# Determining Fault Kinematics For Earthquakes With Unknown Focal Mechanisms Using Seismogram Cross-Correlation Techniques: Test Case of the 2006/2007 Kuril Island Earthquake Sequence

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## ABSTRACT

Two major seismic events occurred in the region of the Kuril Islands in 2006/2007, the magnitude 8.3 November 16, 2006 compressional subduction zone interface event and the magnitude 8.1 January 13, 2007 outer rise extensional event. The aftershock sequence that followed the November main shock is highly unusual for a subduction zone sequence. Many of the smaller aftershocks are too small to determine fault geometries using conventional methods, therefore determining the fault kinematics of these smaller events requires a more indirect approach.

Cross correlation techniques were used to study and better understand this unusual sequence of events. Seismograms with known focal mechanisms were used as a basis for the identification of unclassified earthquakes in the area. The study revealed the validity of this method for determining and developing a classification system for aftershocks with unknown focal mechanisms by an initial test on the small subset of aftershocks for which mechanisms were determined by the Global CMT group.

Seismic waveforms of compressional and tensional events have a characteristic shape, and should be very similar to those caused by similar types of earthquakes. Digital seismograms of 495 aftershocks that occurred during a four day period following the compressional event for which neither the focal mechanism nor the fault characteristics were known were cataloged. A long trace seismogram for this period was compared with a seismogram for both a compressional and tensional reference event for which the focal mechanism was known. Instances where these

two traces correlated resulted in a high cross correlation coefficient at the corresponding time. These aftershocks were then classified based upon their seismic waveform correlation with either of the two known events as either compressional or tensional earthquakes.

Typical subduction zone aftershock sequences show that the majority exhibit the same fault geometry as the preceeding mainshock. This is not the case for the aftershock sequence examined in this study, which displays similar numbers of tensional and compressional events following a compressional mainshock. Although cross correlation techniques were verified as a valid method for determining aftershocks with unknown focal mechanisms, the method is experimental and needs refinement. Possible ways of refinement include filtering waveforms to reduce background noise and incorporating additional seismic stations.

## INTRODUCTION

The Kuril Island chain forms the northwestern region of the ring of tectonic activity, known as the Ring of Fire, encircling the Pacific Ocean. The entire volcanic chain contains an estimated 100 islands, forty of which are currently volcanically active, as well as numerous hot springs and fumaroles. The individual islands themselves comprise the segment of a volcanic island arc formation that originated as the result of subduction of the Pacific plate under the Okhotsk plate in the late Cretaceous. The resultant Kuril trench extends in a northeasterly direction nearly 500km from the eastern coast of Hokkaido to the southern coast of Kamchatka ( Figure 1 ).

## Geologic and Tectonic History

The formation of the Kuril Island arc began in the late Cretaceous, about 90 million years ago, when the Kula plate collided with the Siberian portion of the Eurasian plate initiating a subduction zone along the southeast margin (Kimura & Tamaki, 1985). Regional uplift resulting both from subduction and volcanic activity initiated the arc formation. This continued into the Paleocene and Eocene as volcanic activity and uplift intensified. The Kula plate was eventually completely subducted into the Kuril Trench.

Following the subduction of the Kula plate, the area entered into a volcanic calm period late in the Eocene, although it is likely their elevation continued to change for some time due to isostatic crustal movements. Sedimentary evidence suggests that at least a portion of the chain subsided during this period and that glaciers covered most of the islands during this regression (Kimura & Tamaki, 1985).

Late in the Oligocene, roughly 30 million years ago, the area to the west of the arc began to rotate clockwise and a back arc basin was created which would eventually come to form the Sea of Okhotsk. This period also saw a reawakening of volcanic activity as the Pacific plate began to subduct in the central portion of the arc. As a consequence, many of the oldest rocks in this vicinity date to late Oligocene and early Miocene (Savostin, Zonenshain, & Baranov, 1983).

By the middle of the Miocene, the clockwise rotation of the back arc basin and creation of the Sea of Okhotsk was fully complete. Intense volcanic activity and crustal uplift also resumed, and sedimentary evidence indicates that the islands again began to emerge from the sea early in the Pleistocene (Kimura & Tamaki, 1985). Although many of the islands in the archipelago have not been extensively studied geologically, evidence suggests that they have

been uplifted and remained above sea level since this epoch (Bulgakov, 1996). Traces of glaciation on the northern and central islands indicate that they were covered with ice during the high glacial period of the Pleistocene (Kryvolutskaya, 1973). From late Pleistocene into the Holocene, volcanic activity has continued and has been responsible for the creation of at least one new island in the chain (Yakushko & Niknonov, 1983).

## Historical Seismicity

Historically the Kuril island arc has been very seismically active, both in terms of subduction events and outer rise events. Figure 2 illustrates a seismic hazard map of the region. Highly seismically active areas are denoted by shades of red and orange. The study area is conveniently outlined in a red box, and the locations of the two main shocks are denoted by yellow stars. The smaller star indicates the November compressional interface event and the larger star indicates the January tensional outer rise event. Compressional outer rise events that have been studied imply that the region has a high seismic potential (Christensen & Ruff, 1988), and historical seismicity is illustrated by Figure 3. The tensional normal faulting in the outer rise is a common feature of some subduction zones. In fact these events, which are caused by the stretching of lithospheric crust, are more common than compressional outer rise events (Chappele & Forsyth, 1979).

For this study, the sequence of aftershocks that took place between the November 15, 2006 magnitude 8.3 compressional main shock and the January 13, 2007 magnitude 8.1 tensional main shock in the Kuril Islands were examined. The November event took place on the

subduction interface and the January event took place in the outer rise just before the Kuril Trench. The latter event was the largest outer rise event in recorded history.

The aftershock sequence between the November and January Kuril Island mainshocks is highly unusual. A plot of the 2004 Sumatra earthquake and its associated aftershocks has been included for illustration of what a typical aftershock sequence looks like ( Figure 4 ). Note that the main shock of the Sumatra event was a thrust event, and the vast majority of the aftershocks that follow are of the same focal mechanism. The main shock may not release all of the energy stored along the fault plane, so small aftershocks along the same fault plane are typical of a subduction zone aftershock sequence.

Conversely, the aftershock sequence between the November and January Kuril Island main shocks is highly unusual ( Figure 5 ). The focal mechanisms of this sequence do not follow the typical subduction zone aftershock pattern. The majority of subsequent aftershocks following a subduction zone main shock are expected to be along the same fault plane and display nearly the same focal mechanisms. The Kuril Island aftershock sequence following the compressional November interface event show similar amounts of compressional and tensional aftershocks. The unusual aftershock sequence that occurred between the Kuril Island main shock events indicates that the two main shocks are clearly related, although how exactly is unclear. Therefore it is important to gain understanding of how the sequence of events evolved both spatially and temporally. To accomplish this the faulting geometry of these aftershocks must be studied. Many of the aftershocks, however, are of such low magnitude that their seismic data is not of high enough quality to determine their focal mechanism directly. Therefore, a more indirect approach is needed.

Attention will first be placed on the first four days following the November main shock on the subduction interface. This time period was chosen because aftershock activity falls off exponentially with time. It is also necessary to determine where and when aftershocks started to occur that were atypical for aftershocks following a subduction zone main shock.

Seismic waveforms have a characteristic shape depending on whether the event that generated them was compressional or tensional. These waveforms can be used to match up, or correlate, other events which are too small for a focal mechanism to be derived directly. By correlating events with known focal mechanisms with digital seismograms of events with unknown focal mechanisms, more insight into the nature and relationship of fault rupture can be gained.

## METHODS

Cross correlation techniques, widely used in statistics and signal processing, are considered to be a valid technique to determine the degree of waveform similarity when applied to seismograms. This technique will be applied to identify fault kinematics for earthquakes with unknown focal mechanisms. For this study the signal processing technique will first be tested to determine its validity and application to this problem.

In simplest terms, cross correlation identifies similarities in signals, or in this case, digital seismograms. For the purpose of this study, a long term seismic trace as well as a short term reference seismogram will be used. Computer software time shifts, or "slides", the short term seismogram against the larger one. As this takes place, the amplitudes of each signal at any given time are multiplied, normalized, and then added together. The resultant product output

will have exaggerated peaks where similarities in the two signals occur, low amplitude noise where they do not. These peaks are the foundation for determining whether the seismogram was produced by a tensional or compressional event by determining the degree of waveform similarity between a seismogram from a small event with an unknown focal mechanism and two seismograms from two earthquakes with known mechanisms, one tensional outer rise event and one compressional interface event. For the purpose of this study, two reference events, one tensional and the other compressional, recorded at a high quality, low noise seismic station relatively close to the epicenter of the earthquake sequence were chosen ( Figure 6 ).

Waveform patterns can be recognized by studying the seismograms for earthquakes with known fault mechanisms and correlating them with events that have unknown mechanisms. This technique can be used both to find these patterns and to determine the type of earthquake in which the focal mechanism and fault kinematics are unknown. Events which have known focal mechanisms were obtained from the Global CMT catalog. Events which have a magnitude too small for a focal mechanism to be determined were obtained from the National Earthquake Information Center ( NEIC ) catalog.

The Global CMT catalog ( www.globalcmt.org ) originated at Harvard University as the Harvard Centroid-Moment-Tensor project and was born with several goals in mind. First and foremost was the desire to globally determine and catalog moment tensors for earthquakes greater than magnitude 5. The project has developed techniques for rapid determination of moment tensors for earthquakes with magnitudes greater than 5.5 and has also developed and implemented methods for quantifying earthquake source kinematics, both on a global scale (Ekström, Dziewonski, & Nettles).

The National Earthquake Information Center also maintains a database of known earthquakes (http://earthquake.usgs.gov/regional/neic/), however they do not determine a focal mechanism. The date, time, latitude, and longitude of events are recorded, but fault parameters are not determined.

## Method Verification

Digital seismograms were obtained for two reference events, one tensional and one compressional, with known focal mechanisms from the Global CMT catalog. The tensional event, a magnitude 5.5 earthquake that occurred on November 17, 2006 off the eastern coast of the Kuril Island arc, and the compressional event, a magnitude 5.8 earthquake that occurred on April 9, 2007, were initially individually correlated with themselves ( Figures 7,8 ). This allowed for basic exploration and illustration of the application of cross correlation methods to this problem. Seismic software correlates the seismic waveforms and amplitude is reduced to a value between negative one and positive one. This value, called the cross correlation coefficient ( ccc ), represents the quality of correlation and thus indicates the degree of waveform similarity. An ideal (perfect) waveform match is shown by a ccc of 1.0.

## Test Case For Events With Known Focal Mechanisms

Following illustration of the cross correlation technique, a long duration digital seismogram trace for the four day period following and including the November 15, 2006 Kuril Island subduction zone event was obtained ( Figure 9 ). This trace was then correlated against

both the compressional and tensional reference events, producing two separate traces of cross correlation coefficients with time ( Figure 10 ). The peaks corresponding to high cross correlation values in these products should be representative of either compressional or tensional events that occurred. It is expected that peaks will occur on both cross correlation coefficient traces for every earthquake, since the overall timing of energy arrival is similar, independent of the fault geometry of the event. However, it is hypothesized that the cross correlation coefficient from the tensional reference event will be greater in the case of a tensional event, and the cross correlation coefficient of a compressional event will be greater in the case of a compressional event. This hypothesis will be tested on a catalog of events with known focal mechanisms before proceeding with the catalog of smaller events with unknown focal mechanisms.

A full format Global CMT catalog search was performed for a four day period following and including the November 15, 2006 subduction zone earthquake located in the Kurile Island arc to gather a database of earthquakes with known focal mechanisms. The search was confined to the area bounded by latitude 40-55N and longitude 140-165E. A global search was completed to first make certain that no earthquakes greater than magnitude 6.0 occurred at the same time as this event, and further filtering assured that local events were isolated to only those with known focal mechanisms. A list of twenty three events with known focal mechanisms, seven compressional and sixteen tensional, was compiled. This list was then compared to both the compressional correlated and tensional correlated traces of cross correlation coefficients with time and cross correlation values were recorded for compressional and tensional peaks corresponding to each event with a known focal mechanism ( Appendix B ).

To discover patterns, regions were identified on a plot for compressional cross correlation coefficient versus tensional cross correlation coefficient ( Figure 11 ). It was expected that events which had a higher compressional cross correlation coefficient rather than tensional event would plot in the blue area illustrated on the figure, whereas the events which had a higher tensional cross correlation coefficient rather than compressional would plot in the area illustrated in red. It was found that the twenty three events with known focal mechanisms plotted exactly where they were expected to ( Figure 12 ) thus verifying that the method works for relatively large events.

## Test Case For Events With Unknown Focal Mechanisms

Once the technique was verified by correlating events with known focal mechanisms on a seismic trace, a National Earthquake Information Center ( NEIC ) catalog search was done using the same boundary coordinates and time period for earthquakes too small to have a known focal mechanism. To classify these smaller aftershocks, the same four day period following the November 17, 2006 earthquake was used. The NEIC earthquake catalog search returned 495 aftershock events with a magnitude between 1.0 and 5.0 for which the focal mechanisms were unable to be determined ( Appendix C ). Upon examining the traces of tensional and compressional correlation results from Figure 10, peaks were identified in those waveforms that corresponded temporally with events from the NEIC catalog. Both the tensional and compressional cross correlation values were recorded for each event. Out of the 495 initial aftershocks, 422 events were able to have a peak determined that corresponded to a known event. The remaining 73 events proved impossible to be identified with clear correlation peaks.

Filtering was then applied to ensure only those aftershocks that had been successfully correlated with known waveforms were retained for further study. Events which possessed either a compressional or tensional cross correlation value below 0.05 were considered to be unreliable. In order to be as scientifically strict as possible, two zones were constructed based upon the twenty three events with known focal mechanisms for which the cross correlation technique was known to work ( Figure 13 ). The 422 correlated aftershocks with unknown focal mechanisms were then plotted on a similar diagram ( Figure 14 ). From this plot, 108 aftershocks fell in the compressional zone, 121 fell in the tensional zone, and 266 fell into the unclassifiable zone.

## DISCUSSION

It has been shown earlier in this study that the aftershock sequence following the November 17, 2006 Kuril Islands interface main shock is highly unusual. A comparison of a typical subduction zone aftershock sequence ( Figure 15 ) and the distribution of the Kuril Islands aftershock sequence ( Figure 16 ) illustrates this atypical pattern. To gain a better understanding of this unusual pattern, spatial time plots were created.

For reference, a spatial time plot was constructed for the 23 larger aftershocks with known focal mechanisms ( Figure 17 ). The profile line runs northwest to southeast perpendicular to the Kuril Trench, represented by the line indicated in Figure 5. Time is plotted on the X-axis. The bottom portion of the figure represents landward of the trench and the top portion of the graph represents seaward of the trench. This plot clearly shows the spatial patterns

of the larger tensional and compressional events. Tensional events are organized seaward of the trench, which is to be expected along the outer rise. Compressional events are organized landward of the trench, which is also to be expected as these events occurred on the interface of the subduction plate and overriding plate.

A similar plot along the same profile was made for the smaller aftershocks with unknown focal mechanisms ( Figure 18 ). When all magnitudes of these aftershocks were plotted on the same diagram, no patterns could be observed. Instead of plotting all aftershocks between magnitudes 1.0 and 5.0 on the same plot, several other plots were made with different groupings to try and identify patterns similar to the larger events with known focal mechanisms. A plot of magnitudes 5.0 to 4.8 ( Figure 19 ), magnitudes 4.8 to 4.6 ( Figure 20 ), magnitudes 4.6 to 4.4 ( Figure 21 ), magnitudes 4.4 to 4.2 ( Figure 22 ), magnitudes 4.2 to 4.0 ( Figure 23 ) and magnitudes 4.0 and lower ( Figure 24 ) were constructed.

Aftershocks between magnitudes 5.0 and 4.8 show a similar distribution as that of the larger aftershocks with known focal mechanisms. The plots of lower magnitudes demonstrate that the expected pattern breaks down. It is possible that the cross correlation technique works for events greater than magnitude 4.8 but not for smaller events. It is also possible that smaller earthquakes may occur in response to small stress perturbations, whereas larger events reflect the overall regional state of stress.

The application of cross correlation techniques in determining focal mechanisms for events is in its infancy. The technique was verified to work for events with magnitudes greater than 4.8 and fault kinematics for aftershocks in this range which did not have known focal mechanisms could be determined. The method appears less reliable for events smaller than

magnitude 4.8, and more refinement and study of this technique is needed to determine whether the observed spatial patterns are real. Filtering waveforms to reduce background noise would aid in identifying peaks which coincide temporally with known aftershocks. This would result both in greater amounts of aftershocks being classified and an increased confidence of those classifications. Initially, seismograms were obtained from a single seismic station. Incorporating additional stations would also aid in the further verification of the method for smaller aftershocks and will eventually enhance its effectiveness.

## CONCLUSION

The aftershock sequence in the four days following the November 17, 2006 magnitude 8.3 Kuril Island subduction zone main shock is highly unusual. Typical aftershock sequences follow the same fault geometry as the main shock that preceded them, but data reveals that pattern was not observed in this case, with more than half of the examined aftershocks classified as tensional events. For this particular aftershock sequence, small events are furthermore observed to demonstrate different spatial patterns than larger events.

Large earthquakes tend to follow a consistent stress regime, whereas smaller earthquakes can follow different patterns depending on smaller areas of localized stress. This can cause the spatial distribution of small events to also be different than those for large events. In the case of the aftershock sequence examined in this study, this could offer an explanation for the observed differences in the location of smaller aftershocks ( $M<4.8$ ) as compared to the locations of larger events.

The cross correlation techniques that were explored were verified to work for relatively large earthquakes for which mechanisms were available from the Global CMT catalog. Figures 17 – 24 illustrate the spatial patterns of aftershocks, as well as a potential limitation of this method. Expected spatial patterns are not clear below magnitude 4.8. It could be that cross correlation is applicable to events greater than this magnitude but not smaller. Further study and exploration of the method is ultimately needed to determine the validity of applications to other events. Integrating additional seismic stations would also aid in verification of the method for smaller aftershocks.

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## APPENDIX A - Figures

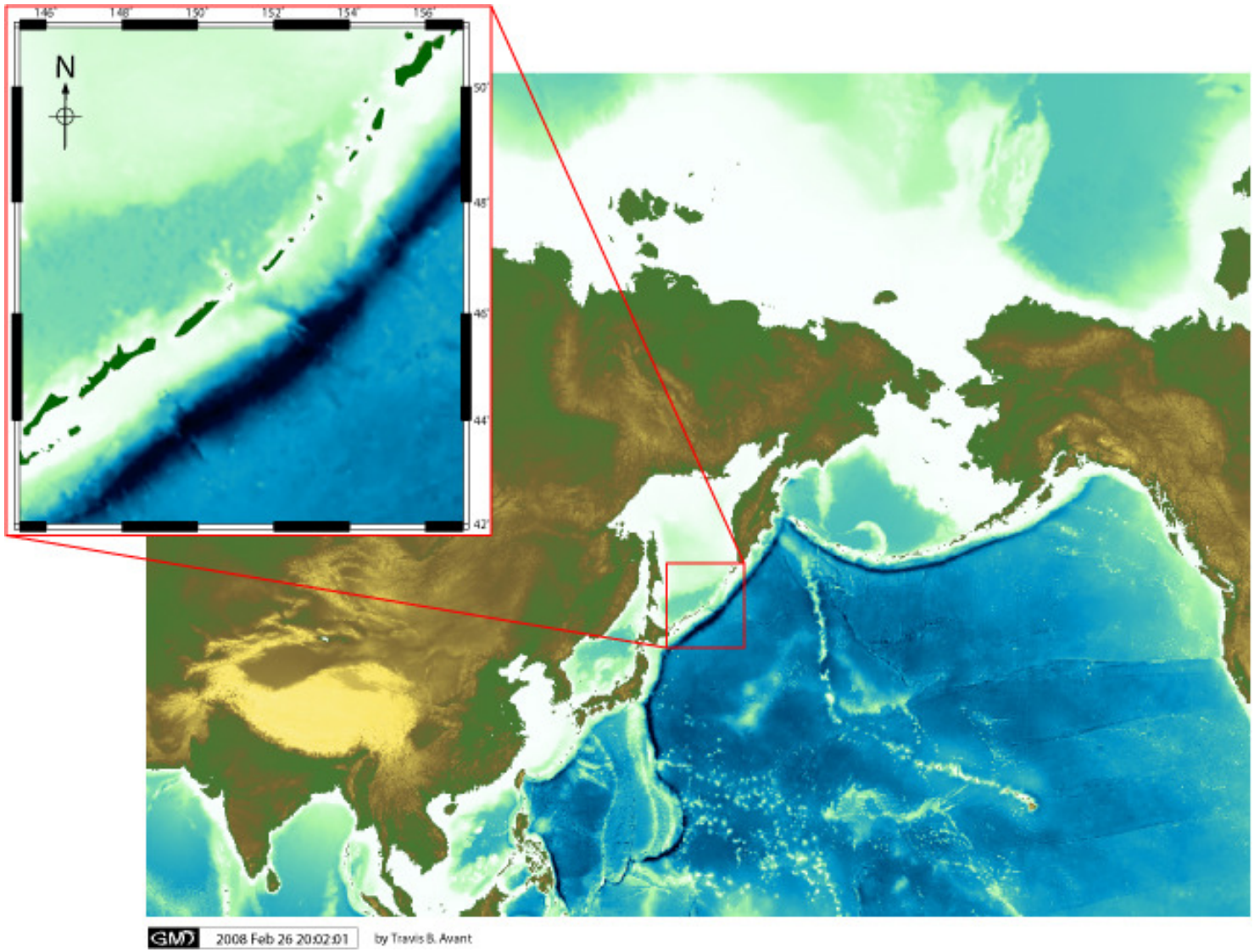


Figure 1: World map showing the location of the Kuril Island arc chain

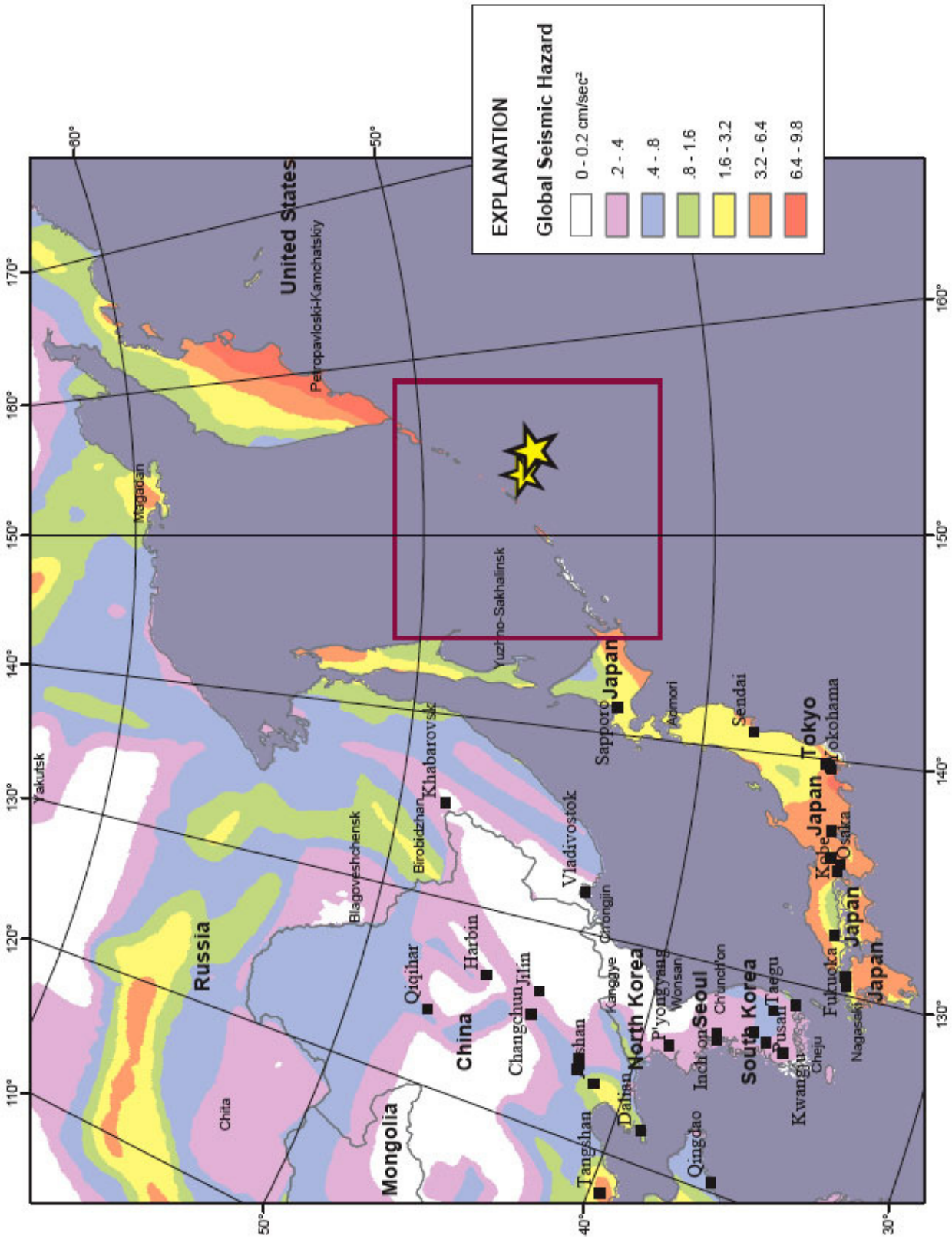


**Figure 2: Map of study area and surrounding region illustrating seismic hazard potential. The small yellow star denotes the November compressional interface event and the large yellow star denotes the January tensional outer rise event.**

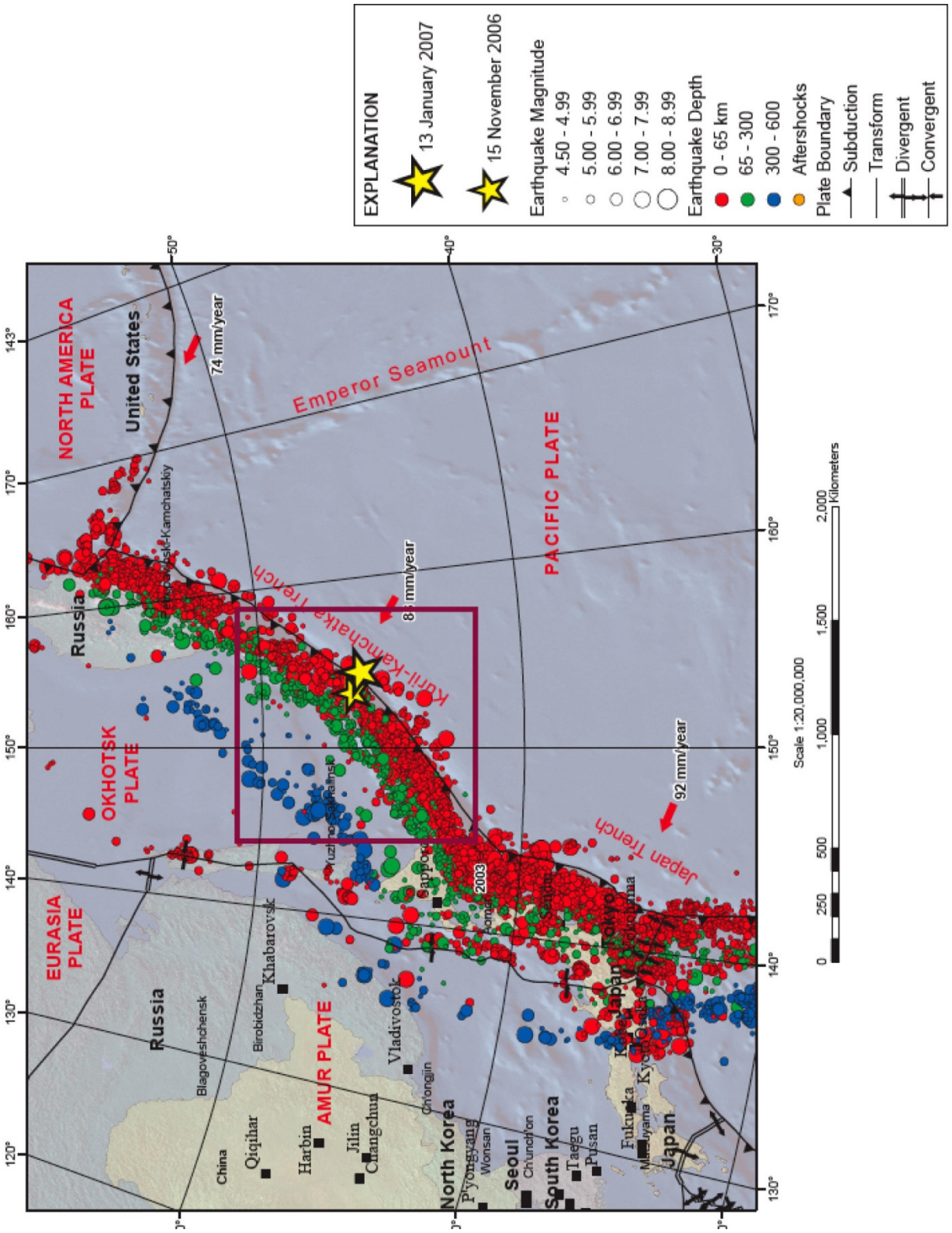


**Figure 3: Illustration showing historical seismicity for the study area ( red box ) as well as the surrounding region. The November 15, 2006 compressional mainshock is indicated by the small yellow star and the January 13, 2007 mainshock is indicated by the large yellow star. Subduction rate of the Pacific Plate under the Okhotsk Plate is shown to be 84mm/year.**

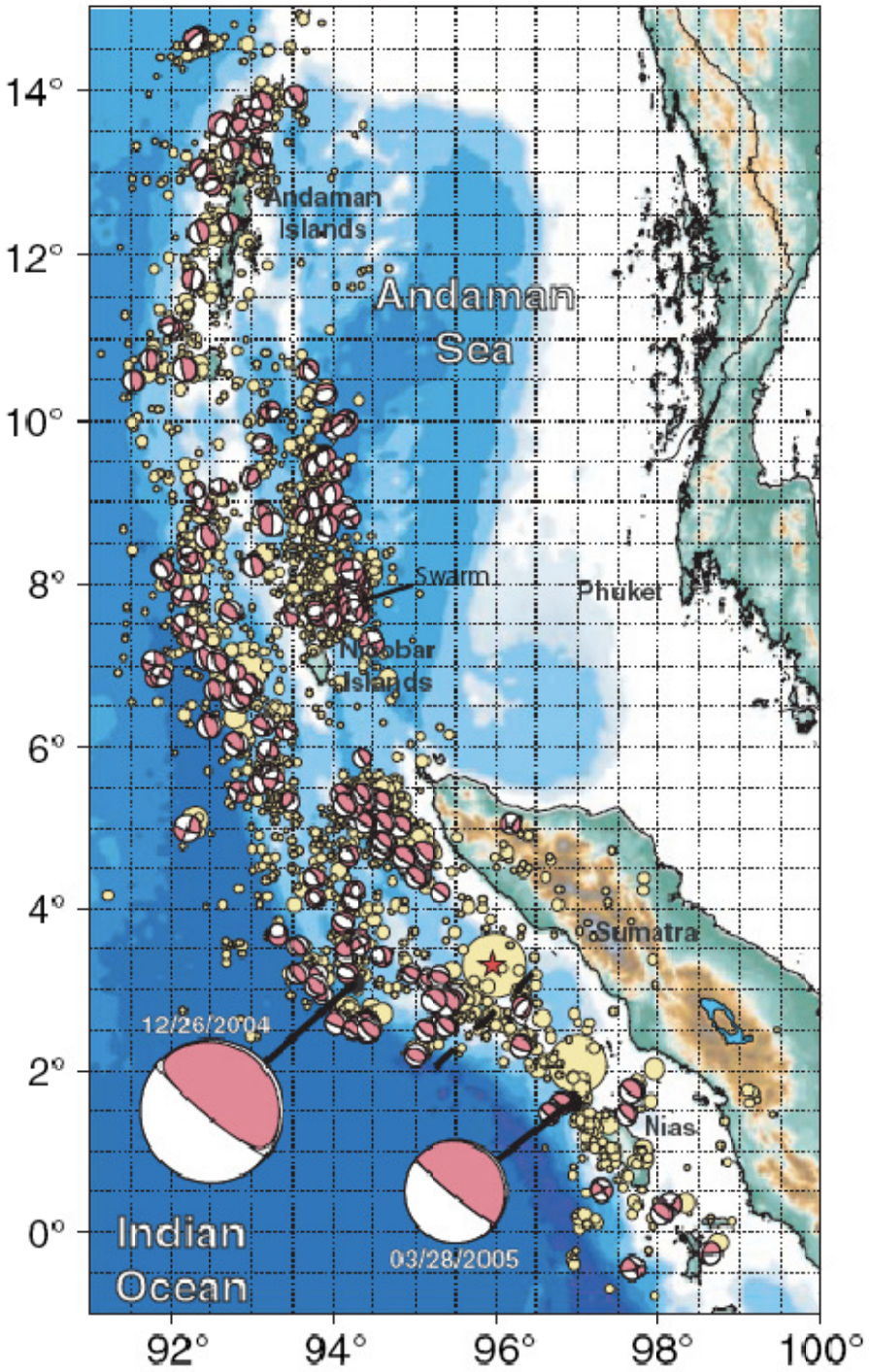


**Figure 4: Map of the 2004 Sumatra earthquake illustrating a typical aftershock pattern. The majority of aftershocks should have the same fault geometry, and thus focal mechanism, as the main shock. ( Lay, et al., 2005 )**

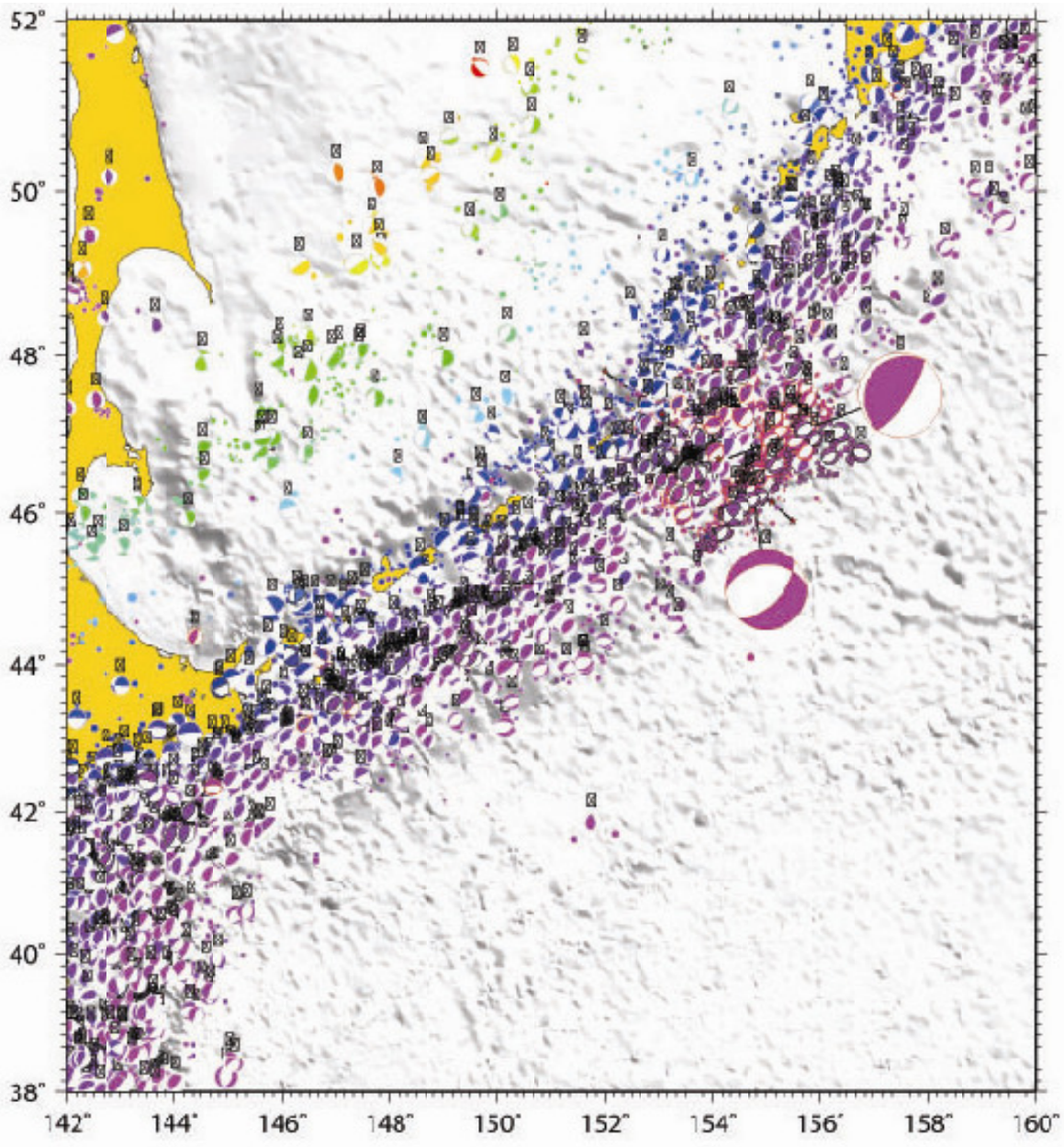


**Figure 5: Map view of the Kuril Island study area showing historical seismicity of aftershocks with known focal mechanisms for the period beginning with the November 15, 2006 event and extending to the January 13, 2007 event**

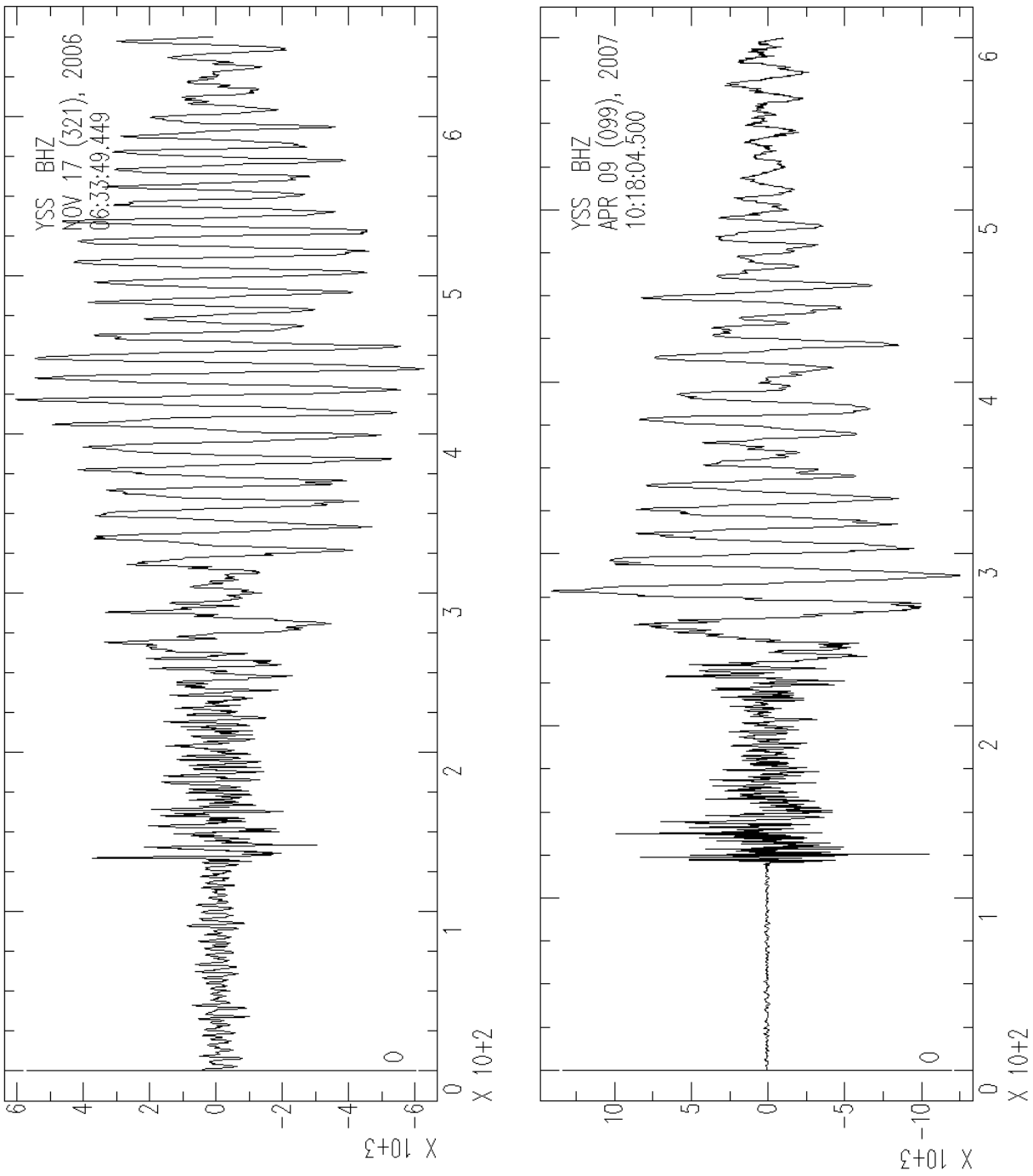


**Figure 6: Digital vertical component seismograms showing characteristic wave forms. Pictured here are the November 17, 2006 tensional ( left ) and the April 9, 2007 compressional ( right ) reference events. Scale along the X-axis is in hundreds of seconds and scale along the Y-axis is an arbitrary measure of wave amplitude.**

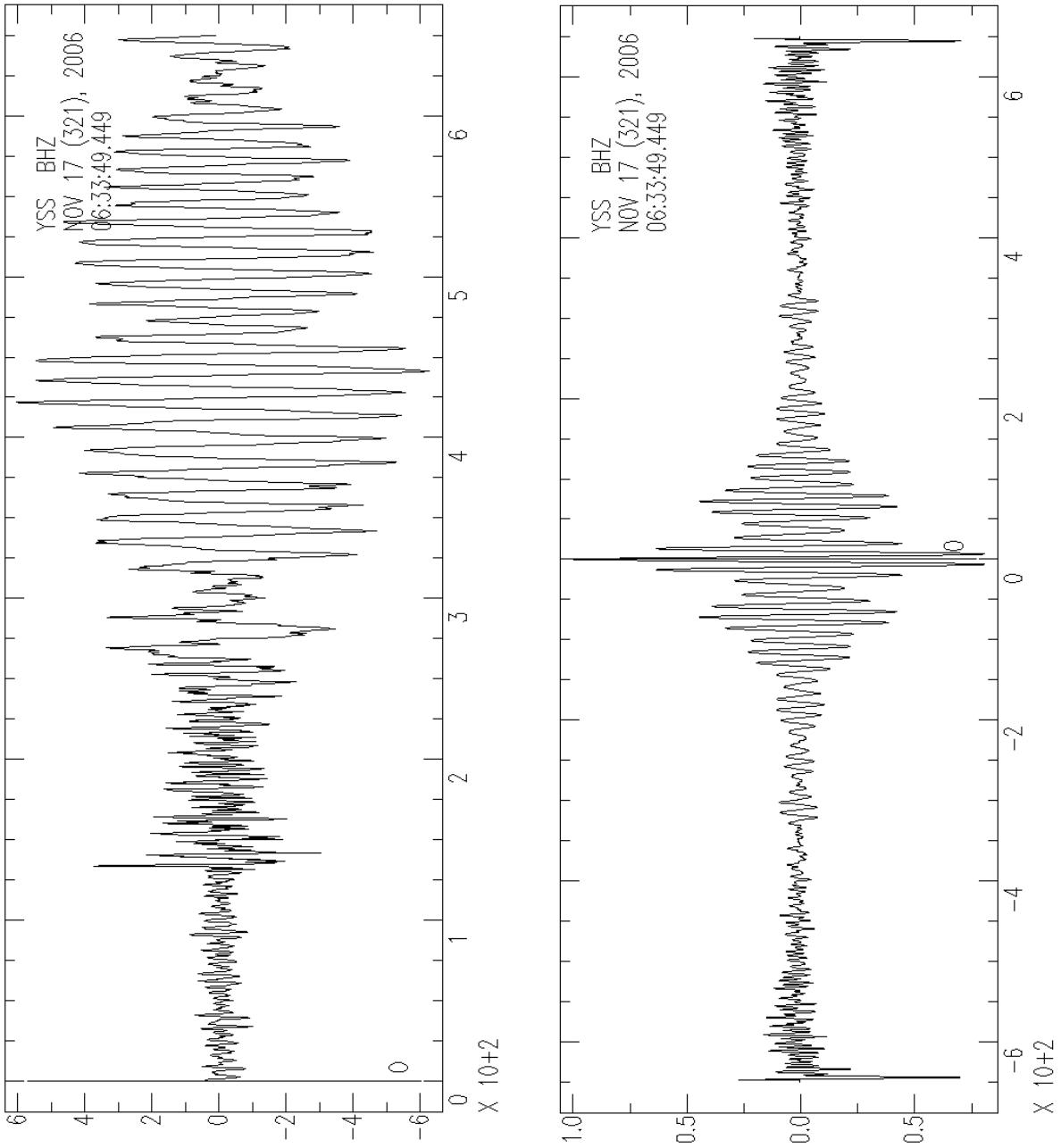


**Figure 7: Digital seismogram of the November 17, 2007 tensional Kuril Island event ( left ) showing cross correlation with the same event ( right ). Scale along the X-axis is in hundreds of seconds. Y-axis scale for the top illustration is an arbitrary measure of wave amplitude. Y-axis scale for the bottom illustration is the normalized cross correlation value. The peak at a cross correlation value of 1.0 indicates a perfect waveform matchup.**

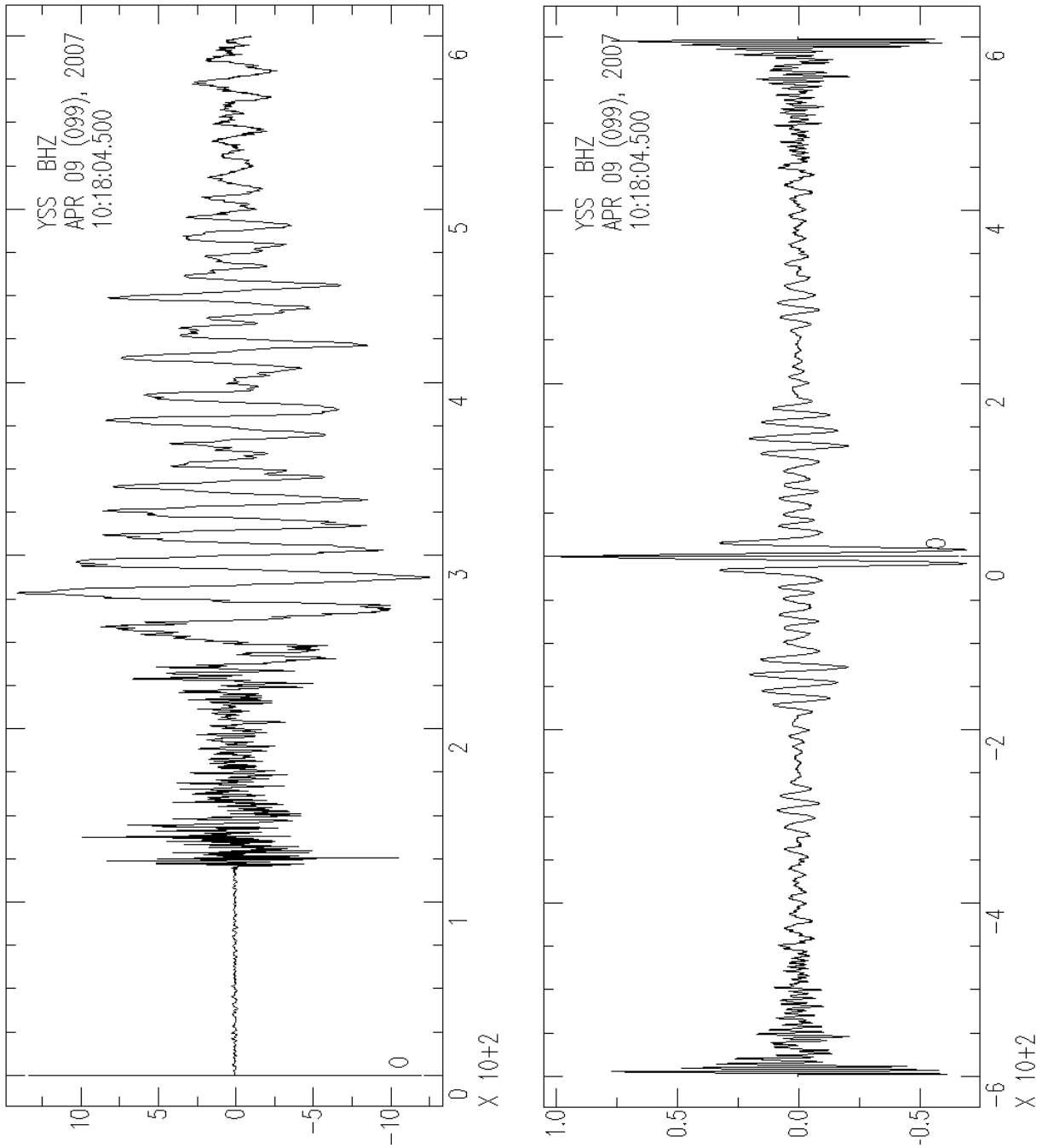


**Figure 8: Digital seismogram of the April 9, 2007 compressional Kuril Island event ( left ) showing cross correlation with the same event ( right ). Scale along the X-axis is in hundreds of seconds. Y-axis scale for the top illustration is an arbitrary measure of wave amplitude. Y-axis scale for the bottom illustration is the normalized cross correlation value. The peak at a cross correlation value of 1.0 indicates a perfect waveform matchup.**

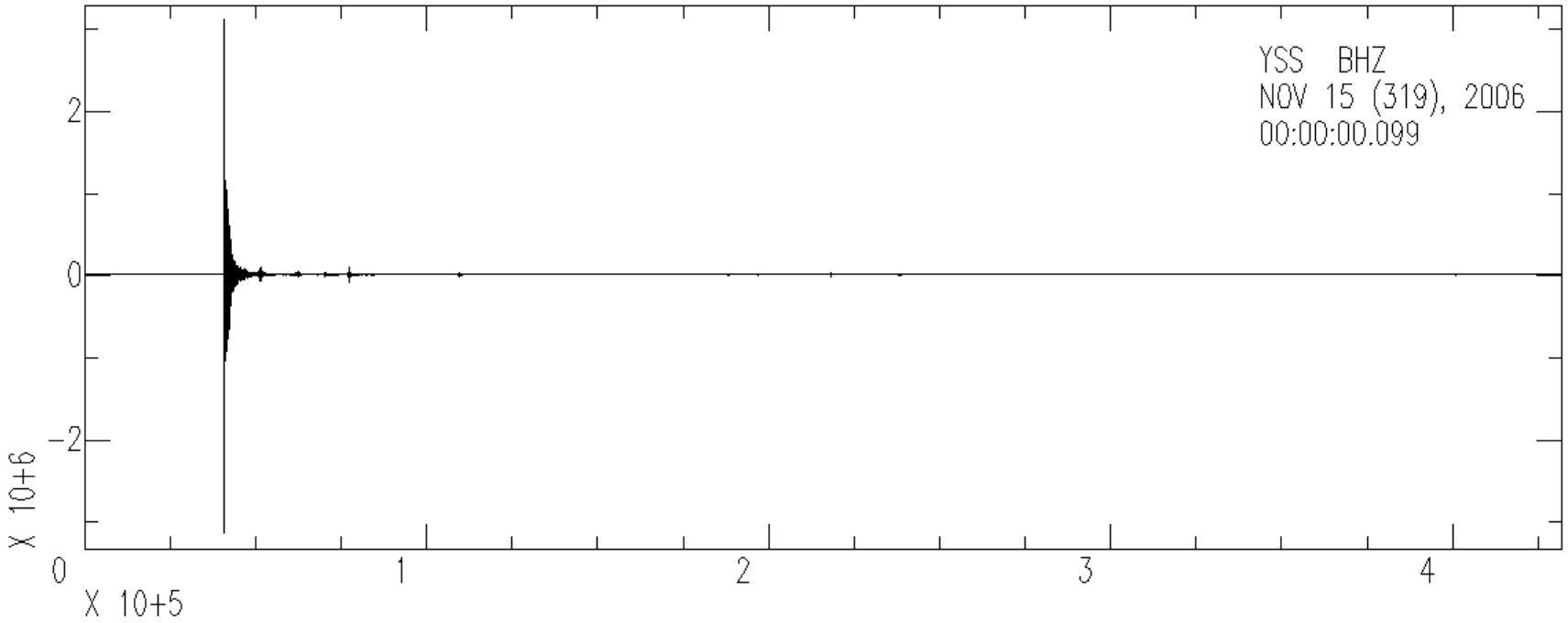


**Figure 9: Four day long trace seismogram beginning from November 15, 2006 and ending four days after the November 17, 2006 compressional interface main shock.**

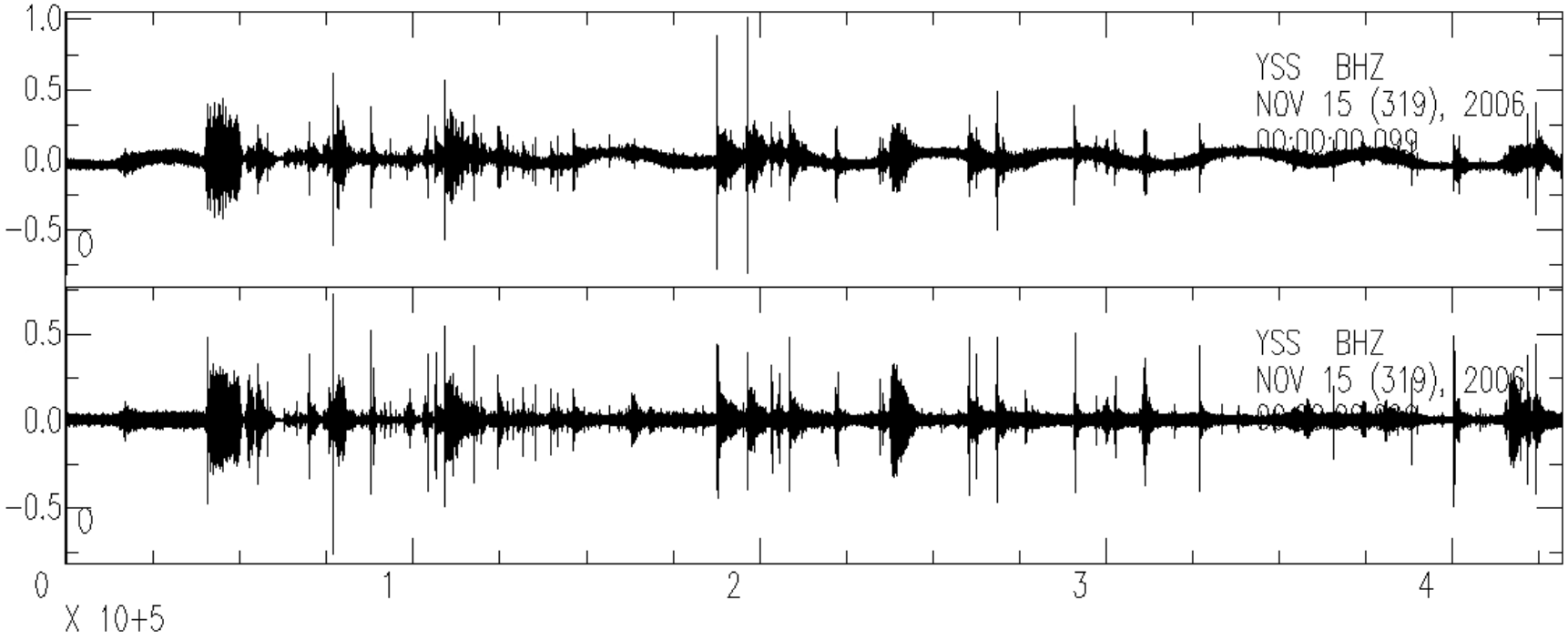


**Figure 10: Illustration showing digital seismograms that have been correlated with both the tensional ( top ) and compressional ( bottom ) reference events. Note the exaggerated peaks in the waveforms. Many of them correspond to earthquakes with known focal mechanisms ( data obtained from the Global CMT catalong ) or with unknown focal mechanisms ( data obtained from the NEIC catalog ). Scale along the X-axis is hundreds of thousands of seconds. Scale along the Y-axis is the cross correlation value.**

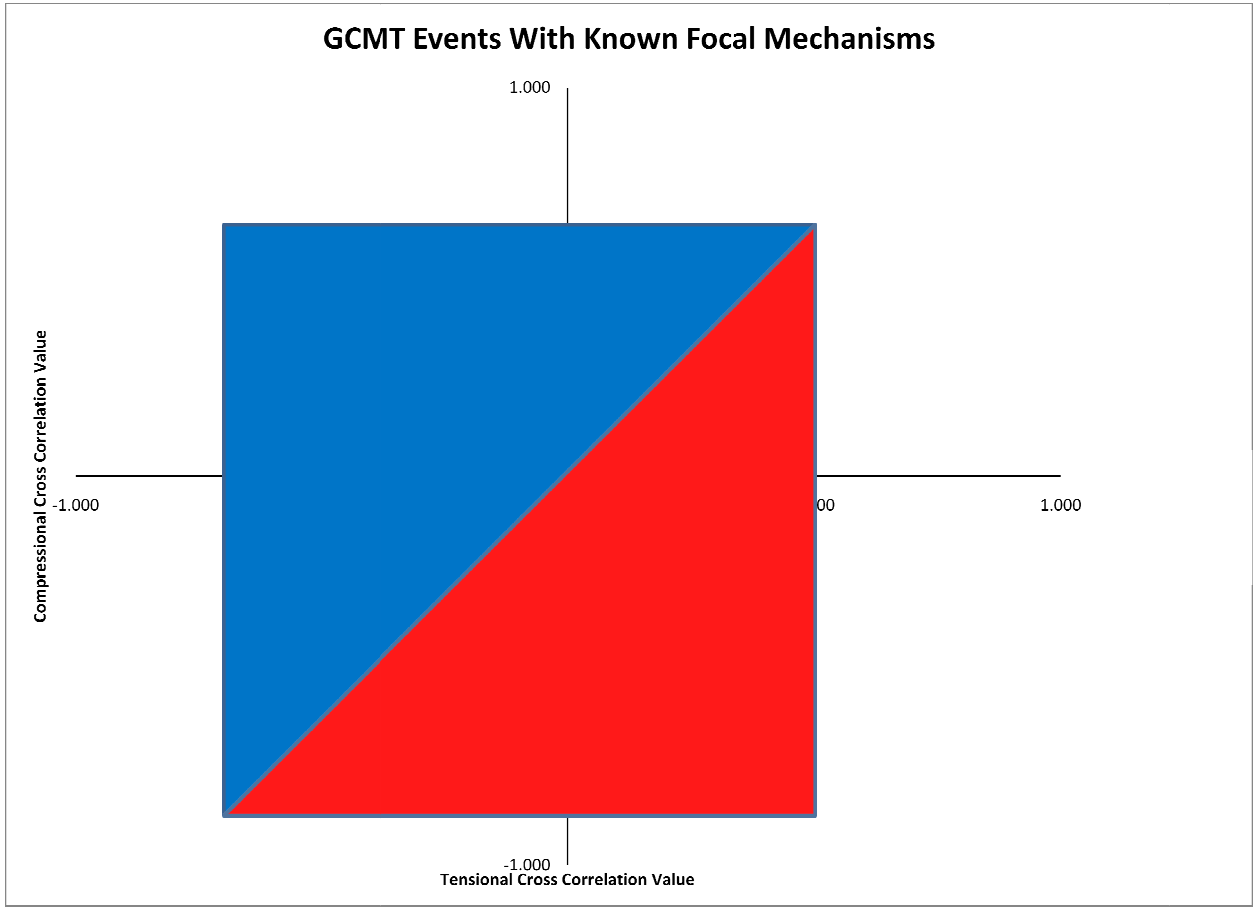


**Figure 11: Illustration showing colored regions where events with specific cross correlation coefficients are expected to plot. Events that have a higher compressional cross correlation coefficient rather than tensional are expected to plot in the blue area. Events that have a higher tensional cross correlation coefficient rather than compressional are expected to plot in the red area.**

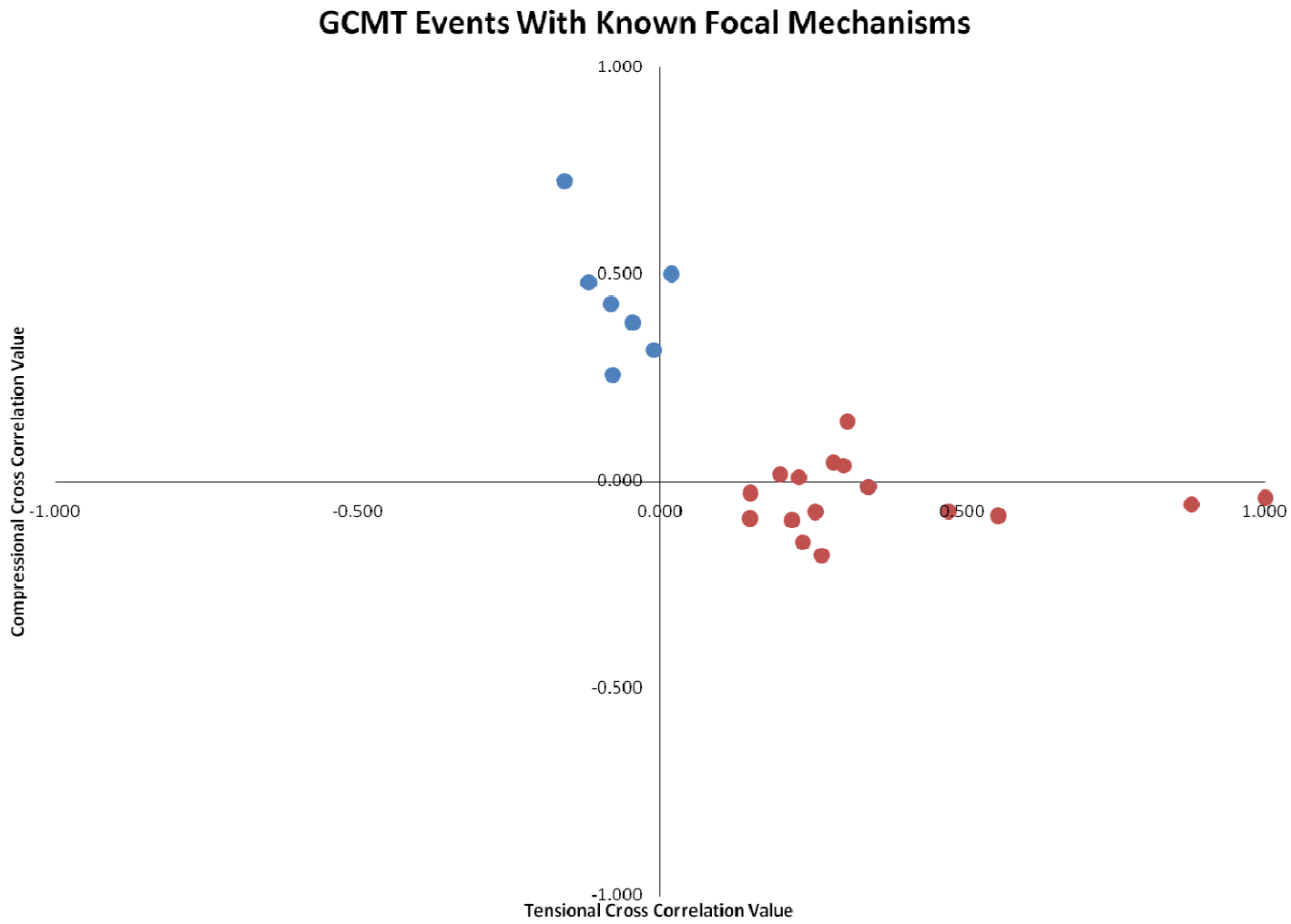


**Figure 12: Plot of 23 aftershocks with known focal mechanisms that occurred in the four day period following the November 17, 2006 compressional subduction zone main shock confirming expected patterns. Seven events plotted in the expected compressional region and sixteen plotted in the expected tensional region. Y-axis is compressional cross correlation value and X-axis is tensional cross correlation value.**

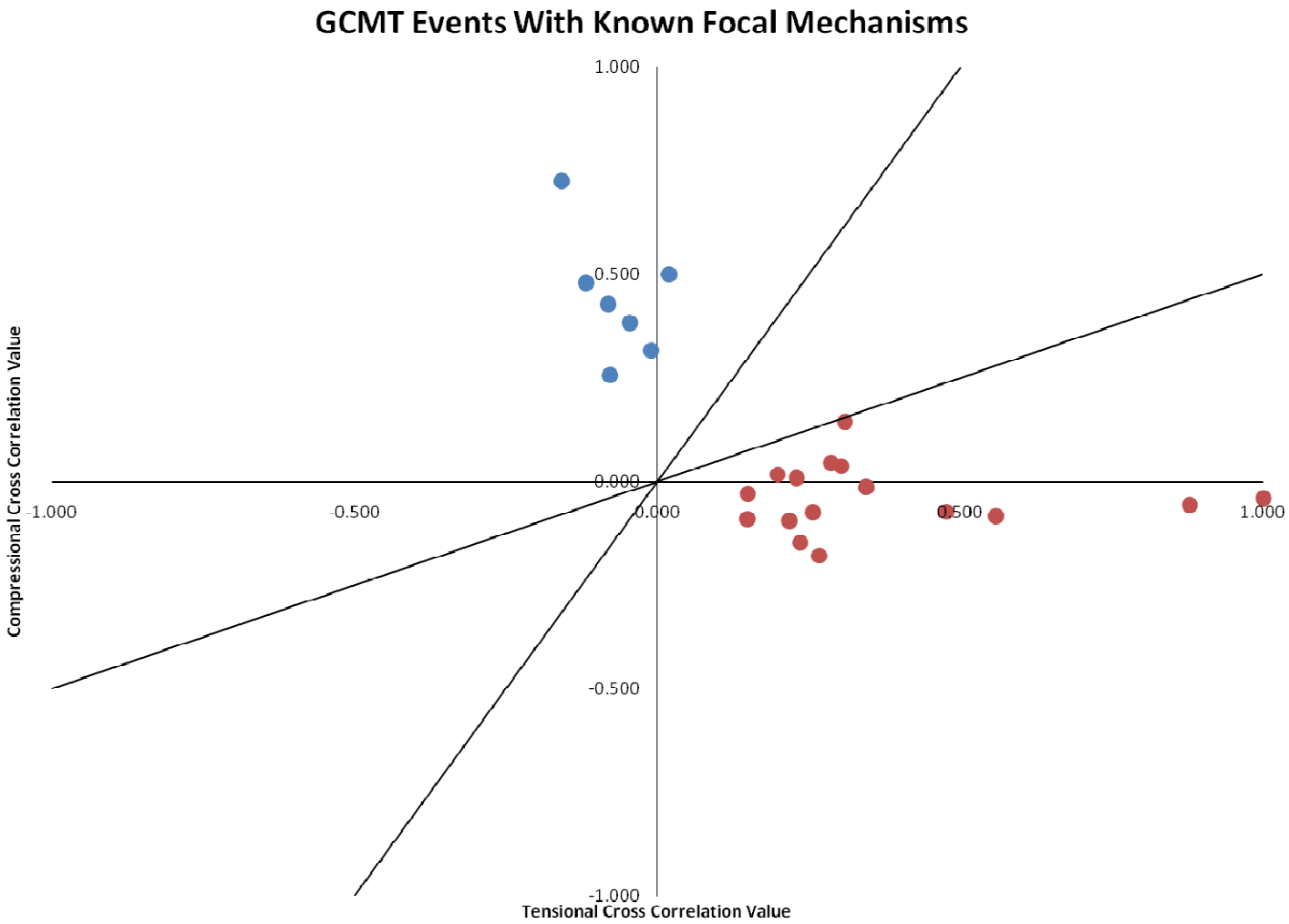


**Figure 13: Plot illustrating confidence zones based upon twenty three aftershocks with known focal mechanisms. The zone between the compressional ( blue ) and tensional ( red ) areas represents a region in which aftershocks cannot be strictly classified.**

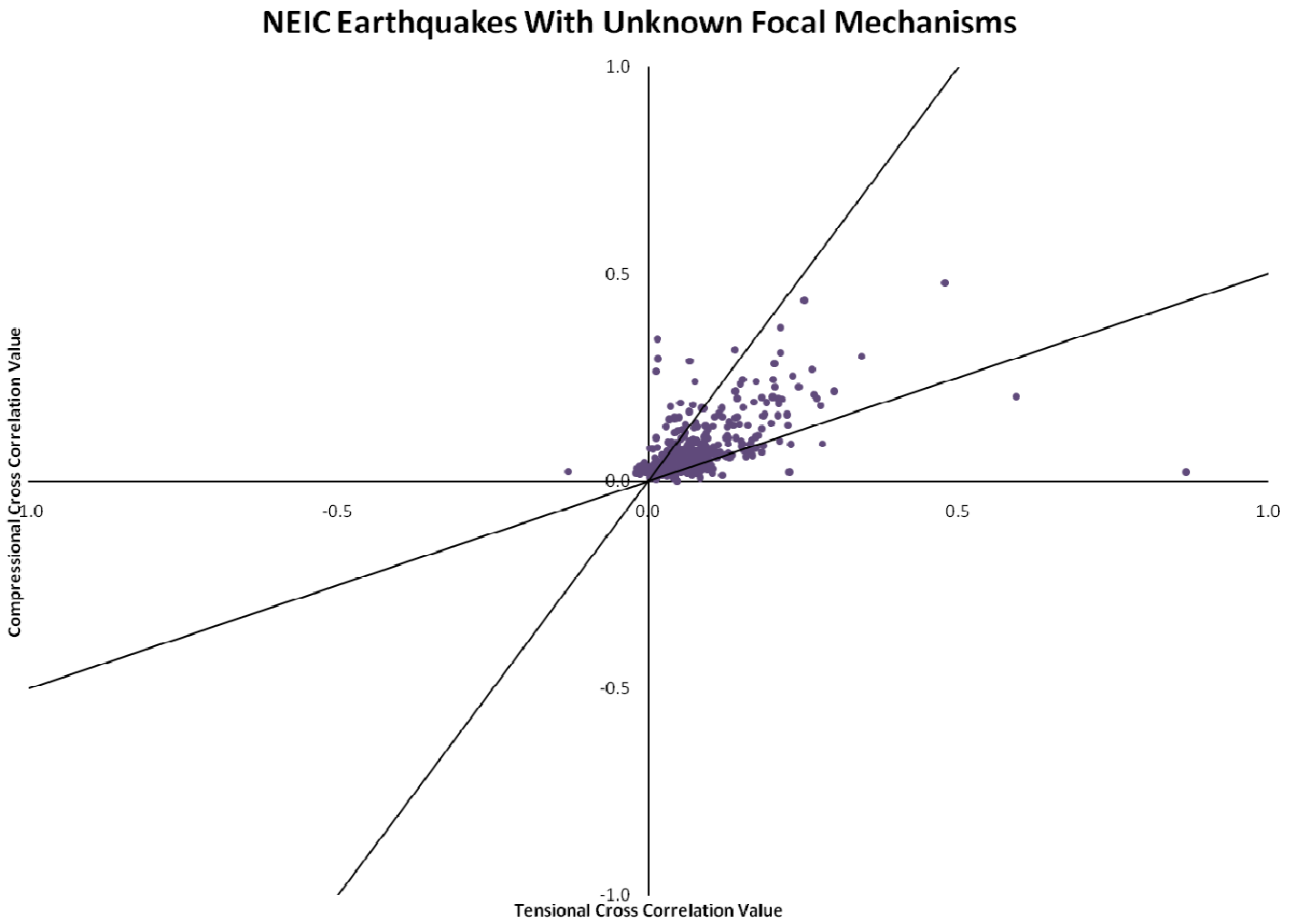


**Figure 14: Plot of # correlated aftershocks with unknown focal mechanisms showing their distribution in relation to defined zones of compressional ( top ), tensional ( bottom ), and uncertain ( middle )**

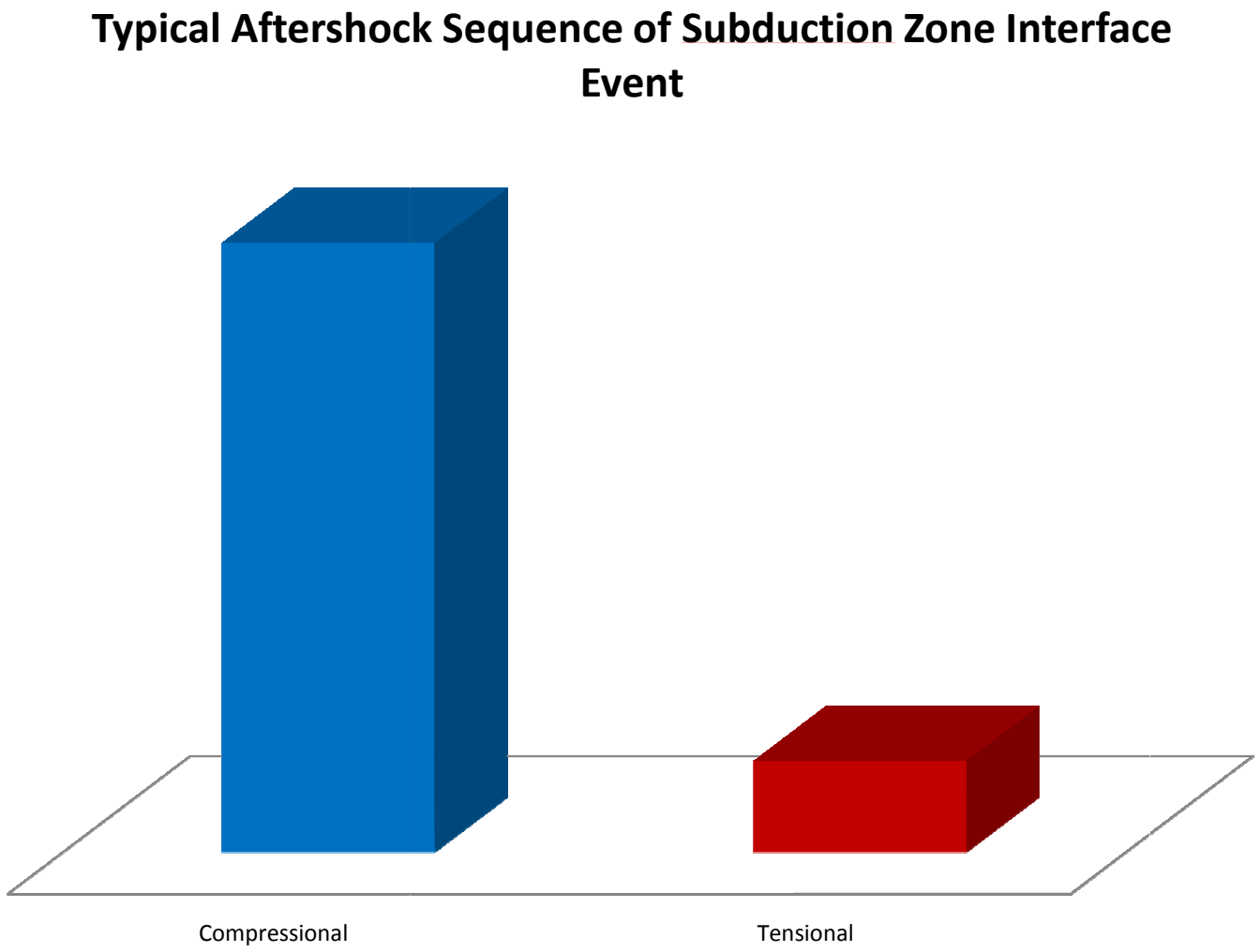


**Figure 15: Histogram illustrationg the relative distribution of aftershocks that is expected following a compressional subduction zone earthquake. The vast majority of aftershocks should follow the same fault orientation as the main shock.**

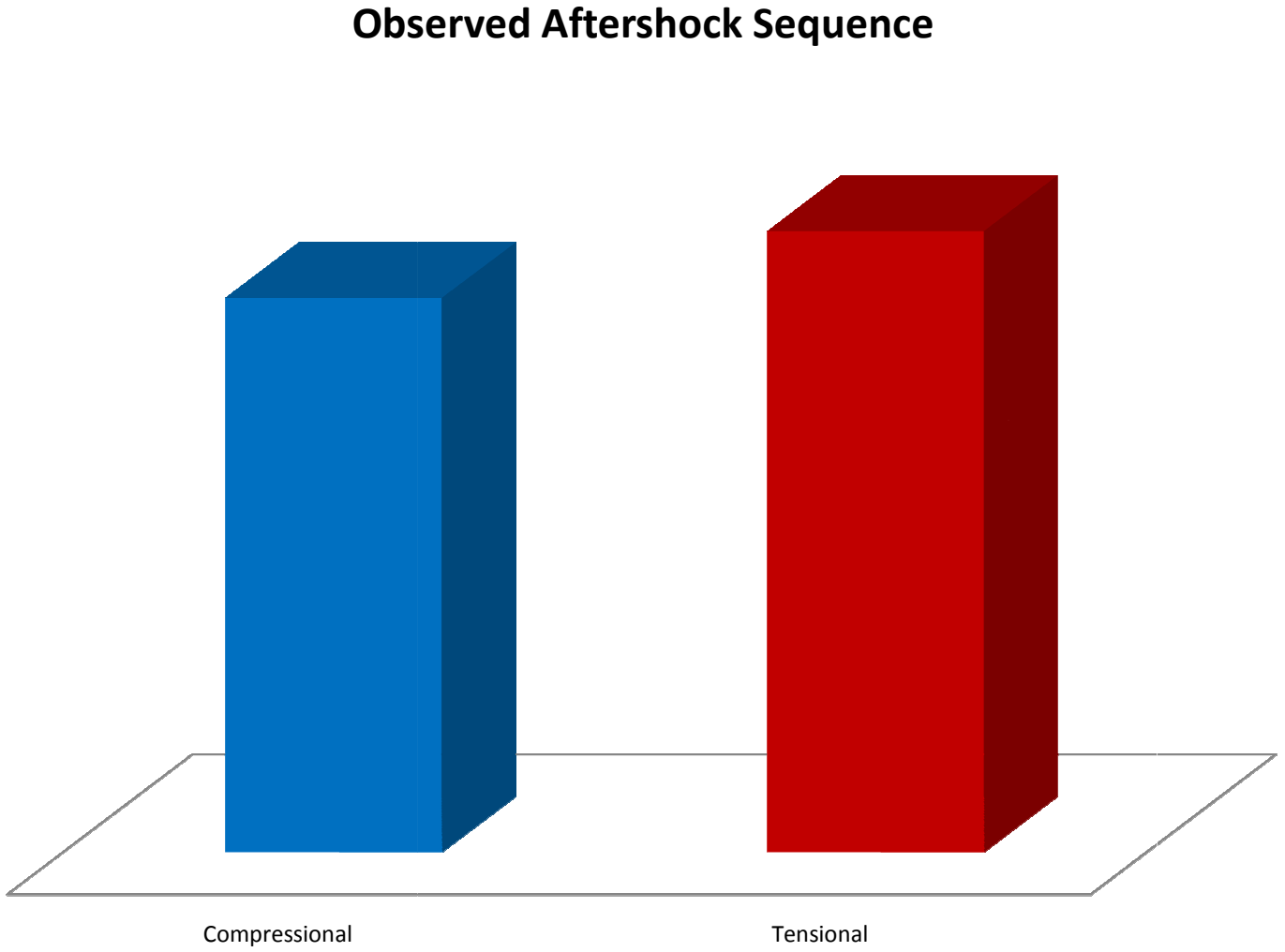


**Figure 16: Histogram illustrating the observed aftershock distribution following the November 17, 2006 magnitude 8.3 main shock in the Kuril Islands. Note that the distribution is not typical of what is normally observed following a compressional subduction zone earthquake.**

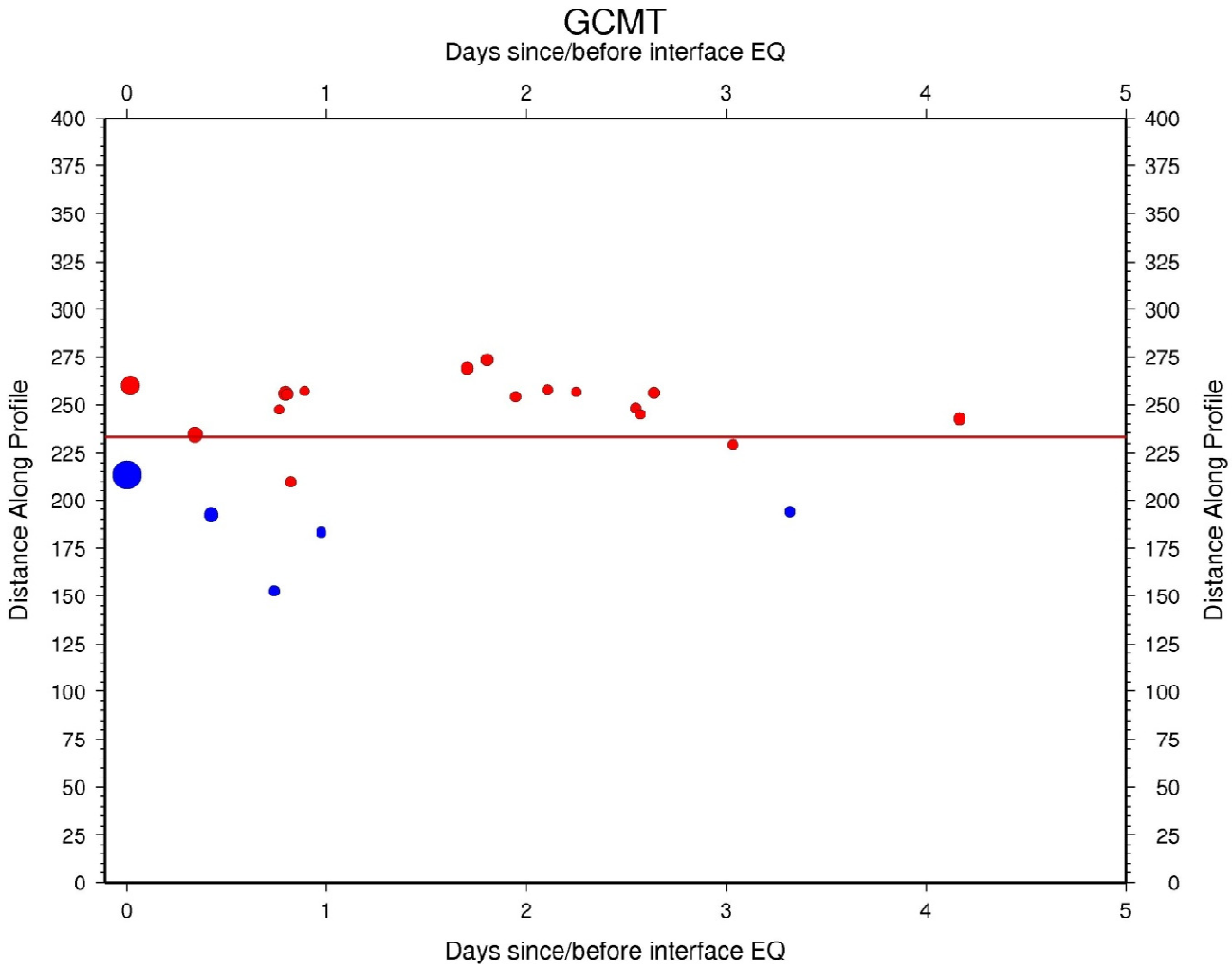


**Figure 17: Spatial and temporal plot of 23 large aftershocks with known focal mechanisms. Red dots represent tensional and blue dots represent compressional events. The red line represents the Kuril Trench.**

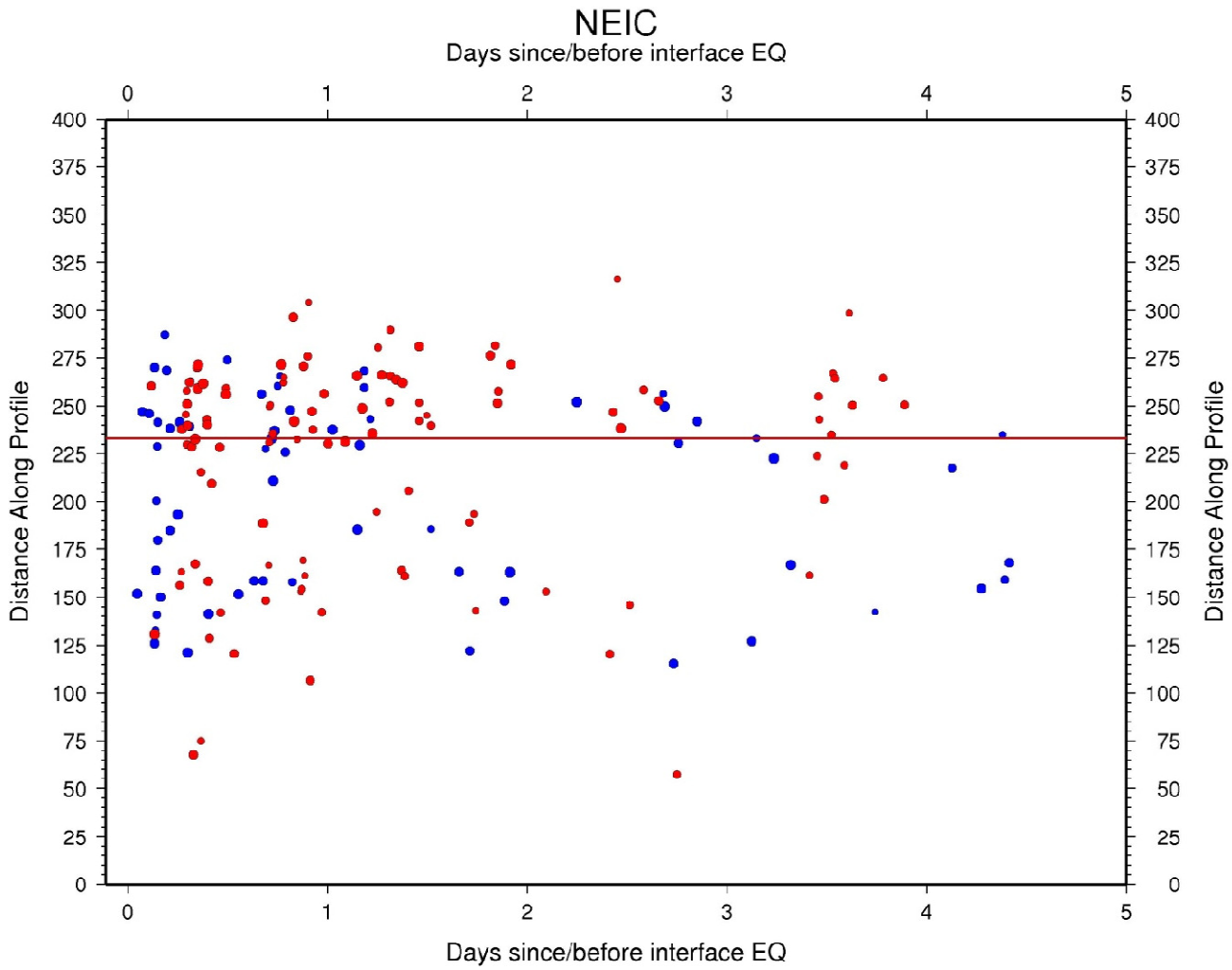


**Figure 18: Spatial and temporal plot of 229 small aftershocks with unknown focal mechanisms. Red dots represent tensional and blue dots represent compressional events. The red line represents the Kuril Trench.**

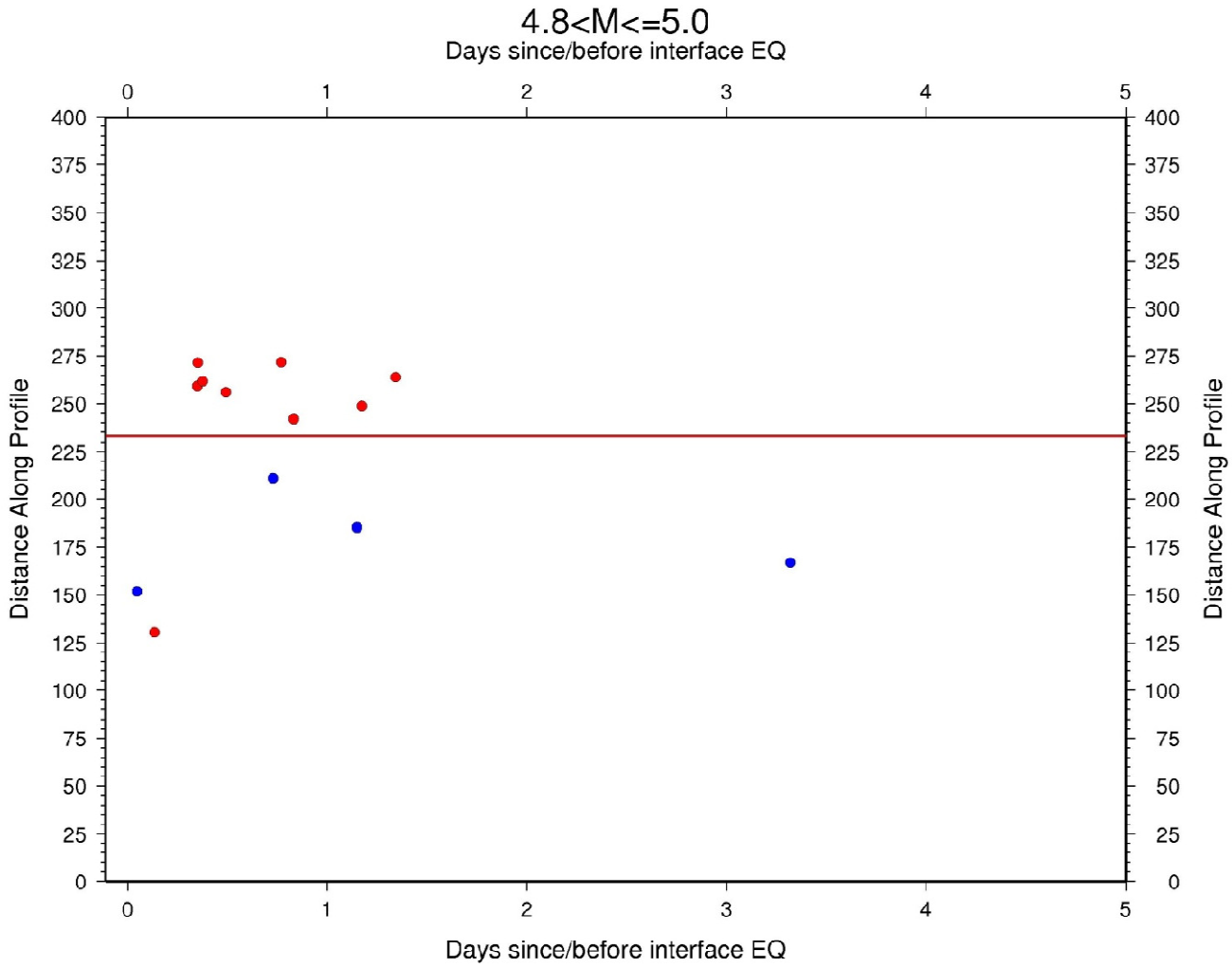


**Figure 19: Spatial and temporal plot of aftershocks with unknown focal mechanisms between magnitude 5.0 and 4.8. Red dots represent tensional and blue dots represent compressional events. The red line represents the Kuril Trench.**

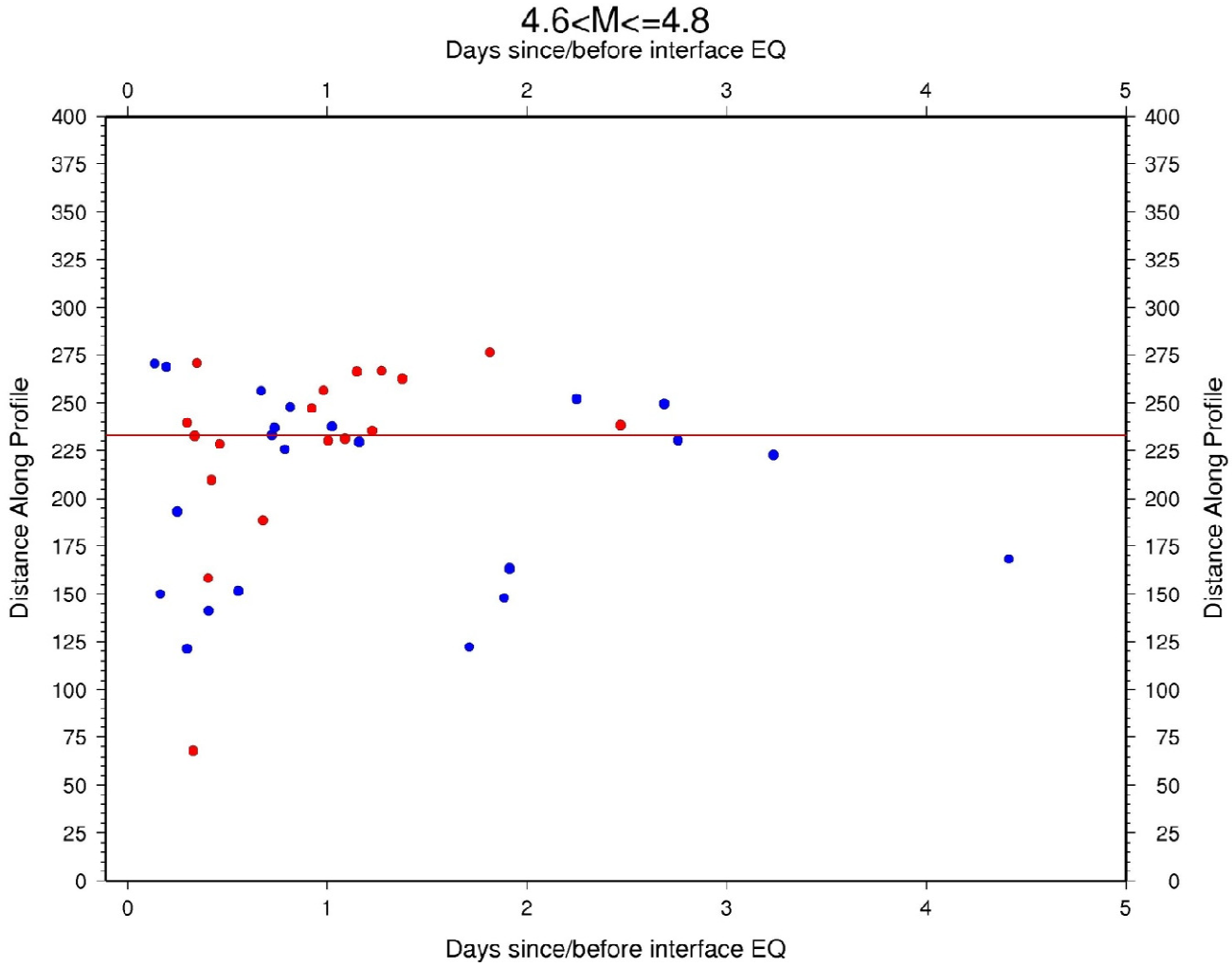


**Figure 20: Spatial and temporal plot of aftershocks with unknown focal mechanisms between magnitude 4.8 and 4.6. Red dots represent tensional and blue dots represent compressional events. The red line represents the Kuril Trench.**

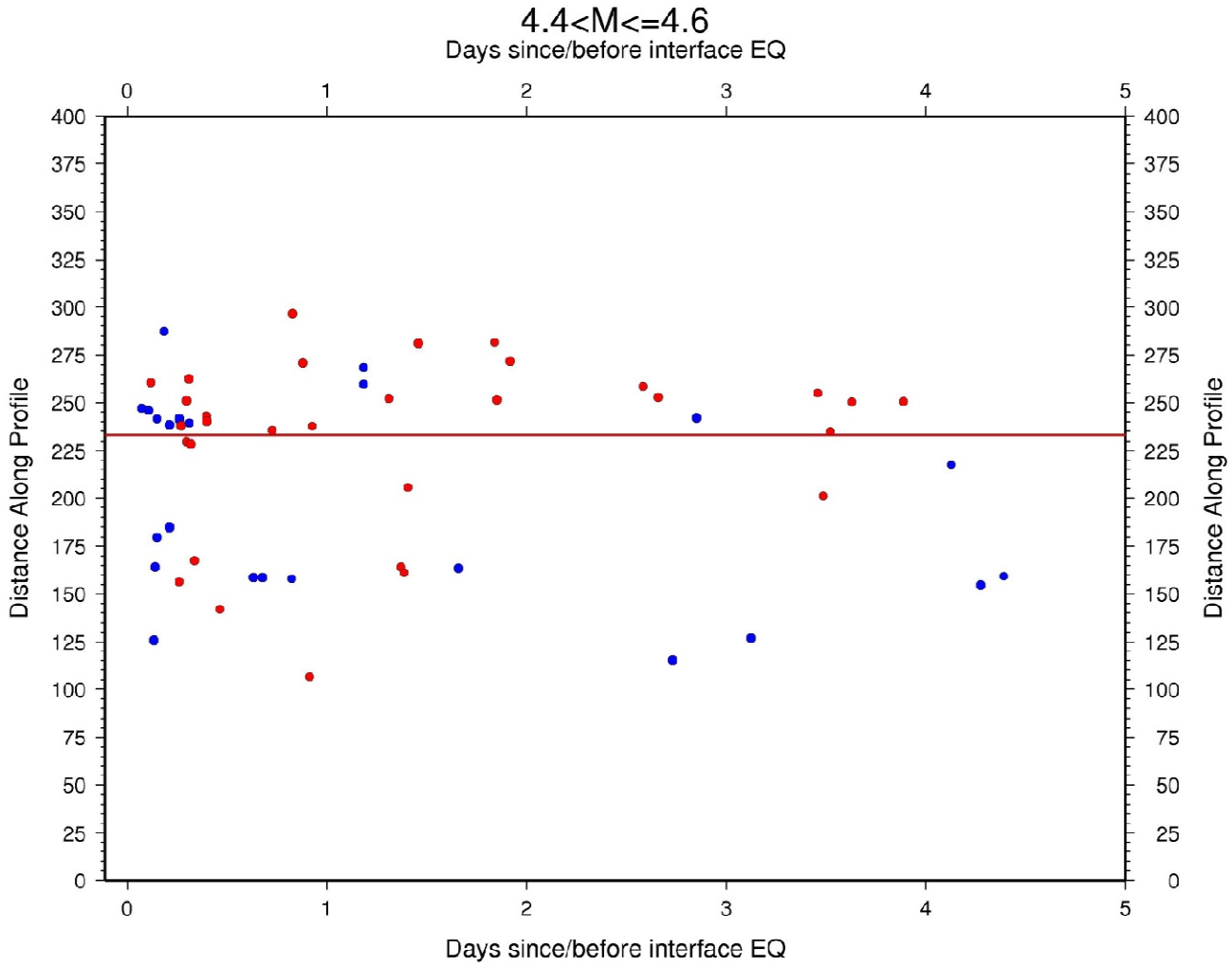


**Figure 21: Spatial and temporal plot of aftershocks with unknown focal mechanisms between magnitude 4.6 and 4.4. Red dots represent tensional and blue dots represent compressional events. The red line represents the Kuril Trench.**

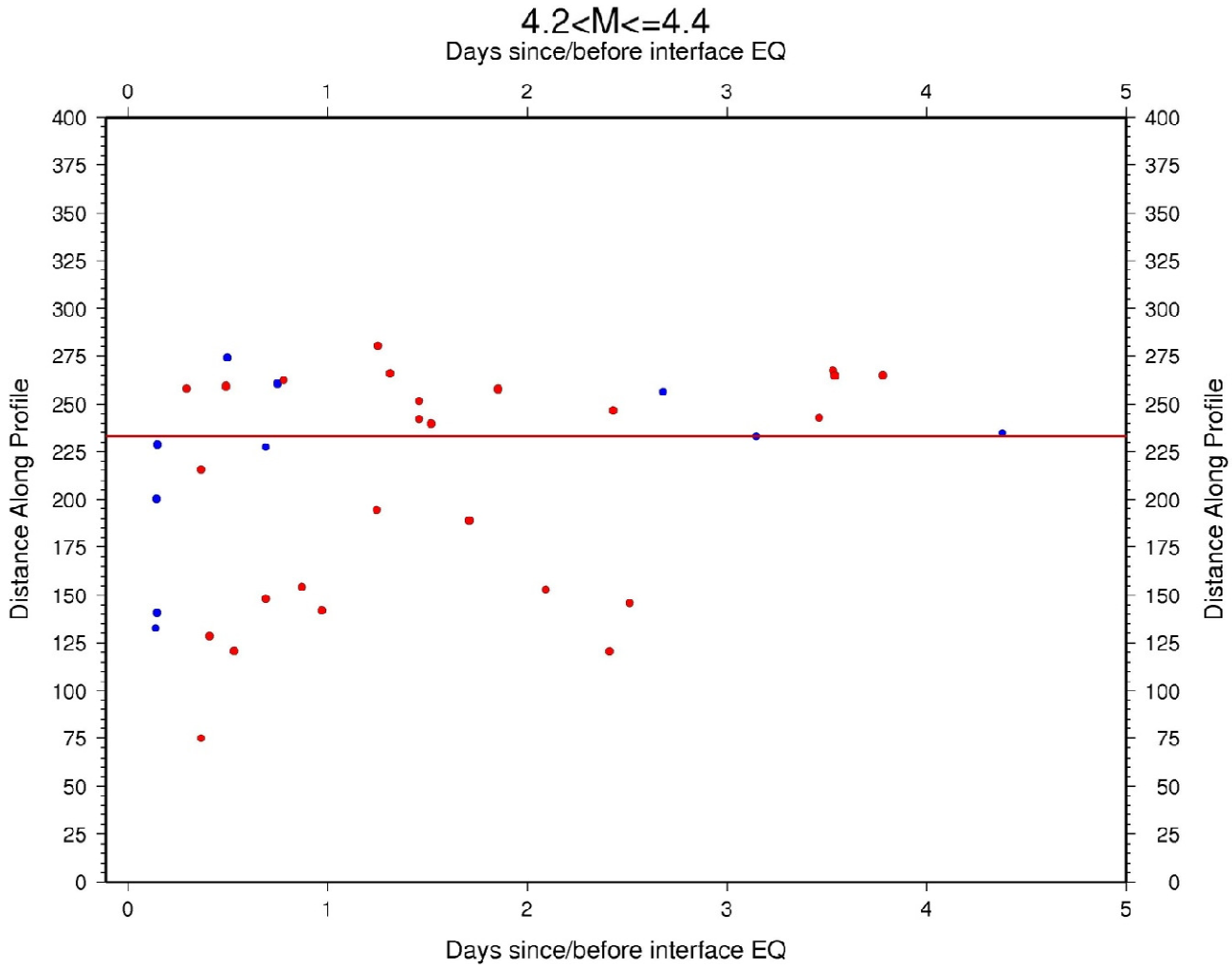


**Figure 22: Spatial and temporal plot of aftershocks with unknown focal mechanisms between magnitude 4.4 and 4.2. Red dots represent tensional and blue dots represent compressional events. The red line represents the Kuril Trench.**

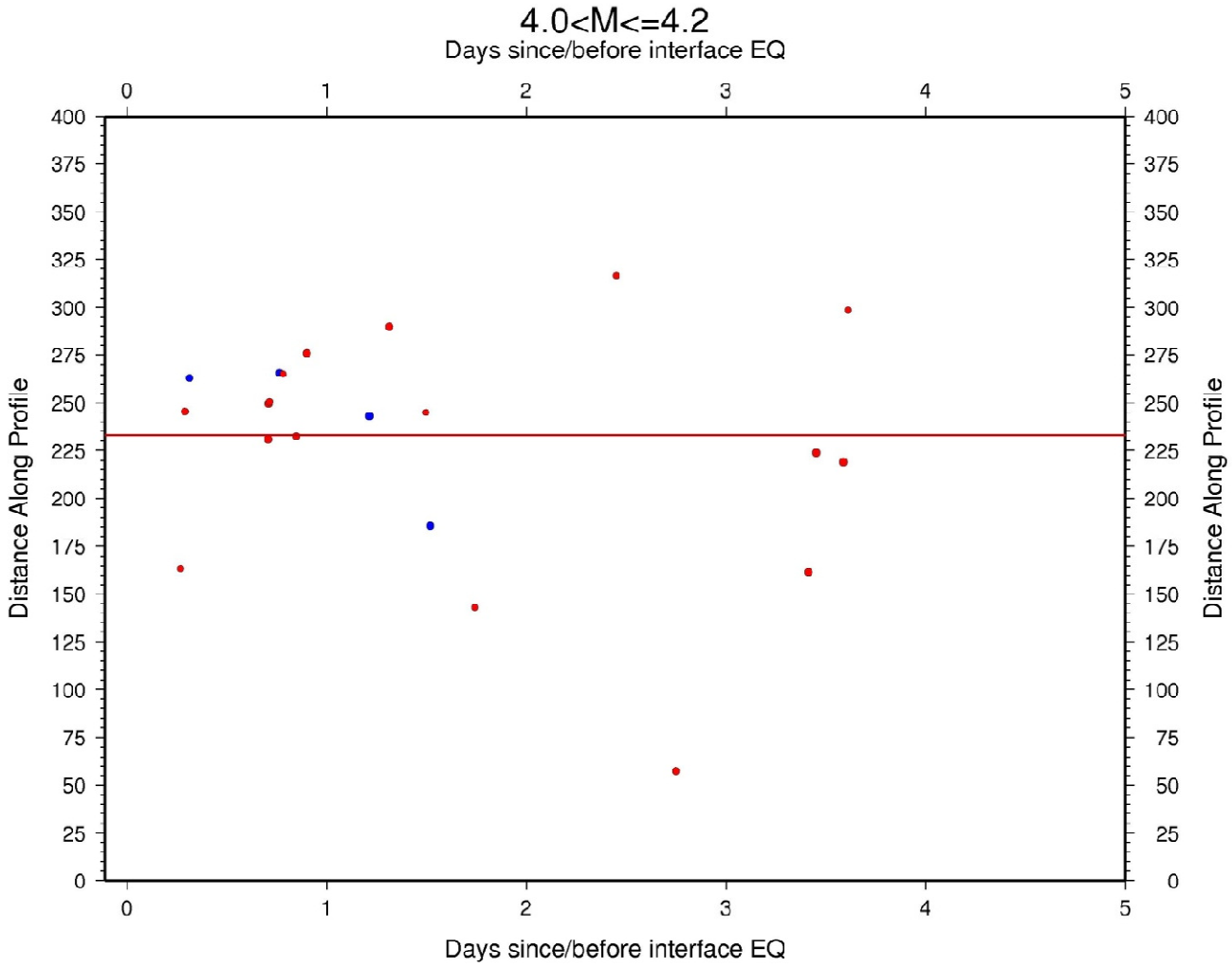


**Figure 23: Spatial and temporal plot of aftershocks with unknown focal mechanisms between magnitude 4.2 and 4.0. Red dots represent tensional and blue dots represent compressional events. The red line represents the Kuril Trench.**

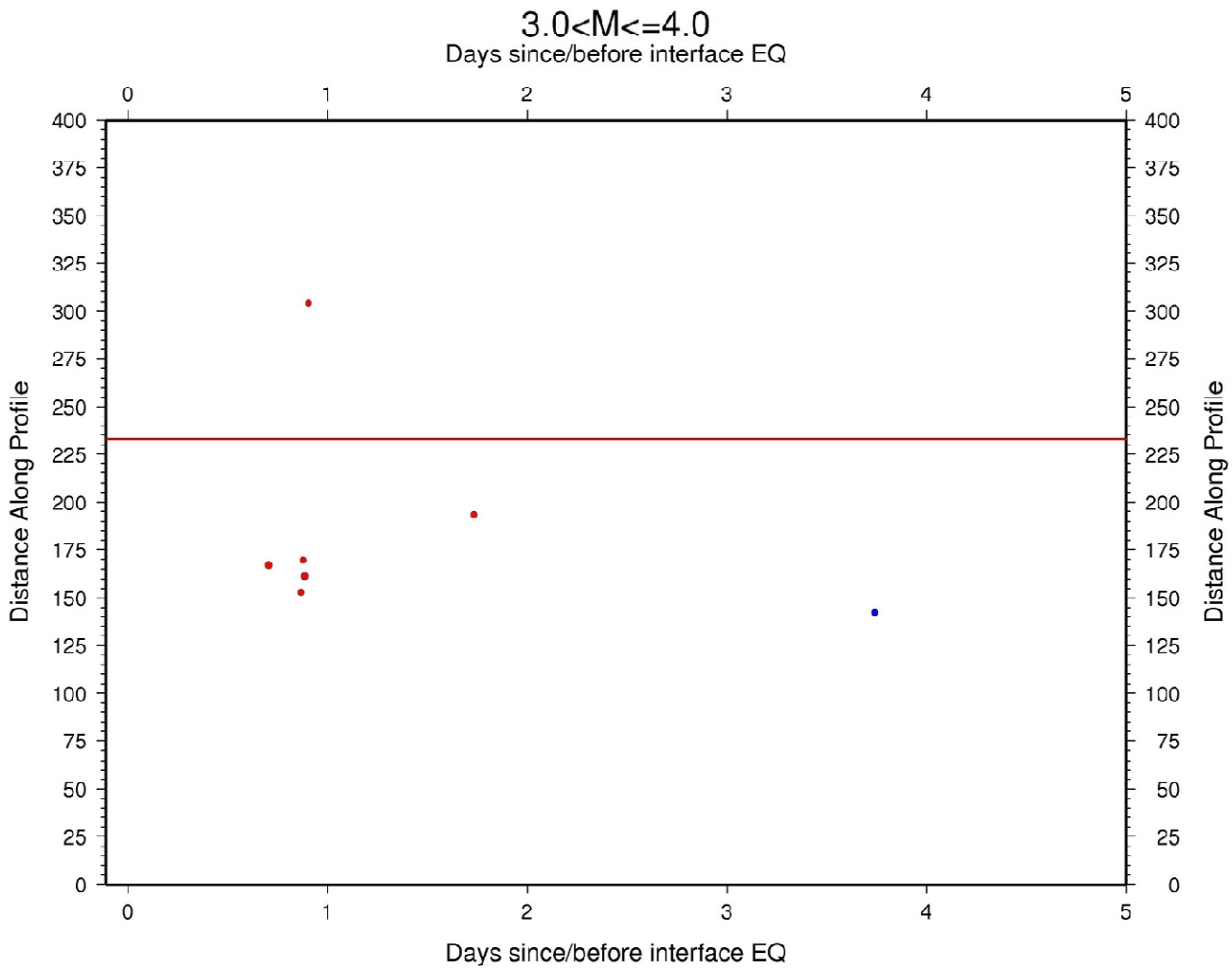


**Figure 24: Spatial and temporal plot of aftershocks with unknown focal mechanisms between magnitude 4.0 and 3.0. Red dots represent tensional and blue dots represent compressional events. The red line represents the Kuril Trench.**

# APPENDIX B – Global CMT Data And Classification

| GlobalCMT Data | | | | | | | Cross Correlation Values | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Date | C/T | Origin Time | Mag | Depth | Latitude | Longitude | Time | Tensional | Time | Compressional |
| 2006-11-15 | C | 11:15:08 | 8.3 | 13.5 | 46.71 | 154.33 | 11:14:12 | -0.117 | 11:15:35 | 0.478 |
| 2006-11-15 | T | 11:41:00 | 6.7 | 23.3 | 46.47 | 154.83 | 11:41:24 | 0.303 | 11:40:47 | 0.038 |
| 2006-11-15 | T | 19:25:30 | 6.0 | 31.3 | 47.11 | 155.14 | 19:24:31 | 0.268 | 19:25:29 | -0.178 |
| 2006-11-15 | C | 21:22:25 | 5.9 | 22.9 | 47.22 | 154.56 | 21:20:37 | -0.157 | 21:22:14 | 0.723 |
| 2006-11-16 | C | 04:57:16 | 5.1 | 41.9 | 47.05 | 153.70 | 04:55:10 | -0.045 | 04:56:46 | 0.382 |
| 2006-11-16 | T | 05:34:44 | 5.0 | 12.0 | 46.86 | 155.07 | 05:33:39 | 0.235 | 05:34:37 | -0.147 |
| 2006-11-16 | T | 06:20:25 | 6.0 | 12.0 | 46.40 | 154.68 | 06:19:32 | 0.560 | 06:21:07 | -0.084 |
| 2006-11-16 | T | 06:32:10 | 5.2 | 14.3 | 46.39 | 154.66 | 06:32:40 | 0.150 | 06:32:14 | -0.092 |
| 2006-11-16 | T | 06:57:09 | 5.1 | 21.7 | 45.98 | 153.45 | 06:56:39 | 0.258 | 06:56:49 | -0.075 |
| 2006-11-16 | T | 08:37:43 | 5.0 | 12.0 | 46.78 | 155.14 | 08:38:06 | 0.286 | 08:37:37 | 0.044 |
| 2006-11-16 | C | 10:36:16 | 4.9 | 16.1 | 47.43 | 154.65 | 10:35:44 | -0.077 | 10:36:24 | 0.255 |
| 2006-11-17 | T | 04:09:57 | 5.4 | 12.0 | 47.06 | 155.67 | 04:09:52 | 0.878 | 04:11:15 | -0.058 |
| 2006-11-17 | T | 06:33:53 | 5.5 | 12.0 | 47.09 | 155.78 | 06:33:49 | 1.000 | 06:35:11 | -0.042 |
| 2006-11-17 | C | 08:32:53 | 5.0 | 30.9 | 48.33 | 155.92 | 08:31:34 | -0.009 | 08:33:09 | 0.317 |
| 2006-11-17 | T | 09:58:15 | 5.1 | 12.0 | 46.91 | 155.24 | 09:57:31 | 0.345 | 09:58:12 | -0.015 |
| 2006-11-17 | T | 13:48:18 | 5.0 | 17.5 | 46.31 | 154.61 | 13:47:23 | 0.229 | 13:48:59 | 0.008 |
| 2006-11-17 | T | 17:13:03 | 4.8 | 14.1 | 46.90 | 155.27 | 17:12:17 | 0.149 | 17:12:17 | -0.030 |
| 2006-11-18 | T | 00:21:46 | 5.1 | 12.0 | 47.04 | 155.29 | 00:21:55 | 0.309 | 00:21:43 | 0.142 |
| 2006-11-18 | T | 00:57:07 | 4.8 | 12.0 | 47.01 | 155.20 | 00:57:05 | 0.219 | 00:57:18 | -0.096 |
| 2006-11-18 | T | 02:35:39 | 5.2 | 12.0 | 47.16 | 155.57 | 02:35:19 | 0.478 | 02:35:55 | -0.072 |
| 2006-11-18 | C | 08:51:00 | 5.1 | 28.3 | 48.15 | 155.37 | 08:49:42 | 0.020 | 08:51:04 | 0.499 |
| 2006-11-18 | T | 12:05:34 | 4.9 | 21.1 | 47.20 | 155.16 | 12:04:49 | 0.198 | 12:06:24 | 0.018 |
| 2006-11-18 | C | 18:54:42 | 4.8 | 20.0 | 46.33 | 153.58 | 18:52:36 | -0.080 | 18:54:13 | 0.427 |
| 2006-11-19 | T | 15:16:56 | 5.3 | 12.0 | 46.94 | 155.08 | 15:16:07 | 0.171 | 15:17:42 | 0.007 |

# APPENDIX C – NEIC Data And Classification

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Date | Time | Latitude | Longitude | Depth (km) | Magnitude | Time | CCC | Time | CCC | Classification |
| 2006-11-15 | 11034 | 48.73 | 155.34 | 28 | 4.5 | Could not be correlated | | | | U |
| 2006-11-15 | 111334 | 46.48 | 153.3 | 10 | 5 | 11:13:46 | 0.343 | 11:13:59 | 0.302 | U |
| 2006-11-15 | 115256 | 47.36 | 154.41 | 10 | 5 | 11:53:26 | 0.242 | 11:53:26 | 0.227 | U |
| 2006-11-15 | 115808 | 47.51 | 154.55 | 10 | 4.9 | 11:57:59 | 0.271 | 11:57:53 | 0.201 | U |
| 2006-11-15 | 120123 | 47.81 | 154.06 | 10 | 4.8 | 12:01:20 | 0.267 | 12:01:45 | 0.209 | U |
| 2006-11-15 | 121400 | 45.96 | 154.38 | 10 | 4.9 | 12:14:10 | 0.213 | 12:14:18 | 0.31 | U |
| 2006-11-15 | 122304 | 46.79 | 153.4 | 10 | 5 | 12:23:30 | 0.14 | 12:23:34 | 0.217 | C |
| 2006-11-15 | 124319 | 46.2 | 153.21 | 10 | 4.6 | 12:43:36 | 0.264 | 12:43:24 | 0.27 | U |
| 2006-11-15 | 125138 | 46.1 | 154.6 | 10 | 4.7 | 12:51:45 | 0.209 | 12:52:11 | 0.199 | U |
| 2006-11-15 | 130003 | 46.72 | 154.9 | 10 | 4.6 | 13:00:09 | 0.118 | 13:00:00 | 0.177 | C |
| 2006-11-15 | 130715 | 47.86 | 155.24 | 10 | 4.9 | 13:06:44 | 0.143 | 13:07:53 | 0.201 | U |
| 2006-11-15 | 130939 | 46.65 | 154.98 | 10 | 4.9 | 13:08:48 | 0.141 | 13:09:42 | 0.153 | U |
| 2006-11-15 | 131236 | 47.01 | 153.16 | 10 | 4.6 | 13:12:58 | 0.174 | 13:13:02 | 0.241 | U |
| 2006-11-15 | 131512 | 47.16 | 153.34 | 10 | 4.8 | 13:14:28 | 0.215 | 13:14:25 | 0.198 | U |
| 2006-11-15 | 131721 | 46.55 | 153.91 | 10 | 4.8 | 13:16:37 | 0.208 | 13:17:20 | 0.159 | U |
| 2006-11-15 | 131731 | 46.63 | 153.98 | 10 | 5 | 13:18:39 | 0.2 | 13:18:12 | 0.204 | U |
| 2006-11-15 | 132837 | 46.83 | 155.03 | 10 | 4.6 | 13:28:35 | 0.198 | 13:28:35 | 0.139 | U |
| 2006-11-15 | 133421 | 46.41 | 153.03 | 10 | 4.6 | 13:34:05 | 0.299 | 13:35:00 | 0.217 | U |
| 2006-11-15 | 133548 | 46.15 | 152.77 | 10 | 4.9 | 13:36:01 | 0.107 | 13:36:10 | 0.155 | U |
| 2006-11-15 | 134643 | 46.62 | 155 | 10 | 5 | 13:47:06 | 0.114 | 13:46:55 | 0.163 | U |
| 2006-11-15 | 134915 | 47.36 | 155.63 | 10 | 4.6 | 13:49:27 | 0.057 | 13:49:27 | 0.109 | C |
| 2006-11-15 | 135422 | 46.57 | 154.66 | 10 | 4.7 | 13:53:28 | 0.086 | 13:54:11 | 0.091 | U |
| 2006-11-15 | 140319 | 46.63 | 155.02 | 10 | 4.5 | 14:03:44 | 0.062 | 14:03:55 | 0.024 | T |
| 2006-11-15 | 140555 | 46.21 | 154.09 | 10 | 4.5 | 0:00:00 | 0 | 14:05:06 | 0.026 | U |
| 2006-11-15 | 140617 | 46.3 | 154.53 | 10 | 4.8 | 0:00:00 | 0 | 14:06:22 | 0.011 | U |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-15 | 140701 | 46.36 | 153.35 | 10 | 4.3 | 0:00:00 | 0 | 14:06:58 | 0.011 | U |
| 2006-11-15 | 140925 | 46.43 | 152.75 | 10 | 4 | 14:09:25 | 0.002 | 14:09:48 | 0.015 | C |
| 2006-11-15 | 140951 | 47.12 | 154.86 | 10 | 4.6 | 14:09:25 | 0.003 | 14:09:47 | 0.015 | C |
| 2006-11-15 | 141804 | 47.13 | 154.22 | 10 | 4.7 | Could not be correlated | | | | U |
| 2006-11-15 | 142025 | 46.62 | 154.82 | 10 | 4.8 | 14:21:04 | 0.029 | 0:00:00 | 0 | U |
| 2006-11-15 | 142658 | 46.6 | 155.15 | 10 | 4.7 | 14:26:44 | 0.039 | 14:26:11 | 0.088 | C |
| 2006-11-15 | 142759 | 46.6 | 152.84 | 10 | 4.9 | 14:28:18 | 0.079 | 14:27:40 | 0.047 | T |
| 2006-11-15 | 142919 | 46.88 | 153.07 | 10 | 4.6 | 14:29:17 | 0.089 | 14:29:31 | 0.176 | C |
| 2006-11-15 | 143418 | 46.82 | 153.12 | 10 | 4.3 | 14:33:49 | 0.042 | 14:34:04 | 0.151 | C |
| 2006-11-15 | 143822 | 47.18 | 152.5 | 10 | 4.1 | 14:37:50 | 0.06 | 14:38:18 | 0.066 | U |
| 2006-11-15 | 143858 | 47.44 | 154.34 | 10 | 4.6 | 14:39:01 | 0.052 | 14:39:10 | 0.104 | C |
| 2006-11-15 | 144002 | 47.22 | 154.7 | 10 | 4.4 | 14:39:40 | 0.049 | 14:40:37 | 0.154 | C |
| 2006-11-15 | 144314 | 47.24 | 153.72 | 10 | 4.4 | 14:43:27 | 0.073 | 14:43:16 | 0.129 | C |
| 2006-11-15 | 144615 | 47.37 | 155.35 | 10 | 4.4 | 14:45:43 | 0.059 | 14:45:36 | 0.138 | C |
| 2006-11-15 | 144821 | 46.31 | 154.34 | 10 | 4.5 | 14:48:11 | 0.034 | 14:48:29 | 0.089 | C |
| 2006-11-15 | 144954 | 46.28 | 153.29 | 10 | 4.6 | 14:49:32 | 0.051 | 14:49:23 | 0.189 | C |
| 2006-11-15 | 150408 | 46.74 | 154.87 | 10 | 4.3 | 15:04:41 | 0.043 | 15:04:48 | 0.057 | U |
| 2006-11-15 | 150533 | 46.39 | 153.68 | 10 | 4.3 | 15:04:41 | 0.042 | 15:04:51 | 0.058 | U |
| 2006-11-15 | 150819 | 46.3 | 154.08 | 10 | 4.4 | 15:08:30 | 0.085 | 15:08:34 | 0.057 | U |
| 2006-11-15 | 151038 | 46.58 | 153.14 | 10 | 4.7 | 15:10:37 | 0.042 | 15:10:06 | 0.155 | C |
| 2006-11-15 | 152323 | 46.74 | 154.68 | 10 | 4.6 | 15:23:32 | 0.147 | 15:23:08 | 0.138 | U |
| 2006-11-15 | 153117 | 46.22 | 153.03 | 10 | 4.9 | 15:31:54 | 0.071 | 15:30:34 | 0.101 | U |
| 2006-11-15 | 153855 | 47.6 | 154.01 | 10 | 4.4 | 15:39:41 | 0.1 | 15:39:00 | 0.078 | U |
| 2006-11-15 | 154153 | 47.75 | 153.42 | 10 | 4.3 | 15:41:48 | 0.057 | 15:41:38 | 0.068 | U |
| 2006-11-15 | 154218 | 46.58 | 155.41 | 10 | 4.5 | 15:42:36 | 0.042 | 15:42:46 | 0.118 | C |
| 2006-11-15 | 154405 | 46.33 | 152.96 | 10 | 4.4 | 15:44:23 | 0.032 | 15:43:58 | 0.037 | U |
| 2006-11-15 | 155258 | 46.24 | 154.71 | 10 | 4.7 | 15:53:17 | 0.047 | 15:52:52 | 0.078 | C |
| 2006-11-15 | 155415 | 47.24 | 155.45 | 10 | 4.7 | 15:54:00 | 0.047 | 15:55:25 | 0.059 | U |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-15 | 155513 | 47.34 | 154.3 | 10 | 4.9 | 15:55:15 | 0.051 | 15:55:25 | 0.059 | U |
| 2006-11-15 | 155829 | 46.39 | 154.77 | 10 | 4.3 | 15:57:57 | 0.012 | 15:58:40 | 0.049 | C |
| 2006-11-15 | 160204 | 47.28 | 153.3 | 10 | 4.6 | 16:01:42 | 0.072 | 16:02:30 | 0.064 | U |
| 2006-11-15 | 161942 | 47.45 | 154.7 | 10 | 4.6 | 16:19:21 | 0.029 | 16:19:45 | 0.073 | C |
| 2006-11-15 | 161958 | 46.49 | 154.49 | 10 | 4.6 | 16:19:22 | 0.029 | 16:19:45 | 0.072 | C |
| 2006-11-15 | 162025 | 46.44 | 153.46 | 10 | 4.8 | 16:21:22 | 0.042 | 16:21:33 | 0.039 | U |
| 2006-11-15 | 162632 | 47.03 | 155.3 | 10 | 4.7 | 16:27:00 | 0.012 | 16:27:16 | 0.038 | C |
| 2006-11-15 | 162835 | 47.03 | 154.72 | 10 | 4.3 | 16:28:00 | 0.043 | 16:27:16 | 0.037 | U |
| 2006-11-15 | 162922 | 48.06 | 155.11 | 10 | 4.3 | 16:30:09 | 0.03 | 16:29:07 | 0.023 | U |
| 2006-11-15 | 163425 | 47.56 | 154.43 | 10 | 4.9 | 16:34:01 | 0.029 | 16:34:25 | 0.028 | U |
| 2006-11-15 | 163940 | 47.38 | 154.37 | 10 | 4.5 | 0:00:00 | 0 | 16:39:11 | 0.107 | U |
| 2006-11-15 | 164039 | 46.66 | 154.92 | 10 | 4.8 | 16:40:37 | 0.029 | 16:40:26 | 0.011 | T |
| 2006-11-15 | 164926 | 47.04 | 155.27 | 10 | 4.6 | 16:49:10 | 0.046 | 16:49:48 | 0.001 | U |
| 2006-11-15 | 165617 | 47.71 | 154.38 | 10 | 4.5 | 16:55:26 | 0.002 | 16:56:47 | 0.008 | C |
| 2006-11-15 | 165704 | 47.4 | 153.89 | 10 | 4.6 | 16:57:06 | 0.012 | 16:58:20 | 0.005 | T |
| 2006-11-15 | 170412 | 47.14 | 155.36 | 10 | 4.6 | Could not be correlated | | | | U |
| 2006-11-15 | 170526 | 46.24 | 154.24 | 10 | 4.4 | 0:00:00 | 0 | 17:06:00 | 0.004 | U |
| 2006-11-15 | 170928 | 46.91 | 152.42 | 10 | 4.1 | Could not be correlated | | | | U |
| 2006-11-15 | 171152 | 46.98 | 155.26 | 10 | 4.5 | 17:11:13 | 0.016 | 17:11:39 | 0.045 | C |
| 2006-11-15 | 171360 | 46.51 | 153.77 | 10 | 4.8 | 17:14:06 | 0.014 | 17:13:37 | 0.081 | C |
| 2006-11-15 | 171919 | 46.99 | 154.72 | 10 | 4.5 | Could not be correlated | | | | U |
| 2006-11-15 | 172213 | 46.68 | 154.75 | 10 | 4.2 | Could not be correlated | | | | U |
| 2006-11-15 | 172851 | 46.39 | 153.03 | 10 | 4.5 | 17:28:20 | 0.068 | 17:28:21 | 0.025 | T |
| 2006-11-15 | 173002 | 46.69 | 154.77 | 10 | 4.6 | 17:29:08 | 0.022 | 17:29:58 | 0.062 | C |
| 2006-11-15 | 173036 | 46.61 | 152.91 | 10 | 4.8 | 0:00:00 | 0 | 17:29:08 | 0.021 | U |
| 2006-11-15 | 173236 | 46.46 | 153.54 | 10 | 4.7 | 17:32:14 | 0.037 | 17:32:50 | 0.015 | T |
| 2006-11-15 | 173414 | 47.36 | 154.84 | 10 | 4.6 | 0:00:00 | 0 | 17:34:05 | 0.025 | U |
| 2006-11-15 | 174139 | 46.31 | 153.06 | 10 | 4.1 | 17:42:04 | 0.054 | 17:42:21 | 0.033 | T |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Date | Time | Latitude | Longitude | Depth (km) | Magnitude | Time | CCC | Time | CCC | Classification |
| 2006-11-15 | 174303 | 46.42 | 154.58 | 10 | 4.5 | Could not be correlated | | | | U |
| 2006-11-15 | 174324 | 46.66 | 155.45 | 10 | 4.7 | Could not be correlated | | | | U |
| 2006-11-15 | 174507 | 46.88 | 154.93 | 10 | 4.6 | 17:45:55 | 0.094 | 17:46:29 | 0.033 | T |
| 2006-11-15 | 175137 | 45.12 | 147.79 | 10 | 4.2 | 17:51:23 | 0.057 | 0:00:00 | 0 | U |
| 2006-11-15 | 175305 | 46.55 | 155.19 | 10 | 4.3 | 17:53:18 | 0.023 | 17:52:51 | 0.039 | C |
| 2006-11-15 | 180255 | 46.38 | 153.48 | 10 | 4.7 | 18:02:41 | 0.069 | 18:03:49 | 0.049 | U |
| 2006-11-15 | 181133 | 46.43 | 154.54 | 10 | 4.2 | 18:11:46 | 0.072 | 18:11:24 | 0.039 | T |
| 2006-11-15 | 181213 | 47.62 | 153.6 | 10 | 4.3 | 18:11:27 | 0.039 | 18:12:09 | 0.032 | U |
| 2006-11-15 | 181238 | 47.36 | 152.76 | 10 | 4.6 | 18:12:37 | 0.025 | 18:12:54 | 0.029 | U |
| 2006-11-15 | 181823 | 46.57 | 154.91 | 10 | 4.3 | 18:19:33 | 0.081 | 18:19:16 | 0.028 | T |
| 2006-11-15 | 182026 | 46.74 | 154.99 | 10 | 4.6 | 18:20:53 | 0.079 | 18:20:29 | 0.026 | T |
| 2006-11-15 | 182211 | 46.85 | 154.76 | 10 | 4.5 | 18:22:17 | 0.091 | 18:22:07 | 0.048 | T |
| 2006-11-15 | 182330 | 46.67 | 154.72 | 10 | 4.7 | 18:23:30 | 0.069 | 18:23:16 | 0.042 | T |
| 2006-11-15 | 182434 | 47.13 | 153.27 | 10 | 4.8 | 18:24:56 | 0.052 | 18:24:07 | 0.103 | C |
| 2006-11-15 | 183840 | 47.01 | 155.24 | 10 | 4.9 | 18:38:04 | 0.059 | 18:38:46 | 0.043 | U |
| 2006-11-15 | 184119 | 47.08 | 155.58 | 10 | 4.6 | 18:41:53 | 0.103 | 18:41:13 | 0.018 | T |
| 2006-11-15 | 184340 | 46.93 | 155.01 | 10 | 4.5 | 18:44:19 | 0.031 | 18:43:16 | 0.054 | C |
| 2006-11-15 | 184451 | 46.85 | 155.32 | 10 | 4.2 | 18:44:50 | 0.042 | 18:44:15 | 0.077 | C |
| 2006-11-15 | 185456 | 46.35 | 154.17 | 10 | 4.6 | 18:55:12 | 0.067 | 18:54:13 | 0.031 | T |
| 2006-11-15 | 185607 | 46.04 | 154.28 | 10 | 4.9 | 18:55:12 | 0.022 | 18:55:35 | 0.027 | U |
| 2006-11-15 | 190132 | 46.97 | 155.63 | 10 | 4.7 | 19:01:43 | 0.031 | 19:01:51 | 0.025 | U |
| 2006-11-15 | 190811 | 46.85 | 152.09 | 10 | 4.7 | 19:07:49 | 0.073 | 19:07:58 | 0.03 | T |
| 2006-11-15 | 191220 | 47.65 | 154.38 | 10 | 3.8 | Could not be correlated | | | | U |
| 2006-11-15 | 191251 | 46.39 | 154.32 | 10 | 4.6 | Could not be correlated | | | | U |
| 2006-11-15 | 191904 | 46.56 | 153.4 | 10 | 4.6 | 19:18:51 | 0.063 | 19:19:26 | 0.021 | T |
| 2006-11-15 | 191958 | 47.05 | 155.04 | 10 | 4.8 | 19:19:11 | 0.077 | 19:20:05 | 0.018 | T |
| 2006-11-15 | 193314 | 47.02 | 155.13 | 10 | 4.7 | 19:33:18 | 0.083 | 19:32:42 | 0.077 | U |
| 2006-11-15 | 193416 | 46.31 | 154.82 | 10 | 4.7 | 19:34:33 | 0.063 | 19:34:23 | 0.033 | T |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-15 | 193529 | 46.81 | 153.11 | 10 | 4.9 | 19:35:59 | 0.075 | 0:00:00 | 0 | U |
| 2006-11-15 | 193702 | 46.51 | 154.86 | 10 | 5 | 19:37:32 | 0.081 | 19:37:51 | 0.033 | T |
| 2006-11-15 | 193920 | 46.49 | 154.93 | 10 | 4.8 | 19:39:17 | 0.077 | 19:39:54 | 0.069 | U |
| 2006-11-15 | 194125 | 46.12 | 154.62 | 10 | 4.9 | 19:41:10 | 0.075 | 19:41:27 | 0.03 | T |
| 2006-11-15 | 200160 | 47.04 | 152.41 | 10 | 4.3 | 20:00:30 | 0.061 | 20:01:15 | 0.022 | T |
| 2006-11-15 | 200353 | 46.83 | 154.5 | 10 | 4.4 | 20:03:51 | 0.058 | 20:03:36 | 0.025 | T |
| 2006-11-15 | 200905 | 48.11 | 155.15 | 10 | 4.4 | 20:09:25 | 0.039 | 20:09:31 | 0.041 | U |
| 2006-11-15 | 201909 | 46.86 | 155.31 | 10 | 4.9 | 20:19:19 | 0.068 | 20:20:00 | 0.022 | T |
| 2006-11-15 | 202719 | 47.1 | 155.18 | 10 | 4.3 | Could not be correlated | | | | U |
| 2006-11-15 | 202805 | 47.02 | 155.16 | 10 | 4.7 | 20:28:21 | 0.02 | 20:27:57 | 0.035 | C |
| 2006-11-15 | 203835 | 47.29 | 153.97 | 10 | 4.5 | 20:38:03 | 0.088 | 20:38:23 | 0.061 | U |
| 2006-11-15 | 204540 | 46.59 | 154.68 | 10 | 4.5 | 20:45:32 | 0.074 | 20:44:55 | 0.035 | T |
| 2006-11-15 | 204821 | 46.96 | 155.06 | 10 | 4.6 | 20:48:29 | 0.075 | 20:48:14 | 0.045 | T |
| 2006-11-15 | 205401 | 47.28 | 154.06 | 10 | 4.7 | 20:54:37 | 0.101 | 20:53:22 | 0.039 | T |
| 2006-11-15 | 205649 | 46.86 | 155.05 | 10 | 5 | 20:57:06 | 0.078 | 20:56:02 | 0.063 | U |
| 2006-11-15 | 205829 | 47.42 | 153.93 | 10 | 4.8 | 20:58:38 | 0.071 | 20:58:18 | 0.184 | C |
| 2006-11-15 | 210512 | 46.77 | 152.99 | 10 | 4.4 | 21:05:16 | 0.087 | 21:05:00 | 0.032 | T |
| 2006-11-15 | 210744 | 46.1 | 152.85 | 10 | 4.6 | Could not be correlated | | | | U |
| 2006-11-15 | 210941 | 48.29 | 154.08 | 10 | 4.6 | Could not be correlated | | | | U |
| 2006-11-15 | 211454 | 47.03 | 154.16 | 10 | 4.6 | 21:14:32 | 0.061 | 21:14:26 | 0.059 | U |
| 2006-11-15 | 212039 | 47.33 | 154.98 | 10 | 4.7 | 21:20:26 | 0.593 | 21:19:57 | 0.205 | T |
| 2006-11-15 | 214535 | 46.33 | 154.52 | 10 | 4.6 | 21:45:55 | 0.232 | 21:45:52 | 0.254 | U |
| 2006-11-15 | 220423 | 45.9 | 154.37 | 10 | 4.3 | 22:04:09 | 0.183 | 22:04:02 | 0.202 | U |
| 2006-11-15 | 220602 | 47.1 | 152.94 | 6 | 4.3 | 22:05:51 | 0.153 | 22:06:30 | 0.178 | U |
| 2006-11-15 | 221038 | 46.97 | 154.96 | 10 | 4.9 | 22:10:24 | 0.185 | 22:10:15 | 0.158 | U |
| 2006-11-15 | 221651 | 46.93 | 154.83 | 10 | 4.7 | 22:17:38 | 0.177 | 22:16:57 | 0.111 | T |
| 2006-11-15 | 221842 | 46.51 | 155.32 | 10 | 4.7 | 21:18:49 | 0.093 | 22:19:00 | 0.114 | U |
| 2006-11-15 | 222306 | 46.45 | 152.86 | 10 | 4.5 | 22:22:35 | 0.111 | 22:23:23 | 0.07 | T |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Date | Time | Latitude | Longitude | Depth (km) | Magnitude | Time | CCC | Time | CCC | Classification |
| 2006-11-15 | 222748 | 47.53 | 155.09 | 10 | 4.7 | 22:28:01 | 0.056 | 22:27:50 | 0.052 | U |
| 2006-11-15 | 223104 | 46.88 | 155.23 | 10 | 4.6 | 22:31:20 | 0.047 | 22:31:32 | 0.044 | U |
| 2006-11-15 | 223342 | 46.15 | 154.36 | 10 | 4.4 | 22:33:20 | 0.055 | 22:33:22 | 0.047 | U |
| 2006-11-15 | 224045 | 47.41 | 153.96 | 10 | 4.8 | 22:40:43 | 0.048 | 22:41:24 | 0.048 | U |
| 2006-11-15 | 224158 | 46.76 | 155.12 | 10 | 4.5 | 22:40:42 | 0.048 | 22:41:26 | 0.047 | U |
| 2006-11-15 | 224432 | 48.07 | 155.05 | 10 | 4.4 | 22:43:51 | 0.086 | 22:44:28 | 0.053 | T |
| 2006-11-15 | 224513 | 46.35 | 153.02 | 10 | 4.9 | 22:45:38 | 0.038 | 22:45:42 | 0.035 | U |
| 2006-11-15 | 225033 | 46.97 | 155.35 | 10 | 5 | 22:50:01 | 0.029 | 22:50:35 | 0.032 | U |
| 2006-11-15 | 225314 | 46.5 | 154.75 | 10 | 4.9 | 22:52:57 | 0.05 | 22:53:53 | 0.04 | U |
| 2006-11-15 | 225532 | 47.12 | 155.1 | 10 | 4.4 | 22:55:06 | 0.052 | 22:53:54 | 0.04 | U |
| 2006-11-15 | 230241 | 46.43 | 154.77 | 10 | 4.4 | 23:02:54 | 0.071 | 23:02:05 | 0.019 | T |
| 2006-11-15 | 230336 | 46.53 | 154.83 | 10 | 4.9 | 23:02:53 | 0.071 | 23:03:31 | 0.029 | T |
| 2006-11-15 | 230735 | 47.85 | 153.75 | 10 | 4.6 | 23:07:40 | 0.041 | 23:07:22 | 0.017 | T |
| 2006-11-15 | 230858 | 46.87 | 155.31 | 10 | 4.8 | 23:08:50 | 0.042 | 23:08:18 | 0.015 | T |
| 2006-11-15 | 231201 | 45.7 | 154.19 | 10 | 4.4 | 23:12:57 | 0.031 | 23:11:50 | 0.095 | C |
| 2006-11-15 | 231946 | 47.01 | 155.52 | 10 | 4.4 | 23:19:41 | 0.017 | 23:19:52 | 0.024 | U |
| 2006-11-15 | 232441 | 47.43 | 155.05 | 10 | 4.4 | Could not be correlated | | | | U |
| 2006-11-15 | 233336 | 46.71 | 155.37 | 10 | 4.4 | Could not be correlated | | | | U |
| 2006-11-15 | 233358 | 46.67 | 154.81 | 10 | 4.6 | Could not be correlated | | | | U |
| 2006-11-15 | 233557 | 46.56 | 153.33 | 10 | 4.2 | 23:35:57 | 0.044 | 23:36:41 | 0.027 | T |
| 2006-11-15 | 233907 | 47.28 | 153.6 | 10 | 4.7 | 23:38:34 | 0.051 | 23:38:42 | 0.051 | U |
| 2006-11-15 | 234120 | 46.79 | 153.01 | 10 | 4.6 | 23:41:38 | 0.042 | 23:41:48 | 0.023 | T |
| 2006-11-16 | 21.21 | 46.85 | 152.95 | 10 | 4.4 | 23:56:46 | 0.058 | 23:59:47 | 0.03 | T |
| 2006-11-16 | 616.97 | 47.24 | 153.46 | 10 | 4.6 | 0:06:38 | 0.009 | 0:06:09 | 0.015 | C |
| 2006-11-16 | 733.67 | 45.8 | 153.61 | 10 | 4.4 | Could not be correlated | | | | U |
| 2006-11-16 | 3254.4 | 47.23 | 153.89 | 10 | 4.8 | 0:31:55 | 0.015 | 0:32:33 | 0.296 | C |
| 2006-11-16 | 3538.8 | 46.32 | 154.35 | 10 | 4.9 | Could not be correlated | | | | U |
| 2006-11-16 | 3803.2 | 46.84 | 155.07 | 10 | 4.8 | 0:37:53 | 0.092 | 0:39:15 | 0.134 | U |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-16 | 10002 | 46.99 | 155.14 | 10 | 4.3 | 0:59:28 | 0.025 | 1:00:13 | 0.038 | C |
| 2006-11-16 | 10056 | 46.78 | 154.79 | 10 | 4.4 | 1:00:54 | 0.011 | 1:01:48 | 0.015 | U |
| 2006-11-16 | 10421 | 46.7 | 154.94 | 10 | 4.2 | 1:04:22 | 0.015 | 1:04:08 | 0.011 | U |
| 2006-11-16 | 11025 | 47.31 | 153.15 | 10 | 4.7 | 1:10:34 | 0.015 | 1:10:36 | 0.029 | C |
| 2006-11-16 | 11832 | 47.35 | 153.01 | 10 | 4.9 | Could not be correlated | | | | U |
| 2006-11-16 | 12559 | 46.82 | 154.69 | 10 | 4.3 | Could not be correlated | | | | U |
| 2006-11-16 | 12836 | 46.39 | 153.11 | 10 | 4.8 | 1:28:18 | 0.019 | 1:28:26 | 0.028 | U |
| 2006-11-16 | 13545 | 47.01 | 154.79 | 10 | 4.5 | 1:36:29 | 0.095 | 1:35:29 | 0.028 | U |
| 2006-11-16 | 13708 | 46.88 | 155.12 | 10 | 4.9 | 1:37:26 | 0.039 | 1:37:11 | 0.047 | U |
| 2006-11-16 | 14903 | 46.3 | 154.14 | 10 | 4.8 | 1:49:36 | 0.019 | 1:49:40 | 0.019 | U |
| 2006-11-16 | 20245 | 45.98 | 154.07 | 10 | 4.4 | 2:02:54 | 0.022 | 2:02:31 | 0.037 | C |
| 2006-11-16 | 20515 | 46.09 | 152.89 | 10 | 4.1 | 2:05:32 | 0.013 | 2:05:15 | 0.015 | U |
| 2006-11-16 | 20540 | 46.18 | 155.95 | 10 | 4.6 | 2:04:36 | 0.03 | 2:05:58 | 0.021 | U |
| 2006-11-16 | 20808 | 46.37 | 154.89 | 10 | 4.2 | 2:08:32 | 0.009 | 2:08:05 | 0.012 | U |
| 2006-11-16 | 21027 | 46.84 | 155.05 | 10 | 4.4 | 2:10:28 | 0.008 | 2:09:38 | 0.015 | C |
| 2006-11-16 | 21247 | 45.72 | 154.64 | 10 | 4.1 | 2:12:04 | 0.022 | 2:12:39 | 0.027 | U |
| 2006-11-16 | 21700 | 46.54 | 154.6 | 10 | 4.4 | 2:16:35 | 0.008 | 2:17:22 | 0.031 | C |
| 2006-11-16 | 22229 | 46.08 | 154.08 | 10 | 4.1 | Could not be correlated | | | | U |
| 2006-11-16 | 22610 | 46.53 | 153.22 | 10 | 4.6 | 2:26:40 | 0.01 | 2:25:41 | 0.057 | C |
| 2006-11-16 | 23211 | 46.93 | 155.24 | 10 | 4.6 | 2:32:10 | 0.021 | 2:31:54 | 0.014 | T |
| 2006-11-16 | 23334 | 46.44 | 154.79 | 10 | 4.2 | 2:33:05 | 0.023 | 2:33:06 | 0.031 | U |
| 2006-11-16 | 23908 | 46.58 | 153.17 | 10 | 4.2 | 2:39:05 | 0.04 | 2:38:58 | 0.007 | T |
| 2006-11-16 | 23942 | 47.06 | 153.47 | 10 | 4 | 2:39:42 | 0.026 | 2:39:40 | 0.025 | U |
| 2006-11-16 | 30107 | 46.28 | 154.3 | 10 | 4.2 | 3:01:54 | 0.034 | 3:00:41 | 0.018 | T |
| 2006-11-16 | 30507 | 46.74 | 154.55 | 10 | 4.5 | 3:05:15 | 0.045 | 3:04:51 | 0.051 | U |
| 2006-11-16 | 31713 | 46.27 | 154.54 | 10 | 4.7 | 3:17:15 | 0.003 | 3:18:19 | 0.079 | C |
| 2006-11-16 | 32420 | 46.87 | 153.24 | 10 | 4.7 | Could not be correlated | | | | U |
| 2006-11-16 | 32743 | 45.81 | 154.19 | 10 | 4.2 | 3:27:35 | 0.003 | 3:27:42 | 0.036 | C |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-16 | 33038 | 46.88 | 153.61 | 10 | 4.6 | 3:30:13 | 0.012 | 3:30:18 | 0.105 | C |
| 2006-11-16 | 33139 | 46.48 | 153.66 | 10 | 4.8 | 3:30:46 | 0.065 | 3:31:00 | 0.034 | T |
| 2006-11-16 | 34022 | 46.61 | 154.93 | 10 | 4.6 | 3:39:55 | 0.022 | 3:40:16 | 0.027 | U |
| 2006-11-16 | 34756 | 47.37 | 155.33 | 10 | 4.3 | 3:47:41 | 0.011 | 3:47:48 | 0.054 | C |
| 2006-11-16 | 34828 | 46.51 | 153.03 | 10 | 4.4 | 3:48:10 | 0.065 | 3:48:23 | 0.036 | T |
| 2006-11-16 | 35008 | 46.4 | 154.29 | 10 | 4.1 | 3:50:04 | 0.034 | 3:50:04 | 0.023 | U |
| 2006-11-16 | 35054 | 47.53 | 154.02 | 10 | 4.1 | 3:51:27 | 0.022 | 3:50:37 | 0.031 | U |
| 2006-11-16 | 35735 | 47.01 | 154.55 | 10 | 4 | 3:57:35 | 0.015 | 3:57:29 | 0.02 | U |
| 2006-11-16 | 40951 | 46.99 | 153.87 | 10 | 4 | 4:09:52 | 0.867 | 4:09:27 | 0.022 | T |
| 2006-11-16 | 41055 | 47.44 | 153.91 | 10 | 4 | 0:00:00 | 0 | 4:11:14 | 0.439 | U |
| 2006-11-16 | 41349 | 46.93 | 154.87 | 10 | 4.2 | 4:13:56 | 0.119 | 4:13:47 | 0.014 | T |
| 2006-11-16 | 41541 | 46.19 | 154.34 | 10 | 4.2 | 4:15:23 | 0.227 | 4:15:00 | 0.022 | T |
| 2006-11-16 | 42105 | 46.74 | 154.98 | 10 | 4.1 | 4:21:06 | 0.084 | 4:21:05 | 0.008 | T |
| 2006-11-16 | 43201 | 46.85 | 154.72 | 10 | 4.7 | Could not be correlated | | | | U |
| 2006-11-16 | 43500 | 46.91 | 154.76 | 10 | 4.4 | 4:34:50 | 0.063 | 4:35:50 | 0.088 | U |
| 2006-11-16 | 43550 | 46.88 | 154.85 | 10 | 4.8 | 4:36:02 | 0.045 | 4:35:49 | 0.091 | C |
| 2006-11-16 | 44115 | 46.68 | 154.66 | 10 | 4.5 | 4:41:26 | 0.085 | 4:40:47 | 0.041 | T |
| 2006-11-16 | 44229 | 47.38 | 155.06 | 10 | 5 | 4:42:39 | 0.078 | 4:43:04 | 0.132 | C |
| 2006-11-16 | 44653 | 46.69 | 154.53 | 10 | 4.7 | 4:46:57 | 0.069 | 0:00:00 | 0 | U |
| 2006-11-16 | 45243 | 46.28 | 154.23 | 10 | 4.8 | 4:52:03 | 0.037 | 4:52:11 | 0.095 | C |
| 2006-11-16 | 50929 | 47 | 153.96 | 10 | 4.1 | 5:09:13 | 0.042 | 5:09:51 | 0.025 | T |
| 2006-11-16 | 51118 | 46.75 | 154.88 | 10 | 4.1 | Could not be correlated | | | | U |
| 2006-11-16 | 51412 | 45.79 | 154.16 | 10 | 4.3 | 5:14:02 | 0.055 | 5:13:55 | 0.038 | U |
| 2006-11-16 | 51543 | 46.06 | 154.37 | 10 | 4.3 | 5:15:42 | 0.03 | 5:15:51 | 0.052 | C |
| 2006-11-16 | 51801 | 46.47 | 154.33 | 10 | 4.3 | Could not be correlated | | | | U |
| 2006-11-16 | 52032 | 46.9 | 155.57 | 10 | 4.1 | 5:20:05 | 0.057 | 0:00:00 | 0 | U |
| 2006-11-16 | 52123 | 46.24 | 154.32 | 10 | 4 | 5:21:18 | 0.032 | 5:21:14 | 0.019 | T |
| 2006-11-16 | 52152 | 47.15 | 155.56 | 10 | 4.5 | 0:00:00 | 0 | 5:21:42 | 0.018 | U |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-16 | 53014 | 46.09 | 153.09 | 10 | 3.9 | Could not be correlated | | | | U |
| 2006-11-16 | 53135 | 46.76 | 155.26 | 10 | 4.1 | 5:31:59 | 0.076 | 5:32:05 | 0.142 | C |
| 2006-11-16 | 54053 | 45.66 | 154.8 | 10 | 4.3 | 5:40:02 | 0.074 | 5:40:25 | 0.096 | U |
| 2006-11-16 | 54313 | 45.68 | 154.13 | 10 | 4.9 | 5:43:09 | 0.115 | 5:43:48 | 0.069 | T |
| 2006-11-16 | 55602 | 46.87 | 155.33 | 10 | 4.3 | 5:56:56 | 0.083 | 5:56:09 | 0.032 | T |
| 2006-11-16 | 55912 | 46.87 | 155.38 | 10 | 4.1 | 5:58:12 | 0.091 | 5:59:24 | 0.058 | T |
| 2006-11-16 | 60914 | 46.78 | 154.61 | 10 | 4.7 | 6:09:20 | 0.039 | 6:09:08 | 0.059 | C |
| 2006-11-16 | 64621 | 46.21 | 154.33 | 10 | 4.7 | 6:46:21 | 0.152 | 6:46:23 | 0.245 | C |
| 2006-11-16 | 70208 | 46.63 | 153.32 | 10 | 4.5 | 7:02:40 | 0.058 | 7:02:45 | 0.123 | C |
| 2006-11-16 | 70723 | 47.37 | 153.59 | 10 | 4 | 7:07:04 | 0.13 | 7:07:08 | 0.143 | U |
| 2006-11-16 | 70813 | 46.43 | 155.39 | 10 | 4.6 | 7:09:18 | 0.28 | 7:08:49 | 0.09 | T |
| 2006-11-16 | 71438 | 47.19 | 155.36 | 10 | 4.9 | 7:14:34 | 0.277 | 7:13:49 | 0.182 | T |
| 2006-11-16 | 71649 | 47.22 | 154.15 | 10 | 4.8 | 7:15:30 | 0.17 | 7:16:10 | 0.191 | U |
| 2006-11-16 | 71958 | 47.49 | 154.9 | 10 | 4 | 7:19:47 | 0.14 | 7:20:30 | 0.153 | U |
| 2006-11-16 | 73605 | 47.01 | 154.99 | 10 | 4.1 | 7:36:07 | 0.164 | 7:36:05 | 0.088 | T |
| 2006-11-16 | 80204 | 47.68 | 154.43 | 10 | 4 | 8:02:34 | 0.131 | 8:02:17 | 0.057 | T |
| 2006-11-16 | 80301 | 47.09 | 155.03 | 10 | 4.8 | 8:03:33 | 0.129 | 8:03:55 | 0.091 | U |
| 2006-11-16 | 80711 | 47.1 | 155.76 | 10 | 4.5 | 8:07:16 | 0.095 | 8:06:32 | 0.065 | U |
| 2006-11-16 | 81004 | 46.78 | 153.43 | 10 | 4.3 | 8:09:44 | 0.164 | 8:09:53 | 0.072 | T |
| 2006-11-16 | 81542 | 47.54 | 155.46 | 10 | 4.6 | 8:15:39 | 0.078 | 8:15:13 | 0.095 | U |
| 2006-11-16 | 81636 | 46.87 | 155.36 | 10 | 4.4 | Could not be correlated | | | | U |
| 2006-11-16 | 81741 | 47.25 | 154.21 | 10 | 3.9 | 8:17:19 | 0.073 | 8:17:54 | 0.037 | T |
| 2006-11-16 | 82055 | 46.9 | 155.51 | 10 | 4.6 | 8:20:11 | 0.099 | 8:20:51 | 0.051 | T |
| 2006-11-16 | 82408 | 47.57 | 154.07 | 10 | 4.8 | 8:25:05 | 0.095 | 8:23:58 | 0.104 | U |
| 2006-11-16 | 82921 | 46.44 | 153.17 | 10 | 3.9 | 8:29:53 | 0.092 | 8:29:27 | 0.038 | T |
| 2006-11-16 | 84255 | 46.77 | 155.43 | 10 | 4.2 | 8:42:43 | 0.105 | 8:43:08 | 0.079 | U |
| 2006-11-16 | 85244 | 46.94 | 155.64 | 10 | 4.2 | 8:51:55 | 0.173 | 8:53:05 | 0.107 | T |
| 2006-11-16 | 85460 | 46.81 | 152.99 | 10 | 3.9 | 8:54:39 | 0.089 | 8:55:04 | 0.094 | U |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-16 | 85743 | 46.18 | 155.23 | 10 | 3.7 | 8:58:14 | 0.135 | 8:57:43 | 0.064 | T |
| 2006-11-16 | 90131 | 47.88 | 154.18 | 10 | 4.3 | 9:01:58 | 0.092 | 9:01:46 | 0.074 | U |
| 2006-11-16 | 90513 | 47.5 | 155 | 10 | 4 | 9:05:43 | 0.063 | 9:04:46 | 0.047 | U |
| 2006-11-16 | 91112 | 47.14 | 153.04 | 10 | 4.5 | 9:10:47 | 0.073 | 9:11:46 | 0.038 | T |
| 2006-11-16 | 91422 | 47.01 | 153.46 | 10 | 4.8 | 9:13:26 | 0.127 | 9:14:04 | 0.131 | U |
| 2006-11-16 | 92140 | 47.06 | 155.3 | 10 | 4.7 | 9:21:24 | 0.106 | 9:21:05 | 0.067 | T |
| 2006-11-16 | 92944 | 46.69 | 154.71 | 10 | 4.5 | 9:30:09 | 0.11 | 9:29:55 | 0.056 | T |
| 2006-11-16 | 94403 | 47.16 | 153.99 | 10 | 4.8 | 9:43:16 | 0.017 | 9:43:57 | 0.029 | C |
| 2006-11-16 | 94909 | 47.01 | 155.07 | 10 | 3.8 | Could not be correlated | | | | U |
| 2006-11-16 | 103012 | 46.06 | 154.62 | 10 | 4.6 | Could not be correlated | | | | U |
| 2006-11-16 | 103333 | 46.7 | 153.14 | 10 | 4.4 | 10:33:49 | 0.229 | 10:34:26 | 0.089 | T |
| 2006-11-16 | 104809 | 47.03 | 155.42 | 10 | 4.7 | 10:47:55 | 0.185 | 10:47:30 | 0.086 | T |
| 2006-11-16 | 105448 | 46.92 | 155.02 | 10 | 4.6 | Could not be correlated | | | | U |
| 2006-11-16 | 111808 | 47.4 | 155.41 | 10 | 4.7 | 11:18:04 | 0.166 | 11:19:13 | 0.099 | T |
| 2006-11-16 | 114836 | 46.71 | 154.73 | 10 | 4.8 | 11:48:45 | 0.059 | 11:48:34 | 0.118 | C |
| 2006-11-16 | 122742 | 46.22 | 152.97 | 10 | 4.5 | 0:00:00 | 0 | 12:27:13 | 0.052 | U |
| 2006-11-16 | 123551 | 46.63 | 153.7 | 10 | 5 | 12:35:38 | 0.19 | 12:35:37 | 0.19 | U |
| 2006-11-16 | 125849 | 46.65 | 155.32 | 10 | 4.7 | 12:58:32 | 0.048 | 0:00:00 | 0 | U |
| 2006-11-16 | 131939 | 46.85 | 153.5 | 10 | 4.5 | Could not be correlated | | | | U |
| 2006-11-16 | 132117 | 46.61 | 154.51 | 10 | 4.8 | 13:32:50 | 0.15 | 13:20:54 | 0.085 | T |
| 2006-11-16 | 133432 | 47.75 | 154.54 | 10 | 5 | 13:33:51 | 0.142 | 13:34:06 | 0.201 | U |
| 2006-11-16 | 141348 | 46.5 | 155.44 | 10 | 4.6 | 14:13:31 | 0.013 | 14:13:39 | 0.027 | C |
| 2006-11-16 | 141632 | 46.55 | 154.85 | 10 | 4.7 | 14:16:50 | 0.007 | 14:16:50 | 0.031 | C |
| 2006-11-16 | 143258 | 46.22 | 154.52 | 10 | 4.5 | Could not be correlated | | | | U |
| 2006-11-16 | 143928 | 46.82 | 155.71 | 10 | 4.5 | 14:38:55 | 0.021 | 14:39:43 | 0.027 | U |
| 2006-11-16 | 144751 | 46.12 | 154.53 | 10 | 4.8 | 14:48:04 | 0.123 | 14:47:24 | 0.062 | T |
| 2006-11-16 | 144938 | 46.54 | 153.67 | 10 | 5 | 14:48:48 | 0.035 | 14:49:26 | 0.18 | C |
| 2006-11-16 | 150023 | 47.57 | 154.16 | 10 | 4.8 | 0:00:00 | 0 | 15:00:11 | 0.087 | U |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-16 | 150537 | 47.51 | 155.53 | 10 | 4.8 | 15:05:14 | 0.029 | 15:05:49 | 0.064 | C |
| 2006-11-16 | 151347 | 46.97 | 154.94 | 10 | 4.5 | 15:13:06 | 0.011 | 15:13:48 | 0.049 | C |
| 2006-11-16 | 152307 | 47.31 | 155.62 | 10 | 5 | 15:22:57 | 0.164 | 15:23:31 | 0.089 | T |
| 2006-11-16 | 153944 | 46.2 | 154.66 | 10 | 4.5 | 15:39:56 | 0.034 | 15:40:04 | 0.056 | C |
| 2006-11-16 | 154044 | 46.31 | 154.64 | 10 | 4.5 | 15:39:57 | 0.035 | 15:40:20 | 0.053 | C |
| 2006-11-16 | 160957 | 47.55 | 155.66 | 10 | 4.7 | 16:09:49 | 0.043 | 16:10:13 | 0.047 | U |
| 2006-11-16 | 162255 | 46.51 | 154.59 | 10 | 4.2 | 16:22:48 | 0.014 | 16:22:12 | 0.343 | C |
| 2006-11-16 | 163744 | 46.31 | 154.24 | 10 | 4.8 | 16:36:51 | 0.211 | 16:37:14 | 0.097 | T |
| 2006-11-16 | 164214 | 47.06 | 155.32 | 10 | 4.8 | 16:41:42 | 0.183 | 16:42:18 | 0.126 | U |
| 2006-11-16 | 165721 | 46.88 | 155.17 | 10 | 4.8 | 16:56:44 | 0.072 | 16:58:08 | 0.075 | U |
| 2006-11-16 | 170122 | 47 | 155.02 | 10 | 4.5 | 17:00:58 | 0.076 | 17:02:07 | 0.064 | U |
| 2006-11-16 | 170908 | 46.66 | 153.96 | 10 | 4.3 | 17:09:06 | 0.085 | 17:09:43 | 0.044 | T |
| 2006-11-16 | 171633 | 46.63 | 155.35 | 10 | 4.3 | 17:16:08 | 0.069 | 17:16:11 | 0.041 | T |
| 2006-11-16 | 173023 | 46.71 | 153.22 | 10 | 4.2 | 17:30:05 | 0.061 | 17:29:44 | 0.074 | U |
| 2006-11-16 | 174600 | 46.8 | 155.32 | 10 | 4.7 | 17:45:58 | 0.097 | 17:46:07 | 0.027 | T |
| 2006-11-16 | 175708 | 46.4 | 154.26 | 10 | 4.5 | Could not be correlated | | | | U |
| 2006-11-16 | 181841 | 46.49 | 155.24 | 10 | 4 | 18:18:26 | 0.064 | 18:19:02 | 0.074 | U |
| 2006-11-16 | 182154 | 45.8 | 154.1 | 10 | 4.6 | 18:21:19 | 0.028 | 18:21:18 | 0.028 | U |
| 2006-11-16 | 184156 | 47.12 | 155.45 | 10 | 4.5 | 18:41:52 | 0.104 | 9:41:01 | 0.03 | T |
| 2006-11-16 | 184648 | 46.64 | 155.52 | 10 | 4.2 | 18:46:41 | 0.07 | 18:46:03 | 0.015 | T |
| 2006-11-16 | 184808 | 45.82 | 154.19 | 10 | 4.4 | 18:47:42 | 0.078 | 18:47:56 | 0.02 | T |
| 2006-11-16 | 192945 | 47.06 | 155.58 | 10 | 5 | 19:29:44 | 0.173 | 19:29:54 | 0.08 | T |
| 2006-11-16 | 200234 | 47.05 | 155.51 | 10 | 4.6 | Could not be correlated | | | | U |
| 2006-11-16 | 201102 | 46.68 | 153.48 | 10 | 4.5 | 20:11:51 | 0.066 | 20:10:33 | 0.036 | T |
| 2006-11-16 | 201546 | 47.09 | 155.59 | 10 | 4.8 | 20:15:35 | 0.095 | 20:15:54 | 0.059 | T |
| 2006-11-16 | 201904 | 47.25 | 152.77 | 10 | 4.3 | 20:19:18 | 0.068 | 20:18:30 | 0.051 | U |
| 2006-11-16 | 203131 | 46.49 | 153.22 | 10 | 4.5 | 20:31:13 | 0.073 | 20:31:05 | 0.044 | T |
| 2006-11-16 | 205936 | 46.72 | 154.21 | 10 | 4.5 | 21:00:08 | 0.072 | 20:59:34 | 0.038 | T |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-16 | 212450 | 46.75 | 154.97 | 10 | 4.7 | 21:24:05 | 0.096 | 21:24:19 | 0.124 | U |
| 2006-11-16 | 213312 | 46.74 | 155.64 | 10 | 4.7 | 21:33:37 | 0.141 | 21:33:11 | 0.105 | U |
| 2006-11-16 | 220436 | 47.23 | 152.88 | 10 | 4.2 | 22:04:31 | 0.062 | 22:04:21 | 0.043 | U |
| 2006-11-16 | 221158 | 46.56 | 154.84 | 10 | 4.3 | 22:11:26 | 0.058 | 22:11:57 | 0.04 | U |
| 2006-11-16 | 221422 | 46.8 | 155.07 | 10 | 4.3 | 22:14:21 | 0.07 | 22:13:47 | 0.032 | T |
| 2006-11-16 | 221558 | 46.32 | 154.36 | 10 | 4.3 | 22:15:37 | 0.086 | 22:16:23 | 0.028 | T |
| 2006-11-16 | 221652 | 46.84 | 155.61 | 10 | 4.6 | 22:16:51 | 0.081 | 22:16:56 | 0.048 | T |
| 2006-11-16 | 230004 | 46.53 | 155.21 | 10 | 4.2 | 22:59:37 | 0.055 | 22:59:14 | 0.052 | U |
| 2006-11-16 | 230216 | 47.77 | 155.97 | 10 | 3.9 | 23:01:55 | 0.065 | 23:02:32 | 0.046 | U |
| 2006-11-16 | 231013 | 46.54 | 154.66 | 10 | 4.1 | 23:10:10 | 0.055 | 23:10:12 | 0.027 | T |
| 2006-11-16 | 233952 | 46.94 | 155.03 | 10 | 4.4 | 23:39:26 | 0.058 | 23:39:52 | 0.03 | T |
| 2006-11-16 | 234150 | 46.49 | 153.62 | 10 | 4.2 | 23:41:16 | 0.023 | 23:41:31 | 0.064 | C |
| 2006-11-17 | 2059.1 | 47.64 | 154.36 | 10 | 4.3 | 0:20:43 | 0.012 | 0:20:42 | 0.048 | C |
| 2006-11-17 | 2452.4 | 46.71 | 153.44 | 10 | 4.3 | 0:25:08 | 0.013 | 0:24:27 | 0.023 | C |
| 2006-11-17 | 3858.4 | 46.66 | 155.58 | 10 | 4.5 | 0:38:39 | 0.033 | 0:00:00 | 0 | U |
| 2006-11-17 | 3949.8 | 47.1 | 155.49 | 10 | 4.7 | 0:39:49 | 0.067 | 0:39:50 | 0.067 | U |
| 2006-11-17 | 4742.7 | 46.38 | 152.96 | 10 | 4.3 | 0:47:18 | 0.039 | 0:47:59 | 0.04 | U |
| 2006-11-17 | 5335.9 | 46.3 | 152.85 | 10 | 4.1 | 0:53:42 | 0.016 | 0:53:29 | 0.045 | C |
| 2006-11-17 | 5855.6 | 46.86 | 155.3 | 10 | 4.4 | 0:58:52 | 0.013 | 0:59:23 | 0.033 | C |
| 2006-11-17 | 10423 | 46.84 | 155.46 | 10 | 4 | 1:04:44 | 0.044 | 1:03:38 | 0.03 | U |
| 2006-11-17 | 11125 | 46.91 | 154.75 | 10 | 4.2 | Could not be correlated | | | | U |
| 2006-11-17 | 11413 | 47.31 | 154.92 | 10 | 4.5 | 1:14:36 | 0.008 | 1:14:34 | 0.031 | C |
| 2006-11-17 | 11933 | 46.18 | 153.31 | 10 | 4.3 | 1:19:24 | 0.009 | 1:19:22 | 0.033 | C |
| 2006-11-17 | 12447 | 48.04 | 154.97 | 10 | 4.2 | 1:24:47 | 0.033 | 1:24:58 | 0.062 | C |
| 2006-11-17 | 14238 | 46.84 | 155.44 | 10 | 4.2 | 1:42:41 | 0.019 | 1:42:11 | 0.041 | C |
| 2006-11-17 | 21908 | 45.87 | 154.09 | 10 | 4.4 | 2:19:13 | 0.042 | 2:19:53 | 0.009 | T |
| 2006-11-17 | 22456 | 47.57 | 155.44 | 10 | 4.7 | 2:24:47 | 0.039 | 2:24:45 | 0.04 | U |
| 2006-11-17 | 23608 | 47.75 | 155.95 | 10 | 4.2 | 2:36:59 | 0.014 | 2:36:25 | 0.047 | C |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-17 | 30410 | 46.43 | 153.19 | 10 | 4.6 | 3:03:53 | 0.007 | 3:03:42 | 0.078 | C |
| 2006-11-17 | 31454 | 46.43 | 153.02 | 10 | 4.1 | 3:15:07 | 0.009 | 3:14:27 | 0.042 | C |
| 2006-11-17 | 32429 | 46.74 | 155.35 | 10 | 4.6 | 3:23:56 | 0.019 | 3:24:21 | 0.024 | U |
| 2006-11-17 | 34112 | 47.46 | 154.34 | 10 | 3.9 | 3:40:59 | 0.001 | 3:41:03 | 0.018 | C |
| 2006-11-17 | 40128 | 46.84 | 155.58 | 10 | 4.2 | 4:01:33 | 0.005 | 4:01:49 | 0.027 | C |
| 2006-11-17 | 41653 | 46.59 | 153.79 | 10 | 4.4 | 4:17:23 | 0.225 | 4:17:33 | 0.135 | T |
| 2006-11-17 | 42024 | 46.8 | 152.92 | 10 | 4.7 | 4:20:25 | 0.054 | 4:19:33 | 0.124 | C |
| 2006-11-17 | 43628 | 46.88 | 155.37 | 10 | 4.5 | 4:36:57 | 0.137 | 4:36:58 | 0.135 | U |
| 2006-11-17 | 45122 | 46.31 | 153.55 | 10 | 4 | 4:51:09 | 0.152 | 4:51:08 | 0.091 | T |
| 2006-11-17 | 50253 | 46.67 | 153.12 | 10 | 4.1 | 5:02:54 | 0.154 | 5:02:44 | 0.074 | T |
| 2006-11-17 | 51637 | 46.04 | 154.24 | 10 | 4.7 | 5:16:16 | 0.091 | 5:16:03 | 0.083 | U |
| 2006-11-17 | 52234 | 46.94 | 154.73 | 10 | 4.2 | 5:22:27 | 0.068 | 5:22:04 | 0.077 | U |
| 2006-11-17 | 54224 | 47.61 | 155.47 | 10 | 3.9 | 5:42:26 | 0.041 | 5:42:08 | 0.035 | U |
| 2006-11-17 | 61838 | 47.12 | 153.71 | 10 | 4.5 | 6:18:02 | 0.077 | 6:18:16 | 0.099 | U |
| 2006-11-17 | 64827 | 46.9 | 155.6 | 10 | 4.7 | 6:48:46 | 0.183 | 6:48:20 | 0.07 | T |
| 2006-11-17 | 65923 | 46.37 | 152.89 | 10 | 4.9 | 6:59:09 | 0.125 | 6:59:14 | 0.105 | U |
| 2006-11-17 | 72126 | 46.98 | 155.5 | 10 | 4.6 | 7:21:25 | 0.105 | 0:00:00 | 0 | U |
| 2006-11-17 | 72515 | 46.92 | 155.71 | 10 | 4.5 | 7:25:33 | 0.126 | 7:24:57 | 0.059 | T |
| 2006-11-17 | 74030 | 47.18 | 155.51 | 10 | 4.6 | 7:40:00 | 0.168 | 7:40:12 | 0.062 | T |
| 2006-11-17 | 74455 | 47.25 | 155.07 | 10 | 4.6 | 7:44:06 | 0.048 | 7:45:34 | 0.065 | U |
| 2006-11-17 | 74704 | 46.53 | 154.86 | 10 | 4.4 | 7:47:25 | 0.157 | 7:47:58 | 0.06 | T |
| 2006-11-17 | 83315 | 46.57 | 153.09 | 10 | 4.7 | 8:32:57 | 0.139 | 8:33:09 | 0.317 | C |
| 2006-11-17 | 85838 | 46.74 | 155.29 | 10 | 4.8 | 8:57:55 | 0.089 | 8:58:44 | 0.073 | U |
| 2006-11-17 | 90718 | 46.26 | 152.99 | 10 | 4.8 | 9:07:21 | 0.187 | 9:06:50 | 0.162 | U |
| 2006-11-17 | 90937 | 46.25 | 152.99 | 10 | 4.8 | 9:09:29 | 0.012 | 9:09:05 | 0.265 | C |
| 2006-11-17 | 91714 | 46.76 | 155.36 | 10 | 4.6 | 9:16:40 | 0.129 | 9:17:05 | 0.067 | T |
| 2006-11-17 | 92221 | 46.74 | 155.66 | 10 | 4.9 | 9:22:21 | 0.126 | 0:00:00 | 0 | U |
| 2006-11-17 | 92522 | 46.53 | 154.99 | 10 | 4.7 | Could not be correlated | | | | U |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-17 | 105806 | 47.08 | 154.86 | 10 | 4.7 | 0:00:00 | 0 | 10:58:01 | 0.088 | U |
| 2006-11-17 | 105818 | 47.5 | 154.21 | 10 | 5 | 10:58:44 | 0.092 | 10:58:18 | 0.085 | U |
| 2006-11-17 | 110539 | 46.91 | 155.39 | 10 | 4.6 | 11:05:21 | 0.074 | 11:05:30 | 0.053 | U |
| 2006-11-17 | 111329 | 47.23 | 155.16 | 10 | 4.4 | 11:13:19 | 0.085 | 11:13:21 | 0.085 | U |
| 2006-11-17 | 121138 | 45.89 | 154.23 | 10 | 4.7 | 12:11:14 | 0.021 | 12:11:27 | 0.045 | C |
| 2006-11-17 | 121348 | 46.65 | 154.59 | 10 | 4.7 | 12:13:51 | 0.023 | 12:13:46 | 0.045 | C |
| 2006-11-17 | 132946 | 46.4 | 152.99 | 10 | 4.3 | 0:13:29 | 0.087 | 13:29:17 | 0.043 | T |
| 2006-11-17 | 134005 | 47.05 | 155.6 | 10 | 4.8 | 13:40:02 | 0.21 | 13:41:26 | 0.187 | U |
| 2006-11-17 | 134626 | 46.52 | 153.39 | 10 | 4.6 | 13:46:10 | 0.09 | 13:46:40 | 0.107 | U |
| 2006-11-17 | 135129 | 46.69 | 153.68 | 10 | 4.3 | 13:51:14 | 0.058 | 13:51:06 | 0.079 | U |
| 2006-11-17 | 142647 | 46.26 | 152.61 | 10 | 4.4 | 0:00:00 | 0 | 14:26:15 | 0.058 | U |
| 2006-11-17 | 151249 | 48.58 | 154.21 | 10 | 4.3 | 15:12:22 | -0.02 | 15:12:11 | 0.019 | U |
| 2006-11-17 | 153131 | 47.03 | 155.64 | 10 | 4.5 | 15:31:42 | -0.014 | 15:31:54 | 0.016 | U |
| 2006-11-17 | 153420 | 46.3 | 154.23 | 10 | 4.3 | 15:34:38 | -0.005 | 15:35:01 | 0.027 | U |
| 2006-11-17 | 154409 | 47.36 | 153.36 | 10 | 4.2 | 15:44:11 | -0.02 | 15:43:56 | 0.02 | U |
| 2006-11-17 | 155109 | 47.41 | 154.89 | 10 | 4.3 | 15:51:33 | -0.13 | 15:50:53 | 0.023 | U |
| 2006-11-17 | 164706 | 46.17 | 153.85 | 10 | 4.1 | 16:47:47 | 0.008 | 16:47:43 | 0.026 | C |
| 2006-11-17 | 171258 | 46.83 | 155.11 | 10 | 4.8 | 17:12:17 | 0.148 | 17:12:58 | 0.235 | C |
| 2006-11-17 | 172854 | 46.83 | 154.98 | 10 | 4.9 | 17:28:13 | 0.143 | 17:28:54 | 0.155 | U |
| 2006-11-17 | 173248 | 47.62 | 154.36 | 10 | 4.4 | 17:32:21 | 0.041 | 0:00:00 | 0 | U |
| 2006-11-17 | 185819 | 46.01 | 154.14 | 10 | 4.7 | 18:58:18 | 0.204 | 18:57:47 | 0.228 | U |
| 2006-11-17 | 190619 | 47 | 155.43 | 10 | 4.7 | 0:00:00 | 0 | 19:05:57 | 0.155 | U |
| 2006-11-17 | 191107 | 46.83 | 154.92 | 10 | 4.3 | 19:11:27 | 0.105 | 19:11:19 | 0.084 | U |
| 2006-11-17 | 191519 | 47.02 | 155.4 | 10 | 4.9 | 19:14:52 | 0.223 | 19:14:48 | 0.161 | U |
| 2006-11-17 | 193945 | 46.62 | 153.35 | 10 | 4.2 | 19:39:41 | 0.112 | 19:40:35 | 0.088 | U |
| 2006-11-17 | 200030 | 46.36 | 152.89 | 10 | 4.4 | 20:00:52 | 0.084 | 20:00:55 | 0.068 | U |
| 2006-11-17 | 203449 | 47.19 | 154.83 | 10 | 4.6 | 20:34:57 | 0.083 | 0:00:00 | 0 | U |
| 2006-11-17 | 210935 | 47.4 | 153.56 | 10 | 4.4 | 21:09:10 | 0.063 | 21:09:12 | 0.033 | T |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-17 | 213204 | 46.93 | 155.14 | 10 | 4.4 | 21:32:01 | 0.068 | 21:31:51 | 0.027 | T |
| 2006-11-17 | 220357 | 45.27 | 154.4 | 10 | 4.1 | 22:03:45 | 0.062 | 22:03:43 | 0.018 | T |
| 2006-11-17 | 220759 | 46.69 | 154.99 | 10 | 4.7 | 22:08:12 | 0.073 | 22:08:00 | 0.059 | U |
| 2006-11-17 | 221508 | 47.48 | 154.03 | 10 | 4.4 | Could not be correlated | | | | U |
| 2006-11-17 | 222124 | 45.87 | 155.11 | 10 | 4.3 | 22:21:36 | 0.082 | 0:00:00 | 0 | U |
| 2006-11-17 | 222334 | 46.65 | 153.64 | 10 | 4.7 | 0:00:00 | 0 | 22:23:15 | 0.045 | U |
| 2006-11-17 | 222902 | 47 | 155.08 | 10 | 4.8 | 22:28:38 | 0.081 | 22:29:03 | 0.02 | T |
| 2006-11-17 | 233329 | 47.04 | 153.58 | 10 | 4.3 | 23:33:09 | 0.083 | 23:33:07 | 0.054 | T |
| 2006-11-17 | 233427 | 46.59 | 153.14 | 10 | 4.5 | 0:00:00 | 0 | 23:34:01 | 0.043 | U |
| 2006-11-18 | 1631.8 | 46.86 | 152.93 | 10 | 4.1 | 0:16:31 | 0.067 | 0:16:31 | 0.069 | U |
| 2006-11-18 | 1707.7 | 47.31 | 153.7 | 10 | 4.7 | 0:16:57 | 0.068 | 0:16:45 | 0.084 | U |
| 2006-11-18 | 1853.8 | 47.2 | 153.68 | 10 | 4.4 | 0:19:05 | 0.119 | 0:19:41 | 0.155 | U |
| 2006-11-18 | 11305 | 46.81 | 155.47 | 10 | 4.4 | 1:12:50 | 0.069 | 1:12:59 | 0.069 | U |
| 2006-11-18 | 11419 | 46.94 | 155.35 | 10 | 4.5 | 1:15:09 | 0.089 | 1:15:22 | 0.049 | T |
| 2006-11-18 | 15727 | 46.86 | 155.43 | 10 | 4.9 | 1:57:15 | 0.038 | 1:57:52 | 0.046 | U |
| 2006-11-18 | 22957 | 46.53 | 152.81 | 10 | 3.9 | 2:29:29 | 0.021 | 2:29:33 | 0.033 | C |
| 2006-11-18 | 23236 | 46.45 | 154.68 | 10 | 4.1 | 2:32:19 | 0.478 | 2:33:55 | 0.479 | U |
| 2006-11-18 | 25913 | 46.41 | 153.57 | 10 | 3.9 | Could not be correlated | | | | U |
| 2006-11-18 | 30439 | 47.17 | 155.52 | 10 | 4.6 | 3:04:35 | 0.15 | 3:04:44 | 0.096 | T |
| 2006-11-18 | 31155 | 47.15 | 155.37 | 10 | 4.8 | 3:11:53 | 0.106 | 3:12:01 | 0.081 | U |
| 2006-11-18 | 32122 | 47.41 | 154.98 | 10 | 4.2 | 3:21:43 | 0.032 | 3:21:47 | 0.049 | C |
| 2006-11-18 | 32920 | 46.74 | 155.68 | 10 | 4.1 | 3:29:50 | 0.045 | 3:29:55 | 0.033 | U |
| 2006-11-18 | 33531 | 46.53 | 154.84 | 10 | 4.3 | 3:36:02 | 0.033 | 3:36:22 | 0.051 | C |
| 2006-11-18 | 34120 | 46.55 | 155.01 | 10 | 4.2 | Could not be correlated | | | | U |
| 2006-11-18 | 34456 | 46.2 | 154.35 | 10 | 4.8 | 3:45:15 | 0.045 | 3:44:48 | 0.07 | C |
| 2006-11-18 | 40504 | 45.39 | 151.7 | 10 | 4.4 | 4:05:00 | 0.026 | 4:05:00 | 0.05 | C |
| 2006-11-18 | 40844 | 47.11 | 155.22 | 10 | 4.6 | 4:09:00 | 0.018 | 4:08:50 | 0.045 | C |
| 2006-11-18 | 44942 | 48.21 | 154.41 | 10 | 4.6 | 4:49:17 | 0.065 | 4:49:43 | 0.168 | C |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-18 | 50040 | 46.74 | 154.99 | 10 | 5 | 5:00:16 | 0.065 | 5:00:40 | 0.097 | U |
| 2006-11-18 | 50602 | 47.21 | 154.88 | 10 | 4.1 | 5:06:11 | 0.049 | 5:05:59 | 0.045 | U |
| 2006-11-18 | 51139 | 47.1 | 152.87 | 10 | 4 | 5:11:48 | 0.033 | 5:11:53 | 0.046 | U |
| 2006-11-18 | 51342 | 47.9 | 153.07 | 10 | 4.2 | 5:14:39 | 0.062 | 5:14:44 | 0.04 | T |
| 2006-11-18 | 52640 | 46.26 | 154.1 | 10 | 4.7 | 5:27:24 | 0.049 | 5:27:14 | 0.078 | C |
| 2006-11-18 | 74117 | 47.34 | 155.54 | 10 | 4.6 | 7:40:47 | 0.066 | 7:41:05 | 0.29 | C |
| 2006-11-18 | 103415 | 47.32 | 152.1 | 10 | 4.7 | 10:33:16 | 0.16 | 10:33:50 | 0.135 | U |
| 2006-11-18 | 104213 | 48.33 | 154.82 | 10 | 3.6 | Could not be correlated | | | | U |
| 2006-11-18 | 112251 | 47.54 | 155.94 | 10 | 4 | Could not be correlated | | | | U |
| 2006-11-18 | 112305 | 49.17 | 154.28 | 10 | 3.6 | 11:22:50 | 0.127 | 11:23:36 | 0.11 | U |
| 2006-11-18 | 115919 | 46.11 | 154.79 | 10 | 4.4 | Could not be correlated | | | | U |
| 2006-11-18 | 120530 | 47.09 | 155.18 | 10 | 4.9 | 12:04:49 | 0.201 | 12:06:24 | 0.246 | U |
| 2006-11-18 | 133122 | 41.18 | 142.61 | 10 | 4.1 | 13:31:50 | -0.005 | 13:31:40 | 0.036 | U |
| 2006-11-18 | 135154 | 46.93 | 155.07 | 10 | 4.3 | 13:52:01 | 0.003 | 13:51:47 | 0.027 | C |
| 2006-11-18 | 141205 | 48.12 | 154.5 | 10 | 4.6 | 14:14:20 | 0.033 | 14:14:30 | 0.15 | C |
| 2006-11-18 | 144745 | 46.4 | 154.3 | 10 | 4.3 | 14:47:33 | 0.04 | 14:47:43 | 0.089 | C |
| 2006-11-18 | 151252 | 46.26 | 154.42 | 10 | 4.5 | 15:11:46 | -0.007 | 15:11:52 | 0.042 | U |
| 2006-11-18 | 152507 | 46.83 | 152.74 | 10 | 4.4 | 15:25:28 | -0.007 | 15:25:53 | 0.046 | U |
| 2006-11-18 | 153734 | 46.35 | 152.92 | 10 | 4.4 | 15:37:15 | -0.016 | 15:36:46 | 0.036 | U |
| 2006-11-18 | 160452 | 41.95 | 142.33 | 10 | 4.1 | 16:03:30 | -0.016 | 16:04:01 | 0.034 | U |
| 2006-11-18 | 161944 | 46.94 | 154.83 | 10 | 4.3 | 16:19:34 | -0.015 | 16:19:30 | 0.032 | U |
| 2006-11-18 | 165236 | 47.4 | 155.28 | 10 | 4.8 | 16:52:27 | 0.044 | 16:53:35 | 0.093 | C |
| 2006-11-18 | 175434 | 45.89 | 154.25 | 10 | 4.4 | 17:54:27 | 0.01 | 17:54:27 | 0.03 | C |
| 2006-11-18 | 180926 | 46.32 | 153.81 | 10 | 4.2 | 18:08:50 | 0.034 | 18:08:49 | 0.028 | U |
| 2006-11-18 | 185438 | 46.34 | 153.15 | 10 | 5 | 18:53:36 | 0.251 | 18:54:13 | 0.437 | C |
| 2006-11-18 | 185926 | 47.37 | 153.25 | 10 | 4.8 | 19:00:33 | 0.129 | 18:59:25 | 0.105 | U |
| 2006-11-18 | 203927 | 46.81 | 155.15 | 10 | 4.6 | 20:39:00 | 0.103 | 20:39:28 | 0.069 | U |
| 2006-11-18 | 211021 | 47.69 | 154.59 | 10 | 4.2 | 21:11:07 | 0.075 | 21:10:37 | 0.026 | T |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Date | Time | Latitude | Longitude | Depth (km) | Magnitude | Time | CCC | Time | CCC | Classification |
| 2006-11-18 | 215737 | 46.77 | 154.66 | 10 | 4.6 | 21:56:27 | 0.091 | 21:58:03 | 0.083 | U |
| 2006-11-18 | 220602 | 47.06 | 154.9 | 10 | 4.2 | 22:06:07 | 0.084 | 22:06:45 | 0.024 | T |
| 2006-11-18 | 221417 | 46.21 | 154.45 | 10 | 4.5 | 22:14:41 | 0.087 | 22:14:40 | 0.028 | T |
| 2006-11-18 | 222158 | 47.27 | 155.47 | 10 | 4.3 | 22:21:02 | 0.089 | 22:21:18 | 0.036 | T |
| 2006-11-18 | 225402 | 47.51 | 155.05 | 10 | 4.5 | 22:53:57 | 0.073 | 22:54:40 | 0.027 | T |
| 2006-11-18 | 234734 | 47.41 | 155.5 | 10 | 4.5 | 23:47:36 | 0.098 | 23:47:44 | 0.029 | T |
| 2006-11-18 | 235716 | 45.86 | 154.26 | 10 | 4.3 | 23:56:53 | 0.071 | 23:57:04 | 0.02 | T |
| 2006-11-19 | 1416.5 | 47.16 | 155.71 | 10 | 4.4 | 0:14:20 | 0.067 | 0:14:54 | 0.025 | T |
| 2006-11-19 | 5346.5 | 46.73 | 152.79 | 10 | 4.7 | 0:53:00 | 0.075 | 0:53:14 | 0.071 | U |
| 2006-11-19 | 12230 | 47.31 | 155.12 | 10 | 4.2 | 1:22:47 | 0.052 | 1:22:32 | 0.021 | T |
| 2006-11-19 | 15357 | 46.47 | 155.47 | 10 | 4.1 | 1:53:55 | 0.068 | 1:53:31 | 0.031 | T |
| 2006-11-19 | 15807 | 46.87 | 152.99 | 10 | 4.5 | 1:58:39 | 0.045 | 1:58:33 | 0.035 | U |
| 2006-11-19 | 22057 | 47.06 | 155.35 | 10 | 4.5 | 2:21:07 | 0.086 | 2:20:38 | 0.053 | T |
| 2006-11-19 | 22343 | 46.95 | 154.94 | 10 | 4.3 | 2:23:55 | 0.087 | 2:23:33 | 0.063 | U |
| 2006-11-19 | 22417 | 46.45 | 155.21 | 10 | 4 | Could not be correlated | | | | U |
| 2006-11-19 | 22529 | 46.95 | 154.86 | 10 | 4.2 | 2:25:48 | 0.049 | 2:25:19 | 0.052 | U |
| 2006-11-19 | 35438 | 46.5 | 154.98 | 10 | 4.3 | 3:54:20 | 0.026 | 0:00:00 | 0 | U |
| 2006-11-19 | 40955 | 46.95 | 155.26 | 10 | 3.9 | 4:09:49 | 0.018 | 4:09:39 | 0.044 | C |
| 2006-11-19 | 44058 | 45.99 | 154.86 | 10 | 4 | 4:40:50 | 0.016 | 4:40:44 | 0.022 | U |
| 2006-11-19 | 50108 | 47.86 | 154.46 | 10 | 3.9 | 5:01:55 | 0.047 | 5:01:29 | 0.122 | C |
| 2006-11-19 | 50241 | 46.89 | 155.72 | 10 | 4.3 | 5:01:56 | 0.065 | 5:02:06 | 0.074 | U |
| 2006-11-19 | 53656 | 46.52 | 153.18 | 10 | 4.8 | 5:37:07 | 0.055 | 5:37:06 | 0.038 | U |
| 2006-11-19 | 55905 | 47.02 | 155.64 | 10 | 4.4 | 5:59:44 | 0.052 | 5:59:07 | 0.036 | U |
| 2006-11-19 | 55928 | 47.09 | 155.63 | 10 | 4.4 | 6:00:42 | 0.057 | 6:00:37 | 0.031 | T |
| 2006-11-19 | 83251 | 46.86 | 155.12 | 10 | 4.5 | 8:32:17 | 0.075 | 8:32:28 | 0.026 | T |
| 2006-11-19 | 104724 | 47.42 | 153.8 | 10 | 4.1 | 10:47:03 | 0.072 | 10:46:28 | 0.06 | U |
| 2006-11-19 | 105719 | 47.06 | 155.01 | 10 | 4.4 | 10:56:58 | 0.056 | 10:57:09 | 0.041 | U |
| 2006-11-19 | 111114 | 46.37 | 152.84 | 10 | 4.2 | 11:11:34 | 0.067 | 11:11:46 | 0.062 | U |

| National Earthquake Information Center (NEIC ) Data | | | | | | Tensional | | Compressional | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Time** | **Latitude** | **Longitude** | **Depth (km)** | **Magnitude** | **Time** | **CCC** | **Time** | **CCC** | **Classification** |
| 2006-11-19 | 115423 | 46.79 | 152.5 | 10 | 4.5 | 11:54:09 | 0.044 | 11:54:20 | 0.036 | U |
| 2006-11-19 | 122304 | 47.42 | 153.97 | 10 | 4.2 | 12:23:14 | 0.074 | 12:22:38 | 0.067 | U |
| 2006-11-19 | 131417 | 47.3 | 156.01 | 10 | 4.2 | 13:14:11 | -0.005 | 13:14:04 | 0.022 | U |
| 2006-11-19 | 135947 | 51.47 | 160.32 | 10 | 4.1 | 14:00:51 | 0.022 | 14:00:40 | 0.063 | C |
| 2006-11-19 | 141655 | 47.42 | 155.22 | 10 | 4.5 | 14:16:29 | 0.028 | 14:17:24 | 0.132 | C |
| 2006-11-19 | 142512 | 47.58 | 155.27 | 10 | 4.9 | 14:25:19 | 0.203 | 14:25:57 | 0.284 | U |
| 2006-11-19 | 151247 | 47.19 | 155.74 | 10 | 4.1 | 15:12:13 | -0.011 | 15:12:18 | 0.038 | U |
| 2006-11-19 | 154001 | 46.97 | 155.57 | 10 | 4.8 | 15:40:43 | -0.018 | 15:40:56 | 0.031 | U |
| 2006-11-19 | 161944 | 46.8 | 154.94 | 10 | 4.4 | 16:19:34 | -0.011 | 16:19:30 | 0.032 | U |
| 2006-11-19 | 163319 | 46.77 | 154.79 | 10 | 4.3 | 16:33:10 | -0.009 | 16:33:05 | 0.03 | U |
| 2006-11-19 | 172228 | 47.9 | 154.42 | 10 | 4.8 | 17:22:12 | -0.005 | 17:22:39 | 0.025 | U |
| 2006-11-19 | 173759 | 47.26 | 152.85 | 10 | 4.4 | 17:38:55 | 0.013 | 17:37:57 | 0.03 | C |
| 2006-11-19 | 174926 | 46.46 | 153.08 | 10 | 4.6 | 17:47:55 | 0.038 | 17:49:44 | 0.073 | C |
| 2006-11-19 | 181231 | 48.52 | 153.2 | 10 | 3.6 | 18:11:59 | 0.021 | 18:11:12 | 0.026 | U |
| 2006-11-19 | 182633 | 47.58 | 154.73 | 10 | 4.8 | 18:26:16 | 0.012 | 18:26:21 | 0.023 | C |
| 2006-11-19 | 202306 | 46.83 | 154.82 | 10 | 4.3 | 20:24:29 | 0.086 | 20:23:46 | 0.177 | C |
| 2006-11-19 | 203820 | 47.12 | 153.89 | 10 | 4.5 | 20:38:16 | 0.074 | 20:38:07 | 0.241 | C |
| 2006-11-19 | 211122 | 47.12 | 154.04 | 10 | 4.7 | 21:10:31 | 0.213 | 21:11:11 | 0.371 | C |
| 2006-11-19 | 213248 | 45.29 | 142.93 | 10 | 3.8 | Could not be correlated | | | | U |
| 2006-11-19 | 214110 | 46.81 | 154.76 | 10 | 4.6 | 21:40:47 | 0.104 | 21:41:09 | 0.133 | U |
| 2006-11-19 | 224741 | 47.14 | 155.25 | 10 | 4.4 | 22:47:02 | 0.074 | 22:47:00 | 0.051 | U |
| 2006-11-19 | 231506 | 46.29 | 152.88 | 10 | 4.7 | 23:14:46 | 0.042 | 23:14:53 | 0.037 | U |