	11.61
			99	999.9	-	TABAS\SED-L1	0.02	20.0	0.026	5.6	6.42
						TABAS\SED-T1	0.02	20.0	0.027	4.1	4.91
			9101 Tabas	3.0*	ABC	TABAS\TAB-UP	0.05		0.688	45.6	17.04
			02	999.9	-	TABAS\TAB-LN	0.05		0.836	97.8	36.92
						TABAS\TAB-TR	0.05		0.852	121.4	94.58
Dursunbey, Turkey 99	1979 0718 1312	0.0 0.0 0.0 0.0	99999 Dursunbey	999.9	---	DURSUN.BEY\DUR-UP	1.30	20.0	0.127	5.8	0.31
			99	999.9	-	DURSUN.BEY\DUR--L	1.20	30.0	0.223	8.0	0.54
						DURSUN.BEY\DUR--T	1.00	30.0	0.366	10.3	0.74
Coyote Lake 00	1979 0806 1705	5.7 5.7 5.6 0.0	CDMG 57217 Coyote Lake Dam (SW Abut)	3.2	IFA	COYOTELK\CYC-UP	0.30	30.0	0.121	6.4	0.67
			00	1.6	-	COYOTELK\CYC160	0.30	40.0	0.157	10.8	1.31
						COYOTELK\CYC250	0.20	40.0	0.279	20.3	2.33
			CDMG 47379 Gilroy Array #1	9.3	IFA	COYOTELK\G01-UP	0.30	40.0	0.072	2.5	0.41
			00	9.1	A	COYOTELK\G01230	0.30	40.0	0.103	3.4	0.48
						COYOTELK\G01320	0.25	40.0	0.132	8.3	1.52
			CDMG 47380 Gilroy Array #2	7.5	IQD	COYOTELK\G02-UP	0.20	50.0	0.166	7.0	1.18

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			00	7.4	C	COYOTELK\G02050	0.20	40.0	0.211	10.9	2.29
			CDMG 47381 Gilroy Array #3	6.0	IHD	COYOTELK\G02140	0.20	40.0	0.339	24.9	5.81
			00	5.3	C	COYOTELK\G03-UP	0.30	40.0	0.160	5.2	1.26
			00			COYOTELK\G03050	0.20	40.0	0.272	18.7	3.42
			00			COYOTELK\G03140	0.15	40.0	0.228	28.8	4.87
			CDMG 57382 Gilroy Array #4	4.5	AHD	COYOTELK\G04-UP	0.30	40.0	0.387	11.7	2.47
			00	3.7	C	COYOTELK\G04270	0.20	25.0	0.248	23.1	2.60
			00			COYOTELK\G04360	0.12	25.0	0.271	26.3	4.78
			CDMG 57383 Gilroy Array #6	3.1	IKB	COYOTELK\G06-UP	0.10	30.0	0.146	12.8	3.92
			00	1.2	B	COYOTELK\G06230	0.08	25.0	0.434	49.2	7.77
			00			COYOTELK\G06320	0.20	40.0	0.316	24.5	3.85
			CDMG 57191 Halls Valley	31.2	IFC	COYOTELK\HVR-UP	0.50	20.0	0.027	1.3	0.13
			00	30.0	C	COYOTELK\HVR150	0.30	15.0	0.039	2.2	0.27
			00			COYOTELK\HVR240	0.30	15.0	0.050	4.8	0.48
			CDMG 1377 San Juan Bautista, 24 Polk St	15.6	AQD	COYOTELK\SJB-UP	0.20	20.0	0.111	4.7	0.95
			00	17.9	B	COYOTELK\SJB213	0.20	20.0	0.108	7.6	0.95
			00			COYOTELK\SJB303	0.20	20.0	0.107	7.5	1.02
			CDMG 1492 SJB Overpass, Bent 3 g.l.	17.2	DQD	COYOTELK\SJ3-UP	0.30	50.0	0.060	2.3	0.21
			00	19.2	B	COYOTELK\SJ3067	0.60	60.0	0.097	5.9	0.55
			00			COYOTELK\SJ3337	0.23	60.0	0.124	7.6	1.07
			CDMG 1492 SJB Overpass, Bent 5 g.l.	17.2	DQD	COYOTELK\SJ5-UP	0.30	50.0	0.036	2.2	0.23
			00	19.2	B	COYOTELK\SJ5067	0.30	50.0	0.073	5.6	0.77
			00			COYOTELK\SJ5337	0.25	60.0	0.114	7.4	1.08
Norcia, Italy 99	1979 0919 2136	0.0 0.0 0.0 0.0	99999 Bevagna	999.9	---	ITALY\F-BEV-UP	1.00	25.0	0.025	0.9	0.09
			99	999.9	-	ITALY\F-BEV-NS	0.50	25.0	0.040	2.1	0.71
						ITALY\F-BEV-EW	1.00	25.0	0.023	1.1	0.84
			99999 Cascia	999.9	---	ITALY\F-CSC-UP	0.80	25.0	0.146	4.2	0.42
			99	999.9	-	ITALY\F-CSC-NS	0.40	25.0	0.161	8.5	0.67
						ITALY\F-CSC-EW	0.30	25.0	0.200	11.6	2.12
			99999 Spoleto	999.9	---	ITALY\F-SPO-UP	0.80	25.0	0.043	1.5	0.15
			99	999.9	-	ITALY\F-SPO-NS	1.00	25.0	0.045	1.7	0.15
						ITALY\F-SPO-EW	0.60	25.0	0.039	2.0	0.22
Imperial Valley 00	1979 1015 2316	6.5 6.6 6.9 0.0	UNAMUCSD 6616 Aeropuerto Mexicali	8.5	I-D	IMPVALL\H-AEP-UP	0.05		0.142	5.6	2.31
			00	1.4	C	IMPVALL\H-AEP045	0.05		0.327	42.8	10.10
						IMPVALL\H-AEP315	0.05		0.260	24.9	3.81
			UNAMUCSD 6618 Agrarias	12.9	IQD	IMPVALL\H-AGRDWN	0.20		0.835	11.1	5.17
			00	999.9	-	IMPVALL\H-AGR003	0.05		0.370	35.6	10.02
						IMPVALL\H-AGR273	0.05		0.221	42.4	11.70
			USGS 5054 Bonds Corner	2.5	AQD	IMPVALL\H-BCR-UP	0.10	40.0	0.425	12.2	4.02
			00	2.6	C	IMPVALL\H-BCR140	0.10	40.0	0.588	45.2	16.78
						IMPVALL\H-BCR230	0.10	40.0	0.775	45.9	14.89
			USGS 5060 Brawley Airport	8.5	AQD	IMPVALL\H-BRA-UP	0.10	40.0	0.146	8.4	3.49
			00	8.5	C	IMPVALL\H-BRA225	0.10	40.0	0.160	35.9	22.44
						IMPVALL\H-BRA315	0.10	40.0	0.220	38.9	13.46
			USGS 5053 Calexico Fire Station	10.6	AQD	IMPVALL\H-CXO-UP	0.10	40.0	0.187	6.7	2.49
			00	10.6	C	IMPVALL\H-CXO225	0.10	40.0	0.275	21.2	9.02
						IMPVALL\H-CXO315	0.20	40.0	0.202	16.0	9.20
			USGS 5061 Calipatria Fire Station	23.8	BQD	IMPVALL\H-CAL-UP	0.10	40.0	0.055	3.9	2.76
			00	23.0	C	IMPVALL\H-CAL225	0.10	40.0	0.128	15.4	10.91
						IMPVALL\H-CAL315	0.10	40.0	0.078	13.3	6.22
			UNAMUCSD 6604 Cerro Prieto	26.5	AVA	IMPVALL\H-CPEDWN	0.10		0.212	6.8	3.29
			00	23.5	B	IMPVALL\H-CPE147	0.10		0.169	11.6	4.25

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			UNAMUCSD 6621 Chihuahua	28.7	IQD	IMPVALL\H-CPE237	0.10		0.157	18.6	7.95
			00	17.7	C	IMPVALL\H-CHIDWN	0.05		0.218	5.1	1.28
						IMPVALL\H-CHI012	0.05		0.270	24.9	9.08
						IMPVALL\H-CHI282	0.05		0.254	30.1	12.89
			USGS 5066 Coachella Canal #4	49.3	AQD	IMPVALL\H-CC4-UP	0.20	40.0	0.038	3.6	0.66
			00	49.0	C	IMPVALL\H-CC4045	0.20	40.0	0.115	12.5	2.33
						IMPVALL\H-CC4135	0.20	40.0	0.128	15.6	2.95
			UNAMUCSD 6622 Compuertas	32.6	IQD	IMPVALL\H-CMPDWN	0.20		0.075	2.9	0.98
			00	23.2	C	IMPVALL\H-CMP015	0.20		0.186	13.9	2.92
						IMPVALL\H-CMP285	0.20		0.147	9.5	2.49
			UNAMUCSD 6617 Cucapah	23.6	IQD	IMPVALL\H-QKP-UP	0.05		0.140	3.1	1.37
			00	12.9	C	IMPVALL\H-QKP085	0.05		0.309	36.3	10.44
						IMPVALL\H-QKFXXX	-99.				
			UNAMUCSD 6605 Delta	43.6	IQD	IMPVALL\H-DLTDWN	0.05		0.145	14.8	8.62
			00	32.7	C	IMPVALL\H-DLT262	0.05		0.238	26.0	12.06
						IMPVALL\H-DLT352	0.05		0.351	33.0	19.02
			CDMG 5154 EC County Center FF	7.6	IDD	IMPVALL\H-ECC-UP	0.10	50.0	0.246	18.1	9.70
			00	7.6	C	IMPVALL\H-ECC002	0.10	40.0	0.213	37.5	15.98
						IMPVALL\H-ECC092	0.10	35.0	0.235	68.8	39.35
			CDMG 5155 EC Meloland Overpass FF	0.5	IDD	IMPVALL\H-EMO-UP	0.10	50.0	0.248	28.9	8.36
			00	0.5	C	IMPVALL\H-EMO000	0.10	40.0	0.314	71.7	25.53
						IMPVALL\H-EMO270	0.10	50.0	0.296	90.5	31.71
			USGS 5056 El Centro Array #1	15.5	AQD	IMPVALL\H-E01-UP	0.10	40.0	0.056	3.8	2.14
			00	22.0	C	IMPVALL\H-E01140	0.10	40.0	0.139	16.0	9.96
						IMPVALL\H-E01230	0.10	40.0	0.134	10.7	6.97
			USGS 5115 El Centro Array #2	10.4	IQD	IMPVALL\H-E02-UP	0.10	40.0	0.110	7.6	5.14
			00	16.0	C	IMPVALL\H-E02140	0.10	40.0	0.315	31.5	14.34
						IMPVALL\H-E02XXX	-99.				
			USGS 5057 El Centro Array #3	9.3	AQD	IMPVALL\H-E03-UP	0.10	40.0	0.127	8.7	4.70
			00	999.9	D	IMPVALL\H-E03140	0.10	40.0	0.266	46.8	18.92
						IMPVALL\H-E03230	0.10	40.0	0.221	39.9	23.31
			USGS 955 El Centro Array #4	4.2	IQD	IMPVALL\H-E04-UP	0.10	40.0	0.248	16.0	10.66
			00	6.8	C	IMPVALL\H-E04140	0.10	40.0	0.485	37.4	20.23
						IMPVALL\H-E04230	0.10	40.0	0.360	76.6	59.02
			USGS 952 El Centro Array #5	1.0	IQD	IMPVALL\H-E05-UP	0.10	40.0	0.537	38.5	19.69
			00	4.0	C	IMPVALL\H-E05140	0.10	40.0	0.519	46.9	35.35
						IMPVALL\H-E05230	0.10	40.0	0.379	90.5	63.03
			CDMG 942 El Centro Array #6	1.0	IQD	IMPVALL\H-E06-UP	0.20	40.0	1.655	57.5	26.41
			00	1.3	C	IMPVALL\H-E06140	0.10	40.0	0.410	64.9	27.69
						IMPVALL\H-E06230	0.10	40.0	0.439	109.8	65.89
			USGS 5028 El Centro Array #7	0.6	AQD	IMPVALL\H-E07-UP	0.10	40.0	0.544	26.4	9.32
			00	0.6	C	IMPVALL\H-E07140	0.10	40.0	0.338	47.6	24.68
						IMPVALL\H-E07230	0.10	40.0	0.463	109.3	44.74
			CDMG 958 El Centro Array #8	3.8	AQD	IMPVALL\H-E08-UP	0.10	40.0	0.439	22.3	11.87
			00	3.8	C	IMPVALL\H-E08140	0.10	40.0	0.602	54.3	32.32
						IMPVALL\H-E08230	0.10	40.0	0.454	49.1	35.59
			USGS 412 El Centro Array #10	8.6	AQD	IMPVALL\H-E10-UP	0.10	40.0	0.105	8.8	6.90
			00	8.5	C	IMPVALL\H-E10050	0.10	40.0	0.171	47.5	31.10
						IMPVALL\H-E10320	0.10	40.0	0.224	41.0	19.38
			USGS 5058 El Centro Array #11	12.6	AQD	IMPVALL\H-E11-UP	0.10	40.0	0.140	11.1	6.82
			00	12.6	C	IMPVALL\H-E11140	0.20	40.0	0.364	34.5	16.07
						IMPVALL\H-E11230	0.10	40.0	0.380	42.1	18.59
			USGS 931 El Centro Array #12	18.2	IQD	IMPVALL\H-E12-UP	0.10	40.0	0.066	6.7	5.31
			00	18.0	C	IMPVALL\H-E12140	0.10	40.0	0.143	17.6	11.30

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			USGS 5059 El Centro Array #13	21.9	AQD	IMPVALL\H-E12230	0.10	40.0	0.116	21.8	12.06
			00	22.0	C	IMPVALL\H-E13-UP	0.20	40.0	0.046	3.2	1.67
						IMPVALL\H-E13140	0.20	40.0	0.117	14.7	7.33
						IMPVALL\H-E13230	0.20	40.0	0.139	13.0	5.84
			USGS 5165 El Centro Differential Array	5.3	IQD	IMPVALL\H-EDA-UP	0.10	40.0	0.707	20.7	11.55
			00	5.1	C	IMPVALL\H-EDA270	0.10	40.0	0.352	71.2	45.80
						IMPVALL\H-EDA360	0.10	40.0	0.480	40.8	14.04
			USGS 5055 Holtville Post Office	7.5	AQD	IMPVALL\H-HVP-UP	0.10	40.0	0.230	9.9	5.69
			00	7.5	C	IMPVALL\H-HVP225	0.10	40.0	0.253	48.8	31.54
						IMPVALL\H-HVP315	0.10	40.0	0.221	49.8	31.96
			CDMG 724 Niland Fire Station	35.9	AQD	IMPVALL\H-NIL-UP	0.10	40.0	0.034	3.8	2.04
			00	36.0	C	IMPVALL\H-NIL090	0.10	30.0	0.109	11.9	6.88
						IMPVALL\H-NIL360	0.10	40.0	0.069	8.3	5.26
			USGS 5051 Parachute Test Site	14.2	AQD	IMPVALL\H-PTS-UP	0.10	40.0	0.159	6.8	4.76
			00	14.0	B	IMPVALL\H-PTS225	0.10	40.0	0.111	17.8	12.35
						IMPVALL\H-PTS315	0.10	40.0	0.204	16.1	9.94
			USGS 5052 Plaster City	31.7	AQD	IMPVALL\H-PLS-UP	0.10	40.0	0.026	2.4	0.98
			00	32.0	C	IMPVALL\H-PLS045	0.10	40.0	0.042	3.2	1.34
						IMPVALL\H-PLS135	0.10	40.0	0.057	5.4	1.94
			UNAMUCSD 6619 SAHOP Casa Flores	11.1	I-C	IMPVALL\H-SHP-UP	0.20		0.379	9.2	1.53
			00	8.4	C	IMPVALL\H-SHP000	0.20		0.287	19.6	2.71
						IMPVALL\H-SHP270	0.20		0.506	30.9	5.64
			USGS 286 Superstition Mtn Camera	26.0	AGA	IMPVALL\H-SUP-UP	0.10	40.0	0.077	2.3	1.14
			00	26.0	B	IMPVALL\H-SUP045	0.10	40.0	0.109	5.2	2.21
						IMPVALL\H-SUP135	0.10	40.0	0.195	8.8	2.78
			UNAMUCSD 6610 Victoria	54.1	IQD	IMPVALL\H-VCT-UP	0.05		0.059	1.6	0.68
			00	43.5	C	IMPVALL\H-VCT075	0.05		0.122	6.4	2.09
						IMPVALL\H-VCT345	0.20		0.167	8.3	1.05
			CDMG 5169 Westmorland Fire Sta	15.1	ADD	IMPVALL\H-WSM-UP	0.10	40.0	0.082	6.8	2.58
			00	15.0	C	IMPVALL\H-WSM090	0.10	40.0	0.074	21.2	16.59
						IMPVALL\H-WSM180	0.10	40.0	0.110	21.9	10.00
Imperial Valley	1979 1015 2319	5.2 5.2 0.0 0.0	USGS 5054 Bonds Corner	15.6*	AQD	IMPVALL\A-BCR-UP	3.00	35.0	0.052	0.9	0.02
00			00	999.9	C	IMPVALL\A-BCR140	0.80	30.0	0.084	3.6	0.34
						IMPVALL\A-BCR230	0.30	30.0	0.100	8.2	1.42
			USGS 5060 Brawley Airport	27.0*	AQD	IMPVALL\A-BRA-UP	1.00	40.0	0.026	0.6	0.02
			00	999.9	C	IMPVALL\A-BRA225	0.80	30.0	0.034	2.0	0.16
						IMPVALL\A-BRA315	1.00	30.0	0.067	2.4	0.12
			USGS 5053 Calexico Fire Station	15.0*	AQD	IMPVALL\A-CXO-UP	0.90	40.0	0.035	0.9	0.05
			00	999.9	C	IMPVALL\A-CXO225	0.45	30.0	0.116	8.0	0.87
						IMPVALL\A-CXO315	0.40	35.0	0.068	5.2	0.51
			UNAMUCSD 6605 Delta	52.1*	IQD	IMPVALL\A-DLTDWN	1.00	25.0	0.023	0.7	0.04
			00	999.9	C	IMPVALL\A-DLT262	0.80	25.0	0.059	2.6	0.21
						IMPVALL\A-DLT352	0.40	30.0	0.112	5.5	0.84
			USGS 5056 El Centro Array #1	26.1*	AQD	IMPVALL\A-E01-UP	0.80	40.0	0.027	0.4	0.03
			00	999.9	C	IMPVALL\A-E01140	0.80	30.0	0.080	3.8	0.39
						IMPVALL\A-E01230	0.70	30.0	0.029	1.1	0.12
			USGS 5115 El Centro Array #2	20.3*	IQD	IMPVALL\A-E02-UP	0.70	40.0	0.032	0.9	0.06
			00	999.9	C	IMPVALL\A-E02140	0.60	25.0	0.150	9.5	0.95
						IMPVALL\A-E02230	1.00	40.0	0.072	3.3	0.23
			USGS 5057 El Centro Array #3	17.9*	AQD	IMPVALL\A-E03-UP	0.60	40.0	0.031	0.6	0.07
			00	999.9	D	IMPVALL\A-E03140	0.50	33.0	0.179	9.5	0.97
						IMPVALL\A-E03230	0.80	40.0	0.112	4.2	0.30
			USGS 955 El Centro Array #4	14.4*	IQD	IMPVALL\A-E04-UP	0.60	40.0	0.097	1.2	0.13

Appendix A

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)			
			00	999.9	C	IMPVALL\A-E04140	0.50	40.0	0.262	8.8	0.64			
			USGS 952 El Centro Array #5	13.8*	IQD	IMPVALL\A-E04230	0.45	35.0	0.157	9.6	0.65			
			00	999.9	C	IMPVALL\A-E05-UP	0.50	50.0	0.079	0.8	0.07			
						IMPVALL\A-E05140	0.70	35.0	0.238	10.7	0.75			
						IMPVALL\A-E05230	0.60	35.0	0.239	13.3	1.06			
			CDMG 942 El Centro Array #6	13.1*	IQD	IMPVALL\A-E06-UP	0.40	50.0	0.080	1.7	0.10			
			00	999.9	C	IMPVALL\A-E06140	0.60	30.0	0.189	12.1	1.15			
						IMPVALL\A-E06230	0.35	30.0	0.366	20.8	2.83			
			USGS 5028 El Centro Array #7	13.1*	AQD	IMPVALL\A-E07-UP	0.70	50.0	0.060	0.8	0.06			
			00	999.9	C	IMPVALL\A-E07140	0.60	40.0	0.132	5.0	0.52			
						IMPVALL\A-E07230	0.40	40.0	0.192	12.2	1.00			
			CDMG 958 El Centro Array #8	13.6*	AQD	IMPVALL\A-E08-UP	0.60	50.0	0.067	1.1	0.08			
			00	999.9	C	IMPVALL\A-E08140	0.70	45.0	0.120	5.6	0.35			
						IMPVALL\A-E08230	0.60	45.0	0.145	9.1	0.87			
			USGS 412 El Centro Array #10	15.1*	AQD	IMPVALL\A-E10-UP	0.60	35.0	0.021	0.4	0.06			
			00	999.9	C	IMPVALL\A-E10050	1.00	30.0	0.066	3.2	0.25			
						IMPVALL\A-E10320	0.50	30.0	0.037	2.9	0.44			
			USGS 5058 El Centro Array #11	17.2*	AQD	IMPVALL\A-E11-UP	0.60	40.0	0.055	1.3	0.08			
			00	999.9	C	IMPVALL\A-E11140	0.70	35.0	0.124	7.3	0.74			
						IMPVALL\A-E11230	0.45	30.0	0.173	11.1	1.02			
			USGS 5165 El Centro Diff Array	13.3*	IQD	IMPVALL\A-EDA-UP	0.60	40.0	0.097	1.6	0.08			
			00	999.9	C	IMPVALL\A-EDA270	0.60	30.0	0.169	10.1	0.82			
						IMPVALL\A-EDA360	0.70	30.0	0.135	6.7	0.41			
			USGS 5055 Holtville Post Office	12.2*	AQD	IMPVALL\A-HVP-UP	0.80	40.0	0.044	1.0	0.08			
			00	999.9	C	IMPVALL\A-HVP225	0.60	30.0	0.127	7.3	0.56			
						IMPVALL\A-HVP315	0.50	30.0	0.211	15.4	2.14			
Imperial Valley	1979 1016 0658	0.0 5.5 0.0 0.0	CDMG 5169 Westmorland Fire Sta	11.2*	ADD	IMPVALL\F-WSM-UP	1.00	50.0	0.115	2.0	0.15			
00			00	999.9	C	IMPVALL\F-WSM180	0.25	40.0	0.171	11.0	2.83			
						IMPVALL\F-WSM360	0.70	40.0	0.089	4.7	0.62			
Livermore	1980 0124 1900	5.8 5.8 5.8 0.0	CDMG 67070 Antioch - 510 G St	20.3	ACD	LIVERMOR\A-ANT-UP	0.20	20.0	0.012	1.5	0.47			
00			00	20.8	B	LIVERMOR\A-ANT270	0.20	13.0	0.051	5.1	0.80			
						LIVERMOR\A-ANT360	0.20	13.0	0.023	2.6	0.72			
			CDWR 1265 Del Valle Dam (Toe)	12.9	ABB	LIVERMOR\A-DVD-UP	0.30	30.0	0.083	4.2	1.00			
			00	999.9	-	LIVERMOR\A-DVD156	0.10	25.0	0.125	9.3	3.15			
						LIVERMOR\A-DVD246	0.15	20.0	0.229	20.5	3.71			
RMOR\A-DVD246	0.15	20.0	0.229	20.5	3.71	CDMG 57064 Fremont - Mission San Jose	29.8	AMB	LIVERMOR\A-FRE-UP	0.13	13.0	0.027	2.3	0.55
			00	33.1	B	LIVERMOR\A-FRE075	0.30	13.0	0.044	4.4	0.85			
						LIVERMOR\A-FRE345	0.30	20.0	0.055	3.9	0.93			
			CDMG 58219 APEEL 3E Hayward CSUH	31.0	AVA	LIVERMOR\A-A3E-UP	0.23	25.0	0.020	1.1	0.20			
			00	40.3	B	LIVERMOR\A-A3E146	0.20	25.0	0.072	4.1	0.75			
						LIVERMOR\A-A3E236	0.20	25.0	0.057	2.7	0.40			
			CDMG 57134 San Ramon Fire Station	21.7	ABB	LIVERMOR\A-SRM-UP	0.30	20.0	0.016	2.0	0.40			
			00	16.7	C	LIVERMOR\A-SRM070	0.15	15.0	0.058	3.3	1.00			
						LIVERMOR\A-SRM340	0.20	15.0	0.040	4.0	1.24			
			CDMG 57187 San Ramon - Eastman Kodak	17.6	ABB	LIVERMOR\A-KOD-UP	0.40	30.0	0.042	2.8	0.45			
			00	15.7	C	LIVERMOR\A-KOD180	0.08	20.0	0.154	18.9	6.13			
						LIVERMOR\A-KOD270	0.20	20.0	0.076	6.1	1.69			
			CDMG 57063 Tracy - Sewage Treatm Plant	37.3	BQC	LIVERMOR\A-STP-UP	0.20	20.0	0.021	3.1	0.98			
			00	28.5	C	LIVERMOR\A-STP093	0.15	20.0	0.050	7.5	2.35			
						LIVERMOR\A-STP183	0.08	15.0	0.073	7.6	1.81			

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Livermore 00	1980 0127 0233	5.4 5.4 5.5 0.0	CDMG 67070 Antioch - 510 G St	30.9	ACD	LIVERMOR\B-ANT-UP	0.30	15.0	0.015	0.8	0.11		
			00	30.9	B	LIVERMOR\B-ANT270	0.20	15.0	0.112	5.8	0.62		
								LIVERMOR\B-ANT360	0.30	12.0	0.050	2.7	0.32
			CDWR 1265 Del Valle Dam (Toe)	12.9	ABB	LIVERMOR\B-DVD-UP	0.30	30.0	0.028	0.8	0.13		
			00	999.9	-	LIVERMOR\B-DVD156	0.40	25.0	0.043	1.8	0.14		
								LIVERMOR\B-DVD246	0.30	20.0	0.041	2.8	0.33
			CDMG 57064 Fremont - Mission San Jose	29.8	AMB	LIVERMOR\B-FRE-UP	0.20	15.0	0.017	1.5	0.23		
			00	29.0	B	LIVERMOR\B-FRE075	0.30	15.0	0.035	4.7	0.79		
								LIVERMOR\B-FRE345	0.25	12.0	0.038	3.3	0.52
			CDMG 58219 APEEL 3E Hayward CSUH	31.0	AVA	LIVERMOR\B-A3E-UP	0.60	25.0	0.014	0.9	0.09		
			00	37.8	B	LIVERMOR\B-A3E146	0.30	20.0	0.053	4.5	0.58		
								LIVERMOR\B-A3E236	0.15	20.0	0.028	1.4	0.30
			CDMG 57T01 Livermore - Fagundas Ranch	3.6	ABB	LIVERMOR\B-LFA-UP	0.30	30.0	0.098	2.5	0.17		
			00	4.0	C	LIVERMOR\B-LFA270	0.30	25.0	0.258	9.6	0.55		
								LIVERMOR\B-LFA360	0.30	20.0	0.233	11.4	1.18
			CDMG 57T02 Livermore - Morgan Terr Park	8.0	ABA	LIVERMOR\B-LMO-UP	0.40	30.0	0.078	4.1	0.39		
			00	10.1	B	LIVERMOR\B-LMO265	0.25	30.0	0.198	11.7	1.02		
								LIVERMOR\B-LMO355	0.40	30.0	0.252	9.8	1.30
			CDMG 57187 San Ramon - Eastman Kodak	17.6	ABB	LIVERMOR\B-KOD-UP	0.30	30.0	0.037	4.0	0.50		
00	17.7	C	LIVERMOR\B-KOD180	0.20	25.0	0.301	19.1	2.82					
					LIVERMOR\B-KOD270	0.25	25.0	0.097	5.6	0.62			
CDMG 57134 San Ramon Fire Station	21.7	ABB	LIVERMOR\B-SRM-UP	0.40	20.0	0.022	1.5	0.21					
00	25.5	C	LIVERMOR\B-SRM070	0.40	15.0	0.049	3.4	0.43					
					LIVERMOR\B-SRM340	0.30	15.0	0.059	4.2	0.46			
Anza (Horse Cany) 00	1980 0225 1047	4.9 0.0 4.7 0.0	USGS 5160 Anza Fire Station	12.1*	AHC	ANZA\AZF-UP	0.50	30.0	0.037	1.4	0.91		
			00	12.1	A	ANZA\AZF225	0.25	25.0	0.065	3.3	0.36		
								ANZA\AZF315	0.60	25.0	0.066	2.6	0.16
			USGS 5044 Anza - Pinyon Flat	13.0*	IGA	ANZA\PFT-UP	0.40	30.0	0.046	1.1	0.08		
			00	12.0	A	ANZA\PFT045	0.40	30.0	0.110	2.5	0.11		
								ANZA\PFT135	0.20	25.0	0.131	5.1	0.49
			USGS 5045 Anza - Terwilliger Valley	5.8*	I-A	ANZA\TVY-UP	2.00	30.0	0.068	1.7	0.06		
			00	5.8	A	ANZA\TVY045	1.10	30.0	0.131	3.9	0.17		
								ANZA\TVY135	1.30	30.0	0.081	1.7	0.06
			USGS 5049 Borrego Air Ranch	40.6*	AAA	ANZA\BAR-UP	0.90	40.0	0.014	0.6	0.06		
			00	41.4	B	ANZA\BAR225	0.60	25.0	0.047	2.6	0.28		
								ANZA\BAR315	0.70	25.0	0.036	1.2	0.10
			USGS 5047 Rancho De Anza	19.6*	IHC	ANZA\RDA-UP	0.60	40.0	0.052	1.6	0.12		
00	20.6	B	ANZA\RDA045	0.60	40.0	0.097	6.7	0.55					
					ANZA\RDA135	0.50	35.0	0.092	6.0	0.45			
Mammoth Lakes 03	1980 0525 1634	6.3 6.1 6.1 0.0	CDMG 54099 Convict Creek	9.0*	AQD	MAMMOTH\I-CVK-UP	0.20	41.0	0.388	20.5	5.93		
			00	999.9	-	MAMMOTH\I-CVK090	0.10	60.0	0.416	23.3	4.66		
								MAMMOTH\I-CVK180	0.10	50.0	0.442	23.1	5.42
			CDMG 54214 Long Valley Dam (Upr L Abut)	15.5*	IVA	MAMMOTH\I-LUL-UP	0.10	40.0	0.123	8.4	1.72		
			00	999.9	-	MAMMOTH\I-LUL000	0.10	57.0	0.430	23.6	7.52		
								MAMMOTH\I-LUL090	0.10	50.0	0.271	13.9	3.06
			CDMG 54301 Mammoth Lakes H. S.	14.0*	BVD	MAMMOTH\I-MLS-UP	0.10	60.0	0.253	11.2	2.55		
			00	999.9	-	MAMMOTH\I-MLS270	0.50	44.0	0.321	15.7	1.57		
					MAMMOTH\I-MLS360	0.50	51.0	0.239	14.4	1.65			
Mammoth Lakes 00	1980 0525 1649	5.7 6.0 0.0 0.0	CDMG 54099 Convict Creek	16.3*	AQD	MAMMOTH\J-CVK-UP	0.50	47.0	0.129	9.0	1.05		
			00	999.9	-	MAMMOTH\J-CVK090	0.50	35.0	0.160	11.3	1.95		
								MAMMOTH\J-CVK180	0.50	35.0	0.178	12.2	2.26

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			CDMG 54214 Long Valley Dam (Upr L Abut)	24.3*	IVA	MAMMOTH\J-LUL-UP	0.50	27.0	0.038	1.5	0.29
			00	999.9	-	MAMMOTH\J-LUL000	0.50	40.0	0.194	5.1	0.65
						MAMMOTH\J-LUL090	0.50	30.0	0.065	4.4	0.59
			CDMG 54301 Mammoth Lakes H. S.	14.2*	BVD	MAMMOTH\J-MLS-UP	0.10	60.0	0.264	9.0	1.56
			00	999.9	-	MAMMOTH\J-MLS000	0.50	50.0	0.441	22.5	2.28
						MAMMOTH\J-MLS270	0.10	52.0	0.390	23.9	2.72
Mammoth Lakes 00	1980 0525 1944	6.0 6.1 0.0 0.0 (6.7)	CDMG 54099 Convict Creek	17.4*	AQD	MAMMOTH\A-CVK-UP	0.20	40.0	0.195	8.5	1.59
			00	999.9	-	MAMMOTH\A-CVK090	0.08	30.0	0.219	18.5	4.87
						MAMMOTH\A-CVK180	0.08	35.0	0.208	16.1	2.29
			CDMG 54214 Long Valley Dam (Downst)	19.7*	IVA	MAMMOTH\A-LVD-UP	0.30	40.0	0.078	4.4	0.42
			00	999.9	-	MAMMOTH\A-LVD000	0.15	40.0	0.107	5.9	1.21
						MAMMOTH\A-LVD090	0.20	35.0	0.070	5.5	1.33
			CDMG 54214 Long Valley Dam (L Abut)	19.7*	IVA	MAMMOTH\A-LVL-UP	0.40	50.0	0.068	4.0	0.45
			00	999.9	-	MAMMOTH\A-LVL000	0.35	50.0	0.104	6.6	1.06
						MAMMOTH\A-LVL090	0.20	50.0	0.077	5.4	1.69
			CDMG 54214 Long Valley Dam (Upr L Abut)	19.7*	IVA	MAMMOTH\A-LUL-UP	0.35	35.0	0.119	4.3	0.53
			00	999.9	-	MAMMOTH\A-LUL000	0.20	40.0	0.484	14.2	1.77
						MAMMOTH\A-LUL090	0.10	40.0	0.188	10.8	3.28
Mammoth Lakes 00	1980 0525 2035	5.7 5.7 0.0 0.0 (5.5)	CDMG 54099 Convict Creek	3.0*	AQD	MAMMOTH\B-CVK-UP	0.20	45.0	0.345	6.2	0.52
			00	999.9	-	MAMMOTH\B-CVK090	0.20	35.0	0.380	13.3	1.16
						MAMMOTH\B-CVK180	0.20	35.0	0.432	21.0	2.31
			CDMG 54214 Long Valley Dam (Downst)	14.4*	IVA	MAMMOTH\B-LVD-UP	1.00	40.0	0.058	2.1	0.12
			00	999.9	-	MAMMOTH\B-LVD000	0.50	30.0	0.089	5.0	0.59
						MAMMOTH\B-LVD090	0.30	30.0	0.046	2.3	0.35
			CDMG 54214 Long Valley Dam (L Abut)	14.4*	IVA	MAMMOTH\B-LVL-UP	0.30	40.0	0.141	5.0	0.36
			00	999.9	-	MAMMOTH\B-LVL000	0.50	40.0	0.231	18.3	1.56
						MAMMOTH\B-LVL090	0.30	40.0	0.185	8.0	0.93
			CDMG 54214 Long Valley Dam (Upr L Abut)	14.4*	IVA	MAMMOTH\B-LUL-UP	0.30	35.0	0.146	5.0	0.36
			00	999.9	-	MAMMOTH\B-LUL000	0.50	40.0	0.245	18.5	1.56
						MAMMOTH\B-LUL090	0.40	40.0	0.195	8.0	0.82
Mammoth Lakes 00	1980 0526 1858	0.0 6.1 5.8 0.0	CDMG 54099 Convict Creek	10.5*	AQD	MAMMOTH\K-CVK-UP	0.50	40.0	0.050	3.8	0.46
			00	999.9	-	MAMMOTH\K-CVK090	0.50	30.0	0.133	7.8	0.82
						MAMMOTH\K-CVK180	0.20	31.0	0.099	3.8	0.41
			CDMG 54214 Long Valley Dam (Upr L Abut)	17.5*	IVA	MAMMOTH\K-LUL-UP	0.50	30.0	0.027	1.2	0.22
			00	999.9	-	MAMMOTH\K-LUL000	0.50	31.0	0.110	6.0	0.63
						MAMMOTH\K-LUL090	0.50	23.0	0.071	6.3	0.65
Mammoth Lakes 03	1980 0527 1451	6.0 6.2 6.0 0.0	CDMG 54100 Benton	48.6*	AQD	MAMMOTH\L-BEN-UP	0.50	40.0	0.064	3.1	0.52
			00	999.9	-	MAMMOTH\L-BEN270	0.50	38.0	0.109	7.0	0.98
						MAMMOTH\L-BEN360	0.50	33.0	0.175	11.2	1.18
			CDMG 54424 Bishop - Paradise Lodge	43.7*	AVA	MAMMOTH\L-BPL-UP	0.20	50.0	0.084	3.0	0.77
			00	999.9	-	MAMMOTH\L-BPL070	0.20	40.0	0.091	5.5	1.48
						MAMMOTH\L-BPL160	0.20	40.0	0.114	5.3	1.41
			CDMG 54099 Convict Creek	18.6*	AQD	MAMMOTH\L-CVK-UP	0.10	50.0	0.188	9.6	1.62
			00	999.9	-	MAMMOTH\L-CVK090	0.10	40.0	0.266	19.1	1.74
						MAMMOTH\L-CVK180	0.10	40.0	0.316	16.2	3.19
			CDMG 54214 Long Valley Dam (Upr L Abut)	20.0*	IVA	MAMMOTH\L-LUL-UP	0.50	43.0	0.314	11.7	1.08
			00	999.9	-	MAMMOTH\L-LUL000	0.50	40.0	0.921	28.9	3.17
						MAMMOTH\L-LUL090	0.20	51.0	0.408	33.9	6.41
			USGS 43 Fish & Game (FIS)	999.9	---	MAMMOTH\L-FIS-UP	0.10	80.0	0.179	10.4	1.69
			99	999.9	-	MAMMOTH\L-FIS000	0.30	80.0	0.395	14.4	1.84

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
						MAMMOTH\L-FIS090	0.40	70.0	0.400	14.8	1.39
Mammoth Lakes 00	1980 0527 1901	4.9 5.0 0.0 0.0	USGS 43 Fish & Game (FIS) 00	5.5* 999.9	IQD -	MAMMOTH\C-FIS-UP MAMMOTH\C-FIS000 MAMMOTH\C-FIS090	0.20 0.20 0.11	50.0 50.0 40.0	0.038 0.103 0.098	1.7 4.2 5.2	0.21 0.37 0.73
			USC 3 Green Church 00	4.7* 999.9	IQD -	MAMMOTH\C-XGR-UP MAMMOTH\C-XGR056 MAMMOTH\C-XGR146	0.80 0.25 0.30	30.0 25.0 30.0	0.079 0.167 0.170	2.2 10.7 12.1	0.19 1.05 1.06
			USC 35 Long Valley Fire Sta 00	4.3* 999.9	AAC -	MAMMOTH\C-XLV-UP MAMMOTH\C-XLV000 MAMMOTH\C-XLV270	0.70 0.70 0.50	20.0 25.0 20.0	0.018 0.022 0.031	1.0 1.7 1.6	0.10 0.24 0.15
			USC 36 Mammoth Elem School 00	8.7* 999.9	AAB -	MAMMOTH\C-XMM-UP MAMMOTH\C-XMM000 MAMMOTH\C-XMM270	0.60 0.80 0.60	20.0 20.0 15.0	0.015 0.050 0.078	1.3 2.8 5.0	0.19 0.26 0.30
			USC 34 USC Cash Baugh Ranch 00	9.9* 999.9	AQD -	MAMMOTH\C-XCB-UP MAMMOTH\C-XCB180 MAMMOTH\C-XCB270	0.45 0.50 0.40	20.0 25.0 20.0	0.025 0.031 0.038	1.9 3.3 2.9	0.22 0.46 0.36
			USC 37 USC McGee Creek Inn 00	1.8* 999.9	AAD -	MAMMOTH\C-XMGXXX MAMMOTH\C-XMG000 MAMMOTH\C-XMG270	-99. 0.70 0.90	30.0 30.0 25.0	0.325 0.131	8.6 5.0	0.53 0.33
Mammoth Lakes 00	1980 0531 1516	4.9 5.1 0.0 0.0	USGS 41 Cashbaugh (CBR) 00	11.8* 999.9	IQD -	MAMMOTH\D-CBR-UP MAMMOTH\D-CBR000 MAMMOTH\D-CBR090	0.40 0.10 0.20	80.0 60.0 60.0	0.093 0.106 0.134	4.1 2.6 6.7	0.22 0.28 0.40
			USGS 42 Convict Lakes (CON) 00	8.7* 999.9	IQB -	MAMMOTH\D-CONDWN MAMMOTH\D-CON180 MAMMOTH\D-CON270	1.00 0.80 0.70	70.0 60.0 70.0	0.114 0.196 0.206	2.0 4.0 6.5	0.12 0.29 0.44
			USGS 43 Fish & Game (FIS) 00	7.7* 999.9	IQD -	MAMMOTH\D-FIS-UP MAMMOTH\D-FIS000 MAMMOTH\D-FIS090	0.60 0.50 0.30	60.0 60.0 50.0	0.081 0.281 0.145	3.3 9.5 10.2	0.27 0.52 1.19
			USGS 44 Hot Creek (HCF) 00	9.9* 999.9	IQD -	MAMMOTH\D-HCF-UP MAMMOTH\D-HCFXXX MAMMOTH\D-HCFXXX	0.35 -99. -99.	100.0	0.049	1.8	0.20
			USC 35 Long Valley Fire Sta 00	8.9* 999.9	AAC -	MAMMOTH\D-XLV-UP MAMMOTH\D-XLV000 MAMMOTH\D-XLV270	0.80 0.60 0.50	20.0 20.0 20.0	0.019 0.026 0.031	0.7 1.2 1.5	0.06 0.17 0.12
			USC 36 Mammoth Elem School 00	7.3* 999.9	AAB -	MAMMOTH\D-XMM-UP MAMMOTH\D-XMM000 MAMMOTH\D-XMM270	0.45 0.30 0.40	30.0 15.0 20.0	0.045 0.099 0.091	1.5 6.1 6.1	0.29 0.57 0.51
			USC 40 USC Convict Lakes 00	9.1* 999.9	AAB -	MAMMOTH\D-XCV-UP MAMMOTH\D-XCV075 MAMMOTH\D-XCV165	0.30 0.50 0.80	40.0 30.0 30.0	0.050 0.164 0.141	1.5 6.0 2.9	0.16 0.48 0.20
			USC 37 USC McGee Creek Inn 00	7.4* 999.9	AAD -	MAMMOTH\D-XMG-UP MAMMOTH\D-XMG000 MAMMOTH\D-XMG270	0.50 1.00 0.60	30.0 20.0 30.0	0.179 0.053 0.184	3.6 13.4 5.5	0.12 0.44 0.28
Victoria, Mexico 00	1980 0609 0328	0.0 6.1 6.4 0.0	UNAMUCSD 6604 Cerro Prieto 00	34.8* 999.9	AVA B	VICT\CPE-UP VICT\CPE045 VICT\CPE315	0.20 0.20 0.20	62.5 62.5 62.5	0.304 0.621 0.587	12.1 31.6 19.9	4.9 13.2 9.4
			UNAMUCSD 6621 Chihuahua 00	36.6* 999.9	IQD C	VICT\CHIDWN VICT\CHI102 VICT\CHI192	0.20 0.20 0.20	23.0 22.0 27.0	0.098 0.150 0.092	5.5 24.8 15.6	2.6 9.2 9.9
			UNAMUCSD 6617 Cuapah 00	41.9* 999.9	IQD C	VICT\QKP-UP VICT\QKP085	0.20 0.20	49.0 44.0	0.067 0.092	10.9 13.1	5.1 5.6

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			UNAMUCSD 6619 SAHOP Casa Flores 00	58.3* 999.9	I-C C	VICT\QKPXXX VICT\SHP-UP VICT\SHP010 VICT\SHP280	-99. 0.50 0.20 0.20	62.5 28.0 27.0	0.047 0.101 0.068	2.4 7.8 9.0	0.5 2.6 2.1
			UNAMUCSD 6624 Victoria Hospital Sotano 00	62.6* 999.9	--D -	VICT\HPB-UP VICT\HPB000 VICT\HPB270	0.50 0.20 0.20	62.5 26.0 62.5	0.024 0.045 0.032	1.9 5.2 5.3	0.6 2.5 1.7
Mammoth Lakes 00	1980 0611 0441	0.0 5.0 0.0 0.0	USGS 42 Convict Lakes (CON) 00	7.6* 999.9	IQB -	MAMMOTH\H-CONDWN MAMMOTH\H-CON180 MAMMOTH\H-CON270	1.50 0.80 1.50	80.0 80.0 70.0	0.091 0.191 0.183	1.1 2.4 2.2	0.03 0.08 0.05
			USGS 43 Fish & Game (FIS) 00	11.2* 999.9	IQD -	MAMMOTH\H-FIS-UP MAMMOTH\H-FIS000 MAMMOTH\H-FIS090	0.90 0.90 0.60	50.0 60.0 50.0	0.029 0.061 0.055	0.5 1.6 1.1	0.04 0.07 0.06
			USC 3 Green Church 00	12.0* 999.9	IQD -	MAMMOTH\H-XGR-UP MAMMOTH\H-XGR056 MAMMOTH\H-XGR146	1.00 0.60 0.40	30.0 25.0 30.0	0.024 0.023 0.033	0.5 1.5 1.4	0.03 0.16 0.14
			USGS 44 Hot Creek (HCF) 00	12.8* 999.9	IQD -	MAMMOTH\H-HCF-UP MAMMOTH\H-HCF000 MAMMOTH\H-HCF090	0.60 0.60 0.50	80.0 60.0 50.0	0.022 0.065 0.099	0.5 1.3 1.5	0.05 0.05 0.10
			USC 35 Long Valley Fire Sta 00	14.2* 999.9	AAC -	MAMMOTH\H-XLV-UP MAMMOTH\H-XLV000 MAMMOTH\H-XLV270	0.60 0.60 0.60	20.0 20.0 20.0	0.004 0.015 0.006	0.3 0.4 0.3	0.04 0.06 0.03
			USC 36 Mammoth Elem School 00	12.3* 999.9	AAB -	MAMMOTH\H-XMMXXX MAMMOTH\H-XMM000 MAMMOTH\H-XMM270	-99. 0.50 0.80	13.0 15.0	0.012 0.018	0.6 0.8	0.06 0.05
			USGS 45 McGee Creek (MGE) 00	11.9* 999.9	IQC -	MAMMOTH\H-MGE-UP MAMMOTH\H-MGE000 MAMMOTH\H-MGE090	2.00 1.00 1.00	60.0 70.0 60.0	0.036 0.066 0.056	0.7 1.4 1.2	0.03 0.08 0.07
			USC 40 USC Convict Lakes 00	9.1* 999.9	AAB -	MAMMOTH\H-XCV-UP MAMMOTH\H-XCV075 MAMMOTH\H-XCV165	1.00 2.00 2.00	40.0 30.0 30.0	0.038 0.030 0.046	0.4 0.6 0.6	0.02 0.02 0.02
			USC 52 USC McGee Creek 00	11.1* 999.9	AAA -	MAMMOTH\H-XMC-UP MAMMOTH\H-XMC117 MAMMOTH\H-XMC207	1.30 0.70 1.00	40.0 35.0 25.0	0.090 0.078 0.211	0.8 1.6 3.0	0.03 0.10 0.09
Almiros, Greece 99	1980 0811	0.0 4.8 0.0 0.0	99999 Almiros 99	999.9 999.9	--- -	GREECE\A-ALM-UP GREECE\A-ALM-NS GREECE\A-ALM-WE	0.30 0.30 0.25	40.0 30.0 30.0	0.069 0.069 0.072	3.8 3.5 5.9	0.58 0.70 1.22
Trinidad 99	1980 1108 1027	0.0 0.0 0.0 0.0	CDMG 1498 Rio Dell Overpass, E Ground 99	71.9* 999.9	APC B	TRINIDAD\B-RDE-UP TRINIDAD\B-RDE000 TRINIDAD\B-RDE270	0.10 0.10 0.10	35.0 45.0 40.0	0.050 0.163 0.134	4.1 9.0 9.9	4.06 9.02 9.89
			CDMG 1498 Rio Dell Overpass, FF 99	71.9* 999.9	IPC B	TRINIDAD\B-RDL-UP TRINIDAD\B-RDL000 TRINIDAD\B-RDL270	0.10 0.10 0.10	30.0 30.0 30.0	0.028 0.061 0.147	2.7 7.0 8.5	2.72 7.03 8.48
			CDMG 1498 Rio Dell Overpass, W Ground 99	71.9* 999.9	APC B	TRINIDAD\B-RDW-UP TRINIDAD\B-RDW000 TRINIDAD\B-RDW270	0.10 0.10 0.10	40.0 40.0 40.0	0.041 0.150 0.156	3.7 9.1 11.2	3.66 9.09 11.20
Irpinia, Italy 99	1980 1123 1934	0.0 6.5 0.0 0.0	99999 Arienzo 99	78.0 999.9	--- -	ITALY\A-ARI-UP ITALY\A-ARI000 ITALY\A-ARI270	0.30 0.30 0.30	25.0 25.0 25.0	0.019 0.031 0.042	2.4 2.9 2.4	0.69 0.77 0.48
			99999 Auletta	25.0	---	ITALY\A-AUL-UP	0.20	35.0	0.043	3.3	1.29

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	999.9	-	ITALY\A-AUL000	0.10	30.0	0.058	5.2	3.21
						ITALY\A-AUL270	0.10	30.0	0.062	6.1	3.72
			99999 Bagnoli Irpino	21.0	---	ITALY\A-BAG-UP	0.10	40.0	0.108	14.2	5.80
			99	999.9	-	ITALY\A-BAG000	0.10	35.0	0.139	22.1	9.33
						ITALY\A-BAG270	0.10	35.0	0.202	32.0	9.65
			99999 Bisaccia	28.0	---	ITALY\A-BIS-UP	0.10	30.0	0.067	14.2	11.10
			99	999.9	-	ITALY\A-BIS000	0.06	25.0	0.100	23.6	14.92
						ITALY\A-BIS270	0.30	25.0	0.083	12.5	2.94
			99999 Bovino	55.0	---	ITALY\A-BOV-UP	0.60	20.0	0.023	1.6	0.19
			99	999.9	-	ITALY\A-BOV000	0.60	30.0	0.038	2.5	0.33
						ITALY\A-BOV270	0.50	30.0	0.053	2.8	0.30
			99999 Brienza	33.0	---	ITALY\A-BRZ-UP	0.40	50.0	0.170	6.1	0.77
			99	999.9	-	ITALY\A-BRZ000	0.20	35.0	0.217	14.3	3.31
						ITALY\A-BRZ270	0.20	30.0	0.199	11.2	1.86
			99999 Calitri	19.0	---	ITALY\A-CTR-UP	0.40	23.0	0.146	9.1	2.22
			99	999.9	-	ITALY\A-CTR000	0.20	30.0	0.132	16.7	4.91
						ITALY\A-CTR270	0.20	30.0	0.176	18.7	5.05
			99999 Mercato San Severino	47.0	---	ITALY\A-MER-UP	0.80	30.0	0.054	2.5	0.26
			99	999.9	-	ITALY\A-MER000	0.30	30.0	0.089	8.9	1.33
						ITALY\A-MER270	0.30	30.0	0.145	10.7	1.79
			99999 Rionero In Vulture	37.0	---	ITALY\A-VLT-UP	0.30	40.0	0.067	4.2	0.90
			99	999.9	-	ITALY\A-VLT000	0.60	30.0	0.106	6.3	0.65
						ITALY\A-VLT270	0.30	30.0	0.104	6.1	1.23
			99999 Sturno	32.0	---	ITALY\A-STU-UP	0.13	33.0	0.260	26.0	10.61
			99	999.9	-	ITALY\A-STU000	0.13	30.0	0.251	37.0	11.77
						ITALY\A-STU270	0.08	30.0	0.358	52.7	33.08
			99999 Torre Del Greco	79.0	---	ITALY\A-TDG-UP	0.10	20.0	0.033	6.8	3.53
			99	999.9	-	ITALY\A-TDG000	0.10	20.0	0.063	6.8	4.80
						ITALY\A-TDG270	0.07	20.0	0.040	9.4	6.92
			99999 Tricarico	76.0	---	ITALY\A-TRC-UP	0.20	30.0	0.026	3.0	1.38
			99	999.9	-	ITALY\A-TRC000	0.20	25.0	0.048	4.0	1.49
						ITALY\A-TRC270	0.10	20.0	0.035	6.2	2.78
Irpinia, Italy 99	1980 1123 1935	0.0 6.5 0.0 0.0	99999 Auletta	25.0	---	ITALY\B-AUL-UP	0.30	30.0	0.016	2.6	0.65
			99	999.9	-	ITALY\B-AUL000	0.30	25.0	0.019	2.4	0.73
						ITALY\B-AUL270	0.30	23.0	0.023	2.3	0.85
			99999 Bagnoli Irpino	21.0	---	ITALY\B-BAG-UP	0.20	30.0	0.032	2.9	0.73
			99	999.9	-	ITALY\B-BAG000	0.30	25.0	0.049	4.5	0.52
						ITALY\B-BAG270	0.30	30.0	0.058	3.5	0.68
			99999 Bisaccia	28.0	---	ITALY\B-BIS-UP	0.13	23.0	0.050	7.0	3.73
			99	999.9	-	ITALY\B-BIS000	0.13	20.0	0.076	10.5	4.70
						ITALY\B-BIS270	0.10	20.0	0.072	14.4	5.48
			99999 Bovino	55.0	---	ITALY\B-BOV-UP	0.40	20.0	0.017	1.2	0.22
			99	999.9	-	ITALY\B-BOV000	0.50	25.0	0.026	2.4	0.45
						ITALY\B-BOV270	0.40	30.0	0.022	2.1	0.34
			99999 Brienza	33.0	---	ITALY\B-BRZ-UP	0.30	30.0	0.024	1.7	0.45
			99	999.9	-	ITALY\B-BRZ000	0.25	23.0	0.040	3.7	0.98
						ITALY\B-BRZ270	0.25	25.0	0.043	3.5	0.92
			99999 Calitri	19.0	---	ITALY\B-CTR-UP	0.12	23.0	0.147	22.6	12.98
			99	999.9	-	ITALY\B-CTR000	0.20	23.0	0.177	23.6	6.95
						ITALY\B-CTR270	0.13	23.0	0.165	26.1	6.85
			99999 Mercato San Severino	47.0	---	ITALY\B-MER-UP	0.30	23.0	0.017	1.1	0.17
			99	999.9	-	ITALY\B-MER000	0.50	20.0	0.042	3.1	0.34
						ITALY\B-MER270	0.70	20.0	0.043	3.2	0.29

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99999 Rionero In Vulture 99	37.0 999.9	--- -	ITALY\B-VLT-UP ITALY\B-VLT000 ITALY\B-VLT270	0.55 0.20 0.23	30.0 30.0 23.0	0.067 0.099 0.096	5.9 12.7 8.5	1.05 3.13 1.44
			99999 Sturno 99	32.0 999.9	--- -	ITALY\B-STU-UP ITALY\B-STU000 ITALY\B-STU270	0.30 0.21 0.23	30.0 23.0 23.0	0.037 0.071 0.077	2.4 3.5 4.5	0.41 0.95 0.76
			99999 Tricarico 99	76.0 999.9	--- -	ITALY\B-TRC-UP ITALY\B-TRC000 ITALY\B-TRC270	0.60 0.40 0.50	25.0 20.0 20.0	0.014 0.021 0.026	1.0 2.9 2.6	0.16 0.77 0.52
Irpinia, Italy 99	1981 0116 0137	0.0 0.0 0.0 0.0	99999 Conza (Base) 99	999.9 999.9	--- -	ITALY\C-CNZ-UP ITALY\C-CNZ000 ITALY\C-CNZ270	0.80 0.10 0.30	30.0 23.0 20.0	0.036 0.073 0.097	1.2 3.9 3.5	0.08 0.97 0.29
Taiwan 02	SMART1(5) 1981 0129	0.0 6.3 5.7 0.0	25 SMART1 C00 99	21.0 999.9	IZD -	SMART1\05C00DN SMART1\05C00EW SMART1\05C00NS	0.20 0.50 0.20	25.0 25.0 25.0	0.043 0.096 0.114	1.7 6.0 13.4	0.40 0.91 1.93
			26 SMART1 I06 99	21.0 999.9	IZD -	SMART1\05I06DN SMART1\05I06EW SMART1\05I06NS	0.50 0.50 0.50	25.0 25.0 25.0	0.032 0.090 0.077	1.3 4.2 9.8	0.28 0.81 1.50
			27 SMART1 I12 99	21.0 999.9	IZD -	SMART1\05I12DN SMART1\05I12EW SMART1\05I12NS	0.20 0.10 0.10	25.0 25.0 25.0	0.060 0.140 0.113	2.0 5.1 12.5	0.46 1.20 2.14
			28 SMART1 M01 99	21.0 999.9	IZD -	SMART1\05M01DN SMART1\05M01EW SMART1\05M01NS	0.10 0.10 0.10	25.0 25.0 25.0	0.095 0.082 0.178	2.4 4.8 15.9	0.35 1.00 2.19
			29 SMART1 M07 99	21.0 999.9	IZD -	SMART1\05M07DN SMART1\05M07EW SMART1\05M07NS	0.20 0.10 0.10	25.0 25.0 25.0	0.050 0.111 0.109	1.5 5.6 10.9	0.34 0.86 1.74
			30 SMART1 O01 99	21.0 999.9	IZD -	SMART1\05O01DN SMART1\05O01EW SMART1\05O01NS	0.20 0.20 0.20	25.0 25.0 25.0	0.032 0.089 0.115	1.3 6.4 13.7	0.35 0.91 2.23
			31 SMART1 O07 99	21.0 999.9	IZD -	SMART1\05O07DN SMART1\05O07EW SMART1\05O07NS	0.20 0.10 0.20	25.0 25.0 25.0	0.028 0.086 0.080	1.9 6.9 11.7	0.42 0.92 2.18
Corinth 99	1981 0224 0000	0.0 6.7 0.0 0.0	99999 Corinth 99	999.9 999.9	--- -	CORINTH\COR-UP CORINTH\COR--L CORINTH\COR--T	0.00 0.00 0.00		0.113 0.240 0.296	8.8 23.3 25.3	4.00 11.41 7.04
Westmorland 00	1981 0426 1209	5.8 5.6 0.0 0.0	USGS 5060 Brawley Airport 00	22.0* 999.9	AQD C	WESTMORL\BRA-UP WESTMORL\BRA225 WESTMORL\BRA315	0.60 0.15 0.70	40.0 40.0 33.0	0.101 0.169 0.171	2.2 12.7 5.8	0.23 3.09 0.48
			CDMG 724 Niland Fire Station 00	19.4* 999.9	AQD C	WESTMORL\NIL-UP WESTMORL\NIL000 WESTMORL\NIL090	0.25 0.30 0.30	40.0 33.0 33.0	0.126 0.105 0.176	2.9 5.6 6.6	0.47 0.69 0.80
			USGS 5051 Parachute Test Site 00	24.1* 999.9	AQD B	WESTMORL\PTS-UP WESTMORL\PTS225 WESTMORL\PTS315	0.35 0.10 0.10	35.0 30.0 33.0	0.157 0.242 0.155	11.2 39.2 26.6	1.78 26.88 12.97
			USGS 5062 Salton Sea Wildlife Refuge 00	10.1* 999.9	AQD D	WESTMORL\WLF-UP WESTMORL\WLF225 WESTMORL\WLF315	0.25 0.07 0.08	50.0 33.0 33.0	0.214 0.199 0.176	4.8 16.4 12.3	1.08 4.45 2.33
			USGS 286 Superstition Mtn Camera 00	26.5* 999.9	AGA B	WESTMORL\SUP-UP WESTMORL\SUP045	0.70 0.70	35.0 30.0	0.045 0.071	1.3 3.6	0.09 0.24

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 5169 Westmorland Fire Sta 00	13.3* 999.9	ADD C	WESTMORL\SUP135 WESTMORL\WSM-UP WESTMORL\WSM090 WESTMORL\WSM180	0.70 0.90 0.08 0.05	30.0 40.0 40.0 40.0	0.116 0.838 0.368 0.496	5.0 10.4 48.7 34.4	0.49 0.46 10.61 10.89
Mammoth Lakes 99	1983 0107 0138	0.0 5.2 0.0 0.0	CDMG 54099 Convict Creek 99	9.5* 999.9	AQD -	MAMMOTH\F-CVK-UP MAMMOTH\F-CVK090 MAMMOTH\F-CVK180	0.20 0.15 0.15	40.0 30.0 30.0	0.097 0.165 0.153	7.9 14.4 18.7	1.65 2.05 2.88
Mammoth Lakes 99	1983 0107 0324	0.0 5.4 0.0 0.0	CDMG 54099 Convict Creek 99	10.8* 999.9	AQD -	MAMMOTH\G-CVK-UP MAMMOTH\G-CVK090 MAMMOTH\G-CVK180	0.30 0.40 0.20	40.0 30.0 30.0	0.073 0.150 0.101	5.7 8.4 7.1	0.75 0.97 1.50
Coalinga 03	1983 0502 2342	6.4 6.7 6.5 0.0	CDMG 46314 Cantua Creek School 99	25.5 999.9	AHD -	COALINGA\H-CAK-UP COALINGA\H-CAK270 COALINGA\H-CAK360	0.20 0.20 0.20	26.0 23.0 23.0	0.094 0.227 0.281	5.1 23.6 25.8	1.86 5.83 3.71
			CDMG 36452 Parkfield - Cholame 1E 99	41.6 999.9	IHD -	COALINGA\H-C01-UP COALINGA\H-C01000 COALINGA\H-C01090	0.50 0.20 0.20	30.0 20.0 20.0	0.059 0.090 0.089	6.6 10.8 15.2	1.82 2.66 2.64
			CDMG 36230 Parkfield - Cholame 2E 99	40.5 999.9	IJB -	COALINGA\H-TM2-UP COALINGA\H-TM2000 COALINGA\H-TM2090	0.50 0.50 0.20	26.0 23.0 22.0	0.017 0.026 0.037	2.3 2.9 5.4	0.52 0.62 1.40
			CDMG 36228 Parkfield - Cholame 2WA 99	42.8 999.9	IHD -	COALINGA\H-C02-UP COALINGA\H-C02000 COALINGA\H-C02090	0.20 0.20 0.20	23.0 22.0 26.0	0.044 0.109 0.114	5.1 11.3 9.6	1.39 2.60 1.79
			CDMG 36450 Parkfield - Cholame 3E 99	38.4 999.9	IMA -	COALINGA\H-TM3-UP COALINGA\H-TM3000 COALINGA\H-TM3090	0.20 0.20 0.20	26.0 23.0 22.0	0.024 0.044 0.056	3.0 4.4 6.5	0.60 1.61 1.75
			CDMG 36410 Parkfield - Cholame 3W 99	43.9 999.9	IHC -	COALINGA\H-C03-UP COALINGA\H-C03000 COALINGA\H-C03090	0.20 0.20 0.20	27.0 21.0 24.0	0.034 0.098 0.084	4.5 7.6 8.3	1.46 1.86 1.41
			CDMG 36412 Parkfield - Cholame 4AW 99	46.0 999.9	IHC -	COALINGA\H-C4A-UP COALINGA\H-C4A000 COALINGA\H-C4A090	0.50 0.20 0.20	33.0 21.0 20.0	0.022 0.047 0.078	2.0 5.0 8.0	0.50 0.90 1.32
			CDMG 36411 Parkfield - Cholame 4W 99	44.7 999.9	IHC -	COALINGA\H-C04-UP COALINGA\H-C04000 COALINGA\H-C04090	0.20 0.20 0.20	30.0 21.0 23.0	0.041 0.136 0.136	3.5 11.3 9.1	0.87 1.79 1.42
			CDMG 36227 Parkfield - Cholame 5W 99	47.3 999.9	IHC C	COALINGA\H-C05-UP COALINGA\H-C05270 COALINGA\H-C05360	0.50 0.20 0.20	30.0 22.0 22.0	0.034 0.147 0.131	2.3 10.8 10.0	1.14 1.07 1.28
			CDMG 36451 Parkfield - Cholame 6W 99	49.0 999.9	IHC -	COALINGA\H-C06-UP COALINGA\H-C06000 COALINGA\H-C06090	0.20 0.50 0.20	30.0 21.0 28.0	0.037 0.126 0.102	3.2 11.0 9.9	0.62 1.34 1.26
			CDMG 36226 Parkfield - Cholame 8W 99	50.7 999.9	IQD C	COALINGA\H-C08-UP COALINGA\H-C08000 COALINGA\H-C08270	0.20 0.20 0.50	27.0 23.0 21.0	0.024 0.098 0.100	3.3 8.6 8.0	0.90 1.53 1.25
			CDMG 36229 Parkfield - Cholame 12W 99	55.2 999.9	IQD -	COALINGA\H-C12-UP COALINGA\H-C12270 COALINGA\H-C12360	0.20 0.20 0.20	30.0 23.0 21.0	0.023 0.040 0.053	3.0 4.2 5.5	1.08 1.01 1.57
			CDMG 36407 Parkfield - Fault Zone 1 99	40.4 999.9	IHD -	COALINGA\H-COW-UP COALINGA\H-COW000 COALINGA\H-COW090	0.20 0.20 0.20	31.0 20.0 21.0	0.040 0.194 0.111	8.6 23.3 17.8	2.45 7.82 4.79
			CDMG 36413 Parkfield - Fault Zone 2 99	37.9 999.9	IHD -	COALINGA\H-Z02-UP COALINGA\H-Z02000	0.50 0.20	33.0 22.0	0.039 0.116	3.8 22.7	0.94 6.05

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 36408 Parkfield - Fault Zone 3	36.4	IHD	COALINGA\H-Z02090	0.20	25.0	0.133	19.7	4.40
			99	999.9	-	COALINGA\H-COH-UP	0.10	31.0	0.049	6.0	2.32
						COALINGA\H-COH000	0.10	27.0	0.140	13.7	4.76
						COALINGA\H-COH090	0.10	22.0	0.164	24.5	4.94
			CDMG 36414 Parkfield - Fault Zone 4	34.3	IPB	COALINGA\H-Z04-UP	0.20	30.0	0.046	6.2	2.29
			99	999.9	-	COALINGA\H-Z04000	0.20	22.0	0.067	12.6	3.36
						COALINGA\H-Z04090	0.20	28.0	0.120	20.4	4.43
			CDMG 36454 Parkfield - Fault Zone 6	32.8	IPB	COALINGA\H-Z06-UP	0.20	31.0	0.026	5.0	1.74
			99	999.9	-	COALINGA\H-Z06000	0.20	24.0	0.055	9.1	3.85
						COALINGA\H-Z06090	0.20	24.0	0.056	11.6	3.19
			CDMG 36431 Parkfield - Fault Zone 7	31.0	IQC	COALINGA\H-Z07-UP	0.20	31.0	0.054	7.8	1.88
			99	999.9	-	COALINGA\H-Z07000	0.20	30.0	0.122	21.1	7.34
						COALINGA\H-Z07090	0.20	30.0	0.119	14.9	3.36
			CDMG 36449 Parkfield - Fault Zone 8	29.6	IMB	COALINGA\H-Z08-UP	0.20	29.0	0.054	4.9	1.66
			99	999.9	-	COALINGA\H-Z08000	0.20	21.0	0.131	17.3	4.21
						COALINGA\H-Z08090	0.20	27.0	0.116	14.2	1.71
			CDMG 36443 Parkfield - Fault Zone 9	31.9	IPB	COALINGA\H-Z09-UP	0.20	30.0	0.026	3.8	1.61
			99	999.9	-	COALINGA\H-Z09000	0.20	23.0	0.057	9.4	2.91
						COALINGA\H-Z09090	0.20	28.0	0.050	8.9	2.46
			CDMG 36444 Parkfield - Fault Zone 10	30.4	IQD	COALINGA\H-Z10-UP	0.20	26.0	0.043	5.8	2.57
			99	999.9	-	COALINGA\H-Z10000	0.20	24.0	0.073	15.3	7.05
						COALINGA\H-Z10090	0.20	21.0	0.131	16.1	3.15
			CDMG 36453 Parkfield - Fault Zone 11	28.4	IMB	COALINGA\H-Z11-UP	0.20	28.0	0.042	4.8	1.80
			99	999.9	-	COALINGA\H-Z11000	0.20	21.0	0.097	11.9	2.35
						COALINGA\H-Z11090	0.20	28.0	0.087	6.6	1.83
			CDMG 36138 Parkfield - Fault Zone 12	29.5	IHC	COALINGA\H-PRK-UP	0.20	27.0	0.070	7.9	2.10
			99	999.9	-	COALINGA\H-PRK090	0.20	20.0	0.110	12.1	3.26
						COALINGA\H-PRK180	0.20	20.0	0.112	14.6	5.69
			CDMG 36456 Parkfield - Fault Zone 14	29.9	IHC	COALINGA\H-Z14-UP	0.10	30.0	0.097	11.4	4.13
			99	999.9	-	COALINGA\H-Z14000	0.20	23.0	0.282	40.9	8.10
						COALINGA\H-Z14090	0.10	23.0	0.274	28.3	5.10
			CDMG 36445 Parkfield - Fault Zone 15	29.9	IQB	COALINGA\H-Z15-UP	0.20	24.0	0.084	10.4	2.08
			99	999.9	-	COALINGA\H-Z15000	0.20	20.0	0.168	21.2	4.91
						COALINGA\H-Z15090	0.20	22.0	0.117	14.1	2.94
			CDMG 36457 Parkfield - Fault Zone 16	28.1	IQC	COALINGA\H-Z16-UP	0.20	30.0	0.061	6.5	1.92
			99	999.9	-	COALINGA\H-Z16000	0.20	26.0	0.195	17.7	3.48
						COALINGA\H-Z16090	0.20	27.0	0.122	12.0	1.83
			CDMG 36415 Parkfield - Gold Hill 1W	46.5	IHD	COALINGA\H-PG1-UP	0.20	30.0	0.035	4.7	1.53
			99	999.9	-	COALINGA\H-PG1000	0.20	24.0	0.119	16.7	4.54
						COALINGA\H-PG1090	0.20	22.0	0.065	10.1	2.57
			CDMG 36421 Parkfield - Gold Hill 2E	32.3	IQD	COALINGA\H-GH2-UP	0.20	32.0	0.035	3.3	0.90
			99	999.9	-	COALINGA\H-GH2000	0.20	30.0	0.072	6.5	1.73
						COALINGA\H-GH2090	0.20	30.0	0.076	7.6	1.40
			CDMG 36416 Parkfield - Gold Hill 2W	36.6	IPB	COALINGA\H-PG2-UP	0.20	32.0	0.036	4.4	1.58
			99	999.9	-	COALINGA\H-PG2000	0.20	21.0	0.083	11.4	3.72
						COALINGA\H-PG2090	0.20	20.0	0.074	11.7	2.64
			CDMG 36439 Parkfield - Gold Hill 3E	29.2	IQD	COALINGA\H-GH3-UP	0.20	30.0	0.054	8.4	1.50
			99	999.9	-	COALINGA\H-GH3000	0.20	26.0	0.094	11.0	2.87
						COALINGA\H-GH3090	0.20	27.0	0.072	6.4	1.56
			CDMG 36420 Parkfield - Gold Hill 3W	38.8	IPB	COALINGA\H-PG3-UP	0.20	36.0	0.067	7.5	1.77
			99	999.9	-	COALINGA\H-PG3000	0.20	30.0	0.137	11.0	2.76
						COALINGA\H-PG3090	0.20	30.0	0.122	9.0	1.74
			CDMG 36433 Parkfield - Gold Hill 4W	41.0	IPB	COALINGA\H-PG4-UP	0.20	30.0	0.029	4.9	1.53
			99	999.9	-	COALINGA\H-PG4000	0.20	31.0	0.056	8.1	2.28

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 36434 Parkfield - Gold Hill 5W 99	43.7 999.9	IPB -	COALINGA\H-PG4090 COALINGA\H-PG5-UP COALINGA\H-PG5000	0.20 0.20 0.20	30.0 30.0 26.0	0.097 0.034 0.073	6.3 3.9 8.5	1.86 1.53 2.62
			CDMG 36432 Parkfield - Gold Hill 6W 99	48.0 999.9	IPC -	COALINGA\H-PG6-UP COALINGA\H-PG6000 COALINGA\H-PG5090	0.20 0.20 0.20	30.0 30.0 30.0	0.037 0.059 0.069	3.2 8.2 7.4	0.80 1.55 1.21
			CDMG 36422 Parkfield - Stone Corral 2E 99	34.4 999.9	IMA -	COALINGA\H-SC2-UP COALINGA\H-SC2000 COALINGA\H-SC2090	0.20 0.20 0.20	35.0 25.0 30.0	0.033 0.061 0.095	4.0 8.1 7.1	1.65 2.65 1.75
			CDMG 36437 Parkfield - Stone Corral 3E 99	31.8 999.9	IMA -	COALINGA\H-SC3-UP COALINGA\H-SC3000 COALINGA\H-SC3090	0.20 0.20 0.20	30.0 23.0 30.0	0.033 0.151 0.106	3.6 8.7 8.1	1.06 2.92 1.39
			CDMG 36438 Parkfield - Stone Corral 4E 99	29.6 999.9	IMA -	COALINGA\H-SC4-UP COALINGA\H-SC4000 COALINGA\H-SC4090	0.20 0.20 0.20	26.0 21.0 22.0	0.030 0.063 0.072	3.0 8.2 6.7	0.89 2.33 1.39
			CDMG 36455 Parkfield - Vineyard Cany 1E 99	26.7 999.9	IQC -	COALINGA\H-PV1-UP COALINGA\H-PV1000 COALINGA\H-PV1090	0.20 0.20 0.20	26.0 24.0 23.0	0.082 0.167 0.230	10.4 20.9 27.6	3.03 5.03 6.21
			CDMG 36448 Parkfield - Vineyard Cany 1W 99	29.5 999.9	IQC -	COALINGA\H-VC1-UP COALINGA\H-VC1000 COALINGA\H-VC1090	0.50 0.50 0.50	28.0 26.0 23.0	0.068 0.081 0.087	6.1 8.2 11.1	1.49 2.12 2.41
			CDMG 36177 Parkfield - Vineyard Cany 2E 99	24.6 999.9	IFA -	COALINGA\H-PGDXXX COALINGA\H-PGD065 COALINGA\H-PGDXXX	-99. 0.20 -99.	30.0	0.161	16.2	3.30
			CDMG 36447 Parkfield - Vineyard Cany 2W 99	30.7 999.9	IHC -	COALINGA\H-VC2-UP COALINGA\H-VC2000 COALINGA\H-VC2090	0.20 0.20 0.20	40.0 30.0 30.0	0.057 0.073 0.083	5.2 7.4 6.9	1.54 1.47 1.22
			CDMG 36176 Parkfield - Vineyard Cany 3W 99	32.3 999.9	IPA -	COALINGA\H-VYC-UP COALINGA\H-VYC020 COALINGA\H-VYC110	0.20 0.20 0.20	31.0 30.0 30.0	0.056 0.098 0.137	6.2 11.8 13.5	1.75 2.95 2.57
			CDMG 36446 Parkfield - Vineyard Cany 4W 99	34.6 999.9	IMB -	COALINGA\H-VC4-UP COALINGA\H-VC4000 COALINGA\H-VC4090	0.20 0.20 0.20	30.0 30.0 27.0	0.024 0.064 0.046	2.8 6.5 4.2	0.64 1.37 0.95
			CDMG 36440 Parkfield - Vineyard Cany 5W 99	37.1 999.9	IHB -	COALINGA\H-VC5-UP COALINGA\H-VC5090 COALINGA\H-VC5XXX	0.20 0.20 -99.	30.0 21.0	0.048 0.062	4.9 6.9	1.09 1.47
			CDMG 36441 Parkfield - Vineyard Cany 6W 99	41.0 999.9	IPC -	COALINGA\H-VC6-UP COALINGA\H-VC6000 COALINGA\H-VC6090	0.20 0.20 0.20	30.0 25.0 27.0	0.038 0.054 0.076	4.8 9.5 5.4	1.62 2.76 1.82
			USBR 1162 Pleasant Valley P.P. - bldg 01	8.5 999.9	AHD -	COALINGA\H-PVB-UP COALINGA\H-PVB045 COALINGA\H-PVB135	0.20 0.20 0.20	30.0 20.0 22.0	0.206 0.380 0.285	12.3 32.4 19.1	2.53 6.43 2.59
			USBR 1162 Pleasant Valley P.P. - yard 01	8.5 999.9	AHD -	COALINGA\H-PVY-UP COALINGA\H-PVY045 COALINGA\H-PVY135	0.20 0.20 0.20	31.0 40.0 31.0	0.353 0.592 0.551	16.1 60.2 36.4	2.35 8.77 3.96
			CDMG 46175 Slack Canyon 01	27.7 999.9	IGA -	COALINGA\H-SCN-UP COALINGA\H-SCN045 COALINGA\H-SCN315	0.20 0.20 0.20	21.0 21.0 21.0	0.053 0.166 0.153	6.8 16.1 13.3	2.42 4.19 2.72
Coalinga 02	1983 0509 0249	5.0 5.3 4.7 0.0	USGS 4 ALP (temp) 99	19.9* 999.9	IQD -	COALINGA\A-ALP-UP COALINGA\A-ALP085 COALINGA\A-ALP355	0.30 0.20 0.20	35.0 30.0 30.0	0.018 0.040 0.021	1.0 2.9 1.5	0.09 0.39 0.16
			USGS 1607 Anticline Ridge Free-Field	12.6*	IPA	COALINGA\A-ATC-UP	2.00	30.0	0.250	4.3	0.11

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	999.9	-	COALINGA\A-ATC270	0.40	30.0	0.576	16.5	0.96
			99	999.9	-	COALINGA\A-ATC360	0.50	40.0	0.673	20.4	1.18
USGS 1607			Anticline Ridge Pad	12.6*	APA	COALINGA\A-ATP-UP	0.60	45.0	0.380	8.1	0.22
			99	999.9	-	COALINGA\A-ATP270	0.50	40.0	0.452	16.8	0.85
			99	999.9	-	COALINGA\A-ATP360	0.60	35.0	0.412	23.2	1.27
CDMG 46T05			Anticline Ridge - Palmer Ave	12.6*	APB	COALINGA\A-CPL-UP	1.00	30.0	0.049	1.7	0.10
			99	999.9	-	COALINGA\A-CPL000	0.35	25.0	0.292	12.1	0.78
			99	999.9	-	COALINGA\A-CPL090	0.40	25.0	0.216	9.2	0.64
USGS 1606			Burnett Construction	17.7*	AHD	COALINGA\A-BNT-UP	0.40	30.0	0.077	2.0	0.15
			99	999.9	-	COALINGA\A-BNT270	0.50	30.0	0.095	3.5	0.37
			99	999.9	-	COALINGA\A-BNT360	0.40	25.0	0.095	4.5	0.35
CDMG 46T04			CHP (temp)	16.7*	AHD	COALINGA\A-CHP-UP	0.80	30.0	0.047	1.7	0.12
			99	999.9	-	COALINGA\A-CHP000	0.40	25.0	0.145	5.2	0.47
			99	999.9	-	COALINGA\A-CHP090	0.50	20.0	0.114	6.0	0.33
CDMG 46T07			Harris Ranch - Hdqtrs (temp)	17.8*	AHD	COALINGA\A-XCH-UP	0.70	20.0	0.071	1.8	0.10
			99	999.9	-	COALINGA\A-XCH000	0.70	20.0	0.080	2.9	0.13
			99	999.9	-	COALINGA\A-XCH090	0.40	15.0	0.154	6.4	0.67
USGS 5			LLN (temp)	13.1*	IPA	COALINGA\A-LLN-UP	0.40	50.0	0.059	2.2	0.18
			99	999.9	-	COALINGA\A-LLN000	0.30	50.0	0.130	7.8	0.49
			99	999.9	-	COALINGA\A-LLN090	0.30	40.0	0.076	3.8	0.38
USGS 6			MIT (temp)	12.5*	IQD	COALINGA\A-MIT-UP	0.40	50.0	0.158	3.8	0.30
			99	999.9	-	COALINGA\A-MIT010	0.15	50.0	0.130	4.6	0.48
			99	999.9	-	COALINGA\A-MITXXX	-99.				
USGS 1604			Oil City	13.3*	APB	COALINGA\A-OLC-UP	0.70	40.0	0.098	3.0	0.13
			99	999.9	-	COALINGA\A-OLC270	0.50	30.0	0.250	9.3	0.71
			99	999.9	-	COALINGA\A-OLC360	0.70	30.0	0.284	9.3	0.39
USGS 1608			Oil Fields Fire Station	12.1*	APA	COALINGA\A-OLP-UP	0.70	30.0	0.147	2.9	0.11
			99	999.9	-	COALINGA\A-OLP270	0.70	30.0	0.247	7.9	0.34
			99	999.9	-	COALINGA\A-OLP360	0.60	30.0	0.178	5.0	0.26
CDMG 46T06			Oil Fields - Skunk Hollow	12.7*	APA	COALINGA\A-COL-UP	1.00	35.0	0.082	1.7	0.07
			99	999.9	-	COALINGA\A-COL000	0.50	35.0	0.313	9.3	0.41
			99	999.9	-	COALINGA\A-COL090	0.50	25.0	0.343	10.8	0.56
USGS 1609			Palmer Ave	12.7*	APB	COALINGA\A-PLM-UP	1.00	30.0	0.095	2.1	0.13
			99	999.9	-	COALINGA\A-PLM270	0.50	15.0	0.202	7.5	0.34
			99	999.9	-	COALINGA\A-PLM360	0.30	20.0	0.289	13.6	0.75
USBR 1162			Pleasant Valley P.P. - yard	14.6*	AHD	COALINGA\A-PVY-UP	0.40	30.0	0.102	2.6	0.16
			99	999.9	-	COALINGA\A-PVY045	0.20	30.0	0.078	9.5	1.04
			99	999.9	-	COALINGA\A-PVY135	0.50	25.0	0.220	9.3	0.50
USGS 7			SGT (temp)	14.1*	IZA	COALINGA\A-SGT-UP	0.30	50.0	0.071	2.7	0.15
			99	999.9	-	COALINGA\A-SGT080	0.10	60.0	0.139	5.8	0.70
			99	999.9	-	COALINGA\A-SGT350	0.10	60.0	0.244	7.4	0.68
USGS 1605			Skunk Hollow	12.4*	APA	COALINGA\A-SKH-UP	0.70	35.0	0.077	1.9	0.12
			99	999.9	-	COALINGA\A-SKH270	0.30	25.0	0.171	6.1	0.49
			99	999.9	-	COALINGA\A-SKH360	0.30	25.0	0.104	4.6	0.37
USGS 8			SUB (temp)	14.5*	IQD	COALINGA\A-SUB-UP	0.40	50.0	0.079	2.0	0.15
			99	999.9	-	COALINGA\A-SUB000	0.15	35.0	0.116	5.9	0.85
			99	999.9	-	COALINGA\A-SUB090	0.10	40.0	0.216	12.2	1.42
CDMG 1703			Sulphur Baths (temp)	20.3*	APA	COALINGA\A-CSU-UP	0.50	20.0	0.005	0.3	0.06
			99	999.9	-	COALINGA\A-CSU000	0.60	15.0	0.008	0.5	0.04
			99	999.9	-	COALINGA\A-CSU090	0.80	20.0	0.004	0.3	0.03
USGS 9			TRA (temp)	14.9*	IQD	COALINGA\A-TRA-UP	0.10	50.0	0.079	4.9	0.36
			99	999.9	-	COALINGA\A-TRA000	0.20	35.0	0.131	9.4	0.97
			99	999.9	-	COALINGA\A-TRA090	0.20	30.0	0.088	6.9	0.70
USGS 10			VEW (temp)	12.6*	IPA	COALINGA\A-VEW-UP	0.08	60.0	0.065	1.5	0.19

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	999.9	-	COALINGA\A-VEW005	0.05	60.0	0.146	8.7	1.09
			USGS 11 YUB (temp)	20.1*	IQD	COALINGA\A-VEW095	0.05	60.0	0.121	7.8	0.75
			99	999.9	-	COALINGA\A-YUBXXX	-99.				
						COALINGA\A-YUB080	0.60	40.0	0.034	1.3	0.10
						COALINGA\A-YUB350	0.40	40.0	0.022	0.9	0.07
Coalinga 02	1983 0611 0309	5.3 5.2 5.4 0.0	USGS 1606 Burnett Construction	10.5*	AHD	COALINGA\B-BNT-UP	0.20	30.0	0.083	4.1	0.80
			99	999.9	-	COALINGA\B-BNT270	0.15	25.0	0.165	8.0	2.43
						COALINGA\B-BNT360	0.15	20.0	0.191	10.0	1.91
			CDMG 46T04 CHP (temp)	10.0*	AHD	COALINGA\B-CHP-UP	0.20	15.0	0.028	3.8	0.76
			99	999.9	-	COALINGA\B-CHP000	0.10	15.0	0.055	5.8	1.96
						COALINGA\B-CHP090	0.10	15.0	0.061	4.7	1.95
			CDMG 1703 Sulphur Baths (temp)	9.7*	APA	COALINGA\B-CSU-UP	0.20	20.0	0.034	3.5	1.47
			99	999.9	-	COALINGA\B-CSU000	0.20	20.0	0.044	5.1	2.29
						COALINGA\B-CSU090	0.20	20.0	0.037	4.5	1.64
Coalinga 02	1983 0709 0740	5.2 5.4 4.9 0.0 (5.3)	USGS 1607 Anticline Ridge Free-Field	11.0*	IPA	COALINGA\C-ATC-UP	0.30	40.0	0.115	3.7	0.43
			99	999.9	-	COALINGA\C-ATC270	0.30	30.0	0.330	16.1	1.20
						COALINGA\C-ATC360	0.45	40.0	0.275	8.9	0.46
			USGS 1607 Anticline Ridge Pad	11.0*	APA	COALINGA\C-ATP-UP	0.30	30.0	0.137	4.7	0.34
			99	999.9	-	COALINGA\C-ATP270	0.40	30.0	0.378	16.1	1.03
						COALINGA\C-ATP360	0.40	25.0	0.261	9.2	0.53
			USGS 1606 Burnett Construction	15.9*	AHD	COALINGA\C-BNT-UP	0.40	30.0	0.074	3.2	0.26
			99	999.9	-	COALINGA\C-BNT270	0.50	30.0	0.119	6.6	0.50
						COALINGA\C-BNT360	0.40	30.0	0.149	7.7	0.52
			CDMG 46T04 CHP (temp)	14.9*	AHD	COALINGA\C-CHP-UP	0.45	30.0	0.079	2.4	0.22
			99	999.9	-	COALINGA\C-CHP000	0.30	25.0	0.204	8.0	0.62
						COALINGA\C-CHP090	0.30	25.0	0.171	5.4	0.38
			USGS 1604 Oil City	10.0*	APB	COALINGA\C-OLC-UP	0.40	30.0	0.210	4.6	0.29
			99	999.9	-	COALINGA\C-OLC270	0.20	30.0	0.387	13.8	1.59
						COALINGA\C-OLC360	0.20	30.0	0.370	12.4	0.89
			USGS 1608 Oil Fields Fire Station - FF	11.9*	IPA	COALINGA\C-OLF-UP	0.25	30.0	0.062	2.0	0.22
			99	999.9	-	COALINGA\C-OLF270	0.60	30.0	0.088	3.0	0.26
						COALINGA\C-OLF360	0.12	30.0	0.096	4.1	0.71
			USGS 1608 Oil Fields Fire Station - Pad	11.9*	APA	COALINGA\C-OLP-UP	0.40	30.0	0.073	1.9	0.20
			99	999.9	-	COALINGA\C-OLP270	0.10	25.0	0.094	3.4	0.53
						COALINGA\C-OLP360	0.40	25.0	0.109	4.0	0.32
			USGS 1609 Palmer Ave	14.0*	APB	COALINGA\C-PLM-UP	0.60	25.0	0.073	2.1	0.10
			99	999.9	-	COALINGA\C-PLM270	0.60	20.0	0.109	3.2	0.24
						COALINGA\C-PLM360	0.50	20.0	0.211	7.0	0.43
			USGS 1605 Skunk Hollow	12.6*	APA	COALINGA\C-SKH-UP	0.50	30.0	0.161	3.1	0.19
			99	999.9	-	COALINGA\C-SKH270	0.40	30.0	0.187	6.4	0.32
						COALINGA\C-SKH360	0.30	20.0	0.141	6.2	0.37
			CDMG 1703 Sulphur Baths (temp)	17.0*	APA	COALINGA\C-CSU-UP	0.50	30.0	0.041	1.0	0.09
			99	999.9	-	COALINGA\C-CSU000	0.35	30.0	0.055	2.2	0.21
						COALINGA\C-CSU090	0.40	25.0	0.074	1.5	0.15
			USGS 1651 Transmitter Hill	10.4*	APA	COALINGA\C-TSM-UP	0.30	30.0	0.114	3.3	0.35
			99	999.9	-	COALINGA\C-TSM270	0.20	25.0	0.205	12.0	1.34
						COALINGA\C-TSM360	0.30	30.0	0.194	9.9	0.87
Coalinga 02	1983 0722 0239	5.8 6.0 5.7 0.0 (5.9)	USGS 1606 Burnett Construction	10.5	AHD	COALINGA\D-BNT-UP	0.10	30.0	0.210	10.2	1.09
			99	999.9	-	COALINGA\D-BNT270	0.30	30.0	0.269	14.2	2.32
						COALINGA\D-BNT360	0.50	25.0	0.323	16.2	1.43
			CDMG 46T04 CHP (temp)	10.0	AHD	COALINGA\D-CHP-UP	0.30	30.0	0.204	7.1	1.10

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	999.9	-	COALINGA\D-CHP000	0.40	30.0	0.324	14.4	1.39
			USGS 1604 Oil City	8.2	APB	COALINGA\D-CHP090	0.30	30.0	0.605	20.7	2.32
			99	999.9	-	COALINGA\D-OLC-UP	0.60	30.0	0.568	12.5	1.20
			99	999.9	-	COALINGA\D-OLC270	0.15	30.0	0.866	42.2	6.14
			99	999.9	-	COALINGA\D-OLC360	0.80	30.0	0.447	24.8	2.23
			USGS 1608 Oil Fields Fire Station - FF	10.9	IPA	COALINGA\D-OLF-UP	0.10	30.0	0.135	7.7	2.82
			99	999.9	-	COALINGA\D-OLF270	0.20	30.0	0.219	14.0	2.85
			99	999.9	-	COALINGA\D-OLF360	0.10	30.0	0.187	14.8	3.82
			USGS 1608 Oil Fields Fire Station Pad	10.9	APA	COALINGA\D-OLP-UP	0.10	30.0	0.152	8.5	3.19
			99	999.9	-	COALINGA\D-OLP270	0.05	30.0	0.217	18.1	2.90
			99	999.9	-	COALINGA\D-OLP360	0.08	25.0	0.210	14.8	4.38
			USGS 1609 Palmer Ave	12.2	APB	COALINGA\D-PLM-UP	0.20	25.0	0.201	6.9	1.35
			99	999.9	-	COALINGA\D-PLM270	0.06	20.0	0.272	12.8	3.31
			99	999.9	-	COALINGA\D-PLM360	0.09	20.0	0.290	21.5	3.31
			USBR 1162 Pleasant Valley P.P. - FF	17.4	AHD	COALINGA\D-PVP-UP	0.07	30.0	0.128	5.9	2.50
			99	999.9	-	COALINGA\D-PVP270	0.03	30.0	0.228	21.6	6.24
			99	999.9	-	COALINGA\D-PVP360	0.10	30.0	0.408	18.9	5.64
			USBR 1162 Pleasant Valley P.P. - yard	17.4	AHD	COALINGA\D-PVY-UP	0.40	30.0	0.316	12.9	0.92
			99	999.9	-	COALINGA\D-PVY045	0.08	30.0	0.602	34.8	8.06
			99	999.9	-	COALINGA\D-PVY135	0.10	30.0	0.327	12.1	2.33
			USGS 1605 Skunk Hollow	12.2	APA	COALINGA\D-SKH-UP	0.10	40.0	0.230	10.0	2.89
			99	999.9	-	COALINGA\D-SKH270	0.07	30.0	0.375	16.4	6.23
			99	999.9	-	COALINGA\D-SKH360	0.10	30.0	0.233	18.9	2.65
			CDMG 1703 Sulphur Baths (temp)	9.7	APA	COALINGA\D-CSU-UP	0.30	30.0	0.082	4.1	0.69
			99	999.9	-	COALINGA\D-CSU000	0.30	25.0	0.141	5.5	0.79
			99	999.9	-	COALINGA\D-CSU090	0.30	25.0	0.127	6.3	0.66
			USGS 1651 Transmitter Hill	9.2	APA	COALINGA\D-TSM-UP	0.10	40.0	0.394	11.0	3.60
			99	999.9	-	COALINGA\D-TSM270	0.10	30.0	0.840	44.1	6.80
			99	999.9	-	COALINGA\D-TSM360	0.08	40.0	1.083	39.7	5.41
Coalinga 02	1983 0722 0343	4.9 5.0 0.0 0.0	CDMG 46T04 CHP (temp)	12.1*	AHD	COALINGA\E-CHP-UP	0.70	30.0	0.118	3.1	0.17
			99	999.9	-	COALINGA\E-CHP000	0.50	25.0	0.148	5.7	0.43
			99	999.9	-	COALINGA\E-CHP090	0.30	25.0	0.202	8.2	0.74
			CDMG 1703 Sulphur Baths (temp)	13.7*	APA	COALINGA\E-CSU-UP	0.20	20.0	0.029	1.1	0.17
			99	999.9	-	COALINGA\E-CSU000	0.50	20.0	0.039	1.6	0.21
			99	999.9	-	COALINGA\E-CSU090	0.20	20.0	0.030	1.0	0.16
Coalinga 02	1983 0725 2231	5.2 5.3 5.1 0.0 (5.1)	CDMG 46T04 CHP (temp)	12.7*	AHD	COALINGA\F-CHP-UP	0.30	40.0	0.332	8.4	0.61
			99	999.9	-	COALINGA\F-CHP000	0.30	40.0	0.431	18.7	1.21
			99	999.9	-	COALINGA\F-CHP090	0.10	40.0	0.733	37.6	5.24
			CDMG 1703 Sulphur Baths (temp)	14.7*	APA	COALINGA\F-CSU-UP	0.40	30.0	0.139	6.5	0.32
			99	999.9	-	COALINGA\F-CSU000	0.30	30.0	0.152	8.5	1.27
			99	999.9	-	COALINGA\F-CSU090	0.30	25.0	0.230	10.9	0.76
Ierissos, Greece 99	1983 0806	0.0 4.9 0.0 0.0	99999 Ierissos	999.9	---	GREECE\B-IER-UP	1.30	30.0	0.009	0.4	0.03
			99	999.9	-	GREECE\B-IER-NS	1.00	23.0	0.026	1.4	0.14
			99	999.9	-	GREECE\B-IER-WE	0.80	23.0	0.026	1.4	0.15
Trinidad offshore 99	1983 0824 1336	0.0 5.5 5.7 0.0	CDMG 1498 Rio Dell Overpass, E Ground	67.6*	APC	TRINIDAD\RDE-UP	0.30	30.0	0.030	1.6	0.43
			99	999.9	B	TRINIDAD\RDE000	0.15	30.0	0.194	8.5	0.82
			99	999.9	B	TRINIDAD\RDE270	0.30	30.0	0.145	6.4	4.93
			CDMG 1498 Rio Dell Overpass, W Ground	67.6*	APC	TRINIDAD\RDW-UP	0.50	40.0	0.033	1.8	1.62
			99	999.9	B	TRINIDAD\RDW000	0.40	40.0	0.166	6.5	0.56
			99	999.9	B	TRINIDAD\RDW270	0.20	35.0	0.128	4.6	0.84

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99999*TRA-642 ETR Reactor Bldg (Bsmnt) 99	999.9	---	BORAH.MS\TRAA-UP	0.00	00.0	0.018	1.1	0.34
			99	999.9	-	BORAH.MS\TRAA089	0.00	00.0	0.029	1.8	0.46
			99999*TRA-670 ATR Reactor Bldg (Bsmnt) 99	999.9	---	BORAH.MS\TRAA179	0.00	00.0	0.030	2.1	0.53
			99	999.9	-	BORAH.MS\TRAB-UP	0.00	00.0	0.019	1.0	0.36
			99	999.9	-	BORAH.MS\TRAB179	0.00	00.0	0.022	1.6	0.38
			99	999.9	-	BORAH.MS\TRAB269	0.00	00.0	0.023	1.2	0.43
Borah Peak, ID 99	1983 1029 2329	0.0 0.0 0.0 0.0	99999 BOR 99	999.9	---	BORAH.AS\BORXXX	-99.				
			99	999.9	-	BORAH.AS\BOR000	0.00	62.5	0.055	5.9	1.03
			99999 CEM 99	999.9	---	BORAH.AS\BOR090	0.00	62.5	0.073	8.1	1.24
			99	999.9	-	BORAH.AS\CEMXXX	-99.				
			99	999.9	-	BORAH.AS\CEM000	0.00	62.5	0.025	2.1	0.32
			99999 HAU 99	999.9	---	BORAH.AS\CEM090	0.00	62.5	0.019	1.7	0.41
			99	999.9	-	BORAH.AS\HAUXXX	-99.				
			99	999.9	-	BORAH.AS\HAU000	0.20	62.5	0.028	0.4	0.08
			99	999.9	-	BORAH.AS\HAU090	0.20	62.5	0.033	0.5	0.08
New Zealand 99	1984 0305 0207	0.0 5.5 0.0 0.0	99999 Turangi Telephone Exchange 99	8.0	---	NEWZEAL\D-TUR-UP	0.40	00.0	0.065	2.2	0.35
			99	999.9	-	NEWZEAL\D-TUR059	1.00	00.0	0.079	4.8	0.36
			99	999.9	-	NEWZEAL\D-TUR329	0.50	00.0	0.072	3.0	0.33
Morgan Hill 00	1984 0424 2115	6.2 6.2 6.1 0.0	CDMG 57066 Agnews State Hospital 00	29.4	AQD	MORGAN\AGW-UP	0.20	18.0	0.016	3.2	1.56
			00	999.9	C	MORGAN\AGW240	0.20	14.0	0.032	5.0	2.33
			USGS 1652 Anderson Dam (Downstream) 00	2.6	AFD	MORGAN\AGW330	0.20	13.0	0.032	5.5	2.05
			00	999.9	B	MORGAN\AND-UP	0.10	45.0	0.204	9.8	1.81
			00	999.9	B	MORGAN\AND250	0.10	30.0	0.423	25.3	4.58
			00	999.9	B	MORGAN\AND340	0.10	38.0	0.289	27.6	6.33
			CDMG 58375 APEEL 1 - Redwood City 00	54.1	IQE	MORGAN\A01-UP	0.50	28.0	0.016	0.8	0.16
			00	999.9	D	MORGAN\A01040	0.20	21.0	0.046	3.4	0.66
			00	999.9	D	MORGAN\A01310	0.20	23.0	0.068	3.9	0.63
			USGS/CDMG 1180 APEEL 1E - Hayward 00	51.8	IHD	MORGAN\A1EXXX	-99.				
			00	999.9	-	MORGAN\A1E000	0.20	22.0	0.041	2.6	0.75
			00	999.9	-	MORGAN\A1E090	0.20	19.0	0.027	3.1	0.61
			CDMG 47125 Capitola 00	38.1	AQC	MORGAN\CAP-UP	0.20	35.0	0.045	2.1	0.39
			00	999.9	C	MORGAN\CAP042	0.20	30.0	0.099	4.9	0.61
			00	999.9	C	MORGAN\CAP132	0.20	28.0	0.142	8.1	1.62
			CDMG 57007 Corralitos 00	22.7	APB	MORGAN\CLS-UP	0.20	27.0	0.040	4.0	0.54
			00	999.9	B	MORGAN\CLS220	0.20	24.0	0.081	6.4	1.17
			00	999.9	B	MORGAN\CLS310	0.20	26.0	0.109	10.8	2.13
			CDMG 57217 Coyote Lake Dam (SW Abut) 00	0.1	IFA	MORGAN\CYC-UP	0.10	50.0	0.388	15.6	2.65
			00	999.9	-	MORGAN\CYC195	0.10	39.0	0.711	51.6	12.00
			00	999.9	-	MORGAN\CYC285	0.10	45.0	1.298	80.8	9.63
			CDMG 57064 Fremont - Mission San Jose 00	31.4	AMB	MORGAN\FRE-UP	0.50	21.0	0.018	1.3	0.40
			00	999.9	B	MORGAN\FRE075	0.50	21.0	0.025	2.4	0.76
			00	999.9	B	MORGAN\FRE345	0.20	18.0	0.021	3.2	1.03
			CDMG 47379 Gilroy Array #1 00	16.2	IFA	MORGAN\G01-UP	0.10	33.0	0.092	3.3	1.07
			00	999.9	A	MORGAN\G01230	0.10	29.0	0.069	2.9	1.26
			00	999.9	A	MORGAN\G01320	0.10	40.0	0.098	2.9	1.02
			CDMG 47380 Gilroy Array #2 00	15.1	IQD	MORGAN\G02-UP	0.20	37.0	0.578	10.8	0.92
			00	999.9	C	MORGAN\G02000	0.20	31.0	0.162	5.1	1.42
			00	999.9	C	MORGAN\G02090	0.10	37.0	0.212	12.6	2.10
			CDMG 47381 Gilroy Array #3 00	14.6	IHD	MORGAN\G03-UP	0.10	42.0	0.395	9.9	1.22
			00	999.9	C	MORGAN\G03000	0.10	37.0	0.194	11.2	2.41
			00	999.9	C	MORGAN\G03090	0.10	32.0	0.200	12.7	3.45

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 57382 Gilroy Array #4 00	12.8 999.9	AHD C	MORGAN\G04-UP MORGAN\G04270 MORGAN\G04360	0.10 0.10 0.10	39.0 25.0 27.0	0.408 0.224 0.348	11.8 19.3 17.4	1.70 4.33 3.11
			CDMG 57383 Gilroy Array #6 00	11.8 999.9	IKB B	MORGAN\G06-UP MORGAN\G06000 MORGAN\G06090	0.10 0.10 0.10	30.0 35.0 27.0	0.405 0.222 0.292	14.1 11.4 36.7	1.86 2.45 6.12
			CDMG 57425 Gilroy Array #7 00	14.0 999.9	AHB C	MORGAN\GMR-UP MORGAN\GMR000 MORGAN\GMR090	0.10 0.10 0.10	40.0 31.0 30.0	0.428 0.190 0.113	5.4 7.4 6.0	0.93 2.06 1.79
			CDMG 47006 Gilroy - Gavilan Coll. 00	16.2 999.9	AFB B	MORGAN\GIL-UP MORGAN\GIL067 MORGAN\GIL337	0.50 0.10 0.10	42.0 30.0 30.0	0.081 0.114 0.095	2.3 3.6 2.9	0.41 0.87 0.93
			CDMG 57191 Halls Valley 00	3.4 999.9	IFC C	MORGAN\HVR-UP MORGAN\HVR150 MORGAN\HVR240	0.20 0.20 0.20	28.0 26.0 30.0	0.110 0.156 0.312	12.2 12.5 39.4	1.25 1.84 7.66
			USGS 1028 Hollister City Hall 00	32.5 999.9	CHD C	MORGAN\HCH-UP MORGAN\HCH001 MORGAN\HCH271	0.20 0.20 0.20	25.0 19.0 24.0	0.118 0.071 0.071	3.9 7.4 9.0	1.07 1.60 3.81
			USGS 1656 Hollister Diff. Array 00	28.3 999.9	IQD C	MORGAN\HDA-UP MORGAN\HDA165 MORGAN\HDA255	0.20 0.20 0.20	24.0 29.0 23.0	0.222 0.089 0.088	7.0 8.7 11.9	0.81 1.72 1.89
			USGS 1656 Hollister Diff Array #1 00	28.3 999.9	IQD C	MORGAN\HD1-UP MORGAN\HD1165 MORGAN\HD1255	0.10 0.20 0.20	35.0 33.0 30.0	0.213 0.095 0.088	6.2 9.7 11.6	0.90 1.53 1.76
			USGS 1656 Hollister Diff Array #3 00	28.3 999.9	IQD C	MORGAN\HD3-UP MORGAN\HD3165 MORGAN\HD3255	0.10 0.10 0.20	35.0 30.0 30.0	0.243 0.078 0.081	8.9 7.2 10.0	0.98 1.47 1.90
			USGS 1656 Hollister Diff Array #4 00	28.3 999.9	IQD C	MORGAN\HD4-UP MORGAN\HD4165 MORGAN\HD4255	0.10 0.10 0.20	35.0 30.0 30.0	0.282 0.098 0.092	9.8 10.3 10.2	1.03 1.68 1.90
			USGS 1656 Hollister Diff Array #5 00	28.3 999.9	IQD C	MORGAN\HD5-UP MORGAN\HD5165 MORGAN\HD5255	0.20 0.20 0.20	35.0 30.0 30.0	0.250 0.098 0.101	8.0 10.3 11.6	1.10 2.00 1.88
			CDMG 56012 Los Banos 00	64.4 999.9	AHD C	MORGAN\LBN-UP MORGAN\LBN090 MORGAN\LBN180	0.50 0.50 0.50	20.0 18.0 18.0	0.011 0.051 0.057	1.0 5.8 8.3	0.50 1.75 1.89
			CDMG 1377 San Juan Bautista, 24 Polk St 00	30.3 999.9	AQD B	MORGAN\SJB-UP MORGAN\SJB213 MORGAN\SJB303	0.10 0.10 0.10	21.0 21.0 21.0	0.052 0.044 0.036	2.7 4.3 4.4	1.35 1.73 1.52
			USGS 1655 San Justo Dam (L Abut) 00	34.9 999.9	FPD -	MORGAN\SJL-UP MORGAN\SJL270 MORGAN\SJL360	0.50 0.20 0.20	32.0 29.0 30.0	0.033 0.081 0.070	2.2 6.5 5.1	0.52 2.59 1.86
			USGS 1655 San Justo Dam (R Abut) 00	34.9 999.9	FPD -	MORGAN\SJR-UP MORGAN\SJR270 MORGAN\SJR360	0.20 0.20 0.20	25.0 24.0 23.0	0.044 0.078 0.060	2.8 7.0 5.8	1.04 3.07 2.16
			CDMG 58235 Saratoga - WVC E Wall 00	28.7 999.9	AQD -	MORGAN\WVEXXX MORGAN\WVE000 MORGAN\WVEXXX	-99. 0.50 -99.	30.0	0.098	4.6	0.61
			CDMG 58235 Saratoga - WVC NE Corner 00	28.7 999.9	AQD -	MORGAN\WNEXXX MORGAN\WNE270 MORGAN\WNEXXX	-99. 0.20 -99.	30.0	0.041	3.5	0.99
			CDMG 58235 Saratoga - WVC SE Corner 00	28.7 999.9	AQD -	MORGAN\WSEXXX MORGAN\WSE270 MORGAN\WSEXXX	-99. 0.50 -99.	30.0	0.045	3.1	0.88

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 58223 SF Intern. Airport	71.2	AHD	MORGAN\SFO-UP	0.50	32.0	0.018	0.8	0.28
			00	999.9	C	MORGAN\SFO050	0.50	26.0	0.048	3.2	0.40
						MORGAN\SFO320	0.50	24.0	0.048	2.7	0.47
			CDMG 58135 UCSC Lick Observatory	44.1	AKA	MORGAN\LOB-UP	0.50	22.0	0.031	1.2	0.32
			00	999.9	B	MORGAN\LOB050	0.50	21.0	0.039	2.0	0.29
						MORGAN\LOB320	0.50	22.0	0.076	3.6	0.62
Lazio-Abruzzo 99	1984 0507 1750	5.9 5.1 5.8 5.5	99999 Atina	15.4	---	ABRUZZO\ATI-UP	0.50	30.0	0.076	2.1	0.27
			99	999.9	-	ABRUZZO\ATI-NS	0.50	30.0	0.093	3.4	0.45
						ABRUZZO\ATI-WE	0.40	40.0	0.113	4.1	0.35
			99999 Garigliano-Centrale Nucleare	54.2	---	ABRUZZO\GCN-UP	1.00	30.0	0.016	1.0	0.11
			99	999.9	-	ABRUZZO\GCN-NS	0.40	20.0	0.058	5.8	0.84
						ABRUZZO\GCN-WE	0.30	30.0	0.074	7.0	0.96
			99999 Isernia-Sant'Agapito	45.0	---	ABRUZZO\ISE-UP	0.70	30.0	0.034	2.1	0.17
			99	999.9	-	ABRUZZO\ISE-NS	0.40	20.0	0.079	3.4	0.52
						ABRUZZO\ISE-WE	0.60	30.0	0.068	2.1	0.27
			99999 Pontecorvo	33.9	---	ABRUZZO\PON-UP	0.90	28.0	0.021	1.3	0.13
			99	999.9	-	ABRUZZO\PON-NS	0.30	23.0	0.072	5.1	0.48
						ABRUZZO\PON-WE	0.30	23.0	0.071	3.1	0.62
			99999 Roccamonfina	50.3	---	ABRUZZO\ROC-UP	0.50	23.0	0.032	2.5	0.38
			99	999.9	-	ABRUZZO\ROC-NS	0.40	23.0	0.030	2.9	0.59
						ABRUZZO\ROC-WE	0.40	23.0	0.047	4.6	0.55
Veroia, Greece 99	1984 0709	0.0 4.8 0.0 0.0	99999 Veroia	999.9	---	GREECE\C-VER-UP	0.50	23.0	0.023	0.6	0.45
			99	999.9	-	GREECE\C-VER-NS	0.60	23.0	0.015	1.1	0.10
						GREECE\C-VER-WE	0.70	23.0	0.012	0.9	0.09
Edesa, Greece 99	1984 0709	0.0 6.5 0.0 0.0	99999 Edesa	999.9	---	GREECE\D-EDE-UP	0.60	30.0	0.018	0.8	0.05
			99	999.9	-	GREECE\D-EDE-NS	0.70	23.0	0.040	3.1	0.29
						GREECE\D-EDE-WE	0.70	20.0	0.049	3.6	0.38
Pelekanada, Greece 99	1984 1010	0.0 4.9 0.0 0.0	99999 Pelekanada	999.9	---	GREECE\E-PLK-UP	0.90	33.0	0.102	3.0	0.18
			99	999.9	-	GREECE\E-PLK-NS	0.70	40.0	0.157	8.2	0.56
						GREECE\E-PLK-WE	0.70	40.0	0.168	7.9	0.55
Bishop (Rnd Val) 00	1984 1123 1912	5.8 5.5 5.7 0.0	USGS 1661 McGee Creek - Surface	19.0*	IQC	ROUNDVAL\MCG-UP	2.00	15.0	0.106	2.2	0.05
			00	999.9	-	ROUNDVAL\MCG270	1.50	40.0	0.088	1.8	0.07
						ROUNDVAL\MCG360	1.00	40.0	0.128	2.2	0.07
Taiwan SMART1 (33) 99	1985 0612	0.0 6.5 5.8 0.0	25 SMART1 C00	45.0	IZD	SMART1\33C00DN	0.20	25.0	0.021	0.9	0.16
			99	999.9	-	SMART1\33C00EW	0.20	25.0	0.083	3.9	
						SMART1\33C00NS	0.20	25.0	0.051	3.1	
			62 SMART1 I01	45.0	IZD	SMART1\33I01DN	0.50	25.0	0.025	0.9	0.15
			99	999.9	-	SMART1\33I01EW	0.50	25.0	0.142	5.6	0.37
						SMART1\33I01NS	0.50	25.0	0.070	3.5	0.28
			61 SMART1 I07	45.0	IZD	SMART1\33I07DN	0.20	25.0	0.014	0.6	0.25
			99	999.9	-	SMART1\33I07EW	0.20	25.0	0.055	2.8	0.41
						SMART1\33I07NS	0.20	25.0	0.040	2.2	0.29
			28 SMART1 M01	45.0	IZD	SMART1\33M01DN	0.20	25.0	0.015	0.6	
			99	999.9	-	SMART1\33M01EW	0.20	25.0	0.031	2.0	
						SMART1\33M01NS	0.20	25.0	0.052	2.3	
			29 SMART1 M07	45.0	IZD	SMART1\33M07DN	0.20	25.0	0.021	0.7	0.20
			99	999.9	-	SMART1\33M07EW	0.20	25.0	0.095	4.8	0.58
						SMART1\33M07NS	0.20	25.0	0.050	3.1	0.81

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			30 SMART1 O01	45.0	IZD	SMART1\33001DN	0.50	25.0	0.014	0.4	
			99	999.9	-	SMART1\33001EW	0.50	25.0	0.063	2.0	0.25
			31 SMART1 O07	45.0	IZD	SMART1\33001NS	0.50	25.0	0.052	2.1	0.31
			99	999.9	-	SMART1\33007DN	0.20	25.0	0.014	0.9	
						SMART1\33007EW	0.20	25.0	0.057	2.9	1.00
						SMART1\33007NS	0.20	25.0	0.048	2.8	0.85
Drama, Greece 99	1985 1109	0.0 4.8 0.0 0.0	99999 Drama 99	999.9	---	GREECE\F-DRA-UP	0.20	30.0	0.033	2.9	0.69
				999.9	-	GREECE\F-DRA-NS	0.30	30.0	0.048	4.5	0.60
						GREECE\F-DRA-WE	0.20	30.0	0.084	6.7	1.43
Kavala, Greece 99	1985 1109	0.0 4.8 0.0 0.0	99999 Kavala 99	999.9	---	GREECE\G-KAV-UP	0.80	33.0	0.049	1.5	0.09
				999.9	-	GREECE\G-KAV-NS	0.80	40.0	0.049	2.3	0.11
						GREECE\G-KAV-WE	0.80	40.0	0.039	1.4	0.08
Nahanni, Canada 03	1985 1223	6.8 0.0 6.9 0.0	6097 Site 1 01	6.0	IZA	NAHANNI\S1-UP	0.20	62.5	2.086	40.5	12.12
				999.9	-	NAHANNI\S1010	0.05	62.5	0.978	46.0	9.67
						NAHANNI\S1280	0.05	62.5	1.096	46.1	14.58
			6098 Site 2 01	8.0	IZA	NAHANNI\S2XXX	-99.				
				999.9	-	NAHANNI\S2240	0.10	62.5	0.489	29.3	7.61
						NAHANNI\S2330	0.05	62.5	0.323	33.1	6.54
			6099 Site 3 02	16.0	IZA	NAHANNI\S3-UP	0.05	62.5	0.140	6.8	3.02
				999.9	-	NAHANNI\S3270	0.10	62.5	0.148	6.1	3.13
						NAHANNI\S3360	0.05	62.5	0.139	3.3	1.06
Hollister 00	1986 0126 1920	5.4 5.5 0.0 0.0	USGS 1656 Hollister Diff Array #1 00	16.9*	IQD	HOLLISTR\D-HD1-UP	0.20	45.0	0.172	5.2	0.56
				999.9	C	HOLLISTR\D-HD1255	0.10	45.0	0.101	9.3	1.95
						HOLLISTR\D-HD1345	0.10	40.0	0.114	8.3	2.29
			USGS 1656 Hollister Diff Array #3 00	16.9*	IQD	HOLLISTR\D-HD3-UP	0.30	40.0	0.124	5.0	0.51
				999.9	C	HOLLISTR\D-HD3255	0.20	35.0	0.106	7.9	1.60
						HOLLISTR\D-HD3345	0.40	40.0	0.104	9.2	1.41
			USGS 1656 Hollister Diff Array #4 00	16.9*	IQD	HOLLISTR\D-HD4-UP	0.30	40.0	0.073	4.1	0.50
				999.9	C	HOLLISTR\D-HD4255	0.10	35.0	0.102	9.0	1.91
						HOLLISTR\D-HD4XXX	-99.				
			CDMG 47189 SAGO South - Surface 00	14.9*	IGB	HOLLISTR\D-SG3-UP	0.30	20.0	0.053	3.4	0.53
				999.9	B	HOLLISTR\D-SG3205	0.25	20.0	0.044	5.3	1.27
						HOLLISTR\D-SG3295	0.15	15.0	0.090	9.3	1.70
Mt. Lewis 99	1986 0331 1155	5.6 5.8 5.5 0.0	CDMG 57191 Halls Valley 99	15.5*	IFC	MTLEWIS\HVR-UP	0.40	20.0	0.072	3.9	0.56
				999.9	C	MTLEWIS\HVR000	0.30	20.0	0.140	8.5	1.65
						MTLEWIS\HVR090	0.10	20.0	0.159	18.4	4.40
Taiwan SMART1(40) 03	1986 0520	6.4 6.5 6.4 0.0	25 SMART1 C00 99	64.0	IZD	SMART1\40C00DN	0.20	25.0	0.038	4.1	1.21
				999.9	-	SMART1\40C00EW	0.20	25.0	0.172	33.0	6.94
						SMART1\40C00NS	0.20	25.0	0.232	19.4	5.07
			32 SMART1 E01 99	64.0	IZD	SMART1\40E01DN	0.20	25.0	0.046	4.9	1.15
				999.9	-	SMART1\40E01EW	0.20	25.0	0.203	36.5	7.60
						SMART1\40E01NS	0.20	25.0	0.183	15.1	3.06
			62 SMART1 I01 99	64.0	IZD	SMART1\40I01DN	0.20	25.0	0.036	4.1	0.86
				999.9	-	SMART1\40I01EW	0.20	25.0	0.183	32.4	6.90
						SMART1\40I01NS	0.20	25.0	0.175	18.1	4.24
			61 SMART1 I07 99	64.0	IZD	SMART1\40I07DN	0.20	25.0	0.041	3.7	
				999.9	-	SMART1\40I07EW	0.20	25.0	0.167	30.6	7.06
						SMART1\40I07NS	0.20	25.0	0.150	17.7	4.10

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			28 SMART1 M01	64.0	IZD	SMART1\40M01DN	0.20	25.0	0.035	3.9	1.05
			99 -	999.9	-	SMART1\40M01EW	0.20	25.0	0.156	26.3	5.75
						SMART1\40M01NS	0.20	25.0	0.173	22.8	4.02
			29 SMART1 M07	64.0	IZD	SMART1\40M07DN	0.20	25.0	0.039	4.2	0.81
			99 -	999.9	-	SMART1\40M07EW	0.20	25.0	0.182	37.9	8.54
						SMART1\40M07NS	0.20	25.0	0.254	23.7	6.01
			30 SMART1 O01	64.0	IZD	SMART1\40O01DN	0.20	25.0	0.034	3.3	0.99
			99 -	999.9	-	SMART1\40O01EW	0.20	25.0	0.106	20.7	4.89
						SMART1\40O01NS	0.20	25.0	0.160	21.9	3.73
			31 SMART1 O07	64.0	IZD	SMART1\40O07DN	0.20	25.0	0.074	4.3	0.83
			99 -	999.9	-	SMART1\40O07EW	0.20	25.0	0.159	28.3	6.83
						SMART1\40O07NS	0.20	25.0	0.163	16.1	3.50
N. Palm Springs 03	1986 0708 0920	6.0 5.9 6.0 0.0 (6.0)	USGS 5224 Anza - Red Mountain	45.6	AGA	PALMSPR\ARM-UP	0.50	50.0	0.072	2.2	0.21
			99	999.9	A	PALMSPR\ARM270	0.30	35.0	0.104	5.2	0.62
						PALMSPR\ARM360	0.60	40.0	0.129	3.4	0.46
			USGS 5231 Anza - Tule Canyon	55.4	AGA	PALMSPR\ATL-UP	0.40	30.0	0.049	2.6	0.30
			99	999.9	B	PALMSPR\ATL270	0.30	30.0	0.110	6.5	0.71
						PALMSPR\ATL360	0.35	35.0	0.095	7.5	0.71
			USGS 5160 Anza Fire Station	46.7	AHC	PALMSPR\AZF-UP	0.50	50.0	0.056	2.3	0.23
			99	999.9	A	PALMSPR\AZF225	0.50	40.0	0.099	5.8	0.29
						PALMSPR\AZF315	0.60	30.0	0.067	4.0	0.50
			USGS 5073 Cabazon	16.3	AHD	PALMSPR\CAB-UP	0.20	45.0	0.363	7.4	0.84
			02	999.9	-	PALMSPR\CAB180	0.15	40.0	0.217	7.6	1.96
						PALMSPR\CAB270	0.15	40.0	0.212	16.3	2.24
			CDOT 754 Colton Interchange - Vault	57.4	BHD	PALMSPR\CLI-UP	0.40	30.0	0.017	1.6	0.40
			99	999.9	-	PALMSPR\CLI082	0.40	30.0	0.042	3.5	0.59
						PALMSPR\CLI352	0.40	30.0	0.065	4.1	0.43
			USGS 5157 Cranston Forest Station	35.3	AQB	PALMSPR\CFR-UP	0.70	45.0	0.118	4.0	0.55
			99	999.9	B	PALMSPR\CFR225	0.60	45.0	0.153	7.4	0.91
						PALMSPR\CFR315	0.60	45.0	0.169	11.7	1.14
			CDMG 12149 Desert Hot Springs	8.0	AQD	PALMSPR\DSPXXX	-99.				
			01	999.9	B	PALMSPR\DSP000	0.50	46.0	0.331	29.5	5.69
						PALMSPR\DSP090	0.50	40.0	0.271	15.7	3.61
			USGS 5069 Fun Valley	15.8	AHC	PALMSPR\FVR-UP	0.13	50.0	0.071	3.7	0.67
			99	999.9	B	PALMSPR\FVR045	0.21	35.0	0.129	6.4	1.06
						PALMSPR\FVR135	0.25	40.0	0.119	10.6	1.38
			CDMG 12331 Hemet Fire Station	43.3	AQD	PALMSPR\H05-UP	0.50	47.0	0.094	3.1	0.25
			99	999.9	C	PALMSPR\H05270	0.50	35.0	0.144	4.9	0.73
						PALMSPR\H05360	0.50	31.0	0.132	4.9	0.38
			CDMG 23321 Hesperia	75.9	AQD	PALMSPR\HES-UP	0.20	39.0	0.033	1.2	0.42
			99	999.9	B	PALMSPR\HES002	0.20	25.0	0.041	2.3	0.70
						PALMSPR\HES092	0.20	30.0	0.037	1.7	0.91
			USGS 5043 Hurkey Creek Park	34.9	AQB	PALMSPR\HCP-UP	0.40	50.0	0.097	3.6	0.55
			99	999.9	B	PALMSPR\HCP045	0.60	50.0	0.240	7.4	0.45
						PALMSPR\HCP135	0.50	50.0	0.187	9.1	0.89
			CDMG 12026 Indio - Coachella Canal	45.7	IQD	PALMSPR\IND-UP	0.50	40.0	0.054	1.8	0.62
			99	999.9	C	PALMSPR\IND000	0.50	30.0	0.053	5.3	1.18
						PALMSPR\IND090	0.50	33.0	0.050	3.2	1.23
			USGS 5067 Indio	39.6	AHD	PALMSPR\INO-UP	0.10	40.0	0.087	3.1	1.40
			99	999.9	-	PALMSPR\INO225	0.10	35.0	0.064	6.6	2.21
						PALMSPR\INO315	0.10	35.0	0.117	12.3	3.62
			CDMG 22170 Joshua Tree	29.8	AGC	PALMSPR\JOS-UP	0.50	36.0	0.040	3.6	0.60
			99	999.9	B	PALMSPR\JOS000	0.50	30.0	0.052	3.7	0.75

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 707 Lake Mathews Dike Toe	73.7	AJA	PALMSPR\JOS090	0.50	24.0	0.065	3.9	0.48
			99	999.9	-	PALMSPR\LMR-UP	2.00	40.0	0.039	0.5	0.02
						PALMSPR\LMR162	1.00	50.0	0.061	1.5	0.08
						PALMSPR\LMR252	1.00	35.0	0.046	0.8	0.03
			CDMG 22T13 Landers Fire Station	38.2	AQD	PALMSPR\LDR-UP	0.50	40.0	0.055	2.4	0.42
			99	999.9	-	PALMSPR\LDR000	0.50	30.0	0.081	4.3	0.42
						PALMSPR\LDR090	0.50	30.0	0.098	4.6	0.53
			USGS 5071 Morongo Valley	10.1	AHC	PALMSPR\MVH-UP	0.30	50.0	0.395	10.6	1.61
			01	999.9	B	PALMSPR\MVH045	0.08	50.0	0.218	31.4	8.51
						PALMSPR\MVH135	0.08	50.0	0.205	40.9	14.96
			CDMG 13198 Murrieta Hot Springs	63.3	IGA	PALMSPR\H01-UP	0.50	28.0	0.032	0.8	0.31
			99	999.9	A	PALMSPR\H01000	0.50	40.0	0.053	1.8	0.30
						PALMSPR\H01090	0.50	40.0	0.049	1.3	0.32
			USGS 5070 North Palm Springs	8.2	AHD	PALMSPR\NPS-UP	0.40	40.0	0.435	12.1	1.16
			01	999.9	B	PALMSPR\NPS210	0.15	20.0	0.594	73.3	11.46
						PALMSPR\NPS300	0.23	30.0	0.694	33.8	3.88
			CDMG 12025 Palm Springs Airport	16.6	IQD	PALMSPR\PSAXXX	-99.				
			99	999.9	C	PALMSPR\PSA000	0.20	50.0	0.158	12.4	2.30
						PALMSPR\PSA090	0.20	60.0	0.187	12.2	2.07
			CDMG 12168 Puerta La Cruz	71.9	AQB	PALMSPR\PLC-UP	0.20	44.0	0.035	1.6	0.34
			99	999.9	B	PALMSPR\PLC258	0.20	38.0	0.075	2.4	0.27
						PALMSPR\PLC348	0.20	32.0	0.055	1.8	0.32
			CDMG 5253 Rancho Cucamonga ff	82.8	IHD	PALMSPR\CLJXXX	-99.				
			99	999.9	-	PALMSPR\CLJ000	0.20	40.0	0.021	1.3	0.33
						PALMSPR\CLJ090	0.30	40.0	0.019	1.1	0.27
			CDMG 13123 Riverside Airport	71.1	AQB	PALMSPR\RIV-UP	0.50	48.0	0.023	0.6	0.14
			99	999.9	B	PALMSPR\RIV180	0.50	40.0	0.051	1.2	0.14
						PALMSPR\RIV270	0.50	42.0	0.040	1.0	0.15
			CDMG 12204 San Jacinto - Soboba	32.0	AGC	PALMSPR\H08-UP	0.50	50.0	0.203	6.4	0.76
			99	999.9	B	PALMSPR\H08000	0.50	48.0	0.250	9.6	1.14
						PALMSPR\H08090	0.50	49.0	0.239	9.2	1.21
			CDMG 12202 San Jacinto Vall. Cem	39.6	AQD	PALMSPR\H06-UP	0.50	40.0	0.053	1.8	0.30
			99	999.9	C	PALMSPR\H06270	0.20	38.0	0.069	3.1	0.99
						PALMSPR\H06360	0.20	31.0	0.063	4.4	1.22
			USGS 5230 Santa Rosa Mountain	43.8	AGA	PALMSPR\ARS-UP	1.00	50.0	0.051	1.5	0.10
			99	999.9	-	PALMSPR\ARS270	1.50	60.0	0.102	2.2	0.10
						PALMSPR\ARS360	1.50	60.0	0.103	2.2	0.10
			CDMG 12206 Silent Valley - Poppet Flat	25.8	IGA	PALMSPR\SIL-UP	0.50	50.0	0.095	3.0	0.47
			02	999.9	A	PALMSPR\SIL000	0.50	47.0	0.139	3.9	0.55
						PALMSPR\SIL090	0.50	49.0	0.113	4.0	0.80
			USGS 5038 Sunnymead	44.4	BHD	PALMSPR\SNY-UP	0.50	40.0	0.056	2.6	0.33
			99	999.9	-	PALMSPR\SNY225	0.30	40.0	0.093	3.9	0.58
						PALMSPR\SNY315	0.40	40.0	0.012	5.1	0.56
			CDMG 13172 Temecula Fire Station	73.2	AQB	PALMSPR\TFS-UP	0.50	27.0	0.028	1.2	0.24
			99	999.9	C	PALMSPR\TFS000	0.50	25.0	0.121	6.9	0.53
						PALMSPR\TFS090	0.50	25.0	0.098	4.6	0.68
			USGS 5072 Whitewater Trout Farm	7.3	AHC	PALMSPR\WWT-UP	0.50	40.0	0.471	13.4	1.02
			01	999.9	A	PALMSPR\WWT180	0.10	40.0	0.492	34.7	6.38
						PALMSPR\WWT270	0.15	45.0	0.612	31.5	4.58
			CDMG 13199 Winchester Bergman Ran	57.6	AGA	PALMSPR\H02-UP	0.50	48.0	0.072	1.6	0.25
			99	999.9	A	PALMSPR\H02000	0.50	42.0	0.070	1.9	0.19
						PALMSPR\H02090	0.50	50.0	0.093	1.8	0.29
			CDMG 13201 Winchester Page Bros R	46.8	IQD	PALMSPR\H04-UP	0.50	59.0	0.070	2.0	0.34
			99	999.9	-	PALMSPR\H04000	0.50	50.0	0.106	3.8	0.69

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
						PALMSPR\H04090	0.50	37.0	0.110	4.3	0.64
Chalfant Valley 00	1986 0720 1429	0.0 5.9 0.0 0.0	CDMG 54100 Benton 00	27.0* 999.9	AQD -	CHALFANT\B-BEN-UP CHALFANT\B-BEN270 CHALFANT\B-BEN360	0.60 0.30 0.20	30.0 30.0 30.0	0.030 0.061 0.052	1.3 3.0 2.4	0.14 0.57 0.47
			CDMG 54171 Bishop - LADWP South St 00	24.0* 999.9	AQD -	CHALFANT\B-LAD-UP CHALFANT\B-LAD180 CHALFANT\B-LAD270	0.10 0.11 0.10	40.0 20.0 20.0	0.049 0.129 0.094	3.3 8.5 8.6	0.96 2.38 3.05
			CDMG 54424 Bishop - Paradise Lodge 00	18.4* 999.9	AVA -	CHALFANT\B-BPL-UP CHALFANT\B-BPL070 CHALFANT\B-BPL160	0.20 0.11 0.13	40.0 30.0 30.0	0.067 0.046 0.095	2.9 1.7 6.3	0.96 0.24 1.69
			CDMG 54T03 Lake Crowley - Shehorn Res. 00	26.0* 999.9	AAB -	CHALFANT\B-SHE-UP CHALFANT\B-SHE009 CHALFANT\B-SHE099	0.70 0.16 0.16	30.0 30.0 25.0	0.029 0.051 0.031	0.9 2.2 1.8	0.06 0.54 0.53
			CDMG 54428 Zack Brothers Ranch 00	11.0* 999.9	AAD -	CHALFANT\B-ZAK-UP CHALFANT\B-ZAK270 CHALFANT\B-ZAK360	0.11 0.11 0.10	45.0 40.0 30.0	0.205 0.285 0.207	5.4 17.3 22.3	2.06 4.00 5.41
Chalfant Valley 00	1986 0721 1442	6.2 6.3 6.0 0.0	CDMG 54100 Benton 00	37.2 999.9	AQD -	CHALFANT\A-BEN-UP CHALFANT\A-BEN270 CHALFANT\A-BEN360	0.50 0.10 0.20	30.0 40.0 33.0	0.127 0.209 0.177	6.8 13.6 15.7	1.53 2.88 3.12
			CDMG 54171 Bishop - LADWP South St 00	9.2 999.9	AQD -	CHALFANT\A-LAD-UP CHALFANT\A-LAD180 CHALFANT\A-LAD270	0.10 0.10 0.10	40.0 40.0 30.0	0.140 0.248 0.175	6.7 19.2 19.4	2.25 7.04 6.72
			CDMG 54424 Bishop - Paradise Lodge 00	23.0 999.9	AVA -	CHALFANT\A-BPL-UP CHALFANT\A-BPL070 CHALFANT\A-BPL160	0.10 0.20 0.10	50.0 30.0 40.0	0.127 0.165 0.161	5.9 4.9 12.4	1.41 2.17 3.26
			CDMG 54099 Convict Creek 00	44.9 999.9	AQD -	CHALFANT\A-CVK-UP CHALFANT\A-CVK000 CHALFANT\A-CVK090	0.20 0.10 0.20	40.0 30.0 30.0	0.036 0.060 0.071	3.1 4.0 3.9	1.09 1.57 1.07
			CDMG 54T03 Lake Crowley - Shehorn Res. 00	36.0 999.9	AAB -	CHALFANT\A-SHE-UP CHALFANT\A-SHE009 CHALFANT\A-SHE099	0.50 0.50 0.50	40.0 30.0 30.0	0.085 0.163 0.091	3.2 7.0 5.5	0.49 0.77 1.61
			CDMG 54214 Long Valley Dam (Downst) 00	33.4 999.9	IVA -	CHALFANT\A-LVD-UP CHALFANT\A-LVD000 CHALFANT\A-LVD090	0.10 0.10 0.10	50.0 40.0 40.0	0.047 0.095 0.056	3.4 4.8 6.4	1.01 1.30 2.58
			CDMG 54214 Long Valley Dam (L Abut) 00	33.4 999.9	IVA -	CHALFANT\A-LVL-UP CHALFANT\A-LVL000 CHALFANT\A-LVL090	0.10 0.10 0.10	43.0 50.0 50.0	0.075 0.082 0.074	3.3 7.0 7.9	1.45 1.34 3.06
			CDMG 54T04 Mammoth Lakes Sheriff Subst. 00	50.8 999.9	AVB -	CHALFANT\A-MAM-UP CHALFANT\A-MAM020 CHALFANT\A-MAM290	0.50 0.50 0.50	23.0 20.0 20.0	0.026 0.042 0.048	1.6 2.2 2.8	0.39 0.42 0.54
			USGS 1661 McGee Creek Surface 00	36.3 999.9	IQC -	CHALFANT\A-MCG-UP CHALFANT\A-MCG270 CHALFANT\A-MCG360	0.10 0.10 0.10	50.0 50.0 35.0	0.069 0.078 0.083	1.4 2.3 2.4	0.52 0.65 0.88
			CDMG 54101 Tinemaha Res. Free Field 00	40.6 999.9	AVA -	CHALFANT\A-TIN-UP CHALFANT\A-TIN000 CHALFANT\A-TIN090	0.50 0.50 0.50	30.0 30.0 30.0	0.023 0.037 0.037	1.7 3.6 6.3	0.54 1.12 1.21
			CDMG 54428 Zack Brothers Ranch 00	18.7 999.9	AAD -	CHALFANT\A-ZAK-UP CHALFANT\A-ZAK270 CHALFANT\A-ZAK360	0.20 0.10 0.10	50.0 33.0 33.0	0.321 0.447 0.400	12.5 36.9 44.5	2.80 7.01 8.56
Chalfant Valley 00	1986 0721 1451	0.0 5.6 0.0 0.0	CDMG 54171 Bishop - LADWP South St 00	14.0* 999.9	AQD -	CHALFANT\C-LAD-UP CHALFANT\C-LAD270	0.40 0.23	40.0 25.0	0.057 0.106	2.2 4.9	0.23 0.53

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 54424 Bishop - Paradise Lodge 00	14.0* 999.9	AVA	CHALFANT\C-LAD360	0.30	20.0	0.070	6.5	0.56
					-	CHALFANT\C-BPL-UP	0.20	40.0	0.053	1.1	0.19
					-	CHALFANT\C-BPL070	0.20	30.0	0.037	1.9	0.34
					-	CHALFANT\C-BPL160	0.20	30.0	0.061	2.1	0.28
			CDMG 54428 Zack Brothers Ranch 00	20.0* 999.9	AAD	CHALFANT\C-ZAK-UP	0.20	40.0	0.079	2.1	0.15
					-	CHALFANT\C-ZAK270	0.13	35.0	0.143	7.4	0.67
					-	CHALFANT\C-ZAK360	0.30	30.0	0.108	5.1	0.58
Chalfant Valley 00	1986 0731 0722	0.0 5.8 0.0 0.0	CDMG 54171 Bishop - LADWP South St 00	13.0* 999.9	AQD	CHALFANT\D-LAD-UP	0.20	40.0	0.067	2.8	0.60
					-	CHALFANT\D-LAD070	0.10	20.0	0.120	10.4	2.71
					-	CHALFANT\D-LAD160	0.15	25.0	0.176	12.2	1.72
			CDMG 54428 Zack Brothers Ranch 00	21.0* 999.9	AAD	CHALFANT\D-ZAK-UP	0.22	40.0	0.046	1.6	0.37
					-	CHALFANT\D-ZAK270	0.13	30.0	0.064	4.1	0.91
					-	CHALFANT\D-ZAK360	0.11	30.0	0.060	4.3	0.84
Kalamata, Greece 99	1986 0913 1725	0.0 5.7 0.0 0.0	99999 Kalamata 99	999.9	---	GREECE\H-KAL-UP	0.20	40.0	0.204	9.6	1.32
				999.9	-	GREECE\H-KAL-NS	0.05	33.0	0.248	29.9	9.03
					-	GREECE\H-KAL-WE	0.20	30.0	0.275	25.4	3.87
Kalamata, Greece 99	1986 0915 1141	0.0 4.8 0.0 0.0	99999 Messini 99	999.9	---	GREECE\I-MES-UP	0.40	30.0	0.021	1.6	0.38
				999.9	-	GREECE\I-MES-NS	0.30	23.0	0.027	4.0	0.95
					-	GREECE\I-MES-WE	0.30	23.0	0.048	1.8	0.49
Kalamata, Greece 99	1986 0915 1141	0.0 4.7 0.0 0.0	99999 Kalamata 99	14.3 999.9	---	GREECE\J-KAL-UP	0.40	40.0	0.118	4.8	0.90
					-	GREECE\J-KAL-NS	0.20	30.0	0.250	22.3	2.34
					-	GREECE\J-KAL-WE	0.20	30.0	0.133	8.1	1.23
Kalamata, Greece 99	1986 0915 1142	0.0 4.9 0.0 0.0	99999 Kalamata 99	9.0 999.9	---	GREECE\K-KAL-UP	0.40	40.0	0.078	5.2	0.79
					-	GREECE\K-KAL-NS	0.20	30.0	0.138	11.1	1.56
					-	GREECE\K-KAL-WE	0.10	30.0	0.272	22.6	3.84
San Salvador 99	1986 1010 1749	0.0 0.0 5.4 0.0	99999 Geotech Investig Center 99	4.3 999.9	---	SANSALV\GIC-UP	0.40	40.0	0.392	12.1	2.11
					-	SANSALV\GIC090	0.20	40.0	0.875	59.3	12.33
					-	SANSALV\GIC180	0.20	40.0	0.475	48.4	14.27
			99999 National Geographical Inst 99	5.7 999.9	---	SANSALV\NGI-UP	0.20	40.0	0.480	12.9	2.37
					-	SANSALV\NGI180	0.10	40.0	0.406	60.5	15.61
					-	SANSALV\NGI270	0.10	40.0	0.612	65.7	10.21
Taiwan SMART1 (45) 02	1986 1114	7.3 7.0 7.8 0.0	25 SMART1 C00 99	39.0 999.9	I2D	SMART1\45C00DN	0.10	25.0	0.080	7.0	3.19
					-	SMART1\45C00EW	0.10	25.0	0.122	29.4	9.74
					-	SMART1\45C00NS	0.10	25.0	0.153	28.3	10.73
			32 SMART1 E01 99	39.0 999.9	I2D	SMART1\45E01DN	0.10	25.0	0.075	6.9	3.47
					-	SMART1\45E01EW	0.10	25.0	0.159	2.5	8.26
					-	SMART1\45E01NS	0.10	25.0	0.189	23.2	9.46
			33 SMART1 E02 99	39.0 999.9	I2D	SMART1\45E02DN	0.10	25.0	0.052	5.5	3.03
					-	SMART1\45E02EW	0.10	25.0	0.136	13.7	5.84
					-	SMART1\45E02NS	0.10	25.0	0.143	12.5	6.07
			62 SMART1 I01 99	39.0 999.9	I2D	SMART1\45I01DN	0.10	25.0	0.075	7.1	4.22
					-	SMART1\45I01EW	0.10	25.0	0.132	30.5	9.05
					-	SMART1\45I01NS	0.10	25.0	0.141	29.8	10.34
			61 SMART1 I07 99	39.0 999.9	I2D	SMART1\45I07DN	0.10	25.0	0.089	6.9	3.22
					-	SMART1\45I07EW	0.10	25.0	0.118	23.3	10.69
					-	SMART1\45I07NS	0.10	25.0	0.122	27.0	9.64
			28 SMART1 M01	39.0	I2D	SMART1\45M01DN	0.10	25.0	0.078	6.1	2.26

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	999.9	-	SMART1\45M01EW	0.10	25.0	0.119	27.0	8.91
			29 SMART1 M07	39.0	IZD	SMART1\45M01NS	0.10	25.0	0.141	21.8	9.93
			99	999.9	-	SMART1\45M07DN	0.20	25.0	0.106	8.6	3.19
			99	999.9	-	SMART1\45M07EW	0.10	25.0	0.156	26.8	9.09
			99	999.9	-	SMART1\45M07NS	0.20	25.0	0.160	22.5	7.62
			30 SMART1 O01	39.0	IZD	SMART1\45O01DN	0.10	25.0	0.063	6.3	3.31
			99	999.9	-	SMART1\45O01EW	0.10	25.0	0.126	21.8	9.66
			99	999.9	-	SMART1\45O01NS	0.10	25.0	0.174	21.2	7.90
			63 SMART1 O02	39.0	IZD	SMART1\45O02DN	0.10	25.0	0.062	7.0	4.66
			99	999.9	-	SMART1\45O02EW	0.10	25.0	0.160	20.4	9.90
			99	999.9	-	SMART1\45O02NS	0.10	25.0	0.242	26.2	11.56
			64 SMART1 O04	39.0	IZD	SMART1\45O04DN	0.10	25.0	0.081	7.2	2.95
			99	999.9	-	SMART1\45O04EW	0.10	25.0	0.126	31.9	9.11
			99	999.9	-	SMART1\45O04NS	0.10	25.0	0.163	25.3	9.84
			65 SMART1 O06	39.0	IZD	SMART1\45O06DN	0.10	25.0	0.079	7.0	2.44
			99	999.9	-	SMART1\45O06EW	0.10	25.0	0.171	24.5	8.91
			99	999.9	-	SMART1\45O06NS	0.10	25.0	0.190	22.8	8.65
			31 SMART1 O07	39.0	IZD	SMART1\45O07DN	0.10	25.0	0.106	8.7	2.36
			99	999.9	-	SMART1\45O07EW	0.10	25.0	0.154	19.4	8.17
			99	999.9	-	SMART1\45O07NS	0.10	25.0	0.164	23.2	11.13
			66 SMART1 O08	39.0	IZD	SMART1\45O08DN	0.10	25.0	0.105	9.2	4.18
			99	999.9	-	SMART1\45O08EW	0.10	25.0	0.142	24.5	9.33
			99	999.9	-	SMART1\45O08NS	0.10	25.0	0.163	30.1	13.21
			67 SMART1 O10	39.0	IZD	SMART1\45O10DN	0.10	25.0	0.062	6.2	3.82
			99	999.9	-	SMART1\45O10EW	0.10	25.0	0.148	24.2	9.97
			99	999.9	-	SMART1\45O10NS	0.10	25.0	0.116	26.8	10.08
			68 SMART1 O12	39.0	IZD	SMART1\45O12DN	0.20	25.0	0.065	6.1	1.99
			99	999.9	-	SMART1\45O12EW	0.10	25.0	0.139	24.5	8.82
			99	999.9	-	SMART1\45O12NS	0.10	25.0	0.159	23.3	10.61
Baja California 99	1987 0207 0345	0.0 5.4 0.0 0.0	UNAMUCSD 6604 Cerro Prieto	8.2	AVA	BAJA\CPE-UP	0.40	50.0	0.590	29.0	2.52
			99	999.9	B	BAJA\CPE161	0.10	50.0	1.388	47.4	11.49
			99	999.9		BAJA\CPE251	0.10	50.0	0.890	65.8	7.63
New Zealand 99	1987 0302 0142	0.0 6.3 0.0 0.0	99999 Maraenui Primary School	72.0	---	NEWZEAL\A-MAR-UP	0.80	00.0	0.018	0.9	0.08
			99	999.9	-	NEWZEAL\A-MAR040	0.30	00.0	0.040	2.0	0.24
			99	999.9	-	NEWZEAL\A-MAR130	0.80	00.0	0.030	1.9	0.13
			99999 Matahina Dam	22.0	---	NEWZEAL\A-MAT-UP	0.20	00.0	0.150	10.0	3.40
			99	999.9	-	NEWZEAL\A-MAT083	0.20	00.0	0.256	21.8	6.41
			99	999.9	-	NEWZEAL\A-MAT353	0.40	00.0	0.344	21.7	2.66
New Zealand 99	1987 0302 0151	0.0 5.6 0.0 0.0	99999 Matahina Dam	26.0	---	NEWZEAL\B-MAT-UP	0.20	00.0	0.026	2.7	0.92
			99	999.9	-	NEWZEAL\B-MAT083	0.40	00.0	0.053	3.7	0.53
			99	999.9	-	NEWZEAL\B-MAT353	0.13	00.0	0.055	5.1	1.07
Whittier Narrows 02	1987 1001 1442	6.0 5.9 5.7 0.0	CDMG 24461 Alhambra - Fremont School	13.2	AMD	WHITTIER\A-ALH-UP	0.40	50.0	0.190	5.5	0.84
			99	999.9	B	WHITTIER\A-ALH180	0.50	35.0	0.333	22.0	2.42
			99	999.9		WHITTIER\A-ALH270	0.30	40.0	0.414	16.3	2.32
			CDMG 24402 Altadena - Eaton Canyon	17.5	AQD	WHITTIER\A-ALT-UP	0.40	40.0	0.163	3.3	0.44
			01	999.9	-	WHITTIER\A-ALT000	0.40	35.0	0.299	11.4	1.20
			99	999.9	-	WHITTIER\A-ALT090	0.40	35.0	0.151	5.7	0.50
			USC 90088 Anaheim - W Ball Rd #	24.4	--D	WHITTIER\A-WBA-UP	0.60	25.0	0.062	1.8	0.10
			99	999.9	C	WHITTIER\A-WBA000	0.25	25.0	0.060	6.6	1.33
			99	999.9		WHITTIER\A-WBA090	0.50	25.0	0.055	3.4	0.63

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
USC 90093			Arcadia - Campus Dr # 99	12.2 999.9	--D C	WHITTIER\A-CAM-UP WHITTIER\A-CAM009 WHITTIER\A-CAM279	0.28 0.15 0.38	25.0 25.0 25.0	0.229 0.300 0.163	6.2 21.0 6.8	0.56 3.12 0.73
CDMG 24087			Arleta - Nordhoff Fire Sta 99	38.9 999.9	AQD C	WHITTIER\A-ARL-UP WHITTIER\A-ARL180 WHITTIER\A-ARL270	0.35 0.40 0.50	40.0 30.0 30.0	0.089 0.093 0.091	3.3 5.4 4.7	0.58 0.55 0.85
USC 90069			Baldwin Park - N Holly # 99	11.9 999.9	--D C	WHITTIER\A-NHO-UP WHITTIER\A-NHO180 WHITTIER\A-NHO270	0.30 0.13 0.50	25.0 25.0 25.0	0.080 0.127 0.061	2.2 8.6 4.3	0.75 2.50 0.54
USC 90094			Bell Gardens - Jaboneria # 99	9.8 999.9	--D C	WHITTIER\A-JAB-UP WHITTIER\A-JAB207 WHITTIER\A-JAB297	0.40 0.25 0.10	25.0 25.0 25.0	0.095 0.219 0.212	2.7 18.9 21.8	0.40 2.54 4.83
USC 90014			Beverly Hills - 12520 Mulhol # 99	27.2 999.9	--C B	WHITTIER\A-MU2-UP WHITTIER\A-MU2032 WHITTIER\A-MU2122	0.40 0.35 0.33	25.0 25.0 22.5	0.068 0.089 0.138	2.4 5.1 6.4	0.32 0.53 0.58
USC 90013			Beverly Hills - 14145 Mulhol # 99	30.3 999.9	--C C	WHITTIER\A-MUL-UP WHITTIER\A-MUL009 WHITTIER\A-MUL279	0.38 0.33 0.35	25.0 25.0 25.0	0.043 0.104 0.126	2.0 6.5 10.3	0.25 0.58 1.05
USC 90061			Big Tujunga, Angeles Nat F # 99	25.5 999.9	--C B	WHITTIER\A-TUJ-UP WHITTIER\A-TUJ262 WHITTIER\A-TUJ352	0.75 0.40 0.90	25.0 25.0 25.0	0.085 0.126 0.178	2.3 4.6 6.7	0.19 0.61 0.37
USGS 951			Brea Dam (Downstream) 99	23.3 999.9	IPD -	WHITTIER\A-BRD-UP WHITTIER\A-BRD040 WHITTIER\A-BRD130	0.50 0.60 0.60	40.0 35.0 40.0	0.094 0.163 0.313	3.1 6.2 14.5	0.22 0.36 0.77
USGS 951			Brea Dam (L Abut) 99	23.3 999.9	IPB -	WHITTIER\A-BRL-UP WHITTIER\A-BRL040 WHITTIER\A-BRL130	0.70 0.50 0.50	40.0 40.0 30.0	0.097 0.118 0.149	2.7 6.2 10.2	0.20 0.60 0.82
USC 90087			Brea - S Flower Av # 99	17.9 999.9	--D C	WHITTIER\A-FLO-UP WHITTIER\A-FLO020 WHITTIER\A-FLOXXX	0.20 0.16 -99.	25.0 25.0 -	0.103 0.115 -	9.1 7.1 -	1.31 1.21 -
USC 90012			Burbank - N Buena Vista # 99	23.7 999.9	--D C	WHITTIER\A-BUE-UP WHITTIER\A-BUE250 WHITTIER\A-BUE340	0.35 0.25 0.30	25.0 25.0 25.0	0.105 0.233 0.190	3.2 16.0 11.6	0.53 1.33 1.16
USC 90052			Calabasas - N Las Virg # 99	53.3 999.9	--B B	WHITTIER\A-VIR-UP WHITTIER\A-VIR200 WHITTIER\A-VIR290	0.40 0.33 0.45	25.0 25.0 25.0	0.023 0.042 0.025	1.6 2.3 1.2	0.15 0.35 0.13
USC 90053			Canoga Park - Topanga Can # 99	47.4 999.9	--D C	WHITTIER\A-CNP-UP WHITTIER\A-CNP106 WHITTIER\A-CNP196	0.35 0.25 0.28	25.0 25.0 25.0	0.055 0.139 0.116	1.9 7.9 8.1	0.30 0.76 1.13
USC 90057			Canyon Country - W Lost Cany # 99	46.4 999.9	--D C	WHITTIER\A-LOS-UP WHITTIER\A-LOS000 WHITTIER\A-LOS270	0.40 0.38 0.23	25.0 25.0 22.5	0.073 0.109 0.103	1.9 7.5 7.0	0.26 0.49 0.85
USGS 108			Carbon Canyon Dam (L Abut) 99	26.8 999.9	AMA -	WHITTIER\A-CBN-UP WHITTIER\A-CBN040 WHITTIER\A-CBN130	0.80 0.80 0.50	45.0 40.0 40.0	0.058 0.200 0.221	2.4 6.5 8.7	0.13 0.51 0.64
USC 90040			Carson - Catskill Ave # 99	28.1 999.9	--D C	WHITTIER\A-CAT-UP WHITTIER\A-CAT090 WHITTIER\A-CAT180	0.50 0.18 0.55	25.0 25.0 25.0	0.037 0.042 0.059	1.3 3.8 2.4	0.15 0.75 0.32
USC 90081			Carson - Water St # 99	24.5 999.9	--D D	WHITTIER\A-WAT-UP WHITTIER\A-WAT180 WHITTIER\A-WAT270	0.50 0.20 0.30	25.0 25.0 25.0	0.046 0.104 0.133	2.0 9.0 11.3	0.23 1.91 1.54
CDMG 24277			Castaic - Hasley Canyon 99	70.9 999.9	A-B -	WHITTIER\A-CSH-UP WHITTIER\A-CSH000 WHITTIER\A-CSH090	0.50 0.70 0.50	20.0 15.0 15.0	0.021 0.031 0.035	1.5 1.9 2.6	0.16 0.19 0.31

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 24278 Castaic - Old Ridge Route 99	78.3 999.9	A-B B	WHITTIER\A-ORR-UP WHITTIER\A-ORR000 WHITTIER\A-ORR090	1.00 0.80 0.80	23.0 15.0 20.0	0.026 0.071 0.065	1.1 4.4 4.5	0.08 0.40 0.38
			USC 90078 Compton - Castlegate St # 99	16.9 999.9	--D C	WHITTIER\A-CAS-UP WHITTIER\A-CAS000 WHITTIER\A-CAS270	0.50 0.09 0.28	25.0 25.0 25.0	0.167 0.332 0.333	3.3 27.1 14.1	0.19 5.04 1.48
			USC 90068 Covina - S Grand Ave # 99	17.1 999.9	--C C	WHITTIER\A-GRA-UP WHITTIER\A-GRA015 WHITTIER\A-GRA105	0.33 0.45 0.40	25.0 25.0 25.0	0.064 0.076 0.068	3.1 5.4 4.1	0.46 0.90 0.62
			USC 90070 Covina - W Badillo # 99	14.2 999.9	--D C	WHITTIER\A-BAD-UP WHITTIER\A-BAD000 WHITTIER\A-BAD270	0.50 0.28 0.38	25.0 25.0 25.0	0.082 0.134 0.081	2.9 7.7 4.0	0.22 1.33 0.63
			USC 90079 Downey - Birchdale # 99	56.8 999.9	--D C	WHITTIER\A-BIR-UP WHITTIER\A-BIR090 WHITTIER\A-BIR180	0.60 0.28 0.15	25.0 25.0 25.0	0.230 0.243 0.299	4.1 13.7 37.8	0.31 1.92 4.95
			CDMG 14368 Downey - Co Maint Bldg 99	18.3 999.9	AQD C	WHITTIER\A-DWN-UP WHITTIER\A-DWN180 WHITTIER\A-DWN270	1.00 0.20 0.25	40.0 30.0 30.0	0.177 0.221 0.141	3.3 28.8 13.4	0.23 3.95 1.60
			USC 90066 El Monte - Fairview Av # 99	9.8 999.9	--D C	WHITTIER\A-FAI-UP WHITTIER\A-FAI000 WHITTIER\A-FAI270	0.30 0.33 0.13	25.0 25.0 25.0	0.136 0.120 0.228	4.8 6.7 15.0	0.45 0.93 4.06
			CDMG 13122 Featherly Park - Maint 99	38.6 999.9	AMC B	WHITTIER\A-FEA-UP WHITTIER\A-FEA000 WHITTIER\A-FEA090	1.30 0.80 0.90	40.0 25.0 25.0	0.050 0.071 0.087	1.4 3.6 5.1	0.07 0.26 0.33
			USC 90002 Fountain Valley - Euclid # 99	35.0 999.9	--D C	WHITTIER\A-EUC-UP WHITTIER\A-EUC022 WHITTIER\A-EUC292	0.38 0.30 0.30	25.0 25.0 25.0	0.049 0.071 0.062	1.1 4.1 6.0	0.16 0.76 1.75
			USGS 709 Garvey Res. - Control Bldg 01	12.1 999.9	APB -	WHITTIER\A-GRV-UP WHITTIER\A-GRV060 WHITTIER\A-GRV330	0.70 0.15 0.20	40.0 40.0 40.0	0.362 0.384 0.457	9.9 15.8 19.0	0.75 2.49 4.31
			USC 90063 Glendale - Las Palmas # 99	19.0 999.9	--C C	WHITTIER\A-GLP-UP WHITTIER\A-GLP177 WHITTIER\A-GLP267	0.63 0.28 0.45	27.0 25.0 25.0	0.143 0.296 0.166	5.7 17.1 8.4	0.39 1.82 0.81
			USC 90065 Glendora - N Oakbank # 99	69.7 999.9	--D B	WHITTIER\A-OAK-UP WHITTIER\A-OAK080 WHITTIER\A-OAK170	0.38 0.35 0.23	25.0 25.0 25.0	0.071 0.092 0.110	3.3 3.4 5.0	0.48 0.50 0.81
			USC 90073 Hacienda Heights - Colima # 99	10.5 999.9	--C C	WHITTIER\A-COM-UP WHITTIER\A-COM140 WHITTIER\A-COM230	0.50 0.23 0.45	25.0 25.0 25.0	0.096 0.195 0.201	2.2 8.6 6.3	0.25 0.84 0.62
			CDMG 12331 Hemet Fire Station 99	105.0 999.9	AQD C	WHITTIER\A-H05-UP WHITTIER\A-H05270 WHITTIER\A-H05360	1.00 0.70 0.80	30.0 25.0 25.0	0.027 0.038 0.032	0.9 1.4 1.6	0.07 0.13 0.10
			CDMG 13197 Huntington Beach - Lake St 99	42.8 999.9	AQD C	WHITTIER\A-HNT-UP WHITTIER\A-HNT270 WHITTIER\A-HNT360	0.22 0.25 0.17	30.0 25.0 25.0	0.027 0.045 0.044	1.3 1.7 3.4	0.26 0.49 1.27
			CDMG 14196 Inglewood - Union Oil 99	25.2 999.9	IQD B	WHITTIER\A-ING-UP WHITTIER\A-ING000 WHITTIER\A-ING090	0.50 0.60 0.25	30.0 40.0 40.0	0.069 0.299 0.247	2.4 8.9 18.1	0.24 0.78 1.92
			CDMG 14403 LA - 116th St School 99	22.5 999.9	AQD B	WHITTIER\A-116-UP WHITTIER\A-116270 WHITTIER\A-116360	0.20 0.20 0.20	30.0 30.0 30.0	0.105 0.294 0.396	3.0 17.6 21.0	0.49 1.97 1.75
			CDMG 24157 LA - Baldwin Hills 99	27.0 999.9	IPB C	WHITTIER\A-BLD-UP WHITTIER\A-BLD000 WHITTIER\A-BLD090	0.40 0.30 0.40	35.0 35.0 30.0	0.114 0.142 0.159	4.0 8.7 8.0	0.37 1.40 0.72

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
USC 90054	99	LA - Centinela St #	99	27.7 999.9	--D C	WHITTIER\A-CEN-UP WHITTIER\A-CEN155 WHITTIER\A-CEN245	0.33 0.30 0.25	25.0 25.0 25.0	0.032 0.059 0.044	1.2 3.0 2.6	0.27 0.55 0.34
CDMG 24389	99	LA - Century City CC North	99	31.4 999.9	IQD C	WHITTIER\A-CCN-UP WHITTIER\A-CCN000 WHITTIER\A-CCN090	0.50 0.60 0.35	23.0 30.0 30.0	0.039 0.078 0.111	1.6 3.1 6.2	0.20 0.34 0.70
CDMG 24390	99	LA - Century City CC South	99	31.3 999.9	IQD C	WHITTIER\A-CTS-UP WHITTIER\A-CTS000 WHITTIER\A-CTS090	0.40 0.20 0.30	30.0 25.0 25.0	0.021 0.051 0.063	1.7 3.5 5.4	0.25 0.61 0.83
USC 90015	99	LA - Chalon Rd #	99	32.6 999.9	--B B	WHITTIER\A-CHL-UP WHITTIER\A-CHL030 WHITTIER\A-CHL120	1.00 0.38 0.75	25.0 25.0 25.0	0.019 0.036 0.020	0.7 2.3 1.1	0.07 0.21 0.12
USC 90033	99	LA - Cypress Ave #	99	11.4 999.9	--C B	WHITTIER\A-CYP-UP WHITTIER\A-CYP053 WHITTIER\A-CYP143	0.40 0.33 0.28	25.0 25.0 25.0	0.084 0.156 0.137	2.9 8.0 9.1	0.29 0.88 1.35
USC 90025	99	LA - E Vernon Ave #	99	10.8 999.9	--D C	WHITTIER\A-VER-UP WHITTIER\A-VER083 WHITTIER\A-VER173	0.40 0.18 0.16	25.0 25.0 25.0	0.086 0.146 0.175	2.7 12.8 8.8	0.39 1.43 1.37
USC 90034	99	LA - Fletcher Dr #	99	14.4 999.9	--D C	WHITTIER\A-FLE-UP WHITTIER\A-FLE144 WHITTIER\A-FLE234	0.30 0.28 0.30	25.0 25.0 25.0	0.103 0.171 0.213	7.6 19.4 12.6	1.03 2.17 1.45
CDMG 24303	99	LA - Hollywood Stor FF	99	25.2 999.9	IPD C	WHITTIER\A-PEL-UP WHITTIER\A-PEL000 WHITTIER\A-PEL090	0.45 0.40 0.40	50.0 25.0 25.0	0.070 0.221 0.124	2.8 9.0 6.9	0.42 1.43 1.12
USC 90016	99	LA - N Faring Rd #	99	28.5 999.9	--B C	WHITTIER\A-FAR-UP WHITTIER\A-FAR000 WHITTIER\A-FAR090	0.55 0.55 0.40	25.0 25.0 25.0	0.034 0.048 0.053	1.6 2.2 3.0	0.13 0.26 0.29
USC 90032	99	LA - N Figueroa St #	99	11.4 999.9	--C B	WHITTIER\A-FIG-UP WHITTIER\A-FIG058 WHITTIER\A-FIG328	0.55 0.30 0.20	25.0 25.0 25.0	0.169 0.151 0.166	5.7 7.9 13.1	0.47 1.10 1.82
USC 90021	99	LA - N Westmoreland #	99	16.6 999.9	--D B	WHITTIER\A-WST-UP WHITTIER\A-WST000 WHITTIER\A-WST270	0.35 0.30 0.30	25.0 25.0 25.0	0.084 0.214 0.199	3.1 9.7 6.2	0.43 0.98 0.72
CDMG 24400	99	LA - Obregon Park	99	13.9 999.9	AQD B	WHITTIER\A-OBR-UP WHITTIER\A-OBR270 WHITTIER\A-OBR360	0.50 0.40 0.40	35.0 35.0 35.0	0.144 0.450 0.400	5.2 16.1 22.9	0.59 2.18 2.53
USC 90022	99	LA - S Grand Ave #	99	14.5 999.9	--D C	WHITTIER\A-GR2-UP WHITTIER\A-GR2090 WHITTIER\A-GR2180	0.30 0.35 0.28	25.0 25.0 25.0	0.122 0.191 0.149	3.5 8.6 8.0	0.29 0.75 1.19
USC 90091	99	LA - Saturn St #	99	20.8 999.9	--D C	WHITTIER\A-STN-UP WHITTIER\A-STN020 WHITTIER\A-STN110	0.28 0.25 0.23	25.0 25.0 25.0	0.041 0.099 0.141	2.0 6.1 4.5	0.59 0.68 0.58
USC 90023	99	LA - W 70th St #	99	16.3 999.9	--D C	WHITTIER\A-W70-UP WHITTIER\A-W70000 WHITTIER\A-W70270	0.30 0.30 0.20	25.0 25.0 25.0	0.077 0.198 0.151	2.8 19.5 8.7	0.45 2.49 1.51
USC 90017	99	LA - Wonderland Ave #	99	24.6 999.9	--A A	WHITTIER\A-WON-UP WHITTIER\A-WON075 WHITTIER\A-WON165	0.55 0.53 0.70	25.0 25.0 25.0	0.024 0.039 0.047	0.9 1.7 1.5	0.10 0.17 0.16
USC 90060	99	La Crescenta - New York #	99	22.7 999.9	--C C	WHITTIER\A-NYA-UP WHITTIER\A-NYA090 WHITTIER\A-NYA180	0.38 0.40 0.30	25.0 25.0 25.0	0.090 0.134 0.141	2.8 11.7 10.9	0.40 1.18 1.69
USC 90074	99	La Habra - Briarcliff #	99	13.5 999.9	--C C	WHITTIER\A-BRC-UP WHITTIER\A-BRC000 WHITTIER\A-BRC090	0.50 0.25 0.25	25.0 25.0 25.0	0.064 0.183 0.131	2.6 9.9 7.3	0.31 2.23 1.10

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
USC 90072 La Puente - Rimgrove Av # 99				11.9	--D	WHITTIER\A-RIM-UP	0.45	25.0	0.076	2.5	0.19
				999.9	C	WHITTIER\A-RIM015	0.18	25.0	0.143	6.2	1.04
CDMG 24271 Lake Hughes #1 99				74.7	APC	WHITTIER\A-L01XXX	-99.	21.5	0.118	5.9	0.42
				999.9	B	WHITTIER\A-L01000	0.90	20.0	0.035	2.5	0.19
USC 90084 Lakewood - Del Amo Blvd # 99				20.9	--D	WHITTIER\A-L01090	0.80	20.0	0.029	1.6	0.18
				999.9	C	WHITTIER\A-DEL-UP	0.30	25.0	0.126	3.4	0.55
CDMG 24526 Lancaster - Med Off FF 99				69.5	IQC	WHITTIER\A-DEL000	0.30	25.0	0.277	28.5	4.52
				999.9	-	WHITTIER\A-DEL090	0.30	25.0	0.178	11.8	2.13
USC 90045 Lawndale - Osage Ave # 99				25.1	--D	WHITTIER\A-LMD-UP	1.30	35.0	0.027	0.8	0.03
				999.9	C	WHITTIER\A-LMD010	0.80	25.0	0.067	2.5	0.16
CDMG 14395 LB - Harbor Admin FF 99				34.2	IQD	WHITTIER\A-LMD100	0.60	25.0	0.071	2.8	0.17
				999.9	-	WHITTIER\A-LOA-UP	0.33	25.0	0.031	2.0	0.26
USC 90080 LB - Orange Ave # 99				18.3	--D	WHITTIER\A-LOA092	0.35	25.0	0.066	5.3	0.89
				999.9	C	WHITTIER\A-LOA182	0.38	25.0	0.053	5.3	0.71
CDMG 14242 LB - Rancho Los Cerritos 99				26.0	IQD	WHITTIER\A-LOA92	0.20	25.0	0.028	1.6	0.40
				999.9	-	WHITTIER\A-HAR000	0.60	30.0	0.058	4.1	0.63
USC 90080 LB - Orange Ave # 99				18.3	--D	WHITTIER\A-HAR090	0.25	25.0	0.071	7.3	0.85
				999.9	C	WHITTIER\A-OR2-UP	0.55	25.0	0.136	3.4	0.38
CDMG 14241 LB - Recreation Park 02				30.5	IQD	WHITTIER\A-OR2010	0.12	25.0	0.255	32.9	4.83
				999.9	-	WHITTIER\A-OR2280	0.28	25.0	0.149	10.3	1.36
CDMG 24055 Leona Valley #5 - Ritter 99				61.3	IQC	WHITTIER\A-LBR-UP	0.70	35.0	0.084	2.8	0.21
				999.9	C	WHITTIER\A-LBR000	0.25	40.0	0.159	16.9	2.90
CDMG 24309 Leona Valley #6 99				64.8	IHD	WHITTIER\A-LBR090	0.50	35.0	0.194	17.2	2.21
				999.9	C	WHITTIER\A-REC-UP	0.60	20.0	0.038	1.6	0.23
USC 90050 Malibu - Las Flores Canyon # 99				46.3	--B	WHITTIER\A-REC090	0.20	30.0	0.058	3.1	0.80
				999.9	B	WHITTIER\A-REC180	0.30	25.0	0.051	6.8	1.64
CDMG 24396 Malibu - Point Dume Sch 99				65.3	AMB	WHITTIER\A-LV5-UP	1.00	25.0	0.029	1.0	0.07
				999.9	B	WHITTIER\A-LV5000	0.80	25.0	0.047	2.1	0.14
USC 90051 Malibu - W Pacific Cst Hwy # 99				60.0	--B	WHITTIER\A-LV5090	0.80	30.0	0.056	2.7	0.19
				999.9	B	WHITTIER\A-LV6-UP	1.00	25.0	0.024	1.0	0.10
USC 90046 Manhattan Beach - Manhattan # 99				28.9	--C	WHITTIER\A-LV6000	1.00	25.0	0.036	1.6	0.10
				999.9	C	WHITTIER\A-LV6090	0.80	25.0	0.053	1.9	0.11
USC 90062 Mill Creek, Angeles Nat For # 99				34.5	--B	WHITTIER\A-LAS-UP	0.65	25.0	0.015	1.0	0.13
				999.9	B	WHITTIER\A-LAS160	0.65	25.0	0.065	2.3	0.14
CDMG 24283 Moorpark - Fire Sta 99				27.1	AMB	WHITTIER\A-LAS250	0.65	25.0	0.055	2.2	0.32
				999.9	B	WHITTIER\A-MAL-UP	0.35	30.0	0.029	1.9	0.15
USC 90046 Manhattan Beach - Manhattan # 99				28.9	--C	WHITTIER\A-MAL180	0.35	25.0	0.048	2.4	0.32
				999.9	C	WHITTIER\A-MAL270	0.60	20.0	0.040	2.0	0.18
USC 90062 Mill Creek, Angeles Nat For # 99				34.5	--B	WHITTIER\A-MAL270	0.60	20.0	0.040	2.0	0.18
				999.9	C	WHITTIER\A-WPA-UP	0.38	25.0	0.029	1.6	0.24
CDMG 24283 Moorpark - Fire Sta 99				27.1	AQD	WHITTIER\A-WPA060	0.40	25.0	0.038	2.5	0.28
				999.9	-	WHITTIER\A-WPA150	0.70	25.0	0.032	2.3	0.22
USC 90046 Manhattan Beach - Manhattan # 99				28.9	--C	WHITTIER\A-MANXXX	-99.				
				999.9	C	WHITTIER\A-MAN090	0.40	25.0	0.054	5.8	0.85
USC 90062 Mill Creek, Angeles Nat For # 99				34.5	--B	WHITTIER\A-MANXXX	-99.				
				999.9	C	WHITTIER\A-ANG-UP	0.70	25.0	0.040	1.6	0.10
CDMG 24283 Moorpark - Fire Sta 99				27.1	AQD	WHITTIER\A-ANG000	0.40	25.0	0.089	4.0	0.52
				999.9	-	WHITTIER\A-ANG090	0.63	25.0	0.071	3.3	0.32
USC 90046 Manhattan Beach - Manhattan # 99				28.9	--C	WHITTIER\A-ANG090	0.63	25.0	0.071	3.3	0.32
				999.9	C	WHITTIER\A-MRP-UP	1.00	25.0	0.019	1.0	0.08
CDMG 24399 Mt Wilson - CIT Seis Sta 01				21.2	IGA	WHITTIER\A-MRP090	0.80	15.0	0.039	3.1	0.26
				999.9	A	WHITTIER\A-MRP180	0.50	15.0	0.042	2.5	0.26
CDMG 24399 Mt Wilson - CIT Seis Sta 01				21.2	IGA	WHITTIER\A-MTW-UP	0.40	40.0	0.119	3.3	0.25
				999.9	A	WHITTIER\A-MTW000	0.60	40.0	0.123	3.3	0.37
						WHITTIER\A-MTW090	0.70	40.0	0.186	4.6	0.21

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
USC 90009			N Hollywood - Coldwater Can #	30.8	--C	WHITTIER\A-CWC-UP	0.20	25.0	0.059	2.7	0.49
	99			999.9	B	WHITTIER\A-CWC180	0.20	25.0	0.116	6.2	0.97
						WHITTIER\A-CWC270	0.30	25.0	0.250	14.3	1.11
CDMG 24279			Newhall - Fire Sta	55.2	AQD	WHITTIER\A-NWH-UP	1.00	25.0	0.038	1.0	0.09
	99			999.9	C	WHITTIER\A-NWH180	0.50	15.0	0.044	2.9	0.31
						WHITTIER\A-NWH270	0.60	15.0	0.060	2.9	0.41
USC 90056			Newhall - W Pico Canyon Rd. #	57.1	--C	WHITTIER\A-WPI-UP	0.30	25.0	0.035	1.7	0.17
	99			999.9	B	WHITTIER\A-WPI046	0.28	25.0	0.088	5.6	0.47
						WHITTIER\A-WPI316	0.38	25.0	0.055	3.9	0.32
USC 90003			Northridge - 17645 Saticoy St #	39.8	--D	WHITTIER\A-STC-UP	0.25	25.0	0.084	2.4	0.41
	99			999.9	C	WHITTIER\A-STC090	0.23	25.0	0.161	8.5	0.72
						WHITTIER\A-STC180	0.20	25.0	0.118	5.1	0.83
USGS 634			Norwalk - Imp Hwy, S Grnd	17.2	IHD	WHITTIER\A-NOR-UP	0.60	45.0	0.096	2.9	0.30
	02			999.9	-	WHITTIER\A-NOR090	0.15	40.0	0.107	8.4	1.40
						WHITTIER\A-NOR360	0.15	45.0	0.248	20.7	4.21
USGS 697			Orange Co. Reservoir	23.0	APB	WHITTIER\A-ORN-UP	1.00	35.0	0.126	2.7	0.19
	99			999.9	-	WHITTIER\A-ORN006	0.40	30.0	0.185	10.2	0.96
						WHITTIER\A-ORN096	0.30	30.0	0.198	6.1	0.74
USC 90049			Pacific Palisades - Sunset #	38.6	--B	WHITTIER\A-SUN-UP	0.28	25.0	0.035	1.3	0.25
	99			999.9	C	WHITTIER\A-SUN190	0.45	25.0	0.063	2.0	0.28
						WHITTIER\A-SUN280	0.50	25.0	0.038	2.0	0.33
CDMG 24088			Pacoima Kagel Canyon	37.9	AMB	WHITTIER\A-PKC-UP	0.50	35.0	0.055	2.7	0.30
	99			999.9	B	WHITTIER\A-PKC000	0.35	20.0	0.166	6.2	0.68
						WHITTIER\A-PKC090	0.45	20.0	0.164	6.8	0.87
USC 90005			Pacoima Kagel Canyon USC #	34.0	--D	WHITTIER\A-KAG-UP	0.53	25.0	0.076	4.0	0.57
	99			999.9	B	WHITTIER\A-KAG045	0.30	25.0	0.119	7.9	1.07
						WHITTIER\A-KAG315	0.23	25.0	0.133	5.5	0.60
USC 90007			Panorama City - Roscoe #	33.0	--D	WHITTIER\A-RO2-UP	0.25	25.0	0.079	2.8	0.50
	99			999.9	B	WHITTIER\A-RO2090	0.25	23.5	0.105	7.2	0.81
						WHITTIER\A-RO2180	0.20	25.0	0.108	7.2	1.48
CDMG 80046			Pasadena - Brown Gym	15.5	-QD	WHITTIER\A-BRG-UP	0.50	40.0	0.161	3.7	0.48
	99			999.9	-	WHITTIER\A-BRG180	0.35	30.0	0.165	13.2	2.09
						WHITTIER\A-BRG270	0.35	30.0	0.149	9.1	1.24
CDMG 80053			Pasadena - CIT Athenaeum	15.4	CQD	WHITTIER\A-PAS-UP	0.50	30.0	0.125	4.8	0.44
	99			999.9	B	WHITTIER\A-PAS180	0.30	40.0	0.174	11.5	1.68
						WHITTIER\A-PAS270	0.30	35.0	0.101	6.0	0.74
CDMG 80052			Pasadena - CIT Bridge Lab	15.5	-QD	WHITTIER\A-BRI-UP	0.70	40.0	0.132	3.6	0.28
	99			999.9	-	WHITTIER\A-BRI090	0.40	35.0	0.184	10.3	1.13
						WHITTIER\A-BRI360	0.25	35.0	0.147	15.0	2.72
CDMG 80047			Pasadena - CIT Calif Blvd	15.5	AQD	WHITTIER\A-CCB-UP	0.30	40.0	0.171	7.0	0.58
	99			999.9	-	WHITTIER\A-CCB270	0.30	40.0	0.177	8.1	0.96
						WHITTIER\A-CCB360	0.30	35.0	0.271	15.4	2.33
CDMG 80051			Pasadena - CIT Indust. Rel	15.5	BQD	WHITTIER\A-CIR-UP	0.50	40.0	0.184	5.5	0.45
	99			999.9	-	WHITTIER\A-CIR090	0.30	25.0	0.239	8.4	0.99
						WHITTIER\A-CIR180	0.30	30.0	0.228	13.8	1.95
CDMG 80049			Pasadena - CIT Keck Lab	15.5	-QD	WHITTIER\A-KEC-UP	0.60	60.0	0.096	4.0	0.41
	99			999.9	-	WHITTIER\A-KEC270	0.40	35.0	0.152	5.1	0.60
						WHITTIER\A-KEC360	0.25	35.0	0.188	14.1	2.63
CDMG 80054			Pasadena - CIT Kresge Lab	17.4	-QD	WHITTIER\A-KRE-UP	0.50	45.0	0.081	3.3	0.37
	99			999.9	-	WHITTIER\A-KRE090	0.40	40.0	0.112	8.0	0.99
						WHITTIER\A-KRE360	0.60	40.0	0.089	3.8	0.28
CDMG 80048			Pasadena - CIT Lura St	15.5	AQD	WHITTIER\A-LUR-UP	0.43	50.0	0.236	5.0	0.61
	99			999.9	-	WHITTIER\A-LUR090	0.40	40.0	0.360	9.8	0.92
						WHITTIER\A-LUR180	0.30	40.0	0.352	18.1	2.35

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 80050 Pasadena - CIT Mudd Lab	15.5	-QD	WHITTIER\A-MUD-UP	0.70	30.0	0.134	3.9	0.36
			99	999.9	-	WHITTIER\A-MUD090	0.40	30.0	0.137	9.4	1.30
						WHITTIER\A-MUD360	0.30	35.0	0.163	15.1	2.23
			USC 90095 Pasadena - Old House Rd #	14.5	--C	WHITTIER\A-OLD-UP	0.25	25.0	0.102	3.5	0.89
			99	999.9	C	WHITTIER\A-OLD000	0.28	25.0	0.231	10.6	1.58
						WHITTIER\A-OLD090	0.23	25.0	0.258	8.0	1.23
			USC 90047 Playa Del Rey - Saran #	28.8	--D	WHITTIER\A-SAR-UP	0.35	25.0	0.018	1.2	0.22
			99	999.9	E	WHITTIER\A-SAR000	0.40	25.0	0.025	2.5	0.47
						WHITTIER\A-SAR270	0.38	25.0	0.034	2.5	0.32
			CDMG 23525 Pomona - 4th & Locust FF	28.8	IQD	WHITTIER\A-PMN-UP	0.80	40.0	0.055	1.3	0.13
			99	999.9	C	WHITTIER\A-PMN012	0.50	30.0	0.067	3.4	0.35
						WHITTIER\A-PMN102	0.55	30.0	0.056	2.5	0.22
			CDMG 23497 Rancho Cucamonga - Law & J	44.3	IHD	WHITTIER\A-CLJ-UP	0.70	40.0	0.044	0.9	0.09
			99	999.9	B	WHITTIER\A-CLJ090	0.60	50.0	0.060	1.5	0.18
						WHITTIER\A-CLJ360	0.60	50.0	0.050	1.4	0.16
			USC 90044 Rancho Palos Verdes - Luconia #	37.7	--C	WHITTIER\A-LUC-UP	0.55	21.5	0.017	0.9	0.11
			99	999.9	B	WHITTIER\A-LUC186	0.45	21.5	0.021	2.0	0.28
						WHITTIER\A-LUC276	0.53	25.0	0.021	1.6	0.24
			CDMG 13123 Riverside Airport	56.8	AQB	WHITTIER\A-RIV-UP	3.00	50.0	0.044	0.7	0.01
			99	999.9	B	WHITTIER\A-RIV180	1.70	35.0	0.050	1.4	0.05
						WHITTIER\A-RIV270	2.00	45.0	0.047	1.4	0.04
			CDMG 24274 Rosamond - Goode Ranch	86.0	IQC	WHITTIER\A-ROS-UP	0.40	30.0	0.021	1.2	0.11
			99	999.9	-	WHITTIER\A-ROS000	0.40	20.0	0.070	3.8	0.39
						WHITTIER\A-ROS090	0.50	20.0	0.065	3.2	0.31
			USC 90019 San Gabriel - E Grand Ave #	9.0	--A	WHITTIER\A-GRN-UP	0.35	25.0	0.227	5.5	0.44
			99	999.9	A	WHITTIER\A-GRN180	0.35	25.0	0.304	23.0	3.34
						WHITTIER\A-GRN270	0.35	25.0	0.199	11.0	1.04
			CDMG 24401 San Marino - SW Academy	14.7	AQD	WHITTIER\A-SMA-UP	0.60	40.0	0.142	5.4	0.74
			99	999.9	B	WHITTIER\A-SMA270	0.40	40.0	0.128	5.6	0.58
						WHITTIER\A-SMA360	0.40	40.0	0.204	12.8	2.60
			USC 90077 Santa Fe Springs - E Joslin #	10.8	--D	WHITTIER\A-EJS-UP	0.25	25.0	0.206	6.7	1.03
			99	999.9	C	WHITTIER\A-EJS048	0.35	25.0	0.426	38.1	3.54
						WHITTIER\A-EJS318	0.35	25.0	0.443	21.7	3.00
			USC 90048 Santa Monica - Second St #	32.6	--B	WHITTIER\A-SEC-UP	0.53	25.0	0.021	0.8	0.13
			99	999.9	B	WHITTIER\A-SEC205	0.53	25.0	0.033	2.7	0.28
						WHITTIER\A-SEC295	0.28	25.0	0.034	4.1	0.60
			USC 90010 Studio City - Coldwater Can #	28.7	--D	WHITTIER\A-CO2-UP	0.35	25.0	0.073	2.8	0.37
			99	999.9	C	WHITTIER\A-CO2092	0.28	25.0	0.177	14.2	1.15
						WHITTIER\A-CO2182	0.30	25.0	0.231	13.7	1.14
			USC 90006 Sun Valley - Roscoe Blvd #	32.6	--D	WHITTIER\A-RO3-UP	0.25	25.0	0.093	3.9	0.43
			99	999.9	B	WHITTIER\A-RO3000	0.25	25.0	0.202	8.5	0.87
						WHITTIER\A-RO3090	0.28	25.0	0.223	13.3	1.05
			USC 90008 Sun Valley - Sunland #	29.3	--B	WHITTIER\A-SUL-UP	0.35	25.0	0.043	2.3	0.41
			99	999.9	B	WHITTIER\A-SUL220	0.30	25.0	0.075	3.4	0.73
						WHITTIER\A-SUL310	0.38	25.0	0.074	3.2	0.30
			USC 90058 Sunland - Mt Gleason Ave #	27.5	--C	WHITTIER\A-GLE-UP	0.30	25.0	0.072	3.5	0.50
			99	999.9	B	WHITTIER\A-GLE180	0.28	25.0	0.089	4.5	0.73
						WHITTIER\A-GLE270	0.28	25.0	0.072	4.0	0.59
			CDMG 24514 Sylmar - Olive View Med FF	47.7	AQD	WHITTIER\A-SYL-UP	0.50	25.0	0.042	1.7	0.18
			99	999.9	B	WHITTIER\A-SYL000	0.35	20.0	0.065	4.4	0.67
						WHITTIER\A-SYL090	0.40	20.0	0.055	3.2	0.46
			USC 90001 Sylmar - Sayre St #	38.6	--D	WHITTIER\A-SAY-UP	0.33	25.0	0.033	1.2	0.20
			99	999.9	B	WHITTIER\A-SAY045	0.25	25.0	0.051	4.2	0.65
						WHITTIER\A-SAY315	0.28	25.0	0.046	2.7	0.41

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 24436 Tarzana - Cedar Hill	43.0	APB	WHITTIER\A-TAR-UP	0.70	40.0	0.248	5.9	0.31
			99	999.9	C	WHITTIER\A-TAR000	0.60	40.0	0.449	20.1	1.29
						WHITTIER\A-TAR090	0.60	40.0	0.644	22.9	1.68
			USC 90082 Terminal Island - S Seaside #	35.7	--D	WHITTIER\A-SSE-UP	0.28	25.0	0.021	1.2	0.32
			99	999.9	C	WHITTIER\A-SSE252	0.20	25.0	0.042	3.9	0.97
						WHITTIER\A-SSE342	0.28	25.0	0.041	3.1	0.97
			USC 90038 Torrance - W 226th St #	31.4	--E	WHITTIER\A-TOR-UP	0.40	25.0	0.025	1.2	0.26
			99	999.9	E	WHITTIER\A-TOR090	0.23	25.0	0.031	2.6	0.65
						WHITTIER\A-TOR180	0.28	25.0	0.051	2.4	0.48
			CDMG 24047 Vasquez Rocks Park	52.4	IBA	WHITTIER\A-VAS-UP	0.90	35.0	0.039	1.1	0.09
			99	999.9	B	WHITTIER\A-VAS000	1.00	25.0	0.060	2.1	0.12
						WHITTIER\A-VAS090	1.00	25.0	0.060	2.3	0.11
			USC 90090 Villa Park - Serrano Ave #	30.1	--B	WHITTIER\A-SER-UP	0.50	25.0	0.033	1.3	0.11
			99	999.9	B	WHITTIER\A-SER000	0.70	25.0	0.046	1.4	0.13
						WHITTIER\A-SER270	0.55	25.0	0.072	2.6	0.27
			USC 90071 West Covina - S Orange #	10.5	--B	WHITTIER\A-SOR-UP	0.50	25.0	0.131	3.7	0.23
			99	999.9	C	WHITTIER\A-SOR225	0.23	25.0	0.137	10.6	1.84
						WHITTIER\A-SOR315	0.23	25.0	0.179	7.0	1.79
			USGS 289 Whittier N. Dam upstream	12.3	IHD	WHITTIER\A-WHD-UP	0.55	50.0	0.505	7.1	0.31
			01	999.9	-	WHITTIER\A-WHD062	0.20	50.0	0.229	17.8	2.62
						WHITTIER\A-WHD152	0.40	40.0	0.316	12.0	1.36
Whittier Narrows 03	1987 1004 1059	5.3 5.3 0.0 0.0	CDMG 24461 Alhambra - Fremont School	12.6*	AMD	WHITTIER\B-ALH-UP	0.50	40.0	0.082	2.9	0.26
			00	999.9	B	WHITTIER\B-ALH180	0.60	30.0	0.174	10.8	0.91
						WHITTIER\B-ALH270	0.50	40.0	0.178	8.9	0.87
			CDMG 24402 Altadena - Eaton Canyon	16.1*	AQD	WHITTIER\B-ALT-UP	0.50	30.0	0.122	3.4	0.28
			00	999.9	-	WHITTIER\B-ALT000	0.45	30.0	0.264	9.5	0.78
						WHITTIER\B-ALT090	0.30	30.0	0.199	10.2	0.81
			CDMG 14368 Downey - Co Maint Bldg	20.5*	AQD	WHITTIER\B-DWN-UP	0.80	40.0	0.048	1.2	0.14
			00	999.9	C	WHITTIER\B-DWN180	0.40	25.0	0.073	4.7	0.55
						WHITTIER\B-DWN270	0.60	30.0	0.065	5.4	0.58
			CDMG 14196 Inglewood - Union Oil	27.3*	IQD	WHITTIER\B-ING-UP	1.00	30.0	0.031	1.9	0.12
			00	999.9	B	WHITTIER\B-ING000	0.40	30.0	0.110	6.9	0.93
						WHITTIER\B-ING090	0.40	30.0	0.157	9.2	0.98
			CDMG 14403 LA - 116th St School	24.6*	AQD	WHITTIER\B-116-UP	0.70	30.0	0.036	1.4	0.12
			00	999.9	B	WHITTIER\B-116270	0.40	30.0	0.166	10.6	1.13
						WHITTIER\B-116360	0.15	30.0	0.151	10.1	1.06
			CDMG 24157 LA - Baldwin Hills	27.6*	IPB	WHITTIER\B-BLD-UP	0.80	35.0	0.040	2.5	0.19
			00	999.9	C	WHITTIER\B-BLD000	0.30	30.0	0.065	6.2	1.08
						WHITTIER\B-BLD090	0.30	30.0	0.134	11.2	1.07
			CDMG 24303 LA - Hollywood Stor FF	24.5*	IPD	WHITTIER\B-PEL-UP	0.60	25.0	0.027	1.0	0.13
			00	999.9	C	WHITTIER\B-PEL090	0.50	20.0	0.056	2.6	0.31
						WHITTIER\B-PEL360	0.50	25.0	0.079	3.8	0.45
			CDMG 24400 LA - Obregon Park	14.9*	AQD	WHITTIER\B-OBR-UP	0.45	35.0	0.098	3.7	0.35
			00	999.9	B	WHITTIER\B-OBR270	0.55	25.0	0.374	14.5	0.98
						WHITTIER\B-OBR360	0.30	30.0	0.261	24.0	2.57
			CDMG 24399 Mt Wilson - CIT Seis Sta	20.4*	IGA	WHITTIER\B-MTW-UP	0.50	35.0	0.086	2.2	0.16
			00	999.9	A	WHITTIER\B-MTW000	0.70	35.0	0.158	5.7	0.25
						WHITTIER\B-MTW090	0.70	40.0	0.142	4.6	0.20
			CDMG 24401 San Marino - SW Academy	12.8*	AQD	WHITTIER\B-SMA-UP	0.60	40.0	0.079	2.7	0.26
			00	999.9	B	WHITTIER\B-SMA270	0.50	40.0	0.156	7.8	1.02
						WHITTIER\B-SMA360	0.30	50.0	0.212	12.9	1.51
			CDMG 24436 Tarzana - Cedar Hill	42.7*	APB	WHITTIER\B-TAR-UP	1.00	35.0	0.037	1.4	0.09
			00	999.9	C	WHITTIER\B-TAR000	0.50	30.0	0.074	2.8	0.23

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
						WHITTIER\B-TAR090	1.00	25.0	0.113	4.5	0.31
Superstitn Hills(A)1987 1124 0514 00		6.3 5.8 6.2 0.0	USGS 5210 Wildlife Liquef. Array 00	24.7 999.9	IQD -	SUPERST\A-IVW-UP SUPERST\A-IVW090 SUPERST\A-IVW360	0.20 0.20 0.20	50.0 50.0 50.0	0.186 0.132 0.134	4.6 12.7 13.4	2.2 7.3 5.2
Superstitn Hills(B)1987 1124 1316 00		6.7 0.0 6.6 0.0	USGS 5060 Brawley Airport 00	18.2 999.9	AQD C	SUPERST\B-BRAXXX SUPERST\B-BRA225 SUPERST\B-BRA315	-99. 0.10 0.13	23.0 20.0	0.156 0.116	13.9 17.2	5.4 8.6
			USGS 5061 Calipatria Fire Station 00	28.3 999.9	BQD C	SUPERST\B-CALXXX SUPERST\B-CAL225 SUPERST\B-CAL315	-99. 0.23 0.23	20.0 20.0 18.0	0.180 0.247	15.5 14.6	3.3 3.1
			CDMG 01335 El Centro Imp. Co. Cent 00	13.9 999.9	AQD C	SUPERST\B-ICC-UP SUPERST\B-ICC000 SUPERST\B-ICC090	0.10 0.10 0.10	47.0 40.0 38.0	0.128 0.358 0.258	8.4 46.4 40.9	4.9 17.5 20.2
			USGS temp Kornbloom Road (temp) 00	19.7 999.9	--- -	SUPERST\B-KRNXXX SUPERST\B-KRN270 SUPERST\B-KRN360	-99. 0.13 0.15	25.0 23.0	0.121 0.136	19.2 31.1	6.3 7.4
			USGS 5051 Parachute Test Site 00	0.7 999.9	AQD B	SUPERST\B-PTSXXX SUPERST\B-PTS225 SUPERST\B-PTS315	-99. 0.06 0.12	20.0 23.0	0.455 0.377	112.0 43.9	52.8 15.2
			USGS 5052 Plaster City 00	21.0 999.9	AQD C	SUPERST\B-PLSXXX SUPERST\B-PLS045 SUPERST\B-PLS135	-99. 0.30 0.20	20.0 18.0	0.121 0.186	9.5 20.6	1.9 5.4
			USGS temp Poe Road (temp) 00	12.4 999.9	--- -	SUPERST\B-POEXXX SUPERST\B-POE270 SUPERST\B-POE360	-99. 0.20 0.07	23.0 23.0	0.446 0.300	35.7 32.8	8.8 11.5
			USGS 5062 Salton Sea Wildlife Refuge 00	27.1 999.9	AQD D	SUPERST\B-WLFXXX SUPERST\B-WLF225 SUPERST\B-WLF315	-99. 0.25 0.20	22.0 30.0	0.119 0.167	7.9 18.3	2.1 4.3
			USGS 286 Superstition Mtn. 00	4.3 999.9	AGA B	SUPERST\B-SUPXXX SUPERST\B-SUP045 SUPERST\B-SUP135	-99. 0.30 0.30	20.0 25.0	0.682 0.894	32.5 42.2	4.7 7.3
			CDMG 11369 Westmorland Fire Sta 00	13.3 999.9	ADD C	SUPERST\B-WSM-UP SUPERST\B-WSM090 SUPERST\B-WSM180	0.10 0.10 0.10	50.0 35.0 40.0	0.249 0.172 0.211	8.7 23.5 31.0	4.2 13.0 20.3
			USGS 5210 Wildlife Liquef. Array 00	24.4 999.9	IQD -	SUPERST\B-IVW-UP SUPERST\B-IVW090 SUPERST\B-IVW360	0.10 0.10 0.10	50.0 50.0 40.0	0.408 0.181 0.207	6.0 29.9 34.5	3.9 19.9 21.0
Spitak, Armenia 03	1988 1207	6.8 0.0 7.0 0.0	12 Gukasian 99	30.0 999.9	A-A -	SPITAK\GUK-UP SPITAK\GUK000 SPITAK\GUK090	0.50 0.50 0.50	25.0 25.0 25.0	0.119 0.199 0.175	8.8 28.6 15.1	4.3 9.8 4.3
Loma Prieta 03	1989 1018 0005	6.9 0.0 7.1 0.0	CDMG 57066 Agnews State Hospital 99	28.2 27.0	AQD C	LOMAP\AGW-UP LOMAP\AGW000 LOMAP\AGW090	0.20 0.20 0.20	42.0 30.0 30.0	0.093 0.172 0.159	8.3 26.0 17.6	4.43 12.64 9.75
			USN 99999 Alameda Naval Air Stn Hanger 23 99	999.9 75.2	-HE C	LOMAP\NAS-UP LOMAP\NAS180 LOMAP\NAS270	0.10 0.10 0.10	00.0 00.0 00.0	0.061 0.268 0.209	4.7 22.0 42.5	2.20 5.15 14.07
			USGS 1652 Anderson Dam (Downstream) 99	21.4 20.0	AFD B	LOMAP\AND-UP LOMAP\AND270 LOMAP\AND360	0.20 0.20 0.20	48.0 41.0 40.0	0.151 0.244 0.240	9.9 20.3 18.4	3.17 7.73 6.73
			USGS 1652 Anderson Dam (L Abut)	21.4	AQA	LOMAP\ADL-UP	0.10	41.0	0.053	9.3	4.07

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	20.0	B	LOMAP\ADL250	0.10	32.0	0.064	12.2	11.87
						LOMAP\ADL340	0.10	41.0	0.077	10.0	5.54
USGS	1002	APEEL 2 - Redwood City		47.9	IQD	LOMAP\A02-UP	0.10	40.0	0.083	9.5	3.15
	99			999.9	D	LOMAP\A02043	0.10	27.0	0.274	53.6	12.68
						LOMAP\A02133	0.10	22.0	0.220	34.3	6.87
CDMG	58393	APEEL 2E Hayward Muir Sch		57.4	ABD	LOMAP\A2E-UP	0.20	40.0	0.095	3.8	2.40
	99			56.3	C	LOMAP\A2E000	0.20	30.0	0.171	13.7	3.89
						LOMAP\A2E090	0.20	25.0	0.139	11.5	5.65
CDMG	58219	APEEL 3E Hayward CSUH		57.1	AVA	LOMAP\A3E-UP	0.20	38.0	0.047	4.2	3.33
	99			56.0	B	LOMAP\A3E000	0.20	30.0	0.078	5.6	3.93
						LOMAP\A3E090	0.20	30.0	0.084	6.4	3.57
CDMG	58378	APEEL 7 - Pulgas		47.7	IEA	LOMAP\A07-UP	0.10	30.0	0.061	6.2	3.08
	99			46.5	B	LOMAP\A07000	0.10	30.0	0.156	16.1	7.75
						LOMAP\A07090	0.10	22.0	0.088	15.7	8.41
USGS	1161	APEEL 9 - Crystal Springs Res		46.9	IQA	LOMAP\A09-UP	0.20	40.0	0.049	7.2	2.11
	99			46.4	B	LOMAP\A09137	0.20	40.0	0.113	15.6	5.78
						LOMAP\A09227	0.20	40.0	0.104	18.1	8.11
CDMG	58373	APEEL 10 - Skyline		47.8	I-A	LOMAP\A10-UP	0.10	30.0	0.037	8.0	3.71
	99			46.6	B	LOMAP\A10000	0.10	25.0	0.103	13.9	8.55
						LOMAP\A10090	0.10	20.0	0.088	24.0	7.35
CDMG	58262	Belmont - Envirotech		49.9	BFA	LOMAP\BES-UP	0.20	38.0	0.041	4.5	2.46
	99			48.7	B	LOMAP\BES000	0.20	22.0	0.108	11.8	3.30
						LOMAP\BES090	0.20	30.0	0.110	16.2	5.71
CDMG	58471	Berkeley LBL		83.6	--A	LOMAP\BRK-UP	0.20	20.0	0.039	3.9	1.40
	99			999.9	B	LOMAP\BRK000	0.20	20.0	0.057	9.2	1.78
						LOMAP\BRK090	0.20	18.0	0.117	20.9	4.44
UCSC	13	BRAN		10.3	--A	LOMAP\BRN-UP	0.10		0.507	17.9	4.17
	99			999.9	-	LOMAP\BRN000	0.10		0.453	51.3	8.37
						LOMAP\BRN090	0.10		0.501	44.6	4.86
CDMG	47125	Capitola		14.5	AQC	LOMAP\CAP-UP	0.20	50.0	0.541	19.4	2.60
	99			8.6	C	LOMAP\CAP000	0.20	48.0	0.529	36.5	9.11
						LOMAP\CAP090	0.20	40.0	0.443	29.3	5.50
CDMG	57007	Corralitos		5.1	APB	LOMAP\CLS-UP	0.20	32.0	0.455	17.7	7.11
	02			0.0	B	LOMAP\CLS000	0.20	40.0	0.644	55.2	10.88
						LOMAP\CLS090	0.20	40.0	0.479	45.2	11.37
CDMG	57504	Coyote Lake Dam (Downst)		22.3	IHD	LOMAP\CLD-UP	0.10	30.0	0.095	9.9	4.51
	02			21.7	B	LOMAP\CLD195	0.10	30.0	0.160	13.0	6.11
						LOMAP\CLD285	0.10	29.0	0.179	22.6	13.20
CDMG	57217	Coyote Lake Dam (SW Abut)		21.8	IFA	LOMAP\CYC-UP	0.10	50.0	0.076	8.6	3.21
	02			999.9	-	LOMAP\CYC195	0.10	31.0	0.151	16.2	7.37
						LOMAP\CYC285	0.10	33.0	0.484	39.7	15.17
CDMG	58375	Foster City - APEEL 1		51.2	IQE	LOMAP\A01-UP	0.10	50.0	0.075	5.8	2.70
	99			999.9	D	LOMAP\A01270	0.10	28.0	0.107	20.6	8.05
						LOMAP\A01360	0.10	30.0	0.116	20.4	3.94
USGS	1686	Fremont - Emerson Court		43.4	AQB	LOMAP\FMS-UP	0.10	38.0	0.067	8.6	6.37
	99			42.4	C	LOMAP\FMS090	0.10	31.0	0.192	12.7	5.50
						LOMAP\FMS180	0.10	32.0	0.141	12.9	8.37
CDMG	57064	Fremont - Mission San Jose		43.0	AMB	LOMAP\FRE-UP	0.20	32.0	0.080	8.5	5.30
	99			42.0	B	LOMAP\FRE000	0.20	24.0	0.124	11.5	5.43
						LOMAP\FRE090	0.20	28.0	0.106	8.8	4.36
CDMG	47006	Gilroy - Gavilan Coll.		11.6	AFB	LOMAP\GIL-UP	0.20	50.0	0.191	12.0	5.77
	99			10.9	B	LOMAP\GIL067	0.20	45.0	0.357	28.6	6.35
						LOMAP\GIL337	0.20	35.0	0.325	22.3	4.59
CDMG	57476	Gilroy - Historic Bldg.		12.7	BQD	LOMAP\GOF-UP	0.20	52.0	0.149	11.1	6.03

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			02	12.3	-	LOMAP\GOF090	0.20	38.0	0.284	42.0	11.10
						LOMAP\GOF180	0.20	40.0	0.241	24.0	3.66
CDMG 47379			Gilroy Array #1	11.2	IFA	LOMAP\G01-UP	0.20	52.0	0.209	14.0	5.59
	99			10.5	A	LOMAP\G01000	0.20	50.0	0.411	31.6	6.38
						LOMAP\G01090	0.20	50.0	0.473	33.9	8.03
CDMG 47380			Gilroy Array #2	12.7	IQD	LOMAP\G02-UP	0.20	40.0	0.294	14.6	4.66
	99			12.1	C	LOMAP\G02000	0.20	40.0	0.367	32.9	7.15
						LOMAP\G02090	0.20	31.0	0.322	39.1	12.07
CDMG 47381			Gilroy Array #3	14.4	IHD	LOMAP\G03-UP	0.10	50.0	0.338	15.5	7.03
	99			14.0	C	LOMAP\G03000	0.10	33.0	0.555	35.7	8.21
						LOMAP\G03090	0.10	40.0	0.367	44.7	19.25
CDMG 57382			Gilroy Array #4	16.1	AHD	LOMAP\G04-UP	0.20	42.0	0.159	14.6	5.10
	99			15.8	C	LOMAP\G04000	0.20	28.0	0.417	38.8	7.09
						LOMAP\G04090	0.20	30.0	0.212	37.9	10.08
CDMG 57383			Gilroy Array #6	19.9	IKB	LOMAP\G06-UP	0.20	32.0	0.101	9.5	4.10
	99			19.9	B	LOMAP\G06000	0.20	38.0	0.126	12.8	4.74
						LOMAP\G06090	0.20	31.0	0.170	14.2	3.79
CDMG 57425			Gilroy Array #7	24.2	AHB	LOMAP\GMR-UP	0.20	48.0	0.115	5.6	2.87
	99			24.3	C	LOMAP\GMR000	0.20	40.0	0.226	16.4	2.52
						LOMAP\GMR090	0.20	35.0	0.323	16.6	3.26
USGS 1678			Golden Gate Bridge	85.1	--A	LOMAP\GGB-UP	0.20	30.0	0.056	11.3	3.81
	99			999.9	B	LOMAP\GGB270	0.20	22.0	0.233	38.1	11.45
						LOMAP\GGB360	0.20	27.0	0.123	17.8	2.92
CDMG 57191			Halls Valley	31.6	IFC	LOMAP\HVR-UP	0.20	28.0	0.056	8.4	4.07
	02			29.3	C	LOMAP\HVR000	0.20	22.0	0.134	15.4	3.30
						LOMAP\HVR090	0.20	22.0	0.103	13.5	5.46
CDMG 58498			Hayward - BART Sta	58.9	I-D	LOMAP\HWB-UP	0.20	40.0	0.082	4.7	2.76
	99			57.7	B	LOMAP\HWB220	0.20	31.0	0.159	15.1	3.72
						LOMAP\HWB310	0.20	36.0	0.156	10.6	3.33
USGS 1028			Hollister City Hall	28.2	CHD	LOMAP\HCH-UP	0.10	32.0	0.216	14.9	7.11
	99			999.9	C	LOMAP\HCH090	0.10	29.0	0.247	38.5	17.83
						LOMAP\HCH180	0.10	30.0	0.215	45.0	26.10
USGS 1656			Hollister Diff. Array	25.8	IQD	LOMAP\HDA-UP	0.10	38.0	0.154	8.4	4.19
	99			999.9	C	LOMAP\HDA165	0.10	40.0	0.269	43.9	18.48
						LOMAP\HDA255	0.10	33.0	0.279	35.6	13.05
USGS 1032			Hollister - SAGO Vault	30.6	FGA	LOMAP\SGI-UP	0.10	40.0	0.042	5.0	3.95
	99			29.9	A	LOMAP\SGI270	0.10	32.0	0.036	7.1	4.55
						LOMAP\SGI360	0.10	31.0	0.060	8.4	4.89
CDMG 47524			Hollister - South & Pine	28.8	IQD	LOMAP\HSP-UP	0.10	31.0	0.197	15.1	7.06
	99			999.9	-	LOMAP\HSP000	0.10	29.0	0.371	62.4	30.28
						LOMAP\HSP090	0.10	23.0	0.177	29.1	18.13
UCSC 16			LGPC	6.1	--A	LOMAP\LGP-UP	0.10		0.890	54.9	17.56
	99			999.9	-	LOMAP\LGP000	0.10		0.563	94.8	41.18
						LOMAP\LGP090	0.10		0.605	51.0	11.50
CDMG 47377			Monterey City Hall	44.8	CGA	LOMAP\MCH-UP	0.20	32.0	0.032	2.7	0.92
	99			42.7	A	LOMAP\MCH000	0.20	28.0	0.073	3.5	1.41
						LOMAP\MCH090	0.20	22.0	0.063	5.8	2.89
CDMG 58224			Oakland - Title & Trust	77.4	BBD	LOMAP\TIB-UP	0.20	49.0	0.148	6.8	1.81
	99			76.3	C	LOMAP\TIB180	0.20	38.0	0.195	19.9	3.54
						LOMAP\TIB270	0.20	44.0	0.244	36.1	7.20
CDMG 58264			Palo Alto - 1900 Embarc.	36.1	BQD	LOMAP\PAE-UP	0.20	50.0	0.080	7.3	3.33
	99			34.8	C	LOMAP\PAE000	0.20	32.0	0.204	22.0	11.67
						LOMAP\PAE090	0.20	30.0	0.213	39.6	17.13
USGS 1601			Palo Alto - SLAC Lab	36.3	AMA	LOMAP\SLC-UP	0.20	40.0	0.090	10.2	2.82

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	35.0	B	LOMAP\SLC270	0.20	33.0	0.194	37.5	9.96
						LOMAP\SLC360	0.20	28.0	0.278	29.3	9.72
			CDMG 58338 Piedmont Jr High	78.3	IFA	LOMAP\PJH-UP	0.20	32.0	0.026	2.5	1.91
			99	77.2	A	LOMAP\PJH045	0.20	27.0	0.084	8.2	2.94
						LOMAP\PJH315	0.20	28.0	0.071	9.1	3.35
			CDMG 58043 Point Bonita	88.6	AFA	LOMAP\PTB-UP	0.20	21.0	0.034	7.2	2.67
			99	999.9	A	LOMAP\PTB207	0.20	22.0	0.071	11.4	3.98
						LOMAP\PTB297	0.20	20.0	0.072	12.9	3.93
			CDMG 58505 Richmond City Hall	93.1	IHD	LOMAP\RCH-UP	0.20	30.0	0.032	4.4	1.27
			99	999.9	C	LOMAP\RCH190	0.20	25.0	0.124	17.3	2.59
						LOMAP\RCH280	0.20	29.0	0.106	14.2	3.91
			CDMG 47189 SAGO South - Surface	34.7	IGB	LOMAP\SG3-UP	0.10	29.0	0.060	7.8	5.86
			99	34.1	B	LOMAP\SG3261	0.10	25.0	0.073	10.5	6.40
						LOMAP\SG3351	0.10	30.0	0.067	9.6	6.42
			CDMG 47179 Salinas - John & Work	32.6	AHD	LOMAP\SJW-UP	0.10	42.0	0.101	6.7	2.38
			99	31.4	C	LOMAP\SJW160	0.10	30.0	0.091	10.7	8.56
						LOMAP\SJW250	0.10	28.0	0.112	15.7	7.87
			CDMG 58065 Saratoga - Aloha Ave	13.0	AQD	LOMAP\STG-UP	0.10	58.0	0.389	26.9	15.15
			99	11.7	B	LOMAP\STG000	0.10	38.0	0.512	41.2	16.21
						LOMAP\STG090	0.10	50.0	0.324	42.6	27.53
			CDMG 58235 Saratoga - W Valley Coll.	13.7	AQD	LOMAP\WVCXXX	-99.				
			99	12.0	B	LOMAP\WVC000	0.10	38.0	0.255	42.4	19.55
						LOMAP\WVC270	0.10	49.0	0.332	61.5	36.40
			CDMG 58132 SF - Cliff House	84.4	CFA	LOMAP\CFH-UP	0.20	29.0	0.062	7.7	2.38
			99	999.9	-	LOMAP\CFH000	0.20	22.0	0.075	10.8	4.35
						LOMAP\CFH090	0.20	28.0	0.108	19.8	5.06
			CDMG 58130 SF - Diamond Heights	77.0	BFA	LOMAP\DMH-UP	0.20	30.0	0.043	6.7	2.07
			99	75.9	B	LOMAP\DMH000	0.20	30.0	0.098	10.0	2.10
						LOMAP\DMH090	0.20	22.0	0.113	13.1	3.36
			CDMG 58131 SF - Pacific Heights	81.6	BFA	LOMAP\PHT-UP	0.20	24.0	0.031	6.0	2.87
			99	80.5	A	LOMAP\PHT270	0.20	22.0	0.061	12.8	3.45
						LOMAP\PHT360	0.20	20.0	0.047	9.2	2.92
			CDMG 58222 SF - Presidio	83.1	IFA	LOMAP\PRS-UP	0.10	31.0	0.058	11.7	4.07
			99	999.9	B	LOMAP\PRS000	0.10	32.0	0.099	12.9	4.32
						LOMAP\PRS090	0.10	32.0	0.200	32.4	5.86
			CDMG 58151 SF - Rincon Hill	79.7	IFA	LOMAP\RIN-UP	0.20	39.0	0.029	3.6	2.38
			99	78.5	A	LOMAP\RIN000	0.20	41.0	0.078	6.7	2.58
						LOMAP\RIN090	0.20	40.0	0.092	10.4	3.91
			CDMG 58133 SF - Telegraph Hill	82.0	CFA	LOMAP\TLH-UP	0.10	22.0	0.026	3.0	1.55
			99	999.9	-	LOMAP\TLH000	0.10	29.0	0.036	3.3	1.40
						LOMAP\TLH090	0.10	28.0	0.077	6.7	4.45
			CDMG 58223 SF Intern. Airport	64.4	AHD	LOMAP\SFO-UP	0.20	38.0	0.065	5.2	2.47
			99	63.2	C	LOMAP\SFO000	0.20	31.0	0.236	25.5	4.20
						LOMAP\SFO090	0.20	30.0	0.329	27.9	6.03
			CDMG 58539 So. San Francisco, Sierra Pt.	68.2	AFA	LOMAP\SSF-UP	0.06	30.0	0.034	4.7	3.35
			99	67.6	A	LOMAP\SSF115	0.06	35.0	0.056	7.1	5.18
						LOMAP\SSF205	0.06	30.0	0.105	8.8	4.59
			USGS 17 Stanford Park. Garage	36.3	---	LOMAP\SPGXXX	-99.				
			99	999.9	-	LOMAP\SPG360	0.10	70.0	0.254	38.5	15.89
						LOMAP\SPGXXX	-99.				
			USGS 1695 Sunnyvale - Colton Ave.	28.8	AHD	LOMAP\SVL-UP	0.10	50.0	0.104	8.6	4.06
			99	27.5	C	LOMAP\SVL270	0.10	40.0	0.207	37.3	19.11
						LOMAP\SVL360	0.10	32.0	0.209	36.0	16.90
			CDMG 58117 Treasure Island	82.9	BHD	LOMAP\TRI-UP	0.10	21.0	0.016	1.2	1.44

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			99	999.9	D	LOMAP\TRI000	0.10	28.0	0.100	15.6	4.41
			UCSC 15 UCSC	18.1	--B	LOMAP\TRI090	0.10	30.0	0.159	32.8	11.52
			01	999.9	-	LOMAP\UC2-UP	0.10		0.223	6.7	1.77
						LOMAP\UC2000	0.10		0.309	10.3	2.80
						LOMAP\UC2090	0.10		0.396	13.2	2.32
			CDMG 58135 UCSC Lick Observatory	17.9	AKA	LOMAP\LOB-UP	0.20	50.0	0.367	10.6	5.39
			01	12.5	B	LOMAP\LOB000	0.20	40.0	0.450	18.7	3.84
						LOMAP\LOB090	0.20	40.0	0.395	17.6	5.00
			UCSC 14 WAHO	16.9	AQD	LOMAP\WAH-UP	0.10		0.267	12.0	2.01
			99	999.9	-	LOMAP\WAH000	0.10		0.370	27.2	3.84
						LOMAP\WAH090	0.10		0.638	38.0	5.85
			CDMG 58127 Woodside	39.9	APB	LOMAP\WDS-UP	0.10	31.0	0.050	6.2	2.80
			99	38.7	B	LOMAP\WDS000	0.10	25.0	0.080	13.7	8.47
						LOMAP\WDS090	0.10	25.0	0.082	16.7	8.89
			CDMG 58163 Yerba Buena Island	80.6	AFA	LOMAP\YBI-UP	0.20	32.0	0.028	3.8	1.82
			99	79.5	A	LOMAP\YBI000	0.20	22.0	0.029	4.2	1.45
						LOMAP\YBI090	0.20	31.0	0.068	13.4	3.26
Griva, Greece 99	1990 1221 0658	0.0 5.9 0.0 0.0	99999 Kilkisa	999.9	---	GREECE\L-KIL-UP	0.60	30.0	0.030	1.8	0.20
			99	999.9	-	GREECE\L-KIL-NS	0.60	30.0	0.046	3.9	0.45
						GREECE\L-KIL-WE	0.70	30.0	0.047	2.8	0.35
			99999 Edesa	999.9	---	GREECE\L-EDE-UP	0.23	30.0	0.045	3.5	0.77
			99	999.9	-	GREECE\L-EDE-NS	0.30	30.0	0.124	10.4	1.07
						GREECE\L-EDE-WE	0.70	30.0	0.090	8.6	0.92
Georgia, USSR 99	1991 0615 0059	0.0 0.0 6.2 0.0	18 Ambralauri	73.7*	A-A	GEORGIA\AMB--Z	0.10		0.007	1.0	0.31
			99	999.9	-	GEORGIA\AMB--X	0.10		0.018	1.8	0.54
						GEORGIA\AMB--Y	0.10		0.016	1.3	0.39
			21 Baz	49.0*	A-D	GEORGIA\BAZ--Z	0.10		0.016	1.4	0.39
			99	999.9	-	GEORGIA\BAZ--X	0.10		0.033	2.2	0.40
						GEORGIA\BAZ--Y	0.10		0.038	2.0	0.35
			19 Iri	36.4*	A-D	GEORGIA\IRI--Z	0.20		0.045	2.9	0.59
			99	999.9	-	GEORGIA\IRI--X	0.20		0.117	7.4	0.96
						GEORGIA\IRI--Y	0.20		0.111	7.9	0.81
			20 Oni	52.0*	A-D	GEORGIA\ONI--Z	0.20		0.018	1.2	0.32
			99	999.9	-	GEORGIA\ONI--X	0.20		0.075	3.1	0.40
						GEORGIA\ONI--Y	0.20		0.046	2.6	0.44
			22 Zem	56.9*	A-D	GEORGIA\ZEM--Z	0.20		0.026	2.1	0.62
			99	999.9	-	GEORGIA\ZEM--X	0.20		0.061	4.7	0.83
						GEORGIA\ZEM--Y	0.20		0.065	4.0	0.49
Erzincan, Turkey 99	1992 0313	6.9 0.0 0.0 0.0	95 Erzincan	2.0	--D	ERZIKAN\ERZ-UP	0.20		0.248	18.3	7.86
			99	999.9	C	ERZIKAN\ERZ-NS	0.10		0.515	83.9	27.35
						ERZIKAN\ERZ-EW	0.10		0.496	64.3	22.78
Roermond 99	1992 0413 0120	0.0 0.0 0.0 0.0	99999 GSH	999.9	---	ROERMOND\GSHXXX	-99.				
			99	999.9	-	ROERMOND\GSH-NS	0.60	50.0	0.012	0.7	0.05
						ROERMOND\GSH-EW	0.40	50.0	0.012	0.6	0.06
			99999 OLF	999.9	---	ROERMOND\OL2-UP	0.40	43.0	0.004	0.3	0.03
			99	999.9	-	ROERMOND\OL2-NS	0.80	60.0	0.006	0.4	0.04
						ROERMOND\OL2-EW	0.60	80.0	0.006	0.5	0.06
			99999 WBS	999.9	---	ROERMOND\WBS-UP	0.20	50.0	0.006	0.5	0.07
			99	999.9	-	ROERMOND\WBS-NS	0.30	50.0	0.005	0.3	0.04
						ROERMOND\WBS-EW	0.50	50.0	0.009	0.4	0.05

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USC 90087 Brea - S Flower Av #	99			136.5	--D	LANDERS\FLO-UP	0.20	25.0	0.018	3.7	1.30
				999.9	C	LANDERS\FLO020	0.13	25.0	0.036	11.0	6.15
USC 90086 Buena Park - La Palma #	99			148.6	--D	LANDERS\FLO290	0.12	25.0	0.045	11.3	7.55
				999.9	C	LANDERS\BPK-UP	0.55	25.0	0.009	0.9	0.18
USC 90012 Burbank - N Buena Vista #	99			162.1	--D	LANDERS\BPK090	0.18	25.0	0.045	11.5	4.81
				999.9	C	LANDERS\BPK180	0.15	25.0	0.052	8.8	5.64
USC 90052 Calabasas - N Las Virg #	99			194.1	--B	LANDERS\BUE-UP	0.33	25.0	0.023	4.7	1.03
				999.9	B	LANDERS\BUE250	0.25	25.0	0.049	7.2	2.18
USC 90004 Chatsworth - Devonshire #	99			176.8	--D	LANDERS\BUE340	0.28	25.0	0.068	10.4	2.86
				999.9	C	LANDERS\VIR-UP	0.50	25.0	0.013	1.4	0.31
USC 90078 Compton - Castlegate St #	99			161.2	--D	LANDERS\VIR200	0.28	25.0	0.018	2.8	0.81
				999.9	C	LANDERS\VIR290	0.20	22.5	0.012	2.5	0.95
SCE 23 Coolwater	99			21.2	--D	LANDERS\DEV-UP	0.20	25.0	0.018	3.8	1.31
				22.8	B	LANDERS\DEV000	0.23	25.0	0.031	4.2	1.50
USC 90070 Covina - W Badillo #	99			128.3	--D	LANDERS\DEV090	0.07	25.0	0.033	6.5	5.97
				999.9	C	LANDERS\CAS-UP	1.25	25.0	0.020	0.8	0.07
CDMG 12149 Desert Hot Springs #	99			23.2	--D	LANDERS\CAS000	0.15	22.5	0.065	12.2	4.99
				22.5	B	LANDERS\CAS270	0.15	25.0	0.063	13.1	4.05
CDMG 14368 Downey - Co Maint Bldg #	99			157.0	--D	LANDERS\CLW-UP	0.10	30.0	0.174	9.9	4.01
				999.9	C	LANDERS\CLW-LN	0.10	30.0	0.283	25.6	13.74
USC 90067 Duarte - Mel Canyon Rd #	99			126.4	--D	LANDERS\CLW-TR	0.10	30.0	0.417	42.3	13.76
				999.9	C	LANDERS\BAD-UP	0.15	25.0	0.029	6.1	2.42
CDMG 12149 Desert Hot Springs #	99			23.2	--D	LANDERS\BAD000	0.13	25.0	0.057	15.8	9.60
				22.5	B	LANDERS\BAD270	0.28	25.0	0.046	7.5	2.09
CDMG 14368 Downey - Co Maint Bldg #	99			157.0	AQD	LANDERS\DSP-UP	0.07	23.0	0.167	9.9	3.71
				999.9	C	LANDERS\DSP000	0.07	23.0	0.171	20.2	13.87
USC 90067 Duarte - Mel Canyon Rd #	99			126.4	--B	LANDERS\DSP090	0.07	23.0	0.154	20.9	7.78
				999.9	B	LANDERS\DWN-UP	0.07	23.0	0.016	6.4	4.46
USC 90066 El Monte - Fairview Av #	99			136.1	--D	LANDERS\DWN000	0.07	23.0	0.051	18.3	24.03
				999.9	C	LANDERS\DWN090	0.07	23.0	0.039	11.3	10.32
CDMG 13122 Featherly Park - Maint #	99			121.9	--B	LANDERS\MEL-UP	0.28	25.0	0.019	4.0	1.14
				999.9	B	LANDERS\MEL090	0.28	25.0	0.026	3.5	0.86
USC 90067 Duarte - Mel Canyon Rd #	99			126.4	--D	LANDERS\MEL180	0.30	25.0	0.017	2.8	1.05
				999.9	C	LANDERS\FAI-UP	0.25	25.0	0.021	3.8	1.30
CDMG 13122 Featherly Park - Maint #	99			121.9	--D	LANDERS\FAI095	0.09	25.0	0.037	11.8	9.40
				999.9	B	LANDERS\FAI185	0.23	25.0	0.038	7.4	2.58
CDMG 24577 Fort Irwin #	99			64.2	AMC	LANDERS\FEA-UP	0.16	23.0	0.026	2.2	1.25
				65.0	B	LANDERS\FEA000	0.16	23.0	0.051	7.0	3.63
USC 90002 Fountain Valley - Euclid #	99			148.8	--D	LANDERS\FEA090	0.16	23.0	0.052	4.6	2.66
				999.9	C	LANDERS\FTI-UP	0.07	23.0	0.056	5.6	3.90
USC 90063 Glendale - Las Palmas #	99			147.9	--D	LANDERS\FTI000	0.07	23.0	0.114	9.7	3.66
				999.9	B	LANDERS\FTI090	0.07	23.0	0.122	16.4	21.81
USC 90065 Glendora - N Oakbank #	99			122.2	--D	LANDERS\EUC-UP	0.90	25.0	0.014	1.0	0.11
				999.9	C	LANDERS\EUC022	0.13	25.0	0.069	14.7	7.87
USC 90073 Hacienda Heights - Colima #	99			136.0	--D	LANDERS\EUC292	0.13	25.0	0.058	10.3	4.70
				999.9	C	LANDERS\GLP-UP	1.10	25.0	0.027	1.0	0.07
USC 90063 Glendale - Las Palmas #	99			147.9	--C	LANDERS\GLP177	0.30	25.0	0.044	6.4	1.07
				999.9	C	LANDERS\GLP267	0.28	25.0	0.071	4.1	0.74
USC 90065 Glendora - N Oakbank #	99			122.2	--D	LANDERS\GLP267	0.28	25.0	0.071	4.1	0.74
				999.9	B	LANDERS\OAK-UP	0.38	25.0	0.030	2.8	0.60
USC 90073 Hacienda Heights - Colima #	99			136.0	--D	LANDERS\OAK080	0.30	25.0	0.039	5.1	1.36
				999.9	C	LANDERS\OAK170	0.28	25.0	0.063	9.9	2.79
USC 90073 Hacienda Heights - Colima #	99			136.0	--C	LANDERS\COM-UP	0.20	25.0	0.027	2.9	1.11
				999.9	C	LANDERS\COM140	0.28	25.0	0.058	8.5	2.63
						LANDERS\COM230	0.25	25.0	0.046	5.7	1.31

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 12331 Hemet Fire Station #	69.5	AQD	LANDERS\H05-UP	0.16	23.0	0.063	3.0	1.60
			99	69.1	C	LANDERS\H05000	0.16	23.0	0.081	5.6	1.36
						LANDERS\H05090	0.16	23.0	0.097	5.7	2.27
			USC 90083 Huntington Bch - Waikiki #	153.3	--D	LANDERS\WAI-UP	0.63	25.0	0.012	1.0	0.15
			99	999.9	C	LANDERS\WAI200	0.14	25.0	0.056	9.5	5.09
						LANDERS\WAI290	0.12	25.0	0.059	10.8	4.07
			CDMG 12026 Indio - Coachella Canal #	55.7	IQD	LANDERS\IND-UP	0.10	23.0	0.042	6.6	3.99
			99	54.9	C	LANDERS\IND000	0.10	23.0	0.104	9.6	5.05
						LANDERS\IND090	0.10	23.0	0.109	15.2	9.69
			CDMG 14196 Inglewood - Union Oil #	166.9	IQD	LANDERS\ING-UP	0.07	23.0	0.015	4.8	5.52
			99	999.9	B	LANDERS\ING000	0.07	23.0	0.043	15.7	19.03
						LANDERS\ING090	0.07	23.0	0.035	10.5	9.99
			CDMG 22170 Joshua Tree #	11.6	AGC	LANDERS\JOS-UP	0.07	23.0	0.181	15.0	9.39
			99	11.3	B	LANDERS\JOS000	0.07	23.0	0.274	27.5	9.82
						LANDERS\JOS090	0.07	23.0	0.284	43.2	14.51
			CDMG 14403 LA - 116th St School #	164.0	AQD	LANDERS\116-UP	0.07	23.0	0.013	5.2	4.36
			99	999.9	B	LANDERS\116000	0.07	23.0	0.042	14.1	17.91
						LANDERS\116090	0.07	23.0	0.042	12.1	13.75
			USC 90025 LA - E Vernon Ave #	157.7	--D	LANDERS\VER-UP	0.38	25.0	0.019	2.2	0.61
			99	999.9	C	LANDERS\VER090	0.13	25.0	0.034	7.7	4.64
						LANDERS\VER180	0.18	25.0	0.039	8.9	4.24
			USC 90034 LA - Fletcher Dr #	152.3	--D	LANDERS\FLE-UP	0.20	22.5	0.024	3.1	0.62
			99	999.9	C	LANDERS\FLE144	0.28	25.0	0.045	6.2	1.48
						LANDERS\FLE234	0.28	25.0	0.040	4.0	1.10
			USC 90032 LA - N Figueroa St #	148.7	--C	LANDERS\FIG-UP	0.40	25.0	0.016	2.3	0.52
			99	999.9	B	LANDERS\FIG058	0.35	25.0	0.030	3.6	1.09
						LANDERS\FIG328	0.38	25.0	0.037	4.3	1.09
			USC 90021 LA - N Westmoreland	159.2	--D	LANDERS\WST-UP	0.53	25.0	0.016	1.9	0.38
			99	999.9	B	LANDERS\WST000	0.38	25.0	0.044	3.7	0.81
						LANDERS\WST270	0.25	25.0	0.036	3.9	1.31
			CDMG 24400 LA - Obregon Park #	151.4	AQD	LANDERS\OBR-UP	0.07	23.0	0.020	4.1	3.72
			99	999.9	B	LANDERS\OBR000	0.07	23.0	0.043	15.5	16.38
						LANDERS\OBR090	0.07	23.0	0.065	7.6	5.83
			USC 90022 LA - S Grand Ave #	161.1	--D	LANDERS\GR2-UP	0.40	25.0	0.014	1.9	0.51
			99	999.9	C	LANDERS\GR2090	0.28	25.0	0.028	4.7	1.64
						LANDERS\GR2180	0.18	25.0	0.035	6.6	2.88
			USC 90020 LA - W 15th St #	161.2	--C	LANDERS\W15-UP	0.30	25.0	0.015	3.3	1.02
			99	999.9	C	LANDERS\W15090	0.09	25.0	0.029	7.8	5.44
						LANDERS\W15180	0.30	25.0	0.036	6.3	1.89
			USC 90023 LA - W 70th St #	167.8	--D	LANDERS\W70-UP	0.35	25.0	0.014	1.8	0.56
			99	999.9	C	LANDERS\W70000	0.18	25.0	0.055	9.6	3.06
						LANDERS\W70270	0.20	25.0	0.049	11.3	3.93
			USC 90060 La Crescenta - New York #	147.9	--C	LANDERS\NYA-UP	0.50	25.0	0.014	1.9	0.32
			99	999.9	C	LANDERS\NYA090	0.40	25.0	0.024	2.7	0.56
						LANDERS\NYA180	0.30	25.0	0.030	4.3	1.11
			USC 90074 La Habra - Briarcliff #	142.8	--C	LANDERS\BRC-UP	0.53	25.0	0.026	2.2	0.44
			99	999.9	C	LANDERS\BRC000	0.25	25.0	0.051	10.0	3.84
						LANDERS\BRC090	0.23	25.0	0.053	9.5	3.04
			USC 90072 La Puente - Rimgrove Av #	132.0	--D	LANDERS\RIM-UP	0.25	25.0	0.017	3.5	0.77
			99	999.9	C	LANDERS\RIM015	0.13	25.0	0.035	8.3	4.39
						LANDERS\RIM105	0.12	25.0	0.043	8.1	5.42
			USC 90084 Lakewood - Del Amo Blvd #	155.8	--D	LANDERS\DEL-UP	0.50	25.0	0.016	1.7	0.35
			99	999.9	C	LANDERS\DEL000	0.16	25.0	0.054	14.1	4.88
						LANDERS\DEL090	0.15	25.0	0.050	12.8	5.14

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
USC 90080	LB - Orange Ave #		99	164.5	--D	LANDERS\OR2-UP	0.50	25.0	0.019	1.6	0.30
				999.9	C	LANDERS\OR2010	0.15	25.0	0.055	9.5	4.23
						LANDERS\OR2280	0.15	25.0	0.061	11.1	4.40
SCE 24	Lucerne Iwan Processing		99	1.1	A-A	LANDERS\LCNWI-UP	0.00	60.0	0.823	41.1	40.70
				999.9	A	LANDERS\LCNWI260	0.00	60.0	0.727	146.5	262.70
						LANDERS\LCNWI345	0.00	60.0	0.789	32.4	69.78
SCE 24	Lucerne PE&A and Iwan Proc.		99	1.1	A-A	LANDERS\LCN-UP	0.08	60.0	0.818	45.9	22.23
				999.9	A	LANDERS\LCN260	0.08	60.0	0.721	97.6	70.31
						LANDERS\LCN345	0.08	60.0	0.785	31.9	16.42
USGS 100	Mission Creek Fault		99	999.9	---	LANDERS\MCF-UP	0.05		0.085	4.3	1.69
				27.8	B	LANDERS\MCF000			0.126	6.8	2.31
						LANDERS\MCF090	0.05		0.125	23.0	24.44
USGS 5071	Morongo Valley		99	19.3	AHC	LANDERS\MVH-UP			0.160	9.3	3.33
				17.7	B	LANDERS\MVH000			0.188	16.6	9.45
						LANDERS\MVH090			0.140	20.2	6.33
USGS 5070	North Palm Springs		99	24.2	AHD	LANDERS\NPS-UP			0.112	7.2	2.40
				27.7	B	LANDERS\NPS000			0.136	11.0	4.97
						LANDERS\NPS090			0.134	14.5	5.57
USC 90003	Northridge - 17645 Saticoy St #		99	176.5	--D	LANDERS\STC-UP	0.20	25.0	0.017	4.5	1.69
				999.9	C	LANDERS\STC090	0.08	25.0	0.036	12.2	8.82
						LANDERS\STC180	0.07	25.0	0.036	15.9	17.06
CDMG 12025	Palm Springs Airport #		99	37.5	IQD	LANDERS\PSA-UP	0.07	23.0	0.108	6.8	3.08
				36.7	C	LANDERS\PSA000	0.07	23.0	0.076	10.9	6.95
						LANDERS\PSA090	0.07	23.0	0.089	13.8	5.29
CDMG 23525	Pomona - 4th & Locust FF #		99	117.0	IQD	LANDERS\PMN-UP	0.12	23.0	0.035	2.8	1.54
				117.6	C	LANDERS\PMN000	0.12	23.0	0.067	12.8	6.95
						LANDERS\PMN090	0.12	23.0	0.044	8.6	3.52
CDMG 12168	Puerta La Cruz #		99	95.9	AQB	LANDERS\PLC-UP	0.30	23.0	0.038	1.7	0.48
				93.1	B	LANDERS\PLC000	0.30	23.0	0.047	2.0	0.41
						LANDERS\PLC090	0.30	23.0	0.044	2.0	0.63
CDMG 13123	Riverside Airport #		99	96.1	AQB	LANDERS\RIV-UP	0.16	23.0	0.040	1.7	1.01
				96.2	B	LANDERS\RIV180	0.16	23.0	0.043	3.0	1.62
						LANDERS\RIV270	0.16	23.0	0.041	3.2	1.38
CDMG 23542	San Bernardino-E & Hospitality		99	80.5	--D	LANDERS\HOS-UP	0.10	50.0	0.065	7.5	2.64
				79.9	C	LANDERS\HOS090	0.10	50.0	0.078	19.8	10.49
						LANDERS\HOS180	0.10	50.0	0.087	14.6	7.63
USC 90019	San Gabriel - E Grand Ave		99	141.6	--A	LANDERS\GRN-UP	0.16	22.5	0.022	6.3	2.97
				999.9	A	LANDERS\GRN180	0.07	25.0	0.041	14.1	15.03
						LANDERS\GRN270	0.13	25.0	0.036	9.6	6.03
USC 90077	Santa Fe Springs - E Joslin #		99	150.4	--D	LANDERS\EJS-UP	0.35	25.0	0.024	1.5	0.47
				999.9	C	LANDERS\EJS030	0.18	25.0	0.060	5.9	2.67
						LANDERS\EJS120	0.15	25.0	0.047	9.2	4.23
CDMG 12206	Silent Valley - Poppet Flat #		99	51.7	IGA	LANDERS\SIL-UP	0.12	23.0	0.038	3.2	2.08
				51.3	A	LANDERS\SIL000	0.12	23.0	0.050	3.8	2.03
						LANDERS\SIL090	0.12	23.0	0.040	5.1	3.88
USC 90008	Sun Valley - Sunland #		99	162.6	--B	LANDERS\SUL-UP	1.00	25.0	0.012	0.9	0.08
				999.9	B	LANDERS\SUL230	0.33	25.0	0.027	2.6	0.71
						LANDERS\SUL320	0.45	25.0	0.021	2.9	0.60
USC 90006	Sun Valley - Roscoe Blvd #		99	167.8	--D	LANDERS\RO3-UP	0.12	25.0	0.021	4.4	2.48
				999.9	B	LANDERS\RO3000	0.07	25.0	0.039	18.1	18.27
						LANDERS\RO3090	0.18	25.0	0.028	7.0	2.62
USC 90058	Sunland - Mt Gleason Ave #		99	151.1	--C	LANDERS\GLE-UP	0.20	25.0	0.021	2.8	0.91
				999.9	B	LANDERS\GLE170	0.33	25.0	0.029	5.3	1.40
						LANDERS\GLE260	0.25	25.0	0.031	6.0	1.70

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CDMG 24436 Tarzana - Cedar Hill # 99	175.6 999.9	APB C	LANDERS\TAR-UP LANDERS\TAR000 LANDERS\TAR090	0.12 0.12 0.12	23.0 23.0 23.0	0.026 0.066 0.043	2.5 9.5 5.4	1.16 5.83 3.18
			USC 90089 Tustin - E Sycamore # 99	134.0 999.9	--D C	LANDERS\SYC-UP LANDERS\SYC135 LANDERS\SYC225	0.28 0.13 0.23	25.0 25.0 25.0	0.017 0.044 0.046	3.3 14.2 6.6	0.97 5.90 2.11
			CDMG 22161 Twentynine Palms # 99	42.2 41.9	AGA A	LANDERS\29P-UP LANDERS\29P000 LANDERS\29P090	0.12 0.12 0.12	23.0 23.0 23.0	0.040 0.080 0.060	3.3 3.7 4.9	1.93 2.34 4.30
			USC 90090 Villa Park - Serrano Ave # 99	131.4 999.9	--B B	LANDERS\SER-UP LANDERS\SER000 LANDERS\SER270	0.20 0.11 0.18	25.0 25.0 25.0	0.021 0.028 0.035	2.8 8.0 7.0	0.93 5.32 3.51
			USC 90071 West Covina - S Orange # 99	132.4 999.9	--B C	LANDERS\SOR-UP LANDERS\SOR225 LANDERS\SOR315	0.25 0.28 0.13	25.0 25.0 25.0	0.023 0.048 0.048	5.7 8.7 15.1	2.38 2.30 12.06
			CDMG 22074 Yermo Fire Station # 99	24.9 26.3	AQD C	LANDERS\YER-UP LANDERS\YER270 LANDERS\YER360	0.07 0.07 0.07	23.0 23.0 23.0	0.136 0.245 0.152	12.9 51.5 29.7	4.82 43.81 24.69
Big Bear 99	1992 0628 1506	6.4 6.5 6.6 0.0	CDMG 23542 San Bernardino-E &Hospitality 99	999.9 999.9	--D C	BIGBEAR\HOS-UP BIGBEAR\HOS090 BIGBEAR\HOS180	0.10 0.10 0.10	50.0 50.0 50.0	0.073 0.092 0.101	4.5 13.8 11.9	1.12 3.53 3.35
Northridge 02	1994 0117 1231	6.7 6.6 6.7 0.0	CDMG 24461 Alhambra - Fremont School 99	35.7 36.1	AMD B	NORTHR\ALH-UP NORTHR\ALH090 NORTHR\ALH360	0.12 0.12 0.12	25.0 25.0 25.0	0.046 0.101 0.079	4.6 10.9 5.0	1.12 2.53 1.43
			CDMG 25169 Anacapa Island # 99	71.2 68.2	AGA -	NORTHR\ACI-UP NORTHR\ACI000 NORTHR\ACI270	0.30 0.30 0.30	23.0 23.0 23.0	0.013 0.067 0.037	0.8 3.2 1.8	0.25 0.47 0.25
			USC 90088 Anaheim - W Ball Rd 99	71.1 999.9	--D C	NORTHR\WBA-UP NORTHR\WBA000 NORTHR\WBA090	1.00 0.23 0.23	30.0 30.0 30.0	0.048 0.072 0.066	1.5 5.2 5.1	0.11 1.00 1.53
			CDMG 24576 Anaverde Valley - City R # 99	38.4 39.1	IHD C	NORTHR\ANA-UP NORTHR\ANA090 NORTHR\ANA180	0.20 0.20 0.20	46.0 46.0 46.0	0.044 0.044 0.060	4.7 3.9 5.5	1.70 1.09 1.54
			CDMG 24310 Antelope Buttes # 99	47.3 48.4	IGA A	NORTHR\ATB-UP NORTHR\ATB000 NORTHR\ATB090	0.12 0.12 0.12	23.0 23.0 23.0	0.029 0.046 0.068	3.6 3.6 4.3	2.63 2.26 2.23
			USC 90099 Arcadia - Arcadia Av 99	42.5 40.6	--D C	NORTHR\ARC-UP NORTHR\ARC172 NORTHR\ARC262	0.50 0.25 0.30	30.0 30.0 30.0	0.092 0.104 0.083	4.0 7.3 10.2	0.56 1.59 1.61
			USC 90093 Arcadia - Campus Dr 99	44.2 42.4	--D C	NORTHR\CAM-UP NORTHR\CAM009 NORTHR\CAM279	0.50 0.30 0.23	30.0 30.0 30.0	0.057 0.089 0.110	4.2 4.7 8.1	0.59 1.29 1.73
			CDMG 24087 Arleta - Nordhoff Fire Sta # 99	9.2 3.9	AQD C	NORTHR\ARL-UP NORTHR\ARL090 NORTHR\ARL360	0.12 0.12 0.12	23.0 23.0 23.0	0.552 0.344 0.308	18.4 40.6 23.2	8.83 15.04 10.75
			USC 90069 Baldwin Park - N Holly 99	50.6 49.0	--D C	NORTHR\NHO-UP NORTHR\NHO180 NORTHR\NHO270	0.70 0.20 0.23	30.0 30.0 30.0	0.045 0.090 0.123	1.7 3.9 8.2	0.23 1.19 1.33
			USC 90094 Bell Gardens - Jaboneria 99	46.6 42.5	--D C	NORTHR\JAB-UP NORTHR\JAB220 NORTHR\JAB310	0.13 0.13 0.13	30.0 30.0 30.0	0.049 0.098 0.068	3.5 7.4 7.6	1.88 3.50 2.46
			USC 90014 Beverly Hills - 12520 Mulhol 99	20.8	--C	NORTHR\MU2-UP	0.30	30.0	0.314	14.1	1.31

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			99	999.9	B	NORTHR\MU2035	0.13	30.0	0.617	40.8	8.57
						NORTHR\MU2125	0.03	30.0	0.444	30.2	4.84
			USC 90013 Beverly Hills - 14145 Mulhol	19.6	--C	NORTHR\MUL-UP	0.40	30.0	0.326	16.9	2.56
			99	999.9	B	NORTHR\MUL009	0.13	30.0	0.416	59.0	13.14
						NORTHR\MUL279	0.20	30.0	0.516	62.8	11.08
			USC 90061 Big Tujunga, Angeles Nat F	24.0	--C	NORTHR\tUJ-UP	0.30	30.0	0.172	3.8	0.56
			99	21.9	B	NORTHR\tUJ262	0.30	30.0	0.163	8.1	0.83
						NORTHR\tUJ352	0.30	30.0	0.245	12.7	1.12
			USC 90087 Brea - S Flower Av	67.3	--D	NORTHR\FLO-UP	0.40	30.0	0.037	2.0	0.30
			99	65.0	C	NORTHR\FLO020	0.30	30.0	0.106	6.5	0.68
						NORTHR\FLO290	0.30	30.0	0.108	9.1	1.39
			VA 638 Brentwood V.A. Hospital	999.9	--D	NORTHR\BVA-UP	0.00	00.0	0.139	9.3	2.41
			99	16.3	B	NORTHR\BVA195	0.00	00.0	0.187	23.7	5.42
						NORTHR\BVA285	0.00	00.0	0.165	17.6	8.39
			USC 90086 Buena Park - La Palma	64.6	--D	NORTHR\BPK-UP	0.80	30.0	0.034	1.5	0.11
			99	999.9	C	NORTHR\BPK090	0.30	30.0	0.139	10.7	1.62
						NORTHR\BPK180	0.30	30.0	0.095	8.1	1.60
			USC 90059 Burbank - Howard Rd.	20.0	--B	NORTHR\HOW-UP	0.10	30.0	0.085	3.6	1.48
			99	16.6	B	NORTHR\HOW060	0.10	30.0	0.120	9.5	2.25
						NORTHR\HOW330	0.10	30.0	0.163	8.5	1.81
			CDMG 25282 Camarillo	36.5	AH-	NORTHR\CMR-UP	0.10	25.0	0.050	4.5	1.28
			99	0.0	C	NORTHR\CMR180	0.10	25.0	0.125	10.9	3.49
						NORTHR\CMR270	0.10	25.0	0.121	11.7	3.20
			USC 90053 Canoga Park - Topanga Can	15.8	--D	NORTHR\CNP-UP	0.10	30.0	0.489	14.2	5.50
			99	0.0	C	NORTHR\CNP106	0.05	30.0	0.356	32.1	9.13
						NORTHR\CNP196	0.05	30.0	0.420	60.8	20.17
			USC 90057 Canyon Country - W Lost Cany	13.0	--D	NORTHR\LOS-UP	0.20	30.0	0.318	20.3	5.17
			99	12.2	C	NORTHR\LOS000	0.05	30.0	0.410	43.0	11.75
						NORTHR\LOS270	0.10	30.0	0.482	45.1	12.58
			USC 90040 Carson - Catskill Ave	53.0	--D	NORTHR\CAT-UP	0.40	30.0	0.050	2.9	0.33
			99	49.2	C	NORTHR\CAT090	0.20	30.0	0.087	8.0	1.50
						NORTHR\CAT180	0.30	30.0	0.083	4.8	1.05
			USC 90081 Carson - Water St	52.2	--D	NORTHR\WAT-UP	0.70	30.0	0.041	2.3	0.25
			99	999.9	D	NORTHR\WAT180	0.20	30.0	0.089	6.4	1.58
						NORTHR\WAT270	0.30	30.0	0.086	8.0	1.92
			CDMG 24278 Castaic - Old Ridge Route #	22.6	AMB	NORTHR\ORR-UP	0.12	23.0	0.217	12.4	1.94
			99	25.4	B	NORTHR\ORR090	0.12	23.0	0.568	52.1	4.21
						NORTHR\ORR360	0.12	23.0	0.514	52.2	2.41
			USC 90078 Compton - Castlegate St	49.6	--D	NORTHR\CAS-UP	0.40	30.0	0.046	2.6	0.42
			99	45.2	C	NORTHR\CAS000	0.10	30.0	0.088	6.8	3.41
						NORTHR\CAS270	0.20	30.0	0.136	7.1	2.15
			USC 90068 Covina - S Grand Ave	60.2	--C	NORTHR\GRA-UP	0.33	30.0	0.053	3.5	0.79
			99	999.9	B	NORTHR\GRA074	0.13	30.0	0.066	7.1	1.94
						NORTHR\GRA344	0.20	30.0	0.062	6.9	1.43
			USC 90070 Covina - W Badillo	56.1	--D	NORTHR\BAD-UP	0.30	30.0	0.043	2.9	0.70
			99	999.9	C	NORTHR\BAD000	0.20	30.0	0.100	5.8	1.21
						NORTHR\BAD270	0.20	30.0	0.079	7.0	1.62
			USC 90079 Downey - Birchdale	40.7	--D	NORTHR\BIR-UP	0.30	30.0	0.058	3.4	0.64
			99	999.9	C	NORTHR\BIR090	0.30	30.0	0.165	12.1	1.52
						NORTHR\BIR180	0.30	30.0	0.171	8.1	1.52
			CDMG 14368 Downey - Co Maint Bldg #	47.6	AQD	NORTHR\DWN-UP	0.20	23.0	0.146	3.9	0.27
			99	45.1	C	NORTHR\DWN090	0.20	23.0	0.158	13.8	2.28
						NORTHR\DWN360	0.20	23.0	0.230	11.3	2.14
			USC 90067 Duarte - Mel Canyon Rd.	51.6	--B	NORTHR\MEL-UP	0.90	30.0	0.046	2.2	0.17

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	50.2	B	NORTHR\MEL090	0.10	30.0	0.079	3.4	1.84
						NORTHR\MEL180	0.30	30.0	0.028	2.4	0.46
USC	90066		El Monte - Fairview Av	47.4	--D	NORTHR\FAI-UP	0.20	30.0	0.059	2.8	1.36
	99			45.5	C	NORTHR\FAI095	0.15	30.0	0.122	9.7	4.24
						NORTHR\FAI185	0.30	30.0	0.163	8.8	1.88
CDMG	24575		Elizabeth Lake #	37.2	IHD	NORTHR\ELI-UP	0.16	46.0	0.050	5.7	1.46
	99			37.6	C	NORTHR\ELI090	0.16	46.0	0.155	7.3	2.70
						NORTHR\ELI180	0.16	46.0	0.109	9.0	1.53
CDMG	13122		Featherly Park - Maint #	84.2	AMC	NORTHR\FEA-UP	0.30	23.0	0.024	1.6	0.24
	99			82.5	B	NORTHR\FEA000	0.30	23.0	0.104	7.7	0.81
						NORTHR\FEA090	0.30	23.0	0.100	5.8	0.51
USC	90085		Garden Grove - Santa Rita	68.9	--D	NORTHR\GARXXX	-99.				
	99			999.9	C	NORTHR\GAR000	0.30	30.0	0.104	8.7	2.10
						NORTHR\GAR270	0.30	30.0	0.103	10.0	2.13
USC	90063		Glendale - Las Palmas	25.4	--C	NORTHR\GLP-UP	0.30	30.0	0.127	4.3	0.44
	99			22.9	C	NORTHR\GLP177	0.13	30.0	0.357	12.3	1.94
						NORTHR\GLP267	0.10	30.0	0.206	7.4	1.75
USC	90065		Glendora - N Oakbank	30.9	--D	NORTHR\OAK-UP	0.50	30.0	0.051	3.6	0.58
	99			999.9	B	NORTHR\OAK080	0.50	30.0	0.040	3.1	0.43
						NORTHR\OAK170	0.10	30.0	0.092	4.9	1.75
USC	90073		Hacienda Hts - Colima	59.1	--C	NORTHR\COM-UP	0.40	30.0	0.041	2.2	0.35
	99			57.1	C	NORTHR\COM140	0.40	30.0	0.067	4.8	0.72
						NORTHR\COM230	0.40	30.0	0.056	3.2	0.87
CDMG	13660		Hemet - Ryan Airfield #	144.1	IHD	NORTHR\HEM-UP	0.30	46.0	0.027	2.0	0.18
	99			145.9	-	NORTHR\HEM000	0.30	46.0	0.064	4.5	0.66
						NORTHR\HEM090	0.30	46.0	0.046	4.7	0.51
USC	90018		Hollywood - Willoughby Ave	25.7	--D	NORTHR\WIL-UP	0.20	30.0	0.142	9.0	3.40
	99			999.9	B	NORTHR\WIL090	0.10	30.0	0.136	12.8	4.82
						NORTHR\WIL180	0.13	30.0	0.245	33.5	6.28
CDMG	13197		Huntington Beach - Lake St #	79.6	AQD	NORTHR\HNT-UP	0.20	23.0	0.018	4.0	0.89
	99			68.9	C	NORTHR\HNT000	0.20	23.0	0.091	10.1	1.13
						NORTHR\HNT090	0.20	23.0	0.070	13.9	1.49
USC	90083		Huntington Bch - Waikiki	57.4	--D	NORTHR\WAI-UP	0.30	30.0	0.022	1.2	0.28
	99			999.9	C	NORTHR\WAI200	0.20	30.0	0.086	5.0	1.63
						NORTHR\WAI290	0.20	30.0	0.068	7.4	1.87
CDMG	14196		Inglewood - Union Oil #	44.7	IQD	NORTHR\ING-UP	0.16	23.0	0.055	2.6	1.01
	99			40.0	B	NORTHR\ING000	0.16	23.0	0.091	7.1	2.25
						NORTHR\ING090	0.16	23.0	0.101	10.3	3.15
USGS	0655		Jensen Filter Plant #	6.2	--D	NORTHR\JEN-UP	0.30		0.400	34.1	8.89
	99			0.0	B	NORTHR\JEN022	0.08		0.424	106.2	43.06
						NORTHR\JEN292	0.20		0.593	99.3	24.00
USC	90000		LA 00	20.7	--A	NORTHR\LA0-UP	0.20		0.182	6.0	2.59
	99			7.6	A	NORTHR\LA0000	0.20		0.261	27.4	4.80
						NORTHR\LA0090	0.30		0.388	38.1	4.59
USGS	00000		LA Dam	2.6	--A	NORTHR\LDM-UP	0.13		0.424	19.5	8.71
	99			0.0	A	NORTHR\LDM064	0.10		0.511	63.7	21.18
						NORTHR\LDM334	0.12		0.349	50.8	15.11
CDMG	14403		LA - 116th St School #	41.9	AQD	NORTHR\116-UP	0.70	23.0	0.061	2.8	0.30
	99			38.9	B	NORTHR\116090	0.16	23.0	0.208	10.3	2.67
						NORTHR\116360	0.16	23.0	0.133	13.5	2.83
CDMG	24157		LA - Baldwin Hills #	31.3	IPB	NORTHR\BLD-UP	0.16	23.0	0.091	8.4	3.29
	99			26.2	B	NORTHR\BLD090	0.16	23.0	0.239	14.9	6.17
						NORTHR\BLD360	0.16	23.0	0.168	17.6	4.79
USC	90054		LA - Centinela St	30.9	--D	NORTHR\CEN-UP	0.13	30.0	0.109	10.6	3.76

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	999.9	C	NORTHR\CEN155	0.13	30.0	0.465	19.3	3.48
						NORTHR\CEN245	0.20	30.0	0.322	22.9	5.47
			CDMG 24389 LA - Century City CC North #	25.7	IQD	NORTHR\CCN-UP	0.14	23.0	0.116	8.7	3.47
			99	18.3	C	NORTHR\CCN090	0.14	23.0	0.256	21.1	6.68
						NORTHR\CCN360	0.14	23.0	0.222	25.2	5.70
			USC 90015 LA - Chalon Rd	23.7	--B	NORTHR\CHL-UP	0.50	30.0	0.174	8.0	1.09
			99	999.9	B	NORTHR\CHL070	0.30	30.0	0.225	16.6	3.39
						NORTHR\CHL160	0.20	30.0	0.185	27.1	5.77
			CDMG 24592 LA - City Terrace #	37.0	IMA	NORTHR\LAC-UP	0.20	46.0	0.135	7.6	1.84
			99	35.4	-	NORTHR\LAC090	0.20	46.0	0.263	12.8	2.89
						NORTHR\LAC180	0.20	46.0	0.316	14.1	2.42
			USC 90033 LA - Cypress Ave	32.8	--C	NORTHR\CYP-UP	0.30	30.0	0.085	3.1	0.44
			99	999.9	B	NORTHR\CYP053	0.20	30.0	0.210	17.3	2.01
						NORTHR\CYP143	0.13	30.0	0.149	10.0	2.23
			USC 90025 LA - E Vernon Ave	39.3	--D	NORTHR\VER-UP	0.20	30.0	0.063	3.4	1.21
			99	999.9	C	NORTHR\VER090	0.20	30.0	0.120	9.2	1.67
						NORTHR\VER180	0.10	30.0	0.153	10.1	1.79
			USC 90034 LA - Fletcher Dr	29.5	--D	NORTHR\FLE-UP	0.30	30.0	0.109	6.9	1.20
			99	999.9	C	NORTHR\FLE144	0.13	30.0	0.162	10.7	2.86
						NORTHR\FLE234	0.15	30.0	0.240	26.2	3.60
			CDMG 24303 LA - Hollywood Stor FF #	25.5	IPD	NORTHR\PEL-UP	0.20	23.0	0.139	9.2	2.30
			99	20.8	C	NORTHR\PEL090	0.20	23.0	0.231	18.3	4.81
						NORTHR\PEL360	0.20	23.0	0.358	27.5	3.04
			USC 90016 LA - N Faring Rd	23.9	--B	NORTHR\FAR-UP	0.20	30.0	0.191	8.9	1.65
			99	999.9	C	NORTHR\FAR000	0.13	30.0	0.273	15.8	3.29
						NORTHR\FAR090	0.13	30.0	0.242	29.8	4.74
			USC 90032 LA - N Figueroa St	33.4	--C	NORTHR\FIG-UP	0.40	30.0	0.097	4.3	0.78
			99	999.9	B	NORTHR\FIG058	0.30	30.0	0.128	9.6	1.43
						NORTHR\FIG328	0.30	30.0	0.174	9.1	1.28
			USC 90021 LA - N Westmoreland	29.0	--D	NORTHR\WST-UP	0.20	30.0	0.093	6.3	1.08
			99	999.9	B	NORTHR\WST000	0.20	30.0	0.401	20.9	2.29
						NORTHR\WST270	0.20	30.0	0.361	20.9	4.27
			CDMG 24400 LA - Obregon Park #	37.9	AQD	NORTHR\OBR-UP	0.20	23.0	0.115	3.7	1.27
			99	35.9	B	NORTHR\OBR090	0.60	23.0	0.355	16.7	1.43
						NORTHR\OBR360	0.90	23.0	0.563	24.5	2.79
			CDMG 24612 LA - Pico & Sentous #	32.7	IHD	NORTHR\PIC-UP	0.20	46.0	0.065	5.3	1.69
			99	29.0	C	NORTHR\PIC090	0.20	46.0	0.103	12.2	3.71
						NORTHR\PIC180	0.20	46.0	0.186	14.3	2.38
			USC 90022 LA - S Grand Ave	36.9	--D	NORTHR\GR2-UP	0.30	30.0	0.094	3.8	0.68
			99	999.9	C	NORTHR\GR2090	0.30	30.0	0.290	17.9	2.42
						NORTHR\GR2180	0.30	30.0	0.264	20.4	1.88
			USC 90096 LA - S. Vermont Ave	34.7	--D	NORTHR\VRM-UP	0.30	30.0	0.165	23.4	3.57
			99	999.9	C	NORTHR\VRM000	0.30	30.0	0.164	10.7	1.83
						NORTHR\VRM090	0.30	30.0	0.071	6.2	1.70
			USC 90091 LA - Saturn St	30.0	--D	NORTHR\STN-UP	0.13	30.0	0.097	7.7	2.12
			99	23.2	C	NORTHR\STN020	0.10	30.0	0.474	34.6	6.55
						NORTHR\STN110	0.10	30.0	0.439	39.0	6.45
			CDMG 24611 LA - Temple & Hope #	32.3	IMA	NORTHR\TEM-UP	0.20	46.0	0.097	4.6	1.34
			99	29.5	B	NORTHR\TEM090	0.20	46.0	0.126	13.9	3.15
						NORTHR\TEM180	0.20	46.0	0.184	20.0	2.74
			CDMG 24605 LA - Univ. Hospital #	34.6	IMA	NORTHR\UNI-UP	0.20	46.0	0.119	6.4	1.37
			99	32.8	B	NORTHR\UNI005	0.20	46.0	0.493	31.1	2.39
						NORTHR\UNI095	0.20	46.0	0.214	10.8	2.37
			USC 90020 LA - W 15th St	32.4	--C	NORTHR\W15-UP	0.30	30.0	0.051	5.8	1.38

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	999.9	B	NORTHR\W15090	0.13	30.0	0.104	11.6	5.73
						NORTHR\W15180	0.13	30.0	0.159	13.4	3.30
USC	90017		LA - Wonderland Ave	22.7	--A	NORTHR\WON-UP	0.13	30.0	0.106	3.6	1.11
	99			999.9	A	NORTHR\WON095	0.13	30.0	0.112	8.7	1.79
						NORTHR\WON185	0.10	30.0	0.172	11.8	2.77
CDMG	24688		LA - UCLA Grounds	14.9	IQ-	NORTHR\UCL-UP	0.08	25.0	0.265	10.2	3.08
	99			16.8	B	NORTHR\UCL090	0.08	25.0	0.278	22.0	4.32
						NORTHR\UCL360	0.08	25.0	0.474	22.2	7.38
USC	90060		La Crescenta - New York	22.3	--C	NORTHR\NYA-UP	0.13	30.0	0.106	3.9	0.87
	99			19.7	C	NORTHR\NYA090	0.30	30.0	0.178	12.5	1.14
						NORTHR\NYA180	0.10	30.0	0.159	11.3	3.00
USC	90074		La Habra - Briarcliff	61.6	--C	NORTHR\BRC-UP	0.40	30.0	0.056	2.6	0.37
	99			58.8	C	NORTHR\BRC000	0.20	30.0	0.109	8.2	1.13
						NORTHR\BRC090	0.20	30.0	0.206	12.3	1.23
USC	90072		La Puente - Rimgrove Av	58.9	--D	NORTHR\RIM-UP	1.00	30.0	0.048	2.6	0.16
	99			57.1	C	NORTHR\RIM015	0.80	30.0	0.109	7.9	0.70
						NORTHR\RIM105	0.80	30.0	0.129	9.7	0.83
CDMG	24271		Lake Hughes #1 #	36.3	APC	NORTHR\L01-UP	0.12	23.0	0.099	7.0	3.43
	99			37.7	B	NORTHR\L01000	0.12	23.0	0.087	9.4	3.70
						NORTHR\L01090	0.12	23.0	0.077	9.5	2.40
CDMG	24469		Lake Hughes #4 - Camp Mend #	32.3	IGB	NORTHR\L04-UP	0.12	23.0	0.053	4.1	3.05
	99			33.2	B	NORTHR\L04000	0.12	23.0	0.057	6.6	3.98
						NORTHR\L04090	0.12	23.0	0.084	6.2	2.27
CDMG	24523		Lake Hughes #4B - Camp Mend #	32.3	IGB	NORTHR\L4B-UP	0.12	23.0	0.042	3.7	3.48
	99			34.1	B	NORTHR\L4B000	0.12	23.0	0.036	3.2	2.21
						NORTHR\L4B090	0.12	23.0	0.063	5.4	1.97
USGS	127		Lake Hughes #9 #	26.8	AGA	NORTHR\L09-UP	0.08		0.079	3.6	3.56
	99			28.9	B	NORTHR\L09000	0.08		0.165	8.4	4.54
						NORTHR\L09090	0.08		0.217	10.1	2.77
CDMG	24607		Lake Hughes #12A #	22.8	IHC	NORTHR\H12-UP	0.13	46.0	0.121	4.0	2.59
	99			24.8	B	NORTHR\H12090	0.12	46.0	0.174	11.8	4.64
						NORTHR\H12180	0.12	46.0	0.257	8.9	4.13
USC	90084		Lakewood - Del Amo Blvd	59.3	--D	NORTHR\DEL-UP	0.80	30.0	0.058	1.6	0.18
	99			55.6	C	NORTHR\DEL000	0.13	30.0	0.137	11.2	1.98
						NORTHR\DEL090	0.20	30.0	0.123	10.4	2.86
CDMG	24475		Lancaster - Fox Airfield Grnds	51.9	IH-	NORTHR\LAN-UP	0.15	25.0	0.045	4.1	0.88
	99			52.5	-	NORTHR\LAN090	0.15	25.0	0.064	5.3	1.21
						NORTHR\LAN360	0.15	25.0	0.081	7.1	1.45
USC	90045		Lawndale - Osage Ave	42.4	--D	NORTHR\LOA-UP	0.13	30.0	0.053	3.5	1.78
	99			999.9	C	NORTHR\LOA092	0.13	30.0	0.084	8.5	2.90
						NORTHR\LOA182	0.13	30.0	0.152	8.0	2.59
CDMG	14560		LB - City Hall #	58.2	IQD	NORTHR\LBC-UP	1.20	23.0	0.021	1.2	0.11
	99			56.9	B	NORTHR\LBC090	0.30	23.0	0.036	5.0	1.65
						NORTHR\LBC360	0.30	23.0	0.051	4.0	1.09
CDMG	14242		LB - Rancho Los Cerritos #	54.3	IQD	NORTHR\LBR-UP	0.16	23.0	0.039	2.7	0.87
	99			50.4	-	NORTHR\LBR000	0.16	23.0	0.065	4.8	2.30
						NORTHR\LBR090	0.16	23.0	0.069	8.3	2.21
CDMG	24305		Leona Valley #1 #	37.7	IGA	NORTHR\LV1-UP	0.20	23.0	0.050	6.8	2.18
	99			999.9	-	NORTHR\LV1000	0.20	23.0	0.089	7.8	1.63
						NORTHR\LV1090	0.20	23.0	0.073	7.1	1.76
CDMG	24306		Leona Valley #2 #	37.7	IH-	NORTHR\LV2-UP	0.20	23.0	0.058	7.1	2.07
	99			999.9	C	NORTHR\LV2000	0.20	23.0	0.091	7.5	1.63
						NORTHR\LV2090	0.20	23.0	0.063	7.2	1.60
CDMG	24307		Leona Valley #3 #	37.8	IGA	NORTHR\LV3-UP	0.20	23.0	0.051	6.9	2.36

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	999.9	A	NORTHR\LV3000	0.20	23.0	0.084	8.5	2.24
						NORTHR\LV3090	0.20	23.0	0.106	8.1	1.77
CDMG 24308			Leona Valley #4 #	38.1	IQ-	NORTHR\LV4-UP	0.20	23.0	0.047	8.0	2.36
			99	999.9	C	NORTHR\LV4000	0.20	23.0	0.079	8.6	1.77
						NORTHR\LV4090	0.20	23.0	0.057	8.0	1.98
CDMG 24055			Leona Valley #5 - Ritter #	38.3	IQC	NORTHR\LV5-UP	0.20	23.0	0.097	11.6	2.53
			99	999.9	C	NORTHR\LV5000	0.20	23.0	0.146	14.9	2.35
						NORTHR\LV5090	0.20	23.0	0.092	10.5	2.70
CDMG 24309			Leona Valley #6 #	38.5	IHD	NORTHR\LV6-UP	0.20	23.0	0.062	8.2	2.02
			99	999.9	C	NORTHR\LV6090	0.20	23.0	0.178	14.4	2.11
						NORTHR\LV6360	0.20	23.0	0.131	10.1	1.22
CDMG 23595			Littlerock - Brainard Can #	46.9	IGA	NORTHR\LIT-UP	0.25	46.0	0.034	2.4	0.50
			99	49.7	A	NORTHR\LIT090	0.20	46.0	0.072	6.0	1.35
						NORTHR\LIT180	0.20	46.0	0.060	6.3	1.25
CDMG 24396			Malibu - Point Dume Sch #	35.2	AMB	NORTHR\MAL-UP	0.30	23.0	0.087	4.4	1.09
			99	27.4	B	NORTHR\MAL090	0.30	23.0	0.130	8.5	2.11
						NORTHR\MAL360	0.30	23.0	0.084	8.9	1.79
USC 90046			Manhattan Beach - Manhattan	42.0	--C	NORTHR\MAN-UP	0.10	30.0	0.085	5.4	2.04
			99	36.9	C	NORTHR\MAN000	0.23	30.0	0.201	13.7	1.86
						NORTHR\MAN090	0.05	30.0	0.128	14.6	4.64
USC 90011			Montebello - Bluff Rd.	12.3	--D	NORTHR\BLF-UP	0.20	30.0	0.076	2.8	0.48
			99	86.8	D	NORTHR\BLF206	0.20	30.0	0.179	9.4	1.48
						NORTHR\BLF296	0.10	30.0	0.128	5.9	2.25
CDMG 34093			Mojave - Hwys 14 & 58 #	85.7	AQ-	NORTHR\MJH-UP	0.30	23.0	0.027	1.8	0.30
			99	999.9	C	NORTHR\MJH000	0.30	23.0	0.037	4.5	0.79
						NORTHR\MJH090	0.30	23.0	0.053	4.1	0.47
CDMG 34237			Mojave - Oak Creek Canyon #	76.4	IQ-	NORTHR\MJO-UP	0.30	23.0	0.023	2.0	0.46
			99	78.5	-	NORTHR\MJO000	0.30	23.0	0.050	3.1	0.52
						NORTHR\MJO090	0.30	23.0	0.059	3.4	0.46
CDMG 24283			Moorpark - Fire Sta #	28.0	AQD	NORTHR\MRP-UP	0.45	23.0	0.159	7.9	0.90
			99	18.8	-	NORTHR\MRP090	0.16	23.0	0.193	20.2	4.79
						NORTHR\MRP180	0.16	23.0	0.292	20.7	4.24
CDMG 23572			Mt Baldy - Elementary Sch #	71.5	IQB	NORTHR\BAL-UP	0.30	46.0	0.037	2.2	0.39
			99	74.0	A	NORTHR\BAL090	0.30	46.0	0.080	3.8	0.56
						NORTHR\BAL180	0.30	46.0	0.070	4.3	0.39
CDMG 24399			Mt Wilson - CIT Seis Sta #	36.1	IGA	NORTHR\MTW-UP	0.08		0.087	3.6	0.58
			99	37.8	A	NORTHR\MTW000	0.08		0.234	7.4	0.70
						NORTHR\MTW090	0.08		0.134	5.8	0.45
USC 90009			N Hollywood - Coldwater Can	14.6	--C	NORTHR\CWC-UP	0.13	30.0	0.289	9.6	4.20
			99	8.3	B	NORTHR\CWC180	0.10	30.0	0.298	25.0	6.46
						NORTHR\CWC270	0.10	30.0	0.271	22.2	11.69
CDMG 24586			Neenach - Sacatara Ck #	53.2	IHD	NORTHR\NEE-UP	0.12	46.0	0.047	7.2	3.10
			99	55.5	B	NORTHR\NEE090	0.12	46.0	0.056	10.0	6.48
						NORTHR\NEE180	0.12	46.0	0.069	13.1	8.22
CDMG 24279			Newhall - Fire Sta #	7.1	AQD	NORTHR\NWH-UP	0.12	23.0	0.548	31.5	16.27
			99	4.5	C	NORTHR\NWH090	0.12	23.0	0.583	75.5	17.57
						NORTHR\NWH360	0.12	23.0	0.590	97.2	38.05
USC 90056			Newhall - W Pico Canyon Rd.	7.1	--C	NORTHR\WPI-UP	0.05	30.0	0.290	37.2	13.29
			99	7.1	B	NORTHR\WPI046	0.05	30.0	0.455	92.8	56.64
						NORTHR\WPI316	0.10	30.0	0.325	67.4	16.11
CDMG 13160			Newport Bch - Irvine Ave. F.S. #	87.6	AQ-	NORTHR\NBI-UP	0.20	23.0	0.017	2.3	0.75
			99	85.3	B	NORTHR\NBI000	0.20	23.0	0.041	4.1	1.29
						NORTHR\NBI090	0.20	23.0	0.061	5.2	1.36
CDMG 13610			Newport Bch - Newp & Coast #	84.6	IMB	NORTHR\NEW-UP	0.17	46.0	0.021	2.2	0.66

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	84.4	B	NORTHR\NEW090	0.12	46.0	0.103	5.8	1.21
						NORTHR\NEW180	0.12	46.0	0.085	6.3	1.34
USC 90003			Northridge - 17645 Saticoy St 99	13.3 0.1	--D C	NORTHR\STCXXX NORTHR\STC090	-99. 0.10	30.0	0.368	28.9	8.44
						NORTHR\STC180	0.10	30.0	0.477	61.5	22.06
USC 90049			Pacific Palisades - Sunset 99	26.2 17.1	--B B	NORTHR\SUN-UP NORTHR\SUN190	0.10 0.05	30.0	0.179	14.7	3.98
						NORTHR\SUN280	0.05	30.0	0.469	31.0	5.26
CDMG 24207			Pacoima Dam (downstr) # 99	8.0 8.1	AGA A	NORTHR\PAC-UP NORTHR\PAC175	0.75 0.16	23.0	0.190	14.2	1.35
						NORTHR\PAC265	0.16	23.0	0.434	31.3	4.80
CDMG 24207			Pacoima Dam (upper left) # 99	8.0 8.1	IGA A	NORTHR\PUL-UP NORTHR\PUL104	0.16 0.16	23.0	1.229	49.6	11.75
						NORTHR\PUL194	0.16	23.0	1.585	55.7	6.06
CDMG 24088			Pacoima Kagel Canyon # 99	8.2 8.1	AMB B	NORTHR\PKC-UP NORTHR\PKC090	0.20 0.14	23.0	0.169	15.1	4.14
						NORTHR\PKC360	0.14	23.0	0.301	31.4	10.87
CDMG 24521			Palmdale - Hwy 14 & Palmdale # 99	43.6 43.3	IQC C	NORTHR\PHP-UP NORTHR\PHP000	0.20 0.20	46.0	0.040	8.0	5.50
						NORTHR\PHP270	0.20	46.0	0.061	14.8	7.18
			99999 Pardee - SCE 99	10.3 5.3	--D -	NORTHR\PAR-UP NORTHR\PAR--L	1.50 0.50	23.0	0.067	16.9	7.96
						NORTHR\PAR--T	0.40	20.0	0.384	10.9	0.50
USC 90095			Pasadena - N Sierra Madre 99	39.2 37.4	--C C	NORTHR\SMV-UP NORTHR\SMV180	0.40 0.30	30.0	0.657	75.2	13.16
						NORTHR\SMV270	0.40	30.0	0.406	43.6	12.09
CDMG 23597			Phelan - Wilson Ranch # 99	86.1 89.2	IHD B	NORTHR\PHE-UP NORTHR\PHE090	0.20 0.20	46.0	0.141	8.4	0.57
						NORTHR\PHE180	0.20	46.0	0.245	12.3	1.09
USC 90047			Playa Del Rey - Saran 99	34.2 27.9	--D B	NORTHR\SMV270 NORTHR\SMV-UP	0.20 0.10	30.0	0.174	9.6	1.53
						NORTHR\SAR-UP	0.10	30.0	0.034	2.3	0.54
CDMG 25148			Point Mugu - Laguna Peak # 99	47.6 38.9	AMA C	NORTHR\PHE180 NORTHR\PTH000	0.20 0.30	46.0	0.047	5.0	1.00
						NORTHR\PTH180	0.20	46.0	0.057	4.0	1.23
CDMG 25281			Port Hueneme - Naval Lab. # 99	54.3 50.0	AHD C	NORTHR\SAR-UP NORTHR\SAR000	0.10 0.10	30.0	0.055	8.4	4.33
						NORTHR\SAR270	0.10	30.0	0.136	18.6	4.51
CDMG 23598			Rancho Cucamonga - Deer Can # 99	80.0 999.9	IGA A	NORTHR\PTH090 NORTHR\PTH180	0.14 0.14	23.0	0.076	13.8	6.88
						NORTHR\PTH-UP	0.30	23.0	0.067	3.4	0.47
CDMG 14404			Rancho Palos Verdes - Hawth # 99	55.2 999.9	AMA A	NORTHR\PTH090 NORTHR\PTH180	0.14 0.14	23.0	0.134	10.2	1.36
						NORTHR\PTH-UP	0.30	23.0	0.223	19.1	1.87
USC 90044			Rancho Palos Verdes - Luconia 99	57.4 999.9	--C C	NORTHR\PTH180 NORTHR\CUC-UP	0.14 0.30	23.0	0.037	2.3	1.17
						NORTHR\CUC090	0.14	23.0	0.103	7.8	2.23
CDMG 13123			Riverside Airport # 99	101.3 100.4	AQB B	NORTHR\CUC180 NORTHR\CUC-UP	0.30 0.30	46.0	0.086	7.7	3.08
						NORTHR\CUC-UP	0.30	46.0	0.025	2.2	0.40
CDMG 14405			Rolling Hills Est-Rancho Vista	46.6	AP-	NORTHR\LAN-UP	0.30	23.0	0.071	4.2	0.56
						NORTHR\LAN-UP	0.30	23.0	0.051	5.9	0.78
						NORTHR\LAN000	0.30	23.0	0.043	1.8	0.39
						NORTHR\LAN090	0.30	23.0	0.072	5.0	0.73
						NORTHR\LUC-UP	0.30	23.0	0.054	3.5	0.98
						NORTHR\LUC005	0.20	30.0	0.075	3.6	0.67
						NORTHR\LUC095	0.30	30.0	0.167	9.9	0.87
DWP 77			Rinaldi Receiving Sta # 99	7.1 0.0	--C C	NORTHR\LUC-UP NORTHR\RRS-UP	0.20 0.30	30.0	0.118	9.2	0.69
						NORTHR\RRS-UP	0.30	30.0	0.852	50.7	11.65
						NORTHR\RRS228	0.30	23.0	0.838	166.1	28.78
						NORTHR\RRS318	0.30	23.0	0.472	73.0	19.76
						NORTHR\RIV-UP	0.30	23.0	0.022	2.3	0.39
						NORTHR\RIV180	0.30	23.0	0.059	2.7	0.28
						NORTHR\RIV270	0.30	23.0	0.064	3.1	0.50
						NORTHR\RHE-UP	0.15	25.0	0.041	2.4	0.44

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			99	48.4	B	NORTHR\RHE090	0.15	25.0	0.116	8.9	1.41
						NORTHR\RHE360	0.15	25.0	0.106	5.8	1.17
CDMG 24092			Rosamond - Airport #	65.0	AH-	NORTHR\RMA-UP	0.30	23.0	0.023	1.4	0.36
			99	65.5	B	NORTHR\RMA000	0.30	23.0	0.075	4.7	0.43
						NORTHR\RMA090	0.30	23.0	0.039	3.5	0.75
CDMG 23672			San Bernardino - CSUSB Gr #	103.1	IHD	NORTHR\BER-UP	0.30	46.0	0.021	1.5	0.25
			99	105.7	-	NORTHR\BER000	0.30	46.0	0.034	2.8	0.31
						NORTHR\BER090	0.30	46.0	0.069	4.0	0.77
CDMG 23542			San Bernardino - E&Hospitality#	108.1	IHD	NORTHR\HOS-UP	0.20	46.0	0.044	2.6	0.51
			99	110.4	C	NORTHR\HOS090	0.20	46.0	0.085	5.9	0.97
						NORTHR\HOS180	0.20	46.0	0.096	6.5	1.34
USC 90019			San Gabriel - E Grand Ave	41.7	--A	NORTHR\GRN-UP	0.10	30.0	0.073	3.7	1.49
			99	39.5	A	NORTHR\GRN180	0.13	30.0	0.141	9.6	2.21
						NORTHR\GRN270	0.10	30.0	0.256	9.8	2.79
CDMG 12673			San Jacinto - CDF Fire Sta #	146.5	IHD	NORTHR\CDF-UP	0.16	46.0	0.022	3.7	1.27
			99	149.1	-	NORTHR\CDF000	0.16	46.0	0.081	8.1	1.62
						NORTHR\CDF090	0.16	46.0	0.099	7.7	1.56
CDMG 24401			San Marino - SW Academy #	35.1	AQD	NORTHR\SMA-UP	0.60	23.0	0.083	3.7	0.41
			99	35.2	B	NORTHR\SMA090	0.30	23.0	0.116	7.3	1.10
						NORTHR\SMA360	0.60	23.0	0.150	7.4	0.75
CDMG 14159			San Pedro - Palos Verdes #	59.9	AMA	NORTHR\SAP-UP	0.30	23.0	0.070	3.0	0.30
			99	56.7	-	NORTHR\SAP000	0.30	23.0	0.101	5.6	0.59
						NORTHR\SAP090	0.30	23.0	0.095	6.6	1.02
CDMG 24644			Sandberg - Bald Mtn #	43.4	IGB	NORTHR\SAN-UP	0.12	46.0	0.044	6.4	3.66
			99	999.9	A	NORTHR\SAN090	0.12	46.0	0.091	12.2	4.73
						NORTHR\SAN180	0.12	46.0	0.098	8.9	4.61
CDMG 25091			Santa Barbara - UCSB Goleta #	111.3	AHD	NORTHR\SBG-UP	0.20	23.0	0.039	2.9	0.74
			99	109.3	-	NORTHR\SBG000	0.20	23.0	0.078	7.0	1.46
						NORTHR\SBG090	0.20	23.0	0.069	6.7	1.57
USC 90077			Santa Fe Springs - E.Joslin	52.5	--D	NORTHR\EJS-UP	0.40	30.0	0.052	2.6	0.32
			99	48.9	C	NORTHR\EJS030	0.30	30.0	0.135	9.5	1.13
						NORTHR\EJS120	0.30	30.0	0.123	7.0	0.96
CDMG 24538			Santa Monica City Hall #	27.6	IQD	NORTHR\STM-UP	0.14	23.0	0.230	14.3	4.17
			99	21.1	C	NORTHR\STM090	0.14	23.0	0.883	41.7	15.09
						NORTHR\STM360	0.14	23.0	0.370	25.1	7.16
USGS 5108			Santa Susana Ground #	19.3	--A	NORTHR\SSUXXX	-99.				
			99	3.7	B	NORTHR\SSU000	0.20		0.279	19.4	4.11
						NORTHR\SSU090			0.290	19.7	7.45
CDMG 14578			Seal Beach - Office Bldg #	64.9	IQD	NORTHR\SEA-UP	0.16	46.0	0.037	2.0	1.90
			99	63.9	B	NORTHR\SEA000	0.16	46.0	0.061	5.8	1.99
						NORTHR\SEA090	0.16	46.0	0.084	6.9	1.34
USGS 0637			Sepulveda VA #	8.9	--D	NORTHR\SPV-UP	0.10		0.467	33.2	9.58
			99	0.4	C	NORTHR\SPV270	0.10		0.753	84.8	18.68
						NORTHR\SPV360	0.00		0.939	76.6	14.95
USC 90055			Simi Valley - Katherine Rd	14.6	--B	NORTHR\KAT-UP	0.30	30.0	0.402	13.1	2.18
			99	0.0	B	NORTHR\KAT000	0.50	30.0	0.877	40.9	5.29
						NORTHR\KAT090	0.40	30.0	0.640	37.8	5.09
MWD 78			Stone Canyon #	22.2	---	NORTHR\SCR-UP	0.08		0.181	6.1	2.42
			99	999.9	B	NORTHR\SCR000	0.03		0.252	28.0	3.14
						NORTHR\SCR090	0.03		0.388	38.0	4.60
USC 90006			Sun Valley - Roscoe Blvd	12.3	--D	NORTHR\RO3-UP	0.10	30.0	0.306	12.5	5.00
			99	6.1	C	NORTHR\RO3000	0.10	30.0	0.303	22.1	7.84
						NORTHR\RO3090	0.10	30.0	0.443	38.2	10.04
USC 90058			Sunland - Mt Gleason Ave	17.7	--C	NORTHR\GLE-UP	0.10	30.0	0.193	11.6	2.35

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			99	14.7	B	NORTHR\GLE170	0.05	30.0	0.127	13.8	5.54
			DWP 74 Sylmar - Converter Sta #	6.2	--D	NORTHR\GLE260	0.05	30.0	0.157	14.5	4.29
			99	0.2	C	NORTHR\SCS-UP			0.586	34.6	25.44
			99			NORTHR\SCS052			0.612	117.4	53.47
			DWP 75 Sylmar - Converter Sta East #	6.1	--D	NORTHR\SCS142			0.897	102.8	46.99
			99	0.0	C	NORTHR\SCE-UP			0.377	24.3	7.30
			99			NORTHR\SCE018			0.828	117.5	34.22
			99			NORTHR\SCE288			0.493	74.6	28.69
			CDMG 24514 Sylmar - Olive View Med FF #	6.4	AQD	NORTHR\SYL-UP	0.12	23.0	0.535	19.1	8.54
			99	3.6	C	NORTHR\SYL090	0.12	23.0	0.604	78.2	16.05
			99			NORTHR\SYL360	0.12	23.0	0.843	129.6	32.68
			CDMG 24436 Tarzana - Cedar Hill #	17.5	A-B	NORTHR\TAR-UP	0.10	23.0	1.048	75.4	20.05
			99	4.1	C	NORTHR\TAR090	0.10	23.0	1.779	113.6	33.22
			99			NORTHR\TAR360	0.10	23.0	0.990	77.6	30.45
			USC 90082 Terminal Island - S Seaside	60.0	--D	NORTHR\SSE-UP	0.13	30.0	0.048	3.1	1.54
			99	56.7	C	NORTHR\SSE240	0.13	30.0	0.133	13.7	2.68
			99			NORTHR\SSE330	0.13	30.0	0.194	12.1	2.28
			USGS 5081 Topanga - Fire Sta #	23.4	---	NORTHR\TPF-UP	0.10		0.199	10.5	3.10
			99	12.6	B	NORTHR\TPF000	0.20		0.364	17.6	2.87
			99			NORTHR\TPF090	0.30		0.266	12.9	1.34
			USC 90089 Tustin - E Sycamore	85.9	--D	NORTHR\SYC-UP	0.23	30.0	0.025	1.5	0.33
			99	999.9	C	NORTHR\SYC135	0.30	30.0	0.070	4.0	0.76
			99			NORTHR\SYC225	0.40	30.0	0.074	4.5	0.42
			CDMG 24047 Vasquez Rocks Park #	24.2	IBA	NORTHR\VAS-UP	0.10		0.091	6.1	1.61
			99	24.0	B	NORTHR\VAS000	0.00		0.151	18.5	2.92
			99			NORTHR\VAS090	0.08		0.139	11.2	2.89
			CDMG 25340 Ventura - Harbor & California	55.5	IH-	NORTHR\VEN-UP	0.10	25.0	0.025	5.1	3.12
			99	56.5	-	NORTHR\VEN090	0.10	25.0	0.054	7.9	2.65
			99			NORTHR\VEN360	0.10	25.0	0.075	12.0	3.87
			USC 90090 Villa Park - Serrano Ave	79.5	--B	NORTHR\SER-UP	0.30	30.0	0.027	2.5	0.37
			99	76.9	C	NORTHR\SER000	0.10	30.0	0.043	3.1	1.19
			99			NORTHR\SER270	0.10	30.0	0.045	3.8	2.00
			USC 90071 West Covina - S Orange Ave	54.1	--B	NORTHR\SOR-UP	0.20	30.0	0.049	2.7	0.95
			99	52.4	C	NORTHR\SOR225	0.20	30.0	0.063	5.9	1.34
			99			NORTHR\SOR315	0.10	30.0	0.067	5.8	2.65
			USC 90075 Whittier - S. Alta Dr	51.2	--B	NORTHR\SAL-UP	0.40	30.0	0.024	1.6	0.34
			99	999.9	B	NORTHR\SAL000	0.30	30.0	0.089	7.5	1.12
			99			NORTHR\SAL090	0.40	30.0	0.052	3.3	0.56
			CDMG 23590 Wrightwood - Jackson Flat #	68.4	I-A	NORTHR\WWJ-UP	0.24	46.0	0.034	5.8	1.32
			99	67.7	A	NORTHR\WWJ090	0.24	46.0	0.056	10.0	2.92
			99			NORTHR\WWJ180	0.24	46.0	0.037	7.0	2.84
			CDMG 23573 Wrightwood - Nielson Ranch #	85.2	IH-	NORTHR\WWN-UP	0.24	46.0	0.021	2.5	0.77
			99	84.5	B	NORTHR\WWN090	0.24	46.0	0.042	5.8	2.29
			99			NORTHR\WWN180	0.24	46.0	0.042	6.3	2.33
			CDMG 23574 Wrightwood - Swarthout #	71.9	IHD	NORTHR\WRI-UP	0.30	46.0	0.034	1.9	0.24
			99	74.7	B	NORTHR\WRI090	0.30	46.0	0.047	3.7	0.49
			99			NORTHR\WRI180	0.30	46.0	0.060	3.7	0.52
Double Springs 99	1994 0912 1223	0.0 6.1 6.1 6.3	99999 Woodfords 99	17.7 999.9	---	DOUBSPRG\WOO-UP	0.60	30.0	0.123	4.4	0.52
					-	DOUBSPRG\WOO000	0.10	30.0	0.060	7.7	1.41
						DOUBSPRG\WOO090	0.40	30.0	0.086	8.3	1.29
Kobe 00	1995 0116 2046	6.9 0.0 0.0 0.0	CEOR 99999 Abeno 99	23.8 999.9	--D	KOBE\ABN-UP	0.05	40.0	0.134	6.2	2.94
					C	KOBE\ABN000	0.05	40.0	0.222	20.7	9.11

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CEOR 99999 Amagasaki 99	10.2 999.9	--D D	KOBE\ABN090 KOBE\AMA-UP KOBE\AMA000 KOBE\AMA090	0.05 0.10 0.10 0.10	40.0 40.0 40.0 40.0	0.235 0.360 0.301 0.363	24.2 19.0 54.3 46.3	10.00 6.31 23.75 24.25
			CEOR 99999 Chihaya 99	48.7 999.9	--A A	KOBE\CHY-UP KOBE\CHY000 KOBE\CHY090	0.05 0.05 0.08	40.0 40.0 40.0	0.080 0.093 0.108	2.5 6.0 4.7	1.77 3.27 1.24
			99999 FUK 99	157.2 999.9	--D -	KOBE\FUK-UP KOBE\FUK000 KOBE\FUK090	0.05 0.05 0.05		0.010 0.034 0.042	1.7 4.3 5.3	0.67 1.28 2.08
			CEOR 99999 Fukushima 99	16.8 999.9	--E D	KOBE\FKS-UP KOBE\FKS000 KOBE\FKS090	0.10 0.08 0.08	40.0 40.0 40.0	0.200 0.178 0.216	8.9 36.3 33.2	5.23 13.37 15.44
			99999 HIK 99	94.2 999.9	--D -	KOBE\HIK-UP KOBE\HIK000 KOBE\HIK090	0.05 0.05 0.05		0.039 0.141 0.148	3.3 15.6 15.4	0.92 3.08 1.96
			CUE 99999 Kakogawa 99	26.4 999.9	--E D	KOBE\KAK-UP KOBE\KAK000 KOBE\KAK090	0.10 0.10 0.10		0.158 0.251 0.345	10.5 18.7 27.6	2.91 5.83 9.60
			CEOR 99999 Kobe University 99	0.2 999.9	--A A	KOBE\KBU-UP KOBE\KBU000 KOBE\KBU090	0.20 0.10 0.10	30.0 30.0 30.0	0.380 0.290 0.310	20.2 54.8 34.2	6.48 13.61 7.14
			99999 KJMA 99	0.6 999.9	--B B	KOBE\KJM-UP KOBE\KJM000 KOBE\KJM090	0.05 0.05 0.05		0.343 0.821 0.599	38.3 81.3 74.3	10.29 17.68 19.95
			CEOR 99999 Morigawachi 99	23.4 999.9	--E D	KOBE\MRG-UP KOBE\MRG000 KOBE\MRG090	0.05 0.05 0.08	40.0 40.0 40.0	0.166 0.214 0.140	6.1 26.3 18.0	3.30 11.99 8.19
			99999 MZH 99	69.4 999.9	--B -	KOBE\MZH-UP KOBE\MZH000 KOBE\MZH090	0.05 0.05 0.05		0.041 0.070 0.052	2.5 4.4 4.7	2.00 1.54 1.87
			CUE 99999 Nishi-Akashi 99	11.1 999.9	--E D	KOBE\NIS-UP KOBE\NIS000 KOBE\NIS090	0.10 0.10 0.10	23.0 23.0 23.0	0.371 0.509 0.503	17.3 37.3 36.6	5.63 9.52 11.26
			99999 OKA 99	89.3 999.9	--B -	KOBE\OKA-UP KOBE\OKA000 KOBE\OKA090	0.05 0.05 0.05		0.038 0.081 0.059	2.5 4.8 3.2	1.68 2.12 1.62
			99999 OSAJ 99	20.2 999.9	--E D	KOBE\OSA-UP KOBE\OSA000 KOBE\OSA090	0.05 0.05 0.05		0.064 0.079 0.064	7.5 18.3 17.0	3.73 9.26 8.03
			CEOR 99999 Port Island (0 m) 99	2.5 999.9	--E D	KOBE\PRI-UP KOBE\PRI000 KOBE\PRI090	0.10 0.10 0.10		0.562 0.315 0.278	70.3 74.9 54.2	27.33 38.30 27.33
			CEOR 99999 Port Island (16 m) 99	2.5 999.9	---	KOBE\KP2-UP KOBE\KP2000 KOBE\KP2090	0.20 0.10 0.10		0.839 0.552 0.535	34.1 72.8 49.4	15.98 33.26 21.80
			CEOR 99999 Port Island (32 m) 99	2.5 999.9	---	KOBE\KP3-UP KOBE\KP3000 KOBE\KP3090	0.10 0.10 0.10		0.204 0.563 0.461	23.7 58.8 43.1	12.00 28.54 19.47
			CEOR 99999 Port Island (83 m) 99	2.5 999.9	---	KOBE\KP4-UP KOBE\KP4000 KOBE\KP4090	0.10 0.10 0.10		0.194 0.696 0.324	26.4 51.0 23.3	12.27 23.40 13.07
			CEOR 99999 Sakai 99	26.9 999.9	--E D	KOBE\SKI-UP KOBE\SKI000	0.05 0.06	40.0 40.0	0.101 0.157	6.4 16.9	3.98 10.74

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CUE 99999 Shin-Osaka 99	15.5 999.9	--E D	KOBE\SKI090 KOBE\SHI-UP KOBE\SHI000	0.10 0.10	40.0 23.0	0.122 0.059	14.6 6.4	8.07 2.16
			CEOR 99999 Tadoka 99	30.5 999.9	--D C	KOBE\SHI090 KOBE\TDO-UP KOBE\TDO000	0.08 0.05	23.0 40.0	0.212 0.294	27.9 24.7	7.64 7.47
			CUE 99999 Takarazuka 99	1.2 999.9	--D D	KOBE\TDO090 KOBE\TAZ-UP KOBE\TAZ000	0.05 0.13	40.0 40.0 33.0	0.137 0.693	6.0 68.3	2.61 26.65
			CUE 99999 Takatori 99	0.3 999.9	--E D	KOBE\TAZ090 KOBE\TAK-UP KOBE\TAK000	0.20 0.13	40.0 40.0	0.694 0.272	85.3 16.0	16.75 4.47
			99999 TOT 99	57.9 999.9	--B -	KOBE\TAK090 KOBE\TOT-UP KOBE\TOT000	0.05 0.05	40.0	0.611 0.015	127.1 1.3	35.77 0.80
			99999 TOT 99	57.9 999.9	--B -	KOBE\TAK090 KOBE\TOT090 KOBE\TOT090	0.05 0.05	40.0	0.616 0.076	120.7 10.9	32.72 3.71
			CEOR 99999 Yae 99	26.3 999.9	--D -	KOBE\TAK090 KOBE\YAE-UP KOBE\YAE000	0.09 0.05	40.0	0.075 0.133	7.6 7.0	4.58 3.52
			99999 Yae 99	26.3 999.9	--D -	KOBE\YAE090 KOBE\YAE090 KOBE\YAE090	0.05 0.05	40.0	0.156 0.147	21.3 21.7	9.02 11.98
Dinar 99	1995 1001 1557	6.2 5.9 6.1 5.7	99999 Balikesir 99	257.3 999.9	--- -	DINAR\BLK090 DINAR\BLK000 DINAR\BLK090	0.20 0.20	7.0 6.0	0.002 0.005	0.5 1.0	0.14 0.28
			99999 Burdur 99	54.8 999.9	--- -	DINAR\BUR-UP DINAR\BUR090 DINAR\BUR180	1.30 0.40	15.0 13.0	0.031 0.042	1.7 4.3	0.12 1.22
			99999 Bursa 99	243.3 999.9	--- -	DINAR\BUR090 DINAR\BUSDWN DINAR\BUS000	0.40 0.50	13.0 5.0	0.040 0.001	4.4 0.2	1.06 0.03
			99999 Bursa 99	243.3 999.9	--- -	DINAR\BUS090 DINAR\CAR-UP DINAR\CAR076	0.30 1.00	6.0 18.0	0.002 0.081	0.3 2.7	0.08 0.15
			99999 Bursa 99	54.5 999.9	--- -	DINAR\CAR256 DINAR\CAR076 DINAR\CAR256	0.80 0.80	18.0 18.0	0.062 0.065	2.7 4.3	0.29 0.35
			99999 Denizli 99	94.3 999.9	--- -	DINAR\DEN090 DINAR\DEN090 DINAR\DEN090	0.10 0.10	20.0 20.0	0.010 0.018	1.5 3.0	0.55 1.46
			99999 Dinar 99	26.3 999.9	--- -	DINAR\DEN090 DINAR\DIN-UP DINAR\DIN090	0.10 0.40	20.0 30.0	0.016 0.137	2.4 13.3	1.29 3.06
			99999 Dinar 99	26.3 999.9	--- -	DINAR\DIN090 DINAR\DIN180 DINAR\DIN180	0.20 0.20	25.0 25.0	0.352 0.282	40.1 24.0	9.41 5.57
			99999 Izmir 1 99	255.0 999.9	--- -	DINAR\IZ1DWN DINAR\IZ1000 DINAR\IZ1090	0.80 0.60	10.0 7.0	0.001 0.001	0.1 0.1	0.01 0.01
			99999 Izmir 2 99	255.0 999.9	--- -	DINAR\IZ1090 DINAR\IZ2DWN DINAR\IZ2000	0.80 0.50	5.0 10.0	0.001 0.001	0.1 0.2	0.01 0.04
			99999 Izmir 2 99	255.0 999.9	--- -	DINAR\IZ2090 DINAR\IZ2090 DINAR\IZ2090	0.20 0.20	5.0 6.0	0.003 0.003	0.5 0.4	0.16 0.08
Kozani 99	1995 0513 0847	0.0 6.6 0.0 0.0	99999 Edessa 99	76.5 999.9	--- -	KOZANI\EDEXXX KOZANI\EDE--L KOZANI\EDE--T	-99. 1.00	10.0 10.0	0.023 0.028	1.8 2.4	0.18 0.32
			99999 Florina 99	70.4 999.9	--- -	KOZANI\FLR-UP KOZANI\FLR--L KOZANI\FLR--T	1.00 1.30	15.0 15.0	0.018 0.029	0.7 1.4	0.05 0.08
			99999 Kardista 99	92.8 999.9	--- -	KOZANI\FLR--T KOZANI\FLR--T KOZANI\FLR--T	0.90 0.40	20.0 15.0	0.023 0.014	1.3 1.7	0.12 0.47
			99999 Kardista 99	92.8 999.9	--- -	KOZANI\KAR-UP KOZANI\KAR--L KOZANI\KAR--T	0.80 0.80	15.0 13.0	0.019 0.021	2.2 1.8	0.28 0.29

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99999 Kastoria 99	51.5 999.9	--- -	KOZANI\KAS-UP KOZANI\KAS--L KOZANI\KAS--T	0.60 0.70 0.90	15.0 13.0 20.0	0.011 0.016 0.018	0.9 0.9 1.4	0.13 0.11 0.18
			99999 Kozani 99	18.9 999.9	--- -	KOZANI\KOZ-UP KOZANI\KOZ--L KOZANI\KOZ--T	0.40 0.20 0.60	25.0 25.0 25.0	0.092 0.215 0.139	4.3 9.3 6.7	0.58 1.66 0.54
			99999 Larisa 99	89.0 999.9	--- -	KOZANI\LAR-UP KOZANI\LAR--L KOZANI\LAR--T	0.30 0.15 0.15	15.0 15.0 10.0	0.015 0.036 0.030	3.1 10.7 8.3	0.75 5.36 3.70
			99999 Veroia 99	596.0 999.9	--- -	KOZANI\VER-UP KOZANI\VER--L KOZANI\VER--T	0.70 0.50 0.60	15.0 20.0 15.0	0.018 0.033 0.026	1.4 2.9 2.1	0.18 0.42 0.32
Kozani 99	1995 0515 0414	0.0 5.1 0.0 0.0	99999 Chromio Anapsiktirio 99	999.9 999.9	--- -	KOZANI\A-CHR-UP KOZANI\A-CHR-EW KOZANI\A-CHR-NS	1.00 0.40 0.40	70.0 40.0 50.0	0.072 0.159 0.141	1.3 4.1 3.2	0.07 0.20 0.13
			99999 Grevena 99	999.9 999.9	--- -	KOZANI\A-GR1-UP KOZANI\A-GR1--L KOZANI\A-GR1--T	1.20 1.00 1.30	15.0 20.0 20.0	0.012 0.049 0.032	0.6 2.1 1.2	0.04 0.12 0.07
Kozani 99	1995 0517 0414	0.0 5.3 0.0 0.0	99999 Chromio Anapsiktirio 99	999.9 999.9	--- -	KOZANI\B-CHR-UP KOZANI\B-CHR-EW KOZANI\B-CHR-NS	0.13 0.33 0.23	65.0 40.0 50.0	0.053 0.122 0.129	3.1 4.4 5.1	0.27 0.33 0.40
			99999 Grevena 99	999.9 999.9	--- -	KOZANI\B-GR1XXX KOZANI\B-GR1--L KOZANI\B-GR1--T	-99. 1.30 0.70	- 20.0 20.0	- 0.016 0.036	- 0.6 1.2	- 0.03 0.08
Kozani 99	1995 0519 0648	0.0 5.1 0.0 0.0	99999 Grevena 99	999.9 999.9	--- -	KOZANI\C-GR1-UP KOZANI\C-GR1--L KOZANI\C-GR1--T	1.30 0.50 1.00	20.0 13.0 20.0	0.016 0.034 0.024	0.6 1.4 1.1	0.04 0.11 0.08
			99999 Grevena Posokemio 99	999.9 999.9	--- -	KOZANI\C-GRPXXX KOZANI\C-GRP--L KOZANI\C-GRP--T	-99. 0.60 1.00	- 15.0 15.0	- 0.026 0.030	- 1.3 1.4	- 0.11 0.11
			99999 Karpero 99	999.9 999.9	--- -	KOZANI\C-KRP-UP KOZANI\C-KRP-EW KOZANI\C-KRP-NS	0.07 0.20 0.10	60.0 50.0 60.0	0.124 0.188 0.276	8.0 13.9 13.2	0.98 1.57 1.46
Aqaba 99	1995 1122 0418	7.1 6.2 0.0 0.0	99999 Hadera 99	412.1 999.9	--- -	AQABA\HAD-UP AQABA\HAD-EW AQABA\HAD-NS	0.10 0.10 0.20	40.0 40.0 40.0	0.010 0.019 0.014	3.6 3.4 2.1	1.69 2.40 0.65
Aqaba 99	1995 1122 0616	7.1 6.2 0.0 0.0	99999 Eilat 99	93.8 999.9	--- -	AQABA\EIL-UP AQABA\EIL-EW AQABA\EIL-NS	0.20 0.10 0.10	40.0 40.0 40.0	0.109 0.097 0.086	4.8 14.0 10.6	1.38 4.55 4.39
Kocaeli, Turkey 00	1999 0817	7.4 0.0 7.8 6.7	ERD 99999 Afyon Bay 99	197.6* 999.9	--- -	KOCAELI\AFYDWN KOCAELI\AFY000 KOCAELI\AFY090	0.12 0.08 0.09	7.0 4.0 6.0	0.005 0.013 0.016	1.1 2.4 3.1	0.36 1.75 2.42
			KOERI 99999 Ambarli 99	78.9 78.9	B-E D	KOCAELI\ATS-UP KOCAELI\ATS000 KOCAELI\ATS090	0.03 0.03 0.02	50.0 50.0 50.0	0.079 0.249 0.184	8.5 40.0 33.2	8.85 30.08 25.83
			KOERI 99999 Arcelik 99	17.0 17.0	B-B B	KOCAELI\ARCDWN KOCAELI\ARC000 KOCAELI\ARC090	0.08 0.07 0.04	50.0 50.0 50.0	0.086 0.218 0.149	8.6 17.7 39.5	5.52 13.64 35.57

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			ITU 99999 Atakoy	67.5	--D	KOCAELI\ATK-UP	0.08	50.0	0.064	7.5	6.09
			99	67.5	C	KOCAELI\ATK000	0.03	50.0	0.105	22.4	23.47
						KOCAELI\ATK090	0.02	40.0	0.164	16.2	11.59
			ERD 99999 Aydin	276.5*	---	KOCAELI\AYD-UP	0.03	10.0	0.003	1.4	1.94
			99	999.9	-	KOCAELI\AYD090	0.02	9.0	0.005	2.7	4.89
						KOCAELI\AYD180	0.03	8.0	0.007	2.8	2.87
			ERD 99999 Balikesir	183.4	--D	KOCAELI\BLK-UP	0.06	20.0	0.007	2.2	1.92
			99	183.4	-	KOCAELI\BLK090	0.02	20.0	0.018	5.7	9.25
						KOCAELI\BLK180	0.03	18.0	0.017	4.6	7.13
			ERD 99999 Bornova	369.3*	---	KOCAELI\BRN-UP	0.02	12.0	0.003	1.9	2.68
			99	999.9	-	KOCAELI\BRN090	0.07	10.0	0.011	2.3	2.52
						KOCAELI\BRN180	0.03	10.0	0.010	2.4	2.74
			KOERI 99999 Botas	136.3	A-D	KOCAELI\BTS-UP	0.03	40.0	0.024	3.4	4.01
			99	136.3	-	KOCAELI\BTS000	0.03	40.0	0.103	10.3	3.95
						KOCAELI\BTS090	0.03	40.0	0.089	11.5	15.15
			ERD 99999 Bursa Sivil	66.6	--A	KOCAELI\BRS-UP	0.02	12.0	0.025	6.1	7.38
			99	66.6	-	KOCAELI\BRS090	0.09	20.0	0.045	8.1	4.35
						KOCAELI\BRS180	0.07	12.0	0.058	9.0	5.85
			KOERI 99999 Bursa Tofas	62.7	I-D	KOCAELI\BUR-UP	0.01	50.0	0.048	10.4	8.77
			99	62.7	-	KOCAELI\BUR000	0.02	50.0	0.103	19.8	17.95
						KOCAELI\BUR090	0.08	50.0	0.108	22.3	10.68
			ERD 99999 Canakkale	392.3*	---	KOCAELI\CNK-UP	0.03	12.0	0.007	3.0	3.84
			99	999.9	-	KOCAELI\CNK090	0.03	10.0	0.029	5.5	5.33
						KOCAELI\CNK180	0.02	12.0	0.025	10.2	17.86
			KOERI 99999 Cekmece	76.1	A-B	KOCAELI\CNA-UP	0.02	50.0	0.057	7.2	6.34
			99	76.1	C	KOCAELI\CNA000	0.02	50.0	0.179	18.4	18.25
						KOCAELI\CNA090	0.02	50.0	0.133	9.5	6.89
			ERD 99999 Duzce	12.7	A-D	KOCAELI\DZC-UP	0.08	20.0	0.229	20.4	17.01
			99	12.7	C	KOCAELI\DZC180		20.0	0.312	58.8	44.11
						KOCAELI\DZC270	0.08	15.0	0.358	46.4	17.61
			ERD 99999 Eregli	237.1*	---	KOCAELI\ERG-UP	0.10	20.0	0.054	5.2	3.12
			99	999.9	-	KOCAELI\ERG180	0.05	20.0	0.106	10.8	4.86
						KOCAELI\ERG090	0.05	20.0	0.090	14.9	6.95
			KOERI 99999 Fatih	64.5	A-C	KOCAELI\FAT-UP	0.03	50.0	0.128	8.0	7.97
			99	64.5	-	KOCAELI\FAT000	0.02	50.0	0.187	18.5	17.05
						KOCAELI\FAT090	0.012	50.0	0.159	14.9	17.05
			ERD 99999 Gebze	17.0	C-A	KOCAELI\GBZ-UP	0.10	40.0	0.203	11.4	4.78
			99	17.0	A	KOCAELI\GBZ000	0.03	25.0	0.244	50.3	42.74
						KOCAELI\GBZ270	0.08	30.0	0.137	29.7	27.54
			ERD 99999 Goynuk	35.5	--B	KOCAELI\GYN-UP	0.10	30.0	0.114	11.5	7.59
			99	35.5	-	KOCAELI\GYN000	0.15	30.0	0.132	8.8	3.05
						KOCAELI\GYN090	0.10	25.0	0.119	10.5	3.94
			KOERI 99999 Hava Alani	69.3	A-B	KOCAELI\DHM-UP		40.0	0.055	8.6	7.70
			99	69.3	-	KOCAELI\DHM000		40.0	0.090	24.8	29.40
						KOCAELI\DHM090	0.02	40.0	0.083	17.7	16.55
			ERD 99999 Istanbul	60.7	--B	KOCAELI\IST-UP	0.02	40.0	0.035	5.6	6.44
			99	60.7	-	KOCAELI\IST090	0.20		0.044	7.7	12.67
						KOCAELI\IST180	0.07		0.053	9.0	8.22
			ERD 99999 Izmit	4.8	B-A	KOCAELI\IZT-UP	0.10	30.0	0.146	13.1	6.66
			99	4.8	A	KOCAELI\IZT180	0.10	30.0	0.152	22.6	9.81
						KOCAELI\IZT090	0.10	30.0	0.220	29.8	17.12
			ERD 99999 Iznik	31.8	A-D	KOCAELI\IZN-UP	0.10	30.0	0.079	6.8	4.26
			99	31.8	C	KOCAELI\IZN180	0.10	25.0	0.098	16.0	7.73
						KOCAELI\IZN090	0.07	25.0	0.136	28.8	17.44

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			ERD 99999 Kutahya 99	144.6 144.6	--D C	KOCAELI\KUT-UP KOCAELI\KUT090 KOCAELI\KUT180	0.10 0.02 0.09	20.0 13.0 12.0	0.023 0.060 0.049	5.1 19.7 9.9	1.67 20.08 3.92
			ERD 99999 Manisa 99	342.4* 999.9	--- -	KOCAELI\MNSDWN KOCAELI\MNS000 KOCAELI\MNS090	0.10 0.08 0.07	6.0 5.0 5.0	0.005 0.012 0.006	1.4 3.0 2.8	0.78 1.21 1.85
			ITU 99999 Maslak 99	63.9 63.9	--A A	KOCAELI\MSK-UP KOCAELI\MSK000 KOCAELI\MSK090	0.03 0.09 0.03	50.0 50.0 50.0	0.030 0.044 0.040	5.7 6.6 6.5	7.24 6.52 9.24
			ITU 99999 Mecidiyekoy 99	62.3 62.3	--B B	KOCAELI\MCD--V KOCAELI\MCD000 KOCAELI\MCD090	0.10 0.06 0.05	60.0 50.0 50.0	0.028 0.054 0.068	6.3 6.2 8.8	4.68 4.75 10.11
			ERD 99999 Sakarya 99	3.1 3.1	A-B B	KOCAELI\SKR-UP KOCAELI\SKRXXX KOCAELI\SKR090	0.04 -99. 0.10	40.0 20.0	0.376 0.011	79.5 1.2	70.52 0.74
			ERD 99999 Tekirdag 99	267.3* 999.9	--A -	KOCAELI\TKR-UP KOCAELI\TKR180 KOCAELI\TKR090	0.10 0.10 0.10	30.0 30.0 30.0	0.036 0.035 0.035	4.4 2.8 0.1	1.55 1.29 0.12
			ERD 99999 Tokat 99	373.3* 999.9	--- -	KOCAELI\TKT-UP KOCAELI\TKT090 KOCAELI\TKT180	0.04 0.03 0.10	10.0 10.0 10.0	.0004 .0011 .0009	0.1 0.2 0.1	0.12 0.19 0.14
			ERD 99999 Tosya 99	459.3* 999.9	--- -	KOCAELI\TOS-UP KOCAELI\TOS090 KOCAELI\TOS180	0.03 0.03 0.02	16.0 10.0 12.0	0.004 0.008 0.011	1.8 4.0 5.9	2.32 2.93 12.61
			ERD 99999 Usak 99	204.6* 999.9	--- -	KOCAELI\USK-UP KOCAELI\USK090 KOCAELI\USK180	0.01 0.02 0.02	12.0 12.0 12.0	0.004 0.016 0.011	1.1 5.8 2.8	1.60 11.22 4.84
			KOERI 99999 Yarimca 99	2.6 2.6	B-D C	KOCAELI\YPT-UP KOCAELI\YPT060 KOCAELI\YPT330	0.07 0.07 0.07	50.0 50.0 50.0	0.242 0.268 0.349	30.8 65.7 62.1	29.55 57.01 50.97
			ITU 99999 Zeytinburnu 99	63.1 63.1	--D C	KOCAELI\ZYT-UP KOCAELI\ZYT000 KOCAELI\ZYT090	0.03 0.06 0.04	50.0 50.0 50.0	0.054 0.108 0.110	7.2 18.5 15.2	8.56 12.98 18.20
Chi-Chi, Taiwan 02	1999 0920	7.6 7.3 7.6 0.0	CWB 99999 CHY002 02	26.8 26.8	--- D	CHICHI\CHY002-V CHICHI\CHY002-E CHICHI\CHY002-N	0.05 0.03 0.03	50.0 50.0 50.0	0.095 0.117 0.147	17.6 45.8 52.9	15.50 45.41 59.81
			CWB 99999 CHY004 99	50.9 50.9	--3 D	CHICHI\CHY004-V CHICHI\CHY004-E CHICHI\CHY004-N	0.05 0.03 0.03	50.0 40.0 50.0	0.041 0.099 0.100	6.5 20.0 15.8	5.34 17.51 15.41
			CWB 99999 CHY006 99	14.9 14.9	--1 C	CHICHI\CHY006-V CHICHI\CHY006-E CHICHI\CHY006-N	0.03 0.03 0.03	50.0 50.0 50.0	0.202 0.364 0.345	25.0 55.4 42.8	11.63 25.59 15.18
			CWB 99999 CHY008 02	45.3 45.3	--2 D	CHICHI\CHY008-V CHICHI\CHY008-E CHICHI\CHY008-N	0.03 0.03 0.03	50.0 40.0 50.0	0.075 0.130 0.120	12.4 28.9 25.1	8.53 20.20 13.84
			CWB 99999 CHY010 99	25.4 25.4	--1 C	CHICHI\CHY010-V CHICHI\CHY010-E CHICHI\CHY010-N	0.03 0.02 0.03	20.0 20.0 50.0	0.125 0.227 0.173	10.6 19.2 21.9	5.16 7.26 11.07
			CWB 99999 CHY012 99	64.2 64.2	--3 D	CHICHI\CHY012-V CHICHI\CHY012-E CHICHI\CHY012-N	0.03 0.02 0.03	40.0 50.0 40.0	0.031 0.053 0.063	8.9 13.0 16.6	8.74 11.80 13.70
			CWB 99999 CHY014 99	41.5 41.5	--1 C	CHICHI\CHY014-V CHICHI\CHY014-E	0.03 0.02	40.0 50.0	0.101 0.229	11.5 24.3	5.16 6.21

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 CHY015	43.5	--3	CHICHI\CHY014-N	0.03	50.0	0.263	21.9	6.57
			99	43.5	C	CHICHI\CHY015-V	0.04	40.0	0.032	6.2	5.47
						CHICHI\CHY015-E	0.02	40.0	0.145	22.5	9.83
						CHICHI\CHY015-N	0.03	40.0	0.157	25.7	13.17
			CWB 99999 CHY016	71.9	--3	CHICHI\CHY016-V	0.03	40.0	0.045	10.4	8.11
			99	71.9	D	CHICHI\CHY016-E	0.03	50.0	0.096	11.6	12.85
						CHICHI\CHY016-N	0.03	50.0	0.105	19.0	16.80
			CWB 99999 CHY017	64.4	--3	CHICHI\CHY017-V	0.03	50.0	0.030	7.2	6.07
			99	64.4	D	CHICHI\CHY017-E	0.02	40.0	0.053	14.9	13.01
						CHICHI\CHY017-N	0.03	50.0	0.056	18.6	15.49
			CWB 99999 CHY019	57.1	--1	CHICHI\CHY019-V	0.03	40.0	0.024	4.6	5.02
			99	57.1	C	CHICHI\CHY019-E	0.02	50.0	0.052	6.3	6.66
						CHICHI\CHY019-N	0.03	50.0	0.064	6.4	4.22
			CWB 99999 CHY022	71.6	--1	CHICHI\CHY022-V	0.03	30.0	0.024	3.9	5.79
			99	71.6	B	CHICHI\CHY022-E	0.00	40.0	0.065	6.9	7.12
						CHICHI\CHY022-N	0.03	40.0	0.044	5.1	5.47
			CWB 99999 CHY023	86.9	--2	CHICHI\CHY023-V	0.03	30.0	0.018	5.5	6.90
			99	86.9	C	CHICHI\CHY023-N	0.03	30.0	0.058	10.1	10.37
						CHICHI\CHY023-W	0.03	30.0	0.047	8.2	8.27
			CWB 99999 CHY024	9.1	--1	CHICHI\CHY024-V	0.03	50.0	0.152	44.8	34.80
			02	9.1	C	CHICHI\CHY024-N	0.02	50.0	0.175	48.9	31.04
						CHICHI\CHY024-W	0.02	50.0	0.278	52.9	43.62
			CWB 99999 CHY025	18.8	--2	CHICHI\CHY025-V	0.04	50.0	0.165	37.9	29.87
			02	18.8	D	CHICHI\CHY025-N	0.05	50.0	0.153	37.7	24.46
						CHICHI\CHY025-W	0.04	50.0	0.159	48.4	36.78
			CWB 99999 CHY026	29.2	--3	CHICHI\CHY026-V	0.04	40.0	0.074	23.9	15.35
			02	29.2	D	CHICHI\CHY026-N	0.04	40.0	0.066	32.6	26.97
						CHICHI\CHY026-W	0.04	33.0	0.076	46.2	35.23
			CWB 99999 CHY027	44.1	--3	CHICHI\CHY027-V	0.05	50.0	0.050	7.5	6.43
			02	44.1	D	CHICHI\CHY027-N	0.04	50.0	0.053	13.1	14.42
						CHICHI\CHY027-W	0.04	40.0	0.057	21.0	18.99
			CWB 99999 CHY028	7.3	--1	CHICHI\CHY028-V	0.04	50.0	0.337	36.4	13.56
			02	7.3	C	CHICHI\CHY028-N	0.10	50.0	0.821	67.0	23.28
						CHICHI\CHY028-W	0.12	50.0	0.653	72.8	14.68
			CWB 99999 CHY029	15.3	--1	CHICHI\CHY029-V	0.04	50.0	0.155	18.7	9.82
			02	15.3	B	CHICHI\CHY029-N	0.03	50.0	0.238	35.2	29.10
						CHICHI\CHY029-W	0.03	50.0	0.277	30.3	14.73
			CWB 99999 CHY032	39.3	--3	CHICHI\CHY032-V	0.03	50.0	0.062	7.4	5.95
			99	39.3	D	CHICHI\CHY032-N	0.03	50.0	0.078	19.4	19.00
						CHICHI\CHY032-W	0.03	50.0	0.088	26.4	17.74
			CWB 99999 CHY033	48.2	--3	CHICHI\CHY033-V	0.05	50.0	0.035	8.9	7.23
			99	48.2	D	CHICHI\CHY033-N	0.05	50.0	0.062	15.5	16.63
						CHICHI\CHY033-W	0.03	50.0	0.068	16.9	16.74
			CWB 99999 CHY034	20.2	--1	CHICHI\CHY034-V	0.03	30.0	0.091	15.0	8.37
			99	20.2	C	CHICHI\CHY034-E	0.03	30.0	0.248	38.8	11.46
						CHICHI\CHY034-N	0.03	30.0	0.310	48.5	16.54
			CWB 99999 CHY035	18.1	--1	CHICHI\CHY035-V	0.08	50.0	0.099	14.4	5.99
			99	18.1	C	CHICHI\CHY035-N	0.04	50.0	0.246	37.6	16.86
						CHICHI\CHY035-W	0.04	40.0	0.252	45.6	12.03
			CWB 99999 CHY036	20.4	--2	CHICHI\CHY036-V	0.04	50.0	0.104	11.3	10.18
			02	20.4	C	CHICHI\CHY036-N	0.03	50.0	0.207	41.4	34.17
						CHICHI\CHY036-W	0.05	50.0	0.294	38.9	21.19
			CWB 99999 CHY039	36.7	--2	CHICHI\CHY039-V	0.05	50.0	0.039	10.5	7.27
			02	36.7	D	CHICHI\CHY039-N	0.03	50.0	0.101	25.7	14.66

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 CHY041	26.0	--1	CHICHI\CHY039-W	0.02	40.0	0.114	28.6	17.46
			99	26.0	D	CHICHI\CHY041-V	0.03	50.0	0.123	9.8	6.37
						CHICHI\CHY041-N	0.03	50.0	0.639	39.5	11.25
						CHICHI\CHY041-W	0.04	50.0	0.302	20.4	8.62
			CWB 99999 CHY042	34.9	--1	CHICHI\CHY042-V	0.04	30.0	0.061	9.0	4.72
			99	34.9	B	CHICHI\CHY042-N	0.03	30.0	0.067	12.3	7.97
						CHICHI\CHY042-W	0.06	30.0	0.099	15.5	6.50
			CWB 99999 CHY044	60.2	--3	CHICHI\CHY044-V	0.05	50.0	0.026	8.5	8.11
			99	60.2	D	CHICHI\CHY044-N	0.06	40.0	0.077	13.4	12.81
						CHICHI\CHY044-W	0.03	40.0	0.055	19.7	18.34
			CWB 99999 CHY046	29.5	--1	CHICHI\CHY046-V	0.03	50.0	0.079	8.6	6.21
			99	29.5	C	CHICHI\CHY046-N	0.04	50.0	0.182	21.0	11.90
						CHICHI\CHY046-W	0.03	50.0	0.142	20.6	10.28
			CWB 99999 CHY047	29.4	--1	CHICHI\CHY047-V	0.03	50.0	0.086	15.4	8.55
			99	29.4	C	CHICHI\CHY047-E	0.03	50.0	0.168	21.1	10.27
						CHICHI\CHY047-N	0.03	50.0	0.186	22.2	13.65
			CWB 99999 CHY050	50.1	--1	CHICHI\CHY050-V	0.03	50.0	0.028	4.9	5.29
			99	50.1	B	CHICHI\CHY050-N	0.03	50.0	0.069	8.3	7.73
						CHICHI\CHY050-W	0.04	50.0	0.106	9.8	4.51
			CWB 99999 CHY052	45.0	--1	CHICHI\CHY052-V	0.03	40.0	0.039	6.6	5.45
			99	45.0	b*	CHICHI\CHY052-E	0.03	50.0	0.086	9.6	6.91
						CHICHI\CHY052-N	0.03	50.0	0.154	12.1	9.40
			CWB 99999 CHY054	53.8	--3	CHICHI\CHY054-V	0.04	50.0	0.032	9.1	6.43
			99	53.8	D	CHICHI\CHY054-N	0.03	50.0	0.097	19.3	13.74
						CHICHI\CHY054-W	0.02	50.0	0.094	17.9	11.86
			CWB 99999 CHY055	59.6	--3	CHICHI\CHY055-V	0.03	50.0	0.042	7.8	6.77
			99	59.6	D	CHICHI\CHY055-E	0.03	50.0	0.098	18.5	15.15
						CHICHI\CHY055-N	0.03	50.0	0.092	20.2	19.93
			CWB 99999 CHY057	62.8	--1	CHICHI\CHY057-V	0.03	30.0	0.022	5.2	5.10
			99	62.8	B	CHICHI\CHY057-N	0.03	30.0	0.056	6.2	4.90
						CHICHI\CHY057-W	0.02	30.0	0.038	7.1	6.10
			CWB 99999 CHY058	65.1	--2	CHICHI\CHY058-V	0.03	40.0	0.027	5.5	5.26
			99	65.1	C	CHICHI\CHY058-N	0.03	23.0	0.056	14.5	10.58
						CHICHI\CHY058-W	0.03	30.0	0.050	9.2	7.18
			CWB 99999 CHY059	78.6	--3	CHICHI\CHY059-V	0.03	30.0	0.015	5.6	5.49
			99	78.6	D	CHICHI\CHY059-N	0.03	25.0	0.049	19.1	14.27
						CHICHI\CHY059-W	0.02	25.0	0.049	11.9	12.93
			CWB 99999 CHY060	74.2	--3	CHICHI\CHY060-V	0.03	30.0	0.019	6.0	4.42
			99	74.2	D	CHICHI\CHY060-N	0.04	30.0	0.048	15.6	15.76
						CHICHI\CHY060-W	0.03	30.0	0.042	12.7	11.92
			CWB 99999 CHY061	66.9	--1	CHICHI\CHY061-V	0.04	30.0	0.021	4.5	4.54
			99	66.9	b*	CHICHI\CHY061-N	0.07	30.0	0.042	3.7	3.13
						CHICHI\CHY061-W	0.02	30.0	0.029	6.0	6.04
			CWB 99999 CHY062	64.1	--1	CHICHI\CHY062-V	0.04	50.0	0.019	4.1	4.77
			99	64.1	C	CHICHI\CHY062-N	0.18	50.0	0.053	4.7	2.09
						CHICHI\CHY062-W	0.20	15.0	0.053	4.5	1.60
			CWB 99999 CHY063	78.1	--1	CHICHI\CHY063-V	0.03	24.0	0.025	5.3	5.42
			99	78.1	C	CHICHI\CHY063-N	0.03	24.0	0.068	9.4	8.27
						CHICHI\CHY063-W	0.02	22.0	0.060	7.9	6.92
			CWB 99999 CHY065	90.2	--1	CHICHI\CHY065-V	0.02	50.0	0.031	5.1	7.56
			99	90.2	C	CHICHI\CHY065-N	0.03	40.0	0.097	12.5	8.25
						CHICHI\CHY065-W	0.02	33.0	0.118	15.8	8.44
			CWB 99999 CHY066	94.9	--3	CHICHI\CHY066-V	0.03	30.0	0.020	6.1	6.16
			99	94.9	D	CHICHI\CHY066-N	0.03	30.0	0.041	10.7	9.30

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 CHY067 99	88.8 88.8	--3 D	CHICHI\CHY066-W CHICHI\CHY067-V CHICHI\CHY067-N	0.02 0.02 0.03	24.0 30.0 40.0	0.056 0.022 0.060	10.3 6.5 10.8	10.06 7.18 9.09
			CWB 99999 CHY069 99	91.2 91.2	--3 D	CHICHI\CHY067-W CHICHI\CHY069-V CHICHI\CHY069-N	0.02 0.03 0.02	40.0 22.0 20.0	0.059 0.024 0.039	8.8 6.3 10.3	9.00 7.02 8.14
			CWB 99999 CHY070 99	89.6 89.6	--2 C	CHICHI\CHY069-W CHICHI\CHY070-V CHICHI\CHY070-N	0.02 0.03 0.02	20.0 30.0 24.0	0.047 0.017 0.049	10.9 6.1 10.4	8.57 5.87 9.99
			CWB 99999 CHY071 99	84.0 84.0	--2 D	CHICHI\CHY070-W CHICHI\CHY071-V CHICHI\CHY071-N	0.02 0.02 0.03	24.0 30.0 25.0	0.038 0.015 0.053	8.7 6.4 17.4	10.15 4.45 12.60
			CWB 99999 CHY074 99	82.5 82.5	--1 b*	CHICHI\CHY071-W CHICHI\CHY074-V CHICHI\CHY074-N	0.03 0.03 0.02	22.0 40.0 40.0	0.084 0.094 0.158	20.7 15.6 23.6	11.44 9.40 11.74
			CWB 99999 CHY076 99	45.7 45.7	--3 D	CHICHI\CHY074-W CHICHI\CHY076-V CHICHI\CHY076-N	0.02 0.03 0.04	40.0 30.0 50.0	0.234 0.031 0.073	28.1 8.2 15.8	19.04 7.24 16.97
			CWB 99999 CHY078 99	82.5 82.5	--2 C	CHICHI\CHY076-W CHICHI\CHY078-V CHICHI\CHY078-N	0.03 0.03 0.03	50.0 24.0 24.0	0.072 0.021 0.045	24.0 5.3 9.6	20.37 6.40 7.93
			CWB 99999 CHY079 99	55.0 55.0	--- B	CHICHI\CHY078-W CHICHI\CHY079-V CHICHI\CHY079-N	0.03 0.03 0.03	20.0 25.0 23.0	0.093 0.029 0.050	14.2 5.2 6.7	7.16 4.77 4.18
			CWB 99999 CHY080 99	7.0 6.8	--- B	CHICHI\CHY079-W CHICHI\CHY080-V CHICHI\CHY080-N	0.02 0.03 0.05	30.0 50.0 50.0	0.043 0.724 0.902	5.6 49.0 102.4	5.62 27.82 33.97
			CWB 99999 CHY081 99	47.7 47.7	--1 B	CHICHI\CHY080-W CHICHI\CHY081-V CHICHI\CHY081-N	0.10 0.03 0.03	50.0 30.0 30.0	0.968 0.025 0.045	107.5 7.2 9.8	18.60 4.86 7.66
			CWB 99999 CHY082 02	38.3 38.3	--3 D	CHICHI\CHY081-W CHICHI\CHY082-V CHICHI\CHY082-N	0.02 0.03 0.03	30.0 50.0 50.0	0.052 0.081 0.063	11.0 8.9 24.7	7.18 6.33 25.78
			CWB 99999 CHY086 99	35.4 35.4	--1 B	CHICHI\CHY082-W CHICHI\CHY086-V CHICHI\CHY086-N	0.04 0.04 0.03	50.0 30.0 30.0	0.067 0.050 0.204	20.9 8.2 17.8	20.70 4.78 7.89
			CWB 99999 CHY087 99	34.5 34.5	--1 B	CHICHI\CHY086-W CHICHI\CHY087-V CHICHI\CHY087-N	0.10 0.03 0.03	30.0 40.0 50.0	0.115 0.056 0.126	14.2 6.4 11.9	6.66 5.77 8.11
			CWB 99999 CHY088 99	42.8 42.8	--1 C	CHICHI\CHY087-W CHICHI\CHY088-V CHICHI\CHY088-N	0.02 0.04 0.04	50.0 40.0 33.0	0.136 0.040 0.216	10.2 7.4 20.5	7.18 4.93 14.21
			CWB 99999 CHY090 99	63.8 63.8	--2 D	CHICHI\CHY088-W CHICHI\CHY090-V CHICHI\CHY090-N	0.04 0.03 0.03	33.0 40.0 40.0	0.144 0.029 0.074	21.0 5.7 16.5	8.06 5.57 15.40
			CWB 99999 CHY092 02	22.5 22.5	--- D	CHICHI\CHY090-W CHICHI\CHY092-V CHICHI\CHY092-E	0.03 0.03 0.05	30.0 50.0 50.0	0.079 0.120 0.111	14.5 29.4 54.8	9.52 26.67 37.26
			CWB 99999 CHY093 99	53.2 53.2	--2 D	CHICHI\CHY092-N CHICHI\CHY093-V CHICHI\CHY093-E	0.03 0.03 0.03	24.0 50.0 50.0	0.082 0.036 0.054	34.4 6.2 17.6	30.53 5.83 13.74
			CWB 99999 CHY094 02	38.0 38.0	--3 D	CHICHI\CHY093-N CHICHI\CHY094-V CHICHI\CHY094-E	0.03 0.03 0.05	50.0 50.0 50.0	0.070 0.046 0.068	14.1 13.6 24.3	12.78 9.27 19.53

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 CHY096 99	87.7 87.7	--2 C	CHICHI\CHY094-N CHICHI\CHY096-V CHICHI\CHY096-N	0.03 0.02 0.04	20.0 45.0 50.0	0.054 0.015 0.045	18.9 6.1 10.8	19.76 6.55 9.86
			CWB 99999 CHY099 99	70.6 70.6	--2 C	CHICHI\CHY096-W CHICHI\CHY099-V CHICHI\CHY099-E	0.03 0.03 0.02	50.0 40.0 40.0	0.032 0.026 0.062	7.4 7.7 12.8	8.19 6.82 9.44
			CWB 99999 CHY100 99	58.8 58.8	--2 C	CHICHI\CHY099-N CHICHI\CHY100-V CHICHI\CHY100-E	0.02 0.03 0.02	40.0 40.0 50.0	0.056 0.029 0.066	17.9 6.2 12.3	13.74 5.49 8.28
			CWB 99999 CHY101 99	11.1 11.1	--2 C	CHICHI\CHY100-N CHICHI\CHY101-V CHICHI\CHY101-N	0.03 0.04 0.04	40.0 50.0 50.0	0.062 0.165 0.440	17.6 28.0 115.0	12.49 19.73 68.75
			CWB 99999 CHY102 99	46.2 46.0	--1 B	CHICHI\CHY101-W CHICHI\CHY102-V CHICHI\CHY102-N	0.03 0.03 0.03	50.0 30.0 33.0	0.353 0.025 0.050	70.6 6.5 6.3	45.28 5.06 4.15
			CWB 99999 CHY104 99	20.7 20.7	--3 D	CHICHI\CHY102-W CHICHI\CHY104-V CHICHI\CHY104-E	0.04 0.04 0.03	30.0 50.0 50.0	0.044 0.125 0.162	7.1 34.1 52.6	5.35 20.49 36.14
			CWB 99999 CHY107 99	55.9 55.9	--2 D	CHICHI\CHY104-N CHICHI\CHY107-V CHICHI\CHY107-E	0.05 0.04 0.02	50.0 40.0 50.0	0.187 0.043 0.102	55.2 8.5 20.9	47.23 7.86 13.42
			CWB 99999 CHY109 99	47.8 47.8	--- b*	CHICHI\CHY107-N CHICHI\CHY109-V CHICHI\CHY109-E	0.02 0.04 0.2	40.0 20.0 20.0	0.094 0.031 0.045	18.7 4.2 5.6	15.38 5.03 1.63
			CWB 99999 CHY110 99	47.8 47.8	--- b*	CHICHI\CHY109-N CHICHI\CHY110-V CHICHI\CHY110-E	0.2 0.14 0.20	20.0 12.0 20.0	0.043 0.018 0.026	5.7 3.0 3.1	1.80 1.25 1.00
			CWB 99999 CHY116 99	86.6 86.6	--- D	CHICHI\CHY110-N CHICHI\CHY116-V CHICHI\CHY116-N	0.10 0.03 0.03	30.0 40.0 40.0	0.028 0.019 0.054	5.2 7.8 20.0	2.78 6.47 20.72
			CWB 99999 ENA 99	77.8 75.1	--1 A	CHICHI\CHY116-W CHICHI\ENA-V CHICHI\ENA-E	0.02 0.20 0.30	40.0 30.0 30.0	0.063 0.046 0.070	16.6 6.2 5.9	14.79 1.61 0.90
			CWB 99999 ESL 99	44.9 40.2	--1 C	CHICHI\ENA-N CHICHI\ESL-V CHICHI\ESL-E	0.30 0.04 0.15	22.0 50.0 25.0	0.060 0.057 0.068	5.1 7.4 6.2	1.18 7.33 2.31
			CWB 99999 HWA002 99	53.8 50.0	--1 B	CHICHI\ESL-N CHICHI\HWA002-V CHICHI\HWA002-E	0.05 0.03 0.06	25.0 40.0 20.0	0.077 0.033 0.049	7.9 7.0 6.1	5.55 7.18 4.58
			CWB 99999 HWA003 99	56.1 52.4	--2 C	CHICHI\HWA002-N CHICHI\HWA003-V CHICHI\HWA003-E	0.06 0.00 0.04	40.0 30.0 20.0	0.094 0.053 0.050	11.9 9.3 10.5	6.80 5.34 5.45
			CWB 99999 HWA005 99	43.9 39.0	--2 C	CHICHI\HWA003-N CHICHI\HWA005-V CHICHI\HWA005-E	0.00 0.03 0.05	20.0 50.0 40.0	0.138 0.051 0.147	19.1 8.1 12.5	8.92 7.15 8.22
			CWB 99999 HWA006 99	44.0 39.2	--2 C	CHICHI\HWA005-N CHICHI\HWA006-V CHICHI\HWA006-E	0.04 0.03 0.06	40.0 50.0 50.0	0.139 0.063 0.089	16.6 6.9 9.2	9.18 6.81 6.11
			CWB 99999 HWA007 99	59.8 56.4	--- C	CHICHI\HWA006-N CHICHI\HWA007-V CHICHI\HWA007-N	0.06 0.02 0.02	50.0 40.0 30.0	0.083 0.032 0.089	7.3 10.0 15.2	5.89 13.05 13.95
			CWB 99999 HWA009 99	59.7 56.2	--2 C	CHICHI\HWA007-W CHICHI\HWA009-V CHICHI\HWA009-N	0.02 0.02 0.05	30.0 50.0 50.0	0.066 0.042 0.103	18.4 9.6 15.8	26.27 12.82 12.59

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 HWA011	56.7	--2	CHICHI\HWA009-W	0.02	50.0	0.085	18.8	24.78
			99	53.1	C	CHICHI\HWA011-V	0.02	40.0	0.039	10.0	10.86
						CHICHI\HWA011-N	0.02	30.0	0.102	22.0	13.76
						CHICHI\HWA011-W	0.02	30.0	0.089	21.3	26.83
			CWB 99999 HWA012	60.3	--2	CHICHI\HWA012-V	0.06	40.0	0.032	7.4	9.39
			99	56.9	C	CHICHI\HWA012-N	0.06	40.0	0.071	12.9	11.12
						CHICHI\HWA012-W	0.12	30.0	0.078	11.9	6.87
			CWB 99999 HWA013	57.4	--2	CHICHI\HWA013-V	0.02	50.0	0.064	8.3	11.31
			99	53.8	C	CHICHI\HWA013-N	0.02	50.0	0.118	22.0	11.63
						CHICHI\HWA013-W	0.02	50.0	0.142	31.2	27.00
			CWB 99999 HWA014	58.3	--2	CHICHI\HWA014-V	0.02	50.0	0.038	8.6	11.95
			99	54.8	C	CHICHI\HWA014-N	0.02	20.0	0.093	26.0	13.67
						CHICHI\HWA014-W	0.02	50.0	0.103	17.4	24.36
			CWB 99999 HWA015	54.9	--2	CHICHI\HWA015-V	0.02	50.0	0.050	9.1	9.85
			99	51.1	C	CHICHI\HWA015-N	0.02	50.0	0.073	16.7	8.41
						CHICHI\HWA015-W	0.02	40.0	0.105	15.5	23.83
			CWB 99999 HWA016	54.7	--1	CHICHI\HWA016-V	0.02	50.0	0.053	10.1	10.39
			99	51.0	C	CHICHI\HWA016-N	0.05	50.0	0.080	12.7	5.65
						CHICHI\HWA016-W	0.05	50.0	0.102	13.3	12.88
			CWB 99999 HWA017	53.9	--1	CHICHI\HWA017-V	0.03	50.0	0.049	9.4	11.67
			99	50.1	C	CHICHI\HWA017-N	0.02	50.0	0.084	9.4	7.23
						CHICHI\HWA017-W	0.02	50.0	0.082	10.8	21.83
			CWB 99999 HWA019	58.8	--2	CHICHI\HWA019-V	0.02	50.0	0.049	9.2	12.00
			99	55.3	C	CHICHI\HWA019-N	0.02	50.0	0.137	17.4	18.28
						CHICHI\HWA019-W	0.02	50.0	0.127	17.3	22.68
			CWB 99999 HWA020	44.9	--1	CHICHI\HWA020-V	0.02	50.0	0.056	8.0	12.44
			99	40.2	C	CHICHI\HWA020-N	0.02	50.0	0.069	7.9	8.80
						CHICHI\HWA020-W	0.02	50.0	0.061	10.3	18.07
			CWB 99999 HWA022	71.4	--1	CHICHI\HWA022-V		30.0	0.040	7.9	7.62
			99	68.6	b*	CHICHI\HWA022-N		30.0	0.082	11.0	17.16
						CHICHI\HWA022-W	0.02	30.0	0.123	12.0	11.01
			CWB 99999 HWA023	57.1	--2	CHICHI\HWA023-V	0.03	50.0	0.026	7.6	10.14
			99	53.4	A	CHICHI\HWA023-N	0.04	40.0	0.037	6.6	9.03
						CHICHI\HWA023-W	0.04	40.0	0.037	8.6	13.88
			CWB 99999 HWA024	44.3	--2	CHICHI\HWA024-V	0.03	40.0	0.025	4.5	5.43
			99	39.6	B	CHICHI\HWA024-N	0.03	30.0	0.024	4.8	5.02
						CHICHI\HWA024-W	0.03	30.0	0.023	7.5	7.36
			CWB 99999 HWA025	61.5	---	CHICHI\HWA025-V	0.03	50.0	0.034	5.7	8.43
			99	58.2	C	CHICHI\HWA025-N	0.02	50.0	0.069	9.2	14.56
						CHICHI\HWA025-W	0.15	50.0	0.061	6.7	3.35
			CWB 99999 HWA026	58.8	---	CHICHI\HWA026-V	0.02	50.0	0.038	6.7	9.93
			99	55.3	A	CHICHI\HWA026-N	0.03	50.0	0.058	9.1	9.74
						CHICHI\HWA026-W	0.02	50.0	0.071	11.2	18.17
			CWB 99999 HWA027	56.8	---	CHICHI\HWA027-V	0.02	40.0	0.039	8.0	10.42
			99	53.2	C	CHICHI\HWA027-N	0.03	40.0	0.091	13.8	10.83
						CHICHI\HWA027-W	0.03	40.0	0.126	13.2	19.15
			CWB 99999 HWA028	57.9	--2	CHICHI\HWA028-V	0.02	50.0	0.050	7.3	11.37
			99	54.4	C	CHICHI\HWA028-N	0.02	50.0	0.091	16.7	13.01
						CHICHI\HWA028-W	0.02	50.0	0.101	15.1	24.87
			CWB 99999 HWA029	56.3	---	CHICHI\HWA029-V	0.03	45.0	0.029	7.2	12.89
			99	52.7	C	CHICHI\HWA029-N	0.12	50.0	0.079	15.8	5.49
						CHICHI\HWA029-W	0.1	40.0	0.097	14.0	6.74
			CWB 99999 HWA030	46.4	--2	CHICHI\HWA030-V	0.02	50.0	0.049	8.2	11.65
			99	41.8	C	CHICHI\HWA030-N	0.02	50.0	0.079	13.8	8.48

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 HWA031	50.4	--2	CHICHI\HWA030-W	0.02	50.0	0.070	11.0	19.95
			99	46.2	C	CHICHI\HWA031-V	0.03	50.0	0.066	16.0	10.09
						CHICHI\HWA031-N	0.02	40.0	0.101	14.1	10.91
						CHICHI\HWA031-W	0.02	30.0	0.095	19.0	17.07
			CWB 99999 HWA032	43.2	---	CHICHI\HWA032-V	0.02	50.0	0.087	7.8	10.21
			99	38.3	C	CHICHI\HWA032-N	0.02	50.0	0.112	8.9	8.60
						CHICHI\HWA032-W	0.5	50.0	0.147	7.6	1.23
			CWB 99999 HWA033	49.0	--2	CHICHI\HWA033-V	0.02	50.0	0.053	10.8	10.75
			99	44.7	B	CHICHI\HWA033-N	0.05	50.0	0.167	18.5	8.59
						CHICHI\HWA033-W	0.05	50.0	0.167	17.0	8.05
			CWB 99999 HWA034	42.0	--2	CHICHI\HWA034-V	0.02	50.0	0.068	7.9	6.39
			99	36.9	C	CHICHI\HWA034-N	0.02	50.0	0.142	9.8	8.72
						CHICHI\HWA034-W	0.05	50.0	0.133	12.0	4.79
			CWB 99999 HWA035	45.9	--2	CHICHI\HWA035-V	0.02	50.0	0.054	7.5	9.60
			99	41.3	C	CHICHI\HWA035-N	0.02	50.0	0.074	7.5	8.88
						CHICHI\HWA035-W	0.02	50.0	0.078	11.9	16.89
			CWB 99999 HWA036	43.6	--2	CHICHI\HWA036-V	0.02	40.0	0.032	7.0	6.77
			99	38.8	C	CHICHI\HWA036-N	0.02	30.0	0.058	12.7	8.46
						CHICHI\HWA036-W	0.02	30.0	0.071	13.8	6.47
			CWB 99999 HWA037	46.6	---	CHICHI\HWA037-V	0.02	30.0	0.082	12.0	6.22
			99	42.1	C	CHICHI\HWA037-N	0.02	30.0	0.126	21.4	9.22
						CHICHI\HWA037-W	0.04	30.0	0.108	13.0	4.71
			CWB 99999 HWA038	42.9	--2	CHICHI\HWA038-V	0.02	33.0	0.041	5.5	5.25
			99	38.0	B	CHICHI\HWA038-N	0.03	30.0	0.059	7.4	7.51
						CHICHI\HWA038-W	0.04	30.0	0.035	8.8	4.97
			CWB 99999 HWA039	46.7	--2	CHICHI\HWA039-V	0.03	30.0	0.039	8.1	6.38
			99	42.2	C	CHICHI\HWA039-N	0.10	50.0	0.075	14.1	4.74
						CHICHI\HWA039-W	0.03	40.0	0.085	10.4	5.58
			CWB 99999 HWA041	50.0	---	CHICHI\HWA041-V	0.02	30.0	0.044	9.5	5.58
			99	45.9	C	CHICHI\HWA041-N	0.02	30.0	0.082	18.9	7.48
						CHICHI\HWA041-W	0.02	30.0	0.080	11.6	7.47
			CWB 99999 HWA043	54.9	--1	CHICHI\HWA043-V	0.02	40.0	0.031	10.2	9.99
			99	51.1	C	CHICHI\HWA043-N	0.02	40.0	0.070	7.7	9.31
						CHICHI\HWA043-W	0.05	40.0	0.056	8.9	7.04
			CWB 99999 HWA044	54.4	---	CHICHI\HWA044-V	0.02	30.0	0.029	8.9	9.32
			99	50.6	C	CHICHI\HWA044-N	0.02	30.0	0.080	9.7	8.61
						CHICHI\HWA044-W	0.02	33.0	0.046	8.1	13.44
			CWB 99999 HWA045	73.3	---	CHICHI\HWA045-V	0.02	40.0	0.072	8.1	9.26
			99	70.6	C	CHICHI\HWA045-N	0.02	40.0	0.183	26.9	19.31
						CHICHI\HWA045-W	0.04	80.0	0.128	17.1	6.95
			CWB 99999 HWA046	59.3	---	CHICHI\HWA046-V	0.03	40.0	0.049	5.7	8.73
			99	55.8	A	CHICHI\HWA046-E	0.02	50.0	0.076	9.8	18.09
						CHICHI\HWA046-N	0.02	50.0	0.087	9.0	14.01
			CWB 99999 HWA048	55.3	---	CHICHI\HWA048-V	0.03	50.0	0.055	8.1	11.34
			99	51.5	C	CHICHI\HWA048-E	0.05	50.0	0.124	18.7	12.14
						CHICHI\HWA048-N	0.02	40.0	0.167	18.6	25.91
			CWB 99999 HWA049	54.0	---	CHICHI\HWA049-V	0.03	30.0	0.038	9.1	10.90
			99	50.2	C	CHICHI\HWA049-E	0.02	40.0	0.098	20.8	25.90
						CHICHI\HWA049-N	0.05	40.0	0.092	24.2	9.06
			CWB 99999 HWA050	56.7	---	CHICHI\HWA050-V	0.03	50.0	0.052	8.4	10.41
			99	53.0	C	CHICHI\HWA050-E	0.02	40.0	0.090	12.7	22.83
						CHICHI\HWA050-N	0.05	50.0	0.093	12.2	5.52
			CWB 99999 HWA051	55.8	---	CHICHI\HWA051-V	0.02	50.0	0.054	9.9	11.73
			99	52.1	C	CHICHI\HWA051-E	0.02	40.0	0.169	18.5	19.83

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 HWA053 99	42.5 37.5	---	CHICHI\HWA051-N CHICHI\HWA053-V CHICHI\HWA053-E	0.02 0.03 -99.	50.0 40.0	0.154 0.025	17.7 4.9	9.97 5.93
					A	CHICHI\HWA053-N	0.03	50.0	0.027	3.3	3.75
			CWB 99999 HWA054 99	43.6 38.8	---	CHICHI\HWA054-V CHICHI\HWA054-E	0.03 0.03	50.0 30.0	0.027 0.015	3.3 3.9	3.75 2.51
					C	CHICHI\HWA054-N	0.06	30.0	0.050	9.4	5.17
			CWB 99999 HWA055 99	48.7 44.4	---	CHICHI\HWA055-V CHICHI\HWA055-E	0.02 0.04	20.0 40.0	0.062 0.094	8.5 19.1	6.46 8.55
					C	CHICHI\HWA055-N	0.03	20.0	0.088	11.9	8.49
			CWB 99999 HWA056 99	48.8 44.5	---	CHICHI\HWA056-V CHICHI\HWA056-N	0.02 0.03	50.0 50.0	0.062 0.107	7.1 10.8	10.35 10.36
					A	CHICHI\HWA056-W	0.02	50.0	0.107	11.7	17.64
			CWB 99999 HWA057 99	58.2 54.7	---	CHICHI\HWA057-V CHICHI\HWA057-N	0.02 0.02	50.0 50.0	0.053 0.124	6.3 7.1	9.32 13.67
					-	CHICHI\HWA057-W	0.02	50.0	0.078	8.4	16.23
			CWB 99999 HWA058 99	48.5 44.1	---	CHICHI\HWA058-V CHICHI\HWA058-N	0.02 0.02	50.0 50.0	0.059 0.114	9.6 12.0	8.78 9.07
					-	CHICHI\HWA058-W	0.02	50.0	0.092	10.2	19.54
			CWB 99999 HWA059 99	52.0 48.0	---	CHICHI\HWA059-V CHICHI\HWA059-N	0.03 0.02	50.0 50.0	0.056 0.120	6.9 12.0	11.90 10.28
					-	CHICHI\HWA059-W	0.02	50.0	0.136	15.9	18.28
			CWB 99999 HWA060 99	60.6 57.2	---	CHICHI\HWA060-V CHICHI\HWA060-N	0.03 0.02	30.0 30.0	0.030 0.036	8.3 6.0	13.03 8.45
					-	CHICHI\HWA060-W	0.02	30.0	0.041	9.1	17.54
			CWB 99999 HWA2 99	58.8 55.3	--2	CHICHI\HWA2-V CHICHI\HWA2-N	0.024 0.2	50.0 50.0	0.050 0.124	8.9 20.9	11.91 6.53
					C	CHICHI\HWA2-W	0.2	50.0	0.126	17.1	5.13
			CWB 99999 ILA001 99	114.8 113.2	---	CHICHI\ILA001-V CHICHI\ILA001-N	0.03 0.05	20.0 20.0	0.011 0.024	5.0 5.8	8.09 5.77
					C	CHICHI\ILA001-W	0.02	20.0	0.023	6.6	10.05
			CWB 99999 ILA002 99	109.1 107.5	---	CHICHI\ILA002-V CHICHI\ILA002-N	0.02 0.04	30.0 24.0	0.022 0.073	6.7 10.7	9.01 7.70
					C	CHICHI\ILA002-W	0.02	24.0	0.048	10.2	9.47
			CWB 99999 ILA003 99	104.5 102.7	---	CHICHI\ILA003-V CHICHI\ILA003-N	0.03 0.05	30.0 30.0	0.020 0.070	8.9 13.9	9.45 13.21
					D	CHICHI\ILA003-W	0.02	30.0	0.059	21.3	12.79
			CWB 99999 ILA004 99	100.7 98.7	--3	CHICHI\ILA004-V CHICHI\ILA004-N	0.03 0.05	22.0 20.0	0.026 0.066	9.5 26.1	12.03 19.83
					D	CHICHI\ILA004-W	0.04	18.0	0.078	29.3	24.08
			CWB 99999 ILA005 99	98.9 96.9	---	CHICHI\ILA005-V CHICHI\ILA005-N	0.03 0.02	30.0 30.0	0.025 0.077	10.9 15.6	11.17 13.62
					c*	CHICHI\ILA005-W	0.02	30.0	0.072	20.6	20.39
			CWB 99999 ILA006 99	96.7 94.6	--2	CHICHI\ILA006-V CHICHI\ILA006-N	0.03 0.02	23.0 30.0	0.037 0.071	8.9 12.3	10.52 13.10
					c*	CHICHI\ILA006-W	0.02	30.0	0.080	13.8	13.00
			CWB 99999 ILA007 99	95.5 93.4	--1	CHICHI\ILA007-V CHICHI\ILA007-N	0.03 0.02	30.0 30.0	0.036 0.089	6.7 10.6	10.54 12.90
					C	CHICHI\ILA007-W	0.02	30.0	0.062	9.5	9.27
			CWB 99999 ILA008 99	96.5 94.4	--1	CHICHI\ILA008-V CHICHI\ILA008-N	0.03 0.04	30.0 30.0	0.037 0.057	9.2 15.8	11.36 11.42
					D	CHICHI\ILA008-W	0.02	30.0	0.082	19.8	17.27
			CWB 99999 ILA010 99	92.2 90.0	---	CHICHI\ILA010-V CHICHI\ILA010-N	0.03 0.02	30.0 30.0	0.023 0.039	7.8 7.2	10.77 11.60

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 ILA012 99	99.7 97.9	--2 C	CHICHI\ILA010-W CHICHI\ILA012-V CHICHI\ILA012-N	0.02 0.03 0.05	30.0 20.0 20.0	0.059 0.029 0.059	7.9 10.3 16.0	9.76 10.33 9.11
			CWB 99999 ILA013 99	95.9 94.0	--3 C	CHICHI\ILA012-W CHICHI\ILA013-V CHICHI\ILA013-N	0.05 0.02 0.02	20.0 33.0 33.0	0.088 0.040 0.149	16.1 12.0 21.6	9.69 10.41 11.36
			CWB 99999 ILA014 99	92.3 90.2	--1 C	CHICHI\ILA013-W CHICHI\ILA014-V CHICHI\ILA014-N	0.02 0.03 0.03	33.0 24.0 30.0	0.142 0.030 0.067	27.5 7.3 13.4	14.29 11.85 8.17
			CWB 99999 ILA015 99	96.6 95.0	--1 A	CHICHI\ILA014-W CHICHI\ILA015-V CHICHI\ILA015-N	0.02 0.03 0.05	30.0 40.0 40.0	0.063 0.020 0.050	12.4 8.4 10.1	14.24 9.88 6.88
			CWB 99999 ILA016 99	93.7 91.9	--2 C	CHICHI\ILA015-W CHICHI\ILA016-V CHICHI\ILA016-N	0.04 0.03 0.05	33.0 30.0 30.0	0.038 0.038 0.077	6.3 8.0 14.3	6.64 9.77 7.98
			CWB 99999 ILA021 99	88.1 86.3	--1 C	CHICHI\ILA016-W CHICHI\ILA021-V CHICHI\ILA021-N	0.02 0.03 0.04	30.0 33.0 33.0	0.082 0.027 0.067	15.1 8.1 9.1	10.60 11.82 9.18
			CWB 99999 ILA024 99	79.0 76.9	--1 A	CHICHI\ILA021-W CHICHI\ILA024-V CHICHI\ILA024-N	0.02 0.03 0.02	40.0 40.0 40.0	0.061 0.024 0.033	11.7 7.9 8.5	9.96 10.86 9.41
			CWB 99999 ILA027 99	94.7 92.6	--1 C	CHICHI\ILA024-W CHICHI\ILA027-V CHICHI\ILA027-E	0.018 0.03 0.06	40.0 20.0 20.0	0.041 0.022 0.101	9.6 5.6 17.8	9.14 6.17 8.02
			CWB 99999 ILA030 99	97.4 95.4	--2 D	CHICHI\ILA027-N CHICHI\ILA030-V CHICHI\ILA030-N	0.10 0.02 0.02	20.0 30.0 20.0	0.062 0.029 0.111	14.4 12.3 23.3	9.16 11.18 12.76
			CWB 99999 ILA031 99	94.8 92.6	--1 A	CHICHI\ILA030-W CHICHI\ILA031-V CHICHI\ILA031-N	0.02 50.0 30.0	24.0 50.0 30.0	0.118 0.030 0.076	27.6 7.3 9.1	22.16 9.75 10.68
			CWB 99999 ILA032 99	95.8 92.6	--1 C	CHICHI\ILA031-W CHICHI\ILA032-V CHICHI\ILA032-E	0.057 0.33 0.03	50.0 20.0 20.0	0.057 0.025 0.056	10.0 2.6 11.7	9.94 0.80 5.05
			CWB 99999 ILA035 99	104.8 103.2	--1 C	CHICHI\ILA032-N CHICHI\ILA035-V CHICHI\ILA035-E	0.13 0.20 0.05	20.0 20.0 20.0	0.049 0.011 0.070	8.6 2.1 10.5	2.09 0.61 5.51
			CWB 99999 ILA036 99	101.6 99.8	--1 C	CHICHI\ILA035-N CHICHI\ILA036-V CHICHI\ILA036-N	0.13 0.03 0.05	20.0 30.0 40.0	0.052 0.026 0.068	9.9 12.8 17.0	3.32 9.59 8.86
			CWB 99999 ILA037 99	95.6 93.7	--2 C	CHICHI\ILA036-W CHICHI\ILA037-V CHICHI\ILA037-N	0.04 0.02 0.05	30.0 40.0 20.0	0.055 0.025 0.096	15.2 8.8 31.5	10.41 10.36 9.57
			CWB 99999 ILA039 99	97.6 95.8	--1 C	CHICHI\ILA037-W CHICHI\ILA039-V CHICHI\ILA039-E	0.04 0.20 0.03	15.0 14.0 20.0	0.069 0.020 0.058	14.3 3.2 12.1	9.30 1.18 13.71
			CWB 99999 ILA041 99	99.8 97.8	--- D	CHICHI\ILA039-N CHICHI\ILA041-V CHICHI\ILA041-N	0.15 0.03 0.02	20.0 30.0 24.0	0.062 0.025 0.064	12.1 9.8 22.0	4.66 12.22 20.82
			CWB 99999 ILA042 99	97.4 95.3	--2 D	CHICHI\ILA041-W CHICHI\ILA042-V CHICHI\ILA042-N	0.02 0.02 0.02	30.0 50.0 40.0	0.100 0.021 0.068	29.4 8.6 12.9	19.23 11.15 14.40
			CWB 99999 ILA043 99	88.9 86.6	--- b*	CHICHI\ILA042-W CHICHI\ILA043-V CHICHI\ILA043-E	0.02 0.30 0.40	22.0 30.0 20.0	0.085 0.034 0.063	21.6 2.9 5.2	18.97 0.59 0.61

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			CWB 99999 ILA044	92.3	---	CHICHI\ILA043-N	0.30	14.0	0.052	5.8	1.06
			99	90.1	C	CHICHI\ILA044-V	0.03	30.0	0.034	9.4	11.48
						CHICHI\ILA044-N	0.02	30.0	0.070	16.5	10.73
						CHICHI\ILA044-W	0.04	40.0	0.084	22.5	13.39
			CWB 99999 ILA046	91.4	--1	CHICHI\ILA046-V	0.04	40.0	0.028	8.0	11.80
			99	89.2	C	CHICHI\ILA046-N	0.04	40.0	0.055	9.8	7.66
						CHICHI\ILA046-W	0.04	40.0	0.068	13.3	10.59
			CWB 99999 ILA048	100.5	---	CHICHI\ILA048-V	0.03	20.0	0.028	10.2	11.96
			99	98.6	D	CHICHI\ILA048-N	0.03	20.0	0.074	23.5	16.79
						CHICHI\ILA048-W	0.02	24.0	0.090	18.5	17.91
			CWB 99999 ILA049	99.6	--2	CHICHI\ILA049-V	0.02	24.0	0.025	9.3	9.62
			99	97.7	C	CHICHI\ILA049-N	0.02	20.0	0.062	15.0	12.81
						CHICHI\ILA049-W	0.02	20.0	0.081	18.0	13.19
			CWB 99999 ILA050	77.8	--1	CHICHI\ILA050-V	0.02	40.0	0.055	8.6	8.92
			99	75.1	A	CHICHI\ILA050-N		40.0	0.064	9.9	16.41
						CHICHI\ILA050-W	0.04	40.0	0.065	7.3	6.69
			CWB 99999 ILA051	90.4	---	CHICHI\ILA051-V	0.02	24.0	0.024	8.4	10.13
			99	88.5	A	CHICHI\ILA051-N	0.02	22.0	0.033	7.3	9.19
						CHICHI\ILA051-W	0.02	22.0	0.080	12.3	9.66
			CWB 99999 ILA052	96.7	--1	CHICHI\ILA052-V	0.04	24.0	0.017	6.4	8.32
			99	94.6	A	CHICHI\ILA052-N	0.04	22.0	0.039	5.7	9.33
						CHICHI\ILA052-W	0.04	22.0	0.027	7.3	9.66
			CWB 99999 ILA054	127.5	---	CHICHI\ILA054-V	0.02	20.0	0.012	5.0	6.90
			99	126.2	A	CHICHI\ILA054-N	0.02	20.0	0.030	5.3	4.93
						CHICHI\ILA054-W	0.02	20.0	0.020	5.7	8.07
			CWB 99999 ILA055	102.0	---	CHICHI\ILA055-V	0.03	30.0	0.028	10.3	13.16
			99	100.0	D	CHICHI\ILA055-N	0.05	30.0	0.067	23.2	21.02
						CHICHI\ILA055-W	0.02	40.0	0.075	29.0	22.88
			CWB 99999 ILA056	103.7	---	CHICHI\ILA056-V	0.03	30.0	0.024	10.6	8.28
			99	101.8	D	CHICHI\ILA056-N	0.05	30.0	0.073	30.4	25.67
						CHICHI\ILA056-W	0.05	30.0	0.078	33.1	28.50
			CWB 99999 ILA059	98.0	---	CHICHI\ILA059-V	0.03	33.0	0.035	9.9	13.09
			99	95.9	D	CHICHI\ILA059-N	0.02	40.0	0.073	16.3	13.24
						CHICHI\ILA059-W	0.04	33.0	0.065	16.9	12.14
			CWB 99999 ILA061	89.8	---	CHICHI\ILA061-V	0.02	40.0	0.026	7.7	9.17
			99	87.6	C	CHICHI\ILA061-N	0.02	40.0	0.048	8.8	15.64
						CHICHI\ILA061-W	0.02	40.0	0.053	9.6	8.95
			CWB 99999 ILA062	84.2	---	CHICHI\ILA062-V	0.02	40.0	0.047	7.0	7.37
			99	81.8	C	CHICHI\ILA062-N	0.02	40.0	0.075	10.0	16.85
						CHICHI\ILA062-W	0.02	40.0	0.081	10.9	9.40
			CWB 99999 ILA063	71.6	---	CHICHI\ILA063-V	0.04	50.0	0.031	7.3	9.45
			99	69.6	A	CHICHI\ILA063-N	0.02	50.0	0.091	8.1	12.98
						CHICHI\ILA063-W	0.02	50.0	0.082	12.6	8.81
			CWB 99999 ILA064	83.4	---	CHICHI\ILA064-V	0.02	50.0	0.050	8.8	9.46
			99	81.0	C	CHICHI\ILA064-N	0.02	50.0	0.072	7.6	16.60
						CHICHI\ILA064-W	0.02	40.0	0.062	9.0	7.97
			CWB 99999 ILA066	81.3	---	CHICHI\ILA066-V	0.02	50.0	0.052	9.3	9.29
			99	78.8	C	CHICHI\ILA066-N	0.02	50.0	0.076	10.6	17.74
						CHICHI\ILA066-W	0.02	50.0	0.096	12.6	9.88
			CWB 99999 ILA067	48.7	---	CHICHI\ILA067-V	0.03	50.0	0.095	11.8	12.41
			99	45.4	-	CHICHI\ILA067-N	0.03	50.0	0.171	17.5	19.66
						CHICHI\ILA067-W	0.03	50.0	0.198	11.8	7.73
			CWB 99999 KAU001	54.6	---	CHICHI\KAU001-V	0.02	30.0	0.041	5.9	6.65
			99	54.2	C	CHICHI\KAU001-E	0.03	30.0	0.043	5.4	3.68

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			CWB 99999 KAU003 99	122.2 122.2	--- C	CHICHI\KAU001-N CHICHI\KAU003-V CHICHI\KAU003-N	0.03 0.04 0.02	30.0 20.0 20.0	0.022 0.011 0.018	5.9 5.4 6.5	6.21 7.18 9.03
			CWB 99999 KAU006 99	124.2 124.2	--- D	CHICHI\KAU003-W CHICHI\KAU006-V CHICHI\KAU006-N	0.02 0.02 0.02	20.0 30.0 30.0	0.020 0.011 0.023	5.4 6.7 10.3	10.83 5.87 7.95
			CWB 99999 KAU007 99	117.1 117.1	--1 C	CHICHI\KAU006-W CHICHI\KAU007-V CHICHI\KAU007-N	0.02 0.02 0.02	30.0 20.0 20.0	0.024 0.014 0.024	6.8 6.8 9.0	11.58 5.13 9.31
			CWB 99999 KAU008 99	118.6 118.6	--2 C	CHICHI\KAU007-W CHICHI\KAU008-V CHICHI\KAU008-N	0.04 0.02 0.02	15.0 30.0 30.0	0.025 0.013 0.030	7.4 5.5 9.0	6.92 5.85 8.64
			CWB 99999 KAU010 99	105.0 105.0	--3 D	CHICHI\KAU008-W CHICHI\KAU010-V CHICHI\KAU010-N	0.02 0.03 0.03	18.0 20.0 20.0	0.027 0.010 0.034	8.2 5.2 16.6	9.26 4.91 14.69
			CWB 99999 KAU011 99	108.6 108.6	--3 D	CHICHI\KAU010-W CHICHI\KAU011-V CHICHI\KAU011-N	0.03 0.04 0.04	18.0 20.0 20.0	0.034 0.013 0.054	11.3 5.6 11.3	9.14 4.30 12.71
			CWB 99999 KAU012 99	92.1 92.1	--1 C	CHICHI\KAU011-W CHICHI\KAU012-V CHICHI\KAU012-N	0.02 0.03 0.03	20.0 20.0 20.0	0.056 0.022 0.047	10.9 7.7 9.8	10.24 7.48 10.83
			CWB 99999 KAU015 99	116.0 116.0	--- C	CHICHI\KAU012-W CHICHI\KAU015-V CHICHI\KAU015-N	0.05 0.02 0.02	20.0 15.0 20.0	0.086 0.014 0.030	9.9 5.3 10.7	7.82 5.39 9.48
			CWB 99999 KAU018 99	87.8 87.7	--1 C	CHICHI\KAU015-W CHICHI\KAU018-V CHICHI\KAU018-N	0.02 0.02 0.02	15.0 20.0 22.0	0.026 0.016 0.026	6.9 6.2 7.9	8.75 5.41 6.97
			CWB 99999 KAU020 99	85.3 85.2	--2 C	CHICHI\KAU018-W CHICHI\KAU020-V CHICHI\KAU020-N	0.02 0.03 0.02	20.0 20.0 20.0	0.035 0.020 0.078	6.2 5.2 15.0	7.12 3.90 5.35
			CWB 99999 KAU022 99	110.8 110.6	--3 D	CHICHI\KAU020-W CHICHI\KAU022-V CHICHI\KAU022-N	0.02 0.02 0.02	15.0 12.0 10.0	0.055 0.013 0.030	12.3 2.5 6.0	6.07 3.12 5.49
			CWB 99999 KAU030 99	115.6 115.0	--3 D	CHICHI\KAU022-W CHICHI\KAU030-V CHICHI\KAU030-N	0.02 0.02 0.02	12.0 20.0 20.0	0.032 0.012 0.034	6.4 3.8 7.8	6.31 3.37 7.04
			CWB 99999 KAU032 99	125.2 125.0	--3 D	CHICHI\KAU030-W CHICHI\KAU032-V CHICHI\KAU032-N	0.02 0.02 0.02	20.0 20.0 20.0	0.039 0.010 0.030	8.0 3.9 8.4	5.93 5.04 6.78
			CWB 99999 KAU033 99	133.0 132.8	--3 D	CHICHI\KAU032-W CHICHI\KAU033-V CHICHI\KAU033-N	0.22 0.02 0.02	15.0 12.0 12.0	0.037 0.008 0.017	7.5 4.0 7.4	3.08 4.02 6.93
			CWB 99999 KAU034 99	122.8 121.8	--1 A	CHICHI\KAU033-W CHICHI\KAU034-V CHICHI\KAU034-N	0.02 0.02 0.04	12.0 12.0 12.0	0.026 0.009 0.009	12.2 2.3 2.1	9.75 3.08 2.42
			CWB 99999 KAU037 99	147.0 145.7	--2 C	CHICHI\KAU034-W CHICHI\KAU037-V CHICHI\KAU037-N	0.05 0.02 0.02	14.0 14.0 12.0	0.009 0.010 0.026	2.1 2.4 4.6	2.56 3.24 3.26
			CWB 99999 KAU038 99	157.4 156.2	--1 A	CHICHI\KAU037-W CHICHI\KAU038-V CHICHI\KAU038-N	0.02 0.03 0.03	12.0 20.0 15.0	0.017 0.006 0.010	3.8 2.0 2.4	5.76 2.69 2.56
			CWB 99999 KAU039 99	166.7 165.5	--2 C	CHICHI\KAU038-W CHICHI\KAU039-V CHICHI\KAU039-N	0.30 0.05 0.02	12.0 10.0 10.0	0.007 0.006 0.010	1.2 1.9 3.1	0.39 2.32 2.35

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 KAU040 99	154.6 153.3	--1 C	CHICHI\KAU039-W CHICHI\KAU040-V CHICHI\KAU040-N	0.02 0.02	10.0 18.0 10.0	0.011 0.007 0.008	2.8 1.8 2.1	4.39 1.99 3.20
						CHICHI\KAU040-W	0.04	12.0	0.008	2.2	2.67
			CWB 99999 KAU042 99	173.8 172.7	--- C	CHICHI\KAU042-V CHICHI\KAU042-N	0.02 0.02	15.0 12.0	0.006 0.011	1.8 3.0	2.21 4.25
						CHICHI\KAU042-W	0.02	10.0	0.010	3.5	2.27
			CWB 99999 KAU043 99	185.7 184.6	--- C	CHICHI\KAU043-V CHICHI\KAU043-N	0.02 0.02	10.0 10.0	0.010 0.015	3.6 4.3	3.02 4.49
						CHICHI\KAU043-W	0.02	10.0	0.016	4.2	3.50
			CWB 99999 KAU044 99	135.3 134.8	--3 D	CHICHI\KAU044-V CHICHI\KAU044-N	0.02 0.02	14.0 14.0	0.010 0.041	3.3 14.4	4.87 10.18
						CHICHI\KAU044-W	0.02	10.0	0.034	9.4	9.75
			CWB 99999 KAU046 99	176.8 175.7	--2 C	CHICHI\KAU046-V CHICHI\KAU046-N	0.03 0.02	10.0 10.0	0.008 0.023	2.9 5.2	2.44 4.01
						CHICHI\KAU046-W	0.02	9.0	0.024	6.8	5.20
			CWB 99999 KAU047 99	64.5 64.3	--- A	CHICHI\KAU047-V CHICHI\KAU047-N	0.03 0.03	30.0 40.0	0.020 0.042	4.8 5.6	4.50 4.00
						CHICHI\KAU047-W	0.02	40.0	0.033	7.1	5.52
			CWB 99999 KAU048 99	105.0 104.8	--3 C	CHICHI\KAU048-V CHICHI\KAU048-N	0.02 0.02	14.0 14.0	0.012 0.030	4.1 8.0	3.55 5.00
						CHICHI\KAU048-W	0.02	14.0	0.039	8.8	6.72
			CWB 99999 KAU050 99	52.1 50.6	--1 A	CHICHI\KAU050-V CHICHI\KAU050-N	0.02 0.03	30.0 40.0	0.023 0.040	5.2 6.4	4.13 3.28
						CHICHI\KAU050-W	0.02	30.0	0.042	5.2	6.98
			CWB 99999 KAU051 99	139.7 138.5	--1 A	CHICHI\KAU051-V CHICHI\KAU051-N	0.03 0.02	12.0 22.0	0.007 0.008	3.3 2.9	3.60 2.69
						CHICHI\KAU051-W	0.10	14.0	0.009	2.4	2.12
			CWB 99999 KAU052 99	182.8 181.7	--- B	CHICHI\KAU052-V CHICHI\KAU052-N	0.05 0.03	10.0 10.0	0.005 0.007	1.7 2.9	2.58 3.13
						CHICHI\KAU052-W	0.03	12.0	0.011	3.3	3.75
			CWB 99999 KAU054 99	40.5 39.6	--1 b*	CHICHI\KAU054-V CHICHI\KAU054-N	0.03 0.03	50.0 50.0	0.030 0.080	5.9 5.2	4.66 3.56
						CHICHI\KAU054-W	0.04	50.0	0.085	8.5	6.00
			CWB 99999 KAU057 99	121.4 121.4	--- B	CHICHI\KAU057-V CHICHI\KAU057-N	0.50 0.03	24.0 20.0	0.010 0.016	1.0 4.6	0.27 5.55
						CHICHI\KAU057-W	0.02	20.0	0.017	6.0	11.22
			CWB 99999 KAU058 99	118.9 118.9	--- D	CHICHI\KAU058-V CHICHI\KAU058-N	0.02 0.03	25.0 20.0	0.013 0.024	5.5 9.1	6.37 6.89
						CHICHI\KAU058-W	0.02	20.0	0.023	6.1	8.04
			CWB 99999 KAU062 99	122.0 122.0	--3 D	CHICHI\KAU062-V CHICHI\KAU062-N	0.03 0.02	30.0 30.0	0.017 0.033	5.4 8.0	4.60 7.42
						CHICHI\KAU062-W	0.02	24.0	0.027	6.6	9.48
			CWB 99999 KAU063 99	98.2 98.2	--- D	CHICHI\KAU063-V CHICHI\KAU063-N	0.03 0.03	40.0 40.0	0.011 0.041	5.0 10.4	4.60 9.22
						CHICHI\KAU063-W	0.02	28.0	0.039	12.5	11.17
			CWB 99999 KAU064 99	106.8 106.8	--3 D	CHICHI\KAU064-V CHICHI\KAU064-N	0.03 0.03	18.0 20.0	0.012 0.032	3.8 8.4	4.29 8.63
						CHICHI\KAU064-W	0.03	20.0	0.040	7.8	6.80
			CWB 99999 KAU066 99	108.7 108.7	--- D	CHICHI\KAU066-V CHICHI\KAU066-N	0.02 0.03	22.0 22.0	0.015 0.043	5.3 7.7	5.50 6.92
						CHICHI\KAU066-W	0.02	22.0	0.034	8.4	8.21
			CWB 99999 KAU069 99	83.6 82.8	--1 A	CHICHI\KAU069-V CHICHI\KAU069-N	0.03 0.10	24.0 30.0	0.019 0.036	2.2 3.1	3.05 0.859

Appendix A

SEISMIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 KAU073 99	124.3 123.8	--3 D	CHICHI\KAU069-W CHICHI\KAU073-V CHICHI\KAU073-N	0.02 0.02 0.02	22.0 20.0 14.0	0.039 0.010 0.029	3.3 3.7 8.5	3.69 4.90 8.77
			CWB 99999 KAU074 99	119.3 118.7	--3 D	CHICHI\KAU073-W CHICHI\KAU074-V CHICHI\KAU074-N	0.02 0.02 0.03	20.0 18.0 18.0	0.029 0.013 0.028	8.0 4.3 10.0	4.91 3.23 6.97
			CWB 99999 KAU075 99	130.0 129.6	--2 D	CHICHI\KAU074-W CHICHI\KAU075-V CHICHI\KAU075-N	0.02 0.02 0.02	20.0 18.0 18.0	0.032 0.010 0.040	6.7 4.3 11.7	7.19 5.33 8.58
			CWB 99999 KAU077 99	97.2 95.6	--1 A	CHICHI\KAU075-W CHICHI\KAU077-V CHICHI\KAU077-N	0.02 0.03 0.03	18.0 20.0 20.0	0.028 0.012 0.023	9.4 3.4 2.5	7.00 3.01 3.76
			CWB 99999 KAU078 99	102.8 101.9	--1 A	CHICHI\KAU077-W CHICHI\KAU078-V CHICHI\KAU078-N	0.02 0.03 0.02	20.0 50.0 50.0	0.022 0.015 0.024	3.2 2.6 2.2	2.68 2.44 3.17
			CWB 99999 KAU081 99	176.4 175.2	--2 C	CHICHI\KAU078-W CHICHI\KAU081-V CHICHI\KAU081-N	0.02 0.02 0.02	50.0 12.0 12.0	0.046 0.010 0.020	2.6 2.8 5.9	3.64 2.87 4.11
			CWB 99999 KAU082 99	184.0 182.9	--- B	CHICHI\KAU081-W CHICHI\KAU082-V CHICHI\KAU082-N	0.02 0.02 0.02	14.0 12.0 15.0	0.027 0.009 0.019	5.5 2.8 4.8	5.81 2.60 4.58
			CWB 99999 KAU083 99	123.0 122.9	--1 D	CHICHI\KAU082-W CHICHI\KAU083-V CHICHI\KAU083-N	0.02 0.02 0.02	12.0 14.0 14.0	0.017 0.011 0.024	7.8 4.9 8.4	6.77 4.97 5.81
			CWB 99999 KAU085 99	93.2 93.2	--3 C	CHICHI\KAU083-W CHICHI\KAU085-V CHICHI\KAU085-N	0.02 0.03 0.03	14.0 30.0 30.0	0.030 0.023 0.055	8.9 7.2 12.4	7.18 8.06 9.42
			CWB 99999 KAU086 99	103.6 103.6	--3 D	CHICHI\KAU085-W CHICHI\KAU086-V CHICHI\KAU086-N	0.02 0.03 0.03	30.0 30.0 24.0	0.050 0.016 0.045	11.2 6.3 16.4	9.80 6.46 18.00
			CWB 99999 KAU087 99	122.1 122.1	--- D	CHICHI\KAU086-W CHICHI\KAU087-V CHICHI\KAU087-N	0.02 0.04 0.02	24.0 30.0 20.0	0.041 0.016 0.032	9.9 6.0 13.0	11.34 6.04 8.44
			CWB 99999 KAU088 99	118.6 118.6	--- D	CHICHI\KAU087-W CHICHI\KAU088-V CHICHI\KAU088-N	0.02 0.03 0.03	20.0 30.0 30.0	0.027 0.016 0.031	10.0 6.4 8.8	11.97 5.58 6.57
			CWB 99999 NST 99	37.0 37.0	--1 C	CHICHI\KAU088-W CHICHI\NST-V CHICHI\NST-E	0.02 0.06 0.03	30.0 24.0 50.0	0.024 0.108 0.309	8.9 17.5 22.7	9.80 11.82 21.38
			CWB 99999 PNG 99	114.2 114.2	--1 A	CHICHI\NST-N CHICHI\PNG-V CHICHI\PNG-E	0.05 0.40 0.24	50.0 30.0 40.0	0.388 0.013 0.028	26.9 1.2 1.6	16.05 0.21 0.52
			CWB 99999 SSD 99	99.3 98.5	--1 B	CHICHI\PNG-N CHICHI\SSD-V CHICHI\SSD-E	0.22 0.30 0.20	30.0 20.0 20.0	0.035 0.014 0.018	2.4 1.5 1.7	0.75 0.35 0.48
			CWB 99999 TAP 99	105.2 105.1	--- D	CHICHI\SSD-N CHICHI\TAP-V CHICHI\TAP-E	0.30 0.16 0.07	20.0 20.0 20.0	0.026 0.013 0.060	1.6 2.4 13.4	0.27 0.85 6.55
			CWB 99999 TAP003 99	104.3 104.3	--3 D	CHICHI\TAP-N CHICHI\TAP005-V CHICHI\TAP005-N	0.20 0.03 0.05	20.0 70.0 70.0	0.054 0.043 0.106	10.5 10.0 28.2	3.44 10.18 15.19
			CWB 99999 TAP005 99	110.2 110.2	--3 D	CHICHI\TAP005-E CHICHI\TAP005-V CHICHI\TAP005-N	0.03 0.03 0.04	70.0 50.0 50.0	0.126 0.024 0.075	34.8 6.3 20.1	20.61 7.83 10.57

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TAP006 99	109.3 109.3	--3 D	CHICHI\TAP005-E CHICHI\TAP006-V CHICHI\TAP006-N	0.03 0.02 0.02	50.0 50.0 50.0	0.137 0.032 0.071	27.8 6.4 14.1	13.50 6.85 5.91
			CWB 99999 TAP007 99	107.6 107.6	--2 D	CHICHI\TAP006-E CHICHI\TAP007-V CHICHI\TAP007-S	0.02 0.03 0.03	50.0 30.0 30.0	0.105 0.029 0.075	19.1 7.0 16.3	15.75 7.91 7.99
			CWB 99999 TAP008 99	108.9 108.9	--- D	CHICHI\TAP007-W CHICHI\TAP008-V CHICHI\TAP008-N	0.02 0.02 0.04	30.0 30.0 20.0	0.109 0.019 0.061	17.9 5.9 14.2	18.06 6.90 8.56
			CWB 99999 TAP010 99	104.4 104.4	--2 D	CHICHI\TAP008-E CHICHI\TAP010-V CHICHI\TAP010-N	0.02 0.04 0.03	20.0 50.0 50.0	0.079 0.027 0.089	18.6 6.4 23.6	17.80 8.42 15.27
			CWB 99999 TAP012 99	105.6 105.6	--2 D	CHICHI\TAP010-E CHICHI\TAP012-V CHICHI\TAP012-N	0.02 0.03 0.03	50.0 50.0 50.0	0.121 0.028 0.055	24.0 6.7 14.0	18.82 8.05 9.44
			CWB 99999 TAP013 99	107.3 107.3	--2 D	CHICHI\TAP012-E CHICHI\TAP013-V CHICHI\TAP013-N	0.02 0.02 0.03	30.0 25.0 25.0	0.100 0.025 0.075	17.1 8.1 14.8	16.53 8.05 9.51
			CWB 99999 TAP014 99	108.6 108.6	--3 D	CHICHI\TAP013-E CHICHI\TAP014-V CHICHI\TAP014-N	0.02 0.02 0.04	30.0 20.0 20.0	0.094 0.029 0.073	19.7 7.1 19.4	16.72 7.05 8.36
			CWB 99999 TAP017 99	101.4 101.4	--2 D	CHICHI\TAP014-E CHICHI\TAP017-V CHICHI\TAP017-N	0.02 0.02 0.03	20.0 50.0 50.0	0.114 0.036 0.106	26.5 10.3 28.3	15.94 9.68 18.83
			CWB 99999 TAP020 99	105.9 105.8	--3 D	CHICHI\TAP017-E CHICHI\TAP020-V CHICHI\TAP020-S	0.02 0.02 0.03	50.0 50.0 30.0	0.114 0.033 0.067	21.3 7.7 15.1	23.08 8.35 9.61
			CWB 99999 TAP021 99	106.8 106.8	--2 D	CHICHI\TAP020-W CHICHI\TAP021-V CHICHI\TAP021-N	0.02 0.02 0.04	25.0 50.0 20.0	0.065 0.037 0.109	19.0 6.7 16.6	18.64 7.80 9.00
			CWB 99999 TAP024 99	100.2 100.2	--2 C	CHICHI\TAP021-E CHICHI\TAP024-V CHICHI\TAP024-S	0.04 0.02 0.02	20.0 50.0 50.0	0.117 0.023 0.075	24.8 7.9 20.2	12.67 9.62 11.49
			CWB 99999 TAP026 99	102.1 102.1	--3 D	CHICHI\TAP024-W CHICHI\TAP026-V CHICHI\TAP026-N	0.02 0.02 0.02	50.0 50.0 50.0	0.062 0.050 0.073	14.6 7.3 14.3	21.11 8.41 8.41
			CWB 99999 TAP028 99	101.4 101.4	--3 C	CHICHI\TAP026-E CHICHI\TAP028-V CHICHI\TAP028-N	0.03 0.02 0.02	50.0 30.0 30.0	0.077 0.015 0.052	11.7 7.6 14.4	16.36 8.72 8.25
			CWB 99999 TAP032 99	98.8 98.8	--1 C	CHICHI\TAP028-E CHICHI\TAP032-V CHICHI\TAP032-N	0.02 0.02 0.03	30.0 50.0 50.0	0.051 0.059 0.115	11.5 9.6 18.0	16.41 8.76 11.46
			CWB 99999 TAP034 99	98.8 98.7	--1 A	CHICHI\TAP032-W CHICHI\TAP034-V CHICHI\TAP034-N	0.02 0.02 0.02	40.0 30.0 30.0	0.107 0.023 0.066	24.2 9.3 12.6	21.13 9.57 6.79
			CWB 99999 TAP035 99	96.9 96.7	--1 A	CHICHI\TAP034-W CHICHI\TAP035-V CHICHI\TAP035-N	0.02 0.02 0.02	30.0 24.0 24.0	0.055 0.028 0.085	9.8 7.6 8.3	14.06 9.01 8.00
			CWB 99999 TAP036 99	95.6 95.3	--1 A	CHICHI\TAP035-W CHICHI\TAP036-V CHICHI\TAP036-N	0.02 0.02 0.02	24.0 30.0 30.0	0.067 0.017 0.039	8.4 6.9 6.1	12.78 9.15 5.83
			CWB 99999 TAP041 99	111.2 111.2	--2 C	CHICHI\TAP036-W CHICHI\TAP041-V CHICHI\TAP041-N	0.02 0.02 0.02	20.0 50.0 30.0	0.030 0.019 0.062	7.6 7.8 16.6	10.69 11.33 12.13

Appendix A

SEISMIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TAP042	108.2	--1	CHICHI\TAP041-W	0.02	30.0	0.090	21.6	28.19
			99	108.2	C	CHICHI\TAP042-V	0.02	30.0	0.025	9.2	8.73
						CHICHI\TAP042-N	0.02	30.0	0.100	15.5	11.46
						CHICHI\TAP042-W	0.02	30.0	0.085	19.1	19.06
			CWB 99999 TAP043	93.7	--1	CHICHI\TAP043-V	0.02	20.0	0.026	8.4	9.53
			99	93.7	C	CHICHI\TAP043-N	0.02	20.0	0.082	17.3	13.10
						CHICHI\TAP043-W	0.02	20.0	0.065	18.4	22.61
			CWB 99999 TAP046	127.3	--1	CHICHI\TAP046-V	0.02	30.0	0.018	4.5	6.17
			99	127.0	C	CHICHI\TAP046-N	0.02	30.0	0.054	6.6	4.93
						CHICHI\TAP046-W	0.02	24.0	0.084	12.6	7.08
			CWB 99999 TAP047	85.8	--2	CHICHI\TAP047-V	0.02	22.0	0.027	8.0	9.05
			99	85.8	C	CHICHI\TAP047-N	0.02	22.0	0.054	17.4	12.23
						CHICHI\TAP047-W	0.02	30.0	0.051	16.9	29.53
			CWB 99999 TAP049	109.1	--2	CHICHI\TAP049-V	0.02	22.0	0.037	7.8	9.51
			99	109.1	c*	CHICHI\TAP049-N	0.03	22.0	0.076	16.7	10.88
						CHICHI\TAP049-W	0.02	22.0	0.117	16.5	20.64
			CWB 99999 TAP051	105.1	--3	CHICHI\TAP051-V	0.02	40.0	0.037	8.8	10.21
			99	105.1	A	CHICHI\TAP051-N	0.02	30.0	0.064	14.9	13.39
						CHICHI\TAP051-W	0.02	30.0	0.112	16.6	21.52
			CWB 99999 TAP052	99.9	---	CHICHI\TAP052-V	0.03	50.0	0.039	8.2	10.24
			99	99.9	B	CHICHI\TAP052-N	0.02	50.0	0.127	23.6	14.06
						CHICHI\TAP052-W	0.02	30.0	0.066	16.6	25.29
			CWB 99999 TAP053	98.3	---	CHICHI\TAP053-V	0.03	20.0	0.035	10.4	9.77
			99	98.2	C	CHICHI\TAP053-N	0.03	20.0	0.086	12.2	7.62
						CHICHI\TAP053-W	0.02	24.0	0.082	11.3	15.70
			CWB 99999 TAP059	125.9	--1	CHICHI\TAP059-V	0.02	20.0	0.018	5.7	6.82
			99	125.9	A	CHICHI\TAP059-N	0.02	30.0	0.039	6.5	4.80
						CHICHI\TAP059-W		15.0	0.030	7.6	8.11
			CWB 99999 TAP060	128.5	--1	CHICHI\TAP060-V	0.02	24.0	0.014	5.0	7.02
			99	128.4	A	CHICHI\TAP060-N	0.02	20.0	0.036	7.6	6.05
						CHICHI\TAP060-W		20.0	0.036	11.0	8.80
			CWB 99999 TAP065	130.9	--1	CHICHI\TAP065-V	0.03	20.0	0.013	5.6	6.37
			99	130.8	A	CHICHI\TAP065-N	0.04	20.0	0.023	7.7	5.28
						CHICHI\TAP065-W	0.03	18.0	0.040	9.9	6.98
			CWB 99999 TAP066	117.5	--1	CHICHI\TAP066-V	0.02	22.0	0.022	4.1	6.23
			99	117.5	B	CHICHI\TAP066-N	0.03	20.0	0.074	12.7	7.78
						CHICHI\TAP066-W	0.02	22.0	0.050	9.1	15.81
			CWB 99999 TAP067	104.3	--1	CHICHI\TAP067-V	0.03	20.0	0.037	8.4	10.40
			99	104.1	A	CHICHI\TAP067-N	0.02	20.0	0.042	9.6	8.18
						CHICHI\TAP067-W	0.02	20.0	0.039	11.5	12.16
			CWB 99999 TAP069	135.3	--1	CHICHI\TAP069-V	0.04	20.0	0.013	5.2	6.49
			99	133.9	A	CHICHI\TAP069-N	0.05	20.0	0.033	5.8	4.58
						CHICHI\TAP069-W	0.04	20.0	0.026	5.0	8.69
			CWB 99999 TAP072	110.1	---	CHICHI\TAP072-V	0.03	30.0	0.018	7.5	9.54
			99	109.8	A	CHICHI\TAP072-N	0.04	30.0	0.050	11.4	6.59
						CHICHI\TAP072-W	0.03	50.0	0.029	7.5	8.67
			CWB 99999 TAP075	118.4	---	CHICHI\TAP075-V	0.03	30.0	0.024	6.3	8.90
			99	118.0	A	CHICHI\TAP075-N	0.02	50.0	0.050	9.7	6.49
						CHICHI\TAP075-W	0.018	30.0	0.083	10.3	11.98
			CWB 99999 TAP077	129.4	---	CHICHI\TAP077-V	0.02	30.0	0.024	5.6	6.87
			99	128.7	C	CHICHI\TAP077-N	0.02	30.0	0.036	6.9	6.03
						CHICHI\TAP077-W	0.02	30.0	0.031	12.0	9.08
			CWB 99999 TAP078	131.0	---	CHICHI\TAP078-V	0.03	33.0	0.018	5.4	8.02
			99	130.3	A	CHICHI\TAP078-N	0.04	40.0	0.042	8.6	5.60

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TAP079 99	130.6 129.6	---	CHICHI\TAP078-W CHICHI\TAP079-V CHICHI\TAP079-N	0.02 0.03 0.04	40.0 30.0 20.0	0.043 0.015 0.023	6.9 5.1 5.6	8.98 7.87 4.67
					A	CHICHI\TAP079-W	0.02	22.0	0.027	5.6	8.72
			CWB 99999 TAP081 99	135.6 134.2	---	CHICHI\TAP081-V CHICHI\TAP081-N	0.03 0.02	20.0 20.0	0.012 0.021	6.1 4.9	8.01 5.44
					A	CHICHI\TAP081-W	0.02	50.0	0.031	7.9	8.78
			CWB 99999 TAP083 99	122.4 122.4	---	CHICHI\TAP083-V CHICHI\TAP083-N	0.03 0.03	50.0 50.0	0.018 0.062	5.9 13.8	8.22 11.01
					C	CHICHI\TAP083-W	0.02	40.0	0.035	13.7	24.11
			CWB 99999 TAP084 99	127.8 127.8	---	CHICHI\TAP084-V CHICHI\TAP084-N	0.03 0.02	40.0 40.0	0.012 0.032	5.5 5.5	7.73 5.15
					C	CHICHI\TAP084-W	0.02	40.0	0.035	6.9	10.30
			CWB 99999 TAP086 99	101.1 100.9	---	CHICHI\TAP086-V CHICHI\TAP086-N	0.02 0.02	22.0 30.0	0.034 0.050	8.0 7.9	9.62 5.70
					b*	CHICHI\TAP086-W	0.02	22.0	0.038	8.5	11.86
			CWB 99999 TAP087 99	103.7 103.7	---	CHICHI\TAP087-V CHICHI\TAP087-N	0.03 0.03	30.0 30.0	0.030 0.079	11.3 17.5	10.40 12.51
					B	CHICHI\TAP087-W	0.03	20.0	0.051	17.3	24.64
			CWB 99999 TAP090 99	112.0 111.9	---	CHICHI\TAP090-V CHICHI\TAP090-N	0.02 0.03	50.0 30.0	0.030 0.091	7.2 16.0	6.56 10.47
					D	CHICHI\TAP090-E	0.02	30.0	0.131	31.9	13.73
			CWB 99999 TAP094 99	111.2 111.2	---	CHICHI\TAP094-V CHICHI\TAP094-N	0.02 0.03	30.0 30.0	0.030 0.087	7.1 18.9	9.44 10.88
					C	CHICHI\TAP094-E	0.02	30.0	0.065	17.8	16.63
			CWB 99999 TAP095 99	111.6 111.6	---	CHICHI\TAP095-V CHICHI\TAP095-N	0.02 0.03	50.0 50.0	0.050 0.098	7.7 18.8	8.44 7.56
					D	CHICHI\TAP095-E	0.03	50.0	0.151	26.9	13.37
			CWB 99999 TAP097 99	104.2 104.1	---	CHICHI\TAP097-V CHICHI\TAP097-N	0.03 0.03	30.0 30.0	0.022 0.086	7.7 21.1	9.79 10.53
					D	CHICHI\TAP097-W	0.02	30.0	0.072	15.1	17.44
			CWB 99999 TAP098 99	111.9 111.9	---	CHICHI\TAP098-V CHICHI\TAP098-N	0.02 0.02	30.0 30.0	0.026 0.054	4.8 8.4	6.68 5.45
					B	CHICHI\TAP098-E	0.02	30.0	0.061	13.4	15.53
			CWB 99999 TAP100 99	104.4 104.4	---	CHICHI\TAP100-V CHICHI\TAP100-N	0.02 0.02	50.0 30.0	0.024 0.087	7.2 13.8	7.92 7.47
					D	CHICHI\TAP100-E	0.02	30.0	0.057	15.3	20.04
			CWB 99999 TAP103 99	125.5 125.1	---	CHICHI\TAP103-V CHICHI\TAP103-N	0.02 0.02	20.0 20.0	0.029 0.177	5.2 21.7	6.11 8.93
					A	CHICHI\TAP103-W	0.03	20.0	0.122	22.7	8.32
			CWB 99999 TCU003 99	84.4 84.4	---	CHICHI\TCU003-V CHICHI\TCU003-N	0.02 0.02	20.0 20.0	0.022 0.076	13.3 21.2	12.60 21.13
					C	CHICHI\TCU003-W	0.03	25.0	0.056	37.4	46.46
			CWB 99999 TCU006 99	71.0 71.0	--1	CHICHI\TCU006-V CHICHI\TCU006-N	0.02 0.02	22.0 17.0	0.036 0.081	15.2 19.3	14.26 21.23
					C	CHICHI\TCU006-W	0.02	20.0	0.057	36.2	56.14
			CWB 99999 TCU007 99	88.4 88.4	--1	CHICHI\TCU007-V CHICHI\TCU007-N	0.03 0.02	30.0 20.0	0.028 0.071	8.5 18.0	9.98 15.45
					C	CHICHI\TCU007-W	0.02	22.0	0.060	23.6	37.22
			CWB 99999 TCU008 99	83.7 83.7	--1	CHICHI\TCU008-V CHICHI\TCU008-N	0.02 0.02	30.0 30.0	0.025 0.062	9.6 17.5	9.64 13.38
					B	CHICHI\TCU008-W	0.02	30.0	0.071	29.8	42.50
			CWB 99999 TCU009 99	80.1 80.1	--1	CHICHI\TCU009-V CHICHI\TCU009-N	0.02 0.02	30.0 30.0	0.022 0.069	11.8 19.5	11.19 24.70

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TCU010	80.4	--1	CHICHI\TCU009-W	0.02	30.0	0.070	26.5	41.45
			99	80.4	B	CHICHI\TCU010-V	0.02	20.0	0.026	13.7	12.95
						CHICHI\TCU010-N	0.02	20.0	0.074	19.3	23.89
						CHICHI\TCU010-W	0.03	20.0	0.088	31.8	46.68
			CWB 99999 TCU011	76.2	--1	CHICHI\TCU011-V	0.03	30.0	0.031	9.3	14.51
			99	76.2	C	CHICHI\TCU011-N	0.03	30.0	0.074	24.6	14.39
						CHICHI\TCU011-W	0.03	30.0	0.065	24.6	32.14
			CWB 99999 TCU014	92.4	--1	CHICHI\TCU014-V	0.03	22.0	0.018	6.2	8.05
			99	92.4	C	CHICHI\TCU014-N	0.02	25.0	0.075	13.5	15.04
						CHICHI\TCU014-W	0.02	20.0	0.058	24.2	37.42
			CWB 99999 TCU015	47.4	--1	CHICHI\TCU015-V	0.02	50.0	0.068	17.2	14.85
			99	47.4	B	CHICHI\TCU015-N	0.03	50.0	0.114	29.5	24.14
						CHICHI\TCU015-W	0.02	50.0	0.119	49.8	49.79
			CWB 99999 TCU017	52.2	--2	CHICHI\TCU017-V	0.02	50.0	0.050	15.6	16.36
			99	52.2	C	CHICHI\TCU017-N	0.02	50.0	0.121	31.9	32.55
						CHICHI\TCU017-W	0.02	33.0	0.088	42.7	49.82
			CWB 99999 TCU018	63.8	--1	CHICHI\TCU018-V		50.0	0.032	18.7	17.55
			99	63.8	B	CHICHI\TCU018-N	0.02	30.0	0.057	22.3	28.27
						CHICHI\TCU018-W	0.02	30.0	0.054	34.5	52.36
			CWB 99999 TCU025	54.4	---	CHICHI\TCU025-V	0.05	50.0	0.034	13.8	18.29
			99	54.4	A	CHICHI\TCU025-N	0.05	50.0	0.058	10.5	10.17
						CHICHI\TCU025-W	0.03	50.0	0.075	19.0	22.00
			CWB 99999 TCU026	54.6	--1	CHICHI\TCU026-V	0.02	50.0	0.061	17.1	18.12
			99	54.6	C	CHICHI\TCU026-N	0.02	50.0	0.091	27.5	29.95
						CHICHI\TCU026-W	0.02	50.0	0.120	39.4	43.09
			CWB 99999 TCU029	24.7	--1	CHICHI\TCU029-V	0.02	50.0	0.063	23.2	26.81
			99	24.7	B	CHICHI\TCU029-N	0.04	50.0	0.200	54.0	40.19
						CHICHI\TCU029-W	0.03	50.0	0.166	38.6	44.57
			CWB 99999 TCU031	26.8	--1	CHICHI\TCU031-V	0.02	30.0	0.065	26.8	29.00
			99	26.8	c*	CHICHI\TCU031-N	0.02	30.0	0.122	43.4	31.11
						CHICHI\TCU031-W	0.02	20.0	0.110	51.1	47.95
			CWB 99999 TCU033	38.2	--1	CHICHI\TCU033-V	0.03	50.0	0.079	15.6	15.15
			99	38.2	C	CHICHI\TCU033-N	0.03	50.0	0.180	24.5	21.00
						CHICHI\TCU033-W	0.02	50.0	0.156	47.2	51.72
			CWB 99999 TCU034	33.0	--1	CHICHI\TCU034-V	0.02	50.0	0.074	12.9	14.93
			99	33.0	B	CHICHI\TCU034-N	0.04	50.0	0.108	23.1	21.66
						CHICHI\TCU034-W	0.02	50.0	0.250	42.1	46.07
			CWB 99999 TCU036	16.7	--1	CHICHI\TCU036-V	0.02	40.0	0.064	23.9	22.50
			99	16.7	C	CHICHI\TCU036-N	0.02	40.0	0.131	50.2	42.17
						CHICHI\TCU036-W	0.02	20.0	0.139	59.6	63.60
			CWB 99999 TCU038	22.4	--2	CHICHI\TCU038-V	0.02	50.0	0.067	34.6	28.80
			99	22.4	C	CHICHI\TCU038-N	0.05	20.0	0.168	44.9	43.60
						CHICHI\TCU038-W	0.025	50.0	0.141	48.9	64.17
			CWB 99999 TCU039	16.7	--1	CHICHI\TCU039-V	0.02	50.0	0.136	50.7	45.98
			99	16.7	B	CHICHI\TCU039-N	0.02	50.0	0.145	54.0	44.54
						CHICHI\TCU039-W	0.02	50.0	0.206	50.0	76.78
			CWB 99999 TCU040	21.0	--2	CHICHI\TCU040-V	0.02	50.0	0.081	19.6	16.99
			99	21.0	D	CHICHI\TCU040-N	0.03	50.0	0.123	50.3	50.20
						CHICHI\TCU040-W	0.02	50.0	0.149	50.9	57.38
			CWB 99999 TCU042	23.3	--2	CHICHI\TCU042-V	0.02	50.0	0.086	19.7	24.09
			99	23.3	C	CHICHI\TCU042-N	0.05	50.0	0.199	39.3	23.86
						CHICHI\TCU042-W	0.02	50.0	0.246	44.8	46.91
			CWB 99999 TCU045	24.1	---	CHICHI\TCU045-V	0.02	50.0	0.361	21.4	22.95
			99	24.1	B	CHICHI\TCU045-N	0.04	50.0	0.512	39.0	14.34

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TCU046	14.3	--1	CHICHI\TCU045-W	0.02	50.0	0.474	36.7	50.66
			99	14.3	A	CHICHI\TCU046-V	0.03	30.0	0.104	32.3	37.74
						CHICHI\TCU046-N	0.06	30.0	0.116	30.9	23.18
						CHICHI\TCU046-W	0.03	30.0	0.133	39.8	37.37
			CWB 99999 TCU047	33.0	---	CHICHI\TCU047-V	0.02	50.0	0.270	26.9	17.88
			99	33.0	B	CHICHI\TCU047-N	0.03	50.0	0.413	40.2	22.22
						CHICHI\TCU047-W	0.02	50.0	0.301	41.6	51.08
			CWB 99999 TCU048	14.4	--1	CHICHI\TCU048-V	0.04	50.0	0.098	20.8	21.64
			02	14.4	B	CHICHI\TCU048-N	0.04	50.0	0.184	48.3	53.55
						CHICHI\TCU048-W	0.02	50.0	0.123	32.6	52.18
			CWB 99999 TCU049	4.5	--2	CHICHI\TCU049-V	0.02	50.0	0.171	26.1	21.82
			99	4.5	C	CHICHI\TCU049-N	0.02	30.0	0.251	61.2	51.29
						CHICHI\TCU049-W	0.02	50.0	0.293	47.9	65.28
			CWB 99999 TCU050	10.3	--2	CHICHI\TCU050-V	0.05	50.0	0.102	38.3	27.58
			02	10.3	C	CHICHI\TCU050-N	0.03	50.0	0.130	42.3	52.04
						CHICHI\TCU050-W	0.03	50.0	0.147	36.9	54.68
			CWB 99999 TCU051	8.3	---	CHICHI\TCU051-V	0.03	50.0	0.114	34.6	24.56
			02	8.3	C	CHICHI\TCU051-N	0.03	50.0	0.225	38.4	56.52
						CHICHI\TCU051-W	0.03	50.0	0.186	49.3	70.26
			CWB 99999 TCU052	0.2	--1	CHICHI\TCU052-V	0.04	50.0	0.241	110.5	163.51
			01	0.1	c*	CHICHI\TCU052-N	0.04	50.0	0.419	118.4	246.15
						CHICHI\TCU052-W	0.04	50.0	0.348	159.0	184.42
			CWB 99999 TCU053	6.7	--2	CHICHI\TCU053-V	0.02	50.0	0.122	25.3	23.45
			99	6.7	C	CHICHI\TCU053-N	0.03	50.0	0.140	41.1	48.05
						CHICHI\TCU053-W	0.02	50.0	0.223	41.3	59.52
			CWB 99999 TCU054	5.9	---	CHICHI\TCU054-V	0.02	50.0	0.130	30.9	24.65
			99	5.9	C	CHICHI\TCU054-N	0.02	50.0	0.188	38.5	52.23
						CHICHI\TCU054-W	0.02	50.0	0.148	59.4	59.42
			CWB 99999 TCU055	6.9	---	CHICHI\TCU055-V	0.08	50.0	0.167	43.7	39.58
			02	6.9	C	CHICHI\TCU055-N	0.04	50.0	0.201	51.5	47.16
						CHICHI\TCU055-W	0.2	50.0	0.237	26.2	9.95
			CWB 99999 TCU056	11.1	--1	CHICHI\TCU056-V	0.05	50.0	0.115	41.4	27.07
			02	11.1	D	CHICHI\TCU056-N	0.03	50.0	0.134	42.9	54.55
						CHICHI\TCU056-W	0.04	40.0	0.134	42.5	50.77
			CWB 99999 TCU057	12.6	---	CHICHI\TCU057-V	0.02	50.0	0.082	34.1	29.01
			02	12.6	B	CHICHI\TCU057-N	0.03	50.0	0.093	42.6	56.22
						CHICHI\TCU057-W	0.02	50.0	0.118	35.2	56.70
			CWB 99999 TCU059	17.8	---	CHICHI\TCU059-V	0.05	40.0	0.057	18.6	12.06
			99	17.8	C	CHICHI\TCU059-N	0.03	30.0	0.172	56.2	53.52
						CHICHI\TCU059-W	0.03	30.0	0.165	59.4	63.65
			CWB 99999 TCU060	9.5	--2	CHICHI\TCU060-V	0.02	50.0	0.086	27.5	24.81
			99	9.5	C	CHICHI\TCU060-N	0.03	50.0	0.106	45.3	45.56
						CHICHI\TCU060-W	0.03	50.0	0.201	36.3	51.89
			CWB 99999 TCU061	17.8	--2	CHICHI\TCU061-V	0.04	50.0	0.089	27.4	24.16
			02	17.8	C	CHICHI\TCU061-N	0.04	50.0	0.144	43.6	36.20
						CHICHI\TCU061-W	0.04	50.0	0.141	40.3	37.04
			CWB 99999 TCU063	10.4	--2	CHICHI\TCU063-V	0.03	50.0	0.132	53.9	40.02
			02	10.4	C	CHICHI\TCU063-N	0.03	40.0	0.134	73.1	59.24
						CHICHI\TCU063-W	0.03	50.0	0.172	59.0	59.19
			CWB 99999 TCU064	15.1	--2	CHICHI\TCU064-V	0.03	50.0	0.084	29.8	24.51
			99	15.1	C	CHICHI\TCU064-N	0.03	50.0	0.117	54.0	59.03
						CHICHI\TCU064-W	0.02	50.0	0.107	39.2	51.83
			CWB 99999 TCU065	1.0	--1	CHICHI\TCU065-V	0.02	50.0	0.272	77.0	53.70
			02	1.0	C	CHICHI\TCU065-N	0.06	50.0	0.603	78.8	60.74

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Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TCU067	0.3	--1	CHICHI\TCU065-W	0.03	50.0	0.814	126.2	92.57
			02	0.3	C	CHICHI\TCU067-V	0.04	50.0	0.225	42.7	28.48
						CHICHI\TCU067-N	0.03	50.0	0.325	66.6	45.95
						CHICHI\TCU067-W	0.02	50.0	0.503	79.5	93.09
			CWB 99999 TCU068	1.1	--1	CHICHI\TCU068-V	0.02	50.0	0.486	187.3	266.55
			01	0.5	C	CHICHI\TCU068-N	0.02	50.0	0.462	263.1	430.00
						CHICHI\TCU068-W	0.03	50.0	0.566	176.6	324.11
			CWB 99999 TCU070	19.1	---	CHICHI\TCU070-V	0.03	50.0	0.085	31.0	30.93
			02	19.1	B	CHICHI\TCU070-N	0.03	50.0	0.169	62.3	56.67
						CHICHI\TCU070-W	0.02	50.0	0.255	52.1	48.09
			CWB 99999 TCU071	4.9	--1	CHICHI\TCU071-V	0.10	50.0	0.449	34.8	31.32
			01	1.0	C	CHICHI\TCU071-N	0.04	50.0	0.655	69.4	49.06
						CHICHI\TCU071-W	0.20	50.0	0.567	44.4	13.76
			CWB 99999 TCU072	7.4	--1	CHICHI\TCU072-V	0.05	50.0	0.279	35.8	27.28
			99	0.2	C	CHICHI\TCU072-N	0.05	50.0	0.400	56.3	41.28
						CHICHI\TCU072-W	0.05	50.0	0.489	71.7	38.64
			CWB 99999 TCU074	13.7	--2	CHICHI\TCU074-V	0.2	50.0	0.286	24.0	7.75
			01	0.3	C	CHICHI\TCU074-N	0.10	50.0	0.349	40.9	15.69
						CHICHI\TCU074-W	0.13	50.0	0.597	73.3	20.44
			CWB 99999 TCU075	1.5	--2	CHICHI\TCU075-V	0.04	50.0	0.227	45.4	25.62
			02	1.5	C	CHICHI\TCU075-N	0.04	50.0	0.264	38.2	33.23
						CHICHI\TCU075-W	0.03	50.0	0.333	88.3	86.45
			CWB 99999 TCU076	2.0	--2	CHICHI\TCU076-V	0.02	50.0	0.281	34.1	17.39
			02	2.0	C	CHICHI\TCU076-N	0.05	50.0	0.416	64.2	35.37
						CHICHI\TCU076-W	0.10	50.0	0.303	62.6	31.47
			CWB 99999 TCU078	7.5	--1	CHICHI\TCU078-V	0.02	50.0	0.176	18.8	14.19
			01	0.0	C	CHICHI\TCU078-N	0.15	50.0	0.292	29.8	9.17
						CHICHI\TCU078-W	0.04	50.0	0.444	39.2	31.24
			CWB 99999 TCU079	10.0	--1	CHICHI\TCU079-V	0.03	50.0	0.388	25.3	12.59
			01	0.0	C	CHICHI\TCU079-N	0.07	50.0	0.393	48.8	13.78
						CHICHI\TCU079-W	0.20	50.0	0.742	61.2	11.11
			CWB 99999 TCU081	53.1	--2	CHICHI\TCU081-V	0.02	30.0	0.034	15.9	15.09
			99	53.1	C	CHICHI\TCU081-N	0.02	20.0	0.097	31.4	31.38
						CHICHI\TCU081-W	0.02	24.0	0.075	44.4	49.94
			CWB 99999 TCU082	5.7	--2	CHICHI\TCU082-V	0.04	50.0	0.131	40.8	25.50
			02	5.7	C	CHICHI\TCU082-N	0.04	50.0	0.192	40.5	53.79
						CHICHI\TCU082-W	0.02	50.0	0.223	58.4	71.47
			CWB 99999 TCU083	78.9	--1	CHICHI\TCU083-V	0.02	30.0	0.034	9.4	11.66
			99	78.9	B	CHICHI\TCU083-N	0.02	20.0	0.111	23.6	13.27
						CHICHI\TCU083-W	0.02	20.0	0.089	31.9	48.44
			CWB 99999 TCU084	10.4	--1	CHICHI\TCU084-V	0.09	50.0	0.340	25.3	11.94
			01	0.0	B	CHICHI\TCU084-N	0.10	50.0	0.417	45.6	21.27
						CHICHI\TCU084-W	0.20	30.0	1.157	114.7	31.43
			CWB 99999 TCU085	64.5	--1	CHICHI\TCU085-V	0.03	50.0	0.042	9.4	12.32
			99	64.0	A	CHICHI\TCU085-N		40.0	0.054	6.4	7.38
						CHICHI\TCU085-W		40.0	0.063	7.5	13.88
			CWB 99999 TCU087	3.2	--1	CHICHI\TCU087-V	0.02	30.0	0.108	61.5	51.32
			99	3.2	b*	CHICHI\TCU087-N	0.05	30.0	0.122	37.1	25.54
						CHICHI\TCU087-W	0.02	30.0	0.128	40.8	62.62
			CWB 99999 TCU089	8.2	--1	CHICHI\TCU089-V	0.03	50.0	0.191	22.1	23.90
			01	0.0	b*	CHICHI\TCU089-N	0.04	50.0	0.248	31.0	32.29
						CHICHI\TCU089-W	0.07	50.0	0.333	30.9	18.52
			CWB 99999 TCU092	96.4	---	CHICHI\TCU092-V	0.02	30.0	0.028	10.3	10.11
			99	96.4	C	CHICHI\TCU092-N	0.02	24.0	0.066	17.2	15.60

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TCU094 99	52.7 52.7	--- B	CHICHI\TCU092-W CHICHI\TCU094-V CHICHI\TCU094-N	0.02 0.02 0.02	20.0 50.0 50.0	0.086 0.041 0.096	23.0 14.8 29.2	36.91 17.91 28.46
			CWB 99999 TCU095 99	43.4 43.4	--1 B	CHICHI\TCU094-W CHICHI\TCU095-V CHICHI\TCU095-N	0.02 0.02 0.04	50.0 50.0 50.0	0.066 0.255 0.712	36.9 21.8 49.1	47.79 21.95 24.45
			CWB 99999 TCU096 99	52.0 52.0	--1 C	CHICHI\TCU095-W CHICHI\TCU096-V CHICHI\TCU096-N	0.02 0.02 0.04	50.0 50.0 40.0	0.378 0.037 0.107	62.0 15.0 27.0	51.75 14.59 26.11
			CWB 99999 TCU098 99	45.0 45.0	--1 C	CHICHI\TCU096-W CHICHI\TCU098-V CHICHI\TCU098-N	0.02 0.02 0.03	22.0 50.0 50.0	0.059 0.050 0.107	39.5 14.8 34.9	41.34 14.36 25.11
			CWB 99999 TCU100 02	12.1 12.1	--- B	CHICHI\TCU098-W CHICHI\TCU100-V CHICHI\TCU100-N	0.02 0.02 0.03	50.0 50.0 50.0	0.100 0.087 0.117	42.0 37.6 46.5	51.93 33.73 53.50
			CWB 99999 TCU101 99	2.9 2.9	--2 C	CHICHI\TCU100-W CHICHI\TCU101-V CHICHI\TCU101-N	0.02 0.03 0.04	50.0 50.0 50.0	0.117 0.169 0.251	34.6 55.2 49.4	51.95 39.19 35.12
			CWB 99999 TCU102 99	1.8 1.8	--2 C	CHICHI\TCU101-W CHICHI\TCU102-V CHICHI\TCU102-N	0.04 0.02 0.05	50.0 50.0 50.0	0.202 0.189 0.169	67.9 56.2 77.1	75.36 48.74 44.87
			CWB 99999 TCU103 99	4.0 4.0	--1 c*	CHICHI\TCU102-W CHICHI\TCU103-V CHICHI\TCU103-N	0.04 0.02 0.05	50.0 50.0 50.0	0.298 0.149 0.162	112.4 64.3 26.8	89.19 42.36 15.97
			CWB 99999 TCU104 02	13.6 13.6	--- B	CHICHI\TCU103-W CHICHI\TCU104-V CHICHI\TCU104-N	0.02 0.03 0.03	50.0 50.0 50.0	0.134 0.083 0.085	61.9 23.3 47.2	87.54 20.60 52.70
			CWB 99999 TCU105 02	18.1 18.1	--- B	CHICHI\TCU104-W CHICHI\TCU105-V CHICHI\TCU105-N	0.03 0.02 0.03	50.0 40.0 30.0	0.106 0.064 0.129	36.6 21.4 38.9	51.97 18.40 45.59
			CWB 99999 TCU106 02	15.2 15.2	--2 C	CHICHI\TCU105-W CHICHI\TCU106-V CHICHI\TCU106-N	0.03 0.03 0.03	40.0 50.0 50.0	0.112 0.123 0.128	34.6 25.3 43.7	48.59 20.65 35.83
			CWB 99999 TCU107 02	20.4 20.4	--2 C	CHICHI\TCU106-W CHICHI\TCU107-V CHICHI\TCU107-N	0.04 0.03 0.03	50.0 50.0 50.0	0.157 0.088 0.158	46.6 27.8 47.4	43.32 21.70 32.79
			CWB 99999 TCU109 02	13.1 13.1	--1 C	CHICHI\TCU107-W CHICHI\TCU109-V CHICHI\TCU109-N	0.03 0.03 0.04	50.0 50.0 50.0	0.124 0.137 0.155	36.8 26.6 53.1	39.81 20.27 34.74
			CWB 99999 TCU110 02	12.6 12.6	--3 D	CHICHI\TCU109-W CHICHI\TCU110-V CHICHI\TCU110-N	0.05 0.03 0.04	50.0 50.0 50.0	0.156 0.122 0.180	50.8 29.5 54.9	46.49 26.90 35.30
			CWB 99999 TCU111 02	22.2 22.2	--3 D	CHICHI\TCU110-W CHICHI\TCU111-V CHICHI\TCU111-N	0.04 0.03 0.04	50.0 50.0 50.0	0.180 0.079 0.099	67.5 24.7 35.6	40.97 22.39 31.30
			CWB 99999 TCU112 02	27.2 27.2	--3 D	CHICHI\TCU111-W CHICHI\TCU112-V CHICHI\TCU112-N	0.02 0.03 0.05	50.0 50.0 40.0	0.136 0.059 0.073	57.8 20.4 33.4	55.22 22.07 37.43
			CWB 99999 TCU113 02	31.5 31.5	--1 D	CHICHI\TCU112-W CHICHI\TCU113-V CHICHI\TCU113-N	0.05 0.03 0.03	40.0 50.0 50.0	0.083 0.077 0.074	41.3 16.0 23.4	30.06 17.03 27.12
			CWB 99999 TCU115 02	22.8 22.8	--3 D	CHICHI\TCU113-W CHICHI\TCU115-V CHICHI\TCU115-N	0.04 0.03 0.03	50.0 50.0 50.0	0.070 0.075 0.117	27.8 22.3 38.7	22.21 21.95 33.03

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TCU116 02	11.9 11.9	--3 D	CHICHI\TCU115-W CHICHI\TCU116-V CHICHI\TCU116-N	0.05 0.03 0.03	50.0 50.0 50.0	0.096 0.115 0.148	54.0 31.5 45.3	37.82 31.65 30.06
			CWB 99999 TCU117 02	25.6 25.6	--3 D	CHICHI\TCU116-W CHICHI\TCU117-V CHICHI\TCU117-N	0.03 0.03 0.03	50.0 50.0 50.0	0.184 0.088 0.120	48.7 19.7 54.4	49.22 19.91 45.54
			CWB 99999 TCU118 02	27.3 27.3	--3 D	CHICHI\TCU117-W CHICHI\TCU118-V CHICHI\TCU118-N	0.02 0.07 0.05	50.0 50.0 50.0	0.119 0.117 0.092	57.8 20.3 33.5	49.00 21.28 36.48
			CWB 99999 TCU119 02	39.0 39.0	--- D	CHICHI\TCU118-W CHICHI\TCU119-V CHICHI\TCU119-N	0.05 0.04 0.03	50.0 50.0 50.0	0.114 0.062 0.058	30.5 15.4 16.8	23.87 13.68 19.75
			CWB 99999 TCU120 02	8.1 8.1	--1 B	CHICHI\TCU119-W CHICHI\TCU120-V CHICHI\TCU120-N	0.04 0.03 0.03	50.0 50.0 50.0	0.072 0.162 0.192	26.5 32.1 36.9	22.52 22.34 33.30
			CWB 99999 TCU122 02	9.0 9.0	--- C	CHICHI\TCU120-W CHICHI\TCU122-V CHICHI\TCU122-N	0.02 0.04 0.02	50.0 50.0 50.0	0.225 0.241 0.261	63.1 41.4 34.0	54.09 33.77 36.08
			CWB 99999 TCU123 02	15.1 15.1	--2 C	CHICHI\TCU122-W CHICHI\TCU123-V CHICHI\TCU123-N	0.02 0.03 0.03	50.0 50.0 50.0	0.220 0.085 0.135	42.5 32.3 36.8	43.02 26.84 27.30
			CWB 99999 TCU128 99	9.7 9.7	--1 B	CHICHI\TCU123-W CHICHI\TCU128-V CHICHI\TCU128-N	0.04 0.02 0.05	50.0 40.0 30.0	0.164 0.097 0.170	40.6 46.0 68.8	33.47 34.77 41.87
			CWB 99999 TCU129 02	1.2 1.2	--2 C	CHICHI\TCU128-W CHICHI\TCU129-V CHICHI\TCU129-W	0.02 0.03 0.03	30.0 50.0 50.0	0.139 0.341 0.634	73.0 35.3 36.1	90.62 23.55 28.87
			CWB 99999 TCU136 99	9.0 9.0	--- B	CHICHI\TCU129-W CHICHI\TCU136-V CHICHI\TCU136-E	0.03 0.03 0.03	50.0 40.0 50.0	1.010 0.123 0.171	60.0 27.3 55.8	50.15 30.19 66.48
			CWB 99999 TCU138 02	10.1 10.1	--- C	CHICHI\TCU136-N CHICHI\TCU138-V CHICHI\TCU138-E	0.03 0.04 0.03	50.0 50.0 50.0	0.177 0.112 0.195	47.5 29.6 40.9	44.82 19.73 36.42
			CWB 99999 TCU140 02	34.0 34.0	--- D	CHICHI\TCU138-N CHICHI\TCU140-V CHICHI\TCU140-E	0.03 0.04 0.05	50.0 50.0 50.0	0.225 0.071 0.070	40.9 19.7 24.0	26.09 17.10 21.44
			CWB 99999 TCU141 02	23.8 23.8	--- D	CHICHI\TCU140-N CHICHI\TCU141-V CHICHI\TCU141-E	0.03 0.03 0.05	50.0 50.0 50.0	0.057 0.104 0.105	20.5 27.2 43.3	17.53 21.83 34.99
			CWB 99999 TCU145 02	36.3 36.3	--- D	CHICHI\TCU141-N CHICHI\TCU145-V CHICHI\TCU145-E	0.03 0.03 0.04	50.0 50.0 50.0	0.085 0.050 0.077	28.1 19.3 28.1	23.11 17.96 27.57
			CWB 99999 TCU147 99	72.4 72.4	--- -	CHICHI\TCU145-N CHICHI\TCU147-V CHICHI\TCU147-N	0.03 0.02 0.02	50.0 30.0 30.0	0.065 0.058 0.136	19.2 17.0 22.7	18.61 14.68 12.58
			CWB 99999 TTN001 99	57.6 54.0	--2 C	CHICHI\TCU147-W CHICHI\TTN001-V CHICHI\TTN001-E	0.02 0.03 0.03	33.0 30.0 30.0	0.107 0.041 0.094	31.2 8.7 14.4	40.84 6.61 7.38
			CWB 99999 TTN002 99	76.0 73.3	--1 C	CHICHI\TTN001-N CHICHI\TTN002-V CHICHI\TTN002-N	0.03 0.03 0.03	30.0 20.0 20.0	0.063 0.016 0.026	9.3 5.2 5.4	5.91 4.77 4.57
			CWB 99999 TTN003 99	108.1 106.2	--- C	CHICHI\TTN002-W CHICHI\TTN003-V CHICHI\TTN003-N	0.03 0.02 0.03	20.0 20.0 20.0	0.026 0.013 0.018	5.4 2.1 3.0	6.41 3.11 2.18

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TTN004 99	77.4 74.8	--1 C	CHICHI\TTN003-W CHICHI\TTN004-V CHICHI\TTN004-N	0.03 0.04 0.04	20.0 20.0 20.0	0.023 0.026 0.046	3.3 3.9 8.3	4.17 4.07 4.57
			CWB 99999 TTN005 99	93.9 91.7	--2 C	CHICHI\TTN004-W CHICHI\TTN005-V CHICHI\TTN005-N	0.03 0.028 0.03	20.0 15.0 15.0	0.039 0.014 0.023	7.4 5.9 6.8	5.69 5.07 4.74
			CWB 99999 TTN006 99	92.3 90.1	--2 C	CHICHI\TTN005-W CHICHI\TTN006-V CHICHI\TTN006-N	0.02 0.02 0.02	12.0 15.0 15.0	0.025 0.014 0.020	9.0 4.7 5.6	9.32 5.14 4.37
			CWB 99999 TTN007 99	93.1 91.0	--2 C	CHICHI\TTN006-W CHICHI\TTN007-V CHICHI\TTN007-N	0.02 0.02 0.02	18.0 15.0 12.0	0.025 0.015 0.026	9.2 5.7 6.4	9.30 5.18 5.46
			CWB 99999 TTN008 99	93.7 91.6	--2 C	CHICHI\TTN007-W CHICHI\TTN008-V CHICHI\TTN008-N	0.02 0.03 0.03	12.0 12.0 12.0	0.019 0.015 0.026	7.8 7.7 6.4	9.34 6.40 4.85
			CWB 99999 TTN009 99	94.7 92.5	--2 C	CHICHI\TTN008-W CHICHI\TTN009-V CHICHI\TTN009-N	0.03 0.03 0.03	12.0 15.0 12.0	0.031 0.014 0.029	9.3 6.1 8.1	11.90 5.19 5.54
			CWB 99999 TTN010 99	95.3 93.1	--2 C	CHICHI\TTN009-W CHICHI\TTN010-V CHICHI\TTN010-N	0.02 0.03 0.03	12.0 14.0 14.0	0.036 0.010 0.029	11.1 3.0 7.4	9.41 4.13 3.95
			CWB 99999 TTN012 99	92.8 90.6	--2 C	CHICHI\TTN010-W CHICHI\TTN012-V CHICHI\TTN012-N	0.02 0.02 0.03	14.0 18.0 18.0	0.019 0.013 0.021	7.8 4.7 4.7	9.13 4.58 3.99
			CWB 99999 TTN013 99	92.5 90.3	--2 C	CHICHI\TTN012-W CHICHI\TTN013-V CHICHI\TTN013-N	0.02 0.02 0.03	20.0 14.0 14.0	0.025 0.007 0.018	9.4 3.0 4.4	9.45 6.45 4.12
			CWB 99999 TTN014 99	67.9 64.9	--2 C	CHICHI\TTN013-W CHICHI\TTN014-V CHICHI\TTN014-N	0.02 0.02 0.02	10.0 22.0 20.0	0.017 0.025 0.045	8.2 5.7 7.6	9.02 5.01 5.90
			CWB 99999 TTN015 99	94.3 92.2	--2 C	CHICHI\TTN014-W CHICHI\TTN015-V CHICHI\TTN015-N	0.03 0.03 0.03	20.0 12.0 10.0	0.051 0.015 0.032	7.2 6.0 6.8	5.51 5.58 5.82
			CWB 99999 TTN016 99	136.6 135.1	--1 A	CHICHI\TTN015-W CHICHI\TTN016-V CHICHI\TTN016-N	0.02 0.03 0.03	10.0 14.0 14.0	0.028 0.006 0.010	10.0 2.5 2.6	9.57 2.80 4.05
			CWB 99999 TTN018 99	86.2 83.8	--2 b*	CHICHI\TTN016-W CHICHI\TTN018-V CHICHI\TTN018-N	0.04 0.02 0.02	14.0 20.0 20.0	0.009 0.014 0.024	2.9 2.9 4.1	3.38 3.17 3.55
			CWB 99999 TTN020 99	57.7 54.1	--2 C	CHICHI\TTN018-W CHICHI\TTN020-V CHICHI\TTN020-N	0.02 0.02 0.02	20.0 30.0 23.0	0.035 0.023 0.030	3.8 4.8 7.5	5.56 4.13 6.44
			CWB 99999 TTN022 99	60.6 57.2	--2 C	CHICHI\TTN020-W CHICHI\TTN022-V CHICHI\TTN022-N	0.02 0.02 0.02	23.0 30.0 20.0	0.035 0.048 0.075	9.0 8.5 10.3	9.49 4.97 8.49
			CWB 99999 TTN023 99	63.3 60.0	--- C	CHICHI\TTN022-W CHICHI\TTN023-V CHICHI\TTN023-N	0.03 0.03 0.02	23.0 30.0 30.0	0.056 0.028 0.067	10.0 6.3 12.0	10.21 4.11 5.86
			CWB 99999 TTN024 99	70.6 67.7	--1 A	CHICHI\TTN023-W CHICHI\TTN024-V CHICHI\TTN024-N	0.02 0.03 0.02	30.0 30.0 30.0	0.044 0.022 0.027	9.9 4.0 3.9	8.07 3.35 3.50
			CWB 99999 TTN025 99	81.7 79.2	--1 b*	CHICHI\TTN024-W CHICHI\TTN025-V CHICHI\TTN025-N	0.02 0.02 0.02	20.0 30.0 30.0	0.030 0.024 0.050	3.8 3.7 5.0	5.32 3.11 2.60

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FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			CWB 99999 TTN026	81.8	--1	CHICHI\TTN025-W	0.02	30.0	0.034	3.9	5.08
			99	79.3	b*	CHICHI\TTN026-V	0.03	22.0	0.014	3.2	3.22
						CHICHI\TTN026-N	0.02	20.0	0.040	4.1	2.88
						CHICHI\TTN026-W	0.02	20.0	0.027	4.2	5.63
			CWB 99999 TTN027	87.6	--1	CHICHI\TTN027-V	0.03	22.0	0.015	3.6	2.64
			99	85.3	c*	CHICHI\TTN027-N	0.03	30.0	0.039	6.1	3.68
						CHICHI\TTN027-W	0.03	20.0	0.031	6.6	5.69
			CWB 99999 TTN028	90.6	--1	CHICHI\TTN028-V	0.03	20.0	0.016	3.0	3.14
			99	88.4	A	CHICHI\TTN028-N	0.02	20.0	0.016	3.1	2.79
						CHICHI\TTN028-W	0.02	18.0	0.019	3.2	4.93
			CWB 99999 TTN031	57.0	--1	CHICHI\TTN031-V	0.03	40.0	0.043	14.2	5.59
			99	53.4	C	CHICHI\TTN031-N	0.03	50.0	0.086	12.8	7.83
						CHICHI\TTN031-W	0.03	30.0	0.074	13.3	6.66
			CWB 99999 TTN032	59.1	--1	CHICHI\TTN032-V	0.02	40.0	0.030	7.1	5.95
			99	55.6	C	CHICHI\TTN032-N	0.02	40.0	0.078	12.6	6.60
						CHICHI\TTN032-W	0.03	40.0	0.053	10.0	5.53
			CWB 99999 TTN033	61.7	--1	CHICHI\TTN033-V	0.02	22.0	0.018	5.5	4.81
			99	58.3	C	CHICHI\TTN033-N	0.02	30.0	0.040	7.0	4.63
						CHICHI\TTN033-W	0.03	30.0	0.031	6.4	5.83
			CWB 99999 TTN036	90.5	--1	CHICHI\TTN036-V	0.02	14.0	0.018	8.4	6.97
			99	88.2	B	CHICHI\TTN036-N	0.02	12.0	0.030	6.8	4.79
						CHICHI\TTN036-W	0.02	12.0	0.025	7.6	8.65
			CWB 99999 TTN040	55.0	---	CHICHI\TTN040-V	0.03	30.0	0.021	4.1	5.13
			99	51.2	A	CHICHI\TTN040-E	0.03	33.0	0.030	7.2	7.37
						CHICHI\TTN040-N	0.04	30.0	0.032	5.4	4.39
			CWB 99999 TTN041	54.2	---	CHICHI\TTN041-V	0.03	30.0	0.041	4.7	4.39
			99	50.3	A	CHICHI\TTN041-E	0.03	40.0	0.079	6.8	6.50
						CHICHI\TTN041-N	0.03	40.0	0.066	4.6	4.02
			CWB 99999 TTN042	72.6	---	CHICHI\TTN042-V	0.03	20.0	0.019	5.4	5.05
			99	69.8	C	CHICHI\TTN042-N	0.03	20.0	0.059	5.9	4.55
						CHICHI\TTN042-W	0.03	22.0	0.059	5.4	5.97
			CWB 99999 TTN044	68.2	---	CHICHI\TTN044-V	0.03	22.0	0.033	6.0	4.44
			99	65.2	B	CHICHI\TTN044-N	0.02	22.0	0.055	10.3	6.66
						CHICHI\TTN044-W	0.03	30.0	0.048	9.7	7.12
			CWB 99999 TTN045	71.0	---	CHICHI\TTN045-V	0.03	20.0	0.017	3.8	3.91
			99	68.1	C	CHICHI\TTN045-N	0.05	30.0	0.035	5.9	4.12
						CHICHI\TTN045-W	0.03	20.0	0.041	9.2	6.75
			CWB 99999 TTN046	74.5	---	CHICHI\TTN046-V	0.03	22.0	0.020	5.0	5.04
			99	71.8	B	CHICHI\TTN046-N	0.03	22.0	0.067	7.4	3.18
						CHICHI\TTN046-W	0.03	20.0	0.113	11.2	6.13
			CWB 99999 TTN047	84.9	---	CHICHI\TTN047-V	-99.				
			99	82.5	B	CHICHI\TTN047-N	0.03	20.0	0.027	5.7	4.78
						CHICHI\TTN047-W	0.03	20.0	0.026	6.2	6.44
			CWB 99999 TTN048	89.7	---	CHICHI\TTN048-V	0.03	20.0	0.018	3.0	2.83
			99	87.5	C	CHICHI\TTN048-N	0.03	20.0	0.024	5.2	3.98
						CHICHI\TTN048-W	0.03	20.0	0.027	7.0	5.66
			CWB 99999 TTN050	101.7	---	CHICHI\TTN050-V	0.03	20.0	0.009	2.7	2.46
			99	99.7	C	CHICHI\TTN050-N	0.03	20.0	0.023	2.7	2.57
						CHICHI\TTN050-W	0.03	20.0	0.027	3.0	4.72
			CWB 99999 TTN051	47.2	---	CHICHI\TTN051-V	0.02	40.0	0.022	6.1	6.01
			99	42.7	-	CHICHI\TTN051-N	0.02	40.0	0.034	4.6	4.63
						CHICHI\TTN051-W	0.02	50.0	0.027	5.7	7.28
			CWB 99999 WTC	42.3	--3	CHICHI\WTC-V	0.07	40.0	0.053	8.5	6.56
			02	42.3	D	CHICHI\WTC-E	0.07	40.0	0.055	16.4	14.41

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYANAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
						CHICHI\WTC-N	0.05	40.0	0.050	10.1	6.92
Duzce, Turkey 00	1999 1112	7.1 7.2 7.3 6.5	KOERI 99999 Ambarli 99	193.3 193.3	B-D D	DUZCE\ATS--V DUZCE\ATS030		20.0	0.008	2.3	1.51
						DUZCE\ATS300	0.05	12.0	0.038	7.4	5.07
						DUZCE\ATS300	0.03	12.0	0.025	7.1	3.52
			KOERI 99999 Arcelik 99	135.7 135.7	B-B B	DUZCE\ARC--V DUZCE\ARC000	0.02	40.0	0.006	2.4	2.28
						DUZCE\ARC000	0.03	30.0	0.008	2.7	3.25
						DUZCE\ARC270	0.05	20.0	0.009	2.5	3.10
			KOERI 99999 Aslan R. 99	134.9 134.9	--D -	DUZCE\DAR--V DUZCE\DAR090	0.06	25.0	0.007	2.2	2.91
						DUZCE\DAR090	0.05	18.0	0.017	3.8	3.66
						DUZCE\DAR180	0.06	18.0	0.007	3.2	4.46
			ERD 99999 Bolu 99	17.6 17.6	A-D C	DUZCE\BOL-UP DUZCE\BOL000	0.05		0.203	17.3	14.29
						DUZCE\BOL000	0.05		0.728	56.4	23.07
						DUZCE\BOL090	0.05		0.822	62.1	13.55
			KOERI 99999 Bursa Tofas 99	169.3 169.3	I-D -	DUZCE\BUR--V DUZCE\BUR090	0.03	25.0	0.011	3.0	2.55
						DUZCE\BUR090	0.03	20.0	0.018	4.3	4.88
						DUZCE\BUR180	0.02	12.0	0.018	4.4	6.04
			KOERI 99999 Cekmece 99	188.4 188.4	A-B C	DUZCE\CNA--V DUZCE\CNA090	0.02	20.0	0.007	1.6	1.64
						DUZCE\CNA090	0.02	20.0	0.017	2.5	1.77
						DUZCE\CNA180	0.02	20.0	0.016	2.2	3.46
			ERD 99999 Duzce 99	8.2 8.2	A-D C	DUZCE\DZC-UP DUZCE\DZC180	0.06	50.0	0.357	22.6	19.40
						DUZCE\DZC180	0.06	50.0	0.348	60.0	42.09
						DUZCE\DZC270	0.08	50.0	0.535	83.5	51.59
			KOERI 99999 Fatih 99	172.5 172.5	A-C -	DUZCE\FAT--V DUZCE\FAT000	0.03	20.0	0.008	2.0	1.67
						DUZCE\FAT000	0.02	20.0	0.035	5.2	3.93
						DUZCE\FAT270	0.04	25.0	0.025	2.2	1.06
			KOERI 99999 Galata Kop. 99	999.9 999.9	--- -	DUZCE\GB--V DUZCE\GB--L	0.02	15.0	0.009	2.0	1.67
						DUZCE\GB--L	0.025	20.0	0.015	2.1	2.20
						DUZCE\GB--T	0.02	20.0	0.015	4.2	2.81
			KOERI 99999 Hava Alani 99	182.7 182.7	A-B -	DUZCE\DHM--V DUZCE\DHM090	0.02	20.0	0.007	1.7	1.61
						DUZCE\DHM090	0.06	12.0	0.017	4.2	1.85
						DUZCE\DHM180	0.03	12.0	0.017	5.5	4.18
			KOERI 99999 Kocamustafapaba Tomb 99	174.0 174.0	A-C -	DUZCE\KMP--V DUZCE\KMP000	0.02	20.0	0.008	1.5	1.82
						DUZCE\KMP000	0.02	20.0	0.015	3.7	3.55
						DUZCE\KMP090	0.03	20.0	0.018	2.3	0.97
			ERD 99999 Kutahya 99	169.5 169.5	--D C	DUZCE\KUT-UP DUZCE\KUT090	0.05	12.0	0.009	2.7	2.92
						DUZCE\KUT090	0.03	12.0	0.022	9.5	5.88
						DUZCE\KUT180	0.04	12.0	0.016	5.0	2.56
			LAMONT 362 Lamont 362 99	27.4 27.4	F-B B	DUZCE\362-V DUZCE\362-N	0.06	50.0	0.020	4.4	4.28
						DUZCE\362-N	0.06	50.0	0.042	9.2	8.07
						DUZCE\362-E	0.03	50.0	0.026	7.7	10.12
			LAMONT 375 Lamont 375 99	8.2 8.2	--B -	DUZCE\375-V DUZCE\375-N	0.06	50.0	0.193	9.5	6.20
						DUZCE\375-N	0.15	50.0	0.970	36.5	5.48
						DUZCE\375-E	0.10	50.0	0.514	20.2	7.49
			LAMONT 531 Lamont 531 99	11.4 11.4	I-A -	DUZCE\531-V DUZCE\531-N	0.06	50.0	0.066	7.3	7.53
						DUZCE\531-N	0.06	50.0	0.159	12.9	7.85
						DUZCE\531-E	0.05	50.0	0.118	14.0	9.52
			LAMONT 1058 Lamont 1058 99	0.9 0.9	I-B B	DUZCE\1058-V DUZCE\1058-N	0.05	50.0	0.070	16.8	11.65
						DUZCE\1058-N	0.06	50.0	0.073	13.5	12.69
						DUZCE\1058-E	0.06	50.0	0.111	14.2	9.39
			LAMONT 1059 Lamont 1059 99	8.5 8.5	--B -	DUZCE\1059-V DUZCE\1059-N	0.06	50.0	0.106	9.3	6.36
						DUZCE\1059-N	0.06	50.0	0.147	12.0	10.66
						DUZCE\1059-E	0.06	50.0	0.133	13.9	7.21
			LAMONT 1060 Lamont 1060	30.2	I-A	DUZCE\1060-V	0.06	50.0	0.022	5.8	6.30

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	30.2	A	DUZCE\1060-N	0.06	50.0	0.028	11.0	11.78
			LAMONT 1061 Lamont 1061	15.6	I-B	DUZCE\1060-E	0.06	50.0	0.053	5.3	5.98
			99	15.6	B	DUZCE\1061-V	0.06	50.0	0.048	7.4	6.12
			LAMONT 1062 Lamont 1062	13.3	I-B	DUZCE\1061-N	0.07	50.0	0.107	11.5	8.21
			99	13.3	-	DUZCE\1061-E	0.07	50.0	0.134	13.7	8.19
			ERD 99999 Mudurnu	33.6	--A	DUZCE\1062-V	0.06	50.0	0.093	7.5	6.51
			99	33.6	-	DUZCE\1062-N	0.05	50.0	0.114	11.2	9.78
			ERD 99999 Sakarya	49.9	A-B	DUZCE\1062-E	0.05	50.0	0.257	16.3	7.47
			99	49.9	B	DUZCE\MDR-UP	0.08		0.060	10.6	7.33
			KOERI 99999 Yarimca	101.7	B-D	DUZCE\MDR000	0.08		0.120	9.3	7.63
			99	101.7	C	DUZCE\MDR090	0.08		0.056	16.3	15.37
						DUZCE\SKR-UP	0.05	40.0	0.011	3.2	4.00
						DUZCE\SKR180	0.05	40.0	0.023	5.5	5.80
						DUZCE\SKR090	0.05	40.0	0.016	5.5	7.34
						DUZCE\YPT--V	0.02	20.0	0.013	3.9	3.92
						DUZCE\YPT060	0.03	12.0	0.022	7.9	8.64
						DUZCE\YPT330	0.05	12.0	0.016	4.4	3.64

S:
 Source mechanism: 00 = strike slip, 01 = normal, 02 = reverse, 03 = reverse-oblique, 04 = normal-oblique, 99 = unknown.
 Dip is the dip of rupture surface.
 M is moment magnitude, UNK = Magnitude type unknown. Missing magnitudes have the value of zero.
 Station owner abbreviations are listed in columns 58 to 65.
 Station numbers were assigned where not available, using numbers 1-33, 60-100 and 99999.
 Records marked with a # were not processed by PE&A due to unavailability of uncorrected data
 Records marked with a @ did not have Fourier spectra computed because the noise levels were too high.
 H/F is the designation for the site being on the hanging wall (01) or foot wall (02), or unknown/not applicable (99).
 Distances marked with a * are hypocentral instead of closest distances. Values of 999.9 indicate unknown distances.
 Second distance is to the surface projection of the fault plane (i.e., JB Distance).
 Site codes are from four sources: 1) Geomatrix (3 letters), 2) USGS (1 letter), 3) CWB, Taiwan (1 number), 4) Lee et al. 2000 paper described below.
 Site categories for the Turkey earthquakes are from Prof. E. Rathje, University of Texas at Austin.
 Site categories for the Chi-Chi, Taiwan earthquake are from Dr. W. Y. Chien, NCREE, Taiwan. Geomatrix site codes were not available for the Chi-Chi earthquake, hence site categories used by the Central Weather Bureau (CWB), Taiwan were used.
 USGS site codes for the Chi-Chi, Taiwan earthquake are from the paper by Lee et al. (2000). These were taken as the suggested NEHRP site classification which was changed to the USGS site classification for the catalog. Questionable site classification stations are indicated with a lower case letter and an "*" in the next column.
 The recorded Lamont acceleration data had a low pass anti-alias filter near 50 Hz for the Duzce, Turkey data.

GEOMATRIX 3-LETTER SITE CLASSIFICATIONS (for the Chi-Chi earthquake the third field is the site category from the CWB, Taiwan, described below)

- FIRST LETTER: Instrument housing
- I = Free-field instrument or instrument shelter. Instrument is located at or within several feet of the ground surface.
 - A = One-story structure of lightweight construction. Instrument is located at the lowest level and within several feet of the ground surface.
 - B = Two- to four-story structure of lightweight construction. Instrument is located at the lowest level and within several feet of the ground surface.
 - C = Two- to four-story structure of lightweight construction. Instrument is located at the lowest level in a basement and below the ground surface.
 - D = Five or more story structure of heavy construction. Instrument is located at the lowest level and within several feet of the ground surface.
 - E = Five or more story structure of heavy construction. Instrument is located at the lowest level in a basement and below the ground surface.
 - F = Structure housing instrument is buried below the ground surface, eg. tunnel.
 - G = Structure of light or heavyweight construction, instrument not at lowest level.
 - H = Earth dam.
 - I = Concrete Dam.

SECOND LETTER: Mapped local geology

Appendix A

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-DYNAMIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
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Sedimentary or metasedimentary:
 H = Holocene (Recent) Quaternary (< 15000y bp).
 Q = Pleistocene Quaternary (< 2my bp).
 P = Pliocene Tertiary (< 6my bp).
 M = Miocene Tertiary (< 22my bp).
 O = Oligocene Tertiary (< 36my bp).
 E = Eocene Tertiary (< 58my bp).
 L = Paleocene Tertiary (< 63my bp).
 K = Cretaceous (< 145my bp).
 F = Franciscan Formation (Cretaceous/Late Jurassic).
 J = Jurassic (< 210my bp).
 T = Triassic (<255my bp).
 Z = Permian or older (> 255my bp).
 Igneous or meta-igneous:
 V = Volcanic (extrusive).
 N = Intrusive.
 G = Granitic.

A, B and C are codes from a previous Geomatrix classification scheme that have been superceded.

THIRD LETTER: Geotechnical subsurface characteristics (used all earthquake except the Chi-Chi, Taiwan of 9/20/99)

A = Rock. Instrument on rock (Vs > 600 mps) or < 5m of soil over rock.
 B = Shallow (stiff) soil. Instrument on/in soil profile up to 20m thick overlying rock.
 C = Deep narrow soil. Instrument on/in soil profile at least 20m thick overlying rock, in a narrow canyon or valley no more than several km wide.
 D = Deep broad soil. Instrument on/in soil profile at least 20m thick overlying rock, in a broad valley.
 E = Soft deep soil. Instrument on/in deep soil profile with average Vs < 150 mps.

THIRD LETTER (NUMBER): Central Weather Bureau (CWB) of Taiwan Site Categories (used only for the Chi-Chi, Taiwan earthquake of 9/20/99)

1 = Hard site.
 2 = Medium site.
 3 = Soft soil site.

USGS 1-LETTER SITE CLASSIFICATIONS

Average shear-wave velocity to a depth of 30m is:
 A = > 750 m/s
 B = 360 - 750 m/s
 C = 180 - 360 m/s
 D = < 180 m/s
 Lower case letter indicates a questionable site classification
 for the Chi-Chi, Taiwan earthquake stations.

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
Kocaeli, Turkey 00	1999 0817	7.4 0.0 7.8 6.7	ERD 99999 Afyon Bay	197.6*	---	KOCAELI\AFYDWN	0.12	7.0	0.005	1.1	0.36
			99	999.9	-	KOCAELI\AFY000	0.08	4.0	0.013	2.4	1.75
						KOCAELI\AFY090	0.09	6.0	0.016	3.1	2.42
			KOERI 99999 Ambarli	78.9	B-E	KOCAELI\ATS-UP	0.03	50.0	0.079	8.5	8.85
			99	78.9	D	KOCAELI\ATS000	0.03	50.0	0.249	40.0	30.08
						KOCAELI\ATS090	0.02	50.0	0.184	33.2	25.83
			KOERI 99999 Arcelik	17.0	B-B	KOCAELI\ARCDWN	0.08	50.0	0.086	8.6	5.52
			99	17.0	B	KOCAELI\ARC000	0.07	50.0	0.218	17.7	13.64
						KOCAELI\ARC090	0.04	50.0	0.149	39.5	35.57
			ITU 99999 Atakoy	67.5	--D	KOCAELI\ATK-UP	0.08	50.0	0.064	7.5	6.09
			99	67.5	C	KOCAELI\ATK000	0.03	50.0	0.105	22.4	23.47
						KOCAELI\ATK090	0.02	40.0	0.164	16.2	11.59
			ERD 99999 Aydin	276.5*	---	KOCAELI\AYD-UP	0.03	10.0	0.003	1.4	1.94
			99	999.9	-	KOCAELI\AYD090	0.02	9.0	0.005	2.7	4.89
						KOCAELI\AYD180	0.03	8.0	0.007	2.8	2.87
			ERD 99999 Balikesir	183.4	--D	KOCAELI\BLK-UP	0.06	20.0	0.007	2.2	1.92
			99	183.4	-	KOCAELI\BLK090	0.02	20.0	0.018	5.7	9.25
						KOCAELI\BLK180	0.03	18.0	0.017	4.6	7.13
			ERD 99999 Bornova	369.3*	---	KOCAELI\BRN-UP	0.02	12.0	0.003	1.9	2.68
			99	999.9	-	KOCAELI\BRN090	0.07	10.0	0.011	2.3	2.52
						KOCAELI\BRN180	0.03	10.0	0.010	2.4	2.74
			KOERI 99999 Botas	136.3	A-D	KOCAELI\BTS-UP	0.03	40.0	0.024	3.4	4.01
			99	136.3	-	KOCAELI\BTS000	0.03	40.0	0.103	10.3	3.95
						KOCAELI\BTS090	0.03	40.0	0.089	11.5	15.15
			ERD 99999 Bursa Sivil	66.6	--A	KOCAELI\BRS-UP	0.02	12.0	0.025	6.1	7.38
			99	66.6	-	KOCAELI\BRS090	0.09	20.0	0.045	8.1	4.35
						KOCAELI\BRS180	0.07	12.0	0.058	9.0	5.85
			KOERI 99999 Bursa Tofas	62.7	I-D	KOCAELI\BUR-UP	0.01	50.0	0.048	10.4	8.77
			99	62.7	-	KOCAELI\BUR000	0.02	50.0	0.103	19.8	17.95
						KOCAELI\BUR090	0.08	50.0	0.108	22.3	10.68
			ERD 99999 Canakkale	392.3*	---	KOCAELI\CNK-UP	0.03	12.0	0.007	3.0	3.84
			99	999.9	-	KOCAELI\CNK090	0.03	10.0	0.029	5.5	5.33
						KOCAELI\CNK180	0.02	12.0	0.025	10.2	17.86
			KOERI 99999 Cekmece	76.1	A-B	KOCAELI\CNA-UP	0.02	50.0	0.057	7.2	6.34
			99	76.1	C	KOCAELI\CNA000	0.02	50.0	0.179	18.4	18.25
						KOCAELI\CNA090	0.02	50.0	0.133	9.5	6.89
			ERD 99999 Duzce	12.7	A-D	KOCAELI\DZC-UP	0.08	20.0	0.229	20.4	17.01
			99	12.7	C	KOCAELI\DZC180		20.0	0.312	58.8	44.11
						KOCAELI\DZC270	0.08	15.0	0.358	46.4	17.61
			ERD 99999 Eregli	237.1*	---	KOCAELI\ERG-UP	0.10	20.0	0.054	5.2	3.12
			99	999.9	-	KOCAELI\ERG180	0.05	20.0	0.106	10.8	4.86
						KOCAELI\ERG090	0.05	20.0	0.090	14.9	6.95
			KOERI 99999 Fatih	64.5	A-C	KOCAELI\FAT-UP	0.03	50.0	0.128	8.0	7.97
			99	64.5	-	KOCAELI\FAT000	0.02	50.0	0.187	18.5	17.05
						KOCAELI\FAT090	0.012	50.0	0.159	14.9	17.05
			ERD 99999 Gebze	17.0	C-A	KOCAELI\GBZ-UP	0.10	40.0	0.203	11.4	4.78
			99	17.0	A	KOCAELI\GBZ000	0.03	25.0	0.244	50.3	42.74
						KOCAELI\GBZ270	0.08	30.0	0.137	29.7	27.54
ERD 99999 Goynuk	35.5	--B	KOCAELI\GYN-UP	0.10	30.0	0.114	11.5	7.59			
99	35.5	-	KOCAELI\GYN000	0.15	30.0	0.132	8.8	3.05			
			KOCAELI\GYN090	0.10	25.0	0.119	10.5	3.94			
KOERI 99999 Hava Alani	69.3	A-B	KOCAELI\DHM-UP	69.3	-	KOCAELI\DHM000	40.0	0.055	8.6	7.70	
99	69.3	-					40.0	0.090	24.8	29.40	

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			ERD 99999 Istanbul	60.7	--B	KOCAELI\DHM090	0.02	40.0	0.083	17.7	16.55
			99	60.7	-	KOCAELI\IST-UP	0.02	40.0	0.035	5.6	6.44
						KOCAELI\IST090	0.20		0.044	7.7	12.67
						KOCAELI\IST180	0.07		0.053	9.0	8.22
			ERD 99999 Izmit	4.8	B-A	KOCAELI\IZT-UP	0.10	30.0	0.150	14.3	14.79
			99	4.8	A	KOCAELI\IZT180	0.10	30.0	0.164	23.2	25.07
						KOCAELI\IZT090	0.10	30.0	0.232	47.5	52.98
			ERD 99999 Iznik	31.8	A-D	KOCAELI\IZN-UP	0.10	30.0	0.079	6.8	4.26
			99	31.8	C	KOCAELI\IZN180	0.10	25.0	0.098	16.0	7.73
						KOCAELI\IZN090	0.07	25.0	0.136	28.8	17.44
			ERD 99999 Kutahya	144.6	--D	KOCAELI\KUT-UP	0.10	20.0	0.023	5.1	1.67
			99	144.6	C	KOCAELI\KUT090	0.02	13.0	0.060	19.7	20.08
						KOCAELI\KUT180	0.09	12.0	0.049	9.9	3.92
			ERD 99999 Manisa	342.4*	---	KOCAELI\MNSDWN	0.10	6.0	0.005	1.4	0.78
			99	999.9	-	KOCAELI\MNS000	0.08	5.0	0.012	3.0	1.21
						KOCAELI\MNS090	0.07	5.0	0.006	2.8	1.85
			ITU 99999 Maslak	63.9	--A	KOCAELI\MSK-UP	0.03	50.0	0.030	5.7	7.24
			99	63.9	A	KOCAELI\MSK000	0.09	50.0	0.044	6.6	6.52
						KOCAELI\MSK090	0.03	50.0	0.040	6.5	9.24
			ITU 99999 Mecidiyekoy	62.3	--B	KOCAELI\MCD--V	0.10	60.0	0.028	6.3	4.68
			99	62.3	B	KOCAELI\MCD000	0.06	50.0	0.054	6.2	4.75
						KOCAELI\MCD090	0.05	50.0	0.068	8.8	10.11
			ERD 99999 Sakarya	3.1	A-B	KOCAELI\SKR-UP			0.259	42.6	26.84
			99	3.1	B	KOCAELI\SKRXXX	-99.				
						KOCAELI\SKR090	0.04	40.0	0.407	80.3	201.46
			ERD 99999 Tekirdag	267.3*	--A	KOCAELI\TKR-UP	0.10	20.0	0.011	1.2	0.74
			99	999.9	-	KOCAELI\TKR180	0.10	30.0	0.036	4.4	1.55
						KOCAELI\TKR090	0.10	30.0	0.035	2.8	1.29
			ERD 99999 Tokat	373.3*	---	KOCAELI\TKT-UP	0.04	10.0	.0004	0.1	0.12
			99	999.9	-	KOCAELI\TKT090	0.03	10.0	.0011	0.2	0.19
						KOCAELI\TKT180	0.10	10.0	.0009	0.1	0.14
			ERD 99999 Tosya	459.3*	---	KOCAELI\TOS-UP	0.03	16.0	0.004	1.8	2.32
			99	999.9	-	KOCAELI\TOS090	0.03	10.0	0.008	4.0	2.93
						KOCAELI\TOS180	0.02	12.0	0.011	5.9	12.61
			ERD 99999 Usak	204.6*	---	KOCAELI\USK-UP	0.01	12.0	0.004	1.1	1.60
			99	999.9	-	KOCAELI\USK090	0.02	12.0	0.016	5.8	11.22
						KOCAELI\USK180	0.02	12.0	0.011	2.8	4.84
			KOERI 99999 Yarimca	2.6	B-D	KOCAELI\YPT-UP			0.241	31.2	44.51
			99	2.6	C	KOCAELI\YPT060	0.07	50.0	0.230	86.7	179.93
						KOCAELI\YPT330	0.07	50.0	0.322	86.6	148.12
			ITU 99999 Zeytinburnu	63.1	--D	KOCAELI\ZYT-UP	0.03	50.0	0.054	7.2	8.56
			99	63.1	C	KOCAELI\ZYT000	0.06	50.0	0.108	18.5	12.98
						KOCAELI\ZYT090	0.04	50.0	0.110	15.2	18.20
Chi-Chi, Taiwan 02	1999 0920	7.6 7.3 7.6 0.0	CWB 99999 CHY002	26.8	---	CHICHI\CHY002-V	0.05	50.0	0.095	17.6	15.50
			02	26.8	D	CHICHI\CHY002-E	0.03	50.0	0.117	45.8	45.41
						CHICHI\CHY002-N	0.03	50.0	0.147	52.9	59.81
			CWB 99999 CHY004	50.9	--3	CHICHI\CHY004-V	0.05	50.0	0.041	6.5	5.34
			99	50.9	D	CHICHI\CHY004-E	0.03	40.0	0.099	20.0	17.51
						CHICHI\CHY004-N	0.03	50.0	0.100	15.8	15.41
			CWB 99999 CHY006	14.9	--1	CHICHI\CHY006-V	0.03	50.0	0.215	22.0	14.15
			99	14.9	C	CHICHI\CHY006-E	0.03	50.0	0.355	60.4	22.08
						CHICHI\CHY006-N	0.03	50.0	0.345	42.8	15.18
			CWB 99999 CHY008	45.3	--2	CHICHI\CHY008-V	0.03	50.0	0.075	12.4	8.53

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			02	45.3	D	CHICHI\CHY008-E	0.03	40.0	0.130	28.9	20.20
						CHICHI\CHY008-N	0.03	50.0	0.120	25.1	13.84
CWB 99999			CHY010	25.4	--1	CHICHI\CHY010-V	0.03	20.0	0.125	10.6	5.16
			99	25.4	C	CHICHI\CHY010-E	0.02	20.0	0.227	19.2	7.26
						CHICHI\CHY010-N	0.03	50.0	0.173	21.9	11.07
CWB 99999			CHY012	64.2	--3	CHICHI\CHY012-V	0.03	40.0	0.031	8.9	8.74
			99	64.2	D	CHICHI\CHY012-E	0.02	50.0	0.053	13.0	11.80
						CHICHI\CHY012-N	0.03	40.0	0.063	16.6	13.70
CWB 99999			CHY014	41.5	--1	CHICHI\CHY014-V	0.03	40.0	0.101	11.5	5.16
			99	41.5	C	CHICHI\CHY014-E	0.02	50.0	0.229	24.3	6.21
						CHICHI\CHY014-N	0.03	50.0	0.263	21.9	6.57
CWB 99999			CHY015	43.5	--3	CHICHI\CHY015-V	0.04	40.0	0.032	6.2	5.47
			99	43.5	C	CHICHI\CHY015-E	0.02	40.0	0.145	22.5	9.83
						CHICHI\CHY015-N	0.03	40.0	0.157	25.7	13.17
CWB 99999			CHY016	71.9	--3	CHICHI\CHY016-V	0.03	40.0	0.045	10.4	8.11
			99	71.9	D	CHICHI\CHY016-E	0.03	50.0	0.096	11.6	12.85
						CHICHI\CHY016-N	0.03	50.0	0.105	19.0	16.80
CWB 99999			CHY017	64.4	--3	CHICHI\CHY017-V	0.03	50.0	0.030	7.2	6.07
			99	64.4	D	CHICHI\CHY017-E	0.02	40.0	0.053	14.9	13.01
						CHICHI\CHY017-N	0.03	50.0	0.056	18.6	15.49
CWB 99999			CHY019	57.1	--1	CHICHI\CHY019-V	0.03	40.0	0.024	4.6	5.02
			99	57.1	C	CHICHI\CHY019-E	0.02	50.0	0.052	6.3	6.66
						CHICHI\CHY019-N	0.03	50.0	0.064	6.4	4.22
CWB 99999			CHY022	71.6	--1	CHICHI\CHY022-V	0.03	30.0	0.024	3.9	5.79
			99	71.6	B	CHICHI\CHY022-E	0.00	40.0	0.065	6.9	7.12
						CHICHI\CHY022-N	0.03	40.0	0.044	5.1	5.47
CWB 99999			CHY023	86.9	--2	CHICHI\CHY023-V	0.03	30.0	0.018	5.5	6.90
			99	86.9	C	CHICHI\CHY023-N	0.03	30.0	0.058	10.1	10.37
						CHICHI\CHY023-W	0.03	30.0	0.047	8.2	8.27
CWB 99999			CHY024	9.1	--1	CHICHI\CHY024-V	0.03	50.0	0.144	47.2	28.22
			02	9.1	C	CHICHI\CHY024-N	0.02	50.0	0.165	43.3	30.72
						CHICHI\CHY024-W	0.02	50.0	0.282	51.4	97.85
CWB 99999			CHY025	18.8	--2	CHICHI\CHY025-V	0.04	50.0	0.173	37.8	32.90
			02	18.8	D	CHICHI\CHY025-N	0.05	50.0	0.155	33.2	32.54
						CHICHI\CHY025-W	0.04	50.0	0.162	51.4	60.30
CWB 99999			CHY026	29.2	--3	CHICHI\CHY026-V	0.04	40.0	0.074	23.9	15.35
			02	29.2	D	CHICHI\CHY026-N	0.04	40.0	0.066	32.6	26.97
						CHICHI\CHY026-W	0.04	33.0	0.076	46.2	35.23
CWB 99999			CHY027	44.1	--3	CHICHI\CHY027-V	0.05	50.0	0.050	7.5	6.43
			02	44.1	D	CHICHI\CHY027-N	0.04	50.0	0.053	13.1	14.42
						CHICHI\CHY027-W	0.04	40.0	0.057	21.0	18.99
CWB 99999			CHY028	7.3	--1	CHICHI\CHY028-V	0.04	50.0	0.342	30.8	23.53
			02	7.3	C	CHICHI\CHY028-N	0.10	50.0	0.765	84.3	27.34
						CHICHI\CHY028-W	0.12	50.0	0.637	63.5	33.01
CWB 99999			CHY029	15.3	--1	CHICHI\CHY029-V	0.04	50.0	0.155	18.7	9.82
			02	15.3	B	CHICHI\CHY029-N	0.03	50.0	0.238	35.2	29.10
						CHICHI\CHY029-W	0.03	50.0	0.289	35.1	17.62
CWB 99999			CHY032	39.3	--3	CHICHI\CHY032-V	0.03	50.0	0.062	7.4	5.95
			99	39.3	D	CHICHI\CHY032-N	0.03	50.0	0.078	19.4	19.00
						CHICHI\CHY032-W	0.03	50.0	0.088	26.4	17.74
CWB 99999			CHY033	48.2	--3	CHICHI\CHY033-V	0.05	50.0	0.035	8.9	7.23
			99	48.2	D	CHICHI\CHY033-N	0.05	50.0	0.062	15.5	16.63
						CHICHI\CHY033-W	0.03	50.0	0.068	16.9	16.74
CWB 99999			CHY034	20.2	--1	CHICHI\CHY034-V	0.03	30.0	0.091	15.0	8.37

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	20.2	C	CHICHI\CHY034-E	0.03	30.0	0.248	38.8	11.46
						CHICHI\CHY034-N	0.03	30.0	0.310	48.5	16.54
			CWB 99999 CHY035	18.1	--1	CHICHI\CHY035-V	0.08	50.0	0.108	18.1	5.70
			99	18.1	C	CHICHI\CHY035-N	0.04	50.0	0.250	31.4	20.33
						CHICHI\CHY035-W	0.04	40.0	0.251	43.9	18.10
			CWB 99999 CHY036	20.4	--2	CHICHI\CHY036-V	0.04	50.0	0.104	11.3	10.18
			02	20.4	C	CHICHI\CHY036-N	0.03	50.0	0.207	41.4	34.17
						CHICHI\CHY036-W	0.05	50.0	0.294	38.9	21.19
			CWB 99999 CHY039	36.7	--2	CHICHI\CHY039-V	0.05	50.0	0.039	10.5	7.27
			02	36.7	D	CHICHI\CHY039-N	0.03	50.0	0.101	25.7	14.66
						CHICHI\CHY039-W	0.02	40.0	0.114	28.6	17.46
			CWB 99999 CHY041	26.0	--1	CHICHI\CHY041-V	0.03	50.0	0.123	9.8	6.37
			99	26.0	D	CHICHI\CHY041-N	0.03	50.0	0.639	39.5	11.25
						CHICHI\CHY041-W	0.04	50.0	0.302	20.4	8.62
			CWB 99999 CHY042	34.9	--1	CHICHI\CHY042-V	0.04	30.0	0.061	9.0	4.72
			99	34.9	B	CHICHI\CHY042-N	0.03	30.0	0.067	12.3	7.97
						CHICHI\CHY042-W	0.06	30.0	0.099	15.5	6.50
			CWB 99999 CHY044	60.2	--3	CHICHI\CHY044-V	0.05	50.0	0.026	8.5	8.11
			99	60.2	D	CHICHI\CHY044-N	0.06	40.0	0.077	13.4	12.81
						CHICHI\CHY044-W	0.03	40.0	0.055	19.7	18.34
			CWB 99999 CHY046	29.5	--1	CHICHI\CHY046-V	0.03	50.0	0.079	8.6	6.21
			99	29.5	C	CHICHI\CHY046-N	0.04	50.0	0.182	21.0	11.90
						CHICHI\CHY046-W	0.03	50.0	0.142	20.6	10.28
			CWB 99999 CHY047	29.4	--1	CHICHI\CHY047-V	0.03	50.0	0.086	15.4	8.55
			99	29.4	C	CHICHI\CHY047-E	0.03	50.0	0.168	21.1	10.27
						CHICHI\CHY047-N	0.03	50.0	0.186	22.2	13.65
			CWB 99999 CHY050	50.1	--1	CHICHI\CHY050-V	0.03	50.0	0.028	4.9	5.29
			99	50.1	B	CHICHI\CHY050-N	0.03	50.0	0.069	8.3	7.73
						CHICHI\CHY050-W	0.04	50.0	0.106	9.8	4.51
			CWB 99999 CHY052	45.0	--1	CHICHI\CHY052-V	0.03	40.0	0.039	6.6	5.45
			99	45.0	b*	CHICHI\CHY052-E	0.03	50.0	0.086	9.6	6.91
						CHICHI\CHY052-N	0.03	50.0	0.154	12.1	9.40
			CWB 99999 CHY054	53.8	--3	CHICHI\CHY054-V	0.04	50.0	0.032	9.1	6.43
			99	53.8	D	CHICHI\CHY054-N	0.03	50.0	0.097	19.3	13.74
						CHICHI\CHY054-W	0.02	50.0	0.094	17.9	11.86
			CWB 99999 CHY055	59.6	--3	CHICHI\CHY055-V	0.03	50.0	0.042	7.8	6.77
			99	59.6	D	CHICHI\CHY055-E	0.03	50.0	0.098	18.5	15.15
						CHICHI\CHY055-N	0.03	50.0	0.092	20.2	19.93
			CWB 99999 CHY057	62.8	--1	CHICHI\CHY057-V	0.03	30.0	0.022	5.2	5.10
			99	62.8	B	CHICHI\CHY057-N	0.03	30.0	0.056	6.2	4.90
						CHICHI\CHY057-W	0.02	30.0	0.038	7.1	6.10
			CWB 99999 CHY058	65.1	--2	CHICHI\CHY058-V	0.03	40.0	0.027	5.5	5.26
			99	65.1	C	CHICHI\CHY058-N	0.03	23.0	0.056	14.5	10.58
						CHICHI\CHY058-W	0.03	30.0	0.050	9.2	7.18
			CWB 99999 CHY059	78.6	--3	CHICHI\CHY059-V	0.03	30.0	0.015	5.6	5.49
			99	78.6	D	CHICHI\CHY059-N	0.03	25.0	0.049	19.1	14.27
						CHICHI\CHY059-W	0.02	25.0	0.049	11.9	12.93
			CWB 99999 CHY060	74.2	--3	CHICHI\CHY060-V	0.03	30.0	0.019	6.0	4.42
			99	74.2	D	CHICHI\CHY060-N	0.04	30.0	0.048	15.6	15.76
						CHICHI\CHY060-W	0.03	30.0	0.042	12.7	11.92
			CWB 99999 CHY061	66.9	--1	CHICHI\CHY061-V	0.04	30.0	0.021	4.5	4.54
			99	66.9	b*	CHICHI\CHY061-N	0.07	30.0	0.042	3.7	3.13
						CHICHI\CHY061-W	0.02	30.0	0.029	6.0	6.04
			CWB 99999 CHY062	64.1	--1	CHICHI\CHY062-V	0.04	50.0	0.019	4.1	4.77

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	64.1	C	CHICHI\CHY062-N	0.18	50.0	0.053	4.7	2.09
						CHICHI\CHY062-W	0.20	15.0	0.053	4.5	1.60
CWB	99999		CHY063	78.1	--1	CHICHI\CHY063-V	0.03	24.0	0.025	5.3	5.42
			99	78.1	C	CHICHI\CHY063-N	0.03	24.0	0.068	9.4	8.27
						CHICHI\CHY063-W	0.02	22.0	0.060	7.9	6.92
CWB	99999		CHY065	90.2	--1	CHICHI\CHY065-V	0.02	50.0	0.031	5.1	7.56
			99	90.2	C	CHICHI\CHY065-N	0.03	40.0	0.097	12.5	8.25
						CHICHI\CHY065-W	0.02	33.0	0.118	15.8	8.44
CWB	99999		CHY066	94.9	--3	CHICHI\CHY066-V	0.03	30.0	0.020	6.1	6.16
			99	94.9	D	CHICHI\CHY066-N	0.03	30.0	0.041	10.7	9.30
						CHICHI\CHY066-W	0.02	24.0	0.056	10.3	10.06
CWB	99999		CHY067	88.8	--3	CHICHI\CHY067-V	0.02	30.0	0.022	6.5	7.18
			99	88.8	D	CHICHI\CHY067-N	0.03	40.0	0.060	10.8	9.09
						CHICHI\CHY067-W	0.02	40.0	0.059	8.8	9.00
CWB	99999		CHY069	91.2	--3	CHICHI\CHY069-V	0.03	22.0	0.024	6.3	7.02
			99	91.2	D	CHICHI\CHY069-N	0.02	20.0	0.039	10.3	8.14
						CHICHI\CHY069-W	0.02	20.0	0.047	10.9	8.57
CWB	99999		CHY070	89.6	--2	CHICHI\CHY070-V	0.03	30.0	0.017	6.1	5.87
			99	89.6	C	CHICHI\CHY070-N	0.02	24.0	0.049	10.4	9.99
						CHICHI\CHY070-W	0.02	24.0	0.038	8.7	10.15
CWB	99999		CHY071	84.0	--2	CHICHI\CHY071-V	0.02	30.0	0.015	6.4	4.45
			99	84.0	D	CHICHI\CHY071-N	0.03	25.0	0.053	17.4	12.60
						CHICHI\CHY071-W	0.03	22.0	0.084	20.7	11.44
CWB	99999		CHY074	82.5	--1	CHICHI\CHY074-V	0.03	40.0	0.094	15.6	9.40
			99	82.5	b*	CHICHI\CHY074-N	0.02	40.0	0.158	23.6	11.74
						CHICHI\CHY074-W	0.02	40.0	0.234	28.1	19.04
CWB	99999		CHY076	45.7	--3	CHICHI\CHY076-V	0.03	30.0	0.031	8.2	7.24
			99	45.7	D	CHICHI\CHY076-N	0.04	50.0	0.073	15.8	16.97
						CHICHI\CHY076-W	0.03	50.0	0.072	24.0	20.37
CWB	99999		CHY078	82.5	--2	CHICHI\CHY078-V	0.03	24.0	0.021	5.3	6.40
			99	82.5	C	CHICHI\CHY078-N	0.03	24.0	0.045	9.6	7.93
						CHICHI\CHY078-W	0.03	20.0	0.093	14.2	7.16
CWB	99999		CHY079	55.0	---	CHICHI\CHY079-V	0.03	25.0	0.029	5.2	4.77
			99	55.0	B	CHICHI\CHY079-N	0.03	23.0	0.050	6.7	4.18
						CHICHI\CHY079-W	0.02	30.0	0.043	5.6	5.62
CWB	99999		CHY080	7.0	---	CHICHI\CHY080-V	0.03	50.0	0.731	40.9	22.03
			99	6.8	B	CHICHI\CHY080-N	0.05	50.0	0.860	93.7	59.17
						CHICHI\CHY080-W	0.10	50.0	0.810	106.7	45.66
CWB	99999		CHY081	47.7	--1	CHICHI\CHY081-V	0.03	30.0	0.025	7.2	4.86
			99	47.7	B	CHICHI\CHY081-N	0.03	30.0	0.045	9.8	7.66
						CHICHI\CHY081-W	0.02	30.0	0.052	11.0	7.18
CWB	99999		CHY082	38.3	--3	CHICHI\CHY082-V	0.03	50.0	0.081	8.9	6.33
			02	38.3	D	CHICHI\CHY082-N	0.03	50.0	0.063	24.7	25.78
						CHICHI\CHY082-W	0.04	50.0	0.067	20.9	20.70
CWB	99999		CHY086	35.4	--1	CHICHI\CHY086-V	0.04	30.0	0.050	8.2	4.78
			99	35.4	B	CHICHI\CHY086-N	0.03	30.0	0.204	17.8	7.89
						CHICHI\CHY086-W	0.10	30.0	0.115	14.2	6.66
CWB	99999		CHY087	34.5	--1	CHICHI\CHY087-V	0.03	40.0	0.056	6.4	5.77
			99	34.5	B	CHICHI\CHY087-N	0.03	50.0	0.126	11.9	8.11
						CHICHI\CHY087-W	0.02	50.0	0.136	10.2	7.18
CWB	99999		CHY088	42.8	--1	CHICHI\CHY088-V	0.04	40.0	0.040	7.4	4.93
			99	42.8	C	CHICHI\CHY088-N	0.04	33.0	0.216	20.5	14.21
						CHICHI\CHY088-W	0.04	33.0	0.144	21.0	8.06
CWB	99999		CHY090	63.8	--2	CHICHI\CHY090-V	0.03	40.0	0.029	5.7	5.57

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	63.8	D	CHICHI\CHY090-N	0.03	40.0	0.074	16.5	15.40
						CHICHI\CHY090-W	0.03	30.0	0.079	14.5	9.52
CWB	99999		CHY092	22.5	---	CHICHI\CHY092-V	0.03	50.0	0.120	29.4	26.67
			02	22.5	D	CHICHI\CHY092-E	0.05	50.0	0.111	54.8	37.26
						CHICHI\CHY092-N	0.03	24.0	0.082	34.4	30.53
CWB	99999		CHY093	53.2	--2	CHICHI\CHY093-V	0.03	50.0	0.036	6.2	5.83
			99	53.2	D	CHICHI\CHY093-E	0.03	50.0	0.054	17.6	13.74
						CHICHI\CHY093-N	0.03	50.0	0.070	14.1	12.78
CWB	99999		CHY094	38.0	--3	CHICHI\CHY094-V	0.03	50.0	0.046	13.6	9.27
			02	38.0	D	CHICHI\CHY094-E	0.05	50.0	0.068	24.3	19.53
						CHICHI\CHY094-N	0.03	20.0	0.054	18.9	19.76
CWB	99999		CHY096	87.7	--2	CHICHI\CHY096-V	0.02	45.0	0.015	6.1	6.55
			99	87.7	C	CHICHI\CHY096-N	0.04	50.0	0.045	10.8	9.86
						CHICHI\CHY096-W	0.03	50.0	0.032	7.4	8.19
CWB	99999		CHY099	70.6	--2	CHICHI\CHY099-V	0.03	40.0	0.026	7.7	6.82
			99	70.6	C	CHICHI\CHY099-E	0.02	40.0	0.062	12.8	9.44
						CHICHI\CHY099-N	0.02	40.0	0.056	17.9	13.74
CWB	99999		CHY100	58.8	--2	CHICHI\CHY100-V	0.03	40.0	0.029	6.2	5.49
			99	58.8	C	CHICHI\CHY100-E	0.02	50.0	0.066	12.3	8.28
						CHICHI\CHY100-N	0.03	40.0	0.062	17.6	12.49
CWB	99999		CHY101	11.1	--2	CHICHI\CHY101-V	0.04	50.0	0.165	27.7	26.45
			99	11.1	C	CHICHI\CHY101-N	0.04	50.0	0.398	108.8	78.79
						CHICHI\CHY101-W	0.03	50.0	0.340	66.3	59.06
CWB	99999		CHY102	46.2	--1	CHICHI\CHY102-V	0.03	30.0	0.025	6.5	5.06
			99	46.0	B	CHICHI\CHY102-N	0.03	33.0	0.050	6.3	4.15
						CHICHI\CHY102-W	0.04	30.0	0.044	7.1	5.35
CWB	99999		CHY104	20.7	--3	CHICHI\CHY104-V	0.04	50.0	0.125	34.1	20.49
			99	20.7	D	CHICHI\CHY104-E	0.03	50.0	0.162	52.6	36.14
						CHICHI\CHY104-N	0.05	50.0	0.187	55.2	47.23
CWB	99999		CHY107	55.9	--2	CHICHI\CHY107-V	0.04	40.0	0.043	8.5	7.86
			99	55.9	D	CHICHI\CHY107-E	0.02	50.0	0.102	20.9	13.42
						CHICHI\CHY107-N	0.02	40.0	0.094	18.7	15.38
CWB	99999		CHY109	47.8	---	CHICHI\CHY109-V	0.04	20.0	0.031	4.2	5.03
			99	47.8	b*	CHICHI\CHY109-E	0.2	20.0	0.045	5.6	1.63
						CHICHI\CHY109-N	0.2	20.0	0.043	5.7	1.80
CWB	99999		CHY110	47.8	---	CHICHI\CHY110-V	0.14	12.0	0.018	3.0	1.25
			99	47.8	b*	CHICHI\CHY110-E	0.20	20.0	0.026	3.1	1.00
						CHICHI\CHY110-N	0.10	30.0	0.028	5.2	2.78
CWB	99999		CHY116	86.6	---	CHICHI\CHY116-V	0.03	40.0	0.019	7.8	6.47
			99	86.6	D	CHICHI\CHY116-N	0.03	40.0	0.054	20.0	20.72
						CHICHI\CHY116-W	0.02	40.0	0.063	16.6	14.79
CWB	99999		ENA	77.8	--1	CHICHI\ENA-V	0.20	30.0	0.046	6.2	1.61
			99	75.1	A	CHICHI\ENA-E	0.30	30.0	0.070	5.9	0.90
						CHICHI\ENA-N	0.30	22.0	0.060	5.1	1.18
CWB	99999		ESL	44.9	--1	CHICHI\ESL-V	0.04	50.0	0.057	7.4	7.33
			99	40.2	C	CHICHI\ESL-E	0.15	25.0	0.068	6.2	2.31
						CHICHI\ESL-N	0.05	25.0	0.077	7.9	5.55
CWB	99999		HWA002	53.8	--1	CHICHI\HWA002-V	0.03	40.0	0.033	7.0	7.18
			99	50.0	B	CHICHI\HWA002-E	0.06	20.0	0.049	6.1	4.58
						CHICHI\HWA002-N	0.06	40.0	0.094	11.9	6.80
CWB	99999		HWA003	56.1	--2	CHICHI\HWA003-V	0.00	30.0	0.053	9.3	5.34
			99	52.4	C	CHICHI\HWA003-E	0.04	20.0	0.050	10.5	5.45
						CHICHI\HWA003-N	0.00	20.0	0.138	19.1	8.92
CWB	99999		HWA005	43.9	--2	CHICHI\HWA005-V	0.03	50.0	0.051	8.1	7.15

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN H/F	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	39.0	C	CHICHI\HWA005-E	0.05	40.0	0.147	12.5	8.22
						CHICHI\HWA005-N	0.04	40.0	0.139	16.6	9.18
CWB	99999	HWA006		44.0	--2	CHICHI\HWA006-V	0.03	50.0	0.063	6.9	6.81
			99	39.2	C	CHICHI\HWA006-E	0.06	50.0	0.089	9.2	6.11
						CHICHI\HWA006-N	0.06	50.0	0.083	7.3	5.89
CWB	99999	HWA007		59.8	---	CHICHI\HWA007-V	0.02	40.0	0.032	10.0	13.05
			99	56.4	C	CHICHI\HWA007-N	0.02	30.0	0.089	15.2	13.95
						CHICHI\HWA007-W	0.02	30.0	0.066	18.4	26.27
CWB	99999	HWA009		59.7	--2	CHICHI\HWA009-V	0.02	50.0	0.042	9.6	12.82
			99	56.2	C	CHICHI\HWA009-N	0.05	50.0	0.103	15.8	12.59
						CHICHI\HWA009-W	0.02	50.0	0.085	18.8	24.78
CWB	99999	HWA011		56.7	--2	CHICHI\HWA011-V	0.02	40.0	0.039	10.0	10.86
			99	53.1	C	CHICHI\HWA011-N	0.02	30.0	0.102	22.0	13.76
						CHICHI\HWA011-W	0.02	30.0	0.089	21.3	26.83
CWB	99999	HWA012		60.3	--2	CHICHI\HWA012-V	0.06	40.0	0.032	7.4	9.39
			99	56.9	C	CHICHI\HWA012-N	0.06	40.0	0.071	12.9	11.12
						CHICHI\HWA012-W	0.12	30.0	0.078	11.9	6.87
CWB	99999	HWA013		57.4	--2	CHICHI\HWA013-V	0.02	50.0	0.064	8.3	11.31
			99	53.8	C	CHICHI\HWA013-N	0.02	50.0	0.118	22.0	11.63
						CHICHI\HWA013-W	0.02	50.0	0.142	31.2	27.00
CWB	99999	HWA014		58.3	--2	CHICHI\HWA014-V	0.02	50.0	0.038	8.6	11.95
			99	54.8	C	CHICHI\HWA014-N	0.02	20.0	0.093	26.0	13.67
						CHICHI\HWA014-W	0.02	50.0	0.103	17.4	24.36
CWB	99999	HWA015		54.9	--2	CHICHI\HWA015-V	0.02	50.0	0.050	9.1	9.85
			99	51.1	C	CHICHI\HWA015-N	0.02	50.0	0.073	16.7	8.41
						CHICHI\HWA015-W	0.02	40.0	0.105	15.5	23.83
CWB	99999	HWA016		54.7	--1	CHICHI\HWA016-V	0.02	50.0	0.053	10.1	10.39
			99	51.0	C	CHICHI\HWA016-N	0.05	50.0	0.080	12.7	5.65
						CHICHI\HWA016-W	0.05	50.0	0.102	13.3	12.88
CWB	99999	HWA017		53.9	--1	CHICHI\HWA017-V	0.03	50.0	0.049	9.4	11.67
			99	50.1	C	CHICHI\HWA017-N	0.02	50.0	0.084	9.4	7.23
						CHICHI\HWA017-W	0.02	50.0	0.082	10.8	21.83
CWB	99999	HWA019		58.8	--2	CHICHI\HWA019-V	0.02	50.0	0.049	9.2	12.00
			99	55.3	C	CHICHI\HWA019-N	0.02	50.0	0.137	17.4	18.28
						CHICHI\HWA019-W	0.02	50.0	0.127	17.3	22.68
CWB	99999	HWA020		44.9	--1	CHICHI\HWA020-V	0.02	50.0	0.056	8.0	12.44
			99	40.2	C	CHICHI\HWA020-N	0.02	50.0	0.069	7.9	8.80
						CHICHI\HWA020-W	0.02	50.0	0.061	10.3	18.07
CWB	99999	HWA022		71.4	--1	CHICHI\HWA022-V		30.0	0.040	7.9	7.62
			99	68.6	b*	CHICHI\HWA022-N		30.0	0.082	11.0	17.16
						CHICHI\HWA022-W	0.02	30.0	0.123	12.0	11.01
CWB	99999	HWA023		57.1	--2	CHICHI\HWA023-V	0.03	50.0	0.026	7.6	10.14
			99	53.4	A	CHICHI\HWA023-N	0.04	40.0	0.037	6.6	9.03
						CHICHI\HWA023-W	0.04	40.0	0.037	8.6	13.88
CWB	99999	HWA024		44.3	--2	CHICHI\HWA024-V	0.03	40.0	0.025	4.5	5.43
			99	39.6	B	CHICHI\HWA024-N	0.03	30.0	0.024	4.8	5.02
						CHICHI\HWA024-W	0.03	30.0	0.023	7.5	7.36
CWB	99999	HWA025		61.5	---	CHICHI\HWA025-V	0.03	50.0	0.034	5.7	8.43
			99	58.2	C	CHICHI\HWA025-N	0.02	50.0	0.069	9.2	14.56
						CHICHI\HWA025-W	0.15	50.0	0.061	6.7	3.35
CWB	99999	HWA026		58.8	---	CHICHI\HWA026-V	0.02	50.0	0.038	6.7	9.93
			99	55.3	A	CHICHI\HWA026-N	0.03	50.0	0.058	9.1	9.74
						CHICHI\HWA026-W	0.02	50.0	0.071	11.2	18.17
CWB	99999	HWA027		56.8	---	CHICHI\HWA027-V	0.02	40.0	0.039	8.0	10.42

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	53.2	C	CHICHI\HWA027-N	0.03	40.0	0.091	13.8	10.83
						CHICHI\HWA027-W	0.03	40.0	0.126	13.2	19.15
CWB	99999	HWA028		57.9	--2	CHICHI\HWA028-V	0.02	50.0	0.050	7.3	11.37
			99	54.4	C	CHICHI\HWA028-N	0.02	50.0	0.091	16.7	13.01
						CHICHI\HWA028-W	0.02	50.0	0.101	15.1	24.87
CWB	99999	HWA029		56.3	---	CHICHI\HWA029-V	0.03	45.0	0.029	7.2	12.89
			99	52.7	C	CHICHI\HWA029-N	0.12	50.0	0.079	15.8	5.49
						CHICHI\HWA029-W	0.1	40.0	0.097	14.0	6.74
CWB	99999	HWA030		46.4	--2	CHICHI\HWA030-V	0.02	50.0	0.049	8.2	11.65
			99	41.8	C	CHICHI\HWA030-N	0.02	50.0	0.079	13.8	8.48
						CHICHI\HWA030-W	0.02	50.0	0.070	11.0	19.95
CWB	99999	HWA031		50.4	--2	CHICHI\HWA031-V	0.03	50.0	0.066	16.0	10.09
			99	46.2	C	CHICHI\HWA031-N	0.02	40.0	0.101	14.1	10.91
						CHICHI\HWA031-W	0.02	30.0	0.095	19.0	17.07
CWB	99999	HWA032		43.2	---	CHICHI\HWA032-V	0.02	50.0	0.087	7.8	10.21
			99	38.3	C	CHICHI\HWA032-N	0.02	50.0	0.112	8.9	8.60
						CHICHI\HWA032-W	0.5	50.0	0.147	7.6	1.23
CWB	99999	HWA033		49.0	--2	CHICHI\HWA033-V	0.02	50.0	0.053	10.8	10.75
			99	44.7	B	CHICHI\HWA033-N	0.05	50.0	0.167	18.5	8.59
						CHICHI\HWA033-W	0.05	50.0	0.167	17.0	8.05
CWB	99999	HWA034		42.0	--2	CHICHI\HWA034-V	0.02	50.0	0.068	7.9	6.39
			99	36.9	C	CHICHI\HWA034-N	0.02	50.0	0.142	9.8	8.72
						CHICHI\HWA034-W	0.05	50.0	0.133	12.0	4.79
CWB	99999	HWA035		45.9	--2	CHICHI\HWA035-V	0.02	50.0	0.054	7.5	9.60
			99	41.3	C	CHICHI\HWA035-N	0.02	50.0	0.074	7.5	8.88
						CHICHI\HWA035-W	0.02	50.0	0.078	11.9	16.89
CWB	99999	HWA036		43.6	--2	CHICHI\HWA036-V	0.02	40.0	0.032	7.0	6.77
			99	38.8	C	CHICHI\HWA036-N	0.02	30.0	0.058	12.7	8.46
						CHICHI\HWA036-W	0.02	30.0	0.071	13.8	6.47
CWB	99999	HWA037		46.6	---	CHICHI\HWA037-V	0.02	30.0	0.082	12.0	6.22
			99	42.1	C	CHICHI\HWA037-N	0.02	30.0	0.126	21.4	9.22
						CHICHI\HWA037-W	0.04	30.0	0.108	13.0	4.71
CWB	99999	HWA038		42.9	--2	CHICHI\HWA038-V	0.02	33.0	0.041	5.5	5.25
			99	38.0	B	CHICHI\HWA038-N	0.03	30.0	0.059	7.4	7.51
						CHICHI\HWA038-W	0.04	30.0	0.035	8.8	4.97
CWB	99999	HWA039		46.7	--2	CHICHI\HWA039-V	0.03	30.0	0.039	8.1	6.38
			99	42.2	C	CHICHI\HWA039-N	0.10	50.0	0.075	14.1	4.74
						CHICHI\HWA039-W	0.03	40.0	0.085	10.4	5.58
CWB	99999	HWA041		50.0	---	CHICHI\HWA041-V	0.02	30.0	0.044	9.5	5.58
			99	45.9	C	CHICHI\HWA041-N	0.02	30.0	0.082	18.9	7.48
						CHICHI\HWA041-W	0.02	30.0	0.080	11.6	7.47
CWB	99999	HWA043		54.9	--1	CHICHI\HWA043-V	0.02	40.0	0.031	10.2	9.99
			99	51.1	C	CHICHI\HWA043-N	0.02	40.0	0.070	7.7	9.31
						CHICHI\HWA043-W	0.05	40.0	0.056	8.9	7.04
CWB	99999	HWA044		54.4	---	CHICHI\HWA044-V	0.02	30.0	0.029	8.9	9.32
			99	50.6	C	CHICHI\HWA044-N	0.02	30.0	0.080	9.7	8.61
						CHICHI\HWA044-W	0.02	33.0	0.046	8.1	13.44
CWB	99999	HWA045		73.3	---	CHICHI\HWA045-V	0.02	40.0	0.072	8.1	9.26
			99	70.6	C	CHICHI\HWA045-N	0.02	40.0	0.183	26.9	19.31
						CHICHI\HWA045-W	0.04	80.0	0.128	17.1	6.95
CWB	99999	HWA046		59.3	---	CHICHI\HWA046-V	0.03	40.0	0.049	5.7	8.73
			99	55.8	A	CHICHI\HWA046-E	0.02	50.0	0.076	9.8	18.09
						CHICHI\HWA046-N	0.02	50.0	0.087	9.0	14.01
CWB	99999	HWA048		55.3	---	CHICHI\HWA048-V	0.03	50.0	0.055	8.1	11.34

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	51.5	C	CHICHI\HWA048-E	0.05	50.0	0.124	18.7	12.14
						CHICHI\HWA048-N	0.02	40.0	0.167	18.6	25.91
CWB	99999	HWA049		54.0	---	CHICHI\HWA049-V	0.03	30.0	0.038	9.1	10.90
			99	50.2	C	CHICHI\HWA049-E	0.02	40.0	0.098	20.8	25.90
						CHICHI\HWA049-N	0.05	40.0	0.092	24.2	9.06
CWB	99999	HWA050		56.7	---	CHICHI\HWA050-V	0.03	50.0	0.052	8.4	10.41
			99	53.0	C	CHICHI\HWA050-E	0.02	40.0	0.090	12.7	22.83
						CHICHI\HWA050-N	0.05	50.0	0.093	12.2	5.52
CWB	99999	HWA051		55.8	---	CHICHI\HWA051-V	0.02	50.0	0.054	9.9	11.73
			99	52.1	C	CHICHI\HWA051-E	0.02	40.0	0.169	18.5	19.83
						CHICHI\HWA051-N	0.02	50.0	0.154	17.7	9.97
CWB	99999	HWA053		42.5	---	CHICHI\HWA053-V	0.03	40.0	0.025	4.9	5.93
			99	37.5	A	CHICHI\HWA053-E	-99.				
						CHICHI\HWA053-N	0.03	50.0	0.027	3.3	3.75
CWB	99999	HWA054		43.6	---	CHICHI\HWA054-V	-99.				
			99	38.8	C	CHICHI\HWA054-E	0.03	30.0	0.015	3.9	2.51
						CHICHI\HWA054-N	0.06	30.0	0.050	9.4	5.17
CWB	99999	HWA055		48.7	---	CHICHI\HWA055-V	0.02	20.0	0.062	8.5	6.46
			99	44.4	C	CHICHI\HWA055-E	0.04	40.0	0.094	19.1	8.55
						CHICHI\HWA055-N	0.03	20.0	0.088	11.9	8.49
CWB	99999	HWA056		48.8	---	CHICHI\HWA056-V	0.02	50.0	0.062	7.1	10.35
			99	44.5	A	CHICHI\HWA056-N	0.03	50.0	0.107	10.8	10.36
						CHICHI\HWA056-W	0.02	50.0	0.107	11.7	17.64
CWB	99999	HWA057		58.2	---	CHICHI\HWA057-V	0.02	50.0	0.053	6.3	9.32
			99	54.7	-	CHICHI\HWA057-N	0.02	50.0	0.124	7.1	13.67
						CHICHI\HWA057-W	0.02	50.0	0.078	8.4	16.23
CWB	99999	HWA058		48.5	---	CHICHI\HWA058-V	0.02	50.0	0.059	9.6	8.78
			99	44.1	-	CHICHI\HWA058-N	0.02	50.0	0.114	12.0	9.07
						CHICHI\HWA058-W	0.02	50.0	0.092	10.2	19.54
CWB	99999	HWA059		52.0	---	CHICHI\HWA059-V	0.03	50.0	0.056	6.9	11.90
			99	48.0	-	CHICHI\HWA059-N	0.02	50.0	0.120	12.0	10.28
						CHICHI\HWA059-W	0.02	50.0	0.136	15.9	18.28
CWB	99999	HWA060		60.6	---	CHICHI\HWA060-V	0.03	30.0	0.030	8.3	13.03
			99	57.2	-	CHICHI\HWA060-N	0.02	30.0	0.036	6.0	8.45
						CHICHI\HWA060-W	0.02	30.0	0.041	9.1	17.54
CWB	99999	HWA2		58.8	--2	CHICHI\HWA2-V	0.024	50.0	0.050	8.9	11.91
			99	55.3	C	CHICHI\HWA2-N	0.2	50.0	0.124	20.9	6.53
						CHICHI\HWA2-W	0.2	50.0	0.126	17.1	5.13
CWB	99999	ILA001		114.8	---	CHICHI\ILA001-V	0.03	20.0	0.011	5.0	8.09
			99	113.2	C	CHICHI\ILA001-N	0.05	20.0	0.024	5.8	5.77
						CHICHI\ILA001-W	0.02	20.0	0.023	6.6	10.05
CWB	99999	ILA002		109.1	---	CHICHI\ILA002-V	0.02	30.0	0.022	6.7	9.01
			99	107.5	C	CHICHI\ILA002-N	0.04	24.0	0.073	10.7	7.70
						CHICHI\ILA002-W	0.02	24.0	0.048	10.2	9.47
CWB	99999	ILA003		104.5	---	CHICHI\ILA003-V	0.03	30.0	0.020	8.9	9.45
			99	102.7	D	CHICHI\ILA003-N	0.05	30.0	0.070	13.9	13.21
						CHICHI\ILA003-W	0.02	30.0	0.059	21.3	12.79
CWB	99999	ILA004		100.7	--3	CHICHI\ILA004-V	0.03	22.0	0.026	9.5	12.03
			99	98.7	D	CHICHI\ILA004-N	0.05	20.0	0.066	26.1	19.83
						CHICHI\ILA004-W	0.04	18.0	0.078	29.3	24.08
CWB	99999	ILA005		98.9	---	CHICHI\ILA005-V	0.03	30.0	0.025	10.9	11.17
			99	96.9	c*	CHICHI\ILA005-N	0.02	30.0	0.077	15.6	13.62
						CHICHI\ILA005-W	0.02	30.0	0.072	20.6	20.39
CWB	99999	ILA006		96.7	--2	CHICHI\ILA006-V	0.03	23.0	0.037	8.9	10.52

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN H/F	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	94.6	c*	CHICHI\ILA006-N	0.02	30.0	0.071	12.3	13.10
						CHICHI\ILA006-W	0.02	30.0	0.080	13.8	13.00
CWB	99999	ILA007		95.5	--1	CHICHI\ILA007-V	0.03	30.0	0.036	6.7	10.54
			99	93.4	C	CHICHI\ILA007-N	0.02	30.0	0.089	10.6	12.90
						CHICHI\ILA007-W	0.02	30.0	0.062	9.5	9.27
CWB	99999	ILA008		96.5	--1	CHICHI\ILA008-V	0.03	30.0	0.037	9.2	11.36
			99	94.4	D	CHICHI\ILA008-N	0.04	30.0	0.057	15.8	11.42
						CHICHI\ILA008-W	0.02	30.0	0.082	19.8	17.27
CWB	99999	ILA010		92.2	---	CHICHI\ILA010-V	0.03	30.0	0.023	7.8	10.77
			99	90.0	b*	CHICHI\ILA010-N	0.02	30.0	0.039	7.2	11.60
						CHICHI\ILA010-W	0.02	30.0	0.059	7.9	9.76
CWB	99999	ILA012		99.7	--2	CHICHI\ILA012-V	0.03	20.0	0.029	10.3	10.33
			99	97.9	C	CHICHI\ILA012-N	0.05	20.0	0.059	16.0	9.11
						CHICHI\ILA012-W	0.05	20.0	0.088	16.1	9.69
CWB	99999	ILA013		95.9	--3	CHICHI\ILA013-V	0.02	33.0	0.040	12.0	10.41
			99	94.0	C	CHICHI\ILA013-N	0.02	33.0	0.149	21.6	11.36
						CHICHI\ILA013-W	0.02	33.0	0.142	27.5	14.29
CWB	99999	ILA014		92.3	--1	CHICHI\ILA014-V	0.03	24.0	0.030	7.3	11.85
			99	90.2	C	CHICHI\ILA014-N	0.03	30.0	0.067	13.4	8.17
						CHICHI\ILA014-W	0.02	30.0	0.063	12.4	14.24
CWB	99999	ILA015		96.6	--1	CHICHI\ILA015-V	0.03	40.0	0.020	8.4	9.88
			99	95.0	A	CHICHI\ILA015-N	0.05	40.0	0.050	10.1	6.88
						CHICHI\ILA015-W	0.04	33.0	0.038	6.3	6.64
CWB	99999	ILA016		93.7	--2	CHICHI\ILA016-V	0.03	30.0	0.038	8.0	9.77
			99	91.9	C	CHICHI\ILA016-N	0.05	30.0	0.077	14.3	7.98
						CHICHI\ILA016-W	0.02	30.0	0.082	15.1	10.60
CWB	99999	ILA021		88.1	--1	CHICHI\ILA021-V	0.03	33.0	0.027	8.1	11.82
			99	86.3	C	CHICHI\ILA021-N	0.04	33.0	0.067	9.1	9.18
						CHICHI\ILA021-W	0.02	40.0	0.061	11.7	9.96
CWB	99999	ILA024		79.0	--1	CHICHI\ILA024-V	0.03	40.0	0.024	7.9	10.86
			99	76.9	A	CHICHI\ILA024-N	0.02	40.0	0.033	8.5	9.41
						CHICHI\ILA024-W	0.018	40.0	0.041	9.6	9.14
CWB	99999	ILA027		94.7	--1	CHICHI\ILA027-V	0.03	20.0	0.022	5.6	6.17
			99	92.6	C	CHICHI\ILA027-E	0.06	20.0	0.101	17.8	8.02
						CHICHI\ILA027-N	0.10	20.0	0.062	14.4	9.16
CWB	99999	ILA030		97.4	--2	CHICHI\ILA030-V	0.02	30.0	0.029	12.3	11.18
			99	95.4	D	CHICHI\ILA030-N	0.02	20.0	0.111	23.3	12.76
						CHICHI\ILA030-W	0.02	24.0	0.118	27.6	22.16
CWB	99999	ILA031		94.8	--1	CHICHI\ILA031-V		50.0	0.030	7.3	9.75
			99	92.6	A	CHICHI\ILA031-N		30.0	0.076	9.1	10.68
						CHICHI\ILA031-W		50.0	0.057	10.0	9.94
CWB	99999	ILA032		95.8	--1	CHICHI\ILA032-V	0.33	20.0	0.025	2.6	0.80
			99	92.6	C	CHICHI\ILA032-E	0.03	20.0	0.056	11.7	5.05
						CHICHI\ILA032-N	0.13	20.0	0.049	8.6	2.09
CWB	99999	ILA035		104.8	--1	CHICHI\ILA035-V	0.20	20.0	0.011	2.1	0.61
			99	103.2	C	CHICHI\ILA035-E	0.05	20.0	0.070	10.5	5.51
						CHICHI\ILA035-N	0.13	20.0	0.052	9.9	3.32
CWB	99999	ILA036		101.6	--1	CHICHI\ILA036-V	0.03	30.0	0.026	12.8	9.59
			99	99.8	C	CHICHI\ILA036-N	0.05	40.0	0.068	17.0	8.86
						CHICHI\ILA036-W	0.04	30.0	0.055	15.2	10.41
CWB	99999	ILA037		95.6	--2	CHICHI\ILA037-V	0.02	40.0	0.025	8.8	10.36
			99	93.7	C	CHICHI\ILA037-N	0.05	20.0	0.096	31.5	9.57
						CHICHI\ILA037-W	0.04	15.0	0.069	14.3	9.30
CWB	99999	ILA039		97.6	--1	CHICHI\ILA039-V	0.20	14.0	0.020	3.2	1.18

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	95.8	C	CHICHI\ILA039-E	0.03	20.0	0.058	12.1	13.71
						CHICHI\ILA039-N	0.15	20.0	0.062	12.1	4.66
CWB 99999			ILA041	99.8	---	CHICHI\ILA041-V	0.03	30.0	0.025	9.8	12.22
			99	97.8	D	CHICHI\ILA041-N	0.02	24.0	0.064	22.0	20.82
						CHICHI\ILA041-W	0.02	30.0	0.100	29.4	19.23
CWB 99999			ILA042	97.4	--2	CHICHI\ILA042-V	0.02	50.0	0.021	8.6	11.15
			99	95.3	D	CHICHI\ILA042-N	0.02	40.0	0.068	12.9	14.40
						CHICHI\ILA042-W	0.02	22.0	0.085	21.6	18.97
CWB 99999			ILA043	88.9	---	CHICHI\ILA043-V	0.30	30.0	0.034	2.9	0.59
			99	86.6	b*	CHICHI\ILA043-E	0.40	20.0	0.063	5.2	0.61
						CHICHI\ILA043-N	0.30	14.0	0.052	5.8	1.06
CWB 99999			ILA044	92.3	---	CHICHI\ILA044-V	0.03	30.0	0.034	9.4	11.48
			99	90.1	C	CHICHI\ILA044-N	0.02	30.0	0.070	16.5	10.73
						CHICHI\ILA044-W	0.04	40.0	0.084	22.5	13.39
CWB 99999			ILA046	91.4	--1	CHICHI\ILA046-V	0.04	40.0	0.028	8.0	11.80
			99	89.2	C	CHICHI\ILA046-N	0.04	40.0	0.055	9.8	7.66
						CHICHI\ILA046-W	0.04	40.0	0.068	13.3	10.59
CWB 99999			ILA048	100.5	---	CHICHI\ILA048-V	0.03	20.0	0.028	10.2	11.96
			99	98.6	D	CHICHI\ILA048-N	0.03	20.0	0.074	23.5	16.79
						CHICHI\ILA048-W	0.02	24.0	0.090	18.5	17.91
CWB 99999			ILA049	99.6	--2	CHICHI\ILA049-V	0.02	24.0	0.025	9.3	9.62
			99	97.7	C	CHICHI\ILA049-N	0.02	20.0	0.062	15.0	12.81
						CHICHI\ILA049-W	0.02	20.0	0.081	18.0	13.19
CWB 99999			ILA050	77.8	--1	CHICHI\ILA050-V	0.02	40.0	0.055	8.6	8.92
			99	75.1	A	CHICHI\ILA050-N		40.0	0.064	9.9	16.41
						CHICHI\ILA050-W	0.04	40.0	0.065	7.3	6.69
CWB 99999			ILA051	90.4	---	CHICHI\ILA051-V	0.02	24.0	0.024	8.4	10.13
			99	88.5	A	CHICHI\ILA051-N	0.02	22.0	0.033	7.3	9.19
						CHICHI\ILA051-W	0.02	22.0	0.080	12.3	9.66
CWB 99999			ILA052	96.7	--1	CHICHI\ILA052-V	0.04	24.0	0.017	6.4	8.32
			99	94.6	A	CHICHI\ILA052-N	0.04	22.0	0.039	5.7	9.33
						CHICHI\ILA052-W	0.04	22.0	0.027	7.3	9.66
CWB 99999			ILA054	127.5	---	CHICHI\ILA054-V	0.02	20.0	0.012	5.0	6.90
			99	126.2	A	CHICHI\ILA054-N	0.02	20.0	0.030	5.3	4.93
						CHICHI\ILA054-W	0.02	20.0	0.020	5.7	8.07
CWB 99999			ILA055	102.0	---	CHICHI\ILA055-V	0.03	30.0	0.028	10.3	13.16
			99	100.0	D	CHICHI\ILA055-N	0.05	30.0	0.067	23.2	21.02
						CHICHI\ILA055-W	0.02	40.0	0.075	29.0	22.88
CWB 99999			ILA056	103.7	---	CHICHI\ILA056-V	0.03	30.0	0.024	10.6	8.28
			99	101.8	D	CHICHI\ILA056-N	0.05	30.0	0.073	30.4	25.67
						CHICHI\ILA056-W	0.05	30.0	0.078	33.1	28.50
CWB 99999			ILA059	98.0	---	CHICHI\ILA059-V	0.03	33.0	0.035	9.9	13.09
			99	95.9	D	CHICHI\ILA059-N	0.02	40.0	0.073	16.3	13.24
						CHICHI\ILA059-W	0.04	33.0	0.065	16.9	12.14
CWB 99999			ILA061	89.8	---	CHICHI\ILA061-V	0.02	40.0	0.026	7.7	9.17
			99	87.6	C	CHICHI\ILA061-N	0.02	40.0	0.048	8.8	15.64
						CHICHI\ILA061-W	0.02	40.0	0.053	9.6	8.95
CWB 99999			ILA062	84.2	---	CHICHI\ILA062-V	0.02	40.0	0.047	7.0	7.37
			99	81.8	C	CHICHI\ILA062-N	0.02	40.0	0.075	10.0	16.85
						CHICHI\ILA062-W	0.02	40.0	0.081	10.9	9.40
CWB 99999			ILA063	71.6	---	CHICHI\ILA063-V	0.04	50.0	0.031	7.3	9.45
			99	69.6	A	CHICHI\ILA063-N	0.02	50.0	0.091	8.1	12.98
						CHICHI\ILA063-W	0.02	50.0	0.082	12.6	8.81
CWB 99999			ILA064	83.4	---	CHICHI\ILA064-V	0.02	50.0	0.050	8.8	9.46

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	81.0	C	CHICHI\ILA064-N	0.02	50.0	0.072	7.6	16.60
						CHICHI\ILA064-W	0.02	40.0	0.062	9.0	7.97
CWB 99999			ILA066	81.3	---	CHICHI\ILA066-V	0.02	50.0	0.052	9.3	9.29
			99	78.8	C	CHICHI\ILA066-N	0.02	50.0	0.076	10.6	17.74
						CHICHI\ILA066-W	0.02	50.0	0.096	12.6	9.88
CWB 99999			ILA067	48.7	---	CHICHI\ILA067-V	0.03	50.0	0.095	11.8	12.41
			99	45.4	-	CHICHI\ILA067-N	0.03	50.0	0.171	17.5	19.66
						CHICHI\ILA067-W	0.03	50.0	0.198	11.8	7.73
CWB 99999			KAU001	54.6	---	CHICHI\KAU001-V	0.02	30.0	0.041	5.9	6.65
			99	54.2	C	CHICHI\KAU001-E	0.03	30.0	0.043	5.4	3.68
						CHICHI\KAU001-N	0.03	30.0	0.022	5.9	6.21
CWB 99999			KAU003	122.2	---	CHICHI\KAU003-V	0.04	20.0	0.011	5.4	7.18
			99	122.2	C	CHICHI\KAU003-N	0.02	20.0	0.018	6.5	9.03
						CHICHI\KAU003-W	0.02	20.0	0.020	5.4	10.83
CWB 99999			KAU006	124.2	---	CHICHI\KAU006-V	0.02	30.0	0.011	6.7	5.87
			99	124.2	D	CHICHI\KAU006-N	0.02	30.0	0.023	10.3	7.95
						CHICHI\KAU006-W	0.02	30.0	0.024	6.8	11.58
CWB 99999			KAU007	117.1	--1	CHICHI\KAU007-V	0.02	20.0	0.014	6.8	5.13
			99	117.1	C	CHICHI\KAU007-N	0.02	20.0	0.024	9.0	9.31
						CHICHI\KAU007-W	0.04	15.0	0.025	7.4	6.92
CWB 99999			KAU008	118.6	--2	CHICHI\KAU008-V	0.02	30.0	0.013	5.5	5.85
			99	118.6	C	CHICHI\KAU008-N	0.02	30.0	0.030	9.0	8.64
						CHICHI\KAU008-W	0.02	18.0	0.027	8.2	9.26
CWB 99999			KAU010	105.0	--3	CHICHI\KAU010-V	0.03	20.0	0.010	5.2	4.91
			99	105.0	D	CHICHI\KAU010-N	0.03	20.0	0.034	16.6	14.69
						CHICHI\KAU010-W	0.03	18.0	0.034	11.3	9.14
CWB 99999			KAU011	108.6	--3	CHICHI\KAU011-V	0.04	20.0	0.013	5.6	4.30
			99	108.6	D	CHICHI\KAU011-N	0.04	20.0	0.054	11.3	12.71
						CHICHI\KAU011-W	0.02	20.0	0.056	10.9	10.24
CWB 99999			KAU012	92.1	--1	CHICHI\KAU012-V	0.03	20.0	0.022	7.7	7.48
			99	92.1	C	CHICHI\KAU012-N		20.0	0.047	9.8	10.83
						CHICHI\KAU012-W	0.05	20.0	0.086	9.9	7.82
CWB 99999			KAU015	116.0	---	CHICHI\KAU015-V	0.02	15.0	0.014	5.3	5.39
			99	116.0	C	CHICHI\KAU015-N	0.02	20.0	0.030	10.7	9.48
						CHICHI\KAU015-W	0.02	15.0	0.026	6.9	8.75
CWB 99999			KAU018	87.8	--1	CHICHI\KAU018-V	0.02	20.0	0.016	6.2	5.41
			99	87.7	C	CHICHI\KAU018-N	0.02	22.0	0.026	7.9	6.97
						CHICHI\KAU018-W	0.02	20.0	0.035	6.2	7.12
CWB 99999			KAU020	85.3	--2	CHICHI\KAU020-V	0.03	20.0	0.020	5.2	3.90
			99	85.2	C	CHICHI\KAU020-N	0.02	20.0	0.078	15.0	5.35
						CHICHI\KAU020-W	0.02	15.0	0.055	12.3	6.07
CWB 99999			KAU022	110.8	--3	CHICHI\KAU022-V	0.02	12.0	0.013	2.5	3.12
			99	110.6	D	CHICHI\KAU022-N	0.02	10.0	0.030	6.0	5.49
						CHICHI\KAU022-W	0.02	12.0	0.032	6.4	6.31
CWB 99999			KAU030	115.6	--3	CHICHI\KAU030-V	0.02	20.0	0.012	3.8	3.37
			99	115.0	D	CHICHI\KAU030-N	0.02	20.0	0.034	7.8	7.04
						CHICHI\KAU030-W	0.02	20.0	0.039	8.0	5.93
CWB 99999			KAU032	125.2	--3	CHICHI\KAU032-V	0.02	20.0	0.010	3.9	5.04
			99	125.0	D	CHICHI\KAU032-N	0.02	20.0	0.030	8.4	6.78
						CHICHI\KAU032-W	0.22	15.0	0.037	7.5	3.08
CWB 99999			KAU033	133.0	--3	CHICHI\KAU033-V	0.02	12.0	0.008	4.0	4.02
			99	132.8	D	CHICHI\KAU033-N	0.02	12.0	0.017	7.4	6.93
						CHICHI\KAU033-W	0.02	12.0	0.026	12.2	9.75
CWB 99999			KAU034	122.8	--1	CHICHI\KAU034-V	0.02	12.0	0.009	2.3	3.08

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	121.8	A	CHICHI\KAU034-N	0.04	12.0	0.009	2.1	2.42
						CHICHI\KAU034-W	0.05	14.0	0.009	2.1	2.56
			CWB 99999 KAU037	147.0	--2	CHICHI\KAU037-V	0.02	14.0	0.010	2.4	3.24
			99	145.7	C	CHICHI\KAU037-N	0.02	12.0	0.026	4.6	3.26
						CHICHI\KAU037-W	0.02	12.0	0.017	3.8	5.76
			CWB 99999 KAU038	157.4	--1	CHICHI\KAU038-V	0.03	20.0	0.006	2.0	2.69
			99	156.2	A	CHICHI\KAU038-N	0.03	15.0	0.010	2.4	2.56
						CHICHI\KAU038-W	0.30	12.0	0.007	1.2	0.39
			CWB 99999 KAU039	166.7	--2	CHICHI\KAU039-V	0.05	10.0	0.006	1.9	2.32
			99	165.5	C	CHICHI\KAU039-N	0.02	10.0	0.010	3.1	2.35
						CHICHI\KAU039-W	0.02	10.0	0.011	2.8	4.39
			CWB 99999 KAU040	154.6	--1	CHICHI\KAU040-V	0.02	18.0	0.007	1.8	1.99
			99	153.3	C	CHICHI\KAU040-N		10.0	0.008	2.1	3.20
						CHICHI\KAU040-W	0.04	12.0	0.008	2.2	2.67
			CWB 99999 KAU042	173.8	---	CHICHI\KAU042-V	0.02	15.0	0.006	1.8	2.21
			99	172.7	C	CHICHI\KAU042-N	0.02	12.0	0.011	3.0	4.25
						CHICHI\KAU042-W	0.02	10.0	0.010	3.5	2.27
			CWB 99999 KAU043	185.7	---	CHICHI\KAU043-V	0.02	10.0	0.010	3.6	3.02
			99	184.6	C	CHICHI\KAU043-N	0.02	10.0	0.015	4.3	4.49
						CHICHI\KAU043-W	0.02	10.0	0.016	4.2	3.50
			CWB 99999 KAU044	135.3	--3	CHICHI\KAU044-V	0.02	14.0	0.010	3.3	4.87
			99	134.8	D	CHICHI\KAU044-N	0.02	14.0	0.041	14.4	10.18
						CHICHI\KAU044-W	0.02	10.0	0.034	9.4	9.75
			CWB 99999 KAU046	176.8	--2	CHICHI\KAU046-V	0.03	10.0	0.008	2.9	2.44
			99	175.7	C	CHICHI\KAU046-N	0.02	10.0	0.023	5.2	4.01
						CHICHI\KAU046-W	0.02	9.0	0.024	6.8	5.20
			CWB 99999 KAU047	64.5	---	CHICHI\KAU047-V	0.03	30.0	0.020	4.8	4.50
			99	64.3	A	CHICHI\KAU047-N	0.03	40.0	0.042	5.6	4.00
						CHICHI\KAU047-W	0.02	40.0	0.033	7.1	5.52
			CWB 99999 KAU048	105.0	--3	CHICHI\KAU048-V	0.02	14.0	0.012	4.1	3.55
			99	104.8	C	CHICHI\KAU048-N	0.02	14.0	0.030	8.0	5.00
						CHICHI\KAU048-W	0.02	14.0	0.039	8.8	6.72
			CWB 99999 KAU050	52.1	--1	CHICHI\KAU050-V	0.02	30.0	0.023	5.2	4.13
			99	50.6	A	CHICHI\KAU050-N	0.03	40.0	0.040	6.4	3.28
						CHICHI\KAU050-W	0.02	30.0	0.042	5.2	6.98
			CWB 99999 KAU051	139.7	--1	CHICHI\KAU051-V	0.03	12.0	0.007	3.3	3.60
			99	138.5	A	CHICHI\KAU051-N	0.02	22.0	0.008	2.9	2.69
						CHICHI\KAU051-W	0.10	14.0	0.009	2.4	2.12
			CWB 99999 KAU052	182.8	---	CHICHI\KAU052-V	0.05	10.0	0.005	1.7	2.58
			99	181.7	B	CHICHI\KAU052-N	0.03	10.0	0.007	2.9	3.13
						CHICHI\KAU052-W	0.03	12.0	0.011	3.3	3.75
			CWB 99999 KAU054	40.5	--1	CHICHI\KAU054-V	0.03	50.0	0.030	5.9	4.66
			99	39.6	b*	CHICHI\KAU054-N	0.03	50.0	0.080	5.2	3.56
						CHICHI\KAU054-W	0.04	50.0	0.085	8.5	6.00
			CWB 99999 KAU057	121.4	---	CHICHI\KAU057-V	0.50	24.0	0.010	1.0	0.27
			99	121.4	B	CHICHI\KAU057-N	0.03	20.0	0.016	4.6	5.55
						CHICHI\KAU057-W	0.02	20.0	0.017	6.0	11.22
			CWB 99999 KAU058	118.9	---	CHICHI\KAU058-V	0.02	25.0	0.013	5.5	6.37
			99	118.9	D	CHICHI\KAU058-N	0.03	20.0	0.024	9.1	6.89
						CHICHI\KAU058-W	0.02	20.0	0.023	6.1	8.04
			CWB 99999 KAU062	122.0	--3	CHICHI\KAU062-V	0.03	30.0	0.017	5.4	4.60
			99	122.0	D	CHICHI\KAU062-N	0.02	30.0	0.033	8.0	7.42
						CHICHI\KAU062-W	0.02	24.0	0.027	6.6	9.48
			CWB 99999 KAU063	98.2	---	CHICHI\KAU063-V	0.03	40.0	0.011	5.0	4.60

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	98.2	D	CHICHI\KAU063-N	0.03	40.0	0.041	10.4	9.22
						CHICHI\KAU063-W	0.02	28.0	0.039	12.5	11.17
CWB 99999	KAU064		106.8	--3	CHICHI\KAU064-V	0.03	18.0	0.012	3.8	4.29	
	99		106.8	D	CHICHI\KAU064-N	0.03	20.0	0.032	8.4	8.63	
						CHICHI\KAU064-W	0.03	20.0	0.040	7.8	6.80
CWB 99999	KAU066		108.7	---	CHICHI\KAU066-V	0.02	22.0	0.015	5.3	5.50	
	99		108.7	D	CHICHI\KAU066-N	0.03	22.0	0.043	7.7	6.92	
						CHICHI\KAU066-W	0.02	22.0	0.034	8.4	8.21
CWB 99999	KAU069		83.6	--1	CHICHI\KAU069-V	0.03	24.0	0.019	2.2	3.05	
	99		82.8	A	CHICHI\KAU069-N	0.10	30.0	0.036	3.1	0.859	
						CHICHI\KAU069-W	0.02	22.0	0.039	3.3	3.69
CWB 99999	KAU073		124.3	--3	CHICHI\KAU073-V	0.02	20.0	0.010	3.7	4.90	
	99		123.8	D	CHICHI\KAU073-N	0.02	14.0	0.029	8.5	8.77	
						CHICHI\KAU073-W	0.02	20.0	0.029	8.0	4.91
CWB 99999	KAU074		119.3	--3	CHICHI\KAU074-V	0.02	18.0	0.013	4.3	3.23	
	99		118.7	D	CHICHI\KAU074-N	0.03	18.0	0.028	10.0	6.97	
						CHICHI\KAU074-W	0.02	20.0	0.032	6.7	7.19
CWB 99999	KAU075		130.0	--2	CHICHI\KAU075-V	0.02	18.0	0.010	4.3	5.33	
	99		129.6	D	CHICHI\KAU075-N	0.02	18.0	0.040	11.7	8.58	
						CHICHI\KAU075-W	0.02	18.0	0.028	9.4	7.00
CWB 99999	KAU077		97.2	--1	CHICHI\KAU077-V	0.03	20.0	0.012	3.4	3.01	
	99		95.6	A	CHICHI\KAU077-N	0.03	20.0	0.023	2.5	3.76	
						CHICHI\KAU077-W	0.02	20.0	0.022	3.2	2.68
CWB 99999	KAU078		102.8	--1	CHICHI\KAU078-V	0.03	50.0	0.015	2.6	2.44	
	99		101.9	A	CHICHI\KAU078-N	0.02	50.0	0.024	2.2	3.17	
						CHICHI\KAU078-W	0.02	50.0	0.046	2.6	3.64
CWB 99999	KAU081		176.4	--2	CHICHI\KAU081-V	0.02	12.0	0.010	2.8	2.87	
	99		175.2	C	CHICHI\KAU081-N	0.02	12.0	0.020	5.9	4.11	
						CHICHI\KAU081-W	0.02	14.0	0.027	5.5	5.81
CWB 99999	KAU082		184.0	---	CHICHI\KAU082-V	0.02	12.0	0.009	2.8	2.60	
	99		182.9	B	CHICHI\KAU082-N	0.02	15.0	0.019	4.8	4.58	
						CHICHI\KAU082-W	0.02	12.0	0.017	7.8	6.77
CWB 99999	KAU083		123.0	--1	CHICHI\KAU083-V	0.02	14.0	0.011	4.9	4.97	
	99		122.9	D	CHICHI\KAU083-N	0.02	14.0	0.024	8.4	5.81	
						CHICHI\KAU083-W	0.02	14.0	0.030	8.9	7.18
CWB 99999	KAU085		93.2	--3	CHICHI\KAU085-V	0.03	30.0	0.023	7.2	8.06	
	99		93.2	C	CHICHI\KAU085-N	0.03	30.0	0.055	12.4	9.42	
						CHICHI\KAU085-W	0.02	30.0	0.050	11.2	9.80
CWB 99999	KAU086		103.6	--3	CHICHI\KAU086-V	0.03	30.0	0.016	6.3	6.46	
	99		103.6	D	CHICHI\KAU086-N	0.03	24.0	0.045	16.4	18.00	
						CHICHI\KAU086-W	0.02	24.0	0.041	9.9	11.34
CWB 99999	KAU087		122.1	---	CHICHI\KAU087-V	0.04	30.0	0.016	6.0	6.04	
	99		122.1	D	CHICHI\KAU087-N	0.02	20.0	0.032	13.0	8.44	
						CHICHI\KAU087-W	0.02	20.0	0.027	10.0	11.97
CWB 99999	KAU088		118.6	---	CHICHI\KAU088-V	0.03	30.0	0.016	6.4	5.58	
	99		118.6	D	CHICHI\KAU088-N	0.03	30.0	0.031	8.8	6.57	
						CHICHI\KAU088-W	0.02	30.0	0.024	8.9	9.80
CWB 99999	NST		37.0	--1	CHICHI\NST-V	0.06	24.0	0.108	17.5	11.82	
	99		37.0	C	CHICHI\NST-E	0.03	50.0	0.309	22.7	21.38	
						CHICHI\NST-N	0.05	50.0	0.388	26.9	16.05
CWB 99999	PNG		114.2	--1	CHICHI\PNG-V	0.40	30.0	0.013	1.2	0.21	
	99		114.2	A	CHICHI\PNG-E	0.24	40.0	0.028	1.6	0.52	
						CHICHI\PNG-N	0.22	30.0	0.035	2.4	0.75
CWB 99999	SSD		99.3	--1	CHICHI\SSD-V	0.30	20.0	0.014	1.5	0.35	

Appendix B

SEISMIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	98.5	B	CHICHI\SSD-E	0.20	20.0	0.018	1.7	0.48
						CHICHI\SSD-N	0.30	20.0	0.026	1.6	0.27
			CWB 99999 TAP	105.2	---	CHICHI\TAP-V	0.16	20.0	0.013	2.4	0.85
			99	105.1	D	CHICHI\TAP-E	0.07	20.0	0.060	13.4	6.55
						CHICHI\TAP-N	0.20	20.0	0.054	10.5	3.44
			CWB 99999 TAP003	104.3	--3	CHICHI\TAP005-V	0.03	70.0	0.043	10.0	10.18
			99	104.3	D	CHICHI\TAP005-N	0.05	70.0	0.106	28.2	15.19
						CHICHI\TAP005-E	0.03	70.0	0.126	34.8	20.61
			CWB 99999 TAP005	110.2	--3	CHICHI\TAP005-V	0.03	50.0	0.024	6.3	7.83
			99	110.2	D	CHICHI\TAP005-N	0.04	50.0	0.075	20.1	10.57
						CHICHI\TAP005-E	0.03	50.0	0.137	27.8	13.50
			CWB 99999 TAP006	109.3	--3	CHICHI\TAP006-V	0.02	50.0	0.032	6.4	6.85
			99	109.3	D	CHICHI\TAP006-N	0.02	50.0	0.071	14.1	5.91
						CHICHI\TAP006-E	0.02	50.0	0.105	19.1	15.75
			CWB 99999 TAP007	107.6	--2	CHICHI\TAP007-V	0.03	30.0	0.029	7.0	7.91
			99	107.6	D	CHICHI\TAP007-S	0.03	30.0	0.075	16.3	7.99
						CHICHI\TAP007-W	0.02	30.0	0.109	17.9	18.06
			CWB 99999 TAP008	108.9	---	CHICHI\TAP008-V	0.02	30.0	0.019	5.9	6.90
			99	108.9	D	CHICHI\TAP008-N	0.04	20.0	0.061	14.2	8.56
						CHICHI\TAP008-E	0.02	20.0	0.079	18.6	17.80
			CWB 99999 TAP010	104.4	--2	CHICHI\TAP010-V	0.04	50.0	0.027	6.4	8.42
			99	104.4	D	CHICHI\TAP010-N	0.03	50.0	0.089	23.6	15.27
						CHICHI\TAP010-E	0.02	50.0	0.121	24.0	18.82
			CWB 99999 TAP012	105.6	--2	CHICHI\TAP012-V	0.03	50.0	0.028	6.7	8.05
			99	105.6	D	CHICHI\TAP012-N	0.03	50.0	0.055	14.0	9.44
						CHICHI\TAP012-E	0.02	30.0	0.100	17.1	16.53
			CWB 99999 TAP013	107.3	--2	CHICHI\TAP013-V	0.02	25.0	0.025	8.1	8.05
			99	107.3	D	CHICHI\TAP013-N	0.03	25.0	0.075	14.8	9.51
						CHICHI\TAP013-E	0.02	30.0	0.094	19.7	16.72
			CWB 99999 TAP014	108.6	--3	CHICHI\TAP014-V	0.02	20.0	0.029	7.1	7.05
			99	108.6	D	CHICHI\TAP014-N	0.04	20.0	0.073	19.4	8.36
						CHICHI\TAP014-E	0.02	20.0	0.114	26.5	15.94
			CWB 99999 TAP017	101.4	--2	CHICHI\TAP017-V	0.02	50.0	0.036	10.3	9.68
			99	101.4	D	CHICHI\TAP017-N	0.03	50.0	0.106	28.3	18.83
						CHICHI\TAP017-E	0.02	50.0	0.114	21.3	23.08
			CWB 99999 TAP020	105.9	--3	CHICHI\TAP020-V	0.02	50.0	0.033	7.7	8.35
			99	105.8	D	CHICHI\TAP020-S	0.03	30.0	0.067	15.1	9.61
						CHICHI\TAP020-W	0.02	25.0	0.065	19.0	18.64
			CWB 99999 TAP021	106.8	--2	CHICHI\TAP021-V	0.02	50.0	0.037	6.7	7.80
			99	106.8	D	CHICHI\TAP021-N	0.04	20.0	0.109	16.6	9.00
						CHICHI\TAP021-E	0.04	20.0	0.117	24.8	12.67
			CWB 99999 TAP024	100.2	--2	CHICHI\TAP024-V	0.02	50.0	0.023	7.9	9.62
			99	100.2	C	CHICHI\TAP024-S	0.02	50.0	0.075	20.2	11.49
						CHICHI\TAP024-W	0.02	50.0	0.062	14.6	21.11
			CWB 99999 TAP026	102.1	--3	CHICHI\TAP026-V	0.02	50.0	0.050	7.3	8.41
			99	102.1	D	CHICHI\TAP026-N	0.02	50.0	0.073	14.3	8.41
						CHICHI\TAP026-E	0.03	50.0	0.077	11.7	16.36
			CWB 99999 TAP028	101.4	--3	CHICHI\TAP028-V	0.02	30.0	0.015	7.6	8.72
			99	101.4	C	CHICHI\TAP028-N	0.02	30.0	0.052	14.4	8.25
						CHICHI\TAP028-E	0.02	30.0	0.051	11.5	16.41
			CWB 99999 TAP032	98.8	--1	CHICHI\TAP032-V	0.02	50.0	0.059	9.6	8.76
			99	98.8	C	CHICHI\TAP032-N	0.03	50.0	0.115	18.0	11.46
						CHICHI\TAP032-W	0.02	40.0	0.107	24.2	21.13
			CWB 99999 TAP034	98.8	--1	CHICHI\TAP034-V	0.02	30.0	0.023	9.3	9.57

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	98.7	A	CHICHI\TAP034-N	0.02	30.0	0.066	12.6	6.79
						CHICHI\TAP034-W	0.02	30.0	0.055	9.8	14.06
CWB 99999	TAP035		99	96.9	--1	CHICHI\TAP035-V	0.02	24.0	0.028	7.6	9.01
						CHICHI\TAP035-N	0.02	24.0	0.085	8.3	8.00
						CHICHI\TAP035-W	0.02	24.0	0.067	8.4	12.78
CWB 99999	TAP036		99	95.6	--1	CHICHI\TAP036-V	0.02	30.0	0.017	6.9	9.15
						CHICHI\TAP036-N	0.02	30.0	0.039	6.1	5.83
						CHICHI\TAP036-W	0.02	20.0	0.030	7.6	10.69
CWB 99999	TAP041		99	111.2	--2	CHICHI\TAP041-V	0.02	50.0	0.019	7.8	11.33
						CHICHI\TAP041-N	0.02	30.0	0.062	16.6	12.13
						CHICHI\TAP041-W	0.02	30.0	0.090	21.6	28.19
CWB 99999	TAP042		99	108.2	--1	CHICHI\TAP042-V	0.02	30.0	0.025	9.2	8.73
						CHICHI\TAP042-N	0.02	30.0	0.100	15.5	11.46
						CHICHI\TAP042-W	0.02	30.0	0.085	19.1	19.06
CWB 99999	TAP043		99	93.7	--1	CHICHI\TAP043-V	0.02	20.0	0.026	8.4	9.53
						CHICHI\TAP043-N	0.02	20.0	0.082	17.3	13.10
						CHICHI\TAP043-W	0.02	20.0	0.065	18.4	22.61
CWB 99999	TAP046		99	127.3	--1	CHICHI\TAP046-V	0.02	30.0	0.018	4.5	6.17
						CHICHI\TAP046-N	0.02	30.0	0.054	6.6	4.93
						CHICHI\TAP046-W	0.02	24.0	0.084	12.6	7.08
CWB 99999	TAP047		99	85.8	--2	CHICHI\TAP047-V	0.02	22.0	0.027	8.0	9.05
						CHICHI\TAP047-N	0.02	22.0	0.054	17.4	12.23
						CHICHI\TAP047-W	0.02	30.0	0.051	16.9	29.53
CWB 99999	TAP049		99	109.1	--2	CHICHI\TAP049-V	0.02	22.0	0.037	7.8	9.51
						CHICHI\TAP049-N	0.03	22.0	0.076	16.7	10.88
						CHICHI\TAP049-W	0.02	22.0	0.117	16.5	20.64
CWB 99999	TAP051		99	105.1	--3	CHICHI\TAP051-V	0.02	40.0	0.037	8.8	10.21
						CHICHI\TAP051-N	0.02	30.0	0.064	14.9	13.39
						CHICHI\TAP051-W	0.02	30.0	0.112	16.6	21.52
CWB 99999	TAP052		99	99.9	---	CHICHI\TAP052-V	0.03	50.0	0.039	8.2	10.24
						CHICHI\TAP052-N	0.02	50.0	0.127	23.6	14.06
						CHICHI\TAP052-W	0.02	30.0	0.066	16.6	25.29
CWB 99999	TAP053		99	98.3	---	CHICHI\TAP053-V	0.03	20.0	0.035	10.4	9.77
						CHICHI\TAP053-N	0.03	20.0	0.086	12.2	7.62
						CHICHI\TAP053-W	0.02	24.0	0.082	11.3	15.70
CWB 99999	TAP059		99	125.9	--1	CHICHI\TAP059-V	0.02	20.0	0.018	5.7	6.82
						CHICHI\TAP059-N	0.02	30.0	0.039	6.5	4.80
						CHICHI\TAP059-W	0.02	15.0	0.030	7.6	8.11
CWB 99999	TAP060		99	128.5	--1	CHICHI\TAP060-V	0.02	24.0	0.014	5.0	7.02
						CHICHI\TAP060-N	0.02	20.0	0.036	7.6	6.05
						CHICHI\TAP060-W	0.02	20.0	0.036	11.0	8.80
CWB 99999	TAP065		99	130.9	--1	CHICHI\TAP065-V	0.03	20.0	0.013	5.6	6.37
						CHICHI\TAP065-N	0.04	20.0	0.023	7.7	5.28
						CHICHI\TAP065-W	0.03	18.0	0.040	9.9	6.98
CWB 99999	TAP066		99	117.5	--1	CHICHI\TAP066-V	0.02	22.0	0.022	4.1	6.23
						CHICHI\TAP066-N	0.03	20.0	0.074	12.7	7.78
						CHICHI\TAP066-W	0.02	22.0	0.050	9.1	15.81
CWB 99999	TAP067		99	104.3	--1	CHICHI\TAP067-V	0.03	20.0	0.037	8.4	10.40
						CHICHI\TAP067-N	0.02	20.0	0.042	9.6	8.18
						CHICHI\TAP067-W	0.02	20.0	0.039	11.5	12.16
CWB 99999	TAP069		99	135.3	--1	CHICHI\TAP069-V	0.04	20.0	0.013	5.2	6.49
						CHICHI\TAP069-N	0.05	20.0	0.033	5.8	4.58
						CHICHI\TAP069-W	0.04	20.0	0.026	5.0	8.69
CWB 99999	TAP072		99	110.1	---	CHICHI\TAP072-V	0.03	30.0	0.018	7.5	9.54

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	109.8	A	CHICHI\TAP072-N	0.04	30.0	0.050	11.4	6.59
						CHICHI\TAP072-W	0.03	50.0	0.029	7.5	8.67
CWB 99999	TAP075		118.4	---	CHICHI\TAP075-V	0.03	30.0	0.024	6.3	8.90	
	99		118.0	A	CHICHI\TAP075-N	0.02	50.0	0.050	9.7	6.49	
						CHICHI\TAP075-W	0.018	30.0	0.083	10.3	11.98
CWB 99999	TAP077		129.4	---	CHICHI\TAP077-V	0.02	30.0	0.024	5.6	6.87	
	99		128.7	C	CHICHI\TAP077-N	0.02	30.0	0.036	6.9	6.03	
						CHICHI\TAP077-W	0.02	30.0	0.031	12.0	9.08
CWB 99999	TAP078		131.0	---	CHICHI\TAP078-V	0.03	33.0	0.018	5.4	8.02	
	99		130.3	A	CHICHI\TAP078-N	0.04	40.0	0.042	8.6	5.60	
						CHICHI\TAP078-W	0.02	40.0	0.043	6.9	8.98
CWB 99999	TAP079		130.6	---	CHICHI\TAP079-V	0.03	30.0	0.015	5.1	7.87	
	99		129.6	A	CHICHI\TAP079-N	0.04	20.0	0.023	5.6	4.67	
						CHICHI\TAP079-W	0.02	22.0	0.027	5.6	8.72
CWB 99999	TAP081		135.6	---	CHICHI\TAP081-V	0.03	20.0	0.012	6.1	8.01	
	99		134.2	A	CHICHI\TAP081-N	0.02	20.0	0.021	4.9	5.44	
						CHICHI\TAP081-W	0.02	50.0	0.031	7.9	8.78
CWB 99999	TAP083		122.4	---	CHICHI\TAP083-V	0.03	50.0	0.018	5.9	8.22	
	99		122.4	C	CHICHI\TAP083-N	0.03	50.0	0.062	13.8	11.01	
						CHICHI\TAP083-W	0.02	40.0	0.035	13.7	24.11
CWB 99999	TAP084		127.8	---	CHICHI\TAP084-V	0.03	40.0	0.012	5.5	7.73	
	99		127.8	C	CHICHI\TAP084-N	0.02	40.0	0.032	5.5	5.15	
						CHICHI\TAP084-W	0.02	40.0	0.035	6.9	10.30
CWB 99999	TAP086		101.1	---	CHICHI\TAP086-V	0.02	22.0	0.034	8.0	9.62	
	99		100.9	b*	CHICHI\TAP086-N	0.02	30.0	0.050	7.9	5.70	
						CHICHI\TAP086-W	0.02	22.0	0.038	8.5	11.86
CWB 99999	TAP087		103.7	---	CHICHI\TAP087-V	0.03	30.0	0.030	11.3	10.40	
	99		103.7	B	CHICHI\TAP087-N	0.03	30.0	0.079	17.5	12.51	
						CHICHI\TAP087-W	0.03	20.0	0.051	17.3	24.64
CWB 99999	TAP090		112.0	---	CHICHI\TAP090-V	0.02	50.0	0.030	7.2	6.56	
	99		111.9	D	CHICHI\TAP090-N	0.03	30.0	0.091	16.0	10.47	
						CHICHI\TAP090-E	0.02	30.0	0.131	31.9	13.73
CWB 99999	TAP094		111.2	---	CHICHI\TAP094-V	0.02	30.0	0.030	7.1	9.44	
	99		111.2	C	CHICHI\TAP094-N	0.03	30.0	0.087	18.9	10.88	
						CHICHI\TAP094-E	0.02	30.0	0.065	17.8	16.63
CWB 99999	TAP095		111.6	---	CHICHI\TAP095-V	0.02	50.0	0.050	7.7	8.44	
	99		111.6	D	CHICHI\TAP095-N	0.03	50.0	0.098	18.8	7.56	
						CHICHI\TAP095-E	0.03	50.0	0.151	26.9	13.37
CWB 99999	TAP097		104.2	---	CHICHI\TAP097-V	0.03	30.0	0.022	7.7	9.79	
	99		104.1	D	CHICHI\TAP097-N	0.03	30.0	0.086	21.1	10.53	
						CHICHI\TAP097-W	0.02	30.0	0.072	15.1	17.44
CWB 99999	TAP098		111.9	---	CHICHI\TAP098-V	0.02	30.0	0.026	4.8	6.68	
	99		111.9	B	CHICHI\TAP098-N	0.02	30.0	0.054	8.4	5.45	
						CHICHI\TAP098-E	0.02	30.0	0.061	13.4	15.53
CWB 99999	TAP100		104.4	---	CHICHI\TAP100-V	0.02	50.0	0.024	7.2	7.92	
	99		104.4	D	CHICHI\TAP100-N	0.02	30.0	0.087	13.8	7.47	
						CHICHI\TAP100-E	0.02	30.0	0.057	15.3	20.04
CWB 99999	TAP103		125.5	---	CHICHI\TAP103-V	0.02	20.0	0.029	5.2	6.11	
	99		125.1	A	CHICHI\TAP103-N	0.02	20.0	0.177	21.7	8.93	
						CHICHI\TAP103-W	0.03	20.0	0.122	22.7	8.32
CWB 99999	TCU003		84.4	---	CHICHI\TCU003-V	0.02	20.0	0.022	13.3	12.60	
	99		84.4	C	CHICHI\TCU003-N	0.02	20.0	0.076	21.2	21.13	
						CHICHI\TCU003-W	0.03	25.0	0.056	37.4	46.46
CWB 99999	TCU006			71.0	--1	CHICHI\TCU006-V	0.02	22.0	0.036	15.2	14.26

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	71.0	C	CHICHI\TCU006-N	0.02	17.0	0.081	19.3	21.23
						CHICHI\TCU006-W	0.02	20.0	0.057	36.2	56.14
CWB	99999		TCU007	88.4	--1	CHICHI\TCU007-V	0.03	30.0	0.028	8.5	9.98
			99	88.4	C	CHICHI\TCU007-N	0.02	20.0	0.071	18.0	15.45
						CHICHI\TCU007-W	0.02	22.0	0.060	23.6	37.22
CWB	99999		TCU008	83.7	--1	CHICHI\TCU008-V	0.02	30.0	0.025	9.6	9.64
			99	83.7	B	CHICHI\TCU008-N	0.02	30.0	0.062	17.5	13.38
						CHICHI\TCU008-W	0.02	30.0	0.071	29.8	42.50
CWB	99999		TCU009	80.1	--1	CHICHI\TCU009-V	0.02	30.0	0.022	11.8	11.19
			99	80.1	C	CHICHI\TCU009-N	0.02	30.0	0.069	19.5	24.70
						CHICHI\TCU009-W	0.02	30.0	0.070	26.5	41.45
CWB	99999		TCU010	80.4	--1	CHICHI\TCU010-V	0.02	20.0	0.026	13.7	12.95
			99	80.4	B	CHICHI\TCU010-N	0.02	20.0	0.074	19.3	23.89
						CHICHI\TCU010-W	0.03	20.0	0.088	31.8	46.68
CWB	99999		TCU011	76.2	--1	CHICHI\TCU011-V	0.03	30.0	0.031	9.3	14.51
			99	76.2	C	CHICHI\TCU011-N	0.03	30.0	0.074	24.6	14.39
						CHICHI\TCU011-W		30.0	0.065	24.6	32.14
CWB	99999		TCU014	92.4	--1	CHICHI\TCU014-V	0.03	22.0	0.018	6.2	8.05
			99	92.4	C	CHICHI\TCU014-N	0.02	25.0	0.075	13.5	15.04
						CHICHI\TCU014-W	0.02	20.0	0.058	24.2	37.42
CWB	99999		TCU015	47.4	--1	CHICHI\TCU015-V	0.02	50.0	0.068	17.2	14.85
			99	47.4	B	CHICHI\TCU015-N	0.03	50.0	0.114	29.5	24.14
						CHICHI\TCU015-W	0.02	50.0	0.119	49.8	49.79
CWB	99999		TCU017	52.2	--2	CHICHI\TCU017-V	0.02	50.0	0.050	15.6	16.36
			99	52.2	C	CHICHI\TCU017-N	0.02	50.0	0.121	31.9	32.55
						CHICHI\TCU017-W	0.02	33.0	0.088	42.7	49.82
CWB	99999		TCU018	63.8	--1	CHICHI\TCU018-V		50.0	0.032	18.7	17.55
			99	63.8	B	CHICHI\TCU018-N	0.02	30.0	0.057	22.3	28.27
						CHICHI\TCU018-W	0.02	30.0	0.054	34.5	52.36
CWB	99999		TCU025	54.4	---	CHICHI\TCU025-V	0.05	50.0	0.034	13.8	18.29
			99	54.4	A	CHICHI\TCU025-N	0.05	50.0	0.058	10.5	10.17
						CHICHI\TCU025-W	0.03	50.0	0.075	19.0	22.00
CWB	99999		TCU026	54.6	--1	CHICHI\TCU026-V	0.02	50.0	0.061	17.1	18.12
			99	54.6	C	CHICHI\TCU026-N	0.02	50.0	0.091	27.5	29.95
						CHICHI\TCU026-W	0.02	50.0	0.120	39.4	43.09
CWB	99999		TCU029	24.7	--1	CHICHI\TCU029-V	0.02	50.0	0.063	23.2	26.81
			99	24.7	B	CHICHI\TCU029-N	0.04	50.0	0.200	54.0	40.19
						CHICHI\TCU029-W	0.03	50.0	0.166	38.6	44.57
CWB	99999		TCU031	26.8	--1	CHICHI\TCU031-V	0.02	30.0	0.065	26.8	29.00
			99	26.8	c*	CHICHI\TCU031-N	0.02	30.0	0.122	43.4	31.11
						CHICHI\TCU031-W	0.02	20.0	0.110	51.1	47.95
CWB	99999		TCU033	38.2	--1	CHICHI\TCU033-V	0.03	50.0	0.079	15.6	15.15
			99	38.2	C	CHICHI\TCU033-N	0.03	50.0	0.180	24.5	21.00
						CHICHI\TCU033-W	0.02	50.0	0.156	47.2	51.72
CWB	99999		TCU034	33.0	--1	CHICHI\TCU034-V	0.02	50.0	0.074	12.9	14.93
			99	33.0	B	CHICHI\TCU034-N	0.04	50.0	0.108	23.1	21.66
						CHICHI\TCU034-W	0.02	50.0	0.250	42.1	46.07
CWB	99999		TCU036	16.7	--1	CHICHI\TCU036-V	0.02	40.0	0.064	23.9	22.50
			99	16.7	C	CHICHI\TCU036-N	0.02	40.0	0.125	47.1	75.89
						CHICHI\TCU036-W	0.02	20.0	0.137	58.9	83.91
CWB	99999		TCU038	22.4	--2	CHICHI\TCU038-V	0.02	50.0	0.067	34.6	28.80
			99	22.4	C	CHICHI\TCU038-N	0.05	20.0	0.168	44.9	43.60
						CHICHI\TCU038-W	0.025	50.0	0.141	48.9	64.17
CWB	99999		TCU039	16.7	--1	CHICHI\TCU039-V	0.02	50.0	0.124	50.5	35.56

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	16.7	B	CHICHI\TCU039-N	0.02	50.0	0.139	57.2	70.43
						CHICHI\TCU039-W	0.02	50.0	0.206	50.0	76.78
CWB	99999		TCU040	21.0	--2	CHICHI\TCU040-V	0.02	50.0	0.081	19.6	16.99
			99	21.0	D	CHICHI\TCU040-N	0.03	50.0	0.123	50.3	50.20
						CHICHI\TCU040-W	0.02	50.0	0.149	50.9	57.38
CWB	99999		TCU042	23.3	--2	CHICHI\TCU042-V	0.02	50.0	0.086	19.7	24.09
			99	23.3	C	CHICHI\TCU042-N	0.05	50.0	0.199	39.3	23.86
						CHICHI\TCU042-W	0.02	50.0	0.246	44.8	46.91
CWB	99999		TCU045	24.1	---	CHICHI\TCU045-V	0.02	50.0	0.361	21.4	22.95
			99	24.1	B	CHICHI\TCU045-N	0.04	50.0	0.512	39.0	14.34
						CHICHI\TCU045-W	0.02	50.0	0.474	36.7	50.66
CWB	99999		TCU046	14.3	--1	CHICHI\TCU046-V	0.03	30.0	0.104	32.3	37.74
			99	14.3	A	CHICHI\TCU046-N	0.06	30.0	0.116	30.9	23.18
						CHICHI\TCU046-W	0.03	30.0	0.141	28.9	45.97
CWB	99999		TCU047	33.0	---	CHICHI\TCU047-V	0.02	50.0	0.270	26.9	17.88
			99	33.0	B	CHICHI\TCU047-N	0.03	50.0	0.413	40.2	22.22
						CHICHI\TCU047-W	0.02	50.0	0.301	41.6	51.08
CWB	99999		TCU048	14.4	--1	CHICHI\TCU048-V	0.04	50.0	0.098	20.8	21.64
			02	14.4	B	CHICHI\TCU048-N	0.04	50.0	0.179	47.5	68.30
						CHICHI\TCU048-W	0.02	50.0	0.119	36.4	95.79
CWB	99999		TCU049	4.5	--2	CHICHI\TCU049-V	0.02	50.0	0.182	27.0	21.05
			99	4.5	C	CHICHI\TCU049-N	0.02	30.0	0.247	59.7	107.86
						CHICHI\TCU049-W	0.02	50.0	0.279	56.3	119.12
CWB	99999		TCU050	10.3	--2	CHICHI\TCU050-V	0.05	50.0	0.102	38.3	27.58
			02	10.3	C	CHICHI\TCU050-N	0.03	50.0	0.131	43.7	82.30
						CHICHI\TCU050-W	0.03	50.0	0.146	40.1	108.78
CWB	99999		TCU051	8.3	---	CHICHI\TCU051-V	0.03	50.0	0.112	30.4	26.84
			02	8.3	C	CHICHI\TCU051-N	0.03	50.0	0.236	41.8	104.65
						CHICHI\TCU051-W	0.03	50.0	0.160	50.9	123.34
CWB	99999		TCU052	0.2	--1	CHICHI\TCU052-V	0.04	50.0	0.198	170.2	416.58
			01	0.1	c*	CHICHI\TCU052-N	0.04	50.0	0.448	220.9	777.98
						CHICHI\TCU052-W	0.04	50.0	0.356	183.8	508.96
CWB	99999		TCU053	6.7	--2	CHICHI\TCU053-V	0.02	50.0	0.123	32.2	26.87
			99	6.7	C	CHICHI\TCU053-N	0.03	50.0	0.135	44.4	93.67
						CHICHI\TCU053-W	0.02	50.0	0.229	43.1	118.10
CWB	99999		TCU054	5.9	---	CHICHI\TCU054-V	0.02	50.0	0.136	29.9	24.48
			99	5.9	C	CHICHI\TCU054-N	0.02	50.0	0.194	44.0	110.79
						CHICHI\TCU054-W	0.02	50.0	0.146	45.8	119.96
CWB	99999		TCU055	6.9	---	CHICHI\TCU055-V	0.08	50.0	0.156	58.4	36.92
			02	6.9	C	CHICHI\TCU055-N	0.04	50.0	0.213	49.7	68.49
						CHICHI\TCU055-W	0.2	50.0	0.262	53.6	140.97
CWB	99999		TCU056	11.1	--1	CHICHI\TCU056-V	0.05	50.0	0.119	42.0	38.32
			02	11.1	D	CHICHI\TCU056-N	0.03	50.0	0.143	40.4	69.64
						CHICHI\TCU056-W	0.04	40.0	0.157	41.3	108.97
CWB	99999		TCU057	12.6	---	CHICHI\TCU057-V	0.02	50.0	0.083	33.7	28.02
			02	12.6	B	CHICHI\TCU057-N	0.03	50.0	0.102	49.7	56.25
						CHICHI\TCU057-W	0.02	50.0	0.114	40.7	105.81
CWB	99999		TCU059	17.8	---	CHICHI\TCU059-V	0.05	40.0	0.066	14.6	23.62
			99	17.8	C	CHICHI\TCU059-N	0.03	30.0	0.165	54.0	81.09
						CHICHI\TCU059-W	0.03	30.0	0.160	51.6	71.07
CWB	99999		TCU060	9.5	--2	CHICHI\TCU060-V	0.02	50.0	0.088	28.1	27.68
			99	9.5	C	CHICHI\TCU060-N	0.03	50.0	0.103	44.5	94.78
						CHICHI\TCU060-W	0.03	50.0	0.201	36.5	96.96
CWB	99999		TCU061	17.8	--2	CHICHI\TCU061-V	0.04	50.0	0.088	27.1	26.87

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			02	17.8	C	CHICHI\TCU061-N	0.04	50.0	0.157	38.1	55.58
						CHICHI\TCU061-W	0.04	50.0	0.136	40.6	82.02
CWB 99999			TCU063	10.4	--2	CHICHI\TCU063-V	0.03	50.0	0.132	53.9	40.02
			02	10.4	C	CHICHI\TCU063-N	0.03	40.0	0.134	73.1	59.24
						CHICHI\TCU063-W	0.03	50.0	0.183	43.9	98.75
CWB 99999			TCU064	15.1	--2	CHICHI\TCU064-V	0.03	50.0	0.084	29.8	24.51
			99	15.1	C	CHICHI\TCU064-N	0.03	50.0	0.116	55.8	85.88
						CHICHI\TCU064-W	0.02	50.0	0.111	42.9	69.46
CWB 99999			TCU065	1.0	--1	CHICHI\TCU065-V	0.02	50.0	0.263	69.8	61.31
			02	1.0	C	CHICHI\TCU065-N	0.06	50.0	0.575	90.1	134.17
						CHICHI\TCU065-W	0.03	50.0	0.789	132.4	185.75
CWB 99999			TCU067	0.3	--1	CHICHI\TCU067-V	0.04	50.0	0.235	50.4	43.88
			02	0.3	C	CHICHI\TCU067-N	0.03	50.0	0.319	56.0	110.88
						CHICHI\TCU067-W	0.02	50.0	0.499	98.5	191.53
CWB 99999			TCU068	1.1	--1	CHICHI\TCU068-V	0.02	50.0	0.530	228.8	451.41
			01	0.5	C	CHICHI\TCU068-N	0.02	50.0	0.372	294.4	882.90
						CHICHI\TCU068-W	0.03	50.0	0.512	280.6	707.12
CWB 99999			TCU070	19.1	---	CHICHI\TCU070-V	0.03	50.0	0.078	36.0	25.92
			02	19.1	B	CHICHI\TCU070-N	0.03	50.0	0.160	60.0	72.85
						CHICHI\TCU070-W	0.02	50.0	0.254	47.4	76.25
CWB 99999			TCU071	4.9	--1	CHICHI\TCU071-V	0.10	50.0	0.424	59.0	221.82
			01	1.0	C	CHICHI\TCU071-N	0.04	50.0	0.652	82.7	259.69
						CHICHI\TCU071-W	0.20	50.0	0.528	70.0	180.13
CWB 99999			TCU072	7.4	--1	CHICHI\TCU072-V	0.05	50.0	0.280	38.4	118.68
			99	0.2	C	CHICHI\TCU072-N	0.05	50.0	0.378	70.5	259.76
						CHICHI\TCU072-W	0.05	50.0	0.475	90.8	280.31
CWB 99999			TCU074	13.7	--2	CHICHI\TCU074-V	0.2	50.0	0.276	25.1	75.62
			01	0.3	C	CHICHI\TCU074-N	0.10	50.0	0.376	48.9	147.09
						CHICHI\TCU074-W	0.13	50.0	0.598	70.4	199.90
CWB 99999			TCU075	1.5	--2	CHICHI\TCU075-V	0.04	50.0	0.228	50.0	39.37
			02	1.5	C	CHICHI\TCU075-N	0.04	50.0	0.262	37.2	62.25
						CHICHI\TCU075-W	0.03	50.0	0.332	116.3	172.18
CWB 99999			TCU076	2.0	--2	CHICHI\TCU076-V	0.02	50.0	0.281	32.7	31.88
			02	2.0	C	CHICHI\TCU076-N	0.05	50.0	0.428	63.0	71.30
						CHICHI\TCU076-W	0.10	50.0	0.347	69.4	114.54
CWB 99999			TCU078	7.5	--1	CHICHI\TCU078-V	0.02	50.0	0.174	18.6	41.06
			01	0.0	C	CHICHI\TCU078-N	0.15	50.0	0.309	32.4	105.68
						CHICHI\TCU078-W	0.04	50.0	0.449	44.4	143.53
CWB 99999			TCU079	10.0	--1	CHICHI\TCU079-V	0.03	50.0	0.392	23.1	42.12
			01	0.0	C	CHICHI\TCU079-N	0.07	50.0	0.425	32.2	73.03
						CHICHI\TCU079-W	0.20	50.0	0.592	65.7	195.59
CWB 99999			TCU081	53.1	--2	CHICHI\TCU081-V	0.02	30.0	0.034	15.9	15.09
			99	53.1	C	CHICHI\TCU081-N	0.02	20.0	0.097	31.4	31.38
						CHICHI\TCU081-W	0.02	24.0	0.075	44.4	49.94
CWB 99999			TCU082	5.7	--2	CHICHI\TCU082-V	0.04	50.0	0.132	34.9	32.35
			02	5.7	C	CHICHI\TCU082-N	0.04	50.0	0.186	43.2	101.41
						CHICHI\TCU082-W	0.02	50.0	0.226	51.6	152.34
CWB 99999			TCU083	78.9	--1	CHICHI\TCU083-V	0.02	30.0	0.034	9.4	11.66
			99	78.9	B	CHICHI\TCU083-N	0.02	20.0	0.111	23.6	13.27
						CHICHI\TCU083-W	0.02	20.0	0.089	31.9	48.44
CWB 99999			TCU084	10.4	--1	CHICHI\TCU084-V	0.09	50.0	0.319	28.1	22.72
			01	0.0	B	CHICHI\TCU084-N	0.10	50.0	0.432	48.7	83.81
						CHICHI\TCU084-W	0.20	30.0	1.008	123.7	206.24
CWB 99999			TCU085	64.5	--1	CHICHI\TCU085-V	0.03	50.0	0.042	9.4	12.32

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	64.0	A	CHICHI\TCU085-N		40.0	0.054	6.4	7.38
						CHICHI\TCU085-W		40.0	0.063	7.5	13.88
CWB	99999		TCU087	3.2	--1	CHICHI\TCU087-V	0.02	30.0	0.108	61.5	51.32
			99	3.2	b*	CHICHI\TCU087-N	0.05	30.0	0.114	44.1	82.12
						CHICHI\TCU087-W	0.02	30.0	0.122	42.7	86.34
CWB	99999		TCU089	8.2	--1	CHICHI\TCU089-V	0.03	50.0	0.191	22.1	23.90
			01	0.0	b*	CHICHI\TCU089-N	0.04	50.0	0.230	34.0	124.37
						CHICHI\TCU089-W	0.07	50.0	0.354	46.2	206.70
CWB	99999		TCU092	96.4	---	CHICHI\TCU092-V	0.02	30.0	0.028	10.3	10.11
			99	96.4	C	CHICHI\TCU092-N	0.02	24.0	0.066	17.2	15.60
						CHICHI\TCU092-W	0.02	20.0	0.086	23.0	36.91
CWB	99999		TCU094	52.7	---	CHICHI\TCU094-V	0.02	50.0	0.041	14.8	17.91
			99	52.7	B	CHICHI\TCU094-N	0.02	50.0	0.096	29.2	28.46
						CHICHI\TCU094-W	0.02	50.0	0.066	36.9	47.79
CWB	99999		TCU095	43.4	--1	CHICHI\TCU095-V	0.02	50.0	0.255	21.8	21.95
			99	43.4	B	CHICHI\TCU095-N	0.04	50.0	0.712	49.1	24.45
						CHICHI\TCU095-W	0.02	50.0	0.378	62.0	51.75
CWB	99999		TCU096	52.0	--1	CHICHI\TCU096-V	0.02	50.0	0.037	15.0	14.59
			99	52.0	C	CHICHI\TCU096-N	0.04	40.0	0.107	27.0	26.11
						CHICHI\TCU096-W	0.02	22.0	0.059	39.5	41.34
CWB	99999		TCU098	45.0	--1	CHICHI\TCU098-V	0.02	50.0	0.050	14.8	14.36
			99	45.0	C	CHICHI\TCU098-N	0.03	50.0	0.107	34.9	25.11
						CHICHI\TCU098-W	0.02	50.0	0.100	42.0	51.93
CWB	99999		TCU100	12.1	---	CHICHI\TCU100-V	0.02	50.0	0.085	39.9	35.84
			02	12.1	B	CHICHI\TCU100-N	0.03	50.0	0.114	43.2	67.53
						CHICHI\TCU100-W	0.02	50.0	0.110	40.2	99.54
CWB	99999		TCU101	2.9	--2	CHICHI\TCU101-V	0.03	50.0	0.167	45.4	38.88
			99	2.9	C	CHICHI\TCU101-N	0.04	50.0	0.259	52.4	40.47
						CHICHI\TCU101-W	0.04	50.0	0.212	72.9	133.48
CWB	99999		TCU102	1.8	--2	CHICHI\TCU102-V	0.02	50.0	0.177	67.7	44.23
			99	1.8	C	CHICHI\TCU102-N	0.05	50.0	0.172	71.8	110.79
						CHICHI\TCU102-W	0.04	50.0	0.304	87.9	163.44
CWB	99999		TCU103	4.0	--1	CHICHI\TCU103-V	0.02	50.0	0.149	64.3	42.36
			99	4.0	c*	CHICHI\TCU103-N	0.05	50.0	0.152	22.7	85.87
						CHICHI\TCU103-W	0.02	50.0	0.129	68.8	98.54
CWB	99999		TCU104	13.6	---	CHICHI\TCU104-V	0.03	50.0	0.083	23.3	20.60
			02	13.6	B	CHICHI\TCU104-N	0.03	50.0	0.089	48.1	72.16
						CHICHI\TCU104-W	0.03	50.0	0.104	30.8	71.36
CWB	99999		TCU105	18.1	---	CHICHI\TCU105-V	0.02	40.0	0.064	21.4	18.40
			02	18.1	B	CHICHI\TCU105-N	0.03	30.0	0.129	38.9	45.59
						CHICHI\TCU105-W	0.03	40.0	0.114	33.0	68.20
CWB	99999		TCU106	15.2	--2	CHICHI\TCU106-V	0.03	50.0	0.123	25.3	20.65
			02	15.2	C	CHICHI\TCU106-N	0.03	50.0	0.125	38.3	41.13
						CHICHI\TCU106-W	0.04	50.0	0.161	39.9	77.15
CWB	99999		TCU107	20.4	--2	CHICHI\TCU107-V	0.03	50.0	0.088	27.8	21.70
			02	20.4	C	CHICHI\TCU107-N	0.03	50.0	0.158	47.4	32.79
						CHICHI\TCU107-W	0.03	50.0	0.124	36.8	39.81
CWB	99999		TCU109	13.1	--1	CHICHI\TCU109-V	0.03	50.0	0.137	26.6	20.27
			02	13.1	C	CHICHI\TCU109-N	0.04	50.0	0.162	56.5	71.14
						CHICHI\TCU109-W	0.05	50.0	0.152	55.3	85.57
CWB	99999		TCU110	12.6	--3	CHICHI\TCU110-V	0.03	50.0	0.119	32.8	23.01
			02	12.6	D	CHICHI\TCU110-N	0.04	50.0	0.191	48.9	40.81
						CHICHI\TCU110-W	0.04	50.0	0.180	56.8	78.25
CWB	99999		TCU111	22.2	--3	CHICHI\TCU111-V	0.03	50.0	0.079	24.7	22.39

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			02	22.2	D	CHICHI\TCU111-N	0.04	50.0	0.099	35.6	31.30
			CWB 99999 TCU112	27.2	--3	CHICHI\TCU111-W	0.02	50.0	0.136	57.8	55.22
			02	27.2	D	CHICHI\TCU112-V	0.03	50.0	0.059	20.4	22.07
						CHICHI\TCU112-N	0.05	40.0	0.073	33.4	37.43
			CWB 99999 TCU113	31.5	--1	CHICHI\TCU112-W	0.05	40.0	0.083	41.3	30.06
			02	31.5	D	CHICHI\TCU113-V	0.03	50.0	0.077	16.0	17.03
						CHICHI\TCU113-N	0.03	50.0	0.074	23.4	27.12
			CWB 99999 TCU115	22.8	--3	CHICHI\TCU113-W	0.04	50.0	0.070	27.8	22.21
			02	22.8	D	CHICHI\TCU115-V	0.03	50.0	0.075	22.3	21.95
						CHICHI\TCU115-N	0.03	50.0	0.117	38.7	33.03
			CWB 99999 TCU116	11.9	--3	CHICHI\TCU115-W	0.05	50.0	0.096	54.0	37.82
			02	11.9	D	CHICHI\TCU116-V	0.03	50.0	0.121	34.1	28.42
						CHICHI\TCU116-N	0.03	50.0	0.136	52.8	32.13
			CWB 99999 TCU117	25.6	--3	CHICHI\TCU116-W	0.03	50.0	0.189	39.7	81.34
			02	25.6	D	CHICHI\TCU117-V	0.03	50.0	0.088	19.7	19.91
						CHICHI\TCU117-N	0.03	50.0	0.120	54.4	45.54
			CWB 99999 TCU118	27.3	--3	CHICHI\TCU117-W	0.02	50.0	0.119	57.8	49.00
			02	27.3	D	CHICHI\TCU118-V	0.07	50.0	0.117	20.3	21.28
						CHICHI\TCU118-N	0.05	50.0	0.092	33.5	36.48
			CWB 99999 TCU119	39.0	---	CHICHI\TCU118-W	0.05	50.0	0.114	30.5	23.87
			02	39.0	D	CHICHI\TCU119-V	0.04	50.0	0.062	15.4	13.68
						CHICHI\TCU119-N	0.03	50.0	0.058	16.8	19.75
			CWB 99999 TCU120	8.1	--1	CHICHI\TCU119-W	0.04	50.0	0.072	26.5	22.52
			02	8.1	B	CHICHI\TCU120-V	0.03	50.0	0.170	35.6	22.00
						CHICHI\TCU120-N	0.03	50.0	0.197	34.8	42.44
			CWB 99999 TCU122	9.0	---	CHICHI\TCU120-W	0.02	50.0	0.228	62.5	105.97
			02	9.0	C	CHICHI\TCU122-V	0.04	50.0	0.241	40.7	32.16
						CHICHI\TCU122-N	0.02	50.0	0.261	43.1	36.10
			CWB 99999 TCU123	15.1	--2	CHICHI\TCU122-W	0.02	50.0	0.212	44.6	92.37
			02	15.1	C	CHICHI\TCU123-V	0.03	50.0	0.085	32.3	26.84
						CHICHI\TCU123-N	0.03	50.0	0.135	36.4	53.29
			CWB 99999 TCU128	9.7	--1	CHICHI\TCU123-W	0.04	50.0	0.152	47.5	70.88
			99	9.7	B	CHICHI\TCU128-V	0.02	40.0	0.092	45.1	33.37
						CHICHI\TCU128-N	0.05	30.0	0.166	62.4	93.67
			CWB 99999 TCU129	1.2	--2	CHICHI\TCU128-W	0.02	30.0	0.144	63.0	75.76
			02	1.2	C	CHICHI\TCU129-V	0.03	50.0	0.342	37.6	51.48
						CHICHI\TCU129-N	0.03	50.0	0.622	55.2	69.17
			CWB 99999 TCU136	9.0	---	CHICHI\TCU129-W	0.03	50.0	1.002	68.0	126.79
			99	9.0	B	CHICHI\TCU136-V	0.03	40.0	0.114	33.7	29.26
						CHICHI\TCU136-E	0.03	50.0	0.170	43.7	103.83
			CWB 99999 TCU138	10.1	---	CHICHI\TCU136-N	0.03	50.0	0.174	52.7	85.17
			02	10.1	C	CHICHI\TCU138-V	0.04	50.0	0.113	26.0	23.23
						CHICHI\TCU138-E	0.03	50.0	0.206	33.3	78.17
			CWB 99999 TCU140	34.0	---	CHICHI\TCU138-N	0.03	50.0	0.212	38.4	38.10
			02	34.0	D	CHICHI\TCU140-V	0.04	50.0	0.071	19.7	17.10
						CHICHI\TCU140-E	0.05	50.0	0.070	24.0	21.44
			CWB 99999 TCU141	23.8	---	CHICHI\TCU140-N	0.03	50.0	0.057	20.5	17.53
			02	23.8	D	CHICHI\TCU141-V	0.03	50.0	0.104	27.2	21.83
						CHICHI\TCU141-E	0.05	50.0	0.105	43.3	34.99
			CWB 99999 TCU145	36.3	---	CHICHI\TCU141-N	0.03	50.0	0.085	28.1	23.11
			02	36.3	D	CHICHI\TCU145-V	0.03	50.0	0.050	19.3	17.96
						CHICHI\TCU145-E	0.04	50.0	0.077	28.1	27.57
			CWB 99999 TCU147	72.4	---	CHICHI\TCU145-N	0.03	50.0	0.065	19.2	18.61
						CHICHI\TCU147-V	0.02	30.0	0.058	17.0	14.68

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	72.4	-	CHICHI\TCU147-N	0.02	30.0	0.136	22.7	12.58
						CHICHI\TCU147-W	0.02	33.0	0.107	31.2	40.84
			CWB 99999 TTN001	57.6	--2	CHICHI\TTN001-V	0.03	30.0	0.041	8.7	6.61
			99	54.0	C	CHICHI\TTN001-E	0.03	30.0	0.094	14.4	7.38
						CHICHI\TTN001-N	0.03	30.0	0.063	9.3	5.91
			CWB 99999 TTN002	76.0	--1	CHICHI\TTN002-V	0.03	20.0	0.016	5.2	4.77
			99	73.3	C	CHICHI\TTN002-N	0.03	20.0	0.026	5.4	4.57
						CHICHI\TTN002-W	0.03	20.0	0.026	5.4	6.41
			CWB 99999 TTN003	108.1	---	CHICHI\TTN003-V	0.02	20.0	0.013	2.1	3.11
			99	106.2	C	CHICHI\TTN003-N	0.03	20.0	0.018	3.0	2.18
						CHICHI\TTN003-W	0.03	20.0	0.023	3.3	4.17
			CWB 99999 TTN004	77.4	--1	CHICHI\TTN004-V	0.04	20.0	0.026	3.9	4.07
			99	74.8	C	CHICHI\TTN004-N	0.04	20.0	0.046	8.3	4.57
						CHICHI\TTN004-W	0.03	20.0	0.039	7.4	5.69
			CWB 99999 TTN005	93.9	--2	CHICHI\TTN005-V	0.028	15.0	0.014	5.9	5.07
			99	91.7	C	CHICHI\TTN005-N	0.03	15.0	0.023	6.8	4.74
						CHICHI\TTN005-W	0.02	12.0	0.025	9.0	9.32
			CWB 99999 TTN006	92.3	--2	CHICHI\TTN006-V	0.02	15.0	0.014	4.7	5.14
			99	90.1	C	CHICHI\TTN006-N	0.02	15.0	0.020	5.6	4.37
						CHICHI\TTN006-W	0.02	18.0	0.025	9.2	9.30
			CWB 99999 TTN007	93.1	--2	CHICHI\TTN007-V	0.02	15.0	0.015	5.7	5.18
			99	91.0	C	CHICHI\TTN007-N	0.02	12.0	0.026	6.4	5.46
						CHICHI\TTN007-W	0.02	12.0	0.019	7.8	9.34
			CWB 99999 TTN008	93.7	--2	CHICHI\TTN008-V	0.03	12.0	0.015	7.7	6.40
			99	91.6	C	CHICHI\TTN008-N	0.03	12.0	0.026	6.4	4.85
						CHICHI\TTN008-W	0.03	12.0	0.031	9.3	11.90
			CWB 99999 TTN009	94.7	--2	CHICHI\TTN009-V	0.03	15.0	0.014	6.1	5.19
			99	92.5	C	CHICHI\TTN009-N	0.03	12.0	0.029	8.1	5.54
						CHICHI\TTN009-W	0.02	12.0	0.036	11.1	9.41
			CWB 99999 TTN010	95.3	--2	CHICHI\TTN010-V	0.03	14.0	0.010	3.0	4.13
			99	93.1	C	CHICHI\TTN010-N	0.03	14.0	0.029	7.4	3.95
						CHICHI\TTN010-W	0.02	14.0	0.019	7.8	9.13
			CWB 99999 TTN012	92.8	--2	CHICHI\TTN012-V	0.02	18.0	0.013	4.7	4.58
			99	90.6	C	CHICHI\TTN012-N	0.03	18.0	0.021	4.7	3.99
						CHICHI\TTN012-W	0.02	20.0	0.025	9.4	9.45
			CWB 99999 TTN013	92.5	--2	CHICHI\TTN013-V	0.02	14.0	0.007	3.0	6.45
			99	90.3	C	CHICHI\TTN013-N	0.03	14.0	0.018	4.4	4.12
						CHICHI\TTN013-W	0.02	10.0	0.017	8.2	9.02
			CWB 99999 TTN014	67.9	--2	CHICHI\TTN014-V	0.02	22.0	0.025	5.7	5.01
			99	64.9	C	CHICHI\TTN014-N	0.02	20.0	0.045	7.6	5.90
						CHICHI\TTN014-W	0.03	20.0	0.051	7.2	5.51
			CWB 99999 TTN015	94.3	--2	CHICHI\TTN015-V	0.03	12.0	0.015	6.0	5.58
			99	92.2	C	CHICHI\TTN015-N	0.03	10.0	0.032	6.8	5.82
						CHICHI\TTN015-W	0.02	10.0	0.028	10.0	9.57
			CWB 99999 TTN016	136.6	--1	CHICHI\TTN016-V	0.03	14.0	0.006	2.5	2.80
			99	135.1	A	CHICHI\TTN016-N	0.03	14.0	0.010	2.6	4.05
						CHICHI\TTN016-W	0.04	14.0	0.009	2.9	3.38
			CWB 99999 TTN018	86.2	--2	CHICHI\TTN018-V	0.02	20.0	0.014	2.9	3.17
			99	83.8	b*	CHICHI\TTN018-N	0.02	20.0	0.024	4.1	3.55
						CHICHI\TTN018-W	0.02	20.0	0.035	3.8	5.56
			CWB 99999 TTN020	57.7	--2	CHICHI\TTN020-V	0.02	30.0	0.023	4.8	4.13
			99	54.1	C	CHICHI\TTN020-N	0.02	23.0	0.030	7.5	6.44
						CHICHI\TTN020-W	0.02	23.0	0.035	9.0	9.49
			CWB 99999 TTN022	60.6	--2	CHICHI\TTN022-V	0.02	30.0	0.048	8.5	4.97

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			99	57.2	C	CHICHI\TTN022-N	0.02	20.0	0.075	10.3	8.49
						CHICHI\TTN022-W	0.03	23.0	0.056	10.0	10.21
CWB 99999			TTN023	63.3	---	CHICHI\TTN023-V	0.03	30.0	0.028	6.3	4.11
			99	60.0	C	CHICHI\TTN023-N	0.02	30.0	0.067	12.0	5.86
						CHICHI\TTN023-W	0.02	30.0	0.044	9.9	8.07
CWB 99999			TTN024	70.6	--1	CHICHI\TTN024-V	0.03	30.0	0.022	4.0	3.35
			99	67.7	A	CHICHI\TTN024-N	0.02	30.0	0.027	3.9	3.50
						CHICHI\TTN024-W	0.02	20.0	0.030	3.8	5.32
CWB 99999			TTN025	81.7	--1	CHICHI\TTN025-V	0.02	30.0	0.024	3.7	3.11
			99	79.2	b*	CHICHI\TTN025-N	0.02	30.0	0.050	5.0	2.60
						CHICHI\TTN025-W	0.02	30.0	0.034	3.9	5.08
CWB 99999			TTN026	81.8	--1	CHICHI\TTN026-V	0.03	22.0	0.014	3.2	3.22
			99	79.3	b*	CHICHI\TTN026-N	0.02	20.0	0.040	4.1	2.88
						CHICHI\TTN026-W	0.02	20.0	0.027	4.2	5.63
CWB 99999			TTN027	87.6	--1	CHICHI\TTN027-V	0.03	22.0	0.015	3.6	2.64
			99	85.3	c*	CHICHI\TTN027-N	0.03	30.0	0.039	6.1	3.68
						CHICHI\TTN027-W	0.03	20.0	0.031	6.6	5.69
CWB 99999			TTN028	90.6	--1	CHICHI\TTN028-V	0.03	20.0	0.016	3.0	3.14
			99	88.4	A	CHICHI\TTN028-N	0.02	20.0	0.016	3.1	2.79
						CHICHI\TTN028-W	0.02	18.0	0.019	3.2	4.93
CWB 99999			TTN031	57.0	--1	CHICHI\TTN031-V	0.03	40.0	0.043	14.2	5.59
			99	53.4	C	CHICHI\TTN031-N	0.03	50.0	0.086	12.8	7.83
						CHICHI\TTN031-W	0.03	30.0	0.074	13.3	6.66
CWB 99999			TTN032	59.1	--1	CHICHI\TTN032-V	0.02	40.0	0.030	7.1	5.95
			99	55.6	C	CHICHI\TTN032-N	0.02	40.0	0.078	12.6	6.60
						CHICHI\TTN032-W	0.03	40.0	0.053	10.0	5.53
CWB 99999			TTN033	61.7	--1	CHICHI\TTN033-V	0.02	22.0	0.018	5.5	4.81
			99	58.3	C	CHICHI\TTN033-N	0.02	30.0	0.040	7.0	4.63
						CHICHI\TTN033-W	0.03	30.0	0.031	6.4	5.83
CWB 99999			TTN036	90.5	--1	CHICHI\TTN036-V	0.02	14.0	0.018	8.4	6.97
			99	88.2	B	CHICHI\TTN036-N	0.02	12.0	0.030	6.8	4.79
						CHICHI\TTN036-W	0.02	12.0	0.025	7.6	8.65
CWB 99999			TTN040	55.0	---	CHICHI\TTN040-V	0.03	30.0	0.021	4.1	5.13
			99	51.2	A	CHICHI\TTN040-E	0.03	33.0	0.030	7.2	7.37
						CHICHI\TTN040-N	0.04	30.0	0.032	5.4	4.39
CWB 99999			TTN041	54.2	---	CHICHI\TTN041-V	0.03	30.0	0.041	4.7	4.39
			99	50.3	A	CHICHI\TTN041-E	0.03	40.0	0.079	6.8	6.50
						CHICHI\TTN041-N	0.03	40.0	0.066	4.6	4.02
CWB 99999			TTN042	72.6	---	CHICHI\TTN042-V	0.03	20.0	0.019	5.4	5.05
			99	69.8	C	CHICHI\TTN042-N	0.03	20.0	0.059	5.9	4.55
						CHICHI\TTN042-W	0.03	22.0	0.059	5.4	5.97
CWB 99999			TTN044	68.2	---	CHICHI\TTN044-V	0.03	22.0	0.033	6.0	4.44
			99	65.2	B	CHICHI\TTN044-N	0.02	22.0	0.055	10.3	6.66
						CHICHI\TTN044-W	0.03	30.0	0.048	9.7	7.12
CWB 99999			TTN045	71.0	---	CHICHI\TTN045-V	0.03	20.0	0.017	3.8	3.91
			99	68.1	C	CHICHI\TTN045-N	0.05	30.0	0.035	5.9	4.12
						CHICHI\TTN045-W	0.03	20.0	0.041	9.2	6.75
CWB 99999			TTN046	74.5	---	CHICHI\TTN046-V	0.03	22.0	0.020	5.0	5.04
			99	71.8	B	CHICHI\TTN046-N	0.03	22.0	0.067	7.4	3.18
						CHICHI\TTN046-W	0.03	20.0	0.113	11.2	6.13
CWB 99999			TTN047	84.9	---	CHICHI\TTN047-V	-99.				
			99	82.5	B	CHICHI\TTN047-N	0.03	20.0	0.027	5.7	4.78
						CHICHI\TTN047-W	0.03	20.0	0.026	6.2	6.44
CWB 99999			TTN048	89.7	---	CHICHI\TTN048-V	0.03	20.0	0.018	3.0	2.83

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
			LAMONT 531 Lamont 531	11.4	I-A	DUZCE\531-V	0.06	50.0	0.066	7.3	7.53
			99	11.4	-	DUZCE\531-N	0.06	50.0	0.160	12.4	20.64
			LAMONT 1058 Lamont 1058	0.9	I-B	DUZCE\1058-V	0.05	50.0	0.074	15.9	16.15
			99	0.9	B	DUZCE\1058-N	0.06	50.0	0.078	17.9	42.16
			LAMONT 1059 Lamont 1059	8.5	--B	DUZCE\1059-V	0.06	50.0	0.101	9.3	9.45
			99	8.5	-	DUZCE\1059-N	0.06	50.0	0.152	14.5	20.41
			LAMONT 1060 Lamont 1060	30.2	I-A	DUZCE\1060-V	0.06	50.0	0.022	5.8	6.30
			99	30.2	A	DUZCE\1060-N	0.06	50.0	0.028	11.0	11.78
			LAMONT 1061 Lamont 1061	15.6	I-B	DUZCE\1061-V	0.06	50.0	0.053	5.9	8.25
			99	15.6	B	DUZCE\1061-N	0.07	50.0	0.101	12.8	16.90
			LAMONT 1062 Lamont 1062	13.3	I-B	DUZCE\1062-V	0.06	50.0	0.094	8.0	8.96
			99	13.3	-	DUZCE\1062-N	0.05	50.0	0.119	11.5	17.37
			ERD 99999 Mudurnu	33.6	--A	DUZCE\MDR-UP	0.08		0.060	10.6	7.33
			99	33.6	-	DUZCE\MDR000	0.08		0.120	9.3	7.63
			ERD 99999 Sakarya	49.9	A-B	DUZCE\SKR-UP	0.05	40.0	0.011	3.2	4.00
			99	49.9	B	DUZCE\SKR180	0.05	40.0	0.023	5.5	5.80
			KOERI 99999 Yarimca	101.7	B-D	DUZCE\SKR090	0.05	40.0	0.016	5.5	7.34
			99	101.7	C	DUZCE\YPT--V	0.02	20.0	0.013	3.9	3.92
						DUZCE\YPT060	0.03	12.0	0.022	7.9	8.64
						DUZCE\YPT330	0.05	12.0	0.016	4.4	3.64

s:

Source mechanism: 00 = strike slip, 01 = normal, 02 = reverse, 03 = reverse-oblique, 04 = normal-oblique, 99 = unknown.
 Dip is the dip of rupture surface.
 M is moment magnitude, UNK = Magnitude type unknown. Missing magnitudes have the value of zero.
 Station owner abbreviations are listed in columns 58 to 65.
 Station numbers were assigned where not available, using numbers 1-33, 60-100 and 99999.
 Records marked with a # were not processed by PE&A due to unavailability of uncorrected data
 Records marked with a @ did not have Fourier spectra computed because the noise levels were too high.
 H/F is the designation for the site being on the hanging wall (01) or foot wall (02), or unknown/not applicable (99).
 Distances marked with a * are hypocentral instead of closest distances. Values of 999.9 indicate unknown distances.
 Second distance is to the surface projection of the fault plane (i.e., JB Distance).
 Site codes are from four sources: 1) Geomatrix (3 letters), 2) USGS (1 letter), 3) CWB, Taiwan (1 number), 4) Lee et al. 2000 paper described below.
 Site categories for the Turkey earthquakes are from Prof. E. Rathje, University of Texas at Austin.
 Site categories for the Chi-Chi, Taiwan earthquake are from Dr. W. Y. Chien, NCREE, Taiwan. Geomatrix site codes were not available for the Chi-Chi earthquake, hence site categories used by the Central Weather Bureau (CWB), Taiwan were used.
 USGS site codes for the Chi-Chi, Taiwan earthquake are from the paper by Lee et al. (2000). These were taken as the suggested NEHRP site classification which was changed to the USGS site classification for the catalog. Questionable site classification stations are indicated with a lower case letter and an "*" in the next column.
 The recorded Lamont acceleration data had a low pass anti-alias filter near 50 Hz for the Duzce, Turkey data.

GEOMATRIX 3-LETTER SITE CLASSIFICATIONS (for the Chi-Chi earthquake the third field is the site category from the CWB, Taiwan, described below)

FIRST LETTER: Instrument housing

I = Free-field instrument or instrument shelter. Instrument is located at or within several feet of the ground surface.

A = One-story structure of lightweight construction. Instrument is located at the lowest level and within several feet of the ground surface.

Appendix B

FIC ENGINEERING AND ANALYSIS STRONG-MOTION CATALOG (01/25/02)-STATIC DATASET

Earthquake Location, Mech, Dip (1)	Date & Time YEAR MODY HRMN	Magnitude (2) M ML MS OTH	Station (3) No. Description H/F	Closest Dist (km) (4)	Site Codes (5)	Dir\Filename	Filter HP (hz)	Corners LP (hz)	PGA (g)	PGV (cm/s)	PGD (cm)
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B = Two- to four-story structure of lightweight construction. Instrument is located at the lowest level and within several feet of the ground surface.
 C = Two- to four-story structure of lightweight construction. Instrument is located at the lowest level in a basement and below the ground surface.
 D = Five or more story structure of heavy construction. Instrument is located at the lowest level and within several feet of the ground surface.
 E = Five or more story structure of heavy construction. Instrument is located at the lowest level in a basement and below the ground surface.
 F = Structure housing instrument is buried below the ground surface, eg. tunnel.
 G = Structure of light or heavyweight construction, instrument not at lowest level.
 H = Earth dam.
 I = Concrete Dam.

SECOND LETTER: Mapped local geology

Sedimentary or metasedimentary:
 H = Holocene (Recent) Quaternary (< 15000y bp).
 Q = Pleistocene Quaternary (< 2my bp).
 P = Pliocene Tertiary (< 6my bp).
 M = Miocene Tertiary (< 22my bp).
 O = Oligocene Tertiary (< 36my bp).
 E = Eocene Tertiary (< 58my bp).
 L = Paleocene Tertiary (< 63my bp).
 K = Cretaceous (< 145my bp).
 F = Franciscan Formation (Cretaceous/Late Jurassic).
 J = Jurassic (< 210my bp).
 T = Triassic (<255my bp).
 Z = Permian or older (> 255my bp).
 Igneous or meta-igneous:
 V = Volcanic (extrusive).
 N = Intrusive.
 G = Granitic.

A, B and C are codes from a previous Geomatrix classification scheme that have been superceded.

THIRD LETTER: Geotechnical subsurface characteristics (used all earthquake except the Chi-Chi, Taiwan of 9/20/99)

A = Rock. Instrument on rock ($V_s > 600$ mps) or < 5m of soil over rock.
 B = Shallow (stiff) soil. Instrument on/in soil profile up to 20m thick overlying rock.
 C = Deep narrow soil. Instrument on/in soil profile at least 20m thick overlying rock, in a narrow canyon or valley no more than several km wide.
 D = Deep broad soil. Instrument on/in soil profile at least 20m thick overlying rock, in a broad valley.
 E = Soft deep soil. Instrument on/in deep soil profile with average $V_s < 150$ mps.

THIRD LETTER (NUMBER): Central Weather Bureau (CWB) of Taiwan Site Categories (used only for the Chi-Chi, Taiwan earthquake of 9/20/99)

1 = Hard site.
 2 = Medium site.
 3 = Soft soil site.

USGS 1-LETTER SITE CLASSIFICATIONS

Average shear-wave velocity to a depth of 30m is:
 A = > 750 m/s
 B = 360 - 750 m/s
 C = 180 - 360 m/s
 D = < 180 m/s
 Lower case letter indicates a questionable site classification for the Chi-Chi, Taiwan earthquake stations.