

7000 Year Canon of Total Lunar Eclipse Tetrads

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This 7000 Year Canon of Total Lunar Eclipse Tetrads covers a time span which starts at sunset, at Jerusalem, on June 6, 3977 B.C.E. on the proleptic (retro-calculated) Julian Calendar, and ends at sunset, at Jerusalem, on May 7, 3024 C.E. on the Gregorian Calendar covering a period of 7000 Creation Years. Additional details, including eclipse visibility maps for each of these and all other lunar eclipses are made available on the Creation Calendar at www.torahcalendar.com. Also available there are details and visibility maps for all solar eclipses during this same period of time. A total of 86,579 lunar Hebrew Months within a period of 7001 Hebrew Years may be viewed at this theoretical stage of restoration on the Creation Calendar. For particular lunar months where an eclipse occurs, one or more clickable icons are displayed indicating a solar eclipse, a lunar eclipse or both. Clicking on an eclipse icon activates an Eclipse Viewer pop-up window which presents additional details and a visibility map for the requested eclipse. The Creation Calendar Restoration Project is a theoretical work in progress. The goal of the project is to truthfully restore the epoch of creation based on the Scriptures and the historical record.

A "tetrad" is a series of four of the same type of eclipse. In particular, this canon documents only the total lunar eclipse tetrads. This particular type of tetrad is relatively rare as there are only 202 total lunar eclipse tetrads within the 7000 Year Canon of Lunar Eclipses.

Column	Heading:	Definition / Description										
1	Lunar Eclipse Tetrad	This column is the numerical catalog number for each total lunar eclipse tetrad within the 7000 Year Canon of Lunar Eclipses. There are a total of 202 total lunar eclipse tetrads in this 7000 year canon.										
2	Tetrad Sequence Number	The number of the eclipse within the tetrad (range is 1 to 4)										
3	Lunar Eclipse Number	Sequential catalog number for each eclipse within the 7000 Year Canon of Lunar Eclipses A total of 16,874 lunar eclipses have been identified and documented within this canon.										
4	Calendar Date and Time (UT)	Calendar Date and Time at instant of Maximum Eclipse (Greatest Eclipse) in Universal Time (UT) Gregorian Calendar is used for dates after October 4, 1582 C.E. Julian Calendar is used for dates before October 5, 1582 C.E.										
5	Astronomical Julian Date (UT)	Instant of Maximum Eclipse in Universal Time (UT) using the Astronomical Julian Date format.										
6	(TD) and Time of Maximum Eclipse	Calendar Date and Time at instant of Maximum Eclipse expressed in Dynamical Time (TD) where dates prior to 1 B.C.E. are expressed as negative years with no year zero whereby Year 1 is preceded by -1 instead of the number 0.										
7	Delta T (seconds)	Difference in time at the moment of eclipse defined as: $\Delta T = (TD - UT)$ in units of seconds										
8	Lunar Eclipse Type	Type of Lunar Eclipse where: <table border="0" style="margin-left: 40px;"> <tr> <td>LNN = Lunar Penumbral</td> <td>Moon only intersects with the penumbra (Penumbral)</td> </tr> <tr> <td>LPN = Lunar Partial Penumbral</td> <td>Moon intersects umbra (Partial) but is not fully within penumbra (Penumbral)</td> </tr> <tr> <td>LNT = Lunar Penumbral total</td> <td>Moon is total in the penumbra (Penumbral) but never intersects with the umbra</td> </tr> <tr> <td>LPU = Lunar Partial Umbral</td> <td>Moon is partially within the umbra (Partial) and total within the penumbra</td> </tr> <tr> <td>LTU = Lunar Total Umbral</td> <td>Moon is totally within the umbra (Total) By definition, this canon only contains Lunar Total Umbral eclipses.</td> </tr> </table>	LNN = Lunar Penumbral	Moon only intersects with the penumbra (Penumbral)	LPN = Lunar Partial Penumbral	Moon intersects umbra (Partial) but is not fully within penumbra (Penumbral)	LNT = Lunar Penumbral total	Moon is total in the penumbra (Penumbral) but never intersects with the umbra	LPU = Lunar Partial Umbral	Moon is partially within the umbra (Partial) and total within the penumbra	LTU = Lunar Total Umbral	Moon is totally within the umbra (Total) By definition, this canon only contains Lunar Total Umbral eclipses.
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9	Gamma	This parameter represents the distance from the center of the Earth's shadow cone axis to the center of the Moon in units of Earth's equatorial radii at the instant of Maximum Eclipse. Positive values indicate eclipses where the Moon passes north of the shadow axis. Negative values indicate eclipses where the Moon passes south of the shadow axis.										
10	Umb. Mag.	Umbral Magnitude is the fraction of the Moon's diameter immersed in the umbra at the instant of Maximum Eclipse. (equal to the distance measured from the edge of the umbral shadow to the edge of the Moon deepest in the umbra). Negative values can only occur if the moon never touches the umbra during the eclipse.										
11	Greatest in Zenith Lat.	Latitude on the Earth where the Moon appears in the zenith at instant of Maximum Eclipse										
12	Greatest in Zenith Lon.	Longitude on the Earth where the Moon appears in the zenith at instant of Maximum Eclipse										
13	Hebrew Date on the Creation Calendar	This is the Hebrew Calendar Day, Hebrew Calendar Month and Gregorian/Julian Year for the instant of Maximum Eclipse based upon its occurrence with respect to the time of sunset at Jerusalem, Israel. If the Maximum Eclipse occurs after sunset at Jerusalem, it is displayed on the following Hebrew Day on the Creation Calendar at www.torahcalendar.com .										

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Lunar Eclipse Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT) of Maximum Eclipse		Astronomical Julian Date (UT)		Date and Time (TDT) of Maximum Eclipse		Lunar Eclipse Type	Delta T (seconds)	Gamma	Umb. Mag.	Greatest in Zenith		Hebrew Date on the Creation Calendar							
		Month	Day	Hour	Minute	Year	Month					Day	Hour	Minute	Year	Month	Day	Year			
1	00008	Jan	03	3973	B. C. E.	19:00:15	0270287.2918423	-3973	Jan	05	01:01:13	108057	LTU	-0.3069	1.3119	22.8N	76.6E	14	09	3973	B. C. E.
	00009	Jun	28	3973	B. C. E.	17:28:55	0270464.2284174	-3973	Jun	29	23:29:52	108057	LTU	0.4049	1.0763	21.2S	94.8E	14	03	3973	B. C. E.
	00010	Dec	23	3973	B. C. E.	11:08:19	0270641.9641116	-3973	Dec	24	17:09:15	108057	LTU	0.3817	1.1722	21.8N	166.5W	14	09	3973	B. C. E.
	00011	Jun	17	3972	B. C. E.	19:12:41	0270818.3004794	-3972	Jun	19	01:13:02	108019	LTU	-0.3515	1.1905	19.5S	68.4E	14	02	3972	B. C. E.
2	00025	Feb	14	3966	B. C. E.	07:51:04	0272885.8271241	-3966	Feb	15	13:47:36	107791	LTU	0.4455	1.0112	22.1N	112.6W	13	11	3966	B. C. E.
	00026	Aug	10	3966	B. C. E.	19:54:18	0273063.3293790	-3966	Aug	12	01:50:48	107791	LTU	-0.4196	1.0856	23.5S	61.8E	15	04	3966	B. C. E.
	00027	Feb	03	3965	B. C. E.	14:28:53	0273240.1033949	-3965	Feb	04	20:24:48	107753	LTU	-0.3169	1.2720	23.0N	147.1E	12	10	3965	B. C. E.
	00028	Jul	30	3965	B. C. E.	03:50:13	0273417.6598711	-3965	Jul	31	09:46:04	107753	LTU	0.3174	1.2471	23.7S	58.3W	15	04	3965	B. C. E.
3	00075	Dec	14	3945	B. C. E.	06:33:17	0280859.7731125	-3945	Dec	15	12:16:28	106993	LTU	0.2906	1.3066	19.6N	98.3W	14	09	3945	B. C. E.
	00076	Jun	08	3944	B. C. E.	10:29:18	0281035.9370179	-3944	Jun	09	16:11:55	106955	LTU	-0.3109	1.3018	17.0S	160.5W	13	02	3944	B. C. E.
	00077	Dec	03	3944	B. C. E.	10:49:45	0281213.9512128	-3944	Dec	04	16:32:19	106955	LTU	-0.4216	1.0395	15.8N	162.6W	14	08	3944	B. C. E.
	00078	May	29	3943	B. C. E.	02:41:10	0281390.6119198	-3943	May	30	08:23:07	106917	LTU	0.4309	1.0963	13.0S	42.8W	14	02	3943	B. C. E.
4	00117	Dec	25	3927	B. C. E.	14:51:03	0287445.1187836	-3927	Dec	26	20:22:53	106312	LTU	0.3068	1.2767	22.1N	138.0E	15	09	3927	B. C. E.
	00118	Jun	19	3926	B. C. E.	18:05:24	0287621.2537503	-3926	Jun	20	23:36:40	106274	LTU	-0.3726	1.1889	20.0S	85.3E	14	03	3926	B. C. E.
	00119	Dec	14	3926	B. C. E.	18:51:06	0287799.2854870	-3926	Dec	16	00:22:19	106274	LTU	-0.4107	1.0598	18.9N	77.4E	14	09	3926	B. C. E.
	00120	Jun	08	3925	B. C. E.	10:22:31	0287975.9323055	-3925	Jun	09	15:53:07	106236	LTU	0.3650	1.2165	16.4S	158.7W	13	02	3925	B. C. E.
5	00159	Jan	04	3908	B. C. E.	22:59:02	0294030.4576605	-3908	Jan	06	04:18:55	105595	LTU	0.3311	1.2320	23.7N	17.0E	15	09	3908	B. C. E.
	00160	Jun	30	3908	B. C. E.	01:49:11	0294206.5758183	-3908	Jul	01	07:09:07	105595	LTU	-0.4289	1.0856	22.3S	30.3W	13	03	3908	B. C. E.
	00161	Dec	25	3908	B. C. E.	02:42:57	0294384.6131589	-3908	Dec	26	08:02:51	105595	LTU	-0.3920	1.0949	21.4N	39.9W	14	09	3908	B. C. E.
	00162	Jun	19	3907	B. C. E.	18:09:22	0294561.2565023	-3907	Jun	20	23:28:39	105557	LTU	0.3032	1.3288	19.4S	84.5E	14	03	3907	B. C. E.
6	00298	Nov	25	3851	B. C. E.	05:38:08	0315173.7348190	-3851	Nov	26	10:22:28	103459	LTU	0.4387	1.0655	14.0N	85.0W	13	08	3851	B. C. E.
	00299	May	21	3850	B. C. E.	08:34:18	0315350.8571554	-3850	May	22	13:18:01	103422	LTU	-0.3295	1.2192	11.2S	130.7W	14	02	3850	B. C. E.
	00300	Nov	14	3850	B. C. E.	21:19:29	0315528.3885265	-3850	Nov	16	02:03:10	103422	LTU	-0.2256	1.4546	9.4N	40.0E	14	08	3850	B. C. E.
	00301	May	09	3849	B. C. E.	10:31:44	0315704.9387019	-3849	May	10	15:14:51	103385	LTU	0.4391	1.0326	6.5S	158.8W	13	01	3849	B. C. E.
7	00341	Dec	05	3833	B. C. E.	14:33:33	0321759.1066262	-3833	Dec	06	19:06:43	102790	LTU	0.4410	1.0628	17.6N	141.2E	13	08	3833	B. C. E.
	00342	May	31	3832	B. C. E.	15:02:28	0321936.1267083	-3832	Jun	01	19:35:01	102753	LTU	-0.4133	1.0648	14.9S	131.5E	13	02	3832	B. C. E.
	00343	Nov	25	3832	B. C. E.	06:18:48	0322113.7630572	-3832	Nov	26	10:51:20	102753	LTU	-0.2273	1.4514	13.5N	95.1W	14	08	3832	B. C. E.
	00344	May	20	3831	B. C. E.	17:14:37	0322290.2184882	-3831	May	21	21:46:34	102715	LTU	0.3560	1.1860	10.5S	99.4E	14	02	3831	B. C. E.
8	01171	Mar	26	3503	B. C. E.	13:54:07	0442037.0792446	-3503	Mar	27	15:09:14	090906	LTU	0.3658	1.2056	9.4N	155.4E	13	12	3503	B. C. E.
	01172	Sep	19	3503	B. C. E.	23:45:08	0442214.4896713	-3503	Sep	21	01:00:13	090906	LTU	-0.2585	1.3348	12.1S	5.5E	14	06	3503	B. C. E.
	01173	Mar	16	3502	B. C. E.	06:32:24	0442391.7724943	-3502	Mar	17	07:46:54	090871	LTU	-0.3760	1.1963	12.4N	93.7W	14	12	3502	B. C. E.
	01174	Sep	08	3502	B. C. E.	22:57:10	0442568.4563637	-3502	Sep	10	00:11:42	090871	LTU	0.4301	1.0233	15.4S	17.3E	14	05	3502	B. C. E.
9	01215	Apr	05	3485	B. C. E.	21:21:39	0448622.3900328	-3485	Apr	06	22:26:19	090279	LTU	0.4381	1.0750	5.3N	42.5E	13	13	3485	B. C. E.
	01216	Sep	30	3485	B. C. E.	07:48:09	0448799.8251013	-3485	Oct	01	08:52:48	090280	LTU	-0.2691	1.3138	7.9S	115.6W	14	06	3485	B. C. E.
	01217	Mar	26	3484	B. C. E.	14:12:49	0448977.0922347	-3484	Mar	27	15:16:54	090245	LTU	-0.3072	1.3233	8.6N	150.4E	13	12	3484	B. C. E.
	01218	Sep	19	3484	B. C. E.	06:56:25	0449153.7891810	-3484	Sep	20	08:00:32	090245	LTU	0.4141	1.0522	11.7S	102.6W	13	06	3484	B. C. E.
10	01285	Mar	17	3456	B. C. E.	13:24:55	0459195.0589741	-3456	Mar	18	14:12:49	089275	LTU	-0.3412	1.2391	11.7N	163.1E	14	12	3456	B. C. E.
	01286	Sep	09	3456	B. C. E.	16:37:39	0459371.1928173	-3456	Sep	10	17:25:36	089275	LTU	0.3691	1.1708	14.9S	112.2E	13	05	3456	B. C. E.
	01287	Mar	06	3455	B. C. E.	22:19:47	0459549.4304044	-3455	Mar	07	23:07:06	089240	LTU	0.4360	1.0368	16.0N	30.2E	15	11	3455	B. C. E.
	01288	Aug	30	3455	B. C. E.	05:49:36	0459725.7427794	-3455	Aug	31	06:36:57	089240	LTU	-0.3360	1.2553	18.8S	85.8W	13	05	3455	B. C. E.
11	01327	Mar	28	3438	B. C. E.	20:46:06	0465780.3653416	-3438	Mar	29	21:23:37	088653	LTU	-0.4120	1.1085	7.7N	51.9E	15	12	3438	B. C. E.
	01328	Sep	21	3438	B. C. E.	01:10:18	0465956.5488228	-3438	Sep	22	01:47:53	088653	LTU	0.3762	1.1580	11.1S	16.1W	13	06	3438	B. C. E.
	01329	Mar	17	3437	B. C. E.	05:17:53	0466134.7207546	-3437	Mar	18	05:54:50	088619	LTU	0.3666	1.1639	12.3N	74.9W	14	12	3437	B. C. E.
	01330	Sep	09	3437	B. C. E.	14:31:14	0466311.1050199	-3437	Sep	10	15:08:14	088619	LTU	-0.3214	1.2815	15.5S	144.0E	13	05	3437	B. C. E.
12	01351	Feb	25	3427	B. C. E.	02:36:03	0469766.6083674	-3427	Feb	26	03:07:18	088275	LTU	0.3368	1.2018	18.6N	33.6W	14	11	3427	B. C. E.
	01352	Aug	21	3427	B. C. E.	05:50:58	0469943.7437251	-3427	Aug	22	06:22:12	088275	LTU	-0.3279	1.2692	20.9S	86.5W	14	05	3427	B. C. E.
	01353	Feb	14	3426	B. C. E.	04:35:51	0470120.6915644	-3426	Feb	15	05:06:34	088241	LTU	-0.4117	1.0791	20.6N	64.0W	13	11	3426	B. C. E.
	01354	Aug	10	3426	B. C. E.	18:30:32	0470298.2712004	-3426	Aug	11	19:01:11	088241	LTU	0.3975	1.1190	22.2S	82.7E	15	04	3426	B. C. E.
13	01376	Jan	24	3416	B. C. E.	12:10:42	0473753.0074339	-3416	Jan	25	12:35:41	087897	LTU	-0.2605	1.3882	23.5N	178.9W	13	10	3416	B. C. E.
	01377	Jul	20	3416	B. C. E.	20:02:09	0473930.3348295	-3416	Jul	21	20:27:05	087897	LTU	0.3270	1.2204	23.8S	58.1E	15	04	3416	B. C. E.
	01378	Jan	14	3415	B. C. E.	03:39:29	0474107.6524196	-3415	Jan	15	04:03:52	087863	LTU	0.4442	1.0631	24.5N	52.2W	14	10	3415	B. C. E.
	01379	Jul	09	3415	B. C. E.	20:06:06	0474284.3375677	-3415	Jul	10	20:30:30	087863</									

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Lunar Eclipse Tetrad	Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT)		Astronomical Julian Date (UT)		(TDT) Date and Time of Maximum Eclipse		Delta T (seconds)	Lunar Eclipse Type	Gamma	Umb. Mag.	Greatest in Zenith		Hebrew Date on the Creation Calendar			
			Month	Day	Hour	Minute	Year	Month					Day	Hour	Minute	Year	Month	Day
22	1	01760	Dec 07	3247	B. C. E.	21:54:23	0535797.4127625	-3247	Dec 08	20:44:23	0822202	LTU	-0.3908	1.1381	18.3N	31.0E	15 09 3247	B. C. E.
	2	01761	Jun 02	3246	B. C. E.	02:55:10	0535973.6216482	-3246	Jun 03	01:44:40	0821688	LTU	0.3493	1.2168	15.9S	46.6W	13 02 3246	B. C. E.
	3	01762	Nov 27	3246	B. C. E.	06:29:12	0536151.7702721	-3246	Nov 28	05:18:37	0821688	LTU	0.3165	1.2450	15.7N	98.3W	14 08 3246	B. C. E.
	4	01763	May 21	3245	B. C. E.	16:33:04	0536328.1896273	-3245	May 22	15:22:00	0821335	LTU	-0.4216	1.1080	13.2S	109.2E	14 02 3245	B. C. E.
23	1	01802	Dec 18	3229	B. C. E.	06:33:08	0542382.7730140	-3229	Dec 19	05:13:14	0816707	LTU	-0.4015	1.1182	20.9N	98.0W	14 09 3229	B. C. E.
	2	01803	Jun 12	3228	B. C. E.	10:08:09	0542558.9223284	-3228	Jun 13	08:47:45	0815744	LTU	0.4216	1.0849	18.8S	155.0W	13 02 3228	B. C. E.
	3	01804	Dec 07	3228	B. C. E.	14:51:22	0542737.1190077	-3228	Dec 08	13:30:54	0815744	LTU	0.3116	1.2533	19.0N	136.5E	14 08 3228	B. C. E.
	4	01805	Jun 02	3227	B. C. E.	00:02:15	0542913.5015654	-3227	Jun 02	22:41:17	0815411	LTU	-0.3460	1.2471	16.6S	3.6W	14 02 3227	B. C. E.
24	1	02630	Apr 08	2899	B. C. E.	05:56:44	0662660.7477268	-2899	Apr 09	01:41:34	0710191	LTU	-0.3442	1.2492	2.2N	87.2W	14 13 2899	B. C. E.
	2	02631	Oct 01	2899	B. C. E.	14:47:03	0662837.1160025	-2899	Oct 02	10:31:57	0710192	LTU	0.2853	1.3035	5.6S	138.8E	12 06 2899	B. C. E.
	3	02632	Mar 28	2898	B. C. E.	19:24:29	0663015.3086697	-2898	Mar 29	15:08:48	0710161	LTU	0.4265	1.0739	7.0N	72.2E	15 12 2898	B. C. E.
	4	02633	Sep 20	2898	B. C. E.	23:38:08	0663191.4848203	-2898	Sep 21	19:22:31	0710161	LTU	-0.4218	1.0827	10.5S	6.7E	13 06 2898	B. C. E.
25	1	02673	Apr 18	2881	B. C. E.	13:25:24	0669246.0593010	-2881	Apr 19	09:01:01	0705339	LTU	-0.4171	1.1149	2.1S	159.4E	14 01 2881	B. C. E.
	2	02674	Oct 11	2881	B. C. E.	23:11:39	0669422.4664243	-2881	Oct 12	18:47:20	0705339	LTU	0.2872	1.3006	1.1S	12.1E	13 07 2881	B. C. E.
	3	02675	Apr 08	2880	B. C. E.	02:33:12	0669960.6063856	-2880	Apr 08	22:08:19	0705059	LTU	0.3544	1.2051	2.7N	36.1W	15 13 2880	B. C. E.
	4	02676	Oct 01	2880	B. C. E.	08:19:56	0669776.8471817	-2880	Oct 02	03:55:07	0705059	LTU	-0.4145	1.0964	2.5S	124.2W	13 06 2880	B. C. E.
26	1	02740	Mar 29	2852	B. C. E.	11:14:59	0679817.9687405	-2852	Mar 30	06:35:53	0696554	LTU	0.3726	1.1410	6.3N	165.5W	14 12 2852	B. C. E.
	2	02741	Sep 22	2852	B. C. E.	07:11:54	0679994.7999333	-2852	Sep 23	02:32:48	0696554	LTU	-0.2724	1.3740	9.5S	106.8W	14 06 2852	B. C. E.
	3	02742	Mar 18	2851	B. C. E.	11:44:12	0680171.9890260	-2851	Mar 19	07:04:36	0696263	LTU	-0.3843	1.1207	9.8N	172.1W	13 12 2851	B. C. E.
	4	02743	Sep 11	2851	B. C. E.	22:09:05	0680349.4229756	-2851	Sep 12	17:29:27	0696264	LTU	0.4171	1.0955	12.8S	28.8E	15 06 2851	B. C. E.
27	1	02764	Feb 26	2841	B. C. E.	14:28:00	0683804.1027796	-2841	Feb 27	09:43:22	0693200	LTU	-0.2907	1.3211	16.5N	148.1E	13 11 2841	B. C. E.
	2	02765	Aug 22	2841	B. C. E.	04:35:09	0683981.6910787	-2841	Aug 22	23:50:27	0693200	LTU	0.2850	1.3052	19.0S	67.8W	14 05 2841	B. C. E.
	3	02766	Feb 15	2840	B. C. E.	03:46:34	0684158.6573328	-2840	Feb 15	23:01:24	0692900	LTU	0.4498	1.0509	20.1N	51.4W	13 11 2840	B. C. E.
	4	02767	Aug 11	2840	B. C. E.	05:55:12	0684335.7466621	-2840	Aug 12	01:10:02	0692900	LTU	-0.4389	1.0027	18.8S	88.2W	14 05 2840	B. C. E.
28	1	02805	Mar 08	2823	B. C. E.	21:56:32	0690389.4142537	-2823	Mar 09	17:02:49	0687755	LTU	-0.3483	1.2184	13.1N	35.5E	13 12 2823	B. C. E.
	2	02806	Sep 02	2823	B. C. E.	12:25:29	0690567.0176927	-2823	Sep 03	07:31:42	0687755	LTU	0.3128	1.2511	15.9S	174.9E	14 05 2823	B. C. E.
	3	02807	Feb 26	2822	B. C. E.	11:43:50	0690743.9887704	-2822	Feb 27	06:49:36	0687745	LTU	0.3997	1.1451	17.1N	170.7W	13 11 2822	B. C. E.
	4	02808	Aug 22	2822	B. C. E.	13:19:33	0690921.0552384	-2822	Aug 23	08:25:17	0687745	LTU	-0.4000	1.0781	19.7S	161.2E	13 05 2822	B. C. E.
29	1	02846	Mar 19	2805	B. C. E.	05:20:08	0696974.7223148	-2805	Mar 20	00:17:22	0682232	LTU	-0.4108	1.1068	9.2N	76.1E	13 12 2805	B. C. E.
	2	02847	Sep 12	2805	B. C. E.	20:22:54	0697152.3492310	-2805	Sep 13	15:20:04	0682232	LTU	0.3337	1.2099	12.2S	55.4E	15 06 2805	B. C. E.
	3	02848	Mar 08	2804	B. C. E.	19:33:37	0697329.3150134	-2804	Mar 09	14:30:20	0682202	LTU	0.3431	1.2512	13.6N	71.4E	14 12 2804	B. C. E.
	4	02849	Sep 01	2804	B. C. E.	20:54:13	0697506.3709862	-2804	Sep 02	15:50:55	0682202	LTU	-0.3699	1.1314	16.6S	47.8E	14 05 2804	B. C. E.
30	1	02913	Feb 27	2776	B. C. E.	20:18:11	0707547.3459634	-2776	Feb 28	15:00:53	0673633	LTU	0.2956	1.3349	16.3N	60.7E	15 11 2776	B. C. E.
	2	02914	Aug 23	2776	B. C. E.	01:20:15	0707723.5557261	-2776	Aug 23	20:03:00	0673633	LTU	-0.4334	1.0373	19.4S	18.8W	13 05 2776	B. C. E.
	3	02915	Feb 17	2775	B. C. E.	09:29:13	0707901.8952923	-2775	Feb 18	04:11:25	0673333	LTU	-0.4562	1.0150	18.6N	137.3W	14 11 2775	B. C. E.
	4	02916	Aug 12	2775	B. C. E.	10:42:40	0708077.9462972	-2775	Aug 13	05:24:55	0673333	LTU	0.3084	1.2962	21.1S	160.2W	13 05 2775	B. C. E.
31	1	02979	Feb 07	2747	B. C. E.	18:28:30	0718119.2697930	-2747	Feb 08	12:56:48	0664949	LTU	-0.2999	1.2682	20.9N	87.7E	15 11 2747	B. C. E.
	2	02980	Aug 03	2747	B. C. E.	09:58:34	0718295.9156744	-2747	Aug 04	04:26:53	0664949	LTU	0.3661	1.2090	22.5S	149.6W	14 04 2747	B. C. E.
	3	02981	Jan 27	2746	B. C. E.	18:16:33	0718473.2614947	-2746	Jan 28	12:44:23	0664649	LTU	0.4210	1.0444	23.4N	90.0E	14 10 2746	B. C. E.
	4	02982	Jul 24	2746	B. C. E.	01:49:13	0718650.5758417	-2746	Jul 24	20:17:00	0664649	LTU	-0.3522	1.2234	24.2S	28.1W	15 04 2746	B. C. E.
32	1	03019	Feb 19	2729	B. C. E.	01:38:21	0724704.5682971	-2729	Feb 19	19:57:45	0659655	LTU	-0.3532	1.1715	18.3N	19.5W	14 11 2729	B. C. E.
	2	03020	Aug 13	2729	B. C. E.	18:14:47	0724881.2602711	-2729	Aug 14	12:34:12	0659655	LTU	0.4030	1.1396	20.6S	87.0E	14 05 2729	B. C. E.
	3	03021	Feb 07	2728	B. C. E.	01:36:25	0725058.5669617	-2728	Feb 07	19:55:23	0659636	LTU	0.3757	1.1302	21.6N	19.2W	14 11 2728	B. C. E.
	4	03022	Aug 03	2728	B. C. E.	09:45:40	0725235.9067131	-2728	Aug 04	04:04:34	0659636	LTU	-0.3079	1.3017	23.1S	146.4W	14 04 2728	B. C. E.
33	1	03043	Jan 18	2718	B. C. E.	03:07:37	0728690.6302940	-2718	Jan 18	21:21:40	0656414	LTU	0.3327	1.2373	24.1N	43.6E	13 10 2718	B. C. E.
	2	03044	Jul 14	2718	B. C. E.	17:22:17	0728868.2238041	-2718	Jul 15	11:36:16	0656414	LTU	-0.3246	1.2395	24.3S	97.9E	15 04 2718	B. C. E.
	3	03045	Jan 07	2717	B. C. E.	15:48:56	0729045.1589778	-2717	Jan 08	10:02:28	0656111	LTU	-0.3839	1.1659	23.6N	124.8E	14 10 2717	B. C. E.
	4	03046	Jul 02	2717	B. C. E.	19:21:20	0729222.3064799	-2717	Jul 03	13:34:50	0656111	LTU	0.4294	1.0327	23.0S	67.4E	14 03 2717	B. C. E.
34	1	03059	Mar 01	2711	B. C. E.	08:37:16	0731289.8592164	-2711	Mar 02	02:47:51	0654335	LTU	-0.4144	1.0602	15.2N	124.4W	14 11 2711	B. C. E.
	2	03060	Aug 25	2711	B. C. E.	02:39:41	0731466.6108863	-2711	Aug 25	20:50:16	0654335	LTU	0.4324	1.0840	18.0S	38.9W	14 05 2711	B. C. E.
	3	03061	Feb 18	2710	B. C. E.	08:47:12	0731643.8661092	-2710	Feb 19	02:57:18	0654055	LTU	0.3228	1.2299	19.0N	126.6E	13 11 2710	B. C. E.
	4	03062	Aug 14	2710	B. C. E.	17:50:33	0731821.2434388	-2710	Aug 15	12:00:36	0654055	LTU	-0.2717	1.3653	21.2S	93.1E	15 05 2710	B. C. E.
35	1	03083	Jan 28	2700	B. C. E.	11:08:36	0735275.9643050	-2700	Jan 29	05:13:49	0651111	LTU	0.3634	1.1844	23.1N	162.8W	13 10 2700	B. C. E.
	2	03084	Jul 25	2700	B. C. E.	00:37:31	0735453.5260492	-2700	Jul 25	18:42:40	0651111	LTU	-0.3817	1.1315	24.1S	10.0W	15 04 2700	B. C. E.
	3	03085	Jan 18	2699	B. C. E.	00												

7000 Year Canon of Total Lunar Eclipse Tetrads

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Lunar Eclipse Tetrad	Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT)		Astronomical Julian Date (UT)		Date and Time (TDT) of Maximum Eclipse		Delta T (seconds)	Lunar Eclipse Type	Gamma	Umb. Mag.	Greatest in Zenith		Hebrew Date on the Creation Calendar		
			Date	Time (UT)	Date	Time (UT)	Date	Time (TDT)					Lat.	Lon.	Day	Month	Year
43	1	04115	Apr 30	2277 B.C.E.	17:57:24	0889869.2481980	-2277	May 01	08:45:45	053303	LTU	0.4443	1.0213	7.8S	90.0E	15 01 2277	B.C.E.
	2	04116	Oct 24	2277 B.C.E.	08:31:16	0890045.8550493	-2277	Oct 24	23:19:40	053303	LTU	-0.1979	1.5061	5.3N	129.0W	13 07 2277	B.C.E.
	3	04117	Apr 19	2276 B.C.E.	19:38:44	0890223.3185655	-2276	Apr 20	10:26:40	053276	LTU	-0.3267	1.2243	4.2S	65.6E	14 01 2276	B.C.E.
	4	04118	Oct 14	2276 B.C.E.	00:11:41	0890400.5081080	-2276	Oct 14	14:59:36	053276	LTU	0.4681	1.0107	1.5N	3.9W	14 07 2276	B.C.E.
44	1	04254	Mar 21	2219 B.C.E.	11:06:39	0911012.9629552	-2219	Mar 22	01:29:38	051779	LTU	0.2967	1.3410	7.5N	163.0W	14 12 2219	B.C.E.
	2	04255	Sep 14	2219 B.C.E.	02:04:12	0911189.5862480	-2219	Sep 14	16:27:12	051779	LTU	-0.3601	1.1540	11.1S	30.2W	13 06 2219	B.C.E.
	3	04256	Mar 11	2218 B.C.E.	03:18:04	0911367.6375463	-2218	Mar 11	17:40:36	051753	LTU	-0.4400	1.0642	10.7N	45.3W	15 12 2218	B.C.E.
	4	04257	Sep 03	2218 B.C.E.	06:11:19	0911543.7578603	-2218	Sep 03	20:33:54	051753	LTU	0.3619	1.1768	14.3S	92.0W	13 06 2218	B.C.E.
45	1	04297	Mar 31	2201 B.C.E.	18:50:01	0917598.2847357	-2201	Apr 01	09:05:12	051311	LTU	0.3618	1.2224	3.4N	80.1E	14 13 2201	B.C.E.
	2	04298	Sep 24	2201 B.C.E.	09:57:18	0917774.9147910	-2201	Sep 25	00:12:30	051311	LTU	-0.3795	1.1178	6.9S	148.9W	13 06 2201	B.C.E.
	3	04299	Mar 21	2200 B.C.E.	10:57:13	0917952.9564050	-2200	Mar 22	01:11:57	051285	LTU	-0.3803	1.1735	6.8N	161.0W	14 12 2200	B.C.E.
	4	04300	Sep 13	2200 B.C.E.	14:20:42	0918129.0977109	-2200	Sep 14	04:35:29	051285	LTU	0.3380	1.2208	10.5S	145.4E	12 06 2200	B.C.E.
46	1	04338	Apr 12	2183 B.C.E.	02:27:07	0924183.6021668	-2183	Apr 12	16:34:33	050846	LTU	0.4320	1.0941	0.8S	35.3W	14 01 2183	B.C.E.
	2	04339	Oct 05	2183 B.C.E.	17:59:23	0924360.2495693	-2183	Oct 06	08:06:50	050846	LTU	-0.3922	1.0943	2.5S	90.0E	14 07 2183	B.C.E.
	3	04340	Apr 01	2182 B.C.E.	18:28:20	0924538.2696733	-2182	Apr 02	08:35:18	050820	LTU	-0.3149	1.2932	2.7N	85.2E	15 13 2182	B.C.E.
	4	04341	Sep 24	2182 B.C.E.	22:39:36	0924714.4441692	-2182	Sep 25	12:46:38	050820	LTU	0.3210	1.2522	6.4S	20.2E	13 06 2182	B.C.E.
47	1	04364	Mar 12	2172 B.C.E.	02:06:31	0928170.5878532	-2172	Mar 12	16:09:11	050562	LTU	-0.3056	1.2737	10.2N	27.5W	15 12 2172	B.C.E.
	2	04365	Sep 04	2172 B.C.E.	09:49:24	0928346.9093037	-2172	Sep 04	23:52:07	050562	LTU	0.3574	1.2178	13.6S	146.5W	13 06 2172	B.C.E.
	3	04366	Mar 01	2171 B.C.E.	03:44:39	0928524.6560042	-2171	Mar 01	17:46:55	050536	LTU	0.4443	1.0028	14.7N	51.2W	14 12 2171	B.C.E.
	4	04367	Aug 25	2171 B.C.E.	02:03:52	0928701.5860215	-2171	Aug 25	16:06:08	050536	LTU	-0.3344	1.2624	17.6S	29.9W	14 05 2171	B.C.E.
48	1	04405	Mar 23	2154 B.C.E.	09:06:42	0934755.8796476	-2154	Mar 23	23:01:40	050100	LTU	-0.3745	1.1471	6.1N	133.4W	14 12 2154	B.C.E.
	2	04406	Sep 15	2154 B.C.E.	18:24:23	0934932.2669319	-2154	Sep 16	08:19:24	050100	LTU	0.3761	1.1829	9.7S	84.4E	14 06 2154	B.C.E.
	3	04407	Mar 11	2153 B.C.E.	10:36:38	0935109.9421075	-2153	Mar 12	00:31:12	050074	LTU	0.3798	1.1226	10.9N	154.8W	14 12 2153	B.C.E.
	4	04408	Sep 04	2153 B.C.E.	10:29:43	0935286.9373006	-2153	Sep 05	00:24:16	050074	LTU	-0.3084	1.2080	14.2S	156.4W	14 06 2153	B.C.E.
49	1	04429	Feb 19	2143 B.C.E.	08:10:14	0938741.8404401	-2143	Feb 19	22:00:34	049818	LTU	0.3468	1.1984	17.5N	117.4W	13 11 2143	B.C.E.
	2	04430	Aug 15	2143 B.C.E.	22:19:32	0938919.4302346	-2143	Aug 16	12:09:48	049818	LTU	-0.3364	1.2306	20.0S	26.0E	15 05 2143	B.C.E.
	3	04431	Feb 08	2142 B.C.E.	17:09:59	0939096.2152684	-2142	Feb 09	06:59:53	049792	LTU	-0.4008	1.1253	19.6N	107.3E	13 11 2142	B.C.E.
	4	04432	Aug 05	2142 B.C.E.	03:53:00	0939273.6617998	-2142	Aug 05	17:42:50	049792	LTU	0.4126	1.0668	21.5S	58.1W	14 05 2142	B.C.E.
50	1	04446	Apr 02	2136 B.C.E.	15:58:56	0941341.1659206	-2136	Apr 03	05:46:14	049640	LTU	-0.4490	1.0102	1.9N	122.4E	15 13 2136	B.C.E.
	2	04447	Sep 26	2136 B.C.E.	03:06:58	0941517.6298418	-2136	Sep 26	16:54:19	049640	LTU	0.3887	1.1590	5.4S	46.7W	13 06 2136	B.C.E.
	3	04448	Mar 22	2135 B.C.E.	17:19:59	0941695.2222120	-2135	Mar 23	07:06:53	049614	LTU	0.3081	1.2557	6.8N	103.4E	14 12 2135	B.C.E.
	4	04449	Sep 15	2135 B.C.E.	19:03:10	0941872.2938660	-2135	Sep 16	08:50:03	049614	LTU	-0.2892	1.3413	10.2S	74.9E	14 06 2135	B.C.E.
51	1	04454	Jan 19	2132 B.C.E.	07:33:39	0942728.8150386	-2132	Jan 19	21:19:17	049537	LTU	-0.2482	1.4218	23.1N	109.9W	14 10 2132	B.C.E.
	2	04455	Jul 14	2132 B.C.E.	23:43:16	0942905.4883773	-2132	Jul 15	13:28:54	049537	LTU	0.3478	1.1845	23.6S	3.1E	14 04 2132	B.C.E.
	3	04456	Jan 08	2131 B.C.E.	23:12:42	0943083.4671505	-2131	Jan 09	12:57:52	049512	LTU	0.4444	1.0504	24.4N	14.2E	14 10 2131	B.C.E.
	4	04457	Jul 04	2131 B.C.E.	03:46:07	0943259.6570310	-2131	Jul 04	17:31:22	049512	LTU	-0.4153	1.0840	24.1S	58.5W	13 03 2131	B.C.E.
52	1	04470	Mar 01	2125 B.C.E.	15:30:13	0945327.1459822	-2125	Mar 02	05:12:54	049359	LTU	0.4004	1.1033	14.2N	132.4E	14 12 2125	B.C.E.
	2	04471	Aug 26	2125 B.C.E.	06:13:34	0945504.7594161	-2125	Aug 26	19:56:11	049359	LTU	-0.3724	1.1612	17.0S	92.3W	14 05 2125	B.C.E.
	3	04472	Jan 19	2124 B.C.E.	01:06:16	0945681.5460225	-2124	Jan 19	14:48:32	049334	LTU	-0.3580	1.1071	16.9N	11.6W	13 11 2124	B.C.E.
	4	04473	Aug 15	2124 B.C.E.	11:10:53	0945858.9658867	-2124	Aug 16	00:53:05	049334	LTU	0.3647	1.1517	19.4S	167.1W	14 05 2124	B.C.E.
53	1	04494	Jan 30	2114 B.C.E.	15:59:31	0949314.1663306	-2114	Jan 31	05:37:31	049080	LTU	-0.2769	1.3706	21.5N	124.5E	14 11 2114	B.C.E.
	2	04495	Jul 26	2114 B.C.E.	06:41:16	0949490.7786575	-2114	Jul 26	20:19:17	049080	LTU	0.4104	1.0689	22.8S	100.6W	13 04 2114	B.C.E.
	3	04496	Jan 20	2113 B.C.E.	07:41:11	0949668.8202665	-2113	Jan 20	21:18:45	049055	LTU	0.4246	1.0868	23.7N	111.7W	14 10 2113	B.C.E.
	4	04497	Jul 14	2113 B.C.E.	11:01:05	0949844.9590877	-2113	Jul 15	00:38:42	049055	LTU	-0.3493	1.2055	24.2S	166.4W	13 04 2113	B.C.E.
54	1	04559	Jan 10	2085 B.C.E.	23:22:30	0959886.4739611	-2085	Jan 11	12:48:16	048348	LTU	0.2752	1.3232	24.1N	12.0E	15 10 2085	B.C.E.
	2	04560	Jul 05	2085 B.C.E.	06:14:11	0960062.7598481	-2085	Jul 05	19:40:00	048348	LTU	-0.3064	1.3179	24.1S	95.3W	13 04 2085	B.C.E.
	3	04561	Dec 30	2085 B.C.E.	00:47:52	0960240.5332460	-2085	Dec 30	14:13:40	048348	LTU	-0.4329	1.0144	23.3N	10.7E	14 10 2085	B.C.E.
	4	04562	Jun 24	2084 B.C.E.	23:13:41	0960417.4678302	-2084	Jun 25	12:39:03	048323	LTU	0.4240	1.1073	22.5S	9.2W	14 03 2084	B.C.E.
55	1	04600	Jan 21	2067 B.C.E.	07:18:02	0966471.8041856	-2067	Jan 21	20:36:15	047896	LTU	0.3014	1.2753	23.3N	105.7W	14 10 2067	B.C.E.
	2	04601	Jul 16	2067 B.C.E.	14:01:10	0966648.0841408	-2067	Jul 17	03:19:27	047896	LTU	-0.3645	1.2109	24.2S	148.8E	13 04 2067	B.C.E.
	3	04602	Jan 10	2066 B.C.E.	08:34:13	0966825.8570923	-2066	Jan 10	21:52:03	047871	LTU	-0.4117	1.0546	23.5N	126.0W	14 10 2066	B.C.E.
	4	04603	Jul 06	2066 B.C.E.	06:56:17	0967002.7890849	-2066	Jul 06	20:14:07	047871	LTU	0.3607	1.2218	23.5S	105.8W	14 04 2066	B.C.E.
56	1	04641	Feb 01	2049 B.C.E.	15:04:14	0973057.1279423	-2049	Feb 02	04:14:59	047447	LTU	0.3349	1.2140	21.7N	138.6E	14 11 2049	B.C.E.
	2	04642	Jul 26	2049 B.C.E.	21:55:41	0973233.4136666	-2049	Jul 27	11:06:29	047447	LTU	-0.4168	1.1144	23.4S	31.0E	14 04 2049	B.C.E.
	3	04643	Jan 20	2048 B.C.E.	16:12:18	0973411.1752105	-2048	Jan 21	05:22:40	047422	LTU	-0.3839	1.1069	22.8N	120.5E	14 10 2048	B.C.E.
	4	04644	Jul 16	2048 B.C.E.	14:44:32	0973588.1142538	-2048	Jul 17	03:54:53	047422	LTU	0.3022	1.3273	23.5S	137.9E	14 04 2048	B.C.E.
57	1	04684	Feb 11	2031 B.C.E.	22:37:43	0979642.4428641	-2031	Feb 12	11:41:02	047000	LTU	0.3779	1.1354	19.3N	25.7E	15 11 2031	

7000 Year Canon of Total Lunar Eclipse Tetrads

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Lunar Eclipse Tetrad	Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT)		Astronomical Julian Date (UT)		Date and Time (TDT) of Maximum Eclipse		Lunar Eclipse Type	Delta T (seconds)	Gamma	Umb. Mag.	Greatest in Zenith		Hebrew Date on the Creation Calendar							
			Month	Day	Hour	Minute	Month	Day					Month	Day	Hour	Minute	Day	Month	Year	Day	Month	Year
64	1	05783	Mar	13	1586	B. C. E.	07:55:55	1142207.8304927	-1586	Mar	13	18:06:50	036654	LTU	0.3264	1.2240	8.8N	115.0W	13	12	1586	B. C. E.
	2	05784	Sep	06	1586	B. C. E.	16:41:10	1142385.1952491	-1586	Sep	07	02:52:02	036654	LTU	-0.2950	1.3225	12.2S	110.4E	15	06	1586	B. C. E.
	3	05785	Mar	01	1585	B. C. E.	12:07:39	1142562.0053110	-1585	Mar	01	22:18:13	036632	LTU	-0.4268	1.0610	12.2N	177.5W	13	12	1585	B. C. E.
	4	05786	Aug	26	1585	B. C. E.	03:02:48	1142739.6269460	-1585	Aug	26	13:13:18	036632	LTU	0.4429	1.0254	15.1S	45.1W	14	05	1585	B. C. E.
65	1	05800	Apr	24	1579	B. C. E.	13:03:35	1144807.0441541	-1579	Apr	24	23:11:56	036503	LTU	-0.4498	1.0275	8.1S	163.6E	14	01	1579	B. C. E.
	2	05801	Oct	17	1579	B. C. E.	19:48:58	1144983.3256736	-1579	Oct	18	05:57:23	036503	LTU	0.3294	1.2544	4.8N	61.0E	13	07	1579	B. C. E.
	3	05802	Apr	13	1578	B. C. E.	18:24:33	1145161.2670516	-1578	Apr	14	04:32:33	036481	LTU	0.3267	1.2289	3.2S	84.7E	15	01	1578	B. C. E.
	4	05803	Oct	07	1578	B. C. E.	10:43:13	1145337.9466782	-1578	Oct	07	20:51:14	036481	LTU	-0.3505	1.2306	0.2S	161.8W	13	07	1578	B. C. E.
66	1	05808	Feb	09	1575	B. C. E.	22:46:27	1146194.4489190	-1575	Feb	10	08:53:24	036416	LTU	-0.2187	1.4718	18.4N	23.2E	14	11	1575	B. C. E.
	2	05809	Aug	06	1575	B. C. E.	01:34:47	1146371.5658212	-1575	Aug	06	11:41:42	036416	LTU	0.2977	1.2709	20.6S	23.2W	14	05	1575	B. C. E.
	3	05810	Jan	30	1574	B. C. E.	14:58:44	1146549.1241238	-1574	Jan	31	01:05:18	036394	LTU	0.4776	1.0008	21.5N	139.8E	13	11	1574	B. C. E.
	4	05811	Jul	26	1574	B. C. E.	02:04:53	1146725.5867236	-1574	Jul	26	12:11:28	036394	LTU	-0.4392	1.0211	23.1S	31.3W	13	04	1574	B. C. E.
67	1	05824	Mar	23	1568	B. C. E.	14:46:45	1148793.1158043	-1568	Mar	24	00:51:12	036265	LTU	0.3950	1.1005	4.8N	141.4E	13	13	1568	B. C. E.
	2	05825	Sep	17	1568	B. C. E.	01:02:43	1148970.5435588	-1568	Sep	17	11:07:07	036265	LTU	-0.3190	1.2757	8.1S	15.5W	14	06	1568	B. C. E.
	3	05826	Mar	12	1567	B. C. E.	19:32:32	1149147.3142570	-1567	Mar	13	05:36:37	036243	LTU	-0.3697	1.1691	8.3N	70.6E	13	12	1567	B. C. E.
	4	05827	Sep	06	1567	B. C. E.	10:52:10	1149324.9528986	-1567	Sep	06	20:56:12	036243	LTU	0.4112	1.1002	11.5S	162.7E	14	06	1567	B. C. E.
68	1	05849	Feb	21	1557	B. C. E.	06:54:32	1152779.7878670	-1557	Feb	21	16:55:01	036028	LTU	-0.2574	1.4033	15.2N	98.8W	13	12	1557	B. C. E.
	2	05850	Aug	16	1557	B. C. E.	08:42:15	1152956.8626781	-1557	Aug	16	18:42:43	036028	LTU	0.3502	1.1726	18.0S	129.8W	14	05	1557	B. C. E.
	3	05851	Aug	09	1556	B. C. E.	23:19:20	1153134.4717627	-1556	Aug	10	09:19:26	036006	LTU	0.4460	1.0600	18.9N	15.1E	14	11	1556	B. C. E.
	4	05852	Aug	05	1556	B. C. E.	09:13:34	1153310.8844257	-1556	Aug	05	19:13:42	036006	LTU	-0.3804	1.1287	21.2S	137.9W	13	05	1556	B. C. E.
69	1	05889	Mar	03	1539	B. C. E.	14:56:52	1159365.1228187	-1539	Mar	04	00:50:54	035641	LTU	-0.3012	1.3252	11.5N	140.2E	13	12	1539	B. C. E.
	2	05890	Aug	27	1539	B. C. E.	15:57:56	1159542.1652328	-1539	Aug	28	01:51:57	035641	LTU	0.3957	1.0871	14.7S	121.2E	13	06	1539	B. C. E.
	3	05891	Feb	21	1538	B. C. E.	07:33:10	1159719.8146964	-1538	Feb	21	17:26:48	035619	LTU	0.4091	1.1288	15.7N	108.3W	14	12	1538	B. C. E.
	4	05892	Aug	16	1538	B. C. E.	16:32:11	1159896.1890116	-1538	Aug	17	02:25:52	035619	LTU	-0.3289	1.2218	18.6S	112.8E	13	05	1538	B. C. E.
70	1	05930	Mar	13	1521	B. C. E.	22:49:44	1165950.4512091	-1521	Mar	14	08:37:22	035257	LTU	-0.3535	1.2316	7.5N	21.2E	14	12	1521	B. C. E.
	2	05931	Sep	06	1521	B. C. E.	23:24:26	1166127.4752952	-1521	Sep	07	09:12:03	035257	LTU	0.4322	1.0183	11.0S	9.3E	14	06	1521	B. C. E.
	3	05932	Mar	03	1520	B. C. E.	15:37:19	1166305.1509134	-1520	Mar	04	01:24:34	035236	LTU	0.3643	1.2118	12.1N	130.2E	15	12	1520	B. C. E.
	4	05933	Aug	27	1520	B. C. E.	00:02:02	1166481.5014135	-1520	Aug	27	09:49:20	035236	LTU	-0.2858	1.3014	15.4S	0.3E	13	05	1520	B. C. E.
71	1	06037	Mar	05	1474	B. C. E.	20:00:34	1183108.3337262	-1474	Mar	06	05:31:36	034264	LTU	0.3466	1.2140	11.3N	64.4E	15	12	1474	B. C. E.
	2	06038	Aug	28	1474	B. C. E.	21:50:44	1183284.4102329	-1474	Aug	29	07:21:50	034264	LTU	-0.4550	1.0288	15.0S	33.2E	13	06	1474	B. C. E.
	3	06039	Feb	23	1473	B. C. E.	01:29:40	1183462.5622712	-1473	Feb	23	11:00:22	034243	LTU	-0.4079	1.0745	14.4N	17.8W	14	12	1473	B. C. E.
	4	06040	Aug	17	1473	B. C. E.	13:12:20	1183639.0502366	-1473	Aug	17	22:43:04	034243	LTU	0.2610	1.4012	17.5S	162.6E	13	05	1473	B. C. E.
72	1	06062	Feb	01	1463	B. C. E.	20:41:10	1187094.3619216	-1463	Feb	02	06:08:25	034034	LTU	-0.3818	1.1155	20.0N	54.3E	14	11	1463	B. C. E.
	2	06063	Jul	29	1463	B. C. E.	05:01:27	1187271.7093404	-1463	Jul	29	14:28:39	034034	LTU	0.3563	1.2163	21.7S	75.2W	14	05	1463	B. C. E.
	3	06064	Jan	22	1462	B. C. E.	00:12:17	1187448.5085355	-1462	Jan	22	09:39:12	034013	LTU	0.3440	1.2064	22.7N	0.8E	13	11	1462	B. C. E.
	4	06065	Jul	18	1462	B. C. E.	16:04:15	1187626.1696231	-1462	Jul	19	01:31:06	034013	LTU	-0.4056	1.1006	23.8S	118.5E	14	04	1462	B. C. E.
73	1	06103	Feb	13	1445	B. C. E.	04:07:33	1193679.6719068	-1445	Feb	13	13:28:34	033660	LTU	-0.4207	1.0467	17.2N	57.1W	13	11	1445	B. C. E.
	2	06104	Aug	08	1445	B. C. E.	12:51:23	1193857.0356808	-1445	Aug	08	22:12:22	033660	LTU	0.4068	1.1208	19.6S	167.7E	14	05	1445	B. C. E.
	3	06105	Feb	01	1444	B. C. E.	08:10:44	1194033.8407833	-1444	Feb	01	17:31:25	033639	LTU	0.3152	1.2623	20.7N	118.1W	13	11	1444	B. C. E.
	4	06106	Jul	28	1444	B. C. E.	23:21:24	1194211.4731953	-1444	Jul	29	08:42:01	033639	LTU	-0.3467	1.2054	22.4S	9.9E	15	05	1444	B. C. E.
74	1	06127	Jan	12	1434	B. C. E.	18:24:31	1197666.2670238	-1434	Jan	13	03:41:44	033432	LTU	0.3488	1.2299	23.8N	86.9E	14	10	1434	B. C. E.
	2	06128	Aug	08	1434	B. C. E.	22:23:05	1197843.4327021	-1434	Aug	09	07:40:17	033432	LTU	-0.3521	1.1752	24.2S	23.2E	14	04	1434	B. C. E.
	3	06129	Jan	02	1433	B. C. E.	10:15:41	1198020.9275560	-1433	Jan	02	19:32:31	033411	LTU	-0.3304	1.2670	23.5N	152.2W	14	10	1433	B. C. E.
	4	06130	Jun	26	1433	B. C. E.	23:19:30	1198197.4718757	-1433	Jun	27	08:36:23	033411	LTU	0.4050	1.0882	23.2S	8.4E	13	03	1433	B. C. E.
75	1	06168	Jan	23	1416	B. C. E.	02:56:14	1204251.6223859	-1416	Jan	23	12:07:16	033061	LTU	0.3686	1.1958	22.4N	40.0W	13	11	1416	B. C. E.
	2	06169	Jul	19	1416	B. C. E.	05:06:29	1204428.7128349	-1416	Jul	19	14:17:30	033061	LTU	-0.4246	1.0407	23.6S	76.9W	14	04	1416	B. C. E.
	3	06170	Jan	12	1415	B. C. E.	18:58:03	1204606.2903129	-1415	Jan	13	04:08:43	033040	LTU	-0.3166	1.2930	23.1N	78.4E	14	10	1415	B. C. E.
	4	06171	Aug	08	1415	B. C. E.	06:07:29	1204782.7551934	-1415	Aug	08	15:18:10	033040	LTU	0.3286	1.2285	23.5S	93.0W	13	04	1415	B. C. E.
76	1	06193	Dec	24	1406	B. C. E.	07:00:09	1208238.7917699	-1406	Dec	24	16:07:42	032855	LTU	-0.3725	1.1617	23.2N	104.3W	14	10	1406	B. C. E.
	2	06194	Jun	17	1405	B. C. E.	12:10:56	1208415.0075975	-1405	Jun	17	21:18:13	032835	LTU	0.2979	1.3206	22.4S	175.1E	13	03		

7000 Year Canon of Total Lunar Eclipse Tetrads

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Lunar Eclipse Tetrad	Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT)		Astronomical Julian Date (UT)		(TDT) Date and Time of Maximum Eclipse		Delta T (seconds)	Lunar Eclipse Type	Gamma	Umb. Mag.	Greatest in Zenith Lon.		Hebrew Date on the Creation Calendar Day Month Year		
			Day	Month	Day	Month	Day	Month					Day	Month	Day	Month	Day
85	1 2 3 4	07269 07270 07271 07272	Apr 04	964 B. C. E.	13:47:48	1369416.0748631	-0964	Apr 04	20:35:41	024471	LTU	-0.3854	1.1616	2.4S	154.2E	13 01	964 B. C. E.
			Sep 29	964 B. C. E.	01:47:28	1369593.5746325	-0964	Sep 29	08:35:18	024471	LTU	0.3323	1.2058	1.0S	28.1W	14 07	964 B. C. E.
			Mar 25	964 B. C. E.	05:24:40	1369770.7254580	-0963	Mar 25	12:12:14	024454	LTU	0.3550	1.2323	2.5N	78.7W	14 13	963 B. C. E.
			Sep 18	963 B. C. E.	01:21:10	1369947.5563640	-0963	Sep 18	08:08:45	024454	LTU	-0.3673	1.1378	6.1S	20.7W	14 06	963 B. C. E.
86	1 2 3 4	07311 07312 07313 07314	Apr 15	946 B. C. E.	21:15:45	1376001.3859347	-0946	Apr 16	03:58:24	024158	LTU	-0.4499	1.0458	6.6S	41.1E	13 01	946 B. C. E.
			Oct 10	946 B. C. E.	09:40:15	1376178.9029539	-0946	Oct 10	16:22:52	024158	LTU	0.3513	1.1687	3.4N	147.0W	14 07	946 B. C. E.
			Apr 04	945 B. C. E.	13:11:50	1376356.0498886	-0945	Apr 04	19:54:11	024140	LTU	0.2955	1.3428	1.9S	163.4E	13 01	945 B. C. E.
			Sep 28	945 B. C. E.	09:01:48	1376532.8762473	-0945	Sep 28	15:44:08	024140	LTU	-0.3410	1.1850	1.7S	136.5W	13 07	945 B. C. E.
87	1 2 3 4	07361 07362 07363 07364	Feb 12	924 B. C. E.	15:29:26	1383975.1454432	-0924	Feb 12	22:05:44	023778	LTU	-0.2696	1.3192	16.2N	132.4E	15 11	924 B. C. E.
			Aug 08	924 B. C. E.	11:54:07	1384151.9959116	-0924	Aug 08	18:30:24	023778	LTU	0.3019	1.3271	18.8S	177.9W	14 05	924 B. C. E.
			Feb 01	923 B. C. E.	15:25:08	1384329.1424528	-0923	Feb 01	22:01:10	023761	LTU	0.4416	1.0090	19.8N	133.3E	14 11	923 B. C. E.
			Jul 29	923 B. C. E.	03:01:32	1384506.6260650	-0923	Jul 29	09:37:31	023761	LTU	-0.4347	1.0674	21.8S	44.9W	15 05	923 B. C. E.
88	1 2 3 4	07378 07379 07380 07381	Mar 26	917 B. C. E.	13:16:12	1386574.0529220	-0917	Mar 26	19:50:29	023658	LTU	0.3509	1.2266	1.6N	163.3E	14 13	917 B. C. E.
			Sep 18	917 B. C. E.	16:15:37	1386750.1775084	-0917	Sep 18	22:49:56	023658	LTU	-0.4429	1.0294	5.6S	115.7E	13 06	917 B. C. E.
			Mar 16	916 B. C. E.	00:04:52	1386928.5033782	-0916	Mar 16	06:38:51	023641	LTU	-0.4134	1.0838	5.1N	1.8E	15 12	916 B. C. E.
			Sep 08	916 B. C. E.	04:06:19	1387104.6710510	-0916	Sep 08	10:40:22	023642	LTU	0.2864	1.3438	9.1S	61.7W	13 06	916 B. C. E.
89	1 2 3 4	07402 07403 07404 07405	Feb 23	906 B. C. E.	22:45:49	1390560.4484866	-0906	Feb 24	05:16:59	023470	LTU	-0.3150	1.2374	12.6N	23.0E	14 12	906 B. C. E.
			Aug 19	906 B. C. E.	19:57:26	1390737.3315469	-0906	Aug 20	02:28:35	023470	LTU	0.3474	1.2417	15.7S	61.3E	14 05	906 B. C. E.
			Feb 12	905 B. C. E.	22:59:28	1390914.4579599	-0905	Feb 13	05:30:22	023453	LTU	0.4057	1.0778	16.9N	20.0E	14 11	905 B. C. E.
			Aug 08	905 B. C. E.	10:41:40	1391091.9455991	-0905	Aug 08	17:12:31	023453	LTU	-0.3825	1.1600	19.4S	159.7W	14 05	905 B. C. E.
90	1 2 3 4	07442 07443 07444 07445	Mar 06	888 B. C. E.	05:52:58	1397145.7451180	-0888	Mar 06	12:19:03	023165	LTU	-0.3678	1.1420	8.7N	84.4W	14 12	888 B. C. E.
			Aug 30	888 B. C. E.	04:07:48	1397322.6720846	-0888	Aug 30	10:33:52	023165	LTU	0.3869	1.1672	12.1S	61.6W	14 06	888 B. C. E.
			Feb 23	887 B. C. E.	06:26:15	1397499.7682338	-0887	Feb 23	12:52:05	023148	LTU	0.3627	1.1595	13.3N	91.9W	13 12	887 B. C. E.
			Aug 19	887 B. C. E.	18:28:40	1397677.2699062	-0887	Aug 20	00:54:26	023148	LTU	-0.3367	1.1410	16.3S	83.6E	15 05	887 B. C. E.
91	1 2 3 4	07466 07467 07468 07469	Feb 03	877 B. C. E.	10:56:13	1401131.9557007	-0877	Feb 03	17:19:12	022978	LTU	0.3269	1.2569	19.3N	159.3W	13 11	877 B. C. E.
			Jul 29	877 B. C. E.	23:04:30	1401309.4641561	-0877	Jul 30	05:27:26	022978	LTU	-0.3240	1.2333	21.3S	14.5E	15 05	877 B. C. E.
			Jan 23	876 B. C. E.	01:11:19	1401486.5495198	-0876	Jan 23	07:34:00	022961	LTU	-0.3782	1.1805	21.0N	13.9W	14 11	876 B. C. E.
			Jul 18	876 B. C. E.	23:48:38	1401663.4921011	-0876	Jul 19	06:11:19	022961	LTU	0.4248	1.0411	22.4S	2.8E	14 04	876 B. C. E.
92	1 2 3 4	07482 07483 07484 07485	Mar 17	870 B. C. E.	12:49:56	1403731.0346727	-0870	Mar 17	19:10:57	022861	LTU	-0.4286	1.0320	4.5N	170.5E	14 12	870 B. C. E.
			Sep 10	870 B. C. E.	12:27:07	1403908.0188333	-0870	Sep 10	18:48:08	022861	LTU	0.4185	1.1072	8.1S	173.0E	14 06	870 B. C. E.
			Mar 05	869 B. C. E.	13:44:24	1404085.0725023	-0869	Mar 05	20:05:10	022844	LTU	0.3120	1.2555	9.4N	158.0E	13 12	869 B. C. E.
			Aug 30	869 B. C. E.	02:22:23	1404262.5988781	-0869	Aug 30	08:43:05	022844	LTU	-0.2976	1.3096	12.7S	35.1W	14 06	869 B. C. E.
93	1 2 3 4	07506 07507 07508 07509	Feb 13	859 B. C. E.	19:02:35	1407717.2934655	-0859	Feb 14	01:20:34	022677	LTU	0.3580	1.2029	16.3N	79.2E	13 11	859 B. C. E.
			Aug 10	859 B. C. E.	06:09:29	1407894.7565856	-0859	Aug 10	12:27:25	022677	LTU	-0.3846	1.1194	18.9S	91.5W	14 05	859 B. C. E.
			Feb 03	858 B. C. E.	09:40:58	1408071.9034518	-0858	Feb 03	15:58:39	022660	LTU	-0.3540	1.2268	18.6N	140.8W	13 11	858 B. C. E.
			Jul 30	858 B. C. E.	06:35:37	1408248.7747390	-0858	Jul 30	12:53:18	022660	LTU	0.3548	1.1684	20.8S	98.5W	13 05	858 B. C. E.
94	1 2 3 4	07530 07531 07532 07533	Jan 14	848 B. C. E.	00:48:21	1411704.5335815	-0848	Jan 14	07:03:12	022492	LTU	-0.3102	1.2958	22.4N	8.9W	14 10	848 B. C. E.
			Jul 09	848 B. C. E.	06:13:28	1411880.7593530	-0848	Jul 09	12:28:23	022493	LTU	0.3446	1.1233	23.3S	93.9W	13 04	848 B. C. E.
			Jan 03	847 B. C. E.	11:55:35	1412058.9969288	-0847	Jan 03	18:10:09	022476	LTU	0.4032	1.0974	24.1N	176.9W	14 10	847 B. C. E.
			Jun 28	847 B. C. E.	17:37:48	1412235.2345859	-0847	Jun 28	23:52:26	022476	LTU	-0.4277	1.0821	24.2S	94.3E	14 04	847 B. C. E.
95	1 2 3 4	07546 07547 07548 07549	Feb 25	841 B. C. E.	03:03:49	1414302.6276531	-0841	Feb 25	09:16:47	022376	LTU	0.3941	1.1396	12.8N	41.3W	13 12	841 B. C. E.
			Aug 10	841 B. C. E.	13:20:23	1414480.0558199	-0841	Aug 20	19:33:18	022376	LTU	-0.4396	1.0156	15.8S	160.7E	14 05	841 B. C. E.
			Feb 13	840 B. C. E.	18:03:30	1414657.2524269	-0840	Feb 13	00:16:10	022360	LTU	-0.3238	1.2841	15.6N	93.7E	14 11	840 B. C. E.
			Aug 09	840 B. C. E.	13:30:33	1414834.0628798	-0840	Aug 09	19:43:14	022360	LTU	0.2910	1.2843	18.4S	158.0E	13 05	840 B. C. E.
96	1 2 3 4	07570 07571 07572 07573	Jan 25	830 B. C. E.	09:19:55	1418289.8888333	-0830	Jan 25	15:29:48	022194	LTU	-0.3286	1.2621	20.6N	135.9W	14 11	830 B. C. E.
			Jul 20	830 B. C. E.	13:23:04	1418466.0576851	-0830	Jul 20	19:33:00	022194	LTU	0.4117	1.0917	22.2S	63.9W	13 04	830 B. C. E.
			Jan 14	829 B. C. E.	20:14:28	1418644.3433811	-0829	Jan 15	02:24:04	022178	LTU	0.3918	1.1178	23.1N	59.6E	15 10	829 B. C. E.
			Jul 09	829 B. C. E.	01:05:49	1418820.5457092	-0829	Jul 09	07:15:29	022178	LTU	-0.3572	1.2190	23.9S	17.0W	13 04	829 B. C. E.
97	1 2 3 4	07679 07680 07681 07682	Jan 15	783 B. C. E.	10:07:37	1435446.9219593	-0783	Jan 15	16:04:41	021424	LTU	0.4290	1.0219	22.9N	148.5W	14 10	783 B. C. E.
			Jul 11	783 B. C. E.	09:13:13	1435623.8841736	-0783	Jul 11	15:10:16	021424	LTU	-0.3455	1.2504	23.8S	138.6W	14 04	783 B. C. E.
			Jan 04	782 B. C. E.	09:47:02	1435800.9076600	-0782	Jan 04	15:43:52	021408	LTU	-0.2648	1.3303	23.4N	144.7W	13 10	782 B. C. E.
			Jul 01	782 B. C. E.	00:33:16	1435978.5231025	-0782	Jul 01	06:30:02	021408	LTU	0.4062	1.1221	23.4S	9.4W	15 04	782 B. C. E.
98	1 2 3 4	08500 08501 08502 08503	May 06	454 B. C. E.	16:04:24	1555725.1697205	-0454	May 06	20:36:06	016304	LTU	0.3815	1.1310	14.4S	117.5E	14 02	454 B. C. E.
			Oct 30	454 B. C. E.	08:12:07	1555901.8417470	-0454	Oct 30	12:43:44	016297	LTU	-0.2079	1.4909	12.0N	126.0W	13 08	454 B. C. E.
			Apr 24	453 B. C. E.	16:55:31	1556079.2052159	-0453	Apr 24	21:27:00	016289	LTU	-0.3812	1.1237	11.4S	105.1E	14 02	453 B. C. E.
			Oct 18	453 B. C. E.	23:50:31	1556256.4934190	-0453	Oct 19	04:21:51	016280	LTU	0.4670	1.1014	8.6N	0.6W	14 08	453 B. C. E.
99	1 2 3 4	08680 08681 08682 08683	Apr 06	378 B. C. E.	19:43:54	1583454.3221493	-0378	Apr 06</									

7000 Year Canon of Total Lunar Eclipse Tetrads

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Lunar Eclipse Tetrad	Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT)		Astronomical Julian Date (UT)		Date and Time (TDT) of Maximum Eclipse		Delta T (seconds)	Lunar Eclipse Type	Gamma	Umb. Mag.	Greatest in Zenith		Hebrew Date on the Creation Calendar						
			Day	Month	Year	Time (UT)	Day	Time (UT)					Day	Time (TDT)	Lat.	Lon.	Day	Month	Year		
106	1	08878	Feb	04	291	B.C.E.	15:50:12	1615170.1598575	-0291	Feb 04	19:41:27	013876	LTU	-0.2733	1.3749	17.1N	126.9E	14	11	291	B.C.E.
	2	08879	Jul	31	291	B.C.E.	04:00:30	1615346.6670149	-0291	Jul 31	07:51:41	013870	LTU	0.3661	1.1556	19.5S	59.5W	13	05	291	B.C.E.
	3	08880	Jan	25	290	B.C.E.	06:41:43	1615524.7789700	-0290	Jan 25	10:32:45	013864	LTU	0.4274	1.0750	20.5N	96.3W	14	11	290	B.C.E.
	4	08881	Jul	20	290	B.C.E.	10:04:08	1615700.9195343	-0290	Jul 20	13:55:07	013857	LTU	-0.4019	1.1167	22.3S	150.6W	13	05	290	B.C.E.
107	1	08894	Mar	17	284	B.C.E.	21:02:53	1617768.3769998	-0284	Mar 18	00:52:36	013781	LTU	0.4207	1.0735	3.2N	47.1E	13	13	284	B.C.E.
	2	08895	Sep	11	284	B.C.E.	12:16:06	1617946.0111799	-0284	Sep 11	16:05:38	013774	LTU	-0.3938	1.1142	6.6S	175.6E	14	06	284	B.C.E.
	3	08896	Mar	07	283	B.C.E.	08:34:54	1618122.8575702	-0283	Mar 07	12:24:24	013768	LTU	-0.3313	1.2623	6.7N	125.4W	13	12	283	B.C.E.
	4	08897	Aug	31	283	B.C.E.	15:18:25	1618300.1377865	-0283	Aug 31	19:07:46	013762	LTU	0.3390	1.1951	10.2S	130.3E	13	06	283	B.C.E.
108	1	08918	Feb	16	273	B.C.E.	00:15:44	1621755.5109306	-0273	Feb 16	04:03:01	013637	LTU	-0.3006	1.3259	13.7N	0.5E	14	12	273	B.C.E.
	2	08919	Aug	10	273	B.C.E.	11:01:41	1621931.9595060	-0273	Aug 10	14:48:54	013631	LTU	0.4285	1.0408	16.7S	164.7W	13	05	273	B.C.E.
	3	08920	Feb	04	272	B.C.E.	15:04:19	1622110.1280002	-0272	Feb 04	18:51:22	013624	LTU	0.4078	1.1108	17.7N	138.5E	14	11	272	B.C.E.
	4	08921	Jul	30	272	B.C.E.	17:24:53	1622286.2256109	-0272	Jul 30	21:11:54	013619	LTU	-0.3366	1.2370	20.2S	99.5E	13	05	272	B.C.E.
109	1	08985	Jan	26	244	B.C.E.	03:58:28	1632327.6655972	-0244	Jan 26	07:39:31	013265	LTU	0.3187	1.2363	20.0N	55.3W	14	11	244	B.C.E.
	2	08986	Jul	21	244	B.C.E.	14:37:15	1632504.1092011	-0244	Jul 21	18:18:14	013258	LTU	-0.3125	1.3100	21.9S	141.3E	13	05	244	B.C.E.
	3	08987	Jan	15	243	B.C.E.	04:05:16	1632681.6703199	-0243	Jan 15	07:46:08	013252	LTU	-0.3805	1.1099	21.6N	58.0W	14	11	243	B.C.E.
	4	08988	Jul	11	243	B.C.E.	07:39:54	1632858.8193763	-0243	Jul 11	11:20:39	013246	LTU	0.4183	1.1146	22.6S	115.0W	14	04	243	B.C.E.
110	1	09026	Feb	06	226	B.C.E.	11:46:11	1638912.9904013	-0226	Feb 06	15:23:27	013038	LTU	0.3463	1.1859	17.1N	171.9W	14	11	226	B.C.E.
	2	09027	Aug	01	226	B.C.E.	22:23:10	1639089.4327596	-0226	Aug 02	02:00:22	013031	LTU	-0.3721	1.2001	19.8S	25.1E	14	05	226	B.C.E.
	3	09028	Jan	26	225	B.C.E.	11:50:43	1639266.9935494	-0225	Jan 26	15:27:49	013026	LTU	-0.3591	1.1506	19.5N	173.6W	13	11	225	B.C.E.
	4	09029	Jul	21	225	B.C.E.	15:16:55	1639444.1367520	-0225	Jul 21	18:53:54	013020	LTU	0.3539	1.2309	21.2S	131.2E	14	05	225	B.C.E.
111	1	09068	Feb	16	208	B.C.E.	19:23:59	1645498.3083207	-0208	Feb 16	22:57:33	012816	LTU	0.3815	1.1217	13.7N	73.6E	15	12	208	B.C.E.
	2	09069	Aug	12	208	B.C.E.	06:16:37	1645674.7615378	-0208	Aug 12	09:50:07	012810	LTU	-0.4256	1.1009	16.9S	93.2W	13	05	208	B.C.E.
	3	09070	Feb	05	207	B.C.E.	19:26:38	1645852.3101666	-0207	Feb 05	23:00:03	012804	LTU	-0.3298	1.2062	16.6N	72.7E	14	11	207	B.C.E.
	4	09071	Aug	01	207	B.C.E.	22:59:15	1646029.4578145	-0207	Aug 02	02:32:32	012798	LTU	0.2944	1.3381	19.0S	15.8E	14	05	207	B.C.E.
112	1	09110	Feb	28	190	B.C.E.	02:51:22	1652083.6190079	-0190	Feb 28	06:21:20	012599	LTU	0.4245	1.0435	9.8N	38.7W	14	12	190	B.C.E.
	2	09111	Aug	23	190	B.C.E.	14:17:47	1652260.0956857	-0190	Aug 23	17:47:41	012593	LTU	-0.4729	1.0132	13.5S	146.2E	13	06	190	B.C.E.
	3	09112	Feb	17	189	B.C.E.	02:54:47	1652437.6213793	-0189	Feb 17	06:24:34	012587	LTU	-0.2939	1.2739	13.2N	39.4W	14	12	189	B.C.E.
	4	09113	Aug	12	189	B.C.E.	06:47:43	1652614.7831383	-0189	Aug 12	10:17:23	012581	LTU	0.2405	1.4348	16.2S	101.3W	14	05	189	B.C.E.
113	1	09160	Dec	27	169	B.C.E.	01:49:19	1660056.5759170	-0169	Dec 27	05:15:00	012341	LTU	0.4277	1.0876	24.1N	26.0W	14	10	169	B.C.E.
	2	09161	Jun	21	168	B.C.E.	18:37:03	1660233.2757263	-0168	Jun 21	22:02:39	012335	LTU	-0.3154	1.2519	23.9S	79.8E	14	04	168	B.C.E.
	3	09162	Dec	16	168	B.C.E.	16:19:14	1660411.1800227	-0168	Dec 16	19:44:41	012329	LTU	-0.2492	1.3986	23.2N	115.2E	15	10	168	B.C.E.
	4	09163	Jun	11	167	B.C.E.	00:39:19	1660587.5273022	-0167	Jun 11	04:04:44	012323	LTU	0.4645	1.0034	22.4N	11.3W	13	03	167	B.C.E.
114	1	09202	Jan	07	150	B.C.E.	10:39:07	1666641.9438347	-0150	Jan 07	14:01:18	012131	LTU	0.4353	1.0742	23.4N	157.1W	14	10	150	B.C.E.
	2	09203	Jul	03	150	B.C.E.	01:14:46	1666818.5519253	-0150	Jul 03	04:36:54	012126	LTU	-0.3965	1.1035	23.9S	19.0W	13	04	150	B.C.E.
	3	09204	Dec	28	150	B.C.E.	01:01:44	1666996.5428677	-0150	Dec 28	04:23:43	012121	LTU	-0.2457	1.4043	23.4N	14.1W	15	10	150	B.C.E.
	4	09205	Jun	21	149	B.C.E.	07:42:22	1667172.8210890	-0149	Jun 21	11:04:19	012115	LTU	0.3857	1.1494	23.3S	116.6W	13	04	149	B.C.E.
115	1	09977	Apr	17	162	C.E.	00:37:29	1780334.5260325	0162	Apr 17	03:06:48	008958	LTU	0.2890	1.3534	9.6S	9.6W	14	01	162	C.E.
	2	09978	Oct	11	162	C.E.	00:12:11	1780511.5084575	0162	Oct 11	02:41:24	008953	LTU	-0.2882	1.2804	6.4N	5.8W	14	07	162	C.E.
	3	09979	Apr	06	163	C.E.	17:35:59	1780689.2333237	0163	Apr 06	20:05:06	008948	LTU	-0.4389	1.0752	6.4S	96.3E	15	01	163	C.E.
	4	09980	Sep	30	163	C.E.	01:16:26	1780865.5530745	0163	Sep 30	03:45:32	008945	LTU	0.4185	1.0521	2.5N	21.5W	13	07	163	C.E.
116	1	10021	Apr	27	180	C.E.	08:15:37	1786919.8441774	0180	Apr 27	10:42:05	008787	LTU	0.3548	1.2342	13.3S	124.8W	13	02	180	C.E.
	2	10022	Oct	21	180	C.E.	07:59:28	1787096.8329625	0180	Oct 21	10:25:51	008783	LTU	-0.3086	1.2419	10.5N	123.1W	13	08	180	C.E.
	3	10023	Apr	17	181	C.E.	01:17:34	1787274.5538709	0181	Apr 17	03:43:52	008778	LTU	-0.3775	1.1880	10.4S	20.0W	14	01	181	C.E.
	4	10024	Oct	10	181	C.E.	09:12:21	1787450.8835759	0181	Oct 10	11:38:36	008773	LTU	0.3930	1.1058	6.8N	141.1W	13	07	181	C.E.
117	1	10063	May	08	198	C.E.	15:49:45	1793505.1595461	0198	May 08	18:13:21	008616	LTU	0.4243	1.1077	16.5S	121.2E	13	02	198	C.E.
	2	10064	Nov	01	198	C.E.	15:53:07	1793682.1618822	0198	Nov 01	18:16:38	008611	LTU	-0.3240	1.2130	14.3N	118.4E	14	08	198	C.E.
	3	10065	Apr	28	199	C.E.	08:53:15	1793859.8703092	0199	Apr 28	11:16:41	008607	LTU	-0.3116	1.3090	14.0S	134.6W	14	02	199	C.E.
	4	10066	Oct	21	199	C.E.	17:17:30	1794036.2204823	0199	Oct 21	19:40:55	008603	LTU	0.3745	1.1399	11.0N	97.1E	13	08	199	C.E.
118	1	10130	Apr	19	227	C.E.	03:52:05	1804077.6611744	0227	Apr 19	06:11:04	008341	LTU	-0.3454	1.2134	11.0S	58.6W	15	02	227	C.E.
	2	10131	Oct	12	227	C.E.	08:56:54	1804253.8728451	0227	Oct 12	11:15:52	008337	LTU	0.3446	1.2322	7.6N	137.3W	13	08	227	C.E.
	3	10132	Apr	07	228	C.E.	08:08:01	1804431.8389035	0228	Apr 07	10:26:52	008332	LTU	0.4216	1.0499	6.3S	121.5W	14	01	228	C.E.
	4	10133	Oct	01	228	C.E.	00:29:17	1804608.5203413	0228	Oct 01	02:48:05	008327	LTU	-0.3448	1.2440	2.7N	9.6W	14	07	228	C.E.
119	1	10154	Mar	18	238	C.E.	04:01:46	1808063.6678930	0238												

7000 Year Canon of Total Lunar Eclipse Tetrads

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Lunar Eclipse Tetrad	Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT)			Astronomical Julian Date (UT)		(TDT) Date and Time of Maximum Eclipse		Delta T (seconds)	Lunar Eclipse Type	Gamma	Umb. Mag.	Greatest in Zenith		Hebrew Date on the Creation Calendar						
			Month	Day	Hour	Minute	Second	Year	Month					Day	Hour	Minute	Second	Lat.	Lon.	Day	Month	Year
127	1	10498	Jan	17	390	C.E.	16:02:32	1863522.1684317	0390	Jan	17	17:55:19	0.06766	LTU	0.3890	1.1576	21.0N	123.1E	14	11	390	C.E.
	2	10499	Jul	13	390	C.E.	18:37:36	1863699.2761127	0390	Jul	13	20:30:17	0.06761	LTU	-0.3314	1.2140	22.3S	81.3E	14	04	390	C.E.
	3	10500	Jan	07	391	C.E.	07:52:33	1863876.8281545	0391	Jan	07	09:45:08	0.06756	LTU	-0.2843	1.3490	22.1N	115.6W	14	10	391	C.E.
	4	10501	Jul	02	391	C.E.	20:15:03	1864053.3437839	0391	Jul	02	22:07:36	0.06751	LTU	0.4318	1.0435	22.9S	56.3E	13	04	391	C.E.
128	1	10539	Jan	29	408	C.E.	00:42:01	1870107.5291757	0408	Jan	29	02:31:49	0.06588	LTU	0.4031	1.1335	18.3N	6.2W	14	11	408	C.E.
	2	10540	Jul	24	408	C.E.	01:13:01	1870284.5507094	0408	Jul	24	03:02:45	0.06583	LTU	-0.4105	1.0680	20.4S	17.2W	14	05	408	C.E.
	3	10541	Jan	17	409	C.E.	16:37:48	1870462.1929191	0409	Jan	17	18:27:25	0.06578	LTU	-0.2747	1.3669	20.2N	114.1E	15	11	409	C.E.
	4	10542	Jul	13	409	C.E.	03:02:46	1870638.6269180	0409	Jul	13	04:52:21	0.06574	LTU	0.3526	1.1896	21.7S	45.2W	13	04	409	C.E.
129	1	10607	Jan	08	437	C.E.	11:46:17	1880679.9904728	0437	Jan	08	13:31:16	0.06301	LTU	-0.4386	1.0336	21.7N	173.8W	14	11	437	C.E.
	2	10608	Jul	03	437	C.E.	18:07:29	1880856.2551922	0437	Jul	03	19:52:26	0.06296	LTU	0.3327	1.2622	22.8S	88.4E	13	04	437	C.E.
	3	10609	Dec	28	437	C.E.	15:55:39	1881034.1636483	0437	Dec	28	17:40:30	0.06292	LTU	0.2628	1.3299	23.6N	122.7E	15	10	437	C.E.
	4	10610	Jun	23	438	C.E.	10:19:22	1881210.9301147	0438	Jun	23	12:04:09	0.06287	LTU	-0.4150	1.1259	24.1S	155.2W	13	04	438	C.E.
130	1	10651	Jan	19	455	C.E.	20:08:58	1887265.3395576	0455	Jan	19	21:51:00	0.06124	LTU	-0.4502	1.0119	19.6N	61.4E	15	11	455	C.E.
	2	10652	Jul	15	455	C.E.	01:32:01	1887441.5638999	0455	Jul	15	03:14:01	0.06119	LTU	0.4024	1.1351	21.4S	22.3W	13	05	455	C.E.
	3	10653	Jan	09	456	C.E.	00:00:03	1887619.5000353	0456	Jan	09	01:41:56	0.06114	LTU	0.2532	1.3474	22.4N	2.8E	14	11	456	C.E.
	4	10654	Jul	03	456	C.E.	17:51:43	1887796.2442650	0456	Jul	03	19:33:32	0.06109	LTU	-0.3427	1.2582	23.4S	92.3E	14	04	456	C.E.
131	1	11436	Apr	29	766	C.E.	13:32:40	2000958.0643469	0766	Apr	29	14:26:15	0.03217	LTU	-0.3177	1.2862	15.8S	155.6E	14	02	766	C.E.
	2	11437	Oct	22	766	C.E.	17:47:32	2001134.2413421	0766	Oct	22	18:41:07	0.03213	LTU	0.3178	1.2602	12.9N	89.4E	13	08	766	C.E.
	3	11438	Apr	18	767	C.E.	23:39:06	2001312.4854911	0767	Apr	18	00:32:34	0.03209	LTU	0.4582	1.0002	11.7S	4.7E	15	02	767	C.E.
	4	11439	Oct	12	767	C.E.	06:04:40	2001488.7532444	0767	Oct	12	06:58:05	0.03204	LTU	-0.3912	1.1515	8.3N	94.4W	13	08	767	C.E.
132	1	11479	May	09	784	C.E.	20:55:30	2007543.3718706	0784	May	09	21:46:34	0.03066	LTU	-0.3885	1.1557	18.9S	44.6E	15	02	784	C.E.
	2	11480	Nov	02	784	C.E.	02:10:53	2007719.5908960	0784	Nov	02	03:01:58	0.03062	LTU	0.3291	1.2398	16.5N	36.5W	13	08	784	C.E.
	3	11481	Apr	29	785	C.E.	06:40:43	2007897.7782776	0785	Apr	29	07:31:39	0.03058	LTU	0.3892	1.1264	15.2S	101.3W	14	02	785	C.E.
	4	11482	Oct	22	785	C.E.	14:38:22	2008074.1099783	0785	Oct	22	15:29:17	0.03054	LTU	-0.3732	1.1842	12.3N	136.8E	13	08	785	C.E.
133	1	11504	Apr	09	795	C.E.	04:45:42	2011529.6983994	0795	Apr	09	05:35:19	0.02977	LTU	0.3222	1.2279	8.5S	71.3W	14	01	795	C.E.
	2	11505	Oct	03	795	C.E.	05:58:34	2011706.7490033	0795	Oct	03	06:48:06	0.02973	LTU	-0.2895	1.3424	5.0N	92.4W	14	07	795	C.E.
	3	11506	Mar	28	796	C.E.	05:58:44	2011883.7491154	0796	Mar	28	06:48:15	0.02970	LTU	-0.4225	1.0550	4.9S	88.9W	13	01	796	C.E.
	4	11507	Sep	21	796	C.E.	19:32:36	2012061.3143106	0796	Sep	21	20:21:59	0.02965	LTU	0.4304	1.0634	1.4N	64.5E	15	07	796	C.E.
134	1	11521	May	21	802	C.E.	04:12:19	2014128.6752233	0802	May	21	05:00:57	0.02919	LTU	-0.4635	1.0170	21.3S	64.5W	15	03	802	C.E.
	2	11522	Nov	13	802	C.E.	10:40:23	2014304.9447052	0802	Nov	13	11:29:00	0.02915	LTU	0.3360	1.1279	19.5N	163.4W	12	09	802	C.E.
	3	11523	May	10	803	C.E.	13:33:46	2014483.0651168	0803	May	10	14:22:15	0.02911	LTU	0.3139	1.2637	18.2S	155.2E	14	02	803	C.E.
	4	11524	Nov	02	803	C.E.	23:19:22	2014659.4717787	0803	Nov	02	00:07:50	0.02907	LTU	-0.3609	1.1265	15.9N	6.6E	13	08	803	C.E.
135	1	11546	Apr	19	813	C.E.	11:30:34	2018114.9795633	0813	Apr	19	12:17:47	0.02832	LTU	0.3939	1.0977	12.2S	173.2W	14	02	813	C.E.
	2	11547	Oct	13	813	C.E.	14:26:20	2018292.1016250	0813	Oct	13	15:13:27	0.02828	LTU	-0.3132	1.2967	9.2N	140.1E	13	08	813	C.E.
	3	11548	Apr	08	814	C.E.	13:04:39	2018469.0449014	0814	Apr	08	13:51:45	0.02824	LTU	-0.3590	1.1744	8.9S	163.7E	13	01	814	C.E.
	4	11549	Oct	03	814	C.E.	03:35:58	2018646.6499771	0814	Oct	03	04:22:56	0.02820	LTU	0.4010	1.1144	5.7N	57.1W	14	07	814	C.E.
136	1	11570	Mar	18	824	C.E.	19:53:08	2022101.3285641	0824	Mar	18	20:38:54	0.02745	LTU	-0.2882	1.3363	1.3S	63.4E	13	01	824	C.E.
	2	11571	Sep	12	824	C.E.	05:53:25	2022278.7454232	0824	Sep	12	06:39:04	0.02741	LTU	0.3125	1.2469	2.4S	89.8W	14	07	824	C.E.
	3	11572	Mar	08	825	C.E.	11:09:45	2022455.9651050	0825	Mar	08	11:55:22	0.02737	LTU	0.4275	1.0949	3.6N	164.7W	13	13	825	C.E.
	4	11573	Sep	01	825	C.E.	05:52:10	2022632.7445618	0825	Sep	01	06:37:45	0.02734	LTU	-0.4126	1.0605	7.3S	88.5W	13	06	825	C.E.
137	1	11611	Mar	30	842	C.E.	03:40:23	2028686.6530414	0842	Mar	30	04:23:51	0.02607	LTU	-0.3366	1.2502	5.6S	54.4W	13	01	842	C.E.
	2	11612	Sep	23	842	C.E.	13:17:31	2028864.0538317	0842	Sep	23	14:00:53	0.02603	LTU	0.3545	1.1672	2.0N	158.3E	14	07	842	C.E.
	3	11613	Mar	19	843	C.E.	19:17:01	2029041.3034845	0843	Mar	19	20:00:20	0.02599	LTU	0.3859	1.1729	0.8S	72.6E	14	01	843	C.E.
	4	11614	Sep	12	843	C.E.	13:03:22	2029218.0440070	0843	Sep	12	13:46:38	0.02595	LTU	-0.3618	1.1526	3.1S	162.9E	13	07	843	C.E.
138	1	11652	Apr	09	860	C.E.	11:22:37	2035271.9740403	0860	Apr	09	12:03:50	0.02471	LTU	-0.3898	1.1554	9.7S	170.8W	13	01	860	C.E.
	2	11653	Oct	03	860	C.E.	20:48:43	2035449.3671612	0860	Oct	03	21:29:49	0.02467	LTU	0.3902	1.0992	6.3N	44.7E	14	07	860	C.E.
	3	11654	Mar	30	861	C.E.	03:17:25	2035626.6370906	0861	Mar	30	03:58:29	0.02464	LTU	0.3384	1.2617	5.0S	48.5W	14	01	861	C.E.
	4	11655	Sep	22	861	C.E.	20:24:00	2035803.3500056	0861	Sep	22	21:05:01	0.02460	LTU	-0.3184	1.2312	1.3N	51.8E	14	07	861	C.E.
139	1	11693	Apr	20	878	C.E.	18:57:28	2041857.2899019	0878	Apr	20	19:36:28	0.02339	LTU	-0.4498	1.0478	13.5S	74.7E	14	02	878	C.E.
	2	11694	Oct	15	878	C.E.	04:28:51	2042034.6867036	0878	Oct	15	05:07:45	0.02335	LTU	0.4180	1.0459	10.5N	70.9W	14	08	878	C.E.
	3	11695	Apr	10	879	C.E.	11:10:47	2042211.9658205	0879	Apr	10	11:49:39	0.02332	LTU	0.2849	1.3611	9.2S	167.7W	13	01	879	C.E.
	4	11696	Oct	04	879	C.E.	03:54:18	2042388.6627070	0879													

7000 Year Canon of Total Lunar Eclipse Tetrads

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Lunar Eclipse Tetrad	Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT)		Astronomical Julian Date (UT)		Date and Time of Maximum Eclipse (TDT)		Delta T (seconds)	Lunar Eclipse Type	Gamma	Umb. Mag.	Greatest in Zenith		Hebrew Date on the Creation Calendar							
			Month	Day	Hour	Minute	Year	Month					Day	Hour	Minute	Year	Month	Day	Year			
148	1	12741	May	09	1305	C. E.	19:08:30	2197838.2975719	1305	May	09	19:16:26	000476	LTU	-0.3054	1.3236	19.7S	71.6E	15	02	1305	C. E.
	2	12742	Nov	02	1305	C. E.	06:47:12	2198014.7827755	1305	Nov	02	06:55:09	000475	LTU	0.2772	1.3119	17.4N	105.6W	13	08	1305	C. E.
	3	12743	Apr	29	1306	C. E.	10:05:27	2198192.9204519	1306	Apr	29	10:13:20	000474	LTU	0.4499	1.0381	16.3S	152.4W	14	02	1306	C. E.
	4	12744	Oct	22	1306	C. E.	13:27:30	2198369.0607588	1306	Oct	22	13:35:24	000473	LTU	-0.4370	1.0478	13.4N	154.3E	12	08	1306	C. E.
149	1	12784	May	21	1323	C. E.	02:40:36	2204423.6115245	1323	May	21	02:47:57	000442	LTU	-0.3752	1.1956	21.9S	41.2W	14	03	1323	C. E.
	2	12785	Nov	13	1323	C. E.	14:52:03	2204600.1194747	1323	Nov	13	14:59:25	000441	LTU	0.2897	1.2893	20.2N	133.7E	14	09	1323	C. E.
	3	12786	May	09	1324	C. E.	17:24:03	2204778.2250296	1324	May	09	17:31:21	000440	LTU	0.3824	1.1614	19.1S	97.8E	15	03	1324	C. E.
	4	12787	Nov	01	1324	C. E.	21:50:02	2204954.4097462	1324	Nov	01	21:57:23	000439	LTU	-0.4206	1.0783	16.8N	28.8E	13	09	1324	C. E.
150	1	12826	May	31	1341	C. E.	10:08:32	2211008.9225886	1341	May	31	10:15:20	000409	LTU	-0.4481	1.0615	23.4S	152.7W	14	03	1341	C. E.
	2	12827	Nov	23	1341	C. E.	23:02:49	2211185.4602856	1341	Nov	23	23:09:40	000409	LTU	0.2979	1.2747	22.3N	11.9E	15	09	1341	C. E.
	3	12828	May	21	1342	C. E.	00:37:47	2211363.5262371	1342	May	21	00:44:33	000408	LTU	0.3115	1.2905	21.3S	10.4W	15	03	1342	C. E.
	4	12829	Nov	13	1342	C. E.	06:19:37	2211539.7636203	1342	Nov	13	06:26:26	000407	LTU	-0.4092	1.0997	19.6N	98.1W	13	09	1342	C. E.
151	1	12852	Apr	30	1352	C. E.	04:52:47	2214995.7033218	1352	Apr	30	04:59:16	000391	LTU	0.3309	1.2208	16.9S	74.2W	14	02	1352	C. E.
	2	12853	Oct	23	1352	C. E.	19:18:54	2215172.3047955	1352	Oct	23	19:25:25	000390	LTU	-0.2764	1.2679	14.2N	66.5E	14	08	1352	C. E.
	3	12854	Apr	19	1353	C. E.	05:25:21	2215349.7259403	1353	Apr	19	05:31:51	000389	LTU	-0.4202	1.0498	14.2S	82.3W	14	02	1353	C. E.
	4	12855	Oct	13	1353	C. E.	11:07:33	2215526.9635743	1353	Oct	13	11:14:00	000388	LTU	0.4110	1.1149	11.2N	170.8W	14	08	1353	C. E.
152	1	12893	May	11	1370	C. E.	11:35:10	2221580.9827564	1370	May	11	11:41:11	000362	LTU	0.4087	1.0779	19.5S	174.8W	14	03	1370	C. E.
	2	12894	Nov	04	1370	C. E.	03:57:21	2221757.6648236	1370	Nov	04	04:03:23	000362	LTU	-0.2920	1.3385	17.5N	63.0W	13	09	1370	C. E.
	3	12895	Apr	30	1371	C. E.	12:06:53	2221935.0047755	1371	Apr	30	12:12:54	000361	LTU	-0.3458	1.1879	17.4S	177.1E	13	02	1371	C. E.
	4	12896	Oct	24	1371	C. E.	19:34:22	2222112.3155300	1371	Oct	24	19:40:21	000360	LTU	0.3911	1.1490	15.0N	62.3E	14	08	1371	C. E.
153	1	12958	Apr	20	1399	C. E.	19:47:21	2232152.3245524	1399	Apr	20	19:52:42	000319	LTU	-0.4016	1.1129	14.7S	62.3E	13	02	1399	C. E.
	2	12959	Oct	15	1399	C. E.	12:11:09	2232330.0077413	1399	Oct	15	12:16:25	000318	LTU	0.3135	1.2572	11.8N	173.3E	14	08	1399	C. E.
	3	12960	Apr	09	1400	C. E.	08:01:26	2232506.8343263	1400	Apr	09	08:06:44	000317	LTU	0.3563	1.2202	10.2S	120.5W	13	02	1400	C. E.
	4	12961	Oct	03	1400	C. E.	14:33:11	2232684.1063774	1400	Oct	03	14:38:27	000317	LTU	-0.4072	1.0665	7.1N	138.5E	13	08	1400	C. E.
154	1	13025	Mar	31	1428	C. E.	08:16:29	2242724.8447787	1428	Mar	31	08:21:07	000279	LTU	0.3012	1.3275	7.3S	123.6W	14	01	1428	C. E.
	2	13026	Sep	23	1428	C. E.	17:25:09	2242901.2257950	1428	Sep	23	17:29:48	000278	LTU	-0.4230	1.0495	3.4N	96.2E	13	07	1428	C. E.
	3	13027	Mar	20	1429	C. E.	22:57:25	2243079.4565372	1429	Mar	20	23:02:01	000278	LTU	-0.4313	1.0683	3.9S	16.7E	15	01	1429	C. E.
	4	13028	Sep	13	1429	C. E.	00:25:48	2243255.5179110	1429	Sep	13	00:30:26	000277	LTU	0.3251	1.2579	0.3S	8.4W	13	07	1429	C. E.
155	1	13091	Mar	11	1457	C. E.	10:53:42	2253296.9539579	1457	Mar	11	10:57:44	000243	LTU	-0.2944	1.2825	0.2S	161.6W	14	01	1457	C. E.
	2	13092	Sep	03	1457	C. E.	22:04:11	2253473.4195728	1457	Sep	03	22:08:15	000243	LTU	0.3420	1.2536	3.7S	27.8E	14	07	1457	C. E.
	3	13093	Feb	28	1458	C. E.	11:00:44	2253650.9588427	1458	Feb	28	11:04:46	000242	LTU	0.4229	1.0365	4.9N	162.3W	13	13	1458	C. E.
	4	13094	Aug	24	1458	C. E.	14:39:40	2253828.1108821	1458	Aug	24	14:43:41	000242	LTU	-0.3737	1.1914	8.4S	140.0E	14	06	1458	C. E.
156	1	13132	Mar	22	1475	C. E.	18:14:50	2259882.2603024	1475	Mar	22	18:18:31	000222	LTU	-0.3412	1.1971	4.5S	87.3E	15	01	1475	C. E.
	2	13133	Sep	15	1475	C. E.	06:07:56	2260058.7555077	1475	Sep	15	06:11:38	000222	LTU	0.3854	1.1728	0.6N	94.1W	13	07	1475	C. E.
	3	13134	Mar	10	1476	C. E.	18:21:25	2260236.2648769	1476	Mar	10	18:25:07	000221	LTU	0.3817	1.1140	0.5N	86.7E	14	01	1476	C. E.
	4	13135	Sep	03	1476	C. E.	22:31:11	2260413.4383269	1476	Sep	03	22:34:51	000221	LTU	-0.3243	1.2797	4.2S	21.2E	14	07	1476	C. E.
157	1	13172	Apr	02	1493	C. E.	01:25:06	2266467.5590969	1493	Apr	02	01:28:27	000202	LTU	-0.3963	1.0965	8.7S	21.1W	14	01	1493	C. E.
	2	13173	Sep	25	1493	C. E.	14:19:33	2266644.0969109	1493	Sep	25	14:22:55	000202	LTU	0.4226	1.1035	5.0N	142.1E	13	07	1493	C. E.
	3	13174	Mar	22	1494	C. E.	01:33:50	2266821.5651586	1494	Mar	22	01:37:11	000201	LTU	0.3335	1.2047	3.8S	22.3W	14	01	1494	C. E.
	4	13175	Sep	15	1494	C. E.	06:28:58	2266998.7701205	1494	Sep	15	06:32:18	000201	LTU	-0.2805	1.3576	0.1N	99.2W	14	07	1494	C. E.
158	1	13196	Mar	01	1504	C. E.	00:41:30	2270453.5288192	1504	Mar	01	00:44:43	000191	LTU	0.4056	1.0958	4.3N	7.5W	13	13	1504	C. E.
	2	13197	Aug	25	1504	C. E.	16:27:24	2270631.1856295	1504	Aug	25	16:30:33	000191	LTU	-0.3517	1.1969	7.6S	113.0E	15	06	1504	C. E.
	3	13198	Feb	18	1505	C. E.	11:41:47	2270807.9873513	1505	Feb	18	11:44:59	000190	LTU	-0.3241	1.2708	7.8N	172.3W	13	12	1505	C. E.
	4	13199	Aug	14	1505	C. E.	20:02:44	2270985.3352258	1505	Aug	14	20:05:53	000190	LTU	0.4064	1.0767	10.9S	59.6E	14	06	1505	C. E.
159	1	13220	Jan	30	1515	C. E.	02:32:51	2274440.6061426	1515	Jan	30	02:35:50	000180	LTU	-0.3447	1.2413	14.7N	34.5W	14	12	1515	C. E.
	2	13221	Jul	25	1515	C. E.	16:26:51	2274617.1853100	1515	Jul	25	16:29:53	000181	LTU	0.3252	1.1738	17.3S	114.5E	13	05	1515	C. E.
	3	13222	Jan	19	1516	C. E.	16:59:08	2274795.2077320	1516	Jan	19	17:02:06	000180	LTU	0.3438	1.2248	18.5N	108.8E	15	11	1516	C. E.
	4	13223	Jul	13	1516	C. E.	22:55:19	2274971.4550764	1516	Jul	13	22:58:20	000180	LTU	-0.4501	1.0308	20.6S	17.6E	13	05	1516	C. E.
160	1	13237	Mar	12	1522	C. E.	08:29:38	2277038.8539097	1522	Mar	12	08:32:34	000174	LTU	0.4404	1.0352	0.0N	125.3W	13	01	1522	C. E.
	2	13238	Sep	05	1522	C. E.	23:47:40	2277216.4914338	1522	Sep	05	23:50:32	000174	LTU	-0.4088	1.0889	3.5S	2.0E	15	07	1522	C. E.
	3	13239	Mar	01	1523	C. E.	19:59:02	2277393.3326608	1523	Mar	01	20:01:56	000173	LTU	-0.2962	1.3244	3.6N	62.8E	14			

7000 Year Canon of Total Lunar Eclipse Tetrads

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Lunar Eclipse Tetrad	Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT) of Maximum Eclipse		Astronomical Julian Date (UT)		Date and Time of Maximum Eclipse (TDT)		Delta T (seconds)	Lunar Eclipse Type	Gamma	Umb. Mag.	Greatest in Zenith		Hebrew Date on the Creation Calendar							
			Year	Month	Day	Time	Year	Month					Day	Time	Year	Month	Day	Year	Month	Day		
169	1	14412	May	16	2003	C. E.	03:40:09	2452775.6528837	2003	May	16	03:41:14	0.00064	LTU	0.4123	1.1278	18.6S	55.8W	14	02	2003	C. E.
	2	14413	Nov	09	2003	C. E.	01:18:33	2452952.5545475	2003	Nov	09	01:19:39	0.00065	LTU	-0.4319	1.0180	16.3N	23.5W	14	08	2003	C. E.
	3	14414	May	04	2004	C. E.	20:30:12	2453130.3543081	2004	May	04	20:31:16	0.00065	LTU	-0.3132	1.3036	16.5S	51.5E	15	02	2004	C. E.
	4	14415	Oct	28	2004	C. E.	03:04:06	2453306.6278475	2004	Oct	28	03:05:13	0.00065	LTU	0.2847	1.3082	13.4N	50.2W	13	08	2004	C. E.
170	1	14437	Apr	15	2014	C. E.	07:45:39	2456762.8233666	2014	Apr	15	07:46:45	0.00069	LTU	-0.3017	1.2908	10.0S	116.5W	15	01	2014	C. E.
	2	14438	Oct	08	2014	C. E.	10:54:35	2456938.9545695	2014	Oct	08	10:55:45	0.00069	LTU	0.3826	1.1660	6.3N	166.9W	13	07	2014	C. E.
	3	14439	Apr	04	2015	C. E.	12:00:15	2457117.0001689	2015	Apr	04	12:01:23	0.00069	LTU	0.4460	1.0009	5.3S	179.2W	14	01	2015	C. E.
	4	14440	Sep	28	2015	C. E.	02:47:08	2457293.6160642	2015	Sep	28	02:48:17	0.00069	LTU	-0.3296	1.2765	1.5N	144.0W	13	07	2015	C. E.
171	1	14478	Apr	25	2032	C. E.	15:13:31	2463348.1343902	2032	Apr	25	15:14:48	0.00079	LTU	-0.3557	1.1915	13.8S	131.0E	14	02	2032	C. E.
	2	14479	Oct	18	2032	C. E.	19:02:21	2463524.2933019	2032	Oct	18	19:03:41	0.00079	LTU	0.4169	1.1029	10.4N	70.5E	13	08	2032	C. E.
	3	14480	Apr	14	2033	C. E.	19:12:31	2463702.3003623	2033	Apr	14	19:13:50	0.00080	LTU	0.3954	1.0945	9.4S	72.0E	15	01	2033	C. E.
	4	14481	Oct	08	2033	C. E.	10:55:03	2463878.9548956	2033	Oct	08	10:56:23	0.00080	LTU	-0.2889	1.3498	5.8N	166.8W	13	07	2033	C. E.
172	1	14502	Mar	25	2043	C. E.	14:30:36	2467334.1045844	2043	Mar	25	14:32:05	0.00087	LTU	0.3849	1.1143	1.6S	144.0E	13	01	2043	C. E.
	2	14503	Sep	19	2043	C. E.	01:50:22	2467511.5766404	2043	Sep	19	01:51:48	0.00088	LTU	-0.3316	1.2557	1.9S	28.9W	14	07	2043	C. E.
	3	14504	Mar	13	2044	C. E.	19:37:04	2467688.3174079	2044	Mar	13	19:38:34	0.00088	LTU	-0.3496	1.2032	2.1N	67.9E	13	13	2044	C. E.
	4	14505	Sep	07	2044	C. E.	11:19:16	2467865.9717166	2044	Sep	07	11:20:43	0.00088	LTU	0.4318	1.0457	5.4S	170.6W	14	06	2044	C. E.
173	1	14518	May	06	2050	C. E.	22:30:28	2469933.4378205	2050	May	06	22:32:00	0.00094	LTU	-0.4180	1.0769	17.2S	21.5E	15	02	2050	C. E.
	2	14519	Oct	30	2050	C. E.	03:20:12	2470109.6390251	2050	Oct	30	03:21:48	0.00095	LTU	0.4435	1.0539	14.2N	54.2W	13	08	2050	C. E.
	3	14520	Apr	26	2051	C. E.	02:14:52	2470287.5936529	2051	Apr	26	02:16:27	0.00096	LTU	0.3371	1.2023	13.2S	34.2W	14	02	2051	C. E.
	4	14521	Oct	19	2051	C. E.	19:10:13	2470464.2987589	2051	Oct	19	19:11:50	0.00097	LTU	-0.2542	1.4119	9.9N	68.7E	14	08	2051	C. E.
174	1	14543	Apr	04	2061	C. E.	21:52:08	2473919.4112093	2061	Apr	04	21:54:06	0.00116	LTU	0.4300	1.0342	5.8S	32.8E	14	01	2061	C. E.
	2	14544	Sep	29	2061	C. E.	09:36:16	2474096.9001834	2061	Sep	29	09:38:11	0.00117	LTU	-0.3810	1.1622	2.4N	146.3W	14	07	2061	C. E.
	3	14545	Mar	25	2062	C. E.	03:31:52	2474273.6471335	2062	Mar	25	03:33:52	0.00118	LTU	-0.3150	1.2696	2.2S	51.6W	13	01	2062	C. E.
	4	14546	Sep	18	2062	C. E.	18:32:03	2474451.2722561	2062	Sep	18	18:34:00	0.00119	LTU	0.3736	1.1497	1.2S	80.3E	15	07	2062	C. E.
175	1	14567	Mar	04	2072	C. E.	15:20:47	2477906.1394329	2072	Mar	04	15:23:08	0.00140	LTU	-0.3430	1.2442	5.6N	132.6E	13	12	2072	C. E.
	2	14568	Aug	28	2072	C. E.	16:03:21	2478083.1689942	2072	Aug	28	16:05:42	0.00141	LTU	0.3563	1.1663	8.9S	119.3E	13	06	2072	C. E.
	3	14569	Feb	22	2073	C. E.	07:22:31	2478260.8073009	2073	Feb	22	07:24:52	0.00142	LTU	0.3388	1.2504	10.3N	107.2W	14	12	2073	C. E.
	4	14570	Aug	17	2073	C. E.	17:40:18	2478437.2363203	2073	Aug	17	17:42:43	0.00143	LTU	-0.3998	1.1014	13.4S	96.0E	13	06	2073	C. E.
176	1	14608	Mar	15	2090	C. E.	23:45:30	2484491.4899355	2090	Mar	15	23:48:31	0.00180	LTU	-0.3674	1.2013	1.3N	5.6E	14	13	2090	C. E.
	2	14609	Sep	08	2090	C. E.	22:49:28	2484668.4510196	2090	Sep	08	22:52:29	0.00181	LTU	0.4257	1.0378	4.8S	16.9E	14	06	2090	C. E.
	3	14610	Mar	05	2091	C. E.	15:55:20	2484846.1634294	2091	Mar	05	15:58:21	0.00182	LTU	0.3212	1.2832	6.1N	124.1E	15	12	2091	C. E.
	4	14611	Aug	29	2091	C. E.	00:35:22	2485022.5245575	2091	Aug	29	00:38:26	0.00183	LTU	-0.3271	1.2352	9.6S	8.5W	13	06	2091	C. E.
177	1	14634	Feb	14	2101	C. E.	02:46:35	2488478.6156786	2101	Feb	14	02:49:58	0.00205	LTU	0.3584	1.1826	13.4N	38.0W	15	12	2101	C. E.
	2	14635	Aug	09	2101	C. E.	08:22:06	2488654.8486652	2101	Aug	09	08:25:35	0.00207	LTU	-0.2864	1.3460	16.1S	124.0W	13	05	2101	C. E.
	3	14636	Feb	03	2102	C. E.	07:14:52	2488832.8019953	2102	Feb	03	07:18:19	0.00208	LTU	-0.3514	1.1687	16.3N	105.5W	14	11	2102	C. E.
	4	14637	Jul	30	2102	C. E.	00:25:41	2489009.5178311	2102	Jul	30	00:29:10	0.00209	LTU	0.4586	1.0451	18.2S	4.9W	14	05	2102	C. E.
178	1	14676	Feb	25	2119	C. E.	11:01:04	2495063.9590701	2119	Feb	25	11:05:11	0.00249	LTU	0.3765	1.1491	9.5N	161.9W	14	12	2119	C. E.
	2	14677	Aug	20	2119	C. E.	15:47:45	2495240.1581625	2119	Aug	20	15:51:57	0.00250	LTU	-0.3538	1.2228	12.8S	124.1E	12	06	2119	C. E.
	3	14678	Feb	14	2120	C. E.	15:13:08	2495418.1341240	2120	Feb	14	15:17:18	0.00251	LTU	-0.3371	1.1951	12.9N	135.1E	14	12	2120	C. E.
	4	14679	Aug	09	2120	C. E.	07:57:19	2495594.8314643	2120	Aug	09	08:01:32	0.00253	LTU	0.3875	1.1752	15.4S	118.1W	13	05	2120	C. E.
179	1	14719	Mar	07	2137	C. E.	19:08:48	2501649.2977758	2137	Mar	07	19:13:41	0.00295	LTU	0.3992	1.1071	5.3N	75.7E	15	12	2137	C. E.
	2	14720	Aug	30	2137	C. E.	23:19:09	2501825.4716277	2137	Aug	30	23:24:06	0.00296	LTU	-0.4171	1.1070	9.0S	10.6E	13	06	2137	C. E.
	3	14721	Feb	24	2138	C. E.	23:04:58	2502003.4617875	2138	Feb	24	23:09:55	0.00297	LTU	-0.3178	1.2307	9.0N	16.9E	15	12	2138	C. E.
	4	14722	Aug	20	2138	C. E.	15:33:47	2502180.1484637	2138	Aug	20	15:38:45	0.00298	LTU	0.3204	1.2978	12.0S	127.3E	13	06	2138	C. E.
180	1	14764	Mar	19	2155	C. E.	03:07:06	2508234.6299253	2155	Mar	19	03:12:43	0.00339	LTU	0.4293	1.0518	1.0N	44.6W	15	13	2155	C. E.
	2	14765	Sep	11	2155	C. E.	06:57:31	2508410.7899391	2155	Sep	11	07:03:12	0.00340	LTU	-0.4752	1.0004	5.0S	104.9W	13	06	2155	C. E.
	3	14766	Mar	07	2156	C. E.	06:48:32	2508588.7837043	2156	Mar	07	06:54:12	0.00341	LTU	-0.2922	1.2784	4.8N	99.6W	14	12	2156	C. E.
	4	14767	Aug	30	2156	C. E.	23:14:55	2508765.4686929	2156	Aug	30	23:20:37	0.00342	LTU	0.2569	1.4132	8.3S	11.3E	14	06	2156	C. E.
181	1	15492	Jun	17	2448	C. E.	10:09:46	2615341.9234436	2448	Jun	17	10:30:25	0.01241	LTU	0.3730	1.1855	23.0S	151.9W	14	04	2448	C. E.
	2	15493	Dec	10	2448	C. E.	16:32:32	2615518.1892538	2448	Dec	10	16:53:17	0.01243	LTU	-0.2667	1.3525	22.7N	110.0E	13	10	2448	C. E.
	3	15494	Jun	06	2449	C. E.	20:19:11	2615696.3466544	2449	Jun	06	20:39:54	0.01245									

7000 Year Canon of Total Lunar Eclipse Tetrads

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Lunar Eclipse Tetrad	Tetrad Sequence Number	7000 Year Canon of Lunar Eclipses Eclipse Number	Calendar Date and Time (UT) of Maximum Eclipse		Astronomical Julian Date (UT)		(TDT) Date and Time of Maximum Eclipse		Delta T (seconds)	Lunar Eclipse Type	Gamma	Umb. Mag.	Greatest in Zenith		Hebrew Date on the Creation Calendar					
			Month	Day	Time (UT)	Year	Month	Day					Time (UT)	Year	Lat.	Lon.	Day	Month	Year	
190	1	15799	Apr	09	25:52	2664214.8217330	2582	Apr	09	08:13:52	001834	LTU	0.3337	1.2017	7.5S	115.3W	14	01	2582	C.E.
	2	15800	Oct	03	06:58:18	2664391.7904860	2582	Oct	03	07:28:54	001837	LTU	-0.3243	1.2840	3.9N	107.1W	14	07	2582	C.E.
	3	15801	Mar	29	08:06:53	2664568.8381132	2583	Mar	29	08:37:33	001839	LTU	-0.3849	1.1169	3.7S	120.8W	13	01	2583	C.E.
	4	15802	Sep	22	21:27:17	2664746.3939516	2583	Sep	22	21:57:57	001841	LTU	0.4136	1.1017	0.4N	36.2E	15	07	2583	C.E.
191	1	15815	May	21	07:14:45	26666813.8019070	2589	May	21	07:45:52	001869	LTU	-0.4097	1.1156	20.7S	109.3W	14	03	2589	C.E.
	2	15816	Nov	13	10:34:41	26666989.9407529	2589	Nov	13	11:05:55	001872	LTU	0.4545	1.0118	18.5N	162.8W	12	09	2589	C.E.
	3	15817	May	10	17:05:34	2667168.2122001	2590	May	10	17:36:46	001874	LTU	0.3540	1.1893	17.5S	102.9E	15	02	2590	C.E.
	4	15818	Nov	02	23:08:47	2667344.4644306	2590	Nov	02	23:40:05	001877	LTU	-0.2685	1.3787	14.8N	8.7E	13	08	2590	C.E.
192	1	15839	Apr	20	14:53:30	2670800.1204883	2600	Apr	20	15:25:33	001923	LTU	0.3845	1.1102	11.3S	136.6E	13	02	2600	C.E.
	2	15840	Oct	14	14:59:45	2670977.1248277	2600	Oct	14	15:31:50	001926	LTU	-0.3691	1.1999	7.9N	131.8E	13	08	2600	C.E.
	3	15841	Apr	09	15:38:23	2671154.1516503	2601	Apr	09	16:10:32	001928	LTU	-0.3444	1.1939	7.9S	125.7E	13	01	2601	C.E.
	4	15842	Oct	04	05:03:55	2671331.7110538	2601	Oct	04	05:36:04	001931	LTU	0.3614	1.1944	4.6N	78.9W	14	07	2601	C.E.
193	1	15863	Mar	20	20:41:28	2674786.3621242	2611	Mar	20	21:14:26	001977	LTU	-0.3503	1.2156	0.1S	51.3E	13	01	2611	C.E.
	2	15864	Sep	14	09:04:28	2674963.8781021	2611	Sep	14	09:37:27	001980	LTU	0.3043	1.2686	3.2S	137.1W	14	07	2611	C.E.
	3	15865	Apr	09	11:12:42	2675140.9671521	2612	Apr	09	11:45:44	001982	LTU	0.3508	1.2310	4.8N	165.6W	13	13	2612	C.E.
	4	15866	Sep	02	09:39:23	2675317.9023525	2612	Sep	02	10:12:29	001985	LTU	-0.4446	1.0054	8.1S	144.6W	13	06	2612	C.E.
194	1	15879	May	01	21:54:23	2677385.4127667	2618	May	01	22:27:57	002014	LTU	0.4427	1.0050	14.8S	31.0E	14	02	2618	C.E.
	2	15880	Oct	25	23:08:42	2677562.4643727	2618	Oct	25	23:42:17	002016	LTU	-0.4073	1.1277	11.8N	9.0E	14	08	2618	C.E.
	3	15881	Apr	20	22:59:56	2677739.4582827	2619	Apr	20	23:33:35	002018	LTU	-0.2952	1.1282	11.8S	14.7E	13	02	2619	C.E.
	4	15882	Oct	15	12:48:40	2677917.0337919	2619	Oct	15	13:22:19	002021	LTU	0.3168	1.2733	8.7N	164.2E	14	08	2619	C.E.
195	1	15903	Mar	31	04:49:59	2681371.7013747	2629	Mar	31	05:24:30	002069	LTU	-0.3783	1.1668	4.5S	71.6W	13	01	2629	C.E.
	2	15904	Sep	24	16:02:04	2681549.1681046	2629	Sep	24	16:36:35	002072	LTU	0.3690	1.1473	1.0N	117.5E	15	07	2629	C.E.
	3	15905	Mar	20	19:40:33	2681726.3198259	2630	Mar	20	20:15:08	002075	LTU	0.3278	1.2747	0.4N	66.7E	14	01	2630	C.E.
	4	15906	Sep	13	16:22:32	2681903.1823180	2630	Sep	13	16:57:10	002077	LTU	-0.3717	1.1383	3.9S	113.6E	14	07	2630	C.E.
196	1	15928	Feb	29	10:32:13	2685358.9390402	2640	Feb	29	11:07:38	002126	LTU	0.3353	1.2478	8.1N	155.0W	14	12	2640	C.E.
	2	15929	Aug	23	16:33:41	2685535.1900529	2640	Aug	23	17:09:12	002129	LTU	-0.3138	1.2727	11.3S	112.6E	13	06	2640	C.E.
	3	15930	Feb	17	21:10:23	2685713.3822097	2641	Feb	17	21:45:53	002132	LTU	-0.3786	1.1403	11.5N	45.5E	15	12	2641	C.E.
	4	15931	Aug	13	04:22:59	2685889.6826247	2641	Aug	13	04:58:34	002134	LTU	0.4544	1.0414	14.1S	64.4W	13	05	2641	C.E.
197	1	15944	Apr	11	12:52:16	2687957.0362909	2647	Apr	11	13:28:21	002164	LTU	-0.4124	1.1071	8.7S	167.1E	13	01	2647	C.E.
	2	15945	Oct	05	23:06:17	2688134.4626965	2647	Oct	05	23:42:23	002167	LTU	0.4277	1.0371	5.3N	10.5E	14	07	2647	C.E.
	3	15946	Mar	31	04:02:14	2688311.6682167	2648	Mar	31	04:38:23	002169	LTU	0.2995	1.3282	4.0S	59.5W	14	01	2648	C.E.
	4	15947	Sep	23	23:13:47	2688488.4679066	2648	Sep	23	23:50:00	002172	LTU	-0.3051	1.2597	0.3N	9.8E	14	07	2648	C.E.
198	1	15969	Mar	11	19:00:29	2691944.2920057	2658	Mar	11	19:37:30	002222	LTU	0.3540	1.2136	3.9N	77.4E	15	13	2658	C.E.
	2	15970	Sep	03	23:40:17	2692120.4863093	2658	Sep	04	00:17:24	002225	LTU	-0.3839	1.1447	7.5S	5.1E	13	06	2658	C.E.
	3	15971	Mar	01	05:23:50	2692298.7248801	2659	Mar	01	06:00:56	002228	LTU	-0.3649	1.1650	7.4N	78.2W	15	12	2659	C.E.
	4	15972	Aug	24	11:48:33	2692474.9920524	2659	Aug	24	12:25:45	002230	LTU	0.3831	1.1728	10.6S	176.4W	13	06	2659	C.E.
199	1	16012	Mar	22	03:20:17	2698529.6390909	2676	Mar	22	03:58:55	002319	LTU	0.3794	1.1670	0.5S	48.3W	15	01	2676	C.E.
	2	16013	Sep	14	06:55:14	2698705.7883585	2676	Sep	14	07:33:58	002322	LTU	-0.4478	1.0280	3.4S	104.6W	13	07	2676	C.E.
	3	16014	Mar	11	13:29:12	2698884.0619445	2677	Mar	11	14:07:54	002324	LTU	-0.3450	1.2012	3.2N	159.8E	14	13	2677	C.E.
	4	16015	Sep	03	19:20:02	2699060.3055744	2677	Sep	03	19:58:50	002327	LTU	0.3160	1.2962	6.8S	69.9E	13	06	2677	C.E.
200	1	16787	Jul	02	14:31:43	2812222.1053592	2987	Jul	02	15:43:50	004328	LTU	0.3858	1.1771	22.4S	143.7E	14	04	2987	C.E.
	2	16788	Dec	26	04:54:02	2812398.7041864	2987	Dec	26	06:06:15	004331	LTU	-0.2485	1.3623	23.0N	73.9W	13	10	2987	C.E.
	3	16789	Jun	21	05:40:15	2812576.7362839	2988	Jun	21	06:52:28	004335	LTU	-0.3690	1.1885	23.7S	84.0W	15	04	2988	C.E.
	4	16790	Dec	14	11:06:31	2812752.9628565	2988	Dec	14	12:18:52	004339	LTU	0.4583	1.0059	23.6N	168.4W	13	10	2988	C.E.
201	1	16830	Jul	13	21:58:38	2818807.4157132	3005	Jul	13	23:13:01	004464	LTU	0.4591	1.0423	21.0S	32.4E	14	04	3005	C.E.
	2	16831	Jan	06	13:01:28	2818984.0426860	3006	Jan	06	14:15:57	004467	LTU	-0.2585	1.3446	22.2N	165.5E	13	10	3006	C.E.
	3	16832	Jul	03	12:53:46	2819162.0373365	3006	Jul	03	14:08:15	004471	LTU	-0.2966	1.3202	23.1S	168.2E	14	04	3006	C.E.
	4	16833	Dec	26	19:32:53	2819338.3145078	3006	Dec	26	20:47:29	004474	LTU	0.4462	1.0288	23.7N	66.3E	13	10	3006	C.E.
202	1	16857	Jun	12	18:03:08	2822794.2521798	3016	Jun	12	19:18:53	004546	LTU	-0.3286	1.2270	23.4S	89.8E	15	03	3016	C.E.
	2	16858	Dec	06	07:57:30	2822970.8315959	3016	Dec	06	09:13:20	004550	LTU	0.2390	1.4355	22.6N	122.0W	13	09	3016	C.E.
	3	16859	Jun	01	18:50:20	2823148.2849486	3017	Jun	01	20:06:14	004554	LTU	0.4252	1.0406	21.7S	77.4E	14	03	3017	C.E.
	4	16860	Nov	25	23:50:28	2823325.4933822	3017	Nov	25	01:06:24	004557	LTU	-0.4440	1.0554	20.3N	1.1W	14	09	3017	C.E.