The MINOR PLANET CIRCULARS/MINOR PLANETS AND COMETS are published, on behalf of Commission 20 of the International Astronomical Union, usually in batches on the date of each full moon, by:

Minor Planet Center
Smithsonian Astrophysical Observatory
Cambridge, MA 02138, U.S.A.
Telephone 617-495-7244/7440/7444 (for emergency use only)
TWX 710-320-6842 ASTROGRAM CAM EASYLINK 62794505
MARSDEN@CFA.BITNET or .SPAN BRIAN@CFAPS1.SPAN GARETH@CFAPS1.SPAN
Brian G. Marsden, Director Gareth V. Williams, Associate Director

EDITORIAL NOTICE.

The conversion of the Minor Planet Center's numerous computer files and programs from B1950.0 to J2000.0 was essentially completed on time, and the general cooperation of contributors in not completely inundating us with observations and enquiries during this difficult time period was much appreciated. As is evident from the size of this batch of MPCs, however, numerous observations were received, and it has still so far been possible to process only a fraction of the total. While we plan to continue this processing during the next month or more, observers are advised that it may still not be possible to credit reports of new discoveries in the order in which they were transmitted to us. Priority will now be given to J2000.0 data submitted according to the new format.

The J2000.0 conversion of the IAU Circulars and of the Computer Service shared by the IAU Circulars and the Minor Planet Circulars was completed a few days before the nominal target of 1992 Jan. 1, and the Computer Service has in fact also been significantly improved. There will still be some delay, however, in issuing the diskette corresponding to this batch of the MPCs and a new edition of the complete magnetic tape of observations (in the FK5/J2000 system).

New J2000.0 editions (the seventh and the fourth, respectively) have been prepared of the 'Catalogue of Cometary Orbits' and the 'Catalogue of Orbits of Unnumbered Minor Planets'. The former catalogue, with 99 pages and 1353 entries arranged essentially as in the previous edition, costs $20.00, although subscribers to the MPCs can purchase it for $10.00 and have their accounts debited by this amount. In the case of the latter catalogue the opportunity was taken of including J2000.0 values for all the orbits in the P-L, T-1, T-2 and T-3 surveys; the total of 14 367 orbits therefore require two volumes, with MPC subscribers again being allowed to purchase it at half the $30.00 price. Versions of these catalogues distributed on diskettes or by e-mail will not be available for several weeks.

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ERRATA.

MPC	Line	
12808	- 3	For (3671) Dionysius read (3671) Dionysus
12809	2	For Dionysius read Dionysus (twice)
15091	9 to 10	The citation should read: Named for the Trojan hero Euphorbos, who wounded the Greek Patroclus in the breast before being killed by the Greek Menelaus.
19055	11	For MPCs is December read MPCs in December

19057 14 Add a note to the effect that the 1991 09 30.50243 observation was originally given as the discovery observation of 1991 RT7 (i.e., in the incorrect half-month), so this designation is being entirely deleted.
19070 15 For Comet McNaught-Hughes (1991w) read Comet McNaught-Russell (1991w)
19257 -26 For 1991 Sept. 17-Dec. 15 read 1990 Sept. 17-Dec. 15
19257 -7 For Comet McNaught-Hughes (1991w) read Comet McNaught-Russell (1991w)
19322 11 For (16.7- 2.3-) read (16.7- 2.3-)X
19336 -9 For (4310) Stromholm read (4310) Stromholm

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OBSERVATORY CODES.

The following listing is a revision of that on 16637-16645. The longitudes are measured in degrees eastward from Greenwich, and the parallax constants are now the product of the geocentric distance (in earth equatorial radii) and the cosine and sine, respectively, of the geocentric latitude. The Minor Planet Center would be pleased to learn of any errors in the list, particularly since an attempt is being made to give the various quantities to more significant figures than in the past.

Obs.	Long.	Parallax		
000	0.0000	0.62411	+0.77873	Greenwich
001	0.15	0.629	+0.774	Crowborough (Roberts)
002	0.62	0.622	+0.781	Rayleigh (Van Looy)
003	3.90	0.725	+0.687	Montpellier
004	1.4625	0.72520	+0.68627	Toulouse
005	2.2313	0.65989	+0.74887	Meudon
006	2.1258	0.75107	+0.65811	Fabra Observatory, Barcelona
007	2.3371	0.65947	+0.74922	Paris
008	3.0355	0.80172	+0.59578	Algiers
009	7.4417	0.6838	+0.7272	Berne-Uecht
010	6.9267	0.72368	+0.68811	Caussols (CERGA)
011	8.80	0.680	+0.732	Wetzikon (Locher)
012	4.3582	0.63333	+0.77131	Uccle
013	4.4840	0.61481	+0.78604	Leiden
014	5.3940	0.72888	+0.68237	Marseilles
015	5.1292	0.61576	+0.78529	Utrecht
016	5.9893	0.68006	+0.73076	Besancon
017	6.8496	0.64193	+0.76431	Hoher List
018	6.7612	0.62779	+0.77578	Dusseldorf-Bilk
019	6.9575	0.68331	+0.72779	Neuchatel
020	7.3004	0.72391	+0.68767	Nice
021	8.3855	0.65701	+0.75138	Karlsruhe
022	7.7748	0.70790	+0.70409	Pino Torinese
023	8.26	0.643	+0.762	Wiesbaden (Landgraf)
024	8.7216	0.65211	+0.75570	Heidelberg-Konigstuhl
025	9.1975	0.66019	+0.74865	Stuttgart
026	7.4648	0.68489	+0.72640	Berne-Zimmerwald
027	9.1912	0.70254	+0.70929	Milan
028	9.9363	0.64686	+0.76009	Wurzburg
029	10.2406	0.59640	+0.80000	Hamburg-Bergedorf
030	11.2554	0.72350	+0.68806	Arcetri Observatory, Florence
031	11.1925	0.63905	+0.76672	Sonneberg
032	11.5842	0.63161	+0.77272	Jena
033	11.7125	0.63089	+0.77334	Karl Schwarzschild Observatory, Tautenburg

034	12.4523	0.74519	+0.66466	Monte Mario Observatory, Rome
035	12.5779	0.56501	+0.82232	Copenhagen
036	12.6514	0.74726	+0.66241	Castel Gandolfo
037	13.7333	0.73660	+0.67416	Collurania Observatory, Teramo
038	13.7704	0.70033	+0.71144	Trieste
039	13.1874	0.56485	+0.82243	Lund
040	13.7298	0.63019	+0.77387	Lohrmann Institute, Dresden
041	11.3808	0.67986	+0.73101	Innsbruck
042	13.0661	0.61169	+0.78847	Potsdam
043	11.5286	0.69770	+0.71422	Asiago Astrophysical Observatory, Padua
044	14.2559	0.75738	+0.65082	Capodimonte Observatory, Naples
045	16.3390	0.66739	+0.74227	Vienna (since 1879)
046	14.29	0.659	+0.748	Klet Observatory, Ceske Budejovice
047	16.8782	0.61146	+0.78864	Poznan
048	15.83	0.640	+0.765	Hradec Kralove
049	17.6067	0.5088	+0.8580	Uppsala-Kvistaberg
050	18.0582	0.51118	+0.85660	Stockholm (before 1931)
051	18.4766	0.83055	-0.55508	Cape
052	18.3083	0.51224	+0.85597	Stockholm-Saltsjobaden
053	18.9642	0.67688	+0.73373	Konkoly Observatory, Budapest (since 1934)
054	11.6654	0.56595	+0.82169	Brorfelde
055	19.9596	0.64321	+0.76316	Cracow
056	20.2450	0.65501	+0.75346	Skalnate Pleso
057	20.5133	0.71074	+0.70116	Belgrade
058	20.4957	0.57895	+0.81263	Kaliningrad
059	20.2201	0.65500	+0.75364	Lomnicky Stit
060	21.4200	0.61572	+0.78535	Warsaw-Ostrowik
061	22.30	0.661	+0.746	Uzhgorod
062	22.2293	0.49440	+0.86632	Turku
063	22.4450	0.49496	+0.86601	Turku-Tuorla
064	22.75	0.495	+0.865	Turku-Kevola
065	12.63	0.673	+0.739	Traunstein (Bendel)
066	23.7169	0.78932	+0.61195	Athens
067	24.0297	0.64632	+0.76058	Lvov University Observatory
068	24.0142	0.64627	+0.76062	Lvov Polytechnic Institute
069	24.41	0.549	+0.833	Baldone, near Riga
070	25.2865	0.57940	+0.81233	Vilnius (before 1939)
071	24.72	0.748	+0.661	Smolyan
072	7.17	0.629	+0.774	Scheuren Observatory (Gussow)
073	26.0967	0.71549	+0.69630	Bucharest
074	26.4058	0.87518	-0.48263	Boyden Observatory, Bloemfontein
075	26.7216	0.52557	+0.84791	Tartu
076	27.8768	0.90127	-0.43225	Johannesburg-Hartbeespoort
077	28.0292	0.89819	-0.43876	Yale-Columbia Station, Johannesburg
078	28.0750	0.89824	-0.43868	Johannesburg
079	28.2288	0.90120	-0.43251	Radcliffe Observatory, Pretoria
080	28.9667	0.75566	+0.65278	Istanbul
081	28.0750	0.89824	-0.43868	Leiden Station, Johannesburg
082	15.63	0.668	+0.741	St. Polten (Klauser)
083	30.50	0.640	+0.767	Golosseevo-Kiev
084	30.3274	0.50471	+0.86041	Pulkovo
085	30.5023	0.63800	+0.76749	Kiev
086	30.7582	0.68987	+0.72152	Odessa
087	31.3411	0.86799	+0.49495	Helwan
088	31.82	0.868	+0.500	Kottomia
089	31.9747	0.68359	+0.72743	Nikolaev
090	8.25	0.645	+0.762	Mainz (Riemann, Landgraf)
091	4.2090	0.70364	+0.70827	St. Etienne (Chanal)
092	18.5546	0.60177	+0.79601	Torun-Piwnice

093	20.3647	0.3537	+0.9322	Skibotn
094	33.9974	0.71565	+0.69620	Crimea-Simeis
095	34.02	0.711	+0.701	Crimea-Nauchnij
096	9.4283	0.69967	+0.71215	Merate
097	34.7625	0.86165	+0.50608	Wise Observatory, Mitzpeh Ramon
098	11.60	0.699	+0.713	Cima Ekar
099	25.53	0.483	+0.873	Lahti (Salmi)
100	24.13	0.462	+0.884	Ahtari (Kapanen)
101	36.2322	0.64403	+0.76246	Kharkov
102	36.59	0.565	+0.823	Zvenigorod
103	14.47	0.694	+0.715	Ljubljana
104	10.8042	0.71985	+0.69202	San Marcello Pistoiese (Tesi)
105	37.5706	0.56403	+0.82302	Moscow
110	39.15	0.544	+0.835	Rostov
114	41.44	0.725	+0.687	Engelhardt Observatory, Zelenchukskaya Station
115	41.4417	0.72492	+0.68700	Zelenchukskaya
119	42.8253	0.74729	+0.66264	Abastuman
123	44.2917	0.76352	+0.64398	Byurakan
125	44.90	0.739	+0.671	Tbilisi
128	46.10	0.626	+0.779	Saratov
129	45.88	0.776	+0.629	Ordubad
135	49.1210	0.56353	+0.82334	Kasan
136	48.8156	0.56282	+0.82383	Engelhardt Observatory, Kasan
168	59.50	0.546	+0.835	Kourovskaya
186	66.8821	0.77679	+0.62781	Kitab
188	66.88	0.781	+0.622	Shokin Majdanak
190	68.68	0.783	+0.619	Gissar
191	68.7811	0.78306	+0.62006	Dushanbe
192	69.2936	0.75213	+0.65692	Tashkent
193	69.22	0.786	+0.617	Sanglok
210	76.9573	0.73042	+0.68104	Alma-Ata
217	77.88	0.729	+0.683	Assah
218	78.4541	0.95444	+0.29768	Hyderabad
219	78.7283	0.95618	+0.29216	Japal-Rangapur
220	78.83	0.976	+0.216	Kavalur
223	80.2464	0.97427	+0.22465	Madras
236	84.9465	0.55370	+0.82995	Tomsk
286	102.79	0.908	+0.420	Yunnan Observatory
292	285.13	0.767	+0.640	Burlington, New Jersey (Handley)
293	285.59	0.769	+0.636	Burlington remote site (Handley)
297	286.83	0.720	+0.692	Middlebury
298	287.3408	0.74943	+0.65988	Van Vleck Observatory
299	107.6160	0.99316	-0.11808	Bosscha Observatory, Lembang
302	288.88	0.990	+0.150	University of the Andes station
303	289.13	0.990	+0.152	Merida
304	289.2980	0.87559	-0.48217	Las Campanas Observatory
305	109.53	0.950	+0.310	Purple Mountain, Hainan Island station
312	112.33	0.957	+0.288	Tsingtao field station, Xisha Islands
323	116.1350	0.84882	-0.52703	Perth Observatory, Bickley
324	116.3277	0.76598	+0.64072	Peking Observatory, Shaho Station
327	117.5750	0.76278	+0.64470	Peking Observatory, Xinglong Station
330	118.8209	0.84828	+0.52788	Purple Mountain Observatory, Nanking
334	120.3196	0.80925	+0.58552	Tsingtao
337	121.1865	0.85708	+0.51349	Zo-Se
363	130.7703	0.83416	+0.54967	Yamada (Otsubo)
364	130.5747	0.85213	+0.52164	YCPM Kagoshima Station (Mukai)
366	138.3003	0.81147	+0.58267	Miyasaka Observatory
367	133.1670	0.81504	+0.57747	Yatsuka (Abe)
368	138.8117	0.81213	+0.58191	Ochiai (Hioki)

369	139.1500	0.8101	+0.5844	Chichibu (Sato)
370	133.5273	0.83424	+0.54956	Kochi (Seki)
371	133.5965	0.82433	+0.56431	Tokyo-Okayama
372	133.8276	0.83450	+0.54920	Geisei (Seki)
373	135.3397	0.82866	+0.55797	Oishi (Tsumura)
374	134.7196	0.81915	+0.57174	Minami-Oda Observatory (Sugano)
375	134.8708	0.8206	+0.5697	Uzurano (Einaga)
376	139.0392	0.81321	+0.58022	Uenohara (Kawasato)
377	135.7933	0.82014	+0.57031	Kwasan Observatory, Kyoto
378	136.0142	0.82437	+0.56426	Murou (Kumamori)
379	137.7708	0.8228	+0.5664	Hamamatsu (Wakuta)
380	137.0349	0.82190	+0.56772	Ishiki (Kojima)
381	137.6283	0.81220	+0.58173	Tokyo-Kiso
382	137.5553	0.80915	+0.58639	Tokyo-Norikura
383	137.8959	0.80218	+0.59526	Chirorin (Sei)
384	138.1792	0.8219	+0.5678	Shimada
385	138.4680	0.82039	+0.56997	Nihondaira Observatory (Urata)
386	138.3217	0.81121	+0.58309	Yatsugatake-Kobuchizawa
387	139.1944	0.81000	+0.58469	Tokyo-Dodaira
388	139.5421	0.81330	+0.57991	Tokyo-Mitaka
389	139.7447	0.81347	+0.57965	Tokyo (before 1938)
390	139.8725	0.80425	+0.59234	Utsunomiya (Kurosaki)
391	140.7824	0.78621	+0.61592	Sendai Observatory, Ayashi Station
392	141.3667	0.73355	+0.67741	JCPM Sapporo Station
393	140.1292	0.8090	+0.5858	JCPM Sakura Station
394	142.3208	0.70692	+0.70493	JCPM Hamatonbetsu Station
395	142.3583	0.7224	+0.6891	Tokyo-Asahikawa
396	142.4208	0.7236	+0.6879	Asahikawa (Tsuchiya)
397	141.4761	0.73210	+0.67892	Sapporo Science Center
398	139.1080	0.80870	+0.58630	Nagatoro (Kawasato)
399	144.5900	0.73158	+0.67950	Kushiro (Ueda)
400	143.7827	0.72344	+0.68811	Kitami (Yanai)
401	139.4208	0.8088	+0.5861	Oosato (Yamagishi)
402	136.3078	0.81800	+0.57335	Dynic Astronomical Observatory
403	137.0556	0.81593	+0.57625	Kani (Mizuno)
404	140.9292	0.7909	+0.6099	Yamamoto (Otomo)
405	139.3292	0.8069	+0.5887	Kamihoriguchi (Shimoda)
406	141.8233	0.72946	+0.68174	Bibai (Saito)
407	140.3099	0.78426	+0.61837	Kahoku (Okazaki)
408	138.1747	0.81121	+0.58328	Nyukasa (Hirasawa, Suzuki)
409	139.3680	0.81236	+0.58124	Mizuho (Hioki)
410	134.8910	0.81883	+0.57222	Sengamine (Ito)
411	139.4170	0.80739	+0.58805	Oizumi (Kobayashi)
412	140.5991	0.80011	+0.59803	Iwaki (Tanaka)
413	149.0661	0.85560	-0.51626	Siding Spring Observatory
414	149.0077	0.81694	-0.57499	Mount Stromlo
415	149.06	0.816	-0.577	Kambah, near Canberra (Herald)
416	149.13	0.816	-0.575	Barton, near Canberra (Herald)
418	150.94	0.858	-0.511	Tamworth (Garradd)
419	150.83	0.833	-0.551	Windsor (Tebbutt)
420	151.2050	0.83126	-0.55404	Sydney
425	152.93	0.896	-0.443	Taylor Range Observatory, Brisbane
474	170.4650	0.72077	-0.69108	Mount John Observatory, Lake Tekapo
478	3.0896	0.72548	+0.68597	Lamalou-les-Bains (Azema)
479	6.0505	0.73020	+0.68096	Sollies-Pont (Candela)
480	0.77	0.615	+0.786	Cockfield (Mobberley)
481	7.93	0.596	+0.800	Moorwarfen
482	357.1854	0.55560	+0.82866	St. Andrews
483	173.80	0.748	-0.661	Carter Observatory, Black Birch Station

484	174.75	0.753	-0.657	Happy Valley, Wellington (Gilmore)
485	174.7654	0.75256	-0.65635	Carter Observatory, Wellington
486	175.47	0.765	-0.643	Palmerston North (Munford)
487	355.45	0.568	+0.821	Macnairston Observatory
488	358.37	0.575	+0.816	Newcastle-upon-Tyne (D. S. Brown)
489	359.87	0.612	+0.788	Hemingford Abbots (Young)
490	358.00	0.633	+0.772	Wimborne Minster (Swan)
491	356.9000	0.76131	+0.64644	Centro Astronomico de Yebes
492	358.47	0.605	+0.795	Mickleover (Baguley)
493	357.45	0.797	+0.603	Estacion Astronomica de Calar Alto
494	357.8361	0.61126	+0.78879	Stakenbridge (Manning)
495	357.66	0.598	+0.800	Altrincham (Scott)
496	358.69	0.631	+0.774	Bishopstoke (Arbour)
497	359.30	0.626	+0.776	Ascot-Loudwater (Armstrong)
498	359.26	0.612	+0.788	Northampton (Hurst)
499	359.79	0.626	+0.776	Cheam (Birtwhistle)
500	0.0000	0.00000	0.00000	Geocentric
501	0.3475	0.63237	+0.77208	Herstmonceux
502	0.85	0.617	+0.783	Colchester (Hendrie)
503	0.0948	0.61400	+0.78667	Cambridge
504	4.44	0.685	+0.725	Le Creusot (Merlin)
505	4.56	0.622	+0.781	Simon Stevin
506	9.96	0.598	+0.797	Bendestorf (Ressel)
507	5.22	0.617	+0.783	Nyenheim (Son)
508	5.29	0.617	+0.783	Zeist (Son)
509	5.87	0.732	+0.680	La Seyne sur Mer
510	8.03	0.631	+0.772	Siegen
511	5.71	0.722	+0.690	Haute Provence
512	4.49	0.615	+0.786	Leiden (before 1860)
513	4.7855	0.69971	+0.71209	Lyons
514	8.43	0.652	+0.755	Mundenheim (1907-1913)
515	7.48	0.650	+0.758	Volkssternwarte Dhaun, near Kirn
516	9.9733	0.59539	+0.80075	Hamburg (before 1909)
517	6.1525	0.69340	+0.71823	Geneva
518	9.9727	0.59545	+0.80071	Marine Observatory, Hamburg
519	8.29	0.626	+0.776	Meschede (Hempel)
520	7.0966	0.63427	+0.77053	Bonn
521	10.8899	0.64562	+0.76116	Bamberg
522	7.7677	0.66279	+0.74633	Strasbourg
523	8.65	0.643	+0.765	Frankfurt
524	8.4605	0.6509	+0.7566	Mannheim
525	8.7708	0.6331	+0.7715	Marburg
526	10.1477	0.58426	+0.80886	Kiel
527	9.9431	0.5955	+0.8007	Altona
528	9.9426	0.62340	+0.77931	Gottingen
529	10.7229	0.50259	+0.86163	Christiania
530	10.6898	0.5911	+0.8039	Lubeck
531	12.4797	0.74545	+0.66434	Collegio Romano, Rome
532	11.6084	0.66853	+0.74130	Munich
533	11.8715	0.70335	+0.70847	Padua
534	12.3913	0.62606	+0.77719	Leipzig (since 1861)
535	13.3578	0.78782	+0.61386	Palermo
536	13.1062	0.61135	+0.78873	Berlin-Babelsberg
537	13.3642	0.6097	+0.7900	Urania Observatory, Berlin
538	13.8461	0.70998	+0.70187	Pola
539	14.1316	0.66968	+0.74024	Kremsmunster
540	14.2750	0.6647	+0.7448	Linz
541	14.3953	0.64306	+0.76331	Prague
542	13.04	0.607	+0.790	Falkensee (Gressmann)

543	11.66	0.565	+0.821	Leipzig (before 1861)
544	13.4250	0.61040	+0.78945	Wilhelm Foerster Observatory, Berlin
545	16.3817	0.66767	+0.74200	Vienna (before 1879)
546	16.3549	0.66760	+0.74207	Oppolzer Observatory, Vienna
547	17.0363	0.62904	+0.77479	Breslau
548	13.3950	0.60999	+0.78976	Berlin (1835-1913)
549	17.6257	0.50341	+0.86116	Uppsala
550	11.4196	0.5943	+0.8015	Schwerin
551	18.1895	0.67201	+0.73808	Hurbanovo, formerly O’Gyalla
552	11.3418	0.71485	+0.69700	Osservatorio S. Vittore, Bologna
553	18.99	0.640	+0.765	Chorzow
554	8.40	0.638	+0.769	Burgsolms Observatory, Wetzlar
555	19.83	0.643	+0.762	Cracow-Fort Skala
556	11.26	0.675	+0.734	Reintal, near Munich (Seiler)
557	14.7837	0.64530	+0.76148	Ondrejov
558	21.0303	0.61396	+0.78672	Warsaw
559	14.98	0.793	+0.607	Serra La Nave
560	10.93	0.704	+0.708	Madonna di Dossobuono (Luciano)
561	20.02	0.671	+0.739	Piszkesteto
562	15.92	0.668	+0.741	Figl Observatory, Vienna
563	13.60	0.671	+0.739	Seewalchen (Bressler)
564	11.19	0.671	+0.741	Herrsching (Stattmayer).
565	10.14	0.704	+0.708	Brescia
566	203.7439	0.93625	+0.35152	Haleakala
567	12.71	0.699	+0.715	Chions
568	204.5278	0.94171	+0.33725	Mauna Kea
569	24.9587	0.49891	+0.86375	Helsinki
570	25.2990	0.5794	+0.8123	Vilnius (since 1939)
571	10.63	0.704	+0.708	Cavriana
572	6.89	0.631	+0.772	Cologne
573	9.6612	0.6145	+0.7862	Eldagsen (Bonk)
574	10.27	0.704	+0.708	Gottolengo (Mattarozzi)
575	6.81	0.683	+0.729	La Chaux de Fonds (Behrend)
576	0.38	0.631	+0.774	Burwash (Young)
577	7.50	0.678	+0.734	Metzerlen Observatory
578	27.99	0.898	-0.439	Linden Observatory (Hers)
579	8.85	0.711	+0.701	Novi Ligure (Balbi)
580	15.50	0.683	+0.729	Graz (Ornig)
581	22.80	0.830	-0.556	Sedgefield (Hers)
582	1.22	0.617	+0.783	Orwell Park
583	30.27	0.692	+0.720	Odessa-Mayaki
584	30.2946	0.50213	+0.86189	Leningrad
585	30.53	0.638	+0.767	Kiev comet station
586	0.1423	0.73358	+0.67799	Pic du Midi
587	9.23	0.697	+0.715	Sormano
588	11.25	0.715	+0.697	Eremo di Tizzano
589	12.64	0.739	+0.673	Santa Lucia Stroncone
590	7.46	0.678	+0.734	Metzerlen
591	9.6258	0.6099	+0.7898	Resse Observatory (Ehring)
592	7.01	0.629	+0.774	Sohlingen (Koch)
593	11.17	0.739	+0.671	Monte Argentario
594	13.2033	0.74497	+0.66529	Monte Autore
595	13.53	0.697	+0.715	Farra d’Isonzo
596	12.62	0.744	+0.666	Colleverde di Guidonia
597	9.6630	0.6146	+0.7862	Springe (Ehring)
656	236.48	0.666	+0.744	Victoria (Newton)
657	236.68	0.664	+0.746	Climenhaga Observatory, Victoria
660	237.7379	0.79038	+0.61059	Leuschner Observatory, Berkeley
662	238.3545	0.79619	+0.60335	Lick Observatory, Mount Hamilton

667	240.0092	0.68448	+0.72663	Wanapum Dam (Pryal)
668	240.82	0.821	+0.568	San Emigdio Peak
669	240.82	0.826	+0.563	Ojai
671	242.00	0.828	+0.561	Stony Ridge
672	241.9403	0.82802	+0.55930	Mount Wilson
673	242.3191	0.82647	+0.56172	Table Mountain Observatory, Wrightwood
674	242.39	0.826	+0.563	Ford Observatory, Wrightwood
675	243.1360	0.83634	+0.54686	Palomar Mountain
680	244.78	0.833	+0.554	Los Angeles (Hutson)
685	247.84	0.816	+0.575	Williams, AZ (Roques)
686	249.2092	0.84512	+0.53359	U. of Minn. Infrared Obs., Mt. Lemmon
687	248.3473	0.81848	+0.57318	Northern Arizona University, Flagstaff
688	248.4645	0.81938	+0.57193	Lowell Observatory, Mesa Station
689	248.2413	0.81844	+0.57329	U.S. Naval Observatory, Flagstaff
690	248.3142	0.81825	+0.57353	Lowell Observatory, Flagstaff
691	248.4006	0.84946	+0.52649	Steward Observatory, Kitt Peak
692	249.0513	0.84679	+0.53036	Steward Observatory, Tucson
693	249.2680	0.84532	+0.53321	Catalina Station, Tucson
694	248.9943	0.84700	+0.53009	Tumamoc Hill, Tucson
695	248.4053	0.84950	+0.52643	Kitt Peak
696	249.1154	0.85205	+0.52249	Whipple Observatory (Mt. Hopkins)
697	248.3842	0.84956	+0.52629	Kitt Peak (McGraw-Hill)
698	249.28	0.844	+0.532	Mt. Bigelow
702	252.8117	0.8305	+0.5561	Joint Obs. for cometary research, Socorro
704	253.34	0.833	+0.554	Lincoln Laboratory ETS, New Mexico
707	254.56	0.774	+0.633	Chamberlin field station (Everhart)
708	255.0475	0.77092	+0.63520	Chamberlin Observatory, Denver
711	255.9785	0.86114	+0.50731	McDonald Observatory, Fort Davis
724	260.8053	0.94388	+0.33026	National Observatory, Tacubaya
741	266.8503	0.71493	+0.69692	Goodsell Observatory, Northfield
754	271.4432	0.73762	+0.67303	Yerkes Observatory, Williams Bay
756	272.3257	0.74361	+0.66641	Dearborn Observatory, Evanston
759	273.1947	0.80946	+0.58530	Nashville (Barnard)
760	273.6048	0.77216	+0.63337	Goethe Link Observatory, Brooklyn
765	275.5775	0.77669	+0.62784	Cincinnati
766	275.5167	0.73600	+0.67477	Michigan State University Obs., East Lansing
767	276.2697	0.74102	+0.66930	Ann Arbor
768	277.08	0.734	+0.675	Dearborn (McEldery)
769	276.9892	0.76716	+0.63936	McMillin Observatory, Columbus
771	277.57	0.922	+0.389	Boyeros Observatory, Havana
773	278.4318	0.74966	+0.65966	Warner and Swasey Observatory, Cleveland
774	278.9250	0.74905	+0.66039	Warner and Swasey Nassau Station, Chardon
776	284.47	0.734	+0.675	Foggy Bottom, Hamilton
777	280.6017	0.72454	+0.68695	Toronto
778	279.9778	0.76172	+0.64582	Allegheny Observatory, Pittsburgh
779	280.5779	0.72219	+0.68943	David Dunlap Observatory, Richmond Hill
780	281.4778	0.78868	+0.61280	Leander McCormick Observatory, Charlottesville
781	281.5075	1.00045	-0.00405	Quito
782	281.65	0.999	+0.000	Quito (comet astrograph station)
783	282.02	0.783	+0.622	Rixeyville (Chester)
784	282.2207	0.7413	+0.6689	Alfred University Observatory
785	285.3433	0.76319	+0.64402	Princeton
786	282.9345	0.77906	+0.62487	U.S. Naval Obs., Washington (since 1893)
787	282.9494	0.77934	+0.62451	U.S. Naval Obs., Washington (before 1893)
788	284.3667	0.76953	+0.63650	Mount Cuba Observatory, Wilmington
789	284.5940	0.73188	+0.67922	Litchfield Observatory, Clinton
790	284.2835	0.70343	+0.70840	Dominion Observatory, Ottawa
791	284.5236	0.76713	+0.63937	Flower and Cook Observatory, Philadelphia
792	288.30	0.753	+0.657	U. of Rhode Island, Quonochontaug

793	286.2203	0.73660	+0.67407	Dudley Observatory, Albany (before 1893)
794	278.90	0.748	+0.661	Vassar College Observatory, Poughkeepsie
795	286.0123	0.7589	+0.6491	Rutherford
796	286.45	0.755	+0.654	Stamford
797	287.0751	0.75218	+0.65676	Yale Observatory, New Haven
798	287.0154	0.75093	+0.65822	Yale Observatory, Bethany
799	288.8650	0.73896	+0.67150	Winchester (Metcalf)
800	288.4511	0.96006	-0.28021	Harvard Observatory, Arequipa
801	288.4408	0.73838	+0.67216	Oak Ridge Observatory
802	288.8706	0.73982	+0.67055	Harvard Observatory, Cambridge
803	288.9167	0.74543	+0.66436	Taunton (Metcalf)
804	289.3121	0.83421	-0.54976	Santiago-San Bernardo
805	288.97	0.840	-0.542	Santiago-Cerro El Roble
806	289.4513	0.83584	-0.54738	Santiago-Cerro Calan
807	289.1941	0.86560	-0.49980	Cerro Tololo Observatory, La Serena
808	290.67	0.851	-0.523	El Leoncito
809	289.2704	0.87346	-0.48603	European Southern Observatory, La Silla
810	288.5154	0.73712	+0.67352	Wallace Observatory, Westford
811	289.8952	0.75259	+0.65629	Maria Mitchell Observatory, Nantucket
812	288.42	0.840	-0.542	Vina del Mar (Liller)
813	289.31	0.844	-0.535	Santiago-Quinta Normal
814	288.42	0.746	+0.664	North Scituate (Napier)
820	295.37	0.931	-0.366	Tarija
821	295.4533	0.85270	-0.52103	Cordoba-Bosque Alegre
822	295.8035	0.85419	-0.51834	Cordoba
839	302.0678	0.82097	-0.56906	La Plata
864	130.7533	0.84257	+0.53680	Kumamoto (Miyamoto)
869	133.4298	0.83480	+0.54870	Tosa (Ike)
870	313.17	0.934	-0.359	Campinas
871	134.3925	0.82256	+0.56678	Akou (Kawanishi)
872	134.2411	0.82904	+0.55734	Tokushima (Iwamoto)
873	133.7708	0.8235	+0.5654	Kurashiki Observatory (Honda)
874	314.42	0.924	-0.380	Itajuba
875	139.2353	0.80896	+0.58593	Yorii (Arai, Mori)
876	139.2467	0.80762	+0.58774	Honjo (Mitsuma)
877	139.0828	0.81194	+0.58196	Okutama (Hioki)
878	136.9142	0.82019	+0.57019	Kagiya (Furuta)
879	137.3535	0.81970	+0.57099	Tokai (Furuta)
880	316.7771	0.92169	-0.38664	Rio de Janeiro
881	137.2571	0.81872	+0.57230	Toyota (Suzuki)
882	137.3558	0.81842	+0.57281	JCPM Oi Station
883	138.4215	0.81986	+0.57065	Shizuoka
884	138.0792	0.8187	+0.5724	Kawane (Iwahana)
885	138.4667	0.82049	+0.56975	JCPM Yakiimo Station
886	138.9367	0.81836	+0.57280	Mishima (Akiyama)
887	139.3367	0.80745	+0.58798	Ojima (Niijima)
888	138.9952	0.81885	+0.57217	Gekko (Oshima)
889	140.1427	0.80322	+0.59372	Karasuyama (Inoda)
890	140.2500	0.8108	+0.5834	JCPM Tone Station
891	140.8633	0.78606	+0.61609	JCPM Kimachi Station
892	139.4753	0.80852	+0.58650	YGCO Hoshikawa and Nagano Stations
893	140.8657	0.78626	+0.61583	Sendai Municipal Observatory
894	138.4476	0.81113	+0.58321	Kiyosato (Miyasaka).
895	140.7203	0.78573	+0.61658	Hatamae (Sato)
896	138.3678	0.81132	+0.58292	Astro Village Observatory
897	139.4929	0.80797	+0.58725	YGCO Chiyoda Station
898	138.1883	0.82107	+0.56899	Fujieda (Shiozawa)
899	142.5500	0.7224	+0.6891	Toma (Tsuchiya)
900	135.9865	0.82039	+0.56995	Ohtsu (Ikari)

901 137.0877 0.81664 +0.57525 Tajimi
902 132.2208 0.82775 +0.55922 Ootake
950 342.12 0.877 +0.478 La Palma
972 357.5833 0.54359 +0.83656 Dun Echt
973 359.67 0.622 +0.779 Harrow
974 8.9220 0.71542 +0.69637 Genoa (Alfano)
975 359.98 0.774 +0.633 Valencia
976 358.48 0.612 +0.788 Leamington Spa (Johnstone)
977 351.5483 0.58660 +0.80717 Markree
978 358.25 0.584 +0.809 Conder Brow (Greenwood)
979 358.75 0.629 +0.774 South Wonston (Arbour)
980 357.2200 0.58864 +0.80570 Lancaster (Buczynski)
981 353.3522 0.58409 +0.80898 Armagh
982 353.6621 0.59771 +0.79904 Dunsink Observatory, Dublin
983 353.7946 0.80521 +0.59101 San Fernando
984 357.26 0.631 +0.774 Eastfield (Ridley)
985 357.53 0.607 +0.790 Telford (McAdam)
986 358.75 0.624 +0.779 Ascot (Waterfield)
987 355.37 0.586 +0.807 Archallagan Observatory (Soper)
988 355.7060 0.56225 +0.82421 Glasgow
989 357.69 0.600 +0.797 Wilfred Hall Observatory, Preston
990 356.3121 0.76260 +0.64487 Madrid
991 356.9278 0.59750 +0.79919 Liverpool (since 1867)
992 356.9995 0.5973 +0.7993 Liverpool (before 1867)
993 357.50 0.631 +0.774 Woolston Observatory (Waterfield)
994 359.39 0.629 +0.776 Godalming (Ridley)
995 358.4177 0.57819 +0.81319 Durham
996 358.7483 0.62025 +0.78179 Oxford
997 359.15 0.619 +0.783 Hartwell
998 359.7593 0.62226 +0.78020 London-Mill Hill
999 359.4725 0.71033 +0.70153 Bordeaux-Floirac

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DELETED OBSERVATIONS.

The following observations are to be deleted.

Object	Date	UT	R. A. (2000)	Decl.	Reference	Obs.
1990 QY17 *	1990 08	26.91152	22 20 49.87	-04 49 17.1	MPC 19087	095
1990 QY17	1990 08	26.92679	22 20 49.14	-04 49 20.3	MPC 19087	095
1990 QY17	1990 08	30.91381	22 17 37.34	-04 59 05.4	MPC 19087	095
1990 QY17	1990 08	30.92770	22 17 36.65	-04 59 06.9	MPC 19087	095
1990 RD17	1990 09	23.89652	00 18 30.61	+00 51 15.3	MPC 19090	095
1990 TV15 *	1990 10	14.82290	23 51 05.89	+00 10 26.1	MPC 19095	095
1990 TV15	1990 10	14.85068	23 51 04.99	+00 10 12.0	MPC 19095	095
1990 WF7	1990 11	19.16319	03 23 45.36	+13 19 42.7	MPC 18248	809
1990 WF7	1990 11	19.17361	03 23 44.70	+13 19 40.1	MPC 18248	809
1990 WF7	1990 11	19.18403	03 23 44.09	+13 19 37.5	MPC 18248	809

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IDENTIFICATION CHANGES.

Continuation to MPC 19056.

Object	Date	UT	R. A. (2000)	Decl.	Old desig.	Mag.	Obs.
1976 SH11 *	1976 09	27.17292	21 58 26.78	-06 10 33.2	1976 QL		675
1979 SG15 *	1979 09	28.89674	00 10 04.00	+09 29 24.3	1979 SZ1	17.0	095

1989 CJ9	*	1989 02 13.72951	10 37 49.11	+34 12 09.6	1987 XC	20		372
1989 EE12	*	1989 03 03.12396	08 56 55.96	+07 58 52.8	1989 CM3			809
1989 EE12		1989 03 03.14132	08 56 55.25	+07 58 58.1	1989 CM3			809
1989 EE12		1989 03 03.15868	08 56 54.60	+07 59 04.5	1989 CM3			809
1990 HD5	*	1990 04 18.70295	14 34 21.04	-05 17 16.9	1987 XC	19		372
1990 HD5		1990 04 18.71372	14 34 20.50	-05 17 13.6	1987 XC			372
1990 HE5	*	1990 04 30.77705	20 17 12.44	-23 46 41.2	1990 HL2			413
1990 HE5		1990 04 30.79441	20 17 13.01	-23 46 37.2	1990 HL2			413
1990 KO3	*	1990 05 23.86111	15 16 38.11	-13 11 33.1	1990 KP2	16.0		095
1990 KO3		1990 05 23.87500	15 16 37.35	-13 11 43.3	1990 KP2	16.0		095
1990 ME2	*	1990 06 28.13229	17 44 21.38	-24 44 23.4	1990 MP1			808
1990 ME2		1990 06 28.16830	17 44 19.13	-24 44 18.8	1990 MP1			808

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CRITICAL LIST OF MINOR PLANETS.

The following list updates and is in the same form as that on MPC 16772:

1. Object observed at only one opposition:
   719

2. Objects observed at only two oppositions:
   2608 3352 3360 3553 3671 3688 3757 3908 4015 4055 4341 4401
   4503 4544 4581 4660 4688 4769

3. Objects accurately observed at only three oppositions:
   1538 2059 2061 2062 2101 2202 2340 2552 2937 3087 3102 3144
   3245 3270 3289 3446 3551 3677 3833 3838 3988 4034 4179 4257
   4450 4486 4487 4587 4707 4708 4776 4783 4791 4792 4805 4827
   4828 4829 4832 4867 4946 4947 4950 4957

4. Objects observed at four or more oppositions, last during 1973-1979:
   1134 1920 2049 2102

5. Objects observed at four or more oppositions, last during 1980-1981:
   1221 1459 1565 1575 1622 2077 2078 2096 2105 2215 2221 2262
   2263 2272 2335 2337 2436 2462 2463 2536 2651 2855

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IDENTIFICATIONS WITH COMETS.

S. Nakano reports the following identifications (cf. MPC 18002):

1983 RD6 = P/du Toit-Neujmin-Delporte
1991 RE12= P/Van Biesbroeck

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ROMAN NUMERAL DESIGNATIONS OF COMETS IN 1990.

The following tabulation continues that on MPC 17273.

Comet	T	Name	Year/letter	Ref.
1990 I	Jan. 20.4	P/Kopff	1988k	IAUC 4647
1990 II	Feb. 8.2	P/Tuttle-Giacobini-Kresak	1989b1	MPC 15520
1990 III	Mar. 17.3	Cernis-Kiuchi-Nakamura	1990b	MPC 16551
1990 IV	Apr. 2.2	P/Sanguin	1989z	MPC 15521

1990	V	Apr. 10.0	Austin	1989c1	MPC 17400
1990	VI	Apr. 11.9	Skorichenko-George	1989e1	MPC 17400
1990	VII	May 17.9	P/Russell 3	1989d	MPC 14154
1990	VIII	May 19.3	P/Schwassmann-Wachmann 3	1989d1	IAUC 4923
1990	IX	June 23.6	P/Peters-Hartley	1990d	MPC 19257
1990	X	July 2.5	P/Wild 4	1990a	MPC 16551
1990	XI	July 6.8	P/Russell 4	1989g1	IAUC 4932
1990	XII	July 14.2	P/Shoemaker-Levy 4	1991f	MPC 18255
1990	XIII	Aug. 1.9	P/Mueller 3	1990l	MPC 19257
1990	XIV	Sept.12.7	P/Honda-Mrkos-Pajdusakova	1990f	IAUC 5035
1990	XV	Sept.18.6	P/Shoemaker-Levy 1	1990o	MPC 19257
1990	XVI	Sept.25.4	P/Shoemaker-Levy 2	1990p	MPC 17595
1990	XVII	Sept.28.7	Tsuchiya-Kiuchi	1990i	MPC 17595
1990	XVIII	Oct. 4.5	P/Holt-Olmstead	1990k	MPC 19257
1990	XIX	Oct. 18.3	McNaught-Russell	1991g	MPC 17940
1990	XX	Oct. 24.7	Levy	1990c	MPC 17596
1990	XXI	Oct. 28.6	P/Encke		IAUC 5085
1990	XXII	Nov. 18.4	McNaught-Russell	1991w	MPC 19257
1990	XXIII	Nov. 19.0	P/Johnson	1990h	IAUC 5038
1990	XXIV	Nov. 19.9	P/Mueller 2	1990j	MPC 19258
1990	XXV	Nov. 22.6	P/Kearns-Kwee	1989u	MPC 15215
1990	XXVI	Dec. 10.9	Arai	1991b	MPC 18081
1990	XXVII	Dec. 12.4	P/Shoemaker-Levy 3	1991e	MPC 18255
1990	XXVIII	Dec. 16.9	P/Wild 2	1989t	MPC 15521
1990	XXIX	Dec. 22.3	P/Spacewatch	1991x	MPC 19258
1990	XXX	Dec. 28.9	P/Taylor	1990n	IAUC 5134

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OBSERVATIONS OF COMETS.

Observations are published here for the following observatory codes:

098 Cima Ekar. 0.4-m Schmidt. Observers A. Boattini, M. Cavagna, C. Gualdoni, P. Sicoli and M. Tombelli.
104 Pian dei Termini. 0.4-m f/5 reflector. Observers L. Tesi and P. Giagli. Reduction by G. Cattani.
293 Burlington remote site. Observer T. Handley.
364 JCPM Kagoshima Station. 0.25-m f/4.2 Wright-Schmidt. Observers M. Mukai and T. Takeishi.
372 Geisei. 0.60-m reflector. Observer T. Seki. In part from Orient. Astron. Assoc. Comet Bull.
373 Oishi. 0.31-m f/4.2 reflector. Observer M. Tsumura. Measured by S. Hayakawa.
381 Kiso. 1.05-m Schmidt. Observers T. Nakamura, K. Nakata, G. Sasaki, H. Furusawa, T. Soyano and N. Miyauchi-Isobe.
385 Nihondaira Observatory Oohira Station. 0.25-m f/3.4 hyperboloid astrocamera. Observer T. Urata.
402 Dynic. 0.25-m f/3.4 Schmidt. Observer A. Sugie.
411 Oizumi. 0.16-m f/4.8 reflector + CCD. Observer T. Kobayashi.
413 Siding Spring. U.K. Schmidt, Uppsala Southern Schmidt and 1.0-m reflector + CCD. Observers S. M. Hughes, R. H. McNaught and D. I. Steel.
478 Lamalou-les-Bains. Observer J.-M. Azema.
503 Cambridge. Observer J. D. Shanklin.
540 Linz. 0.3-m f/5.2 Schmidt-Cassegrain. Observers E. Meyer, E. Obermair and H. Raab.
541 Prague. 0.37-m Maksutov. Observer J. Manek.

587 Sormano. 0.21-m f/4.9 astrograph and 0.5-m f/5.9 reflector. Observers M. Cavagna, E. Colzani, P. Sicoli, A. Testa and G. Ventre.
589 Santa Lucia Stroncone. 0.5-m f/7.5 Ritchey-Chretien and 0.25-m f/3 Baker-Schmidt + CCD. Observer A. Vagnozzi.
595 Farra d'Isonzo. 0.4-m f/4.5 reflector. Observers G. Lombardi, E. Pettarin and F. Piani.
657 Victoria. 0.25-m astrograph and 0.5-m reflector + CCD. Observers J. B. Tatum, D. D. Balam and R. M. Robb.
675 Palomar. 0.46-m Schmidt and 1.2-m Schmidt. Observers J. Alu, C. Brewer, E. Helin, K. Lawrence, D. H. Levy, D. Mendenhall, J. Mueller, P. Rose, C. S. Shoemaker and E. M. Shoemaker. Measurers T. M. King, K. Lawrence, J. Mueller, P. Rose, C. S. Shoemaker and B. A. Skiff.
691 Steward Observatory, Kitt Peak. 0.9-m SPACEWATCH telescope. Observers T. Gehrels, D. Rabinowitz and J. V. Scotti. Measured by Scotti.
695 Kitt Peak. 2.1-m reflector. Observer B. E. A. Mueller.
801 Oak Ridge Observatory. 1.5-m reflector + CCD. Observers R. E. McCrosky and C.-Y. Shao.
875 Fukaya. 0.16-m hyperboloid astrograph. Observer M. Ishikawa. Measured by S. Hayakawa.
887 Ojima. 0.30-m f/5.8 reflector and 0.16-m f/3.3 hyperboloid astro-camera. Observers T. Niijima and T. Urata. Measured by Urata.
892 YGCO Nagano Station. 0.16-m f/3.3 and 0.25-m f/4.5 reflectors. Observer S. Hayakawa.
894 Otomo. 0.25-m f/3.4 reflector. Observer S. Otomo.
896 Yatsugatake South Base Observatory. 0.20-m f/4 hyperboloid reflector. Observers Y. and R. Kushida. Measured by Y. Kushida.
897 Chiyoda. 0.25-m f/3.4 Wright-Schmidt camera. Observer T. Kojima.
900 Ohtsu. 0.16-m f/2.5 Schmidt. Observer Y. Ikari.

Object	Date	UT	R. A. (2000)	Decl.	Mag.		N	Obs.
			Periodic Comet Smirnova-Chernykh					
/1984 V	1991	12 08.68958	09 52 23.02	+19 17 51.8	17	T		372
/1984 V	1991	12 08.70244	09 52 23.18	+19 17 52.3				372
			Periodic Comet Grigg-Skjellerup					
/1987 X	1991	11 08.36677	06 26 12.68	+02 12 08.1	21.0	N		695
/1987 X	1991	11 08.37778	06 26 12.51	+02 12 01.6	21.4	N		695
/1987 X	1991	11 08.44229	06 26 11.53	+02 11 23.1	21.2	N		695
/1987 X	1991	11 08.45992	06 26 11.27	+02 11 12.5	21.2	N		695
			Periodic Comet Schwassmann-Wachmann 1					
/1989 XV	1991	11 08.22363	03 33 22.78	+30 25 16.8				801
/1989 XV	1991	12 01.25329	03 21 21.49	+29 39 23.5	16.0	T		675
/1989 XV	1991	12 01.28854	03 21 20.35	+29 39 19.5				675
/1989 XV	1991	12 03.25329	03 20 23.21	+29 34 24.1				675
/1989 XV	1991	12 03.28438	03 20 22.28	+29 34 21.2				675
/1989 XV	1991	12 04.55347	03 19 46.23	+29 31 08.9			1	381
/1989 XV	1991	12 05.14409	03 19 29.53	+29 29 39.6				801
/1989 XV	1991	12 05.16963	03 19 28.82	+29 29 36.0				801
/1989 XV	1991	12 12.50341	03 16 15.23	+29 10 27.8				411
/1989 XV	1991	12 30.53534	03 10 32.43	+28 23 25.8				411
/1989 XV	1991	12 30.53786	03 10 32.30	+28 23 24.9				411
/1989 XV	1991	12 30.54267	03 10 32.55	+28 23 22.9				411
/1989 XV	1991	12 31.48271	03 10 20.64	+28 21 08.1				411
/1989 XV	1991	12 31.48510	03 10 20.56	+28 21 05.4				411
/1989 XV	1991	12 31.48987	03 10 20.51	+28 21 05.1				411
/1989 XV	1991	12 31.49230	03 10 20.51	+28 21 06.0				411

Comet Levy (1990 XX)

/1990 XX	1990 07 28.98958	23 37 02.11	+28 39 03.4		2	541
/1990 XX	1990 07 29.05069	23 36 52.05	+28 38 21.9			541
/1990 XX	1991 11 03.42738	09 54 09.36	+21 16 21.1			801
/1990 XX	1991 11 06.39176	09 54 12.74	+21 29 03.1			801
/1990 XX	1991 11 06.42081	09 54 12.76	+21 29 10.5			801

Comet McNaught-Russell (1990 XXII)

/1990 XXII	1991 11 08.48428	21 37 36.87	-09 28 29.8		413
/1990 XXII	1991 11 08.48907	21 37 36.91	-09 28 32.4		413
/1990 XXII	1991 11 26.50325	21 38 44.07	-10 48 15.9		413
/1990 XXII	1991 11 26.50762	21 38 44.08	-10 48 16.8		413

Periodic Comet Spacewatch

/1990 XXIX	1991 11 09.19785	22 53 38.34	-12 25 43.7	22.0 N	695

Comet Shoemaker-Levy (1991d)

/1991d	1991 11 04.81343	13 28 02.83	+34 19 35.7		411
/1991d	1991 11 04.81525	13 28 03.29	+34 19 37.1		411
/1991d	1991 11 04.82138	13 28 04.34	+34 19 40.1		411
/1991d	1991 11 04.82626	13 28 05.24	+34 19 41.9		411
/1991d	1991 11 10.82883	13 46 04.97	+34 56 14.9		411
/1991d	1991 11 10.83017	13 46 05.32	+34 56 15.3		411
/1991d	1991 11 10.83112	13 46 05.53	+34 56 15.3		411
/1991d	1991 11 10.83226	13 46 05.75	+34 56 16.6		411
/1991d	1991 11 20.83665	14 17 54.42	+35 58 47.3		411
/1991d	1991 11 20.83970	14 17 55.06	+35 58 49.0		411
/1991d	1991 11 20.84159	14 17 55.30	+35 58 49.4		411
/1991d	1991 12 03.51128	15 01 16.61	+37 16 13.6	11.0 T	675
/1991d	1991 12 03.54472	15 01 23.78	+37 16 25.3		675
/1991d	1991 12 03.85055	15 02 28.78	+37 18 14.0		411
/1991d	1991 12 03.85149	15 02 28.93	+37 18 15.2		411
/1991d	1991 12 03.85330	15 02 29.28	+37 18 14.8		411
/1991d	1991 12 03.85422	15 02 29.50	+37 18 16.2		411
/1991d	1991 12 03.85501	15 02 29.76	+37 18 15.7		411
/1991d	1991 12 03.85557	15 02 29.82	+37 18 15.4		411
/1991d	1991 12 03.85668	15 02 29.99	+37 18 17.2		411
/1991d	1991 12 05.43947	15 08 08.16	+37 27 25.7		801
/1991d	1991 12 05.44235	15 08 08.77	+37 27 26.2		801
/1991d	1991 12 06.85468	15 13 12.43	+37 35 30.9		411
/1991d	1991 12 06.85568	15 13 12.70	+37 35 30.3		411
/1991d	1991 12 06.85753	15 13 13.07	+37 35 31.1		411
/1991d	1991 12 06.85847	15 13 13.45	+37 35 31.1		411
/1991d	1991 12 06.86146	15 13 13.98	+37 35 33.3		411
/1991d	1991 12 15.85315	15 46 04.01	+38 23 11.2		411
/1991d	1991 12 15.85806	15 46 05.17	+38 23 14.0		411
/1991d	1991 12 15.86014	15 46 05.46	+38 23 14.6		411
/1991d	1991 12 18.81422	15 57 02.72	+38 37 15.3		411
/1991d	1991 12 18.81601	15 57 03.09	+38 37 15.4		411
/1991d	1991 12 18.81694	15 57 03.27	+38 37 15.6		411
/1991d	1991 12 18.81785	15 57 03.52	+38 37 15.6		411
/1991d	1991 12 18.81973	15 57 03.91	+38 37 16.8		411
/1991d	1991 12 18.82063	15 57 04.11	+38 37 17.1		411
/1991d	1991 12 19.85714	16 00 55.39	+38 41 58.3		411
/1991d	1991 12 19.85810	16 00 55.63	+38 41 58.3		411
/1991d	1991 12 19.85992	16 00 56.02	+38 41 59.0		411
/1991d	1991 12 19.86083	16 00 56.23	+38 41 58.8		411
/1991d	1991 12 19.86255	16 00 56.59	+38 41 59.7		411
/1991d	1991 12 19.86435	16 00 57.01	+38 42 00.5		411

Comet Helin-Lawrence (1991l)

/1991l	1991	11	18.74512	12	44	32.47	-42	13	09.4	12 T	3 413
/1991l	1991	12	20.61682	13	44	54.04	-68	32	09.8		413
/1991l	1991	12	20.61986	13	44	54.75	-68	32	21.3		413
/1991l	1991	12	20.62655	13	44	56.30	-68	32	45.5		413
/1991l	1991	12	20.63230	13	44	57.66	-68	33	06.5		413
/1991l	1992	01	03.66435	16	18	23.01	-82	19	56.7	15 N	4 413

Periodic Comet Faye

/1991n	1991	10	01.86736	01	43	46.69	+12	02	54.1		595
/1991n	1991	10	02.85347	01	44	08.88	+11	51	28.5		595
/1991n	1991	10	03.95486	01	44	31.46	+11	38	26.9		595
/1991n	1991	10	04.84028	01	44	49.34	+11	27	40.4		595
/1991n	1991	10	08.90694	01	45	59.09	+10	35	13.3		595
/1991n	1991	10	16.85718	01	47	36.52	+08	42	02.0	8.7 T	104
/1991n	1991	10	16.86030	01	47	36.59	+08	41	59.3		104
/1991n	1991	10	16.86464	01	47	36.70	+08	41	53.4		104
/1991n	1991	10	16.87257	01	47	36.77	+08	41	48.5		104
/1991n	1991	10	16.87946	01	47	37.04	+08	41	39.6		104
/1991n	1991	10	16.88299	01	47	37.13	+08	41	36.1		104
/1991n	1991	10	29.84583	01	49	39.27	+05	28	54.3		595
/1991n	1991	11	01.91806	01	50	14.29	+04	46	05.1		595
/1991n	1991	11	03.19127	01	50	30.64	+04	29	05.5		801
/1991n	1991	11	03.20838	01	50	30.80	+04	28	51.6		801
/1991n	1991	11	03.67222	01	50	36.96	+04	22	47.0		900
/1991n	1991	11	03.67569	01	50	36.88	+04	22	46.4		900
/1991n	1991	11	03.67917	01	50	36.96	+04	22	44.1		900
/1991n	1991	11	05.43576	01	51	03.74	+04	00	09.7	9.0 T	892
/1991n	1991	11	05.46042	01	51	04.22	+03	59	49.6		892
/1991n	1991	11	05.54977	01	51	05.06	+03	58	42.1		887
/1991n	1991	11	05.56944	01	51	05.23	+03	58	28.1		887
/1991n	1991	11	06.19233	01	51	15.02	+03	50	43.9		801
/1991n	1991	11	06.20755	01	51	15.20	+03	50	32.4		801
/1991n	1991	11	07.91725	01	51	44.68	+03	29	59.3		098
/1991n	1991	11	07.92772	01	51	44.90	+03	29	50.9		098
/1991n	1991	11	07.98704	01	51	45.65	+03	29	10.9		098
/1991n	1991	11	08.87344	01	52	02.71	+03	18	56.1		098
/1991n	1991	11	09.92586	01	52	23.38	+03	07	08.6		503
/1991n	1991	11	10.84523	01	52	42.78	+02	57	15.6		587
/1991n	1991	11	11.52731	01	52	57.83	+02	50	12.0		373
/1991n	1991	11	11.53889	01	52	58.06	+02	50	03.4		373
/1991n	1991	11	25.39637	02	00	29.01	+01	08	24.7		411
/1991n	1991	11	25.39826	02	00	29.10	+01	08	23.7		411
/1991n	1991	11	25.40072	02	00	29.20	+01	08	22.5		411
/1991n	1991	11	25.40185	02	00	29.29	+01	08	22.5		411
/1991n	1991	11	25.43331	02	00	30.56	+01	08	17.4		411
/1991n	1991	11	25.43390	02	00	30.51	+01	08	15.6		411
/1991n	1991	11	25.43499	02	00	30.44	+01	08	14.0		411
/1991n	1991	11	25.43728	02	00	30.59	+01	08	15.0		411
/1991n	1991	11	25.43912	02	00	30.67	+01	08	13.1		411
/1991n	1991	12	01.51428	02	05	21.73	+00	50	42.4		411
/1991n	1991	12	01.51615	02	05	21.79	+00	50	42.3		411
/1991n	1991	12	01.51711	02	05	21.79	+00	50	41.9		411
/1991n	1991	12	01.51942	02	05	21.95	+00	50	42.2		411
/1991n	1991	12	01.53176	02	05	22.52	+00	50	39.9		411
/1991n	1991	12	02.86667	02	06	34.50	+00	48	53.1		595
/1991n	1991	12	07.44264	02	11	02.39	+00	48	43.8		411
/1991n	1991	12	07.44460	02	11	02.50	+00	48	43.9		411
/1991n	1991	12	07.44605	02	11	02.49	+00	48	43.9		411

/1991n	1991	12	07.44696	02 11 02.67	+00 48 43.7				411
/1991n	1991	12	07.44885	02 11 02.75	+00 48 44.2				411
/1991n	1991	12	07.44980	02 11 02.76	+00 48 44.4				411
/1991n	1991	12	09.47188	02 13 11.37	+00 51 16.4				411
/1991n	1991	12	09.47281	02 13 11.44	+00 51 16.1				411
/1991n	1991	12	09.47466	02 13 11.54	+00 51 16.4				411
/1991n	1991	12	09.47556	02 13 11.61	+00 51 16.9				411
/1991n	1991	12	09.47665	02 13 11.66	+00 51 16.3				411
/1991n	1991	12	09.83615	02 13 35.01	+00 51 49.7				540
/1991n	1991	12	09.84376	02 13 35.53	+00 51 51.2				540
/1991n	1991	12	09.85105	02 13 35.99	+00 51 51.6				540
/1991n	1991	12	09.85521	02 13 36.24	+00 51 51.5				540
/1991n	1991	12	12.46701	02 16 33.16	+00 57 45.4				892
/1991n	1991	12	12.48507	02 16 34.33	+00 57 47.4				892
/1991n	1991	12	30.49049	02 40 59.16	+02 32 54.8				411
/1991n	1991	12	30.49156	02 40 59.19	+02 32 54.6				411
/1991n	1991	12	30.49248	02 40 59.27	+02 32 56.4				411
/1991n	1991	12	30.49456	02 40 59.49	+02 32 57.7				411
/1991n	1991	12	30.49560	02 40 59.51	+02 32 56.9				411
/1991n	1991	12	30.49653	02 40 59.69	+02 32 57.7				411
/1991n	1991	12	30.49873	02 40 59.92	+02 32 58.1				411
/1991n	1991	12	30.49948	02 40 59.95	+02 32 58.2				411
/1991n	1991	12	30.50038	02 40 59.99	+02 32 58.6				411
/1991n	1992	01	02.55556	02 45 44.99	+02 56 20.7				411
/1991n	1992	01	02.55650	02 45 45.02	+02 56 20.9				411
/1991n	1992	01	02.55741	02 45 45.07	+02 56 21.2				411
/1991n	1992	01	02.55834	02 45 45.18	+02 56 21.8				411
/1991n	1992	01	02.55927	02 45 45.28	+02 56 22.8				411
/1991n	1992	01	02.56021	02 45 45.42	+02 56 23.7				411
/1991n	1992	01	04.47543	02 48 49.04	+03 11 46.9				411
/1991n	1992	01	04.47647	02 48 49.16	+03 11 46.8				411
/1991n	1992	01	04.47826	02 48 49.33	+03 11 48.2				411
/1991n	1992	01	05.20937	02 50 00.17	+03 17 46.0				657
			Periodic Comet Chernykh						
/1991o	1991	11	05.20406	23 21 01.63	-10 36 11.3				691
/1991o	1991	11	05.21805	23 21 01.82	-10 36 09.8	16.8	V		691
/1991o	1991	11	05.22736	23 21 01.96	-10 36 07.9			5	691
/1991o	1991	11	06.01738	23 21 15.52	-10 34 14.4				801
/1991o	1991	11	06.06836	23 21 16.29	-10 34 06.6				801
/1991o	1991	11	27.11262	23 32 44.34	-09 02 46.9			6	691
/1991o	1991	11	27.12167	23 32 44.73	-09 02 43.9				691
/1991o	1991	11	27.13490	23 32 45.36	-09 02 39.0	17.2	V		691
			Periodic Comet Shoemaker 1						
/1991p	1991	11	05.94855	20 54 38.19	-16 57 04.6				801
/1991p	1991	11	05.95608	20 54 38.72	-16 56 55.7				801
			Periodic Comet Levy						
/1991q	1991	11	03.42355	09 36 17.24	+29 24 27.8				801
/1991q	1991	11	03.43478	09 36 17.67	+29 24 25.6				801
/1991q	1991	11	12.81424	09 41 35.74	+29 04 17.3	18	T	7	372
/1991q	1991	12	13.63958	09 36 37.05	+29 28 16.7	18.5	T		372
/1991q	1991	12	13.65486	09 36 36.38	+29 28 19.2				372
			Periodic Comet Wirtanen						
/1991s	1991	11	09.79416	11 34 49.09	+10 34 27.0				900
/1991s	1991	11	09.80220	11 34 49.51	+10 34 18.3				900

/1991s	1991 11 10.81264	11 37 44.69	+10 23 51.6					411
/1991s	1991 11 10.81473	11 37 44.65	+10 23 48.5					411
/1991s	1991 12 06.83870	12 42 29.73	+06 35 06.1					411
	Periodic Comet Hartley 2							
/1991t	1991 08 11.08957	04 13 06.44	+30 25 53.4					098
/1991t	1991 08 11.11811	04 13 17.39	+30 25 56.6					098
/1991t	1991 08 12.06835	04 19 41.04	+30 27 26.9					098
/1991t	1991 08 12.07873	04 19 45.18	+30 27 25.5					098
/1991t	1991 10 07.39583	08 58 19.86	+12 34 37.4					293
/1991t	1991 10 07.40000	08 58 20.64	+12 34 31.7					293
/1991t	1991 11 03.43186	10 06 08.24	+03 03 22.5					801
/1991t	1991 11 03.43685	10 06 08.81	+03 03 17.2					801
/1991t	1991 11 04.79816	10 08 48.61	+02 38 17.6					411
/1991t	1991 11 04.80100	10 08 48.91	+02 38 14.1					411
/1991t	1991 11 04.80150	10 08 49.06	+02 38 10.3					411
/1991t	1991 11 04.80208	10 08 48.95	+02 38 10.4					411
/1991t	1991 11 04.80455	10 08 49.33	+02 38 08.3					411
/1991t	1991 11 06.42574	10 11 54.34	+02 08 49.8					801
/1991t	1991 11 06.43012	10 11 54.83	+02 08 45.0					801
/1991t	1991 11 09.80984	10 18 02.35	+01 09 23.7	9	T			900
/1991t	1991 11 09.81904	10 18 03.34	+01 09 16.4					900
/1991t	1991 11 10.79491	10 19 44.84	+00 52 33.2					411
/1991t	1991 11 10.79856	10 19 45.15	+00 52 28.0					411
/1991t	1991 11 10.79939	10 19 45.27	+00 52 27.5					411
/1991t	1991 11 10.80174	10 19 45.58	+00 52 25.0					411
/1991t	1991 11 20.79871	10 35 08.76	-01 47 16.8					411
/1991t	1991 11 20.80126	10 35 08.94	-01 47 19.1					411
/1991t	1991 11 20.80328	10 35 09.11	-01 47 21.9					411
/1991t	1991 11 20.80471	10 35 09.20	-01 47 21.4					411
/1991t	1991 11 20.80664	10 35 09.41	-01 47 24.8					411
/1991t	1991 11 20.81275	10 35 09.83	-01 47 28.6					411
/1991t	1991 11 20.81606	10 35 10.09	-01 47 33.1					411
/1991t	1991 12 06.81459	10 52 20.50	-05 18 33.4					411
/1991t	1991 12 06.81804	10 52 20.61	-05 18 36.1					411
/1991t	1991 12 06.81988	10 52 20.75	-05 18 37.6					411
/1991t	1991 12 06.82172	10 52 20.82	-05 18 38.7					411
/1991t	1991 12 06.82334	10 52 20.81	-05 18 40.4					411
/1991t	1991 12 19.84187	10 59 06.49	-07 25 39.1					411
/1991t	1991 12 19.84405	10 59 06.55	-07 25 37.8					411
/1991t	1991 12 19.84541	10 59 06.47	-07 25 38.2					411
/1991t	1991 12 19.84642	10 59 06.61	-07 25 40.1					411
/1991t	1991 12 19.84825	10 59 06.47	-07 25 41.1					411
/1991t	1991 12 19.84918	10 59 06.55	-07 25 40.5					411
/1991t	1991 12 30.68535	10 59 28.41	-08 36 05.1					411
/1991t	1991 12 30.68665	10 59 28.35	-08 36 06.4					411
/1991t	1991 12 30.68985	10 59 28.41	-08 36 05.1					411
/1991t	1991 12 30.69111	10 59 28.38	-08 36 06.6					411
/1991t	1991 12 30.69310	10 59 28.30	-08 36 07.2					411
/1991t	1991 12 30.69470	10 59 28.29	-08 36 06.3					411
/1991t	1991 12 30.69806	10 59 28.18	-08 36 08.2					411
/1991t	1992 01 04.82120	10 57 54.61	-08 56 44.2					411
/1991t	1992 01 04.82719	10 57 54.50	-08 56 45.8					411
/1991t	1992 01 04.82881	10 57 54.38	-08 56 44.4					411
/1991t	1992 01 04.83046	10 57 54.40	-08 56 46.9					411
/1991t	1992 01 04.83213	10 57 54.35	-08 56 46.8					411

Comet McNaught-Russell (1991v)

/1991v	1991	11	26.46951	19	36	26.10	-57 05 54.0		413
/1991v	1991	11	26.47255	19	36	26.34	-57 05 54.5		413
/1991v	1991	11	26.47718	19	36	26.66	-57 05 55.0		413

Periodic Comet McNaught-Hughes

/1991y	1991	11	08.50979	23	14	03.03	-15 39 44.0		413
/1991y	1991	11	08.51341	23	14	03.13	-15 39 42.1		413
/1991y	1991	11	02.48611	23	11	25.91	-16 23 17.6		413
/1991y	1991	11	26.56194	23	26	16.39	-13 05 37.9		413
/1991y	1991	11	26.56711	23	26	16.59	-13 05 35.3		413
/1991y	1991	11	27.53046	23	27	05.26	-12 56 34.5		413
/1991y	1991	11	27.53515	23	27	05.49	-12 56 31.7		413

Periodic Comet Shoemaker-Levy 5

/1991z	1991	11	01.55865	00	07	08.80	-03 51 31.5	17 T	372
/1991z	1991	11	05.04128	00	06	24.08	-03 17 57.6		801
/1991z	1991	11	05.05991	00	06	23.92	-03 17 46.7		801
/1991z	1991	11	07.19079	00	06	08.16	-02 56 20.2		675
/1991z	1991	11	07.22361	00	06	07.98	-02 56 00.4		675
/1991z	1991	11	25.37882	00	10	01.64	+00 30 06.4	18 T	372
/1991z	1991	12	01.11649	00	13	25.41	+01 42 08.6	16.7 T	675
/1991z	1991	12	01.15642	00	13	27.06	+01 42 36.7		675
/1991z	1991	12	03.10781	00	14	49.79	+02 07 47.5		675
/1991z	1991	12	03.14080	00	14	51.15	+02 08 08.4		675

Comet Shoemaker-Levy (1991a1)

/1991a 1	1991	11	01.68212	01	56	28.48	+38 38 08.4	16.5 T	372
/1991a 1	1991	11	03.17188	01	53	25.31	+38 35 16.6		801
/1991a 1	1991	11	03.18612	01	53	23.54	+38 35 14.6		801
/1991a 1	1991	11	05.74635	01	48	06.23	+38 28 48.5	17 T	894
/1991a 1	1991	11	05.75417	01	48	05.18	+38 28 48.0		894
/1991a 1	1991	11	06.18884	01	47	11.63	+38 27 32.2		801
/1991a 1	1991	11	06.20258	01	47	09.90	+38 27 29.8		801
/1991a 1	1991	11	06.65903	01	46	12.84	+38 26 08.7	17.5 T	372
/1991a 1	1991	11	07.30920	01	44	52.26	+38 23 59.4	15.5 T	675
/1991a 1	1991	11	09.25938	01	40	49.70	+38 17 00.3		675
/1991a 1	1991	11	09.31806	01	40	42.37	+38 16 47.7		675
/1991a 1	1991	11	25.40904	01	08	38.11	+36 42 45.3	17 T	372
/1991a 1	1991	12	01.76250	00	57	20.38	+35 52 07.5		540
/1991a 1	1991	12	01.80625	00	57	16.10	+35 51 46.0		540
/1991a 1	1991	12	05.03558	00	51	57.81	+35 24 21.0		801
/1991a 1	1991	12	05.04534	00	51	56.77	+35 24 18.4		801
/1991a 1	1991	12	05.96627	00	50	29.56	+35 16 18.9		801
/1991a 1	1991	12	05.97347	00	50	28.84	+35 16 14.5		801
/1991a 1	1991	12	09.42587	00	45	15.60	+34 46 09.3		411
/1991a 1	1991	12	09.43456	00	45	14.78	+34 46 04.5		411
/1991a 1	1991	12	09.44245	00	45	14.11	+34 46 01.1		411
/1991a 1	1991	12	11.44599	00	42	23.10	+34 28 26.1		411
/1991a 1	1991	12	11.45095	00	42	22.65	+34 28 21.8		411
/1991a 1	1991	12	12.46168	00	40	59.22	+34 19 30.0		411
/1991a 1	1991	12	12.46657	00	40	59.00	+34 19 26.5		411
/1991a 1	1991	12	29.86632	00	22	18.75	+31 55 58.8		587
/1991a 1	1991	12	30.39095	00	21	53.79	+31 52 08.8		411
/1991a 1	1991	12	30.46426	00	21	50.36	+31 51 35.8		411
/1991a 1	1991	12	30.46752	00	21	50.26	+31 51 32.9		411
/1991a 1	1991	12	30.47282	00	21	49.98	+31 51 31.2		411
/1991a 1	1992	01	02.51344	00	19	36.27	+31 30 00.0		411
/1991a 1	1992	01	02.51593	00	19	36.19	+31 29 59.8		411

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/1991a 1          1992 01 02.52061  00 19 36.00  +31 29 58.2                411
/1991a 1          1992 01 02.52299  00 19 35.86  +31 29 56.6                411
/1991a 1          1992 01 02.52858  00 19 35.69  +31 29 52.6                411
/1991a 1          1992 01 04.45167  00 18 19.63  +31 17 01.9                411

                       Periodic Comet Shoemaker-Levy 6
/1991b 1          1991 11 03.21111  23 59 20.45  -09 02 56.0   13   T       675
/1991b 1          1991 11 03.21528  23 59 21.35  -09 02 34.0                675
/1991b 1          1991 11 03.23490  23 59 24.07  -09 00 06.5                675
/1991b 1          1991 11 03.23906  23 59 24.43  -08 59 47.3                675
/1991b 1          1991 11 06.16597  00 06 57.24  -03 19 07.5                675
/1991b 1          1991 11 06.17014  00 06 57.75  -03 18 48.4                675
/1991b 1          1991 11 06.18993  00 07 00.74  -03 16 23.0                675
/1991b 1          1991 11 06.19410  00 07 01.09  -03 16 03.1                675
/1991b 1          1991 11 07.19079  00 09 33.72  -01 25 02.9                675
/1991b 1          1991 11 07.22361  00 09 38.29  -01 21 26.8                675
/1991b 1          1991 11 09.19392  00 14 37.74  +02 09 05.7                675
/1991b 1          1991 11 09.23594  00 14 43.61  +02 13 28.2                675
/1991b 1          1991 11 10.15694  00 17 03.59  +03 47 31.6              8 675
/1991b 1          1991 11 10.39884  00 17 37.44  +04 11 36.7                675
/1991b 1          1991 11 11.50417  00 20 25.44  +06 00 02.3   11.0 T       373
/1991b 1          1991 11 11.51372  00 20 26.71  +06 00 58.9                373
/1991b 1          1991 11 11.60903  00 20 39.88  +06 10 11.0                896
/1991b 1          1991 11 11.62361  00 20 42.06  +06 11 25.8                896
/1991b 1          1991 11 12.46076  00 22 49.00  +07 30 20.4                402
/1991b 1          1991 11 12.46632  00 22 50.15  +07 30 56.6                402
/1991b 1          1991 11 12.47546  00 22 51.27  +07 31 40.5                897
/1991b 1          1991 11 12.50347  00 22 54.99  +07 34 22.3                897
/1991b 1          1991 11 12.51725  00 22 56.53  +07 35 35.0                897
/1991b 1          1991 11 13.25573  00 24 46.66  +08 43 05.4   13.0 T       675
/1991b 1          1991 11 13.54571  00 25 29.91  +09 09 04.9                411
/1991b 1          1991 11 13.59097  00 25 36.17  +09 13 02.4   13.5 T       372
/1991b 1          1991 11 13.59479  00 25 36.77  +09 13 23.6                372
/1991b 1          1991 11 13.60796  00 25 38.54  +09 14 32.8                411
/1991b 1          1991 11 25.39028  00 54 26.11  +22 58 11.2   15   T       372
/1991b 1          1991 11 25.46293  00 54 35.39  +23 01 57.5                411
/1991b 1          1991 11 25.46639  00 54 35.65  +23 02 09.3                411
/1991b 1          1991 11 25.46895  00 54 36.25  +23 02 18.8                411
/1991b 1          1991 11 25.47487  00 54 36.98  +23 02 36.7                411
/1991b 1          1991 11 25.47842  00 54 37.49  +23 02 45.9                411
/1991b 1          1991 11 27.82535  01 00 15.29  +24 59 51.5                104
/1991b 1          1991 11 27.82951  01 00 16.13  +25 00 03.4                104
/1991b 1          1991 11 28.15287  01 01 02.84  +25 15 07.0                657
/1991b 1          1991 11 28.16017  01 01 03.80  +25 15 27.3                657
/1991b 1          1991 12 01.83160  01 09 49.50  +27 51 51.8                104
/1991b 1          1991 12 01.83750  01 09 50.48  +27 52 08.4                104
/1991b 1          1991 12 03.83576  01 14 36.05  +29 06 24.3                104
/1991b 1          1991 12 03.84167  01 14 36.74  +29 06 31.5                104
/1991b 1          1991 12 04.51875  01 16 13.41  +29 30 17.5   16   T       372
/1991b 1          1991 12 09.44918  01 27 58.07  +32 01 09.9                411
/1991b 1          1991 12 09.45403  01 27 58.84  +32 01 15.4                411
/1991b 1          1991 12 09.46055  01 27 59.72  +32 01 25.3                411
/1991b 1          1991 12 09.60486  01 28 19.27  +32 05 18.0   16   T       372
/1991b 1          1991 12 09.61389  01 28 20.53  +32 05 31.6                372
/1991b 1          1991 12 13.60139  01 37 50.47  +33 43 39.0   16   T       372

                       Periodic Comet Tsuchinshan 1
/1991c 1          1991 11 08.84306  12 33 26.79  +04 00 46.3   17   T   9   372
/1991c 1          1991 11 11.83056  12 40 47.98  +03 23 11.8   18   T       372
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/1991c 1	1991	11	11.84340	12 40 49.83	+03	23	03.0			372
/1991c 1	1991	11	11.85208	12 40 51.15	+03	22	52.8			372
/1991c 1	1991	11	12.82779	12 43 13.66	+03	10	49.6	18	T	372

Periodic Comet Shoemaker-Levy 7

/1991d 1	1991	11	13.34878	03 32 23.71	+44	17	23.4	16.5	T	A	675
/1991d 1	1991	11	13.37969	03 32 23.02	+44	17	17.4			A	675
/1991d 1	1991	11	15.35972	03 31 49.88	+44	11	01.0			B	675
/1991d 1	1991	11	16.36458	03 31 33.20	+44	07	05.4				675
/1991d 1	1991	11	28.50139	03 28 34.84	+42	42	28.1	17	T		372
/1991d 1	1991	11	28.63888	03 28 32.64	+42	41	09.0				372
/1991d 1	1991	11	30.33542	03 28 18.76	+42	24	34.4	16.5	T		675
/1991d 1	1991	11	30.34913	03 28 18.55	+42	24	24.6				675
/1991d 1	1991	12	01.24635	03 28 13.46	+42	15	15.5				675
/1991d 1	1991	12	03.27205	03 28 05.06	+41	53	41.4				675
/1991d 1	1991	12	04.63958	03 28 02.95	+41	38	33.0	17.5	T	C	372
/1991d 1	1991	12	04.68264	03 28 02.63	+41	38	04.2			C	372
/1991d 1	1991	12	05.15394	03 28 03.69	+41	32	41.4				801
/1991d 1	1991	12	05.17341	03 28 03.54	+41	32	29.0				801
/1991d 1	1991	12	06.00652	03 28 05.70	+41	22	52.0				801
/1991d 1	1991	12	06.01604	03 28 05.64	+41	22	42.8				801
/1991d 1	1991	12	08.60521	03 28 18.11	+40	52	14.3	18	T		372
/1991d 1	1991	12	08.61632	03 28 18.09	+40	52	04.7				372
/1991d 1	1991	12	10.32436	03 28 34.35	+40	31	12.1				657
/1991d 1	1991	12	10.33624	03 28 34.52	+40	31	03.8				657
/1991d 1	1991	12	10.34637	03 28 34.66	+40	30	54.4				657
/1991d 1	1991	12	11.62604	03 28 50.67	+40	15	09.1	18	T		372
/1991d 1	1991	12	13.61806	03 29 22.77	+39	50	05.8	18.5	T		372
/1991d 1	1991	12	29.62605	03 38 46.94	+36	28	08.2	19	T		372
/1991d 1	1991	12	30.57848	03 39 36.82	+36	16	41.7	19	T		372

Periodic Comet Tsuchinshan 2

/1991e 1	1991	12	03.21335	03 11 50.56	+26	42	26.0	21.2	V	D	691
/1991e 1	1991	12	03.23212	03 11 49.56	+26	42	18.5	20.6	V	C	691
/1991e 1	1991	12	03.25032	03 11 48.43	+26	42	10.7	21.0	V	B	691
/1991e 1	1991	12	13.29695	03 04 07.91	+25	34	41.0	21.7	V		691
/1991e 1	1991	12	13.31132	03 04 07.38	+25	34	35.0	21.0	V		691
/1991e 1	1991	12	13.32596	03 04 06.66	+25	34	28.7	21.5	V		691

Periodic Comet Kowal 2

/1991f 1	1991	12	12.80011	08 35 02.45	-00	43	11.8				875
/1991f 1	1991	12	13.72775	08 35 14.99	-01	06	31.6				875
/1991f 1	1991	12	13.76373	08 35 15.09	-01	07	28.1				875
/1991f 1	1991	12	13.79457	08 35 15.43	-01	08	11.8				875
/1991f 1	1991	12	15.81549	08 35 33.17	-01	58	02.2				411
/1991f 1	1991	12	15.82056	08 35 33.29	-01	58	13.2				411
/1991f 1	1991	12	15.82562	08 35 33.03	-01	58	18.2				411
/1991f 1	1991	12	15.83373	08 35 33.20	-01	58	31.9				411
/1991f 1	1991	12	15.84139	08 35 33.38	-01	58	42.1				411
/1991f 1	1991	12	16.70243	08 35 38.05	-02	19	31.5				381
/1991f 1	1991	12	16.72291	08 35 37.73	-02	20	03.7	14.0	T		896
/1991f 1	1991	12	16.74930	08 35 37.74	-02	20	38.9				896
/1991f 1	1991	12	16.79812	08 35 37.83	-02	21	50.9				411
/1991f 1	1991	12	16.79861	08 35 38.08	-02	21	59.2				896
/1991f 1	1991	12	16.80142	08 35 37.65	-02	21	51.7				411
/1991f 1	1991	12	16.80521	08 35 38.00	-02	22	00.4	15	T		897
/1991f 1	1991	12	16.80871	08 35 37.74	-02	22	05.2				411
/1991f 1	1991	12	16.81174	08 35 37.82	-02	22	10.2				411
/1991f 1	1991	12	16.81648	08 35 37.81	-02	22	15.0				411

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/1991f 1          1991 12 16.83484  08 35 37.89  -02 22 41.4                897
/1991f 1          1991 12 17.77326  08 35 39.84  -02 45 03.6   17.5 T       372
/1991f 1          1991 12 17.78472  08 35 39.87  -02 45 19.5                372
/1991f 1          1991 12 17.80139  08 35 39.84  -02 45 43.0                372
/1991f 1          1991 12 17.82222  08 35 39.61  -02 46 13.6                372
/1991f 1          1991 12 18.77686  08 35 39.21  -03 08 37.5                411
/1991f 1          1991 12 18.78021  08 35 39.34  -03 08 42.0                411
/1991f 1          1991 12 18.78281  08 35 39.21  -03 08 44.1                411
/1991f 1          1991 12 18.78767  08 35 39.28  -03 08 51.8                411
/1991f 1          1991 12 18.79056  08 35 39.04  -03 08 55.1                411
/1991f 1          1991 12 18.79532  08 35 39.03  -03 09 02.2                411
/1991f 1          1991 12 19.81669  08 35 35.66  -03 32 33.6                411
/1991f 1          1991 12 19.82237  08 35 35.60  -03 32 44.9                411
/1991f 1          1991 12 19.82571  08 35 35.45  -03 32 50.7                411
/1991f 1          1991 12 19.82846  08 35 35.60  -03 32 54.3                411
/1991f 1          1991 12 19.83249  08 35 35.59  -03 32 59.6                411
/1991f 1          1991 12 21.69639  08 35 22.71  -04 14 41.7                413
/1991f 1          1991 12 21.69938  08 35 22.68  -04 14 45.9                413
/1991f 1          1991 12 29.74149  08 32 47.71  -06 57 13.7   17.0 T       372
/1991f 1          1991 12 29.75093  08 32 47.36  -06 57 25.3                372
/1991f 1          1991 12 30.65557  08 32 21.23  -07 13 31.9                411
/1991f 1          1991 12 30.65798  08 32 21.14  -07 13 32.8                411
/1991f 1          1991 12 30.66280  08 32 20.89  -07 13 39.5                411
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/1991f 1          1991 12 30.67451  08 32 20.62  -07 13 52.0                411
/1991f 1          1991 12 30.69375  08 32 19.94  -07 14 14.3   16.5 T       372
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/1991f 1          1992 01 02.56768  08 30 45.46  -08 02 16.2                411
/1991f 1          1992 01 02.57099  08 30 45.32  -08 02 20.1                411
/1991f 1          1992 01 02.57526  08 30 45.06  -08 02 24.6                411
/1991f 1          1992 01 02.57762  08 30 45.01  -08 02 25.4                411
/1991f 1          1992 01 02.58005  08 30 44.98  -08 02 29.1                411
/1991f 1          1992 01 03.71771  08 30 02.69  -08 20 09.4   16.0 T       372
/1991f 1          1992 01 03.72813  08 30 02.25  -08 20 17.3                372
/1991f 1          1992 01 04.75171  08 29 22.91  -08 35 31.9                411
/1991f 1          1992 01 04.75418  08 29 22.70  -08 35 34.4                411
/1991f 1          1992 01 04.76142  08 29 22.43  -08 35 39.7                411
/1991f 1          1992 01 04.76420  08 29 22.16  -08 35 43.4                411
/1991f 1          1992 01 04.76588  08 29 22.22  -08 35 44.5                411
/1991f 1          1992 01 04.76913  08 29 22.00  -08 35 47.8                411
/1991f 1          1992 01 04.77080  08 29 22.00  -08 35 49.8                411

                      Comet Zanotta-Brewington (1991g1)
/1991g 1          1991 12 24.36146  20 46 44.04  +18 53 06.9   10   T       897
/1991g 1          1991 12 24.36510  20 46 44.71  +18 52 58.7                897
/1991g 1          1991 12 24.37222  20 46 46.24  +18 52 55.6                897
/1991g 1          1991 12 24.37650  20 46 47.18  +18 52 42.2                897
/1991g 1          1991 12 26.37569  20 53 51.54  +18 06 48.4   10   T       402
/1991g 1          1991 12 26.37853  20 53 52.22  +18 06 43.6                411
/1991g 1          1991 12 26.38194  20 53 52.91  +18 06 40.2                402
/1991g 1          1991 12 26.38507  20 53 53.42  +18 06 34.1                896
/1991g 1          1991 12 26.38681  20 53 53.82  +18 06 31.2                402
/1991g 1          1991 12 26.39097  20 53 54.62  +18 06 28.5                897
/1991g 1          1991 12 26.39256  20 53 55.03  +18 06 24.7                411
/1991g 1          1991 12 26.39306  20 53 55.18  +18 06 22.7                402
/1991g 1          1991 12 26.39486  20 53 55.38  +18 06 20.8                411
/1991g 1          1991 12 26.39544  20 53 55.85  +18 06 20.1                411
/1991g 1          1991 12 26.39578  20 53 55.84  +18 06 18.4                897
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/1991g	1	1991	12	26.40868	20	53	58.46	+18	06	05.3	897
/1991g	1	1991	12	26.40895	20	53	58.56	+18	06	01.2	411
/1991g	1	1991	12	26.41007	20	53	59.07	+18	06	00.1	896
/1991g	1	1991	12	26.41078	20	53	58.97	+18	05	59.4	411
/1991g	1	1991	12	26.42292	20	54	01.73	+18	05	39.0 12 T	894
/1991g	1	1991	12	26.75590	20	55	14.03	+17	57	41.5	587
/1991g	1	1991	12	26.77569	20	55	18.67	+17	57	11.7	589
/1991g	1	1991	12	26.78264	20	55	20.17	+17	57	01.7	589
/1991g	1	1991	12	26.78993	20	55	21.63	+17	56	50.9	589
/1991g	1	1991	12	27.70972	20	58	43.90	+17	34	21.8	595
/1991g	1	1991	12	27.72083	20	58	46.94	+17	34	03.6	589
/1991g	1	1991	12	27.72778	20	58	47.97	+17	33	55.2	589
/1991g	1	1991	12	27.74965	20	58	52.89	+17	33	20.4 E	587
/1991g	1	1991	12	27.77083	20	58	57.31	+17	32	51.8	589
/1991g	1	1991	12	27.77778	20	58	59.00	+17	32	40.4	589
/1991g	1	1991	12	27.80694	20	59	05.81	+17	31	58.4	589
/1991g	1	1991	12	27.82153	20	59	08.97	+17	31	35.3	589
/1991g	1	1991	12	28.37589	21	01	13.02	+17	17	35.7	411
/1991g	1	1991	12	28.38197	21	01	14.37	+17	17	24.7	411
/1991g	1	1991	12	28.38274	21	01	14.55	+17	17	25.1	411
/1991g	1	1991	12	28.38417	21	01	14.77	+17	17	22.8	411
/1991g	1	1991	12	28.38878	21	01	15.80	+17	17	15.0	411
/1991g	1	1991	12	28.70000	21	02	26.38	+17	09	13.6	595
/1991g	1	1991	12	28.71528	21	02	29.54	+17	08	52.1	595
/1991g	1	1991	12	28.72083	21	02	31.28	+17	08	40.9	595
/1991g	1	1991	12	28.72222	21	02	31.12	+17	08	41.3	589
/1991g	1	1991	12	28.72777	21	02	32.14	+17	08	34.1	595
/1991g	1	1991	12	28.72917	21	02	32.63	+17	08	31.1	589
/1991g	1	1991	12	28.74306	21	02	35.95	+17	08	09.6	589
/1991g	1	1991	12	28.74444	21	02	36.43	+17	08	04.8	595
/1991g	1	1991	12	28.75000	21	02	37.22	+17	07	58.9	589
/1991g	1	1991	12	28.76389	21	02	40.61	+17	07	38.8	589
/1991g	1	1991	12	28.76563	21	02	40.8	+17	07	37	478
/1991g	1	1991	12	28.77083	21	02	41.94	+17	07	28.0	589
/1991g	1	1991	12	28.78368	21	02	45.13	+17	07	06.4	589
/1991g	1	1991	12	29.39340	21	05	04.48	+16	51	04.9	896
/1991g	1	1991	12	30.36486	21	08	49.15	+16	24	58.0 10.5 T	411
/1991g	1	1991	12	30.36584	21	08	49.38	+16	24	56.1	411
/1991g	1	1991	12	30.36763	21	08	49.81	+16	24	53.2	411
/1991g	1	1991	12	30.36862	21	08	50.04	+16	24	52.1	411
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/1991g	1	1991	12	30.37226	21	08	50.86	+16	24	45.2	411
/1991g	1	1991	12	30.37300	21	08	51.06	+16	24	43.6	411
/1991g	1	1991	12	30.37464	21	08	51.42	+16	24	40.6	411
/1991g	1	1991	12	30.37538	21	08	51.60	+16	24	39.1	411
/1991g	1	1991	12	30.37612	21	08	51.74	+16	24	39.2	411
/1991g	1	1991	12	30.41075	21	08	59.75	+16	23	41.7	364
/1991g	1	1991	12	30.41389	21	09	00.53	+16	23	36.3	364
/1991g	1	1991	12	30.74792	21	10	19.07	+16	14	18.0	104
/1991g	1	1991	12	30.75069	21	10	19.45	+16	14	14.0	104
/1991g	1	1991	12	30.75347	21	10	20.17	+16	14	08.0	104
/1991g	1	1991	12	31.36730	21	12	45.58	+15	56	52.1	411
/1991g	1	1991	12	31.36787	21	12	45.74	+15	56	52.0	411
/1991g	1	1991	12	31.36844	21	12	45.80	+15	56	50.3	411
/1991g	1	1991	12	31.37022	21	12	46.23	+15	56	48.0	411
/1991g	1	1991	12	31.37124	21	12	46.49	+15	56	46.2	411
/1991g	1	1991	12	31.37227	21	12	46.72	+15	56	43.7	411
/1991g	1	1991	12	31.38186	21	12	48.96	+15	56	27.7	411

/1991g 1	1991 12 31.38269	21 12 49.17	+15 56 25.4			411
/1991g 1	1991 12 31.38354	21 12 49.36	+15 56 24.4			411
/1991g 1	1991 12 31.38547	21 12 49.89	+15 56 22.3			411
/1991g 1	1991 12 31.38646	21 12 50.15	+15 56 20.2			411
/1991g 1	1991 12 31.74861	21 14 16.62	+15 45 52.0			104
/1991g 1	1991 12 31.75208	21 14 17.46	+15 45 46.1			104
/1991g 1	1991 12 31.75417	21 14 17.74	+15 45 41.3			104
/1991g 1	1991 12 31.75660	21 14 18.34	+15 45 37.4			104
/1991g 1	1992 01 01.38611	21 16 49.99	+15 27 11.8			896
/1991g 1	1992 01 01.39080	21 16 51.42	+15 27 01.1			411
/1991g 1	1992 01 01.39158	21 16 51.66	+15 26 59.3			411
/1991g 1	1992 01 01.39256	21 16 51.87	+15 26 57.0			411
/1991g 1	1992 01 01.39333	21 16 52.09	+15 26 57.5			411
/1991g 1	1992 01 01.39490	21 16 52.42	+15 26 53.5			411
/1991g 1	1992 01 01.39564	21 16 52.57	+15 26 51.6			411
/1991g 1	1992 01 01.39642	21 16 52.75	+15 26 50.0			411
/1991g 1	1992 01 01.39716	21 16 52.92	+15 26 49.4			411
/1991g 1	1992 01 01.75625	21 18 20.39	+15 16 00.6			104
/1991g 1	1992 01 01.76389	21 18 22.14	+15 15 47.1			104
/1991g 1	1992 01 01.76701	21 18 23.09	+15 15 42.6			104
/1991g 1	1992 01 02.36644	21 20 50.29	+14 57 23.9			411
/1991g 1	1992 01 02.36707	21 20 50.44	+14 57 23.2			411
/1991g 1	1992 01 02.36792	21 20 50.63	+14 57 21.3			411
/1991g 1	1992 01 02.36847	21 20 50.82	+14 57 20.7			411
/1991g 1	1992 01 02.36995	21 20 51.16	+14 57 17.8			411
/1991g 1	1992 01 02.37050	21 20 51.30	+14 57 16.7			411
/1991g 1	1992 01 02.37108	21 20 51.43	+14 57 15.9			411
/1991g 1	1992 01 02.37164	21 20 51.58	+14 57 14.2			411
/1991g 1	1992 01 02.38785	21 20 55.74	+14 56 44.2	8.5 T		372
/1991g 1	1992 01 02.39132	21 20 56.52	+14 56 36.7			372
/1991g 1	1992 01 02.39688	21 20 57.95	+14 56 26.9			372
/1991g 1	1992 01 02.40590	21 21 00.13	+14 56 07.8			372
/1991g 1	1992 01 02.41007	21 21 01.15	+14 55 59.9			372
/1991g 1	1992 01 02.73819	21 22 22.30	+14 45 45.0			540
/1991g 1	1992 01 02.74583	21 22 24.19	+14 45 30.5			540
/1991g 1	1992 01 02.75347	21 22 25.95	+14 45 16.5			540
/1991g 1	1992 01 02.76111	21 22 27.97	+14 45 03.1			540
/1991g 1	1992 01 03.38153	21 25 03.17	+14 25 15.6			411
/1991g 1	1992 01 03.38215	21 25 03.32	+14 25 14.1			411
/1991g 1	1992 01 03.38270	21 25 03.39	+14 25 12.9			411
/1991g 1	1992 01 03.38328	21 25 03.51	+14 25 12.0			411
/1991g 1	1992 01 03.38454	21 25 03.91	+14 25 11.0			411
/1991g 1	1992 01 03.38527	21 25 04.09	+14 25 09.8			411
/1991g 1	1992 01 03.38602	21 25 04.28	+14 25 06.9			411
/1991g 1	1992 01 03.38685	21 25 04.50	+14 25 06.1			411
/1991g 1	1992 01 03.76563	21 26 40.07	+14 12 39.8			587
/1991g 1	1992 01 04.41250	21 29 24.50	+13 51 11.6			894
/1991g 1	1992 01 05.14774	21 32 34.02	+13 25 52.2			657
/1991g 1	1992 01 05.37436	21 33 32.82	+13 17 59.5			411
/1991g 1	1992 01 05.37497	21 33 32.99	+13 17 58.6			411
/1991g 1	1992 01 05.37552	21 33 33.12	+13 17 57.2			411
/1991g 1	1992 01 05.37606	21 33 33.24	+13 17 56.9			411
/1991g 1	1992 01 05.37747	21 33 33.64	+13 17 53.4			411
/1991g 1	1992 01 05.37827	21 33 33.83	+13 17 50.9			411
/1991g 1	1992 01 05.37915	21 33 34.06	+13 17 49.9			411
/1991g 1	1992 01 05.37989	21 33 34.27	+13 17 48.3			411
/1991g 1	1992 01 12.41215	22 05 47.39	+08 26 33.9	8.0 T		364
/1991g 1	1992 01 14.43021	22 15 37.13	+06 44 26.6	7.5 T		364
/1991g 1	1992 01 14.43194	22 15 37.52	+06 44 21.0	7.5 T		364

/1991g 1	1992	01	15.40764	22 20 27.51	+05 51 33.5	7.5	T		364
/1991g 1	1992	01	15.41076	22 20 28.48	+05 51 22.5	7.5	T		364

Comet Mueller (1991h1)

/1991h 1	1991	12	13.48264	09 38 56.16	+42 31 23.9	17.5	T		675
/1991h 1	1991	12	13.52778	09 38 53.58	+42 31 53.0				675
/1991h 1	1991	12	31.35486	08 58 02.50	+47 38 09.3	16	T		675
/1991h 1	1991	12	31.39444	08 57 52.55	+47 38 58.2				675
/1991h 1	1992	01	01.43038	08 53 23.87	+48 00 34.2				675
/1991h 1	1992	01	01.46605	08 53 14.48	+48 01 15.8				675
/1991h 1	1992	01	02.23370	08 49 41.85	+48 17 15.5				801
/1991h 1	1992	01	02.23774	08 49 40.68	+48 17 20.3				801
/1991h 1	1992	01	02.58750	08 48 00.17	+48 24 39.9	16	T		896
/1991h 1	1992	01	02.60972	08 47 53.77	+48 25 08.2	16	T		897
/1991h 1	1992	01	02.61562	08 47 51.10	+48 25 15.5				896
/1991h 1	1992	01	02.61933	08 47 50.91	+48 25 18.7				897
/1991h 1	1992	01	02.63264	08 47 46.59	+48 25 35.1				897
/1991h 1	1992	01	02.67917	08 47 33.51	+48 26 34.2	16	T		385
/1991h 1	1992	01	02.68681	08 47 30.83	+48 26 42.3				385
/1991h 1	1992	01	02.90417	08 46 26.69	+48 31 13.9	16.0	T		589
/1991h 1	1992	01	02.93125	08 46 19.33	+48 31 43.9				589
/1991h 1	1992	01	02.94514	08 46 15.06	+48 32 02.7				589
/1991h 1	1992	01	03.69583	08 42 22.89	+48 47 42.9	16.5	T		372
/1991h 1	1992	01	03.70308	08 42 20.93	+48 47 48.6	15.5	T		411
/1991h 1	1992	01	03.70536	08 42 20.26	+48 47 51.4				411
/1991h 1	1992	01	03.71032	08 42 18.59	+48 47 58.2				411
/1991h 1	1992	01	03.71371	08 42 17.29	+48 48 02.0				411
/1991h 1	1992	01	03.72473	08 42 13.93	+48 48 14.0				411
/1991h 1	1992	01	04.78250	08 36 26.66	+49 09 53.8				411
/1991h 1	1992	01	04.80311	08 36 19.53	+49 10 17.4				411
/1991h 1	1992	01	04.80792	08 36 17.64	+49 10 25.4				411
/1991h 1	1992	01	04.81031	08 36 16.95	+49 10 24.4				411
/1991h 1	1992	01	07.52847	08 19 19.37	+50 03 16.7	16	T		372
/1991h 1	1992	01	10.45272	07 57 22.33	+50 50 54.2				897
/1991h 1	1992	01	10.46441	07 57 16.55	+50 51 07.9				897
/1991h 1	1992	01	14.55208	07 19 28.07	+51 26 13.2	14.5	T		897
/1991h 1	1992	01	14.55926	07 19 23.67	+51 26 11.4				897
/1991h 1	1992	01	14.56626	07 19 19.20	+51 26 14.0				897
/1991h 1	1992	01	15.75590	07 06 45.40	+51 25 43.9	15	T		372
/1991h 1	1992	01	15.76319	07 06 40.54	+51 25 42.9				372
/1991h 1	1992	01	17.17662	06 51 00.38	+51 16 47.9			F	657
/1991h 1	1992	01	17.17870	06 50 59.16	+51 16 46.6			F	657
/1991h 1	1992	01	17.18248	06 50 56.58	+51 16 44.6			F	657

Note 1: coma 15" across, strongly condensed and fanshaped near p.a. 300 - 330 . 2: correction to MPC 18493. 3: strongly condensed, poor focus, dark film. 4: very condensed on short exposure, no hint of coma. 5: primary coma diameter 33", tail extending 1′.08 in p.a. 50 , narrow faint trail extending 4′.5 in p.a. 256 ; secondary separated by 57".8 in p.a. 72 , coma diameter 11", tail extending 0′.33 in p.a. 50 . 6: primary coma diameter 17", tail extending 0′.78 in p.a. 52 , faint tail continuing 6′.05 in p.a. 69 , faint trail extending 6′.57 in p.a. 254 ; secondary separated by 60".4 in p.a. 69 , coma diameter 9", tail extending 0′.50 in p.a. 61 . 7: coma diameter 5", 3′ tail in p.a. 300 . 8: strongly condensed; tail 1′ extending eastward. 9: 30" tail in p.a. 300 . A: diffuse with condensation. B: apparently involved with faint star. C: small 7" coma. D: stellar to the limits of seeing. E: bad seeing. F: strong moonlight.

OBSERVATIONS OF MINOR PLANETS.

The observations are listed separately for each observatory code. Alphabetic note codes shown with some of the observations are defined according to the scheme below. Numerical codes are defined in the headings for the individual observatories.

A earlier approximate position inferior
a sense of motion ambiguous
B black or dark plate
b bad seeing
C correction to earlier position
c crowded star field
D declination uncertain
d diffuse image
E at or near edge of plate
F faint image
f involved with emulsion or plate flaw
G poor guiding
g no guiding
I involved with star
i inkdot measured
M measurement difficult
N near edge of plate, measurement uncertain
O image out of focus
o plate measured in one direction only
P position uncertain
p poor image
R right ascension uncertain
r poor distribution of reference stars
S poor sky
s streaked image
T time uncertain
t trailed image
U uncertain image
u unconfirmed image
V very faint image
W weak image
w weak solution

Object	Date	UT	R. A. (2000)	Decl.	Mag.	N Obs.
033 Tautenburg						
F. Borngen, Karl Schwarzschild Observatorium, O-6901 Tautenburg, Federal Republic of Germany						
L. D. Schmadel, Astronomisches Rechen-Institut, W-6900 Heidelberg, Federal Republic of Germany						
Observers F. Borngen, L. D. Schmadel						
1.3-m Schmidt telescope						
PPM						
1976 QP	1991 10	03.99653	00 53 12.84	+07 32 27.6		033
1976 QP	1991 10	04.04097	00 53 10.38	+07 32 08.8		033
1976 QP	1991 10	04.99792	00 52 18.00	+07 25 37.7	18.2	033
1977 QL1	1991 10	05.07500	02 23 51.35	+20 08 01.9		033
1977 QL1	1991 10	06.06597	02 23 11.14	+20 07 34.3		033
1977 QL1	1991 10	06.11319	02 23 09.12	+20 07 32.3		033
1977 QL1	1991 10	09.05417	02 21 01.75	+20 05 11.7		033
1977 QL1	1991 10	09.10139	02 20 59.71	+20 05 10.5		033
1977 QL1	1991 10	10.06597	02 20 15.57	+20 04 06.1	17.8	033

1980	RB8	1991 10 05.07500	02 13 59.26	+18 32 29.8			033
1980	RB8	1991 10 06.06597	02 13 13.52	+18 27 44.0			033
1980	RB8	1991 10 06.11319	02 13 11.30	+18 27 28.9			033
1980	RB8	1991 10 09.05417	02 10 48.30	+18 12 15.7			033
1980	RB8	1991 10 09.10139	02 10 45.93	+18 12 00.1			033
1980	RB8	1991 10 10.06597	02 09 56.96	+18 06 41.0		18.6	033
1980	TW5	1991 10 05.07500	02 21 19.17	+19 13 36.8			033
1980	TW5	1991 10 06.06597	02 20 42.31	+19 10 55.0			033
1980	TW5	1991 10 06.11319	02 20 40.47	+19 10 46.9			033
1980	TW5	1991 10 09.05417	02 18 45.22	+19 02 00.4			033
1980	TW5	1991 10 09.10139	02 18 43.24	+19 01 51.2			033
1980	TW5	1991 10 10.06597	02 18 03.86	+18 58 44.6		18.1	033
1981	GC	1991 10 03.99653	00 54 39.89	+07 58 18.2			033
1981	GC	1991 10 04.04097	00 54 37.55	+07 58 04.2			033
1981	GC	1991 10 04.99792	00 53 48.44	+07 53 07.1		18.7	033
1982	FF2	1991 10 02.89688	00 32 17.64	+08 29 11.1			033
1982	FF2	1991 10 02.97778	00 32 13.18	+08 28 38.6			033
1982	FF2	1991 10 03.97361	00 31 20.12	+08 21 51.9			033
1982	FF2	1991 10 04.01944	00 31 17.61	+08 21 33.9			033
1982	FF2	1991 10 09.92361	00 26 06.97	+07 40 43.8		18.3	033
1982	FF2	1991 10 09.97153	00 26 04.42	+07 40 23.4			033
1984	UC1	1991 10 03.99653	00 52 26.30	+09 45 59.0			033
1984	UC1	1991 10 04.04097	00 52 23.71	+09 45 42.4			033
1984	UC1	1991 10 04.99792	00 51 29.66	+09 39 40.0		18.3	033
1986	WO7	1991 10 02.89688	00 31 11.82	+08 38 00.0			033
1986	WO7	1991 10 02.97778	00 31 07.93	+08 37 40.9			033
1986	WO7	1991 10 03.97361	00 30 21.69	+08 33 39.2			033
1986	WO7	1991 10 04.01944	00 30 19.48	+08 33 28.8			033
1986	WO7	1991 10 09.92361	00 25 47.51	+08 08 51.4		18.4	033
1986	WO7	1991 10 09.97153	00 25 45.30	+08 08 39.3			033
1988	XY1	1991 10 02.89688	00 35 37.32	+08 40 36.4			033
1988	XY1	1991 10 02.97778	00 35 32.39	+08 40 10.7			033
1988	XY1	1991 10 03.97361	00 34 33.16	+08 34 39.6			033
1988	XY1	1991 10 04.01944	00 34 30.33	+08 34 25.1			033
1988	XY1	1991 10 09.92361	00 28 42.92	+08 00 45.4		17.7	033
1988	XY1	1991 10 09.97153	00 28 40.04	+08 00 28.7			033
1989	CO3	1991 10 03.99653	00 54 23.38	+08 33 33.5			033
1989	CO3	1991 10 04.04097	00 54 21.16	+08 33 08.3			033
1989	CO3	1991 10 04.99792	00 53 35.65	+08 24 06.0		17.9	033
1990	ES3	1991 10 04.97361	00 35 05.90	+11 44 24.3			033
1990	ES3	1991 10 05.01944	00 35 02.88	+11 44 11.1			033
1990	ES3	1991 10 05.88472	00 34 09.56	+11 40 20.1		17.0	033
1991	RO2	1991 10 02.89688	00 38 24.04	+07 48 39.5			033
1991	RO2	1991 10 02.97778	00 38 20.70	+07 47 47.7			033
1991	RO2	1991 10 03.97361	00 37 41.80	+07 37 13.7			033
1991	RO2	1991 10 04.01944	00 37 39.83	+07 36 44.5			033
1991	RO2	1991 10 09.92361	00 33 57.06	+06 34 18.7		16.8	033
1991	RO2	1991 10 09.97153	00 33 55.19	+06 33 49.1			033
1991	RX2	1991 10 04.85972	00 10 42.56	+08 13 39.5		18.6	033
1991	RX2	1991 10 04.92917	00 10 38.71	+08 13 14.3			033
1991	RX2	1991 10 05.86111	00 09 48.54	+08 07 32.4			033
1991	RT3	1991 10 02.89688	00 37 25.37	+10 04 43.7			033
1991	RT3	1991 10 02.97778	00 37 21.15	+10 04 03.4			033
1991	RT3	1991 10 03.97361	00 36 31.11	+09 55 25.9			033
1991	RT3	1991 10 04.01944	00 36 28.63	+09 55 01.6			033
1991	RT3	1991 10 04.97361	00 35 40.79	+09 46 39.7			033
1991	RT3	1991 10 05.01944	00 35 38.36	+09 46 15.5			033
1991	RT3	1991 10 05.88472	00 34 55.22	+09 38 34.2		16.8	033
1991	RT3	1991 10 09.92361	00 31 34.65	+09 01 55.7		16.9	033

1991 RT3	1991 10 09.97153	00 31 32.15	+09 01 29.3		033
1991 RA4	1991 10 02.89688	00 35 46.71	+09 14 02.1		033
1991 RA4	1991 10 02.97778	00 35 42.49	+09 13 22.1		033
1991 RA4	1991 10 03.97361	00 34 51.51	+09 05 02.0		033
1991 RA4	1991 10 04.01944	00 34 49.04	+09 04 38.4		033
1991 RA4	1991 10 09.92361	00 29 51.96	+08 14 36.3	18.7	033
1991 RA4	1991 10 09.97153	00 29 49.53	+08 14 11.5		033
1991 RB4	1991 10 02.89688	00 34 46.21	+08 20 10.1		033
1991 RB4	1991 10 02.97778	00 34 41.30	+08 19 50.0		033
1991 RB4	1991 10 03.97361	00 33 41.58	+08 15 34.5		033
1991 RB4	1991 10 04.01944	00 33 38.72	+08 15 23.5		033
1991 RB4	1991 10 09.92361	00 27 47.66	+07 49 17.8	18.6	033
1991 RB4	1991 10 09.97153	00 27 44.76	+07 49 04.9		033
1991 RC4	1991 09 05.04167	00 58 52.38	+10 02 57.4	19.6	033
1991 RC4	1991 09 05.08819	00 58 51.14	+10 02 50.4		033
1991 RC4	1991 10 02.89688	00 38 25.90	+07 39 34.9		033
1991 RC4	1991 10 02.97778	00 38 21.25	+07 39 00.0		033
1991 RC4	1991 10 03.97361	00 37 25.50	+07 31 45.0		033
1991 RC4	1991 10 04.01944	00 37 22.82	+07 31 25.6		033
1991 RC4	1991 10 09.92361	00 31 54.27	+06 47 30.9	17.6	033
1991 RC4	1991 10 09.97153	00 31 51.55	+06 47 09.8		033
1991 RD4	1991 10 02.89688	00 39 01.87	+07 30 59.3		033
1991 RD4	1991 10 02.97778	00 38 57.31	+07 30 19.5		033
1991 RD4	1991 10 03.97361	00 38 02.85	+07 22 11.8		033
1991 RD4	1991 10 04.01944	00 38 00.22	+07 21 49.4		033
1991 RD4	1991 10 09.92361	00 32 44.55	+06 33 36.7	18.7	033
1991 RD4	1991 10 09.97153	00 32 42.01	+06 33 13.4		033
1991 RE4	1991 10 02.89688	00 37 27.48	+08 47 16.7		033
1991 RE4	1991 10 02.97778	00 37 22.39	+08 47 04.5		033
1991 RE4	1991 10 03.97361	00 36 21.64	+08 44 23.9		033
1991 RE4	1991 10 04.01944	00 36 18.71	+08 44 16.7		033
1991 RE4	1991 10 09.92361	00 30 28.90	+08 27 22.7	18.1	033
1991 RE4	1991 10 09.97153	00 30 26.00	+08 27 14.6		033
1991 RF4	1991 10 02.89688	00 40 01.71	+08 28 02.0		033
1991 RF4	1991 10 02.97778	00 39 57.17	+08 27 30.3		033
1991 RF4	1991 10 03.97361	00 39 02.76	+08 21 02.3		033
1991 RF4	1991 10 04.01944	00 39 00.15	+08 20 44.5		033
1991 RF4	1991 10 09.92361	00 33 44.46	+07 41 54.4	18.7	033
1991 RF4	1991 10 09.97153	00 33 41.87	+07 41 35.5		033
1991 RJ4	1991 10 02.89688	00 41 23.24	+08 52 43.9		033
1991 RJ4	1991 10 02.97778	00 41 18.88	+08 52 31.6		033
1991 RJ4	1991 10 03.97361	00 40 27.43	+08 50 14.2		033
1991 RJ4	1991 10 04.01944	00 40 24.97	+08 50 06.9		033
1991 RJ4	1991 10 09.92361	00 35 20.58	+08 35 30.8	18.5	033
1991 RJ4	1991 10 09.97153	00 35 18.06	+08 35 23.8		033
1991 RR4	1991 10 03.99653	00 49 13.08	+10 05 58.7		033
1991 RR4	1991 10 04.04097	00 49 10.37	+10 05 51.5		033
1991 RR4	1991 10 04.99792	00 48 14.69	+10 02 54.7	17.5	033
1991 RS4	1991 10 03.99653	00 51 01.36	+08 35 56.3		033
1991 RS4	1991 10 04.04097	00 50 58.93	+08 35 45.5		033
1991 RS4	1991 10 04.99792	00 50 09.82	+08 31 41.4	18.8	033
1991 RT4	1991 10 03.99653	00 48 45.61	+09 20 59.7		033
1991 RT4	1991 10 04.04097	00 48 42.86	+09 20 43.5		033
1991 RT4	1991 10 04.99792	00 47 45.97	+09 15 02.4	19.6	033
1991 RU4	1991 10 03.99653	00 54 56.03	+08 35 47.7		033
1991 RU4	1991 10 04.04097	00 54 54.10	+08 35 27.5		033
1991 RU4	1991 10 04.99792	00 54 13.42	+08 28 24.2	18.3	033
1991 RV4	1991 10 03.99653	00 53 41.04	+08 55 15.4		033
1991 RV4	1991 10 04.04097	00 53 38.77	+08 54 59.1		033

1991	RV4		1991	10	04.99792	00	52	51.48	+08 49 02.8	19.0	033
1991	RW4		1991	10	03.99653	00	50	57.57	+08 39 38.6		033
1991	RW4		1991	10	04.04097	00	50	54.97	+08 39 33.9		033
1991	RW4		1991	10	04.99792	00	49	59.98	+08 37 45.2	18.1	033
1991	RX4		1991	10	03.99653	00	56	33.68	+08 31 01.6		033
1991	RX4		1991	10	04.04097	00	56	31.70	+08 30 41.4		033
1991	RX4		1991	10	04.99792	00	55	50.56	+08 23 25.4	18.6	033
1991	RY4		1991	10	03.99653	00	56	10.42	+07 37 20.2		033
1991	RY4		1991	10	04.04097	00	56	08.32	+07 37 03.8		033
1991	RY4		1991	10	04.99792	00	55	23.13	+07 31 08.7	18.5	033
1991	RA5		1991	10	03.99653	00	52	14.34	+09 06 27.2		033
1991	RA5		1991	10	04.04097	00	52	11.51	+09 06 16.5		033
1991	RA5		1991	10	04.99792	00	51	12.50	+09 02 13.3	19.1	033
1991	RC5		1991	10	03.99653	00	56	04.05	+10 20 26.2		033
1991	RC5		1991	10	04.04097	00	56	01.65	+10 20 21.8		033
1991	RC5		1991	10	04.99792	00	55	10.36	+10 18 58.1	18.0	033
1991	RD5		1991	10	03.99653	00	53	29.41	+09 32 58.9		033
1991	RD5		1991	10	04.04097	00	53	26.56	+09 32 44.8		033
1991	RD5		1991	10	04.99792	00	52	26.07	+09 27 33.6	19.1	033
1991	RG7		1991	10	05.07500	02	23	47.20	+20 16 48.7		033
1991	RG7		1991	10	06.06597	02	23	16.08	+20 14 28.8		033
1991	RG7		1991	10	06.11319	02	23	14.43	+20 14 21.2		033
1991	RG7		1991	10	09.05417	02	21	31.70	+20 06 01.5		033
1991	RG7		1991	10	09.10139	02	21	30.04	+20 05 54.6		033
1991	RG7		1991	10	10.06597	02	20	53.19	+20 02 44.5	18.3	033
1991	RH7		1991	10	05.07500	02	17	32.67	+20 44 54.8		033
1991	RH7		1991	10	06.06597	02	16	50.14	+20 40 54.1		033
1991	RH7		1991	10	06.11319	02	16	48.06	+20 40 42.0		033
1991	RH7		1991	10	09.05417	02	14	36.32	+20 27 52.6		033
1991	RH7		1991	10	09.10139	02	14	33.94	+20 27 38.9		033
1991	RH7		1991	10	10.06597	02	13	49.13	+20 23 10.1	19.0	033
1991	RJ7		1991	10	05.07500	02	16	27.87	+19 20 36.4		033
1991	RJ7		1991	10	06.06597	02	15	37.98	+19 17 29.9		033
1991	RJ7		1991	10	06.11319	02	15	35.52	+19 17 19.9		033
1991	RJ7		1991	10	09.05417	02	13	00.07	+19 07 03.7		033
1991	RJ7		1991	10	09.10139	02	12	57.32	+19 06 51.9		033
1991	RJ7		1991	10	10.06597	02	12	04.21	+19 03 11.2	19.3	033
1991	RK7		1991	10	05.07500	02	16	54.92	+20 39 34.1		033
1991	RK7		1991	10	06.06597	02	16	03.36	+20 36 31.2		033
1991	RK7		1991	10	06.11319	02	16	00.78	+20 36 22.2		033
1991	RK7		1991	10	09.05417	02	13	19.93	+20 26 09.8		033
1991	RK7		1991	10	09.10139	02	13	17.13	+20 25 58.5		033
1991	RK7		1991	10	10.06597	02	12	22.09	+20 22 15.3	18.8	033
1991	TS2		1991	10	03.99653	00	47	37.03	+08 22 30.8		033
1991	TS2		1991	10	04.04097	00	47	33.98	+08 22 32.9		033
1991	TS2		1991	10	04.99792	00	46	29.76	+08 23 31.5	18.4	033
1991	TV2		1991	10	03.99653	00	49	24.25	+10 20 01.5		033
1991	TV2		1991	10	04.04097	00	49	21.33	+10 20 00.3		033
1991	TV2		1991	10	04.99792	00	48	19.96	+10 19 28.3	18.9	033
1991	TX2		1991	10	03.99653	00	49	24.99	+09 07 21.5		033
1991	TX2		1991	10	04.04097	00	49	22.60	+09 07 07.5		033
1991	TX2		1991	10	04.99792	00	48	33.81	+09 01 41.9	19.4	033
1991	TY2		1991	10	03.99653	00	49	47.95	+10 16 36.4		033
1991	TY2		1991	10	04.04097	00	49	45.95	+10 16 21.8		033
1991	TY2		1991	10	04.99792	00	49	03.18	+10 11 11.2	19.7	033
1991	TW4	*	1991	10	05.07500	02	13	21.97	+20 59 43.6		033
1991	TW4		1991	10	06.06597	02	12	53.88	+20 49 49.2		033
1991	TW4		1991	10	06.11319	02	12	52.54	+20 49 20.6		033
1991	TW4		1991	10	09.05417	02	11	22.39	+20 18 36.9		033

1991	TW4		1991	10	09.10139	02	11	20.70	+20	18	07.0		033
1991	TW4		1991	10	10.06597	02	10	49.25	+20	07	34.4	19.5	033
1991	TX4	*	1991	10	05.07500	02	13	34.25	+18	30	19.4		033
1991	TX4		1991	10	06.06597	02	12	45.14	+18	30	44.3		033
1991	TX4		1991	10	06.11319	02	12	42.69	+18	30	43.9		033
1991	TX4		1991	10	09.05417	02	10	06.72	+18	30	54.3		033
1991	TX4		1991	10	09.10139	02	10	04.11	+18	30	54.2		033
1991	TX4		1991	10	10.06597	02	09	09.89	+18	30	36.7	18.0	033
1991	TY4	*	1991	10	05.07500	02	16	53.34	+19	53	24.5		033
1991	TY4		1991	10	06.06597	02	16	17.81	+19	48	24.2		033
1991	TY4		1991	10	06.11319	02	16	15.94	+19	48	09.1		033
1991	TY4		1991	10	09.05417	02	14	22.47	+19	32	02.8		033
1991	TY4		1991	10	09.10139	02	14	20.36	+19	31	45.1		033
1991	TY4		1991	10	10.06597	02	13	40.97	+19	26	05.9	19.4	033
1991	TZ4	*	1991	10	05.07500	02	19	50.89	+18	52	03.6		033
1991	TZ4		1991	10	06.06597	02	19	11.67	+18	46	19.3		033
1991	TZ4		1991	10	06.11319	02	19	09.61	+18	46	02.6		033
1991	TZ4		1991	10	09.05417	02	17	06.56	+18	28	02.7		033
1991	TZ4		1991	10	09.10139	02	17	04.34	+18	27	43.8		033
1991	TZ4		1991	10	10.06597	02	16	22.09	+18	21	32.5	19.2	033
1991	TA5	*	1991	10	05.07500	02	19	54.82	+19	42	32.1		033
1991	TA5		1991	10	06.06597	02	19	09.48	+19	44	47.2		033
1991	TA5		1991	10	06.11319	02	19	07.17	+19	44	52.9		033
1991	TA5		1991	10	09.05417	02	16	42.37	+19	50	28.2		033
1991	TA5		1991	10	09.10139	02	16	39.78	+19	50	32.6		033
1991	TA5		1991	10	10.06597	02	15	49.27	+19	52	01.7	17.9	033
1991	TB5	*	1991	10	05.07500	02	20	21.86	+20	39	32.7		033
1991	TB5		1991	10	06.06597	02	19	28.79	+20	42	36.3		033
1991	TB5		1991	10	06.11319	02	19	26.15	+20	42	44.8		033
1991	TB5		1991	10	09.05417	02	16	40.41	+20	50	51.5		033
1991	TB5		1991	10	09.10139	02	16	37.63	+20	50	58.3		033
1991	TB5		1991	10	10.06597	02	15	40.95	+20	53	18.8	19.2	033
1991	TC5	*	1991	10	05.07500	02	21	04.23	+20	51	23.9		033
1991	TC5		1991	10	06.06597	02	20	34.77	+20	48	27.8		033
1991	TC5		1991	10	06.11319	02	20	33.05	+20	48	18.7		033
1991	TC5		1991	10	09.05417	02	18	53.66	+20	37	49.6		033
1991	TC5		1991	10	09.10139	02	18	51.87	+20	37	38.6		033
1991	TC5		1991	10	10.06597	02	18	15.73	+20	33	39.0	18.5	033
1991	TD5	*	1991	10	05.07500	02	21	08.89	+18	25	33.3		033
1991	TD5		1991	10	06.06597	02	20	20.28	+18	22	31.5		033
1991	TD5		1991	10	06.11319	02	20	17.81	+18	22	22.7		033
1991	TD5		1991	10	09.05417	02	17	46.37	+18	12	28.7		033
1991	TD5		1991	10	09.10139	02	17	43.74	+18	12	17.7		033
1991	TD5		1991	10	10.06597	02	16	52.09	+18	08	46.4	19.1	033
1991	TE5	*	1991	10	05.07500	02	22	23.66	+19	41	43.6		033
1991	TE5		1991	10	06.06597	02	21	30.25	+19	44	36.0		033
1991	TE5		1991	10	06.11319	02	21	27.59	+19	44	43.3		033
1991	TE5		1991	10	09.05417	02	18	40.85	+19	52	22.7		033
1991	TE5		1991	10	09.10139	02	18	38.00	+19	52	29.4		033
1991	TE5		1991	10	10.06597	02	17	40.95	+19	54	43.5	17.4	033
1991	TF5	*	1991	10	05.07500	02	24	20.55	+20	46	29.0		033
1991	TF5		1991	10	06.06597	02	23	41.28	+20	50	09.6		033
1991	TF5		1991	10	06.11319	02	23	39.21	+20	50	18.6		033
1991	TF5		1991	10	09.05417	02	21	29.54	+20	59	49.2		033
1991	TF5		1991	10	09.10139	02	21	27.63	+21	00	00.4		033
1991	TF5		1991	10	10.06597	02	20	41.23	+21	02	40.2	19.1	033
1991	TG5	*	1991	10	05.07500	02	24	57.55	+19	15	20.9		033
1991	TG5		1991	10	06.06597	02	24	22.05	+19	15	06.1		033
1991	TG5		1991	10	06.11319	02	24	20.16	+19	15	03.9		033

1991 TG5		1991	10	09.05417	02	22	22.55	+19	12	53.2		033
1991 TG5		1991	10	09.10139	02	22	20.63	+19	12	52.1		033
1991 TG5		1991	10	10.06597	02	21	38.43	+19	11	42.7	19.6	033
1991 TH5	*	1991	10	05.07500	02	25	18.57	+19	17	57.5		033
1991 TH5		1991	10	06.06597	02	24	36.75	+19	15	17.2		033
1991 TH5		1991	10	06.11319	02	24	34.67	+19	15	09.2	19.6	033
1991 TJ5	*	1991	10	03.99653	00	46	52.83	+08	28	00.5		033
1991 TJ5		1991	10	04.04097	00	46	50.70	+08	27	46.6		033
1991 TJ5		1991	10	04.99792	00	46	05.13	+08	22	36.2	19.4	033
1991 TK5	*	1991	10	03.99653	00	47	41.27	+09	05	58.1		033
1991 TK5		1991	10	04.04097	00	47	39.19	+09	05	48.6		033
1991 TK5		1991	10	04.99792	00	46	56.09	+09	02	12.3	19.3	033
1991 TL5	*	1991	10	03.99653	00	48	17.33	+09	29	56.3		033
1991 TL5		1991	10	04.04097	00	48	15.12	+09	29	41.1		033
1991 TL5		1991	10	04.99792	00	47	28.71	+09	24	27.8	19.3	033
1991 TM5	*	1991	10	03.99653	00	48	18.51	+07	15	15.8		033
1991 TM5		1991	10	04.04097	00	48	15.74	+07	15	00.1		033
1991 TM5		1991	10	04.99792	00	47	16.22	+07	09	51.2	18.7	033
1991 TN5	*	1991	10	03.99653	00	49	54.83	+08	13	47.7		033
1991 TN5		1991	10	04.04097	00	49	52.78	+08	13	35.8		033
1991 TN5		1991	10	04.99792	00	49	10.00	+08	09	15.4	19.5	033
1991 TO5	*	1991	10	03.99653	00	51	04.04	+07	16	10.0		033
1991 TO5		1991	10	04.04097	00	51	01.65	+07	16	03.6		033
1991 TO5		1991	10	04.99792	00	50	08.97	+07	14	09.7	19.6	033
1991 TP5	*	1991	10	03.99653	00	52	52.04	+09	56	56.5		033
1991 TP5		1991	10	04.04097	00	52	49.54	+09	56	39.4		033
1991 TP5		1991	10	04.99792	00	51	56.67	+09	50	22.6	19.2	033
1991 TQ5	*	1991	10	03.99653	00	53	08.50	+08	21	32.9		033
1991 TQ5		1991	10	04.04097	00	53	05.87	+08	21	20.3		033
1991 TQ5		1991	10	04.99792	00	52	09.60	+08	16	34.3	19.5	033
1991 TR5	*	1991	10	03.99653	00	54	46.63	+07	55	37.6		033
1991 TR5		1991	10	04.04097	00	54	44.07	+07	55	28.5		033
1991 TR5		1991	10	04.99792	00	53	50.02	+07	52	04.9	19.5	033
1991 TS5	*	1991	10	03.99653	00	56	09.54	+07	48	30.6		033
1991 TS5		1991	10	04.04097	00	56	07.12	+07	48	23.5		033
1991 TS5		1991	10	04.99792	00	55	15.63	+07	45	53.2	17.1	033
1991 TT5	*	1991	10	03.99653	00	56	48.16	+09	26	34.1		033
1991 TT5		1991	10	04.04097	00	56	45.34	+09	26	29.5		033
1991 TT5		1991	10	04.99792	00	55	46.15	+09	25	15.1	19.8	033
1991 TU5	*	1991	10	03.99653	00	58	31.47	+09	16	16.4		033
1991 TU5		1991	10	04.04097	00	58	28.86	+09	16	05.5		033
1991 TU5		1991	10	04.99792	00	57	34.32	+09	12	07.3	19.6	033
1991 TV5	*	1991	10	03.99653	00	58	39.42	+08	59	18.5		033
1991 TV5		1991	10	04.04097	00	58	37.05	+08	59	03.5		033
1991 TV5		1991	10	04.99792	00	57	48.15	+08	53	26.3	19.4	033
1991 TW5	*	1991	10	03.99653	00	58	40.23	+08	07	44.7		033
1991 TW5		1991	10	04.04097	00	58	37.68	+08	07	30.4		033
1991 TW5		1991	10	04.99792	00	57	43.73	+08	01	52.5	19.6	033
3196 T-1		1991	10	03.99653	00	48	08.58	+07	22	47.1		033
3196 T-1		1991	10	04.04097	00	48	06.49	+07	22	31.9		033
3196 T-1		1991	10	04.99792	00	47	20.16	+07	17	23.9	19.0	033
2041 T-3		1991	10	02.89688	00	41	45.68	+08	53	10.0		033
2041 T-3		1991	10	02.97778	00	41	41.64	+08	52	41.9		033
2041 T-3		1991	10	04.01944	00	40	51.57	+08	46	46.2	17.3	033
(327)		1991	10	05.07500	02	21	02.77	+20	30	35.1		033
(327)		1991	10	06.06597	02	20	18.80	+20	30	19.0		033
(327)		1991	10	06.11319	02	20	16.61	+20	30	17.9		033
(327)		1991	10	09.05417	02	17	59.34	+20	28	38.6		033
(327)		1991	10	09.10139	02	17	57.03	+20	28	36.3		033

(327)	1991 10 10.06597	02 17 10.04	+20 27 47.3	15.3	033
(395)	1991 10 02.89688	00 35 50.32	+09 09 11.4		033
(395)	1991 10 02.97778	00 35 46.28	+09 08 45.0		033
(395)	1991 10 03.97361	00 34 57.50	+09 03 04.7		033
(395)	1991 10 04.01944	00 34 55.14	+09 02 49.5		033
(395)	1991 10 09.92361	00 30 10.16	+08 28 37.5	15.2	033
(395)	1991 10 09.97153	00 30 07.81	+08 28 20.6		033
(465)	1991 10 05.07500	02 24 27.82	+20 50 03.3		033
(465)	1991 10 06.06597	02 23 50.24	+20 47 58.5		033
(465)	1991 10 06.11319	02 23 48.39	+20 47 51.8		033
(465)	1991 10 09.05417	02 21 51.81	+20 40 59.2		033
(465)	1991 10 09.10139	02 21 50.20	+20 40 54.9		033
(465)	1991 10 10.06597	02 21 10.45	+20 38 26.2	16.3	033
(830)	1991 10 03.99653	00 52 23.95	+08 51 53.8		033
(830)	1991 10 04.04097	00 52 21.86	+08 51 44.4		033
(830)	1991 10 04.99792	00 51 37.95	+08 48 14.3	14.5	033
(1286)	1991 10 03.99653	00 48 19.87	+07 33 23.2		033
(1286)	1991 10 04.04097	00 48 17.98	+07 33 01.7		033
(1286)	1991 10 04.99792	00 47 37.16	+07 25 30.0	15.7	033
(1315)	1991 10 05.07500	02 21 49.05	+18 34 59.3		033
(1315)	1991 10 06.06597	02 21 13.83	+18 31 16.8		033
(1315)	1991 10 06.11319	02 21 12.07	+18 31 06.0		033
(1315)	1991 10 09.05417	02 19 22.54	+18 19 25.2		033
(1315)	1991 10 09.10139	02 19 20.70	+18 19 13.6		033
(1315)	1991 10 10.06597	02 18 43.32	+18 15 11.2	15.9	033
(1964)	1991 10 03.99653	00 46 03.06	+08 37 57.6		033
(1964)	1991 10 04.04097	00 46 00.78	+08 37 41.1		033
(1964)	1991 10 04.99792	00 45 13.55	+08 31 36.3	16.4	033
(2026)	1991 10 03.99653	00 46 26.56	+08 43 06.1		033
(2026)	1991 10 04.04097	00 46 24.07	+08 42 52.3		033
(2026)	1991 10 04.99792	00 45 30.84	+08 37 49.2	17.6	033
(2130)	1991 10 03.99653	00 50 29.09	+10 11 19.3		033
(2130)	1991 10 04.04097	00 50 26.10	+10 11 13.3		033
(2130)	1991 10 04.99792	00 49 24.03	+10 08 56.2	16.2	033
(2331)	1991 10 02.87778	00 09 51.47	+07 20 46.9		033
(2331)	1991 10 02.95625	00 09 46.92	+07 20 15.1		033
(2331)	1991 10 03.91458	00 08 53.31	+07 13 46.6		033
(2331)	1991 10 08.86736	00 04 21.41	+06 39 45.3		033
(2331)	1991 10 08.91458	00 04 18.82	+06 39 25.5		033
(2331)	1991 10 09.87569	00 03 27.60	+06 32 46.0	16.7	033
(3740)	1991 10 05.07500	02 21 03.87	+20 15 33.4		033
(3740)	1991 10 06.06597	02 20 32.68	+20 19 52.3		033
(3740)	1991 10 06.11319	02 20 31.02	+20 20 03.8		033
(3740)	1991 10 09.05417	02 18 46.44	+20 31 43.3		033
(3740)	1991 10 09.10139	02 18 44.57	+20 31 53.8		033
(3740)	1991 10 10.06597	02 18 06.65	+20 35 20.4	16.6	033
(3866)	1991 10 03.99653	00 49 09.62	+08 30 50.2		033
(3866)	1991 10 04.04097	00 49 07.63	+08 30 34.2		033
(3866)	1991 10 04.99792	00 48 26.11	+08 24 46.6	15.9	033
(4029)	1991 10 02.87778	00 05 40.61	+05 12 15.3		033
(4029)	1991 10 02.95625	00 05 36.64	+05 11 39.9		033
(4029)	1991 10 03.91458	00 04 49.98	+05 04 36.0		033
(4029)	1991 10 08.86736	00 00 56.25	+04 28 20.3		033
(4029)	1991 10 08.91458	00 00 54.07	+04 27 59.6		033
(4029)	1991 10 09.87569	00 00 10.76	+04 21 04.8	17.7	033

049 Kvistaberg
C.-I. Lagerkvist, Astronomiska Observatoriet, Box 515,
S-75120 Uppsala, Sweden

Observers C.-I. Lagerkvist, T. Oja, A. Erikson
AGK3

(34)	1989 09 11.04267	01 31 00.04	+08 23 39.2			049
(34)	1989 09 11.06206	01 30 59.46	+08 23 34.7			049
(34)	1989 09 12.06972	01 30 32.91	+08 19 00.3			049
(34)	1989 09 12.08911	01 30 32.27	+08 18 53.8			049
(382)	1990 10 11.79871	23 11 59.70	+02 29 58.9			049
(382)	1990 10 11.81325	23 11 59.25	+02 29 55.9			049
(684)	1989 10 24.85187	23 37 35.73	+02 38 59.2			049
(684)	1989 10 24.86367	23 37 35.38	+02 38 56.0			049
(959)	1990 12 20.89949	04 05 51.34	+22 24 35.1			049
(959)	1990 12 20.91403	04 05 50.72	+22 24 35.3			049
(959)	1990 12 21.87494	04 05 14.18	+22 24 14.6			049
(959)	1990 12 21.88948	04 05 13.63	+22 24 15.0			049
(1118)	1990 09 26.85421	23 25 58.97	+10 42 45.2			049
(1118)	1990 09 26.86875	23 25 58.20	+10 42 43.7			049
(1223)	1990 12 20.93169	04 26 11.25	+23 56 44.0			049
(1223)	1990 12 20.94762	04 26 10.42	+23 56 42.7			049
(1381)	1989 10 24.85187	23 44 54.12	+01 36 59.5			049
(1381)	1989 10 24.86367	23 44 53.63	+01 36 58.5			049
(1856)	1989 09 11.04267	01 35 43.62	+09 21 05.9			049
(1856)	1989 09 11.06206	01 35 42.98	+09 21 01.4			049
(2170)	1990 11 18.94427	04 53 01.30	+23 13 40.9			049
(2170)	1990 11 18.95881	04 53 00.51	+23 13 37.5			049
(2224)	1990 11 18.94427	04 37 10.57	+23 05 13.5			049
(2224)	1990 11 18.95881	04 37 09.70	+23 05 13.8			049
(2224)	1990 12 20.89949	04 08 30.51	+22 21 47.2			049
(2224)	1990 12 20.91403	04 08 29.73	+22 21 45.8			049
(2224)	1990 12 21.87494	04 07 47.80	+22 20 23.2			049
(2224)	1990 12 21.88948	04 07 47.12	+22 20 21.3			049
(2674)	1989 09 11.04267	01 37 07.99	+09 19 21.5			049
(2674)	1989 09 11.06206	01 37 07.56	+09 19 21.1			049
(2675)	1990 12 20.89949	03 57 47.00	+25 08 31.6			049
(2675)	1990 12 20.91403	03 57 46.29	+25 08 29.4			049
(2697)	1990 12 20.89949	04 08 34.13	+22 50 58.9			049
(2697)	1990 12 20.91403	04 08 33.61	+22 50 57.1			049
(2697)	1990 12 21.87494	04 07 58.49	+22 48 19.1			049
(2697)	1990 12 21.88948	04 07 58.03	+22 48 17.6			049
(3841)	1990 11 18.94427	04 43 26.34	+25 35 07.9			049
(3841)	1990 11 18.95881	04 43 25.37	+25 35 10.2			049
(4223)	1990 12 20.89949	04 03 53.31	+25 01 57.3			049
(4223)	1990 12 20.91403	04 03 52.77	+25 01 53.2			049

095 Crimean Astrophysical Observatory
N. S. Chernykh, Crimean Astrophysical Observatory, P.O. Nauchnyj, Crimea 334413, Ukraine
Yu. V. Batrakov, Institute for Theoretical Astronomy, Naberezhnaya Kutuzova 10, St. Petersburg 191187, Russia
Observers N. S. Chernykh, L. I. Chernykh, L. G. Karachkina, L. V. Zhuravleva

1986 PX4	1990 08 30.99852	00 34 21.03	+02 16 25.7			095
1986 PX4	1990 08 31.01241	00 34 20.89	+02 16 22.8			095
1988 CL2	1990 08 28.87221	22 32 24.35	-15 05 29.8	16.5	E	095
1988 CL2	1990 08 28.88610	22 32 23.72	-15 05 46.1	16.5	E	095
(838)	1990 10 23.82674	00 23 57.78	+14 49 10.3		E	095

293 Burlington remote site
T. Handley, 13 Linden Avenue, Burlington, NJ 08016, U.S.A.
0.26-m f/3.9 Wright-Schmidt camera

1969 TA		1991 10 07.27917	00 52 17.54	+14 55 51.2			293
1969 TA		1991 10 07.29028	00 52 17.00	+14 55 43.8			293
1985 VP		1991 10 07.36354	01 42 53.89	+23 10 27.7			293
1985 VP		1991 10 07.37674	01 42 53.12	+23 10 25.4			293
1987 SQ3		1991 10 07.36354	01 43 57.76	+23 04 23.2			293
1987 SQ3		1991 10 07.37674	01 43 57.07	+23 04 25.5			293
1988 BL2		1991 10 07.32500	01 13 52.69	-00 11 11.3			293
(2826)		1991 10 07.32500	01 13 30.96	+00 14 07.8			293

364 JCPM Kagoshima Station
M. Takeishi, Odori 4, Hamatonbetsu Esashigun, Hokkaido 098-57, Japan
Observer M. Mukai
Measurer M. Takeishi
0.25-m f/4.2 Wright-Schmidt telescope

1986 QS		1991 10 07.56875	01 14 05.88	+16 00 23.3	17		364
1986 QS		1991 10 07.58611	01 14 04.90	+16 00 23.2			364
1986 QS		1991 10 12.55903	01 09 19.76	+15 55 22.4			364
1986 QS		1991 10 12.57639	01 09 18.83	+15 55 20.5			364
1986 QS		1991 10 13.49236	01 08 26.09	+15 54 00.1			364
1986 QS		1991 10 13.50972	01 08 25.02	+15 54 00.2			364
1986 QS		1991 10 13.52847	01 08 23.75	+15 53 57.5			364
1986 QS		1991 10 13.54583	01 08 22.59	+15 53 58.7			364
1991 TS4		1991 10 07.56875	01 07 35.60	+16 45 05.6	16.5		364
1991 TS4		1991 10 07.58611	01 07 34.30	+16 45 03.8			364
1991 TS4		1991 10 13.52847	01 00 49.16	+16 33 33.9			364
1991 TS4		1991 10 13.54583	01 00 47.97	+16 33 33.1			364
1991 WB	*	1991 11 30.60799	06 17 00.98	+26 14 06.4	15.5		364
1991 WB		1991 11 30.62188	06 16 59.90	+26 14 27.5			364
1991 WB		1991 12 02.59479	06 14 21.84	+27 06 09.7	15.5		364
1991 WB		1991 12 02.60868	06 14 20.78	+27 06 32.8			364
1991 WB		1991 12 03.55174	06 13 01.88	+27 31 14.0	15.5		364
1991 WB		1991 12 03.56563	06 13 00.59	+27 31 36.4	15.5		364
1991 WB		1991 12 09.55938	06 03 52.55	+30 06 59.1	15.5		364
1991 WB		1991 12 09.57326	06 03 51.16	+30 07 21.0	15.5		364
1991 WB		1991 12 29.49549	05 29 12.60	+37 28 48.8	15.5		364
1991 WB		1991 12 29.50938	05 29 11.12	+37 29 05.0	15.5		364
1991 WB		1991 12 30.44757	05 27 37.33	+37 45 32.4	16		364
1991 WB		1991 12 30.46146	05 27 35.83	+37 45 49.4	16		364
(465)		1991 11 01.55139	02 04 07.71	+19 19 02.6	15		364
(465)		1991 11 01.56875	02 04 06.85	+19 18 58.4	15		364
(896)		1991 11 01.50694	00 48 51.45	+16 03 47.1			364
(896)		1991 11 01.52431	00 48 50.72	+16 03 41.8			364
(1210)		1992 01 02.58333	07 35 30.64	+22 04 40.9	15.5		364
(1210)		1992 01 02.61146	07 35 29.92	+22 04 45.4	15.5		364
(2571)		1991 11 10.57535	03 53 53.16	+18 57 33.8	16		364
(2571)		1991 11 10.58785	03 53 52.28	+18 57 35.3	16		364
(4039)		1991 11 01.55139	01 59 42.16	+20 25 18.5	16.5		364
(4039)		1991 11 01.56875	01 59 41.15	+20 25 10.9	16.5		364

366 Miyasaka Observatory
S. Miyasaka, 3-8-501, 4 Chome, Nagayama, Tama, Tokyo 206, Japan
Observer S. Miyasaka
0.25-m reflector
PPM

1975 YD		1991 10 13.71975	02 38 56.65	+18 21 18.3			366
1975 YD		1991 10 13.74252	02 38 55.92	+18 21 02.4			366
1975 YD		1991 11 03.63428	02 26 04.07	+13 41 56.9			366
1975 YD		1991 11 03.65470	02 26 03.21	+13 41 41.3			366
1975 YD		1991 11 06.59506	02 24 01.02	+12 59 12.7			366

1975 YD	1991 11 06.61465	02 24 00.01	+12 58 55.1				366
1978 PT4	1991 10 13.68559	02 28 34.15	-15 20 43.4				366
1978 PT4	1991 10 13.70815	02 28 33.19	-15 20 52.6				366
1978 PT4	1991 11 03.57067	02 10 50.74	-16 25 14.0				366
1978 PT4	1991 11 03.59352	02 10 49.40	-16 25 13.1				366
1978 UV	1991 10 13.61242	01 31 09.52	+03 52 18.8				366
1978 UV	1991 10 13.63474	01 31 08.31	+03 52 16.8				366
1979 QX3	1991 10 13.64775	01 50 26.58	+26 01 13.5	16.0			366
1979 QX3	1991 10 13.67100	01 50 25.44	+26 01 10.1				366
1982 BW	1991 11 08.80703	04 39 29.26	+20 25 25.7				366
1982 BW	1991 11 08.82791	04 39 28.36	+20 25 26.7				366
1982 BW	1991 11 15.74242	04 33 52.39	+20 38 25.3				366
1982 BW	1991 11 15.76380	04 33 51.15	+20 38 29.6				366
1985 CG	1991 11 03.66900	03 24 57.86	+13 29 46.6				366
1985 CG	1991 11 03.68888	03 24 56.69	+13 29 45.7				366
1985 CG	1991 11 06.62580	03 22 11.22	+13 21 58.9				366
1985 CG	1991 12 07.48514	02 54 15.48	+12 35 42.6				366
1985 CG	1991 12 07.51531	02 54 14.27	+12 35 44.0				366
1985 CG	1991 12 13.60165	02 51 08.98	+12 41 09.4				366
1985 CG	1991 12 13.62375	02 51 08.39	+12 41 11.4				366
1986 RD1	1991 11 15.70854	01 25 19.19	+23 30 09.5				366
1989 AX1	1991 11 03.70387	04 20 37.02	+32 07 49.1				366
1989 AX1	1991 11 03.72597	04 20 35.62	+32 07 54.9				366
1989 AX1	1991 11 06.77613	04 17 49.30	+32 18 24.2				366
1989 AX1	1991 11 06.79716	04 17 48.03	+32 18 29.6				366
1989 AX1	1991 11 30.51740	03 49 59.02	+32 21 41.5				366
1989 AX1	1991 11 30.53349	03 49 57.75	+32 21 39.4				366
1989 AX1	1991 12 01.65507	03 48 38.84	+32 18 29.6				366
(1356)	1991 12 07.48514	02 51 34.03	+13 07 22.7				366
(1356)	1991 12 07.51531	02 51 33.01	+13 07 22.0				366
(1356)	1991 12 13.60165	02 48 18.21	+13 11 02.1				366
(1356)	1991 12 13.62375	02 48 17.61	+13 11 01.5				366

367 Yatsuka
S. Miyasaka, 3-8-501, 4 Chome, Nagayama, Tama, Tokyo 206, Japan
Observer H. Abe
Measurer S. Miyasaka

1978 UV	1991 10 17.66806	01 27 25.29	+03 48 42.4				367
1978 UV	1991 10 17.67847	01 27 24.64	+03 48 40.8				367
1978 UV	1991 10 17.68889	01 27 24.03	+03 48 41.0				367
1982 BW	1991 11 30.60556	04 19 53.24	+21 03 08.2				367
1982 BW	1991 11 30.61597	04 19 52.65	+21 03 09.2				367
1982 BW	1991 11 30.62639	04 19 52.02	+21 03 11.2				367
1982 BW	1991 12 04.58125	04 16 01.36	+21 09 04.2				367
1982 BW	1991 12 04.59167	04 16 00.73	+21 09 05.6				367
1982 BW	1991 12 04.60208	04 16 00.17	+21 09 06.6				367
1986 RD1	1991 10 17.70000	01 48 39.66	+25 43 43.9				367
1986 RD1	1991 10 17.71041	01 48 38.98	+25 43 42.8				367
1986 RD1	1991 10 17.71944	01 48 38.58	+25 43 42.1				367
1989 AX1	1991 11 30.57431	03 49 54.73	+32 21 33.1				367
1989 AX1	1991 11 30.58472	03 49 53.92	+32 21 31.2				367
1989 AX1	1991 11 30.59514	03 49 53.16	+32 21 29.6				367
1989 AX1	1991 12 04.55000	03 45 24.23	+32 09 19.8				367
1989 AX1	1991 12 04.56042	03 45 23.55	+32 09 18.2				367
1989 AX1	1991 12 04.57083	03 45 22.73	+32 09 16.4				367

372 Geisei
T. Seki, Kamimachi 2-9-35, Kochi, Japan
0.60-m reflector

1982 FC		1991 12 09.66632	04 57 20.94	+36 38 30.2	18		372
1982 FC		1992 01 02.50243	04 28 51.89	+36 11 39.2	17.5		372
1982 FC		1992 01 03.67847	04 27 49.71	+36 08 15.5	17.5		372
1987 WY		1991 11 28.57639	01 10 43.72	+11 46 14.2	16.5		372
1987 WY		1991 11 28.58437	01 10 43.83	+11 46 11.9			372
1987 WY		1991 11 30.56667	01 11 27.95	+11 30 15.1	16.5		372
1987 WY		1991 11 30.57639	01 11 28.18	+11 30 10.5			372
1987 XC		1991 11 28.61275	02 22 16.30	+10 57 04.6	17		372
1987 XC		1991 11 28.62396	02 22 15.72	+10 57 10.8			372
1989 CW		1991 12 04.69583	06 25 14.58	+24 30 56.4	18.5		372
1989 CW		1991 12 08.66425	06 21 21.42	+24 33 12.6	18		372
1989 CW		1991 12 08.67500	06 21 20.40	+24 33 12.2			372
1989 CW		1991 12 11.67153	06 18 10.37	+24 34 37.3	18.5		372
1989 CW		1991 12 29.64583	05 57 09.83	+24 34 58.3	18.5		372
1989 CW		1991 12 29.65799	05 57 09.20	+24 34 59.3			372
1989 EO1		1991 12 04.61217	04 18 17.37	+32 15 41.2	17.5		372
1989 EO1		1991 12 04.62326	04 18 16.65	+32 15 40.9			372
1989 EO1		1991 12 08.63576	04 13 29.18	+32 00 11.7	18		372
1989 EO1		1991 12 08.64758	04 13 28.35	+32 00 10.0			372
1989 EO1		1991 12 29.59271	03 54 22.65	+30 14 56.1	18		372
1989 EO1		1991 12 29.60486	03 54 22.16	+30 14 50.6			372
1991 VZ1		1991 11 03.70208	04 04 04.09	+16 45 16.1	16.5		372
1991 VZ1		1991 11 06.70174	04 01 30.48	+16 47 34.8	16.5		372
1991 VZ1		1991 11 08.67188	03 59 44.24	+16 49 03.8	16.5		372
1991 YA		1992 01 07.44722	04 59 46.51	+21 18 14.5	17		372
1992 AA		1992 01 07.42708	04 37 52.60	+19 35 14.5	15		372
1992 AB		1992 01 07.43681	04 20 08.61	+19 06 19.1	17		372
1992 AB		1992 01 09.63368	04 16 23.26	+20 21 54.0	16.5		372
1992 AC		1992 01 09.67188	09 02 35.22	+08 52 11.0	14		372
1992 AC		1992 01 09.67882	09 02 35.83	+08 52 27.1			372
1992 AC		1992 01 09.68535	09 02 36.43	+08 52 43.7			372
1992 AC		1992 01 09.69131	09 02 37.13	+08 52 57.2			372
1992 AC		1992 01 09.69549	09 02 37.54	+08 53 07.3			372
(435)		1991 11 03.79681	09 25 26.94	+17 06 35.4	16.5		372
(435)		1991 11 03.81536	09 25 27.55	+17 06 33.2			372
(860)		1991 11 13.70174	09 38 28.43	+15 57 59.0	17		372
(860)		1991 11 13.71840	09 38 29.09	+15 57 55.4			372
(2203)		1991 11 03.75556	09 12 23.17	+17 46 42.1	18		372
(2203)		1991 11 03.76806	09 12 23.65	+17 46 41.0			372
(4649)		1991 11 13.75521	10 07 00.89	+23 21 08.1	17		372
(4649)		1991 11 13.76666	10 07 01.68	+23 21 07.1			372

376 Uenohara
N. Kawasato, 3-51, Hana-Koganei, Kodaira, Tokyo 187, Japan
GSC

1988 EB		1991 11 07.45729	02 01 30.19	+12 28 46.9			376
1988 EB		1991 11 07.58993	02 01 22.69	+12 28 33.9			376
1990 SM2		1991 12 28.57396	07 42 13.92	+24 55 24.2			376
1990 SM2		1991 12 28.61354	07 42 11.86	+24 55 36.1			376
1991 TS4	*	1991 10 15.55727	00 58 33.3	+16 28 23	16	N	376
1991 TS4		1991 10 15.57743	00 58 31.9	+16 28 20		N	376
1991 TS4		1991 11 05.48090	00 40 10.06	+15 18 15.3			376
1991 TS4		1991 11 05.52604	00 40 08.40	+15 18 05.8			376
1991 TS4		1991 11 07.42118	00 39 07.85	+15 11 59.1			376
1991 TS4		1991 11 07.46910	00 39 06.22	+15 11 50.3			376
1991 TS4		1991 12 12.48299	00 43 11.51	+14 43 04.4			376
(243)		1991 12 30.51424	05 16 45.58	+24 33 13.0			376
(243)		1991 12 30.54271	05 16 44.05	+24 33 11.4			376

385 Nihondaira Observatory Oohira station
T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
0.30-m f/3.8 hyperboloid astrocamera
GSC

1986 RE2		1991 12 30.53611	07 32 35.02	+28 51 38.6	17			385
1986 RE2		1991 12 30.55139	07 32 34.11	+28 51 33.6				385
1986 RE2		1991 12 31.67465	07 31 09.97	+28 45 34.1	17			385
1990 RB		1991 12 28.59306	06 57 10.60	+25 38 45.6	16.5			385
1990 RB		1991 12 28.60208	06 57 10.33	+25 38 44.9				385
1990 RB		1992 01 10.52361	06 44 38.93	+25 22 25.6	16.5			385
1990 RB		1992 01 10.53125	06 44 38.58	+25 22 25.9				385
1991 UP1	*	1991 10 18.60347	03 41 35.97	+19 53 04.4	16			385
1991 UP1		1991 10 18.62222	03 41 35.49	+19 52 55.0				385
1991 UP1		1991 11 03.53958	03 31 08.02	+17 12 05.5	16			385
1991 UP1		1991 11 03.55208	03 31 07.43	+17 11 57.4				385
1991 UP1		1991 11 04.55321	03 30 18.26	+17 01 01.2	16			385
1991 UP1		1991 11 04.56250	03 30 17.94	+17 00 54.3				385
1991 UP1		1991 12 12.53264	03 02 42.06	+10 54 29.5	16.3			385
1991 UP1		1991 12 12.54167	03 02 41.77	+10 54 26.6				385
1991 UP1		1991 12 13.50417	03 02 21.49	+10 48 24.7	16.3			385
1991 UP1		1991 12 13.51389	03 02 21.21	+10 48 21.5				385
1991 VF		1991 11 04.53900	03 57 03.27	+14 55 01.3	15.5			385
1991 VF		1991 11 04.54236	03 57 02.71	+14 55 07.8				385
1991 VT1		1991 12 12.55069	03 57 06.79	+21 39 00.7	16.5			385
1991 VT1		1991 12 12.55903	03 57 06.42	+21 38 58.1				385
1991 VB3		1991 12 12.55069	03 56 59.15	+20 22 19.6	16.5			385
1991 VB3		1991 12 12.55903	03 56 58.81	+20 22 18.7				385
1991 WB		1991 12 07.67188	06 06 52.5	+29 18 32	15.8		I	385
1991 WB		1991 12 07.68125	06 06 51.8	+29 18 48			G	385
1991 WB		1991 12 12.58264	05 58 51.10	+31 23 04.6	15			385
1991 WB		1991 12 29.47830	05 29 14.29	+37 28 31.0	16			385
1991 WB		1991 12 29.49034	05 29 12.88	+37 28 43.7				385

391 Sendai Observatory, Ayashi Station
M. Koishikawa, Sendai Municipal Observatory, 1-1 Sakuragaoka-koen,
Sendai 980, Japan
Observer M. Koishikawa
0.30-m f/3.8 astrocamera

1992 AC	*	1992 01 05.70278	08 55 25.15	+06 24 56.6	14			391
1992 AC		1992 01 05.72361	08 55 27.17	+06 25 39.4				391

399 Kushiro
H. Kaneda, Taiyo MS 2-H, 2 chome 2-15, kawazoe 8 jo, Minami-ku,
Sapporo 005, Japan
Observer S. Ueda, M. Matsuyama
Measurer H. Kaneda, K. Watanabe
0.16-m f/3.8 Wright-Schmidt, 0.25-m f/3.4 reflector, 0.22-m f/3.3 Schmidt
GSC, ACRS

1977 QY3		1991 11 09.60307	04 07 03.72	+13 49 33.1	17			399
1977 QY3		1991 11 09.62049	04 07 02.88	+13 49 31.5				399
1977 QY3		1991 11 11.56806	04 04 55.99	+13 46 32.2	17			399
1977 QY3		1991 11 11.58333	04 04 54.92	+13 46 30.1				399
1978 VR4		1991 11 13.60069	04 23 13.52	+19 58 52.6	16.5			399
1978 VR4		1991 11 13.61563	04 23 12.67	+19 58 46.5				399
1981 SA5		1991 10 31.55208	02 32 30.32	+14 00 02.1	16.5			399
1981 SA5		1991 10 31.56713	02 32 29.60	+13 59 58.4				399
1985 TQ1		1991 11 04.50139	02 39 35.45	+20 59 52.3	16.5			399
1985 TQ1		1991 11 04.51632	02 39 34.63	+20 59 51.4				399
1985 TQ1		1991 11 05.49931	02 38 41.12	+20 58 29.1	16.5			399

1985	TQ1	1991 11 05.51528	02 38 40.38	+20 58 27.8		399
1986	TB7	1991 11 11.45839	01 13 39.53	+17 11 25.2	17	399
1986	TB7	1991 11 11.47465	01 13 39.03	+17 11 17.1		399
1988	BO5	1991 12 30.53128	07 03 59.09	+26 10 10.4	16	399
1988	BO5	1991 12 30.54754	07 03 58.02	+26 10 11.6		399
1988	BO5	1992 01 02.50278	07 00 54.45	+26 13 50.0	16.5	399
1988	BO5	1992 01 02.51771	07 00 53.50	+26 13 50.9		399
1990	FS	1991 11 01.53472	00 40 40.61	-03 45 38.4	16.5	399
1990	FS	1991 11 01.55208	00 40 40.18	-03 45 42.3		399
1990	OX	1991 11 04.53542	02 41 57.02	+12 15 17.7	16.5	399
1990	OX	1991 11 04.55035	02 41 56.15	+12 15 12.9		399
1990	OX	1991 11 09.56383	02 37 46.81	+11 45 52.4	16.5	399
1990	OX	1991 11 09.58160	02 37 45.94	+11 45 45.3		399
1991	SG1	1991 10 28.46250	01 24 22.81	+19 01 57.9	15.5	399
1991	SG1	1991 10 28.47778	01 24 22.08	+19 01 51.8		399
1991	SG1	1991 10 29.41250	01 23 31.84	+18 54 26.5	15.5	399
1991	SG1	1991 10 29.42743	01 23 31.03	+18 54 17.7		399
1991	SG1	1991 11 11.45839	01 13 27.10	+17 08 20.3	16	399
1991	SG1	1991 11 11.47465	01 13 26.48	+17 08 12.3		399
1991	UA	1991 10 28.42951	01 39 50.57	+12 40 17.3	17	399
1991	UA	1991 10 29.44792	01 39 09.57	+12 36 58.6	17	399
1991	UA	1991 10 29.46424	01 39 08.89	+12 36 55.3		399
1991	UA	1991 10 31.44514	01 37 50.58	+12 30 28.2	17	399
1991	UA	1991 10 31.46007	01 37 50.03	+12 30 24.7		399
1991	UB	1991 10 29.44792	01 35 16.14	+15 13 01.1	17	399
1991	UB	1991 10 29.46424	01 35 14.98	+15 13 02.4		399
1991	UB	1991 10 31.44514	01 33 12.94	+15 12 35.2	17	399
1991	UB	1991 10 31.46007	01 33 12.06	+15 12 33.9		399
1991	UC	1991 10 31.44514	01 37 17.65	+11 51 01.9	17.5	399
1991	UC	1991 10 31.46007	01 37 16.78	+11 50 58.0		399
1991	UE	1991 10 29.44792	01 36 49.66	+14 12 15.2	17	399
1991	UE	1991 10 29.46424	01 36 48.55	+14 12 07.8		399
1991	UE	1991 10 31.44514	01 34 50.11	+14 02 39.2	17	399
1991	UE	1991 10 31.46007	01 34 49.42	+14 02 34.7		399
1991	UF	1991 10 28.42951	01 39 11.93	+15 04 14.4	16.5	399
1991	UF	1991 10 28.44462	01 39 11.21	+15 04 08.4		399
1991	UF	1991 10 29.44792	01 38 17.51	+14 57 42.7	16.5	399
1991	UF	1991 10 29.46424	01 38 16.43	+14 57 36.3		399
1991	UF	1991 10 31.44514	01 36 32.97	+14 44 56.7	17	399
1991	UF	1991 10 31.46007	01 36 32.12	+14 44 49.7		399
1991	UG	1991 10 28.42951	01 40 01.16	+14 05 45.3	17	399
1991	UG	1991 10 28.44462	01 40 00.05	+14 05 42.6		399
1991	UG	1991 10 29.44792	01 39 07.61	+14 03 38.0	16.5	399
1991	UG	1991 10 29.46424	01 39 06.77	+14 03 36.8		399
1991	UG	1991 10 31.44514	01 37 24.52	+13 59 27.2	17	399
1991	UG	1991 10 31.46007	01 37 23.77	+13 59 24.3		399
1991	UJ	1991 10 28.42951	01 41 00.69	+14 25 30.9	17	399
1991	UJ	1991 10 28.44462	01 40 59.75	+14 25 25.0		399
1991	UJ	1991 10 29.44792	01 40 04.23	+14 22 56.8	17	399
1991	UJ	1991 10 29.46424	01 40 03.19	+14 22 54.8		399
1991	UJ	1991 10 31.44514	01 38 16.56	+14 17 57.5	17	399
1991	UJ	1991 10 31.46007	01 38 15.67	+14 17 54.1		399
1991	UK	1991 10 28.42951	01 42 30.11	+14 04 20.0	17	399
1991	UK	1991 10 28.44462	01 42 29.06	+14 04 14.2		399
1991	UK	1991 10 29.44792	01 41 35.47	+13 58 02.5	16.5	399
1991	UK	1991 10 29.46424	01 41 34.66	+13 57 56.6		399
1991	UK	1991 10 31.44514	01 39 50.81	+13 45 42.1	16.5	399
1991	UK	1991 10 31.46007	01 39 49.96	+13 45 37.8		399
1991	UM	1991 10 28.42951	01 45 25.97	+12 22 58.1	17	399

1991 UM	1991 10 28.44462	01 45 25.08	+12 22 53.5			399
1991 UM	1991 10 29.44792	01 44 25.17	+12 18 39.3	17		399
1991 UM	1991 10 29.46424	01 44 24.12	+12 18 36.3			399
1991 UM	1991 10 31.44514	01 42 27.64	+12 10 15.8	17		399
1991 UM	1991 10 31.46007	01 42 26.82	+12 10 13.0			399
1991 UN	1991 10 29.44792	01 45 55.42	+13 15 37.6	17		399
1991 UN	1991 10 29.46424	01 45 54.57	+13 15 34.4			399
1991 UN	1991 10 31.44514	01 44 11.17	+13 10 20.7	17		399
1991 UN	1991 10 31.46007	01 44 10.30	+13 10 18.1			399
1991 UP	1991 10 28.42951	01 47 14.93	+14 54 00.6	17		399
1991 UP	1991 10 28.44462	01 47 14.07	+14 53 56.9			399
1991 UP	1991 10 29.44792	01 46 18.67	+14 47 31.1	17		399
1991 UP	1991 10 29.46424	01 46 17.84	+14 47 23.6			399
1991 UP	1991 10 31.44514	01 44 30.30	+14 34 32.3	17		399
1991 UP	1991 10 31.46007	01 44 29.40	+14 34 25.0			399
1991 UQ	1991 10 28.42951	01 46 10.99	+12 15 07.4	17		399
1991 UQ	1991 10 28.44462	01 46 09.96	+12 15 03.9			399
1991 UQ	1991 10 29.44792	01 45 08.21	+12 11 06.7	17		399
1991 UQ	1991 10 29.46424	01 45 07.26	+12 10 59.4			399
1991 UQ	1991 10 31.44514	01 43 07.53	+12 03 11.8	17		399
1991 UQ	1991 10 31.46007	01 43 06.77	+12 03 09.7			399
1991 UR	1991 10 28.42951	01 46 49.93	+16 13 53.9	16.5		399
1991 UR	1991 10 28.44462	01 46 48.96	+16 13 50.9			399
1991 UR	1991 10 29.44792	01 45 43.93	+16 11 57.6	17		399
1991 UR	1991 10 29.46424	01 45 42.89	+16 11 56.2			399
1991 UU	1991 10 29.48403	02 14 28.69	+16 07 14.4	16.5		399
1991 UU	1991 10 29.49896	02 14 27.70	+16 07 06.5			399
1991 UU	1991 10 31.47928	02 12 25.08	+15 50 47.5	16		399
1991 UU	1991 10 31.49497	02 12 23.95	+15 50 40.3			399
1991 UU	1991 11 09.49456	02 03 38.17	+14 37 19.0	16.5		399
1991 UU	1991 11 09.50938	02 03 37.34	+14 37 13.1			399
1991 UV	1991 10 29.48403	02 17 20.74	+13 54 29.8	16.5		399
1991 UV	1991 10 29.49896	02 17 19.77	+13 54 25.2			399
1991 UV	1991 10 31.47928	02 15 17.80	+13 41 50.4	16		399
1991 UV	1991 10 31.49497	02 15 16.86	+13 41 43.9			399
1991 UV	1991 11 09.49456	02 06 30.37	+12 46 14.8	16.5		399
1991 UV	1991 11 09.50938	02 06 29.43	+12 46 09.8			399
1991 UW	1991 10 31.65463	02 32 47.73	+09 51 35.6	17		399
1991 UW	1991 10 31.67025	02 32 46.55	+09 51 31.1			399
1991 UW	1991 11 04.53542	02 28 25.85	+09 41 44.7	17.5		399
1991 UW	1991 11 04.55035	02 28 24.86	+09 41 42.0			399
1991 UX	1991 10 31.65463	02 40 04.79	+10 14 12.7	15		399
1991 UX	1991 10 31.67025	02 40 03.70	+10 14 12.6			399
1991 UX	1991 11 04.53542	02 35 47.89	+10 19 24.4	14.5		399
1991 UX	1991 11 04.55035	02 35 46.82	+10 19 25.3			399
1991 UX	1991 11 09.56383	02 30 13.39	+10 27 15.7	15		399
1991 UX	1991 11 09.58160	02 30 12.16	+10 27 17.4			399
1991 UY	1991 11 04.57014	02 41 50.00	+07 34 33.0	15.5		399
1991 UY	1991 11 04.58507	02 41 48.92	+07 34 33.2			399
1991 UY	1991 11 05.53495	02 40 47.84	+07 34 33.5	15.5		399
1991 UY	1991 11 05.55081	02 40 46.68	+07 34 33.9			399
1991 UY	1991 11 11.53021	02 34 26.33	+07 37 11.0	16		399
1991 UY	1991 11 11.54583	02 34 25.32	+07 37 12.9			399
1991 UC1	1991 10 31.65463	02 44 45.30	+09 29 00.5	17		399
1991 UC1	1991 10 31.67025	02 44 44.53	+09 28 52.8			399
1991 UC1	1991 11 04.53542	02 41 21.64	+09 03 22.4	17		399
1991 UC1	1991 11 04.55035	02 41 20.77	+09 03 14.8			399
1991 UC1	1991 11 09.56383	02 36 58.30	+08 31 32.4	17		399
1991 UC1	1991 11 09.58160	02 36 57.47	+08 31 29.1			399

1991 UD1		1991	10	29.44792	01	44	08.26	+15 51 09.7	17	399
1991 UD1		1991	10	29.46424	01	44	07.50	+15 51 05.4		399
1991 UE1		1991	10	29.48403	02	12	53.97	+15 40 32.2	17	399
1991 UE1		1991	10	29.49896	02	12	52.98	+15 40 29.6		399
1991 UE1		1991	10	31.47928	02	11	05.84	+15 33 35.9	16.5	399
1991 UE1		1991	10	31.49497	02	11	05.03	+15 33 32.8		399
1991 UE1		1991	11	09.49456	02	03	18.65	+15 01 13.7	17.5	399
1991 UE1		1991	11	09.50938	02	03	17.94	+15 01 09.3		399
1991 UF1		1991	10	31.65463	02	36	21.51	+09 05 50.3	17	399
1991 UF1		1991	10	31.67025	02	36	20.55	+09 05 45.7		399
1991 UF1		1991	11	04.53542	02	32	47.81	+08 56 30.6	17	399
1991 UF1		1991	11	04.55035	02	32	46.74	+08 56 27.8		399
1991 UF1		1991	11	09.56383	02	28	14.68	+08 46 49.3	17	399
1991 UF1		1991	11	09.58160	02	28	13.76	+08 46 46.8		399
1991 UK1		1991	11	11.45839	01	09	22.35	+16 30 21.5	17	399
1991 UK1		1991	11	11.47465	01	09	21.85	+16 30 16.8		399
1991 UM1		1991	11	11.45839	01	17	13.00	+16 31 06.0	16.5	399
1991 UM1		1991	11	11.47465	01	17	12.37	+16 31 03.1		399
1991 UN1		1991	11	11.45839	01	18	09.74	+19 31 39.6	17	399
1991 UN1		1991	11	11.47465	01	18	08.97	+19 31 33.5		399
1991 US1	*	1991	10	29.48403	02	08	37.51	+15 25 43.4	17	399
1991 US1		1991	10	29.49896	02	08	36.68	+15 25 40.2		399
1991 US1		1991	10	31.47928	02	06	46.01	+15 20 56.0	17	399
1991 US1		1991	10	31.49497	02	06	45.00	+15 20 53.5		399
1991 UT1	*	1991	10	29.48403	02	14	06.87	+13 53 59.0	17	399
1991 UT1		1991	10	29.49896	02	14	05.97	+13 53 52.3		399
1991 UT1		1991	10	31.47928	02	12	05.88	+13 46 05.3	17	399
1991 UT1		1991	10	31.49497	02	12	05.10	+13 45 59.2		399
1991 UU1	*	1991	10	29.48403	02	17	14.81	+14 10 37.2	17	399
1991 UU1		1991	10	29.49896	02	17	13.70	+14 10 39.3		399
1991 UU1		1991	10	31.47928	02	15	00.33	+14 15 21.0	17	399
1991 UU1		1991	10	31.49497	02	14	59.23	+14 15 20.9		399
1991 UU1		1991	11	09.49456	02	05	18.57	+14 35 41.6	17	399
1991 UU1		1991	11	09.50938	02	05	17.56	+14 35 43.4		399
1991 UV1	*	1991	10	29.48403	02	18	46.43	+14 57 15.0	17	399
1991 UV1		1991	10	29.49896	02	18	45.57	+14 57 17.2		399
1991 UV1		1991	10	31.47928	02	16	31.94	+14 57 49.1	16.5	399
1991 UV1		1991	10	31.49497	02	16	30.90	+14 57 52.8		399
1991 UV1		1991	11	09.49456	02	06	35.03	+14 59 23.8	17	399
1991 UV1		1991	11	09.50938	02	06	33.90	+14 59 23.9		399
1991 UX1	*	1991	10	29.51846	02	24	34.86	+17 41 48.2	16.5	399
1991 UX1		1991	10	29.53171	02	24	34.04	+17 41 42.2		399
1991 UX1		1991	10	31.55208	02	22	45.64	+17 26 52.9	16.5	399
1991 UX1		1991	10	31.56713	02	22	44.82	+17 26 46.9		399
1991 UX1		1991	11	09.52778	02	14	54.68	+16 19 27.7	17	399
1991 UX1		1991	11	09.54277	02	14	53.88	+16 19 21.4		399
1991 UY1	*	1991	10	29.51846	02	25	04.70	+14 04 29.8	17	399
1991 UY1		1991	10	29.53171	02	25	03.77	+14 04 34.5		399
1991 UY1		1991	10	31.55208	02	22	30.27	+14 15 39.2	17	399
1991 UY1		1991	10	31.56713	02	22	29.28	+14 15 43.8		399
1991 UZ1	*	1991	10	29.51846	02	25	37.95	+17 32 07.6	16.5	399
1991 UZ1		1991	10	29.53171	02	25	36.97	+17 32 06.8		399
1991 UZ1		1991	10	31.55208	02	23	39.07	+17 31 56.7	17	399
1991 UZ1		1991	10	31.56713	02	23	38.34	+17 31 56.1		399
1991 UZ1		1991	11	09.52778	02	15	00.27	+17 29 02.1	17	399
1991 UZ1		1991	11	09.54277	02	14	59.29	+17 29 00.6		399
1991 UA2	*	1991	10	29.51846	02	26	31.57	+16 15 21.6	17	399
1991 UA2		1991	10	29.53171	02	26	30.71	+16 15 17.8		399
1991 UA2		1991	10	31.55208	02	24	45.40	+16 06 44.9	17	399

1991 UA2		1991	10	31.56713	02	24	44.46	+16 06 39.5		399
1991 UA2		1991	11	09.52778	02	17	02.49	+15 27 34.8	17.5	399
1991 UA2		1991	11	09.54277	02	17	01.70	+15 27 31.9		399
1991 UB2	*	1991	10	29.51846	02	27	14.15	+17 29 50.0	17	399
1991 UB2		1991	10	29.53171	02	27	13.26	+17 29 44.0		399
1991 UB2		1991	10	31.55208	02	25	13.39	+17 14 53.4	17	399
1991 UB2		1991	10	31.56713	02	25	12.52	+17 14 48.2		399
1991 UB2		1991	11	09.52778	02	16	32.66	+16 07 17.8	17.5	399
1991 UB2		1991	11	09.54277	02	16	31.77	+16 07 10.0		399
1991 UC2	*	1991	10	29.51846	02	27	36.37	+15 37 47.8	17	399
1991 UC2		1991	10	29.53171	02	27	35.67	+15 37 44.5		399
1991 UC2		1991	10	31.55208	02	25	41.12	+15 26 42.7	17	399
1991 UC2		1991	10	31.56713	02	25	40.40	+15 26 37.2		399
1991 UC2		1991	11	09.52778	02	17	19.09	+14 36 35.8	17	399
1991 UC2		1991	11	09.54277	02	17	18.23	+14 36 31.3		399
1991 UD2	*	1991	10	29.51846	02	30	09.17	+16 08 16.2	17	399
1991 UD2		1991	10	29.53171	02	30	08.29	+16 08 15.4		399
1991 UD2		1991	10	31.55208	02	28	17.88	+16 06 13.5	17	399
1991 UD2		1991	10	31.56713	02	28	16.94	+16 06 11.8		399
1991 UD2		1991	11	09.52778	02	20	09.56	+15 55 53.2	17	399
1991 UD2		1991	11	09.54277	02	20	08.54	+15 55 51.5		399
1991 UE2	*	1991	10	29.51846	02	30	49.99	+13 48 42.2	17	399
1991 UE2		1991	10	29.53171	02	30	49.14	+13 48 38.2		399
1991 UE2		1991	10	31.55208	02	28	50.62	+13 42 36.7	16.5	399
1991 UE2		1991	10	31.56713	02	28	49.73	+13 42 33.8		399
1991 UE2		1991	11	09.52778	02	20	06.29	+13 15 42.8	17.5	399
1991 UE2		1991	11	09.54277	02	20	05.37	+13 15 41.3		399
1991 UF2	*	1991	10	29.51846	02	31	06.27	+13 24 50.2	17	399
1991 UF2		1991	10	29.53171	02	31	05.50	+13 24 49.8		399
1991 UF2		1991	10	31.55208	02	29	05.59	+13 20 56.6	16.5	399
1991 UF2		1991	10	31.56713	02	29	04.71	+13 20 57.0		399
1991 UF2		1991	11	09.52778	02	20	27.48	+13 04 47.2	17	399
1991 UF2		1991	11	09.54277	02	20	26.59	+13 04 46.0		399
1991 UG2	*	1991	10	29.51846	02	31	55.59	+14 24 33.2	17	399
1991 UG2		1991	10	29.53171	02	31	54.84	+14 24 30.9		399
1991 UG2		1991	10	31.55208	02	30	19.38	+14 16 36.3	17	399
1991 UG2		1991	10	31.56713	02	30	18.69	+14 16 34.2		399
1991 UH2	*	1991	10	29.51846	02	32	41.78	+13 44 06.3	17	399
1991 UH2		1991	10	29.53171	02	32	41.15	+13 44 01.4		399
1991 UH2		1991	10	31.55208	02	31	11.84	+13 30 37.5	17	399
1991 UH2		1991	10	31.56713	02	31	11.11	+13 30 32.5		399
1991 UH2		1991	11	04.53542	02	28	15.01	+13 04 10.1	17	399
1991 UH2		1991	11	04.55035	02	28	14.26	+13 04 03.8		399
1991 UJ2	*	1991	10	29.51846	02	35	43.19	+16 32 04.6	17	399
1991 UJ2		1991	10	29.53171	02	35	42.26	+16 32 03.3		399
1991 UJ2		1991	10	31.55208	02	33	25.55	+16 26 51.2	16.5	399
1991 UJ2		1991	10	31.56713	02	33	24.37	+16 26 50.1		399
1991 UJ2		1991	11	09.52778	02	23	26.78	+16 02 11.8	17	399
1991 UJ2		1991	11	09.54277	02	23	25.80	+16 02 09.3		399
1991 US2	*	1991	10	31.58553	03	46	12.63	+16 29 53.9	16.5	399
1991 US2		1991	10	31.60069	03	46	12.08	+16 29 52.1		399
1991 US2		1991	11	04.60799	03	43	15.39	+16 20 16.5	16.5	399
1991 US2		1991	11	04.62326	03	43	14.57	+16 20 15.0		399
1991 US2		1991	12	05.42917	03	18	17.50	+15 06 22.4	17	399
1991 US2		1991	12	05.44375	03	18	16.98	+15 06 20.1		399
1991 US2		1991	12	07.47083	03	16	49.71	+15 02 35.9	17	399
1991 US2		1991	12	07.48576	03	16	49.04	+15 02 34.9		399
1991 US2		1991	12	09.48750	03	15	26.55	+14 59 10.5	16.5	399
1991 US2		1991	12	09.50255	03	15	25.98	+14 59 07.0		399

1991 UT2	*	1991	10	31.58553	03	47	41.04	+16	16	38.1	16.5	399
1991 UT2		1991	10	31.60069	03	47	40.22	+16	16	38.3		399
1991 UT2		1991	11	04.60799	03	43	57.29	+16	17	07.5	16.5	399
1991 UT2		1991	11	04.62326	03	43	56.23	+16	17	07.4		399
1991 UT2		1991	12	05.42917	03	13	15.81	+16	20	52.1	16.5	399
1991 UT2		1991	12	05.44375	03	13	15.05	+16	20	51.9		399
1991 UT2		1991	12	07.47083	03	11	33.75	+16	22	06.3	17	399
1991 UT2		1991	12	07.48576	03	11	32.83	+16	22	06.6		399
1991 UT2		1991	12	09.52361	03	09	56.45	+16	23	35.6	17	399
1991 UT2		1991	12	09.53854	03	09	55.61	+16	23	35.4		399
1991 UU2	*	1991	10	31.58553	03	51	52.92	+16	26	58.0	17	399
1991 UU2		1991	10	31.60069	03	51	52.14	+16	26	55.1		399
1991 UU2		1991	11	04.60799	03	48	48.25	+16	15	22.1	16.5	399
1991 UU2		1991	11	04.62326	03	48	47.62	+16	15	18.7		399
1991 UU2		1991	12	05.42917	03	23	01.93	+14	49	14.1	17	399
1991 UU2		1991	12	05.44375	03	23	01.19	+14	49	11.8		399
1991 UU2		1991	12	09.48750	03	20	10.23	+14	41	08.8	17	399
1991 UU2		1991	12	09.50255	03	20	09.59	+14	41	06.7		399
1991 UV2	*	1991	10	31.58553	03	54	53.53	+15	19	09.5	16	399
1991 UV2		1991	10	31.60069	03	54	52.67	+15	19	16.8		399
1991 UV2		1991	11	04.60799	03	50	58.84	+15	47	27.4	15	399
1991 UV2		1991	11	04.62326	03	50	57.92	+15	47	34.8		399
1991 UV2		1991	12	05.42917	03	17	29.62	+19	17	21.1	16	399
1991 UV2		1991	12	05.44375	03	17	28.82	+19	17	27.6		399
1991 UV2		1991	12	07.47083	03	15	47.67	+19	30	21.2	16.5	399
1991 UV2		1991	12	07.48576	03	15	46.85	+19	30	27.2		399
1991 UV2		1991	12	09.52361	03	14	12.99	+19	43	21.9	16.5	399
1991 UV2		1991	12	09.53854	03	14	12.35	+19	43	25.4		399
1991 UW2	*	1991	10	31.65463	02	36	26.64	+13	00	35.0	17	399
1991 UW2		1991	10	31.67025	02	36	25.66	+13	00	28.1		399
1991 UW2		1991	11	04.53542	02	32	39.60	+12	42	46.5	17	399
1991 UW2		1991	11	04.55035	02	32	38.55	+12	42	41.7		399
1991 UW2		1991	11	09.56383	02	27	45.06	+12	20	08.5	17	399
1991 UW2		1991	11	09.58160	02	27	43.90	+12	20	05.2		399
1991 UX2	*	1991	10	31.65463	02	36	31.58	+12	57	48.5	17	399
1991 UX2		1991	10	31.67025	02	36	30.49	+12	57	47.7		399
1991 UX2		1991	11	04.53542	02	32	11.64	+13	01	00.1	17	399
1991 UX2		1991	11	04.55035	02	32	10.42	+13	01	00.7		399
1991 UY2	*	1991	10	31.65463	02	37	56.22	+13	30	16.7	17	399
1991 UY2		1991	10	31.67025	02	37	55.42	+13	30	10.3		399
1991 UY2		1991	11	04.53542	02	34	40.11	+13	12	53.5	17.5	399
1991 UY2		1991	11	04.55035	02	34	39.23	+13	12	47.8		399
1991 UY2		1991	11	09.56383	02	30	27.90	+12	50	36.0	17.5	399
1991 UY2		1991	11	09.58160	02	30	27.19	+12	50	32.8		399
1991 UZ2	*	1991	10	31.65463	02	37	59.39	+13	02	33.4	17	399
1991 UZ2		1991	10	31.67025	02	37	58.69	+13	02	29.2		399
1991 UZ2		1991	11	04.53542	02	35	00.59	+12	47	42.8	17	399
1991 UZ2		1991	11	04.55035	02	34	59.92	+12	47	40.7		399
1991 UZ2		1991	11	09.56383	02	31	10.29	+12	28	43.3	17.5	399
1991 UZ2		1991	11	09.58160	02	31	09.40	+12	28	38.5		399
1991 UA3	*	1991	10	31.65463	02	38	02.39	+12	07	56.8	16.5	399
1991 UA3		1991	10	31.67025	02	38	01.37	+12	07	56.9		399
1991 UA3		1991	11	04.53542	02	34	24.18	+12	08	12.4	16.5	399
1991 UA3		1991	11	04.55035	02	34	23.42	+12	08	13.2		399
1991 UA3		1991	11	09.56383	02	29	44.86	+12	09	08.6	17	399
1991 UA3		1991	11	09.58160	02	29	43.95	+12	09	10.2		399
1991 UB3		1991	10	18.77326	02	52	21.33	+11	39	38.4	17	399
1991 UB3		1991	10	18.78646	02	52	20.59	+11	39	37.3		399
1991 UB3		1991	10	19.78750	02	51	32.75	+11	39	30.2	17	399

1991 UB3		1991	10	19.80139	02	51	31.98	+11 39 29.9		399
1991 UB3	*	1991	10	31.65463	02	40	30.83	+11 37 17.9	16	399
1991 UB3		1991	10	31.67025	02	40	29.82	+11 37 17.8		399
1991 UB3		1991	11	04.53542	02	36	33.98	+11 37 05.3	16	399
1991 UB3		1991	11	04.55035	02	36	32.98	+11 37 05.3		399
1991 UB3		1991	11	09.56383	02	31	29.95	+11 38 03.2	16	399
1991 UB3		1991	11	09.58160	02	31	28.88	+11 38 02.6		399
1991 UC3	*	1991	10	31.65463	02	44	14.65	+12 59 49.8	17	399
1991 UC3		1991	10	31.67025	02	44	13.81	+12 59 45.3		399
1991 UC3		1991	11	04.53542	02	40	56.65	+12 38 15.3	17	399
1991 UC3		1991	11	04.55035	02	40	55.95	+12 38 11.6		399
1991 UC3		1991	11	09.56383	02	36	42.30	+12 11 09.2	17	399
1991 UC3		1991	11	09.58160	02	36	41.22	+12 11 04.6		399
1991 UD3	*	1991	10	31.65463	02	44	40.72	+13 09 45.3	16.5	399
1991 UD3		1991	10	31.67025	02	44	40.06	+13 09 37.5		399
1991 UD3		1991	11	04.53542	02	41	36.34	+12 33 01.2	16	399
1991 UD3		1991	11	04.55035	02	41	35.56	+12 32 53.4		399
1991 UD3		1991	11	09.56383	02	37	34.06	+11 45 50.0	16.5	399
1991 UD3		1991	11	09.58160	02	37	33.06	+11 45 40.1		399
1991 UE3	*	1991	10	18.77326	02	50	02.26	+07 33 38.5	17	399
1991 UE3		1991	10	18.78646	02	50	01.54	+07 33 36.3		399
1991 UE3		1991	11	04.57014	02	31	35.96	+06 50 22.7	16.5	399
1991 UE3		1991	11	04.58507	02	31	34.97	+06 50 21.7		399
1991 UE3		1991	11	05.53495	02	30	31.76	+06 48 32.9	17	399
1991 UE3		1991	11	05.55081	02	30	30.65	+06 48 30.8		399
1991 UE3		1991	11	11.53021	02	24	04.68	+06 39 32.9	17	399
1991 UE3		1991	11	11.54583	02	24	03.72	+06 39 30.8		399
1991 UG3	*	1991	10	31.51733	02	22	12.01	+20 32 55.8	15.5	399
1991 UG3		1991	10	31.53299	02	22	11.00	+20 32 51.2		399
1991 UG3		1991	11	04.46528	02	18	24.95	+20 14 29.5	16	399
1991 UG3		1991	11	04.48021	02	18	23.97	+20 14 24.0		399
1991 UG3		1991	11	05.46528	02	17	28.48	+20 09 36.5	16.5	399
1991 UG3		1991	11	05.47986	02	17	27.64	+20 09 33.0		399
1991 UG3		1991	11	09.66806	02	13	40.44	+19 48 28.6	16.5	399
1991 UG3		1991	11	09.68391	02	13	39.53	+19 48 25.0		399
1991 UH3	*	1991	10	31.51733	02	33	01.56	+19 46 51.4	16.5	399
1991 UH3		1991	10	31.53299	02	33	00.60	+19 46 52.3		399
1991 UH3		1991	11	04.46528	02	28	57.63	+19 50 07.1	16.5	399
1991 UH3		1991	11	04.48021	02	28	56.61	+19 50 08.3		399
1991 UH3		1991	11	05.46528	02	27	55.20	+19 50 44.3	17	399
1991 UH3		1991	11	05.47986	02	27	54.36	+19 50 44.2		399
1991 UH3		1991	11	09.66806	02	23	34.54	+19 52 32.1	17	399
1991 UH3		1991	11	09.68391	02	23	33.49	+19 52 31.9		399
1991 UJ3	*	1991	10	31.51733	02	33	59.09	+19 48 21.7	16.5	399
1991 UJ3		1991	10	31.53299	02	33	57.87	+19 48 19.0		399
1991 UJ3		1991	11	04.46528	02	29	31.74	+19 35 34.8	16.5	399
1991 UJ3		1991	11	04.48021	02	29	30.61	+19 35 30.1		399
1991 UJ3		1991	11	05.46528	02	28	24.55	+19 32 06.6	17	399
1991 UJ3		1991	11	05.47986	02	28	23.63	+19 32 03.0		399
1991 UJ3		1991	11	09.66806	02	23	49.66	+19 17 01.0	17	399
1991 UJ3		1991	11	09.68391	02	23	48.52	+19 16 56.1		399
1991 UK3	*	1991	10	31.58553	03	41	09.63	+16 54 07.7	17	399
1991 UK3		1991	10	31.60069	03	41	09.16	+16 54 03.1		399
1991 UK3		1991	11	04.60799	03	38	16.94	+16 23 56.6	17	399
1991 UK3		1991	11	04.62326	03	38	16.21	+16 23 48.1		399
1991 UK3		1991	12	04.51250	03	14	28.57	+12 33 40.6	17	399
1991 UK3		1991	12	04.52743	03	14	27.94	+12 33 34.3		399
1991 UK3		1991	12	05.46181	03	13	49.36	+12 27 14.9	17	399
1991 UK3		1991	12	05.47674	03	13	48.77	+12 27 08.5		399

1991 UK3		1991	12	09.48750	03	11	13.14	+12 01 18.5	17	399
1991 UK3		1991	12	09.50255	03	11	12.54	+12 01 12.8		399
1991 UL3	*	1991	10	31.58553	03	42	04.93	+14 51 25.4	16.5	399
1991 UL3		1991	10	31.60069	03	42	04.29	+14 51 16.2		399
1991 UL3		1991	11	04.60799	03	38	51.83	+14 11 33.6	16.5	399
1991 UL3		1991	11	04.62326	03	38	50.97	+14 11 24.3		399
1991 UL3		1991	12	04.51250	03	14	19.37	+09 54 32.4	17	399
1991 UL3		1991	12	04.52743	03	14	18.79	+09 54 26.7		399
1991 UL3		1991	12	05.46181	03	13	44.83	+09 48 52.1	17	399
1991 UL3		1991	12	05.47674	03	13	44.27	+09 48 47.0		399
1991 UM3	*	1991	10	31.58553	03	49	01.94	+17 29 05.1	17	399
1991 UM3		1991	10	31.60069	03	49	01.22	+17 29 06.3		399
1991 UM3		1991	11	04.60799	03	45	16.61	+17 33 57.4	17	399
1991 UM3		1991	11	04.62326	03	45	15.73	+17 34 00.5		399
1991 UM3		1991	12	05.42917	03	14	49.20	+18 03 14.0	17	399
1991 UM3		1991	12	05.44375	03	14	48.53	+18 03 15.6		399
1991 UM3		1991	12	07.47083	03	13	13.10	+18 05 37.0	17.5	399
1991 UM3		1991	12	07.48576	03	13	12.37	+18 05 38.4		399
1991 UM3		1991	12	09.52361	03	11	42.80	+18 08 12.6	17.5	399
1991 UM3		1991	12	09.53854	03	11	42.12	+18 08 14.0		399
1991 UN3	*	1991	10	31.58553	03	54	53.60	+15 24 07.1	17	399
1991 UN3		1991	10	31.60069	03	54	53.00	+15 24 06.4		399
1991 UN3		1991	11	04.60799	03	51	17.19	+15 19 35.1	16.5	399
1991 UN3		1991	11	04.62326	03	51	16.32	+15 19 35.1		399
1991 UN3		1991	12	05.42917	03	19	40.17	+14 57 57.0	17	399
1991 UN3		1991	12	05.44375	03	19	39.40	+14 57 57.0		399
1991 UN3		1991	12	07.47083	03	17	59.27	+14 58 53.6	17	399
1991 UN3		1991	12	07.48576	03	17	58.56	+14 58 51.8		399
1991 UN3		1991	12	09.48750	03	16	26.59	+15 00 12.4	16.5	399
1991 UN3		1991	12	09.50255	03	16	26.01	+15 00 13.1		399
1991 UO3	*	1991	10	31.65463	02	32	42.50	+08 49 27.5	17	399
1991 UO3		1991	10	31.67025	02	32	41.41	+08 49 29.3		399
1991 UO3		1991	11	04.53542	02	28	05.44	+09 02 08.9	17	399
1991 UO3		1991	11	04.55035	02	28	04.44	+09 02 09.7		399
1991 UP3	*	1991	10	31.65463	02	40	05.07	+10 16 56.3	16.5	399
1991 UP3		1991	10	31.67025	02	40	04.04	+10 16 52.3		399
1991 UP3		1991	11	04.53542	02	36	26.71	+10 07 45.9	17	399
1991 UP3		1991	11	04.55035	02	36	25.76	+10 07 45.5		399
1991 UP3		1991	11	09.56383	02	31	45.47	+09 57 45.6	17	399
1991 UP3		1991	11	09.58160	02	31	44.51	+09 57 41.9		399
1991 UQ3		1991	10	18.77326	02	55	11.59	+10 24 32.8	17	399
1991 UQ3		1991	10	18.78646	02	55	10.84	+10 24 30.2		399
1991 UQ3		1991	10	19.78750	02	54	14.56	+10 19 57.9	17	399
1991 UQ3		1991	10	19.80139	02	54	13.79	+10 19 55.2		399
1991 UQ3	*	1991	10	31.65463	02	42	04.53	+09 26 14.6	16.5	399
1991 UQ3		1991	10	31.67025	02	42	03.50	+09 26 10.7		399
1991 UQ3		1991	11	04.53542	02	37	54.61	+09 09 42.5	16.5	399
1991 UQ3		1991	11	04.55035	02	37	53.72	+09 09 39.8		399
1991 UQ3		1991	11	09.56383	02	32	35.55	+08 50 04.8	17	399
1991 UQ3		1991	11	09.58160	02	32	34.32	+08 50 02.0		399
1991 UQ3		1991	12	04.43333	02	12	44.57	+08 02 12.7	17	399
1991 UQ3		1991	12	04.45451	02	12	44.09	+08 02 13.1		399
1991 UQ3		1991	12	07.58981	02	11	22.60	+08 03 17.1	17.5	399
1991 UQ3		1991	12	07.61111	02	11	22.09	+08 03 18.5		399
1991 UV3	*	1991	10	31.51733	02	32	00.68	+19 43 33.7	17	399
1991 UV3		1991	10	31.53299	02	31	59.91	+19 43 26.3		399
1991 UV3		1991	11	05.46528	02	27	44.30	+19 03 27.8	17.5	399
1991 UV3		1991	11	05.47986	02	27	43.43	+19 03 18.6		399
1991 UV3		1991	11	09.66806	02	24	08.79	+18 28 07.2	17	399

1991 UV3		1991 11 09.68391	02 24 07.98	+18 27 57.2		399
1991 UW3	*	1991 10 31.52054	03 27 36.02	+30 07 18.1	16	399
1991 UW3		1991 10 31.53976	03 27 35.02	+30 07 15.8		399
1991 UW3		1991 10 31.55694	03 27 33.83	+30 07 15.3		399
1991 UW3		1991 11 05.56968	03 22 34.21	+29 54 49.1	16	399
1991 UW3		1991 11 05.58906	03 22 33.03	+29 54 48.2		399
1991 UW3		1991 12 10.48490	02 53 31.40	+26 19 50.4	16.5	399
1991 UW3		1991 12 10.50000	02 53 31.17	+26 19 46.0		399
1991 UX3		1991 10 18.69661	01 57 05.11	+12 57 55.6	17	399
1991 UX3		1991 10 18.71215	01 57 04.13	+12 57 52.1		399
1991 UX3	*	1991 10 19.70833	01 55 59.32	+12 53 25.4	17	399
1991 UX3		1991 10 19.72396	01 55 58.69	+12 53 19.9		399
1991 UY3		1991 10 29.51846	02 34 01.47	+14 18 11.8	17	399
1991 UY3		1991 10 29.53171	02 34 00.80	+14 18 07.5		399
1991 UY3	*	1991 10 31.55208	02 32 26.63	+14 03 34.3	17	399
1991 UY3		1991 10 31.56713	02 32 26.02	+14 03 29.3		399
1991 UY3		1991 11 09.56383	02 25 32.14	+12 59 34.6	17	399
1991 UY3		1991 11 09.58160	02 25 31.44	+12 59 28.2		399
1991 UZ3	*	1991 10 31.65463	02 35 48.28	+11 33 01.0	17	399
1991 UZ3		1991 10 31.67025	02 35 47.34	+11 32 53.8		399
1991 UZ3		1991 11 04.53542	02 32 11.13	+11 15 17.0	17.5	399
1991 UZ3		1991 11 04.55035	02 32 10.21	+11 15 14.2		399
1991 UZ3		1991 11 09.56383	02 27 32.32	+10 53 37.7	17	399
1991 UZ3		1991 11 09.58160	02 27 31.25	+10 53 33.9		399
1991 UA4	*	1991 10 31.65463	02 36 23.85	+12 28 49.7	16.5	399
1991 UA4		1991 10 31.67025	02 36 22.98	+12 28 48.2		399
1991 UA4		1991 11 04.53542	02 32 36.72	+12 22 22.4	16	399
1991 UA4		1991 11 04.55035	02 32 35.83	+12 22 20.1		399
1991 UA4		1991 11 09.56383	02 27 44.10	+12 14 54.4	16.5	399
1991 UA4		1991 11 09.58160	02 27 43.07	+12 14 53.3		399
1991 VM		1991 11 09.60307	04 12 08.35	+13 33 59.4	16.5	399
1991 VM		1991 11 09.62049	04 12 07.38	+13 33 59.1		399
1991 VM		1991 11 11.56806	04 10 20.46	+13 35 04.3	17	399
1991 VM		1991 11 11.58333	04 10 19.49	+13 35 03.6		399
1991 VR	*	1991 11 04.50139	02 39 30.74	+20 15 54.3	15.5	399
1991 VR		1991 11 04.51632	02 39 29.64	+20 15 53.9		399
1991 VR		1991 11 05.49931	02 38 21.71	+20 14 20.7	15	399
1991 VR		1991 11 05.51528	02 38 20.66	+20 14 19.6		399
1991 VR		1991 11 11.49583	02 31 35.58	+20 02 58.3	15.5	399
1991 VR		1991 11 11.51076	02 31 34.63	+20 02 57.2		399
1991 VR		1991 12 04.47292	02 13 25.48	+19 16 35.1	16.5	399
1991 VR		1991 12 04.49410	02 13 24.96	+19 16 33.3		399
1991 VR		1991 12 07.62986	02 12 21.83	+19 13 03.6	17	399
1991 VR		1991 12 07.65116	02 12 21.61	+19 13 02.4		399
1991 VS	*	1991 11 04.57014	02 36 32.26	+04 38 37.3	17	399
1991 VS		1991 11 04.58507	02 36 31.31	+04 38 35.2		399
1991 VS		1991 11 05.53495	02 35 34.95	+04 36 04.2	17	399
1991 VS		1991 11 05.55081	02 35 33.95	+04 36 03.8		399
1991 VS		1991 11 11.53021	02 29 41.88	+04 22 49.4	17	399
1991 VS		1991 11 11.54583	02 29 41.02	+04 22 48.7		399
1991 VZ	*	1991 11 04.50139	02 32 45.55	+19 49 02.6	17	399
1991 VZ		1991 11 04.51632	02 32 44.76	+19 48 52.5		399
1991 VZ		1991 11 05.49931	02 31 53.76	+19 37 42.5	17	399
1991 VZ		1991 11 05.51528	02 31 52.80	+19 37 33.5		399
1991 VA1	*	1991 11 04.50139	02 33 28.19	+21 09 45.2	17	399
1991 VA1		1991 11 04.51632	02 33 27.36	+21 09 39.5		399
1991 VA1		1991 11 05.49931	02 32 41.61	+21 03 26.2	17	399
1991 VA1		1991 11 05.51528	02 32 40.67	+21 03 21.5		399
1991 VA1		1991 11 11.49583	02 28 07.51	+20 24 41.2	17	399

1991 VA1		1991	11	11.51076	02	28	06.69	+20 24 34.0		399
1991 VB1	*	1991	11	04.50139	02	34	01.54	+21 19 51.5	17	399
1991 VB1		1991	11	04.51632	02	34	00.57	+21 19 51.2		399
1991 VB1		1991	11	05.49931	02	32	53.60	+21 17 27.6	17	399
1991 VB1		1991	11	05.51528	02	32	52.33	+21 17 26.5		399
1991 VC1	*	1991	11	04.50139	02	34	15.68	+20 02 13.8	16.5	399
1991 VC1		1991	11	04.51632	02	34	14.78	+20 02 09.4		399
1991 VC1		1991	11	05.49931	02	33	21.03	+19 57 46.8	17	399
1991 VC1		1991	11	05.51528	02	33	20.16	+19 57 42.4		399
1991 VC1		1991	11	11.49583	02	28	03.82	+19 29 49.5	17	399
1991 VC1		1991	11	11.51076	02	28	02.99	+19 29 45.3		399
1991 VD1	*	1991	11	04.50139	02	38	25.07	+20 53 59.1	16.5	399
1991 VD1		1991	11	04.51632	02	38	23.89	+20 54 00.7		399
1991 VD1		1991	11	05.49931	02	37	10.56	+20 57 09.7	16.5	399
1991 VD1		1991	11	05.51528	02	37	09.32	+20 57 12.5		399
1991 VD1		1991	11	11.49583	02	29	46.97	+21 14 18.3	17	399
1991 VD1		1991	11	11.51076	02	29	45.79	+21 14 20.3		399
1991 VE1	*	1991	11	04.50139	02	39	57.96	+22 21 58.6	17	399
1991 VE1		1991	11	04.51632	02	39	57.08	+22 21 50.1		399
1991 VE1		1991	11	05.49931	02	39	05.98	+22 12 33.2	16.5	399
1991 VE1		1991	11	05.51528	02	39	05.03	+22 12 23.4		399
1991 VE1		1991	11	11.49583	02	34	00.46	+21 14 30.3	16.5	399
1991 VE1		1991	11	11.51076	02	33	59.69	+21 14 21.4		399
1991 VF1	*	1991	11	04.50139	02	42	48.75	+20 12 39.7	16.5	399
1991 VF1		1991	11	04.51632	02	42	47.78	+20 12 38.2		399
1991 VF1		1991	11	05.49931	02	41	42.03	+20 09 48.2	16.5	399
1991 VF1		1991	11	05.51528	02	41	40.88	+20 09 43.0		399
1991 VF1		1991	11	11.49583	02	35	08.61	+19 50 51.8	17	399
1991 VF1		1991	11	11.51076	02	35	07.59	+19 50 48.1		399
1991 VF1		1991	12	04.47292	02	16	58.78	+18 39 24.3	17.5	399
1991 VF1		1991	12	04.49410	02	16	58.28	+18 39 21.4		399
1991 VG1	*	1991	11	04.50139	02	43	08.35	+18 53 53.3	16.5	399
1991 VG1		1991	11	04.51632	02	43	07.28	+18 53 55.5		399
1991 VG1		1991	11	05.49931	02	42	07.87	+18 56 23.1	16.5	399
1991 VG1		1991	11	05.51528	02	42	06.82	+18 56 26.2		399
1991 VG1		1991	11	11.49583	02	36	04.67	+19 09 58.7	16.5	399
1991 VG1		1991	11	11.51076	02	36	03.60	+19 10 00.7		399
1991 VG1		1991	12	04.47292	02	19	40.64	+19 55 13.6	17	399
1991 VG1		1991	12	04.49410	02	19	40.28	+19 55 17.1		399
1991 VL1	*	1991	11	04.57014	02	32	44.83	+03 38 30.1	17	399
1991 VL1		1991	11	04.58507	02	32	43.96	+03 38 28.6		399
1991 VL1		1991	11	05.53495	02	31	44.58	+03 36 45.8	17	399
1991 VL1		1991	11	05.55081	02	31	43.51	+03 36 45.9		399
1991 VL1		1991	11	11.53021	02	25	41.98	+03 30 20.0	17	399
1991 VL1		1991	11	11.54583	02	25	40.95	+03 30 18.8		399
1991 VM1	*	1991	11	04.57014	02	36	54.30	+06 35 25.8	17	399
1991 VM1		1991	11	04.58507	02	36	53.40	+06 35 20.7		399
1991 VM1		1991	11	05.53495	02	35	52.25	+06 31 03.7	17	399
1991 VM1		1991	11	05.55081	02	35	51.33	+06 30 59.0		399
1991 VM1		1991	11	11.53021	02	29	35.00	+06 06 27.5	17	399
1991 VM1		1991	11	11.54583	02	29	33.98	+06 06 23.8		399
1991 VN1	*	1991	11	04.57014	02	37	21.58	+05 24 03.8	17	399
1991 VN1		1991	11	04.58507	02	37	20.69	+05 23 57.9		399
1991 VN1		1991	11	05.53495	02	36	20.23	+05 20 15.4	17	399
1991 VN1		1991	11	05.55081	02	36	19.18	+05 20 09.5		399
1991 VN1		1991	11	11.53021	02	30	05.39	+04 59 28.8	16.5	399
1991 VN1		1991	11	11.54583	02	30	04.46	+04 59 25.5		399
1991 VO1	*	1991	11	04.57014	02	38	11.35	+04 35 37.0	16.5	399
1991 VO1		1991	11	04.58507	02	38	10.44	+04 35 34.4		399

1991 VO1		1991	11	05.53495	02	37	13.52	+04 32 31.3	17	399
1991 VO1		1991	11	05.55081	02	37	12.52	+04 32 29.2		399
1991 VO1		1991	11	11.53021	02	31	19.23	+04 17 03.4	16	399
1991 VO1		1991	11	11.54583	02	31	18.23	+04 17 01.1		399
1991 VP1	*	1991	11	04.57014	02	38	30.04	+05 24 17.7	17	399
1991 VP1		1991	11	04.58507	02	38	29.12	+05 24 13.4		399
1991 VP1		1991	11	05.53495	02	37	32.42	+05 20 17.6		399
1991 VP1		1991	11	05.55081	02	37	31.28	+05 20 14.2		399
1991 VP1		1991	11	11.53021	02	31	38.74	+04 58 56.3	16.5	399
1991 VP1		1991	11	11.54583	02	31	37.78	+04 58 55.4		399
1991 VQ1	*	1991	11	04.57014	02	39	57.85	+06 59 50.2	15	399
1991 VQ1		1991	11	04.58507	02	39	56.83	+06 59 51.6		399
1991 VQ1		1991	11	05.53495	02	38	56.05	+07 01 38.9	15	399
1991 VQ1		1991	11	05.55081	02	38	54.88	+07 01 41.0		399
1991 VQ1		1991	11	11.53021	02	32	42.02	+07 15 42.5	15.5	399
1991 VQ1		1991	11	11.54583	02	32	41.00	+07 15 45.7		399
1991 VQ1		1991	12	04.43333	02	16	44.12	+08 58 33.0	16	399
1991 VQ1		1991	12	04.45451	02	16	43.69	+08 58 41.5		399
1991 VQ1		1991	12	07.58981	02	15	55.11	+09 18 30.4	16.5	399
1991 VQ1		1991	12	07.61111	02	15	54.77	+09 18 38.5		399
1991 VZ1	*	1991	11	09.60307	03	58	53.11	+16 49 46.8	16	399
1991 VZ1		1991	11	09.62049	03	58	52.00	+16 49 46.9		399
1991 VZ1		1991	11	11.56806	03	57	02.21	+16 51 14.5	15.5	399
1991 VZ1		1991	11	11.58333	03	57	01.38	+16 51 14.8		399
1991 VZ1		1991	11	13.56250	03	55	06.91	+16 52 40.5	16	399
1991 VZ1		1991	11	13.57743	03	55	05.96	+16 52 40.5		399
1991 VZ1		1991	12	05.64028	03	33	16.59	+17 11 22.6	16.5	399
1991 VZ1		1991	12	05.65521	03	33	15.72	+17 11 23.5		399
1991 VZ1		1991	12	07.54063	03	31	34.88	+17 13 36.2	16.5	399
1991 VZ1		1991	12	07.55764	03	31	33.86	+17 13 37.4		399
1991 VA2	*	1991	11	09.60307	04	00	37.02	+14 29 56.5	17.5	399
1991 VA2		1991	11	09.62049	04	00	36.31	+14 29 55.8		399
1991 VA2		1991	11	11.56806	03	58	55.39	+14 21 56.9	17.5	399
1991 VA2		1991	11	11.58333	03	58	54.62	+14 21 53.5		399
1991 VA2		1991	11	13.56250	03	57	08.81	+14 13 51.8	17.5	399
1991 VA2		1991	11	13.57743	03	57	07.96	+14 13 48.7		399
1991 VB2	*	1991	11	09.60307	04	00	42.25	+16 37 33.7	17.5	399
1991 VB2		1991	11	09.62049	04	00	41.35	+16 37 30.4		399
1991 VB2		1991	11	11.56806	03	58	39.02	+16 29 52.1	17.5	399
1991 VB2		1991	11	11.58333	03	58	37.95	+16 29 47.8		399
1991 VB2		1991	11	13.56250	03	56	30.93	+16 22 01.5	17.5	399
1991 VB2		1991	11	13.57743	03	56	30.03	+16 21 57.4		399
1991 VC2	*	1991	11	09.60307	04	01	07.66	+14 14 35.7	17	399
1991 VC2		1991	11	09.62049	04	01	07.01	+14 14 28.4		399
1991 VC2		1991	11	11.56806	03	59	36.25	+14 02 48.0	17	399
1991 VC2		1991	11	11.58333	03	59	35.36	+14 02 44.0		399
1991 VC2		1991	11	13.56250	03	58	00.79	+13 50 53.3	17	399
1991 VC2		1991	11	13.57743	03	57	59.96	+13 50 48.7		399
1991 VC2		1991	12	05.59931	03	40	10.54	+11 53 19.5	17	399
1991 VC2		1991	12	05.61424	03	40	09.72	+11 53 19.2		399
1991 VC2		1991	12	07.50417	03	38	48.56	+11 45 18.8	17	399
1991 VD2	*	1991	11	09.60307	04	01	51.17	+16 59 30.8	17	399
1991 VD2		1991	11	09.62049	04	01	50.20	+16 59 29.4		399
1991 VD2		1991	11	11.56806	04	00	16.65	+16 56 01.2	17	399
1991 VD2		1991	11	11.58333	04	00	15.81	+16 55 58.1		399
1991 VD2		1991	11	13.56250	03	58	37.97	+16 52 24.9	17	399
1991 VD2		1991	11	13.57743	03	58	37.09	+16 52 24.2		399
1991 VD2		1991	12	05.64028	03	40	01.33	+16 17 58.7	17	399
1991 VD2		1991	12	05.65521	03	40	00.45	+16 17 58.1		399

1991 VD2		1991 12 07.54063	03 38 36.61	+16 16 04.2	17		399
1991 VD2		1991 12 07.55764	03 38 35.92	+16 16 03.9			399
1991 VE2	*	1991 11 09.60307	04 02 31.35	+17 25 50.9	16.5		399
1991 VE2		1991 11 09.62049	04 02 30.36	+17 25 37.9			399
1991 VE2		1991 11 11.56806	04 00 50.85	+17 04 58.5	16.5		399
1991 VE2		1991 11 11.58333	04 00 50.06	+17 04 48.4			399
1991 VE2		1991 11 13.56250	03 59 05.78	+16 43 30.6	17		399
1991 VE2		1991 11 13.57743	03 59 04.88	+16 43 21.3			399
1991 VE2		1991 12 05.59931	03 39 20.34	+12 54 47.8	16.5		399
1991 VE2		1991 12 05.61424	03 39 19.62	+12 54 39.9			399
1991 VE2		1991 12 07.50417	03 37 51.83	+12 37 31.0	17		399
1991 VF2	*	1991 11 09.60307	04 03 35.36	+17 15 22.3	17		399
1991 VF2		1991 11 09.62049	04 03 34.37	+17 15 14.8			399
1991 VF2		1991 11 11.56806	04 01 51.24	+17 00 51.2	17		399
1991 VF2		1991 11 11.58333	04 01 50.29	+17 00 45.4			399
1991 VF2		1991 11 13.56250	03 59 58.90	+16 46 45.2	17		399
1991 VF2		1991 11 13.57743	03 59 58.04	+16 46 38.6			399
1991 VF2		1991 12 05.59931	03 38 19.96	+14 12 26.1	17		399
1991 VF2		1991 12 05.61424	03 38 19.17	+14 12 20.6			399
1991 VF2		1991 12 07.50417	03 36 42.30	+14 01 18.9	17		399
1991 VG2	*	1991 11 09.60307	04 04 44.16	+15 30 21.6	16.5		399
1991 VG2		1991 11 09.62049	04 04 43.17	+15 30 18.7			399
1991 VG2		1991 11 11.56806	04 03 02.25	+15 23 35.4	17		399
1991 VG2		1991 11 11.58333	04 03 01.27	+15 23 31.2			399
1991 VG2		1991 11 13.56250	04 01 13.77	+15 16 41.7	17		399
1991 VG2		1991 11 13.57743	04 01 12.92	+15 16 37.3			399
1991 VG2		1991 12 05.59931	03 39 52.70	+14 13 27.5	17		399
1991 VG2		1991 12 05.61424	03 39 51.98	+14 13 27.1			399
1991 VG2		1991 12 07.50417	03 38 14.71	+14 10 11.4	17		399
1991 VH2	*	1991 11 09.60307	04 06 39.72	+15 42 07.3	17		399
1991 VH2		1991 11 09.62049	04 06 38.87	+15 42 06.8			399
1991 VH2		1991 11 11.56806	04 04 48.55	+15 40 03.1	17		399
1991 VH2		1991 11 11.58333	04 04 47.71	+15 40 01.7			399
1991 VH2		1991 11 13.56250	04 02 52.93	+15 37 58.1	17.5		399
1991 VH2		1991 11 13.57743	04 02 52.11	+15 37 56.5			399
1991 VH2		1991 12 05.59931	03 40 41.87	+15 20 23.2	17.5		399
1991 VH2		1991 12 05.61424	03 40 40.96	+15 20 21.7			399
1991 VJ2	*	1991 11 09.60307	04 06 44.79	+16 06 11.4	16		399
1991 VJ2		1991 11 09.62049	04 06 43.69	+16 06 05.5			399
1991 VJ2		1991 11 11.56806	04 04 45.28	+15 53 32.4	16.5		399
1991 VJ2		1991 11 11.58333	04 04 44.39	+15 53 27.7			399
1991 VJ2		1991 11 13.56250	04 02 40.68	+15 40 47.3	16.5		399
1991 VJ2		1991 11 13.57743	04 02 39.77	+15 40 42.5			399
1991 VJ2		1991 12 05.59931	03 40 15.06	+13 41 23.7	17		399
1991 VJ2		1991 12 05.61424	03 40 14.25	+13 41 19.9			399
1991 VJ2		1991 12 07.50417	03 38 41.30	+13 34 14.6	17		399
1991 VK2	*	1991 11 09.60307	04 08 45.91	+14 34 57.4	17		399
1991 VK2		1991 11 09.62049	04 08 44.99	+14 34 59.2			399
1991 VK2		1991 11 11.56806	04 07 07.92	+14 36 48.7	17		399
1991 VK2		1991 11 11.58333	04 07 07.06	+14 36 51.1			399
1991 VK2		1991 11 13.56250	04 05 23.62	+14 38 54.9	17		399
1991 VK2		1991 11 13.57743	04 05 22.76	+14 38 55.8			399
1991 VL2	*	1991 11 09.60307	04 09 13.67	+17 31 22.7	17		399
1991 VL2		1991 11 09.62049	04 09 12.86	+17 31 19.9			399
1991 VL2		1991 11 11.56806	04 07 28.59	+17 24 57.0	17		399
1991 VL2		1991 11 11.58333	04 07 27.73	+17 24 52.6			399
1991 VM2	*	1991 11 09.60307	04 12 06.97	+17 20 23.2	17		399
1991 VM2		1991 11 09.62049	04 12 06.24	+17 20 23.2			399
1991 VM2		1991 11 11.56806	04 10 37.31	+17 16 19.8	17		399

1991 VM2		1991	11	11.58333	04	10	36.72	+17	16	19.2		399
1991 VW2	*	1991	11	09.60307	04	04	56.28	+17	22	11.3	17	399
1991 VW2		1991	11	09.62049	04	04	55.35	+17	22	10.2		399
1991 VW2		1991	11	11.56806	04	03	12.16	+17	20	59.9	16.5	399
1991 VW2		1991	11	11.58333	04	03	11.29	+17	20	59.5		399
1991 VB3		1991	12	04.54653	04	04	58.53	+21	15	49.0	16.5	399
1991 VB3		1991	12	04.56146	04	04	57.70	+21	15	45.7		399
1991 VB3		1991	12	05.55278	04	03	54.28	+21	08	59.8	16.5	399
1991 VB3		1991	12	05.56777	04	03	53.27	+21	08	54.5		399
1991 VO3		1991	10	31.65463	02	36	20.27	+12	26	31.7	17	399
1991 VO3		1991	10	31.67025	02	36	19.20	+12	26	27.6		399
1991 VO3	*	1991	11	04.53542	02	32	17.70	+12	16	59.5	17	399
1991 VO3		1991	11	04.55035	02	32	16.82	+12	16	57.8		399
1991 VO3		1991	11	09.56383	02	27	03.78	+12	05	15.4	17	399
1991 VO3		1991	11	09.58160	02	27	02.83	+12	05	13.5		399
1991 VP3		1991	10	31.65463	02	39	01.03	+13	00	27.3	17.5	399
1991 VP3		1991	10	31.67025	02	38	59.77	+13	00	27.6		399
1991 VP3	*	1991	11	04.53542	02	34	43.73	+12	55	44.2	17	399
1991 VP3		1991	11	04.55035	02	34	42.84	+12	55	44.9		399
1991 VP3		1991	11	09.56383	02	29	10.94	+12	49	49.6	17	399
1991 VP3		1991	11	09.58160	02	29	09.99	+12	49	50.3		399
1991 VQ3	*	1991	11	04.53542	02	40	53.91	+13	10	31.6	17	399
1991 VQ3		1991	11	04.55035	02	40	53.12	+13	10	25.7		399
1991 VQ3		1991	11	09.56383	02	35	43.82	+12	40	46.3	17	399
1991 VQ3		1991	11	09.58160	02	35	42.99	+12	40	41.6		399
1991 VS3	*	1991	11	11.60417	04	08	50.56	+21	15	58.1	17	399
1991 VS3		1991	11	11.61910	04	08	49.75	+21	16	03.3		399
1991 VS3		1991	11	13.52922	04	06	35.69	+21	29	20.9	17	399
1991 VS3		1991	11	13.54421	04	06	34.41	+21	29	28.1		399
1991 VT3	*	1991	11	11.60417	04	10	00.44	+21	11	04.9	16	399
1991 VT3		1991	11	11.61910	04	09	59.65	+21	10	56.5		399
1991 VT3		1991	11	13.52922	04	08	12.15	+20	53	24.7	16	399
1991 VT3		1991	11	13.54421	04	08	11.06	+20	53	13.6		399
1991 VT3		1991	12	05.64028	03	47	12.04	+17	28	44.3	17	399
1991 VT3		1991	12	05.65521	03	47	11.29	+17	28	38.7		399
1991 VT3		1991	12	07.54063	03	45	38.73	+17	12	37.0	17	399
1991 VT3		1991	12	07.55764	03	45	37.92	+17	12	28.1		399
1991 VU3	*	1991	11	11.63889	04	11	55.33	+20	59	11.9	17	399
1991 VU3		1991	11	11.65417	04	11	54.33	+20	59	01.7		399
1991 VU3		1991	11	13.60069	04	10	17.15	+20	42	27.0	17	399
1991 VU3		1991	11	13.61563	04	10	16.20	+20	42	18.5		399
1991 VV3	*	1991	11	11.63889	04	13	31.24	+22	02	03.4	16.5	399
1991 VV3		1991	11	11.65417	04	13	30.40	+22	02	02.0		399
1991 VV3		1991	11	13.60069	04	11	40.81	+22	03	15.6	16.5	399
1991 VV3		1991	11	13.61563	04	11	39.92	+22	03	17.8		399
1991 VV3		1991	12	05.68125	03	49	17.32	+22	00	42.8	17	399
1991 VV3		1991	12	05.69653	03	49	16.41	+22	00	41.7		399
1991 VV3		1991	12	07.67361	03	47	31.10	+21	59	47.9	17	399
1991 VV3		1991	12	07.68854	03	47	30.40	+21	59	47.5		399
1991 VV3		1991	12	09.55764	03	45	56.85	+21	58	56.9	17	399
1991 VV3		1991	12	09.57396	03	45	56.11	+21	58	55.8		399
1991 VW3	*	1991	11	11.63889	04	16	16.23	+21	22	16.8	16.5	399
1991 VW3		1991	11	11.65417	04	16	15.36	+21	22	14.6		399
1991 VW3		1991	11	13.60069	04	14	04.92	+21	15	14.3	16.5	399
1991 VW3		1991	11	13.61563	04	14	03.88	+21	15	11.3		399
1991 VX3	*	1991	11	11.63889	04	17	10.87	+21	37	35.3	17	399
1991 VX3		1991	11	11.65417	04	17	10.06	+21	37	34.9		399
1991 VX3		1991	11	13.60069	04	15	13.22	+21	35	05.7	16.5	399
1991 VX3		1991	11	13.61563	04	15	12.35	+21	35	04.7		399

1991 VX3		1991 12 05.68125	03 50 43.11	+20 52 45.0	17		399
1991 VX3		1991 12 05.69653	03 50 42.05	+20 52 43.8			399
1991 VX3		1991 12 07.67361	03 48 38.90	+20 48 26.1	17		399
1991 VX3		1991 12 07.68854	03 48 38.02	+20 48 24.8			399
1991 VX3		1991 12 09.55764	03 46 46.19	+20 44 28.9	17		399
1991 VX3		1991 12 09.57396	03 46 45.33	+20 44 27.4			399
1991 VY3	*	1991 11 11.63889	04 23 45.68	+19 17 27.8	17		399
1991 VY3		1991 11 11.65417	04 23 44.87	+19 17 26.4			399
1991 VY3		1991 11 13.60069	04 22 17.74	+19 13 22.3	17		399
1991 VY3		1991 11 13.61563	04 22 16.95	+19 13 20.3			399
1991 VY3		1991 12 04.54653	04 04 47.06	+18 26 50.9	17		399
1991 VY3		1991 12 04.56146	04 04 46.20	+18 26 48.4			399
1991 VY3		1991 12 05.55278	04 03 56.77	+18 24 42.0	16.5		399
1991 VY3		1991 12 05.56777	04 03 56.09	+18 24 39.9			399
1991 VY3		1991 12 14.65069	03 56 52.71	+18 07 05.2	17		399
1991 VY3		1991 12 14.66979	03 56 51.90	+18 07 03.5			399
1991 VZ3	*	1991 11 12.53631	05 03 43.33	+35 00 49.5	16.5		399
1991 VZ3		1991 11 12.57295	05 03 41.15	+35 00 47.9			399
1991 VZ3		1991 11 12.58941	05 03 39.98	+35 00 46.7			399
1991 VZ3		1991 11 14.63924	05 01 49.25	+34 58 04.7	16.5		399
1991 VZ3		1991 11 14.67708	05 01 47.49	+34 58 00.5			399
1991 VZ3		1991 12 05.46276	04 38 43.73	+33 46 41.5	16.5		399
1991 VZ3		1991 12 05.48030	04 38 42.42	+33 46 38.1			399
1991 VZ3		1991 12 05.50148	04 38 41.07	+33 46 30.5			399
1991 VZ3		1991 12 14.68646	04 28 00.05	+32 50 45.8	16.5		399
1991 VZ3		1991 12 14.70243	04 27 58.86	+32 50 38.9			399
1991 VZ3		1991 12 14.72448	04 27 57.55	+32 50 34.6			399
1991 VA4		1991 11 09.60307	04 01 41.24	+15 34 55.3	16.5		399
1991 VA4		1991 11 09.62049	04 01 40.48	+15 34 54.3			399
1991 VA4		1991 11 11.56806	03 59 58.79	+15 31 32.0	16.5		399
1991 VA4		1991 11 11.58333	03 59 57.90	+15 31 31.1			399
1991 VA4		1991 11 13.56250	03 58 10.04	+15 28 10.1	16.5		399
1991 VA4		1991 11 13.57743	03 58 09.13	+15 28 08.8			399
2146 T-1		1991 11 04.60799	03 50 29.24	+17 42 42.4	17		399
2146 T-1		1991 11 04.62326	03 50 28.44	+17 42 40.0			399
2272 T-3		1991 10 29.44792	01 44 27.94	+15 53 47.3	17		399
2272 T-3		1991 10 29.46424	01 44 26.98	+15 53 45.9			399
(2060)		1992 01 04.59722	08 34 32.10	+10 53 43.2	16.5		399
(2060)		1992 01 04.61215	08 34 31.87	+10 53 43.2			399
(2640)		1991 10 31.51733	02 34 05.07	+21 50 18.9	16.5		399
(2640)		1991 10 31.53299	02 34 03.97	+21 50 16.6			399
(3839)		1991 11 11.63889	04 16 34.52	+21 24 02.2	17		399
(3839)		1991 11 11.65417	04 16 33.58	+21 23 59.3			399
(4127)		1991 11 09.60307	04 11 05.66	+17 35 36.0	16.5		399
(4127)		1991 11 09.62049	04 11 04.98	+17 35 34.6			399
(4127)		1991 11 11.56806	04 09 28.82	+17 30 22.3	16.5		399
(4127)		1991 11 11.58333	04 09 28.04	+17 30 19.5			399

400 Kitami
K. Watanabe, 3-8 Mason Hashimoto B-203, atsubetsu cyuo 3 jo 4 chome,
Atsubetsu-ku, Sapporo 004, Japan
Observers K. Endate, T. Fujii, A. Takahashi, M. Yanai
Measurers K. Watanabe, H. Kaneda
0.20-m f/4.0 reflector, 0.25-m f/3.4 reflector
GSC

1984 YE4		1991 11 26.45590	02 47 59.45	+11 24 26.0	16.5		400
1984 YE4		1991 11 26.47604	02 47 58.47	+11 24 27.3			400
1984 YE4		1991 11 30.55903	02 44 39.77	+11 32 29.5	16.0		400
1984 YE4		1991 11 30.57639	02 44 38.83	+11 32 31.3			400

1988 XT		1991	10	18.66632	01	03	36.36	+08 00 35.1	17	400
1988 XT		1991	10	18.68299	01	03	35.34	+08 00 29.0		400
1991 SN1		1991	10	29.48924	00	58	26.09	+05 37 53.0	16.5	400
1991 SN1		1991	10	29.50521	00	58	25.62	+05 37 43.7		400
1991 SN1		1991	10	31.49201	00	57	25.56	+05 20 47.9	16.5	400
1991 SN1		1991	10	31.50799	00	57	25.06	+05 20 38.8		400
1991 TF2		1991	10	29.46667	01	47	45.51	+25 00 30.5	16.0	400
1991 TF2		1991	10	29.48125	01	47	44.47	+25 00 26.6		400
1991 UQ1	*	1991	10	29.47847	02	56	48.72	+17 29 48.6	16.0	400
1991 UQ1		1991	10	29.49792	02	56	47.23	+17 29 53.3		400
1991 UQ1		1991	10	31.53681	02	54	32.99	+17 36 38.4	16.0	400
1991 UQ1		1991	10	31.55486	02	54	31.68	+17 36 42.2		400
1991 UQ1		1991	11	02.47778	02	52	21.61	+17 42 48.0	16.0	400
1991 UQ1		1991	11	02.49583	02	52	20.40	+17 42 51.7		400
1991 UQ1		1991	11	26.44410	02	26	31.00	+18 45 41.8	16.0	400
1991 UQ1		1991	11	26.45938	02	26	30.24	+18 45 43.0		400
1991 UR1	*	1991	10	29.47847	03	01	10.87	+17 06 47.7	16.5	400
1991 UR1		1991	10	29.49792	03	01	09.47	+17 06 44.0		400
1991 UR1		1991	10	31.53681	02	59	14.14	+17 01 50.8	16.5	400
1991 UR1		1991	10	31.55486	02	59	12.88	+17 01 47.6		400
1991 UR1		1991	11	02.47778	02	57	20.92	+16 56 51.1	16.5	400
1991 UR1		1991	11	02.49583	02	57	19.86	+16 56 49.1		400
1991 UW1	*	1991	10	29.51354	03	16	16.89	+18 44 17.8	16.5	400
1991 UW1		1991	10	29.53229	03	16	15.80	+18 44 18.8		400
1991 UW1		1991	10	31.57049	03	14	05.74	+18 42 10.6	16.5	400
1991 UW1		1991	10	31.58785	03	14	04.79	+18 42 10.8		400
1991 UK2	*	1991	10	29.51840	03	01	19.20	+13 43 49.7	16.0	400
1991 UK2		1991	10	29.53438	03	01	18.25	+13 43 41.6		400
1991 UK2		1991	10	31.52326	02	59	32.00	+13 27 19.2	16.0	400
1991 UK2		1991	10	31.53854	02	59	31.08	+13 27 13.0		400
1991 UK2		1991	11	26.52049	02	36	59.00	+10 13 02.6	16.0	400
1991 UK2		1991	11	26.53715	02	36	58.32	+10 12 59.9		400
1991 UK2		1991	11	30.49861	02	34	32.03	+09 52 12.5	16.0	400
1991 UK2		1991	11	30.51632	02	34	31.48	+09 52 06.3		400
1991 UL2	*	1991	10	29.51840	03	04	37.28	+09 12 47.6	16.0	400
1991 UL2		1991	10	29.53438	03	04	36.24	+09 12 44.4		400
1991 UL2		1991	10	31.52326	03	02	52.27	+09 05 19.0	16.0	400
1991 UL2		1991	10	31.53854	03	02	51.42	+09 05 15.5		400
1991 UL2		1991	11	26.45590	02	40	25.28	+08 01 09.9	16.0	400
1991 UL2		1991	11	26.47604	02	40	24.39	+08 01 08.3		400
1991 UL2		1991	11	30.49861	02	37	44.22	+07 59 26.6	16.0	400
1991 UL2		1991	11	30.51632	02	37	43.54	+07 59 22.5		400
1991 UM2	*	1991	10	29.55243	03	14	51.36	+12 33 02.2	17	400
1991 UM2		1991	10	29.56840	03	14	50.45	+12 32 58.8		400
1991 UM2		1991	10	31.56007	03	12	53.66	+12 26 54.7	16.5	400
1991 UM2		1991	10	31.57604	03	12	52.60	+12 26 50.5		400
1991 UM2		1991	11	02.51840	03	10	55.96	+12 20 57.1	16.5	400
1991 UM2		1991	11	02.53576	03	10	54.91	+12 20 51.5		400
1991 UM2		1991	11	04.50590	03	08	54.51	+12 14 59.9	16.5	400
1991 UM2		1991	11	04.52361	03	08	53.34	+12 14 55.1		400
1991 UN2	*	1991	10	29.55243	03	17	58.82	+12 39 39.4	17	400
1991 UN2		1991	10	29.56840	03	17	58.02	+12 39 37.8		400
1991 UN2		1991	10	31.56007	03	16	05.31	+12 38 10.0	16.5	400
1991 UN2		1991	10	31.57604	03	16	04.22	+12 38 10.3		400
1991 UN2		1991	11	02.51840	03	14	10.95	+12 36 47.8	17	400
1991 UN2		1991	11	02.53576	03	14	09.97	+12 36 45.7		400
1991 UN2		1991	11	04.50590	03	12	12.58	+12 35 25.9	16.5	400
1991 UN2		1991	11	04.52361	03	12	11.46	+12 35 26.3		400
1991 UO2	*	1991	10	29.55243	03	21	55.83	+08 48 52.3	16.0	400

1991	UO2		1991	10	29.56840	03	21	55.01	+08 48 48.7	400
1991	UO2		1991	10	31.56007	03	20	17.28	+08 42 45.2	16.0	400
1991	UO2		1991	10	31.57604	03	20	16.52	+08 42 42.6	400
1991	UO2		1991	11	26.48924	02	57	04.50	+08 10 40.8	16.0	400
1991	UO2		1991	11	26.50521	02	57	03.66	+08 10 41.3	400
1991	UP2	*	1991	10	29.55243	03	23	35.10	+13 20 03.0	16.5	400
1991	UP2		1991	10	29.56840	03	23	34.23	+13 20 01.4	400
1991	UP2		1991	10	31.56007	03	21	34.99	+13 16 41.2	16.5	400
1991	UP2		1991	10	31.57604	03	21	34.14	+13 16 41.0	400
1991	UP2		1991	11	02.51840	03	19	34.17	+13 13 25.7	16.5	400
1991	UP2		1991	11	02.53576	03	19	33.03	+13 13 24.2	400
1991	UP2		1991	11	04.50590	03	17	28.25	+13 10 10.0	16.5	400
1991	UP2		1991	11	04.52361	03	17	26.97	+13 10 08.1	400
1991	UP2		1991	12	02.48993	02	49	46.35	+12 49 02.0	16.5	400
1991	UP2		1991	12	02.50660	02	49	45.78	+12 48 57.6	400
1991	UQ2	*	1991	10	31.53681	02	53	01.65	+18 24 43.6	16.0	400
1991	UQ2		1991	10	31.55486	02	53	00.16	+18 24 52.1	400
1991	UQ2		1991	11	02.47778	02	50	35.84	+18 38 11.5	16.0	400
1991	UQ2		1991	11	02.49583	02	50	34.17	+18 38 20.1	400
1991	UR2		1991	10	29.47847	02	59	18.42	+18 11 33.0	16.0	400
1991	UR2		1991	10	29.49792	02	59	17.29	+18 11 40.6	400
1991	UR2	*	1991	10	31.53681	02	57	26.13	+18 26 10.3	16.0	400
1991	UR2		1991	10	31.55486	02	57	25.04	+18 26 18.9	400
1991	UR2		1991	11	02.47778	02	55	35.86	+18 39 46.3	16.0	400
1991	UR2		1991	11	02.49583	02	55	34.79	+18 39 54.8	400
1991	UF3	*	1991	10	29.47847	02	55	38.34	+17 16 22.5	16.0	400
1991	UF3		1991	10	29.49792	02	55	36.96	+17 16 28.6	400
1991	UF3		1991	11	02.47778	02	50	50.74	+17 34 49.3	16.0	400
1991	UF3		1991	11	02.49583	02	50	49.42	+17 34 53.3	400
1991	UR3		1991	10	08.59965	02	06	28.29	+25 49 58.0	17	400
1991	UR3		1991	10	08.61840	02	06	27.29	+25 49 57.1	400
1991	UR3	*	1991	10	16.62396	01	59	49.00	+25 41 14.3	16.5	400
1991	UR3		1991	10	16.64271	01	59	48.07	+25 41 11.4	400
1991	UR3		1991	10	29.46667	01	48	18.21	+25 05 10.0	16.5	400
1991	UR3		1991	10	29.48125	01	48	17.58	+25 05 05.7	400
1991	US3	*	1991	10	31.58993	03	25	30.46	+09 23 15.4	17	400
1991	US3		1991	10	31.60590	03	25	29.49	+09 23 17.7	400
1991	US3		1991	11	02.56354	03	23	21.83	+09 28 19.2	17	400
1991	US3		1991	11	02.58646	03	23	20.05	+09 28 21.1	400
1991	US3		1991	11	26.48924	02	56	51.90	+10 49 30.9	16.5	400
1991	US3		1991	11	26.50521	02	56	51.06	+10 49 36.1	400
1991	UT3	*	1991	10	31.61979	03	39	47.48	+12 06 40.6	16.0	400
1991	UT3		1991	10	31.63646	03	39	46.48	+12 06 37.9	400
1991	UT3		1991	11	02.61944	03	37	56.22	+12 02 03.6	16.5	400
1991	UT3		1991	11	02.63854	03	37	55.11	+12 02 00.2	400
1991	UT3		1991	11	02.65035	03	37	54.40	+12 01 57.2	400
1991	UU3	*	1991	10	31.63264	03	34	32.98	+22 30 03.6	16.5	400
1991	UU3		1991	10	31.65035	03	34	31.84	+22 30 00.0	400
1991	UU3		1991	11	04.55903	03	30	23.45	+22 20 49.2	16.5	400
1991	UU3		1991	11	04.57708	03	30	22.29	+22 20 45.9	400
1991	UU3		1991	11	14.58125	03	19	03.63	+21 49 27.8	16.5	400
1991	UU3		1991	11	14.59931	03	19	02.10	+21 49 22.8	400
1991	UU3		1991	12	02.48958	03	00	52.21	+20 41 22.6	16.5	400
1991	UU3		1991	12	02.50764	03	00	51.26	+20 41 22.5	400
1991	VF		1991	11	02.65382	03	59	59.86	+14 13 11.9	16.5	400
1991	VF		1991	11	02.67118	03	59	58.21	+14 13 36.6	400
1991	VF		1991	11	04.64688	03	56	52.40	+14 57 25.6	16.5	400
1991	VF		1991	11	04.66424	03	56	50.67	+14 57 47.9	400
1991	VN	*	1991	11	02.55174	03	28	03.74	+14 26 04.8	16.5	400

1991 VN		1991	11	02.56910	03	28	02.75	+14	26	02.9		400
1991 VN		1991	11	04.54062	03	26	22.06	+14	18	19.6	17	400
1991 VN		1991	11	04.55799	03	26	21.09	+14	18	13.9		400
1991 VO	*	1991	11	02.55174	03	30	13.69	+15	15	10.2	16.5	400
1991 VO		1991	11	02.56910	03	30	12.87	+15	15	04.5		400
1991 VO		1991	11	04.54062	03	28	26.09	+15	01	32.0	16.5	400
1991 VO		1991	11	04.55799	03	28	25.12	+15	01	25.6		400
1991 VO		1991	12	02.52465	03	02	32.01	+12	01	39.5	16.5	400
1991 VO		1991	12	02.54132	03	02	31.16	+12	01	34.8		400
1991 VP	*	1991	11	02.55174	03	33	33.76	+15	47	00.9	16.5	400
1991 VP		1991	11	02.56910	03	33	32.93	+15	46	57.9		400
1991 VP		1991	11	04.54062	03	31	37.37	+15	38	05.4	16.5	400
1991 VP		1991	11	04.55799	03	31	36.42	+15	38	00.9		400
1991 VP		1991	12	02.52465	03	04	29.19	+13	43	29.6	16.5	400
1991 VP		1991	12	02.54132	03	04	28.29	+13	43	24.5		400
1991 VQ	*	1991	11	02.58576	03	34	58.50	+17	09	59.2	17	400
1991 VQ		1991	11	02.60312	03	34	57.66	+17	10	00.9		400
1991 VQ		1991	11	04.58021	03	33	07.24	+17	13	40.0	17	400
1991 VQ		1991	11	04.59757	03	33	06.28	+17	13	40.1		400
1991 VT		1991	10	31.58993	03	31	37.93	+08	36	16.4	16.0	400
1991 VT		1991	10	31.60590	03	31	37.05	+08	36	20.1		400
1991 VT		1991	11	02.56354	03	29	31.39	+08	44	35.3	16.5	400
1991 VT		1991	11	02.58646	03	29	30.36	+08	44	38.6		400
1991 VT		1991	11	02.59826	03	29	29.08	+08	44	44.3		400
1991 VW	*	1991	11	02.51840	03	10	22.71	+13	32	51.8	16.5	400
1991 VW		1991	11	02.53576	03	10	21.86	+13	32	48.7		400
1991 VW		1991	11	04.50590	03	08	40.84	+13	26	52.8	16.5	400
1991 VW		1991	11	04.52361	03	08	39.73	+13	26	47.4		400
1991 VX	*	1991	11	02.51840	03	13	23.44	+14	23	15.4	16.5	400
1991 VX		1991	11	02.53576	03	13	22.26	+14	23	12.3		400
1991 VX		1991	11	04.50590	03	11	35.66	+14	22	07.3	16.5	400
1991 VX		1991	11	04.52361	03	11	34.60	+14	22	07.4		400
1991 VY	*	1991	11	02.51840	03	16	22.79	+13	55	48.3	16.5	400
1991 VY		1991	11	02.53576	03	16	21.85	+13	55	45.9		400
1991 VY		1991	11	04.50590	03	14	24.00	+13	53	31.8	16.5	400
1991 VY		1991	11	04.52361	03	14	22.92	+13	53	32.1		400
1991 VY		1991	12	02.48993	02	47	21.52	+13	38	05.7	16.5	400
1991 VY		1991	12	02.50660	02	47	20.87	+13	38	05.5		400
1991 VH1		1991	10	31.63264	03	33	38.67	+22	30	09.3	16.5	400
1991 VH1		1991	10	31.65035	03	33	37.80	+22	30	02.8		400
1991 VH1		1991	11	04.55903	03	30	20.57	+22	06	35.5	16.5	400
1991 VH1		1991	11	04.57708	03	30	19.58	+22	06	30.1		400
1991 VU1	*	1991	11	02.55174	03	32	50.92	+15	15	15.2	16.5	400
1991 VU1		1991	11	02.56910	03	32	49.82	+15	15	16.5		400
1991 VU1		1991	11	04.54062	03	31	04.40	+15	15	32.1	16.5	400
1991 VU1		1991	11	04.55799	03	31	03.48	+15	15	31.4		400
1991 VT2	*	1991	11	02.55174	03	34	34.47	+15	17	02.9	16.5	400
1991 VT2		1991	11	02.56910	03	34	33.15	+15	17	03.7		400
1991 VT2		1991	11	04.54062	03	32	40.32	+15	17	27.1	16.5	400
1991 VT2		1991	11	04.55799	03	32	39.58	+15	17	26.6		400
1991 VH3	*	1991	11	09.62326	04	17	45.83	+12	18	02.9	16.0	400
1991 VH3		1991	11	09.64063	04	17	44.77	+12	18	00.5		400
1991 VH3		1991	11	10.56007	04	16	54.20	+12	15	47.4		400
1991 VH3		1991	11	10.57535	04	16	53.31	+12	15	45.9		400
1991 VR3	*	1991	11	09.57535	04	07	54.24	+10	57	33.6	16.0	400
1991 VR3		1991	11	09.59201	04	07	53.30	+10	57	34.4		400
1991 VR3		1991	11	10.52813	04	07	07.54	+10	56	54.4	16.0	400
1991 VR3		1991	11	10.54410	04	07	06.79	+10	56	54.8		400
1991 VR3		1991	11	30.48299	03	48	32.84	+11	12	13.8	16.0	400

1991 VR3	1991 12 07.49549	03 42 42.57	+11 33 08.4	16.0		400
1991 VR3	1991 12 07.51493	03 42 41.54	+11 33 12.1			400
(2208)	1991 11 02.55174	03 34 23.12	+15 23 28.6	16.0		400
(2208)	1991 11 02.56910	03 34 22.28	+15 23 28.4			400
(2208)	1991 11 04.54062	03 32 56.41	+15 20 04.5	15.5		400
(2208)	1991 11 04.55799	03 32 55.63	+15 20 04.8			400
(2470)	1991 12 02.57465	03 04 41.79	+15 23 26.7	16.0		400
(2535)	1991 11 30.49861	02 33 57.62	+09 45 01.1	16.0		400
(2535)	1991 11 30.51632	02 33 56.64	+09 44 55.9			400

402 Dynic Astronomical Observatory
A. Sugie, Dynic Astronomical Observatory, Taga 270, Taga-Cho, Inukami-Gun, Shiga-Ken, 522-03, Japan
0.25-m f/3.4 Schmidt
AGK3

1976 WC1		1992 01 02.69797	08 49 34.08	+29 56 39.9	17.0		402
1976 WC1		1992 01 02.71458	08 49 33.32	+29 56 50.4			402
1976 WC1		1992 01 10.70347	08 42 41.93	+31 18 11.9	16.5		402
1976 WC1		1992 01 10.71944	08 42 40.97	+31 18 21.9			402
1976 WC1		1992 01 14.71322	08 38 38.58	+31 57 57.1			402
1976 WC1		1992 01 14.72723	08 38 37.72	+31 58 05.4			402
1991 VS1		1991 11 09.64028	04 31 26.35	+25 27 30.5	17.0		402
1991 VS1		1991 11 09.65417	04 31 25.91	+25 27 32.8			402
1991 VS1		1991 11 15.66597	04 27 08.11	+25 36 39.4			402
1991 VS1		1991 11 15.68264	04 27 07.33	+25 36 41.2			402
1991 VS1		1991 11 30.63542	04 13 30.85	+25 43 25.1	16.5		402
1991 VS1		1991 11 30.64931	04 13 30.08	+25 43 26.4			402
1991 VX2	*	1991 11 05.65417	04 17 38.04	+27 24 39.5	17.5		402
1991 VX2		1991 11 05.66806	04 17 37.38	+27 24 42.8			402
1991 VX2		1991 11 09.61319	04 14 34.41	+27 18 16.0			402
1991 VX2		1991 11 09.62917	04 14 33.71	+27 18 17.1			402
1991 VX2		1991 11 30.60972	03 56 03.86	+26 18 52.5	17.0		402
1991 VX2		1991 11 30.62361	03 56 03.04	+26 18 49.3			402
1991 VY2	*	1991 11 05.65417	04 18 45.57	+27 29 14.1	17.5		402
1991 VY2		1991 11 05.66806	04 18 44.76	+27 29 10.9			402
1991 VY2		1991 11 09.61319	04 14 55.79	+27 12 37.0			402
1991 VY2		1991 11 09.62917	04 14 54.79	+27 12 31.8			402
1991 VZ2	*	1991 11 05.65417	04 18 50.59	+26 03 09.1	16.5		402
1991 VZ2		1991 11 05.66806	04 18 49.76	+26 03 12.7			402
1991 VZ2		1991 11 09.61319	04 14 49.16	+26 12 01.2			402
1991 VZ2		1991 11 09.62917	04 14 48.09	+26 12 05.8			402
1991 VZ2		1991 11 30.60972	03 50 40.42	+26 12 29.0	17.0		402
1991 VZ2		1991 11 30.62361	03 50 39.50	+26 12 28.8			402
1991 VA3	*	1991 11 09.64028	04 33 24.70	+27 06 16.5	16.5		402
1991 VA3		1991 11 09.65417	04 33 23.99	+27 06 11.0			402
1991 VA3		1991 11 12.55139	04 30 53.51	+26 44 11.4			402
1991 VA3		1991 11 12.56997	04 30 52.47	+26 44 02.3			402
1991 VA3		1991 11 15.66597	04 28 00.17	+26 19 09.7	17.0		402
1991 VA3		1991 11 15.68264	04 27 59.08	+26 19 01.0			402
1991 VA3		1991 11 30.63542	04 12 58.83	+24 04 28.8	16.0		402
1991 VA3		1991 11 30.64931	04 12 57.95	+24 04 20.5			402
1991 YA		1992 01 10.58819	04 57 01.78	+17 54 09.1	16.0		402
1991 YA		1992 01 10.59931	04 57 01.16	+17 53 24.5			402
1992 AC		1992 01 07.73715	08 59 03.13	+07 37 05.8	13.0		402
1992 AC		1992 01 07.74479	08 59 03.93	+07 37 22.7			402
1992 AC		1992 01 10.65278	09 04 24.25	+09 32 35.8			402
1992 AC		1992 01 10.65833	09 04 24.82	+09 32 50.6			402
(481)		1991 11 05.44861	01 24 17.97	-02 12 53.4			402
(481)		1991 11 05.45208	01 24 17.92	-02 12 51.8			402

(481)		1991 11 05.45903	01 24 17.50	-02 12 51.8			402
(481)		1991 11 05.46250	01 24 17.37	-02 12 51.9			402
(481)		1991 11 05.46597	01 24 17.19	-02 12 50.6			402
(481)		1991 11 05.46944	01 24 17.01	-02 12 50.6			402
(481)		1991 11 05.47292	01 24 16.83	-02 12 51.0			402
(481)		1991 11 05.47639	01 24 16.68	-02 12 49.1			402
(481)		1991 11 05.48681	01 24 16.34	-02 12 48.3			402
(481)		1991 11 05.49375	01 24 15.79	-02 12 48.3			402
(481)		1991 11 09.59063	01 21 15.59	-02 03 53.9			402
(481)		1991 11 09.59410	01 21 15.40	-02 03 53.4			402
(481)		1991 11 09.59757	01 21 15.26	-02 03 52.7			402
(481)		1991 11 09.60104	01 21 15.09	-02 03 52.4			402
(481)		1991 11 09.60451	01 21 14.96	-02 03 51.8			402

403 Kani
T. Furuta, Mitsuike 17-2, Kakiya-Cho, Tokai, Aichi-Ken 477, Japan
Observers Y. Mizuno, T. Furuta
Measurer T. Furuta
0.25-m f/4.2 Wright-Schmidt camera
AGK3

1976 YY		1991 11 04.61701	03 42 16.56	+21 21 48.4	16.0		403
1976 YY		1991 11 04.62789	03 42 15.64	+21 21 46.9			403
1976 YY		1991 11 05.59167	03 41 19.62	+21 21 05.0			403
1976 YY		1991 11 05.60255	03 41 18.84	+21 21 03.3			403
1986 UM1		1991 11 04.60503	03 24 09.38	+21 31 45.8	16.0		403
1991 TT4	*	1991 10 13.59844	02 23 28.62	+21 46 20.3	16.0		403
1991 TT4		1991 10 13.61111	02 23 27.85	+21 46 21.3			403
1991 TT4		1991 11 04.54132	01 59 30.02	+22 14 54.8	16.0		403
1991 TT4		1991 11 04.55208	01 59 29.52	+22 14 56.6			403
1991 TU4	*	1991 10 13.59844	02 23 35.45	+22 06 16.9	16.0		403
1991 TU4		1991 10 13.61111	02 23 34.83	+22 06 14.7			403
1991 TU4		1991 11 04.54132	02 03 00.75	+20 11 32.6	16.0		403
1991 TU4		1991 11 04.55208	02 03 00.16	+20 11 27.6			403
1991 VT	*	1991 11 04.57135	03 27 18.89	+08 53 19.3	16.0		403
1991 VT		1991 11 04.58252	03 27 18.04	+08 53 23.7			403
1991 VT		1991 11 05.54572	03 26 13.65	+08 57 47.6			403
1991 VT		1991 11 05.55660	03 26 12.53	+08 57 50.5			403
1991 VT		1991 11 10.58981	03 20 25.75	+09 21 44.8	16.0		403
1991 VT		1991 11 14.58495	03 15 46.9	+09 42 12	16.0		403
1991 VT		1991 11 14.59808	03 15 46.0	+09 42 18			403
1991 VU	*	1991 11 04.61701	03 39 27.28	+22 28 03.9	16.0		403
1991 VU		1991 11 04.62789	03 39 26.40	+22 28 00.7			403
1991 VU		1991 11 05.59167	03 38 37.35	+22 21 48.1			403
1991 VU		1991 11 05.60255	03 38 36.89	+22 21 43.4			403
1991 VU		1991 11 10.62685	03 34 08.92	+21 47 40.1	16.0		403
1991 VU		1991 11 10.63819	03 34 08.25	+21 47 35.0			403
1991 VU		1991 11 14.61105	03 30 28.4	+21 19 07	16.0		403
1991 VH1		1991 11 05.56782	03 29 27.4	+22 00 16	16.0		403
1991 VH1		1991 11 05.57963	03 29 27.0	+22 00 08			403

408 Nyukasa
K. Watanabe, 3-8 Mason Hashimoto B-203, Atsubetsu Chuo 3 Jo 4 Chome,
Atsubetsu-Ku, Sapporo 004, Japan
Observers M. Hirasawa, S. Suzuki
Measurer K. Watanabe
0.16-m f/3.8 Wright-Schmidt camera
AGK3

1991 TH2		1991 11 03.46840	02 10 14.04	+08 10 10.3	16.5		408
1991 TH2		1991 11 03.48924	02 10 13.06	+08 10 06.1			408

1991 TH2	1991 11 03.50139	02 10 12.38	+08 09 58.3				408
1991 TH2	1991 11 04.51563	02 09 24.09	+08 05 00.9	16.0			408
1991 TH2	1991 11 04.53646	02 09 23.03	+08 04 56.5				408
1991 TJ2	1991 11 03.52118	02 04 47.05	+09 03 07.1	16.5			408
1991 TJ2	1991 11 03.54201	02 04 45.67	+09 03 02.7				408
1991 TJ2	1991 11 04.55122	02 03 38.52	+09 01 51.3	16.0			408
1991 TJ2	1991 11 04.57118	02 03 37.34	+09 01 50.6				408

411 Oizumi
T. Kobayashi, 1717-2 Shimo-Koizumi, Oizumi-machi, Ora-gun, Gunma-ken, 370-05 Japan
0.16-m f/4.8 reflector + CCD
GSC

1989 AX1	1991 11 04.77659	04 19 40.63	+32 11 44.5				411
1989 AX1	1991 11 04.78216	04 19 40.31	+32 11 45.3				411
1991 VK	1991 12 09.39523	22 08 01.21	+18 45 04.5				411
1991 VK	1991 12 09.39866	22 08 00.38	+18 44 59.9				411
1991 VK	1991 12 09.40104	22 07 59.88	+18 44 57.5				411
1991 VK	1991 12 09.40439	22 07 59.17	+18 44 53.3				411
1991 VK	1991 12 09.40760	22 07 58.40	+18 44 49.6				411
1991 VK	1991 12 09.41190	22 07 57.47	+18 44 43.5				411
1991 VK	1991 12 11.42219	22 00 45.29	+18 01 47.0				411
1991 VK	1991 12 11.42554	22 00 44.39	+18 01 42.9				411
1991 VK	1991 12 12.43253	21 56 50.03	+17 37 50.1				411
1991 VK	1991 12 12.43590	21 56 49.13	+17 37 44.8				411
1991 VK	1991 12 12.43815	21 56 48.58	+17 37 43.2				411
1992 AC	1992 01 10.60023	09 04 18.70	+09 30 22.6	14			411
1992 AC	1992 01 10.60226	09 04 18.91	+09 30 27.3				411
1992 AC	1992 01 10.60316	09 04 19.02	+09 30 30.0				411
1992 AC	1992 01 10.60567	09 04 19.27	+09 30 36.1				411
1992 AC	1992 01 10.60749	09 04 19.49	+09 30 41.0				411
1992 AC	1992 01 10.60837	09 04 19.57	+09 30 43.2				411
1992 AC	1992 01 11.50897	09 06 01.11	+10 09 14.6				411
1992 AC	1992 01 11.50994	09 06 01.23	+10 09 17.2				411
1992 AC	1992 01 11.51087	09 06 01.28	+10 09 19.2				411
1992 AC	1992 01 11.51669	09 06 01.92	+10 09 35.0				411
1992 AC	1992 01 11.51773	09 06 02.08	+10 09 37.6				411
1992 AC	1992 01 11.51943	09 06 02.26	+10 09 42.2				411

413 Siding Spring
R. H. McNaught, Siding Spring Observatory, Coonabarabran, N.S.W. 2357, Australia
Observers R. H. McNaught, M. A. Read, K. S. Russell, S. M. Hughes, D. I. Steel
Measurer R. H. McNaught
1.2-m U.K. Schmidt, Uppsala Southern Schmidt, 1.0-m reflector + CCD

1988 BL5	1984 03 07.56247	10 34 19.62	-09 34 47.6	18	V		413
1988 BL5	1984 03 07.60413	10 34 17.19	-09 34 37.4				413
1988 BL5	1992 01 15.71369	11 08 18.20	-07 53 37.9	18	V		413
1991 QF	1991 11 26.52955	21 53 35.41	-26 38 40.9				413
1991 QF	1991 11 26.53156	21 53 35.67	-26 38 38.2				413
1991 SX	1991 11 02.48611	23 10 48.89	-16 22 48.5				413
1991 SB1	1991 11 02.48611	23 10 07.22	-17 30 25.8				413
1991 SE1	1991 11 02.48611	23 12 13.45	-17 33 15.4				413
1991 TC	1991 11 02.47049	22 03 57.57	-10 32 20.9			V	413
1991 TC	1991 11 08.49734	22 08 36.02	-08 48 21.9				413
1991 TC	1991 11 08.49990	22 08 36.15	-08 48 19.2				413
1991 TC	1991 11 26.52245	22 26 04.47	-04 05 15.5				413
1991 TC	1991 11 26.52448	22 26 04.55	-04 05 13.3				413

1991 TX		1991	11	27.57387	01	49	36.28	-16	20	45.9		413
1991 TX		1991	11	27.57728	01	49	36.16	-16	20	40.5		413
1991 TY		1991	11	14.66447	01	37	58.29	-36	12	07.6		413
1991 TY		1991	11	26.57334	01	38	35.53	-32	43	42.6		413
1991 TY		1991	11	26.57740	01	38	35.57	-32	43	37.4		413
1991 TY		1991	11	26.58429	01	38	35.68	-32	43	28.6		413
1991 TY		1991	11	27.45714	01	38	49.06	-32	26	17.9		413
1991 TY		1991	11	27.49881	01	38	49.55	-32	25	29.3		413
1991 TY		1991	11	27.58381	01	38	50.63	-32	23	46.5		413
1991 TY		1991	11	27.58782	01	38	50.70	-32	23	41.5		413
1991 TC1		1991	11	02.50058	23	49	45.12	-17	37	44.9		413
1991 TD1		1991	10	18.73160	03	23	39.21	-03	42	36.6		413
1991 TD1		1991	11	02.52119	03	13	49.03	-10	42	18.2	p	413
1991 TD1		1991	11	13.64410	03	04	14.94	-14	42	32.1		413
1991 TD1		1991	11	26.70873	02	54	32.69	-17	27	53.5		413
1991 TD1		1991	11	27.52710	02	54	04.42	-17	34	04.2	16.5 V	413
1991 TD1		1991	11	27.56876	02	54	02.90	-17	34	20.5		413
1991 TD1		1991	11	29.44780	02	53	01.75	-17	46	36.5		413
1991 TE1		1991	10	18.73160	03	12	51.12	-01	58	32.6		413
1991 TF1		1991	10	18.73160	03	20	10.45	-02	10	10.1		413
1991 UG1		1991	11	02.50990	01	07	58.90	-37	51	46.6	t	413
1991 UG1		1991	11	13.63623	01	00	22.28	-31	40	56.8		413
1991 UG1		1991	11	25.51774	00	58	15.42	-24	50	54.5		413
1991 UG1		1991	11	25.52117	00	58	15.42	-24	50	46.9		413
1991 UG1		1991	11	25.52495	00	58	15.36	-24	50	39.0		413
1991 VE		1991	11	27.54020	02	01	24.74	+09	22	17.9		413
1991 VE		1991	11	27.55530	02	01	22.02	+09	22	20.6		413
1991 VE		1991	11	27.55875	02	01	21.47	+09	22	21.5		413
1991 VE		1991	11	27.56567	02	01	20.79	+09	22	18.8		413
1991 VH	*	1991	11	09.41353	23	24	40.42	-67	14	44.2	17 V	413
1991 VH		1991	11	09.45867	23	25	02.60	-67	13	15.5		413
1991 VH		1991	11	13.61782	23	56	25.20	-64	53	52.9	F	413
1991 VH		1991	11	13.62824	23	56	29.77	-64	53	32.4	F	413
1991 VH		1991	11	14.49236	00	02	21.65	-64	21	56.4	F	413
1991 VH		1991	11	14.64317	00	03	19.17	-64	15	59.3	F	413
1991 VH		1991	11	16.65845	00	15	58.77	-62	58	19.1	F	413
1991 VH		1991	11	16.66620	00	16	01.36	-62	58	00.9	F	413
1991 VH		1991	11	17.68255	00	21	59.66	-62	17	12.6		413
1991 VH		1991	11	17.69074	00	22	02.45	-62	16	51.9		413
1991 VH		1991	11	18.69022	00	27	39.66	-61	35	50.6		413
1991 VH		1991	11	18.69734	00	27	42.20	-61	35	28.9		413
1991 VH		1991	11	25.50433	01	00	24.50	-56	34	36.3		413
1991 VH		1991	11	25.50619	01	00	24.94	-56	34	31.2		413
1991 VH		1991	11	25.54326	01	00	33.65	-56	32	45.4		413
1991 VH		1991	11	25.54699	01	00	34.54	-56	32	34.8		413
1991 VH		1991	11	26.63617	01	05	01.66	-55	41	07.1		413
1991 VH		1991	11	26.65337	01	05	05.63	-55	40	16.0		413
1991 VH		1991	11	26.65706	01	05	06.60	-55	40	04.9		413
1991 VH		1991	11	26.66061	01	05	07.38	-55	39	54.7		413
1991 VH		1991	11	27.51292	01	08	31.49	-54	59	27.0		413
1991 VH		1991	11	27.51488	01	08	31.91	-54	59	21.3		413
1991 VH		1991	11	27.51803	01	08	32.63	-54	59	12.2		413
1991 VH		1991	11	27.52360	01	08	33.76	-54	58	55.6		413
1991 VH		1991	12	20.55921	02	16	10.63	-34	31	32.1		413
1991 VH		1991	12	20.56120	02	16	10.92	-34	31	25.0		413
1991 VH		1991	12	20.56671	02	16	11.65	-34	31	06.0		413
1991 VH		1991	12	21.58118	02	18	35.35	-33	33	39.9		413
1991 VH		1991	12	21.58406	02	18	35.70	-33	33	29.1		413
1991 VH		1991	12	21.59273	02	18	36.89	-33	32	58.9		413

1991 VH		1991 12 21.59549	02 18 37.29	-33 32 49.7						413
1991 VJ	*	1991 11 09.48694	23 46 29.14	-37 07 56.8	17.5	V				413
1991 VJ		1991 11 09.53208	23 46 31.36	-37 06 24.5						413
1991 VJ		1991 11 13.59097	23 50 03.21	-34 50 22.3						413
1991 VJ		1991 11 26.54299	00 03 25.56	-27 41 27.3						413
1991 VJ		1991 11 26.54524	00 03 25.72	-27 41 22.6						413
1991 VJ		1991 11 27.43103	00 04 26.65	-27 12 38.0						413
1991 VJ		1991 11 27.43463	00 04 26.88	-27 12 30.8						413
1991 VJ		1991 11 27.44000	00 04 27.27	-27 12 20.5						413
1991 WA	*	1991 11 29.45312	02 01 35.77	-20 57 38.4	16	V				413
1991 WA		1991 11 29.50174	02 01 30.13	-20 48 06.7						413
1991 WA		1991 12 01.42488	01 58 36.05	-14 44 14.4						413
1991 WA		1991 12 01.55171	01 58 24.73	-14 21 55.9					F	413
1991 WA		1991 12 01.55775	01 58 24.35	-14 20 51.2					F	413
1991 WA		1991 12 02.49549	01 57 17.75	-11 42 23.3						413
1991 WA		1991 12 02.61539	01 57 08.70	-11 22 54.7					F	413
1991 WA		1991 12 04.44760	01 55 26.34	-06 46 05.6					F	413
1991 WA		1991 12 04.45315	01 55 26.03	-06 45 16.3					F	413
1991 WA		1991 12 04.50883	01 55 22.79	-06 37 29.5	17	V			F	413
1991 WA		1991 12 20.52616	01 54 04.44	+15 33 19.8						413
1991 WA		1991 12 20.52804	01 54 04.49	+15 33 25.8						413
1991 WA		1991 12 20.52988	01 54 04.44	+15 33 30.3						413
1991 WA		1991 12 20.53169	01 54 04.55	+15 33 35.1						413
1991 WA		1991 12 20.53766	01 54 04.68	+15 33 52.6						413
1991 WA		1991 12 20.54856	01 54 04.90	+15 34 23.5						413
1991 WA		1991 12 20.55058	01 54 04.98	+15 34 29.3						413
1991 XB		1991 12 20.57196	04 21 50.41	+07 42 38.5						413
1991 XB		1991 12 20.57396	04 21 50.66	+07 42 33.7						413
1991 XB		1991 12 20.58693	04 21 52.08	+07 42 00.6						413
1991 XB		1991 12 20.58964	04 21 52.34	+07 41 54.5						413
1991 XB		1991 12 20.59241	04 21 52.59	+07 41 46.8						413
1992 AA		1992 01 10.47384	04 42 28.43	+21 31 04.2						413
1992 AB		1992 01 10.46748	04 15 02.00	+20 50 38.6						413
1992 AC		1992 01 10.49619	09 04 07.76	+09 26 30.0						413
(4551)		1991 12 08.49986	04 34 10.64	+02 58 22.6						413
(4551)		1991 12 08.55194	04 34 07.54	+02 58 25.6						413
(4953)		1991 11 26.55255	00 11 02.31	-31 37 04.8						413
(4953)		1991 11 26.55591	00 11 02.06	-31 37 00.8						413
(4969)		1991 11 28.63935	06 02 31.63	-32 43 46.5						413
(4969)		1991 11 28.70185	06 02 30.20	-32 44 41.2						413

474 Mount John
A. C. Gilmore, P.O. Box 57, Lake Tekapo, New Zealand
Observer A. C. Gilmore
Measurer P. M. Kilmartin
0.6-m f/14 Cassegrain reflector
AGK3, SAOC, CPZ, field plates from Carter Observatory

1977 RZ8		1991 05 08.51865	14 31 24.93	-39 40 46.5	16.7					474
1977 RZ8		1991 05 08.53311	14 31 23.95	-39 40 45.4						474
1977 RZ8		1991 06 11.48411	14 05 35.34	-37 16 06.2	17.5					474
1977 RZ8		1991 06 11.50295	14 05 35.07	-37 15 59.8						474
1988 RD		1991 07 10.55226	15 58 29.11	-56 46 51.5	17.4					474
1988 RD		1991 07 10.56782	15 58 28.38	-56 46 43.5						474

494 Stakenbridge
B. Manning, Moonrakers, Stakenbridge, Churchill, Kidderminster,
Worcs. DY10 3LS, England

1991 VO2	*	1991 11 11.96101	03 22 05.15	+18 09 44.5	16.8					494
1991 VO2		1991 11 12.93528	03 20 58.73	+18 10 11.4						494

1991 VO2		1991 11 12.95728	03 20 57.13	+18 10 11.1			494
1991 VP2	*	1991 11 11.96101	03 23 55.31	+18 23 19.7	16.3		494
1991 VP2		1991 11 12.93528	03 22 54.59	+18 19 50.6			494
1991 VP2		1991 11 12.95728	03 22 53.17	+18 19 46.0			494

541 Stefanik Observatory, Prague-Petrin
J. Manek, Pruchova 38/583, C-15000 Prague 5-Kosire, Czechoslovakia
0.2-m f/7 refractor, 0.37-m f/9 Maksutov-Cassegrain

(10)	1990 08 03.07465	23 28 37.63	+01 20 35.7		541
(10)	1990 08 03.08854	23 28 37.34	+01 20 36.1		541
(29)	1990 08 03.03125	22 20 59.73	-16 07 50.2		541
(29)	1990 08 03.04792	22 20 58.91	-16 07 52.8		541
(40)	1990 07 15.00729	22 08 03.11	-16 16 55.7		541
(40)	1990 07 15.02396	22 08 02.82	-16 17 01.5		541
(40)	1990 08 03.00868	21 56 49.01	-18 17 41.2		541
(40)	1990 08 03.02257	21 56 48.30	-18 17 46.5		541
(51)	1990 07 29.07813	21 31 38.21	-03 30 06.3		541
(51)	1990 07 29.08854	21 31 37.67	-03 30 10.4		541
(51)	1990 08 02.98837	21 27 36.35	-04 01 01.4		541
(51)	1990 08 17.89987	21 14 35.99	-05 55 32.4		541
(51)	1990 08 17.92071	21 14 34.86	-05 55 41.6		541
(85)	1990 07 22.95990	20 30 42.09	+03 16 54.7		541
(85)	1990 07 22.98941	20 30 40.68	+03 16 52.3		541
(85)	1990 08 02.90747	20 22 20.93	+02 35 58.9		541
(85)	1990 08 02.92830	20 22 19.92	+02 35 51.9		541
(85)	1990 08 17.87846	20 12 21.58	+00 51 43.2		541
(85)	1990 08 17.89640	20 12 20.91	+00 51 35.4		541
(194)	1990 07 22.99288	20 44 54.74	+02 43 18.7		541
(194)	1990 07 23.01372	20 44 53.95	+02 43 03.7		541
(194)	1990 08 02.94271	20 37 55.77	+00 15 51.4		541
(194)	1990 08 02.96632	20 37 54.80	+00 15 29.4		541

571 Cavriana
L. Lai, Via Mantovana 130, I-37062 Dossobuono (Verona), Italy
Observers L. Lai, I. Rocchetti, G. Vesentini
0.4-m f/5 reflector
SAOC

(33)	1990 12 16.92917	03 06 46.70	+20 03 41.4		571
(33)	1990 12 16.94306	03 06 46.48	+20 03 40.0		571
(56)	1991 10 02.84375	22 50 01.07	-02 21 30.4		571
(56)	1991 10 02.85903	22 50 00.69	-02 21 38.7		571
(133)	1991 10 02.84375	22 48 21.22	-01 40 19.1		571
(133)	1991 10 02.85903	22 48 20.67	-01 40 20.8		571
(1029)	1990 12 16.92917	03 04 37.45	+19 09 58.0		571
(1029)	1990 12 16.94306	03 04 36.92	+19 09 55.7		571
(1066)	1991 01 16.93958	08 06 34.03	+26 15 24.1		571
(1066)	1991 01 16.95833	08 06 32.74	+26 15 28.0		571
(2431)	1991 10 04.85833	23 39 38.63	+01 09 36.4		571
(2431)	1991 10 04.87361	23 39 38.05	+01 09 34.3		571
(4335)	1991 01 16.93958	08 05 19.55	+25 43 43.6		571
(4335)	1991 01 16.95833	08 05 18.16	+25 43 48.1		571

573 Eldagsen
W. Bonk, Nordstrasse 33, W-3257 Springe 3, Federal Republic of Germany
AGK3

(91)	1991 10 09.84702	01 43 22.70	+11 30 28.2		573
(91)	1991 10 09.85865	01 43 21.98	+11 30 26.3		573
(426)	1991 10 27.73463	01 34 32.13	+40 19 12.1		573
(426)	1991 10 27.74499	01 34 31.42	+40 19 11.3		573

(1407)	1991 10 10.85986	02 08 19.50	+23 30 58.7	573
(1407)	1991 10 10.86525	02 08 19.40	+23 30 56.5	573
(1407)	1991 10 27.75957	01 56 09.79	+21 58 43.6	573
(1407)	1991 10 27.77456	01 56 09.19	+21 58 36.2	573

587 Sormano
P. Sicoli, Via Valli 9, I-22040 Garbagnate Monastero (Como), Italy
0.5-m f/5.9 reflector
Observers M. Cavagna, E. Colzani, P. Sicoli, A. Testa, G. Ventre
PPM

1991 VK	1991 11 26.77569	22 42 58.55	+21 53 26.7	587
1991 VK	1991 11 29.86042	22 35 19.93	+21 15 20.4	587
1991 VK	1991 11 29.88160	22 35 16.43	+21 15 02.2	587
1991 VK	1991 11 30.80764	22 32 55.97	+21 02 58.2	587
1991 VL	1991 11 29.91945	00 12 01.23	+18 55 49.8	587
1991 VL	1991 12 07.77014	00 03 25.16	+16 56 08.1	587

595 Farra d'Isonzo
L. Bittesini, Via dei Conventi 10, I-34070 Farra D'Isonzo (GO), Italy
Observers G. Lombardi, F. Piani
Measurers G. Lombardi, F. Piani
0.4-m f/4.5 reflector
PPM

1988 EU	1991 10 09.82708	01 34 22.34	+08 25 50.2	595
1988 EU	1991 10 09.89236	01 34 19.16	+08 25 38.7	595
1988 EU	1991 10 09.95764	01 34 15.99	+08 25 29.3	595
(1168)	1991 08 16.89097	19 47 04.49	+02 55 42.5	595
(1168)	1991 08 16.91042	19 47 04.20	+02 55 31.2	595
(2382)	1991 08 16.85694	18 39 03.15	+26 49 51.3	595
(2382)	1991 08 16.87500	18 39 02.88	+26 49 48.4	595
(2382)	1991 08 21.83750	18 38 54.31	+26 32 28.1	595
(2382)	1991 08 21.85833	18 38 54.10	+26 32 22.1	595
(2382)	1991 09 01.87292	18 42 03.96	+25 29 58.0	595
(2382)	1991 09 03.84722	18 43 07.82	+25 16 05.3	595
(2382)	1991 09 03.89306	18 43 09.35	+25 15 43.5	595
(2382)	1991 09 09.83403	18 47 14.35	+24 30 26.1	595
(2382)	1991 09 09.90347	18 47 17.62	+24 29 50.7	595
(2719)	1991 10 09.82708	01 35 07.55	+08 39 45.2	595
(2719)	1991 10 09.89236	01 35 03.84	+08 39 23.6	595
(2719)	1991 10 09.95764	01 34 59.61	+08 39 02.4	595

596 Colleverde di Guidonia
S. V. Casulli, Via M. Rosa 1, I-00010 Colleverde di Guidonia (RM), Italy
0.31-m f/2.8 Baker-Schmidt CCD camera
GSC

1986 VD1	1991 10 10.86944	02 37 26.12	+33 17 51.9	596
1986 VD1	1991 10 10.90903	02 37 24.23	+33 17 56.1	596
1986 VD1	1991 10 10.92222	02 37 23.74	+33 17 57.7	596
1987 SQ3	1991 10 02.87951	01 47 55.15	+23 04 36.9	596
1987 SQ3	1991 10 02.90729	01 47 53.70	+23 04 37.2	596
1988 EU	1991 10 08.85938	01 35 07.47	+08 28 29.1	596
1988 EU	1991 10 08.88576	01 35 06.34	+08 28 24.0	596
1988 EU	1991 10 08.91125	01 35 05.05	+08 28 21.8	596
(25)	1991 08 02.86674	21 08 54.54	+29 03 16.9	596
(25)	1991 08 02.89771	21 08 53.13	+29 03 14.2	596
(1683)	1991 10 05.94201	03 29 21.09	+36 37 05.1	596
(1683)	1991 10 05.96354	03 29 20.40	+36 37 10.8	596
(1683)	1991 10 05.97951	03 29 19.94	+36 37 15.1	596
(2104)	1991 08 31.82708	22 39 49.94	+18 59 32.2	596

(2104)	1991 08 31.84931	22 39 48.91	+18 59 28.6			596
(2444)	1991 10 05.85799	02 06 34.20	+37 36 47.8			596
(2444)	1991 10 05.88299	02 06 33.01	+37 36 49.7			596
(2444)	1991 10 05.90174	02 06 32.23	+37 36 49.8			596
(4988)	1991 10 04.80243	23 04 01.61	-05 23 27.7			596
(4988)	1991 10 04.81632	23 04 01.26	-05 23 33.5			596
(4988)	1991 10 05.79757	23 03 37.19	-05 28 07.4			596

657 Victoria, Climenhaga Observatory
J. B. Tatum, Dept. of Physics, University of Victoria, P.O. Box 1700, Victoria, BC V8W 2Y2, Canada
Observers J. B. Tatum, D. D. Balam, P. M. Krol
0.5-m reflector + CCD

1991 PA11	1991 09 17.31778	23 42 06.96	+01 36 25.1			657
1991 PA11	1991 09 17.35806	23 42 05.32	+01 36 01.6			657
1991 QJ	1991 09 03.28854	22 52 07.53	-07 09 11.5			657
1991 QJ	1991 09 03.32674	22 52 05.86	-07 09 35.9			657
1991 VE	1991 11 09.37431	03 35 55.16	+09 14 19.9			657
(621)	1991 05 11.31042	13 13 17.94	-05 33 23.9			657
(1001)	1991 07 07.28437	20 55 56.09	-07 32 13.2			657
(1249)	1991 08 11.28264	21 32 12.55	-06 45 23.0			657
(1249)	1991 08 12.29965	21 31 10.59	-06 49 07.9			657
(1249)	1991 08 12.33090	21 31 08.54	-06 49 15.3			657
(1807)	1991 08 15.41146	00 44 12.54	+10 53 54.2			657
(1843)	1991 07 07.28437	20 54 20.04	-08 56 52.2			657
(1891)	1991 08 06.35556	21 57 56.94	-12 35 46.5			657
(1991)	1991 09 17.31778	23 34 34.42	+03 24 39.6			657
(1991)	1991 09 17.35806	23 34 31.89	+03 24 37.2			657
(2104)	1991 08 06.37292	22 56 21.48	+19 19 42.4			657
(3728)	1991 09 03.27049	21 59 08.45	-03 04 20.8			657
(3728)	1991 09 03.30937	21 59 06.70	-03 04 49.7			657
(4074)	1991 09 17.31778	23 37 04.73	+01 34 24.8			657
(4074)	1991 09 17.35806	23 37 02.93	+01 34 05.9			657

675 Palomar
E. Helin, MS 183-501, Jet Propulsion Laboratory, Pasadena, CA 91109, U.S.A. (2)
C. Shoemaker, P.O. Box 984, Flagstaff, AZ 86002, U.S.A. (3)
C. J. van Houten, Sterrewacht Leiden, Postbus 9513, NL-2300 RA Leiden, The Netherlands (4)
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road, Flagstaff, AZ 86001, U.S.A. (6)
9 = 3 + 6
Observers J. Alu (2, S), T. Gehrels (4, L), E. Helin (2, S), H. E. Holt (9, S), T. M. King (9, S), K. Lawrence (2, S), D. H. Levy (3, S), C. M. Olmstead (9, S), P. Rose (2, S), C. S. Shoemaker (3, S), E. M. Shoemaker (3, S), L. A. Zimmerman (9, S)
Measurers K. Lawrence (2), T. M. King (3), C. M. Olmstead (9), P. Rose (2), C. S. Shoemaker (3), B. A. Skiff (9), C. J. van Houten (4), I. van Houten-Groeneveld (4), A. Wisse (4)
1.2-m (L) and 0.46-m (S) Schmidt telescopes

1964 VT1	1991 11 07.19079	00 01 17.46	-02 50 48.8		9	675
1964 VT1	1991 11 07.22361	00 01 16.90	-02 50 48.4		9	675
1964 VT1	1991 11 09.18697	00 00 50.54	-02 49 25.9	17.2	9	675
1964 VT1	1991 11 09.22847	00 00 49.98	-02 49 24.0		9	675
1971 BD3	1990 11 13.40868	04 13 39.44	+22 26 13.4	16.5	9	675
1971 BD3	1990 11 13.45330	04 13 36.95	+22 26 01.8		9	675
1971 BD3	1990 11 14.42674	04 12 45.12	+22 21 44.5	16.5	9	675
1971 BD3	1990 11 14.45833	04 12 43.35	+22 21 36.0		9	675

1972	RX1	1991	11	07.19079	23	50	33.72	-03	26	30.2		9	675
1972	RX1	1991	11	07.22361	23	50	34.04	-03	26	34.9		9	675
1972	RX1	1991	11	09.22847	23	50	51.40	-03	27	57.1		9	675
1973	SQ1	1990	01	26.46051	10	24	34.88	+02	57	09.6	18.0	3	675
1973	SQ1	1990	01	26.51441	10	24	33.66	+02	57	16.7		3	675
1973	SQ1	1990	01	28.43108	10	23	48.98	+03	00	50.0		3	675
1973	SQ1	1990	02	20.35330	10	13	17.23	+03	59	49.1	17.7	3	675
1973	SQ1	1990	02	20.38750	10	13	16.18	+03	59	57.4		3	675
1973	SQ3	1991	11	07.19079	00	03	35.52	-01	45	39.1		9	675
1973	SQ3	1991	11	07.22361	00	03	35.71	-01	45	45.1		9	675
1973	SQ3	1991	11	09.18697	00	03	51.28	-01	50	45.4	17.0	9	675
1973	SQ3	1991	11	09.22847	00	03	51.61	-01	50	51.2		9	675
1974	ST	1991	11	07.19079	00	11	55.61	-02	17	35.1		9	675
1974	ST	1991	11	07.22361	00	11	55.16	-02	17	36.5		9	675
1974	ST	1991	11	09.18697	00	11	30.80	-02	18	09.6	17.0	9	675
1974	ST	1991	11	09.22847	00	11	30.27	-02	18	09.3		9	675
1975	XF	1989	09	28.43576	02	13	43.68	+04	24	16.6		9	675
1975	XF	1989	09	28.48038	02	13	42.50	+04	23	52.6		9	675
1975	XF	1989	11	02.32473	01	48	43.30	-00	17	03.4		9	675
1975	XF	1989	11	02.36163	01	48	41.71	-00	17	12.8		9	675
1975	XF	1989	11	03.25434	01	48	03.71	-00	21	25.8		9	675
1975	XF	1989	11	03.29080	01	48	02.06	-00	21	36.1		9	675
1975	XH	1990	11	15.35642	03	17	56.85	+04	21	03.1		9	675
1975	XH	1990	11	16.36632	03	16	50.29	+04	20	58.0		9	675
1976	EB	1991	09	13.31910	23	33	23.53	-01	34	27.2	16.0	9	675
1976	EB	1991	09	13.35712	23	33	20.97	-01	34	33.9		9	675
1976	EB	1991	09	16.37674	23	30	09.39	-01	44	11.5	15.8	9	675
1976	EB	1991	09	16.41684	23	30	06.75	-01	44	19.0		9	675
1976	GX3	1991	11	09.34219	03	32	43.33	+14	47	56.6		9	675
1976	GX3	1991	11	09.38524	03	32	40.53	+14	47	44.1	17.5	9	675
1976	UD4	1991	11	07.19079	23	51	37.32	-02	55	22.2		9	675
1976	UD4	1991	11	07.22361	23	51	37.33	-02	55	23.0		9	675
1976	UD4	1991	11	09.18697	23	51	43.94	-02	56	00.6	17.2	9	675
1976	UD4	1991	11	09.22847	23	51	44.12	-02	56	01.3		9	675
1977	DN4	1991	11	09.19392	00	31	08.42	-00	50	53.7		9	675
1977	DN4	1991	11	09.23594	00	31	07.58	-00	50	58.0		9	675
1977	DY8	1991	09	15.41753	00	25	05.75	-01	07	18.3	17.2	9	675
1977	DY8	1991	09	15.46424	00	25	02.95	-01	07	29.4		9	675
1977	DY8	1991	09	17.36064	00	23	15.82	-01	15	43.3	17.2	9	675
1977	DY8	1991	09	17.39479	00	23	13.82	-01	15	52.6		9	675
1977	DY8	1991	11	07.19079	23	46	48.63	-02	52	08.3		9	675
1977	DY8	1991	11	07.22361	23	46	48.51	-02	52	02.1		9	675
1977	DY8	1991	11	09.18697	23	46	48.93	-02	46	36.3	17.8	9	675
1977	DY8	1991	11	09.22847	23	46	48.90	-02	46	27.0		9	675
1977	EF1	1991	09	14.38368	23	51	59.30	+03	27	35.8	17.5	9	675
1977	EF1	1991	09	14.43767	23	51	56.81	+03	27	04.9		9	675
1977	EF1	1991	09	17.34861	23	49	44.47	+02	58	50.2	17.2	9	675
1977	EW5	1991	09	11.32257	23	47	40.55	+01	14	28.5		9	675
1977	EW5	1991	09	11.37431	23	47	38.01	+01	14	19.3	17.2	9	675
1977	EW5	1991	09	14.38368	23	45	19.15	+01	05	12.7		9	675
1977	EW5	1991	09	14.43767	23	45	16.70	+01	05	03.0		9	675
1977	EW5	1991	09	15.36128	23	44	33.56	+01	02	09.4		9	675
1977	EW5	1991	09	15.39861	23	44	31.87	+01	02	02.1		9	675
1977	EW5	1991	09	17.34861	23	43	00.39	+00	55	51.4	17.0	9	675
1977	EW5	1991	09	17.38229	23	42	58.77	+00	55	45.2		9	675
1977	TD1	1990	11	15.35642	03	16	38.36	+09	11	40.1		9	675
1977	TD1	1990	11	15.38767	03	16	36.71	+09	11	21.9		9	675
1977	TD1	1990	11	16.36632	03	15	48.74	+09	01	31.8		9	675
1978	NQ1	1991	09	13.39444	23	51	08.98	+07	05	02.5	17.0	9	675

1978	NQ1	1991	09	13.43212	23	51	06.48	+07	04	49.7		9	675
1978	NQ1	1991	09	14.38368	23	50	06.68	+06	59	16.2	17.2	9	675
1978	NQ1	1991	09	14.43767	23	50	03.13	+06	58	57.0		9	675
1978	NQ1	1991	09	15.37153	23	49	04.32	+06	53	21.2	17.0	9	675
1978	NQ1	1991	09	15.40851	23	49	01.84	+06	53	07.7		9	675
1978	NQ1	1991	09	17.34861	23	46	59.54	+06	41	07.3	16.8	9	675
1978	NQ1	1991	09	17.38229	23	46	57.28	+06	40	54.2		9	675
1978	SM5	1991	11	09.19392	00	29	10.39	-00	04	04.7		9	675
1978	SM5	1991	11	09.23594	00	29	09.44	-00	04	06.3		9	675
1978	SM5	1991	11	10.15694	00	28	48.19	-00	04	23.5		9	675
1978	SM5	1991	11	10.39884	00	28	42.51	-00	04	26.6		9	675
1979	EL	1990	11	15.38767	03	31	18.57	+01	28	16.1		9	675
1979	EL	1990	11	16.36632	03	30	17.68	+01	31	36.8		9	675
1979	MS6	1991	11	03.20781	00	23	33.94	+08	59	17.8	16.5	2	675
1979	MS6	1991	11	03.23125	00	23	33.21	+08	59	06.7		2	675
1979	MS6	1991	11	05.20903	00	22	36.31	+08	46	28.0		2	675
1979	MS6	1991	11	05.23698	00	22	35.37	+08	46	17.2		2	675
1980	DD1	1991	11	07.19079	00	11	34.69	-02	44	50.6		9	675
1980	DD1	1991	11	07.22361	00	11	33.79	-02	44	46.3		9	675
1980	DD1	1991	11	09.18697	00	10	49.99	-02	42	08.4	18.5	9	675
1980	DD1	1991	11	09.22847	00	10	48.98	-02	42	03.5		9	675
1980	UC	1991	11	09.19392	00	32	46.56	-00	49	06.7		9	675
1980	UC	1991	11	09.23594	00	32	45.89	-00	49	08.3		9	675
1980	UC	1991	11	10.15694	00	32	33.48	-00	49	12.9		9	675
1980	XX	1990	11	14.42674	04	25	01.42	+16	37	08.3	16.8	9	675
1980	XX	1990	11	14.45833	04	24	59.40	+16	37	09.3	17.2	9	675
1981	DZ1	1990	11	15.35642	03	32	25.21	+04	30	33.2		9	675
1981	DZ1	1990	11	15.38767	03	32	23.72	+04	30	17.0		9	675
1981	EX15	1991	09	13.35712	23	36	28.68	+00	23	12.3	18.5	9	675
1981	GC	1991	11	09.19392	00	28	38.55	+05	07	43.3		9	675
1981	GC	1991	11	09.23594	00	28	37.39	+05	07	35.3		9	675
1981	GC	1991	11	10.15694	00	28	13.84	+05	04	39.5		9	675
1981	QP3	1991	11	07.19079	00	03	33.80	-03	48	39.3		9	675
1981	QP3	1991	11	07.22361	00	03	33.26	-03	48	38.9		9	675
1981	QP3	1991	11	09.18697	00	03	06.75	-03	48	10.6	17.8	9	675
1981	QP3	1991	11	09.22847	00	03	06.15	-03	48	09.6		9	675
1981	WR	1991	09	14.39288	00	07	58.52	-06	42	37.5	16.8	9	675
1981	WR	1991	09	14.44635	00	07	55.55	-06	43	01.3		9	675
1981	WR	1991	09	16.38663	00	06	12.14	-06	57	32.2	17.0	9	675
1981	WR	1991	09	16.42674	00	06	09.90	-06	57	49.9		9	675
1982	BJ	1989	01	10.35816	08	17	25.93	+18	38	27.3	17.0	3	675
1982	BJ	1989	01	10.39948	08	17	23.55	+18	39	22.9		3	675
1982	BJ	1989	01	14.44583	08	13	34.14	+20	12	04.3		3	675
1982	BJ	1989	01	30.33524	07	56	51.89	+26	21	14.8		3	675
1982	BJ	1989	02	01.27378	07	54	53.49	+27	03	51.2	16.3	3	675
1982	QM	1991	09	17.36064	00	37	06.56	-02	13	37.4	16.8	9	675
1982	QM	1991	09	17.39479	00	37	05.28	-02	13	54.0		9	675
1982	SC2	1989	09	28.43576	02	05	54.72	+04	47	10.4		9	675
1982	SC2	1989	09	28.48038	02	05	52.58	+04	46	55.0		9	675
1982	SL6	1991	11	07.19079	23	51	09.37	-00	08	37.3		9	675
1982	SL6	1991	11	07.22361	23	51	08.98	-00	08	35.8		9	675
1982	SL6	1991	11	09.18697	23	50	52.06	-00	06	40.9	17.5	9	675
1982	SL6	1991	11	09.22847	23	50	51.67	-00	06	38.3		9	675
1983	CM	1991	11	09.19392	00	25	50.31	+03	16	06.4		9	675
1983	CM	1991	11	09.23594	00	25	49.03	+03	16	05.9		9	675
1983	CM	1991	11	10.39884	00	25	16.53	+03	15	09.3		9	675
1983	EU	1991	11	09.19392	00	21	00.48	+00	16	27.6		9	675
1983	EU	1991	11	09.23594	00	20	59.54	+00	16	20.8		9	675
1983	EU	1991	11	10.15694	00	20	41.89	+00	13	27.4		9	675

1983	PB	1990	11	13.40868	04 16 44.62	+18	31	51.7	18.5	9 675
1983	PB	1990	11	13.45330	04 16 41.25	+18	31	50.4		9 675
1983	PB	1990	11	14.42674	04 15 30.88	+18	31	52.3	18.8	9 675
1983	PB	1990	11	14.45833	04 15 28.50	+18	31	53.5		9 675
1983	RL	1991	09	15.34132	23 00 29.28	+02	54	21.2		9 675
1983	RL	1991	09	15.38056	23 00 25.04	+02	54	49.6		9 675
1983	TD2	1991	11	10.41646	03 25 29.51	+07	39	08.0		9 675
1983	TD2	1991	11	10.44580	03 25 27.96	+07	38	53.4		9 675
1984	DE	1991	12	01.25329	03 18 28.02	+29	51	06.4	16.8	9 675
1984	DE	1991	12	01.28854	03 18 26.00	+29	50	56.4		9 675
1984	SX5	1991	09	13.31910	23 23 53.55	-05	22	42.3	16.8	9 675
1984	SX5	1991	09	13.35712	23 23 51.42	-05	23	04.8		9 675
1984	SX5	1991	09	16.37674	23 21 18.67	-05	51	51.2	16.8	9 675
1984	SX5	1991	09	16.41684	23 21 16.55	-05	52	14.0		9 675
1984	UC1	1991	11	09.19392	00 24 31.27	+06	02	26.3		9 675
1984	UC1	1991	11	09.23594	00 24 30.21	+06	02	16.7		9 675
1984	UC1	1991	11	10.15694	00 24 09.85	+05	58	19.4		9 675
1984	UC1	1991	11	10.39884	00 24 04.31	+05	57	21.4		9 675
1984	UD3	1991	09	14.38368	23 42 05.61	+05	16	59.1	17.0	9 675
1984	UD3	1991	09	14.43767	23 42 02.87	+05	16	31.5		9 675
1984	UD3	1991	09	17.34861	23 39 41.61	+04	51	05.6	16.5	9 675
1984	UD3	1991	09	17.38229	23 39 39.88	+04	50	47.7		9 675
1985	CG	1991	11	09.34219	03 19 31.54	+13	14	55.9		9 675
1985	CG	1991	11	09.38524	03 19 28.85	+13	14	48.5	16.5	9 675
1985	GU1	1991	11	07.33333	04 33 55.60	+38	52	12.4	17.8	3 675
1985	GU1	1991	11	07.36597	04 33 53.76	+38	52	17.8		3 675
1985	GU1	1991	11	09.41510	04 31 49.79	+38	59	06.2		3 675
1985	GU1	1991	11	09.44826	04 31 47.69	+38	59	12.5		3 675
1985	GU1	1991	11	12.41806	04 28 38.51	+39	07	43.4		3 675
1985	TG3	1989	01	10.34931	08 13 10.25	+22	32	44.3	17.7	3 675
1985	TG3	1989	01	11.37656	08 12 34.40	+22	33	23.5		3 675
1985	TG3	1989	01	11.41076	08 12 33.18	+22	33	26.1		3 675
1985	TG3	1989	01	30.33524	08 01 23.32	+22	42	23.5		3 675
1985	TG3	1989	01	31.28333	08 00 50.95	+22	42	37.7		3 675
1985	TG3	1989	01	31.32144	08 00 49.70	+22	42	40.1		3 675
1985	TG3	1990	02	20.25590	10 02 50.42	+06	08	05.1	17.9	3 675
1985	TG3	1990	02	20.32656	10 02 48.17	+06	08	13.0		3 675
1985	TG3	1990	03	26.19792	09 47 35.73	+07	06	50.3	18.3	3 675
1985	TG3	1990	03	26.23229	09 47 35.13	+07	06	52.2		3 675
1986	CD2	1991	11	09.18697	23 56 00.22	+02	08	26.0	18.5	9 675
1986	CD2	1991	11	09.22847	23 55 59.60	+02	08	27.8		9 675
1986	QB1	1991	09	14.39288	23 42 14.58	-06	58	14.8	16.8	9 675
1986	QB1	1991	09	14.44635	23 42 11.86	-06	58	29.6		9 675
1986	RY5	1990	11	13.40868	04 08 20.74	+19	10	21.9	17.5	9 675
1986	RY5	1990	11	13.45330	04 08 17.92	+19	10	06.4		9 675
1986	RY5	1990	11	14.42674	04 07 18.06	+19	04	53.1	17.2	9 675
1986	RY5	1990	11	14.45833	04 07 16.06	+19	04	43.0		9 675
1986	RF13	1991	09	11.32257	00 00 29.66	-04	06	27.1		9 675
1986	RF13	1991	09	11.37431	00 00 27.18	-04	06	46.4	17.0	9 675
1986	RF13	1991	09	14.39288	23 58 13.45	-04	24	17.2	16.8	9 675
1986	RF13	1991	09	14.44635	23 58 10.93	-04	24	35.9		9 675
1986	RF13	1991	09	16.38663	23 56 43.32	-04	35	51.3	16.8	9 675
1986	RF13	1991	09	16.42674	23 56 41.42	-04	36	05.0		9 675
1986	TS6	1991	03	12.36580	12 42 06.19	-09	55	18.3	18.1	3 675
1986	TS6	1991	03	12.39774	12 42 05.20	-09	55	16.2		3 675
1986	VT	1991	09	11.32257	23 48 31.13	-00	24	06.5		9 675
1986	VT	1991	09	11.37431	23 48 28.71	-00	24	22.2	16.8	9 675
1986	VT	1991	09	13.31910	23 47 04.63	-00	34	26.6		9 675
1986	VT	1991	09	15.36128	23 45 35.27	-00	45	08.7	16.8	9 675

1986	VT	1991	09	15.39861	23	45	33.58	-00	45	20.7		9	675
1986	VT	1991	09	16.37674	23	44	50.54	-00	50	33.0	16.5	9	675
1986	VT	1991	09	16.41684	23	44	48.71	-00	50	45.2		9	675
1986	VF5	1991	11	07.19079	23	59	24.27	+03	11	52.0		9	675
1986	VF5	1991	11	07.22361	23	59	23.67	+03	11	52.1		9	675
1986	VF5	1991	11	09.18697	23	58	48.55	+03	13	04.1	17.2	9	675
1986	VF5	1991	11	09.22847	23	58	47.84	+03	13	07.3		9	675
1986	WP8	1991	11	09.19392	00	22	09.81	+00	11	13.7		9	675
1986	WP8	1991	11	09.23594	00	22	08.88	+00	11	09.7		9	675
1987	HK	1991	05	13.35295	14	37	14.47	-17	13	31.0	17.7	3	675
1987	HK	1991	05	15.30486	14	35	30.51	-17	05	06.3		3	675
1987	OC	1991	11	05.41337	02	39	13.52	+47	02	16.6	16.0	2	675
1987	OC	1991	11	06.31163	02	38	06.36	+46	50	26.1		2	675
1987	OC	1991	11	06.33455	02	38	04.61	+46	50	06.8		2	675
1987	QG2	1991	12	01.25329	03	18	18.29	+30	47	02.1	17.0	9	675
1987	QG2	1991	12	01.28854	03	18	16.07	+30	46	51.4		9	675
1987	QG2	1991	12	03.25329	03	16	23.98	+30	35	17.8		9	675
1987	QG2	1991	12	03.28438	03	16	22.18	+30	35	08.4		9	675
1987	QW7	1991	09	15.34132	23	05	40.21	-02	09	20.0	16.9	9	675
1987	QW7	1991	09	15.38056	23	05	38.26	-02	09	34.6		9	675
1987	RO3	1991	09	15.34132	23	04	13.25	+01	57	30.5	17.2	9	675
1987	RO3	1991	09	15.38056	23	04	11.59	+01	57	10.1		9	675
1987	RO3	1991	09	17.25139	23	03	01.63	+01	41	58.4		9	675
1987	RO3	1991	09	17.29097	23	02	59.99	+01	41	39.2	17.2	9	675
1987	SG2	1991	09	13.31910	23	29	37.65	-04	04	09.1	17.0	9	675
1987	SG2	1991	09	13.35712	23	29	35.72	-04	04	29.1		9	675
1987	SG2	1991	09	16.37674	23	27	07.89	-04	29	52.1	17.2	9	675
1987	SG2	1991	09	16.41684	23	27	05.92	-04	30	11.2		9	675
1987	UJ	1991	11	09.19392	00	14	17.95	+04	44	38.2		9	675
1987	UJ	1991	11	09.23594	00	14	17.49	+04	44	34.9		9	675
1987	UJ	1991	11	10.15694	00	14	09.33	+04	43	38.5		9	675
1987	UN	1991	11	03.19566	23	49	37.08	-17	29	36.6	15.5	2	675
1987	UN	1991	11	03.21875	23	49	36.74	-17	29	20.2		2	675
1987	UN	1991	11	05.19809	23	49	18.74	-17	05	17.6		2	675
1987	UN	1991	11	05.22587	23	49	18.43	-17	04	56.6		2	675
1987	UN	1991	12	07.10990	00	00	38.95	-09	37	31.6	15.5	2	675
1987	UN	1991	12	07.13455	00	00	40.07	-09	37	09.0		2	675
1988	BX1	1989	01	10.49653	11	07	48.46	+42	34	01.5	17.6	3	675
1988	BX1	1989	01	10.53854	11	07	48.14	+42	34	19.8		3	675
1988	BX1	1989	01	11.51771	11	07	39.08	+42	41	19.7		3	675
1988	BX1	1989	01	11.54583	11	07	38.83	+42	41	32.3		3	675
1988	BY1	1989	01	10.50538	11	13	27.25	+31	34	01.0	18.1	3	675
1988	BY1	1989	01	10.54740	11	13	26.85	+31	34	11.6		3	675
1988	BY1	1989	01	11.52674	11	13	16.94	+31	38	31.4		3	675
1988	BY1	1989	03	09.33681	10	45	44.53	+34	48	51.4	17.9	3	675
1988	BY1	1989	03	09.36892	10	45	43.30	+34	48	52.4		3	675
1988	BY1	1990	02	22.52222	12	52	47.39	+13	44	55.8	18.3	3	675
1988	BY1	1990	02	22.54722	12	52	46.90	+13	44	59.3		3	675
1988	BY1	1990	02	24.54618	12	52	04.45	+13	50	45.4		3	675
1988	BY1	1990	03	27.33056	12	37	26.79	+15	06	54.7	18.1	3	675
1988	BY1	1990	03	27.36389	12	37	25.80	+15	06	59.7		3	675
1988	BY1	1990	04	22.26528	12	24	14.01	+15	22	33.0	18.3	3	675
1988	BY1	1990	04	22.29792	12	24	13.24	+15	22	30.4		3	675
1988	BL2	1991	11	07.20990	00	44	56.24	+01	07	54.7	17.3	3	675
1988	BL2	1991	11	07.24236	00	44	54.82	+01	07	59.0		3	675
1988	BL2	1991	11	09.19392	00	43	37.72	+01	16	13.4		9	675
1988	BL2	1991	11	09.21580	00	43	36.83	+01	16	16.8		3	675
1988	BL2	1991	11	09.23594	00	43	36.01	+01	16	24.3		9	675
1988	BL2	1991	11	10.15694	00	43	01.68	+01	20	24.9		9	675

1988	BL2	1991	11	10.39884	00	42	52.57	+01	21	28.2			9	675
1988	VM3	1991	09	11.32257	00	14	31.09	+01	19	45.2			9	675
1988	VM3	1991	09	11.37431	00	14	28.25	+01	19	34.5		17.2	9	675
1988	VM3	1991	09	15.36128	00	11	02.13	+01	06	54.4			9	675
1988	VM3	1991	09	15.39861	00	11	00.05	+01	06	46.8		16.5	9	675
1988	VM3	1991	11	07.19079	23	42	54.45	-00	17	06.9			9	675
1988	VM3	1991	11	07.22361	23	42	54.96	-00	17	01.0			9	675
1988	VM3	1991	11	09.18697	23	43	30.24	-00	11	23.4		17.5	9	675
1988	VM3	1991	11	09.22847	23	43	30.89	-00	11	15.7			9	675
1988	VK4	1991	11	07.19079	00	10	53.65	-00	52	40.2			9	675
1988	VK4	1991	11	07.22361	00	10	52.74	-00	52	38.2			9	675
1988	VK4	1991	11	09.22847	00	10	05.07	-00	48	47.7			9	675
1988	VS4	1992	01	01.16858	04	29	18.39	+06	57	27.9		17.5	3	675
1988	VS4	1992	01	01.20747	04	29	16.71	+06	57	13.7			3	675
1988	WB	1991	11	07.19079	23	52	39.58	+02	03	27.0			9	675
1988	WB	1991	11	07.22361	23	52	39.16	+02	03	24.9			9	675
1988	WB	1991	11	09.18697	23	52	22.56	+01	59	34.1		17.5	9	675
1988	WB	1991	11	09.22847	23	52	22.18	+01	59	29.3			9	675
1988	XD1	1991	09	14.39288	23	54	53.59	-08	25	03.1		18.2	9	675
1988	XD1	1991	09	14.44635	23	54	50.28	-08	25	20.3			9	675
1988	XD1	1991	09	16.38663	23	52	56.20	-08	35	47.4		16.8	9	675
1988	XD1	1991	09	16.42674	23	52	53.68	-08	36	00.3			9	675
1989	AU1	1990	01	26.46051	10	27	09.52	+02	05	09.8		17.7	3	675
1989	AU1	1990	01	26.51441	10	27	08.34	+02	05	14.4			3	675
1989	AU1	1990	01	28.43108	10	26	22.70	+02	07	51.1			3	675
1989	AU1	1990	02	20.35330	10	15	30.07	+02	57	59.5		17.4	3	675
1989	AU1	1990	02	20.38750	10	15	29.06	+02	58	06.4			3	675
1989	AU1	1990	03	26.19792	10	00	27.01	+04	37	53.5		17.8	3	675
1989	AU1	1990	03	26.23229	10	00	26.45	+04	37	59.1			3	675
1989	AU1	1991	03	12.36580	12	37	16.26	-10	46	33.1			3	675
1989	AU1	1991	03	12.39774	12	37	15.37	-10	46	27.5			3	675
1989	AV2	1990	01	26.45052	09	59	58.70	-04	47	24.5		18.1	3	675
1989	AV2	1990	01	28.38472	09	59	03.54	-04	47	59.9		18.0	3	675
1989	AV2	1990	01	28.42153	09	59	02.44	-04	47	58.3			3	675
1989	AV2	1990	02	20.24392	09	47	07.82	-04	31	29.8		17.9	3	675
1989	AV2	1990	02	22.32031	09	46	01.93	-04	28	05.9			3	675
1989	AV2	1990	02	22.35642	09	46	00.70	-04	28	00.8			3	675
1989	AV2	1990	03	30.23889	09	31	20.21	-03	05	20.5			3	675
1989	AV2	1990	03	30.27049	09	31	19.73	-03	05	14.6			3	675
1989	CD	1991	11	09.19392	00	26	43.04	-00	20	57.6			9	675
1989	CD	1991	11	09.23594	00	26	42.20	-00	20	59.7			9	675
1989	CD	1991	11	10.15694	00	26	24.71	-00	21	36.1			9	675
1989	CD	1991	11	10.39884	00	26	19.94	-00	21	44.4			9	675
1989	CH1	1991	12	08.16441	01	31	21.69	-12	55	48.9		17.0	2	675
1989	CH1	1991	12	08.19323	01	31	21.54	-12	55	36.2			2	675
1989	CN1	1991	09	15.36128	00	13	35.05	-01	28	48.7			9	675
1989	CN1	1991	09	15.39861	00	13	33.05	-01	28	58.7			9	675
1989	CN1	1991	09	15.41753	00	13	32.10	-01	29	06.3		17.5	9	675
1989	CN1	1991	09	15.46424	00	13	29.45	-01	29	17.3			9	675
1989	CN1	1991	09	17.36064	00	11	47.25	-01	37	57.7		17.5	9	675
1989	CN1	1991	09	17.39479	00	11	45.27	-01	38	06.9			9	675
1989	CO3	1991	11	09.19392	00	32	35.07	+03	22	04.0			9	675
1989	CO3	1991	11	09.23594	00	32	34.57	+03	21	51.4			9	675
1989	CO3	1991	11	10.39884	00	32	23.12	+03	15	31.8			9	675
1989	CD4	1991	12	01.25329	03	22	16.92	+26	44	22.4		17.0	9	675
1989	CD4	1991	12	01.28854	03	22	14.77	+26	44	12.6		16.5	9	675
1989	CD4	1991	12	03.25329	03	20	25.53	+26	33	47.6			9	675
1989	CD4	1991	12	03.28438	03	20	23.75	+26	33	38.8			9	675
1989	CJ5	1991	11	07.19079	23	55	33.83	+02	02	30.7			9	675

1989	CJ5	1991	11	07.22361	23	55	34.10	+02	02	34.1		9	675
1989	CJ5	1991	11	09.18697	23	55	58.27	+02	04	37.2	17.2	9	675
1989	CJ5	1991	11	09.22847	23	55	58.76	+02	04	40.3		9	675
1989	EL6	1991	09	11.32257	23	52	11.14	-01	21	18.2		9	675
1989	EL6	1991	09	11.37431	23	52	08.17	-01	21	32.7	17.8	9	675
1989	EL6	1991	09	15.36128	23	48	31.78	-01	40	21.5	17.5	9	675
1989	EL6	1991	09	15.39861	23	48	29.67	-01	40	32.6		9	675
1989	EL6	1991	09	16.37674	23	47	35.31	-01	45	16.5	17.2	9	675
1989	EL6	1991	09	16.41684	23	47	32.97	-01	45	27.5		9	675
1989	FJ	1991	11	07.19079	00	09	42.80	-03	28	44.4		9	675
1989	FJ	1991	11	07.22361	00	09	41.84	-03	28	44.4		9	675
1989	FJ	1991	11	09.18697	00	08	56.69	-03	28	09.2	18.5	9	675
1989	FJ	1991	11	09.22847	00	08	55.61	-03	28	08.8		9	675
1989	LJ	1991	12	07.32708	05	19	49.09	+18	31	05.8	16.0	2	675
1989	LJ	1991	12	07.35017	05	19	47.58	+18	31	11.4		2	675
1989	NB1	1991	12	07.47188	06	36	50.70	+06	19	42.1	17.0	2	675
1989	NB1	1991	12	07.50061	06	36	49.71	+06	19	44.6		2	675
1989	RO2	1991	03	12.36580	12	36	57.10	-11	23	29.6	18.1	3	675
1989	RO2	1991	03	12.39774	12	36	55.12	-11	23	29.8		3	675
1989	SX4	1989	11	02.32473	01	29	20.46	-01	23	59.2		9	675
1989	SX4	1989	11	02.36163	01	29	19.15	-01	24	15.8		9	675
1989	SX4	1989	11	03.25434	01	28	48.47	-01	31	59.5		9	675
1989	SX4	1989	11	03.29080	01	28	47.17	-01	32	18.8		9	675
1989	TQ2	1989	09	28.43576	02	24	58.01	+03	12	30.8		9	675
1989	TQ2	1989	09	28.48038	02	24	56.22	+03	12	31.5		9	675
1989	TR2	1989	09	28.43576	02	25	15.03	+03	55	55.6		9	675
1989	TT2	1989	09	28.43576	02	28	20.24	+04	46	29.8		9	675
1989	TT2	1989	09	28.48038	02	28	19.03	+04	46	16.4		9	675
1989	US	1989	09	28.43576	02	20	22.36	+10	18	40.0		9	675
1989	US	1989	09	28.48038	02	20	20.73	+10	18	37.7		9	675
1989	UH2	1989	11	02.32473	01	54	47.90	-03	03	04.5		9	675
1989	UH2	1989	11	02.36163	01	54	44.35	-03	02	35.5		9	675
1989	UH2	1989	11	03.25434	01	53	15.86	-02	49	49.1		9	675
1989	UH2	1989	11	03.29080	01	53	12.25	-02	49	17.5		9	675
1989	UX5	1990	11	13.40868	04	24	26.33	+20	25	50.2	18.5	9	675
1989	UX5	1990	11	13.45330	04	24	24.76	+20	25	47.6		9	675
1989	UX5	1990	11	14.42674	04	23	52.79	+20	24	59.0	18.5	9	675
1989	UX5	1990	11	14.45833	04	23	51.70	+20	24	58.4		9	675
1990	DV3	1990	02	20.35330	10	11	40.58	+07	08	50.7	16.0	3	675
1990	DV3	1990	02	20.38750	10	11	39.03	+07	09	47.2		3	675
1990	DV3	1990	02	21.27101	10	11	02.83	+07	34	11.3		3	675
1990	DV3	1990	02	21.31597	10	11	00.72	+07	35	24.9		3	675
1990	FQ1	1991	11	01.18420	01	03	01.47	+11	39	13.0	16.0	2	675
1990	FQ1	1991	11	01.21215	01	03	00.55	+11	38	47.9		2	675
1990	FQ1	1991	11	03.25035	01	01	50.29	+11	07	30.3		2	675
1990	FQ1	1991	11	03.28003	01	01	49.41	+11	07	01.2		2	675
1990	FQ1	1991	12	08.15139	00	58	12.40	+04	54	46.9	16.5	2	675
1990	FQ1	1991	12	08.17865	00	58	12.98	+04	54	37.7	16.5	2	675
1990	FW1	1991	08	07.38524	23	16	05.85	-08	45	53.7	17.8	9	675
1990	FW1	1991	08	07.39306	23	16	05.58	-08	45	56.6	18.2	9	675
1990	FW1	1991	08	07.41406	23	16	04.83	-08	46	00.8		9	675
1990	FW1	1991	08	07.42257	23	16	04.57	-08	46	03.8		9	675
1990	FW1	1991	08	10.40851	23	14	17.79	-08	59	57.9	17.8	9	675
1990	KG2	1991	09	13.39444	00	09	14.18	+04	25	52.3	17.0	9	675
1990	KG2	1991	09	13.43212	00	09	12.63	+04	25	34.6		9	675
1990	KG2	1991	09	15.37153	00	07	55.92	+04	10	28.8	17.0	9	675
1990	KG2	1991	09	15.40851	00	07	54.38	+04	10	12.0		9	675
1990	MF	1990	11	13.40868	04	31	14.08	+19	13	53.5	19.2	9	675
1990	MF	1990	11	13.45330	04	31	08.01	+19	13	32.6		9	675

1990 MF	1990	11	14.42674	04	28	59.66	+19	06	31.3	18.2	9	675
1990 MF	1990	11	14.45833	04	28	55.45	+19	06	18.2		9	675
1990 OO	1991	11	03.46997	03	42	58.58	+07	35	28.0	16.0	2	675
1990 OO	1991	11	03.49201	03	42	57.53	+07	35	19.3		2	675
1990 OO	1991	11	06.37865	03	40	50.48	+07	16	42.8		2	675
1990 OO	1991	11	06.40521	03	40	49.29	+07	16	32.8		2	675
1990 QJ	1991	12	08.09774	00	47	03.78	+41	52	31.7	17.0	2	675
1990 QJ	1991	12	08.13299	00	47	03.72	+41	52	09.9		2	675
1990 TH12	1990	11	13.40868	03	58	48.77	+21	40	06.9	17.2	9	675
1990 TH12	1990	11	13.45330	03	58	46.03	+21	39	52.6		9	675
1990 TQ12	1990	11	13.40868	04	10	43.03	+24	12	44.1	16.5	9	675
1990 TQ12	1990	11	13.45330	04	10	40.71	+24	12	28.9		9	675
1990 TQ12	1990	11	14.42674	04	09	51.96	+24	06	48.5		9	675
1990 TQ12	1990	11	14.45833	04	09	50.19	+24	06	36.9	16.8	9	675
1990 TR12	1990	11	13.40868	04	02	34.98	+21	10	36.6	17.2	9	675
1990 TR12	1990	11	13.45330	04	02	32.65	+21	10	22.5		9	675
1990 TT12	1990	11	13.40868	04	02	47.85	+22	43	49.1	17.5	9	675
1990 TT12	1990	11	13.45330	04	02	45.40	+22	43	45.0		9	675
1990 TT12	1990	11	14.42674	04	01	53.14	+22	41	43.5		9	675
1990 TT12	1990	11	14.45833	04	01	51.32	+22	41	39.4	17.0	9	675
1990 TV12	1990	11	13.40868	04	10	57.81	+21	25	39.3	17.5	9	675
1990 TV12	1990	11	13.45330	04	10	56.22	+21	25	28.4		9	675
1990 TV12	1990	11	14.42674	04	10	23.68	+21	21	22.9	18.2	9	675
1990 TV12	1990	11	14.45833	04	10	22.60	+21	21	14.3		9	675
1990 UH1	1990	11	15.35642	03	13	10.08	+03	27	44.8		9	675
1990 UH1	1990	11	16.36632	03	12	10.24	+03	33	02.2		9	675
1990 UX1	1990	11	15.35642	03	19	34.32	+03	40	53.4		9	675
1990 UX1	1990	11	15.38767	03	19	32.65	+03	40	37.8		9	675
1990 UX1	1990	11	16.36632	03	18	44.07	+03	32	59.9		9	675
1990 UY1	1990	11	15.35642	03	16	20.79	+03	05	34.5		9	675
1990 UY1	1990	11	15.38767	03	16	18.81	+03	05	35.5		9	675
1990 UY1	1990	11	16.36632	03	15	19.16	+03	06	13.5		9	675
1990 VU1	1991	12	31.28368	05	58	51.17	+33	30	48.7	18.1	3	675
1990 VU1	1991	12	31.31788	05	58	49.84	+33	30	50.8		3	675
1990 VX1	1990	11	13.40868	04	13	04.89	+21	53	39.3	16.8	9	675
1990 VX1	1990	11	13.45330	04	13	02.08	+21	53	28.6		9	675
1990 VX1	1990	11	14.42674	04	12	03.01	+21	49	33.1	16.8	9	675
1990 VX1	1990	11	14.45833	04	12	00.97	+21	49	25.1		9	675
1990 VB4	1990	11	13.40868	04	27	53.24	+19	35	32.5	17.0	9	675
1990 VB4	1990	11	13.45330	04	27	51.18	+19	35	21.2		9	675
1990 VB4	1990	11	14.42674	04	27	06.71	+19	31	25.3	17.2	9	675
1990 VB4	1990	11	14.45833	04	27	05.18	+19	31	18.0		9	675
1990 VD4	1990	11	13.40868	04	31	47.52	+18	37	41.2	17.5	9	675
1990 VD4	1990	11	13.45330	04	31	45.11	+18	37	34.1		9	675
1990 VD4	1990	11	14.42674	04	30	54.45	+18	34	45.9		9	675
1990 VD4	1990	11	14.45833	04	30	52.86	+18	34	40.9	17.2	9	675
1990 VE4	1990	11	13.40868	04	04	12.56	+22	26	04.5	17.2	9	675
1990 VE4	1990	11	13.45330	04	04	09.65	+22	26	19.8		9	675
1990 VE4	1990	11	14.42674	04	03	09.05	+22	31	47.7	17.2	9	675
1990 VE4	1990	11	14.45833	04	03	06.98	+22	31	57.8		9	675
1990 VU8	1990	11	15.35642	03	23	10.84	+02	54	49.2		9	675
1990 VU8	1990	11	15.38767	03	23	09.12	+02	54	46.4		9	675
1990 VU8	1990	11	16.36632	03	22	16.87	+02	52	42.8		9	675
1990 WQ	1990	11	15.38767	03	39	25.67	+08	44	14.4		9	675
1990 WQ	1990	11	16.36632	03	38	34.32	+08	49	27.9		9	675
1990 WB3	1990	11	13.40868	04	02	48.48	+17	59	41.2	17.2	9	675
1990 WB3	1990	11	13.45330	04	02	45.93	+17	59	39.2		9	675
1990 WB3	1990	11	14.42674	04	01	50.75	+17	59	09.3	17.2	9	675
1990 WB3	1990	11	14.45833	04	01	48.91	+17	59	08.4		9	675

1990	YB	1989	09	28.43576	02	19	49.99	+09	49	29.6		9	675
1990	YB	1989	09	28.48038	02	19	48.45	+09	49	17.7		9	675
1991	AX1	1989	09	28.43576	02	20	29.16	+09	25	51.9		9	675
1991	AX1	1989	09	28.48038	02	20	27.63	+09	25	41.8		9	675
1991	DG	1991	09	14.43767	23	28	17.75	+02	54	33.1	19.0	9	675
1991	JX	1991	09	17.38229	23	57	16.19	+04	34	14.0	18.8	9	675
1991	PO10	1991	09	15.34132	23	11	21.77	+01	31	15.6	16.2	9	675
1991	PO10	1991	09	15.38056	23	11	19.90	+01	30	52.8		9	675
1991	PO10	1991	09	17.25139	23	09	56.62	+01	12	26.6		9	675
1991	PO10	1991	09	17.29097	23	09	54.76	+01	12	03.5	16.2	9	675
1991	PQ10	1991	09	15.34132	23	03	59.42	+02	10	12.5	16.8	9	675
1991	PQ10	1991	09	15.38056	23	03	57.03	+02	09	57.0		9	675
1991	PQ10	1991	09	17.25139	23	02	07.93	+01	57	48.6		9	675
1991	PQ10	1991	09	17.29097	23	02	05.55	+01	57	33.1	16.8	9	675
1991	PR10	1991	09	15.34132	23	11	32.03	-00	16	46.2	17.2	9	675
1991	PR10	1991	09	15.38056	23	11	30.08	-00	17	08.9		9	675
1991	PR10	1991	09	17.25139	23	10	02.44	-00	34	53.4		9	675
1991	PR10	1991	09	17.29097	23	10	00.47	-00	35	16.5	17.2	9	675
1991	PT10	1991	09	15.34132	23	23	03.12	+02	51	31.3		9	675
1991	PT10	1991	09	15.38056	23	23	01.29	+02	51	23.4		9	675
1991	PT10	1991	09	17.25139	23	21	38.69	+02	44	10.9		9	675
1991	PT10	1991	09	17.29097	23	21	36.79	+02	44	01.5	17.5	9	675
1991	PW10	1991	09	15.34132	23	13	47.41	+00	53	45.7		9	675
1991	PW10	1991	09	15.38056	23	13	45.04	+00	53	35.6		9	675
1991	PW10	1991	09	17.25139	23	11	56.95	+00	45	13.4		9	675
1991	PW10	1991	09	17.29097	23	11	54.59	+00	45	02.8	17.0	9	675
1991	PX10	1991	09	14.38368	23	43	43.45	+02	28	59.8	17.2	9	675
1991	PX10	1991	09	14.43767	23	43	41.32	+02	28	16.0		9	675
1991	PX10	1991	09	17.34861	23	41	56.26	+01	47	49.4	17.0	9	675
1991	PX10	1991	09	17.38229	23	41	54.96	+01	47	20.5		9	675
1991	PY10	1991	09	14.38368	23	33	18.87	+01	30	30.4	17.0	9	675
1991	PY10	1991	09	14.43767	23	33	16.47	+01	30	02.2		9	675
1991	PY10	1991	09	15.34132	23	32	37.00	+01	22	01.6		9	675
1991	PY10	1991	09	15.38056	23	32	35.18	+01	21	40.0	17.5	9	675
1991	PY10	1991	09	16.37674	23	31	51.49	+01	12	48.9	17.0	9	675
1991	PY10	1991	09	16.41684	23	31	49.73	+01	12	27.0		9	675
1991	PY10	1991	09	17.25139	23	31	13.42	+01	04	59.9		9	675
1991	PY10	1991	09	17.29097	23	31	11.62	+01	04	38.0	17.5	9	675
1991	PY10	1991	09	17.34861	23	31	09.07	+01	04	09.4	17.0	9	675
1991	PY10	1991	09	17.38229	23	31	07.53	+01	03	51.4		9	675
1991	PZ10	1991	09	14.38368	23	29	23.48	+06	22	45.0	17.2	9	675
1991	PZ10	1991	09	14.43767	23	29	20.17	+06	22	47.7		9	675
1991	PZ10	1991	09	17.34861	23	26	31.62	+06	24	26.1	16.8	9	675
1991	PZ10	1991	09	17.38229	23	26	29.53	+06	24	25.7		9	675
1991	PA11	1991	09	14.38368	23	44	01.38	+02	07	00.6	15.5	9	675
1991	PA11	1991	09	14.43767	23	43	59.08	+02	06	27.1		9	675
1991	PA11	1991	09	17.34861	23	42	05.62	+01	36	11.8	15.5	9	675
1991	PA11	1991	09	17.38229	23	42	04.20	+01	35	50.7		9	675
1991	PG11	1991	09	11.32257	23	53	41.95	+01	04	51.3		9	675
1991	PG11	1991	09	11.37431	23	53	39.61	+01	04	14.4	16.5	9	675
1991	PG11	1991	09	15.36128	23	50	58.04	+00	18	04.1	16.2	9	675
1991	PG11	1991	09	15.39861	23	50	56.48	+00	17	36.7		9	675
1991	PH11	1991	09	14.38368	23	41	27.70	+06	49	19.1	17.2	9	675
1991	PH11	1991	09	14.43767	23	41	24.97	+06	48	59.6		9	675
1991	PH11	1991	09	17.34861	23	39	03.30	+06	31	11.8	17.0	9	675
1991	PH11	1991	09	17.38229	23	39	01.66	+06	30	58.7		9	675
1991	PJ11	1991	09	14.38368	23	46	42.31	+04	04	18.9	17.2	9	675
1991	PJ11	1991	09	14.43767	23	46	39.62	+04	04	00.0		9	675
1991	PJ11	1991	09	17.34861	23	44	22.22	+03	46	47.2	17.0	9	675

1991 PJ11	1991	09	17.38229	23	44	20.53	+03	46	34.9		9 675
1991 PK11	1991	09	14.38368	23	46	25.43	+06	37	39.1	17.2	9 675
1991 PK11	1991	09	14.43767	23	46	22.51	+06	37	29.3		9 675
1991 PK11	1991	09	17.34861	23	43	48.31	+06	28	32.2	17.2	9 675
1991 PK11	1991	09	17.38229	23	43	46.46	+06	28	25.6		9 675
1991 PL11	1991	09	13.39444	23	55	55.45	+06	16	59.8	16.5	9 675
1991 PL11	1991	09	13.43212	23	55	53.85	+06	16	32.7		9 675
1991 PL11	1991	09	14.38368	23	55	15.89	+06	05	07.0	17.0	9 675
1991 PL11	1991	09	14.43767	23	55	13.58	+06	04	28.5		9 675
1991 PL11	1991	09	15.37153	23	54	36.07	+05	53	06.9		9 675
1991 PL11	1991	09	15.40851	23	54	34.49	+05	52	40.3		9 675
1991 PL11	1991	09	17.34861	23	53	15.31	+05	28	40.3	16.5	9 675
1991 PL11	1991	09	17.38229	23	53	13.89	+05	28	14.6		9 675
1991 PM11	1991	09	13.39444	00	04	18.64	+05	35	46.9	16.0	9 675
1991 PM11	1991	09	13.43212	00	04	16.71	+05	35	45.9		9 675
1991 PM11	1991	09	15.37153	00	02	42.72	+05	34	40.9	16.0	9 675
1991 PM11	1991	09	15.40851	00	02	40.79	+05	34	39.0		9 675
1991 PO11	1991	09	13.31910	23	32	49.93	+00	26	05.4	17.0	9 675
1991 PO11	1991	09	13.35712	23	32	48.03	+00	25	45.7		9 675
1991 PO11	1991	09	15.34132	23	31	09.68	+00	06	38.2		9 675
1991 PO11	1991	09	15.38056	23	31	07.66	+00	06	16.0	17.5	9 675
1991 PO11	1991	09	16.37674	23	30	18.46	-00	03	22.8	16.5	9 675
1991 PO11	1991	09	16.41684	23	30	16.40	-00	03	45.8		9 675
1991 PO11	1991	09	17.25139	23	29	35.65	-00	11	50.3		9 675
1991 PO11	1991	09	17.29097	23	29	33.60	-00	12	14.2	17.5	9 675
1991 PP11	1991	09	14.38368	23	43	18.26	+02	04	06.5	17.0	9 675
1991 PP11	1991	09	14.43767	23	43	16.06	+02	03	31.1		9 675
1991 PQ11	1991	09	14.38368	23	35	12.42	+04	29	53.3	17.2	9 675
1991 PQ11	1991	09	14.43767	23	35	09.37	+04	29	41.2		9 675
1991 PQ11	1991	09	17.34861	23	32	30.10	+04	18	54.1	17.0	9 675
1991 PQ11	1991	09	17.38229	23	32	28.17	+04	18	44.9		9 675
1991 PG16	1991	09	14.39288	23	54	41.70	-05	09	42.0	16.8	9 675
1991 PG16	1991	09	14.44635	23	54	39.43	-05	09	58.8		9 675
1991 PG16	1991	09	16.38663	23	53	22.80	-05	20	13.3	16.8	9 675
1991 PG16	1991	09	16.42674	23	53	21.11	-05	20	26.1		9 675
1991 PH16	1991	09	14.38368	23	41	25.62	+02	42	40.7	17.2	9 675
1991 PH16	1991	09	14.43767	23	41	22.01	+02	42	37.0		9 675
1991 PK16	1991	09	13.31910	23	49	03.52	-04	15	58.0	17.8	9 675
1991 PK16	1991	09	13.35712	23	49	01.62	-04	16	10.2		9 675
1991 PK16	1991	09	16.37674	23	46	43.58	-04	33	36.9	18.0	9 675
1991 PK16	1991	09	16.38663	23	46	43.19	-04	33	40.6	17.8	9 675
1991 PK16	1991	09	16.41684	23	46	41.75	-04	33	49.9		9 675
1991 PK16	1991	09	16.42674	23	46	41.30	-04	33	53.2		9 675
1991 PL16	1991	09	11.32257	23	42	28.92	-01	15	52.3		9 675
1991 PL16	1991	09	11.37431	23	42	25.30	-01	15	48.2	17.5	9 675
1991 PL16	1991	09	13.31910	23	40	19.60	-01	13	20.5	17.5	9 675
1991 PL16	1991	09	13.35712	23	40	16.97	-01	13	16.6		9 675
1991 PL16	1991	09	16.37674	23	37	00.64	-01	09	41.0	17.0	9 675
1991 PL16	1991	09	16.41684	23	36	57.93	-01	09	37.0		9 675
1991 PO16	1991	09	13.31910	23	24	46.70	-06	46	14.3	17.5	9 675
1991 PO16	1991	09	13.35712	23	24	44.88	-06	46	38.5		9 675
1991 PP16	1991	09	13.31910	23	33	08.02	-06	42	36.1	16.8	9 675
1991 PP16	1991	09	13.35712	23	33	06.09	-06	42	57.1		9 675
1991 PP16	1991	09	16.37674	23	30	47.61	-07	10	06.8	16.8	9 675
1991 PP16	1991	09	16.41684	23	30	45.67	-07	10	28.1		9 675
1991 PQ16	1991	09	13.31910	23	34	41.42	-03	11	22.1	17.0	9 675
1991 PQ16	1991	09	13.35712	23	34	39.38	-03	11	46.0		9 675
1991 PQ16	1991	09	16.37674	23	32	13.00	-03	41	52.2	17.0	9 675
1991 PQ16	1991	09	16.41684	23	32	10.92	-03	42	16.1		9 675

1991 PR16	1991	09	13.31910	23	38	57.14	-04	07	54.4	17.0	9	675
1991 PR16	1991	09	13.35712	23	38	55.02	-04	08	09.0		9	675
1991 PR16	1991	09	16.37674	23	36	26.07	-04	27	40.6	17.0	9	675
1991 PR16	1991	09	16.41684	23	36	23.98	-04	27	55.8		9	675
1991 PT16	1991	09	13.31910	23	38	21.65	-03	43	19.7	17.0	9	675
1991 PT16	1991	09	13.35712	23	38	19.73	-03	43	32.4		9	675
1991 PT16	1991	09	16.37674	23	36	02.20	-04	01	03.3	17.2	9	675
1991 PT16	1991	09	16.41684	23	36	00.25	-04	01	16.8		9	675
1991 PU16	1991	09	13.31910	23	38	01.96	-05	45	22.2	17.5	9	675
1991 PU16	1991	09	13.35712	23	37	59.60	-05	45	32.1		9	675
1991 PU16	1991	09	16.37674	23	35	08.50	-05	57	15.6	17.5	9	675
1991 PU16	1991	09	16.41684	23	35	06.15	-05	57	24.4		9	675
1991 RE	1991	09	15.34132	23	04	47.68	-00	51	13.9	17.8	9	675
1991 RE	1991	09	15.38056	23	04	45.69	-00	51	23.4		9	675
1991 RG	1991	09	15.38056	23	05	34.37	+00	26	11.3		9	675
1991 RG	1991	09	17.25139	23	03	51.95	+00	12	31.8		9	675
1991 RG	1991	09	17.29097	23	03	49.73	+00	12	15.8	17.8	9	675
1991 RJ	1991	09	15.34132	23	10	56.98	+00	12	32.3	17.0	9	675
1991 RJ	1991	09	15.38056	23	10	54.43	+00	12	34.3		9	675
1991 RJ	1991	09	17.25139	23	08	57.51	+00	14	04.6		9	675
1991 RJ	1991	09	17.29097	23	08	54.93	+00	14	06.8	17.0	9	675
1991 RN	1991	09	13.39444	00	10	18.17	+09	23	30.4	16.2	9	675
1991 RN	1991	09	13.43212	00	10	15.95	+09	23	29.9		9	675
1991 RN	1991	09	15.37153	00	08	26.75	+09	22	57.0	16.0	9	675
1991 RN	1991	09	15.40851	00	08	24.55	+09	22	56.1		9	675
1991 RW	1991	09	14.39288	00	11	57.10	-06	18	28.7	17.0	9	675
1991 RW	1991	09	14.44635	00	11	54.92	-06	19	39.5		9	675
1991 RW	1991	09	15.41753	00	11	17.90	-06	41	00.7	17.5	9	675
1991 RW	1991	09	15.46424	00	11	15.91	-06	42	01.3		9	675
1991 RW	1991	09	16.38663	00	10	40.20	-07	02	12.6	17.5	9	675
1991 RW	1991	09	16.42674	00	10	38.52	-07	03	05.7		9	675
1991 RW	1991	09	17.36064	00	10	02.07	-07	23	26.3	17.5	9	675
1991 RW	1991	09	17.39479	00	10	00.62	-07	24	09.1		9	675
1991 RX	1991	10	10.26667	23	59	28.42	-01	49	28.5	17.0	2	675
1991 RX	1991	10	10.29479	23	59	26.79	-01	49	27.9		2	675
1991 RX	1991	10	12.27587	23	57	40.56	-01	48	35.9		2	675
1991 RX	1991	10	12.30052	23	57	39.37	-01	48	34.9		2	675
1991 RJ1	1991	09	13.31910	23	21	44.99	-06	28	33.0	16.8	9	675
1991 RJ1	1991	09	13.35712	23	21	42.44	-06	28	19.7		9	675
1991 RS1	1991	09	13.39444	00	08	45.62	+05	16	39.9	17.0	9	675
1991 RS1	1991	09	13.43212	00	08	43.31	+05	16	40.7		9	675
1991 RS1	1991	09	15.37153	00	06	48.25	+05	17	09.5	16.8	9	675
1991 RS1	1991	09	15.40851	00	06	45.93	+05	17	09.9		9	675
1991 RV1	1991	10	11.16927	23	53	22.48	+13	38	16.1	16.0	2	675
1991 RV1	1991	10	11.19306	23	53	21.67	+13	38	00.8		2	675
1991 RV1	1991	10	14.22500	23	51	46.73	+13	06	21.2		2	675
1991 RV1	1991	10	14.24792	23	51	46.01	+13	06	06.9		2	675
1991 RQ2	1991	09	13.39444	00	23	19.64	+07	52	35.5		9	675
1991 RQ2	1991	09	13.43212	00	23	18.32	+07	52	21.1	18.5	9	675
1991 RO3	1991	09	13.39444	00	21	20.97	+08	26	44.1	19.0	9	675
1991 RO3	1991	09	13.43212	00	21	18.92	+08	26	37.9		9	675
1991 RT3	1991	09	13.40370	00	51	29.97	+12	15	40.7	18.0	9	675
1991 RT3	1991	09	13.46267	00	51	27.92	+12	15	24.4		9	675
1991 RT3	1991	09	15.42644	00	50	22.41	+12	06	15.4		9	675
1991 RT3	1991	09	15.47448	00	50	20.40	+12	05	59.5	17.5	9	675
1991 RJ5	1991	11	07.19079	00	08	20.01	-04	08	34.4		9	675
1991 RJ5	1991	11	07.22361	00	08	19.42	-04	08	33.7		9	675
1991 RJ5	1991	11	09.18697	00	07	53.27	-04	07	44.4	17.3	9	675
1991 RJ5	1991	11	09.22847	00	07	52.55	-04	07	42.2		9	675

1991	RO5		1991	09	17.36064	00	39	38.18	-03	06	33.5	18.0	9	675
1991	RO5		1991	09	17.39479	00	39	36.23	-03	06	37.3		9	675
1991	RE7		1991	11	09.18697	00	00	18.78	+03	00	04.3	17.0	9	675
1991	RE7		1991	11	09.22847	00	00	17.88	+03	00	10.3		9	675
1991	RS7		1991	10	10.22865	00	05	00.85	-13	29	45.3	17.0	2	675
1991	RS7		1991	10	10.25087	00	04	59.90	-13	29	48.8		2	675
1991	RS7		1991	10	12.28299	00	03	35.59	-13	35	10.1		2	675
1991	RS7		1991	10	12.30660	00	03	34.78	-13	35	12.3		2	675
1991	RU7		1991	09	13.31910	23	30	24.12	-01	17	56.5	18.2	9	675
1991	RU7		1991	09	13.35712	23	30	22.29	-01	18	21.2		9	675
1991	RU7		1991	09	16.37674	23	28	04.78	-01	51	20.5	18.0	9	675
1991	RU7		1991	09	16.41684	23	28	02.83	-01	51	46.2		9	675
1991	RQ9		1991	09	13.39444	00	16	22.55	+04	15	25.3	17.0	9	675
1991	RQ9		1991	09	13.43212	00	16	20.53	+04	15	15.9	17.5	9	675
1991	RQ9		1991	09	15.37153	00	14	44.64	+04	07	27.4		9	675
1991	RQ9		1991	09	15.40851	00	14	42.67	+04	07	17.8		9	675
1991	RV12		1991	09	13.31910	23	42	45.44	-06	25	12.8	18.2	9	675
1991	RV12		1991	09	13.35712	23	42	43.65	-06	25	21.1		9	675
1991	RV12	*	1991	09	14.39288	23	41	56.43	-06	29	11.0	17.8	9	675
1991	RV12		1991	09	14.44635	23	41	53.89	-06	29	21.7		9	675
1991	RV12		1991	09	16.37674	23	40	25.53	-06	36	21.4	18.5	9	675
1991	RV12		1991	09	16.41684	23	40	23.56	-06	36	30.7		9	675
1991	SF1		1991	11	09.18697	23	58	35.40	+01	31	17.7	17.0	9	675
1991	SF1		1991	11	09.22847	23	58	35.55	+01	31	01.5		9	675
1991	SG1		1991	11	01.23108	01	21	04.42	+18	31	47.5	15.5	2	675
1991	SG1		1991	11	03.30538	01	19	20.78	+18	14	49.0		2	675
1991	SG1		1991	11	03.32691	01	19	19.71	+18	14	38.8		2	675
1991	SS1		1991	09	15.41753	00	33	49.54	-07	27	09.8	17.5	9	675
1991	SS1		1991	09	15.46424	00	33	47.91	-07	27	05.3		9	675
1991	SS1		1991	09	17.36064	00	32	52.27	-07	24	38.3	17.5	9	675
1991	SS1		1991	09	17.39479	00	32	51.02	-07	24	34.5		9	675
1991	TA1		1991	11	02.17153	00	26	14.96	+02	54	02.7	15.5	2	675
1991	TA1		1991	11	02.19618	00	26	14.72	+02	53	21.5		2	675
1991	TA1		1991	11	04.23003	00	26	09.48	+01	59	10.5		2	675
1991	TA1		1991	11	04.25139	00	26	09.41	+01	58	37.7		2	675
1991	TA1		1991	11	06.16250	00	26	12.98	+01	10	05.9		2	675
1991	TA1		1991	11	06.18628	00	26	12.87	+01	09	29.2		2	675
1991	TA1		1991	12	07.12240	00	43	48.16	-06	34	48.0	16.5	2	675
1991	TA1		1991	12	07.14618	00	43	49.42	-06	34	56.8		2	675
1991	TB1		1991	11	01.12795	22	14	25.29	+21	44	56.4	17.0	2	675
1991	TB1		1991	11	01.14931	22	14	20.61	+21	45	33.4		2	675
1991	TH1		1991	11	02.17708	00	38	51.66	+13	23	07.4	16.5	2	675
1991	TH1		1991	11	02.20156	00	38	49.74	+13	23	28.7		2	675
1991	TH1		1991	11	04.24080	00	36	21.60	+13	50	05.6		2	675
1991	TH1		1991	11	04.26163	00	36	20.07	+13	50	22.0		2	675
1991	TK1		1991	11	07.13472	23	22	42.02	+28	37	20.8	18.3	3	675
1991	TK1		1991	11	07.16719	23	22	40.78	+28	37	16.0		3	675
1991	TK1		1991	11	09.20104	23	21	37.54	+28	32	15.0		3	675
1991	TL1		1991	11	03.36840	02	26	34.71	-02	19	07.1	15.0	2	675
1991	TL1		1991	11	03.40313	02	26	33.19	-02	19	51.0		2	675
1991	TL1		1991	11	05.39983	02	25	16.56	-03	02	14.3		2	675
1991	TL1		1991	11	05.42752	02	25	15.37	-03	02	49.2		2	675
1991	TL1		1991	11	06.28194	02	24	43.33	-03	20	31.3		2	675
1991	TQ1		1991	11	02.17153	00	12	06.20	+02	07	15.8	15.5	2	675
1991	TQ1		1991	11	02.19618	00	12	04.64	+02	07	40.4		2	675
1991	TQ1		1991	11	04.23003	00	10	08.00	+02	41	47.9		2	675
1991	TQ1		1991	11	04.25139	00	10	06.75	+02	42	09.2		2	675
1991	TR1		1991	11	01.37257	02	38	38.39	+18	20	53.3	16.0	2	675
1991	TR1		1991	11	01.39635	02	38	36.93	+18	20	14.8		2	675

1991	TR1		1991	11	03.37483	02	36	44.96	+17	29	02.2		2	675
1991	TR1		1991	11	03.40920	02	36	42.81	+17	28	07.8		2	675
1991	TY1		1991	11	01.22552	01	35	51.57	-10	30	56.7	16.5	2	675
1991	TY1		1991	11	01.24826	01	35	50.98	-10	31	06.1		2	675
1991	TY1		1991	11	03.33854	01	34	57.91	-10	44	17.5		2	675
1991	TY1		1991	11	03.38160	01	34	56.76	-10	44	33.0		2	675
1991	TC2		1991	11	01.17014	23	58	09.39	-09	04	18.9	17.0	2	675
1991	TC2		1991	11	01.19861	23	58	07.23	-09	03	46.6		2	675
1991	TC2		1991	11	03.21319	23	56	05.09	-08	26	04.8		2	675
1991	TC2		1991	11	03.23698	23	56	03.72	-08	25	37.7		2	675
1991	TC2		1991	11	05.16076	23	54	18.97	-07	49	14.4		2	675
1991	TC2		1991	11	05.18490	23	54	17.79	-07	48	47.1		2	675
1991	TK2		1991	11	01.13507	23	05	47.11	-06	05	13.1	16.5	2	675
1991	TK2		1991	11	01.15608	23	05	49.47	-06	05	19.6		2	675
1991	TK2		1991	11	03.11823	23	09	33.07	-06	14	17.7		2	675
1991	TK2		1991	11	03.14010	23	09	35.37	-06	14	23.4		2	675
1991	TL2		1991	11	12.17101	23	23	56.20	+21	08	33.7	18.6	3	675
1991	TL2		1991	11	12.20990	23	23	57.64	+21	08	11.5		3	675
1991	TC4		1991	11	01.22552	01	46	00.79	-07	35	42.9	16.0	2	675
1991	TC4		1991	11	01.24826	01	45	59.90	-07	35	51.9		2	675
1991	TC4		1991	11	03.33854	01	44	34.39	-07	48	08.1		2	675
1991	TC4		1991	11	03.38160	01	44	32.55	-07	48	22.1		2	675
1991	TE4		1991	11	02.32101	02	23	46.65	+23	12	57.2	16.5	2	675
1991	TE4		1991	11	02.34306	02	23	44.99	+23	13	03.1		2	675
1991	TE4		1991	11	04.37813	02	21	14.25	+23	21	33.0		2	675
1991	TE4		1991	11	04.40035	02	21	12.31	+23	21	38.5		2	675
1991	TG4		1991	11	01.18420	01	03	43.30	+16	30	28.0	16.5	2	675
1991	TG4		1991	11	01.21215	01	03	42.07	+16	29	54.7		2	675
1991	TG4		1991	11	03.25035	01	02	13.52	+15	48	03.9		2	675
1991	TG4		1991	11	03.28003	01	02	12.25	+15	47	29.5		2	675
1991	VB	*	1991	11	01.32639	01	49	58.74	+28	17	29.8	16.5	2	675
1991	VB		1991	11	01.35191	01	49	59.77	+28	17	10.3		2	675
1991	VB		1991	11	02.27292	01	50	42.96	+28	03	14.3		2	675
1991	VB		1991	11	02.30104	01	50	44.18	+28	02	47.3		2	675
1991	VB		1991	11	02.43281	01	50	49.10	+28	00	42.7		2	675
1991	VB		1991	11	03.34497	01	51	32.79	+27	46	33.3		2	675
1991	VB		1991	11	05.22049	01	53	04.47	+27	16	38.1		2	675
1991	VB		1991	11	05.43455	01	53	13.16	+27	13	03.5		2	675
1991	VB		1991	11	06.42969	01	54	02.65	+26	56	46.5	16.5	2	675
1991	VB		1991	12	07.20590	02	29	17.92	+19	12	11.1	17.0	2	675
1991	VB		1991	12	07.23021	02	29	19.85	+19	11	53.6		2	675
1991	VE	*	1991	11	03.51597	04	35	24.17	+08	50	06.9	16.5	2	675
1991	VE		1991	11	03.53906	04	35	08.06	+08	50	16.0		2	675
1991	VE		1991	11	06.37656	04	04	27.92	+09	06	12.4	16.5	2	675
1991	VE		1991	11	06.38073	04	04	26.12	+09	06	12.8		2	675
1991	VE		1991	11	06.40313	04	04	11.09	+09	06	21.7		2	675
1991	VE		1991	11	06.40729	04	04	09.40	+09	06	21.6		2	675
1991	VE		1991	11	06.42396	04	03	58.41	+09	06	26.6		2	675
1991	VE		1991	11	06.44635	04	03	44.62	+09	06	31.8		2	675
1991	VE		1991	11	09.34219	03	36	12.28	+09	14	27.8		9	675
1991	VE		1991	11	09.38524	03	35	48.67	+09	14	30.9	16.5	9	675
1991	VE		1991	11	10.41646	03	26	59.01	+09	15	52.0	17.0	9	675
1991	VE		1991	11	10.44580	03	26	44.18	+09	15	51.7	17.0	9	675
1991	VF	*	1991	11	03.50134	03	58	40.51	+14	32	02.3	15.0	2	675
1991	VF		1991	11	04.46979	03	57	09.02	+14	53	30.6		2	675
1991	VF		1991	11	04.49358	03	57	06.59	+14	54	03.6		2	675
1991	VF		1991	12	07.21181	03	01	03.90	+25	54	00.0	15.5	2	675
1991	VF		1991	12	07.23611	03	01	01.94	+25	54	23.0		2	675
1991	VK		1991	10	03.36128	00	51	43.57	+23	59	31.4	17.8	3	675

1991 VK		1991	10	03.39045	00	51	40.92	+23	59	45.5		3	675
1991 VK		1991	10	07.34028	00	45	25.42	+24	31	11.8		3	675
1991 VK		1991	10	07.37014	00	45	22.14	+24	31	24.8		3	675
1991 VK	*	1991	11	01.16337	23	47	46.22	+25	26	14.4	15.5	2	675
1991 VK		1991	11	01.19132	23	47	41.37	+25	26	08.8		2	675
1991 VK		1991	11	02.19063	23	45	00.26	+25	22	08.0		2	675
1991 VK		1991	11	04.21823	23	39	33.23	+25	12	33.5		2	675
1991 VK		1991	11	09.12465	23	26	33.22	+24	42	07.3		3	675
1991 VK		1991	11	09.15851	23	26	27.44	+24	41	53.5		3	675
1991 VK		1991	11	12.17101	23	18	39.57	+24	18	50.9		3	675
1991 VK		1991	12	07.10382	22	15	25.61	+19	27	50.7	15.5	2	675
1991 VK		1991	12	07.12847	22	15	20.43	+19	27	22.8		2	675
1991 VL		1991	10	05.39861	02	05	23.21	+29	00	39.9	17.9	3	675
1991 VL		1991	10	05.43733	02	05	19.51	+29	00	40.3		3	675
1991 VL		1991	10	10.43021	01	56	55.93	+28	55	55.3	17	2	675
1991 VL		1991	10	10.45313	01	56	53.57	+28	55	52.0		2	675
1991 VL		1991	10	12.43264	01	53	13.48	+28	51	20.3		2	675
1991 VL		1991	10	12.45764	01	53	10.66	+28	51	16.3		2	675
1991 VL	*	1991	11	07.28750	00	54	47.03	+25	04	54.0	17.2	3	675
1991 VL		1991	11	08.19461	00	52	41.18	+24	51	36.3		3	675
1991 VL		1991	11	09.31145	00	50	07.18	+24	34	54.0		3	675
1991 VL		1991	12	01.10851	00	10	29.80	+18	36	52.7	17.0	3	675
1991 VL		1991	12	01.14913	00	10	26.64	+18	36	14.8		3	675
1991 VL		1991	12	03.10069	00	08	07.04	+18	05	39.4		3	675
1991 VL		1991	12	03.13351	00	08	04.69	+18	05	09.4		3	675
1991 VV	*	1991	11	02.21389	00	39	49.88	+31	48	49.2	16.5	2	675
1991 VV		1991	11	02.23872	00	39	49.59	+31	48	10.7		2	675
1991 VV		1991	11	05.16719	00	39	35.78	+30	31	25.1		2	675
1991 VV		1991	11	05.19115	00	39	35.59	+30	30	48.7		2	675
1991 VV		1991	11	05.37031	00	39	34.67	+30	26	04.0		2	675
1991 VV		1991	11	06.14549	00	39	35.15	+30	05	42.2		2	675
1991 VV		1991	11	06.35174	00	39	34.56	+30	00	15.6		2	675
1991 VV		1991	12	07.15347	00	56	12.06	+18	15	54.7	17.0	2	675
1991 VV		1991	12	07.17656	00	56	13.36	+18	15	30.8		2	675
1991 VX1	*	1991	11	02.28003	01	43	14.15	+19	20	59.2	16.0	2	675
1991 VX1		1991	11	02.30729	01	43	12.55	+19	20	26.5		2	675
1991 VX1		1991	11	04.33594	01	41	17.51	+18	39	41.6		2	675
1991 VX1		1991	11	04.35903	01	41	16.18	+18	39	14.5		2	675
1991 VX1		1991	12	08.15729	01	27	35.77	+09	15	15.2	16.5	2	675
1991 VX1		1991	12	08.18594	01	27	36.04	+09	14	58.2		2	675
1991 VY1	*	1991	11	05.41337	02	24	00.52	+51	45	08.7	16.0	2	675
1991 VY1		1991	11	06.31163	02	23	12.70	+51	29	21.4		2	675
1991 VY1		1991	11	06.33455	02	23	11.31	+51	28	56.8		2	675
1991 VQ2	*	1991	11	01.17014	00	15	04.25	-11	41	40.6	16.0	2	675
1991 VQ2		1991	11	01.19861	00	15	02.36	-11	41	11.0		2	675
1991 VQ2		1991	11	05.21476	00	11	17.45	-10	30	31.6		2	675
1991 VQ2		1991	11	05.24236	00	11	15.97	-10	30	02.5		2	675
1991 VQ2		1991	11	06.21024	00	10	28.11	-10	12	35.2		2	675
1991 VQ2		1991	11	06.24497	00	10	26.29	-10	11	56.4		2	675
1991 VQ2		1991	12	08.08628	00	06	22.21	+00	05	21.4	16.5	2	675
1991 VQ2		1991	12	08.11111	00	06	22.91	+00	05	53.1		2	675
1991 VR2	*	1991	11	01.38472	02	48	30.38	+12	16	22.9	16.5	2	675
1991 VR2		1991	11	01.40781	02	48	27.92	+12	16	36.1		2	675
1991 VR2		1991	11	04.42396	02	43	33.97	+12	44	35.0		2	675
1991 VR2		1991	11	04.44427	02	43	31.92	+12	44	44.4		2	675
1991 VS2	*	1991	11	02.26476	01	22	08.69	+29	39	13.5	16.5	2	675
1991 VS2		1991	11	02.29479	01	22	05.38	+29	39	23.9		2	675
1991 VS2		1991	11	04.28490	01	18	33.96	+29	51	21.8		2	675
1991 VS2		1991	11	04.31007	01	18	31.28	+29	51	31.4		2	675

1991 VF3	*	1991	11	03.48108	03	58	14.95	+28	10	15.3	16.0	2	675
1991 VF3		1991	11	04.48698	03	57	02.67	+28	20	10.0		2	675
1991 VF3		1991	11	05.50764	03	55	47.38	+28	30	02.9		2	675
1991 VF3		1991	11	05.52899	03	55	45.73	+28	30	12.8		2	675
1991 VG3	*	1991	11	04.22483	00	09	00.02	+15	02	29.9	16.0	2	675
1991 VG3		1991	11	04.24618	00	09	00.06	+15	01	56.1		2	675
1991 VG3		1991	11	06.15660	00	09	16.90	+14	13	21.8		2	675
1991 VG3		1991	11	06.17882	00	09	16.99	+14	12	49.0		2	675
1991 VG3		1991	12	07.11563	00	29	38.79	+04	42	32.7	17.0	2	675
1991 VG3		1991	12	07.14045	00	29	40.38	+04	42	16.2		2	675
1991 VL3	*	1991	11	01.32639	01	54	55.04	+24	40	42.3	16.5	2	675
1991 VL3		1991	11	01.35191	01	54	53.33	+24	40	15.9		2	675
1991 VL3		1991	11	02.27292	01	53	57.77	+24	22	52.7		2	675
1991 VL3		1991	11	02.30104	01	53	56.13	+24	22	20.2		2	675
1991 VL3		1991	11	03.34497	01	52	53.98	+24	02	33.6		2	675
1991 VM3	*	1991	11	03.51024	04	25	12.11	+23	28	16.2	16.5	2	675
1991 VM3		1991	11	03.53351	04	25	10.88	+23	28	25.3		2	675
1991 VM3		1991	11	05.51285	04	23	19.16	+23	41	30.3		2	675
1991 VM3		1991	11	05.53420	04	23	17.92	+23	41	37.5		2	675
1991 VN3	*	1991	11	03.51024	04	33	20.63	+21	01	30.9	16.5	2	675
1991 VN3		1991	11	03.53351	04	33	20.09	+21	01	39.6		2	675
1991 VN3		1991	11	05.51285	04	32	30.78	+21	14	08.1		2	675
1991 VN3		1991	11	05.53420	04	32	30.14	+21	14	14.7		2	675
1991 VB4	*	1991	11	01.23108	01	12	32.15	+17	10	28.2	15.0	2	675
1991 VB4		1991	11	03.30538	01	11	39.26	+16	40	55.9		2	675
1991 VB4		1991	11	03.32691	01	11	38.72	+16	40	37.9		2	675
1991 VC4	*	1991	11	02.17708	00	38	15.84	+10	37	53.9	16.0	2	675
1991 VC4		1991	11	02.20156	00	38	15.20	+10	37	35.0		2	675
1991 VC4		1991	11	04.24080	00	37	32.84	+10	13	06.3		2	675
1991 VC4		1991	11	04.26163	00	37	32.35	+10	12	52.3		2	675
1991 VC4		1991	12	08.15139	00	45	02.88	+05	57	44.6	16.5	2	675
1991 VC4		1991	12	08.17865	00	45	04.12	+05	57	38.5	16.5	2	675
1991 VD4	*	1991	11	03.35382	02	23	26.07	+38	43	08.1	15.5	2	675
1991 VD4		1991	11	03.38872	02	23	24.28	+38	42	41.7		2	675
1991 VD4		1991	11	05.36441	02	21	49.33	+38	16	55.3		2	675
1991 VD4		1991	12	07.17118	02	06	24.43	+29	50	21.1	15.5	2	675
1991 VD4		1991	12	07.19288	02	06	24.22	+29	50	01.3		2	675
1991 WB		1991	12	07.41753	06	07	16.22	+29	11	55.8	15.0	2	675
1991 WB		1991	12	07.44063	06	07	13.92	+29	12	33.2		2	675
1991 WB		1991	12	08.12587	06	06	10.37	+29	30	11.6		2	675
1991 WB		1991	12	08.17170	06	06	05.95	+29	31	23.5		2	675
1991 WB		1991	12	08.31701	06	05	51.71	+29	35	10.4		2	675
1991 XB	*	1991	12	01.31197	03	40	51.38	+25	20	34.7	16.2	3	675
1991 XB		1991	12	01.34427	03	40	55.59	+25	18	33.3		3	675
1991 XB		1991	12	03.30885	03	45	33.21	+23	14	03.2	16.2	3	675
1991 XB		1991	12	03.34131	03	45	37.40	+23	11	59.5		3	675
1991 XB		1991	12	06.23298	03	52	14.78	+20	11	47.0		3	675
1991 XB		1991	12	06.24322	03	52	15.95	+20	11	13.4	16.5	3	675
1991 XB		1991	12	06.37344	03	52	32.01	+20	03	13.1		3	675
1991 XC	*	1991	12	03.49792	08	52	58.75	+59	50	21.2	17.0	3	675
1991 XC		1991	12	03.53073	08	53	00.74	+59	50	42.6		3	675
1991 XC		1991	12	06.51597	08	56	23.21	+60	23	21.9		3	675
1991 XC		1991	12	06.54392	08	56	24.80	+60	23	39.2		3	675
1991 XC		1991	12	31.34809	08	54	09.31	+63	44	22.9	16.7	3	675
1991 XC		1991	12	31.38715	08	54	06.23	+63	44	30.5		3	675
1991 YA		1991	12	02.35017	06	29	45.85	+59	31	35.7	16.0	3	675
1991 YA		1991	12	02.38438	06	29	38.51	+59	30	18.7		3	675
1991 YA	*	1991	12	31.26597	05	09	06.19	+29	49	34.4	16.0	3	675
1991 YA		1991	12	31.29861	05	09	02.73	+29	47	10.4		3	675

1991 YA		1992	01	03.11163	05	04	52.63	+26	21	01.9		3 675
1991 YA		1992	01	03.13281	05	04	50.97	+26	19	32.0		3 675
1992 AA	*	1992	01	01.17552	04	30	24.81	+15	32	10.7	15.5	3 675
1992 AA		1992	01	01.21406	04	30	26.65	+15	33	41.8		3 675
1992 AA		1992	01	04.23542	04	33	43.05	+17	31	47.5		3 675
1992 AB	*	1992	01	01.17552	04	31	47.08	+15	29	29.7	16.7	3 675
1992 AB		1992	01	01.21406	04	31	42.45	+15	30	52.6		3 675
1992 AB		1992	01	04.23542	04	25	56.16	+17	15	28.5		3 675
6555 P-L		1989	09	28.43576	02	19	44.63	+09	19	47.3		9 675
6555 P-L		1989	09	28.48038	02	19	43.04	+09	19	37.2		9 675
1114 T-1		1991	09	12.47793	00	44	10.35	+08	29	10.6		9 675
1114 T-1		1991	09	12.50122	00	44	09.42	+08	29	01.7	17.0	9 675
1114 T-1		1991	09	14.40191	00	42	54.28	+08	16	46.1		9 675
1114 T-1		1991	09	14.45498	00	42	51.98	+08	16	25.6	17.0	9 675
1114 T-1		1991	11	09.18697	00	09	39.51	+01	47	58.2	17.0	9 675
1114 T-1		1991	11	09.22847	00	09	39.39	+01	47	52.2		9 675
1127 T-1		1971	03	24.38924	12	07	53.64	-04	23	47.3		4 675
1127 T-1		1971	03	25.27326	12	07	06.78	-04	17	27.9		4 675
1127 T-1	*	1971	03	25.31562	12	07	04.40	-04	17	08.4	20.3	4 675
1127 T-1		1971	03	26.26771	12	06	13.99	-04	10	20.8		4 675
3174 T-1		1991	12	01.25329	03	20	04.02	+32	45	08.3	18.5	9 675
3174 T-1		1991	12	01.28854	03	20	01.62	+32	45	01.6		9 675
3174 T-1		1991	12	03.28438	03	17	53.20	+32	37	48.4		9 675
3289 T-1		1991	09	13.39444	00	18	36.77	+06	50	23.3	16.2	9 675
3289 T-1		1991	09	13.43212	00	18	34.97	+06	50	07.0		9 675
3289 T-1		1991	09	15.37153	00	17	06.68	+06	35	50.2	16.5	9 675
3289 T-1		1991	09	15.40851	00	17	04.85	+06	35	33.7		9 675
3289 T-1		1991	11	09.18697	23	50	40.25	+00	18	57.9	17.2	9 675
3289 T-1		1991	11	09.22847	23	50	40.77	+00	18	53.7		9 675
4272 T-1		1971	03	24.40486	12	38	04.45	+02	48	54.1		4 675
4272 T-1		1971	03	26.31007	12	36	22.25	+03	01	01.1		4 675
4272 T-1	*	1971	03	26.34896	12	36	19.97	+03	01	16.0	16.9	4 675
4272 T-1		1971	03	27.35208	12	35	25.45	+03	07	31.4		4 675
4272 T-1		1971	04	02.43993	12	29	50.87	+03	44	19.9		4 675
4272 T-1		1971	05	13.17535	12	05	48.75	+05	17	19.7		4 675
4272 T-1		1971	05	14.20694	12	05	44.27	+05	15	21.2		4 675
4272 T-1		1971	05	16.31510	12	05	40.69	+05	10	41.2		4 675
1051 T-2		1991	09	17.40885	00	13	50.64	+01	11	28.0		9 675
1051 T-2		1991	09	17.45938	00	13	48.45	+01	11	00.2	17.8	9 675
1079 T-2		1991	11	07.19079	00	09	18.90	+01	34	57.4		9 675
1079 T-2		1991	11	07.22361	00	09	18.39	+01	34	56.3		9 675
1079 T-2		1991	11	09.18697	00	08	54.90	+01	33	35.3	18.5	9 675
1079 T-2		1991	11	09.22847	00	08	54.54	+01	33	34.7		9 675
1266 T-2		1991	09	13.31910	23	31	50.35	-03	21	09.5	17.8	9 675
1266 T-2		1991	09	13.35712	23	31	47.88	-03	21	15.3		9 675
1266 T-2		1991	09	16.37674	23	28	43.02	-03	28	57.5	17.5	9 675
1266 T-2		1991	09	16.41684	23	28	40.50	-03	29	03.5		9 675
3336 T-2		1991	09	15.41753	00	29	48.22	-00	53	07.0	17.0	9 675
3336 T-2		1991	09	15.46424	00	29	46.24	-00	53	31.9		9 675
3336 T-2		1991	09	17.36064	00	28	37.30	-01	10	40.7	17.0	9 675
3336 T-2		1991	09	17.39479	00	28	35.94	-01	10	59.9		9 675
2041 T-3		1991	11	09.19392	00	18	14.31	+05	35	42.0		9 675
2041 T-3		1991	11	09.23594	00	18	13.65	+05	35	30.9		9 675
2041 T-3		1991	11	10.15694	00	17	57.09	+05	32	11.2		9 675
5191 T-3		1989	11	02.32473	01	37	31.58	-05	01	08.8		9 675
5191 T-3		1989	11	02.36163	01	37	30.54	-05	01	11.7		9 675
5191 T-3		1989	11	03.25434	01	37	06.30	-05	03	07.8		9 675
5191 T-3		1989	11	03.29080	01	37	05.26	-05	03	12.3		9 675
(4)		1990	11	15.35642	03	33	14.04	+09	52	39.0		9 675

(4)	1990	11	15.38767	03	33	12.03	+09	52	35.2		9	675
(4)	1990	11	16.36632	03	32	10.19	+09	50	42.5		9	675
(28)	1991	11	10.41646	03	32	44.02	+03	46	13.9		9	675
(28)	1991	11	10.44580	03	32	42.49	+03	46	06.4		9	675
(55)	1991	11	09.19392	00	27	53.72	+05	43	54.2		9	675
(55)	1991	11	09.23594	00	27	52.74	+05	43	55.7		9	675
(55)	1991	11	10.15694	00	27	33.86	+05	44	25.5		9	675
(55)	1991	11	10.39884	00	27	28.70	+05	44	33.8		9	675
(56)	1991	09	15.34132	22	59	10.38	+00	27	26.6		9	675
(56)	1991	09	15.38056	22	59	08.69	+00	27	02.8		9	675
(65)	1991	11	09.34219	03	31	15.94	+14	14	21.4		9	675
(65)	1991	11	09.38524	03	31	14.02	+14	14	14.2		9	675
(94)	1991	12	01.25329	03	06	37.97	+27	36	23.6		9	675
(94)	1991	12	01.28854	03	06	36.20	+27	36	18.4		9	675
(94)	1991	12	03.25329	03	05	03.94	+27	30	43.7		9	675
(94)	1991	12	03.28438	03	05	02.44	+27	30	39.3		9	675
(104)	1991	11	07.19079	00	08	04.72	-01	05	15.0		9	675
(104)	1991	11	07.22361	00	08	04.11	-01	05	15.9		9	675
(104)	1991	11	09.18697	00	07	32.80	-01	05	54.6	13.8	9	675
(104)	1991	11	09.22847	00	07	32.15	-01	05	55.2		9	675
(107)	1991	09	13.31910	23	17	47.76	-03	16	23.3		9	675
(107)	1991	09	13.35712	23	17	46.21	-03	16	37.4		9	675
(107)	1991	09	16.37674	23	15	53.29	-03	35	13.6	13.0	9	675
(107)	1991	09	16.41684	23	15	51.74	-03	35	28.3		9	675
(133)	1991	09	15.34132	23	00	24.04	-00	44	54.5		9	675
(133)	1991	09	15.38056	23	00	22.22	-00	45	02.2		9	675
(137)	1991	09	13.39444	00	01	13.53	+09	51	57.0		9	675
(137)	1991	09	13.43212	00	01	12.03	+09	51	36.5		9	675
(137)	1991	09	15.37153	23	59	57.93	+09	33	42.9		9	675
(137)	1991	09	15.40851	23	59	56.46	+09	33	22.2		9	675
(161)	1991	12	01.25329	03	06	59.50	+27	31	29.3	13.2	9	675
(161)	1991	12	01.28854	03	06	57.27	+27	31	24.6		9	675
(161)	1991	12	03.25329	03	05	01.29	+27	26	21.1		9	675
(161)	1991	12	03.28438	03	04	59.41	+27	26	17.7		9	675
(171)	1991	09	13.31910	23	33	32.99	-06	30	48.3	14.5	9	675
(171)	1991	09	13.35712	23	33	31.27	-06	30	58.7		9	675
(171)	1991	09	16.37674	23	31	22.03	-06	45	17.5	14.5	9	675
(171)	1991	09	16.41684	23	31	20.28	-06	45	28.9		9	675
(210)	1991	09	15.41753	00	15	10.44	-03	52	43.3		9	675
(210)	1991	09	15.46424	00	15	08.02	-03	52	53.3		9	675
(210)	1991	09	16.38663	00	14	22.12	-03	56	19.4	13.2	9	675
(210)	1991	09	16.42674	00	14	19.97	-03	56	28.2		9	675
(210)	1991	09	17.36064	00	13	32.99	-03	59	55.4		9	675
(210)	1991	09	17.39479	00	13	31.21	-04	00	03.2		9	675
(224)	1991	11	07.19079	23	52	58.66	+02	33	19.8		9	675
(224)	1991	11	07.22361	23	52	58.15	+02	33	18.6		9	675
(224)	1991	11	09.18697	23	52	33.24	+02	32	24.7	13.8	9	675
(224)	1991	11	09.22847	23	52	32.76	+02	32	23.5		9	675
(271)	1991	09	11.32257	23	46	52.59	+00	25	17.0		9	675
(271)	1991	09	11.37431	23	46	50.06	+00	25	06.0		9	675
(271)	1991	09	15.36128	23	43	42.48	+00	10	36.1		9	675
(271)	1991	09	15.39861	23	43	40.67	+00	10	27.8		9	675
(271)	1991	09	16.37674	23	42	54.03	+00	06	46.0	14.0	9	675
(271)	1991	09	16.41684	23	42	52.07	+00	06	37.0		9	675
(319)	1991	09	13.39444	00	09	32.14	+03	35	28.6	15.0	9	675
(319)	1991	09	13.43212	00	09	30.77	+03	35	11.2		9	675
(319)	1991	09	15.36128	00	08	22.72	+03	20	09.2		9	675
(319)	1991	09	15.37153	00	08	22.32	+03	20	02.0		9	675
(319)	1991	09	15.39861	00	08	21.38	+03	19	50.8		9	675

(319)		1991	09	15.40851	00	08	20.99	+03	19	47.3			9	675
(345)		1991	09	13.39444	00	08	01.68	+11	10	30.9			9	675
(345)		1991	09	13.43212	00	07	59.81	+11	10	12.4			9	675
(345)		1991	09	15.37153	00	06	28.47	+10	54	18.4			9	675
(345)		1991	09	15.40851	00	06	26.64	+10	54	00.9			9	675
(417)		1991	09	15.34132	23	04	42.17	-00	26	26.7			9	675
(417)		1991	09	15.38056	23	04	40.38	-00	26	41.8			9	675
(417)		1991	09	17.25139	23	03	17.81	-00	38	50.5			9	675
(417)		1991	09	17.29097	23	03	16.03	-00	39	05.9			9	675
(420)		1991	09	14.38368	23	36	56.04	+07	07	00.8			9	675
(420)		1991	09	14.43767	23	36	53.84	+07	06	45.6		14.2	9	675
(420)		1991	09	17.34861	23	34	56.88	+06	53	00.5			9	675
(420)		1991	09	17.38229	23	34	55.51	+06	52	50.2			9	675
(454)		1991	11	09.19392	00	32	46.69	+01	27	20.7			9	675
(454)		1991	11	09.23594	00	32	45.43	+01	27	18.7			9	675
(454)		1991	11	10.15694	00	32	19.38	+01	26	41.6			9	675
(454)		1991	11	10.39884	00	32	12.44	+01	26	32.8			9	675
(503)		1991	09	15.41753	00	21	08.27	-05	40	28.2			9	675
(503)		1991	09	15.46424	00	21	05.94	-05	40	42.0			9	675
(503)		1991	09	17.36064	00	19	35.08	-05	50	38.9			9	675
(503)		1991	09	17.39479	00	19	33.38	-05	50	49.6			9	675
(527)		1991	11	10.41646	03	25	25.61	+03	34	23.8			9	675
(527)		1991	11	10.44580	03	25	23.96	+03	34	20.1			9	675
(585)		1991	09	11.32257	00	11	28.09	+01	51	14.1			9	675
(585)		1991	09	11.37431	00	11	25.54	+01	50	49.2			9	675
(585)		1991	09	15.36128	00	08	17.24	+01	19	17.7			9	675
(585)		1991	09	15.39861	00	08	15.44	+01	19	00.2			9	675
(591)		1991	09	13.39444	23	59	39.75	+08	13	56.7			9	675
(591)		1991	09	13.43212	23	59	37.70	+08	13	51.9			9	675
(591)		1991	09	15.37153	23	57	54.68	+08	09	16.7			9	675
(591)		1991	09	15.40851	23	57	52.65	+08	09	11.3			9	675
(615)		1991	09	11.32257	23	46	25.05	-03	14	59.2			9	675
(615)		1991	09	11.37431	23	46	22.16	-03	15	13.9			9	675
(615)		1991	09	13.31910	23	44	40.20	-03	24	10.6		14.5	9	675
(615)		1991	09	13.35712	23	44	38.09	-03	24	22.0			9	675
(615)		1991	09	16.37674	23	41	58.45	-03	38	13.0		14.2	9	675
(615)		1991	09	16.41684	23	41	56.24	-03	38	23.9			9	675
(636)		1989	09	28.43576	02	12	30.36	+10	37	27.2			9	675
(636)		1989	09	28.48038	02	12	28.51	+10	37	25.7			9	675
(718)		1991	09	14.39288	00	06	03.86	-06	28	44.5		15.0	9	675
(718)		1991	09	14.44635	00	06	01.35	-06	28	57.5			9	675
(718)		1991	09	16.38663	00	04	32.96	-06	36	39.4		15.2	9	675
(718)		1991	09	16.42674	00	04	31.07	-06	36	48.7			9	675
(809)		1991	09	14.39288	23	43	33.32	-06	56	18.2		14.5	9	675
(809)		1991	09	14.44635	23	43	30.94	-06	56	55.1			9	675
(809)		1991	09	16.38663	23	42	13.00	-07	19	24.3			9	675
(830)		1991	11	09.19392	00	29	10.00	+06	46	04.0			9	675
(830)		1991	11	09.23594	00	29	09.00	+06	45	58.0			9	675
(830)		1991	11	10.15694	00	28	48.90	+06	43	51.6			9	675
(830)		1991	11	10.39884	00	28	43.52	+06	43	18.3			9	675
(847)		1990	11	13.40868	04	06	44.27	+23	06	17.6		14.5	9	675
(847)		1990	11	13.45330	04	06	41.74	+23	06	10.2			9	675
(847)		1990	11	14.42674	04	05	49.05	+23	03	07.9		14.6	9	675
(847)		1990	11	14.45833	04	05	47.25	+23	03	02.1			9	675
(876)		1991	09	15.41753	00	37	52.30	-05	39	20.2			9	675
(876)		1991	09	15.46424	00	37	50.54	-05	39	44.6			9	675
(876)		1991	09	17.36064	00	36	42.22	-05	56	49.7			9	675
(876)		1991	09	17.39479	00	36	40.83	-05	57	08.4			9	675
(889)		1989	11	02.32473	01	49	01.21	-05	25	59.4			9	675

(889)		1989	11	02.36163	01	48	59.59	-05	26	04.8			9	675
(889)		1989	11	03.25434	01	48	20.06	-05	28	31.6			9	675
(889)		1989	11	03.29080	01	48	18.37	-05	28	37.7			9	675
(901)		1991	09	15.34132	23	14	49.03	+03	55	15.6			9	675
(901)		1991	09	15.38056	23	14	47.07	+03	55	02.9			9	675
(901)		1991	09	17.25139	23	13	21.36	+03	44	53.3			9	675
(901)		1991	09	17.29097	23	13	19.44	+03	44	39.9			9	675
(915)		1991	12	01.25329	03	17	37.70	+27	21	12.1		14.0	9	675
(915)		1991	12	01.28854	03	17	35.46	+27	21	08.0			9	675
(915)		1991	12	03.25329	03	15	41.93	+27	16	17.5			9	675
(915)		1991	12	03.28438	03	15	40.04	+27	16	13.7			9	675
(996)		1991	11	09.19392	00	20	20.59	+02	39	58.8			9	675
(996)		1991	11	09.23594	00	20	19.67	+02	39	53.2			9	675
(996)		1991	11	10.15694	00	20	00.13	+02	37	48.6			9	675
(996)		1991	11	10.39884	00	19	55.03	+02	37	16.3			9	675
(999)		1991	11	09.34219	03	18	55.34	+14	01	37.6			9	675
(999)		1991	11	09.38524	03	18	52.86	+14	01	13.6			9	675
(1020)		1991	09	13.31910	23	33	08.50	-01	50	22.8		16.8	9	675
(1020)		1991	09	13.35712	23	33	06.62	-01	50	37.0			9	675
(1020)		1991	09	16.37674	23	30	46.89	-02	09	53.0		16.8	9	675
(1020)		1991	09	16.41684	23	30	45.00	-02	10	07.9			9	675
(1061)		1991	09	13.31910	23	33	51.92	-07	12	45.0		16.8	9	675
(1061)		1991	09	13.35712	23	33	50.08	-07	12	55.8			9	675
(1061)		1991	09	16.37674	23	31	35.14	-07	28	05.6		16.0	9	675
(1061)		1991	09	16.41684	23	31	33.27	-07	28	17.3			9	675
(1085)		1990	11	15.35642	03	31	04.92	+09	20	46.7			9	675
(1085)		1990	11	15.38767	03	31	03.40	+09	20	41.1			9	675
(1085)		1990	11	16.36632	03	30	17.15	+09	17	59.9			9	675
(1088)		1989	09	28.43576	02	22	36.02	+03	58	07.8			9	675
(1088)		1989	09	28.48038	02	22	34.50	+03	58	10.3			9	675
(1142)		1990	11	13.40868	04	24	16.37	+18	45	39.2		16.2	9	675
(1142)		1990	11	13.45330	04	24	14.27	+18	45	33.8			9	675
(1142)		1990	11	14.42674	04	23	29.88	+18	43	41.4			9	675
(1142)		1990	11	14.45833	04	23	28.39	+18	43	37.6		16.0	9	675
(1192)		1991	09	11.32257	00	16	15.03	-01	12	28.9			9	675
(1192)		1991	09	11.37431	00	16	11.21	-01	12	28.7			9	675
(1192)		1991	09	15.36128	00	11	30.38	-01	10	46.8			9	675
(1192)		1991	09	15.39861	00	11	27.64	-01	10	46.2			9	675
(1239)		1991	11	07.19079	23	53	11.51	-02	59	09.9			9	675
(1239)		1991	11	07.22361	23	53	10.79	-02	59	08.5			9	675
(1239)		1991	11	09.18697	23	52	41.50	-03	00	21.8		17.5	9	675
(1239)		1991	11	09.22847	23	52	40.87	-03	00	23.0			9	675
(1257)		1991	09	14.38368	23	40	53.05	+02	22	14.7		16.5	9	675
(1257)		1991	09	14.43767	23	40	50.18	+02	21	53.0			9	675
(1257)		1991	09	17.34861	23	38	20.97	+02	02	03.6			9	675
(1257)		1991	09	17.38229	23	38	19.18	+02	01	50.0		16.2	9	675
(1261)		1991	09	13.31910	23	33	34.36	-06	23	51.4		17.0	9	675
(1261)		1991	09	13.35712	23	33	32.61	-06	24	01.7			9	675
(1261)		1991	09	16.41684	23	31	22.21	-06	37	30.7		16.8	9	675
(1286)		1991	11	09.19392	00	28	07.99	+03	20	29.3			9	675
(1286)		1991	11	09.23594	00	28	07.25	+03	20	16.8			9	675
(1286)		1991	11	10.15694	00	27	53.06	+03	15	50.0			9	675
(1286)		1991	11	10.39884	00	27	49.21	+03	14	42.0			9	675
(1321)		1991	12	01.25329	03	03	52.72	+31	28	28.5			9	675
(1321)		1991	12	01.28854	03	03	50.94	+31	28	19.5		15.2	9	675
(1335)		1991	09	11.32257	00	00	28.50	-00	03	22.9			9	675
(1335)		1991	09	11.37431	00	00	25.94	-00	03	46.6			9	675
(1335)		1991	09	15.36128	23	57	21.87	-00	33	33.8			9	675
(1335)		1991	09	15.39861	23	57	20.00	-00	33	51.4			9	675

(1340)	1990	11	13.40868	04	10	16.26	+21	37	18.6	17.0	9 675
(1340)	1990	11	13.45330	04	10	14.12	+21	37	13.1		9 675
(1340)	1990	11	14.42674	04	09	27.90	+21	35	16.9	16.8	9 675
(1340)	1990	11	14.45833	04	09	26.34	+21	35	13.0		9 675
(1351)	1991	11	09.19392	00	21	12.85	+04	26	48.9		9 675
(1351)	1991	11	09.23594	00	21	11.82	+04	26	48.1		9 675
(1351)	1991	11	10.15694	00	20	50.72	+04	26	39.5		9 675
(1351)	1991	11	10.39884	00	20	45.10	+04	26	38.7		9 675
(1356)	1991	11	09.34219	03	13	46.10	+13	24	48.8		9 675
(1356)	1991	11	09.38524	03	13	43.79	+13	24	45.6		9 675
(1399)	1989	09	28.43576	02	08	13.47	+04	37	13.2		9 675
(1399)	1989	11	02.32473	01	43	39.69	-00	35	45.1		9 675
(1399)	1989	11	02.36163	01	43	38.08	-00	35	56.7		9 675
(1399)	1989	11	03.25434	01	43	00.84	-00	41	00.4		9 675
(1399)	1989	11	03.29080	01	42	59.21	-00	41	12.0		9 675
(1462)	1991	09	11.32257	23	47	30.28	-02	08	18.0		9 675
(1462)	1991	09	11.37431	23	47	27.92	-02	08	31.4		9 675
(1462)	1991	09	13.31910	23	46	04.25	-02	17	13.8	16.5	9 675
(1462)	1991	09	13.35712	23	46	02.49	-02	17	24.5		9 675
(1462)	1991	09	15.36128	23	44	35.63	-02	26	23.0		9 675
(1462)	1991	09	15.39861	23	44	33.95	-02	26	33.3		9 675
(1462)	1991	09	16.37674	23	43	51.38	-02	30	58.4	16.2	9 675
(1462)	1991	09	16.41684	23	43	49.61	-02	31	08.7		9 675
(1482)	1989	09	28.43576	02	18	03.06	+10	30	15.3		9 675
(1482)	1989	09	28.48038	02	18	01.37	+10	30	06.9		9 675
(1483)	1990	11	13.40868	04	06	51.18	+19	13	00.8	16.2	9 675
(1483)	1990	11	13.45330	04	06	48.64	+19	12	57.6		9 675
(1483)	1990	11	14.42674	04	05	53.88	+19	11	49.2	16.2	9 675
(1484)	1990	11	15.35642	03	22	12.38	+08	29	32.7		9 675
(1484)	1990	11	15.38767	03	22	10.33	+08	29	33.8		9 675
(1484)	1990	11	16.36632	03	21	12.83	+08	29	46.4		9 675
(1511)	1991	09	14.39288	23	53	58.20	-07	51	19.8	16.8	9 675
(1511)	1991	09	14.44635	23	53	55.12	-07	51	38.6		9 675
(1511)	1991	09	16.38663	23	52	07.44	-08	03	23.2	16.8	9 675
(1511)	1991	09	16.42674	23	52	05.11	-08	03	37.7		9 675
(1518)	1991	11	07.19079	00	04	51.62	-01	02	41.4		9 675
(1518)	1991	11	07.22361	00	04	50.99	-01	02	34.1		9 675
(1518)	1991	11	09.18697	00	04	22.17	-00	54	56.7	16.0	9 675
(1518)	1991	11	09.22847	00	04	21.53	-00	54	46.9		9 675
(1570)	1991	11	07.19079	23	55	23.67	-00	38	58.2		9 675
(1570)	1991	11	07.22361	23	55	23.27	-00	39	01.0		9 675
(1570)	1991	11	09.18697	23	55	05.10	-00	42	03.0	16.8	9 675
(1570)	1991	11	09.22847	23	55	04.68	-00	42	06.6		9 675
(1581)	1991	11	09.19392	00	39	53.54	+00	41	05.3		9 675
(1581)	1991	11	09.23594	00	39	52.45	+00	41	00.3		9 675
(1581)	1991	11	10.15694	00	39	29.20	+00	39	13.9		9 675
(1581)	1991	11	10.39884	00	39	23.05	+00	38	47.6		9 675
(1713)	1991	09	14.39288	00	10	50.63	-06	49	19.3	15.8	9 675
(1713)	1991	09	14.44635	00	10	47.50	-06	49	34.3		9 675
(1713)	1991	09	15.41753	00	09	54.26	-06	54	05.3		9 675
(1713)	1991	09	15.46424	00	09	51.49	-06	54	17.7		9 675
(1713)	1991	09	16.38663	00	09	00.33	-06	58	31.6	15.8	9 675
(1713)	1991	09	16.42674	00	08	57.96	-06	58	42.4		9 675
(1743)	1991	09	11.32257	00	09	17.13	+03	11	51.7		9 675
(1743)	1991	09	11.37431	00	09	14.53	+03	11	28.7		9 675
(1743)	1991	09	13.39444	00	07	38.86	+02	57	16.2		9 675
(1743)	1991	09	13.43212	00	07	37.01	+02	57	00.3		9 675
(1743)	1991	09	15.36128	00	06	03.78	+02	43	04.3		9 675
(1743)	1991	09	15.37153	00	06	03.26	+02	42	58.6		9 675

(1743)	1991	09	15.39861	00	06	01.95	+02	42	48.0	9	675
(1743)	1991	09	15.40851	00	06	01.42	+02	42	44.0	9	675
(1833)	1991	11	10.41646	03	40	06.87	+04	01	25.5	9	675
(1833)	1991	11	10.44580	03	40	05.27	+04	01	17.2	9	675
(1835)	1990	11	13.40868	04	03	30.69	+22	07	04.5	15.8	9	675
(1835)	1990	11	13.45330	04	03	28.18	+22	06	58.2	9	675
(1835)	1990	11	14.42674	04	02	35.27	+22	04	26.4	16.2	9	675
(1835)	1990	11	14.45833	04	02	33.45	+22	04	21.3	9	675
(1871)	1990	11	15.38767	03	14	34.72	+07	13	30.7	9	675
(1873)	1990	11	15.35642	03	12	11.89	+03	42	58.9	9	675
(1878)	1991	11	09.19392	00	21	04.29	+01	47	05.6	9	675
(1878)	1991	11	09.23594	00	21	03.42	+01	46	59.6	9	675
(1878)	1991	11	10.15694	00	20	47.00	+01	44	49.0	9	675
(1878)	1991	11	10.39884	00	20	42.62	+01	44	16.0	9	675
(1881)	1991	09	14.38368	23	27	47.36	+07	52	14.3	9	675
(1881)	1991	09	14.43767	23	27	45.03	+07	51	50.6	9	675
(1909)	1991	09	11.32257	23	45	07.98	+00	56	09.9	9	675
(1909)	1991	09	11.37431	23	45	04.89	+00	55	49.9	9	675
(1909)	1991	09	14.38368	23	42	18.91	+00	36	45.6	9	675
(1909)	1991	09	14.43767	23	42	15.79	+00	36	24.7	9	675
(1909)	1991	09	16.37674	23	40	28.47	+00	23	53.0	16.8	9	675
(1909)	1991	09	17.34861	23	39	34.93	+00	17	41.9	9	675
(1909)	1991	09	17.38229	23	39	32.97	+00	17	29.9	9	675
(1939)	1991	11	09.19392	00	31	15.85	+02	52	57.3	9	675
(1939)	1991	11	09.23594	00	31	14.83	+02	52	52.1	9	675
(1939)	1991	11	10.15694	00	30	53.73	+02	50	51.5	9	675
(1939)	1991	11	10.39884	00	30	48.06	+02	50	20.6	9	675
(1964)	1991	11	09.19392	00	24	38.91	+05	10	16.3	9	675
(1964)	1991	11	09.23594	00	24	38.51	+05	10	07.9	9	675
(1964)	1991	11	10.15694	00	24	32.45	+05	07	14.5	9	675
(1964)	1991	11	10.39884	00	24	30.55	+05	06	31.4	9	675
(1974)	1991	09	13.31910	23	24	22.23	-04	15	50.6	17.5	9	675
(1974)	1991	09	13.35712	23	24	20.52	-04	16	07.7	9	675
(1974)	1991	09	16.37674	23	22	18.63	-04	38	24.4	18.0	9	675
(1974)	1991	09	16.41684	23	22	17.07	-04	38	42.3	9	675
(1976)	1990	11	13.40868	04	19	27.91	+19	26	37.8	17.2	9	675
(1976)	1990	11	13.45330	04	19	25.22	+19	26	32.3	9	675
(1976)	1990	11	14.42674	04	18	27.27	+19	24	45.1	17.2	9	675
(1976)	1990	11	14.45833	04	18	25.31	+19	24	42.2	9	675
(1982)	1989	09	28.43576	02	11	54.38	+07	29	38.5	9	675
(1982)	1989	09	28.48038	02	11	52.11	+07	29	39.2	9	675
(1991)	1991	09	14.38368	23	37	33.95	+03	28	35.8	16.2	9	675
(1991)	1991	09	14.43767	23	37	30.49	+03	28	31.9	9	675
(1991)	1991	09	17.34861	23	34	32.44	+03	24	41.8	15.5	9	675
(2026)	1991	11	09.19392	00	19	12.04	+05	44	17.0	9	675
(2026)	1991	11	09.23594	00	19	11.02	+05	44	08.2	9	675
(2026)	1991	11	10.15694	00	18	49.48	+05	41	08.1	9	675
(2026)	1991	11	10.39884	00	18	43.78	+05	40	23.4	9	675
(2087)	1991	11	09.19392	00	38	16.10	+00	54	26.4	9	675
(2087)	1991	11	09.23594	00	38	15.04	+00	54	23.5	9	675
(2087)	1991	11	10.15694	00	37	53.95	+00	53	33.0	9	675
(2087)	1991	11	10.39884	00	37	48.21	+00	53	21.0	9	675
(2098)	1991	09	13.39444	00	12	38.74	+05	57	14.5	9	675
(2098)	1991	09	13.43212	00	12	36.54	+05	57	11.5	9	675
(2098)	1991	09	15.37153	00	10	47.49	+05	54	45.5	9	675
(2098)	1991	09	15.40851	00	10	45.23	+05	54	42.7	9	675
(2099)	1991	11	02.28003	01	54	11.73	+15	10	45.9	15.0	2	675
(2099)	1991	11	02.30729	01	54	11.75	+15	09	18.8	2	675
(2099)	1991	11	04.32830	01	54	28.34	+13	21	16.4	2	675

(2099)	1991	11	04.35295	01	54	28.48	+13	19	58.9		2	675
(2139)	1990	11	13.40868	04	26	17.39	+22	40	55.8	17.0	9	675
(2139)	1990	11	13.45330	04	26	14.56	+22	40	47.2		9	675
(2139)	1990	11	14.42674	04	25	15.29	+22	37	47.6	16.5	9	675
(2139)	1990	11	14.45833	04	25	13.26	+22	37	41.7		9	675
(2142)	1991	11	07.19079	23	48	02.27	-01	47	45.1		9	675
(2142)	1991	11	07.22361	23	48	01.78	-01	47	48.4		9	675
(2142)	1991	11	09.18697	23	47	37.40	-01	50	25.4	18.0	9	675
(2142)	1991	11	09.22847	23	47	36.81	-01	50	27.5		9	675
(2208)	1991	11	09.34219	03	29	19.27	+15	11	48.2		9	675
(2208)	1991	11	09.38524	03	29	17.23	+15	11	43.8		9	675
(2228)	1989	09	28.43576	02	02	11.80	+09	34	56.4		9	675
(2228)	1989	09	28.48038	02	02	10.32	+09	34	47.4		9	675
(2247)	1991	12	01.25329	03	26	36.11	+27	41	28.6	17.5	9	675
(2247)	1991	12	01.28854	03	26	33.83	+27	41	23.9		9	675
(2247)	1991	12	03.25329	03	24	37.75	+27	36	04.4		9	675
(2247)	1991	12	03.28438	03	24	35.81	+27	36	00.1		9	675
(2283)	1991	11	09.34219	03	25	00.52	+12	15	05.2		9	675
(2283)	1991	11	09.38524	03	24	57.80	+12	14	46.7		9	675
(2291)	1991	09	15.41753	00	41	21.90	-04	43	00.7		9	675
(2291)	1991	09	17.36064	00	40	14.20	-05	05	37.2		9	675
(2291)	1991	09	17.39479	00	40	12.94	-05	06	01.1		9	675
(2328)	1991	09	11.32257	23	55	52.95	+01	41	40.9		9	675
(2328)	1991	09	11.37431	23	55	50.21	+01	41	12.6		9	675
(2328)	1991	09	15.36128	23	52	31.40	+01	05	11.8		9	675
(2328)	1991	09	15.39861	23	52	29.50	+01	04	50.5		9	675
(2357)	1990	11	13.40868	04	03	52.43	+17	51	32.8	16.5	9	675
(2357)	1990	11	13.45330	04	03	50.84	+17	51	29.9		9	675
(2357)	1990	11	14.42674	04	03	20.25	+17	49	50.7	16.8	9	675
(2357)	1990	11	14.45833	04	03	19.23	+17	49	47.0		9	675
(2404)	1991	11	09.19392	00	34	59.87	-00	09	00.1		9	675
(2404)	1991	11	09.23594	00	34	58.89	-00	09	05.1		9	675
(2404)	1991	11	10.15694	00	34	38.30	-00	10	27.3		9	675
(2404)	1991	11	10.39884	00	34	32.65	-00	10	48.4		9	675
(2408)	1991	09	15.41753	00	41	38.19	-04	44	40.9		9	675
(2408)	1991	09	15.46424	00	41	36.13	-04	45	15.7		9	675
(2408)	1991	09	17.36064	00	40	15.13	-05	09	22.0		9	675
(2408)	1991	09	17.39479	00	40	13.59	-05	09	47.9		9	675
(2431)	1991	09	11.37431	23	59	03.75	+02	35	19.6		9	675
(2431)	1991	09	15.36128	23	55	37.80	+02	21	59.1		9	675
(2431)	1991	09	15.39861	23	55	35.80	+02	21	50.3		9	675
(2431)	1991	09	17.34861	23	53	53.36	+02	14	53.2	15.8	9	675
(2431)	1991	09	17.38229	23	53	51.48	+02	14	45.6		9	675
(2442)	1991	11	09.19392	00	41	35.53	+02	21	07.5		9	675
(2442)	1991	11	09.23594	00	41	34.56	+02	20	57.3		9	675
(2442)	1991	11	10.15694	00	41	15.89	+02	17	21.7		9	675
(2442)	1991	11	10.39884	00	41	10.82	+02	16	27.4		9	675
(2450)	1990	11	13.40868	04	23	13.09	+18	39	51.0	17.2	9	675
(2450)	1990	11	13.45330	04	23	11.01	+18	39	46.1		9	675
(2450)	1990	11	14.42674	04	22	25.64	+18	38	01.1	17.0	9	675
(2450)	1990	11	14.45833	04	22	24.11	+18	37	58.5		9	675
(2455)	1991	12	01.25329	03	37	04.92	+30	12	58.0	15.8	9	675
(2455)	1991	12	01.28854	03	37	02.82	+30	12	46.5		9	675
(2455)	1991	12	03.25329	03	35	13.76	+30	01	17.1		9	675
(2455)	1991	12	03.28438	03	35	11.96	+30	01	05.8		9	675
(2470)	1991	11	09.34219	03	24	33.60	+16	17	29.9		9	675
(2470)	1991	11	09.38524	03	24	31.25	+16	17	24.0		9	675
(2502)	1991	11	07.19079	00	08	58.82	+00	26	55.4		9	675
(2502)	1991	11	07.22361	00	08	57.89	+00	26	57.6		9	675

(2502)	1991 11 09.18697	00 07 59.46	+00 28 46.1	17.0	9	675
(2502)	1991 11 09.22847	00 07 58.30	+00 28 48.4		9	675
(2506)	1991 11 09.19392	00 21 22.35	+00 31 16.0		9	675
(2506)	1991 11 09.23594	00 21 21.54	+00 31 09.7		9	675
(2506)	1991 11 10.15694	00 21 05.20	+00 29 18.8		9	675
(2521)	1991 12 01.25329	03 21 46.66	+26 35 01.1	16.8	9	675
(2521)	1991 12 01.28854	03 21 44.73	+26 34 49.3		9	675
(2521)	1991 12 03.25329	03 20 03.88	+26 23 23.8		9	675
(2521)	1991 12 03.28438	03 20 02.22	+26 23 14.1		9	675
(2563)	1991 11 09.19392	00 37 15.26	+01 06 46.3		9	675
(2563)	1991 11 09.23594	00 37 14.06	+01 06 39.9		9	675
(2563)	1991 11 10.15694	00 36 51.03	+01 04 42.9		9	675
(2563)	1991 11 10.39884	00 36 44.95	+01 04 13.2		9	675
(2601)	1991 12 01.25329	03 12 37.52	+29 05 06.4	17.0	9	675
(2601)	1991 12 01.28854	03 12 35.76	+29 04 54.3		9	675
(2601)	1991 12 03.25329	03 11 05.75	+28 53 22.5		9	675
(2601)	1991 12 03.28438	03 11 04.27	+28 53 12.6		9	675
(2620)	1990 11 13.40868	04 10 56.99	+19 53 41.7	17.2	9	675
(2620)	1990 11 13.45330	04 10 54.56	+19 53 37.9		9	675
(2620)	1990 11 14.42674	04 10 02.50	+19 52 22.9	16.8	9	675
(2620)	1990 11 14.45833	04 10 00.75	+19 52 20.6		9	675
(2667)	1990 11 13.40868	04 30 12.72	+21 56 01.7	16.5	9	675
(2667)	1990 11 13.45330	04 30 10.51	+21 55 58.6		9	675
(2667)	1990 11 14.42674	04 29 23.13	+21 55 00.6	16.5	9	675
(2667)	1990 11 14.45833	04 29 21.49	+21 54 59.0		9	675
(2702)	1991 11 09.19392	00 17 04.56	+03 34 31.8		9	675
(2702)	1991 11 09.23594	00 17 03.80	+03 34 24.8		9	675
(2702)	1991 11 10.15694	00 16 47.04	+03 32 06.9		9	675
(2702)	1991 11 10.39884	00 16 42.63	+03 31 31.3		9	675
(2736)	1990 11 13.40868	04 17 40.16	+24 54 43.6		9	675
(2736)	1990 11 13.45330	04 17 37.24	+24 54 28.8		9	675
(2736)	1990 11 14.42674	04 16 36.09	+24 48 53.5	16.8	9	675
(2736)	1990 11 14.45833	04 16 34.08	+24 48 42.4		9	675
(2738)	1991 09 11.32257	23 58 18.23	+01 27 38.7		9	675
(2738)	1991 09 11.37431	23 58 15.56	+01 27 21.9		9	675
(2738)	1991 09 15.36128	23 55 04.77	+01 07 39.9		9	675
(2738)	1991 09 15.39861	23 55 02.97	+01 07 27.4		9	675
(2776)	1991 11 09.34219	03 26 50.55	+13 05 35.3		9	675
(2776)	1991 11 09.38524	03 26 47.95	+13 05 21.7		9	675
(2788)	1991 09 11.32257	00 09 09.28	-00 22 26.6		9	675
(2788)	1991 09 11.37431	00 09 06.55	-00 22 42.6		9	675
(2788)	1991 09 15.36128	00 05 45.95	-00 41 17.7		9	675
(2788)	1991 09 15.39861	00 05 44.00	-00 41 27.8		9	675
(2806)	1991 11 07.19079	00 04 41.17	-03 23 05.3		9	675
(2806)	1991 11 07.22361	00 04 40.68	-03 23 06.3		9	675
(2806)	1991 11 09.18697	00 04 18.46	-03 23 08.4	17.6	9	675
(2806)	1991 11 09.22847	00 04 18.05	-03 23 08.3		9	675
(2846)	1991 09 15.41753	00 25 58.23	-07 17 52.3		9	675
(2846)	1991 09 15.46424	00 25 56.37	-07 18 11.3		9	675
(2846)	1991 09 17.36064	00 24 44.59	-07 31 24.6		9	675
(2846)	1991 09 17.39479	00 24 43.26	-07 31 38.3		9	675
(2854)	1991 09 14.38368	23 26 43.37	+05 48 04.9	17.2	9	675
(2854)	1991 09 14.43767	23 26 39.96	+05 47 48.5		9	675
(2854)	1991 09 17.34861	23 23 41.93	+05 32 15.9	16.8	9	675
(2854)	1991 09 17.38229	23 23 39.79	+05 32 03.9		9	675
(2862)	1991 09 15.34132	23 04 00.01	-00 35 25.6		9	675
(2862)	1991 09 15.38056	23 03 57.69	-00 35 42.2		9	675
(2862)	1991 09 17.25139	23 02 12.18	-00 49 07.4		9	675
(2862)	1991 09 17.29097	23 02 09.86	-00 49 24.1		9	675

(2907)	1991	11	10.41646	03	34	02.45	+05 30 34.7		9 675
(2907)	1991	11	10.44580	03	34	01.03	+05 30 26.4		9 675
(2926)	1991	09	13.39444	00	24	10.92	+06 54 07.8		9 675
(2926)	1991	09	13.43212	00	24	08.94	+06 53 55.1	17.0	9 675
(2926)	1991	09	15.37153	00	22	28.44	+06 41 19.7		9 675
(2926)	1991	09	15.40851	00	22	26.56	+06 41 06.0		9 675
(2926)	1991	11	07.19079	23	47	13.03	+01 06 31.5		9 675
(2926)	1991	11	07.22361	23	47	12.82	+01 06 26.2		9 675
(2926)	1991	11	09.18697	23	47	07.08	+01 01 16.0	17.8	9 675
(2926)	1991	11	09.22847	23	47	06.90	+01 01 09.6		9 675
(2939)	1991	09	11.32257	00	11	20.38	+02 06 30.8		9 675
(2939)	1991	09	11.37431	00	11	17.35	+02 06 16.3		9 675
(2939)	1991	09	15.36128	00	07	39.41	+01 49 04.7		9 675
(2939)	1991	09	15.39861	00	07	37.31	+01 48 54.7		9 675
(2971)	1990	11	13.40868	04	15	00.68	+16 49 36.1	16.5	9 675
(2971)	1990	11	13.45330	04	14	57.85	+16 49 40.7		9 675
(2971)	1990	11	14.42674	04	13	57.13	+16 51 27.2		9 675
(2971)	1990	11	14.45833	04	13	55.11	+16 51 31.2		9 675
(2996)	1991	09	13.31910	23	17	04.69	-03 01 52.7	16.8	9 675
(2996)	1991	09	13.35712	23	17	02.57	-03 02 01.6		9 675
(2996)	1991	09	15.34132	23	15	22.86	-03 09 56.3		9 675
(2996)	1991	09	15.38056	23	15	20.87	-03 10 06.2		9 675
(2997)	1991	12	01.25329	03	03	50.94	+28 44 12.3	16.5	9 675
(2997)	1991	12	01.28854	03	03	48.97	+28 44 04.6		9 675
(2997)	1991	12	03.25329	03	02	08.39	+28 36 03.8		9 675
(2997)	1991	12	03.28438	03	02	06.73	+28 35 57.4		9 675
(3010)	1990	11	13.40868	04	02	28.12	+17 59 48.8	18.2	9 675
(3010)	1990	11	13.45330	04	02	25.92	+17 59 43.2		9 675
(3010)	1990	11	14.42674	04	01	38.62	+17 57 31.3	17.6	9 675
(3010)	1990	11	14.45833	04	01	37.08	+17 57 27.0		9 675
(3020)	1991	11	10.41646	03	24	30.19	+08 29 02.3		9 675
(3020)	1991	11	10.44580	03	24	28.62	+08 28 55.7		9 675
(3088)	1991	09	11.32257	00	03	00.22	-01 03 14.8		9 675
(3088)	1991	09	11.37431	00	02	58.05	-01 03 38.7		9 675
(3088)	1991	09	15.36128	00	00	19.06	-01 33 11.3		9 675
(3088)	1991	09	15.39861	00	00	17.52	-01 33 28.5		9 675
(3088)	1991	09	16.38663	23	59	37.19	-01 40 52.5	16.5	9 675
(3088)	1991	09	16.42674	23	59	35.52	-01 41 11.3		9 675
(3129)	1989	11	02.32473	01	30	28.04	-00 58 33.9		9 675
(3129)	1989	11	02.36163	01	30	26.45	-00 58 38.9		9 675
(3129)	1989	11	03.25434	01	29	46.67	-01 01 31.3		9 675
(3129)	1989	11	03.29080	01	29	45.05	-01 01 37.8		9 675
(3131)	1990	11	14.42674	03	59	22.53	+21 24 31.7	17.2	9 675
(3131)	1990	11	14.45833	03	59	20.83	+21 24 27.9		9 675
(3155)	1991	09	14.39288	23	53	01.25	-09 07 20.2	16.0	9 675
(3155)	1991	09	14.44635	23	52	57.82	-09 07 29.8		9 675
(3155)	1991	09	16.38663	23	50	59.52	-09 13 37.8	15.8	9 675
(3155)	1991	09	16.42674	23	50	56.93	-09 13 45.1		9 675
(3189)	1989	09	28.43576	01	56	47.33	+06 41 29.9		9 675
(3189)	1989	09	28.48038	01	56	45.89	+06 41 10.7		9 675
(3192)	1991	09	15.41753	00	13	34.84	-02 46 39.1		9 675
(3192)	1991	09	15.46424	00	13	32.25	-02 46 54.6		9 675
(3192)	1991	09	17.36064	00	11	50.18	-02 57 31.9		9 675
(3192)	1991	09	17.39479	00	11	48.07	-02 57 44.6		9 675
(3200)	1991	11	07.33333	04	32	48.01	+39 53 00.9	18.2	3 675
(3200)	1991	11	07.36597	04	32	42.86	+39 52 59.4		3 675
(3200)	1991	11	12.41806	04	18	35.45	+39 43 13.7		3 675
(3227)	1991	09	11.32257	00	13	14.96	-01 11 07.8		9 675
(3227)	1991	09	11.37431	00	13	12.39	-01 11 30.4		9 675

(3227)	1991	09	15.36128	00	09	59.61	-01	39	20.8	9 675
(3227)	1991	09	15.39861	00	09	57.72	-01	39	36.9	9 675
(3228)	1991	09	13.39444	00	14	36.84	+04	43	19.5	17.0 9 675
(3228)	1991	09	13.43212	00	14	34.84	+04	43	08.4	9 675
(3228)	1991	09	15.37153	00	12	56.95	+04	33	53.9	9 675
(3228)	1991	09	15.40851	00	12	55.01	+04	33	43.4	9 675
(3261)	1989	09	28.43576	02	02	30.35	+08	40	42.2	9 675
(3261)	1989	09	28.48038	02	02	28.68	+08	40	31.3	9 675
(3268)	1990	11	13.40868	04	19	17.70	+18	08	02.3	17.2 9 675
(3268)	1990	11	13.45330	04	19	14.95	+18	07	47.5	9 675
(3268)	1990	11	14.42674	04	18	16.59	+18	02	35.8	16.8 9 675
(3268)	1990	11	14.45833	04	18	14.63	+18	02	25.7	9 675
(3280)	1991	09	13.31910	23	16	08.31	-02	21	21.7	16.0 9 675
(3280)	1991	09	13.35712	23	16	06.19	-02	21	30.8	9 675
(3280)	1991	09	15.34132	23	14	24.95	-02	29	57.1	9 675
(3280)	1991	09	15.38056	23	14	22.91	-02	30	07.0	9 675
(3280)	1991	09	17.25139	23	12	49.18	-02	38	02.4	9 675
(3280)	1991	09	17.29097	23	12	47.12	-02	38	12.8	9 675
(3294)	1991	09	11.32257	00	11	51.81	-00	43	10.1	9 675
(3294)	1991	09	11.37431	00	11	49.02	-00	43	20.2	9 675
(3294)	1991	09	15.36128	00	08	27.73	-00	56	29.9	9 675
(3294)	1991	09	15.39861	00	08	25.79	-00	56	38.0	9 675
(3327)	1991	11	09.19392	00	30	10.84	+01	26	26.4	9 675
(3327)	1991	11	09.23594	00	30	09.97	+01	26	22.9	9 675
(3327)	1991	11	10.15694	00	29	52.19	+01	25	11.1	9 675
(3327)	1991	11	10.39884	00	29	47.41	+01	24	52.5	9 675
(3347)	1991	11	07.19079	00	12	46.88	+01	04	01.8	9 675
(3347)	1991	11	07.22361	00	12	46.35	+01	03	54.6	9 675
(3347)	1991	11	09.18697	00	12	19.83	+00	58	02.9	16.8 9 675
(3347)	1991	11	09.19392	00	12	19.80	+00	58	03.4	9 675
(3347)	1991	11	09.22847	00	12	19.30	+00	57	56.4	9 675
(3347)	1991	11	09.23594	00	12	19.22	+00	57	56.7	9 675
(3347)	1991	11	10.15694	00	12	08.77	+00	55	24.8	9 675
(3348)	1991	11	07.19079	00	03	35.30	-01	11	31.3	9 675
(3348)	1991	11	07.22361	00	03	34.92	-01	11	36.5	9 675
(3348)	1991	11	09.18697	00	03	10.12	-01	18	03.0	18.0 9 675
(3348)	1991	11	09.22847	00	03	09.59	-01	18	10.5	9 675
(3365)	1991	11	09.19392	00	29	25.30	+00	43	11.9	9 675
(3365)	1991	11	09.23594	00	29	24.62	+00	43	01.5	9 675
(3365)	1991	11	10.15694	00	29	12.13	+00	39	34.1	9 675
(3365)	1991	11	10.39884	00	29	08.77	+00	38	40.7	9 675
(3381)	1991	09	13.39444	00	13	44.59	+10	16	43.0	16.2 9 675
(3381)	1991	09	13.43212	00	13	42.88	+10	16	35.0	16.2 9 675
(3381)	1991	09	15.37153	00	12	19.36	+10	09	30.1	9 675
(3381)	1991	09	15.40851	00	12	17.65	+10	09	21.7	9 675
(3394)	1991	09	11.32257	23	56	58.76	+03	06	35.7	9 675
(3394)	1991	09	11.37431	23	56	56.06	+03	06	10.2	9 675
(3394)	1991	09	14.38368	23	54	20.97	+02	43	14.0	9 675
(3394)	1991	09	14.43767	23	54	18.12	+02	42	48.7	17.8 9 675
(3394)	1991	09	15.36128	23	53	30.02	+02	35	36.1	9 675
(3394)	1991	09	15.39861	23	53	28.05	+02	35	16.6	9 675
(3394)	1991	09	17.34861	23	51	45.33	+02	19	54.3	17.8 9 675
(3394)	1991	09	17.38229	23	51	43.36	+02	19	36.3	9 675
(3397)	1989	09	28.43576	02	12	34.27	+10	21	25.7	9 675
(3397)	1989	09	28.48038	02	12	31.64	+10	21	39.8	9 675
(3415)	1991	09	11.32257	00	08	32.11	+03	01	41.7	9 675
(3415)	1991	09	11.37431	00	08	30.14	+03	01	28.8	9 675
(3415)	1991	09	13.43212	00	07	17.38	+02	53	50.8	16.0 9 675
(3415)	1991	09	15.36128	00	06	07.48	+02	46	21.8	9 675

(3415)	1991	09	15.37153	00	06	07.07	+02 46 17.6		9 675
(3415)	1991	09	15.39861	00	06	06.12	+02 46 12.3		9 675
(3415)	1991	09	15.40851	00	06	05.70	+02 46 10.6		9 675
(3441)	1991	11	09.34219	03	20	17.00	+14 13 50.3		9 675
(3441)	1991	11	09.38524	03	20	14.70	+14 13 42.6		9 675
(3451)	1989	11	02.32473	01	33	45.30	-04 21 38.9		9 675
(3451)	1989	11	02.36163	01	33	44.34	-04 21 46.3		9 675
(3451)	1989	11	03.25434	01	33	21.01	-04 25 27.3		9 675
(3451)	1989	11	03.29080	01	33	20.04	-04 25 36.3		9 675
(3454)	1991	11	07.19079	23	51	21.58	-01 37 57.2		9 675
(3454)	1991	11	07.22361	23	51	21.43	-01 38 03.8		9 675
(3454)	1991	11	09.18697	23	51	22.57	-01 44 11.3	16.8	9 675
(3454)	1991	11	09.22847	23	51	22.56	-01 44 18.4		9 675
(3515)	1991	09	13.31910	23	30	49.73	-02 46 33.0	17.0	9 675
(3515)	1991	09	13.35712	23	30	47.80	-02 46 43.7		9 675
(3515)	1991	09	16.37674	23	28	22.33	-03 00 49.5	17.2	9 675
(3515)	1991	09	16.41684	23	28	20.26	-03 01 01.4		9 675
(3525)	1991	09	13.31910	23	25	59.77	+00 07 14.1	17.5	9 675
(3525)	1991	09	13.35712	23	25	57.95	+00 07 05.4		9 675
(3525)	1991	09	15.34132	23	24	29.31	-00 01 53.9		9 675
(3525)	1991	09	16.37674	23	23	43.08	-00 06 37.3	17.2	9 675
(3525)	1991	09	16.41684	23	23	41.26	-00 06 48.5		9 675
(3525)	1991	09	17.25139	23	23	04.34	-00 10 38.7		9 675
(3525)	1991	09	17.29097	23	23	02.43	-00 10 48.8		9 675
(3597)	1991	11	09.19392	00	37	13.73	+00 16 53.5		9 675
(3597)	1991	11	09.23594	00	37	12.90	+00 16 52.0		9 675
(3597)	1991	11	10.15694	00	36	57.13	+00 16 37.8		9 675
(3597)	1991	11	10.39884	00	36	52.82	+00 16 35.1		9 675
(3608)	1991	11	09.34219	03	30	19.30	+11 23 35.7		9 675
(3608)	1991	11	09.38524	03	30	17.09	+11 23 34.1		9 675
(3626)	1991	09	14.43767	23	47	15.97	+05 22 38.7	16.8	9 675
(3626)	1991	09	17.34861	23	45	04.71	+05 10 26.1	16.5	9 675
(3626)	1991	09	17.38229	23	45	03.14	+05 10 16.9		9 675
(3628)	1991	11	10.41646	03	27	14.60	+05 43 02.7		9 675
(3628)	1991	11	10.44580	03	27	12.81	+05 42 54.8		9 675
(3681)	1991	11	09.34219	03	44	52.38	+12 35 45.7		9 675
(3681)	1991	11	09.38524	03	44	49.49	+12 35 36.3		9 675
(3703)	1989	09	28.43576	02	26	40.34	+08 21 11.6		9 675
(3703)	1989	09	28.48038	02	26	38.90	+08 20 50.1		9 675
(3781)	1991	11	07.19079	00	00	04.74	-00 35 31.7		9 675
(3781)	1991	11	07.22361	00	00	04.41	-00 35 35.4		9 675
(3781)	1991	11	09.18697	23	59	47.76	-00 38 29.8	17.0	9 675
(3781)	1991	11	09.22847	23	59	47.44	-00 38 32.3		9 675
(3795)	1991	11	09.34219	03	38	13.83	+15 40 37.9		9 675
(3795)	1991	11	09.38524	03	38	10.99	+15 40 37.0		9 675
(3834)	1990	11	13.40868	04	24	19.81	+24 07 17.6	18.5	9 675
(3834)	1990	11	13.45330	04	24	17.06	+24 07 21.5		9 675
(3834)	1990	11	14.42674	04	23	18.00	+24 09 01.2	18.2	9 675
(3834)	1990	11	14.45833	04	23	15.98	+24 09 04.1		9 675
(3848)	1991	11	09.19392	00	40	33.13	+02 39 17.6		9 675
(3848)	1991	11	09.23594	00	40	32.09	+02 39 07.7		9 675
(3848)	1991	11	10.15694	00	40	08.87	+02 35 56.4		9 675
(3856)	1991	11	09.19392	00	27	16.72	+04 09 50.9		9 675
(3856)	1991	11	09.23594	00	27	15.76	+04 09 45.4		9 675
(3856)	1991	11	10.15694	00	26	57.13	+04 07 51.1		9 675
(3856)	1991	11	10.39884	00	26	52.01	+04 07 22.3		9 675
(3866)	1991	11	09.19392	00	29	24.76	+05 15 56.7		9 675
(3866)	1991	11	09.23594	00	29	24.13	+05 15 48.1		9 675
(3866)	1991	11	10.15694	00	29	13.24	+05 12 41.8		9 675

(3866)	1991	11	10.39884	00	29	10.21	+05 11 55.1		9 675
(3869)	1990	11	13.40868	04	30	58.67	+22 46 11.6	16.5	9 675
(3869)	1990	11	13.45330	04	30	55.98	+22 46 01.2		9 675
(3869)	1990	11	14.42674	04	29	59.41	+22 42 22.4	16.5	9 675
(3869)	1990	11	14.45833	04	29	57.44	+22 42 15.0		9 675
(3870)	1990	11	15.35642	03	35	10.22	+09 18 56.9		9 675
(3870)	1990	11	15.38767	03	35	08.54	+09 18 45.2		9 675
(3870)	1990	11	16.36632	03	34	15.88	+09 12 43.8		9 675
(3969)	1991	09	13.31910	23	30	12.45	-03 04 03.6	16.8	9 675
(3969)	1991	09	13.35712	23	30	10.27	-03 04 20.7		9 675
(3969)	1991	09	16.37674	23	27	31.30	-03 26 55.7	16.8	9 675
(3969)	1991	09	16.41684	23	27	29.06	-03 27 13.8		9 675
(3996)	1991	11	07.19079	00	09	03.78	-02 38 39.6		9 675
(3996)	1991	11	07.22361	00	09	03.12	-02 38 40.3		9 675
(3996)	1991	11	09.18697	00	08	32.11	-02 38 55.3	16.8	9 675
(3996)	1991	11	09.22847	00	08	31.47	-02 38 54.5		9 675
(3998)	1991	09	13.31910	23	47	17.83	-04 18 58.1	16.2	9 675
(3998)	1991	09	13.35712	23	47	15.22	-04 19 04.8		9 675
(3998)	1991	09	14.39288	23	46	09.49	-04 22 11.5	16.0	9 675
(3998)	1991	09	14.44635	23	46	05.85	-04 22 21.4		9 675
(3998)	1991	09	16.37674	23	44	01.90	-04 28 07.5	16.0	9 675
(3998)	1991	09	16.38663	23	44	01.28	-04 28 09.6	16.0	9 675
(3998)	1991	09	16.41684	23	43	59.18	-04 28 14.1		9 675
(3998)	1991	09	16.42674	23	43	58.54	-04 28 16.0		9 675
(3999)	1991	09	11.32257	23	59	56.80	+03 45 06.6		9 675
(3999)	1991	09	11.37431	23	59	53.92	+03 44 50.7		9 675
(3999)	1991	09	13.39444	23	58	09.22	+03 35 16.4	17.0	9 675
(3999)	1991	09	13.43212	23	58	07.20	+03 35 05.3		9 675
(3999)	1991	09	15.36128	23	56	25.52	+03 25 32.8		9 675
(3999)	1991	09	15.37153	23	56	24.81	+03 25 28.8		9 675
(3999)	1991	09	15.39861	23	56	23.54	+03 25 20.1		9 675
(3999)	1991	09	15.40851	23	56	22.82	+03 25 18.3		9 675
(3999)	1991	09	17.34861	23	54	39.01	+03 15 24.7	17.0	9 675
(3999)	1991	09	17.38229	23	54	37.12	+03 15 14.1		9 675
(4029)	1991	09	13.39444	00	21	48.35	+07 27 40.3	17.2	9 675
(4029)	1991	09	13.43212	00	21	46.49	+07 27 26.7		9 675
(4029)	1991	09	15.37153	00	20	14.75	+07 15 22.9		9 675
(4029)	1991	09	15.40851	00	20	12.99	+07 15 09.7		9 675
(4029)	1991	11	07.19079	23	46	42.25	+01 40 59.9		9 675
(4029)	1991	11	07.22361	23	46	41.92	+01 40 53.8		9 675
(4029)	1991	11	09.18697	23	46	26.37	+01 34 08.2	17.5	9 675
(4029)	1991	11	09.22847	23	46	26.06	+01 33 58.4		9 675
(4062)	1991	12	01.25329	03	21	47.39	+32 49 56.0	16.2	9 675
(4062)	1991	12	01.28854	03	21	45.05	+32 49 46.4		9 675
(4062)	1991	12	03.25329	03	19	49.57	+32 39 44.8		9 675
(4062)	1991	12	03.28438	03	19	47.67	+32 39 35.2		9 675
(4074)	1991	09	14.38368	23	39	06.77	+01 56 17.4	17.2	9 675
(4074)	1991	09	14.43767	23	39	04.44	+01 55 53.5		9 675
(4074)	1991	09	17.34861	23	37	03.34	+01 34 13.7	17.0	9 675
(4074)	1991	09	17.38229	23	37	01.95	+01 33 58.2		9 675
(4085)	1991	11	09.34219	03	32	36.89	+12 14 56.7		9 675
(4085)	1991	11	09.38524	03	32	34.22	+12 14 58.9	17.0	9 675
(4088)	1991	09	14.39288	00	04	52.26	-08 44 32.7	16.2	9 675
(4088)	1991	09	14.44635	00	04	49.04	-08 44 43.5		9 675
(4088)	1991	09	16.38663	00	02	56.67	-08 51 18.5	16.5	9 675
(4088)	1991	09	16.42674	00	02	54.23	-08 51 26.9		9 675
(4123)	1991	09	15.41753	00	16	07.85	-02 12 17.8	17.2	9 675
(4123)	1991	09	15.46424	00	16	05.55	-02 12 29.7		9 675
(4123)	1991	09	17.36064	00	14	37.54	-02 21 24.7	17.2	9 675

(4123)	1991	09	17.39479	00	14	35.87	-02 21 34.6		9 675
(4194)	1991	09	15.41753	00	19	32.96	-02 50 45.0	16.8	9 675
(4194)	1991	09	15.46424	00	19	30.85	-02 51 05.6		9 675
(4194)	1991	09	17.36064	00	18	07.60	-03 05 33.7	16.8	9 675
(4194)	1991	09	17.39479	00	18	06.05	-03 05 50.7		9 675
(4216)	1990	11	13.40868	04	27	15.31	+17 22 27.0	19.0	9 675
(4216)	1990	11	14.42674	04	26	16.59	+17 18 33.1	18.8	9 675
(4216)	1990	11	14.45833	04	26	14.80	+17 18 26.2		9 675
(4229)	1991	09	13.31910	23	36	45.29	-04 11 10.7	17.5	9 675
(4229)	1991	09	13.35712	23	36	43.16	-04 11 28.2		9 675
(4229)	1991	09	16.37674	23	34	02.14	-04 35 05.9	17.2	9 675
(4229)	1991	09	16.41684	23	33	59.92	-04 35 24.4		9 675
(4230)	1990	11	13.40868	04	10	04.06	+17 00 38.4	18.5	9 675
(4230)	1990	11	13.45330	04	10	02.43	+17 00 32.9		9 675
(4230)	1990	11	14.42674	04	09	24.66	+16 58 32.7	18.0	9 675
(4230)	1990	11	14.45833	04	09	23.37	+16 58 29.0		9 675
(4239)	1990	11	13.40868	04	00	51.37	+22 37 11.6		9 675
(4239)	1990	11	13.45330	04	00	47.98	+22 37 02.8		9 675
(4313)	1989	09	28.43576	02	14	16.02	+08 07 02.3		9 675
(4313)	1989	09	28.48038	02	14	14.14	+08 07 00.2		9 675
(4406)	1991	09	13.31910	23	24	30.88	-06 32 08.3	18.8	9 675
(4406)	1991	09	13.35712	23	24	29.15	-06 32 18.5		9 675
(4432)	1990	11	13.40868	04	01	02.81	+19 51 47.9	17.2	9 675
(4432)	1990	11	13.45330	04	00	59.90	+19 51 40.1		9 675
(4432)	1990	11	14.42674	03	59	58.99	+19 48 54.8	17.2	9 675
(4432)	1990	11	14.45833	03	59	56.95	+19 48 49.1		9 675
(4466)	1991	11	07.19079	23	52	12.11	-01 58 26.6		9 675
(4466)	1991	11	07.22361	23	52	11.76	-01 58 29.5		9 675
(4466)	1991	11	09.18697	23	51	55.59	-02 00 49.6	17.2	9 675
(4466)	1991	11	09.22847	23	51	55.14	-02 00 53.9		9 675
(4480)	1989	09	28.43576	02	16	05.82	+10 21 35.5		9 675
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(4508)	1991	11	09.19392	00	37	48.96	+00 52 33.0		9 675
(4508)	1991	11	09.23594	00	37	47.62	+00 52 29.2		9 675
(4508)	1991	11	10.15694	00	37	22.97	+00 51 07.2		9 675
(4508)	1991	11	10.39884	00	37	16.23	+00 50 47.0		9 675
(4535)	1991	09	15.41753	00	32	43.92	-05 04 09.0	17.8	9 675
(4535)	1991	09	15.46424	00	32	41.83	-05 04 28.2		9 675
(4535)	1991	09	17.36064	00	31	19.00	-05 17 49.3	17.8	9 675
(4535)	1991	09	17.39479	00	31	17.44	-05 18 02.8		9 675
(4548)	1991	09	14.44635	00	10	45.54	-06 45 18.3	17.5	9 675
(4548)	1991	09	15.46424	00	09	42.60	-06 48 45.8		9 675
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(4569)	1991	11	10.44580	03	28	14.11	+08 59 55.4		9 675
(4597)	1991	09	14.39288	00	12	21.99	-06 39 07.0	17.0	9 675
(4597)	1991	09	14.44635	00	12	19.14	-06 39 24.2		9 675
(4597)	1991	09	15.41753	00	11	29.84	-06 44 36.5	17.0	9 675
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(4597)	1991	09	16.38663	00	10	39.99	-06 49 45.3	17.0	9 675
(4597)	1991	09	16.42674	00	10	37.88	-06 49 57.9		9 675
(4597)	1991	09	17.36064	00	09	49.82	-06 54 53.1	17.0	9 675
(4597)	1991	09	17.39479	00	09	47.98	-06 55 03.9		9 675
(4630)	1991	09	15.41753	00	31	24.34	-06 40 38.1		9 675
(4630)	1991	09	15.46424	00	31	22.00	-06 40 50.5		9 675
(4630)	1991	09	17.36064	00	29	52.48	-06 49 26.1		9 675

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(4703)	1990 11 15.38767	03 18 20.14	+07 20 11.9		9	675
(4703)	1990 11 16.36632	03 17 20.96	+07 17 02.8		9	675
(4722)	1990 11 13.40868	04 17 18.87	+20 56 16.1	17.2	9	675
(4722)	1990 11 13.45330	04 17 17.32	+20 56 15.1		9	675
(4722)	1990 11 14.42674	04 16 43.81	+20 55 58.3	17.2	9	675
(4722)	1990 11 14.45833	04 16 42.70	+20 55 58.1		9	675
(4782)	1990 11 13.40868	04 06 53.29	+22 57 20.3	16.8	9	675
(4782)	1990 11 13.45330	04 06 50.75	+22 57 14.0		9	675
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(4782)	1990 11 14.45833	04 05 55.86	+22 55 02.5		9	675
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(4786)	1989 11 02.36163	01 33 13.98	-02 09 58.9		9	675
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(4948)	1991 09 15.34132	23 20 58.81	+03 18 57.0		9	675
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(4963)	1991 09 14.43767	23 33 26.34	+04 56 39.0		9	675
(4963)	1991 09 17.34861	23 30 27.20	+04 52 34.8	16.0	9	675
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(4974)	1991 09 16.37674	23 27 48.51	-01 46 02.9	17.2	9	675
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(4982)	1991 09 15.38056	23 05 03.29	+01 58 30.9		9	675
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(4983)	1991 09 15.36128	23 55 22.07	+02 14 09.0		9	675
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(4985)	1991 11 09.19392	00 19 00.26	+02 08 57.9		9	675
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(4994)	1971 05 14.21962	12 03 21.03	+00 22 47.4		4	675
(4995)	1991 10 10.11493	21 02 44.41	-02 56 08.8	15.5	2	675

(4995)	1991 10 10.13715	21 02 44.38	-02 55 57.5		2	675
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(4998)	1991 09 13.46267	01 10 01.63	+12 17 17.8		9	675
(4998)	1991 09 15.42644	01 08 46.52	+12 17 24.8	17.8	9	675
(4998)	1991 09 15.47448	01 08 44.59	+12 17 25.0		9	675
(4999)	1990 11 15.35642	03 24 46.26	+03 11 44.2		9	675
(4999)	1990 11 15.38767	03 24 44.72	+03 11 37.6		9	675
(4999)	1990 11 16.36632	03 23 57.58	+03 08 05.4		9	675
(5000)	1991 09 13.31910	23 36 54.99	-07 16 13.2	16.5	9	675
(5000)	1991 09 13.35712	23 36 53.33	-07 16 37.3		9	675
(5000)	1991 10 11.20104	23 22 01.28	-11 03 57.3	16.0	2	675
(5000)	1991 10 11.22344	23 22 00.80	-11 04 00.8		2	675
(5000)	1991 10 13.22378	23 21 32.33	-11 12 57.2		2	675

688 Lowell Observatory, Anderson Mesa Station
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road, Flagstaff
AZ 86001, U.S.A.
Observer B. A. Skiff
Measurer B. A. Skiff
1.1-m f/8 Hall reflector + CCD

1988 RG10	1991 11 13.28497	05 53 50.29	+27 33 21.5		688
1988 RG10	1991 11 13.36154	05 53 48.46	+27 33 23.7		688
1988 RG10	1991 11 13.42975	05 53 46.90	+27 33 25.4		688
1988 RL10	1991 11 13.29587	04 48 38.15	+18 28 12.9		688
1988 RL10	1991 11 13.37637	04 48 35.76	+18 28 07.8		688
1988 RS10	1991 11 13.31453	04 55 58.36	+19 43 31.4		688
1988 RS10	1991 11 13.38450	04 55 56.33	+19 43 28.2		688
1988 RN11	1991 11 13.32528	04 20 08.56	+19 49 03.6		688
1988 RN11	1991 11 13.39854	04 20 06.35	+19 48 57.8		688
1988 SW1	1991 11 13.34286	04 42 57.50	+34 54 25.9		688
1988 SW1	1991 11 13.40830	04 42 55.23	+34 54 30.6		688

689 U.S. Naval Observatory, Flagstaff Station
D. K. Yeomans, 301-150G, Jet Propulsion Laboratory,
Pasadena, CA 91109, U.S.A.
Observers C. Dahn, H. Harris, S. Leggett, A. Monet, D. Monet,
J. Pier, R. Stone, R. Walker, F. Vrba
0.20-m transit + scanning CCD (1), 1.5-m reflector photographic (2),
1.5-m reflector + stare-mode CCD
Lick Gaspra Catalogue

(951)	1991 04 10.44598	16 28 21.82	-23 59 04.6	1	689
(951)	1991 04 14.43441	16 27 24.96	-23 54 46.1	1	689
(951)	1991 04 17.42551	16 26 22.48	-23 50 34.1	1	689
(951)	1991 04 18.42248	16 25 57.88	-23 48 58.4	1	689
(951)	1991 04 20.40100	16 25 03.64	-23 45 31.7		689
(951)	1991 04 20.40288	16 25 03.58	-23 45 31.5		689
(951)	1991 04 20.40698	16 25 03.45	-23 45 31.0		689
(951)	1991 04 20.41439	16 25 03.22	-23 45 30.2		689
(951)	1991 04 20.41639	16 25 03.17	-23 45 29.9	1	689
(951)	1991 04 20.41789	16 25 03.11	-23 45 29.8		689
(951)	1991 04 20.41947	16 25 03.06	-23 45 29.6		689
(951)	1991 04 20.42116	16 25 03.01	-23 45 29.5		689
(951)	1991 04 20.42290	16 25 02.96	-23 45 29.3		689
(951)	1991 04 20.42463	16 25 02.90	-23 45 29.1		689
(951)	1991 04 20.43027	16 25 02.72	-23 45 28.6		689
(951)	1991 04 20.43375	16 25 02.61	-23 45 28.2		689
(951)	1991 04 20.43699	16 25 02.50	-23 45 27.9		689
(951)	1991 04 20.44222	16 25 02.36	-23 45 27.2		689

(951)	1991	04	20.44424	16	25	02.29	-23	45	26.9	689
(951)	1991	04	20.44822	16	25	02.16	-23	45	26.5	689
(951)	1991	04	20.45097	16	25	02.08	-23	45	26.2	689
(951)	1991	04	22.41021	16	24	01.18	-23	41	37.7	1 689
(951)	1991	05	08.35810	16	11	48.90	-22	55	52.5	1 689
(951)	1991	05	09.35469	16	10	51.21	-22	52	08.5	1 689
(951)	1991	05	09.36119	16	10	50.82	-22	52	06.9	689
(951)	1991	05	09.36701	16	10	50.46	-22	52	05.5	689
(951)	1991	05	09.37712	16	10	49.85	-22	52	03.2	689
(951)	1991	05	09.38065	16	10	49.63	-22	52	02.4	689
(951)	1991	05	09.38455	16	10	49.40	-22	52	01.5	689
(951)	1991	05	09.38914	16	10	49.12	-22	52	00.5	689
(951)	1991	05	11.34786	16	08	52.67	-22	44	23.1	1 689
(951)	1991	05	12.34443	16	07	51.94	-22	40	21.8	1 689
(951)	1991	05	13.34099	16	06	50.32	-22	36	15.1	1 689
(951)	1991	05	14.33730	16	05	47.89	-22	32	02.8	689
(951)	1991	05	14.33754	16	05	47.88	-22	32	02.9	1 689
(951)	1991	05	14.33916	16	05	47.78	-22	32	02.3	689
(951)	1991	05	14.34088	16	05	47.66	-22	32	01.9	689
(951)	1991	05	14.34256	16	05	47.56	-22	32	01.5	689
(951)	1991	05	14.34410	16	05	47.45	-22	32	01.1	689
(951)	1991	05	14.34575	16	05	47.34	-22	32	00.7	689
(951)	1991	05	14.34765	16	05	47.22	-22	32	00.2	689
(951)	1991	05	15.33408	16	04	44.72	-22	27	45.6	1 689
(951)	1991	05	16.33061	16	03	40.91	-22	23	23.4	1 689
(951)	1991	05	17.31425	16	02	37.38	-22	18	59.7	689
(951)	1991	05	17.31620	16	02	37.25	-22	18	59.2	689
(951)	1991	05	17.33426	16	02	36.03	-22	18	54.1	689
(951)	1991	05	17.33625	16	02	35.90	-22	18	53.6	689
(951)	1991	05	19.32018	16	00	26.36	-22	09	48.8	1 689
(951)	1991	06	04.26455	15	43	10.93	-20	50	07.8	1 689
(951)	1991	06	05.26112	15	42	10.66	-20	45	02.0	1 689
(951)	1991	06	07.25430	15	40	12.99	-20	34	54.4	1 689
(951)	1991	06	07.25443	15	40	12.98	-20	34	54.3	689
(951)	1991	06	07.25742	15	40	12.80	-20	34	53.4	689
(951)	1991	06	07.25952	15	40	12.67	-20	34	52.7	689
(951)	1991	06	07.26126	15	40	12.57	-20	34	52.2	689
(951)	1991	06	07.26309	15	40	12.46	-20	34	51.6	689
(951)	1991	06	07.26507	15	40	12.34	-20	34	51.0	689
(951)	1991	06	07.26704	15	40	12.22	-20	34	50.4	689
(951)	1991	06	10.24417	15	37	24.77	-20	19	57.9	1 689
(951)	1991	06	13.23204	15	34	47.96	-20	05	29.1	689
(951)	1991	06	13.23473	15	34	47.82	-20	05	28.4	689
(951)	1991	06	13.23733	15	34	47.68	-20	05	27.7	689
(951)	1991	06	13.23974	15	34	47.56	-20	05	27.0	689
(951)	1991	06	16.22431	15	32	23.76	-19	51	34.4	1 689
(951)	1991	07	02.17469	15	23	49.66	-18	51	58.2	1 689
(951)	1991	07	03.17177	15	23	32.78	-18	49	13.2	1 689
(951)	1991	07	04.16886	15	23	17.73	-18	46	36.1	1 689
(951)	1991	07	04.18462	15	23	17.51	-18	46	33.8	2 689
(951)	1991	07	05.16598	15	23	04.56	-18	44	06.6	1 689
(951)	1991	07	10.15411	15	22	26.33	-18	33	34.3	689
(951)	1991	07	10.15591	15	22	26.32	-18	33	34.1	689
(951)	1991	07	10.15751	15	22	26.32	-18	33	34.0	689
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(951)	1991	07	11.15264	15	22	24.22	-18	31	51.2	689
(951)	1991	07	11.15413	15	22	24.22	-18	31	51.1	689
(951)	1991	07	14.19052	15	22	29.02	-18	27	25.4	689
(951)	1991	07	14.19502	15	22	29.03	-18	27	25.1	689

(951)	1991 07 15.15494	15 22 34.15	-18 26 16.4		689
(951)	1991 07 15.16102	15 22 34.17	-18 26 15.9		689
(951)	1991 07 15.16402	15 22 34.20	-18 26 15.7		689
(951)	1991 07 15.16684	15 22 34.20	-18 26 15.5		689
(951)	1991 07 15.16954	15 22 34.21	-18 26 15.3		689
(951)	1991 08 01.14439	15 28 25.08	-18 24 15.1		689
(951)	1991 08 01.14697	15 28 25.15	-18 24 15.2		689
(951)	1991 08 01.15005	15 28 25.25	-18 24 15.4		689
(951)	1991 08 01.15443	15 28 25.41	-18 24 15.6		689
(951)	1991 08 01.15694	15 28 25.49	-18 24 15.7		689
(951)	1991 08 02.15050	15 29 00.37	-18 25 07.3		689
(951)	1991 08 02.15513	15 29 00.53	-18 25 07.5		689
(951)	1991 08 02.15821	15 29 00.63	-18 25 07.7		689
(951)	1991 08 02.16117	15 29 00.73	-18 25 07.9		689
(951)	1991 08 02.16431	15 29 00.84	-18 25 08.0		689
(951)	1991 08 02.16728	15 29 00.94	-18 25 08.2		689
(951)	1991 08 04.16669	15 30 15.65	-18 27 09.1		689
(951)	1991 08 04.17214	15 30 15.86	-18 27 09.4		689
(951)	1991 08 04.17617	15 30 16.01	-18 27 09.6		689
(951)	1991 08 04.18023	15 30 16.16	-18 27 09.9		689
(951)	1991 08 04.18486	15 30 16.32	-18 27 10.3		689
(951)	1991 08 04.18944	15 30 16.49	-18 27 10.6		689
(951)	1991 08 05.15412	15 30 54.75	-18 28 17.1		689
(951)	1991 08 05.15755	15 30 54.89	-18 28 17.3		689
(951)	1991 08 05.16058	15 30 55.00	-18 28 17.5		689
(951)	1991 08 05.16358	15 30 55.12	-18 28 17.7		689
(951)	1991 08 05.17240	15 30 55.46	-18 28 18.4		689
(951)	1991 08 05.17540	15 30 55.58	-18 28 18.6		689
(951)	1991 08 05.17819	15 30 55.69	-18 28 18.8		689
(951)	1991 08 05.18091	15 30 55.79	-18 28 18.9		689
(951)	1991 08 06.14329	15 31 35.33	-18 29 30.7		689
(951)	1991 08 06.14745	15 31 35.50	-18 29 31.0		689
(951)	1991 08 07.14404	15 32 17.80	-18 30 50.3		689
(951)	1991 08 07.14743	15 32 17.94	-18 30 50.6		689
(951)	1991 08 07.15024	15 32 18.06	-18 30 50.8		689
(951)	1991 08 07.15294	15 32 18.17	-18 30 51.0		689
(951)	1991 08 07.15572	15 32 18.28	-18 30 51.2		689
(951)	1991 08 07.15927	15 32 18.44	-18 30 51.5		689
(951)	1991 08 07.16282	15 32 18.59	-18 30 51.8		689
(951)	1991 08 07.16620	15 32 18.72	-18 30 52.0		689
(951)	1991 08 08.14347	15 33 01.63	-18 32 15.0		689
(951)	1991 08 08.14713	15 33 01.79	-18 32 15.3		689
(951)	1991 08 08.15026	15 33 01.92	-18 32 15.6		689
(951)	1991 08 08.15338	15 33 02.06	-18 32 15.8		689
(951)	1991 08 28.13095	15 52 12.06	-19 14 42.4		689
(951)	1991 08 28.13495	15 52 12.33	-19 14 43.0		689
(951)	1991 08 28.13852	15 52 12.58	-19 14 43.5		689
(951)	1991 08 28.14251	15 52 12.85	-19 14 44.1		689
(951)	1991 08 28.14573	15 52 13.07	-19 14 44.6		689
(951)	1991 08 28.14868	15 52 13.27	-19 14 45.0		689
(951)	1991 08 29.13887	15 53 22.59	-19 17 22.4		689
(951)	1991 08 29.14226	15 53 22.83	-19 17 23.0		689
(951)	1991 08 29.14528	15 53 23.04	-19 17 23.4		689
(951)	1991 08 29.15073	15 53 23.42	-19 17 24.3		689

690 Lowell Observatory
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road,
Flagstaff, AZ 86001, U.S.A.
Observer C. W. Tombaugh

Measurer B. A. Skiff
0.33-m photographic telescope

1930 MR		1930 06 26.33819	19 08 44.58	-12 27 18.9				690
1930 MR		1930 06 30.32292	19 05 06.13	-12 33 13.0			R	690

691 Kitt Peak, Steward Observatory
T. Gehrels, Space Sciences Building, University of Arizona,
Tucson, AZ 85721, U.S.A.
Observers T. Gehrels, D. Rabinowitz, J. V. Scotti
0.91-m SPACEWATCH telescope
SAOC 1984
See also MPC 9198, MPC 10373 and Astron. J. 91, 1242, 1986

1990 VA		1991 10 30.24128	04 50 37.92	+13 54 17.0				691
1990 VA		1991 10 30.24835	04 50 36.51	+13 53 54.3				691
1990 VA		1991 10 30.26124	04 50 34.28	+13 53 14.0	18.9	V		691
1990 VA		1992 01 09.08534	02 46 38.61	-10 57 05.1				691
1990 VA		1992 01 09.11481	02 46 39.59	-10 56 50.3	21.1	V		691
1990 VA		1992 01 09.13540	02 46 40.18	-10 56 39.8				691
1991 SS1		1991 11 27.08070	00 27 06.35	+03 33 25.0	18.3	V		691
1991 SS1		1991 11 27.08900	00 27 06.88	+03 33 32.8				691
1991 SS1		1991 11 27.09720	00 27 07.41	+03 33 40.2				691
1991 VA		1991 11 03.15652	01 44 19.35	+22 41 04.4	19.7	V		691
1991 VA		1991 11 03.43607	01 47 26.05	+23 50 03.0	19.7	V		691
1991 VA		1991 11 04.30484	01 57 22.06	+26 48 52.3				691
1991 VA		1991 11 04.31414	01 57 26.55	+26 50 26.7				691
1991 VA		1991 11 04.31942	01 57 29.11	+26 51 22.0				691
1991 VA		1991 11 04.33705	01 57 37.84	+26 54 24.5	20.3	V		691
1991 VA		1991 11 06.24358	02 13 04.34	+31 08 49.0	20.5	V		691
1991 VA		1991 11 06.24934	02 13 06.08	+31 09 24.4	20.2	V		691
1991 VA		1991 11 06.26261	02 13 10.21	+31 10 45.7				691
1991 VA		1991 11 06.27543	02 13 14.11	+31 12 04.6	20.1	V		691
1991 VA		1991 11 06.28000	02 13 15.42	+31 12 32.4	20.4	V		691
1991 VC	*	1991 11 04.21790	02 46 18.17	+12 58 46.8	20.4	V		691
1991 VC		1991 11 04.24048	02 46 16.33	+12 58 46.8				691
1991 VC		1991 11 04.26289	02 46 14.48	+12 58 46.0				691
1991 VC		1991 11 05.30651	02 44 52.60	+12 58 08.7				691
1991 VC		1991 11 05.32352	02 44 51.25	+12 58 08.0	20.3	V		691
1991 VC		1991 11 05.34426	02 44 49.52	+12 58 07.1				691
1991 VC		1991 11 06.28674	02 43 36.38	+12 57 34.1				691
1991 VC		1991 11 06.29723	02 43 35.55	+12 57 34.1				691
1991 VC		1991 11 06.30916	02 43 34.57	+12 57 33.7	20.0	V		691
1991 VD	*	1991 11 04.22586	03 00 32.54	+13 02 18.6	19.7	V		691
1991 VD		1991 11 04.24843	03 00 29.86	+13 02 50.6				691
1991 VD		1991 11 04.27084	03 00 27.17	+13 03 22.2				691
1991 VD		1991 11 05.31400	02 58 26.38	+13 28 02.1				691
1991 VD		1991 11 05.33100	02 58 24.30	+13 28 26.7	19.6	V		691
1991 VD		1991 11 05.35174	02 58 21.81	+13 28 55.1				691
1991 VD		1991 11 06.32368	02 56 28.30	+13 52 00.1				691
1991 VD		1991 11 06.33449	02 56 26.99	+13 52 16.0	19.5	V		691
1991 VD		1991 11 06.35214	02 56 24.85	+13 52 41.1				691
1991 VE		1991 11 08.44781	03 44 15.81	+09 12 40.8	17.0	V		691
1991 VE		1991 11 08.45646	03 44 10.85	+09 12 41.7	16.8	V		691
1991 VE		1991 11 08.46522	03 44 05.99	+09 12 42.6	16.9	V		691
1991 VG	*	1991 11 06.32553	02 56 23.49	+13 42 02.7	20.7	V		691
1991 VG		1991 11 06.33633	02 56 21.80	+13 41 45.5				691
1991 VG		1991 11 06.35398	02 56 19.13	+13 41 14.9				691
1991 VG		1991 11 07.18437	02 56 36.02	+13 18 40.7	20.8	V		691
1991 VG		1991 11 07.19491	02 56 34.70	+13 18 25.0				691
1991 VG		1991 11 07.20631	02 56 33.31	+13 18 12.1				691

1991 VG		1991 11 07.33878	02 56 13.01	+13 14 43.9					691
1991 VG		1991 11 07.34932	02 56 11.36	+13 14 24.9					691
1991 VG		1991 11 07.36008	02 56 09.71	+13 14 05.0		21.2	V		691
1991 VG		1991 11 08.25231	02 56 17.99	+12 48 25.5					691
1991 VG		1991 11 08.26526	02 56 15.90	+12 48 03.4		20.3	V		691
1991 VG		1991 11 08.27777	02 56 13.74	+12 47 42.9					691
1991 VG		1991 11 08.29081	02 56 11.68	+12 47 20.5					691
1991 VG		1991 11 08.30357	02 56 09.51	+12 46 57.3		20.7	V		691
1991 VG		1991 11 08.31659	02 56 07.38	+12 46 33.9					691
1991 VG		1991 11 09.22124	02 56 13.65	+12 18 33.7		20.6	V		691
1991 VG		1991 11 09.23018	02 56 12.22	+12 18 18.4					691
1991 VG		1991 11 09.26343	02 56 06.70	+12 17 18.2					691
1991 VG		1991 11 09.38013	02 55 47.15	+12 13 28.3					691
1991 VG		1991 11 09.38854	02 55 45.88	+12 13 09.3		20.8	V		691
1991 VG		1991 11 09.39727	02 55 44.58	+12 12 49.6					691
1991 VG		1991 11 11.24590	02 55 51.03	+11 09 29.4					691
1991 VG		1991 11 11.25073	02 55 50.20	+11 09 21.0		20.8	V		691
1991 VG		1991 11 11.32859	02 55 35.85	+11 06 29.6					691
1991 VG		1991 11 11.40787	02 55 22.71	+11 03 16.8		20.3	V		691
1991 VG		1991 11 13.24111	02 55 35.71	+09 50 40.2					691
1991 VG		1991 11 13.26312	02 55 31.45	+09 49 46.7		20.6	V		691
1991 VG		1991 11 13.28475	02 55 27.19	+09 48 54.1					691
1991 VG		1991 11 26.31369	02 58 07.69	-09 17 14.3		18.9	V		691
1991 VG		1991 11 26.31903	02 58 05.87	-09 18 10.9		18.6	V		691
1991 VG		1991 11 26.32341	02 58 04.35	-09 18 58.7		18.8	V		691
1991 VG		1991 11 26.36721	02 57 50.63	-09 26 43.3		18.8	V		691
1991 VG		1991 11 26.37456	02 57 48.66	-09 28 00.9		18.9	V		691
1991 VG		1991 11 26.37664	02 57 48.10	-09 28 22.6		19.0	V		691
1991 VG		1991 11 26.37882	02 57 47.54	-09 28 45.3		19.1	V		691
1991 VG		1991 11 26.38104	02 57 46.97	-09 29 08.9		19.1	V		691
1991 VG		1991 11 26.38323	02 57 46.43	-09 29 31.5		19.0	V		691
1991 VG		1991 11 26.38536	02 57 45.89	-09 29 53.9		18.9	V		691
1991 VG		1991 11 26.38744	02 57 45.42	-09 30 15.7		19.2	V		691
1991 VG		1991 11 26.38954	02 57 44.93	-09 30 37.1		19.2	V		691
1991 VG		1991 11 26.39170	02 57 44.40	-09 31 00.2		18.9	V		691
1991 VG		1991 11 27.15753	02 59 57.28	-12 05 22.7		18.8	V		691
1991 VG		1991 11 27.18541	02 59 47.75	-12 11 42.7		18.8	V		691
1991 VG		1991 11 27.22987	02 59 30.67	-12 21 39.9		18.8	V		691
1991 VG		1991 11 27.27152	02 59 13.58	-12 30 46.9		18.7	V		691
1991 VG		1991 11 29.22579	03 01 59.14	-21 14 12.3		19.3	V		691
1991 VG		1991 11 29.24056	03 01 51.78	-21 19 05.2		19.4	V		691
1991 VG		1991 11 29.26080	03 01 41.54	-21 25 40.9		18.8	V		691
1991 VG		1991 11 29.26777	03 01 37.98	-21 27 55.6		18.9	V		691
1991 VK		1991 12 15.15923	21 45 00.50	+16 23 11.0		17.0	V		691
1991 VK		1991 12 15.16647	21 44 58.38	+16 22 56.9		16.9	V		691
1991 VK		1991 12 15.17420	21 44 56.11	+16 22 41.9		16.8	V		691
1991 XA	*	1991 12 03.28031	04 19 07.18	+14 45 49.6		19.7	V		691
1991 XA		1991 12 03.30137	04 19 12.09	+14 47 38.7		19.6	V		691
1991 XA		1991 12 03.32249	04 19 16.96	+14 49 27.6		19.6	V		691
1991 XA		1991 12 04.17234	04 22 56.59	+15 59 44.9					691
1991 XA		1991 12 04.18682	04 22 59.87	+16 00 55.4		19.9	V		691
1991 XA		1991 12 04.20099	04 23 03.03	+16 02 05.1					691
1991 XA		1991 12 04.37851	04 23 41.25	+16 15 58.4					691
1991 XA		1991 12 04.38775	04 23 43.25	+16 16 41.1					691
1991 XA		1991 12 04.39679	04 23 45.15	+16 17 24.3					691
1991 XA		1991 12 07.26588	04 34 04.63	+19 31 48.6		19.9	V		691
1991 XA		1991 12 07.28775	04 34 08.29	+19 33 06.4		19.9	V		691
1991 XA		1991 12 15.28188	04 53 49.06	+25 10 03.6		21.2	V		691
1991 XA		1991 12 15.28610	04 53 49.56	+25 10 10.9					691

1991 XA	1991 12 15.29356	04 53 50.08	+25 10 23.0			691
1991 XB	1991 12 13.34496	04 07 30.84	+13 22 55.6	17.7 V		691
1991 XB	1991 12 13.35222	04 07 31.61	+13 22 32.5	17.7 V		691
1991 XB	1991 12 15.10460	04 11 08.55	+11 52 14.2	17.9 V		691
1991 XB	1991 12 15.11149	04 11 09.34	+11 51 53.5			691
(796)	1991 12 15.20318	01 57 22.71	+26 23 28.8	14.0 V		691
(796)	1991 12 15.21063	01 57 22.69	+26 23 31.0			691
(796)	1991 12 15.21876	01 57 22.66	+26 23 33.6			691
(3122)	1991 12 15.16009	21 46 15.16	+16 08 06.8	18.0 V		691
(3122)	1991 12 15.16738	21 46 16.79	+16 08 23.3			691
(3122)	1991 12 15.17515	21 46 18.56	+16 08 40.9			691

695 Kitt Peak
B. E. A. Mueller, Kitt Peak National Observatory, P.O. Box 26732, Tucson, AZ 85726, U.S.A.
2.1-m reflector
SAOC

1991 VA	1991 11 09.30087	02 28 06.99	+34 47 00.2			695
1991 VA	1991 11 09.30841	02 28 08.14	+34 47 20.1			695
1991 VA	1991 11 09.33036	02 28 11.59	+34 48 22.7			695

801 Oak Ridge
R. E. McCrosky, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, U.S.A.
Observers R. E. McCrosky, C.-Y. Shao
1.5-m reflector + CCD

1931 TS1	1991 11 08.27086	04 27 43.34	+24 06 41.0			801
1931 TS1	1991 11 08.29056	04 27 42.39	+24 06 40.1			801
1931 TS1	1991 12 05.18725	04 03 16.49	+23 21 53.5			801
1931 TS1	1991 12 05.21222	04 03 15.10	+23 21 49.4			801
1933 UM1	1991 11 08.19046	03 01 44.21	+19 04 13.0			801
1933 UM1	1991 11 08.20767	03 01 43.28	+19 04 09.5			801
1937 NN	1991 11 03.31962	05 00 26.12	+30 14 12.6			801
1937 NN	1991 11 07.28381	04 57 14.73	+30 12 57.2			801
1943 EN	1991 11 03.19369	02 08 58.43	+17 39 59.2			801
1943 EN	1991 11 03.21056	02 08 57.25	+17 39 56.2			801
1943 EN	1991 11 06.19983	02 05 36.26	+17 30 09.3			801
1943 EN	1991 11 06.21240	02 05 35.39	+17 30 06.9			801
1948 KF	1991 11 03.29036	04 41 14.95	+20 35 27.1			801
1948 KF	1991 11 03.30686	04 41 14.05	+20 35 28.5			801
1948 KF	1991 11 06.29161	04 38 25.50	+20 39 37.9			801
1948 KF	1991 11 06.31005	04 38 24.41	+20 39 39.6			801
1949 QQ1	1991 11 03.19602	02 08 41.99	+27 19 02.6			801
1949 QQ1	1991 11 03.21328	02 08 41.04	+27 18 57.9			801
1949 QQ1	1991 11 06.20556	02 06 03.60	+27 04 40.3			801
1949 QQ1	1991 11 06.21534	02 06 03.08	+27 04 37.3			801
1949 QQ1	1991 12 05.08004	01 48 35.89	+24 21 31.2			801
1949 QQ1	1991 12 05.10585	01 48 35.43	+24 21 22.6			801
1964 VT1	1991 09 09.27972	00 41 31.87	+00 01 54.8			801
1964 VT1	1991 09 09.29530	00 41 31.24	+00 01 51.2			801
1969 TL1	1991 12 05.16108	03 39 49.85	+18 43 58.0			801
1969 TL1	1991 12 05.17911	03 39 49.04	+18 43 55.5			801
1969 TB3	1991 11 03.29641	05 04 27.20	+24 04 06.6			801
1969 TB3	1991 11 03.32229	05 04 26.24	+24 04 03.5			801
1969 TB3	1991 11 06.29714	05 02 32.66	+23 57 58.8			801
1969 TB3	1991 11 06.31483	05 02 31.89	+23 57 56.7			801
1972 RY3	1991 11 05.05715	00 20 36.36	-02 13 26.9			801
1972 RY3	1991 11 05.08589	00 20 35.64	-02 13 25.9			801
1974 ME	1991 11 06.19667	01 57 36.73	-01 59 18.0			801

1974	ME	1991	11	06.20944	01	57	36.10	-01	59	18.7	801
1974	MG	1987	05	01.24067	13	38	34.36	-20	41	31.8	801
1974	MG	1991	11	06.09699	00	19	25.89	+11	06	45.5	801
1974	MG	1991	11	06.12648	00	19	25.26	+11	06	38.7	801
1974	ST	1991	11	06.04532	00	12	12.35	-02	16	59.7	801
1974	ST	1991	11	06.08803	00	12	11.63	-02	17	01.5	801
1975	DB	1991	11	06.40233	08	53	21.21	+14	02	52.4	801
1975	DB	1991	11	06.41499	08	53	22.08	+14	02	44.6	801
1975	LQ	1991	11	07.15654	02	05	29.51	+04	54	20.9	801
1975	LQ	1991	11	07.16355	02	05	29.15	+04	54	18.7	801
1975	SA1	1991	11	08.23912	03	28	12.31	+25	53	08.9	801
1975	SA1	1991	11	08.25315	03	28	11.49	+25	53	08.6	801
1975	TX2	1991	11	03.29340	05	00	04.01	+24	33	27.0	801
1975	TX2	1991	11	03.31645	05	00	03.25	+24	33	32.2	801
1975	TX2	1991	11	06.29450	04	58	22.72	+24	44	41.6	801
1975	TX2	1991	11	06.31272	04	58	22.00	+24	44	45.9	801
1975	TC6	1991	11	07.41568	07	59	47.36	+31	57	33.2	801
1975	TC6	1991	11	07.42721	07	59	48.04	+31	57	35.6	801
1975	TC6	1991	12	05.33325	08	15	22.43	+34	21	11.0	801
1975	TC6	1991	12	05.35887	08	15	22.47	+34	21	21.2	801
1976	GK3	1991	11	03.34931	06	15	09.57	+03	24	00.9	801
1976	GK3	1991	11	03.36874	06	15	09.59	+03	23	50.6	801
1976	GK3	1991	11	06.35008	06	15	11.48	+02	56	37.5	801
1976	GK3	1991	11	06.36714	06	15	11.43	+02	56	28.1	801
1976	GX3	1991	11	03.25824	03	38	53.91	+15	18	46.6	801
1976	GX3	1991	11	03.27731	03	38	52.76	+15	18	40.9	801
1976	GX3	1991	11	06.24525	03	35	55.01	+15	03	40.8	801
1976	GX3	1991	11	06.25811	03	35	54.18	+15	03	36.6	801
1976	YY	1991	12	05.12912	03	12	08.31	+20	32	48.1	801
1976	YY	1991	12	05.14763	03	12	07.41	+20	32	46.3	801
1977	EV	1991	11	05.05400	00	18	23.99	+23	14	47.3	801
1977	EV	1991	11	05.08244	00	18	22.92	+23	14	37.1	801
1977	EV	1991	11	07.02888	00	17	15.84	+23	02	58.4	801
1977	EV	1991	11	07.03149	00	17	15.73	+23	02	57.4	801
1977	EV	1991	12	05.00338	00	12	50.73	+20	43	48.4	801
1977	EV	1991	12	05.03958	00	12	51.20	+20	43	40.8	801
1977	FN1	1991	11	03.22756	02	56	11.02	+17	16	26.5	801
1977	FN1	1991	11	03.24586	02	56	10.08	+17	16	24.6	801
1977	FN1	1991	11	06.21894	02	53	38.31	+17	11	11.1	801
1977	FN1	1991	11	06.24012	02	53	37.19	+17	11	08.9	801
1977	FN1	1991	12	05.10284	02	31	26.46	+16	21	22.4	801
1977	FN1	1991	12	05.12542	02	31	25.59	+16	21	20.2	801
1977	NN	1991	11	03.23027	03	06	22.74	+26	31	51.3	801
1977	NN	1991	11	03.24351	03	06	21.73	+26	31	48.1	801
1977	NN	1991	11	06.22164	03	02	51.99	+26	19	15.1	801
1977	NN	1991	11	06.23815	03	02	50.77	+26	19	10.1	801
1977	QH4	1991	11	07.30262	05	24	12.61	+33	14	59.7	801
1977	QH4	1991	11	07.31899	05	24	12.09	+33	15	03.2	801
1977	QH4	1991	11	10.30679	05	22	28.76	+33	25	02.0	801
1977	QH4	1991	11	10.33169	05	22	27.69	+33	25	06.7	G 801
1977	RK	1991	11	08.19582	03	08	01.61	+18	11	21.6	801
1977	RK	1991	11	08.20558	03	08	00.59	+18	11	26.6	801
1977	RY6	1991	11	03.20079	02	18	00.54	+23	14	07.2	801
1977	RY6	1991	11	03.21521	02	17	59.62	+23	14	06.3	801
1977	RY6	1991	11	08.15851	02	13	00.99	+23	06	39.4	801
1977	RY6	1991	11	08.17207	02	13	00.15	+23	06	37.3	801
1977	SG3	1991	11	03.33186	05	56	15.66	+23	45	26.2	801
1977	SG3	1991	11	06.33331	05	56	01.85	+24	02	04.6	801
1977	SG3	1991	11	06.36275	05	56	01.48	+24	02	14.6	801

1978	VR4	1991	12	05.18459	04	00	41.90	+17	54	14.7	801
1978	VR4	1991	12	05.20925	04	00	40.31	+17	54	06.2	801
1979	FQ2	1991	11	06.02727	23	37	45.67	-14	41	23.2	801
1979	FQ2	1991	11	06.07646	23	37	45.11	-14	41	10.8	801
1979	QZ1	1987	01	30.21480	07	13	06.01	+23	15	10.2	801
1979	QZ1	1991	11	03.25543	03	32	10.64	+19	45	48.3	801
1979	QZ1	1991	11	03.27921	03	32	09.49	+19	45	44.8	801
1979	QZ1	1991	11	06.24300	03	29	47.40	+19	38	08.1	801
1979	QZ1	1991	11	06.25991	03	29	46.55	+19	38	05.4	801
1979	QZ1	1991	12	05.11779	03	06	16.47	+18	12	33.1	801
1979	QZ1	1991	12	05.14013	03	06	15.58	+18	12	29.6	801
1979	QX3	1991	12	05.98892	01	17	31.51	+22	21	44.0	801
1979	QX3	1991	12	06.02038	01	17	31.33	+22	21	37.1	801
1979	SP13	1991	12	05.30002	07	22	29.58	+21	39	33.0	801
1979	SP13	1991	12	05.32701	07	22	28.76	+21	39	38.5	801
1980	CG	1990	08	16.06679	17	00	12.53	-13	24	38.7	801
1980	CG	1991	11	06.38457	07	58	14.43	+10	46	05.8	801
1980	CG	1991	11	06.40503	07	58	15.14	+10	46	01.8	801
1980	CG	1991	12	05.31218	08	02	31.94	+10	07	57.2	801
1980	CG	1991	12	05.34301	08	02	31.25	+10	07	59.1	801
1980	FY	1991	11	08.26749	04	23	42.97	+24	53	54.9	801
1980	FY	1991	11	08.28128	04	23	42.12	+24	53	53.5	801
1980	UC	1991	11	06.10060	00	33	38.03	-00	47	43.1	801
1980	UC	1991	11	06.13551	00	33	37.32	-00	47	44.8	801
1980	YC	1991	11	07.29196	05	21	18.71	+24	18	23.2	801
1980	YC	1991	11	07.31404	05	21	18.05	+24	18	28.9	801
1981	EH11	1991	09	07.22308	23	14	10.72	-04	08	25.6	801
1981	EH11	1991	09	07.23749	23	14	09.75	-04	08	23.1	801
1981	EO42	1991	11	03.22222	02	51	11.53	+22	46	39.0	801
1981	EO42	1991	11	03.24109	02	51	10.30	+22	46	37.6	801
1981	EO42	1991	11	08.18840	02	46	00.19	+22	38	43.4	801
1981	EO42	1991	11	08.20385	02	45	59.18	+22	38	41.5	801
1981	QH2	1991	11	06.15005	01	14	04.37	-00	11	32.5	801
1981	QH2	1991	11	06.17006	01	14	03.75	-00	11	35.5	801
1981	TJ4	1991	10	09.08022	23	34	13.52	-11	48	43.8	r 801
1981	TJ4	1991	11	05.02634	23	23	30.35	-10	20	44.9	801
1981	VC1	1991	11	03.30203	05	08	09.86	+23	49	03.2	801
1981	VC1	1991	11	03.32895	05	08	08.96	+23	49	05.9	801
1981	VC1	1991	11	06.30275	05	06	26.70	+23	54	06.0	801
1981	VC1	1991	11	06.32196	05	06	25.93	+23	54	08.5	801
1982	BQ2	1991	11	06.14659	01	10	54.31	+00	04	16.4	801
1982	BQ2	1991	11	06.16755	01	10	53.44	+00	04	12.2	801
1982	SJ1	1991	11	06.95520	22	03	44.07	-11	21	07.8	801
1982	SJ1	1991	11	06.97378	22	03	44.82	-11	21	07.6	801
1982	SX5	1991	11	08.19759	03	03	00.58	+20	53	06.3	801
1982	SX5	1991	11	08.20968	03	02	59.82	+20	53	03.1	801
1982	SX5	1991	12	05.11497	02	40	04.05	+19	00	13.3	801
1982	SX5	1991	12	05.13404	02	40	03.39	+19	00	08.4	801
1982	TG1	1991	11	03.34601	06	08	01.86	+12	15	07.0	801
1982	TG1	1991	11	03.36661	06	08	01.86	+12	14	55.9	801
1982	TG1	1991	11	06.34491	06	07	56.45	+11	47	58.4	801
1982	TG1	1991	11	06.36502	06	07	56.35	+11	47	47.5	801
1982	TG1	1991	12	05.24782	05	53	00.91	+07	46	19.8	801
1982	TG1	1991	12	05.26262	05	53	00.20	+07	46	13.8	801
1983	RL	1991	11	04.99678	22	25	23.39	+10	16	11.5	801
1983	RL	1991	11	05.01164	22	25	23.82	+10	16	17.9	801
1983	RL	1991	11	07.00096	22	26	29.32	+10	30	50.4	801
1983	RD2	1991	11	03.39287	07	14	21.21	+22	23	28.6	801
1983	RD2	1991	11	07.39344	07	16	19.57	+22	18	20.4	801

1983	RD2	1991	11	07.41207	07	16	20.02	+22	18	19.0	801
1983	RD2	1991	12	05.30247	07	14	14.70	+22	08	47.0	801
1983	RD2	1991	12	05.32473	07	14	13.93	+22	08	46.9	801
1983	TE1	1991	11	03.28778	04	32	51.62	+17	21	48.8	801
1983	TE1	1991	11	03.30451	04	32	50.97	+17	21	43.1	801
1983	TE1	1991	11	06.28785	04	30	52.56	+17	04	33.1	801
1983	TE1	1991	11	06.30762	04	30	51.69	+17	04	26.4	801
1984	DX	1991	11	07.34683	06	15	48.16	+17	03	06.5	801
1984	DX	1991	11	07.37832	06	15	48.51	+17	03	02.7	801
1984	SF1	1991	11	06.25010	03	42	53.36	+24	06	04.8	801
1984	SF1	1991	11	08.24204	03	40	37.87	+23	58	17.8	801
1984	SF1	1991	11	08.25561	03	40	36.91	+23	58	14.4	801
1984	SF1	1991	12	05.12159	03	11	19.60	+21	44	25.9	801
1984	SF1	1991	12	05.13697	03	11	18.99	+21	44	20.7	801
1985	CG	1991	11	08.21913	03	20	38.02	+13	17	48.8	801
1985	CG	1991	11	08.23624	03	20	36.98	+13	17	46.0	801
1985	FB2	1991	11	07.38318	06	57	16.13	+07	38	09.6	801
1985	FB2	1991	11	07.40569	06	57	16.54	+07	38	02.5	801
1985	PC2	1991	11	08.31433	05	37	59.17	+17	44	02.8	801
1985	PC2	1991	11	08.36015	05	37	57.99	+17	44	01.0	801
1985	PC2	1991	12	05.22745	05	18	46.20	+17	45	04.3	I 801
1985	PC2	1991	12	05.24148	05	18	45.37	+17	45	06.1	801
1985	RV4	1991	11	08.16645	02	38	10.56	+15	42	58.1	801
1985	RV4	1991	11	08.19366	02	38	09.19	+15	42	51.8	801
1985	TQ1	1991	11	08.16066	02	36	17.33	+20	54	29.4	801
1985	TQ1	1991	11	08.17394	02	36	16.59	+20	54	28.1	801
1985	VD	1991	11	06.33899	06	04	29.10	+17	42	38.6	801
1985	VD	1991	11	06.37627	06	04	28.36	+17	42	37.8	801
1985	VD1	1991	11	07.34140	05	55	57.50	+29	59	38.6	801
1985	VD1	1991	11	07.37480	05	55	56.76	+29	59	42.1	801
1986	RD1	1991	11	03.16753	01	33	49.59	+24	39	48.0	801
1986	RD1	1991	11	03.19844	01	33	48.01	+24	39	38.3	801
1986	RD1	1991	11	06.16303	01	31	27.84	+24	23	56.0	801
1986	RD1	1991	11	06.18321	01	31	26.88	+24	23	49.3	801
1986	RK1	1991	11	03.20331	02	32	15.15	+08	23	00.6	801
1986	RK1	1991	11	03.21769	02	32	14.39	+08	22	56.2	801
1986	RQ5	1991	11	03.40214	07	28	46.34	+25	07	10.8	801
1986	RQ5	1991	11	03.41829	07	28	47.18	+25	07	13.5	801
1986	RQ5	1991	11	06.35825	07	31	19.10	+25	16	11.4	801
1986	RQ5	1991	11	06.37366	07	31	19.84	+25	16	14.2	801
1986	RQ5	1991	12	05.30529	07	40	59.56	+27	35	28.5	801
1986	RQ5	1991	12	05.32941	07	40	59.24	+27	35	37.6	801
1986	TU6	1991	11	03.18880	01	47	16.99	+24	23	50.5	801
1986	TU6	1991	11	03.20638	01	47	16.14	+24	23	44.6	801
1986	TU6	1991	11	06.16536	01	44	57.49	+24	05	51.9	801
1986	TU6	1991	11	06.18534	01	44	56.54	+24	05	44.5	801
1986	UM1	1991	11	03.24965	03	25	24.74	+21	32	55.3	801
1986	UM1	1991	11	03.27500	03	25	23.30	+21	32	53.9	801
1986	UM1	1991	11	08.21612	03	20	42.25	+21	27	54.9	801
1986	UM1	1991	11	08.23490	03	20	41.13	+21	27	53.6	801
1986	VD1	1991	11	08.15580	02	11	25.90	+32	25	15.9	801
1986	VD1	1991	11	08.17049	02	11	25.05	+32	25	11.2	801
1987	DC6	1991	12	05.29311	07	12	40.04	+13	16	28.3	801
1987	DC6	1991	12	05.32208	07	12	39.13	+13	16	27.5	801
1987	KB	1991	12	04.96453	23	38	21.34	+07	13	47.9	801
1987	KB	1991	12	04.98284	23	38	22.71	+07	13	47.3	801
1987	OC	1991	12	05.09588	02	13	32.97	+38	35	29.7	I 801
1987	OC	1991	12	05.10855	02	13	32.50	+38	35	15.6	801
1987	OC	1991	12	06.00014	02	13	15.86	+38	18	46.3	801

1987	OC	1991	12	06.01197	02	13	15.61	+38	18	33.6	801
1987	QL1	1991	11	08.21174	03	13	10.26	+25	43	37.5	801
1987	QL1	1991	11	08.23325	03	13	08.73	+25	43	31.0	801
1987	QG2	1991	11	03.26038	03	48	55.87	+32	13	21.4	801
1987	QG2	1991	11	03.28147	03	48	54.60	+32	13	21.7	801
1987	QG2	1991	11	06.25631	03	45	57.05	+32	12	57.7	801
1987	QG2	1991	11	06.26951	03	45	56.24	+32	12	58.1	801
1987	RM1	1991	11	07.33708	05	44	18.68	+18	02	16.0	801
1987	RM1	1991	11	07.35862	05	44	18.09	+18	02	14.2	801
1987	RM1	1991	12	05.23102	05	21	30.73	+17	25	52.8	801
1987	RM1	1991	12	05.24444	05	21	29.88	+17	25	51.7	801
1987	SQ3	1991	11	03.15417	01	18	00.43	+21	31	50.7	801
1987	SQ3	1991	11	03.16942	01	17	59.64	+21	31	45.8	801
1987	SQ3	1991	11	06.15271	01	15	38.56	+21	15	22.9	801
1987	SQ3	1991	11	06.17244	01	15	37.63	+21	15	16.3	801
1987	SM4	1991	11	05.02094	22	51	26.50	+07	07	07.2	801
1987	SM4	1991	11	05.04532	22	51	27.15	+07	07	04.5	801
1987	SM4	1991	11	06.99105	22	52	26.02	+07	03	38.7	801
1987	SM4	1991	11	07.02447	22	52	27.00	+07	03	35.6	t 801
1987	ST17	1991	11	07.24931	04	16	00.46	+18	18	51.8	801
1987	ST17	1991	11	07.27187	04	15	59.31	+18	18	41.1	801
1987	UW	1991	11	06.00707	23	05	53.28	+08	38	27.6	801
1987	UW	1991	11	06.02262	23	05	53.74	+08	38	09.8	801
1987	UQ3	1991	12	05.26042	06	45	45.85	+24	18	59.1	801
1987	UQ3	1991	12	05.27851	06	45	44.84	+24	19	02.3	801
1987	YK	1991	11	06.35244	06	52	10.62	+24	37	36.6	801
1987	YK	1991	11	06.39514	06	52	10.80	+24	37	42.4	801
1987	YK	1991	12	05.25392	06	40	44.97	+26	07	25.0	801
1987	YK	1991	12	05.26791	06	40	44.18	+26	07	27.7	801
1988	AF1	1991	11	07.23894	04	03	53.60	+20	51	04.3	801
1988	AF1	1991	11	07.26619	04	03	52.41	+20	51	06.6	801
1988	AF1	1991	11	08.24808	04	03	12.22	+20	52	27.5	801
1988	AF1	1991	11	08.26280	04	03	11.56	+20	52	28.7	801
1988	BB	1991	11	10.11389	00	23	16.91	+13	37	13.5	w 801
1988	BB	1991	11	10.12852	00	23	16.51	+13	37	09.0	w 801
1988	BL2	1991	11	06.11081	00	45	42.12	+01	03	29.1	801
1988	BL2	1991	11	06.12949	00	45	41.29	+01	03	33.5	801
1988	BL2	1991	11	10.13253	00	43	02.51	+01	20	17.7	801
1988	BL2	1991	11	10.14544	00	43	01.96	+01	20	20.5	801
1988	BL2	1991	12	05.01963	00	35	59.35	+03	40	49.3	801
1988	BL2	1991	12	05.04219	00	35	59.19	+03	40	56.4	801
1988	BK5	1991	09	07.21509	23	12	57.75	+15	51	52.2	801
1988	BK5	1991	09	07.23406	23	12	56.76	+15	51	51.3	801
1988	CH	1991	11	06.38780	08	13	35.04	+13	36	15.9	801
1988	CH	1991	11	06.39751	08	13	35.71	+13	36	12.6	801
1988	CH	1991	11	09.40872	08	16	59.77	+13	19	33.1	801
1988	CH	1991	12	05.34628	08	35	35.74	+11	29	47.2	801
1988	CH	1991	12	05.37891	08	35	36.22	+11	29	41.6	801
1988	CD4	1991	12	05.15773	03	22	24.36	+22	51	15.3	801
1988	CD4	1991	12	05.17659	03	22	23.51	+22	51	07.9	801
1988	EL	1991	11	06.95087	21	59	33.10	-08	07	45.3	801
1988	EL	1991	11	06.96185	21	59	33.45	-08	07	37.2	801
1988	VS4	1991	11	03.31002	05	27	03.12	+18	52	32.6	801
1988	VS4	1991	11	03.32567	05	27	02.71	+18	52	21.2	801
1988	VS4	1991	11	06.32458	05	25	41.97	+18	14	50.5	801
1988	VS4	1991	11	06.34200	05	25	41.40	+18	14	37.0	801
1989	AM	1991	11	06.40826	08	44	54.79	+29	43	29.1	801
1989	AM	1991	11	06.41759	08	44	55.58	+29	43	35.8	801
1989	AM	1991	11	09.41171	08	49	01.70	+30	18	11.0	801

1989 AM	1991 11 09.42362	08 49 02.61	+30 18 19.2			801
1989 BG	1991 11 07.28770	05 15 22.84	+34 45 59.6			801
1989 BG	1991 11 07.30797	05 15 21.31	+34 46 05.6			801
1989 BG	1991 11 08.27926	05 14 40.47	+34 48 13.3			801
1989 BG	1991 11 08.29918	05 14 39.55	+34 48 15.7			801
1989 CO3	1991 11 10.11772	00 32 25.91	+03 17 01.9			801
1989 CO3	1991 11 10.13714	00 32 25.71	+03 16 56.2			801
1989 CD4	1991 11 03.26228	03 51 30.44	+28 14 39.6			801
1989 CD4	1991 11 03.28467	03 51 29.20	+28 14 38.8			801
1989 CD4	1991 11 06.25435	03 48 46.39	+28 12 10.0			801
1989 CD4	1991 11 06.26722	03 48 45.60	+28 12 09.1			801
1989 EL	1991 11 03.21995	02 43 43.24	+19 21 48.7			801
1989 EL	1991 11 03.23907	02 43 42.07	+19 21 41.1			801
1989 EL	1991 11 08.16339	02 38 49.89	+18 47 44.9			801
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1989 EO1	1991 11 08.27709	04 47 34.35	+32 45 12.2			801
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1989 FJ	1991 11 06.04087	00 10 11.75	-03 28 51.1			801
1989 FJ	1991 11 06.07999	00 10 10.62	-03 28 51.0			801
1990 EL7	1991 10 10.99594	21 12 35.80	-14 26 39.6			801
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1990 FS	1991 11 06.10388	00 38 28.65	-03 58 19.8			801
1990 FS	1991 11 06.13269	00 38 27.84	-03 58 23.7			801
1990 FW1	1991 10 11.03896	22 28 25.94	-13 09 17.5			801
1990 FW1	1991 10 11.07902	22 28 25.23	-13 09 18.2			801
1990 KK	1991 11 03.38692	06 56 27.87	+18 55 35.9			801
1990 KK	1991 11 03.40623	06 56 28.40	+18 55 50.6			801
1990 KK	1991 11 06.35486	06 57 51.91	+19 33 03.1			801
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1990 KK	1991 12 05.27082	06 51 07.15	+28 04 13.6			801
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1990 MA	1991 11 03.39809	07 16 34.37	+23 27 00.1			801
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1990 MA	1991 12 05.28868	07 00 29.12	+33 48 50.8			801
1990 ME	1991 11 08.16871	02 37 59.38	-00 34 15.2			801
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1990 OO	1991 11 08.24566	03 39 25.35	+07 05 00.2			801
1990 OO	1991 11 08.26080	03 39 24.65	+07 04 54.6			801
1990 OX	1991 11 08.18520	02 38 54.84	+11 53 51.5			801
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1990 OA1	1991 11 07.29565	05 23 39.47	+28 48 15.9			801
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1990 QQ1	1991 12 05.35627	08 45 33.07	+37 01 25.5			801
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1990 QO3	1991 10 08.38412	05 33 10.14	+35 26 47.5			801
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1990 RW	1991 11 03.23326	03 16 40.73	+19 37 06.6			801
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1990 RW	1991 11 08.21388	03 13 13.17	+19 24 44.6				801
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1990 SM2	1991 12 05.33604	07 56 29.42	+23 09 56.7				801
1990 SB4	1991 12 05.38778	10 36 03.77	+15 59 52.1				801
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1990 TC	1991 11 07.33219	05 29 24.58	+12 21 15.1				801
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1990 VA	1991 11 06.27394	04 28 22.03	+07 32 23.4			t	801
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1991 QG	1991 11 05.02961	22 36 25.37	-06 07 30.4				801
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1991 SS1	1991 11 06.09209	00 11 29.74	-01 30 13.2				801
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1991 TB1	1991 11 04.98539	22 02 33.91	+23 30 31.7				801
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1991 VK	1991 12 04.93391	22 21 51.48	+20 03 35.4				801
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1991 VL	1991 12 05.01235	00 06 02.54	+17 36 31.7				801
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1991 WA	1991 12 05.07093	01 54 57.52	-05 20 52.3				801
6552 P-L	1991 09 07.32662	02 10 32.18	+07 52 43.4				801
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6552 P-L	1991 10 08.28756	01 59 57.36	+04 01 45.9				801
6552 P-L	1991 10 08.30487	01 59 56.51	+04 01 36.5				801
1051 T-2	1991 11 06.03633	23 46 02.12	-05 08 57.5				801
1051 T-2	1991 11 06.08387	23 46 01.66	-05 09 08.6				801
2160 T-2	1991 12 05.25681	06 43 46.37	+24 04 02.9				801
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3019 T-3	1991 11 06.11634	00 48 21.22	+02 05 42.4				801
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(243)	1991 11 03.33582	05 59 30.74	+24 55 22.6				801
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(243)	1991 11 06.33071	05 58 53.57	+24 56 20.0				801
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(1009)	1991 11 06.95854	22 15 40.19	+07 09 31.7				801
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(1538)	1991 11 03.16512	01 27 40.83	+25 29 16.0				801
(1538)	1991 11 03.18182	01 27 39.83	+25 29 13.1				801
(1538)	1991 11 06.16113	01 24 59.26	+25 19 35.3				801
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(4998)	1991 10 08.21880	00 50 34.77	+11 47 34.1				801
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(4998)	1991 10 11.21818	00 47 57.63	+11 40 15.2				801
(4998)	1991 10 11.23275	00 47 56.85	+11 40 13.0				801

809 European Southern Observatory
H. Debehogne, Observatoire Royal de Belgique, Avenue Circulaire 3, B-1180 Brussels, Belgium (3)
E. W. Elst, Observatoire Royal de Belgique, Avenue Circulaire 3, B-1180 Brussels, Belgium (4)
R. M. West, European Southern Observatory, Karl-Schwarzschild Strasse 2, W-8046 Garching bei Munchen, Federal Republic of Germany (5)
Observers H. Debehogne, E. W. Elst, O. Hainaut, G. Pizarro, O. Pizarro, A. Smette, R. M. West

1985 SM3	1991 07 22.34862	20 45 18.41	-18 35 44.3			3	809
1985 SM3	1991 07 22.35834	20 45 17.83	-18 35 45.1			3	809
1985 SM3	1991 07 22.36806	20 45 17.24	-18 35 45.9			3	809
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1989 BT	1991 07 12.19237	19 59 49.33	-18 19 39.5	16.1		3	809
1989 BT	1991 07 12.20070	19 59 48.87	-18 19 40.4			3	809
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1991 NO2	1991 07 05.18195	21 24 35.89	-17 56 08.1	16.9		3	809
1991 NO2	1991 07 05.19444	21 24 35.65	-17 56 11.6			3	809
1991 NO2	1991 07 05.20694	21 24 35.39	-17 56 15.2			3	809
1991 NO2	1991 07 06.20070	21 24 16.21	-18 00 48.0			3	809
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1991 PH8	1991 07 11.43091	21 33 31.94	-17 56 22.5			3	809
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1991 VG	1991 12 02.12286	03 09 51.20	-43 08 56.7			5	809
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(111)	1991	07	19.36841	20	42	21.47	-18	31	35.8	3	809
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(111)	1991	07	21.32465	20	40	34.25	-18	35	18.6	3	809
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(208)	1991	07	06.10312	19	34	47.85	-24	17	16.0	3	809
(208)	1991	07	06.11354	19	34	47.29	-24	17	17.5	3	809
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(383)	1991	07	11.14757	19	54	07.60	-22	13	07.0	3	809
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(414)	1991	07	05.19444	21	20	16.02	-19	17	04.4	3	809
(414)	1991	07	05.20694	21	20	15.71	-19	17	07.9	3	809
(414)	1991	07	06.20070	21	19	51.13	-19	21	24.2	3	809
(414)	1991	07	06.21320	21	19	50.83	-19	21	27.7	3	809
(414)	1991	07	06.22569	21	19	50.50	-19	21	30.9	3	809
(414)	1991	07	08.38542	21	18	53.61	-19	31	04.2	3	809
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(745)	1991	07	15.06702	19	47	08.17	-17	08	23.5	3	809
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(966)	1991	07	05.05624	15	36	10.53	-20	03	05.8	3	809
(1004)	1991	07	12.16077	19	51	32.99	-18	12	16.7	3	809
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(1004)	1991	07	12.18159	19	51	32.05	-18	12	19.9	3	809
(1004)	1991	07	13.10104	19	50	51.22	-18	14	33.6	3	809
(1004)	1991	07	13.11146	19	50	50.76	-18	14	35.2	3	809
(1004)	1991	07	13.12187	19	50	50.30	-18	14	37.0	3	809
(1004)	1991	07	14.24548	19	49	59.77	-18	17	21.3	3	809
(1004)	1991	07	14.25591	19	49	59.29	-18	17	22.8	3	809
(1004)	1991	07	14.26633	19	49	58.80	-18	17	24.2	3	809
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(1004)	1991	07	15.05660	19	49	23.61	-18	19	21.3	3	809
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(1004)	1991	07	16.25798	19	48	29.02	-18	22	21.2	3	809
(1004)	1991	07	16.26840	19	48	28.54	-18	22	22.5	3	809
(1004)	1991	07	16.27882	19	48	28.06	-18	22	24.0	3	809
(1063)	1991	07	06.24132	20	28	51.82	-22	39	31.8	3	809
(1063)	1991	07	06.25174	20	28	51.29	-22	39	35.8	3	809
(1063)	1991	07	06.26215	20	28	50.78	-22	39	39.7	3	809
(1063)	1991	07	08.32535	20	27	07.27	-22	52	53.1	3	809
(1063)	1991	07	08.33577	20	27	06.75	-22	52	56.9	3	809
(1063)	1991	07	15.37952	20	20	37.01	-23	38	23.3	3	809
(1063)	1991	07	15.38992	20	20	36.42	-23	38	27.3	3	809
(1063)	1991	07	15.40034	20	20	35.84	-23	38	31.0	3	809
(1063)	1991	07	16.22327	20	19	47.78	-23	43	48.2	3	809
(1063)	1991	07	16.23367	20	19	47.15	-23	43	52.3	3	809
(1063)	1991	07	16.24409	20	19	46.54	-23	43	56.5	3	809
(1269)	1991	07	10.31737	20	08	49.84	-19	00	59.6	3	809
(1269)	1991	07	10.32987	20	08	49.35	-19	01	01.2	3	809
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(1269)	1991	07	12.38542	20	07	31.34	-19	05	43.5	3	809
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(1273)	1991	07	03.11493	19	25	37.76	-24	04	10.0	3	809
(1273)	1991	07	03.12674	19	25	37.06	-24	04	09.1	3	809
(1273)	1991	07	03.13853	19	25	36.33	-24	04	08.3	3	809
(1273)	1991	07	04.07987	19	24	38.95	-24	03	03.3	3	809
(1273)	1991	07	04.09236	19	24	38.16	-24	03	02.4	3	809
(1273)	1991	07	04.10486	19	24	37.37	-24	03	01.6	3	809
(1273)	1991	07	05.07465	19	23	37.50	-24	01	52.4	3	809

(1273)	1991	07	05.08507	19	23	36.85	-24	01	51.8	3	809
(1273)	1991	07	05.09549	19	23	36.19	-24	01	51.0	3	809
(1290)	1991	07	18.19618	20	32	38.14	-20	04	05.4	3	809
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(1290)	1991	07	18.21701	20	32	36.86	-20	04	06.3	3	809
(1290)	1991	07	19.33577	20	31	28.47	-20	04	49.9	3	809
(1290)	1991	07	19.34618	20	31	27.84	-20	04	50.3	3	809
(1305)	1991	07	05.18195	21	21	51.01	-18	31	31.4	3	809
(1305)	1991	07	05.19444	21	21	50.65	-18	31	33.9	3	809
(1305)	1991	07	05.20694	21	21	50.28	-18	31	36.2	3	809
(1305)	1991	07	06.20070	21	21	22.40	-18	34	41.6	3	809
(1305)	1991	07	06.21320	21	21	22.05	-18	34	44.0	3	809
(1305)	1991	07	06.22569	21	21	21.70	-18	34	46.7	3	809
(1305)	1991	07	08.38542	21	20	16.61	-18	41	44.7	3	809
(1305)	1991	07	08.39792	21	20	16.25	-18	41	47.1	3	809
(1306)	1991	07	04.15973	20	05	24.76	-12	38	09.4	3	809
(1306)	1991	07	04.16806	20	05	24.38	-12	38	08.6	3	809
(1306)	1991	07	04.17639	20	05	24.01	-12	38	07.5	3	809
(1306)	1991	07	05.14133	20	04	39.69	-12	36	05.9	3	809
(1306)	1991	07	05.15244	20	04	39.19	-12	36	04.8	3	809
(1306)	1991	07	05.16354	20	04	38.65	-12	36	03.4	3	809
(1306)	1991	07	08.09618	20	02	20.88	-12	30	12.3	3	809
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(1306)	1991	07	11.22534	19	59	48.25	-12	24	29.9	3	809
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(1306)	1991	07	12.26633	19	58	56.48	-12	22	43.9	3	809
(1306)	1991	07	12.27673	19	58	55.96	-12	22	42.8	3	809
(1306)	1991	07	12.28716	19	58	55.43	-12	22	41.8	3	809
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(1306)	1991	07	14.29062	19	57	14.78	-12	19	30.4	3	809
(1306)	1991	07	14.30104	19	57	14.28	-12	19	29.3	3	809
(1306)	1991	07	15.30313	19	56	23.44	-12	17	58.8	3	809
(1306)	1991	07	15.31354	19	56	22.92	-12	17	58.0	3	809
(1306)	1991	07	15.32396	19	56	22.38	-12	17	56.8	3	809
(1306)	1991	07	16.29271	19	55	33.16	-12	16	32.1	3	809
(1306)	1991	07	16.30313	19	55	32.63	-12	16	30.9	3	809
(1306)	1991	07	16.31354	19	55	32.08	-12	16	29.7	3	809
(1333)	1991	07	07.33958	19	46	52.85	-19	38	44.9	3	809
(1333)	1991	07	07.34792	19	46	52.43	-19	38	47.7	3	809
(1333)	1991	07	08.20348	19	46	07.19	-19	44	16.1	3	809
(1333)	1991	07	08.21181	19	46	06.75	-19	44	19.5	3	809
(1333)	1991	07	08.22014	19	46	06.31	-19	44	22.5	3	809
(1333)	1991	07	08.28993	19	46	02.61	-19	44	49.6	3	809
(1333)	1991	07	08.30035	19	46	02.05	-19	44	53.6	3	809
(1333)	1991	07	08.31076	19	46	01.50	-19	44	57.6	3	809
(1333)	1991	07	10.08681	19	44	26.23	-19	56	21.3	3	809
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(1497)	1991	06	29.97153	15	36	09.14	-20	32	43.3	3	809
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(1547)	1991	07	05.10729	19	27	46.79	-23	07	01.1	3	809
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(1559)	1991	07	10.14410	19	51	36.46	-24 15 36.1	3 809
(1559)	1991	07	10.15451	19	51	35.80	-24 15 36.9	3 809
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(1589)	1991	07	10.25174	19	59	18.79	-24 09 45.5	3 809
(1589)	1991	07	10.26215	19	59	18.20	-24 09 48.7	3 809
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(1681)	1991	07	13.03334	19	42	10.95	-24 35 30.6	3 809
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(1689)	1991	07	06.05869	19	27	15.13	-18 51 12.3	3 809
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(1689)	1991	07	06.07951	19	27	13.94	-18 51 17.9	3 809
(1689)	1991	07	07.27708	19	26	03.20	-18 56 50.0	3 809
(1704)	1991	07	12.36319	20	14	23.57	-18 48 41.8	3 809
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(2533)	1991	07	10.31737	20	10	33.21	-17	46	49.7	3	809
(2533)	1991	07	10.32987	20	10	32.63	-17	46	51.2	3	809

(2533)	1991	07	10.34236	20	10	32.07	-17	46	52.8	3	809
(2533)	1991	07	11.32292	20	09	47.47	-17	49	02.3	3	809
(2533)	1991	07	11.33542	20	09	46.92	-17	49	03.9	3	809
(2533)	1991	07	11.34792	20	09	46.35	-17	49	05.7	3	809
(2533)	1991	07	11.36389	20	09	45.63	-17	49	07.7	3	809
(2533)	1991	07	11.37639	20	09	45.07	-17	49	09.3	3	809
(2533)	1991	07	11.38888	20	09	44.51	-17	49	11.0	3	809
(2533)	1991	07	12.36319	20	08	59.61	-17	51	21.3	3	809
(2533)	1991	07	12.37430	20	08	59.11	-17	51	22.4	3	809
(2533)	1991	07	12.38542	20	08	58.58	-17	51	23.9	3	809
(2533)	1991	07	15.08090	20	06	52.42	-17	57	33.7	3	809
(2533)	1991	07	15.09132	20	06	51.94	-17	57	35.2	3	809
(2533)	1991	07	15.10173	20	06	51.43	-17	57	36.5	3	809
(2533)	1991	07	16.03021	20	06	07.39	-17	59	45.3	3	809
(2533)	1991	07	16.04062	20	06	06.88	-17	59	46.8	3	809
(2533)	1991	07	16.05104	20	06	06.41	-17	59	48.3	3	809
(2553)	1991	07	10.31737	20	14	06.50	-19	20	35.0	3	809
(2553)	1991	07	10.32987	20	14	05.95	-19	20	37.6	3	809
(2553)	1991	07	10.34236	20	14	05.38	-19	20	40.3	3	809
(2553)	1991	07	11.36389	20	13	19.79	-19	24	41.3	3	809
(2553)	1991	07	11.37639	20	13	19.24	-19	24	44.1	3	809
(2553)	1991	07	11.38888	20	13	18.69	-19	24	47.1	3	809
(2553)	1991	07	12.36319	20	12	34.68	-19	28	37.7	3	809
(2553)	1991	07	12.37430	20	12	34.20	-19	28	40.3	3	809
(2553)	1991	07	12.38542	20	12	33.68	-19	28	42.9	3	809
(2561)	1991	07	08.25729	19	51	01.90	-17	44	19.7	3	809
(2561)	1991	07	08.26772	19	51	01.32	-17	44	21.5	3	809
(2561)	1991	07	08.27812	19	51	00.73	-17	44	23.0	3	809
(2561)	1991	07	10.10938	19	49	16.47	-17	49	30.0	3	809
(2561)	1991	07	10.11980	19	49	15.87	-17	49	31.4	3	809
(2561)	1991	07	10.13020	19	49	15.27	-17	49	33.3	3	809
(2561)	1991	07	11.06076	19	48	21.67	-17	52	10.5	3	809
(2561)	1991	07	11.07118	19	48	21.05	-17	52	12.3	3	809
(2561)	1991	07	11.08160	19	48	20.43	-17	52	14.2	3	809
(2561)	1991	07	18.11458	19	41	24.82	-18	12	55.9	3	809
(2561)	1991	07	18.12292	19	41	24.33	-18	12	57.3	3	809
(2561)	1991	07	18.13126	19	41	23.84	-18	12	58.9	3	809
(2609)	1991	07	06.24132	20	26	02.80	-20	53	29.1	3	809
(2609)	1991	07	06.25174	20	26	02.18	-20	53	29.4	3	809
(2609)	1991	07	06.26215	20	26	01.57	-20	53	29.8	3	809
(2609)	1991	07	08.32535	20	23	58.95	-20	54	37.1	3	809
(2609)	1991	07	08.33577	20	23	58.35	-20	54	37.5	3	809
(2916)	1991	07	04.07987	19	28	09.40	-24	44	42.1	3	809
(2916)	1991	07	04.09236	19	28	08.54	-24	44	42.5	3	809
(2916)	1991	07	04.10486	19	28	07.70	-24	44	43.1	3	809
(2916)	1991	07	05.07465	19	27	02.48	-24	45	14.1	3	809
(2916)	1991	07	05.08507	19	27	01.79	-24	45	14.4	3	809
(2916)	1991	07	05.09549	19	27	01.08	-24	45	14.7	3	809
(2992)	1991	07	11.25729	19	59	01.83	-10	50	30.2	3	809
(2992)	1991	07	11.26772	19	59	01.35	-10	50	32.2	3	809
(2992)	1991	07	11.27812	19	59	00.84	-10	50	34.3	3	809
(2992)	1991	07	12.30035	19	58	10.37	-10	52	57.1	3	809
(2992)	1991	07	12.31076	19	58	09.86	-10	52	58.7	3	809
(2992)	1991	07	12.32118	19	58	09.35	-10	53	00.3	3	809
(3049)	1991	07	10.21979	20	01	57.72	-21	48	19.1	3	809
(3049)	1991	07	10.23021	20	01	57.24	-21	48	21.5	3	809
(3049)	1991	07	10.24063	20	01	56.74	-21	48	23.3	3	809
(3049)	1991	07	11.16077	20	01	13.29	-21	51	23.5	3	809
(3049)	1991	07	11.17117	20	01	12.80	-21	51	25.5	3	809

(3049)	1991	07	11.18159	20	01	12.33	-21	51	27.6	3	809
(3110)	1991	07	10.39860	21	34	17.57	-16	45	23.1	3	809
(3110)	1991	07	10.41251	21	34	17.19	-16	45	25.0	3	809
(3110)	1991	07	10.42639	21	34	16.82	-16	45	27.2	3	809
(3160)	1991	07	15.19409	20	08	11.65	-22	55	02.5	3	809
(3160)	1991	07	15.20451	20	08	11.02	-22	55	02.1	3	809
(3160)	1991	07	15.21494	20	08	10.40	-22	55	01.6	3	809
(3160)	1991	07	16.13091	20	07	15.32	-22	54	17.3	3	809
(3160)	1991	07	16.14133	20	07	14.69	-22	54	17.0	3	809
(3160)	1991	07	16.15173	20	07	14.07	-22	54	16.8	3	809
(3182)	1991	06	29.97153	15	37	12.70	-19	06	13.6	3	809
(3182)	1991	06	29.99235	15	37	12.22	-19	06	07.7	3	809
(3182)	1991	06	30.01320	15	37	11.76	-19	06	02.0	3	809
(3182)	1991	07	01.97084	15	36	28.12	-18	57	13.1	3	809
(3182)	1991	07	01.98889	15	36	27.71	-18	57	08.0	3	809
(3182)	1991	07	02.00694	15	36	27.32	-18	57	03.1	3	809
(3182)	1991	07	04.02153	15	35	48.41	-18	48	20.6	3	809
(3182)	1991	07	04.03958	15	35	48.05	-18	48	15.8	3	809
(3182)	1991	07	04.05763	15	35	47.73	-18	48	11.3	3	809
(3182)	1991	07	05.02014	15	35	31.32	-18	44	12.2	3	809
(3182)	1991	07	05.03819	15	35	30.98	-18	44	07.7	3	809
(3182)	1991	07	05.05624	15	35	30.67	-18	44	03.3	3	809
(3266)	1991	07	08.17049	19	37	52.39	-19	28	17.1	3	809
(3266)	1991	07	08.18091	19	37	51.61	-19	28	33.6	3	809
(3266)	1991	07	08.19131	19	37	50.82	-19	28	50.3	3	809
(3266)	1991	07	10.02951	19	35	32.01	-20	17	55.4	3	809
(3266)	1991	07	10.03993	19	35	31.20	-20	18	12.3	3	809
(3266)	1991	07	10.05035	19	35	30.41	-20	18	29.0	3	809
(3374)	1991	07	10.39860	21	35	47.85	-18	03	37.9	3	809
(3374)	1991	07	10.41251	21	35	47.45	-18	03	41.0	3	809
(3374)	1991	07	10.42639	21	35	47.05	-18	03	44.0	3	809
(3374)	1991	07	11.40451	21	35	18.93	-18	07	18.1	3	809
(3374)	1991	07	11.41771	21	35	18.55	-18	07	20.9	3	809
(3374)	1991	07	11.43091	21	35	18.17	-18	07	23.8	3	809
(3374)	1991	07	12.39999	21	34	49.34	-18	11	01.6	3	809
(3386)	1991	07	12.16077	19	55	17.68	-18	00	44.0	3	809
(3386)	1991	07	12.17117	19	55	17.16	-18	00	45.6	3	809
(3386)	1991	07	12.18159	19	55	16.63	-18	00	46.8	3	809
(3386)	1991	07	13.10104	19	54	29.70	-18	03	09.9	3	809
(3386)	1991	07	13.11146	19	54	29.16	-18	03	11.6	3	809
(3386)	1991	07	13.12187	19	54	28.64	-18	03	13.2	3	809
(3386)	1991	07	14.24548	19	53	30.59	-18	06	12.7	3	809
(3386)	1991	07	14.25591	19	53	30.06	-18	06	14.5	3	809
(3386)	1991	07	14.26633	19	53	29.53	-18	06	16.2	3	809
(3386)	1991	07	15.04617	19	52	49.52	-18	08	22.2	3	809
(3386)	1991	07	15.05660	19	52	48.99	-18	08	23.8	3	809
(3386)	1991	07	15.06702	19	52	48.45	-18	08	25.6	3	809
(3386)	1991	07	16.25798	19	51	46.05	-18	11	39.1	3	809
(3386)	1991	07	16.26840	19	51	45.50	-18	11	40.5	3	809
(3386)	1991	07	16.27882	19	51	44.96	-18	11	42.0	3	809
(3412)	1991	07	10.21979	20	02	08.85	-21	47	31.9	3	809
(3412)	1991	07	10.23021	20	02	08.20	-21	47	32.9	3	809
(3412)	1991	07	10.24063	20	02	07.53	-21	47	34.0	3	809
(3412)	1991	07	11.16077	20	01	09.10	-21	49	11.4	3	809
(3412)	1991	07	11.17117	20	01	08.45	-21	49	12.6	3	809
(3412)	1991	07	11.18159	20	01	07.79	-21	49	13.9	3	809
(3543)	1991	07	10.31737	20	10	01.31	-18	50	09.6	3	809
(3543)	1991	07	10.32987	20	10	00.73	-18	50	11.4	3	809
(3543)	1991	07	10.34236	20	10	00.14	-18	50	13.2	3	809

(3543)	1991	07	11.36389	20	09	14.15	-18	52	45.8	3 809
(3543)	1991	07	11.37639	20	09	13.57	-18	52	47.3	3 809
(3543)	1991	07	11.38888	20	09	13.03	-18	52	49.2	3 809
(3543)	1991	07	12.36319	20	08	28.81	-18	55	18.4	3 809
(3543)	1991	07	12.37430	20	08	28.32	-18	55	19.9	3 809
(3543)	1991	07	12.38542	20	08	27.83	-18	55	21.6	3 809
(3577)	1991	07	12.12743	19	55	43.90	-19	33	36.8	3 809
(3577)	1991	07	12.13785	19	55	43.51	-19	33	37.6	3 809
(3577)	1991	07	12.14827	19	55	43.09	-19	33	38.3	3 809
(3577)	1991	07	13.06702	19	55	08.39	-19	34	49.7	3 809
(3577)	1991	07	13.07742	19	55	08.02	-19	34	50.7	3 809
(3577)	1991	07	13.08784	19	55	07.64	-19	34	51.5	3 809
(3640)	1991	07	04.12013	19	30	07.35	-22	09	45.3	3 809
(3640)	1991	07	04.13264	19	30	06.53	-22	09	45.6	3 809
(3640)	1991	07	04.14514	19	30	05.73	-22	09	46.2	3 809
(3640)	1991	07	05.10729	19	29	02.56	-22	10	05.9	3 809
(3640)	1991	07	05.11771	19	29	01.88	-22	10	06.1	3 809
(3640)	1991	07	05.12813	19	29	01.20	-22	10	06.6	3 809
(3666)	1991	07	12.12743	19	50	22.75	-20	36	26.4	3 809
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(3669)	1991	07	10.14410	19	52	21.88	-24	00	12.1	3 809
(3669)	1991	07	10.15451	19	52	21.21	-24	00	15.3	3 809
(3669)	1991	07	10.16493	19	52	20.53	-24	00	18.6	3 809
(3669)	1991	07	11.09410	19	51	21.00	-24	05	07.4	3 809
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(3690)	1991	07	04.15973	20	08	22.34	-11	17	47.1	3 809
(3690)	1991	07	04.16806	20	08	21.98	-11	17	46.3	3 809
(3690)	1991	07	04.17639	20	08	21.57	-11	17	45.4	3 809
(3690)	1991	07	05.14133	20	07	36.50	-11	16	04.1	3 809
(3690)	1991	07	05.15244	20	07	36.00	-11	16	03.0	3 809
(3690)	1991	07	05.16354	20	07	35.46	-11	16	01.9	3 809
(3690)	1991	07	08.09618	20	05	11.03	-11	11	59.5	3 809
(3690)	1991	07	08.10660	20	05	10.48	-11	11	58.6	3 809
(3690)	1991	07	10.28368	20	03	16.33	-11	09	56.7	3 809
(3690)	1991	07	10.29410	20	03	15.79	-11	09	55.8	3 809
(3690)	1991	07	10.30452	20	03	15.23	-11	09	55.4	3 809
(3690)	1991	07	11.25729	20	02	24.24	-11	09	17.2	3 809
(3690)	1991	07	11.26772	20	02	23.68	-11	09	17.0	3 809
(3690)	1991	07	11.27812	20	02	23.12	-11	09	16.2	3 809
(3797)	1991	07	08.28993	19	45	39.87	-20	08	02.6	3 809
(3797)	1991	07	08.30035	19	45	39.36	-20	08	04.0	3 809
(3797)	1991	07	08.31076	19	45	38.86	-20	08	05.5	3 809
(3797)	1991	07	10.08681	19	44	17.10	-20	11	29.2	3 809
(3797)	1991	07	10.09792	19	44	16.59	-20	11	30.5	3 809
(3951)	1991	07	06.05869	19	30	39.96	-19	01	46.9	3 809
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(3983)	1991	07	10.14410	19	53	25.48	-23	38	22.4	3 809
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(3983)	1991	07	10.16493	19	53	24.20	-23	38	24.7	3 809
(3983)	1991	07	11.09410	19	52	26.95	-23	40	10.1	3 809
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(3983)	1991	07	11.11493	19	52	25.64	-23	40	12.5	3 809
(4040)	1991	07	10.39860	21	34	02.45	-18	10	24.4	3 809
(4040)	1991	07	10.41251	21	34	02.06	-18	10	27.2	3 809
(4040)	1991	07	10.42639	21	34	01.69	-18	10	30.1	3 809

(4040)	1991	07	11.40451	21	33	34.32	-18	13	55.1	3	809
(4040)	1991	07	11.41771	21	33	33.96	-18	13	58.0	3	809
(4040)	1991	07	11.43091	21	33	33.58	-18	14	00.5	3	809
(4051)	1991	07	06.12813	19	39	12.96	-21	14	13.9	3	809
(4051)	1991	07	06.13853	19	39	12.40	-21	14	14.4	3	809
(4051)	1991	07	06.14896	19	39	11.84	-21	14	15.0	3	809
(4051)	1991	07	07.30000	19	38	09.99	-21	15	27.9	3	809
(4051)	1991	07	07.30695	19	38	09.62	-21	15	28.3	3	809
(4051)	1991	07	08.07222	19	37	28.79	-21	16	18.4	3	809
(4051)	1991	07	08.08055	19	37	28.30	-21	16	18.6	3	809
(4051)	1991	07	18.09097	19	28	13.28	-21	26	27.3	3	809
(4051)	1991	07	18.09792	19	28	12.91	-21	26	27.7	3	809
(4051)	1991	07	18.10486	19	28	12.51	-21	26	28.0	3	809
(4067)	1991	07	05.18195	21	26	12.03	-19	04	33.7	3	809
(4067)	1991	07	05.19444	21	26	11.67	-19	04	34.8	3	809
(4067)	1991	07	05.20694	21	26	11.30	-19	04	35.9	3	809
(4067)	1991	07	06.20070	21	25	41.61	-19	05	56.0	3	809
(4067)	1991	07	06.21320	21	25	41.24	-19	05	57.3	3	809
(4067)	1991	07	06.22569	21	25	40.87	-19	05	58.2	3	809
(4076)	1991	07	15.23715	20	11	15.56	-21	39	19.1	3	809
(4076)	1991	07	15.24757	20	11	15.03	-21	39	20.6	3	809
(4076)	1991	07	15.25798	20	11	14.48	-21	39	22.2	3	809
(4076)	1991	07	16.17882	20	10	26.64	-21	41	37.8	3	809
(4076)	1991	07	16.18924	20	10	26.10	-21	41	39.4	3	809
(4076)	1991	07	16.19965	20	10	25.55	-21	41	41.0	3	809
(4082)	1991	07	10.31737	20	14	30.89	-19	41	40.6	3	809
(4082)	1991	07	10.32987	20	14	30.12	-19	41	39.3	3	809
(4082)	1991	07	10.34236	20	14	29.34	-19	41	37.9	3	809
(4082)	1991	07	11.36389	20	13	25.76	-19	39	55.4	3	809
(4082)	1991	07	11.37639	20	13	24.98	-19	39	54.1	3	809
(4082)	1991	07	11.38888	20	13	24.21	-19	39	52.4	3	809
(4082)	1991	07	12.36319	20	12	22.64	-19	38	13.8	3	809
(4082)	1991	07	12.37430	20	12	21.93	-19	38	12.9	3	809
(4082)	1991	07	12.38542	20	12	21.24	-19	38	11.8	3	809
(4139)	1991	07	07.33958	19	51	02.52	-19	59	06.3	3	809
(4139)	1991	07	07.34792	19	51	02.11	-19	59	06.9	3	809
(4139)	1991	07	08.28993	19	50	19.11	-20	01	31.9	3	809
(4139)	1991	07	08.30035	19	50	18.61	-20	01	33.5	3	809
(4139)	1991	07	08.31076	19	50	18.11	-20	01	34.9	3	809
(4139)	1991	07	10.08681	19	48	55.91	-20	06	10.5	3	809
(4139)	1991	07	10.09792	19	48	55.39	-20	06	12.2	3	809
(4376)	1991	07	03.96458	15	28	51.86	-18	17	20.3	3	809
(4376)	1991	07	03.98264	15	28	51.55	-18	17	19.0	3	809
(4376)	1991	07	04.00070	15	28	51.26	-18	17	17.9	3	809
(4376)	1991	07	04.96458	15	28	35.18	-18	16	14.9	3	809
(4376)	1991	07	04.98264	15	28	34.90	-18	16	14.1	3	809
(4376)	1991	07	05.00070	15	28	34.61	-18	16	12.9	3	809
(4494)	1991	07	23.37987	21	33	17.66	-13	12	05.5	3	809
(4494)	1991	07	23.39653	21	33	16.81	-13	12	08.2	3	809
(4494)	1991	07	23.41319	21	33	15.97	-13	12	11.2	3	809
(4494)	1991	07	24.41562	21	32	25.21	-13	15	11.0	3	809
(4494)	1991	07	24.43021	21	32	24.48	-13	15	14.0	3	809
(4529)	1991	07	06.16493	20	48	06.87	-14	58	46.2	3	809
(4529)	1991	07	06.17535	20	48	06.51	-14	58	48.9	3	809
(4529)	1991	07	06.18576	20	48	06.13	-14	58	51.7	3	809
(4529)	1991	07	08.35695	20	46	48.42	-15	09	12.0	3	809
(4529)	1991	07	08.36945	20	46	47.94	-15	09	15.5	3	809
(4536)	1991	07	06.09271	19	39	38.65	-24	49	42.3	3	809
(4536)	1991	07	06.10312	19	39	37.94	-24	49	42.5	3	809

(4536)	1991 07 06.11354	19 39 37.23	-24 49 43.2		3	809
(4536)	1991 07 07.28542	19 38 16.70	-24 50 25.9		3	809
(4536)	1991 07 07.29236	19 38 16.21	-24 50 26.2		3	809
(4546)	1991 07 10.28368	20 00 18.27	-10 21 24.9		3	809
(4546)	1991 07 10.29410	20 00 17.69	-10 21 26.2		3	809
(4546)	1991 07 10.30452	20 00 17.10	-10 21 27.4		3	809
(4546)	1991 07 11.25729	19 59 24.10	-10 23 33.2		3	809
(4546)	1991 07 11.26772	19 59 23.51	-10 23 34.2		3	809
(4546)	1991 07 11.27812	19 59 22.94	-10 23 35.7		3	809
(4546)	1991 07 12.30035	19 58 25.28	-10 26 00.1		3	809
(4546)	1991 07 12.31076	19 58 24.69	-10 26 01.6		3	809
(4546)	1991 07 12.32118	19 58 24.08	-10 26 03.0		3	809
(4942)	1991 07 06.16493	20 52 45.54	-14 58 34.4		3	809
(4942)	1991 07 06.17535	20 52 45.14	-14 58 33.5		3	809
(4942)	1991 07 06.18576	20 52 44.73	-14 58 32.6		3	809
(4942)	1991 07 08.35695	20 51 21.47	-14 55 41.6		3	809
(4942)	1991 07 08.36945	20 51 21.00	-14 55 40.8		3	809
(4942)	1991 07 10.35834	20 49 57.39	-14 53 34.7		3	809
(4942)	1991 07 10.37083	20 49 56.87	-14 53 33.7		3	809
(4942)	1991 07 10.38333	20 49 56.36	-14 53 32.7		3	809
(4949)	1991 07 18.27812	20 46 39.53	-20 07 17.7		3	809
(4949)	1991 07 18.28854	20 46 38.98	-20 07 21.8		3	809
(4949)	1991 07 18.29895	20 46 38.44	-20 07 26.0		3	809
(4949)	1991 07 18.31285	20 46 37.71	-20 07 31.8		3	809
(4949)	1991 07 18.32326	20 46 37.17	-20 07 36.0		3	809
(4949)	1991 07 18.33368	20 46 36.62	-20 07 40.2		3	809
(4949)	1991 07 19.38785	20 45 41.68	-20 14 46.7		3	809
(4949)	1991 07 19.39827	20 45 41.13	-20 14 50.4		3	809
(5009)	1991 07 10.39860	21 34 25.31	-16 54 21.0	17.5	3	809
(5009)	1991 07 10.41251	21 34 24.78	-16 54 25.0		3	809
(5009)	1991 07 10.42639	21 34 24.23	-16 54 29.3		3	809

877 Okutama
S. Hayakawa, 1-31-33, Nagano, Gyoda-Shi, Saitama-Ken, 361 Japan
Observer T. Hioki
Measurers S. Hayakawa, T. Hioki
0.30-m f/3.8 hyperboloid astrocamera
AGK3, SAOC, GSC

1980 CG	1991 12 29.65556	07 45 52.61	+11 22 49.1	16.5	877
1980 CG	1991 12 29.67292	07 45 51.16	+11 22 53.1		877
1980 CG	1991 12 30.57743	07 44 58.24	+11 27 32.2		877
1980 CG	1991 12 30.59554	07 44 57.14	+11 27 37.8		877
1985 CZ1	1992 01 02.67153	08 49 36.46	+19 20 15.5	16.0	877
1985 CZ1	1992 01 02.69097	08 49 35.55	+19 20 16.4		877
1985 CZ1	1992 01 03.72616	08 48 46.37	+19 20 16.2		877
1985 CZ1	1992 01 03.75208	08 48 44.98	+19 20 16.5		877
1991 TW1	1991 11 03.62361	01 38 43.28	+06 32 39.6		877
1991 TW1	1991 11 03.64826	01 38 42.15	+06 32 36.4		877
1991 TW1	1991 11 05.65313	01 37 04.87	+06 30 49.5		877
1991 TW1	1991 11 05.69410	01 37 02.85	+06 30 49.6		877
1991 UV2	1991 11 06.78082	03 48 41.94	+16 02 45.3	16.5	877
1991 UV2	1991 11 06.80312	03 48 40.25	+16 02 57.5		877
1991 UV2	1991 11 07.58090	03 47 50.60	+16 08 27.4		877
1991 UV2	1991 11 07.60382	03 47 49.14	+16 08 35.6		877
1991 VE3	1991 11 13.68021	04 37 09.60	+13 44 09.4	16.0	877
1991 VE3	1991 11 13.69757	04 37 08.77	+13 44 07.7		877
1991 VE3	1991 11 14.74641	04 36 26.64	+13 43 33.8		877
1991 VE3	1991 11 14.76354	04 36 26.16	+13 43 34.2		877
(3769)	1992 01 01.78946	08 18 46.02	+26 58 08.9	15.0	877

(3769)		1992 01 01.80612	08 18 45.14	+26 58 15.6			877
(3769)		1992 01 02.63889	08 18 01.63	+27 03 26.7			877
(3769)		1992 01 02.65590	08 18 00.66	+27 03 33.0			877
(3865)		1992 01 01.67076	08 15 07.29	+09 19 56.2		16.5	877
(3865)		1992 01 01.70265	08 15 06.18	+09 19 58.9			877
(3865)		1992 01 02.53715	08 14 24.49	+09 20 11.5			877
(3865)		1992 01 02.55532	08 14 23.63	+09 20 12.3			877
(4635)		1992 01 10.66701	09 32 50.92	+24 09 41.6			877
(4635)		1992 01 10.68472	09 32 50.42	+24 09 46.7			877

881 Toyota
T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
Observers K. Suzuki, T. Urata
Measurer T. Urata
0.31-m f/5.7 reflector

1991 TP1		1991 11 04.54444	00 32 27.16	+07 13 59.7		17	881
1991 TP1		1991 11 04.57986	00 32 26.61	+07 13 47.1			881
1991 TP1		1991 11 10.51667	00 31 32.67	+06 43 36.9		17	881
1991 TP1		1991 11 10.57292	00 31 32.36	+06 43 21.6			881
1991 VT1		1991 12 02.54549	04 06 54.95	+22 31 49.3		17	881
1991 VT1		1991 12 02.55729	04 06 54.23	+22 31 45.8			881
1991 VJ3	*	1991 11 11.56007	04 27 54.70	+22 34 46.6		16	881
1991 VJ3		1991 11 11.58368	04 27 53.43	+22 34 48.6			881
1991 VJ3		1991 11 14.60660	04 25 02.88	+22 40 09.9		16.5	881
1991 VJ3		1991 11 14.63160	04 25 01.25	+22 40 12.3			881
1991 VJ3		1991 12 02.54549	04 05 12.85	+22 59 01.9		16	881
1991 VJ3		1991 12 02.56910	04 05 11.14	+22 59 01.4			881
1991 VJ3		1991 12 13.57049	03 53 51.64	+23 02 43.0		16.5	881
1991 VJ3		1991 12 13.58160	03 53 51.01	+23 02 44.1			881
1991 VX3		1991 11 11.61910	04 17 12.36	+21 37 37.5		16.5	881
1991 VX3		1991 11 11.64271	04 17 10.89	+21 37 37.6			881

885 JCPM Yakiimo Station
T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
Observers A. Natori, T. Urata
Measurer T. Urata
0.20-m f/4.0 hyperboloid astrocamera
GSC

1991 UV2		1991 11 12.64271	03 42 09.25	+16 44 07.2		15.5	885
1991 UV2		1991 11 12.65035	03 42 08.72	+16 44 09.7			885
1991 VF		1991 11 03.66215	03 58 26.18	+14 35 33.2		15.5	885
1991 VF		1991 11 03.68438	03 58 23.88	+14 36 04.3			885
1991 VF		1991 11 05.69045	03 55 10.42	+15 20 44.1		15.5	885
1991 VF		1991 11 05.70399	03 55 09.00	+15 21 01.9			885
1991 VM	*	1991 11 03.69201	04 16 55.62	+13 32 02.1		16	885
1991 VM		1991 11 03.71979	04 16 54.48	+13 32 06.5			885
1991 VM		1991 11 05.71319	04 15 24.48	+13 32 32.9		16.5	885
1991 VM		1991 11 05.72847	04 15 23.73	+13 32 33.6			885
1991 VM		1991 11 12.65694	04 09 18.15	+13 35 45.9		16.5	885
1991 VM		1991 11 12.66875	04 09 17.43	+13 35 44.9			885
1991 VM		1991 12 03.54618	03 47 50.46	+14 08 23.1		16	885
1991 VM		1991 12 03.56007	03 47 49.48	+14 08 25.4			885
1991 VM		1991 12 14.57431	03 38 55.41	+14 43 47.6		16.5	885
1991 VS1		1991 11 10.62847	04 30 48.17	+25 29 17.0		16.5	885
1991 VS1		1991 11 10.63533	04 30 48.04	+25 29 16.1			885
1991 VT1		1991 11 10.62847	04 29 50.01	+24 13 07.1		16.5	885
1991 VT1		1991 11 10.64227	04 29 49.21	+24 13 05.0			885
1991 VN2	*	1991 11 10.59271	04 55 26.82	+05 17 47.1		15.5	885

1991 VN2		1991 11 10.60382	04 55 26.35	+05 17 43.3				885
1991 VN2		1991 11 12.69444	04 54 07.36	+05 11 12.6	15.8			885
1991 VN2		1991 11 12.70764	04 54 06.78	+05 11 10.3				885
1991 VN2		1991 12 03.57465	04 37 02.36	+04 47 24.2	15.5			885
1991 VN2		1991 12 03.58160	04 37 02.06	+04 47 25.3				885
1991 VB3		1991 11 10.62847	04 30 16.44	+23 44 40.8	16.5			885
1991 WB		1991 12 05.65069	06 09 58.18	+28 26 08.2	15.8			885
1991 WB		1991 12 05.66319	06 09 57.03	+28 26 28.2				885
1992 AA		1992 01 07.49792	04 37 57.73	+19 38 00.2	15			885
1992 AA		1992 01 07.50694	04 37 58.3	+19 38 22			p	885
1992 AB		1992 01 07.47674	04 20 04.85	+19 07 39.6	16			885
1992 AB		1992 01 07.48646	04 20 03.30	+19 08 04.2				885

886 Susono
T. Furuta, 17-2 Mitsuike, Kagiya, Tokai 477, Japan
Observers M. Akiyama, T. Furuta
Measurer T. Furuta
0.25-m f/4.2 Wright-Schmidt camera
AGK3

1976 WC1		1992 01 12.66424	08 40 45.64	+31 37 47.6	15.5			886
1976 WC1		1992 01 12.67517	08 40 45.12	+31 37 53.8				886
1979 SP13		1991 12 28.56701	07 03 20.92	+23 14 22.3	15.5			886
1979 SP13		1991 12 29.53628	07 02 18.32	+23 18 31.6				886
1979 SP13		1991 12 29.54722	07 02 17.66	+23 18 34.4				886
1988 CH		1992 01 12.65069	08 22 24.88	+12 13 27.2	16.0		E	886
1992 AA		1992 01 10.52569	04 42 33.02	+21 32 24.5				886
1992 AC		1992 01 03.61840	08 51 46.0	+05 18 05	13.5		E	886
1992 AC		1992 01 03.62917	08 51 47.1	+05 18 25			E	886
1992 AC		1992 01 10.59792	09 04 18.44	+09 30 17.8				886

887 Ojima
T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
Observers T. Niijima, T. Urata
Measurer T. Urata
0.30-m f/5.8 reflector, 0.16-m f/3.3 hyperboloid astrocamera
GCS, ACRS

1991 VS1	*	1991 11 05.59375	04 33 43.27	+25 19 27.6	16.5			887
1991 VS1		1991 11 05.61308	04 33 42.4	+25 19 29			G	887
1991 VS1		1991 11 12.62986	04 29 25.79	+25 32 29.3	16			887
1991 VS1		1991 11 12.64907	04 29 24.96	+25 32 28.8				887
1991 VT1	*	1991 11 05.59375	04 33 47.77	+24 28 55.1	16			887
1991 VT1		1991 11 05.61308	04 33 46.8	+24 28 52			G	887
1991 VT1		1991 11 12.61875	04 28 03.06	+24 05 54.6	16.5			887
1991 VT1		1991 11 12.63958	04 28 02.15	+24 05 46.6				887
1991 VB3	*	1991 11 12.61875	04 28 28.37	+23 34 20.3	16.5			887
1991 VB3		1991 11 12.63958	04 28 27.23	+23 34 15.0				887

889 Karasuyama
T. Urata, 6-1, Muramatsubara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan
Observers S. Inoda, T. Urata
Measurer T. Urata
0.31-m f/5.6 reflector
AGK3

1984 DN		1992 01 11.56563	07 07 22.82	+12 48 25.9	16			889
1984 DN		1992 01 11.58507	07 07 21.75	+12 48 32.4				889

894 Kiyosato and Otomo
S. Otomo, Kiyosato 3545-3902, Takane-cho, Kitakoma-gun, Yamanashi-ken, 407-03, Japan

Observer S. Otomo
0.25-m reflector
PPM

1975 YD		1991 11 11.59618	02 20 42.89	+11 48 13.8		894
1975 YD		1991 11 11.62118	02 20 41.88	+11 47 53.8		894
1979 QX9		1991 12 26.56267	05 24 09.42	+21 19 30.7	17.0	894
1979 QX9		1991 12 26.57396	05 24 08.52	+21 19 29.2		894
1979 SP13		1991 12 15.72604	07 15 43.15	+22 19 12.5	16.6	894
1979 SP13		1991 12 15.75243	07 15 41.75	+22 19 18.3		894
1979 SP13		1991 12 16.78576	07 14 50.06	+22 23 36.3	16.8	894
1979 SP13		1991 12 16.79965	07 14 49.32	+22 23 40.3		894
1979 SP14		1991 11 05.61892	02 48 39.80	+12 16 32.8	16.8	894
1979 SP14		1991 11 05.64619	02 48 38.54	+12 16 27.2		894
1979 SP14		1991 11 10.56997	02 44 42.08	+12 00 54.0	17.0	894
1979 SP14		1991 11 10.59340	02 44 40.92	+12 00 47.9		894
1979 SP14		1991 11 12.59028	02 43 06.52	+11 54 47.3	16.8	894
1979 SP14		1991 11 12.60278	02 43 05.92	+11 54 46.6		894
1983 HB1		1991 11 13.73559	04 23 01.01	+06 59 31.1	17.0	894
1983 HB1		1991 11 13.75938	04 22 59.87	+06 59 31.3		894
1983 TD2		1991 11 04.72309	03 30 02.01	+08 26 08.9		894
1983 TD2		1991 11 04.74809	03 30 00.76	+08 25 57.7		894
1984 YE4		1991 11 05.63004	03 09 01.76	+11 12 38.9		894
1984 YE4		1991 11 05.65729	03 08 59.85	+11 12 38.7		894
1985 CG		1991 11 05.67188	03 23 05.62	+13 24 29.9		894
1985 CG		1991 11 05.70903	03 23 03.42	+13 24 24.5		894
1985 CG		1991 11 13.62674	03 15 12.83	+13 04 19.0		894
1985 CG		1991 11 13.65035	03 15 11.35	+13 04 15.8		894
1987 OM		1992 01 10.66007	07 15 34.45	+22 06 48.4	17.0	894
1987 OM		1992 01 10.67188	07 15 33.55	+22 06 50.8		894
1987 XC		1991 11 04.58206	02 48 14.75	+08 17 35.9	16.5	894
1987 XC		1991 11 04.60938	02 48 12.57	+08 17 44.4		894
1987 XC		1991 11 05.58142	02 46 58.82	+08 23 34.9	16.7	894
1987 XC		1991 11 05.60660	02 46 56.88	+08 23 42.4		894
1987 XC		1991 11 10.58142	02 40 45.53	+08 54 25.7	16.7	894
1987 XC		1991 11 10.60469	02 40 43.74	+08 54 34.8		894
1988 BG4		1991 12 15.68148	06 33 57.92	+32 40 55.0	17.0	894
1988 BG4		1991 12 16.75781	06 32 43.71	+32 36 10.0		894
1988 BG4		1991 12 16.77118	06 32 42.79	+32 36 06.0		894
1990 TL4		1992 01 04.73160	07 56 30.09	+17 35 44.0		894
1990 TL4		1992 01 04.75799	07 56 28.67	+17 35 42.6		894
1990 TL4		1992 01 09.64271	07 51 56.74	+17 37 42.8	16.7	894
1990 TL4		1992 01 09.65729	07 51 56.04	+17 37 41.8		894
1991 SF1		1991 10 28.56910	23 58 45.14	+02 59 20.5		894
1991 SF1		1991 10 28.60955	23 58 44.59	+02 59 00.8		894
1991 TV1		1991 11 04.53854	02 07 02.83	+07 39 09.4	16.2	894
1991 TV1		1991 11 04.55703	02 07 01.74	+07 39 16.2		894
1991 TV1		1991 11 05.56823	02 06 07.17	+07 45 00.6		894
1991 TV1		1991 11 05.59352	02 06 05.71	+07 45 09.0		894
1991 TV1		1991 11 11.55642	02 01 08.56	+08 21 10.0	16.0	894
1991 TV1		1991 11 11.56806	02 01 08.02	+08 21 15.7		894
1991 TH2		1991 10 15.75868	02 25 14.00	+09 56 44.3	16.8	894
1991 TH2		1991 10 15.79306	02 25 12.40	+09 56 32.3		894
1991 TH2		1991 11 04.53854	02 09 22.92	+08 04 56.2	16.7	894
1991 TH2		1991 11 04.55703	02 09 22.09	+08 04 50.0		894
1991 TH2		1991 11 05.56823	02 08 34.41	+08 00 03.7		894
1991 TH2		1991 11 05.59352	02 08 33.13	+07 59 56.0		894
1991 TH2		1991 11 11.55642	02 04 14.92	+07 35 21.2	16.8	894
1991 TH2		1991 11 11.56806	02 04 14.43	+07 35 18.5		894
1991 TV4	*	1991 10 15.78093	02 40 26.59	+09 12 24.7	17.0	894

1991 TV4	1991 10 15.80556	02 40 25.15	+09 12 17.4			894
1991 TV4	1991 11 04.56763	02 20 32.41	+07 32 54.0	16.7		894
1991 TV4	1991 11 04.59635	02 20 30.51	+07 32 47.4			894
1991 TV4	1991 11 05.56823	02 19 32.09	+07 28 51.9			894
1991 TV4	1991 11 05.59352	02 19 30.49	+07 28 44.4			894
1991 TV4	1991 11 11.55642	02 13 51.58	+07 07 56.1	16.8		894
1991 TV4	1991 11 11.56806	02 13 50.95	+07 07 53.7			894
1991 UY	1991 11 04.62546	02 41 46.49	+07 34 33.2	16.5		894
1991 UY	1991 11 04.64699	02 41 45.02	+07 34 32.3			894
1991 UY	1991 11 05.58142	02 40 44.80	+07 34 34.0			894
1991 UY	1991 11 05.60660	02 40 43.09	+07 34 33.5			894
1991 UZ	1991 11 04.62546	02 32 42.60	+06 04 41.9	16.3		894
1991 UZ	1991 11 04.64699	02 32 41.46	+06 04 34.2			894
1991 UZ	1991 11 30.69346	02 16 59.08	+04 37 25.4	16.5		894
1991 UL2	1991 11 04.68576	02 59 06.79	+08 50 24.8	16.7		894
1991 UL2	1991 11 04.71008	02 59 05.45	+08 50 18.2			894
1991 UL2	1991 11 12.61510	02 51 50.09	+08 25 47.7	16.7		894
1991 UL2	1991 11 12.62639	02 51 49.48	+08 25 44.6			894
1991 UO2	1991 11 04.72309	03 16 37.99	+08 31 05.8	16.5		894
1991 UO2	1991 11 04.74809	03 16 36.43	+08 31 00.4			894
1991 UO2	1991 11 10.61707	03 11 07.70	+08 17 56.4			894
1991 UO2	1991 11 10.64037	03 11 06.30	+08 17 53.7			894
1991 UP2	1991 11 13.62674	03 07 30.77	+12 56 39.0	17.0		894
1991 UP2	1991 11 13.65035	03 07 29.12	+12 56 37.9			894
1991 UV2	1991 11 11.63490	03 43 18.80	+16 37 00.3	16.3		894
1991 UV2	1991 11 11.66944	03 43 16.24	+16 37 15.2			894
1991 UV2	1991 11 12.64037	03 42 09.46	+16 44 04.8			894
1991 UV2	1991 11 12.66528	03 42 07.63	+16 44 15.3			894
1991 UB3	1991 11 10.56997	02 30 30.80	+11 38 30.3	16.6		894
1991 UB3	1991 11 10.59340	02 30 29.29	+11 38 29.4			894
1991 UB3	1991 11 11.59618	02 29 31.29	+11 38 58.4			894
1991 UB3	1991 11 11.62118	02 29 29.74	+11 39 00.0			894
1991 UB3	1991 11 12.59028	02 28 34.72	+11 39 35.2			894
1991 UB3	1991 11 12.60278	02 28 34.07	+11 39 35.0			894
1991 UD3	1991 11 10.56997	02 36 46.30	+11 36 31.3	16.7		894
1991 UD3	1991 11 10.59340	02 36 45.16	+11 36 19.9			894
1991 UD3	1991 11 11.59618	02 35 58.05	+11 27 09.6			894
1991 UD3	1991 11 11.62118	02 35 56.80	+11 26 56.7			894
1991 UD3	1991 11 12.59028	02 35 11.94	+11 18 11.2			894
1991 UD3	1991 11 12.60278	02 35 11.39	+11 18 06.1			894
1991 UL3	1991 11 05.68391	03 37 57.52	+14 00 53.2	16.7		894
1991 UL3	1991 11 05.72118	03 37 55.52	+14 00 29.7			894
1991 UL3	1991 11 11.58160	03 32 49.26	+13 02 44.3	16.5		894
1991 UL3	1991 11 11.60868	03 32 47.76	+13 02 29.6			894
1991 UN3	1991 11 11.63490	03 44 11.50	+15 11 35.3	16.6		894
1991 UN3	1991 11 11.66944	03 44 09.19	+15 11 32.1			894
1991 UN3	1991 11 12.64037	03 43 07.11	+15 10 25.4			894
1991 UN3	1991 11 12.66528	03 43 05.47	+15 10 25.7			894
1991 US3	1991 11 04.72309	03 20 57.03	+09 34 01.7	16.8		894
1991 US3	1991 11 04.74809	03 20 55.38	+09 34 06.5			894
1991 US3	1991 11 12.69123	03 11 50.00	+09 57 50.0	16.7		894
1991 US3	1991 11 12.70278	03 11 49.05	+09 57 52.0			894
1991 UT3	1991 11 05.68391	03 34 56.03	+11 55 12.8	16.8		894
1991 UT3	1991 11 05.72118	03 34 53.91	+11 55 09.2			894
1991 UT3	1991 11 11.58160	03 28 48.02	+11 43 31.3	16.7		894
1991 UT3	1991 11 11.60868	03 28 46.25	+11 43 29.4			894
1991 VF	1991 11 11.63490	03 44 53.32	+17 33 44.5	16.0		894
1991 VF	1991 11 11.66944	03 44 49.39	+17 34 29.1			894
1991 VF	1991 11 12.64037	03 43 04.01	+17 56 06.5			894

1991 VF		1991 11 12.66528	03 43 01.03	+17 56 42.2			894
1991 VN		1991 11 05.67188	03 25 22.51	+14 13 54.9	17.2		894
1991 VN		1991 11 05.70903	03 25 20.36	+14 13 44.7			894
1991 VN		1991 11 13.62674	03 18 15.48	+13 44 32.0	16.8		894
1991 VN		1991 11 13.65035	03 18 14.20	+13 44 26.3			894
1991 VJ1		1991 10 15.75868	02 27 41.92	+08 55 09.4	17.0		894
1991 VJ1		1991 10 15.79306	02 27 40.55	+08 55 01.7			894
1991 VJ1	*	1991 11 04.56763	02 13 57.58	+08 00 24.1	16.8		894
1991 VJ1		1991 11 04.59635	02 13 56.30	+08 00 20.5			894
1991 VJ1		1991 11 05.56823	02 13 16.09	+07 58 38.9	16.6		894
1991 VJ1		1991 11 05.59352	02 13 15.00	+07 58 35.0			894
1991 VJ1		1991 11 11.55642	02 09 27.26	+07 51 31.2	16.7		894
1991 VJ1		1991 11 11.56806	02 09 26.84	+07 51 30.9			894
1991 VK1	*	1991 11 04.56763	02 16 27.84	+08 36 26.6	17.0		894
1991 VK1		1991 11 04.59635	02 16 26.22	+08 36 14.1			894
1991 VK1		1991 11 05.56823	02 15 34.74	+08 30 18.3	16.8		894
1991 VK1		1991 11 05.59352	02 15 33.26	+08 30 08.6			894
1991 VK1		1991 11 11.55642	02 10 34.28	+07 56 56.8	16.9		894
1991 VK1		1991 11 11.56806	02 10 33.68	+07 56 53.1			894
1991 VQ1		1991 11 04.62546	02 39 54.24	+06 59 57.2	16.5		894
1991 VQ1		1991 11 04.64699	02 39 52.69	+07 00 00.2			894
1991 VQ1		1991 11 05.58142	02 38 53.08	+07 01 43.8			894
1991 VQ1		1991 11 05.60660	02 38 51.27	+07 01 47.0			894
1991 VZ1		1991 11 12.65278	03 55 59.74	+16 52 01.1	16.8		894
1991 VZ1		1991 11 12.67787	03 55 58.25	+16 52 02.7			894
1991 VZ1		1991 11 15.73715	03 52 58.19	+16 54 15.2	16.7		894
1991 VZ1		1991 11 15.75139	03 52 57.26	+16 54 15.8			894
1991 VD2		1991 11 12.65278	03 59 23.21	+16 54 06.0	17.1		894
1991 VD2		1991 11 12.67787	03 59 21.94	+16 54 00.8			894
1991 VD2		1991 11 15.73715	03 56 47.64	+16 48 31.6	17.0		894
1991 VD2		1991 11 15.75139	03 56 46.86	+16 48 30.4			894
1991 VE2		1991 11 12.65278	03 59 53.98	+16 53 19.8	17.0		894
1991 VE2		1991 11 12.67787	03 59 52.56	+16 53 04.9			894
1991 VE2		1991 11 15.73715	03 57 07.98	+16 20 03.0	17.0		894
1991 VE2		1991 11 15.75139	03 57 07.11	+16 19 54.1			894
1991 VF2		1991 11 12.65278	04 00 50.04	+16 53 25.0	17.1		894
1991 VF2		1991 11 12.67787	04 00 48.55	+16 53 12.5			894
1991 VF2		1991 11 15.73715	03 57 52.59	+16 30 46.0	17.0		894
1991 VF2		1991 11 15.75139	03 57 51.93	+16 30 42.2			894
1991 VJ2		1991 11 12.65278	04 03 37.74	+15 46 36.1	17.0		894
1991 VJ2		1991 11 12.67787	04 03 35.92	+15 46 28.1			894
1991 VJ2		1991 11 15.73715	04 00 21.70	+15 27 01.8	17.0		894
1991 VJ2		1991 11 15.75139	04 00 20.72	+15 26 54.3			894
1991 VU2	*	1991 11 04.63646	03 22 05.69	+05 27 29.7	17.0		894
1991 VU2		1991 11 04.65741	03 22 04.16	+05 27 31.3			894
1991 VU2		1991 11 13.63854	03 12 47.17	+05 51 53.7	17.0		894
1991 VU2		1991 11 13.66250	03 12 45.58	+05 51 57.8			894
1991 VU2		1991 11 17.72500	03 08 34.86	+06 06 48.0	16.8		894
1991 VU2		1991 11 17.73889	03 08 34.08	+06 06 51.4			894
1991 VV2	*	1991 11 04.77569	03 58 08.63	+36 00 37.1	16.5		894
1991 VV2		1991 11 04.79722	03 58 07.22	+36 00 47.0			894
1991 VV2		1991 11 12.71667	03 49 16.84	+36 52 02.6			894
1991 VV2		1991 11 12.73056	03 49 15.73	+36 52 07.1			894
1991 VV2		1991 11 30.75451	03 26 22.53	+37 46 06.9	16.3		894
1991 VV2		1991 11 30.78785	03 26 20.03	+37 46 07.2			894
1991 VV2		1991 12 12.57401	03 13 44.07	+37 37 22.5	16.5		894
1991 VV2		1991 12 12.58785	03 13 43.42	+37 37 21.2			894
1991 VW2		1991 11 12.65278	04 02 12.66	+17 20 21.4	16.9		894
1991 VW2		1991 11 12.67787	04 02 11.20	+17 20 21.3			894

1991 VW2		1991 11 15.73715	03 59 18.09	+17 18 27.0	17.0	894
1991 VW2		1991 11 15.75139	03 59 17.22	+17 18 24.8		894
1991 VC3	*	1991 11 13.68177	04 33 13.03	+13 39 04.4	16.5	894
1991 VC3		1991 11 13.70903	04 33 10.87	+13 39 31.0		894
1991 VC3		1991 11 14.65243	04 31 58.55	+13 54 54.7		894
1991 VC3		1991 12 07.59705	03 57 24.71	+20 36 30.5	16.2	894
1991 VC3		1991 12 07.60764	03 57 23.76	+20 36 41.3		894
1991 VC3		1991 12 14.63351	03 47 23.25	+22 36 15.9	16.3	894
1991 VC3		1991 12 14.64517	03 47 22.23	+22 36 28.4		894
1991 VD3	*	1991 11 13.68177	04 34 32.85	+12 56 22.8	17.0	894
1991 VD3		1991 11 13.70903	04 34 32.11	+12 56 21.2		894
1991 VD3		1991 11 14.65243	04 34 04.37	+12 55 08.7		894
1991 VE3	*	1991 11 13.68177	04 37 09.31	+13 44 07.7	16.6	894
1991 VE3		1991 11 13.70903	04 37 08.17	+13 44 06.4		894
1991 VE3		1991 11 14.65243	04 36 30.89	+13 43 37.1		894
1991 VE3		1991 12 12.62240	04 13 44.69	+14 12 47.5	16.8	894
1991 VE3		1991 12 12.64965	04 13 43.55	+14 12 49.9		894
1991 VE3		1991 12 13.63160	04 13 02.35	+14 15 42.2		894
1991 VE3		1991 12 13.65799	04 13 01.28	+14 15 48.7		894
1991 VR3		1991 11 10.77500	04 06 54.56	+10 56 46.3	16.7	894
1991 VR3		1991 11 10.81076	04 06 52.69	+10 56 43.5		894
1991 VR3		1991 11 15.76493	04 02 30.25	+10 55 13.5	16.7	894
1991 VR3		1991 11 15.77882	04 02 29.52	+10 55 14.1		894
1991 VA4	*	1991 11 12.65278	03 59 00.17	+15 29 42.6	17.5	894
1991 VA4		1991 11 12.67787	03 58 58.60	+15 29 39.3		894
1991 VA4		1991 11 15.73715	03 56 06.15	+15 24 35.6	17.5	894
1991 VA4		1991 11 15.75139	03 56 05.35	+15 24 35.6		894
1171 T-1		1991 11 13.68177	04 29 54.96	+13 30 35.8	17.5	894
1171 T-1		1991 11 13.70903	04 29 53.32	+13 30 26.3		894
1171 T-1		1991 11 14.65243	04 28 59.28	+13 24 42.7	17.0	894
(120)		1991 12 15.68148	06 33 39.28	+32 29 14.9		894
(120)		1991 12 16.75781	06 32 40.16	+32 30 09.3		894
(120)		1991 12 16.77118	06 32 39.39	+32 30 11.2		894
(294)		1991 11 10.61707	02 57 40.55	+06 51 15.0		894
(294)		1991 11 10.64037	02 57 39.34	+06 51 10.6		894
(294)		1991 11 12.61510	02 56 01.69	+06 45 14.2		894
(294)		1991 11 12.62639	02 56 01.08	+06 45 12.1		894
(562)		1991 11 04.68576	02 57 04.79	+08 35 01.7		894
(562)		1991 11 04.71008	02 57 03.43	+08 35 00.6		894
(562)		1991 11 12.61510	02 49 56.27	+08 30 59.5		894
(562)		1991 11 12.62639	02 49 55.70	+08 30 59.8		894
(740)		1991 11 11.68475	03 54 11.56	+06 10 02.8		894
(740)		1991 11 11.70909	03 54 10.36	+06 10 00.6		894
(871)		1991 11 04.56763	02 20 38.64	+07 34 50.0		894
(871)		1991 11 04.59635	02 20 36.89	+07 34 39.6		894
(871)		1991 11 05.56823	02 19 38.30	+07 29 13.9		894
(871)		1991 11 05.59352	02 19 36.67	+07 29 04.8		894
(871)		1991 11 11.55642	02 13 49.16	+06 57 57.5		894
(871)		1991 11 11.56806	02 13 48.50	+06 57 54.1		894
(872)		1991 11 05.63004	03 06 08.78	+11 33 28.7		894
(872)		1991 11 05.65729	03 06 07.37	+11 33 19.5		894
(956)		1991 11 05.63004	03 08 49.44	+11 32 38.7		894
(956)		1991 11 05.65729	03 08 47.67	+11 32 26.6		894
(999)		1991 11 13.62674	03 15 01.21	+13 24 17.7		894
(999)		1991 11 13.65035	03 14 59.86	+13 24 05.4		894
(1248)		1991 11 12.65278	04 05 03.08	+15 18 10.7		894
(1248)		1991 11 12.67787	04 05 01.63	+15 18 10.3		894
(1356)		1991 11 13.62674	03 10 00.56	+13 19 41.1		894
(1356)		1991 11 13.65035	03 09 59.29	+13 19 39.6		894

(1464)		1991 11 10.76157	03 50 20.95	+10 31 54.2				894
(1464)		1991 11 10.79919	03 50 18.96	+10 31 52.6				894
(1684)		1992 01 10.66007	07 12 39.88	+22 32 34.6				894
(1684)		1992 01 10.67188	07 12 39.27	+22 32 36.1				894
(1684)		1992 01 12.62569	07 10 56.86	+22 37 04.9				894
(1892)		1991 12 15.79173	07 42 28.88	+35 24 04.4				894
(1892)		1991 12 15.81667	07 42 27.47	+35 24 03.1				894
(2114)		1992 01 10.74201	07 55 18.72	+21 33 24.2				894
(2114)		1992 01 10.75590	07 55 17.91	+21 33 25.4				894
(2121)		1991 11 14.65243	04 34 03.37	+14 23 43.6				894
(2176)		1991 12 15.65417	05 29 40.65	+22 41 29.8			16.8	894
(2176)		1991 12 15.66667	05 29 39.93	+22 41 30.0				894
(2346)		1991 12 07.59705	03 54 19.37	+19 58 02.4				894
(2346)		1991 12 07.60764	03 54 18.79	+19 57 58.5				894
(2517)		1991 12 07.59705	03 58 40.59	+20 04 04.1				894
(2517)		1991 12 07.60764	03 58 40.13	+20 04 02.4				894
(2564)		1992 01 04.73160	07 54 17.94	+18 12 23.2				894
(2564)		1992 01 04.75799	07 54 16.24	+18 12 28.6				894
(2564)		1992 01 09.64271	07 49 12.23	+18 30 14.7				894
(2564)		1992 01 09.65729	07 49 11.16	+18 30 18.3				894
(2868)		1991 11 11.68475	03 52 05.05	+06 58 05.7			16.6	894
(2868)		1991 11 11.70909	03 52 03.79	+06 58 00.9				894
(2896)		1991 11 17.75260	05 03 27.56	+13 20 58.8				894
(2896)		1991 11 17.77274	05 03 26.31	+13 20 54.0				894
(3201)		1991 11 12.65278	03 57 30.61	+16 10 33.1				894
(3201)		1991 11 12.67787	03 57 28.99	+16 10 28.9				894
(3201)		1991 11 15.73715	03 54 13.22	+16 02 13.1				894
(3201)		1991 11 15.75139	03 54 12.24	+16 02 10.7				894
(3219)		1992 01 10.66007	07 12 40.07	+22 51 40.6				894
(3219)		1992 01 10.67188	07 12 39.39	+22 51 41.2				894
(3219)		1992 01 12.62569	07 10 49.20	+22 51 16.2				894
(3441)		1991 11 13.62674	03 16 38.76	+14 02 05.9				894
(3441)		1991 11 13.65035	03 16 37.53	+14 02 02.9				894
(3608)		1991 11 11.58160	03 28 28.90	+11 21 56.1				894
(3608)		1991 11 11.60868	03 28 27.50	+11 21 55.7				894
(3829)		1991 11 15.76493	04 00 46.26	+11 38 32.2			16.7	894
(3829)		1991 11 15.77882	04 00 45.61	+11 38 27.5				894
(4085)		1991 11 05.68391	03 36 16.17	+12 14 23.7				894
(4085)		1991 11 05.72118	03 36 14.01	+12 14 24.8				894
(4150)		1991 11 05.63004	03 06 00.35	+11 25 19.0				894
(4150)		1991 11 05.65729	03 05 58.47	+11 25 12.0				894
(4609)		1991 11 11.68475	03 52 24.02	+06 04 00.1			17.0	894
(4609)		1991 11 11.70909	03 52 22.94	+06 03 52.3				894
(4609)		1991 11 15.68715	03 49 18.58	+05 42 41.2				894
(4609)		1991 11 15.71148	03 49 17.42	+05 42 34.0				894

896 Yatsugatake South Base Observatory
O. Muramatsu, 119-1, 2-8 Sakurazutsumi, Musashino, Tokyo 180, Japan
Observers Y. Kushida, O. Muramatsu
Measurer O. Muramatsu
0.20-m f/4.0 reflector
PPM

1991 UV2		1991 11 10.64514	03 44 26.30	+16 30 02.0			17.0	896
1991 UV2		1991 11 11.73125	03 43 11.97	+16 37 40.3				896
1991 UN3		1991 11 10.64514	03 45 14.05	+15 12 42.7			17.0	896
1991 UN3		1991 11 11.73125	03 44 05.15	+15 11 27.2				896
1991 UW3		1991 11 04.77465	03 23 23.07	+29 57 17.3			16.5	896
1991 UW3		1991 11 10.70780	03 17 05.51	+29 34 44.9				896
1991 VR1	*	1991 11 04.64167	03 10 18.93	+29 38 33.2			16.5	896

1991 VR1		1991 11 04.66944	03 10 17.37	+29 38 30.1					896
1991 VR1		1991 11 05.73090	03 09 16.69	+29 36 08.2					896
1991 VR1		1991 11 05.75799	03 09 15.09	+29 36 03.5					896
1991 VR1		1991 11 10.72257	03 04 24.68	+29 21 15.0					896
1991 VR1		1991 11 17.73646	02 57 35.34	+28 50 47.5					896
1991 VR1		1991 12 12.63333	02 42 07.40	+26 21 18.3					896
1991 VV1	*	1991 11 04.57153	03 13 23.16	+19 10 48.5	16.5				896
1991 VV1		1991 11 04.60625	03 13 21.26	+19 10 19.9					896
1991 VV1		1991 11 10.51076	03 07 59.77	+17 50 36.0	16.5				896
1991 VV1		1991 11 10.54271	03 07 58.05	+17 50 09.7					896
1991 VV1		1991 11 17.74792	03 01 38.53	+16 14 18.7					896
1991 VW1	*	1991 11 04.64167	03 16 52.36	+28 12 17.3	17.0				896
1991 VW1		1991 11 10.70799	03 10 19.6	+27 59 44				W	896
1991 VW1		1991 11 10.73785	03 10 17.70	+27 59 41.1					896
1991 VW1		1991 11 12.74722	03 08 05.16	+27 54 14.1					896
1991 VK3	*	1991 11 13.66580	03 49 22.15	+28 45 35.2	16.5				896
1991 VK3		1991 11 14.70556	03 48 06.82	+28 44 55.3					896
1991 VK3		1991 11 17.77326	03 44 21.15	+28 41 53.0					896
1991 VK3		1991 12 12.68507	03 16 20.19	+27 28 04.9					896
1992 AA		1992 01 07.65382	04 38 09.29	+19 43 53.6					896
1992 AA		1992 01 07.67743	04 38 11.17	+19 44 45.4					896
1992 AC		1992 01 07.71962	08 59 01.41	+07 36 24.6	11				896
1992 AC		1992 01 07.74062	08 59 03.49	+07 37 11.7					896
1992 AC		1992 01 09.67049	09 02 34.98	+08 52 02.0					896
1992 AC		1992 01 10.77326	09 04 36.48	+09 37 36.8					896
(4025)		1991 11 10.45729	00 53 18.00	-00 03 23.4					896
(4025)		1991 11 10.49201	00 53 17.35	-00 03 24.6					896

897 YGCO Chiyoda Station
T. Kojima, 45 Shimonakamori, Chiyoda-cyo, Ora-Gun,
Gunma-ken, 370-07 Japan
Observer T. Kojima
0.25-m f/3.4 Wright-Schmidt camera

1992 AC		1989 03 29.55278	15 22 39.73	+30 08 48.6	15.5				897
1992 AC		1989 03 29.59097	15 22 38.91	+30 09 06.9					897
1992 AC		1992 01 12.73611	09 08 18.2	+11 03 58	13				897
1992 AC		1992 01 12.77431	09 08 22.2	+11 05 45					897

898 Fujieda
M. Kizawa, 1458-10, Minami Numagami, Shizuoka-Ken 420, Japan
Observers H. Shiozawa, M. Kizawa
Measurer M. Kizawa
0.20-m f/4.0 hyperboloid astro-camera, 0.20-m f/4.9 reflector

1986 TB12		1991 12 30.57943	06 30 19.26	+28 57 16.1	16				898
1986 TB12		1991 12 30.60099	06 30 17.40	+28 57 18.7	16				898
1986 TB12		1992 01 04.57534	06 25 05.74	+28 52 17.5	16				898
1988 AF		1991 12 30.57943	06 36 19.97	+30 04 38.0	15				898
1988 AF		1991 12 30.60099	06 36 18.30	+30 04 28.3	15				898
1988 AF		1992 01 02.63891	06 32 42.60	+29 45 43.7	16				898
1988 AF		1992 01 02.66054	06 32 41.01	+29 45 36.6	16				898
1988 AF		1992 01 04.55236	06 30 29.12	+29 33 20.1	16				898
1988 AF		1992 01 04.57534	06 30 27.50	+29 33 11.7	16				898
1990 RB		1992 01 04.59584	06 50 20.33	+25 30 52.7	16.5			F	898
1990 RB		1992 01 04.61644	06 50 19.14	+25 30 50.0	16.5			F	898
1990 RB		1992 01 12.66045	06 42 39.66	+25 19 04.3	16				898
1990 RB		1992 01 12.68530	06 42 38.32	+25 19 01.4	16				898

901 Tajimi
T. Furuta, 17-2 Mitsuike, Kagiya, Tokai 477, Japan

Observers T. Mizuno, T. Furuta
Measurer T. Furuta
0.15-m f/5 reflector
AGK3

1982 BW		1991 11 14.63785	04 34 49.48	+20 36 26.9	16.0		901
1982 BW		1991 11 14.65243	04 34 48.71	+20 36 28.1			901
1987 SV		1991 11 14.57049	03 27 38.27	+26 01 18.4	16.0		901
1987 SV		1991 11 14.58299	03 27 37.50	+26 01 14.5			901
1991 VH1	*	1991 11 04.58819	03 30 18.9	+22 05 35	16.0		901
1991 VH1		1991 11 04.60417	03 30 17.8	+22 05 32			901

902 Ootake
K. Watanabe, 4-3-8 B-203, Atsubetsu Chuo 3-Jo, Atsubetsu-Ku, Sapporo 004, Japan
Observer K. Takehata
Measurer K. Watanabe
0.16-m f/3.8 Wright-Schmidt camera
GSC

1989 AX1		1991 12 01.55868	03 48 46.07	+32 18 48.2	16.0		902
1989 AX1		1991 12 01.57292	03 48 44.83	+32 18 44.3			902

* * * * *

ORBITAL ELEMENTS.

Orbital elements have been computed by the following contributors:

C. M. Bardwell, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, U.S.A. (B)
E. Bowell, Lowell Observatory, 1400 West Mars Hill Road, Flagstaff, AZ 86001, U.S.A. (E)
L. L. Filenko, Institute for Theoretical Astronomy, Naberezhnaya Kutuzova 10, St. Petersburg 191187, Russia
D. W. E. Green, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, U.S.A.
H. Kaneda, 2-15-2H, Kawazoe 8 Jo 2 Chome, Minami-ku, Sapporo 005, Japan
T. Kobayashi, 1717-2 Shimo-Koizumi, Oizumi-machi, Ora-gun, Gunma-ken, 370-05 Japan
B. G. Marsden, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, U.S.A. (M)
R. Nagata, 1-8-6 Nishi-Koizumi, Oizumi-machi, Ora-gun, Gunma-ken, 370-05 Japan
S. Nakano, 3-19, 1 chome, Takenokuchi, Sumoto, Hyogo-ken 656, Japan (N)
N. K. Sumzina, Institute for Theoretical Astronomy, Naberezhnaya Kutuzova 10, St. Petersburg 191187, Russia
T. Urata, 6-1, Muramatsuhara 1 Chome, Shimizu, Shizuoka-Ken 424, Japan (U)
G. V. Williams, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, U.S.A. (W)
D. K. Yeomans, Jet Propulsion Laboratory, MS 301-150G, Pasadena, CA 91109, U.S.A.

The name of the orbit computer is shown on the line giving T for a comet and Epoch for a displayed minor-planet orbit; for many of the minor planets (O-C) residuals are shown in full (in R.A. and Decl.); observations are identified by date and observatory code, X referring to an approximate and Y to a semiaccurate position. For displayed minor planets "Id." shows those involved in establishing the identifications (generally with the principal contributors first), "k" indicating key identifications and "d" (only) double (or multiple) designations; no identifier is shown if only the orbit

computer is involved and the results were not previously published. J-P indicates that only the perturbations by the outer planets were considered, and a and n are then related by a gravitational constant augmented by the masses of the inner planets. For the one-opposition orbits, equinox 2000.0 is used, and the columns headed Arc and O show the time span in days covered by the observations and the number of observations utilized in the computation (0 = 10 or more). In the note column N, D means that there are double (or multiple) designations, E means that the value of the eccentricity was assumed, F means both; the double designations are listed at the end; the codes for the orbit computers (column C) are as listed above.

Periodic Comet Shoemaker-Levy 6 (1991b1)

T 1991 Oct. 13.85995 TT				Marsden
q 1.1323618		(2000.0)	P	Q
n 0.13057070	Peri.	333.12875	+0.96948539	-0.16829930
a 3.8480340	Node	37.93249	+0.24221165	+0.76981715
e 0.7057298	Incl.	16.85587	-0.03783642	+0.61567598
P 7.55				

From 35 observations 1991 Nov. 3-Dec. 13.

Periodic Comet Shoemaker-Levy 7 (1991d1)

T 1991 Oct. 27.54388 TT				Nakano
q 1.6302031		(2000.0)	P	Q
n 0.14639211	Peri.	91.97116	+0.69633719	-0.70572564
a 3.5655314	Node	312.94974	+0.56687847	+0.65244003
e 0.5427882	Incl.	10.28104	+0.44018554	+0.27617628
P 6.73				

From 21 observations 1991 Nov. 13-Dec. 30.

Periodic Comet Kowal 2 (1991f1)

Epoch 1991 Oct. 31.0 TT = JDT 2448560.5				
T 1991 Nov. 4.42565 TT				Nakano
q 1.4997440		(2000.0)	P	Q
n 0.15431409	Peri.	189.54766	+0.22506568	-0.94104439
a 3.4424343	Node	247.78785	+0.91097675	+0.29518533
e 0.5643362	Incl.	15.83051	+0.34563968	-0.16523036
P 6.39				

From 65 observations 1979-1992, mean residual 1".31. Nongravitational parameters A1 = -2.37 +/- 0.57, A2 = +0.3458 +/- 0.2534.

Comet Shoemaker-Levy (1991d)

Epoch 1992 Jan. 19.0 TT = JDT 2448640.5				
T 1991 Dec. 31.18638 TT				Nakano
q 2.2649865		(2000.0)	P	Q
z +0.0028760	Peri.	74.36725	-0.34223749	+0.75619558
+/-0.0000046	Node	145.12944	-0.39183490	-0.65433960
e 0.9934860	Incl.	77.28829	+0.85401341	+0.00281656

From 103 observations 1991 Jan. 22-Dec. 19, mean residual 0".72.

Comet Zanotta-Brewington (1991g1)

T 1992 Jan. 31.99019 TT				Nakano
q 0.6439713		(2000.0)	P	Q
	Peri.	197.86993	+0.05736949	-0.67024104
	Node	254.91392	+0.98373845	+0.16430033
e 1.0	Incl.	50.02580	+0.17019813	-0.72372809

From 96 observations 1991 Dec. 24-1992 Jan. 15.

Comet Helin-Alu (1991r)
Epoch 1992 Feb. 28.0 TT = JDT 2448680.5
T 1992 Feb. 19.67498 TT Nakano

q	4.8505117	(2000.0)	P	Q
z	+0.0000975	Peri. 30.75359	+0.07813190	+0.68169544
	+/-0.0000509	Node 253.65393	-0.99689591	+0.04632869
e	0.9995271	Incl. 49.29654	-0.00969267	+0.73016777

From 34 observations 1991 June 13-Sept. 13, mean residual 0".83.

Comet Mueller (1991h1)
T 1992 Mar. 21.20956 TT Marsden

q	0.1986413	(2000.0)	P	Q
		Peri. 307.01777	+0.26706897	+0.20197703
		Node 288.78759	-0.18400007	-0.94911302
e	1.0	Incl. 95.55467	-0.94594828	+0.24163970

From 28 observations 1991 Dec. 13-1992 Jan. 17.

Comet McNaught-Russell (1991v)
Epoch 1992 May 18.0 TT = JDT 2448760.5
T 1992 May 3.51590 TT Nakano

q	3.1929167	(2000.0)	P	Q
z	+0.0016752	Peri. 257.26137	+0.10443966	-0.49614883
	+/-0.0000387	Node 120.46195	+0.20962333	+0.85818439
e	0.9946512	Incl. 90.50078	-0.97218847	+0.13174179

From 12 observations 1991 Aug. 3-Nov. 26, mean residual 0".63.

Comet Shoemaker-Levy (1991a1)
Epoch 1992 Aug. 6.0 TT = JDT 2448840.5
T 1992 July 24.54203 TT Kobayashi

q	0.8367315	(2000.0)	P	Q
z	+0.0000915	Peri. 145.22391	-0.36642399	-0.62126877
	+/-0.0000418	Node 49.05535	-0.91407796	+0.10133470
e	0.9999234	Incl. 113.50930	+0.17376692	-0.77701763

From 50 observations 1991 Oct. 6-1992 Jan. 4, mean residual 0".90.

One-opposition minor planets

Planet	H	Epoch	M	Peri.	Node	Incl.	e	a	Arc	O	N	C
1989 SX4	14.6	891021	353.44	211.80	183.09	12.65	0.1676	2.6204	38	0		E
1990 DV3	14.0	900218	12.39	336.29	155.73	25.10	0.1921	2.3082	25	0		W
1990 TR12	12.4	901105	83.49	81.53	240.77	9.46	0.1000	2.9853	30	7		E
1990 VU8	13.7	901125	78.00	188.70	130.94	9.87	0.1292	2.7793	7	0		E
1990 WQ	16.6	901125	11.68	303.89	88.09	8.27	0.3576	2.7262	9	0		E
1991 PN7	14.0	910812	252.55	20.50	54.09	2.82	0.0332	2.8306	31	0	D	W
1991 PT10	14.8	910901	357.24	68.59	282.50	3.09	0.2657	2.5417	41	6		E
1991 PY10	13.0	910901	311.83	223.48	188.44	9.13	0.1473	2.7690	41	0		E
1991 PZ10	14.5	910901	15.06	357.99	322.07	7.61	0.2751	2.3928	41	8		E
1991 PJ11	14.1	910901	14.20	86.65	241.91	2.88	0.2031	2.5908	39	9		E
1991 PK11	12.8	910901	289.09	130.68	313.81	6.83	0.1757	2.7467	39	9		E
1991 PO11	14.0	910901	41.16	109.77	187.03	6.42	0.1199	2.3367	39	0		E
1991 PP11	13.5	910901	22.20	120.76	185.81	9.48	0.3151	2.9117	36	4		E
1991 PG16	13.4	910901	351.90	254.05	111.27	2.60	0.2961	3.1567	40	6		E
1991 PH16	14.0	910901	13.14	356.61	335.48	6.66	0.1217	2.2116	38	4		E
1991 PL16	14.1	910901	24.21	323.28	350.69	12.22	0.1811	2.5912	40	8		E
1991 PO16	13.2	910901	56.64	110.41	162.67	13.31	0.1600	2.6684	37	9		E
1991 PP16	14.0	910901	3.62	189.49	151.69	5.39	0.1566	2.3915	40	0		E
1991 PQ16	13.8	910901	316.03	229.36	169.94	7.49	0.0860	2.3681	40	9		E
1991 PR16	14.6	910901	13.38	187.82	138.51	1.43	0.1956	2.2742	40	6		E
1991 PT16	12.6	910901	22.57	171.42	152.94	2.43	0.0571	2.9100	40	6		E
1991 PU16	14.5	910901	18.16	302.68	21.20	3.26	0.1241	2.3723	40	6		E

1991	RE	15.0	910901	344.96	70.68	297.99	3.08	0.2287	2.6674	11	7		E
1991	RX	14.0	910921	48.84	273.35	13.31	8.31	0.2427	2.3130	35	8		W
1991	RJ1	14.9	910921	7.38	343.72	354.92	10.06	0.3000	2.5736	6	6	E	E
1991	RA4	14.5	910921	116.27	26.53	214.07	7.76	0.1165	2.4709	27	0		M
1991	RB4	14.5	910921	239.47	155.87	340.77	5.07	0.0908	2.3659	27	0		M
1991	RD4	15.0	910921	65.49	64.46	214.19	4.35	0.2048	2.3958	27	0		M
1991	RE4	15.5	910921	29.80	333.82	345.44	4.97	0.2284	2.3360	27	0		M
1991	RF4	15.5	910921	42.93	48.68	258.95	2.23	0.1805	2.4218	27	0		M
1991	RJ4	14.0	910921	313.40	69.99	354.09	8.69	0.0900	3.0321	27	0		M
1991	RU4	13.5	910921	357.50	168.77	205.22	8.29	0.0713	3.0459	22	0		M
1991	RX4	13.5	910921	19.51	144.79	204.02	8.54	0.0705	2.9900	22	0		M
1991	RY4	14.5	910921	4.40	147.51	215.53	2.21	0.1694	2.7016	25	0		M
1991	RC5	13.5	910921	311.20	68.19	0.93	10.88	0.0885	3.0078	25	0		M
1991	RO5	15.4	910921	17.87	305.50	32.54	6.25	0.1441	2.2331	4	6		E
1991	RE7	11.8	911011	62.10	281.73	8.12	17.46	0.1586	3.1728	68	0		E
1991	RG7	15.0	910921	336.76	152.47	262.25	3.74	0.1772	2.4424	30	0		M
1991	RJ7	14.5	910921	142.84	302.35	291.93	3.35	0.1171	2.2420	27	0		M
1991	RK7	14.5	910921	119.85	323.42	289.23	4.01	0.1237	2.1812	30	0		M
1991	RS7	12.5	910921	56.50	183.08	108.29	8.49	0.1098	2.7512	35	7		W
1991	RU7	15.7	910921	331.75	217.69	178.86	6.18	0.2014	2.2402	8	0		E
1991	RQ9	14.6	910921	26.54	3.90	315.09	1.67	0.2248	2.4212	7	8		E
1991	SX	16.0	911011	17.86	215.95	116.89	6.70	0.1913	2.2959	33	7		W
1991	SB1	15.5	910921	356.28	266.00	89.79	7.33	0.1369	2.3414	58	8		W
1991	SE1	15.5	910921	346.39	273.71	95.61	7.47	0.1368	2.3689	58	9		W
1991	SN1	14.1	911011	10.58	159.96	203.45	5.78	0.1676	2.2192	45	0		N
1991	SS1	17.0	911011	351.34	353.48	37.99	5.74	0.3657	2.3732	59	0		M
1991	TC	15.0	911011	29.72	284.12	355.42	26.56	0.4215	2.6436	57	0		W
1991	TX	15.0	911011	9.09	284.16	77.11	24.15	0.2826	2.4077	57	6		W
1991	TY	14.0	911031	10.02	239.37	127.08	23.22	0.2918	2.4007	56	0		M
1991	TA1	14.0	911011	356.83	173.82	204.88	25.60	0.0873	1.9091	32	0		W
1991	TE1	13.0	911011	300.85	12.24	90.50	14.53	0.0918	2.5633	6	4		W
1991	TF1	12.5	911011	320.91	278.47	170.41	17.53	0.1316	3.1664	6	4		W
1991	TH1	14.0	911011	358.57	2.44	18.42	22.96	0.2229	2.2975	23	8		M
1991	TK1	14.5	911011	315.16	115.11	336.79	21.97	0.2959	2.3484	35	6		W
1991	TP1	14.0	911011	39.91	82.26	234.36	3.79	0.2163	2.2041	58	0		U
1991	TQ1	13.5	911011	350.22	6.67	21.30	24.63	0.2163	2.3284	25	8		W
1991	TR1	14.5	911011	17.74	145.24	223.82	19.58	0.0994	1.9189	21	7		W
1991	TY1	13.5	911011	358.85	218.42	164.16	13.35	0.2947	2.6726	24	8		M
1991	TC2	14.0	911011	298.83	55.21	26.98	24.98	0.1198	1.9215	26	0		W
1991	TL2	14.5	911011	21.15	51.06	276.10	14.77	0.3311	2.7361	38	5		W
1991	TS2	15.0	910921	37.15	316.07	6.18	15.29	0.1253	2.6290	6	7		M
1991	TV2	16.0	910921	26.15	334.27	356.42	8.39	0.1852	2.4396	6	7		M
1991	TX2	14.5	910921	300.64	180.04	257.95	2.36	0.0843	2.6386	6	7		M
1991	TY2	15.0	910921	11.41	108.87	247.25	3.60	0.1167	3.1046	6	7		M
1991	TC4	12.5	911011	30.19	175.76	163.64	13.69	0.1905	2.5914	24	8		M
1991	TE4	13.5	911011	10.75	352.59	23.60	15.26	0.2149	2.6570	25	8		W
1991	TG4	13.0	911011	259.49	270.18	222.81	19.44	0.0996	1.9532	21	8		W
1991	TV4	14.1	911031	46.93	206.78	126.24	3.04	0.1750	2.1721	27	8		N
1991	TW4	15.5	910921	356.36	167.54	220.91	18.05	0.2259	3.0991	5	6		W
1991	TX4	14.5	910921	285.44	114.48	357.36	5.64	0.1407	2.1914	5	6		W
1991	TY4	15.5	910921	355.68	150.79	236.83	6.67	0.1269	2.5286	5	6	E	W
1991	TZ4	14.0	910921	174.99	346.06	224.94	12.14	0.1155	2.6444	5	6	E	W
1991	TA5	14.5	910921	1.91	17.80	0.82	6.89	0.1381	2.3751	5	6		W
1991	TB5	15.0	910921	40.22	314.14	10.55	12.53	0.2145	2.7119	5	6		W
1991	TC5	16.5	910921	10.01	99.00	260.68	3.44	0.2484	2.2400	5	6	E	W
1991	TD5	15.0	910921	56.10	350.84	306.93	2.56	0.2713	2.5885	5	6		W
1991	TE5	13.0	910921	57.81	299.16	15.17	13.77	0.1257	2.5812	5	6		W
1991	TF5	16.5	910921	3.20	20.13	353.39	5.53	0.1937	2.1964	5	6		W
1991	TG5	17.0	910921	10.94	36.42	324.28	2.49	0.2138	2.2131	5	6		W

1991	UA	11.9	911031	5.50	28.86	352.07	2.32	0.2612	3.9866	13	9	N
1991	UB	12.9	911031	312.18	76.36	17.96	13.35	0.1556	2.7794	13	8	N
1991	UC	14.3	911011	351.96	88.18	309.06	0.85	0.2156	2.6169	13	6	N
1991	UE	13.7	911031	301.22	117.69	343.66	2.86	0.1036	2.2894	13	8	N
1991	UF	13.9	911031	11.99	100.23	276.39	2.48	0.1348	2.3037	13	0	N
1991	UG	12.1	911031	40.54	327.91	15.65	8.70	0.0879	3.0080	13	0	N
1991	UJ	13.9	911031	31.22	333.58	7.43	4.73	0.2547	2.5854	13	0	N
1991	UN	14.2	911031	349.32	38.76	11.78	3.17	0.2330	2.6356	13	8	N
1991	UP	14.4	911031	329.98	176.39	262.52	2.33	0.2118	2.3686	13	0	N
1991	UQ	14.0	911031	57.46	303.31	18.60	2.83	0.1256	2.2405	13	0	N
1991	UR	13.8	911031	41.47	328.98	10.50	6.79	0.1445	2.3176	11	8	N
1991	UZ	13.1	911031	11.55	211.25	168.70	5.58	0.2154	2.5580	43	8	N
1991	UC1	12.6	911031	252.54	321.53	187.80	7.10	0.0147	2.5980	22	0	N
1991	UD1	14.6	911011	356.00	41.58	350.07	3.38	0.2120	2.4345	11	6	N
1991	UE1	14.7	911031	349.40	59.79	354.10	1.54	0.2295	2.4203	22	0	N
1991	UF1	14.6	911031	357.87	308.18	93.49	3.41	0.2089	2.3809	22	0	N
1991	UG1	13.5	911031	13.84	276.62	66.10	29.72	0.3957	2.7563	37	9	B
1991	UK1	14.0	911031	32.43	7.30	333.88	4.93	0.2221	2.2836	14	6	N
1991	UN1	13.8	911031	14.58	58.91	315.03	5.84	0.1142	2.3576	14	6	N
1991	UQ1	13.5	911031	345.99	23.18	38.91	8.50	0.1814	2.2884	28	8	N
1991	UR1	14.5	911031	5.87	351.86	41.21	1.41	0.1836	2.1762	4	6	E N
1991	UU1	15.2	911031	4.74	355.09	34.64	6.96	0.1931	2.1840	11	6	N
1991	UV1	14.5	911120	340.33	41.28	32.16	6.60	0.1784	2.2741	11	6	E N
1991	UX1	12.5	911031	128.83	34.49	233.09	7.60	0.0220	2.5834	11	6	N
1991	UZ1	12.3	911031	335.38	38.49	29.56	12.21	0.0865	2.9984	11	6	N
1991	UA2	12.7	911031	303.60	155.59	304.41	1.07	0.0515	2.8483	11	6	N
1991	UD2	12.9	911031	349.47	21.01	32.52	7.40	0.1553	3.0440	11	6	N
1991	UE2	13.6	911031	328.28	29.79	48.33	3.11	0.1163	2.5234	11	6	N
1991	UF2	14.8	911031	15.87	322.77	50.76	2.74	0.2107	2.2676	11	6	N
1991	UH2	12.7	911031	346.97	205.25	212.56	7.23	0.1781	3.2335	6	6	N
1991	UJ2	13.0	911031	104.55	245.26	32.45	6.14	0.1684	2.3069	11	6	N
1991	UM2	13.4	911031	43.41	242.67	99.53	3.45	0.1928	2.4184	6	8	N
1991	UN2	14.0	911031	26.04	282.34	76.77	4.91	0.2641	2.5266	6	8	N
1991	UP2	13.5	911120	43.67	275.96	79.37	4.62	0.1396	2.2767	34	0	N
1991	UW2	14.3	911031	323.65	333.63	118.22	1.14	0.1964	2.3798	9	6	N
1991	UY2	12.4	911031	163.70	51.64	183.19	2.02	0.0512	2.8646	9	6	N
1991	UA3	12.9	911031	14.47	325.52	51.82	8.72	0.2006	2.9989	9	6	N
1991	UB3	14.2	911031	3.28	333.77	60.36	4.90	0.1963	2.2891	25	0	N
1991	UH3	13.5	911031	332.99	63.73	23.56	8.68	0.2755	2.8473	9	8	N
1991	UJ3	13.8	911031	53.14	325.27	3.99	3.98	0.1706	2.2691	9	8	N
1991	UK3	12.2	911210	313.43	269.04	222.92	13.38	0.2552	3.1032	39	0	N
1991	UL3	13.1	911120	36.87	145.55	214.51	10.94	0.2084	2.5971	35	0	N
1991	UM3	12.9	911031	42.04	289.50	59.53	9.44	0.2053	2.7764	39	0	N
1991	UN3	13.5	911120	22.10	304.89	84.40	4.57	0.0963	2.2950	39	0	N
1991	UP3	14.4	911031	355.71	319.30	86.21	3.35	0.1977	2.3974	9	6	N
1991	UQ3	13.0	911031	103.70	172.99	109.05	3.69	0.1293	2.2299	50	0	N
1991	US3	12.9	911120	55.28	272.68	65.16	15.57	0.1645	2.5792	26	0	N
1991	UT3	13.8	911031	24.95	268.72	103.67	4.30	0.1529	2.2338	11	9	N
1991	UV3	13.2	911031	310.89	228.10	237.57	9.10	0.1685	2.7398	9	6	N
1991	UZ3	14.6	911031	343.64	291.35	130.80	1.76	0.1726	2.3778	9	6	N
1991	UA4	14.2	911031	346.63	358.19	61.26	3.34	0.2058	2.3326	9	6	N
1991	VC	17.5	911031	61.23	252.23	54.08	7.33	0.2901	2.1623	2	9	E M
1991	VD	19.5	911031	346.42	13.16	47.08	20.57	0.1748	1.8881	2	9	E M
1991	VJ	15.0	911031	17.00	261.30	72.41	22.89	0.3377	2.3306	18	8	M
1991	VM	13.5	911120	14.74	302.96	94.09	5.55	0.1904	2.2639	41	8	U
1991	VT	12.7	911031	26.34	300.14	66.34	15.93	0.1910	2.6176	14	9	N
1991	VU	12.4	911120	18.03	148.34	243.79	7.45	0.1273	2.6199	10	7	E N
1991	VV	13.5	911120	8.74	142.00	241.45	23.58	0.2082	2.3345	35	9	W
1991	VY	12.9	911031	341.43	358.57	68.64	5.83	0.0934	2.4532	30	6	N

1991 VA1	12.4	911031	22.19	120.64	250.56	7.90	0.1486	3.2440	7	6		N
1991 VC1	14.4	911031	13.69	65.32	312.57	2.28	0.2326	2.4848	7	6		N
1991 VD1	13.1	911031	3.19	5.37	32.86	16.79	0.0817	2.5536	7	6		N
1991 VF1	13.9	911120	40.78	351.13	6.47	3.64	0.1214	2.2541	30	8		N
1991 VG1	14.7	911120	352.59	33.26	30.33	5.96	0.2710	2.3809	30	8		N
1991 VJ1	14.7	911031	6.78	274.32	108.12	2.43	0.3157	2.5710	26	8		N
1991 VK1	14.6	911031	354.16	233.74	171.02	3.00	0.1587	2.1843	7	6		N
1991 VL1	14.3	911031	30.47	255.87	102.76	5.97	0.1265	2.1748	7	6		N
1991 VN1	13.2	911031	161.59	120.08	115.13	5.61	0.0555	2.1930	7	6		N
1991 VO1	13.6	911031	334.77	318.70	112.16	5.53	0.1266	2.2730	7	6		N
1991 VP1	13.9	911031	330.78	311.76	123.85	4.90	0.1204	2.2445	7	6		N
1991 VQ1	13.1	911120	25.36	296.63	71.94	7.35	0.2078	2.2829	33	0		N
1991 VT1	13.5	911210	18.46	143.95	262.61	2.96	0.1156	2.1862	37	9		U
1991 VV1	13.6	911120	39.60	121.96	229.18	14.06	0.2312	2.4921	13	5		N
1991 VX1	13.0	911120	241.86	298.71	226.76	19.72	0.0714	1.9305	36	6		W
1991 VA2	14.2	911120	4.47	246.26	165.74	3.54	0.1449	2.5393	4	6		N
1991 VB2	13.6	911120	125.76	114.82	168.03	2.51	0.1110	2.2355	4	6	E	N
1991 VC2	12.3	911120	10.04	196.56	210.17	9.24	0.0823	2.9815	28	9		N
1991 VE2	13.1	911120	343.38	210.72	228.44	14.63	0.0988	2.5478	28	0		N
1991 VJ2	13.9	911120	46.24	145.43	204.18	4.63	0.2283	2.2481	28	0		N
1991 VK2	15.0	911120	17.28	291.69	94.14	4.26	0.3013	2.4137	4	6		N
1991 VQ2	13.0	911120	335.44	31.39	33.50	23.94	0.2413	2.3425	37	8		W
1991 VU2	13.5	911120	23.36	295.92	79.36	12.53	0.2018	2.6781	13	6		N
1991 VV2	12.8	911210	346.72	69.25	16.78	14.00	0.1721	2.5981	38	8		N
1991 VX2	12.4	911120	39.91	63.32	304.23	4.38	0.1676	3.1846	25	6		N
1991 VZ2	14.7	911120	29.70	336.38	23.47	4.00	0.3542	2.3246	25	6		N
1991 VA3	13.0	911120	36.57	113.94	254.57	11.57	0.2131	2.6028	21	8		N
1991 VC3	13.7	911230	2.92	5.15	68.43	24.18	0.1977	2.3364	31	7		N
1991 VE3	14.0	911120	4.48	294.79	119.14	4.48	0.2865	2.5341	30	0		N
1991 VG3	13.0	911120	354.84	178.18	219.08	25.84	0.1676	2.2649	33	6		W
1991 VJ3	13.5	911210	357.70	19.46	53.48	4.49	0.1397	2.2480	32	8		U
1991 VL3	14.0	911031	91.57	53.61	237.21	16.97	0.1175	1.9324	2	5	E	W
1991 VO3	13.9	911031	314.80	38.81	59.47	4.26	0.1508	2.3914	9	6		N
1991 VP3	13.2	911031	237.91	122.31	48.63	9.50	0.1006	2.3774	9	6		N
1991 VT3	12.6	911210	55.86	111.79	238.29	12.98	0.1864	2.5873	26	8		N
1991 VX3	13.5	911210	319.36	60.60	53.43	1.85	0.0740	2.2492	28	0		N
1991 VA4	14.5	911120	346.06	332.67	106.43	3.02	0.1958	2.3045	6	0		N
1991 VC4	12.5	911120	343.07	194.56	222.28	11.08	0.1889	2.4464	36	6		W
1991 VD4	11.5	911120	356.91	154.13	257.81	23.71	0.2507	3.1745	34	5		W
1991 WB	12.4	911210	26.35	314.61	79.37	35.88	0.3282	2.7490	30	0		U
1991 XC	14.0	911210	359.84	93.00	0.90	21.35	0.3025	2.4307	28	6		W
1991 YA	14.6	911230	0.48	174.13	274.40	44.32	0.4428	2.7496	39	9		N
1992 AB	14.0	911230	342.13	56.04	89.02	40.46	0.5413	3.1890	9	5		W

1991 PN7 = 1991 RT12 (A. Lowe)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina

(33) Polyhymnia Obs. 218 M 155.17313 Peri. 337.55098
H 8.55 G 0.33 Opp. 39 n 0.20262578 Node 8.88163
rms res. 1".15 (M-P) 1904-1990 e 0.3378278 Incl. 1.89250

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina

(60) Echo Obs. 175 M 121.44991 Peri. 269.54016
H 8.21 G 0.27 Opp. 32 n 0.26622882 Node 192.10300
rms res. 1".28 (M-P) 1914-1990 e 0.1831844 Incl. 3.59711

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina

(86) Semele Obs. 161 M 41.14303 Peri. 302.96409
H 8.54 G 0.15 Opp. 32 n 0.17968299 Node 87.31946
rms res. 1".08 (M-P) 1909-1989 e 0.2113104 Incl. 4.79327

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(142) Polana Obs. 137 M 353.86451 Peri. 292.25036
H 10.27 G 0.15 Opp. 28 n 0.26215606 Node 291.48336
rms res. 1".26 (M-P) 1903-1990 e 0.1362849 Incl. 2.23952

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(155) Scylla Obs. 47 M 139.30521 Peri. 46.00901
H 11.39 G 0.15 Opp. 10 n 0.21550992 Node 41.24973
rms res. 2".14 (M-P) 1907-1991 e 0.2767539 Incl. 11.39507

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(156) Xanthippe Obs. 122 M 140.59842 Peri. 338.37189
H 8.64 G 0.15 Opp. 34 n 0.21829430 Node 242.31460
rms res. 1".99 (M-P) 1901-1988 e 0.2235652 Incl. 9.75506

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(177) Irma Obs. 114 M 320.52193 Peri. 37.83226
H 9.49 G 0.15 Opp. 28 n 0.21393820 Node 348.02178
rms res. 1".64 (M-P) 1900-1990 e 0.2377615 Incl. 1.39812

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(178) Belisana Obs. 143 M 34.15711 Peri. 210.71073
H 9.38 G 0.15 Opp. 34 n 0.25543488 Node 51.31736
rms res. 1".91 (M-P) 1900-1991 e 0.0440785 Incl. 1.90357

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(180) Garumna Obs. 136 M 172.17530 Peri. 173.64585
H 10.31 G 0.15 Opp. 25 n 0.21941075 Node 313.08955
rms res. 1".59 (M-P) 1941-1990 e 0.1667616 Incl. 0.87432

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(182) Elsa Obs. 159 M 232.72120 Peri. 309.39794
H 9.12 G 0.15 Opp. 34 n 0.26244184 Node 107.33406
rms res. 1".45 (M-P) 1908-1989 e 0.1868891 Incl. 2.00171

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(210) Isabella Obs. 120 M 24.36600 Peri. 12.97613
H 9.33 G 0.15 Opp. 29 n 0.21947257 Node 33.01466
rms res. 1".10 (M-P) 1915-1989 e 0.1220499 Incl. 5.27231

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(221) Eos Obs. 123 M 206.95029 Peri. 193.99334
H 7.67 G 0.13 Opp. 36 n 0.18796274 Node 142.27306
rms res. 1".75 (M-P) 1909-1989 e 0.0961303 Incl. 10.86463

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(226) Weringia Obs. 51 M 235.30355 Peri. 152.56033
H 9.75 G 0.15 Opp. 19 n 0.22037002 Node 135.41908
rms res. 1".75 (M-P) 1904-1989 e 0.2025366 Incl. 15.93161

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(229) Adelinda Obs. 129 M 145.03941 Peri. 311.07554
H 9.13 G 0.15 Opp. 37 n 0.15690200 Node 28.49340
rms res. 1".87 (M-P) 1920-1990 e 0.1575604 Incl. 2.11408

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(236) Honoria Obs. 145 M 243.07424 Peri. 174.41147
H 8.18 G -0.02 Opp. 34 n 0.21060922 Node 186.24168
rms res. 1".18 (M-P) 1907-1991 e 0.1904672 Incl. 7.69029

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(248) Lameia Obs. 81 M 191.58779 Peri. 10.46633
H 10.21 G 0.15 Opp. 22 n 0.25376836 Node 247.30334
rms res. 1".21 (M-P) 1913-1989 e 0.0641956 Incl. 4.04027

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(251) Sophia Obs. 66 M 141.42012 Peri. 289.79469
H 10.0 G 0.15 Opp. 19 n 0.18145834 Node 156.50048
rms res. 1".56 (M-P) 1904-1991 e 0.1072979 Incl. 10.52865

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(255) Oppavia Obs. 81 M 157.60412 Peri. 153.39026
H 10.39 G 0.15 Opp. 26 n 0.21650471 Node 14.01286
rms res. 2".28 (M-P) 1913-1988 e 0.0772163 Incl. 9.48004

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(258) Tyche Obs. 126 M 267.64646 Peri. 154.42157
H 8.50 G 0.23 Opp. 29 n 0.23314057 Node 207.95820
rms res. 1".54 (M-P) 1906-1989 e 0.2043622 Incl. 14.26489

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(266) Aline Obs. 69 M 7.12641 Peri. 149.89925
H 8.80 G 0.15 Opp. 25 n 0.20991202 Node 236.27146
rms res. 1".16 (M-P) 1912-1987 e 0.1575370 Incl. 13.39517

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(268) Adorea Obs. 161 M 151.49935 Peri. 69.20001
H 8.28 G 0.15 Opp. 28 n 0.18017416 Node 121.06260
rms res. 1".45 (M-P) 1921-1987 e 0.1233330 Incl. 2.43333

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(284) Amalia Obs. 69 M 125.01999 Peri. 57.65488
H 10.05 G 0.11 Opp. 22 n 0.27226011 Node 234.13076
rms res. 2".35 (M-P) 1907-1989 e 0.2236865 Incl. 8.05263

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(285) Regina Obs. 33 M 332.68975 Peri. 16.12438
H 10.5 G 0.15 Opp. 11 n 0.18206242 Node 311.54190
rms res. 2".41 (M-P) 1911-1984 e 0.2077874 Incl. 17.62747

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(292) Ludovica Obs. 65 M 33.68980 Peri. 284.13863
H 10.24 G 0.15 Opp. 21 n 0.24500356 Node 43.76943
rms res. 1".39 (M-P) 1910-1990 e 0.0337885 Incl. 14.93891

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(293) Brasilia Obs. 37 M 117.60327 Peri. 85.22437
H 9.94 G 0.15 Opp. 18 n 0.20366946 Node 61.82769
rms res. 2".17 (M-P) 1909-1989 e 0.1061306 Incl. 15.57351

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(301) Bavaria Obs. 109 M 349.52417 Peri. 124.25232
H 10.1 G 0.15 Opp. 29 n 0.21909361 Node 142.71339
rms res. 1".69 (M-P) 1902-1991 e 0.0635252 Incl. 4.89193

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(306) Unitas Obs. 164 M 215.11304 Peri. 166.87924
H 8.96 G 0.15 Opp. 38 n 0.27205606 Node 142.12422
rms res. 1".40 (M-P) 1902-1990 e 0.1506698 Incl. 7.26407

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(332) Siri Obs. 136 M 108.85937 Peri. 295.57968
H 9.5 G 0.15 Opp. 41 n 0.21356271 Node 31.96562
rms res. 1".92 (M-P) 1901-1990 e 0.0904146 Incl. 2.85664

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(357) Ninina Obs. 107 M 44.68932 Peri. 243.32127
H 8.72 G 0.15 Opp. 30 n 0.17640765 Node 138.52522
rms res. 2".07 (M-P) 1907-1988 e 0.0782579 Incl. 15.08130

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(358) Apollonia Obs. 162 M 204.43255 Peri. 252.02334
H 9.1 G 0.15 Opp. 32 n 0.20213371 Node 172.61041
rms res. 1".63 (M-P) 1901-1991 e 0.1529383 Incl. 3.54614

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(368) Haidea Obs. 105 M 101.07093 Peri. 91.14750
H 9.93 G 0.15 Opp. 25 n 0.18386392 Node 227.77439
rms res. 1".39 (M-P) 1905-1988 e 0.2097050 Incl. 7.77950

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(392) Wilhelmina Obs. 65 M 353.00928 Peri. 172.87622
H 9.7 G 0.15 Opp. 19 n 0.20123519 Node 210.24748
rms res. 1".88 (M-P) 1933-1990 e 0.1405276 Incl. 14.31465

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(393) Lampetia Obs. 92 M 100.78595 Peri. 89.36659
H 8.39 G 0.15 Opp. 23 n 0.21317130 Node 213.40897
rms res. 1".22 (M-P) 1913-1989 e 0.3324306 Incl. 14.88311

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(395) Delia Obs. 99 M 146.74877 Peri. 11.19791
H 10.38 G 0.15 Opp. 25 n 0.21223071 Node 259.88863
rms res. 1".85 (M-P) 1926-1987 e 0.0873893 Incl. 3.35504

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(396) Aeolia Obs. 98 M 333.25241 Peri. 20.32548
H 9.9 G 0.15 Opp. 27 n 0.21702151 Node 250.41879
rms res. 1".76 (M-P) 1925-1989 e 0.1565166 Incl. 2.54166

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(421) Zahringia Obs. 115 M 219.07601 Peri. 209.32843
H 11.78 G 0.15 Opp. 18 n 0.24350671 Node 187.72223
rms res. 1".29 (M-P) 1904-1991 e 0.2828955 Incl. 7.76328

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(445) Edna Obs. 69 M 120.34833 Peri. 76.21752
H 9.29 G 0.15 Opp. 24 n 0.17207225 Node 293.38866
rms res. 1".70 (M-P) 1905-1987 e 0.1898376 Incl. 21.42971

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(450) Brigitta Obs. 52 M 266.50643 Peri. 358.51687
H 10.28 G 0.15 Opp. 16 n 0.18844269 Node 14.82436
rms res. 1".30 (M-P) 1920-1991 e 0.1048875 Incl. 10.16556

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(457) Alleghenia Obs. 43 M 306.32592 Peri. 129.17327
H 11.0 G 0.15 Opp. 9 n 0.18183953 Node 250.04850
rms res. 1".48 (M-P) 1900-1987 e 0.1838442 Incl. 12.95647

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(463) Lola Obs. 28 M 259.56230 Peri. 329.43041
H 11.82 G 0.15 Opp. 12 n 0.26551222 Node 36.73670
rms res. 2".09 (M-P) 1926-1989 e 0.2214809 Incl. 13.56960

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(464) Megaira Obs. 53 M 270.57081 Peri. 257.91088
H 9.52 G 0.15 Opp. 20 n 0.21029474 Node 102.80608
rms res. 1".69 (M-P) 1901-1989 e 0.2056459 Incl. 10.16362

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(468) Lina Obs. 151 M 261.86686 Peri. 335.56113
H 9.83 G 0.15 Opp. 29 n 0.17754636 Node 21.64102
rms res. 1".41 (M-P) 1901-1989 e 0.1942269 Incl. 0.44415

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(469) Argentina Obs. 89 M 58.39118 Peri. 205.44627
H 8.62 G 0.15 Opp. 25 n 0.17573616 Node 334.81489
rms res. 1".41 (M-P) 1907-1991 e 0.1763172 Incl. 11.72652

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(508) Princetonia Obs. 82 M 292.52691 Peri. 184.40748
H 8.24 G 0.15 Opp. 30 n 0.17512411 Node 44.84439
rms res. 2".00 (M-P) 1912-1990 e 0.0220417 Incl. 13.34372

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(523) Ada Obs. 84 M 136.02427 Peri. 187.60843
H 9.6 G 0.15 Opp. 25 n 0.19332327 Node 261.51219
rms res. 2".09 (M-P) 1902-1989 e 0.1826559 Incl. 4.32097

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(528) Rezia Obs. 68 M 230.67898 Peri. 299.77922
H 9.14 G 0.15 Opp. 23 n 0.15740142 Node 50.21767
rms res. 1".34 (M-P) 1904-1991 e 0.0129756 Incl. 12.66323

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(542) Susanna Obs. 71 M 246.99837 Peri. 215.75215
H 9.36 G 0.15 Opp. 22 n 0.19917684 Node 153.34697
rms res. 1".90 (M-P) 1904-1991 e 0.1425999 Incl. 12.08055

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(547) Praxedis Obs. 80 M 358.98165 Peri. 194.82979
H 9.52 G 0.15 Opp. 23 n 0.21358742 Node 193.58458
rms res. 1".37 (M-P) 1904-1990 e 0.2379347 Incl. 16.91574

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(553) Kundry Obs. 71 M 108.10809 Peri. 354.34821
H 12.2 G 0.15 Opp. 15 n 0.29571473 Node 72.56583
rms res. 1".78 (M-P) 1904-1990 e 0.1101385 Incl. 5.39166

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(564) Dudu Obs. 30 M 4.81778 Peri. 215.09528
H 10.43 G 0.15 Opp. 15 n 0.21609671 Node 71.03692
rms res. 2".18 (M-P) 1905-1991 e 0.2738785 Incl. 17.96664

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(576) Emanuela Obs. 70 M 304.25789 Peri. 27.57556
H 9.4 G 0.15 Opp. 23 n 0.19121640 Node 300.16506
rms res. 1".43 (M-P) 1924-1991 e 0.1968225 Incl. 10.23184

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(577) Rhea Obs. 85 M 325.67883 Peri. 332.68345
H 9.5 G 0.15 Opp. 32 n 0.17885721 Node 329.15062
rms res. 1".64 (M-P) 1905-1985 e 0.1447655 Incl. 5.30638

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(602) Marianna Obs. 69 M 85.93580 Peri. 42.24562
H 8.31 G 0.15 Opp. 28 n 0.18133361 Node 332.58667
rms res. 1".76 (M-P) 1906-1990 e 0.2421845 Incl. 15.22139

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(603) Timandra Obs. 70 M 106.62101 Peri. 157.55589
H 12.1 G 0.15 Opp. 10 n 0.24342712 Node 343.76630
rms res. 1".46 (M-P) 1906-1991 e 0.1717060 Incl. 8.00028

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(613) Ginevra Obs. 54 M 34.64203 Peri. 64.27390
H 9.67 G 0.15 Opp. 28 n 0.19754187 Node 355.22571
rms res. 1".85 (M-P) 1901-1988 e 0.0559190 Incl. 7.69022

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(629) Bernardina Obs. 54 M 173.69596 Peri. 30.26494
H 9.9 G 0.15 Opp. 17 n 0.17848692 Node 87.82969
rms res. 1".87 (M-P) 1907-1987 e 0.1690527 Incl. 9.33322

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(630) Euphemia Obs. 81 M 33.27274 Peri. 39.15960
H 11.0 G 0.15 Opp. 18 n 0.23201310 Node 105.86337
rms res. 1".18 (M-P) 1924-1990 e 0.1156927 Incl. 13.86218

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(641) Agnes Obs. 88 M 174.08186 Peri. 17.53574
H 12.1 G 0.15 Opp. 18 n 0.29806552 Node 41.17175
rms res. 1".34 (M-P) 1907-1991 e 0.1289824 Incl. 1.71674

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(642) Clara Obs. 83 M 241.27931 Peri. 105.83211
H 9.98 G 0.15 Opp. 18 n 0.17249664 Node 7.49687
rms res. 1".43 (M-P) 1919-1989 e 0.1256937 Incl. 8.10093

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(643) Scheherezade Obs. 41 M 185.92084 Peri. 236.80614
H 9.72 G 0.15 Opp. 22 n 0.16062146 Node 252.81693
rms res. 1".65 (M-P) 1907-1989 e 0.0759770 Incl. 13.71784

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(648) Pippa Obs. 49 M 273.32715 Peri. 168.24258
H 9.68 G 0.15 Opp. 23 n 0.17148898 Node 292.32188
rms res. 1".80 (M-P) 1907-1987 e 0.2003842 Incl. 9.84442

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(660) Crescentia Obs. 108 M 196.29315 Peri. 104.77055
H 9.14 G 0.15 Opp. 25 n 0.24444966 Node 157.34816
rms res. 1".98 (M-P) 1926-1990 e 0.1054329 Incl. 15.23931

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(670) Ottegebe Obs. 95 M 286.84614 Peri. 194.52650
H 9.8 G 0.15 Opp. 31 n 0.21014655 Node 174.99846
rms res. 1".58 (M-P) 1908-1990 e 0.1941854 Incl. 7.53306

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(676) Melitta Obs. 90 M 29.76752 Peri. 183.00555
H 9.3 G 0.15 Opp. 19 n 0.18442825 Node 150.73207
rms res. 1".55 (M-P) 1911-1986 e 0.1317580 Incl. 12.86730

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(682) Hagar Obs. 86 M 59.27535 Peri. 103.85939
H 12.2 G 0.15 Opp. 8 n 0.22828399 Node 191.30906
rms res. 1".43 (M-P) 1909-1987 e 0.1755952 Incl. 11.48012

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(684) Hildburg Obs. 94 M 352.28965 Peri. 290.11031
H 10.84 G 0.15 Opp. 19 n 0.25994600 Node 336.79642
rms res. 1".47 (M-P) 1909-1989 e 0.0361094 Incl. 5.51472

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(686) Gersuind Obs. 51 M 314.45703 Peri. 87.59512
H 9.67 G 0.15 Opp. 14 n 0.23679308 Node 243.80759
rms res. 0".89 (M-P) 1909-1984 e 0.2682592 Incl. 15.70174

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(691) Lehigh Obs. 45 M 335.38832 Peri. 300.32987
H 9.30 G 0.15 Opp. 23 n 0.18864381 Node 88.58881
rms res. 1".70 (M-P) 1914-1985 e 0.1244126 Incl. 13.01271

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(694) Ekard Obs. 76 M 14.22539 Peri. 110.47673
H 9.17 G 0.15 Opp. 22 n 0.22582703 Node 230.81752
rms res. 1".76 (M-P) 1909-1979 e 0.3228615 Incl. 15.84806

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(699) Hela Obs. 42 M 112.78020 Peri. 91.39589
H 11.72 G 0.15 Opp. 13 n 0.23324555 Node 242.95981
rms res. 1".30 (M-P) 1902-1990 e 0.4091422 Incl. 15.28527

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(706) Hirundo Obs. 82 M 55.39033 Peri. 29.63765
H 10.2 G 0.15 Opp. 18 n 0.21878757 Node 325.85678
rms res. 1".50 (M-P) 1910-1989 e 0.1950456 Incl. 14.46168

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(747) Winchester Obs. 140 M 184.98871 Peri. 275.89798
H 7.69 G 0.15 Opp. 30 n 0.19041595 Node 130.26104
rms res. 1".29 (M-P) 1913-1986 e 0.3442755 Incl. 18.17841

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(764) Gedania Obs. 70 M 276.62373 Peri. 156.11716
H 9.48 G 0.15 Opp. 27 n 0.17362050 Node 259.77459
rms res. 2".10 (M-P) 1902-1987 e 0.1141576 Incl. 10.08654

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(766) Moguntia Obs. 73 M 308.47394 Peri. 66.86098
H 10.15 G 0.15 Opp. 23 n 0.18750524 Node 8.51447
rms res. 1".71 (M-P) 1908-1989 e 0.0904051 Incl. 10.10276

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(768) Struveana Obs. 41 M 33.02228 Peri. 11.63931
H 10.21 G 0.15 Opp. 14 n 0.17627053 Node 39.59188
rms res. 2".21 (M-P) 1933-1990 e 0.2003956 Incl. 16.27111

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(773) Irmintraud Obs. 57 M 225.55598 Peri. 331.36883
H 9.10 G 0.15 Opp. 22 n 0.20373314 Node 322.82677
rms res. 2".01 (M-P) 1913-1990 e 0.0788272 Incl. 16.68152

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(774) Armor Obs. 84 M 45.75574 Peri. 30.69407
H 8.6 G 0.15 Opp. 28 n 0.18530323 Node 250.53668
rms res. 1".95 (M-P) 1908-1989 e 0.1695706 Incl. 5.56048

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(776) Berbericia Obs. 84 M 310.91533 Peri. 305.40648
H 7.68 G 0.34 Opp. 27 n 0.19639722 Node 80.21803
rms res. 1".60 (M-P) 1914-1990 e 0.1655880 Incl. 18.23136

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(783) Nora Obs. 40 M 214.29387 Peri. 153.77211
H 10.6 G 0.15 Opp. 19 n 0.27491183 Node 142.38804
rms res. 2".17 (M-P) 1911-1990 e 0.2301623 Incl. 9.32149

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(786) Bredichina Obs. 50 M 284.93621 Peri. 134.59577
H 8.65 G 0.15 Opp. 22 n 0.17506790 Node 90.15142
rms res. 1".56 (M-P) 1914-1990 e 0.1719648 Incl. 14.57078

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(788) Hohensteina Obs. 69 M 55.67092 Peri. 41.77251
H 8.3 G 0.15 Opp. 25 n 0.17760816 Node 178.50567
rms res. 1".46 (M-P) 1914-1987 e 0.1200286 Incl. 14.35105

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(791) Ani Obs. 73 M 4.39538 Peri. 203.29410
H 9.25 G 0.15 Opp. 21 n 0.17919481 Node 130.18084
rms res. 1".62 (M-P) 1948-1989 e 0.2004571 Incl. 16.38812

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(796) Sarita Obs. 41 M 74.39410 Peri. 329.24746
H 9.12 G 0.15 Opp. 18 n 0.23068342 Node 33.49597
rms res. 1".58 (M-P) 1914-1989 e 0.3224639 Incl. 19.07699

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(802) Epyaxa Obs. 41 M 316.08696 Peri. 115.50561
H 12.6 G 0.15 Opp. 9 n 0.30288448 Node 8.02925
rms res. 1".99 (M-P) 1915-1990 e 0.0789568 Incl. 5.20738

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(804) Hispania Obs. 83 M 264.77540 Peri. 343.76217
H 7.84 G 0.18 Opp. 21 n 0.20614883 Node 347.95685
rms res. 1".44 (M-P) 1924-1987 e 0.1397138 Incl. 15.38576

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(808) Merxia Obs. 99 M 265.70349 Peri. 272.76656
H 9.7 G 0.15 Opp. 27 n 0.21658033 Node 181.51363
rms res. 1".81 (M-P) 1901-1987 e 0.1276993 Incl. 4.71301

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(816) Juliana Obs. 42 M 235.39754 Peri. 23.05686
H 10.0 G 0.15 Opp. 17 n 0.18904345 Node 128.16637
rms res. 1".91 (M-P) 1916-1990 e 0.1032170 Incl. 14.29626

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(829) Academia Obs. 43 M 61.30563 Peri. 40.26231
H 10.7 G 0.15 Opp. 20 n 0.23786101 Node 352.90066
rms res. 1".52 (M-P) 1914-1987 e 0.0983357 Incl. 8.31420

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(832) Karin Obs. 64 M 211.92007 Peri. 120.80552
H 11.18 G 0.15 Opp. 21 n 0.20342058 Node 255.02890
rms res. 2".20 (M-P) 1902-1991 e 0.0814632 Incl. 1.00004

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(845) Naema Obs. 75 M 74.46605 Peri. 291.32972
H 9.7 G 0.15 Opp. 27 n 0.19567689 Node 43.56911
rms res. 2".34 (M-P) 1916-1990 e 0.0686308 Incl. 12.63077

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(854) Frostia Obs. 61 M 270.10367 Peri. 82.96004
H 12.1 G 0.15 Opp. 16 n 0.27036399 Node 191.04300
rms res. 1".31 (M-P) 1942-1990 e 0.1749442 Incl. 6.08342

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(859) Bouzareah Obs. 35 M 37.44598 Peri. 7.90002
H 9.6 G 0.15 Opp. 15 n 0.17017332 Node 36.30451
rms res. 1".90 (M-P) 1918-1989 e 0.1068432 Incl. 13.60565

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(861) Aida Obs. 80 M 359.49880 Peri. 199.81491
H 9.6 G 0.15 Opp. 28 n 0.17699117 Node 115.29459
rms res. 1".61 (M-P) 1906-1988 e 0.1002036 Incl. 8.05734

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(862) Franzia Obs. 56 M 73.18238 Peri. 119.98355
H 10.6 G 0.15 Opp. 17 n 0.20983205 Node 300.50988
rms res. 1".51 (M-P) 1903-1990 e 0.0804120 Incl. 13.88977

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(877) Walkure Obs. 70 M 178.49912 Peri. 276.33647
H 10.71 G 0.15 Opp. 25 n 0.25141648 Node 116.50897
rms res. 2".06 (M-P) 1921-1991 e 0.1599563 Incl. 4.25840

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(881) Athene Obs. 39 M 260.32457 Peri. 41.15600
H 11.6 G 0.15 Opp. 8 n 0.23340079 Node 277.49596
rms res. 1".24 (M-P) 1938-1986 e 0.2077556 Incl. 14.20046

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(882) Swetlana Obs. 65 M 139.08084 Peri. 125.40282
H 10.5 G 0.15 Opp. 14 n 0.17602381 Node 257.43438
rms res. 1".54 (M-P) 1917-1989 e 0.2510336 Incl. 6.07219

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(913) Otila Obs. 59 M 123.64034 Peri. 188.40837
H 11.9 G 0.15 Opp. 19 n 0.30261528 Node 95.14150
rms res. 2".32 (M-P) 1909-1990 e 0.1708848 Incl. 5.80685

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(916) America Obs. 18 M 21.70026 Peri. 40.69405
H 11.2 G 0.15 Opp. 13 n 0.27112032 Node 330.13441
rms res. 1".99 (M-P) 1924-1986 e 0.2365862 Incl. 11.13050

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(919) Ilsebill Obs. 66 M 359.49912 Peri. 153.47511
H 11.3 G 0.15 Opp. 18 n 0.21354486 Node 230.30046
rms res. 1".69 (M-P) 1918-1987 e 0.0857760 Incl. 8.15447

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(925) Alphonsina Obs. 150 M 98.56947 Peri. 199.53546
H 8.33 G 0.15 Opp. 25 n 0.22227567 Node 299.94482
rms res. 1".43 (M-P) 1902-1991 e 0.0813512 Incl. 21.11136

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(938) Chlosinde Obs. 68 M 266.99020 Peri. 228.43818
H 10.8 G 0.15 Opp. 17 n 0.17572282 Node 119.25109
rms res. 1".46 (M-P) 1920-1989 e 0.1883189 Incl. 2.66510

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(944) Hidalgo Obs. 210 M 31.60662 Peri. 57.34938
H 10.77 G 0.15 Opp. 14 n 0.06986753 Node 21.65448
rms res. 1".24 (M-P) 1920-1991 e 0.6576901 Incl. 42.46306

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(960) Birgit Obs. 59 M 22.09150 Peri. 87.46670
H 12.9 G 0.15 Opp. 17 n 0.29236732 Node 249.55227
rms res. 2".19 (M-P) 1921-1985 e 0.1661244 Incl. 3.02146

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(967) Helionape Obs. 49 M 187.12727 Peri. 231.26963
H 12.1 G 0.15 Opp. 11 n 0.29683243 Node 82.60211
rms res. 1".56 (M-P) 1940-1989 e 0.1686346 Incl. 5.41683

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(983) Gunila Obs. 49 M 213.53310 Peri. 352.37907
H 9.58 G 0.15 Opp. 22 n 0.17588806 Node 251.15060
rms res. 1".58 (M-P) 1922-1986 e 0.1002531 Incl. 14.85564

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(984) Gretia Obs. 107 M 294.85611 Peri. 54.69006
H 9.03 G 0.15 Opp. 26 n 0.21006854 Node 314.74673
rms res. 1".61 (M-P) 1915-1990 e 0.1974478 Incl. 9.11957

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(985) Rosina Obs. 26 M 13.78755 Peri. 58.76851
H 12.7 G 0.15 Opp. 8 n 0.28267996 Node 290.84169
rms res. 1".59 (M-P) 1922-1987 e 0.2779089 Incl. 4.06615

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1002) Olbersia Obs. 57 M 276.55577 Peri. 355.26410
H 11.1 G 0.15 Opp. 17 n 0.21189306 Node 344.17039
rms res. 1".77 (M-P) 1951-1989 e 0.1534362 Incl. 10.77651

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1007) Pawlowia Obs. 100 M 150.25790 Peri. 76.76301
H 11.5 G 0.15 Opp. 21 n 0.22092325 Node 307.82203
rms res. 1".54 (M-P) 1923-1989 e 0.1093970 Incl. 2.54290

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1011) Laodamia Obs. 100 M 159.03696 Peri. 353.18075
H 12.74 G 0.15 Opp. 17 n 0.26583218 Node 132.78814
rms res. 1".26 (M-P) 1939-1989 e 0.3470525 Incl. 5.47565

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1013) Tombecka Obs. 52 M 193.32757 Peri. 98.14148
H 10.12 G 0.15 Opp. 16 n 0.22412354 Node 27.87620
rms res. 1".79 (M-P) 1905-1984 e 0.2094112 Incl. 11.88687

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1014) Semphyra Obs. 61 M 201.35179 Peri. 231.62858
H 12.1 G 0.15 Opp. 16 n 0.20972879 Node 252.44579
rms res. 1".61 (M-P) 1924-1990 e 0.1981002 Incl. 2.27214

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1019) Strackea Obs. 40 M 199.95749 Peri. 121.80359
H 12.63 G 0.15 Opp. 15 n 0.37296713 Node 144.55491
rms res. 1".76 (M-P) 1924-1988 e 0.0714544 Incl. 26.97917

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1020) Arcadia Obs. 75 M 188.73840 Peri. 39.36104
H 11.9 G 0.15 Opp. 9 n 0.21151145 Node 181.07511
rms res. 1".38 (M-P) 1924-1986 e 0.0425593 Incl. 4.04653

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1022) Olympiada Obs. 54 M 198.56593 Peri. 125.05612
H 10.5 G 0.15 Opp. 18 n 0.20998758 Node 112.25767
rms res. 1".66 (M-P) 1910-1990 e 0.1759941 Incl. 21.06303

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1036) Ganymed Obs. 352 M 210.14190 Peri. 132.02330
H 9.45 G 0.30 Opp. 29 n 0.22662867 Node 215.91198
rms res. 0".99 (M-P) 1941-1989 e 0.5374570 Incl. 26.53741

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1037) Davidweilla Obs. 24 M 14.91956 Peri. 169.01865
H 13.6 G 0.15 Opp. 9 n 0.29111353 Node 200.92113
rms res. 1".96 (M-P) 1924-1988 e 0.1915809 Incl. 5.89362

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1050) Meta Obs. 44 M 215.45060 Peri. 66.01698
H 12.0 G 0.15 Opp. 12 n 0.23191760 Node 342.61692
rms res. 2".34 (M-P) 1908-1989 e 0.1776892 Incl. 12.51751

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1051) Merope Obs. 62 M 228.89277 Peri. 144.92106
H 9.9 G 0.15 Opp. 15 n 0.17020029 Node 181.35108
rms res. 1".54 (M-P) 1925-1982 e 0.0920935 Incl. 23.37800

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1058) Grubba Obs. 68 M 183.95637 Peri. 93.61372
H 11.98 G 0.15 Opp. 15 n 0.30276524 Node 222.14589
rms res. 1".73 (M-P) 1906-1989 e 0.1876510 Incl. 3.68670

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1059) Mussorgskia Obs. 52 M 221.21725 Peri. 87.19945
H 10.7 G 0.15 Opp. 18 n 0.22924906 Node 200.76897
rms res. 2".17 (M-P) 1920-1990 e 0.1842232 Incl. 10.10133

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1062) Ljuba Obs. 92 M 249.77739 Peri. 94.00537
H 9.85 G 0.15 Opp. 24 n 0.18903409 Node 342.05101
rms res. 1".45 (M-P) 1927-1990 e 0.0700070 Incl. 5.60507

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1065) Amundsenia Obs. 39 M 58.19405 Peri. 353.06997
H 13.2 G 0.15 Opp. 11 n 0.27201879 Node 330.58625
rms res. 1".87 (M-P) 1926-1990 e 0.2995273 Incl. 8.38776

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1070) Tunica Obs. 60 M 153.20718 Peri. 175.93697
H 10.6 G 0.15 Opp. 10 n 0.16988911 Node 165.79426
rms res. 1".09 (M-P) 1926-1987 e 0.0854310 Incl. 17.03276

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1077) Campanula Obs. 64 M 287.63864 Peri. 13.43302
H 12.2 G 0.15 Opp. 11 n 0.26646150 Node 346.57081
rms res. 1".88 (M-P) 1926-1989 e 0.1990714 Incl. 5.40816

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1082) Pirola Obs. 99 M 285.03309 Peri. 189.96559
H 10.41 G 0.15 Opp. 27 n 0.17831613 Node 148.10332
rms res. 1".70 (M-P) 1927-1990 e 0.1759535 Incl. 1.84790

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1086) Nata Obs. 87 M 50.02069 Peri. 172.40581
H 9.3 G 0.15 Opp. 25 n 0.17500594 Node 313.61162
rms res. 1".39 (M-P) 1928-1989 e 0.0550298 Incl. 8.35221

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1090) Sumida Obs. 75 M 290.28277 Peri. 337.22824
H 12.49 G 0.15 Opp. 9 n 0.27208236 Node 148.22593
rms res. 1".61 (M-P) 1928-1986 e 0.2218293 Incl. 21.52180

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1091) Spiraea Obs. 68 M 117.72078 Peri. 13.29100
H 10.6 G 0.15 Opp. 12 n 0.15559441 Node 80.68560
rms res. 1".62 (M-P) 1928-1991 e 0.0520094 Incl. 1.15768

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1092) Lilium Obs. 63 M 168.40674 Peri. 313.75744
H 10.82 G 0.15 Opp. 20 n 0.19962373 Node 308.25251
rms res. 1".81 (M-P) 1924-1990 e 0.0842266 Incl. 5.39668

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1094) Siberia Obs. 55 M 149.47867 Peri. 308.78726
H 11.9 G 0.15 Opp. 18 n 0.24289401 Node 149.33573
rms res. 2".41 (M-P) 1935-1989 e 0.1361210 Incl. 13.99946

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1096) Reunerta Obs. 46 M 65.34291 Peri. 247.21081
H 10.3 G 0.15 Opp. 21 n 0.23488305 Node 81.61235
rms res. 2".28 (M-P) 1928-1985 e 0.1913996 Incl. 9.48624

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1097) Vicia Obs. 87 M 321.14093 Peri. 176.54231
H 11.7 G 0.15 Opp. 19 n 0.22995199 Node 133.87468
rms res. 1".38 (M-P) 1907-1989 e 0.2973248 Incl. 1.52815

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1100) Arnica Obs. 140 M 12.18123 Peri. 21.25859
H 11.0 G 0.15 Opp. 30 n 0.19977264 Node 304.99365
rms res. 1".70 (M-P) 1918-1990 e 0.0702966 Incl. 1.03749

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1101) Clematis Obs. 27 M 22.41381 Peri. 116.04598
H 10.1 G 0.15 Opp. 9 n 0.16924790 Node 202.33256
rms res. 1".66 (M-P) 1928-1986 e 0.0746913 Incl. 21.34904

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1104) Syringa Obs. 49 M 340.14373 Peri. 276.14088
H 12.5 G 0.15 Opp. 7 n 0.23144376 Node 129.42524
rms res. 1".28 (M-P) 1929-1989 e 0.3476378 Incl. 6.41725

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1107) Lictoria Obs. 63 M 114.52614 Peri. 356.01768
H 9.1 G 0.15 Opp. 25 n 0.17392733 Node 111.08444
rms res. 1".90 (M-P) 1909-1991 e 0.1291114 Incl. 7.06663

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1113) Katja Obs. 63 M 123.22875 Peri. 122.22470
H 9.4 G 0.15 Opp. 21 n 0.18004272 Node 324.87489
rms res. 1".81 (M-P) 1909-1989 e 0.1460757 Incl. 13.30047

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1115) Sabauda Obs. 44 M 208.48059 Peri. 51.10814
H 9.3 G 0.15 Opp. 19 n 0.18011794 Node 72.79163
rms res. 1".81 (M-P) 1929-1985 e 0.1673128 Incl. 15.36312

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1120) Cannonia Obs. 73 M 106.45126 Peri. 219.16474
H 12.8 G 0.15 Opp. 17 n 0.29866371 Node 158.84760
rms res. 1".98 (M-P) 1943-1990 e 0.1550282 Incl. 4.04530

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1123) Shapleya Obs. 55 M 55.97730 Peri. 316.86155
H 11.7 G 0.15 Opp. 13 n 0.29697528 Node 80.13421
rms res. 1".19 (M-P) 1940-1989 e 0.1562300 Incl. 6.41897

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1126) Otero Obs. 53 M 164.04356 Peri. 135.55259
H 12.1 G 0.15 Opp. 17 n 0.28778300 Node 1.33164
rms res. 2".24 (M-P) 1926-1989 e 0.1469988 Incl. 6.50921

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1129) Neujmina Obs. 62 M 285.71000 Peri. 133.92536
H 10.20 G 0.15 Opp. 19 n 0.18766794 Node 269.98170
rms res. 2".50 (M-P) 1926-1987 e 0.0872379 Incl. 8.61593

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1132) Hollandia Obs. 58 M 120.99887 Peri. 268.75087
H 10.6 G 0.15 Opp. 18 n 0.22403714 Node 30.47981
rms res. 1".83 (M-P) 1929-1989 e 0.2751911 Incl. 7.24147

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1133) Lugduna Obs. 59 M 142.25951 Peri. 306.24739
H 12.22 G 0.15 Opp. 14 n 0.30477935 Node 58.46264
rms res. 1".51 (M-P) 1929-1984 e 0.1869221 Incl. 5.37618

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1135) Colchis Obs. 82 M 165.27603 Peri. 3.12979
H 10.2 G 0.15 Opp. 25 n 0.22610011 Node 351.18048
rms res. 1".60 (M-P) 1929-1990 e 0.1137640 Incl. 4.55804

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1137) Raissa Obs. 98 M 249.81267 Peri. 277.28897
H 10.74 G 0.15 Opp. 24 n 0.26125582 Node 78.58765
rms res. 1".91 (M-P) 1908-1984 e 0.0968822 Incl. 4.32366

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1139) Atami Obs. 95 M 14.69207 Peri. 206.26408
H 12.51 G 0.15 Opp. 16 n 0.36267833 Node 213.53657
rms res. 1".63 (M-P) 1929-1986 e 0.2551960 Incl. 13.08770

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1141) Bohmia Obs. 31 M 155.20069 Peri. 275.65447
H 13.9 G 0.15 Opp. 9 n 0.28791677 Node 105.74057
rms res. 1".96 (M-P) 1930-1990 e 0.1648952 Incl. 4.27382

Epoch 1992 June 27.0 TT = JDT 2448800.5 Filenko
(1145) Robelmonte Obs. 76 M 185.18940 Peri. 267.94380
H 11.1 G 0.15 Opp. 25 n 0.26114344 Node 347.02974
rms res. 2".10 (M-P) 1931-1987 e 0.1171487 Incl. 6.22414

Epoch 1992 June 27.0 TT = JDT 2448800.5 Sumzina
(1166) Sakuntala Obs. 33 M 94.55965 Peri. 189.00990
H 11.3 G 0.15 Opp. 16 n 0.24378018 Node 106.95794
rms res. 1".61 (M-P) 1930-1989 e 0.2050279 Incl. 18.85128

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
(2346) Lilio Obs. 32 M 114.40726 Peri. 105.17091
H 11.9 G 0.15 Opp. 12 n 0.26999245 Node 245.17982
rms res. 0".83 (M-P) 1929-1991 e 0.1560632 Incl. 5.92058

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(3266) 1978 PA Obs. 40 M 67.03641 Peri. 255.68858
H 13.6 G 0.15 Opp. 6 n 0.37392025 Node 110.79133
rms res. 0".99 (M-C) 1978-1991 e 0.1102101 Incl. 26.37775

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
(3577) Putilin Obs. 45 M 243.24739 Peri. 180.94178
H 10.8 G 0.15 Opp. 9 n 0.12481139 Node 280.95313
rms res. 0".95 (M-C) 1961-1991 e 0.1882726 Incl. 3.74070

(5013)* 1964 VT1 = 1980 EQ1 = 1982 SB5
Discovered 1964 Nov. 9 at the Purple Mountain Observatory.
Id. B. G. Marsden (MPC 11739)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 11.54871	(2000.0)	P	Q	
n 0.21473198	Peri. 12.43807	+0.52843450	-0.84771144	
a 2.7618806	Node 45.68397	+0.77327133	+0.45809404	
e 0.0658528	Incl. 3.70901	+0.35044033	+0.26746059	
P 4.59	H 12.4	G 0.15		

Residuals in seconds of arc

641109	330	1.3+	1.3-	821107	808	1.4-	1.0+	910913	801	0.2-	0.4+
641127	330	(4.0-	0.4+)	821107	808	0.6-	1.1+	910913	801	0.3-	0.4+
641223	330	1.0-	0.3+	821109	808	0.8+	0.3+	910913	675	0.3-	0.9-
641225	330	0.0	0.5-	821109	808	0.2-	0.9+	910913	675	0.1+	0.1-
650101	330	0.3-	0.7+	910902	413	1.2+	0.1+	910916	675	0.1+	0.5-
800315	095	(1.9-	3.8-)	910903	413	0.9-	0.3+	910916	675	0.1+	0.8-
800408	675	0.3-	0.6-	910903	413	1.1-	0.5+	910917	675	0.6-	0.4+
800409	675	0.1-	0.4-	910909	801	0.1+	0.2+	910917	675	0.1-	0.7+
820926	095	0.4+	0.5-	910909	801	0.1-	0.1+	911008	801	0.2+	0.2+

911008 801 0.1+ 0.2+ 911107 675 0.6+ 0.9- 911109 675 1.2+ 1.4-
911009 801 0.1- 0.2+ 911107 675 0.5+ 1.6-
911009 801 0.1- 0.2+ 911109 675 1.2+ 1.2-

(5014)* 1974 ST = 1980 VE = 1989 EJ9

Discovered 1974 Sept. 19 by L. I. Chernykh at the Crimean Astrophysical Observatory.

Id. B. G. Marsden (MPC 7838, 17954)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	94.29455	(2000.0)	P	Q
n	0.17488627	Peri. 192.03862	+0.45598245	+0.88910028
a	3.1668846	Node 105.10054	-0.81309422	+0.43433434
e	0.2293575	Incl. 2.36010	-0.36188091	+0.14441044
P	5.64	H 12.2	G 0.15	

Residuals in seconds of arc

740919 095 (2.8- 3.7-) 850815 688 (2.2+ 4.1+) 910913 675 0.1- 0.7-
740921 808 1.5- 1.5+ 850918 801 0.2- 0.9+ 910916 675 0.2+ 1.1-
740921 808 0.9- 1.5+ 890305 033 0.7- 0.3+ 910916 675 0.2+ 1.4-
740921 095 (0.3+ 5.0-) 890305 033 0.6- 0.6- 911008 801 0.3+ 0.6+
741010 808 0.8- 0.7+ 900517 095 0.6- 0.3- 911008 801 0.3+ 0.4+
741010 808 0.2+ 0.1- 900517 095 1.4- 0.5- 911009 801 0.1+ 0.1+
741019 808 0.2+ 0.3- 900523 095 1.9+ 0.8- 911009 801 0.6- 0.2+
741019 808 0.2+ 0.6+ 900523 095 0.1+ 1.4- 911106 801 1.0+ 0.9-
801008 095 0.9+ 1.5+ 910902 413 0.6+ 0.5+ 911106 801 0.8+ 1.1-
801106 801 1.1+ 0.7- 910903 413 1.6- 0.0 911107 675 0.0 0.7-
840329 095 (5.4+ 2.1-) 910909 801 0.2- 0.1+ 911107 675 0.8+ 1.2-
840404 095 (5.0+ 1.5-) 910909 801 0.2- 0.0 911109 675 0.5+ 1.2-
850815 688 (1.6+ 3.9+) 910913 675 0.3+ 1.7- 911109 675 0.4+ 0.6-

(5015)* 1975 VP = 1975 VH10 = 1978 PZ1 = 1980 DE5 = 1981 NS = 1983 CQ4 = 1985 YR

Discovered 1975 Nov. 1 by T. M. Smirnova at the Crimean Astrophysical Observatory.

Id. C. M. Bardwell (MPC 13309), H. Oishi (JAM 1207)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

M	53.04311	(2000.0)	P	Q
n	0.30731739	Peri. 262.10921	+0.67553137	-0.73658047
a	2.1747598	Node 145.32041	+0.69743393	+0.62368788
e	0.1243832	Incl. 3.35166	+0.23925567	+0.26165365
P	3.21	H 14.0	G 0.15	

Residuals in seconds of arc

750930 675 1.6+ 0.1- 851214 675(32.1+ 1.5-) 910913 801 0.5+ 0.6+
751001 675 0.0 2.1+ 851214 675(36.7+ 1.2-) 910913 675 0.6- 0.4-
751002 675 0.9+ 0.2+ 851218 688 2.3- 0.2+ 910913 675 1.2- 0.1-
751101 095 (1.6- 5.9-) 851218 688 0.7- 1.5- 910914 675 0.4- 0.4+
751102 095 (5.2+ 3.7+) 881107 877 (3.1+ 5.9+)Y 910914 675 0.0 1.2-
751105 095 (4.6+ 1.3-) 881107 877 (5.5+ 6.9+)Y 910914 675 1.1- 0.9+
751106 095 0.1- 1.0- 881206 801 2.1+ 1.0+ 910914 675 1.1+ 0.1-
751107 095 2.9- 0.3- 881210 293 0.3- 0.1+ 910916 675 0.2- 0.7-
780808 095 0.3- 0.6+ 910911 675 1.3- 0.8- 910916 675 0.4+ 1.0-
800221 095 0.4+ 1.4- 910911 675 1.2- 0.3+ 911008 801 0.5+ 0.3-
810702 805 0.2+ 1.9- 910912 675 0.6+ 0.1- 911008 801 0.5+ 0.3-
810702 805 0.6- 0.5+ 910912 675 1.2+ 0.1+ 911009 801 0.3+ 0.1+
830214 381 0.9+ 0.5+ 910913 801 1.2+ 0.3+ 911009 801 0.2+ 0.1+

(5016)* 1976 GX3 = 1987 QB10 = 1990 KP2

Discovered 1976 Apr. 2 by N. S. Chernykh at the Crimean Astrophysical Observatory.

Id. I. A. Filippova (MPC 15239), G. V. Williams

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 179.23684 (2000.0) P Q
n 0.28343845 Peri. 97.11283 +0.25136739 +0.96785666
a 2.2952511 Node 187.46099 -0.91119224 +0.23376224
e 0.1324963 Incl. 3.63872 -0.32640947 +0.09278307
P 3.48 H 12.9 G 0.15
Residuals in seconds of arc

760402 095	0.6+	0.2+	900329 801	0.1+	0.3-	911011 801	0.1+	0.0
760405 095	0.1+	0.4+	900329 801	0.2+	1.1-	911011 801	0.1-	0.1+
760502 095	0.7-	0.7-	900424 801	0.0	0.6-	911103 801	0.2-	0.2+
870826 095	0.0	2.0+	900424 801	0.1+	0.5-	911103 801	0.1-	0.3+
870901 095	(5.1-	0.7-)	900517 095	(5.1-	1.5+)	911106 801	1.0+	0.8-
870925 095	0.3+	2.6-	900517 095	(3.1-	1.6-)	911106 801	0.7+	1.0-
900327 801	0.2+	0.5-	900517 046	1.2-	0.4+	911109 675	0.4-	1.4-
900327 801	0.0	0.3-	900517 046	0.1+	0.9-	911109 675	0.5-	0.7-

(5017)* 1977 DS2 = 1988 BV3
Discovered 1977 Feb. 18 by H. Kosai and K. Hurukawa at the Kiso station of the Tokyo Astronomical Observatory.
Id. C. M. Bardwell (MPC 13463)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell
M 28.64779 (2000.0) P Q
n 0.17647722 Peri. 241.06402 +0.90013028 -0.40018702
a 3.1478228 Node 141.78916 +0.42826672 +0.88523628
e 0.0830688 Incl. 16.15376 -0.07970624 +0.23708033
P 5.58 H 12.3 G 0.15
Residuals in seconds of arc

770218 381	0.1-	0.5-	880118 809	0.5+	0.5-	880128 809	0.7+	0.9-
770218 381	1.2-	0.7+	880118 809	0.6+	0.4-	880128 809	0.3+	0.8-
770218 381	0.7-	2.0+	880119 809	0.3+	0.1+	880129 809	0.2-	0.9-
770218 381	1.8+	0.4+	880119 809	0.6+	0.5+	900625 801	0.1-	0.0
770219 381	0.3+	0.2+	880121 809	0.7-	0.2-	900625 801	0.4-	0.3-
770219 381	0.0	0.7+	880121 809	0.0	0.4-	900626 801	0.4-	0.5-
770219 381	0.1+	0.5+	880123 809	1.0-	0.1-	900720 801	0.2+	0.6-
770219 381	0.8+	0.0	880123 809	0.7-	0.1-	900720 801	0.1+	1.7-
770312 381	0.0	1.0-	880125 809	0.6-	0.0	910812 801	0.2-	1.3-
770312 381	0.5-	1.0-	880125 809	0.1-	0.4-	910812 801	0.3-	1.1-
770315 381	0.0	0.5-	880125 809	0.3+	0.7-	911009 801	0.5+	0.2-
770315 381	0.2-	0.1-	880126 809	0.1-	0.4-	911009 801	0.5+	0.2-
880118 809	0.1+	0.5-	880126 809	0.1-	0.5-			

(5018)* 1977 DY8 = 1978 NJ5
Discovered 1977 Feb. 19 by H. Kosai and K. Hurukawa at the Kiso station of the Tokyo Astronomical Observatory.
Id. S. Nakano (MPC 12940)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 67.50158 (2000.0) P Q
n 0.31086122 Peri. 351.88778 +0.92196731 -0.38606138
a 2.1582000 Node 30.87781 +0.35856822 +0.82118798
e 0.0592137 Incl. 3.41192 +0.14630484 +0.42024625
P 3.17 H 14.2 G 0.15
Residuals in seconds of arc

770219 381	0.6+	0.3+	780711 675	0.2+	0.4-	881105 046	0.3-	1.0-
770219 381	1.1-	0.6+	780713 675	(13.3-	3.1-)	881105 046	0.4+	0.4+
770312 381	0.2-	0.3-	881006 801	(7.0-	0.6+)	881110 046	0.7+	1.3+
770312 381	1.2-	0.7-	881104 046	(4.8-	0.4-)	881110 046	0.3-	0.9-
770315 381	1.7+	1.6-	881104 046	0.7-	2.0-	881111 801	0.5-	1.4+
770315 381	0.7-	0.8-	881105 888	(0.5+	6.0-)	881206 801	1.6-	2.1+
780710 675	(0.4+	5.3-)	881105 888	2.5+	2.1-	910902 413	0.6-	0.9+

910902	413	1.1-	0.1+	910915	675	0.8+	1.1-	911009	801	0.3-	0.6-
910909	801	0.1+	0.3+	910915	675	0.4-	0.1-	911107	675	0.6-	0.2+
910909	801	0.1-	0.0	910917	675	0.2+	0.6-	911107	675	0.2-	1.3+
910910	675	1.7+	0.6-	910917	675	1.2+	0.9-	911109	675	0.5-	0.1-
910910	675	0.6-	1.3-	910917	675	0.7+	0.2+	911109	675	0.9-	1.7+
910913	801	0.0	0.3+	910917	675	0.7+	0.9+				
910913	801	0.0	0.3+	911009	801	0.4-	1.0-				

(5019)* 1979 MS6 = 1984 YO3 = 1987 SM19

Discovered 1979 June 25 by E. F. Helin and S. J. Bus at Siding Spring.
Id. S. Nakano (MPC 15406), D. W. E. Green (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5			Green
M 292.92572	(2000.0)	P	Q
n 0.26102583	Peri. 271.64072	-0.90808714	-0.40961363
a 2.4248249	Node 244.18632	+0.41231781	-0.83808004
e 0.0757504	Incl. 5.55526	+0.07329242	-0.36033113
P 3.78	H 13.0	G 0.15	

Residuals in seconds of arc

790623	413	2.4+	0.9-	870917	095	1.5-	1.6+	910915	675	0.7+	0.2-
790624	413	0.3+	0.6-	870923	095	0.2+	0.6+	911008	801	0.0	0.1+
790625	413	0.9+	0.3-	900625	801	0.5-	0.0	911008	801	0.0	0.3+
790629	413	0.5+	0.1-	900625	801	0.5+	0.2-	911009	801	0.2+	0.3+
790724	413	0.3-	0.5-	910912	801	0.3+	0.4-	911009	801	0.3+	0.2+
790726	675	0.0	0.4+	910912	801	0.3+	0.5-	911103	675	0.4+	1.0+
790726	675	0.3-	0.9+	910913	801	0.1-	0.1+	911103	675	0.8+	0.9-
790727	675	1.6-	0.4+	910913	801	0.2-	0.2+	911105	675	0.3-	0.1+
790728	413	1.2-	0.4-	910913	675	0.2+	1.1-	911105	675	2.1-	0.2-
790822	675	0.1-	1.1+	910913	675	0.5+	1.5-				
841227	095	(38.6-	6.2-)	910915	675	0.1+	0.4-				

(5020)* 1981 EX19 = 1963 UH

Discovered 1981 Mar. 2 by S. J. Bus at Siding Spring in the course of the U.K. Schmidt-Caltech Asteroid Survey.
Id. C. M. Bardwell (MPC 10040), K. Hurukawa (JAM 1901)

Epoch 1992 June 27.0 TT = JDT 2448800.5			Bardwell
M 63.93125	(2000.0)	P	Q
n 0.31176886	Peri. 130.96703	+0.85278994	+0.52222227
a 2.1540092	Node 197.55396	-0.48471500	+0.78733608
e 0.2130080	Incl. 1.09486	-0.19442398	+0.32769771
P 3.16	H 14.7	G 0.15	

Residuals in seconds of arc

631018	760	0.0	1.2+	810408	413	1.4-	2.1+	910512	809	1.4-	0.8-
631018	760	0.7-	0.7-	810408	413	0.9+	0.1-	910512	688	1.6+	1.0+
810209	413	0.9-	0.4-	810411	413	(3.2-	0.4+)	910512	688	1.7+	0.9+
810213	413	0.1+	0.5+	810411	413	2.0+	2.6-	910513	688	1.8+	1.0+
810302	413	2.1-	1.2+	810502	413	0.5+	0.5+	910513	688	1.6+	0.9+
810302	413	(4.1+	1.9-)	810503	413	0.7+	0.0	910514	801	0.2-	0.5+
810303	413	1.5-	0.6-	850814	688	1.8+	2.1+	910514	801	0.3-	0.5+
810303	413	1.0+	0.8-	850814	688	1.0+	0.1+	910516	801	0.4-	0.5+
810307	413	0.3-	0.2+	850912	688	0.0	1.8-	910516	801	0.2-	0.4+
810307	413	2.6+	0.9-	850912	688	1.8-	0.5-	910517	809	0.8-	0.7-
810311	413	1.1-	0.8+	851012	801	(4.2+	3.8+)	910517	809	1.5-	0.7-
810311	413	0.4-	0.4-	891231	413	0.6-	1.0+	910517	809	0.4-	0.9-
810316	413	1.6+	0.4-	910512	809	1.0-	0.7-	910716	801	0.1+	0.2+
810329	413	0.1-	0.6-	910512	809	1.7-	1.1-	910716	801	0.2+	0.1+

(5021)* 1982 VK12 = 1953 UZ = 1987 QP7

Discovered 1982 Nov. 13 by L. G. Karachkina at the Crimean Astrophysical Observatory.

Id. D. W. E. Green (MPC 13595, unpublished), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Green

M	253.34651	(2000.0)	P	Q
n	0.17335683	Peri. 323.10486	+0.39606890	-0.91735221
a	3.1854839	Node 103.53175	+0.85195495	+0.35091796
e	0.1542710	Incl. 2.35376	+0.34249408	+0.18794015
P	5.69	H 12.1	G 0.15	

Residuals in seconds of arc

531029	020	(15.3+	50.1-)	881208	801	0.5+	0.2-	890127	046	(4.3+	1.5-)
821113	095	2.8-	1.8-	890103	046	0.2+	1.4+	890128	046	(5.2+	1.2-)
821222	095	0.2+	2.2+	890103	046	2.0-	1.0-	890128	046	(3.9+	2.2-)
830106	095	2.1+	2.2+	890104	046	1.6-	0.8-	910518	809	0.6-	1.0-
870822	033	0.5+	1.9-	890104	046	1.9-	0.1+	910518	809	1.2-	2.0-
870822	033	0.1-	2.1-	890106	801	1.0-	0.2-	910518	809	1.1-	2.0-
870823	033	0.1-	1.7-	890109	046	0.4+	0.9-	910606	809	0.5+	1.2+
870831	095	1.4-	0.4-	890109	046	0.8-	0.4-	910606	809	0.5+	1.2+
870904	095	0.0	0.0	890112	046	(5.6-	1.1+)	910606	809	0.0	0.9+
870924	095	0.5+	0.5+	890112	046	(3.7-	0.8+)	910608	809	0.1+	1.1-
870927	095	1.6+	1.8+	890126	046	2.9+	1.4-	910608	809	0.8+	0.6-
871022	413	0.7-	0.5-	890126	046	2.8+	2.4-	910608	809	0.4+	0.1-
871022	413	1.0+	0.6+	890127	046	(4.5+	1.6-)				

(5022)* 1984 HE1 = 1969 RZ = 1986 TO4
Discovered 1984 Apr. 23 by W. Ferreri and V. Zappala at the European Southern Observatory.
Id. D. W. E. Green (MPC 11516)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Green

M	80.89373	(2000.0)	P	Q
n	0.17669635	Peri. 74.15880	+0.44976934	+0.88336031
a	3.1452198	Node 223.36138	-0.87520625	+0.40647119
e	0.0930961	Incl. 11.07075	-0.17810550	+0.23335751
P	5.58	H 11.8	G 0.15	

Residuals in seconds of arc

690910	095	1.2+	4.7-	840430	809	0.8+	0.1-	900516	095	1.3-	1.6-
840403	095	2.0+	1.5-	840504	809	0.0	0.1+	900517	046	0.2-	0.6-
840423	809	0.2+	0.5+	840504	809	0.3-	0.4-	900517	046	0.4+	2.1+
840423	809	0.2-	0.4+	840507	809	0.8+	0.1-	910712	675	0.9-	1.9-
840423	809	0.6-	0.6+	840507	809	0.1+	0.1-	910712	675	1.5-	0.8-
840424	809	0.1-	0.5+	840507	809	0.8+	0.7-	910716	801	0.7+	0.9+
840424	809	0.8-	0.9+	860909	095	0.3-	0.4+	910716	801	0.6+	0.9+
840425	809	0.6-	0.1+	860912	095	0.7+	1.3+	910811	801	0.3+	1.0+
840425	809	0.9-	0.0	861009	033	0.4-	1.0+	910812	801	0.4+	1.1+
840427	809	0.2-	0.2-	861010	033	0.2+	1.2+	910812	801	0.4+	1.1+
840427	809	0.6-	0.5+	861128	801	1.7-	0.4-				
840430	809	0.7+	0.1-	861202	801	0.1+	0.2-				

(5023)* 1985 TG3
Discovered 1985 Oct. 11 by C. S. Shoemaker at Palomar.
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	182.53382	(2000.0)	P	Q
n	0.08195934	Peri. 85.15263	+0.81466112	-0.55776447
a	5.2489257	Node 308.65355	+0.41792845	+0.75451000
e	0.0501685	Incl. 11.73470	+0.40207346	+0.34585179
P	12.03	H 10.0	G 0.15	

Residuals in seconds of arc

850916	675	(2.6+	0.3-)	851013	675	2.5-	1.5+	871122	675	0.1+	0.0
850916	675	0.4+	1.7-	851013	675	0.8-	1.6+	871123	675	1.2-	1.0-
851011	675	(3.0-	0.5-)	851015	688	1.5+	1.0-	880116	801	0.7-	1.1+
851011	675	0.9+	0.8+	851015	688	0.0	0.0	880119	675	0.2+	0.4-

880120	675	0.7+	1.2-	890131	675	1.5+	0.8+	910309	675	1.4+	0.2-
890110	675	0.0	0.2+	900220	675	0.0	0.0	910414	675	0.2+	0.0
890111	675	0.5-	0.1+	900220	675	0.6+	0.4+	910414	675	1.0-	0.6+
890111	675	0.5-	1.4+	900326	675	1.0-	0.8+	910419	675	0.5-	0.4-
890130	675	0.6+	1.1-	900326	675	0.0	0.1-				
890131	675	0.5+	1.1-	910309	675	0.1+	0.0				

(5024)* 1985 VP = 1973 SL3
Discovered 1985 Nov. 14 by P. Jensen at Brorfelde.
Id. T. A. Vinogradova (MPC 14196)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 332.34264		(2000.0)	P	Q
n 0.17005327	Peri.	110.97312	-0.24929066	-0.96797028
a 3.2266069	Node	353.25043	+0.76740713	-0.17868443
e 0.0394358	Incl.	14.68505	+0.59071182	-0.17636729
P 5.80	H	11.4	G 0.15	

Residuals in seconds of arc

730923	095	0.1+	1.4-	900726	675	0.8-	1.0+	910930	399	0.1+	1.7+
730928	095	1.9+	1.8-	900726	675	0.4-	1.2+	911007	293	0.5-	1.1+
850919	095	0.2+	1.1+	900915	675	1.3+	1.2-	911007	293	1.9-	1.3-
850921	095	0.3-	0.4+	900915	675	1.4-	0.7+	911009	801	0.9+	0.4-
851018	095	0.6+	0.3-	910909	801	0.3-	0.5+	911009	801	0.7+	0.4-
851114	054	0.1+	0.7-	910909	801	0.2-	0.4+				
851115	054	0.1+	0.0	910930	399	0.6-	0.4+				

(5025)* 1986 TS6 = 1989 BX
Discovered 1986 Oct. 5 by M. Antal at Piwnice.
Id. C. M. Bardwell (MPC 14351)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

M 161.47633		(2000.0)	P	Q
n 0.08255239	Peri.	72.70302	+0.48680567	-0.87259526
a 5.2237566	Node	347.92448	+0.71119152	+0.42249962
e 0.0751533	Incl.	11.01520	+0.50717537	+0.24509506
P 11.94	H	9.9	G 0.15	

Residuals in seconds of arc

861005	092	0.2-	0.4+	890131	675	1.0-	0.9-	900316	809	0.1+	0.6+
861005	092	0.7+	0.1-	890202	675	0.1-	0.4-	900316	809	0.1+	0.7+
861009	092	0.1+	0.4-	900126	675	0.2+	0.6+	900317	809	1.0-	0.4+
861009	092	0.3+	0.0	900128	675	1.5-	1.0-	900317	809	0.9-	0.1+
861009	092	0.6+	0.3+	900302	809	1.4+	0.4+	900317	809	0.9-	0.2+
861010	092	2.0-	0.3+	900302	809	1.4+	0.3+	910211	801	0.0	0.5-
861010	092	0.7-	0.3-	900302	809	1.5+	0.1+	910211	801	0.1+	1.3+
861011	092	0.3+	0.4+	900303	809	0.3-	0.8-	910312	675	0.5+	0.1-
861012	092	0.8+	0.2-	900303	809	0.1-	0.8-	910312	675	0.8-	0.7-
890108	675	0.1-	0.9+	900303	809	0.0	0.7-				
890108	675	0.8+	0.1-	900316	809	0.4+	0.5+				

(5026)* 1987 QL1 = 1965 QE = 1976 QL = 1980 VA2
Discovered 1987 Aug. 22 by A. Mrkos at Klet.
Id. S. Nakano (MPC 15247)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 122.63754		(2000.0)	P	Q
n 0.26910304	Peri.	16.50876	+0.78397784	+0.61774837
a 2.3760577	Node	305.17802	-0.57771233	+0.68982399
e 0.2443702	Incl.	4.30564	-0.22721620	+0.37753121
P 3.66	H	13.2	G 0.15	

Residuals in seconds of arc

650827	330	0.1+	0.9+	760827	675	0.2+	0.2-	760830	675	(0.2-	3.5+)
760826	095	2.3-	1.5-	760828	675	0.1+	1.1+	801106	330	0.3+	1.2+

801110 330 1.0+ 1.4+ 870922 095 0.4+ 1.1+ 911007 801 0.3- 0.5-
870822 046 (5.2- 0.1+) 870925 095 0.9+ 0.8- 911010 801 0.0 0.4-
870822 046 (5.7- 0.3-) 910913 801 0.8- 0.3- 911010 801 0.1- 0.5-
870826 095 0.5+ 1.0- 910913 801 0.4- 0.5- 911108 801 0.0 0.2-
870901 095 0.2+ 0.6+ 911007 801 0.4- 0.3- 911108 801 0.0 0.4-

(5027)* 1988 BX1
Discovered 1988 Jan. 21 by C. S. Shoemaker at Palomar.
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 177.59588 (2000.0) P Q
n 0.08139381 Peri. 344.91804 +0.41453719 -0.75280024
a 5.2732108 Node 78.20683 +0.87963777 +0.18746060
e 0.0653441 Incl. 31.48991 +0.23323018 +0.63099154
P 12.11 H 9.4 G 0.15
Residuals in seconds of arc
880121 675 0.9+ 0.4- 880412 675 0.5+ 0.5- 900401 675 0.2- 1.5-
880123 675 0.7+ 2.2- 880413 801 1.5- 1.2+ 900420 675 0.6- 1.7-
880124 675 0.5+ 1.2- 880414 675 0.5+ 0.4- 900420 675 0.2+ 0.7-
880216 675 0.0 1.1+ 890110 675 0.1+ 0.4- 910414 675 1.0- 1.4-
880217 675 0.1- 1.2+ 890110 675 1.0+ 0.0 910414 675 0.4- 0.1+
880220 675 0.0 1.5+ 890111 675 0.5- 1.3+ 910416 675 0.1- 0.6+
880317 801 1.0- 1.5+ 890111 675 0.0 2.0+ 910416 675 1.8+ 0.0
880317 675 0.3- 1.1- 900330 675 2.3- 0.3+ 910513 675 0.2- 1.0+
880318 675 0.3- 1.5- 900330 675 1.0+ 0.4+ 910515 675 0.9+ 1.1+

(5028)* 1988 BY1 = 1985 US2
Discovered 1988 Jan. 23 by C. S. Shoemaker at Palomar.
Id. C. M. Bardwell (MPC 18628), G. V. Williams (ibid.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 181.35798 (2000.0) P Q
n 0.08236913 Peri. 10.77060 +0.58527761 -0.76969018
a 5.2315019 Node 44.04414 +0.71399533 +0.34018212
e 0.1301577 Incl. 21.51843 +0.38426655 +0.54023434
P 11.97 H 9.9 G 0.15
Residuals in seconds of arc
851017 010(16.0- 0.3-) 880414 675 0.3+ 0.4- 900422 675 0.1- 1.8-
851018 010(15.5- 2.9-) 890110 675 0.4- 0.2+ 910309 675 0.9- 0.4+
880123 675 0.4- 0.0 890110 675 0.1+ 0.2- 910312 675 0.5+ 0.9-
880124 675 0.1+ 1.6+ 890111 675 0.5+ 1.1+ 910312 675 1.6+ 1.1-
880216 675 0.6- 0.1- 890309 675 0.4+ 0.2- 910414 675 0.1+ 0.7+
880217 675 0.7- 0.9+ 890309 675 0.1- 0.5- 910414 675 1.5- 0.0
880220 675 1.2- 0.2- 900222 675 0.3+ 1.5+ 910416 675 0.6- 0.7-
880317 801 (1.1- 4.0+) 900222 675 0.9+ 0.7+ 910419 675 0.1- 1.6+
880317 675 0.9+ 2.3- 900224 675 0.5+ 0.9+ 910514 675 1.6+ 0.0
880318 675 1.1+ 1.4- 900327 675 1.1- 1.6- 910516 675 0.0 0.4+
880413 801 0.4+ 1.3+ 900327 675 0.5+ 0.0 910516 675 0.0 0.1+
880414 675 0.8+ 0.3+ 900422 675 1.9- 0.4-

(5029)* 1988 BL2 = 1971 SJ3 = 1986 TB6
Discovered 1988 Jan. 24 by C. S. Shoemaker at Palomar.
Id. C. M. Bardwell (MPC 12962)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell
M 64.44916 (2000.0) P Q
n 0.19608250 Peri. 330.50782 +0.98641193 +0.03083052
a 2.9343381 Node 29.09984 +0.08105583 +0.76304147
e 0.0917191 Incl. 19.37892 -0.14290364 +0.64561381
P 5.03 H 11.7 G 0.15

Residuals in seconds of arc

710926	805	0.5-	0.1+		890403	474	2.1-	1.2-		911106	801	0.0	0.0
710927	805	0.8-	0.4+		911001	413	0.6+	0.7+		911107	675	0.5+	0.3-
861010	046	1.7-	2.6+		911002	413	0.8-	1.6+		911107	675	(0.0	4.0-)
861010	046	0.2+	2.5+		911003	675	0.4+	0.4-		911109	675	0.1+	0.3-
880124	675	0.0	0.2+		911004	801	0.4+	0.4-		911109	675	0.2-	2.6-
880124	675	0.3-	0.6+		911004	801	0.6+	0.5-		911109	675	0.5-	0.3-
880216	675	0.4+	1.1+		911006	675	1.8+	0.9-		911110	801	0.2+	0.1-
880217	675	0.2-	1.5+		911006	675	1.5+	1.9-		911110	801	0.7-	0.7-
880220	675	1.2-	0.7+		911007	293	1.6+	0.8-		911110	675	1.2-	0.0
880317	675	0.4+	2.7-		911008	801	0.7+	0.7-		911110	675	0.3-	0.7-
880318	675	1.2+	2.6-		911008	801	0.7+	0.8-		911205	801	0.7+	1.8+
890403	474	0.5+	0.5-		911106	801	0.1+	0.0		911205	801	2.2-	0.3-

(5030)* 1988 VK4 = 1950 RW = 1983 DK

Discovered 1988 Nov. 3 by P. Jensen at Brorfelde.

Id. S. Nakano (MPC 14793)

Epoch 1992 June 27.0 TT = JDT 2448800.5

			Nakano
M 204.58174	(2000.0)	P	Q
n 0.28968350	Peri. 208.21239	-0.58597889	+0.80747241
a 2.2621438	Node 26.09175	-0.71138148	-0.47246256
e 0.0917452	Incl. 8.88758	-0.38802723	-0.35322435
P 3.40	H 13.3	G 0.15	

Residuals in seconds of arc

500913	839	0.1+	0.4-		881207	054	1.2-	0.5+		910913	675	0.3-	0.2-
830211	095	0.3-	1.7-		900326	801	0.7-	0.2+		910913	675	0.1-	0.1-
830215	095	1.4+	2.1+		900326	801	0.9-	0.0		910916	675	0.8-	0.5-
830219	688	0.5-	0.8-		900329	400	(2.8+	1.9+)		910916	675	0.2+	1.0-
830219	688	1.1-	1.7-		900329	400	2.0+	1.5+		911009	801	0.2+	0.2+
881103	054	0.9-	0.2-		910912	801	0.2+	0.5+		911009	801	0.1+	0.4+
881103	054	1.3+	0.0		910912	801	0.0	0.8+		911107	675	0.5+	0.2-
881104	054	0.3-	0.5+		910912	675	0.2+	1.5+		911107	675	0.4+	1.7-
881201	054	0.3-	1.0+		910912	675	0.4+	1.1+		911109	675	0.4+	1.7-

(5031)* 1990 FW1 = 1975 JL

Discovered 1990 Mar. 16 by Z. Vavrova at Klet.

Id. H. Kaneda (MPC 16587)

Epoch 1992 June 27.0 TT = JDT 2448800.5

			Kaneda
M 174.69619	(2000.0)	P	Q
n 0.25916574	Peri. 164.68173	-0.65090846	+0.75825636
a 2.4364135	Node 64.69308	-0.70073711	-0.58138234
e 0.1236565	Incl. 2.34262	-0.29203714	-0.29502857
P 3.80	H 13.7	G 0.15	

Residuals in seconds of arc

710324	675	2.3-	1.6-		750511	808	0.2-	0.1+		900322	095	(4.7-	0.6-)
710325	675	0.4-	0.1+		750511	808	1.4+	1.3+		910807	675	0.4+	1.0-
710325	675	1.0-	0.3+		900316	046	0.8-	1.2-		910807	675	0.5+	1.8-
710326	675	0.2+	1.2-		900316	046	0.8-	0.6-		910807	675	0.4+	0.3-
710327	675	0.3-	0.6-		900317	046	1.2-	0.9+		910807	675	1.1+	1.0-
710402	675	2.0+	1.1-		900317	046	0.3-	0.2+		910810	675	0.1-	0.0
710513	675	0.0	1.3+		900318	046	0.1-	0.9+		911011	801	0.3-	0.2-
710514	675	0.6-	2.4-		900318	046	0.6-	0.6-		911011	801	0.1+	0.4-
750507	808	0.6-	0.3+		900319	046	2.4+	1.2-					
750507	808	0.9+	1.5+		900319	046	0.8+	0.4+					

(5032)* 1990 OO = 1980 PD2 = 1986 WX7

Discovered 1990 July 18 by E. F. Helin at Palomar.

Id. G. V. Williams (MPC 17022), R. Nagata (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 61.54563		(2000.0)	P	Q
n 0.18904784	Peri.	205.69018	+0.86820796	-0.49602558
a 3.0066872	Node	184.11969	+0.48099642	+0.84783051
e 0.1004427	Incl.	10.56678	+0.12189084	+0.18746213
P 5.21	H	11.8	G 0.15	

Residuals in seconds of arc

800806 809	0.2+	0.0	900721 675	0.9+	1.2+	911008 801	0.7-	0.5+
800807 809	0.0	0.7+	900721 675	1.5+	1.2+	911103 675	0.0	0.2-
800809 809	0.3-	0.3-	900816 675	0.9-	1.8-	911103 675	1.1-	0.3-
861130 675	(3.4-	2.1+)	900816 675	1.1-	0.0	911106 675	0.5+	1.3-
861130 675	0.9-	0.8+	900819 675	1.1+	1.4-	911106 675	1.3+	1.2-
861203 675	0.8+	0.2-	900819 675	1.4-	0.3-	911108 801	0.3+	0.5+
861203 675	(3.3+	0.2+)	911007 801	0.4-	0.3+	911108 801	0.6+	0.5+
900718 675	0.6+	0.4+	911007 801	0.1-	0.6+			
900718 675	0.6-	0.5+	911008 801	0.5-	0.3+			

(5033)* 1990 PF = 1990 RW9 = 1975 RO2 = 1979 HT = 1981 UF18 = 1983 CP1 = 1988 FH1 = 1991 UU2

Discovered 1990 Aug. 15 by E. W. Elst at Haute Provence.

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 173.23443		(2000.0)	P	Q
n 0.19757445	Peri.	138.20717	+0.20249912	+0.97893643
a 2.9195474	Node	143.45378	-0.90966473	+0.19788005
e 0.0539232	Incl.	2.50542	-0.36263506	+0.05026891
P 4.99	H	12.1	G 0.15	

Residuals in seconds of arc

750904 808	0.3-	0.7+	900815 511	0.9+	0.8-	900918 675	0.5-	1.2-
750904 808	0.5-	2.2+	900816 511	0.4-	0.4-	911031 399	0.0	1.0+
790419 807	0.6-	0.0	900820 511	0.9-	0.2+	911031 399	1.3-	0.6+
790426 807	0.5+	0.4-	900820 511	0.6+	0.7-	911104 399	0.8-	0.9+
790426 807	0.1+	1.0+	900820 511	0.6-	0.4-	911104 399	0.9+	0.2+
811024 095	(5.4+	2.5-)	900821 511	1.7+	0.5+	911205 399	0.0	0.0
830204 046	0.6-	2.9-	900822 511	(0.1+	3.1-)	911205 399	1.2-	0.5-
830204 046	(1.6+	3.8-)	900822 511	(1.3+	3.8-)	911209 399	1.1+	0.0
880317 033	0.3+	0.2+	900914 675	0.1+	0.8-	911209 399	0.8+	0.5-
880317 033	0.2-	0.2-	900914 675	0.4+	1.5-			
900815 511	0.8+	0.6+	900918 675	0.6-	1.0-			

(5034)* 1991 PW10 = 1977 QH2 = 1981 UK9 = 1984 SX2 = 1988 VJ4 = 1990 CO = 1990 FD5

Discovered 1991 Aug. 7 by H. E. Holt at Palomar.

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 134.14675		(2000.0)	P	Q
n 0.28190912	Peri.	328.44259	+0.14529867	+0.98770515
a 2.3035447	Node	309.84624	-0.89138913	+0.10538764
e 0.1821596	Incl.	4.30843	-0.42931772	+0.11546423
P 3.50	H	13.0	G 0.15	

Residuals in seconds of arc

770821 095	1.4+	0.5+	881103 054	1.6+	1.0+	910808 675	0.0	0.7+
770823 095	1.5-	1.6+	881104 054	0.1+	0.0	910915 675	0.2+	0.0
811030 381	0.8-	0.0	900215 400	0.8-	1.2+	910915 675	0.7+	0.4+
811030 381	1.2-	0.3-	900215 400	0.7+	0.9+	910917 675	0.1+	0.0
840928 688	0.0	2.0-	900317 095	0.2+	2.0-	910917 675	0.4+	0.1+
840928 688	1.0+	0.9-	900317 095	(2.3+	5.5-)			
881103 054	0.2+	0.0	910807 675	2.5-	0.5-			

(5035)* 1991 UX = 1949 WL = 1978 SX = 1978 TR9 = 1980 BN1 = 1988 AD2 = 1990 JE1

Discovered 1991 Oct. 18 by S. Ueda and H. Kaneda at Kushiro.

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	5.25285	(2000.0)	P	Q	
n	0.23370703	Peri.	53.16151	-0.24610815	-0.95153718
a	2.6102866	Node	52.12175	+0.79817929	-0.30690748
e	0.1540072	Incl.	13.51116	+0.54985507	+0.01961634
P	4.22	H 11.7	G 0.15		

Residuals in seconds of arc

491118	020	(33.7+	23.6-)X	871220	010	0.6-	0.4+	911019	399	0.7-	0.2+
491125	020	(21.1+	89.4-)X	880111	033	0.2-	0.4-	911031	399	0.8+	1.0+
780927	095	0.5-	0.9+	880111	033	0.1+	0.1+	911031	399	0.3+	0.3-
781007	095	(3.5+	6.4+)	900503	413	0.7-	0.5-	911104	399	0.8+	0.2+
800123	095	1.5-	0.4-	900504	413	0.4+	0.3-	911104	399	0.1+	0.2-
800221	095	1.9+	0.3+	911018	399	0.0	1.5-	911109	399	0.1+	0.9+
871220	010	(3.8-	0.8+)	911018	399	0.3+	0.6-	911109	399	0.2-	0.8+
871220	010	0.1-	0.3-	911019	399	0.4-	0.8-				

(5036)* 1991 US2 = 1965 DC = 1971 FY = 1977 KA2 = 1982 KA1 = 1985 UB2 = 1988 KK1 = 1990 ST12

Discovered 1991 Oct. 31 by S. Ueda and H. Kaneda at Kushiro.

Id. H. Kaneda; 1965 DC = 1979 SF13 (MPC 18618) is invalid

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	309.52031	(2000.0)	P	Q	
n	0.17681906	Peri.	59.78145	-0.96489130	-0.25797790
a	3.1437645	Node	105.23079	+0.21997616	-0.89634453
e	0.1825315	Incl.	2.92980	+0.14351049	-0.36057439
P	5.57	H 11.1	G 0.15		

Residuals in seconds of arc

650225	330	1.6+	0.3-	851018	095	1.8+	1.9+	900922	809	0.3+	0.1+
650304	330	0.8-	1.7-	851020	049	1.5+	0.4-	911031	399	1.5-	0.5+
710319	095	0.6-	1.4+	851020	049	2.0+	0.8+	911031	399	0.1+	0.8+
770518	675	0.9-	0.1+	880518	809	2.0+	1.0+	911104	399	0.4+	0.5-
770519	675	2.0-	0.2+	880518	809	0.9+	0.6+	911104	399	1.1-	0.2+
820525	033	0.1-	0.2-	880518	809	1.3+	0.6+	911205	399	0.3-	1.0+
820525	033	0.0	0.0	900921	809	0.3-	1.2-	911205	399	1.6+	0.3+
851017	049	(1.4+	3.0-)	900921	809	0.1-	0.8-	911207	399	0.5-	0.3-
851017	049	1.4-	2.0+	900921	809	0.0	0.8-	911207	399	0.9-	0.3+
851017	010	(3.7-	1.2+)	900922	809	0.2-	0.3+	911209	399	1.9-	0.4+
851018	010	(2.5-	3.0-)	900922	809	0.1+	0.3+	911209	399	1.1-	1.6-

(5037)* 6552 P-L = 1984 SA6 = 1987 QH8

Discovered 1960 Sept. 24 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.

Id. O. Kippes (MPC 9761), D. W. E. Green, G. V. Williams

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	22.87929	(2000.0)	P	Q	
n	0.28758576	Peri.	280.14296	+0.06188427	-0.99765753
a	2.2731310	Node	166.20797	+0.95691982	+0.05100523
e	0.1109473	Incl.	7.02370	+0.28368080	+0.04558431
P	3.43	H 13.7	G 0.15		

Residuals in seconds of arc

600924	675	0.2+	0.4-	601024	675	0.2+	0.4+	840921	809	0.3-	0.1+
600926	675	0.1+	0.7-	601026	675	0.4+	0.3+	840922	809	0.9+	2.6+
600927	675	0.5+	0.4-	770908	675	0.3+	1.3-	840922	809	1.0+	2.5+
600928	675	0.1+	1.0-	770909	675	0.3+	1.4-	840922	809	1.0+	2.5+
601017	675	1.1+	0.8+	840921	809	0.8-	0.6+	840923	809	1.4-	1.2+
601022	675	1.8-	0.5-	840921	809	0.4-	0.4+	840923	809	1.0-	1.1+

840923 809 0.9- 1.1+ 840928 809 0.2- 0.4+ 841021 071 0.7- 1.4-
840924 809 1.1- 0.6+ 840928 809 0.2+ 0.1+ 841021 071 1.5- 1.0-
840924 809 1.5- 0.4+ 840929 809 0.1+ 0.9+ 870817 010(43.5- 36.0+)
840924 809 1.6- 0.3+ 840929 809 0.0 1.3+ 870817 010(40.0- 37.3+)
840926 809 0.4- 0.7- 840929 809 0.3+ 1.0+ 870817 010(40.6- 36.9+)
840926 809 0.2- 0.4- 840929 809 1.1- 0.4- 910907 801 0.5+ 0.1-
840926 809 0.3+ 0.8- 840929 809 1.0- 0.3- 910907 801 0.3+ 0.0
840927 809 0.4- 0.5- 840929 809 0.8- 0.2- 910909 801 0.3+ 0.1+
840927 809 0.4- 0.0 840930 809 0.4- 1.0- 910909 801 0.3+ 0.1+
840927 809 0.1+ 0.2+ 840930 809 0.4- 0.9- 911005 801 0.3+ 0.2+
840928 809 1.7+ 0.2- 840930 809 0.0 0.8- 911005 801 0.1+ 0.2+
840928 809 1.9+ 0.5- 841001 809 1.9+ 0.8- 911008 801 0.5- 1.0-
840928 809 2.3+ 0.8- 841001 809 2.0+ 0.6- 911008 801 0.8- 0.8-
840928 809 0.4- 0.2+ 841001 809 2.2+ 0.7-

1953 TD1 = 1991 EX1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nagata
M 233.66920 (2000.0) P Q
n 0.29783874 Peri. 202.86394 +0.77265034 -0.63451837
a 2.2206593 Node 196.56806 +0.59272419 +0.73229811
e 0.1843364 Incl. 4.01126 +0.22735322 +0.24723656
P 3.31 H 14.5 G 0.15
Residuals in seconds of arc
531008 760 (6.4- 1.8+) 531015 760 0.9- 0.8+ 910307 809 0.2+ 0.7-
531008 760 0.4+ 0.5+ 531015 760 2.3+ 3.6+ 910309 809 0.6+ 0.5+
531010 760 0.2+ 3.5- 910307 809 1.2- 0.4- 910309 809 0.3+ 0.4+
531010 760 1.9- 1.4- 910307 809 0.3- 0.8- 910309 809 0.3+ 0.8+

1955 UN1 = 1955 UP1 = 1973 SV3 = 1991 RH8
Id. S. Kanda (d, MPC 1453), R. Nagata
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nagata
M 86.16376 (2000.0) P Q
n 0.27334368 Peri. 327.87850 +0.97809657 +0.19683230
a 2.3514190 Node 21.08768 -0.12766273 +0.82417428
e 0.2635638 Incl. 10.84657 -0.16440599 +0.53103088
P 3.61 H 13.4 G 0.15
Residuals in seconds of arc
551019 012 2.7+ 0.2- 910912 675 0.5+ 0.5- 911002 403 2.1- 0.9+
551025 760 0.3- 2.7- 910912 675 0.3+ 0.5+ 911003 403 0.3- 1.0+
551025 760 1.2- 1.9- 910914 675 1.1+ 0.2+ 911003 403 1.0+ 1.4+
551108 388 0.6- 3.7+ 910914 675 0.5+ 0.1-
730925 095 (7.6- 2.1-) 911002 403 1.8- 2.5- Y

1974 SK1 = 1962 WP1 = 1978 PY1 = 1985 HP1 = 1991 VL2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi
M 90.54250 (2000.0) P Q
n 0.23732447 Peri. 200.93278 +0.98052903 -0.19626996
a 2.5836937 Node 170.37946 +0.18517246 +0.91326060
e 0.1236593 Incl. 2.19381 +0.06537569 +0.35697785
P 4.15 H 13.3 G 0.15
Residuals in seconds of arc
621130 760 0.6- 0.8- 740923 095 (5.0+ 1.1+) 911109 399 1.8- 0.8-
621130 760 0.3+ 1.2- 741009 095 1.2+ 0.2+ 911109 399 0.3+ 0.2-
740919 095 0.6+ 1.1- 780808 095 1.7- 0.3- 911111 399 0.5+ 2.2+
740921 095 0.6+ 0.1+ 850417 801 0.0 1.2- 911111 399 0.5+ 0.8+

1974 XW = 1975 AE1 = 1978 VW14 = 1984 CU = 1988 AA3 = 1991 VW2
Id. H. Oishi (d, JAM 1823), T. Kobayashi

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	16.39241	(2000.0)	P	Q
n	0.22903498	Peri. 27.38483	-0.29316319	-0.95250208
a	2.6456649	Node 79.75796	+0.86113112	-0.30052741
e	0.1824680	Incl. 4.80515	+0.41534147	-0.04922465
P	4.30	H 13.3	G 0.15	

Residuals in seconds of arc

741214	330	0.4+	1.7-	880111	033	0.2+	1.3+	911112	894	0.5-	0.4-
741218	330	0.5-	0.7-	880111	033	0.0	1.2+	911112	894	0.7-	0.5+
750112	330	0.1+	0.2-	911109	399	0.6-	0.8+	911115	894	1.0+	1.2+
781101	095 (1.8+	5.9-)		911109	399	0.4-	0.3+	911115	894	0.7+	0.4-
840206	688	0.8-	0.1+	911111	399	0.1+	0.7-				
840206	688	0.4+	0.7-	911111	399	0.0	0.6-				

1976 YE1 = 1972 VU = 1987 ST24 = 1990 MR1 = 1990 ME2 = 1991 TU4

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	36.32584	(2000.0)	P	Q
n	0.25832993	Peri. 144.52581	+0.42437000	-0.90182831
a	2.4416659	Node 280.23969	+0.81052311	+0.41837417
e	0.0429826	Incl. 4.74113	+0.40368600	+0.10802196
P	3.82	H 12.9	G 0.15	

Residuals in seconds of arc

721108	095	0.4-	1.8+	900625	808	1.2+	0.7+	911013	403	0.6+	0.5-
761216	095 (5.6-	1.2-)		900625	808	0.1-	0.1-	911104	403	0.4-	0.3+
761218	095	0.7+	0.3+	900628	808	0.7-	0.5+	911104	403	0.2+	0.5-
761220	095	0.8-	0.2+	900628	808	0.4-	0.1-				
870923	095(11.1+	0.4+)		911013	403	0.1+	0.9-				

1977 DU = 1975 TA1 = 1985 FG1 = 1991 VW1

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	344.68276	(2000.0)	P	Q
n	0.25187566	Peri. 151.40181	-0.68085752	-0.73158482
a	2.4832012	Node 341.43715	+0.64939108	-0.58096801
e	0.0786401	Incl. 6.29052	+0.33870971	-0.35673494
P	3.91	H 13.8	G 0.15	

Residuals in seconds of arc

751003	095	0.7-	1.3+	770219	381	0.0	0.1-	911110	896 (1.8-	4.0-)Y
770213	675	0.6-	0.0	770219	381	0.3+	0.1-	911110	896	0.3-	2.0-
770214	675	0.3-	0.6+	850322	688	0.6+	0.3-	911112	896	0.8+	0.7+
770218	381	0.3+	0.0	850322	688	0.1-	1.3+				
770218	381	0.3+	0.6-	911104	896	0.4-	0.9+				

1977 RZ8 = 1987 SS19

Id. A. Lowe (MPC 15875)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	61.33231	(2000.0)	P	Q
n	0.19940645	Peri. 277.36728	-0.18656831	+0.97875425
a	2.9016382	Node 341.21804	-0.76454035	-0.19900594
e	0.1601923	Incl. 15.31564	-0.61698486	-0.04936338
P	4.94	H 12.5	G 0.15	

Residuals in seconds of arc

770908	675	0.1-	0.4+	870923	095	1.3-	2.9+	910611	474	0.2+	0.2-
770909	675	0.2+	0.4-	910508	474	0.4-	0.2+	910611	474	0.7+	0.5-
870917	095	1.2+	2.7-	910508	474	0.4-	0.4+				

1978 PT4 = 1986 LL

Id. T. Kobayashi (MPC 12949)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M 64.86342	(2000.0)	P	Q	
n 0.23667227	Peri. 262.34015	+0.91005677	-0.33552714	
a 2.5884382	Node 116.99008	+0.39567170	+0.87813007	
e 0.1602552	Incl. 15.84832	-0.12345273	+0.34104123	
P 4.16	H 12.4	G 0.15		

Residuals in seconds of arc

780710	675	0.4+	2.5-	Y	860604	675	(18.1+ | 2.7-)	900625	801	0.1+	0.2-
780711	675	(3.4+	5.6-)	Y	860604	675	(18.0+	0.5-)	911013	366	0.1+	0.7-
780713	675	(10.8-	2.7+)	Y	860606	675	(16.4+	4.8-)	911013	366	1.7+	1.0-
780806	323	0.5-	0.3+		860606	675	(20.5+ | 3.5-)	911103	366	0.1+	0.9+
780806	323	0.0	1.0+		900528	801	0.1+	0.3+	911103	366	1.6-	0.7+
780809	323	0.2+	1.0+		900528	801	0.0	0.4+				
780809	323	0.2+	0.4+		900625	801	0.2-	0.3-				

1981 QY2 = 1991 PK16

Id. G. V. Williams; 1981 QY2 = 1963 UL (MPC 12452) is invalid

Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 160.91266	(2000.0)	P	Q
n 0.20188801	Peri. 115.19752	-0.35382141	+0.93461440
a 2.8778116	Node 134.03085	-0.87521138	-0.31720935
e 0.0162549	Incl. 2.88154	-0.32987187	-0.16085443
P 4.88	H 13.0	G 0.15	

Residuals in seconds of arc

810824	809	(2.3+ | 0.4+)		810826	809	0.1-	1.2-	810901	809	0.3-	0.6+
810824	809	(3.0+ | 0.2+)		810826	809	0.2+	1.3-	810901	809	0.5+	0.5+
810824	809	(3.4+ | 0.1-)		810826	809	0.5+	1.1-	810901	809	1.1+	0.8+
810825	809	(0.3- | 2.9-)		810827	809	0.8-	0.1+	810901	809	0.7+	0.1+
810825	809	(0.8- | 3.1-)		810827	809	0.4-	0.1+	810901	809	0.5+	0.2-
810825	809	(0.8-	3.5-)		810827	809	0.2-	0.0	810905	809	(3.5-	0.5-)
810825	809	(1.5+	3.0-)		810827	809	0.4-	0.7+	810905	809	(3.2-	0.6-)
810825	809	(1.3+	2.8-)		810827	809	0.1+	0.8+	810905	809	(2.9-	0.8-)
810825	809	1.3+	2.3-		810827	809	0.1-	0.7+	910807	675	0.2+	0.1+
810825	809	0.7+	1.2+		810828	809	0.9-	0.0	910808	675	0.2-	0.2+
810825	809	0.7+	0.7+		810828	809	0.8-	0.5-	910913	675	0.3+	0.1+
810825	809	0.9+	0.8+		810828	809	0.8-	0.8-	910913	675	1.3-	1.1+
810826	809	0.3-	0.2+		810828	809	0.2+	0.0	910916	675	0.6-	0.8-
810826	809	0.2-	0.2+		810828	809	0.4+	0.1+	910916	675	0.6+	1.1-
810826	809	0.0	0.4+		810828	809	0.3+	0.1-	910916	675	0.5+	0.0
810826	809	0.1-	0.5-		810901	809	1.3-	1.0+	910916	675	0.7+	0.1+
810826	809	0.3+	1.3-		810901	809	0.7-	0.9+				
810826	809	0.6+	1.1-		810901	809	1.4-	0.8+				

1981 WS1 = 1991 UW

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 161.04740	(2000.0)	P	Q
n 0.29213658	Peri. 220.28289	+0.28620882	+0.95342217
a 2.2494625	Node 66.53999	-0.85023947	+0.29854278
e 0.1830070	Incl. 5.95931	-0.44178882	+0.04310880
P 3.37	H 13.8	G 0.15	

Residuals in seconds of arc

811030	381	0.2-	1.5+		911018	399	1.1-	1.2-	911031	399	0.4+	1.0-
811030	381	1.9+	0.3+		911018	399	(3.5- | 5.4-)	911104	399	0.3+	0.8+
811124	801	1.4-	0.1-		911019	399	(3.5- | 2.4-)	911104	399	0.9+	0.2+
811125	801	1.0-	0.0		911019	399	2.1-	0.1-				
811126	801	0.6+	1.4-		911031	399	1.7+	1.0+				

1982 QY1 = 1991 VH1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 78.03150 (2000.0) P Q
n 0.22825322 Peri. 134.25876 +0.94228228 -0.31622541
a 2.6517024 Node 244.46010 +0.26181754 +0.90074327
e 0.1236844 Incl. 7.00413 +0.20869999 +0.29776341
P 4.32 H 12.4 G 0.15
Residuals in seconds of arc

820823	561	0.5-	0.7-	820826	561	1.8-	0.4+	911104	400	0.4+ 1.7+
820823	561	0.8-	1.1-	820828	095	1.5+	2.9+	911104	901	(1.4- 50.1-)Y
820824	561	0.5+	0.1+	820829	095	2.8+	1.7+	911104	901	(4.6- 47.2-)Y
820824	561	1.6-	0.6-	820920	095	1.2-	2.0-	911105	403	2.1- 0.5+ Y
820825	561	0.0	0.1-	911031	400	0.2-	0.5+	911105	403	1.3+ 3.0- Y
820825	561	0.9+	0.8-	911031	400	0.1+	0.1+			
820826	561	0.3+	0.0	911104	400	0.5+	0.4+			

1982 TT2 = 1991 TT4
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 88.41938 (2000.0) P Q
n 0.21759723 Peri. 329.57704 +0.94893803 +0.31204581
a 2.7375820 Node 12.50078 -0.22874325 +0.78170513
e 0.2236863 Incl. 12.35219 -0.21723981 +0.53996713
P 4.53 H 12.5 G 0.15
Residuals in seconds of arc

821015	095	0.1-	0.7-	911013	403	0.3-	0.6+	911104	403	1.7+ 1.0+
821021	095	0.4+	1.2+	911013	403	0.0	0.8-			
821111	095	0.4-	0.4-	911104	403	1.3-	0.9-			

1982 UQ10 = 1991 VS1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 36.27513 (2000.0) P Q
n 0.22138973 Peri. 60.44839 +0.07978484 -0.99650598
a 2.7062282 Node 25.01152 +0.89315053 +0.06046187
e 0.2761379 Incl. 3.34945 +0.44262456 +0.05762111
P 4.45 H 13.8 G 0.15
Residuals in seconds of arc

821025	095	0.5-	0.9-	911109	402	0.5-	0.5+	911112	887	1.3+ 2.2-
821109	095	1.8+	1.4+	911109	402	1.2+	1.2+	911115	402	0.2- 0.6-
821114	095	1.1-	1.3-	911110	885	1.3-	2.4+	911115	402	0.7+ 0.0
911105	887	0.4+	0.5+	911110	885	0.9+	0.8+	911130	402	0.7- 1.4-
911105	887	2.8-	0.8- Y	911112	887	0.6+	0.1+	911130	402	0.3+ 0.2+

1983 CY2 = 1991 UR3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 5.80974 (2000.0) P Q
n 0.19025090 Peri. 113.00964 +0.17204479 -0.98118143
a 2.9939984 Node 326.70631 +0.83521924 +0.19247181
e 0.0593542 Incl. 9.18862 +0.52231160 +0.01541416
P 5.18 H 11.8 G 0.15
Residuals in seconds of arc

830215	688	0.2-	0.4+	830316	688	0.9-	0.3+	911016	400	0.5- 0.2+
830215	688	0.1-	0.2-	830316	688	0.3+	0.6+	911016	400	0.5+ 0.7-
830310	688	0.3-	0.7-	911008	400	1.2+	0.8+	911029	400	1.7- 0.3+
830310	688	1.2+	0.4-	911008	400	0.1-	0.3+	911029	400	0.6+ 0.8-

1984 WA1 = 1991 VF
Id. T. Urata, T. Kobayashi

Epoch 1992 June 27.0 TT = JDT 2448800.5 Urata

M	84.94012	(2000.0)	P	Q
n	0.28277443	Peri. 322.70402	+0.90332240	-0.23589001
a	2.2988429	Node 54.85316	+0.41473253	+0.69360812
e	0.2611207	Incl. 25.98698	-0.10956995	+0.68063476
P	3.49	H 13.6	G 0.15	

Residuals in seconds of arc

841127	046	0.6-	0.1+	911102	400	1.1+	0.5+	911104	400	0.9+	0.9-
841127	046	0.8+	0.5-	911103	675	(3.7-	2.9+)	911105	885	0.9-	0.3+
841128	046	2.3+	1.6-	911103	885	0.7+	0.6-	911105	885	1.3-	0.0
841128	046	0.0	0.5+	911103	885	1.0-	0.9+	911111	894	0.1+	0.2-
841130	046	0.6-	1.0-	911104	675	0.4+	0.1+	911111	894	0.7-	1.7-
841130	046	2.2-	0.4+	911104	675	0.7-	1.6+	911112	894	0.1-	0.5-
841212	046	2.3+	0.8-	911104	385	1.5+	1.1-	911112	894	2.4-	2.1+
841212	046	0.7+	0.7+	911104	385	1.8-	0.9+	911207	675	0.4-	1.2+
911102	400	1.0+	1.2-	911104	400	0.9+	0.0	911207	675	0.6+	1.1+

1984 YE4 = 1989 EA

Id. T. Kobayashi (MPC 15411)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	50.53706	(2000.0)	P	Q
n	0.27255880	Peri. 348.59488	+0.44947728	-0.88656347
a	2.3559311	Node 74.61592	+0.82824809	+0.36772018
e	0.1433639	Incl. 6.51705	+0.33462707	+0.28069038
P	3.62	H 13.7	G 0.15	

Residuals in seconds of arc

841227	095	0.1-	1.0+	890302	402	2.2+	1.3+	911126	400	0.9-	2.5+
841229	095	1.5+	1.5-	890302	402	2.0+	2.1+	911126	400	0.7+	1.7+
841230	095	0.8-	1.2-	890308	402	2.0-	0.9-	911130	400	0.6+	0.2+
841231	095	0.4-	0.3-	890308	402	1.7-	1.2-	911130	400	1.0-	0.3-
890301	402	(16.3-	1.9-)	911105	894	0.9+	1.4-				
890301	402	(15.6-	1.1+)	911105	894	1.0-	1.0-				

1985 CZ1 = 1979 OO5

Id. K. Hurukawa (MPC 10309), L. D. Schmadel (ibid.)

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	72.80847	(2000.0)	P	Q
n	0.27466658	Peri. 143.80169	+0.00421483	-0.99624086
a	2.3438627	Node 305.80020	+0.89058994	+0.04309034
e	0.0672295	Incl. 6.12396	+0.45478763	-0.07514901
P	3.59	H 13.1	G 0.15	

Residuals in seconds of arc

790724	675	1.0-	1.0+	850217	809	1.1-	0.5+	850225	809	0.4+	0.1+
790725	675	0.4+	0.8+	850218	809	0.4-	0.1-	850225	809	0.1+	0.1+
850212	809	0.8-	0.7+	850218	809	0.3-	0.1-	850225	809	0.3+	0.4+
850212	809	0.7-	0.5+	850218	809	0.1-	0.2-	850226	809	0.5+	0.4-
850212	809	0.4-	0.5+	850219	809	0.8-	0.4-	850226	809	0.6+	0.2-
850214	809	0.2+	0.7-	850219	809	0.5-	0.2-	850226	809	1.2+	0.7-
850214	809	0.1+	0.7-	850219	809	0.2-	0.4-	850227	809	0.1-	0.7+
850214	809	0.1+	0.8-	850220	809	0.3-	0.2+	850227	809	0.1+	0.4+
850215	809	0.1-	0.2+	850220	809	0.2-	0.1-	850228	809	0.2+	0.5+
850215	809	0.0	0.0	850220	809	0.1+	0.0	850228	809	0.3+	0.1-
850215	809	0.5+	0.4-	850222	809	0.3-	0.5+	900917	675	0.2+	0.4+
850216	809	0.7+	0.0	850222	809	0.0	0.2+	900917	675	0.5-	0.2+
850216	809	0.5+	0.0	850222	809	0.0	0.4+	920102	877	0.1-	0.2-
850216	809	0.8+	0.3-	850224	809	1.1+	0.1+	920102	877	0.5+	0.7+
850217	809	1.2-	0.3+	850224	809	0.9+	0.3-	920103	877	0.7+	0.4+
850217	809	1.3-	0.4+	850224	809	0.5+	0.2-	920103	877	0.4-	0.7+

1985 PC2 = 1980 VO2 = 1980 WJ
Id. B. G. Marsden (MPC 14019), T. A. Vinogradova
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 72.20855	(2000.0)	P	Q	
n 0.18236233	Peri. 261.25154	+0.92986367	-0.36057073	
a 3.0797299	Node 119.85489	+0.36191353	+0.86078267	
e 0.2479708	Incl. 4.83436	+0.06612231	+0.35922409	
P 5.40	H 13.0	G 0.15		

Residuals in seconds of arc

801111	330	1.3+	0.2+	850819	095	1.2+	0.5-	911108	801	0.1-	0.2+
801130	330	1.2-	0.7-	850824	095	0.1+	0.2+	911108	801	0.1-	0.6-
850813	095	1.3-	0.3-	850911	095	0.2-	1.8+	911205	801	0.3+	0.5-
850815	095	0.6+	1.3-	850919	095	0.2-	0.2+	911205	801	0.1-	1.0+
850817	095	0.9-	0.9-	850920	095	0.6+	1.0+				

1985 UQ4 = 1991 VM2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 68.18176	(2000.0)	P	Q	
n 0.16830053	Peri. 254.98082	+0.93599253	-0.34992004	
a 3.2489702	Node 125.48726	+0.33837262	+0.86426567	
e 0.1301698	Incl. 2.70253	+0.09706677	+0.36138736	
P 5.86	H 12.1	G 0.15		

Residuals in seconds of arc

851022	095	0.8+	1.1-	911109	399	2.2-	0.8-	911111	399	2.7+	0.2+
851109	095	0.2-	0.7+	911109	399	1.1-	1.3+				
851111	095	0.7-	0.8+	911111	399	0.7+	1.1-				

1986 CE2 = 1978 YO = 1983 GJ2 = 1991 VK3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 352.86980	(2000.0)	P	Q	
n 0.30134388	Peri. 139.30932	-0.77324953	-0.63409760	
a 2.2034057	Node 1.34408	+0.55306026	-0.67621212	
e 0.0755798	Incl. 5.68523	+0.31017658	-0.37504321	
P 3.27	H 13.3	G 0.15		

Residuals in seconds of arc

781222	095	0.1+	0.6-	860214	809	0.5+	1.0-	860219	809	2.1-	1.1+
830410	095	1.1-	2.2-	860215	809	1.5+	0.9-	860219	809	1.7-	1.3+
860212	809	0.3+	0.5-	860215	809	1.7+	0.9-	860220	809	1.5-	1.9+
860212	809	0.3+	0.4-	860215	809	1.9+	0.8-	860220	809	1.3-	1.8+
860212	809	0.5+	0.3-	860216	809	0.3-	0.4-	860220	809	1.1-	1.9+
860213	809	0.4-	0.1+	860216	809	0.4+	0.4-	911113	896	0.3-	1.2-
860213	809	0.0	0.1+	860217	809	1.1+	0.1-	911114	896	1.6-	1.5-
860213	809	0.1+	0.2+	860217	809	1.3+	0.1-	911117	896	0.1-	2.1+
860214	809	0.2+	1.1-	860217	809	1.5+	0.1-	911212	896	2.4+	0.5-
860214	809	0.4+	1.0-	860219	809	2.4-	0.9+				

1986 RE2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 95.47288	(2000.0)	P	Q	
n 0.22828855	Peri. 106.16900	+0.67055893	-0.66843904	
a 2.6514288	Node 297.08212	+0.46346943	+0.71614931	
e 0.0730402	Incl. 21.18634	+0.57926402	+0.20079696	
P 4.32	H 12.3	G 0.15		

Residuals in seconds of arc

860905	675	1.4-	0.9-	861007	010(17.0+	6.2-)		900924	675	0.1-	0.3+
860905	675	0.8+	2.3-	861007	010(14.6+	4.7-)		911230	385	0.9-	0.4+
860906	675	0.7+	1.7+	900922	675	1.4-	0.7-	911230	385	2.3+	0.1+
860906	675	0.1-	1.5+	900922	675	0.9+	0.1-	911231	385	1.4-	0.4-
861007	010(15.7+	2.1-)		900924	675	0.6+	0.5+				

1986 TR3 = 1981 XC1 = 1991 RK12
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nagata

M 70.40571	(2000.0)	P	Q	
n 0.17781331	Peri. 293.60239	+0.53617947	+0.84410200	
a 3.1320345	Node 8.82224	-0.77000431	+0.49000432	
e 0.1713535	Incl. 0.68852	-0.34583947	+0.21768690	
P 5.54	H 13.0	G 0.15		

Residuals in seconds of arc

811204	511	0.1+	0.2-	861005	046	1.3-	0.3-	910904	809	0.3+	0.3+
811204	511	0.1-	0.4+	861005	046	2.4+	0.5+	910904	809	0.0	0.2+
861003	095	1.9-	1.0+	861009	046	0.7+	2.9-	910904	809	0.6-	0.2+
861004	046	1.1+	0.9+	861009	046	0.8-	0.1-	910906	809	1.0+	0.2-
861004	046	1.1+	0.9+	861010	046	(3.1+	4.1-)	910906	809	0.4-	0.3-
861004	046	1.2-	0.1-	861010	046	(2.5+	3.3-)	910906	809	0.3-	0.0

1987 HK
Id. C. S. Shoemaker (1991 obs.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 42.11972	(2000.0)	P	Q	
n 0.24123178	Peri. 338.68795	+0.37566464	+0.92665978	
a 2.5557186	Node 313.37470	-0.84760813	+0.33772932	
e 0.0860332	Incl. 1.05092	-0.37474863	+0.16504714	
P 4.09	H 13.5	G 0.15		

Residuals in seconds of arc

870421	675	1.0+	0.4+	870530	675	0.3-	1.4-	870601	675	0.1+	1.3+
870422	675	0.6-	1.7+	870530	413	0.4+	1.4+	910513	675	0.1-	1.1-
870529	675	0.6-	1.2-	870530	413	0.3+	0.5-	910515	675	0.4-	0.3-

1987 RA3 = 1991 RM12
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nagata

M 85.27631	(2000.0)	P	Q	
n 0.23920866	Peri. 166.94397	+0.60184701	+0.79711978	
a 2.5701084	Node 140.02826	-0.73936690	+0.57924937	
e 0.2412261	Incl. 4.35551	-0.30185555	+0.17049992	
P 4.12	H 13.8	G 0.15		

Residuals in seconds of arc

870902	095	0.2+	1.0-	910904	809	0.2+	0.5+	910906	809	1.1+	0.1+
870920	095	0.6-	2.3-	910904	809	0.8-	0.7+	910906	809	0.4+	0.5-
870922	095	0.6+	3.1+	910904	809	0.8-	0.8-	910906	809	0.1-	0.4+

1987 WY = 1991 VB4
Id. G. V. Williams, T. Seki (1991 obs.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 65.64154	(2000.0)	P	Q	
n 0.23310770	Peri. 141.66638	+0.96109809	-0.21909777	
a 2.6147588	Node 231.82946	+0.16947864	+0.94860142	
e 0.2430801	Incl. 12.35275	+0.21809962	+0.22836707	
P 4.23	H 13.0	G 0.15		

Residuals in seconds of arc

871121	675	(5.4+	1.1+)	871214	372	0.2-	0.7-	911101	675	0.6-	0.8+
871121	675	(5.6+	1.8+)	871216	372	0.2+	0.5-	911103	675	0.3-	1.4-
871125	372	(3.2-	0.7+)Y	871216	372	0.9-	0.2+	911103	675	0.2+	1.0-
871125	372	(5.3-	0.7+)Y	871219	372	2.0+	1.8-	911128	372	(4.1+	3.4-)
871129	372	0.1+	0.2-	871219	372	(3.3+	0.6-)	911128	372	(3.6+	1.6-)
871129	372	(1.3+	3.3+)	871221	372	0.2+	0.8+	911130	372	0.2+	1.2+
871201	372	0.2+	0.9+	871221	372	0.2-	0.6-	911130	372	0.5+	1.2+
871201	372	1.2-	0.7-	871225	372	0.6-	0.9+				
871214	372	0.2-	0.5+	871225	372	0.7+	0.7+				

1987 XC = 1982 JG1
Id. T. Kobayashi (MPC 12801)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 93.59467 (2000.0) P Q
n 0.24111925 Peri. 284.83844 +0.90938725 +0.34352701
a 2.5565137 Node 55.60049 -0.17722430 +0.83009976
e 0.2671232 Incl. 16.51326 -0.37630622 +0.43923068
P 4.09 H 13.9 G 0.15
Residuals in seconds of arc

820515	675	1.3-	2.9-	871219	372	0.1+	1.3-	911104	894	0.6+	1.2-
820516	675	1.6-	2.7-	871219	372	0.2-	0.4-	911105	894	0.4-	0.3-
820516	675	1.2-	2.0-	871225	372	0.9+	0.4-	911105	894	0.2+	1.9-
820517	675	1.9-	2.3-	871225	372	1.4-	0.3-	911110	894	0.5+	1.6-
871214	372	(6.1-	1.3-)	880113	372	2.4+	1.9+	911110	894	0.1+	1.3-
871214	372	0.2+	2.3-	880113	372	1.3-	1.1-	911128	372	0.9+	2.1+
871216	372	2.6+	1.2-	911104	894	1.1+	0.1+	911128	372	(0.3+	3.4+)

1988 BK2 = 1991 VM3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 343.02894 (2000.0) P Q
n 0.22460067 Peri. 79.29453 -0.64230845 -0.69824019
a 2.6803737 Node 55.47457 +0.46232373 -0.68187689
e 0.0558585 Incl. 22.55927 +0.61130731 -0.21795536
P 4.39 H 12.0 G 0.15
Residuals in seconds of arc

880123	675	0.8-	1.1+	880217	675	1.5+	0.2-	911103	675	0.6+	0.8+
880124	675	1.1+	0.8-	880220	675	0.3+	1.1-	911105	675	0.2-	0.3-
880216	675	2.1-	0.8+	911103	675	0.4-	0.8+	911105	675	0.1+	1.3-

1988 BG4 = 1986 RX11 = 1990 HL2
Id. S. Nakano (MPC 14792), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 80.09212 (2000.0) P Q
n 0.22650850 Peri. 102.42531 +0.75608417 -0.62429215
a 2.6653017 Node 296.55043 +0.48199696 +0.73421307
e 0.1905435 Incl. 12.68669 +0.44273656 +0.26681543
P 4.35 H 13.0 G 0.15
Residuals in seconds of arc

860909	095	1.0+	0.8+	880123	809	0.8+	1.1-	880128	809	1.8-	0.4-
860929	095	0.3+	1.2-	880123	809	0.8+	0.9-	880130	809	1.7-	0.9+
861003	095	0.2-	1.2-	880125	809	0.1+	1.9-	880130	809	2.1-	1.0+
880120	809	1.0+	1.8+	880125	809	0.1+	1.9-	900427	413	0.0	0.6+
880120	809	1.0+	1.7+	880125	809	0.1+	1.8-	900427	413	0.1-	1.2-
880120	809	1.3+	1.5+	880126	809	1.0-	1.0-	911215	894	0.6+	0.2+
880121	809	1.2+	0.6+	880126	809	0.4-	1.0-	911216	894	0.3-	0.5+
880121	809	1.2+	0.6+	880128	809	1.8-	0.3-	911216	894	0.1+	0.2+

1988 BL5
Id. R. H. McNaught (1984, 1992 obs.)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 109.50638 (2000.0) P Q
n 0.24617753 Peri. 146.13548 +0.34346566 -0.91761651
a 2.5213731 Node 283.06905 +0.80973192 +0.39723328
e 0.1209311 Incl. 11.84981 +0.47577890 -0.01362546
P 4.00 H 14.0 G 0.15
Residuals in seconds of arc

840307	413	0.2-	0.3-	880128	413	1.0+	1.5+	880312	413	0.1+	0.7+
840307	413	0.2+	0.5-	880223	413	0.7+	1.3-	880312	413	2.3-	1.0+
880128	413	2.3-	0.7-	880223	413	2.4+	0.1-	920115	413	0.3+	0.3-

1988 XV2 = 1978 VL13 = 1991 RD10 = 1991 TN3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nagata

M 50.93751		(2000.0)	P	Q
n 0.30276138	Peri.	126.93971	+0.59483163	-0.80170577
a 2.1965229	Node	286.45723	+0.71669948	+0.56198424
e 0.2024973	Incl.	3.50785	+0.36402910	+0.20357203
P 3.26	H	15.3	G 0.15	

Residuals in seconds of arc

781101 095	0.9+	2.0-	910912 675	0.5+	0.4-	911004 033	0.2-	0.8+
881201 054	0.7-	0.5+	910912 675	1.5-	0.2+	911004 033	0.1-	0.4+
881212 054	0.9+	0.4-	910914 675	0.7+	0.4-	911005 033	0.6-	0.5+
881213 054	0.4-	0.5+	910914 675	0.1+	0.3+			

1989 AF1 = 1962 WC1 = 1991 VH3
Id. K. Watanabe (k), S. Nakano
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M 91.07488		(2000.0)	P	Q
n 0.30563755	Peri.	264.65165	+0.87295762	-0.48288071
a 2.1827211	Node	124.20445	+0.47407072	+0.80649125
e 0.1273591	Incl.	4.79091	+0.11489967	+0.34117163
P 3.22	H	13.6	G 0.15	

Residuals in seconds of arc

621126 760	0.4+	0.1-	890111 675	0.1+	0.7-	890114 391	2.0-	0.8+
621126 760	0.0	1.7-	890113 402	0.5+	1.0+	890205 402	1.2-	0.4+
890104 046	(5.1-	0.2+)	890113 402	2.5+	0.5+	890205 402	1.0-	0.9-
890104 046	1.4-	0.2-	890113 402	(4.3-	1.1+)	911109 400	0.4+	0.3+
890105 391	1.7-	1.2+	890113 391	2.3+	0.1+	911109 400	0.6-	0.4+
890105 391	0.5+	0.3-	890113 391	1.2+	0.1-	911110 400	0.1-	0.1+
890111 675	0.0	1.5-	890114 391	(3.8+	0.7-)	911110 400	0.1-	0.7+

1989 EC2 = 1987 WS2 = 1991 RV12
Id. E. Bowell (k), G. V. Williams
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 162.59135		(2000.0)	P	Q
n 0.17619780	Peri.	205.59806	-0.65859728	+0.75147832
a 3.1511499	Node	23.27278	-0.67227119	-0.56423427
e 0.1156398	Incl.	5.68143	-0.33808442	-0.34193570
P 5.59	H	12.0	G 0.15	

Residuals in seconds of arc

871126 033	0.4+	0.0	890308 399	1.2-	1.3+	890404 399	1.3-	0.3-
871126 033	0.4-	0.1-	890312 399	0.5+	0.5-	890406 399	0.2+	1.0-
890305 046	(2.5+	1.3+)	890312 399	(2.1-	0.5+)	890406 399	1.2+	0.0
890305 046	1.0-	0.6+	890312 399	(2.6+	0.6-)	890406 399	0.1-	0.8-
890306 046	0.7-	0.4+	890312 399	0.2+	0.7+	910913 675	0.7-	0.1+
890306 046	0.4+	0.9-	890312 399	0.5+	0.1+	910913 675	0.7-	0.2+
890307 046	0.1-	0.2-	890326 399	1.4-	1.2+	910914 675	1.5+	1.2-
890307 046	0.7+	0.0	890326 399	(2.8-	0.6+)	910914 675	1.0+	0.3-
890308 399	(2.2+	0.3-)	890404 399	0.2+	0.2-	910916 675	0.4+	0.5+
890308 399	0.3+	0.9-	890404 399	1.0+	0.6-	910916 675	0.9-	0.2-

1989 TC3 = 1991 EW1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 115.02366		(2000.0)	P	Q
n 0.18581126	Peri.	301.95328	-0.36045724	-0.93242142
a 3.0415015	Node	169.08366	+0.89507136	-0.35351212
e 0.1967931	Incl.	7.80189	+0.26252207	-0.07496313
P 5.30	H	13.4	G 0.15	

Residuals in seconds of arc

890928	809	0.6+	0.4+	891007	809	0.7-	0.8-	891008	809	0.7-	0.2-
890928	809	1.0+	0.5-	891007	809	1.0+	0.3+	891008	809	0.1-	0.2-
890928	809	0.9-	1.5-	891007	809	0.2-	0.4-	910307	809	0.0	0.4+
891003	809	0.0	1.0+	891007	809	0.2-	1.0-	910307	809	0.6+	0.0
891003	809	0.0	0.7+	891008	809	0.7+	0.8+	910307	809	1.0+	0.2+
891003	809	0.9-	0.6+	891008	809	0.1+	0.6+	910309	809	0.5-	0.5-
891007	809	0.1+	1.1-	891008	809	0.3+	1.1+	910309	809	0.4-	0.2-
891007	809	0.6+	0.8-	891008	809	0.7-	0.9+	910309	809	0.8-	0.1+

1989 UX5

Epoch 1992 June 27.0 TT = JDT 2448800.5				Bowell	
M 39.99455		(2000.0)	P	Q	
n 0.08626936	Peri.	358.86748	+0.24117818	-0.96776470	
a 5.0726123	Node	77.17327	+0.89098280	+0.19116653	
e 0.0292052	Incl.	4.26757	+0.38468525	+0.16397209	
P 11.42	H	10.8	G 0.15		

Residuals in seconds of arc

891004	807	0.5-	0.5-	891104	675	1.0-	1.0-	901113	675	0.8+	0.2-
891030	807	0.2+	0.1+	891128	688	0.3-	0.4+	901113	675	0.4-	0.5-
891101	807	0.4+	0.1+	891128	688	0.2-	0.5+	901114	675	0.0	0.4-
891101	807	0.5+	0.4+	900128	688	0.5-	0.9+	901114	675	0.4-	0.7+
891104	675	1.4+	1.0-	900128	688	0.3-	0.9+				

1990 DA1 = 1958 UF = 1980 DB3 = 1991 TF2

Epoch 1992 June 27.0 TT = JDT 2448800.5				Nakano	
M 145.07487		(2000.0)	P	Q	
n 0.30028029	Peri.	319.25295	+0.45209785	+0.89021251	
a 2.2086056	Node	337.45353	-0.77580915	+0.36150133	
e 0.2237930	Incl.	8.38888	-0.44014508	+0.27719753	
P 3.28	H	13.0	G 0.15		

Residuals in seconds of arc (or two decimals in units of degrees)

581016	760(0.06+	0.09+)X		900305	809	0.3+	0.3-	900321	400	2.4-	1.8+
800220	095	0.2-	0.3-	900307	809	0.1+	0.4+	911008	400	0.4-	1.3+
900228	400 (0.6-	11.4+)		900307	809	0.5+	0.3+	911008	400	0.9-	2.8+
900228	400 (0.8-	13.9+)		900307	809	0.6+	0.1+	911016	400	0.6+	1.7-
900302	400 (4.3+	10.9+)		900317	400 (4.5-		0.7-)	911016	400	0.6+	0.1-
900305	809	0.0	0.4-	900317	400 (3.8-		0.2-)	911029	400	0.2-	1.0-
900305	809	0.2-	0.3-	900321	400	1.5+	0.8-	911029	400	0.2+	0.8-

1990 FQ1 = 1952 HE3 = 1957 WJ1

Id. G. V. Williams, E. F. Helin (1991 obs.)

Epoch 1992 June 27.0 TT = JDT 2448800.5				Williams	
M 138.68513		(2000.0)	P	Q	
n 0.25893228	Peri.	78.69318	+0.33510108	+0.91788346	
a 2.4378777	Node	213.44994	-0.94217477	+0.32735169	
e 0.1508798	Incl.	22.68668	+0.00373871	+0.22434532	
P 3.81	H	12.5	G 0.15		

Residuals in seconds of arc

520426	711	0.1-	4.9+ Y	900425	675	0.0	2.4-	911101	675	0.2+	0.6-
571127	760	0.4+	0.9+	900425	675	0.4-	1.8-	911101	675	2.1+	0.3+
571127	760	0.7-	0.1-	900428	675	0.1-	0.7-	911103	675	1.4-	0.1-
900324	675	0.7-	0.4-	900428	675	0.1-	1.2-	911103	675	1.0+	2.1-
900324	675	1.4-	0.2+	900525	675	0.1-	1.5-	911208	675	1.5-	1.1-
900325	675	1.4+	1.4+	900525	675	1.3+	2.2-	911208	675	0.5-	0.8-

1990 KE = 1991 PL11
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bowell
M 58.15166 (2000.0) P Q
n 0.23366079 Peri. 177.40927 +0.99112519 -0.12496702
a 2.6106310 Node 190.11296 +0.11685093 +0.98157821
e 0.1069121 Incl. 14.95819 +0.06337753 +0.14452495
P 4.22 H 13.1 G 0.15
Residuals in seconds of arc

900519	413	(7.1-	2.6+)	900529	413	0.8-	0.9+	910914	675	0.4-	0.3-
900519	413	(5.3+	1.4-)	900529	413	1.1-	0.2+	910914	675	0.8-	0.4+
900520	413	0.7-	0.2-	910809	675	(16.1-	0.5-)	910915	675	0.1+	0.1-
900520	413	0.8+	0.3+	910810	675	0.3-	0.5-	910915	675	0.1+	0.6+
900526	413	0.1+	0.2-	910913	675	0.6+	0.1+	910917	675	0.1-	0.1+
900526	413	1.6+	0.9-	910913	675	0.2+	0.1+	910917	675	0.5+	0.3-

1990 RB = 1979 OR7 = 1982 DU1
Id. T. Urata (MPC 17215; unpublished)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Urata
M 134.30977 (2000.0) P Q
n 0.18965260 Peri. 55.78196 +0.97292944 +0.18240296
a 3.0002920 Node 293.34652 -0.22749546 +0.86398524
e 0.1062915 Incl. 8.89135 +0.04067081 +0.46931723
P 5.20 H 11.8 G 0.15
Residuals in seconds of arc

790721	095	3.1-	5.4+	900920	675	1.1+	2.5-	911228	385	2.0+	0.2-
790724	413	0.9-	1.4-	900920	675	0.2+	0.7-	920104	898	0.2+	0.8+
790727	675	3.0+	1.1-	900920	885	1.3+	0.0	920104	898	0.9+	0.4-
820226	801	0.4+	1.4+	900920	885	0.8+	0.8+	920110	385	0.3-	1.4-
900912	385	1.2-	0.5-	900920	885	0.2+	1.3+	920110	385	1.0+	0.5-
900912	385	1.4+	1.7-	900927	385	2.0-	0.7+	920112	898	1.2-	1.9+
900917	675	1.5+	0.4-	900927	385	4.0-	4.3+	920112	898	0.4-	1.5+
900917	675	0.4+	1.4-	911228	385	1.6-	0.0				

1990 RR2 = 1975 XH4 = 1977 FM2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 159.97156 (2000.0) P Q
n 0.25553642 Peri. 173.36883 +0.99230891 -0.12073295
a 2.4594284 Node 193.65654 +0.10759190 +0.95036977
e 0.1367569 Incl. 6.64568 +0.06121288 +0.28674181
P 3.86 H 12.9 G 0.15
Residuals in seconds of arc

751203	095	0.1-	0.9+	900919	675	0.5-	0.6+	900928	809	1.0+	0.1+
770326	095	0.2+	0.4+	900923	809	0.4+	0.5+	900929	809	0.5+	0.5-
900829	095	0.2+	2.5+	900923	809	0.8+	0.5+	900929	809	1.0+	0.3-
900829	095	(4.5-	1.0-)	900923	809	0.8+	0.2+	900929	809	1.5+	0.4-
900915	675	1.2+	1.7-	900923	095	2.5-	0.1+	901011	095	(4.9-	1.1+)
900915	095	(0.2-	6.5-)	900924	809	0.0	0.3+	901014	095	1.3-	0.2-
900915	095	(1.9-	6.1-)	900924	809	0.1-	0.2+	901014	095	1.4-	0.7-
900916	675	0.1-	0.6+	900924	809	0.3+	0.5+	901015	095	0.4-	1.9-
900916	675	0.7-	0.6+	900928	809	0.4+	0.2+	901015	095	1.5-	1.9-
900919	675	0.7-	0.6+	900928	809	0.7+	0.2+				

1990 RE6 = 1949 JA = 1968 QS1 = 1971 KA1 = 1979 OG13 = 1979 QE8 = 1980 XK3 = 1986 NE

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 286.26299	(2000.0)	P	Q
n 0.26924300	Peri. 53.29589	-0.82770612	+0.56074625
a 2.3752342	Node 160.78222	-0.53350953	-0.77440712
e 0.1452269	Incl. 3.76114	-0.17398321	-0.29301407
P 3.66	H 12.7	G 0.15	

Residuals in seconds of arc

490503	024	0.0	1.1-	900828	095	1.2+	1.9+	900910	809	0.2-	0.3-
680828	095	2.2+	1.4-	900828	095	2.0-	2.0-	900911	809	0.2-	0.3-
710525	095	0.9-	1.3+	900909	809	0.9+	1.4+	900911	809	0.1+	0.3-
790731	095	2.0-	0.3+	900909	809	1.3+	1.4+	900914	675	1.8-	1.1-
790826	095	1.8-	0.7-	900909	809	1.7+	1.5+	900914	675	1.4-	1.8-
801210	095	0.8+	1.4-	900910	809	0.5+	0.3-	900917	809	0.5-	0.9+
860707	010	2.2+	1.4-	900910	809	0.8+	0.2-	900918	809	0.8-	0.7+
860708	010	(9.7+	0.7+)	900910	809	1.1+	0.2-	900918	809	1.3-	0.8+

1990 RD9 = 1970 GL = 1981 AA2 = 1985 DE1 = 1987 VL = 1991 VZ3

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 294.50913	(2000.0)	P	Q
n 0.26009272	Peri. 270.65944	-0.90574055	+0.38244184
a 2.4306210	Node 291.83853	-0.26612178	-0.84863311
e 0.1234294	Incl. 11.35015	-0.32986853	-0.36545872
P 3.79	H 12.6	G 0.15	

Residuals in seconds of arc

700407	805	0.7+	0.2+	871114	010	(24.0+	2.0-)	911112	399	2.3-	0.8-
700407	805	0.5-	0.5+	871114	010	(24.9+	2.0-)	911114	399	(6.4-	0.7+)
700407	805	0.3-	0.3+	900914	675	0.4-	0.7+	911114	399	1.4-	0.1-
810108	381	0.6+	1.4-	900914	675	0.2+	0.6+	911205	399	0.7-	0.6-
810108	381	0.9+	0.3+	900915	675	0.4-	0.2-	911205	399	1.0-	1.5+
850225	688	0.7+	0.3-	900915	675	0.7-	1.7-	911205	399	1.6+	0.5+
850225	688	1.2-	0.3+	900918	675	1.6+	1.2-	911214	399	1.2+	0.6+
850318	688	1.4+	0.7-	900918	675	0.7+	0.9+	911214	399	0.2-	0.3+
850318	688	2.0-	1.0-	911112	399	(3.9+	1.2-)	911214	399	(2.0+	5.1+)
871114	010	(20.9+	1.5-)	911112	399	1.2+	0.6-				

1990 VB15 = 1990 UR11 = 1980 RM3 = 1985 DS4

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 197.91836	(2000.0)	P	Q
n 0.30531586	Peri. 283.66215	+0.87093636	-0.48744029
a 2.1842540	Node 105.54151	+0.47211858	+0.79491497
e 0.1305130	Incl. 3.70305	+0.13628609	+0.36126465
P 3.23	H 13.5	G 0.15	

Residuals in seconds of arc

800904	095	0.2-	0.7+	901028	095	1.1+	1.4-	901121	095	1.2-	2.0+
850220	675	0.3-	0.4+	901029	095	2.2+	1.7-	901123	095	0.5-	0.7-
850223	675	0.4+	0.3-	901115	095	(9.1+	0.3+)	901123	095	0.6+	0.1+
901017	095	0.6-	0.4-	901115	095	0.2+	1.2+				
901017	095	(1.6-	5.0-)	901121	095	1.7-	0.6+				

1990 VC15 = 1990 WA9 = 1981 WV2 = 1985 PV1

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M 133.30366	(2000.0)	P	Q
n 0.22012845	Peri. 231.37532	+0.66107929	-0.75030959
a 2.7165556	Node 177.23644	+0.70690558	+0.62143587
e 0.0845706	Incl. 3.70121	+0.25151277	+0.22550603
P 4.48	H 12.6	G 0.15	

Residuals in seconds of arc

811124	033	0.4+	0.3+	901115	095	0.7+	2.4-	901121 095 1.8+ 0.5-
811124	033	0.4-	0.3-	901119	809	0.4+	1.7+	901123 095 0.7+ 0.6-
850814	010	0.1-	0.1-	901119	809	0.8-	1.7+	901123 095 0.7- 0.0
850816	010	0.1+	0.1+	901119	809	1.1-	1.6+	
901115	095	(7.6+	0.1+)	901121	095	1.0-	1.4-	

1991 NR2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell

M	76.59059		(2000.0)		P		Q	
n	0.22701199	Peri.	27.85861		+0.68627979		+0.66961187	
a	2.6613594	Node	287.08791		-0.71027278		+0.53291234	
e	0.4043945	Incl.	17.28271		-0.15662898		+0.51732425	
P	4.34	H	14.0	G	0.15			

From 18 observations 1991 July 12-Nov. 5, mean residual 0".25.

1991 PH8 = 1980 DB5 = 1987 UX7 = 1989 AH1
Id. G. V. Williams, A. Lowe
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	115.79264		(2000.0)		P		Q	
n	0.20658049	Peri.	176.65855		-0.08714878		+0.99447251	
a	2.8340653	Node	88.33610		-0.91534429		-0.05673869	
e	0.0124480	Incl.	3.35870		-0.39312838		-0.08834679	
P	4.77	H	12.0	G	0.15			

Residuals in seconds of arc

800221	095	1.1+	2.5+	890115	400	0.7-	0.3+	910712 809 (8.8+ 5.0-)
871023	095	0.6-	1.4+	910710	809	1.3-	0.9-	910805 675 (0.3+ 11.4+)
890113	400	0.7+	0.4-	910710	809	1.1-	1.0-	910805 675 1.3+ 1.1+
890113	400	1.3-	1.2-	910710	809	1.2-	1.1-	910807 675 2.7+ 1.5+
890113	400	0.3+	0.5+	910711	809	1.3-	0.3+	910807 675 0.5+ 0.7+
890115	400	0.3-	0.4+	910711	809	0.4-	0.3+	
890115	400	1.3+	0.2+	910711	809	0.0	0.4+	

1991 PO10 = 1955 SQ = 1973 TL = 1984 UF = 1990 FV4
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	93.76898		(2000.0)		P		Q	
n	0.27355984	Peri.	129.66643		+0.86013782		+0.50864905	
a	2.3501802	Node	199.84994		-0.49548113		+0.81558027	
e	0.1465334	Incl.	6.41443		-0.12108419		+0.27587127	
P	3.60	H	13.0	G	0.15			

Residuals in seconds of arc

550917	760	0.1-	1.3+	910807	675	0.8+	0.9-	910909 046 0.6- 1.7+
550917	760	0.6-	0.1+	910807	675	0.3-	0.3-	910910 046 0.1- 0.7-
731001	095	1.2+	1.5-	910807	675	1.2-	0.1+	910910 046 0.3+ 0.3-
841017	046	0.6+	1.8-	910808	675	0.3+	0.0	910915 675 0.5+ 0.9-
841017	046	0.5-	1.2+	910810	675	0.4-	0.6+	910915 675 0.7+ 0.6-
900327	675	0.7-	0.6-	910810	675	0.2-	0.7+	910917 675 0.1+ 0.6-
900327	675	0.0	1.7-	910909	046	(0.7+	3.2+)	910917 675 0.2+ 0.2-

1991 PQ10 = 1938 AB = 1981 NF = 1982 YP4 = 1985 UO1 = 1988 VV7
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	323.05424		(2000.0)		P		Q	
n	0.30728111	Peri.	219.83838		-0.52762571		-0.84632325	
a	2.1749309	Node	262.12367		+0.79698398		-0.46339007	
e	0.0839079	Incl.	4.23383		+0.29398578		-0.26269108	
P	3.21	H	12.5	G	0.15			

Residuals in seconds of arc

371222	053	(14.1-	38.3+)X	380104	053	(18.3+	32.9+)X	810702 805 (0.3- 15.2-)
371223	053	(72.7-	57.3+)X	380105	053	(26.4+	5.2-)X	810702 805 0.2- 0.6+

821223 095 0.0 0.2- 910807 675 1.3+ 0.4- 910915 675 0.2+ 0.7-
851022 033 0.0 0.3- 910808 675 0.4+ 0.7+ 910917 675 0.7- 0.2-
881107 801 0.4- 1.4+ 910915 675 0.1+ 0.4- 910917 675 0.6- 0.2-

1991 PG11 = 1977 RU18
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 103.81142 (2000.0) P Q
n 0.28175041 Peri. 137.44121 +0.72944563 +0.68403771
a 2.3044096 Node 179.39475 -0.65448882 +0.69844996
e 0.2379859 Incl. 6.61144 -0.19888050 +0.21038074
P 3.50 H 14.5 G 0.15
Residuals in seconds of arc
770909 675 0.2+ 0.4+ 910810 675 0.9- 0.0 910915 675 0.9- 0.3+
770910 675 0.3- 0.0 910911 675 0.9+ 0.9+ 910915 675 0.8+ 0.9-
910809 675 0.9+ 0.0 910911 675 0.6- 0.6-

1991 PQ11 = 1975 TK = 1979 SY1 = 1979 SG15 = 1987 SW18
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 82.96289 (2000.0) P Q
n 0.24505494 Peri. 30.43390 +0.93135612 +0.35703080
a 2.5290674 Node 308.47525 -0.34974927 +0.82266653
e 0.0869408 Incl. 5.23627 -0.10124833 +0.44243506
P 4.02 H 13.5 G 0.15
Residuals in seconds of arc
751003 095 0.8- 1.1+ 910810 675 0.2- 0.1+ 910914 675 0.2+ 0.2+
790922 095 0.1- 0.3- 910906 511 1.3+ 0.9- 910917 675 0.1+ 0.7+
790928 095 1.3+ 1.2- 910907 511 0.1- 1.1- 910917 675 0.0 0.7-
870916 095 0.8- 1.4+ 910908 511 0.7- 0.6-
910809 675 0.1- 0.8+ 910914 675 0.0 0.7+

1991 QF
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 50.69394 (2000.0) P Q
n 0.24564103 Peri. 316.33078 +0.97959587 +0.04489602
a 2.5250430 Node 42.30439 +0.07837257 +0.81222875
e 0.3185311 Incl. 16.92100 -0.18506668 +0.58160881
P 4.01 H 14.5 G 0.15
From 9 observations 1991 Aug. 30-Nov. 26, mean residual 0".40.

1991 QG
Epoch 1992 June 27.0 TT = JDT 2448800.5 Bardwell
M 46.66469 (2000.0) P Q
n 0.18906312 Peri. 162.15694 +0.99838393 -0.03572983
a 3.0065251 Node 200.04678 +0.02177049 +0.95877138
e 0.4018632 Incl. 7.40711 +0.05249356 +0.28192343
P 5.21 H 14.0 G 0.15
From 20 observations 1991 Aug. 6-Nov. 6, mean residual 0".85.

1991 RV1 = 1980 TT5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 33.60154 (2000.0) P Q
n 0.17768026 Peri. 162.21950 +0.89117316 -0.42009876
a 3.1335978 Node 223.91920 +0.38045056 +0.89768597
e 0.1687559 Incl. 14.29347 +0.24711895 +0.13295464
P 5.55 H 12.0 G 0.15
Residuals in seconds of arc
801009 675 1.9+ 0.9+ 910909 675 1.0- 0.9- 911011 675 0.4+ 0.3-
801010 675 1.9- 0.9- 910909 675 0.7- 0.1+ 911014 675 0.3- 0.0
910908 675 1.5+ 0.8+ 911011 675 0.3+ 0.2+ 911014 675 0.2- 0.1+

1991 RO2 = 1127 T-1
Epoch 1992 June 27.0 TT = JDT 2448800.5 (J-P) Marsden
M 88.32686 (2000.0) P Q
n 0.26084084 Peri. 130.86103 +0.91833902 +0.39347084
a 2.4259761 Node 206.05364 -0.38610985 +0.86681746
e 0.2831493 Incl. 5.59572 -0.08702091 +0.30628122
P 3.78 H 15.0 G 0.15
Residuals in seconds of arc

710324	675	0.6+	0.7-	910910	511	0.8-	1.4-	910915	675	0.1-	1.1+
710325	675	0.1-	0.1+	910912	033	0.2+	0.1-	910915	675	1.5+	1.1+
710325	675	1.1-	1.4+	910912	033	0.3+	0.3-	911002	033	0.6-	0.3+
710326	675	0.6+	0.8-	910913	675	1.2+	0.0	911002	033	0.2+	0.2-
910905	033	0.7-	0.3+	910913	675	1.2+	0.4+	911003	033	0.1-	0.9-
910905	033	1.1-	0.1+	910914	033	0.4-	0.0	911004	033	0.9-	0.9-
910908	511	0.0	1.1-	910915	033	0.4-	0.2+	911009	033	0.2+	0.2+
910908	511	(1.1+	2.8-)	910915	033	0.3+	0.5+	911009	033	0.0	0.6+

1991 RH7 = 1986 RS9
Epoch 1992 June 27.0 TT = JDT 2448800.5 (J-P) Marsden
M 143.80916 (2000.0) P Q
n 0.21276431 Peri. 30.79084 +0.18248989 +0.97672876
a 2.7788881 Node 249.92643 -0.92474371 +0.13157515
e 0.1902213 Incl. 6.89067 -0.33398578 +0.16937798
P 4.63 H 13.5 G 0.15
Residuals in seconds of arc

860908	095	0.3+	0.4+	910914	033	0.3+	0.2+	911009	033	1.1+	0.1+
860911	095	0.3-	0.3-	910915	033	1.3+	0.2+	911009	033	0.9-	0.5-
910911	033	1.0-	0.6+	911005	033	0.4-	0.3+	911010	033	0.1+	0.2-
910913	033	0.2-	1.6-	911006	033	0.3-	0.7+				
910913	033	0.1-	0.4-	911006	033	0.0	0.4+				

1991 TB1
Epoch 1991 Oct. 11.0 TT = JDT 2448540.5 Bardwell
M 304.09205 (2000.0) P Q
n 0.56161296 Peri. 103.53396 -0.33018119 -0.94290764
a 1.4549385 Node 6.28274 +0.63529319 -0.25619108
e 0.3525601 Incl. 23.50891 +0.69812817 -0.21281754
P 1.75 H 17.0 G 0.15
From 13 observations 1991 Oct. 2-Nov. 4.

1991 TD1 = 1975 TQ2 = 1990 FS4
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams
M 102.54440 (2000.0) P Q
n 0.37124805 Peri. 193.70393 +0.91219074 -0.40299896
a 1.9173141 Node 190.97941 +0.40299630 +0.91506753
e 0.1181355 Incl. 22.91639 +0.07417577 -0.01559676
P 2.65 H 14.5 G 0.15
Residuals in seconds of arc

751003	095	0.0	0.4+	911013	675	0.4+	0.3-	911102	413	0.6-	1.4+
751013	095	(2.4+	22.3+)	911013	675	0.3-	0.1-	911113	413	0.7-	0.3-
900327	675	0.5-	0.6+	911013	413	0.4-	1.1-	911126	413	0.4+	0.5-
900327	675	0.5+	0.3+	911014	675	0.7+	1.9+	911127	413	0.6-	1.1-
911012	413	0.5+	0.6-	911015	413	0.4+	0.2-	911127	413	0.5+	0.4+
911012	413	0.2+	0.6+	911018	413	0.2-	0.1+	911129	413	0.4-	0.1-

1991 TL1 = 1989 GV3
Epoch 1992 June 27.0 TT = JDT 2448800.5 (J-P) Marsden
M 40.69839 (2000.0) P Q
n 0.26160202 Peri. 240.16647 +0.24876107 -0.96386299
a 2.4212679 Node 196.28462 +0.96375254 +0.25612172
e 0.2784145 Incl. 19.87291 +0.09643112 -0.07327892
P 3.77 H 13.5 G 0.15
Residuals in seconds of arc

890404	809	0.8+	0.5-	890408	809	1.1-	1.0+	911012	675	1.1-	0.2-
890404	809	0.2+	0.2+	890408	809	0.1+	0.8+	911103	675	0.2-	0.5-
890404	809	1.3+	0.2+	890408	809	0.4+	0.3+	911103	675	1.2-	0.5+
890406	809	1.4-	0.7-	911010	675	1.6+	0.9-	911105	675	1.0+	0.2+
890406	809	0.2-	1.6-	911010	675	0.2-	0.6+	911105	675	0.2+	0.1-
890406	809	(3.1+	2.2-)	911012	675	0.9-	0.0	911106	675	0.7+	0.2+

1991 TV1 = 1987 UO9 = 1987 YW3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 65.28888 (2000.0) P Q
n 0.24299763 Peri. 328.94701 +0.92662750 -0.35774343
a 2.5433221 Node 52.46124 +0.36790888 +0.79934251
e 0.3088158 Incl. 8.38842 +0.07748897 +0.48277447
P 4.06 H 13.8 G 0.15
Residuals in seconds of arc

871028	095	0.8+	0.7-	911015	894	1.5-	0.8+	911104	894	0.1+	0.3+
871223	010	0.1+	0.1+	911015	894	0.9-	1.0+	911105	894	0.7+	0.3+
871223	010	1.0-	0.2+	911028	894	0.9-	0.8-	911105	894	0.6+	0.0
911013	894	1.3+	0.6+	911028	894	0.6-	0.8-	911111	894	0.0	0.4-
911013	894	0.1-	1.3-	911104	894	0.3+	0.2-	911111	894	0.6+	0.9+

1991 TW1 = 1973 YL1 = 1977 RD1 = 1988 BF1
Id. R. Nagata
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi
M 46.79609 (2000.0) P Q
n 0.21540366 Peri. 345.66901 +0.79200375 -0.60520444
a 2.7561362 Node 51.86211 +0.56971647 +0.68533497
e 0.1603919 Incl. 5.86414 +0.21943838 +0.40502291
P 4.58 H 13.0 G 0.15
Residuals in seconds of arc

731220	095	0.7+	0.1-	880121	511	2.4+	0.1-	911103	877	1.2-	0.6+
731221	095	1.2-	2.5+	911013	877	0.1+	0.6-	911103	877	0.8+	1.0-
770907	095	0.8-	1.6+	911013	877	0.6-	1.2-	911105	877	0.5-	1.2-
880121	511	2.1-	0.6-	911015	877	0.5+	1.0-	911105	877	0.7-	0.9+
880121	511	0.5-	0.0	911015	877	2.8+	1.1+				

1991 TH2 = 1969 TV5 = 1980 TX10
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 75.65255 (2000.0) P Q
n 0.26940924 Peri. 218.82624 +0.95035150 -0.31076420
a 2.3742570 Node 159.26196 +0.29561214 +0.88549974
e 0.2218896 Incl. 2.59806 +0.09718786 +0.34542123
P 3.66 H 14.1 G 0.15
Residuals in seconds of arc

691015	095	0.9-	2.9-	911013	408	0.3-	1.2+	911015	894	0.1-	0.8-
691017	095	2.4+	0.0	911013	408	1.1+	1.8+	911103	408	1.7-	1.3+
801008	095	1.7-	2.3+	911015	408	0.6+	1.6+	911103	408	(0.6-	3.2+)
911013	403	(0.3-	3.7-)	911015	408	1.6-	1.0+	911103	408	1.5-	1.0-
911013	403	0.2+	2.4-	911015	894	0.8+	1.1-	911104	408	0.8+	1.1-

911104 408 0.7+ 0.4+ 911105 894 0.8- 0.4+ 911111 894 0.2+ 0.5-
911104 894 0.6+ 0.7+ 911105 894 1.0- 0.3-
911104 894 2.2+ 0.2- 911111 894 0.1+ 0.3-

1991 TJ2 = 1949 PB = 1952 KD1 = 1968 KL = 1975 TS5 = 1975 VL7
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 133.98560 (2000.0) P Q
n 0.30714231 Peri. 255.55224 +0.62971706 +0.77251399
a 2.1755861 Node 53.77405 -0.66799382 +0.59219133
e 0.2274512 Incl. 5.81436 -0.39653586 +0.22919765
P 3.21 H 13.4 G 0.15
Residuals in seconds of arc
490815 078(64.2+ 56.9+) 911013 408 0.4- 0.1- 911103 408 1.3+ 1.7-
520525 711(32.6+ 17.9-) 911013 408 1.6- 0.0 911104 408 1.3- 0.3-
680522 095 0.6- 1.5- 911015 408 1.7- 1.0+ 911104 408 1.5+ 0.3+
751014 095 1.2+ 2.6- 911015 408 1.0+ 2.1+
751106 095 0.6+ 1.7- 911103 408 0.2+ 1.2+

1991 TK2
Epoch 1991 Oct. 11.0 TT = JDT 2448540.5 Marsden
M 9.11666 (2000.0) P Q
n 0.21319889 Peri. 138.31508 +0.89074171 +0.45104794
a 2.7751050 Node 195.16426 -0.45264785 +0.86919639
e 0.4849534 Incl. 12.35934 -0.04109906 +0.20261637
P 4.62 H 14.5 G 0.15
From 10 observations 1991 Oct. 10-Nov. 3.

1991 TS4 = 1980 FO7 = 1981 SX = 1983 CH1 = 1983 DW = 1983 EV3
Id. S. Nakano, B. G. Marsden (d)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 118.41053 (2000.0) P Q
n 0.29788802 Peri. 342.76811 +0.82309847 +0.56650285
a 2.2204144 Node 342.54889 -0.50415155 +0.69665411
e 0.1515574 Incl. 7.62499 -0.26141943 +0.44016766
P 3.31 H 13.0 G 0.15
Residuals in seconds of arc
800323 809 0.2+ 0.4+ 830315 095 1.2- 1.0+ 911105 376 1.0- 0.5+
810929 704 1.1+ 0.6+ 911007 364 1.4+ 0.4+ 911105 376 0.8- 0.1-
810929 704 2.0- 1.0+ 911007 364 0.5+ 0.1- 911107 376 0.8+ 0.2+
810930 704 0.8- 1.2+ 911013 364 0.0 2.3- 911107 376 0.2- 0.2+
830211 688 2.6+ 0.1+ 911013 364 0.4+ 0.7- 911212 376 1.0- 1.1+
830211 688 0.6+ 1.2- 911015 376 0.3+ 0.7- Y
830219 688 2.0- 0.3+ 911015 376 0.3+ 0.5- Y

1991 UK = 1950 TO1 = 1976 SC9 = 1987 RA4 = 1987 SU6
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 50.86304 (2000.0) P Q
n 0.26497908 Peri. 144.14539 +0.65280466 -0.75663686
a 2.4006471 Node 265.07126 +0.68615286 +0.61113188
e 0.1338231 Incl. 2.11091 +0.32099895 +0.23241878
P 3.72 H 13.5 G 0.15
Residuals in seconds of arc
501013 024 0.4+ 1.0- 911018 399 0.2+ 2.3+ 911028 399 1.4- 0.5-
760929 095 0.4- 1.2+ 911018 399 1.2- 1.3+ 911029 399 1.2- 0.8-
870902 095 0.2+ 0.3+ 911019 399 0.2+ 0.6+ 911029 399 0.1+ 0.8-
870918 071 0.1+ 0.9- 911019 399 0.9+ 0.3- 911031 399 0.7+ 1.2-
870918 071 (6.7+ 0.9-) 911028 399 1.7+ 0.2- 911031 399 0.0 0.0

1991 UM = 1978 VT11
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 73.28189 (2000.0) P Q
n 0.29843926 Peri. 19.83674 +0.86022217 -0.50987872
a 2.2176793 Node 10.82594 +0.46309017 +0.77587113
e 0.0985093 Incl. 1.96562 +0.21346032 +0.37154769
P 3.30 H 14.3 G 0.15
Residuals in seconds of arc

781105	675	0.1+	0.0	911018	399	0.1+	1.0-	911029 399 0.9+ 0.2-
781106	675	0.1+	0.3+	911019	399	0.0	0.3+	911029 399 0.2+ 0.9+
781107	675	0.9-	0.2-	911019	399	0.1+	0.1+	911031 399 0.4- 0.4-
781108	675	0.8+	0.2-	911028	399	1.6-	0.3+	911031 399 0.8+ 0.5+
911018	399	0.7+	0.1+	911028	399	0.9-	0.6-	

1991 UU = 1957 KH = 1974 QD1 = 1977 KT1 = 1978 YH1 = 1981 UL14
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 151.53190 (2000.0) P Q
n 0.29514035 Peri. 62.05153 +0.40141278 +0.91317322
a 2.2341740 Node 231.79068 -0.86872498 +0.35519180
e 0.1929333 Incl. 5.15397 -0.29014596 +0.19988359
P 3.34 H 13.4 G 0.15
Residuals in seconds of arc

570529	760	(2.1+	10.7-)	811023	095	1.1+	0.8+	911029 399 0.9- 0.2-
570529	760	2.0-	2.7-	911018	399	0.4-	1.1-	911031 399 1.5+ 0.4+
740821	095	1.1+	3.1+	911018	399	0.8-	0.4-	911031 399 0.4- 0.9+
770518	675	1.2+	0.0	911019	399	1.0-	1.2-	911109 399 0.1+ 1.7-
770519	675	0.1+	0.1+	911019	399	1.1-	2.7-	911109 399 0.1+ 0.6-
781222	095	2.1+	1.2+	911029	399	0.4-	0.4+	

1991 UV = 1970 OJ = 1977 RM3 = 1984 SZ3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 141.44919 (2000.0) P Q
n 0.28726016 Peri. 86.75164 +0.58289271 +0.81228799
a 2.2748484 Node 218.92640 -0.75791402 +0.53438578
e 0.1619889 Incl. 1.87874 -0.29292052 +0.23370936
P 3.43 H 13.4 G 0.15
Residuals in seconds of arc

700731	095	0.0	0.4+	840930	046	0.6+	0.1+	911029 399 1.6- 1.2+
770912	095	0.4-	1.8+	840930	046	0.3+	0.9+	911031 399 1.0- 1.1+
770918	095	0.4-	0.5-	911018	399	0.5+	0.3-	911031 399 0.3- 0.5+
840927	033	0.8-	1.3-	911018	399	1.6+	0.6-	911109 399 1.3+ 0.6-
840927	033	0.7-	1.0-	911019	399	0.6-	0.3+	911109 399 0.1- 0.4-
840929	046	1.1+	1.4-	911019	399	0.7+	1.0+	
840929	046	1.0+	0.8-	911029	399	1.3-	0.2+	

1991 UY = 1981 YC1 = 1984 UR1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 75.88252 (2000.0) P Q
n 0.28673496 Peri. 315.38956 +0.86149244 -0.49388565
a 2.2776254 Node 74.54702 +0.49333112 +0.75911458
e 0.1301483 Incl. 7.02799 +0.12022968 +0.42405427
P 3.44 H 13.3 G 0.15
Residuals in seconds of arc

811229	704	(2.6-	4.3-)	841029	688	0.6-	2.0-	911019 399 0.2+ 0.8+
811230	704	(5.2-	1.3-)	841029	688	1.0+	0.9+	911019 399 0.3- 2.2+
811231	704	0.0	0.5-	911018	399	0.2+	0.4+	911104 399 1.8- 0.0
820101	704	0.1+	0.2+	911018	399	0.6-	1.0-	911104 399 (2.9- 0.2+)

911104 894 0.9+ 0.6- 911105 399 0.8- 0.7+ 911111 399 0.8- 0.2-
911104 894 0.7+ 1.4- 911105 894 1.1+ 0.2- 911111 399 0.8- 0.9+
911105 399 0.6+ 0.4+ 911105 894 1.0+ 0.8-

1991 UP1 = 1948 UB = 1982 SE7 = 1990 MD
Id. S. Nakano, T. Urata
Epoch 1992 June 27.0 TT = JDT 2448800.5 Urata
M 78.69539 (2000.0) P Q
n 0.23012899 Peri. 150.71234 +0.95599038 -0.24334042
a 2.6372734 Node 224.37731 +0.20217698 +0.95122721
e 0.1628821 Incl. 13.55452 +0.21261906 +0.18961073
P 4.28 H 12.4 G 0.15
Residuals in seconds of arc
481028 062 0.2- 0.9- 900623 675 (1.6- 9.3+) 911104 385 2.0+ 0.3+
481028 062 1.1+ 3.5- 911018 385 0.4+ 0.1- 911212 385 0.8- 1.2+
820917 095 1.3- 1.3+ 911018 385 1.5+ 0.7+ 911212 385 1.9- 1.8+
900622 675 (0.1+ 7.4+) 911103 385 0.1- 1.1- 911213 385 0.3- 1.2+
900622 675 (0.3+ 7.1+) 911103 385 0.5+ 1.1- 911213 385 1.2- 1.6+
900623 675 0.2+ 2.2+ 911104 385 0.3- 1.1+

1991 UB2 = 1980 RG6
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 201.23950 (2000.0) P Q
n 0.27650897 Peri. 22.28169 -0.23862121 +0.96714072
a 2.3334396 Node 234.01983 -0.90653306 -0.25424020
e 0.1004514 Incl. 6.22473 -0.34822080 -0.00087055
P 3.56 H 13.3 G 0.15
Residuals in seconds of arc
800913 675 0.8- 0.5- 911029 399 0.7- 1.2- 911109 399 0.4- 0.1+
800914 675 0.8+ 0.5+ 911031 399 0.3+ 0.8+ 911109 399 0.8- 0.9-
911029 399 0.5+ 1.0- 911031 399 1.0+ 2.2+

1991 UC2 = 1983 QG1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 36.75155 (2000.0) P Q
n 0.25927599 Peri. 191.74577 +0.32192932 -0.94651438
a 2.4357227 Node 239.47796 +0.87066826 +0.30499053
e 0.1295051 Incl. 1.44524 +0.37188478 +0.10531527
P 3.80 H 14.2 G 0.15
Residuals in seconds of arc
830831 675 0.8- 0.2+ 911029 399 0.2- 0.2- 911109 399 0.2+ 0.5-
830901 675 0.2+ 0.8- 911029 399 0.9+ 0.7+ 911109 399 0.0 0.0
830902 675 0.2+ 0.2+ 911031 399 1.7- 0.3+
830902 675 0.3+ 0.3+ 911031 399 0.8+ 0.2-

1991 UK2 = 1942 VV = 1986 GX1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 61.19593 (2000.0) P Q
n 0.28121131 Peri. 204.59219 +0.64663572 -0.76144456
a 2.3073538 Node 205.19535 +0.71633489 +0.62664041
e 0.0928048 Incl. 6.12691 +0.26215753 +0.16590353
P 3.50 H 12.8 G 0.15
Residuals in seconds of arc
421105 062 0.4- 0.2+ 860409 071 2.6- 1.5+ 911126 400 0.2+ 1.0-
421106 062 0.4+ 0.4+ 860409 071 1.0+ 1.3- 911126 400 0.6+ 1.9+
860408 071 1.1+ 0.9- 911029 400 0.1- 1.3- 911130 400 0.5- 0.9+
860408 071 0.5+ 0.1- 911029 400 1.2- 1.6- 911130 400 0.8+ 0.2-
860408 071 0.6- 0.1- 911031 400 0.7+ 0.6-
860408 071 0.3+ 0.0 911031 400 0.2- 0.7+

1991 UL2 = 1974 UL = 1989 GK8
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 58.02763 (2000.0) P Q
n 0.23205870 Peri. 281.75498 +0.77126410 -0.63239093
a 2.6226328 Node 117.51631 +0.61114283 +0.70395317
e 0.1115897 Incl. 4.67878 +0.17792167 +0.32331354
P 4.25 H 12.5 G 0.15
Residuals in seconds of arc

741023	330	0.2-	0.5+	911029	400	2.1-	0.3+	911112	894	0.2+	1.2-
890406	033	0.7+	0.6+	911031	400	0.4+	0.9+	911126	400	0.6+	0.3+
890407	033	0.8+	0.8+	911031	400	0.2+	0.8+	911126	400	0.7+	0.4-
890409	033	1.1-	0.1-	911104	894	1.1-	0.4+	911130	400	1.5+	0.0
890409	033	0.2-	0.8-	911104	894	0.5-	1.1-	911130	400	(1.7+	4.0-)
911029	400	0.7+	0.1-	911112	894	0.3-	0.0				

1991 UO2 = 1984 WU
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 66.71914 (2000.0) P Q
n 0.27810705 Peri. 289.98491 +0.72558034 -0.68393186
a 2.3244920 Node 113.25124 +0.65822325 +0.65760299
e 0.1962641 Incl. 4.74251 +0.20068715 +0.31590428
P 3.54 H 13.7 G 0.15
Residuals in seconds of arc

841120	688	1.2+	0.9-	911029	400	0.4-	0.7-	911110	894	0.5+	0.6+
841120	688	0.0	1.4-	911031	400	0.1+	0.5+	911110	894	0.6+	0.5+
841127	688	0.5-	0.4+	911031	400	1.4+	0.7+	911126	400	0.4-	1.5+
841127	688	0.3-	0.4+	911104	894	0.7+	0.6-	911126	400	1.5-	1.0+
911029	400	0.2-	0.1-	911104	894	1.2-	1.9-				

1991 UT2 = 1974 WP1 = 1977 KQ1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 177.39106 (2000.0) P Q
n 0.23472483 Peri. 219.71257 +0.22701509 +0.96081473
a 2.6027355 Node 63.94293 -0.84248023 +0.27567767
e 0.0620672 Incl. 10.19818 -0.48856035 -0.02892896
P 4.20 H 12.1 G 0.15
Residuals in seconds of arc

741117	808	0.1-	0.9-	911031	399	0.7-	0.3-	911207	399	1.1+	0.5+
741117	808	0.1+	0.8+	911104	399	1.5+	0.3+	911207	399	1.3-	0.1+
770518	675	0.1-	0.2-	911104	399	0.8-	0.2+	911209	399	0.4+	0.3+
770519	675	0.2+	0.4+	911205	399	1.0+	0.5+	911209	399	1.5-	0.6-
911031	399	0.9-	0.4-	911205	399	1.1+	0.2-				

1991 UV2 = 1978 TX6
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 71.85616 (2000.0) P Q
n 0.22935074 Peri. 317.80222 +0.93882785 -0.28384090
a 2.6432361 Node 59.67802 +0.34400243 +0.79965946
e 0.2845100 Incl. 13.05802 -0.01626642 +0.52913050
P 4.30 H 13.2 G 0.15
Residuals in seconds of arc

781002	095	1.0-	1.6-	911107	877	0.0	1.0+	911112	885	0.5-	0.1+
781008	095	1.0+	1.5+	911107	877	1.5+	0.6-	911112	894	0.7-	0.4-
911031	399	1.8-	0.1+	911110	896	0.3+	1.3-	911205	399	0.8-	0.3-
911031	399	1.6-	1.0+	911111	894	0.8+	1.0-	911205	399	0.9-	0.6+
911104	399	0.0	0.8+	911111	894	0.4-	0.6-	911207	399	1.6+	0.4-
911104	399	0.9+	1.7+	911111	896	1.7+	1.3-	911207	399	0.6+	0.1-
911106	877	2.3+	1.6-	911112	894	0.3-	0.5-	911209	399	1.0-	1.5+
911106	877	0.8-	1.3+	911112	885	0.8-	0.8+	911209	399	0.2-	0.7-

1991 UZ2 = 1982 BJ9 = 1986 WZ1 = 1988 CO3 = 1990 RT6
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 240.36935 (2000.0) P Q
n 0.17852067 Peri. 48.85701 -0.88916467 +0.45743178
a 3.1237556 Node 158.35632 -0.42892307 -0.82409852
e 0.1561014 Incl. 1.85378 -0.15940887 -0.33409250
P 5.52 H 11.8 G 0.15
Residuals in seconds of arc

820119	095	0.0	0.7+	900911	809	0.1+	0.1-	900914	809	1.4+	1.5-
861129	046	0.3-	0.9-	900911	809	0.2+	0.1-	900914	809	1.7+	1.5-
861129	046	0.9+	0.8-	900912	809	1.3-	0.5+	911031	399	0.3+	0.1-
880213	809	1.5-	0.7-	900912	809	1.1-	0.6+	911031	399	0.8+	0.7-
880213	809	1.3-	2.0-	900912	809	1.0-	0.6+	911104	399	1.3-	0.6+
880213	809	1.2-	1.2-	900913	809	0.1+	0.8-	911104	399	0.8-	1.9+
880217	809	1.4+	0.1-	900913	809	0.3+	0.7-	911109	399	0.4+	1.1+
880217	809	1.2+	0.0	900913	809	0.6+	0.6-	911109	399	0.6-	0.2+
900911	809	0.1-	0.1-	900914	809	1.1+	1.4-				

1991 UC3 = 1982 UD11 = 1982 VU8 = 1986 QP
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 71.58137 (2000.0) P Q
n 0.21795901 Peri. 181.11630 +0.97918885 -0.20270749
a 2.7345519 Node 190.59477 +0.18662068 +0.91857177
e 0.1930444 Incl. 3.10010 +0.07976162 +0.33931633
P 4.52 H 13.7 G 0.15
Residuals in seconds of arc

821025	095	0.5-	1.2+	860828	809	1.6-	0.7+	911031	399	0.8-	1.4-
821109	095	0.8+	2.3-	860828	809	1.1-	0.8+	911104	399	0.0	0.0
860826	809	0.4-	0.2-	860830	809	1.1+	0.8-	911104	399	1.4+	1.3+
860826	809	0.1+	0.2+	860830	809	1.5+	0.9-	911109	399	1.0+	1.3+
860826	809	0.7+	0.4+	860830	809	1.8+	1.1-	911109	399	1.4-	2.2+
860827	809	2.1-	0.7+	911031	399	0.6-	2.2-				

1991 UD3 = 1983 XK
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 35.63328 (1950.0) P Q
n 0.24119296 Peri. 226.89306 +0.23775208 -0.96940332
a 2.5559928 Node 209.51668 +0.92330160 +0.24507901
e 0.2370657 Incl. 7.12198 +0.30164233 +0.01390990
P 4.09 H 13.9 G 0.15
Residuals in seconds of arc

831206	688	0.5-	1.2-	911104	399	(4.8+	0.7-)	911111	894	0.2-	1.0-
831206	688	(3.5-	4.8-)	911104	399	(4.5+	0.1-)	911111	894	0.4-	0.3-
831209	688	1.0+	0.8+	911109	399	1.1+	1.4+	911112	894	0.5-	0.5-
831209	688	0.5-	0.4+	911109	399	0.4-	1.3+	911112	894	0.4+	1.1+
911031	399	0.8-	0.6-	911110	894	0.2-	1.7-				
911031	399	0.8+	0.5+	911110	894	0.3+	0.2-				

1991 UE3 = 1974 VZ2 = 1980 JL
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 161.25669 (2000.0) P Q
n 0.29070981 Peri. 208.63321 +0.26016690 +0.95754801
a 2.2568166 Node 76.67304 -0.85978824 +0.28825911
e 0.1908457 Incl. 7.33053 -0.43940569 +0.00291417
P 3.39 H 13.3 G 0.15
Residuals in seconds of arc

741109	808	0.4+	0.7-	800512	046	1.3-	0.4-	800513	046	0.8+	0.7+
741109	808	0.2+	0.6-	800512	046	0.1+	0.5-	800513	046	0.3+	0.0

911018 399 0.9- 0.3+ 911104 399 0.2- 0.5+ 911111 399 0.6+ 0.6+
911018 399 0.6+ 0.5+ 911105 399 0.3- 0.1+ 911111 399 1.2+ 0.4-
911104 399 0.8- 0.2- 911105 399 0.7- 0.3-

1991 UG3 = 1989 CY5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 86.67920 (2000.0) P Q
n 0.26466299 Peri. 44.04093 +0.99826790 -0.04740466
a 2.4025581 Node 318.63827 +0.02764062 +0.90071395
e 0.2161888 Incl. 3.02242 +0.05193447 +0.43181845
P 3.72 H 13.7 G 0.15
Residuals in seconds of arc
890202 033 0.2+ 0.1+ 911104 399 1.7+ 0.4+ 911109 399 0.1+ 1.1-
890204 033 0.1- 0.0 911104 399 0.3+ 0.9- 911109 399 0.6- 0.3+
911031 399 0.1- 0.3+ 911105 399 0.4- 0.3+
911031 399 0.9- 0.2- 911105 399 0.2- 0.9+

1991 UU3 = 1977 RS5 = 1984 UE3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 126.28501 (2000.0) P Q
n 0.28599518 Peri. 335.85788 +0.89094731 +0.45410249
a 2.2815513 Node 357.13268 -0.41003112 +0.80261784
e 0.1613509 Incl. 2.23561 -0.19515985 +0.38677581
P 3.45 H 13.4 G 0.15
Residuals in seconds of arc
770909 095 0.3- 0.4+ 911031 400 0.7- 0.2+ 911114 400 2.4- 1.5-
841026 688 0.5+ 0.9- 911104 400 0.1+ 1.1+ 911202 400 0.7+ 1.9-
841026 688 0.3+ 0.9- 911104 400 1.0+ 0.6+ 911202 400 0.4+ 1.9+
911031 400 0.6- 1.5+ 911114 400 1.1+ 0.3-

1991 UW3 = 1951 SS = 1979 BM2 = 1981 SQ7 = 1981 WL5
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano
M 93.58407 (2000.0) P Q
n 0.29678332 Peri. 55.88663 +0.98302988 -0.17247067
a 2.2259209 Node 313.95621 +0.12625678 +0.88326018
e 0.2351069 Incl. 4.98067 +0.13308446 +0.43601068
P 3.32 H 14.0 G 0.15
Residuals in seconds of arc
510929 094(96.9+ 20.3+)X 811124 095 1.4- 2.1+ 911105 399 0.8- 2.1-
790127 675 0.3- 0.5+ 911031 399 0.9- 0.2+ 911105 399 0.6+ 0.7+
790129 675 0.3+ 0.3- 911031 399 1.0+ 0.4- 911110 896 1.5- 0.3+
810929 095 0.5- 0.3+ 911031 399 1.1- 0.7+ 911210 399 0.3+ 1.0-
811002 095 1.0+ 0.0 911104 896 2.0+ 1.3- 911210 399 1.4+ 0.5+

1991 UY3 = 1987 SX4
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 65.26207 (2000.0) P Q
n 0.25217779 Peri. 178.43688 +0.86061874 -0.50821368
a 2.4812174 Node 212.17395 +0.46656347 +0.81242832
e 0.2465111 Incl. 3.49583 +0.20409292 +0.28579552
P 3.91 H 15.0 G 0.15
Residuals in seconds of arc
870929 054 0.3+ 0.7+ 911029 399 0.4- 2.1- 911031 399 1.7+ 2.1+
870930 054 0.3- 0.2+ 911029 399 0.7- 0.7- 911109 399 1.1- 0.4-
870930 054 0.0 0.8- 911031 399 0.3- 0.6+ 911109 399 0.9+ 0.5+

1991 VA
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	160.15725	(2000.0)	P	Q
n	0.57698856	Peri. 313.42130	+0.98497760	+0.15811508
a	1.4289748	Node 37.63903	-0.10631018	+0.87202074
e	0.3518591	Incl. 6.52699	-0.13607821	+0.46322721
P	1.71	H 26.5	G 0.15	

From 13 observations 1991 Nov. 1-9, mean residual 0".85.

1991 VB
Epoch 1991 Oct. 31.0 TT = JDT 2448560.5 Marsden

M	2.21329	(2000.0)	P	Q
n	0.29531650	Peri. 134.02140	+0.85423341	-0.50849844
a	2.2332855	Node 256.82191	+0.43952191	+0.81755204
e	0.4089801	Incl. 6.38227	+0.27767924	+0.27025542
P	3.34	H 16.5	G 0.15	

From 10 observations 1991 Nov. 1-Dec. 7.

1991 VE
Epoch 1991 Oct. 31.0 TT = JDT 2448560.5 Marsden

M	79.34611	(2000.0)	P	Q
n	1.17280850	Peri. 193.36564	-0.25152644	+0.96147348
a	0.8905357	Node 62.16206	-0.87605268	-0.17745317
e	0.6637985	Incl. 7.20595	-0.41141967	-0.20995030
P	0.84	H 19.0	G 0.15	

From 18 observations 1991 Nov. 3-27.

1991 VG
Epoch 1992 June 27.0 TT = JDT 2448800.5 Yeomans

M	171.22173	(2000.0)	P	Q
n	0.94848844	Peri. 24.49986	-0.14787506	-0.98870799
a	1.0259228	Node 74.01131	+0.90317832	-0.14500448
e	0.0492738	Incl. 1.44722	+0.40299117	-0.03781807
P	1.04	H 28.8	G 0.15	

From 47 observations 1991 Nov. 6-Dec. 2, mean residual 1".49.

1991 VH
Epoch 1991 Nov. 20.0 TT = JDT 2448580.5 Williams

M	47.54404	(2000.0)	P	Q
n	0.81336858	Peri. 206.96777	+0.96363663	+0.21680916
a	1.1366091	Node 139.51110	-0.18040846	+0.95907570
e	0.1439476	Incl. 13.91992	-0.19712237	+0.18211973
P	1.21	H 17.0	G 0.15	

From 28 observations 1991 Nov. 9-Dec. 21.

1991 VK = 1991 TS1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M	67.48281	(2000.0)	P	Q
n	0.39400733	Peri. 173.17347	-0.31492325	-0.94526336
a	1.8427504	Node 295.15371	+0.86627401	-0.24948494
e	0.5060331	Incl. 5.41647	+0.38780495	-0.21031986
P	2.50	H 17.0	G 0.15	

From 37 observations 1991 Oct. 3-Dec. 15, mean residual 0".87.

1991 VL
Epoch 1992 June 27.0 TT = JDT 2448800.5 Marsden

M	41.67361	(2000.0)	P	Q
n	0.39678283	Peri. 226.31104	-0.99171283	-0.04334301
a	1.8341470	Node 310.81944	+0.09747194	-0.86709669
e	0.7715708	Incl. 9.19605	-0.08369516	-0.49625065
P	2.48	H 14.0	G 0.15	

From 19 observations 1991 Oct. 5-Dec. 7, mean residual 0".78.

1991 VN = 1978 WO13
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	75.20770	(2000.0)	P	Q
n	0.22577969	Peri. 208.24705	+0.99916562	-0.03721915
a	2.6710343	Node 153.86972	+0.04079242	+0.92970674
e	0.3386523	Incl. 2.18830	-0.00201109	+0.36641522
P	4.37	H 14.7	G 0.15	

Residuals in seconds of arc

781129 675	0.3-	0.5-	911104 400	0.9+	1.7+	911113 894	0.5-	0.1+
781130 675	0.3+	0.7+	911104 400	0.6+	0.1-	911113 894	0.4+	0.7-
911102 400	0.1-	0.7-	911105 894	0.4+	0.2-			
911102 400	1.1-	1.4+	911105 894	0.7-	1.6-			

1991 VO = 1990 ML
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	1.89126	(2000.0)	P	Q
n	0.27117987	Peri. 268.48421	-0.44622557	-0.89346823
a	2.3639108	Node 208.19414	+0.85798384	-0.41092209
e	0.0586436	Incl. 6.19242	+0.25445328	-0.18126653
P	3.63	H 12.8	G 0.15	

Residuals in seconds of arc

900627 675	0.4+	0.2+	911102 400	1.6-	0.8-	911202 400	0.4+	0.2-
900627 675	0.7-	0.3+	911102 400	0.4+	0.6+	911202 400	0.5-	0.2+
900629 675	0.8+	0.0	911104 400	0.5+	0.3-			
900629 675	0.5-	0.5-	911104 400	0.8+	0.5+			

1991 VP = 1975 GR = 1976 SW4 = 1982 DN6 = 1987 SF4 = 1990 KR2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	145.34682	(2000.0)	P	Q
n	0.26656174	Peri. 135.93645	+0.65654211	+0.75428060
a	2.3911354	Node 175.09614	-0.70328579	+0.61388410
e	0.1360097	Incl. 2.43883	-0.27265649	+0.23282414
P	3.70	H 13.1	G 0.15	

Residuals in seconds of arc

750415 805	0.6+	2.0+	870929 688	1.7+	2.4+	911102 400	1.3-	0.9-
760924 095	0.9-	0.3+	870929 688	0.8-	1.6+	911102 400	1.6+	0.7+
820227 010	0.9+	0.0	900517 095	1.7-	0.5+	911104 400	1.3-	1.8-
870917 095	0.1-	1.7-	900517 095	0.3-	0.6-	911104 400	0.3+	1.7-
870921 046	(0.4+	5.1-)	900523 095	0.2+	3.1-	911202 400	1.0+	0.3+
870921 046	(2.2-	6.5-)	900523 095	0.1+	1.3-	911202 400	0.2-	1.8-

1991 VR = 1933 UV1 = 1978 RO5 = 1978 TA4 = 1978 VQ13 = 1980 FX10
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	93.94209	(2000.0)	P	Q
n	0.30635836	Peri. 359.07744	+0.96671997	-0.25481188
a	2.1792960	Node 15.74225	+0.23526247	+0.85028014
e	0.1244521	Incl. 4.83713	+0.10051897	+0.46053728
P	3.22	H 13.6	G 0.15	

Residuals in seconds of arc

331023	012	0.3+	0.6-	911104	399	0.0	0.9-	911111	399	0.8- 0.5+
780906	095	0.3-	0.5+	911104	399	0.4-	0.0	911204	399	0.0 1.1+
781004	095	1.3+	0.9-	911105	399	1.1-	0.4+	911204	399	0.6+ 0.9+
781101	095	0.4+	1.9-	911105	399	0.3+	0.7+	911207	399	0.3+ 0.4-
800316	095	1.0-	1.8-	911111	399	1.8-	0.2-	911207	399	2.5+ 0.2-

1991 VS = 1977 CY2 = 1985 DF = 1990 MX1

Epoch 1992 June 27.0 TT = JDT 2448800.5				Kaneda
M 329.04440		(2000.0)	P	Q
n 0.25182209	Peri.	49.44363	-0.79054688	-0.59791205
a 2.4835534	Node	93.42470	+0.51411170	-0.76545912
e 0.1165664	Incl.	7.62354	+0.33275335	-0.23785190
P 3.91	H	13.0	G 0.15	

Residuals in seconds of arc

770212	675	0.5-	0.9-	850225	688	1.5-	1.1-	911105	399	1.8+ 0.4-
770213	675	0.0	1.4-	900628	808	0.2-	2.9-	911105	399	1.3+ 1.6+
850218	054	0.6+	0.3-	900628	808	1.0+	1.7-	911111	399	2.5- 2.4-
850219	054	1.1-	0.8+	911104	399	1.1+	0.1-	911111	399	1.5- 1.4-
850225	688	1.3+	1.0-	911104	399	0.5+	0.2+			

1991 VE1 = 1982 UM9 = 1986 UN1

Epoch 1992 June 27.0 TT = JDT 2448800.5				Kaneda
M 91.01038		(2000.0)	P	Q
n 0.21908240	Peri.	109.95881	+0.97230825	+0.14587010
a 2.7251959	Node	242.03054	-0.19641590	+0.93342672
e 0.1389702	Incl.	11.93113	+0.12663913	+0.32777503
P 4.50	H	12.8	G 0.15	

Residuals in seconds of arc

821021	095	1.4+	1.3-	861027	010	1.0+	0.9-	911105	399	0.2+ 0.7+
821022	095	1.3-	0.6+	861028	010	(5.5+	3.0+)	911105	399	1.1- 0.1-
861027	010	1.0-	1.0+	911104	399	0.3-	0.1+	911111	399	1.3+ 0.1+
861027	010	(5.3-	0.8+)	911104	399	1.3-	0.1-	911111	399	1.2+ 0.1-

1991 VM1 = 1975 TN6 = 1981 RC6 = 1981 SS2

Epoch 1992 June 27.0 TT = JDT 2448800.5				Kaneda
M 236.66622		(2000.0)	P	Q
n 0.30987020	Peri.	110.19342	-0.58478842	+0.80817517
a 2.1627991	Node	123.82344	-0.77209886	-0.52814720
e 0.0819315	Incl.	4.82133	-0.24876868	-0.26060205
P 3.18	H	13.5	G 0.15	

Residuals in seconds of arc

751011	033	0.3+	0.7-	810922	809	0.0	0.1-	911105	399	2.8- 0.7+
810901	675	0.4-	0.5+	810922	809	0.7-	0.3+	911105	399	0.9- 0.3+
810902	675	0.5+	0.3+	911104	399	0.1-	0.3+	911111	399	1.4+ 0.1+
810922	809	0.5+	0.9-	911104	399	1.2+	0.7-	911111	399	1.0+ 0.1-

1991 VR1 = 1973 AL = 1983 PM = 1985 FE1

Epoch 1992 June 27.0 TT = JDT 2448800.5				Nakano
M 54.20747		(2000.0)	P	Q
n 0.25660568	Peri.	100.60124	+0.53849035	-0.83991940
a 2.4525914	Node	316.59507	+0.72956081	+0.50484554
e 0.2166925	Incl.	5.64189	+0.42162681	+0.19916421
P 3.84	H	13.5	G 0.15	

Residuals in seconds of arc

730101	095	1.6-	2.8-	830813	688	0.8-	2.0-	850322	688	0.8- 0.0
730103	095	1.0+	0.5-	830813	688	2.1+	0.2-	850322	688	1.0+ 0.3+

911104 896 0.8- 0.2+ 911105 896 0.0 0.1+ 911212 896 0.6- 1.3+
911104 896 0.6+ 0.7+ 911110 896 0.2+ 0.2+
911105 896 0.3- 0.6+ 911117 896 0.1+ 0.3-

1991 VZ1 = 1942 GN = 1952 HP2 = 1968 UX1 = 1973 YL2
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 353.66200 (2000.0) P Q
n 0.21450729 Peri. 49.07551 -0.44975550 -0.87696969
a 2.7638089 Node 68.40789 +0.75497207 -0.47453334
e 0.0616138 Incl. 10.48736 +0.47721815 -0.07577776
P 4.59 H 11.6 G 0.15
Residuals in seconds of arc
420412 024 (5.3- 2.0+) 911108 372 (3.2- 1.4-) 911113 399 0.9- 0.4-
420413 024 0.7- 0.2+ 911109 399 0.0 0.8+ 911115 894 0.4+ 0.3-
420413 024 0.3- 0.1+ 911109 399 1.6- 0.1+ 911115 894 0.5- 0.3-
520426 711 1.4+ 2.4+ Y 911111 399 1.4- 1.7+ 911205 399 1.7+ 0.3+
681023 095 1.4+ 1.8- 911111 399 0.4- 1.3+ 911205 399 1.1+ 0.3+
731220 095 1.2+ 2.4- 911112 894 0.2- 0.0 911207 399 1.2+ 1.1+
911103 372 1.9- 0.3+ 911112 894 0.1- 0.6+ 911207 399 0.2- 1.1+
911106 372 0.4- 1.1- 911113 399 0.1- 0.3+

1991 VD2 = 1985 RB6
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 51.43538 (2000.0) P Q
n 0.17981488 Peri. 297.23567 +0.74928375 -0.66029524
a 3.1087487 Node 104.13329 +0.62463487 +0.67914021
e 0.1816285 Incl. 3.00485 +0.22001169 +0.32059130
P 5.48 H 12.8 G 0.15
Residuals in seconds of arc
850915 095 0.1+ 0.4+ 911112 894 0.6+ 1.6+ 911205 399 1.5+ 0.3-
850920 095 0.1- 0.6- 911112 894 0.9+ 0.9- 911205 399 1.1- 0.2+
911109 399 0.4+ 0.4+ 911113 399 0.1- 0.8- 911207 399 0.3- 0.7-
911109 399 1.3- 0.8+ 911113 399 1.6- 0.0 911207 399 0.9+ 0.1-
911111 399 0.1- 0.9+ 911115 894 0.7+ 0.4-
911111 399 1.1- 0.6- 911115 894 0.3+ 0.0

1991 VF2 = 1989 EZ3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 30.37064 (2000.0) P Q
n 0.29319784 Peri. 246.68659 -0.22533814 -0.97252286
a 2.2440311 Node 216.49198 +0.92596689 -0.19510446
e 0.1400867 Incl. 5.64496 +0.30299842 -0.12701789
P 3.36 H 14.2 G 0.15
Residuals in seconds of arc
890302 809 0.3+ 0.2- 911109 399 0.5- 0.6+ 911115 894 (3.5- 2.4-)
890302 809 0.0 0.6- 911111 399(14.7+ 24.4-) 911115 894 0.5- 0.2+
890302 809 0.6- 0.1- 911111 399(13.6+ 23.7-) 911205 399 0.2+ 0.2+
890303 809 0.7+ 0.2+ 911112 894 0.6+ 0.3+ 911205 399 0.7+ 0.2+
890303 809 0.2- 0.2+ 911112 894 0.4+ 1.2- 911207 399 0.8- 0.1-
890303 809 0.2- 0.5+ 911113 399 0.2- 0.4-
911109 399 0.1- 0.7+ 911113 399 0.2+ 0.5-

1991 VG2 = 1980 WZ3
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda
M 33.16965 (2000.0) P Q
n 0.26821275 Peri. 308.26219 -0.08864376 -0.99572355
a 2.3813128 Node 146.79547 +0.92806753 -0.09204950
e 0.1733620 Incl. 2.72307 +0.36170837 -0.00784201
P 3.67 H 14.0 G 0.15

Residuals in seconds of arc

801129	675	0.2-	0.2-	911111	399	2.3+	1.0+	911205 399 0.4- 0.6-
801201	675	0.3+	0.4-	911111	399	0.4+	0.1-	911205 399 1.1+ 0.7+
911109	399	0.0	0.2-	911113	399	1.0-	0.0	911207 399 0.8- 0.7+
911109	399	0.9-	0.5+	911113	399	0.8-	1.4-	

1991 VH2 = 1973 FL1 = 1987 WO4 = 1990 OT1

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	265.61924	(2000.0)	P	Q	
n	0.24506455	Peri.	130.65767	-0.82398926	+0.55126808
a	2.5290013	Node	83.18524	-0.55147692	-0.72723469
e	0.1232457	Incl.	7.57774	-0.13005730	-0.40894157
P	4.02	H	12.6	G 0.15	

Residuals in seconds of arc

730327	095	0.6-	0.5-	900730	675	1.2-	1.3-	911113 399 0.5+ 0.8+
730402	095	0.5-	1.8-	900730	675	0.7+	0.1-	911113 399 1.6+ 0.1+
871126	046	0.4-	1.4-	911109	399	0.1+	0.4+	911205 399 1.2- 0.3+
871126	046	1.7+	2.7-	911109	399	2.2+	0.9+	911205 399 1.8- 0.9-
900729	675	1.3+	0.6-	911111	399	1.4-	0.3+	
900729	675	0.1+	0.1-	911111	399	0.6-	0.1-	

1991 VN2 = 1952 MA = 1962 PL = 1981 RB6 = 1988 CW

Epoch 1992 June 27.0 TT = JDT 2448800.5 Urata

M	59.54440	(2000.0)	P	Q	
n	0.20893534	Peri.	264.13883	+0.71299064	-0.69145091
a	2.8127304	Node	139.52115	+0.69309274	+0.66987884
e	0.2124115	Incl.	10.32591	+0.10614520	+0.27047729
P	4.72	H	12.0	G 0.15	

Residuals in seconds of arc

520627	024	0.4+	0.1+	880213	033	0.5-	0.0	911110 885 0.3+ 1.3-
620803	760	1.0-	0.4-	880214	033	0.5+	0.5-	911112 885 0.2+ 0.4-
620803	760	1.0+	1.1-	880214	033	0.3-	0.2-	911112 885 0.3- 0.3-
810901	675	0.0	0.1+	880215	033	1.0-	0.3-	911203 885 1.1- 0.3+
810902	675	0.0	0.2-	880215	033	0.7+	0.6-	911203 885 0.3+ 1.0+
880213	033	3.0-	2.8+	880216	033	0.3+	0.0	
880213	033	2.6+	3.0-	911110	885	1.0+	0.3+	

1991 VB3 = 1978 WZ14 = 1981 UN13 = 1987 QC8

Epoch 1992 June 27.0 TT = JDT 2448800.5 Urata

M	34.18770	(2000.0)	P	Q	
n	0.30410769	Peri.	209.99500	-0.16949498	-0.98135819
a	2.1900353	Node	249.89080	+0.92230884	-0.12555565
e	0.0700931	Incl.	5.53633	+0.34730082	-0.14550558
P	3.24	H	13.4	G 0.15	

Residuals in seconds of arc

781124	049	0.8+	1.1-	870817	010	0.2+	1.3+	911204 399 1.6+ 1.6+
781124	049	1.0+	0.7-	870817	010	0.1-	1.1+	911205 399 0.6- 1.4+
781124	049	0.9-	0.6-	911110	885	0.5+	2.3+	911205 399 0.9- 2.2+
781124	049	0.2-	0.5-	911112	887	1.3-	1.0-	911212 385 0.5- 0.2+
811023	095	1.5+	5.0-	911112	887	0.2-	0.3+	911212 385 1.5+ 2.6+
870817	010	1.3-	2.4+	911204	399	0.8-	1.2-	

1991 VR3 = 1982 AE

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	71.55353	(2000.0)	P	Q	
n	0.28950048	Peri.	294.27582	+0.69723665	-0.71190782
a	2.2630971	Node	111.24176	+0.68602125	+0.62869587
e	0.2258533	Incl.	5.16786	+0.20793246	+0.31293572
P	3.40	H	14.1	G 0.15	

Residuals in seconds of arc

820115	046	1.0-	0.3-		911109	400	1.2+	0.7-		911115	894	0.6-	1.3-
820115	046	0.3+	0.2-		911109	400	0.0	0.8+		911115	894	0.5+	0.6-
820116	046	2.8-	1.0+		911110	400	1.3-	0.2+		911130	400	0.5+	0.7+
820116	046	0.7+	0.7+		911110	400	0.0	1.2+		911207	400	0.4+	0.4+
820118	046	2.3+	0.8-		911110	894	0.2+	0.3+		911207	400	1.0-	0.2-
820118	046	0.4+	0.5-		911110	894	0.3+	0.9-					

1991 VV3 = 1987 RJ2 = 1987 SO13

Epoch 1992 June 27.0 TT = JDT 2448800.5 Kaneda

M	74.14544		(2000.0)	P	Q
n	0.26796459	Peri.	347.09191	+0.80094538	-0.59717609
a	2.3827827	Node	49.66141	+0.55424537	+0.71219303
e	0.2102712	Incl.	3.24986	+0.22649185	+0.36900110
P	3.68	H	14.0	G 0.15	

Residuals in seconds of arc

870901	095	0.9+	1.0-		911113	399	1.2-	0.1-		911207	399	1.2-	0.9+
870922	095	0.9-	0.9+		911113	399	1.0-	1.6+		911207	399	0.2+	1.1+
911111	399	0.6+	0.6+		911205	399	0.1+	1.2-		911209	399	0.2+	0.3+
911111	399	1.3+	1.4-		911205	399	0.5-	1.7-		911209	399	1.6+	0.3-

1991 VY3 = 1951 YT1 = 1981 BM = 1987 DQ3 = 1990 RQ6

Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	6.02311		(2000.0)	P	Q
n	0.17272515	Peri.	311.10430	-0.25454477	-0.96699005
a	3.1932456	Node	153.63542	+0.89497965	-0.24014325
e	0.1404156	Incl.	1.51146	+0.36635828	-0.08521423
P	5.71	H	12.1	G 0.15	

Residuals in seconds of arc

511227	711	1.1-	0.9+ Y		900911	809	1.0+	0.3+		911113	399	1.0+	0.6-
511228	711	0.0	0.2+ Y		900912	809	0.6+	0.0		911113	399	0.2-	0.8-
810130	688	1.7+	3.3-		900912	809	0.9+	0.1-		911204	399	0.6+	1.1+
810130	688	3.0+	3.1-		900912	809	1.1+	0.1-		911204	399	0.7-	0.5+
870223	010	1.0-	0.0		900913	809	1.3-	0.8-		911205	399	0.2+	0.9+
870223	010	0.5-	1.1+		900913	809	1.1-	0.9-		911205	399	1.5+	0.7+
870223	010	0.7-	1.4+		900913	809	1.4-	0.9-		911214	399	1.7-	0.1+
900911	809	0.6+	0.3+		911111	399	0.1-	0.4-		911214	399	1.3-	0.4+
900911	809	0.8+	0.2+		911111	399	1.7-	0.1+					

1991 WA

Epoch 1991 Dec. 10.0 TT = JDT 2448600.5 Marsden

M	37.06876		(2000.0)	P	Q
n	0.49721346	Peri.	241.81093	+0.43706928	+0.68161617
a	1.5780017	Node	66.77716	-0.41979202	+0.73161822
e	0.6429709	Incl.	39.68514	-0.79545277	-0.01158334
P	1.98	H	17.5	G 0.15	

From 17 observations 1991 Nov. 29-Dec. 20.

1991 XA

Epoch 1991 Nov. 20.0 TT = JDT 2448580.5 Marsden

M	7.02542		(2000.0)	P	Q
n	0.28797344	Peri.	308.41970	+0.89815251	-0.43051375
a	2.2710904	Node	77.24229	+0.42653786	+0.80381632
e	0.5687276	Incl.	5.25519	+0.10671230	+0.41053287
P	3.42	H	24.0	G 0.15	

From 10 observations 1991 Dec. 3-15.

1991 XB
Epoch 1991 Nov. 20.0 TT = JDT 2448580.5 Marsden

M	358.68679	(2000.0)	P	Q
n	0.19295695	Peri. 171.66012	+0.45733911	-0.85011700
a	2.9659404	Node 250.77992	+0.79913011	+0.52165366
e	0.5787257	Incl. 16.04840	+0.39016921	-0.07196211
P	5.11	H 18.0	G 0.15	

From 15 observations 1991 Dec. 1-20.

1992 AA
Epoch 1991 Dec. 30.0 TT = JDT 2448620.5 Nakano

M	357.75764	(2000.0)	P	Q
n	0.35553665	Peri. 354.35865	-0.12655966	-0.98201281
a	1.9733910	Node 102.85471	+0.91563206	-0.16998674
e	0.3877435	Incl. 8.26326	+0.38157644	+0.08219087
P	2.77	H 15.6	G 0.15	

From 10 observations 1992 Jan. 1-10.

1992 AC = 1989 EN1
Epoch 1992 June 27.0 TT = JDT 2448800.5 Kobayashi

M	42.48318	(2000.0)	P	Q
n	0.32293083	Peri. 25.12101	-0.82407821	-0.51539871
a	2.1040839	Node 121.82512	+0.46171682	-0.85153828
e	0.4215461	Incl. 16.06135	+0.32819610	-0.09615990
P	3.05	H 13.6	G 0.15	

Residuals in seconds of arc

890310	897	1.0-	0.0	920107	402	0.1-	0.1-	920110	411	0.2+	0.1-
890310	897	0.1-	0.4-	920109	896	(0.5-	2.0-)	920110	402	0.8+	0.3-
890315	897	(3.6+	1.4+)	920109	372	(0.9-	2.7+)	920110	402	0.9+	0.4+
890315	897	0.6+	0.2-	920109	372	(2.2-	1.9+)	920110	896	(0.3+	3.7-)
890315	897	(1.8+	1.6+)	920109	372	(3.0-	2.7+)	920111	411	0.1-	0.3+
890329	897	0.4+	0.6+	920109	372	(1.6-	1.7+)	920111	411	0.1+	0.3+
890329	897	0.0	0.1-	920109	372	(1.7-	1.6+)	920111	411	0.6-	0.1-
920103	886	(0.0	1.7+)Y	920110	413	0.6+	0.1-	920111	411	0.5-	0.3+
920103	886	(0.8+	2.0+)Y	920110	886	0.9-	0.6+	920111	411	0.3+	0.2+
920105	391	0.1+	0.6-	920110	411	0.3-	0.1-	920111	411	0.2+	0.3+
920105	391	0.2-	0.0	920110	411	0.3-	0.5-	920112	897	(2.5-	4.2-)Y
920107	896	(0.3+	1.9-)	920110	411	0.0	0.1-	920112	897	(2.8-	1.5-)Y
920107	402	0.7-	0.0	920110	411	0.1-	0.3-				
920107	896	(0.2+	1.5-)	920110	411	0.3+	0.0				

1171 T-1 = 1987 UB = 1989 EE12
Id. D. W. E. Green (MPC 19320), S. Nakano
Epoch 1992 June 27.0 TT = JDT 2448800.5 Nakano

M	122.91973	(2000.0)	P	Q
n	0.26611085	Peri. 137.45940	+0.92232526	+0.38397045
a	2.3938356	Node 200.08653	-0.37973608	+0.87986543
e	0.1843132	Incl. 7.25834	-0.07153054	+0.28000629
P	3.70	H 14.0	G 0.15	

Residuals in seconds of arc

710324	675	0.8-	0.6-	710513	675	1.5+	0.3+	871027	881	1.1+	1.7-
710325	675	0.5-	1.4+	710514	675	0.5+	0.5-	890303	809	0.2-	1.1+
710325	675	0.3-	1.0-	870923	095	0.8-	0.3-	890303	809	0.1-	0.2+
710326	675	0.1+	0.1-	871018	881	0.1-	0.6+	890303	809	0.8+	0.3+
710327	675	1.1-	0.4+	871018	881	0.4+	0.4-	911113	894	0.6+	0.2-
710416	675	0.1-	2.0-	871023	095	(3.8+	1.8-)	911113	894	0.2+	0.3+
710416	675	0.1-	1.7-	871027	881	(0.4-	4.0-)	911114	894	0.8-	0.9-

3196 T-1 = 1978 WE16 = 1980 FW5 = 1985 JA2
Id. D. W. E. Green (MPC 19323, unpublished)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Green

M 230.39847	(2000.0)	P	Q	
n 0.21645989	Peri. 315.75713	-0.94888288	+0.31435781	
a 2.7471630	Node 242.58442	-0.28001844	-0.87980023	
e 0.1498791	Incl. 1.82643	-0.14563981	-0.35655396	
P 4.55	H 13.5	G 0.15		

Residuals in seconds of arc

710324	675	0.7-	0.4+	710416	675	0.8+	1.1-	850515	675	0.0	0.5+
710325	675	1.2+	0.2+	710416	675	0.3-	0.4+	911003	033	1.3-	0.5+
710326	675	0.1+	0.1-	781130	675	0.3-	0.3-	911004	033	0.3+	0.4-
710326	675	0.6-	0.1+	781201	675	0.1+	0.4+	911004	033	0.8+	0.4+
710327	675	0.1-	0.2+	800323	809	0.3+	0.6+				
710402	675	0.5-	0.5-	850514	675	(49.6+	15.3-)				

4272 T-1 = 1979 HV6 = 1991 NO2 = 1991 PH3
Id. G. V. Williams, S. Nakano (d, MPC 18998)
Epoch 1992 June 27.0 TT = JDT 2448800.5 Williams

M 110.00975	(2000.0)	P	Q	
n 0.25562153	Peri. 178.02215	+0.11710952	+0.99102571	
a 2.4588824	Node 98.69898	-0.91206159	+0.13300263	
e 0.1499936	Incl. 3.73816	-0.39297456	-0.01335466	
P 3.86	H 14.0	G 0.15		

Residuals in seconds of arc

710324	675	1.1+	2.2-	910706	809	0.6-	0.3+	910807	809	0.6+	0.7+
710326	675	0.1+	0.3+	910706	809	0.2-	0.3+	910807	809	1.0+	0.2+
710326	675	1.2-	0.5+	910706	809	0.4+	0.2+	910814	809	0.1+	0.3-
710327	675	1.4-	1.9-	910708	809	0.0	0.6+	910814	809	1.1-	0.8-
710402	675	0.4+	1.5+	910708	809	0.7+	0.3+	910814	809	0.5-	0.2-
710513	675	0.1+	0.2-	910714	675	0.0	0.9-	910904	809	1.5+	1.1-
710514	675	0.1-	0.1-	910714	675	1.0-	0.1-	910904	809	0.4+	0.7-
710516	675	0.0	0.9+	910719	675	0.6-	1.2+	910904	809	0.4-	0.2-
790430	095	0.5+	0.5-	910802	809	(2.7+	0.8+)	910907	809	0.6+	1.0-
910705	809	1.2-	0.2+	910802	809	(2.2+	0.3+)	910907	809	0.0	0.7-
910705	809	1.0-	0.2+	910802	809	1.7+	0.7+	910907	809	0.0	0.9-
910705	809	1.0-	0.0	910807	809	0.3+	0.5+				

5191 T-3 = 1988 RX
Id. C. M. Bardwell (MPC 14029)
Epoch 1992 June 27.0 TT = JDT 2448800.5 (J-P) Bardwell

M 138.16902	(2000.0)	P	Q	
n 0.08240047	Peri. 172.06332	+0.68745148	+0.71293852	
a 5.2301858	Node 141.19728	-0.67783892	+0.69825650	
e 0.1278064	Incl. 12.75094	-0.26066233	+0.06447119	
P 11.96	H 10.5	G 0.15		

Residuals in seconds of arc

771016	675	1.7+	1.9-	771022	675	1.0+	1.5+	891102	675	0.4-	1.8-
771016	675	1.2+	2.0-	880913	675	0.8+	0.0	891102	675	0.4-	0.1+
771017	675	1.6-	0.9+	880916	675	0.1+	0.4-	891103	675	0.8+	0.1-
771017	675	1.0-	0.7+	881008	675	0.2+	0.7+	891103	675	0.4+	0.1+
771022	675	1.7-	2.3+	881010	675	1.1-	0.2-				

EPHEMERIDES.

1991 TB1 a,e,i = 1.45, 0.35, 24 Elements MPC 19508

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 01 09	20 40.18	+47 57.9	0.427	0.947	72.5	82.0	17.9
1992 01 14	20 33.34	+49 46.4	0.413	0.943	72.2	83.1	17.9
1992 01 19	20 25.20	+51 33.0	0.397	0.942	72.2	84.1	17.8
1992 01 24	20 15.47	+53 17.3	0.378	0.944	72.7	84.8	17.7
1992 01 29	20 03.81	+54 59.9	0.357	0.948	73.6	85.2	17.6
1992 02 03	19 49.64	+56 42.1	0.334	0.956	75.1	85.2	17.5
1992 02 08	19 31.99	+58 25.1	0.309	0.966	77.2	84.7	17.3
1992 02 13	19 09.22	+60 09.2	0.282	0.979	80.0	83.5	17.1
1992 02 18	18 38.69	+61 51.2	0.254	0.994	83.8	81.4	16.9
1992 02 23	17 56.26	+63 19.0	0.226	1.011	88.9	78.1	16.5
1992 02 28	16 56.62	+63 57.9	0.199	1.030	95.8	73.1	16.1
1992 03 04	15 38.29	+62 27.7	0.174	1.050	105.0	65.8	15.6
1992 03 09	14 13.68	+56 51.6	0.154	1.073	117.3	55.4	15.1
1992 03 14	13 02.74	+46 13.1	0.143	1.096	132.4	42.0	14.6
1992 03 19	12 12.68	+32 15.2	0.144	1.120	148.0	28.1	14.3
1992 03 24	11 39.51	+18 25.0	0.158	1.145	158.4	18.7	14.2
1992 03 29	11 17.78	+07 06.9	0.183	1.171	158.7	18.0	14.6

Comet Zanotta-Brewington (1991g1) Elements MPC 19467

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 01 09	21 49.74	+10 59.5	0.924	0.805	49.8	69.0	7.9
1992 01 14	22 13.51	+07 07.1	0.862	0.748	47.2	74.9	7.4
1992 01 19	22 38.63	+02 17.1	0.807	0.701	44.7	81.1	7.0
1992 01 24	23 04.50	-03 36.3	0.761	0.666	42.5	86.9	6.6
1992 01 29	23 30.35	-10 28.1	0.728	0.647	41.1	91.3	6.4
1992 02 03	23 55.34	-17 58.5	0.709	0.645	40.8	93.2	6.4
1992 02 08	00 18.92	-25 36.8	0.706	0.661	42.1	92.3	6.4
1992 02 13	00 40.94	-32 52.9	0.715	0.693	44.6	89.0	6.7
1992 02 18	01 01.75	-39 27.3	0.734	0.738	48.0	84.3	7.0
1992 02 23	01 21.99	-45 12.7	0.758	0.793	51.9	79.2	7.4
1992 02 28	01 42.54	-50 10.8	0.785	0.855	56.2	74.1	7.8
1992 03 04	02 04.35	-54 27.0	0.813	0.923	60.6	69.3	8.2
1992 03 09	02 28.37	-58 07.1	0.841	0.994	65.0	64.9	8.6
1992 03 14	02 55.57	-61 14.7	0.868	1.067	69.6	60.8	9.0
1992 03 19	03 26.82	-63 51.3	0.895	1.142	74.1	57.0	9.3
1992 03 24	04 02.74	-65 55.2	0.922	1.218	78.6	53.4	9.7
1992 03 29	04 43.35	-67 23.1	0.950	1.293	83.1	50.0	10.0
1992 04 03	05 27.63	-68 11.0	0.980	1.369	87.5	46.9	10.3
1992 04 08	06 13.48	-68 16.5	1.011	1.445	91.7	43.9	10.6

Comet Shoemaker-Levy (1991a1) Elements MPC 19468

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 01 09	00 15.75	+30 49.0	2.970	3.109	88.8	18.4	14.8
1992 01 19	00 11.96	+29 59.9	3.025	2.990	78.6	18.8	14.7
1992 01 29	00 10.44	+29 29.2	3.072	2.870	69.0	18.7	14.5
1992 02 08	00 10.82	+29 17.3	3.105	2.749	60.0	18.1	14.4
1992 02 18	00 12.76	+29 24.2	3.119	2.625	51.8	17.2	14.2
1992 02 28	00 15.97	+29 49.4	3.111	2.501	44.4	16.1	13.9
1992 03 09	00 20.24	+30 32.6	3.078	2.374	37.9	14.9	13.7
1992 03 19	00 25.37	+31 34.2	3.017	2.247	32.8	13.9	13.4

Periodic Comet Shoemaker-Levy 6 (1991b1) Elements MPC 19467

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 01 09	02 40.65	+39 24.3	0.863	1.596	119.4	32.5	15.2
1992 01 19	03 04.38	+40 15.9	1.010	1.680	114.8	32.1	15.9

1992 01 29	03 27.98	+40 45.8	1.167	1.766	110.0	31.6	16.5
1992 02 08	03 51.39	+41 00.2	1.334	1.853	105.0	30.9	17.1
1992 02 18	04 14.57	+41 03.1	1.509	1.941	99.9	30.1	17.7
1992 02 28	04 37.43	+40 56.6	1.691	2.028	94.7	29.1	18.2
1992 03 09	04 59.94	+40 42.2	1.879	2.115	89.3	28.0	18.7
1992 03 19	05 22.04	+40 20.9	2.070	2.201	84.0	26.7	19.2
1992 03 29	05 43.68	+39 53.2	2.265	2.287	78.6	25.3	19.7

1991 VH a,e,i = 1.14, 0.14, 14 Elements MPC 19516

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 01 09	02 59.61	-16 22.7	0.394	1.155	105.9	55.0	17.3
1992 01 19	03 21.61	-07 46.2	0.433	1.177	105.7	53.6	17.5
1992 01 29	03 44.22	-00 03.7	0.480	1.198	104.4	52.8	17.7
1992 02 08	04 07.82	+06 37.6	0.535	1.218	102.3	52.3	18.0
1992 02 18	04 32.61	+12 16.3	0.596	1.236	99.5	52.1	18.3
1992 02 28	04 58.56	+16 55.2	0.662	1.252	96.5	51.8	18.5
1992 03 09	05 25.67	+20 39.1	0.732	1.266	93.2	51.6	18.7
1992 03 19	05 53.84	+23 32.6	0.803	1.277	89.8	51.2	19.0
1992 03 29	06 22.83	+25 40.5	0.875	1.287	86.5	50.8	19.1
1992 04 08	06 52.46	+27 06.4	0.947	1.294	83.2	50.2	19.3
1992 04 18	07 22.49	+27 54.1	1.016	1.298	80.0	49.6	19.5
1992 04 28	07 52.64	+28 06.8	1.083	1.300	76.8	48.9	19.6
1992 05 08	08 22.75	+27 47.3	1.147	1.300	73.8	48.2	19.7
1992 05 18	08 52.61	+26 58.7	1.206	1.297	71.0	47.5	19.8
1992 05 28	09 22.10	+25 43.5	1.260	1.291	68.2	46.8	19.8
1992 06 07	09 51.18	+24 04.3	1.309	1.283	65.6	46.1	19.9
1992 06 17	10 19.85	+22 03.4	1.353	1.273	63.1	45.4	19.9
1992 06 27	10 48.13	+19 43.2	1.390	1.260	60.8	44.8	19.9
1992 07 07	11 16.15	+17 05.6	1.422	1.245	58.6	44.2	19.9

1991 VB a,e,i = 2.23, 0.41, 6 Elements MPC 19516

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 01 09	03 24.36	+16 32.4	0.707	1.504	124.8	32.5	18.0
1992 01 19	03 43.35	+16 37.0	0.808	1.547	119.1	33.8	18.4
1992 01 29	04 02.96	+16 53.3	0.919	1.593	113.6	34.5	18.8
1992 02 08	04 23.06	+17 15.3	1.039	1.641	108.2	34.8	19.1
1992 02 18	04 43.54	+17 38.3	1.167	1.691	103.0	34.7	19.4
1992 02 28	05 04.26	+17 58.7	1.302	1.741	97.9	34.3	19.7
1992 03 09	05 25.12	+18 13.9	1.443	1.792	92.9	33.6	20.0

Periodic Comet Shoemaker-Levy 7 (1991d1) Elements MPC 19467

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 01 09	03 49.31	+34 30.0	0.960	1.782	132.9	23.8	17.7
1992 01 19	04 02.15	+32 52.1	1.062	1.822	125.8	26.0	18.0
1992 01 29	04 17.00	+31 29.9	1.177	1.865	119.0	27.5	18.4
1992 02 08	04 33.37	+30 21.2	1.305	1.912	112.4	28.5	18.8
1992 02 18	04 50.87	+29 22.7	1.442	1.961	106.1	29.0	19.2
1992 02 28	05 09.11	+28 31.1	1.588	2.012	100.0	29.0	19.6
1992 03 09	05 27.86	+27 43.4	1.742	2.065	94.1	28.7	19.9

1992 AA a,e,i = 1.97, 0.39, 8 Elements MPC 19522

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 01 09	04 40.16	+20 35.3	0.268	1.209	143.2	29.1	14.4
1992 01 19	04 58.76	+26 28.5	0.291	1.216	137.9	32.9	14.7
1992 01 29	05 23.47	+31 11.8	0.325	1.230	133.2	35.7	15.1
1992 02 08	05 52.84	+34 29.2	0.368	1.251	129.0	37.8	15.4
1992 02 18	06 25.02	+36 21.0	0.421	1.279	125.4	39.0	15.8
1992 02 28	06 57.97	+36 57.3	0.484	1.313	122.0	39.8	16.2
1992 03 09	07 30.27	+36 32.0	0.556	1.351	118.7	40.1	16.6

1992 03 19	08 01.06	+35 20.1	0.636	1.393	115.5	40.2	16.9
1992 03 29	08 29.90	+33 34.7	0.725	1.438	112.1	40.0	17.3

1991 XB a,e,i = 2.97, 0.58, 16 Elements MPC 19522

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 01 09	04 56.19	-00 52.9	0.442	1.346	138.4	29.0	18.1
1992 01 19	05 12.94	-02 26.8	0.521	1.391	132.8	31.3	18.6
1992 01 29	05 29.69	-02 52.1	0.612	1.444	127.9	32.6	19.1
1992 02 08	05 46.70	-02 35.4	0.712	1.501	123.4	33.3	19.5
1992 02 18	06 04.13	-01 56.1	0.822	1.562	119.0	33.6	19.9
1992 02 28	06 21.92	-01 07.6	0.942	1.627	114.6	33.6	20.3

Comet Mueller (1991h1) Elements MPC 19468

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 01 09	08 08.78	+50 28.8	0.808	1.731	150.1	16.5	14.9
1992 01 14	07 25.06	+51 24.5	0.717	1.643	149.9	17.5	14.4
1992 01 19	06 29.67	+50 50.1	0.642	1.553	144.7	21.5	14.0
1992 01 24	05 28.17	+47 50.7	0.590	1.461	134.8	28.6	13.5
1992 01 29	04 30.18	+42 09.8	0.561	1.366	121.7	37.8	13.1
1992 02 03	03 42.47	+34 34.4	0.559	1.268	107.2	47.9	12.8
1992 02 08	03 05.99	+26 23.2	0.578	1.168	92.8	57.5	12.5
1992 02 13	02 38.44	+18 37.8	0.616	1.063	79.4	65.9	12.2
1992 02 18	02 17.04	+11 45.4	0.666	0.955	67.3	72.7	11.9
1992 02 23	01 59.43	+05 48.7	0.723	0.841	56.3	78.0	11.5
1992 02 28	01 43.67	+00 39.8	0.785	0.723	46.3	82.0	11.1

Periodic Comet Kowal 2 (1991f1) Elements MPC 19467

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 01 09	08 26.40	-09 31.5	0.746	1.647	144.1	20.5	14.6
1992 01 19	08 18.42	-10 57.7	0.774	1.691	148.3	17.8	14.9
1992 01 29	08 10.63	-11 22.3	0.818	1.739	149.4	16.8	15.2
1992 02 08	08 04.66	-10 55.5	0.880	1.791	147.3	17.3	15.5
1992 02 18	08 01.61	-09 53.4	0.959	1.845	142.7	18.9	15.9
1992 02 28	08 01.87	-08 32.6	1.055	1.902	136.8	20.9	16.3
1992 03 09	08 05.33	-07 06.5	1.165	1.960	130.4	22.7	16.7
1992 03 19	08 11.62	-05 44.9	1.290	2.021	123.8	24.2	17.1
1992 03 29	08 20.22	-04 33.8	1.426	2.082	117.3	25.2	17.5
1992 04 08	08 30.68	-03 36.4	1.572	2.144	110.9	25.9	18.0
1992 04 18	08 42.57	-02 54.0	1.728	2.207	104.6	26.1	18.3
1992 04 28	08 55.49	-02 26.8	1.890	2.270	98.5	26.0	18.7
1992 05 08	09 09.18	-02 14.1	2.059	2.333	92.6	25.6	19.1
1992 05 18	09 23.40	-02 14.9	2.231	2.397	86.7	24.9	19.4
1992 05 28	09 37.96	-02 27.9	2.406	2.460	81.0	24.0	19.8
1992 06 07	09 52.72	-02 51.9	2.582	2.523	75.3	22.9	20.1
1992 06 17	10 07.58	-03 25.6	2.757	2.585	69.6	21.6	20.4

1992 AC a,e,i = 2.10, 0.42, 16 Elements MPC 19522

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 01 09	09 01.36	+08 25.8	0.323	1.277	151.7	21.4	12.7
1992 01 19	09 20.76	+16 23.2	0.279	1.250	160.8	15.0	12.1
1992 01 29	09 43.01	+26 40.1	0.254	1.231	163.8	12.9	11.8
1992 02 08	10 08.48	+37 21.8	0.251	1.220	155.8	19.4	12.0
1992 02 18	10 36.47	+46 01.4	0.267	1.217	145.2	27.6	12.4
1992 02 28	11 04.33	+51 27.9	0.296	1.223	136.6	33.8	12.8
1992 03 09	11 28.84	+53 49.9	0.334	1.236	130.6	37.6	13.2
1992 03 19	11 48.58	+53 47.2	0.377	1.258	126.7	39.4	13.5
1992 03 29	12 03.87	+51 59.8	0.424	1.286	124.3	39.9	13.9
1992 04 08	12 16.11	+48 56.2	0.476	1.321	122.6	39.7	14.2
1992 04 18	12 26.91	+44 59.1	0.534	1.361	121.4	39.0	14.5

1992 04 28	12 37.25	+40 27.5	0.597	1.405	120.1	38.3	14.8
1992 05 08	12 47.77	+35 36.2	0.668	1.452	118.5	37.6	15.1
1992 05 18	12 58.83	+30 37.9	0.748	1.503	116.5	37.0	15.4
1992 05 28	13 10.50	+25 43.0	0.837	1.555	114.0	36.5	15.7
1992 06 07	13 22.83	+20 57.8	0.936	1.609	111.0	36.1	16.0
1992 06 17	13 35.84	+16 27.1	1.045	1.663	107.6	35.6	16.3
1992 06 27	13 49.43	+12 13.6	1.163	1.718	103.9	35.0	16.5
1992 07 07	14 03.60	+08 18.0	1.290	1.774	99.9	34.4	16.8
1992 07 17	14 18.30	+04 40.8	1.424	1.828	95.6	33.6	17.1
1992 07 27	14 33.49	+01 21.5	1.565	1.883	91.2	32.6	17.3
1992 08 06	14 49.16	-01 40.7	1.711	1.937	86.6	31.5	17.5
1992 08 16	15 05.27	-04 26.4	1.862	1.989	81.9	30.3	17.8
1992 08 26	15 21.78	-06 56.5	2.015	2.041	77.0	28.8	17.9
1992 09 05	15 38.69	-09 11.6	2.170	2.092	72.1	27.3	18.1
1992 09 15	15 55.95	-11 12.4	2.324	2.142	67.0	25.6	18.3
1992 09 25	16 13.54	-12 59.4	2.477	2.190	61.9	23.8	18.4
1992 10 05	16 31.42	-14 33.0	2.626	2.237	56.6	21.9	18.5
1992 10 15	16 49.53	-15 53.8	2.770	2.283	51.3	19.9	18.6
1992 10 25	17 07.84	-17 02.0	2.908	2.328	45.8	17.8	18.7
1992 11 04	17 26.30	-17 58.0	3.038	2.371	40.3	15.7	18.7
1992 11 14	17 44.82	-18 42.3	3.159	2.412	34.7	13.5	18.8

Periodic Comet Howell — Elements MPC 16379

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m2
1992 01 09	11 41.12	+07 35.4	3.029	3.562	115.3	14.5	20.0
1992 01 19	11 40.93	+07 51.4	2.851	3.516	125.6	13.2	19.8
1992 01 29	11 38.76	+08 19.9	2.688	3.468	136.3	11.3	19.5
1992 02 08	11 34.53	+09 00.1	2.547	3.420	147.5	8.9	19.3
1992 02 18	11 28.36	+09 49.8	2.430	3.371	159.0	6.0	19.0
1992 02 28	11 20.57	+10 45.3	2.341	3.321	170.1	3.0	18.8
1992 03 09	11 11.71	+11 41.9	2.283	3.270	172.5	2.3	18.6
1992 03 19	11 02.57	+12 33.8	2.256	3.218	162.2	5.4	18.7
1992 03 29	10 53.95	+13 16.4	2.258	3.165	150.5	8.9	18.9
1992 04 08	10 46.62	+13 45.9	2.286	3.112	139.0	12.2	19.0
1992 04 18	10 41.17	+14 00.6	2.335	3.057	128.0	15.0	19.1
1992 04 28	10 37.93	+14 00.3	2.399	3.002	117.6	17.3	19.2
1992 05 08	10 37.03	+13 45.6	2.475	2.945	107.9	19.0	19.3
1992 05 18	10 38.43	+13 17.6	2.556	2.888	98.7	20.3	19.3
1992 05 28	10 41.98	+12 37.5	2.639	2.830	90.2	21.0	19.4
1992 06 07	10 47.48	+11 46.5	2.720	2.771	82.2	21.3	19.4
1992 06 17	10 54.73	+10 45.6	2.796	2.711	74.7	21.2	19.4
1992 06 27	11 03.53	+09 35.5	2.865	2.651	67.6	20.8	19.4
1992 07 07	11 13.73	+08 16.9	2.926	2.590	60.9	20.1	19.4
1992 07 17	11 25.16	+06 50.3	2.977	2.528	54.6	19.1	19.4
1992 07 27	11 37.73	+05 16.3	3.017	2.465	48.5	18.0	19.3
1992 08 06	11 51.37	+03 35.2	3.046	2.402	42.8	16.7	19.2
1992 08 16	12 06.01	+01 47.8	3.063	2.338	37.2	15.2	19.1
1992 08 26	12 21.63	-00 05.7	3.068	2.274	32.0	13.6	19.0

1990 TR — a,e,i = 2.14, 0.44, 8 — Elements MPC 18634

Date TT	R. A. (2000)	Decl.	Delta	r	Variation		V
1992 01 09	11 55.28	+06 33.3	2.532	3.036	-0.52	+5.0	19.8
1992 01 19	11 54.50	+06 45.3	2.408	3.047	-0.56	+5.3	19.7
1992 01 29	11 51.28	+07 11.2	2.297	3.056	-0.60	+5.6	19.5
1992 02 08	11 45.61	+07 49.9	2.205	3.063	-0.64	+5.9	19.3
1992 02 18	11 37.71	+08 38.3	2.137	3.069	-0.67	+6.1	19.1
1992 02 28	11 28.11	+09 31.6	2.098	3.074	-0.70	+6.1	18.9
1992 03 09	11 17.57	+10 24.4	2.088	3.078	-0.71	+6.1	18.8
1992 03 19	11 07.07	+11 10.5	2.111	3.080	-0.71	+5.9	19.0

1992 03 29	10 57.53	+11 45.6	2.163	3.081	-0.69	+5.6	19.2
1992 04 08	10 49.71	+12 07.0	2.241	3.080	-0.66	+5.3	19.4

1991 JW a,e,i = 1.04, 0.12, 9 Elements MPC 18827

Date TT	R. A. (2000)	Decl.	Delta	r	Variation		V
1992 01 09	12 26.65	+46 17.4	0.206	1.086	-5.72	+198.8	18.3
1992 01 19	12 29.64	+51 45.1	0.207	1.103	-9.55	+213.5	18.2
1992 01 29	12 18.42	+56 54.7	0.210	1.118	-15.61	+208.8	18.1
1992 02 08	11 48.44	+60 53.4	0.216	1.131	-23.53	+175.6	18.1
1992 02 18	11 02.50	+62 27.6	0.225	1.142	-29.15	+115.3	18.2
1992 02 28	10 15.62	+61 02.9	0.239	1.150	-27.87	+52.3	18.4
1992 03 09	09 42.57	+57 11.1	0.257	1.156	-22.04	+11.5	18.6
1992 03 19	09 26.45	+51 57.2	0.279	1.160	-16.16	-5.1	18.9
1992 03 29	09 22.91	+46 12.0	0.303	1.161	-11.72	-7.5	19.1
1992 04 08	09 27.63	+40 20.3	0.330	1.159	-8.61	-3.3	19.4

Periodic Comet Ashbrook-Jackson Elements MPC 16380

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m2
1992 01 09	15 56.49	-28 55.1	4.589	3.965	45.7	10.2	18.5
1992 01 19	16 07.48	-29 45.2	4.440	3.931	53.2	11.6	18.4
1992 01 29	16 17.97	-30 34.1	4.280	3.897	60.9	12.8	18.4
1992 02 08	16 27.79	-31 22.0	4.110	3.863	68.7	13.8	18.3
1992 02 18	16 36.74	-32 09.1	3.933	3.828	76.7	14.5	18.2
1992 02 28	16 44.64	-32 55.8	3.752	3.793	84.9	15.1	18.1
1992 03 09	16 51.23	-33 42.4	3.569	3.758	93.2	15.3	18.0
1992 03 19	16 56.27	-34 29.0	3.388	3.723	101.9	15.2	17.8
1992 03 29	16 59.51	-35 15.4	3.213	3.687	110.7	14.7	17.7
1992 04 08	17 00.71	-36 01.0	3.047	3.651	119.9	13.8	17.5
1992 04 18	16 59.66	-36 44.5	2.894	3.615	129.3	12.4	17.3
1992 04 28	16 56.28	-37 23.9	2.758	3.578	138.8	10.7	17.1
1992 05 08	16 50.62	-37 56.5	2.643	3.541	148.3	8.6	16.9
1992 05 18	16 43.01	-38 19.1	2.552	3.505	156.9	6.5	16.8
1992 05 28	16 34.02	-38 29.4	2.486	3.467	162.8	5.0	16.6
1992 06 07	16 24.45	-38 25.7	2.449	3.430	162.4	5.1	16.5
1992 06 17	16 15.24	-38 08.8	2.439	3.393	156.1	7.0	16.6
1992 06 27	16 07.27	-37 41.3	2.454	3.355	147.3	9.4	16.7
1992 07 07	16 01.25	-37 07.0	2.493	3.317	137.8	11.9	16.8
1992 07 17	15 57.61	-36 30.4	2.551	3.280	128.3	14.1	16.9
1992 07 27	15 56.55	-35 55.0	2.625	3.242	119.0	15.9	17.0
1992 08 06	15 58.09	-35 23.5	2.710	3.204	110.1	17.3	17.1
1992 08 16	16 02.09	-34 57.5	2.803	3.166	101.6	18.3	17.2
1992 08 26	16 08.38	-34 37.2	2.900	3.129	93.5	18.8	17.3
1992 09 05	16 16.77	-34 22.2	2.999	3.091	85.7	19.0	17.3
1992 09 15	16 27.05	-34 11.6	3.095	3.054	78.3	18.8	17.3
1992 09 25	16 39.02	-34 04.0	3.188	3.016	71.1	18.3	17.4
1992 10 05	16 52.52	-33 58.0	3.275	2.979	64.2	17.6	17.4
1992 10 15	17 07.38	-33 51.9	3.354	2.942	57.6	16.6	17.4
1992 10 25	17 23.44	-33 44.1	3.425	2.906	51.1	15.5	17.3
1992 11 04	17 40.56	-33 33.1	3.486	2.870	44.9	14.1	17.3
1992 11 14	17 58.60	-33 17.6	3.537	2.834	38.8	12.6	17.3
1992 11 24	18 17.40	-32 56.1	3.576	2.799	32.9	11.0	17.2

1991 VK a,e,i = 1.84, 0.51, 5 Elements MPC 19516

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	V
1992 01 09	17 36.07	-17 57.2	0.081	0.910	24.4	153.5	20.5
1992 01 14	16 43.63	-24 01.4	0.095	0.914	40.6	135.5	18.0
1992 01 19	16 06.14	-27 44.3	0.113	0.922	53.7	120.6	17.0
1992 01 24	15 40.67	-30 04.3	0.133	0.934	64.0	108.7	16.6
1992 01 29	15 23.28	-31 40.2	0.153	0.950	72.3	98.8	16.4

1992 02 03	15 10.81	-32 51.3	0.173	0.969	79.6	90.3	16.3
1992 02 08	15 01.10	-33 46.2	0.192	0.992	86.2	82.7	16.3
1992 02 18	14 44.75	-34 59.2	0.226	1.046	98.7	69.0	16.3
1992 02 28	14 27.59	-35 23.6	0.256	1.109	111.2	56.4	16.3
1992 03 09	14 07.01	-34 47.5	0.284	1.177	124.3	44.2	16.3
1992 03 19	13 44.04	-33 01.8	0.317	1.249	137.8	32.4	16.4
1992 03 29	13 21.82	-30 15.4	0.358	1.322	150.7	21.7	16.4
1992 04 08	13 03.47	-26 55.5	0.413	1.397	160.3	14.0	16.6
1992 04 18	12 50.92	-23 37.8	0.483	1.471	161.8	12.3	17.0
1992 04 28	12 44.23	-20 47.6	0.570	1.544	155.6	15.6	17.6
1992 05 08	12 42.63	-18 35.9	0.672	1.616	147.0	19.9	18.2
1992 05 18	12 45.14	-17 03.8	0.790	1.686	138.4	23.5	18.7
1992 05 28	12 50.76	-16 06.2	0.919	1.754	130.2	26.2	19.2
1992 06 07	12 58.77	-15 37.1	1.060	1.820	122.5	28.0	19.7
1992 06 17	13 08.59	-15 30.9	1.210	1.884	115.3	29.2	20.1
1992 06 27	13 19.79	-15 42.0	1.367	1.945	108.5	29.7	20.4

Comet Helin-Alu (1991r) Elements MPC 19468

Date TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1
1992 01 29	18 33.91	-05 23.0	5.638	4.853	34.1	6.5	15.6
1992 02 08	18 42.91	-04 08.6	5.550	4.851	41.1	7.7	15.6
1992 02 18	18 51.39	-02 47.2	5.450	4.851	48.4	8.8	15.5
1992 02 28	18 59.25	-01 19.1	5.339	4.851	55.8	9.7	15.5
1992 03 09	19 06.38	+00 15.6	5.219	4.853	63.2	10.5	15.4
1992 03 19	19 12.67	+01 56.5	5.093	4.856	70.7	11.2	15.4
1992 03 29	19 18.01	+03 42.9	4.963	4.860	78.3	11.6	15.3
1992 04 08	19 22.29	+05 33.9	4.834	4.865	85.9	11.8	15.3
1992 04 18	19 25.41	+07 28.3	4.708	4.872	93.4	11.9	15.2
1992 04 28	19 27.29	+09 24.4	4.588	4.880	100.9	11.7	15.2
1992 05 08	19 27.87	+11 20.4	4.478	4.889	108.3	11.3	15.1
1992 05 18	19 27.14	+13 13.5	4.381	4.899	115.3	10.8	15.1
1992 05 28	19 25.12	+15 01.2	4.299	4.911	121.9	10.1	15.1
1992 06 07	19 21.91	+16 40.4	4.236	4.924	127.8	9.4	15.1
1992 06 17	19 17.71	+18 08.2	4.194	4.937	132.5	8.7	15.0
1992 06 27	19 12.77	+19 21.9	4.173	4.953	135.7	8.2	15.1
1992 07 07	19 07.43	+20 19.8	4.176	4.969	137.1	8.0	15.1
1992 07 17	19 02.06	+21 00.8	4.201	4.986	136.4	8.1	15.1
1992 07 27	18 57.03	+21 25.4	4.247	5.005	133.9	8.4	15.1
1992 08 06	18 52.70	+21 34.7	4.314	5.024	129.8	8.9	15.2
1992 08 16	18 49.36	+21 30.8	4.400	5.045	124.7	9.5	15.2
1992 08 26	18 47.20	+21 16.6	4.501	5.067	118.9	10.1	15.3
1992 09 05	18 46.36	+20 54.7	4.615	5.090	112.7	10.5	15.4
1992 09 15	18 46.87	+20 28.3	4.740	5.114	106.3	10.9	15.5
1992 09 25	18 48.73	+19 59.9	4.872	5.139	99.8	11.1	15.5
1992 10 05	18 51.87	+19 32.0	5.009	5.164	93.3	11.1	15.6
1992 10 15	18 56.20	+19 06.7	5.148	5.191	86.9	11.1	15.7
1992 10 25	19 01.60	+18 45.5	5.287	5.219	80.7	10.8	15.8
1992 11 04	19 07.98	+18 30.0	5.423	5.248	74.6	10.5	15.9
1992 11 14	19 15.18	+18 21.2	5.555	5.278	68.8	10.1	15.9
1992 11 24	19 23.08	+18 19.8	5.680	5.308	63.2	9.6	16.0
1992 12 04	19 31.58	+18 26.5	5.797	5.340	57.9	9.0	16.1
1992 12 14	19 40.53	+18 41.6	5.904	5.372	53.1	8.4	16.2
1992 12 24	19 49.84	+19 05.2	6.001	5.405	48.9	7.9	16.2
1993 01 03	19 59.38	+19 37.6	6.086	5.439	45.2	7.4	16.3
1993 01 13	20 09.05	+20 18.4	6.159	5.473	42.4	7.0	16.3
1993 01 23	20 18.76	+21 07.5	6.219	5.509	40.6	6.7	16.4
1993 02 02	20 28.41	+22 04.5	6.266	5.545	39.8	6.5	16.4
1993 02 12	20 37.89	+23 09.0	6.300	5.582	40.2	6.5	16.5

Periodic Comet Levy (1991q) Elements MPC 19258

Date TT	R. A. (2000) Decl.	Delta	r	Elong.	Phase	m1
1992 02 08	08 26.68 +30 24.2	2.168	3.113	159.9	6.2	14.6
1992 02 18	08 16.77 +29 54.4	2.327	3.217	149.4	9.0	14.9
1992 02 28	08 09.66 +29 16.5	2.512	3.321	138.7	11.4	15.2
1992 03 09	08 05.35 +28 33.7	2.719	3.423	128.2	13.2	15.5
1992 03 19	08 03.66 +27 48.4	2.942	3.524	118.3	14.4	15.8
1992 03 29	08 04.21 +27 02.1	3.178	3.624	108.8	15.1	16.1
1992 04 08	08 06.67 +26 15.4	3.422	3.723	99.7	15.4	16.4
1992 04 18	08 10.70 +25 28.7	3.670	3.821	91.0	15.2	16.6
1992 04 28	08 15.97 +24 41.9	3.919	3.918	82.6	14.8	16.9
1992 05 08	08 22.22 +23 54.8	4.165	4.014	74.5	14.0	17.1
1992 05 18	08 29.25 +23 07.4	4.405	4.109	66.6	13.1	17.4
1992 05 28	08 36.84 +22 19.6	4.636	4.203	58.9	11.9	17.6
1992 06 07	08 44.85 +21 31.1	4.857	4.297	51.3	10.6	17.8
1992 06 17	08 53.15 +20 42.0	5.064	4.389	43.9	9.2	17.9
1992 06 27	09 01.62 +19 52.5	5.256	4.480	36.5	7.8	18.1

Periodic Comet Hartley 2 (1991t) Elements MPC 18598

Date TT	R. A. (2000) Decl.	Delta	r	Elong.	Phase	m2
1992 02 08	10 24.40 -07 18.7	1.203	2.129	152.9	12.2	17.3
1992 02 18	10 11.23 -05 43.4	1.258	2.220	162.2	7.8	17.3
1992 02 28	09 59.34 -03 55.5	1.341	2.309	163.9	6.8	17.5
1992 03 09	09 49.86 -02 07.7	1.452	2.397	156.8	9.4	17.8
1992 03 19	09 43.40 -00 29.8	1.588	2.483	147.0	12.6	18.2
1992 03 29	09 40.01 +00 52.5	1.746	2.567	136.9	15.4	18.6
1992 04 08	09 39.47 +01 57.0	1.923	2.650	127.1	17.5	19.0
1992 04 18	09 41.40 +02 43.5	2.114	2.731	117.9	19.0	19.3
1992 04 28	09 45.37 +03 13.4	2.315	2.811	109.1	19.8	19.6
1992 05 08	09 50.99 +03 28.4	2.524	2.889	100.8	20.1	19.8
1992 05 18	09 57.92 +03 30.3	2.737	2.965	92.9	19.9	20.0
1992 05 28	10 05.87 +03 20.7	2.950	3.040	85.3	19.4	20.2
1992 06 07	10 14.61 +03 01.3	3.163	3.114	78.0	18.6	20.4
1992 06 17	10 23.95 +02 33.4	3.372	3.186	70.8	17.5	20.6
1992 06 27	10 33.74 +01 58.3	3.575	3.256	63.8	16.3	20.7

Periodic Comet Forbes Elements MPC 16379

Date TT	R. A. (2000) Decl.	Delta	r	Elong.	Phase	m2
1992 02 08	10 49.98 +07 19.7	2.641	3.573	157.5	6.1	20.8
1992 02 18	10 42.22 +07 53.4	2.546	3.523	169.6	2.9	20.6
1992 02 28	10 33.48 +08 31.6	2.482	3.472	178.0	0.6	20.3
1992 03 09	10 24.45 +09 10.4	2.449	3.420	165.7	4.1	20.5
1992 03 19	10 15.92 +09 45.7	2.446	3.367	153.6	7.6	20.6
1992 03 29	10 08.58 +10 14.2	2.471	3.314	141.8	10.7	20.7
1992 04 08	10 02.99 +10 33.4	2.518	3.259	130.6	13.5	20.9
1992 04 18	09 59.49 +10 42.1	2.583	3.204	119.9	15.8	20.9
1992 04 28	09 58.21 +10 39.7	2.660	3.148	109.9	17.5	21.0
1992 05 08	09 59.13 +10 26.3	2.744	3.091	100.5	18.7	21.1
1992 05 18	10 02.12 +10 02.4	2.831	3.033	91.6	19.5	21.2
1992 05 28	10 06.99 +09 28.5	2.916	2.975	83.4	19.8	21.2
1992 06 07	10 13.56 +08 44.9	2.998	2.915	75.6	19.7	21.2
1992 06 17	10 21.64 +07 52.2	3.072	2.855	68.2	19.3	21.2
1992 06 27	10 31.05 +06 50.7	3.138	2.794	61.2	18.6	21.2
1992 07 07	10 41.65 +05 40.8	3.194	2.733	54.6	17.6	21.1
1992 07 17	10 53.31 +04 22.8	3.238	2.671	48.2	16.5	21.1
1992 07 27	11 05.95 +02 57.1	3.270	2.608	42.2	15.2	21.0
1992 08 06	11 19.49 +01 23.9	3.289	2.544	36.3	13.7	20.9
1992 08 16	11 33.90 -00 16.3	3.296	2.480	30.8	12.0	20.8

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1992 01 09    07 19.15   +26 55.3    1.539    2.521   175.3     1.8    17.6
-11.77 -0.09  + 21.1 - 4.4   1972 HL1    17953   - 6.40 +1.63    -6.5 - 3.6
1992 02 08    06 48.71   +27 15.5    1.644    2.496   142.1    14.1    18.3

1992 01 09    07 19.93   +21 01.2    2.277    3.260   178.7     0.4    17.0
- 8.72 +0.04  + 18.8 - 0.5    (4658)     17415   - 5.05 +1.05  + 11.1 - 1.6
1992 02 08    06 57.42   +21 48.1    2.460    3.315   144.7     9.9    17.8

1992 01 09    07 19.69   +23 21.2    2.288    3.271   178.8     0.4    17.0
- 8.77 +0.03  + 22.1 - 1.5   1979 SU11   18804   - 5.10 +1.07    +9.2 - 2.3
1992 02 08    06 56.97   +24 09.6    2.463    3.315   144.4    10.0    17.7

1992 01 09    07 20.25   +25 43.6    3.626    4.608   176.5     0.8    17.3
- 6.95 -0.03  + 15.9 - 1.5   1989 UA6    18294   - 4.82 +0.68    +4.6 - 1.9
1992 02 08    07 01.29   +26 15.1    3.754    4.597   145.0     7.1    17.8

1992 01 09    07 20.55   +27 56.8    1.575    2.555   174.3     2.2    15.6
-12.50 +0.15  - 62.7 - 5.0   1986 RE2    19499   - 6.24 +1.63  - 74.5 + 1.2
1992 02 08    06 49.71   +24 19.4    1.722    2.577   142.7    13.4    16.3

1992 01 09    07 20.99   +44 40.8    1.280    2.221   157.5     9.7    15.7
-13.04 +0.14  - 16.3 -16.9   1980 FH5    15702   - 4.60 +2.15  - 89.9 - 5.8
1992 02 08    06 50.84   +41 40.7    1.418    2.248   137.8    17.2    16.2

1992 01 09    07 21.31   +18 29.5    1.519    2.501   176.2     1.5    17.3
-11.30 -0.14  + 40.0 + 1.1    (4795)     18098   - 6.50 +1.53  + 33.5 - 2.5
1992 02 08    06 51.51   +20 26.1    1.614    2.477   143.4    13.7    18.0

1992 01 09    07 21.41   +21 58.3    1.871    2.855   179.2     0.3    17.7
-10.10 +0.02  + 10.4 - 1.1   4024 P-L    17651   - 5.64 +1.29    +0.7 - 1.6
1992 02 08    06 55.46   +22 15.7    2.028    2.887   144.2    11.5    18.5

1992 01 09    07 22.22   +21 33.2    2.293    3.277   178.9     0.3    17.0
- 8.47  0.00  + 22.5 - 0.7   1984 SY5    17435   - 5.01 +1.03  + 13.2 - 2.0
1992 02 08    07 00.10   +22 29.0    2.461    3.319   145.3     9.7    17.7

1992 01 09    07 22.18   +12 54.4    1.620    2.595   170.6     3.5    17.0
-10.16  0.00  + 30.2 + 4.0   1988 AX4    16874   - 5.45 +1.37  + 39.7 - 0.6
1992 02 08    06 56.24   +14 47.7    1.770    2.635   144.4    12.6    17.6

1992 01 09    07 22.73   +23 21.2    2.289    3.272   178.5     0.5    17.0
- 8.77 -0.10  + 20.4 - 1.3   4121 T-1    19326   - 5.60 +1.05    +8.1 - 2.3
1992 02 08    06 59.07   +24 05.9    2.383    3.240   144.9    10.1    17.6

1992 01 09    07 22.15   +26 22.2    4.783    5.765   175.8     0.7    17.3
- 6.13  0.00    -9.0 - 1.3   1988 TZ1    17442   - 4.44 +0.52  - 16.6 - 1.1
1992 02 08    07 05.34   +25 43.5    4.933    5.777   146.0     5.5    17.7

1992 01 09    07 24.15   +15 28.8    2.141    3.119   173.1     2.2    16.9
- 8.31 -0.10  + 25.6 + 2.3   3137 T-2    14968   - 5.20 +1.03  + 29.9 - 0.7
1992 02 08    07 01.79   +16 57.7    2.235    3.101   145.8    10.3    17.4

1992 01 09    07 28.35   +11 58.9    2.211    3.183   169.5     3.2    16.5
- 8.53 -0.09    +2.9 + 3.6    (4745)     17810   - 5.53 +0.99  + 17.2 + 1.0
1992 02 08    07 05.27   +12 33.6    2.317    3.184   146.2     9.9    16.9

1992 01 09    07 29.24   +13 21.0    1.583    2.559   170.8     3.5    17.4
-10.61 -0.06  + 72.1 + 3.4   1983 OD     12786   - 6.02 +1.39  + 69.3 - 3.5
1992 02 08    07 01.61   +17 05.9    1.748    2.623   145.8    12.2    18.0
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1992 01 09    07 30.19   +26 02.2    1.260    2.241   175.3     2.1    16.8
-11.73 +0.02  + 16.0 - 4.5   1987 US4    15711   - 5.36 +1.75  - 11.1 - 3.3
1992 02 08    07 01.37   +26 07.1    1.435    2.313   145.0    14.1    17.7

1992 01 09    07 30.09   +03 02.6    1.917    2.863   160.6     6.5    17.0
- 9.49 -0.14    -7.7 + 8.4    (4992)     19280   - 6.17 +1.12  + 32.0 + 4.0
1992 02 08    07 04.26   +03 46.9    2.005    2.861   143.7    11.8    17.3

1992 01 09    07 30.74   +07 25.9    1.671    2.633   164.9     5.6    16.7
- 9.46 -0.14  + 15.5 + 7.2   1978 SE5    17625   - 5.66 +1.25  + 43.7 + 1.8
1992 02 08    07 05.48   +09 04.8    1.775    2.648   145.6    12.1    17.1

1992 01 09    07 31.57   +25 50.2    1.909    2.890   175.3     1.6    16.1
- 9.58 -0.19  + 45.0 - 2.7   1990 SM2    17450   - 6.05 +1.23  + 19.9 - 4.6
1992 02 08    07 05.50   +27 30.9    2.020    2.889   145.6    11.1    16.7

1992 01 09    07 32.48   +28 33.4    1.471    2.449   172.9     2.8    17.6
-11.29 -0.12  + 30.6 - 5.6   4665 P-L    12583   - 6.05 +1.60    -5.5 - 4.9
1992 02 08    07 03.28   +29 09.6    1.620    2.491   144.8    13.2    18.3

1992 01 09    07 31.82   +01 45.4    2.116    3.055   159.3     6.5    17.1
- 8.71 -0.09  + 23.3 + 8.3   1988 CV3    17821   - 5.61 +1.01  + 57.2 + 2.5
1992 02 08    07 08.33   +03 56.8    2.242    3.100   144.8    10.6    17.5

1992 01 09    07 31.69   +09 03.5    1.949    2.914   166.5     4.5    16.2
- 8.03 -0.14  + 25.6 + 5.7   1987 DS6    13313   - 5.00 +1.05  + 45.7 + 0.8
1992 02 08    07 09.94   +10 59.3    2.043    2.920   147.1    10.6    16.5

1992 01 09    07 35.27   +12 22.3    1.423    2.397   169.4     4.3    16.0
-10.32 -0.05  + 61.9 + 4.3   1980 CG     11423   - 5.47 +1.44  + 63.2 - 3.0
1992 02 08    07 08.83   +15 43.4    1.606    2.494   147.5    12.3    16.7

1992 01 09    07 35.71   +20 39.0    1.704    2.686   175.7     1.6    17.5
-10.94 -0.12  + 20.0 - 0.6   1968 QE     11145   - 6.64 +1.36    +9.5 - 2.2
1992 02 08    07 06.61   +21 26.0    1.856    2.736   146.9    11.4    18.2

1992 01 09    07 37.24   +26 51.2    1.536    2.516   173.7     2.5    17.2
-12.36 -0.15    -2.1 - 4.6   1980 PF      9469   - 7.25 +1.59  - 27.0 - 2.6
1992 02 08    07 04.62   +26 03.7    1.673    2.549   145.8    12.6    17.9

1992 01 09    07 37.59   +21 21.4    1.711    2.693   175.5     1.7    16.0
- 9.61 -0.20    +9.9 - 0.5   1990 SU10   17641   - 5.91 +1.27    +0.7 - 1.9
1992 02 08    07 11.58   +21 39.9    1.821    2.709   148.0    11.1    16.7

1992 01 09    07 38.45   +13 28.8    1.669    2.643   170.0     3.7    17.0
-10.18 -0.28  + 14.4 + 3.9    (4684)     17607   - 6.81 +1.27  + 26.3 + 0.1
1992 02 08    07 10.08   +14 36.8    1.740    2.627   147.7    11.6    17.4

1992 01 09    07 39.62   +03 06.3    1.685    2.631   160.2     7.3    16.3
- 9.72 -0.16    -2.3 + 9.4   1990 OE     17446   - 6.08 +1.21  + 39.5 + 3.7
1992 02 08    07 13.40   +04 12.7    1.811    2.686   146.0    11.8    16.7

1992 01 09    07 41.20   +36 17.9    2.158    3.118   165.1     4.7    18.0
-11.25 -0.18  + 20.1 - 7.7   1977 QD3    12005   - 7.42 +1.29  - 24.4 - 5.6
1992 02 08    07 10.48   +36 07.6    2.311    3.160   143.7    10.7    18.5

1992 01 09    07 40.87   +17 48.8    1.125    2.104   173.1     3.2    16.7
- 9.82 -0.42  + 20.7 + 2.6   4113 P-L     8145   - 5.41 +1.67  + 21.0 - 1.9
1992 02 08    07 14.13   +18 59.6    1.187    2.093   148.8    14.1    17.3
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1992 01 09    07 43.77   +43 40.5    2.542    3.473   157.9     6.1    16.7
-11.15 -0.22  + 19.0 - 9.4   1953 FK1    17953   - 7.68 +1.22  - 34.1 - 6.8
1992 02 08    07 12.85   +43 12.9    2.685    3.502   140.5    10.3    17.0

1992 01 09    07 43.06   +24 57.9    2.255    3.235   173.7     1.9    17.4
- 8.87 -0.30  + 26.4 - 1.7   1977 EO1     9476   - 6.59 +0.98    +8.5 - 3.5
1992 02 08    07 17.50   +25 53.5    2.310    3.194   148.6     9.3    17.9

1992 01 09    07 44.67   +17 57.1    1.379    2.357   172.5     3.1    15.5
- 9.71 -0.33  + 48.7 + 1.9    (4968)     19004   - 5.87 +1.43  + 40.6 - 3.7
1992 02 08    07 18.03   +20 21.3    1.485    2.389   149.6    12.1    16.1

1992 01 09    07 45.16   +07 05.0    1.622    2.580   163.5     6.2    17.0
- 8.68 -0.27  + 18.2 + 7.7   1981 UU11   17432   - 5.58 +1.17  + 47.7 + 1.6
1992 02 08    07 21.10   +08 55.2    1.718    2.615   149.3    11.1    17.4

1992 01 09    07 46.90   +14 46.4    1.576    2.550   169.9     3.9    17.9
-10.79 -0.44  + 35.4 + 3.7   1990 QC2    17213   - 7.75 +1.32  + 40.5 - 1.6
1992 02 08    07 15.84   +16 50.0    1.633    2.531   149.2    11.5    18.3

1992 01 09    07 46.05   +19 39.0    1.657    2.636   173.0     2.6    15.4
- 8.46 -0.32  + 23.8 + 0.8    (4683)     17607   - 5.49 +1.19  + 17.3 - 2.4
1992 02 08    07 22.34   +20 46.6    1.740    2.644   150.6    10.6    15.9

1992 01 09    07 48.70   +40 17.0    1.904    2.851   160.8     6.5    17.7
-11.92 -0.44  + 19.3 -10.2   4026 P-L    18830   - 8.31 +1.47  - 41.5 - 7.9
1992 02 08    07 14.81   +39 39.4    1.974    2.823   142.7    12.2    18.0

1992 01 09    07 49.43   +22 19.3    1.521    2.499   172.8     2.8    16.8
- 9.85 -0.39  + 19.8 - 0.9   1990 QA2    17447   - 6.49 +1.35    +4.5 - 3.2
1992 02 08    07 21.70   +22 59.9    1.608    2.512   150.1    11.3    17.3

1992 01 09    07 49.66   +16 04.4    1.777    2.752   170.4     3.4    17.8
-10.32 -0.30  + 53.7 + 2.2   1990 MN     16881   - 7.24 +1.19  + 48.7 - 3.1
1992 02 08    07 20.57   +18 47.8    1.904    2.804   150.3    10.0    18.3

1992 01 09    07 52.94   +26 56.5    1.676    2.651   170.8     3.4    17.6
-10.84 -0.46  + 23.5 - 3.6   1986 QR1    17819   - 7.80 +1.33    -6.1 - 4.8
1992 02 08    07 21.65   +27 24.6    1.748    2.644   149.1    11.0    18.0

1992 01 09    07 51.97   +02 57.2    1.686    2.628   159.1     7.7    16.7
- 8.99 -0.32  + 46.3 + 9.8   1936 QE1    16574   - 6.26 +1.12  + 81.2 + 1.2
1992 02 08    07 26.44   +06 24.3    1.780    2.679   149.8    10.7    17.0

1992 01 09    07 53.42   +20 11.8    1.285    2.262   171.6     3.6    17.7
-11.01 -0.39  + 41.8   0.0   3025 T-2    15257   - 6.82 +1.55  + 25.1 - 4.3
1992 02 08    07 23.07   +22 00.1    1.415    2.325   150.6    12.0    18.3

1992 01 09    07 54.02   +38 13.4    1.163    2.121   162.3     8.1    15.5
-11.39 -0.83  + 45.2 -12.0   1975 TC6    13305   - 7.32 +1.96  - 36.8 -11.5
1992 02 08    07 20.75   +38 24.8    1.198    2.081   144.4    16.0    15.9

1992 01 09    07 52.52   +17 37.5    2.188    3.162   170.7     2.9    15.5
- 9.24 -0.27    +4.2 + 1.1   1990 TL4    17826   - 6.90 +0.96    +4.4 - 0.8
1992 02 08    07 26.02   +17 53.8    2.289    3.191   151.6     8.4    15.9

1992 01 09    07 53.47   +07 08.1    1.713    2.668   162.7     6.3    16.5
- 9.40 -0.25  + 29.4 + 7.1   1988 CF5    16698   - 6.34 +1.13  + 52.9 + 0.5
1992 02 08    07 27.29   +09 23.7    1.855    2.759   150.9    10.0    16.9
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1992 01 09    07 54.03   +17 12.1    1.103    2.078   170.2     4.6    17.7
- 9.75 -0.48  + 27.6 + 3.0   2566 P-L    14626   - 5.68 +1.60  + 26.3 - 2.7
1992 02 08    07 27.04   +18 43.3    1.203    2.124   151.8    12.7    18.3

1992 01 09    07 57.72   +23 35.2    1.526    2.502   170.8     3.6    17.3
-11.83 -0.38    +9.1 - 2.3   5148 T-2    15259   - 8.01 +1.45  - 10.4 - 3.0
1992 02 08    07 24.58   +23 34.5    1.655    2.561   150.7    10.9    17.8

1992 01 09    08 01.80   +23 40.0    1.291    2.265   169.9     4.4    16.7
-12.10 -0.48    +2.2 - 2.5   1076 T-3    15088   - 7.93 +1.61  - 17.9 - 2.9
1992 02 08    07 27.88   +23 17.1    1.411    2.326   151.5    11.7    17.3

1992 01 09    07 58.05   +08 15.2    2.599    3.551   163.1     4.6    17.2
- 7.54 -0.32  + 15.8 + 4.7   1978 SS2    13463   - 6.35 +0.69  + 35.0 + 1.3
1992 02 08    07 35.35   +09 37.5    2.619    3.526   152.9     7.3    17.4

1992 01 09    08 00.67   -03 05.4    2.397    3.302   152.7     7.9    18.0
- 9.97 -0.26  - 30.5 + 9.2   1990 MJ     18821   - 7.91 +0.87  + 17.6 + 5.8
1992 02 08    07 31.77   -03 18.6    2.517    3.384   146.6     9.2    18.3

1992 01 09    08 00.86   +09 48.7    1.506    2.466   163.9     6.3    17.8
- 9.75 -0.60  + 18.1 + 6.9   1989 GP4    14956   - 7.70 +1.20  + 43.3 + 1.1
1992 02 08    07 31.36   +11 31.5    1.529    2.446   152.4    10.8    18.0

1992 01 09    07 59.59   +07 02.8    1.892    2.843   161.9     6.2    16.5
- 8.01 -0.40    +6.0 + 6.8   1990 TJ2    17453   - 6.20 +0.93  + 34.9 + 2.3
1992 02 08    07 35.82   +08 12.4    1.945    2.857   152.6     9.1    16.7

1992 01 09    08 02.41   +27 50.4    1.782    2.753   168.6     4.1    17.5
-10.85 -0.51  + 24.1 - 3.9   1990 QL3    17214   - 8.28 +1.24    -7.8 - 5.2
1992 02 08    07 30.48   +28 17.2    1.865    2.767   150.7    10.0    17.9

1992 01 09    08 00.28   +22 53.8    2.094    3.068   170.3     3.1    16.9
- 8.38 -0.47  + 25.2 - 0.5   1987 DW6    16232   - 6.92 +0.92  + 11.3 - 3.4
1992 02 08    07 34.78   +23 53.7    2.112    3.024   152.9     8.5    17.1

1992 01 09    07 58.84   +13 06.7    4.706    5.667   166.7     2.3    17.0
- 5.00 -0.16  + 27.8 + 1.7    (4832)     18273   - 4.36 +0.36  + 32.2 - 0.3
1992 02 08    07 43.86   +14 40.4    4.776    5.690   155.8     4.1    17.1

1992 01 09    08 02.16   +23 03.5    2.224    3.197   169.9     3.1    17.1
- 8.19 -0.46  + 28.0 - 0.5   1976 GU3    15550   - 6.90 +0.85  + 14.0 - 3.4
1992 02 08    07 37.09   +24 11.8    2.243    3.156   153.3     8.1    17.3

1992 01 09    08 05.84   +17 03.9    1.737    2.706   167.7     4.4    17.8
- 9.68 -0.62  + 32.9 + 2.6   2777 P-L    14627   - 8.24 +1.06  + 32.3 - 2.3
1992 02 08    07 35.82   +18 50.9    1.749    2.670   153.9     9.4    18.0

1992 01 09    08 07.88   +27 17.2    1.506    2.476   167.7     4.9    16.4
-11.89 -0.56  + 24.8 - 4.4   1987 SQ17   16026   - 8.68 +1.45  - 10.3 - 5.5
1992 02 08    07 33.29   +27 41.0    1.618    2.529   151.5    10.7    16.8

1992 01 09    08 09.63   +32 32.9    1.641    2.602   164.7     5.7    17.6
-11.10 -0.50  + 36.2 - 7.1   1973 UC     14779   - 7.96 +1.37  - 13.0 - 7.2
1992 02 08    07 37.58   +33 07.9    1.792    2.691   150.0    10.6    18.1

1992 01 09    08 08.48   -00 22.7    1.371    2.297   154.3    10.7    16.6
- 8.29 -0.69  - 18.5 +13.0    (4704)     17615   - 6.80 +1.14  + 49.3 + 7.5
1992 02 08    07 42.46   +00 33.4    1.369    2.282   150.9    12.1    16.6
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1992 01 09    08 14.46   +19 19.5    1.395    2.363   166.6     5.5    18.0
-11.50 -0.60  + 16.8 + 0.7   3538 P-L    12690    - 8.58 +1.40    +7.5 - 2.8
1992 02 08    07 40.65   +20 02.5    1.510    2.440   154.9     9.9    18.5

1992 01 09    08 13.63   +09 19.5    1.389    2.342   161.5     7.7    17.6
- 9.51 -0.85  + 28.0 + 8.3   2642 P-L    17651    - 8.56 +1.16  + 58.1 + 0.9
1992 02 08    07 42.81   +11 42.4    1.368    2.301   155.1    10.4    17.7

1992 01 09    08 14.76   +37 52.0    1.995    2.939   160.2     6.5    16.8
-11.30 -0.59  + 23.4 - 8.3   1977 QF1    16868    - 9.01 +1.23  - 31.6 - 7.9
1992 02 08    07 40.94   +37 38.8    2.096    2.979   148.1    10.1    17.1

1992 01 09    08 12.97   -07 06.6    1.728    2.613   147.8    11.6    15.5
- 8.32 -0.47  + 13.0 +14.3   1990 OB     17445    - 6.58 +0.97  + 79.9 + 6.3
1992 02 08    07 47.97   -04 32.5    1.807    2.701   149.0    10.8    15.6

1992 01 09    08 12.59   +19 22.8    2.773    3.738   167.0     3.4    17.8
- 7.59 -0.37  + 25.9 + 0.7    (4814)     18266    - 6.69 +0.64  + 20.5 - 2.1
1992 02 08    07 49.30   +20 37.7    2.840    3.767   156.9     5.9    18.0

1992 01 09    08 12.54   +20 18.7    2.472    3.438   167.2     3.6    18.0
- 7.84 -0.41  + 30.5 + 0.5   1990 VL8    18299    - 6.78 +0.73  + 22.1 - 2.8
1992 02 08    07 48.52   +21 43.4    2.546    3.473   156.5     6.5    18.2

1992 01 09    08 14.77   +14 40.8    1.555    2.516   164.7     5.9    17.4
- 8.61 -0.66  + 35.7 + 4.4   3013 T-2    17836    - 7.25 +1.06  + 42.0 - 2.0
1992 02 08    07 47.80   +16 49.2    1.598    2.535   156.8     8.8    17.6

1992 01 09    08 16.11   +40 17.7    2.682    3.613   158.2     5.8    16.4
- 9.53 -0.57  + 19.2 - 6.8   1976 QE1    11638    - 8.55 +0.86  - 28.5 - 7.6
1992 02 08    07 46.35   +40 05.2    2.694    3.564   147.3     8.6    16.5

1992 01 09    08 20.57   +34 30.2    1.791    2.742   161.7     6.5    16.0
-11.20 -0.64  + 13.9 - 7.3   1977 QY     17197    - 8.98 +1.25  - 35.2 - 7.0
1992 02 08    07 46.79   +33 57.8    1.891    2.796   151.2     9.8    16.3

1992 01 09    08 20.60   +36 52.1    1.676    2.622   160.1     7.3    16.3
-10.78 -0.77  + 31.0 - 8.4    (4667)     17418    - 8.85 +1.31  - 29.4 - 9.1
1992 02 08    07 47.28   +36 55.8    1.752    2.650   149.5    10.9    16.6

1992 01 09    08 19.36   +20 18.4    1.423    2.388   165.7     5.9    16.3
- 9.50 -0.82  + 23.0 + 1.0   1990 SF11   17826    - 8.21 +1.19  + 12.1 - 3.7
1992 02 08    07 49.07   +21 19.9    1.452    2.390   156.7     9.4    16.5

1992 01 09    08 20.01   +15 33.5    1.635    2.594   164.0     6.0    17.4
-10.03 -0.70    +7.0 + 3.0   1979 ML1    17955    - 8.75 +1.07  + 12.6 - 0.9
1992 02 08    07 48.55   +16 10.1    1.672    2.609   157.0     8.5    17.6

1992 01 09    08 20.84   +26 33.1    1.411    2.375   165.1     6.1    17.4
-10.54 -0.89  + 28.5 - 3.0   1989 GH4    17637    - 9.04 +1.32    -5.8 - 6.5
1992 02 08    07 47.37   +27 13.7    1.448    2.376   154.6    10.3    17.6

1992 01 09    08 18.33   +17 02.1    1.864    2.825   165.0     5.2    15.1
- 7.49 -0.59  + 43.7 + 2.8    (4848)     18279    - 6.65 +0.85  + 42.1 - 2.9
1992 02 08    07 54.46   +19 21.5    1.905    2.845   158.2     7.4    15.3

1992 01 09    08 22.57   +22 13.1    1.627    2.590   165.1     5.6    18.1
-10.45 -0.81  + 49.3 + 0.1   1990 MG     18121    - 9.44 +1.11  + 28.3 - 5.7
1992 02 08    07 49.17   +24 20.3    1.666    2.598   156.0     8.9    18.3
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1992 01 09    08 18.60   +22 17.0    2.629    3.592   166.1     3.8    17.7
- 7.65 -0.48  + 30.1   0.0   1989 SO8    16877   - 7.16 +0.64  + 18.8 - 3.2
1992 02 08    07 54.33   +23 36.4    2.647    3.577   157.3     6.1    17.9

1992 01 09    08 19.04   +18 19.3    2.559    3.519   165.3     4.1    18.1
- 7.52 -0.44  + 27.1 + 1.3   1978 RL1    11051   - 6.82 +0.65  + 23.6 - 2.1
1992 02 08    07 55.52   +19 41.5    2.615    3.551   158.4     5.9    18.3

1992 01 09    08 22.02   +26 24.9    1.566    2.528   164.9     5.8    17.4
- 9.76 -0.78  + 32.7 - 2.6   1990 SV13   18124   - 8.43 +1.16    +1.1 - 6.3
1992 02 08    07 51.11   +27 22.5    1.618    2.547   155.3     9.3    17.7

1992 01 09    08 20.35   +07 05.4    2.231    3.168   158.7     6.5    17.7
- 8.66 -0.48    -0.5 + 5.7   1981 RA2    17199   - 7.74 +0.75  + 24.5 + 2.2
1992 02 08    07 53.46   +07 47.8    2.282    3.212   156.6     7.0    17.8

1992 01 09    08 18.86   +19 45.9    2.849    3.809   165.7     3.7    18.2
- 6.53 -0.42  + 21.8 + 0.8    (4757)     17945   - 6.17 +0.54  + 17.4 - 2.0
1992 02 08    07 58.03   +20 50.1    2.854    3.790   158.8     5.4    18.3

1992 01 09    08 24.31   +38 07.3    1.589    2.530   158.7     8.1    16.1
-10.71 -0.76    -1.9 - 9.6   1990 QQ1    17447   - 8.42 +1.37  - 62.2 - 7.9
1992 02 08    07 51.66   +36 28.0    1.671    2.576   150.5    10.9    16.4

1992 01 09    08 23.60   +19 20.5    1.856    2.816   164.5     5.4    18.0
- 9.66 -0.69  + 37.9 + 1.3   1990 QD2    18821   - 8.81 +0.94  + 28.5 - 3.7
1992 02 08    07 52.87   +21 09.4    1.898    2.835   157.6     7.6    18.2

1992 01 09    08 24.34   +17 45.4    1.877    2.835   163.9     5.5    17.8
- 9.39 -0.68  + 26.0 + 2.0    (4697)     17612   - 8.64 +0.90  + 22.8 - 2.6
1992 02 08    07 54.37   +19 07.0    1.909    2.849   158.3     7.4    17.9

1992 01 09    08 24.70   +29 03.2    1.171    2.132   163.6     7.5    15.7
- 9.39 -1.04  + 32.9 - 4.6    (4939)     18792   - 7.92 +1.44  - 14.3 - 8.5
1992 02 08    07 54.13   +29 38.2    1.213    2.147   154.8    11.3    16.0

1992 01 09    08 25.73   +40 16.9    2.491    3.417   157.0     6.5    17.6
- 9.59 -0.67  + 58.6 - 7.0   1990 VY6    17646   - 8.89 +0.88    +4.0 - 9.3
1992 02 08    07 55.14   +41 55.0    2.579    3.450   147.2     8.9    17.8

1992 01 09    08 29.09   +33 19.1    1.278    2.231   160.9     8.3    17.9
-10.60 -1.09  + 53.8 - 7.3   4098 T-1    19325   - 9.20 +1.47  - 11.3 -11.1
1992 02 08    07 54.63   +34 29.8    1.339    2.259   152.2    11.8    18.1

1992 01 09    08 25.44   +11 57.1    1.086    2.041   161.0     9.0    15.3
- 7.77 -0.93  + 40.8 + 8.2   1988 CH     13052   - 6.58 +1.26  + 59.4 - 2.1
1992 02 08    07 59.85   +14 46.7    1.137    2.090   159.7     9.4    15.5

1992 01 09    08 30.53   +28 10.7    1.554    2.510   162.6     6.7    17.0
-10.63 -1.05  + 47.6 - 2.9    (4654)     17414   -10.43 +1.14    +7.2 - 8.5
1992 02 08    07 54.86   +29 43.3    1.551    2.480   154.9     9.7    17.1

1992 01 09    08 29.05   +18 13.2    1.333    2.291   162.9     7.2    17.5
- 9.27 -1.10  + 45.9 + 3.9   1979 FD3    14780   - 9.43 +1.10  + 42.1 - 4.5
1992 02 08    07 56.92   +20 40.8    1.302    2.249   158.6     9.2    17.4

1992 01 09    08 29.28   +13 38.3    1.414    2.366   161.1     7.7    16.7
-10.04 -0.82  + 24.9 + 5.0   1987 RU3    18112   - 8.84 +1.15  + 34.6 - 1.6
1992 02 08    07 57.30   +15 19.7    1.477    2.424   159.1     8.4    16.8
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1992 01 09	08 29.05	+05 25.3	1.679	2.608	156.0	8.8	17.3	
- 8.74 -0.80	+ 13.0 + 8.7	1990 SW	19305	- 8.63 +0.86	+ 51.3 + 3.0			
1992 02 08	07 59.93	+07 12.3	1.658	2.599	157.9	8.2	17.2	
1992 01 09	08 29.54	+03 15.6	2.126	3.043	154.4	8.0	16.6	
- 7.26 -0.58	+ 10.5 + 7.8	1985 UB5	12317	- 7.03 +0.65	+ 46.2 + 3.2			
1992 02 08	08 05.84	+04 49.1	2.137	3.074	158.1	6.9	16.6	
1992 01 09	08 30.86	+05 15.1	1.590	2.518	155.6	9.3	16.2	
- 7.85 -0.78	+4.4 + 9.0	1990 RV2	17826	- 7.61 +0.86	+ 44.9 + 3.4			
1992 02 08	08 04.62	+06 39.5	1.593	2.538	158.7	8.1	16.2	
1992 01 09	08 30.81	-00 46.6	1.716	2.620	151.0	10.5	18.3	
- 7.86 -0.69	+ 21.5 +11.6	2145 T-2	18132	- 7.45 +0.82	+ 74.3 + 4.5			
1992 02 08	08 05.04	+01 50.3	1.738	2.671	156.3	8.5	18.3	
1992 01 09	08 32.74	+20 16.0	1.679	2.634	162.6	6.4	16.7	
- 8.44 -0.78	+ 45.6 + 1.4	(4701)	17614	- 8.00 +0.91	+ 32.7 - 4.8			
1992 02 08	08 04.94	+22 24.9	1.729	2.678	160.0	7.2	16.9	
1992 01 09	08 36.13	+15 45.3	1.753	2.700	160.5	7.0	18.1	
- 9.73 -0.75	+ 12.3 + 2.9	1990 OL4	17211	- 9.13 +0.92	+ 15.7 - 1.5			
1992 02 08	08 04.73	+16 35.4	1.806	2.757	160.9	6.7	18.2	
1992 01 09	08 35.70	+18 52.7	1.538	2.490	161.6	7.2	16.4	
- 9.39 -0.95	+6.7 + 1.7	1981 EF2	12321	- 9.34 +0.98	+2.1 - 2.6			
1992 02 08	08 04.02	+19 13.7	1.532	2.484	160.5	7.6	16.4	
1992 01 09	08 33.49	+16 21.4	2.065	3.014	161.3	6.0	16.9	
- 7.73 -0.69	+ 28.0 + 2.9	(4696)	17612	- 7.80 +0.68	+ 30.1 - 2.0			
1992 02 08	08 07.67	+17 57.5	2.063	3.015	161.5	6.0	16.9	
1992 01 09	08 34.11	-00 55.7	2.033	2.929	150.4	9.6	17.8	
- 7.63 -0.72	+ 10.3 +10.0	1990 UG4	17965	- 8.07 +0.62	+ 61.2 + 5.5			
1992 02 08	08 08.09	+00 59.9	1.971	2.902	156.4	7.8	17.6	
1992 01 09	08 35.53	+16 33.6	1.861	2.808	161.0	6.6	17.1	
- 8.87 -0.77	+ 13.0 + 2.6	1982 UH8	17201	- 8.79 +0.81	+ 15.0 - 1.7			
1992 02 08	08 06.12	+17 23.6	1.869	2.821	161.2	6.5	17.1	
1992 01 09	08 36.95	+12 55.1	1.723	2.665	159.1	7.6	18.3	
- 9.12 -0.90	+ 43.1 + 5.6	1990 SU8	18298	- 9.51 +0.81	+ 55.1 - 1.7			
1992 02 08	08 05.82	+15 36.0	1.702	2.655	161.1	6.9	18.2	
1992 01 09	08 37.60	+16 52.0	2.090	3.035	160.6	6.2	16.0	
- 8.93 -0.76	-1.3 + 1.9	1981 RP2	13152	- 9.21 +0.69	+0.1 - 1.1			
1992 02 08	08 07.69	+16 55.8	2.058	3.010	161.6	5.9	15.9	
1992 01 09	08 38.89	+13 04.2	1.671	2.612	158.8	7.8	16.6	
- 9.13 -0.93	+ 12.7 + 4.8	1990 SA1	17449	- 9.56 +0.83	+ 26.7 - 0.4			
1992 02 08	08 07.61	+14 13.0	1.643	2.598	161.5	6.9	16.5	
1992 01 09	08 39.59	+12 28.1	1.389	2.331	158.3	9.0	16.7	
- 9.55 -0.94	+ 10.8 + 5.9	1987 UX1	12688	- 9.12 +1.06	+ 27.7 - 0.3			
1992 02 08	08 07.86	+13 37.3	1.431	2.387	161.5	7.5	16.7	
1992 01 09	08 39.20	+16 39.4	1.297	2.247	160.2	8.5	17.9	
- 9.03 -0.99	+ 20.2 + 3.8	1981 EJ15	10616	- 8.59 +1.11	+ 21.8 - 2.7			
1992 02 08	08 08.86	+17 54.5	1.343	2.301	161.8	7.7	18.0	

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1992 01 09    08 35.54   +00 56.7    1.245    2.162   151.6    12.5    15.9
- 6.18 -1.03  + 25.5 +14.8   1988 EM1    15889   - 6.93 +0.87  + 96.1 + 6.0
1992 02 08    08 12.33   +04 15.2    1.189    2.140   159.2     9.4    15.7

1992 01 09    08 41.22   +23 15.3    1.658    2.607   160.9     7.1    18.2
- 9.59 -0.89  + 43.4 - 0.4   6547 P-L    17975   - 9.33 +0.97  + 20.0 - 6.1
1992 02 08    08 09.40   +25 01.0    1.717    2.665   160.0     7.3    18.3

1992 01 09    08 40.14   +35 04.6    2.255    3.188   158.0     6.6    16.6
- 8.61 -0.77  + 49.3 - 4.9    (4681)     17606   - 8.68 +0.76    +3.9 - 8.6
1992 02 08    08 11.35   +36 31.3    2.305    3.217   153.3     7.9    16.7

1992 01 09    08 39.94   +22 47.6    2.278    3.225   161.2     5.7    17.6
- 8.48 -0.70  + 25.0 - 0.1    (4694)     17611   - 8.69 +0.65  + 10.5 - 4.0
1992 02 08    08 11.68   +23 47.9    2.284    3.233   161.0     5.7    17.6

1992 01 09    08 43.40   +24 51.8    1.587    2.535   160.3     7.5    17.1
- 9.64 -1.03  + 29.7 - 1.1   1990 QH1    17213   - 9.90 +0.97    +2.9 - 6.3
1992 02 08    08 10.37   +25 50.4    1.598    2.546   159.8     7.7    17.1

1992 01 09    08 44.29   +31 01.1    1.515    2.458   158.9     8.3    15.9
- 9.06 -1.28  + 99.6 - 2.0   1976 WC1    14780   -10.48 +0.94  + 47.5 -12.8
1992 02 08    08 10.86   +35 01.8    1.499    2.425   154.3    10.2    16.0

1992 01 09    08 44.10   +19 21.3    1.256    2.205   159.8     8.9    15.9
- 9.28 -1.18    +2.2 + 1.8   1985 CZ1    19498   - 9.59 +1.11    -3.9 - 3.0
1992 02 08    08 11.54   +19 27.7    1.258    2.217   162.2     7.8    15.9

1992 01 09    08 41.08   -01 04.3    1.796    2.688   149.2    10.8    17.6
- 7.33 -0.78  + 11.3 +11.2   3164 T-3    17654   - 7.70 +0.68  + 65.9 + 5.4
1992 02 08    08 15.84   +01 02.2    1.783    2.722   158.0     7.8    17.5

1992 01 09    08 42.06   +18 59.2    1.803    2.748   160.2     7.0    16.3
- 7.35 -0.79  + 28.2 + 2.0    (4677)     17422   - 7.55 +0.74  + 22.8 - 3.3
1992 02 08    08 16.89   +20 25.5    1.834    2.793   163.2     5.9    16.3

1992 01 09    08 45.44   +16 30.8    1.323    2.267   158.7     9.1    18.5
- 8.03 -1.17  + 19.6 + 4.4   1981 EW13   13041   - 9.06 +0.91  + 24.6 - 2.5
1992 02 08    08 15.94   +17 50.0    1.291    2.255   163.5     7.1    18.3

1992 01 09    08 48.06   +15 32.5    1.518    2.456   157.8     8.7    18.0
- 9.96 -0.98  + 16.9 + 3.8   1987 SC4    14950   - 9.97 +0.97  + 20.9 - 2.0
1992 02 08    08 14.54   +16 39.9    1.560    2.520   163.2     6.5    18.0

1992 01 09    08 47.32   +21 50.6    1.145    2.094   159.4     9.5    18.5
- 8.80 -1.24  + 15.8 + 0.8   4063 P-L     8909   - 9.01 +1.18    -1.7 - 5.2
1992 02 08    08 16.10   +22 22.7    1.175    2.136   162.4     8.0    18.6

1992 01 09    08 51.50   +38 26.3    2.374    3.288   154.3     7.5    16.4
-10.84 -0.81    -0.2 - 6.9    (4837)     18275   -10.61 +0.86  - 50.3 - 7.9
1992 02 08    08 16.23   +37 12.5    2.412    3.323   153.4     7.6    16.5

1992 01 09    08 45.34   -00 00.8    2.155    3.042   149.3     9.5    17.1
- 6.81 -0.68    +4.3 + 8.9   1990 TU     17218   - 7.33 +0.53  + 48.8 + 4.7
1992 02 08    08 21.90   +01 26.6    2.138    3.081   159.4     6.5    17.0

1992 01 09    08 45.89   +20 21.4    1.855    2.798   159.5     7.1    16.6
- 6.88 -0.87  + 35.2 + 1.9   3076 T-2    14967   - 7.80 +0.63  + 27.3 - 4.1
1992 02 08    08 21.10   +22 06.3    1.826    2.786   163.6     5.7    16.5
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1992 01 09    08 49.14   +17 11.3    1.792    2.730   158.1     7.7    18.5
- 8.58 -0.93  + 23.5 + 2.9   1989 GC1    17636   - 9.37 +0.72  + 23.3 - 2.7
1992 02 08    08 19.18   +18 31.8    1.781    2.743   164.1     5.6    18.4

1992 01 09    08 47.89   +22 47.4    2.290    3.229   159.3     6.2    17.4
- 7.32 -0.74  + 37.5 + 0.5   1990 VS6    18434   - 8.04 +0.54  + 23.6 - 4.5
1992 02 08    08 22.46   +24 28.4    2.285    3.240   162.9     5.1    17.4

1992 01 09    08 47.82   +00 52.1    1.436    2.337   149.5    12.3    16.4
- 6.48 -0.99  + 32.6 +13.3   4577 P-L    17025   - 7.50 +0.72  + 91.9 + 4.5
1992 02 08    08 23.67   +04 15.2    1.409    2.365   161.5     7.6    16.2

1992 01 09    08 50.63   +15 11.5    2.214    3.143   157.1     7.0    16.8
- 7.37 -0.71  + 29.7 + 3.3   1987 BC     14791   - 7.96 +0.55  + 33.8 - 1.8
1992 02 08    08 25.30   +16 56.2    2.231    3.197   165.8     4.3    16.8

1992 01 09    08 56.27   +31 40.3    1.403    2.337   156.3     9.7    16.1
- 9.64 -1.32    +8.7 - 5.3   1988 ED     17019   -10.60 +1.06  - 42.6 - 9.2
1992 02 08    08 21.47   +30 56.6    1.396    2.343   158.8     8.8    16.1

1992 01 09    08 54.47   +30 02.3    1.888    2.820   157.1     7.8    18.2
- 8.67 -1.00  + 49.7 - 2.7   5568 P-L    14797   - 9.60 +0.74  + 10.8 - 8.6
1992 02 08    08 23.83   +31 44.0    1.908    2.849   158.6     7.3    18.2

1992 01 09    08 55.50   +20 00.9    1.524    2.460   157.3     8.9    18.4
- 8.65 -1.25  + 57.9 + 3.5   1980 LY     17428   -10.66 +0.72  + 48.2 - 6.1
1992 02 08    08 22.89   +22 58.0    1.470    2.432   163.6     6.6    18.2

1992 01 09    08 57.04   +26 25.9    1.598    2.533   157.2     8.7    17.6
- 8.97 -1.30  + 15.1 - 1.5   1984 DQ     13465   -11.22 +0.72  - 16.1 - 7.4
1992 02 08    08 23.00   +26 35.4    1.503    2.459   161.8     7.2    17.4

1992 01 09    08 57.35   +25 18.2    1.721    2.655   157.2     8.3    18.1
- 9.29 -1.10  + 32.3 - 0.8   1990 QN2    18121   -10.49 +0.77   +5.6 - 6.7
1992 02 08    08 24.20   +26 26.0    1.713    2.669   162.1     6.5    18.0

1992 01 09    08 58.28   +16 24.1    1.523    2.453   155.7     9.5    18.5
- 9.48 -1.12  + 17.9 + 3.6   1987 SE7    15249   -10.46 +0.85  + 19.9 - 2.6
1992 02 08    08 24.74   +17 32.4    1.533    2.500   165.6     5.6    18.4

1992 01 09    08 57.05   +16 08.6    1.560    2.491   155.9     9.3    16.7
- 8.02 -1.20  + 56.4 + 5.8   1986 JS     17631   -10.21 +0.63  + 62.1 - 3.9
1992 02 08    08 26.31   +19 24.4    1.491    2.459   165.6     5.7    16.4

1992 01 09    08 56.71   +16 23.6    1.262    2.198   156.1    10.4    17.4
- 7.70 -1.26  + 24.3 + 4.9   1981 EH23   10385   - 9.13 +0.87  + 28.9 - 3.1
1992 02 08    08 27.53   +17 58.3    1.257    2.227   166.2     6.1    17.2

1992 01 09    08 58.53   +16 46.5    1.542    2.472   155.8     9.4    18.5
- 8.57 -1.24  + 38.7 + 4.7   1980 KK     17816   -10.73 +0.67  + 41.6 - 3.6
1992 02 08    08 26.05   +19 02.5    1.476    2.444   165.6     5.7    18.2

1992 01 09    08 56.53   +27 19.8    1.980    2.911   157.2     7.5    17.8
- 7.69 -0.94  + 23.4 - 1.5   1089 T-1    19319   - 8.87 +0.61    -3.5 - 6.3
1992 02 08    08 28.80   +27 58.5    1.959    2.913   162.0     6.0    17.8

1992 01 09    08 56.76   +18 35.8    2.141    3.069   156.7     7.3    16.3
- 7.63 -0.80    +7.4 + 1.7    (4668)     17419   - 8.55 +0.54    +4.9 - 2.2
1992 02 08    08 30.01   +19 01.5    2.133    3.101   166.6     4.2    16.2
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1992 01 09	08 56.31	+18 37.2	2.251	3.179	156.8	7.0	17.9
- 7.45 -0.73	+ 24.7 + 1.8	1979 SR2	17198	- 8.12 +0.53	+ 20.6 - 2.8		
1992 02 08	08 30.61	+19 53.6	2.285	3.253	166.4	4.1	17.8
1992 01 09	09 09.25	+49 39.3	1.154	2.039	145.0	16.1	15.7
-10.95 -2.65	+208.5 -15.2	1989 AM	16583	-16.02 +1.56	+ 48.8 -29.8		
1992 02 08	08 20.95	+56 32.7	1.223	2.057	137.0	19.1	16.0
1992 01 09	08 55.78	-01 11.7	2.242	3.111	146.6	10.0	17.9
- 6.94 -0.80	+5.1 + 9.1	1990 WE2	18435	- 8.38 +0.39	+ 53.5 + 5.7		
1992 02 08	08 30.61	+00 22.3	2.145	3.091	160.1	6.2	17.6
1992 01 09	08 58.00	+09 03.5	1.368	2.287	152.7	11.4	16.8
- 7.28 -1.32	+4.1 + 8.4	1989 KA	14797	-10.13 +0.58	+ 41.6 + 2.7		
1992 02 08	08 28.36	+10 22.4	1.252	2.221	165.6	6.4	16.3
1992 01 09	08 54.64	+06 33.6	2.256	3.158	152.0	8.4	16.8
- 6.32 -0.73	+ 30.7 + 6.9	1990 UY	17456	- 7.40 +0.42	+ 57.8 + 1.5		
1992 02 08	08 31.95	+08 56.2	2.216	3.182	165.8	4.4	16.6
1992 01 09	08 59.90	+26 06.5	2.114	3.041	156.6	7.4	16.6
- 7.35 -0.92	+ 71.6 0.0	1990 SW3	17450	- 8.82 +0.51	+ 45.9 - 7.6		
1992 02 08	08 32.99	+29 16.9	2.117	3.069	161.7	5.8	16.5
1992 01 09	09 03.38	+28 33.0	1.997	2.921	155.5	8.0	17.9
- 8.83 -1.03	+ 54.1 - 1.7	1971 UN	17196	-10.24 +0.63	+ 20.0 - 8.3		
1992 02 08	08 31.72	+30 36.4	2.008	2.957	160.5	6.4	17.9
1992 01 09	09 03.34	+20 29.7	1.405	2.336	155.5	10.0	17.2
- 8.55 -1.29	+ 52.1 + 2.8	1987 RJ	12448	-10.35 +0.80	+ 37.7 - 6.7		
1992 02 08	08 31.12	+23 02.2	1.403	2.370	165.3	6.1	17.1
1992 01 09	08 57.39	-03 11.2	2.075	2.935	144.9	11.1	16.4
- 5.76 -0.80	+ 20.1 +11.0	(4679)	17422	- 7.19 +0.40	+ 76.5 + 6.3		
1992 02 08	08 35.75	-00 37.7	1.996	2.943	160.1	6.5	16.1
1992 01 09	09 06.28	+24 02.8	1.322	2.253	155.2	10.6	16.5
- 8.10 -1.53	+ 34.3 + 1.1	1931 FC	15062	-11.27 +0.71	+9.9 - 8.1		
1992 02 08	08 33.07	+25 26.3	1.244	2.209	164.3	6.9	16.2
1992 01 09	09 01.50	+17 18.7	2.098	3.019	155.3	7.8	16.6
- 6.77 -0.83	+ 28.6 + 2.8	(4657)	17415	- 7.99 +0.48	+ 28.7 - 2.6		
1992 02 08	08 36.95	+18 54.7	2.097	3.069	168.2	3.8	16.4
1992 01 09	09 01.86	+03 58.9	1.784	2.676	149.0	10.9	18.1
- 6.62 -0.95	+ 34.4 + 9.8	3159 T-2	17653	- 8.23 +0.49	+ 75.3 + 2.6		
1992 02 08	08 36.92	+06 56.7	1.745	2.712	165.8	5.1	17.8
1992 01 09	09 08.51	+34 57.1	2.045	2.954	152.8	8.8	18.0
- 8.38 -1.11	+ 71.0 - 3.9	1977 TQ6	12578	-10.17 +0.60	+ 20.4 -11.0		
1992 02 08	08 37.52	+37 27.3	2.072	2.998	155.5	7.8	18.0
1992 01 09	09 04.48	-04 51.1	1.814	2.662	142.5	13.0	17.7
- 6.63 -1.02	- 29.2 +11.2	1990 VC	17643	- 8.88 +0.40	+ 39.7 + 9.8		
1992 02 08	08 38.59	-04 33.1	1.706	2.643	157.2	8.3	17.3
1992 01 09	09 05.87	+12 55.5	2.102	3.011	152.8	8.6	17.1
- 6.91 -0.81	+ 31.0 + 4.6	1990 QN4	17214	- 8.09 +0.47	+ 41.1 - 1.3		
1992 02 08	08 41.01	+14 54.6	2.123	3.099	169.6	3.3	16.9

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1992 01 09    09 03.35   +08 53.3    1.990    2.893   151.5     9.3    16.3
- 5.54 -0.88  + 24.7 + 6.8   1981 EF26   17628   - 7.35 +0.37  + 51.0 + 1.2
1992 02 08    08 41.71   +10 57.1    1.916    2.890   168.8     3.8    16.0

1992 01 09    09 03.76   -01 09.6    1.973    2.837   145.3    11.4    16.4
- 5.93 -0.83  + 23.8 +10.6    (4975)     19007   - 7.34 +0.43  + 74.4 + 4.8
1992 02 08    08 41.53   +01 28.5    1.946    2.902   162.7     5.8    16.2

1992 01 09    09 06.51   +16 36.4    2.207    3.121   153.9     8.0    17.3
- 6.79 -0.88  + 35.6 + 3.4   1985 QN     10302   - 8.55 +0.37  + 38.4 - 2.5
1992 02 08    08 41.19   +18 38.3    2.154    3.128   169.2     3.4    17.0

1992 01 09    09 07.83   +16 56.3    1.123    2.052   153.7    12.3    18.0
- 6.41 -1.48  + 30.6 + 5.8   1981 EF25   10823   - 9.09 +0.76  + 35.0 - 4.2
1992 02 08    08 40.42   +18 53.4    1.100    2.077   169.0     5.2    17.7

1992 01 09    09 10.74   +14 06.6    1.447    2.362   152.2    11.2    16.8
- 7.90 -1.28  + 30.7 + 6.1    (4789)     18096   -10.23 +0.64  + 42.7 - 2.3
1992 02 08    08 40.01   +16 12.5    1.420    2.397   169.4     4.4    16.4

1992 01 09    09 12.98   +34 59.9    2.045    2.950   151.9     9.0    18.0
- 9.18 -1.15  + 45.8 - 4.3   1986 TT11   17438   -11.05 +0.63   -3.8 -10.3
1992 02 08    08 39.35   +36 14.2    2.048    2.980   156.8     7.5    18.0

1992 01 09    09 11.77   +16 52.6    1.554    2.470   152.8    10.5    18.6
- 8.25 -1.31  + 31.0 + 4.5   1990 QW3    17024   -11.08 +0.55  + 33.9 - 3.5
1992 02 08    08 39.32   +18 44.9    1.486    2.461   168.8     4.5    18.2

1992 01 09    09 05.67   +16 20.1    1.941    2.857   154.0     8.7    17.8
- 5.83 -0.96  + 26.7 + 4.0   1981 EJ19   10384   - 7.90 +0.38  + 32.8 - 2.1
1992 02 08    08 42.62   +18 00.5    1.863    2.839   169.7     3.6    17.5

1992 01 09    09 07.59   +03 45.1    2.253    3.129   147.7     9.7    18.1
- 6.41 -0.82  + 30.6 + 8.1    (5007)     19286   - 8.14 +0.32  + 65.9 + 2.7
1992 02 08    08 43.64   +06 19.6    2.181    3.149   166.7     4.1    17.8

1992 01 09    09 07.67   +14 23.1    1.961    2.872   152.9     9.0    17.0
- 5.82 -0.95  + 25.2 + 4.7   2249 T-2    16037   - 7.91 +0.36  + 36.5 - 1.2
1992 02 08    08 44.65   +16 06.6    1.886    2.863   170.5     3.3    16.6

1992 01 09    09 06.91   +01 23.0    2.718    3.579   146.4     8.8    16.9
- 5.29 -0.67  + 14.9 + 7.1   1989 RS     17824   - 6.76 +0.23  + 49.8 + 3.7
1992 02 08    08 47.17   +03 06.2    2.629    3.590   164.8     4.1    16.6

1992 01 09    09 07.36   -14 07.4    2.216    2.992   134.9    13.5    18.4
- 5.15 -0.84  - 22.0 +12.4   1981 DZ1    10614   - 7.16 +0.27  + 56.4 +11.9
1992 02 08    08 46.85   -13 14.9    2.090    2.985   150.0     9.5    18.1

1992 01 09    09 10.87   +08 30.3    1.347    2.251   149.7    12.7    16.7
- 5.65 -1.28  + 36.3 +10.3   1988 BY3    17821   - 8.51 +0.50  + 74.0 + 0.8
1992 02 08    08 46.34   +11 33.3    1.290    2.268   170.1     4.3    16.2

1992 01 09    09 10.29   +04 36.7    2.511    3.383   147.7     8.9    16.7
- 5.76 -0.75    +2.1 + 6.3   1990 VB4    17645   - 7.51 +0.24  + 32.8 + 3.2
1992 02 08    08 48.54   +05 34.7    2.416    3.384   167.0     3.8    16.4

1992 01 09    09 10.58   +03 54.1    2.314    3.185   147.2     9.6    18.2
- 5.77 -0.83  + 16.0 + 7.5   1990 VZ4    18434   - 7.79 +0.25  + 51.7 + 3.4
1992 02 08    08 48.25   +05 43.1    2.202    3.171   167.0     4.0    17.8
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1992 01 09    09 13.89   +04 10.2    1.952    2.826   146.7    11.0    17.5
- 6.92 -0.95    +3.3 + 8.1   1988 CF7    18113   - 8.86 +0.39  + 41.6 + 3.6
1992 02 08    08 47.73   +05 25.9    1.910    2.879   166.7     4.5    17.2

1992 01 09    09 17.77   +10 36.2    1.619    2.515     +1.30    -8.0  17.3
- 7.86 -1.22    +1.2 + 6.4   1990 OT     17638   -10.47 +0.49  + 25.5 + 1.0
1992 02 08    08 47.11   +11 26.3    1.569    2.546     +1.41    -8.0  16.9

1992 01 09    09 18.45   +20 10.8    2.107    3.011   152.0     8.8    17.1
- 8.00 -1.03    +9.6 + 1.5   1988 CT5    16429   -10.26 +0.39    +2.6 - 3.4
1992 02 08    08 48.44   +20 38.0    2.046    3.022   170.0     3.3    16.8

1992 01 09    09 16.94   +20 18.8    1.371    2.288   152.3    11.5    17.2
- 6.23 -1.43  + 55.1 + 4.5   7604 P-L    12584   - 9.76 +0.47  + 47.5 - 6.7
1992 02 08    08 49.43   +23 13.7    1.309    2.285   168.6     4.9    16.8

1992 01 09    09 14.93   +15 56.1    2.313    3.213   151.8     8.3    18.2
- 6.04 -0.84  + 26.9 + 3.4   1984 TD     18110   - 7.86 +0.30  + 31.5 - 1.9
1992 02 08    08 51.97   +17 33.6    2.279    3.258   172.0     2.4    17.9

1992 01 09    09 19.97   +18 31.4    1.895    2.798   151.3     9.7    17.8
- 7.40 -1.12  + 39.8 + 3.4   1990 RW3    17964   -10.00 +0.38  + 37.0 - 4.1
1992 02 08    08 51.09   +20 40.6    1.847    2.824   170.5     3.3    17.4

1992 01 09    09 18.15   +04 04.1    1.244    2.131   145.8    15.0    15.5
- 5.47 -1.46  - 65.4 + 8.4   1975 DB     15062   - 9.48 +0.37    -7.7 + 9.1
1992 02 08    08 52.33   +02 12.9    1.136    2.104   164.8     7.1    14.9

1992 01 09    09 20.63   +05 37.9    2.121    2.988   146.1    10.6    17.9
- 6.49 -0.95  + 16.1 + 7.4   1982 UD7    11438   - 8.83 +0.27  + 48.7 + 2.5
1992 02 08    08 55.39   +07 24.0    2.048    3.023   169.5     3.4    17.5

1992 01 09    09 19.56   +12 57.3    2.140    3.031   149.7     9.4    16.2
- 5.34 -0.91  + 46.4 + 5.5   1990 WL     17647   - 7.64 +0.25  + 59.6 - 1.5
1992 02 08    08 57.96   +15 49.2    2.088    3.070   173.7     2.0    15.8

1992 01 09    09 28.50   +20 20.4    1.098    2.009   149.7    14.3    17.5
- 6.71 -1.71  + 44.7 + 4.3   1980 TS4    13598   -10.52 +0.66  + 31.9 - 7.7
1992 02 08    08 58.27   +22 37.8    1.101    2.080   170.4     4.5    17.2

1992 01 09    09 20.92   +05 23.4    1.991    2.859   145.9    11.1    16.6
- 4.91 -0.97  + 27.5 + 8.5   1987 EH     17439   - 7.61 +0.20  + 65.0 + 2.8
1992 02 08    09 00.00   +07 52.5    1.889    2.867   170.6     3.2    16.1

1992 01 09    09 26.47   +06 36.8    1.389    2.268   145.4    14.3    17.3
- 5.94 -1.39    -7.5 + 9.4   1981 DE     11147   - 9.73 +0.34  + 37.6 + 4.1
1992 02 08    08 59.78   +07 31.6    1.311    2.289   170.2     4.2    16.8

1992 01 09    09 30.35   +23 34.3    1.908    2.801   149.6    10.2    17.8
- 7.85 -1.18  + 16.3 + 0.6   1990 TF     17451   -10.56 +0.40    -0.6 - 5.4
1992 02 08    08 59.82   +24 09.0    1.881    2.856   169.4     3.6    17.5

1992 01 09    09 27.96   +18 15.5    1.320    2.223   149.4    13.0    17.1
- 5.67 -1.59  + 47.3 + 6.4   1989 FH     17442   -10.65 +0.24  + 52.3 - 5.3
1992 02 08    09 00.10   +21 06.6    1.208    2.189   171.8     3.7    16.5

1992 01 09    09 27.68   +16 08.6    1.735    2.627   148.9    11.1    18.0
- 6.23 -1.27  + 59.5 + 6.3   1979 MR3    18282   -10.05 +0.20  + 68.7 - 3.7
1992 02 08    09 00.55   +19 39.5    1.633    2.615   172.9     2.7    17.4
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1992 01 09    09 26.68   +09 30.1    1.983    2.857   146.7    10.9    17.4
- 6.04 -1.07  + 34.0 + 7.2   1990 UJ     17455   - 9.15 +0.18  + 60.2 + 0.6
1992 02 08    09 01.58   +12 03.5    1.878    2.860   173.7     2.2    16.9

1992 01 09    09 29.16   +11 35.8    1.467    2.354   147.0    13.1    18.2
- 5.72 -1.42  + 32.1 + 8.4   2314 T-2    15906   -10.14 +0.20  + 60.5 - 0.2
1992 02 08    09 02.38   +14 10.7    1.352    2.336   174.6     2.3    17.5

1992 01 09    09 32.32   +22 16.2    1.392    2.292   149.1    12.7    16.6
- 6.46 -1.64  + 47.6 + 3.9   1989 EL2    17636   -11.61 +0.24  + 35.3 - 7.8
1992 02 08    09 01.75   +24 42.6    1.283    2.260   169.2     4.7    16.0

1992 01 09    09 27.23   -05 17.9    1.954    2.766   138.2    13.7    17.0
- 5.98 -1.05    -7.0 +11.3   1986 RH12   14790   - 8.90 +0.21  + 58.6 + 8.7
1992 02 08    09 02.59   -03 55.9    1.856    2.803   160.1     6.9    16.6

1992 01 09    09 33.83   +21 50.0    1.507    2.402   148.7    12.3    17.0
- 6.23 -1.54  + 50.6 + 4.2    (4721)     17621   -11.23 +0.17  + 41.6 - 7.1
1992 02 08    09 04.48   +24 29.3    1.390    2.367   169.7     4.3    16.5

1992 01 09    09 30.08   +08 40.2    1.961    2.827   145.6    11.3    18.4
- 5.83 -1.11  + 29.4 + 7.5   1978 PW3    12948   - 9.21 +0.14  + 59.0 + 1.3
1992 02 08    09 05.24   +11 04.3    1.841    2.823   173.8     2.2    17.8

1992 01 09    09 31.36   +15 14.7    1.773    2.658   147.8    11.4    17.6
- 5.71 -1.25  + 39.6 + 6.0   1988 CT2    14951   - 9.69 +0.13  + 52.6 - 2.3
1992 02 08    09 05.71   +17 48.4    1.650    2.634   174.9     1.9    16.9

1992 01 09    09 36.39   +21 23.2    1.720    2.607   148.0    11.5    18.1
- 6.80 -1.42  + 41.9 + 3.5    (4811)     18265   -11.38 +0.14  + 34.0 - 6.0
1992 02 08    09 06.24   +23 34.7    1.600    2.578   170.7     3.6    17.5

1992 01 09    09 30.42   +05 00.4    1.262    2.136   143.7    15.8    16.5
- 4.29 -1.46    -8.9 +11.0   1988 CN4    17440   - 8.70 +0.23  + 47.4 + 5.7
1992 02 08    09 07.80   +06 07.9    1.176    2.154   170.0     4.5    15.9

1992 01 09    09 32.13   +08 40.7    1.683    2.553   145.2    12.7    18.4
- 5.34 -1.26    +0.1 + 7.4   1978 VK3    12958   - 9.43 +0.11  + 33.7 + 2.7
1992 02 08    09 07.45   +09 40.1    1.545    2.527   173.1     2.7    17.7

1992 01 09    09 31.12   +10 48.2    1.369    2.254   146.3    14.0    17.7
- 4.34 -1.41  + 18.4 + 8.6   1105 T-2    15075   - 8.75 +0.19  + 50.8 + 0.8
1992 02 08    09 08.54   +12 46.4    1.272    2.257   175.5     2.0    17.0

1992 01 09    09 38.27   +23 20.3    1.537    2.427   147.8    12.5    18.1
- 6.75 -1.53  + 54.5 + 3.0   7581 P-L    18831   -11.31 +0.26  + 37.1 - 8.2
1992 02 08    09 07.88   +25 58.8    1.471    2.446   168.6     4.6    17.7

1992 01 09    09 34.00   +07 18.8    2.290    3.140   144.1    10.6    18.0
- 4.99 -0.97  + 28.7 + 7.1   1990 VD6    18434   - 8.17 +0.03  + 59.2 + 2.1
1992 02 08    09 12.42   +09 40.0    2.140    3.122   173.7     2.0    17.4

1992 01 09    09 37.80   +10 47.2    1.586    2.456   144.8    13.4    17.7
- 5.80 -1.29  + 39.2 + 8.0   1986 QN     11639   - 9.43 +0.25  + 62.9 - 1.0
1992 02 08    09 12.11   +13 37.1    1.551    2.536   176.7     1.3    17.2

1992 01 09    09 35.49   +24 46.2    2.257    3.138   148.5     9.4    17.1
- 5.17 -1.06  + 59.9 + 2.0   1972 JJ     13480   - 8.55 +0.08  + 46.3 - 6.3
1992 02 08    09 12.82   +27 41.0    2.166    3.136   167.3     4.0    16.7
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1992 01 09    09 37.11   +14 27.3    1.795    2.669   146.3    11.8    18.8
- 4.91 -1.25  + 35.0 + 6.3   2768 P-L    15902   - 9.27 +0.01  + 52.3 - 1.4
1992 02 08    09 13.52   +16 52.5    1.645    2.631   177.0     1.1    18.0

1992 01 09    09 36.64   +25 38.9    2.331    3.210   148.3     9.3    16.8
- 5.39 -1.03  + 64.5 + 1.5   1987 DJ     17439   - 8.59 +0.10  + 47.8 - 6.7
1992 02 08    09 13.57   +28 42.5    2.270    3.237   166.3     4.1    16.5

1992 01 09    09 40.20   +15 40.2    1.989    2.857   145.9    11.1    18.0
- 6.29 -1.17  + 34.4 + 4.8   1986 PX4    19296   - 9.87 +0.13  + 42.4 - 2.5
1992 02 08    09 13.57   +17 49.0    1.906    2.891   176.4     1.2    17.4

1992 01 09    09 40.67   +15 07.8    2.213    3.075   145.6    10.4    18.3
- 6.75 -1.04  + 16.9 + 3.9   1973 QO1    17624   - 9.75 +0.17  + 24.4 - 1.6
1992 02 08    09 13.68   +16 20.0    2.151    3.136   177.3     0.9    17.8

1992 01 09    09 37.84   +21 01.1    2.702    3.571   147.6     8.5    16.3
- 5.88 -0.90  + 18.2 + 1.7    (4712)     17618   - 8.65 +0.08  + 13.2 - 3.2
1992 02 08    09 14.25   +21 57.3    2.593    3.573   172.9     2.0    15.9

1992 01 09    09 37.26   -06 46.3    2.123    2.906   135.3    13.8    17.0
- 5.15 -1.03  - 10.9 +10.7    (4962)     19002   - 8.47 +0.06  + 54.3 + 9.3
1992 02 08    09 14.83   -05 38.8    1.988    2.930   159.0     6.9    16.6

1992 01 09    09 37.94   -05 31.8    1.630    2.435   136.0    16.3    16.8
- 4.77 -1.26  - 35.7 +12.1    (4877)     18411   - 8.78 +0.11  + 41.1 +11.3
1992 02 08    09 15.11   -05 22.6    1.526    2.474   159.2     8.1    16.4

1992 01 09    09 42.62   +29 47.9    1.405    2.293   146.9    13.6    16.3
- 5.10 -1.68  + 53.3 + 0.2   1983 AA3    18808   -10.46 +0.19  + 14.4 -12.0
1992 02 08    09 15.83   +31 52.3    1.338    2.300   163.3     7.1    16.0

1992 01 09    09 45.50   +27 20.9    1.967    2.839   146.3    11.1    17.4
- 6.86 -1.29  + 35.9 + 0.2   1990 RT2    19304   -10.66 +0.20  + 10.6 - 7.8
1992 02 08    09 16.48   +28 45.5    1.918    2.886   166.4     4.6    17.1

1992 01 09    09 38.05   -10 19.9    1.006    1.823   132.8    23.3    16.9
- 2.54 -1.75  + 69.4 +27.6   1984 DA     11996   - 9.27 -0.07  +238.4 +20.7
1992 02 08    09 17.26   -02 26.3    0.850    1.814   162.2     9.6    16.1

1992 01 09    09 46.06   +17 38.2    1.791    2.658   145.1    12.2    18.6
- 6.55 -1.33  + 23.1 + 4.2   1979 SS     17198   -10.72 +0.13  + 25.8 - 3.4
1992 02 08    09 17.47   +19 05.5    1.710    2.695   175.9     1.5    18.0

1992 01 09    09 41.51   -00 14.0    1.505    2.334   138.5    16.2    17.1
- 4.57 -1.41  - 59.9 + 8.9   1988 BH5    14354   - 9.67 -0.03    +3.1 +10.4
1992 02 08    09 17.62   -01 42.2    1.351    2.313   163.0     7.2    16.5

1992 01 09    09 48.31   +17 21.3    1.298    2.174   144.5    15.2    18.4
- 5.95 -1.68  + 35.8 + 6.2   1984 YY1    17958   -11.17 +0.22  + 40.3 - 4.9
1992 02 08    09 19.12   +19 36.3    1.250    2.234   175.5     2.0    17.8

1992 01 09    09 44.27   +15 21.1    1.858    2.722   144.9    12.0    18.7
- 5.43 -1.27  + 33.1 + 5.7   1981 EZ27   12706   - 9.87  0.00  + 45.8 - 2.1
1992 02 08    09 18.99   +17 33.7    1.726    2.711   177.4     0.9    18.0

1992 01 09    09 42.07   +17 55.0    2.065    2.933   146.1    10.8    16.3
- 4.93 -1.13  + 36.1 + 4.3   1990 VH4    18433   - 8.78 +0.01  + 40.7 - 3.0
1992 02 08    09 19.40   +20 03.9    1.944    2.928   175.1     1.7    15.7
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1992 01 09    09 45.94   +16 26.4    1.543    2.414   144.8    13.6    17.3
- 5.29 -1.45  + 28.0 + 5.7   1990 QY2    17448   -10.04 +0.10  + 37.0 - 3.1
1992 02 08    09 20.11   +18 20.2    1.460    2.446   176.8     1.3    16.6

1992 01 09    09 42.81   +08 29.8    2.015    2.860   142.7    12.0    17.0
- 4.77 -1.10  + 19.6 + 7.2   1990 VF2    18298   - 8.45 +0.02  + 49.0 + 1.7
1992 02 08    09 20.91   +10 22.7    1.900    2.884   175.1     1.7    16.4

1992 01 09    09 40.58   +05 58.0    2.497    3.328   142.0    10.5    16.5
- 4.34 -0.88  + 29.0 + 6.9   1990 XH     17648   - 7.26 +0.01  + 59.2 + 2.3
1992 02 08    09 21.55   +08 18.9    2.372    3.354   173.0     2.0    15.9

1992 01 09    09 43.63   +13 52.8    2.023    2.881   144.6    11.4    16.5
- 4.58 -1.11  + 33.3 + 5.7   1990 TK1    17452   - 8.32 +0.02  + 48.5 - 1.2
1992 02 08    09 22.21   +16 08.2    1.917    2.903   179.0     0.3    15.8

1992 01 09    09 51.63   +16 54.6    1.456    2.322   143.6    14.6    18.1
- 6.15 -1.57  + 41.8 + 6.1   3241 T-3    16039   -11.14 +0.15  + 47.3 - 4.6
1992 02 08    09 22.52   +19 28.2    1.405    2.389   175.8     1.7    17.4

1992 01 09    09 45.21   +12 47.2    2.032    2.885   143.8    11.6    17.3
- 4.62 -1.14  + 35.7 + 6.4    (4737)     17807   - 8.71 -0.05  + 55.7 - 0.5
1992 02 08    09 23.22   +15 17.0    1.890    2.876   179.8     0.1    16.4

1992 02 08    09 24.80   +10 17.5    1.828    2.811   175.0     1.7    16.0
- 8.21 +0.01  + 30.5 + 1.8    (4687)     17608   - 4.35 +1.12  + 23.8 - 3.5
1992 03 09    09 03.91   +11 48.8    1.970    2.847   145.9    11.3    16.6

1992 02 08    09 25.66   +12 41.2    2.448    3.433   177.4     0.7    18.1
- 7.40 -0.01  + 47.9 + 0.4   1981 ER21   16576   - 4.55 +0.87  + 35.1 - 4.1
1992 03 09    09 06.09   +14 54.1    2.596    3.462   145.7     9.3    18.7

1992 02 08    09 25.59   +07 48.0    1.721    2.702   172.5     2.7    17.6
- 9.95 -0.05  + 52.7 + 3.4   1983 PZ     17201   - 5.85 +1.26  + 48.3 - 4.2
1992 03 09    08 59.48   +10 33.5    1.837    2.710   145.0    12.1    18.2

1992 02 08    09 25.90   +26 49.4    2.077    3.049   168.4     3.7    16.9
- 9.06 -0.01  + 16.3 - 6.0   1981 ES35   15064   - 5.18 +1.15  - 23.8 - 6.2
1992 03 09    09 02.41   +26 38.5    2.219    3.052   140.6    11.9    17.4

1992 02 08    09 26.56   +10 29.8    1.717    2.701   175.2     1.8    16.6
- 9.28 -0.15  + 20.5 + 2.1   1989 RB2    15420   - 5.66 +1.22  + 16.0 - 3.2
1992 03 09    09 01.60   +11 34.4    1.772    2.649   145.3    12.3    17.1

1992 02 08    09 26.48   +13 08.2    1.709    2.695   177.8     0.8    17.3
- 9.99 -0.06  + 61.3 + 0.3   1983 QH1    17818   - 5.82 +1.28  + 40.6 - 6.1
1992 03 09    09 00.30   +15 52.8    1.835    2.703   144.1    12.4    18.0

1992 02 08    09 33.01   +16 18.7    1.108    2.093   177.6     1.1    15.8
-11.27 -0.20  + 28.6 - 1.8   1990 QY7    18296   - 5.64 +1.77    -1.9 - 6.7
1992 03 09    09 03.99   +17 07.8    1.199    2.089   144.6    16.0    16.7

1992 02 08    09 32.99   +14 01.3    1.344    2.330   177.5     1.1    17.1
-10.46 -0.28  + 49.7 + 0.7   1979 HW6    14780   - 6.21 +1.51  + 27.5 - 6.7
1992 03 09    09 04.65   +16 10.8    1.401    2.287   145.1    14.4    17.8

1992 02 08    09 33.12   +17 19.7    1.919    2.905   177.0     1.0    17.9
-10.05 -0.11  + 44.4 - 1.9   1990 TU8    19307   - 6.41 +1.17  + 17.6 - 5.9
1992 03 09    09 06.07   +19 00.0    2.051    2.917   144.5    11.4    18.6
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1992 02 08    09 32.90   +25 43.4    1.610    2.586   169.3     4.0    17.0
- 9.68 -0.38  + 96.2 - 5.0   1988 JW     13451   - 6.38 +1.36  + 38.8 -11.6
1992 03 09    09 05.57   +29 18.2    1.646    2.489   139.9    14.9    17.4

1992 02 08    09 34.05   +22 55.2    2.063    3.043   172.0     2.6    16.3
- 8.11 -0.10  + 66.7 - 4.4   1990 UG2    17827   - 4.90 +1.04  + 25.6 - 7.9
1992 03 09    09 12.41   +25 20.2    2.221    3.074   143.2    11.2    16.9

1992 02 08    09 35.42   +22 29.7    1.202    2.184   172.3     3.5    16.9
-11.31 -0.08  + 39.6 - 6.8   1987 SG13   15558   - 5.46 +1.70  - 13.1 - 8.6
1992 03 09    09 06.96   +23 12.6    1.348    2.224   143.1    15.6    17.7

1992 02 08    09 35.19   +27 53.0    1.588    2.559   167.1     4.9    16.0
-10.89 -0.22  + 15.5 - 8.2   1985 RS     14350   - 6.56 +1.46  - 39.6 - 8.2
1992 03 09    09 05.90   +27 16.6    1.666    2.516   141.0    14.4    16.4

1992 02 08    09 36.31   +20 04.2    1.397    2.381   174.4     2.3    16.1
-10.85 -0.31  + 50.8 - 3.6   1990 UE     17454   - 6.62 +1.52    +8.6 - 8.5
1992 03 09    09 06.71   +21 42.5    1.468    2.343   143.6    14.5    16.7

1992 02 08    09 35.43   +09 56.3    1.882    2.865   174.0     2.1    15.8
- 7.50 -0.16  + 71.0 + 2.6    (4999)     19283   - 4.60 +1.02  + 60.4 - 5.4
1992 03 09    09 15.10   +13 28.1    1.974    2.866   148.2    10.5    16.3

1992 02 08    09 37.91   -04 15.0    2.229    3.175   160.2     6.0    17.7
- 8.50 -0.18  + 33.6 + 8.1   1081 T-3    14971   - 6.05 +0.91  + 61.4 + 0.7
1992 03 09    09 14.07   -01 38.6    2.282    3.170   148.3     9.5    17.9

1992 02 08    09 39.36   +30 21.2    1.832    2.794   164.5     5.4    17.3
-11.45 -0.10  + 13.3 - 9.0   1986 TG1    17438   - 6.99 +1.37  - 41.4 - 7.5
1992 03 09    09 08.98   +29 36.2    1.982    2.819   140.3    13.0    17.8

1992 02 08    09 39.19   +04 38.4    2.178    3.151   168.8     3.5    17.8
- 8.36 -0.15  + 69.1 + 4.4    (4809)     18265   - 5.76 +0.93  + 70.5 - 3.6
1992 03 09    09 16.02   +08 22.6    2.281    3.176   149.3     9.2    18.2

1992 02 08    09 40.96   +16 24.1    1.702    2.687   175.8     1.5    17.7
- 9.55 -0.16  + 67.2 - 1.6   1988 CL2    19300   - 5.90 +1.21  + 35.2 - 7.5
1992 03 09    09 15.24   +19 08.6    1.849    2.732   146.5    11.6    18.4

1992 02 08    09 41.36   +05 16.6    1.701    2.676   169.2     4.0    16.6
- 9.01 -0.20  + 58.2 + 5.0   1990 RR2    19504   - 5.76 +1.14  + 60.0 - 4.0
1992 03 09    09 16.71   +08 30.6    1.804    2.706   149.4    10.8    17.0

1992 02 08    09 42.30   +15 19.3    2.109    3.094    +1.00     -5.4  16.8
- 8.33 -0.20  + 39.0 - 0.4   1990 TT12   17965   - 5.76 +0.96  + 20.4 - 5.0
1992 03 09    09 19.04   +16 56.9    2.205    3.093    +0.96     -4.7  17.3

1992 02 08    09 44.75   +10 59.5    1.080    2.063   173.4     3.2    17.1
- 8.75 -0.36  + 55.3 + 3.2   2808 P-L     9033   - 4.52 +1.54  + 38.9 - 7.3
1992 03 09    09 21.32   +13 40.2    1.159    2.077   149.6    14.0    17.7

1992 02 08    09 45.69   +10 03.9    1.432    2.414   172.6     3.0    18.2
- 9.93 -0.36  + 45.5 + 3.1   1989 GZ1    17636   - 6.53 +1.34  + 36.6 - 5.2
1992 03 09    09 17.85   +12 22.4    1.498    2.405   149.1    12.2    18.7

1992 02 08    09 44.72   +00 16.3    2.257    3.217   164.2     4.8    17.7
- 8.19 -0.18  + 55.2 + 6.1   2098 P-L    17461   - 5.89 +0.87  + 68.5 - 1.7
1992 03 09    09 21.67   +03 36.4    2.348    3.251   150.8     8.6    18.0
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1992 02 08    09 46.89   +26 57.6    1.669    2.639   167.1     4.8    18.0
-11.07 -0.15  + 10.6 - 7.6   1168 T-3    18134   - 6.77 +1.37  - 38.4 - 7.1
1992 03 09    09 17.32   +26 14.7    1.825    2.690   143.7    12.6    18.6

1992 02 08    09 47.73   +09 42.3    1.909    2.889   172.0     2.7    17.5
- 9.52 -0.19  + 31.8 + 2.0   1986 TW9    17958   - 6.52 +1.06  + 25.4 - 3.6
1992 03 09    09 21.36   +11 18.5    2.039    2.942   150.1     9.7    18.0

1992 02 08    09 47.79   +06 14.1    1.943    2.918   169.3     3.6    18.0
- 8.16 -0.33  + 74.6 + 5.0   5166 T-3    15910   - 6.10 +0.95  + 76.1 - 4.2
1992 03 09    09 24.04   +10 17.3    1.977    2.885   151.0     9.6    18.3

1992 02 08    09 50.38   +26 07.7    1.365    2.337   167.5     5.2    16.0
-11.67 -0.27  - 33.0 - 8.4   1982 DU     11842   - 6.94 +1.57  - 79.6 - 5.4
1992 03 09    09 19.07   +23 12.9    1.470    2.357   145.6    13.8    16.5

1992 02 08    09 53.03   +22 18.3    1.257    2.235   170.2     4.3    17.1
-11.43 -0.45  + 26.5 - 5.8   1982 DX3    17432   - 7.29 +1.60  - 23.7 - 8.6
1992 03 09    09 21.15   +22 27.6    1.343    2.238   146.3    14.2    17.7

1992 02 08    09 52.87   +34 28.3    1.842    2.788   159.7     7.0    17.1
-10.31 -0.29  + 61.5 -11.0   1982 UA7    11431   - 6.79 +1.28  - 11.9 -11.1
1992 03 09    09 24.29   +35 42.9    2.012    2.838   139.1    13.2    17.6

1992 02 08    09 52.34   +12 18.8    1.948    2.929   172.5     2.5    16.8
- 8.15 -0.32  + 39.0 + 1.3   1979 QP     17626   - 6.03 +0.95  + 27.3 - 4.6
1992 03 09    09 28.73   +14 09.1    2.010    2.919   151.2     9.4    17.2

1992 02 08    09 52.66   +10 52.1    2.057    3.036   171.8     2.7    16.6
- 8.10 -0.28  + 43.9 + 1.8   1980 TX3    18282   - 6.00 +0.91  + 35.0 - 4.3
1992 03 09    09 29.32   +13 01.8    2.138    3.049   151.7     8.9    17.0

1992 02 08    09 53.01   -05 53.6    2.076    3.012   157.7     7.1    18.0
- 8.26 -0.35  + 32.5 + 9.5   3051 P-L    15074   - 6.52 +0.87  + 68.7 + 1.6
1992 03 09    09 28.58   -03 07.1    2.081    2.991   151.5     9.1    18.1

1992 02 08    09 57.24   +00 30.0    2.034    2.991    +0.66    -9.4  17.9
-11.42 -0.32    -6.3 + 6.1   1990 OK1    17638   - 8.92 +1.05  + 16.1 + 0.9
1992 03 09    09 24.20   +00 54.5    2.121    3.029    +0.65    -9.1  18.1

1992 02 08    09 57.44   +16 18.5    1.887    2.867   171.9     2.8    17.8
- 9.59 -0.33  + 48.3 - 1.0   1981 EB23    9752   - 7.12 +1.05  + 22.4 - 6.4
1992 03 09    09 29.82   +18 14.5    1.994    2.897   150.0     9.9    18.3

1992 02 08    09 57.31   -01 16.8    2.000    2.952   161.5     6.1    17.8
- 8.15 -0.26  + 53.6 + 7.3   1981 WE1    17200   - 5.94 +0.91  + 71.1 - 1.6
1992 03 09    09 34.02   +02 06.8    2.107    3.030   153.8     8.3    18.1

1992 02 08    09 58.79   +12 54.3    2.065    3.044   171.3     2.8    16.8
- 8.19 -0.35  + 40.3 + 1.0    (4782)     18093   - 6.42 +0.88  + 27.2 - 4.7
1992 03 09    09 34.60   +14 46.2    2.129    3.043   152.4     8.7    17.2

1992 02 08    09 59.56   +05 52.7    1.617    2.588   167.2     4.8    18.0
- 8.64 -0.50  + 60.0 + 6.0   1981 ET25   17430   - 6.78 +1.06  + 65.1 - 4.1
1992 03 09    09 33.55   +09 19.1    1.637    2.564   153.4    10.0    18.3

1992 02 08    10 01.36   +13 03.9    1.710    2.688   170.7     3.4    17.9
- 9.88 -0.30  + 39.1 + 0.3   1982 ST7    16231   - 6.97 +1.13  + 20.7 - 5.4
1992 03 09    09 33.43   +14 44.2    1.856    2.773   152.1     9.6    18.5
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1992 02 08 10 00.88 +13 48.6 1.895 2.873 171.0 3.1 17.8
- 8.01 -0.35 + 40.4 + 0.5 1990 TP7 17642 - 6.02 +0.94 + 23.6 - 5.3
1992 03 09 09 37.45 +15 35.4 1.983 2.901 152.7 9.0 18.2

1992 02 08 10 05.57 +12 53.8 1.538 2.514 169.7 4.0 15.8
-10.04 -0.53 + 12.1 + 0.8 1982 UE12 13595 - 7.74 +1.18 -1.0 - 4.4
1992 03 09 09 35.72 +13 20.3 1.596 2.522 153.1 10.3 16.2

1992 02 08 10 07.03 +06 49.0 1.580 2.549 166.5 5.2 18.2
- 8.91 -0.50 + 50.6 + 4.9 1981 EY10 17628 - 6.95 +1.07 + 51.0 - 4.4
1992 03 09 09 40.32 +09 38.8 1.642 2.577 155.0 9.4 18.5

1992 02 08 10 09.72 +10 03.4 1.183 2.157 167.7 5.6 16.0
- 9.91 -0.61 + 43.6 + 3.5 1982 FG3 15243 - 7.05 +1.39 + 31.8 - 6.3
1992 03 09 09 40.58 +12 14.5 1.271 2.209 154.5 11.1 16.4

1992 02 08 10 10.62 +15 14.2 2.178 3.151 168.8 3.5 16.9
- 8.06 -0.40 + 42.5 - 0.1 1990 VK1 17459 - 6.71 +0.80 + 23.4 - 5.4
1992 03 09 09 46.25 +17 02.9 2.260 3.183 154.1 7.8 17.2

1992 02 08 10 10.89 -10 39.9 1.541 2.454 151.6 11.0 16.0
- 7.86 -0.68 +5.6 +14.2 1980 LE1 17627 - 6.98 +0.97 + 72.9 + 5.9
1992 03 09 09 45.55 -08 27.0 1.491 2.420 153.4 10.6 15.9

1992 02 08 10 11.09 +13 56.5 1.922 2.895 168.5 3.9 16.6
- 7.80 -0.56 + 94.5 + 2.1 1989 NE 17824 - 6.96 +0.82 + 74.4 - 7.8
1992 03 09 09 46.40 +18 28.2 1.940 2.863 153.4 8.9 16.8

1992 02 08 10 13.57 +13 06.0 1.793 2.765 167.8 4.3 17.4
- 9.49 -0.53 + 61.2 + 1.2 (4909) 18780 - 7.94 +0.98 + 41.5 - 6.7
1992 03 09 09 44.62 +15 54.6 1.867 2.794 154.2 8.9 17.7

1992 02 08 10 13.42 +06 00.7 1.883 2.847 164.8 5.2 17.3
- 8.25 -0.43 + 12.8 + 4.1 5006 T-2 16038 - 6.71 +0.88 + 19.7 - 1.8
1992 03 09 09 48.57 +07 00.4 1.966 2.908 157.4 7.5 17.5

1992 02 08 10 15.98 +38 38.3 1.661 2.584 154.0 9.6 14.3
-10.59 -0.63 + 15.9 -13.0 1973 SS4 19289 - 7.97 +1.33 - 68.3 -12.2
1992 03 09 09 44.49 +37 18.0 1.748 2.593 140.7 14.0 14.6

1992 02 08 10 12.79 +10 26.7 2.511 3.480 167.2 3.6 18.0
- 6.98 -0.42 + 39.1 + 2.2 1981 EQ42 16424 - 6.41 +0.60 + 35.0 - 3.4
1992 03 09 09 50.82 +12 28.0 2.504 3.439 156.8 6.5 18.1

1992 02 08 10 15.10 -00 27.5 1.954 2.900 159.9 6.7 18.3
- 8.92 -0.50 + 48.4 + 7.7 1990 TB 17217 - 7.73 +0.85 + 68.9 - 1.3
1992 03 09 09 47.62 +02 45.1 1.994 2.935 157.2 7.5 18.4

1992 02 08 10 15.49 +00 16.2 1.554 2.505 160.4 7.6 17.5
- 8.78 -0.62 + 57.2 + 9.2 1045 T-2 18446 - 7.43 +1.01 + 79.0 - 2.4
1992 03 09 09 48.16 +04 01.9 1.587 2.533 157.4 8.7 17.6

1992 02 08 10 17.39 +08 48.3 1.374 2.342 165.5 6.1 17.4
- 9.47 -0.75 + 59.3 + 4.9 1990 QV5 17448 - 8.08 +1.15 + 53.2 - 6.2
1992 03 09 09 47.52 +11 57.7 1.407 2.350 156.2 9.8 17.6

1992 02 08 10 18.31 +32 43.2 1.873 2.814 158.6 7.3 15.7
- 8.82 -0.60 + 79.2 - 8.7 (4649) 17412 - 7.36 +1.02 +7.5 -12.7
1992 03 09 09 51.03 +35 00.5 1.991 2.849 143.3 12.0 16.1

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1992 02 08    10 20.66   +13 34.5    1.617    2.586   166.2     5.2    15.5
-10.34 -0.64    +0.4 + 0.3   1990 SB4    17450   - 8.78 +1.08  - 13.5 - 4.1
1992 03 09    09 48.79   +13 22.7    1.674    2.612   156.1     8.9    15.8

1992 02 08    10 18.21   -08 27.1    1.647    2.564   152.8    10.1    16.3
- 7.94 -0.58  + 31.1 +12.7   1986 TM1    17632   - 6.79 +0.92  + 81.0 + 2.5
1992 03 09    09 53.34   -05 20.0    1.673    2.614   156.5     8.7    16.3

1992 02 08    10 19.24   +07 05.5    1.244    2.210   164.2     7.0    17.7
- 8.66 -0.72  + 49.1 + 5.9   1981 EW17   15064   - 6.95 +1.19  + 48.7 - 5.5
1992 03 09    09 52.28   +09 53.3    1.307    2.258   157.9     9.5    18.0

1992 02 08    10 21.95   +16 54.2    1.573    2.541   166.0     5.4    17.4
- 9.86 -0.69  + 63.3 - 0.8   1977 RD3    15240   - 8.50 +1.08  + 29.5 - 8.8
1992 03 09    09 51.12   +19 28.4    1.642    2.571   153.9     9.8    17.8

1992 02 08    10 18.50   +09 59.2    1.780    2.747   165.7     5.1    17.9
- 7.20 -0.54  + 42.5 + 2.9   1335 T-2    17463   - 6.20 +0.83  + 36.0 - 4.7
1992 03 09    09 55.88   +12 11.0    1.833    2.780   158.1     7.7    18.1

1992 02 08    10 21.43   +15 55.0    1.704    2.672   166.2     5.1    17.2
- 9.77 -0.64  + 54.5 - 0.3    (4678)     17422   - 8.48 +1.01  + 26.8 - 7.6
1992 03 09    09 51.00   +18 10.5    1.772    2.702   154.5     9.1    17.5

1992 02 08    10 20.34   +00 53.8    1.544    2.494   160.0     7.8    18.0
- 8.78 -0.68  + 56.4 + 9.0   4081 P-L    18445   - 7.75 +0.98  + 77.2 - 2.5
1992 03 09    09 52.46   +04 35.6    1.569    2.519   158.5     8.3    18.1

1992 02 08    10 19.91   +12 04.5    1.202    2.173   166.1     6.3    16.1
- 7.94 -0.91  + 74.0 + 4.3   1985 FU1     9767   - 7.19 +1.15  + 56.9 - 9.0
1992 03 09    09 53.38   +15 45.6    1.200    2.146   156.2    10.8    16.2

1992 02 08    10 20.19   +07 25.0    2.319    3.279   164.2     4.7    16.8
- 7.59 -0.49  + 19.2 + 3.1   5162 T-2    15907   - 7.09 +0.64  + 22.3 - 2.1
1992 03 09    09 56.09   +08 36.8    2.324    3.270   159.1     6.2    16.9

1992 02 08    10 23.99   +14 09.2    1.519    2.487   165.5     5.7    18.1
- 9.81 -0.78  + 52.2 + 1.2   1986 GY     17204   - 8.87 +1.06  + 29.4 - 7.5
1992 03 09    09 52.55   +16 27.7    1.551    2.490   155.7     9.5    18.4

1992 02 08    10 20.93   +08 29.7    1.817    2.780   164.5     5.4    16.9
- 7.58 -0.59  + 41.4 + 3.8   1985 TB1    18284   - 6.85 +0.80  + 39.9 - 4.0
1992 03 09    09 56.72   +10 46.1    1.844    2.792   158.7     7.4    17.0

1992 02 08    10 21.43   +10 07.6    2.150    3.114   165.1     4.7    16.0
- 8.22 -0.55    +3.0 + 1.9   1981 DG3    11837   - 7.74 +0.71    +0.6 - 2.5
1992 03 09    09 55.16   +10 21.0    2.143    3.088   158.5     6.8    16.1

1992 02 08    10 24.28   +35 16.8    1.386    2.322   155.9    10.0    16.2
- 9.69 -0.82  + 64.6 -12.7   1982 WE     12949   - 7.64 +1.35  - 29.4 -15.0
1992 03 09    09 54.26   +36 13.7    1.499    2.367   142.7    14.7    16.6

1992 02 08    10 23.26   +00 51.3    1.743    2.689   159.5     7.4    15.9
- 8.18 -0.74  + 19.7 + 7.7   1976 GL8    17624   - 8.09 +0.79  + 45.7 + 0.2
1992 03 09    09 56.02   +02 43.4    1.690    2.643   159.3     7.6    15.8

1992 02 08    10 23.68   +02 00.1    1.934    2.881   160.2     6.7    17.3
- 7.68 -0.66  + 23.7 + 6.6   1975 NC     18280   - 7.62 +0.70  + 44.0 - 0.4
1992 03 09    09 58.21   +03 54.6    1.883    2.836   159.9     6.9    17.3
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1992 02 08    10 26.64   +23 20.1    1.047    2.012   163.2     8.2    15.7
- 9.39 -0.97  + 59.0 - 6.1   1987 UU4    15250   - 7.51 +1.45    -9.3 -13.2
1992 03 09    09 56.80   +24 47.6    1.126    2.055   151.7    13.3    16.1

1992 02 08    10 23.65   +21 20.9    2.778    3.738   164.6     4.0    17.7
- 7.18 -0.47  + 87.3 - 1.4    (4770)     17950   - 6.97 +0.54  + 56.7 - 7.7
1992 03 09    10 00.56   +25 08.6    2.834    3.741   152.1     7.1    18.0

1992 02 08    10 26.73   +28 51.4    2.157    3.103   160.1     6.2    18.1
- 9.29 -0.70  + 56.2 - 5.4   1989 NE1    15254   - 8.96 +0.81    +3.1 -10.5
1992 03 09    09 56.57   +30 29.9    2.177    3.061   147.5    10.0    18.3

1992 02 08    10 25.98   +10 17.2    1.477    2.440   164.1     6.4    18.3
- 8.44 -0.89  + 46.4 + 4.3   1981 EK34   14346   - 8.46 +0.92  + 41.3 - 5.6
1992 03 09    09 57.26   +12 47.0    1.438    2.388   158.2     8.9    18.3

1992 02 08    10 28.28   +19 32.7    1.665    2.628   164.1     5.9    16.7
- 9.80 -0.85  + 18.1 - 2.3   1985 RH     12967   - 9.52 +0.95  - 16.5 - 7.7
1992 03 09    09 55.94   +19 45.1    1.646    2.579   154.7     9.5    16.8

1992 02 08    10 27.88   +03 14.4    1.358    2.310   160.2     8.3    17.6
- 7.73 -0.89  + 42.7 + 8.7   1981 ET8    10769   - 7.63 +0.94  + 63.2 - 2.6
1992 03 09    10 01.43   +06 14.2    1.333    2.294   160.7     8.2    17.5

1992 02 08    10 29.32   +11 42.7    1.186    2.151   163.7     7.4    17.5
- 8.08 -0.91  + 70.1 + 3.6   1990 QZ8    18297   - 7.29 +1.13  + 50.0 - 9.0
1992 03 09    10 02.46   +15 06.5    1.232    2.186   158.4     9.6    17.7

1992 02 08    10 26.79   +09 10.1    2.573    3.530   163.5     4.5    17.2
- 6.64 -0.48  + 40.7 + 2.7   1976 GH2    17012   - 6.57 +0.51  + 39.2 - 3.1
1992 03 09    10 05.13   +11 20.8    2.564    3.516   160.5     5.4    17.2

1992 02 08    10 27.52   +10 28.8    1.761    2.723   163.8     5.8    16.9
- 6.71 -0.64  + 63.9 + 3.4   1987 DP6    17439   - 6.38 +0.75  + 54.6 - 6.0
1992 03 09    10 05.32   +13 43.9    1.791    2.743   159.6     7.2    17.0

1992 02 08    10 29.55   +09 11.6    1.522    2.482   162.9     6.7    17.4
- 8.22 -0.79  + 67.3 + 4.7   1990 SW4    17964   - 7.82 +0.91  + 60.3 - 6.4
1992 03 09    10 02.34   +12 43.6    1.545    2.499   159.4     8.0    17.5

1992 02 08    10 30.86   +14 16.2    1.786    2.747   163.8     5.7    17.2
- 8.40 -0.64  + 67.9 + 0.8    (4996)     19282   - 7.68 +0.84  + 43.8 - 7.6
1992 03 09    10 04.00   +17 19.3    1.869    2.812   157.6     7.7    17.5

1992 02 08    10 32.83   +08 05.0    1.662    2.617   161.7     6.8    17.2
- 9.43 -0.83  + 34.9 + 4.3   1990 RS17   19305   - 9.33 +0.87  + 35.4 - 4.0
1992 03 09    10 01.53   +10 06.0    1.658    2.613   160.0     7.5    17.2

1992 02 08    10 31.35   +14 07.7    1.264    2.228   163.7     7.1    16.3
- 7.47 -0.92  + 51.0 + 1.8   4321 T-1    19327   - 7.11 +1.02  + 27.4 - 8.5
1992 03 09    10 05.87   +16 24.5    1.288    2.242   158.5     9.4    16.4

1992 02 08    10 31.95   -02 01.6    2.148    3.075   155.9     7.5    18.1
- 7.47 -0.54  + 44.4 + 7.6   1990 SH1    17449   - 7.12 +0.64  + 67.7 - 0.4
1992 03 09    10 07.88   +01 01.4    2.184    3.143   162.0     5.6    18.1

1992 02 08    10 33.56   +10 22.9    1.751    2.708   162.4     6.3    17.4
- 8.15 -0.80  + 47.9 + 3.6   1978 PO3    11504   - 8.39 +0.75  + 42.0 - 5.2
1992 03 09    10 05.88   +12 54.1    1.729    2.684   160.1     7.2    17.4
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1992 02 08    10 35.60   +04 56.1    1.285    2.236   159.6     8.8    15.9
- 9.04 -0.92  + 35.9 + 7.2   1987 VB     17206   - 8.52 +1.07  + 46.7 - 3.7
1992 03 09    10 05.56   +07 20.2    1.320    2.284   161.6     7.9    16.0

1992 02 08    10 32.94   +13 32.7    2.029    2.987   163.2     5.5    17.4
- 7.30 -0.64  + 88.0 + 2.0   1990 VE1    17643   - 7.27 +0.66  + 68.7 - 7.6
1992 03 09    10 08.68   +17 45.4    2.066    3.011   158.3     7.0    17.5

1992 02 08    10 33.80   +11 14.1    2.185    3.140   162.6     5.4    17.9
- 7.54 -0.59  + 58.4 + 2.3   1990 UJ2    17457   - 7.46 +0.62  + 48.5 - 5.2
1992 03 09    10 09.05   +14 08.2    2.216    3.169   160.3     6.1    18.0

1992 02 08    10 36.90   +07 03.8    1.425    2.377   160.4     8.0    16.4
- 8.61 -1.03  + 36.4 + 6.1   1989 GL1    18292   - 9.31 +0.86  + 43.6 - 3.9
1992 03 09    10 06.50   +09 22.5    1.377    2.339   161.4     7.8    16.3

1992 02 08    10 35.33   +06 38.9    2.759    3.704   160.5     5.1    17.3
- 6.92 -0.49  + 18.6 + 3.0   1981 EO9    18107   - 7.07 +0.45  + 23.1 - 1.6
1992 03 09    10 12.60   +07 49.9    2.747    3.709   163.2     4.4    17.2

1992 02 08    10 38.90   +13 01.6    1.099    2.059   161.7     8.6    16.9
- 7.92 -1.09  + 44.2 + 2.7   1981 ET22   17430   - 7.80 +1.12  + 22.8 - 8.5
1992 03 09    10 11.22   +15 02.7    1.130    2.091   160.3     9.2    17.0

1992 02 08    10 39.33   +14 18.9    1.075    2.035   161.8     8.7    15.6
- 8.24 -1.17  + 40.5 + 1.8   1985 CH1    18284   - 8.33 +1.15  + 14.4 - 9.0
1992 03 09    10 10.14   +16 01.4    1.088    2.048   159.6     9.7    15.7

1992 02 08    10 38.46   +07 46.0    1.782    2.731   160.3     7.0    17.4
- 7.52 -0.70  + 65.3 + 4.5    (4978)     19008   - 7.44 +0.72  + 61.8 - 5.3
1992 03 09    10 13.38   +11 14.9    1.829    2.792   162.4     6.2    17.4

1992 02 08    10 40.42   +13 22.3    1.488    2.443   161.4     7.4    18.3
- 8.78 -0.85  + 52.2 + 1.6   2630 P-L     8144   - 8.45 +0.93  + 30.8 - 7.5
1992 03 09    10 11.24   +15 43.7    1.549    2.505   159.9     7.8    18.5

1992 02 08    10 39.10   -11 39.8    1.907    2.788   147.3    11.0    17.8
- 7.68 -0.72  + 12.0 +12.2    (4699)     17613   - 7.90 +0.67  + 69.1 + 5.1
1992 03 09    10 13.14   -09 25.2    1.885    2.833   158.6     7.4    17.7

1992 02 08    10 42.04   +19 56.7    1.160    2.117   160.8     8.8    16.5
- 8.57 -1.18  + 69.8 - 1.6   4171 T-3    12703   - 8.81 +1.12  + 18.1 -13.0
1992 03 09    10 11.68   +22 29.8    1.185    2.130   155.7    11.1    16.7

1992 02 08    10 40.06   +24 37.9    2.180    3.125   159.9     6.2    16.1
- 7.88 -0.67  + 74.3 - 3.4   1990 PA     17447   - 7.92 +0.66  + 29.5 - 9.9
1992 03 09    10 13.89   +27 25.6    2.254    3.167   152.3     8.4    16.3

1992 02 08    10 41.65   +11 00.9    1.580    2.532   160.6     7.4    16.5
- 8.48 -0.93  + 35.8 + 3.2    (4671)     17420   - 9.00 +0.80  + 27.5 - 5.5
1992 03 09    10 12.22   +12 51.9    1.566    2.527   161.5     7.1    16.5

1992 02 08    10 42.30   +14 19.0    1.521    2.475   161.1     7.4    16.6
- 8.47 -0.92  + 78.4 + 1.9   1985 BH     19018   - 8.67 +0.86  + 52.1 - 9.3
1992 03 09    10 13.28   +17 55.5    1.557    2.510   159.1     8.1    16.7

1992 02 08    10 45.13   +15 58.9    1.372    2.326   160.5     8.1    16.9
- 8.78 -1.01  + 68.3 + 0.6   1990 OJ2    17023   - 8.92 +0.96  + 34.8 -10.1
1992 03 09    10 14.92   +18 53.5    1.418    2.371   158.7     8.7    17.0
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1992 02 08	10 44.28	+40 14.3	1.994	2.887	149.5	10.0	15.4
- 8.52 -0.93	+ 58.2 -10.2	1990 VA7	17646	- 8.79 +0.86	- 23.9 -14.5
1992 03 09	10 15.00	+41 13.8	2.038	2.875	140.5	12.7	15.6
1992 02 08	10 42.29	-04 57.8	2.017	2.925	152.0	9.1	18.0
- 6.99 -0.66	+ 52.6 + 9.6	1977 RL7	17197	- 7.26 +0.59	+ 86.0 + 0.5
1992 03 09	10 18.61	-01 13.1	2.019	2.986	163.9	5.3	17.8
1992 02 08	10 42.48	-07 22.6	1.622	2.526	150.2	11.2	16.8
- 6.11 -0.87	+ 52.3 +13.5	1159 T-2	15076	- 7.09 +0.61	+107.9 + 2.9
1992 03 09	10 19.92	-03 02.7	1.549	2.517	163.5	6.4	16.4
1992 02 08	10 45.31	+08 55.2	1.107	2.059	159.2	9.8	17.4
- 6.80 -1.13	+ 64.2 + 6.4	1977 DB1	16575	- 7.39 +0.96	+ 57.6 - 8.0
1992 03 09	10 20.14	+12 24.7	1.129	2.100	163.5	7.7	17.4
1992 02 08	10 45.43	+19 16.4	2.161	3.107	160.2	6.2	17.7
- 7.24 -0.76	+ 34.1 - 0.8	1981 EQ	15553	- 8.10 +0.52	+7.9 - 7.0
1992 03 09	10 20.04	+20 30.9	2.117	3.062	158.5	6.8	17.7
1992 02 08	10 44.05	+09 16.6	2.108	3.052	159.6	6.5	17.5
- 6.10 -0.71	+ 45.9 + 3.7	1981 EB1	12790	- 6.93 +0.48	+ 45.3 - 3.9
1992 03 09	10 22.32	+11 47.5	2.063	3.031	164.2	5.1	17.4
1992 02 08	10 47.38	+00 25.2	1.790	2.715	154.6	9.0	17.0
- 7.70 -0.85	+ 35.7 + 8.1	(4686)	17608	- 8.56 +0.62	+ 60.8 - 0.6
1992 03 09	10 20.27	+03 05.9	1.756	2.729	165.3	5.3	16.8
1992 02 08	10 51.31	+18 13.7	1.398	2.346	158.9	8.7	16.2
- 9.12 -1.11	+ 56.6 - 0.7	3006 T-3	13476	- 9.76 +0.92	+ 17.8 -10.4
1992 03 09	10 19.22	+20 23.4	1.425	2.377	158.5	8.8	16.2
1992 02 08	10 46.62	+08 50.6	2.233	3.173	158.8	6.4	15.7
- 6.53 -0.70	+ 26.6 + 3.2	1981 EY26	11046	- 7.45 +0.44	+ 27.7 - 2.9
1992 03 09	10 23.52	+10 23.4	2.175	3.145	165.1	4.7	15.6
1992 02 08	10 50.63	+13 01.5	1.564	2.510	158.9	8.1	17.4
- 8.46 -0.98	+ 72.8 + 2.8	(4669)	17419	- 9.22 +0.77	+ 52.7 - 8.5
1992 03 09	10 20.86	+16 30.6	1.584	2.545	161.4	7.2	17.5
1992 02 08	10 47.94	-03 42.1	1.829	2.739	151.9	9.8	17.1
- 7.06 -0.74	+ 44.4 + 9.5	1981 VS	11629	- 7.42 +0.63	+ 76.1 + 0.1
1992 03 09	10 23.69	-00 23.8	1.855	2.827	165.4	5.1	17.0
1992 02 08	10 50.57	+04 18.9	1.680	2.612	156.1	8.8	17.8
- 7.60 -0.99	+ 49.9 + 7.4	1989 GT4	14956	- 9.13 +0.58	+ 66.2 - 2.7
1992 03 09	10 22.56	+07 31.7	1.609	2.582	165.7	5.5	17.5
1992 02 08	10 48.26	+14 29.3	2.655	3.596	159.6	5.5	16.8
- 6.43 -0.59	+ 40.6 + 0.9	1991 AA	17830	- 7.07 +0.40	+ 28.1 - 4.7
1992 03 09	10 26.18	+16 22.8	2.651	3.610	162.4	4.8	16.8
1992 02 08	10 53.09	+12 58.1	1.520	2.464	158.3	8.5	16.0
- 7.52 -1.06	+ 44.9 + 2.8	1988 CO	12952	- 8.90 +0.68	+ 30.3 - 7.0
1992 03 09	10 25.24	+15 09.1	1.493	2.459	163.0	6.8	15.8
1992 02 08	10 53.10	+15 29.3	1.613	2.557	158.5	8.1	17.6
- 7.50 -0.98	+ 56.9 + 1.3	1990 TJ	17451	- 8.56 +0.68	+ 32.7 - 8.4
1992 03 09	10 25.93	+18 01.8	1.617	2.577	161.2	7.1	17.6

1992 02 08	10 52.52	+06 02.4	1.183	2.124	156.4	10.7	17.9	
- 6.42 -1.27	+ 52.2 + 8.9	1979 MX5	18803	- 8.51 +0.73	+ 67.0 - 4.8			
1992 03 09	10 26.42	+09 26.8	1.121	2.098	166.1	6.5	17.6	
1992 02 08	10 49.71	+05 02.1	2.344	3.273	156.6	6.9	17.9	
- 5.82 -0.65	+ 45.0 + 4.9	1981 EG36	10622	- 6.72 +0.39	+ 54.1 - 2.1			
1992 03 09	10 28.97	+07 43.8	2.306	3.281	167.2	3.8	17.8	
1992 02 08	10 57.19	-09 42.1	1.598	2.478	146.0	12.9	17.7	
- 7.58 -1.03	- 20.0 +12.1	1988 BL5	19501	- 9.07 +0.61	+ 42.9 + 6.7			
1992 03 09	10 29.18	-08 58.0	1.556	2.518	161.8	7.1	17.5	
1992 02 08	10 55.65	+06 13.1	1.136	2.075	155.8	11.2	17.7	
- 6.23 -1.31	+ 27.1 + 7.8	4077 P-L	14797	- 8.43 +0.73	+ 41.4 - 3.8			
1992 03 09	10 29.85	+08 17.5	1.082	2.062	167.3	6.1	17.3	
1992 02 08	10 59.83	+04 08.7	1.317	2.245	154.0	11.1	16.0	
- 8.36 -1.18	+6.6 + 7.1	1983 RC5	18283	- 9.70 +0.80	+ 25.3 - 1.5			
1992 03 09	10 29.07	+05 12.4	1.316	2.296	167.6	5.3	15.8	
1992 02 08	10 56.48	+05 52.1	1.696	2.625	155.5	9.0	17.8	
- 7.16 -0.89	+ 45.6 + 5.7	1053 T-2	19328	- 8.15 +0.61	+ 51.9 - 3.7			
1992 03 09	10 30.73	+08 35.9	1.709	2.687	167.4	4.6	17.7	
1992 02 08	11 04.70	+07 32.8	1.687	2.611	154.2	9.5	17.2	
- 7.13 -1.00	+ 53.9 + 5.4	1979 WX3	17013	- 8.76 +0.53	+ 55.7 - 4.8			
1992 03 09	10 38.04	+10 36.2	1.679	2.658	168.2	4.4	17.0	
1992 02 08	10 59.36	-02 29.8	1.728	2.631	150.5	10.6	16.8	
- 6.76 -1.02	+ 28.4 + 9.8	1986 RY5	18810	- 8.87 +0.44	+ 68.0 + 1.8			
1992 03 09	10 33.23	+00 09.5	1.626	2.605	167.9	4.6	16.3	
1992 02 08	11 05.94	+20 46.8	2.331	3.252	155.2	7.3	18.1	
- 8.03 -0.81	+ 46.4 - 1.4	1990 TE1	17452	- 9.22 +0.46	+ 15.8 - 7.8			
1992 03 09	10 37.72	+22 32.2	2.350	3.298	159.4	6.1	18.1	
1992 02 08	11 06.56	-02 19.9	1.800	2.695	+1.04	-8.3	16.8	
- 7.64 -1.03	+8.6 + 8.5	1990 SO4	17641	- 9.73 +0.44	+ 44.3 + 2.1			
1992 03 09	10 37.79	-00 48.7	1.726	2.707	+1.11	-8.9	16.4	
1992 02 08	11 06.61	+13 33.7	1.424	2.356	155.1	10.1	16.7	
- 7.34 -1.20	+ 74.9 + 3.3	1990 SQ16	19027	- 9.35 +0.63	+ 53.5 - 9.6			
1992 03 09	10 38.18	+17 10.4	1.425	2.394	163.8	6.6	16.6	
1992 02 08	11 08.47	+19 00.5	1.173	2.107	154.8	11.5	16.2	
- 7.49 -1.46	+ 58.5 - 0.1	1987 WF	17019	- 9.94 +0.78	+ 14.1 -12.7			
1992 03 09	10 38.15	+21 13.0	1.168	2.130	160.5	8.9	16.1	
1992 02 08	11 00.51	+09 13.5	1.274	2.211	155.7	10.6	17.9	
- 6.25 -1.23	+ 78.6 + 6.9	1979 MA6	17426	- 8.36 +0.65	+ 74.8 - 8.1			
1992 03 09	10 35.13	+13 31.7	1.250	2.227	165.9	6.2	17.7	
1992 02 08	11 07.73	+03 09.5	1.407	2.323	151.8	11.6	17.8	
- 6.87 -1.31	+ 30.9 + 8.8	2158 T-3	14631	-10.08 +0.44	+ 57.3 - 1.3			
1992 03 09	10 39.05	+05 40.6	1.301	2.286	170.0	4.3	17.3	
1992 02 08	10 58.34	+06 49.4	2.346	3.269	155.4	7.2	17.5	
- 5.60 -0.74	+ 39.4 + 4.5	2563 P-L	6207	- 7.15 +0.29	+ 46.8 - 2.3			
1992 03 09	10 37.31	+09 11.2	2.249	3.229	168.7	3.5	17.1	

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1992 02 08    11 06.18   +08 39.4    1.529    2.455   154.2    10.1    18.0
- 6.39 -1.10  + 46.2 + 5.3   1978 VZ2    16575   - 8.47 +0.51  + 46.8 - 5.2
1992 03 09    10 40.90   +11 18.5    1.500    2.481   168.4     4.6    17.8

1992 02 08    11 03.31   +29 17.2    2.089    3.002   153.2     8.5    16.7
- 7.25 -0.90  + 60.0 - 4.8   1990 VP2    17644   - 8.46 +0.54   +5.9 -11.4
1992 03 09    10 37.10   +31 08.2    2.135    3.045   151.6     8.9    16.8

1992 02 08    11 05.84   +05 30.4    2.057    2.971   153.2     8.6    17.1
- 5.79 -0.83  + 43.1 + 5.3   1979 QC2    17816   - 7.46 +0.35  + 52.3 - 2.6
1992 03 09    10 43.78   +08 08.2    2.017    3.000   170.6     3.1    16.8

1992 02 08    11 04.85   -07 11.7    1.567    2.450   146.4    12.9    18.2
- 4.78 -1.07  + 44.5 +13.7   6245 P-L    12700   - 7.37 +0.35 +105.9 + 4.3
1992 03 09    10 43.99   -03 08.9    1.449    2.430   168.5     4.7    17.6

1992 02 08    11 05.93   +06 36.0    2.643    3.553   153.6     7.1    18.3
- 5.57 -0.69  + 34.5 + 3.9   1981 EW20   18621   - 7.15 +0.23  + 41.2 - 1.9
1992 03 09    10 45.15   +08 40.3    2.554    3.537   170.6     2.6    18.0

1992 02 08    11 12.06   +17 35.1    1.911    2.831   154.0     8.8    18.3
- 7.19 -1.00  + 57.4 + 0.6   1982 US6    11431   - 9.19 +0.43  + 31.3 - 8.4
1992 03 09    10 44.84   +20 05.0    1.898    2.860   162.3     6.1    18.1

1992 02 08    11 09.28   +03 14.7    1.985    2.890   151.4     9.4    17.4
- 5.99 -0.93  + 28.4 + 6.3    (4726)     17803   - 8.23 +0.29  + 46.7 - 0.9
1992 03 09    10 45.68   +05 20.8    1.890    2.876   171.7     2.9    17.0

1992 02 08    11 11.79   +08 23.5    1.256    2.180   152.8    11.9    17.9
- 5.59 -1.42  + 34.7 + 6.8   4805 P-L     7943   - 9.44 +0.39  + 42.7 - 4.9
1992 03 09    10 45.91   +10 41.4    1.148    2.132   169.7     4.8    17.4

1992 02 08    11 14.14   +02 17.9    1.590    2.493   149.9    11.4    17.2
- 7.29 -1.13  + 23.6 + 7.6   1988 CC2    18289   - 9.54 +0.49  + 45.6 - 1.1
1992 03 09    10 45.90   +04 17.8    1.561    2.548   171.8     3.2    16.8

1992 02 08    11 08.27   +08 58.0    2.688    3.599   153.8     7.0    18.4
- 5.63 -0.68  + 42.5 + 3.1   1978 RK1    16021   - 7.11 +0.24  + 42.9 - 3.0
1992 03 09    10 47.47   +11 17.4    2.637    3.618   169.7     2.8    18.2

1992 02 08    11 08.76   +08 48.6    2.643    3.553   153.6     7.1    18.4
- 5.56 -0.72  + 34.8 + 3.3   4582 P-L    17974   - 7.33 +0.20  + 37.1 - 2.7
1992 03 09    10 47.72   +10 47.5    2.541    3.523   170.0     2.8    18.1

1992 02 08    11 13.72   +01 31.0    2.083    2.976   149.7     9.6    18.2
- 6.80 -0.93  + 27.5 + 6.6   1982 OF     15882   - 9.02 +0.29  + 48.9 - 0.3
1992 03 09    10 47.73   +03 38.3    2.000    2.987   172.2     2.6    17.8

1992 02 08    11 09.37   -00 32.5    1.917    2.812   149.6    10.2    18.3
- 4.75 -0.92  + 28.2 + 8.1   1981 EQ9    10614   - 7.08 +0.25  + 58.7 + 0.9
1992 03 09    10 49.46   +01 50.9    1.810    2.797   172.2     2.7    17.8

1992 02 08    11 15.56   +04 25.1    1.842    2.744   150.5    10.2    18.3
- 7.08 -1.05  + 33.4 + 6.2   1988 CF3    17821   - 9.49 +0.36  + 47.6 - 2.0
1992 03 09    10 48.11   +06 42.0    1.782    2.768   172.0     2.8    17.9

1992 02 08    11 10.56   +04 00.9    2.391    3.291   151.5     8.2    18.1
- 5.58 -0.74  + 35.4 + 5.0   1981 EX41   12796   - 7.17 +0.27  + 47.0 - 1.5
1992 03 09    10 49.58   +06 16.5    2.351    3.338   172.5     2.2    17.7
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1992 02 08	11 17.23	+02 21.0	1.583	2.483	149.3	11.7	17.2
- 6.79 -1.28	+ 19.7 + 7.9	1983 RX	14616	-10.42 +0.27		+ 46.8 - 0.1	
1992 03 09	10 48.53	+04 15.6	1.455	2.443	172.5	3.1	16.6
1992 02 08	11 12.91	-12 37.4	2.454	3.282	141.2	10.8	16.7
- 5.65 -0.82	- 20.9 + 8.7	1991 AJ3	18125	- 7.87 +0.18		+ 29.0 + 6.7	
1992 03 09	10 50.80	-12 21.7	2.311	3.269	161.8	5.4	16.3
1992 02 08	11 08.34	-04 48.3	2.508	3.381	147.3	9.1	17.9
- 3.97 -0.68	+ 44.6 + 8.0	1988 RV12	15715	- 5.60 +0.19		+ 76.9 + 1.8	
1992 03 09	10 52.37	-01 34.6	2.416	3.401	171.1	2.6	17.5
1992 02 08	11 16.93	-03 04.0	1.277	2.170	146.6	14.5	16.5
- 5.24 -1.46	+2.6 +11.5	1986 PK6	14948	- 9.79 +0.23		+ 58.9 + 4.7	
1992 03 09	10 51.28	-01 19.3	1.128	2.114	171.0	4.2	15.8
1992 02 08	11 21.37	+09 02.1	1.474	2.383	150.7	11.7	17.7
- 6.78 -1.29	+ 52.0 + 5.7	4581 P-L	18642	- 9.90 +0.41		+ 51.6 - 6.0	
1992 03 09	10 53.19	+11 59.1	1.432	2.417	170.2	4.0	17.4
1992 02 08	11 23.27	-01 55.4	1.558	2.438	145.9	13.1	17.2
- 7.12 -1.21	+ 33.4 +10.1	1987 UP2	15416	- 9.85 +0.42		+ 69.1 + 0.4	
1992 03 09	10 54.80	+00 56.4	1.528	2.517	173.1	2.7	16.7
1992 02 08	11 19.18	+07 43.7	2.430	3.326	150.8	8.3	18.2
- 5.92 -0.78	+ 40.2 + 3.7	1990 VZ	17459	- 7.70 +0.24		+ 42.4 - 3.0	
1992 03 09	10 56.86	+10 00.0	2.411	3.398	172.2	2.3	17.9
1992 02 08	11 22.87	+02 27.1	1.659	2.550	148.0	11.8	17.8
- 6.40 -1.20	+ 36.1 + 8.1	1989 GT3	18292	- 9.70 +0.27		+ 60.2 - 1.1	
1992 03 09	10 56.02	+05 08.6	1.569	2.559	174.3	2.2	17.2
1992 02 08	11 21.75	+07 28.5	1.220	2.133	150.2	13.3	17.9
- 5.28 -1.46	+ 73.4 + 8.8	1990 RC8	19305	- 9.16 +0.38		+ 80.8 - 7.1	
1992 03 09	10 56.68	+11 49.3	1.168	2.154	170.8	4.2	17.4
1992 02 08	11 25.81	+07 29.4	1.160	2.070	149.2	14.1	17.3
- 5.12 -1.57	+ 26.6 + 7.3	1985 CN1	10029	- 9.68 +0.32		+ 37.2 - 4.6	
1992 03 09	11 00.11	+09 27.0	1.082	2.072	173.2	3.3	16.7
1992 02 08	11 26.01	-17 03.1	1.596	2.404	135.9	16.6	17.3
- 5.99 -1.27	- 29.8 +14.2	1983 XX	17015	- 9.52 +0.27		+ 56.1 +11.7	
1992 03 09	10 59.88	-16 19.3	1.507	2.459	158.7	8.4	16.9
1992 02 08	11 31.64	+08 17.5	1.531	2.425	148.0	12.4	18.6
- 7.42 -1.31	+ 36.0 + 5.2	1980 TV2	14946	-10.63 +0.39		+ 37.4 - 4.9	
1992 03 09	11 01.41	+10 26.4	1.511	2.499	172.6	2.9	18.2
1992 02 08	11 26.90	+10 43.8	1.778	2.676	149.8	10.7	17.2
- 5.51 -1.19	+ 40.9 + 4.6	1984 HR1	15709	- 9.30 +0.11		+ 40.6 - 5.0	
1992 03 09	11 02.28	+13 03.9	1.646	2.631	170.5	3.6	16.6
1992 02 08	11 25.97	+01 57.3	1.904	2.784	147.1	11.1	16.9
- 5.02 -1.03	+ 40.5 + 7.5	1990 VC15	19505	- 7.99 +0.16		+ 63.3 - 0.8	
1992 03 09	11 04.25	+04 48.5	1.817	2.808	176.4	1.3	16.3
1992 02 08	11 24.73	+00 15.3	2.289	3.160	146.6	9.9	17.7
- 4.77 -0.85	+ 35.8 + 6.7	1978 PJ2	18281	- 7.13 +0.14		+ 58.4 + 0.1	
1992 03 09	11 05.06	+02 48.8	2.211	3.202	176.2	1.2	17.2

1992 02 08	11 28.45	+07 18.7	1.400	2.300	148.5	12.9	18.2	
- 5.09 -1.35	+ 24.5 + 6.2	6670 P-L	17976	- 8.99 +0.25	+ 33.6 - 3.7			
1992 03 09	11 04.37	+09 04.1	1.332	2.322	174.2	2.5	17.6	
1992 02 08	11 37.44	-04 29.2	1.814	2.658	+0.80	-11.8	17.7	
- 8.39 -1.27	- 35.7 + 7.7	1990 QB	17638	-11.98 +0.24	+6.3 + 5.0			
1992 03 09	11 04.09	-05 08.4	1.735	2.717	+0.90	-12.6	17.2	
1992 02 08	11 24.91	-01 42.3	2.017	2.886	145.6	11.1	18.5	
- 3.80 -0.96	+ 37.4 + 8.8	1981 EP18	15703	- 6.92 +0.06	+ 73.0 + 1.8			
1992 03 09	11 06.95	+01 16.1	1.863	2.854	175.7	1.5	17.8	
1992 02 08	11 35.50	+00 24.0	1.628	2.496	144.3	13.3	18.0	
- 6.31 -1.30	+ 16.8 + 8.4	1990 QJ1	17639	-10.28 +0.17	+ 47.9 + 0.7			
1992 03 09	11 07.89	+02 15.2	1.535	2.527	176.5	1.4	17.3	
1992 02 08	11 28.88	+00 46.2	1.385	2.271	146.0	14.1	17.3	
- 3.78 -1.35	+ 49.1 +11.4	1981 EP26	13310	- 8.36 +0.07	+ 89.7	0.0		
1992 03 09	11 08.04	+04 35.4	1.255	2.247	177.3	1.2	16.4	
1992 02 08	11 34.70	+03 11.9	1.835	2.707	145.7	11.9	17.7	
- 5.86 -1.14	+ 31.7 + 6.9	1971 TF	14613	- 9.30 +0.15	+ 51.0 - 1.3			
1992 03 09	11 09.57	+05 31.0	1.754	2.746	177.5	0.9	17.1	
1992 02 08	11 29.29	-06 55.3	1.628	2.480	141.9	14.2	17.8	
- 3.42 -1.19	+ 47.1 +13.5	2170 T-2	14965	- 7.66 -0.01	+112.9 + 5.7			
1992 03 09	11 10.49	-02 40.9	1.448	2.436	172.6	3.0	17.0	
1992 02 08	11 37.37	-02 06.0	1.516	2.377	142.7	14.5	17.4	
- 6.01 -1.37	+7.7 + 9.6	(4650)	17412	-10.25 +0.17	+ 49.0 + 2.5			
1992 03 09	11 10.14	-00 27.7	1.429	2.419	174.6	2.2	16.7	
1992 02 08	11 33.77	-23 58.9	2.129	2.860	129.6	15.4	18.3	
- 4.89 -1.14	- 12.8 +13.0	1989 LW	16029	- 9.09 -0.07	+ 76.0 +14.5			
1992 03 09	11 10.83	-22 27.2	1.884	2.806	153.0	9.2	17.7	
1992 02 08	11 36.11	+08 31.4	1.732	2.615	147.0	11.8	17.5	
- 5.61 -1.25	+ 47.9 + 5.8	1976 YB2	19289	- 9.63 +0.09	+ 53.5 - 4.5			
1992 03 09	11 10.78	+11 22.4	1.630	2.618	172.8	2.7	16.9	
1992 02 08	11 32.58	+08 56.0	2.027	2.911	148.0	10.3	17.9	
- 4.85 -1.03	+ 69.3 + 5.5	1981 QV2	17431	- 8.09 +0.08	+ 72.8 - 4.7			
1992 03 09	11 11.11	+12 48.1	1.940	2.926	171.4	2.9	17.5	
1992 02 08	11 39.83	+26 55.0	1.319	2.209	146.4	14.3	15.7	
- 5.50 -1.70	+ 52.5 - 3.0	1979 DF	18105	-10.72 +0.24	- 11.7 -16.4			
1992 03 09	11 11.90	+28 21.4	1.260	2.205	156.0	10.5	15.5	
1992 02 08	11 36.76	+13 52.1	2.040	2.923	147.9	10.3	17.5	
- 4.98 -1.10	+ 69.1 + 3.9	1989 NM	15071	- 8.74 +0.01	+ 61.5 - 6.6			
1992 03 09	11 14.13	+17 27.6	1.923	2.899	166.9	4.4	17.1	
1992 02 08	11 42.63	+00 19.0	1.521	2.382	142.7	14.5	17.6	
- 6.09 -1.43	+ 11.0 + 8.7	1990 QF	17024	-10.77 +0.10	+ 44.4 + 1.1			
1992 03 09	11 14.51	+01 56.1	1.422	2.415	177.3	1.1	16.8	
1992 02 08	11 41.06	+11 11.6	1.321	2.211	146.4	14.3	17.6	
- 4.86 -1.59	+ 48.8 + 6.1	4017 T-3	12702	-10.50 +0.02	+ 47.3 - 7.3			
1992 03 09	11 15.06	+14 00.7	1.208	2.193	170.4	4.3	17.0	

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1992 02 08    11 36.19   +02 55.8    2.050    2.915   145.2    11.1    18.3
- 4.61 -1.03  + 39.9 + 6.8   1990 WS4    18435   - 7.98 +0.04  + 60.1 - 0.9
1992 03 09    11 15.35   +05 40.1    1.938    2.930   178.5     0.5    17.6

1992 02 08    11 37.32   +05 35.9    1.192    2.083   145.9    15.4    16.8
- 3.58 -1.57  + 58.0 +10.0   3070 T-2    19036   - 8.92 +0.07  + 78.9 - 4.6
1992 03 09    11 15.55   +09 28.5    1.104    2.095   174.9     2.4    16.1

1992 02 08    11 34.83   +03 08.0    2.859    3.715   145.6     8.6    17.4
- 4.48 -0.76  + 31.0 + 4.8    (4759)     17946   - 6.99  0.00  + 45.7 - 0.4
1992 03 09    11 16.23   +05 12.6    2.721    3.713   179.0     0.3    16.8

1992 02 08    11 36.41   -08 14.1    2.431    3.246   139.7    11.3    18.2
- 4.66 -0.90  + 15.0 + 8.4   1980 TC5    17956   - 7.66 +0.01  + 57.3 + 4.4
1992 03 09    11 16.26   -06 18.2    2.282    3.263   169.2     3.3    17.7

1992 02 08    11 38.86   +15 07.7    1.701    2.588   147.5    11.8    16.4
- 4.44 -1.25  + 57.3 + 3.3   1973 AW3    17623   - 8.60 +0.05  + 42.6 - 8.0
1992 03 09    11 16.91   +17 58.6    1.617    2.592   166.5     5.1    16.0

1992 02 08    11 40.07   -14 09.8    2.510    3.285   135.3    12.2    18.2
- 5.33 -0.95  - 10.8 + 8.9    (4816)     18267   - 8.62 -0.02  + 41.9 + 7.3
1992 03 09    11 17.45   -13 20.3    2.336    3.296   162.2     5.3    17.8

1992 02 08    11 43.00   +01 59.1    1.848    2.704   143.3    12.6    18.5
- 5.34 -1.23  + 42.1 + 8.2   1980 PX     17428   - 9.79 -0.05  + 69.9 - 0.3
1992 03 09    11 18.14   +05 02.9    1.697    2.690   179.4     0.2    17.7

1992 03 09    11 18.95   -04 26.2    1.359    2.345   171.1     3.7    16.4
- 9.93 -0.18  + 47.5 + 6.5   1989 LM     14958   - 5.64 +1.42  + 50.8 - 5.1
1992 04 08    10 52.64   -01 37.3    1.397    2.295   145.7    14.2    16.8

1992 03 09    11 18.57   +06 19.7    2.088    3.081   178.1     0.6    16.6
- 9.42 -0.04  + 23.4 - 1.0    (4738)     17808   - 6.09 +1.03   +2.2 - 5.3
1992 04 08    10 53.34   +07 05.9    2.194    3.057   143.4    11.3    17.2

1992 03 09    11 18.78   +07 24.8    1.537    2.529   177.0     1.2    16.7
- 8.78 +0.09  + 77.1 - 3.0   1988 DJ1    17441   - 4.19 +1.23  + 33.9 - 9.6
1992 04 08    10 57.23   +10 23.4    1.718    2.588   142.9    13.5    17.6

1992 03 09    11 19.27   -08 00.0    1.303    2.283   167.6     5.4    15.5
- 8.67 -0.17  + 79.4 + 9.9    (4838)     18275   - 4.46 +1.40  + 91.9 - 5.7
1992 04 08    10 56.66   -03 14.2    1.327    2.235   147.0    14.1    15.9

1992 03 09    11 20.03   +02 53.8    2.467    3.460   178.4     0.5    17.7
- 7.30 -0.01  + 47.7 + 0.4   1304 T-2    15079   - 4.62 +0.81  + 32.5 - 4.9
1992 04 08    11 00.63   +05 03.9    2.601    3.475   145.8     9.3    18.4

1992 03 09    11 20.75   +04 32.6    2.034    3.027   179.5     0.2    17.3
- 7.73 -0.05  + 56.9   0.0   1985 XS     16426   - 4.69 +0.96  + 34.8 - 6.5
1992 04 08    11 00.26   +07 02.1    2.137    3.013   145.0    11.0    18.0

1992 03 09    11 21.09   +07 36.0    1.125    2.117   176.8     1.5    18.1
- 8.62 -0.01  + 64.2 - 2.8   2678 P-L    13303   - 3.41 +1.49  + 16.6 -10.8
1992 04 08    11 00.27   +09 51.9    1.243    2.135   143.8    16.1    19.0

1992 03 09    11 20.93   -11 20.9    1.858    2.826   164.2     5.5    15.8
- 8.86 +0.01  + 12.9 + 7.6   1990 UR2    17457   - 5.09 +1.10  + 34.2 - 0.8
1992 04 08    10 57.98   -09 54.8    1.989    2.886   147.7    10.7    16.3
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1992 03 09    11 20.92   +06 28.9    1.111    2.104   177.9     1.0    16.7
- 9.66 +0.03  + 73.5 - 2.4   1987 SO9    18288   - 4.01 +1.56  + 25.8 -11.1
1992 04 08    10 57.58   +09 13.7    1.245    2.135   143.5    16.2    17.7

1992 03 09    11 23.81   +07 36.2    2.691    3.683   176.6     0.9    17.1
- 7.07 -0.05  + 46.3 - 1.2    (4903)     18615   - 4.80 +0.74  + 24.3 - 5.5
1992 04 08    11 04.55   +09 30.1    2.809    3.674   144.9     9.0    17.7

1992 03 09    11 24.91   -05 01.9    1.671    2.655   170.4     3.6    17.1
-10.54 -0.06  + 25.1 + 5.1   1979 QC1    11518   - 6.43 +1.24  + 29.9 - 3.3
1992 04 08    10 57.06   -03 23.8    1.790    2.687   147.1    11.7    17.6

1992 03 09    11 28.58   +07 59.9    2.790    3.781   175.7     1.1    17.8
- 7.08 -0.06  + 34.9 - 1.4   1989 VC2    17021   - 4.95 +0.71  + 14.0 - 5.0
1992 04 08    11 09.12   +09 19.9    2.919    3.791   146.0     8.5    18.3

1992 03 09    11 29.44   +14 02.9    1.736    2.719   170.0     3.6    18.0
- 9.81 -0.08  + 58.2 - 5.7   1983 RG2    17202   - 6.02 +1.18   +6.8 - 9.6
1992 04 08    11 03.37   +15 47.5    1.884    2.739   141.4    13.2    18.6

1992 03 09    11 29.25   +20 53.8    1.620    2.587   163.3     6.3    16.6
- 8.33 -0.14  + 59.4 - 9.2   1990 WP4    18435   - 4.72 +1.18  - 10.6 -11.9
1992 04 08    11 07.21   +22 12.0    1.733    2.568   138.2    15.1    17.1

1992 03 09    11 29.51   +02 47.8    1.097    2.089   176.9     1.5    16.0
- 8.78 -0.40  + 91.1 + 3.8   1985 CS1    16696   - 4.95 +1.51  + 63.5 -11.4
1992 04 08    11 05.37   +07 08.0    1.107    2.017   146.1    16.1    16.6

1992 03 09    11 30.52   +02 40.1    1.876    2.867   176.6     1.2    15.8
- 7.54 -0.07  + 51.1 + 0.5   1990 VD2    19307   - 4.47 +0.97  + 31.5 - 6.2
1992 04 08    11 10.58   +04 56.4    2.017    2.916   148.2    10.4    16.5

1992 03 09    11 31.62   +04 56.7    1.081    2.073   176.8     1.6    17.2
- 9.91 -0.16  + 45.4 - 0.7   2572 P-L    14627   - 4.87 +1.56  + 10.3 - 9.1
1992 04 08    11 06.29   +06 35.7    1.191    2.101   146.6    15.2    18.0

1992 03 09    11 32.26   -07 13.7    1.339    2.319   167.9     5.2    16.0
-10.63 -0.10  + 20.1 + 7.5    (4648)     17411   - 5.97 +1.41  + 33.1 - 3.1
1992 04 08    11 04.55   -05 34.3    1.467    2.383   149.2    12.4    16.6

1992 03 09    11 31.69   +00 38.4    1.842    2.833   175.0     1.7    16.8
- 6.98 -0.06  + 84.3 + 1.3   1050 T-2    14962   - 3.94 +0.95  + 62.0 - 7.6
1992 04 08    11 13.45   +04 34.2    1.999    2.903   149.0    10.2    17.5

1992 03 09    11 33.03   -04 10.4    2.053    3.037   170.7     3.0    17.6
- 8.68 -0.09  + 53.6 + 3.8   1990 YA     18436   - 5.73 +0.96  + 50.8 - 4.3
1992 04 08    11 09.49   -01 18.8    2.182    3.089   149.8     9.4    18.1

1992 03 09    11 33.38   +03 50.8    1.668    2.660   176.3     1.4    16.9
- 8.69 -0.21  + 82.2 + 0.8   1975 QC     14779   - 5.63 +1.10  + 54.8 - 8.7
1992 04 08    11 09.48   +07 33.9    1.750    2.646   146.9    11.9    17.6

1992 03 09    11 33.50   -05 49.7    2.227    3.207   169.1     3.4    18.7
- 7.78 -0.07  + 42.5 + 4.1    (4731)     17805   - 5.10 +0.86  + 44.5 - 3.2
1992 04 08    11 12.47   -03 25.9    2.372    3.283   150.9     8.5    19.1

1992 03 09    11 33.59   +01 51.8    1.919    2.910   175.5     1.5    17.9
- 8.66 -0.14  + 68.0 + 1.3   1986 RS2    11349   - 5.76 +0.99  + 48.9 - 6.8
1992 04 08    11 09.86   +05 02.1    2.029    2.927   148.0    10.4    18.5
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