SEISMICITY OF THE LIVERMORE VALLEY
IN RELATION TO THE
GENERAL ELECTRIC VALLECITOS PLANT

Bruce A. Bolt and Roger A. Hansen

March 1980

SEISMICITY OF THE LIVERMORE VALLEY IN RELATION TO THE GENERAL ELECTRIC VALLECITOS PLANT

by

Bruce A. Bolt and Roger A. Hansen

1. QUESTIONS

This seismological report is in response to specific questions on seismicity raised for consideration by the G.E.T.R. Subcommittee. These questions are:

1. Regional seismicity
   a. Distribution of epicenters--historic and recent instrumental results,
   b. Focal depths,
   c. Accuracy of current seismic networks in the region as it relates to a and b,
   d. Focal mechanisms as related to the regional tectonics,
   e. Relationship of hypocentral distributions in known or postulated faulting, particularly the Livermore, Las Positas and Verona faults.
2. Site seismicity
   a. Are there seismographs operating on or near the site?
   b. If so, what are the results? Specifically, are there microearthquakes occurring on the site? If so, where?

It should be remarked that the letter of request stated that, while the list of questions is long, many of them can be addressed briefly. With this in mind, this report directs itself mainly at the basic seismological data and no attempt is made to analyze the seismicity in terms of future strong ground motion.

2. PRIMARY DATA SOURCES

A complete list of catalogued earthquakes for the area was constructed from three primary sources. The first is the comprehensive historical catalog published by Townley and Allen for northern California. This catalog is now on magnetic tape and a retrieval program was used to list all local earthquakes in the catalog from 1769 through 1910 within approximately 16 km of the GE plant. The second source is the catalog of earthquakes located instrumentally by seismologists at the Berkeley Seismographic Station (Bolt and Miller, 1976). Hypocenters were taken from this catalog for the period 1910 to 1969. The catalog is now supplemented by Bulletins of the Seismographic Station up to 1979. However, commencing in 1969, hypocenters of local seismicity down to microseismic levels were determined by the U.S. Geological Survey using a denser net of stations in central California. Through the courtesy of the USGS, a complete listing of these epicenters was retrieved from a magnetic tape file. Comparison showed that all epicenters in the area common to both the Berkeley catalog and the USGS catalog had close hypocentral values (about 2 km maximum). For the sake of this study, USGS solutions were adopted from 1969 through 1979.

All epicenter coordinates from the three primary data sources were merged on one magnetic tape and the total list, believed to be essentially complete so far as tabulated sources in this area are concerned, is given in Appendix A. There are, in all, 965 epicenters listed. The quality of the data obviously varies enormously (see Section 5). For obvious reasons, the list progressively includes earthquakes of smaller and smaller magnitude. It is only since 1969 that microearthquakes with magnitudes down to about 0.3 are included in the catalog.

For convenience, the epicenters listed in Appendix A have been plotted in Figure 1. It also shows the approximate locations of the main faults in the area. There is a difficulty in relation to the consistency of the fault mapping. Geological maps now available vary in the detail of their mapping throughout the area shown in Figure 1. This is largely because localized special studies have been made in recent years in connection with, for example, the Sandia Laboratories at Livermore, the Lawrence Livermore Laboratories, the GE plant and, more recently, the Greenville earthquake sequence of January, 1980. The result of this recent field work, not yet published or evaluated thoroughly, is that variations in interpretation and interpolations exist. The source of the faults shown on Figure 1 is a map made available by Earth Sciences Associates.

3. DISTRIBUTION OF EPICENTERS (QUESTION 1.a)

The epicenters plotted on Figure 1 indicate that small earthquakes down to microseismic magnitudes occur from time to time over most of the region in question, many of them unrelated to mapped faults. It would be premature, however, to make a firm conclusion on such correlations. There is little question (see Section 5) that many of the plotted epicenters have possible errors of over 5 km and, also, not all small faults in the region are at present mapped.

Close study of Figure 1 indicates, however, that there are clusters of earthquakes which can be related to mapped tectonic features. First, there is a rather dense concentration of earthquakes along the Hayward fault (the most westerly fault shown in Figure 1). There is also a clustering of earthquakes to the east of the Calaveras fault at the southwest portion of the map. A further concentration of epicenters occurs at the east boundary of the map in the vicinity of Corral Hollow fault. There is also a cluster of earthquakes on the northwest edge of Figure 1 which is associated with a microearthquake sequence in the vicinity of the Tasajara Hills in 1977.

It should be pointed out here also that the map does not include epicenters from the very recent earthquake sequence along the Greenville fault (Bolt, McEvilly and Uhrhammer, 1980). This sequence had two principal shocks, one on January 24 and one on January 27, 1980, of magnitudes 5.5 and 5.8, respectively. The sequence consisted of hundreds of small earthquakes along the Greenville fault which showed surface rupture, predominately in a right-lateral sense, of a few cm offset (see fault plane solutions in Section 4).

In this region the major Calaveras fault zone (Figure 1) is not associated with many earthquake epicenters in the period of study except at the southern end. This lack of micro-seismicity earthquakes on sections of the Calaveras, Hayward or San Andreas faults in central

California is not uncommon but the cause of such variability in micro-earthquake activity is, at the present time, unknown.

Let us now consider the plot of epicenters within about 6 km from the GE site (GETR in Figure 1) and any relationship with the Verona fault. There are 12 epicenters in the vicinity above magnitude 2 (see Numbers keyed on Figure 1).

Number 1. A sequence of 5 earthquakes occurring on March 28 and 29, 1943. The largest was assigned a magnitude of 4.2; one had a magnitude of 2.8 and three had no assigned magnitude.

Number 2. A magnitude 2.5 earthquake on June 10, 1943.

Number 3. A magnitude 3.6 earthquake on March 31, 1943.

Number 4. A magnitude 3.7 earthquake on November 13, 1945.

Number 5. A magnitude 2.5 earthquake on June 20, 1957.

Number 6. A magnitude 3.0 earthquake on July 12, 1932.

Number 7. A magnitude 2.1 earthquake on September 10, 1970.

Number 8. A magnitude 2.0 earthquake on August 6, 1979.

Association of these earthquakes with faults such as the Verona and Calaveras is speculative, given the uncertainties of epicenter and fault location. Earthquakes Numbers 1-6 were located using few stations with an azimuthal coverage of only about 100°. In most cases, the readings came from only the three stations of the Berkeley network, Berkeley, Mt. Hamilton and Palo Alto. The exceptions were the magnitude 4.2 earthquake in 1943 and the magnitude 2.5 earthquake in 1957. The 1943 event also used readings from the Fresno station, which is at a distance of over 200 km to the southeast. The 1957 earthquake used also a reading from the San Francisco station.

Given the readings in the Berkeley Bulletin for these earthquakes, relocations were made with a modern computer program and these produced a change of only a few km in the epicenters. An exception was the epicenter for the 1957 earthquake which did not formally converge for the crustal model adopted, indicating a considerable range of uncertainty in the solution. Also, event Number 2 above was found to shift significantly towards the northwest.

Events Numbers 7 and 8 were located by the USGS using 17 and 25 stations, respectively. However, the small energy of these two earthquakes reduced significantly the first motion readings (see Section 6).

4. FOCAL DEPTHS (QUESTION 1.b)

The dense seismographic networks of the last decade in the region around the site (Hayward, Calaveras fault zones, etc.) have indicated that local earthquake foci are situated almost without exception in the upper 16 km of the Earth's crust. Indeed, as can be seen from the focal depths published in the Table in the Appendix (see particularly 1969-1979 for highest precision), the majority of focal depths range between 8 km and 3 km, with a few as shallow as 1 km. Of particular interest is the estimate of focal depth of the largest earthquake in the last ten years within 5 km of the GE plant, i.e. Number 8 in Section 3. This was formally given a focal depth of 5.7 km. It might also be remarked that the two principal earthquakes of the 1980 Greenville sequence, which were located with great care, had focal depths of 12 and 15 km, respectively.

5. ACCURACY OF ESTIMATIONS (QUESTION 1.c)

Some remarks on the solutions given in the Appendix have already been made. It is unnecessary to stress that the epicenters taken from the historical Townley-Allen catalog might be in error by well over 10 km, because they are based largely on felt reports (and thus upon the density of population at the time).

From 1910 until about 1969, the seismographs at Berkeley (44 km from the site) and Mt. Hamilton (36 km from the site) were the nearest modern stations with good timing. Therefore, locations of local earthquakes depended largely on readings of P and S waves from these two stations, supplemented by readings from other stations further to the west and sometimes Fresno to the southeast. It is rather difficult to place a precision on the solutions during this period. In order to assess the uncertainty, one of the Greenville sequence (18^h57^m, February 21, 1980) was relocated, using only the stations Mt. Hamilton, Berkeley and Pilarcitas Creek on the San Francisco Peninsula. These stations are meant to replicate the available stations before the telemetry networks. The relocation gave a solution that converged (when the depth was constrained to 5.0 km) but was about 10 km to the northwest of the precise location obtained using the present local network. There is thus a suggestion that uncertainties in locating earthquakes up to about 1969 could have been as large as 10 km(although many may have less error than this rather high figure. A consequence is that a particular epicenter in this time interval might, in fact, be associated with a different fault from the one shown adjacent in Figure 1.

6. FOCAL MECHANISMS (QUESTION 1.d)

It will be obvious from the small magnitudes of recent earthquakes listed in the Appendix in the vicinity of the GE plant that it is not possible to make meaningful fault plane solutions in most cases from polarity readings from the few local stations available. Indeed, only 13 stations are available, even in the best cases, for local events in 1979. Nevertheless, an attempt was made to determine a likely mechanism for the most promising of the earthquakes nearest to the Verona fault in Figure 1. This is the earthquake of August 6, 1979 (Number 8 in Section 3 and Figure 1).

The polarity of the first P motions at the 13 available telemetry stations was consistent with right-lateral motion along a fault striking approximately north but with uncertainty of up to 10°. One of the stations was inconsistent with pure dip-slip faulting.

Five other fault plane solutions are available for the general area and these are shown in Figure 2. The Figure is from a special report prepared for Sandia Laboratories, Livermore, California and prepared by URS/John Blume and Associates, Engineers, in September, 1978. (Earthquakes marked A, C and D are also indicated in Figure 1; event B lies off Figure 1.) The data used were from the Berkeley and USGS seismographic files. Only for the earthquake marked A, about 15 km from the GE site is there a suggestion of a possible general association with the northwest-trending faults of which the Verona fault may be a member. This earthquake (6/28/65) has a magnitude of 3.6. Eleven polarity P readings were available. Reasonably well distributed in azimuth, they indicate a right-lateral strike-slip event. The fault plane solutions for earthquakes marked C and D are, again, predominately right-lateral strike-slip, in agreement with the general tectonic trends and strain field of this area. These earthquakes (8/31/76, magnitude = 3.3, and 6/21/77, magnitude = 4.6) are members of the cluster of seismicity near the Corral Hollow fault (Figure 1).

Three other solutions are available for earthquakes associated with the Greenville fault. The earthquake marked B (Figure 2, 12/29/69, magnitude = 3.8) had only seven observed polarities which were also consistent with right-lateral strike-slip motion. Fault plane solutions for the two principal shocks of the January, 1980 Greenville sequence are given as Figures 3 and 4. It will be seen that, for these recent earthquakes, sufficient observations of polarity are available to make the fault plane solutions relatively reliable. An important conclusion is that the right-lateral motion shown predominately in these earthquakes is in agreement with the offset seen along the Greenville fault at the surface.

7. RELATIONS BETWEEN HYPOCENTERS AND FAULTS (QUESTION 1.e)

Some comments on this question have already been made in the preceding sections. Apart from the concentration along the Hayward fault shown in Figure 1 and the unequivocal concentration along the Greenville fault in the January, 1980 sequence when surface rupture occurred (not shown in Figure 1), causative and mechanical connections between the earthquakes in Appendix A and known faults in the area are not available. Even the Calaveras fault, which is a major through-going fault (like the Hayward fault) does not have seismicity closely associated with it in this region during the last 100 years.

The Hayward fault is known to have been the source of the large earthquakes of June 10, 1836 and October 21, 1868. In the first earthquake, surface rupture was reported between Mission San Jose and San Pablo; in the 1868 earthquake, surface rupture was reported between Warm Springs and San Leandro. It is not clear whether destructive earthquakes have involved motion of the Calaveras fault in historic times. It has been suggested that the earthquakes of July 3, 1861 arose from movement on the Calaveras fault with high intensities of shaking reported from the San Ramon valley. There are some reports of ground surface displacement which may or may not have been associated with the Calaveras fault. Reports, however, are not at all clear on these matters. Another even less-well supported suggestion of association with the Calaveras fault is the earthquake of March 30, 1898.

Specific mention was made in the questions of the relation between hypocenters on the known Livermore, Las Positas and Verona faults. Correlations can be attempted from the plot shown in Figure 1 but there appears to be considerable doubt concerning any concentrations of earthquakes along any one of these faults. There have been reports of some slight cracking corresponding to the mapped position of the

Las Positas fault following the Greenville earthquake sequence of January, 1980 but there is no information available which would locate aftershocks of this sequence along the Las Positas fault.

It is possible to speculate that the group of earthquakes to the northwest of the GE plant may be associated with slips along faults parallel to the Verona fault as mapped in Figure 1. It is clear, however, from Figure 1 that in the vicinity of the General Electric plant no earthquakes above magnitude 3 have occurred in the last decade and none above magnitude 4 for the last 37 years.

8. SEISMICITY OF THE SITE (QUESTION 2)

There are no seismographs operating in the General Electric facility. The nearest seismographs that are now operational in the area are 3 telemetry stations of the USGS and LLL networks. These are CPL (USGS) at a distance of 7.5 km from the site; CL04 (LLL) at a distance of 4 km; and CL05 (LLL) at a distance of 3 km.

It may be appropriate here to comment on the value of running a microearthquake net at the site itself. Because certain assumptions have been made that the Verona fault is active and that it could be the locus of a large (postulated magnitude 6) earthquake, then the issue of activity of the fault appears not to arise. The detection of microearthquakes would not alter this assumption. The question of the mechanism of fault displacements on the Verona fault would similarly not be affected by a small network of stations on the site. These would not give sufficient coverage unless a regional network were employed

OFFICIAL SEAL
VIRGINIA C. CA[illegible]
NOTARY PUBLIC - CALIFORNIA
ALAMEDA COUNTY
My comm. expires MAR 8, 19[illegible]

to enable meaningful fault plane solutions to be made. The seismicity level indicated in Figure 1 entails that such a network would have to be operated for a considerable time before there would be any hope of obtaining definite fault plane solutions.

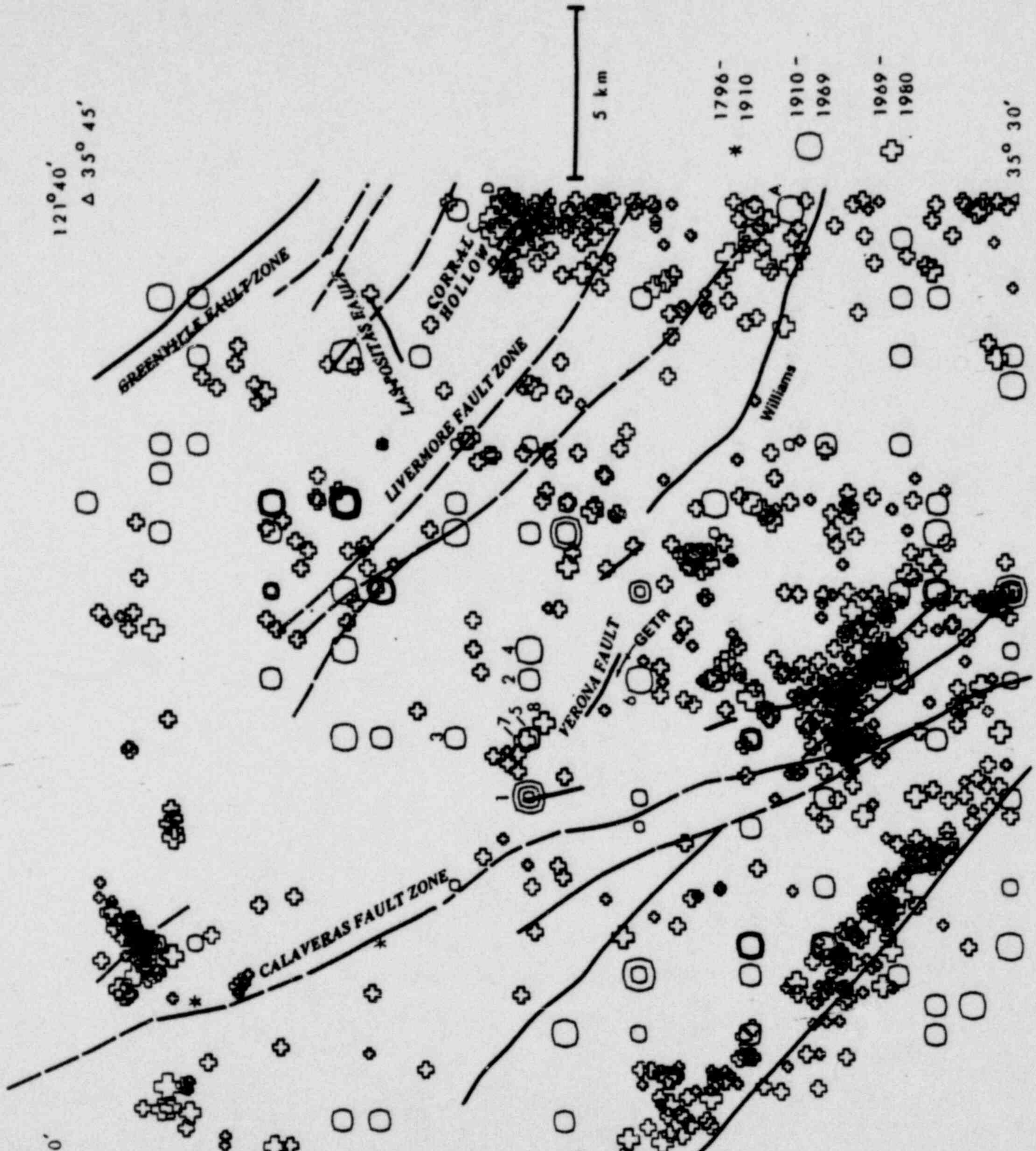

FIGURE 1. EPICENTER PLOT

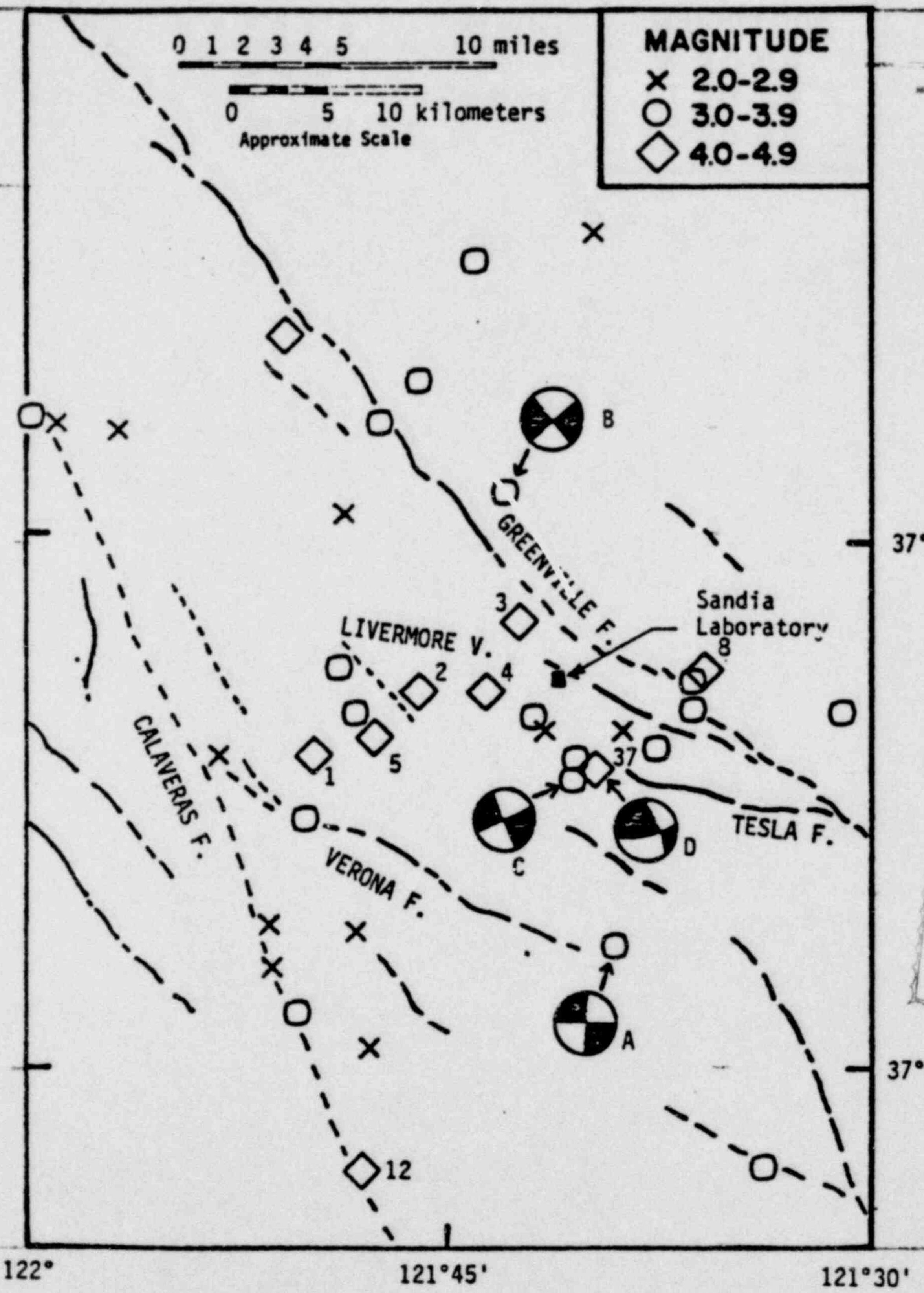

FIGURE 2. SEISMICITY OF THE LIVERMORE VALLEY AREA, 1943 TO 1977, SHOWING FAULT PLANE SOLUTIONS (URS/JOHN BLUME AND ASSOCIATES)

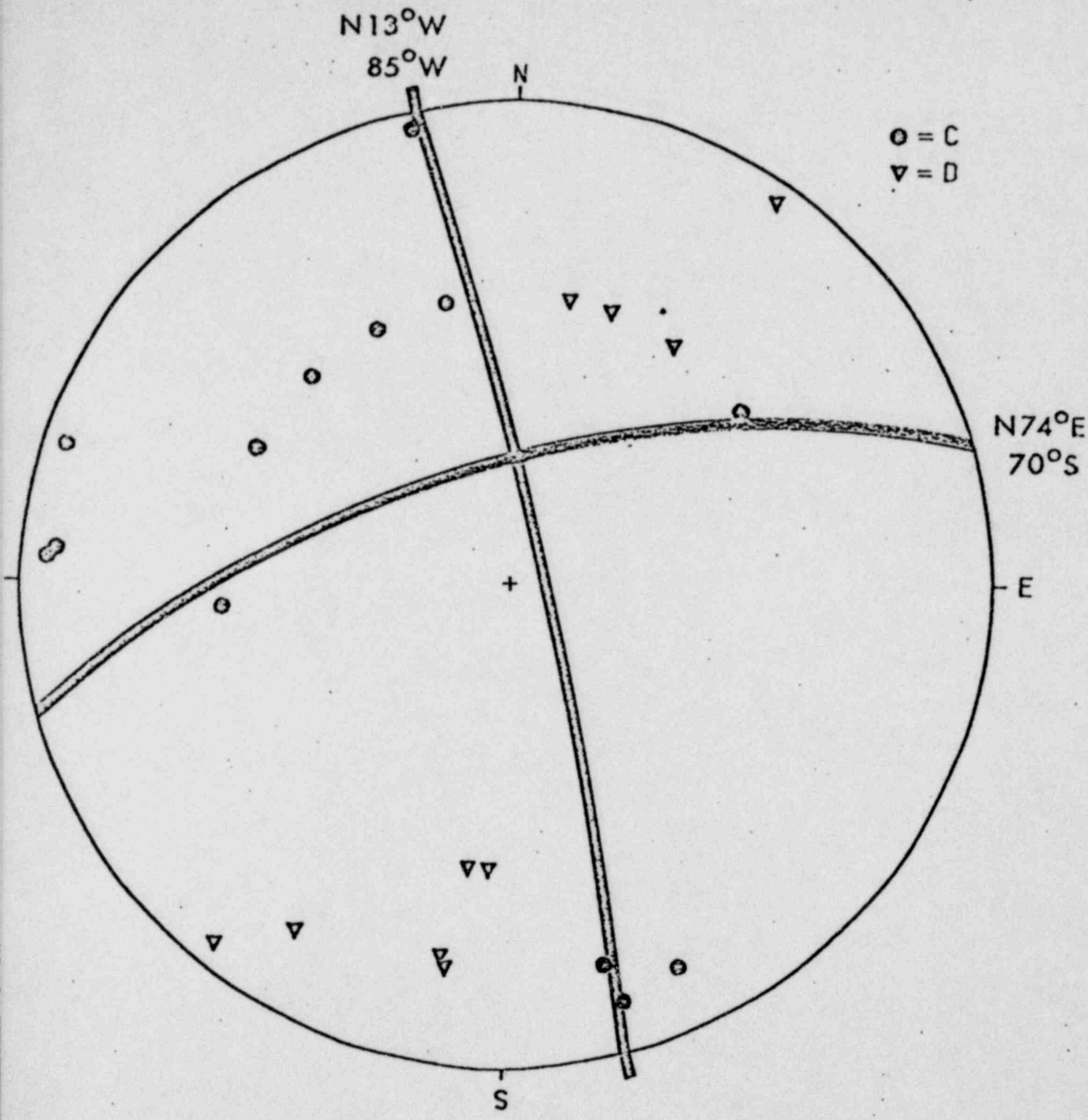

FIG. 3 EARTHQUAKE 24 JAN 1980 UPPER HEMISPHERE

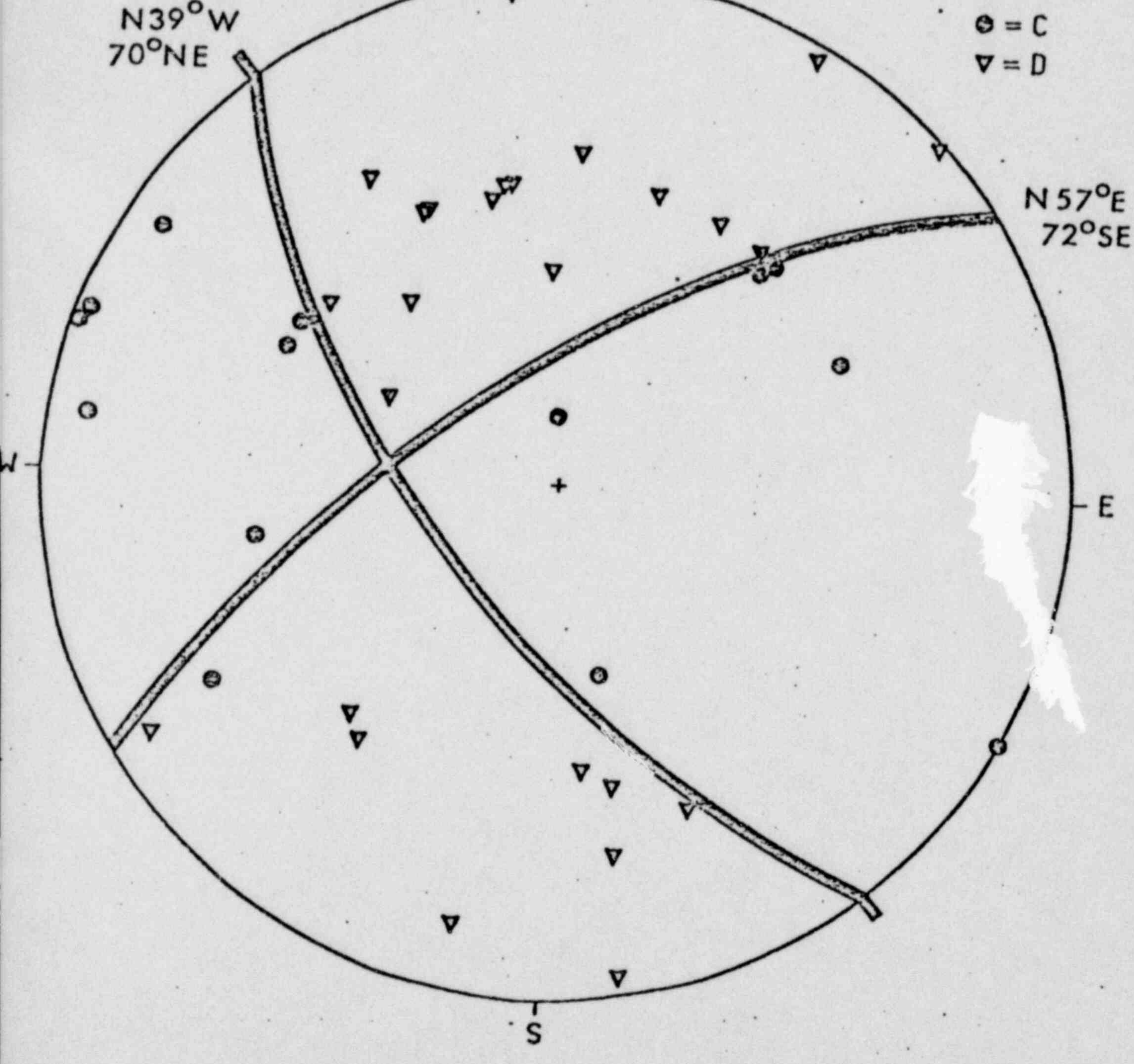

FIG.4 EARTHQUAKE 27 JAN 1980 UPPER HEMISPHERE

Appendix A

List of Catalogued Earthquakes

RIGHTHAND PLOT BOUNDARY IS 121 DEG 40.0 MIN W..LEFT BOUNDARY IS 122 DEG 0. MIN W.

TOP BOUNDARY IS 37 DEG 45.0 MIN N..BOTTOM BOUNDARY IS 37 DEG 30.0 MIN N.

LATITUDE OF THE PLOT CENTER IS 37 DEG 37.5 MIN N
GRID SPACING. LATITUDE IN INCREMENTS OF 0 DEG 5.0 MIN, LONGITUDE 0 DEG 5.0 MIN.

THE SCALE OF THE PLOT IS 35.00 INCHES PER DEGREE OF LATITUDE.

STATION	LATITUDE DEG-MIN	LONGITUDE DEG-MIN	ELEVATION FEET
A	37 30.0	121 40.0	-0.
B	37 45.0	121 40.0	-0.
C	37 45.0	122 0.	-0.
D	37 30.0	122 0.	-0.

SPECS ARRAY FOR PLOT

2.000	.200	121.667	122.000	37.750
37.500	9.240	8.750	4.000	3.000
1.000	99.000	1.000	1.000	1.000

DATE	TIME	LATITUDE	LONGITUDE	DEPTH	MAG
70461- 1861	011-0.	37 43.2	121 56.4	-0.	0.
20269	6-0-0.	37 40.2	121 45.0	-0.	0.
12782	-0-0-0.	37 34.8	122 0.	-0.	0.
32183	9-0-0.	37 34.8	122 0.	-0.	0.
72385	3-0-0.	37 34.8	122 0.	-0.	0.
111292	956-0.	37 34.8	122 0.	-0.	0.
12997	11 3-0.	37 34.8	122 0.	-0.	0.
71597	619-0.	37 34.8	122 0.	-0.	0.
101797	2330-0.	37 34.8	122 0.	-0.	0.
122697	15 6-0.	37 34.8	122 0.	-0.	0.
111498	2110-0.	37 34.8	122 0.	-0.	0.
111498	2157-0.	37 34.8	122 0.	-0.	0.
70699	2010-0.	37 40.2	121 55.2	-0.	0.
11400- 1900	1927-0.	37 34.8	122 0.	-0.	0.
52000	13 5-0.	37 34.8	122 0.	-0.	0.

12101	7 0-0.	37 34.8	122 0.	-0.	0.
80701	1023-0.	37 34.8	122 0.	-0.	0.
61103	1312-0.	37 40.2	121 45.0	-0.	0.
51904	930-0.	37 34.8	122 0.	-0.	0.
42805	825-0.	37 34.8	122 0.	-0.	0.
92605	1435-0.	37 34.8	122 0.	-0.	0.
41106	854-0.	37 34.8	122 0.	-0.	0.
60606	755-0.	37 34.8	122 0.	-0.	0.
61606	545-0.	37 40.2	121 45.0	-0.	0.
20407	355-0.	37 40.2	121 45.0	-0.	0.
21307	1850-0.	37 40.2	121 45.0	-0.	0.
21407	245-0.	37 40.2	121 45.0	-0.	0.
21407	8-0-0.	37 40.2	121 45.0	-0.	0.
102907	2125-0.	37 40.2	121 45.0	-0.	0.
22209	2030-0.	37 40.2	121 45.0	-0.	0.
191C2709	245-0.	37 40.2	121 45.0	-0.	0.
100719	735-0.	37 40.2	121 45.0	-0.	0.
140707	1638-0.	37 40.2	121 45.0	-0.	0.
160114	18 5-0.	37 40.2	121 45.0	-0.	0.
300513	1018-0.	37 40.2	121 45.0	-0.	0.
320630	023-0.	37 34.8	122 0.	-0.	3.0
320712	43341.0	37 36.0	121 49.8	-0.	3.0
330516	114526.	37 36.0	122 0.	-0.	4.5
330629	84842.	37 36.0	122 0.	-0.	0.
350630	1525-0.	37 36.0	122 0.	-0.	0.
360924	3 9-0.	37 36.0	121 52.8	-0.	0.
381201	1617-0.	37 30.0	121 48.0	-0.	4.5
410331	20 1 0.0	37 36.0	121 48.0	-0.	0.
410924	1350-0.	37 42.0	121 48.0	-0.	0.
411027	659-0.	37 34.8	121 46.8	-0.	0.
420807	2 226.	37 34.2	121 40.2	-0.	2.5
430328	55245.	37 37.8	121 52.2	-0.	2.8
430329	1133-0.	37 37.8	121 52.2	-0.	0.
430329	114555.	37 37.8	121 52.2	-0.	4.2
430329	1155-0.	37 37.8	121 52.2	-0.	0.
430329	12 4-0.	37 37.8	121 52.2	-0.	0.
430331	7 6 9.	37 40.8	121 51.0	-0.	3.6
430407	015 1.	37 39.0	121 46.8	-0.	3.4
430408	013 4.	37 40.8	121 48.0	-0.	3.0
430411	21629.	37 42.0	121 46.8	-0.	2.5
430412	212042.	37 40.8	121 46.2	-0.	2.9
430415	122811.	37 40.8	121 46.2	-0.	3.2
430415	1323-0.	37 39.0	121 45.0	-0.	0.
430415	1523 4.	37 40.8	121 46.2	-0.	4.0
430415	1531 2.	37 40.8	121 46.2	-0.	4.1
430415	1532-0.	37 39.0	121 45.0	-0.	0.
430415	1535-0.	37 39.0	121 45.0	-0.	0.
430415	1538-0.	37 39.0	121 45.0	-0.	0.
430415	1550-0.	37 39.0	121 45.0	-0.	0.
430415	16 3-0.	37 39.0	121 45.0	-0.	0.
430415	18 0-0.	37 39.0	121 45.0	-0.	0.
430416	1 8-0.	37 39.0	121 45.0	-0.	0.
430420	2 019.	37 39.0	121 51.0	-0.	2.2
430421	171253.	37 33.6	121 45.0	-0.	0.
430421	2329 0.	37 33.6	121 45.0	-0.	0.
430421	233944.	37 40.8	121 43.2	-0.	4.2

430421	235846.	37 33.6	121 45.0	-0.	0.
430426	1154 0.	37 37.2	121 46.8	-0.	4.1
430426	12 258.	37 33.6	121 45.0	-0.	0.
430426	1215-0.	37 33.6	121 45.0	-0.	0.
430426	1824-0.	37 33.6	121 45.0	-0.	0.
430429	61129.	37 39.0	121 45.0	-0.	0.
430429	8 9-0.	37 39.0	121 45.0	-0.	0.
430501	252-0.	37 39.0	121 45.0	-0.	0.
430505	1149-0.	37 39.0	121 45.0	-0.	0.
430505	18 7-0.	37 39.0	121 45.0	-0.	0.
430506	6 3-0.	37 39.0	121 45.0	-0.	0.
430508	930-0.	37 39.0	121 45.0	-0.	0.
430508	1020-0.	37 39.0	121 45.0	-0.	0.
430508	122939.	37 43.8	121 42.0	-0.	3.4
430508	1330-0.	37 39.0	121 45.0	-0.	0.
430517	1945-0.	37 39.0	121 45.0	-0.	0.
430527	610 1.	37 43.2	121 45.0	-0.	2.8
430529	45750.	37 40.2	121 48.0	-0.	2.7
430530	1 4 9.	37 40.2	121 48.0	-0.	3.7
430610	55527.	37 37.8	121 49.8	-0.	2.5
430629	45423.	37 43.8	121 42.0	-0.	3.4
430706	21 5-0.	37 39.0	121 45.0	-0.	0.
430304	2050 5.	37 39.0	121 45.0	-0.	0.
430804	211746.	37 39.0	121 45.0	-0.	0.
430813	449-0.	37 39.0	121 45.0	-0.	0.
430926	174826.	37 30.0	121 43.8	-0.	3.5
431123	134038.	37 40.2	121 51.0	-0.	2.5
431219	15228.	37 40.8	121 49.2	-0.	3.1
431220	145-0.	37 39.0	121 54.0	-0.	0.
440120	02910.	37 40.8	121 46.2	-0.	2.6
440402	205842.	37 43.2	121 42.0	-0.	2.6
440724	1047-0.	37 39.0	121 45.0	-0.	0.
450807	43827.	37 31.2	121 46.2	-0.	2.5
450807	2337 1.	37 31.2	121 46.2	-0.	2.6
450827	71042.	37 34.2	121 52.8	-0.	2.8
451113	112 8.0	37 37.8	121 49.2	-0.	3.7
460219	6 758.	37 33.0	121 45.0	-0.	2.0
460425	215038.	37 34.2	121 55.2	-0.	3.8
460429	1939 9.	37 34.2	121 55.2	-0.	2.2
470402	548-0.	37 31.8	121 45.0	-0.	2.5
470413	912-0.	37 34.2	121 51.0	-0.	2.0
470503	6 4-0.	37 42.0	121 46.2	-0.	2.6
470816	1645-0.	37 36.0	121 48.0	-0.	2.5
480225	191858.	37 34.8	121 46.2	-0.	3.2
480316	11 212.	37 34.8	121 49.8	-0.	2.3
480705	91832.	37 42.0	121 48.0	-0.	1.7
480713	41054.	37 43.2	121 43.2	-0.	2.1
481125	213452.	37 34.2	121 57.0	-0.	2.8
490212	25616.	37 37.2	121 57.0	-0.	3.4
490429	53147.	37 39.0	121 46.2	-0.	2.8
490807	34236.	37 30.0	121 43.2	-0.	2.7
491023	93522.	37 31.2	121 42.0	-0.	2.3
500506	21435.	37 43.2	121 55.2	-0.	1.8
500811	34344.	37 36.0	121 57.0	-0.	1.9
510203	212950.	37 31.2	121 57.0	-0.	2.4
510720	82514.	37 30.0	121 48.0	-0.	1.6

510831	134811.	37 34.2	121 55.8	-0.	2.2
510831	153535.	37 34.2	121 55.8	-0.	2.5
520126	231054.	37 37.2	121 58.8	-0.	2.5
520428	3 130.	37 30.0	121 55.2	-0.	3.1
520623	202214.	37 34.2	121 51.0	-0.	1.9
520802	162845.	37 39.0	122 0.	-0.	2.9
530223	0 056.	37 37.8	121 46.8	-0.	2.7
530307	855 5.	37 37.2	121 46.2	-0.	1.6
530627	223922.	37 42.0	121 46.2	-0.	2.5
530905	1728 0.	37 31.2	121 48.0	-0.	2.2
530911	17 758.	37 36.0	121 52.2	-0.	1.9
540430	133024.	37 37.2	121 46.8	-0.	2.1
541114	105433.	37 43.8	121 55.2	-0.	1.8
551028	11 923.	37 31.8	121 45.0	-0.	2.3
560604	13 5 8.	37 39.0	121 40.2	-0.	2.6
560605	1628 9.	37 31.8	121 40.8	-0.	2.3
570228	131544.	37 31.2	121 51.0	-0.	2.1
570408	9 039.	37 36.0	121 55.8	-0.	1.7
570408	143033.	37 31.8	121 49.8	-0.	2.6
570415	2350 5.	37 31.2	121 46.2	-0.	2.7
570419	12938.	37 30.0	121 49.8	-0.	1.8
570620	14052.	37 37.8	121 51.0	-0.	2.5
570928	151719.	37 31.2	121 48.0	-0.	3.1
580306	145838.	37 33.0	121 52.2	-0.	2.8
580714	04133.	37 37.8	121 45.0	-0.	1.9
581029	141059.	37 43.8	121 46.8	-0.	2.2
581111	23527.	37 37.2	121 40.2	-0.	1.8
590128	125017.	37 31.2	121 46.8	-0.	3.0
590219	195519.	37 43.8	121 45.0	-0.	2.0
590330	629 8.	37 30.0	121 49.2	-0.	1.9
590419	211052.	37 40.2	121 58.8	-0.	2.5
590625	11 352.	37 40.8	121 58.8	-0.	2.8
590713	194759.	37 33.0	121 55.2	-0.	3.0
590714	02128.	37 33.0	121 55.2	-0.	2.0
591007	24132.	37 30.0	121 48.0	-0.	2.5
600305	105728.	37 30.0	121 54.0	-0.	1.6
600314	204725.	37 45.0	121 46.2	-0.	2.2
600413	85715.	37 31.8	121 48.0	-0.	2.0
600612	2 143.	37 42.0	121 49.8	-0.	2.0
600823	93341.	37 31.8	121 43.2	-0.	2.5
601224	144034.	37 31.8	121 42.0	-0.	2.6
610320	14 0 5.	37 34.8	121 49.8	-0.	2.3
610506	183018.	37 34.2	121 46.2	-0.	2.0
630131	82313.3	37 30.6	121 56.4	-0.	3.3
630131	85842.9	37 31.2	121 56.4	-0.	2.7
630520	195751.7	37 42.0	121 46.2	-0.	3.4
630525	23 747.7	37 30.0	121 52.2	-0.	2.5
640107	202537.6	37 31.8	121 55.8	-0.	2.6
640112	74814.2	37 39.6	121 43.2	-0.	2.6
650628	111511.4	37 33.6	121 40.2	-0.	3.6
650730	181330.0	37 43.8	121 45.6	-0.	2.9
650819	11 4 5.	37 36.0	121 42.0	-0.	2.5
651109	72143.9	37 35.4	122 0.	-0.	2.5
671214	185435.3	37 33.0	121 54.0	-0.	2.6
700612	330 4.0	37 36.0	121 55.8	-0.	4.3
690414	916 33.3	37 30.4	121 50.4	4.5	.9

690425	755 40.7	37 35.1	121 50.3	4.3	1.1
690428	2113 4.8	37 36.7	121 40.8	6.6	1.0
690429	911 45.5	37 30.8	121 50.1	7.3	.8
690515	4 6 38.8	37 30.8	121 50.5	4.1	.7
690601	1220 45.1	37 38.7	121 48.6	5.0	1.9
690606	917 53.3	37 30.3	121 40.9	12.7	.8
690610	1010 54.5	37 32.0	121 48.5	8.4	1.2
690610	1033 35.9	37 31.8	121 49.5	9.0	2.4
690610	1230 11.6	37 32.1	121 48.5	8.8	.8
690610	1546 23.2	37 32.7	121 48.8	7.6	1.4
690614	1452 9.7	37 32.2	121 48.0	12.4	1.2
690614	1453 8.1	37 32.1	121 48.4	10.4	1.9
690618	016 24.3	37 40.6	121 43.4	10.8	1.0
690618	023 32.5	37 34.1	121 42.4	5.0	1.0
690618	2117 11.5	37 32.4	121 48.0	2.9	.7
690626	1442 38.0	37 30.2	121 51.9	5.0	1.5
690702	357 14.5	37 33.1	121 55.1	6.0	.7
690704	1214 17.0	37 31.0	121 53.4	4.3	1.8
690704	1458 39.1	37 31.4	121 53.5	5.3	1.5
690711	2336 32.0	37 36.7	121 40.0	7.5	1.7
690714	1731 34.3	37 36.9	121 40.5	7.6	1.1
690728	1912 53.5	37 37.5	121 40.5	7.0	2.0
690814	1654 48.1	37 32.0	121 53.0	5.0	.9
690825	1841 38.9	37 34.8	121 58.3	6.3	2.1
690929	229 10.3	37 37.2	121 40.3	7.4	1.1
691001	1242 1.8	37 33.5	121 54.1	5.0	.9
691002	2351 18.8	37 35.2	121 47.5	5.9	1.5
691005	19 3 43.3	37 33.2	121 49.8	3.8	1.0
691010	051 20.2	37 32.4	121 40.0	6.4	1.6
691026	13 8 57.1	37 34.2	121 56.9	3.0	1.2
691029	021 37.9	37 33.0	121 45.1	5.0	1.4
691109	1920 26.9	37 32.9	121 40.5	4.3	1.9
691109	1922 36.5	37 32.6	121 40.1	6.3	1.1
691109	1923 39.2	37 32.2	121 40.0	5.0	.8
691113	923 57.9	37 31.0	121 48.0	7.6	1.4
691115	3 1 52.8	37 37.7	121 40.2	10.5	1.2
691115	6 3 50.1	37 36.6	121 40.2	6.9	1.1
691116	059 58.8	37 34.5	121 48.9	3.6	.5
691122	18 2 3.0	37 33.2	121 55.5	4.3	1.0
691202	124 40.1	37 32.4	121 56.1	3.6	.9
691203	815 44.4	37 32.9	121 48.0	5.0	.9
691214	1029 29.7	37 36.0	121 59.7	6.1	1.6
691217	2221 16.1	37 32.8	121 50.9	5.0	.9
691218	257 56.2	37 32.4	121 51.0	5.0	.7
691220	522 8.9	37 32.7	121 51.4	5.0	1.0
691220	643 32.1	37 32.6	121 51.6	5.0	.8
691221	1435 58.0	37 32.7	121 51.4	5.0	.6
691221	1644 39.6	37 32.7	121 51.2	5.0	.7
691222	846 43.9	37 32.7	121 50.8	5.0	.1
691222	1944 28.1	37 32.7	121 51.3	5.0	.6
691222	1955 49.5	37 32.7	121 51.3	5.0	1.2
691222	1958 27.8	37 32.7	121 51.1	5.0	1.7
691222	2343 47.3	37 32.5	121 51.2	5.0	.6
691224	917 22.1	37 32.7	121 51.7	5.0	.6
691225	1224 20.6	37 34.3	121 57.0	5.3	1.4
691229	821 32.0	37 31.0	121 48.7	9.7	1.7

700105	1413	20.4	37	33.2	121	51.2	5.8	1.4
700105	1731	12.1	37	32.1	121	49.7	6.2	3.1
700105	1732	43.7	37	32.5	121	49.6	5.0	1.4
700105	1735	38.6	37	33.1	121	49.4	5.0	1.2
700105	18 2	37.6	37	32.3	121	49.9	2.0	.7
700105	1822	13.9	37	32.3	121	49.4	5.6	1.3
700105	1826	45.3	37	32.2	121	49.7	3.8	1.1
700105	1827	39.2	37	32.5	121	50.0	5.0	.7
700105	2155	49.1	37	32.3	121	49.7	5.0	.8
700105	2331	58.7	37	32.2	121	49.2	5.0	.3
700106	834	55.0	37	32.1	121	49.5	6.2	2.7
700106	849	40.8	37	32.3	121	49.6	5.2	.4
700106	12 0	29.9	37	32.1	121	49.7	4.7	.5
700106	12 0	37.8	37	32.2	121	49.3	5.3	.8
700106	1219	57.5	37	32.3	121	49.7	3.7	1.0
700106	1718	8.1	37	30.4	121	51.5	3.2	1.3
700106	1945	24.7	37	32.3	121	49.6	3.6	2.1
700107	1514	16.3	37	31.9	121	49.5	4.1	.4
700107	1934	17.6	37	32.3	121	49.0	6.4	.4
700116	617	57.4	37	32.4	121	51.2	5.0	.2
700116	649	46.1	37	35.8	121	40.1	5.6	.8
700118	1845	32.6	37	32.7	121	54.9	5.0	1.3
700119	7 5	3.8	37	32.0	121	49.2	5.0	.2
700123	10 7	39.7	37	32.4	121	49.7	4.8	.7
700124	026	37.1	37	35.1	121	46.3	5.0	1.0
700126	1317	55.7	37	35.8	121	40.6	6.0	.8
700126	2330	19.7	37	35.3	121	50.2	3.3	1.0
700127	1614	24.2	37	32.4	121	49.8	5.9	1.9
700130	1029	59.7	37	32.6	121	49.4	5.0	.6
700208	1547	10.3	37	35.2	121	58.7	3.5	1.1
700209	711	34.4	37	35.6	121	43.6	7.1	1.2
700309	347	32.1	37	36.2	121	44.7	5.9	1.1
700311	715	33.3	37	31.9	121	49.3	5.0	1.3
700311	8 1	57.3	37	32.0	121	49.2	3.6	.6
700322	1740	58.0	37	32.8	121	50.9	5.0	1.0
700322	1752	3.5	37	32.4	121	51.1	5.0	.9
700330	15 1	42.4	37	41.6	121	59.8	1.8	1.3
700330	23 5	14.3	37	31.1	121	45.9	6.5	.6
700330	2329	52.0	37	31.6	121	46.1	6.0	1.1
700331	6 3	24.8	37	31.6	121	45.7	8.4	.6
700408	1143	20.7	37	31.0	121	52.2	7.1	1.7
700417	317	54.1	37	37.5	121	45.4	5.0	.4
700420	439	9.6	37	33.4	121	44.9	5.0	.2
700427	20 0	4.8	37	31.5	121	50.8	4.0	1.4
700430	952	37.4	37	32.3	121	49.4	3.8	.4
700503	9 4	49.7	37	32.8	121	51.1	5.6	1.5
700505	859	27.0	37	35.8	121	40.4	6.3	.9
700509	618	12.9	37	34.4	121	49.7	7.7	.4
700522	1447	29.7	37	32.5	121	51.2	5.0	.7
700605	1746	46.0	37	31.5	121	53.0	5.0	1.9
700605	1359	29.0	37	31.3	121	53.3	6.2	1.9
700607	316	5.4	37	36.7	121	40.2	6.6	1.4
700618	2323	49.3	37	32.3	121	49.7	2.6	1.3
700620	1436	30.4	37	32.7	121	51.1	4.8	1.2
700624	1754	8.7	37	30.7	121	52.2	5.0	1.7
700625	935	9.3	37	30.6	121	52.4	5.2	.5

700629	1414 12.5	37 40.6	121 48.3	5.0	1.2
700702	638 43.3	37 40.4	121 47.5	5.0	1.8
700702	7 1 20.2	37 41.3	121 46.1	5.0	1.6
700702	8 4 55.3	37 40.8	121 47.2	5.0	1.8
700702	8 5 57.1	37 41.3	121 46.2	5.0	1.2
700702	846 58.1	37 41.3	121 45.6	5.0	1.3
700714	1242 7.3	37 33.6	121 56.1	4.3	.9
700720	1051 30.5	37 31.6	121 47.7	2.5	1.3
700726	1053 59.1	37 32.6	121 57.5	2.0	1.0
700729	2332 19.1	37 31.6	121 53.6	6.3	1.1
700803	129 34.8	37 32.4	121 52.6	1.0	2.1
700808	529 13.7	37 32.5	121 51.6	5.0	.9
700809	1911 59.5	37 42.1	121 46.7	13.9	1.3
700810	538 22.5	37 33.0	121 51.7	5.0	1.1
700811	614 52.5	37 34.7	121 59.0	5.7	1.7
700812	1011 45.7	37 34.3	121 51.1	6.3	1.3
700815	1121 4.3	37 32.8	121 50.8	5.0	.8
700816	1726 14.3	37 31.0	121 53.1	6.3	2.6
700819	2316 1.1	37 32.9	121 51.3	5.0	.8
700822	910 26.1	37 32.8	121 51.2	5.0	.7
700822	1316 10.4	37 32.8	121 51.2	5.8	2.1
700822	1956 19.7	37 32.7	121 51.4	5.0	1.9
700824	1 5 13.9	37 36.9	121 40.3	7.2	1.2
700825	14 5 24.5	37 31.5	121 48.7	4.3	1.4
700831	326 21.9	37 32.8	121 51.2	5.0	1.4
700903	326 29.1	37 36.1	121 40.0	8.3	1.0
700903	2314 57.8	37 32.2	121 41.3	2.5	1.5
700910	724 24.4	37 37.9	121 51.0	5.1	2.1
700915	1519 41.7	37 31.7	121 53.7	5.0	1.4
700929	238 29.0	37 42.9	121 43.8	5.0	1.0
701006	10 7 14.6	37 38.0	121 51.3	6.4	1.8
701012	1532 48.8	37 36.5	121 40.0	6.8	1.5
701125	5 4 56.9	37 44.6	121 54.4	6.6	.9
701129	434 21.4	37 44.8	121 54.3	5.6	.9
701129	459 53.7	37 44.7	121 54.0	7.0	.9
701213	1543 10.7	37 37.6	121 40.1	7.7	1.2
701218	1952 42.2	37 37.5	121 40.0	7.3	1.6
701218	1952 58.8	37 37.2	121 40.6	7.7	1.5
701219	351 2.9	37 37.7	121 40.5	6.1	1.4
701226	1523 36.4	37 37.7	121 40.1	7.4	1.3
710101	15 6 21.5	37 36.6	121 40.0	7.5	.9
710122	1146 41.3	37 34.7	121 41.7	6.7	1.2
710125	946 11.6	37 37.6	121 40.4	7.3	1.1
710204	325 27.2	37 32.0	121 54.7	5.5	1.3
710204	325 43.8	37 32.1	121 54.6	5.0	2.0
710311	1032 46.4	37 30.6	121 50.2	3.7	1.5
710320	3 3 41.6	37 36.6	121 40.5	8.3	1.1
710323	451 57.2	37 31.9	121 49.5	3.0	1.0
710401	1351 31.8	37 36.9	121 40.5	7.5	.9
710423	12 9 22.9	37 36.5	121 54.3	5.5	.8
710424	15 7 1.4	37 32.6	121 46.4	5.8	1.5
710513	749 17.0	37 32.2	121 54.4	5.0	.8
710513	3 0 4.1	37 33.0	121 48.0	5.0	1.0
710607	051 23.5	37 37.1	121 40.0	6.9	1.6
710611	934 14.6	37 36.5	121 40.4	8.3	.9
710614	222 25.4	37 41.6	121 54.3	14.5	1.4

710617	1113 1.5	37 31.3	121 53.2	5.0	1.5
710617	1113 51.5	37 31.6	121 53.3	4.9	1.2
710618	1224 7.2	37 31.7	121 53.2	4.0	.7
710629	15 1 50.8	37 35.4	121 54.8	7.8	1.4
710704	15 2 8.9	37 31.9	121 49.2	7.4	1.4
710715	1656 24.9	37 43.1	121 43.6	5.4	1.6
710728	541 57.0	37 38.0	121 51.7	3.3	1.3
710805	1212 58.9	37 34.1	1[illegible]1 53.6	6.2	1.3
710805	1218 47.4	37 34.3	121 57.5	5.7	1.8
710806	643 12.0	37 44.3	121 48.8	10.4	1.3
710806	938 39.8	37 43.9	121 48.8	6.0	2.3
710818	943 30.2	37 31.9	121 49.3	3.6	1.0
710825	428 29.1	37 32.3	121 54.4	5.2	1.1
710909	439 18.7	37 32.3	121 54.8	5.4	2.0
710912	1 2 29.4	37 37.2	121 46.2	5.0	1.5
710914	1036 3.5	37 32.9	121 55.8	6.1	.6
710914	1037 32.4	37 32.9	121 56.0	7.0	1.7
710914	11 4 50.5	37 33.1	121 56.4	5.8	.8
710914	11 9 9.3	37 33.1	121 56.3	6.1	1.3
710923	1022 50.5	37 35.3	121 53.1	4.9	1.5
711012	2354 10.4	37 32.5	121 55.5	5.5	1.4
711109	1144 2.9	37 35.0	121 47.6	5.6	1.7
711109	1144 39.0	37 35.3	121 47.2	4.5	1.3
711109	1935 53.1	37 44.8	121 48.5	11.1	1.2
711110	1235 58.1	37 33.4	121 55.9	4.9	2.0
711113	8 2 15.3	37 36.7	121 41.8	5.4	1.7
711122	316 23.5	37 36.6	121 45.6	6.6	1.9
711204	1331 34.0	37 41.9	121 48.8	16.2	1.0
711205	440 45.0	37 42.1	121 48.6	16.7	1.2
711216	7 9 12.7	37 36.1	121 40.2	6.8	1.1
720102	1212 4.4	37 42.2	121 54.4	7.1	1.1
720109	656 16.1	37 35.5	121 47.0	5.2	1.4
720109	942 55.0	37 35.1	121 47.2	6.0	1.4
720109	1305 42.5	37 35.1	121 47.3	6.3	2.1
720110	313 14.7	37 35.2	121 47.2	6.4	2.2
720110	2208 10.8	37 30.5	121 51.8	5.0	1.2
720121	952 54.6	37 34.3	121 42.5	4.5	1.2
720125	2244 32.7	37 32.2	121 49.3	6.4	1.5
720213	1542 7.6	37 32.3	121 40.2	5.5	.6
720214	445 55.2	37 37.5	121 48.3	3.2	.3
720217	358 25.2	37 30.2	121 50.8	5.3	2.0
720219	1732 33.7	37 30.3	121 52.4	1.9	1.6
720320	1331 46.4	37 30.9	121 53.2	4.5	.7
720321	924 50.6	37 31.8	121 49.1	4.6	1.4
720324	721 8.3	37 33.9	121 50.5	6.2	2.1
720326	128 44.2	37 31.3	121 50.3	4.8	.7
720407	1726 2.4	37 34.2	121 50.1	6.4	3.0
720407	1849 44.0	37 34.1	121 50.0	6.6	1.9
720422	1610 44.7	37 32.0	121 49.0	4.3	1.8
720423	211 37.4	37 32.4	121 48.7	3.9	1.0
720423	959 32.2	37 42.6	121 43.0	4.8	1.7
720429	9 5 27.8	37 44.2	121 46.6	6.8	1.7
720516	1141 54.2	37 31.2	121 52.0	4.3	1.5
720523	435 1.4	37 34.4	121 49.1	5.1	1.2
720530	254 46.4	37 32.5	121 48.8	6.0	2.9
720602	2246 54.4	37 32.3	121 48.8	5.9	1.3

720615	1944 58.0	37 34.4	121 49.0	2.7	.4
720621	1212 45.6	37 34.8	121 58.9	1.9	1.3
720624	041 25.5	37 33.1	121 48.5	2.8	.7
720624	052 17.6	37 32.1	121 56.0	4.9	2.8
720624	055 52.7	37 31.9	121 56.0	3.5	.9
720625	328 3.6	37 31.5	121 54.4	2.6	1.0
720626	2025 24.6	37 30.0	121 52.6	3.7	1.8
720630	1018 13.9	37 44.2	121 48.5	10.2	1.6
720701	551 29.1	37 32.7	121 55.0	4.5	.8
720709	2215 40.2	37 40.9	121 45.9	7.9	1.9
720802	2129 0.5	37 37.3	121 53.6	4.5	1.4
720825	1628 45.3	37 36.6	121 50.4	16.8	.9
720828	313 17.5	37 33.6	121 57.7	4.8	.6
720908	544 3.2	37 35.8	121 40.1	7.7	1.0
720909	334 8.9	37 34.4	121 46.0	5.7	1.5

720913	1453 28.3	37 33.0	121 56.0	5.0	.6
720925	7 5 16.5	37 32.5	121 55.0	4.4	1.5
720927	1027 27.9	37 31.2	121 53.3	6.1	1.1
721003	2 8 2.3	37 37.2	121 53.8	5.7	1.6
721012	1133 2.9	37 43.3	121 58.2	6.7	.5
721012	1137 31.3	37 43.3	121 58.0	6.6	.8
721012	1244 35.1	37 43.4	121 58.1	6.5	1.1
721012	1627 53.9	37 43.0	121 57.6	6.3	1.2
721014	753 56.6	37 31.7	121 46.7	3.2	.9
721017	232 3.7	37 39.6	121 50.5	4.4	1.6
721020	0 4 25.8	37 32.9	121 50.9	5.0	1.2
721021	1130 5.8	37 33.1	121 48.2	6.1	.6
721025	1248 37.9	37 32.0	121 48.3	6.7	.9
721025	15 2 27.8	37 33.0	121 50.8	4.9	.8
721025	2247 19.1	37 33.3	121 50.8	5.0	1.0

721028	419 11.1	37 43.6	121 52.7	11.1	1.6
721028	423 36.8	37 43.6	121 52.5	11.3	1.5
721028	6 2 15.0	37 43.5	121 52.9	11.6	1.2
721028	636 47.3	37 43.6	121 52.8	11.8	1.5
721028	737 49.2	37 43.6	121 53.1	11.4	2.1
721028	16 8 24.8	37 44.3	121 51.3	9.7	1.5
721028	1610 13.3	37 44.3	121 51.2	9.1	.9
721102	2131 48.8	37 32.1	121 55.6	5.2	.3
721103	053 8.7	37 40.4	121 57.4	2.4	.6
721105	1740 49.4	37 33.4	121 51.7	9.9	.4
721109	123 13.6	37 32.7	121 47.4	5.2	.9
721109	821 7.3	37 32.3	121 48.6	6.6	1.8
721116	12 8 35.2	37 32.5	121 51.1	5.8	2.2
721116	1352 36.7	37 33.0	121 50.8	5.2	.9
721117	446 53.3	37 32.9	121 50.9	4.7	.5

721118	1141 5.4	37 32.9	121 50.8	4.8	.4
721118	1141 9.5	37 32.7	121 50.6	4.7	1.0
721118	1245 14.7	37 32.7	121 50.8	5.0	1.6
721120	759 54.1	37 42.7	121 59.3	6.5	.7
721120	8 1 36.3	37 42.7	121 59.1	6.4	.5
721130	1340 38.4	37 34.9	121 47.4	6.6	2.2
721130	1453 42.9	37 34.9	121 47.2	3.5	1.1
721130	1454 1.5	37 35.0	121 47.2	6.4	1.1
721130	1746 18.2	37 34.9	121 47.1	6.7	.7
721201	226 15.2	37 30.0	121 41.8	6.1	.9
721212	733 42.4	37 31.1	121 54.8	5.5	.4

721216	2010 1.2	37 39.2	121 43.9	4.9	1.8
721218	1655 39.0	37 32.0	121 54.9	5.9	.7
721223	1456 15.1	37 34.7	121 54.0	8.3	.8
721223	1642 40.1	37 34.7	121 54.1	9.2	.8
730101	724 43.9	37 38.1	121 51.3	5.1	.7
730105	1656 57.6	37 37.7	121 54.0	6.2	1.6
730107	1716 57.8	37 32.1	121 49.6	4.8	.7
730110	1045 20.1	37 33.0	121 56.7	6.5	.6
730110	1827 51.9	37 36.5	121 41.2	5.6	.7
730111	1147 2.6	37 33.4	121 51.7	5.0	1.1
730111	1210 45.9	37 33.2	121 56.8	6.3	.7
730111	1232 51.4	37 33.6	121 51.7	5.1	.8
730113	1140 21.3	37 32.5	121 50.9	5.1	.5
730115	2312 37.9	37 38.2	121 53.1	11.7	.8
730128	1724 8.0	37 31.3	121 53.5	5.6	.9
730214	13 1 1.9	37 35.6	121 40.9	6.9	.8
730220	2128 31.6	37 34.3	121 57.2	5.1	.9
730223	2047 0.4	37 32.7	121 50.8	4.6	.9
730301	1552 3.1	37 32.3	121 55.5	7.1	.5
730302	846 32.2	37 35.6	121 45.7	8.1	.4
730303	930 20.9	37 32.7	121 55.3	6.5	.7
730307	1648 54.4	37 30.7	121 49.4	3.5	.6
730314	1055 20.2	37 35.6	121 49.8	7.1	.5
730316	942 40.2	37 35.0	121 49.8	9.3	.4
730320	314 50.3	37 35.1	121 58.9	6.1	1.3
730330	2221 37.6	37 30.3	121 49.8	3.0	.9
730405	1331 26.2	37 35.1	121 54.3	9.4	1.0
730411	4 6 42.9	37 35.1	121 54.2	8.5	.3
730418	1936 58.1	37 36.6	121 45.6	7.5	1.8
730422	21 0 15.2	37 32.7	121 55.7	4.9	.8
730423	536 55.0	37 42.3	121 55.8	5.2	.7
730424	1756 19.7	37 42.5	121 56.0	5.4	1.0
730425	2 7 4.1	37 30.3	121 43.2	6.1	2.1
730426	744 7.4	37 33.4	121 56.2	4.8	1.0
730427	2144 6.2	37 35.1	121 49.1	7.7	.7
730429	1842 40.8	37 32.8	121 55.4	4.3	.6
730501	12 2 12.8	37 31.0	121 40.7	.1	1.8
730516	1520 56.8	37 33.6	121 46.2	5.0	1.1
730518	2 5 33.8	37 31.1	121 48.2	6.4	1.0
730524	3 7 56.6	37 31.2	121 48.8	8.7	.8
730526	131 53.0	37 32.9	121 46.4	6.9	1.1
730527	348 37.6	37 33.9	121 46.5	6.6	2.4
730527	1430 3.7	37 33.9	121 46.5	6.3	.7
730527	16 4 6.9	37 34.0	121 46.3	6.2	2.1
730527	2019 17.2	37 33.8	121 46.3	6.7	.7
730529	1528 30.6	37 34.0	121 46.4	7.3	.7
730601	1142 13.5	37 38.7	121 49.2	6.5	1.4
730612	2022 2.6	37 35.5	121 58.5	6.6	2.7
730624	13 8 29.9	37 30.9	121 50.7	5.2	1.8
730630	358 5.6	37 34.8	121 57.9	5.0	.6
730702	14 2 23.1	37 33.1	121 57.4	1.6	.5
730705	1450 41.8	37 35.5	121 42.3	7.0	1.0
730706	2039 37.0	37 36.4	121 59.8	5.7	1.8
730715	1255 25.5	37 35.3	121 42.2	6.8	.8
730718	1136 28.1	37 34.6	121 57.8	7.1	.7
730802	1054 1.5	37 32.6	121 56.3	6.5	1.2

730302	11 4 57.5	37 32.7	121 56.7	6.7	.3
730802	1116 36.2	37 32.7	121 56.0	6.8	.3
730302	1141 24.8	37 32.7	121 56.1	6.6	.3
730302	1611 53.1	37 32.7	121 56.3	6.4	1.8
730812	913 45.4	37 35.3	121 42.2	6.8	1.1
730812	1125 19.1	37 32.0	121 48.4	6.7	.6
730814	1217 55.6	37 35.6	121 58.3	6.7	1.1
730817	1347 52.6	37 40.5	121 47.1	7.6	1.5
730826	1224 32.6	37 35.6	121 58.4	6.7	.3
730830	18 5 28.4	37 33.3	121 57.4	3.6	1.0
730901	21 5 50.4	37 32.3	121 49.4	4.6	.9
730902	1523 37.9	37 31.2	121 53.3	6.4	.5
730910	2258 37.8	37 34.4	121 45.3	6.6	.5
730911	2252 0.8	37 32.2	121 55.7	5.8	.8
730919	19 9 2.0	37 34.6	121 58.0	6.6	1.2
730927	244 1.1	37 31.9	121 54.5	4.9	.5
730928	2149 48.3	37 38.1	121 41.1	6.3	1.4
730930	23 0 54.4	37 31.3	121 41.5	6.2	2.2
731004	2120 41.1	37 44.3	121 55.5	7.0	.7
731007	1645 22.5	37 32.3	121 50.8	6.0	1.0
731007	1745 12.2	37 32.7	121 51.2	5.8	2.8
731007	1828 37.1	37 32.3	121 51.1	5.7	1.9
731007	1934 54.2	37 32.6	121 50.6	5.1	.5
731007	22 3 0.7	37 32.2	121 50.7	5.9	.5
731007	23 4 46.7	37 32.6	121 51.0	5.1	.7
731008	2 5 23.0	37 32.2	121 51.0	5.8	.6
731008	2333 46.7	37 32.7	121 51.2	5.0	1.6
731009	4 6 47.6	37 32.2	121 52.3	8.1	.5
731010	1826 36.4	37 32.9	121 50.9	5.1	1.2
731016	825 54.1	37 38.2	121 41.0	7.7	1.4
731016	1038 4.8	37 38.2	121 41.3	6.6	1.0
731016	1945 44.9	37 32.2	121 51.1	5.7	.5
731022	636 6.8	37 31.3	121 48.3	2.5	.8
731022	11 4 53.0	37 35.9	121 58.0	6.2	.5
731025	141 12.7	37 43.6	121 56.3	4.4	.5
731025	8 4 41.3	37 34.8	121 58.1	6.9	.7
731028	1515 38.8	37 34.2	121 44.1	6.8	.9
731029	349 50.3	37 37.8	121 53.6	4.6	.5
731031	7 2 39.3	37 32.3	121 51.1	5.9	1.2
731031	742 21.5	37 32.4	121 51.0	5.1	.8
731107	23 5 56.9	37 33.1	121 56.0	5.6	.7
731109	426 30.0	37 34.5	121 47.4	7.5	.9
731117	2036 26.5	37 34.8	121 57.7	6.4	.8
731119	937 53.8	37 31.9	121 46.3	4.5	.9
731119	1446 5.8	37 32.0	121 53.9	4.9	.9
731120	5 3 12.3	37 31.3	121 53.1	5.1	.7
731125	1657 58.4	37 32.1	121 51.5	7.2	.3
731127	1054 46.3	37 35.0	121 48.2	8.4	.5
731128	351 51.0	37 35.8	121 54.6	8.2	.6
731207	1138 27.5	37 31.8	121 48.2	5.0	.9
731209	1247 51.6	37 33.3	121 46.1	9.5	.5
731210	1038 37.6	37 32.9	121 49.6	12.6	.5
731211	2248 40.5	37 34.6	121 47.3	7.7	.7
731220	2354 32.4	37 35.0	121 49.8	5.4	.7
731229	412 21.3	37 33.5	121 49.7	8.6	.9
740102	231 20.9	37 37.9	121 43.9	5.0	.8

740110	11 8 29.9	37 32.3	121 54.3	5.5	1.5
740110	1118 1.7	37 22.0	121 54.3	5.1	1.9
740110	1119 29.8	37 22.2	121 54.4	5.5	1.0
740110	1133 39.5	37 32.3	121 54.5	5.4	1.2
740112	735 55.8	37 31.7	121 41.2	5.8	1.0
740115	1344 4.9	37 34.1	121 57.5	2.7	.8
740119	722 7.3	37 34.5	121 57.8	9.6	.8
740120	20 7 24.1	37 31.7	121 53.8	4.7	.6
740129	429 37.5	37 32.0	121 48.5	4.3	.9
740201	4 1 59.1	37 37.2	121 44.0	5.2	1.1
740205	2232 56.8	37 32.6	121 51.2	7.1	.6
740207	927 42.2	37 40.5	121 47.2	8.4	.8
740208	13 9 19.6	37 42.5	121 56.2	9.7	.7
740208	1732 1.1	37 42.4	121 56.0	10.5	.9
740208	1744 26.1	37 42.5	121 56.1	10.7	1.2
740210	6 2 40.1	37 40.3	121 56.2	5.8	1.3
740210	1721 2.9	37 32.0	121 54.3	6.2	1.9
740210	1943 14.6	37 32.0	121 54.4	5.9	2.0
740217	1113 33.3	37 32.8	121 51.0	4.7	.2
740218	1523 49.1	37 30.1	121 51.5	4.2	.9
740223	1459 54.1	37 32.1	121 49.1	2.9	.9
740226	1554 5.6	37 41.6	121 49.0	11.4	1.0
740313	20 3 41.9	37 32.0	121 51.3	12.4	.3
740315	1 8 12.9	37 44.7	121 48.6	10.2	.9
740315	138 2.1	37 44.4	121 48.5	9.8	.8
740317	943 23.1	37 33.5	121 40.6	6.3	1.3
740318	1749 27.0	37 37.5	121 45.1	7.9	1.4
740321	234 44.9	37 35.4	121 48.9	4.1	.9
740321	12 3 31.9	37 35.4	121 57.8	6.3	1.4
740321	2249 39.3	37 35.5	121 57.9	6.0	2.1
740321	2250 51.7	37 35.1	121 58.2	6.5	.4
740324	1218 1.4	37 32.6	121 50.3	8.7	.6
740324	1657 8.8	37 32.6	121 50.5	6.5	3.3
740324	1659 7.7	37 33.1	121 50.0	4.8	1.3
740324	17 1 5.0	37 32.5	121 49.9	6.9	.7
740324	17 2 12.0	37 33.0	121 50.2	6.2	.9
740324	17 4 52.8	37 33.2	121 50.1	6.1	.5
740324	17 7 5.1	37 33.4	121 50.2	6.3	.7
740324	1715 41.5	37 33.4	121 50.0	6.8	.6
740324	1720 37.0	37 32.5	121 50.1	5.4	1.6
740324	18 1 25.1	37 32.6	121 49.3	4.2	.8
740324	2210 19.5	37 33.0	121 49.8	6.0	.7
740325	957 15.8	37 32.6	121 50.0	8.3	.5
740325	1637 37.0	37 33.5	121 50.1	8.0	.6
740328	532 24.7	37 32.4	121 51.0	5.8	1.1
740330	2321 5[illegible].1	37 32.7	121 46.2	6.0	.9
740410	559 5.0	37 40.0	121 47.4	7.7	.5
740429	016 59.1	37 35.0	121 41.9	5.9	.8
740429	243 1.3	37 39.5	121 57.7	9.6	1.0
740429	1255 2.5	37 35.5	121 40.1	7.4	.7
740429	1310 46.6	37 35.2	121 40.7	6.8	.7
740504	1359 17.2	37 35.3	121 58.6	4.6	1.2
740505	10 9 35.8	37 24.4	121 58.0	7.8	.2
740522	116 40.9	37 39.4	121 41.3	6.8	.8
740605	542 53.9	37 33.8	121 52.2	7.4	.6
740609	838 13.1	37 30.3	121 40.0	6.2	1.6

740613	739 30.1	37 33.8	121 45.7	1.4	1.0
740620	616 41.2	37 34.6	121 47.0	3.7	1.1
740624	333 14.1	37 30.9	121 50.3	4.3	1.3
740624	657 4.9	37 34.6	121 50.4	8.2	1.4
740627	2041 23.5	37 36.8	121 59.8	5.7	1.4
740629	0 9 9.9	37 32.1	121 54.7	4.4	.6
740824	17 0 30.8	37 31.3	121 40.4	5.7	1.8
740827	212 49.3	37 32.8	121 55.4	4.9	1.2
740830	458 54.1	37 31.5	121 52.2	5.7	2.3
740908	1811 13.4	37 32.6	121 50.2	4.5	.7
740915	1736 17.2	37 32.3	121 49.2	5.6	1.6
740924	044 44.5	37 32.1	121 48.3	3.5	1.3
740929	0 8 44.3	37 33.4	121 49.5	5.9	1.1
740929	2220 4.3	37 36.4	121 46.4	3.0	1.4
740929	2222 12.4	37 36.4	121 46.5	7.0	.9
741013	654 30.7	37 32.6	121 50.5	4.7	1.0
741013	1340 25.1	37 33.4	121 41.0	6.2	1.1
741014	250 25.5	37 37.0	121 45.2	1.8	1.5
741016	1725 29.8	37 32.8	121 50.1	4.0	.6
741017	210 6.3	37 32.3	121 50.3	4.7	1.2
741020	016 12.3	37 32.6	121 50.3	4.6	1.2
741020	333 33.8	37 41.4	121 47.2	12.3	1.7
741020	344 12.0	37 41.8	121 46.6	13.6	1.0
741020	344 44.7	37 41.5	121 47.5	10.8	1.9
741020	5 6 29.7	37 41.6	121 47.0	12.1	1.8
741028	511 20.9	37 32.2	121 53.9	6.5	.6
741028	511 50.8	37 32.0	121 53.7	6.7	.5
741029	2039 6.0	37 36.7	121 46.2	4.6	1.2
741101	042 18.9	37 30.0	121 48.5	1.6	1.1
741107	1455 0.5	37 30.4	121 42.9	5.3	1.1
741108	112 3.0	37 30.1	121 48.0	1.4	1.3
741110	315 48.6	37 30.2	121 48.0	1.2	1.1
741112	1 6 31.2	37 30.3	121 48.3	.6	1.5
741118	1411 23.2	37 34.2	121 57.5	5.1	1.1
741121	047 1.2	37 30.3	121 48.2	1.2	1.6
741123	1029 53.0	37 35.0	121 47.1	3.0	.8
741123	12 1 48.1	37 30.3	121 55.0	5.4	2.0
741124	049 0.6	37 30.3	121 48.2	1.2	1.5
741124	429 0.3	37 35.2	121 47.5	1.2	1.0
741127	1 6 30.1	37 30.3	121 48.3	.7	1.5
741127	20 7 48.9	37 34.4	121 57.5	4.7	1.7
741203	9 1 11.9	37 32.7	121 56.1	6.2	1.3
741207	2349 22.4	37 30.2	121 48.3	1.5	1.2
741209	22 1 6.8	37 30.1	121 48.4	1.2	1.8
741213	0 2 30.4	37 30.3	121 48.2	1.2	1.3
741219	041 13.9	37 30.8	121 48.1	.8	1.3
741219	2216 36.8	37 31.0	121 52.9	5.2	1.5
741220	22 3 45.3	37 30.5	121 48.2	.7	1.5
750108	19 3 31.6	37 33.7	121 48.0	4.6	1.1
750117	1934 39.0	37 37.0	121 59.6	5.7	1.5
750122	044 12.5	37 30.9	121 48.6	5.5	1.8
750124	636 59.9	37 33.7	121 49.7	6.7	1.5
750206	037 0.8	37 30.7	121 48.9	3.7	1.8
750215	1523 33.5	37 33.4	121 50.2	9.6	1.2
750220	729 49.8	37 33.4	121 48.0	4.3	1.0
750222	1355 45.6	37 35.6	121 47.8	4.0	1.0

750226	318	48.1	37	32.0	121	49.6	8.5	1.1
750228	1833	4.5	37	33.1	121	55.2	4.4	.9
750309	225	39.4	37	35.8	121	57.7	7.3	1.3
750311	19 1	56.2	37	37.2	121	40.5	9.3	1.5
750313	2224	59.5	37	30.4	121	48.2	4.5	1.7
750316	7 6	26.1	37	37.3	121	41.5	7.4	1.2
750316	923	15.8	37	37.7	121	41.3	7.4	1.6
750319	2346	13.4	37	30.5	121	48.1	4.9	1.9
750401	1522	9.9	37	32.6	121	54.8	5.0	1.5
750402	1945	45.2	37	39.4	121	46.7	7.5	1.6
750405	421	19.1	37	32.5	121	55.0	5.4	1.6
750427	826	4.2	37	37.0	121	40.9	5.8	1.3
750513	622	12.7	37	31.7	121	53.8	5.8	1.7
750523	1152	50.4	37	33.0	121	52.7	6.5	1.2
750523	1233	32.1	37	33.2	121	52.5	12.7	1.5
750525	1334	57.6	37	36.8	121	46.4	7.0	2.0
750623	1823	18.2	37	30.8	121	50.3	6.7	1.2
750703	2125	13.4	37	37.2	121	51.8	5.1	1.6
750705	1159	54.7	37	35.5	121	57.9	5.8	2.1
750707	040	31.1	37	32.7	121	55.3	3.8	1.2
750716	218	44.7	37	35.3	121	48.7	6.4	1.4
750720	339	36.7	37	35.6	121	57.8	6.2	1.0
750725	1121	0.8	37	36.3	121	45.1	7.2	1.3
750725	1848	22.0	37	35.2	121	58.3	6.2	1.2
750814	19 9	30.2	37	38.1	121	51.5	4.3	1.9
750818	143	22.1	37	38.4	121	51.4	4.7	1.3
750825	2152	41.4	37	38.3	121	40.6	9.5	2.2
750904	1219	29.0	37	35.3	121	57.7	4.9	.9
750905	21 0	54.1	37	34.0	121	40.4	5.9	2.0
750921	1134	16.2	37	32.2	121	46.1	3.1	1.2
751004	2 4	43.0	37	34.0	121	50.4	7.8	1.1
751023	1427	26.4	37	34.3	121	51.7	5.4	1.3
751025	23 6	6.1	37	36.8	121	40.1	6.8	1.1
751103	444	14.2	37	43.7	121	50.6	11.8	1.3
751106	3 7	20.4	37	40.8	121	48.6	13.2	1.8
751109	1519	51.5	37	34.6	121	42.1	5.4	1.2
751110	1149	28.0	37	31.4	121	47.3	5.9	2.0
751113	252	1.1	37	37.2	121	47.5	5.2	2.0
751122	1919	23.9	37	32.8	121	50.4	5.3	1.5
751204	2118	34.5	37	33.7	121	49.6	9.0	1.5
751209	10 4	13.4	37	34.9	121	42.2	5.5	1.6
751225	20 9	36.3	37	37.1	121	47.2	6.7	1.2
751226	1 7	6.7	37	32.9	121	50.4	1.6	1.0
751226	246	16.7	37	32.8	121	50.3	5.5	1.5
751228	152	38.7	37	37.0	121	41.5	6.1	2.0
751228	2 3	11.6	37	36.6	121	41.4	6.8	1.5
751228	351	37.8	37	36.8	121	41.2	6.8	1.4
751231	7 6	9.3	37	32.8	121	50.4	5.5	2.1
751231	14 3	36.5	37	32.8	121	50.2	4.8	1.4
751231	14 7	47.3	37	32.8	121	50.6	4.3	1.0
760101	13 2	12.0	37	33.2	121	50.2	6.4	1.9
760102	337	39.5	37	32.6	121	50.0	4.8	1.3
760103	1156	16.7	37	32.5	121	50.1	4.6	.9
760103	1251	41.0	37	32.6	121	50.2	4.7	1.0
760103	1410	49.3	37	32.9	121	50.2	4.3	.9
760105	235	8.7	37	32.9	121	50.2	4.6	.9

760107	2 2 10.7	37 32.8	121 49.9	4.3	1.2
760118	1051 35.0	37 31.5	121 53.3	5.7	1.0
760124	1139 46.5	37 36.2	121 59.5	2.9	1.1
760125	327 34.1	37 36.5	121 47.5	3.7	1.1
760125	1453 29.7	37 32.7	121 55.5	5.9	1.7
760129	10 3 18.8	37 36.2	121 59.2	4.9	2.4
760202	5 7 55.5	37 44.3	121 56.2	5.2	2.2
760209	1534 14.0	37 34.9	121 58.8	1.4	1.2
760212	155 4.4	37 44.4	121 56.1	4.5	2.4
760212	11 5 20.1	37 44.2	121 56.2	4.6	1.6
760229	1236 42.7	37 44.0	121 58.6	4.0	1.5
760301	17 6 40.1	37 43.6	121 58.1	4.6	3.0
760301	20 5 1.0	37 43.6	121 58.6	3.2	2.5
760302	254 35.3	37 43.3	121 58.6	1.9	2.5
760303	1734 15.2	37 32.6	121 49.7	4.8	1.4
760303	2010 59.5	37 32.5	121 49.9	5.6	2.2
760313	524 23.4	37 34.2	121 40.1	5.6	1.6
760313	1855 28.8	37 32.0	121 54.4	5.7	2.4
760313	19 0 7.1	37 32.0	121 53.9	6.1	1.5
760314	210 10.5	37 32.2	121 54.2	5.4	1.9
760316	1622 46.8	37 32.1	121 54.3	4.9	1.6
760317	310 16.2	37 31.9	121 49.1	8.8	1.3
760320	1347 41.3	37 31.5	121 53.5	6.1	2.6
760320	19 9 33.6	37 31.5	121 53.5	6.0	1.8
760321	451 55.2	37 39.1	121 40.0	7.1	1.7
760323	314 4.3	37 37.5	121 41.0	8.7	1.2
760325	2259 5.6	37 32.1	121 54.0	5.0	1.6
760325	2314 33.1	37 31.8	121 54.2	5.7	2.1
760326	318 7.0	37 31.9	121 54.4	5.8	2.1
760412	2136 12.8	37 41.4	121 59.8	2.3	1.4
760414	1557 19.9	37 41.9	121 59.7	4.7	1.7
760414	2359 7.6	[illegible] 41.4	121 59.7	2.1	1.6
760418	424 7.4	37 41.9	121 59.3	4.5	2.0
760419	1344 5.5	37 41.6	121 59.3	4.9	1.5
760420	253 55.2	37 30.5	121 49.9	4.3	2.0
760505	817 49.2	37 30.5	121 40.0	6.0	1.6
760519	135 14.5	37 43.7	121 58.6	3.6	2.8
760604	233 34.5	37 31.4	121 41.3	5.6	1.2
760613	949 17.6	37 37.9	121 56.2	9.6	1.5
760630	1139 52.1	37 36.0	121 57.7	6.4	1.7
760709	842 56.7	37 32.4	121 49.9	3.9	1.1
760712	1333 47.0	37 32.0	121 55.0	6.0	1.9
760716	11 1 48.8	37 40.4	121 41.9	2.3	1.8
760716	1144 33.4	37 39.4	121 42.5	.6	1.8
760717	112 7.2	37 32.9	121 49.2	7.8	1.5
760807	946 13.8	37 33.1	121 50.6	8.8	1.7
760831	1229 28.4	37 38.4	121 40.7	9.9	3.0
760831	1438 4.0	37 38.1	121 40.1	8.8	1.4
760831	15 3 15.9	37 38.0	121 40.7	7.1	2.2
760831	15 5 6.8	37 37.9	121 40.9	6.9	2.2
760831	1522 27.4	37 38.0	121 40.7	8.1	1.9
760831	1531 16.0	37 38.0	121 40.2	8.5	1.2
760831	16 4 2.6	37 38.3	121 40.1	9.0	1.6
760901	857 56.2	37 30.4	121 51.9	4.0	1.6
760901	1019 2.2	37 38.0	121 40.6	8.5	1.5
760903	1127 44.9	37 38.2	121 40.0	9.5	1.1

760904	1031 46.4	37 38.1	121 40.4	9.4	1.4
760904	2248 55.0	37 37.5	121 45.9	1.5	1.5
760905	249 40.0	37 38.8	121 44.9	5.4	1.5
760905	249 59.6	37 37.6	121 46.1	1.2	1.3
760909	2355 23.6	37 38.8	121 44.9	5.7	2.0
760909	2356 44.8	37 38.5	121 45.2	4.9	1.4
760911	946 2.7	37 37.9	121 45.2	2.9	1.8
760911	10 6 1.9	37 38.4	121 45.2	5.0	1.3
761007	2026 15.1	37 36.1	121 47.1	3.3	1.3
761008	5 9 35.9	37 37.3	121 43.3	4.5	1.1
761017	15 2 4.2	37 31.7	121 47.7	5.2	2.4
761019	1 3 21.8	37 37.7	121 54.9	2.0	1.5
761103	1038 5.0	37 41.8	121 57.3	6.9	1.6
761104	1420 46.4	37 38.6	121 45.3	5.4	1.6
761116	4 4 51.9	37 30.8	121 40.0	5.8	1.8
761116	415 3.9	37 30.8	121 40.1	5.9	1.8
761116	420 18.7	37 30.6	121 40.3	5.8	2.4
761116	428 24.7	37 30.5	121 40.2	6.1	2.1
761116	429 50.3	37 31.2	121 40.1	5.8	1.7
761116	517 47.8	37 30.1	121 40.1	2.6	1.8
761128	042 17.0	37 35.7	121 49.5	4.6	1.2
761223	519 21.9	37 32.2	121 48.0	4.1	1.7
770110	0713 9.0	37 34.9	121 48.1	4.3	1.6
770110	1755 37.1	37 31.9	121 54.3	5.9	1.5
770111	0413 39.2	37 35.5	121 58.7	5.6	1.4
770117	1329 39.7	37 33.0	121 56.1	5.5	1.3
770121	0346 2.2	37 32.6	121 46.0	6.4	1.3
770128	0309 9.9	37 43.3	121 59.0	6.4	1.3
770211	1115 32.9	37 34.0	121 58.1	2.7	1.1
770427	2321 10.4	37 30.7	121 55.2	.3	1.7
770429	2054 57.3	37 33.8	121 49.4	4.1	1.3
770621	0243 6.5	37 38.2	121 40.0	10.5	3.9
770621	0256 42.4	37 38.2	121 40.0	10.1	1.5
770621	0417 10.3	37 38.0	121 40.0	9.0	1.1
770621	0442 8.5	37 37.6	121 40.5	9.3	1.1
770621	0443 57.8	37 37.8	121 40.3	8.9	1.2
770621	0500 26.2	37 37.7	121 40.6	9.1	1.2
770622	1301 51.3	37 37.8	121 40.5	9.4	1.3
770623	1936 25.0	37 38.5	121 40.4	9.5	2.1
770625	1410 28.3	37 34.1	121 40.5	6.4	1.3
770628	1246 40.4	37 34.0	121 41.3	2.4	2.7
770628	1304 38.8	37 34.3	121 40.7	4.0	2.1
770628	1454 15.5	37 33.6	121 40.8	3.4	1.2
770628	2200 55.4	37 33.9	121 41.5	2.3	1.8
770703	0948 22.4	37 32.8	121 55.5	4.8	1.3
770703	1016 56.3	37 36.7	121 40.0	8.4	.9
770730	0957 30.7	37 44.2	121 54.8	6.8	1.1
770730	0959 2.9	37 44.0	121 55.2	7.4	1.0
770730	1743 32.6	37 43.9	121 55.1	3.4	1.3
770813	1913 32.0	37 44.1	121 47.7	4.4	1.5
770813	1919 43.8	37 44.3	121 54.7	4.4	.8
770814	0406 36.4	37 44.6	121 54.5	7.0	1.1
770814	1338 51.7	37 43.6	121 55.5	4.7	2.2
770814	1417 48.9	37 44.7	121 55.6	6.0	1.0
770814	1425 34.5	37 44.6	121 54.6	7.6	2.9
770814	1430 13.3	37 44.2	121 55.2	4.4	1.5

770814	1441 49.9	37 43.8	121 55.8	0.	1.9
770814	1449 52.3	37 44.0	121 55.2	4.3	1.1
770814	1453 17.9	37 44.5	121 54.9	4.7	1.3
770814	1500 19.6	37 44.4	121 54.8	5.0	1.9
770814	1503 58.3	37 44.4	121 55.1	6.8	1.0
770814	1539 34.5	37 44.1	121 55.5	3.3	1.4
770814	1542 19.0	37 44.2	121 55.0	2.9	1.3
770814	1647 5.7	37 44.0	121 55.7	3.2	1.5
770814	1713 41.7	37 44.1	121 55.0	3.3	1.4
770814	1813 12.4	37 44.2	121 55.2	3.0	1.7
770814	1813 42.0	37 44.2	121 55.1	3.1	1.6
770814	2004 22.6	37 43.9	121 55.2	3.0	1.4
770814	2005 42.3	37 44.1	121 55.4	3.0	1.6
770814	2006 43.6	37 43.9	121 55.2	3.2	1.3
770814	2244 37.5	37 43.9	121 55.5	3.1	1.2
770815	0338 19.5	37 43.9	121 55.8	2.4	2.2
770815	0414 12.2	37 44.1	121 55.1	3.0	1.3
770815	0521 18.5	37 42.9	121 55.0	0.	1.7
770815	0614 11.8	37 43.9	121 55.9	3.2	1.3
770815	0653 51.5	37 44.1	121 55.8	3.4	2.0
770815	0917 7.5	37 44.2	121 55.0	3.0	1.5
770815	1253 10.2	37 44.2	121 55.0	3.3	1.5
770815	1635 29.9	37 44.2	121 54.7	8.3	1.2
770815	1636 31.2	37 44.3	121 54.9	6.6	1.6
770817	1740 2.4	37 44.0	121 55.5	3.2	1.4
770817	2227 39.2	37 43.8	121 55.6	1.8	2.5
770817	2229 36.0	37 44.1	121 55.1	3.0	1.4
770903	1956 9.4	37 37.0	121 44.2	17.1	.8
770918	1832 46.5	37 33.7	121 42.6	0.	2.0
771105	0642 15.8	37 38.2	121 41.5	4.2	1.5
771105	0720 8.7	37 38.1	121 41.5	5.8	2.0
771105	0931 58.5	37 38.1	121 41.6	5.6	1.9
771122	1146 21.0	37 35.8	121 58.9	5.4	1.3
771122	1428 10.4	37 30.9	121 49.9	5.6	1.0
771124	2210 56.0	37 32.5	121 42.3	.6	1.4
771202	2035 51.2	37 32.5	121 46.9	.5	1.7
780207	239 35.2	37 33.1	121 58.1	6.9	1.7
780207	817 40.0	37 33.7	121 58.2	6.4	1.2
780305	1436 18.7	37 32.0	121 54.6	5.9	1.8
780312	22 2 37.3	37 32.8	121 47.0	5.7	1.7
780317	1944 26.3	37 31.7	121 49.8	5.6	2.3
780324	20 9 18.6	37 33.9	121 45.2	7.0	1.1
780328	728 45.5	37 32.2	121 49.3	5.1	1.3
780404	1359 2.8	37 38.6	121 49.7	7.3	1.0
780408	013 11.0	37 34.6	121 49.4	6.6	2.6
780410	1541 0.2	37 32.9	121 55.4	5.0	1.4
780419	2142 22.2	37 31.9	121 49.2	2.5	1.3
780515	617 4.2	37 30.6	121 52.7	5.1	1.5
780529	058 51.0	37 34.4	121 49.6	8.7	1.7
780618	110 0.4	37 34.6	121 49.6	8.3	2.0
780707	1757 35.1	37 32.4	121 55.1	3.6	1.4
780721	031 44.1	37 31.2	121 47.5	3.4	1.0
780808	2319 14.2	37 32.8	121 52.2	5.3	1.7
780815	314 59.4	37 31.9	121 48.2	5.3	1.5
780821	2336 5.7	37 32.7	121 49.9	4.3	1.0
780828	332 18.2	37 33.3	121 50.7	6.4	2.3

780914	15 5 17.7	37 33.9	121 50.6	6.4	1.2
781016	615 0.3	37 33.2	121 50.7	8.1	1.4
781017	12 6 38.6	37 32.7	121 48.9	6.8	1.3
781021	1513 47.7	37 31.8	121 53.1	7.6	1.5
781025	4 7 54.0	37 33.3	121 40.0	3.3	1.0
781102	1948 58.2	37 32.5	121 51.9	8.3	1.3
781107	10 7 8.6	37 34.4	121 40.4	4.7	1.4
781118	13 8 18.2	37 30.7	121 51.9	8.4	.9
781123	1216 37.9	37 41.1	121 43.4	8.1	1.4
781127	422 42.1	37 34.5	121 40.0	4.9	1.8
781130	2243 52.7	37 31.1	121 47.0	3.2	1.4
781204	1429 8.5	37 32.5	121 49.2	10.3	2.0
781224	2150 40.1	37 31.6	121 47.2	4.5	1.3
790116	1350 21.0	37 34.9	121 49.8	6.8	1.4
790128	759 55.6	37 40.3	121 48.0	7.6	1.3
790215	1045 45.6	37 37.3	121 48.4	3.2	1.6
790218	1731 16.5	37 31.9	121 55.3	5.7	2.1
790224	14 6 56.7	37 23.3	121 49.7	8.0	1.4
790312	12 6 9.3	37 34.6	121 41.2	7.4	3.0
790313	040 32.6	37 34.3	121 40.9	6.7	1.9
790314	1854 42.5	37 34.1	121 41.0	6.7	1.1
790402	1529 53.5	37 35.7	121 50.1	5.9	1.9
790404	1053 36.1	37 30.1	121 47.4	5.0	1.0
790413	436 24.6	37 37.7	121 43.9	5.0	2.3
790413	646 2.7	37 37.8	121 43.8	4.5	1.9
790430	1315 41.1	37 35.5	121 41.5	6.5	1.8
790430	1315 41.1	37 35.5	121 41.5	6.5	1.8
790430	1419 35.3	37 35.8	121 41.8	6.1	2.1
790430	1437 45.0	37 35.6	121 41.7	6.3	2.2
790505	344 0.8	37 21.2	121 53.6	5.4	1.9
790527	724 22.7	37 34.9	121 49.8	6.6	1.2
790602	434 19.5	37 32.6	121 48.0	5.6	1.5
790603	1459 12.9	37 32.6	121 48.4	5.4	2.0
790615	2239 14.6	37 32.9	121 46.8	5.9	1.8
790616	516 53.6	37 32.6	121 46.2	6.7	.9
790703	1325 45.5	37 35.6	121 59.2	5.6	2.9
790703	1357 22.4	37 35.5	121 59.0	5.7	1.5
790707	513 51.6	37 35.3	121 59.1	5.9	1.4
790726	2356 50.8	37 32.6	121 51.0	6.2	1.2
790806	1341 23.3	37 37.6	121 50.7	5.7	2.0
790806	1341 23.3	37 37.6	121 50.7	5.7	2.0
790905	1550 31.2	37 42.1	121 43.9	4.8	2.4
790905	1622 26.7	37 42.6	121 43.3	4.7	1.7
790905	18 5 34.9	37 42.3	121 43.8	5.7	1.0
790906	744 8.6	37 42.2	121 44.1	6.2	1.0
790907	1813 28.9	37 33.6	121 41.3	7.3	2.0
790919	117 26.9	37 35.0	121 42.2	4.2	.9
790928	4 4 38.3	37 35.9	121 49.4	6.4	.9
791003	1344 47.1	37 35.5	121 42.8	5.2	1.4
791011	3 6 59.7	37 38.0	121 40.2	5.0	1.1
791026	1824 52.3	37 32.4	121 40.7	1.5	1.1
791029	2055 58.7	37 38.5	121 53.4	9.3	1.5
791105	1541 55.3	37 32.6	121 46.3	5.2	1.8