

800511	046	0.2+	0.7+	Y	930301	894	0.6+	0.3-	930314	894	0.2+	0.2-
800512	046	0.6-	1.0-		930302	894	0.4+	0.7+	930320	894	0.0	0.5-
800512	046	0.2+	0.3+		930302	894	1.1+	0.1+	930320	894	0.4-	1.2-
800513	046	0.1+	0.4-		930313	894	0.2-	0.3+	930409	894	1.1-	0.6+
800513	046	0.2+	0.2-		930313	894	0.8+	0.6-	930409	894	1.6-	0.7-
930301	894	0.2+	0.3+		930314	894	0.7-	0.2+	930410	894	0.3+	1.1+

(5607)* 1993 EN = 1972 LR = 1975 EW5 = 1977 RN8 = 1982 VX12 = 1982 YB2
 = 1986 TC2 = 1990 RS9 = 1991 XQ2

Discovered 1993 Mar. 12 by S. Ueda and H. Kaneda at Kushiro.

Epoch 1993 Aug. 1.0 TT = JDT 2449200.5

M 211.52220	(2000.0)	P	Q
n 0.22457029	Peri. 205.41859	+0.99811035	-0.01729209
a 2.6806155	Node 155.35537	+0.03293946	+0.96063254
e 0.1269939	Incl. 8.12907	-0.05187221	+0.27728345
P 4.39	H 12.5	G 0.15	

Residuals in seconds of arc

720606	095	1.5+	0.4-	900914	675	0.1-	1.4-	930312	399	0.2+	0.4+
750308	095	0.2+	0.1+	900918	675	0.4-	1.3-	930312	399	0.9-	0.4+
770908	675	0.1+	0.9+	900918	675	(0.1-	4.1-)	930319	399	0.6-	1.0-
770909	675	0.3-	0.6+	911207	809	2.1+	0.3-	930319	399	0.9-	1.0-
821114	095	1.9-	1.2+	911207	809	0.0	0.5-	930415	399	0.4-	0.3+
821221	095	1.5-	0.8-	911207	809	1.0-	0.7-	930415	399	0.5+	0.1+
861007	688	0.9+	0.8-	911209	809	1.8+	0.3-	930416	399	0.9-	0.3-
861007	688	1.1-	0.2-	911209	809	1.0+	0.7-	930416	399	0.6-	0.9-
900914	675	1.1+	1.8-	911209	809	0.9+	0.4-				

(5608)* 1993 E0 = 1976 JM = 1978 VC11 = 1980 DV4 = 1984 CD = 1986 TK7
 = 1988 AZ2 = 1990 QX10

Discovered 1993 Mar. 12 by S. Ueda and H. Kaneda at Kushiro.

Id. S. Nakano; 1984 SH = 1980 DV4 (JAM 1903) is invalid

Epoch 1993 Aug. 1.0 TT = JDT 2449200.5

M 286.38526	(2000.0)	P	Q
n 0.22936561	Peri. 252.50874	+0.36904126	+0.92878685
a 2.6431219	Node 39.20193	-0.83093656	+0.34615833
e 0.0439666	Incl. 3.09362	-0.41635679	+0.13239861
P 4.30	H 12.7	G 0.15	

Residuals in seconds of arc

760502	095	0.8+	1.1-	861002	049	(1.9-	4.5+)	930320	400	1.5+	0.6-
781105	675	0.4+	0.5-	880111	033	0.4+	0.5-	930320	400	(0.2+	3.9-)
781106	675	0.3-	0.3-	880111	033	0.6+	0.8-	930323	691	1.0-	1.0-
781107	675	1.0-	0.3-	900827	675	0.3-	1.6-	930323	691	0.9-	1.0-
781108	675	0.3+	0.7-	900827	675	0.7+	1.3-	930323	691	0.9-	0.9-
800221	095	0.8-	1.7+	900916	675	0.4+	0.0	930415	399	0.6+	1.5+
840204	046	(5.2+	5.4-)	900916	675	0.4+	0.6-	930415	399	1.1-	0.2+
840204	046	(7.0+	4.9-)	930312	399	0.0	0.2+	930419	399	0.7+	0.5-
861002	049	0.4-	0.9+	930312	399	0.4-	0.5+	930419	399	0.1-	0.1+
861002	049	0.6+	1.2-	930319	399	0.7+	0.3-				
861002	049	0.7-	2.4+	930319	399	0.3-	0.0				

(5609)* 1993 FU = 1973 SW5 = 1978 PF1 = 1978 QB = 1989 RT4 = 1992 AG4

Discovered 1993 Mar. 22 by A. Vagnozzi at Santa Lucia Stroncone.

Epoch 1993 Aug. 1.0 TT = JDT 2449200.5

M 294.65960	(2000.0)	P	Q
n 0.18137184	Peri. 282.95963	+0.31787656	+0.94812913
a 3.0909322	Node 5.57664	-0.86014620	+0.28943072
e 0.1498889	Incl. 1.40037	-0.39887719	+0.13145723
P 5.43	H 12.0	G 0.15	

(segue)

Residuals in seconds of arc

730928 095	0.2+	1.5-	930327 595	0.5-	0.5+	930331 595	0.2+	0.0
780808 095	0.7-	0.4-	930327 595	0.8-	0.1-	930331 595	0.7-	0.1+
780823 688	1.5+	2.4-	930327 589	0.5+	0.3+	930408 589	0.1-	1.6+
780823 688	0.8+	0.6-	930327 589	0.8-	0.9-	930408 589	0.3+	1.2+
890902 071	0.6-	0.5-	930327 595	0.3-	0.6-	930408 589	0.0	1.0+
890902 071	1.1+	0.9-	930327 595	0.9-	1.1+	930416 589	0.9+	0.5-
890903 071	1.0+	1.9-	930327 595	0.0	0.4-	930416 589	0.0	0.8-
890903 071	0.5+	2.0-	930327 589	0.4-	0.0	930420 589	0.2-	0.5-
920101 691	0.4-	2.3-	930328 587	0.3-	0.2-	930420 589	0.5-	0.6-
920101 691	0.4-	2.0-	930328 587	0.9+	0.5+	930423 589	0.3-	0.2+
920101 691	0.3-	2.2-	930328 589	0.4-	0.1-	930423 589	0.2-	0.4-
930322 589	0.3+	1.3-	930328 589	0.6-	0.1+	930508 589	0.0	0.1-
930322 589	0.4+	0.8-	930328 589	0.8-	0.3+	930508 589	0.5+	0.2-
930322 589	0.2+	1.3-	930330 589	0.0	0.6-	930508 589	0.2+	0.3+
930322 589	0.2+	1.2-	930330 589	0.0	0.7-	930508 589	0.0	0.4+
930322 589	0.3+	1.4-	930330 108	(2.8-	3.9-)	930509 589	0.2+	0.2-
930323 589	0.1+	1.4-	930330 108	2.2-	1.9+	930509 589	0.2+	0.0
930323 589	0.2+	1.1-	930330 108	0.8-	0.8-			
930327 595	0.8+	0.9+	930330 108	1.0+	0.9-			

(5610)* 2041 T-3 = 1982 UL6

Discovered 1977 Oct. 16 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.

Id. C. M. Bardwell (MPC 12572)

Epoch 1993 Aug. 1.0 TT = JDT 2449200.5

M 292.93341

(2000.0)

P

Bardwell

Q

n 0.21000774

Peri.

332.60660

-0.79856799

+0.59960075

a 2.8031469

Node

244.33246

-0.54100348

-0.75333469

e 0.0437692

Incl.

3.34642

-0.26382645

-0.27012180

P 4.69

H

12.8

G 0.15

Residuals in seconds of arc

771007 675	1.0+	0.1+	821109 095	1.3-	0.1-	911004 033	0.4-	0.1+
771011 675	0.7-	1.5+	821114 095	0.1+	1.4-	911010 691	0.7-	0.3+
771011 675	1.2-	0.9+	900429 413	0.9-	0.0	911010 691	0.6-	0.6+
771012 675	0.5-	0.5+	910905 033	0.4+	0.6-	911010 691	0.6-	0.1+
771012 675	1.4-	0.9+	910905 033	0.4+	0.7-	911109 675	2.4-	0.7-
771016 675	1.6+	1.6-	910912 033	1.4+	0.2+	911109 675	0.4+	2.4-
771016 675	0.7+	0.7-	910912 033	1.5+	0.1+	911110 675	0.7+	1.0-
771017 675	0.4-	1.7+	910913 675	0.0	0.3-	921221 801	0.2+	0.1+
771017 675	1.2-	1.8+	910913 675	0.5+	0.2-	921221 801	0.1+	0.1-
771021 675	0.9+	0.0	910914 033	0.2-	0.9-	921228 801	0.2+	0.9-
771021 675	1.0+	0.5+	910915 033	0.7-	0.1+	921228 801	0.8+	0.6-
771022 675	1.4+	1.1+	910915 033	0.8+	1.6-	930119 801	0.7+	0.7+
771022 675	0.2+	0.7+	910915 675	1.3+	1.2-	930119 801	0.2+	0.1+
821020 095	1.5-	0.3+	911002 033	1.1+	0.9+	930121 801	0.0	0.5-
821025 095	2.9-	0.8+	911002 033	0.1+	0.2+	930121 801	0.4-	0.4-

1932 CP = 1993 HQ

Epoch 1993 Aug. 1.0 TT = JDT 2449200.5

M 24.79463

(2000.0)

P

Nakano

Q

n 0.29244888

Peri.

194.17983

-0.80721633

+0.58817629

a 2.2478607

Node

22.07313

-0.52790330

-0.68188520

e 0.0940219

Incl.

7.56947

-0.26404528

-0.43483471

P 3.37

H

12.9

G 0.15

Residuals in seconds of arc

320205 024	(12.0-	0.8+)	320310 024	0.5+	1.1-	930416 400	1.1+	0.7+
320211 024	4.4-	0.8-	320325 024	4.2+	1.9+	930420 400	0.3-	0.5-
320301 024	(7.9+	2.8-)	930416 400	2.2+	1.5+	930420 400	1.4+	0.1+