

Date	Saros	delta T	Mag.	First contact	Second contact	Maximum eclipse	Third contact	Fourth contact	Duration	Duration tot./ann.
1999-08-11	145	0:01:04	0,893 P	10:21:17 46,9°		11:39:58 52,3°		12:59:18 51,6°	2:38:01	
2003-05-31	147	0:01:05	0,869 P	03:32:29 -3,0°		04:28:21 3,8°		05:27:18 11,9°	(1:54:50)	
2005-10-03	134	0:01:05	0,502 P	09:02:50 22,8°		10:13:22 29,4°		11:27:18 33,1°	2:24:28	
2006-03-29	139	0:01:05	0,434 P	10:50:51 38,1°		11:49:15 40,7°		12:48:03 40,3°	1:57:12	
2008-08-01	126	0:01:06	0,300 P	09:44:07 44,8°		10:38:04 50,7°		11:33:03 54,5°	1:48:56	
2011-01-04	151	0:01:06	0,808 P	08:07:56 -1,9°		09:26:55 6,7°		10:52:32 12,8°	(2:44:37)	
2015-03-20	120	0:01:08	0,788 P	09:38:43 28,1°		10:47:20 34,2°		11:58:29 37,2°	2:19:46	
2021-06-10	147	0:01:11	0,240 P	10:36:23 55,9°		11:38:45 60,1°		12:43:05 59,7°	2:06:42	
2022-10-25	124	0:01:12	0,437 P	10:09:47 21,8°		11:13:52 24,8°		12:19:18 25,0°	2:09:32	
2025-03-29	149	0:01:15	0,257 P	11:32:17 40,4°		12:19:35 41,0°		13:07:05 39,7°	1:34:49	
2026-08-12	126	0:01:17	0,874 P	18:15:23 11,1°		19:08:19 3,3°		19:58:50 -3,6°	(1:43:27)	
2027-08-02	136	0:01:18	0,447 P	09:17:20 41,3°		10:13:45 48,2°		11:11:47 53,2°	1:54:27	
2029-06-12	118	0:01:20	0,170 P	03:27:32 -2,6°		03:57:45 0,8°		04:28:45 4,7°	(1:01:14)	
2030-06-01	128	0:01:21	0,664 P	05:19:58 10,9°		06:21:53 20,0°		07:29:17 30,2°	2:09:19	
2034-03-20	130	0:01:26	0,079 P	11:10:11 35,8°		11:39:08 36,9°		12:08:09 37,4°	0:57:59	
2036-08-21	155	0:01:29	0,728 P	18:12:51 8,8°		19:02:38 1,4°		19:50:08 -5,3°	(1:37:17)	
2037-01-16	122	0:01:29	0,631 P	09:01:42 5,4°		10:25:11 12,8°		11:54:26 16,5°	2:52:44	
2038-01-05	132	0:01:30	0,197 P	15:01:10 6,4°		15:47:42 1,5°		16:31:41 -3,8°	(1:30:32)	
2038-07-02	137	0:01:31	0,058 P	14:50:16 47,7°		15:16:29 44,1°		15:42:03 40,4°	0:51:47	
2039-06-21	147	0:01:32	0,828 P	18:27:12 15,6°		19:29:01 7,1°		20:26:48 -0,1°	(1:59:36)	
2048-06-11	128	0:01:43	0,808 P	13:10:51 58,1°		14:41:33 48,4°		16:03:35 36,7°	2:52:44	
2050-11-14	153	0:01:46	0,788 P	13:40:06 15,3°		15:03:58 7,7°		16:20:28 -1,6°	(2:40:22)	
2053-09-12	145	0:01:50	0,463 P	08:27:51 24,5°		09:27:01 31,8°		10:29:20 37,7°	2:01:29	
2059-11-05	134	0:01:58	0,649 P	07:34:08 2,4°		08:45:09 11,0°		10:02:13 17,9°	2:28:05	
2060-04-30	139	0:01:59	0,347 P	10:38:00 48,9°		11:30:42 52,0°		12:24:20 52,3°	1:46:20	
2065-02-05	151	0:02:05	0,769 P	09:48:40 14,3°		11:10:41 20,1°		12:34:18 21,7°	2:45:38	
2066-06-22	128	0:02:07	0,620 P	20:10:19 1,9°		21:02:38 -4,0°		21:53:02 -8,5°	(1:42:43)	
2069-04-21	120	0:02:11	0,256 P	10:18:42 44,3°		11:05:58 47,9°		11:54:25 49,6°	1:35:44	
2072-09-12	155	0:02:15	0,298 P	08:04:57 21,2°		08:51:08 27,4°		09:39:22 33,0°	1:34:25	
2075-07-13	147	0:02:19	0,856 P	04:46:00 5,0°		05:47:45 13,5°		06:54:46 23,5°	2:08:46	
2076-11-26	124	0:02:21	0,626 P	11:04:09 15,6°		12:21:37 16,1°		13:39:05 12,9°	2:34:57	

Date	Saros	delta T	Mag.	First contact	Second contact	Maximum eclipse	Third contact	Fourth contact	Duration	Duration tot./ann.
2078-05-11	139	0:02:23	0,195 P	19:41:32 0,3°		20:10:45 -3,4°		20:39:18 -6,8°	(0:57:46)	
2079-05-01	149	0:02:25	0,321 P	11:15:36 51,5°		12:08:36 52,7°		13:02:18 50,9°	1:46:43	
2080-09-13	126	0:02:27	0,848 P	16:55:05 12,7°		17:52:17 4,0°		18:46:23 -4,2°	(1:51:18)	
2081-09-03	136	0:02:28	0,852 P	07:44:27 20,6°		08:46:45 29,4°		09:52:23 37,2°	2:07:56	
2082-02-27	141	0:02:29	0,804 P	16:20:12 10,8°		17:31:48 0,7°		18:38:00 -9,2°	(2:17:48)	
2088-04-21	130	0:02:38	0,592 P	10:34:29 45,8°		11:42:19 49,5°		12:51:13 48,7°	2:16:44	
2090-09-23	155	0:02:41	0,983 P	17:33:34 3,4°		18:28:15 -4,9°		19:19:58 -12,6°	(1:46:24)	
2091-02-18	122	0:02:42	0,519 P	09:31:31 16,5°		10:50:09 23,1°		12:12:21 26,0°	2:40:50	
2092-02-07	132	0:02:43	0,599 P	16:32:15 3,4°		17:32:52 -5,0°		18:29:21 -13,3°	(1:57:06)	
2093-07-23	147	0:02:45	0,956 A	12:16:07 57,3°	13:48:50 52,4°	13:50:48 52,2°	13:52:47 52,0°	15:18:28 41,6°	3:02:21	03:56
2102-07-15	128	0:02:59	0,230 P	06:54:11 23,2°		07:43:30 30,7°		08:36:29 38,6°	1:42:19	
2103-07-04	138	0:03:01	0,404 P	09:06:42 44,3°		10:14:18 53,0°		11:25:16 59,1°	2:18:35	
2104-12-17	153	0:03:03	0,641 P	14:30:38 7,5°		15:47:42 -0,3°		16:57:46 -9,2°	(2:27:07)	
2107-10-16	145	0:03:07	0,026 P	08:47:01 17,2°		09:02:42 18,9°		09:18:32 20,6°	0:31:30	
2113-12-08	134	0:03:17	0,507 P	07:32:57 -4,6°		08:41:03 3,5°		09:55:44 10,2°	(2:22:47)	
2119-03-11	151	0:03:25	0,610 P	10:34:14 29,6°		11:48:50 33,3°		13:04:12 32,8°	2:29:58	
2120-07-25	128	0:03:28	0,600 P	15:03:24 43,4°		16:15:16 33,2°		17:21:06 23,2°	2:17:42	
2126-10-16	155	0:03:38	0,774 P	08:03:03 11,7°		09:06:24 19,2°		10:13:36 25,1°	2:10:33	
2128-03-01	132	0:03:40	0,128 P	07:40:49 6,3°		08:15:18 11,0°		08:51:09 15,7°	1:10:20	
2130-12-30	124	0:03:45	0,555 P	13:16:47 12,9°		14:32:00 8,1°		15:42:15 1,2°	2:25:28	
2133-06-03	149	0:03:49	0,716 P	09:18:36 46,3°		10:25:12 54,3°		11:35:32 59,3°	2:16:56	
2135-10-07	136	0:03:53	1,003 T	07:31:14 10,0°	08:32:26 18,1°	08:33:08 18,2°	08:33:51 18,3°	09:38:35 25,3°	2:07:21	01:25
2136-04-01	141	0:03:54	0,642 P	14:43:43 32,8°		15:59:43 23,2°		17:10:11 12,9°	2:26:27	
2141-06-04	120	0:04:03	0,029 P	19:00:51 9,7°		19:12:35 8,1°		19:24:16 6,5°	0:23:25	
2142-05-25	130	0:04:04	0,987 P	08:49:36 41,3°		10:00:41 50,6°		11:16:20 57,2°	2:26:44	
2145-03-23	122	0:04:09	0,277 P	08:51:44 23,9°		09:48:43 30,5°		10:48:53 35,7°	1:57:09	
2146-03-12	132	0:04:11	0,839 P	17:22:58 5,5°		18:23:29 -3,6°		19:20:08 -12,2°	(1:57:09)	
2147-08-26	147	0:04:14	0,569 P	06:31:13 11,7°		07:37:59 21,8°		08:51:09 32,3°	2:19:56	
2148-08-14	157	0:04:15	0,064 P	08:42:08 33,7°		09:12:03 37,8°		09:42:52 41,6°	1:00:45	
2151-06-14	149	0:04:20	0,921 P	18:27:51 15,2°		19:20:52 7,8°		20:11:08 1,4°	1:43:17	
2157-08-05	138	0:04:31	0,759 P	04:35:35 -0,5°		05:33:55 7,6°		06:36:37 16,9°	(2:01:02)	
2159-01-19	153	0:04:34	0,311 P	15:48:23 4,0°		16:43:56 -2,9°		17:35:58 -10,0°	(1:47:36)	
2160-06-04	130	0:04:37	0,810 P	18:03:11 18,0°		18:57:04 10,3°		19:48:00 3,5°	1:44:49	
2166-08-25	157	0:04:48	0,825 P	16:47:03 20,7°		17:53:36 10,6°		18:55:09 1,4°	2:08:05	

Date	Saros	delta T	Mag.	First contact	Second contact	Maximum eclipse	Third contact	Fourth contact	Duration	Duration tot./ann.
2168-01-10	134	0:04:51	0,308 P	08:23:45 0,4°		09:27:02 7,2°		10:35:36 12,5°	2:11:50	
2173-04-12	151	0:05:01	0,707 P	09:45:57 37,8°		10:58:58 44,2°		12:15:02 46,4°	2:29:05	
2175-08-16	138	0:05:05	0,548 P	12:41:12 50,6°		13:55:05 45,9°		15:05:14 38,0°	2:24:02	
2179-06-05	140	0:05:12	0,060 P	11:30:38 59,3°		12:00:10 60,0°		12:29:41 59,7°	0:59:03	
2180-11-17	155	0:05:15	0,729 P	09:49:58 13,6°		11:00:08 17,5°		12:12:38 18,1°	2:22:41	
2182-04-03	132	0:05:18	0,406 P	07:35:21 17,2°		08:29:46 25,0°		09:27:37 32,4°	1:52:16	
2185-01-31	124	0:05:23	0,149 P	15:46:11 7,3°		16:25:15 2,5°		17:02:38 -2,4°	(1:16:27)	
2187-07-06	149	0:05:28	0,812 P	06:56:12 24,5°		07:56:10 33,6°		09:00:46 43,1°	2:04:34	
2189-11-08	136	0:05:33	0,760 P	08:39:20 9,4°		09:43:40 15,5°		10:51:39 19,6°	2:12:19	
2190-05-04	141	0:05:34	0,180 P	11:43:44 53,4°		12:34:39 53,1°		13:25:33 50,2°	1:41:50	
2191-04-23	151	0:05:36	0,488 P	19:07:59 0,8°		19:56:19 -5,9°		20:42:29 -11,7°	(1:34:30)	
2192-04-12	161	0:05:38	0,005 P	07:07:52 16,3°		07:13:42 17,2°		07:19:25 18,1°	0:11:33	
2192-09-06	128	0:05:38	0,421 P	17:24:45 10,8°		18:19:21 2,5°		19:10:57 -5,2°	(1:46:12)	
2195-02-10	153	0:05:43	0,942 A	05:53:26 -15,4°	07:00:20 -5,4°	07:03:12 -5,0°	07:06:05 -4,5°	08:19:45 5,6°	(2:26:19)	(05:45)
2196-06-26	130	0:05:46	0,545 P	06:23:35 20,3°		07:17:45 28,5°		08:15:55 37,3°	1:52:20	
2199-04-25	122	0:05:52	0,022 P	07:11:50 20,7°		07:26:15 22,9°		07:40:47 25,0°	0:28:57	
2200-04-14	132	0:05:54	1,001 T	17:08:54 16,3°	18:10:13 7,0°	18:10:20 7,0°	18:10:26 7,0°	19:07:38 -1,5°	(1:58:44)	00:13
2202-09-17	157	0:05:59	0,482 P	04:45:33 -9,4°		05:38:17 -1,5°		06:34:38 7,0°	(1:49:05)	
2205-07-17	149	0:06:04	0,483 P	16:10:54 35,1°		17:04:01 27,0°		17:53:59 19,4°	1:43:05	
2213-02-21	153	0:06:20	0,123 P	16:24:41 8,2°		17:01:11 3,2°		17:36:18 -1,8°	(1:11:37)	
2214-07-08	130	0:06:23	0,717 P	15:29:21 42,0°		16:31:47 32,7°		17:29:51 23,9°	2:00:30	
2220-09-27	157	0:06:36	0,817 P	13:20:20 33,0°		14:43:58 25,5°		16:01:21 15,7°	2:41:01	
2221-02-23	124	0:06:37	0,453 P	06:09:24 -9,4°		07:04:42 -1,1°		08:04:02 7,3°	(1:54:37)	
2222-02-12	134	0:06:39	0,328 P	08:53:54 10,2°		10:02:07 17,3°		11:14:42 22,2°	2:20:48	
2224-12-11	126	0:06:45	0,390 P	10:56:07 13,3°		11:54:51 14,5°		12:54:07 13,5°	1:58:00	
2227-05-16	151	0:06:51	0,907 P	07:45:05 30,4°		08:51:42 40,1°		10:03:29 49,2°	2:18:24	
2229-09-18	138	0:06:56	0,823 P	09:04:45 27,6°		10:22:38 35,4°		11:43:33 39,2°	2:38:47	
2233-07-08	140	0:07:04	0,438 P	06:13:49 17,9°		07:09:26 26,3°		08:09:17 35,3°	1:55:29	
2234-12-21	155	0:07:07	0,719 P	13:16:00 12,5°		14:25:42 8,0°		15:31:06 1,7°	2:15:05	
2236-05-06	132	0:07:10	0,796 P	06:20:14 15,6°		07:19:03 24,6°		08:22:19 34,0°	2:02:06	
2241-08-08	149	0:07:22	0,339 P	04:55:28 1,6°		05:35:48 7,3°		06:17:57 13,5°	1:22:29	
2242-07-28	159	0:07:24	0,549 P	17:52:23 18,0°		18:46:20 10,0°		19:37:10 2,9°	1:44:46	
2243-12-12	136	0:07:27	0,381 P	11:34:48 14,3°		12:35:44 14,1°		13:36:18 11,6°	2:01:30	
2245-05-26	151	0:07:31	0,876 P	16:58:12 26,6°		18:00:40 17,1°		18:58:41 8,8°	2:00:29	

Date	Saros	delta T	Mag.	First contact	Second contact	Maximum eclipse	Third contact	Fourth contact	Duration	Duration tot./ann.
2246-05-16	161	0:07:33	0,207 P	05:56:02 13,9°		06:28:11 18,8°		07:01:23 23,8°	1:05:20	

Created with Alcyone Solar Eclipse Calculator. The calculations are based on the Five Millenium Canon of Solar Eclipses -1999 to +3000 with eclipse predictions by Fred Espenak (NASA's GSFC). Besselian Elements provided by Jean Meus.