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The main changes in this year's report from last year's report are evol ut i onary, due to the acquisi t ion of another year's data.

In this report Earth Rotation Parameter (ERP) estimates have> been obt ai n ed from an anal ysi s of Deep Space Network (DSN) VLBI dat a that directly aligns its celestial and t errest ri al ref erence frames wi t h those of the Internati onal Earth Rotat ion Service (I ERS). NASA' S De ep Space Net work operat es radio telescopes for the primary purpose of communicating with int erplanetar y spacecraft . The DSN has three compl exes : in California (stations 1)SS 1 2.,13,14,35), in Spain (1)SS 61,63,65), and in Australia (DSS 42,43,45) . Two projects at. JPL (call ed TEMPO and CAT M&E below) use these t elescopes to make VLBI observations from which we have est imated earth rotat ion parameters. Most observing sessi ons use ant ennas i n onl y two compl exes, and usual ly exact ly one ant enna in each complex. Thi s report describes a homogeneous reduction of currently available dual frequency (S and X band) VLBI data from both projects.

The Time and Earth Motion Precision Observations (TEMPO) project makes rapid turnaround VLBI measurements of station clock synchronization and earth orientation in support of spacecraft navi gat i on, which needs extremely t imely, moderate accuracy earth rot at ion in format i on. in TEMPO observat ions the raw hi t st reams recorded at t he t el escopes are telemeter ed to JPL for correlation, so that no physical transport at ion of magnetic tapes is involved. TEMPO uses the JPL-developed Block 1 VLBI system, which has a 500,000 bits/second sampling rat. e, with t ime-division multiplexing of channel s. This sampling rate permits the telemetry, ant] th us makes rapid turnaround possible. The reduced sensitivity caused by the relatively low sampling rate in comparison to other present-clay VLBI systems is largely compensated by the very large antennas and very 1 ow syst em noi se levels Of the DSN telesc o pes. TEMPO uses two '/0 met er DSN antennas (DSS 14, 43, 63) whenever possible and one 34 meter DSN ant enna together with one '/0 meter antenna when i t i s not possi bl e t o obtai n simul taneous usc of both of the 1 arger antennas . Current l y, TEMPO records 3 channel s in S band (2285 MHz) and 3 channels in X band (8450 MHz) . Since June 12, 1991, TEMPO has used a spanned bandwidth of 99 MHz at. X band and 39 MHz at .S band . Before that date, most TEMPO sessions used a spanned bandwidth of 40 MHz in each band. At present the DSN nominally schedul es t wo TEMPO observi ng sessi ons per week, one on the Spain- California (SC) basel ine, and the other on the Austral ia-California (AC) baseline. Each session is generally 3 hours in duration (occasionally less) , and records a maximum of 20 sources . TEMPO observes most sources for 3 minutes arid 18 seconds, a few for 6 mi nut es and 36 seconds . We plan to produce an operational series of ERP est i mat es from TEMPO sessions during 1994 that will be a continuat ion of the ERP series reported here.

The Catalog Maintenance and Enhancement (CAT M&E) project determines celestial coordinates of radio sources, and baseline vectors between DSN stations, for use in spacecraft navigation. In CAT M&E observations the raw bit streams are recorded on magnetic tapes for transportation to the correlator. Since June 1989 most CAT M&E observing sessions have used the Mark III VLBI system on stations DSS 15, 45, and 65, which support a 400 MHz spanned bandwidth capability.

From 1 ate 1978 through 1988, CAT M&E used the Mark 11 VLBI system with a spanned bandwidth of 40 MHz in each band, and used two 70 meter DSN antennas (DSS 14, 43, 63) whenever possible. The DSN schedules CAT M&E observing sessions at irregular intervals, typically several times per year, with separate observing sessions on the SC and AC base] ines. Each session is nominally 24 hours in duration and typically includes 100 to 330 observations of 50 to 134 radio sources.

Data from both the TEMPO and CAT M&E projects were used in the soluti on proce ss for the ERP series reported here. In order that the TEMPO c)perat.ions] series of ERP estimates during 1994 can be an exact cont inuati on of the ERP seri es report ed here, the solution process consisted of two major steps. First, a "catalog solution" designated JPL 1994-1 (see below) determined radio source coordinates, station coordinat es ancl si te vel oci ti es, a parametric model for the celestial motion of the Celestial Ephemeris Pole, and a parametric model for the nearly- diurnal and nearly- semidiurnal tidal frequency variations of UT1 and polar motion. Then the second step, called the "ERP solution", used these results from the catalog solutionto determine the earth rotat ion parameters in a manner that can be exactly continued in the operational seri es . In the ERP solution the data from each observing session were processed independently to provide an estimate of the UT0 and variation of latitude (DPHI) of the baseline VECTOR for that. session. Except for the UT0 and variation of lati tude, the relation between the earth-fixed reference frame and the radio-quasar reference frame was specified entirely by a priori dat a (which includes the results from the catalog solution) . In addition to UT0 and DPHI , the other parameters estimated i n the ERP soluti on were:

1. A first degree polynomial clock model , including a term allowing for a bias in the phase-delay-rate data, wi th breaks as needed.
7. Adjustments to the troposphere zenith delay at each station. In the CAT M&E sessions, new troposphere zeni t_h parameters were introduced approximately every three hours (every two hours for data after 1992.0) . A priori estimates of the troposphere zenith de] ays, derived f rom tab] es of monthly average zeni th delays for each sta t ion, were included in the solution with a 6 cm standard devi at ion. (For good quality observing sessions in recent years, the effect of these a prioris is negligible and the estimated troposphere zenith delays are essentially completely determined by the VLBI observables.)

Othe r properties of the ERP soluti on we re :

1. The reported earth rotation parameters have had nearly- diurnal and ne arl y- semid iurnal tidal frequency variations removed according to the parametric model estimated in the catalog solution. (In other words, the effects in the table below headed "She>-t. Period Tidal ERP Variations" have! NO1' been added back in producing EOP(JPL)94 R 01.)
2. Ocean loading effects were calculated from the model of Scherneck (1983; 1991) .
3. Pole tidal effects were included (Sovers, 1991) .
4. The Lanyi (1984) function was used for mapping zenith tropospheric delays to observed elevations.
5. The effects of charged particles in the ionosphere and solar plasma on the single-band delay and delay rate observables were removed by using the appropriate linear combination of the S-band and X-band data to form "dual frequency" delay and delay rate observabl es.
6. For recent, years only sessions with 6 or more acceptable delay observati ons were included in the solution reported here.
7. The effect on path lengths caused by moving ("slewing") the antenna subreflector, so as to maximize the antenna gain when its focal length changes as the elevation angle changes, has been modeled for the TEMPO data. No such model is needed for the CAT M&E data since CAT M&E does not slew the subreflector. (Apparent station coordinates estimated from VLBI data will be corrupted if the

subreflect or is slewed but the of feet on path length is not modeled in the delay calculations. The station coordinates estimated by the JPL 1994-1 catalog solution and used in the ERP solution are appropriate both for the case where the subreflector is not slewed and no path length effect is modeled and also for the case where the subreflector is slewed and the resulting effect on path length is explicitly modeled in the calculations.)

The raw observable uncertainties have been modified by adding quadratically an uncertainty component, for each of the two stations, equal to a small fraction (0.002 or 0.003) of the total a priori tropospheric effect at. that_ station on the observable . We further quadratically added an "additive noise" constant when needed so as to make the Chi Square of the postfit residuals approximately equal t_o the number of degrees of freedom in the solution. The delay and delay rate additive noise constants were adjusted separately for each CAT M&E observing session. For the TEMPO data, the additive noises were adjusted for each of several blocks of observing sessions.

Each Earth Rotation measurement here is a UT0-DPHI pair , and has an associated error ellipse in the UT0 - DPHI plane. Each such error ellipse is completely specified by the reported standard errors and correlation coefficient. between UT0 and DPHI . For single baseline VLBI measurements of ERP, such as those reported here, this error ellipse is typically quite c>]c,~]gat-eel, with a ratio of major axis to minor axis of about. 4:1 . Therefore, for a proper interpretation of these data, it is CRUCIAL to make full use of the reported correlation coefficient .

For a single- base,] ine VLBI estimate of earth rotation, the orientation of the error ellipse in the UT - DPHI plane is mostly determined by the global station geometry. The direction crf the! minor axis of the error ellipse in the UT0- DPHI plane as predicted by the station geometry is called the transverse rotation direction, and corresponds to the motion of the baseline in the local horizontal at each station or equivalently to a rotation about an axis through the center of the earth and the midpoint of the baseline. In addition to lining relatively insensitive to random measurement errors, the transverse rotation component is also relatively free of errors introduced by tropospheric modeling errors, antenna deformations , and other sources of systematic local-vertical errors. The transverse rotation components for the DSN baselines are:

Baseline	Transverse Component
Australia-California	-1 .000 DPHI + 0.00 (UT0-TAI)
Spain- California	+0.582 DPHI + 12 .21 (UT0-TAI)
Spain - Australia	-0.9'/2 DPHI + 2.77 (UT0- TAI)

These coefficients assume that. UT0 and DPHI are expressed in seconds of time and in arcseconds, respectively; the units of the transverse components are arcseconds. We recommend that these linear combinations be used Lo take full advantage of the inherent accuracy of these data.

The ERP solution produced earth orientation results for a total of 1042 observing sessions between October 28, 1978, and March 13, 1994 .

During calendar year 1993, the TEMPO project produced earth rotation measurements from 93 dual frequency observing sessions, with a median standard error along the minor axis of the error ellipse of 0.3 milliarcseconds (mas) , and along the major axis of 1 . 4 mas . During 1993 the median turnaround time for TEMPO measurements, from observation to availability of earth orientation parameters, was 49 hours.

JPL 1994-1 CATALOG

The JPL 1994-1 catalog was developed specifically for use in TEMPO operation] ERP solutions during 1994. Since short- duration VLBI determinations of the ERP are sensitive to errors in the celestial position of the Celestial Ephemeris Pole (CEP), and since! the current IAU standards for the CEP are known to be in error by amounts signi ficant to TEMPO, it is important that TEMPO use a CEP series that is corrected from the IAU standards and is consistent with the radio source coordi nat es (RSC) used. Current practicalities of TEMPO operations favor the use of a parametric model for the CEP that includes {he long period motions. Therefore we have estimated such a model along with the RSC and set of station coordinates (SSC) in the: JPL 1994- 1 catalog solution. This year our CEP motion model consists of the ZMOA-1990-2 nutation model (Herring, 1991) plus adjustments to the coefficients of certain terms of the ZMOA-1990-2 model , along with the IAU precession model and adjustments to its coefficients. Our CEP mot ion model is intended only to permit processing of TEMPO data for the ERP during the period report ed here and during 1994, and will presumably need revision in 1995. in particular, it may not include all signi ficant components, not all i t s adjustment s may be genuinely signi fi cant , and i ts parameters may not a] 1 be wel 1 separated, but. we believe it. is adequa te for our purposes.

As part. of the JPL 1994- 1 cat alog solut i on we estimat ed coefficient s of a model of ERP variat ions at nearl y- diurnal and nearl y- semid iurnal tidal fre quencies. Nearly- di urnal polar motion vari at i ons wer e const rainedto have no retrograde par-t , t hus al lowing si mu] t aneous est imati on of nuta i ons .

The JPL 1994-1 catalog solution had the following properties:

1. Except where otherwise noted, the catalog solut ion was essent ially ident i cal to the ERP solution described above.
2. All the available CAT M&E da tarough December 19, 1993, and most of the TEMPO data through December 29, 1993, were! included.
3. Inform at ion from int - complex radio interferometry was used to constrain the coordinate di f ferences between stat ions wi thin each compl C'x . The uncerta inties used for these intracomplex ti es vary from stat ion pair to st at ion pair and from component to component (the' local vertical uncertainty is typically three times the horizontal uncertainty) . These uncertaint ies are our best estimates of the realistic one- st andard- deviation uncertainties of these t i es and range from 5 mm t o 1 8 mm.
4. For each pair of observing sessions that. used di fferent pai rs of DSN complexes (that is, Cali fornia-to-Spain and Cal i fornia - to- Australia) with a time separation between the mi dpoint s of the sessions of lessthan15 hours, the adjustment (dX, dY, dUT1) to the init ial values of ear th orientat ion is the same for both members of the pai r. (The initial-value ERP series was a version of the SPACE93 series (Gross, 1994) modified to not us e DSN VLBI data; i t. i s a smoothed, combi nat i on- of - t echni ques ERP series obt ained by Kalman filter ing.) This treatment of cl ose- in-time pai rs serves to det ermine the angle between the Californi a- to- Spain and Californi a-to-Aus tral ia base] ine vectors (and thus also the length of the Aust rali a-Lo-Spain vector) . There were 66 such pairs of TEMPO sessions; there were 7 such pai rs involving one TEMPO session and one CAT M&E session; and there were no such pairs involving two CAT M&E observing sessions. This year there is one CAT M&E session (December 19, 1.993) in which one station in each complex participat ed (DSS 25,45,65) , with small groups of observations on the Cal i fornia- to-Spain and Cali fornia-to-Aus tral ia baselines interleaved. Although the> duration of this session was only 8 hours, it has Significantly improved our knowledge of Lhe rate of change of the length of the Aus tralia- to-Spain vector. (A special thank you to Chris Jacobs for leading the effort to acquire this data, and for get.t.ir-rg the results to us in time for this analysis.)

5. The terrestrial frame of the JPL 1994-1 system was tied to the lnternat.ions] Earth Rotation Service Terrestrial Reference Frame ITRF-92 (IERS, 1993, ~'able '1'-3) in the following way. The coordinates of all the DSN stations, including all those in California, were estimated in the catalog solution subject to six constraints applied to the nine coordinates of DSS 15, DSS 45, and DSS 65. These constraints are such that if a seven parameter transformation (3 translations, 3 rotations, 1 se-ale) between the JPL 1994-1 and ITRF-92 systems were estimated by unweighted least squares applied to the coordinates of DSS 15, 45, and 65, then the resulting 3 translation and 3 rotation parts of the transformation would be zero while the scale could be nonzero and unknown in advance of computing the catalog. (When expressed as the dot, product of a nine dimensional uni t. vector with the nine station coordinates, each constraint is assigned an a priori standard deviation of 5 mm; thi s does not- affect- the resulting coordinates but does affect the calculated formal errors, giving them a more spheri cal di stribution than would resul t i f either very large or very smal 1 a priori standard deviations were used.) These constraints serve: to determine both the translation and the rotation of the terrestrial coordinate system. The station coordinates resulting from the solution apply at a reference time of 1988.0, in agreement with that of ITR F-92.
6. Three-dimensi onal site velocities were estimated for each of the three DSN complexes. All stations in each DSN complex were assumed to have the same site velocity. The velocities were constrained so as to produce no net translation rate and no net. rotation rate, for the network composed of the three DSN complexes, relative to the net motion of this network of three sites as expressed in the ITRF-92 velocity field (IERS, 1993, Table T-5) . Thus only three velocity paramet ers are act ua l ly being separately est imat ed; on e way to describe these i s as t hC! rates Of change of (1) the, Californi a-to-Austral ia length, (2) the Cal ifornia-to-Spain length, and (3) the angle between the Cal i fornia-to-Austral ia and Cali fornia- to- Spain vectors. (When expressed as the dot product of a nine dimensi onal unit vector with the, nine site velocity component s , each constraint is assigned an a priori st andard deviation of 1 .0 mm/yr; this does not affect the resulting velocity components but does affect. the calculated formal errors, givi ng them a more spheri cal distribution than would result. if either very large or very small a priori standard devi ations were used.)
7. The celestial frame: of the JPL 1994-1 system was tied to the International Earth Rotation Service Celestial Reference Frame in the following way. The Right Ascension and Declination of OJ 287 (0851+202) and the Declination of CTD 20 (0234+285), which are among the best observed sour ces in the DSN catalog and are primary sources in the 1993 realization of the IERS Celestial Reference Frame, were held fixed at their values in that frame as speci fied in the set of radio sour ce coordinates RSC(IERS)93 C 01 (IERS, 1993, Table C-4).
The formal errors of these three source coordinates are properly zero , but. in order to convey the quality of determination of these two sources we have replaced these three zeros in our source list RSC(JPL)94 R 01 by the formal errors for these three coordinates from a similar solution that. had three coordinates of two different well-observed sources held fixed; we have similarly replaced the two correlation coefficients between Right Ascension and Declination for these two sources.
8. The reference epoch of the JPL 1994-1 celestial system was J2000. Canal the definition of side real time was a function of the estimated precession constant (Sovers, 1991, sections 2.6.1 and 2.9.3.3).

'l'his year we have used the MODEST option to perform the genera] relativity calculations according to the "TDT spatial coordinates"

convent i on (Severs, 1991). This choice has a small effect on the length scale of the Set. of Station Coordinates. The relativity model used is essentially equivalent to the "consensus model " described by Eubanks (1991). As a result, the estimated Set of Station Coordinates has the scale of a geocentric coordinate system using a time scale consistent wi th lnternat-ions] Atomic Time.

The model of the celestial motion of the CEP obtained as part. of the JPL 1994- 1 catalog solution i s presented below as adjustments to the IAU precession and ZMOA-1990-2 nutation coefficients along with two offset parameters which represent- t-he estimated position of the (mean) CEP at epoch J2000 as expressed in the coordinate system of the radio sources . A positive X-offset represents a displacement of the CEP toward 18 hours Right. Ascension, and a positive Y-offset. represents a di splacement of the CEP toward O hours Right Ascension. The CEP-motion model includes a term representing a secular rate in obl iquity. Also included is an empirical term with a period of -429.8 days (for the origin of this particular value of period, see (Herring et. a] . , 1991 ; Herring, 1991)) . only those nutation terms listed below were adjusted in the catalog solution. Two sets of standard errors are presented; the "formal " errors are just. the formal errors from the catalog solution, ancl the "generalized" errors are the formal errors from a simi lar sol ut i on whi ch al so est imat ed addi t i onal component s wi th peri ods of 121.75, 2"1.55, 13.63, and 9.13 days as wcl] as both out-of-phase nutations for all ten periods.

Celestial Ephemeris Pole Motion Model
(nutati ons relative ZMOA-1990-2)

IAU-Index	Period	Phase	Component	Adjustment	Formal Error	Generalized Error
	days			mas	mas	mas
precession			Longitude	-3.21/yr	0.06/yr	0.14/yr
obliquity rate			Obliquity	-0.?.8/y1-	0.05/yr	0.06/yr
Y-offset			I, sin eps	-18.70	0.34	0.74
X-offset			Obliquity	+ 5.94	0."/6	0.77
1	-6'198.38	1n	Longitude	- 0.98	0.31	0.73
			Obliquity	- 0.01	0.16	0.17
		Out	Longitude	+ 1.13	0.21	0.41
			Obliquity	- 0.15	0.29	0.29
2	-3399.19	111	Obliquity	- 0.23	0.08	0.08
		OUt	Longitude	- 0.70	0.17	0.2?0
			Obliquity	+ 0.17	0.12	0.13
10	365.26	ln	Longitude	- 0.50	0.08	0.10
			Obliquity	+ 0.03	0.03	0.03
		OuL	Longitude	+ 0.64	0.08	0.09
			Obliquity	+ 0.00	0.03	0.04
9	18-2.62	In	Longitude	- 0.06	0.06	0.07
			Obliquity	- 0.04	0.02	0.03
		Out	Longitude	+ 0.18	0.06	0.07
			Obliquity	+ 0.01	0.02	0.03
31	13.66	1n	Longitude	- 0.20	0.05	0.14
			Obliquity	+ 0.11	0.03	0.05
		out	Longitude	+ 0.47	0.07	0.13
			Obliquity	+ 0.10	0.02	0.06
	-4?,9.8	1n	Longitude	- 0.04	0.08	0.09
			Obliquity	+ 0.02	0.04	0.04

Out	Longitude	- 0.61	0.09	0.10
	Obliquity	-- 0.12	0.03	0.03

The parametric model for the nearly-diurnal and nearly-semidiurnal tidal frequency variations of UT1 and polar motion obtained as part of the JPL 1994- 1 catalog solution is presented below. The argument conventions used here are those of Severs et al . (1993). The formal errors of these parameters range from 13 to 53 microarcseconds but realistic uncertainties are probably about 75 microarcseconds (one standard deviation) .

Short Period Tidal ERP Variations

	Period	UT1 (microseconds)		Polar Motion Amplitude (microarcseconds)		Polar Motion Phase! (degrees)	
Term	(hours)	Cosine	Sine	prograde	retrograde	prograde	retrograde
K2	11..96"/24	3.0	4.0	43	54	59	246
S2	1?..00000	1.3	9.9	40	143	58	314
M2	12.42060	- 8.4	18.0	64	242	119	274
N2	12.65835	0.1	2.8	20	32	106	188
K1	23.9344"1	13.1	26.2	191	0	163	*
P1	7.4.06589	- 4.5	4 . 3	59	0	342	*
01	25.81934	-13.3	-13.5	145	0	314	*
Q1	26.86836	3.6	- 1.8	38	0	323	*

For the 1994-1 catalog solution, the data set used has NOT been restricted to have only elevation angles above some arbitrary minimum value. Note however that- low elevation observations are effectively down-weighted by the observable uncertainty adjustment procedure described above. Because the most frequently used stations in this data set (DSS 14,15,43,45,63,65) have antenna limits at. 6.0 to 6.35 degrees elevation, almost all the data in this data set has elevation angles above 6 degrees. Because of the very long lengths of the DSN baselines, the DSN VLBI observing schedules have included low elevation observations since! t.heir inception. Since at least 1983, the TEMPO sessions have been designed to improve the determination of the troposphere zenith parameters and their separation from the geodetic parameters by deliberately including a few observations for this }>111pose, which have low elevation angles and are not near the cusps of the visibility sector. In the set. of elevation angles associated with the observations included in the 1994-1 catalog solution, the portion that fall in each 10 degree increment is as follows (in percent) :

0 - 10	- 20	- 30	- 40	- 50	- 60	- "10	- 80	90	degrees
8.8	23.8	21.5	1'1.5	13.9	9.0	3.0	1.9	0.7	percent

The average elevation angle is 30.70 degrees.

For accurate interpretation of the UT0 and DPHI values reported here , one should use accurate values of the latitude and longitude of the baseline vector; these can be calculated for each station pair from the SSC estimated in the JPL 1994-1 catalog solution and reported here. Approximate values are:

Baseline	Latitude (degrees)	Longitude (degrees)
Australia-California	- 43.97	+106.05
Spain-California	+ 2.99	+ 30.73
Spain-Australia	+ 38.50	- 18.10

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SUPPLEMENTARY STATISTICS FOR
DEEP SPACE NETWORK VLBI EARTH ORIENTATION DATA SERIES EOP(JPL) 94 R 01

JPL TEMPO 4 CAT M&E EARTH ORIENTATION RESULTS
10/28/78 - 3/13/94

ANNUAL93 IERS REPORT

STATISTICS TABLE

PROVIDES INFORMATION ON RESIDUAL SCATTER
TOGETHER WITH EARTH ORIENTATION COVARIANCE EIGEN-ANALYSIS

POST FIT RESIDUAL STATISTICS :

RMS = ROOT MEAN SQUARE OF POSTFIT RESIDUALS
UNITS ARE NANOSECONDS AND PICOSECONDS/SECOND
WRMS = ROOT MEAN SQUARE (RESIDUAL / ERROR)
N = NUMBER OBSERVATIONS

EARTH ORIENTATION EIGEN-ANALYSIS :

- PROVIDES ERROR ELLIPSE FOR BASELINE UT0
AND VARIATION OF LATITUDE
- ERROR ELLIPSE AXES ARE IN MILLIARCSECONDS

E1 = STANDARD ERROR ALONG MINOR AXIS OF ERROR ELLIPSE
= ACCURACY IN WELL DETERMINED DIRECTION
E2 = STANDARD ERROR ALONG MAJOR AXIS OF ERROR ELLIPSE
ANGLE = ANGLE (IN DEGREES) BETWEEN BASELINE VARIATION
OF LATITUDE AND THE ERROR ELLIPSE MAJOR AXIS
ANGLE IS POSITIVE TOWARDS POSITIVE UT0

DATE	BASE-LINE	BAND	DELAY RESIDUALS RMS NSEC	WRMS	N	RATE RESIDUALS RMS PSEC/SEC	WRMS	N	ERROR ELLIPSE E1 MAS	E2 MAS	ANGLE DEGREES
781028	14/43	SX	0.32	0.86	95	0.11	0.98	95	0.4	1.2	-86.0
7811 4	14/43	SX	0.31	0.76	23	0.10	1.05	23	0.5	2.1	88.2
781231	14/43	SX	0.34	0.85	115	0.13	0.96	115	0.3	1.1	-88.6
791123	14/43	SX	0.58	0.77	35	0.20	0.95	35	1.8	5.4	85.0
791126	14/63	SX	0.59	0.90	112	0.13	0.98	112	0.6	2.3	-42.6
791220	14/43	SX	0.47	0.92	132	0.14	1.01	132	0.3	1.3	89.4
791221	14/63	SX	0.57	0.83	33	0.11	1.04	33	2.1	8.8	-53.2
791227	14/63	SX	0.55	0.86	68	0.12	1.05	68	1.2	4.0	-39.9
791229	14/43	SX	0.41	0.77	43	0.11	0.99	43	0.6	2.1	-88.9
80 112	14/43	SX	0.44	0.85	109	0.21	1.02	109	0.5	1.7	87.8
80 125	14/63	SX	0.59	0.79	48	0.08	1.01	48	1.5	5.6	-40.8
80 127	14/43	SX	0.39	0.84	42	0.16	1.03	42	0.7	2.6	86.9
80 214	14/43	SX	0.36	0.84	49	0.12	1.06	49	0.6	1.9	-89.0
80 214	14/63	SX	0.56	0.88	137	0.10	0.98	137	0.7	2.5	-42.1
80 223	14/43	SX	0.46	0.88	106	0.14	1.00	106	0.3	1.4	85.6
80 224	14/63	SX	0.41	0.80	47	0.11	1.03	47	1.2	4.3	-41.8
80 719	14/63	SX	0.31	0.77	9	0.09	0.80	9	1.8	7.0	-54.3
80 725	14/63	SX	0.19	0.52	5	0.12	1.09	7	3.3	29.2	-68.0
80 824	14/43	SX	0.39	0.65	10	0.38	0.97	8	2.6	14.4	-77.5
80 824	14/63	SX	0.31	0.59	5	0.08	0.76	7	3.3	31.4	-67.8
80 923	14/43	SX	0.38	0.83	8	0.14	1.30	8	2.6	8.1	-66.3
80 924	14/63	SX	0.25	0.36	5	0.15	1.29	6	7.6	22.2	-59.5
80 930	14/43	SX	0.23	0.48	11	0.06	0.51	11	1.4	6.3	-81.4
801016	14/43	SX	0.31	0.61	9	0.08	0.72	10	2.5	7.5	-80.1
801017	14/63	SX	0.16	0.18	6	0.14	1.20	8	3.6	11.6	-44.8
801122	14/43	SX	0.30	0.50	12	0.16	1.51	12	1.5	6.0	-76.1
8012 8	14/43	SX	0.24	0.47	5	0.04	0.37	6	4.2	10.1	-88.9

301214	14/43	Sx	0.25	0.63	8	0.15	).30	9	2.3	15.4	-58.8
301214	14/63	Sx	0.15	0.14	5	0.44	1.10	5	4.8	24.5	-42.8
301223	14/43	Sx	0.30	0.52	6	0.04	0.40	6	4.9	30.1	67.3
81 2 4	14/43	Sx	0.47	0.83	10	0.04	0.39	6	2.3	5.4	-85.2
81 211	14/43	Sx	0.52	0.7"1	7	0.11	0.66	7	3.1	9.4	-74.0
81 219	14/43	Sx	0.56	0.91	5	0.09	0.81.	5	21.0	31.6	64.3
81 3 1	14/63	Sx	0.43	0.41	6	0.05	0.43	6	6.2	23.7	-58.6
81 510	14/63	SX	0.52	0.4-1	6	0.44	1.07	3	5.9	28.5	-55.2
81 516	14/43	Sx	0.37	1.14	11	0.12	1.05	12	1.5	5.0	77.4
81 531	14/43	SX	0.36	0.39	11	0.17	0.43	11	2.2	8.3	'19.6
81 531	14/63	Sx	0.16	0.15	6	0.07	0.63	5	7.5	13.9	-19.5
81 614	14/43	Sx	0.26	0.81	10	0.08	0.64	10	2.2	5.3	74.3
81 614	14/63	Sx	0.32	0.35	5	0.08	0.61	5	16.4	49.6	-72.0
81 719	14/43	Sx	0.31	0.73	9	0.06	0.53	12	1.8	6.0	69.9
81 719	14/63	SX	0.31	0.67	6	0.11	0.94	7	3.5	.13.6	-67.6
81 726	14/43	Sx	0.28	0.85	12	0.08	0."18	12	1.4	5.6	-71.3
81 8 1	14/43	Sx	0.27	0.86	11	0.08	0.6"/	11	1.0	4.6	-78.6
81 8 2	14/63	Sx	0.22	0.58	8	0.11	0.99	8	1.6	6.9	-42.5
8112 9	13/43	SX	0.65	0.87	47	0.08	1.01	47	0.6	2.2	-83.5
811218	14/43	Sx	0.51	1.59	9	0.10	0.84	9	1.9	"1.6	-88.2
82 1 3	63/43	Sx	0.43	0.80	6	0.06	0.49	6	4.7	15.2	-55.0
82 1 8	14/63	Sx	0.20	0.60	6	0.08	0.78	6	3.0	6.9	-40.9
82 123	14/43	Sx	0.16	0.50	10	0.08	0.71	10	1.8	5.2	-89.5
82 2 8	14/43	Sx	0.41	0.83	13	0.06	0.54	12	1.3	6.2	-83.2
82 213	14/63	Sx	0.2.6	0.75	17	0.14	1.32	15	1.1	4.5	-44.8
82 220	14/63	Sx	0.28	0.76	11	0. 07	0.61	11	1.0	4.5	-38.3
82 221	14/43	Sx	0.37	0.86	11	0.09	0.77	12	1.2	3.2	-86.2
82 228	14/43	SX	0.46	1.04	16	0.11	0.98	16	2.2	8.0	-71 .3
82 326	14/63	Sx	0.14	0.46	13	0.10	0.94	12	1.1	4,8	-37.2
82 329	14/43	Sx	0.34	0.66	9	0.10	0.92.	13	1.9	6.0	-75.8
82 4 8	14/43	Sx	0.29	0.71	16	0.12	1.07	16	0.6	2.7	-87.5
82 412	14/63	Sx	0.06	0.2.2	9	0.04	0.38	10	1.3	"1.9	-29.3
82 5 7	14/63	Sx	0.49	1.02	11	0.05	0.49	11	1.3	4.9	-43.0
82 513	14/43	Sx	0.25	0.56	10	0.13	1.13	11	1.5	6.1	-82.2
82 523	14/63	Sx	0.34	0.96	13	0.08	0.74	12	1.1	3.5	-37.9
82 524	14/43	SX	0.25	0.64	16	0.09	0.76	16	0.7	2.7	-87.4
82 529	14/63	SX	0.26	0.39	5	0.11	0.91	5	9.9	61.5	-30.0
82 7 1	13/43	SX	0.48	0.84	93	0.05	1.02	93	0.5	1.4	-86.3
82 7 2	32/43	SX	0.30	0.54	9	0.08	0.64	11	2.3	-1.4	-71.2
82 7 4	13/63	SX	0.62	0.86	110	0.22	0.96	110	0.8	3.1	-45.7
82 717	12/43	SX	0.37	0.43	8	0.26	0.63	8	3.0	34.5	86.2
82 718	12/63	SX	0.31	0.52	10	0.11	0.93	12	4.2	18.7	-55.8
82 813	12/43	SX	0.16	0.21	5	0.52	1.30	4	4.3	21.6	81.4
82 815	12/63	SX	0.23	0.46	8	0.06	0.53	8	4.2	14.0	-58.0
82 817	13/63	SX	0.51	0.90	73	0.08	1 .05	73	1.0	3.3	-45.2
82 911	14/43	SX	0.65	0.52	8	0.31	0.78	6	6.2	19.0	-83.3
82 919	14/61	Sx	0.30	0.42	6	0.15	1.36	6	6.4	41.3	-59.6
82 926	14/43	Sx	0.31	0.19	6	0.32	0.79	8	6.4	2"1.5	89.4
82 926	14/61	Sx	0.48	0.69	6	0.16	1.41	7	"1,9	22.0	-56.7
8210 3	14/61	Sx	0.43	0.76	10	0.06	0.53	11	3.2	19.6	-56.0
8210 4	14/61	Sx	0.41	0.81	115	0.09	1.04	115	0.8	3.2	-54.-/
821023	14/43	Sx	0.68	0.56	9	0.27	0.69	7	6.2	19.8	-81.4
8211 6	14/43	Sx	0.63	1.13	15	0.51	1.27	13	1.8	8.3	83.8
8211 6	14/61	SX	0.36	0.87	13	0.07	0.62!	17	2.5	9.7	-50.7
821110	14/61	Sx	0.50	0.83	18	0.09	0."/7	18	2.2	9.3	-44.0
821114	14/43	Sx	0.77	1.14	15	0.35	0.90	10	1.4	6.1	89.4
821125	14/63	Sx	0.31	0.68	16	0.0"/	0.55	16	1.3	4.6	-36.0
821128	14/63	Sx	0.2"/	0.91	209	0.11	0.98	209	0.3	1.1	-38.9
821130	14/43	Sx	0.39	0.86	113	0.30	0.98	113	0.6	2.0	89.5
8212 4	14/63	Sx	0.48	1.05	12	0.06	0.55	14	1.5	5.8	-48.2
821212	14/63	Sx	0.55	0.78	15	0.08	0.66	16	1.7	4.8	-45.8
821217	14/43	Sx	0.33	0.79	14	0.06	0.50	16	0.8	3.5	88.8
821219	14/63	SX	0.19	0.34	11	0.03	0.23	13	1."/	6.6	-50.1
83 1 2	14/63	Sx	0.37	0.53	18	0.03	0.26	19	1.2	4.1	-41.1
83 1 8	14/63	Sx	0.38	0.88	14	0.07	0.59	17	1.3	4.3	-41.1
83 111	14/43	Sx	0.20	0.59	18	0.09	0.83	18	0.7	2.6	-84.1

83 123	14/43	Sx	0.19	0.79	118	0.17	0.98	118	0.3	1.1	88.1
83 124	14/43	SX	0.19	0.53	15	0.08	0.76	15	0.8	4.1	87.8
83 125	14/63	SX	0.22	0.90	225	0.10	1.00	225	0.2	0.9	-37.9
83 129	34/43	Sx	0.25	0.55	16	0.15	3.40	17	1.1	4.4	88.2
83 129	14/63	SX	0.29	0.54	14	0.06	0.56	13	1.4	4.0	-37.8
8 3 2 5	14/43	Sx	0.39	0.66	18	0.14	1.18	13	1.1	4.5	88.9
83 2 6	14/63	SX	0.21	0.47	18	0.09	0.81	17	1.0	3.4	-39.8
83 215	14/42	SX	0.44	0.79	19	0.07	0.66	18	0.9	3.8	-88.2
83 222	14/63	SX	0.39	1.33	8	0.04	0.40	9	2.4	10.3	-14.1
83 3 5	14/63	SX	0.39	0.58	16	0.06	0.50	19	1.2	3.9	-39.2
83 325	14/42	SX	0.18	0.29	9	0.17	0.43	7	4.4	24.7	71.3
83 325	14/63	Sx	0.52	0.66	9	0.09	0.73	14	2.8	7.2	-42.8
83 4 8	14/63	Sx	0.19	0.83	208	0.09	0.97	208	0.2	0.9	-40.4
83 413	14/63	SX	0.46	0.59	17	0.09	0.6″/	19	1.5	4.4	-38.9
83 423	14/42	Sx	0.56	0.39	10	0.25	1.63	15	2.7	8.1	-75.3
83 423	14/63	SX	0.43	0.72	14	0.13	1.15	15	1.1	4.1	-37.4
8 3 5 4	14 /4-2	SX	0.41	0.47	10	0.16	1.30	12	1.9	7.5	-88.6
83 5 4	14/63	Sx	0.51	0.83	13	0.14	1.19	16	1.2	4.6	-35.1
83 520	14/43	Sx	0.17	0.72	205	0.10	0.99	205	0.2	0.6	86.3
83 522	14/63	Sx	0.24	0.88	184	0.30	0.97	184	0.4	1.2	-43.4
83 523	14/43	Sx	0.47	1.29	15	0.09	0.82	16	1.0	3.9	84.′2
83 524	14/63	Sx	0.33	0.71	16	0.07	0.53	19	1.2	4.1	-35.0
83 6 2	14/43	Sx	0.31	0.59	14	0.06	0.53	20	0.8	4.0	-88.6
83 6 2	14/63	Sx	0.23	0.68	6	0.14	1.30	6	4.5	6.″1	-24.1
83 7 8	12/43	Sx	0.60	0.70	20	0.22	0.95	17	2.4	9.8	-89.1
83 716	12/63	Sx	0.50	0.62	8	0.21	0.83	10	6.1	3.1.4	-52.9
83 717	12/43	SX	0.79	1.22	14	0.13	0.55	10	1.6	″/.4	-85.2
83 725	12/43	Sx	0.-/5	0.81	15	0.28	1.13	13	.2.3	9.8	83.6
83 726	12/63	SX	0.58	0.65	13	0.22	0.95	14	4.8	35.3	-58.2
83 8 3	12/43	SX	0.28	0.38	11	0.26	1.10	11	3.1	13.1	-74.1
83 811	12/63	SX	0.54	0.59	12	0.23	0.94	12	4.0	23.2	-58.8
83 820	12/63	Sx	1.30	1.18	10	0.′20	0.80	17	4.1	20.1	-57.9
83 821	12/43	Sx	0.26	0.25	15	0.19	0.82	15	2.4	10.5	-78.3
83 828	12/63	SX	0.77	1.06	15	0.32	1.26	14	3.4	17.7	-59.4
83 829	12/43	SX	0.47	0.68	16	0.22	0.92	17	2.2	8.8	-78.8
83 9 6	12/63	SX	0.86	1.20	13	0.27	1.05	14	3.9	19.2	-59.5
83 9 7	1?. /43	SX	0.62	0.93	15	0.18	0.78	12	2.2	7.7	-84.2
83 916	12/43	SX	0.69	0.54	12	0.30	1.16	12	3.7	14.0	-77.3
83 923	12/43	SX	0.74	0.56	14	0.30	1.25	17	2.7	8.9	-82.7
83 923	12/63	SX	0.46	0.69	14	0.22	0.94	15	3.7	20.3	-61.7
83 929	12/63	SX	0.51	0.76	13	0.22	0.93	15	3.4	12.2	-53.8
83 930	12/43	SX	0.41	0.5″1	13	0.22	0.96	15	2.7	9.3	-′/6.3
8310 6	12/63	SX	0.65	0.72	13	0.16	0.69	15	3.7	16.7	-58.9
8310 7	12/43	SX	0.59	1.00	14	0.19	0.81	13	2..6	8.6	89.0
8310 8	43/63	SX	0.67	0.60	5	0.16	1.13	6	7.1	18.7	-64.7
831033	3?. /63	SX	0.56	0.67	16	0.20	0.71	16	3.6	12.9	-51.9
831014	12/43	SX	0.36	0.56	14	0.17	0.-/4	12	2..9	1′2.3	67 .3
831020	12/63	SX	0.34	0.47	7	0.19	0.84	5	4.4	17.3	-55.7
831021	12/43	SX	0.39	0.58	20	0.20	0.85	17	2.2	7.2	90.0
83102′/	12/63	SX	0.52	0.67	15	0.19	0.82	15	3.0	12.0	-53.4
831028	12/43	SX	0.42	0.59	16	0.14	0.61	12	2..0	8.1	-89.5
8311 4	12 /63	SX	0.38	0.50	16	0.08	0.61	20	3.5	11.1	-48.8
8311 5	12/43	SX	0.42	1.14	19	0.14	1.15	20	1.2	4.7	-83.2
831112	12/63	SX	0.37	0.46	11	0.07	0.64	11	2.7	9.5	-53.1
831113	32./43	SX	0.28	0.60	16	0.14	1.09	17	1.7	4.3	-82.8
831118	12/43	SX	0.34	0.89	148	0.30	0.99	148	0.4	1.″1	-86.3
831119	12/63	Sx	0.33	0.87	203	0.30	0.99	203	0.4	1.5	-54.7
831120	12/43	Sx	0.26	0.63	18	0.13	1.20	19	1.2	4.4	89.4
831120	12/63	SX	0.39	0.58	19	0.0″/	0.55	20	1.9	8.1	-52.8
83112″/	12/43	Sx	0.34	0.79	18	0.06	0.51	18	1.6	4.9	-85.3
831127	12/63	Sx	0.37	0.48	12	0.09	0.79	13	2.2	9.3	-54.8
8312 4	12/63	SX	0.37	0.72	12	0.12	0.96	18	2..7	13.8	-60.9
831211	12/43	Sx	0.22	0.54	16	0.10	0.81	18	1.5	5.4	-76.3
831211	12/63	Sx	0.23	0.56	11	0.07	0.59	14	2.1	11.1	-53.9
831216	12/63	Sx	0.35	0.57	14	0.09	0.72	16	2.4	10.6	-54.8
831217	12/63	Sx	0.29	0.77	182	0.08	1..00	182	0.4	1.6	-54.4

831218	12/43	SX	0.32	0.88	170	0.08	0.97	170	0.3	1.2	-85.9
831224	12/43	SX	0.31	0.66	20	0.14	1.26	20	1.3	4.1	-87.4
831224	12/63	SX	0.17	0.44	17	0.06	0.46	20	1.9	8.0	-50.5
831229	12/63	SX	0.45	0.63	18	0.12	0.87	20	1.7	6.5	-52.5
831230	12/43	SX	0.34	0.70	18	0.12	0.91	19	1.2	5.0	87.7
84 113	12/43	Sx	0.32	0.54	9	0.12	0.93	11	?..0	6.3	-88.1
84 122	12/43	Sx	0.26	0.50	7	0.05	0.49	8	2.2	"1.6	-83."/
84 122	12/63	SX	0.35	0.58	13	0.06	0.52	15	2.8	9.8	-55.7
84 129	12/43	SX	0.30	0.36	9	0.14	1.06	14	3.4	8.4	-81.5
84 2 5	12/43	SX	0.33	0.58	12	0.14	1.20	12	2.0	6.6	-80.9
8 4 2 5	12/63	SX	0.45	0.55	18	0.05	0.37	18	1.7	7.4	-50.6
84 211	12/63	SX	0.21	0.43	11	0.08	0.53	18	2.6	10.2	-54.0
84 211	12/63	SX	0.32	0.83	357	0.08	0.98	35'7	0.3	1.1	-53.9
84 212	12/43	SX	0.23	0.'72	206	0.17	0.95	206	0.3	1.1	-87.3
84 212	12/43	SX	0.36	0.53	17	0.17	1.52	15	1.8	5.4	--18.4
84 219	12/43	SX	0.29	0.49	17	0.06	0.50	16	1.4	4.9	-87.4
84 219	1?, /63	SX	0.50	0.81	8	0.03	0.28	10	3.7	13.6	-52.5
84 226	12/63	SX	0.19	0.48	11	0.05	0.41	17	3.1	11.2	-58.6
84 3 4	12/63	SX	0.34	0.58	13	0.07	0.51	18	3.2	13.2	-57.9
84 311	1?. /43	SX	0.65	0.83	11	0.17	1.34	13	2.7	9.6	83.3
84 311	12/63	SX	0.67	0.61	15	0.08	0.66	19	2.8	10.5	-56.6
84 311	43/63	SX	0.95	1.08	7	0.09	0.64	8	5.9	20.3	-83.4
84 318	12/43	Sx	0.51	1.01	10	0.33	1.14	11	2.2	8.2	83.7
84 318	12/63	SX	0.24	0.47	15	0.0"7	0.62	19	.2.7	10.4	-48.6
84 324	12/63	SX	0.20	0.40	9	0.08	0.74	13	3.5	10.6	-60.0
84 324	12/63	Sx	0.38	0.85	313	0.11	0.98	313	0.4	1.6	-57.1
84 325	12/43	SX	0.30	0.89	288	0.13	1.00	.288	0.2	0.9	-87.3
84 325	12/43	Sx	0.40	0.8'1	18	0.38	1.64	17	1.6	6.4	-88.4
84 4 1	12/43	Sx	0.33	0.6'1	17	0.09	0.83	19	1.0	3.7	-88.6
8 4 4 8	12/43	SX	0.54	1.16	16	0.13	1.11	16	1.1	4.1	-84.4
8 4 4 9	12/63	Sx	0.44	0.70	19	0.13	1.07	20	2.2	8.4	-51.4
84 410	12/43	Sx	0.24	0.51	16	0.11	0.94	18	3.3	4.6	-87.4
84 411	12/63	Sx	0.43	0.53	20	0.09	0.76	20	2.2	8.2	-49.1
84 412	12/43	Sx	0.24	0.51	18	0.12	1.10	19	1.2	4.4	-88.6
84 413	12/63	SX	0.39	0.54	12	0.07	0.5"1	15	3.2	11.9	-50.4
84 414	12/43	SX	0.37	0.72	17	0.09	0.80	18	1.3	5.2	-89.9
84 415	12/63	SX	0.36	0.43	12	0.12	1.03	13	3.3	11.1	-49.7
84 416	12./43	SX	0.47	0.80	18	0.10	0.83	20	1.3	5.1	89.2
84 417	12/63	SX	0.35	0.12	7	0.18	1.23	8	13.7	31.5	-47.5
84 420	12/43	SX	0.43	0.57	14	0.14	1.22	13	2.1	8.1	79.6
84 421	12/63	Sx	0.27	0.35	18	0.08	0.64	20	2.3	7.9	-48.2
84 422	12/43	Sx	0.29	0.55	11	0.09	0.76	12	1.9	"7.5	85.2
84 429	12/43	Sx	0.29	0.57	14	0.12	0.89	15	1.5	5.6	-89.8
84 429	12/63	SX	0.24	0.31	5	0.05	0.43	5	13.2	27.4	-41.7
84 5 5	12/43	SX	0.35	0.52	15	0.10	0.87	15	1.2	5.3	-81.1
84 512	12/63	SX	0.27	0.'/4	191	0.10	0.98	191	0.4	1."/	-54.4
84 512	12/63	SX	0.31	0.57	12	0.09	0.79	14	2.9	16.3	-60.2
84 513	1?. /43	SX	0.18	0.51	21	0.21	0.9"/	21	0."1	3.5	-85.8
84 513	12/43	SX	0.3'1	0.71	13	0.10	0.91	12	1.3	4.3	-83.7
84 519	12/63	Sx	0.60	0.96	13	0.12	1.05	14	3.0	12.8	-57.1
84 5?.0	12/43	SX	0.29	0.56	17	0.11	1.00	19	1.2	3.8	-86.7
84 527	12/43	Sx	0.27	0.50	16	0.12	1.09	19	1.3	4.2	-83.7
84 6 3	12/43	Sx	0.38	0.75	17	0.12	1.05	18	1.1	3.9	87.7
84 6 3	12/63	SX	0.33	0.72	14	0.13	1.13	18	2.4	9.7	-60.6
84 610	12/43	Sx	0.36	0.82	14	0.08	0.77	17	1.4	5.6	-85.8
84 610	12/63	SX	0."/5	0.89	15	0.12	0.99	17	?,.3	9.6	-51.9
84 615	1 ?/43	Sx	0.18	0.48	16	0.10	0.91	1"1	1.2	4.0	-86.1
84 623	12/63	Sx	0.42	0.96	12	0.12	1.02	13	3.2	15.3	-60.4
84 624	12/43	Sx	0.26	0.67	17	0.15	1.?.5	18	1.2	5.2	87.1
84 7 7	12/63	Sx	0.26	0.55	12	0.1"/	1.39	15	3.6	15.6	-61.2
84 7 8	12/43	SX	0.44	0.89	15	0.12	0.97	18	1.8	7.8	-68.0
84 714	12/63	Sx	0.35	0.75	163	0.10	0.98	163	0.5	2.1	-57.3
84 714	12/63	SX	0.49	0.97	16	0.10	0.86	18	2.1	7.9	-58.9
84 715	12/43	Sx	0.35	0.75	115	0.11	1.01	)15	0.4	1.6	-88.3
84 722	12/43	SX	0.30	0.43	12	0.15	1.15	17	2.2	8.2	-70.6
84 729	12/63	SX	0.40	0.60	15	0.09	0.-7-/	14	2.8	13.7	-57.6

84 8 4	12/63	SX	0.20	0.50	8	0.20	1.47	15	3.3	15.5	-62.8
84 81?,	12/63	SX	0.68	1.12	18	0.07	0.64	19	2.3	9.5	-54.6
84 822	12/63	SX	0.23	0.64	9	0.14	1.23	10	2.8	11.3	-55.4
84 825	12/63	SX	0.35	0.65	15	0.16	1.47	15	2.?,	9.0	-56.3
84 9 9′	42/63	Sx	0.29	0.22	5	0.12	0.55	5	″).9	20.7	82.3
84 922	42/63	SX	0.48	0.58	7	0.16	1.18	8	6.1	13.6	62.6
8411 4	14/63	SX	0.59	1.20	13	0.12	0.93	15	2.9	8.7	-44.3
841129	14/42	Sx	0.80	0.71	12	0.10	0.-/1	14	2.5	8.2	-87.1
8412 2	14/63	SX	0.68	0.48	9	0.14	1.08	11	9.4	23.7	-36.8
8412 9	14/63	SX	0,33	0.47	12	0.07	0.5?,	17	2.3	9.7	-54.3
85 113	14/42	SX	0.65	0.60	8	0.10	0.84	11	3.4	8.1	-89.8
85 113	14/63	SX	0.17	0.″/0	6	0.07	0.59	6	2.3	8.2	-44.1
85 126	14/42	SX	0.84	0.64	12	0.09	0.′14	16	2.6	8.2	74.1
85 210	14/42	SX	0.27	0.59	8	0.07	0.5′1	9	2.1	″1.9	84.5
85 324	14/61	SX	0.34	0.67	17	0.09	0.83	18	2.0	5.8	-54.8
85 330	14/61	SX	0.30	0.65	16	0.09	0.78	16	1.8	5.5	-50.8
85 427	14/43	Sx	0.14	0.52	15	0.08	0.76	15	0.9	4.3	-85.6
85 512	14/61	Sx	0.24	0.65	18	0.09	0.73	18	1.6	′1.″1	-50.7
85 526	14/43	Sx	0.18	0.69	18	0.12	1.08	18	0.7	3.1	-88.5
85 531	14/43	SX	0.46	1.00	17	0.14	1.26	17	0.8	3.1	-85.1
85 720	14/43	SX	0.33	0.44	4	0.10	0.88	4	8.7	16.5	-9.8
85 810	14/43	Sx	0.28	0.87	13	0.07	0.61	14	1.4	5.7	-74.4
85 928	14/63	SX	0.46	0.88	206	0.17	0.98	206	0.6	1.9	-47.9
85 929	14/43	Sx	0.48	0.88	210	0.20	0.98	210	0.4	1.4	88.1
851019	14/63	Sx	0.65	0.rlo	11	0.13	0.91	11	1.9	7.6	-49.7
851026	14/63	SX	0.41	0.80	11	0.16	1.40	11	1.5	6.4	-36.9
851027	43/14	Sx	0.69	0.81	17	0.09	0.57	17	1.5	5.0	-86.5
851110	14/43	SX	0. 57	1.42	14	0.0″1	0.64	14	1.3	4.4	87.9
851124	14/43	Sx	0.17	0.48	19	0.09	0.83	19	0.8	3.3	89.3
86 1 5	14/63	Sx	0.68	3.04	14	0.19	1.40	14	1.7	6.8	-38.6
86 2 1	14/43	SX	0.18	0.45	6	0.05	0.50	6	1.8	8.8	78.0
86 2 8	14/43	SX	0.38	0.71	17	0.13	1.02	17	0.8	3.5	-88.9
86 215	14/43	SX	0.71	0.7″1	13	0.23	1.94	13	1.4	4.9	-84.4
86 215	14/63	SX	1.11	1.12	18	0.27	1.″10	18	1.8	6.1	-36.1
86 222	14/43	SX	0.38	1.04	17	0.13	3.23	1′1	0.″/	3.7	-87.2
86 224	14/63	SX	0.62	0.93	12	0.17	1.51	12	2.3	6.1	-47.2
86 3 1	14/43	SX	0.16	0.61	7	0.0″1	0.64	7	0.9	5.4	87.8
86 3 1	14/63	Sx	0.51	0.69	16	0.15	1.28	16	2.3	6.″1	-47.8
86 3 8	14/43	SX	0.28	0.72	19	0.12	1.09	19	0.9	3.-1	-89.3
86 3 9	14/63	SX	0.38	0.77	15	0.16	1.46	15	1.5	6.1	-31.6
86 315	14/63	SX	0.35	0.64	18	0.25	1.39	18	1.4	5.4	-32.8
86 322	14/63	Sx	0.51	0.59	15	0.15	1.31	15	2.2	7.6	-31.1
86 323	14/43	Sx	0.25	0.82	18	0.19	1.″15	18	0.7	2.9	-84.″/
86 329	14/43	SX	0.19	0.67	15	0.09	0.80	15	0.7	3.3	8′1.5
86 330	14/63	SX	0.46	0.98	18	0.09	0.82	18	1.4	4.5	-39.5
86 4 5	14/43	SX	0.53	0.96	19	0.13	1.13	19	0.′1	3.3	88.″1
9 6 4 6	14/63	SX	0.96	1.03	12	0.13	1.21	12	3.8	11.7	-40.6
86 412	14/43	SX	0.27	0.67	19	0.18	1.69	19	0.8	2.9	-86.0
86 414	14/63	SX	0.48	1.14	14	0.18	1.4″1	14	1.4	5.7	-32,.7
86 419	14/43	SX	0.60	1.02	12	0.0-/	0.65	12	0.9	4.3	86.0
86 420	14/63	SX	0.22	0.65	14	0.15	1.38	14	2.2	8.6	-43.″1
86 426	14/43	SX	0.22	0.72	10	0.11	0.99	10	1.1	4.6	-88.6
86 427	14/63	Sx	0.49	0.65	16	0.11	0.98	16	1.4	6.1	-38.7
86 5 3	14/43	Sx	0.36	0.81	18	0.11	0.98	18	0.8	4.3	89.7
86 5 4	14/63	SX	0.60	0.96	15	0.15	1.34	15	2.7	11.7	-48.8
86 510	14/43	SX	0.21	0.64	18	0.13	1.20	18	0.″1	3.3	83.9
86 615	14/63	Sx	0.58	0.82	18	0.11	0.97	18	1.2	5.5	-36.8
86 616	14/43	SX	0.53	1.17	17	0.08	0.71	17	3.0	4.6	88.9
86 622	14/43	Sx	0.93	0.92	17	0.32	0.86	17	1.0	4.5	86.1
86 622	14/63	Sx	0.43	0.61	13	0.09	0.″18	13	1.6	8.2	-38.5
86 628	14/63	Sx	0.60	1.06	71	0.24	1.04	71	0.9	3.4	-43.3
86 628	14/63	SX	1.22	1.04	14	0.26	1.42	15	3.6	11.0	-52.3
86 629	14/43	Sx	0.37	0.89	166	0.19	0.98	166	0.4	1.5	88.1
86 7 7	14/43	SX	0.44	0.83	20	0.10	0.72	20	1.3	5.3	85.5
86 7 8	14/63	Sx	0.62	0.89	18	0.22	1.57	18	1.6	6.0	-47.4
86 713	14/43	Sx	0.33	0.96	15	0.12	0.86	15	1.4	4.9	89.7

86 714	14/63	Sx	0.53	1.32	17	0.18	1.48	17	1.0	3.9	-38.1
86 720	14/43	Sx	0.42	1.04	19	0.06	0.52	19	1.2	4.3	-76.6
86 720	14/63	Sx	1.25	1.51	18	0.19	1.27	18	1.3	4.4	-36.2
86 726	14/43	SX	0.27	0.16	19	0.08	0.71	19	0.7	3.8	85.3
8 6 8 2	14/43	Sx	0.33	1.11	19	0.12	0.95	19	0.7	3.6	85.6
86 811	14/43	Sx	0.41	1.16	17	0.05	0.51	17	0.9	3.3	82.3
86 811	14/61	SX	0.37	0.54	15	0.05	0.49	15	2.0	11.1	-45.5
86 816	14/43	Sx	0.34	0.91	185	0.14	0.9′/	185	0.3	1.2	84.7
86 816	14/43	Sx	0.41	0.95	18	0.09	0.81	18	0.8	?,.6	-89.1
86 817	14/61	SX	0.60	1.10	15	0.09	0.84	15	1.4	5.4	-36.2
86 830	14/43	Sx	0.44	0.83	9	0.12	0.90	12	1.8	7.5	-89.7
86 914	14/43	SX	0.18	0.71	17	0.07	0.62	17	0.-1	3.6	87.0
86 920	14/61	Sx	0.37	1.28	15	0.11	1.02	15	1.6	7.6	-51.9
86 922	14/43	SX	0.25	1.00	17	0.06	0.59	17	0.7	3.1	81.8
86 92.8	14/43	Sx	0.19	0.74	18	0.09	0.86	18	0.6	3.6	89.2
8610 4	14/61	SX	0.09	0.32	9	0.03	0.27	9	2.9	13.2	-51.2
8610 5	14/43	Sx	0.22	0.91	18	0.08	0.75	18	0.6	2.6	-85.0
8610 6	14/43	Sx	0.25	0.94	189	0.14	1.01	189	0.2	0.8	89.7
861011	14/61	Sx	0.44	1.08	16	0.08	0.″/1	16	1.5	6.8	-52.1
861012	14/43	Sx	0.16	0.66	16	0.18	1.71	16	0.7	3.1	80.″/
861019	14/61	Sx	0.22	0.-/6	15	0.08	0.″/4	15	1.8	9.1	-52.3
861026	14/61	Sx	0.73	1.16	17	0.05	0.39	17	1.7	8.5	-47.3
8611 2	14/61	Sx	0.31	0.92	17	0.08	0.70	17	1.2	9.4	-42.2
8611 9	14/61	Sx	0.58	1.02	16	0.05	0.46	16	1.7	8.6	-50.3
861117	14/61	Sx	0.42	1.13	17	0.08	0.68	17	1.7	8.0	-55.5
861123	14/43	Sx	0.?,7	0.9?,	145	0.11	3.00	145	0.2	1.0	85.9
861126	14/61	Sx	0.15	0.49	15	0.04	0.39	15	1.7	8.6	-51.2
861129	14/43	Sx	0.36	0.82	19	0.09	0.72	19	0.7	3.6	-89.9
861129	14/61	Sx	0.44	0.88	16	0.03	0.32	16	1.8	8.9	-52.7
861214	14/43	Sx	0.31	0.69	19	0.16	1.48	19	0.6	2.7	-83.2
861214	14/61	Sx	0.31	0.72	18	0.04	0.3″/	18	1.0	8.′/	-41.2
861220	14/43	Sx	0.70	0.65	14	0.11	0.73	14	2.0	′/.4	80.6
8612?,1	14/61	Sx	0.36	0.83	19	0.07	0.60	19	1.5	8.5	-49.6
86122′/	14/61	Sx	0.20	0.48	14	0.04	0.41	14	1.9	10.1	-57.4
87 1 3	14/43	Sx	0.47	1.10	16	0.32	1.51	16	0.9	5.2	-90.0
87 1 4	14/61	SX	0.26	0.93	16	0.05	0.44	16	1.5	7.6	-53.5
87 1 9	14/61	SX	0.40	0.73	17	0.08	0.66	17	1.7	8.2	-56.0
87 119	14/43	SX	0.33	1.02	19	0.13	1.19	19	0.8	3.9	88.1
87 125	14/61	Sx	0.52	0.98	18	0.07	0.63	18	1.5	4.4	-47.5
87 126	14/43	Sx	0.50	0.87	15	0.26	1.31	15	0.9	5.3	-88.9
8-/ 213	14/42	SX	0.39	1.08	19	0.14	1.32	19	0.8	3.4	-88.6
87 222	14/61	SX	0.26	0.84	18	0.06	0.59	18	1.5	7.3	-56.4
87 3 7	14/42	SX	0.26	0.68	1″1	0.06	0.56	17	1.3	4.4	-89.2
87 315	14/42	Sx	0.22	0.53	19	0.15	1.42	19	0.8	3.3	88.6
87 321	14/61	SX	0.41	0.99	15	0.11	0.99	15	2.1	8.3	-56.7
87 329	14/61	SX	0.34	0.94	12	0.09	0.79	12	2.6	9.5	-55.5
87 4 1	14/61	Sx	0.51	1.01	15	0.06	0.54	15	1.9	7.4	-50.2
87 4 4	14/42	Sx	0.44	1.05	18	0.08	0.70	18	0.8	3.6	83.1
87 411	14/42	Sx	0.55	0.95	18	0.09	0.83	18	0.9	3.4	87.1
87 411	14/61	Sx	0.29	0.93	18	0.08	0.73	18	1.7	4.8	-48.8
87 418	14/61	Sx	0.19	0.62,	12	0.10	0.95	12	2.1	6.8	-52.1
87 419	14/42	Sx	0.90	0.95	19	0.10	0.85	19	2.0	5.0	-89.5
87 425	14/61	SX	0.10	0.16	5	0.07	0.62	5	4.3	15.3	-29.4
87 426	14/42	SX	0.48	1.75	20	0.09	0.79	20	0.8	3.6	-89.0
87 5 8	14/42	Sx	0.30	0.69	19	0.10	0.92	19	0.7	2.8	-89.3
87 5 9	14/42	SX	0.21	0.85	104	0.12	0.97	104	0.3	1.2	89.0
87 510	14/61	Sx	0.28	0.77	19	0.08	0.75	19	1.8	6.8	-56.6
87 510	14/63	Sx	0.23	0.89	193	0.12	0.97	193	0.3	1.1	-53.0
87 517	14/61	Sx	0.60	0.88	19	0.09	0.78	19	1.7	4.6	-50.2
8″/ 518	14/42	Sx	0.49	1.57	7	0.11	1.05	7	1.5	6.7	86.5
87 522	14/61	Sx	0.32	0.99	19	0.22	1.96	19	1.4	6.8	-54.8
87 523	14/42	Sx	0.94	1.04	18	0.17	1.43	18	1,1	4.0	-86.7
87 530	14/42	SX	0.19	0.63	19	0.08	0.78	19	0.9	3.6	-89.5
87 531	14/61	Sx	0.21	0.54	18	0.06	0.53	18	1.5	3.9	-45.0
87 6 7	14/42	Sx	0.45	0.90	20	0.07	0.67	20	1.0	4.4	85.6
87 621	14/42	Sx	0.44	0.75	20	0.16	1.48	20	0.9	3.9	-86.0

87 627	14/61	SX	1.26	0.95	J6	0.08	0.71	J6	3.″1	12.9	-59.5
87 628	14/42	Sx	0.56	0.67	8	0.04	0.41	8	2.0	7.0	-83.8
87 ‘1 4	14/42	Sx	0.37	0.74	16	0.11	1.04	16	1.2	3.8	87.9
87 7 5	14/61	Sx	0.29	0.65	16	0.06	0.58	16	1.4	4.7	-44.6
87 711	14/42	Sx	0.29	0.″17	19	0.09	0.83	19	0.9	3.6	-84.9
87 719	14/42	Sx	0.34	0.98	18	0.10	0.91	18	0.9	3.9	-85.4
87 719	14/61	Sx	0.18	0.52	14	0.07	0.64	14	1.3	5.9	-43.2
87 727	14/42	Sx	0.47	0.9″/	16	0.09	0.88	16	0.9	4.2	86.1
87 8 1	14/61	Sx	0.43	0.67	16	0.07	0.58	16	1.4	4.6	-43.0
87 8 2	14/42	Sx	0.68	0.91	18	0.08	0.6″1	18	1.2	5.1	‘78.4
8 7 8 9	14/63	Sx	1.04	0.87	14	0.13	0.94	14	1.3	6.0	-27.5
87 815	14/42	Sx	0.36	0.68	10	0.07	0.59	10	1.2	4.4	-85.1
8′/ 816	14/63	Sx	0.20	0.83	8	0.09	0.86	8	1.2	4.8	-38.6
87 817	14/63	Sx	0.25	0.95	142	0.09	0.99	142	0.3	1.0	-43.2
87 822	14/42	Sx	0.23	0.65	18	0.06	0.54	18	0.8	2.′1	83.4
87 824	14/63	Sx	0.26	0.91	11	0.0″1	0.60	12	1.5	6.9	-45.1
87 829	14/63	Sx	0.72	0.89	17	0.10	0.83	17	1.4	5.0	-42.5
87 830	14/42	SX	0.″16	0.″/9	20	0.12	1.07	20	1.1	4.9	-′19.1
87 9 “1	14/42	Sx	0.13	0.22	6	0.08	0.75	6	2.6	11.5	8″1.4
8“1 912	14/42	Sx	0.19	0.48	16	0.13	1.18	16	1.0	3.4	-88.1
87 913	14/63	Sx	0.′23	0.68	1″1	0.12	1.16	17	0.8	4.3	-41.5
87 919	14/63	Sx	0.35	0.73	7	0.0′1	0.63	7	2.7	10.4	-24.6
87 920	14/42	Sx	0.28	0.69	15	0.06	0.52	15	0.9	3.5	-86.7
87 926	14/63	Sx	0.12	0.49	18	0.08	0.79	18	0.7	3.3	-32.1
8710 3	15/42	Sx	0.43	0.91	17	0.11	0.99	17	1.6	6.7	-86.4
8710 4	15/63	Sx	0.29	0.61	18	0.15	1.31	18	1.5	5.8	-41.0
871010	15/63	Sx	0.27	0.65	17	0.05	0.43	17	1.4	5.7	-43.2
871012	15/42	Sx	0.22	0.54	14	0.11	1.01	14	1.1	4.6	-89.0
871018	15/42	Sx	0.69	1.06	15	0.05	0.42	15	1.4	7.6	-82.6
871018	15/63	Sx	0.23	0.47	18	0.07	0.59	18	1.4	5.0	-52.0
8“11020	15/42	Sx	0.42	0.77	14	0.0′1	0.61	14	2.0	8.2	-85.2
871024	15/63	Sx	0.23	0.62	16	0.09	0.81	16	1.8	13.9	-57.9
871030	15/63	Sx	0.34	0.6-7	18	0.06	0.55	18	1.4	4.6	-38.4
8711 “1	15/63	Sx	0.38	0.″/9	17	0.0′1	0.50	17	1.6	5.6	-45.6
8711 8	15/43	Sx	0.81	0.68	15	0.15	1.15	15	2.4	8.0	7′1.7
871 1 8	15/63	SX	0.24	0.92	75	0.08	0.95	75	0.5	1.6	-44.7
871115	15/43	Sx	0.20	0.67	19	0.04	0.34	19	0.8	3.7	86.″/
871120	15/63	Sx	0.08	0.35	16	0.02	0.22	16	1.3	5.2	-44.5
8712 1	15/43	Sx	0.24	0.36	12	0.09	0.86	12	1.6	8.8	77.6
8712 5	15/43	Sx	0.21	0.63	17	0.09	0.81	17	1.0	4.4	84.8
8712 6	15/63	Sx	0.15	0.58	18	0.07	0.61	18	1.1	5.1	-43.8
871221	15/43	Sx	0.20	0.67	18	0.05	0.43	18	0.8	4.2	82.3
871226	15/43	Sx	0.27	0.91	91	0.07	0.73	91	0.2	1.1	89.9
871227	15/63	SX	0.23	0.71	18	0.03	0.25	18	1.0	3.″1	-44.5
871228	15/43	Sx	0.30	0.82	78	0.12	1.19	78	0.3	1.3	-89.0
88 1 2	15/63	Sx	0.26	0.56	13	0.09	0.80	14	2.9	-1.4	-45.-I
88 1 3	15/43	Sx	0.23.	0.66	20	0.07	0.68	20	0.9	3.8	84.3
8 8 1 9	15/43	SX	0.26	1.07	17	0.16	1.54	17	0.6	2.2	89.3
88 110	15/63	Sx	0.16	0.77	18	0.04	0.36	18	0.7	2.7	-40.8
88 117	15/63	SX	0.9′/	1.06	16	0.09	0.″14	16	2.5	11.1	-36.3
88 124	15/63	Sx	0.26	0.88	18	0.10	0.95	18	0.7	2.6	-42.9
88 125	15/43	Sx	0.15	0.70	18	0.03	0.28	18	0.5	2.9	84.2
88 129	15/43	Sx	0.43	0.98	15	0.11	1.06	15	0.8	6.0	77.6
88 129	15/63	Sx	0.53	0.93	18	0.09	0.91	18	0.9	3.8	-39.1
88 2 7	15/63	sx	1.06	1.07	14	0.0′1	0.55	14	4.7	13.3	-60.7
88 212	15/63	Sx	0.33	0.72	18	0.08	0.72	18	1.0	4.6	-39.7
88 213	15/43	SX	0.15	0.72	65	0.08	0.98	65	0.3	1.3	88.′7
88 213	15/43	Sx	0.17	0.83	1″1	0.06	0.5′1	17	0.5	1.8	-89.1
88 215	15/43	sx	0.33	0.98	95	0.09	0.′96	95	0.3	1.0	89.5
88 219	15/63	Sx	0.15	0.83	18	0.05	0.47	18	1.1	4.3	-40.7
88 220	15/43	SX	0.21	0.92	19	0.06	0.53	19	0.8	3.4	-86.5
88 227	15/43	Sx	0.22	0.91	19	0.11	1 .05	19	0.6	3.2,	86.9
88 227	15/63	Sx	0.16	0.65	17	0.12	1.12	17	0.9	3.2	-43.1
8 8 3 5	15/43	SX	0.28	0.87	18	0.06	0.60	18	0.7	3.1	86.5
8 8 3 5	15/63	SX	0.21	0.75	18	0.08	0.69	18	0.7	3.1	-39.3
88 311	15/63	Sx	0.17	0.73	16	0.03	0.31	16	0.9	3.3	-37.6

88 313	15/43	Sx	0.18	0.78	17	0.06	0.55	17	0.7	2.9	87.6
88 318	15/63	Sx	0.14	0.90	18	0.05	0.48	18	0.6	2.8	-41.0
88 324	15/43	SX	0.12	0.68	19	0.11	1.07	19	0.4	2.6	85.7
88 325	15/63	Sx	0.24	0.76	50	0.09	1.07	50	1.1	2.9	-44.7
88 326	15/63	Sx	0.38	1.05	18	0.06	0.56	18	1.3	4.4	-48.4
88 327	15/63	Sx	0.27	0.93	136	0.08	0.95	136	0.4	1.3	-45.1
88 4 2	15/43	Sx	0.24	0.76	20	0.08	0.72	?.0	0.4	3.3	86.1
88 4 2	15/43	Sx	0.35	0.89	42	0.05	0.59	42	0.9	3.3	76.6
88 4 2	15/63	Sx	0.30	0.56	16	0.08	0.81	16	1.0	4.6	-42.9
8 8 4 3	15/43	SX	0.20	0.87	111	0.09	1.07	111	0.4	1.6	-85.2
88 4 9	15/63	Sx	0.10	0.60	18	0.04	0.39	18	0.6	2.5	-40.4
88 411	15/43	SX	0.26	0.91	19	0.13	1.20	19	1.0	2.4	-87.8
88 416	15/43	SX	0.21	0.80	16	0.0″/	0.67	16	0.6	2.9	87.6
88 421	15/43	SX	0.18	0.76	18	0.07	0.62	18	0.6	2.1	85.1
88 43C	15/63	Sx	0.11	0.63	9	0.0′/	0.69	9	1.1	4.4	-38.3
88 5 8	15/63	SX	0.46	0.97	18	0.08	0.78	18	0.8	3.2	-44.9
88 511	15/43	Sx	0.14	0.66	17	0.03	0.30	17	0.7	2,9	85.8
88 514	15/43	Sx	0.13	0.65	18	0.11	1.02	18	0.5	3.4	83.9
88 514	15/43	SX	0.16	0.91	62	0.05	0.9″/	62	0.3	1.0	85.1
88 52 C	15/63	Sx	0.15	0.68	101	0.08	0.97	101	0.″1	2.5	-55.3
88 521	15/43	SX	0.55	0.62	12	0.0″/	0.61	12	3.2	10.1	80.5
88 522	15/63	SX	0.18	0.74	16	0.12	1.12	16	0.8	4.2	-37.5
88 526	15/43	SX	0.49	0.61	14	0.10	0.93	14	1.9	6.3	-85.8
88 528	15/63	SX	0.23	0.86	1″1	0.19	1.77	1″1	1.0	3.4	-46.1
88 611	14/63	SX	0.05	0.28	15	0.12	1.13	15	0.8	2.7	-40.4
88 612	14/45	SX	0.08	0.36	16	0.0″/	*0.″10*	16	0.6	1.9	-88.2
88 618	14/45	SX	0.52	0.89	I	0.10	*0.92*	4	1.0	5.1	86.5
88 618	14/63	SX	0.23	0.96	1′1	0.05	0.49	17	0.7	2.8	-35.5
88 625	14/45	SX	0.41	1.66	18	0.13	1.19	18	0.7	2.5	87.6
88 626	14/63	SX	0.04	0.28	7	0.09	0.85	7	0.9	3.7	-37.1
88 716	14/63	SX	0.13	0.54	34	0.08	0.74	14	1.5	9.9	-60.5
88 718	14/43	SX	0.10	0.67	4	0.04	0.39	7	1.3	6.6	-88.9
88 723	14/63	SX	0.19	1.00	17	0.33	1.23	17	0.6	3.0	-39.9
88 725	14/43	SX	0.?.4	0.60	13	0.14	1.28	13	0.8	4.7	7′1.7
88 73C	14/63	SX	0.33	1.05	16	0.10	0.99	16	0.5	2.6	-34.7
88 8 6	14/65	SX	0.33	0.92	57	0.12	1.21	57	1.1	4.6	-65.6
88 8 7	14/65	SX	0.19	1.00	18	0.10	0.85	18	1.2	4.9	-45.9
88 8 8	14/65	SX	0.25	0.91	64	0.08	0.74	64	0.8	2.5	-56.7
88 813	14/43	Sx	0.66	0.85	18	0.08	0.-/0	18	1.2	4.0	85.8
88 81?	14/65	Sx	0.s3	0.70	10	0.0′/	0.62	10	2.3	′1.0	-38.7
88 82C	14/43	Sx	0.09	0.79	103	0.13	0.98	103	0.3	1.4	85.9
88 82C	14/43	Sx	0.15	0.93	14	0.17	1.68	14	*0.′1*	3.0	-89.8
88 827	14/43	SX	0.56	0.75	15	0.17	1.49	15	1.4	5.6	82.8
88 827	14/65	SX	0.″15	0.87	12	0.16	1.44	12	6.2	16.8	-62.9
88 9 2	14/43	SX	0.15	0.63	19	0.16	1.48	19	0.4	1.8	-86.0
88 9 3	14/43	SX	0.15	0.95	59	0.34	1.04	59	0.3	1.4	89.1
8 8 9 (	14/63	SX	0.31	0.96	11	0.05	0.48	11	0.9	4.8	-41.5
88 9 5	14/65	SX	0.22	0.88	117	0.07	1.00	117	0.6	1.′/	-4′/.9
88 911	14/43	Sx	0.85	0.68	12	0.16	0.″/6	12	2.0	7.8	83.0
88 911	14/63	SX	0.06	0.36	16	0.06	0.61	16	0.5	3.7	-38.5
88 917	14/63	SX	0.27	0.75	120	0.11	0.99	120	0.5	1.4	-36.6
88 924	14/43	SX	0.5″1	0.73	10	0.12	1.02	10	2.7	8.1	7″1.9
88 925	14/63	Sx	0.07	0.52	14	0.10	0.93	14	1.0	5.5	-54.8
8810 1	14/43	SX	0.07	0.46	10	0.15	1.42	10	0.6	2.9	86.0
8810 1	14/63	SX	0.23	1.06	16	0.10	0.92	16	0.6	3.4	-38.9
8810 8	14/63	Sx	0.37	0.88	11	0.12	1.08	11	1.3	19.8	-41.1
8810 9	14/43	Sx	0.45	0.85	16	0.11	1.08	16	0.8	3.6	85.3
881023	14/43	Sx	0.2,6	0.77	16	0.19	1.″80	16	0.6	3.3	88.5
881029	14/43	SX	0.12	0.70	18	0.15	1.40	18	0.5	2.7	-82.3
8811 6	14/63	SX	0.03	0.21	11	0.03	0.26	11	0.9	5.3	-41.7
8811 6	14/63	SX	0.19	0.87	107	0.10	1.01	107	0.3	1.3	-44.1
8811 7	14/43	SX	0.09	0.51	18	0.06	0.59	18	0.9	3.3	-85.0
881112	14/63	SX	0.21	0.78	11	0.06	0.61	11	*0.″1*	4.4	-39.3
881119	14/63	Sx	0.13	0.81	17	0.07	0.66	17	0.6	2.4	-41.2
881120	14/43	SX	0.42	1.01	12	0.18	3.59	12	1.3	4.8	88.1
881126	14/43	SX	0.12	0.68	18	0.06	0.56	18	0.4	2.6	86.8

3812 4	14/43	SX	0.14	0.40	17	0.11	1.08	17	0.5	3.0	86.3
381211	14/43	Sx	0.23	0.80	14	0.15	1.42	14	0.5	3.7	-84.9
381211	14/63	SX	0.29	0.94	17	0.03	0.29	17	0.8	3.0	-34.3
381217	14/63	Sx	0.26	1.03	18	0.05	0.47	18	0.6	3.8	-37.1
381226	14/43	Sx	0.17	0.84	16	0.17	1.61	16	0.5	2.8	8′/.6
381231	14/63	SX	0.23	0.69	16	0.05	0.40	16	0.7	4.6	-37.0
39 1 3	14/43	SX	0.15	0.85	18	0.09	0.86	18	0.5	2.3	-87.2
39 1 8	14/43	Sx	0.13	0.76	18	0.16	1.5′2	18	0.5	2.4	88.4
39 1 8	14/63	Sx	0.09	0.48	16	0.04	0.36	16	0.6	3.8	-38.0
39 115	14/43	Sx	0.11	0.43	15	0.07	0.66	15	0.6	2.7	-85.5
39 115	14/63	Sx	0.15	0.60	10	0.07	0.69	10	1.2	5.5	-42.5
39 121	14/43	SX	0.09	0.65	18	0.05	0.51	18	0.4	2.-2	-86.8
39 122	14/63	Sx	0.12	0.81	14	0.04	0.40	14	0.5	3.5	-37.9
39 128	14/43	SX	0.10	0.52	19	0.09	0.82	19	0.4	1.7	89.1
39 129	14/63	Sx	0.09	0.53	16	0.05	0.44	16	0.5	2.0	-35.0
39 2 5	14/63	Sx	0.16	0.61	64	0.09	0.94	64	0.4	1.4	-39.6
39 211	14/63	Sx	1.68	1.39	12	0.09	0.78	12	2.″1	13.7	-45.9
39 219	14/43	Sx	0.12	0.58	19	0.14	1.42	19	0.6	2.6	-88.3
39 219	14/63	Sx	0.08	0.58	16	0.06	0.59	16	0.6	2.3	-37.3
39 226	14/43	Sx	0.17	0.73	16	0.13	1.30	16	0.6	3.2	-86.″/
39 3 4	14/43	Sx	0.15	0.69	17	0.10	1.00	17	0.5	2.5	-89.′1
39 3 4	14/63	SX	0.13	0.93	16	0.04	0.44	16	0.5	2.3	-33.8
39 312	14/43	Sx	0.15	0.96	17	0.13	1.38	17	0.5	2.8	84.6
39 318	14/43	Sx	0.17	0.″18	14	0.11	1.17	14	0.5	?,4	-83.2
39 319	14/63	Sx	0.0′/	1.06	161	0.12	1.01	161	0.1	0.6	-44.0
39 326	14/43	Sx	0.17	0.83	16	0.07	0.74	16	0.5	3.0	84.1
39 326	14/63	Sx	0.19	0.83	16	0.16	1.24	16	0.8	2.7	-38.9
39 4 2	14/43	SX	0.08	0.34	13	0.0″/	0.36	13	1.1	5.3	86.0
39 4 7	14/63	Sx	0.05	0.3′/	13	0.05	0.49	13	0.7	4.0	-41.1
39 416	14/43	Sx	0.10	0.52	19	0.05	0.49	19	0.5	2.3	87.2
39 417	14/63	Sx	0.08	0.51	14	0.08	0.88	14	1.1	6.2	-55.0
39 418	14/63	Sx	0.16	0.71	177	0.06	0.98	177	0.-2	0.9	-46.8
39 422	14/43	Sx	0.08	0.40	13	0.20	1.02	13	0.5	3.9	-85.7
39 429	14/63	Sx	0.25	0.′/3	17	0.08	0.81	17	0.5	3.3	-33.3
39 5 6	14/43	SX	0.09	0.41	18	0.09	0.92	18	0.5	2.9	-86.1
39 5 6	14/63	SX	0.18	0.50	19	0.06	0.62	19	0.8	4.2	-45.7
39 5 7	14/43	Sx	0.0″/	1.05	180	0.30	1.02	180	0.1	0.3	89.0
39 513	14/63	Sx	0.24	0.85	11	0.08	0.70	11	1.1	5.8	-38.1
89 52(	14/43	SX	0.34	0.95	13	0.12	1.18	13	0.8	3.6	-86.4
89 52(	14/63	Sx	0.17	0.85	18	0.06	0.66	18	0.5	4.2	-41.2
89 529	14/43	Sx	0.33	0.79	18	0.08	0.8″1	18	0.5	2.5	-88.0
89 6 3	14/43	Sx	0.12	0.65	19	0.11	1.16	19	0.5	2.0	-89.3
89 6 5	14/63	Sx	0.23	0.81	16	0.06	0.64	16	0.6	3.6	-39.7
89 611	14/43	Sx	0.11	0.66	16	0.10	1.05	16	0.4	2.5	88.4
89 611	14/63	SX	0.35	1.10	17	0.07	0.67	17	0.7	2.4	-39.1
89 618	14/43	Sx	0.09	0.52	17	0.05	0.51	17	0.4	2.0	-88.4
89 618	14/63	Sx	0.19	0.88	17	0.10	1.03	17	0.6	3.9	-34.4
89 623	14/43	Sx	0.15	0.95	15	0.0″/	0.77	15	0.5	2.0	-85.8
89 625	14/63	Sx	0.21	0.94	15	0.08	0.81	15	0.8	2.8	-41.5
89 7 4	14/43	Sx	0.17	0.91	19	0.09	0.97	19	0.4	1.6	-87.4
89 7 9	14/43	SX	0.08	0.53	17	0.15	1.55	17	0.5	2.0	88.9
89 7 9	14/63	Sx	0.13	0.86	17	0.09	0.95	17	0.5	2.5	-35.7
89 710	15/45	Sx	0.04	0.61	81	0.14	0.97	81	0.1	0.6	89.2
89 714	14/43	Sx	0.15	0.67	18	0.09	0.94	18	0.5	1.7	-86.5
89 716	14/63	Sx	0.12	0.72	16	0.10	1.05	16	0.5	3.5	-33.2
89 722	14/43	Sx	0.17	0.″?7	16	0.18	1.″10	16	0.4	2.0	89.3
89 723	14/63	Sx	0.06	0.49	15	0.05	0.54	15	0.5	3.4	-33.3
89 729	14/43	Sx	0.20	0.65	18	0.16	1.58	18	0.4	1.6	-89.2
89 730	14/63	Sx	0.14	0.88	14	0.13	1.31	14	0.5	2.5	-33.2
89 8 9	14/43	Sx	0.13	0.72	14	0.0″1	0.75	14	0.4	2.2	--89.1
89 8 6	14/63	Sx	0.16	0.93	15	0.18	1.92	15	0.6	3.2	-27.5
89 812	14/43	Sx	0.22	0.81	12	0.07	0.70	12	0.7	3.0	-85.6
89 813	14/63	SX	0.14	1.11	12	0.08	0.79	12	0.6	3.1	-31.4
89 820	14/63	SX	0.14	0.89	16	0.07	0.77	16	0.5	2.5	-32.0
89 826	14/43	Sx	0.10	0.61	12	0.07	0.75	12	0.5	2.2	-88.3
89 9 2	14/43	Sx	0.12	0.″/1	19	0.07	0.68	19	0.4	1.6	-86.6

9° 430	15/63	SX	0.13	0.60	15	0.09	0.93	15	0.8	2.9	-37.7
9° 5 5	14/45	SX	0.28	.72	15	.4	0.43	15	0.9	3.6	83.7
9° 5 8	14/65	SX	0.16	0.61	14	0.8	0.85	14	1.0	3.3	-40.1
9° 513	15/43	SX	0.10	.68	15	0.8	0.91	15	0.4	2.2	85.8
9° 513	15/63	SX	0.21	0.83	13	.9	1.01	13	0.6	2.6	-37.6
9 520	14/65	SX	0.20	.78	16	0.8	0.92	16	0.7	4.0	-43.3
9° 522	15/43	SX	0.08	0.47	14	.09	0.94	14	0.5	2.4	84.0
9° 528	14/65	SX	0.23	.60	12	.03	1.38	12	0.8	3.3	-44.3
9° 529	15/43	SX	0.11	0.69	15	0.08	0.86	15	0.4	2.4	84.4
9° 6 2	14/65	SX	0.13	.57	13	0.14	0.45	13	0.5	3.0	-37.1
9° 6 7	14/45	SX	0.41	0.78	13	.07	0.75	13	1.1	4.0	85.6
9° 610	15/63	SX	0.18	.89	15	.01	1.18	15	0.5	2.4	-35.6
9° 613	14/45	SX	0.27	.61	14	.18	0.82	14	0.8	3.3	-89.1
9° 618	15/63	SX	0.26	.87	18	.07	0.70	18	0.6	3.8	-38.4
9° 621	14/45	SX	0.07	.43	15	.03	0.38	15	0.5	2.2	-89.7
9 624	14/65	SX	0.23	.02	14	.02	1.29	14	0.6	3.1	-34.8
9° 628	14/45	SX	0.16	.94	16	.10	1.12	16	0.5	2.1	89.9
9° 630	15/63	SX	0.06	.27	5	.6	0.67	5	1.6	6.9	-47.1
9° 7 5	15/43	SX	0.14	.84	15	.15	1.65	15	0.5	2.1	-88.2
9° 7 8	15/63	SX	0.16	0.73	18	.7	0.81	18	0.6	3.7	-37.9
9° 7 9	15/43	SX	0.07	0.43	17	.3	1.45	17	0.4	1.8	89.3
9° 719	14/45	SX	0.12	0.56	15	0.9	1.00	15	0.6	3.1	85.9
9° 720	15/45	SX	0.08	0.97	281	.8	0.98	281	0.1	0.3	89.2
9° 721	15/63	SX	0.22	0.85	14	.19	0.95	14	0.5	2.4	-36.9
9° 726	15/43	SX	0.19	0.06	15	.07	0.73	15	0.6	2.5	84.1
9 729	15/63	SX	0.17	0.77	11	.9	0.95	11	1.4	7.0	-43.5
9° 731	15/65	SX	0.07	0.93	232	0.03	1.00	232	0.1	0.4	-39.7
9° 8 2	15/43	SX	0.12	1.88	11	0.05	1.56	11	0.5	3.0	84.3
9° 8 5	15/63	SX	0.17	0.84	17	0.0	0.80	17	0.6	3.2	-34.1
9° 8 8	15/43	SX	0.15	.57	15	0.1	0.73	15	0.6	2.3	86.0
9° 812	14/65	SX	0.21	.07	7	0.18	0.80	7	1.0	4.5	-43.3
9° 815	14/45	SX	0.09	.44	15	0.06	0.65	15	0.6	2.3	79.2
9° 819	14/65	SX	0.12	.66	10	0.06	1.68	10	0.8	3.8	-38.7
9° 822	14/45	SX	0.15	.96	13	0.07	0.81	13	0.5	2.1	89.7
9° 826	14/65	SX	0.18	.55	17	0.08	0.89	17	0.9	3.5	-37.0
9° 829	15/43	SX	0.16	.81	15	0.19	0.99	15	0.5	2.0	-84.3
90 9 2	14/65	SX	0.32	.94	15	0.09	0.96	15	0.7	4.9	-44.7
90 9 5	15/43	SX	0.28	.27	15	0.07	0.78	15	0.4	1.6	88.7
90 910	14/65	SX	0.29	0.00	15	0.08	0.91	15	0.7	4.3	-46.4
90 913	14/45	SX	0.27	1.34	15	0.04	0.42	15	0.5	1.9	-83.8
90 916	14/65	SX	0.19	1.04	13	0.05	0.59	13	0.7	7.6	-43.9
90 920	15/43	SX	0.30	1.30	15	0.04	1.49	15	0.5	2.6	-80.3
90 923	14/65	SX	0.23	1.62	10	0.8	0.82	10	1.3	6.5	-40.9
90 924	15/65	SX	0.06	1.90	102	0.05	0.99	102	0.1	0.6	-39.8
90 925	15/45	SX	0.07	1.94	114	0.18	0.97	114	0.1	0.5	-89.3
90 926	15/43	SX	0.12	0.51	13	0.19	0.99	13	0.6	3.0	-71.0
9 927	15/65	SX	0.07	0.00	152	.07	0.99	152	0.1	0.5	-38.4
9° 930	14/65	SX	0.12	0.70	12	.8	0.82	12	0.7	3.0	-39.8
9° 930	15/45	SX	0.06	.76	96	.09	0.99	96	0.1	0.4	89.6
9° 0 4	15/43	SX	0.12	.83	14	.07	0.78	14	0.6	3.0	-80.7
9° 1 0 8	14/65	SX	0.15	.48	11	.06	0.64	11	1.2	5.6	-36.8
9° 1 014	15/43	SX	0.11	.67	13	.04	0.48	13	0.5	2.9	-79.9
9° 1 015	14/65	SX	0.24	.90	14	.03	1.42	14	0.9	4.1	-38.2
9° 020	14/65	SX	0.08	.53	7	.14	0.40	7	1.0	8.1	-35.7
9° 023	14/45	SX	0.11	.58	19	.06	0.69	19	0.6	2.3	-83.5
9° 1 028	15/63	SX	0.30	.71	16	.06	0.67	16	0.8	4.9	-42.8
9 1 030	15/43	SX	0.13	.56	14	.7	0.80	14	0.5	2.7	-82.4
9° 1 1	15/45	SX	0.08	.87	139	.8	0.99	139	0.2	0.7	-89.6
9° 1 3	15/63	SX	0.31	.13	16	.10	1.05	16	0.6	3.2	-34.1
9° 1 8	15/43	SX	0.15	.84	19	.14	0.47	19	0.5	2.5	-84.8
9° 1 9	14/65	SX	0.11	.50	13	.06	0.61	13	1.0	4.3	-40.4
9° 1 111	15/65	SX	0.04	.66	100	.05	1.01	100	0.1	0.5	-41.9
9° 1 112	15/65	SX	0.03	.73	30	.05	0.97	30	0.1	0.7	-38.0
9° 1 114	15/43	SX	0.11	.47	6	.20	2.17	6	2.1	19.0	71.3
9° 1 118	14/65	SX	0.14	.75	14	.03	0.31	14	1.1	4.3	-31.8
9° 1 121	14/45	SX	0.11	.67	17	.11	1.19	17	0.4	1.9	-88.2

901124	14/65	SX	0.21	0.74	14	0.08	0.84	14	0.7	2.9	-38.6
901128	15/43	SX	0.12	0.76	18	0.09	1.01	18	0.5	2.3	-87.9
9012 5	14/45	SX	0.17	1.00	16	0.05	0.52	16	0.4	1.9	-88.0
901212	15/43	SX	0.22	1.03	14	0.09	0.95	14	0.6	2.2	-89.2
901216	14/65	SX	0.18	0.71	14	0.07	0.72	14	0.8	4.4	-41.1
901222	14/65	SX	0.20	0.73	15	0.08	0.88	15	.0	4.0	-51.7
901226	14/45	SX	0.16	0.69	15	0.09	0.95	15	.5	2.2	-89.9
901229	14/65	SX	0.17	1.01	14	0.03	0.32	14	0.7	3.2	-36.8
901230	15/65	SX	0.06	1.06	76	0.05	1.03	76	0.1	0.5	-42.4
91 1 6	14/65	SX	0.08	0.35	14	0.04	0.47	14	0.8	3.1	-48.5
91 1 9	15/43	SX	.06	0.32	10	0.06	0.65	10	0.6	3.3	87.0
91 112	15/63	SX	0.05	0.26	12	0.05	0.58	12	0.9	3.9	-53.6
91 120	15/63	SX	0.14	0.69	13	0.05	0.59	13	0.9	4.9	-35.8
91 123	15/43	SX	0.28	0.92	16	.10	1.02	16	0.6	2.4	88.8
91 127	15/63	SX	0.16	0.84	14	0.05	0.52	14	0.5	2.2	-38.3
91 130	15/43	SX	0.12	0.63	16	0.11	1.21	16	0.4	2.0	89.8
91 2 6	14/43	SX	0.13	0.71	17	0.10	1.07	17	0.4	1.8	85.8
91 210	14/63	SX	0.12	1.18	17	0.15	0.59	17	0.7	2.3	-39.9
91 211	15/65	SX	0.24	0.70	115	0.03	0.96	115	0.1	0.4	-42.0
91 214	14/43	SX	0.05	1.17	17	0.00	1.01	17	0.6	2.7	89.5
91 217	14/63	SX	0.37	0.55	16	0.20	1.01	16	0.6	3.2	-37.2
91 221	14/43	SX	.18	0.55	16	0.12	.25	16	0.4	2.1	88.3
91 224	14/63	SX	.01	0.75	16	.13	.32	16	.4	2.0	-33.8
91 227	14/43	SX	0.13	0.88	18	0.08	0.89	18	0.4	1.9	87.5
91 3 3	14/63	SX	0.11	0.63	18	0.09	0.98	18	0.5	3.3	-39.5
91 3 7	14/43	SX	0.18	0.61	16	0.09	0.92	16	0.4	1.7	89.9
91 3 9	14/63	SX	0.12	0.84	17	0.02	.28	17	0.5	2.6	-41.5
91 315	14/43	SX	0.13	0.89	16	0.02	.24	16	0.4	1.6	-87.1
91 316	14/63	SX	0.15	0.81	19	0.12	1.24	19	0.4	2.1	-35.7
91 320	14/43	SX	0.23	0.97	16	0.13	1.36	16	0.4	1.8	-88.8
91 324	14/63	SX	0.14	0.72	7	0.18	.89	7	0.1	6.8	-48.3
91 330	15/45	SX	0.13	0.90	57	0.13	0.99	57	1.2	1.1	-88.8
91 331	14/63	SX	0.17	0.98	15	0.05	0.53	15	0.6	2.3	-41.3
91 4 2	15/45	SX	.15	0.80	153	0.22	.00	153	0.1	0.4	89.6
91 4 3	14/43	SX	0.03	1.02	17	0.05	0.54	17	0.3	1.5	89.5
91 4 7	14/63	SX	0.14	1.73	15	0.02	0.33	15	0.5	2.4	-37.4
91 4 7	15/65	SX	0.25	0.85	103	0.02	.98	103	0.1	0.5	-39.0
91 4 9	15/65	SX	0.07	0.94	88	0.09	0.01	88	0.1	0.6	-43.3
91 413	14/63	SX	0.09	0.80	16	0.07	.76	16	0.3	2.2	-35.0
91 421	14/63	SX	0.01	0.44	14	.05	0.50	14	0.9	2.8	-35.2
91 424	15/43	SX	0.13	0.71	16	0.09	0.01	16	0.4	2.3	86.5
91 428	14/63	SX	0.17	0.58	18	0.06	0.64	18	0.4	2.5	-34.4
91 5 1	14/43	SX	0.00	0.79	17	0.06	0.64	17	0.3	1.6	88.5
91 5 4	15/63	SX	0.12	0.47	14	0.04	.39	14	0.7	2.6	-40.9
91 5 8	14/43	SX	.16	0.85	16	0.10	.06	16	.4	1.9	89.2
91 512	14/63	SX	.29	0.74	17	0.03	0.30	17	0.4	2.6	-33.8
91 515	14/43	SX	0.09	0.66	16	0.04	.45	16	0.4	1.6	88.7
91 517	15/45	SX	0.00	0.97	92	0.11	.01	92	0.1	0.6	-88.8
91 519	14/63	SX	0.12	0.50	17	.05	0.52	17	0.4	2.1	-34.3
91 519	15/45	SX	0.16	0.85	166	.08	.10	166	0.1	0.4	-89.6
91 524	15/43	SX	0.03	0.81	15	0 0.05	0.53	15	0.4	2.2	85.6
91 525	14/65	SX	0.13	0.71	14	0 .11	.15	14	0.8	4.3	-49.6
91 527	15/65	SX	0.16	0.90	187	0 .09	.01	187	0.1	0.3	-38.2
91 531	14/45	SX	0.08	0.49	15	0 .07	0.74	15	0.6	2.3	85.6
91 6 1	14/65	SX	0.05	0.98	15	0 .06	0.61	15	0.8	3.3	-43.9
91 6 5	14/43	SX	0.40	0.68	15	0 0.06	0.66	15	.5	1.9	85.6
91 6 8	14/65	SX	0.14	0.63	14	0 .08	0.87	14	0.6	3.0	-42.1
91 612	14/43	SX	0.15	0.66	16	0 0.07	0.69	16	0.2	1.5	86.0
91 616	14/65	SX	0.09	0.57	14	0 0.10	0.93	14	0.4	1.9	-39.0
91 619	14/43	SX	0.05	0.58	15	.04	0.44	15	0.3	1.6	86.4
91 621	15/45	SX	0.00	0.88	106	0 0.14	0.98	106	0.1	0.6	88.5
91 623	14/63	SX	0.06	0.67	16	0 .05	0.51	16	0.4	1.4	-43.6
91 626	14/43	SX	0.06	0.65	16	0 .19	1.89	16	0.2	1.5	86.1
91 630	15/65	SX	0.06	0.98	162	0 0.11	1.01	162	0.1	0.4	-41.2
91 7 5	14/43	SX	0.05	0.64	16	0 .08	0.79	16	0.3	1.3	-81.3
91 7 7	14/63	SX	0.06	0.59	11	0 0.14	1.40	11	0.3	1.5	-31.9

91 7 9	14/43	s x	0.11	0.88	16	0.13	1.28	16	0.3	1.6	-81.6
91 713	14/63	Sx	0.12	0.88	11	0.09	0.88	11	0.4	2.4	-32.8
91 715	14/43	s x	0.08	0.86	16	0.14	1.31	16	0.3	1.2	90.0
91 720	14/63	Sx	0.10	1.24	15	0.14	1.37	15	0.4	2.0	-41.2
91 725	14/43	SX	0.05	0.47	18	0.08	0.75	18	0.2	1.2	86.3
91 728	14/63	s x	0.08	1.09	16	0.12	1.23	16	0.3	1.9	-32.2
91 731	14/43	s x	0.08	0.73	16	0.10	0.98	16	0.3	1.1	-83.1
91 8 5	14/63	SX	0.07	0.95	18	0.07	0.6″)	18	0.3	1.4	-36.8
91 8 6	14/45	s x	0.08	0.72	14	0.15	3.47	14	0.4	1.9	-89.7
91 811	14/65	s x	0.12	0.54	13	0.12	1.20	13	0.8	4.0	-50.3
91 813	14/45	s x	0.06	0.56	14	0.10	0.99	14	0.4	2.0	-78.1
91 818	14/65	s x	0.16	0.86	14	0.09	0.91	14	0.5	2.8	-46.0
91 822	14/43	SX	0.07	0.60	14	0.10	1.00	14	0.3	1.7	88.3
91 824	15/65	Sx	0.07	1.05	255	0.16	1.01	255	0.1	0.3	-37.0
91 825	14/63	s x	0.15	1.00	17	0.11	1.08	17	0.5	2.2	-42.9
91 828	14/43	Sx	0.11	0.88	16	0.09	0.92	16	0.3	1.4	-81.3
91 831	15/45	s x	0.07	0.98	257	0.33	1.01	257	0.1	0.3	-89.9
91 9 1	14/63	s x	0.08	0.93	16	0.07	0.71	16	0.3	2.0	-38.6
91 9 5	14/43	Sx	0.11	0.94	16	0.10	1.00	16	0.3	1.0	89.1
91 912	14/43	s x	0.05	0.52	16	0.05	0.51	16	0.3	1.1	89.1
91 914	14/63	s x	0.06	0.45	16	0.11	1.10	16	0.4	1.5	-34.4
91 919	14/43	s x	0.06	0.55	16	0.10	1.00	16	0.2	1.0	88.1
91 921	14/63	s x	0.34	1.03	16	0.16	1.52	16	0.4	1.7	-42.5
91 925	14/43	Sx	0.06	0.62	17	0.06	0.62	17	0.3	1.5	85.0
91 928	14/63	SX	0.18	1.23	14	0.19	1.89	14	0.4	1.6	-28.4
9110 2	34/43	Sx	0.04	0.34	16	0.06	0.54	16	0.3	1.3	86.1
9110 5	14/63	Sx	0.10	0.98	17	0.09	0.85	17	0.3	1.3	-3′/.3
9110 6	15/45	s x	0.0″/	0.95	288	0.15	1.02	288	0.1	0.3	89.3
9110 8	14/43	SX	0.04	0.48	19	0.05	0.45	19	0.3	1.4	85.1
911013	14/63	s x	0.05	0.59	16	0.06	0.60	16	0.3	1.3	-35.3
911016	14/43	s x	0.06	0.56	18	0.08	0.″/4	18	0.3	1.0	-89.3
911020	14/63	SX	0.09	0.71	8	0. 07	0.66	8	0.5	2.2	-35.3
911022	14/43	SX	0.07	0.-/5	17	0.07	0.66	17	0.2	1.0	-86.8
911027	14/63	Sx	0.02	0.15	6	0.09	0.86	6	0.4	3.1	-36.7
911031	14/43	SX	0.10	1.16	18	0.06	0.63	18	0.2	1.0	89.9
9111 2	14/63	SX	0.04	0.56	15	0.09	0.82	15	0.3	1.5	-37.2
9111 5	14/43	s x	0.13	0.74	16	0.07	0.72	16	0.3	1.2	-87.′1
911111	15/65	SX	0.06	0.90	237	0.12	1.01	237	0.1	0.3	-39.4
911116	14/63	Sx	0.08	0.77	16	0.10	0.91	16	0.3	1.2	-33.$3
911117	15/45	SX	0.08	0.92	258	0.15	0.99	258	0.1	0.3	89.4
911120	14/43	SX	0.08	0.79	17	0.10	0.96	17	0.2	1.0	-85.2
911124	14/63	Sx	0.04	0.54	17	0.04	0.38	17	0.3	1.2	-36.7
911128	14/43	s x	0.07	0.″/8	17	0.08	0.″15	17	0.2	1.1	-8′1.8
9112 2	14/63	s x	0.11	1.02	16	0.03	0.33	16	0.3	1.4	-38.6
9112 4	14/43	Sx	0.05	0.44	18	0.05	0.52	18	0.2.	1.0	-89.9
9112 9	14/63	s x	0.11	1.01	17	0.06	0.53	17	0.3	1.3	-35.4
911210	14/43	SX	0.08	0.″10	19	0.09	0.90	19	0.2	1.0	-89.1
911214	14/63	s x	0.57	1.45	17	0.05	0.45	17	0.7	2.4	-43.2
911217	14/43	SX	0.11	0.63	18	*0.06*	*0.56*	*18*	0.2	0.9	-88.4
911223	14/63	s x	0.′06	0.80	16	*0.03*	*0.31*	16	0.3	1.5	-36.4
911223	15/65	s x	0.07	1.10	239	*0.13*	*1.00*	239	0.1	0.3	-37.4
911226	14/43	s x	0.04	0.43	12	*0.06*	0.61	12	0.3	1.1	-87.8
911230	14/63	s x	0.05	0.62	16	0.13	1.27	16	0.3	1.0	-36.3
911231	14/43	Sx	0.09	0.80	17	0.18	1.79	17	0.3	1.1	88.2
92 1 4	15/45	SX	0.06	0.85	215	*0.34*	0.99	215	0.1	0.3	8.9.9
92 1 6	14/63	SX	0.06	0.58	16	0.09	0.88	16	0.3	1.4	-35.2
92 1 7	14/43	s x	*0.0″1*	0.75	17	0.08	0.75	17	0.?.	0.9	-89.3
92 112	14/63	Sx	0.06	0.70	17	0.09	0.86	17	0.3	).3	-34.5
92 114	14/43	SX	0.05	0.50	17	0.07	0.6″/	17	0.3	1.1	87.2
92 119	14/63	SX	0.03	0.43	16	0.[]3	0.27	16	0.2	1.6	-34.7
92 121	14/43	Sx	0.11	3.12	17	0.16	1.59	17	0.3	1.0	89.8
92 126	14/63	Sx	0.06	0.72	13	0.05	0.51	13	0.2	1.6	-32.5
92 128	14/43	SX	0.03	0.30	19	0.0″/	0.65	19	0.2	0.9	-87.5
92 2 1	14/63	Sx	0.04	0.57	16	0.03	0.24	16	0.2	1.2	-32.8
92 2 2	15/65	Sx	0.07	0.89	276	0.05	1.01	?,76	0.0	0.2	-39.3
92 2 5	14/43	Sx	0.05	0.49	17	0.07	0.69	17	0.2	1.2	85.7

92 2 6	14/63	SX	.07	0.84	14	.08	0.73	14	.3	1.4	-31.5
92 212	14/43	SX	.16	1.57	18	.22	2.14	18	.2	1.0	-88.5
92 216	14/63	SX	.05	0.64	17	.17	1.63	17	.2	1.2	-32.3
92 219	14/45	SX	.08	0.80	17	.10	0.95	17	.3	1.1	-87.7
92 223	14/63	SX	.04	0.64	15	.11	1.12	15	.4	1.4	-34.3
92 227	14/45	SX	.10	0.51	8	.04	0.41	8	.6	2.6	-82.7
92 229	14/63	SX	.05	0.66	11	.05	0.49	11	.7	4.3	-34.3
92 3 6	14/45	SX	.08	0.87	17	.19	1.87	17	.3	1.3	87.6
92 3 8	14/63	SX	.08	0.95	15	.11	1.05	15	.3	1.5	-37.5
92 312	14/43	SX	.04	0.46	17	.03	0.30	17	.2	1.0	88.5
92 314	15/45	SX	.10	1.00	323	.13	1.01	323	.1	0.3	-89.6
92 316	14/63	SX	.07	0.85	11	.03	0.29	11	.3	1.5	-35.3
92 319	14/43	SX	.05	0.63	19	.09	0.85	19	.2	1.1	87.5
92 321	15/65	SX	.07	0.97	284	.11	0.98	284	.1	0.3	-37.3
92 322	14/63	SX	.13	0.66	16	.09	0.81	16	.3	1.5	-33.1
92 322	15/45	SX	.09	1.09	332	.13	0.99	332	.0	0.2	89.8
92 324	14/43	SX	.6	0.57	17	.06	0.63	17	.2	1.0	88.7
92 328	15/65	SX	.6	0.95	305	.10	0.99	305	.0	0.2	-38.2
92 330	14/63	SX	.4	1.30	16	.17	1.73	16	.3	1.7	-29.4
92 4 2	14/43	SX	.7	0.71	18	.08	0.79	18	.2	1.0	89.2
92 4 4	15/45	SX	.6	0.80	314	.13	1.02	314	.1	0.2	-89.1
92 4 5	14/63	SX	.3	1.10	16	.13	1.33	16	.3	1.7	-32.7
92 4 9	14/43	SX	.4	.40	18	.05	0.51	18	.2	1.0	88.7
92 411	14/63	SX	.4	.59	16	.10	1.01	16	.2	1.4	-32.4
92 411	15/45	SX	.6	.87	329	.10	0.99	329	.0	0.2	-89.6
92 413	15/65	SX	.8	.97	269	.15	1.07	269	.1	0.3	-37.3
92 414	14/43	SX	.4	.46	17	.11	1.02	17	.2	1.0	88.5
92 418	15/45	SX	.7	.84	313	.13	1.00	313	.1	0.2	89.8
92 419	14/63	SX	.4	.60	16	.04	0.40	16	.3	1.4	-32.9
92 420	15/65	SX	.0	.39	250	.08	1.03	250	.1	0.3	-38.7
92 423	14/43	SX	.4	.53	16	.5	0.49	16	.2	1.1	87.6
92 425	14/63	SX	.6	.58	15	.5	0.52	15	.3	1.4	-31.3
92 428	14/43	SX	.2	.28	17	.0	1.00	17	.2	1.1	89.0
92 5 3	14/63	SX	.5	0.74	16	0.8	0.82	16	.3	1.5	-32.5
92 5 6	14/43	SX	.5	0.59	16	0.7	0.70	16	.2	1.1	87.0
92 510	15/45	SX	.8	1.00	303	0.3	1.01	303	.1	0.3	-89.1
92 513	14/43	SX	.9	0.81	17	0.9	0.83	17	.2	1.0	88.5
92 517	14/63	SX	.7	0.75	19	0.5	0.44	19	.3	1.4	-36.1
92 518	14/43	SX	.4	0.83	17	0.9	0.85	17	.2	1.0	88.6
92 527	14/43	SX	.4	0.45	15	0.06	0.60	15	.3	1.2	82.9
92 531	14/63	SX	.6	0.75	18	0.07	0.72	18	.2	1.2	-32.7
92 6 7	14/63	SX	.22	1.08	17	0.15	1.47	17	.3	1.3	-32.9
92 612	14/43	SX	.12	1.15	17	0.13	1.24	17	.2	1.1	86.0
92 614	14/63	SX	.11	1.03	15	0.12	1.15	15	.4	1.8	-36.4
92 617	14/43	SX	.8	0.76	17	.05	0.52	17	.3	1.0	88.3
92 619	14/63	SX	.8	0.80	17	.08	0.80	17	.2	1.2	-32.8
92 624	14/43	SX	.9	0.91	16	.10	0.96	16	.2	1.0	89.0
92 7 2	15/43	SX	.7	0.61	16	.9	0.81	16	.4	1.6	87.4
92 7 4	15/63	SX	.25	0.69	14	.19	1.22	14	.5	3.3	-36.7
92 7 5	15/45	SX	.12	0.95	262	.10	1.01	262	.1	0.4	-86.5
92 7 8	15/43	SX	.8	0.62	16	.10	0.95	16	.3	1.1	88.4
92 712	15/63	SX	.32	1.07	11	.15	0.95	11	.6	2.4	-40.9
92 714	15/43	SX	.9	0.74	17	.0	0.52	17	.5	1.8	-79.2
92 719	15/63	SX	.8	0.65	17	.05	0.54	17	.4	1.7	-34.6
92 721	15/43	SX	.02	0.22	6	.02	0.22	6	.6	3.3	-83.2
92 725	14/63	SX	.7	0.88	16	.12	1.21	16	.3	1.5	-30.8
92 728	14/43	SX	.10	0.46	15	.11	1.10	15	.6	1.7	86.4
92 8 2	14/63	SX	.13	0.95	16	.10	0.96	16	.3	1.4	-32.2
92 8 4	14/43	SX	.13	0.74	16	.14	1.37	16	.4	1.9	86.4
92 8 9	14/63	SX	.29	1.39	15	.12	1.11	15	.8	2.6	-38.7
92 811	14/43	SX	.08	0.73	17	.09	0.85	17	.4	1.4	-83.9
92 818	15/43	SX	.06	0.64	15	.15	1.44	15	.4	1.3	-87.2
92 822	15/63	SX	.07	0.68	16	.13	1.24	16	.3	1.5	-33.8
92 823	15/65	SX	.06	0.88	267	.12	1.02	267	.1	0.3	-39.4
92 825	14/43	SX	.04	0.37	17	.07	0.69	17	.3	1.1	-85.6
92 829	14/63	SX	.06	0.78	15	.10	0.98	15	.3	2.0	-30.8

92 9 1	14/43	SX	0.27	0.53	9	0.11	1.10	9	0.8	9.6	-74.5
92 9 5	14/63	SX	0.06	0.57	11	0.05	0.50	11	0.5	2.1	-37.6
92 910	14/43	SX	0.04	0.45	17	0.10	0.94	17	0.4	1.3	-82.1
92 912	14/63	SX	0.06	0.69	17	0.09	0.91	17	0.2	1.5	-35.8
92 916	14/43	SX	0.07	.54	17	0.13	1.26	17	0.3	1.0	89.0
92 919	14/63	SX	0.10	0.35	17	0.06	0.56	17	0.2	1.3	-36.6
92 922	15/65	SX	0.07	0.96	249	0.14	1.02	249	0.1	0.4	-39.0
92 924	14/43	SX	0.08	.68	17	0.07	0.66	17	0.3	1.4	85.4
92 926	14/63	SX	0.14	0.23	17	0.08	.79	17	0.3	1.3	-35.0
92 930	14/43	SX	0.05	0.67	17	0.06	0.55	17	0.2	1.1	-88.1
9210 3	14/63	SX	.24	.98	10	.10	0.99	10	0.4	1.9	-31.4
9210 7	14/43	SX	0.03	0.43	14	0.04	0.38	14	0.3	1.7	83.7
921010	14/63	SX	0.08	0.74	16	0.09	0.93	16	0.2	1.2	-32.2
921017	15/63	SX	0.04	0.54	18	0.07	0.64	18	0.2	1.3	-32.1
921022	14/43	SX	0.05	0.51	16	0.07	0.70	16	0.3	1.2	86.1
921024	14/63	SX	0.08	0.99	18	0.14	.38	18	0.2	1.3	-37.3
921028	14/43	SX	0.07	0.65	17	0.11	.11	17	0.4	1.4	-82.2
921031	14/63	SX	.6	0.75	19	0.12	.22	19	0.2	1.3	-31.3
9211 1	15/45	SX	0.7	0.89	327	0.14	0.01	327	0.1	0.3	-88.3
9211 7	14/65	SX	0.0	0.80	15	0.04	0.39	15	0.5	2.2	-36.2
921111	14/43	SX	0.5	0.45	16	0.06	0.57	16	0.3	1.1	85.1
921113	15/63	SX	0.9	.83	15	.09	.84	15	0.4	1.6	-34.1
921116	15/45	SX	0.7	1.04	308	0.14	0.00	308	0.1	0.3	-89.5
921118	15/43	SX	.7	0.66	18	0.05	.47	18	.3	1.1	86.8
921121	15/63	SX	0.9	0.70	12	0.03	0.24	12	0.3	1.6	-35.6
921122	15/65	SX	0.8	1.05	309	0.11	0.02	309	0.1	0.3	-42.8
921125	15/43	SX	0.9	0.79	15	0.09	0.86	15	0.3	1.5	86.5
921129	14/63	SX	.4	0.76	18	0.06	.63	18	0.2	1.3	-37.0
9212 1	14/45	SX	.8	0.72	17	0.12	0.16	17	0.2	1.0	-87.6
9212 6	14/65	SX	.2	0.80	17	0.07	.71	17	0.3	1.7	-34.3
921210	14/45	SX	.2	1.22	17	0.11	0.06	17	0.4	1.4	-82.9
921212	14/63	SX	.2	1.00	12	0.07	.70	12	0.5	2.0	-38.0
921216	15/43	SX	0.6	0.49	17	0.06	0.58	17	0.3	1.2	89.1
921219	15/63	SX	.7	0.67	16	0.08	0.80	16	0.3	1.6	-36.3
921221	15/45	SX	0.7	0.94	302	0.11	0.99	302	0.1	0.3	89.8
921224	14/43	SX	0.2	0.29	8	0.15	0.51	8	0.6	4.7	-82.7
921227	14/63	SX	0.3	0.23	9	0.04	0.40	9	0.6	2.6	-32.3
921227	15/65	SX	0.8	1.03	297	0.10	.99	297	0.1	0.3	-41.1
93 110	14/63	SX	0.8	1.03	17	0.10	1.02	17	0.2	1.1	-31.3
93 113	14/43	SX	0.9	0.65	15	0.15	1.48	15	0.5	1.9	82.8
93 117	14/63	SX	.18	0.66	16	0.11	1.02	16	0.3	1.3	-33.5
93 120	14/43	SX	0.05	0.95	15	0.30	0.52	15	0.6	2.1	87.5
93 124	14/63	SX	0.02	0.29	17	0.04	0.42	17	0.3	1.6	-36.8
93 131	14/63	SX	0.5	0.91	17	0.06	0.61	17	0.3	1.4	-35.3
93 2 3	14/43	SX	.7	0.74	14	.09	0.93	14	0.4	1.3	-84.7
93 2 7	14/63	SX	0.5	0.76	18	0.05	0.50	18	.2	1.1	-30.8
93 210	14/43	SX	0.7	0.77	16	0.18	1.79	16	0.3	1.2	88.3
93 212	15/45	SX	0.0	0.98	281	0.18	0.00	281	0.1	0.4	-89.1
93 213	14/63	SX	0.3	0.44	19	0.05	.49	19	0.2	1.2	-31.1
93 215	15/65	SX	0.6	0.86	281	0.05	1.02	281	0.1	0.2	-41.3
93 217	14/43	SX	0.8	0.83	16	0.13	1.27	16	0.3	1.3	88.5
93 220	14/63	SX	0.3	0.97	17	0.10	1.02	17	0.3	1.4	-30.5
93 225	14/45	SX	0.5	0.52	15	0.05	0.48	15	0.3	1.2	-88.5
93 227	14/63	SX	0.4	1.00	17	0.12	1.10	17	0.4	1.7	-39.1
93 3 3	14/45	SX	0.4	0.47	16	0.11	1.04	16	0.2	1.0	-87.3
93 312	14/45	SX	0.7	0.71	15	.06	0.64	15	0.3	2.0	-88.0
93 313	14/63	SX	0.6	0.79	18	0.03	0.33	18	.5	2.1	-43.2
93 317	14/45	SX	0.1	1.05	16	0.20	2.03	16	0.3	1.4	-84.1
93 321	14/63	SX	0.4	0.95	17	0.08	0.81	17	0.4	1.6	-37.4
93 324	14/45	SX	0.5	0.48	15	0.06	0.63	15	0.3	1.4	-86.8
93 328	14/63	SX	0.1	0.78	16	0.06	0.56	16	0.3	1.6	-37.7
93 331	14/45	SX	0.6	0.63	15	0.06	0.63	15	0.3	1.5	87.0
93 4 4	14/63	SX	0.1	0.84	15	0.07	0.72	15	0.4	1.4	-39.2
93 4 7	14/45	SX	0.5	0.44	16	0.08	0.82	16	0.3	1.5	-87.4
93 411	14/63	SX	0.9	0.88	17	0.06	0.64	17	0.3	1.3	-38.3
93 414	14/45	SX	0.4	0.99	14	0.11	1.07	14	0.3	1.3	-89.2

93 418	14/63	SX	0.08	0.65	13	0.08	0.81	13	0.3	1.6	-30.9
93 425	14/63	SX	0.07	0.47	16	0.06	0.57	16	0.3	1.4	-32.8
93 428	14/43	SX	0.08	0.87	17	0.08	0.78	17	0.3	1.0	88.0
93 5 2	14/63	SX	0.07	0.57	16	0.09	0.84	16	0.4	1.4	-39.5
93 5 5	14/43	SX	0.04	0.53	11	0.06	0.53	11	0.3	1.8	84.0
93 510	14/63	SX	0.28	0.79	12	0.06	0.53	12	0.2	5.9	-37.4
93 512	14/43	SX	0.11	0.65	16	0.14	1.37	16	0.3	1.3	86.7
93 516	14/63	SX	0.14	1.22	16	0.14	1.15	16	0.3	1.5	-35.4
93 519	14/43	SX	0.08	0.84	17	0.12	1.28	17	0.2	1.2	87.1
93 522	14/63	SX	0.15	0.78	19	0.13	1.08	19	0.3	1.4	-37.3
93 526	14/43	SX	0.06	0.59	16	0.11	1.47	16	0.2	1.3	87.7
93 529	14/63	SX	0.09	0.62	16	0.05	0.69	16	0.3	1.5	-37.4
93 6 2	14/43	SX	0.08	0.86	15	0.07	1.03	15	0.3	1.6	83.1
93 6 9	14/43	SX	0.06	0.57	17	0.10	1.01	17	0.2	1.1	86.0
93 613	14/63	SX	0.11	0.70	15	0.10	0.58	15	0.3	1.5	-36.2
93 616	14/43	SX	0.07	0.80	17	0.07	1.01	17	0.2	1.0	-89.4
93 620	14/63	SX	0.09	0.85	11	0.10	1.24	11	0.3	1.6	-38.4
93 620	15/45	SX	0.07	0.81	36	0.13	0.97	36	0.3	1.0	85.9
93 623	14/43	SX	0.08	0.49	17	0.21	0.52	17	0.4	1.9	-84.0
93 627	14/63	SX	0.11	1.18	16	0.05	0.68	16	0.3	1.5	-35.8
93 629	14/43	SX	0.05	0.42	17	0.07	0.79	17	0.2	1.1	89.4
93 7 4	14/63	SX	0.05	0.60	17	0.08	0.46	17	0.3	1.1	-34.0
93 7 7	14/43	SX	0.06	0.61	16	0.05	0.50	16	0.3	1.5	85.9
93 717	14/63	SX	0.06	0.69	15	0.05	0.75	15	0.4	1.9	-34.7
93 719	15/65	SX	0.07	1.05	84	0.08	1.02	84	0.1	0.6	-37.1
93 721	14/43	SX	0.06	0.62	16	0.17	0.79	16	0.3	1.2	84.6
93 725	14/63	SX	0.05	0.64	16	0.08	0.39	16	0.3	1.3	-36.8
93 728	14/43	SX	0.06	0.69	17	0.04	0.59	17	0.2	1.0	88.3
93 8 1	14/63	SX	0.10	0.87	14	0.06	0.59	14	0.4	1.3	-37.3
93 8 3	14/43	SX	0.06	0.54	17	0.06	0.83	17	0.3	1.3	88.1
93 8 7	14/63	SX	0.05	0.67	15	0.08	0.84	15	0.3	1.4	-30.4
93 810	14/43	SX	0.07	0.66	16	0.08	1.05	16	0.4	1.3	-83.4
93 817	14/43	SX	0.07	0.64	17	0.01	0.52	17	0.3	1.2	-83.9
93 817	14/63	SX	0.07	0.65	17	0.15	0.85	17	0.3	1.3	-34.3
93 821	14/63	SX	0.09	0.78	18	0.09	0.93	18	0.2	1.3	-33.1
93 824	14/45	SX	0.08	0.64	16	0.09	0.44	16	0.4	1.7	-83.6
93 828	14/63	SX	0.08	0.73	16	0.04	0.99	16	0.3	1.2	-33.6
93 9 1	14/43	SX	0.10	0.88	16	0.00	1.22	16	0.5	1.6	-83.5
93 9 5	14/63	SX	0.09	0.93	18	0.12	0.73	18	0.3	1.2	-36.2
93 912	15/63	SX	0.09	0.69	15	0.17	0.73	15	0.4	1.7	-39.4
93 916	14/45	SX	0.10	0.76	15	0.08	1.14	15	0.4	2.8	-76.0
93 918	14/63	SX	0.08	0.99	17	0.12	0.53	17	0.2	1.3	-34.1
93 921	14/43	SX	0.06	0.56	17	0.15	0.41	17	0.4	1.9	-78.5
93 925	14/63	SX	0.31	0.85	16	0.04	0.63	16	0.9	3.9	-31.2
9310 3	14/63	SX	0.03	0.38	17	0.06	0.45	17	0.3	1.3	-33.8
9310 5	14/43	SX	0.07	0.54	15	0.05	0.90	15	0.4	1.3	-87.0
931010	14/63	SX	0.11	1.10	15	0.09	1.60	15	0.4	1.8	-29.5
931013	14/43	SX	0.04	0.50	18	0.06	0.58	18	0.4	1.3	-88.2
931018	15/63	SX	0.09	0.74	18	0.08	0.70	18	0.3	1.4	-33.7
931019	15/43	SX	0.17	0.71	15	0.00	0.88	15	0.4	2.0	-85.3
931023	15/63	SX	0.14	0.77	18	0.13	1.29	18	0.3	1.3	-33.4
931027	15/43	SX	0.13	0.65	12	0.06	0.63	12	0.5	2.5	-83.0
931031	15/63	SX	0.13	0.54	17	0.06	0.55	17	0.6	2.3	-35.7
9311 1	15/43	SX	0.19	1.00	14	0.06	0.63	14	0.3	2.6	-80.9
9311 7	15/63	SX	0.11	1.18	17	0.04	0.38	17	0.3	1.6	-34.4
9311 9	15/43	SX	0.14	0.68	15	0.11	1.11	15	0.4	2.0	-87.4
931115	15/63	SX	0.36	0.89	15	0.17	0.34	15	1.4	6.3	-36.1
931116	15/43	SX	0.15	0.97	15	0.17	0.64	15	0.4	2.3	-80.4
931121	15/63	SX	0.10	1.02	17	0.05	0.45	17	0.3	1.4	-35.0
931123	15/43	SX	0.16	0.88	16	0.00	1.03	16	0.6	1.8	88.4
931128	15/63	SX	0.10	0.98	17	0.17	0.70	17	0.3	1.8	-34.6
931130	15/43	SX	0.09	0.70	15	0.17	0.71	15	0.5	1.9	-89.0
9312 6	15/63	SX	0.54	0.72	11	0.16	0.32	11	1.9	6.5	-37.9
931212	15/63	SX	0.36	0.58	14	0.21	0.55	14	1.7	5.7	-38.0
931214	15/43	SX	0.12	0.92	18	0.14	1.38	18	0.4	1.8	-89.4
931219	15/45	SX	0.06	0.79	52	0.17	1.00	52	0.1	0.5	-89.1

931219	15/65	Sx	0.06	0.93	54	0.07	0.98	54	0.1	0.6	-46.1
931220	14/63	Sx	0.32	0.63	18	0.06	0.29	18	1.1	3.9	-42.8
931223	14/43	Sx	0.06	0.52	16	0.11	1.02	16	0.3	1.0	88.8
931227	14/63	Sx	0.18	0.53	1"1	0.08	0.41	17	0.9	4.2	-33.8
931229	14/43	Sx	0.05	0.53	18	0.06	0.64	18	0.2	1.0	-88.4
94 1 3	14/63	Sx	0.06	0.76	15	0.11	1.09	15	0.4	1.3	-37.5
94 1 5	14/43	Sx	0.09	0.79	20	0.14	1.40	20	0.2	1.0	-88.4
94 1 8	14/63	SX	0.08	1.03	18	0.06	0.53	18	0.4	1.5	-34.0
94 112	14/45	Sx	0.?,1	1.15	17	0.15	1.41	17	0.4	1.5	-84.5
94 115	14/63	SX	0.11	1.30	16	0.02	0.25	16	0.3	1.2	-34.1
94 119	14/43	Sx	0.09	0.95	1"1	0.06	0.63	17	0.2	1.0	-89.1
94 123	14/63	Sx	0.06	0.63	19	0.04	0.35	19	0.3	3.2	-33.4
94 126	14/43	Sx	0.0-/	0.84	14	0.06	0.62	14	0.3	1.1	-86.1
94 130	14/63	SX	0.05	0.52	18	0.03	0.33	18	0.3	1.1	-32.5
94 2 1	14/43	SX	0.12	1.13	14	0.11	1.09	14	0.3	1.1	-85.7
94 2 6	14/63	Sx	0.07	0.99	18	0.08	0.'/8	18	0.3	1.1	-31.4
94 2 8	14/43	Sx	0.09	0.80	16	0.13	1.29	16	0.3	1.1	88.2
94 213	14/63	Sx	0.07	0."13	18	0.04	0.3"1	18	0.3	1.2	-31.7
94 218	14/43	Sx	0.09	1.02	18	0.10	0.99	18	0.3	1.0	-87.6
94 220	14/63	Sx	0.09	1.0"/	15	0.11	1.12	15	0.3	1.6	-33.8
94 227	14/63	Sx	0.24	0.93	17	0.09	0.87	17	0.3	1.3	-33.9
94 3 2	14/43	Sx	0.06	0.55	20	0.12	1.14	20	0.2	1.0	-85.7
9 4 3 6	14/63	Sx	0.19	1.00	14	0.05	0.51	14	0.5	2.0	-40."1
94 3 9	14/43	SX	0.10	0.91	19	0.22	2.14	19	0.3	1.1	-8'/.3
94 313	14/63	Sx	0.04	0.60	15	0.04	0.44	15	0.3	1.3	--36.8
					--						

EXPLANATION OF INTEGER KEYS USED IN EOP(JPL) 94 R 01

Field 17 describes the baseline used in the pass. For example, an entry in field 17 of 1563 means t-hat t-he two stations involved were DSS 15 (Goldstone) and DSS 63 (Madrid), and that the baseline vector points from DSS 15 to 1)SS 63.

Field 18 is a code, where the first character describes the project, the second character describes the frequency band, and the third character describes the frequency standard configuration.

The following key displays the possible entries for the first. character (i.e. the hundreds digit), which specifies the project that conducted the observations:

2 => Catalog Maintenance and Enhancement project
1 => Time and Earth Motion Precision Observations project

The following key displays the possible entries for the second character (i.e. the tens digit), describing the frequency band:

2 => Data type was combined S/X
1 => Data type! was x band only
0 => Data type was s band only not_ normal ly report.eel)

The following key displays the possible entries for the third character (i.e. the unit.s digit), describing the frequency standard configuration:

0 => Both stations employed Hydrogen Maser frequency standards .
1 => At least one station employed a Cesium frequency standard .
2 => Frequency distribution equipment problems required an increased "additive noise constant" to account for increased noise.

For example, if the entry for field 18 was 120, this would mean the observing session was conducted by the TEMPO project., used dual-band (s/x) observables, and used H2 maser frequency standards at both stations.

EOP(JPL) 94 R 01

DEEP SPACE NETWORK VLBI EARTH ORIENTATION DATA FROM REFERENCE FRAME JPL 1994-1 IN THE IERS FORMAT

MJD	VAR LAT SECONDS OF ARC	UT0-UTC SECONDS OF TIMI?	VAR LAT ERROR ARC SEC	UT0 ERR SECONDS OF TIME	RMs DELAY N S EC	CORR VAR LAT - UT0	BSLN CODE
43809.020	-0.31416 0.	-0.215020 0. 0.	0.00043 0.	0.000115 0. 0.	0.32	-0.1765 0. 0. 0.	1443 220
43816.758	-0.28624 0.	-0.239707 0. 0.	0.00051 0.	0.000193 0. 0.	0.31	0.1230 0. 0. 0.	1443 220
43873.422	-0.12054 0.	-0.407704 0. 0.	0.00027 o.	0.000097 0. 0.	0.34	-0.0876 0. 0. 0.	1443 220
44200.813	-0.34866 0.	-0.258862 0. 0.	0.00185 0.	0.000500 0. 0.	0.58	0.2263 0. 0. 0.	1443 220
44203.305	-0.04439 0.	-0.260585 0. 0.	0.00178 0.	0.000111 0. 0.	0.59	-0.8593 0. 0. 0.	1463 220
44227.5″/4	-0.30063 0.	-0.329713 0. 0.	0.00034 0.	0.000123 0. 0.	0.47	0.0373 0. 0. 0.	1443 220
44228.707	-0.01474 0.	-0.326772 0. 0.	0.00552 0.	0.000475 0. 0.	0.57	-0.8808 0. 0. 0.	1463 220
44234.801	-0.01057 0.	-0.342877 0. 0.	0.00313 0.	0.000179 0. 0.	0.55	-0.8400 0. 0. 0.	1463 220
44236.652	-0.28351 0.	-0.353303 0. 0.	0.00058 0.	0.000196 0. 0.	0.41	-0.0656 0. 0. 0.	1443 220
44250.828	-0.25985 0.	0.612486 0. 0.	0.00048 0.	0.000161 0. 0.	0.44	0.1289 0. 0. 0.	1443 220
44263.988	-0.00558 0.	0.581672 0. 0.	0.00436 0.	0.000255 0. 0.	0.59	-0.8630 0. 0. 0.	1463 220
44265.613	-0.23339 0.	0.573463 0. 0.	0.00075 0.	0.000236 0. 0.	0.39	0.1690 0. 0. 0.	1443 220
44283.211	-0.02773 0.	0.540434 0. 0.	0.00189 0.	0.000115 0. 0.	0.56	-0.8592 0. 0. 0.	1463 220
44283.918	-0.20138 0.	0.536181 0. 0.	0.00060 0.	0.000179 0. 0.	0.36	-0.0497 0. 0. 0.	1443 220
44292.785	-0.19354 0.	0.510425 0. 0.	0.00036 0.	0.000134 0. 0.	0.46	0.2937 0. 0. 0.	1443 220
44293.531	-0.03715 0.	0.5106″/2 O. 0.	0.00330 0.	0.0002.00 0. 0.	0.41	-0.8439 0. 0. 0.	1463 220
44439.918	-0.18392 0.	0.177218 0. 0.	0.00430 0.	0.000382 0. 0.	0.31	-0.8667 0. 0. 0.	1463 120
44445.434	-0.20920 0.	0.171285 0. 0.	0.01134 0.	0.001803 0. 0.	0.19	-0.9482 0. 0. 0.	1463 120
444″15.359	-0.17768 0.	0.116769 0. 0.	0.01226 0.	0.001934 0. 0.	0.31	-0.9567 0. 0. 0.	1463 120
44475.488	-0.30419 0.	0.125535 0. 0.	0.00403 0.	0.001296 0. 0.	0.39	-0.7466 0. 0. 0.	1443 121
44505.391	-0.31891 0.	0.058413 0. 0.	0.00404 0.	0.000692 0. 0.	0.38	-0.7127 0. 0. 0.	1443 120
44506.379	-0.18639 0.	0.048551 0. 0.	0.01304 0.	0.001.301 0. 0.	0.25	-0.′/499 O. 0. 0.	1463 120
44512.387	-0.32520 0.	0.039217 0. 0.	0.00172 0.	0.000578 0. 0.	0.23	-0,5218 0. 0. 0.	1443 120
44528.363	-0.33′/79 O.	0.001234 0. 0.	0.00276 0.	0.000683 ,0. 0.	0.31	-0.4136 0. 0. 0.	1443 120
44529.113	-0.18851 0.	-0.005883 0. 0.	0.00861 0.	0.000569 O. 0.	0.16	-0.8192 0. 0. 0.	1463 120
44565.285	-0.362″}2 O.	-0.095909 0. 0.	0.00208 0.	0.000542 0. 0.	0.30	-0.6544 0. 0. 0.	1443 17,0
44581.258	-0.36017 0.	-0.135140 0. 0.	0.00416 0.	0.000932 0. 0.	0.24	-0.0374 0. 0. 0.	1443 120
4458″).012	-0.19399 0.	-0.149294 0. 0.	0.01829 0.	0.001134 0. 0.	0.15	-0.9255 0. 0. 0.	1463 121
44587.227	-0.36691 0.	-0.149750 0. 0.	0.00821 0.	0.001223 0. 0.	0.25	-0.9473 0. 0. 0.	1443 120
44596.391	-0.38751 0.	-0.174329 0. 0.	0.01244 0.	0.002568 0. 0.	0.30	0.9046 0. 0. 0.	1443 120
44(I39.410	-0.34428 0.	-0.273860 0. 0.	0.00238 0.	0.000495 0. 0.	0.47	-0.1543 0. 0. 0.	1443 120
44[46.363	-0.34019 0.	-0.292479 0. 0.	0.00397 0.	0.000841 0. 0.	0.52	-0.5796 0. 0. 0.	1443 120
44(54.313	-0.34489 0.	-0.314184 0. 0.	0.02337 0.	0.002759 0. 0.	0.56	0.3106 0. 0. 0.	1443 120
44664.809	-0.07766 0.	-0.334916 0. 0.	0.01341 0.	0.001362 0. 0.	0.43	-0.8473 0. 0, 0.	1463 120
44734.184	-0.05972 0.	-0.518576 0. 0.	0.01693 0.	0.0015″/2 O. 0.	0.52	-0.9081 0. 0. 0.	1463 121
44″/40.344	-0.26076 0.	-0.536525 0. 0.	0.00185 0.	0.000455 0. 0.	0.37	0.5425 0. 0. 0.	1443 120
44755.180	-0.03845 0.	-0.569035 0. 0.	0.01337 0.	0.000562 0. 0.	0.16	-0.3853 0. 0. 0.	1463 120
44755.305	-0.24942 0.	-0.572877 0. 0.	0.00262 0.	0.000760 0. 0.	0.36	0.5338 0. 0. 0.	1443 121
44769.141	-0.05981 0.	-0.599911 0. 0.	0.02187 0.	0.003160 0. 0.	0.32	-0.6201 0. 0. 0.	1463 120
44769.262	-0.23067 0.	-0.603278 0. 0.	0.00258 0.	0.000478 0. 0.	0.26	0.4597 0. 0. 0.	1443 120
44804.04-/	-0.04430 0.	0.353118 0. 0.	0.00610 0.	0.000840 0. 0.	0.31	-0.7841 0. 0. 0.	1463 120
44804.164	-0.20369 0.	0.350232 0. 0.	0.00269 0.	0.000525 0. 0.	0.31	0.6907 0. 0. 0.	1443 120
44811.605	-0.19195 0.	0.338158 0. 0.	0.00220 0.	0.000488 0. 0.	0.28	-0.7599 0. 0. 0.	1443 120
44817.590	-0.18764 0.	0.329726 0. 0.	0.00137 0.	0.000420 0. 0.	0.27	-0.6319 0. 0. 0.	1443 120
44818.277	-0.05017 0.	0.329638 0. 0.	0.00539 0.	0.000319 0. 0.	0.22	-0.8990 0. 0. 0.	1463 120
44947.410	-0.28229 0.	0.078721 0. 0.	0.00067 0.	0.000200 0. 0.	0.65	-0.3394 0. 0. 0.	1343 220
44956.293	-0.30486 0.	0.057618 0. 0.	0.00191 0.	0.000702 0. 0.	0.51	-0.1190 0. 0. 0.	1443 120
449′72.281	-0.02176 0.	0.031067 0. 0.	0.00955 0.	0.001084 0. 0.	0.43	-0.8128 0. 0. 0.	6343 120
449′17.984	-0.26048 0.	-0.000971 0. 0.	0.00557 0.	0.000336 0. 0.	0.20	-0.6834 0. 0. 0.	1463 120
44992.223	-0.37726 0.	-0.020590 0. 0.	0.0017″/ O.	0.000478 0. 0.	0.16	-0.0246 0. 0. 0.	1443 120

45008.824 -0.40612 0. -0,054767 0. 0. 0.00150 0. 0.000565 0. 0. 0.41 -0.4650 0. 0. 0. 1443 120
45013.762 -0.23074 0. -0.073274 0. 0. 0.00326 0. 0.000216 0. 0. 0.26 -0.8880 0. 0. 0. 1463 120
45020.492 -0.22327 0. -0,086724 0. 0. 0.00358 0. 0.000193 0. 0. 0.28 -0.8980 0. 0. 0. 1463 120
45021.891 -0.41501 0. -0.083294 0. 0. 0.00120 0. 0.000294 0. 0. 0.37 -0.1528 0. 0. 0. 1443 120
45028.645 -0.42743 0. -0,103945 0. 0. 0.00328 0. 0.000701 0. 0. 0.46 -0.7193 0. 0. 0. 1443 120
45054.785 -0.13751 0. -0.168463 0. 0. 0.00392 0. 0.000204 0. 0. 0.14 -0.8887 0. 0. 0. 1463 120
45057.004 -0.44426 0. -0.174302 0. 0. 0.00233 0. 0.000538 0. 0. 0.34 -0.5674 0. 0. 0. 1443 120
45067.281 -0.44012 0. -0.203977 0. 0. 0.00064 0. 0.000247 0. 0. 0.29 -0.1763 0. 0. 0. 1443 120
45071.742 -0.10951 0. -0.213588 0. 0. 0.00691 0. 0.000269 0. 0. 0.06 -0.9254 0. 0. 0. 1463 120
45096.309 -0.04743 0. -0.278117 0. 0. 0.00370 0. 0.000231 0. 0. 0.49 -0.8647 0. 0. 0. 1463 120
45102.934 -0.40360 0. -0.298624 0. 0. 0.00170 0. 0.000559 0. 0. 0.25 -0.4557 0. 0. 0. 1443 120
45112.066 -0.00200 0. -0.311867 0. 0. 0.00283 0. 0.000154 0. 0. 0.34 -0.7994 0. 0. 0. 1463 120
45113.168 -0.38573 0. -0.322532 0. 0. 0.00072 0. 0.000248 0. 0. 0.25 -0.1569 0. 0. 0. 1443 120
45118.918 0.05286 0. -0.328324 0. 0. 0.05346 0. 0.002127 0. 0. 0.26 -0.9337 0. 0. 0. 1463 120
45151.852 -0.28927 0. 0.598147 0. 0. 0.00050 0. 0.000124 0. 0. 0.48 -0.1538 0. 0. 0. 1343 220
45152.371 -0.28919 0. 0.597509 0. 0. 0.00322 0. 0.000647 0. 0. 0.30 -0.6634 0. 0. 0. 1243 120
45154.113 0.08148 0. 0.606156 0. 0. 0.00227 0. 0,000154 0. 0. 0.62 -0.8631 0. 0. 0. 1363 220
45167.383 -0.24153 0. 0.575111 0. 0. 0.00313 0. 0.001336 0. 0. 0.37 0.2976 0. 0. 0. 1243 121
45168.383 0.10124 0. 0.585273 0. 0. 0.01110 0. 0.001044 0. 0. 0.31 -0.8902 0. 0. 0. 1263 120
45194.391 -0.18282 0. 0.537792 0. 0. 0.00531 0. 0.0019″12 0. 0. 0.16 0.5856 0. 0. 0. 1243 121
45196.434 0.08985 0. 0.547794 0. 0. 0.00822 0. 0.000803 0. 0. 0.23 -0.8039 0. 0. 0. 1263 120
45198.246 0.08925 0. 0.545003 0. 0. 0.00240 0. 0.000161 0. 0. 0.51 -0.8321 0. 0. 0. 1363 220
45223.602 -0.08039 0. 0.486237 0. 0. 0.00654 0. 0.00174″1 0. 0. 0.65 -0.3049 0. 0. 0. 1443 12.1
45231.031 -0.01573 0. 0.480740 0. 0. 0.02161 0. 0.002379 0. 0. 0.30 -0.9401 0. 0. 0. 1461 120
45238.012 0.00033 0. 0.460899 0. 0. 0.013″18 0. 0.001260 0. 0. 0.48 -0.7454 0. 0. 0. 1461 120
45238.582 -0.07162 0. 0.456264 0. 0. 0.00636 0. 0.002543 0. 0. 0.31 0.0404 0. 0. 0. 1443 121
45245.168 -0.01717 0. 0.444490 0. 0. 0.01131 0. 0.001091 0. 0. 0.43 -0.9394 0. 0. 0. 1461 120
45246.098 -0.01809 0. 0.442574 0. 0. 0.00195 0. 0.0001.76 0. 0. 0.41 -0.8830 0. 0. 0. 1461 220
45165.547 -0.07190 0. 0,404243 0. 0. 0.00685 0. 0.001809 0. 0. 0.68 -0.3907 0. 0. 0. 1443 121
452′79.148 -0.12491 0. 0.366828 0. 0. 0.00641 0. 0.000508 0. 0. 0.36 -0.8724 0. 0. 0. 1461 120
45279.535 -0.07190 0. 0.372877 0. 0. 0.00198 0. 0.000764 0. 0. 0.63 0.4322 0. 0, 0. 1443 121
45283.996 -0.14006 0. 0.354883 0. 0. 0.00688 0. 0.000444 0. 0. 0.50 -0.8932 0. 0. 0. 1461 120
45?8″/.613 -0.07611 0. 0.353414 0. 0. 0.00142 0. 0.000566 0. 0. 0.77 0.0451 0. 0. 0. 1443 121
45298.180 -0.18946 0. 0.321070 0. 0. 0.00383 0. 0.000195 0. 0. 0.31 -0.8331 0. 0. 0. 1463 120
45301.375 -0.20813 0. 0.312506 0. 0. 0.00088 0. 0.000049 0. 0. 0.27 -0.8713 0. 0, 0. 1463 220
45303.551 -0.09843 0. 0.318088 0. 0. 0.00061 0. 0.000188 0. 0. 0.39 0.0251 0. 0. 0. 1443 220
45307.965 -0.23446 0. 0.295963 0. 0. 0.00405 0. 0.000297 0. 0. 0.48 -0.8748 0. 0. 0. 1463 120
45315.160 -0.25366 0. 0.276099 0. 0. 0.0035″1 0. 0.000243 0. 0. 0.55 -0.7728 0. 0, 0. 1463 120
45320.504 -0.14293 0. 0,279061 0. 0. 0.00083 0. 0.000327 0. 0. 0.33 0.0871 0. 0. 0. 1443 120
45322.090 -0.27068 0. 0,261075 0. 0. 0.00444 0. 0.000345 0. 0. 0.)9 -0.8701 0. 0. 0. 1463 120
45336.27″/ -0.31067 0. 0.224835 0. 0. 0.00320 0. 0.000189 0. 0. 0.37 -0.8486 0. 0. 0. 1463 120
45342.148 -0.32550 0. 0.208090 0. 0. 0.00340 0. 0.000202 0. 0. 0.38 -0.8229 0. 0. 0. 1463 120
45345.512 -0.21893 0. 0,218182 0. 0. 0.00072 0. 0.000239 0. 0. 0.20 -0.3426 0. 0. 0. 1443 120
45357.039 -0.26124 0. 0.186539 0. 0. 0.00026 0. 0.000104 0. 0. 0.19 0.1315 0. 0. 0. 1443 220
45358.543 -0.26652 0. 0.180866 0. 0. 0.00085 0. 0.000377 0. 0. 0.19 0.1779 0. 0. 0. 1443 120
453′59.348 -0.34668 0. 0.161222 0. 0. 0.00073 0. 0.000039 0. 0. 0.22 -0.8700 0. 0. 0. 1463 220
45353.063 -0.35475 0. 0,150449 0. 0. 0.00327 0. 0.000179 0. 0. 0.29 -0.7691 0. 0. 0. 1463 120
45363.266 -0.28288 0. 0.167138 0. 0. 0.00115 0. 0.000409 0. 0. 0.25 0.1093 0. 0. 0. 1443 120
453′/0.258 -0.31207 0. 0.143598 0. 0. 0.00109 0. 0.000418 0. 0. 0.39 0.0769 0. 0. 0. 1443 120
453′71.313 -0.35474 0. 0.122876 0. 0. 0.00270 0. 0.000154 0. 0. 0.21 -0.8256 0. 0. 0. 1463 120
45380.457 -0.34858 0. 0.116975 0. 0. 0.00090 0. 0.000354 0. 0. 0.44 -0.1278 0. 0. 0. 1442 120
45387.910 -0.38648 0. 0.078093 0. 0. 0.01003 0. 0.000226 0. 0. 0.39 -0.6982 0. 0. 0. 1463 120
45398.094 -0.37496 0. 0.044811 0. 0. 0.00312 0. 0.000175 0. 0. 0.39 -0.8276 0. 0. 0. 1463 120
4541.8.270 -0.45978 0. 0.005120 0. 0. 0.00892 0. 0.002163 0. 0. 0.18 0.8559 0. 0. 0. 1442 121
45418.789 -0.35050 0. -0.012869 0. 0. 0.00566 0. 0.000356 0. 0. 0.52 -0.7314 0. 0. 0. 1463 120
45432.441 -0.31093 0. -0.053690 0. 0. 0.00067 0. 0.000039 0. 0. 0.19 -0.8523 0. 0. 0. 1463 220
45437.816 -0.29507 0. -0.069420 0. 0. 0.00352 0. 0.000199 0. 0. 0.46 -0.7755 0. 0. 0. 1463 120
45447.742 -0.25242 0. -0.096940 0. 0. 0.00330 0. 0.0001′75 0. 0. 0.43 -0.8520 0. 0. 0. 1463 120

45447.941 -0.53806 0. -0.093314 0. 0. 0.00333 0. 0.000731 0. 0. 0.56 -0.5500 0. 0. 0. 1442 120
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45474.844 -0.55704 0. -0.164668 0. 0. 0.00018 0. 0.000059 0. 0. 0.17 0.2189 0. 0, 0. 1443 220
45476.379 -0.14747 0. -0.168054 0, 0. 0.00087 0. 0.000056 0, 0. 0.24 -0,8150 0. 0. 0. 1463 220
45477.336 -0.55262 0. -0.171059 0. 0. 0.00105 0. 0.000354 0. 0. 0.47 0.3429 0. 0. 0. 1443 120
45478.383 -0.13601 0. -0.173487 0. 0. 0.00346 0. 0.0001″/1 O. 0. 0.33 -0.8272 0. 0. 0. 1463 120
45487.199 -0.10201 0. -0.191252 0. 0. 0.00643 0. 0.000331 0. 0. 0.23 -0.2918 0. 0. 0. 1463 120
45487.453 -0.54335 0. -0.196219 0. 0. 0.00080 0. 0.000369 0. 0, 0.31 -0.1199 0. 0. 0. 1443 120
45523.227 -0.45799 0. 0.729308 0. 0. 0.00241 0. 0.000901 0. 0. 0.60 -0.0577 0. 0. 0. 1243 122
45531.605 0.04114 0. 0.732519 0. 0. 0.01957 0. 0.001688 0. 0. 0.50 -0.9212 0. 0. 0. 1263 122
45532.324 -0.42785 0. 0.713492 0. 0. 0.00171 0. 0.000681 0. 0. 0.79 -0.3452 0. 0. 0. 1243 122
45540.445 -0.40145 0. 0.705026 0. 0. 0.00256 0. 0.000897 0. 0. 0.75 0.4047 0. 0. 0. 1243 122
45541.496 0.09656 0. 0.715240 0. 0. 0.00907 0. 0.000883 0. 0. 0.58 -0.7878 0. 0. 0. 1263 122
45549.676 -0.36548 0. 0.685464 0. 0. 0.00467 0. 0.001168 0. 0. 0.28 -0.7288 0. 0. 0. 1243 122
45557.551 0.13652 0. 0.691688 0. 0. 0.01250 0. 0.001331 0. 0. 0.54 -0.9287 0. 0. 0. 1263 122
45566.473 0.16464 0. 0.674405 0. 0. 0.01123 0. 0.001144 0. 0. 1.30 -0.9049 0. 0. 0. 1263 122
45567.641 -0.29502 0. 0.658434 0. 0. 0.00317 0. 0.000949 0. 0. 0.26 -0.6343 0. 0. 0. 1243 122
45574.395 0.15762 0. 0.663317 0. 0. 0.00946 0. 0.001019 0. 0. 0.77 -0.9109 0. 0. 0. 1263 122
45575.621 -0.25835 0. 0.641838 0. 0. 0.00273 0. 0.000796 0. 0. 0.47 -0.5888 0. 0. 0. 1243 122
45′583.426 0.17927 0. 0.645816 0. 0. 0.01032 0. 0.001111 0. 0. 0.86 -0.8980 0. 0. 0. 1263 122
45′584.523 -0.21292 0. 0.627174 0. 0. 0.00235 0. 0.000711 0. 0. 0.62 -0.3071 0. 0. 0. 1243 122
45′593.578 -0.16826 0. 0.607121 0. 0. 0.00471 0. 0.001259 0. 0. 0.69 -0.6040 0. 0. 0. 1243 122
454500.309 0.17212 0. 0.613381 0. 0. 0.01014 0. 0.001193 0. 0. 0.46 -0.9102 0. 0. 0. 1263 122
45500.508 -0.14492 0. 0.599608 0. 0. 0.00295 0. 0.000817 0. 0. 0.74 -0.3489 0. 0. 0. 1243 122
45(506.36″/ 0.14718 0. 0.603084 0. 0. 0.00771 0. 0.000669 0. 0. 0.51 -0.8413 0. 0. 0. 1263 122
45607.461 -0.12097 0. 0.587812 0. 0. 0.00345 0. 0.000834 0. 0. 0.41 -0.5809 0. 0. 0. 1243 122
45613.352 0.13547 0. 0.587787 0. 0. 0.00918 0. 0.000959 0. 0. 0.65 -0.8848 0. 0. 0. 1263 122
45614.578 -0.10363 0. 0.570830 0. 0. 0.00258 0. 0.000796 0. 0. 0.59 0.0509 0. 0. 0. 1243 122
45615.793 -0.19163 0. 0.581445 0. 0. 0.01022 0. 0.001455 0. 0. 0.67 -0.6587 0. 0. 0. 6343 120
45620.359 0.13670 0. 0.571426 0. 0. 0.0084′7 0. 0.000693 0. 0. 0.56 -0.8489 0. 0. 0. 1263 122
45621.301 -0.09243 0. 0.560648 0. 0. 0.00544 0. 0.001051 0. 0. 0.36 -0.8179 0. 0. 0. 1243 122
45627.352 0.12834 0. 0.557370 0. 0. 0.01040 0. 0.000964 0. 0. 0.34 -0.8610 0. 0. 0. 1263 122
45628.547 -0.06161 0. 0.546526 0. 0. 0.00216 0. 0.000661 0. 0. 0.39 0.0023 0. 0. 0. 1243 122
45634.344 0.08126 0. 0.543922 0. 0. 0.00753 0. 0.000651 0. 0. 0.52 -0.8710 0. 0. 0. 1263]22
45635.531 -0.04458 0. 0.533757 0. 0. 0.00205 0. 0.000751 0. 0. 0.42 -0.0332 0. 0. 0. 1243 122
45642.359 0.06913 0. 0.520301 0. 0. 0.00775 0. 0.000575 0. 0. 0.38 -0.816] O. 0. 0. 1263 120
45643.449 -0.03542 0. 0.514812 0. 0. 0.00135 0. 0.000427 0. 0. 0.42 -0.3788 0. 0. 0. 1243 120
45650.160 0.03086 0. 0.504595 0. 0. 0.00613 0. 0.000520 0. 0. 0.37 -0.8368 0. 0. 0. 1263 120
45651.469 -0.02218 0. 0.498625 0. 0. 0.00173 0. 0.000393 0. 0. 0.28 -0.2629 0. 0. 0. 1243 120
45656.453 -0.02103 0. 0.487287 0. 0. 0.00041 0. 0.000160 0. 0. 0.34 -0.2644 0. 0. 0. 1243 220
45657.422 0.00007 0. 0.485334 0. 0. 0.00094 0. 0.000083 0. 0. 0.31 -0.8412 0. 0. 0. 1263 220
45658.261 -0.00419 0. 0.482947 0. 0. 0.00511 0. 0.000434 0. 0. 0.39 -0.8860 0. 0. 0. 1263 120
45658.488 -0.02091 0. 0.482019 0. 0. 0.00125 0. 0.000410 0. 0. 0.26 0.0365 0. 0. 0. 1243 120
45665.180 -0.03967 0. 0.468659 0. 0. 0.00567 0. 0.000515 0. 0. 0.37 -0.8868 0. 0. 0. 1263 120
45665.434 -0.01586 0. 0.470013 0. 0. 0.00166 0. 0.000451 0. 0. 0.34 -0.2171 0. 0. 0. 1243 120
456′)2.105 -0.08176 0. 0.454713 0. 0. 0.00713 0. 0.000811 0. 0. 0.37 -0.9027 0. 0. 0. 1263 120
45679.172 -0.09045 0. 0.439772 0. 0. 0.006″/3 O. 0.000601 0. 0. 0.23 -0.9263 0. 0. 0. 1263 120
45679.371 -0.02172 0. 0.444839 0. 0. 0.00195 0. 0.000486 0. 0. 0.22 -0.6061 0. 0. 0.]243 120
45684.113 -0.10583 0. 0.429509 0. 0. 0.00644 0. 0.000587 0. 0. 0.35 -0.8937 0. 0. 0. 1263 120
45685.461 -0.10797 0. 0.426028 0. 0. 0.00099 0. 0.000088 0. 0. 0.29 -0.8457 0. 0. 0. 1263 220
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45692.086 -0.13597 0. 0.414189 0. 0. 0.00531 0. 0.000419 0. 0. 0.17 -0.8851 0. 0. 0. 1263 120
45692.371 -0.03588 0. 0.421470 0. 0. 0.00128 0. 0.000378 0. 0. 0.31 -0.1329 0. 0. 0. 1243 120
45697.129 -0.14971 0. 0.401720 0. 0. 0.00418 0. 0.000350 0. 0. 0.45 -0.8600 0. 0. 0. 1263 120
45698.391 -0.04886 0. 0.408660 0. 0. 0.00126 0. 0.000464 0. 0. 0.34 0.1485 0. 0. 0. 1243 120
45712.426 -0.07550 0. 0.387253 0. 0. 0.00203 0. 0.000577 0. 0. 0.32 -0.0930 0. 0. 0. 1243 120
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45735.215 -0.12905 0.   0.359726 0. 0. 0.00220 0. 0.000598 0. 0. 0.33 -0.4270 0. 0. 0. 1243 120
45741.125 -0.30877 0.   0.332754 0. 0. 0.00639 0. 0.000562 0. 0. 0.21 -0.8648 0. 0. 0. 1263 120
45741.598 -0.30512 0.   0.331529 0. 0. 0.00068 0. 0.000059 0. 0. 0.32 -0.8390 0. 0. 0. 1263 220
45742.211 -0.15089 0.   0.348981 0. 0. 0.00204 0. 0.000490 0. 0. 0.36 -0.4729 0. 0. 0. 1243 120
45742.594 -0.15395 0.   0.347921 0. 0. 0.00027 0. 0.000098 0. 0. 0.23 -0.1727 0. 0. 0. 1243 220
45749.102 -0.31693 0.   0.318658 0. 0. 0.00876 0. 0.000732 0. 0. 0.50 -0.8538 0. 0. 0. 1263 120
45749.301 -0.16887 0.   0.336719 0. 0. 0.00143 0. 0.000452 0. 0. 0.29 -0.1456 0. 0. 0. 1243 120
45756.109 -0.34598 0.   0.305829 0. 0. 0.00639 0. 0.000643 0. 0. 0.19 -0.8279 0. 0. 0. 1263 120
45763.168 -0.36735 0.   0.296605 0. 0. 0.00753 0. 0.000755 0. 0. 0.34 -0.8689 0. 0. 0. 1263 120
45770.082 -0.37999 0.   0.282″/69 0. 0. 0.00624 0. 0.000594 0. 0. 0.67 -0.8488 0. 0. 0. 1263 120
45770.230 -0.25525 0.   0.300750 0. 0. 0.00286 0. 0.000884 0. 0. 0.65 0.3604 0. 0. 0. 1243 120
45770.395  0.13290 0.   0.303335 0. 0. 0.00629 0. 0.001715 0. 0. 0.95 -0.3385 0. 0. 0. 6343 120
45777.090 -0.38870 0.   0.268102 0. 0. 0.00719 0. 0.000534 0. 0. 0.24 -0.8679 0. 0. 0. 1263 120
45777.238 -0.28283 0.   0.289342 0. 0. 0.00240 0. 0.000751 0. 0. 0.51  0.3479 0. 0. 0. 1243 120
45783.422 -0.38975 0.   0.254020 0. 0. 0.00614 0. 0.000623 0. 0. 0.20 -0.7557 0. 0. 0. 1263 120
45183.957 -0.39463 0.   0.253648 0. 0. 0.00093 0. 0.000091 0. 0. 0.38 -0.8661 0. 0. 0. 1263 220
45784.484 -0.31139 0.   0.272336 0. 0. 0.00166 0. 0.000592 0. 0. 0.40 -0.1034 0. 0. 0. 1243 120
45′784.914 -0.31259 0.   0.272235 0. 0. 0.00022 0. 0.000086 0. 0. 0.30 -0.1878 0. 0. 0. 1243 220
45′791 .262 -0.335″18 0.   0.260260 0. 0. 0.00101 0. 0.000339 0. 0. 0.33 -0.0799 0. 0. 0. 1243 120
45′798.223 -0.36467 0.   0.246036 0. 0. 0.00114 0. 0.000380 0. 0. 0.54 -0.3328 0. 0. 0. 1243 120
45799.930 -0.38850 0.   0.224127 0. 0. 0.00550 0. 0.000446 0. 0. 0.44 -0.8693 0. 0. 0. 12.63 120
45800.090 -0.37485 0.   0.2426)6 0. 0. 0.00127 0. 0.000421 0. 0. 0.24 -0.1500 0. 0. 0. 1243 120
45)301.926 -0.39151 0.   0.221185 0. 0. 0.00560 0. 0.000423 0. 0. 0.43 -0.8635 0. 0. 0. 1263 120
451302.090 -0.38328 0.   0.239652 0. 0. 0.00119 0. 0.000406 0. 0. 0.24 -0.0831 0. 0. 0. 1243 120
45803.938 -0.38556 0.   0.215681 0. 0. 0.00798 0. 0.000625 0. 0. 0.39 -0.8588 0. 0. 0. 1263 120
45[304.094 -0.39058 0.   0.234619 0. 0. 0.00134 0. 0.000479 0. 0. 0.37 -0.0045 0. 0. 0. 1243 120
45[305.938 -0.38121 0.   0.209303 0. 0. 0.00759 0. 0.000580 0. 0. 0.36 -0.8319 0. 0. 0. 1263 120
45806.094 -0.40238 0.   0.228998 0. 0. 0.00130 0. 0.000467 0. 0. 0.47 0.0502 0. 0. 0. 1243 120
45807.926 -0.46965 0.   0.212074 0. 0. 0.02357 0. 0.001666 0. 0. 0.35 -0.6804 0. 0. 0. 1263 120
45810.098 -0.40827 0.   0.221432 0. 0. 0.00250 0. 0.000734 0. 0. 0.43 0.5467 0. 0. 0. 1243 120
45831 .9?,6 -0.38150 0.   0.1988)1 0. 0. 0.00555 0. 0.000406 0. 0. 0.27 -0.8405 0. 0. 0. 1263 120
45812.102 -0.42187 0.   0.216097 0. 0. 0.00196 0. 0.000690 0. 0. 0.29  0.2989 0. 0. 0. 1243 120
45819.035 -0.37156 0.   0.185356 0. 0. 0.02229 0. 0.001381 0. 0. 0.24 -0.6205 0. 0. 0. 1263 120
45819.145 -0.44807 0.   0.200875 0. 0. 0.00148 0. 0.000514 0. 0. 0.29 -0.0147 0. 0. 0. 1243 120
45825.883 -0.4″/009 0.   0.187276 0. 0. 0.0014″1 0. 0.000481 0. 0. 0.35 -0.5272 0. 0. 0. 1243 120
45832.063 -0.37500 0,   0.164154 0. 0. 0.00846 0. 0.000945 0. 0. 0.31 -0.9215 0. 0. 0. 1263 120
45832.500 -0.35094 0.   0.160802 0. 0. 0.00105 0. 0.000093 0. 0. 0.27 -0.8564 0. 0. 0. 1263 220
45833.156 -0.49712 0.   0.173029 0. 0. 0.0013″/ 0. 0.000399 0. 0. 0.37 -0.3182 0. 0. 0. 1243 120
45833.172 -0.49423 0.   0.172625 0. 0. 0.00075 0. 0.000324 0. 0. 0.18 -0.3337 0. 0. 0. 1243 220
45839.938 -0.33290 0.   0.147563 0. 0. 0.00738 0. 0.000722 0. 0. 0.60 -0.8794 0. 0. 0. 1263 120
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45847.078 -0.52426 0.   0.148529 0. 0. 0.00134 0. 0.000387 0. 0. 0.27 -0.3141 0. 0. 0. 1243 120
45854.004 -0.28388 0.   0.129789 0. 0. 0.00522 0. 0.000569 0. 0. 0.33 -0.8502 0. 0. 0. 1263 120
45854.527 -0.53908 0.   0.137699 0. 0. 0.00112 0. 0.000363 0. 0. 0.38 0.1286 0. 0. 0. 1243 120
45861.273 -0.54429 0.   0.126389 0. 0. 0.00146 0. 0.000511 0. 0. 0.36 -0.2609 0. 0. 0. 1243 120
45861,668 -0.23498 0.   0.116682 0. 0. 0.00617 0. 0.000511 0. 0. 0.75 -0.8865 0. 0. 0. 1263 120
45866.555 -0.54920 0.   0.120045 0. 0. 0.00125 0. 0.000365 0. 0. 0.18 -0.1949 0. 0. 0. 1243 120
45874.852 -0.19803 0.   0.104792 0. 0. 0.00807 0. 0.000893 0. 0. 0.42 -0.8925 0. 0. 0. 1263 120
45875.309 -0.55589 0.   0.107796 0. 0. 0.00124 0. 0.000477 0. 0. 0.26 0.2019 0. 0. 0. 1243 120
45888.961 -0.13900 0.   0.093012 0. 0. 0.00812 0. 0.000916 0. 0. 0.26 -0.8686 0. 0. 0. 1263 120
45889.566 -0.54809 0.   0.090825 0. 0. 0.00339 0. 0.000673 0. 0. 0.44 -0,8133 0. 0. 0. 1243 120
45895.117 -0.12674 0.   0.091789 0. 0. 0.00445 0. 0.000457 0. 0. 0.49 -0.8448 0. 0. 0. 1263 120
45895.613 -0.11932 0.   0.091280 0. 0. 0.00120 0. 0.000117 0. 0. 0.35 -0.8560 0. 0. 0. 1263 220
45896.602 -0.54412 0.   0.087001 0. 0. 0.00037 0. 0.000145 0. 0. 0.35 -0.1158 0. 0. 0. 1243 220
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45934.449 0.05059 0. 0.053853 0. 0. 0.00681 0. 0.000628 0. 0. 0.23 -0.8728 0. 0. 0. 1263 120
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45952.637 0.39619 0. 0.040640 0. 0. 0.00830 0. 0.001748 0. 0. 0.29 0.2873 0. 0. 0. 4263 120
45965.813 0.38537 0. 0.019819 0. 0. 0.00828 0. 0.001056 0. 0. 0.48 0.5908 0. 0. 0. 4263 120
46008.434 0.14922 0. -0.066790 0. 0. 0.00657 0. 0.000428 0. 0. 0.59 -0.8063 0. 0. 0. 1463 120
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46036.36″1 0.10314 0. -0.116030 0. 0. 0.01979 0. 0.001070 0. 0. 0.68 -0.7136 0. 0. 0. 1463 120
46043.777 0.10253 0. -0.125374 0. 0. 0.00598 0. 0.000535 0. 0. 0.33 -0.8840 0. 0. 0. 1463 120
46078.480 -0.02103 0. -0.179746 0. 0. 0.00342 0. 0.000744 0. 0. 0.65 -0.0054 0. 0. 0. 1442 120
46078.645 -0.01929 0. -0.180177 0. 0. 0.0060-/ O. 0.000393 0. 0. 0.17 -0.8555 0. 0. 0. 1463 120
46091.566 -0.02324 0. -0.194668 0. 0. 0.00334 0. 0.000728 0. 0. 0.84 0.5994 0. 0. 0. 1442 120
46106.527 -0.04592 0. -0.213521 0. 0. 0.00219 0. 0.000724 0. 0. 0.27 0.3193 0. 0. 0. 1442 120
46148.9″/3 -0.26955 0. -0.294787 0. 0. 0.00374 0. 0.000326 0. 0. 0.34 -0.7720 0. 0. 0. 1461 120
46154.941 -0.28968 0. -0.303427 0. 0. 0.00371 0. 0.000291 0. 0. 0.30 -0.8069 0. 0. 0. 1461 120
46182.941 -0.26040 0. -0.337660 0. 0. 0.00092 0. 0.000393 0. 0. 0.14 -0.3427 0. 0. 0. 1443 120
46197.648 -0.34569 0. -0.382458 0. 0. 0.00504 0. 0.000403 0. 0. 0.24 -0.9137 0. 0. 0. 1461 120
46211.926 -0.36561 0. -0.387782 0. 0. 0.00073 0. 0.000283 0. 0. 0.18 -0.1006 0. 0. 0. 1443 120
46216.145 -0.37614 0. -0.396513 0. 0. 0.00081 0. 0.000282 0. 0. 0.46 -0.3023 0. 0. 0. 1443 120
46266.926 -0.47314 0. 0.546429 0. 0. 0.01635 0. 0.000830 0. 0. 0.33 -0.2251 0. 0. 0. 1443 120
46287.539 -0.48976 0. 0.525696 0. 0. 0.00205 0. 0.000512 0. 0. 0.28 -0.7063 0. 0. 0. 1443 120
46336.758 -0.02849 0. 0.472555 0. 0. 0.00136 0. 0,000098 0. 0. 0.46 -0.8261 0. 0. 0. 1463 220
46337.871 -0.44778 0. 0.462834 0. 0. 0.00037 0. 0.000126 0. 0. 0.48 0.1122 0. 0. 0. 1443 220
46.35″1.324 0.00881 0. 0.436315 0. 0. 0.00510 0. 0.000392 0. 0. 0.65 -0.8748 0. 0. 0. 1463 120
46364.305 0.00254 0. 0.423079 0. 0. 0.00517 0. 0.000267 0. 0. 0.41 -0.8858 0. 0. 0. 1463 120
46365.602 -0.37151 0. 0.409601 0. 0. 0.00149 0. 0.000463 0. 0. 0.69 -0.1886 0. 0. 0. 1443 120
463″/9.637 -0.33928 0. 0.384725 0. 0. 0.00130 0. 0.000402 0. 0. 0.57 0.1111 0. 0. 0. 1443 120
46393.547 -0.30407 0. 0.359048 0. 0. 0.00082 0. 0.000305 0. 0. 0.17 0.0456 0. 0. 0. 1443 120
46435.051 0.06362 0. 0.307427 0. 0. 0.00539 0. 0.000294 0. 0. 0.68 -0.8814 0. 0. 0. 1463 120
46462.328 -0.15070 0. 0.261883 0. 0. 0.00255 0. 0.000″199 0. 0. 0.18 0.6888 0. 0. 0. 1443 120
46469.332 -0.13723 0. 0.252952 0. 0. 0.00080 0. 0.000322 0. 0. 0.38 -0.0″162 0. 0. 0. 1443 1′20
46476.355 -0.13305 0. 0.241850 0. 0. 0.00147 0. 0.000449 0. 0. 0.71 -0.2970 0. 0. 0. 1443 120
46476.980 0.01344 0. 0.243417 0. 0. 0.00504 0. 0.000258 0. 0. 1.11 -0.8207 0. 0. 0. 1463 120
46483.336 -0.12409 0. 0.234805 0. 0. 0.00072 0. 0.000338 0. 0. 0.38 -0.2395 0. 0. 0. 1443 120
46485.020 -0.02151 0. 0.235477 0. 0. 0.00446 0. 0.000314 0. 0. 0.62 -0.7435 0. 0. 0. 1463 120
46490.387 -0.11762 0. 0.224636 0. 0. 0.00094 0. 0.000498 0. 0. 0.16 0.2166 0. 0. 0. 1443 120
46<90.984 -0.03177 0. 0.224806 0. 0. 0.00479 0. 0.000344 0. 0. 0.51 -0.7867 0. 0. 0. 1463 120
46497.414 -0.11617 0. 0.218518 0. 0. 0.00087 0. 0.000345 0. 0. 0.28 -0.0481 0. 0. 0. 1443 120
46498.027 -0.03782 0. 0.215896 0. 0. 0.00526 0. 0.000230 0. 0, 0,38 -0.8551 0. 0. 0. 1463 120
46504.984 -0.07039 0. 0.206149 0. 0. 0.00456 0. 0.000207 0. 0. 0.35 -0.8584′0. 0. 0. 1463 120
46511.992 -0.08022 0. 0.200968 0. 0. 0.00659 0. 0.000289 0. 0. 0.51 -0.8165 0. 0. 0. 1463 120
46512.324 -0.11206 0. 0.20337-/ O. 0. 0.00078 0. 0.000264 0. 0. 0.25 -0.3155 0. 0. 0. 1443 120
46518.402 -0.11716 0. 0.192815 0. 0. 0.00075 0. 0.000300 0. 0. 0.19 0.1802 0. 0. 0. 1443 120
465)9.039 -0.10317 0. 0.187358 0. 0. 0.00359 0. 0.000203 0. 0. 0.46 -0.8307 0. 0. 0. 1463 120
46525.367 -0.12239 0. 0.184270 0. 0. 0.00072 0. 0.000301 0. 0. 0.53 0.0956 0. 0. 0. 1443 120
46526.059 -0.13400 0. 0.178404 0. 0. 0,00923 0. 0.000543 0. 0. 0.96 -0.8061 0. 0. 0. 1463 120
46532.285 -0.13412 0. 0,172756 0. 0. 0.00079 0. 0.000271 0. 0. 0.27 -0.2410 0. 0. 0. 1443 120
46534.078 -0.13813 0. 0.163959 0. 0. 0.00481 0. 0.000218 0. 0. 0.48 -0.8681 0. 0. 0. 1463 120
46539.531 -0.14486 0. 0.163907 0. 0. 0.00092 0. 0.000394 0. 0. 0.60 0.3097 0. 0. 0. 1443 120
46540.523 -0.16275 0. 0.155900 0. 0. 0.00642 0. 0.000410 0. 0. 0.22 -0.8830 0. 0. 0. 1463 120
46546.2./″1 -0.15413 0. 0.150944 0. 0. 0.00110 0. 0.000429 0. 0. 0.22 -0.0998 0. 0. 0. 1443 120
46547.168 -0.15895 0. 0.141794 0. 0. 0.00487 0. 0.000266 0. 0. 0.49 -0.8901 0. 0. 0. 1463 120
46553.383 -0.16882 0. 0.141115 0. 0. 0,00080 0. 0.000397 0. 0. 0.36 0.0310 0. 0. 0. 1443 120
46554.504 -0.20006 0. 0.131726 0. 0. 0.00795 0. 0.000596 0. 0. 0.60 -0.9002 0. 0. 0. 1463 120
46560.445 -0.17902 0. 0.128426 0. 0. 0.00079 0. 0.000300 0. 0. 0.21 0.4129 0. 0. 0. 1443 120
46596.984 -0.23502 0. 0.085748 0. 0. 0.00450 0. 0.000230 0. 0. 0.58 -0.9036 0. 0. 0. 1463 120

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46597.238 -0.25337 0.   0.095564 0. 0.  0.00100 0. 0.000428 0.  0. 0,53 0.0861 0. 0. 0. 1443 120
46603.328  -0.26705 0.   0.088856 0.  0. 0.00101 0. 0.000416 0.  0. 0.93 0.2904 0. 0. 0. 1443 120
46603.984  -0.22111 0.   0.078799 0.  0. 0.00650 0. 0.000350 0.  0. 0.43 -0.9268 0. 0. 0. 1463 120
46609.289  -0.23087 0.   0.075585 0. 0. 0.00731 0. 0.000598 0. 0. 1.22 -0.7942 0. 0. 0. 1463 120
46609.781  -0.22272 0.   0.073670 0.  0. 0.00255 0. 0.000161 0.  0. 0.60 -0.8749 0. 0. 0. 1463 220
46610.867  -0.28635 0.   0.082082 0. 0. 0.00039 0. 0.000136 0. 0. 0.37 0.1191 0. 0. 0. 1443 220
46618.309  -0.30322 0.   0.078006 0. 0.  0.00133 0. 0.000489 0.  0. 0.44 0.2971 0. 0. 0. 1443 120
46619.141  -0.22368 0.   0.068730 0. 0. 0.00426 0. 0.000304 0. 0. 0.62 -0.8659 0. 0. 0. 1463 120
46624.293  -0.31556 0.   0.073891 0. 0. 0.00136 0. 0.000453 O. 0. 0.33 0.0197 0. 0. 0. 1443 120
46625.000  -0.23149 0.   0.064377 0. 0. 0.00311. 0. 0.000168 O. 0. 0.53 -0.8597 0. 0. 0. 1463 120
46631.574  -0.33087 0.   0.068504 0. 0. 0.00155 0. 0.000385 O. 0. 0.42 -0.5848 0. 0. 0. 1443 120
46631.785  -0.21556 0.   0.059947 0. 0. 0.00363 0. 0.000186 0. 0. 1.25 -0.8353 0. 0. 0. 1463 120
46637.242  -0.33922 0.   0.062863 0. 0. 0.00079 0. 0.000352 0. 0. 0.27 0.3839 0. 0. 0. 1443 120
46644.223  -0.34885 0.   0.058946 0. 0. 0.00074 0.  0.000330 0. 0. 0.33 0.3611 0. 0. 0. 1443 120
46653.184  -0.20533 0.   0.045932 0. 0. 0.00787 0. 0.000533 0. 0. 0.37 -0.9387 0. 0. 0. 1461 120
46653.379  -0.36305 0.   0.051833 0. 0. 0.00096 0. 0.000305 0. 0. 0.41  0.4290 0. 0. 0. 1443 120
46658.438  -0.36580 0.   0.048412 0. 0. 0.00083 0. 0.000237 0. 0. 0.41 -0.0458 0. 0. 0. 1443 120
46658.918  -0.36765 0.   0.048292 0. 0. 0.00032 0. 0.000107 0. 0. 0.34  0.3125 0. 0. 0. 1443 220
46659.922  -0.20077 0.   0.042054 0. 0. 0.00443 0. 0.000225 0. 0. 0.60 -0.8686 0. 0. 0. 1461 120
46672.215  -0.38720 0.   0.037537 0. 0.  0.00176 0. 0.000695 0. 0. 0.44 -0.0180 0. 0. 0. 1443 120
46687.020 -0.39307 0.   0.021722 0.  0. 0.00071 0. 0.000329 0.  0. 0.18 0.2523 0. 0. 0. 1443 120
46[,93.355  -0.16273 0.   0.008988 0.  0. 0.00485 0. 0.000403 0.  0. 0.3-/ -0.9125 0. 0. 0. 1461 120
46[95.238  -0.39347 0.   0.008498 0. 0. 0.00083 0. 0.000285 0. 0. 0.25 0.5120 0. 0. 0. 1443 120
46″/01.941  -0.39326 0.   0.001034 0.  0. 0.00060 0. 0.000331 0.  0. 0.19 0.0813 0. 0. 0. 1443 120
46′/0/.039 -0.150-/2 O. -0.010450 0. 0. 0.0085′/ O. 0.000696 0. 0. 0.09 -0.9039 0. 0. 0. 1461 120
46708.746  -0.39686 0. -0.012772 0. 0. 0.00066 0. 0.000237 0. 0. 0.22 -0.3193 0. 0. 0. 1443 120
46″/09.203  -0.39657 0. -0.013679 0. 0. 0.00019 0. 0.000070 0. 0. 0.25 0.0226 0. 0. 0. 1443 220
46″/14.293  -0.13291 0.  -0.022901 0. 0. 0.00433 0. 0.000362 0. 0. 0.44 -0.9015 0. 0. 0. 1461 120
46715.191  -0.39513 0.  -0.022469 0. 0. 0.00088 0. 0.000285 0. 0. 0.16 0.5373 0. 0. 0. 1443 120
46722.0″/8  -0.12632 0.  -0.036299 0. 0. 0.00576 0. 0.000487 0. 0. 0.22 -0.9202 0. 0. 0. 1461 120
46729.012  -0.12501 0.  -0.045094 0. 0. 0.00586 0. 0.000421 0. 0. 0.73 -0.9255 0. 0. 0. 1461 120
46736.953  -0.11283 0. -0.059804 0. 0. 0.00703 0. 0.000426 0. 0. 0.31 -0.9664 0. 0. 0. 1461 120
46743.000  -0.10699 0.  -0.065991 0. 0. 0.00567 0. 0.000447 0. 0. 0.58 -0.9199 0. 0. 0. 1461 120
46751.0″/8  -0.08415 0.  -0.079740 0. 0. 0.00472 0. 0,000442 0. 0. 0.42 -0.9064 0, 0, 0. 1461 120
46757.22″1  -0.37968 0.  -0.087948 0. 0. 0.00026 0. 0.000095 0. 0. 0.27 0.2676 0. 0. 0. 1443 220
46760.078  -0.07685 0.  -0.089833 0. 0. 0.00558 0. 0.000454 0. 0. 0.15 -0.9188 0. 0. 0. 1461 120
46763.750  -0.37268 0.  -0.099869 0. 0. 0.0006-) O. 0.000335 0. 0. 0.36 -0.0115 0. 0. 0. 1443 120
46763.969  -0.07414 0. -0.096931 0. 0. 0.00559 0. 0.000477 0.  0. 0.44 -0.9139 0. 0. 0. 1461 120
46″178.164  -0.35479 0.  -0.120647 0. 0. 0.00065 0. 0.000248 0. 0. 0.31 -0.4631 0. 0. 0. 1443 120
46″/78.828  -0.03750 0.  -0.116785 0. 0. 0.00661 0. 0.000387 0. 0. 0.31 -0.9717 0. 0. 0. 1461 120
46′/84.730  -0.35202 0.  -0.125407 0. 0. 0.00229 0. 0.000671 0. 0. 0.70 0.4890 0. 0. 0. 1443 120
46785.965  -0.04002 0.  -0.121867 0. 0. 0.00562 0. 0.000435 0. 0. 0.36 -0.9349 0. 0. 0. 1461 ]20
4679).117  -0.04335 0. -0.130396 0. 0. 0.00570 0. 0.000573 0. 0. 0.20 -0.9163 0. 0. 0. 1461 120
46798.324  -0.33701 0.  -0.143967 0. 0. 0.00087 0. 0.000479 0. 0. 0.47 -0.0031 0. 0. 0. 1443 122
46799.086  -0.03433 0.  -0.141363 0. 0. 0.00469 0. 0.000412 0. 0. 0.26 -0.9172 0. O′. 0. 1461 120
46804.992  -0.02701 0.  -0.151435 0. 0. 0.00481 0. 0.000458 0. 0. 0.40 -0.9071 0. 0. 0. 1461 120
46814.285  -0.31274 0.  -0.163680 0. 0. 0.00079 0. 0.000356 0. 0. 0.33  0.1580 0. 0. 0. 1443 120
46820.293  -0.02600 0.  -0.168254 0. 0. 0.00314 0. 0.000224 0. 0. 0.52 -0.7906 0. 0. 0. 1461 120
468.21.262 -0.30410 0. -0.174353 0. 0. 0.00087 0.  0.000485 0. 0. 0.50 -0.1086 0. 0. 0. 1443 122
468.39.328  -0.28215 0.  -0.196806 0. 0. 0.00084 0. 0.0003)2 O. 0. 0.39 -0.0933 0. 0. 0. 1442 120
46848.957  -0.02096 0.  -0.209589 0. 0. 0.00422 0. 0.000409 0. 0. 0.26 -0.9121 0. 0. 0. 1461 120
468(51.254  -0.25591 0.  -0.239202 0. 0. 0.00130 0. 0.000403 0. 0. 0.26 -0.0402 0. 0. 0. 1442 120
46869.359  -0.24297 0.  -0.250267 0. 0. 0.00084 0. 0.000304 0. 0. 0.22 0.0893 0. 0. 0. 1442 120
468″75.926  -0.02491 0.  -0.259079 0. 0. 0.00487 0. 0.000466 0. 0. 0.41 -0.8573 0. 0. 0. 1461 120
468[33.914  -0.03110 0.  -0.273583 0. 0. 0.00578 0. 0.000529 0. 0. 0.34 -0.8436 0. 0. 0. 1461 120
46886.922  -0.02856 0.  -0.279149 0. 0. 0.00496 0. 0.00038″/ O. 0. 0.51 -0.8726 0. 0, 0. 1461 ]20
46889.367  -0.22995 0.  -0.284576 0. 0. 0.00090 0. 0.000333 0. 0. 0.44 0.4614 0. 0. 0. 1442 120
46896.320 -0.22405 0. -0.295033 0. 0. 0.00088 0. 0.000318 0.  0. 0.55 0.1843 0. 0. 0. 1442 120
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46896.961 -0.03005 0. -0.294294 0. 0. 0.00340 0. 0.000251 0. 0. 0.29 -0.7757 0. 0. 0. 1461 120
46903.930 -0.03865 0. -0.306286 0. 0. 0.00450 0. 0.000368 0. 0. 0.19 -0.8196 0. 0. 0. 1461 120
46904.648 -0.21559 0. -0.308192 0. 0. 0.00198 0. 0.000461 0. 0. 0.90 -0.0174 0. 0. 0. 1442 120
46910.938 -0.05201 0. -0.317572 0. 0. 0.01348 0. 0.000557 0. 0. 0.10 -0.8172 0. 0. 0. 1461 120
46911.582 -0.21702 0. -0.320832 0. 0. 0.00077 0. 0.000328 0. 0. 0.48 -0.0795 0. 0. 0. 1442 120
46923.719 -0.20661 0. -0.336228 0. 0. 0.00074 0. 0.000259 0. 0. 0.30 -0.0433 0. 0. 0. 1442 120
46924.406 -0.20616 0. -0.336989 0. 0. 0.00027 0. 0.000115 0. 0. 0.21 0.0757 0. 0. 0. 1442 220
46925.805 -0.05889 0. -0.339207 0. 0. 0.00072 0. 0.000061 0. 0. 0.23 -0.8602 0. 0. 0. 1463 220
46925.828 -0.05555 0. -0.339603 0. 0. 0.00404 0. 0.000385 0. 0. 0.28 -0.8549 0. 0. 0. 1461 120
46932,984 -0.05716 0. -0.349644 0. 0. 0.00321 0. 0.000245 0. 0. 0.60 -0.7637 0. 0. 0. 1461 120
46933.203 -0.20180 0. -0.348745 0. 0. 0.00151 0. 0.000614 0. 0. 0.49 0.2600 0. 0. 0, 1442 120
46937.727 -0.06291 0. -0.356858 0. 0. 0.00409 0. 0.000374 0. 0. 0.32 -0.9066 0. 0. 0. 1461 120
46938.934 -0.20207 0. -0.358212 0. 0. 0.00107 0. 0.000365 0. 0. 0.94 -0.1963 0. 0. 0. 1442 120
46945.930 -0.19763 0. -0.365499 0. 0. 0.00086 0. 0.000330 0. 0. 0.19 -0.0355 0. 0. 0. 1442 120
46946,086 -0.07760 0. -0.367187 0. 0. 0.00299 0. 0.000199 0. 0. 0.21 -0.7347 0. 0. 0. 1461 120
46953,328 -0.19714 0. -0.373545 0. 0. 0.00104 0. 0.000406 0. 0. 0.45 0.3081 0. 0. 0. 1442 120
46967.414 -0.19583 0. -0.389560 0. 0. 0.00094 0. 0.000361 0. 0. 0.44 -0.2784 0. 0. 0. 1442 120
46973,742 -0.10'/99 0. -0.393823 0. 0. 0.00730 0. 0.000751 0. 0. 1.26 -0.8110 0. 0. 0. 1461 120
46974.816 -0.19417 0. -0.393255 0. 0. 0.00212 0. 0.000639 0. 0. 0.56 -0.3275 0. 0. 0. 1442 120
46980.074 -0.19721 0. -0.395982 0. 0. 0.00117 0. 0.000355 0. 0. 0.37 0.1108 0. 0. 0. 1442 120
46981.047 -0.11422 0. -0.400669 0. 0. 0.00346 0. 0.000228 0. 0. 0.29 -0.8320 0. 0. 0. 1461 120
46987.332 -0.19860 0. -0.400075 0. 0. 0.00095 0. 0.000334 0. 0. 0.29 -0.3162 0. 0. 0. 1442 120
46995.125 -0.13005 0. -0.411249 0. 0. 0.00439 0. 0.000276 0. 0. 0.18 -0.9049 0. 0. 0. 1461 120
46995.324 -0.20181 0. -0.407193 0. 0. 0.00091 0. 0.000360 0. 0. 0.34 -0.3244 0. 0. 0. 1442 120
47003.082 -0.20954 0. -0.40″1072 0. 0. 0.00093 0. 0.000389 0. 0. 0.47 0.2958 0. 0. 0. 1442 120
4″/008.965 -0.14023 0. -0.416856 0. 0. 0.00349 0. 0.000220 0. 0. 0.43 -0.8215 0. 0. 0. 1461 120
4'/009.391 -0.20890 0. -0.411106 0. 0. 0.00153 0. 0.000463 0. 0. 0.68 0.6318 0. 0. 0. 1442 120
47016.004 -0.14585 0. -0.419215 0. 0. 0.00540 0. 0.000201 0. 0. 1.04 -0.8743 0. 0. 0. 1463 120
47(022.457 -0.22005 0. -0.420699 0. 0. 0.00129 0. 0.000406 0. 0. 0.36 -0.2654 0. 0. 0. 1442 120
47023,824 -0.14381 0. -0.427620 0. 0. 0.00386 0. 0.000211 0. 0. 0.20 -0.8742 0. 0. 0. 1463 120
47024.250 -0.15582 0. -0.427445 0. 0. 0.00072 0. 0.000045 0. 0. 0.25 -0.8660 0. 0. 0. 1463 220
4″/029,3″/1 -0.22734 0. -0.423704 0. 0. 0.00085 0. 0.000252 0. 0. 0.23 0.3376 0. 0. 0. 1442 120
4′/031.145 -0.15146 0. -0.431547 0. 0. 0.00501 0. 0.000335 0. 0. 0.26 -0.9105 0. 0. 0. 1463 120
47036.961 -0.16420 0. -0.439180 0. 0. 0.00383 0. 0.000237 0. 0. 0.72 -0.8545 0. 0. 0. 1463 120
4'/037.438 -0.23954 0. -0.433617 0. 0. 0.00146 0. 0.000446 0. 0. 0.76 -0.6028 0. 0. 0. 1442 120
47045.270 -0.24508 0. -0.443276 0. 0. 0.00264 0. 0.001057 0. 0. 0.13 0.1848 0. 0. 0. 1442 120
47050.78) -0.24802 0. -0.450036 0. 0. 0.0009″1 0. 0.000319 0. 0. 0.19 -0.1088 0. 0. 0. 1442 120
47051.95″/ -0.17418 0. -0.458092 0. 0. 0.00326 0. 0.000194 0. 0. 0.23 -0.9271 0. 0. 0. 1463 120
47057.871 -0.18246 0. -0.463435 0. 0. 0.00954 0. 0.000332 0. 0. 0.35 -0.8059 0. 0. 0. 1463 120
47058.793 -0,25402 0. -0.457856 0. 0. 0.00095 0. 0.000321 0. 0. 0.28 -0.1974 0. 0. 0. 1442 120
47064.855 -0.19383 0. -0.475804 0. 0. 0.00280 0. 0.000123 0. 0. 0.12 -0.8956 0. 0. 0. 1463 120
47071.625 -0.26918 0. -0.476732 0. 0. 0.00161 0. 0.000617 0. 0. 0.43 -0.2504 0. 0. 0. 1542 120
4'/0'/2.496 -0.20222 0. -0.486305 0. 0. 0.00445 0. 0.000263 0. 0. 0.29 -0.8728 0. 0. 0. 1563 120
47(178.496 -0.20559 0. -0.499059 0. 0. 0.00427 0. 0.000269 0. 0. 0.27 -0.8785 0. 0. 0. 1563 120
47080.688 -0.28227 0. -0.493697 0. 0. 0.00110 0. 0.000429 0. 0. 0.22 -0.0674 0. 0. 0. 1542 120
47086.309 -0.21067 0. -0.509186 0. 0. 0.00325 0. 0.000267 0. 0. 0.23 -0.8470 0. 0. 0. 1563 120
47086.504 -0.28746 0. -0.500670 0. 0. 0.00172 0. 0.000698 0. 0. 0.69 -0.5507 0. 0. 0. 1542 120
47088.527 -0.28963 0. -0.504238 0. 0. 0.00207 0. 0.000″159 0. 0. 0.42 -0.3109 0. 0. 0. 1542 120
47092.547 -0,23088 0. -0.519379 0. 0, 0.00752, 0. 0.000784 0. 0. 0.23 -0.9590 0. 0. 0. 1563 120
47098.125 -0,21755 0. -0.5285)6 0. 0. 0.00373 0. 0.000205 0. 0. 0.34 -0.8319 0. 0. 0.)563 120
47106.539 -0.22167 0. -0.545281 0. 0. 0.00405 0. 0.000274 0. 0. 0.38 -0.8536 0. 0. 0. 1563 120
47107.156 -0,22714 0. -0.545628 0. 0. 0.00121 0. 0.000080 0. 0. 0.24 -0.8441 0. 0. 0. 1563 220
47107.918 -0.30917 0. -0.538017 0. 0. 0,.00291 0. 0.000723 0. 0. 0.81 0.5275 0. 0. 0. 1543 120
47114.875 -0.32661 0. -0.548849 0. 0. 0.00085 0. 0.000337 0. 0. 0.20 0.2330 0. 0. 0. 1543 120
47119.125 -0.23032 0. -0.566168 0. 0. 0.00383 0. 0.000251 0. 0. 0.08 -0.8902 0. 0. 0. 1563 120
47130.465 -0.34373 0. -0.575122 0. 0. 0.00248 0. 0.000794 0. 0. 0.24 0.7362 0. 0. 0. 1543 120
47134.840 -0.35292 0. -0.583868 0. 0. 0.00107 0. 0.000404 0. 0. 0.21 0.3511 0. 0. 0. 1543 120
47135.129 -0.24838 0. -0.592746 0. 0. 0.00375 0. 0.000241 0. 0. 0.15 -0.9041 0. 0. 0. 1563 120

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47150.410 -0.37640 0.  -0.606566 0. 0. 0.00096 0. 0.000386 0. 0. 0.20 0.5688 0. 0. 0. 1543 120
47155.531 -0.38163 0.  -0.616106 0. 0. 0.00023 0. 0.000098 0. 0. 0.27  0.0115 0. 0. 0. 1543 220
47156.113 -0.23557 0.  -0.625773 0. 0. 0.00277 0. 0.000181 0. 0. 0.23 -0.8541 0. 0. 0. 1563 120
47157.016 -0.38433 0.  -0.619267 0. 0. 0.00035 0. 0.000125 0. 0. 0.30 -0.0634 0. 0. 0. 1543 220
47162.809 -0.23666 0.   0.363690 0. 0. 0.00557 0. 0.000377 0. 0. 0.26 -0.7247 0. 0. 0. 1563 120
47163.352 -0.39308 0.   0.370152 0. 0. 0.00101 0. 0.000347 0. 0. 0.23 0.3490 0. 0. 0. 1543 120
47169.457 -0.40048 0.   0.361170 0. 0. 0.00055 0. 0.000200 0. 0. 0.26 0.0437 0. 0. 0. 1543 120
47170.121 -0.22360 0.   0.353393 0. 0. 0.00212 0. 0.000124 0. 0. 0.16 -0.8881 0. 0. 0. 1563 120
47177.750 -0.21845 0.   0.341860 0. 0. 0.00905 0. 0.000456 0. 0. 0.97 -0.8981 0. 0. 0. 1563 120
47184.070 -0.20780 0.   0.331654 0. 0. 0.00194 0. 0.000121 0. 0. 0.26 -0.8784 0. 0. 0. 1563 120
47185.582 -0.41432 0.   0.334625 0. 0. 0.00059 0. 0.000266 0. 0. 0.15 0.4827 0. 0. 0. 1543 120
47189.305 -0.41991 0.   0.330587 0. 0. 0.00150 0. 0.000540 0. 0. 0.43  0.8427 0. 0. 0. 1543 120
47189.918 -0.19278 0.   0.325124 0. 0. 0.00300 0. 0.000166 0. 0. 0.53 -0.8826 0. 0. 0. 1563 120
47198.094 -0.18357 0.   0.315678 0. 0. 0.00768 0. 0.000787 0. 0. 1.06 -0.7281 0. 0. 0. 1563 120
47.203.125 -0.17170 0.  0.305702 0. 0. 0.00361 0. 0.000203 0. 0. 0.31 -0.9054 0. 0. 0. 1563 120
41204.367 -0.43317 0.   0.307149 0. 0. 0.00047 0. 0.000169 0. 0. 0.17 -0.0548 0. 0. 0. 1543 120
47204.625 -0.43232 0.   0.306527 0. 0. 0.00028 0. 0.000117 0. 0. 0.15 0.1003 0. 0. 0. 1543 220
47206.051 -0.43105 0.   0.304980 0. 0. 0.00028 0. 0.000095 0. 0. 0.33  0.0272 0. 0. 0. 1543 220
47210.125 -0.16696 0.   0.292904 0. 0. 0.00336 0. 0.000196 0. 0. 0.15 -0.8740 0. 0. 0. 1563 120
47211.672 -0.43278 0.   0.291448 0. 0. 0.00084 0. 0.000314 0. 0. 0.21 -0.2345 0. 0. 0. 1543 120
47218.535 -0.43140 0.   0.278493 0. 0. 0.00067 0. 0.000292 0. 0. 0.22 0.2442 0. 0. 0. 1543 120
47218.977 -0.16671 0.   0.276134 0. 0. 0.00239 0. 0.000150 0. 0. 0.16 -0.8577 0. 0. 0. 1563 12.0
47225.570 -0.43890 0.   0.263571 0. 0. 0.00072 0. 0.000289 0. 0. 0.28 0.2531 0. 0. 0. 1543 120
47225.965 -0.15251 0.   0.261728 0. 0. 0.00244 0. 0.000136 0. 0. 0.21 -0.9002 0. 0. 0. 1563 120
47231.129 -0.13426 0.   0.251772 0. 0. 0.00265 0. 0.000141 0. 0. 0.17 -0.8536 0. 0. 0. 1563 120
47233.578 -0.44021 0.   0.249062 0. 0. 0.0006"/ 0. 0.000?67 0. 0. 0.18 0.1734 0. 0. 0. 1543 120
47238.914 -0.11662 0.   0.239713 0. 0. 0.00215 0. 0.000126 0. 0. 0.14 -0.9045 0. 0. 0. 1563 120
47244.445 -0.43331 0.   0.229365 0. 0. 0.00048 0. 0.000241 0. 0. 0.12 0.3923 0. 0. 0. 1543 120
4"1245.914 -0.10024 0.  0.229340 0. 0. 0.00221 0. 0.000146 0. 0. 0.24 -0.7682 0. 0. 0. 1563 220
47246.988 -0.09941 0.   0.228036 0. 0. 0.00306 0. 0.000225 0, 0. 0.38 -0.8232 0. 0. 0. 1563 120
47247.383 -0.09652 0.   0.227497 0. 0. 0.00093 0. 0.000062 0. 0. 0.27 -0.8394 0. 0. 0. 1563 220
47253.117 -0.42618 0.   0.214223 0. 0. 0.00050 0. 0.000308 0. 0. 0.24  0.4453 0. 0. 0. 1543 120
47253.375 -0.42420 0.   0.213620 0. 0. 0.00117 0. 0.000300 0. 0. 0.35 0.6122 0. 0. 0. 1543 220
47253.656 -0.09387 0.   0.215553 0. 0. 0.00346 0. 0.000216 0, 0. 0.30 -0.9062 0. 0. 0. 1563 120
47?54.820 -0.42339 0.   0.210204 0. 0. 0.00039 0. 0.000144 0, 0. 0.20 -0.3198 0. 0. 0. 1543 220
47260.863 -0.08450 0.   0.202425 0. 0. 0.00192 0. 0.000111 0. 0. 0.10 -0.8954 0. 0. 0. 1563 120
47262.039 -0.41541 0.   0.197491 0. 0. 0.00097 0. 0.000222 0. 0. 0.26 -0.0804 0. 0. 0. 1543 120
4"/267.125 -0.40802 0.  0.183869 0. 0. 0.00062 0. 0.000270 0. 0. 0.21  0.1904 0. 0. 0. 1543 120
47272.492 -0.40498 0.  0.173825 0. 0. 0.00062 0. 0.000196 0. 0. 0.18 0.2673 0. 0. 0. 1543 120
47281.656 -0.03289 0.   0.163328 0. 0. 0.00351 0. 0.000190 0. 0. 0.11 -0.8737 0. 0. 0. 1563 120
47289.012 -0.03229 0.   0.153321 0. 0. 0.00234 0. 0.000155 0. 0. 0.46 -0.8707 0. 0. 0. 1563 120
47292.402 -0.38020 0.   0.140851 0. 0. 0.00075 0. 0.000264 0. 0. 0.14 0.2649 0. 0. 0. 1543 120
47295.016 -0.37835 0.   0.134935 0. 0. 0.00060 0. 0.000310 0. 0. 0.13  0.5904 0. 0. 0. 1543 120
47295.293 -0.37819 0.   0.134288 0. 0. 0.00029 0. 0.000093 0. 0. 0.16 0.2724 0. 0. 0. 1543 220
47301.477 -0.01884 0.   0.132136 0. 0. 0.00150 0. 0.000137 0. 0. 0.15 -0.8453 0. 0. 0. 1563 220
47302.285 -0.36930 0.   0.125047 0. 0. 0.00357 0. 0.000918 0. 0. 0.55 0.4167 0. 0. 0. 1543 120
47303.883 -0.01289 0.   0.129073 0. 0. 0.00334 0. 0.000174 0. 0. 0.18 -0.9153 0. 0. 0. 1563 120
47307.863 -0.35602 0.   0.115851 0. 0. 0.00190 0. 0.000582 0. 0. 0.49 -0.2204 0. 0. 0. 1543 120
47309.965 -0.00971 0.   0.118820 0. 0. 0.00249 0. 0.000171 0. 0. 0.23 -0.8524 0. 0. 0. 1563 120
47323.902 -0.00677 0.   0.100895 0. 0. 0.00210 0. 0.000122 0. 0. 0.05 -0.8423 0. 0. 0. 1463 120
47324.070 -0.32435 0.   0.094493 0. 0. 0.00056 0. 0.000176 0. 0. 0.08 -0.1002 0. 0. 0. 1445 120
47330.543 -0.31398 0.   0.090783 0. 0. 0.00103 0. 0.000472 0. 0. 0.52 0.2910 0. 0. 0. 1445 120
47330.72-/ -0.00191 0.  0.097252 0. 0. 0.00232 0. 0.000114 0. 0. 0.23 -0.8873 0. 0. 0. 1463 120
47337.012 -0.29861 0,   0.085496 0. 0. 0.00074 0. 0.000232 0. 0. 0.41 0.1295 0. 0. 0. 1445 120
47338.031  0.01012 0.   0.091599 0. 0. 0,00300 0. 0.000156 0. 0. 0.04 -0.8782 0. 0. 0. 1463 120
47358.820  0.02571 0.   0.084198 0. 0. 0.00505 0. 0.000576 0. 0. 0.13 -0.9420 0. 0. 0. 1463 120
47360.238 -0.25809 0.   0.076321 0. 0. 0.00128 0. 0.000608 0. 0. 0.10 -0.0923 0. 0. 0. 1443 120
47365.938 0.03340 0.   0.078990 0. 0. 0.00232 0. 0.000131 0. 0. 0.19 -0.9136 0. 0. 0. 1463 120
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47367.086 -0.24111 0. 0.071133 0. 0. 0.00128 0. 0.000423 0. 0. 0.24 0.7543 0. 0. 0. 1443 120
47372.973 0.02871 0. 0.075529 0. 0. 0.00215 0. 0.000101 0. 0. 0.33 -0.9282 0. 0. 0. 1463 120
47379.719 0.03295 0. 0.069723 0. 0. 0.00214 0. 0.000281 0. 0. 0.33 -0.8302 0. 0. 0. 1465 220
47380.441 0.02588 0. 0.069814 0. 0. 0.00351 0. 0.000240 0. 0. 0.19 -0.8897 0. 0. 0. 1465 120
47381.180 0.02911 0. 0.070048 0. 0. 0.00155 0. 0.000144 0. 0. 0.25 -0.7882 0. 0. 0. 1465 220
47386.090 -0.20115 0. 0.062331 0. 0. 0.00120 0. 0.000372 0. 0. 0.66 0.2254 0. 0. 0. 1443 120
4"/386.266 0.01917 0. 0.068395 0. 0. 0.00565 0. 0.000315 0. 0. 0.53 -0.7993 0. 0. 0. 1465 120
47393.125 -0.18953 0. 0.057260 0. 0. 0.00066 0. 0.000278 0. 0. 0.15 -0.0161 0. 0. 0. 1443 120
47393.594 -0.18720 0. 0.057144 0. 0. 0.00032 0. 0.000128 0. 0. 0.09 0.2982 0. 0. 0. 1443 220
47400.047 -0.17584 0. 0.055495 0. 0. 0.00154 0. 0.000515 0. 0. 0.56 0.4273 0. 0. 0. 1443 120
47400,223 0.00193 0. 0.061338 0. 0. 0.00943 0. 0.001012 0. 0. 0.75 -0.6891 0. 0. 0. 1465 120
47406.820 -0.16347 0. 0.048812 0. 0. 0.00046 0. 0.000169 0. 0. 0.15 -0.2637 0. 0. 0. 1443 120
47407.148 -0.16292 0. 0.048506 0. 0. 0.00033 0. 0.000127 0. 0. 0.15 0.0610 0. 0. 0. 1443 220
47408.777 -0.00212 0. 0.051588 0. 0. 0.00362 0. 0.000215 0. 0. 0.31 -0.9300 0. 0. 0. 1463 120
47409.242 -0.00028 0. 0.051297 0. 0. 0.00123 0. 0.000088 0. 0. 0.22 -0.7819 0. 0. 0. 1465 220
47415.000 -0.15105 0. 0.043/58 0. 0. 0.00222 0. 0.000711 0. 0. 0.85 0.3964 0. 0. 0. 1443 120
47415.938 -0.01005 0. 0.046290 0. 0. 0.00288 0. 0.000154 0. 0. 0.06 -0.9547 0. 0. 0. 1463 120
47421."/11 -0.02065 0. 0.040850 0. 0. 0.00117 0. 0.000062 0. 0. 0.27 -0.7849 0. 0. 0. 1463 220
47428.938 -0.13368 0. 0.032810 0. 0. 0.00311 0. 0.000736 0. 0. 0.57 0.4906 0. 0. 0. 1443 120
47429.63") -0.04228 0. 0.031257 0. 0. 0.00330 0. 0.000304 0. 0. 0.07 -0.9243 0. 0. 0. 1463 120
4"1435.758 -0.05726 0. 0.022360 0. 0. 0.00267 0. 0.000145 0. 0. 0.23 -0.9408 0. 0. 0. 1463 120
47.435.961 -0.1?.551 0. 0.023762 0. 0. 0.00066 0. 0.000267 0. 0. 0.07 0.2874 0. 0. 0. 1443 120
47442.832 -0.08545 0. 0.014158 0. 0. 0.01495 0. 0.000868 0. 0. 0.37 -0.9914 0. 0. 0. 1463 120
47443.930 -0.12183 0. 0.014311 0. 0. 0.00089 0. 0.000329 0. 0. 0.45 0.3092 0. 0. 0. 1443 120
47457.875 -0.12098 0. -0.005504 0. 0. 0.00061 0. 0.000302 0. 0. 0.26 0.1358 0. 0. 0. 1443 120
4'/463.289 -0.12251 0. -0.011314 0. 0. 0.00058 0. 0.000244 0. 0. 0.12 -0.5952 0. 0. 0. 1443 120
47471.199 -0.16771 0. -0.032201 0. 0. 0.00399 0. 0.000238 0. 0. 0.03 -0.9414 0. 0. 0. 1463 120
4./4"/1.844 -0.17077 0. -0.033288 0. 0. 0.00094 0. 0.000061 0. 0. 0.19 -0.9071 0. 0. 0. 1463 220
47472.7.66 -0.13198 0. -0.025478 0. 0. 0.00091 0. 0.000306 0. 0. 0.09 -0.3000 0. 0. 0. 1443 120
47477.781 -0.19038 0. -0.042665 0. 0. 0.00347 0. 0.000191 0. 0. 0.21 -0.9466 0. 0. 0. 1463 120
47484.488 -0.20604 0. -0.055056 0. 0. 0,00185 0. 0.000109 0. 0. 0.13 -0.8983 0. 0. 0. 1463 120
47485.918 -0.15424 0. -0.046185 0. 0. 0.0012"7 0. 0.000440 0. 0. 0.42 0.1170 0. 0. 0. 1443 120
47491.469 -0.16518 0. -0.054773 0. 0. 0.00042 0. 0.000240 0. 0. 0.12 0.3402 0. 0. 0. 1443 120
47<,99.906 -0.18361 0. -0.067931 0. 0. 0.00052 0. 0.000274 0. 0. 0.14 0.3520 0. 0. 0. 1443 120
47506.145 -0.26796 0. -0.089203 0. 0. 0.00248 0. 0.000120 0. 0. 0.29 -0.8378 0. 0. 0. 1463 120
47506.332 -0.19913 0. -0.076068 0. 0. 0.00060 0. 0.000344 0. 0. 0.23 -0.5418 0. 0. 0. 1443 120
47512.637 -0.28451 0. -0.099182 0. 0. 0.00308 0. 0.000157 0. 0. 0.26 -0.9503 0. 0. 0. 1463 120
475,21.395 -0.24384 0. -0.093736 0. 0. 0.00053 0. 0.000254 0. 0. 0.17 0.2130 0. 0. 0. 1443 120
475,26.086 -0.29856 0. -0.114031 0. 0. 0.00372 0. 0.000189 0. 0. 0.23 -0.9499 0. 0. 0. 1463 120
47529.496 -0.26600 0. -0.104145 0. 0. 0.00049 0. 0.000209 0. 0. 0.15 -0.2181 0. 0. 0. 1443 120
47534.063 -0.29927 0. -0.122485 0. 0. 0.00298 0. 0.000157 0. 0. 0.09 -0.9533 0. 0. 0. 1463 120
4"1534.391 -0.27784 0. -0.107880 0. 0. 0.00054 0. 0.000222 0. 0. 0.13 0.1213 0. 0. 0. 1443 120
47541.410 -0.29670 0. -0.119235 0. 0. 0.00062 0. 0.000251 0. 0. 0.11 -0.3302 0. 0. 0. 1443 120
47541.902 -0.30645 0. -0.134257 0. 0. 0.00410 0. 0.000252 0. 0. 0.15 -0.9118 0. 0. 0. 1463 120
47547.465 -0.31295 0. -0.125077 0. 0. 0.00041 0. 0.000199 0. 0. 0.09 -0.2804 0. 0. 0. 1443 120
47548.566 -0.30633 0. -0.140317 0. 0. 0.00280 0. 0.000147 0. 0. 0.12 -0.9544 0. 0. 0. 1463 120
47554.488 -0.32913 0. -0.136169 0. 0. 0.00038 0. 0.000156 0. 0. 0.10 0.0653 0. 0. 0. 1443 120
4'/555.086 -0.30819 0. -0.150970 0. 0. 0.00169 0. 0.000082 0. 0. 0.09 -0.8836 0. 0. 0. 1463 120
47562.258 -0.30617 0. -0.159668 0. 0. 0.00114 0. 0.000064 0. 0. 0.16 -0.8750 0. 0. 0. 1463 220
47568.586 -0.31215 0. -0.171547 0. 0. 0.00970 0. 0.000665 0. 0. 1.68 -0.9257 0. 0. 0. 1463 120
47576.086 -0.29709 0. -0.179767 0. 0. 0.00186 0. 0.000097 0. 0. 0.08 -0.8814 0. 0. 0. 1463 120
47576.293 -0.38642 0. -0.168523 0. 0. 0.00057 0. 0.000238 0. 0. 0.12 -0.1286 0. 0. 0. 1443 120
47583,129 -0.40598 0. -0.179378 0. 0. 0.00058 0. 0.000297 0. 0. 0.17 -0.3114 0. 0. 0. 1443 120
47589.281 -0.42004 0. -0.187400 0. 0. 0.00050 0. 0.000234 0. 0. 0.15 -0.0292 0. 0. 0. 1443 120
47589.992 -0.27758 0. -0.198193 0. 0. 0.00191 0. 0.000089 0. 0. 0.13 -0.8911 0. 0. 0. 1463 120
475'97.543 -0.43618 0. -0.205345 0. 0. 0.00054 0. 0.000255 0. 0. 0.15 0.4712 0. 0. 0. 1443 120
47603.879 -0.45028 0. -0.214755 0. 0. 0.00053 0. 0.000218 0. 0. 0.17 -0,5090 0. 0. 0, 1443 120
47604.621 -0.25168 0. -0.223951 0. 0. 0.00044 0. 0.000028 0. 0. 0.07 -0.9121 0. 0. 0. 1463 220

47611.086 -0.23836 0. -0.235808 0. 0. 0.00214 0. 0.000119 0. 0. 0.19 -0.8422 0. 0. 0. 1463 120
47611.566 -0.46272 0. -0.230585 0. 0. 0.00059 0. 0.000279 0. 0. 0.17 0.5084 0. 0. 0. 1443 120
47618.520 -0.46793 0. -0.239588 0. 0. 0.00113 0. 0.000490 0. 0. 0.08 0.3153 0. 0. 0. 1443 122
47623.039 -0.20458 0. -0.254780 0. 0. 0.00302 0. 0.000177 0. 0. 0.05 -0.9377 0. 0. 0. 1463 120
47632.477 -0.48357 0. -0.265653 0. 0. 0.00047 0. 0.000209 0. 0. 0.10 0.2257 0. 0. 0. 1443 120
47633.070 -0.17260 0. -0.269497 0. 0. 0.00366 0. 0.000341 0. 0. 0.08 -0.9359 0. 0. 0. 1463 120
47634.199 -0.17462 0. -0.271065 0. 0. 0.00067 0. 0.000047 0. 0. 0.16 -0.8701 0. 0. 0. 1463 220
47638.219 -0.48772 0. -0.277946 0. 0. 0.00062 0. 0.000360 0. 0. 0.08 -0.4633 0. 0. 0. 1443 122
47645.887 -0.15555 0. -0.292205 0. 0. 0.00274 0. 0.000123 0. 0. 0.25 -0.9435 0. 0. 0. 1463 120
47652.496 -0.13290 0. -0.307189 0. 0. 0.00297 0. 0.000202 0. 0. 0.18 -0.9299 0. 0. 0. 1463 120
47652.934 -0.48557 0. -0.308835 0. 0. 0.00050 0. 0.000269 0. 0. 0.09 -0.3828 0. 0. 0. 1443 120
4'/653.551 -0.48603 0. -0.309684 0. 0. 0.00006 0. 0.000031 0. 0. 0.07 0.0833 0. 0. 0. 1443 220
4"/559.305 -0.11814 0. -0.316483 0. 0. 0.00460 0. 0.000244 0. 0. 0.24 -0.9304 0. 0. 0. 1463 120
47666.441 -0.09829 0. -0.328782 0. 0. 0.00319 0. 0.000187 0. 0. 0.17 -0.9672 0. 0. 0. 1463 120
47666.996 -0.48013 0. -0.332493 0. 0. 0.00087 0. 0.000334 0. 0. 0.34 -0.2486 0. 0. 0. 1443 120
47675.113 -0.47137 0. -0.347452 0. 0. 0.00050 0. 0.000230 0. 0. 0.13 -0.1695 0. 0. 0. 1443 120
47680.090 -0.46618 0. -0.358471 0. 0. 0.00046 0. 0.000180 0. 0. 0.12 -0.0489 0. 0. 0. 1443 120
47682.082 -0.05012 0. -0.355593 0. 0. 0.0027'7 0. 0.000155 0. 0. 0.23 -0.9378 0. 0. 0. 1463 120
47688.090 -0.45724 0. -0.369195 0. 0. 0.00043 0. 0.0002.32 0. 0. 0.11 0.1568 0. 0, 0. 1443 120
47688.711 -0.037"/8 O. -0.363730 0. 0. 0.00194 0. 0.000109 0. 0. 0.35 -0.8348 0. 0. 0. 1463 120
47695.078 -0.44452 0. -0.378620 0. 0. 0.00043 0. 0.000181 0. 0. 0.09 -0.1195 0. 0. 0. 1443 120
47695.746 -0.02246 0. -0.371262 0. 0. 0.00321 0. 0.000149 0. 0. 0.19 -0.9439 0. 0. 0. 1463 120
47'/00.039 -0.43562 0. -0.383255 0. 0. 0.00048 0. 0.000184 0. 0. 0.15 -0.2896 0. 0. 0. 1443 120
47'/02.691 -0.00066 0. -0.378676 0. 0. 0.00219 0. 0.000131 0. 0. 0.21 -0.8610 0. 0. 0. 1463 120
47711.004 -0.41269 0. -0.395418 0. 0. 0.00044 0. 0.000151 0. 0. 0.17 -0.1579 0. 0. 0. 1443 120
47"/16.023 -0.39928 0. -0.400501 0. 0. 0.00046 0. 0.000184 0. 0. 0.08 0.0756 0. 0. 0. 1443 120
47716.703 0.03619 0. -0.390465 0. 0. 0.00204 0. 0.000100 0. 0. 0.13 -0.9132 0. 0. 0. 1463 120
4"/'/1'/.961 -0.39549 0. -0.402759 0. 0. 0.00011 0. 0.000056 0. 0. 0.04 0.0")10 o. 0. 0. 1545 220
47"/21.980 -0.38446 0. -0.406614 0. 0. 0.00053 0..0.000152 0. 0. 0.15 -0.1719 0. 0. 0. 1443 120
47')23.664 0.06294 0. -0.396713 0. 0. 0.00291 0. 0.000129 0. 0. 0.12 -0.9567 0. 0. 0. 1463 120
47729.9-/3 -0.36581 0. -0.416787 0. 0. 0.00043 0. 0.000185 0. 0. 0.17 0.0557 0. 0. 0. 1443 120
47'730.641 0.07017 0. -0.405440 0. 0. 0.00289 0. 0.000127 0. 0. 0.06 -0.9597 0. 0. 0. 1463 120
47736.930 -0.34318 0. -0.424060 0. 0. 0.00035 0. 0.000150 0. 0. 0.20 -0.0650 0. 0. 0. 1443 120
47737.598 0.06681 0. -0.411650 0. 0. 0.00213 0. 0.000097 0. 0. 0.14 -0.9004 0. 0. 0. 1463 120
47743.8")5 -0.32112 0. -0.431199 0. 0. 0.00040 0. 0.000199 0. 0. 0.13 -0.0860 0. 0. 0. 1443 120
47744.5"14 0.08179 0. -0.418799 0. 0. 0.00288 0. 0.000106 0. 0. 0.16 -0.8977 0. 0. 0. 1463 120
47750.848 -0.30104 0. -0.437629 0. 0. 0.00071 0. 0.000272 0. 0. 0.22 -0.3004 0. 0. 0. 1443 120
47751.5"14 0.10173 0. -0.424841 0. 0. 0.00269 0. 0.000113 0. 0. 0.14 -0.9232 0. 0. 0. 1463 120
47758,539 0.11062 0. -0.435459 0. 0. 0.00214 0. 0.000093 0. 0. 0.14 -0.9095 0. 0. 0. 1463 120
47'764.813 -0.25652 0. -0.455312 0. 0. 0.00047 0. 0.000204 0. 0. 0.10 -0.1282 0. 0. 0. 1443 120
47771.828 -0.23361 0. -0.463397 0. 0. 0.00037 0. 0.000148 0. 0. 0.12 -0.2447 0. 0. 0. 1443 120
47"/76."/77 -0.21694 0. -0.467944 0. 0. 0.00013 0. 0.000066 0. 0. 0.06 0.'1014 0. 0. 0. 1545 220
477'78.813 -0.21064 0. -0.469285 0. 0. 0.00038 0. 0.000155 0. 0. 0.12 -0.2417 0. 0. 0. 1443 120
477'79.492 0.11182 0. -0.457390 0. 0. 0.00344 0. 0.000203 0. 0. 0.24 -0.8575 0. 0. 0. 1463 120
47"182.734 0.11101 0. -0.461570 0. 0. 0.00096 0. 0.000064 0. 0. 0.09 -0.9171 0. 0. 0. 1565 220
4.7"/85."173 -0.18999 0. -0.478843 0. 0. 0.00040 0. 0.000181 0. 0. 0.15 -0.1365 0. 0. 0. 1443 120
477136.492 0.08757 0. -0.468386 0. 0. 0.00815 0. 0.00042-/ O. 0. 1.33 -0.7894 0. 0. 0. 1463 120
47792.79"1 -0.16926 0. -0.487662 0. 0. 0.00050 0. 0.000212 0. 0. 0.10 -0.3664 0. 0. 0. 1443 120
47793.438 0.10643 0. -0.478715 0. 0. 0.00262 0. 0.000143 0. 0. 0.23 -0.9019 0. 0. 0. 1463 120
47797.770 -0.15369 0. -0.494473 0. 0. 0.00043 0. 0.000175 0. 0. 0.10 -0.1493 0. 0. 0. 1443 120
47802.703 -0.14176 0. -0.501770 0. 0. 0.00016 0. 0.000060 0. 0. 0.06 0.3653 0. 0. 0. 1445 220
47805,"/34 -0.134"/1 O. -0.504771 0. 0. 0.00036 0. 0.000152 0. 0. 0.12 -0.1991 0. 0. 0. 1443 120
47808.445 0.06612 0. -0.500542 0. 0. 0.00321 0. 0.000148 0. 0. 0.04 -0.9638 0. 0. 0. 1463 120
47813.824 -0.11216 0. -0.519260 0. 0. 0.00233 0. 0.000671 0. 0. 1.10 0.1734 0. 0. 0. 1443 120
47814.395 0.04948 0. -0.514366 0. 0. 0.00341 0. 0.000?13 O. 0. 0.11 -0.82.67 0. 0. 0. 1463 120
47821.691 -0.10086 0. -0.532693 0. 0. 0,00043 0. 0.000165 0. 0. 0.08 -0.1246 0. 0. 0. 1443 120
4"1827.676 -0.09135 0. -0.545763 0. 0. 0.00033 0. 0.000140 0. 0. 0.09 -0.2925 0. 0. 0. 1443 120
47829.375 0.00963 0. -0.545986 0. O. 0.00290 0. 0.000133 0. 0. 0.10 -0.9652 0. 0. 0. 1463 120

47835.348 -0.00766 0. -0.555972 0. 0. 0.00250 0. 0.000122 0. 0. 0.08 -0.9343 0. 0. 0. 1463 120
47841.340 -0.02847 0. -0.571041 0. 0. 0.00286 0. 0.000130 0. 0. 0.08 -0.9584 0. 0. 0. 1463 120
47843.652 -0.07327 0. -0.575832 0. 0. 0.00040 0. 0.000170 0. 0. 0.13 -0.2225 0. 0. 0. 1443 120
47848.379 -0.05335 0. -0.585107 0. 0. 0.00251 0. 0.000127 0. 0. 0.14 -0.8511 0. 0. 0. 1463 120
47849.629 -0.07169 0. -0.585715 0. 0. 0.00040 0. 0.000164 0. 0. 0.10 -0.1354 0. 0. 0. 1443 120
47855.355 -0.07830 0. -0.602067 0. 0. 0.00177 0. 0.000086 0. 0. 0.13 -0.9013 0. 0. 0. 1463 120
47857.609 -0.07548 0. -0.602612 0. 0. 0.00046 0. 0.000174 0. 0. 0.14 -0.0842 0. 0. 0. 1443 120
47862.582 -0.10454 0. -0.616139 0. 0. 0.00216 0. 0.000130 0. 0. 0.20 -0.9064 0. 0. 0. 1463 120
47863.363 -0.07416 0. -0.611797 0. 0. 0.00041 0. 0.000227 0. 0. 0.13 -0.0770 0. 0. 0. 1443 120
47863.641 -0.07508 0. -0.612573 0. 0. 0.00037 0. 0.000223 0. 0. 0.05 0.2265 0. 0. 0. 1445 220
47869.730 -0.08414 0. -0.626621 0. 0. 0.00049 0. 0.000189 0. 0. 0.10 0.2462 0. 0. 0. 1443 120
478″10.926 -0.13489 0. -0.634898 0. 0. 0.00305 0. 0.000172 0. 0. 0.14 -0.9412 0. 0. 0. 1463 120
47876.289 -0.15332 0. -0.643819 0. 0. 0.002″/9 0. 0.000171 0. 0. 0.30 -0.8661 0. 0. 0. 1465 120
47877.574 -0.09642 0. -0.637992 0. 0. 0.00034 0. 0.000142 0. 0. 0.08 -0.1196 0. 0. 0. 1443 120
47883.633 -0.10650 0. -0.649608 0. 0. 0.00036 0. 0.000190 0. 0. 0.14 -0.1164 0. 0. 0. 1443 120
47891.238 -0.19886 0. -0.669688 0. 0. 0.00272 0. 0.000177 0. 0. 0.14 -0.8660 0. 0. 0. 1465 120
4″/897.195 -0.21555 0. 0.317850 0. 0. 0.00263 0. 0.000132 0. 0. 0.08 -0.9201 0. 0. 0. 1465 120
47′305.199 -0.24087 0. 0.306150 0. 0. 0.00229 0. 0.000111 0. 0. 0.11 -0.8989 0. 0. 0. 1465 120
47905.359 -0.14883 0. 0.319078 0. 0. 0.00050 0. 0.000256 0. 0. 0.14 0.5421 0. 0. 0. 1443 120
47911.547 -0.16443 0. 0.308773 0. 0. 0.00042 0. 0.000156 0. 0. 0.17 -0.0254 0. 0. 0. 1443 120
47918.344 -0.17911 0. 0.300892 0. 0. 0.00054 0. 0.000262 0. 0. 0.07 0.0828 0. 0. 0. 1443 120
47919.117 -0.29003 0. 0.283614 0. 0. 0.00214,0. 0.000132 0. 0. 0.09 -0.8674 0. 0. 0. 1465 120
47924.445 -0.19631 0. 0.286685 0. 0. 0.00161 0. 0.000467 0. 0. 0.89 -0.0344 0. 0. 0. 1443 120
47925.102 -0.30397 0. 0.267663 0. 0. 0.00333 0. 0.000212 0. 0. 0.08 -0.8877 0. 0. 0. 1465 120
47933.090 -0.32907 0. 0.250048 0. 0. 0.00220 0. 0.000111 0. 0. 0.08 -0.9206 0. 0. 0. 1465 120
47933.414 -0.22767 0. 0.266318 0. 0. 0.00032 0. 0.000125 0. 0. 0.06 -0.0156 0. 0. 0. 1443 120
47940.820 -0.25854 0. 0.248918 0. 0. 0.00007 0. 0.000036 0. 0. 0.09 0.0189 0. 0. 0. 1545 220
4′/945.988 -0.34994 0. 0.222100 0. 0. 0.00031 0. 0.000019 0. 0. 0.06 -0.9157 0. 0. 0. 1565 220
47946.453 -0.356″/7 0. 0.221424 0. 0. 0.00247 0. 0.000140 0. 0. 0.26 -0.9092 0. 0. 0. 1465 120
47947.281 -0.27682 0. 0.236877 0. 0. 0.00045 0. 0.000186 0. 0. 0.10 0.1619 0. 0. 0. 1443 120
47953.875 -0.30513 0. 0.221158 0. 0. 0.00050 0. 0.000133 0. 0. 0.15 -0.2591 0. 0. 0. 1443 120
47954.910 -0.35294 0. 0.201292 0. 0. 0.00324 0. 0.000180 0. 0. 0.24 -0.8675 0. 0. 0. 1465 120
47959.137 -0.36573 0. 0.193723 0. 0. 0.00258 0. 0.000138 0. 0. 0.16 -0.8520 0. 0. 0. 1563 120
47959.941 -0.32856 0. 0.209150 0. 0. 0.00108 0. 0.000377 0. 0. 0.09 -0.6892 0. 0. 0. 1543 120
47967.348 -0.35282 0. 0.192460 0. 0. 0.00051 0. 0.000272 0. 0. 0.08 -0.4424 0. 0. 0. 1445 120
47968.0-/8 .0.37625 0. 0.173285 0. 0. 0.00240 0. 0.000143 0. 0. 0.31 -0.8309 0. 0. 0. 1465 120
47974.344 -0.37882 0. 0.176269 0. 0. 0.00041 0. 0.000223 0. 0. 0.17 -0.1831 0. 0. 0. 1543 120
47975.496 -0.37500 0. 0.155369 0. 0. 0.00347 0. 0.000192 0. 0. 0.13 -0.9532 0. 0. 0. 1563 120
47982.301 -0.40895 0. 0.153868 0. 0. 0.00046 0. 0.000258 0. 0. 0.08 -0.4381 0. 0. 0. 1445 120
47982.824 -0.37303 0. 0.136322 0. 0. 0.00269 0. 0.000146 0. 0. 0.11 -0.9063 0. 0. 0. 1465 120
47988.375 -0.43063 0. 0.139896 0. 0. 0.00069 0. 0.000328 0. 0. 0.08 0.1496 0. 0. 0. 1543 120
47990.074 -0.36492 0. 0.119110 0. 0. 0.00249 0. 0.000162 0. 0. 0.12 -0.8666 0. 0. 0. 1563 120
47991.906 -0.44520 0. 0.129887 0. 0. 0.00008 0. 0.000036 0. 0. 0.07 0.0391 0. 0. 0. 1545 220
47995.449 -0.36090 0. 0.107443 0. 0. 0.00044 0. 0.000023 0. 0. 0.08 -0.9315 0. 0. 0. 1565 220
4″/996.223 -0.46037 0. 0.120792 0. 0. 0.00040 0. 0.000154 0. 0. 0.09 -0.0649 0. 0. 0. 1445 120
4799″1.293 -0.36323 0. 0.104407 0. 0. 0.00234 0. 0.000130 0. 0. 0.18 -0.9401 0. 0. 0. 1465 120
48003.262 -0.35268 0. 0.090419 0. 0. 0.00266 0. 0.000163 0. 0. 0.10 -0.8272 0. 0. 0. 1563 120
48005.402 -0,48840 0. 0.09″/607 0. 0. 0.00135 0. 0.000462 0. 0. 0.30 0.5957 0. 0. 0. 1445 120
48010.297 -0.49860 0. 0.087245 0. 0. 0.00078 0. 0.000321 0. 0. 0.20 -0.0014 0. 0. 0. 1445 120
48011.039 -0.34299 0. 0.073134 0. 0. 0.00232 0. 0.000125 0. 0. 0.13 -0.8357 0. 0. 0. 1563 120
48016.355 -0.51113 0. 0.075138 0. 0. 0.00094 0. 0.000333 0. 0. 0.28 0.4008 0. 0. 0. 1445 120
48019.004 -0.33063 0. 0.057661 0. 0. 0.00260 0. 0.000150 0. 0. 0.16 -0.8274 0. 0. 0. 1465 120
480,24.027 -0.31313 0, 0.049895 0. 0. 0.00211 0. 0.000111 0. 0. 0.21 -0.8970 0. 0. 0. 1563 120
48024.293 -0.53449 0. 0.059734 0. 0. 0.00048 0. 0.000206 0. 0. 0.10 0.3284 0. 0. 0. 1543 120
48031.465 -0.29695 0. 0.034926 0. 0. 0.00297 0. 0.000187 0. 0. 0.20 -0.9397 0. 0. 0. 1465 120
48033.348 -0.55098 0. 0.037838 0. 0. 0.00059 0. 0.00021″) 0. 0. 0.08 0.3960 0. 0. 0. 1543 120
48039.098 -0.26931 0. 0.019609 0. 0. 0.00243 0. 0.000159 0. 0. 0.23 -0.8951 0. 0. 0. 1465 120
48040.297 -0.56158 0. 0.023591 0. 0. 0.00050 0. 0.000218 0. 0. 0.11 0,4490 0, 0. 0. 1543 120

48044.121 -0.25011 0. 0.009374 0. 0. 0.00241 0. 0.000123 0. 0. 0.13 -0.9316 0. 0. 0. 1465 120
48049.293 -0.56880 0. 0.005164 0. 0. 0.00112 0. 0.000366 0. 0. 0.41 0.2537 0. 0. 0. 1445 120
48052.113 -0.22062 0. -0.002193 0. 0. 0.00197 0. 0.000097 0. 0. 0.18 -0.8988 0. 0. 0. 1563 120
48055.035 -0.5″1199 0. -0,003962 0. 0. 0.00085 0. 0.000306 0. 0. 0.27 -0.0604 0. 0. 0. 1445 120
48060.164 -0.18875 0. -0.016746 0. 0. 0.00299 0. 0.000160 0. 0. 0.26 -0.9418 0. 0. 0. 1563 120
48063.996 -0.57417 0. ‘0.022365 O. 0. 0.00048 0. 0.000208 0. 0. 0.07 -0.0235 0. 0. 0. 1445 120
48066.047 -0.17012 0. -0.025262 0. 0. 0.00253 0. 0.000121 0. 0. 0.23 -0.9213 0. 0. 0. 1465 120
48070.043 -0.56928 0. -0.032662 0. 0. 0.00046 0. 0.000191 0. 0. 0.16 0.0070 0. 0. 0. 1445 120
480″/2.227 -0.14664 0. -0.035636 0. 0. 0.00486 0. 0.000346 0. 0. 0.06 -0.9035 0. 0. 0. 1563 120
48077.078 -0.56518 0. -0.045843 0. 0. 0.00047 0. 0.000191 0. 0. 0.14 -0.1308 0. 0. 0. 1543 120
48080.109 -0.11626 0. -0.044262 0. 0. 0.00297 O. 0.000156 0. 0. 0.16 -0.9435 0. 0. 0. 1563 120
48081.016 -0.56106 0. -0.049887 0. 0. 0,00038 0. 0.000170 0. 0. 0.07 0.0555 0. 0. 0. 1543 120
48091.211 -0.54600 0. -0.066699 0. 0. 0.00060 0. 0.000284 0. 0. 0.12 0.3605 0. 0. 0. 1445 120
48092.469 -0.54428 0. -0.067147 0. 0. 0.00007 0. 0.000032 0. 0. 0.08 0.0740 0. 0. 0. 1545 220
48093.9)4 -0.04739 0. -0.061078 0. 0. 0.00198 0. 0.000102 0. 0. 0.22 -0.9014 0. 0. 0. 1563 120
48098.156 -0.53211 0. -0.075239 0. 0. 0.00061 0. 0.000234 0. 0. 0.19 0.4133 0. 0. 0. 1543 120
48101.47′/ -0.01642 0. -0.071258 0. 0. 0.00518 0. 0.000329 0. 0. 0.17 -0.9255 0. 0. 0. 1563 120
48103.008 -0.0)465 O. -0.072996 0. 0. 0.00030 0. 0.000017 0. 0. 0.07 -0.9164 0. 0. 0. 1565 220
48105.195 -0.51404 0. -0.084710 0. 0. 0.00059 0. 0.000272 0. 0. 0.12 0.4867 0. 0. 0. 1543 120
48108.023 0.00181 0. -0.077508 0. 0. 0.00266 0. 0.000124 0. 0. 0.17 -0.9094 0. 0. 0. 1563 120
48111.371 -0.496-/8 O. -0.093461 0. 0. 0.00058 0. 0.000212 0. 0. 0.15 0.2589 0. 0. 0. 1543 120
48.1)5.105 0.02364 0. -0.090047 0. 0. 0.00335 0. 0.000211 0. 0. 0.21 -0.9052 0. 0. 0. 1465 120
48.118.340 -0.4′/920 O. -0.107092 0. 0. 0.00070 0. 0.000211 0. 0. 0.09 0.5826 0. 0. 0. 1445 120
48122.082 0.04121 0. -0.099522 0. 0. 0.00299 0. 0.000162 0. 0. 0.12 -0.9153 0. 0. 0. 1465 120
48125.246 -0.45961 0. -0.119524 0. 0. 0.00046 0. 0.000190 0. 0. 0.15 0.0246 0. 0. 0. 1445 120
48129.262 0.07117 0. -0.114325 0. 0. 0.00288 0. 0.000150 0. 0. 0.18 -0.8699 0. 0. 0. 1465 120
48132.418 -0.43730 0. -0.132837 0. 0. 0.00052 0. 0.000181 0. 0. 0.16 -0.3509 0. 0. 0. 1543 120
48136.113 0.08384 0. -0.123327 0. 0. 0.00354 0. 0.000233 0. 0. 0.32 -0.9655 0. 0. 0. 1465 120
48139.344 -0.41550 0. -0.144661 0. 0. 0.00045 0. 0.000149 0. 0. 0.28 0.0750 0. 0. 0. 1543 120
48144.113 0.10514 0. -0.139969 0. 0. 0.00299 0. 0.000209 0. 0. 0.7.9 -0.9495 0. 0. 0. 1465 120
481.47.3″/1 -0.38416 0. -0.160109 0. 0. 0.00052 0. 0.0001″/0 O. 0. 0.27 -0.3563 0. 0. 0. 1445 120
48150.086 0.12848 0. -0.150209 0. 0. 0.00551. 0. 0.000354 0. 0. 0.19 -0.9828 0. 0. 0. 1465 1?.0
48154.38″/ -0.35606 0. -0.174936 0. 0. 0.00069 0. 0.000240 0. 0. 0.30 -0.6104 0. 0. 0. 1543 120
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48159.7″/0 -0.33712 0. -0.184674 0. 0. 0.00012 0. 0.000042 0. 0. 0.07 -0.0412 0. 0. 0. 1545 220
48160,383 -0.33298 0. -0.185668 0. 0. 0.00114 0. 0.000265 0. 0. 0.12 -0.8277 0. 0. 0. 1543 120
48161.7″/3 0.12672 0. -0.172694 0. 0. 0.0003″/ O. 0.000020 0. 0. 0.07 -0.9381 0. 0. 0. 1565 220
48164.285 -0.31823 0. -0.192797 0. 0. 0.00010 0. 0.000040 0. 0. 0.06 0.0316 0. 0. 0. 1545 220
48164.934 0.13409 0. -0.179389 0. 0. 0.00238 0. 0.000135 0. 0. 0.12 -0.8973 0. 0. 0. 1465 120
48168.406 -0.30404 0. -0.204018 0. 0. 0.00076 0. 0.000271 0. 0. 0.12 -0.6037 0. 0. 0. 1543 120
48172.176 0.12619 0. -0.196940 0. 0. 0.00452 0. 0.000231 0. 0. 0.15 -0.9061 0. 0. 0. 1465 120
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48179.148 0.13897 0. -0.211618 0. 0. 0.00329 0. 0.000176 0. 0. 0.24 -0.9103 0. 0. 0. 1465 120
48184.922 0.13113 0. -0.223944 0. 0. 0.00658 0. 0.000318 0. 0. 0.08 -0.9676 0. 0. 0. 1465 120
48187.492 -0.22848 0. -0.241532 0. 0. 0.00061 0. 0.000214 0. 0. 0.11 -0.4065 0. 0. 0. 1445 120
48192.195 0.12830 0. -0.238136 0. 0. 0.00361 0. 0.000223 0. 0. 0.30 -0.9492 0. 0. 0. 1563 120
48194.402 -0.20871 0. -0.256587 0. 0. 0.00061 0. 0.000243 0. 0. 0,13 -0.5490 0. 0. 0. 1543 120
48196.328 -0.20266 0. -0.262286 0. 0. 0.00016 0. 0.000064 0. 0. 0.08 -0.0249 0. 0. 0. 1545 220
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482137.129 0.11131 0. -0.274722 0. 0. 0.00059 0. 0.000031 0. 0. 0.03 -0.9332 0. 0. 0. 1565 220
482(39.492 -0.15759 0. -0.289452 0. 0. 0.00641 0. 0.001662 0. 0. 0.11 0.9395 0. 0. 0. 1543 120
48213.043 0.10529 0. -0.287682 0. 0. 0.00366 0. 0.000161 0. 0. 0.14 -0.8585 0. 0. 0, 1465 120
48216.617 -0.14454 0. -0.303065 0. 0. 0.00040 0. 0.000179 0. 0. 0.11 -0.1480 0. 0. 0. 1445 120
48219.785 0.08504 0. -0.300261 0. 0. 0.00232 0. 0.000127 0. 0. 0.21 -0.8819 0. 0. 0. 1465 120

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48223.426 -0.1282.1 0.  -0.318925 0. 0. 0.00055 0. 0.000208 0. 0. 0.12 -0.1396 0. 0. 0. 1543 120
48230.578 -0.11394 0.   -0.333705 0. 0. 0.00040 0. 0.000172 0. 0. 0.17 -0.1528 0. 0. 0. 1445 120
48237.531 -0.10075 0.   -0.348695 0. 0. 0.00062 0. 0.000200 0. 0. 0.22 -0.0457 0. 0. 0. 1543 120
48241.102  0.03239 0.   -0.349296 0. 0. 0.00336 0. 0.000197 0. 0. 0.18 -0.9353 0. 0. 0. 1465 120
48247.156 0.02021 0.    -0.359487 0. 0. 0.00258 0. 0.000212 0. 0. 0.20 -0.8757 0. 0. 0. 1465 120
48251.512 -0.07947 0.   -0.372236 0. 0. 0.00051 0. 0.000202 0. 0. 0.16 -0.0043 0. 0. 0. 1445 120
48254.2-/0 -0.00413 0.  -0.376347 0. 0. 0.00258 0. 0.000132 0. 0. 0.17 -0.9000 0. 0. 0. 1465 120
48255.859 -0.01223 0.   -0.379129 0. 0. 0.00038 0. 0.000023 0. 0. 0.06 -0.9181 0. 0. 0. 1565 220
48262.078 -0.03618 0.    0.606494 0. 0. 0.00213 0. 0.000157 0. 0. 0.08 -0.8692 0. 0. 0. 1465 120
48265.492 -0.07488 0.    0.599933 0. 0. 0.00062 0. 0.000303 0. 0. 0.06 0.2630 0. 0. 0. 1543 120
48268.188 -0.05143 0.    0.593061 0. 0. 0.00241 0. 0.000210 0. 0. 0.05 -0.8876 0. 0. 0. 1563 120
48276.148 -0.07868 0.    0.576172 0. 0. 0.00398 0. 0.000195 0. 0. 0.14 -0.9334 0. 0. 0. 1563 120
4$2″/9.496 -0.07011 0.   0.572677 0. 0. 0.00057 0. 0.000225 0. 0. 0.28 0.0847 0. 0. 0. 1543 120
48283.152 -0.10144 0.    0.561093 0. 0. 0.00172 0. 0.000093 0. 0. 0.16 -0.8843 0. 0. 0. 1563 120
4.8286.457 -0.07554 0.   0.561076 0. 0. 0.00043 0. 0.000183 0. 0. 0.12 0.0118 0. 0. 0. 1543 120
48293.539 -0.07729 0.    0.545284 0. 0. 0.00040 0. 0.000167 0. 0. 0.13 0.3172 0. 0. 0. 1443 120
48297.230 -0.15969 0.    0.530585 0. 0. 0.00182 0. 0.000105 0. 0. 0.22 -0.8270 0. 0. 0. 1463 120
48298.418 -0.16214 0.    0.528366 0. 0. 0.00029 0. 0.000017 0. 0. 0.04 -0.9236 0. 0. 0. 1565 220
48301.477 -0.08445 0.    0.531544 0. 0. 0,00059 0. 0.000252 0. 0. 0.35 0.0413 0. 0. 0. 1443 122
48304.250 -0.18500 0.    0.514185 0. 0. 0.00257 0. 0.000133 0. 0. 0.17 -0.9226 0. 0. 0. 1463 120
48308.250 -0.10004 0.    0.516550 0. 0. 0.00041 0. 0.000197 0. 0. 0.08 0.1516 0. 0. 0. 1443 120
48311.223 -0.21450 0.    0.499016 0. 0. 0.00166 0. 0.000077 0. 0. 0.11 -0.9118 0. 0. 0. 1463 120
48314.496 -0.11185 0.    0.504052 0. 0. 0.00040 0. 0.000179 0. 0. 0.13 0.1991 0. 0. 0. 1443 120
48318.496 -0.23551 0.    0.479377 0. 0. 0.00254 0. 0.000141 0. 0. 0.11 -0.9510 0. 0. 0. 1463 120
48322.281 -0.12941 0.    0.485957 0. 0. 0.00041 0. 0.000161 0. 0. 0.18  0.0059 0. 0. 0. 1443 120
48324.863 -0.26169 0.    0.467114 0. 0. 0.00198 0. 0.000118 0. 0. 0.12 -0.9165 0. 0. 0. 1463 120
48330.234 -0.15480 0.    0.470989 0. 0. 0.00039 0. 0.000151 0. 0. 0.13 -0.2032 0. 0. 0. 1443 120
48331.410 -0.28223 0.    0.452235 0. 0. 0.00)73 O. 0.000085 0< 0. 0.25 -0.9143 0. 0. 0. 1463 120
48335.203 -0.16957 0.    0.458244 0. 0. 0.00040 0. 0.000167 0. 0. 0.13 --0.0872 0. 0. 0. 1443 120
48.339.426 -0.30856 0.   0.433285 0. 0. 0.00458 0. 0.000340 0. 0. 0.14 -0.9445 0. 0. 0. 1463 120
48345.555 -0.20446 0.    0.434684 0. 0. 0.00023 0. 0.000102 0. 0. 0.13 -0.0992 0. 0. 0. 1545 220
48346.461 -0.32920 0.    0.414569 0. 0. 0.0017′/ O. 0.000105 0. 0. 0.17 -0.8842 0. 0. 0. 1463 120
48348.105 -0.21459 0.    0.428659 0. 0. 0.00008 0. 0.000034 0. 0. 0.05 0.0313 0. 0. 0. 1545 220
48349.344 -0.21966 0.    0.426280 0. 0. 0.00032 0. 0.000141 0. 0. 0.13 0.0404 0. 0. 0. 1443 )20
48353.125 -0.34675 0.    0.400678 0. 0. 0.00042 0. 0.000023 0. 0. 0.05 -0.9320 0. 0. 0. 1565 220
48353.379 -0.34526 0.    0.399994 0. 0. 0.00192 0. 0.000100 O. 0. 0.24 -0.9047 0. 0. 0. 1463 120
48355.594 -0.35321 0.    0.395536 0. 0. 0.00043 0. O.OOC1027 O. 0. 0.07 -0.9078 0. 0. 0. 1565 220
48359.926 -0.35779 0.    0.384247 0. 0. 0.00182 0. 0.000087 0. 0. 0.09 -0.9474 0. 0. 0. 1463 1?,0
48367.379 -0.36867 0.    0.367984 0. 0. 0.00238 0. 0.000120 0. 0. 0.11 -0.8074 0. 0. 0. 1463 120
48370.371 -0.30275 0.    0.379254 0. 0. 0.00044 0. 0.000215 0. 0. 0.13  0.3089 0. 0. 0. 1543 120
48374.328 -0.3784″) O.   0.349586 0. 0. 0.00209 0. 0.000098 0. 0. 0.07 -0.9301 0. 0. 0. 1463 120
48377.273 -0.32721 0.    0.362226 0. 0. 0.00034 0. 0.000146 0. 0. 0.10 0.1130 0. 0. 0. 1443 120
48380.371 -0.38444 0.    0.337455 0. 0. 0.00204 0. 0.000120 0. 0. 0.12 -0.8698 0. 0. 0. 1563 120
48384.316 -0.35516 0.    0.347194 0. 0. 0.00038 0. 0.000177 0. 0. 0.26 0.0686 0. 0. 0. 1443 120
48388.230 -0.38939 0.    0.317823 0. 0. 0.00218 0. 0.000099 0. 0. 0.09 -0.9423 0. 0. 0. 1463 120
48391.336 -0.38325 0.    0.328441 0. 0. 0.00040 0. 0.000145 0. 0. 0.09  0.0819 0. 0. 0. 1443 120
48393.250 -0.39198 0.    0.324222 0. 0. 0.00010 0. 0.000055 0. 0. 0.10 -0.1163 0. 0. 0. 1545 220
48395.711 -0.40141 0.    0.318627 0. 0. 0.00007 0. 0.000035 0. 0. 0.06 -0.0314 0. 0. 0. 1545 220
48395.793 -0.38620 0.    0.300999 0. 0. 0.00178 0. 0.000083 0. 0. 0.12 -0.9209 0. 0. 0. 1463 120
48400.355 -0.41718 0.    0.307611 0. 0. 0.00048 0. 0.000205 0. 0. 0.13  0.3436 0. 0. 0. 1543 120
48401.395 -0.37653 0.    0.288620 0. 0. 0.00283 0. 0.000219 0. 0. 0.13 -0.9241 0. 0. 0. 1465 )20
48403.887 -0.37462 0.    0.284908 0. 0. 0.00025 0. 0.000013 0. 0. 0.06 -0.9190 0. 0. 0. 1565 220
48407.531 -0.44362 0.    0.295620 0. 0. 0.00058 0. 0.000208 0. 0. 0.08 0.2764 0. 0. 0. 1445 120
48408.176 -0.37559 0.    0.279410 0. 0. 0.00244 0. 0.00015″) O. 0. 0.45 -0.8861 0. 0. 0. 1465 120
48412.523 -0.46022 0.    0.285902 0. 0. 0.00053 0. 0.000176 0. 0. 0.10 0.2566 0. 0. 0. 1443 120
48415.250 -0.35938 0.    0.264227 0. 0. 0.00225 0. 0.000137 0. 0. 0.14 -0.9174 0. 0. 0. 1465 120
48419.371 -0.48432 0.    0.269341 0. 0. 0.00024 0. 0.000138 0. 0. 0.05 0.4242 0. 0. 0. 1443 120
48423.258 -0.34245 0.    0.247969 0. 0. 0.00151 0. 0.000083 0. 0. 0.09 -0.8965 0. 0. 0. 1465 120
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48426.371 -0.50505 0.   0.253512 0. 0. 0.00028 0. 0.000152 0. 0. 0.05 0.3496 0. 0. 0. 1443 120
48428.465 -0.50967 0.   0.249638 0. 0. 0.00013 0. 0.000057 0. 0. 0.10 0.1210 0. 0. 0. 1545 220
48430.355 -0.33116 0.   0.235026 0. 0. 0.00108 0. 0.000069 0. 0. 0.06 -0.8201 0. 0. 0. 1463 120
48433.332 -0.51940 0.   0.243355 0. 0. 0.00024 0. 0.000136 0. 0. 0.06 0.4032 0. 0. 0. 1443 120
48437.723 -0.31553 0.   0.228203 0. 0. 0.00031 0. 0.000018 0.  0. 0.06 -0.8956 0. 0. 0. 1565 220
48442.609 -0.54075 0.   0.230441 0. 0. 0.00037 0. 0.000123 O. 0. 0.05 -0.5256 0. 0. 0. 1443 120
48444.934 -0.29557 0.   0.218215 0. 0.  0.00127 0. 0.000055 0. 0. 0.06 -0.8982 0. 0. 0. 1463 120
48446.633 -0.54663 0.   0.225085 0. 0. 0.00041 0. 0.000144 0. 0. 0.11 -0.5330 0. 0. 0. 1443 120
48450.715 -0.27202 0.   0.211812 0. 0. 0.00199 0. 0.000088 0. 0. 0.12 -0.9343 0. 0. 0. 1463 120
4&452.898 -0.55735 0.   0.214423 0. 0. 0.00027 0.  0.000113 0. 0. 0.08 0.0033 0. 0. 0. 1443 120
4845"/.500 -0.25251 0.   0.201473 0. 0. 0.00156 0. 0.000092 0. 0. 0.10 -0.9299 0. 0. 0. 1463 120
48462,426 -0.56831 0.   0.200844 0. 0. 0.00026 0. 0.000111 0. 0. 0.05 0.2860 0. 0. 0. 1443.120
48465.016 -0.22067 0.   0.194121 0.  0. 0.00166 0. O.OOOO/l O. 0. 0.08 -0.9566 0. 0. 0. 1463 120
48468.527 -0.57368 0.   0.190955 0. 0. 0.00031 0. 0.000105 0. 0. 0.08 -0.4159 0. 0. 0. 1443 120
48473.020 -0.19442 0.   0.183419 0.  0. 0.00112 0. 0.000057 0. 0. 0.07 -0.9253 0. 0. 0. 1463 120
48474.828 -0.57239 0.   0.183174 0. 0. 0.00037 0. 0.000177 0. 0. 0.08 -0.0305 0. 0. 0. 1445 120
48479.195 -0.17029 0.   0.175966 0. 0. 0.00264 0. 0.000208 0. 0. 0.12 -0.9162 0. 0. 0. 1465 120
48481.527 -0.57038 0.   0.170796 0.  0. 0.00057 0. 0.000182 0. 0. 0.06 -0.7014 0. 0. 0. 1445 120
48486.191 -0.14957 0.   0.164959 0.  0. 0.00196 0. 0.000135 0.  0. 0.16 -0.9438 0. 0. 0. 1465 120
48490.371 -0.56006 0.   0.157520 0. 0.  0.00030 0. 0.000161 0. 0. 0.07 0.1658 0. 0. 0. 1443 120
48492.516 -0.12703 0.   0.157232 0.  0. 0.00026 0. 0.000013 0.  0. 0.07 -0.9248 0. 0. 0. 1565 220
48493,090 -0.13104 0.   0.156525 0. 0. 0.00168 0. 0.000105 0. 0. 0.15 -0.8954 0. 0. 0. 1463 120
48496.504 -0.55226 0.   0.145538 0.  0. 0.00034 0. 0.000131 0. 0. 0.11 -0,6094 0. 0. 0. 1443 120
48499,"/85 -0.54821 0.   0.139238 0. 0. 0.00006 0. 0.000029 0. 0. 0.07 -0.0086 0. 0. 0. 1545 220
48'500.340 -0.10225 0.   0.142611 0. 0. 0.00157 0.  0.000084 0. 0. 0.08 -0.9511 0. 0. 0. 1463 120
48'504.352 -0.54201 0.   0.130148 0. 0. 0.00027 0. 0.000093 0. 0. 0.11 0.0522 0. 0. 0. 1443 120
48511.332 -0.53160 0.   0.111995 0.  0. 0.00026 0. 0.000099 0. 0. 0.05 0.0581 0. 0. 0. 1443 120
48513.688 -0.06030 0.   0.114217 0. 0. 0.00127 0. 0.000061 0. 0. 0.06 -0.86"19 0. 0. 0. 1463 120
48518.332 -0.51620 0.   0.098986 0. 0. 0.00025 0. 0.000093 0. 0. 0.06 0.1278 0. 0. 0. 1443 120
48520.355 -0.03605 0.   0.102706 0. 0. 0.00130 0. 0.000080 0. 0. 0.34 -0.9160 0. 0. 0. 1463 120
48524.645 -0.50244 0.   0.083881 0.  0. 0.00031 0. 0.000134 0. 0. 0.06 0.3894 0. 0. 0. 1443 120
48527.559 -0.01446 0.   0.085946 0.  0. 0.00141 0. 0.000057 0. 0. 0.18 -0.80'/7 O. 0. 0. 1463 120
48531.641 -0.48417 0.   0.068398 0. 0. 0.00027 0. 0.000120 0. 0. 0.04  0.3182 0. 0. 0. 1443 120
48534.391  0.00347 0.   0.071390 0. 0. 0.00107 0. 0.000056 0. 0. 0.10 -0.8895 0. 0. 0. 1463 120
48535."127 -0.47277 0.   0.057879 0. 0.  0.00006 0. 0.000028 0. 0. 0.07  0.0599 0.  0. 0. 1545 220
48537,586 -0.46601 0.   0.053127 0.  0. 0.00028 0. 0.000133 0. 0. 0.04 0.4215 0. 0. 0. 1443 120
48542.402  0.02159 0.   0.054513 0.  0. 0.00103 0. O.OOC1050 O. 0. 0.05 -0.8967 0. 0. 0. 1463 120
48545.652 -0.44116 0.   0.038630 0.  0. 0.00025 0. 0.000092 0.  0. 0.06 -0.0431 0. 0. 0. 1443 320
48549.180 0.03691 0.   0.043072 0. 0. 0.00181. 0. 0.000088 0. 0. 0.09 -0.9074 0. 0. 0. 1463 120
48551.70"/ -0.42206 0.   0.025852 0. 0. 0.00025 0.  0.000095 0. 0. 0.07 -0.2233 0. 0. 0. 1443 120
48556.309 0.03723 0.   0.028277 0.  0. 0.00253 0. 0.000127 0. 0. 0.02 -0.9581 0. 0. 0. 1463 120
48560.625 -0.39434 0.   0.006958 0.  0. 0.00023 0. 0.000094 0. 0. 0.10 0.0094 0. 0. 0. 1443 120
48562.262 0.05455 0.   0.013877 0. 0. 0.00119 0. 0.000062 0. 0. 0.04 -0.9012 0. 0. 0. 1463 120
48565.371 -0.38303 0.  -0.006279 0. 0. 0.00028 0. 0.000112 0.  0. 0.13 -0.1658 0. 0. 0. 1443 120
48571.043 0.0681"/ O. -0.005473 0. 0.  0.00022 0. 0.000012 0. 0. 0.06 -0.9091 0. 0. 0. 1565 220
48576.246 0.06873 0. -0.016826 0.  0. 0.00100 0. 0.000047 0. 0. 0.08 -0,8786 0. 0. 0. 1463 120
48577.465 -0.34647 0.  -0.031980 0. 0. 0.00006 0. 0.000027 0. 0. 0.08 0.0505 0. 0. 0. 1545 220
48580.355 -0.33758 0. -0.039453 0. 0. 0.00026 0. 0.000096 0. 0. 0,08 -0.3180 0. 0. 0. 1443 )20
48584.242 0.07586 0.  -0.035658 0. 0. 0.00101 0. 0.000051 0. 0. 0.04 -0.9111 0. 0. 0. 1463 120
48588.645 -0.30976 0.  -0.058748 0. 0. 0.00021 0. 0.000104 0.  0. 0.07 -0.1982 0. 0. 0. 1443 120
48592.125 0.08361 0.  -0.056946 0. 0. 0.00112 0. 0.000061 0. 0. 0.11 -0.9118 0. 0. 0. 1463 120
48594.516 -0.29284 0.  -0.074300 0. 0. 0.00025 0. 0.000091 0. 0. 0.05 -0.0083 0. 0. 0. 1443 120
485'99.250 0.08077 0.  -0.071894 0. 0. 0.00107 0. 0.000052 0. 0. 0.11 -0.9000 0. 0. 0. 1463 120
486130.594 -0.27257 0.  -0.085827 0. 0. 0.00024 0. 0.000089 0. 0. 0.08 -0.0597 0. 0. 0. 1443 120
48604.207 0.07932 0.  -0.083724 0. 0. 0.00183 0. 0.000116 0. 0. 0.57 -0.8291 0. 0. 0, 1463 120
48607.547 -0.25092 0.  -0.102608 0. 0. 0.00025 0. 0.000083 0. 0. 0.11 -0.0931 0. 0. 0. 1443 120
48613.090 0.07807 0.  -0.103642 0. 0. 0.00124 0. 0.000063 0. 0. 0.06 -0.9190 0. 0. 0. 1463 )20
48613.480 0.07631 0.  -0.104461 0. 0. 0.00024 0. 0,000013 0. 0. 0.07 -0.9347 0. 0. 0. 1565 220
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48616.586 -0.22707 0. -0.121711 0. 0. 0.00028 0. 0.000102 0. 0. 0.04 -0.1387 0. 0. 0. 1443 120
4f620.270 0.07305 0. -0.121194 0. 0. 0.00081 0. 0.000042 0. 0. 0.05 -0.8280 0. 0. 0. 1463 120
4$621.426 -0.21534 0. -0.132434 0. 0. 0.00031 0. 0.000106 0. 0. 0.09 0.1069 o. 0. 0. 1443 120
48625.484 -0.20374 0. -0.139424 0. 0. 0.00007 0. 0.000032 0. 0. 0.06 0.0110 0. 0. 0. 1545 220
4$627.129 0.06472 0. -0.133938 0. 0. 0.00119 0. 0.000058 0. 0. 0.06 -0.9186 0. 0. 0. 1463 120
48628.512 -0.19630 0. -0.145342 0. 0. 0.00024 0. 0.000085 0. 0. 0.07 -0.0445 0. 0. 0. 1443 120
48633.125 0.05464 0. -0.148805 0. 0. 0.00108 0. 0.000051 0. 0. 0.06 -0.9151 0. 0. 0. 1463 120
48635.387 -0.18079 0. -0.161844 0. 0. 0.00029 0. 0.000101 0. 0. 0.05 0.1744 0. 0. 0. 1443 120
48640.160 0.04201 0. -0.165435 0. 0. 0.00129 0. 0.000060 0. 0. 0.03 -0.9576 0. 0. 0. 1463 120
48642.391 -0.16551 0. -0.177678 0. 0. 0.00028 0. 0.000096 0. 0. 0.11 0.0140 0. 0. 0. 1443 120
48647.145 0.02967 0. -0.186034 0. 0. 0.00132 0. 0.000057 0. 0. 0.06 -0.9442 0. 0. 0. 1463 120
48649.438 -0.15201 0. -0.196230 0. 0. 0.00023 0. 0.000080 0. 0. 0.03 -0.1532 0. 0. 0. 1443 120
48653.133 0.01891 0. -0.199301 0. 0. 0.00098 0. 0.000044 0. 0. 0.04 -0.9216 0. 0. 0. 1463 120
48654.484 0.01776 0. -0.202411 0. 0. 0.00017 0. 0.000010 0. 0. 0.07 -0.9095 0. 0. 0. 1565 220
48657.297 -0.14095 0. -0.213117 0. 0. 0.00026 0. 0.000115 0. 0. 0.05 0.3467 0. 0. 0. 1443 120
48658.090 0.01091 0. -0.211636 0. 0. 0.00121 0. 0.000051 0. 0. 0.07 -0.920″/ O. 0. 0. 1463 120
48664.344 -0.13150 0. -0.229891 0. 0. 0.00024 0. 0.000090 0. 0. 0.16 -0.0981 0. 0. 0. 1443 120
48668.016 -0.01256 0. -0.235415 0. 0. 0.00104 0. 0.000045 0. 0. 0.05 -0.9129 0. 0. 0. 1463 120
48671.445 -0.12516 0. -0.245964 0. 0. 0.00026 0. 0.000100 0. 0. 0.08 -0.1567 0. 0. 0. 1445 120
48675.578 -0.03365 0. -0.256138 0. 0. 0.00117 0. 0.000056 0. 0. 0.04 -0.8531 0. 0. 0. 1463 120
48679.129 -0.11″/87 O. -0.262976 0. 0. 0.00066 0. 0.000242 0. 0. 0.10 -0.4823 0. 0. 0. 1445 120
48681.641 -0.05384 0. -0.268592 0. 0. 0.00355 0. 0.000165 0. 0. 0.05 -0.9479 0. 0. 0. 1463 120
48687.246 -0.11095 0. -0.280613 0. 0. 0.00032 0. 0.000119 0. 0. 0.08 0.1580 0. 0. 0. 1445 120
48689.270 -0.07742 0. -0.288746 0. 0. 0.00122 0. 0.000064 0. 0. 0.08 -0.9114 0. 0. 0. 1463 120
48693.543 -0.11072 0. -0.295777 0. 0. 0.00024 0. 0.000094 0. 0. 0.04 0.1077 0. 0. 0. 1443 120
48595.730 -0.11269 0. -0.301214 0. 0. 0.00006 0. 0.000027 0. 0. 0.10 -0.0329 0. 0. 0. 1545 220
48697.016 -O.10138 0. -0.309446 0. 0. 0.00123 0. 0.000060 0. 0. 0.07 -0.8888 0. 0. 0. 1463 120
48′700.457 -0.11690 0. -0.316216 0. 0. 0.00021 0. 0.000097 0. 0. 0.05 0.2162 0. 0. 0. 1443 120
48702.363 -0.12207 0. -0.327628 0. 0. 0.00022 0. 0.000011 0. 0. 0.07 -0.9239 0. 0. 0. 1565 220
48703.277 -0.12559 0. -0.330283 0. 0. 0.00130 0. 0.000059 0. 0. 0.13 -0.9132 0. 0. 0. 1463 120
48703.648 -0.11950 0. -0.325226 0. 0. 0.00005 0. 0.000022 0. 0. 0.09 0.0140 0. 0. 0. 1545 220
48′/05.5]2 -0.12147 0. -0.329675 0. 0. 0.00024 0. 0.000095 0. 0. 0.06 0.0942 0. 0. 0. 1443 120
48709.215 -0.14357 0. -0.345262 0. 0. 0.00019 0. 0.000010 0. 0. 0.06 -0.9226 0. 0. 0. 1565 220
48711.090 -0.15143 0. -0.350378 0. 0. 0.00148 0. 0.000058 0. 0. 0.14 -0.9127 0. 0. 0. 1463 120
48″/)4.406 -0.13647 0. -0.352498 0. 0. 0.00021 0. 0.000088 0. 0. 0.07 0.0591 0. 0. 0. 1443 120
48716.250 -0.13787 0. -0.357579 0. 0. 0.00005 0. 0.000022 0. 0. 0.06 -0.0693 0. 0. 0. 1545 220
48″/′17.066 -0.16″/16 O. -0.367874 0. 0. 0.00144 0. 0.000064 0. 0. 0.13 -0.9102 0. 0. 0. 1463 120
48″/21.391 -0.14426 0. -0.369770 0. 0. 0.00021 0. 0.000089 0. 0. 0.04 0.1007 0. 0. 0. 1443 120
48″/23.008 -0.14693 0. -0.373708 0. 0. 0.00004 0. 0.000021 0. 0. 0.06 -0.0305 0. 0. 0. 1545 220
48723.945 -0.17850 0. -0.385624 0. 0. 0.00117 0. 0.000051 0. 0. 0.04 -0.9448 0. 0. 0. 1463 120
48′/25.566 -0.18508 0. -0.390789 0. 0. 0.00025 0. 0.000013 0. 0. 0.08 -0.9284 0. 0. 0. 1565 220
48726.453 -0.15393 0. -0.384308 0. 0. 0.00024 0. 0.000095 0. 0. 0.04 ‘0.1074 O. 0. 0. 1443 120
48730.828 -0.16227 0. -0.397755 0. 0. 0.00005 0. 0.000022 0. 0. 0.07 0.0124 0. 0. 0. 1545 220
48731.047 -0.20278 0. -0.408583 0. 0. 0.00114 0. 0.000051 0. 0. 0.04 -0.9167 0. 0. 0. 1463 120
48732.383 -0.20509 0. -0.411841 0. 0. 0.00022 0. 0.000012 0. 0. 0.10 -0.9093 0. 0. 0. 1565 220
48735.387 -0.16968 0, -0.407711 0. 0. 0.00023 0. 0.000098 0. 0. 0.04 0.1869 0. 0. 0. 1443 120
48737.098 -0.21640 0. -0.422621 0. 0. 0.00121 0. 0.000051 0. 0. 0.06 -0.9125 0. 0. 0. 1463 120
48740.4)4 -0.17852 0. -0.420146 0. 0. 0.00024 0. 0.000098 0. 0. 0.12 0.0747 0. 0. 0. 1443 120
48745.000 -0.2378-/ O. -0.443361 0. 0. 0.00123 0. 0.000054 0. 0. 0.05 -0.9198 0. 0. 0. 1463 120
48748.311 -0.19219 0. -0.437639 0. 0. 0.00023 0. 0.000104 0. 0. 0.05 0.2410 0. 0. 0. 1443 120
48752.090 -0.20182 0. -0.446019 0. 0. 0.00006 0. 0.000023 0. 0. 0.08 -0.0665 0. 0. 0. 1545 220
48755.3″/5 -0.20920 0. -0.454700 0. 0. 0.00024 0. 0.000096 0. 0. 0.09 0.1104 0. 0. 0. 1443 120
48″159.301 -0.27040 0. -0.476998 0. 0. 0.00110 0. 0.000055 0. 0. 0.07 -0.9250 0. 0. 0. 1463 120
48760.359 -0.21875 0. -0.465360 0. 0. 0.00024 0. 0.000096 0. 0. 0.14 0.1015 0. 0. 0. 1443 120
48769.391 -0.23983 0. -0.484086 0. 0. 0.00030 0. 0.000107 0. 0. 0.04 0.4529 0. 0. 0. 1443 120
487′73.168 -0.28966 0. -0.505943 0. 0. 0.00102 0. 0.000045 0. 0. 0.06 -0.9043 0. 0. 0. 1463 120
487[30.031 -0.29902 0. -0.517902 0. 0. 0.00107 0. 0.000048 0. 0. 0.22 -0.8861 0. 0. 0, 1463 120
487135.371 -0.27626 0. -0.513808 0. 0. 0.00024 0. 0.000100 0. 0. 0.12 0.2952 0. 0. 0. 1443 120

48787.082 -0.30505 0. -0.530580 0. 0. 0.00150 0. 0.000076 0. 0. 0.11 -0.9028 0. 0. 0. 1463 120
48790.582 -0.29075 0. -0.520873 0. 0. 0.00027 0. 0.000094 0. 0. 0.08 0.1066 0. 0. 0. 1443 120
48792.988 -0.31050 0. -0.539288 0. 0. 0.00105 0. 0.000047 0. 0. 0.08 -0.9139 0. 0. 0. 1463 120
48797.375 -0.30742 0. -0.532307 0. 0. 0.00022 0. 0.000090 0. 0. 0.09 0.0740 0. 0. 0. 1443 120
48805.449 -0.32901 0. 0.456177 0. 0. 0.00041 0. 0.000151 0. 0. 0.07 0.1722 0. 0. 0. 1543 120
48807.402 -0.31915 0. 0.438614 0. 0. 0.00263 0. 0.000132 0. 0. 0.25 -0.9596 0. 0. 0. 1563 120
48808.852 -0.33843 0. 0.450190 0. 0. 0.00009 0. 0.000036 0. 0. 0.12 -0.2478 0. 0. 0. 1545 220
48811.527 -0.34488 0. 0.446078 0. 0. 0.00033 0. 0.000105 0. 0. 0.08 0.0872 0. 0. 0. 1543 120
48815.105 -0.31357 0. 0.428239 0. 0. 0.00186 0. 0.000109 0. 0. 0.32 -0.8774 0. 0. 0. 1563 120
48817.602 -0.35990 0. 0.440255 0. 0. 0.00059 0. 0.000165 0. 0. 0.09 -0.5327 0. 0. 0. 1543 120
48822.469 -0.31509 0. 0.420220 0. 0. 0.00142 0. 0.000068 0. 0. 0.08 -0.9048 0. 0. 0. 1563 120
48824.500 -0.37707 0. 0.429888 0. 0. 0.00070 0. 0.000302 0. 0. 0.02 -0.5331 0. 0. 0. 1543 120
48828.746 -0.30922 0. 0.411076 0. 0. 0.00129 0. 0.000053 0. 0. 0.07 -0.9218 0. 0. 0. 1463 120
48831.469 -0.39479 0. 0.419856 0. 0. 0.00061 0. 0.000156 0. 0. 0.10 0.1542 0. 0. 0. 1443 120
48836.867 -0.30652 0. 0.397465 0. 0. 0.00124 0. 0.000054 0. 0. 0.13 -0.9034 0. 0. 0. 1463 120
48838.344 -0.41217 0. 0.406879 0. 0. 0.00044 0. 0.000173 0. 0. 0.13 0.2590 0. 0. 0. 1443 120
48843.676 -0.30408 0. 0.387″/15 O. 0. 0.00208 0. 0.000115 0. 0. 0.29 -0.8253 0. 0. 0. 1463 120
48845.539 -0.43279 0. 0.396100 0. 0. 0.00039 0. 0.000124 0. 0. 0.08 -0.3466 0. 0. 0. 1443 120
48852.449 -0.44855 0. 0.383183 0. 0. 0.00036 0. 0.000117 0. 0. 0.06 -0.1612 0. 0. 0. 1543 120
48856.504 -0.28874 0. 0.366068 0. 0. 0.00127 0. 0.000059 0. 0. 0.07 -0.8847 0. 0. 0. 1563 120
48357.594 -0.28279 0. 0.364244 0. 0. 0.00023 0. 0.000013 0. 0. 0.06 -0,9216 0. 0. 0. 1565 220
48859.453 -0.46394 0. 0.370133 0. 0. 0.00027 0. 0.000104 0. 0. 0.04 -0.3028 0. 0. 0. 1443 120
48863.660 -0,26950 0. 0.350338 0. 0. 0.00172 0. 0.000070 0. 0. 0.06 -0.9497 0. 0. 0. 1463 120
48866.434 -0.4″1343 0. 0.350894 0. 0. 0.00370 0. 0.000861 0. 0. 0.27 -0.6363 0. 0. 0. 1443 120
481370.730 -0.25′/30 O. 0.337250 0. 0. 0.001″/1 O. 0.000090 0. 0. 0.06 -0.90″/9 O. 0. 0. 1463 120
48[375.430 -0.48832 0. 0.336093 0. 0. 0.00041 0. 0.000116 0. 0. 0,04 -0.3808 0. 0. 0. 1443 120
48[377.281 -0.24596 0. 0.325493 0. 0. 0.00119 0. 0.000058 0. 0. 0.06 -0.9386 0. 0. 0. 1463 120
48881.332 -0.49381 0. 0.323262 0. 0. 0.00029 0. 0.000096 0. 0. 0.07 0.0593 0. 0. 0. 1443 120
48884.277 -0.23478 0. 0.312581 0. 0. 0.00106 0. 0.000054 0. 0. 0.10 -0.9265 0. 0. 0. 1463 120
48887.242 -0.22′/00 O. 0.307312 0. 0. 0.00028 0. 0.000015 O. 0. 0.07 -0.9070 0. 0. 0. 1565 220
48889.250 -0.49864 0. 0.307523 0. 0. 0.00032 0. 0.000132 0. 0. 0.08 0.3445 0. 0. 0. 1443 120
48891.223 -0.22034 0. 0.297564 0. 0. 0.00108 0. 0.000052 0. 0. 0.14 -0.9196 0. 0. 0. 1463 120
48895.551 -0.49921 0. 0.291356 0. 0. 0.00025 0. 0.000103 0. 0. 0.05 -0.1354 0. 0. 0. 1443 120
48898.711 -0.20253 0. 0.281998 0. 0. 0.00161 0. 0.000068 0. 0. 0.24 -0.9142 0. 0. 0. 1463 120
48902.574 -0.50252 0. 0.276521 0. 0. 0.00038 0. 0.000352 0. 0. 0.03 0.4506 0. 0. 0. 1443 120
48905.594 -0.18770 O. 0.266685 0. 0. 0.00103 0. 0.000045 0. 0. 0.08 -0.9085 0. 0. 0. 1463 120
48912.289 -0.16730 0. 0.251889 0. 0. 0.00113 0. 0.000049 0. 0. 0.04 -0.9258 0. 0. 0. 1563 120
48$,]7.]64 -0.50176 O. 0.239387 0. 0. 0.00029 0. 0.000112 0. 0. 0.05 0.2687 0. 0. 0. 1443 120
48919.164 -0.15049 0. 0.232755 0. 0. 0.00105 0. 0.000054 0. 0. 0.08 -0.9347 0. 0. 0. 1463 120
48923.336 -0.49942 0. 0.221327 0. 0. 0.00042 0. 0′.000128 0. 0. 0.07 -0.4147 0. 0. 0. 1443 120
48926.250 -0.14001 0. 0.215848 0. 0. 0.00108 0. 0.000045 0. 0. 0.06 -0.9325 0. 0. 0. 1463 120
48927.797 -0.49563 0. 0.211111 0. 0. 0.00005 0. 0.000024 0. 0. 0.07 -0.1414 0. 0. 0. 1545 220
48933.832 -0.12126 0. 0.197677 0. 0. 0.00182 0. 0.000091 0. 0. 0.10 -0.8943 0. 0. 0. 1465 120
48937.828 -0.48620 0. 0.185896 0. 0. 0.00027 0. 0.000102 0. 0. 0.05 0.3302 0. 0. 0. 1443 120
48939.484 -0.10686 0. 0.185148 0. 0. 0.00)35 O. 0.000063 0. 0. 0.09 -0.8949 0. 0. 0. 1563 120
48942.055 -0.48376 0. 0.176022 0. 0. 0.00005 0. 0.000027 0. 0. 0.07 -0.0467 0. 0. 0. 1545 220
48944.789 -0.48185 0. 0.167894 0. 0. 0.00029 0. 0.000103 0. 0. 0.07 0.2006 0. 0. 0. 1543 120
48947.426 -0.08655 0. 0.163578 0. 0. 0.00131 0. 0.000064 0. 0. 0.09 -0.9021 0. 0. 0. 1563 120
48948.613 -0.08403 0. 0.160422 0. 0. 0.00022 0. 0.000014 0. 0. 0.08 -0.9003 0. 0. 0. 1565 220
48951.430 -0.47396 0. 0.149613 0. 0. 0.00035 0. 0.000140 0. 0. 0.09 0.2534 0. 0. 0. 1543 120
48955.066 -0.07331 0. 0.146193 0. 0. 0.00102 0. 0.000052 0. 0. 0.04 -0.9333 0. 0. 0. 1463 120
4895″?.672 -0.46132 0. 0.135006 0. 0. 0.00025 0. 0.000095 0. 0. 0.08 -0.1630 0. 0. 0. 1445 120
48962.074 -0.06155 0. 0.128197 0. 0. 0.00138 0. 0.000065 0. 0. 0.12 -0.9129 0. 0. 0. 1465 120
48966.207 -0.44749 0. 0.112633 0. 0. 0.00039 0. 0.000129 0. 0. 0.12 -0.4182 0. 0. 0. 1445 120
48968.871 -0.04297 0. 0.111354 0. 0. 0.00160 0. 0.000086 0. 0. 0.22 -0.8664 0. 0. 0. 1463 120
48972.477 -0.43727 0. 0.094658 0. 0. 0.00030 0. 0.000115 0. 0. 0.06 0.0605 0. 0. 0. 1543 120
48975.641 -0.03430 0. 0.092121 0. 0. 0.00129 0. 0.000065 0. 0. 0.07 -0.9167 0. 0. 0. 1563 120
489′77.027 -0.42703 0. 0.082211 0. 0. 0.00006 0. 0.000026 0. 0. 0,07 0.0147 0. 0. 0. 1545 220

48′980.340	-0.41908	0.	0.075408	0.	0.	0.00085	0.	0.000432	0.	0.	0.02	-0.6931	0.	0.	0.	1443	120
48983.164	-0.01627	0.	0.076095	0.	0.	0.00224	0.	0.000099	0.	0.	0.03	-0.8896	0.	0.	0.	1463	120
48983.625	-0.01585	0.	0.075020	0.	0.	0.00023	0.	0.000013	0.	0.	0.08	-0.9065	0.	0.	0.	1565	220
48997.133	0.01460	0.	0.040018	0.	0.	0.00093	0.	0.000039	0.	0.	0.08	-0.9110	0.	0.	0.	1463	120
49000.391	-0.37133	0.	0.022392	0.	0.	0.00054	0.	0.000176	0.	0.	0.09	0.4175	0.	0.	0.	1443	120
49304.516	0.02200	0.	0.019797	0.	0.	0.00106	0.	0.000049	0.	0.	0.08	-0.8917	0.	0.	0.	1463	120
49007.176	-0.35410	0.	0.004908	0.	0.	0.00059	0.	0.000190	0.	0.	0.15	0.1403	0.	0.	0.	1443	122
491311.621	0.02962	0.	0.004298	0.	0.	0.00133	0.	0.000068	0.	0.	0.02	-0.9262	0.	0.	0.	1463	120
49318.637	0.03624	0.	-0.014460	0.	0.	0.00114	0.	0.000056	0.	0.	0.05	-0.8749	0.	0.	0.	1463	120
49021.070	-0.31798	0.	-0.029519	0.	0.	0.00040	0.	0.000119	0.	0.	0.07	-0.2678	0.	0.	0.	1443	120
491325.059	0.04171	0.	-0.030938	0.	0.	0.00093	0.	0.000039	0.	0.	0.05	-0.9119	0.	0.	0.	1463	120
49028.309	-0.30119	0.	-0.050898	0.	0.	0.0002′7	0.	0.000112	0.	0.	0.07	0.1259	0.	0.	0.	1443	120
49030.602	-0.29535	0.	-0.057665	0.	0.	0.0000′7	0.	0.000032	0.	0.	0.10	-0.0765	0.	0.	0.	1545	220
49031.961	0.04518	0.	-0.051939	0.	0.	0.00100	0.	0.000041	0.	0.	0.03	-0.9387	0.	0.	0.	1463	120
49[)33.105	0.04643	0.	-0.054566	0.	0.	0.00018	0.	0.000011	0.	0.	0.06	-0.8824	0.	0.	0.	1565	220
49[)35.055	-0.28188	0.	-0.068013	0.	0.	0.0002″7	0.	0.000119	0.	0.	0.08	0.1204	0.	0.	0.	1443	120
49038.133	0.05162	0.	-0.066562	0.	0.	0.00121	0.	0.000050	0.	0.	0.23	-0.8893	0.	0.	0.	1463	120
49043.414	-0.26490	0.	-0.089630	0.	0.	0.00026	0.	0.000109	0.	0.	0.05	-0.1120	0.	0.	0.	1445	120
49045.383	0.04224	0.	-0.086161	0.	0.	0.00133	0.	0.0000″/4	O.	0.	0.14	-0.9010	0.	0.	0.	1463	120
49049.352	-0.25043	0.	-0.102963	0.	0.	0.00025	0.	0.000095	0.	0.	0.04	-0.1854	0.	0.	0.	1445	120
49058.086	-0.23442	0.	-0.128364	O.	0.	0.00030	0.	0.000186	0.	0.	0.07	-0.2288	0.	0.	0.	1445	120
49059.773	0.03689	0.	-0.125227	0.	0.	0.00156	0.	0.000098	0.	0.	0.16	-0.9065	0.	0.	0.	1463	120
49063.891	-0.22262	0.	-0.142703	0.	0.	0.00032	0.	0.000132	0.	0.	0.11	-0.4387	0.	0.	0.	1445	120
4906″/.047	0.03363	0.	-0.144652	0.	0.	0.00130	0.	0.000069	0.	0.	0.14	-0.8578	0.	0.	0.	1463	120
49070.676	-0.20958	0.	-0.161125	0.	0.	0.00028	0.	0.000125	0.	0.	0.05	-0.2621	0.	0.	0.	1445	120
490-/4.555	0.02340	0.	-0.164966	0.	0.	0.00126	0.	0.000066	0.	0.	0.10	-0.9052	0.	0.	0.	1463	120
49077.″/38	-0.19518	0.	-0.177190	0.	0.	0.00030	0.	0.000138	0.	0.	0.06	0.2500	0.	0.	0.	1445	120
49081.508	0.00374	0.	-0.183134	0.	0.	0.00112	0.	0.000063	0.	0.	0.10	-0.8780	0.	0.	0.	1463	120
49084.660	-0.18607	0.	-0.197068	0.	0.	0.00030	0.	0.000139	0.	0.	0.05	-0.2183	0.	0.	0.	1445	120
49088.547	-0.01360	0.	-0.204544	0.	0.	0.00102	0.	0.000055	0.	0.	0.09	-0,8639	0.	0.	0.	1463	120
49091.203	-0.18050	0.	-0.213655	0.	0.	0.00030	0.	0.000117	0.	0.	0.14	-0.0590	0.	0.	0.	1445	120
49095.055	-0.02499	0.	-0.222819	0.	0.	0.00136	0.	0.000056	0.	0.	0.08	-0.9157	0.	0.	0.	1463	120
49102.168	-0.04079	0.	-0.242496	0.	0.	0.00117	0.	0.000052	0.	0.	0.07	-0.9020	0.	0.	0.	1463	120
49105.418	-0.16940	0.	-0.251541	0.	0.	0.00026	0.	0.000096	0.	0.	0.08	0.1351	0.	0.	0.	1443	120
49109.426	-0.05438	0.	-0.263876	0.	0.	0.00110	0.	0.000062	0.	0.	0.07	-0.8752	0.	0.	0.	1463	120
49112.453	-0.16882	0.	-0.273386	0.	0.	0.00034	0.	0.000165	0.	0.	0.04	0.5300	0.	0.	0.	1443	120
49117.2″/3	-0.0′/320	O.	-0.285686	0.	0.	0.004″/3	O.	0.000246	0.	0.	0.28	-0.9213	0.	0.	0.	1463	120
49119.375	-0.16541	0.	-0.289568	0.	0.	0.00029	0.	0.000124	0.	0.	0.11	0.2593	0.	0.	0.	1443	120
49123.430	-0.07627	0.	-0.301334	0.	0.	0.00125	0.	0.000061	0.	0.	0.14	-0.9008	0.	0.	0.	1463	120
49126.266	-0.16766	0.	-0.306382	0.	0.	0.00022	0.	0.000108	0.	0.	0.08	0.2583	0.	0.	0.	1443	120
49129,262	-0.08684	0.	-0.315272	0.	0.	0.00112	0.	0.000058	0.	0.	0.15	-0.8990	0.	0.	0.	1463	120
49133.250	-0.16998	0.	-0.321284	0.	0.	0.00023	0.	0.000117	0.	0.	0.06	0.2229	0.	0.	0.	1443	120
49136.359	-0.09994	0.	-0.332645	0.	0.	0.00117	0.	0.000061	0.	0.	0.09	-0.9046	0.	0.	0.	1463	120
49140.379	-0.16839	0.	-0.339758	0.	0.	0.00032	0.	0.000150	0.	0.	0.08	0.6046	0.	0.	0.	1443	120
49147.375	-0.1″)055	o.	-0.352520	0.	0.	0.00024	0.	0.000099	0.	0.	0.06	0.2934	0.	0.	0.	1443	120
49151.129	-0.12955	0.	-0.365476	0.	0.	0.00122	0.	0.000061	0.	0.	0.11	-0.8995	0.	0.	0.	1463	120
49154.430	-0.17568	0.	-0.366964	0.	0.	0.00021	0.	0.000089	0.	0.	0.07	-0.0409	0.	0.	0.	1443	120
49158.184	-0.)4176	O.	-0.378785	0.	0.	0.00124	0.	0.000067	0.	0.	0.09	-0.9083	0.	0.	0.	1463	120
49158.762	-0.17766	0.	-0.373790	0.	0.	0.00027	0.	0.000088	0.	0.	0.07	0.2379	0.	0.	0.	1545	220
49161.461	-0.17843	0.	-0.379071	0.	0.	0.00044	0.	0.000175	0.	0.	0.08	-0.4287	0.	0.	0.	1443	120
49165.316	-0.15470	0.	-0,393859	0.	0.	0.00124	0.	0.000061	0.	0.	0.11	-0.9194	0.	0.	0.	1463	120
49167.184	-0.18294	0.	-0.390964	0.	0.	0,00024	0.	0.000100	0.	0.	0.05	0.0477	0,	0.	0.	1443	120
49172.336	-0.16630	0.	0.594610	0.	0.	0.00093	0.	0.000044	0.	0.	0.05	-0.8714	0.	0.	0.	1463	120
49175.477	-0.19001	0.	0.597152	0.	0.	0.00029	0.	0.000139	0.	0.	0.06	0.3527	0.	0.	0.	1443	120
49185.371	-0.17826	0.	0.575385	0.	0.	0.00159	0.	0.000075	0.	0.	0.06	-0.9197	0.	0.	0.	1463	120
49187.340	-0.17967	0.	0.572772	0.	0.	0.00051	0.	0.000026	0.	0.	0.07	-0.9427	0.	0.	0.	1565	220
49189.418	-0.20709	0.	0.577114	0.	0.	0.00030	0.	0.000112	0.	0.	0.06	0.3569	0.	0.	0.	1443	120
49193.273	-0.18874	0.	0.560683	0.	0.	0.00105	0.	0.000054	0.	0.	0.05	-0.8562	0.	0.	0.	1463	120

```
49196.270 -0.21571 0.   0.564096 0. 0. 0.00023 0. 0.000091 0. 0. 0.06 0.1185 0. 0. 0. 1443 120
49200.207 -0.20254 0.   0.549662 0. 0. 0.00108 0. 0.000057 0. 0. 0.10 -0.8577 0. 0. 0. 1463 120
49202.746 -0.22468 0.   0.554552 0. 0. 0.00031 0. 0.000117 0. 0, 0.06 0.1262 0. 0. 0. 1443 120
49206.648 -0.21594 0.   0.537658 0. 0. 0.00118 0. 0.000048 0. 0. 0.05 -0.9162 0. 0. 0. 1463 120
49209.566 -0.23631 0.   0.542365 0. 0. 0.00043 0. 0.000117 0. 0. 0.07 -0.3027 0. 0. 0. 1443 120
49216.332 -0.23070 0.   0.521250 0. 0. 0.00105 0. 0,000050 0. 0. 0.07 -0.8958 0. 0. 0. 1463 120
49216.633 -0.24915 0.   0.531097 0. 0. 0.00034 0. 0,000110 0. 0. 0.07 -0.3522 0. 0. 0. 1443 120
49220.344 -0.23845 0.   0.511465 0. 0. 0.00112 0. 0.000050 0. 0. 0.09 -0.9305 0. 0. 0. 1463 120
49223.535 -0.25891 0.   0.515059 0. 0. 0.00045 0. 0.000152 0. 0. 0.08 -0.3886 0. 0. 0. 1445 120
49227.301 -0.24272 0.   0.498559 0. 0. 0.00101 0. 0.000046 0. 0. 0.08 -0.9024 0. 0. 0. 1463 120
49231.570 -0.27699 0.   0.501284 0. 0. 0.00051 0. 0.000149 0. 0. 0.10 -0.3256 0. 0. 0. 1443 120
49235.289 -0.25113 0.   0.482949 0. 0. 0.00098 0. 0.000050 0. 0. 0.09 -0.8925 0. 0. 0. 1463 120
49242.133 -0.25900 0.   0.4"/0619 0. 0. 0.00132 0. 0.000074 0. 0. 0.09 -0.8788 0. 0. 0. 1563 120
49246.426 -0.30448 0.   0.470302 0. 0. 0.00079 0. 0.00024-/ 0. 0. 0.10 -0.8168 0. 0. 0. 1445 120
49248.293 -0.?.6028 0.  0.454382 0. 0. 0.00112 0. 0.000052 0. 0. 0.08 -0.9383 0. 0. 0. 1463 120
49251.398 -0.31093 0.   0.458504 0. 0. 0.00053 0. 0.000173 0. 0. 0.06 -0.6838 0. 0. 0. 1443 120
49,255.570 -0.26383 0.  0.438640 0. 0. 0.00334 0. 0.000143 0. 0. 0.31 -0.8819 0. 0. 0. 1463 120
49.263.242 -0.2"/189 0. 0.420897 0. 0. 0.00108 0. 0.000050 0. 0. 0.03 -0.9095 0. 0. 0. 1463 120
49265.473 -0.33746 0.   0.427446 0. 0. 0.00040 0. 0.000120 0. 0. 0.07 -0.1565 0. 0. 0. 1443 120
492'/0.211 -0.27642 0.  0.405454 0. 0. 0.00156 0. 0.000062 0. 0. 0.11 -0.8995 0. 0. 0. 1463 120
49273.539 -0.35552 0.   0.406625 0. 0. 0.00036 0. 0.000118 0. 0. 0.04 -0.1020 0. 0. 0. )443 120
49278.293 -0.27407 0.   0.381226 0. 0. 0.00115 0. 0.000053 0. 0. 0.09 -0.8892 0. 0. 0. 1563 120
49279.488 -0.36544 0.   0.389548 0. 0. 0.00043 0. 0.000183 0. 0. 0.17 -0.3670 0. 0. 0. 1543 120
49283.281 -0.27366 0.   0.369067 0. 0. 0.00114 0. 0.000052 0. 0. 0.14 -0.8935 0. 0. 0. 1563 120
49287.469 -0.37912 0.   0.368934 0. 0. 0.00062 0. 0.000226 0. 0. 0.13 -0.4654 0. 0. 0. 1543 120
49291.254 -0.27907 0.   0.348012 0. 0. 0.00191 0. 0.000095 0. 0. 0.13 -0.8800 0. 0. 0. 1563 120
49292.426 -0.38628 0.   0.356145 0. 0. 0.00052 0. 0.000238 0. 0. 0.19 -0.7'/89 0. 0. 0. 1543 120
49298.234 -0.27151 0.   0.332101 0. 0. 0.00131 0. 0.000062 0. 0. 0.11 -0.9201 0. 0. 0. 1563 120
49300.453 -0.40085 0.   0.335713 0. 0. 0.00041 0. 0.000183 0. 0. 0.14 -0.2106 0. 0. 0. 1543 120
49306.203 -0.26437 0.   0.309324 0. 0. 0.00518 0. 0.000259 0. 0. 0.36 -0.9051 0. 0. 0. 1563 122
49307.391 -0.40886 0.   0.315987 0. 0. 0.00053 0. 0.000208 0. 0. 0.15 -0.6992 0. 0. 0. 1543 120
49312.195 -0.26356 0.   0.295588 0. 0. 0.0012[) 0. 0.000057 0. 0. 0.10 -0.9254 0. 0. 0. 1563 120
49314.434 -0.41815 0.   0.299053 0. 0. 0.00055 0. 0.000168 0. 0. 0.16 0.0813 0. 0. 0. 1543 120
49319.215 -0.26807 0.   0.279432 0. 0. 0.00151 0. 0.000071 0. 0. 0.10 -0.9306 0. 0. 0. 1563 120
49321.418 -0.42452 0.   0.284197 0. 0. 0.00048 0. 0.000176 0. 0. 0.09 -0.0629 0. 0. 0. 1543 120
49327.422 -0.25083 0.   0.262406 0. 0. 0.00525 0. 0.0002.84 0. 0. 0.54 -0.8307 0. 0. 0. 1563 122
49?33.391 -0,25260 0.   0.247122 0. 0. 0.00460 0. 0.000249 0. 0. 0.36 -0.8334 0. 0. 0. 1563 122
49335.387 -0.44367 0.   0.251165 0. 0. 0.00040 0. 0.000164 0. 0. 0.12 -0.0475 0. 0. 0. 1543 120
49340.754 -0.44988 0.   0.237356 0. 0. 0.00011 0. 0.000042 0. 0. 0.06 -0.0645 0. 0. 0. 1545 220
49340.758 -0.25213 0.   0.229705 0. 0. 0.00040 0. 0.000027 0. 0. 0.06 -0.9000 0. 0. 0. 1565 220
49341.656 -0.25191 0.   0.227299 0. 0. 0.00293 0. 0.000183 0. 0. 0.32 -0.8402 0. 0. 0. 1463 122
49344.547 -0.45595 0.   0.227109 0. 0. 0.00027 0. 0.000095 0. 0. 0.06 0.0748 0. 0. 0. 1443 120
49348.086 -0.24369 0.   0.211971 0. 0. 0.00353 0. 0.000164 0. 0. 0.18 -0.8912 0. 0. 0. 1463 122
49350.586 -0.46016 0.   0.213306 0. 0. 0.00022 0. 0.000095 0. 0. 0.05 -0.1206 0. 0. 0. 1443 120
49355.645 -0.23073 0.   0.193436 0. 0. 0.00105 0. 0.000056 0. 0. 0.06 -0.8456 0. 0. 0. 1463 120
49357.543 -0.46749 0.   0.193893 0. 0. 0.00024 0. 0.000090 0. 0. 0.09 -0.1045 0. 0. 0. 1443 120
49360.113 -0.21664 0.   0.182290 0. 0. 0.00127 0. 0.000061 0. 0. 0.08 -0.8335 0. 0. 0. 1463 120
49364.520 -0.47255 0.   0.177900 0. 0. 0.00044 0. 0.000140 0. 0. 0.21 -0.3085 0. 0. 0. 1445 120
49367.176 -0.20603 0.   0.167320 0. 0. 0.00101 0. 0.000047 0. 0. 0.11 -0.8974 0. 0. 0. 1463 120
493"/1.523 -0.47542 0.  0.160977 0. 0. 0.00023 0. 0.000088 0. 0. 0.09 -0.0631 0. 0. 0. 1443 120
49375.063 -0.18978 0.   0.150600 0. 0. 0.00099 0. 0.000046 0. 0. 0.06 -0.8759 0. 0. 0. 1463 120
49378.512 -0.47813 0.   0.145884 0. 0. 0.00033 0. 0.000104 0. 0. 0.07 -0.2120 0. 0. 0. 1443 120
49382.047 -0.17164 0.   0.134436 0. 0. 0.00093 0. 0.000042 0. 0. 0.05 -0.8557 0. 0. 0. 1463 120
49384.484 -0.475"19 0.  0.129121 0. 0. 0.00032 0. 0.000099 0. 0. 0.12 -0.2234 0. 0. 0. 1443 120
49389.027 -0.15128 0.   0.117710 0. 0. 0,00099 0. 0.000043 0. 0. 0.07 -0.8736 0. 0. 0. 1463 120
49391.5)6 -0.47698 0.   0.113431 0. 0. 0.00027 0. 0.000098 0. 0. 0.09 0.1135 0. 0. 0. 1443 120
49396.004 -0.13727 0.   0.102659 0. 0. 0.00107 0. 0.000046 0. 0. 0.07 -0.8883 0. 0. 0. 1463 120
49401.453 -0.47023 0.   0.089243 0. 0. 0.00028 0. 0.000090 0. 0. 0.09 -0.1344 0. 0. 0. 1443 120
```

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49403.125 -0.11684 0.   0.087000 0. 0. 0.00131 0. 0.000060 0. 0. 0.09 -0.9253 0. 0. 0. 1463 120
49410.125 -0.10619 0.   0.068635 0. 0.  0.00106 0. 0.000050 0. 0. 0.24 -0.8400 0. 0. 0. 1463 120
49413.375 -0.46591 0.   0.055338 0. 0.  0.00026 0. 0.000091 0. 0. 0.06 -0.2690 0. 0. 0. 1443 120
49417.074 -0.09681 0.   0.048199 0. 0. 0.00158 0. 0.000092 0. 0. 0.19 -0.8795 0. 0. 0. 1463 120
49420.262 -0.45614 0.   0.036630 0. 0. 0,00029 0. 0.000103 0. 0. 0.10 -0.1685 0. 0. 0. 1443 120
49424.059 -0.08187 0.   0.030010 0. 0. 0.00106 0. 0.000054 0. 0. 0.04 -0.9002 0. 0. 0. 1463 120
```

C SSC(JPL) 94 R 01
C
C DEEP SPACE NETWORK VLBI STATION LOCATIONS FROM REFERENCE FRAME JPL R994-1
C
C Station coordinates and velocities were adjusted for all ten DSN
C antennas. Stations in each of the three DSN complexes were constrained
C to move at the same rate. The velocities reported below are total
C rates; they are not increments from any model. The velocities as well
C as the coordinates are expressed in the ITRF-92 coordinate system.
C Coordinates and their errors are in units of Meters.
C Velocities and their errors are in units of Meters/Year.
C The covariance matrix for station coordinates and velocities is
C reported following the X and V records, as C records.
C

	Domes ID	Station Name	CDP Number	X (Meters)	Y (Meters)	Z (Meters)	X Err	Y Err	Z Err	Ref. epoch	Mean epoch Days	Time span
X	40405S003	DSS 12	1512	-2350443.673	-4651980.837	3665630.978	0.010	0.014	0.013	47161	45760	785
V	40405	DSS 12	1512	-0.0141	0.0045	-0.0062	0.0010	0.0016	0.0014	45760	785	
X	40405S014	DSS 13	1513	-2351129.049	-4655477.110	3660956.960	0.008	0.011	0.010	47161	45632	1391
V	40405	DSS 13	1513	-0.0141	0.0045	-0.0062	0.0010	0.0016	0.0014	45632	1391	
X	40405S001	DSS 14	1514	-2353621.111	-4641341.540	3677052.357	0.006	0.008	0.008	47161	47083	5542
V	40405	DSS 14	1514	-0.0141	0.0045	-0.0062	0.0010	0.0016	0.0014	47083	5542	
X	40405S019	DSS 15	7231	-2353538.657	-4641549.516	3676670.038	0.005	0.008	0.007	47161	48427	2269
V	40405	DSS 15	7231	-0.0141	0.0045	-0.0062	0.0010	0.0016	0.0014	48427	2269	
X	50103S005	DSS 42	1542	-4460980.823	2682413.503	-3674582.259	0.019	0.012	0.015	47161	46784	1708
V	50103	DSS 42	1542	-0.0380	0.0033	0.0434	0.0026	0.0011	0.0017	46784	1708	
X	50103S001	DSS 43	1543	-4460894.394	2682361.533	-3674748.770	0.014	0.007	0.009	47161	46854	5542
V	50103	DSS 43	1543	-0.0380	0.0033	0.0434	0.0026	0.0011	0.0017	46854	5542	
X	50103S010	DSS 45	1545	-4460935.066	2682765.695	-3674381.599	0.014	0.006	0.008	47161	48568	2016
V	50103	DSS 45	1545	-0.0380	0.0033	0.0434	0.0026	0.0011	0.0017	48568	2016	
X	13407S003	DSS 61	1561	4849245.253	-360278.281	4114884.373	0.014	0.011	0.017	47161	46436	1778
V	13407	DSS 61	1561	-0.0083	0.0207	0.0138	0.0021	0.0016	0.0024	46436	1778	
X	13407S001	DSS 63	1563	4849092.588	-360180.685	4115109.040	0.010	0.010	0.014	47161	46861	5146
V	13407	DSS 63	1563	-0.0083	0.0207	0.0138	0.0021	0.0016	0.0024	46861	5146	
X	13407S010	DSS 65	1565	4849336.787	-360488.975	4114748.714	0.010	0.009	0.014	47161	48501	1992
V	13407	DSS 65	1565	-0.0083	0.0207	0.0138	0.0021	0.0016	0.0024	48501	1992	

C
C Station coordinate covariance matrix in units of
C (millimeters)**2 for positions,
C (millimeters/year)**2 for rates, and
C (millimeters)*(millimeters/year) for position-rate cross terms.
C

C Parameter #s:	x	y	z	$\dot{x}$	$\dot{y}$	$\dot{z}$
	(mm^2			(mm/y)^2		
C DSS 12	1	2	3	4	5	6
C DSS 13	7	8	9	10	11	12

```
c  DSS 14              13  14  15    16  17  18
c  DSS 15              19  20  21    22  23  24
c  11SS 42             25  26  27    28  29  30
c  DSS 43              31  32  33    34  35  36
c  1)ss 45             37  38  39    40  41  42
c  DSS 61              43  44  45    46  47  48
C  DSS 63              49  50  51    52  53  54
c  DSS 65              55  56  57    58  59  60
c
c    #   Covariance
c
c    1  1.07534D+02
c    2 -1.23259D+01  1.87060D+02
c    3 -2.16114D+01 -6.26009D+01  1.67549D+02
C    4 -1.60295D-01 -9.048801>-01 -1.014171)-01  1.02071D+00
c    5 -7.66060D-01 -3.37228D+00  1.24712D+00  2.95510D-01  2.53301D+00
c    6  5.66041D-01  2.34675D+00 -1.11589D+00 -6.57949D-01 -7.18256D-01  1.92372D+00
c
c    7  3.95689D+01  6.59493D+00 -2.26177D+01 -8.77178D-01 -1.01953D+00  3.73238D-01
c       5.66496D+01
c    8 3.04100D+00  9.38786D+01 -3.22978D+01 -1.28421D+00 -4.69767D+00  3.24608D+00
c       2.41194D+01  1.30191D+02
c    9 -2.01095D+01 -2.86055D+01  9.07532D+01  3.58364D-02  2.21066D+00 -1.84881D+00
c      -3.21224D+01 -5.51723D+01  1 .08236D+02
c   10 -1.60295D-01 -9.04880[)-01 --1.014171)-01  1.02071D+00  2.95510D-01 -6.57949D-01
c      -8.77178D-01 -1.28421D+00  3.583641)-02  1.02071D+00
C   11 -"/.660601>-01 -3.37228D+00  1.24712D+00  2.95510D-01  2.53301D+00 -7.18256D-01
c      -1.01953D+00 -4.69767D+00  2.21066D+00  2.95510D-01  2.53301D+00
c    12  5.66041D-01  2.34675D+00 -1.11589D+00 -6.57949D-01 -7.18256D-01  1.92372D+00
c        3./32371)-01  3.24608D+00 -1.84881D+00 -6.57949D-01 -7.18256D-01  1 .92372D+00
c
c    13  2.39278D+01 -3.67653D-01 -1.02159D+01 -1.07973D+00 -1 .03810D+00  2.67896D-01
c        2.29180D+01 -1.37694D+00 -9.68003D+00 -1.07973D+00 -1.03810D+00  2.67896D-01
c        3.96988D+01
c    14  2.97393D-01  4.63997D+01 -5.57609D+00 -1.449041)+00 -4.93374D+00  3.34128D+00
C       -1.08512D+00  4.76775D+01 -6.88511D+00 -1.449041>400 -4.93374D+00  3.34128D+00
c       -1 .76699D+00  6.96901D+01
C    15 -1.06918D+01 -5.00785D+00  4.29673D+01  1.0555"/1)-01  2.44247D+00 -1.99744D+00
c       -9.31512D+00 -5.26746D+00  4.34766D+01  1 .0555"/1)-0)  2.44247D+00 -1.99744D+00
c       -1 .18109D+01 -1.17409D+01  7.04107D+01
c    16 -1.60295D-01 -9.04880D-01 -1.01417D-01  1.020731)400  2.95510D-01 -6.57949D-01
c       -8.771781)-01 -1.28421D+00  3.58364D-02  1 .02071D+00  2.95510D-01 -6.57949D-01
c       -1.07973D+00 -1.44904D+00  1.05557D-01  1.02071D+00
c    17 -7.66060D-01 -3.37228D+00  1.24712D+00  2.955101)-01  2.53301D+00 -7.18256D-01
c       -1.01953D+00 -4.69767D+00  2.21066D+00  2.95510D-01  2.53301D+00 -7.18256D-01
c       -1.03810D+00 -4.93374D+00  2.44247D+00  2.95510D-01  2.53301D+00
c    18  5.66041D-01  2.34675D+00 -1.11589D+00 -6.579491)-01 -7.18256D-01  1.92372D+00
c        3.73238D-01  3.24608D+00 -1.84881D+00 -6.579491)-01 -7.18256D-01  1.92372D+00
c        2.67896[)-01  3.34128D+00 -1.99744D+00 -6.57949D-01 -7.18256D-01  1.92372D+00
c
c    19  1.79151D+01 -3.86512D+00 -7.70318D+00 -1.34123D+00 -1.65804D+00  6.44471D-01
c        2.11270D+01 -1.85564D+00 -8.52372D+00 -1.34123D+00 -1.65804D+00  6.44471D-01
c        2.17157D+01 -1.58003D+00 -8.53134D+00 -1.34123D+00 -1.65804D+00  6.44471D-01
c        2.34823D+01
c    20 -4.64202D+00  4.29437D+01 -2.28718D+00 -1.86027D+00 -6.10157D+00  4.09532D+00
c       -2.69833D+00  5.01151D+01 -7.32736D+00 -1.86027D+00 -6.10157D+00  4.09532D+00
c       -3.25952D+00  4.74618D+01 -4.81192D+00 -1.86027D+00 -6.10157D+00  4.09532D+00
c        1.33521D+00  5.84769D+01
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C    21 -8.86430D+00 -3.91908D+00  4.06981D+01  3.80210D-01  3.32189D+00 -2.58454D+00
C       -8.53078D+00 -8.62110D+00  4.43474D+01  3.80210D-01  3.32189D+00 -2.58454D+00
C       -8.22266D+00 -7.25678D+00  4.30061D+01  3.80210D-01  3.32189D+00 -2.58454D+00
C       -1.05499D+01 -1.38263D+01  4.86654D+01
C    22 -1.60295D-01 -9.04880D-01 -1.01417D-01  1.02071D+00  2.95510D-0I -6.57949D-01
C       -8.77178[)-01 -1.28421D+00  3.58364D-02  1.02071D+00  2.95510D-01 -6.57949D-01
C       -1.07973D+00 -1.44904D+00  1.05557D-01  1 .02071D+00  2.95510D-01 -6.57949D-01
C       -1.34123D+00 -1.86027D+00  3.80210D-01  1.02071D+00
C    23 -7.660601)-01 -3.37228D+00  1.24712D+00  2.95510D-0I  2.53301D+00 -7.18256D-01
C       -1.01953D+00 -4.697671)+00  2.21066D+00  2.955101)-01  2.53301D+00 -7.18256D-01
C       -1 .03810D+00 -4.93374D+00  2.44247D+00  2.955101)-01  2.53301D+00 -7.18256D-01
C       -1.65804D+00 -6.10157D+00  3.32189D+00  2.955101)-01  2.53301D+00
C    24  5.660411)-01  2.34675D+00 -1.11589D+00 -6.57949D-01 -7.18256D-01  1.92372D+00
C        3.732371)-01  3.24608D+00 -1.84881D+00 -6.579491)-01 --7.182561)-01  1.92372D+00
C        2.678961)-01  3.34128D+00 -1.99744D+00 -6.579491)-01 -7.182561)-01  1.92372D+00
C        6.444711)-01  4.09532D+00 -2.58454D+00 -6.579491)-01 -7.18256D-01  1.92372D+00
C
C    25 -1.13853D+01 -4.14899D+01  1.62374D+01  3.36917D+00  1.00351D+01 -6.55933D+00
C       -1.31943D+01 -4.55563D+01  1.90477D+01  3.36917D+00  1.00351D+01 -6.55933D+00
C       -8.30282D+00 -4.53547D+01  2.16026D+01  3.36917D+00  1.00351D+01 -6.55933D+00
C       -1.48480D+01 -4.85780D+01  2.12772D+01  3.36917D+00  1.00351D+01 -6.55933D+00
C        3.67481D+02
C    26  4.45659D+00 -6.03476D-01 -8.99741D+00  4.223011)-01  1.15603D+00 -7.37306D-01
C        4.36432D+00 -4.87305D+00 -5.76322D+00  4.223011)-01  1.15603D+00 -7.37306D-01
C        4.04254D+00  2.72756D+00 -1.39291D+01  4.22301D-01  1 .15603D+00 -7.373061)-01
C        2.24620D+00 -9.93983D+00 -1.63322D+00  4.22301D-01  1.15603D+00 -7.373061)-01
C       -6.74228D+01  1.53322D+02
C    2"1 -3.95525D+00 -2.45347D+01  5.39100D+00  1.36358D+00  3.86921D+00 -2.49240D+00
C       -5.02512D+00 -2.36057D+01  4.51469D+00  1.36358D+00  3.86921D+00 -2.49240D+00
C       -2.69520D+00 -2.87411D+01  1.12336D+01  1 .36358D+00  3.86921D+00 -2.49240D+00
C       -4.54195D+00 -2.17921D+01  2.87302D+00  1.36358D+00  3.86921D+00 -2.49240D+00
C        1.46569D+02 -4.53702D+01  2.09498D+02
C    28  2.51302D+00  7.43601D+00 -2.56452D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C        2.854011)+00  8.367531)+00 -3.23364D+00 -1.09117D+00 -2.77934D+00  1 .81897D+00
C        2.27762D+00  7.46894D+00 -2.59995D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C        3.16851D+00  8.97917D+00 -3.70036D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C       -1.78745D+01 -2.09964D+00 -6.92123D+00  6.58578D+00
C    29 -2.99508D-01 -2.345261)-01 -1.74824D-01  2.459611)-01 -1.27601D-01 -1.805241)-01
C       -5:45721D-01  3.I1030D-01 -6.382341)-01  2.45961D-01 -1.27601[)-01 -1.80524[)-01
C       -4.37937D-01  7.09152D-01 -9.91131D-01  2.45961D-01 -1.27601D-01 -1.80524D-01
C       -3.69394D-01  9.30210D-01 -1.18561D+00  2.45961D-01 -1.27601D-01 -1.805241)-01
C       -3.71641D-01 -1.39044D-02 -1.03995D-01 -2.22226D-01  1.13658D+00
C    30  1.65990D+00  4.36546D+00 -1.28788D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
C        2.05941D+00  4.43058D+00 -1.27435D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
C        1 .64738D+00  3.59532D+00 -6.247521)-01 -6.19447D-01 -1.68108D+00  7.79636D-01
C        2.08946D+00  4.25637D+00 -1.07829D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
C       -9.72097D+00 -1.16624D+00 -3.79807D+00  3.04441D+00  6.41751D-02  2.92913D+00
C
C    31 -1.19084D+01 -4.33967D+01  1.70072D+01  3.58932D+00  1.02864D+01 -6.64742D+00
C       -1.40679D+01 -4.70917D+01  1.94675D+01  3.58932D+00  1.02864D+01 -6.64742D+00
C       -9.09362D+00 -4.58421D+01  2.09777D+01  3.58932D+00  1.02864D+01 -6.64742D+00
C       -1.56430D+01 -4.96660D+01  2.12780D+01  3.58932D+00  1.02864D+01 -6.64742D+00
C        1.96682D+02 -3.90827D+00  6.01728D+01 -1.86783D+01 -2.02169D-01 -1.03149D+01
C        2.01741D+02
C    32  4.54974D+00 -5.88163D-02 -9.21517D+00 3.49294D-01  1.24025D+00 -8.49237D-01
C        4.73627D+00 -4 .77266D+00 -5.58631D+00  3.49294D-01  1.24025D+00 -8.49237D-01
C        4.30959D+00  1.86922D+00 -1.28142D+01  3.49294D-01  1.24025D+00 -8.49237D-01
C        2.51367D+00 -1.03095D+01 -1.02660D+00  3.49294D-01  1.24025D+00 -8.49237D-01
```

```
c      -4.48057D+00  5.41391D+01  3.86870D+00 -1.95278D+00 -1.60623D-01 -9.60170D-01
c      -5.38190D+00  5.51006D+01
c    33 -4.24861D+00 -2.57533D+01  5.881421)+00   1.51163D+00  3.91640D+00 -2.44902D+00
c      -5.67239D+00 -2.43410D+01  4.56713D+00   1.51163D+00  3.91640D+00 -2.44902D+00
c      -3.23049D+00 -2.83272D+01  1.01534D+01   1.51163D+00  3.91640D+00 -2.44902D+00
c      -5.07935D+00 -2.19927D+01  2.432271)+00   1.51163D+00  3.91640D+00 -2.44902D+00
c       6.04633D+01  4.13063D+00  7.70512D+01 -7.37471D+00  7.57859D-02 -4.20410D+00
c       6.34266D+01  2.78074D+00  7.93110D+01
c    34  2.51302D+00  7.43601D+00 -2.56452D+00 -1.09117D+00 -2.779341)+00  1.81897D+00
c       2.85401D+00  8.36753D+00 -3.23364D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
c       2.27762D+00  7.46894D+00 -2.59995D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
c       3.16851D+00  8.97917D+00 -3.70036D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
c      -1.78745D+01 -2.09964D+00 -6.92123D+00  6.58578D+00 -2.22226D-01  3.04441D+00
C      -1.86783D+01 -1.95278D+00 -7.37471D+00  6.58578D+00
c    35 -2.99508D-01 -2.34526D-01 -1.74824D-01  2.45961D-01 -1.27601D-01 -1.80524D-01
c      -5.457211)-01   3.I103OD-01 -6.38234D-01  2.45961D-01 -1.276011)-01 -1.805241)-01
c      -4.379371)-01   7.09152D-01 -9.91131D-01  2.45961D-01 -1.276011)-01 -1.80524D-01
c      -3.69394D-01  9.30210D-01 -1.18561D+00  2.45961[)-01 -1.27601D-01 -1.80524D-01
c      -3.71641D-01 -1.39044D-02 -1.03995D-01 -2.22226D-01  1.13658D+00  6.41751D-02
c      -2.02169D-01 -1.60623D-01  7.57859D-02 -2.22226D-01  1.13658D+00
c    36  1.65990D+00  4.36546D+00 -1.28788D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
c       2.05941D+00  4.43058D+00 -1.27435D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
c       1.64738D+00  3.59532D+00 -6.24752D-01 -6.19447D-01 -1.68108D+00  7.79636D-01
c       2.08946D+00  4.25637D+00 -1.07829D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
c      -9.72097D+00 -1.16624D+00 -3.79807D+00  3.04441D+00 6.417511)-02  2.92913D+00
c      -1.03149D+01 -9.601701)-01 -4.20410D+00  3.04441D+00  6.41751D-02  2.92913D+00
c
c    37 -1.53147D+01 -4.05894D+01  8.83756D+00  4.69622D+00  1.09409D+01 -6.57801D+00
c      -1.82444D+01 -4.71215D+01  1.32959D+01  4.69622D+00  1.09409D+01 -6.57801D+00
c      -1.39615D+01 -3.72771D+01  5.46861D+00  4.69622D+00  1.09409D+01 -6.57801D+00
c      -2.15132D+01 -5.32119D+01  1.78544D+01  4.69622D+00  1.094091)401 -6.57801D+00
C       1.57929D+02  8.85923D+00  4.88043D+01 -2.19568D+01  8.72103w01 -1.30594D+01
C       1.62260D+02  7.99183D+00  5.13032D+01 -2.19568D+01  8.72103D-01 -1.30594D+01
C       1.88647D+02
C    38 5.787231)+00 -5.82163D+00 -1.55592D+00 -1.99485D-01  1.42785D+00 -1.31462D+00
C       6.55860D+00 -8.51951D+00  6.54171D-01 -1.99485D-01  1.42785D+00 -1.31462D+00
C       6.516811)400 -8.24603D+00  2.72508D-01 -1.994851)-01  1.42785D+00 -1.31462D+00
C       5.57759D+00 -1.14999D+01  3.22297D+00 -1.99485D-01  1.42785D+00 -1.31462D+00
c       2.28179D+00  2.76275D+01  6.30333D+00 -").692521)-01 -9.449101)-01  3.64194D-01
c       1.89593D+00  2.81486D+01  5.75796D+00 -7.69252D-01 -9.44910D-0I  3.64194D-01
c      -3.00947D+00  3.22713D+01
C    39 -6.58756D+00 -2.04489D+01 -3.02328D+00  2.36924D+00  4.05145D+00 -2.08210D+00
c      -8.74445D+00 -2.16729D+01 -2.49881D+00  2.36924D+00  4.05145D+00 -2.08210D+00
C      -6.86332D+00 -1.75054D+01 -5.71748D+00  2.36924D+00  4.05145D+00 -2.08210D+00
c      -9.74722D+00 -2.26199D+01 -2.06158D+00  2.36924D+00  4.05145D+00 -2.08210D+00
c       5.21456D+01  9.63513D+00  4.80554D+01 -9.59422D+00  1.09107D+00 -6.30449D+00
C       5.44327D+01  8.85415D+00  4.96099D+01 -9.59422D+00  1.09107D+00 -6.30449D+00
C       7.02592D+01  7.35753D-01  6.20761D+01
C    40  2.51302D+00  7.43601D+00 -2.56452D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C       2.85401D+00  8.36753D+00 -3.23364D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C       2.27762D+00 7.46894D+00 -2.59995D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
c       3.16851D+00  8.97917D+00 -3.70036D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
c      -1.78745D+01 -2.09964D+00 -6.92123D+00  6.58578D+00 -2.222261)-01  3.04441D+00
c      -1.86783D+01 -1.95278D+00 -7.37471D+00  6.58578D+00 -2.222261)-01 3.04441D+00
c      -2.19568D+01 -7.69252D-01 -9.59422D+00  6.58578D+00
c    41 -2.99508D-01 -2.34526D-01 -1.74824D-01  2.45961D-01 -1.27601D-01 -1.80524D-01
c      -5.45721D-01  3.11030D-01 -6.38234D-01  2.459611)-01 -1.27601D-01 -1.80524D-01
c      -4.37937D-01  7.09152D-01 -9.91131D-01  2.459611)-01 -1.27601D-01 -1.80524D-01
```

```
c      -3.69394D-01  9.30210D-01 -1.18561D+00 2.45961D-01 -1.27601D-01  -1.80524D-01
c      -3.71641D-01 -1.39044D-02 -1.039951)-01 -2.22226D-01  1.13658D+00  6.41751D-02
c      -2.02169D-01 -1.60623D-01  7.57859D-02 -2.22226D-01  1.13658D+00  6.41751D-02
c       8.723031)-01  -9.44910D-01  1.09107D+00 -2.22226D-01  1.13658D+00
c   42  1.65990D+00  4.36546D+00 -1.28788D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
c       2.059411)+00  4.43058D+00 -1.27435D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
c       1.64738D+00  3.59532D+00 --6.247521)-01 -6.19447D-01 -1.68108D+00  7.79636D-01
c       2.08946D+00  4.25637D+00 -1.07829D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
C      -9.72097D+00 -1.16624D+00 -3.79807D+00  3.04441D+00  6.41751D-02  2.92913D+00
c      -1.03149D+01 -9.60170D-01 -4.20410D+00  3.04441D+00  6.41751D-02  2.92913D+00
C      -1.30594D+01  3.64194D-01 -6.30449D+00  3.04441D+00  6.417511)-02  2.92913D+00
C
c   43  2.21741D+01  3.89256D+01 -3.12789D+00 -2.96441D+00 -6.55312D+00  3.85330D+00
c       1.86429D+01  3.95622D+01 -4.50096D+00 -2.96441D+00 -6.55312D+00 3.85330D+00
c       2.69370D+01  3.97180D+01 -2.41769D+00 -2.96441D+00 -6.55312D+00  3.85330D+00
c       1.64115D+01  3.73089D+01 -3.38684D+00 -2.96441D+00 -6.55312D+00 3.85330D+00
C      -6.52733D+01 -2.66228D+00 -3.37912D+01  1.23408D+01 -3.276261)-01  7.203391)+00
c      -6.83985D+01 -2.36202D+00 -3.53576D+01  1.23408D+01 -3.27626D-01  7.20339D+00
C      -7.89750D+01 -5.364921)-01  -4.11129D+01  1.23408D+01 -3.27626D-01  7.20339D+00
C       2.03985D+02
c   44  2.72869D+00 -2.32246D+01 -1.08631D+01  2.75860D+00  6.12080D+00 -3.60705D+00
C      -4.77045D-01 -2.83362D+01 -7.62572D+00  2.75860D+00  6.12080D+00 -3.60705D+00
C       7.541111)-01 -2.10051D+01 -1.06822D+01  2.75860D+00  6.12080D+00 -3.60705D+00
c      -3.79919D+00 -3.41416D+01 -3.46814D+00  2.75860D+00  6.12080D+00 -3.60705D+00
C       6.23472D+01  1 .366031)+01  2.84442D+01 -1 .18808D+01  4.16426D-01 -7.01945D+00
C       6.49671D+01  1.31549D+01  2.99419D+01 -1 .18808D+01  4.16426D-01 -7.01945D+00
C       8.07511D+01  6.46598D+00  4.13575D+01 -1 .18808D+01  4.16426D-01 -7.01945D+00
C      -7.10846D+01  1.17937D+02
C   45  2.70921D+01  2.65112D+01 -1.40986D+01 -4.48120D+00 -9.46631D+00  5.45624D+00
c       2.75150D+01  3.07648D+01 -1.737741)401  -4.48120D+00 -9.46631D+00  5.456241)+00
C       3.00110D+01  2.82722D+01 -9.51819D+00 -4.48120D+00 -9.46631D+00  5.45624D+00
C       2.86076D+01  3.34632D+01 -1.96926D+01 -4.481201)+00 -9.46631D+00  5.45624D+00
c      -9.82674D+01 -1.99466D+00 -3.84641D+01  1.84289D+01 -7.610561)-01  1 .09857D+01
C      -1.02790D+02 -1.25922D+00 -4.09497D+01  1.84289D+01 -7.61056D-01  1 .09857D+01
C      -1.24401D+02  6.35135D+00 -5.54866D+01  1.84289D+01 -7.61056D-01  1.09857D+01
C       1.58383D+02 -7.45896D+01  2.78892D+02
c   46 -2.353021)+00 -6.53118D+00  2.66581D+00  8.982791)-01  2.53132D+00 -1.20779D+00
C      -1.97700D+00 -7.08340D+00  3.19779D+00  8.98279D-01  2.53132D+00 -1.20779D+00
c      -1.19789D+00 -6.01987D+00  2.49437D+00  8.982791)-01  2.53132D+00 -1.20779D+00
C      -1.82732D+00 -7.11889D+00  3.32012D+00  8.98279D-01  2.53132D+00 -1.20779D+00
C       1.45054D+01  1.67730D+00  5.55769D+00 -4.21678D+00  1.858771)-02  -2.60592D+00
c       1.50890D+01  1.60343D+00  5.86313D+00 -4.21678D+00  1.85877D-02  -2.60592D+00
c       1.72605D+01  9.68706D-01  7.22500D+00 -4.21678D+00  1.858771)-02  -2.60592D+00
c      -9.37629D+00  9.12219D+00 -1.39477D+01  4.21121D+00
C   47  1.06291D+00  3.60282D+00 -1.06981D+00 -3.09561D-01 -1.76629D+00  4.64670D-01
c       1.56347D+00  4.38369D+00 -1.57042D+00 -3.095611)-01  -1.76629D+00  4.64670D-01
c       1.47608D+00  4.22457D+00 -1.45136D+00 -3.09561D-01 -1.76629D+00  4.64670D-01
C       2.02717D+00  5.17097D+00 -2.13610D+00 -3.09561D-01 -1.76629D+00  4.64670D-01
C      -9.66350D+00 -1.14184D+00 -3.76539D+00  2.87628D+00  2.05878D-01  1.85885D+00
c      -1.00843D+01 -1.07933D+00 -3.99237D+00  2.87628D+00  2.05878D-01  1.85885D+00
c      -1.18128D+01 -4.82845D-01 -5.14247D+00  2.87628D+00  2.05878D-01  1.85885D+00
c       6.88096D+00 -6.53691D+00  1.02273D+01 -2.65654D+00  2.70479D+00
c   48 -2.22757D+00 -6.71448D+00  2.40511D+00  1 .32612D+00  2.21901D+00 -1.97078D+00
c      -2.43373D+00 -7.67836D+00  3.12429D+00  1.32612D+00  2.21901D+00 -1.97078D+00
c      -1.91525D+00 -6.93659D+00  2.62217D+00  1.32612D+00  2.21901D+00 -1.97078D+00
c      -2.73410D+00 -8.35190D+00  3.66291D+00  1.32612D+00  2.21901D+00 -1.97078D+00
c       1.62803D+01  1.90368D+00  6.29039D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
C       1.69623D+01  1.80955D+00  6.65304D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
```

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C       1.96375D+01  9.50467D-01  8.38664D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
C      -1.10565D+01  1.06267D+01 -1.64419D+01  3.70270D+00 -2.28475D+00  5.84657D+00
C
C   49  2.40270D+01  4.18259D+01 -4.92726D+00 -2.81977D+00 -6.71512D+00  4.07035D+00
C       1.90292D+01  4.17741D+01 -6.10952D+00 -2.81977D+00 -6.71512D+00  4.07035D+00
C       2.54101D+01  3.97289D+01 -2.80485D+00 -2.81977D+00 -6.71512D+00  4.07035D+00
C       1.57263D+01  3.81007D+01 -4.10706D+00 -2.81977D+00 -6.71512D+00  4.07035D+00
C      -6.85451D+01 -3.12400D+00 -3.48747D+01  1.29018D+01 -3.19341D-01  7.51147D+00
C      -7.10539D+01 -2.91646D+00 -3.61078D+01  1.29018D+01 -3.19341D-01  7.51147D+00
C      -8.17952D+01 -9.27429D-01 -4.20399D+01  1.29018D+01 -3.19341D-01  7.51147D+00
C       9.14801D+01 -6.26744D+01  8.12657D+01 -1.00820D+01  7.03481D+00 -1.15816D+01
C       9.46820D+01
C   50  2.72523D+00 -2.33502D+01 -1.08378D+01  2.79013D+00  6.18054D+00 -3.63969D+00
C      -5.466641)-01 -2.85215D+01 -7.56944D+00  2.79013D+00  6.18054D+00 -3.63969D+00
C       5.884911)-01 -2.13183D+01 -1.05465D+01  2.79013D+00  6.18054D+00 -3.63969D+00
C      -3.92314D+00 -3.44085D+01 -3.35647D+00  2.79013D+00  6.18054D+00 -3.63969D+00
C       6.30279D+01  1.36600D+01  2.87586D+01 -1 .19746D+01  4.153681)-01 -7.07122D+00
C       6.55114D+01  1.31757D+01  3.01820D+01 -1.19746D+01  4.15368D-01 -7.07122D+00
C       8.12755D+01  6.49576D+00  4.15830D+01 -1.19746D+01  4.15368D-01 -7.07122D+00
C      -6.19017D+01  9.26480D+01 -6.71935D+01  9.18447D+00 -6.59559D+00  1.07111D+01
C      -6.29903D+01  9.29768D+01
C   51  2.84865D+01  2.88072D+01 -1.54733D+01 -4.402361)+00 -9.64430D+00  5.64998D+00
C       2.78707D+01  3.26002D+01 -1.86381D+01 -4.40236D+00 -9.64430D+00  5.64998D+00
C       2.90209D+01  2.85759D+01 -9.93687D+00 -4.40236D+00 -9.64430D+00  5.64998D+00
C       2.82101D+01  3.43095D+01 -2.03387D+01 -4.40236D+00 -9.64430D+00  5.64998D+00
C      -1.01366D+02 -2.340971)+00 -3.95742D+01  1.89386D+01 -7.53838D-01  1.12658D+01
C      -1.05297D+02 -1.69511D+00 -4.17395D+01  1.89386D+01 -7.53838D-01  1.12658D+01
C      -1.27013D+02  6.02975D+00 -5.63954D+01  1 .89386D+01 -7.53838D-01  1.12658D+01
C       8.08581D+01 -6.78256D+01  1.86224D+02 -1.45362D+01  1.03982D+01 -1.69158D+01
C       8.39676D+01 -6.8321OD+OI  1.89026D+02
C   52 -2.35302D+00 -6.53118D+00  2.66581D+00  8.982791)-01  2.53132D+00 -1.20779D+00
C      -1.97700D+00 -7.08340D+00  3.19779D+00  8.98279D-01  2.53132D+00 -1 .20779D+00
C      -1.19789D+00 -6.01987D+00  2.49437D+00  8.98279D-01  2.53132D+00 -1.20779D+00
C      -1.82732D+00 -7.11889D+00  3.32012D+00  8.982791)-01  2.53132D+00 -1.20779D+00
C       1.45054D+01  1.67730D+00  5.55769D+00 -4.21678D+00  1.85877D-02 -2.60592D+00
C       1.50890D+01  1 .60343D+00  5.86313D+00 -4.21678D+00  1.8587"11)-02 -2.60592D+00
C       1.72605D+01  9.687061)-01  7.22500D+00 -4.21678D+00  1.8587"/1)-02 -2.60592D+00
C      -9.37629D+00  9.12219D+00 -1.39477D+01  4.21121D+00 -2.65654D+00  3.70270D+00
C      -1.00820D+01  9.18447D+00 -1 .453621)+01  4.21121D+00
C   53  1.06291D+00  3.60282D+00 -1.06981D+00 -3.095611)-01 -1.76629D+00  4.64670D-01
C       1.56347D+00  4.38369D+00 -1.57042D+00 -3.09561D-01 -1.76629D+00  4.64670D-01
C       1 .47608D+00  4.22457D+00 -1.45136D+00 -3.09561D-01 -1.76629D+00  4.64670D-01
C       2.02717D+00  5.17097D+00 -2.13610D+00 -3.09561D-01 -1.76629D+00  4.64670D-01
C      -9.66350D+00 -1.14184D+00 -3.76539D+00  2.87628D+00  2.05878D-01  1.85885D+00
C      -1.00843D+01 -1.07933D+00 -3.99237D+00  2.87628D+00  2.05878D-01  1.85885D+00
C      -1.18128D+01 -4.82845D-01 -5.14247D+00  2.87628D+00  2.058781)-01  1.85885D+00
C       6.88096D+00 -6.53691D+00  1.02273D+01 -2.65654D+00  2.70479D+00 -2.284751)+00
C       7.03481D+00 -6.59559D+00  1.03982D+01 -2.65654D+00  2.70479D+00
C   54 -2.22757D+00 -6.71448D+00  2.40511D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C      -2.43373D+00 -7.67836D+00  3.12429D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C      -1.91525D+00 -6.93659D+00  2.62217D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C      -2.73410D+00 -8.35190D+00  3.66291D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C       1.62803D+01  1.90368D+00  6.29039D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
C       1.69623D+01  1.80955D+00  6.65304D+00 -4.80109D+00  2.579011)-01 -2.65938D+00
C       1.96375D+01  9.50467D-01  8.38664D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
C      -1.10565D+01  1.06267D+01 -1.64419D+01  3.70270D+00 -2.28475D+00  5.84657D+00
C      -1.15816D+01  1.07111D+01 -1.69158D+01  3.70270D+00 -2.28475D+00  5.84657D+00
C
```

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c    55  1.46333D+01  3.99742D+01 -3.86542D+00 -2.57047D+00 -7.68227D+00  5.02615D+00
c         1.40940D+01  4.41679D+01 -7.27936D+00 -2.57047D+00 -7.68227D+00  5.02615D+00
c         1.02019D+01  3.60300D+01 -9.44754D-01 -2.57047D+00 -7.68227D+00  5.02615D+00
c         1.49739D+01  4.70933D+01 -9.85502D+00 -2.57047D+00 -7.68227D+00  5.02615D+00
c        -8.67864D+01 -9.03897D+00 -3.89045D+01  1.50292D+01 -1.51457D-01  8.56393D+00
c        -8.94755D+01 -8.70096D+00 -4.03103D+01  1.50292D+01 -1.51457D-01  8.56393D+00
c        -1.04369D+02 -3.52218D+00 -5.02608D+01  1.50292D+01 -1.51457D-01  8.56393D+00
c         6.98729D+01 -6.33085D+01  7.63297D+01 -1.24586D+01  7.83375D+00 -1.35901D+01
c         7.27871D+01 -6.36300D+01  7.88209D+01 -1.24586D+01  7.83375D+00 -1.35901D+01
c         9.20325D+01
c    56   6.929681)-01 -2.79862D+01 -8.75045D+00  2.98548D+00  6.56235D+00 -3.85139D+00
c        -2.33024D+00 -3.28553D+01 -5.65204D+00  2.98548D+00  6.56235D+00 -3.85139D+00
c        -5.817011>-01 -2.81547D+01 -9.54319D+00  2.98548D+00  6.56235D+00 -3.85139D+00
c        -5.43060D+00 -3.82211D+01 -1.76231D+00  2.98548D+00  6.56235D+00 -3.85139D+00
c         7.22159D+01  1.35282D+01  3.30935D+01 -1.26465D+01  4.29463D-01 -7.46031D+00
c         7.46895D+01  1.30674D+01  3.449561)+01 -1.26465D+01  4.29463D-01 -7.46031D+00
c         8.97781D+01  6.87961D+00  4.52641D+01 -1.26465D+01  4.29463D-01 -7.46031D+00
c        -5.692731)+01   7.46833D+01 -6.47049D+01  9.66099D+00 -6.99155D+00  1.13119D+01
c        -5.80266D+01  7.50136D+01 -6.58418D+01  9.66099D+00 -6.99155D+00  1.13119D+01
c        -6.92372D+01  8.00808D+01
c    57  2.35810D+01  3.19502D+01 -1.69167D+01 -4.39337D+00 -1.07267D+01  6.56755D+00
c         2.59377D+01  3.85618D+01 -2.15597D+01 -4.39337D+00 -1.07267D+01  6.56755D+00
c         2.16868D+01  2.88652D+01 -1.38489D+01 -4.39337D+00 -1.07267D+01  6.56755D+00
c         2.90226D+01  4.46499D+01 -2.62174D+01 -4.39337D+00 -1.07267D+01  6.56755D+00
c        -1.23421D+02 -6.72106D+00 -4.65087D+01  2.11701D+01 -6.41438D-01  1.24235D+01
c        -1.27483D+02 -5.99786D+00 -4.87868D+01  2.11701D+01 -6.41438D-01  1.24235D+01
c        -1.51669D+02  3.65067D+00 -6.58470D+01  2.11701D+01 -6.414381)-01  1.24235D+01
c         7.29599D+01 -7.01900D+01  1.56841D+02 -1.67767D+01  1.13679D+01 -1.89912D+01
c         7.58450D+01 -7.06926D+01  1.59481D+02 -1.67767D+01  1.13679D+01 -1.89912D+01
c         9.83649D+01 -7.88754D+01  1.83820D+02
c    58 -2.35302D+00 -6.53118D+00  2.66581D+00  8.98279D-01  2.53132D+00 -1.20779D+00
c        -1.97700D+00 -7.08340D+00  3.19779D+00  8.982791)-01  2.53132D+00 -1.20779D+00
c        -1.19789D+00 -6.01987D+00  2.49437D+00  8.982'/91)-01  2.53132D+00 -1.20779D+00
c        -1.82732D+00 -7.11889D+00  3.32012D+00  8.982791)-01  2.53132D+00 -1.20779D+00
c         1.45054D+01  1.67730D+00  5.55769D+00 -4.21678D+00  1.85877D-02 -2.60592D+00
c         1.50890D+01  1.60343D+00  5.86313D+00 -4.21678D+00  1.8587"/1)-02 -2.60592D+00
c         1.72605D+01  9.6870611-01  7.22500D+00 -4.21678D+00  1.85877D-02 -2.60592D+00
c        -9.37629D+00  9.12219D+00 -1.39477D+01  4.21121D+00 -2.65654D+00  3.70270D+00
c        -1.00820D+01  9.18447D+00 -1.45362D+01  4.21121D+00 -2.65654D+00  3.70270D+00
c        -1.24586D+01  9.66099D+00 -1.67767D+01  4.21121D+00
c    59  1.06291D+00  3.60282D+00 -1.06981D+00 -3.095611)-01 -1.76629D+00  4.646701)-01
c         1.56347D+00  4.38369D+00 -1.57042D+00 -3.09561D-01 -1.76629D+00  4.64670D-01
c         1.47608D+00  4.22457D+00 -1.45136D+00 -3.09561D-01 -1.76629D+00  4.64670D-01
c         2.02717D+00  5.17097D+00 -2.13610D+00 -3.095611)-01 -1.76629D+00  4.64670D-01
c        -9.66350D+00 -1.14184D+00 -3.76539D+00  2.87628D+00  2.05878D-01  1.85885D+00
c        -1.00843D+01 -1.07933D+00 -3.99237D+00  2.87628D+00  2.05878D-01  1.85885D+00
c        -1.18128D+01 -4.82845D-01 -5.14247D+00  2.87628D+00  2.05878D-01  1.85885D+00
c         6.88096D+00 -6.53691D+00  1.02273D+01 -2.65654D+00  2.70479D+00 -2.28475D+00
c         7.03481D+00 -6.59559D+00  1.03982D+01 -2.65654D+00  2.70479D+00 -2.28475D+00
c         7.83375D+00 -6.99155D+00  1.13679D+01 -2.65654D+00  2.70479D+00
c    60 -2.22757D+00 -6.71448D+00  2.40511D+00  1.32612D+00  2.21901D+00 -1.97078D+00
c        -2.43373D+00 -7.67836D+00  3.12429D+00  1.32612D+00  2.21901D+00 -1.97078D+00
c        -1.91525D+00 -6.93659D+00  2.62217D+00  1.32612D+00  2.21901D+00 -1.97078D+00
c        -2.73410D+00 -8.35190D+00  3.66291D+00  1.32612D+00  2.21901D+00 -1.97078D+00
c         1.62803D+01  1.90368D+00  6.29039D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
c         1.69623D+01  1.80955D+00  6.65304D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
c         1.96375D+01  9.50467D-01  8.38664D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
c        -1.10565D+01  1.06267D+01 -1.64419D+01  3.70270D+00 -2.28475D+00  5.84657D+00
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C       -1.15816D+01  1.07111D+01 -1.69158D+01  3.70270D+00 -2.28475D+00 5.84657D+00
C       -1.35901D+01  1.13119D+01 -1.89912D+01  3.70270D+00 -2.28475D+00  5.84657D+00
```

Summary description of terrestrial system for JPL 1994-1 station coordinates

1 --	Technique	VLBI
2 -	Analysis Center	JPL
3 -	Solution identifier	1994-1
4 -	Software used	MODEST (nee Masterfit)
5 -	Relativity scale	LE (TDT = geocentric with IAT)
6 -	Permanent tidal correction	No
7 -	Tectonic plate model	ITRF-92 plus adjustments
8 -	Velocity of light	299 792 458 m/s
9 -	Geogravitational constant	3.9860 0448 *10**14 m**3*s**-2
10 -	Reference epoch	1 Jan 1988
11 -	Adjusted parameters	Xo, Yo, Zo, x, Y, z
12	Definition of the origin, and	
13 -	Definition of the orientation	Six constraints were applied (with 5 mm uncertainty) to the nine coordinates (at epoch 1988.0) of DSS 15, DSS 45, and DSS 65, such that- if a seven parameter transformation (3 translations, 3 rotations, 1 scale) between the JPL 1994-1 and ITRF-92 systems were estimated by unweighted least squares applied to the coordinates of DSS 15, 45, and 65, then the resulting 3 translation and 3 rotation parts of the transformation would be zero while the scale could be nonzero and unknown in advance of computing the catalog . See text for details.
14	Constraint for time evolution	Six constraints were applied (with 1.0 mm/yr uncertainty) to the nine site-velocity parameters of the DSN network so as to yield no-net-translation-rate and no-net-rotation-rate with respect to the net motion of the three sites Madrid, Goldstone, and Canberra as specified by the ITRF-92 velocity field. See text for details

RSC(JPL) 94 R 01

DEEP SPACE NETWORK VLBI RADIO SOURCE POSITIONS FROM REFERENCE FRAME JPL 1994-1 IN THE IERS 1993 FORMAT

IAU name	Alt. name	Right ascension hr mn sec	Declination dg mn arc sec	RA error time sec	Dec error arc sec	Corr. RA-Dec	Mean MJD	First MJD	Last MJD	No. Sns	Delay Obs	Rate Obs
0003-066	0003-066	0 6 13.89288035	-6 23 35.3342591	0.000012140	.0002734	-0.2988	48702.1	48196.0	49187.0	32	70	70
0007+171	GC 0007+17	0 10 33.99061305	17 24 18.7617008	0.00001441	0.0002925	-0.2305	48772.5	48196.0	4915.2.0	12	20	20
0008-264	P 0008-264	0 11 1.24681438	-25 12 33.3770482	0.00006483	0.0007?24	-0.8659	45053.4	44227.0	48195.0	20	42	42
0013-005	P 0013-00	0 16 11.08854486	- 0 15 12.4447248	0.00001739	0.0003183	-0.5918	48378.7	47381.0	49340.0	20	42	42
00144813	0014+813	C 17 8.47466936	81 35 8.1353705	0.00010273	0.0001632	0.0642	48607.3	48352.0	48732.0	5	14	14
0016+731	0016+731	0 19 45.78625077	73 27 30.0175475	0.00004514	0.0001385	-0.C104	48625.3	48158.0	49255.0	28	59	59
0019+058	p 0019+058	0 22 32.44120355	6 8 4.2697852	0.00001589	0.0002985	-0.5186	46530.2	45151.0	48942.0	32	69	69
0048-097	P 0048-09	0 50 41.31737716	- 9 29 5.2094355	0.00001284	0.0002703	-0.3813	48680.1	46609.0	49287.0	76	137	137
0104-408	P 0104-408	6 45.10809731	-40 34 19.9598622	0.00003481	0.0003849	-0.4545	47633.5	43809.0	49251.0	91	224	225
0106*013	P 0106+01	8 38.77110084	1 35 0.3177019	0.00000986	0.0001975	-0.1723	46628.0	43809.0	49187.0	158	340	341
0111+021	P 0111+021	1 13 43.14493480	2 22 17.3171462	0.'30002526	0.0004153	-0.8388	47007.3	44227.0	49158.0	31	72	72
0112-017	P 0112-017	1 15 17.09996883	- 1 27 4.5767101	0.00900998	0.0002071	-0.2103	48389.5	47254.0	49187.0	56	115	115
0113-118	P 0113-118	1 16 12.52177882	-11 36 15.4327919	0.00001269	0.0002773	-0.3855	47173.4	43S09.0	49307.0	69	115	119
0119+115	p 0119+11	1 21 41.59503335	11 49 50.4136203	0.00000988	0.0001749	-0.1026	48369.6	47254.0	49187.0	43	88	88
0119+041	GC 0119+04	1 21 55.85158884	4 22 24.7351349	0.09C01065	0.0002082	-0.2686	47832.7	45476.0	49032.0	34	64	54
0133+476	DA 55	1 36 58.59475028	47 51 29.1005363	0.00001689	0.0001494	-0.0527	46991.3	43S73.0	49340.0	154	275	278
0146+056	0146+056	1 49 22.37087033	5 55 53.5697574	0.00002431	0.0003793	-0.8376	48900.8	47254.0	49158.0	15	34	34
0149+218	P 0149+21	1 52 18.05901579	22 7 7.7905574	0.00001148	0.0001495	-0.2382	48455.4	47301.0	49340.0	33	66	66
0159+723	0159+723	2 3 33.38485213	72 32 53.5578.242	0.00005010	0.0001825	-0.1466	48825.1	48352.9	49033.0	8	26	26
0201+113	P 0201+113	2 3 45.55705525	11 34 45.4101627	0.00001079	0.0001692	-0.3645	48192.0	45432.0	49187.0	39	79	79
0202+149	P 0202+14	2 4 50.41389585	15 14 11.0436596	0.00000972	0.0001278	-0.1773	47455.7	44203.0	49348.0	119	241	242
0202+319	DW 0202+31	2 5 4.92532275	32 12 30.0961388	0.00001451	0.0001624	-0.3220	48615.7	48196.0	49158.0	19	38	38
0212+735	0212+735	2 17 30.81321715	73 49 ?2.5222945	0.00004124	0.0001283	-0.2997	47586.1	45301.0	49348.0	252	541	544
0221+067	GC 0221+06	2 24 28.42817782	5 59 23.3422409	0.00001076	0.0001751	-0.4372	48541.9	47254.0	49158.0	35	75	75
0224*671	DW 0224+67	2 28 50.05140727	67 21 3.0301672	0.00003140	0.0001967	-0.2310	47461.0	44203.0	49341.0	222	368	383
0229+131	P 0229+13	2 31 45.89404515	13 22 54.7165878	0.00000943	0.0001353	-0.2825	48457.6	47254.0	49187.0	50	110	110
0234+285	CTD 20	2 37 52.40565505	28 48 8.9904200	0.00001040	0.0001067	-0.1726	47430.2	44203.0	49348.0	303	727	727
0235+164	GC 0235+16	2 38 38.93910277	16 36 59.275057:	0.00000933	0.0001068	-0.2714	47450.6	44203.0	49235.0	242	490	492
0237+040	GC 0237+04	2 39 51.26303620	4 16 21.4125938	0.00001390	0.0002539	-0.6198	48428.1	47941.0	49158.0	12	20	20
0239+108	OD 166	2 42 29.17084540	10 17 0.7286219	0.00000947	0.0001477	-0.3408	47382.8	45151.0	49187.0	65	147	147
0250+178	GC 0250+17	2 53 34.88217938	18 5 42.52558'73	0.00003394	0.0008961	-0.5453	47?60.9	47714.0	49187.0	6	14	14
0256+075	OD 094.7	2 59 27.07660813	7 47 39.6442592	0.00001984	0.0003249	-0.S035	46878.5	45151.0	49158.0	31	57	57
0259+121	0259+121	3 2 30.54578310	12 18 56.7429635	0.00001659	0.0004507	-0.5053	48705.5	45925.0	49032.0	10	23	23
0300+470	OE 400	3 3 35.24218102	47 16 16.2760770	0.00001506	0.0001405	-0.2758	47083.1	43808.9	49348.0	253	456	456
0302+625	0302+625	3 6 42.65948234	62 43 2.0247851	0.00002944	0.0002061	-0.3090	48s29.5	48613.0	49340.0	13	38	38
0306+102	0306+102	3 9 3.62350332	10 2? 16.3416293	0.00001804	0.0002674	-0.8210	48193.0	47254.0	49158.0	20	40	40
0309+411	0309+411	3 13 1.96209383	41 20 1.1841292	0.00001467	0.0001748	-0.3447	48288.8	46610.0	49187.0	23	50	50
0316+413	3C 84	3 19 48.16012071	41 30 42.1053984	0.00001436	0.0002039	-0.2595	47113.4	44203.0	49032.0	39	64	65
0317+188	? 0317+188	3 19 51.25670757	19 1 31.2915267	0.00001835	0.0003286	-0.7006	48255.9	47714.0	49187.0	8	18	18
0326+277	0326*277	3 29 57.66939808	27 55 15.4996705	0.00001773	0.0002194	-0.7449	48272.9	46610.0	49030.0	18	36	36
0332-403	P 0322-403	3 34 13.65461198	-40 8 25.3971886	0.00004593	0.0004051	-0.51'77	46925.8	43899.0	49335.0	55	86	88
0333+321	NRAO 140	3 36 30.1075794?	32 18 29.3428744	0.00001229	0.0001516	-0.4485	45184.5	43808.0	49033.0	89	163	173
9336-019	CTA 26	3 39 30.93780082	- 1 46 35.8032872	0.00001003	0.8052155	-0.4521	47797.3	44203.0	49348.0	?4	176	186
0341+158	0341+158	3 44 23.17218511	15 59 43.3700887	0.00001448	0.0004418	-0.4519	48619.3	47393.0	49032.0	9	21	21
0342+147	0342+147	3 45 6.41554045	14 53 .49.5586284	0.00001847	0.0002847	-9.8365	47699.0	45237.0	49030.0	24	49	49
0400+258	CTD 26	4 3 5.58604811	26 0 1.5032796	0.00001140	0.0001862	-0.5180	48402.5	44947.0	49033.0	22	43	43
0402-362	P 0402-352	4 3 53.74992182	-36 5 1.9119943	0.00002710	0.0003225	-0.4544	47495.4	43873.0	49335.0	130	224	221
0406-127	0406-127	4 9 5.75969875	-12 38 48.2425835	0.00002540	0.0004000	-0.8131	48284.7	45797.0	49030.0	17	27	27
0406+121	GC 0406+12	4 9 22.00870819	12 17 39.8482518	0.00901827	0.0002771	-0.8631	45459.4	44203.0	49030.0	64	128	136
0409+229	P 0409+22	4 12 43.65685955	23 5 5.4540948	0.00002446	0.0005060	-0.5470	47768.4	47714.0	47798.0	4	13	13
0420-014	P 0420-01	4 23 15.80072699	- 1 20 33.0646157	0.00000873	0.0001640	-0.4590	47455.0	43873.0	49348.0	315	759	769

0420+417 VRO 41.04.01	4 23 56.00977616	41 50	2.7138102	0.00002061	0.0006456	0.2532	45701.0	44203.0	48355.0	12	18	19
0423+233 GC 0423.22	4 25 55.73478085	23 27	?.9.5345275	0.00001990	0.0004477	-0.5754	47757.0	47714.0	47798.0	4	12	12
0425+048 P 0425+048	4 27 .27.57039558	4 57	8.3281952	0.00008795	0.0012182	-0.9901	47546.0	46609.0	49030.0	18	38	38
0426+273 0426+273	4 29 52.96077424	27 24	37.8773403	0.00002347	0.0005157	-0.5091	47759.5	47714.0	47728.0	4	14	14
0430+052 3C 120	4 33 11.09558159	5 21	15.61959640	0.00001147	0.0002266	-0.6238	45?45.3	43808.0	49033.0	35	73	73
0434-188 P 0434-188	4 37 1.48273?55	-18 44	48.5125229	0.00001359	0.0002547	-0.4749	47527.0	44227.9	49348.0	134	232	238
0438-436 P 0438-43	4 40 17.17990010	-43 33	8.6019885	0.00009098	0.0006290	-5.7399	45581.7	43809.0	43875.0	28	47	48
0440-002 NRAO 190	4 42 38.66077386	- 0 17	43.4196107	0.00005579	0.0010683	-0.7781	45435.0	43$73.5	48206.0	10	16	15
0440+345 0440+345	4 43 31.63521585	34 41	6.6641319	0.00002271	0.0002994	-0.7?73	43075.8	45757.9	49030.0	16	25	25
0446+112 P 0446+11	4 49 7.67108950	11 21	28.5971475	0.00001674	0.0003491	-0.5457	47579.7	47255.0	48355.0	12	22	22
0451-282 P 0451-28	4 53 14.64687953	-28 7	37.3275316	0.00005478	0.0006807	-9.8955	46940.0	44227.0	48927.0	18	34	38
0454-234 045.4-234	4 57 3.17926073	-23 24	52.01?471S	0.00002179	0.0003321	-0.5554	48635.2	48158.0	49032.0	24	52	52
0458-020 P 0458-02	5 1 12.30988055	- 1 59	14.2554142	0.00001209	0.0002185	-0,6795	48663.2	47802.0	49033.0	27	49	49
0458+138 P 0458+138	5 1 45.27082294	13 56	7.2209743	0.00003538	0.0005309	-0.9149	.47921.5	46757.0	43977.0	16	23	23
0459+060 GC 0459+06	5 2 15.44592335	6 9	7.4947439	0.00004324	0.0006710	-0.9205	47790.4	47379.0	48206.0	8	13	13
0500+019 0500+019	5 3 21.19713968	2 3	4.6776824	0.00002319	0.0003772	-0.8791	47933.8	47255.0	48704.0	14	27	27
0502+049 P 0502+049	5 5 23.18482151	4 59	42.7239607	0.00003625	0.0012720	-0,9855	47718.5	47379.0	48092.0	10	17	17
0454+844 0454+844	5 8 42.36338473	84 32	4.5447153	0.00009137	0.0001803	-0.1729	47524.1	45301.0	49137.0	43	154	154
0506+101 P 0506+101	5 9 27.45707615	10 11	44.6007252	0.00001051	0.0001979	-0.5839	48346.4	46757.0	49032.0	37	65	66
05074179 P 0507+17	5 10 2.35914323	18 0	41.5821449	0.00002009	0.0003058	-0.8653	47723.7	46336.0	49030.0	22	43	43
0511-220 P 0511-220	5 13 49.11429572	-21 59	16.090.9144	0.00003330	0.0004558	-0.7778	47870.1	46797.0	48206.0	11	17	17
0528+134 P 0528+134	5 30 56.41672953	13 31	55.1501491	0.00000739.0	0.0002355	-0.6338	47?00.?	44203.0	49187.0	118	246	243
0537-441 P 0537-441	5 33 50.36154384	-44 5	8.9379253	0.00004521	0.0003902	-0.5792	47295.2	43809.0	49335.0	111	231	225
0537-158 P 0537-158	5 39 32.01015313	-15 50	30.3203269	0.00003775	0.0007606	-0.7254	47994.8	46806.0	49030.0	9	12	12
0536+145 0536+145	5 39 42.36599351	14 33	45.5524533	0.00001041	0.0001761	-0.7601	48205.8	46609.0	49032.0	41	76	75
0544+273 0544*272	5 47 34.14892077	27 21	56.3430529	0.00002516	0.0002317	-0.8293	47714.4	46609.0	49030.0	23	36	36
9552*398 DA 193	5 55 29.30559318	39 48	49.1555550	0.0,0000870	0.0001332	-0.4174	47510.9	43808.0	49350.0	414	1064	1068
0556+238 0556+238	5 59 32.03313693	23 53	52.?272175	0.00001022	0.0001730	-0.6963	47998.1	46610.0	49030.0	37	70	70
0600+177 0600+177	5 3 9.13027727	17 42	16.8111716	0.00002059	0.0002971	-0.9196	47966.6	46336.0	49030.0	32	53	53
0605-085 P 0605-08	5 7 59.69?22955	- 8 34	49.9774150	0.00001194	0.0002522	-0.5144	47832.7	43808.0	4?032.0	32	55	55
0607-157 P 0607-15	6 9 40.94951229	-15 42	40.6716540	0.000018S4	0.0003267	-0.6497	47495.4	43873.0	49033.0	22	38	39
0611+131 0611+131	6 13 57.6?276245	13 6	45.4022752	0.00001322	0.0002758	-0.7049	48001.9	47379.0	48437.0	13	23	23
0615+820 0615+820	6 25 3.00614506	82 2	25.55827?.7	0.00007668	0.0001964	0.0364	4362.7.9	48352.0	49187.0	9	25	25
0642+214 3C 166	6 45 24.09952881	21 21	51.2020069	0.00001971	0.0002912	-0.8619	48?058.8	45558.0	49030.0	20	34	34
0646-306 P 0646-305	6 48 14.09715234	-30 44	19.6553493	0.00022177	0.0021148	-0.9778	48621.0	47802.0	49030.0	2	3	3
0650+371 0650+371	6 53 58.28235545	37 5	40.505897;	0.00000873	0.0001787	-?.3407	48688.4	48348,0	49187.0	30	75	75
0657+172 0657+172	7 0 1.52553539	17 9	21.7023089	0.00000732	0.0001440	-0.7208	48350.0	46336.0	4?3.40.0	53	115	115
0710+439 OI 417	7 13 33.16405679	43 49	17.2013080	0.00001407	0.0002953	-0.0382	437?4.2	48352.0	49033.0	13	20	20
0716+714 0716+714	7 21 52.44850633	71 20	35.3538873	0.00003131	0.0001954	0.0510	48818.9	43353.0	49187.0	10	32	32
0722+145 P 0722+145	7 25 16.30779554	14 25	2.3.7454872	0.00001617	0.0002963	-'2.7455	47635.1	47253.0	43352.0	12	21	21
0723-008 DW 0723-00	7 25 50.63993782	- 0 54	56.5442723	0.00004282	0.0007407	-0.8733	45555.9	44203.0	46806.0	32	84	84
0727-115 P 0727-11	7 30 19.11246164	-11 41	12.5998050	0.00001050	0.0001968	-0.3548	47541.8	43803.0	49350.0	345	904	903
0735+178 P 0735+17	7 33 7.39374808	17 42	13.9983?2	0.00000534	0.0001168	-0.5742	47705.8	43808.0	49344.0	101	232	232
0736+017 P 0736+01	7 39 13.03339260	1 37	4.6185312	0.00001158	0.0002171	-0.6916	48284.2	47253.0	48927.0	22	47	47
0738+313 OI 353	7 41 10.70330477	31 12	0.228780'7	0.00001435	0.9003005	-0.4250	45309.8	43816.0	48732.0	14	25	26
0742+103 DW 0742+10	7 45 33.05956225	10 11	12.6921765	0.00001005	0.0001884	-0.7562	464?5.1	43308.0	49033.0	171	371	382
0743-006 P 0743-006	7 45 54.03230455	- 0 44	17.5395313	0.00002608	0.0004408	-0,8520	48721.9	48352.0	49340.0	9	15	15
0743+259 GC 0743+25	7 46 25.87415706	25 49	2.1353903	0.00002125	0.0003928	-0.6805	47550.3	47253.0	43159.0	11	22	22
0745+241 B2 0745+24	7 48 36.10926984	24 0	24.1108820	0.00000835	0.0001811	-0.5949	47213.1	45431.0	49033.0	35	38	83
0748+126 P 0748+126	7 50 52.04577052	12 31	4.3277348	0.00003055	0.0005922	-0.7361	.45514.9	44203.0	47379.0	29	53	68
07494540 07494540	7 53 1.38457845	53 52	59.6371840	0.00001549	0.0002587	0.0333	48695.3	48353,0	49187.0	9	19	19
07544100 P 0754+100	7 57 5.64294905	9 56	34.8514900	0.00002088	0.0004013	-0.7480	47606.8	47253.0	43159.0	10	18	18
0805-077 P 0805-07	8 8 15.53601872	- 7 51	9.3856229	0.00001094	0.0002183	-0.4102	48457.1	46797.0	49033.0	25	54	54
0808+019 P 0808+019	3 11 26.70730944	1 46	52.2208003	0.00001020	0.5902447	-0.5293	43339.5	48352.0	4?033.0	12	26	26
0814+425 OJ 425	8 18 15.99962507	42 22	45.4151708	0.00001054	0.0001571	-0.2850	47083.3	43898.0	49340.0	125	222	223
0823+033 P 0823+033	8 25 50.33835320	3 9	24.5207972	0.00000675	0.0001341	-0.4315	47576.4	44200.0	49350.0	218	427	435
0827+243 ?32 0827+24	3 30 52.08615933	24 10	59.8213136	0.00002697	0.0003926	-0.8452	45041.3	44200.0	47776.0	12	21	21
0828+4?3 OJ 448	8 32 23.21672700	49 13	21.0380903	0.00001585	0.0003313	0.0803	48380.1	48352.0	49033.0	6	17	17

0833+585	0833+585	8 37 22.40981720	58 25 1.8456?45	0.00004136	0.0003756	0.3863	48716.2	48353.0	49187.0	7	13	13
0836+710	4C 71.07	8 41 24.36559255	70 53 42.1729458	0.00031512	0.0017596	0.2217	44700.7	44202.0	45895.0	9	18	20
0851+202	W 287	8 54 48.87492109	20 6 30.6413900	0.00000695	0.0001317	-5.3475	47386.2	43808.0	49350.0	351	758	755
0859-140	P 0859-14	9 2 15.83087250	-14 15 30.8743311	0.00001833	0.0003072	-0.5545	47602.4	43808.0	49340.0	25	50	52
0859+470	OJ 499	? 3 3.90011700	46 51 4.1377509	0.00001174	0.0001922	-0.0539	475s76.2	43808.0	49165.0	55	102	107
0906+015	P 0906+01	9 9 10.09159421	1 21 35.5181845	0.0'2002522	0.0004195	-5.8755	48561.5	48252.0	48703.0	6	16	16
0912+029	P 0912+029	9 14 37.91346800	2 45 52.2464487	0.00004084	0.0006461	-0.9345	47653.:	47253.0	48159.0	11	19	19
0917+449	0917+449	9 20 58.45849060	44 41 52.9852385	0.00001060	0.0002.759	-0.0584	48737.9	47940.0	49'333.0	20	53	53
0919-260	0919-260	9 21 29.35275884	-26 18 43.3849186	0.00007825	0.0008581	-0.?09:	48712.0	48345.0	49030.0	8	14	14
0920-397	P 0920-39	9 22 46.41820683	-39 59 35.0667230	0.00011052	0.0009855	-0.8957	48002.6	46797.0	49030.0	9	16	16
0923+392	4C 39.25	9 27 3.01390224	39 2 20.8523159	0.00000737	0.0001114	-0.0835	47512.6	43808.0	49350.0	341	824	825
0925-203	P 0925-203	9 27 51.82437210	-20 34 51.2325485	0.00008534	0.0011333	-0.9477	47467.1	46797.0	49340.0	8	18	18
0952+172	AO 0952+17	? 54 55.82354688	17 43 31.2223489	0.00001421	0.0009711	-0.2491	46753.8	44200.0	48437.0	11	13	13
0953+254	OK 290	9 56 49.87540180	25 15 16.049619:	0.00000604	0.0001535	-0.4747	48598.5	48158.0	49030.0	26	58	58
1004+141	GC 1004+14	10 7 41.49806372	13 56 29.6023316	0.00002148	0.0004024	-0.8172	45783.3	44200.0	48159.0	11	24	24
1011+250	1011+250	10 13 53.42873297	24 49 16.4414355	0.00000782	0.0002842	-0.3715	48877.8	48353.0	49033.0	11	22	22
1012+232	1012+232	10 14 47.06545878	23 1 15.5708614	0.09002799	0.0004015	-0.9044	47794.9	47253.0	48703.0	13	29	29
1022+194	GC 1022+19	10 24 44.80960612	19 12 20.4156274	0.00001547	0.0003223	-0.6266	47885.7	47379.0	48161.0	10	16	16
1034-293	P 1034-293	10 37 16.07975235	-29 34 2.8131325	0.00002969	0.0003324	-5.3359	47531.1	44200.0	49350.0	176	315	316
1038+064	OL 064.5	10 41 17.16250218	5 10 16.9238548	0.00001285	0.0002765	-9.5777	46510.9	44203.0	48927.0	35	88	88
1040+123	3C 245	10 42 44.6052395:	12 3 31.2633512	0.00001842	0.0004537	-0.6389	46259.7	44200.0	48161.0	10	15	15
1039+811	1039+811	10 44 23.06279951	80 54 39.4431820	0.00007562.	0.0001353	0.1702	48743.0	48353.0	49033.0	15	45	45
1042+071	P 1042+071	10 44 55.91124705	6 55 38.25?2552	0.00001902	0.0004573	-0.6058	47794.2	47253.0	48353.0	10	18	18
1044+719	1044+719	10 48 27.5199?248	71 43 35.9337523	0.00004079	0.0002480	0.0065	48735.5	46925.0	49333.0	55	87	87
1055+018	P 1055+01	10 58 2?.60520793	1 33 58.8239655	0.00000767	0.0001852	-0.1419	47592.5	44200.0	49350.0	271	610	610
1104-445	P 1104-445	11 7 8.59419295	-44 49 7.6186500	0.00005597	0.0004186	-0.389?	47473.4	43808.0	49344.0	132	204	209
1111+149	GC 1111+14	11 13 58.69511553	14 42 25.9525767	0.90002529	0.0004204	-0.8431	462.80.4	44200.0	48102.0	11	25	25
1116+128	P 1116+12	11 18 57.30144056	12 34 41.7182099	0.00000841	0.0002285	-0.4527	48257.9	44250.0	49033.0	21	41	41
1123+264	P 1123+26	11 25 53.71195?9	26 10 19.9782805	0.00000582	0.0001524	-0.4910	47360.3	44200.0	49033.0	93	249	249
1124-186	P 1124-186	11 27 4.39227557	-18 57 17.4405798	0.00002598	0.0004615	-0.5291	48920.9	48695.0	49033.0	9	17	17
1127-145	P 1127-14	11 30 7.0525268?	-14 49 27.3886370	0.9000155:	0.0003270	-0.1795	46521.2	43808.0	48927.0	49	97	101
1128+385	GC 1128+38	11 30 53.28263813	38 15 18.5464477	0.00002504	0.0002749	-0.5597	46485.6	44283.0	49147.0	4?	104	2.05
1130+009	P 1130+009	11 33 20.05578538	0 40 52.835?253	0.00002214	0.0004385	-0.6861	47519.1	44203.0	49030.0	9	15	15
1144+402	1144+402	11 46 58.29793582	39 58 34.3041534	0.00001253	0.0002258	-9.2650	48666.8	48102.0	49030.0	11	20	20
1144+379	P 1144-379	11 47 1.37072442	-38 12 11.0234443	0.00003341	0.0003462	-0.0021	47372.4	43808.0	49350.0	181	354	354
1145-071	1145-071	11 47 51.55399955	- 7 24 41.1396415	0.00001918	0.0004131	-0.5009	47824.9	47379.0	48161.0	13	23	23
1148-001	P 1148-00	11 50 43.87078313	- 0 23 54.2041202	0.00002193	0.'3005057	-0.5977	46053.2	43808.0	48353.0	20	31	32
1150+812	1150+812	11 53 12.49947091	80 58 29.1545S69	0.00007762	0.0001325	-0.0309	48531.6	48161.0	49187.0	12	52	52
1156-094	P 1156-094	11 59 12.71215879	- 9 40 52.0549573	0.00031286	0.0043178	-0.9956	47580.9	46797.0	48976.0	9	13	13
1156+295	GC 1156+29	11 59 31.83391973	29 14 43.8265022	0.00000676	0.0001804	-0.442.S!	48699.?.	48161.0	49033.0	30	67	67
1219+285	ON 231	12 21 31.69051224	28 13 5S.49950S5	0.00000972	0.0002488	-(?.4965	48586.8	48161.0	49030.0	17	33	33
1222+037	P 1222+037	12 24 52.42190989	3 30 50.2932933	0.00003260	0.0006302	-0.7615	45705.4	44200.0	49119.0	34	53	64
1226+023	3C 273	12 29 5.69979302	2 3 8.5985667	0.00000824	0.0002383	-0.0638	46930.1	43808.0	49340.0	170	391	390
1228+126	3C 274	12 30 4?.4234816:	12 23 2S'.0425753	0.00013069	0.0017947	-0.?849	45353.:	44200.0	48160.0	9	17	17
1243-072	1243-072	12 46 4.23210927	- 7 30 46.5743545	0.00001839	0.0004173	-0.4207	47884.7	47253.0	48161.0	11	22	22
1244-255	P 1244-255	12 46 45.80206125	-25 47 49.2890605	0.00002569	0.0003765	-0.1739	47473.7	44200.0	49350.0	129	227	225
1252+119	P 1252+11	12 54 38.25561401	11 41 5.8945006	0.00001142	0.0004202	-0.3438	48877.9	48353.0	49033.0	9	23	23
1253-055	3C 27?	12 56 11.15655105	- 5 47 21.5245377	0.00001079	0.0003004	-0.0173	47259.:	43808.0	49340.0	126	223	225
1302-102	P 1302-102	13 5 33.01501535	-10 33 19.4279219	0.00001454	0.0003504	-0.1586	48399.4	47379.0	49340.0	27	59	59
1308*326	B2 1308+32	13 10 28.56386365	32 20 43.7823729	0.00000673	0.0001899	-5.3982	47564.7	44200.0	49340.'2	225	555	555
1313-333	0?-322	13 16 7.?85?5997	-33 38 59.1727455	0.00003552	0.0004221	-0.2035	47355.8	43808.0	49340.0	44	105	105
1315+346	OP 325	13 17 36.49420534	34 25 15.9317585	0.00001161	0.0002671	-'3.3306	48355.7	47946.0	49030.0	14	32	32
1324+224	1324+224	13 27 0.85132483	22 10 50.1623022	0.00000728	0.0002258	-0.3558	48749.1	48428.0	49033.0	28	83	83
1334-127	DW 1335-12	13 37 29.78278525	-12 57 24.6934170	0.00001279	0.0003329	0.0947	47644.9	43816.0	49350.0	225	451	451
1342+662	GC 1342+662	13 43 45.95962028	66 2 25.7445783	0.00007362	0.0004961	-0.0997	45644.8	45301.0	47782.0	10	35	35
1342+663	GC 1342+663	13 44 8.67975450	66 6 11.6433442	0.00002774	0.0001676	-0.2110	46526.5	44263.0	49240.0	69	211	212
1349-439	P 1349-439	13 52 56.53491055	-44 12 40.3872356	0.00008259	0.0006223	-0.5899	47220.6	44265.0	49340.0	45	72	72
1354+195	P 1354+19	13 57 4.43565729	19 19 7.3718775	0.00000681	0.0002358	-0.2391	47249.6	44200.0	49340.0	92	250	250

1354-152	0?-2.22	13 57 11.24501721	-15 27 23.7874253	0.00002340	0.0004321	-0.?991	48237.0	47253.0	49340.0	28	53	53
1404+286	OQ 208	14 7 0.39442305	28 27 14.6897775	0.00001770	0.0003247	-0.6523	48112.4	.472.27.0	49030.0	19	43	43
1406-076	P 1406-076	14 8 56.48119482	- 7 52 25.5565152	0.00002215	0 . . .0004376	-0.4932	482??..4	47379.0	49030.0	19	28	28
1413+135	P 1413+135	14 15 58.81750841	13 20 23.7123402	0.00001052	0.0003287	-0.2831	48820.3	48353.0	49033.0	13	32	32
1418+546	GC 1418+54	14 19 46.59739497	54 23 14.7866274	0.00001765	0.0002857	-0.2472	47190.3	44282.0	49270.0	168	315	318
1424-418	P 1424-41	14 27 56.2?752833	-42 5 19.4382073	0.00005903	0.0005141	-0.3510	48555.4	47940.0	49240.0	19	40	40
1430-178	OQ-151	14 32 57.69056541	-18 1 35.2481485	0.00004023	0.0006376	-0.6918	45787.2	44227.9	48976.0	21	38	38
1435-218	P 1435-218	14 38 9.46943928	-.22 4 54.7484784	0.00002583	0.0004841	-0.3227	48705.8	48161.0	49033.0	19	31	31
1443-162	1443-162	14 45 53.37630115	-16 29 1.6192564	0.00002834	0.0005124	-0.5172	48348.4	47379.0	42?76.0	14	28	28
1445-161	P 1445-16	14 48 15.05417135	-16 20 24.5495389	0.00002490	0.0004712	-0.4248	48338.3	47379.0	49030.0	19	39	39
1502+106	OR 103	15 4 24.97979078	10 29 39.1979048	0.00000797	0.0002788	-0.0106	45943.8	43808.0	49341.0	111	290	291
1504+377	1504+377	15 6 9.52??7124	37 30 51.1316264	0.00001228	0.0003166	-5.2749	48760.8	47949.0	49033.0	9	26	26
1504-166	? 1504-167	2.5 7 4.78697025	-16 52 30.2680860	0.00001503	0.0004004	-0.0142	47397.4	45153.0	49340.0	59	134	134
1510-089	P 1510-08	15 12 50.53293561	- 9 5 5?.8302503	0.00001188	0.0003497	0.1066	47534.0	43808.0	49341.0	197	413	415
1511-100	P 1511-100	15 13 44.8?3456?5	-10 12 0.2647652	0.00002105	0.0004522	-0.2934	48172.5	47254.0	48976.0	22	32	32
1514-241	P 1514-24	15 17 41.81317780	-24 22 19.4766849	0.00004454	0.0006253	-0.5430	48336.8	47254.0	49340.0	14	28	28
1519-273	P 1519-273	15 22 37.67502774	-27 30 10.7861827	0.00002562	0.0004375	-0.0879	47572.3	44200.0	49340.0	133	313	314
1532+016	P 1532*O:	15 34 52.4536873:	1 31 4.2058141	0.00001186	0.0003501	-0.1247	48330.2	47253.0	49033.0	25	51	51
1538+149	GC 1538+14	15 40 49.49151976	14 47 45.8840050	0.00000904	0.0002927	-0.2.076	48716.0	48102.0	49033.0	25	59	59
1546+027	P 1546+027	15 49 29.43685809	2 37 '1.1626118	0.00001107	0.0003510	-9.0728	48816.2	48353.0	49033.0	14	36	36
1548+056	DW 1548+05	15 50 35.2592484:	5 27 10.4472131	0.00000954	0.0003178	0.0045	48483.2	47253.0	49341.0	66	101	101
1555+001	DW 1555+00	15 57 51.43397552	- 0 1 50.4144400	0.00000992	0.000327:	0.1028	47401.7	43808.0	49340.0	88	205	205
1555-140	P 1555-140	15 58 21.94984170	-14 9 59.0755044	0.00079070	0.0107211	-0.9982	48832.7	48703.9	48975.0	4	4	4
1600+335	B2 1600+33	16 2 7.26348037	33 25 53.9720883	0.00001020	0.0003506	-0.0795	48856.2	48102.0	49033.0	8	26	26
1604-333	P 1604-333	16 7 34.76235565	-33 31 8.9136885	0.00005975	0.0006639	-0.5312	48815.0	48393.0	49340.0	10	22	22
1606+106	P 1606+10	16 8 46.20320114	10 29 7.7748151	0.00001550	0.0003685	-0.43?3	48517.0	48102.0	48703.0	10	23	23
1611+343	DA 406	16 13 41.06425220	34 12 47.9080558	0.00000798	0.0002702	-0.0427	45S99.5	43809.0	49187.0	61	162	163
1614+051	P 1614+051	16 16 ?.7.55683744	4 59 32.7353349	0.00001477	0.0004237	-0.2788	47626.5	46659.0	48353.0	11	19	19
1622-253	P 1622-252	16 25 46.8?175820	-25 27 28.3277574	0.00005938	0.0007774	-0.7592	4S542.9	48345.0	49030.0	9	15	15
1624+416	1624+416	16 25 57.56969588	41 34 40.5282332	0.00001359	0.0003119	-0.0924	48459.3	47940.0	49030.0	18	28	28
1622-297	P 1622-29	16 26 6.02096250	-29 51 26.9725573	0.00005462	0.0006688	-0.5372	48582.0	47254.0	49030.0	12	17	17
1633+382	GC 1633+38	16 35 ?5.4?2?5853	38 8 4.5000757	0.39000849	0.0002537	0.0323	46848.4	44202.0	49340.0	115	277	277
2.637*574	P 1637+574	16 38 13.4552?581	57 20 23.9783272	0.00001496	0.0002256	_0.1244	48839.6	48161.0	49348.0	36	82	82
1638+398	NRAO 512	16 40 29.53276719	39 46 46.0278154	0.00000897	0.0002595	0.0274	47321.1	43873.0	49341.0	111	274	274
1642+590	1642+690	16 42 7.84851369	68 56 39.7557213	0.00002348	0.0002074	-0.1837	48907.1	48158.0	49348.0	49	94	94
1641+399	3C 345	16 42 58.809$'8?23	39 48 36.9933031	0.00000843	0.0002507	0.0577	4692(?.5	44203.0	49340.0	177	584	587
1647-296	P 1647-296	16 50 39.54415630	-29 43 46.9554671	0.00006444	0.0007954	-0.7394	48812.3	48428.0	49030.0	9	12	12
1652+398	DA 426	16 53 52.2165682.8	39 45 36.6077192	0.00001294	0.0004826	0.0061	48414.2	48196.0	48613.0	5	10	10
1655+077	OS 092	16 58 .9.01146817	7 41 27.5399554	0.00001422	0.0003774	-9.2798	47575.3	45238.0	49340.0	16	42	42
1656+053	DW 1656+05	16 58 32.44734925	5 15 16.4438582	0.00001126	0.0003724	-0.0731	47356.3	44200.0	49033.0	24	52	57
1657-261	P 1657-261	17 0 53.15408572	-26 10 51.7259210	0.00002649	0.0004691	-0.2132	47?05.2	45356.0	49340.0	61	123	123
1706-174	OT-111	17 9 34.24542159	-17 28 53.2657273	0.00003472	0.0005711	-0.5695	47023.3	45356.0	49340.0	27	67	57
1717+178	GC 1717+17	17 19 13.04846875	17 45 6.4371897	0.00003778	0.0009927	-0.4827	44872.1	44203.0	48164.0	12	27	31
1730-130	NRAO 530	17 33 2.70579525	-13 4 49.5483583	0.00001239	0.0003908	0.1128	47341.9	43809.0	49341.0	192	440	440
1732+389	1732+389	17 34 20.57852827	38 57 51.4419863	0.00000955	0.0002652	0.1974	48730.0	48196.0	49033.0	31	75	75
1738+476	0'? 465	17 39 57.12906740	47 37 58.3618544	0.00002058	0.0005566	-0.2125	46357.5	43809.0	48534.0	62	104	105
1739+522	4C 51.37	17 40 36.97782811	52 11 43.4058153	0.000012S:	0.0002521	0.2231	48674.4	48102.0	49340.0	21	57	57
1741-038	P 1741-038	17 43 58.85615275	- 3 50 4.6173708	0.00001025	0.0003511	0.1606	47553.5	43809.0	49341.0	205	500	500
1743+173	GC 1743+17	17 45 35.20818267	17 20 1.4223?52	0.00000895	0.0003269	0.1180	48780.3	48102.0	49187.0	21	47	47
1749+701	1749+701	17 48 32.84035574	70 5 50.7680213	0.00007869	0.0004420	-0.1813	45490.6	44202.0	47552.0	44	120	124
1749+096	OT 081	17 51 22.81857882	? 39 0.7274880	0.00000877	[illegible]	0.1999	48348.7	45336.0	49341.0	73	161	161
1751+288	GC 1751+28	17 53 42.4736222?	28 48 4.9382429	0.00001304	'2.0003335	-0.1140	48567.6	48103.0	49030.0	14	23	23
1803-784	1803+784	18 0 45.68387564	78 28 4.0177439	0.00004043	0.0001920	0.0559	48782.5	47301.0	49340.0	105	217	217
1807+698	3C 371	18 6 50.68059S54,	59 49 28.1078297	0.00002438	0.0002033	0.1166	45570.1	44202.0	49187.0	132	325	329
1826+796	1826+796	18 23 14.10883205	79 38 49.0022118	0.00007244	0.0002675	0.3215	48801.9	48353.0	49033.0	8	19	19
1821+107	P 1821+10	18 24 2.85525788	10 44 23.7728289	0.00001864	0.0005565	-().3928	45357.1	44202.0	48355.0	26	53	53
1845+797	3C 390.3	18 42 8.?8976757	79 46 17.1275442	0.00011447	0.0003051	-9.2755	48380.9	48158.0	48613.0	5	12	12
1908-201	OV-213	19 11 9.65291629	-2'3 5 55.1095058	0.00001688	0.0004393	-0.1719	48153.4	45356.0	49341.0	50	115	115

1920-211 OV-235	19 23 32.18985106	-21 4 33.3336956	0.00001698	0.0004370	-0.1671	48224.0	46709.0	49341.0	61	123	123
1921-293 OV-236	19 24 51.05502843	-29 14 30.1217103	0.00002276	0.0004435	-0.1257	47792.8	43809.0	49340.0	114	316	316
1923+210 OV 239.7	19 25 5?.69525?24	21 6 26.1611325	0.00000935	0.0002787	0.3035	48300.2	47106.0	49340.0	53	145	145
1928+738 1928+738	19 27 48.49509175	73 58 1.5692971	0.00003441	0.0001958	0.3319	48538.4	48158.0	49340.0	16	45	45
1929+226 1929+226	19 31 24.91677043	22 43 31.2577460	0.00001393	0.0003733	-0.0669	48661.6	48613.0	48709.0	5	11	11
1933-400 P 1933-400	19 37 16.21746630	-39 58 1.5536859	0.00004078	0.0005104	-0.3270	48178.2	44227.0	49340.0	20	57	58
1936-155 P 1936-15	19 39 25.6577621?	-15 25 43.0586104	0.00002460	0.0004939	-0.5010	48062.3	47301.0	48976.0	24	40	40
1954+513 1954+513	19 55 42.73823187	51 31 48.5457155	0.00001549	'3.0002272	0.4249	48666.1	48158.0	49187.0	18	53	53
1958-179 OV-198	20 0 57.09045612	-17 48 57.6727573	0.00001381	0.0004019	-0.0835	47726.0	43809.0	49200.0	142	273	271
2008-159 P 2008-159	20 11 15.71093815	-15 46 40.2535603	0.00001659	0 . . .0004158	-0.2399	48172.6	47254.0	48976.0	34	54	64
2011-067 OW-015	20 11 14.21587200	- 5 44 2.5569?86	0.00008807	0.0012814	-9.?248	48647.8	48345.0	48976.0	10	14	14
2017+743 2017+743	20 17 13.07920911	74 40 47.9995?8	0.00004715	0.0002042	0.3653	48792.4	48353.0	49033.0	9	25	25
2021+614 OW 637	20 22 5.58158345	61 36 58.8042900	0.00002254	0.0002125	0.3607	48011.5	44755.0	49348.0	176	258	252
2021+317 2021+317	20 23 19.01733203	31 53 2.3054474	0.00001407	0.0004235	0.2001	48865.4	48353.0	49187.0	10	23	23
2030+547 OW 551	20 31 47.95846972	54 55 3.1408104	0.00005098	0.000987:	0.3458	45481.5	44202.0	48206.0	11	18	20
2029+121 P 2029+121	20 31 54.99426778	12 19 41.339787:	0.00002408	0.0006505	-0.4786	45024.8	44202.0	48355.0	18	38	38
2037*511 3c 418	20 38 37.03467325	51 19 12.6621838	0.00001885	0.0002612	0.3559	48726.7	48158.0	.49033.0	11	27	27
2051+745 2051+745	20 51 33.7343251:	74 41 40.497891:	0.00008732	0.0002831	-0.3040	48743.5	48353.0	49033.0	9	14	14
2113+293 B2 2113+29B	21 15 29.41342187	29 33 38.3667649	0.00001231	0.0002800	0.2339	46717.0	44202.0	49341.0	80	142	144
2121+053 OX 035	21 23 44.51733208	5 35 22.0938531	0.00001347	0.0003187	-0.1895	48004.8	47254.0	49030.0	32	55	65
2126-158 P 2126-15	21 29 12.17590157	-15 38 41.0406888	0.00002149	0.0004623	-0.4768	48565.3	48196.0	4?340.0	13	25	25
2128+048 P 2127+04	21 30 32.8774372:	5 2 17.4575?25	0.00002511	0.0006843	-0.4794	48625.6	48205.0	49030.0	10	13	13
2128-123 p 2128-12	21 31 35.26174108	-12 7 4.7957286	0.00001523	0.0003799	-0.2779	48137.5	47254.0	49340.0	31	57	57
2131-021 P 2131-021	21 34 10.30960485	- 1 53 17.2388132	0.00001066	0.0003069	0.0145	48356.3	47254.0	49340.0	51	112	112
2134+004 P 2134+004	21 36 38.58538337	0 41 54.2131884	0.00001025	0.0002909	0.0686	47332.0	43809.0	49340.0	95	209	212
2136+141 OX 161	21 39 1.30926013	14 23 35.9920723	0.00001404	0.0003407	-0.1572	48868.4	48715.0	49032.0	11	19	19
2143-156 OX-173	21 46 22.97939259	-15 25 43.8857708	0.00002190	0.0004588	-0.4896	48712.2	48196.0	48983.0	12	22	22
2144+092 ox 074	21 47 10.16301378	9 29 46.6715857	0.00001658	0.0003757	-0.3319	48406.3	48196.0	49031.0	9	13	13
2145+067 P 2145+06	21 48 5.45866457	6 57 38.6042699	0.00000958	0.0002602	0.2104	4747?.5	43809.0	49340.0	216	545	545
2149+056 OX 082	21 51 37.87548295	5 52 12.9546417	0.00001680	0.0003518	-0.3940	46348.8	44202.0	49031.0	47	102	102
2150+173 2150+173	21 52 24.81928293	17 34 37.7948455	0.00001396	0.0004228	-0.0932	48840.1	48196.0	49187.0	10	20	20
2155-152 OX-192	21 58 6.28193917	-15 1 9.3281451	0.00001606	0.0003873	-0.3325	47441.8	43809.0	48983.0	68	105	104
2200+420VRO 42.22.01	22 2 43.29132206	42 16 39.9797474	0.00001464	0 .0001919	0.5190	47446.7	4380?.0	49340.0	172	38C	387
2201+315 B2 2201+31A	22 3 14.97574115	31 45 38.25?4729	n.00001865	0.0002446	0.2467	48668.6	48161.0	49158.0	21	38	38
2215-038 P 2216-03	22 18 52.03773150	- 3 35 36.8795011	0.00001216	0.0003123	-0.1566	47251.7	45246.0	49340.0	72	138	139
2223-052 3C .446	22 25 47.25930226	- 4 57 1.3904617	0.00001176	0.0003025	-0.1342	47937.7	45151.0	49251.0	117	237	238
2227-088 P 2227-08	22 29 .40.08433246	- 8 32 54.4349842	0.00001416	0.0003382	-0.3024	48295.1	47254.0	49340.0	33	67	67
2229+695 2229+695	22 30 36.46964695	59 46 28.0770125	0.00006709	0.00032.55	0.2201	47373.5	46337.0	49340.0	9	18	18
2230+114 CTA 102	22 32 36.40889086	11 43 50.9043370	0.00000998	0.0002335	0.1973	47164.4	43809.0	49340.0	87	213	213
2234+282 GC 2234+28	22 35 22.47084307	28 28 57.4132902	0.00001189	0.0001978	0.3800	47384.7	44202.0	49321.0	141	308	3C8
2233-148 P 2233-148	22 36 34.08'713705	-14 33 22.1890664	0.00002269	0.0004751	-0.5290	48551.0	48196.0	48977.0	9	14	14
2243-123 OY-172.6	22 46 18.231?871?	-12 6 51.2776090	0.00001167	0.0003167	-0.1535	47471.7	43809.0	49340.0	131	251	251
2245-328 P 2245-328	22 48 38.68580051	-22 35 52 .1876?24	0.00003451	0.0004504	-0.5536	47035.9	43809.0	49031.0	49	123	125
2251+158 3C 454.3	22 53 57.74794914	16 8 53.5613453	0.00001056	0.(?(?02133	0.1956	47288.2	43809.0	49307.0	186	385	385
2252-089 P 2252-089	22 .55 4.2297933?	- 8 44 4.0211604	0.00002180	0.0004737	-0.5731	48541.0	47393.0	49032.0	13	22	22
2253+417 GC 2253+41	22 55 36.70776244	42 2 52.5226223	0.00004070	0.0003592	-0.5135	46024.8	44263.0	49158.0	33	67	68
2254+074 GC 2254+07	22 57 17.30311570	7 43 12.3027760	0.00001754	0.0003719	-0.4588	48202..1	4740?.0	48942.0	14	28	28
2254+024 P 2254+024	22 57 17.56309229	2 43 17.5119557	0.00001725	'3.0003457	-0.4759	47933.1	47254.0	48942.0	19	40	40
2255-282 P 2255-282	22 58 5.96293440	-27 58 21.2563191	0.00004006	0.000526:	-0.7000	48766.7	48196.0	49031.0	12	29	29
2318+049 GC 2318+04	23 20 44.85660129	5 13 4?.?528309	0.00001352	0.0002755	-0.2?52	47954.8	47254.0	49340.0	28	52	52
2319+272 B2 2319+27	23 21 59.86222565	27 32 45.4441255	0.00001453	0.0004160	0.0774	48722.12	48103.0	49032.0	8	18	18
2320-035 P 2320-035	23 23 ?1.95375932.	- 3 17 5.0233?72	0.00001991	0.0002729	-0.1440	47262.4	44202.0	49187.0	79	165	166
2328+107 P 2328+:0	23 30 40.85221497	11 0 18.7103233	0.00001772	0.0003152	-0.5070	48494.2	48196.0	.49158.0	15	22	22
2331-240 2331-240	23 33 55.23786258	-23 43 40.5575829	0.00002515	0.0004220	-0.5843	48589.7	48196.0	49032.0	21	40	40
2335-027 P 2335-527	23 37 57.33907168	- 2 30 57.5285605	0.00001427	0.0003162	-0.3933	48330.3	47381.0	49187.0	22	36	35
2344+092 P 2344+09	23 45 35.83849982	9 30 45.5162259	0.00002858	0.0004552	-0.7833	48456.8	48196.0	48977.0	9	16	16
2345-157 P 2345-16	23 48 2.60851004	-16 31 12.0212242	0.00001527	0.0003339	-9.4068	47378.3	43809.0	49187.0	75	150	159
2351+456 2351+456	23 54 21.68021512	45 53 4.2365836	0.00001935	0.0002180	0.2345	48730.3	47941.0	49033.0	16	34	34

2351-154 2351-154	23	54	30.19519813	-15	13	11.2123248	0.00001563	0.0003354	-0.4321	48488.3	47381.0	49032.0	31	59	59
2355-106 P 2355-106	23	58	10.88241196	-10	20	8.6107726	0.00001480	0.0003138	-0.4444	48041.1	46337.0	49340.0	44	98	98

From late 1978 through 1988, CAT M&E used the Mark II VLBI system with a spanned bandwidth of 40 MHz in each band, and used two "/0 meter DSN antennas (1)ss 14, 43, 63) whenever- possible. The DSN schedules CAT M&E observing sessions at irregular intervals, typically severs] times per year, with sepal-ate observing sessions on the SC and AC base] ines. Each session is nominally 24 hours in duration and typically includes 100 to 330 observations of 50 to 134 radio sources.

Data from both the TEMPO and CAT M&E projects were used in the solution process for the ERP series reported here. In order that the TEMPO c)perat.ions] series of ERP estimates during 1994 can be an exact continuation of the ERP series reported here, the solution process consisted of two major steps. First, a "catalog solution" designated JPL 1994-1 (see below) determined radio source coordinates, station coordinates and site velocities, a parametric model for the celestial motion of the Celestial Ephemeris Pole, and a parametric model for the nearly- diurnal and nearly-semi diurnal tidal frequency variations of UT1 and polar motion. Then the second step, called the "ERP solution", used these results from the catalog solution to determine the earth rotation parameters in a manner that can be exactly continued in the operational series. In the ERP solution the data from each observing session were processed independently to provide an estimate of the UT0 and variation of latitude (DPHI) of the baseline VECTOR for that session. Except for the UT0 and variation of latitude, the relation between the cart.t- fixed reference frame and the radio-guasar reference frame was specified entirely by a priori data (which includes the results from the catalog solution). In addition to UT0 and DPHI, the other parameters estimated in the ERP solution were:

1. A first degree polynomial clock model, including a term allowing for a bias in the phase-delay-rate data, with breaks as needed.
2. Adjustments to the troposphere zenith delay at. each station. In the CAT M&E sessions, new troposphere zenith parameters were introduced approximately every three hours (every two hours for data after 1992.0). A priori estimates of the troposphere zenith delays, derived from tables of monthly average zenith delays for each station, were included in the solution with a 6 cm standard deviation. (For good quality observing sessions in recent years, the effect of these a prioris is negligible and the estimated troposphere zenith delays are essentially completely determined by the VLBI observables.)

Other properties of the ERP solution were:

1. The reported earth rotation parameters have had nearly-diurnal and nearly- semidiurnal tidal frequency variations removed according to the parametric model estimated in the catalog solution. (In other words, the effects in the table below headed "Short Period Tidal ERP Variations" have NOT been added back in producing EOP(JPL)94 R01.)
2. Ocean loading effects were calculated from the modelof Scherneck *(1983; 1991)*.
3. Pole tidal effects were included (Sovers, 1991).
4. The Lanyi (1984) function was used for mapping zenith tropospheric delays to observed elevations.
5. The effects of charged particles in the ionosphere and solarplasma on the single-band delay and delay rate observables were removed by using the appropriate linear combination of the S-band and X-hand data to form "dual frequency" delay and delay rate observables.
6. For recent years only sessions with 6 or more acceptable delay observat.ions were included in the solution reported here.
7. The effect on path lengths caused by moving ("slewing") the antenna subreflector, so as to maximize, the antenna gain when its focal length changes as the elevation angle changes, has beenmodeled for the TEMPO data. No such model is needed for the CAT M&E data since ('Al' M&E does not slew the subreflector. (Apparent. station coordinates estimated from VLBI data will be corrupted if the

subreflector is slewed but the effect on path length is not modeled in the delay calculations. The station coordinates estimated by the JPL 1994-1 catalog solution and used in the ERP solution are appropriate both for the case where the subreflector is not slewed and no path length effect is modeled and also for the case where the subreflector is slewed and the resulting effect on path length is explicitly modeled in the calculations.)

The raw observable uncertainties have been modified by adding quadratically an uncertainty component, for each of the two stations, equal to a small fraction (0.002 or 0.003) of the total a priori tropospheric effect. at. t-hat station on the observable. We further quadratically added an "additive noise" Constant when needed so as to make the Chi Square of the post fit. residuals approximately equal to the number of degrees of freedom in the solution. The delay and delay rate additive noise constants were adjusted separately for each CAT M&E observing session. For the TEMPO data, the additive noises were adjusted for each of several blocks of observing sessions.

Each Earth Rotation measurement here is a UT0-DPHI pair, and has an associated error ellipse in the UT0 - DPHI plane. Each such error ellipse is completely specified by the reported standard errors and correlation coefficient between UT0 and DPHI. For single baseline VLBI measurements of ERP, such as those reported here, this error ellipse is typically quite elongated, with a ratio of major axis to minor axis of about 4:1. Therefore, for a proper interpretation of these data, it is CRUCIAL to make full use of the reported correlation coefficient.

For a single-baseline VLBI estimate of earth rotation, the orientation of the error ellipse in the UT0-DPHI plane is mostly determined by the global station geometry. The direction of the minor axis of the error ellipse in the UT0-DPHI plane> as predicted by the station geometry is called the transverse rotation direction, and corresponds to the motion of the baseline in the local horizontal at. each station or equivalently to a rotation about an axis through the center of the earth and the midpoint of the baseline. In addition to being relatively insensitive to random measurement errors, the transverse rotation component is also relatively free of errors introduced by tropospheric modeling errors, antenna deformations, and other sources of systematic local-vertical errors. The transverse rotation components for the DSN baselines are:

Baseline	Transverse Component
Australia-California	-1.000 DPHI + 0.00 (UT0-TAI)
Spain-California	+0.582 DPHI + 12.21 (UT0-TAI)
Spain-Australia	-0.972 DPHI + 2.77 (UT0-TAI)

These coefficients assume that UT0 and DPHI are expressed in seconds of time and in arcseconds, respectively; the units of the linear transverse components are arcseconds. We recommend that these linear combinations be used to take full advantage of the inherent accuracy of these data.

The ERP solution produced earth orientation results for a total of 1042 observing sessions between October 28, 1978, and March 13, 1994.

During calendar year 1993, the TEMPO project produced earth rotation measurements from 93 dual frequency observing sessions, with a median standard error along the minor axis of the error ellipse of 0.3 milliarcseconds (mas), and along the major axis of 1.4 mas. During 1993 the median Turnaround time for TEMPO measurements, from observation to availability of earth orientation parameters, was 49 hours.

JPL 1994-1 CATALOG

The JPL 1994-1 catalog was developed specifically for use in TEMPO operations] ERP solutions during 1994. Since short duration VLBI determinations of the ERP are sensitive to errors in the celestial position of the Celestial Ephemeris Pole (CEP), and since the current 1 AU standards for the CEP are known to he in error by amounts significant to TEMPO, it is important that TEMPO use a CEP series that is corrected from the IAU standards anti is consistent with the radio source coordinates (RSC) used. Current practicalities of TEMPO operations favor the use of a parametric model for the CEP that. includes the 1 ong period motions. Therefore we have> estimated such a model along with the RSC and set of station coordinates (SSC) in t-he J}'], 1994-1 catalog solution. 'i'his year our CEP motion mode] consists of the % MOA - 1990-2 nutation model (Herring, 1991) plus adjustments to the coefficients of certain terms of the % MOA-1990-2 model, along with the IAU precession model and adjustments to its coefficients. Our CEP motion model is intendedonly to permit processing of TEMPO data for the ERP during the period reported here and during 1994, and will presumably need revision in 1995. In particular, it may not include all significant components, not all its adjustments may be genuinely significant, and its parameters may not all be well separat.eel, but we believe it. is adeguate for Our purposes.

As part of the JPL 1994-1 cat.ale):] solution we estimated coefficients of a model of ERP variations at nearly- diurnal and nearly- semidiurnal tidal frequencies. Nearly-diurnal polar motion variations were constrained to have no retrograde part, thus allowing simultaneous estimation of nutations.

The JPL1994-1 catalog solution hacl the following properties:

1. Except where otherwise noted, the catalog solutionwas essentially identical to the ERP solution descri heel above.
2. All the available CAT M&E data through December 19, 1993, and most of the TEMPO data through Decembe r 29, 1993, were included.
3. lnformation from intr - complex radio interferometry was used to constrain the coordinate differences between stations within each complex. The uncertainties used for these intracomplex ties vary from station pair to station pair and from component to component (the local vertical uncertainty is typically three times the horizontal uncertainty). These uncertainties are our best. estimates of the realistic one- standard- deviation uncertainties of these ties and range from 5 nun to 18 mm.
4. For each pair of observing sessions that used different pairs of DSN complexes (that. is, California-Lo-Spain and California-to- Australia) with a time separation between the midpoints of the sessi errs of less than 15 hours, the adjustment (dX,dY,dUT1) to the initial values of earth orientation is the same for both members of the pair. (The initial-value ERP series was a version of the SPACE93 series (Gross, 1994) modified to not use DSN VLBI data; it. is a slnoc)t.heel, combination- of-techniques ERP series obtained by Kalman filtering.) This treatment of close-in-time pairs servestodetermine the angle bet.wc:erl the California- to- Spain and California-to-Australia baseline vectors (and thus also the length of the Australia-to-Spain vector). There were 66 such pairs of TEMPO sessions; there were 7 such pairs involving one TEMPO session and one CAT M&E session; and t.here were no such pairs involving two CAT M&E observing sessions, 'l'his year there is one CAT M&E session (December 19, 1993) in which one station in each complex participated (DSS 15,45, 65), with small groups of observations on the California- to-Spain and California-to-Australia baselines interleaved. Although the duration of this session was only 8 hours, it has significantly improved our knowledge of the rate of change of the length of the Australia-to- Spain vector. (A special thank you to Chris Jacobs for leading the effort toacquire this data, and for getting the result-s to us in Lime for this analysis.)

5. The terrestrial frame of the JPL 1994-1 system was tied to the International Earth Rotation Service Terrestrial Reference Frame ITRF-92 (IERS, 1993, Table 'I-3) in the following way. The coordinates of all the DSN stations, including all those in California, were estimated in the c:at.slog solution subject to six constraints applied to the nine coordinates of 1)SS 15, DSS 45, and 1)ss 65. These constraints are such that. i f a seven parameter transformation (3 translations, 3 rotations, 1 scale) between the JPI, 1994-1 and ITRF - 92 systems were estimated by unweighted 1 east squares applied to the coordinates of DSS 15, 45, and 65, then the resulting 3 translation and 3 rotation parts of the transformation would he zero while the scale could he nonzero and unknown in advance of computing the catalog. (When expressed as the dot product of a nine dimensionaunit vector with the nine station coordinates, each constraint is assigned an a priori standard deviation of 5 mm; this does not affect the resulting coordinates but does affect the calculated formal errors, giving them a more spherical distribution than would result. if either very large or very small a priori standard deviations were used.) These constraints serve to determine both the translation and the rotation of the terrestrial coordinate system. The station coordinates resulting from the solution apply at a reference time of 1988.0, in agreement with that of ITRF-92.
6. Three-dimensional site velocities were estimated for each of the three DSN complexes. All stations in each DSN complex were assumed to have the same site velocity. The velocities were constrained so as to produce no net translation rate and no net rotation rate, for the network composed of the three DSN complexes, relative to the net motion of this network of three sites as expressed in the ITRF-92 velocity field (IERS, 1993, Table T-5). Thus only three velocity parameters are actually being separately estimated; one way to describe these is as the rates of change of (1) the California-to-Australia length, (2) the California-to-Spain length, and (3) the angle between the ('a] i f ornia - to-Aust ral i a and California-to-Spain vectors. (When expressed as the dot product of a nine dimensional unit vector with the nine site velocity components, each constraint is assigned an a priori standard deviation of 1.0 mm/yr; this does not affect the resulting velocity components but does affect. the calculated formal errors, giving them a more spherical distribution than would result if either very large or very sma] 1 a priori standard deviations were used.)
7. The celestial frame of the JPL 1994-1 system was tied to the International Earth Rotation Service Celestial Reference Frame in the following way. The Right Ascension and Declination of OJ 287 (0851+202) and the Declination of Cl'I) 20 (0234+285), which are among the best. observed sources in the! DSN catalog and are primary sources in the 1993 realization of the IERS Celestial Reference Frame, were held fixed at. their values in that frame as specified in the set of radio source coordinates RSC(IERS)93 C01 (IERS, 1993, '1'able C-4).
The formal errors of these three source coordinates are properly zero, but_ in order to convey the quality of determination of these two sources we have replaced these three zeros in our source list RSC(JPL)94 R 01 by the formal errors for these three coordinates from a similar solution that. had three coordinates of two different well-observed sources held fixed; we have similarly replaced the two correlation coefficients between Right. Ascension and Declination for these two sources.
8. The reference epoch of the JPL 1994-1 celestial system was J2000, and the definition of sidereal time was a function of the estimated precession constant (Sovers, 1991, sections 2.6.1 and 2.9.3.3).

This year we have used the MODEST option to perform the genera] relativity calculations according to the "TDT spatial coordinates"

convention (Sovers, 1991). This choice has a small effect on the length scale of the Set of Station Coordinates. The relativity model used is essentially equivalent to the "consensus model" described by Eubanks (1991). As a result, the estimated Set. of Station Coordinates has the scale of a geocentric coordinate system using a time scale consistent with International Atomic Time.

The model of the celestial motion of the CEP obtained as part of the JPL *1994-1* catalog solution is presented below as adjustments to the IAU precession and ZMOA-1990-2 nutation coefficients along with two offset parameters which represent the estimated position of the (mean) CEP at. epoch J2000 as expressed in the coordinate system of the radio sources. A positive X-offset represents a displacement. of the CEP toward 18 hours Right Ascension, and a positive Y- of f set represents a displacement of the CEP toward 0 hours Right Ascension. The CEP-motion model includes a term representing a secular rate in obliquity. Also included is an empirics] term with a period of -429.8 days (for the origin of this particular value of period, see (Herring et al., 1991; Herring, 1991)). Only those nutation terms listed below were adjusted in the catalog solution. Two sets of standard errors are presented; the "formal" errors are just the formal errors from the catalog solution, and the "generalized" errors are the formal errors from a similar solution which also estimated additional components with periods of 121.75, 27.55, 13.63, and 9.13 days as well as both out-of-phase nutations for all ten periods.

Celestial Ephemeris Pole Motion Model
(nutations relative ZMOA-1990-2)

IAU-Index	Period days	Phase	Component	Adjustment Ills	Formal Error mas	Generalized Error mas
precession			Longitude	-3.21/yr	0.06/yr	0.14/yr
obliquity rate			Obliquity	-0.28/yr	0.05/yr	0.06/yr
Y-offset			L sin eps	-18."/0	0.34	0."/4
X-offset			Obliquity	i 5.94	0.76	0.77
1	-6'/98.38	In	Longitude	- 0.98	0.31	0.73
			Obliquity	*0.01*	0.16	0.17
		Out	Longitude	+ 1.13	0.21	0.41
			Obliquity	- 0.15	0.29	0.29
2	-3399.39	In	Obliquity	- *0.23*	0.08	0.08
		Out-	Longitude	- *0."/0*	0.17	0.20
			Obliquity	+ 0.17	0.12	0.13
10	365.26	In	Longitude	- *0.50*	0.08	0.10
			Obliquity	+ *0.03*	0.03	0.03
		Out.	Longitude	+ *0.64*	0.08	0.09
			Obliquity	+ *().()0*	0.03	0.04
9	182.62	In	Longitude	- *0.06*	0.06	0.0"/
			Obliquity	- *0.04*	0.02	0.03
		Out	Longitude	+ 0.18	0.06	0.07
			Obliquity	+ *0.03*	0.02	0.03
31	13.66	In	Longitude	- *0.20*	0.05	0.14
			Obliquity	+ 0.11	0.03	0.05
		Out	Longitude	+ 0.47	0.0'/	0.13
			Obliquity	+ 0.10	0.02	0.06
	429.8	In	Longitude	*0.04*	0.08	0.09
			Obliquity	+ *0.02*	0.04	0.04

Out	Longitude	- 0.61	0.09	0.10
	Obliquity	- 0.12	0.03	0.03

The parametric model for the nearly-diurnal and nearly-semidiurnal tidal frequency variations of UT1 and polar motion obtained as part of the JPL 1994-1 catalog solution is presented below. The argument conventions used here are those of Sovers et al. (1993). The formal errors of these parameters range from 13 to 53 microarcseconds but realistic uncertainties are probably about 75 microarcseconds (one standard deviation).

Short Period Tidal ERP Variations

	Period	UT1 (microseconds)		Polar Motion Amplitude (microarcseconds)		Polar Motion Phase (degrees)	
Term	(hours)	Cosine	Sine	prograde	retrograde	prograde	retrograde
K2	11.96724	3.0	4.0	43	54	59	246
S2	12.00000	1.3	9.9	40	143	58	314
M2	12.42060	- 8.4	18.0	64	242	119	274
N2	12.65835	0.1	2.8	20	32	106	188
K1	23.9344-I	13.1	26.2	191	0	163	*
P1	24.06589	- 4.5	- 4.3	59	0	342	*
O1	25.81934	-13.3	-13.5	145	0	314	*
Q1	26.86836	3.6	- 1.8	38	0	323	*

For the 1994-1 catalog solution, the data set used has been restricted to have only elevation angles above some arbitrary minimum value. Note however that low elevation observations are effectively down-weighted by the observable uncertainty adjustment procedure described above. Because the most frequently used stations in this data set (DSS14,15,43,45,63,65) have antenna limits at 6.0 to 6.35 degrees elevation, almost all the data in this data set has elevation angles above 6 degrees. Because of the very long lengths of the DSN baselines, the DSN VLBI observing schedules have included low elevation observations since their inception. Since at least 1983, the TEMPO sessions have been designed to improve the determination of the troposphere zenith parameters and their separation from the geodetic parameters by deliberately including a few observations for this purpose, which have low elevation angles and are not near the cusps of the visibility sector. In the set of elevation angles associated with the observations included in the 1994-1 catalog solution, the portion that fall in each 10 degree increment is as follows (in percent):

0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80	80 - 90	
8.8	23.8	21.5	17.5	13.9	9.0	3.0	1.9	0.1	degrees percent

The average elevation angle is 30.70 degrees.

For accurate interpretation of the UT0 and DPHI values reported here, one should use accurate values of the latitude and longitude of the baseline vector; these can be calculated for each station pair from the SSC estimated in the JPL 1994-1 catalog solution and reported here. Approximate values are:

Baseline	Latitude (degrees)	Longitude (degrees)
Australia-California	43.97	+106.05
Spain-California	+ 2.99	+ 30.73
Spain-Australia	+ 38.50	18.10

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SUPPLEMENTARY STATI S1'1 CS FOR
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J PL TEMPO + CAT M& E EA RTH ORI E NTATI ON RESUI TS
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S'J'A'J'] STI CS TABL E

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I'OS'J" EI T RESIDUAL STATI S1'] ['S :

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UN] 1'S ARE NANOSECONDS ANJ) PI C OSECONDS / SECONI)
WRMS = ROOT MEAN SQUARE (RESI I DUAI , / ERROR)
N = NUMBER OBSERVATI ONS

EARTH ORI ENTATI ON EI G EN-ANAI ,YSI S :

- PROVI DES ERROR EI LI PSE FOR B ASEL I NE UT0
ANI) VARI Al'] ON OF LATI TUDE
- ERROR 1,:1,1,1 PSE AXES ARE 1 N Ml 1,1,1 ARC SE CONDS

E1 = STANDARD E RROR Al ,ONG MI NOR AX I S OF ERROR EL L I PSE
= ACCURACY 1 N WEI L D ETE RMI NED 1)1 RECTI ON
E2 = STANDARD ERROR AI ,ONG MAJ OR AX I S OF ERROR EI ,1,1 PSE
ANGLE = ANGI E (I N D E G REES) BETWEEN BASEI I NE VARI Al'] ON
OF LATI TUDE AND THE ERROR EI LI PSE MAJOR AX I S
ANGI E 1 S POS1 1'1 VE TOWARDS POSI TIVE UT0

DATE	W,S E- I NE	IAN I)	D ELAY RESI DUALS RM S NSEC	WRM S	N	RATE RESI DUAI ,S RMS PSEC/ SEC	WRMS	N	ERROR EI LI PSE E1 MAS	E2 MAS	ANGI E DEGREES
/81028	14/43	Sx	0.32?	0.86	95	0.11	0.98	95	0.4	1.2	-86.0
/811 4	*14/43*	SX	0.31	0.76	23	0.10	1.05	23	0.5	2.1	88.2
/81231	14/43	Sx	0.34	0.85	115	0.13	0.96	115	0.3	1.1	-88.6
/91123	14/43	SX	0.58	0.77	35	0.20	0.95	35	1.8	5.4	85.0
/91126	14/63	Sx	0.59	0.90	112	0.13	0.98	112	0.6	2.3	-42.6
/91220	14/43	Sx	0.47	0.92	132	0.14	1.01	132	0.3	1.3	89.4
/91221	14/63	SX	0.57	0.83	33	0.11	1.04	33	2.1	8.8	*-53.2*
/91227	14/63	S X	0.55	0.86	68	0.12	1 .05	68	1.2	4.0	*-39.9*
/91229	14/43	SX	0.43	0.7'1	43	0.11	0.99	43	0.6	2.1	-88.9
30 112	*14/43*	Sx	0.44	0.85	109	0.21	1.02	109	0.5	3.'/	87.8
30 125	14/63	S X	0.59	0.-/9	48	0.08	1.01	48	1.5	5.6	*-40.8*
30 127	*14/43*	Sx	0.39	0.84	42	0.16	1.03	42	0.'1	2.6	*86.9*
30 214	*14/43*	SX	0.36	0.84	49	0.12	1.06	49	0.6	1.9	*-89.0*
30 214	14/63	Sx	0.56	0.88	137	0 .10	0.98	137	0.7	2.5	-42.1
30 223	*14/43*	Sx	0.46	0.88	106	0.14	1.00	106	0.3	1.4	*85.6*
30 224	14/63	Sx	0.41	0.80	47	0.11	1.03	47	1.2	4.3	-41.8
30 719	14/63	Sx	0.31	0.77	9	0.09	0.80	9	1.8	'1.0	*-54.3*
80 725	14/63	Sx	0.19	0.52	5	0.12	1.09	7	3.3	29.2	*-68.0*
80 824	14/43	Sx	0.39	0.65	10	0.38	0.9'/	8	2.6	14.4	*-'1'1.5*
80 824	14/63	Sx	0.31	0.59	5	0.08	0.76	7	3.3	31.4	*-6'1.8*
80 923	14/43	Sx	0.38	0.83	8	0.14	1.30	8	2.6	8.1	*-66.3*
80 924	14/63	Sx	0.25	0.36	5	0.15	1.29	6	7.6	22.2	-59.5
80 930	14/43	S X	0.23	0.48	11	0.06	0.51	11	1.4	6.3	-81.4
801016	14/43	SX	0.31	0.61	9	0.08	0.72	10	2.5	7.5	*-80.1*
801017	14/63	SX	0.16	0.18	6	0.14	1.20	8	3.6	11.6	*-44.8*
801122	14/43	Sx	0.30	0.50	12	0.16	1 .53	12	1.5	6.0	-76.1
8012 8	14/43	Sx	0.24	0.47	5	0.04	*0.3'1*	6	4.2	10.1	*-88.9*

801214	14/43	SX	0.25	0.63	8	0.15	1.30	9	2.3	15.4	-58.8
801214	14/63	SX	0.15	0.14	5	0.44	1.10	5	4.8	24.5	-42.8
801223	14/43	SX	0.30	0.52	6	0.04	0.40	6	4.9	30.1	67.3
81 2 4	14/43	SX	0.47	0.83	10	0.04	0.39	6	2.3	5.4	-85.2
81 211	14/43	SX	0.52	0.77	7	0.11	0.66	7	3.1	9.4	-74.0
81 219	14/43	SX	0.56	0.91	5	0.09	0.81	5	21.0	31.6	64.3
81 3 1	14/63	SX	0.43	0.41	6	0.05	0.43	6	6.2	23.7	-58.6
81 510	14/63	SX	0.52	0.47	6	0.44	1.07	3	5.9	28.5	-55.2
81 516	14/43	SX	0.37	1.14	11	0.12	1.05	12	1.5	5.0	77.4
81 531	14/43	SX	0.36	0.39	11	0.17	0.43	11	2.2	8.3	79.6
81 531	14/63	SX	0.16	0.15	6	0.07	0.63	5	7.5	13.9	-19.5
81 614	14/43	SX	0.26	0.81	10	0.08	0.64	10	2.2	5.3	74.3
81 614	14/63	SX	0.32	0.35	5	0.08	0.61	5	16.4	49.6	-72.0
81 719	14/43	SX	0.31	0.73	9	0.06	0.53	12	1.8	6.0	69.9
81 719	14/63	SX	0.31	0.67	6	0.11	0.94	7	3.5	13.6	-67.6
81 726	14/43	SX	0.28	0.85	12	0.08	0.78	12	1.4	5.6	-71.3
81 8 1	14/43	SX	0.27	0.86	11	0.08	0.67	11	1.0	4.6	-78.6
81 8 2	14/63	SX	0.22	0.58	8	0.11	0.99	8	1.6	6.9	-42.5
8112 9	13/43	SX	0.65	0.87	47	0.08	1.01	47	0.6	2.2	-83.5
811218	14/43	SX	0.51	1.59	9	0.10	0.84	9	1.9	7.6	-88.2
82 1 3	63/43	SX	0.43	0.80	6	0.06	0.49	6	4.7	15.2	-55.0
82 1 8	14/63	SX	0.20	0.60	6	0.08	0.78	6	3.0	6.9	-40.9
82 123	14/43	SX	0.16	0.50	10	0.08	0.71	10	1.8	5.2	-89.5
82 2 8	14/43	SX	0.41	0.83	13	0.06	0.54	12	1.3	6.2	-83.2
82 213	14/63	SX	0.26	0.75	17	0.14	1.32	15	1.1	4.5	-44.8
82 220	14/63	SX	0.28	0.76	11	0.07	0.61	11	1.0	4.5	-38.3
82 221	14/43	SX	0.37	0.86	11	0.09	0.77	12	1.2	3.2	-86.2
82 228	14/43	SX	0.46	1.04	16	0.11	0.98	16	2.2	8.0	-71.3
82 326	14/63	SX	0.14	0.46	13	0.10	0.94	12	1.1	4.8	-37.2
82 329	14/43	SX	0.34	0.66	9	0.10	0.92	13	1.9	6.0	-75.8
82 4 8	14/43	SX	0.29	0.71	16	0.12	1.07	16	0.6	2.7	-87.5
82 412	14/63	SX	0.06	0.22	9	0.04	0.38	10	1.3	7.9	-29.3
82 5 7	14/63	SX	0.49	1.02	11	0.05	0.49	11	1.3	4.9	-43.0
82 513	14/43	SX	0.25	0.56	10	0.13	1.13	11	1.5	6.1	-82.2
82 523	14/63	SX	0.34	0.96	13	0.08	0.74	12	1.1	3.5	-37.9
82 524	14/43	SX	0.25	0.64	16	0.09	0.76	16	0.7	2.7	-87.4
82 529	14/63	SX	0.26	0.39	5	0.11	0.91	5	9.9	61.5	-30.0
82 7 1	13/43	SX	0.48	0.84	93	0.05	1.02	93	0.5	1.4	-86.3
82 7 2	12/43	SX	0.30	0.54	9	0.08	0.64	11	2.3	7.4	-71.2
82 7 4	13/63	SX	0.62	0.86	110	0.22	0.96	110	0.8	3.1	-45.7
82 717	12/43	SX	0.37	0.43	8	0.26	0.63	8	3.0	14.5	86.2
82 718	12/63	SX	0.31	0.52	10	0.11	0.91	12	4.2	18.7	-55.8
82 813	12/43	SX	0.16	0.21	5	0.52	1.30	4	4.3	21.6	81.4
82 815	12/63	SX	0.23	0.46	8	0.06	0.53	8	4.2	14.0	-58.0
82 817	13/63	SX	0.51	0.90	73	0.08	1.05	73	1.0	3.3	-45.2
82 911	14/43	SX	0.65	0.52	8	0.31	0.78	6	6.2	19.0	-83.3
82 919	14/61	SX	0.30	0.42	6	0.15	1.36	6	6.4	41.3	-59.6
82 926	14/43	SX	0.31	0.19	6	0.32	0.79	8	6.4	27.5	89.4
82 926	14/61	SX	0.48	0.69	6	0.16	1.41	7	7.9	22.0	-56.7
8210 3	14/61	SX	0.43	0.76	10	0.06	0.53	11	3.2	19.6	-56.0
8210 4	14/61	SX	0.41	0.81	115	0.09	1.04	115	0.8	3.2	-54.7
821023	14/43	SX	0.68	0.56	9	0.27	0.69	7	6.2	19.8	-81.4
8211 6	14/43	SX	0.63	1.13	15	0.51	1.27	13	1.8	8.3	83.8
8211 6	14/61	SX	0.36	0.87	13	0.07	0.62	17	2.5	9.7	-50.7
821110	14/61	SX	0.50	0.83	18	0.09	0.77	18	2.2	9.3	-44.0
821114	14/43	SX	0.77	1.14	15	0.35	0.90	10	1.4	6.1	89.4
821125	14/63	SX	0.31	0.68	16	0.07	0.55	16	1.3	4.6	-36.0
821128	14/63	SX	0.27	0.91	209	0.11	0.98	209	0.3	1.1	-38.9
821130	14/43	SX	0.39	0.86	113	0.30	0.98	113	0.6	2.0	89.5
8212 4	14/63	SX	0.48	1.05	12	0.06	0.55	14	1.5	5.8	-48.2
821212	14/63	SX	0.55	0.78	15	0.08	0.66	16	1.7	4.8	-45.8
821217	14/43	SX	0.33	0.79	14	0.06	0.50	16	0.8	3.5	88.8
821219	14/63	SX	0.19	0.34	11	0.03	0.23	13	1.7	6.6	-50.1
83 1 2	14/63	SX	0.37	0.53	18	0.03	0.26	19	1.2	4.1	-41.1
83 1 8	14/63	SX	0.38	0.88	14	0.07	0.59	17	1.3	4.3	-41.1
83 111	14/43	SX	0.20	0.59	18	0.09	0.83	18	0.7	2.6	-84.1

83 123	14/43	SX	0.19	0.79	118	0.17	0.98	118	0.3	1.1	88.1
83 124	14/43	SX	0.19	0.53	15	0.08	0.76	15	0.8	4.1	87.8
83 125	14/63	SX	0.22	0.90	225	0.10	1.00	225	0.2	0.9	-37.9
83 129	14/43	SX	0.25	0.55	16	0.15	1.40	17	1.1	4.4	88.2
83 129	14/63	SX	0.29	0.54	14	0.06	0.56	13	1.4	4.0	-37.8
83 2 5	14/43	SX	0.39	0.66	18	0.14	1.18	13	1.1	4.5	88.9
83 2 6	14/63	SX	0.21	0.47	18	0.09	0.81	17	1.0	3.4	-39.8
83 215	14/42	SX	0.44	0.79	19	0.07	0.66	18	0.9	3.8	-88.2
83 222	14/63	SX	0.39	1.33	8	0.04	0.40	9	2.4	10.3	-14.1
83 3 5	14/63	SX	0.39	0.58	16	0.06	0.50	19	1.2	3.9	-39.2
83 325	14/42	SX	0.18	0.29	9	0.17	0.43	7	4.4	24.7	71.3
83 325	14/63	SX	0.52	0.66	9	0.09	0.73	14	2.8	7.2	-42.8
83 4 8	14/63	SX	0.19	0.83	208	0.09	0.97	208	0.2	0.9	-40.4
83 413	14/63	SX	0.46	0.59	17	0.09	0.67	19	1.5	4.4	-38.9
83 423	14/42	SX	0.56	0.39	10	0.25	1.63	15	2.7	8.1	-75.3
83 423	14/63	SX	0.43	0.72	14	0.13	1.15	15	1.1	4.1	-37.4
83 5 4	14/42	SX	0.41	0.47	10	0.16	1.30	12	1.9	7.5	-88.6
83 5 4	14/63	SX	0.51	0.83	13	0.14	1.19	16	1.2	4.6	-35.1
83 520	14/43	SX	0.17	0.72	205	0.10	0.99	205	0.2	0.6	86.3
83 522	14/63	SX	0.24	0.88	184	0.10	0.97	184	0.4	1.2	-43.4
83 523	14/43	SX	0.47	1.29	15	0.09	0.82	16	1.0	3.9	84.2
83 524	14/63	SX	0.33	0.71	16	0.07	0.53	19	1.2	4.1	-35.0
83 6 2	14/43	SX	0.31	0.59	14	0.06	0.53	20	0.8	4.0	-88.6
83 6 2	14/63	SX	0.23	0.68	6	0.14	1.30	6	4.5	6.7	-24.1
83 7 8	12/43	SX	0.60	0.70	20	0.22	0.95	17	2.4	9.8	-89.1
83 716	12/63	SX	0.50	0.62	8	0.21	0.83	10	6.1	31.4	-52.9
83 717	12/43	SX	0.79	1.22	14	0.13	0.55	10	1.6	7.4	-85.2
83 725	12/43	SX	0.75	0.81	15	0.28	1.13	13	2.3	9.8	83.6
83 726	12/63	SX	0.58	0.65	13	0.22	0.95	14	4.8	15.3	-58.2
83 8 3	12/43	SX	0.28	0.38	11	0.26	1.10	11	3.1	13.1	-74.1
83 811	12/63	SX	0.54	0.59	12	0.23	0.94	12	4.0	23.2	-58.8
83 820	12/63	SX	1.30	1.18	10	0.20	0.80	17	4.1	20.1	-57.9
83 821	12/43	SX	0.26	0.25	15	0.19	0.82	15	2.4	10.5	-78.3
83 828	12/63	SX	0.77	1.06	15	0.32	1.26	14	3.4	17.7	-59.4
83 829	12/43	SX	0.47	0.68	16	0.22	0.92	17	2.2	8.8	-78.8
83 9 6	12/63	SX	0.86	1.20	13	0.27	1.05	14	3.9	19.2	-59.5
83 9 7	12/43	SX	0.62	0.93	15	0.18	0.78	12	2.2	7.7	-84.2
83 916	12/43	SX	0.69	0.54	12	0.30	1.16	12	3.7	14.0	-77.3
83 923	12/43	SX	0.74	0.56	14	0.30	1.25	17	2.7	8.9	-82.7
83 923	12/63	SX	0.46	0.69	14	0.22	0.94	15	3.7	20.3	-61.7
83 929	12/63	SX	0.51	0.76	13	0.22	0.93	15	3.4	12.2	-53.8
83 930	12/43	SX	0.41	0.57	13	0.22	0.96	15	2.7	9.3	-76.3
8310 6	12/63	SX	0.65	0.72	13	0.16	0.69	15	3.7	16.7	-58.9
8310 7	12/43	SX	0.59	1.00	14	0.19	0.81	13	2.6	8.6	89.0
8310 8	43/63	SX	0.67	0.60	5	0.16	1.13	6	7.1	18.7	-64.7
831013	12/63	SX	0.56	0.67	16	0.20	0.71	16	3.6	12.9	-51.9
831014	12/43	SX	0.36	0.56	14	0.17	0.74	12	2.9	12.3	-67.3
831020	12/63	SX	0.34	0.47	7	0.19	0.84	5	4.4	17.3	-55.7
831021	12/43	SX	0.39	0.58	20	0.20	0.85	17	2.2	7.2	90.0
831027	12/63	SX	0.52	0.67	15	0.19	0.82	15	3.0	12.0	-53.4
831028	12/43	SX	0.42	0.59	16	0.14	0.61	12	2.0	8.1	-89.5
8311 4	12/63	SX	0.38	0.50	16	0.08	0.61	20	3.5	11.1	-48.8
8311 5	12/43	SX	0.42	1.14	19	0.14	1.15	20	1.2	4.7	-83.2
831112	12/63	SX	0.37	0.46	11	0.07	0.64	11	2.7	9.5	-53.1
831113	12/43	SX	0.28	0.60	16	0.14	1.09	17	1.7	4.3	-82.8
831118	12/43	SX	0.34	0.89	148	0.30	0.99	148	0.4	1.7	-86.3
831119	12/63	SX	0.31	0.87	203	0.10	0.99	203	0.4	1.5	-54.7
831120	12/43	SX	0.26	0.63	18	0.13	1.20	19	1.2	4.4	89.4
831120	12/63	SX	0.39	0.58	19	0.07	0.55	20	1.9	8.1	-52.8
831127	12/43	SX	0.34	0.79	18	0.06	0.51	18	1.6	4.9	-85.3
831127	12/63	SX	0.37	0.48	12	0.09	0.79	13	2.2	9.3	-54.8
8312 4	12/63	SX	0.37	0.72	12	0.12	0.96	18	2.7	13.8	-60.9
831211	12/43	SX	0.22	0.54	16	0.10	0.81	18	1.5	5.4	-76.3
831211	12/63	SX	0.23	0.56	11	0.07	0.59	14	2.1	11.1	-53.9
831216	12/63	SX	0.35	0.57	14	0.09	0.72	16	2.4	10.6	-54.8
831217	12/63	SX	0.29	0.77	182	0.08	1.00	182	0.4	1.6	-54.4

831218	12/43	SX	0.32	0.88	170	0.08	0.9'/	170	0.3	1.2	-85.9
831224	12/43	SX	0.31	0.66	20	0.14	1.26	20	1.3	4.1	-87.4
831224	12/63	SX	0.1"/	0.44	17	0.06	0.46	20	1.9	8.0	-50.5
831229	12/63	Sx	0.45	0.63	18	0.12	0.8"/	20	1.7	6.5	-52.5
831230	12/43	SX	0.34	0. "/0	18	0.12	0.91	19	1.2	5.0	87.7
84 113	12/43	Sx	0.32	0.54	9	0.12	0.93	11	2.0	6.3	-88.1
84 122	12/43	SX	0.26	0.50	7	0.05	0.49	8	2.2	7.6	-83.7
84 122	12/63	SX	0.35	0.58	13	0.06	0.52	15	2.8	9.8	-55.'/
84 129	12/43	SX	0.30	0.36	9	0.14	1.06	14	3.4	8.4	-81.5
84 2 5	12/43	SX	0.33	0.58	12	0.14	1.20	12	2.0	6.6	-80.9
84 2 5	12/63	Sx	0.45	0.55	18	0.05	0.37	18	1.7	7.4	-50.6
84 211	12/63	Sx	0.21	0.43	11	0.08	0.53	18	2.6	10.2	-54.0
84 211	12/63	Sx	0.32	0.83	357	0.08	0.98	357	0.3	1.1	-53.9
84 212	12/43	Sx	0.23	0.72	206	0.17	0.95	206	0.3	1.1	-8"1.3
84 212	12/43	Sx	0.36	0.53	17	0.17	1.52	15	1.8	5.4	-78.4
84 219	12/43	Sx	0.29	0.49	17	0.06	0.50	16	1.4	4.9	-87.4
84 219	12/63	SX	0.50	0.81	8	0.03	0.28	10	3.7	13.6	-52.5
84 '226	1 ?/63	Sx	0.19	0.48	11	0.05	0.41	17	3.1	11.2	-58.6
8 4 3 4	12/63	SX	0.34	0.58	13	0.07	0.51	18	3.2	13.2	-57.9
84 311	12/43	Sx	0.65	0.83	11	0.17	1.34	13	2.7	9.6	83.3
84 311	12/63	SX	0.67	0.61	15	0.08	0.66	19	2.8	10.5	-56.6
84 311	43/63	SX	0.95	1.08	7	0.09	0.64	8	5.9	20.3	-83.4
84 318	12/43	SX	0.51	1.01	10	0.13	1.14	11	2.2	8.'2	83. 7
84 318	12/63	Sx	0.24	0.4'/	15	0 .0-/	0.62	19	2.7	10.4	-48.6
84 324	1?, /63	Sx	0 .2,0	0.40	9	0.08	0.74	13	3.5	10.6	-60.0
84 324	12/63	Sx	0.38	0.85	313	0.11	0.98	313	0.4	1.6	-57.1
84 325	12/43	SX	0.30	0.89	288	0.13	1.00	288	0.2	0.9	-8"1.3
84 325	12/43	SX	0.40	0.87	18	0.18	1.64	17	1.6	6.4	-88.4
84 4 1	12/43	Sx	0.33	0.67	17	0.09	0.83	19	1.0	3."1	-88.6
84 4 8	12/43	SX	0.54	1.16	16	0.13	1.11	16	1.1	4.1	-84.4
8 4 4 9	12/63	SX	0.44	0."/0	19	0.13	1 .0"/	20	2.2	8.4	-51.4
84 410	12/43	Sx	0.24	0.51	16	0.11	0.94	18	1.3	4.6	-8'/.4
84 411	1'2 /63	SX	0.43	0.53	20	0.09	0. "/6	20	2.2	8.2	-49.1
84 412	12/43	SX	0.24	0.51	18	0.12	1.10	19	1.2	4.4	-88.6
84 413	12/63	SX	0.39	0.54	12	0.0'/	0.5"/	15	3.2	11.9	-50.4
84 414	12/43	SX	0.37	0.72	17	0.09	0.80	18	1.3	5.2	-89.9
84 415	12/63	Sx	0.36	0.43	12	0.12	1.03	13	3.3	11.1	-49.7
84 416	12/43	Sx	0.47	0.80	18	0.10	0.83	20	1.3	5.1	89.2
84 417	12/63	Sx	0.35	0.12	7	0.18	1.23	8	13.7	31 .5	-47.5
84 420	12/43	Sx	0.43	0.57	14	0.14	1.22	13	2.1	8.1	79.6
84 421	12/63	SX	0 .2-/	0.35	18	0.08	0.64	20	2.3	'1.9	-48.2
84 422	12/43	Sx	0.29	0.55	11	0.09	0.76	12	1.9	7.5	85.2
84 429	12/43	Sx	0.29	0.5'/	14	0.12	0.89	15	1.5	5.6	-89.8
84 429	12/63	Sx	0.24	0.31	5	0.05	0.43	5	13.2	27.4	-41.7
84 5 5	12/43	Sx	0.35	0.52	15	0.10	0.87	15	1.2	5 .3	-81.1
84 512	12/63	Sx	0.27	0.74	191	0.10	0.98	191	0.4	1.7	-54.4
84 512	12/63	Sx	0.31	0.57	12	0.09	0. '/9	14	2.9	16.3	-60.2
84 513	12/43	Sx	0.18	0.51	21	0.21	0.97	21	0.'/	3.5	-85.8
84 513	12/43	Sx	0.37	0. "/1	13	0.10	0.91	12	1.3	4.3	-83. 7
84 519	12/63	Sx	0.60	0.96	13	0.12	1.05	14	3.()	12.8	-57.1
84 520	12/43	Sx	0.29	0.56	17	0.11	1.00	19	1.2	3.8	-86 .-I
84 527	12/43	Sx	0.27	0.50	16	0.12	1.09	19	1.3	4.2	-83. 7
8 4 6 3	12/43	Sx	0.38	0. "/5	17	0.12	3.05	18	1.1	3.9	87.7
8 4 6 3	12/63	Sx	0.33	0.72	14	0.13	1.13	18	2.4	9.7	-60.6
84 610	12/43	Sx	0.36	0.82	14	0.08	0.77	17	1.4	5.6	-85.8
84 610	12/63	Sx	0.75	0.89	15	0.12	0.99	17	2.3	9.6	-51.9
84 615	12/43	Sx	0.18	0.48	16	0.10	0.91	17	1.2	4.0	-86.1
84 623	12/63	Sx	0.42	0.96	12	0.12	1.02	13	3.2	15.3	-60.4
84 624	12/43	Sx	0.26	0.67	17	0.15	1.25	18	1.2	5.2	87.1
84 7 7	12/63	Sx	0.26	0.55	12	0.17	1.39	15	3.6	15.6	-61.2
84 7 8	12/43	Sx	0.44	().89	15	0.12	0.97	18	1.8	7.8	-68.0
84 714	12/63	Sx	0.35	0. '/5	163	0.10	0.98	163	0.5	2.1	-57.3
84 714	12/63	Sx	0.49	0.97	16	0.10	0.86	18	2.1	7.9	-58.9
84 715	12/43	Sx	0.35	(). '/5	115	0.11	1.01	115	0.4	1.6	-88.3
84 722	12/43	Sx	0.30	().43	12	0.15	1.15	17	2.2	8.2	-70.6
84 729	12/63	Sx	0.40	0.60	15	0.09	0.77	14	2.8	13."/	-57.6

84 8 4	12/63	SX	0.20	0.50	8	0.20	1.47	15	3.3	15.5	-62.8
84 812	12/63	SX	0.68	1.12	18	0.07	0.64	19	2.3	9.5	-54.6
84 822	12/63	SX	0.23	0.64	9	0.14	1.23	10	2.8	11.3	-55.4
84 825	12/63	SX	0.35	0.65	15	0.16	1.47	15	2.2	9.0	-56.3
84 9 9	42/63	SX	0.29	0.22	5	0.12	0.55	5	7.9	20.7	82.3
84 922	42/63	SX	0.48	0.58	7	0.16	1.18	8	6.1	13.6	62.6
8411 4	14/63	SX	0.59	1.20	13	0.12	0.93	15	2.9	8.7	-44.3
841129	14/42	SX	0.80	0.71	12	0.10	0.71	14	2.5	8.2	-87.1
8412 2	14/63	SX	0.68	0.48	9	0.14	1.08	11	9.4	23.7	-36.8
8412 9	14/63	SX	0.33	0.47	12	0.07	0.52	17	2.3	9.7	-54.3
85 113	14/42	SX	0.65	0.60	8	0.10	0.84	11	3.4	8.1	-89.8
85 113	14/63	SX	0.17	0.70	6	0.07	0.59	6	2.3	8.2	-44.1
85 126	14/42	SX	0.84	0.64	12	0.09	0.74	16	2.6	8.2	74.1
85 210	14/42	SX	0.27	0.59	8	0.07	0.57	9	2.1	7.9	84.5
85 324	14/61	SX	0.34	0.67	17	0.09	0.83	18	2.0	5.8	-54.8
85 330	14/61	SX	0.30	0.65	16	0.09	0.78	16	1.8	5.5	-50.8
85 427	14/43	SX	0.14	0.52	15	0.08	0.76	15	0.9	4.3	-85.6
85 512	14/61	SX	0.24	0.65	18	0.09	0.73	18	1.6	7.7	-50.7
85 526	14/43	SX	0.18	0.69	18	0.12	1.08	18	0.7	3.1	-88.5
85 531	14/43	SX	0.46	1.00	17	0.14	1.26	17	0.8	3.1	-85.1
85 720	14/43	SX	0.33	0.44	4	0.10	0.88	4	8.7	16.5	-9.8
85 810	14/43	SX	0.28	0.87	13	0.07	0.61	14	1.4	5.7	-74.4
85 928	14/63	SX	0.46	0.88	206	0.17	0.98	206	0.6	1.9	-47.9
85 929	14/43	SX	0.48	0.88	210	0.20	0.98	210	0.4	1.4	88.1
851019	14/63	SX	0.65	0.70	11	0.13	0.91	11	1.9	7.6	-49.7
851026	14/63	SX	0.41	0.80	11	0.16	1.40	11	1.5	6.4	-36.9
851027	43/14	SX	0.69	0.81	17	0.09	0.57	17	1.5	5.0	-86.5
851110	14/43	SX	0.57	1.42	14	0.07	0.64	14	1.3	4.4	87.9
851124	14/43	SX	0.17	0.48	19	0.09	0.83	19	0.8	3.3	89.3
86 1 5	14/63	SX	0.68	1.04	14	0.19	1.40	14	1.7	6.8	-38.6
86 2 1	14/43	SX	0.18	0.45	6	0.05	0.50	6	1.8	8.8	78.0
86 2 8	14/43	SX	0.38	0.71	17	0.13	1.02	17	0.8	3.5	-88.9
86 215	14/43	SX	0.71	0.77	13	0.23	1.94	13	1.4	4.9	-84.4
86 215	14/63	SX	1.11	1.12	18	0.27	1.70	18	1.8	6.1	-36.1
86 222	14/43	SX	0.38	1.04	17	0.13	1.23	17	0.7	3.7	-87.2
86 224	14/63	SX	0.62	0.93	12	0.17	1.51	12	2.3	6.1	-47.2
86 3 1	14/43	SX	0.16	0.61	7	0.07	0.64	7	0.9	5.4	87.8
86 3 1	14/63	SX	0.51	0.69	16	0.15	1.28	16	2.3	6.7	-47.8
86 3 8	14/43	SX	0.28	0.72	19	0.12	1.09	19	0.9	3.7	-89.3
86 3 9	14/63	SX	0.38	0.77	15	0.16	1.46	15	1.5	6.1	-31.6
86 315	14/63	SX	0.35	0.64	18	0.25	1.39	18	1.4	5.4	-32.8
86 322	14/63	SX	0.51	0.59	15	0.15	1.31	15	2.2	7.6	-31.1
86 323	14/43	SX	0.25	0.82	18	0.19	1.75	18	0.7	2.9	-84.7
86 329	14/43	SX	0.19	0.67	15	0.09	0.80	15	0.7	3.3	87.5
86 330	14/63	SX	0.46	0.98	18	0.09	0.82	18	1.4	4.5	-39.5
86 4 5	14/43	SX	0.53	0.96	19	0.13	1.13	19	0.7	3.3	88.7
86 4 6	14/63	SX	0.96	1.03	12	0.13	1.21	12	3.8	11.7	-40.6
86 412	14/43	SX	0.27	0.67	19	0.18	1.69	19	0.8	2.9	-86.0
86 414	14/63	SX	0.48	1.14	14	0.18	1.47	14	1.4	5.7	-32.7
86 419	14/43	SX	0.60	1.02	12	0.07	0.65	12	0.9	4.3	86.0
86 420	14/63	SX	0.22	0.65	14	0.15	1.38	14	2.2	8.6	-43.7
86 426	14/43	SX	0.22	0.72	10	0.11	0.99	10	1.1	4.6	-88.6
86 427	14/63	SX	0.49	0.65	16	0.11	0.98	16	1.4	6.1	-38.7
86 5 3	14/43	SX	0.36	0.81	18	0.11	0.98	18	0.8	4.3	89.7
86 5 4	14/63	SX	0.60	0.96	15	0.15	1.34	15	2.7	11.7	-48.8
86 510	14/43	SX	0.21	0.64	18	0.13	1.20	18	0.7	3.3	83.9
86 615	14/63	SX	0.58	0.82	18	0.11	0.97	18	1.2	5.5	-36.8
86 616	14/43	SX	0.53	1.17	17	0.08	0.71	17	1.0	4.6	88.9
86 622	14/43	SX	0.93	0.92	17	0.12	0.86	17	1.0	4.5	86.1
86 622	14/63	SX	0.43	0.61	13	0.09	0.78	13	1.6	8.2	-38.5
86 628	14/63	SX	0.60	1.06	71	0.24	1.04	71	0.9	3.4	-43.3
86 628	14/63	SX	1.22	1.04	14	0.26	1.42	15	3.6	11.0	-52.3
86 629	14/43	SX	0.37	0.89	166	0.19	0.98	166	0.4	1.5	88.1
86 7 7	14/43	SX	0.44	0.83	20	0.10	0.72	20	1.3	5.3	85.5
86 7 8	14/63	SX	0.62	0.89	18	0.22	1.57	18	1.6	6.0	-47.4
86 713	14/43	SX	0.33	0.96	15	0.12	0.86	15	1.4	4.9	89.7

36 714	14/63	Sx	0.53	1.32	17	0.18	1.48	17	1.0	3.9	-38.1
36 720	14/43	Sx	0.42	1.04	19	0.06	0.52	19	1.2	4.3	-76.6
36 720	14/63	Sx	1.25	1.51	18	0.19	1.27	18	1.3	4.4	-36.'2
36 726	14/43	Sx	0.27	0.-/6	19	0.08	0.71	19	0.7	3.8	85.3
36 8 2	14/43	SX	0.33	1.11	19	0.12	0.95	19	0.7	3.6	85,6
36 811	14/43	Sx	0.41	1.16	17	0.05	0.51	17	0.9	3.3	82.3
36 811	14/61	SX	0.37	0.54	15	0.05	0.49	15	2.0	11.1	-45.5
36 816	14/43	Sx	0.34	0.91	185	0.14	0.97	185	0.3	1.2	84. 7
36 816	14/43	Sx	0.41	0.95	18	0.09	0.81	18	0.8	2.6	-89.1
36 817	14/61	Sx	0.60	1.10	15	0.09	0.84	15	1.4	5.4	-36.2
36 830	14/43	SX	0.44	0.83	9	0.12	0.90	12	1.8	7.5	-89.7
36 914	14/43	Sx	0.18	0.71	17	0.07	0.62	17	0.7	3.6	87.0
36 920	14/61	Sx	0.3"1	1.28	15	0.11	1.02	15	1.6	7.6	-51.9
36 922	14/43	Sx	0.2?5	1.00	17	0.06	0.59	17	0."1	3.1	81.8
36 928	14/43	Sx	0.19	0. "/4	18	0.09	0.86	18	0.6	3.6	89.2
3610 4	14/61	Sx	0.09	().32	9	0.03	0.27	9	2.9	13.2	-51.2
3610 5	14/43	Sx	0.22	0.91	18	0.08	0. '/5	18	0.6	'2.6	-85.0
3610 6	14/43	Sx	0.25	0.94	189	0.14	1.01	189	0.2	0.8	89.7
361011	14/61	Sx	0.44	1.08	16	0.08	0.71	16	1.5	6.8	-52.1
361012	14/43	Sx	0.16	0.66	16	0.18	1.71	16	0.7	3.1	80.7
361019	14/61	SX	0.22	0.-/6	15	0.08	0. "/4	15	1.8	9.1	-5'2.3
361026	14/61	SX	0."13	1.16	17	0.05	0.39	17	1.7	8.5	-4'/.3
3611 2	14/61	SX	0.31	0.92	17	0.08	0. '/0	17	1.2	9.4	-42.2
3611 9	14/61	SX	0.58	1.02	16	0.05	0.46	16	1.7	8.6	-50.3
361117	14/61	SX	0.42	1.13	17	0.08	0.68	17	1.7	8.0	-55.5
361123	14/43	SX	0.27	0.92	145	0.11	1.00	145	0.2	1.0	85.9
361126	14/61	Sx	0.15	0.49	15	0.04	0.39	15	1.7	8.6	-51.2
361129	14/43	Sx	0.36	0.82	19	0.09	0.72	19	0.7	3.6	-89.9
361129	14/61	SX	0.44	0.88	16	0.03	0.32	16	1.8	8.9	-52. 7
361214	14/43	SX	0.31	0.69	19	0.16	1.48	19	0.6	2 .-1	-83.2
361214	14/61	SX	0.31	0.72	18	0.04	0 .3-/	18	1.0	8.7	-41.'2
361220	14/43	SX	0.70	0.65	14	0.11	0. '/3	14	2.0	7.4	80.6
361221	14/61	SX	0.36	0.83	19	0.07	0.60	19	1.5	8.5	-49.6
361227	14/61	SX	0.20	0.48	14	0.04	0.41	14	1.9	10.1	-57.4
87 1 3	14/43	SX	0.47	1.10	16	0.32	1.51	16	0.9	5.2	-90.0
87 1 4	14/61	SX	0.26	0.93	16	0.05	0.44	16	1.5	7.6	-53.5
87 1 9	14/61	SX	0.40	0.73	17	0.08	0.66	17	1.7	8.2	-56.0
87 119	14/43	SX	0.33	1.02	19	0.13	1.19	19	0.8	3.9	88.1
87 125	14/61	SX	0.52	0.98	18	0.0'/	0.63	18	1.5	4.4	-47.5
87 126	14/43	Sx	0.50	0.87	15	0.26	1.31	15	0.9	5.3	-88.9
87 213	14/42	Sx	0.39	1.08	19	0.14	1.32	19	0.8	3.4	-88.6
87 222	14/61	SX	0.26	0.84	18	0.06	0.59	18	1.5	7.3	-56.4
87 3 7	14/42	Sx	0.26	0.68	17	0.06	0.56	17	1.3	4.4	-89.2
87 315	14/42	SX	0.22	0.53	19	0.15	1.42	19	0.8	3.3	88.6
87 321	14/61	Sx	0.41	0.99	15	0.11	0.99	15	2.1	8.3	-56.'/
87 329	14/61	SX	0.34	0.94	12	0.09	0.79	12	2.6	9.5	-55.5
87 4 1	14/61	SX	0.51	1.01	15	0.06	0.54	15	1.9	"1.4	-50.2
87 4 4	14/42	Sx	0.44	1.05	18	0.08	0. "/0	18	0.8	3.6	83.1
87 411	14/42	Sx	0.55	0.95	18	0.09	0.83	18	0.9	3.4	87.1
87 411	14/61	SX	0.29	0.93	18	0.08	0. "/3	18	1.7	4.8	-48.8
87 418	14/61	Sx	0.19	0.62	12	0.10	0.95	12	2.1	6.8	-52.1
87 419	14/42	Sx	0.90	0.95	19	0.10	0.85	19	2.0	5.0	-89.5
87 425	14/61	SX	0.10	0.16	5	0.07	0.62	5	4.3	15.3	-29.4
87 426	14/42	SX	0.48	1. '/5	20	0.09	0. "/9	20	0.8	3.6	-89.0
87 5 8	14/42	SX	0.30	0.69	19	0.10	0.92	19	0.7	2.8	-89.3
87 5 9	14/42	Sy	0.21	0.85	104	0.12	0.97	104	0.3	1.2	89.0
87 510	14/61	Sx	0.28	0. 77	19	0.08	0.75	19	1.8	6.8	-56.6
87 510	14/63	SX	0.2,3	0.89	193	0.12	0.9'/	193	0.3	1.1	-53.0
87 517	14/61	Sx	0.60	0.88	19	0.09	0. "/8	19	1.7	4.6	50.2
87 518	14/42	Sx	0.49	1.57	7	0.11	1.05	7	1.5	6."/	86.5
87 522	14/61	Sx	0.32	0.99	19	0.22	1.96	19	1.4	6.8	-54.8
87 523	14/42	SX	0.94	1.04	18	0.17	1.43	18	1.1	4.0	-86. 7
87 530	14/42	SX	0.19	0.63	19	0.08	0. '/8	19	0.9	3.6	-89.5
87 531	14/61	Sx	0.21	0.54	18	0.06	0.53	18	1.5	3.9	-45.0
87 6 7	14/42	SX	0.45	0.90	20	0.0'/	0.67	20	1.0	4.4	85.6
87 621	14/42	SX	0.44	0. '15	20	0.16	1.48	20	0.9	3.9	-86.0

87 627	14/61	SX	1.26	0.95	16	0.08	0.71	16	3.7	12.9	-59.5
87 628	14/42	SX	0.56	0.67	8	0.04	0.41	8	2.0	7.0	-83.8
87 7 4	14/42	SX	0.37	0.74	16	0.11	1.04	16	1.2	3.8	87.9
87 7 5	14/61	SX	0.29	0.65	16	0.06	0.58	16	1.4	4.7	-44.6
87 711	14/42	SX	0.29	0.77	19	0.09	0.83	19	0.9	3.6	-84.9
87 719	14/42	SX	0.34	0.98	18	0.10	0.91	18	0.9	3.9	-85.4
87 719	14/61	SX	0.18	0.52	14	0.07	0.64	14	1.3	5.9	-43.2
87 727	14/42	SX	0.47	0.97	16	0.09	0.88	16	0.9	4.2	86.1
87 8 1	14/61	SX	0.43	0.67	16	0.07	0.58	16	1.4	4.6	-43.0
87 8 2	14/42	SX	0.68	0.91	18	0.08	0.67	18	1.2	5.1	-78.4
87 8 9	14/63	SX	1.04	0.87	14	0.13	0.94	14	1.3	6.0	-27.5
87 815	14/42	SX	0.36	0.68	10	0.07	0.59	10	1.2	4.4	-85.1
87 816	14/63	SX	0.20	0.83	8	0.09	0.86	8	1.2	4.8	-38.6
87 817	14/63	SX	0.25	0.95	142	0.09	0.99	142	0.3	1.0	43.2
87 822	14/42	SX	0.23	0.65	18	0.06	0.54	18	0.8	2.7	-83.4
87 824	14/63	SX	0.26	0.91	11	0.07	0.60	12	1.5	6.9	-45.1
87 829	14/63	SX	0.72	0.89	17	0.10	0.83	17	1.4	5.0	-42.5
87 830	14/42	SX	0.76	0.79	20	0.12	1.07	20	1.1	4.9	-79.1
87 9 7	14/42	SX	0.13	0.22	6	0.08	0.75	6	2.6	11.5	-87.4
87 912	14/42	SX	0.19	0.48	16	0.13	1.18	16	1.0	3.4	-88.1
87 913	14/63	SX	0.23	0.68	17	0.12	1.16	17	0.8	4.3	-41.5
87 919	14/63	SX	0.35	0.73	7	0.07	0.63	7	2.7	10.4	-24.6
87 920	14/42	SX	0.28	0.69	15	0.06	0.52	15	0.9	3.5	-86.7
87 926	14/63	SX	0.12	0.49	18	0.08	0.79	18	0.7	3.3	-32.1
8710 3	15/42	SX	0.43	0.91	17	0.11	0.99	17	1.6	6.7	-86.4
8710 4	15/63	SX	0.29	0.61	18	0.15	1.31	18	1.5	5.8	-41.0
871010	15/63	SX	0.27	0.65	17	0.05	0.43	17	1.4	5.7	-43.2
871012	15/42	SX	0.22	0.54	14	0.11	1.01	14	1.1	4.6	-89.0
871018	15/42	SX	0.69	1.06	15	0.05	0.42	15	1.4	7.6	-82.6
871018	15/63	SX	0.23	0.47	18	0.07	0.59	18	1.4	5.0	-52.0
871020	15/42	SX	0.42	0.77	14	0.07	0.61	14	2.0	8.2	-85.2
871024	15/63	SX	0.23	0.62	16	0.09	0.81	16	1.8	13.9	57.9
871030	15/63	SX	0.34	0.67	18	0.06	0.55	18	1.4	4.6	-38.4
8711 7	15/63	SX	0.38	0.79	17	0.07	0.50	17	1.6	5.6	-45.6
8711 8	15/43	SX	0.81	0.68	15	0.15	1.15	15	2.4	8.0	77.7
8711 8	15/63	SX	0.24	0.92	75	0.08	0.95	75	0.5	1.6	-44.7
871115	15/43	SX	0.20	0.67	19	0.04	0.34	19	0.8	3.7	86.7
871120	15/63	SX	0.08	0.35	16	0.02	0.22	16	1.3	5.2	-44.5
8712 1	15/43	SX	0.24	0.36	12	0.09	0.86	12	1.6	8.8	77.6
8712 5	15/43	SX	0.21	0.63	17	0.09	0.81	17	1.0	4.4	84.8
8712 6	15/63	SX	0.15	0.58	18	0.07	0.61	18	1.1	5.1	43.8
871221	15/43	SX	0.20	0.67	18	0.05	0.43	18	0.8	4.2	82.3
871226	15/43	SX	0.27	0.91	91	0.07	0.73	91	0.2	1.1	89.9
871227	15/63	SX	0.23	0.71	18	0.03	0.25	18	1.0	3.7	-44.5
871228	15/43	SX	0.30	0.82	78	0.12	1.19	78	0.3	1.3	-89.0
88 1 2	15/63	SX	0.26	0.56	13	0.09	0.80	14	2.9	7.4	-45.7
88 1 3	15/43	SX	0.23	0.66	20	0.07	0.68	20	0.9	3.8	84.3
88 1 9	15/43	SX	0.26	1.07	17	0.16	1.54	17	0.6	2.2	89.3
88 110	15/63	SX	0.16	0.77	18	0.04	0.36	18	0.7	2.7	-40.8
88 117	15/63	SX	0.97	1.06	16	0.09	0.74	16	2.5	11.1	-36.3
88 124	15/63	SX	0.26	0.88	18	0.10	0.95	18	0.7	2.6	-42.9
88 125	15/43	SX	0.15	0.70	18	0.03	0.28	18	0.5	2.9	84.2
88 129	15/43	SX	0.43	0.98	15	0.11	1.06	15	0.8	6.0	77.6
88 129	15/63	SX	0.53	0.93	18	0.09	0.91	18	0.9	3.8	-39.1
88 2 7	15/63	SX	1.06	1.07	14	0.07	0.55	14	4.7	13.3	-60.7
88 212	15/63	SX	0.31	0.72	18	0.08	0.72	18	1.0	4.6	-39.7
88 213	15/43	SX	0.15	0.72	65	0.08	0.98	65	0.3	1.3	88.7
88 213	15/43	SX	0.17	0.83	17	0.06	0.57	17	0.5	1.8	-89.1
88 215	15/43	SX	0.33	0.98	95	0.09	0.96	95	0.3	1.0	89.5
88 219	15/63	SX	0.15	0.83	18	0.05	0.47	18	1.1	4.3	-40.7
88 220	15/43	SX	0.21	0.92	19	0.06	0.53	19	0.8	3.4	-86.5
88 227	15/43	SX	0.22	0.91	19	0.11	1.05	19	0.6	3.2	86.9
88 227	15/63	SX	0.16	0.65	17	0.12	1.12	17	0.9	3.2	-43.1
88 3 5	15/43	SX	0.28	0.87	18	0.06	0.60	18	0.7	3.1	86.5
88 3 5	15/63	SX	0.21	0.75	18	0.08	0.69	18	0.7	3.1	-39.3
88 311	15/63	SX	0.17	0.73	16	0.03	0.31	16	0.9	3.3	-37.6

88 313	15/43	SX	0.18	0.78	17	0.06	0.55	17	0.7	2.9	87.6
88 318	15/63	SX	0.14	0.90	18	0.05	0.48	18	0.6	2.8	-41.0
88 324	15/43	SX	0.12	0.68	19	0.11	1.07	19	0.4	2.6	85.7
88 325	15/63	SX	0.24	0.76	50	0.09	1.07	50	1.1	2.9	-44.7
88 326	15/63	SX	0.38	1.05	18	0.06	0.56	18	1.3	4.4	-48.4
88 327	15/63	SX	0.27	0.93	136	0.08	0.95	136	0.4	1.3	-45.1
88 4 2	15/43	SX	0.24	0.76	20	0.08	0.72	20	0.4	3.3	86.1
88 4 2	15/43	SX	0.35	0.89	42	0.05	0.59	42	0.9	3.3	76.6
88 4 2	15/63	SX	0.30	0.56	16	0.08	0.81	16	1.0	4.6	-42.9
88 4 3	15/43	SX	0.20	0.87	111	0.09	1.07	111	0.4	1.6	-85.2
88 4 9	15/63	SX	0.10	0.60	18	0.04	0.39	18	0.6	2.5	-40.4
88 411	15/43	SX	0.26	0.91	19	0.13	1.20	19	1.0	2.4	-87.8
88 416	15/43	SX	0.21	0.80	16	0.07	0.67	16	0.6	2.9	87.6
88 421	15/43	SX	0.18	0.76	18	0.07	0.62	18	0.6	2.1	85.1
88 430	15/63	SX	0.11	0.63	9	0.07	0.69	9	1.1	4.4	-38.3
88 5 8	15/63	SX	0.46	0.97	18	0.08	0.78	18	0.8	3.2	-44.9
88 511	15/43	SX	0.14	0.66	17	0.03	0.30	17	0.7	2.9	85.8
88 514	15/43	SX	0.13	0.65	18	0.11	1.02	18	0.5	3.4	83.9
88 514	15/43	SX	0.16	0.91	62	0.05	0.97	62	0.3	1.0	85.1
88 520	15/63	SX	0.15	0.68	101	0.08	0.97	101	0.7	2.5	-55.3
88 521	15/43	SX	0.55	0.62	12	0.07	0.61	12	3.2	10.1	80.5
88 522	15/63	SX	0.18	0.74	16	0.12	1.12	16	0.8	4.2	-37.5
88 526	15/43	SX	0.49	0.61	14	0.10	0.93	14	1.9	6.3	-85.8
88 528	15/63	SX	0.23	0.86	17	0.19	1.77	17	1.0	3.4	-46.1
88 611	14/63	SX	0.05	0.28	15	0.12	1.13	15	0.8	2.7	-40.4
88 612	14/45	SX	0.08	0.36	16	0.07	0.70	16	0.6	1.9	-88.2
88 618	14/45	SX	0.52	0.89	7	0.10	0.92	7	1.0	5.1	86.5
88 618	14/63	SX	0.23	0.96	17	0.05	0.49	17	0.7	2.8	-35.5
88 625	14/45	SX	0.41	1.66	18	0.13	1.19	18	0.7	2.5	87.6
88 626	14/63	SX	0.04	0.28	7	0.09	0.85	7	0.9	3.7	-37.1
88 716	14/63	SX	0.13	0.54	14	0.08	0.74	14	1.5	9.9	-60.5
88 718	14/43	SX	0.10	0.67	7	0.04	0.39	7	1.3	6.6	-88.9
88 723	14/63	SX	0.19	1.00	17	0.13	1.23	17	0.6	3.0	-39.9
88 725	14/43	SX	0.24	0.60	13	0.14	1.28	13	0.8	4.7	77.7
88 730	14/63	SX	0.33	1.05	16	0.10	0.99	16	0.5	2.6	-34.7
88 8 6	14/65	SX	0.33	0.92	57	0.12	1.21	57	1.1	4.6	-65.6
88 8 7	14/65	SX	0.19	1.00	18	0.10	0.85	18	1.2	4.9	-45.9
88 8 8	14/65	SX	0.25	0.91	64	0.08	0.74	64	0.8	2.5	-56.7
88 813	14/43	SX	0.66	0.85	18	0.08	0.70	18	1.2	4.0	85.8
88 813	14/65	SX	0.53	0.70	10	0.07	0.62	10	2.3	7.0	-38.7
88 820	14/43	SX	0.09	0.79	103	0.13	0.98	103	0.3	1.4	85.9
88 820	14/43	SX	0.15	0.93	14	0.17	1.68	14	0.7	3.0	-89.8
88 827	14/43	SX	0.56	0.75	15	0.17	1.49	15	1.4	5.6	82.8
88 827	14/65	SX	0.75	0.87	12	0.16	1.44	12	6.2	16.8	-62.9
88 9 2	14/43	SX	0.15	0.63	19	0.16	1.48	19	0.4	1.8	-86.0
88 9 3	14/43	SX	0.15	0.95	59	0.14	1.04	59	0.3	1.4	89.1
88 9 4	14/63	SX	0.31	0.96	11	0.05	0.48	11	0.9	4.8	-41.5
88 9 5	14/65	SX	0.22	0.88	117	0.07	1.00	117	0.6	1.7	-47.9
88 911	14/43	SX	0.85	0.68	12	0.16	0.76	12	2.0	7.8	83.0
88 911	14/63	SX	0.06	0.36	16	0.06	0.61	16	0.5	3.7	-38.5
88 917	14/63	SX	0.27	0.75	120	0.11	0.99	120	0.5	1.4	-36.6
88 924	14/43	SX	0.57	0.73	10	0.12	1.02	10	2.7	8.1	77.9
88 925	14/63	SX	0.07	0.52	14	0.10	0.93	14	1.0	5.5	-54.8
8810 1	14/43	SX	0.07	0.46	10	0.15	1.42	10	0.6	2.9	86.0
8810 1	14/63	SX	0.23	1.06	16	0.10	0.92	16	0.6	3.4	-38.9
8810 8	14/63	SX	0.37	0.88	11	0.12	1.08	11	1.3	19.8	-41.1
8810 9	14/43	SX	0.45	0.85	16	0.11	1.08	16	0.8	3.6	85.3
881023	14/43	SX	0.26	0.77	16	0.19	1.80	16	0.6	3.3	88.5
881029	14/43	SX	0.12	0.70	18	0.15	1.40	18	0.5	2.7	-82.3
8811 6	14/63	SX	0.03	0.21	11	0.03	0.26	11	0.9	5.3	-41.7
8811 6	14/63	SX	0.19	0.87	107	0.10	1.01	107	0.3	1.3	-44.1
8811 7	14/43	SX	0.09	0.51	18	0.06	0.59	18	0.9	3.3	-85.0
881112	14/63	SX	0.21	0.78	11	0.06	0.61	11	0.7	4.4	-39.3
881119	14/63	SX	0.13	0.81	17	0.07	0.66	17	0.6	2.4	-41.2
881120	14/43	SX	0.42	1.01	12	0.18	1.59	12	1.3	4.8	88.1
881126	14/43	SX	0.12	0.68	18	0.06	0.56	18	0.4	2.6	86.8

8812 4	14/43	SX	0.14	0.40	17	0.11	1.08	17	°.5	3.0	86.3
881211	14/43	SX	0.23	0.80	14	0.15	1.42	14	°.5	3.7	-84.9
881211	14/63	SX	0.29	0.94	17	0.03	0.29	17	°.8	3.0	-34.3
881217	14/63	SX	0.26	1.03	18	0.05	0.47	18	°.6	3.8	-37.1
881226	14/43	SX	0.17	0.84	16	0.17	1.61	16	°.5	2.8	87.6
881231	14/63	SX	0.23	0.69	16	0.05	0.40	16	.7	4.6	-37.0
89 1 3	14/43	SX	0.15	0.85	18	0.09	0.86	18	°.5	2.3	-87.2
89 1 8	14/43	SX	0.13	0.76	18	0.16	1.52	18	°.5	2.4	88.4
89 1 8	14/63	SX	0.09	0.48	16	0.04	0.36	16	°.6	3.8	-38.0
89 115	14/43	SX	0.11	0.43	15	0.07	0.66	15	°.6	2.7	-85.5
89 115	14/63	SX	0.15	0.60	10	0.07	0.69	10	.2	5.5	-42.5
89 121	14/43	SX	0.09	0.65	18	0.05	0.51	18	°.4	2.2	-86.8
89 122	14/63	SX	0.12	0.81	14	0.04	0.40	14	°.5	3.5	-37.9
89 128	14/43	SX	0.10	0.52	19	0.09	0.82	19	°.4	1.7	89.1
89 129	14/63	SX	0.09	0.53	16	0.05	0.44	16	°.5	2.0	-35.0
89 2 5	14/63	SX	0.16	0.61	64	0.09	0.94	64	.4	1.4	-39.6
89 211	14/63	SX	1.68	1.39	12	0.09	0.78	12	2.7	13.7	-45.9
89 219	14/43	SX	0.12	0.58	19	0.14	1.42	19	0.6	2.6	-88.3
89 219	14/63	SX	0.08	0.58	16	0.06	0.59	16	0.6	2.3	-37.1
89 226	14/43	SX	0.17	0.73	16	0.13	1.30	16	0.6	3.2	-86.7
89 3 4	14/43	SX	0.15	0.69	17	0.10	1.00	17	0.5	2.5	-89.7
89 3 4	14/63	SX	0.13	0.93	16	0.04	0.44	16	0.5	2.3	-33.8
89 312	14/43	SX	0.15	0.96	17	0.13	1.38	17	.5	2.8	84.6
89 318	14/43	SX	0.17	0.78	14	0.11	1.17	14	°.5	2.4	-83.2
89 319	14/63	SX	0.07	1.06	161	0.12	1.01	161	°.1	0.6	-44.0
89 326	14/43	SX	0.17	0.83	16	0.07	0.74	16	°.5	3.0	84.1
89 326	14/63	SX	0.19	0.83	16	0.16	1.24	16	.8	2.7	-38.9
89 4 2	14/43	SX	0.08	0.34	13	0.07	0.36	13	°.1	5.3	86.0
89 4 7	14/63	SX	0.05	0.37	13	0.05	0.49	13	.7	4.0	-41.1
89 416	14/43	SX	0.10	0.52	19	0.05	0.49	19	°.5	2.3	87.2
89 417	14/63	SX	0.08	0.51	14	0.08	0.88	14	.1	6.2	-55.0
89 418	14/63	SX	0.16	0.71	177	0.06	0.98	177	.2	0.9	-46.8
89 422	14/43	SX	0.08	0.40	13	0.20	1.02	13	°.5	3.9	-85.7
89 429	14/63	SX	0.25	0.73	17	0.08	0.81	17	°.5	3.3	-33.3
89 5 6	14/43	SX	0.09	0.41	18	0.09	0.92	18	°.5	2.9	-86.1
89 5 6	14/63	SX	0.18	0.50	19	0.06	0.62	19	°.8	4.2	-45.7
89 5 7	14/43	SX	0.07	1.05	180	0.10	1.02	180	.1	0.3	89.0
89 513	14/63	SX	0.24	0.85	11	0.08	0.70	11	°.1	5.8	-38.1
89 520	14/43	SX	0.34	0.95	13	0.12	1.18	13	.8	3.6	-86.4
89 520	14/63	SX	0.17	0.85	18	0.06	0.66	18	°.5	4.2	-41.2
89 529	14/43	SX	0.13	0.79	18	0.08	0.87	18	°.5	2.5	-88.0
89 6 3	14/43	SX	0.12	0.65	19	0.11	1.16	19	°.5	2.0	-89.3
89 6 5	14/63	SX	0.23	0.81	16	0.06	0.64	16	°.6	3.6	-39.7
89 611	14/43	SX	0.11	0.66	16	0.10	1.05	16	°.4	2.5	88.4
89 611	14/63	SX	0.35	1.10	17	0.07	0.67	17	°.7	2.4	-39.1
89 618	14/43	SX	0.09	0.52	17	0.05	0.51	17	°.4	2.0	-88.4
89 618	14/63	SX	0.19	0.88	17	0.10	1.03	17	.6	3.9	-34.4
89 623	14/43	SX	0.15	0.95	15	0.07	0.77	15	°.5	2.0	-85.8
89 625	14/63	SX	0.21	0.94	15	0.08	0.81	15	°.8	2.8	-41.5
89 7 4	14/43	SX	0.17	0.91	19	0.09	0.97	19	°.4	1.6	-87.4
89 7 9	14/43	SX	0.08	0.53	17	0.15	1.55	17	°.5	2.0	88.9
89 7 9	14/63	SX	0.13	0.86	17	0.09	0.95	17	°.5	2.5	-35.7
89 710	15/45	SX	0.04	0.61	81	0.14	0.97	81	°.1	0.6	89.2
89 714	14/43	SX	0.15	0.67	18	0.09	0.94	18	°.5	1.7	-86.5
89 716	14/63	SX	0.12	0.72	16	0.10	1.05	16	°.5	3.5	-33.2
89 722	14/43	SX	0.17	0.77	16	0.18	1.70	16	.4	2.0	89.3
89 723	14/63	SX	0.06	0.49	15	0.05	0.54	15	0.5	3.4	-33.1
89 729	14/43	SX	0.20	0.65	18	0.16	1.58	18	0.4	1.6	-89.2
89 730	14/63	SX	0.14	0.88	14	0.13	1.31	14	0.5	2.5	-33.2
89 8 5	14/43	SX	0.13	0.72	14	0.07	0.75	14	0.4	2.2	-89.1
89 8 6	14/63	SX	0.16	0.93	15	0.18	1.92	15	0.6	3.2	-27.5
89 812	14/43	SX	0.22	0.81	12	0.07	0.70	12	0.7	3.0	-85.6
89 813	14/63	SX	0.14	1.11	12	0.08	0.79	12	0.6	3.1	-31.4
89 820	14/63	SX	0.14	0.89	16	0.07	0.77	16	0.5	2.5	-32.0
89 826	14/43	SX	0.10	0.61	12	0.07	0.75	12	0.5	2.2	-88.3
89 9 2	14/43	SX	0.12	0.71	19	0.07	0.68	19	0.4	1.6	-86.6

89 9 7	15/45	SX	0.06	0.77	84	0.14	0.98	84	0.1	0.7	88.9
89 9 9	14/43	SX	0.12	0.60	19	0.06	0.59	19	0.4	1.7	-86.7
89 910	14/63	SX	0.24	0.86	11	0.13	1.40	11	1.2	4.4	-41.0
89 913	15/65	SX	0.09	0.92	41	0.07	1.00	41	0.3	1.3	-45.1
89 916	14/43	SX	0.15	0.81	19	0.10	1.03	19	0.4	2.0	-88.3
89 917	14/63	SX	1.33	1.53	12	0.14	1.36	12	3.3	9.8	-36.4
89 923	14/43	SX	0.10	0.45	18	0.09	0.88	18	0.5	2.3	-85.2
89 924	14/63	SX	0.23	0.91	14	0.11	1.16	14	0.7	3.3	-38.8
89 928	14/43	SX	0.10	0.63	19	0.08	0.80	19	0.4	1.9	-87.9
8910 3	14/45	SX	0.06	0.90	49	0.08	1.04	49	0.1	0.6	84.5
8910 6	14/43	SX	0.12	0.76	19	0.05	0.52	19	0.4	1.7	-87.4
8910 9	14/63	SX	0.04	0.36	15	0.02	0.23	15	0.5	3.9	-34.3
891014	14/43	SX	0.10	1.08	11	0.14	1.31	11	2.3	7.3	86.5
891015	14/63	SX	0.11	0.43	14	0.05	0.47	14	1.4	4.5	-42.8
891022	14/43	SX	0.08	0.37	17	0.13	1.23	17	0.4	1.8	-88.2
891028	14/43	SX	0.09	0.57	19	0.05	0.52	19	0.3	1.5	-86.2
891030	14/63	SX	0.10	0.74	15	0.03	0.33	15	0.4	3.5	-34.2
8911 5	14/63	SX	0.08	0.65	15	0.05	0.53	15	0.5	3.1	-35.7
891111	14/63	SX	0.08	0.64	16	0.06	0.62	16	0.5	3.4	-34.0
891113	14/43	SX	0.13	0.82	19	0.07	0.75	19	0.4	1.8	-87.1
891118	14/63	SX	0.14	0.53	12	0.07	0.65	12	0.8	3.1	-36.0
891119	14/43	SX	0.10	0.59	19	0.05	0.54	19	0.4	1.8	-88.1
891125	14/63	SX	0.13	0.44	17	0.07	0.68	17	0.5	2.1	-35.3
891127	14/43	SX	0.14	0.68	19	0.05	0.51	19	0.5	1.9	-88.7
8912 2	14/63	SX	0.10	0.66	16	0.04	0.38	16	0.6	2.8	-41.8
8912 3	14/43	SX	0.23	0.61	18	0.08	0.88	18	0.4	2.5	-89.3
8912 3	14/45	SX	0.15	0.58	32	0.08	0.99	32	0.4	2.4	88.0
8912 9	14/43	SX	0.00	0.65	15	0.19	1.97	15	0.5	2.0	86.5
891210	14/63	SX	0.14	1.02	18	0.06	0.64	18	0.7	3.9	-39.9
891216	14/65	SX	0.10	0.95	16	0.08	0.77	16	1.0	3.7	-42.4
891217	14/43	SX	0.38	0.58	18	0.05	0.52	18	0.3	1.5	-88.4
891223	14/43	SX	0.04	0.63	18	0.05	0.53	18	0.4	2.1	-88.8
891231	14/65	SX	0.14	0.72	16	0.03	0.36	16	1.0	3.7	-44.2
90 1 6	14/65	SX	0.18	0.51	11	0.02	0.21	11	0.6	3.2	-36.3
90 114	14/43	SX	0.04	0.91	17	0.15	1.66	17	0.4	2.8	84.3
90 114	14/65	SX	0.11	0.65	15	0.08	0.82	15	0.6	2.8	-35.1
90 120	14/43	SX	0.17	0.45	17	0.06	0.63	17	0.4	1.7	-89.6
90 127	14/43	SX	0.17	0.37	13	0.12	1.33	13	0.5	2.8	89.1
90 128	14/65	SX	0.09	0.57	17	0.04	0.46	17	0.7	2.8	-42.3
90 2 2	14/43	SX	0.09	1.13	14	0.20	2.09	14	1.6	5.1	-89.3
90 2 3	14/65	SX	0.88	0.53	7	0.09	0.97	7	1.1	4.5	-43.6
90 211	14/43	SX	0.06	0.41	19	0.07	0.77	19	0.3	1.4	-89.8
90 211	14/65	SX	0.08	0.50	17	0.07	0.78	17	0.5	2.7	-36.5
90 218	15/45	SX	0.09	1.02	181	0.14	0.99	181	0.1	0.4	89.8
90 223	15/65	SX	0.06	0.97	134	0.06	0.98	134	0.1	0.4	-42.3
90 224	14/65	SX	0.06	1.05	11	0.03	0.36	11	0.7	3.2	-39.9
90 225	14/43	SX	0.20	0.61	19	0.14	1.49	19	0.4	2.0	87.8
90 3 3	14/43	SX	0.15	0.67	17	0.05	0.58	17	0.5	1.4	-84.2
90 3 4	14/65	SX	0.14	0.94	12	0.09	0.95	12	1.1	4.1	-39.2
90 3 9	15/43	SX	0.29	0.47	12	0.05	0.56	12	0.8	4.1	-79.3
90 3 9	15/63	SX	0.06	0.83	11	0.04	0.39	11	0.9	3.2	-37.7
90 317	14/45	SX	0.18	0.49	17	0.08	0.88	17	0.5	3.0	-85.5
90 318	14/65	SX	0.01	1.88	12	0.04	0.46	12	0.9	3.1	-41.2
90 324	15/43	SX	0.37	0.96	15	0.09	0.93	15	0.4	2.4	-88.2
90 325	15/63	SX	0.13	0.52	13	0.08	0.87	13	0.7	4.5	-39.5
90 4 1	14/45	SX	0.18	0.49	17	0.08	0.86	17	0.4	2.8	-85.8
90 4 1	14/65	SX	0.00	0.46	14	0.09	0.93	14	0.7	3.4	-38.7
90 4 7	15/43	SX	0.11	0.50	7	0.10	1.15	7	0.7	3.6	88.3
90 4 9	15/63	SX	0.08	0.51	16	0.03	0.35	16	0.9	3.4	-44.3
90 410	15/45	SX	0.12	0.89	144	0.11	0.98	144	0.1	0.4	89.5
90 414	15/65	SX	0.07	0.91	170	0.12	1.03	170	0.1	0.5	-38.0
90 415	14/45	SX	0.08	0.58	15	0.05	0.57	15	0.4	1.7	-89.0
90 416	14/65	SX	0.09	0.96	13	0.07	0.77	13	0.5	3.0	-39.4
90 422	15/63	SX	0.18	0.55	8	0.06	0.67	8	1.1	3.5	-42.1
90 424	14/45	SX	0.10	0.62	15	0.15	1.58	15	1.1	5.1	80.5
90 429	14/45	SX	0.30	0.83	10	0.09	1.01	10	0.8	3.5	-90.0

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90 430	15/63	[illegible]	0.13	0.60	15	0.09	0.93	15	0.8	2.9	-37.7
90 5 5	14/45	[illegible]	0.28	0.72	15	0.04	0.43	15	0.9	3.6	83.7
90 5 8	14/65	[illegible]	0.16	0.61	14	0.08	0.85	14	1.0	3.3	-40.1
90 513	15/43	[illegible]	0.10	0.68	15	0.08	0.91	15	0.4	2.2	85.8
90 513	15/63	[illegible]	0.21	0.83	13	0.09	1.01	13	0.6	2.6	-37.6
90 520	14/65	[illegible]	0.20	0.78	16	0.08	0.92	16	0.7	4.0	-43.3
90 522	15/43	[illegible]	0.08	0.47	14	0.09	0.94	14	0.5	2.4	84.0
90 528	14/65	[illegible]	0.23	0.60	12	0.13	1.38	12	0.8	3.3	-44.3
90 529	15/43	[illegible]	0.11	0.69	15	0.08	0.86	15	0.4	2.4	84.4
90 6 2	14/65	[illegible]	0.13	0.57	13	0.04	0.45	13	0.5	3.0	-37.1
90 6 7	14/45	[illegible]	0.41	0.78	13	0.07	0.75	13	1.1	4.0	85.6
90 610	15/63	[illegible]	0.18	0.89	15	0.11	1.18	15	0.5	2.4	-35.6
90 613	14/45	[illegible]	0.27	0.61	14	0.08	0.82	14	0.8	3.3	-89.1
90 618	15/63	[illegible]	0.26	0.87	18	0.07	0.70	18	0.6	3.8	-38.4
90 621	14/45	[illegible]	0.07	0.43	15	0.03	0.38	15	0.5	2.2	-89.7
90 624	14/65	[illegible]	0.23	1.02	14	0.12	1.29	14	0.6	3.1	-34.8
90 628	14/45	[illegible]	0.16	0.94	16	0.10	1.12	16	.5	2.1	89.9
90 630	15/63	[illegible]	0.06	0.27	5	0.06	0.67	5	.6	6.9	-47.1
90 7 5	15/43	[illegible]	0.14	0.84	15	0.15	1.65	15	.5	2.1	-88.2
90 7 8	15/63	[illegible]	0.16	0.73	18	0.07	0.81	18	.6	3.7	-37.9
90 7 9	15/43	[illegible]	0.07	0.43	17	0.13	1.45	17	.4	1.8	89.3
90 719	14/45	[illegible]	0.12	0.56	15	0.09	1.00	15	.6	3.1	85.9
90 720	15/45	[illegible]	0.08	0.97	281	0.18	0.98	281	.1	0.3	89.2
90 721	15/63	[illegible]	0.22	0.85	14	0.09	0.95	14	.5	2.4	-36.9
90 726	15/43	[illegible]	0.19	1.06	15	0.07	0.73	15	.6	2.5	84.1
90 729	15/63	[illegible]	0.17	0.77	11	0.09	0.95	11	.4	7.0	-43.5
90 731	15/65	[illegible]	0.07	0.93	232	0.13	1.00	232	.1	0.4	-39.7
90 8 2	15/43	[illegible]	0.12	0.88	11	0.15	1.56	11	.5	3.0	84.3
90 8 5	15/63	[illegible]	0.17	0.84	17	0.07	0.80	17	.6	3.2	-34.1
90 8 8	15/43	[illegible]	0.15	0.57	15	0.07	0.73	15	.6	2.3	86.0
90 812	14/65	[illegible]	0.21	1.07	7	0.08	0.80	7	.0	4.5	-43.3
90 815	14/45	[illegible]	0.09	0.44	15	0.06	0.65	15	.6	2.3	79.2
90 819	14/65	[illegible]	0.12	0.66	10	0.16	1.68	10	.8	3.8	-38.7
90 822	14/45	[illegible]	0.15	0.96	13	0.07	0.81	13	.5	2.1	89.7
90 826	14/65	[illegible]	0.18	0.55	17	0.08	0.89	17	.9	3.5	-37.0
90 829	15/43	[illegible]	0.16	0.81	15	0.09	0.99	15	.5	2.0	-84.3
90 9 2	14/65	[illegible]	0.32	0.94	15	0.09	0.96	15	0.7	4.9	-44.7
90 9 5	15/43	[illegible]	0.28	1.27	15	0.07	0.78	15	0.4	1.6	88.7
90 910	14/65	[illegible]	0.29	1.00	15	0.08	0.91	15	0.7	4.3	-46.4
90 913	14/45	[illegible]	0.27	1.34	15	0.04	0.42	15	0.5	1.9	-83.8
90 916	14/65	[illegible]	0.19	1.04	13	0.05	0.59	13	0.7	7.6	-43.9
90 920	15/43	[illegible]	0.30	1.30	15	0.14	1.49	15	0.5	2.6	-80.3
90 923	14/65	[illegible]	0.23	0.62	10	0.08	0.82	10	1.3	6.5	-40.9
90 924	15/65	[illegible]	0.06	0.90	102	0.15	0.99	102	0.1	0.6	-39.8
90 925	15/45	[illegible]	0.07	0.94	114	0.18	0.97	114	0.1	0.5	-89.3
90 926	15/43	[illegible]	0.12	0.51	13	0.09	0.99	13	0.6	3.0	-71.0
90 927	15/65	[illegible]	0.07	1.00	152	0.17	0.99	152	0.1	0.5	-38.4
90 930	14/65	[illegible]	0.12	0.70	12	0.08	0.82	12	0.7	3.0	-39.8
90 930	15/45	[illegible]	0.06	0.76	96	0.09	0.99	96	0.1	0.4	89.6
9010 4	15/43	[illegible]	0.12	0.83	14	0.07	0.78	14	0.6	3.0	-80.7
9010 8	14/65	[illegible]	0.15	0.48	11	0.06	0.64	11	1.2	5.6	-36.8
901014	15/43	[illegible]	0.11	0.67	13	0.04	0.48	13	0.5	2.9	-79.9
901015	14/65	[illegible]	0.24	0.90	14	0.13	1.42	14	0.9	4.1	-38.2
901020	14/65	[illegible]	0.08	0.53	7	0.04	0.40	7	1.0	8.1	-35.7
901023	14/45	[illegible]	0.11	0.58	19	0.06	0.69	19	0.6	2.3	-83.5
901028	15/63	[illegible]	0.30	0.71	16	0.06	0.67	16	0.8	4.9	-42.8
901030	15/43	[illegible]	0.13	0.56	14	0.07	0.80	14	0.5	2.7	-82.4
9011 1	15/45	[illegible]	0.08	0.87	139	0.18	0.99	139	0.2	0.7	-89.6
9011 3	15/63	[illegible]	0.31	1.13	16	0.10	1.05	16	0.6	3.2	-34.1
9011 8	15/43	[illegible]	0.15	0.84	19	0.04	0.47	19	0.5	2.5	-84.8
9011 9	14/65	[illegible]	0.11	0.50	13	0.06	0.61	13	1.0	4.3	-40.4
901111	15/65	[illegible]	0.04	0.66	100	0.05	1.01	100	0.1	0.5	-41.9
901112	15/65	[illegible]	0.03	0.73	30	0.05	0.97	30	0.1	0.7	-38.0
901114	15/43	[illegible]	0.11	0.47	6	0.20	2.17	6	2.1	19.0	71.3
901118	14/65	[illegible]	0.14	0.75	14	0.03	0.31	14	1.1	4.3	-31.8
901121	14/45	[illegible]	0.11	0.67	17	0.11	1.19	17	0.4	1.9	-88.2

901124	14/65	SX	0.21	0.74	14	0.08	0.84	14	0.7	2.9	-38.6
901128	15/43	SX	0.12	0.76	18	0.09	1.01	18	0.5	2.3	-87.9
9012 5	14/45	SX	0.17	1.00	16	0.05	0.52	16	0.4	1.9	-88.0
901212	15/43	SX	0.22	1.03	14	0.09	0.95	14	0.6	2.2	-89.2
901216	14/65	SX	0.18	0.71	14	0.07	0.72	14	0.8	4.4	-41.1
901222	14/65	SX	0.20	0.73	15	0.08	0.88	15	1.0	4.0	-51.7
901226	14/45	SX	0.16	0.69	15	0.09	0.95	15	0.5	2.2	-89.9
901229	14/65	SX	0.17	1.01	14	0.03	0.32	14	0.7	3.2	-36.8
901230	15/65	SX	0.06	1.06	76	0.05	1.03	76	0.1	0.5	-42.4
91 1 6	14/65	SX	0.08	0.35	14	0.04	0.47	14	0.8	3.1	-48.5
91 1 9	15/43	SX	0.06	0.32	10	0.06	0.65	10	0.6	3.3	87.0
91 112	15/63	SX	0.05	0.26	12	0.05	0.58	12	0.9	3.9	-53.6
91 120	15/63	SX	0.14	0.99	13	0.05	0.59	13	0.9	4.9	-35.8
91 123	15/43	SX	0.28	0.82	16	0.10	1.02	16	0.6	2.4	88.8
91 127	15/63	SX	0.16	0.64	14	0.05	0.52	14	0.5	2.2	-38.3
91 130	15/43	SX	0.12	0.73	16	0.11	1.21	16	0.4	2.0	89.8
91 2 6	14/43	SX	0.13	0.71	17	0.10	1.07	17	0.4	1.8	85.8
91 210	14/63	SX	0.22	1.18	17	0.05	0.59	17	0.7	2.3	-39.9
91 211	15/65	SX	0.04	0.70	115	0.03	0.96	115	0.1	0.4	-42.0
91 214	14/43	SX	0.35	1.17	17	0.20	1.01	17	0.6	2.7	89.5
91 217	14/63	SX	0.17	0.55	16	0.10	1.01	16	0.6	3.2	-37.2
91 221	14/43	SX	0.08	0.55	16	0.12	1.25	16	0.4	2.1	88.3
91 224	14/63	SX	0.11	0.75	16	0.03	0.32	16	0.4	2.0	-33.8
91 227	14/43	SX	0.13	0.88	18	0.08	0.89	18	0.4	1.9	87.5
91 3 3	14/63	SX	0.11	0.63	18	0.09	0.98	18	0.4	3.3	-39.5
91 3 7	14/43	SX	0.18	0.61	16	0.09	0.92	16	0.5	1.7	89.9
91 3 9	14/63	SX	0.12	0.84	17	0.12	1.28	17	0.4	2.6	-41.5
91 315	14/43	SX	0.13	0.89	16	0.12	1.24	16	0.5	1.6	-87.1
91 316	14/63	SX	0.25	0.81	19	0.12	1.24	19	0.4	2.1	-35.7
91 320	14/43	SX	0.13	0.97	16	0.13	1.36	16	0.4	1.8	-88.8
91 324	14/63	SX	0.14	0.72	7	0.08	0.89	7	1.1	6.8	-48.3
91 330	15/45	SX	0.13	0.90	57	0.23	0.99	57	0.2	1.1	-88.8
91 331	14/63	SX	0.17	0.88	15	0.05	0.53	15	0.6	2.3	-41.3
91 4 2	15/45	SX	0.05	0.80	153	0.12	1.00	153	0.1	0.4	89.6
91 4 3	14/43	SX	0.13	0.02	17	0.05	0.54	17	0.3	1.5	89.5
91 4 7	14/63	SX	0.24	1.72	15	0.12	1.33	15	0.5	2.4	-37.4
91 4 7	15/65	SX	0.05	1.85	103	0.12	0.98	103	0.1	0.5	-39.0
91 4 9	15/65	SX	0.07	0.94	88	0.09	1.01	88	0.1	0.6	-43.3
91 413	14/63	SX	0.09	0.80	16	0.07	0.76	16	0.3	2.2	-35.0
91 421	14/63	SX	0.11	0.74	14	0.05	0.50	14	0.9	2.8	-35.2
91 424	15/43	SX	0.13	0.51	16	0.09	1.01	16	0.4	2.3	86.5
91 428	14/63	SX	0.07	0.78	18	0.06	0.64	18	0.4	2.5	-34.4
91 5 1	14/43	SX	0.10	0.49	17	0.06	0.64	17	0.3	1.6	88.5
91 5 4	15/63	SX	0.12	0.87	14	0.04	0.39	14	0.7	2.6	-40.9
91 5 8	14/43	SX	0.26	0.75	16	0.10	1.06	16	0.4	1.9	89.2
91 512	14/63	SX	0.09	0.04	17	0.03	0.30	17	0.4	2.6	-33.8
91 515	14/43	SX	0.09	0.66	16	0.04	0.45	16	0.4	1.6	88.7
91 517	15/45	SX	0.10	0.97	92	0.11	1.01	92	0.1	0.6	-88.8
91 519	14/63	SX	0.12	0.50	17	0.05	0.52	17	0.4	2.1	-34.3
91 519	15/45	SX	0.06	0.85	166	0.08	1.10	166	0.1	0.4	-89.6
91 524	15/43	SX	0.13	0.81	15	0.05	0.53	15	0.4	2.2	85.6
91 525	14/65	SX	0.13	0.71	14	0.11	1.15	14	0.8	4.3	-49.6
91 527	15/65	SX	0.06	0.90	187	0.09	1.01	187	0.1	0.3	-38.2
91 531	14/45	SX	0.08	0.49	15	0.07	0.74	15	0.6	2.3	85.6
91 6 1	14/65	SX	0.45	0.98	15	0.06	0.61	15	0.8	3.3	-43.9
91 6 5	14/43	SX	0.10	0.68	15	0.06	0.66	15	0.5	1.9	85.6
91 6 8	14/65	SX	0.14	0.63	14	0.08	0.87	14	0.6	3.0	-42.1
91 612	14/43	SX	0.05	0.66	16	0.07	0.69	16	0.2	1.5	86.0
91 616	14/65	SX	0.09	0.57	14	0.10	0.93	14	0.4	1.9	-39.0
91 619	14/43	SX	0.05	0.58	15	0.04	0.44	15	0.3	1.6	86.4
91 621	15/45	SX	0.10	0.88	106	0.14	0.98	106	0.1	0.6	88.5
91 623	14/63	SX	0.06	0.67	16	0.05	0.51	16	0.4	1.4	-43.6
91 626	14/43	SX	0.06	0.65	16	0.19	1.89	16	0.2	1.5	86.1
91 630	15/65	SX	0.06	0.98	162	0.11	1.01	162	0.1	0.4	-41.2
91 7 5	14/43	SX	0.05	0.64	16	0.08	0.79	16	0.3	1.3	-81.3
91 7 7	14/63	SX	0.06	0.59	11	0.14	1.40	11	0.3	1.5	-31.9

91 7 9	14/43	SX	0.11	0.88	16	0.13	1.28	16	0.3	1.6	-81.6
91 713	14/63	SX	0.12	0.88	11	0.09	0.88	11	0.4	2.4	-32.8
91 715	14/43	SX	0.08	0.86	16	0.14	1.31	16	0.3	1.2	90.0
91 720	14/63	SX	0.10	1.24	15	.14	1.37	15	0.4	2.0	-41.2
91 725	14/43	SX	0.05	0.47	18	0.08	0.75	18	0.2	1.2	86.3
91 728	14/63	SX	0.08	1.09	16	0.12	1.23	16	0.3	1.9	-32.2
91 731	14/43	SX	.08	0.73	16	0.10	0.98	16	0.3	1.1	-83.1
91 8 5	14/63	SX	0.07	0.95	18	0.07	0.67	18	0.3	1.4	-36.8
91 8 6	14/45	SX	0.08	0.72	14	0.15	1.47	14	0.4	1.9	-89.7
91 811	14/65	SX	0.12	0.54	13	0.12	1.20	13	0.8	4.0	-50.3
91 813	14/45	SX	0.06	0.56	14	0.10	0.99	14	0.4	2.0	-78.1
91 818	14/65	SX	0.16	0.86	14	.09	0.91	14	0.5	2.8	-46.0
91 822	14/43	SX	0.07	0.60	14	.10	1.00	14	0.3	1.7	88.3
91 824	15/65	SX	0.07	1.05	255	0.16	1.01	255	0.1	0.3	-37.0
91 825	14/63	SX	0.15	1.00	17	0.11	1.08	17	0.5	2.2	-42.9
91 828	14/43	SX	.11	0.88	16	0.09	0.92	16	0.3	1.4	-81.3
91 831	15/45	SX	.07	0.98	257	0.13	1.01	257	0.1	0.3	-89.9
91 9 1	14/63	SX	0.08	0.93	16	0.07	0.71	16	0.3	2.0	-38.6
91 9 5	14/43	SX	0.11	0.94	16	0.10	1.00	16	0.3	1.0	89.1
91 912	14/43	SX	0.05	0.52	16	0.05	0.51	16	0.3	1.1	89.1
91 914	14/63	SX	0.06	0.45	16	.11	1.10	16	0.4	1.5	-34.4
91 919	14/43	SX	0.06	0.55	16	0.10	1.00	16	0.2	1.0	88.1
91 921	14/63	SX	0.34	1.03	16	0.16	1.52	16	0.4	1.7	-42.5
91 925	14/43	SX	0.06	0.62	17	0.06	0.62	17	0.3	1.5	85.0
91 928	14/63	SX	0.18	1.23	14	0.19	1.89	14	0.4	1.6	-28.4
9110 2	14/43	SX	.04	0.34	16	0.06	0.54	16	0.3	1.3	86.1
9110 5	14/63	SX	.10	0.98	17	0.09	0.85	17	0.3	1.3	-37.3
9110 6	15/45	SX	0.07	0.95	288	0.15	1.02	288	0.1	0.3	89.3
9110 8	14/43	SX	0.04	0.48	19	0.05	0.45	19	0.3	1.4	85.1
911013	14/63	SX	0.05	0.59	16	0.06	0.60	16	0.3	1.3	-35.3
911016	14/43	SX	0.06	0.56	18	.08	0.74	18	0.3	1.0	-89.3
911020	14/63	SX	0.09	0.71	8	0.07	0.66	8	0.5	2.2	-35.3
911022	14/43	SX	0.07	0.75	17	0.07	0.66	17	0.2	1.0	-86.8
911027	14/63	SX	0.02	0.15	6	0.09	0.86	6	0.4	3.1	-36.7
911031	14/43	SX	.10	1.16	18	0.06	0.63	18	0.2	1.0	89.9
9111 2	14/63	SX	.04	0.56	15	0.09	0.82	15	0.3	1.5	-37.2
9111 5	14/43	SX	0.13	0.74	16	0.07	0.72	16	0.3	1.2	-87.7
911111	15/65	SX	0.06	0.90	237	0.12	1.01	237	0.1	0.3	-39.4
911116	14/63	SX	0.08	0.77	16	.10	0.91	16	0.3	1.2	-33.8
911117	15/45	SX	0.08	0.92	258	0.05	0.99	258	0.1	0.3	89.4
911120	14/43	SX	0.08	0.79	17	0.10	0.96	17	0.2	1.0	-85.2
911124	14/63	SX	0.04	0.54	17	0.04	0.38	17	0.3	1.2	-36.7
911128	14/43	SX	.07	0.78	17	0.08	0.75	17	0.2	1.1	-87.8
9112 2	14/63	SX	0.11	1.02	16	0.03	0.33	16	0.3	1.4	-38.6
9112 4	14/43	SX	0.05	0.44	18	0.05	0.52	18	0.2	1.0	-89.9
9112 9	14/63	SX	0.11	1.01	17	0.06	0.53	17	0.3	1.3	-35.4
911210	14/43	SX	.08	0.70	19	0.09	0.90	19	0.2	1.0	-89.1
911214	14/63	SX	.57	1.45	17	0.05	0.45	17	0.7	2.4	-43.2
911217	14/43	SX	0.11	0.63	18	.06	0.56	18	0.2	0.9	-88.4
911223	14/63	SX	0.06	0.80	16	.03	0.31	16	0.3	1.5	-36.4
911223	15/65	SX	0.07	1.10	239	0.03	1.00	239	0.1	0.3	-37.4
911226	14/43	SX	0.04	0.43	12	0.16	0.61	12	0.3	1.1	-87.8
911230	14/63	SX	0.05	0.62	16	0.13	1.27	16	0.3	1.0	-36.3
911231	14/43	SX	0.09	0.80	17	0.18	1.79	17	0.3	1.1	88.2
92 1 4	15/45	SX	0.06	0.85	215	0.14	0.99	215	0.1	0.3	89.9
92 1 6	14/63	SX	0.06	0.58	16	0.19	0.88	16	0.3	1.4	-35.2
92 1 7	14/43	SX	.07	0.75	17	0.08	0.75	17	0.2	0.9	-89.3
92 112	14/63	SX	.06	0.70	17	.09	0.86	17	0.3	1.3	-34.5
92 114	14/43	SX	0.05	0.50	17	.07	0.67	17	0.3	1.1	87.2
92 119	14/63	SX	0.03	0.43	16	0.03	0.27	16	0.2	1.6	-34.7
92 121	14/43	SX	0.11	1.12	17	0.06	1.59	17	0.3	1.0	89.8
92 126	14/63	SX	0.06	0.72	13	.05	0.51	13	0.2	1.6	-32.5
92 128	14/43	SX	0.03	0.30	19	0.07	0.65	19	0.2	0.9	-87.5
92 2 1	14/63	SX	0.04	0.57	16	0.03	0.24	16	0.2	1.2	-32.8
92 2 2	15/65	SX	0.07	0.89	276	0.05	1.01	276	0.0	0.2	-39.3
92 2 5	14/43	SX	0.05	0.49	17	0.07	0.69	17	0.2	1.2	85.7

92 2 6	14/63	SX	.07	0.84	14	0.08	0.73	14	0.3	1.4	-31.5
92 212	14/43	SX	.16	1.57	18	0.22	2.14	18	0.2	1.0	-88.5
92 216	14/63	SX	.05	0.64	17	0.17	1.63	17	0.2	1.2	-32.3
92 219	14/45	SX	.08	0.80	17	0.10	0.95	17	0.3	1.1	-87.7
92 223	14/63	SX	.04	0.64	15	0.11	1.12	15	0.4	1.4	-34.3
92 227	14/45	SX	.00	0.51	8	0.04	0.41	8	0.6	2.6	-82.7
92 229	14/63	SX	.15	0.66	11	0.05	0.49	11	0.7	4.3	-34.3
92 3 6	14/45	SX	.08	0.87	17	0.19	1.87	17	0.3	1.3	87.6
92 3 8	14/63	SX	.08	0.95	15	0.11	1.05	15	0.3	1.5	-37.5
92 312	14/43	SX	.04	0.46	17	0.03	0.30	17	0.2	1.0	88.5
92 314	15/45	SX	.00	1.00	323	0.13	1.01	323	0.1	0.3	-89.6
92 316	14/63	SX	.07	0.85	11	0.03	0.29	11	0.3	1.5	-35.3
92 319	14/43	SX	.05	0.63	19	0.09	0.85	19	0.2	1.1	87.5
92 321	15/65	SX	.17	0.97	284	0.11	0.98	284	0.1	0.3	-37.3
92 322	14/63	SX	.03	0.66	16	0.09	0.81	16	0.3	1.5	-33.1
92 322	15/45	SX	.09	1.09	332	0.13	0.99	332	0.0	0.2	89.8
92 324	14/43	SX	.06	0.57	17	0.06	0.63	17	0.2	1.0	88.7
92 328	15/65	SX	.16	0.95	305	0.10	0.99	305	0.0	0.2	-38.2
92 330	14/63	SX	.04	1.30	16	0.17	1.73	16	0.3	1.7	-29.4
92 4 2	14/43	SX	.07	0.71	18	0.08	0.79	18	0.2	1.0	89.2
92 4 4	15/45	SX	.16	0.80	314	0.13	1.02	314	0.1	0.2	-89.1
92 4 5	14/63	SX	.03	1.10	16	0.13	1.33	16	0.3	1.7	-32.7
92 4 9	14/43	SX	.04	0.40	18	0.05	0.51	18	0.2	1.0	88.7
92 411	14/63	SX	.04	0.59	16	0.10	1.01	16	0.2	1.4	-32.4
92 411	15/45	SX	.06	0.87	329	0.10	0.99	329	0.0	0.2	-89.6
92 413	15/65	SX	.08	0.97	269	0.15	1.07	269	0.1	0.3	-37.3
92 414	14/43	SX	.04	0.46	17	0.11	1.02	17	0.2	1.0	88.5
92 418	15/45	SX	.07	0.84	313	0.13	1.00	313	0.1	0.2	89.8
92 419	14/63	SX	.14	0.60	16	0.04	0.40	16	0.3	1.4	-32.9
92 420	15/65	SX	.00	1.39	250	0.08	1.03	250	0.1	0.3	-38.7
92 423	14/43	SX	.04	0.53	16	0.05	0.49	16	0.2	1.1	87.6
92 425	14/63	SX	.16	0.58	15	0.05	0.52	15	0.3	1.4	-31.3
92 428	14/43	SX	.12	1.28	17	0.10	1.00	17	0.2	1.1	89.0
92 5 3	14/63	SX	.05	0.74	16	0.08	0.82	16	0.3	1.5	-32.5
92 5 6	14/43	SX	.05	0.59	16	0.07	0.70	16	0.2	1.1	87.0
92 510	15/45	SX	.08	1.00	303	0.13	1.01	303	0.1	0.3	-89.1
92 513	14/43	SX	.09	0.81	17	0.09	0.83	17	0.2	1.0	88.5
92 517	14/63	SX	.07	0.75	19	0.05	0.44	19	0.3	1.4	-36.1
92 518	14/43	SX	.14	0.83	17	0.09	0.85	17	0.2	1.0	88.6
92 527	14/43	SX	.04	0.45	15	0.06	0.60	15	0.3	1.2	82.9
92 531	14/63	SX	.06	0.75	18	0.07	0.72	18	0.2	1.2	-32.7
92 6 7	14/63	SX	.22	1.08	17	0.15	1.47	17	0.3	1.3	-32.9
92 612	14/43	SX	.12	1.15	17	0.13	1.24	17	0.2	1.1	86.0
92 614	14/63	SX	.11	1.03	15	0.12	1.15	15	0.4	1.8	-36.4
92 617	14/43	SX	.08	0.76	17	0.05	0.52	17	0.3	1.0	88.3
92 619	14/63	SX	.08	0.80	17	0.08	0.80	17	0.2	1.2	-32.8
92 624	14/43	SX	.09	0.91	16	0.10	0.96	16	0.2	1.0	89.0
92 7 2	15/43	SX	.07	0.61	16	0.09	0.81	16	0.4	1.6	87.4
92 7 4	15/63	SX	.25	0.69	14	0.13	1.22	14	0.5	3.3	-36.7
92 7 5	15/45	SX	.12	0.95	262	0.19	1.01	262	0.1	0.4	-86.5
92 7 8	15/43	SX	.08	0.62	16	0.10	0.95	16	0.3	1.1	88.4
92 712	15/63	SX	.32	1.07	11	0.10	0.95	11	0.6	2.4	-40.9
92 714	15/43	SX	.09	0.74	17	0.05	0.52	17	0.5	1.8	-79.2
92 719	15/63	SX	.08	0.65	17	0.05	0.54	17	0.4	1.7	-34.6
92 721	15/43	SX	.02	0.22	6	0.02	0.22	6	0.6	3.3	-83.2
92 725	14/63	SX	.07	0.88	16	0.12	1.21	16	0.3	1.5	-30.8
92 728	14/43	SX	0.10	0.46	15	0.11	1.10	15	0.6	1.7	86.4
92 8 2	14/63	SX	0.13	0.95	16	0.10	0.96	16	0.3	1.4	-32.2
92 8 4	14/43	SX	0.13	0.74	16	0.14	1.37	16	0.4	1.9	86.4
92 8 9	14/63	SX	0.29	1.39	15	0.12	1.11	15	0.8	2.6	-38.7
92 811	14/43	SX	0.08	0.73	17	0.09	0.85	17	0.4	1.4	-83.9
92 818	15/43	SX	0.06	0.64	15	0.15	1.44	15	0.4	1.3	-87.2
92 822	15/63	SX	0.07	0.68	16	0.13	1.24	16	0.3	1.5	-33.8
92 823	15/65	SX	0.06	0.88	267	0.12	1.02	267	0.1	0.3	-39.4
92 825	14/43	SX	0.04	0.37	17	0.07	0.69	17	0.3	1.1	-85.6
92 829	14/63	SX	0.06	0.78	15	0.10	0.98	15	0.3	2.0	-30.8

92 9 1	14/43	SX	0.2	0.53	9	0.11	1.10	9	2.8	9.6	-74.5
92 9 5	14/63	SX	0.0	0.57	11	0.05	0.50	11	0.5	2.1	-37.6
92 910	14/43	SX	0.0	0.45	17	0.10	0.94	17	0.4	1.3	-82.1
92 912	14/63	SX	0.06	0.69	17	0.09	0.91	17	0.2	1.5	-35.8
92 916	14/43	SX	0.07	0.54	17	0.13	1.26	17	0.3	1.0	89.0
92 919	14/63	SX	0.10	1.35	17	0.06	0.56	17	0.2	1.3	-36.6
92 922	15/65	SX	0.07	0.96	249	0.14	1.02	249	.1	0.4	-39.0
92 924	14/43	SX	0.08	0.68	17	0.07	0.66	17	.3	1.4	85.4
92 926	14/63	SX	0.14	1.23	17	0.08	0.79	17	.3	1.3	-35.0
92 930	14/43	SX	0.05	0.67	17	0.06	0.55	17	.2	1.1	-88.1
9210 3	14/63	SX	0.24	0.98	10	0.10	0.99	10	.4	1.9	-31.4
9210 7	14/43	SX	0.03	0.43	14	0.04	0.38	14	.3	1.7	83.7
921010	14/63	SX	0.08	0.74	16	0.09	0.93	16	.2	1.2	-32.2
921017	15/63	SX	0.04	0.54	18	0.07	0.64	18	.2	1.3	-32.1
921022	14/43	SX	0.05	0.51	16	0.07	0.70	16	.3	1.2	86.1
921024	14/63	SX	0.08	0.99	18	0.14	1.38	18	.2	1.3	-37.3
921028	14/43	SX	0.07	0.65	17	0.11	1.11	17	.4	1.4	-82.2
921031	14/63	SX	0.06	0.75	19	0.12	1.22	19	.2	1.3	-31.3
9211 1	15/45	SX	0.7	0.89	327	0.14	1.01	327	.1	0.3	-88.3
9211 7	14/65	SX	0.0	0.80	15	0.04	0.39	15	.5	2.2	-36.2
921111	14/43	SX	0.5	0.45	16	0.06	0.57	16	.3	1.1	85.1
921113	15/63	SX	0.9	0.83	15	0.09	0.84	15	.4	1.6	-34.1
921116	15/45	SX	0.7	1.04	308	0.14	1.00	308	.1	0.3	-89.5
921118	15/43	SX	0.7	0.66	18	0.05	0.47	18	.3	1.1	86.8
921121	15/63	SX	0.9	0.70	12	0.03	0.24	12	.3	1.6	-35.6
921122	15/65	SX	0.8	1.05	309	0.11	1.02	309	.1	0.3	-42.8
921125	15/43	SX	0.09	0.79	15	0.09	0.86	15	0.3	1.5	86.5
921129	14/63	SX	0.04	0.76	18	0.06	0.63	18	0.2	1.3	-37.0
9212 1	14/45	SX	0.08	0.72	17	0.12	1.16	17	0.2	1.0	-87.6
9212 6	14/65	SX	0.12	0.80	17	0.07	0.71	17	0.3	1.7	-34.3
921210	14/45	SX	0.12	1.22	17	0.11	1.06	17	0.4	1.4	-82.9
921212	14/63	SX	0.22	1.00	12	0.07	0.70	12	0.5	2.0	-38.0
921216	15/43	SX	0.06	0.49	17	0.06	0.58	17	0.3	1.2	89.1
921219	15/63	SX	0.07	0.67	16	0.08	0.80	16	0.3	1.6	-36.3
921221	15/45	SX	0.7	0.94	302	0.11	0.99	302	0.1	0.3	89.8
921224	14/43	SX	0.2	0.29	8	0.15	1.51	8	0.6	4.7	-82.7
921227	14/63	SX	0.3	0.23	9	0.04	0.40	9	0.6	2.6	-32.3
921227	15/65	SX	0.8	1.03	297	0.10	0.99	297	0.1	0.3	-41.1
93 110	14/63	SX	0.8	1.03	17	0.10	1.02	17	0.2	1.1	-31.3
93 113	14/43	SX	0.9	0.65	15	0.15	1.48	15	0.5	1.9	82.8
93 117	14/63	SX	0.8	0.66	16	0.11	1.02	16	0.3	1.3	-33.5
93 120	14/43	SX	0.5	0.95	15	0.30	1.52	15	0.6	2.1	87.5
93 124	14/63	SX	0.2	0.29	17	0.04	0.42	17	0.3	1.6	-36.8
93 131	14/63	SX	0.5	0.91	17	0.06	0.61	17	0.3	1.4	-35.3
93 2 3	14/43	SX	0.7	0.74	14	0.09	0.93	14	0.4	1.3	-84.7
93 2 7	14/63	SX	0.5	0.76	18	0.05	0.50	18	0.2	1.1	-30.8
93 210	14/43	SX	0.7	0.77	16	0.18	1.79	16	.3	1.2	88.3
93 212	15/45	SX	0.0	0.98	281	0.18	1.00	281	0.1	0.4	-89.1
93 213	14/63	SX	0.3	0.44	19	0.05	0.49	19	0.2	1.2	-31.1
93 215	15/65	SX	0.6	0.86	281	0.05	1.02	281	0.1	0.2	-41.3
93 217	14/43	SX	0.08	0.83	16	0.13	1.27	16	0.3	1.3	88.5
93 220	14/63	SX	0.23	0.97	17	0.10	1.02	17	0.3	1.4	-30.5
93 225	14/45	SX	0.05	0.52	15	0.05	0.48	15	0.3	1.2	-88.5
93 227	14/63	SX	0.14	1.00	17	0.12	1.10	17	0.4	1.7	-39.1
93 3 3	14/45	SX	0.04	0.47	16	0.11	1.04	16	0.2	1.0	-87.3
93 312	14/45	SX	0.07	0.71	15	0.06	0.64	15	0.3	2.0	-88.0
93 313	14/63	SX	.16	0.79	18	0.03	0.33	18	.5	2.1	-43.2
93 317	14/45	SX	0.11	1.05	16	0.20	2.03	16	0.3	1.4	-84.1
93 321	14/63	SX	0.14	0.95	17	0.08	0.81	17	0.4	1.6	-37.4
93 324	14/45	SX	0.05	0.48	15	0.06	0.63	15	0.3	1.4	-86.8
93 328	14/63	SX	0.10	0.78	16	0.06	0.56	16	0.3	1.6	-37.7
93 331	14/45	SX	0.06	0.63	15	0.06	0.63	15	0.3	1.5	87.0
93 4 4	14/63	SX	0.10	0.84	15	0.07	0.72	15	0.4	1.4	-39.2
93 4 7	14/45	SX	0.05	0.44	16	0.08	0.82	16	0.3	1.5	-87.4
93 411	14/63	SX	0.09	0.88	17	0.06	0.64	17	0.3	1.3	-38.3
93 414	14/45	SX	0.14	0.99	14	0.11	1.07	14	0.3	1.3	-89.2

93 418	14/63	SX	0.08	0.65	13	0.08	0.81	13	0.3	1.6	-30.9
93 425	14/63	SX	0.07	0.47	16	0.06	0.57	16	0.3	1.4	-32.8
93 428	14/43	SX	0.08	0.87	17	0.08	0.78	17	0.3	1.0	88.0
93 5 2	14/63	SX	0.07	0.57	16	0.09	0.84	16	0.4	1.4	-39.5
93 5 5	14/43	SX	0.04	0.53	11	0.06	0.53	11	0.3	1.8	84.0
93 510	14/63	SX	0.28	0.79	12	0.06	0.53	12	1.2	5.9	-37.4
93 512	14/43	SX	0.11	0.65	16	0.14	1.37	16	0.3	1.3	86.7
93 516	14/63	SX	0.14	1.22	16	0.12	1.15	16	0.3	1.5	-35.4
93 519	14/43	SX	0.08	0.84	17	0.13	1.28	17	0.2	1.2	87.1
93 522	14/63	SX	0.15	0.78	19	0.11	1.08	19	0.3	1.4	-37.3
93 526	14/43	SX	0.06	0.59	16	0.15	1.47	16	0.2	1.3	87.7
93 529	14/63	SX	0.09	0.62	16	0.07	0.69	16	0.3	1.5	-37.4
93 6 2	14/43	SX	0.08	0.86	15	0.10	1.03	15	0.3	1.6	83.1
93 6 9	14/43	SX	0.06	0.57	17	0.10	1.01	17	0.2	1.1	86.0
93 613	14/63	SX	0.11	0.70	15	0.07	0.58	15	0.3	1.5	-36.2
93 616	14/43	SX	0.07	0.80	17	0.10	1.01	17	0.2	1.0	-89.4
93 620	14/63	SX	0.09	0.85	11	0.13	1.24	11	0.3	1.6	-38.4
93 620	15/45	SX	0.07	0.81	36	0.21	0.97	36	0.3	1.0	85.9
93 623	14/43	SX	0.08	0.49	17	0.05	0.52	17	0.4	1.9	-84.0
93 627	14/63	SX	0.11	1.18	16	0.07	0.68	16	0.3	1.5	-35.8
93 629	14/43	SX	0.05	0.42	17	0.08	0.79	17	0.2	1.1	89.4
93 7 4	14/63	SX	0.05	0.60	17	0.05	0.46	17	0.3	1.1	-34.0
93 7 7	14/43	SX	0.06	0.61	16	0.05	0.50	16	0.3	1.5	85.9
93 717	14/63	SX	0.06	0.69	15	0.08	0.75	15	0.4	1.9	-34.7
93 719	15/65	SX	0.07	1.05	84	0.17	1.02	84	0.1	0.6	-37.1
93 721	14/43	SX	0.06	0.62	16	0.08	0.79	16	0.3	1.2	84.6
93 725	14/63	SX	0.05	0.64	16	0.04	0.39	16	0.3	1.3	-36.8
93 728	14/43	SX	0.06	0.69	17	0.06	0.59	17	0.2	1.0	88.3
93 8 1	14/63	SX	0.10	0.87	14	0.06	0.59	14	0.4	1.3	-37.3
93 8 3	14/43	SX	0.06	0.54	17	0.08	0.83	17	0.3	1.3	88.1
93 8 7	14/63	SX	0.05	0.67	15	0.08	0.84	15	0.3	1.4	-30.4
93 810	14/43	SX	0.07	0.66	16	0.11	1.05	16	0.4	1.3	-83.4
93 817	14/43	SX	0.07	0.64	17	0.05	0.52	17	0.3	1.2	-83.9
93 817	14/63	SX	0.07	0.65	17	0.09	0.85	17	0.3	1.3	-34.3
93 821	14/63	SX	0.09	0.78	18	0.09	0.93	18	0.2	1.3	-33.1
93 824	14/45	SX	0.08	0.64	16	0.04	0.44	16	0.4	1.7	-83.6
93 828	14/63	SX	0.08	0.73	16	0.10	0.99	16	0.3	1.2	-33.6
93 9 1	14/43	SX	0.10	0.88	16	0.12	1.22	16	0.5	1.6	-83.5
93 9 5	14/63	SX	0.09	0.93	18	0.07	0.73	18	0.3	1.2	-36.2
93 912	15/63	SX	0.09	0.69	15	0.08	0.73	15	0.4	1.7	-39.4
93 916	14/45	SX	0.10	0.76	15	0.12	1.14	15	0.4	2.8	-76.0
93 918	14/63	SX	0.08	0.99	17	0.05	0.53	17	0.2	1.3	-34.1
93 921	14/43	SX	0.06	0.56	17	0.04	0.41	17	0.4	1.9	-78.5
93 925	14/63	SX	0.31	0.85	16	0.06	0.63	16	0.9	3.9	-31.2
9310 3	14/63	SX	0.03	0.38	17	0.05	0.45	17	0.3	1.3	-33.8
9310 5	14/43	SX	0.07	0.54	15	0.09	0.90	15	0.4	1.3	-87.0
931010	14/63	SX	0.11	1.10	15	0.16	1.60	15	0.4	1.8	-29.5
931013	14/43	SX	0.04	0.50	18	0.06	0.58	18	0.4	1.3	-88.2
931018	15/63	SX	0.09	0.74	18	0.08	0.70	18	0.3	1.4	-33.7
931019	15/43	SX	0.17	0.71	15	0.10	0.88	15	0.4	2.0	-85.3
931023	15/63	SX	0.14	0.77	18	0.13	1.29	18	0.3	1.3	-33.4
931027	15/43	SX	0.13	0.65	12	0.06	0.63	12	0.5	2.5	-83.0
931031	15/63	SX	0.13	0.54	17	0.06	0.55	17	0.6	2.3	-35.7
9311 1	15/43	SX	0.19	1.00	14	0.06	0.63	14	0.3	2.6	-80.9
9311 7	15/63	SX	0.11	1.18	17	0.04	0.38	17	0.3	1.6	-34.4
9311 9	15/43	SX	0.14	0.68	15	0.11	1.11	15	0.4	2.0	-87.4
931115	15/63	SX	0.36	0.89	15	0.07	0.34	15	1.4	6.3	-36.1
931116	15/43	SX	0.15	0.97	15	0.07	0.64	15	0.4	2.3	-80.4
931121	15/63	SX	0.10	1.02	17	0.05	0.45	17	0.3	1.4	-35.0
931123	15/43	SX	0.16	0.88	16	0.10	1.03	16	0.6	1.8	88.4
931128	15/63	SX	0.10	0.98	17	0.07	0.70	17	0.3	1.8	-34.6
931130	15/43	SX	0.09	0.70	15	0.07	0.71	15	0.5	1.9	-89.0
9312 6	15/63	SX	0.54	0.72	11	0.06	0.32	11	1.9	6.5	-37.9
931212	15/63	SX	0.36	0.58	14	0.11	0.55	14	1.7	5.7	-38.0
931214	15/43	SX	0.12	0.92	18	0.14	1.38	18	0.4	1.8	-89.4
931219	15/45	SX	0.06	0.79	52	0.07	1.00	52	0.1	0.5	-89.1

931219	15/65	SX	0.06	0.93	54	0.07	0.98	54	0.1	0.6	-46.1
931220	14/63	SX	0.32	0.63	18	0.06	0.29	18	1.1	3.9	-42.8
931223	14/43	SX	0.06	0.52	16	0.11	1.02	16	0.3	1.0	88.8
931227	14/63	SX	0.18	0.53	17	0.08	0.41	17	0.9	4.2	-33.8
931229	14/43	SX	0.05	0.53	18	0.06	0.64	18	0.2	1.0	-88.4
94 1 3	14/63	SX	0.06	0.76	15	0.11	1.09	15	0.4	1.3	-37.5
94 1 5	14/43	SX	0.09	0.79	20	0.14	1.40	20	0.2	1.0	-88.4
94 1 8	14/63	SX	0.08	1.03	18	0.06	0.53	18	0.4	1.5	-34.0
94 112	14/45	SX	0.21	1.15	17	0.15	1.41	17	0.4	1.5	-84.5
94 115	14/63	SX	0.11	1.30	16	0.02	0.25	16	0.3	1.2	-34.1
94 119	14/43	SX	0.09	0.95	17	0.06	0.63	17	0.2	1.0	-89.1
94 123	14/63	SX	0.06	0.63	19	0.04	0.35	19	0.3	1.2	-33.4
94 126	14/43	SX	0.07	0.84	14	0.06	0.62	14	0.3	1.1	-86.1
94 130	14/63	SX	0.05	0.52	18	0.03	0.33	18	0.3	1.1	-32.5
94 2 1	14/43	SX	0.12	1.13	14	0.11	1.09	14	0.3	1.1	-85.7
94 2 6	14/63	SX	0.07	0.99	18	0.08	0.78	18	0.3	1.1	-31.4
94 2 8	14/43	SX	0.09	0.80	16	0.13	1.29	16	0.3	1.1	88.2
94 213	14/63	SX	0.07	0.73	18	0.04	0.37	18	0.3	1.2	-31.7
94 218	14/43	SX	0.09	1.02	18	0.10	0.99	18	0.3	1.0	-87.6
94 220	14/63	SX	0.09	1.07	15	0.11	1.12	15	0.3	1.6	-33.8
94 227	14/63	SX	0.24	0.93	17	0.09	0.87	17	0.3	1.3	-33.9
94 3 2	14/43	SX	0.06	0.55	20	0.12	1.14	20	0.2	1.0	-85.7
94 3 6	14/63	SX	0.19	1.00	14	0.05	0.51	14	0.5	2.0	-40.7
94 3 9	14/43	SX	0.10	0.91	19	0.22	2.14	19	0.3	1.1	-87.3
94 313	14/63	SX	0.04	0.60	15	0.04	0.44	15	0.3	1.3	-36.8
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Field 17 describes the baseline used in the pass. For example, an entry in field 17 of 1563 means that the two stations involved were 11SS 15 (Goldstone) and 11SS 63 (Madrid), and that the baseline vector points from 11SS 15 to 11SS 63.

Field 18 is a code, where the first character describes the project, the second character describes the frequency band, and the third character describes the frequency standard configuration.

The following key displays the possible entries for the first character (i.e. the hundreds digit), which specifies the project that conducted the observations:

2 => Catalog Maintenance and Enhancement project
1 => Time! and Earth Motion Precision Observations project

The following key displays the possible entries for the second character (i.e. the tens digit), describing the frequency band:

2 => Data type was combined S/X
1 => Data type was X band only
0 => Data type was S band only (not normally reported)

The following key displays the possible entries for the third character (i.e. the units digit), describing the frequency standard configuration:

0 => Both stations employed Hydrogen Maser frequency standards.
1 => At least one station employed a Cesium frequency standard.
2 => Frequency distribution equipment problems required an increased "additive noise constant" to account for increased noise.

For example, if the entry for field 18 was 120, this would mean the observing session was conducted by the TEMPO project, used dual-band (S/X) observables, and used H2 maser frequency standards at both stations.

EOP(JPL) 94 R 01

DEEP SPACE NETWORK VLBI EARTH ORIENTA'I'1ON DATA FROM REFERENCE FRAME JPL 1994-1 IN THE IERS FORMAT

MJ D	VAR LA T SECONDS OF ARC	UT0-UTC SECONDS OF TIME	VAR LAT ERROR ARC SEC	UT0 ERR SECONDS OF TIME	RMs DELAY NSEC	CORR VAR LAT -UT0	BSIN CODE
43809.020	-0.31416 0.	-0.215020 0.	0. 0.00043 0.	0.000115 0.	0. 0.32	-0.1765 0.	0. 0. 1443 220
43816.758	-0.28624 0.	-0.239707 0.	0. 0.00051 0.	0.000193 0.	0. 0.31	0.1230 0.	0. 0. 1443 220
43873.422	-0.12054 0.	-0.407704 0.	0. 0.00027 0.	0.000097 0.	0. 0.34	-0.0876 0.	0. 0. 1443 220
44200.813	-0.34866 0.	-0.258862 0.	0. 0.00185 0.	0.000500 0.	0. 0.58	0.2263 0.	0. 0. 1443 220
44203.305	-0.04439 0.	-0.260585 0.	0. 0.00178 0.	0.000111 0.	0. 0.59	-0.8593 0.	0. 0. 1463 220
44227.574	-0.30063 0.	-0.329713 0.	0. 0.00034 0.	0.000123 0.	0. 0.47	0.0373 0.	0. 0. 1443 220
44228.70"/	-0.01474 0.	-0.326772 0.	0. 0.00552 0.	0.000475 0.	0. 0.57	-0.8808 0.	0. 0. 1463 220
44234.801	-0.02057 0.	-0.342877 0.	0. 0.00313 0.	0.000179 0.	0. 0.55	-0.8400 0.	0. 0. 1463 220
44236.652	-0.28351 0.	-0.353303 0.	0. 0.00058 0.	0.000196 0.	0. 0.41	-0.0656 0.	0. 0. 1443 220
44250,828	-0.25985 0.	0.612486 0.	0. 0.00048 0.	0.000161 0.	0. 0.44	0.1289 0.	0. 0. 1443 220
44263.988	-0.00558 0.	0.581672 0.	0. 0.00436 0.	0.000255 0.	0. 0.59	-0.8630 0.	0. 0. 1463 220
44265.613	-0.23339 0.	0.573463 0.	0. 0.000"/5 0.	0.000236 0.	0. 0.39	0.1690 0.	0. 0. 1443 220
44283.211	-0.02773 0.	0.540434 0.	0. 0.00189 0.	0.000115 0.	0. 0.56	-0.8592 0.	0. 0. 1463 220
44283.918	-0.20138 0.	0.536181 0.	0. 0.00060 0.	0.000179 0.	0. 0.36	-0.0497 0.	0. 0. 1443 220
44292.785	-0.19354 0.	0.510425 0.	0. 0.00036 0.	0.000134 0.	0. 0.46	0.2937 0.	0. 0. 1443 220
44293.531	-0.03715 0.	0.510672 0.	0. 0.00330 0.	0.000200 0.	0. 0.41	-0.8439 0.	0. 0. 1463 220
44439.918	-0.18392 0.	0.177218 0.	0. 0.00430 0.	0.000382 0.	0. 0.31	-0.8667 0.	0. 0. 1463 120
44445.434	-0.20920 0.	0.171285 0.	0. 0.01134 0.	0.001803 0.	0. 0.19	-0.9482 0.	0. 0. 1463 120
444-15.359	-0.17768 0.	0.116769 0.	0. 0.01226 0.	0.001934 0.	0. 0.31	-0.9567 0.	0. 0. 1463 120
44475.488	-0.30419 0.	0.125535 0.	0. 0.00403 0.	0.001296 0.	0. 0.39	-0.7466 0.	0. 0. 1443 121
44505.391	-0.31891 0.	0.058413 0.	0. 0.00404 0.	0.000692 0.	0. 0.38	-0.712-/ 0.	0. 0. 1443 120
44506.379	-0.)8639 0.	0.048551 0.	0. 0.01304 0.	0.001301 0.	0. 0.25	-0.7499 0.	0. 0. 1463 120
44512.387	-0.32520 0.	0.039217 0.	0. 0.001"/2 0.	0.000578 0.	0. 0.23	-0.5218 0.	0. 0. 1443 120
44528.363	-0.33779 0.	0.001234 0.	0. 0.00276 0.	0.000683 0.	0. 0.31	-0.4136 0.	0. 0. 1443 120
44529.113	-0.18851 0.	-0.005883 0.	0. 0.00861 0.	0.000569 0.	0. 0.16	-0.8192 0.	0. 0. 1463 120
44565.285	-0.36272 0.	-0.095909 0.	0. 0.00208 0.	0.000542 0.	0. 0.30	-0.6544 0.	0. 0. 1443 120
44581.258	-0.36017 0.	-0.135140 0.	0. 0.00416 0.	0.000932 0.	0. 0.24	-0.0374 0.	0. 0. 1443 120
44587.012	-0.19399 0.	-0.149294 0.	0. 0.01829 0.	0.001134 0.	0. 0.15	-0.9255 0.	0. 0. 1463 121
44587.227	-0.3669) 0.	-0.149750 0.	0. 0.00821 0.	0.001223 0.	0. 0.25	-0.9473 0.	0. 0. 1443 120
44596.391	-0.38751 0.	-0.174329 0.	0. 0.01244 0.	0.002568 0.	0. 0.30	0.9046 0.	0. 0. 1443 120
44(539.410	-0.34428 0.	-0.273860 0.	0. 0.00238 0.	0.000495 0.	0. 0.47	-0.1543 0.	0. 0. 1443 120
44646.363	-0.34019 0.	-0.292479 0.	0. 0.0039"/ 0.	0.000841 0.	0. 0.52	-0.5796 0.	0. 0. 1443 120
44654.313	-0.34489 0.	-0.314184 0.	0. 0.02337 0.	0.002"/59 0.	0. 0.56	0.3106 0.	0. 0. 1443 120
44664.809	-0.07766 0.	-0.334916 0.	0. 0.01341 0.	0.001362 0.	0. 0.43	-0.8473 0.	0. 0. 1463 120
44'734.)84	-0.05972 0.	-0.518576 0.	0. 0.01693 0.	0.001572 0.	0. 0.52	-0.9081 0.	0. 0. 1463 121
44'740.344	-0.26076 0.	-0.536525 0.	0. 0.00185 0.	0.000455 0.	0. 0.37	0.5425 0.	0. 0. 1443 120
44755.180	-0.03845 0.	-0.569035 0.	0. 0.01337 0.	0.000562 0.	0. 0.16	-0.3853 0.	0. 0. 1463 120
44755.305	-0.2494? 0.	-0.572877 0.	0. 0.00262 0.	0.000'/60 0.	0. 0.36	0.5338 0.	0. 0. 1443 121
44769.141	-0.05981 0.	-0.599911 0.	0. 0.02187 0.	0.003160 0.	0. 0.32	-0.6201 0.	0. 0. 1463 120
44'769.262	-0.23067 0.	-0.603278 0.	0. 0.00258 0.	0.000478 0.	0. 0.26	0.4597 0.	0. 0. 1443 120
44[304.047	-0.04430 0.	0.353118 0.	0. 0.00610 0.	0.000840 0.	0. 0.31	-0.7841 0.	0. 0. 1463 120
44804.164	-0.20369 0.	0.350232 0.	0. 0.00269 0.	0.000525 0.	0. 0.31	0.6907 0.	0. 0. 1443 120
44811.605	-0.19195 0.	0.338158 0.	0. 0.00220 0.	0.000488 0.	0. 0.28	-0.7599 0.	0. 0. 1443 120
44817.590	-0.18764 0.	0.329726 0.	0. 0.0013'/ 0.	0.000420 0.	0. 0.27	-0.6319 0.	0. 0. 1443 120
44818.277	-0.05017 0.	0.329638 0.	0. 0.00519 0.	0.000319 0.	0. 0.22	-0.8990 0.	0. 0. 1463 120
44947.410	-0.28229 0.	0.078721 0.	0. 0.0006"/ 0.	0.000200 0.	0. 0.65	-0.3394 0.	0. 0. 1343 220
44956.293	-0.30486 0.	0.057618 0.	0. 0.00191 0.	0.000702 0.	0. 0.51	-0.1190 0.	0. 0.)443 120
44972.281	-0.02176 0.	0.031067 0.	0. 0.00955 0.	0.001084 0.	0. 0.43	-0.8128 0.	0. 0. 6343 120
449'/'.984	-0.26048 0.	-0.000971 0.	0. 0.00557 0.	0.000336 0.	0. 0.20	-0.6834 0.	0. 0. 1463 120
44992.223	-0.37726 0.	-0.020590 0.	0. 0.00177 0.	0.000478 0.	0. 0.16	-0.0246 0.	0. 0. 1443 120

45008.824 -0.40612 0. -0.054767 0. 0. 0.00150 0. 0.000565 0. 0. 0.41 -0.4650 0. 0. 0. 1443 120
45013.762 -0.23074 0. -0.073274 0. 0. 0.00326 0. 0.000216 0. 0. 0.26 -0.8880 0. 0. 0. 1463 120
45020.492 -0.22327 0. -0.086724 0. 0. 0.00358 0. 0.000193 0. 0. 0.28 -0.8980 0. 0. 0. 1463 120
45[121 .891 -0.41507 0. -0.083294 0. 0. 0.00120 0. 0.000294 0. 0. 0.37 -0.1528 0. 0. 0. 1443 120
45028.645 -0.42743 0. -0.103945 0. 0. 0.00328 0. 0.000701 0. 0. 0.46 -0.7193 0. 0. 0. 1443 120
45054.785 -0.13751 0. -0.168463 0. 0. 0.00392 0. 0.000204 0. 0. 0.14 -0.8887 0. 0. 0. 1463 120
45057.004 -0.44426 0. -0.174302 0. 0. 0.00233 0. 0.000538 0. 0. 0.34 -0.5674 0. 0. 0. 1443 120
45067.281 -0.44012 0. -0.20397-/ O. 0. 0.00064 0. 0.000247 0. 0. 0.29 -0.1763 0. 0. 0. 1443 120
45071.742 -0.10951 0. -0.213588 0. 0. 0.00691 0. 0.000269 0. 0. 0.06 -0.9254 0. 0. 0. 1463 120
45096.309 -0.04743 0. -0.278117 0. 0. 0.00370 0. 0.00[1231 O. 0. 0.49 -0.8647 0. 0. 0. 1463 120
45102.934 -0.40360 0. -0.298624 0. 0. 0.00170 0. 0.000559 0. 0. 0.25 -0.4557 0. 0. 0. 1443 120
45112.066 -0.00200 0. -0.311867 0. 0. 0.00283 0. 0.000154 0. 0. 0.34 -0.7994 0. 0. 0. 1463 120
45113.168 -0.38573 0. -0.322532 0. 0. 0.00072 0. 0.000248 0. 0. 0.25 -0.1569 0. 0. 0. 1443 120
45118.918 0.05286 0. -0.328324 0. 0. 0.05346 0. 0.00?127 O. 0. 0.26 -0.9337 0. 0. 0. 1463 120
45151.852 -0.28927 0. 0.598147 0. 0. 0.00050 0. 0.000124 0. 0. 0.48 -0.1538 0. 0. 0. 1343 220
45152.371 -0.28919 0. 0.59″/509 O. 0. 0.00322 0. 0.000647 0. 0. 0.30 -0.6634 0. 0. 0. 1243 120
45154.113 0.08148 0. 0.606156 0. 0. 0.0022″/ O. 0.000154 0. 0. 0.62 -0.8631 0. 0. 0. 1363 220
45167.383 -0.24153 0. 0.575)11 o. 0. 0.003)3 o. 0.001336 0. 0. 0.37 0.2976 0. 0. 0. 1243 121
45168.383 0.10124 0. 0.585273 0. 0. 0.01110 0. 0.001044 0. 0. 0.31 -0.8902 0. 0. 0. 1263 120
45194.391 -0.18282 0. 0.537792 0. 0. 0.00531 0. 0.001972 0. 0. 0.16 0.5856 0. 0. 0. 1243 121
45196.434 0.08985 0. 0.547″194 0. 0. 0.00822 0. 0.000803 0. 0. 0.23 -0.8039 0. 0. 0. 1263 120
453.98.246 0.08925 0. 0.545003 0. 0. 0.00240 O. 0.000161 0. 0. 0.51 -0.8321 0. 0. 0. 1363 220
45223.602 -0.08039 0. 0.486237 0. 0. 0.00654 0. 0.001747 0. 0. 0.65 -0.3049 0. 0. 0. 1443 121
45231 .031 -0.01573 0. 0.480740 0. 0. 0.02161 0. 0.002379 0. 0. 0.30 -0.9401 0. 0. 0. 1461 120
45238.012 0.00033 0. 0.460899 0. 0. 0.01378 0. 0.001260 0. 0. 0.48 -0.7454 0. 0. 0. 1461 120
45238.582 -0.07162 0. 0.456264 0. 0. 0.00636 0. 0.002543 0. 0. 0.31 0.0404 0. 0. 0. 1443 121
45245.168 -0.01717 0. 0.444490 0. 0. 0.0)131 O. 0.001091 0. 0. 0.43 -0.9394 0. 0. 0. 1461 120
45246.098 -0.01809 0. 0.442574 0. 0. 0.00195 0. 0.000176 0. 0. 0.41 -0.8830 0. 0. 0. 1461 220
45265.547 -0.0″/190 O. 0.404243 0. 0. 0.00685 0. 0.001809 0. 0. 0.68 -0.3907 0. 0. 0. 1443 121
45279.148 -0.12491 0. 0.366828 0. 0. 0.00641 0. 0,000508 0. 0. 0.36 -0.8724 0. 0. 0. 1461 120
45279.535 -0.07190 0. 0.3″/2877 O. 0. 0.00198 0. 0.000764 0. 0. 0.63 0.4322 0. 0. 0. 1443 121
45283.996 -0.14006 0. 0.354883 0. 0. 0.00688 0. 0.000444 0. 0. 0.50 -0.8932 0. 0. 0. 1461 120
45287.613 -0.07611 0. 0.353414 0. 0. 0.00142 0. 0.000566 0. 0. 0.77 0.0451 0. 0. 0. 1443 121
45298.180 -0.18946 0. 0.321070 0. 0. 0.00383 0. 0.000195 0. 0. 0.31 -0.8331 0. 0. 0. 1463 120
45301.375 -0.20813 0. 0.312506 0. 0. 0.00088 0. 0.000049 0. 0. 0.27 -0.8713 0. 0. 0. 1463 220
45303.551 -0.09843 0. 0.318088 0. 0. 0.00061 0. 0.000188 0. 0. 0.39 0.0251 0. 0. 0. 1443 220
45307.965 -0.23446 0. 0.295963 0. 0. 0.00405 0. 0.000297 0. 0. 0.48 -0.8748 0. 0. 0. 1463 120
45315.160 -0.25366 0. 0.276099″0. 0. 0.00357 0. 0.000243 0. 0. 0.55 -0.7728 0. 0. 0. 1463 120
45320.504 -0.14293 0. 0.279061 0. 0. 0.00083 0. 0.000327 0. 0. 0.33 0.0871 0. 0. 0. 1443 120
45322.090 -0.27068 0. 0,261075 0. 0. 0.00444 0. 0.000345 0. 0. 0.19 -0.8701 0. 0. 0. 1463 120
45336.277 -0.31067 0. 0.224835 0. 0. 0.00320 0. 0.000189 0. 0. 0.37 -0.8486 0. 0. 0. 1463 120
45342.148 -0.32550 0. 0.208090 0. 0. 0.00340 0. 0.000202 0. 0. 0.38 -0.8229 0. 0. 0. 1463 120
45345.512 -0.21893 0. 0.218182 0. 0. 0.00072 0. 0.000239 0. 0. 0.20 -0.3426 0. 0. 0. 1443 120
45357.039 -0.26124 0. 0.186639 0. 0. 0.00026 0. 0.000104 0. 0. 0.19 0.)315 O. 0. 0. 1443 220
45358.543 -0.26652 0. 0.180866 0. 0. 0.00085 0. 0.000377 0. 0. 0.19 0.1779 0. 0. 0. 1443 120
45359.348 -0.34668 0. 0.161222 0. 0. 0.00073 0. 0.000039 0. 0. 0.22 -0.8700 0. 0. 0, 1463 220
45363.063 -0.35475 0. 0.150449 0. 0. 0.00327 0. 0.000179 0. 0. 0.29 -0.7691 0. 0. 0. 1463 120
45363.266 -0.28288 0. 0.167138 0. 0. 0.00115 0. 0.000409 0. 0. 0.25 0.1093 0. 0. 0. 1443 120
45370.258 -0.31207 0. 0.143598 0. 0. 0.00109 0. 0.000418 0. 0. 0.39 0.0769 0. 0. 0. 1443 120
45371.313 -0.35474 0. 0.122876 0. 0. 0.00270 0. 0.000154 0. 0. 0.21 -0.8256 0. 0. 0. 1463 120
45380.45″/ -0.34858 0. 0.116975 0. 0. 0.00090 0. 0.000354 0. 0. 0.44 -0.1278 0. 0. 0. 1442 120
4538″/.910 -0.38648 0. 0.078093 0. 0. 0.0)001 O. 0.000226 0. 0. 0.39 -0.6982 0. 0. 0.)463 120
45398.094 -0.3″/496 O. 0.044811 0. 0. 0.00312 0. 0.000175 0. 0. 0.39 -0.8276 0. 0. 0. 1463 120
45418.270 -0.45978 0. 0.005120 0. 0. 0.00892 0. 0.002163 0. 0. 0.18 0.8559 0. 0. 0. 1442 1?,1
45418.″/89 -0.35050 0. -0.012869 0. 0. 0.00566 0. 0.000356 0. 0. 0.52 -0.7314 0. 0. 0. 1463 120
45432.441 -0.31093 0. -0.053690 0. 0. 0.00067 0. 0.000039 0. 0. 0.19 -0.8523 0. 0. 0. 1463 220
45437.816 -0.29507 0. -0.069420 0. 0. 0.00352 0. 0.000199 0. 0. 0.46 -0.7755 0. 0. 0. 1463 120
45447.′742 -0.25242 0. -0.096940 0. 0. 0.00330 0. 0.000175 0. 0. 0.43 -0.8520 0. 0. 0. 1463 120

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45447.941 -0.53806 0.  -0.093314 0. 0. 0.00333 0. 0.000731 0. 0. 0.56 -0.5500 0. 0. 0. 1442 120
45458.727 -0.21781 0.  -0.124095 0. 0. 0.00380 0. 0.000187 0. 0. 0.51 -0.8581 0. 0. 0. 1463 120
45458.953 -0.55109 0.  -0.121328 0. 0. 0.00192 0. 0.000694 0. 0. 0.41 -0.0874 0. 0. 0. 1442 120
45474.844 -0.55704 0.  -0.164668 0. 0. 0.00018 0. 0.000059 0. 0. 0.17 0.2189 0. 0. 0. 1443 220
45476.379 -0.14747 0.  -0.168054 0. 0. 0.00087 0. 0.000056 0. 0. 0.24 -0.8150 0. 0. 0. 1463 220
45477.336 -0.55262 0.  -0.171059 0. 0. 0.00105 0. 0.000354 0. 0. 0.47 0.3429 0. 0. 0. 1443 120
45478.383 -0.13601 0.  -0.173487 0. 0. 0.00346 0. 0.000171 0. 0. 0.33 -0.82.72 0. 0. 0. 1463 120
45487.199 -0.10201 0.  -0.191252 0. 0. 0.00643 0.  0.000331 0. 0. 0.23 -0.2918 0. 0. 0. 1463 12.0
45487.453 -0.54335 0.  -0.196219 0. 0. 0.00080 0. 0.000369 0. 0. 0.31 -0.)199 O. 0. 0. 1443 120
45523.227 -0.45799 0.   0.729308 0. 0. 0.00?41 0. 0.000901 0. 0. 0.60 -0.0577 0. 0. 0. 1243 122
45531.605  0.04114 0.   0.732519 0.  0. 0.01957 0. 0.001688 0. 0. 0.50 -0.9212 0. 0. 0. 1263 122
45532.324 -0.42785 0.   0.713492 0.  0. 0.00171 0. 0.000681 0.  0. 0.79 -0.3452 0. 0. 0. 1243 122
45540.445 -0.40145 0.   0.705026 0. 0. 0.00256 0. 0.000897 0. 0. 0.75 0.4047 0. 0. 0. 1243 122
45541.496  0.09656 0.   0.715240 0. 0. 0.00907 0.  0.000883 0. 0. 0.58 -0.7878 0. 0. 0. 1263 122
45549.676 -0.36548 0.   0.685464 0. 0. 0.00467 0. 0.001168 0. 0. 0.28 -0.7288 0. 0. 0. 1243 122
45557.551  0.13652 0.   0.691688 0. 0. 0.01250 0.  0.001331 0. 0. 0.54 -0.9287 0. 0. 0. 1263 122
45566.473  0.16464 0.   0.674405 0. 0. 0.01123 0. 0.001144 0. 0. 1.30 -0.9049 0. 0. 0. 1263 122
4556"/.641 -0.29502 0.   0.658434 0. 0. 0.00317 0.  0.000949 0. 0. 0.26 -0.6343 0. 0. 0. 1243 122
45574.395  0.15762 0.   0.663317 0. 0. 0.00946 0. 0.001019 0. 0. 0.77 -0,9109 0. 0. 0. 1263 122
45575.621 -0.25835 0.   0.641838 0. 0. 0.00273 0. 0.000796 0. 0. 0.47 -0.5888 0. 0. 0, 1243 122
45583.426  0.17927 0.   0.645816 0. 0. 0.01032 0. 0.001111 0. 0. 0.86 -0.8980 0. 0. 0. 1263 122
45584.523 -0.21292 0.   0.627174 0. 0. 0.00235 0. 0.000711 0. 0. 0.62 -0.3071 0. 0. 0. 1243 122
45593.5"/8 -0.16826 0.   0.607121 0. 0. 0.00471 0. 0.001259 0. 0. 0.69 -0.6040 0. 0. 0. 1243 122
45600.309  0.17212 0.   0.613381 0.  0. 0.01014 0. 0.001193 0. 0. 0.46 -0.9102 0. 0. 0. 1263 122
45[,00.508 -0.14492 0.   0.599608 0. 0. 0.00295 0. 0.0008)7 O.  0. 0.74 -0.3489 0. 0. 0. 1243 122
45606.367  0.14718 0.   0.603084 0. 0. 0.00771 0.  0.000669 0. 0. 0.51 -0.8413 0. 0. 0. 1263 122
45607.461 -0.12097 0.   0.587812 0. 0. 0.00345 0. 0.000834 0. 0. 0.41 -0.5809 0. 0. 0. 1243 122
45(,13.352  0.13547 0.   0.58"/787 O. 0. 0.00918 0. 0.000959 0. 0. 0.65 -0.8848 0. 0. 0. 1263 122
45(14.578 -0.10363 0.   0.570830 0. 0. 0.00258 0. 0.000796 0. 0. 0.59 0.0509 0. 0. 0. 1243 122
45(15.793 -0.19163 0.   0.581445 0. 0. 0.01022 0. 0.001455 0. 0. 0.67 -0.6587 0. 0. 0. 6343 120
45(20.359 0.13670 0.   0.571426 0. 0. 0.00847 0. 0.000693 0. 0. 0.56 -0.8489 0. 0. 0. 1263 122
45[21 .301 -0.09243 0.   0.560648 0. 0. 0.00544 0. 0.001051 0. 0. 0.36 -0.8179 0. 0. 0. 1243 122
45627.352  0.12834 0.   0.557370 0. 0. 0.01040 0. 0.000964 0. 0. 0.34 -0.8610 0. 0. 0. 1263 122
45[28.547 -0.06161 0.   0.546526 0.  0. 0.00216 0. 0.000661 0. 0. 0.39 0.0023 0. 0. 0. 1243 122
45634.344 0.08126 0.   0.543922 0. 0. 0.00753 0.  0.000651 0. 0. 0.52 -0.8710 0. 0. 0. 1263 122
45635.531 -0.04458 0.   0.533757 0. 0. 0.00205 0. 0.000751 0. 0. 0.42 -0.0332 0. 0. 0. 1243 ]22
45642.359  0.06913 0.   0.520301 0. 0. 0.00775 0. 0.000575 0. 0. 0.38 -0.8161 0. 0. 0. 1263 120
45643.449 -0.03542 0.   0.514812 0. 0. 0.00135 0.  0.000427 0. 0. 0.42 -0.3788 0. 0. 0. 1243 120
45650.160  0.01086 0.   0.504595 0. 0. 0.00613 0. 0.000520 0. 0. 0.37 -0.8368 0. 0. 0. 1263 120
45651.469 -0.02218 0.   0.498625 0. 0. 0.00173 0. 0.000393 0. 0. 0.28 -0.2629 0. 0. 0. 1243 120
45656.453 -0.02103 0.   0.48728"/ O. 0. 0.00043 0. 0.000160 0. 0. 0.34 -0.2644 0. 0. 0. 1243 220
45657.422  0.00007 0.   0.485334 0. 0. 0.00094 0. 0.000083 0. 0. 0.31 -0.8412 0. 0. 0. 1263 220
45658.281 -0.00419 0.   0.482947 0.  0. 0.00511 0. 0.000434 0. 0. 0.39 -0.8860 0. 0. 0. ]263 120
45658.488 -0.02091 0.   0.482019 0. 0. 0.00125 0. 0.000410 0. 0. 0.26 0.0365 0. 0. 0. 1243 120
45665.180 -0.03967 0.   0.468659 0. 0. 0.00567 0. 0.000515 0. 0. 0.37 -0.8868 0. 0. 0. 1263 120
45665.434 -0.01586 0.   0.470013 0. 0. 0.00166 0. 0.000451 0. 0. 0.34 -0.2171 0. 0. 0. 1243 120
45672.105 -0.08176 0.   0.454713 0. 0. 0.00713 0. 0.000811 0. 0. 0.37 -0.9027 0. 0. 0. 1263 120
45679.172 -0.09045 0.   0.439772 0.  0. 0.00673 0. 0.000601 0. 0. 0.23 -0.9263 0. 0. 0. 1263 120
45679.371 -0.02172 0.   0.444839 0. 0. 0.00195 0. 0.000486 0. 0. 0.22 -0.6061 0. 0. 0. 1243 120
45684.113 -0.10583 0.   0.429509 0. 0. 0.00644 0. 0.000587 0. 0. 0.35 -0,8937 0. 0. 0. 1263 120
45685.461 -0.10797 0.   0.426028 0. 0. 0.00099 0. 0.000088 0. 0. 0.29 -0.8457 0. 0. 0. 1263 220
45686.418 -0.03105 0.   0.431431 0. 0. 0.00036 0. 0.000112 0. 0. 0.32 -0.2219 0. 0. 0. 1243 220
45692.086 -0.13597 0.   0.414189 0. 0. 0.00531 0. 0.000419 0. 0. 0.17 -0.8851 0. 0. 0. 1263 120
45692.371 -0.03588 0.   0.421470 0. 0. 0.00128 0. 0.000378 0. 0. 0.31 -0.1329 0. 0. 0. 1243 120
45697.129 -0.14971 0.   0.401720 0.  0. 0.00418 0.  0.000350 0. 0. 0.45 -0.8600 0. 0. 0. 1263 120
45698.391 -0.04886 0.   0.408660 0. 0. 0.00126 0. 0.000464 0, 0. 0.34 0.1485 0. 0. 0. 1243 120
45712.426 -0.07550 0.   0.38"/253 O.  0. 0.00203 0. 0.000577 0. 0. 0.32 -0.0930 0. 0, (). 1243 120
45'/21.094 -0.23648 0.   0.362144 0. 0. 0.00596 0. 0.00054"1 0. 0. 0.35 -0.8341 0. 0. 0. 1263 120
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45721.270 -0.09407 0.   0.374884 0. 0. 0.00232 0. 0.000701 0. 0. 0.26 -0.3324 0. 0. 0. 1243 120
45728.387 -0.11838 0.   0.364410 0. 0. 0.00359 0. 0.000766 0. 0. 0.30 -0.2876 0. 0. 0. 1243 120
45735.031 -0.28849 0.   0.342627 0. 0. 0.00489 0. 0.000388 0. 0. 0.45 -0.8914 0. 0. 0. 1263 120
45735.215 -0.12905 0.   0.359726 0. 0. 0.00220 0. 0.000598 0. 0. 0.33 -0.4270 0. 0. 0. 1243 120
45741.125 -0.30877 0.   0.332754 0. 0. 0.00639 0. 0.000562 0. 0. 0.21 -0.8648 0. 0. 0. 1263 120
45741.598 -0.30512 0.   0.331529 0. 0. 0.00068 0. 0.000059 0. 0. 0,32 -0.8390 0. 0. 0. 1263 220
45742.211 -0.15089 0.   0.348981 0. 0. 0.00204 0. 0.000490 0. 0. 0.36 -0.4729 0. 0. 0. 1243 120
45742.594 -0.15395 0.   0.347921 0. 0. 0.0002"/ O. 0.000098 0. 0. 0.23 -0.1727 0. 0. 0. 1243 220
45749.102 -0.31693 0.   0.318658 0. 0. 0.00876 0. 0.000732 0. 0. 0.50 -0.8538 0. 0. 0. 1263 120
45749.301 -0.16887 0.   0.336'719 0. 0. 0.00143 0. 0.000452 0. 0. 0.29 -0.1456 0. 0. 0. 1243 120
45756.109 -0.34598 0.   0.305829 0. 0. 0.00639 0. 0.000643 0. 0. 0.19 -0.8279 0. 0. 0. 1263 120
45"/63.168 -0.36735 0.   0.296605 0. 0. 0.00753 0. 0.000755 0. 0. 0.34 -0.8689 0. 0. 0. 1263 120
45770.082 -0.37999 0.   0.282769 0. 0. 0.00624 0. 0.000594 0. 0. 0.67 -0.8488 0. 0. 0. 1263 120
45770.230 -0.25525 0.   0.300750 0. 0. 0.00286 0. 0.000884 0. 0. 0.65 0.3604 0. 0. 0. 1243 120
45"/70.395  0.13290 0.   0.303335 0. 0. 0.00629 0. 0.001"/15 O. 0. 0.95 -0.3385 0. 0. 0. 6343 120
45"/77.090 -0.38870 0.   0.268102 0. 0. 0.00719 0. 0.000534 0. 0. 0.24 -0.8679 0. 0. 0. 1263 120
4577"/.238 -0.28283 0.   0.289342 0. 0. 0.00240 0. 0.000751 0. 0. 0.51  0.3479 0. 0. 0. 1243 120
45"/83.422 -0.38975 0.   0.254020 0. 0. 0.00614 0. 0.000623 0. 0. 0.20 -0.7557 0. 0. 0. 1263 120
45783.95"/ -0.39463 0.   0.253648 0. 0. 0.00093 0. 0.000091 0. 0. 0.38 -0.8661 0. 0. 0. 1263 220
45784.484 -0.31139 0.   0.272336 0. 0. 0.00166 0. 0.000592 0. 0. 0.40 -0.1034 0. 0. 0. 1243 120
45784.914 -0.31259 0.   0.272235 0. 0. 0.00022 0. 0.000086 0. 0. 0.30 -0.1878 0. 0. 0. 1243 220
45791.262 -0.33578 0.   0.260260 0. 0. 0.00101 0. 0.000339 0. 0. 0.33 -0.0799 0. 0. 0. 1243 120
45798.223 -0.36467 0.   0.246036 0. 0. 0.00114 0. 0.000380 0. 0. 0.54 -0.3328 0. 0. 0. 1243 120
45799.930 -0.38850 0.   0.224127 0. 0. 0.00550 0. 0.000446 0. 0. 0.44 -0.8693 0. 0. 0. 1263 120
45800.090 -0.37485 0.   0.242616 0. 0. 0.0012"/ O. 0.000421 0. 0. 0.24 -0.1500 0. 0. 0. 1243 120
45601.926 -0.39151 0.   0.221185 0. 0. 0.00560 0. 0.000423 0. 0. 0.43 -0.8635 0. 0. 0. 1263 120
45?02.090 -0.38328 0.   0.239652 0. 0. 0.00119 0. 0.000406 0. 0. 0.24 -0.0831 0. 0. 0. 1243 120
45E03.938 -0.38556 0.   0.215681 0. 0. 0.00798 0. 0.000625 0. 0. 0.39 -0.8588 0. 0. 0. 1263 120
45804.094 -0.39058 0.   0.234619 0. 0. 0.00134 0. 0.000479 0. 0. 0.37 -0.0045 0. 0. 0. 1243 120
45805.938 -0.38121 0.   0.209303 0. 0. 0.00759 0. 0.000580 0. 0. 0.36 -0.8319 0. 0. 0. 1263 120
45806.094 -0.40238 0.   0.228998 0. 0. 0.00130 0. 0.000467 0. 0. 0.47 0.0502 0. 0. 0. 1243 120
45807.926 -0.46965 0.   0.2120-/4 O. 0. 0.02357 0. 0.001666 0. 0. 0.35 -0.6804 0. 0. 0. 1263 120
45810.098 -0.40827 0.   0.221432 0. 0. 0.00250 0. 0.000734 0. 0. 0.43 0.5467 0. 0. 0. 1243 120
45811 .926 -0.38150 0.   0.198811 0. 0. 0.00555 0. 0.000406 0. 0. 0.27 -0.8405 0. 0. 0. 1263 120
45E12.102 -0.42187 0.   0.216097 0. 0. 0.00196 0. 0.000690 0. 0. 0.29 0,2989 0. 0. 0. 1243 120
45819.035 -0.37156 0.   0.185356 0. 0. 0.02229 0. 0.001381 0. 0. 0.24 -0.6205 0. 0. 0. 1263 120
45819.)45 -0.44807 0.   0.200875 0. 0. 0.00148 0. 0.000514 0. 0. 0.29 -0.0147 0. 0. 0. 1243 120
45825.883 -0.47009 0.   0.187276 0. 0. 0.00147 0. 0.000481 0. 0. 0.35 -0.5272 0. 0. 0. 1243 120
45832.063 -0.37500 0.   0.164154 0. 0. 0.00846 0. 0.000945 0. 0. 0.31 -0.9215 0. 0. 0. 1263 120
45832.500 -0.35094 0.   0.160802 0. 0. 0.00105 0. 0.000093 0. 0. 0.27 -0.8564 0. 0. 0. 1263 220
45833.156 -0.49712 0.   0.173029 0. 0. 0.00137 0. 0.000399 0. 0. 0.3-/ -0.3182 0. 0. 0. 1243 120
45833.172 -0.49423 0.   0.172625 0. 0. 0.00075 0. 0.000324 0. 0. 0.18 -0.3337 0. 0. 0. 1243 220
45839.938 -0.33290 0.   0.147563 0. 0. 0.00738 0. 0.000722 0. 0. 0.60 -0.8794 0. 0. 0. 1263 120
45840.098 -0.51006 0.   0.160443 0. 0. 0.00122 0. 0.000352 0. 0. 0.29 -0.1606 0. 0. 0. 1243 120
45847.078 -0.52426 0.   0.148529 0. 0. 0.00134 0. 0.000387 0. 0. 0.27 -0.3141 0. 0. 0. 1243 120
45854.004 -0.28388 0.   0.129789 0. 0. 0.00522 0. 0.000569 0. 0. 0.33 -0.8502 0. 0. 0. 1263 120
45854.527 -0.53908 0.   0.137699 0. 0. 0.00112 0. 0.000363 0. 0. 0.38 0.1286 0. 0. 0. 1243 120
45861.273 -0.54429 0.   0.126389 0. 0. 0.00146 0. 0.000511 0. 0. 0.36 -0.2609 0. 0. 0. 1243 120
45861.668 -0.23498 0.   0.116682 0. 0. 0.00617 0. 0.000513 0. 0. 0.75 -0.8865 0. 0. 0. 1263 120
45866.555 -0.54920 0.   0.120045 0. 0. 0.00125 0. 0.000365 0. 0. 0.18 -0.1949 0. 0. 0. 1243 120
45874.852 -0.19803 0.   0.104792 0. 0. 0.00807 0. 0.000893 0. 0. 0.42 -0.8925 0. 0. 0. 1263 120
45875.309 -0.55589 0.   0.107796 0. 0. 0.00124 0. 0.0004"/7 O. 0. 0.26 0.2019 0. 0. 0. 1243 120
45888.961 -0.13900 0.   0.093012 0. 0. 0.00812 0. 0.000916 0. 0. 0.26 -0.8686 0. 0. 0. 1263 120
45889.566 -0.54809 0.   0.090825 0. 0. 0.00339 0. 0.000673 0. 0. 0.44 -0.8133 0. 0. 0. 1243 120
45695.117 -0.126"/4 O.   0.091789 0. 0. 0.00445 0. 0.000457 0. 0. 0.49 -0.8448 0. 0. 0. 1263 120
45895.613 -0.11932 0.   0.091280 0. 0. 0.00120 0. 0.000117 0. 0. 0.35 -0.8560 0. 0. 0. 1263 220
45896.602 -0.54412 0.   0.087001 0. 0. 0.00037 0. 0.000145 0. 0. 0.35 -0.1158 0. 0. 0. 1243 220
45903.566 -0.52829 0.   0.077995 0. 0. 0.00343 0. 0.000718 0. 0. 0.30 -0.7341 0. 0. 0. 1243 120
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45′310.742 -0.04871 0. 0.081198 0. 0. 0.00772 0. 0.000″176 0. 0. 0.40 -0.9031 0. 0. 0. 1263 120
45916.961 -0.01679 0. 0.071424 0. 0. 0.00769 0. 0.000926 0. 0. 0.20 -0.8739 0. 0. 0. 1263 120
45′324.2″17 0.00999 0. 0.067111 0. 0. 0.00580 0. 0.000522 0. 0. 0.68 -0.8803 0. 0. 0. 1263 120
45934.449 0.05059 0. 0.053853 0. 0. 0.00681 0. 0.000628 0. 0. 0.23 -0.8728 0. 0. 0. 1263 120
45937.539 0.047″13 0. 0.052201 0. 0. 0.00535 0. 0.000508 0. 0. 0.35 -0.8696 0. 0. 0. 1263 120
45952.637 0.39619 0. 0.040640 0. 0. 0.00830 0. 0.001748 0. 0. 0.29 0.2873 0. 0. 0. 4263 120
45965.813 0.3853″/ 0. 0.019819 0. 0. 0.00828 0. 0.003056 0. 0. 0.48 0.5908 0. 0. 0. 4263 120
46008.434 0.14922 0. -0.066790 0. 0. 0.00657 0. 0.000428 0. 0. 0.59 -0.8063 0. 0. 0. 1463 120
46033.488 -0.11600 0. -0.118919 0. 0. 0.0025″/ O. 0.000755 0. 0. 0.80 -0.1465 0. 0. 0. 1442 120
46036.367 0.10314 0. -0.116030 0. 0. 0.01979 0. 0.001070 0. 0. 0.68 -0.7136 0. 0. 0. 1463 120
46043.777 0.10253 0. -0.125374 0. 0. 0.0059[1 O. 0.000535 0. 0. 0.33 -0.8840 0. 0. 0. 1463 120
460′/8.480 -0.02103 0. -0.179746 0. 0. 0.00342 0. 0.000744 0. 0. 0.65 -0.0054 0. 0. 0. 1442 120
46078.645 -0.01929 0. -0.180177 0. 0. 0.00607 0. 0.000393 0. 0. 0.17 -0.8555 0. 0. 0. 1463 120
46091.566 -0.02324 0. -0.194668 0. 0. 0.00334 0. 0.000728 0. 0. 0.84 0.5994 0. 0. 0. 1442 120
46206.527 -0.04592 0. -0.213521 0. 0. 0.00219 0. 0.000724 0. 0. 0.27 0.3193 0. 0. 0. 1442 120
46348.973 -0.26955 0. -0.294787 0. 0. 0.00374 0. 0.000326 0. 0. 0.34 -0.7720 0. 0. 0. 1461 120
46154.941 -0.28968 0. -0.30342″} O. 0. 0.00371 0. 0.000291 0. 0. 0.30 -0.8069 0. 0. 0. 1461 120
46182.941 -0.26040 0. -0.337660 0. 0. 0.00092 0. 0.000393 0. 0. 0.14 -0.3427 0. 0. 0. 1443 120
4619″/.648 -0.34569 0. -0.382458 0. 0. 0.00504 0. 0.000403 0. 0. 0.24 -0.9137 0. 0. 0. 1461 12.0
46211.926 -0.36561 0. -0.387782 0. 0. 0.00073 0. 0.000283 0. 0. 0.18 -0.1006 0. 0. 0. 1443 120
462′16.145 -0.37614 0. -0.396513 0. 0. 0.00081 0. 0.000282 0. 0. 0.46 -0.3023 0. 0. 0. 1443 120
46266.926 -0.47314 0. 0.546429 0. 0. 0.01635 0. 0.000830 0. 0. 0.33 -0.2251 0. 0. 0. 1443 120
46287.539 -0.48976 0. 0.525696 0. 0. 0.00205 0. 0.000512 0. 0. 0.28 -0.7063 0. 0. 0. 1443 120
46336.758 -0.02849 0. 0.472555 0. 0. 0.00136 0. 0.000098 0. 0. 0.46 -0.8261 0. 0. 0. 1463 220
4633′/.871 -0.44778 0. 0.462834 0. 0. 0.00037 0. 0.000126 0. 0. 0.48 0.1122 0. 0. 0. 1443 220
46357.324 0.00881 0. 0.436315 0. 0. 0.00510 0. 0.000392 0. 0. 0.65 -0.8748 0. 0. 0. 1463 120
46364.305 0.00254 0. 0.423079 0. 0. 0.00517 0. 0.000267 0. 0. 0.41 -0.8858 0. 0. 0. 1463 120
46365.602 -0.37151 0. 0.409601 0. 0. 0.00149 0. 0.000463 0. 0. 0.69 -0.1886 0. 0. 0. 1443 120
46379.63-/ -0.33928 0. 0.384725 0. 0. 0.00130 0. 0.000402 0. 0. 0.57 0.1111 0. 0. 0. 1443 120
46393.547 -0.30407 0. 0.359048 0. 0. 0.00082 0. 0.000305 0. 0. 0.17 0.0456 0. 0. 0. 1443 120
46435.051 0.06362 0. 0.307427 0. 0. 0.00539 0. 0.000294 0. 0. 0.68 -0.8814 0. 0. 0. 1463 120
46462.328 -0.15070 0. 0.261883 0. 0. 0.00255 0. 0.000799 0. 0. 0.18 0.6888 0. 0. 0. 1443 120
46469.332 -0.13723 0. 0.252952 0. 0. 0.00080 0. 0.000322 0. 0. 0.38 -0.0762 0. 0. 0. 1443 120
46476.355 -0.13305 0. 0.241850 0. 0. 0.00147 0. 0.000449 0. 0. 0.71 -0.2970 0. 0. 0. 1443 120
46476.980 0.01344 0. 0.243417 0. 0. 0.00504 0. 0.000258 0. 0. 1.11 -0.8207 0. 0. 0. 1463 120
46483.336 -0.12409 0. 0.234805 0. 0. 0.00072 0. 0.000338 0. 0. 0.38 -0.2395 0. 0. 0. 1443 120
46485.020 -0.02151 0. 0.235477 0. 0. 0.00446 0. 0.000314 0. 0. 0.62 -0.7435 0. 0. 0. 1463 120
46490.387 -0.11762 0. 0.224636 0. 0. 0.00094 0. 0.000498 0. 0. 0.16 0.2166 0. 0. 0. 1443 120
46490.984 -0.03177 0. 0.224806 0. 0. 0.00479 0. 0.000344 0. 0. 0.51 -0.786″/ O. 0. 0. 1463 120
4649′1.414 -0.11617 0. 0.218518 0. 0. 0.00087 0. 0.000345 0. 0. 0.28 -0.0481 0. 0. 0. 1443 120
46498.027 -0.03782 0. 0.215896 0. 0. 0.00526 0. 0.000230 0. 0. 0.38 -0.8551 0. 0. 0. 1463 120
46504.984 -0.07039 0. 0.206149 0. 0. 0,00456 0. 0.00020″/ O. 0. 0.35 -0.8584 0. 0. 0. 1463 120
46511.992 -0.08022 0. 0.200968 0. 0. 0.00659 0. 0.000289 0. 0. 0.51 -0.8165 0. 0. 0. 1463 120
46512.324 -0.11206 0. 0.203377 0. 0. 0.00078 0. 0.000264 0. 0. 0.25 -0.3155 0. 0. 0. 1443 120
46518.402 -0.11716 0. 0.192815 0. 0. 0.00075 0. 0.000300 0. 0. 0.19 0.1802 0. 0. 0. 1443 120
46519.039 -0.10317 0. 0.187358 0. 0. 0.00359 0. 0.000203 0. 0. 0.46 -0.8307 0. 0. 0. 1463 120
46525.36″1 -0.12239 0. 0.184270 0. 0. 0.00072 0. 0.000301 0. 0. 0.53 0.0956 0. 0. 0. 1443 120
46526.059 -0.13400 0. 0.178404 0. 0. 0.00923 0. 0.000543 0. 0. 0.96 -0.8061 0. 0. 0. 1463 120
46532.285 -0.13412 0. 0.172756 0. 0. 0.00079 0. 0.000271 0. 0. 0.27 -0.2410 0. 0. 0. 1443 120
46534.078 -0.13813 0. 0.163959 0. 0. 0.00481 0. 0.000218 0. 0. 0.48 -0.8681 0. 0. 0. 1463 120
46539.531 -0.14486 0. 0.163907 0. 0. 0.00092 0. 0.000394 0. 0. 0.60 0.3097 0. 0. 0. 1443 120
46540.523 -0.16275 0. 0.155900 0. 0. 0.00642 0. 0.000410 0. 0. 0.22 -0.8830 0. 0. 0. 1463 120
46546.2′/7 -0.15413 0. 0.150944 0. 0, 0.00110 0. 0.000429 0. 0. 0.22 -0.0998 0. 0. 0. 1443 120
46547.368 -0.15895 0. 0.141794 0. 0. 0.00487 0. 0.000266 0. 0. 0.49 -0.8901 0. 0. 0. 1463 120
46553.383 -0.16882 0. 0.141115 0. 0. 0.00080 0. 0.000397 0. 0. 0.36 0.0310 0. 0. 0. 1443 120
46554.504 -0.20006 0. 0.131726 0. 0. 0.00795 0. 0.000596 0. 0. 0.60 -0.9002 0. 0. 0. 1463 120
46560.445 -0.17902 0. 0.128426 0. 0. 0.00079 0. 0.000300 0. 0. 0.21 0.4129 0. 0. 0. 1443 120
46596.984 -0.2?3502 O. 0.085748 0. 0. 0.00450 0. 0.000230 0. 0. 0.58 -0.9036 0. 0. 0. 1463 120

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46597.238 -0 .2533-1 0.   0.095564 0. 0. 0.00100 0. 0.000428 0. 0. 0.53  0.0861 0. 0. 0. 1443 120
46603.328 -0.26705 0.   0.088856 0. 0. 0.00101 0. 0.000416 O. 0. 0.93 0.2904 0. 0. 0. 1443 120
46603.984 -0.22111 0.   0.078799 0. 0. 0.00650 0. 0.000350 0. 0. 0.43 -0.9268 0. 0. 0. 1463 120
46609.289 -0.23087 0.   0.0″/5585 O. 0. 0.00″131 0. 0.000598 0. 0. 1.22 -0.7942 0. 0. 0. 1463 120
46609.781 -0.22272 0.   0.073670 0. 0. 0.00255 0. 0.000161 0. 0. 0.60 -0.8749 0. 0. 0. 1463 220
46610.867 -0.28635 0.   0.082082 0. 0. 0.00039 0. 0.000136 0. 0. 0.37 0.1191 0. 0. 0. 1443 220
46618.309 -0.30322 0.   0.078006 0. 0. 0.00133 0. 0.000489 0. 0. 0.44  0.2971 0. 0. 0. 1443 120
46619.141 -0.22368 0.   0.068730 0. 0. 0.00426 0. 0.000304 0. 0. 0.62 -0.8659 0. 0. 0. 1463 120
46624.293 -0.31556 0.   0.073891 0. 0. 0.00136 0. 0.000453 0. 0. 0.33 0.0197 0. 0. 0. 1443 120
46625.000 -0.23149 0.   0.064377 0. 0. 0.00311 0. 0.000168 0. 0. 0.53 -0.8597 0. 0. 0. 1463 120
46631.574 -0.3308-1 0.   0.068504 0. 0. 0.00155 0. 0.000385 0. 0. 0.42 -0.5848 0. 0. 0. 1443 120
46631.′/85 -0.21556 0.   0.059947 0. 0. 0.00363 O. 0.000186 0. 0. 1.25 -0.8353 0. 0. 0. 1463 120
46637.242 -0.33922 0.   0.062863 0. 0. 0.00079 0. 0.000352 0. 0. 0.27 0.3839 0. 0. 0. 1443 120
46644.223 -0.34885 0.   0.058946 0. 0. 0.00074 0. 0.000330 0. 0. 0.33 0.3611 0. 0. 0. 1443 120
46653.184 -0.20533 0.   0.045932 0. 0. 0.00″/8″/ O. 0.000533 0. 0. 0.37 -0.9387 0. 0. 0. 1461 120
46653.3″/9 -0.36305 0.   0.051833 0. 0. 0.00096 0. 0.000305 0. 0. 0.41  0.4290 0. 0. 0. 1443 120
46658.438 -0.36580 0.   0.048412 0. 0. 0.00083 0. 0.000237 0. 0. 0.41 -0.0458 0. 0. 0. 1443 120
46658.918 -0.36765 0.   0.048292 0. 0. 0.00032 0. 0.00010″/ o. 0. 0.34  0.3125 0. 0. 0. 1443 220
46659.922 -0.20077 0.   0.042054 0. 0. 0.00443 0. 0.000225 0. 0. 0.60 -0.8686 0. 0. 0. 1461 120
46672.215 -0.38720 0.   0.037537 0. 0. 0.00176 0. 0.000695 0. 0. 0.44 -0.0180 0. 0. 0. 1443 120
46687.020 -0.39307 0.   0.021722 0. 0. 0.00071 0. 0.000329 0. 0. 0.18 0.2523 0. 0. 0. 1443 120
46693.355 -0.16273 0.   0.008988 0. 0. 0.00485 0. 0.000403 0. 0. 0.37 -0.9125 0. 0. 0. 1461 120
46695.238 -0.39347 0.   0.008498 0. 0. 0.00083 0. 0.000285 0. 0. 0.25 0.5120 0. 0. 0. 1443 120
46701.941 -0.39326 0.   0.001034 0. 0. 0.00060 0. 0.000331 0. 0. 0.19 0.0813 0. 0. 0. 1443 120
46707.039 -0.15072 0. -0.010450 0. 0. 0.00857 0. 0.000696 0. 0. 0.09 -0.9039 0. 0. 0. 1461 120
46708.746 -0.39686 0. -0.012772 0. 0. 0.00066 0. 0.000237 0. 0. 0.22 -0.3193 0. 0. 0. 1443 120
46′/09.203 -0.39657 0.  -0.013679 0. 0. 0.00019 0. 0.000070 0. 0. 0.25 0.0226 0. 0. 0. 1443 220
46′/]4.293 -0.13291 0.  -0.022901 0. 0. 0.00433 0. 0.000362 0. 0. 0.44 -0.9015 0, 0. 0. 1461 120
46715.191 -0.39513 0.  -0.022469 0. 0. 0.00088 0. 0.000285 0. 0. 0.16 0.5373 0. 0. 0. 1443 120
46″/22.078 -0.12632 0.  -0.036299 0. 0. 0.00576 0. 0.000487 0. 0. 0.22 -0.9202 0. 0. 0. 1461 120
46729.012 -0.12501 0.  -0.045094 0. 0. 0.00586 0. 0.000421 0. 0. 0.73 -0.9255 0. 0. 0. 1461 120
46736.953 -0.11283 0. -0.059804 0. 0. 0.00″103 0. 0.000426 0. 0. 0.31 -0.9664 0. 0. 0. 146) 120
46743.000 -0.10699 0. -0.065991 0. 0. 0.00567 0. 0.000447 0. 0. 0.58 -0.9199 0. 0. 0. 1461 120
46″/51.078 -0.08415 0.  -0.079740 0. 0. 0.00472 0. 0.000442 0. 0. 0.42 -0.9064 0. 0. 0. 1461 120
46757.227 -0.37968 0.  -0.087948 0. 0. 0.00026 0. 0.000095 0. 0. 0.27 0.2676 0. 0. 0. 1443 220
46′/′60.078 -0.07685 0.  -0.089833 0. 0. 0.00558 0. 0.000454 0. 0. 0.15 -0.9188 0. 0. 0. 1461 120
46763.750 -0.37268 0.  -0.099869 0. 0. 0.00067 0. 0.000335 0. 0. 0.36 -0.0115 0. 0. 0. 1443 120
46′/63.969 -0.07414 0.  -0.096931 0. 0. 0.00559 0. 0.000477 0. 0. 0.44 -0.9139 0. 0. 0. 1461 120
46″)′78.164 -0.35479 0. -0.120647 0. 0. 0.00065 0. 0.000248 0. 0. 0.31 -0.4631 0. 0. 0. 1443 120
46778.828 -0.03750 0.  -0.116785 0. 0. 0.00661 0. 0.000387 0. 0. 0.31 -0.9717 0. 0. 0. 1461 120
46784.730 -0.35202 0.  -0.125407 0. 0. 0.00229 0. 0.000671 0. 0. 0.70  0.4890 0. 0. 0. 1443 120
46785.965 -0.04002 0.  -0.121867 0. 0. 0.00562 0. 0.000435 0. 0. 0.36 -0.9349 0. 0. 0. 1461 120
46791.117 -0.04335 0. -0.130396 0. 0. 0.00570 0. 0.000573 0. 0. 0.20 -0.9163 0. 0. 0. 1461 120
46798.324 -0.33701 0.  -0.143967 0. 0. 0.00087 0. 0.000479 0. 0. 0.47 -0.0031 0. 0. 0. 1443 122
46799.086 -0.03433 0.  -0.141363 0. 0. 0.00469 0. 0.000412 0. 0. 0.26 -0.9172 0. O″. O. 1461 120
46804.992 -0.02701 0.  -0.151435 0. 0. 0.00481 0. 0.000458 0. 0. 0.40 -0.9071 0. 0. 0. 1461 120
46814.285 -0.31274 0.  -0.163680 0. 0. 0.00079 0. 0.000356 0. 0. 0.33 0.1580 0. 0. 0. 1443 120
46820.293 -0.02600 0. -0.168254 0. 0. 0.00314 0. 0.000224 0. 0. 0.52 -0.7906 0. 0. 0. 1461 120
46821.262 -0.30410 0.  -0.174353 0. 0. 0.00087 0. 0.000485 0. 0. 0.50 -0.1086 0. 0. 0. 1443 122
46839.328 -0.28215 0. -0.196806 0. 0. 0.00084 0. 0.000312 0. 0. 0.39 -0.0933 0. 0. 0. 1442 120
46848.95″/ -0.02096 0.  -0.209589 0. 0. 0.00422 0. 0.000409 0. 0. 0.26 -0.9)21 O. 0. 0. 1461 120
46861.254 -0.25591 0.  -0.239202 0. 0. 0.00130 0, 0.000403 0. 0. 0.26 -0.0402 0. 0. 0. 1442 120
46869.359 -0.24297 0.  -0.250267 0. 0. 0.00084 0. 0.000304 0. 0. 0.22 0.0893 0. 0. 0. 1442 120
46875.926 -0.02491 0.  -0.259079 0. 0. 0.00487 0. 0.000466 0. 0. 0.41 -0.8573 0. 0. 0. 1461 120
46883.914 -0.03110 0.  -0.273583 0. 0. 0.00578 0. 0.000529 0. 0. 0.34 -0.8436 0. 0. 0. )461 120
46886.922 -0.02856 0.  -0.279149 0. 0. 0.00496 0. 0.00038″1 0. 0. 0.51 -0.8726 0. 0. 0. 1461 120
46889.367 -0.22995 0.  -0.284576 0. 0. 0.00090 0. 0.000333 0. 0. 0.44  0.4614 0. 0. 0. 1442 120
46896.320 -0.22405 0.  -0.295033 0. 0. 0.00088 0. 0.000318 0. 0. 0.55 0.1843 0. 0. 0. 1442 120
```

46396.961	-0.03005	0.	-0.294294	0.	0.	0.00340	0.	0.000251	0.	0.	0.29	-0.7757	0.	0.	0.	1461	120	
46'303.930	-0.03865	0.	-0.306286	0.	0.	0.00450	0.	0.000368	0.	0.	0.19	-0.8196	0.	0.	0.	1461	12.0	
46'304 .648	-0.21559	0.	-0.308192	0.	0.	0.0[]198	0.	0.000461	0.	0.	0.90	-0.0174	0.	0.	0.	1442	120	
46910.938	-0.05201	0.	-0.317572	0.	0.	0.01348	0.	0.000557	0.	0.	0.)0	-0.8172	0.	0.	0.	1461	120	
46911 .582	-0.21702	0.	-0.320832	0.	0.	0.000-/'/	0.	0.000328	0.	0.	0.48	-0.0795	0.	0.	0.	1442	120	
46923 .719	-0.20661	0.	-0.336228	0.	0.	0.00074	0.	0.000259	0.	0.	0.30	-0.0433	0.	0.	0.	1442	120	
46924 .406	-0.20616	0.	-0.336989	0.	0.	0.0002″1	0.	0.000115	0.	0.	0.21	0.0757	0.	0.	0.	1442	220	
46925 .805	-0.05889	0.	-0.339207	0.	0.	0.00072	0.	0.000061	0.	0.	0.23	-0.8602	0.	0.	0.	1463	220	
46925. 828	-0.05555	0.	-0.339603	0.	0.	0.00404	0.	0.000385	O.	0.	0.28	-0.8549	0.	0.	0.	1461	120	
46932 .984	-0.05716	0.	-0.349644	0.	0.	0.00321	0.	0.000245	0.	0.	0.60	-0.7637	0.	0.	0.	1461	120	
46933 .203	-0.20180	0.	-0.348745	0.	0.	0.00151	0.	0.000614	0.	0.	0.49	0.2600	0.	0.	0.	1442	120	
46937.727	-0.06291	0.	-0.356858	0.	0.	0.00409	0.	0.000374	0.	0.	0.32	-0.9066	0.	0.	0.	1461	120	
46938.934	-0.20207	0.	-0.358212	0.	0.	0.0010″/	0.	0.000365	0.	0.	0.94	-0.1963	0.	0.	0.	1442	120	
46945.930	-0.19763	0.	-0.365499	0.	0.	0.00086	0.	0.000330	0.	0.	0.19	-0.0355	0.	0.	0.	1442	120	
46946.086	-0.07760	0.	-0.367187	0.	0.	0.00299	0.	0.000199	0.	0.	0.21	-0.7347	0.	0.	0.	1461	120	
46953.328	-0.19714	0.	-0.373545	0.	0.	0.00104	0.	0.000406	0.	0.	0.45	0.3081	0.	0.	0.	1442	120	
46967.414	-0.19583	0.	-0.389560	0.	0.	0.00094	0.	0.000361	0.	0.	0.44	-0.2″/84	0.	0.	0.	1442	120	
46973.742	-0.10799	0.	-0.393823	0.	0.	0.00730	0.	0.000751	0.	0.	1.26	-0.8110	0.	0.	0.	1461	120	
469″/4.816	-0.19417	0.	-0.393255	0.	0.	0.00212	0.	0.000639	0.	0.	0.56	-0.3275	0.	0.	0.	1442	120	
46980.074	-0.19721	0.	-0.395982	0.	0.	0.00117	0.	0.000355	0.	0.	0.37	0.1108	0.	0.	0.	1442	120	
46981.047	-0.11422	0.	-0.400669	0.	0.	0.00346	0.	0.000228	0.	0.	0.29	-0.8320	0.	0.	0.	1461	120	
46987.332	-0.19860	0.	-0.400075	0.	0.	0.00095	0.	0.000334	0.	0.	0.29	-0.3162	0.	0.	0.	1442	120	
46995.125	-0.13005	0.	-0.411249	0.	0.	0.00439	0.	0.000276	0.	0.	0.18	-0.9049	0.	0.	0.	1461	120	
46995.324	-0.20181	0.	-0.407193	0.	0.	0.00091	0.	0.000360	0.	0.	0.34	-0.3244	0.	0.	0.	1442	120	
47003.082	-0.20954	0.	-0.40'1072	0.	0.	0.00093	0.	0.000389	0.	0.	0.47	0.2958	0.	0.	0.	1442	120	
47008.965	-0.14023	0.	-0.416856	0.	0.	0.00349	0.	0.000220	0.	0.	0.43	-0.8215	0.	0.	0.	1461	120	
47009.391	-0.20890	0.	-0.411106	0.	0.	0.00153	0.	0.000463	0.	0.	0.68	0.6318	0.	0.	0.	1442	120	
4″/016.004	-0.14585	0.	-0.419215	0.	0.	0.00540	0.	0.000201	0.	0.	1.04	-0.8743	0.	0.	0.	1463	120	
4″1022.457	-0.22005	0.	-0.420699	0.	0.	0.00129	0.	0.000406	0.	0.	0.36	-0.2654	0.	0.	0.	1442	120	
4″/023.824	-0.14381	0.	-0.427620	0.	0.	0.00386	0.	0.000211	0.	0.	0.20	-0.8742	0.	0.	0.	1463	120	
47(124.250	-0.15582	0.	-0.427445	0.	0.	0.00072	0.	0.000045	0.	0.	0.25	-0.8660	0.	0.	0.	1463	220	
47029.371	-0.22734	0.	-0.42.3704	0.	0.	0.00085	0.	0.000252	0.	0.	0.23	0.3376	0.	0.	0.	1442	120	
4-/031 .145	-0.15146	0.	-0.431547	0.	0.	0.00501	0.	0.000335	0.	0.	0.26	-0.9105	0.	0.	0.	1463	120	
47036.961	-0.16420	0.	-0.439180	0.	0.	0.00383	0.	0.000237	0.	0.	0.72	-0.8545	0.	0.	0.	1463	120	
47037.438	-0.23954	0.	-0.433617	0.	0.	0.00146	0.	0.000446	0.	0.	0.76	-0.6028	0.	0.	0.	1442	120	
47045.270	-0.24508	0.	-0.443276	0.	0.	0.00264	0.	0.001057	0.	0.	0.13	0.1848	0.	0.	0.	1442	120	
47050.781	-0.24802	0.	-0.450036	0.	0.	0.00097	0.	0.000319	0.	0.	0.19	-0.1088	0.	0.	0.	1442	120	
47051.957	-0.1″/418	0.	-0.458092	0.	0.	0.00326	0.	0.000194	0.	0.	0.23	-0.9271	0.	0.	0.	1463	120	
47057.8″/1	-0.18246	0.	-0.463435	0.	0.	0,00954	0.	0.000332	0.	0.	0.35	-0.8059	0.	0.	0.	1463	120	
47058.793	-0.25402	0.	-0.457856	0.	0.	0.00095	0.	0.000321	0.	0.	0.28	-0.1974	0.	0.	0.	1442	120	
47064.855	-0.19383	0.	-0.475804	0.	0.	0.00280	0.	0.000123	0.	0.	0.12	-0.8956	0.	0.	0.	1463	120	
470″/1.625	-0.26918	0.	-0.476732	0.	0.	0.00161	0.	0.000617	0.	0.	0.43	-0.2504	0.	0.	0.	1542	120	
47072.496	-0.20222	0.	-0.486305	0.	0.	0.00445	0.	0.000263	0.	0.	0.29	-0.8728	0.	0.	0.	1563	120	
47078.496	-0.20559	0.	-0.499059	0.	0.	0.00427	0.	0.000269	0.	0.	0.27	-0.8″185	0.	0.	0.	1563	120	
47080.688	-0.28227	0.	-0.493697	0.	0.	0.00110	0.	0.000429	0.	0.	0.22	-0.0674	0.	0.	0.	1542	120	
4′/086.309	-0.21067	0.	-0.509186	0.	0.	0.00325	0.	0.00026″/	O.	0.	0.23	-0.8470	0.	0.	0.	1563	120	
47086.504	-0.28746	0.	-0.500670	0.	0.	0.00172	0.	0.000698	0.	0.	0.69	-0.5507	0.	0.	0.	1542	120	
47088.527	-0.28963	0.	-0.504238	0.	0.	0.00207	0.	0.000759	0.	0.	0.42	-0.3109	0.	0.	0.	1542	120	
47092.547	-0.23088	0.	-0.519379	0.	0.	0.00752	0.	0.000784	0.	0.	0.23	-0.9590	0.	0.	0.	1563	120	
4″/098.125	-0.21755	0.	-0.528516	0.	0.	0.00373	0.	0.000205	0.	0.	0.34	-0.8319	0.	0.	0.	1563	120	
47106.539	-0.22167	0.	-0.545281	0.	0.	0.00405	0.	0.000274	0.	0.	0.38	-0.8536	0.	0.	0.	1563	120	
4″}107.156	-0.22714	0.	-0.545628	0.	0.	0.00121	0.	0.000080	0.	0,	0.24	-0.8441	0.	0.	0.	1563	220	
47107.918	-0.30917	0.	-0.538017	0.	0.	0.00291	0.	0.000723	0.	0.	0.81	0.5275	0.	0.	0.	1543	120	
47114.875	-0.32661	0.	-0.548849	0.	0.	0.00085	0.	0.000337	0.	0.	0.20	0.2330	0.	0.	0.	1543	120	
4′/119.125	-0.23032	IO.	-0.566168	0.	0.	0.00383	0.	(1.000251	o.	0.	0.08	-0.8902	0.	0.	0.	1563	120	
47130.465	-0.34373	10.	-0.5″/5122	O.	0.	0.00248	0.	0.000794	0.	0.	0.24	0.7362	0.	0.	0.	1543	120	
47134.840	-0.35292	0.	-0.583868	0.	0.	0.00107	0.	0.000404	0.	0.	0.21	0.3511	0.	0.	0.	1543	120	
47135.129	-0.24838	0.	-0.592746	0.	0.	0.00375	0.	0.000241	0.	0.	0.15	-0.9041	0.	0.	0.	1563	120	

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47150.410 -0.37640 0.  -0.606566 0. 0. 0.00096 0.  0.000386 0. 0. 0.20 0.5688 0. 0. 0. 1543 120
47155.531 -0.38163 0.  -0.616106 0. 0. 0.00023 0. 0.000098 0. 0, 0.27 0.0115 0. 0. 0. 1543 220
47156.113 -0.23557 0.  -0.625773 0. 0. 0.00277 0.  0.000181 0. 0. 0.23 -0.8541 0. 0. 0. 1563 120
47157.016 -0.38433 0.  -0.619267 0. 0. 0.00035 0.  0.000125 0. 0. 0.30 -0.0634 0. 0. 0. 1543 220
47162.809 -0.23666 0.   0.363690 0.  0. 0.0055"7 0. 0.000377 0.  0. 0.26 -0.7247 0. 0. 0. 1563 120
47163.352 -0.39308 0.   0.370152 0. 0. 0.00101. 0. 0.000347 O.  0. 0.23 0.3490 0. 0. 0. 1543 120
47169.457 -0.40048 0.   0.361170 0. 0. 0.00055 0.  0.000200 0. 0. 0.26 0.0437 0. 0. 0. 1543 120
47170.121 -0.22360 0.   0.353393 0. 0. 0.00212 0.  0.000124 0. 0. 0.16 -0.8881 0. 0. 0. 1563 120
47177.750 -0.21845 0.   0.341860 0. 0. 0.00905 0. 0.000456 0.  0. 0.97 -0.8981 0. 0. 0. 1563 120
47184.070 -0.20780 0.   0.331654 0. 0. 0.00194 0. 0.000121 0. 0. 0.26 -0.8784 0. 0. 0. 1563 120
47185.582 -0.41432 0.   0.334625 0. 0. 0.00059 0. 0.000266 0. 0. 0.15  0.4827 0. 0. 0. 1543 120
47189.305 -0.41991 0.   0.330587 0. 0. 0.00150 0.  0.000540 0. 0. 0.43 0.8427 0. 0. 0. 1543 120
47189.918 -0.19278 0.   0.325124 0. 0. 0.00300 0. 0.000166 0. 0. 0.53 -0.8826 0. 0. 0. 1563 120
47198.094 -0.18357 0.   0.315678 0. 0. 0.00768 0. 0.000787 0. 0. 1.06 -0.7281 0. 0. 0. 1563 120
4-/203.125 -0.17170 0.  0.305702 0. 0. 0.00363 0. 0.000203 0. 0. 0.31 -0.9054 0. 0. 0. 1563 120
47204.367 -0.43317 0.   0.307149 0. 0. 0.0004"/ O. 0.000169 0. 0. 0.17 -0.0548 0. 0. 0. 1543 120
47204.625 -0.43232 0.   0.306527 0. 0. 0.00028 0. 0.000117 0. 0. 0.15 0.1003 0. 0. 0. 1543 220
47206.051 -0.43105 0.   0.304980 0. 0. 0.00028 0. 0.000095 0. 0. 0.33 0.0272 0. 0. 0. ]543 22o
47210.125 -0.16696 0.   0.292904 0. 0. 0.00336 0.  0.000196 0. 0. 0.15 -0.8740 0. 0. 0. 1563 120
47211.6"/2 -0.432-/8 O.  0.291448 0. 0. 0.00084 0. 0.000314 0. 0. 0.21 -0.2345 0. 0. 0. 1543 120
47218.535 -0.43140 0.   0.278493 0. 0. 0.0006"/ O. 0.000292 0. 0. 0.22  0.2442 0. 0. 0. 1543 120
47218.977 -0.16671 0.   0.276134 0. 0. 0.00239 0. 0.000150 0. 0. 0.16 -0.8577 0. 0. 0. 1563 120
47225.570 -0.43890 0.   0.263571 0.  0. 0.00072 0.  0.000289 0. 0. 0.28 0.2531 0. 0. 0. 1543 120
47225.965 -0.15251 0.   0.261728 0. 0. 0.00244 0. 0.000136 0. 0. 0.21 -0.9002 0. 0. 0. )563 120
47231.129 -0.13426 0.   0.251772 0. 0. 0.00265 0. 0.000141 0. 0. 0.17 -0.8536 0. 0. 0. 1563 120
47233.578 -0.44021 0.   0.249062 0. 0. 0.00067 0. 0.000267 0,  0. 0.18 0.1734 0. 0. 0. 1543 120
47238.914 -0.11662 0.   0.239713 0. 0. 0.00215 0.  0.000126 0. 0. 0.14 -0.9045 0. 0. 0. 1563 120
47244.445 -0.43331 0.   0.229365 0. 0. 0.00048 0. 0.000241 0. 0. 0.12 0.3923 0. 0. 0. 1543 120
4"1245.914 -0.10024 0.  0.229340 0. 0. 0.00221 0.  0.000146 0. 0. 0.24 -0.7682 0. 0. 0. 1563 220
47246.988 -0.09941 0.   0.228036 0. 0. 0.00306 0. 0.000225 0. 0. 0.38 -0.8232 0. 0. 0. 1563 120
47247.383 -0.09652 0.   0.227497 0. 0. 0.00093 0. 0.000062 0. 0. 0.27 -0.8394 0. 0. 0. 1563 220
47253.117 -0.42618 0.   0.214223 0. 0. 0.00050 0. 0.000308 0. 0. 0.24 0.4453 0. 0. 0. 1543 120
47253,375 -0.42420 0.   0.213620 0. 0. 0.00117 0.  0.000300 0. 0. 0.35 0.6)22 O. 0. 0. 1543 220
47253.656 -0.0938'7 0.  0.215553 0. 0. 0.00346 0. 0.000216 0. 0. 0.30 -0.9062 0. 0. 0. 1563 120
4"/254.820 -0.42339 0.   0.210204 0. 0. 0.00039 0. 0.000144 0. 0. 0.20 -0.3198 0. 0. 0. 1543 220
47260.863 -0.08450 0.   0.202425 0.  0. 0.00192 0. 0.000111 0. 0. 0.10 -0.8954 0. 0. 0. 1563 120
47262.039 -0.41541 0.   0.197491 0. 0. 0.00097 0. 0.000222 0. 0. 0.26 -0.0804 0. 0. 0. 1543 120
4726'/.125 -0.40802 0.   0.183869 0.  0. 0.00062 0. 0.000270 0. 0. 0.21  0.1904 0. 0. 0. 1543 120
472'/2.492 -0.40498 0.   0.173825 0. 0. 0.00062 0. 0.000196 0. 0. 0.18 0.2673 0. 0. 0. 1543 120
47281.656 -0.03289 0.   0.163328 0.  0. 0.00351 0. 0.000190 0. 0. 0.11 -0.8737 0. 0. 0. 1563 120
47289.012 -0.03229 0.   0.153321 0. 0. 0.00234 0. 0.000155 0. 0. 0.46 -0.8707 0. 0. 0. 1563 120
47292.402 -0.380?.0 O.  0.140851 0.  0. 0.00075 0. 0.000264 0. 0. 0.14  0.2649 0. 0. 0. 1543 120
47295.016 -0.37835 0.   0.134935 0. 0. 0,00060 0. 0.000310 0. 0. 0.13 0.5904 0. 0. 0. 1543 120
47295.293 -0.37819 0.   0.134288 0. 0. 0.00029 0. 0.000093 0. 0. 0.)6 0.2724 0. 0. 0. 1543 220
47301.477 -0.01884 0.   0.132136 0. 0. 0.00150 0. 0.000137 0. 0. 0.15 -0.8453 0. 0. 0. 1563 220
47302.285 -0.36930 0.   0.125047 0. 0. 0.00357 0.  0.000918 0. 0. 0.55  0.4167 0. 0. 0. 1543 120
47303.883 -0.01289 0.   0.129073 0. 0. 0.00334 0. 0.000174 0. 0. 0.18 -0.9153 0. 0. 0. 1563 120
47307.863 -0.35602 0.   0.115851 0. 0. 0.00190 0.  0.000582 0. 0. 0.49 -0.2204 0. 0. 0. 1543 120
47309.965 -0,00973 0.   0.118820 0. 0. 0.00249 0. 0.000171 0. 0. 0.23 -0.8524 0. 0. 0. 1563 120
47323.902 -0.006-/7 O.  0.100895 0. 0. 0.00210 0.  0.000122 0. 0. 0.05 -0.8423 0. 0. 0. 1463 120
47324.070 -0.32435 0.   0.094493 0. 0. 0.00056 0. 0.000176 0. 0. 0.08 -0.1002 0. 0. 0. 1445 120
47330.543 -0.31398 0.   0.090783 0.  0. 0.00103 0. 0.000472 0. 0. 0.52 0.2910 0. 0. 0. 1445 120
47330.727 -0.00191 0.   0.097252 0. 0. 0.00232 0. 0.000114 0. 0. 0.23 -0.8873 0. 0. 0. 1463 120
47337.012 -0.29861 0.   0.085496 0. 0. 0.00074 0. 0.000237 0. 0. 0.41  0.1295 0.  0. 0. 1445 120
47338.031  0.01012 0.   0.091599 0. 0. 0.00300 0. 0.000156 0. 0. 0.04 -0.8782 0. 0. 0. 1463 120
47358.820 0.02571 0.   0.084198 0. 0. 0.00505 0. 0.000576 0.  0. 0.13 -0.9420 0. 0. 0. 1463 120
47360.238 -0.25809 0.   0.076321 0. 0. 0.00128 0. 0.000608 0. 0. 0.10 -0.0923 0. 0. 0. 1443 120
47365.938  0.03340 0.   0.078990 0. 0. 0.00232 0. 0.000131 0.  0. 0.19 -0.9136 0. 0. 0. 1463 120
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47367.086 -0.24131 0. 0.071133 0. 0. 0.00128 0. 0.000423 0. 0. 0.24 0.7543 0. 0. 0. 1443 120
47372.973 0.0?.871 0. 0.075529 0. 0. 0.00215 0. 0.000101 0. 0. 0.33 -0.9282 0. 0. 0. 1463 120
47379.719 0.03295 0. 0.069723 0. 0. 0.00214 0. 0.000281 0. 0. 0.33 -0.8302 0. 0. 0. 1465 220
47380.441 0.02588 0. 0.069814 0. 0. 0.00351 0. 0.000240 0. 0. 0.19 -0.8897 0. 0. 0. 1465 120
47381 .180 0.02911 0. 0.070048 0. 0. 0.00155 0. 0.000144 0. 0. 0.25 -0.7882 0. 0. 0. 1465 220
47386.090 -0.20115 0. 0.062331 0. 0. 0.00120 0. 0.000372 0. 0. 0.66 0.2254 0. 0. 0. 1443 120
4′/386.266 0.01917 0. 0.068395 0. 0. 0.00565 0. 0.000315 0. 0. 0.53 -0.″/993 0. 0. 0. 1465 120
47393.1?.5 -0.18953 0. 0.057260 0. 0. 0.00066 0. 0.000278 0. 0. 0.15 -0.0161 0. 0. 0. 1443 120
4″/393.594 -0.18720 0. 0.057144 0. 0. 0.00032 0. 0.000128 0. 0. 0.09 0.2982 0. 0. 0. 1443 220
47400.047 -0.17584 0. 0.055495 0. 0. 0.00154 0. 0.000515 0. 0. 0.56 0.4273 0. 0. 0. 1443 120
4′/400.223 0.00193 0. 0.061338 0. 0. 0.00943 0. 0.001012 0. 0. 0.75 -0.6891 0. 0. 0. 1465 120
47406.820 -0.]6347 0. 0.048812 0. 0. 0.00046 0. 0.000169 0. 0. 0.15 -0.2637 0. 0. 0. 1443 120
47407.148 -0.16292 0. 0.048506 0. 0. 0.00033 0. 0.000127 0. 0. 0.15 0.0610 0. 0. 0. 1443 220
47408.777 -0.00212 0. 0.051588 0. 0. 0.00362 0. 0.000215 0. 0. 0.31 -0.9300 0. 0. 0. 1463 120
47409.242 -0.00028 0. 0.051297 0. 0. 0.00123 0. 0.000088 0. 0. 0.22 -0.7819 0. 0. 0. 1465 220
47415.000 -0.15105 0. 0.043758 0. 0. 0.00222 0. 0.000711 0. 0. 0,85 0.3964 0. 0. 0. 1443 120
47415.938 -0.01005 0. 0.046290 0. 0. 0.00288 0. 0.000154 0. 0. 0.06 -0.9547 0. 0. 0. 1463 120
47421.711 -0.02065 0. 0.040850 0. 0. 0.00117 0. 0.000062 0. 0. 0.27 -0.7849 0. 0. 0. 1463 220
4742.8.938 -0.13368 0. 0.032810 0. 0. 0.00313 0. 0.000⁻/36 0. 0. 0.57 0.4906 0. 0. 0. 1443 120
47429.637 -0.04228 0. 0.031257 0. 0. 0.00330 0. 0.000304 0. 0. 0.07 -0.9243 0. 0. 0. 1463 120
47435.758 -0.05726 0. 0.022360 0. 0. 0.0026′/ 0. 0.000145 0. 0. 0.23 -0.9408 0. 0. 0. 1463 120
47435.961 -0.12551 0. 0.023762 0. 0. 0.00066 0. 0.000267 0. 0. 0.07 0.2874 0. 0. 0. 1443 120
47442.832 -0.08545 0. 0.014158 0. 0. 0.01495 0. 0.000868 0. 0. 0.37 -0.9914 0. 0. 0. 1463 120
47443.930 -0.12183 0. 0.014311 0. 0. 0.00089 0. 0.000329 0. 0. 0.45 0.3092 0. 0. 0. 1443 120
47457.875 -0.12098 0. -0.005504 0. 0. 0.00061 0. 0.000302 0. 0. 0.26 0.1358 0. 0. 0. 1443 120
47463.289 -0.12251 0. -0.011314 0. 0. 0.00058 0. 0.000244 0. 0. 0.12 -0.5952 0. 0. 0. 1443 120
47471.199 -0.16771 0. -0.032201 0. 0. 0.00399 0. 0.000238 0. 0. 0.03 -0.9414 0. 0. 0. 1463 120
47471.844 -0.17077 0. -0.033288 0. 0. 0.00094 0. 0.000061 0. 0. 0.19 -0.9071 0. 0. 0. 1463 220
4″/4″/2.266 -0.13198 0. -0.025478 0. 0. 0.00091 0. 0.000306 0. 0. 0.09 -0.3000 0. 0. 0. 1443 120
47477.781 .().]9038 0. -0.042665 0. 0. 0.00347 0. 0,000191 0. 0. 0.21 -0.9466 0. 0. 0. 1463 120
47484.488 -0.20604 0. -0.055056 0. 0. 0.00185 0. 0.000109 0. 0. 0.13 -0.8983 0. 0. 0. 1463 120
47485.918 -0.15424 0. -0.046185 0. 0. 0.00127 0. 0.000440 0. 0. 0.42 0.1170 0. 0. 0. 1443)20
4″/491.469 -0.16518 0. -0.054773 0. 0. 0.00042 0. 0.000240 0. 0. 0.12 0.3402 0. 0. 0. 1443 120
4′/499.906 -0.18361 0. -0.067931 0. 0. 0.00052 0. 0.000274 0. 0. 0.14 0.3520 0. 0. 0. 1443 120
47506.145 -0.26796 0. -0.089203 0. 0. 0.00248 0. 0.000120 0. 0. 0.29 -0.8378 0. 0. 0. 1463 120
4″/506.332 -0.19913 0. -0.076068 0. 0. 0.00060 0. 0.000344 0. 0. 0.23 -0.5418 0. 0. 0. 1443 120
47512.637 -0.28451 0. -0.099182 0. 0. 0.00308 0. 0.000157 0. 0. 0.26 -0.9503 0. 0. 0. 1463 120
47521.395 -0.?.4384 0. -0.093736 0. 0. 0.00053 0. 0.000254 0. 0. 0.17 0.2130 0. 0. 0. 1443 120
47526.086 -0.29856 0. -0.114031 0. 0. 0.003″/2 0. 0.000189 0. 0. 0.23 -0.9499 0. 0. 0. 1463 120
47529.496 -0.26600 0. -0.104145 0. 0. 0.00049 0. 0.000209 0. 0. 0.15 -0.2181 0. 0. 0. 1443 120
47534.063 -0.29927 0. -0.122485 0. 0. 0.00298 0. 0.000157 0. 0. 0.09 -0.9533 0. 0. 0. 1463 120
47534.391 -0.27784 0. -0.107880 0. 0. 0.00054 0. 0.0002.22 0. 0. 0.13 0.1213 0. 0. 0. 1443 120
47541.410 -0.29670 0. -0.119235 0. 0. 0.00062 0. 0.000251 0. 0. 0.11 -0.3302 0. 0. 0. 1443 120
47541.902 -0.30645 0. -0.134257 0. 0. 0.00410 0. 0.000252 0. 0. 0.15 -0.9118 0. 0. 0. 1463 120
47547.465 -0.31295 0. -0.125077 0. 0. 0.00041 0. 0.000199 0. 0. 0.09 -0.2804 0. 0. 0. 1443 120
47548.566 -0.30633 0. -0.140317 0. 0. 0.00280 0. 0.000147 0. 0. 0.12 -0.9544 0. 0. 0. 1463 120
47554.488 -0.32913 0. -0.136169 0. 0. 0.00038 0. 0.000156 0. 0. 0.10 0.0653 0. 0. 0. 1443 120
47555.086 -0.30819 0. -0.150970 0. 0. 0.00169 0. 0.000082 0. 0. 0.09 -0.8836 0. 0. 0. 1463 120
475,62.258 -0.3061″7 0. -0.159668 0. 0. 0.00114 0. 0.000064 0. 0. 0.16 -0.8750 0. 0. 0. 1463 220
47568.586 -0.31215 0. -0.171547 0. 0. 0.00970 0. 0.000665 0. 0. 1.68 -0.9257 0. 0. 0. 1463 120
475,76.086 -0.29709 0. -0.17976″1 0. 0. 0.00186 0. 0.000097 0. 0. 0.08 -0.8814 0. 0. 0. 1463 120
475,76.293 -0.38642 0. -0.168523 0. 0. 0.00057 0. 0.000238 0. 0. 0.12 -0.1286 0. 0. 0. 1443 120
47583.129 -0.40598 0. -0.179378 0. 0. 0.00058 0. 0.000297 0. 0. 0.17 -0.3114 0. 0. 0. 1443 120
47589.281 -0.42004 0. -0.187400 0. 0. 0.00050 0. 0.000234 0. 0. 0.15 -0.0292 0. 0. 0. 1443 120
47589.99? -0.2./758 0. -0.198193 0. 0. 0.00191 0. 0.000089 0. 0. 0.13 -0.8911 0. 0. 0. 1463 120
4./597.543 -0.43618 0. -0.205345 0. 0. 0.00054 0. 0.000255 0. 0. 0.15 0.4712 0. 0. 0. 1443 120
47603.879 -0.45028 0. -0.214755 0. 0. 0.00053 0. 0.000218 0. 0. 0.17 -0.5090 0. 0. 0. 1443 120
47604.621 -0.25168 0. -0.223951 0. 0. 0.00044 0. 0.000028 0. 0. 0.07 -0.9121 0. 0. 0. 1463 220

47611.086 -0.23836 0. -0.235808 0. 0. 0.00214 0. 0.000119 0. 0. 0.19 -0.8422 0. 0. 0. 1463 120
47611.566 -0.46272 0. -0.230585 0. 0. 0.00059 0. 0.000279 0. 0. 0.17 0.5084 0. 0. 0. 1443 120
47618.520 -0.46793 0. -0.239588 0. 0. 0.00113 0. 0.000490 0. 0. 0.08 0.3153 0. 0. 0. 1443 122
47623.039 -0.20458 0. -0.254780 0. 0. 0.0030? O. 0.000177 0. 0. 0.05 -0.9377 0. 0. 0. 1463 120
47632.477 -0.48357 0. -0.265653 0. 0. 0.00047 0. 0.000209 0. 0. 0.10 0.2257 0. 0. 0. 1443 120
47633.070 -0.17260 0. -0.269497 0. 0. 0.00366 0. 0.000341 0. 0. 0.08 -0.9359 0. 0. 0. 1463 120
47634.199 -0.17462 0. -0.271065 0. 0. 0.0006-/ O. 0.000047 0. 0. 0.16 -0.8701 0. 0. 0. 1463 220
47638.219 -0.48772 0. -0.277946 0. 0. 0.00062 0. 0.000360 0. 0. 0.08 -0.4633 0. 0. 0. 1443 122
47645.887 -0.15555 0. -0.292205 0. 0. 0.00274 0. 0.00012.3 0. 0. 0.25 -0.9435 0. 0. 0. 1463 120
47652.496 -0.13290 0. -0.307189 0. 0. 0.00297 0. 0.000202 0. 0. 0.18 -0.9299 0. 0. 0. 1463 120
47652.934 -0.48557 0. -0.308835 0. 0. 0.00050 0. 0,000269 0. 0. 0.09 -0.3828 0. 0. 0. 1443 120
47653.551 -0,48603 0. -0.309684 0. 0. 0.00006 0. 0.000031 0. 0. 0.07 0.0833 0. 0. 0. 1443 220
47659.305 -0.11814 0. -0.316483 0. 0. 0.00460 0. 0.000244 0. 0. 0.24 -0.9304 0. 0. 0. 1463 120
47666.441 -0.09829 0. -0.328782 0. 0. 0.00319 0. 0.000187 0. 0. 0.17 -0.96′/2 O. 0. 0. 1463 120
4"/666.996 -0.48013 0. -0.332493 0. 0. 0.00087 0. 0.000334 0. 0. 0.34 -0.2486 0. 0. 0. 1443 120
47675.113 -0.47137 0. -0.34′/452 O. 0. 0.00050 0. 0.000230 0, 0. 0.13 -0.1695 0. 0. 0. 1443 120
47680.090 -0.46618 0. -0.358471 0. 0. 0.00046 (). 0.000180 0. 0. 0.12 -0.0489 0. 0. 0. 1443 120
47682.082 -0.05012 0. -0.355593 0. 0. 0.00277 0. 0.000155 0. 0. 0.23 -0.9378 0. 0. 0. 1463 120
47688.090 -0.45724 0. -0.369195 0. 0. 0.00043 0. 0.000232 0. 0. 0.11 0.1568 0. 0. 0. 1443 12.0
47688.711 -0.03778 0. -0.363730 0. 0. 0.00194 0. 0.000109 0. 0. 0.35 -0.8348 0. 0. 0. 1463 120
47695.078 -0.44452 0. -0.378620 0. 0. 0.00043 0. 0.000181 0. 0. 0.09 -0.1195 0. 0. 0. 1443 120
47695.746 -0.02246 0. -0.371262 0. 0. 0.00321 0. 0.000149 0. 0. 0.19 -0.9439 0. 0. 0. 1463 120
47700.039 -0.43562 0. -0.383255 0. 0. 0.00048 0. 0.000184 0. 0. 0.)5 -0.2896 0. 0. 0. 1443 120
47702.691 -0.00066 0. -0.378676 0. 0. 0.00219 0. 0.000131 0. 0. 0.21 -0.8610 0. 0. 0. 1463 120
47711.004 -0.41269 0. -0.395418 0. 0. 0.00044 0. 0.000151 0. 0. 0.17 -0.1579 0. 0. 0.]443 120
47716.023 -0.39928 0. -0.400501 0. 0. 0.00046 0. 0.000184 0. 0. 0.08 0.0756 0. 0. 0. 1443 120
47716.703 0.03619 0. -0.390465 0. 0. 0.00204 0. 0.000100 0. 0. 0.13 -0.9132 0. 0. 0. 1463 120
47717.961 -0.39549 0. -0.402759 0. 0. 0.00011 0. 0.000056 0. 0. 0.04 0.0710 0. 0. 0. 1545 220
47721.980 -0.38446 0. -0.406614 0. 0. 0.00053 0. 0.000152 0. 0. 0.15 -0.1719 0. 0. 0. 1443 120
47723.664 0.06294 0. -0.396713 0. 0. 0.00291 (). 0.000129 0. 0. 0.12 -0.956-/ O. 0. 0. 1463 120
47729.973 -0.36581 0. -0.416787 0. 0. 0.00043 0. 0.000185 0. 0. 0.17 0.0557 0. 0. 0. 1443 120
47730.641 0.07037 0. -0.405440 0. 0. 0.00289 0. 0.000127 0. 0. 0.06 -0.9597 0. 0. 0. 1463 120
47736.930 -0.34318 0. -0.424060 0. 0. 0.00035 0. 0.000150 0. 0. 0.20 -0.0650 0. 0. 0. 1443 120
47737.598 0.06681 0. -0.411650 0. 0. 0.00213 0. 0.000097 0. 0. 0.14 -0.9004 0. 0. 0. 1463 120
47743.875 -0.32112 0. -0.431199 0. 0. 0.00040 o. 0.000199 0. 0. 0.13 -0.0860 0. 0. 0. 1443 120
47744.574 0.08179 0. -0.418799 0. 0. 0.00288 O. 0.000106 0. 0. 0.16 -0.897"/ O. 0. 0. 1463 120
47750.848 -0.30104 0. -0.437629 0. 0. 0.00071 0. 0.000272 0. 0. 0.22 -0.3004 0. 0. 0. 1443 120
47751.574 0.10173 0. -0.424841 0. 0. 0.00269 0. 0.000113 0. 0. 0.)4 -0.9232 0. 0. 0. 1463 120
47758.539 0.11062 0. -0.435459 0. 0. 0.00214 0. 0.000093 0. 0. 0.14 -0.9095 0. 0. 0. 1463 120
47764.813 -0.25652 0. -0.455312 0. 0. 0.00047 0. 0.000204 0. 0. 0.10 -0.1282 0. 0. 0. 1443 120
47771.828 -0.23361 0. -0.463397 0. 0. 0.0003"/ O. 0.000148 0. 0. 0.12 -0.2447 0. 0. 0. 1443 120
47776.777 -0.21694 0. -0.467944 0. 0. 0.00013 0. 0.000066 0. 0. 0.06 0.1014 0. 0. 0. 1545 220
47778.813 -0.21064 0. -0.469285 0. 0. 0.00038 0. 0.000155 0. 0. 0.12 -0.2417 0. 0. 0. 1443 120
47779.492 0.11182 0. -0.457390 0. 0. 0.00344 0. 0.000203 0. 0. 0.24 -0.8575 0. 0. 0. 1463 120
47782.734 0.11101 0. -0.461570 0. 0. 0.00096 0. 0.000064 0. 0. 0.09 -0.9171 0. 0. 0. 1565 220
47785.773 -0.18999 0. -0.478843 0. 0. 0.00040 O. 0.000181 0. 0. 0.15 -0.1365 0. 0. 0. 1443 120
47786.492 0.0875"/ O. -0.468386 0. 0. 0.00815 0. 0.000427 0. 0. 1.33 -0.7894 0. 0. 0. 1463 120
4-/.,/92.-/9-/ -0.16926 0. -0.487662 0. 0. 0.00050 0. 0.000212 0. 0. 0.10 -0.3664 0. 0. 0. 1443 120
47"/93.438 0.10643 0. -0.478715 0. 0. 0.00262 0. 0.000143 0. 0. 0.23 -0.9019 0. 0. 0. 1463 120
4"/79′/.770 -0.15369 0. -0.494473 0. 0. 0.00043 0. 0.000175 0. 0. 0.10 -0.1493 0. 0. 0. 1443 120
47802.703 -0.14176 0. -0.501770 0. 0. 0.00016 0. 0.000060 0. 0. 0.06 0.3653 0. 0. 0. 1445 220
4-/805.734 -0.13471 0. -0.504771 0. 0. 0.00036 0. 0.000152 0. 0. 0.12 -0.1991 0. 0. 0. 1443 120
4"/808.445 0.06612 0. -0.500542 0. 0. 0.00321 0. 0.000148 0. 0. 0.04 -0.9638 0. 0. 0. 1463 120
47813.824 -0.11216 0. -0.5)9260 O. 0. 0.00233 0. 0.000671 0. 0. 1.10 0.1734 0. 0. 0. 1443 120
47814.395 0.04948 0. -0.514366 0. 0. 0.00341 (). 0.00021.3 0. 0. 0.11 -0.8267 0. 0. 0. 1463 120
47821.691 -0.10086 0. -0.532693 0. 0. 0.00043 0. 0.000165 0. 0. 0.08 -0.1246 0. 0. 0. 1443 120
47827.676 -0.09135 0. -0.545763 0. 0. 0.00033 0. 0.000140 0. 0. 0.09 -0.2925 0. 0. 0. 1443 120
4782.9.375 0.00963 0. -0.545986 0. 0. 0.00290 0. 0.000133 0. 0. 0.10 -0.9652 0. 0. 0. 1463 120

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47835.348 -0.00766 0.  -0.555972 0. 0. 0.00250 0.  0.000122 0. 0. 0.08 -0.9343 0. 0. 0. 1463 120
47[141 .340 -0.02847 0.  -0.571041 0. 0. 0.00286 0. 0.000130 0. 0. 0.08 -0.9584 0. 0. 0. 1463 120
47843.652 -0.07327 0.  -0.575832 0. 0. 0,00040 0. 0.0001'70 0. 0. 0.13 -0.2225 0. 0. 0. 1443 120
47848.379 -0.05335 0. -0.585107 0.  0. 0.00253 0. 0.000127 0. 0. 0.14 -0.8511 0. 0. 0. 1463 120
4"/[149.629 -0.07169 0.  -0.585715 0. 0. 0.00040 0. 0.000164 0. 0. 0.10 -0.1354 0. 0. 0. 1443 120
4'/})55.355 -0.07830 0. -0.602067 0. 0. 0.0017"/ O. 0.000086 0. 0, 0.13 -0.9013 0. 0. 0. 1463 120
47[157.609 -0.07548 0.  -0.602612 0. 0. 0.00046 0.  0.000174 0. 0. 0.14 -0.0842 0. 0. 0. 1443 120
47862.582 -0.10454 0. -0.616139 0. 0. 0.00216 0.  0.000130 0. 0. 0.20 -0.9064 0. 0. 0. 1463 120
47863.363 -0.07416 0. -0.611797 0.  0. 0.00041 0. 0.000227 0. 0. 0.13 -0.0770 0. 0. 0. 1443 120
47863.641 -0.07508 0. -0.612573 0. 0. 0.00037 0. 0.000223 0. 0. 0.05 0.2265 0. 0. 0. 1445 220
47869.730 -0.08414 0. -0.626621 0. 0. 0.00049 0.  0.000189 0. 0. 0.10 0.2462 0. 0. 0. 1443 120
47870.926 -0.13489 0. -0.634898 0. 0. 0.00305 0.  0.000172 0. 0. 0.14 -0.9412 0. 0. 0. 1463 120
478/6.289 -0.15332 0. -0.643819 0. 0. 0.00279 O.  0.000171 0. 0. 0.30 -0.8661 0. 0. 0. 1465 120
4"/877.574 -0.09642 0. -0.637992 0.  0. 0.00034 0. 0.000142 0. 0. 0.08 -0.1196 0. 0. 0. 1443 120
47883.633 -0.10650 0.  -0.649608 0. 0. 0.00036 0. 0.000190 0. 0. 0.14 -0.1164 0. 0. 0. 1443 120
4'/891.238 -0.19886 0.  -0.669688 0. 0. 0.00272 0. 0.000177 0. 0. 0.14 -0.8660 0. 0. 0. 1465 120
47897.195 -0.21555 0.   0.317850 0. 0. 0.00263 0. 0.000132 0. 0. 0.08 -0.9201 0. 0. 0. 1465 120
47905.199 -0.24087 O.   0.306150 0. 0. 0.00229 0.  0.000111 0. 0. 0.11 -0.8989 0. 0. 0. 1465 120
47905.359 -0.14883 0.   0.319078 0. 0. 0.00050 O. 0.000256 0. 0. 0.14 0.5421 0. 0. 0. 1443 120
47911.547 -0.16443 0.   0.308773 0. 0. 0.00042 0. 0.000156 0. 0. 0.17 -0.0254 0. 0. 0. 1443 120
47918.344 -0.17911 0.   0.300892 0. 0. 0.00054 0. 0.000262 0. 0. 0.07 0.0828 0. 0. 0. 1443 120
4"/919.117 -0.29003 0.   0.283614 0. 0. 0.00214 0. 0.000132 0. 0. 0.09 -0.8674 0. 0. 0. 1465 120
4'/$)24.445 -0.19631 0.   0.286685 0. 0. 0.00161 (). 0,000467 0. 0. 0.89 -0.0344 0. 0. 0. 1443 120
47925.102 -0.30397 O.   0.267663 0.  0. 0.00333 0. 0.000212 0. 0. 0.08 -0.8877 0. 0. 0. 1465 120
47933.090 -0.32907 o.   0.250048 0. 0. 0.00220 0. 0.000111 0. 0. 0.08 -0.9206 0. 0. 0. 1465 120
47933.4]4 -0.22767 o.   0.266318 0. 0. 0.00032 0. 0.000125 0. 0. 0.06 -0.0156 0. 0. 0. 1443 120
4'/940.820 -0.25854 0.   0.248918 0. 0. 0.00007 0. 0.000036 0. 0. 0.09  0.0189 0. 0. 0. 1545 220
47945.988 -0.34994 o.   0.222100 0. 0. 0.00031 0. 0.000019 0. 0. 0.06 -0.9157 0. 0. 0. 1565 220
47946.453 -0.35677 0.   0.221424 0. 0. 0.00247 0.  0.000140 0. 0. 0.26 -0.9092 0. 0. 0. 1465 120
4"/$)4"/.28] -0.27682 0.   0.236877 0. 0. 0.00045 0. 0.000186 0. 0. 0.10 0.1619 0. 0. 0. 1443 120
47953.875 -0.30513 0.   0.221158 0. 0. 0.00050 0.  0.000133 0. 0. 0.15 -0.2591 0. 0. 0. 1443 120
47954.9]0 -0.35294 0.   0.201292 0.  0. 0.00324 0. 0.000180 0.  0. 0.24 -0.8675 0. 0. 0. 1465 120
47959.137 -0.36573 0.   0.193723 0. 0. 0.00258 0.  0.000138 0. 0. 0.16 -0.8520 0. 0. 0. 1563 120
47959.941 -0.32856 0.   0.209150 0. 0. 0.00108 0. 0.000377 0. 0. 0.09 -0.6892 0. 0. 0. )543 120
47967.348 -0.35282 o.   0.192460 0. 0. 0.00051 0. 0.000272 0. 0. 0.08 -0.4424 0. 0. 0. 1445 120
47968.078 -0.37625 0.   0.173285 0. 0. 0.00240 0. 0.000143 0. 0. 0.31 -0.8309 0. 0. 0. 1465 120
4-/974.344 -0.37882 0.   0.176269 0. 0. 0.00041 0. 0.000223 0. 0. 0.17 -0.1831 0. 0. 0. 1543 120
47975.496 -0.37500 0.   0.155369 0. 0. 0.00347 0. 0.000192 0. 0. 0.13 -0.9532 0. 0. 0. 1563 120
4',982.30] -0.40895 0.   0.153868 0.  0. 0.00046 0. 0.000258 0. 0. 0.08 -0.4381 0. 0. 0. 1445 120
47982.824 -0.37303 0.   0.136322 0. 0. 0.00269 0. 0.000146 0. 0. 0.11 -0.9063 0. 0. 0. 1465 120
47988.375 -0.43063 0.   0.139896 0. 0. 0.00069 0. 0.000328 0. 0. 0.08 0.1496 0. 0. 0. 1543 120
47990.074 -0.36492 0.   0.119110 0. 0. 0.00249 0. 0.000162 0. 0. 0.12 -0.8666 0. 0. 0. 1563 120
47991.906 -0.44520 0.   0.129887 0. 0. 0.00008 0. 0.000036 0. 0. 0.07 0.0391 0. 0. 0. 1545 22o
47995.449 -0.36090 o.   0.107443 0. 0. 0.00044 0. 0.000023 0. 0. 0.08 -0.9315 0. 0. 0. 1565 220
47996.223 -0.46037 0.   0.120792 0. 0. 0.00040 0. 0.000154 0. 0. 0.09 -0.0649 0. 0. 0. 1445 120
4'/$,97.293 -0.36323 0.   0.104407 0. 0. 0.00234 0. 0.000130 0. 0. 0.18 -0.9401 0. 0. 0. 1465 120
48003.262 -0.35268 0.   0.090419 0. 0. 0.00266 0. 0.000163 0. 0. 0.10 -0.8272 0. 0. 0. 1563 120
48[,05.402 -0.48840 0.   0.097607 0. 0. 0.00135 0. 0.000462 0. 0. 0.30 0.5957 0. 0. 0. 1445 120
48C,10.297 -0.49860 0.   0.087245 0. 0. 0.00078 0. 0.000321 0. 0. 0.20 -0.0014 0. 0. 0. 1445 120
48(111.039 -0.34299 0.   0.073134 0. 0. 0.00232 0. 0.000125 0. 0. 0.13 -0.8357 0. 0. 0. 1563 120
48016.355 -0.51113 0.   0.075138 0. 0. 0.00094 0. 0.000333 0. 0. 0.28 0.4008 0. 0. 0. 1445 120
48019.004 -0.33063 0.   0.057661 0. 0. 0.00260 0. 0.000150 0. 0. 0.16 -0.8274 0. 0. 0. 1465 120
48024.027 -0.31313 0.   0.049895 0. 0. 0.00211 0. 0.000111 0. 0. 0.21 -0.8970 0. 0. 0. 1563 120
48024.293 -0.53449 0.   0.059734 0.  0. 0.00048 0. 0.000206 0.  0. 0.10 0.3284 0. 0. 0. 1543 120
48031 465 -0.29695 0.   0.034926 0. 0. 0.00297 0. 0.000187 0. 0. 0.20 -0.9397 0. 0. 0. 1465 120
48033.348 -0.55098 0.   0.037838 0. 0. 0.00059 0. 0.000217 0. 0. 0.08 0.3960 0. 0. 0. 1543 120
48039.098 -0.26931 0.   0.019609 0. 0. 0.00243 0. 0.000159 0. 0. 0.23 -0.8951 0. 0. 0. 1465 120
48C40.297 -0.56158 0.   0.023591 0. 0. 0.00050 0. 0.000218 0. 0. 0.11  0.4490 0. 0. 0. 1543 120
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48044.121 -0.25011 0. 0.009374 0. 0. 0.00241 0. 0.000123 0. 0. 0.13 -0.9316 0. 0. 0. 1465 120
48049.293 -0.56880 0. 0.005164 0. 0. 0.00112 0. 0.000366 0. 0. 0.41 0.253′/ 0. 0. 0. 1445 120
48052.113 -0.22062 0. -0.002193 0. 0. 0.00197 0. 0.000097 0. 0. 0.18 -0.8988 0. 0. 0. 1563 120
48055.035 -0.57199 0. -0.003962 0. 0. 0.00085 0. 0.000306 0. 0. 0.27 -0.0604 0. 0. 0. 1445 120
48060.164 -0.18875 0. -0.016746 0. 0. 0.00299 0. 0.000160 0. 0. 0.26 -0.9418 0. 0. 0. 1563 120
48063.996 -0.57417 0. -0.022365 0. 0. 0.00048 0. 0.000208 0. 0. 0.07 -0.0235 0. 0. 0. 1445 120
48066.047 -0.17012 0. -0.025262 0. 0. 0.00253 0. 0.000121 0. 0. 0.23 -0.9213 0. 0. 0. 1465 120
48070.043 -0.56928 0. -0.032662 0. 0. 0.00046 (). 0.000191 0. 0. 0.16 0.0070 0. 0. 0. 1445 120
48072.22″/ -0.14664 0. -0.035636 0. 0. 0.00486 0. 0.000346 0. 0. 0.06 -0.9035 0. 0. 0. 1563 120
48077.078 -0.56518 0. -0.045843 0. 0. 0.00047 0. 0,000191 0. 0. 0.14 -0.1308 0. 0. 0. 1543 120
48080.109 -0.11626 0. -0.044262 0. 0. 0.00297 0. 0.000156 0. 0. 0.16 -0.9435 0. 0. 0. 1563 120
48081.016 -0.56106 0. -0.049887 0. 0. 0.00038 0. 0.000170 0. 0. 0.07 0.0555 0. 0. 0. 1543 120
48091.211 -0.54600 0. -0.066699 0. 0. 0.00060 0. 0.000284 0. 0. 0.12 0.3605 0. 0. 0. 1445 120
48092.469 -0.54428 0. -0.067147 0. 0. 0.0000′/ O. 0.000032 0. 0. 0.08 0.0740 0. 0. 0. 1545 220
48093.9)4 -0.04739 0. -0.061078 0. 0. 0.00198 0. 0.000102 0. 0. 0.22 -0.9014 0. 0. 0. 1563 120
48098.156 -0.53211 0. -0.075239 0. 0. 0.00061 0. 0.000234 0. 0. 0.19 0.4133 0. 0. 0. 1543 120
48101.47″/ -0.01642 0. -0.071258 0. 0. 0.00518 0. 0.000329 0. 0. 0.17 -0.9255 0. 0. 0. 1563 120
48103.008 -0.01465 0. -0.072996 0. 0. 0.00030 0. 0.000017 0. 0. 0.07 -0.9164 0. 0. 0. 1565 220
48105.195 -0.51404 0. -0.084710 0. 0. 0.00059 0. 0.0002″/2 O. 0. 0.12 0.4867 0. 0. 0. 1543 120
48108.023 0.00181 0. -0.077508 0. 0. 0.00266 0. 0.000124 0. 0. 0.17 -0.9094 0. 0. 0. 1563 120
48311.371 -0.49678 0. -0.093461 0. 0. 0.00058 0. 0.000212 0. 0. 0.15 0.2589 0. 0. 0.)543 120
48115.105 0.02364 0. -0.09004″) O. 0. 0.00335 0. 0.000211 0. 0. 0.21 -0.9052 0. 0. 0. 1465 120
48118.340 -0.47920 0. -0.107092 0. 0. 0.00070 0. 0.000211 0. 0. 0.09 0.5826 0. 0. 0.)445 120
48322.08? 0.0412.1 0. -0.099522 0. 0. 0.00299 0. 0.000162 0. 0. 0.12 -0.9153 0. 0. 0. 1465 120
48125.246 -0.45961 0. -0.119524 0. 0. 0.00046 0. 0.000190 0. 0. 0.15 0.0246 0. 0. 0. 1445 120
48129.262 0.07117 0. -0.114325 0. 0. 0.00288 0. 0.000150 0. 0. 0.18 -0.8699 0. 0. 0. 1465 120
48132.418 -0.43730 0. -0.132837 0. 0. 0.00052 0. 0.000181 0. 0. 0.16 -0.3509 0. 0. 0. 1543 120
48136.113 0.08384 0. -0.123327 0. 0. 0.00354 0. 0.000233 0. 0. 0.32 -0.9655 0. 0. 0. 1465 120
48139.344 -0.41550 0. -0.144661 0. 0. 0.00045 0. 0.000149 0. 0. 0.28 0.0750 0. 0. 0. 1543 120
48244.113 0.10514 0. -0.139969 0. 0. 0.00299 0. 0.000209 0. 0. 0.29 -0.9495 0. 0. 0. 1465 120
48147.3″/1 -0.38416 0. -0.160109 0. 0. 0.00052 0. 0.000170 0. 0, 0.27 -0.3563 0. 0. 0. 1445 120
48150.086 0.12848 0. -0.150209 0. 0. 0.00551 0. 0.000354 0. 0. 0.19 -0.9828 0. 0. 0. 1465 120
48154.387 -0.35606 0. -0.1′/4936 O. 0. 0.00069 0. 0.000240 0. 0. 0.30 -0.6104 0. 0. 0. 1543 120
48157.184 0.32358 0. -0.165111 0. 0. 0.00495 0. 0.000289 0. 0. 0.23 -0.9229 0. 0. 0. 1465 120
48158.29-/ 0.12355 0. -0,166955 0. 0. 0.00045 0. 0.000025 0. 0. 0.06 -0.9426 0. 0. 0. 1565 220
48159.7-/0 -0.33712 0. -0.184674 0. 0. 0.00012 0. 0.000042 0. 0. 0.07 -0.0412 0. 0. 0. 1545 220
48160.383 -0.33298 0. -0.185668 0. 0. 0.00114 0. 0.000265 0. 0. 0.12 -0.8277 0. 0. 0. 1543 120
48161.773 0.126″/2 O. -0.172694 0. 0. 0.00037 0. 0.000020 0. 0. 0.07 -0.9381 0. 0. 0. 1565 220
48164.285 -0.31823 0. -0.192797 0. 0. 0.00010 0. 0,000040 0. 0. 0.06 0.0316 0. 0. 0. 1545 220
48164.934 0.13409 0. -0.179389 0. 0, 0.00238 0. 0.000135 0. 0. 0.12 -0.8973 0. 0. 0. 1465 120
48168.406 -0.30404 0. -0.204018 0. 0. 0.00076 0. 0.000271 0. 0. 0.12 -0.6037 0. 0. 0. 1543 120
483″/2.176 0.12619 0. -0.196940 0. 0. 0.00452 0. 0.000231 0. 0. 0.15 -0.9061 0. 0. 0. 14.55 120
48178.418 -0.26379 0. -0.224346 0. 0. 0.00074 0. 0.000266 0. 0. 0.11 -0.6642 0. 0. 0. 1543 120
48179.148 0.13897 0. -0.211618 0. 0. 0.00329 0. 0.000176 0. 0. 0.24 -0.9103 0. 0. 0. 1465 120
48184.922 0.13113 0. -0.223944 0. 0. 0.00658 0. 0.000318 0. 0. 0.08 -0.9676 0, 0. 0. 1465 120
4818″/.492 -0.22848 0. -0.241532 0. 0. 0.00061 0. 0.000214 0. 0. 0.11 -0.4065 0. 0. 0. 1445 120
48192.195 0.12830 0. -0.238136 0. 0. 0.00361 0. 0.000223 0. 0. 0.30 -0.9492 0. 0. 0. 1563 120
48194.402 -0.20871 0. -0.256587 0. 0. 0.0006) O. 0.000243 0. 0. 0.13 -0.5490 0. 0. 0. 1543 120
48196.328 -0.20266 0. -0.262286 0. 0. 0.00016 0. 0.000064 0. 0. 0.08 -0.0249 0. 0. 0. 1545 220
48198.500 0.12980 0. -0.255748 0. 0. 0.00265 0. 0.000123 0. 0. 0.31 -0.9277 0. 0. 0. 1563 120
48203.453 -0.18070 0. -0.276382 0. 0. 0.00059 0. 0.000225 0. 0, 0.15 -0.3577 0. 0. 0. 1543 120
48204.066 0.11568 0. -0.266939 0. 0. 0.00333 0. 0.000192 0. 0. 0.11 -0.8939 0. 0. 0. 1465 120
48206.105 0.31158 0. -0.271953 0. 0. 0.00035 0. 0.000021 0. 0. 0.04 -0.9408 0. 0. 0. 1565 220
4820′/.129 0.11131 0. -0.274722 0. 0. 0.00059 0. 0.000031 0. 0. 0.03 -0.9332 0. 0. 0. 1565 220
48209.492 -0.15759 0. -0.289452 0. 0. 0.00641 0. 0.001662 0. 0. 0.11 0.9395 0. 0. 0. 1543 120
48213.043 0.10529 0. -0.287682 0. 0. 0.00366 0. 0.000161 0. 0. 0.14 -0.8585 0. 0. 0. 1465 120
48216.61″/ -0.14454 0. -0.303065 0. 0. 0.00040 0. 0.000179 0. 0. 0.11 -0.1480 0. 0. 0. 1445 120
48219.785 0.08504 0. -0.300261 0. 0. 0.00232 0. 0.000127 0. 0. 0.21 -0.8819 0. 0. 0. 1465 120

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48223.426  -0.12821 0.  -0.318925 0.  0.  0.00055 0.  0.000208 0.  0.  0.12  -0.1396 0.  0.  0.  1543 120
48230.578  -0.11394 0.  -0.333705 0.  0.  0.00040 0.  0.000172 0.  0.  0.17  -0.1528 0.  0.  0.  1445 120
4823"/.531 -0.10075 0.  -0.348695 0.  0.  0.00062 0.  0.000200 0.  0.  0.22  -0.0457 0.  0.  0.  1543 120
48241.102   0.03239 0.  -0.349296 0.  0.  0.00336 0.  0.000197 0.  0.  0.18  -0.9353 0.  0.  0.  1465 120
48247.156   0.02021 0.  -0.359487 0.  0.  0.00258 0.  0.000212 0.  0.  0.20  -0.8757 0.  0.  0.  1465 120
48251.512 -0.0'/94"/ 0.  -0.372236 0.  0.  0.00051 0.  0.000202 0,  0.  0.16  -0.0043 0.  0.  0.  1445 120
48254.270  -0.00413 0.  -0.376347 0.  0.  0.00258 0.  0.000132 0.  0.  0.17  -0.9000 0.  0.  0.  1465 120
48255.859  -0.01223 0.  -0.379129 0.  0.  0.00038 0.  0.000023 0.  0.  0.06  -0.9181 0.  0.  0.  1565 220
48262.078 -0.03618 0.   0.606494 0.  0.  0.00213 0.  0.000157 0.  0.  0.08  -0.8692 0.  0.  0.  1465 120
48265.492  -0.07488 0.   0.599933 0.  0.  0.00062 0.  0.000303 0.  0.  0.06   0.2630 0.  0.  0.  1543 120
48268.188 -0.05143 0.   0.593061 0.  0.  0.00241 0.  0.000210 0.  0.  0.05  -0.8876 0.  0.  0.  1563 120
48276.148 -0.07868 0.   0.576172 0.  0.  0.00398 0.  0.000195 0.  0.  0.14  -0.9334 0.  0.  0.  1563 120
48279.496  -0.07011 0.   0.5"12677 0.  0.  0.00057 0.  0.000225 0.  0.  0.28   0.0847 0.  0.  0.  1543 120
48283.152 -0.10144 0.   0.561093 0.  0.  0.00172 0.  0.000093 0.  0.  0.16  -0.8843 0.  0.  0.  1563 120
48286.457  -0.07554 0.   0.561076 0.  0.  0.00043 0.  0.000383 0.  0.  0.12   0.0118 0.  0.  0.  1543 120
48293.539  -0.07729 0.   0.545284 0.  0.  0.00040 0,  0.000167 0.  0.  0.13   0.3172 0.  0.  0.  1443 120
48297.230 -0.15969 0.   0.530585 0.  0.  0.00182 0.  0.000105 0.  0.  0.22  -0.8270 0.  0.  0.  1463 120
48298.418 -0.16214 0.   0.528366 0.  0.  0.00029 0.  0.000017 0.  0.  0.04  -0.9236 0.  0.  0.  1565 220
48301.47-/ -0.08445 0.   0.531544 0.  0.  0.00059 0.  0.000252 0.  0.  0.35   0.0413 0.  0.  0.  1443 122
48304.250  -0.18500 0.   0.514185 0.  0.  0.00257 0.  0.000133 0.  0.  0.17  -0.9226 0.  0.  0.  1463 120
48308.250  -0.10004 0.   0.516550 0.  0.  0.00041 0.  0.000197 0.  0.  0.08   0.1516 0.  0.  0.  1443 120
48311.223  -0.21450 0.   0.499016 0.  0.  0,00166 0.  0.000077 0.  0.  0.11  -0.9118 0.  0.  0.  1463 120
48314.496  -0.11185 0.   0.504052 0.  0.  0.00040 0.  0.000179 0.  0.  0.13   0.1991 0.  0.  0.  1443 120
48318.496  -0.23551 0.   0.479377 0.  0.  0.00254 0.  0.000141 0.  0.  0.11  -0.9510 0.  0.  0.  1463 120
4832.2.28] -0.12941 0.   0.485957 0.  0.  0.00041 0.  0.000161 0.  0.  0.18   0.0059 0.  0.  0.  1443 120
48324.863  -0.26169 0.   0.467114 0.  0.  0.00198 0.  0.000118 0.  0.  0.12  -0.9165 0.  0.  0.  1463 120
48330.234  -0.15480 0.   0.470989 0.  0.  0.00039 0.  0.000351 0.  0.  0.13  -0.2032 0.  0.  0.  1443 120
48331.410  -0.28223 0.   0.452235 0.  0.  0.00173 0.  0.000085 0.  0.  0.25  -0.9143 0.  0.  0.  1463 120
48335.203 -0.1695-/ 0.   0.458244 0.  0.  0.00040 0.  0.000167 0.  0.  0.13  -0.0872 0.  0.  0.  1443 120
48339.426  -0.30856 0.   0.433285 0.  0.  0.00458 0.  0.000340 0.  0.  0.14  -0.9445 0.  0.  0.  1463 120
48345.555  -0.20446 0.   0.434684 0.  0.  0.00023 0.  0.000102 0.  0.  0.13  -0.0992 0.  0.  0.  1545 220
48346.461  -0.32920 0.   0.414569 0.  0,  0.0017"/ 0.  0.000105 0.  0.  0.17  -0.8842 0.  0.  0.  1463 120
48348.105  -0.21459 0.   0.428659 0.  0.  0.00008 0.  0.000034 0.  0.  0.05   0.0313 0.  0.  0.  1545 220
48349.344  -0.21966 0.   0.426280 0,  0.  0.00032 0.  0.000141 0.  0.  0.13   0.0404 0.  0.  0.  1443 120
48353.125  -0.34675 0.   0.400678 0.  0.  0.00042 0.  0.000023 0.  0.  0.05  -0.9320 0.  0.  0.  1565 220
48353.379  -0.34526 0.   0.399994 0.  0.  0.00192 0.  0.000100 0.  0.  0.24  -0.9047 0.  0.  0.  1463 120
48355.594  -0.35321 0.   0.395536 0.  0.  0.00043 0.  0.000027 0.  0.  0.07  -0.9078 0.  0.  0.  1565 220
48359.926  -0.35779 0.   0.384247 0.  0.  0.00182 0.  0.000087 0.  0.  0.09  -0.9474 0.  0.  0.  1463 120
4836"/.3"/9 -0.3686"/ 0.   0.367984 0.  0.  0.00238 0.  0.000120 0.  0.  0.11  -0.8074 0.  0.  0.  1463 120
48370.371 -0.30275 0.   0.379254 0.  0.  0.00044 0.  0.000215 0.  0.  0.13   0.3089 0.  0.  0.  1543 120
48?/4.328 -0.3784"/ 0.   0.349586 0.  0.  0.00209 0.  0.000098 0.  0.  0.07  -0.9301 0.  0.  0.  1463 120
48377.273 -0.32721 0.   0.362226 0.  0.  0.00034 0.  0.000146 0.  0.  0.10   0.1130 0.  0.  0.  1443 120
48380.371  -0.38444 0.   0.337455 0.  0.  0.00204 0,  0.000120 0.  0.  0.12  -0.8698 0.  0.  0.  1563 120
48384.316  -0.35516 0.   0.347194 0.  0.  0.00038 0.  0.000177 0.  0.  0.26   0.0686 0.  0.  0.  1443 120
48388.230  -0.38939 0.   0.317823 0.  0.  0.00218 0.  0.000099 0.  0.  0.09  -0.9423 0.  0.  0.  1463 120
48391.336  -0.38325 0.   0.328441 0.  0.  0.00040 0.  0.000145 0.  0.  0.09   0.0819 0.  0.  0.  1443 120
48393.250  -0.39198 0.   0.324222 0.  0.  0,00010 0.  0.000055 0.  0.  0.10  -0.1]63 0.  0.  0.  ]545 220
48395."/11 -0.40141 0.   0.318627 0.  0.  0.00007 0.  0.000035 0.  0.  0.06  -0.0314 0.  0.  0.  1545 220
48395.793  -0.38620 0.   0.300999 0.  0.  0.00178 0.  0.000083 0.  0.  0.12  -0.9209 0.  0.  0.  1463 120
48400.355  -0.41718 0.   0.307611 0.  0.  0.00048 0.  0.000205 0.  0.  0.13   0.3436 0.  0.  0.  1543 120
4840).395  -0.37653 0.   0.288620 0.  0.  0.00283 0.  0.000219 0.  0.  0.13  -0.9241 0.  0.  0.  1465 120
48403.887  -0.37462 0.   0.284908 0.  0.  0.00025 0.  0.000013 0.  0.  0.06  -0.9190 0.  0.  0.  1565 220
48407.531  -0,44362 0.   0.295620 0.  0.  0.00058 0.  0.000208 0.  0.  0.08   0.2764 0.  0.  0.  1445 120
48408.176  -0.37559 0.   0.279410 0.  0.  0.00244 0.  0.000157 0.  0.  0.45  -0.8861 0.  0.  0.  1465 120
48412.523  -0.46022 0.   0.285902 0.  0.  0.00053 0.  0.000176 0.  0.  0.10   0.2566 0.  0.  0.  1443 120
48415.250  -0.35938 0.   0.264227 0.  0.  0.00225 0.  0.000137 0.  0.  0.)4  -0.9174 0.  0.  0.  1465 120
48419.371  -0.48432 0.   0.269341 0.  0.  0.00024 0.  0.000138 0.  0.  0.05   0.4242 0.  0.  0.  1443 120
48423.258  -0.34245 0.   0.247969 0.  0.  0.00151 0.  0.000083 0.  0.  0,09  -0.8965 0.  0.  0.  1465 120
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48426.371  -0.50505 0.   0.253512 0. 0. 0.00028 0.  0.000152 0. 0. 0.05 0.3496 0. 0. 0. 1443 120
48428.465 -0.5096"/ 0.   0.249638 0. 0. 0.00013 0.  0.000057 0. 0. 0.10 0.1210 0. 0. 0. 1545 220
48430.355  -0.33116 0.   0.235026 0. 0.  0.00108 0.  0.000069 0. 0. 0.06 -0.8201 0. 0. 0. 1463 120
48433.332  -0.51940 0.   0.243355 0. 0. 0.00024 0.  0.000136 0. 0. 0.06 0.4032 0. 0. 0. 1443 120
48437.723  -0.31553 0.   0.228203 0. 0. 0.00031 0.  0.000018 0. 0. 0.06 -0.8956 0. 0. 0. 1565 220
48442.609  -0.54075 0.   0.230441 0. 0. 0.00037 0.  0.000123 0. 0. 0.05 -0.5256 0. 0. 0. 1443 120
48444.934  -0.29557 0.   0.218215 0. 0. 0.0012"/ o.  0.000055 0. 0.  0.06 -0.8982 0. 0. 0. 1463 120
48446.633  -0.54663 0.   0.225085 0. 0. 0.00041 0.  0.000144 0. 0. 0.11 -0.5330 0. 0. 0. 1443 120
48450.715  -0.27202 0.   0.211812 0. 0. 0.00199 o.  0.000088 0. 0. 0.12 -0.9343 0. 0. 0. 1463 120
48452.898 -0.55735 0.   0.214423 0. 0. 0.00027 0.  0.000113 0. 0. 0.08 0.0033 0. 0. 0. 1443 120
48457.500  -0.25251 0.   0.201473 0. 0. 0.00156 0.  0.000092 0. 0. 0.10 -0.9299 0. 0. 0. )463 120
48462.426 -0.56831 0.   0.200844 0. 0, 0.00026 0.  0.000111  0. 0. 0.05 0.2860 0. 0. 0. )443 120
48465.016 -0.22067 0.   0.194121  0. 0. 0.00166 0.  0.000071  0. 0. 0.08 -0.9566 0. 0. 0. 1463 120
48468.527 -0.57368 0.   0.190955 0. 0.  0.00033 0.  0.000)05 0. 0. 0.08 -0.4159 0. 0. 0. 1443 120
48473.020 -0.19442 0.   0.183419 0. 0. 0.00112 0.  0.000057 0. 0. 0.07 -0.9253 0. 0. 0. 1463 120
484'/4.828 -0.57239 0.   0.183174 0. 0. 0.00037 0.  0.000177 0. 0. 0.08 -0.0305 0. 0. 0. 1445 120
48479.195 -0.17029 0.   0.175966 0. 0. 0.00264 0.  0.000208 0. 0. 0.12 -0.9162 0. 0. 0, 1465 120
48481.527  -0.57038 0.   0.170796 0. 0. 0.00057 0.  0.000182 0. 0. 0.06 -0.7014 0. 0. 0. 1445 120
48486.191 -0.14957 0.   0.164959 0. 0. 0.00196 0.  0.000135 0. 0. 0.16 -0.9438 0. 0. 0. 1465 120
48490.371 -0.56006 0.   0.157520 0. 0. 0.00030 0.  0.000161  0. 0. 0.07 0.1658 0. 0. 0. 1443 120
48492.516  -0.12703 0.   0.157232 0. 0. 0.00026 0.  0.000013 0. 0. 0.07 -0.9248 0. 0. 0. 1565 220
48493.090 -0.13104 0.   0.156525 0. 0. 0.00168 0.  0.000105 0. 0. 0.15 -0.8954 0. 0. 0. 1463 120
48496.504 -0.55226 0.   0.145538 0. 0.  0.00034 0.  0.000131  0. 0. 0.11 -0.6094 0. 0. 0. 1443 120
48499.785 -0.54821 0.   0.1392.38 0. 0. 0.00006 0.  0.000029 0. 0. 0.07 -0.0086 0. 0. 0. 1545 220
48500.340  -0.10225 0.   0.142611  0. 0. 0.00157 0.  0.000084 0. 0. 0.08 -0.9511 0. 0. 0. 1463 120
48504.352  -0.54201 0.   0.130148 0. 0. 0.00027 0.  0.000093 0. 0. 0.11 0.0522 0. 0. 0. 1443 120
48511.332  -0.53160 0.   0.111995 0. 0. 0.00026 0.  0.000099 0. 0. 0.05 0.0581 0. 0. 0. 1443 120
48513.688  -0.06030 0.   0.114217 0. 0. 0.00127 0.  0.000061 0. 0. 0.06 -0.8679 0. 0. 0. 1463 120
48518.332  -0.5)620 0.   0.098986 0. 0. 0.00025 0.  0.000093 0. 0. 0.06 0.1278 0. 0. 0. 1443 120
48520.355  -0.03605 0.   0.102706 0. 0.  0.00230 0.  0.000080 0. 0.  0.34 -0.9160 0. 0. 0. 1463 120
48524.645  -0.50244 0.   0.083881  0. 0. 0.00031 0.  0.000134 0. 0. 0.06 0.3894 0. 0. 0. 1443 120
48527.559 -0.01446 o.  0.085946 0. 0.  0.00141 0.  0.000057 0. 0. 0.18 -0.8077 0. 0. 0. 1463 120
48531.641 -0.48417 0.   0.068398 0. 0.  0.0002"/ o.  0.000120 0. 0. 0.04  0.3182 0. 0. 0. 1443 120
48534.391  0.00347 0.   0.071390 0. 0. 0.0010'/ o.  0.000056 0. 0. 0.10 -0.8895 0. 0. 0. 1463 120
48535.727  -0.47277 0.   0.057879 0. 0. 0.00006 0.  0.000028 0. 0. 0.07  0.0599 0. 0. 0. 1545 220
48537.586  -0.46601 0.   0.053127 0. 0. 0.00028 0.  0.000133 0. 0. 0.04  0.4215 0.  0. 0. 1443 120
48542.402  0.02159 0.   0.054513 0. 0. 0.00103 0.  0.000050 0. 0. 0.05 -0.8967 0. 0. 0. 1463 120
48545.652  -0.44116 0.   0.038630 0. 0. 0.00025 0.  0.000092 0. 0. 0.06 -0.0431 0. 0. 0. 1443 120
48549.180  0.03691 0.   0.043072 0. 0. 0.00181 0.  0.000088 0. 0. 0,09 -0.9074 0. 0. 0. 1463 120
48551.707  -0.42206 0.   0.025852 0. 0.  0.00025 0.  0.000095 0. 0. 0.07 -0.2233 0. 0. 0. 1443 120
48556.309  0.03723 0.   0.028277 0. 0. 0.00253 0.  0.000127 0. 0. 0.02 -0.9581 0. 0. 0. 1463 120
48560.625  -0.39434 0.   0.006958 0. 0. 0.00023 0.  0.000094  0. 0. 0.10 0.0094 0. 0. 0. 1443 120
48562.262  0.05455 0.   0.013877 0. 0. 0.00119 0.  0.000062 0. 0. 0.04 -0.9012 0. 0. 0. 1463 120
48565.3'/1 -0.38303 0.  -0.006279 0. 0.  0.00028 0.  0.000112 0. 0. 0.13 -0.1658 0. 0. 0. 1443 120
48571.043  0.06817 0.  -0.005473 0. 0. 0.00022 0.  0.000012 0. 0. 0.06 -0.9091 0. 0. 0. 1565 220
48576.246  0.06873 0.  -0.016826 0. 0. 0.00100 0.  0.000047 0. 0. 0.08 -0.8786 0. 0. 0. 1463 120
48577.465  -0.34647 0.  -0.031980 0. 0. 0.00006 0.  0.000027 0. 0. 0.08 0.0505 0. 0. 0. 1545 220
48580.355  -0.33758 0.  -0.039453 0.  0. 0.00026 0.  0.000096 0. 0. 0.08 -0.3180 0. 0. 0. 1443 120
48584.242  0.07586 0.  -0.035658 0. 0. 0.00)01 o.  0.000053  0. 0. 0.04 -0.9111 0. 0. 0. 1463 120
48588.645  -0.30976 0.  -0.058748 0. 0. 0.00021 0.  0.000104  0. 0. 0.0"/ -0.1982 0. 0. 0. 1443 120
48592.125  0.08361 0.  -0.056946 0. 0. 0.00112 0.  0.000061  0. 0. 0.11 -0.9118 0. 0. 0. 1463 120
48594.516  -0.29284 0.  -0.074300 0. 0. 0.00025 0.  0.000091  0. 0. 0.05 -0.0083 0. 0. 0. 1443 120
48599.250  0.08077 0.  -0.071894 0. 0.  0.00107 0.  0.000052 0. 0. 0.11 -0.9000 0. 0. 0. 1463 120
48600.594  -0,27257 0.  -0.085827 0. 0. 0.00024 0.  0.000089 0. 0. 0.08 -0.0597 0. 0. 0. 1443 120
48604.207  0.07932 0.  -0.083724 0. 0. 0.00183 ().  0.000116 0. 0. 0.57 -0.829) 0. 0. 0. 1463 120
48607.547  -0.25092 0.  -0.102608 o. 0.  0.00025 0.  0.000083 0. 0. 0.11 -0.0931 0. 0. 0. 1443 120
48613.090  0.07807 D.  -0.103642 0. 0. 0.00124 0.  0.000063  0. 0. 0.06 -0.9190 0. 0. 0. 1463 120
48613.480  0.07631 o.  -0.104461 0. 0. 0.00024 0.  0.000013 0. 0. 0.07 -0.9347 0. 0. 0. 1565 220
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48616.586 -0.22707 0. -0.12171) O, 0. 0.00028 0. 0.000102 0. 0. 0.04 -0.1387 0. 0. 0. 1443 120
481520,270 0.0″)305 o. -0.121194 0. 0. 0.00081 0. 0.000042 0. 0. 0.05 -0.8280 0. 0. 0. 1463 120
4862).426 -0.21534 0. -0.132434 0. 0. 0.00031 0. 0.000106 0. 0. 0.09 0.1069 0. 0. 0. 1443 120
48625.484 -0.20374 0. -0.139424 0. 0. 0.00007 0. 0.000032 0. 0. 0.06 0.0110 0. 0. 0. 1545 220
48627.129 0.06472 0. -0.133938 0. 0. 0.00119 0. 0.000058 0. 0. 0.06 -0.9186 0. 0. 0. 1463 120
48628.512 -0.19630 O. -0.145342 0. 0. 0.0002.4 0. 0.000(185 O. 0. 0.07 -0.0445 0. 0. 0. 1443 120
48633.125 0.05464 0. -0.148805 0. 0. 0.00108 0. 0.000051 0. 0. 0.06 -0.9151 0. 0. 0. 1463 120
48635.387 -0.18079 0. -0.161844 0. 0. 0.00029 0. 0.000101 0. 0. 0.05 0.1744 0. 0. 0. 1443 120
48640.160 0.04201 0. -0.165435 0. 0. 0.00129 0. 0.000060 0. 0. 0.03 -0.9576 0. 0. 0. 1463 120
48642.391 -0.16551 0. -0.177678 0. 0. 0.00028 0. 0.000096 0. 0. 0.11 0.0140 0. 0. 0. 1443 120
48647.145 0.02967 0. -0.186034 0. 0. 0.00132 0. 0.000057 0. 0. 0.06 -0.9442 0. 0. 0. 1463 120
48649.438 -0.15201 0. -0.196230 0. 0. 0.00023 0. 0.000080 0. 0. 0.03 -0.1532 0. 0. 0. 1443 120
48653.133 0.01891 0. -0.199301 0. 0. 0.00098 0. 0.000044 0. 0. 0.04 -0.9216 0. 0. 0. 1463 120
48654.484 0.02776 0. -0.202411 0. 0. 0.00017 0. 0.000010 0. 0. 0.07 -0.9095 0. 0. 0. 1565 220
48657.297 -0.14095 0. -0.213117 0. 0. 0.00026 0. 0.000115 0. 0. 0.05 0.346″/ O. 0. 0. 1443 120
48658.090 0.01091 0. -0.211636 0. 0. 0.00121 0. 0.000051 0. 0. 0.07 -0.9207 0. 0. 0. 1463 1′20
48664.344 -0.13150 0. -0.229891 0. 0. 0.00024 0. 0.000090 0. 0. 0.16 -0.0981 0. 0. 0. 1443 120
48668.016 -0.01256 0. -0,235415 0. 0. 0.00104 0. 0.000045 0. 0. 0.05 -0.9129 0. 0. 0. 1463 120
48671.445 -0.12516 0. -0.245964 0. 0. 0.00026 0. 0.000100 0. 0. 0.08 -0.1567 0. 0. 0. 1445 120
48675.578 -0.03365 0. -0.256138 0. 0. 0.00117 0. 0.000056 0. 0. 0.04 -0.8531 0. 0. 0. 1463 120
48(,79.129 -0.11787 0. -0.262976 0. 0. 0.00066 0. 0.000242 0. 0. 0.10 -0.4823 0. 0. 0. 1445 120
48681.641 -0.05384 0. -0.268592 0. 0. 0.00355 0. 0.000165 0. 0. 0.05 -0.9479 0. 0. 0. 1463 120
48687.246 -0.11095 0. -0.280613 0. 0. 0.00032 0. 0.000119 0. 0. 0.08 0.1580 0. 0. 0. 1445 120
48(,89.270 -0.07742 0. -0.288746 0. 0. 0.00122 0. 0.000064 0. 0. 0.08 -0.9114 0. 0. 0. 1463 120
48(93.543 -0.110″)2 O. -0.295777 0. 0. 0.00024 0. 0.000094 0. 0. 0.04 0.1077 0. 0. 0. 1443 120
48[95.730 -0.11269 0. -0.301214 0. 0. 0.00006 0. 0.000027 0. 0. 0.10 -0.03′29 0. 0. 0. 1545 220
4869″/.016 -0.10138 0. -0.309446 0. 0. 0.00123 0. 0.000060 0. 0. 0.07 -0.8888 0. 0. 0. 1463 120
48700.457 -0.11690 0. -0.316216 0. 0. 0.00021 0. 0.000097 0. 0. 0.05 0.2162 0. 0. 0. 1443 120
48′/02.363 -0.12207 0. -0.327628 0. 0. 0.00022 0. 0.000011 0. 0. 0.07 -0.9239 0. 0. 0. 1565 220
48703.277 -0.12559 0. -0.330283 0. 0. 0.00130 0. 0.000059 0. 0. 0.13 -0.9132 0. 0. 0. 1463 120
48703.648 -0.11950 0. -0.3252,26 0. 0. 0.00005 0. 0.000022 0. 0. 0.09 0.0140 0. 0. 0. 1545 220
48705.512 -0.12147 0. -0.329675 0. 0. 0.00024 0. 0.000095 0. 0. 0.06 0.0942 0. 0. 0. 1443 120
48709.215 -0.1435″/ O. -0.345262 0. 0. 0.00019 0. 0.000010 0. 0. 0.06 -0.9226 0. 0. 0. 1565 220
48711.090 -0.15143 0. -0.350378 0. 0. 0.00148 0. 0.000058 0. 0. 0.14 -0.9127 0. 0. 0. 1463 120
48″/14.406 -0.13647 0. -0.352498 0. 0. 0.00021 0. 0.000088 0. 0. 0.07 0.0591 0. 0. 0. 1443 120
48716.250 -0.13787 0. -0.357579 0. 0. 0.00005 0. 0.000022 0. 0. 0.06 -0.0693 0. 0. 0. 1545 220
48717.066 -0.16716 0. -0.36″)874 O. 0. 0.00144 0. 0.000064 0. 0. 0.13 -0.9102 0. 0. 0. 1463 120
48721.391 -0.14426 0. -0.369770 0. 0. 0.00021 0. 0.000089 0. 0. 0.04 0.1007 0. 0. 0. 1443 120
48723.008 -0.14693 0. -0.373708 0. 0. 0.00004 0. 0.000021 0. 0. 0.06 -0.0305 0. 0. 0, 1545 220
48″/23.945 -0.17850 0. -0.385624 0. 0. 0.00117 0. 0.000051 0. 0. 0.04 -0.9448 0. 0. 0. 1463 120
48725.566 -0.18508 10. -0.390789 0. 0. 0.00025 0. 0.000013 0. 0. 0.08 -0.9284 0. 0. 0. 1565 220
48726.453 -0.15393 0. -0.384308 0. 0. 0.00024 0. 0.000095 0. 0. 0.04 0.1074 0. 0. 0. 1443 120
48730.828 -0.16227 0. -0.397755 0. 0. 0.00005 0. 0.000022 0. 0. 0.07 0.0124 0. 0. 0. 1545 220
48731.047 -0.20278 10. -0.408583 0. 0. 0.00114 0. 0.000051 0. 0. 0.04 -0.9167 0. 0. 0. 1463 120
48732.383 -0.20509 10. -0.411841 0. 0. 0.00022 0. 0.000012 0. 0. 0.10 -0.9093 0. 0. 0. 1565 220
48735.38′/ -0.16968 0. -0.407711 0. 0. 0.00023 0. 0.000098 0. 0. 0.04 0.1869 0. 0. 0. 1443 120
48737.098 -0.21640 0. -0.422621 0. 0. 0.00121 0. 0.000051 0. 0. 0.06 -0.9125 0. 0. 0. 1463 120
48′/40.414 -0.17852 (). -0.420146 0. 0. 0.00024 0. 0.000098 0. 0. 0.12 0.074′/ O. 0. 0. 1443 120
48745.000 -0.23787 (). -0.443361 0. 0. 0.00123 0. 0.000054 0. 0. 0.05 -0.9198 0. 0. 0. 1463 120
48748.371 -0.19219 (). -0.437639 0. 0. 0.00023 0. 0.000204 0. 0. 0.05 0.2410 0. 0. 0. 1443 120
48752.090 -0.20182 (). -0.446019 0. 0. 0.00006 0. 0.000023 O. 0. 0.08 -0.0665 0. 0. 0. 1545 220
48755.375 -0.20920 (). -0.454700 0, 0. 0.00024 0. 0.000096 0. 0. 0.09 0.1104 0. 0. 0. 1443 120
48759.301 -0.2″/040 (). -0.476998 0. 0. 0.00110 0. 0.000055 0. 0. 0.07 -0.9250 0. 0. 0. 1463 120
48′/60.359 -0.21875 (). -0.465360 0. 0. 0.00024 0. 0.000096 0. 0. 0.14 0.1015 0. 0. 0. 1443 120
48769.391 -0.23983 0. -0.484086 0. 0. 0.00030 0. 0.000107 0. 0. 0.04 0.4529 0. 0. 0. 1443 120
487″/3.168 -0.28966 0. -0.505943 0, 0. 0.00102 0. 0.000045 0. 0. 0.06 -0.9043 0. 0. 0. 1463 120
48780.03) -0.29902 0. -0.517902 0. 0. 0.00107 0. 0.000048 0. 0. 0.22 -0.8861 0. 0. 0. 1463 120
48785.371 -0.27626 0. -0.513808 0. 0. 0.00024 0. 0.000100 0. 0. 0.12 0.295?, O. 0. 0. 1443 120

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48″/87.082 -0.30505 0.  -0.530580 0. 0. 0.00150 0. 0.000076 O. 0. 0.11 -0.9028 0. 0. 0. 1463 120
48′/90.582 -0.29075 0.  -0.520873 0. 0. 0.00027 0. 0.000094 0. 0. 0.08 0.1066 0. 0. 0. 1443 120
48′)92.988 -0.31050 0.  -0.539288 0. 0. 0.00105 0. 0.000047 0. 0. 0.08 -0.9139 0. 0. 0. 1463 120
48′197.375 -0.30742 0.  -0.532307 0. 0. 0.0002.2 0. 0.000090 0. 0. 0.09 0.0740 0. 0. 0. 1443 120
48805.449 -0.32901 0.   0.456177 0. 0. 0.00041 0. 0.000151 0. 0. 0.07 0.1722 0. 0. 0. 1543 120
48807.402 -0.31915 0.   0.438614 0. 0. 0.00263 0. 0.000132 0. 0. 0.25 -0.9596 0. 0. 0. 1563 120
48808.852 -0.33843 0.   0.450190 0. 0. 0.00009 0. 0.000036 0. 0. 0.12 -0.2478 0. 0. 0. 1545 220
48811.527 -0.34488 0.   0.446078 0. 0. 0.00033 0. 0.000105 0. 0. 0.08 0.0872 0. 0. 0. 1543 120
48815.105 -0.31357 0.   0.428239 0. 0. 0.00186 0. 0.000109 0. 0. 0.32 -0.8774 0. 0. 0. 1563 120
48817.602 -0.35990 0.   0.440255 0. 0. 0.00059 0. 0.000165 0. 0. 0.09 -0.5327 0. 0. 0. 1543 120
48822.469 -0.31509 0.   0.420220 0. 0. 0.00142 0. 0.000068 0. 0. 0.08 -0.9048 0. 0. 0. 1563 120
48824.500 -0.37707 0.   0.429888 0. 0. 0.00070 0. 0.000302 0. 0. 0.02 -0.5331 0. 0. 0. 1543 120
48828.746 -0.309.22 0.  0.411076 0. 0. 0.00129 0. 0.000053 0. 0. 0.07 -0.9218 0. 0. 0. 1463 120
48831.469 -0.39479 0.   0.419856 0. 0. 0.00061 O. 0.000156 0. 0. 0.10 0.1542 0. 0. 0. 1443 120
48[136.867 -0.30652 0.  0.397465 0. 0. 0.00124 0. 0.000054 0. 0. 0.13 -0.9034 0. 0. 0. 1463 120
48838.344 -0.41217 0.   0.406879 0. 0. 0.00044 0. 0.000173 0. 0. 0.13 0.2590 0. 0. 0. 1443 120
48[)43.676 -0.30408 0.  0.387715 0. 0. 0.00208 0. 0.000115 0. 0. 0.29 -0.8253 0. 0. 0. 1463 120
48845.539 -0.43279 0.   0.396100 0. 0. 0.00039 0. 0.000124 0. 0. 0.08 -0.3466 0. 0. 0. 1443 120
48852.449 -0.44855 0.   0.383183 0. 0. 0.00036 0. 0.000117 0. 0. 0.06 -0.1612 0. 0. 0. 1543 120
48[156.504 -0.28874 0.  0.366068 0. 0. 0.0012′/ o. 0.000059 0. 0. 0.07 -0.8847 0. 0. 0. 1563 120
48857.594 -0.28279 0.   0.364244 0. 0. 0.00023 0. 0.000013 0. 0. 0.06 -0.9216 0. 0. 0. 1565 220
48859.453 -0.46394 0.   0.370133 0. 0. 0.00027 0. 0.000104 0. 0. 0.04 -0.3028 0. 0. 0. 1443 120
48863.660 -0.26950 0.   0.350338 0. 0. 0.00172 0. 0.000070 0. 0. 0.06 -0.9497 0. 0. 0. 1463 120
48866.434 -0.47343 0.   0.350894 0. 0. 0.00370 O. 0.000861 0. 0. 0.27 -0.6363 0. 0. 0. 1443 120
488″/0.730 -0.25730 0.  0.337250 0. 0. 0.00171 0. 0.000090 0. 0. 0.06 -0.9079 0. 0. 0. 1463 120
48875.430 -0.48832 0.   0.336093 0. 0. 0.00041 0. 0.000116 0. 0. 0.04 -0.3808 0. 0. 0. 1443 120
488′/7.281 -0.24596 0.  0.325493 0. 0. 0.00119 0. 0.000058 0. 0. 0.06 -0.9386 0. 0. 0. 1463 120
48881.332 -0.49381 0.   0.323262 0. 0. 0.00029 0. 0.000096 0. 0. 0.07 0.0593 0. 0. 0. 1443 120
48884.2-/″/ -0.23478 0. 0.312581 0. 0. 0.00106 0. 0.000054 0. 0. 0.10 -0.9265 0. 0. 0. )463 120
48887.242 -0.22700 0.   0.307312 0. 0. 0.00028 0. 0.000015 0. 0. 0.07 -0.9070 0. 0. 0. 1565 220
48889.250 -0.49864 0.   0.307523 0. 0. 0.00032 0. 0.000132 0. 0. 0.08 0.3445 0. 0. 0. 1443 120
48891.223 -0.22034 0.   0.297564 0. 0. 0.0010S O. 0.000052 0. 0. 0.14 -0.9196 0. 0. 0. 1463 120
48895.551 -0.49921 0.   0.291356 0. 0. 0.00025 0. 0.000103 0. 0. 0.05 -0.1354 0. 0. 0. 1443 120
48898.711 -0.20253 0.   0.281998 0. 0. 0.00161 0. 0.000068 0. 0. 0.24 -0.9142 0. 0. 0. 1463 120
48902.574 -0.50252 o.   0.276521 0. 0. 0.00038 0. 0.000152 0. 0. 0.03 0.4506 0. 0. 0. 1443 120
48$,05.594 -0.18770 0.  0.266685 0. 0. 0.00103 0. 0.000045 0. 0. 0.08 -0.9085 0. 0. 0. 1463 120
48912.289 -0.16730 0.   0.251889 0. 0. 0.00113 0. 0.000049 0. 0. 0.04 -0.9258 0. 0. 0. 1563 120
48917.164 -0.50176 o.   0.239387 0. 0. 0.00029 0. 0.000112 0. 0. 0.05 0.2687 0. 0. 0. 1443 120
48919.164 -0.15049 0.   0.232755 0. 0. 0.00105 0. 0.000054 0. 0. 0.08 -0.9347 0. 0. 0. 1463 120
48923.336 -0.49942 0.   0.221327 0. 0. 0.00042 0. 0.000128 0. 0. 0.07 -0.4147 0. 0. 0. 1443 120
48926.250 -0.14001 0.   0.215848 0. 0. 0.00108 0. 0.000045 0. 0. 0.06 -0.9325 0. 0. 0. )463 120
48<,27.]97 -0.49563 o.  0.211111 0. 0. 0.00005 0. 0.000024 0. 0. 0.07 -0.1414 0. 0. 0. 1545 220
48933.832 -0.12126 0.   0.197677 0. 0. 0.00182 0. 0.000091 0. 0. 0.10 -0.8943 0. 0. 0. 1465 120
48937.828 -0.48620 0.   0.185896 0. 0. 0.00027 0. 0.000102 0. 0. 0.05 0.3302 0. 0. 0. 1443 120
48$,39.484 -0.10686 o.  0.185148 0. 0. 0.00135 0. 0.000063 0. 0. 0.09 -0.8949 0. 0. 0. 1563 120
48942.055 -0.48376 0.   0.176022 0. 0. 0.00005 0. 0.000027 0. 0. 0.07 -0.0467 0. 0. 0. 1545 220
48944.789 -0.48185 o.   0.167894 0. 0. 0.00029 0. 0.000103 0. 0. 0.07 0.2006 0. 0. 0. 1543 1?.0
48947.426 -0.08655 0.   0.163578 0. 0. 0.00131 0. 0.000064 0. 0. 0.09 -0.9021 0. 0. 0. 1563 120
48948.613 -0.08403 o.   0.160422 0. 0. 0.00022 0. 0.000014 0. 0. 0.08 -0.9003 0. 0. 0. 1565 220
48951.430 -0.47396 0.   0.149613 0. 0. 0.00035 0. 0.000140 0. 0. 0.09 0.2534 0. 0. 0. 1543 120
48955.066 -0.07331 o.   0.146193 0. 0. 0.00102 0. 0.000052 0. 0. 0.04 -0.9333 0. 0. 0. 1463 120
48957.672 -0.46132 o.   0.135006 0. 0. 0.00025 0. 0.000095 0. 0. 0.08 -0,1630 0. 0. 0. 1445 120
48962.074 -0.06155 0.   0.128197 0. 0. 0.00138 0. 0.000065 0. 0. 0.12 -0.9129 0. 0. 0, 1465 120
48966.207 -0.44749 0.   0.112633 0. 0. 0.00039 0. 0.000129 0. 0. 0.12 -0.4182 0. 0. 0. 1445 120
48968.8-/1 -0.04297 0.  0.111354 0. 0. 0.00160 0. 0.000086 0. 0. 0.22 -0.8664 0. 0. 0. 1463 120
48972.477 -0.43727 0.   0.094658 0. 0. 0.00030 0. 0.000115 0. 0. 0.06 0.0605 0. 0. 0. 1543 120
48975.641 -0.03430 0.   0.092121 0. 0. 0.00129 0. 0.000065 0. 0. 0.07 -0.9167 0. 0. 0. 1563 120
48977.027 -0.42703 0.   0.082211 0. 0. 0.00006 0. 0.000026 0. 0. 0.07 0.0147 0. 0. 0. 1545 220
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48980.340 -0.41908 0. 0.075408 0. 0. 0.00085 0. 0.000432 0. 0. 0.02 -0.6931 0. 0. 0. 1443 120
48983.164 -0.01627 0. 0.076095 0. 0. 0.00224 0. O.OOC1099 O. 0. 0.03 -0.8896 0. 0. 0. 1463 120
48983.625 -0.01585 0. 0.075020 0. 0. 0.00023 0. 0.000013 0. 0. 0.08 -0.9065 0. 0. 0. 1565 220
48997.133 0.01460 0. 0.040018 0. 0. 0.00093 0. 0.000039 0. 0. 0.08 -0.9110 0. 0. 0. 1463 120
49000.391 -0.37133 0. 0.022392 0. 0. 0.00054 0. 0.000176 0. 0. 0.09 0.4175 0. 0. 0. 1443 120
49004.516 0.02200 0. 0.019797 0. 0. 0.00106 0. 0.000049 0. 0. 0.08 -0.8917 0. 0. 0. 1463 120
49007.)76 -0.35410 0. 0.004908 0. 0. 0.00059 0. 0.000190 0. 0. 0.15 0.1403 0. 0. 0. 1443 122
49011,621 0.02962 0. 0.004298 0. 0. 0.00133 0. 0.000068 0. 0. 0.02 -0.9262 0. 0. 0. 1463 120
49018,63″/ 0.03624 0. -0.014460 0. 0. 0.00114 0. 0.000056 0. 0. 0.05 -0.8749 0. 0. 0. 1463 120
49021.070 -0.31798 0. -0.029519 0. 0. 0.00040 0. 0.000119 0. 0. 0.07 -0.2678 0. 0. 0. 1443 120
49025.059 0.04171 0. -0.030938 0. 0. 0.00093 0. 0.000039 0. 0. 0.05 -0.9119 0. 0. 0. 1463 120
49028.309 -0.30119 0. -0.050898 0. 0. 0.00027 0. 0.000112 0. 0. 0.07 0.1259 0. 0. 0. 1443 120
49030.602 -0.2.9535 0. -0.057665 0. 0. 0.00007 0. 0.000032 0. 0. 0.10 -0.0765 0. 0. 0. 1545 220
49031.961 0.04538 0. -0.051939 0. 0. 0.00100 0. 0.000041 0. 0. 0.03 -0.938-/ O. 0. 0. 1463 120
49033.105 0.04643 0. -0.054566 0. 0. 0.00018 0. 0.000011 0. 0. 0.06 -0.8824 0. 0. 0. 1565 220
49035.055 -0.28188 0. -0.068013 0. 0, 0.00027 0. 0.000119 0. 0. 0.08 0.1204 0. 0. 0. 1443 120
49038.133 0.05162 0. -0.066562 0. 0. 0.00121 O. 0.000050 0. 0. 0.23 -0.8893 0. 0. 0. 1463 120
49043.414 -0.26490 0. -0.089630 0. 0. 0.00026 0. 0.000109 0. 0. 0.05 -0.1120 0. 0. 0. 1445 120
49045.383 0.04224 0. -0.086161 0. 0. 0.00133 0. 0.000074 0. 0. 0.14 -0.9010 0. 0. 0. 1463 120
49049.352 -0.25043 0. -0.102963 O. 0. 0.00025 0. 0.000095 0. 0. 0.04 -0.1854 0. 0. 0. 1445 120
49058.086 -0.2344′2 0. -0.128364 0. 0. 0.00030 0. 0.000186 0. 0. 0.07 -0.2288 0. 0. 0. 1445 120
49059.″/73 0.03689 0. -0.125227 0. 0. 0.00156 0. 0.000098 0. 0. 0.16 -0.9065 0. 0. 0. 1463 120
49063.891 -0.22262 0. -0.142703 0. 0. 0.00032 0. 0.000132 0. 0. 0.11 -0.4387 0. 0. 0. 1445 120
4906″/.047 0.03363 0. -0.144652 0. 0. 0.00130 0. 0.000069 0. 0. 0.14 -0.8578 0. 0. 0. 1463 120
490-⁄0.676 -0.20958 0. -0.161125 0. 0. 0.00028 0. 0.000125 0. 0. 0.05 -0.2621 0. 0. 0. 1445 120
49074.555 0.02340 0. -0.164966 0. 0. 0.00126 0. 0.000066 0. 0. 0.10 -0.9052 0, 0. 0. 1463 120
49077.738 -0.19518 0. -0.17-/)90 o. 0. 0.00030 0. 0.000138 0. 0. 0.06 0.2500 0. 0. 0. 1445 120
49081.508 0.00374 0. -0.183134 0. 0. 0.00112 0. 0.000063 0. 0. 0.10 -0.8780 0. 0. 0. 1463 120
49084.660 -0.18607 0. -0.197068 0. 0. 0.00030 0. 0.000139 0. 0. 0.05 -0.2183 0. 0. 0. 1445 120
49088.547 -0.01360 0. -0.204544 0. 0. 0.00102 0. 0.000055 0. 0. 0.09 -0.8639 0. 0. 0. 1463 120
49091.203 -0.18050 0. -0.213655 0. 0. 0.00030 0. 0.000117 0. 0. 0.14 -0.0590 0. 0. 0. 1445 120
49095.055 -0.02499 0. -0.222819 0. 0. 0.00136 0. 0.000056 0. 0. 0.08 -0.9157 0. 0. 0. 1463 120
49102.168 -0.04079 0. -0.242496 0. 0. 0.00117 0. 0.000052 0. 0. 0.07 -0.9020 0. 0. 0. 1463 120
49105.418 -0.16940 0. -0.251541 0. 0. 0.00026 0. 0.000096 0. 0. 0.08 0.1351 0. 0. 0. 1443 120
49209.426 -0.05438 0. -0.263876 0. 0. 0.00110 0. 0.000062 0. 0. 0.07 -0.8752 0. 0. 0. 1463 120
49112.453 -0.16882 0. -0.273386 0. 0. 0.00034 0. 0.000165 0. 0. 0.04 0.5300 0. 0. 0. 1443 120
4911″/.273 -0.07320 0. -0.285686 0. 0. 0.00473 0. 0.000246 0. 0. 0.28 -0.9213 0. 0. 0. 1463 120
49119.375 -0.16541 0. -0.289568 0. 0. 0.00029 0. 0.000124 0. 0. 0.11 0.2593 0. 0. 0. 1443 120
49123.430 -0.07627 0. -0.301334 0. 0. 0.00125 0. 0.000061 0. 0. 0.14 -0.9008 0. 0. 0. 1463 120
49126.266 -0.16766 0. -0.306382 0. 0. 0.00022 0. 0.000108 0. 0. 0.08 0.2583 0. 0. 0. 1443 120
49129.262 -0.08684 0. -0.3)5272 O. 0. 0.00112 0. 0.000058 0. 0. 0.15 -0.8990 0. 0. 0. 1463 120
49133.250 -0.)6998 O. -0.321284 0. 0. 0.00023 0. 0,000117 0. 0. 0.06 0.2229 0. 0. 0. 1443 12.0
49136.359 -0.09994 0. -0.332645 0. 0. 0.00117 0. 0.000061 0. 0. 0.09 -0.9046 0. 0. 0. 1463 120
49140.379 -0.16839 0. -0.339758 0. 0. 0.00032 0. 0.000150 0. 0. 0.08 0.6046 0. 0. 0. 1443 120
4914″/.375 -0.1″/055 0. -0.352520 0. 0. 0.00024 0. 0.000099 0. 0. 0.06 0.2934 0. 0. 0. 1443 120
49151.129 -0.12955 0. -0.365476 0. 0. 0.00122 0. 0.000061 0. 0. 0.11 -0.8995 0. 0. 0. 1463 120
49154.430 -0.17568 0. -0.366964 0. 0. 0.00021 0. 0.000089 0. 0. 0.07 -0.0409 0. 0. 0. 1443 120
49158.184 -0.141″/6 O. -0.378785 0. 0. 0.00124 0. 0.000067 0. 0. 0.09 -0.9083 0. 0. 0. 1463 120
49158.762 -0.1⁄766 O. -0.373790 0. 0. 0.00027 0. 0.000088 0. 0. 0.07 0.2379 0. 0. 0. 1545 220
49161.461 -0.17843 0. -0.379071 0. 0. 0.00044 0. 0.000175 0. 0. 0.08 -0.4287 0. 0. 0. 1443 120
49165.316 -0.15470 0. -0.393859 0. 0. 0.00124 0. 0.000061 0. 0. 0.11 -0.9194 0. 0. 0. 1463 120
49167.184 -0.18294 0. -0.390964 0. 0. 0.00024 0. 0.000100 0. 0. 0.05 0.0477 0. 0. 0. 1443 120
49172.336 -0.16630 0. 0.594610 0. 0. 0.00093 0. 0.000044 0. 0. 0.05 -0.8714 0. 0. 0. 1463 120
49175.477 -0.19001 0. 0.597152 0. 0. 0.00029 0. 0.000139 0. 0. 0.06 0.352.7 0. 0. 0. 1443 120
49185.371 -0.1″/826 O. 0.5″/5385 O. 0. 0.00159 0. 0.000075 0. 0. 0.06 -0.9197 0. 0. 0. 1463 120
49187.340 -0.17967 0. 0.572772 0. 0. 0.00051 0. 0.000026 0. 0. 0.07 -0.9427 0. 0. 0. 1565 220
49189.418 -0.20709 0. 0.577114 0. 0. 0.00030 0. 0.000112 0. 0. 0.06 0.3569 0. 0. 0. 1443 120
49193.273 -0.18874 0. 0.560683 0. 0. 0.00105 0. 0.000054 0. 0. 0.05 -0.8562 0. 0. 0. 1463 120

49196.270	-0. ?.15-/1	0.	0.564096	0.	0.	0.00023	0.	0.000091	0.	0.	0.06	0.1185	0.	0.	0.	1443	120
49200.207	-0.20254	0.	0.549662	0.	0.	0.00108	0.	0.000057	0.	0.	0.10	-0.8577	0.	0.	0.	1463	120
49202.″/46	-0.22468	0.	0.554552	0.	0.	0.00031	0.	().()00117	0.	0.	0.06	0.1262	0.	0.	0.	1443	120
49206.648	-0.21594	0.	0.537658	0.	0.	0.00118	0.	0.000048	0.	0.	0.05	-0.9162	0.	0.	0.	1463	120
49209.566	-0.23631	0.	0.542365	0.	0.	0.00043	0.	0.000117	0.	0.	0.07	-0.3027	0.	0.	0.	1443	120
49216.332	-0.23070	0.	0.521250	0.	0.	0.00105	0.	0.000050	0.	0.	0.07	-0.8958	0.	0.	0.	1463	120
49216.633	-0.24915	0.	0.531097	0.	0.	0.00034	0.	0.000110	0.	0.	0.07	-0.3522	0.	0.	0.	1443	120
49220.344	-0.23845	0.	0.511465	0.	0.	0.00112	0.	0.000050	0.	0.	0.09	-0.9305	0.	0.	0.	1463	120
49223.535	-0.25891	0.	(-).515059	0.	0.	0.00045	0.	0.000152	0.	0.	0.08	-0.3886	0.	0.	0.	1445	120
49227.301	-0.24272	0.	0.498559	0.	0.	0.00103	0.	0.000046	0.	0.	0.08	-0.9024	0.	0.	0.	1463	120
49231.570	-0.27699	0.	0.501284	0.	0.	0.00051	0.	0.000149	0.	0.	0.10	-0.3256	0.	0.	0.	1443	1?.0
49235.289	-0.25113	0.	0.482949	0.	0.	0.00098	0.	0.000050	0.	0.	0.09	-0.8925	0.	0.	0.	1463	120
49242.133	-0.25900	0.	0.470619	0.	0.	0.00132	0.	0.000074	0.	0.	0.09	-0.8788	0.	0.	0.	1563	120
49246.426	-0.30448	0.	0.470302	0.	0.	0.00079	0.	0.000247	0.	0.	0.10	-0.8168	0.	0.	0.	1445	120
49248.293	-0.26028	0.	0.454382	0.	0.	0.00112	0.	0.000052	0.	0.	0.08	-0.9383	0.	0.	0.	1463	120
49251.398	-0.31093	0.	0.458504	0.	0.	0.00053	0.	0.000173	0.	0.	0.06	-0.6838	0.	0.	0.	1443	120
49255.570	-0.26383	0.	0.438640	0.	0.	0.00334	0.	0.000143	0.	0.	0.31	-0.8819	0.	0.	0.	1463	120
49263.242	-0.2'/189	0.	0.420897	0.	0.	0.00108	0.	0.000050	0.	0.	0.03	-0.9095	0.	0.	0.	1463	120
49265.473	-0.33746	0.	0.427446	0.	0.	0.00040	0.	0.000120	0.	0.	0.07	-0.1565	0.	0.	0.	1443	120
49270.211	-0.27642	0.	0.405454	0.	0.	0.00156	0.	0.000062	0.	0.	0.11	-0.8995	0.	0.	0.	1463	120
49273.539	-0.35552	0.	0.406625	0.	0.	0.00036	0.	0.000118	0.	0.	0.04	-0.1020	0.	0.	0.	1443	120
49278.293	-0.27407	0.	0.381226	0.	0.	0.00115	0.	0.000053	0.	0.	0.09	-0.8892	0.	0.	0.	1563	120
49279.488	-0.36544	0.	0.389548	0.	0.	0.00043	0.	0.000183	0.	0.	0.17	-0.3670	0.	0.	0.	1543	120
49283.281	-0.27366	0.	0.369067	0.	0.	0.00114	0.	0.000052	0.	0.	0.14	-0.8935	0.	0.	0.	1563	120
49287.469	-0.37912	0.	0.368934	0.	0.	0.00062	0.	0.000226	0.	0.	0.13	-0.4654	0.	0.	0.	1543	120
49291.254	-0.27907	0.	0.348012	0.	0.	0.00191	0.	0.000095	0.	0.	0.13	-0.8800	0.	0.	0.	1563	120
49292.426	-0.38628	0.	0.356145	0.	0.	0.00052	0.	0.000238	0.	0.	0.19	-0.7789	0.	0.	0.	1543	120
49298.234	-0.27151	0.	0.332101	0.	0.	0.00131	0.	0.000062	0.	0.	0.11	-0.9201	0.	0.	0.	1563	120
49300.453	-0.40085	0.	0.335713	0.	0.	0.00041	0.	0.000183	0.	0.	0.14	-0.2106	0.	0.	0.	1543	120
49306.203	-0.26437	0.	0.309324	0.	0.	0.00518	0.	0.000259	0.	0.	0.36	-0.9051	0.	0.	0.	1563	122
49307.391	-0.40886	0.	0.315987	0.	0.	0.00053	0.	0.000208	0.	0.	0.15	-0.6992	0.	0.	0.	1543	120
49312.195	-0.26356	0.	0.295588	0.	0.	0.00120	0.	0.00C1057	0.	0.	0.10	-0.9254	0.	0.	0.	1563	120
49314.434	-0.41815	0.	0.299053	0.	0.	0.00055	0.	0.000168	0.	0.	0.16	0.0813	0.	0.	0.	1543	120
49319.215	-0.26807	0.	0.279432	0.	0.	0.00151	0.	0.000071	0.	0.	0.10	-0.9306	0.	0.	0.	1563	120
49321.418	-0.42452	0.	0.284197	0.	0.	0.00048	0.	0.000176	0.	0.	0.09	-0.0629	0.	0.	0.	1543	120
4932'/.422	-0.25083	0.	0.262406	0.	0.	0.00525	0.	0.000284	0.	0.	0.54	-0.8307	0.	0.	0.	1563	122
49333.391	-0.25260	0.	0.247122	0.	0.	0.00460	0.	0.000249	0.	0.	0.36	-0.8334	0.	0.	0.	1563	122
49335.387	-0.4436″/	0.	0.251165	0.	0.	0.00040	0.	0.000164	0.	0.	0.)2	-0.0475	0.	0.	0.	1543	120
49340.'/54	-0.44988	0.	0.237356	0.	0.	0.00011	0.	0.000042	0.	0.	0.06	-0.0645	0.	0.	0.	1545	220
49340.758	-0.25213	0.	0.229″/05	0.	0.	0.00040	0.	0,000027	0.	0.	0.06	-0.9000	0.	0.	0.	1565	220
49341.656	-0.25191	0.	0.227299	0.	0.	0.00293	0.	0.000183	0.	0.	0.32	-0.8402	0.	0.	0.	1463	)22
49344.54″1	-0.45595	0.	0.227109	0.	0.	0.00027	0.	0.000095	0.	0.	0.06	0.0748	0.	0.	0.	1443	120
49348.086	-0,24369	0.	0.211971	0.	0.	0.00353	0.	0.000164	0.	0.	0.18	-0.8912	0.	0.	0.	1463	122
49350.586	-0.46016	0.	0.213306	0.	0.	0.00022	0.	0.000095	0.	0.	0.05	-0.1206	0.	0.	0.	1443	120
49355.645	-0.23073	0.	0.193436	0.	0.	0.00105	0.	0.000056	0.	0.	0.06	-0.8456	0.	0.	0.	1463	120
49357.543	-0.46749	0.	0.193893	0.	0.	0.00024	0.	0.000090	0.	0.	0.09	-0.1045	0.	0.	0.	1443	120
49360.113	-0,21664	0.	0.182290	0.	0.	0.0012″1	0.	0.000061	0.	0.	0.08	-0.8335	0.	0.	0.	1463	120
49364.520	-0.47255	0.	0.177900	0.	0.	0.00044	0.	0.000140	0.	0.	0.21	-0.3085	0.	0.	0.	1445	120
49367.176	-0,20603	0.	0.167320	0.	0.	0.00101	0.	0.000047	0.	0.	0.11	-0.8974	0.	0.	0.	1463	120
49371.523	-0.47542	0.	0.160977	0.	0.	0.00023	0.	0.000088	0.	0.	0.09	-0.0631	0.	0.	0.	1443	120
493'/5.063	-0.18978	0.	0.150600	0.	0.	0.00099	0.	0.000046	0.	0.	0.06	-0.8″/59	0.	0.	0.	1463	120
493″/8.512	-0.47813	0.	0.145884	0.	0.	0.00033	0.	0.000)04	0.	0.	0.07	-0.2120	0.	0.	0.	1443	120
49382.047	-0.17164	0.	0.134436	0.	0.	0.00093	0.	0.000042	0.	0.	0.05	-0.8557	0.	0.	0.	1463	120
49384.484	-0.47579	0.	0.129121	0.	0.	0.00032	0.	0.000099	0.	0.	0.12	-0.2234	0.	0.	0.	1443	120
49389.027	-0.15128	0.	0.117710	0.	0.	0.00099	0.	0.000043	0.	0.	0.07	-0.8736	0.	0.	0.	1463	120
49391.516	-0.47698	0.	0.113431	0.	0.	0.00027	0.	0,000098	0.	0.	0.09	0.1135	0.	0.	0.	1443	1?,0
49396.004	-0.13727	0.	0.102659	0.	0.	0.0010″7	0.	0.000046	0.	0.	0.07	-0.8883	0.	0.	0.	1463	120
49401.453	-0.47023	0.	0.089243	0.	0.	0.00028	0.	0.000090	0.	0.	0.09	-0.1344	0.	0.	0.	1443	120

```
49403.125 -0.11684 0.   0.087000 0. 0. 0.00131 0. 0.000060 0. 0. 0.09 -0.9253 0. 0. 0. 1463 120
49410.125 -0.10619 0.   0.068635 0. 0. 0.00106 0.  0.000050 0. 0. 0.24 -0.8400 0. 0. 0. 1463 120
49413.3″/5 -0.46591 0.  0.055338 0. 0. 0.00026 0. 0.000091 0. 0. 0.06 -0.2690 0. 0. 0. 1443 120
49417.074 -0.09681 0.   0.048199 0. 0. 0.00158 0. 0.000092 0. 0. 0.19 -0.8795 0. 0. 0. 1463 120
49420.262 -0.45614 0.   0.036630 0. 0. 0.00029 0.  0.000103 0. 0. 0.10 -0.1685 0. 0. 0. 1443 120
49424.059 -0.08187 0.   0.030010 0. 0. 0.00106 0.  0.000054 0. 0. 0.04 -0.9002 0. 0. 0. 1463 120
```

C SSC(JPL) 94 R 01
C
C DEEP SPACE NETWORK VLBI STATION LOCATIONS FROM REFERENCE FRAME JPL 1994-1
C
C Station coordinates and velocities were adjusted for all ten DSN
C antennas. Stations in each of the three DSN complexes were constrained
C to move at the same rate. The velocities reported below are total
C rates; they are not increments from any model. The velocities as well
C as the coordinates are expressed in the ITRF-92 coordinate system.
C Coordinates and their errors are in units of Meters.
C Velocities and their errors are in units of Meters/Year.
C The covariance matrix for station coordinates and velocities is
C reported following the X and V records, as C records.
C

C	Domes ID	Station Name	CDP Number	X	Y	Z	X Err	Y Err	Z Err	Ref. epoch	Mean epoch	Time span
				Meters						-----	Days	-----
X	40405S003	DSS 12	1512	-2350443.673	-4651980.837	3665630.978	0.010	0.014	0.013	47161	45760	785
V	40405	DSS 12	1512	-0.0141	0.0045	-0.0062	0.0010	0.0016	0.0014	45760	785	
X	40405S014	DSS 13	1513	-2351129.049	-4655477.11(?	3668956.960	0.008	0.011	0.010	47161	45632	1391
V	40405	DSS 13	1513	-0.0141	0.0045	-0.0062	0.0010	0.0016	0.0014	4.5632	1391	
X	40405S001	DSS 14	1514	-2353621 111	-4641341.54(!	3677052 .357	0.006	0.008	0.008	47161	47083	5542
V	40405	DSS 14	1514	-0.0141	0.0045	-0.0062	0.0010	0.0016	0.0014	47083	5542	
X	40405S019	DSS 15	7231	-2353538 557	-464164S?.515	3675570 .038	0.005	0.008	0.007	47161	48427	2269
V	40405	DSS 15	7231	-0.0141	0.0045	-0.0062	0.0010	0.0016	0.0014	48427	2269	
X	50103S005	DSS 42	1542	-4460980 823	2682413.503	-3674582 .259	0.019	0.012	0.015	47161	46784	1708
V	50103	DSS 42	1542	-0.0380	0.0033	0.0434	0.0026	0.0011	0.0017	46784	1708	
X	50103S001	DSS 43	1543	-4460894 394	2682351.533	-3674748 .770	0.014	0.007	0.009	47161	46854	5542
V	50103	DSS 43	1543	-0.0380	0.0033	0.0434	0.0025	0.0011	0.0017	46854	5542	
X	50103S010	DSS 45	1545	-4460935 066	2682755.595	-3574381 .599	0.014	0.006	0.008	47161	48568	2016
V	50103	DSS 45	1545	-0.0380	0.0033	0.0434	0.0026	0.0011	0.0017	48558	2016	
X	13407S003	DSS 61	1561	4849245 253	-359278.281.	4114884.373	0.014	0.011	0.017	47161	46436	1778
V	13407	DSS 51	1561	-0.0083	0.0207	0.0138	0.0021	0.0015	0.0024	46436	1778	
X	13407S001	DSS 53	1563	4849092 688	-350180.585	4115109.040	0.010	0.010	0.014	47161	46861	5146
V	13407	DSS 63	1553	-0.0083	0.0207	0.0138	0.0021	0.0016	0.0024	46861	5145	
X	13407S010	DSS 55	1565	4849336 787	-360488.975	4114748.714	0.010	0.009	0.014	47161	48501	1992
V	13407	DSS 55	1555	-0.0083	0.0207	0.0138	0.0021	0.0016	0.0024	48501	1992	

C
C Station coordinate covariance matrix in units of
C (millimeters)**2 for positions,
C (millimeters/year)**2 for rates, and for position-rate cross terms.
C

C	Parameter #s:	x	y	z	x.	y.	z.
		(mm^2)			(mm/y)^2		
C	DSS 12	1	2	3	4	5	6
C	DSS 13	7	8	9	10	11	12

DSS 14	13	14	15	16	17	18
[1ss 15	19	20	21	22	23	24
1)ss 42	25	26	27	28	29	30
1)ss 43	31	32	33	34	35	36
[]ss 4:>	37	38	39	40	41	42
[]ss 61	43	44	45	46	47	48
DSS 63	49	50	51	52	53	54
1)SS 65	55	56	57	58	59	60

#	Covariance					
1	1 . 07534D+02					
2	-1.23259D+01	1 .87060D+02				
3	-2.16114D+01	-6.26009D+01	1.67549D+02			
4	-1.60295D-01	-9.04880D-01	-1.01417D-01	1.02071D+00		
5	-'/.660601)-01	-3.37228D+00	1.24712D+00	2.95510D-01	2.53301D+00	
6	5.660411)-01	2.34675D+00	-1.11589D+00	-6.5'/9491)-01	-7.18256D-01	1.92372D+00
7	3.95689D+01	6.59493D+00	-2.26177D+01	-8.771781)-01	-1.01953D+00	3.73238D-01
	5.66496D+01					
8	3.04100D+00	9.38786D+01	-3.22978D+01	-1.28421D+00	-4.69767D+00	3.24608D+00
	2.41194D+01	1.30191D+02				
9	-2.01095D+01	-2.86055D+01	9.07532D+01	3.58364D-02	2.21066D+00	-1.84881D+00
	-3.21224D+01	-5.51723D+01	1.08236D+02			
10	-1.60295D-01	-9.04880D-01	-1.01417D-01	1.02071D+00	2.95510L)-01	-6.57949D-01
	-8.77178D-01	-1.28421D+00	3.58364D-02	1.02071D+00		
11	-7.66060D-01	-3.37228D+00	1.24712D+00	2.95510D-01	2.53301D+00	-7.18256D-01
	-1 .01953D+00	-4.69767D+00	2.21066D+00	2.955101)-01	2.53301D+00	
12	5.66041D-01	2.34675D+00	-1 .11589D+00	-6.57949D-01	-7.18256D-01	1.92372D+00
	3.73237D-01	3.24608D+00	-1.84881D+00	-6.57949D-01	-"/.182561)-01	1.92372D+00
13	2.39278D+01	-3.67653D-01	-1.02159D+01	-1.07973D+00	-1.03810D+00	2.678961)-01
	2.29180D+01	-1.37694D+00	-9.68003D+00	-1.07973D+00	-1.03810D+00	2.67896D-01
	3.96988D+01					
14	2.97393D-01	4.63997D+01	-5.57609D+00	-1.44904D+00	-4.93374D+00	3.34128D+00
	-1.08512D+00	4.76775D+01	-6.88511D+00	-1.44904D+00	-4.93374D+00	3.34128D+00
	-1 .76699D+00	6.96901D+01				
15	-1.06918D+01	-5.00785D+00	4.29673D+01	1.05557D-01	2.44247D+00	-1.99744D+00
	-9.31512D+00	-5.26746D+00	4.34766D+01	1.05557D-01	2.44247D+00	-1.99744D+00
	-1 .18109D+01	-1 .17409D+01	7.04107D+01			
16	-1.602.951)-01	-9.04880D-01	-1.01417D-01	1.02071D+00	2.95510L)-01	-6.57949D-01
	-8.77178[)-01	-1.28421D+00	3.58364D-02	1.02071D+00	2.95510D-01	-6.579491)-01
	-1 .07973D+00	-1.44904D+00	1.0555"/1)-01	1.02071D+00		
17	-7.66060D-01	-3.37228D+00	1.24712D+00	2.95510D-01	2.53301D+00	-7.182561]-01
	-1 .01953D+00	-4.69767D+00	2.21066D+00	2.95510D-01	2.53301D+00	-7.182561)-01
	-1 .03810D+00	-4.93374D+00	2.44247D+00	2.95510D-01	2.53301D+00	
18	5.66041D-01	2.34675D+00	-1.11589D+00	-6.579491)-01	-7.18256D-01	1.92372D+00
	3.73238D-01	3.24608D+00	-1.84881D+00	-6.579491)-01	-7.18256D-01	1.92372D+00
	2.67896D-01	3.34128D+00	-1.99744D+00	-6.579491)-01	-7.18256D-01	1.92372D+00
19	1.79151D+01	-3.86512D+00	-7.70318D+00	-1.34123D+00	-1.65804D+00	6.44471D-01
	2.11270D+01	-1.85564D+00	-8.52372D+00	-1.34123D+00	-1.65804D+00	6.44471D-01
	2.17157D+01	-1.58003D+00	-8.53134D+00	-1.34123D+00	-1.65804D+00	6.444711)-01
	2.34823D+01					
20	-4.64202D+00	4.29437D+01	-2.28718D+00	-1.86027D+00	-6.10157D+00	4.09532D+00
	-2.69833D+00	5.01151D+01	-7.32736D+00	-1.86027D+00	-6.10157D+00	4.09532D+00
	-3.25952D+00	4.74618D+01	-4.81192D+00	-1.86027D+00	-6.10157D+00	4.09532D+00
	1 .33521D+00	5.84769D+01				

```
C   21 -8.86430D+00 -3.91908D+00  4.06981D+01  3.802101)-01  3.321891)+00 -2.58454D+00
C      -8.53078D+00 -8.62I10D+OO  4.43474D+01  3.802101)-01  3.32189D+00 -2.58454D+00
C      -8.22266D+00 -7.25678D+00  4.30061D+01  3.802101)-01  3.32189D+00 -2.58454D+00
C      -1.05499D+01 -1.38263D+01  4.86654D+01
C   22 -1.60295D-01 -9.04880D-01 -1.01417D-01  1.02071D+00  2.9551OD-OI -6.57949D-01
C      -8.77178D-01 -1.28421D+00  3.583641)-02  1.02071D+00  2.955)011-01 -6.5-79491)-01
C      -1.07973D+00 -1.44904D+00  1.0555711-01  1.02071D+00  2.95510D-01 -6.57949D-01
C      -1.34123D+00 -1.86027D+00  3.802101)-01  1.02071D+00
C   23 -7.660601)-01 -3.37228D+00  I .24712D+00  2.955)0[)-01  2.533011)+00  -7.182561)-01
C      -1.01953D+00 -4.69767D+00  2.21066D+00  2.95510D-01  2.53301D+00 -7.18256D-01
C      -1.03810D+00 -4.93374D+00  2.442471)+00  2.955101)-01  2.53301D+00 -7.18256D-01
C      -1.65804D+00 -6.10157D+00  3.32189D+00  2.95510D-01  2.53301D+00
C   24  5.66041D-01  2.34675D+00 -1.11589D+00 -6.57949P-O] -7.18256D-01  1.92372D+00
C       3.73237D-01  3.24608D+00 -1.84881D+00 -6.579491)-01 -7.18256D-01  1.92372D+00
C       2.67896D-01  3.34128D+00 -1.99744D+00 -6.57949D-01 -7.18256D-01  1.92372D+00
C       6.44471D-01  4.09532D+00 -2.584541)+00 -6.57945'1)-01 -7.182561)-01  1.92372D+00
C
C   25 -1.13853D+01 -4.14899D+01  1.62374D+01  3.36917D+00  1.00351D+01 -6.55933D+00
C      -1.31943D+01 -4.55563D+01  1.90477D+01  3.36917D+00  1.00351D+01 -6.55933D+00
C      -8.30282D+00 -4.53547D+01  2.16026D+01  3.36917D+00  1.00351D+01 -6.55933D+00
C      -1.48480D+01 -4.85780D+01  2.12772D+01  3.36917D+00  1.00351D+01 -6.55933D+00
C       3.67481D+02
C   26  4.45659D+00 -6.03476D-01 -8.99741D+00  4.22301D-01  1.15603D+00 -7.373061)-01
C       4.36432D+00 -4.87305D+00 -5.76322D+00  4.22301D-01  1.15603D+00 -7.373061)-01
C       4.04254D+00  2.72756D+00 -1.39291D+01  4.223011)-01  1 .15603D+00 -7.373061]-01
C       2.24620D+00 -9.93983D+00 -1.63322D+00  4.22301D-01  1.15603D+00 -7.37306D-01
C      -6.74228D+01  1 .53322D+02
C   27 -3.95525D+00 -2.45347D+01  5.39100D+00  1.36358D+00  3.86921D+00 -2.49240D+00
C      -5.02512D+00 -2.36057D+01  4.51469D+00  1.36358D+00  3.86921D+00 -2.49240D+00
C      -2.69520D+00 -2.87411D+01  1 .12336D+01  1.36358D+00  3.86921D+00 -2.49240r)+oo
C      -4.54195D+00 -2.17921D+01  2.87302D+00  1.36358D+00  3.86921D+00 -2.49240D+00
C       1 .46569D+02 -4.53702D+01  2.09498D+02
C   28  2.51302D+00  7.43601D+00 -2.56452D+00 -1.09117D+00 -2.77934D+00  1 .81897D+00
C       2.85401D+00  8.36753D+00 -3.23364D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C       2 .27762D+00  7.46894D+00 -2.59995D+00 -1 .09117D+00 -2.77934D+00  1.81897D+00
C       3.16851D+00  8.97917D+00 -3.70036D+00 -1 .09117D+00 -2.77934D+00  1.81897D+00
C      -1 .78745D+01 -2.09964D+00 -6.92123D+00  6.58578D+00
C   29 -2.99508D-01 -2.34526D-01 -1.748241>-01  2.459631)-01 -1.276011)-01 -1.805241)-01
C      -5.45721D-01  3.11030D-01 -6.382341)-01  2.45961D-01 -1.276011)-01 -1.805241)-01
C      -4.37937D-01  7.09152D-01 -9.911311)-01  2.459611)-01 -1.27601D-01 -1.80524D-01
C      -3.693941)-01  9.30210D-01 -1.18561D+00  2.45961D-01 -1 .27601D-01 -1.80524D-01
C      -3./16411)-01  -1 .390441)-0? -1.039951)-01  -2.222261)-01  1.13658D+00
C   30  1.65990D+00  4.36546D+00 -1.28788D+00 -6.19447D-01 -1.68108D+00  7.79636[)-01
C       2.05941D+00  4.430581)+00  -1 .27435D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
C       1 .64738D+00  3.59532[)+00  -6.24752D-01 -6.194471)-01  -1 .68108D+00  7.796361)-01
C       2.08946D+00  4.25637D+00 -1.07829D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
C      -9.72097D+00 -1.16624D+00 -3.79807D+00  3.04441D+00  6.41751D-02  2.92913D+00
C
C   31 -1.19084D+01 -4.33967D+01  1.70072D+01  3.58932D+00  1.02864D+01 -6.64742D+00
C      -1 .40679D+01 -4.70917D+01  1 .94675D+01  3.58932D+00  1 .02864D+01 -6.64742D+00
C      -9.09362D+00 -4.58421D+01  2.09777D+01  3.58932D+00  1.02864D+01 -6.64742D+00
C      -1 .56430D+01 -4.96660D+01  2.12780D+01  3.58932D+00  1.02864D+01 -6.647421)+00
C       1.96682D+02 -3.90827D+00  6.01728D+01 -1.86783D+01 -2.02169D-01 -1.03149D+01
C       2.01741D+02
C   32  4.54974D+00 -5.88163D-02 -9.21517D+00  3.49294[)-01  1.24025D+00 -8.492371)-01
C       4.73627D+00 -4.77266D+00 -5.58631D+00  3.49294D-01  1.24025D+00 -8.492371)-01
C       4.30959D+00  1.86922D+00 -1.28142D+01  3.49294D-01  1 .24025D+00 -8.4923711-01
C       2.51367D+00 -1.03095D+01 -1 .02660D+00  3.49294D-01  1.24025D+00 -8.492371)-01
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C      -4.48057 D+00  5.41391 D+01  3.86870D+00 -1.95278D+00 -1.60623D-01 -9.60170D-01
C      -5.38190 D+00  5.51 006D+01
C   33 -4.24861D+00 -2.57533D+01  5.88142D+00  1.51163D+00  3.91640D+00 -2.44902[)+00
C      -5.67239D+00 -2.43410D+01  4.56713D+00  1.51163D+00  3.91640D+00 -2.44902r)+oo
C      -3.23049D+O() -2.83272D+01  1.01534D+01  1.51163D+00  3.91640D+00 -2.44902D+00
C      -5.07935D+00 -2.19927D+01  2.43227D+00  1 .51163D+00  3.91640D+00 -2.449021)+00
C       6.04633D+01  4.13063D+00  7.70512D+01 -7.37471D+00  7.57859D-02 -4.20410D+00
C       6.34266D+01  2.78074D+00  7.93110D+01
C   34  2.51302D+00  7.43601D+00 -2.56452D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C       2.85401D+00  8.36753D+00 -3.23364D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C       2.27762D+00  7.46894D+00 -2.59995D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C       3.16851D+00  8.97917D+00 -3.70036D+00 -1.09117D+00 -2.77934D+00  1 .81897D+00
C      -1.78745D+01 -2.09964D+00 -6.92123D+00  6.58578D+00 -2.22226D-01  3.04441D+00
C      -1.86783D+01 -1.95278D+00 -7.37471D+00  6.58578D+00
C   35 -2.99508D-01 -2.34526D-01 -1.74824D-01  2.45961D-01 -1.27601D-01 -1.80524D-01
C      -5.45721D-01  3.11030D-01 -6.382341)-01  2.459611)-01 -1.27601D-01 -1.80524D-01
C      -4.37937D-01  7.09152D-01 -9.911311)-01  2.459611)-01 -1.27601D-01 -1.80524D-01
C      -3.69394D-01  9.302101)-01 -1.18561D+00  2.45961D-01 -1.27601D-01 -1.80524D-01
C      -3.7164111-03 -1.39044D-02 -1.03995D-01 -2.22226D-01  1.13658D+00  6.41751D-02
C      -2.021691)-01 -1.60623D-01  7.57859D-02 -2.222261)-01  1 .13658D+00
C   36  1.65990D+00  4.36546D+00 -1.28788D+00 -6.194471)-01 -1.68108D+00  7.79636D-01
C       2.05941D+00  4.43058D+00 -1.27435D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
C       1.64738D+00  3.59532D+00 -6.247521)-01 -6.194471)-01 -1.68108D+00  7.79636D-01
C       2.08946D+00  4.25637[)+00 -1.07829D+00 -6.194471)-01 -1.68108D+OO  7.79636[)-01
C      -9.72097D+00 -1.16624D+00 -3.79807D+00  3.04441D+00  6.41751D-02  2.92913D+00
C      -1.03149D+01 -9.601701)-01 -4.20410D+OO  3.04441D+00  6.41751D-02  2.92913D+00
C'
C   3'/ -1.53147D+01 -4.05894D+01  8.83756D+00  4.69622D+00  1.09409D+01 -6.57801D+00
C      -1.82444D+01 -4.71215D+01  1.32959D+01  4.69622D+00  1.09409D+01 -6.57801D+00
('     -1.39615D+01 -3.72771D+01  5.46861D+00  4.69622D+00  1.09409D+01 -6.57801D+00
C      -2.15132D+01 -5.32119D+01  1.78544D+01  4.69622D+00  1.09409D+01 -6.57801D+00
C       1.57929D+02  8.85923D+00  4.88043D+01 -2.19568D+01  8.72103D-01 -1.30594D+01
C       1.62260D+02  7.99183D+00  5.13032D+01 -2.19568D+01  8.72103D-01 -1.30594D+01
C       1.88647D+02
C   38  5.78723D+00 -5.82163D+00 -1.55592D+00 -1 .99485D-01  1.42785D+00 -1.31462D+00
C       6.55860D+00 -8.51951D+00  6.54171D-01 -1.99485D-01  1.42785D+00 -1.31462D+00
C       6.51681D+00 -8.24603D+00  2.72508D-01 -1.99485[)-01  1.427851)+00 -1.31462D+00
C       5.57759D+00 -1.14999D+01  3.22297D+00 -1.99485D-01  1.42785D+00 -1.31462D+00
C       2.28179D+00  2.76275D+01  6.30333D+00 -7.692521>-03 -9.44910L)-OI  3.64194D-01
C       1.89593D+00  2.81486D+01  5.757961)+00 -7.69252D-01 -9.44910L)-OI  3.64194D-01
C      -3.00947D+00  3.22713D+01
C   39 -6.58756D+00 -2.04489D+01 -3.02328D+00 2.36924D+00  4.05145D+00 -2.08210D+00
C      -8.74445D+00 -2.16729D+01 -2.49881D+00  2.36924D+00  4.05145D+00 -2.08210D+00
C      -6.86332D+00 -1.75054D+01 -5.71748D+00  2.36924D+00  4.05145D+00 -2.08210D+00
C      -9.74722D+00 -2.26199D+01 -2.06158D+00  2.36924D+00  4.05145D+00 -2.08210D+00
C       5.21456D+01  9.63513D+00  4.80554D+01 -9.59422D+00  1.09107D+00 -6.30449D+00
C       5.44327D+01  8.85415D+00  4.96099D+01 -9.59422D+00  1.09107D+00 -6.30449D+00
C       7.02592D+01  7.35753D-01  6.20761D+01
C   40  2.51302D+00  7.43601D+00 -2.56452D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C       2.85401D+00  8.36753D+00 -3.23364D+00 -1.09117D+00 -2.77934r)+00  1.81897D+00
C       2.27762D+00  7.46894D+00 -2.59995D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C       3.16851D+00  8.97917D+00 -3.70036D+00 -1.09117D+00 -2.77934D+00  1.81897D+00
C      -1.78745D+01 -2.09964D+00 -6.92123D+00  6.58578D+00 -2.222261>-01  3.04441D+00
C      -1.86783D+01 -1.95278D+00 -7.37471D+00  6.58578D+00 -2.22226D-01  3.04441D+00
C      -2.19568D+01 -7.69252D-01 -9.59422D+00  6.58578D+00
C   41 -2.99508D-01 -2.34526D-01 -1.748241)-01  2.459611)-02 -1.27601D-01 -1.80524D-01
C      -5.45721D-01  3.11030D-01 -6.38234D-01  2.45961D-01 -1.27601D-01 -1.80524D-01
C      -4.37937D-01  7.09152D-01 -9.91131D-01  2.459611>-01 -1.27601D-01 -1.80524D-01
```

```
C      -3.693941)-01   9.30210D-01 -1.18561D+00  2.459611)-01  -1.276011)-01 -1.80524D-01
C      -3."/16411>-0] -1.390441)-02 -1.039951)-01 -2.222261>-01   1 .13658D+00  6.41751D-02
C     -2.02169D-01 -1.606231)-01  7.57859D-02 -2.2222611-01  1.13658D+00  6.41751D-02
C      8.72103D-01 -9.44910D-01  1.09107D+00 -2.222261>-01  1.13658D+00
C   42 1.65990D+00  4.36546D+00 -1.28788D+00 -6.19447D-01 -1.68108D+00  7.796361)-01
C      2.05941D+00  4.43058D+00 -1.27435D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
C      1 .64738D+00  3.59532D+00 -6.247521]-01 -6.194471)-01 -1.68108D+00  7.796361)-01
C      2.08946D+00  4.25637D+00 -1.07829D+00 -6.19447D-01 -1.68108D+00  7.79636D-01
C     -9.72097D+00 -1.16624D+00 -3.79807D+00  3.04441D+00  6.41751D-02  2.92913D+00
C     -1.03149D+01 -9.601701)-01 -4.20410D+OO  3.04441D+00  6.41751D-02  2.92913D+00
C     -1.30594D+01  3.641941)-01 -6.30449D+00  3.04441D+00  6.41751D-02  2.929131)+00
C
C   43 2.21741D+01  3.89256D+01 -3.12789D+00 -2.96441D+00 -6.55312D+00  3.85330D+00
C      1 .86429D+01  3.95622D+01 -4.50096D+00 -2.96441D+00 -6.55312D+00  3.853301)+00
C      2.69370D+01  3.97180D+01 -2.41769D+00 -2.96441D+00 -6.55312D+00  3.85330D+00
C      1.64115D+01  3.73089D+01 -3.38684D+00 -2.96441D+00 -6.55312D+00  3.853301)+00
C     -6.52733D+01 -2.66228D+00 -3.37912D+01  1.23408D+01 -3.27626D-01  7.20339D+00
C     -6.83985D+01 -2.36202D+00 -3.53576D+01  1.23408D+01 -3.27626D-01  7.20339D+00
C     -7.89750D+01 -5.36492D-01 -4.11129D+01  1.23408D+01 -3.276261)-01  7.20339D+00
C      2.03985D+02
C   44 2.72869D+00 -2.32246D+01 -1.08631D+01  2.75860D+00  6.12080D+00 -3.60705D+00
C     -4.77045D-01 -2.83362D+01 -7.62572D+00  2.75860D+00  6.120801)+00 -3.60705D+00
C      '/.5411111-01 -2.10051D+01 -1.06822D+01  2.75860D+00  6.12080D+00 -3.60705D+00
C     -3.79919D+00 -3.41416D+01 -3.46814D+00  2.75860D+00  6.12080D+00 -3.60705D+00
C      6.23472D+01  1.36603D+01  2.84442D+01 -1.18808D+01  4.164261)-01 -7.01945D+00
C      6.49671D+01  1.31549D+01  2.99419D+01 -1.18808D+01  4.16426D-01 -7.01945D+00
C      8.07511D+01  6.46598D+00  4.13575D+01 -1 .18808D+01  4.16426D-01 -7.01945D+00
C     -7.10846D+01  1.17937D+02
C   45 2.70921D+01  2.65112D+01 -1 .40986D+01 -4.48120D+00 -9.46631D+00  5.45624D+00
C      2.75150D+01  3.07648D+01 -1.73774D+01 -4.48120D+00 -9.46631D+00  5.45624D+00
C      3.00110D+01  2.82722D+01 -9.51819D+00 -4.48120D+00 -9.46631D+00  5.45624D+00
C      2.86076D+01  3.34632D+01 -1.96926D+01 -4.48120D+00 -9.46631D+00  5.45624D+00
C     -9.82674D+01 -1.99466D+00 -3.84641D+01  1.84289D+01 -7.61056D-01  1.09857D+01
C     -1.02790D+02 -1.25922D+00 -4.09497D+01  1.84289D+01 -7.61056D-O1  1.09857D+01
C     -1.24401D+02  6.35135D+00 -5.54866D+01  1.84289D+01 -7.61056D-01  1.09857D+01
C      1.58383D+02 -7.45896D+01  2.78892D+02
C   46 -2.35302D+00 -6.53118D+00  2.66581D+00  8.98279D-01  2.53132D+00 -1.20779D+00
C     -1.97700D+00 -7.08340D+00  3.19779D+00  8.982791)-01  2.53132D+00 -1.20779D+00
C     -1.19789D+00 - 6.01987D+00  2.49437D+00  8.98279[)-01  2.53132D+00 -1.20779D+00
C     -1.82732D+00 -7.11889D+00  3.32012D+00  8.982791)-01  2.53132D+00 -1.20779D+00
C      1 .45054D+01  1.67730D+00  5.55769D+00 -4.21678D+00  1.85877D-02 -2.60592D+00
C      1.50890D+01  1.60343D+00  5.86313D+00 -4.21678D+00  1.85877D-02 -2.60592D+00
C      1.72605D+01  9.687061)-01  7.22500D+00 -4.21678D+00  1.858771)-02 -2.60592D+00
C     -9.37629D+00  9.12219D+00 -1.39477D+01  4.21121D+00
C   47 1.06291D+00  3.60282D+00 -1 .06981D+00 -3.09561D-01 -1.76629D+00  4.646701)-01
C      1 .56347D+00  4.38369D+00 -1.57042D+00 -3.09561D-01 -1 .766291)+00  4.64670D-01
C      1.47608D+00  4.22457D+00 -1 .45136D+00 -3.09561])-01 -1.76629D+00  4.64670D-01
C      2.02717D+00  5.17097D+00 -2.13610D+00 -3.095611)-01 -1 .76629D+00  4.64670D-01
C     -9.66350D+00 -1.14184D+00 -3.76539D+00  2.87628D+00  2.058781)-01  1.85885D+00
C     -1.00843D+01 -1.07933D+00 -3.99237D+00  2.87628D+00  2.058781)-01  1 .85885D+00
C     -1.18128D+01 -4.828451)-01 -5.14247D+00  2.87628D+00  2.05878D-01  1.85885D+00
C      6.88096D+00 -6.53691D+00  1 .02273D+01 -2.65654D+00  2.70479D+00
C   48 -2.22757D+00 -6.71448D+00  2.40511D+00  1 .326121)+00  2.21901D+00 -1.97078D+00
C     -2.43373D+00 -7.67836D+00  3.12429D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C     -1 .91525D+00 -6.93659D+00  2.62217D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C     -2.73410D+00 -8.35190D+00  3.66291D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C      1.62803D+01  1 .90368D+00  6.29039D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
C      1.69623D+01  1.80955D+00  6.65304D+00 -4.80109D+00  2.579011)-01 -2.65938D+00
```

```
C       1 .963″ 75D+01  9.5046'7[) -01  8.38664D+00 -4.80109D+00  2.579011)-01 -2.65938LI+00
C      -1.10565D+01  1.06267D+01 -1.64419D+01  3.70270D+00 -2.28475D+00  5.84657D+00
C
C   49  2.40270D+01  4.18259D+01 -4.92726D+00 -2.81977D+00 -6.71512D+00  4.07035D+00
C       1.90292D+01  4.17741D+01 -6.10952D+00 -2.81977D+00 -6.71512D+00  4.07035D+00
C       2.54101D+01  3.97289D+01 -2.80485D+00 -2.819771)+00 -6.71512D+00  4.07035D+00
C       1.57263D+01  3.81007D+01 -4.10706D+00 -2.81977D+00 -6.71512D+00  4.070351)+00
C      -6.85451D+01 -3.12400D+00 -3.48747D+01  1.29018D+01 -3.19341D-01  7.51147D+00
C      -7.10539D+01 -2.91646D+00 -3.61078D+01  1.29018D+01 -3.19341D-01  7.51147D+00
C      -8.17952D+01 -9.274291)-01 -4.20399D+01  1.29018D+01 -3.19341D-01  7.51147D+00
C       9.14801D+01 -6.26744D+01  8.12657D+01 -1.008201)401  7.03481D+00 -1.15816D+01
C       9.46820D+01
C   50  2.72523D+00 -2.33502D+01 -1.08378D+01  2.79013D+00  6.18054D+00 -3.63969D+00
C      -5.46664D-01 -2.85215D+01 -7.56944D+00  2.79013D+00  6.18054D+00 -3.63969D+00
C       5.88491D-01 -2.13183D+01 -1.05465D+01  2.79013D+00  6.18054D+00 -3.63969r)+00
C      -3.92314D+00 -3.44085D+01 -3.35647D+00  2.79013D+00  6.18054D+00 -3.63969D+00
C       6.30279D+01  1.36600D+01  2.87586D+01 -1.19746D+01  4.15368D-01 -7.07122D+00
C       6.55114D+01  1.31757D+01  3.01820D+01 -1.19746D+01  4.15368D-01 -7.07122D+00
C       8.12755D+01  6.49576D+00  4.15830D+01 -1.19746D+01  4.153681)-01 -7.07122D+00
C      -6.19017D+01  9.26480D+01 -6.71935D+01  9.18447D+00 -6.59559D+00  1.07111D+01
C      -6.29903D+01  9.29768D+01
C   51  2.84865D+01  2.88072D+01 -1.54733D+01 -4.40236D+00 -9.64430D+00  5.64998D+00
C       2.78707D+01  3.26002D+01 -1.86381D+01 -4.40236D+00 -9.644301)+00  5.64998D+00
C       2.90209D+01  2.85759D+01 -9.93687D+00 -4.40236D+00 -9.64430D+00  5.649981)+00
C       2.82101D+01  3.43095D+01 -2.03387D+01 -4.40236D+00 -9.644301)+00  5.64998D+00
C      -1.01366D+02 -2.34097D+00 -3.95742D+01  1.89386D+01 -7.538381)-01  1.12658D+01
C      -1.05297D+02 -1.69511D+00 -4.173951)+01  1.89386D+01 -7.53838D-01  1.12658D+01
C      -1.27013D+02  6.02975D+00 -5.63954D+01  1.89386D+01 -7.53838D-01  1.12658D+01
C       8.08581D+01 -6.78256D+01  1.86224D+02 -1.45362D+01  1.03982D+01 -1.69158D+01
C       8.39676D+01 -6.83210D+01  1.89026D+02
C   52 -2.35302D+00 -6.53118D+00  2.66581D+00  8.98279D-01  2.53132D+00 -1.20779D+00
C      -1.97700D+00 -7.08340D+00  3. 19779D+00  8.982″/91>-01  2.53132D+00 -1.20779D+00
C      -1.19789D+00 -6.01987D+00  2.49437D+00  8.982791)-01  2.53132D+00 -1.20779D+00
C      -1.82732D+00 -7.11889D+00  3.32012D+00  8.98279D-01  2.53132D+00 -1.20779D+00
C       1 .450541)401  1.67730D+00  5.55769D+00 -4.21678D+00  1.85877D-02 -2.605921)+00
C       1 .50890D+01  1.60343D+00  5.86313D+00 -4.21678D+00  1.85877D-02 -2.60592D+00
C       1 .72605D+01  9.68706D-01  7.22500D+00 -4.21678D+00  1.858″/'/1)-02 -2.60592D+00
C      -9.376291)+00  9.12219D+00 -1.39477D+01  4.21121D+00 -2.65654D+00  3.70270D+00
C      -1.00820D+01  9.18447D+00 -1.45362D+01  4.21121D+00
C   53  1.06291D+00  3.60282D+00 -1.06981D+00 -3.095611)-01 -1.76629D+00  4.646701)-01
C       1.56347D+00  4.38369D+00 -1.57042D+00 -3.09561D-01 -1.76629D+00  4.64670r)-01
C       1.47608D+00  4.22457D+00 -1.45136D+00 -3.095611)-01 -1.76629D+00  4.64670D-01
C       2.02717D+00  5.17097D+00 -2.13610D+00 -3.095611)-01 -1.76629D+00  4.64670D-01
C      -9.66350D+00 -1.14184D+00 -3.76539D+00  2.87628D+00  2.05878D-01  1.85885D+00
C      -1.00843D+01 -1.07933D+00 -3.99237D+00  2.87628D+00  2.058781)-01  1.85885D+00
C      -1.18128D+01 -4.82845D-01 -5.14247D+00  2.87628D+00  2.05878D-01  1.85885D+00
C       6.88096D+00 -6.53691D+00  1.02273D+01 -2.65654D+00  2.70479D+00 -2.28475D+00
C       7.03481D+00 -6.59559D+00  1.03982D+01 -2.65654D+00  2.70479D+00
C   54 -2.22757D+00 -6.71448D+00  2.40511D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C      -2.43373D+00 -7.67836D+00  3.12429D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C      -1.91525D+00 -6.93659D+00  2.62217D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C      -2.73410D+00 -8.35190D+00  3.66291D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C       1 .62803D+01  1.90368D+00  6.29039D+00 -4.80109D+00  2.57901D-01 -2.659381)+00
C       1 .69623D+01  1.80955D+00  6.65304D+00 -4.80109D+00 2.57901D-01 -2.65938D+00
C       1.96375D+01  9.50467D-01  8.38664D+00 -4.80109D+00  2.5″/9011)-01 -2.65938D+00
C      -1 .10565D+01  1.06267D+01 -1.64419D+01  3.70270D+00 -2.28475D+00  5.84657D+00
C      -1.15816D+01  1.07111D+01 -1.69158D+01  3.70270D+00 -2.28475D+00  5.84657D+00
C
```

```
C   55  1 .463331 +01  3.99742D+01 -3.86542D+00 -2.57047D+00 -7.68227D+00  5.02615D+00
C       1 .409401 +01  4.41679D+01 -7.27936D+00 -2.57047D+00 -7.68227D+00  5.02615D+00
C       1 . 02019D+01  3.60300D+01 -9.4475411-01 -2.57047D+00 -7.68227D+00  5.02615D+00
C       1 . 49739D+01  4.70933D+01 -9.85502D+00 -2.57047D+00 -7.68227D+00  5.02615D+00
C'     -8.67864D+01 -9.03897D+00 -3.89045D+01  1.50292D+01 -1.51457D-01  8.56393D+00
C      -8.947551)401  -8.70096D+00 -4.03103D+01  1 .50292D+01 -1.51457D-01  8.56393D+00
C      --1 . 04369D+02 -3.52218D+00 -5.02608D+01  1.50292D+01 -1.51457D-01  8.56393D+00
C       6.98729D+01 -6.33085D+01  7.63297D+01 -1.24586D+01  7.83375D+00 -1.35901D+01
C       7.27871D+01 -6.36300D+01  7.88209D+01 -1 .24586D+01  7.83375D+00 -1.35901D+01
C       9.20325D+01
C   56  6.92968D-01 -2.79862D+01 -8.75045D+00  2.98548D+00  6.56235D+00 -3.85139D+00
C      -2.33024D+00 -3.28553D+01 -5.65204D+00  2.98548D+00  6.56235D+00 -3.85139D+00
C      -5.81701D-01 -2.81547D+01 -9.54319D+00  2.98548D+00  6.56235D+00 -3.85139D+00
C      -5.43060D+00 -3.82211D+01 -1.76231D+00  2.98548D+00  6.56235D+00 -3.85139D+00
C       7.22159D+01  1 .35282D+01  3.30935D+01 -1 .26465D+01  4.29463[)-01 -7.46031D+00
C       7.46895D+01  1.30674D+01  3.44956D+01 -1 .26465D+01  4.29463D-01 -7.46031D+00
C       8.977811)4011  6.87961D+00  4.52641D+01 -1 .26465D+01  4.29463D-01 -7.46031D+00
C      -5.69273D+01  7.46833D+01 -6.47049D+01  9.66099D+00 -6.99155D+00  1.13119D+01
C      -5.80266D+01  7.50136D+01 -6.58418D+01  9.66099D+00 -6.99155D+00  1.13119D+01
C      -6.92372D+01  8.00808D+01
C   57  2.35810D+01  3.19502D+01 -1 . 69167D+01 -4.39337D+00 -1.07267D+01  6.56755D+00
C       2.59377D+01  3.85618D+01 -2.15597D+01 -4.39337D+00 -1 .07267D+01  6.56755D+00
C       2.16868D+01  2.88652D+01 -1.38489D+01 -4.39337D+00 -1.07267D+01  6.56755D+00
C       2.90226D+01  4.46499D+01 -2.62174D+01 -4.3933-/D+oo  -1 .07267D+01  6.56755D+00
C      -1 .23421D+02 -6.72106D+00 -4.65087D+01  2.11701D+01 -6.414381)-01  1.24235D+01
C      -I .27483D+02 -5.99786D+00 -4.87868D+01  2.11701D+01 -6.41438D-01  1.24235D+01
C      -1 .51669D+02  3.65067D+00 -6.58470D+01  2.11701D+01 -6.41438D-01  1.24235D+01
C       7.29599D+01 -7.01900D+01  1.56841D+02 -1.67767D+01  1.13679D+01 -1.89912D+01
C       7.58450D+01 -7.06926D+01  1.59481D+02 -1.67767D+01  1.13679D+01 -1.89912D+01
C       9.83649D+01 -7.88754D+01  1.83820D+02
C   58 -2.35302D+00 -6.53118D+00  2.66581D+00  8.98279D-01  2.53132D+00 -1.20779D+00
C      -1.97700D+00 -7.08340D+00  3.19779D+00  8.982791)-01  2.53132D+00 -1.20779D+00
C      -1 .19789D+00 -6.01987D+00  2.49437D+00  8.98279D-01  2.53132D+00 -1.20779D+00
C      -1.82732D+00 -7.11889D+00  3.32012D+00  8.98279P-O]  2.53132D+00 -1.20779D+00
C       1 .45054D+01  1.67730D+00  5.55769D+00 -4.21678D+00  1.858771)-02 -2.60592D+00
C       1.50890D+01  1.60343D+00  5.86313D+00 -4.21678D+00  1.85877D-02 -2.60592D+00
C       1 .72605D+01  9.68706D-01  7.22500D+00 -4.21678D+00  1.85877[)-02 -2.60592D+00
C      -9.376291)+00  9.12219D+00 -1 .39477D+01  4.21121D+00 -2.65654D+00  3.70270D+00
C      -1 .00820D+01  9.18447D+00 -1.45362D+01  4.21121D+00 -2.65654D+00  3.70270D+00
C      -1.24586D+01  9.66099D+00 -1.67767D+01  4.21121D+00
C   59  1.06291D+00  3.60282D+00 -1.06981D+00 -3.09561D-01 -1 .76629D+00  4.64670D-01
C       1.56347D+00  4.38369D+00 -1.57042D+00 -3.09561D-01 -1.76629D+00  4.64670D-01
C       1.47608D+00  4.22457D+00 -1.45136D+00 -3.09561[)-01 -1.76629D+00  4.64670D-01
C       2.02717D+00  5.17097D+00 -2.13610D+00 -3.09561D-01 -1 .76629D+00  4.64670[)-01
C      -9.66350D+00 -1.14184D+00 -3.76539D+00  2.87628D+00  2.05878D-01  1.85885D+00
C      -1.00843D+01 -1.07933D+00 -3.99237D+00  2.87628D+00  2.058781)-01  1 .85885D+00
C      -1.18128D+01 -4.82845D-01 -5.14247D+00  2.87628D+00  2.05878D-01  1.85885D+00
C       6.88096D+00 - 6.53691D+00  1.02273D+01 -2.65654D+00  2.70479D+00 -2.28475D+00
C       7.03481D+00 -6.59559D+00  1.03982D+01 -2.65654D+00  2.70479D+00 -2.28475D+00
C       7.83375D+00 - 6.99155D+00  1.13679D+01 -2.65654D+00  2.70479D+00
C   60 -2.22757D+00 -6.71448D+00  2.40511D+00  1 .32612D+00  2.21901D+00 -1.97078D+00
C      -2.43373D+00 -7.67836D+00  3.12429D+00  1 .32612D+00  2.21901D+00 -1.97078D+00
C      -1.91525D+00 -6.93659D+00  2.62217D+00  1.32612D+00  2.21901D+00 -1.97078D+00
C      -2.73410D+00 -8.35190D+00  3.66291D+00  1 .32612D+00  2.21901D+00 -1.97078D+00
C       1.62803D+01  1.90368D+00  6.29039D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
C       1.69623D+01  1 .80955D+00  6.65304D+00 -4.80109D+00  2.5'/9011)-01 -2.65938D+00
C       1.96375D+01  9.5046"/1)-01  8.38664D+00 -4.80109D+00  2.57901D-01 -2.65938D+00
C      -1 .10565D+01  1.06267D+01 -1.64419D+01  3.70270D+00 -2.28475D+00  5.84657D+00
```

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C       -1 . 15816D+01   1.07111 D+01 -1.691581] +01   3.70270D+00 -2.28475 D+00   5.84657D+00
C       -1 . 35901D+01   1.13119D+01 -1.89912D+01   3.70270D+00 -2.28475D+00   5.846571)+00
```

Summary description of terrestrial System for JPL 1994-1 station coordinates

1 -	Technique	VLBI
2 -	Analysis Center	JPL
3 -	Solution identifier	1994-1
4 -	Software used	MODEST (nee Masterfit)
5 -	Relativity scale	IAE (TDT = geocentric with IAT)
6 -	Permanent tidal correction	NC)
7	Tectonic plate model	ITR{1,'-92 plus adjustments
8 -	Velocity of light.	299 792 458 m/s
9 -	Geogravitational constant	3.9860 0448 *10**14 m**3*s**-2
10 -	Reference epoch	1 Jan 1988
11	Adjusted parameters	X(), Y0, Z0, $\dot{x}$, $\dot{Y}$, $\dot{Z}$
12 -	Definition of the origin, and	
13	Definition of the orientation	

Six constraints were applied (with 5 mm uncertainty) to the nine coordinates (at epoch *1988.0)* of DSS 15, 1)ss 45, and 1)ss *65*, such that if a seven parameter transformation (3 translations, 3 rotations, 1 scale) between the JPL 1994-1 and ITRF-92 systems were estimated by unweighted least squares applied to the coordinates of DSS 15, 45, and 65, then the resulting 3 translation and 3 rotation parts of the transformation would be zero while the scale could be nonzero and unknown in advance crf computing the catalog. See text for details.

14 - Constraint for time evolution

Six constraints were applied (With 1.0 mm/yr uncertainty) to the nine site-velocity parameters of the DSN network so as to yield no-net-translation-rate and rlo-net- rotation-rate with respect to the net motion of the three, sites Madrid, Goldstone, and Canberra as specified by the I'J'}<F'- 92 velocity field. See text. for details.

RSC(JPL) 94 R 01

DEEP SPACE NETWORK VLBI RADIO SOURCE POSITIONS FROM REFERENCE FRAME JPL 1994-1 IN THE IERS 1993 FORMAT

IAU name	Alt. name	Right ascension hr mn sec	Declination dg mn arc sec	RA error time sec	Dec error arc sec	Corr. RA-Dec	Mean MJD	First MJD	Last MJD	No. Sns	Delay Obs	Rate Obs
0003-066	0003-066	0 6 13.89288035	- 6 23 35.3342591	0.00001214	0.0002734	-0.2988	48702.1	48196.0	49187.0	32	70	70
0007+171	GC 0007+17	0 10 33.99061305	17 24 18.7617008	0.00001441	0.0002925	-0.2305	48772.5	48196.0	49158.0	12	20	20
0008-264	P 0008-264	0 11 1.24681438	-25 12 33.3770482	0.00006483	0.0007924	-0.8659	45062.4	44227.0	48196.0	20	42	42
0013-005	P 0013-00	0 16 11.08854486	- 0 15 12.4447248	0.00001739	0.0003183	-0.5918	48378.7	47381.0	49340.0	20	42	42
0014+813	0014+813	0 17 8.47456936	81 35 8.1363705	0.00010273	0.0001632	0.0542	48607.3	48352.0	48732.0	5	14	14
0016+731	0016+731	0 19 45.78625C77	73 27 30.0175476	0.00004514	0.0001385	-0.0104	48625.3	48158.0	49255.0	28	59	59
0019+058	P 0019+058	0 22 32.44120355	6 8 4.2697852	0.00001589	0.0002985	-0.5186	46630.2	45151.0	48942.0	32	69	59
0048-097	P 0048-09	0 50 41.31737716	- 9 29 5.2094355	0.00001284	0.0002703	-0.3813	48680.1	46609.0	49287.0	75	137	137
0104-408	P 0104-408	1 6 45.10809731	-40 34 19.9598522	0.00003481	0.0003849	-9.4546	47632.6	43809.0	49251.0	91	224	225
0106+013	P 0106+01	1 8 38.77110084	1 35 0.3177019	0.00000985	0.0001975	-0.1723	46628.0	43809.0	49187.0	158	340	341
0111+021	P 0111+021	1 13 43.144?3480	2 22 17.3171462	0.00002626	0.0004153	-0.8388	47007.3	44227.0	49158.0	31	72	72
0112-017	P 0112-017	1 15 17.09996883	- 1 27 4.5767101	0.00000998	0.0002071	-0.2103	48389.5	47254.0	49187.0	56	115	115
0113-118	P 0113-118	1 16 12.52197882	-11 35 15.4327919	0.00001269	0.0002773	-0.3855	47173.4	43809.0	4?307.0	69	115	110
0119+115	P 0119+11	1 21 41.59503335	11 49 50.4136203	0.00000988	0.0001749	-0.1026	48369.6	47254.0	49187.0	43	88	88
0119+041	GC 0119+04	1 21 55.85158884	4 22 24.7351340	0.00001065	0.0002082	-0.2586	47832.7	45476.0	49032.0	34	54	54
0133+476	DA 55	1 35 58.59475028	47 51 29.1005363	0.00001689	0.0001494	-0.0527	45991.3	43873.0	49340.0	154	275	278
0146+056	0146+056	1 49 22.37087033	5 55 53.5597574	0.00002431	0.0003793	-5.8376	48000.8	47254.0	49158.0	15	34	34
0149+218	P 0149+21	1 52 18.05901579	22 7 7.7005674	0.00001148	0.0001496	-0.2382	48455.4	47301.0	49340.0	33	55	55
0159+723	0159+723	2 3 33.38485213	72 32 53.5678442	0.00005010	0.0001825	-0.1456	48825.1	48352.0	49033.0	8	26	26
0201+113	P 0201+113	2 3 45.55705525	11 34 45.4101627	0.00001079	0.0001672	-0.3645	48192.0	45432.0	49187.0	39	79	79
0202+149	P 0202+14	2 4 50.41389585	15 14 11.00436596	0.00000972	0.0001278	-0.1773	47455.7	44203.0	49348.0	119	241	242
0202+319	DW 0202+31	2 5 4.92532275	32 12 30.0951388	0.00001451	0.0001624	-0.3220	48615.7	48196.0	49158.0	19	38	38
0212+735	0212+735	2 17 30.81321715	73 49 32.5222?45	0.00004124	0.0001383	-0.2997	47585.2	45301.0	49348.0	252	541	544
0221+067	GC 0221+06	2 24 28.42817782	6 59 23.3422409	0.00001076	0.0001751	-0.4372	48541.?	47254.0	49158.0	35	75	75
0224+671	DW 0224+67	2 28 50.05140737	57 21 3.0301672	0.00002140	0.0001967	-0.2310	47461.0	44203.0	49341.0	222	368	383
0229+131	P 0229+13	2 31 45.89404515	13 22 54.7165878	0.00000943	0.0001353	-0.2825	484.57.5	47254.0	49187.0	50	110	110
0234+285	CTD 20	2 37 52.40565506	28 48 8.99042000	0.00001040	0.0001067	-0.1726	47430.2	44203.0	49348.0	3113	727	727
0235+164	GC 0235+16	2 38 38.93010277	16 35 59.2750571	0.00000933	0.0001058	-0.2714	47450.6	44203.0	49335.0	242	490	492
0237+040	GC 0237+04	2 39 51.26303620	4 16 21.4125938	0.00001390	0.0002539	-0.5198	48428.1	47?41.0	49158.0	12	20	20
0239+108	OD 166	2 42 29.17084540	11 1 0.72862190	0.00000947	0.0001477	-0.3408	47382.8	45151.0	4?187.0	65	147	147
0250+178	GC 0250+17	2 53 34.88219938	18 5 42.5255873	0.00003394	0.0008361	-0.5453	47960.9	47714.0	4?187.0	6	14	14
0256+075	OD 094.7	2 59 27.07650813	7 47 39.5442592	0.00001984	0.0003249	-0.8035	45878.5	45151.0	49158.0	31	57	57
0259+121	0259+121	3 2 30.54678310	12 18 55.7492535	0.00001659	0.0004507	-0.5053	48705.6	46925.0	49032.0	10	23	23
0300+470	OE 400	3 3 35.24218102	47 16 16.27607700	0.00001506	0.0001405	-0.2758	47083.1	43808.0	4?348.0	253	456	456
0302+625	0302+625	3 5 42.55948234	52 432.0247861	0.00002944	0.0002061	-0.3090	4882?.6	48613.0	49340.0	13	38	38
0306+102	0306+102	3 9 3.6235C332	10 29 15.3416293	0.00001804	0.0002674	-0.8210	48193.0	47254.0	49158.0	20	40	40
0309+411	0309+411	3 13 1.96209383	41 20 1.1841292	0.00001467	0.0001748	-0.3447	48288.8	46610.0	49187.0	23	50	50
0316+413	3C 84	3 19 48.16012071	41 30 42.1053984	0.00001436	0.0002039	-0.2695	47113.4	44203.0	49032.0	39	64	55
0317+188	P 0317+188	3 1? 51.25670757	19 1 31.2915267	0.00001835	0.0003286	-0.7006	48265.9	47714.0	49187.0	8	18	18
0326+277	0326+277	3 2? 57.6592?8?8	27 55 15.4996705	0.00001773	0.0002194	-0.7449	48272.9	46610.0	49030.0	18	35	36
0332-403	P 0332-403	3 34 13.55451198	-40 8 25.3971885	0.00004593	0.0004052	-0.6177	46920.8	43809.0	49335.0	55	85	88
0333+321	NRAO 140	3 35 32.19757?49	32 18 29.3428744	0.00001229	0.0001516	-0.4485	45184.5	43808.0	49033.0	89	163	173
0336-019	CTA 26	3 39 30.93780082	- 1 46 35.8032892	0.00001003	0.0002155	-0.452:	47797.3	44203.0	49348.0	?4	176	186
0341+158	0341+158	3 44 23.17218511	15 59 43.3700887	0.00001448	0.0004418	-0.4519	48619.3	47393.0	49032.0	9	21	21
0342+147	0342+147	3 45 5.41554045	14 53 49.5586284	0.00001847	0.0002847	-0.8365	47699.0	46337.0	49030.0	24	49	49
0400+258	CTD 26	4 3 5.58604811	26 C 1.5032796	0.00001143	0.9001852	-0.5180	48402.5	44947.0	49033.0	22	43	43
0402-362	P 0402-362	4 3 53.74992182	-36 5 1.9119943	0.00002710	0.0003225	-0.4544	474?5.4	43873.0	49335.0	130	224	221
0406-127	0406-127	4 9 5.75959875	-12 38 48.1425835	0.00002540	0.0004000	-0.8131	48284.7	46797.0	49030.0	17	27	27
0406+121	GC 0406+12	4 9 22.00870819	12 17 39.8482518	0.00001827	0.0002771	-0.8631	4545?.4	44203.0	49030.0	54	128	136
0409+229	P 0409+22	4 12 43.56585?56	23 5 5.4540948	0.00002446	0.0005060	-0.5470	47758.4	47714.0	47798.0	4	13	13
0420-014	P 0420-01	4 23 15.80072590	- 1 20 33.0646157	0.00000873	0.0001640	-0.4690	47466.0	43873.0	4?348.0	315	759	759

0420+417	VRO 41.04.01	4	23	56	00977616	41	50	2	7138102	0	00002061	0.0006456	0	2532	45701.0	44203.0	48355.0	12	18	19
0423+233	GC 0423+23	4	26	55	73478085	23	27	39	6346276	0	00001990	0.0004477	-0	5754	47767.0	47714.0	47798.0	4	12	12
0425+048	P 0425+048	4	27	47	57039608	4	57	8	3281952	0	000087	0	0	0013182	0	9901	47546.0	46609.0	49030.0	18	38	38
0426+273	0426+273	4	29	52	96077424	27	24	7	8773403	0	00002347	0	0	0005157	-0	5091	47769.5	47714.0	47798.0	4	14	14
0430+052	3C 120	4	33	11	095	8159	5	21	15	6195964	0.00001147	0.0002266	-0	6238	46945.8	43808.0	49033.0	35	73	73
0434-188	P 0434-188	4	37	1	482	73	65	-18	44	48	6126929	0.00001359	0.0002547	-0	4749	47527.0	44227.0	49348.0	134	232	238
0438-436	P 0438-43	4	40	17	17990010	-43	33	8	601	885	0.00009098	0	00062	0	78	0	45681.7	43809.0	48875.0	28	47	48
0440-003	NRAO 190	4	42	38	66077386	-	0	17	43	4196107	0.00005579	0.0010683	-0	7781	45435.0	43873.0	48206.0	10	16	16
0440+345	0440+345	4	43	31	63521585	34	41	6	6641319	0.00002271	0	002994	-0	7083	48076.8	46757.0	49030.0	16	25	25
0446+112	P 0446+11	4	49	7	67108950	11	21	28	5971495	0.00001674	0	003491	0	6473	47579.7	47255.0	48355.0	12	22	22
0451-282	P 0451-28	4	53	14	64687953	-28	7	37	3275316	0.00005478	0	006807	-0	8957	46940.0	44227.0	48927.0	18	34	38
0454-234	0454-234	4	57	3	17926	73	-23	24	52	0194718	0.00002179	0	00	21	-0	6554	48685.2	48158.0	49032.0	24	52	52
0458-020	P 0458-02	5	1	12	80	88	55	-	1	59	14	2554142	0.00001209	0	0002185	0	6755	48663.3	47802.0	49033.0	27	49	49
0458+138	P 0458+138	5	1	45	27082294	13	56	7	2209743	0	003538	0	0005309	-0	9199	47921.5	46757.0	48977.0	16	23	23
0459+060	GC 0459+06	5	2	15	44592386	6	9	7	4	474	9	0.00004324	0	0006710	-0	9245	47790.4	47379.0	48206.0	8	13	13
0500+019	0500+019	5	3	21	19713968	2	3	4	6776824	0	00	0231	0	0003772	0	8701	47933.8	47255.0	48704.0	14	27	27
0502+049	P 0502+049	5	5	23	18482151	4	59	42	723	6	0.00008635	0	0012720	-0	9855	47718.5	47379.0	48092.0	10	17	17
0454+844	0454+844	5	8	42	3	338478	84	32	4	5447158	0.0000	137	0	0001803	-0	1759	47624.1	45301.0	49187.0	43	154	154
0506+101	P 0506+101	5	9	27	45707616	10	11	44	6007252	0.00001051	0	0001979	-0	6829	48346.4	46757.0	49032.0	37	66	66
0507+179	P 0507+17	5	10	2	36914323	18	0	41	582144	0	00002009	0	003058	-0	8633	47723.7	46336.0	49030.0	22	43	43
0511-220	P 0511-220	5	13	49	11429572	-21	59	16	0909144	0	00003330	0.0004658	-0	7758	47870.1	46797.0	48206.0	11	17	17
0528+134	P 0528+134	5	30	56	4167295	13	31	55	1501491	0	00000739	0	00	1355	-0	6378	47199.3	44203.0	49187.0	118	246	248
0537-441	P 0537-441	5	38	50	36154384	-44	5	8	379253	0	00004621	0	0003902	-0	5732	47295.2	43809.0	49335.0	111	231	225
0537-158	P 0537-158	5	39	32	01016313	-15	50	30	320326	0.00	03776	0.0007606	-0	7294	47994.8	46806.0	49030.0	9	12	12
0536+145	0536+145	5	39	42	36599351	14	33	45	5624538	0.	1041	0.0001761	-0	8751	48205.8	46609.0	49032.0	41	76	76
0544+273	0544+273	5	47	34	14892077	27	21	56	84	0529	0	00002516	0	0003317	-0	8293	47714.4	46609.0	49030.0	23	36	36
0552+398	DA 193	5	55	30	80559318	39	48	4	1655650	0.00000870	0	0001332	-0	6174	47510.9	43808.0	49350.0	414	1064	1068
0556+238	0556+238	5	59	32	03313693	23	53	5	9272195	0.00001022	0	0001730	-0	9966	47998.1	46610.0	49030.0	37	70	70
0600+177	0600+177	6	3		13027727	17	42	16	8111716	0	00002059	0	0002971	-0	5794	47966.6	46336.0	49030.0	32	63	63
0605-085	P 0605-08	6	7	59	69	22955	-	8	34	49	9774150	0.00001194	0	0002522	-0	6147	47832.7	43808.0	49032.0	32	55	56
0607-157	P 0607-15	6	9	40	94951229	-15	42	40	6716540	0	00001884	0.0003267	-0	7499	47496.4	43873.0	49033.0	22	38	39
0611+131	0611+131	6	13	57	69276246	13	6	45	4022751	0	00001332	0.0002758	-0	044	48001.9	47379.0	48437.0	13	23	23
0615+820	0615+820	6	26	3	00614506	82	2	25	5682737	0	00007668	0	0001	64	-0	0369	48617.9	48352.0	49187.0	9	25	25
0642+214	3C 166	6	45	24	0	952881	21	21	51	2020069	0	00001	71	0	0002912	-0	8618	48068.8	46658.0	49030.0	20	34	34
0646-306	P 0646-306	6	48	14	09715234	-30	44	19	6663493	0	00022177	0	0021148	-0	9777	48621.0	47802.0	49030.0	2	3	3
0650+371	0650+371	6	53	58	282	5545	37	5	40	6068	71	0	00000873	0	01787	0	3408	48688.4	48348.0	49187.0	30	75	75
0657+172	0657+172	7	0	1	525	3539	17	9	21	7023089	0.00000732	0.0001440	-0	7202	48350.0	46336.0	49340.0	53	115	115
0710+439	OI 417	7	13	38	1640	699	43	49	17	2013080	0.00001407	0.0002953	-0	0380	48794.2	48352.0	49033.0	13	20	20
0716+714	0716+714	7	21	53	44850633	71	20	36	36	8875	0	00003131	0.0001964	-0	0515	48818.9	48353.0	49187.0	10	32	32
0722+145	P 0722+145	7	25	16	80779554	14	25	13	7464872	0.00001617	0.0002963	-0	7453	47636.1	47253.0	48352.0	12	21	21
0723-008	DW 0723-00	7	25	50	639	3782	-	0	54	56	5442728	0.00004282	0.0007407	-0	8738	45565.9	44203.0	46806.0	32	84	84
0727-115	P 0727-11	7	30	19	11246164	-11	41	12	5998050	0	00001060	0.0001968	-0	3542	47541.8	43808.0	49350.0	345	904	903
0735+178	P 0735+17	7	38	7	3	374	08	17	42	18	9	887	2	0	000005	4	0.0001168	-0	6746	47706.8	43808.0	49344.0	101	232	232
0736+017	P 0736+01	7	39	18	03389260	1	37	-4	6186312	0.00001158	0.0002171	-0	6910	48284.2	47253.0	48927.0	22	47	47
0738+313	OI 363	7	41	10	70	30477	31	12	0	2287807	0.00001435	0.0003005	-0	4252	46809.8	43816.0	48732.0	14	26	26
0742+103	DW 0742+10	7	45	33	05956225	10	11	2	6	21765	0.00001005	0.0001884	-0	7560	46495.1	43808.0	49033.0	171	371	382
0743-006	P 0743-006	7	45	54	08230455	-	0	44	17	5	6	13	0.00002608	0	0	4408	-0	8525	48721.9	48352.0	49340.0	9	15	15
0743+259	GC 0743+25	7	46	25	87415706	25	49	12	1353903	0.00002125	0.0003928	-0	6809	47550.3	47253.0	48159.0	11	22	22
0745+241	B2 0745+24	7	48	36	10926984	24	0	24	110	820	0	00000836	0.0001811	-0	5949	47218.1	45431.0	49033.0	35	88	88
0748+126	P 0748+126	7	50	52	04577052	12	31	4	8277348	0	00003055	0.0005922	-0	7363	45514.9	44203.0	47379.0	29	68	68
0749+540	0749+540	7	53	1	38457845	53	52	59	6371840	0.00001549	0.0002587	-0	0330	48696.3	48353.0	49187.0	9	19	19
0754+100	P 0754+100	7	57	6	64294	05	9	56	4	8514900	0.00002088	0.0004013	-0	7482	47606.8	47253.0	48159.0	10	18	18
0805-077	P 0805-07	8	8	15	53601872	-	7	51	9	8856229	0	00001094	0	00021	-0	4102	48467.1	46797.0	49033.0	25	64	64
0808+019	P 0808+019	8	11	26	70730944	1	46	52	2208008	0.00001020	0.0002447	-0	5293	48889.5	48352.0	49033.0	12	26	26
0814+425	OJ 425	8	18	15	9	962007	42	22	45	4151708	0.00001054	0.0001571	-0	1850	47083.3	43808.0	49340.0	125	222	223
0823+033	P 0823+033	8	25	50	33835320	3	9	24	5207972	0	00000676	0.0001341	-0	4316	47575.4	44200.0	49350.0	218	427	435
0827+243	B2 0827+24	8	30	52	08615933	24	10	59	8213136	0.00	02697	0.0003926	-0	8462	46041.3	44200.0	47776.0	12	21	21
0828+493	OJ 448	8	32	23	21672700	49	13	21	0380903	0.00	1585	0.0003313	0	0808	48880.1	48352.0	49033.0	6	17	17

0833+585	0833+585	8	37	22.45981720	58	25	1.8455945	0.00004136	0.0003756	0.3863	48715.2	48353.0	49187.0	7	13	13
0836+710	4C 71.07	8	41	24.36560165	70	53	42.1729458	0.00031512	0.0017596	0.2217	44700.7	44202.0	45895.0	9	18	20
0851+202	OJ 287	8	54	48.87492100	20	6	30.5413900	0.00000695	0.0001317	-0.3476	47385.2	43808.0	49350.0	351	758	756
0859-140	P 0859-14	9	2	16.83087360	-14	15	30.8743311	0.00001833	0.0003072	-0.5545	47602.4	43898.0	49340.0	26	50	52
0859+470	OJ 499	9	3	3.99011788	46	51	4.1377509	0.00001174	0.0001922	-0.0539	47696.2	43808.0	49165.0	65	102	107
0906+015	P 0906+01	9	9	10.09159421	1	21	35.6181845	0.00002522	0.0004195	-0.8766	48551.6	48352.0	48702.0	6	16	16
0912+029	P 0912+029	?	14	37.91346800	2	45	59.2454487	0.00004084	0.0005461	-'0.9345	47653.1	47253.0	48159.0	11	19	19
0917+449	0917+449	9	20	58.45849060	44	41	53.9852385	0.00001060	0.0001769	-0.0584	48737.9	47940.0	49033.0	20	53	53
0919-260	0919-260	9	21	29.25375884	-26	18	43.3849186	0.00007825	0.0008581	-0.9091	48712.0	48345.0	49030.0	8	14	14
0920-397	P 0920-39	?	22	46.41820683	-39	5?	35.0667230	0.00011052	0.0009855	-0.8957	48002.5	46797.0	49030.0	9	16	16
0923+392	4C 39.25	9	27	3.01390224	3?	2	20.8523159	0.00000737	0.0001114	-0.0835	47512.6	43808.0	49350.0	341	824	825
0925-203	P 0925-203	9	27	51.82437210	-20	34	51.2325485	0.00008634	0.0011333	-0.9477	47467.1	45797.0	49340.0	8	18	18
0952+172	AO 0952+17	?	54	56.82364588	17	43	31.2223489	0.00001421	0.0009711	-0.2491	45753.8	44200.0	48437.0	11	13	13
0953+254	OK 290	9	56	49.87540180	25	15	16.0496191	0.00000604	0.0001535	-0.4747	48598.6	48158.0	49030.0	26	58	58
1004+141	GC 1004+14	10	7	41.49806372	13	55	29.5023316	0.00002148	0.0004024	-0.8172	45783.3	44200.0	48159.0	11	24	24
1011+250	1011+250	10	13	53.4287327?	24	49	16.4414355	0.00000782	0.9002842	-0.3715	48877.8	48353.0	49033.0	11	22	22
1012+232	1012+232	10	14	47.06545898	23	1	15.5708614	0.00002799	0.0004015	-0.9044	477?4.9	47253.0	48703.0	13	29	29
1022+194	GC 1022+19	10	24	44.80960612	19	12	20.4156274	0.00001547	0.0003223	-0.6266	47885.7	47379.0	48161.0	10	16	16
1034-293	P 1034-293	10	37	16.07975235	-29	34	2.8131325	0.00002969	0.0003324	-0.3359	47531.1	44200.0	49350.0	176	315	316
1038+064	OL 064.5	10	41	17.15250218	6	10	16.9238548	0.00001285	0.0002765	-0.5777	46510.9	44203.0	48927.0	35	88	88
1040+123	3C 245	10	42	44.69523951	12	3	31.2533612	0.00001842	0.5004537	-0.6389	46259.7	44200.0	48151.0	10	15	15
1039+811	1039+811	10	44	23.06279951	80	54	39.4431820	0.00007563	0.0001353	0.1702	48743.0	48353.0	49033.0	15	46	46
1042+071	P 1042+071	10	44	55.91124705	6	55	38.2532551	0.00001902	0.0004573	-0.6058	47794.2	47253.0	48353.0	10	18	18
1044+719	1044+719	10	48	27.51999348	71	43	35.9387523	0.00004079	0.0002480	0.0065	48736.5	46925.0	49333.0	55	87	87
1055+018	P 1055+01	10	58	29.50520793	1	33	58.8239555	0.00000767	0.0001852	-0.1419	47598.5	44200.0	49350.0	271	610	610
1104-445	P 1104-445	11	7	8.5942.?295	-44	4?	7.6186500	0.00005697	0.0004186	-0.3899	47473.4	43808.0	49344.0	132	204	209
1111+149	GC 1111+14	11	13	58.69511553	14	42	26.9525767	0.00002529	0.0004204	-0.8431	45180.4	44200.0	48102.0	11	25	25
1116+128	P 1116+12	11	18	57.30144056	12	34	41.7182099	0.00000841	0.0002285	-0.4527	48257.9	44250.0	49033.0	21	41	41
1123+264	P 1123+26	11	25	53.71195299	25	10	19.9782805	0.00000582	0.0001524	-0.4910	47360.3	44200.0	49033.0	93	249	249
1124-186	P 1124-186	11	27	4.3?237657	-18	57	17.4405798	0.00002698	0.0004615	-0.5291	48920.9	48695.0	49033.0	9	17	17
1127-145	P 1127-14	11	30	7.0525258?	-14	4?	27.3886370	0.00001561	0.0003270	-0.1795	46621.2	43808.0	48927.0	49	97	101
1128+385	GC 1128+38	11	30	53.28263813	38	15	18.5464477	0.00002504	0.0002749	-0.5597	46485.6	44283.0	49147.0	49	104	105
1130+009	P 1130+009	11	33	20.05578538	0	40	52.8359?53	0.00002214	0.0004385	-0.6861	47519.1	44203.0	49030.0	9	15	15
1144+402	1144+402	11	46	58.297?3582	39	58	34.3041534	0.00001253	0.0002358	-0.2550	48656.2	48102.0	49030.0	11	20	20
1144-379	P 1144-379	11	47	1.37072442	-38	12	11.0234443	0.00003341	0.0003462	-0.0021	47372.4	43808.0	49350.0	181	354	354
1145-071	1145-071	11	47	51.55399965	- 7	24	41.1395415	0.0000192.8	0.0004131	-0.5009	47824.9	47379.0	48161.0	13	23	23
1148-001	P 1148-00	11	50	43.87078313	- 0	23	54.2041202	0.00002193	0.0005067	-0.5977	46053.2	43808.0	48353.0	20	31	32
1150+812	1150+812	11	53	12.49947091	80	58	29.1545869	0.00007762	0.0001325	-0.0309	48531.5	48161.0	49187.0	12	52	52
1156-094	P 1156-094	11	59	12.71215879	- 9	40	52.0549573	0.00031285	0.0043178	-0.?956	47580.9	46797.0	48976.0	9	13	13
1156+295	GC 1156+29	11	59	31.83391973	29	14	43.8255022	0.00000676	0.0001804	-0.4418	48599.1	48161.0	49033.0	30	67	67
1219+285	ON 231	12	21	32-.59051224	28	13	58.4995085	0.00000972	0.0002488	-0.4955	48586.8	48151.0	49030.0	17	33	33
1222+037	P 1222+037	12	24	52.42190989	3	30	50.2932933	0.00003260	0.0006302	-0.7615	45705.4	44200.0	49119.0	34	63	64
1226+023	3C 273	12	29	6.69979302	2	3	8.5985667	0.00000824	0.0002383	-0.0538	46930.1	43808.0	49340.0	170	391	390
1228+126	3C 274	12	30	4?.42348161	12	23	28.0425763	0.00013069	0.0017947	-0.9849	45363.1	44200.0	48160.0	9	17	17
1243-072	1243-072	12	46	4.23210927	- 7	30	45.5743545	0.00001839	0.0004173	-0.4207	47884.7	47253.0	48161.0	11	22	22
1244-255	P 1244-255	12	46	45.80206125	-25	47	49.2890605	0.00002559	0.0003765	-9.1739	47473.7	44200.0	49350.0	129	227	226
1252+119	P 1252+11	12	54	38.25551402	11	41	5.8945006	0.00001142	0.0004202	-0.3438	48877.9	48353.0	49033.0	9	23	23
1253-055	3C 279	12	56	11.15555105	- 5	47	21.5245377	0.00002079	0.000300.4	-0.0173	47259.1	43808.0	49340.0	126	223	225
1302-102	P 1302-102	13	5	33.01501535	-10	33	19.4279219	0.00001454	0.0003504	-0.1586	4839?.4	47379.0	49340.0	27	59	59
1308+326	B2 1308+32	13	10	28.65385365	32	20	43.7823729	0.00000673	0.00018?9	-0.3983	47564.7	44200.0	49340.0	225	555	556
1313-333	OP-322	13	16	7.985?699'7	-33	38	59.1727455	0.00003552	0.0004221	-0.2035	47365.8	43898.0	49340.0	44	105	105
1315+346	OP 326	13	17	36.49420534	34	25	15.9317585	0.00001161	0.0002671	-0.3305	48355.7	47946.0	49030.0	14	32	32
1324+224	1324+224	13	27	0.86132483	22	10	50.1623022	0.00000728	0.0002258	-0.3558	48749.1	48428.0	49033.0	28	83	83
1334-127	DW 1335-12	13	37	39.78278626	-12	57	24.6934170	0.00001279	0.0003329	0.0947	47644.9	43816.0	49350.0	225	451	451
1342+662	GC 1342+662	13	43	45.95952028	66	2	25.7445783	0.00007362	0.0004961	-0.0997	45544.8	45301.0	47782.0	10	35	35
1342+663	GC 1342+663	13	44	8.57975459	65	6	11.6433442	0.00002774	0.0001575	-0.2110	46526.5	44253.0	49340.0	69	211	212
1349-439	P 1349-439	13	52	56.53491955	-44	12	40.3872355	0.00008259	0.0006223	-0.5899	47220.6	44255.0	49340.0	45	72	72
1354+195	P 1354+19	13	57	4.43665729	19	19	7.3718775	0.00000681	0.0002358	-0.2391	47249.6	44200.0	49340.0	92	250	250

1354-152	OP-192	13	57	11.24501721	-15	27	28.7874203	0.00002340	0.0004321	-0.3991	48237.0	47253.0	49340.0	28	53	53
1404+286	OQ 208	14	7	0.39442305	28	27	14.6897775	0.00001770	0.0003247	-0.6523	48112.4	47247.0	49030.0	19	43	43
1406-076	P 1406-076	14	8	56.48119482	- 7	52	26.6665162	0.00002215	0.0004376	-0.4932	48290.4	47379.0	49030.0	19	28	28
1413+135	P 1413+135	14	15	58.81750841	13	20	23.7123402	0.00001052	0.0003287	-0.2831	48820.3	48353.0	49033.0	13	32	32
1418+546	GC 1418+54	14	19	46.59739497	54	23	14.7866274	0.00001765	0.0002857	-0.2472	47190.3	44282.0	49270.0	168	315	318
1424-418	P 1424-41	14	27	56.29762833	-42	6	19.4382073	0.00005903	0.0005141	-0.3510	48666.4	47940.0	49340.0	19	40	40
1430-178	OQ-151	14	32	57.69056541	-18	1	35.2481485	0.00004023	0.0006376	-0.6918	46787.2	44227.0	48976.0	21	38	38
1435-218	P 1435-218	14	38	9.46943928	-22	4	54.7484784	0.00002583	0.0004841	-0.3227	48705.8	48161.0	49033.0	19	31	31
1443-162	1443-162	14	45	53.37630115	-16	29	1.6192564	0.00002834	0.0005124	-0.5172	48348.4	47379.0	48976.0	14	28	28
1445-161	P 1445-16	14	48	15.05417135	-16	20	24.5495389	0.00002490	0.0004712	-0.4248	48338.3	47379.0	49030.0	19	39	39
1502+106	OR 103	15	4	24.97979078	10	29	39.1979048	0.00000797	0.0002788	0.0106	46943.8	43808.0	49341.0	111	290	291
1504+377	1504+377	15	6	9.52997124	37	30	51.1316264	0.00001228	0.0003166	-0.2749	48760.8	47940.0	49033.0	9	26	26
1504-166	P 1504-167	15	7	4.78697025	-16	52	30.2680860	0.00001603	0.0004004	0.0142	47397.4	45153.0	49340.0	59	134	134
1510-089	P 1510-08	15	12	50.53293561	- 9	5	59.8302503	0.00001188	0.0003497	-0.1066	47534.0	43808.0	49341.0	197	413	415
1511-100	P 1511-100	15	13	44.89345695	-10	12	0.2647652	0.00002105	0.0004522	0.3934	48172.5	47254.0	48976.0	22	32	32
1514-241	P 1514-24	15	17	41.81317780	-24	22	19.4766849	0.00004454	0.0006263	-0.6430	48336.8	47254.0	49340.0	14	28	28
1519-273	P 1519-273	15	22	37.67602774	-27	30	10.7861827	0.00002562	0.0004376	0.0879	47572.3	44200.0	49340.0	133	313	314
1532+016	P 1532+01	15	34	52.45368731	1	31	4.2058141	0.00001186	0.0003501	-0.1247	48330.2	47253.0	49033.0	26	51	51
1538+149	GC 1538+14	15	40	49.49151976	14	47	45.8840050	0.00000904	0.0002927	-0.1076	48716.0	48102.0	49033.0	25	59	59
1546+027	P 1546+027	15	49	29.43685809	2	37	1.1626118	0.00001107	0.0003510	-0.0728	48816.2	48353.0	49033.0	14	36	36
1548+056	DW 1548+05	15	50	35.26924841	5	27	10.4472131	0.00000964	0.0003178	0.0045	48483.2	47253.0	49341.0	66	101	101
1555+001	DW 1555+00	15	57	51.43397562	- 0	1	50.4144400	0.00000992	0.0003271	0.1028	47401.7	43808.0	49340.0	88	205	205
1555-140	P 1555-140	15	58	21.94984170	-14	9	59.0755044	0.00079070	0.0107211	-0.9982	48832.7	48703.0	48976.0	4	4	4
1600+335	BZ 1600+33	16	2	7.26348037	33	26	53.0720883	0.00001020	0.0003506	-0.0795	48866.2	48102.0	49033.0	8	26	26
1604-333	P 1604-333	16	7	34.76236566	-33	31	8.9136885	0.00005975	0.0006639	-0.6312	48815.0	48393.0	49340.0	10	22	22
1606+106	P 1606+10	16	8	46.20320114	10	29	7.7748151	0.00001650	0.0003685	-0.4393	48517.0	48102.0	48703.0	10	23	23
1611+343	DA 406	16	13	41.06425220	34	12	47.9080558	0.00000798	0.0002702	-0.0427	46899.5	43809.0	49187.0	61	162	163
1614+051	P 1614+051	16	16	37.55683744	4	59	32.7353349	0.00001477	0.0004237	-0.2788	47626.5	46659.0	48353.0	11	19	19
1622-253	P 1622-253	16	25	46.89175820	-25	27	38.3277674	0.00005938	0.0007774	-0.7592	48642.9	48345.0	49030.0	9	15	15
1624+416	1624+416	16	25	57.66969588	41	34	40.6282332	0.00001359	0.0003119	-0.0924	48459.3	47940.0	49030.0	18	28	28
1622-297	P 1622-29	16	26	6.02095250	-29	51	26.9725573	0.00005462	0.0006688	-0.6272	48582.0	47254.0	49030.0	12	17	17
1633+382	GC 1633+38	16	35	15.49295868	38	8	4.5000757	0.00000849	0.0002637	0.0323	46848.4	44202.0	49340.0	115	277	277
1637+574	P 1637+574	16	38	13.45629581	57	20	23.9783272	0.00001496	0.0002256	-0.1244	48839.6	48161.0	49348.0	36	82	82
1638+398	NRAO 512	16	40	29.63275719	39	46	46.0278154	0.00000897	0.0002695	0.0274	47321.1	43873.0	49341.0	111	274	274
1642+690	1642+690	16	42	7.84851369	68	56	39.7557213	0.00002348	0.0002074	-0.1837	48907.1	48158.0	49348.0	49	94	94
1641+399	3C 345	16	42	58.80998023	39	48	36.9933031	0.00000843	0.0002507	0.0577	46920.5	44203.0	49340.0	177	584	587
1647-296	P 1647-296	16	50	39.54415630	-29	43	46.9554671	0.00006444	0.0007954	-0.7394	48812.3	48428.0	49030.0	9	12	12
1652+398	DA 426	16	53	52.21666818	39	45	36.6077192	0.00001294	0.0004826	0.0061	48414.2	48196.0	48613.0	6	10	10
1655+077	OS 092	16	58	9.01146817	7	41	27.5399654	0.00001422	0.0003774	-0.2798	47575.3	46338.0	49340.0	16	42	42
1656+053	DW 1656+05	16	58	33.44734925	5	15	16.4438682	0.00001126	0.0003724	-0.0731	47366.3	44200.0	49033.0	24	52	57
1657-261	P 1657-261	17	0	53.15408572	-26	10	51.7259210	0.00002649	0.0004691	-0.2232	47906.2	45356.0	49340.0	61	123	123
1706-174	OT-111	17	9	34.34542169	-17	28	53.3657273	0.00003172	0.0005711	-0.5695	47023.3	45356.0	49340.0	27	67	67
1717+178	GC 1717+17	17	19	13.04846875	17	45	6.4371897	0.00003778	0.0009927	-0.4827	44872.1	44203.0	48164.0	12	27	31
1730-130	NRAO 530	17	33	2.70579525	-13	4	49.5483583	0.00001239	0.0003908	0.1128	47341.9	43809.0	49341.0	192	440	440
1732+389	1732+389	17	34	20.57852827	38	57	51.4419863	0.00000955	0.0002652	0.1974	48730.0	48196.0	49033.0	31	75	75
1738+476	OT 465	17	39	57.12906740	47	37	58.3618544	0.00002058	0.0005566	0.0125	46357.5	43809.0	48534.0	62	104	105
1739+522	4C 51.37	17	40	36.97782811	52	11	43.4068163	0.00001281	0.0002521	0.2231	48674.4	48102.0	49340.0	21	57	57
1741-038	P 1741-038	17	43	58.85615275	- 3	50	4.6173708	0.00001025	0.0003511	0.1605	47553.5	43809.0	49341.0	205	500	500
1743+173	GC 1743+17	17	45	35.20818267	17	20	1.4223952	0.00000895	0.0003269	0.1180	48780.3	48102.0	49187.0	21	47	47
1749+701	1749+701	17	48	32.84035574	70	5	50.7680213	0.00007869	0.0004420	-0.2813	45490.6	44202.0	47652.0	44	120	124
1749+096	OT 081	17	51	32.81857882	9	39	0.7274880	0.00000877	0.0003103	0.1999	48348.7	46336.0	49341.0	73	161	161
1751+288	GC 1751+28	17	53	42.47362229	28	48	4.9382429	0.00001304	0.0003336	-0.2440	48567.6	48103.0	49030.0	14	23	23
1803+784	1803+784	18	0	45.68387564	78	28	4.0177439	0.00004043	0.0001920	0.4559	48782.5	47301.0	49340.0	105	217	217
1807+698	3C 371	18	6	50.68059864	69	49	28.1078297	0.00002438	0.0002033	0.1766	46670.1	44202.0	49187.0	132	325	329
1826+796	1826+796	18	23	14.10883205	79	38	49.0022118	0.00007244	0.0002675	0.3215	48801.9	48353.0	49033.0	8	19	19
1821+107	P 1821+10	18	24	2.85525788	10	44	23.7728289	0.00001864	0.0005566	-0.3928	46367.1	44202.0	48355.0	26	53	53
1845+797	3C 390.3	18	42	8.98976757	79	46	17.1275442	0.00011447	0.0003051	-0.3765	48380.9	48158.0	48613.0	6	12	12
1908-201	OV-213	19	11	9.65291629	-20	6	55.1095058	0.00001688	0.0004393	-0.1719	48153.4	45356.0	49341.0	60	115	115

1920-211 OV-235	19 23 32.18985106	-21 4 33.3335955	0.00001698	0.0004370	-0.1671	48224.0	46709.0	49341.0	61	123	123
1921-293 OV-236	19 24 51.05602843	-29 14 30.1217103	0.00002276	0.0004435	-0.1257	47702.8	43809.0	49340.0	114	316	316
1923+210 OV 239.7	19 25 59.60535924	21 5 25.1511325	0.00000935	0.0002787	0.3035	48300.2	47106.0	49340.0	53	145	145
1928+738 1928+738	19 27 48.49509175	73 58 1.56?2?71	0.00003441	0.0001958	0.3319	48538.4	48158.0	49340.0	16	45	45
1929+226 1929+226	19 31 [illegible]	22 43 31.[illegible]	0.00001393	0.0003733	-0.0669	48661.6	48613.0	48709.0	5	11	11
1933-400 P 1933-400	19 37 15.21745630	-39 58 ?.5535859	0.00004078	0.0005104	-0.3270	48178.2	44227.0	49340.0	20	57	58
1936-155 P 1936-15	19 39 26.65776319	-15 25 43.0586104	0.00002460	0.0004939	-0.5010	48062.3	47301.0	48976.0	24	40	40
1954+513 1954+513	19 55 42.73823187	51 31 48.5457155	0.00901549	0.0002272	0.4249	48666.1	48158.()	49187.0	18	53	53
1958-179 OV-198	20 0 57.09045512	-17 48 57.6727573	0.00001381	0.0004019	-0.0835	47725.0	43809.0	49200.0	142	273	271
2008-159 P 20(?8-15?	20 11 15.71093816	-15 45 40.2535603	0.00001659	0.0004158	-0.2399	48172.6	47254.0	48976.0	34	64	64
2011-067 OW-015	20 11 14.21587200	- 6 44 3.5550986	0.00008807	0.0012814	-0.9248	48647.8	48345.0	48975.0	10	14	14
2017+743 2017+743	20 17 13.07920911	74 40 47.9995598	0.00004715	0.0002042	0.3653	48792.4	48353.0	49033.0	9	25	25
2021+614 OW 637	20 22 6.68158345	61 35 58.8042900	0.00002254	0.0002125	0.3607	48011.5	44755.0	49348.0	176	258	262
2021+317 2021+317	20 [illegible]	31 53 2.3054474	0.00001407	0.0004235	0.2001	48865.4	48353.0	49187.0	10	23	23
2030+547 OW 551	20 31 47.?5846972	54 55 3.1408104	0.00505098	0.0009871	0.3458	45481.5	44292.9	48206.0	11	18	20
2029+121 P 2029+121	20 31 54.99426778	12 19 41.3397871	0.00002408	0.0905505	-0.4785	46024.8	44202.0	48355.0	18	38	38
2037+511 3C 418	20 38 37.03467325	51 19 12.6621838	0.00001885	0.0002512	9.3559	48726.7	48158.0	49033.0	11	27	27
2051+745 2051+745	20 51 33.73432511	74 41 40.4978911	0.00008732	0.0002831	-0.3040	48743.5	48353.0	49033.0	9	14	14
2113+293 B2 2113+29B	21 15 29.41342187	29 33 38.3667649	0.00001231	0.0002800	0.233?	45717.0	44202.0	49341.0	80	142	144
2121*053 OX 036	21 23 44.51733308	5 35 22.0938531	0.00001347	0.0003187	-0.1895	48004.8	47254.(?	49030.0	32	65	65
2126-158 P 2126-?5	21 29 12.17590157	-15 38 41.0406888	0.00002149	0.0004523	-0.4768	48565.3	48195.0	49340.0	13	25	25
2128+048 P 2127+04	21 30 32.87743721	5 2 17.4675925	0.00002511	0.0006843	-0.4794	48625.6	48205.0	49030.0	10	13	13
2128-123 P 2128-12	21 31 35.25174108	-12 7 4.7967285	0.00002.523	0.0003799	-0.2779	48137.5	47254.(!	49340.0	31	57	57
2131-021 P 2131-021	21 34 10.30950485	- 1 53 17.2388132	0.00001066	0.0003069	0.0145	48356.3	47254.0	49340.0	51	112	112
2134+004 P 2134+004	21 36 38.58638337	0 41 54.2131884	0.00001025	0.0002909	0.0686	47332.0	43809.0	49340.0	95	209	212
2136+141 OX 161	21 3? 1.30926013	14 23 35.9920723	0.00001404	0.0003407	-0.1672	48868.4	48715.0	49032.0	11	19	19
2143-156 OX-173	21 45 22.97939259	-15 25 43.8857708	0.00002190	0.0004588	-0.4896	48712.2	48195.0	48983.0	12	22	22
2144+092 OX 074	21 47 10.16301378	9 29 45.6715857	0.00001658	0.0003757	-0.3319	48406.3	48196.0	49031.0	9	13	13
2145+067 P 2145+06	21 48 5.45855457	6 57 38.6042699	0.00000958	0.0002602	0.2104	47479.5	43809.0	49340.0	216	545	545
2149+056 OX 082	21 51 37.87548295	5 52 12.9546417	0.00001580	0.0903518	-0.3940	46348.8	44202.0	49031.0	47	102	102
2150+173 2150+173	21 52 24.81938203	17 34 37.7948455	0.00001396	0.0004228	-0.0932	48840.1	48196.0	49187.0	10	20	20
2155-152 OX-192	21 58 5.281?3917	-15 1 9.3281451	0.00001606	0.0003873	-0.3326	47441.8	43809.0	48983.0	68	105	104
2200+420 VRO 42.22.01	22 2 43.29132206	42 16 39.9797474	0.00001464	0.0001919	0.5190	47445.7	43809.0	49340.0	172	380	387
2201+315 B2 2201+31A	22 3 14.97574115	31 45 38.2694720	0.00001365	0.0002446	0.2467	48558.5	48151.0	492.58.(2	21	38	38
2216-038 P 2216-03	22 18 52.03773150	- 3 35 36.8795011	0.00001216	0.0003123	-0.1566	47251.7	45246.0	49340.0	72	138	139
2223-052 3C 446	22 25 47.2593?226	- 4 57 1.3904617	0.00001176	0.0003025	-0.1342	47937.7	45151.0	49251.0	117	237	238
2227-088 P 2227-08	22 29 40.08433245	- 8 32 54.4349841	0.00091416	9.0003382	-0.3024	48295.1	47254.0	49340.0	33	67	67
2229+695 2229+695	22 30 35.46954695	59 45 28.0770125	0.00006709	0.0003455	0.2201	47373.5	45337.0	49340.0	9	18	18
2230+114 CTA 102	22 32 36.40889085	11 43 50.9043370	0.00000998	0.0002335	0.1973	47164.4	43809.0	49340.0	87	213	213
2234*282 GC 2234+28	22 35 22.47084307	28 28 57.4132992	0.00001189	0.0001978	0.3800	47384.7	44202.0	49321.0	141	308	308
2233-148 P 2233-148	22 36 34.08713706	-14 33 22.1890564	0.00002259	0.0004751	-0.5290	48551.0	48196.0	48977.0	9	14	14
2243-123 OY-172.6	22 46 18.23198719	-12 5 51.2775090	0.00001157	0.0003167	-0.1535	47471.7	43809.0	49340.0	131	251	251
2245-328 P 2245-328	22 48 38.6858905:	-32 35 52.1876924	0.00003451	0.0004504	-0.5536	47035.9	43809.0	49031.0	49	123	125
2251+158 3C 454.3	22 53 57.74794914	16 8 53.5513453	0.00001056	0.0002133	0.1956	47288.2	43809.0	49307.0	186	385	386
2252-089 P 2252-089	22 55 4.23?7933?	- 8 44 4.0211604	0.00002180	0.0004737	-0.5731	48541.0	47393.0	49032.0	13	22	22
2253+417 GC 2253+41	22 55 25.70775244	42 2 52.5326223	0.00004070	0.0003592	-0.5135	46024.8	44263.0	49158.0	33	67	68
2254+074 GC 2254+07	22 57 17.30311570	7 43 12.3027760	0.00001754	0.0003719	-0.4588	48201.1	47409.0	48942.0	14	28	28
2254+!224 P 2254+024	22 57 17.55309229	2 43 17.5119557	0.00001725	0.0003457	-0.4759	47?33.1	47254.0	48942.0	19	40	40
2255-282 P 2255-282	22 58 5.962?3440	-27 58 21.2563191	0.00004006	0.0005268	-0.7000	48755.7	48196.0	49331.0	12	29	29
2318+049 GC 2318+04	23 20 44.85659129	5 13 49.9528309	0.00001352	0.0002755	-0.2952	47964.8	47254.0	49340.0	28	52	52
2319'272 B2 2319+27	23 21 59.85222565	27 32 46.4441205	0.00001453	0.0004160	0.0774	48722.0	48103.0	49032.0	8	18	18
2320-035 P 2320-035	23 23 31.95375931	- 3 17 5.0233792	0.00001091	0.0002729	-0.1440	47252.4	44202.0	49187.0	79	165	166
2328+107 P 2328+10	23 30 40.85221497	11 0 18.7103233	0.00001772	0.00'33152	-0.5070	48494.2	48196.0	49158.0	15	22	22
2331-240 2331-240	23 33 55.23785258	-23 43 40.6576829	0.00002515	0.0004220	-0.5843	48689.7	48195.0	49032.0	21	40	40
2335-027 P 2335-027	23 37 57.33907168	- 2 30 57.5286505	0.00001427	0.0003162	-0.3933	48339.3	47381.0	49187.0	22	36	36
2344+092 P 2344+09	23 46 36.83849982	9 30 45.5162269	0.00002858	0.0004562	-0.7833	48456.8	48195.0	48?77-0	9	16	16
2345-167 P 2345-15	23 48 2.60851004	-16 31 12.0212242	0.00001527	0.0003339	-0.4068	47378.3	43809.0	49187.0	76	150	159
2351+456 2351+456	23 54 21.68021512	45 53 4.2356835	0.00001935	0.0002180	0.2345	48730.3	47941.0	49033.0	16	34	34

2351-154	2351-154	23	54	30.19519813	-15	13	11	2123248	0.	0.0003354	-0.4321	48488.3	47381.0	49032.0	31	59	59
2355-106 P	2355-106	23	58	10.88241196	-10	20	8	6107726	0.00001480	0.0003138	-0.4444	48041.1	46337.0	49340.0	44	98	98