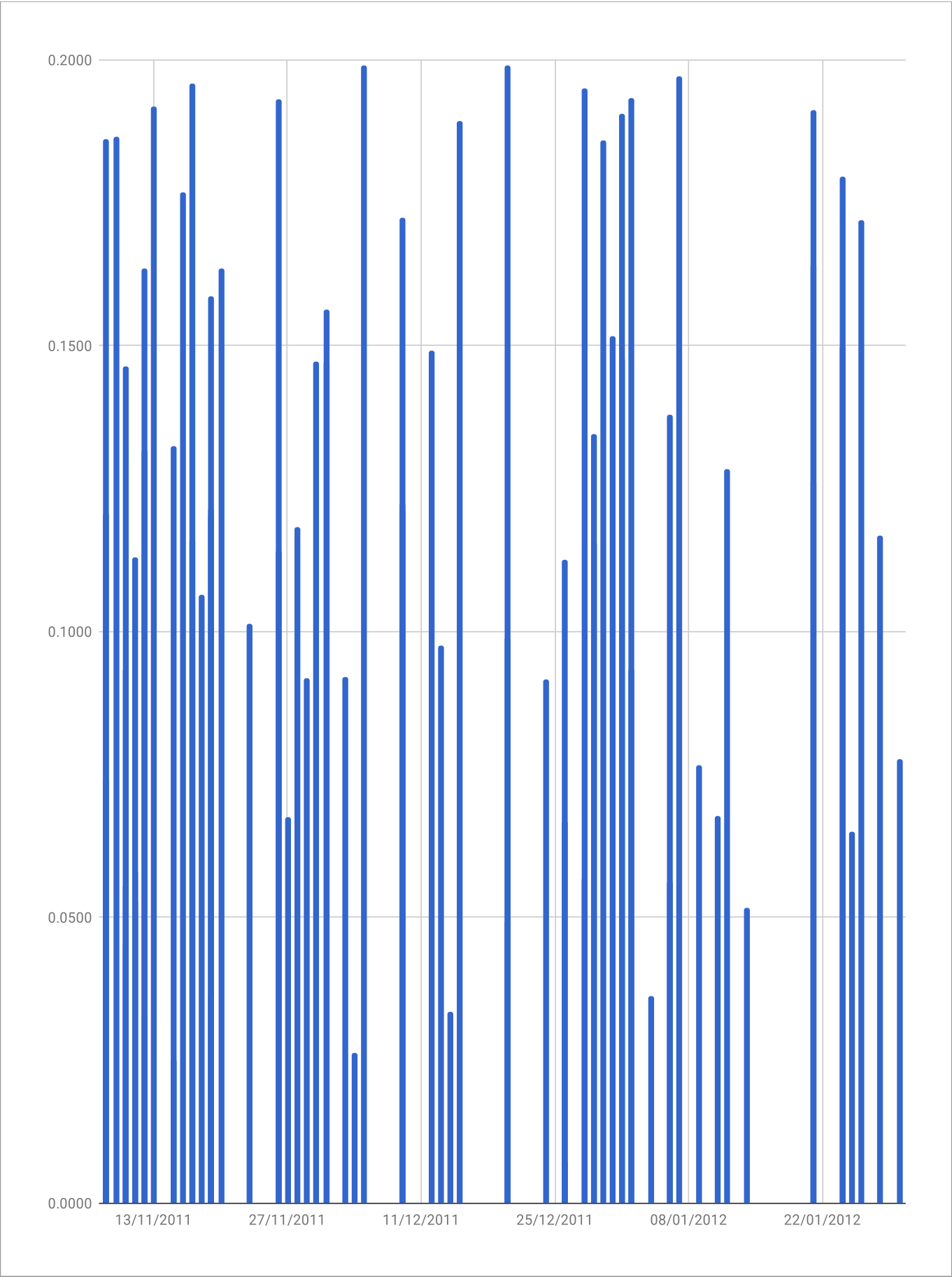


UPCOMING CLOSE APPROACHES TO EARTH	1 AU = ~150 million kilometers	1 LD = Lunar Distance = ~384,000 kilometers				
Object Name	Close Approach Date	Miss Distance (AU)	Miss Distance (LD)	Estimated Diameter	H (mag)	Relative Velocity (km/s)
(2006 JY26)	08/11/2011	0.1208	47.0	5.7 m - 13 m	28.3	6.58
(2010 LM68)	08/11/2011	0.1861	72.4	180 m - 410 m	20.8	9.55
(2005 XB1)	08/11/2011	0.0742	28.9	120 m - 260 m	21.8	13.15
(2005 YU55)	08/11/2011	0.0022	0.8	400 m	21.9	13.72
(2004 VB61)	09/11/2011	0.1866	72.6	100 m - 230 m	22.0	6.28
(2011 VB)	10/11/2011	0.0557	21.7	28 m - 62 m	24.9	7.17
(2011 TP6)	10/11/2011	0.0456	17.7	21 m - 48 m	25.5	2.81
(2008 UX)	10/11/2011	0.1463	56.9	190 m - 420 m	20.7	18.71
(2011 UA276)	10/11/2011	0.0936	36.4	27 m - 60 m	25.0	6.42
(1992 JD)	11/11/2011	0.1129	43.9	26 m - 59 m	25.0	7.72
(2011 UZ275)	11/11/2011	0.0581	22.6	68 m - 150 m	22.9	5.00
(2011 UY192)	11/11/2011	0.0528	20.5	34 m - 75 m	24.5	14.28
(2008 NA)	12/11/2011	0.1634	63.6	48 m - 110 m	23.7	12.08
138852 (2000 WN10)	12/11/2011	0.1318	51.3	270 m - 600 m	20.0	13.15
(2011 UZ114)	12/11/2011	0.0330	12.8	21 m - 47 m	25.5	7.62
154275 (2002 SR41)	13/11/2011	0.1918	74.6	240 m - 550 m	20.2	11.64
(2011 UT91)	15/11/2011	0.0253	9.9	67 m - 150 m	23.0	12.22
(2011 UB276)	15/11/2011	0.1323	51.5	63 m - 140 m	23.1	11.90
10145 (1994 CK1)	16/11/2011	0.1767	68.8	920 m - 2.1 km	17.3	13.10
(2010 WG3)	17/11/2011	0.1162	45.2	84 m - 190 m	22.5	8.33
202683 (2006 US216)	17/11/2011	0.1958	76.2	290 m - 660 m	19.8	17.99
(2011 UY255)	18/11/2011	0.1064	41.4	73 m - 160 m	22.8	6.73
(2011 UA115)	19/11/2011	0.0365	14.2	27 m - 61 m	24.9	9.71
(2011 UH21)	19/11/2011	0.1203	46.8	67 m - 150 m	23.0	6.10
(2011 UB115)	19/11/2011	0.1586	61.7	45 m - 100 m	23.9	7.90
(2005 WS3)	19/11/2011	0.1216	47.3	160 m - 350 m	21.2	15.81
(2008 WL64)	20/11/2011	0.1634	63.6	500 m - 1.1 km	18.6	34.02
175706 (1996 FG3)	23/11/2011	0.1014	39.5	670 m - 1.5 km	18.0	8.13
(2011 SR69)	26/11/2011	0.1143	44.5	270 m - 600 m	20.0	6.63
(2010 RJ43)	26/11/2011	0.1930	75.1	59 m - 130 m	23.3	10.66
(2008 KT)	27/11/2011	0.0674	26.2	6.0 m - 14 m	28.2	4.97
(1994 XL1)	28/11/2011	0.1182	46.0	180 m - 400 m	20.8	16.36
289315 (2005 AN26)	29/11/2011	0.0918	35.7	550 m - 1.2 km	18.4	12.51
(2002 TZ66)	30/11/2011	0.1471	57.3	18 m - 39 m	25.9	4.30
(2004 JN1)	01/12/2011	0.1473	57.3	54 m - 120 m	23.5	8.96
(2006 WO3)	01/12/2011	0.1564	60.9	140 m - 300 m	21.5	13.38
(2011 KG4)	03/12/2011	0.0921	35.9	67 m - 150 m	23.0	12.52
(2003 XV)	04/12/2011	0.0262	10.2	12 m - 27 m	26.7	12.66
(2010 TK7)	05/12/2011	0.1991	77.5	200 m - 450 m	20.6	14.62
170502 (2003 WM7)	09/12/2011	0.1224	47.6	990 m - 2.2 km	17.1	28.54
(2003 SS84)	09/12/2011	0.1723	67.0	120 m - 260 m	21.8	10.96
190491 (2000 FJ10)	09/12/2011	0.1213	47.2	170 m - 390 m	20.9	4.90
(2009 VO24)	12/12/2011	0.1491	58.0	310 m - 680 m	19.7	14.33
(2011 UV158)	13/12/2011	0.0976	38.0	100 m - 220 m	22.1	10.17
(2004 BG41)	14/12/2011	0.0335	13.0	35 m - 77 m	24.4	8.36
(2011 GD60)	15/12/2011	0.1892	73.6	120 m - 270 m	21.7	4.92
137671 (1999 XP35)	20/12/2011	0.1991	77.5	620 m - 1.4 km	18.2	11.15
(2008 YQ27)	20/12/2011	0.0991	38.6	81 m - 180 m	22.6	12.74
(2011 OV18)	20/12/2011	0.0496	19.3	290 m - 640 m	19.8	12.09
(2008 AF3)	24/12/2011	0.0915	35.6	14 m - 31 m	26.4	6.01
(2000 YA)	26/12/2011	0.0074	2.9	49 m - 110 m	23.7	13.62
(2001 YE4)	26/12/2011	0.0668	26.0	210 m - 460 m	20.6	10.79
(2009 WK1)	26/12/2011	0.1126	43.8	9.5 m - 21 m	27.2	7.41
(2011 SL102)	28/12/2011	0.1949	75.9	690 m - 1.6 km	17.9	6.02
(2003 AK18)	28/12/2011	0.0570	22.2	310 m - 700 m	19.6	11.67
(2004 XK50)	29/12/2011	0.1346	52.4	390 m - 880 m	19.2	26.38
(2000 CH59)	29/12/2011	0.1158	45.1	320 m - 710 m	19.6	9.59
(2011 ON24)	30/12/2011	0.1858	72.3	68 m - 150 m	23.0	9.36
263976 (2009 KD5)	31/12/2011	0.1516	59.0	590 m - 1.3 km	18.3	8.83
(2002 AB2)	01/01/2012	0.1479	57.5	67 m - 150 m	23.0	10.15
(2007 AM)	01/01/2012	0.1906	74.2	130 m - 280 m	21.6	11.36
(2007 BD)	02/01/2012	0.0935	36.4	20 m - 45 m	25.6	9.40
(2004 FG29)	02/01/2012	0.1932	75.2	19 m - 41 m	25.8	20.55
(2003 AF23)	04/01/2012	0.0361	14.1	200 m - 460 m	20.6	16.18
(2008 SA)	06/01/2012	0.0563	21.9	26 m - 58 m	25.0	6.63
(1999 LS7)	06/01/2012	0.1379	53.7	190 m - 430 m	20.7	11.90
(2011 VO5)	07/01/2012	0.1972	76.7	120 m - 260 m	21.8	8.52

UPCOMING CLOSE APPROACHES TO EARTH	1 AU = ~150 million kilometers	1 LD = Lunar Distance = ~384,000 kilometers				
Object Name	Close Approach Date	Miss Distance (AU)	Miss Distance (LD)	Estimated Diameter	H (mag)	Relative Velocity (km/s)
(2011 AC3)	09/01/2012	0.0765	29.8	89 m - 200 m	22.4	20.61
(2002 BF25)	11/01/2012	0.0677	26.3	82 m - 180 m	22.5	8.77
(2004 YD)	12/01/2012	0.1284	50.0	41 m - 92 m	24.1	8.45
(2005 BU)	14/01/2012	0.0517	20.1	13 m - 29 m	26.6	11.24
(2010 JK1)	21/01/2012	0.1644	64.0	35 m - 78 m	24.4	4.27
(2005 YO3)	21/01/2012	0.1265	49.2	25 m - 57 m	25.1	9.44
P/2006 T1 (Levy)	21/01/2012	0.1911	74.4	n/a	0.0	15.46
(2009 BO58)	24/01/2012	0.1795	69.8	110 m - 250 m	21.9	20.32
(2010 LN14)	24/01/2012	0.1500	58.4	160 m - 350 m	21.1	19.19
7341 (1991 VK)	25/01/2012	0.0650	25.3	1.2 km - 2.7 km	16.7	8.73
(2011 FC29)	26/01/2012	0.1720	67.0	170 m - 380 m	20.9	17.47
(2008 CL20)	28/01/2012	0.1168	45.4	23 m - 52 m	25.3	9.96
(2010 WU8)	30/01/2012	0.0776	30.2	39 m - 86 m	24.2	7.91



RECENT CLOSE APPROACHES TO EARTH						
1 AU = ~150 million kilometers	1 LD = Lunar Distance = ~384,000 kilometers					
Object Name	Close Approach Date	Miss Distance (AU)	Miss Distance (LD)	Estimated Diameter	H (mag)	Relative Velocity (km/s)
(2011 UY114)	31/10/2011	0.1442	56.1	54 m - 120 m	23.4	4.93
(2011 UP63)	01/11/2011	0.0655	25.5	48 m - 110 m	23.7	6.48
(2011 TK)	01/11/2011	0.135	52.5	150 m - 330 m	21.3	13.96
(2011 UD64)	01/11/2011	0.0281	10.9	23 m - 51 m	25.3	9.52
(2011 UD)	06/11/2011	0.1367	53.2	200 m - 460 m	20.6	22.44
(2009 VN1)	06/11/2011	0.1299	50.5	39 m - 88 m	24.2	13.61
(2011 UB131)	06/11/2011	0.1682	65.5	120 m - 270 m	21.7	21.74
(2011 UF10)	07/11/2011	0.1255	48.8	55 m - 120 m	23.4	6.16
(2011 FZ2)	07/11/2011	0.1949	75.9	1.0 km - 2.3 km	17.0	24.09
(2007 VF189)	07/11/2011	0.1217	47.4	5.7 m - 13 m	28.3	14.99

Historic comet close approaches prior to 2006	1 LD = Lunar Distance = ~384,000 kilometers			1 AU = ~150 million kilometers
Comet Name	Date of Close Earth Approach	Miss Distance (AU)	Miss Distance (LD)	Designation
Lexell	1770-Jul-01.7	0.0151	5.9	D/1770 L1
Tempel-Tuttle	1366-Oct-26.4	0.0229	8.9	55P/1366 U1
IRAS-Araki-Alcock	1983-May-11.5	0.0313	12.2	C/1983 H1
Halley	837-Apr-10.5	0.0334	13.0	1P/ 837 F1
Biela	1805-Dec-09.9	0.0366	14.2	3D/1805 V1
Comet of 1743	1743-Feb-08.9	0.039	15.2	C/1743 C1
Pons-Winnecke	1927-Jun-26.8	0.0394	15.3	7P/
Comet of 1014	1014-Feb-24.9	0.0407	15.8	C/1014 C1
Comet of 1702	1702-Apr-20.2	0.0437	17.0	C/1702 H1
Comet of 1132	1132-Oct-07.2	0.0447	17.4	C/1132 T1
Comet of 1351	1351-Nov-29.4	0.0479	18.6	C/1351 W1
Comet of 1345	1345-Jul-31.9	0.0485	18.9	C/1345 O1
Comet of 1499	1499-Aug-17.1	0.0588	22.9	C/1499 Q1
Schwassmann-Wachmann 3	1930-May-31.7	0.0617	24.0	3P/1930 J1
Sugano-Saigusa-Fujikawa	1983-Jun-12.8	0.0628	24.4	C/1983 J1
Comet of 1080	1080-Aug-05.7	0.0641	24.9	C/1080 P1
Great comet	1760-Jan-08.2	0.0681	26.5	C/1760 A1
Comet of 1472	1472-Jan-22.9	0.069	26.9	C/1471 Y1
Comet of 400	400-Mar-31.1	0.0767	29.8	C/ 400 F1
LINEAR	1921-Mar-09.9	0.0775	30.1	P/2000 G1
Comet of 1556	1556-Mar-13.0	0.0835	32.5	C/1556 D1
Schweizer	1853-Apr-29.1	0.0839	32.7	C/1853 G1
Bouvard-Herschel	1797-Aug-16.5	0.0879	34.2	C/1797 P1
Halley	374-Apr-01.9	0.0884	34.4	1P/ 374 E1
Halley	607-Apr-19.2	0.0898	34.9	1P/ 607 H1
Comet of 568	568-Sep-25.7	0.0918	35.7	C/ 568 O1
Messier	1763-Sep-23.7	0.0934	36.3	C/1763 S1
Tempel	1864-Aug-08.4	0.0964	37.5	C/1864 N1
Machholz 2-A	1905-Jan-05.2	0.0968	37.7	141P-A
LINEAR	2000-Mar-04.7	0.0974	37.9	P/2000 G1
Schmidt	1862-Jul-04.6	0.0982	38.2	C/1862 N1
Comet of 390	390-Aug-18.9	0.1002	39.0	C/ 390 Q1
Hyakutake	1996-Mar-25.3	0.1018	39.6	C/1996 B2
Seki	1961-Nov-15.2	0.1019	39.7	C/1961 T1

Comet Name	Date of Close Earth Approach	Miss Distance (AU)
Halley	374-Apr-01.9	0.0884
Comet of 390	390-Aug-18.9	0.1002
Comet of 400	400-Mar-31.1	0.0767
Comet of 568	568-Sep-25.7	0.0918
Halley	607-Apr-19.2	0.0898
Halley	837-Apr-10.5	0.0334
Comet of 1014	1014-Feb-24.9	0.0407
Comet of 1080	1080-Aug-05.7	0.0641
Comet of 1132	1132-Oct-07.2	0.0447
Comet of 1345	1345-Jul-31.9	0.0485
Comet of 1351	1351-Nov-29.4	0.0479
Tempel-Tuttle	1366-Oct-26.4	0.0229
Comet of 1472	1472-Jan-22.9	0.069
Comet of 1499	1499-Aug-17.1	0.0588
Comet of 1556	1556-Mar-13.0	0.0835
Comet of 1702	1702-Apr-20.2	0.0437
Comet of 1743	1743-Feb-08.9	0.039
Great comet	1760-Jan-08.2	0.0681
Messier	1763-Sep-23.7	0.0934
Lexell	1770-Jul-01.7	0.0151
Bouvard-Herschel	1797-Aug-16.5	0.0879
Biela	1805-Dec-09.9	0.0366
Schweizer	1853-Apr-29.1	0.0839
Schmidt	1862-Jul-04.6	0.0982
Tempel	1864-Aug-08.4	0.0964
Machholz 2-A	1905-Jan-05.2	0.0968
LINEAR	1921-Mar-09.9	0.0775
Pons-Winnecke	1927-Jun-26.8	0.0394
Schwassmann-Wachmann 3	1930-May-31.7	0.0617
Seki	1961-Nov-15.2	0.1019
Sugano-Saigusa-Fujikawa	1983-Jun-12.8	0.0628
IRAS-Araki-Alcock	1983-May-11.5	0.0313
Hyakutake	1996-Mar-25.3	0.1018
LINEAR	2000-Mar-04.7	0.0974

Comet Name	Date of Close Earth Approach	Miss Distance (AU)
374-Apr-01.9	374-Apr-01.9	0.0884
390-Aug-18.9	390-Aug-18.9	0.1002
400-Mar-31.1	400-Mar-31.1	0.0767
568-Sep-25.7	568-Sep-25.7	0.0918
607-Apr-19.2	607-Apr-19.2	0.0898
837-Apr-10.5	837-Apr-10.5	0.0334
1014-Feb-24.9	1014-Feb-24.9	0.0407
1080-Aug-05.7	1080-Aug-05.7	0.0641
1132-Oct-07.2	1132-Oct-07.2	0.0447
1345-Jul-31.9	1345-Jul-31.9	0.0485
1351-Nov-29.4	1351-Nov-29.4	0.0479
1366-Oct-26.4	1366-Oct-26.4	0.0229
1472-Jan-22.9	1472-Jan-22.9	0.069
1499-Aug-17.1	1499-Aug-17.1	0.0588
1556-Mar-13.0	1556-Mar-13.0	0.0835
1702-Apr-20.2	1702-Apr-20.2	0.0437
1743-Feb-08.9	1743-Feb-08.9	0.039
1760-Jan-08.2	1760-Jan-08.2	0.0681
1763-Sep-23.7	1763-Sep-23.7	0.0934
1770-Jul-01.7	1770-Jul-01.7	0.0151
1797-Aug-16.5	1797-Aug-16.5	0.0879
1805-Dec-09.9	1805-Dec-09.9	0.0366
1853-Apr-29.1	1853-Apr-29.1	0.0839
1862-Jul-04.6	1862-Jul-04.6	0.0982
1864-Aug-08.4	1864-Aug-08.4	0.0964
1905-Jan-05.2	1905-Jan-05.2	0.0968
1921-Mar-09.9	1921-Mar-09.9	0.0775
1927-Jun-26.8	1927-Jun-26.8	0.0394
1930-May-31.7	1930-May-31.7	0.0617
1961-Nov-15.2	1961-Nov-15.2	0.1019
1983-May-11.5	1983-May-11.5	0.0313
1996-Mar-25.3	1996-Mar-25.3	0.1018
2000-Mar-04.7	2000-Mar-04.7	0.0974

**Near Earth Object
Programme**

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