CANON OF LUNAR ECLIPSES 1500 B.C.–A.D. 3000

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Table 3.11

Comparison Between Oppolzer's Canon and Ours

Eclipses Classified as Different Types

Part 1 Omitted by Oppolzer, partial in ours

Date	Oppolzer's Mag.	Our Mag.	Date	Oppolzer's Mag.	Our Mag.
−1094 Oct 7	—	0.023	−519 May 15	—	0.003
−1076 Oct 17	—	0.002	−186 Jun 22	—	0.002
− 982 Sep 29	—	0.020	12 May 24	—	0.005
− 924 Aug 18	—	0.022	1050 Feb 9	—	0.004
− 884 Jun 28	—	0.018	1553 Jul 25	—	0.007
− 801 Jul 11	—	0.027	1988 Mar 3	—	0.002
− 743 May 31	—	0.016	2042 Sep 29	—	0.002
− 602 May 3	—	0.003			

Part 2 Oppolzer's partial, ours penumbral

Date	Oppolzer's Mag.	Our Mag.	Date	Oppolzer's Mag.	Our Mag.
−1142 Jun 2	0.5	(1.067)	197 Nov 12	0.2	(1.103)
−1084 Apr 22	0.1	(0.931)	273 Oct 13	0.2	(0.981)
−1001 May 5	0.3	(1.061)	512 Jun 15	0.1	(1.043)
−990 Apr 3	0.1	(0.981)	765 May 9	0.3	(0.956)
−867 Feb 22	0.2	(1.014)	823 Sep 24	0.1	(1.038)
− 856 Jan 24	0.2	(0.962)	833 Apr 8	0.1	(1.009)
− 838 Jul 29	0.4	(1.045)	957 Jan 18	0.2	(0.982)
− 831 Sep 10	0.6	(1.091)	1304 May 20	0.2	(0.959)
− 726 Jul 22	0.4	(1.059)	1514 Feb 9	0.2	(0.989)
− 274 Oct 1	0.3	(1.052)	1890 Jun 3	0.1	(0.975)
− 197 Jul 23	0.1	(0.971)	1987 Oct 7	0.1	(1.010)
− 187 Aug 1	0.2	(1.023)	2045 Mar 3	0.2	(0.987)
− 129 Jun 22	0.1	(0.958)			

Part 3 Oppolzer's partial, ours total

Date	Oppolzer's Mag.	Our Mag.	Date	Oppolzer's Mag.	Our Mag.
−1021 May 16	11.6	1.003	792 Dec 3	11.8	1.004
−916 Sep 18	11.9	1.030	1382 Sep 23	11.8	1.001
−840 Aug 20	11.9	1.017	2155 Sep 11	11.9	1.007
−757 Mar 9	11.8	1.006			

Part 4 Oppolzer's total, ours partial

Date	Oppolzer's Mag.	Our Mag.	Date	Oppolzer's Mag.	Our Mag.
−1168 Apr 20	12.2	0.959	379 Feb 17	12.1	0.995
−1139 Mar 31	12.1	0.942	386 Apr 1	12.2	0.993
−1045 Sep 6	12.5	0.977	462 Mar 2	12.2	0.999
−1016 Feb 21	12.3	0.967	473 Jan 30	12.0	0.983
−940 Jul 17	12.0	0.971	614 Jun 27	12.1	0.991
−933 Mar 5	12.4	0.992	914 Nov 5	12.2	0.975
−723 May 20	12.0	0.959	972 Sep 25	12.0	0.986
−576 Jun 14	12.0	0.988	1012 Aug 4	12.1	0.985
−488 Sep 27	12.1	0.971	1048 Mar 3	12.4	0.997
−470 Oct 8	12.4	0.999	1106 Jul 17	12.4	0.992
−430 Aug 17	12.3	0.999	1446 Oct 5	12.1	0.985
−394 Mar 16	12.2	0.982	1540 Sep 16	12.4	0.998
−390 Jan 1	12.0	0.969	1547 Oct 28	12.0	0.970
−387 Oct 20	12.2	0.995	1551 Aug 16	12.0	0.974
− 372 Jan 12	12.2	0.992	1605 Apr 3	12.2	0.992
−307 Jul 9	12.0	0.993	1827 May 11	12.1	0.985
−260 Jun 30	12.3	0.998	1881 Dec 5	12.0	0.979
75 Jun 17	12.1	0.998	1899 Dec 17	12.2	0.996
216 May 18	12.1	0.981	1939 Oct 28	12.1	0.991
303 Sep 12	12.1	0.989	1961 Aug 26	12.1	0.993

NOTE: In Oppolzer's Canon the lunar diameter = 12, and the magnitude scale was such that magnitude of totality $\geq$ 12.0. In our Canon the lunar diameter =1, and the magnitude of totality $\geq$ 1.

Table 3.12
Comparison Between Meeus–Mucke's Canon and Ours
1900 - 2500
The Magnitude Systems are the Same

Date	Meeus–Mucke's Type	Meeus–Mucke's Magnitude	Ours Type	Ours Magnitude
1900 Jun 13	penumbral	(1.001)	partial	0.001
1951 Feb 21	—	—	penumbral	(0.007)
1988 Mar 3	penumbral	(1.092)	partial	0.002
2015 Apr 4	partial	0.998	total	1.003
2016 Aug 18	—	—	penumbral	(0.019)
2042 Sep 29	penumbral	(0.954)	partial	0.002
2042 Oct 28	—	—	penumbral	(0.008)
2157 Feb 24	penumbral	(1.093)	partial	0.003
2194 Mar 7	—	—	penumbral	(0.007)
2288 Feb 18	—	—	penumbral	(0.019)
2356 Nov 8	—	—	penumbral	(0.011)
2374 May 26	—	—	penumbral	(0.005)
2385 Oct 19	—	—	penumbral	(0.014)
2413 Nov 8	partial	0.999	total	1.005
2421 May 17	—	—	penumbral	(0.005)
2460 May 5	partial	0.994	total	1.000
2468 Oct 31	—	—	penumbral	(0.005)