

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 1

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

conjunction	-2399 Jul 27 j 23:35	13°♄50'27	1°10'36		-2394 Apr 21 j 22:09	0°♈	
minimum elong	-2399 Jul 27 j 23:31	13°♄50'21	1°10'40		-2394 Jun 03 j 22:47	0°♊	
	-2399 Aug 21 j 14:23	0°♊			-2394 Jul 21 j 05:39	0°♋	
morning rise	-2399 Sep 11 j 09:52	13°♊54'04		asc. node	-2394 Sep 04 j 18:08	24°♌16'06	
	-2399 Oct 05 j 01:48	0°♍			-2394 Sep 18 j 06:20	0°♍	
	-2399 Nov 16 j 23:26	0°♎		retrograde	-2394 Oct 30 j 16:51	9°♎22'45	
	-2399 Dec 28 j 13:03	0°♏			-2394 Dec 08 j 18:38	30°♏♌	
desc. node	-2398 Jan 25 j 04:15	20°♏20'09		opposition	-2394 Dec 09 j 18:41	29°♌35'54	3°15'59
	-2398 Feb 07 j 05:24	0°♌		min. Earth dist.	-2394 Dec 08 j 23:10	29°♌55'28	0.66992 AU
	-2398 Mar 19 j 19:13	0°♍		greatest brilliancy	-2394 Dec 09 j 14:59	29°♌39'36	-1.3m
	-2398 Apr 30 j 19:40	0°♎		direct	-2393 Jan 19 j 01:55	19°♌54'20	
	-2398 Jun 17 j 13:36	0°♈			-2393 Mar 05 j 18:09	0°♍	
retrograde	-2398 Aug 16 j 08:25	19°♈31'35			-2393 May 05 j 22:28	0°♄	
min. Earth dist.	-2398 Sep 15 j 10:23	13°♈19'46	0.50756 AU		-2393 Jun 24 j 08:55	0°♊	
greatest brilliancy	-2398 Sep 22 j 08:23	10°♈45'45	-2.1m		-2393 Aug 08 j 01:25	0°♍	
opposition	-2398 Sep 23 j 03:58	10°♈27'33	-3°10'58	desc. node	-2393 Sep 16 j 23:36	28°♍47'22	
direct	-2398 Oct 27 j 11:08	3°♈02'21			-2393 Sep 18 j 14:42	0°♎	
asc. node	-2398 Nov 30 j 18:23	9°♈28'06		evening set	-2393 Oct 25 j 04:05	27°♎45'46	
	-2397 Jan 16 j 06:58	0°♊			-2393 Oct 28 j 01:28	0°♏	
	-2397 Mar 11 j 12:54	0°♋			-2393 Dec 05 j 08:40	0°♌	
	-2397 Apr 30 j 21:17	0°♍					
	-2397 Jun 18 j 02:17	0°♄		conjunction	-2393 Dec 28 j 04:10	17°♌59'33	-0°59'01
evening set	-2397 Jul 20 j 04:49	20°♄43'50		minimum elong	-2393 Dec 28 j 01:29	17°♌54'18	0°59'04
	-2397 Aug 03 j 05:18	0°♊			-2392 Jan 12 j 10:57	0°♍	
max. Earth dist.	-2397 Aug 09 j 10:34	4°♊09'25	2.57691 AU	max. Earth dist.	-2392 Jan 30 j 07:14	13°♍54'17	2.38050 AU
					-2392 Feb 20 j 06:08	0°♎	
conjunction	-2397 Sep 05 j 21:57	22°♊51'49	0°55'21	morning rise	-2392 Mar 05 j 22:03	11°♎04'22	
minimum elong	-2397 Sep 05 j 23:24	22°♊54'19	0°55'22		-2392 Mar 31 j 13:26	0°♈	
	-2397 Sep 16 j 04:19	0°♍			-2392 May 13 j 00:21	0°♊	
morning rise	-2397 Oct 25 j 11:40	28°♍05'02			-2392 Jun 27 j 05:00	0°♋	
	-2397 Oct 28 j 02:38	0°♎		asc. node	-2392 Jul 22 j 17:25	15°♌59'26	
	-2397 Dec 07 j 09:42	0°♏			-2392 Aug 15 j 05:40	0°♍	
desc. node	-2397 Dec 13 j 02:42	4°♏19'31			-2392 Oct 12 j 15:13	0°♄	
	-2396 Jan 15 j 15:30	0°♌		retrograde	-2392 Dec 03 j 21:12	12°♄56'33	
	-2396 Feb 23 j 13:52	0°♍		opposition	-2391 Jan 12 j 02:23	3°♄45'33	4°39'08
	-2396 Apr 03 j 03:39	0°♎		greatest brilliancy	-2391 Jan 12 j 12:25	3°♄35'41	-1.4m
	-2396 May 14 j 15:50	0°♈		min. Earth dist.	-2391 Jan 15 j 03:22	2°♄33'45	0.65964 AU
	-2396 Jun 29 j 12:15	0°♊			-2391 Jan 21 j 20:17	30°♏♍	
	-2396 Aug 31 j 17:27	0°♋		direct	-2391 Feb 22 j 09:33	23°♍44'36	
retrograde	-2396 Sep 25 j 09:52	3°♋44'00			-2391 Mar 28 j 17:22	0°♄	
asc. node	-2396 Oct 17 j 17:41	0°♌15'32			-2391 May 30 j 10:38	0°♊	
	-2396 Oct 18 j 13:49	30°♏♊			-2391 Jul 16 j 20:13	0°♍	
min. Earth dist.	-2396 Oct 30 j 15:27	25°♊37'12	0.61633 AU	desc. node	-2391 Aug 03 j 22:09	12°♍29'04	
opposition	-2396 Nov 04 j 05:21	23°♊47'40	0°42'53		-2391 Aug 28 j 05:52	0°♎	
greatest brilliancy	-2396 Nov 04 j 02:05	23°♊50'54	-1.6m		-2391 Oct 06 j 22:54	0°♏	
direct	-2396 Dec 12 j 05:01	14°♊54'03			-2391 Nov 14 j 08:22	0°♌	
	-2395 Feb 07 j 20:53	0°♋			-2391 Dec 22 j 13:06	0°♍	
	-2395 Apr 07 j 18:51	0°♍		evening set	-2390 Jan 01 j 03:15	7°♍27'51	
	-2395 May 28 j 12:43	0°♄			-2390 Jan 30 j 12:20	0°♎	
	-2395 Jul 14 j 11:02	0°♊					
	-2395 Aug 27 j 10:12	0°♍		conjunction	-2390 Mar 05 j 22:27	25°♎34'53	-0°51'38
evening set	-2395 Aug 31 j 06:42	2°♍43'05		minimum elong	-2390 Mar 06 j 00:56	25°♎39'24	0°51'39
max. Earth dist.	-2395 Sep 15 j 07:30	13°♍27'24	2.46071 AU		-2390 Mar 12 j 00:31	0°♈	
	-2395 Oct 07 j 22:23	0°♎		max. Earth dist.	-2390 Apr 16 j 09:43	25°♈03'45	2.50718 AU
					-2390 Apr 23 j 13:20	0°♊	
conjunction	-2395 Oct 23 j 18:33	11°♎50'31	0°04'19	morning rise	-2390 May 03 j 22:21	7°♊05'22	
minimum elong	-2395 Oct 23 j 18:50	11°♎51'03	0°04'18		-2390 Jun 07 j 07:30	0°♋	
behind sun begin	-2395 Oct 22 j 19:33	11°♎07'12		asc. node	-2390 Jun 09 j 16:18	1°♌32'47	
behind sun end	-2395 Oct 24 j 18:08	12°♎34'57			-2390 Jul 24 j 08:00	0°♍	
desc. node	-2395 Oct 30 j 00:51	16°♎34'35			-2390 Sep 12 j 03:53	0°♄	
	-2395 Nov 16 j 14:27	0°♏			-2390 Nov 07 j 09:52	0°♊	
morning rise	-2395 Dec 23 j 02:18	28°♏22'03		retrograde	-2389 Jan 13 j 00:41	19°♊09'48	
	-2395 Dec 25 j 04:20	0°♌		opposition	-2389 Feb 19 j 05:05	11°♊00'10	4°38'02
	-2394 Feb 01 j 11:59	0°♍		greatest brilliancy	-2389 Feb 20 j 07:23	10°♊35'28	-1.7m
	-2394 Mar 12 j 10:39	0°♎		min. Earth dist.	-2389 Feb 25 j 23:53	8°♊27'34	0.58480 AU

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 2

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direct	-2389 Mar 31 j 19:01	1°♏19'03		evening set	-2384 May 28 j 00:28	0°♐28'54	
	-2389 Jun 19 j 10:46	0°♍		max. Earth dist.	-2384 Jul 04 j 09:19	24°♐14'50	2.66552 AU
desc. node	-2389 Jun 21 j 20:12	1°♍24'28					
	-2389 Aug 04 j 18:34	0°♌		conjunction	-2384 Jul 13 j 11:19	0°♌04'11	1°08'11
	-2389 Sep 14 j 21:41	0°♍		minimum elong	-2384 Jul 13 j 10:40	0°♌03'10	1°08'15
	-2389 Oct 24 j 01:30	0°♎			-2384 Jul 13 j 08:42	0°♌	
	-2389 Dec 01 j 20:45	0°♏		morning rise	-2384 Aug 27 j 10:41	29°♌17'25	
	-2388 Jan 10 j 10:16	0°♎			-2384 Aug 28 j 12:33	0°♏	
	-2388 Feb 20 j 12:36	0°♎			-2384 Oct 12 j 09:13	0°♍	
evening set	-2388 Mar 02 j 16:51	7°♎55'49			-2384 Nov 24 j 22:26	0°♌	
	-2388 Apr 03 j 13:12	0°♍			-2383 Jan 06 j 09:16	0°♍	
				desc. node	-2383 Feb 10 j 20:31	25°♍26'09	
conjunction	-2388 Apr 26 j 08:46	15°♍22'39	-0°00'10		-2383 Feb 17 j 04:58	0°♎	
minimum elong	-2388 Apr 26 j 08:45	15°♍22'36	0°00'08		-2383 Mar 31 j 09:33	0°♏	
behind sun begin	-2388 Apr 25 j 11:24	14°♍47'01			-2383 May 15 j 19:43	0°♎	
behind sun end	-2388 Apr 27 j 06:05	15°♍58'09		retrograde	-2383 Jul 27 j 19:58	27°♎35'40	
asc. node	-2388 Apr 26 j 15:09	15°♍33'15		min. Earth dist.	-2383 Aug 24 j 20:34	22°♎15'59	0.45675 AU
max. Earth dist.	-2388 May 17 j 16:43	29°♍28'31	2.61230 AU	opposition	-2383 Sep 01 j 22:22	19°♎28'37	-4°57'42
	-2388 May 18 j 11:57	0°♎		greatest brilliancy	-2383 Aug 31 j 15:19	19°♎55'32	-2.4m
morning rise	-2388 Jun 15 j 15:25	18°♎15'04		direct	-2383 Oct 04 j 09:27	12°♎53'43	
	-2388 Jul 04 j 00:29	0°♐			-2383 Dec 03 j 04:48	0°♎	
	-2388 Aug 20 j 17:44	0°♌		asc. node	-2383 Dec 17 j 10:32	6°♎59'42	
	-2388 Oct 08 j 18:10	0°♏			-2382 Jan 28 j 09:52	0°♍	
	-2388 Nov 29 j 16:18	0°♍			-2382 Mar 20 j 05:03	0°♎	
	-2387 Feb 03 j 20:33	0°♌			-2382 May 08 j 08:02	0°♐	
retrograde	-2387 Mar 06 j 14:00	5°♌03'40			-2382 Jun 25 j 01:49	0°♌	
	-2387 Apr 04 j 17:24	30°♎		evening set	-2382 Jul 05 j 00:23	6°♌22'32	
opposition	-2387 Apr 09 j 00:26	28°♎37'12	1°45'19	max. Earth dist.	-2382 Jul 29 j 10:14	22°♌15'50	2.61161 AU
greatest brilliancy	-2387 Apr 09 j 15:50	28°♎34'33	-2.4m		-2382 Aug 10 j 02:52	0°♏	
min. Earth dist.	-2387 Apr 17 j 08:49	25°♎53'06	0.45989 AU				
desc. node	-2387 May 08 j 20:49	21°♎05'35		conjunction	-2382 Aug 20 j 18:17	7°♏07'04	1°05'15
direct	-2387 May 15 j 16:58	20°♎45'47		minimum elong	-2382 Aug 20 j 19:13	7°♏08'40	1°05'18
	-2387 Jun 23 j 19:46	0°♌			-2382 Sep 23 j 05:31	0°♍	
	-2387 Aug 15 j 18:53	0°♍		morning rise	-2382 Oct 07 j 02:17	9°♍42'30	
	-2387 Sep 27 j 15:54	0°♎			-2382 Nov 04 j 11:20	0°♌	
	-2387 Nov 07 j 14:45	0°♏			-2382 Dec 15 j 03:52	0°♍	
	-2387 Dec 18 j 18:57	0°♎		desc. node	-2382 Dec 29 j 19:32	11°♍00'58	
	-2386 Jan 30 j 04:53	0°♎			-2381 Jan 23 j 19:51	0°♎	
asc. node	-2386 Mar 14 j 12:22	29°♎29'54			-2381 Mar 04 j 04:41	0°♏	
	-2386 Mar 15 j 06:22	0°♍			-2381 Apr 13 j 07:26	0°♎	
evening set	-2386 Apr 19 j 00:35	22°♍55'47			-2381 May 25 j 21:16	0°♎	
	-2386 Apr 29 j 21:33	0°♎			-2381 Jul 14 j 11:51	0°♍	
				retrograde	-2381 Sep 11 j 12:33	18°♍12'37	
conjunction	-2386 Jun 06 j 22:34	24°♎28'26	0°44'18	min. Earth dist.	-2381 Oct 14 j 20:49	10°♍45'59	0.57931 AU
minimum elong	-2386 Jun 06 j 21:16	24°♎26'21	0°44'20	opposition	-2381 Oct 20 j 19:52	8°♍25'35	-0°38'00
max. Earth dist.	-2386 Jun 11 j 16:12	27°♎29'58	2.66612 AU	greatest brilliancy	-2381 Oct 20 j 16:49	8°♍28'34	-1.8m
	-2386 Jun 15 j 14:12	0°♐		asc. node	-2381 Nov 04 j 09:53	3°♍15'51	
morning rise	-2386 Jul 22 j 23:01	23°♐48'52		direct	-2381 Nov 26 j 13:15	0°♍00'24	
	-2386 Aug 01 j 15:55	0°♌			-2380 Feb 22 j 16:30	0°♎	
	-2386 Sep 17 j 14:08	0°♏			-2380 Apr 16 j 14:37	0°♐	
	-2386 Nov 03 j 05:50	0°♍			-2380 Jun 05 j 01:33	0°♌	
	-2386 Dec 20 j 00:38	0°♌			-2380 Jul 21 j 14:12	0°♏	
	-2385 Feb 06 j 03:37	0°♍		evening set	-2380 Aug 13 j 13:41	15°♏29'01	
desc. node	-2385 Mar 26 j 21:24	27°♍10'28		max. Earth dist.	-2380 Aug 29 j 03:50	26°♏15'11	2.50997 AU
	-2385 Apr 01 j 20:28	0°♎			-2380 Sep 03 j 12:19	0°♍	
retrograde	-2385 May 22 j 07:23	13°♎32'22					
opposition	-2385 Jun 21 j 19:35	8°♎27'51	-5°36'27	conjunction	-2380 Oct 03 j 03:21	21°♍11'29	0°28'23
min. Earth dist.	-2385 Jun 21 j 07:13	8°♎36'05	0.37577 AU	minimum elong	-2380 Oct 03 j 04:43	21°♍13'58	0°28'22
greatest brilliancy	-2385 Jun 21 j 15:25	8°♎30'38	-2.9m		-2380 Oct 15 j 03:48	0°♌	
direct	-2385 Jul 21 j 19:23	3°♎28'06		desc. node	-2380 Nov 15 j 18:25	23°♌41'39	
	-2385 Oct 03 j 22:44	0°♏			-2380 Nov 24 j 00:47	0°♍	
	-2385 Nov 21 j 21:33	0°♎		morning rise	-2380 Nov 27 j 08:28	2°♍32'36	
	-2384 Jan 07 j 06:57	0°♎			-2379 Jan 01 j 19:42	0°♎	
asc. node	-2384 Jan 30 j 10:39	14°♎59'43			-2379 Feb 09 j 07:33	0°♏	
	-2384 Feb 22 j 18:02	0°♍			-2379 Mar 20 j 09:41	0°♎	
	-2384 Apr 09 j 20:06	0°♎			-2379 Apr 30 j 02:22	0°♎	
	-2384 May 27 j 06:12	0°♐			-2379 Jun 12 j 16:55	0°♍	



































































































































## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 3

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2379 Aug 01 j 03:49	0°♄				-2374 Sep 23 j 16:44	0°♍		
asc. node	-2379 Sep 21 j 08:58	22°♄18'31				-2374 Nov 01 j 10:13	0°♌		
retrograde	-2379 Oct 17 j 06:46	26°♄13'43				-2374 Dec 09 j 21:24	0°♋		
min. Earth dist.	-2379 Nov 24 j 02:32	17°♄14'24	0.65641 AU			-2373 Jan 18 j 03:08	0°♊		
opposition	-2379 Nov 26 j 09:38	16°♄19'04	2°25'23	evening set		-2373 Feb 09 j 17:23	16°♊47'05		
greatest brilliancy	-2379 Nov 26 j 03:45	16°♄24'59	-1.4m			-2373 Feb 27 j 22:01	0°♐		
direct	-2378 Jan 04 j 22:30	6°♄52'34							
	-2378 Mar 21 j 04:33	0°♐		conjunction		-2373 Apr 08 j 18:29	28°♐00'13	-0°20'47	
	-2378 May 15 j 00:46	0°♏		minimum elong		-2373 Apr 08 j 19:36	28°♐02'08	0°20'46	
	-2378 Jul 02 j 04:03	0°♎				-2373 Apr 11 j 16:19	0°♏		
	-2378 Aug 15 j 11:25	0°♍		max. Earth dist.		-2373 May 07 j 12:47	17°♏28'17	2.57685 AU	
	-2378 Sep 25 j 23:20	0°♌		asc. node		-2373 May 14 j 05:45	21°♏55'57		
evening set	-2378 Oct 01 j 20:01	4°♌22'22				-2373 May 26 j 11:28	0°♌		
desc. node	-2378 Oct 03 j 16:20	5°♌45'25		morning rise		-2373 May 31 j 20:15	3°♌30'39		
max. Earth dist.	-2378 Oct 31 j 23:17	27°♌17'30	2.38825 AU			-2373 Jul 12 j 01:53	0°♐		
	-2378 Nov 04 j 11:27	0°♍				-2373 Aug 29 j 08:14	0°♏		
						-2373 Oct 19 j 00:02	0°♎		
conjunction	-2378 Nov 30 j 15:05	20°♍23'18	-0°38'11			-2373 Dec 15 j 20:27	0°♍		
minimum elong	-2378 Nov 30 j 12:24	20°♍18'01	0°38'12	retrograde		-2372 Feb 12 j 08:47	15°♍31'34		
	-2378 Dec 12 j 20:35	0°♌		opposition		-2372 Mar 18 j 11:29	8°♍18'35	3°23'50	
	-2377 Jan 20 j 00:11	0°♋		greatest brilliancy		-2372 Mar 19 j 14:07	7°♍55'06	-2.1m	
morning rise	-2377 Feb 06 j 09:27	13°♋32'36		min. Earth dist.		-2372 Mar 26 j 19:29	5°♍22'43	0.51224 AU	
	-2377 Feb 27 j 19:34	0°♊				-2372 Apr 17 j 11:26	30°♋♎		
	-2377 Apr 09 j 02:46	0°♐		direct		-2372 Apr 26 j 06:04	29°♎28'06		
	-2377 May 21 j 15:46	0°♏				-2372 May 05 j 02:54	0°♍		
	-2377 Jul 06 j 07:22	0°♄		desc. node		-2372 May 25 j 13:03	4°♍44'47		
asc. node	-2377 Aug 09 j 09:08	20°♄36'04				-2372 Jul 15 j 04:45	0°♌		
	-2377 Aug 26 j 04:06	0°♐				-2372 Aug 28 j 16:19	0°♍		
	-2377 Nov 19 j 03:43	0°♏				-2372 Oct 08 j 06:52	0°♌		
retrograde	-2377 Nov 20 j 22:06	0°♏01'10				-2372 Nov 17 j 00:35	0°♋		
	-2377 Nov 22 j 16:14	30°♋♐				-2372 Dec 27 j 07:57	0°♊		
opposition	-2377 Dec 30 j 14:34	20°♐33'30	4°15'09			-2371 Feb 07 j 01:32	0°♐		
greatest brilliancy	-2377 Dec 30 j 18:14	20°♐29'51	-1.3m			-2371 Mar 22 j 14:27	0°♏		
min. Earth dist.	-2376 Jan 01 j 03:19	19°♐56'59	0.67153 AU	asc. node		-2371 Mar 31 j 04:25	5°♏46'09		
direct	-2376 Feb 09 j 16:30	10°♐36'31		evening set		-2371 Apr 01 j 20:16	6°♏52'48		
	-2376 Apr 16 j 06:08	0°♏				-2371 May 06 j 21:08	0°♄		
	-2376 Jun 09 j 07:06	0°♎							
	-2376 Jul 25 j 05:16	0°♍		conjunction		-2371 May 22 j 13:43	10°♄11'09	0°29'09	
desc. node	-2376 Aug 20 j 15:25	18°♍38'53		minimum elong		-2371 May 22 j 12:39	10°♄09'24	0°29'10	
	-2376 Sep 05 j 03:55	0°♌		max. Earth dist.		-2371 Jun 02 j 12:16	17°♄14'13	2.65136 AU	
	-2376 Oct 14 j 16:53	0°♍				-2371 Jun 22 j 10:20	0°♐		
	-2376 Nov 22 j 00:16	0°♌		morning rise		-2371 Jul 08 j 20:19	10°♐27'30		
evening set	-2376 Dec 04 j 15:46	9°♌58'34				-2371 Aug 08 j 15:40	0°♏		
	-2376 Dec 30 j 02:58	0°♋				-2371 Sep 25 j 03:46	0°♎		
	-2375 Feb 06 j 23:25	0°♊				-2371 Nov 12 j 03:05	0°♍		
						-2371 Dec 31 j 19:11	0°♌		
conjunction	-2375 Feb 08 j 19:57	1°♊24'28	-1°04'20			-2370 Feb 26 j 13:31	0°♍		
minimum elong	-2375 Feb 08 j 21:29	1°♊27'22	1°04'22	desc. node		-2370 Apr 12 j 12:56	13°♍22'56		
	-2375 Mar 19 j 08:25	0°♐		retrograde		-2370 Apr 20 j 07:56	13°♍45'02		
max. Earth dist.	-2375 Mar 29 j 09:56	7°♐15'33	2.45552 AU	opposition		-2370 May 21 j 02:04	8°♍32'24	-2°39'08	
morning rise	-2375 Apr 13 j 09:20	17°♐53'40		greatest brilliancy		-2370 May 21 j 11:39	8°♍25'44	-2.8m	
	-2375 Apr 30 j 18:49	0°♏		min. Earth dist.		-2370 May 25 j 19:48	7°♍13'23	0.39185 AU	
	-2375 Jun 14 j 14:08	0°♄		direct		-2370 Jun 22 j 05:40	2°♍44'57		
asc. node	-2375 Jun 26 j 07:57	7°♄35'33				-2370 Sep 03 j 18:23	0°♌		
	-2375 Aug 01 j 02:00	0°♐				-2370 Oct 20 j 08:37	0°♋		
	-2375 Sep 21 j 16:32	0°♏				-2370 Dec 03 j 08:11	0°♊		
	-2375 Nov 28 j 03:04	0°♎				-2369 Jan 16 j 12:13	0°♐		
retrograde	-2375 Dec 27 j 09:25	4°♎35'02		asc. node		-2369 Feb 16 j 03:01	20°♐23'47		
	-2374 Jan 23 j 09:11	30°♎♏				-2369 Mar 02 j 17:38	0°♏		
opposition	-2374 Feb 03 j 13:02	25°♏57'25	4°51'15			-2369 Apr 18 j 02:24	0°♄		
greatest brilliancy	-2374 Feb 04 j 09:42	25°♏37'33	-1.5m	evening set		-2369 May 13 j 23:04	16°♄30'58		
min. Earth dist.	-2374 Feb 08 j 22:04	23°♏53'26	0.62180 AU			-2369 Jun 04 j 03:34	0°♐		
direct	-2374 Mar 16 j 16:17	16°♏01'33		max. Earth dist.		-2369 Jun 26 j 03:33	14°♐00'16	2.67213 AU	
	-2374 May 08 j 14:05	0°♎							
	-2374 Jul 01 j 08:16	0°♍		conjunction		-2369 Jun 30 j 01:25	16°♐29'54	1°01'46	
desc. node	-2374 Jul 08 j 14:31	4°♍41'15		minimum elong		-2369 Jun 30 j 00:21	16°♐28'12	1°01'49	
	-2374 Aug 14 j 08:46	0°♌				-2369 Jul 21 j 04:14	0°♏		

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 4

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

morning rise	-2369 Aug 14 j 02:10	15°  23'57		asc. node	-2364 Oct 08 j 00:27	12°  19'43	
	-2369 Sep 05 j 13:09	0°  0		min. Earth dist.	-2364 Nov 08 j 18:33	4°  00'42	0.63328 AU
	-2369 Oct 20 j 22:38	0°  0		opposition	-2364 Nov 12 j 12:44	2°  30'24	1°23'56
	-2369 Dec 04 j 09:23	0°  0		greatest brilliancy	-2364 Nov 12 j 07:26	2°  35'42	-1.5m
	-2368 Jan 17 j 04:02	0°  0			-2364 Nov 18 j 22:00	30°  0	
desc. node	-2368 Feb 28 j 13:29	29°  03'06		direct	-2364 Dec 21 j 02:40	23°  0	
	-2368 Feb 29 j 23:02	0°  0			-2363 Jan 25 j 21:52	0°  0	
	-2368 Apr 15 j 20:09	0°  0			-2363 Apr 01 j 09:51	0°  0	
	-2368 Jun 19 j 16:11	0°  0			-2363 May 23 j 07:36	0°  0	
retrograde	-2368 Jul 05 j 02:34	1°  38'53			-2363 Jul 09 j 15:36	0°  0	
	-2368 Jul 20 j 09:19	30°  0			-2363 Aug 22 j 17:59	0°  0	
min. Earth dist.	-2368 Jul 31 j 18:59	27°  01'59	0.41053 AU	evening set	-2363 Sep 11 j 00:58	13°  0	
greatest brilliancy	-2368 Aug 06 j 08:29	25°  0	-2.7m	max. Earth dist.	-2363 Sep 27 j 20:11	25°  0	2.43313 AU
opposition	-2368 Aug 07 j 18:29	24°  0	-6°24'19		-2363 Oct 03 j 06:32	0°  0	
direct	-2368 Sep 07 j 13:36	19°  0		desc. node	-2363 Oct 20 j 10:34	12°  0	
	-2368 Oct 22 j 06:32	0°  0					
	-2368 Dec 19 j 04:40	0°  0		conjunction	-2363 Nov 05 j 13:46	25°  0	-0°11'06
asc. node	-2367 Jan 03 j 01:40	8°  0		minimum elong	-2363 Nov 05 j 12:59	25°  0	0°11'06
	-2367 Feb 07 j 09:54	0°  0		behind sun begin	-2363 Nov 04 j 18:20	24°  0	
	-2367 Mar 28 j 06:17	0°  0		behind sun end	-2363 Nov 06 j 07:39	25°  0	
	-2367 May 15 j 13:03	0°  0			-2363 Nov 11 j 21:19	0°  0	
evening set	-2367 Jun 20 j 04:48	22°  0			-2363 Dec 20 j 09:12	0°  0	
	-2367 Jul 01 j 23:01	0°  0		morning rise	-2362 Jan 07 j 23:00	14°  0	
max. Earth dist.	-2367 Jul 19 j 10:05	11°  0	2.63877 AU		-2362 Jan 27 j 14:48	0°  0	
					-2362 Mar 07 j 11:14	0°  0	
conjunction	-2367 Aug 05 j 11:52	22°  0	1°10'00		-2362 Apr 16 j 19:38	0°  0	
minimum elong	-2367 Aug 05 j 12:11	22°  0	1°10'03		-2362 May 29 j 13:42	0°  0	
	-2367 Aug 16 j 23:50	0°  0			-2362 Jul 15 j 00:31	0°  0	
morning rise	-2367 Sep 20 j 10:13	23°  0		asc. node	-2362 Aug 25 j 23:23	23°  0	
	-2367 Sep 30 j 08:00	0°  0			-2362 Sep 07 j 11:36	0°  0	
	-2367 Nov 11 j 23:45	0°  0		retrograde	-2362 Nov 07 j 10:06	17°  0	
	-2367 Dec 23 j 05:10	0°  0		opposition	-2362 Dec 17 j 09:38	7°  0	3°40'45
desc. node	-2366 Jan 15 j 11:56	17°  0		greatest brilliancy	-2362 Dec 17 j 08:08	7°  0	-1.3m
	-2366 Feb 01 j 11:33	0°  0		min. Earth dist.	-2362 Dec 17 j 10:28	7°  0	0.67336 AU
	-2366 Mar 13 j 12:33	0°  0			-2361 Jan 08 j 09:13	30°  0	
	-2366 Apr 23 j 14:18	0°  0		direct	-2361 Jan 27 j 00:39	27°  0	
	-2366 Jun 07 j 10:38	0°  0			-2361 Feb 15 j 23:25	0°  0	
	-2366 Aug 15 j 02:56	0°  0			-2361 Apr 29 j 07:32	0°  0	
retrograde	-2366 Aug 26 j 08:44	0°  0			-2361 Jun 19 j 00:17	0°  0	
	-2366 Sep 06 j 07:48	30°  0			-2361 Aug 03 j 02:24	0°  0	
min. Earth dist.	-2366 Sep 26 j 14:52	24°  0	0.53460 AU	desc. node	-2361 Sep 07 j 08:43	25°  0	
opposition	-2366 Oct 03 j 19:41	21°  0	-2°12'00		-2361 Sep 13 j 19:17	0°  0	
greatest brilliancy	-2366 Oct 03 j 06:58	21°  0	-2.0m		-2361 Oct 23 j 07:04	0°  0	
direct	-2366 Nov 08 j 01:29	13°  0		evening set	-2361 Nov 08 j 11:52	12°  0	
asc. node	-2366 Nov 21 j 00:57	14°  0			-2361 Nov 30 j 14:17	0°  0	
	-2365 Jan 06 j 11:20	0°  0			-2360 Jan 07 j 16:24	0°  0	
	-2365 Mar 05 j 08:54	0°  0					
	-2365 Apr 25 j 17:26	0°  0		conjunction	-2360 Jan 13 j 02:59	4°  0	-1°05'10
	-2365 Jun 13 j 08:03	0°  0		minimum elong	-2360 Jan 13 j 01:41	4°  0	1°05'13
evening set	-2365 Jul 29 j 03:38	29°  0			-2360 Feb 15 j 11:14	0°  0	
	-2365 Jul 29 j 14:33	0°  0		max. Earth dist.	-2360 Feb 29 j 20:26	10°  0	2.40316 AU
max. Earth dist.	-2365 Aug 16 j 08:58	11°  0	2.55459 AU	morning rise	-2360 Mar 20 j 17:26	25°  0	
	-2365 Sep 11 j 13:23	0°  0			-2360 Mar 26 j 17:53	0°  0	
					-2360 May 08 j 03:04	0°  0	
conjunction	-2365 Sep 15 j 16:33	2°  0	0°47'08		-2360 Jun 22 j 01:58	0°  0	
minimum elong	-2365 Sep 15 j 18:08	2°  0	0°47'09	asc. node	-2360 Jul 12 j 23:03	13°  0	
	-2365 Oct 23 j 09:21	0°  0			-2360 Aug 09 j 08:25	0°  0	
morning rise	-2365 Nov 05 j 23:08	10°  0			-2360 Oct 03 j 03:32	0°  0	
	-2365 Dec 02 j 12:37	0°  0		retrograde	-2360 Dec 12 j 04:21	20°  0	
desc. node	-2365 Dec 03 j 11:05	0°  0		opposition	-2359 Jan 20 j 01:47	11°  0	4°47'26
	-2364 Jan 10 j 14:03	0°  0		greatest brilliancy	-2359 Jan 20 j 15:41	11°  0	-1.4m
	-2364 Feb 18 j 07:59	0°  0		min. Earth dist.	-2359 Jan 23 j 23:14	10°  0	0.64892 AU
	-2364 Mar 28 j 16:15	0°  0		direct	-2359 Mar 02 j 09:27	1°  0	
	-2364 May 08 j 18:39	0°  0			-2359 May 23 j 04:43	0°  0	
	-2364 Jun 22 j 11:20	0°  0			-2359 Jul 11 j 03:05	0°  0	
	-2364 Aug 15 j 22:49	0°  0		desc. node	-2359 Jul 25 j 06:48	9°  0	
retrograde	-2364 Oct 03 j 13:27	12°  0			-2359 Aug 23 j 00:13	0°  0	

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Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2359 Oct 01 j 21:51	0°♌		morning rise	-2354 Jul 30 j 23:59	1°♊53'48	
	-2359 Nov 09 j 09:39	0°♊			-2354 Sep 12 j 17:23	0°♏	
	-2359 Dec 17 j 16:09	0°♊			-2354 Oct 28 j 20:25	0°♏	
evening set	-2358 Jan 16 j 01:49	22°♊41'15			-2354 Dec 13 j 14:20	0°♌	
	-2358 Jan 25 j 16:55	0°♌			-2353 Jan 28 j 14:11	0°♌	
	-2358 Mar 07 j 06:27	0°♋		desc. node	-2353 Mar 17 j 05:35	29°♌41'34	
					-2353 Mar 17 j 18:05	0°♊	
conjunction	-2358 Mar 18 j 21:29	8°♋20'34	-0°41'14		-2353 May 23 j 16:55	0°♊	
minimum elong	-2358 Mar 18 j 23:41	8°♋24'29	0°41'15	retrograde	-2353 Jun 08 j 19:54	1°♊40'52	
	-2358 Apr 18 j 20:07	0°♊			-2353 Jun 24 j 22:13	30°♋♊	
max. Earth dist.	-2358 Apr 24 j 16:42	4°♊00'49	2.53376 AU	min. Earth dist.	-2353 Jul 06 j 12:30	27°♊10'31	0.38074 AU
morning rise	-2358 May 14 j 13:46	17°♊26'24		greatest brilliancy	-2353 Jul 09 j 05:52	26°♊25'57	-2.9m
asc. node	-2358 May 30 j 22:36	28°♊17'20		opposition	-2353 Jul 10 j 00:31	26°♊13'13	-6°31'41
	-2358 Jun 02 j 13:11	0°♋		direct	-2353 Aug 08 j 16:40	21°♊12'34	
	-2358 Jul 19 j 08:11	0°♌			-2353 Sep 16 j 22:47	0°♊	
	-2358 Sep 06 j 10:28	0°♊			-2353 Nov 13 j 07:58	0°♌	
	-2358 Oct 29 j 20:55	0°♏			-2353 Dec 31 j 21:22	0°♋	
retrograde	-2357 Jan 23 j 07:47	28°♏29'58		asc. node	-2352 Jan 20 j 17:38	12°♋32'14	
opposition	-2357 Feb 28 j 20:22	20°♏38'22	4°19'32		-2352 Feb 17 j 07:57	0°♊	
greatest brilliancy	-2357 Mar 02 j 00:25	20°♏12'29	-1.8m		-2352 Apr 04 j 22:02	0°♋	
min. Earth dist.	-2357 Mar 08 j 07:29	17°♏53'24	0.56099 AU		-2352 May 22 j 14:20	0°♌	
direct	-2357 Apr 09 j 22:54	11°♏10'16		evening set	-2352 Jun 05 j 11:31	8°♌46'19	
	-2357 Jun 10 j 00:05	0°♏			-2352 Jul 08 j 19:14	0°♊	
desc. node	-2357 Jun 12 j 06:00	1°♏11'06		max. Earth dist.	-2352 Jul 09 j 20:17	0°♊40'11	2.65838 AU
	-2357 Jul 29 j 03:15	0°♌					
	-2357 Sep 09 j 01:47	0°♌		conjunction	-2352 Jul 21 j 17:56	8°♊20'19	1°10'05
	-2357 Oct 18 j 14:33	0°♊		minimum elong	-2352 Jul 21 j 17:37	8°♊19'48	1°10'09
	-2357 Nov 26 j 15:42	0°♊			-2352 Aug 23 j 21:57	0°♏	
	-2356 Jan 05 j 09:48	0°♌		morning rise	-2352 Sep 04 j 21:40	7°♏57'04	
	-2356 Feb 15 j 15:59	0°♋			-2352 Oct 07 j 14:06	0°♏	
evening set	-2356 Mar 14 j 04:05	19°♋16'34			-2352 Nov 19 j 18:57	0°♌	
	-2356 Mar 29 j 19:45	0°♊			-2352 Dec 31 j 17:44	0°♌	
asc. node	-2356 Apr 16 j 20:23	12°♊09'05		desc. node	-2351 Feb 01 j 06:05	22°♌57'32	
					-2351 Feb 10 j 20:48	0°♊	
conjunction	-2356 May 06 j 06:00	25°♊01'05	0°11'14		-2351 Mar 24 j 00:21	0°♊	
minimum elong	-2356 May 06 j 05:29	25°♊00'15	0°11'15		-2351 May 06 j 00:50	0°♌	
behind sun begin	-2356 May 05 j 14:29	24°♊35'35			-2351 Jun 26 j 21:33	0°♋	
behind sun end	-2356 May 06 j 20:30	25°♊24'55		retrograde	-2351 Aug 08 j 07:05	10°♋55'09	
	-2356 May 13 j 20:13	0°♋		min. Earth dist.	-2351 Sep 06 j 09:23	5°♋07'16	0.48488 AU
max. Earth dist.	-2356 May 23 j 16:57	6°♋25'59	2.62852 AU	greatest brilliancy	-2351 Sep 13 j 09:24	2°♋35'53	-2.2m
morning rise	-2356 Jun 24 j 06:53	26°♋46'43		opposition	-2351 Sep 14 j 10:16	2°♋13'24	-3°56'55
	-2356 Jun 29 j 07:59	0°♌			-2351 Sep 20 j 19:26	30°♋♌	
	-2356 Aug 15 j 19:35	0°♊		direct	-2351 Oct 17 j 22:43	25°♌09'33	
	-2356 Oct 03 j 03:44	0°♏			-2351 Nov 16 j 02:24	0°♋	
	-2356 Nov 22 j 04:55	0°♏		asc. node	-2351 Dec 07 j 16:04	7°♋59'40	
	-2355 Jan 17 j 03:45	0°♌			-2350 Jan 21 j 01:30	0°♊	
retrograde	-2355 Mar 21 j 09:38	18°♌06'00			-2350 Mar 14 j 14:20	0°♋	
opposition	-2355 Apr 22 j 22:14	12°♌07'18	0°23'59		-2350 May 03 j 09:15	0°♌	
greatest brilliancy	-2355 Apr 23 j 01:45	12°♌04'33	-2.6m		-2350 Jun 20 j 09:53	0°♊	
desc. node	-2355 Apr 29 j 05:36	10°♌09'31		evening set	-2350 Jul 13 j 15:25	14°♊56'41	
min. Earth dist.	-2355 Apr 30 j 15:19	9°♌43'56	0.43241 AU	max. Earth dist.	-2350 Aug 04 j 17:27	29°♊27'40	2.59342 AU
direct	-2355 May 28 j 02:06	4°♌58'15			-2350 Aug 05 j 12:55	0°♏	
	-2355 Aug 05 j 09:20	0°♌					
	-2355 Sep 20 j 03:34	0°♊		conjunction	-2350 Aug 29 j 20:12	16°♏22'15	1°00'11
	-2355 Nov 01 j 06:22	0°♊		minimum elong	-2350 Aug 29 j 21:27	16°♏24'24	1°00'14
	-2355 Dec 13 j 03:04	0°♌			-2350 Sep 18 j 14:35	0°♏	
	-2354 Jan 24 j 23:55	0°♋		morning rise	-2350 Oct 17 j 06:51	20°♏17'30	
asc. node	-2354 Mar 04 j 18:36	26°♋16'14			-2350 Oct 30 j 17:07	0°♌	
	-2354 Mar 10 j 09:02	0°♊			-2350 Dec 10 j 05:01	0°♌	
	-2354 Apr 25 j 05:01	0°♋		desc. node	-2350 Dec 20 j 04:51	7°♌32'52	
evening set	-2354 Apr 28 j 07:37	2°♋00'26			-2349 Jan 18 j 15:20	0°♊	
	-2354 Jun 10 j 23:54	0°♌			-2349 Feb 26 j 17:50	0°♊	
					-2349 Apr 07 j 11:45	0°♌	
conjunction	-2354 Jun 15 j 11:02	2°♌50'48	0°51'42		-2349 May 19 j 07:17	0°♋	
minimum elong	-2354 Jun 15 j 09:45	2°♌48'45	0°51'44		-2349 Jul 05 j 04:36	0°♊	
max. Earth dist.	-2354 Jun 17 j 00:53	3°♌51'08	2.67058 AU	retrograde	-2349 Sep 20 j 05:17	27°♊42'45	
	-2354 Jul 28 j 00:47	0°♊		min. Earth dist.	-2349 Oct 24 j 14:59	19°♊52'51	0.60076 AU

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Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

asc. node	-2349 Oct 25 j 15:02	19° $\Upsilon$ 29'09			-2344 Oct 09 j 19:33	0° $\mathbb{M}$	
opposition	-2349 Oct 29 j 19:33	17° $\Upsilon$ 49'17	0°10'34		-2344 Nov 17 j 04:13	0° $\mathcal{A}$	
greatest brilliancy	-2349 Oct 29 j 18:41	17° $\Upsilon$ 50'08	-1.7m	evening set	-2344 Dec 20 j 05:19	26° $\mathcal{A}$ 00'31	
direct	-2349 Dec 06 j 05:56	9° $\Upsilon$ 07'30			-2344 Dec 25 j 07:41	0° $\mathcal{Z}$	
	-2348 Feb 14 j 10:02	0° $\mathcal{B}$			-2343 Feb 02 j 04:48	0° $\approx$	
	-2348 Apr 10 j 21:06	0° $\mathbb{I}$					
	-2348 May 31 j 01:57	0° $\mathcal{E}$		conjunction	-2343 Feb 23 j 08:56	15° $\approx$ 53'42	-0°58'09
	-2348 Jul 16 j 21:08	0° $\mathcal{Q}$		minimum elong	-2343 Feb 23 j 11:17	15° $\approx$ 58'03	0°58'10
evening set	-2348 Aug 23 j 10:58	25° $\mathcal{Q}$ 30'36			-2343 Mar 14 j 14:10	0° $\mathcal{H}$	
	-2348 Aug 29 j 21:03	0° $\mathbb{M}$		max. Earth dist.	-2343 Apr 09 j 06:21	18° $\mathcal{H}$ 20'25	2.48441 AU
max. Earth dist.	-2348 Sep 07 j 08:42	5° $\mathbb{M}$ 59'30	2.48311 AU	morning rise	-2343 Apr 25 j 09:18	29° $\mathcal{H}$ 33'54	
	-2348 Oct 10 j 11:44	0° $\mathcal{E}$			-2343 Apr 26 j 00:27	0° $\Upsilon$	
					-2343 Jun 09 j 17:20	0° $\mathcal{B}$	
conjunction	-2348 Oct 14 j 12:28	2° $\mathcal{E}$ 59'06	0°15'12	asc. node	-2343 Jun 16 j 13:39	4° $\mathcal{B}$ 27'30	
minimum elong	-2348 Oct 14 j 13:20	3° $\mathcal{E}$ 00'41	0°15'10		-2343 Jul 26 j 20:46	0° $\mathbb{I}$	
behind sun begin	-2348 Oct 14 j 04:43	2° $\mathcal{E}$ 44'43			-2343 Sep 15 j 06:25	0° $\mathcal{E}$	
behind sun end	-2348 Oct 14 j 21:57	3° $\mathcal{E}$ 16'40			-2343 Nov 13 j 08:38	0° $\mathcal{Q}$	
desc. node	-2348 Nov 06 j 03:15	19° $\mathcal{E}$ 58'08		retrograde	-2342 Jan 05 j 17:08	13° $\mathcal{Q}$ 14'29	
	-2348 Nov 19 j 06:44	0° $\mathbb{M}$		opposition	-2342 Feb 12 j 08:19	4° $\mathcal{Q}$ 51'46	4°45'38
morning rise	-2348 Dec 11 j 10:38	17° $\mathbb{M}$ 07'20		greatest brilliancy	-2342 Feb 13 j 08:23	4° $\mathcal{Q}$ 28'54	-1.6m
	-2348 Dec 27 j 23:03	0° $\mathcal{A}$		min. Earth dist.	-2342 Feb 18 j 12:31	2° $\mathcal{Q}$ 31'02	0.60238 AU
	-2347 Feb 04 j 08:24	0° $\mathcal{Z}$			-2342 Feb 25 j 12:46	30° $\mathcal{R}$ $\mathcal{E}$	
	-2347 Mar 15 j 07:50	0° $\approx$		direct	-2342 Mar 25 j 05:14	25° $\mathcal{E}$ 02'33	
	-2347 Apr 24 j 19:56	0° $\mathcal{H}$			-2342 Apr 23 j 14:09	0° $\mathcal{Q}$	
	-2347 Jun 06 j 23:51	0° $\Upsilon$			-2342 Jun 24 j 05:42	0° $\mathbb{M}$	
	-2347 Jul 24 j 21:20	0° $\mathcal{B}$		desc. node	-2342 Jun 28 j 22:12	2° $\mathbb{M}$ 53'21	
asc. node	-2347 Sep 11 j 15:38	24° $\mathcal{B}$ 27'07			-2342 Aug 08 j 11:15	0° $\mathcal{E}$	
	-2347 Sep 27 j 15:51	0° $\mathbb{I}$			-2342 Sep 18 j 06:08	0° $\mathbb{M}$	
retrograde	-2347 Oct 25 j 01:03	4° $\mathbb{I}$ 17'16			-2342 Oct 27 j 05:11	0° $\mathcal{A}$	
	-2347 Nov 19 j 09:27	30° $\mathcal{R}$ $\mathcal{B}$			-2342 Dec 04 j 20:20	0° $\mathcal{Z}$	
min. Earth dist.	-2347 Dec 02 j 16:20	25° $\mathcal{B}$ 01'50	0.66507 AU		-2341 Jan 13 j 05:28	0° $\approx$	
opposition	-2347 Dec 04 j 03:31	24° $\mathcal{B}$ 26'30	2°56'12	evening set	-2341 Feb 22 j 11:38	29° $\approx$ 32'15	
greatest brilliancy	-2347 Dec 03 j 22:31	24° $\mathcal{B}$ 31'31	-1.4m		-2341 Feb 23 j 03:06	0° $\mathcal{H}$	
direct	-2346 Jan 13 j 02:38	14° $\mathcal{B}$ 51'06			-2341 Apr 06 j 23:33	0° $\Upsilon$	
	-2346 Mar 12 j 03:53	0° $\mathbb{I}$					
	-2346 May 09 j 04:20	0° $\mathcal{E}$		conjunction	-2341 Apr 19 j 13:58	8° $\Upsilon$ 33'48	-0°08'49
	-2346 Jun 27 j 02:09	0° $\mathcal{Q}$		minimum elong	-2341 Apr 19 j 14:25	8° $\Upsilon$ 34'33	0°08'47
	-2346 Aug 10 j 16:04	0° $\mathbb{M}$		behind sun begin	-2341 Apr 18 j 19:39	8° $\Upsilon$ 02'53	
	-2346 Sep 21 j 05:57	0° $\mathcal{E}$		behind sun end	-2341 Apr 20 j 09:11	9° $\Upsilon$ 06'13	
desc. node	-2346 Sep 24 j 01:43	2° $\mathcal{E}$ 06'01		asc. node	-2341 May 04 j 12:37	18° $\Upsilon$ 34'52	
evening set	-2346 Oct 14 j 16:00	17° $\mathcal{E}$ 38'19		max. Earth dist.	-2341 May 14 j 02:12	24° $\Upsilon$ 55'26	2.59739 AU
	-2346 Oct 30 j 18:03	0° $\mathbb{M}$			-2341 May 21 j 19:17	0° $\mathcal{B}$	
	-2346 Dec 08 j 02:12	0° $\mathcal{A}$		morning rise	-2341 Jun 10 j 00:22	12° $\mathcal{B}$ 30'32	
max. Earth dist.	-2346 Dec 11 j 13:35	2° $\mathcal{A}$ 44'19	2.37445 AU		-2341 Jul 07 j 07:35	0° $\mathbb{I}$	
					-2341 Aug 24 j 05:15	0° $\mathcal{E}$	
conjunction	-2346 Dec 15 j 21:44	6° $\mathcal{A}$ 09'36	-0°51'16		-2341 Oct 12 j 19:40	0° $\mathcal{Q}$	
minimum elong	-2346 Dec 15 j 18:41	6° $\mathcal{A}$ 03'34	0°51'18		-2341 Dec 05 j 14:20	0° $\mathbb{M}$	
	-2345 Jan 15 j 04:46	0° $\mathcal{Z}$		retrograde	-2340 Feb 25 j 01:13	26° $\mathbb{M}$ 40'16	
morning rise	-2345 Feb 22 j 18:21	29° $\mathcal{Z}$ 50'38		opposition	-2340 Mar 30 j 06:13	19° $\mathbb{M}$ 52'00	2°33'30
	-2345 Feb 22 j 23:16	0° $\approx$		greatest brilliancy	-2340 Mar 31 j 03:50	19° $\mathbb{M}$ 33'34	-2.2m
	-2345 Apr 04 j 05:11	0° $\mathcal{H}$		min. Earth dist.	-2340 Apr 07 j 17:41	16° $\mathbb{M}$ 59'14	0.48327 AU
	-2345 May 16 j 15:23	0° $\Upsilon$		direct	-2340 May 06 j 22:47	11° $\mathbb{M}$ 31'13	
	-2345 Jun 30 j 22:06	0° $\mathcal{B}$		desc. node	-2340 May 15 j 22:23	12° $\mathbb{M}$ 04'17	
asc. node	-2345 Jul 30 j 15:19	18° $\mathcal{B}$ 24'27			-2340 Jul 04 j 10:09	0° $\mathcal{E}$	
	-2345 Aug 19 j 11:51	0° $\mathbb{I}$			-2340 Aug 21 j 06:03	0° $\mathbb{M}$	
	-2345 Oct 20 j 17:11	0° $\mathcal{E}$			-2340 Oct 01 j 22:23	0° $\mathcal{A}$	
retrograde	-2345 Nov 28 j 21:16	7° $\mathcal{E}$ 52'15			-2340 Nov 11 j 05:59	0° $\mathcal{Z}$	
	-2344 Jan 03 j 15:46	30° $\mathcal{R}$ $\mathbb{I}$			-2340 Dec 21 j 23:15	0° $\approx$	
opposition	-2344 Jan 07 j 07:54	28° $\mathbb{I}$ 33'33	4°30'18		-2339 Feb 02 j 00:13	0° $\mathcal{H}$	
greatest brilliancy	-2344 Jan 07 j 15:04	28° $\mathbb{I}$ 26'28	-1.3m		-2339 Mar 17 j 18:50	0° $\Upsilon$	
min. Earth dist.	-2344 Jan 09 j 17:02	27° $\mathbb{I}$ 37'03	0.66619 AU	asc. node	-2339 Mar 21 j 10:14	2° $\Upsilon$ 26'35	
direct	-2344 Feb 17 j 13:08	18° $\mathbb{I}$ 33'41		evening set	-2339 Apr 11 j 19:49	16° $\Upsilon$ 39'24	
	-2344 Apr 06 j 00:12	0° $\mathcal{E}$			-2339 May 02 j 05:04	0° $\mathcal{B}$	
	-2344 Jun 03 j 02:30	0° $\mathcal{Q}$					
	-2344 Jul 19 j 21:26	0° $\mathbb{M}$		conjunction	-2339 May 31 j 11:20	18° $\mathcal{B}$ 53'54	0°38'18
desc. node	-2344 Aug 11 j 00:10	15° $\mathbb{M}$ 24'22		minimum elong	-2339 May 31 j 10:06	18° $\mathcal{B}$ 51'54	0°38'20
	-2344 Aug 31 j 03:28	0° $\mathcal{E}$		max. Earth dist.	-2339 Jun 07 j 23:50	23° $\mathcal{B}$ 43'08	2.66062 AU

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 7

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2339 Jun 17 j 19:33	0°♊		opposition	-2334 Oct 13 j 18:44	1°♊48'25	-1°16'11
morning rise	-2339 Jul 16 j 23:31	18°♊34'57		greatest brilliancy	-2334 Oct 13 j 12:01	1°♊54'57	-1.9m
	-2339 Aug 03 j 22:29	0°♋			-2334 Oct 18 j 12:22	30°♋	
	-2339 Sep 20 j 02:21	0°♌		asc. node	-2334 Nov 11 j 07:13	24°♋01'01	
	-2339 Nov 06 j 06:45	0°♍		direct	-2334 Nov 18 j 20:47	23°♋38'14	
	-2339 Dec 24 j 02:50	0°♎			-2334 Dec 23 j 08:31	0°♌	
	-2338 Feb 12 j 17:39	0°♏			-2333 Feb 26 j 16:10	0°♍	
desc. node	-2338 Apr 02 j 23:00	23°♏30'41			-2333 Apr 20 j 09:30	0°♎	
	-2338 Apr 29 j 09:35	0°♐			-2333 Jun 08 j 12:04	0°♏	
retrograde	-2338 May 08 j 06:06	0°♑29'52			-2333 Jul 24 j 23:01	0°♐	
	-2338 May 17 j 02:18	30°♑		evening set	-2333 Aug 07 j 09:41	8°♐59'46	
opposition	-2338 Jun 07 j 15:04	25°♑28'54	-4°27'14	max. Earth dist.	-2333 Aug 24 j 00:57	20°♐20'19	2.53069 AU
greatest brilliancy	-2338 Jun 07 j 20:30	25°♑25'16	-2.9m		-2333 Sep 06 j 22:46	0°♑	
min. Earth dist.	-2338 Jun 09 j 14:51	24°♑56'49	0.37913 AU				
direct	-2338 Jul 08 j 09:30	20°♑14'48		conjunction	-2333 Sep 25 j 22:58	13°♑28'19	0°37'02
	-2338 Aug 18 j 00:11	0°♒		minimum elong	-2333 Sep 26 j 00:31	13°♑31'06	0°37'03
	-2338 Oct 11 j 08:52	0°♓			-2333 Oct 18 j 17:13	0°♒	
	-2338 Nov 26 j 12:09	0°♐		morning rise	-2333 Nov 18 j 05:49	22°♒47'08	
	-2337 Jan 10 j 17:23	0°♋		desc. node	-2333 Nov 23 j 20:19	27°♒02'08	
asc. node	-2337 Feb 06 j 08:01	17°♋29'30			-2333 Nov 27 j 17:47	0°♓	
	-2337 Feb 25 j 13:17	0°♌			-2332 Jan 05 j 15:47	0°♒	
	-2337 Apr 13 j 06:29	0°♍			-2332 Feb 13 j 05:57	0°♓	
evening set	-2337 May 22 j 16:11	25°♍01'38			-2332 Mar 23 j 09:53	0°♐	
	-2337 May 30 j 12:18	0°♎			-2332 May 03 j 04:45	0°♋	
max. Earth dist.	-2337 Jul 01 j 11:44	20°♎20'19	2.66957 AU		-2332 Jun 16 j 02:30	0°♌	
					-2332 Aug 05 j 21:57	0°♍	
conjunction	-2337 Jul 08 j 08:27	24°♎43'26	1°05'58	asc. node	-2332 Sep 28 j 06:15	19°♍47'42	
minimum elong	-2337 Jul 08 j 07:37	24°♎42'07	1°06'01	retrograde	-2332 Oct 11 j 12:55	20°♍54'01	
	-2337 Jul 16 j 14:09	0°♋		min. Earth dist.	-2332 Nov 17 j 15:38	12°♍08'21	0.64723 AU
morning rise	-2337 Aug 22 j 06:39	23°♋43'50		opposition	-2332 Nov 20 j 14:14	10°♍57'26	2°01'12
	-2337 Aug 31 j 20:31	0°♌		greatest brilliancy	-2332 Nov 20 j 08:08	11°♍03'34	-1.5m
	-2337 Oct 15 j 23:15	0°♍		direct	-2332 Dec 29 j 16:51	1°♍39'07	
	-2337 Nov 28 j 21:46	0°♎			-2331 Mar 25 j 09:52	0°♎	
	-2336 Jan 10 j 21:44	0°♏			-2331 May 17 j 21:54	0°♋	
desc. node	-2336 Feb 18 j 22:09	27°♏30'47			-2331 Jul 04 j 17:47	0°♌	
	-2336 Feb 22 j 10:55	0°♐			-2331 Aug 18 j 00:23	0°♍	
	-2336 Apr 05 j 19:47	0°♑		evening set	-2331 Sep 22 j 13:21	25°♑33'18	
	-2336 May 24 j 12:45	0°♒			-2331 Sep 28 j 13:41	0°♎	
retrograde	-2336 Jul 18 j 09:56	17°♒14'19		desc. node	-2331 Oct 10 j 18:24	9°♒06'39	
min. Earth dist.	-2336 Aug 14 j 16:37	12°♒16'27	0.43483 AU	max. Earth dist.	-2331 Oct 14 j 10:33	11°♒52'47	2.40681 AU
greatest brilliancy	-2336 Aug 21 j 02:36	10°♒09'35	-2.5m		-2331 Nov 07 j 03:52	0°♓	
opposition	-2336 Aug 22 j 12:40	9°♒41'21	-5°40'25				
direct	-2336 Sep 23 j 04:14	3°♒31'08		conjunction	-2331 Nov 19 j 09:01	9°♓28'05	-0°26'48
	-2336 Dec 10 j 04:22	0°♋		minimum elong	-2331 Nov 19 j 07:04	9°♓24'18	0°26'48
asc. node	-2336 Dec 24 j 07:42	7°♋39'15			-2331 Dec 15 j 14:31	0°♒	
	-2335 Feb 01 j 03:35	0°♌			-2330 Jan 22 j 18:47	0°♓	
	-2335 Mar 22 j 23:45	0°♍		morning rise	-2330 Jan 24 j 11:14	1°♓19'05	
	-2335 May 10 j 17:28	0°♎			-2330 Mar 02 j 13:57	0°♐	
	-2335 Jun 27 j 08:16	0°♏			-2330 Apr 11 j 20:19	0°♋	
evening set	-2335 Jun 28 j 16:16	0°♐51'11			-2330 May 24 j 09:30	0°♌	
max. Earth dist.	-2335 Jul 25 j 05:36	18°♐01'23	2.62480 AU		-2330 Jul 09 j 05:54	0°♍	
	-2335 Aug 12 j 09:59	0°♑		asc. node	-2330 Aug 16 j 06:26	22°♍31'18	
					-2330 Aug 30 j 03:45	0°♎	
conjunction	-2335 Aug 14 j 03:38	1°♑09'11	1°07'51	retrograde	-2330 Nov 15 j 03:53	25°♎01'53	
minimum elong	-2335 Aug 14 j 04:19	1°♑10'19	1°07'53	opposition	-2330 Dec 24 j 23:47	15°♎27'58	4°02'00
	-2335 Sep 25 j 16:04	0°♒		greatest brilliancy	-2330 Dec 25 j 01:01	15°♎26'45	-1.3m
morning rise	-2335 Sep 29 j 18:09	2°♒50'10		min. Earth dist.	-2330 Dec 25 j 20:41	15°♎07'08	0.67359 AU
	-2335 Nov 07 j 02:53	0°♓		direct	-2329 Feb 03 j 21:06	5°♎34'14	
	-2335 Dec 18 j 01:33	0°♏			-2329 Apr 21 j 22:31	0°♋	
desc. node	-2334 Jan 05 j 21:07	14°♏04'25			-2329 Jun 13 j 10:30	0°♌	
	-2334 Jan 26 j 23:39	0°♐			-2329 Jul 29 j 01:07	0°♍	
	-2334 Mar 07 j 14:40	0°♑		desc. node	-2329 Aug 28 j 16:59	21°♑45'40	
	-2334 Apr 17 j 01:07	0°♒			-2329 Sep 08 j 22:13	0°♎	
	-2334 May 30 j 06:53	0°♋			-2329 Oct 18 j 11:23	0°♌	
	-2334 Jul 22 j 02:35	0°♌		evening set	-2329 Nov 23 j 15:55	28°♓19'38	
retrograde	-2334 Sep 04 j 20:01	11°♌27'19			-2329 Nov 25 j 18:49	0°♒	
min. Earth dist.	-2334 Oct 07 j 06:13	4°♌20'24	0.56017 AU		-2328 Jan 02 j 20:52	0°♓	

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Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

conjunction	-2328 Jan 29 j 00:31	20° $\text{♁}$ 19'29	-1°06'26	retrograde	-2323 Apr 06 j 17:42	2° $\text{♁}$ 25'11	
minimum elong	-2328 Jan 29 j 00:57	20° $\text{♁}$ 20'19	1°06'30	desc. node	-2323 Apr 19 j 14:42	1° $\text{♁}$ 23'48	
	-2328 Feb 10 j 15:55	0° $\text{♁}$			-2323 Apr 26 j 17:06	30° $\text{♁}$	
max. Earth dist.	-2328 Mar 19 j 03:41	27° $\text{♁}$ 57'56	2.43174 AU	opposition	-2323 May 08 j 05:09	26° $\text{♁}$ 54'13	-1°14'56
	-2328 Mar 21 j 22:41	0° $\text{♁}$		greatest brilliancy	-2323 May 08 j 11:53	26° $\text{♁}$ 49'18	-2.7m
morning rise	-2328 Apr 03 j 13:30	9° $\text{♁}$ 06'27		min. Earth dist.	-2323 May 14 j 15:27	25° $\text{♁}$ 01'58	0.40777 AU
	-2328 May 03 j 07:05	0° $\text{♁}$		direct	-2323 Jun 10 j 17:20	20° $\text{♁}$ 31'22	
	-2328 Jun 17 j 02:07	0° $\text{♁}$			-2323 Jul 20 j 05:57	0° $\text{♁}$	
asc. node	-2328 Jul 03 j 05:39	10° $\text{♁}$ 23'11			-2323 Sep 11 j 05:13	0° $\text{♁}$	
	-2328 Aug 03 j 19:17	0° $\text{♁}$			-2323 Oct 25 j 06:34	0° $\text{♁}$	
	-2328 Sep 25 j 09:31	0° $\text{♁}$			-2323 Dec 07 j 02:58	0° $\text{♁}$	
retrograde	-2328 Dec 20 j 18:08	29° $\text{♁}$ 07'26			-2322 Jan 19 j 14:35	0° $\text{♁}$	
opposition	-2327 Jan 28 j 06:16	20° $\text{♁}$ 19'10	4°51'06	asc. node	-2322 Feb 23 j 00:53	23° $\text{♁}$ 09'05	
greatest brilliancy	-2327 Jan 29 j 00:01	20° $\text{♁}$ 01'58	-1.4m		-2322 Mar 05 j 09:12	0° $\text{♁}$	
min. Earth dist.	-2327 Feb 01 j 23:33	18° $\text{♁}$ 29'19	0.63522 AU		-2322 Apr 20 j 11:04	0° $\text{♁}$	
direct	-2327 Mar 10 j 12:14	10° $\text{♁}$ 19'48		evening set	-2322 May 07 j 08:53	10° $\text{♁}$ 51'05	
	-2327 May 14 j 17:58	0° $\text{♁}$			-2322 Jun 06 j 08:56	0° $\text{♁}$	
	-2327 Jul 05 j 02:14	0° $\text{♁}$		max. Earth dist.	-2322 Jun 22 j 09:13	10° $\text{♁}$ 12'03	2.67247 AU
desc. node	-2327 Jul 15 j 16:29	6° $\text{♁}$ 59'45					
	-2327 Aug 17 j 14:53	0° $\text{♁}$		conjunction	-2322 Jun 23 j 21:08	11° $\text{♁}$ 09'15	0°57'59
	-2327 Sep 26 j 18:47	0° $\text{♁}$		minimum elong	-2322 Jun 23 j 19:58	11° $\text{♁}$ 07'23	0°58'02
	-2327 Nov 04 j 09:37	0° $\text{♁}$			-2322 Jul 23 j 09:33	0° $\text{♁}$	
	-2327 Dec 12 j 18:02	0° $\text{♁}$		morning rise	-2322 Aug 08 j 01:48	10° $\text{♁}$ 03'29	
	-2326 Jan 20 j 20:34	0° $\text{♁}$			-2322 Sep 07 j 22:04	0° $\text{♁}$	
evening set	-2326 Jan 30 j 08:47	7° $\text{♁}$ 08'25			-2322 Oct 23 j 15:19	0° $\text{♁}$	
	-2326 Mar 02 j 11:42	0° $\text{♁}$			-2322 Dec 07 j 14:51	0° $\text{♁}$	
					-2321 Jan 21 j 05:50	0° $\text{♁}$	
conjunction	-2326 Mar 31 j 02:06	20° $\text{♁}$ 17'42	-0°29'37	desc. node	-2321 Mar 07 j 15:19	0° $\text{♁}$ 07'15	
minimum elong	-2326 Mar 31 j 03:43	20° $\text{♁}$ 20'31	0°29'37		-2321 Mar 07 j 10:51	0° $\text{♁}$	
	-2326 Apr 14 j 02:32	0° $\text{♁}$			-2321 Apr 25 j 22:55	0° $\text{♁}$	
max. Earth dist.	-2326 May 02 j 07:40	12° $\text{♁}$ 23'23	2.55856 AU	retrograde	-2321 Jun 24 j 19:46	19° $\text{♁}$ 21'35	
asc. node	-2326 May 21 j 03:10	24° $\text{♁}$ 56'33		min. Earth dist.	-2321 Jul 21 j 13:33	14° $\text{♁}$ 53'58	0.39425 AU
morning rise	-2326 May 24 j 15:51	27° $\text{♁}$ 16'19		greatest brilliancy	-2321 Jul 26 j 01:32	13° $\text{♁}$ 35'33	-2.8m
	-2326 May 28 j 19:23	0° $\text{♁}$		opposition	-2321 Jul 27 j 07:02	13° $\text{♁}$ 13'56	-6°42'10
	-2326 Jul 14 j 10:32	0° $\text{♁}$		direct	-2321 Aug 26 j 11:17	7° $\text{♁}$ 55'31	
	-2326 Aug 31 j 23:28	0° $\text{♁}$			-2321 Nov 02 j 11:27	0° $\text{♁}$	
	-2326 Oct 22 j 13:40	0° $\text{♁}$			-2321 Dec 24 j 20:20	0° $\text{♁}$	
	-2326 Dec 24 j 10:02	0° $\text{♁}$		asc. node	-2320 Jan 10 j 23:21	10° $\text{♁}$ 26'23	
retrograde	-2325 Feb 03 j 09:01	8° $\text{♁}$ 22'25			-2320 Feb 11 j 15:17	0° $\text{♁}$	
opposition	-2325 Mar 11 j 03:16	0° $\text{♁}$ 51'07	3°51'26		-2320 Mar 30 j 20:45	0° $\text{♁}$	
greatest brilliancy	-2325 Mar 12 j 07:16	0° $\text{♁}$ 25'50	-1.9m		-2320 May 17 j 20:48	0° $\text{♁}$	
	-2325 Mar 13 j 11:45	30° $\text{♁}$		evening set	-2320 Jun 13 j 22:22	17° $\text{♁}$ 04'43	
min. Earth dist.	-2325 Mar 19 j 03:00	27° $\text{♁}$ 58'21	0.53485 AU		-2320 Jul 04 j 04:42	0° $\text{♁}$	
direct	-2325 Apr 19 j 13:32	21° $\text{♁}$ 41'15		max. Earth dist.	-2320 Jul 15 j 09:29	7° $\text{♁}$ 12'11	2.64853 AU
	-2325 May 27 j 10:13	0° $\text{♁}$					
desc. node	-2325 Jun 02 j 15:14	2° $\text{♁}$ 36'05		conjunction	-2320 Jul 30 j 03:51	16° $\text{♁}$ 46'50	1°10'34
	-2325 Jul 21 j 15:52	0° $\text{♁}$		minimum elong	-2320 Jul 30 j 03:53	16° $\text{♁}$ 46'54	1°10'37
	-2325 Sep 02 j 20:20	0° $\text{♁}$			-2320 Aug 19 j 06:58	0° $\text{♁}$	
	-2325 Oct 12 j 22:11	0° $\text{♁}$		morning rise	-2320 Sep 13 j 16:04	16° $\text{♁}$ 57'57	
	-2325 Nov 21 j 07:11	0° $\text{♁}$			-2320 Oct 02 j 19:26	0° $\text{♁}$	
	-2325 Dec 31 j 07:18	0° $\text{♁}$			-2320 Nov 14 j 17:30	0° $\text{♁}$	
	-2324 Feb 10 j 18:11	0° $\text{♁}$			-2320 Dec 26 j 06:49	0° $\text{♁}$	
evening set	-2324 Mar 25 j 01:04	29° $\text{♁}$ 59'14		desc. node	-2319 Jan 22 j 14:06	20° $\text{♁}$ 06'49	
	-2324 Mar 25 j 01:32	0° $\text{♁}$			-2319 Feb 04 j 21:54	0° $\text{♁}$	
asc. node	-2324 Apr 07 j 01:55	8° $\text{♁}$ 46'18			-2319 Mar 17 j 08:43	0° $\text{♁}$	
	-2324 May 09 j 04:09	0° $\text{♁}$			-2319 Apr 28 j 01:39	0° $\text{♁}$	
					-2319 Jun 13 j 16:24	0° $\text{♁}$	
conjunction	-2324 May 15 j 17:54	4° $\text{♁}$ 17'15	0°21'56	retrograde	-2319 Aug 18 j 21:18	23° $\text{♁}$ 02'12	
minimum elong	-2324 May 15 j 17:01	4° $\text{♁}$ 15'49	0°21'58	min. Earth dist.	-2319 Sep 18 j 03:36	16° $\text{♁}$ 45'08	0.51267 AU
max. Earth dist.	-2324 May 29 j 13:15	13° $\text{♁}$ 14'16	2.64219 AU	opposition	-2319 Sep 25 j 18:58	13° $\text{♁}$ 54'13	-2°56'00
	-2324 Jun 24 j 15:55	0° $\text{♁}$		greatest brilliancy	-2319 Sep 25 j 01:10	14° $\text{♁}$ 10'51	-2.1m
morning rise	-2324 Jul 02 j 17:22	5° $\text{♁}$ 08'24		direct	-2319 Oct 30 j 07:20	6° $\text{♁}$ 24'11	
	-2324 Aug 10 j 23:17	0° $\text{♁}$		asc. node	-2319 Nov 27 j 22:24	11° $\text{♁}$ 02'39	
	-2324 Sep 27 j 19:11	0° $\text{♁}$			-2318 Jan 12 j 13:10	0° $\text{♁}$	
	-2324 Nov 15 j 13:06	0° $\text{♁}$			-2318 Mar 08 j 16:28	0° $\text{♁}$	
	-2323 Jan 06 j 04:48	0° $\text{♁}$			-2318 Apr 28 j 07:45	0° $\text{♁}$	
	-2323 Mar 17 j 06:21	0° $\text{♁}$			-2318 Jun 15 j 16:39	0° $\text{♁}$	



## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 9

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

evening set	-2318 Jul 22 j 10:19	23° $\overline{5}$ 42'44		max. Earth dist.	-2313 Feb 06 j 19:15	21° $\overline{3}$ 16'50	2.38385 AU
	-2318 Jul 31 j 22:32	0° $\Omega$			-2313 Feb 18 j 04:20	0° $\approx$	
max. Earth dist.	-2318 Aug 11 j 07:42	6° $\Omega$ 56'18	2.57273 AU	morning rise	-2313 Mar 10 j 08:58	15° $\approx$ 14'11	
					-2313 Mar 30 j 09:23	0° $\mathbb{H}$	
conjunction	-2318 Sep 08 j 07:05	26° $\Omega$ 02'24	0°53'20		-2313 May 11 j 17:11	0° $\mathbb{Y}$	
minimum elong	-2318 Sep 08 j 08:35	26° $\Omega$ 04'59	0°53'21		-2313 Jun 25 j 17:16	0° $\mathbb{B}$	
	-2318 Sep 13 j 23:41	0° $\mathbb{M}$		asc. node	-2313 Jul 20 j 20:32	15° $\mathbb{B}$ 51'12	
	-2318 Oct 25 j 23:19	0° $\underline{\Omega}$			-2313 Aug 13 j 08:53	0° $\mathbb{I}$	
morning rise	-2318 Oct 28 j 04:09	1° $\underline{\Omega}$ 36'35			-2313 Oct 09 j 04:37	0° $\overline{\mathbb{E}}$	
	-2318 Dec 05 j 06:56	0° $\mathbb{M}$		retrograde	-2313 Dec 07 j 00:22	15° $\overline{\mathbb{E}}$ 46'52	
desc. node	-2318 Dec 10 j 12:59	3° $\mathbb{M}$ 58'44		opposition	-2312 Jan 15 j 04:00	6° $\overline{\mathbb{E}}$ 37'58	4°41'32
	-2317 Jan 13 j 12:29	0° $\mathbb{A}$		greatest brilliancy	-2312 Jan 15 j 14:54	6° $\overline{\mathbb{E}}$ 27'16	-1.4m
	-2317 Feb 21 j 09:45	0° $\overline{\mathbb{B}}$		min. Earth dist.	-2312 Jan 18 j 09:20	5° $\overline{\mathbb{E}}$ 21'56	0.65794 AU
	-2317 Apr 01 j 21:13	0° $\approx$			-2312 Feb 02 j 13:24	30° $\mathbb{R}$ $\mathbb{I}$	
	-2317 May 13 j 04:33	0° $\mathbb{H}$		direct	-2312 Feb 25 j 11:02	26° $\mathbb{I}$ 36'33	
	-2317 Jun 27 j 12:27	0° $\mathbb{Y}$			-2312 Mar 21 j 01:10	0° $\overline{\mathbb{E}}$	
	-2317 Aug 25 j 11:24	0° $\mathbb{B}$			-2312 May 27 j 09:39	0° $\Omega$	
retrograde	-2317 Sep 28 j 13:34	6° $\mathbb{B}$ 43'25			-2312 Jul 14 j 09:08	0° $\mathbb{M}$	
asc. node	-2317 Oct 15 j 22:11	4° $\mathbb{B}$ 36'15		desc. node	-2312 Aug 01 j 08:45	12° $\mathbb{M}$ 19'59	
	-2317 Oct 30 j 05:30	30° $\mathbb{R}$ $\mathbb{Y}$			-2312 Aug 26 j 00:30	0° $\underline{\Omega}$	
min. Earth dist.	-2317 Nov 02 j 23:41	28° $\mathbb{Y}$ 32'01	0.61984 AU		-2312 Oct 04 j 20:22	0° $\mathbb{M}$	
opposition	-2317 Nov 07 j 09:00	26° $\mathbb{Y}$ 46'48	0°54'41		-2312 Nov 12 j 07:00	0° $\mathbb{A}$	
greatest brilliancy	-2317 Nov 07 j 05:00	26° $\mathbb{Y}$ 50'48	-1.6m		-2312 Dec 20 j 11:43	0° $\overline{\mathbb{B}}$	
direct	-2317 Dec 15 j 10:38	17° $\mathbb{Y}$ 50'29		evening set	-2311 Jan 04 j 13:58	11° $\overline{\mathbb{B}}$ 44'06	
	-2316 Feb 04 j 04:28	0° $\mathbb{B}$			-2311 Jan 28 j 10:01	0° $\approx$	
	-2316 Apr 04 j 19:52	0° $\mathbb{I}$					
	-2316 May 25 j 23:43	0° $\overline{\mathbb{E}}$		conjunction	-2311 Mar 09 j 01:04	29° $\approx$ 24'47	-0°49'09
	-2316 Jul 12 j 03:12	0° $\Omega$		minimum elong	-2311 Mar 09 j 03:32	29° $\approx$ 29'14	0°49'09
	-2316 Aug 25 j 05:52	0° $\mathbb{M}$			-2311 Mar 09 j 20:30	0° $\mathbb{H}$	
evening set	-2316 Sep 02 j 18:26	6° $\mathbb{M}$ 00'53		max. Earth dist.	-2311 Apr 18 j 11:35	28° $\mathbb{H}$ 03'32	2.51225 AU
max. Earth dist.	-2316 Sep 18 j 01:48	16° $\mathbb{M}$ 59'17	2.45551 AU		-2311 Apr 21 j 07:04	0° $\mathbb{Y}$	
	-2316 Oct 05 j 20:22	0° $\underline{\Omega}$		morning rise	-2311 May 06 j 14:07	10° $\mathbb{Y}$ 26'43	
					-2311 Jun 04 j 22:29	0° $\mathbb{B}$	
conjunction	-2316 Oct 26 j 15:18	15° $\underline{\Omega}$ 33'23	0°00'38	asc. node	-2311 Jun 06 j 19:57	1° $\mathbb{B}$ 14'29	
minimum elong	-2316 Oct 26 j 15:21	15° $\underline{\Omega}$ 33'28	0°00'36		-2311 Jul 21 j 19:15	0° $\mathbb{I}$	
behind sun begin	-2316 Oct 25 j 15:22	14° $\underline{\Omega}$ 48'09			-2311 Sep 09 j 07:40	0° $\overline{\mathbb{E}}$	
behind sun end	-2316 Oct 27 j 15:20	16° $\underline{\Omega}$ 18'50			-2311 Nov 03 j 11:10	0° $\Omega$	
desc. node	-2316 Oct 27 j 12:51	16° $\underline{\Omega}$ 14'08		retrograde	-2310 Jan 15 j 12:35	22° $\Omega$ 13'22	
	-2316 Nov 14 j 13:40	0° $\mathbb{M}$		opposition	-2310 Feb 21 j 13:19	14° $\Omega$ 07'00	4°33'05
	-2316 Dec 23 j 03:43	0° $\mathbb{A}$		greatest brilliancy	-2310 Feb 22 j 15:58	13° $\Omega$ 42'02	-1.7m
morning rise	-2316 Dec 26 j 14:00	2° $\mathbb{A}$ 41'15		min. Earth dist.	-2310 Feb 28 j 10:59	11° $\Omega$ 31'55	0.58062 AU
	-2315 Jan 30 j 10:32	0° $\overline{\mathbb{B}}$		direct	-2310 Apr 03 j 01:12	4° $\Omega$ 27'34	
	-2315 Mar 10 j 07:25	0° $\approx$			-2310 Jun 16 j 02:00	0° $\mathbb{M}$	
	-2315 Apr 19 j 16:02	0° $\mathbb{H}$		desc. node	-2310 Jun 19 j 07:54	1° $\mathbb{M}$ 51'26	
	-2315 Jun 01 j 11:52	0° $\mathbb{Y}$			-2310 Aug 02 j 05:33	0° $\underline{\Omega}$	
	-2315 Jul 18 j 08:31	0° $\mathbb{B}$			-2310 Sep 12 j 15:06	0° $\mathbb{M}$	
asc. node	-2315 Sep 01 j 21:18	24° $\mathbb{B}$ 51'09			-2310 Oct 21 j 21:25	0° $\mathbb{A}$	
	-2315 Sep 13 j 06:57	0° $\mathbb{I}$			-2310 Nov 29 j 17:12	0° $\overline{\mathbb{B}}$	
retrograde	-2315 Nov 01 j 18:25	12° $\mathbb{I}$ 12'29			-2309 Jan 08 j 06:07	0° $\approx$	
opposition	-2315 Dec 11 j 19:20	2° $\mathbb{I}$ 26'44	3°23'25		-2309 Feb 18 j 07:10	0° $\mathbb{H}$	
min. Earth dist.	-2315 Dec 11 j 04:11	2° $\mathbb{I}$ 41'55	0.67098 AU	evening set	-2309 Mar 06 j 12:20	11° $\mathbb{H}$ 29'19	
greatest brilliancy	-2315 Dec 11 j 16:01	2° $\mathbb{I}$ 30'03	-1.3m		-2309 Apr 02 j 06:13	0° $\mathbb{Y}$	
	-2315 Dec 17 j 23:26	30° $\mathbb{R}$ $\mathbb{B}$		asc. node	-2309 Apr 24 j 18:12	15° $\mathbb{Y}$ 11'22	
direct	-2314 Jan 21 j 03:20	22° $\mathbb{B}$ 43'39					
	-2314 Feb 28 j 01:35	0° $\mathbb{I}$		conjunction	-2309 Apr 29 j 20:41	18° $\mathbb{Y}$ 35'28	0°03'01
	-2314 May 02 j 22:28	0° $\overline{\mathbb{E}}$		minimum elong	-2309 Apr 29 j 20:34	18° $\mathbb{Y}$ 35'16	0°03'03
	-2314 Jun 21 j 20:59	0° $\Omega$		behind sun begin	-2309 Apr 28 j 23:17	17° $\mathbb{Y}$ 59'54	
	-2314 Aug 05 j 19:14	0° $\mathbb{M}$		behind sun end	-2309 Apr 30 j 17:50	19° $\mathbb{Y}$ 10'37	
desc. node	-2314 Sep 14 j 10:54	28° $\mathbb{M}$ 29'12			-2309 May 17 j 03:23	0° $\mathbb{B}$	
	-2314 Sep 16 j 11:56	0° $\underline{\Omega}$		max. Earth dist.	-2309 May 20 j 07:40	2° $\mathbb{B}$ 04'57	2.61561 AU
	-2314 Oct 26 j 00:40	0° $\mathbb{M}$		morning rise	-2309 Jun 18 j 21:12	21° $\mathbb{B}$ 13'58	
evening set	-2314 Oct 28 j 07:36	1° $\mathbb{M}$ 46'19			-2309 Jul 02 j 14:16	0° $\mathbb{I}$	
	-2314 Dec 03 j 08:36	0° $\mathbb{A}$			-2309 Aug 19 j 05:06	0° $\overline{\mathbb{E}}$	
					-2309 Oct 07 j 00:23	0° $\Omega$	
conjunction	-2314 Dec 31 j 16:53	22° $\mathbb{A}$ 21'07	-1°00'50		-2309 Nov 27 j 07:54	0° $\mathbb{M}$	
minimum elong	-2314 Dec 31 j 14:29	22° $\mathbb{A}$ 16'25	1°00'53		-2308 Jan 28 j 03:59	0° $\underline{\Omega}$	
	-2313 Jan 10 j 10:30	0° $\overline{\mathbb{B}}$		retrograde	-2308 Mar 09 j 19:44	8° $\underline{\Omega}$ 47'46	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 10

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

opposition	-2308 Apr 12 j 03:25	2°♌26'08	1°26'31		-2303 May 05 j 19:50	0°♊	
greatest brilliancy	-2308 Apr 12 j 16:06	2°♌15'48	-2.4m		-2303 Jun 22 j 16:28	0°♊	
	-2308 Apr 19 j 15:24	30°♏♏		evening set	-2303 Jul 07 j 04:47	9°♏18'19	
min. Earth dist.	-2308 Apr 20 j 09:57	29°♏45'23	0.45472 AU	max. Earth dist.	-2303 Jul 31 j 07:13	25°♏01'10	2.60849 AU
desc. node	-2308 May 06 j 07:30	25°♏45'03			-2303 Aug 07 j 19:54	0°♏	
direct	-2308 May 18 j 12:25	24°♏42'26					
	-2308 Jun 16 j 10:47	0°♌		conjunction	-2303 Aug 23 j 00:02	10°♏09'00	1°04'02
	-2308 Aug 12 j 13:23	0°♌		minimum elong	-2303 Aug 23 j 01:04	10°♏10'44	1°04'04
	-2308 Sep 25 j 01:00	0°♏			-2303 Sep 21 j 00:30	0°♏	
	-2308 Nov 05 j 04:56	0°♏		morning rise	-2303 Oct 09 j 12:16	12°♏57'32	
	-2308 Dec 16 j 10:55	0°♏			-2303 Nov 02 j 07:38	0°♌	
	-2307 Jan 27 j 21:01	0°♏			-2303 Dec 13 j 00:46	0°♌	
asc. node	-2307 Mar 11 j 16:16	29°♏10'20		desc. node	-2303 Dec 27 j 06:44	10°♌42'38	
	-2307 Mar 12 j 21:58	0°♏			-2302 Jan 21 j 16:26	0°♏	
evening set	-2307 Apr 21 j 09:15	26°♏00'48			-2302 Mar 01 j 23:43	0°♏	
	-2307 Apr 27 j 12:30	0°♏			-2302 Apr 10 j 22:58	0°♏	
					-2302 May 23 j 04:39	0°♏	
conjunction	-2307 Jun 09 j 03:22	27°♏24'32	0°46'28		-2302 Jul 10 j 14:53	0°♏	
minimum elong	-2307 Jun 09 j 02:04	27°♏22'27	0°46'31	retrograde	-2302 Sep 13 j 20:14	21°♏24'52	
max. Earth dist.	-2307 Jun 13 j 09:25	0°♊07'27	2.66715 AU	min. Earth dist.	-2302 Oct 17 j 09:11	13°♏52'59	0.58356 AU
	-2307 Jun 13 j 04:45	0°♊		opposition	-2302 Oct 23 j 04:01	11°♏36'09	-0°24'15
morning rise	-2307 Jul 25 j 01:15	26°♊40'48		greatest brilliancy	-2302 Oct 23 j 02:09	11°♏38'01	-1.8m
	-2307 Jul 30 j 06:12	0°♏		asc. node	-2302 Nov 01 j 12:19	8°♏05'45	
	-2307 Sep 15 j 03:36	0°♏		direct	-2302 Nov 29 j 00:03	3°♏07'31	
	-2307 Oct 31 j 16:51	0°♏			-2301 Feb 19 j 03:58	0°♏	
	-2307 Dec 17 j 05:46	0°♌			-2301 Apr 14 j 20:06	0°♊	
	-2306 Feb 02 j 18:37	0°♌			-2301 Jun 03 j 13:52	0°♏	
desc. node	-2306 Mar 24 j 06:49	28°♌32'24			-2301 Jul 20 j 06:38	0°♏	
	-2306 Mar 27 j 03:22	0°♏		evening set	-2301 Aug 16 j 23:07	18°♏39'29	
retrograde	-2306 May 26 j 08:26	18°♏21'36		max. Earth dist.	-2301 Sep 01 j 10:40	29°♏23'14	2.50494 AU
opposition	-2306 Jun 25 j 22:07	13°♏14'12	-5°53'20		-2301 Sep 02 j 07:40	0°♏	
min. Earth dist.	-2306 Jun 24 j 18:26	13°♏32'36	0.37612 AU				
greatest brilliancy	-2306 Jun 25 j 15:06	13°♏18'52	-2.9m	conjunction	-2301 Oct 06 j 18:54	24°♏40'25	0°25'10
direct	-2306 Jul 25 j 17:16	8°♏15'52		minimum elong	-2301 Oct 06 j 20:10	24°♏42'44	0°25'09
	-2306 Sep 29 j 12:54	0°♏			-2301 Oct 14 j 01:07	0°♌	
	-2306 Nov 18 j 20:12	0°♏		desc. node	-2301 Nov 14 j 05:07	23°♌19'39	
	-2305 Jan 04 j 14:58	0°♏			-2301 Nov 22 j 23:15	0°♌	
asc. node	-2305 Jan 27 j 15:02	14°♏50'22		morning rise	-2301 Dec 01 j 11:50	6°♌32'10	
	-2305 Feb 20 j 05:37	0°♏			-2301 Dec 31 j 18:29	0°♏	
	-2305 Apr 08 j 09:15	0°♏			-2300 Feb 08 j 05:46	0°♏	
	-2305 May 25 j 20:27	0°♊			-2300 Mar 18 j 06:19	0°♏	
evening set	-2305 May 31 j 04:51	3°♊23'07			-2300 Apr 27 j 19:49	0°♏	
max. Earth dist.	-2305 Jul 06 j 21:12	26°♊43'08	2.66443 AU		-2300 Jun 10 j 04:02	0°♏	
	-2305 Jul 12 j 00:05	0°♏			-2300 Jul 28 j 21:26	0°♏	
				asc. node	-2300 Sep 18 j 12:41	23°♏43'26	
conjunction	-2305 Jul 16 j 14:21	2°♏56'59	1°08'50	retrograde	-2300 Oct 19 j 08:57	29°♏06'16	
minimum elong	-2305 Jul 16 j 13:48	2°♏56'07	1°08'54	min. Earth dist.	-2300 Nov 26 j 07:55	20°♏03'35	0.65826 AU
	-2305 Aug 27 j 05:00	0°♏		opposition	-2300 Nov 28 j 10:54	19°♏12'18	2°34'40
morning rise	-2305 Aug 30 j 13:56	2°♏13'20		greatest brilliancy	-2300 Nov 28 j 05:00	19°♏18'14	-1.4m
	-2305 Oct 11 j 02:16	0°♏		direct	-2299 Jan 07 j 01:00	9°♏44'01	
	-2305 Nov 23 j 15:06	0°♌			-2299 Mar 17 j 09:34	0°♊	
	-2304 Jan 05 j 00:21	0°♌			-2299 May 12 j 06:26	0°♏	
desc. node	-2304 Feb 09 j 07:25	25°♌23'31			-2299 Jun 29 j 18:10	0°♏	
	-2304 Feb 15 j 16:38	0°♏			-2299 Aug 13 j 06:15	0°♏	
	-2304 Mar 28 j 14:03	0°♏			-2299 Sep 23 j 21:03	0°♌	
	-2304 May 12 j 03:45	0°♏		desc. node	-2299 Oct 01 j 03:29	5°♌24'54	
	-2304 Jul 15 j 13:35	0°♏		evening set	-2299 Oct 04 j 17:48	8°♌06'42	
retrograde	-2304 Jul 30 j 16:59	1°♏36'31			-2299 Nov 02 j 10:43	0°♌	
	-2304 Aug 14 j 14:00	30°♏♏		max. Earth dist.	-2299 Nov 07 j 02:32	3°♌36'19	2.38437 AU
min. Earth dist.	-2304 Aug 27 j 21:04	26°♏12'14	0.46213 AU				
greatest brilliancy	-2304 Sep 03 j 18:51	23°♏48'11	-2.4m	conjunction	-2299 Dec 04 j 00:29	24°♌38'01	-0°41'31
opposition	-2304 Sep 05 j 00:34	23°♏22'16	-4°43'09	minimum elong	-2299 Dec 03 j 21:38	24°♌32'25	0°41'31
direct	-2304 Oct 07 j 17:36	16°♏41'31			-2299 Dec 10 j 20:15	0°♏	
	-2304 Nov 28 j 05:15	0°♏			-2298 Jan 17 j 23:15	0°♏	
asc. node	-2304 Dec 14 j 13:34	7°♏37'19		morning rise	-2298 Feb 10 j 03:05	18°♏01'49	
	-2303 Jan 25 j 07:11	0°♏			-2298 Feb 25 j 17:13	0°♏	
	-2303 Mar 17 j 12:27	0°♏			-2298 Apr 06 j 22:10	0°♏	

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2298 May 19 j 07:48	0°♂					-2293 Jul 12 j 18:01	0°♂	
	-2298 Jul 03 j 17:44	0°♂					-2293 Aug 27 j 00:36	0°♂	
asc. node	-2298 Aug 06 j 12:46	20°♂37'45					-2293 Oct 06 j 21:16	0°♂	
	-2298 Aug 23 j 00:02	0°♂					-2293 Nov 15 j 17:19	0°♂	
	-2298 Oct 31 j 15:17	0°♂					-2293 Dec 26 j 01:21	0°♂	
retrograde	-2298 Nov 23 j 00:39	2°♂50'19					-2292 Feb 05 j 18:39	0°♂	
	-2298 Dec 13 j 21:14	30°♂♂					-2292 Mar 20 j 06:47	0°♂	
opposition	-2297 Jan 01 j 15:26	23°♂24'30	4°19'41		asc. node		-2292 Mar 28 j 08:12	5°♂25'22	
greatest brilliancy	-2297 Jan 01 j 19:51	23°♂20'07	-1.3m		evening set		-2292 Apr 04 j 09:16	10°♂07'56	
min. Earth dist.	-2297 Jan 03 j 08:27	22°♂43'45	0.67075 AU				-2292 May 04 j 12:34	0°♂	
direct	-2297 Feb 11 j 17:18	13°♂26'46							
	-2297 Apr 13 j 05:15	0°♂			conjunction		-2292 May 24 j 20:46	13°♂11'52	0°31'46
	-2297 Jun 07 j 13:12	0°♂			minimum elong		-2292 May 24 j 19:38	13°♂10'01	0°31'48
	-2297 Jul 23 j 20:42	0°♂			max. Earth dist.		-2292 Jun 04 j 03:45	19°♂49'22	2.65346 AU
desc. node	-2297 Aug 19 j 02:00	18°♂24'19					-2292 Jun 20 j 00:57	0°♂	
	-2297 Sep 04 j 00:03	0°♂			morning rise		-2292 Jul 10 j 22:42	13°♂19'25	
	-2297 Oct 13 j 15:31	0°♂					-2292 Aug 06 j 05:21	0°♂	
	-2297 Nov 20 j 23:54	0°♂					-2292 Sep 22 j 15:40	0°♂	
evening set	-2297 Dec 09 j 03:21	14°♂18'41					-2292 Nov 09 j 10:28	0°♂	
	-2297 Dec 29 j 02:19	0°♂					-2292 Dec 28 j 14:32	0°♂	
	-2296 Feb 05 j 21:33	0°♂					-2291 Feb 21 j 06:07	0°♂	
					desc. node		-2291 Apr 10 j 00:39	16°♂53'03	
conjunction	-2296 Feb 13 j 05:13	5°♂32'52	-1°03'05		retrograde		-2291 Apr 24 j 04:41	18°♂05'43	
minimum elong	-2296 Feb 13 j 07:01	5°♂36'17	1°03'08		opposition		-2291 May 24 j 20:02	12°♂56'21	-3°04'37
	-2296 Mar 17 j 04:33	0°♂			greatest brilliancy		-2291 May 25 j 05:55	12°♂49'31	-2.9m
max. Earth dist.	-2296 Apr 01 j 01:52	10°♂44'00	2.46092 AU		min. Earth dist.		-2291 May 29 j 02:31	11°♂45'28	0.38868 AU
morning rise	-2296 Apr 16 j 07:40	21°♂30'56			direct		-2291 Jun 25 j 18:07	7°♂15'55	
	-2296 Apr 28 j 12:25	0°♂					-2291 Aug 30 j 13:25	0°♂	
	-2296 Jun 12 j 04:36	0°♂					-2291 Oct 17 j 08:24	0°♂	
asc. node	-2296 Jun 23 j 10:58	7°♂18'42					-2291 Nov 30 j 16:30	0°♂	
	-2296 Jul 29 j 11:32	0°♂					-2290 Jan 13 j 23:52	0°♂	
	-2296 Sep 18 j 13:56	0°♂			asc. node		-2290 Feb 13 j 05:48	20°♂07'32	
	-2296 Nov 21 j 03:27	0°♂					-2290 Feb 28 j 06:33	0°♂	
retrograde	-2296 Dec 29 j 18:03	7°♂32'29					-2290 Apr 15 j 15:56	0°♂	
	-2295 Feb 03 j 01:17	30°♂♂			evening set		-2290 May 16 j 05:20	19°♂29'49	
opposition	-2295 Feb 05 j 18:38	28°♂57'48	4°49'42				-2290 Jun 01 j 17:42	0°♂	
greatest brilliancy	-2295 Feb 06 j 16:03	28°♂37'14	-1.5m		max. Earth dist.		-2290 Jun 27 j 16:34	16°♂30'54	2.67197 AU
min. Earth dist.	-2295 Feb 11 j 07:20	26°♂50'23	0.61821 AU						
direct	-2295 Mar 18 j 20:06	19°♂02'51			conjunction		-2290 Jul 02 j 05:01	19°♂23'46	1°03'04
	-2295 May 03 j 18:19	0°♂			minimum elong		-2290 Jul 02 j 04:01	19°♂22'11	1°03'07
	-2295 Jun 28 j 12:03	0°♂					-2290 Jul 18 j 19:03	0°♂	
desc. node	-2295 Jul 06 j 00:16	4°♂46'52			morning rise		-2290 Aug 16 j 04:20	18°♂17'11	
	-2295 Aug 11 j 23:17	0°♂					-2290 Sep 03 j 04:27	0°♂	
	-2295 Sep 21 j 11:49	0°♂					-2290 Oct 18 j 13:41	0°♂	
	-2295 Oct 30 j 07:21	0°♂					-2290 Dec 01 j 22:59	0°♂	
	-2295 Dec 07 j 19:01	0°♂					-2289 Jan 14 j 14:19	0°♂	
	-2294 Jan 16 j 00:11	0°♂			desc. node		-2289 Feb 26 j 00:08	29°♂14'57	
evening set	-2294 Feb 12 j 18:30	20°♂35'45					-2289 Feb 27 j 02:26	0°♂	
	-2294 Feb 25 j 17:41	0°♂					-2289 Apr 13 j 05:10	0°♂	
	-2294 Apr 09 j 10:07	0°♂					-2289 Jun 08 j 19:42	0°♂	
					retrograde		-2289 Jul 09 j 05:19	6°♂00'17	
conjunction	-2294 Apr 11 j 10:19	1°♂22'37	-0°17'38		min. Earth dist.		-2289 Aug 05 j 00:25	1°♂20'14	0.41470 AU
minimum elong	-2294 Apr 11 j 11:15	1°♂24'13	0°17'37				-2289 Aug 09 j 07:26	30°♂♂	
max. Earth dist.	-2294 May 09 j 06:23	20°♂10'02	2.58092 AU		greatest brilliancy		-2289 Aug 10 j 18:41	29°♂32'11	-2.6m
asc. node	-2294 May 11 j 09:52	21°♂35'38			opposition		-2289 Aug 12 j 05:07	29°♂05'07	-6°16'21
	-2294 May 24 j 03:16	0°♂			direct		-2289 Sep 12 j 02:07	23°♂19'35	
morning rise	-2294 Jun 03 j 04:04	6°♂33'52					-2289 Oct 16 j 07:04	0°♂	
	-2294 Jul 09 j 15:29	0°♂					-2289 Dec 16 j 20:16	0°♂	
	-2294 Aug 26 j 18:18	0°♂			asc. node		-2288 Jan 01 j 05:02	8°♂51'30	
	-2294 Oct 16 j 01:30	0°♂					-2288 Feb 05 j 14:57	0°♂	
	-2294 Dec 11 j 09:46	0°♂					-2288 Mar 25 j 16:13	0°♂	
retrograde	-2293 Feb 15 j 05:58	18°♂53'04					-2288 May 13 j 01:41	0°♂	
opposition	-2293 Mar 22 j 04:29	11°♂44'29	3°11'48		evening set		-2288 Jun 22 j 09:07	25°♂24'20	
greatest brilliancy	-2293 Mar 23 j 05:58	11°♂22'06	-2.1m				-2288 Jun 29 j 13:49	0°♂	
min. Earth dist.	-2293 Mar 30 j 12:56	8°♂49'04	0.50667 AU		max. Earth dist.		-2288 Jul 21 j 01:45	13°♂51'16	2.63650 AU
direct	-2293 Apr 29 j 17:02	2°♂59'02							
desc. node	-2293 May 24 j 00:00	6°♂41'45			conjunction		-2288 Aug 07 j 16:18	25°♂22'07	1°09'33

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

minimum elong	-2288 Aug 07 j 16:43	25° $\mathfrak{D}$ 22'48	1°09'36		-2283 May 27 j 05:01	0° $\Upsilon$	
	-2288 Aug 14 j 16:37	0° $\mathcal{Q}$			-2283 Jul 12 j 07:53	0° $\mathcal{B}$	
morning rise	-2288 Sep 22 j 16:48	26° $\mathcal{Q}$ 17'24		asc. node	-2283 Aug 23 j 03:53	24° $\mathcal{B}$ 08'02	
	-2288 Sep 28 j 02:16	0° $\mathfrak{M}$			-2283 Sep 03 j 15:24	0° $\mathbb{I}$	
	-2288 Nov 09 j 18:48	0° $\mathfrak{L}$		retrograde	-2283 Nov 09 j 11:28	20° $\mathbb{I}$ 02'09	
	-2288 Dec 21 j 00:08	0° $\mathfrak{M}$		opposition	-2283 Dec 19 j 09:36	10° $\mathbb{I}$ 22'28	3°47'06
desc. node	-2287 Jan 12 j 23:09	17° $\mathfrak{M}$ 03'37		greatest brilliancy	-2283 Dec 19 j 08:35	10° $\mathbb{I}$ 23'29	-1.3m
	-2287 Jan 30 j 05:29	0° $\mathfrak{X}$		min. Earth dist.	-2283 Dec 19 j 14:17	10° $\mathbb{I}$ 17'47	0.67364 AU
	-2287 Mar 11 j 04:03	0° $\mathcal{Z}$		direct	-2282 Jan 29 j 01:07	0° $\mathbb{I}$ 32'56	
	-2287 Apr 21 j 00:24	0° $\approx$			-2282 Apr 26 j 02:23	0° $\mathfrak{D}$	
	-2287 Jun 04 j 05:30	0° $\mathfrak{H}$			-2282 Jun 16 j 10:57	0° $\mathcal{Q}$	
	-2287 Aug 03 j 00:58	0° $\Upsilon$			-2282 Jul 31 j 19:31	0° $\mathfrak{M}$	
retrograde	-2287 Aug 28 j 19:30	4° $\Upsilon$ 16'01		desc. node	-2282 Sep 04 j 18:47	24° $\mathfrak{M}$ 55'58	
	-2287 Sep 22 j 05:54	30° $\mathfrak{R}$ $\mathfrak{H}$			-2282 Sep 11 j 15:54	0° $\mathfrak{L}$	
min. Earth dist.	-2287 Sep 29 j 06:52	27° $\mathfrak{H}$ 30'06	0.53958 AU		-2282 Oct 21 j 05:32	0° $\mathfrak{M}$	
opposition	-2287 Oct 06 j 07:46	24° $\mathfrak{H}$ 48'26	-1°57'12	evening set	-2282 Nov 11 j 22:19	16° $\mathfrak{M}$ .54'50	
greatest brilliancy	-2287 Oct 05 j 20:38	24° $\mathfrak{H}$ 59'06	-2.0m		-2282 Nov 28 j 13:26	0° $\mathfrak{X}$	
direct	-2287 Nov 10 j 17:18	16° $\mathfrak{H}$ 54'59			-2281 Jan 05 j 15:15	0° $\mathcal{Z}$	
asc. node	-2287 Nov 18 j 04:49	17° $\mathfrak{H}$ 16'20					
	-2286 Jan 01 j 17:38	0° $\Upsilon$		conjunction	-2281 Jan 16 j 19:07	8° $\mathcal{Z}$ 43'38	-1°05'53
	-2286 Mar 02 j 07:52	0° $\mathcal{B}$		minimum elong	-2281 Jan 16 j 18:15	8° $\mathcal{Z}$ 41'57	1°05'57
	-2286 Apr 23 j 01:54	0° $\mathbb{I}$			-2281 Feb 13 j 09:01	0° $\approx$	
	-2286 Jun 10 j 21:16	0° $\mathfrak{D}$		max. Earth dist.	-2281 Mar 06 j 20:04	16° $\approx$ 10'52	2.40868 AU
	-2286 Jul 27 j 07:11	0° $\mathcal{Q}$		morning rise	-2281 Mar 25 j 01:25	29° $\approx$ 37'13	
evening set	-2286 Jul 31 j 10:54	2° $\mathcal{Q}$ 45'47			-2281 Mar 25 j 13:55	0° $\mathfrak{H}$	
max. Earth dist.	-2286 Aug 18 j 11:44	14° $\mathcal{Q}$ 54'44	2.55038 AU		-2281 May 06 j 20:38	0° $\Upsilon$	
	-2286 Sep 09 j 08:42	0° $\mathfrak{M}$			-2281 Jun 20 j 15:54	0° $\mathcal{B}$	
				asc. node	-2281 Jul 11 j 03:21	13° $\mathcal{B}$ 05'30	
conjunction	-2286 Sep 18 j 03:43	6° $\mathfrak{M}$ 10'28	0°44'39		-2281 Aug 07 j 15:27	0° $\mathbb{I}$	
minimum elong	-2286 Sep 18 j 05:18	6° $\mathfrak{M}$ 13'15	0°44'40		-2281 Sep 30 j 12:15	0° $\mathfrak{D}$	
	-2286 Oct 21 j 06:35	0° $\mathfrak{L}$		retrograde	-2281 Dec 15 j 08:39	23° $\mathfrak{D}$ 47'39	
morning rise	-2286 Nov 08 j 18:01	13° $\mathfrak{L}$ 39'41		opposition	-2280 Jan 23 j 03:51	14° $\mathfrak{D}$ 49'40	4°48'26
desc. node	-2286 Nov 30 j 22:26	0° $\mathfrak{M}$ 21'58		greatest brilliancy	-2280 Jan 23 j 18:34	14° $\mathfrak{D}$ 35'17	-1.4m
	-2286 Nov 30 j 10:52	0° $\mathfrak{M}$		min. Earth dist.	-2280 Jan 27 j 04:57	13° $\mathfrak{D}$ 14'45	0.64666 AU
	-2285 Jan 08 j 12:24	0° $\mathfrak{X}$		direct	-2280 Mar 04 j 10:39	4° $\mathfrak{D}$ 48'26	
	-2285 Feb 16 j 05:24	0° $\mathcal{Z}$			-2280 May 19 j 20:46	0° $\mathcal{Q}$	
	-2285 Mar 27 j 11:29	0° $\approx$			-2280 Jul 08 j 14:35	0° $\mathfrak{M}$	
	-2285 May 07 j 09:39	0° $\mathfrak{H}$		desc. node	-2280 Jul 22 j 18:20	9° $\mathfrak{M}$ 30'19	
	-2285 Jun 20 j 16:54	0° $\Upsilon$			-2280 Aug 20 j 18:37	0° $\mathfrak{L}$	
	-2285 Aug 12 j 12:51	0° $\mathcal{B}$			-2280 Sep 29 j 19:24	0° $\mathfrak{M}$	
retrograde	-2285 Oct 06 j 16:42	15° $\mathcal{B}$ 24'53			-2280 Nov 07 j 08:22	0° $\mathfrak{X}$	
asc. node	-2285 Oct 06 j 04:06	15° $\mathcal{B}$ 24'46			-2280 Dec 15 j 14:40	0° $\mathcal{Z}$	
min. Earth dist.	-2285 Nov 12 j 01:20	6° $\mathcal{B}$ 53'50	0.63610 AU	evening set	-2279 Jan 19 j 11:29	26° $\mathcal{Z}$ 52'35	
opposition	-2285 Nov 15 j 15:29	5° $\mathcal{B}$ 27'20	1°34'52		-2279 Jan 23 j 14:17	0° $\approx$	
greatest brilliancy	-2285 Nov 15 j 09:44	5° $\mathcal{B}$ 33'06	-1.5m		-2279 Mar 05 j 02:05	0° $\mathfrak{H}$	
	-2285 Nov 30 j 13:24	30° $\mathfrak{R}$ $\Upsilon$					
direct	-2285 Dec 24 j 07:06	26° $\Upsilon$ 18'14		conjunction	-2279 Mar 21 j 21:55	12° $\mathfrak{H}$ 03'45	-0°38'17
	-2284 Jan 19 j 08:21	0° $\mathcal{B}$		minimum elong	-2279 Mar 21 j 23:59	12° $\mathfrak{H}$ 07'25	0°38'16
	-2284 Mar 29 j 05:32	0° $\mathbb{I}$			-2279 Apr 16 j 13:40	0° $\Upsilon$	
	-2284 May 20 j 16:31	0° $\mathfrak{D}$		max. Earth dist.	-2279 Apr 26 j 19:03	7° $\Upsilon$ 00'11	2.53873 AU
	-2284 Jul 07 j 06:29	0° $\mathcal{Q}$		morning rise	-2279 May 17 j 03:29	20° $\Upsilon$ 42'37	
	-2284 Aug 20 j 12:37	0° $\mathfrak{M}$		asc. node	-2279 May 28 j 00:52	27° $\Upsilon$ 55'39	
evening set	-2284 Sep 13 j 17:48	17° $\mathfrak{M}$ 14'58			-2279 May 31 j 04:28	0° $\mathcal{B}$	
max. Earth dist.	-2284 Oct 01 j 11:11	0° $\mathfrak{L}$ 13'46	2.42807 AU		-2279 Jul 16 j 20:34	0° $\mathbb{I}$	
	-2284 Oct 01 j 03:45	0° $\mathfrak{L}$			-2279 Sep 03 j 17:24	0° $\mathfrak{D}$	
desc. node	-2284 Oct 17 j 20:44	12° $\mathfrak{L}$ 29'09			-2279 Oct 26 j 11:28	0° $\mathcal{Q}$	
					-2278 Jan 08 j 22:22	0° $\mathfrak{M}$	
conjunction	-2284 Nov 08 j 16:24	29° $\mathfrak{L}$ 06'41	-0°14'56	retrograde	-2278 Jan 25 j 22:58	1° $\mathfrak{M}$ 38'31	
minimum elong	-2284 Nov 08 j 15:20	29° $\mathfrak{L}$ 04'39	0°14'58		-2278 Feb 11 j 00:12	30° $\mathfrak{R}$ $\mathcal{Q}$	
behind sun begin	-2284 Nov 08 j 05:05	28° $\mathfrak{L}$ 44'56		opposition	-2278 Mar 03 j 07:25	23° $\mathcal{Q}$ 50'30	4°12'19
behind sun end	-2284 Nov 09 j 01:36	29° $\mathfrak{L}$ 24'23		greatest brilliancy	-2278 Mar 04 j 11:21	23° $\mathcal{Q}$ 24'47	-1.8m
	-2284 Nov 09 j 20:06	0° $\mathfrak{M}$		min. Earth dist.	-2278 Mar 10 j 20:02	21° $\mathcal{Q}$ 04'27	0.55630 AU
	-2284 Dec 18 j 08:39	0° $\mathfrak{X}$		direct	-2278 Apr 12 j 06:08	14° $\mathcal{Q}$ 25'16	
morning rise	-2283 Jan 11 j 14:30	19° $\mathfrak{X}$ 02'48			-2278 Jun 05 j 19:43	0° $\mathfrak{M}$	
	-2283 Jan 25 j 13:56	0° $\mathcal{Z}$		desc. node	-2278 Jun 09 j 17:24	1° $\mathfrak{M}$ 57'39	
	-2283 Mar 05 j 09:04	0° $\approx$			-2278 Jul 26 j 09:53	0° $\mathfrak{L}$	
	-2283 Apr 14 j 15:03	0° $\mathfrak{H}$			-2278 Sep 06 j 17:27	0° $\mathfrak{M}$	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 13

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2278 Oct 16 j 09:43	0°♊		minimum elong	-2273 Jul 24 j 22:18	11°♎17'06	1°10'24
	-2278 Nov 24 j 11:55	0°♋			-2273 Aug 22 j 13:44	0°♌	
	-2277 Jan 03 j 05:39	0°♍		morning rise	-2273 Sep 08 j 03:14	10°♏59'41	
	-2277 Feb 13 j 10:37	0°♎			-2273 Oct 06 j 06:42	0°♐	
evening set	-2277 Mar 17 j 21:12	22°♏42'36			-2273 Nov 18 j 11:44	0°♑	
	-2277 Mar 28 j 12:48	0°♐			-2273 Dec 30 j 09:51	0°♒	
asc. node	-2277 Apr 14 j 23:33	11°♐46'55		desc. node	-2272 Jan 30 j 15:58	22°♓48'21	
					-2272 Feb 09 j 11:09	0°♊	
conjunction	-2277 May 09 j 16:36	28°♐09'55	0°14'15		-2272 Mar 21 j 10:38	0°♋	
minimum elong	-2277 May 09 j 15:58	28°♐08'54	0°14'16		-2272 May 03 j 00:30	0°♍	
behind sun begin	-2277 May 09 j 06:58	27°♐54'07			-2272 Jun 21 j 17:49	0°♎	
behind sun end	-2277 May 10 j 00:59	28°♐23'41		retrograde	-2272 Aug 10 j 23:36	14°♏37'12	
	-2277 May 12 j 11:44	0°♏		min. Earth dist.	-2272 Sep 09 j 06:12	8°♏43'32	0.49008 AU
max. Earth dist.	-2277 May 26 j 08:25	9°♏02'27	2.63133 AU	greatest brilliancy	-2272 Sep 16 j 06:09	6°♏11'13	-2.2m
morning rise	-2277 Jun 27 j 11:52	29°♏43'36		opposition	-2272 Sep 17 j 05:14	5°♏50'11	-3°41'49
	-2277 Jun 27 j 22:08	0°♐			-2272 Oct 06 j 23:45	30°♑	
	-2277 Aug 14 j 08:04	0°♑		direct	-2272 Oct 20 j 23:11	28°♑41'04	
	-2277 Oct 01 j 12:45	0°♒			-2272 Nov 04 j 12:15	0°♋	
	-2277 Nov 20 j 04:43	0°♐		asc. node	-2272 Dec 04 j 19:41	9°♏05'15	
	-2276 Jan 13 j 16:16	0°♑			-2271 Jan 17 j 15:06	0°♐	
retrograde	-2276 Mar 24 j 23:58	22°♑02'22			-2271 Mar 11 j 19:09	0°♏	
opposition	-2276 Apr 26 j 07:12	16°♑09'21	0°01'28		-2271 Apr 30 j 19:42	0°♐	
greatest brilliancy	-2273 May 07 j 11:33	21°♏23'49	1.8m		-2271 Jun 17 j 23:43	0°♑	
desc. node	-2276 Apr 26 j 16:20	16°♑02'21		evening set	-2271 Jul 15 j 20:33	17°♑55'19	
min. Earth dist.	-2276 May 03 j 20:43	13°♑50'38	0.42739 AU		-2271 Aug 03 j 05:23	0°♒	
direct	-2276 May 31 j 03:57	9°♑09'16		max. Earth dist.	-2271 Aug 06 j 14:23	2°♒14'38	2.58954 AU
	-2276 Aug 01 j 05:03	0°♓					
	-2276 Sep 17 j 05:17	0°♊		conjunction	-2271 Sep 01 j 04:21	19°♒30'52	0°58'30
	-2276 Oct 29 j 16:48	0°♋		minimum elong	-2271 Sep 01 j 05:40	19°♒33'08	0°58'31
	-2276 Dec 10 j 16:54	0°♍			-2271 Sep 16 j 09:00	0°♐	
	-2275 Jan 22 j 14:51	0°♎		morning rise	-2271 Oct 19 j 21:11	23°♐44'16	
asc. node	-2275 Mar 01 j 22:38	25°♏58'00			-2271 Oct 28 j 12:47	0°♑	
	-2275 Mar 07 j 23:57	0°♐			-2271 Dec 08 j 01:10	0°♓	
	-2275 Apr 22 j 19:33	0°♏		desc. node	-2271 Dec 17 j 14:41	7°♓13'17	
evening set	-2275 Apr 30 j 15:32	5°♏03'16			-2270 Jan 16 j 11:14	0°♊	
	-2275 Jun 08 j 14:11	0°♐			-2270 Feb 24 j 12:36	0°♋	
					-2270 Apr 05 j 03:57	0°♍	
conjunction	-2275 Jun 17 j 15:51	5°♐46'57	0°53'34		-2270 May 16 j 17:50	0°♎	
minimum elong	-2275 Jun 17 j 14:35	5°♐44'55	0°53'37		-2270 Jul 01 j 22:44	0°♐	
max. Earth dist.	-2275 Jun 18 j 18:21	6°♐29'10	2.67110 AU		-2270 Sep 11 j 11:34	0°♏	
	-2275 Jul 25 j 15:05	0°♑		retrograde	-2270 Sep 22 j 10:08	0°♏47'16	
morning rise	-2275 Aug 02 j 02:40	4°♑47'14			-2270 Oct 02 j 22:44	30°♑	
	-2275 Sep 10 j 07:28	0°♒		asc. node	-2270 Oct 22 j 19:35	24°♐29'58	
	-2275 Oct 26 j 09:15	0°♐		min. Earth dist.	-2270 Oct 27 j 00:24	22°♐52'43	0.60468 AU
	-2275 Dec 10 j 23:48	0°♑		opposition	-2270 Nov 01 j 00:49	20°♐52'51	0°23'05
	-2274 Jan 25 j 15:58	0°♓		greatest brilliancy	-2270 Oct 31 j 22:55	20°♐54'45	-1.7m
	-2274 Mar 13 j 23:13	0°♊		direct	-2270 Dec 08 j 13:15	12°♐08'13	
desc. node	-2274 Mar 14 j 16:35	0°♊26'21			-2269 Feb 10 j 08:33	0°♏	
	-2274 May 11 j 03:38	0°♋			-2269 Apr 08 j 23:52	0°♐	
retrograde	-2274 Jun 12 j 13:46	6°♋24'36			-2269 May 29 j 13:13	0°♑	
min. Earth dist.	-2274 Jul 10 j 00:14	1°♋55'43	0.38253 AU		-2269 Jul 15 j 13:12	0°♒	
opposition	-2274 Jul 13 j 22:40	0°♋50'36	-6°38'20	evening set	-2269 Aug 26 j 21:19	28°♒44'40	
greatest brilliancy	-2274 Jul 13 j 01:50	1°♋05'01	-2.9m		-2269 Aug 28 j 16:23	0°♐	
	-2274 Jul 17 j 00:20	30°♑		max. Earth dist.	-2269 Sep 10 j 21:40	9°♐20'19	2.47791 AU
direct	-2274 Aug 12 j 17:35	25°♊47'47			-2269 Oct 09 j 09:16	0°♑	
	-2274 Sep 07 j 22:49	0°♋					
	-2274 Nov 09 j 18:27	0°♍		conjunction	-2269 Oct 18 j 06:53	6°♑35'56	0°11'41
	-2274 Dec 29 j 00:46	0°♎		minimum elong	-2269 Oct 18 j 07:33	6°♑37'11	0°11'40
asc. node	-2273 Jan 17 j 20:49	12°♏27'02		behind sun begin	-2269 Oct 17 j 15:01	6°♑06'24	
	-2273 Feb 14 j 17:08	0°♐		behind sun end	-2269 Oct 19 j 00:06	7°♑08'00	
	-2273 Apr 03 j 09:46	0°♏		desc. node	-2269 Nov 04 j 14:22	19°♑36'45	
	-2273 May 21 j 03:36	0°♐			-2269 Nov 18 j 05:23	0°♓	
evening set	-2273 Jun 08 j 16:29	11°♐42'23		morning rise	-2269 Dec 15 j 19:40	21°♓20'35	
	-2273 Jul 07 j 09:50	0°♑			-2269 Dec 26 j 21:49	0°♊	
max. Earth dist.	-2273 Jul 12 j 08:35	3°♑10'36	2.65661 AU		-2268 Feb 03 j 06:20	0°♋	
					-2268 Mar 13 j 03:59	0°♍	
conjunction	-2273 Jul 24 j 22:31	11°♑17'26	1°10'21		-2268 Apr 22 j 13:07	0°♎	


































































































































## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 14

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2268 Jun 04 j 11:47	0°♊				-2263 Jun 21 j 04:26	0°♎	
	-2268 Jul 21 j 21:02	0°♋		desc. node		-2263 Jun 26 j 09:42	3°♎09'18	
asc. node	-2268 Sep 08 j 18:42	25°♋18'50				-2263 Aug 06 j 00:41	0°♊	
	-2268 Sep 20 j 19:19	0°♈				-2263 Sep 16 j 00:55	0°♌	
retrograde	-2268 Oct 27 j 03:02	7°♈08'22				-2263 Oct 25 j 02:04	0°♍	
	-2268 Nov 29 j 09:34	30°♋♋				-2263 Dec 02 j 17:38	0°♎	
min. Earth dist.	-2268 Dec 04 j 21:05	27°♋49'51	0.66660 AU			-2262 Jan 11 j 02:04	0°♌	
opposition	-2268 Dec 06 j 04:24	27°♋18'22	3°04'21			-2262 Feb 20 j 22:23	0°♋	
greatest brilliancy	-2268 Dec 05 j 23:36	27°♋23'11	-1.4m	evening set		-2262 Feb 25 j 09:48	3°♋12'21	
direct	-2267 Jan 15 j 04:30	17°♋41'27				-2262 Apr 04 j 17:12	0°♊	
	-2267 Mar 07 j 13:31	0°♈						
	-2267 May 06 j 06:52	0°♎		conjunction		-2262 Apr 22 j 04:00	11°♊50'56	-0°05'37
	-2267 Jun 24 j 15:04	0°♏		minimum elong		-2262 Apr 22 j 04:15	11°♊51'23	0°05'37
	-2267 Aug 08 j 10:18	0°♎		behind sun begin		-2262 Apr 21 j 07:19	11°♊16'09	
	-2267 Sep 19 j 03:30	0°♊		behind sun end		-2262 Apr 23 j 01:11	12°♊26'34	
desc. node	-2267 Sep 21 j 12:47	1°♊46'15		asc. node		-2262 May 01 j 15:46	18°♊12'28	
evening set	-2267 Oct 17 j 16:46	21°♊31'02		max. Earth dist.		-2262 May 15 j 18:29	27°♊33'59	2.60109 AU
	-2267 Oct 28 j 17:28	0°♌				-2262 May 19 j 11:14	0°♋	
	-2267 Dec 06 j 02:17	0°♍		morning rise		-2262 Jun 12 j 07:26	15°♋31'24	
						-2262 Jul 04 j 21:38	0°♈	
conjunction	-2267 Dec 19 j 09:39	10°♍29'32	-0°53'51			-2262 Aug 21 j 16:27	0°♎	
minimum elong	-2267 Dec 19 j 06:39	10°♍23'37	0°53'52			-2262 Oct 10 j 00:31	0°♏	
max. Earth dist.	-2267 Dec 25 j 01:07	14°♍56'37	2.37404 AU			-2262 Dec 01 j 22:59	0°♎	
	-2266 Jan 13 j 04:24	0°♎				-2261 Feb 22 j 04:47	0°♊	
	-2266 Feb 20 j 21:24	0°♌		retrograde		-2261 Feb 28 j 01:40	0°♊12'38	
morning rise	-2266 Feb 26 j 09:02	4°♌10'36				-2261 Mar 05 j 20:22	30°♋♎	
	-2266 Apr 02 j 00:57	0°♋		opposition		-2261 Apr 03 j 04:04	23°♎28'52	2°17'45
	-2266 May 14 j 07:51	0°♊		greatest brilliancy		-2261 Apr 03 j 23:38	23°♎12'19	-2.3m
	-2266 Jun 28 j 09:35	0°♋		min. Earth dist.		-2261 Apr 11 j 15:32	20°♎37'46	0.47803 AU
asc. node	-2266 Jul 27 j 17:33	18°♋18'23		direct		-2261 May 10 j 14:27	15°♎14'38	
	-2266 Aug 16 j 12:40	0°♈		desc. node		-2261 May 14 j 09:18	15°♎20'33	
	-2266 Oct 15 j 07:00	0°♎				-2261 Jun 30 j 21:15	0°♊	
retrograde	-2266 Dec 01 j 00:24	10°♎41'41				-2261 Aug 19 j 09:10	0°♌	
opposition	-2265 Jan 09 j 09:06	1°♎24'46	4°33'36			-2261 Sep 30 j 11:10	0°♍	
greatest brilliancy	-2265 Jan 09 j 17:02	1°♎16'56	-1.3m			-2261 Nov 09 j 22:20	0°♎	
min. Earth dist.	-2265 Jan 11 j 22:01	0°♎24'30	0.66497 AU			-2261 Dec 20 j 16:39	0°♌	
	-2265 Jan 12 j 22:51	30°♋♈				-2260 Jan 31 j 17:23	0°♋	
direct	-2265 Feb 19 j 14:04	21°♈24'18				-2260 Mar 15 j 11:11	0°♊	
	-2265 Apr 01 j 18:03	0°♎		asc. node		-2260 Mar 18 j 13:57	2°♊05'32	
	-2265 Jun 01 j 05:15	0°♏		evening set		-2260 Apr 14 j 06:07	19°♊47'43	
	-2265 Jul 18 j 11:43	0°♎				-2260 Apr 29 j 20:34	0°♋	
desc. node	-2265 Aug 09 j 10:40	15°♎12'12						
	-2265 Aug 29 j 22:55	0°♊		conjunction		-2260 Jun 02 j 17:09	21°♋51'31	0°40'41
	-2265 Oct 08 j 17:37	0°♌		minimum elong		-2260 Jun 02 j 15:53	21°♋49'28	0°40'43
	-2265 Nov 16 j 03:24	0°♍		max. Earth dist.		-2260 Jun 09 j 15:29	26°♋17'52	2.66206 AU
evening set	-2265 Dec 24 j 17:02	0°♎19'56				-2260 Jun 15 j 10:25	0°♈	
	-2265 Dec 24 j 06:51	0°♎		morning rise		-2260 Jul 19 j 01:53	21°♈26'32	
	-2264 Feb 01 j 02:58	0°♌				-2260 Aug 01 j 12:46	0°♎	
						-2260 Sep 17 j 15:19	0°♏	
conjunction	-2264 Feb 27 j 14:41	19°♌51'39	-0°56'06			-2260 Nov 03 j 16:21	0°♎	
minimum elong	-2264 Feb 27 j 17:08	19°♌56'10	0°56'08			-2260 Dec 21 j 04:26	0°♊	
	-2264 Mar 12 j 10:35	0°♋				-2259 Feb 08 j 20:57	0°♌	
max. Earth dist.	-2264 Apr 11 j 15:12	21°♋33'20	2.48968 AU	desc. node		-2259 Mar 31 j 08:21	25°♌36'00	
	-2264 Apr 23 j 18:32	0°♊				-2259 Apr 12 j 09:50	0°♍	
morning rise	-2264 Apr 28 j 03:58	3°♊01'36		retrograde		-2259 May 12 j 06:33	5°♍10'58	
	-2264 Jun 07 j 08:30	0°♋		opposition		-2259 Jun 11 j 15:58	0°♍10'12	-4°49'55
asc. node	-2264 Jun 13 j 17:05	4°♋09'15		greatest brilliancy		-2259 Jun 11 j 19:25	0°♍07'53	-2.9m
	-2264 Jul 24 j 07:43	0°♈				-2259 Jun 12 j 07:14	30°♋♌	
	-2264 Sep 12 j 08:29	0°♎		min. Earth dist.		-2259 Jun 13 j 00:41	29°♌48'22	0.37795 AU
	-2264 Nov 08 j 20:03	0°♏		direct		-2259 Jul 12 j 03:26	25°♌00'39	
retrograde	-2263 Jan 08 j 03:17	16°♏14'01				-2259 Aug 09 j 11:06	0°♍	
opposition	-2263 Feb 14 j 14:59	7°♏54'07	4°42'14			-2259 Oct 07 j 19:41	0°♎	
greatest brilliancy	-2263 Feb 15 j 15:31	7°♏30'49	-1.6m			-2259 Nov 23 j 16:29	0°♌	
min. Earth dist.	-2263 Feb 20 j 21:51	5°♏30'56	0.59863 AU			-2258 Jan 08 j 03:46	0°♋	
	-2263 Mar 10 j 13:33	30°♋♎		asc. node		-2258 Feb 03 j 12:37	17°♋17'25	
direct	-2263 Mar 27 j 09:39	28°♎06'10				-2258 Feb 23 j 02:00	0°♊	
	-2263 Apr 14 j 00:49	0°♏				-2258 Apr 10 j 20:10	0°♋	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 15

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

evening set	-2258 May 24 j 20:23	27°  55'49			-2253 Mar 22 j 05:52	0° 		
	-2258 May 28 j 02:43	0° 			-2253 May 01 j 21:11	0° 		
max. Earth dist.	-2258 Jul 03 j 00:34	22°  50'01	2.66884 AU		-2253 Jun 14 j 11:34	0° 		
					-2253 Aug 03 j 08:00	0° 		
conjunction	-2258 Jul 10 j 10:57	27°  35'05	1°06'52	asc. node	-2253 Sep 26 j 10:08	21°  47'35		
minimum elong	-2258 Jul 10 j 10:12	27°  33'53	1°06'56	retrograde	-2253 Oct 14 j 15:08	23°  48'53		
	-2258 Jul 14 j 05:27	0° 		min. Earth dist.	-2253 Nov 20 j 20:58	14°  59'57	0.64948 AU	
morning rise	-2258 Aug 24 j 08:50	26°  37'15		opposition	-2253 Nov 23 j 15:55	13°  52'34	2°11'08	
	-2258 Aug 29 j 12:40	0° 		greatest brilliancy	-2253 Nov 23 j 09:36	13°  58'56	-1.4m	
	-2258 Oct 13 j 15:38	0° 		direct	-2252 Jan 01 j 20:14	4°  32'26		
	-2258 Nov 26 j 13:18	0° 			-2252 Mar 21 j 21:42	0° 		
	-2257 Jan 08 j 10:53	0° 			-2252 May 15 j 04:48	0° 		
desc. node	-2257 Feb 16 j 09:04	27°  34'18			-2252 Jul 02 j 08:05	0° 		
	-2257 Feb 19 j 19:20	0° 			-2252 Aug 15 j 19:01	0° 		
	-2257 Apr 03 j 17:48	0° 		evening set	-2252 Sep 25 j 07:51	29°  09'42		
	-2257 May 20 j 21:44	0° 			-2252 Sep 26 j 11:03	0° 		
retrograde	-2257 Jul 22 j 11:18	21°  27'34		desc. node	-2252 Oct 08 j 05:30	8°  46'18		
min. Earth dist.	-2257 Aug 18 j 19:55	16°  25'35	0.44002 AU	max. Earth dist.	-2252 Oct 18 j 04:56	16°  18'04	2.40205 AU	
greatest brilliancy	-2257 Aug 25 j 10:20	14°  13'54	-2.5m		-2252 Nov 05 j 02:43	0° 		
opposition	-2257 Aug 26 j 19:37	13°  46'04	-5°27'37					
direct	-2257 Sep 27 j 16:35	7°  29'48		conjunction	-2252 Nov 22 j 14:32	13°  34'16	-0°30'25	
	-2257 Dec 07 j 03:31	0° 		minimum elong	-2252 Nov 22 j 12:20	13°  29'59	0°30'27	
asc. node	-2257 Dec 22 j 11:13	8°  02'52			-2252 Dec 13 j 13:47	0° 		
	-2256 Jan 30 j 04:39	0° 			-2251 Jan 20 j 17:33	0° 		
	-2256 Mar 20 j 08:23	0° 		morning rise	-2251 Jan 28 j 04:37	5°  35'00		
	-2256 May 08 j 05:39	0° 			-2251 Feb 28 j 11:21	0° 		
	-2256 Jun 24 j 22:57	0° 			-2251 Apr 09 j 15:25	0° 		
evening set	-2256 Jun 30 j 19:55	3°  45'24			-2251 May 22 j 01:04	0° 		
max. Earth dist.	-2256 Jul 26 j 22:52	20°  40'14	2.62210 AU		-2251 Jul 06 j 15:00	0° 		
	-2256 Aug 10 j 02:49	0° 		asc. node	-2251 Aug 13 j 10:17	22°  39'25		
					-2251 Aug 26 j 18:42	0° 		
conjunction	-2256 Aug 16 j 08:09	4°  08'03	1°06'57	retrograde	-2251 Nov 17 j 06:21	27°  31'06		
minimum elong	-2256 Aug 16 j 08:55	4°  09'22	1°07'00	opposition	-2251 Dec 27 j 00:17	18°  18'38	4°07'14	
	-2256 Sep 23 j 10:42	0° 		greatest brilliancy	-2251 Dec 27 j 02:06	18°  16'50	-1.3m	
morning rise	-2256 Oct 02 j 01:59	5°  09'54		min. Earth dist.	-2251 Dec 28 j 00:46	17°  15'41	0.67330 AU	
	-2256 Nov 04 j 22:44	0° 		direct	-2250 Feb 05 j 21:32	8°  24'07		
	-2256 Dec 15 j 21:47	0° 			-2250 Apr 18 j 06:59	0° 		
desc. node	-2255 Jan 03 j 08:55	13°  34'48			-2250 Jun 10 j 18:18	0° 		
	-2255 Jan 24 j 19:18	0° 			-2250 Jul 26 j 17:11	0° 		
	-2255 Mar 05 j 08:25	0° 		desc. node	-2250 Aug 26 j 04:00	21°  09'20		
	-2255 Apr 14 j 14:35	0° 			-2250 Sep 06 j 18:40	0° 		
	-2255 May 27 j 10:03	0° 			-2250 Oct 16 j 10:12	0° 		
	-2255 Jul 17 j 07:41	0° 			-2250 Nov 23 j 18:31	0° 		
retrograde	-2255 Sep 07 j 04:27	14°  45'23		evening set	-2250 Nov 27 j 01:54	2°  36'33		
min. Earth dist.	-2255 Oct 09 j 19:48	7°  33'02	0.56474 AU		-2250 Dec 31 j 20:17	0° 		
opposition	-2255 Oct 16 j 04:31	5°  03'58	-1°01'49					
greatest brilliancy	-2255 Oct 15 j 23:08	5°  09'14	-1.9m	conjunction	-2249 Feb 01 j 11:58	24°  34'48	-1°05'58	
	-2255 Oct 30 j 15:55	30°  08'00		minimum elong	-2249 Feb 01 j 12:48	24°  36'24	1°06'01	
asc. node	-2255 Nov 08 j 09:57	27°  08'03			-2249 Feb 08 j 14:04	0° 		
direct	-2255 Nov 21 j 09:06	26°  05'05			-2249 Mar 20 j 18:50	0° 		
	-2255 Dec 14 j 23:14	0° 		max. Earth dist.	-2249 Mar 23 j 05:40	1°  47'06	2.43713 AU	
	-2254 Feb 23 j 08:49	0° 		morning rise	-2249 Apr 07 j 15:30	12°  05'44		
	-2254 Apr 17 j 16:03	0° 			-2249 May 02 j 00:42	0° 		
	-2254 Jun 06 j 00:34	0° 			-2249 Jun 15 j 16:21	0° 		
	-2254 Jul 22 j 15:19	0° 		asc. node	-2249 Jul 01 j 08:38	10°  07'39		
evening set	-2254 Aug 09 j 17:41	12°  06'43			-2249 Aug 02 j 03:53	0° 		
max. Earth dist.	-2254 Aug 26 j 05:59	23°  04'10	2.52599 AU		-2249 Sep 23 j 02:55	0° 		
	-2254 Sep 04 j 17:49	0° 			-2249 Dec 05 j 00:57	0° 		
				retrograde	-2249 Dec 24 j 01:35	2°  02'22		
conjunction	-2254 Sep 28 j 12:00	16°  50'57	0°34'09		-2248 Jan 10 j 21:07	30°  08'56		
minimum elong	-2254 Sep 28 j 13:29	16°  53'37	0°34'08	opposition	-2248 Jan 31 j 10:25	23°  06'41	4°50'43	
	-2254 Oct 16 j 14:12	0° 		greatest brilliancy	-2248 Feb 01 j 04:52	22°  05'47	-1.5m	
morning rise	-2254 Nov 21 j 04:51	26°  36'33		min. Earth dist.	-2248 Feb 05 j 06:56	21°  03'43	0.63210 AU	
desc. node	-2254 Nov 21 j 07:11	26°  40'59		direct	-2248 Mar 12 j 14:27	13°  01'59		
	-2254 Nov 25 j 15:52	0° 			-2248 May 10 j 17:32	0° 		
	-2253 Jan 03 j 14:08	0° 			-2248 Jul 02 j 09:07	0° 		
	-2253 Feb 11 j 03:42	0° 		desc. node	-2248 Jul 13 j 02:24	7°  00'00		

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2248 Aug 15 j 06:50	0°♌	conjunction	-2243 Jun 26 j 01:08	14°♊03'12	0°59'31
	-2248 Sep 24 j 14:55	0°♍	minimum elong	-2243 Jun 25 j 24:00	14°♊01'22	0°59'34
	-2248 Nov 02 j 07:39	0°♎		-2243 Jul 21 j 00:35	0°♏	
	-2248 Dec 10 j 16:30	0°♐	morning rise	-2243 Aug 10 j 03:55	12°♏55'37	
	-2247 Jan 18 j 18:21	0°♑		-2243 Sep 05 j 13:15	0°♐	
evening set	-2247 Feb 02 j 12:41	11°♑04'20		-2243 Oct 21 j 05:51	0°♑	
	-2247 Feb 28 j 07:56	0°♒		-2243 Dec 05 j 03:13	0°♑	
				-2242 Jan 18 j 13:28	0°♒	
conjunction	-2247 Apr 02 j 20:20	23°♒45'44 -0°26'33		-2242 Mar 04 j 08:02	0°♒	
minimum elong	-2247 Apr 02 j 21:47	23°♒48'15 0°26'31	desc. node	-2242 Mar 05 j 01:45	0°♒29'10	
	-2247 Apr 11 j 20:46	0°♓		-2242 Apr 21 j 08:58	0°♓	
max. Earth dist.	-2247 May 04 j 05:53	15°♓13'16 2.56283 AU	retrograde	-2242 Jun 28 j 03:32	23°♓53'43	
asc. node	-2247 May 18 j 07:27	24°♓36'27	min. Earth dist.	-2242 Jul 24 j 21:22	19°♓24'53	0.39752 AU
	-2247 May 26 j 11:24	0°♈	opposition	-2242 Jul 30 j 22:48	17°♓37'24	-6°39'24
morning rise	-2247 May 27 j 01:06	0°♈22'32	greatest brilliancy	-2242 Jul 29 j 15:54	18°♓00'22	-2.8m
	-2247 Jul 12 j 00:01	0°♉	direct	-2242 Aug 30 j 04:51	12°♓14'27	
	-2247 Aug 29 j 08:44	0°♊		-2242 Oct 28 j 20:56	0°♋	
	-2247 Oct 19 j 11:53	0°♋		-2242 Dec 21 j 18:17	0°♌	
	-2247 Dec 18 j 16:44	0°♌	asc. node	-2241 Jan 08 j 02:15	10°♌27'15	
retrograde	-2246 Feb 06 j 02:57	11°♌37'51		-2241 Feb 08 j 22:28	0°♍	
opposition	-2246 Mar 13 j 17:32	4°♌10'31 3°41'45		-2241 Mar 29 j 07:39	0°♍	
greatest brilliancy	-2246 Mar 14 j 20:54	3°♌45'54 -2.0m		-2241 May 16 j 09:54	0°♎	
min. Earth dist.	-2246 Mar 21 j 18:49	1°♌17'09 0.52943 AU	evening set	-2241 Jun 17 j 03:10	20°♎00'03	
	-2246 Mar 25 j 13:39	30°♌04'56		-2241 Jul 02 j 19:42	0°♏	
direct	-2246 Apr 21 j 22:43	25°♌04'56	max. Earth dist.	-2241 Jul 17 j 22:13	9°♏42'45	2.64655 AU
	-2246 May 20 j 09:38	0°♍				
desc. node	-2246 May 31 j 01:38	3°♍54'44	conjunction	-2241 Aug 02 j 08:17	19°♏43'36	1°10'25
	-2246 Jul 18 j 14:04	0°♎	minimum elong	-2241 Aug 02 j 08:25	19°♏43'50	1°10'28
	-2246 Aug 31 j 07:52	0°♏		-2241 Aug 17 j 23:37	0°♐	
	-2246 Oct 10 j 14:32	0°♐	morning rise	-2241 Sep 16 j 21:44	20°♐01'00	
	-2246 Nov 19 j 01:25	0°♑		-2241 Oct 01 j 13:16	0°♑	
	-2246 Dec 29 j 01:55	0°♒		-2241 Nov 13 j 11:45	0°♒	
	-2245 Feb 08 j 12:17	0°♒		-2241 Dec 25 j 00:42	0°♓	
	-2245 Mar 23 j 18:40	0°♓	desc. node	-2240 Jan 21 j 00:57	19°♓55'17	
evening set	-2245 Mar 28 j 15:12	3°♓17'16		-2240 Feb 03 j 14:21	0°♔	
asc. node	-2245 Apr 05 j 06:16	8°♓25'24		-2240 Mar 14 j 22:10	0°♕	
	-2245 May 07 j 20:10	0°♈		-2240 Apr 25 j 08:09	0°♋	
				-2240 Jun 10 j 00:18	0°♌	
conjunction	-2245 May 19 j 01:44	7°♈19'21 0°24'43	retrograde	-2240 Aug 21 j 10:25	26°♌34'24	
minimum elong	-2245 May 19 j 00:46	7°♈17'46 0°24'44	min. Earth dist.	-2240 Sep 20 j 22:31	20°♌10'45	0.51787 AU
max. Earth dist.	-2245 Jun 01 j 02:12	15°♈45'04 2.64462 AU	opposition	-2240 Sep 28 j 10:11	17°♌22'02	-2°40'43
	-2245 Jun 23 j 06:54	0°♉	greatest brilliancy	-2240 Sep 27 j 18:06	17°♌37'11	-2.1m
morning rise	-2245 Jul 05 j 20:11	8°♉00'27	direct	-2240 Nov 02 j 02:09	9°♌47'12	
	-2245 Aug 09 j 13:02	0°♊	asc. node	-2240 Nov 25 j 02:11	12°♌52'41	
	-2245 Sep 26 j 06:32	0°♋		-2239 Jan 08 j 12:44	0°♍	
	-2245 Nov 13 j 18:25	0°♌		-2239 Mar 05 j 17:54	0°♍	
	-2244 Jan 03 j 16:12	0°♍		-2239 Apr 25 j 16:49	0°♎	
	-2244 Mar 06 j 14:11	0°♎		-2239 Jun 13 j 05:53	0°♏	
retrograde	-2244 Apr 10 j 13:39	6°♎34'19	evening set	-2239 Jul 24 j 16:36	26°♎44'27	
desc. node	-2244 Apr 17 j 02:08	6°♎18'14		-2239 Jul 29 j 14:54	0°♐	
opposition	-2244 May 11 j 19:24	1°♎08'05 -1°40'01	max. Earth dist.	-2239 Aug 13 j 08:21	9°♐50'22	2.56885 AU
greatest brilliancy	-2244 May 12 j 03:47	1°♎02'02 -2.8m				
	-2244 May 15 j 17:17	30°♎04'56	conjunction	-2239 Sep 10 j 16:30	29°♐14'36	0°51'12
min. Earth dist.	-2244 May 17 j 21:06	29°♎22'49 0.40353 AU	minimum elong	-2239 Sep 10 j 18:02	29°♐17'15	0°51'13
direct	-2244 Jun 14 j 01:34	24°♎53'25		-2239 Sep 11 j 18:35	0°♑	
	-2244 Jul 12 j 06:12	0°♏		-2239 Oct 23 j 19:59	0°♒	
	-2244 Sep 07 j 18:51	0°♐	morning rise	-2239 Oct 30 j 20:11	5°♒07'50	
	-2244 Oct 22 j 11:58	0°♑		-2239 Dec 03 j 04:30	0°♓	
	-2244 Dec 04 j 14:01	0°♒	desc. node	-2239 Dec 08 j 00:13	3°♓39'04	
	-2243 Jan 17 j 03:50	0°♒		-2238 Jan 11 j 09:59	0°♔	
asc. node	-2243 Feb 20 j 03:37	22°♒50'30		-2238 Feb 19 j 06:09	0°♕	
	-2243 Mar 02 j 23:14	0°♓		-2238 Mar 30 j 15:12	0°♋	
	-2243 Apr 18 j 01:22	0°♈		-2238 May 10 j 17:41	0°♌	
evening set	-2243 May 09 j 15:55	13°♈51'11		-2238 Jun 24 j 13:58	0°♍	
	-2243 Jun 03 j 23:33	0°♉		-2238 Aug 19 j 16:09	0°♎	
max. Earth dist.	-2243 Jun 24 j 01:22	12°♉47'06 2.67270 AU	retrograde	-2238 Sep 30 j 17:31	9°♎45'16	
			asc. node	-2238 Oct 13 j 01:40	8°♎40'48	



## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 17

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

min. Earth dist.	-2238 Nov 05 j 07:26	1° $\text{♁}$ 29'56	0.62318 AU		-2233 Aug 24 j 19:04	0° $\text{♁}$	
opposition	-2238 Nov 09 j 13:13	29° $\text{♁}$ 47'57	1°06'24		-2233 Oct 03 j 17:47	0° $\text{♁}$	
greatest brilliancy	-2238 Nov 09 j 08:30	29° $\text{♁}$ 52'41	-1.6m		-2233 Nov 11 j 05:26	0° $\text{♁}$	
	-2238 Nov 09 j 01:12	30° $\text{♁}$			-2233 Dec 19 j 09:54	0° $\text{♁}$	
direct	-2238 Dec 17 j 17:05	20° $\text{♁}$ 49'10		evening set	-2232 Jan 09 j 02:13	16° $\text{♁}$ 03'49	
	-2237 Jan 29 j 20:30	0° $\text{♁}$			-2232 Jan 27 j 07:05	0° $\text{♁}$	
	-2237 Apr 02 j 18:03	0° $\text{♁}$			-2232 Mar 07 j 15:50	0° $\text{♁}$	
	-2237 May 24 j 08:54	0° $\text{♁}$					
	-2237 Jul 10 j 17:50	0° $\text{♁}$		conjunction	-2232 Mar 12 j 04:54	3° $\text{♁}$ 17'34	-0°46'28
	-2237 Aug 24 j 00:08	0° $\text{♁}$		minimum elong	-2232 Mar 12 j 07:19	3° $\text{♁}$ 21'55	0°46'28
evening set	-2237 Sep 06 j 09:09	9° $\text{♁}$ 26'36			-2232 Apr 19 j 00:21	0° $\text{♁}$	
max. Earth dist.	-2237 Sep 22 j 04:31	20° $\text{♁}$ 49'09	2.45039 AU	max. Earth dist.	-2232 Apr 20 j 20:47	1° $\text{♁}$ 16'38	2.51761 AU
	-2237 Oct 04 j 17:10	0° $\text{♁}$		morning rise	-2232 May 09 j 06:23	13° $\text{♁}$ 49'25	
desc. node	-2237 Oct 25 j 22:29	15° $\text{♁}$ 51'14			-2232 Jun 02 j 13:23	0° $\text{♁}$	
				asc. node	-2232 Jun 03 j 22:33	0° $\text{♁}$ 54'29	
conjunction	-2237 Oct 30 j 14:40	19° $\text{♁}$ 23'36	-0°03'14		-2232 Jul 19 j 06:54	0° $\text{♁}$	
minimum elong	-2237 Oct 30 j 14:27	19° $\text{♁}$ 23'12	0°03'15		-2232 Sep 06 j 12:48	0° $\text{♁}$	
behind sun begin	-2237 Oct 29 j 14:29	18° $\text{♁}$ 37'46			-2232 Oct 30 j 18:11	0° $\text{♁}$	
behind sun end	-2237 Oct 31 j 14:25	20° $\text{♁}$ 08'41		retrograde	-2231 Jan 18 j 00:53	25° $\text{♁}$ 17'44	
	-2237 Nov 13 j 12:04	0° $\text{♁}$		opposition	-2231 Feb 23 j 22:12	17° $\text{♁}$ 14'26	4°27'35
	-2237 Dec 22 j 02:44	0° $\text{♁}$		greatest brilliancy	-2231 Feb 25 j 00:56	16° $\text{♁}$ 49'23	-1.7m
morning rise	-2237 Dec 31 j 03:02	7° $\text{♁}$ 04'01		min. Earth dist.	-2231 Mar 02 j 21:45	14° $\text{♁}$ 37'49	0.57637 AU
	-2236 Jan 29 j 09:12	0° $\text{♁}$		direct	-2231 Apr 05 j 06:36	7° $\text{♁}$ 37'16	
	-2236 Mar 08 j 04:41	0° $\text{♁}$			-2231 Jun 12 j 12:45	0° $\text{♁}$	
	-2236 Apr 17 j 10:37	0° $\text{♁}$		desc. node	-2231 Jun 16 j 19:18	2° $\text{♁}$ 22'10	
	-2236 May 30 j 01:55	0° $\text{♁}$			-2231 Jul 30 j 15:31	0° $\text{♁}$	
	-2236 Jul 15 j 13:05	0° $\text{♁}$			-2231 Sep 10 j 08:19	0° $\text{♁}$	
asc. node	-2236 Aug 30 j 00:49	25° $\text{♁}$ 21'14			-2231 Oct 19 j 17:29	0° $\text{♁}$	
	-2236 Sep 08 j 19:54	0° $\text{♁}$			-2231 Nov 27 j 14:00	0° $\text{♁}$	
retrograde	-2236 Nov 03 j 19:53	15° $\text{♁}$ 02'10			-2230 Jan 06 j 02:22	0° $\text{♁}$	
opposition	-2236 Dec 13 j 19:34	5° $\text{♁}$ 17'20	3°30'32		-2230 Feb 16 j 02:02	0° $\text{♁}$	
min. Earth dist.	-2236 Dec 13 j 07:52	5° $\text{♁}$ 29'06	0.67170 AU	evening set	-2230 Mar 09 j 08:01	15° $\text{♁}$ 02'13	
greatest brilliancy	-2236 Dec 13 j 16:36	5° $\text{♁}$ 20'19	-1.3m		-2230 Mar 30 j 23:23	0° $\text{♁}$	
	-2236 Dec 27 j 21:24	30° $\text{♁}$		asc. node	-2230 Apr 21 j 20:57	14° $\text{♁}$ 48'38	
direct	-2235 Jan 23 j 04:30	25° $\text{♁}$ 33'02					
	-2235 Feb 21 j 02:54	0° $\text{♁}$		conjunction	-2230 May 02 j 09:16	21° $\text{♁}$ 48'53	0°06'10
	-2235 Apr 29 j 20:10	0° $\text{♁}$		minimum elong	-2230 May 02 j 08:58	21° $\text{♁}$ 48'23	0°06'11
	-2235 Jun 19 j 07:53	0° $\text{♁}$		behind sun begin	-2230 May 01 j 12:57	21° $\text{♁}$ 15'13	
	-2235 Aug 03 j 12:03	0° $\text{♁}$		behind sun end	-2230 May 03 j 04:58	22° $\text{♁}$ 21'31	
desc. node	-2235 Sep 11 j 20:27	28° $\text{♁}$ 09'50			-2230 May 14 j 18:56	0° $\text{♁}$	
	-2235 Sep 14 j 08:07	0° $\text{♁}$		max. Earth dist.	-2230 May 22 j 00:19	4° $\text{♁}$ 43'58	2.61885 AU
	-2235 Oct 23 j 22:44	0° $\text{♁}$		morning rise	-2230 Jun 21 j 03:22	24° $\text{♁}$ 13'10	
evening set	-2235 Oct 31 j 15:39	5° $\text{♁}$ 58'19			-2230 Jun 30 j 04:22	0° $\text{♁}$	
	-2235 Dec 01 j 07:22	0° $\text{♁}$			-2230 Aug 16 j 17:12	0° $\text{♁}$	
					-2230 Oct 04 j 08:07	0° $\text{♁}$	
conjunction	-2234 Jan 04 j 09:28	26° $\text{♁}$ 52'22	-1°02'29		-2230 Nov 24 j 03:19	0° $\text{♁}$	
minimum elong	-2234 Jan 04 j 07:22	26° $\text{♁}$ 48'14	1°02'31		-2229 Jan 22 j 03:15	0° $\text{♁}$	
	-2234 Jan 08 j 09:02	0° $\text{♁}$		retrograde	-2229 Mar 14 j 03:15	12° $\text{♁}$ 31'33	
max. Earth dist.	-2234 Feb 14 j 08:46	28° $\text{♁}$ 41'38	2.38809 AU	opposition	-2229 Apr 16 j 06:53	6° $\text{♁}$ 15'28	1°07'00
	-2234 Feb 16 j 01:47	0° $\text{♁}$		greatest brilliancy	-2229 Apr 16 j 16:47	6° $\text{♁}$ 07'31	-2.5m
morning rise	-2234 Mar 13 j 20:38	19° $\text{♁}$ 25'53		min. Earth dist.	-2229 Apr 24 j 12:25	3° $\text{♁}$ 37'31	0.44935 AU
	-2234 Mar 28 j 04:58	0° $\text{♁}$		desc. node	-2229 May 04 j 17:56	0° $\text{♁}$ 47'34	
	-2234 May 09 j 10:05	0° $\text{♁}$			-2229 May 08 j 12:02	30° $\text{♁}$	
	-2234 Jun 23 j 06:04	0° $\text{♁}$		direct	-2229 May 22 j 09:58	28° $\text{♁}$ 39'55	
asc. node	-2234 Jul 18 j 00:31	15° $\text{♁}$ 42'48			-2229 Jun 05 j 12:54	0° $\text{♁}$	
	-2234 Aug 10 j 13:35	0° $\text{♁}$			-2229 Aug 10 j 03:43	0° $\text{♁}$	
	-2234 Oct 05 j 02:40	0° $\text{♁}$			-2229 Sep 23 j 08:33	0° $\text{♁}$	
retrograde	-2234 Dec 09 j 04:06	18° $\text{♁}$ 36'34			-2229 Nov 03 j 18:25	0° $\text{♁}$	
opposition	-2233 Jan 17 j 05:20	9° $\text{♁}$ 29'35	4°43'27		-2229 Dec 15 j 02:41	0° $\text{♁}$	
greatest brilliancy	-2233 Jan 17 j 16:59	9° $\text{♁}$ 18'08	-1.4m		-2228 Jan 26 j 13:17	0° $\text{♁}$	
min. Earth dist.	-2233 Jan 20 j 14:00	8° $\text{♁}$ 10'13	0.65612 AU	asc. node	-2228 Mar 08 j 20:12	28° $\text{♁}$ 50'19	
	-2233 Feb 18 j 10:17	30° $\text{♁}$			-2228 Mar 10 j 13:51	0° $\text{♁}$	
direct	-2233 Feb 27 j 11:32	29° $\text{♁}$ 28'00		evening set	-2228 Apr 23 j 18:24	29° $\text{♁}$ 05'55	
	-2233 Mar 08 j 20:45	0° $\text{♁}$			-2228 Apr 25 j 03:43	0° $\text{♁}$	
	-2233 May 25 j 06:43	0° $\text{♁}$			-2228 Jun 10 j 19:32	0° $\text{♁}$	
	-2233 Jul 12 j 21:40	0° $\text{♁}$					
desc. node	-2233 Jul 30 j 20:02	12° $\text{♁}$ 12'31		conjunction	-2228 Jun 11 j 08:47	0° $\text{♁}$ 21'10	0°48'35

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 18

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

minimum elong	-2228 Jun 11 j 07:29	0° $\Pi$ 19'05	0°48'36	min. Earth dist.	-2223 Oct 19 j 18:52	16° $\Upsilon$ 55'58	0.58774 AU
max. Earth dist.	-2228 Jun 15 j 02:08	2° $\Pi$ 43'45	2.66810 AU	opposition	-2223 Oct 25 j 10:15	14° $\Upsilon$ 42'04	-0°11'02
morning rise	-2228 Jul 27 j 03:40	29° $\Pi$ 32'48		greatest brilliancy	-2223 Oct 25 j 09:28	14° $\Upsilon$ 42'52	-1.8m
	-2228 Jul 27 j 20:44	0° $\mathfrak{C}$		asc. node	-2223 Oct 29 j 17:08	13° $\Upsilon$ 01'58	
	-2228 Sep 12 j 17:36	0° $\Omega$		direct	-2223 Dec 01 j 08:42	6° $\Upsilon$ 10'28	
	-2228 Oct 29 j 05:01	0° $\mathfrak{M}$			-2222 Feb 15 j 12:37	0° $\mathfrak{B}$	
	-2228 Dec 14 j 13:13	0° $\underline{\mathfrak{A}}$			-2222 Apr 12 j 01:04	0° $\Pi$	
	-2227 Jan 30 j 14:38	0° $\mathfrak{M}$			-2222 Jun 01 j 02:03	0° $\mathfrak{C}$	
desc. node	-2227 Mar 21 j 18:01	29° $\mathfrak{M}$ 41'59			-2222 Jul 17 j 23:07	0° $\Omega$	
	-2227 Mar 22 j 07:21	0° $\mathfrak{A}$		evening set	-2222 Aug 19 j 08:02	21° $\Omega$ 49'00	
retrograde	-2227 May 30 j 08:34	23° $\mathfrak{A}$ 05'26			-2222 Aug 31 j 03:12	0° $\mathfrak{M}$	
min. Earth dist.	-2227 Jun 28 j 06:34	18° $\mathfrak{A}$ 21'34	0.37646 AU	max. Earth dist.	-2222 Sep 03 j 18:31	2° $\mathfrak{M}$ 32'54	2.49987 AU
opposition	-2227 Jun 29 j 22:34	17° $\mathfrak{A}$ 54'56	-6°07'49				
greatest brilliancy	-2227 Jun 29 j 13:04	18° $\mathfrak{A}$ 01'15	-2.9m	conjunction	-2222 Oct 09 j 10:43	28° $\mathfrak{M}$ 10'01	0°21'54
direct	-2227 Jul 29 j 16:46	12° $\mathfrak{A}$ 57'33		minimum elong	-2222 Oct 09 j 11:51	28° $\mathfrak{M}$ 12'05	0°21'53
	-2227 Sep 24 j 15:33	0° $\mathfrak{B}$			-2222 Oct 11 j 22:37	0° $\underline{\mathfrak{A}}$	
	-2227 Nov 15 j 16:29	0° $\approx$		desc. node	-2222 Nov 11 j 15:56	22° $\underline{\mathfrak{A}}$ 57'49	
	-2226 Jan 01 j 21:57	0° $\mathfrak{H}$			-2222 Nov 20 j 21:43	0° $\mathfrak{M}$	
asc. node	-2226 Jan 24 j 18:29	14° $\mathfrak{H}$ 40'46		morning rise	-2222 Dec 04 j 16:38	10° $\mathfrak{M}$ 35'13	
	-2226 Feb 17 j 16:39	0° $\Upsilon$			-2222 Dec 29 j 16:58	0° $\mathfrak{A}$	
	-2226 Apr 05 j 22:05	0° $\mathfrak{B}$			-2221 Feb 06 j 03:23	0° $\mathfrak{B}$	
	-2226 May 23 j 10:27	0° $\Pi$			-2221 Mar 17 j 02:08	0° $\approx$	
evening set	-2226 Jun 02 j 09:30	6° $\Pi$ 18'00			-2221 Apr 26 j 12:31	0° $\mathfrak{H}$	
max. Earth dist.	-2226 Jul 08 j 10:15	29° $\Pi$ 13'43	2.66309 AU		-2221 Jun 08 j 14:57	0° $\Upsilon$	
	-2226 Jul 09 j 15:10	0° $\mathfrak{C}$			-2221 Jul 26 j 17:18	0° $\mathfrak{B}$	
				asc. node	-2221 Sep 16 j 16:30	24° $\mathfrak{B}$ 57'47	
conjunction	-2226 Jul 18 j 18:10	5° $\mathfrak{C}$ 51'33	1°09'23		-2221 Oct 04 j 08:24	0° $\Pi$	
minimum elong	-2226 Jul 18 j 17:42	5° $\mathfrak{C}$ 50'48	1°09'26	retrograde	-2221 Oct 22 j 10:29	1° $\Pi$ 58'10	
	-2226 Aug 24 j 21:05	0° $\Omega$			-2221 Nov 08 j 09:50	30° $\mathfrak{R}$ $\mathfrak{B}$	
morning rise	-2226 Sep 01 j 18:06	5° $\Omega$ 11'39		min. Earth dist.	-2221 Nov 29 j 12:13	22° $\mathfrak{B}$ 52'42	0.66020 AU
	-2226 Oct 08 j 18:59	0° $\mathfrak{M}$		opposition	-2221 Dec 01 j 11:53	22° $\mathfrak{B}$ 04'42	2°43'28
	-2226 Nov 21 j 07:44	0° $\underline{\mathfrak{A}}$		greatest brilliancy	-2221 Dec 01 j 06:01	22° $\mathfrak{B}$ 10'37	-1.4m
	-2225 Jan 02 j 15:56	0° $\mathfrak{M}$		direct	-2220 Jan 10 j 03:34	12° $\mathfrak{B}$ 34'54	
desc. node	-2225 Feb 06 j 18:03	25° $\mathfrak{M}$ 18'12			-2220 Mar 13 j 09:22	0° $\Pi$	
	-2225 Feb 13 j 05:40	0° $\mathfrak{A}$			-2220 May 09 j 11:01	0° $\mathfrak{C}$	
	-2225 Mar 26 j 21:26	0° $\mathfrak{B}$			-2220 Jun 27 j 07:38	0° $\Omega$	
	-2225 May 09 j 19:01	0° $\approx$			-2220 Aug 11 j 00:39	0° $\mathfrak{M}$	
	-2225 Jul 05 j 14:49	0° $\mathfrak{H}$			-2220 Sep 21 j 18:33	0° $\underline{\mathfrak{A}}$	
retrograde	-2225 Aug 03 j 12:55	5° $\mathfrak{H}$ 28'16		desc. node	-2220 Sep 28 j 14:50	5° $\underline{\mathfrak{A}}$ 05'10	
	-2225 Aug 31 j 18:29	30° $\mathfrak{R}$ $\approx$		evening set	-2220 Oct 07 j 14:49	11° $\underline{\mathfrak{A}}$ 50'09	
min. Earth dist.	-2225 Aug 31 j 20:32	29° $\approx$ 58'15	0.46729 AU		-2220 Oct 31 j 10:01	0° $\mathfrak{M}$	
opposition	-2225 Sep 08 j 23:24	27° $\approx$ 07'21	-4°28'39	max. Earth dist.	-2220 Nov 14 j 02:22	10° $\mathfrak{M}$ 36'32	2.38114 AU
greatest brilliancy	-2225 Sep 07 j 19:19	27° $\approx$ 32'08	-2.3m				
direct	-2225 Oct 11 j 21:59	20° $\approx$ 20'55		conjunction	-2220 Dec 07 j 09:17	28° $\mathfrak{M}$ 51'26	-0°44'39
	-2225 Nov 23 j 14:29	0° $\mathfrak{H}$		minimum elong	-2220 Dec 07 j 06:20	28° $\mathfrak{M}$ 45'37	0°44'40
asc. node	-2225 Dec 12 j 17:10	8° $\mathfrak{H}$ 20'07			-2220 Dec 08 j 20:08	0° $\mathfrak{A}$	
	-2224 Jan 23 j 03:05	0° $\Upsilon$			-2219 Jan 15 j 22:37	0° $\mathfrak{B}$	
	-2224 Mar 14 j 19:24	0° $\mathfrak{B}$		morning rise	-2219 Feb 13 j 19:37	22° $\mathfrak{B}$ 28'17	
	-2224 May 03 j 07:23	0° $\Pi$			-2219 Feb 23 j 15:03	0° $\approx$	
	-2224 Jun 20 j 06:58	0° $\mathfrak{C}$			-2219 Apr 04 j 17:33	0° $\mathfrak{H}$	
evening set	-2224 Jul 09 j 09:18	12° $\mathfrak{C}$ 14'32			-2219 May 16 j 23:42	0° $\Upsilon$	
max. Earth dist.	-2224 Aug 02 j 00:33	27° $\mathfrak{C}$ 40'48	2.60501 AU		-2219 Jul 01 j 04:06	0° $\mathfrak{B}$	
	-2224 Aug 05 j 12:42	0° $\Omega$		asc. node	-2219 Aug 03 j 14:59	20° $\mathfrak{B}$ 36'20	
					-2219 Aug 19 j 21:30	0° $\Pi$	
conjunction	-2224 Aug 25 j 06:55	13° $\Omega$ 13'23	1°02'41		-2219 Oct 23 j 13:03	0° $\mathfrak{C}$	
minimum elong	-2224 Aug 25 j 08:01	13° $\Omega$ 15'16	1°02'43	retrograde	-2219 Nov 25 j 03:13	5° $\mathfrak{C}$ 39'41	
	-2224 Sep 18 j 19:05	0° $\mathfrak{M}$			-2219 Dec 24 j 21:14	30° $\mathfrak{R}$ $\Pi$	
morning rise	-2224 Oct 12 j 00:15	16° $\mathfrak{M}$ 17'21		opposition	-2218 Jan 03 j 16:08	26° $\Pi$ 15'18	4°23'45
	-2224 Oct 31 j 03:21	0° $\underline{\mathfrak{A}}$		greatest brilliancy	-2218 Jan 03 j 21:12	26° $\Pi$ 10'15	-1.3m
	-2224 Dec 10 j 20:55	0° $\mathfrak{M}$		min. Earth dist.	-2218 Jan 05 j 12:22	25° $\Pi$ 31'19	0.67002 AU
desc. node	-2224 Dec 24 j 16:38	10° $\mathfrak{M}$ 23'22		direct	-2218 Feb 13 j 18:01	16° $\Pi$ 16'58	
	-2223 Jan 19 j 12:16	0° $\mathfrak{A}$			-2218 Apr 08 j 20:55	0° $\mathfrak{C}$	
	-2223 Feb 27 j 18:17	0° $\mathfrak{B}$			-2218 Jun 04 j 17:59	0° $\Omega$	
	-2223 Apr 08 j 14:38	0° $\approx$			-2218 Jul 21 j 11:25	0° $\mathfrak{M}$	
	-2223 May 20 j 13:30	0° $\mathfrak{H}$		desc. node	-2218 Aug 16 j 12:49	18° $\mathfrak{M}$ 11'31	
	-2223 Jul 07 j 01:05	0° $\Upsilon$			-2218 Sep 01 j 19:31	0° $\underline{\mathfrak{A}}$	
retrograde	-2223 Sep 16 j 01:12	24° $\Upsilon$ 32'18			-2218 Oct 11 j 13:34	0° $\mathfrak{M}$	

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2218 Nov 18 j 23:03	0°♊		morning rise	-2213 Jul 14 j 01:30	16°♊12'06	
evening set	-2218 Dec 12 j 14:39	18°♊38'45			-2213 Aug 04 j 19:02	0°♊	
	-2218 Dec 27 j 01:26	0°♊			-2213 Sep 21 j 03:32	0°♊	
	-2217 Feb 03 j 19:39	0°♊			-2213 Nov 07 j 17:54	0°♊	
					-2213 Dec 26 j 10:49	0°♊	
conjunction	-2217 Feb 16 j 13:37	9°♊39'04	-1°01'39		-2212 Feb 17 j 10:26	0°♊	
minimum elong	-2217 Feb 16 j 15:39	9°♊42'55	1°01'41	desc. node	-2212 Apr 07 j 09:59	20°♊03'52	
	-2217 Mar 16 j 00:50	0°♊		retrograde	-2212 Apr 28 j 02:36	22°♊36'46	
max. Earth dist.	-2217 Apr 04 j 19:11	14°♊14'18	2.46629 AU	opposition	-2212 May 28 j 17:54	17°♊29'47	-3°30'21
morning rise	-2217 Apr 20 j 05:22	25°♊06'33		greatest brilliancy	-2212 May 29 j 03:19	17°♊23'18	-2.9m
	-2217 Apr 27 j 06:13	0°♊		min. Earth dist.	-2212 Jun 01 j 10:37	16°♊28'54	0.38617 AU
	-2217 Jun 10 j 19:12	0°♊		direct	-2212 Jun 29 j 07:42	11°♊56'08	
asc. node	-2217 Jun 21 j 14:37	7°♊02'30			-2212 Aug 25 j 19:49	0°♊	
	-2217 Jul 27 j 21:22	0°♊			-2212 Oct 14 j 05:55	0°♊	
	-2217 Sep 16 j 12:51	0°♊			-2212 Nov 28 j 00:38	0°♊	
	-2217 Nov 16 j 10:32	0°♊			-2211 Jan 11 j 12:02	0°♊	
retrograde	-2216 Jan 02 j 01:54	10°♊29'31		asc. node	-2211 Feb 10 j 10:09	19°♊52'48	
opposition	-2216 Feb 08 j 23:29	1°♊57'19	4°47'36		-2211 Feb 25 j 20:10	0°♊	
greatest brilliancy	-2216 Feb 09 j 21:26	1°♊36'15	-1.5m		-2211 Apr 13 j 06:03	0°♊	
	-2216 Feb 14 j 01:37	30°♊		evening set	-2211 May 18 j 10:08	22°♊25'23	
min. Earth dist.	-2216 Feb 14 j 14:48	29°♊47'27	0.61482 AU		-2211 May 30 j 08:17	0°♊	
direct	-2216 Mar 20 j 22:57	22°♊03'22		max. Earth dist.	-2211 Jun 29 j 08:23	19°♊05'14	2.67160 AU
	-2216 Apr 28 j 06:39	0°♊					
	-2216 Jun 25 j 14:50	0°♊		conjunction	-2211 Jul 04 j 07:51	22°♊15'44	1°04'15
desc. node	-2216 Jul 03 j 11:29	4°♊55'47		minimum elong	-2211 Jul 04 j 06:55	22°♊14'14	1°04'17
	-2216 Aug 09 j 13:46	0°♊			-2211 Jul 16 j 10:17	0°♊	
	-2216 Sep 19 j 06:57	0°♊		morning rise	-2211 Aug 18 j 06:28	21°♊09'49	
	-2216 Oct 28 j 04:23	0°♊			-2211 Aug 31 j 20:17	0°♊	
	-2216 Dec 05 j 16:23	0°♊			-2211 Oct 16 j 05:22	0°♊	
	-2215 Jan 13 j 20:51	0°♊			-2211 Nov 29 j 13:12	0°♊	
evening set	-2215 Feb 15 j 19:23	24°♊23'59			-2210 Jan 12 j 01:10	0°♊	
	-2215 Feb 23 j 12:58	0°♊		desc. node	-2210 Feb 23 j 10:23	29°♊25'08	
	-2215 Apr 07 j 03:38	0°♊			-2210 Feb 24 j 06:34	0°♊	
					-2210 Apr 09 j 17:07	0°♊	
conjunction	-2215 Apr 14 j 02:15	4°♊45'16	-0°14'26		-2210 Jun 01 j 05:41	0°♊	
minimum elong	-2215 Apr 14 j 03:01	4°♊46'34	0°14'25	retrograde	-2210 Jul 12 j 11:17	10°♊26'14	
behind sun begin	-2215 Apr 13 j 17:39	4°♊30'35		min. Earth dist.	-2210 Aug 08 j 06:17	5°♊43'22	0.41940 AU
behind sun end	-2215 Apr 14 j 12:24	5°♊02'33		greatest brilliancy	-2210 Aug 14 j 06:55	3°♊49'13	-2.6m
asc. node	-2215 May 08 j 13:45	21°♊15'12		opposition	-2210 Aug 15 j 17:25	3°♊21'49	-6°06'31
max. Earth dist.	-2215 May 11 j 02:28	22°♊56'11	2.58488 AU		-2210 Aug 27 j 08:40	30°♊	
	-2215 May 21 j 18:52	0°♊		direct	-2210 Sep 15 j 18:52	27°♊30'24	
morning rise	-2215 Jun 05 j 12:05	9°♊37'45			-2210 Oct 05 j 23:23	0°♊	
	-2215 Jul 07 j 04:51	0°♊			-2210 Dec 13 j 07:58	0°♊	
	-2215 Aug 24 j 04:13	0°♊		asc. node	-2210 Dec 29 j 08:50	9°♊04'09	
	-2215 Oct 13 j 03:27	0°♊			-2209 Feb 02 j 19:20	0°♊	
	-2215 Dec 07 j 06:02	0°♊			-2209 Mar 24 j 02:19	0°♊	
retrograde	-2214 Feb 18 j 02:31	22°♊17'35			-2209 May 11 j 14:40	0°♊	
opposition	-2214 Mar 24 j 22:24	15°♊13'09	2°58'52	evening set	-2209 Jun 25 j 12:56	28°♊17'52	
greatest brilliancy	-2214 Mar 25 j 22:29	14°♊52'07	-2.1m		-2209 Jun 28 j 04:56	0°♊	
min. Earth dist.	-2214 Apr 02 j 08:33	12°♊17'45	0.50145 AU	max. Earth dist.	-2209 Jul 23 j 15:31	16°♊23'25	2.63408 AU
direct	-2214 May 02 j 06:23	6°♊33'11					
desc. node	-2214 May 21 j 11:03	8°♊55'14		conjunction	-2209 Aug 10 j 20:22	28°♊18'46	1°08'58
	-2214 Jul 09 j 02:38	0°♊		minimum elong	-2209 Aug 10 j 20:53	28°♊19'36	1°09'01
	-2214 Aug 24 j 08:28	0°♊			-2209 Aug 13 j 09:40	0°♊	
	-2214 Oct 04 j 12:07	0°♊		morning rise	-2209 Sep 25 j 23:15	29°♊22'45	
	-2214 Nov 13 j 10:42	0°♊			-2209 Sep 26 j 20:54	0°♊	
	-2214 Dec 23 j 19:16	0°♊			-2209 Nov 08 j 14:23	0°♊	
	-2213 Feb 03 j 12:02	0°♊			-2209 Dec 19 j 19:49	0°♊	
	-2213 Mar 18 j 23:09	0°♊		desc. node	-2208 Jan 11 j 10:46	16°♊49'16	
asc. node	-2213 Mar 26 j 11:48	5°♊04'17			-2208 Jan 29 j 00:15	0°♊	
evening set	-2213 Apr 07 j 20:42	13°♊20'09			-2208 Mar 08 j 20:25	0°♊	
	-2213 May 03 j 03:56	0°♊			-2208 Apr 18 j 11:34	0°♊	
					-2208 Jun 01 j 02:59	0°♊	
conjunction	-2213 May 28 j 03:24	16°♊11'52	0°34'20		-2208 Jul 26 j 16:34	0°♊	
minimum elong	-2213 May 28 j 02:12	16°♊09'58	0°34'22	retrograde	-2208 Aug 31 j 05:41	7°♊41'26	
max. Earth dist.	-2213 Jun 06 j 16:30	22°♊20'17	2.65530 AU	min. Earth dist.	-2208 Oct 01 j 22:45	0°♊49'58	0.54451 AU
	-2213 Jun 18 j 15:31	0°♊			-2208 Oct 04 j 03:07	30°♊	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 20

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

opposition	-2208 Oct 08 j 20:30	28° $\text{H}$ 10'21	-1°42'04			-2202 Jan 03 j 14:32	0° $\text{Z}$	
greatest brilliancy	-2208 Oct 08 j 10:53	28° $\text{H}$ 19'38	-1.9m					
direct	-2208 Nov 13 j 08:44	20° $\text{H}$ 12'52		conjunction	-2202 Jan 20 j 08:40	13° $\text{Z}$ 05'41	-1°06'18	
asc. node	-2208 Nov 15 j 07:30	20° $\text{H}$ 14'21		minimum elong	-2202 Jan 20 j 08:12	13° $\text{Z}$ 04'46	1°06'21	
	-2208 Dec 27 j 08:13	0° $\text{Y}$			-2202 Feb 11 j 06:57	0° $\approx$		
	-2207 Feb 27 j 04:59	0° $\text{B}$		max. Earth dist.	-2202 Mar 10 j 20:10	20° $\approx$ 44'50	2.41378 AU	
	-2207 Apr 20 j 09:56	0° $\text{II}$			-2202 Mar 23 j 09:48	0° $\text{H}$		
	-2207 Jun 08 j 10:24	0° $\text{E}$		morning rise	-2202 Mar 28 j 07:29	3° $\text{H}$ 34'17		
	-2207 Jul 24 j 23:46	0° $\text{O}$			-2202 May 04 j 13:48	0° $\text{Y}$		
evening set	-2207 Aug 02 j 17:44	5° $\text{O}$ 49'07			-2202 Jun 18 j 05:23	0° $\text{B}$		
max. Earth dist.	-2207 Aug 20 j 13:52	17° $\text{O}$ 52'02	2.54602 AU	asc. node	-2202 Jul 08 j 06:04	12° $\text{B}$ 52'02		
	-2207 Sep 07 j 03:53	0° $\text{H}$			-2202 Aug 04 j 22:25	0° $\text{II}$		
					-2202 Sep 26 j 23:39	0° $\text{E}$		
conjunction	-2207 Sep 20 j 14:38	9° $\text{H}$ 27'01	0°42'04	retrograde	-2202 Dec 17 j 14:52	26° $\text{E}$ 41'33		
minimum elong	-2207 Sep 20 j 16:12	9° $\text{H}$ 29'47	0°42'05	opposition	-2201 Jan 25 j 07:07	17° $\text{E}$ 45'48	4°49'04	
	-2207 Oct 19 j 03:37	0° $\text{O}$		greatest brilliancy	-2201 Jan 25 j 22:30	17° $\text{E}$ 30'46	-1.4m	
morning rise	-2207 Nov 11 j 13:40	17° $\text{O}$ 19'55		min. Earth dist.	-2201 Jan 29 j 11:14	16° $\text{E}$ 08'00	0.64403 AU	
desc. node	-2207 Nov 28 j 09:00	0° $\text{M}$ 00'02		direct	-2201 Mar 07 j 12:33	7° $\text{E}$ 45'07		
	-2207 Nov 28 j 08:59	0° $\text{M}$			-2201 May 17 j 06:39	0° $\text{O}$		
	-2206 Jan 06 j 10:48	0° $\text{A}$			-2201 Jul 06 j 23:28	0° $\text{H}$		
	-2206 Feb 14 j 03:05	0° $\text{Z}$		desc. node	-2201 Jul 21 j 04:23	9° $\text{H}$ 26'53		
	-2206 Mar 25 j 07:11	0° $\approx$			-2201 Aug 19 j 11:21	0° $\text{O}$		
	-2206 May 05 j 01:22	0° $\text{H}$			-2201 Sep 28 j 15:53	0° $\text{M}$		
	-2206 Jun 17 j 23:53	0° $\text{Y}$			-2201 Nov 06 j 06:35	0° $\text{A}$		
	-2206 Aug 08 j 11:31	0° $\text{B}$			-2201 Dec 14 j 13:09	0° $\text{Z}$		
asc. node	-2206 Oct 03 j 07:16	18° $\text{B}$ 10'46			-2200 Jan 22 j 11:55	0° $\approx$		
retrograde	-2206 Oct 08 j 19:04	18° $\text{B}$ 22'43		evening set	-2200 Jan 23 j 17:59	0° $\approx$ 56'57		
min. Earth dist.	-2206 Nov 14 j 07:16	9° $\text{B}$ 48'30	0.63886 AU		-2200 Mar 02 j 22:04	0° $\text{H}$		
opposition	-2206 Nov 17 j 18:22	8° $\text{B}$ 24'58	1°45'40					
greatest brilliancy	-2206 Nov 17 j 12:10	8° $\text{B}$ 31'12	-1.5m	conjunction	-2200 Mar 24 j 19:09	15° $\text{H}$ 40'11	-0°35'19	
	-2206 Dec 15 j 15:37	30° $\text{R}$ $\text{Y}$		minimum elong	-2200 Mar 24 j 21:06	15° $\text{H}$ 43'37	0°35'19	
direct	-2206 Dec 26 j 12:19	29° $\text{Y}$ 13'52			-2200 Apr 14 j 07:31	0° $\text{Y}$		
	-2205 Jan 06 j 22:40	0° $\text{B}$		max. Earth dist.	-2200 Apr 28 j 23:04	10° $\text{Y}$ 01'46	2.54335 AU	
	-2205 Mar 26 j 22:35	0° $\text{II}$		morning rise	-2200 May 19 j 15:03	23° $\text{Y}$ 54'44		
	-2205 May 19 j 00:47	0° $\text{E}$		asc. node	-2200 May 25 j 04:56	27° $\text{Y}$ 36'31		
	-2205 Jul 05 j 21:19	0° $\text{O}$			-2200 May 28 j 19:57	0° $\text{B}$		
	-2205 Aug 19 j 07:28	0° $\text{H}$			-2200 Jul 14 j 09:08	0° $\text{II}$		
evening set	-2205 Sep 17 j 10:12	20° $\text{H}$ 45'01			-2200 Sep 01 j 00:52	0° $\text{E}$		
	-2205 Sep 30 j 01:09	0° $\text{O}$			-2200 Oct 23 j 04:32	0° $\text{O}$		
max. Earth dist.	-2205 Oct 05 j 15:21	4° $\text{O}$ 08'41	2.42293 AU		-2200 Dec 29 j 09:33	0° $\text{H}$		
desc. node	-2205 Oct 16 j 07:03	12° $\text{O}$ 06'57		retrograde	-2199 Jan 28 j 14:08	4° $\text{H}$ 49'51		
	-2205 Nov 08 j 18:56	0° $\text{M}$			-2199 Feb 25 j 11:46	30° $\text{R}$ $\text{O}$		
				opposition	-2199 Mar 05 j 19:22	27° $\text{O}$ 05'25	4°04'35	
conjunction	-2205 Nov 12 j 19:00	3° $\text{M}$ 05'02	-0°18'44	greatest brilliancy	-2199 Mar 06 j 22:59	26° $\text{O}$ 40'03	-1.8m	
minimum elong	-2205 Nov 12 j 17:40	3° $\text{M}$ 02'28	0°18'44	min. Earth dist.	-2199 Mar 13 j 10:25	24° $\text{O}$ 17'52	0.55121 AU	
	-2205 Dec 17 j 07:56	0° $\text{A}$		direct	-2199 Apr 14 j 14:09	17° $\text{O}$ 43'44		
morning rise	-2204 Jan 16 j 07:17	23° $\text{A}$ 33'03			-2199 Jun 01 j 02:22	0° $\text{H}$		
	-2204 Jan 24 j 12:46	0° $\text{Z}$		desc. node	-2199 Jun 07 j 03:03	2° $\text{H}$ 50'47		
	-2204 Mar 03 j 06:33	0° $\approx$			-2199 Jul 23 j 13:05	0° $\text{O}$		
	-2204 Apr 12 j 10:11	0° $\text{H}$			-2199 Sep 04 j 06:45	0° $\text{M}$		
	-2204 May 24 j 20:15	0° $\text{Y}$			-2199 Oct 14 j 02:59	0° $\text{A}$		
	-2204 Jul 09 j 15:40	0° $\text{B}$			-2199 Nov 22 j 06:42	0° $\text{Z}$		
asc. node	-2204 Aug 20 j 07:16	24° $\text{B}$ 23'11			-2198 Jan 01 j 00:34	0° $\approx$		
	-2204 Aug 30 j 23:27	0° $\text{II}$			-2198 Feb 11 j 04:50	0° $\text{H}$		
retrograde	-2204 Nov 11 j 13:26	22° $\text{II}$ 51'53		evening set	-2198 Mar 20 j 13:11	26° $\text{H}$ 06'27		
opposition	-2204 Dec 21 j 10:03	13° $\text{II}$ 13'22	3°53'10		-2198 Mar 26 j 05:48	0° $\text{Y}$		
greatest brilliancy	-2204 Dec 21 j 09:30	13° $\text{II}$ 13'55	-1.3m	asc. node	-2198 Apr 12 j 03:53	11° $\text{Y}$ 26'30		
min. Earth dist.	-2204 Dec 21 j 17:52	13° $\text{II}$ 05'32	0.67383 AU		-2198 May 10 j 03:26	0° $\text{B}$		
direct	-2203 Jan 31 j 02:10	3° $\text{II}$ 23'03						
	-2203 Apr 22 j 17:11	0° $\text{E}$		conjunction	-2198 May 12 j 01:50	1° $\text{B}$ 16'02	0°17'11	
	-2203 Jun 13 j 20:13	0° $\text{O}$		minimum elong	-2198 May 12 j 01:06	1° $\text{B}$ 14'50	0°17'12	
	-2203 Jul 29 j 12:10	0° $\text{H}$		max. Earth dist.	-2198 May 27 j 22:07	11° $\text{B}$ 35'41	2.63414 AU	
desc. node	-2203 Sep 02 j 05:48	24° $\text{H}$ 39'14			-2198 Jun 25 j 12:35	0° $\text{II}$		
	-2203 Sep 09 j 12:37	0° $\text{O}$		morning rise	-2198 Jun 29 j 15:37	2° $\text{II}$ 38'06		
	-2203 Oct 19 j 04:26	0° $\text{M}$			-2198 Aug 11 j 21:00	0° $\text{E}$		
evening set	-2203 Nov 15 j 06:52	21° $\text{M}$ 08'07			-2198 Sep 28 j 22:36	0° $\text{O}$		
	-2203 Nov 26 j 13:07	0° $\text{A}$			-2198 Nov 17 j 06:34	0° $\text{H}$		

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 21

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2197 Jan 09 j 14:04	0°♏	evening set	-2192 Jul 18 j 01:50	20°♎53'55	
retrograde	-2197 Mar 29 j 15:08	25°♏58'55		-2192 Jul 31 j 22:08	0°♏	
desc. node	-2197 Apr 25 j 03:30	21°♏49'10	max. Earth dist.	-2192 Aug 08 j 10:28	4°♏59'38	2.58604 AU
opposition	-2197 Apr 30 j 16:00	20°♏11'27 -0°21'28				
greatest brilliancy	-2197 Apr 30 j 18:24	20°♏09'38 -2.6m	conjunction	-2192 Sep 03 j 12:01	22°♏37'55	0°56'42
min. Earth dist.	-2197 May 08 j 00:28	17°♏57'48 0.42233 AU	minimum elong	-2192 Sep 03 j 13:24	22°♏40'17	0°56'44
direct	-2197 Jun 04 j 07:09	13°♏19'45		-2192 Sep 14 j 04:07	0°♐	
	-2197 Jul 28 j 13:58	0°♐	morning rise	-2192 Oct 22 j 10:29	27°♐07'47	
	-2197 Sep 15 j 04:13	0°♐		-2192 Oct 26 j 09:33	0°♏	
	-2197 Oct 28 j 01:33	0°♐		-2192 Dec 05 j 22:39	0°♐	
	-2197 Dec 09 j 05:27	0°♐	desc. node	-2192 Dec 15 j 01:59	6°♐53'55	
	-2196 Jan 21 j 04:53	0°♐		-2191 Jan 14 j 08:34	0°♐	
asc. node	-2196 Feb 28 j 01:19	25°♐38'33		-2191 Feb 22 j 08:43	0°♐	
	-2196 Mar 05 j 14:18	0°♐		-2191 Apr 02 j 21:22	0°♐	
	-2196 Apr 20 j 09:54	0°♐		-2191 May 14 j 05:45	0°♐	
evening set	-2196 May 02 j 23:33	8°♐06'14		-2191 Jun 28 j 20:00	0°♐	
	-2196 Jun 06 j 04:35	0°♐		-2191 Aug 30 j 12:17	0°♐	
			retrograde	-2191 Sep 24 j 13:45	3°♐51'14	
conjunction	-2196 Jun 19 j 20:06	8°♐41'55 0°55'21		-2191 Oct 18 j 00:21	30°♐	
minimum elong	-2196 Jun 19 j 18:53	8°♐39'58 0°55'23	asc. node	-2191 Oct 19 j 23:21	29°♐21'41	
max. Earth dist.	-2196 Jun 20 j 10:05	9°♐04'11 2.67176 AU	min. Earth dist.	-2191 Oct 29 j 08:25	25°♐52'49	0.60840 AU
	-2196 Jul 23 j 05:37	0°♐	opposition	-2191 Nov 03 j 05:50	23°♐55'43	0°35'34
morning rise	-2196 Aug 04 j 04:21	7°♐38'44	greatest brilliancy	-2191 Nov 03 j 02:56	23°♐58'37	-1.7m
	-2196 Sep 07 j 21:54	0°♐	direct	-2191 Dec 10 j 21:15	15°♐08'25	
	-2196 Oct 23 j 22:36	0°♐		-2190 Feb 05 j 23:42	0°♐	
	-2196 Dec 08 j 10:10	0°♐		-2190 Apr 06 j 01:15	0°♐	
	-2195 Jan 22 j 19:41	0°♐		-2190 May 26 j 23:46	0°♐	
	-2195 Mar 10 j 10:07	0°♐		-2190 Jul 13 j 04:41	0°♐	
desc. node	-2195 Mar 12 j 03:33	1°♐04'22		-2190 Aug 26 j 11:18	0°♐	
	-2195 May 03 j 11:20	0°♐	evening set	-2190 Aug 29 j 09:55	2°♐03'33	
retrograde	-2195 Jun 16 j 02:32	11°♐04'15	max. Earth dist.	-2190 Sep 13 j 14:02	12°♐48'06	2.47288 AU
min. Earth dist.	-2195 Jul 13 j 10:03	6°♐36'33 0.38455 AU		-2190 Oct 07 j 06:38	0°♐	
opposition	-2195 Jul 17 j 18:41	5°♐23'16 -6°42'42				
greatest brilliancy	-2195 Jul 16 j 19:33	5°♐39'32 -2.8m	conjunction	-2190 Oct 21 j 02:41	10°♐16'02	0°08'05
direct	-2195 Aug 16 j 14:54	0°♐17'43	minimum elong	-2190 Oct 21 j 03:10	10°♐16'55	0°08'04
	-2195 Nov 06 j 00:28	0°♐	behind sun begin	-2190 Oct 20 j 06:28	9°♐38'15	
	-2195 Dec 26 j 02:56	0°♐	behind sun end	-2190 Oct 21 j 23:52	10°♐55'37	
asc. node	-2194 Jan 14 j 23:40	12°♐22'44	desc. node	-2190 Nov 02 j 00:19	19°♐13'05	
	-2194 Feb 12 j 01:45	0°♐		-2190 Nov 16 j 04:14	0°♐	
	-2194 Mar 31 j 21:12	0°♐	morning rise	-2190 Dec 19 j 04:04	25°♐32'10	
	-2194 May 18 j 16:50	0°♐		-2190 Dec 24 j 21:14	0°♐	
evening set	-2194 Jun 10 j 20:55	14°♐37'21		-2189 Feb 01 j 05:19	0°♐	
	-2194 Jul 05 j 00:42	0°♐		-2189 Mar 12 j 01:26	0°♐	
max. Earth dist.	-2194 Jul 13 j 21:20	5°♐41'08 2.65502 AU		-2189 Apr 21 j 07:45	0°♐	
				-2189 Jun 03 j 01:27	0°♐	
conjunction	-2194 Jul 27 j 02:07	14°♐12'24 1°10'30		-2189 Jul 19 j 23:35	0°♐	
minimum elong	-2194 Jul 27 j 02:00	14°♐12'13 1°10'32	asc. node	-2189 Sep 06 j 22:17	26°♐02'50	
	-2194 Aug 20 j 06:06	0°♐		-2189 Sep 16 j 06:33	0°♐	
morning rise	-2194 Sep 10 j 07:31	13°♐59'20	retrograde	-2189 Oct 30 j 03:44	9°♐58'06	
	-2194 Oct 04 j 00:02	0°♐	min. Earth dist.	-2189 Dec 08 j 00:32	0°♐37'12	0.66775 AU
	-2194 Nov 16 j 05:19	0°♐	opposition	-2189 Dec 09 j 04:49	0°♐08'45	3°12'15
	-2194 Dec 28 j 02:45	0°♐	greatest brilliancy	-2189 Dec 09 j 00:13	0°♐13'23	-1.3m
desc. node	-2193 Jan 28 j 02:48	22°♐39'29		-2189 Dec 09 j 13:31	30°♐	
	-2193 Feb 07 j 02:16	0°♐	direct	-2188 Jan 18 j 06:45	20°♐30'34	
	-2193 Mar 19 j 21:55	0°♐		-2188 Mar 02 j 11:20	0°♐	
	-2193 May 01 j 02:27	0°♐		-2188 May 03 j 08:00	0°♐	
	-2193 Jun 18 j 05:20	0°♐		-2188 Jun 22 j 03:11	0°♐	
retrograde	-2193 Aug 14 j 14:22	18°♐17'17		-2188 Aug 06 j 03:44	0°♐	
min. Earth dist.	-2193 Sep 13 j 03:07	12°♐16'56 0.49536 AU	desc. node	-2188 Sep 17 j 00:07	0°♐	
opposition	-2193 Sep 20 j 23:14	9°♐24'38 -3°26'33	evening set	-2188 Sep 18 j 22:25	1°♐25'37	
greatest brilliancy	-2193 Sep 20 j 01:53	9°♐44'17 -2.2m		-2188 Oct 20 j 20:59	25°♐32'35	
direct	-2193 Oct 24 j 20:45	2°♐10'15		-2188 Oct 26 j 15:55	0°♐	
asc. node	-2193 Dec 02 j 23:36	10°♐20'40		-2188 Dec 04 j 01:32	0°♐	
	-2192 Jan 15 j 01:23	0°♐				
	-2192 Mar 08 j 23:08	0°♐	conjunction	-2188 Dec 23 j 00:16	14°♐56'22	-0°56'17
	-2192 Apr 28 j 05:52	0°♐	minimum elong	-2188 Dec 22 j 21:25	14°♐50'44	0°56'19
	-2192 Jun 15 j 13:34	0°♐	max. Earth dist.	-2187 Jan 07 j 03:58	26°♐52'27	2.37501 AU

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2187 Jan 11 j 03:30	0°♂		retrograde	-2182 Mar 03 j 04:09	3°♂♂50	
	-2187 Feb 18 j 19:28	0°♂			-2182 Mar 28 j 01:42	30°♂♂	
morning rise	-2187 Mar 01 j 23:11	8°♂29'01		opposition	-2182 Apr 06 j 03:00	27°♂08'20	2°01'20
	-2187 Mar 30 j 21:09	0°♂		greatest brilliancy	-2182 Apr 06 j 20:28	26°♂53'43	-2.3m
	-2187 May 12 j 01:10	0°♂		min. Earth dist.	-2182 Apr 14 j 15:26	24°♂18'18	0.47251 AU
	-2187 Jun 25 j 22:23	0°♂		desc. node	-2182 May 11 j 19:42	19°♂02'12	
asc. node	-2187 Jul 24 j 21:59	18°♂12'45		direct	-2182 May 13 j 08:36	19°♂01'13	
	-2187 Aug 13 j 15:56	0°♂			-2182 Jun 25 j 15:14	0°♂	
	-2187 Oct 10 j 13:36	0°♂			-2182 Aug 16 j 08:54	0°♂	
retrograde	-2187 Dec 03 j 02:53	13°♂29'29			-2182 Sep 27 j 22:13	0°♂	
opposition	-2186 Jan 11 j 09:35	4°♂14'06	4°36'26		-2182 Nov 07 j 13:35	0°♂	
greatest brilliancy	-2186 Jan 11 j 18:11	4°♂05'36	-1.3m		-2182 Dec 18 j 09:20	0°♂	
min. Earth dist.	-2186 Jan 14 j 01:34	3°♂10'48	0.66362 AU		-2181 Jan 29 j 10:03	0°♂	
	-2186 Jan 22 j 10:13	30°♂♂			-2181 Mar 14 j 03:05	0°♂	
direct	-2186 Feb 21 j 14:20	24°♂13'24		asc. node	-2181 Mar 16 j 17:46	1°♂45'21	
	-2186 Mar 26 j 14:25	0°♂		evening set	-2181 Apr 17 j 16:11	22°♂56'10	
	-2186 May 29 j 06:33	0°♂			-2181 Apr 28 j 11:35	0°♂	
	-2186 Jul 16 j 01:33	0°♂					
desc. node	-2186 Aug 06 j 21:50	15°♂01'55		conjunction	-2181 Jun 05 j 23:07	24°♂50'07	0°43'00
	-2186 Aug 27 j 18:05	0°♂		minimum elong	-2181 Jun 05 j 21:49	24°♂48'02	0°43'02
	-2186 Oct 06 j 15:21	0°♂		max. Earth dist.	-2181 Jun 12 j 05:18	28°♂50'28	2.66343 AU
	-2186 Nov 14 j 02:05	0°♂			-2181 Jun 14 j 00:47	0°♂	
greatest brilliancy	-2186 Dec 21 j 23:45	29°♂49'05	1.2m	morning rise	-2181 Jul 22 j 04:30	24°♂19'17	
	-2186 Dec 22 j 05:20	0°♂			-2181 Jul 31 j 02:41	0°♂	
evening set	-2186 Dec 28 j 06:54	4°♂44'30			-2181 Sep 16 j 04:18	0°♂	
	-2185 Jan 30 j 00:24	0°♂			-2181 Nov 02 j 02:40	0°♂	
					-2181 Dec 19 j 08:08	0°♂	
conjunction	-2185 Mar 02 j 21:45	23°♂52'45	-0°53'51		-2180 Feb 06 j 06:33	0°♂	
minimum elong	-2185 Mar 03 j 00:15	23°♂57'21	0°53'51	desc. node	-2180 Mar 28 j 19:31	27°♂25'06	
	-2185 Mar 11 j 06:23	0°♂			-2180 Apr 03 j 20:22	0°♂	
max. Earth dist.	-2185 Apr 15 j 06:51	24°♂58'38	2.49537 AU	retrograde	-2180 May 16 j 09:12	9°♂51'25	
	-2185 Apr 22 j 12:16	0°♂		opposition	-2180 Jun 15 j 16:27	4°♂50'44	-5°11'01
morning rise	-2185 May 01 j 22:49	6°♂29'53		greatest brilliancy	-2180 Jun 15 j 17:56	4°♂49'45	-2.9m
	-2185 Jun 05 j 23:42	0°♂		min. Earth dist.	-2180 Jun 16 j 12:06	4°♂37'45	0.37684 AU
asc. node	-2185 Jun 11 j 20:39	3°♂50'54			-2180 Jul 09 j 21:05	30°♂♂	
	-2185 Jul 22 j 19:12	0°♂		direct	-2180 Jul 15 j 21:52	29°♂45'28	
	-2185 Sep 10 j 12:04	0°♂			-2180 Jul 21 j 23:40	0°♂	
	-2185 Nov 05 j 16:26	0°♂			-2180 Oct 04 j 00:17	0°♂	
retrograde	-2184 Jan 11 j 12:35	19°♂13'44			-2180 Nov 20 j 18:17	0°♂	
opposition	-2184 Feb 17 j 21:30	10°♂56'33	4°38'14		-2179 Jan 05 j 12:39	0°♂	
greatest brilliancy	-2184 Feb 18 j 22:19	10°♂33'01	-1.6m	asc. node	-2179 Jan 31 j 16:05	17°♂05'31	
min. Earth dist.	-2184 Feb 24 j 06:55	8°♂31'16	0.59477 AU		-2179 Feb 20 j 13:41	0°♂	
direct	-2184 Mar 29 j 13:37	1°♂10'28			-2179 Apr 08 j 09:02	0°♂	
	-2184 Jun 18 j 00:00	0°♂			-2179 May 25 j 16:21	0°♂	
desc. node	-2184 Jun 23 j 21:07	3°♂28'33		evening set	-2179 May 27 j 01:29	0°♂52'29	
	-2184 Aug 03 j 13:09	0°♂		max. Earth dist.	-2179 Jul 04 j 16:48	25°♂26'20	2.66792 AU
	-2184 Sep 13 j 19:19	0°♂			-2179 Jul 11 j 19:58	0°♂	
	-2184 Oct 22 j 22:52	0°♂					
	-2184 Nov 30 j 14:55	0°♂		conjunction	-2179 Jul 12 j 14:48	0°♂30'10	1°07'42
	-2183 Jan 08 j 22:37	0°♂		minimum elong	-2179 Jul 12 j 14:08	0°♂29'06	1°07'44
	-2183 Feb 18 j 17:26	0°♂		morning rise	-2179 Aug 26 j 12:36	29°♂34'44	
evening set	-2183 Feb 28 j 08:13	6°♂52'44			-2179 Aug 27 j 04:01	0°♂	
	-2183 Apr 02 j 10:27	0°♂			-2179 Oct 11 j 07:24	0°♂	
					-2179 Nov 24 j 04:39	0°♂	
conjunction	-2183 Apr 24 j 18:13	15°♂08'49	-0°02'24		-2178 Jan 06 j 00:34	0°♂	
minimum elong	-2183 Apr 24 j 18:22	15°♂09'03	0°02'23	desc. node	-2178 Feb 13 j 19:49	27°♂34'50	
behind sun begin	-2183 Apr 23 j 20:34	14°♂32'30			-2178 Feb 17 j 05:23	0°♂	
behind sun end	-2183 Apr 25 j 16:10	15°♂45'35			-2178 Mar 31 j 19:32	0°♂	
asc. node	-2183 Apr 28 j 18:44	17°♂50'25			-2178 May 16 j 19:42	0°♂	
	-2183 May 17 j 02:43	0°♂		retrograde	-2178 Jul 25 j 11:07	25°♂32'34	
max. Earth dist.	-2183 May 17 j 14:56	0°♂20'06	2.60468 AU	min. Earth dist.	-2178 Aug 21 j 22:21	20°♂25'24	0.44492 AU
morning rise	-2183 Jun 14 j 14:22	18°♂32'41		opposition	-2178 Aug 29 j 23:17	17°♂43'14	-5°14'24
	-2183 Jul 02 j 11:22	0°♂		greatest brilliancy	-2178 Aug 28 j 15:14	18°♂10'22	-2.5m
	-2183 Aug 19 j 03:43	0°♂		direct	-2178 Oct 01 j 02:12	11°♂21'04	
	-2183 Oct 07 j 06:16	0°♂			-2178 Dec 02 j 19:36	0°♂	
	-2183 Nov 28 j 11:41	0°♂		asc. node	-2178 Dec 19 j 14:41	8°♂30'34	
	-2182 Feb 04 j 23:25	0°♂			-2177 Jan 27 j 04:09	0°♂	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2177 Mar 18 j 16:11	0°♄		morning rise	-2172 Feb 01 j 23:09	10°♂22'01	
	-2177 May 06 j 17:15	0°♂			-2172 Feb 27 j 09:09	0°♂	
	-2177 Jun 23 j 13:06	0°♂			-2172 Apr 07 j 10:43	0°♂	
evening set	-2177 Jul 04 j 00:41	6°♂42'11			-2172 May 19 j 16:43	0°♂	
max. Earth dist.	-2177 Jul 29 j 13:01	23°♂14'56	2.61890 AU		-2172 Jul 04 j 00:29	0°♄	
	-2177 Aug 08 j 19:02	0°♂		asc. node	-2172 Aug 10 j 12:09	22°♄42'39	
					-2172 Aug 23 j 12:19	0°♂	
conjunction	-2177 Aug 19 j 14:24	7°♂11'03	1°05'55		-2172 Nov 08 j 18:41	0°♂	
minimum elong	-2177 Aug 19 j 15:16	7°♂12'30	1°05'57	retrograde	-2172 Nov 19 j 07:56	0°♂40'16	
	-2177 Sep 22 j 04:30	0°♂			-2172 Nov 29 j 10:38	30°♄	
morning rise	-2177 Oct 05 j 12:12	9°♂15'38		opposition	-2172 Dec 29 j 00:54	21°♂09'00	4°12'11
	-2177 Nov 03 j 17:33	0°♄		greatest brilliancy	-2172 Dec 29 j 03:16	21°♂06'38	-1.3m
	-2177 Dec 14 j 16:58	0°♂		min. Earth dist.	-2172 Dec 30 j 04:23	20°♂41'33	0.67307 AU
desc. node	-2176 Jan 01 j 18:25	13°♂30'41		direct	-2171 Feb 07 j 23:15	11°♂13'50	
	-2176 Jan 23 j 14:07	0°♄			-2171 Apr 14 j 11:09	0°♂	
	-2176 Mar 03 j 01:50	0°♂			-2171 Jun 08 j 01:24	0°♂	
	-2176 Apr 12 j 04:35	0°♂			-2171 Jul 24 j 08:56	0°♂	
	-2176 May 24 j 15:31	0°♂		desc. node	-2171 Aug 23 j 14:49	21°♂15'12	
	-2176 Jul 13 j 02:18	0°♂			-2171 Sep 04 j 14:53	0°♄	
retrograde	-2176 Sep 09 j 10:39	17°♂59'02			-2171 Oct 14 j 08:52	0°♂	
min. Earth dist.	-2176 Oct 12 j 07:04	10°♂42'16	0.56920 AU		-2171 Nov 21 j 18:14	0°♄	
opposition	-2176 Oct 18 j 12:57	8°♂15'30	-0°47'50	evening set	-2171 Nov 30 j 12:43	6°♄55'02	
greatest brilliancy	-2176 Oct 18 j 08:51	8°♂19'30	-1.8m		-2171 Dec 29 j 19:54	0°♂	
asc. node	-2176 Nov 05 j 14:24	2°♂13'19					
	-2176 Nov 21 j 19:24	30°♄		conjunction	-2170 Feb 04 j 23:17	28°♂48'46	-1°05'16
direct	-2176 Nov 23 j 20:38	29°♄58'22		minimum elong	-2170 Feb 05 j 00:28	28°♂51'02	1°05'18
	-2176 Nov 25 j 22:19	0°♂			-2170 Feb 06 j 12:35	0°♂	
	-2175 Feb 19 j 23:32	0°♄			-2170 Mar 18 j 15:23	0°♂	
	-2175 Apr 14 j 22:09	0°♂		max. Earth dist.	-2170 Mar 26 j 12:00	5°♄42'58	2.44244 AU
	-2175 Jun 03 j 12:54	0°♂		morning rise	-2170 Apr 10 j 16:47	16°♄36'51	
	-2175 Jul 20 j 07:34	0°♂			-2170 Apr 29 j 18:36	0°♂	
evening set	-2175 Aug 12 j 01:31	15°♂13'27			-2170 Jun 13 j 06:49	0°♄	
max. Earth dist.	-2175 Aug 28 j 08:51	26°♂24'24	2.52109 AU	asc. node	-2170 Jun 28 j 11:50	9°♄51'56	
	-2175 Sep 02 j 12:53	0°♂			-2170 Jul 30 j 12:57	0°♂	
					-2170 Sep 19 j 22:36	0°♂	
conjunction	-2175 Oct 01 j 01:46	20°♂15'20	0°31'09		-2170 Nov 25 j 17:43	0°♂	
minimum elong	-2175 Oct 01 j 03:10	20°♂17'53	0°31'09	retrograde	-2170 Dec 26 j 07:38	4°♂56'56	
	-2175 Oct 14 j 11:09	0°♄			-2169 Jan 23 j 07:31	30°♄	
desc. node	-2175 Nov 18 j 17:20	26°♄18'51		opposition	-2169 Feb 02 j 14:19	26°♄13'27	4°49'50
	-2175 Nov 23 j 13:44	0°♂		greatest brilliancy	-2169 Feb 03 j 09:23	25°♄54'58	-1.5m
morning rise	-2175 Nov 24 j 06:19	0°♂31'35		min. Earth dist.	-2169 Feb 07 j 13:45	24°♄17'48	0.62913 AU
	-2174 Jan 01 j 12:02	0°♄		direct	-2169 Mar 15 j 17:20	16°♄15'35	
	-2174 Feb 09 j 00:47	0°♂			-2169 May 07 j 10:07	0°♂	
	-2174 Mar 20 j 01:08	0°♂			-2169 Jun 30 j 15:29	0°♂	
	-2174 Apr 29 j 13:11	0°♂		desc. node	-2169 Jul 11 j 13:09	7°♂02'05	
	-2174 Jun 11 j 21:04	0°♂			-2169 Aug 13 j 22:45	0°♄	
	-2174 Jul 30 j 22:11	0°♄			-2169 Sep 23 j 10:54	0°♂	
asc. node	-2174 Sep 23 j 13:55	23°♄32'31			-2169 Nov 01 j 05:19	0°♄	
retrograde	-2174 Oct 16 j 16:17	26°♄42'46			-2169 Dec 09 j 14:26	0°♂	
min. Earth dist.	-2174 Nov 23 j 01:33	17°♄51'07	0.65192 AU		-2168 Jan 17 j 15:33	0°♂	
opposition	-2174 Nov 25 j 17:35	16°♄46'41	2°20'45	evening set	-2168 Feb 06 j 16:30	15°♄00'20	
greatest brilliancy	-2174 Nov 25 j 11:06	16°♄53'13	-1.4m		-2168 Feb 27 j 03:44	0°♄	
direct	-2173 Jan 04 j 00:27	7°♄24'47					
	-2173 Mar 19 j 06:22	0°♂		conjunction	-2168 Apr 05 j 15:02	27°♄14'39	-0°23'22
	-2173 May 13 j 11:07	0°♂		minimum elong	-2168 Apr 05 j 16:19	27°♄16'52	0°23'22
	-2173 Jun 30 j 22:15	0°♂			-2168 Apr 09 j 14:45	0°♂	
	-2173 Aug 14 j 13:44	0°♂		max. Earth dist.	-2168 May 06 j 06:36	18°♂07'35	2.56718 AU
	-2173 Sep 25 j 08:44	0°♄		asc. node	-2168 May 15 j 11:24	24°♂16'00	
evening set	-2173 Sep 29 j 02:26	2°♄45'56			-2168 May 24 j 03:16	0°♄	
desc. node	-2173 Oct 06 j 16:28	8°♄25'05		morning rise	-2168 May 29 j 11:05	3°♄30'08	
max. Earth dist.	-2173 Oct 23 j 12:52	21°♄09'02	2.39755 AU		-2168 Jul 09 j 13:20	0°♂	
	-2173 Nov 04 j 02:05	0°♂			-2168 Aug 26 j 17:58	0°♂	
					-2168 Oct 16 j 11:09	0°♂	
conjunction	-2173 Nov 26 j 20:57	17°♂41'23	-0°33'58		-2168 Dec 13 j 16:22	0°♂	
minimum elong	-2173 Nov 26 j 18:32	17°♂36'40	0°33'58	retrograde	-2167 Feb 08 j 19:52	14°♂54'50	
	-2173 Dec 12 j 13:41	0°♄		opposition	-2167 Mar 16 j 08:11	7°♂31'18	3°31'08
	-2172 Jan 19 j 16:54	0°♂		greatest brilliancy	-2167 Mar 17 j 10:41	7°♂07'34	-2.0m

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

min. Earth dist.	-2167 Mar 24 j 12:11	4° $\mathbb{M}$ 36'47	0.52444 AU	evening set	-2162 Jun 19 j 06:27	22° $\mathbb{I}$ 53'11	
	-2167 Apr 09 j 16:03	30° $\mathbb{R}$ $\mathcal{Q}$			-2162 Jun 30 j 10:28	0° $\mathfrak{S}$	
direct	-2167 Apr 24 j 10:08	28° $\mathcal{Q}$ 30'07		max. Earth dist.	-2162 Jul 19 j 11:21	12° $\mathfrak{S}$ 14'12	2.64451 AU
	-2167 May 09 j 16:23	0° $\mathbb{M}$					
desc. node	-2167 May 28 j 12:29	5° $\mathbb{M}$ 24'00		conjunction	-2162 Aug 04 j 11:25	22° $\mathfrak{S}$ 38'34	1°10'08
	-2167 Jul 15 j 10:05	0° $\mathfrak{L}$		minimum elong	-2162 Aug 04 j 11:40	22° $\mathfrak{S}$ 38'58	1°10'11
	-2167 Aug 28 j 19:22	0° $\mathbb{M}$			-2162 Aug 15 j 16:09	0° $\mathcal{Q}$	
	-2167 Oct 08 j 07:13	0° $\mathfrak{J}$		morning rise	-2162 Sep 19 j 02:45	23° $\mathcal{Q}$ 03'09	
	-2167 Nov 16 j 19:54	0° $\mathfrak{Z}$			-2162 Sep 29 j 07:13	0° $\mathbb{M}$	
	-2167 Dec 26 j 20:33	0° $\approx$			-2162 Nov 11 j 06:25	0° $\mathfrak{L}$	
	-2166 Feb 06 j 06:07	0° $\mathfrak{H}$			-2162 Dec 22 j 19:10	0° $\mathbb{M}$	
	-2166 Mar 21 j 11:21	0° $\mathbb{Y}$		desc. node	-2161 Jan 18 j 12:24	19° $\mathbb{M}$ 43'36	
evening set	-2166 Mar 31 j 04:38	6° $\mathbb{Y}$ 34'28			-2161 Feb 01 j 07:30	0° $\mathfrak{J}$	
asc. node	-2166 Apr 02 j 09:13	8° $\mathbb{Y}$ 02'55			-2161 Mar 13 j 12:21	0° $\mathfrak{Z}$	
	-2166 May 05 j 11:43	0° $\mathfrak{B}$			-2161 Apr 23 j 15:42	0° $\approx$	
					-2161 Jun 07 j 12:24	0° $\mathfrak{H}$	
conjunction	-2166 May 21 j 09:52	10° $\mathfrak{B}$ 22'32	0°27'28		-2161 Aug 20 j 15:02	0° $\mathbb{Y}$	
minimum elong	-2166 May 21 j 08:49	10° $\mathfrak{B}$ 20'50	0°27'30	retrograde	-2161 Aug 24 j 21:56	0° $\mathbb{Y}$ 07'57	
max. Earth dist.	-2166 Jun 02 j 15:01	18° $\mathfrak{B}$ 16'24	2.64689 AU		-2161 Aug 29 j 03:33	30° $\mathbb{R}$ $\mathfrak{H}$	
	-2166 Jun 20 j 21:28	0° $\mathbb{I}$		min. Earth dist.	-2161 Sep 24 j 16:13	23° $\mathfrak{H}$ 38'38	0.52308 AU
morning rise	-2166 Jul 08 j 00:00	10° $\mathbb{I}$ 54'45		greatest brilliancy	-2161 Oct 01 j 10:57	21° $\mathfrak{H}$ 04'44	-2.1m
	-2166 Aug 07 j 02:26	0° $\mathfrak{S}$		opposition	-2161 Oct 02 j 01:27	20° $\mathfrak{H}$ 51'00	-2°25'11
	-2166 Sep 23 j 17:31	0° $\mathcal{Q}$		direct	-2161 Nov 05 j 20:30	13° $\mathfrak{H}$ 11'40	
	-2166 Nov 10 j 23:38	0° $\mathbb{M}$		asc. node	-2161 Nov 23 j 05:09	14° $\mathfrak{H}$ 59'58	
	-2166 Dec 31 j 05:33	0° $\mathfrak{L}$			-2160 Jan 05 j 04:10	0° $\mathbb{Y}$	
	-2165 Feb 28 j 03:54	0° $\mathbb{M}$			-2160 Mar 02 j 17:52	0° $\mathfrak{B}$	
retrograde	-2165 Apr 15 j 08:13	10° $\mathbb{M}$ 51'07			-2160 Apr 23 j 01:30	0° $\mathbb{I}$	
desc. node	-2165 Apr 15 j 11:41	10° $\mathbb{M}$ 51'07			-2160 Jun 10 j 19:01	0° $\mathfrak{S}$	
opposition	-2165 May 16 j 11:59	5° $\mathbb{M}$ 28'54	-2°05'47	evening set	-2160 Jul 26 j 22:19	29° $\mathfrak{S}$ 45'20	
greatest brilliancy	-2165 May 16 j 21:34	5° $\mathbb{M}$ 22'01	-2.8m		-2160 Jul 27 j 07:12	0° $\mathcal{Q}$	
min. Earth dist.	-2165 May 22 j 03:02	3° $\mathbb{M}$ 52'08	0.39985 AU	max. Earth dist.	-2160 Aug 15 j 05:38	12° $\mathcal{Q}$ 38'58	2.56487 AU
	-2165 Jun 08 j 19:55	30° $\mathbb{R}$ $\mathfrak{L}$			-2160 Sep 09 j 13:22	0° $\mathbb{M}$	
direct	-2165 Jun 18 j 10:07	29° $\mathfrak{L}$ 22'16					
	-2165 Jun 27 j 23:09	0° $\mathbb{M}$		conjunction	-2160 Sep 13 j 01:28	2° $\mathbb{M}$ 26'28	0°48'57
	-2165 Sep 05 j 03:07	0° $\mathfrak{J}$		minimum elong	-2160 Sep 13 j 02:59	2° $\mathbb{M}$ 29'08	0°48'58
	-2165 Oct 20 j 16:08	0° $\mathfrak{Z}$			-2160 Oct 21 j 16:36	0° $\mathfrak{L}$	
	-2165 Dec 03 j 00:56	0° $\approx$		morning rise	-2160 Nov 02 j 12:40	8° $\mathfrak{L}$ 40'20	
	-2164 Jan 15 j 17:17	0° $\mathfrak{H}$			-2160 Dec 01 j 02:11	0° $\mathbb{M}$	
asc. node	-2164 Feb 18 j 07:30	22° $\mathfrak{H}$ 33'31		desc. node	-2160 Dec 05 j 10:52	3° $\mathbb{M}$ 18'02	
	-2164 Feb 29 j 13:26	0° $\mathbb{Y}$			-2159 Jan 09 j 07:51	0° $\mathfrak{J}$	
	-2164 Apr 15 j 15:39	0° $\mathfrak{B}$			-2159 Feb 17 j 03:13	0° $\mathfrak{Z}$	
evening set	-2164 May 11 j 21:44	16° $\mathfrak{B}$ 49'17			-2159 Mar 28 j 10:03	0° $\approx$	
	-2164 Jun 01 j 13:59	0° $\mathbb{I}$			-2159 May 08 j 07:57	0° $\mathfrak{H}$	
max. Earth dist.	-2164 Jun 25 j 17:19	15° $\mathbb{I}$ 22'09	2.67272 AU		-2159 Jun 21 j 17:40	0° $\mathbb{Y}$	
					-2159 Aug 14 j 17:17	0° $\mathfrak{B}$	
conjunction	-2164 Jun 28 j 04:17	16° $\mathbb{I}$ 56'05	1°00'57	retrograde	-2159 Oct 02 j 19:28	12° $\mathfrak{B}$ 46'01	
minimum elong	-2164 Jun 28 j 03:13	16° $\mathbb{I}$ 54'22	1°01'00	asc. node	-2159 Oct 10 j 04:35	12° $\mathfrak{B}$ 23'10	
	-2164 Jul 18 j 15:25	0° $\mathfrak{S}$		min. Earth dist.	-2159 Nov 07 j 13:37	4° $\mathfrak{B}$ 27'37	0.62635 AU
morning rise	-2164 Aug 12 j 05:48	15° $\mathfrak{S}$ 47'45		opposition	-2159 Nov 11 j 16:49	2° $\mathfrak{B}$ 48'14	1°17'57
	-2164 Sep 03 j 04:19	0° $\mathcal{Q}$		greatest brilliancy	-2159 Nov 11 j 11:26	2° $\mathfrak{B}$ 53'38	-1.6m
	-2164 Oct 18 j 20:21	0° $\mathbb{M}$			-2159 Nov 18 j 21:50	30° $\mathbb{R}$ $\mathbb{Y}$	
	-2164 Dec 02 j 15:32	0° $\mathfrak{L}$		direct	-2159 Dec 19 j 23:48	23° $\mathbb{Y}$ 47'09	
	-2163 Jan 15 j 21:09	0° $\mathbb{M}$			-2158 Jan 23 j 14:29	0° $\mathfrak{B}$	
	-2163 Mar 01 j 06:01	0° $\mathfrak{J}$			-2158 Mar 30 j 14:45	0° $\mathbb{I}$	
desc. node	-2163 Mar 02 j 11:48	0° $\mathfrak{J}$ 49'41			-2158 May 21 j 18:03	0° $\mathfrak{S}$	
	-2163 Apr 17 j 02:29	0° $\mathfrak{Z}$			-2158 Jul 08 j 08:52	0° $\mathcal{Q}$	
retrograde	-2163 Jul 01 j 14:07	28° $\mathfrak{Z}$ 31'28			-2158 Aug 21 j 18:52	0° $\mathbb{M}$	
min. Earth dist.	-2163 Jul 28 j 05:33	24° $\mathfrak{Z}$ 01'40	0.40138 AU	evening set	-2158 Sep 08 j 23:26	12° $\mathbb{M}$ 50'54	
greatest brilliancy	-2163 Aug 02 j 08:06	22° $\mathfrak{Z}$ 30'11	-2.7m	max. Earth dist.	-2158 Sep 24 j 22:31	24° $\mathbb{M}$ 22'55	2.44510 AU
opposition	-2163 Aug 03 j 16:20	22° $\mathfrak{Z}$ 06'01	-6°34'35		-2158 Oct 02 j 14:19	0° $\mathfrak{L}$	
direct	-2163 Sep 03 j 00:12	16° $\mathfrak{Z}$ 38'05		desc. node	-2158 Oct 23 j 08:50	15° $\mathfrak{L}$ 29'16	
	-2163 Oct 23 j 13:47	0° $\approx$					
	-2163 Dec 18 j 13:29	0° $\mathfrak{H}$		conjunction	-2158 Nov 02 j 13:43	23° $\mathfrak{L}$ 13'15	-0°07'00
asc. node	-2162 Jan 05 j 06:32	10° $\mathfrak{H}$ 32'50		minimum elong	-2158 Nov 02 j 13:15	23° $\mathfrak{L}$ 12'21	0°07'01
	-2162 Feb 06 j 04:51	0° $\mathbb{Y}$		behind sun begin	-2158 Nov 01 j 14:45	22° $\mathfrak{L}$ 29'35	
	-2162 Mar 26 j 18:16	0° $\mathfrak{B}$		behind sun end	-2158 Nov 03 j 11:44	23° $\mathfrak{L}$ 55'10	
	-2162 May 13 j 22:49	0° $\mathbb{I}$			-2158 Nov 11 j 10:37	0° $\mathbb{M}$	



## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 25

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2158 Dec 20 j 01:44	0°♂		direct	-2152 Apr 07 j 13:41	10°♂49'13	
morning rise	-2157 Jan 03 j 16:16	11°♂27'25			-2152 Jun 08 j 16:34	0°♂	
	-2157 Jan 27 j 07:48	0°♂		desc. node	-2152 Jun 14 j 04:38	2°♂56'19	
	-2157 Mar 07 j 01:58	0°♂			-2152 Jul 27 j 23:00	0°♂	
	-2157 Apr 16 j 05:28	0°♂			-2152 Sep 07 j 23:53	0°♂	
	-2157 May 28 j 16:35	0°♂			-2152 Oct 17 j 12:24	0°♂	
asc. node	-2157 Jul 13 j 19:10	0°♂			-2152 Nov 25 j 10:10	0°♂	
	-2157 Aug 28 j 04:42	25°♂46'48			-2151 Jan 03 j 22:31	0°♂	
	-2157 Sep 05 j 17:43	0°♂			-2151 Feb 13 j 21:17	0°♂	
retrograde	-2157 Nov 06 j 20:35	17°♂51'57		evening set	-2151 Mar 12 j 01:52	18°♂30'28	
opposition	-2157 Dec 16 j 19:53	8°♂08'04	3°37'22		-2151 Mar 28 j 17:16	0°♂	
min. Earth dist.	-2157 Dec 16 j 11:02	8°♂16'56	0.67235 AU	asc. node	-2151 Apr 19 j 01:43	14°♂27'57	
greatest brilliancy	-2157 Dec 16 j 17:14	8°♂10'43	-1.3m				
direct	-2156 Jan 10 j 10:47	30°♂		conjunction	-2151 May 04 j 19:30	24°♂56'55	0°09'11
	-2156 Jan 26 j 06:34	28°♂22'49		minimum elong	-2151 May 04 j 19:04	24°♂56'14	0°09'12
	-2156 Feb 12 j 04:17	0°♂		behind sun begin	-2151 May 04 j 01:28	24°♂27'07	
	-2156 Apr 26 j 15:48	0°♂		behind sun end	-2151 May 05 j 12:41	25°♂25'19	
	-2156 Jun 16 j 18:29	0°♂			-2151 May 12 j 11:16	0°♂	
desc. node	-2156 Aug 01 j 05:14	0°♂		max. Earth dist.	-2151 May 23 j 17:39	7°♂22'43	2.62193 AU
	-2156 Sep 09 j 07:48	27°♂52'33		morning rise	-2151 Jun 23 j 07:31	27°♂07'52	
	-2156 Sep 12 j 05:03	0°♂			-2151 Jun 27 j 19:12	0°♂	
evening set	-2156 Oct 21 j 21:43	0°♂			-2151 Aug 14 j 06:07	0°♂	
	-2156 Nov 03 j 21:07	10°♂03'53			-2151 Oct 01 j 17:08	0°♂	
	-2156 Nov 29 j 07:03	0°♂			-2151 Nov 21 j 01:39	0°♂	
	-2155 Jan 06 j 08:21	0°♂			-2150 Jan 17 j 00:10	0°♂	
				retrograde	-2150 Mar 17 j 13:52	16°♂16'02	
conjunction	-2155 Jan 07 j 23:09	1°♂16'09	-1°03'47	opposition	-2150 Apr 19 j 10:54	10°♂05'46	0°47'00
minimum elong	-2155 Jan 07 j 21:25	1°♂12'44	1°03'49	greatest brilliancy	-2150 Apr 19 j 17:56	10°♂00'10	-2.5m
	-2155 Feb 13 j 23:50	0°♂		min. Earth dist.	-2150 Apr 27 j 14:01	7°♂31'06	0.44377 AU
max. Earth dist.	-2155 Feb 21 j 09:57	5°♂39'21	2.39236 AU	desc. node	-2150 May 02 j 05:02	6°♂08'56	
morning rise	-2155 Mar 17 j 06:17	23°♂32'19		direct	-2150 May 25 j 08:38	2°♂38'07	
	-2155 Mar 26 j 00:59	0°♂			-2150 Aug 06 j 12:39	0°♂	
	-2155 May 07 j 03:22	0°♂			-2150 Sep 20 j 13:48	0°♂	
	-2155 Jun 20 j 19:24	0°♂			-2150 Nov 01 j 06:12	0°♂	
asc. node	-2155 Jul 15 j 03:52	15°♂32'05			-2150 Dec 12 j 17:07	0°♂	
	-2155 Aug 07 j 19:28	0°♂			-2149 Jan 24 j 04:35	0°♂	
	-2155 Oct 01 j 06:44	0°♂		asc. node	-2149 Mar 06 j 23:10	28°♂29'37	
	-2155 Dec 11 j 08:04	21°♂27'59			-2149 Mar 09 j 05:10	0°♂	
retrograde	-2154 Jan 19 j 07:24	12°♂22'53	4°45'05		-2149 Apr 23 j 18:46	0°♂	
opposition	-2154 Jan 19 j 19:41	12°♂10'48	-1.4m	evening set	-2149 Apr 27 j 03:05	2°♂10'15	
greatest brilliancy	-2154 Jan 22 j 19:01	11°♂00'42	0.65406 AU		-2149 Jun 09 j 10:24	0°♂	
min. Earth dist.	-2154 Mar 01 j 13:24	2°♂21'37					
direct	-2154 May 22 j 00:02	0°♂		conjunction	-2149 Jun 14 j 13:18	3°♂16'09	0°50'34
	-2154 Jul 10 j 08:46	0°♂		minimum elong	-2149 Jun 14 j 12:00	3°♂14'05	0°50'37
desc. node	-2154 Jul 28 j 06:29	12°♂05'31		max. Earth dist.	-2149 Jun 17 j 14:41	5°♂13'14	2.66916 AU
	-2154 Aug 22 j 13:01	0°♂			-2149 Jul 26 j 11:29	0°♂	
	-2154 Oct 01 j 15:11	0°♂		morning rise	-2149 Jul 30 j 05:20	2°♂23'19	
	-2154 Nov 09 j 04:22	0°♂			-2149 Sep 11 j 07:52	0°♂	
	-2154 Dec 17 j 09:02	0°♂			-2149 Oct 27 j 17:39	0°♂	
evening set	-2153 Jan 12 j 10:56	20°♂14'16			-2149 Dec 12 j 21:40	0°♂	
	-2153 Jan 25 j 05:20	0°♂			-2148 Jan 28 j 13:18	0°♂	
	-2153 Mar 06 j 12:23	0°♂			-2148 Mar 17 j 23:26	0°♂	
				desc. node	-2148 Mar 19 j 05:26	0°♂42'19	
conjunction	-2153 Mar 16 j 05:15	7°♂01'20	-0°43'46	retrograde	-2148 Jun 03 j 02:55	27°♂47'19	
minimum elong	-2153 Mar 16 j 07:35	7°♂05'32	0°43'44	min. Earth dist.	-2148 Jul 01 j 17:23	23°♂07'36	0.37709 AU
	-2153 Apr 17 j 18:45	0°♂		opposition	-2148 Jul 03 j 21:22	22°♂32'36	-6°20'04
max. Earth dist.	-2153 Apr 24 j 04:58	4°♂25'47	2.52257 AU	greatest brilliancy	-2148 Jul 03 j 09:23	22°♂40'41	-2.9m
morning rise	-2153 May 12 j 20:21	17°♂06'10		direct	-2148 Aug 02 j 16:02	17°♂35'07	
	-2153 Jun 01 j 05:17	0°♂			-2148 Sep 19 j 00:22	0°♂	
asc. node	-2153 Jun 02 j 02:44	0°♂35'19			-2148 Nov 12 j 09:42	0°♂	
	-2153 Jul 17 j 19:34	0°♂			-2148 Dec 30 j 03:30	0°♂	
	-2153 Sep 04 j 19:23	0°♂		asc. node	-2147 Jan 21 j 21:09	14°♂31'49	
	-2153 Oct 28 j 05:46	0°♂			-2147 Feb 15 j 02:43	0°♂	
retrograde	-2152 Jan 21 j 12:58	28°♂23'26			-2147 Apr 03 j 10:12	0°♂	
opposition	-2152 Feb 27 j 07:42	20°♂23'25	4°21'38		-2147 May 20 j 23:59	0°♂	
greatest brilliancy	-2152 Feb 28 j 10:27	19°♂58'26	-1.7m	evening set	-2147 Jun 04 j 14:20	9°♂13'37	
min. Earth dist.	-2152 Mar 05 j 10:29	17°♂44'33	0.57161 AU		-2147 Jul 07 j 06:04	0°♂	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

max. Earth dist.	-2147 Jul 10 j 01:48	1° $\text{♁}$ 48'26	2.66187 AU			-2142 Jul 23 j 15:35	0° $\text{♁}$		
				asc. node		-2142 Sep 13 j 19:36	26° $\text{♁}$ 02'40		
conjunction	-2147 Jul 20 j 21:42	8° $\text{♁}$ 45'55	1°09'49			-2142 Sep 25 j 05:48	0° $\text{♁}$		
minimum elong	-2147 Jul 20 j 21:21	8° $\text{♁}$ 45'21	1°09'52	retrograde		-2142 Oct 24 j 10:41	4° $\text{♁}$ 50'49		
	-2147 Aug 22 j 13:12	0° $\text{♁}$				-2142 Nov 20 j 09:40	30° $\text{♁}$		
morning rise	-2147 Sep 03 j 21:56	8° $\text{♁}$ 09'31		min. Earth dist.		-2142 Dec 01 j 16:21	25° $\text{♁}$ 42'44	0.66188 AU	
	-2147 Oct 06 j 11:50	0° $\text{♁}$		opposition		-2142 Dec 03 j 12:58	24° $\text{♁}$ 57'51	2°52'09	
	-2147 Nov 19 j 00:28	0° $\text{♁}$		greatest brilliancy		-2142 Dec 03 j 07:09	25° $\text{♁}$ 03'42	-1.4m	
	-2147 Dec 31 j 07:36	0° $\text{♁}$		direct		-2141 Jan 12 j 07:31	15° $\text{♁}$ 26'29		
desc. node	-2146 Feb 04 j 04:29	25° $\text{♁}$ 12'13				-2141 Mar 10 j 01:20	0° $\text{♁}$		
	-2146 Feb 10 j 18:53	0° $\text{♁}$				-2141 May 07 j 13:37	0° $\text{♁}$		
	-2146 Mar 24 j 05:32	0° $\text{♁}$				-2141 Jun 25 j 19:45	0° $\text{♁}$		
	-2146 May 06 j 13:29	0° $\text{♁}$				-2141 Aug 09 j 17:45	0° $\text{♁}$		
	-2146 Jun 28 j 12:49	0° $\text{♁}$				-2141 Sep 20 j 14:45	0° $\text{♁}$		
retrograde	-2146 Aug 06 j 06:11	9° $\text{♁}$ 18'37		desc. node		-2141 Sep 27 j 00:08	4° $\text{♁}$ 44'10		
min. Earth dist.	-2146 Sep 03 j 20:16	3° $\text{♁}$ 41'58	0.47248 AU	evening set		-2141 Oct 11 j 16:07	15° $\text{♁}$ 44'26		
opposition	-2146 Sep 11 j 21:08	0° $\text{♁}$ 50'53	-4°13'42			-2141 Oct 30 j 08:07	0° $\text{♁}$		
greatest brilliancy	-2146 Sep 10 j 18:37	1° $\text{♁}$ 14'32	-2.3m	max. Earth dist.		-2141 Nov 22 j 09:53	17° $\text{♁}$ 55'36	2.37845 AU	
	-2146 Sep 14 j 06:53	30° $\text{♁}$				-2141 Dec 07 j 19:06	0° $\text{♁}$		
direct	-2146 Oct 14 j 23:40	23° $\text{♁}$ 58'53							
	-2146 Nov 16 j 17:30	0° $\text{♁}$		conjunction		-2141 Dec 11 j 22:01	3° $\text{♁}$ 14'41	-0°47'45	
asc. node	-2146 Dec 09 j 21:01	9° $\text{♁}$ 11'08		minimum elong		-2141 Dec 11 j 19:01	3° $\text{♁}$ 08'46	0°47'45	
	-2145 Jan 19 j 19:59	0° $\text{♁}$				-2140 Jan 14 j 21:28	0° $\text{♁}$		
	-2145 Mar 13 j 00:58	0° $\text{♁}$		morning rise		-2140 Feb 18 j 12:49	26° $\text{♁}$ 55'54		
	-2145 May 01 j 18:00	0° $\text{♁}$				-2140 Feb 22 j 12:53	0° $\text{♁}$		
	-2145 Jun 18 j 20:48	0° $\text{♁}$				-2140 Apr 02 j 13:22	0° $\text{♁}$		
evening set	-2145 Jul 12 j 14:30	15° $\text{♁}$ 12'37				-2140 May 14 j 16:23	0° $\text{♁}$		
	-2145 Aug 04 j 05:07	0° $\text{♁}$				-2140 Jun 28 j 15:39	0° $\text{♁}$		
max. Earth dist.	-2145 Aug 04 j 16:38	0° $\text{♁}$ 19'02	2.60173 AU	asc. node		-2140 Jul 31 j 19:10	20° $\text{♁}$ 35'04		
						-2140 Aug 16 j 21:32	0° $\text{♁}$		
conjunction	-2145 Aug 28 j 13:31	16° $\text{♁}$ 17'56	1°01'13			-2140 Oct 17 j 08:54	0° $\text{♁}$		
minimum elong	-2145 Aug 28 j 14:43	16° $\text{♁}$ 19'56	1°01'14	retrograde		-2140 Nov 27 j 04:26	8° $\text{♁}$ 28'11		
	-2145 Sep 17 j 13:38	0° $\text{♁}$				-2139 Jan 03 j 09:03	30° $\text{♁}$		
morning rise	-2145 Oct 15 j 11:23	19° $\text{♁}$ 35'51		opposition		-2139 Jan 05 j 16:27	29° $\text{♁}$ 05'08	4°27'30	
	-2145 Oct 29 j 23:17	0° $\text{♁}$		greatest brilliancy		-2139 Jan 05 j 22:08	28° $\text{♁}$ 59'30	-1.3m	
	-2145 Dec 09 j 17:26	0° $\text{♁}$		min. Earth dist.		-2139 Jan 07 j 15:51	28° $\text{♁}$ 18'04	0.66911 AU	
desc. node	-2145 Dec 23 j 03:34	10° $\text{♁}$ 05'19		direct		-2139 Feb 15 j 19:19	19° $\text{♁}$ 06'25		
	-2144 Jan 18 j 08:28	0° $\text{♁}$				-2139 Apr 04 j 02:41	0° $\text{♁}$		
	-2144 Feb 26 j 13:06	0° $\text{♁}$				-2139 Jun 01 j 21:38	0° $\text{♁}$		
	-2144 Apr 06 j 06:30	0° $\text{♁}$				-2139 Jul 19 j 01:44	0° $\text{♁}$		
	-2144 May 17 j 22:49	0° $\text{♁}$		desc. node		-2139 Aug 13 j 23:22	17° $\text{♁}$ 58'54		
	-2144 Jul 03 j 14:42	0° $\text{♁}$				-2139 Aug 30 j 14:40	0° $\text{♁}$		
retrograde	-2144 Sep 18 j 05:34	27° $\text{♁}$ 41'41				-2139 Oct 09 j 11:10	0° $\text{♁}$		
min. Earth dist.	-2144 Oct 22 j 04:20	20° $\text{♁}$ 01'31	0.59186 AU			-2139 Nov 16 j 21:33	0° $\text{♁}$		
asc. node	-2144 Oct 26 j 20:46	18° $\text{♁}$ 10'12		evening set		-2139 Dec 16 j 05:59	23° $\text{♁}$ 08'03		
opposition	-2144 Oct 27 j 17:08	17° $\text{♁}$ 50'02	0°02'11			-2139 Dec 24 j 23:44	0° $\text{♁}$		
greatest brilliancy	-2144 Oct 27 j 17:00	17° $\text{♁}$ 50'09	-1.7m			-2138 Feb 01 j 16:56	0° $\text{♁}$		
direct	-2144 Dec 03 j 19:14	9° $\text{♁}$ 15'27							
	-2143 Feb 11 j 15:18	0° $\text{♁}$		conjunction		-2138 Feb 20 j 00:15	13° $\text{♁}$ 50'26	-0°59'57	
	-2143 Apr 09 j 03:49	0° $\text{♁}$		minimum elong		-2138 Feb 20 j 02:28	13° $\text{♁}$ 54'37	0°59'58	
	-2143 May 29 j 12:37	0° $\text{♁}$				-2138 Mar 13 j 20:29	0° $\text{♁}$		
	-2143 Jul 15 j 14:12	0° $\text{♁}$		max. Earth dist.		-2138 Apr 07 j 18:54	17° $\text{♁}$ 56'26	2.47218 AU	
evening set	-2143 Aug 21 j 18:49	25° $\text{♁}$ 03'49		morning rise		-2138 Apr 23 j 03:15	28° $\text{♁}$ 42'48		
	-2143 Aug 28 j 21:36	0° $\text{♁}$				-2138 Apr 24 j 23:43	0° $\text{♁}$		
max. Earth dist.	-2143 Sep 06 j 02:59	5° $\text{♁}$ 45'48	2.49504 AU			-2138 Jun 08 j 09:58	0° $\text{♁}$		
	-2143 Oct 09 j 19:23	0° $\text{♁}$		asc. node		-2138 Jun 18 j 18:24	6° $\text{♁}$ 45'58		
						-2138 Jul 25 j 07:55	0° $\text{♁}$		
conjunction	-2143 Oct 12 j 03:37	1° $\text{♁}$ 43'20	0°18'31			-2138 Sep 13 j 13:49	0° $\text{♁}$		
minimum elong	-2143 Oct 12 j 04:36	1° $\text{♁}$ 45'10	0°18'31			-2138 Nov 11 j 11:48	0° $\text{♁}$		
desc. node	-2143 Nov 09 j 02:06	22° $\text{♁}$ 35'25		retrograde		-2137 Jan 04 j 09:07	13° $\text{♁}$ 26'38		
	-2143 Nov 18 j 19:58	0° $\text{♁}$		opposition		-2137 Feb 11 j 04:44	4° $\text{♁}$ 56'52	4°45'00	
morning rise	-2143 Dec 07 j 21:14	14° $\text{♁}$ 38'35		greatest brilliancy		-2137 Feb 12 j 03:06	4° $\text{♁}$ 35'25	-1.6m	
	-2143 Dec 27 j 15:43	0° $\text{♁}$		min. Earth dist.		-2137 Feb 16 j 23:16	2° $\text{♁}$ 44'18	0.61137 AU	
	-2142 Feb 04 j 01:35	0° $\text{♁}$				-2137 Feb 24 j 13:53	30° $\text{♁}$		
	-2142 Mar 14 j 22:42	0° $\text{♁}$		direct		-2137 Mar 24 j 03:06	25° $\text{♁}$ 04'22		
	-2142 Apr 24 j 06:02	0° $\text{♁}$				-2137 Apr 22 j 14:25	0° $\text{♁}$		
	-2142 Jun 06 j 02:54	0° $\text{♁}$				-2137 Jun 23 j 15:59	0° $\text{♁}$		

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 27

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

desc. node	-2137 Jul 01 j 22:43	5°♎06'23	minimum elong	-2132 Jul 06 j 10:49	25°♊08'32	1°05'23
	-2137 Aug 08 j 04:01	0°♊		-2132 Jul 14 j 01:07	0°♊	
	-2137 Sep 18 j 02:14	0°♌	morning rise	-2132 Aug 20 j 09:39	24°♊04'53	
	-2137 Oct 27 j 01:40	0°♌		-2132 Aug 29 j 11:44	0°♌	
	-2137 Dec 04 j 13:56	0°♊		-2132 Oct 13 j 20:57	0°♎	
	-2136 Jan 12 j 17:35	0°♊		-2132 Nov 27 j 03:53	0°♊	
evening set	-2136 Feb 19 j 21:08	28°♊13'14		-2131 Jan 09 j 13:25	0°♌	
	-2136 Feb 22 j 08:10	0°♌	desc. node	-2131 Feb 20 j 21:26	29°♌31'54	
	-2136 Apr 04 j 21:01	0°♎		-2131 Feb 21 j 13:34	0°♌	
				-2131 Apr 06 j 11:17	0°♊	
conjunction	-2136 Apr 16 j 19:18	8°♎09'40 -0°11'09		-2131 May 26 j 10:52	0°♊	
minimum elong	-2136 Apr 16 j 19:53	8°♎10'40 0°11'09	retrograde	-2131 Jul 15 j 16:01	14°♊43'37	
behind sun begin	-2136 Apr 16 j 03:37	7°♎43'02	min. Earth dist.	-2131 Aug 11 j 11:47	9°♊56'39	0.42383 AU
behind sun end	-2136 Apr 17 j 12:09	8°♎38'17	greatest brilliancy	-2131 Aug 17 j 16:32	7°♊58'00	-2.6m
asc. node	-2136 May 05 j 16:13	20°♎52'31	opposition	-2131 Aug 19 j 02:35	7°♊30'36	-5°55'58
max. Earth dist.	-2136 May 13 j 03:22	25°♎50'22 2.58896 AU	direct	-2131 Sep 19 j 09:44	1°♊33'31	
	-2136 May 19 j 10:24	0°♌		-2131 Dec 09 j 15:37	0°♌	
morning rise	-2136 Jun 07 j 20:52	12°♌42'44	asc. node	-2131 Dec 26 j 12:25	9°♌19'50	
	-2136 Jul 04 j 18:27	0°♊		-2130 Jan 30 j 22:18	0°♎	
	-2136 Aug 21 j 14:51	0°♊		-2130 Mar 21 j 11:32	0°♌	
	-2136 Oct 10 j 07:13	0°♌		-2130 May 09 j 02:57	0°♊	
	-2136 Dec 03 j 09:27	0°♎		-2130 Jun 25 j 19:24	0°♊	
retrograde	-2135 Feb 21 j 00:26	25°♎42'59	evening set	-2130 Jun 27 j 17:20	1°♊13'15	
opposition	-2135 Mar 27 j 17:27	18°♎43'19 2°45'04	max. Earth dist.	-2130 Jul 25 j 05:08	18°♊56'27	2.63128 AU
greatest brilliancy	-2135 Mar 28 j 16:06	18°♎23'44 -2.2m		-2130 Aug 11 j 01:58	0°♌	
min. Earth dist.	-2135 Apr 05 j 05:35	15°♎47'45 0.49607 AU				
direct	-2135 May 04 j 21:48	10°♎09'06	conjunction	-2130 Aug 13 j 01:41	1°♌18'50	1°08'15
desc. node	-2135 May 18 j 21:14	11°♎26'16	minimum elong	-2130 Aug 13 j 02:18	1°♌19'51	1°08'18
	-2135 Jul 05 j 04:22	0°♊		-2130 Sep 24 j 14:38	0°♎	
	-2135 Aug 21 j 14:37	0°♌	morning rise	-2130 Sep 28 j 07:49	2°♎33'33	
	-2135 Oct 02 j 02:17	0°♌		-2130 Nov 06 j 09:00	0°♊	
	-2135 Nov 11 j 03:51	0°♊		-2130 Dec 17 j 14:39	0°♌	
	-2135 Dec 21 j 13:13	0°♊	desc. node	-2129 Jan 08 j 20:04	16°♌31'45	
	-2134 Feb 01 j 05:34	0°♌		-2129 Jan 26 j 18:35	0°♌	
	-2134 Mar 16 j 15:42	0°♎		-2129 Mar 07 j 13:02	0°♊	
asc. node	-2134 Mar 23 j 14:49	4°♎41'50		-2129 Apr 17 j 00:03	0°♊	
evening set	-2134 Apr 10 j 08:38	16°♎32'36		-2129 May 30 j 04:17	0°♌	
	-2134 Apr 30 j 19:26	0°♌		-2129 Jul 22 j 01:16	0°♎	
			retrograde	-2129 Sep 03 j 12:49	11°♎00'15	
conjunction	-2134 May 30 j 10:43	19°♌12'41 0°36'52	min. Earth dist.	-2129 Oct 05 j 11:22	4°♎04'22	0.54924 AU
minimum elong	-2134 May 30 j 09:29	19°♌10'42 0°36'54	opposition	-2129 Oct 12 j 06:46	1°♎26'28	-1°27'31
max. Earth dist.	-2134 Jun 08 j 06:13	24°♌52'27 2.65709 AU	greatest brilliancy	-2129 Oct 11 j 22:36	1°♎34'21	-1.9m
	-2134 Jun 16 j 06:16	0°♊		-2129 Oct 16 j 01:48	30°♌	
morning rise	-2134 Jul 16 j 05:04	19°♊05'37	asc. node	-2129 Nov 13 j 11:44	23°♌30'05	
	-2134 Aug 02 j 09:06	0°♊	direct	-2129 Nov 16 j 22:48	23°♌25'22	
	-2134 Sep 18 j 16:14	0°♌		-2129 Dec 22 j 01:50	0°♎	
	-2134 Nov 05 j 02:58	0°♎		-2128 Feb 25 j 00:36	0°♌	
	-2134 Dec 23 j 10:34	0°♊		-2128 Apr 17 j 17:25	0°♊	
	-2133 Feb 13 j 03:28	0°♌		-2128 Jun 05 j 23:11	0°♊	
desc. node	-2133 Apr 05 j 20:53	22°♌48'56		-2128 Jul 22 j 16:04	0°♌	
retrograde	-2133 May 03 j 03:36	27°♌06'30	evening set	-2128 Aug 05 j 00:38	8°♌52'59	
opposition	-2133 Jun 02 j 15:37	22°♌02'21 -3°55'13	max. Earth dist.	-2128 Aug 22 j 11:17	20°♌41'50	2.54135 AU
greatest brilliancy	-2133 Jun 03 j 00:22	21°♌56'25 -2.9m		-2128 Sep 04 j 22:46	0°♎	
min. Earth dist.	-2133 Jun 05 j 20:39	21°♌10'12 0.38363 AU				
direct	-2133 Jul 03 j 20:48	16°♌35'49	conjunction	-2128 Sep 23 j 02:36	12°♎46'21	0°39'24
	-2133 Aug 21 j 09:02	0°♌	minimum elong	-2128 Sep 23 j 04:08	12°♎49'05	0°39'23
	-2133 Oct 12 j 00:02	0°♊		-2128 Oct 17 j 00:13	0°♊	
	-2133 Nov 26 j 07:15	0°♊	morning rise	-2128 Nov 14 j 11:55	21°♊06'45	
	-2132 Jan 09 j 23:23	0°♌	desc. node	-2128 Nov 25 j 18:49	29°♊37'59	
asc. node	-2132 Feb 08 j 13:34	19°♌37'27		-2128 Nov 26 j 06:25	0°♌	
	-2132 Feb 24 j 09:19	0°♎		-2127 Jan 04 j 08:15	0°♌	
	-2132 Apr 10 j 19:52	0°♌		-2127 Feb 11 j 23:43	0°♊	
evening set	-2132 May 20 j 16:02	25°♌22'57		-2127 Mar 23 j 01:59	0°♊	
	-2132 May 27 j 22:32	0°♊		-2127 May 02 j 16:39	0°♌	
max. Earth dist.	-2132 Jul 01 j 01:36	21°♊42'22 2.67110 AU		-2127 Jun 15 j 07:36	0°♎	
				-2127 Aug 04 j 17:10	0°♌	
conjunction	-2132 Jul 06 j 11:41	25°♊09'55 1°05'20	asc. node	-2127 Sep 30 j 11:27	20°♌36'29	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

retrograde	-2127 Oct 10 j 19:34	21°♄17'58		conjunction	-2121 Mar 28 j 16:40	19°♄16'26	-0°32'17
min. Earth dist.	-2127 Nov 16 j 12:06	12°♄40'58	0.64171 AU	minimum elong	-2121 Mar 28 j 18:28	19°♄19'36	0°32'16
opposition	-2127 Nov 19 j 20:19	11°♄20'25	1°55'56		-2121 Apr 13 j 01:32	0°♄	
greatest brilliancy	-2127 Nov 19 j 13:48	11°♄26'58	-1.5m	max. Earth dist.	-2121 May 02 j 01:57	13°♄00'56	2.54804 AU
direct	-2127 Dec 28 j 17:46	2°♄07'17		morning rise	-2121 May 23 j 02:58	27°♄06'51	
	-2126 Mar 23 j 13:20	0°♄		asc. node	-2121 May 23 j 09:11	27°♄17'11	
	-2126 May 16 j 08:25	0°♄			-2121 May 27 j 11:42	0°♄	
	-2126 Jul 03 j 11:52	0°♄			-2121 Jul 12 j 21:59	0°♄	
	-2126 Aug 17 j 02:13	0°♄			-2121 Aug 30 j 08:53	0°♄	
evening set	-2126 Sep 20 j 02:17	24°♄14'40			-2121 Oct 20 j 23:54	0°♄	
	-2126 Sep 27 j 22:37	0°♄			-2121 Dec 23 j 06:00	0°♄	
max. Earth dist.	-2126 Oct 08 j 18:04	8°♄01'17	2.41784 AU	retrograde	-2120 Feb 01 j 03:24	8°♄00'27	
desc. node	-2126 Oct 13 j 18:16	11°♄46'17		opposition	-2120 Mar 08 j 06:52	0°♄19'29	3°56'09
	-2126 Nov 06 j 17:55	0°♄		greatest brilliancy	-2120 Mar 09 j 10:10	29°♄54'34	-1.9m
					-2120 Mar 09 j 04:13	30°♄	
conjunction	-2126 Nov 15 j 21:57	7°♄04'11	-0°22'27	min. Earth dist.	-2120 Mar 16 j 01:25	27°♄29'52	0.54646 AU
minimum elong	-2126 Nov 15 j 20:21	7°♄01'05	0°22'27	direct	-2120 Apr 16 j 23:40	21°♄01'17	
	-2126 Dec 15 j 07:19	0°♄			-2120 May 26 j 18:04	0°♄	
morning rise	-2125 Jan 20 j 00:39	28°♄04'37		desc. node	-2120 Jun 04 j 14:05	3°♄50'55	
	-2125 Jan 22 j 11:31	0°♄			-2120 Jul 20 j 15:45	0°♄	
	-2125 Mar 02 j 03:42	0°♄			-2120 Sep 01 j 20:40	0°♄	
	-2125 Apr 11 j 04:50	0°♄			-2120 Oct 11 j 21:00	0°♄	
	-2125 May 23 j 11:04	0°♄			-2120 Nov 20 j 02:02	0°♄	
	-2125 Jul 07 j 23:38	0°♄			-2120 Dec 29 j 19:47	0°♄	
asc. node	-2125 Aug 18 j 09:57	24°♄34'47			-2119 Feb 08 j 23:07	0°♄	
	-2125 Aug 28 j 11:19	0°♄		evening set	-2119 Mar 23 j 04:25	29°♄28'41	
retrograde	-2125 Nov 14 j 13:36	25°♄41'12			-2119 Mar 23 j 22:46	0°♄	
opposition	-2125 Dec 24 j 10:28	16°♄03'47	3°58'50	asc. node	-2119 Apr 09 j 07:04	11°♄04'11	
greatest brilliancy	-2125 Dec 24 j 10:24	16°♄03'51	-1.3m		-2119 May 07 j 19:07	0°♄	
min. Earth dist.	-2125 Dec 24 j 21:27	15°♄52'48	0.67410 AU				
direct	-2124 Feb 03 j 04:51	6°♄12'40		conjunction	-2119 May 14 j 10:51	4°♄21'40	0°20'05
	-2124 Apr 19 j 04:53	0°♄		minimum elong	-2119 May 14 j 10:01	4°♄20'18	0°20'06
	-2124 Jun 11 j 04:36	0°♄		max. Earth dist.	-2119 May 29 j 13:50	14°♄12'06	2.63676 AU
	-2124 Jul 27 j 04:13	0°♄			-2119 Jun 23 j 03:03	0°♄	
desc. node	-2124 Aug 30 j 16:57	24°♄23'50		morning rise	-2119 Jul 01 j 19:43	5°♄33'06	
	-2124 Sep 07 j 08:49	0°♄			-2119 Aug 09 j 09:56	0°♄	
	-2124 Oct 17 j 02:59	0°♄			-2119 Sep 26 j 08:33	0°♄	
evening set	-2124 Nov 18 j 15:12	25°♄21'30			-2119 Nov 14 j 09:04	0°♄	
	-2124 Nov 24 j 12:41	0°♄			-2118 Jan 05 j 16:56	0°♄	
	-2123 Jan 01 j 13:57	0°♄			-2118 Mar 31 j 07:05	0°♄	
				retrograde	-2118 Apr 02 j 06:25	0°♄01'27	
conjunction	-2123 Jan 23 j 21:38	17°♄25'47	-1°06'26		-2118 Apr 04 j 05:28	30°♄	
minimum elong	-2123 Jan 23 j 21:36	17°♄25'43	1°06'28	desc. node	-2118 Apr 22 j 13:42	27°♄29'48	
	-2123 Feb 09 j 05:11	0°♄		opposition	-2118 May 04 j 03:05	24°♄18'48	-0°45'16
max. Earth dist.	-2123 Mar 14 j 15:30	25°♄08'38	2.41883 AU	greatest brilliancy	-2118 May 04 j 07:46	24°♄15'16	-2.7m
	-2123 Mar 21 j 06:00	0°♄		min. Earth dist.	-2118 May 11 j 03:46	22°♄11'59	0.41781 AU
morning rise	-2123 Mar 31 j 12:21	7°♄28'16		direct	-2118 Jun 07 j 10:34	17°♄35'15	
	-2123 May 02 j 07:12	0°♄			-2118 Jul 23 j 06:22	0°♄	
	-2123 Jun 15 j 19:07	0°♄			-2118 Sep 12 j 01:18	0°♄	
asc. node	-2123 Jul 05 j 09:23	12°♄38'52			-2118 Oct 25 j 10:28	0°♄	
	-2123 Aug 02 j 06:03	0°♄			-2118 Dec 06 j 18:44	0°♄	
	-2123 Sep 23 j 14:25	0°♄			-2117 Jan 18 j 19:41	0°♄	
retrograde	-2123 Dec 19 j 18:34	29°♄34'15		asc. node	-2117 Feb 25 j 05:07	25°♄19'49	
opposition	-2122 Jan 27 j 09:41	20°♄40'25	4°49'15		-2117 Mar 04 j 05:19	0°♄	
greatest brilliancy	-2122 Jan 28 j 01:43	20°♄24'45	-1.4m		-2117 Apr 19 j 00:45	0°♄	
min. Earth dist.	-2122 Jan 31 j 17:12	18°♄59'29	0.64158 AU	evening set	-2117 May 06 j 06:09	11°♄05'54	
direct	-2122 Mar 09 j 15:17	10°♄40'13			-2117 Jun 04 j 19:23	0°♄	
	-2122 May 13 j 12:43	0°♄					
	-2122 Jul 04 j 07:56	0°♄		conjunction	-2117 Jun 22 j 23:39	11°♄35'05	0°57'02
desc. node	-2122 Jul 18 j 15:01	9°♄24'51		minimum elong	-2117 Jun 22 j 22:27	11°♄33'10	0°57'04
	-2122 Aug 17 j 03:57	0°♄		max. Earth dist.	-2117 Jun 22 j 22:45	11°♄33'39	2.67218 AU
	-2122 Sep 26 j 12:09	0°♄			-2117 Jul 21 j 20:35	0°♄	
	-2122 Nov 04 j 04:25	0°♄		morning rise	-2117 Aug 07 j 06:18	10°♄30'06	
	-2122 Dec 12 j 11:14	0°♄			-2117 Sep 06 j 12:47	0°♄	
	-2121 Jan 20 j 09:18	0°♄			-2117 Oct 22 j 12:22	0°♄	
evening set	-2121 Jan 27 j 00:28	5°♄01'02			-2117 Dec 06 j 20:56	0°♄	
	-2121 Mar 01 j 18:02	0°♄			-2116 Jan 20 j 23:59	0°♄	

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Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2116 Mar 06 j 23:30	0°♊				-2111 Jul 10 j 20:01	0°♎		
desc. node	-2116 Mar 09 j 13:24	1°♊38'08				-2111 Aug 24 j 06:03	0°♐		
	-2116 Apr 27 j 07:40	0°♊		evening set		-2111 Aug 31 j 22:13	5°♐22'18		
retrograde	-2116 Jun 19 j 17:29	15°♊49'05		max. Earth dist.		-2111 Sep 16 j 00:40	16°♐06'20	2.46765 AU	
min. Earth dist.	-2116 Jul 16 j 19:24	11°♊23'01	0.38731 AU			-2111 Oct 05 j 03:42	0°♑		
opposition	-2116 Jul 21 j 16:24	10°♊00'11	-6°44'36						
greatest brilliancy	-2116 Jul 20 j 14:53	10°♊18'18	-2.8m	conjunction		-2111 Oct 23 j 22:38	13°♑57'25	0°04'27	
direct	-2116 Aug 20 j 12:39	4°♊51'08		minimum elong		-2111 Oct 23 j 22:54	13°♑57'56	0°04'26	
	-2116 Nov 02 j 00:05	0°♋		behind sun begin		-2111 Oct 22 j 23:55	13°♑14'51		
	-2116 Dec 23 j 04:10	0°♋		behind sun end		-2111 Oct 24 j 21:54	14°♑41'04		
asc. node	-2115 Jan 12 j 04:16	12°♋21'37		desc. node		-2111 Oct 30 j 10:42	18°♑51'05		
	-2115 Feb 09 j 10:36	0°♋				-2111 Nov 14 j 02:39	0°♒		
	-2115 Mar 29 j 09:10	0°♌		morning rise		-2111 Dec 22 j 13:46	29°♒47'33		
	-2115 May 16 j 06:34	0°♌				-2111 Dec 22 j 20:09	0°♊		
evening set	-2115 Jun 13 j 00:23	17°♌29'49				-2110 Jan 30 j 03:51	0°♊		
	-2115 Jul 02 j 16:02	0°♌				-2110 Mar 09 j 22:36	0°♋		
max. Earth dist.	-2115 Jul 15 j 12:53	8°♌15'18	2.65332 AU			-2110 Apr 19 j 02:23	0°♋		
						-2110 May 31 j 15:26	0°♌		
conjunction	-2115 Jul 29 j 05:01	17°♌05'32	1°10'31			-2110 Jul 17 j 03:22	0°♌		
minimum elong	-2115 Jul 29 j 05:00	17°♌05'31	1°10'34	asc. node		-2110 Sep 04 j 02:00	26°♌41'37		
	-2115 Aug 17 j 22:59	0°♎				-2110 Sep 11 j 10:07	0°♌		
morning rise	-2115 Sep 12 j 11:56	16°♎58'26		retrograde		-2110 Nov 01 j 03:48	12°♌49'02		
	-2115 Oct 01 j 18:04	0°♏		min. Earth dist.		-2110 Dec 10 j 04:16	3°♌25'53	0.66891 AU	
	-2115 Nov 13 j 23:44	0°♏		opposition		-2110 Dec 11 j 05:26	3°♌00'37	3°19'49	
	-2115 Dec 25 j 20:31	0°♏		greatest brilliancy		-2110 Dec 11 j 01:04	3°♌05'00	-1.3m	
desc. node	-2114 Jan 25 j 13:48	22°♏29'19				-2110 Dec 18 j 21:29	30°♌♊		
	-2114 Feb 04 j 18:12	0°♊		direct		-2109 Jan 20 j 10:07	23°♌21'08		
	-2114 Mar 17 j 09:59	0°♊				-2109 Feb 25 j 12:27	0°♌		
	-2114 Apr 28 j 05:49	0°♋				-2109 May 01 j 06:55	0°♌		
	-2114 Jun 14 j 01:46	0°♋				-2109 Jun 20 j 14:38	0°♎		
retrograde	-2114 Aug 17 j 04:13	21°♋59'16				-2109 Aug 04 j 21:07	0°♏		
min. Earth dist.	-2114 Sep 15 j 23:31	15°♋53'04	0.50076 AU			-2109 Sep 15 j 20:59	0°♏		
opposition	-2114 Sep 23 j 17:54	13°♋00'53	-3°10'42	desc. node		-2109 Sep 17 j 09:24	1°♏07'09		
greatest brilliancy	-2114 Sep 22 j 22:07	13°♋19'12	-2.2m	evening set		-2109 Oct 25 j 00:01	29°♏31'44		
direct	-2114 Oct 27 j 18:52	5°♋41'32				-2109 Oct 25 j 14:41	0°♏		
asc. node	-2114 Nov 30 j 02:58	11°♋48'37				-2109 Dec 03 j 00:59	0°♊		
	-2113 Jan 11 j 07:00	0°♌							
	-2113 Mar 07 j 02:18	0°♌		conjunction		-2109 Dec 27 j 13:56	19°♊21'14	-0°58'26	
	-2113 Apr 26 j 16:00	0°♌		minimum elong		-2109 Dec 27 j 11:15	19°♊15'57	0°58'27	
	-2113 Jun 14 j 03:28	0°♌				-2108 Jan 10 j 02:34	0°♊		
evening set	-2113 Jul 21 j 07:06	23°♌52'19		max. Earth dist.		-2108 Jan 20 j 19:21	8°♊23'08	2.37676 AU	
	-2113 Jul 30 j 14:52	0°♎				-2108 Feb 17 j 17:15	0°♋		
max. Earth dist.	-2113 Aug 11 j 03:45	7°♎40'01	2.58232 AU	morning rise		-2108 Mar 05 j 13:20	12°♋47'25		
						-2108 Mar 28 j 16:53	0°♋		
conjunction	-2113 Sep 06 j 19:26	25°♎44'57	0°54'48			-2108 May 09 j 18:00	0°♌		
minimum elong	-2113 Sep 06 j 20:52	25°♎47'24	0°54'49			-2108 Jun 23 j 10:50	0°♌		
	-2113 Sep 12 j 23:06	0°♏		asc. node		-2108 Jul 22 j 01:27	18°♌05'42		
	-2113 Oct 25 j 06:14	0°♏				-2108 Aug 10 j 19:29	0°♌		
morning rise	-2113 Oct 26 j 00:06	0°♏32'25				-2108 Oct 06 j 04:44	0°♌		
	-2113 Dec 04 j 20:16	0°♏		retrograde		-2108 Dec 05 j 05:18	16°♌20'56		
desc. node	-2113 Dec 13 j 12:42	6°♏33'06		opposition		-2107 Jan 13 j 11:14	7°♌07'18	4°38'56	
	-2112 Jan 13 j 06:15	0°♊		greatest brilliancy		-2107 Jan 13 j 20:29	6°♌58'10	-1.3m	
	-2112 Feb 21 j 05:25	0°♊		min. Earth dist.		-2107 Jan 16 j 06:30	6°♌00'53	0.66207 AU	
	-2112 Mar 31 j 15:34	0°♋				-2107 Feb 02 j 14:42	30°♌♌		
	-2112 May 11 j 18:43	0°♋		direct		-2107 Feb 23 j 17:10	27°♌06'40		
	-2112 Jun 25 j 19:45	0°♌				-2107 Mar 18 j 09:16	0°♌		
	-2112 Aug 23 j 05:24	0°♌				-2107 May 26 j 04:10	0°♎		
retrograde	-2112 Sep 26 j 16:44	6°♌55'47				-2107 Jul 13 j 13:43	0°♏		
asc. node	-2112 Oct 17 j 01:51	4°♌00'58		desc. node		-2107 Aug 04 j 08:13	14°♏52'26		
	-2112 Oct 28 j 20:59	30°♌♌				-2107 Aug 25 j 12:28	0°♏		
min. Earth dist.	-2112 Oct 31 j 16:09	28°♌54'17	0.61202 AU			-2107 Oct 04 j 12:54	0°♏		
opposition	-2112 Nov 05 j 11:12	26°♌59'36	0°47'55			-2107 Nov 12 j 01:01	0°♊		
greatest brilliancy	-2112 Nov 05 j 07:23	27°♌03'24	-1.6m			-2107 Dec 20 j 04:15	0°♊		
direct	-2112 Dec 13 j 06:30	18°♌09'36		evening set		-2107 Dec 31 j 17:55	9°♊02'23		
	-2111 Feb 01 j 04:03	0°♌				-2106 Jan 27 j 22:15	0°♋		
	-2111 Apr 03 j 01:01	0°♌							
	-2111 May 24 j 09:50	0°♌		conjunction		-2106 Mar 06 j 01:36	27°♋46'51	-0°51'28	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

minimum elong	-2106 Mar 06 j 04:07	27° $\approx$ 51'28	0°51'29	desc. node	-2101 Mar 27 j 06:54	28° $\mathbb{M}$ 59'00	
	-2106 Mar 09 j 02:26	0° $\mathbb{H}$			-2101 Mar 29 j 10:30	0° $\mathbb{A}$	
max. Earth dist.	-2106 Apr 17 j 18:51	28° $\mathbb{H}$ 17'16	2.50059 AU	retrograde	-2101 May 21 j 09:18	14° $\mathbb{A}$ 30'41	
	-2106 Apr 20 j 06:00	0° $\mathbb{Y}$		opposition	-2101 Jun 20 j 16:05	9° $\mathbb{A}$ 29'13	-5°30'18
morning rise	-2106 May 04 j 15:41	9° $\mathbb{Y}$ 54'36		greatest brilliancy	-2101 Jun 20 j 15:38	9° $\mathbb{A}$ 29'32	-2.9m
	-2106 Jun 03 j 14:44	0° $\mathbb{B}$		min. Earth dist.	-2101 Jun 20 j 23:33	9° $\mathbb{A}$ 24'16	0.37593 AU
asc. node	-2106 Jun 09 j 00:08	3° $\mathbb{B}$ 32'38		direct	-2101 Jul 20 j 19:45	4° $\mathbb{A}$ 27'04	
	-2106 Jul 20 j 06:33	0° $\mathbb{II}$			-2101 Sep 30 j 22:24	0° $\mathbb{B}$	
	-2106 Sep 07 j 16:05	0° $\mathbb{E}$			-2101 Nov 18 j 18:16	0° $\approx$	
	-2106 Nov 01 j 18:07	0° $\mathbb{Q}$			-2100 Jan 03 j 20:39	0° $\mathbb{H}$	
retrograde	-2105 Jan 13 j 22:40	22° $\mathbb{Q}$ 17'33		asc. node	-2100 Jan 29 j 18:37	16° $\mathbb{H}$ 53'10	
opposition	-2105 Feb 20 j 05:46	14° $\mathbb{Q}$ 03'26	4°33'49		-2100 Feb 19 j 00:51	0° $\mathbb{Y}$	
greatest brilliancy	-2105 Feb 21 j 06:51	13° $\mathbb{Q}$ 39'44	-1.7m		-2100 Apr 05 j 21:43	0° $\mathbb{B}$	
min. Earth dist.	-2105 Feb 26 j 18:55	11° $\mathbb{Q}$ 35'21	0.59040 AU		-2100 May 23 j 06:05	0° $\mathbb{II}$	
direct	-2105 Apr 01 j 20:49	4° $\mathbb{Q}$ 19'46		evening set	-2100 May 29 j 06:56	3° $\mathbb{II}$ 49'17	
	-2105 Jun 15 j 13:54	0° $\mathbb{P}$		max. Earth dist.	-2100 Jul 06 j 09:41	28° $\mathbb{II}$ 03'06	2.66711 AU
desc. node	-2105 Jun 22 j 06:09	3° $\mathbb{P}$ 50'44			-2100 Jul 09 j 10:48	0° $\mathbb{E}$	
	-2105 Aug 01 j 22:52	0° $\mathbb{L}$					
	-2105 Sep 12 j 11:48	0° $\mathbb{M}$		conjunction	-2100 Jul 14 j 18:10	3° $\mathbb{E}$ 24'00	1°08'25
	-2105 Oct 21 j 18:18	0° $\mathbb{A}$		minimum elong	-2100 Jul 14 j 17:35	3° $\mathbb{E}$ 23'03	1°08'27
	-2105 Nov 29 j 11:23	0° $\mathbb{B}$			-2100 Aug 24 j 19:50	0° $\mathbb{Q}$	
	-2104 Jan 07 j 18:51	0° $\approx$		morning rise	-2100 Aug 28 j 15:45	2° $\mathbb{Q}$ 30'40	
	-2104 Feb 17 j 12:35	0° $\mathbb{H}$			-2100 Oct 08 j 23:40	0° $\mathbb{P}$	
evening set	-2104 Mar 03 j 04:42	10° $\mathbb{H}$ 28'54			-2100 Nov 21 j 20:31	0° $\mathbb{L}$	
	-2104 Mar 31 j 04:00	0° $\mathbb{Y}$			-2099 Jan 03 j 14:52	0° $\mathbb{M}$	
asc. node	-2104 Apr 25 j 23:04	17° $\mathbb{Y}$ 30'00		desc. node	-2099 Feb 11 j 06:01	27° $\mathbb{M}$ 32'42	
					-2099 Feb 14 j 16:26	0° $\mathbb{A}$	
conjunction	-2104 Apr 27 j 06:42	18° $\mathbb{Y}$ 22'57	0°00'48		-2099 Mar 28 j 23:23	0° $\mathbb{B}$	
minimum elong	-2104 Apr 27 j 06:36	18° $\mathbb{Y}$ 22'48	0°00'49		-2099 May 13 j 01:28	0° $\approx$	
behind sun begin	-2104 Apr 26 j 08:54	17° $\mathbb{Y}$ 46'29		retrograde	-2099 Jul 28 j 08:07	29° $\approx$ 34'15	
behind sun end	-2104 Apr 28 j 04:19	18° $\mathbb{Y}$ 59'05		min. Earth dist.	-2099 Aug 25 j 01:21	24° $\approx$ 20'44	0.44989 AU
	-2104 May 14 j 18:32	0° $\mathbb{B}$		greatest brilliancy	-2099 Aug 31 j 18:48	22° $\approx$ 03'20	-2.4m
max. Earth dist.	-2104 May 19 j 12:15	3° $\mathbb{B}$ 06'58	2.60814 AU	opposition	-2099 Sep 02 j 01:40	21° $\approx$ 36'51	-5°00'38
morning rise	-2104 Jun 16 j 20:03	21° $\mathbb{B}$ 31'24		direct	-2099 Oct 04 j 08:42	15° $\approx$ 08'52	
	-2104 Jun 30 j 01:25	0° $\mathbb{II}$			-2099 Nov 28 j 01:52	0° $\mathbb{H}$	
	-2104 Aug 16 j 15:26	0° $\mathbb{E}$		asc. node	-2099 Dec 16 j 18:30	9° $\mathbb{H}$ 03'21	
	-2104 Oct 04 j 13:02	0° $\mathbb{Q}$			-2098 Jan 24 j 02:09	0° $\mathbb{Y}$	
	-2104 Nov 25 j 03:49	0° $\mathbb{P}$			-2098 Mar 15 j 23:31	0° $\mathbb{B}$	
	-2103 Jan 27 j 12:52	0° $\mathbb{L}$			-2098 May 04 j 04:43	0° $\mathbb{II}$	
retrograde	-2103 Mar 06 j 09:54	7° $\mathbb{L}$ 22'58			-2098 Jun 21 j 03:25	0° $\mathbb{E}$	
opposition	-2103 Apr 09 j 02:53	0° $\mathbb{L}$ 50'03	1°44'05	evening set	-2098 Jul 06 j 05:19	9° $\mathbb{E}$ 38'14	
greatest brilliancy	-2103 Apr 09 j 18:11	0° $\mathbb{L}$ 37'23	-2.3m	max. Earth dist.	-2098 Jul 31 j 03:41	25° $\mathbb{E}$ 49'43	2.61596 AU
	-2103 Apr 11 j 15:08	30° $\mathbb{R}$ $\mathbb{P}$			-2098 Aug 06 j 11:46	0° $\mathbb{Q}$	
min. Earth dist.	-2103 Apr 17 j 14:41	28° $\mathbb{P}$ 01'48	0.46674 AU				
desc. node	-2103 May 09 j 06:06	23° $\mathbb{P}$ 09'34		conjunction	-2098 Aug 21 j 19:56	10° $\mathbb{Q}$ 12'04	1°04'47
direct	-2103 May 16 j 04:03	22° $\mathbb{P}$ 49'44		minimum elong	-2098 Aug 21 j 20:53	10° $\mathbb{Q}$ 13'40	1°04'49
	-2103 Jun 19 j 05:56	0° $\mathbb{L}$			-2098 Sep 19 j 23:07	0° $\mathbb{P}$	
	-2103 Aug 13 j 04:51	0° $\mathbb{M}$		morning rise	-2098 Oct 07 j 21:31	12° $\mathbb{P}$ 28'38	
	-2103 Sep 25 j 07:05	0° $\mathbb{A}$			-2098 Nov 01 j 13:22	0° $\mathbb{L}$	
	-2103 Nov 05 j 03:09	0° $\mathbb{B}$			-2098 Dec 12 j 13:09	0° $\mathbb{M}$	
	-2103 Dec 16 j 00:41	0° $\approx$		desc. node	-2098 Dec 30 j 04:54	13° $\mathbb{M}$ 12'38	
	-2102 Jan 27 j 01:50	0° $\mathbb{H}$			-2097 Jan 21 j 09:49	0° $\mathbb{A}$	
	-2102 Mar 11 j 18:36	0° $\mathbb{Y}$			-2097 Mar 01 j 20:02	0° $\mathbb{B}$	
asc. node	-2102 Mar 13 j 20:42	1° $\mathbb{Y}$ 24'15			-2097 Apr 10 j 19:25	0° $\approx$	
evening set	-2102 Apr 20 j 02:22	26° $\mathbb{Y}$ 04'34			-2097 May 22 j 22:31	0° $\mathbb{H}$	
	-2102 Apr 26 j 02:38	0° $\mathbb{B}$			-2097 Jul 10 j 04:57	0° $\mathbb{Y}$	
				retrograde	-2097 Sep 12 j 15:49	21° $\mathbb{Y}$ 11'49	
conjunction	-2102 Jun 08 j 04:39	27° $\mathbb{B}$ 47'34	0°45'13	min. Earth dist.	-2097 Oct 15 j 17:44	13° $\mathbb{Y}$ 51'07	0.57371 AU
minimum elong	-2102 Jun 08 j 03:20	27° $\mathbb{B}$ 45'29	0°45'14	opposition	-2097 Oct 21 j 21:16	11° $\mathbb{Y}$ 26'29	-0°33'55
	-2102 Jun 11 j 15:25	0° $\mathbb{II}$		greatest brilliancy	-2097 Oct 21 j 18:25	11° $\mathbb{Y}$ 29'16	-1.8m
max. Earth dist.	-2102 Jun 13 j 16:56	1° $\mathbb{II}$ 19'09	2.66487 AU	asc. node	-2097 Nov 03 j 18:07	6° $\mathbb{Y}$ 49'23	
morning rise	-2102 Jul 24 j 06:50	27° $\mathbb{II}$ 11'05		direct	-2097 Nov 27 j 09:13	3° $\mathbb{Y}$ 05'56	
	-2102 Jul 28 j 16:58	0° $\mathbb{E}$			-2096 Feb 17 j 11:02	0° $\mathbb{B}$	
	-2102 Sep 13 j 17:45	0° $\mathbb{Q}$			-2096 Apr 12 j 03:16	0° $\mathbb{II}$	
	-2102 Oct 30 j 13:47	0° $\mathbb{P}$			-2096 Jun 01 j 00:39	0° $\mathbb{E}$	
	-2102 Dec 16 j 13:28	0° $\mathbb{L}$			-2096 Jul 17 j 23:28	0° $\mathbb{Q}$	
	-2101 Feb 02 j 20:56	0° $\mathbb{M}$		evening set	-2096 Aug 14 j 10:40	18° $\mathbb{Q}$ 22'48	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

max. Earth dist.	-2096 Aug 30 j 10:44	29°Ω23'14	2.51649 AU	asc. node	-2091 Jun 25 j 16:15	9°♄37'13	
	-2096 Aug 31 j 07:53	0°♍			-2091 Jul 27 j 22:58	0°♊	
					-2091 Sep 16 j 20:55	0°♎	
conjunction	-2096 Oct 03 j 16:06	23°♍40'46	0°28'04		-2091 Nov 19 j 01:37	0°♏	
minimum elong	-2096 Oct 03 j 17:25	23°♍43'10	0°28'03	retrograde	-2091 Dec 28 j 12:16	7°♏50'28	
	-2096 Oct 12 j 08:25	0°♎			-2090 Feb 02 j 12:52	30°♌♎	
desc. node	-2096 Nov 16 j 03:55	25°♎56'17		opposition	-2090 Feb 04 j 17:44	29°♎09'12	4°48'23
	-2096 Nov 21 j 12:20	0°♍		greatest brilliancy	-2090 Feb 05 j 13:21	28°♎50'14	-1.5m
morning rise	-2096 Nov 27 j 07:10	4°♍24'41		min. Earth dist.	-2090 Feb 09 j 21:02	27°♎10'15	0.62619 AU
	-2096 Dec 30 j 10:59	0°♌		direct	-2090 Mar 17 j 21:01	19°♎12'16	
	-2095 Feb 06 j 23:06	0°♄			-2090 May 02 j 16:00	0°♏	
	-2095 Mar 17 j 21:41	0°♌			-2090 Jun 27 j 20:37	0°♍	
	-2095 Apr 27 j 06:27	0°♌		desc. node	-2090 Jul 09 j 00:27	7°♍06'23	
	-2095 Jun 09 j 08:05	0°♍			-2090 Aug 11 j 14:25	0°♎	
	-2095 Jul 27 j 16:10	0°♌			-2090 Sep 21 j 06:50	0°♍	
asc. node	-2095 Sep 20 j 17:06	25°♌03'58			-2090 Oct 30 j 02:56	0°♌	
retrograde	-2095 Oct 18 j 16:15	29°♌35'50			-2090 Dec 07 j 12:12	0°♄	
min. Earth dist.	-2095 Nov 25 j 06:19	20°♌41'14	0.65409 AU		-2089 Jan 15 j 12:25	0°♌	
opposition	-2095 Nov 27 j 19:03	19°♌40'12	2°30'07	evening set	-2089 Feb 09 j 21:33	18°♌58'45	
greatest brilliancy	-2095 Nov 27 j 12:30	19°♌46'47	-1.4m		-2089 Feb 24 j 23:03	0°♌	
direct	-2094 Jan 06 j 05:26	10°♌16'21			-2089 Apr 08 j 08:13	0°♍	
	-2094 Mar 15 j 10:27	0°♊					
	-2094 May 10 j 16:12	0°♎		conjunction	-2089 Apr 09 j 10:50	0°♍45'56	-0°20'06
	-2094 Jun 28 j 11:33	0°♏		minimum elong	-2089 Apr 09 j 11:56	0°♍47'49	0°20'05
	-2094 Aug 12 j 07:34	0°♍		max. Earth dist.	-2089 May 09 j 08:10	21°♍03'56	2.57170 AU
	-2094 Sep 23 j 05:31	0°♎		asc. node	-2089 May 13 j 13:57	23°♍53'48	
evening set	-2094 Oct 02 j 00:20	6°♎30'23			-2089 May 22 j 18:46	0°♌	
desc. node	-2094 Oct 04 j 02:07	8°♎03'11		morning rise	-2089 Jun 01 j 21:31	6°♌38'54	
max. Earth dist.	-2094 Oct 29 j 04:33	27°♎03'12	2.39332 AU		-2089 Jul 08 j 02:37	0°♊	
	-2094 Nov 02 j 00:40	0°♍			-2089 Aug 25 j 03:40	0°♎	
					-2089 Oct 14 j 12:09	0°♏	
conjunction	-2094 Nov 30 j 05:54	21°♍55'07	-0°37'28		-2089 Dec 10 j 04:10	0°♍	
minimum elong	-2094 Nov 30 j 03:18	21°♍50'01	0°37'29	retrograde	-2088 Feb 12 j 13:49	18°♍12'44	
	-2094 Dec 10 j 13:04	0°♌		opposition	-2088 Mar 18 j 23:31	10°♍53'33	3°19'53
	-2093 Jan 17 j 16:09	0°♄		greatest brilliancy	-2088 Mar 20 j 01:12	10°♍30'45	-2.0m
morning rise	-2093 Feb 05 j 16:38	14°♄51'43		min. Earth dist.	-2088 Mar 27 j 06:21	7°♍57'47	0.51927 AU
	-2093 Feb 25 j 07:19	0°♌		direct	-2088 Apr 26 j 22:57	1°♍56'57	
	-2093 Apr 06 j 06:47	0°♌		desc. node	-2088 May 25 j 23:06	7°♍05'53	
	-2093 May 18 j 09:28	0°♍			-2088 Jul 12 j 01:59	0°♎	
	-2093 Jul 02 j 11:34	0°♌			-2088 Aug 26 j 05:33	0°♍	
asc. node	-2093 Aug 08 j 16:46	22°♌46'08			-2088 Oct 05 j 23:21	0°♌	
	-2093 Aug 21 j 09:25	0°♊			-2088 Nov 14 j 14:13	0°♄	
	-2093 Oct 28 j 11:24	0°♎			-2088 Dec 24 j 15:09	0°♌	
retrograde	-2093 Nov 22 j 08:03	3°♎27'44			-2087 Feb 03 j 23:56	0°♌	
	-2093 Dec 15 j 08:30	30°♌♊			-2087 Mar 19 j 03:53	0°♍	
opposition	-2092 Jan 01 j 01:00	23°♊57'46	4°16'42	asc. node	-2087 Mar 30 j 12:23	7°♍41'02	
greatest brilliancy	-2092 Jan 01 j 03:58	23°♊54'49	-1.3m	evening set	-2087 Apr 02 j 18:07	9°♍51'42	
min. Earth dist.	-2092 Jan 02 j 08:02	23°♊26'52	0.67261 AU		-2087 May 03 j 02:59	0°♌	
direct	-2092 Feb 11 j 01:21	14°♊01'57					
	-2092 Apr 10 j 09:48	0°♎		conjunction	-2087 May 23 j 17:50	13°♌25'50	0°30'11
	-2092 Jun 05 j 07:30	0°♏		minimum elong	-2087 May 23 j 16:44	13°♌24'02	0°30'12
	-2092 Jul 22 j 00:05	0°♍		max. Earth dist.	-2087 Jun 04 j 07:49	20°♌54'34	2.64904 AU
desc. node	-2092 Aug 21 j 01:00	21°♍00'12			-2087 Jun 18 j 11:44	0°♊	
	-2092 Sep 02 j 10:26	0°♎		morning rise	-2087 Jul 10 j 03:38	13°♊49'11	
	-2092 Oct 12 j 06:41	0°♍			-2087 Aug 04 j 15:45	0°♎	
	-2092 Nov 19 j 16:56	0°♌			-2087 Sep 21 j 04:56	0°♏	
evening set	-2092 Dec 04 j 03:15	11°♌22'50			-2087 Nov 08 j 06:13	0°♍	
	-2092 Dec 27 j 18:29	0°♄			-2087 Dec 27 j 22:52	0°♎	
	-2091 Feb 04 j 10:11	0°♌			-2086 Feb 22 j 05:45	0°♍	
				desc. node	-2086 Apr 12 j 22:36	14°♍54'39	
conjunction	-2091 Feb 08 j 12:37	3°♌07'51	-1°04'16	retrograde	-2086 Apr 19 j 04:12	15°♍09'04	
minimum elong	-2091 Feb 08 j 14:09	3°♌10'45	1°04'18	opposition	-2086 May 20 j 05:20	9°♍51'14	-2°31'25
	-2091 Mar 16 j 11:21	0°♌		greatest brilliancy	-2086 May 20 j 15:41	9°♍43'54	-2.8m
max. Earth dist.	-2091 Mar 29 j 21:12	9°♌44'23	2.44839 AU	min. Earth dist.	-2086 May 25 j 10:39	8°♍22'47	0.39615 AU
morning rise	-2091 Apr 13 j 17:39	20°♌20'28		direct	-2086 Jun 21 j 17:31	3°♍53'22	
	-2091 Apr 27 j 12:22	0°♍			-2086 Sep 01 j 04:08	0°♌	
	-2091 Jun 10 j 21:36	0°♌			-2086 Oct 17 j 17:44	0°♄	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 32

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2086 Nov 30 j 10:29	0°♊		minimum elong	-2081 Sep 16 j 13:20	5°♎43'58	0°46'35
	-2085 Jan 13 j 05:56	0°♋			-2081 Oct 20 j 12:50	0°♌	
asc. node	-2085 Feb 15 j 11:23	22°♋17'32		morning rise	-2081 Nov 06 j 07:43	12°♌19'01	
	-2085 Feb 27 j 03:06	0°♌			-2081 Nov 29 j 23:13	0°♍	
	-2085 Apr 14 j 05:33	0°♍		desc. node	-2081 Dec 03 j 20:26	2°♍56'13	
evening set	-2085 May 15 j 04:11	19°♍48'42			-2080 Jan 08 j 04:55	0°♎	
	-2085 May 31 j 04:03	0°♎			-2080 Feb 15 j 23:31	0°♏	
max. Earth dist.	-2085 Jun 28 j 07:42	17°♎55'14	2.67265 AU		-2080 Mar 26 j 04:30	0°♐	
					-2080 May 05 j 22:33	0°♋	
conjunction	-2085 Jul 01 j 08:11	19°♎50'45	1°02'18		-2080 Jun 18 j 23:17	0°♌	
minimum elong	-2085 Jul 01 j 07:09	19°♎49'06	1°02'20		-2080 Aug 10 j 08:29	0°♍	
	-2085 Jul 17 j 05:53	0°♏		retrograde	-2080 Oct 04 j 20:58	15°♍43'41	
morning rise	-2085 Aug 15 j 08:35	18°♏42'02		asc. node	-2080 Oct 07 j 08:53	15°♍41'07	
	-2085 Sep 01 j 19:09	0°♐		min. Earth dist.	-2080 Nov 09 j 19:56	7°♍22'07	0.62959 AU
	-2085 Oct 17 j 10:59	0°♑		opposition	-2080 Nov 13 j 20:00	5°♍45'58	1°29'02
	-2085 Dec 01 j 04:42	0°♒		greatest brilliancy	-2080 Nov 13 j 14:04	5°♍51'53	-1.5m
	-2084 Jan 14 j 06:45	0°♓			-2080 Nov 29 j 20:56	30°♎♑	
	-2084 Feb 27 j 07:49	0°♎		direct	-2080 Dec 22 j 07:03	26°♑42'28	
desc. node	-2084 Feb 28 j 23:06	1°♎06'13			-2079 Jan 15 j 16:36	0°♏	
	-2084 Apr 13 j 06:21	0°♏			-2079 Mar 27 j 10:11	0°♎	
	-2084 Jun 13 j 18:08	0°♐			-2079 May 19 j 03:03	0°♏	
retrograde	-2084 Jul 05 j 00:16	3°♐00'52			-2079 Jul 06 j 00:00	0°♐	
	-2084 Jul 26 j 03:13	30°♎♑			-2079 Aug 19 j 13:54	0°♑	
min. Earth dist.	-2084 Jul 31 j 12:49	28°♑28'59	0.40509 AU	evening set	-2079 Sep 11 j 13:13	16°♑13'54	
greatest brilliancy	-2084 Aug 05 j 21:55	26°♑51'44	-2.7m	max. Earth dist.	-2079 Sep 27 j 13:03	27°♑49'58	2.43979 AU
opposition	-2084 Aug 07 j 06:40	26°♑26'52	-6°28'15		-2079 Sep 30 j 11:54	0°♒	
direct	-2084 Sep 06 j 19:30	20°♑53'56		desc. node	-2079 Oct 20 j 20:03	15°♒08'07	
	-2084 Oct 17 j 08:34	0°♓					
	-2084 Dec 15 j 06:03	0°♋		conjunction	-2079 Nov 05 j 13:34	27°♒03'57	-0°10'44
asc. node	-2083 Jan 02 j 10:17	10°♋40'11		minimum elong	-2079 Nov 05 j 12:50	27°♒02'33	0°10'45
	-2083 Feb 03 j 10:11	0°♌		behind sun begin	-2079 Nov 04 j 17:51	26°♒26'19	
	-2083 Mar 24 j 04:17	0°♍		behind sun end	-2079 Nov 06 j 07:50	27°♒38'49	
	-2083 May 11 j 11:18	0°♎			-2079 Nov 09 j 09:37	0°♏	
evening set	-2083 Jun 21 j 10:59	25°♎48'43			-2079 Dec 18 j 01:02	0°♎	
	-2083 Jun 28 j 00:51	0°♏		morning rise	-2078 Jan 07 j 07:40	15°♎♑45'56	
max. Earth dist.	-2083 Jul 21 j 03:28	14°♏51'03	2.64210 AU		-2078 Jan 25 j 06:27	0°♏	
					-2078 Mar 04 j 23:05	0°♐	
conjunction	-2083 Aug 06 j 16:18	25°♏37'17	1°09'45		-2078 Apr 14 j 00:03	0°♋	
minimum elong	-2083 Aug 06 j 16:39	25°♏37'51	1°09'47		-2078 May 26 j 07:12	0°♌	
	-2083 Aug 13 j 08:11	0°♐			-2078 Jul 11 j 01:59	0°♍	
morning rise	-2083 Sep 21 j 10:13	26°♐10'43		asc. node	-2078 Aug 25 j 07:43	26°♍07'08	
	-2083 Sep 27 j 00:33	0°♑			-2078 Sep 01 j 22:01	0°♎	
	-2083 Nov 09 j 00:30	0°♒		retrograde	-2078 Nov 08 j 20:17	20°♎41'04	
	-2083 Dec 20 j 13:18	0°♓		opposition	-2078 Dec 18 j 20:23	10°♎58'20	3°43'47
desc. node	-2082 Jan 15 j 21:46	19°♎28'03		greatest brilliancy	-2078 Dec 18 j 18:11	11°♎00'32	-1.3m
	-2082 Jan 30 j 00:49	0°♎		min. Earth dist.	-2078 Dec 18 j 15:16	11°♎03'28	0.67312 AU
	-2082 Mar 11 j 03:30	0°♏		direct	-2077 Jan 28 j 09:59	1°♎11'54	
	-2082 Apr 21 j 01:33	0°♐			-2077 Apr 24 j 09:22	0°♏	
	-2082 Jun 04 j 06:36	0°♋			-2077 Jun 15 j 04:35	0°♐	
	-2082 Aug 04 j 00:41	0°♌			-2077 Jul 30 j 22:11	0°♑	
retrograde	-2082 Aug 27 j 06:56	3°♌34'07		desc. node	-2077 Sep 07 j 18:40	27°♑34'40	
	-2082 Sep 18 j 13:58	30°♎♑			-2077 Sep 11 j 01:54	0°♒	
min. Earth dist.	-2082 Sep 27 j 06:52	27°♋00'18	0.52802 AU		-2077 Oct 20 j 20:50	0°♓	
opposition	-2082 Oct 04 j 14:27	24°♋13'37	-2°10'01	evening set	-2077 Nov 08 j 03:08	14°♓10'25	
greatest brilliancy	-2082 Oct 04 j 01:33	24°♋25'53	-2.0m		-2077 Nov 28 j 07:07	0°♎	
direct	-2082 Nov 08 j 13:40	16°♋30'11			-2076 Jan 05 j 08:12	0°♏	
asc. node	-2082 Nov 20 j 09:17	17°♋21'35					
	-2082 Dec 31 j 11:42	0°♌		conjunction	-2076 Jan 12 j 13:31	5°♏39'59	-1°04'49
	-2081 Feb 28 j 17:07	0°♍		minimum elong	-2076 Jan 12 j 12:08	5°♏37'16	1°04'51
	-2081 Apr 21 j 10:07	0°♎			-2076 Feb 12 j 22:26	0°♐	
	-2081 Jun 09 j 08:13	0°♏		max. Earth dist.	-2076 Feb 27 j 11:07	11°♐03'26	2.39676 AU
	-2081 Jul 25 j 23:31	0°♐		morning rise	-2076 Mar 20 j 15:55	27°♐37'31	
evening set	-2081 Jul 30 j 04:44	2°♐47'15			-2076 Mar 23 j 21:25	0°♋	
max. Earth dist.	-2081 Aug 17 j 23:34	15°♐21'59	2.56039 AU		-2076 May 04 j 20:53	0°♌	
	-2081 Sep 08 j 08:02	0°♑			-2076 Jun 18 j 08:54	0°♍	
				asc. node	-2076 Jul 12 j 06:41	15°♍19'59	
conjunction	-2081 Sep 16 j 11:47	5°♑41'15	0°46'35		-2076 Aug 05 j 01:57	0°♎	



Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2076 Sep 27 j 15:19	0°☿				-2071 Dec 10 j 07:43	0°♊		
retrograde	-2076 Dec 13 j 10:46	24°☿19'24				-2070 Jan 21 j 19:55	0°♋		
opposition	-2075 Jan 21 j 09:35	15°☿16'09	4°46'13	asc. node		-2070 Mar 04 j 02:31	28°♋09'50		
greatest brilliancy	-2075 Jan 21 j 22:35	15°☿03'23	-1.4m			-2070 Mar 06 j 20:18	0°♌		
min. Earth dist.	-2075 Jan 25 j 01:12	13°☿50'17	0.65207 AU			-2070 Apr 21 j 09:28	0°♍		
direct	-2075 Mar 03 j 16:49	5°☿15'00		evening set		-2070 Apr 29 j 11:19	5°♍14'07		
	-2075 May 18 j 14:37	0°♎				-2070 Jun 07 j 00:51	0°♏		
	-2075 Jul 07 j 19:19	0°♐							
desc. node	-2075 Jul 25 j 16:37	11°♐58'43		conjunction		-2070 Jun 16 j 17:59	6°♏12'04	0°52'30	
	-2075 Aug 20 j 06:40	0°♑		minimum elong		-2070 Jun 16 j 16:43	6°♏10'02	0°52'32	
	-2075 Sep 29 j 12:13	0°♒		max. Earth dist.		-2070 Jun 19 j 01:48	7°♏41'05	2.66995 AU	
	-2075 Nov 07 j 02:51	0°♓				-2070 Jul 24 j 01:51	0°☿		
	-2075 Dec 15 j 07:41	0°♈		morning rise		-2070 Aug 01 j 07:59	5°☿16'10		
evening set	-2074 Jan 15 j 20:00	24°♈25'31				-2070 Sep 08 j 21:44	0°♎		
	-2074 Jan 23 j 03:12	0°♊				-2070 Oct 25 j 05:47	0°♏		
	-2074 Mar 04 j 08:41	0°♋				-2070 Dec 10 j 05:36	0°♑		
						-2069 Jan 25 j 12:02	0°♒		
conjunction	-2074 Mar 19 j 05:45	10°♋45'15	-0°40'55			-2069 Mar 14 j 20:43	0°♓		
minimum elong	-2074 Mar 19 j 08:00	10°♋49'16	0°40'54	desc. node		-2069 Mar 17 j 14:39	1°♓36'24		
	-2074 Apr 15 j 12:57	0°♌				-2069 May 18 j 16:51	0°♈		
max. Earth dist.	-2074 Apr 26 j 08:48	7°♌27'45	2.52752 AU	retrograde		-2069 Jun 07 j 21:48	2°♈37'12		
morning rise	-2074 May 15 j 10:36	20°♌23'36				-2069 Jun 28 j 12:04	30°♌♓		
	-2074 May 29 j 20:57	0°♍		min. Earth dist.		-2069 Jul 06 j 03:59	28°♓02'06	0.37849 AU	
asc. node	-2074 May 30 j 06:28	0°♍15'43		opposition		-2069 Jul 08 j 22:29	27°♓16'55	-6°30'02	
	-2074 Jul 15 j 08:01	0°♎		greatest brilliancy		-2069 Jul 08 j 07:26	27°♓27'09	-2.9m	
	-2074 Sep 02 j 02:07	0°☿		direct		-2069 Aug 07 j 15:41	22°♓18'16		
	-2074 Oct 24 j 20:01	0°♎				-2069 Sep 12 j 22:30	0°♈		
	-2073 Jan 07 j 20:55	0°♏				-2069 Nov 09 j 23:16	0°♊		
retrograde	-2073 Jan 24 j 00:22	1°♏30'02				-2069 Dec 28 j 08:14	0°♋		
	-2073 Feb 08 j 09:52	30°♏♎		asc. node		-2068 Jan 20 j 01:47	14°♋26'37		
opposition	-2073 Mar 01 j 17:35	23°♎33'20	4°14'58			-2068 Feb 13 j 12:42	0°♌		
greatest brilliancy	-2073 Mar 02 j 20:23	23°♎08'28	-1.8m			-2068 Mar 31 j 22:21	0°♍		
min. Earth dist.	-2073 Mar 09 j 00:28	20°♎51'36	0.56713 AU			-2068 May 18 j 13:28	0°♎		
direct	-2073 Apr 10 j 22:31	14°♎01'50		evening set		-2068 Jun 06 j 18:09	12°♎07'27		
	-2073 Jun 05 j 13:41	0°♏				-2068 Jul 04 j 20:52	0°☿		
desc. node	-2073 Jun 12 j 15:28	3°♏36'39		max. Earth dist.		-2068 Jul 11 j 18:38	4°☿25'20	2.66053 AU	
	-2073 Jul 26 j 05:51	0°♑							
	-2073 Sep 06 j 15:29	0°♒		conjunction		-2068 Jul 23 j 00:18	11°☿38'58	1°10'08	
	-2073 Oct 16 j 07:19	0°♓		minimum elong		-2068 Jul 23 j 00:02	11°☿38'32	1°10'10	
	-2073 Nov 24 j 06:05	0°♈				-2068 Aug 20 j 05:18	0°♎		
	-2072 Jan 02 j 18:09	0°♊		morning rise		-2068 Sep 06 j 01:33	11°♎07'12		
	-2072 Feb 12 j 15:50	0°♋				-2068 Oct 04 j 04:49	0°♏		
evening set	-2072 Mar 14 j 19:41	21°♋59'27				-2068 Nov 16 j 17:28	0°♑		
	-2072 Mar 26 j 10:24	0°♌				-2068 Dec 28 j 23:31	0°♒		
asc. node	-2072 Apr 16 j 04:38	14°♌05'17		desc. node		-2067 Feb 01 j 14:57	25°♒05'54		
						-2067 Feb 08 j 08:17	0°♓		
conjunction	-2072 May 07 j 06:26	28°♌07'07	0°12'14			-2067 Mar 21 j 13:52	0°♈		
minimum elong	-2072 May 07 j 05:52	28°♌06'12	0°12'15			-2067 May 03 j 09:27	0°♊		
behind sun begin	-2072 May 06 j 16:20	27°♌43'51				-2067 Jun 22 j 18:34	0°♋		
behind sun end	-2072 May 07 j 19:25	28°♌28'32		retrograde		-2067 Aug 08 j 23:10	13°♋12'29		
	-2072 May 10 j 02:55	0°♍		min. Earth dist.		-2067 Sep 06 j 19:45	7°♋30'03	0.47801 AU	
max. Earth dist.	-2072 May 25 j 13:05	10°♍05'58	2.62496 AU	opposition		-2067 Sep 14 j 20:07	4°♋37'40	-3°58'01	
morning rise	-2072 Jun 25 j 12:54	0°♎05'39		greatest brilliancy		-2067 Sep 13 j 19:00	5°♋00'14	-2.3m	
	-2072 Jun 25 j 09:22	0°♏				-2067 Sep 29 j 14:03	30°♋♊		
	-2072 Aug 11 j 18:21	0°☿		direct		-2067 Oct 18 j 01:59	27°♊40'14		
	-2072 Sep 29 j 01:33	0°♎				-2067 Nov 06 j 18:29	0°♋		
	-2072 Nov 18 j 00:18	0°♏		asc. node		-2067 Dec 07 j 00:42	10°♋11'50		
	-2071 Jan 12 j 07:52	0°♑				-2066 Jan 16 j 09:32	0°♌		
retrograde	-2071 Mar 21 j 00:38	20°♑06'41				-2066 Mar 10 j 05:44	0°♍		
opposition	-2071 Apr 22 j 16:45	14°♑01'27	0°25'49			-2066 Apr 29 j 04:26	0°♎		
greatest brilliancy	-2071 Apr 22 j 20:39	13°♑58'23	-2.5m			-2066 Jun 16 j 10:34	0°☿		
desc. node	-2071 Apr 29 j 15:12	11°♑49'58		evening set		-2066 Jul 14 j 18:56	18°☿09'25		
min. Earth dist.	-2071 Apr 30 j 14:49	11°♑31'46	0.43878 AU			-2066 Aug 01 j 21:31	0°♎		
direct	-2071 May 28 j 07:58	6°♑41'18		max. Earth dist.		-2066 Aug 06 j 08:21	2°♑56'39	2.59837 AU	
	-2071 Aug 02 j 15:13	0°♒							
	-2071 Sep 17 j 17:56	0°♓		conjunction		-2066 Aug 30 j 19:33	19°♑21'41	0°59'39	
	-2071 Oct 29 j 17:58	0°♈		minimum elong		-2066 Aug 30 j 20:47	19°♑23'47	0°59'40	

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2066 Sep 15 j 08:13	0°♍		asc. node	-2061 Jul 29 j 23:15	20°♊31'44	
morning rise	-2066 Oct 17 j 22:40	22°♍54'47			-2061 Aug 14 j 23:20	0°♊	
	-2066 Oct 27 j 19:25	0°♌			-2061 Oct 13 j 03:03	0°♌	
	-2066 Dec 07 j 14:23	0°♍		retrograde	-2061 Nov 30 j 05:39	11°♌17'43	
desc. node	-2066 Dec 20 j 14:16	9°♍45'52		opposition	-2060 Jan 08 j 17:35	1°♌56'20	4°30'51
	-2065 Jan 16 j 05:18	0°♎		greatest brilliancy	-2060 Jan 08 j 23:56	1°♌50'03	-1.3m
	-2065 Feb 24 j 08:45	0°♏		min. Earth dist.	-2060 Jan 10 j 20:44	1°♌05'40	0.66809 AU
	-2065 Apr 04 j 23:17	0°♐			-2060 Jan 13 j 15:35	30°♋♊	
	-2065 May 16 j 09:25	0°♑		direct	-2060 Feb 18 j 22:22	21°♊57'17	
	-2065 Jul 01 j 08:01	0°♒			-2060 Mar 29 j 16:12	0°♌	
	-2065 Sep 10 j 04:34	0°♈			-2060 May 29 j 23:28	0°♌	
retrograde	-2065 Sep 21 j 10:02	0°♈50'42			-2060 Jul 16 j 15:39	0°♍	
	-2065 Oct 02 j 08:02	30°♋♑		desc. node	-2060 Aug 11 j 10:01	17°♍46'27	
asc. node	-2065 Oct 24 j 23:04	23°♑21'15			-2060 Aug 28 j 10:08	0°♌	
min. Earth dist.	-2065 Oct 25 j 13:38	23°♑07'00	0.59596 AU		-2060 Oct 07 j 09:33	0°♍	
opposition	-2065 Oct 30 j 23:55	20°♑58'02	0°15'23		-2060 Nov 14 j 21:09	0°♎	
greatest brilliancy	-2065 Oct 30 j 22:35	20°♑59'22	-1.7m	evening set	-2060 Dec 19 j 17:31	27°♎27'24	
direct	-2065 Dec 07 j 06:34	12°♑20'14			-2060 Dec 22 j 23:13	0°♏	
	-2064 Feb 08 j 12:08	0°♈			-2059 Jan 30 j 15:20	0°♐	
	-2064 Apr 06 j 05:52	0°♊					
	-2064 May 26 j 23:20	0°♌		conjunction	-2059 Feb 23 j 07:11	17°♐52'25	-0°58'05
	-2064 Jul 13 j 05:40	0°♌		minimum elong	-2059 Feb 23 j 09:35	17°♐56'52	0°58'05
evening set	-2064 Aug 24 j 05:16	28°♌17'32			-2059 Mar 11 j 17:01	0°♑	
	-2064 Aug 26 j 16:20	0°♍		max. Earth dist.	-2059 Apr 10 j 11:19	21°♑23'56	2.47760 AU
max. Earth dist.	-2064 Sep 08 j 07:12	8°♍50'49	2.48997 AU		-2059 Apr 22 j 17:54	0°♒	
	-2064 Oct 07 j 16:22	0°♌		morning rise	-2059 Apr 25 j 23:03	2°♒13'51	
					-2059 Jun 06 j 01:21	0°♈	
conjunction	-2064 Oct 14 j 20:43	5°♌17'03	0°15'06	asc. node	-2059 Jun 15 j 21:39	6°♈27'25	
minimum elong	-2064 Oct 14 j 21:33	5°♌18'36	0°15'04		-2059 Jul 22 j 19:16	0°♊	
behind sun begin	-2064 Oct 14 j 12:43	5°♌02'18			-2059 Sep 10 j 16:26	0°♌	
behind sun end	-2064 Oct 15 j 06:22	5°♌34'53			-2059 Nov 07 j 00:30	0°♌	
desc. node	-2064 Nov 06 j 12:39	22°♌13'37		retrograde	-2058 Jan 06 j 16:38	16°♌25'31	
	-2064 Nov 16 j 18:20	0°♍		opposition	-2058 Feb 13 j 10:56	7°♌58'37	4°41'53
morning rise	-2064 Dec 11 j 02:59	18°♍44'29		greatest brilliancy	-2058 Feb 14 j 09:48	7°♌36'47	-1.6m
	-2064 Dec 25 j 14:33	0°♎		min. Earth dist.	-2058 Feb 19 j 09:44	5°♌42'36	0.60753 AU
	-2063 Feb 02 j 00:00	0°♏			-2058 Mar 09 j 13:57	30°♋♌	
	-2063 Mar 12 j 19:42	0°♐		direct	-2058 Mar 26 j 09:11	28°♌07'47	
	-2063 Apr 22 j 00:15	0°♑			-2058 Apr 12 j 23:21	0°♌	
	-2063 Jun 03 j 15:55	0°♒			-2058 Jun 20 j 13:31	0°♍	
	-2063 Jul 20 j 16:20	0°♈		desc. node	-2058 Jun 29 j 08:03	5°♍18'25	
asc. node	-2063 Sep 10 j 23:16	26°♈59'07			-2058 Aug 05 j 16:33	0°♌	
	-2063 Sep 18 j 17:22	0°♊			-2058 Sep 15 j 20:33	0°♍	
retrograde	-2063 Oct 26 j 10:41	7°♊42'20			-2058 Oct 24 j 22:34	0°♎	
	-2063 Nov 30 j 03:42	30°♋♈			-2058 Dec 02 j 11:40	0°♏	
min. Earth dist.	-2063 Dec 03 j 20:38	28°♈31'30	0.66353 AU		-2057 Jan 10 j 14:58	0°♐	
opposition	-2063 Dec 05 j 13:46	27°♈50'12	3°00'29		-2057 Feb 20 j 04:19	0°♑	
greatest brilliancy	-2063 Dec 05 j 08:06	27°♈55'54	-1.4m	evening set	-2057 Feb 22 j 20:14	1°♑55'28	
direct	-2062 Jan 14 j 11:24	18°♈17'05			-2057 Apr 03 j 15:26	0°♒	
	-2062 Mar 05 j 08:20	0°♊					
	-2062 May 04 j 15:39	0°♌		conjunction	-2057 Apr 20 j 09:46	11°♑27'42	-0°07'59
	-2062 Jun 23 j 08:23	0°♌		minimum elong	-2057 Apr 20 j 10:10	11°♑28'23	0°07'57
	-2062 Aug 07 j 11:46	0°♍		behind sun begin	-2057 Apr 19 j 14:31	10°♑55'05	
	-2062 Sep 18 j 11:56	0°♌		behind sun end	-2057 Apr 21 j 05:49	12°♑01'40	
desc. node	-2062 Sep 24 j 11:09	4°♌24'37		asc. node	-2057 May 03 j 20:33	20°♑31'10	
evening set	-2062 Oct 14 j 15:48	19°♌34'25		max. Earth dist.	-2057 May 16 j 00:49	28°♑37'13	2.59275 AU
	-2062 Oct 28 j 07:03	0°♍			-2057 May 18 j 02:54	0°♈	
max. Earth dist.	-2062 Dec 02 j 13:50	27°♍29'01	2.37598 AU	morning rise	-2057 Jun 11 j 03:48	15°♈43'12	
	-2062 Dec 05 j 18:38	0°♎			-2057 Jul 03 j 08:56	0°♊	
					-2057 Aug 20 j 02:29	0°♌	
conjunction	-2062 Dec 15 j 09:11	7°♎34'02	-0°50'34		-2057 Oct 08 j 12:37	0°♌	
minimum elong	-2062 Dec 15 j 06:10	7°♎28'06	0°50'36		-2057 Nov 30 j 18:24	0°♍	
	-2061 Jan 12 j 20:37	0°♏		retrograde	-2056 Feb 25 j 01:47	29°♍09'43	
	-2061 Feb 20 j 10:49	0°♐		opposition	-2056 Mar 30 j 13:20	22°♍15'17	2°30'42
morning rise	-2061 Feb 22 j 05:15	1°♐21'14		greatest brilliancy	-2056 Mar 31 j 10:30	21°♍57'08	-2.2m
	-2061 Apr 01 j 09:17	0°♑		min. Earth dist.	-2056 Apr 08 j 02:18	19°♍20'06	0.49028 AU
	-2061 May 13 j 09:21	0°♒		direct	-2056 May 07 j 14:00	13°♍46'48	
	-2061 Jun 27 j 03:53	0°♈		desc. node	-2056 May 16 j 07:32	14°♍17'52	

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2056 Jun 30 j 20:16	0°♄		conjunction	-2051 Aug 15 j 06:36	4°♄18'16	1°07'27
	-2056 Aug 18 j 17:54	0°♍		minimum elong	-2051 Aug 15 j 07:18	4°♄19'25	1°07'28
	-2056 Sep 29 j 14:36	0°♎			-2051 Sep 22 j 08:43	0°♎	
	-2056 Nov 08 j 19:38	0°♏		morning rise	-2051 Sep 30 j 15:46	5°♎43'03	
	-2056 Dec 19 j 06:15	0°♐			-2051 Nov 04 j 04:01	0°♑	
	-2055 Jan 29 j 22:38	0°♒			-2051 Dec 15 j 09:50	0°♒	
	-2055 Mar 14 j 08:10	0°♓		desc. node	-2050 Jan 06 j 06:26	16°♒15'49	
asc. node	-2055 Mar 20 j 18:47	4°♓21'00			-2050 Jan 24 j 13:04	0°♓	
evening set	-2055 Apr 12 j 19:40	19°♓42'59			-2050 Mar 05 j 05:41	0°♏	
	-2055 Apr 28 j 11:07	0°♐			-2050 Apr 14 j 12:43	0°♐	
					-2050 May 27 j 06:53	0°♑	
conjunction	-2055 Jun 01 j 16:21	22°♑10'17	0°39'16		-2050 Jul 17 j 04:24	0°♒	
minimum elong	-2055 Jun 01 j 15:05	22°♑08'15	0°39'18	retrograde	-2050 Sep 05 j 19:53	14°♒19'13	
max. Earth dist.	-2055 Jun 09 j 20:03	27°♑24'22	2.65884 AU	min. Earth dist.	-2050 Oct 07 j 23:49	7°♒19'11	0.55404 AU
	-2055 Jun 13 j 21:16	0°♒		opposition	-2050 Oct 14 j 17:09	4°♒43'06	-1°12'56
morning rise	-2055 Jul 18 j 07:03	21°♒56'20		greatest brilliancy	-2050 Oct 14 j 10:27	4°♒49'34	-1.9m
	-2055 Jul 30 j 23:26	0°♓			-2050 Oct 28 j 03:53	30°♒♑	
	-2055 Sep 16 j 05:20	0°♄		asc. node	-2050 Nov 10 j 15:42	27°♑09'42	
	-2055 Nov 02 j 12:55	0°♎		direct	-2050 Nov 19 j 13:50	26°♑38'05	
	-2055 Dec 20 j 12:29	0°♑			-2050 Dec 13 j 21:16	0°♒	
	-2054 Feb 09 j 04:53	0°♒			-2049 Feb 21 j 17:17	0°♓	
desc. node	-2054 Apr 03 j 08:34	25°♒12'33			-2049 Apr 15 j 23:33	0°♒	
	-2054 Apr 20 j 20:22	0°♓			-2049 Jun 04 j 11:02	0°♓	
retrograde	-2054 May 07 j 05:23	1°♓36'42			-2049 Jul 21 j 07:41	0°♄	
	-2054 May 23 j 08:50	30°♒♒		evening set	-2049 Aug 08 j 08:31	11°♄59'28	
opposition	-2054 Jun 06 j 13:18	26°♒34'52	-4°19'04	max. Earth dist.	-2049 Aug 25 j 08:56	23°♄32'51	2.53695 AU
greatest brilliancy	-2054 Jun 06 j 21:15	26°♒29'32	-2.9m		-2049 Sep 03 j 17:19	0°♎	
min. Earth dist.	-2054 Jun 09 j 07:19	25°♒50'35	0.38126 AU				
direct	-2054 Jul 07 j 12:43	21°♒14'40		conjunction	-2049 Sep 26 j 14:30	16°♎06'11	0°36'37
	-2054 Aug 14 j 18:15	0°♓		minimum elong	-2049 Sep 26 j 16:00	16°♎08'51	0°36'37
	-2054 Oct 08 j 14:15	0°♏			-2049 Oct 15 j 20:54	0°♑	
	-2054 Nov 23 j 12:00	0°♐		morning rise	-2049 Nov 18 j 08:52	24°♑51'04	
	-2053 Jan 07 j 09:28	0°♒		desc. node	-2049 Nov 24 j 05:49	29°♑17'20	
asc. node	-2053 Feb 05 j 16:31	19°♑23'04			-2049 Nov 25 j 04:20	0°♒	
	-2053 Feb 21 j 21:34	0°♓			-2048 Jan 03 j 06:27	0°♓	
	-2053 Apr 09 j 09:08	0°♐			-2048 Feb 10 j 21:09	0°♏	
evening set	-2053 May 23 j 21:49	28°♑20'28			-2048 Mar 20 j 21:33	0°♐	
	-2053 May 26 j 12:34	0°♒			-2048 Apr 30 j 08:40	0°♑	
max. Earth dist.	-2053 Jul 03 j 15:32	24°♒14'19	2.67070 AU		-2048 Jun 12 j 16:21	0°♒	
					-2048 Aug 01 j 03:22	0°♓	
conjunction	-2053 Jul 09 j 14:53	28°♒03'11	1°06'19	asc. node	-2048 Sep 27 j 14:42	22°♑46'30	
minimum elong	-2053 Jul 09 j 14:06	28°♒01'56	1°06'21	retrograde	-2048 Oct 12 j 20:55	24°♑14'24	
	-2053 Jul 12 j 15:57	0°♓		min. Earth dist.	-2048 Nov 18 j 18:24	15°♑33'56	0.64435 AU
morning rise	-2053 Aug 23 j 12:10	26°♓59'00		opposition	-2048 Nov 21 j 22:55	14°♑17'12	2°06'09
	-2053 Aug 28 j 03:15	0°♄		greatest brilliancy	-2048 Nov 21 j 16:10	14°♑23'59	-1.5m
	-2053 Oct 12 j 12:37	0°♎		direct	-2048 Dec 30 j 23:45	5°♑01'44	
	-2053 Nov 25 j 18:44	0°♑			-2047 Mar 20 j 00:01	0°♒	
	-2052 Jan 08 j 02:02	0°♒			-2047 May 13 j 14:21	0°♓	
desc. node	-2052 Feb 19 j 07:51	29°♒35'58			-2047 Jul 01 j 01:06	0°♄	
	-2052 Feb 19 j 21:34	0°♓			-2047 Aug 14 j 19:47	0°♎	
	-2052 Apr 03 j 08:31	0°♏		evening set	-2047 Sep 22 j 21:03	27°♎51'27	
	-2052 May 21 j 13:02	0°♐			-2047 Sep 25 j 19:06	0°♑	
retrograde	-2052 Jul 18 j 16:52	18°♐56'41		desc. node	-2047 Oct 11 j 04:07	11°♑24'47	
min. Earth dist.	-2052 Aug 14 j 17:05	14°♐04'21	0.42835 AU	max. Earth dist.	-2047 Oct 12 j 19:01	12°♑37'40	2.41298 AU
greatest brilliancy	-2052 Aug 21 j 00:01	12°♐02'08	-2.6m		-2047 Nov 04 j 16:13	0°♒	
opposition	-2052 Aug 22 j 09:24	11°♐34'50	-5°44'26				
direct	-2052 Sep 22 j 21:15	5°♐31'54		conjunction	-2047 Nov 19 j 03:08	11°♒09'11	-0°26'11
	-2052 Dec 05 j 17:58	0°♑		minimum elong	-2047 Nov 19 j 01:17	11°♒05'36	0°26'11
asc. node	-2052 Dec 23 j 16:02	9°♑39'27			-2047 Dec 13 j 06:28	0°♓	
	-2051 Jan 27 j 23:42	0°♒			-2046 Jan 20 j 10:29	0°♏	
	-2051 Mar 18 j 19:51	0°♓		morning rise	-2046 Jan 23 j 17:26	2°♏34'44	
	-2051 May 06 j 14:40	0°♒			-2046 Feb 28 j 01:32	0°♐	
	-2051 Jun 23 j 09:37	0°♓			-2046 Apr 09 j 00:28	0°♑	
evening set	-2051 Jun 29 j 21:54	4°♓09'07			-2046 May 21 j 03:06	0°♒	
max. Earth dist.	-2051 Jul 26 j 21:42	21°♓34'12	2.62867 AU		-2046 Jul 05 j 09:15	0°♓	
	-2051 Aug 08 j 18:21	0°♄		asc. node	-2046 Aug 15 j 14:13	24°♑44'36	
					-2046 Aug 25 j 03:22	0°♒	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 36

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

retrograde	-2046 Nov 16 j 13:34	28° $\Pi$ 29'32			-2041 Dec 28 j 15:17	0° $\approx$	
opposition	-2046 Dec 26 j 10:38	18° $\Pi$ 53'30	4°04'13		-2040 Feb 07 j 17:38	0° $\text{H}$	
greatest brilliancy	-2046 Dec 26 j 11:09	18° $\Pi$ 52'59	-1.3m		-2040 Mar 21 j 15:51	0° $\Upsilon$	
min. Earth dist.	-2046 Dec 27 j 01:41	18° $\Pi$ 38'29	0.67408 AU	evening set	-2040 Mar 25 j 20:22	2° $\Upsilon$ 51'26	
direct	-2045 Feb 05 j 07:13	9° $\Pi$ 01'17		asc. node	-2040 Apr 06 j 09:47	10° $\Upsilon$ 40'54	
	-2045 Apr 16 j 12:42	0° $\text{E}$			-2040 May 05 j 10:48	0° $\text{B}$	
	-2045 Jun 09 j 12:00	0° $\Omega$					
	-2045 Jul 25 j 19:36	0° $\text{M}$		conjunction	-2040 May 16 j 20:31	7° $\text{B}$ 28'12	0°22'58
desc. node	-2045 Aug 29 j 02:17	24° $\text{M}$ 06'27		minimum elong	-2040 May 16 j 19:35	7° $\text{B}$ 26'41	0°23'00
	-2045 Sep 06 j 04:20	0° $\text{E}$		max. Earth dist.	-2040 May 31 j 10:36	16° $\text{B}$ 56'39	2.63934 AU
	-2045 Oct 16 j 00:46	0° $\text{M}$			-2040 Jun 20 j 17:33	0° $\Pi$	
evening set	-2045 Nov 23 j 04:29	29° $\text{M}$ 46'17		morning rise	-2040 Jul 04 j 00:24	8° $\Pi$ 29'02	
	-2045 Nov 23 j 11:27	0° $\text{A}$			-2040 Aug 06 j 23:11	0° $\text{E}$	
	-2045 Dec 31 j 12:39	0° $\text{B}$			-2040 Sep 23 j 19:18	0° $\Omega$	
					-2040 Nov 11 j 13:25	0° $\text{M}$	
conjunction	-2044 Jan 28 j 13:35	21° $\text{B}$ 52'24	-1°06'17		-2039 Jan 02 j 01:38	0° $\text{E}$	
minimum elong	-2044 Jan 28 j 13:58	21° $\text{B}$ 53'07	1°06'20		-2039 Mar 09 j 19:04	0° $\text{M}$	
	-2044 Feb 08 j 02:59	0° $\approx$		retrograde	-2039 Apr 05 j 21:13	4° $\text{M}$ 06'32	
max. Earth dist.	-2044 Mar 18 j 19:17	29° $\approx$ 47'24	2.42459 AU	desc. node	-2039 Apr 19 j 23:53	2° $\text{M}$ 52'41	
	-2044 Mar 19 j 02:09	0° $\text{H}$			-2039 May 02 j 10:12	30° $\text{R}$ $\text{E}$	
morning rise	-2044 Apr 03 j 17:08	11° $\text{H}$ 21'36		opposition	-2039 May 07 j 15:27	28° $\text{E}$ 28'55	-1°09'42
	-2044 Apr 30 j 00:59	0° $\Upsilon$		greatest brilliancy	-2039 May 07 j 22:10	28° $\text{E}$ 23'55	-2.7m
	-2044 Jun 13 j 09:38	0° $\text{B}$		min. Earth dist.	-2039 May 14 j 09:03	26° $\text{E}$ 29'05	0.41329 AU
asc. node	-2044 Jul 02 j 13:48	12° $\text{B}$ 25'46		direct	-2039 Jun 10 j 13:26	21° $\text{E}$ 54'27	
	-2044 Jul 30 j 15:00	0° $\Pi$			-2039 Jul 16 j 17:51	0° $\text{M}$	
	-2044 Sep 20 j 08:43	0° $\text{E}$			-2039 Sep 08 j 18:14	0° $\text{A}$	
	-2044 Dec 01 j 02:19	0° $\Omega$			-2039 Oct 22 j 17:34	0° $\text{B}$	
retrograde	-2044 Dec 21 j 22:00	2° $\Omega$ 26'14			-2039 Dec 04 j 07:02	0° $\approx$	
	-2043 Jan 10 j 09:59	30° $\text{R}$ $\text{E}$			-2038 Jan 16 j 09:58	0° $\text{H}$	
opposition	-2043 Jan 29 j 12:23	23° $\text{E}$ 34'31	4°48'56	asc. node	-2038 Feb 22 j 08:57	25° $\text{H}$ 01'38	
greatest brilliancy	-2043 Jan 30 j 05:08	23° $\text{E}$ 18'14	-1.4m		-2038 Mar 01 j 20:02	0° $\Upsilon$	
min. Earth dist.	-2043 Feb 03 j 00:13	21° $\text{E}$ 49'47	0.63904 AU		-2038 Apr 16 j 15:22	0° $\text{B}$	
direct	-2043 Mar 11 j 19:01	13° $\text{E}$ 34'43		evening set	-2038 May 08 j 13:55	14° $\text{B}$ 07'28	
	-2043 May 09 j 13:16	0° $\Omega$			-2038 Jun 02 j 09:57	0° $\Pi$	
	-2043 Jul 01 j 15:51	0° $\text{M}$		max. Earth dist.	-2038 Jun 24 j 11:26	14° $\Pi$ 03'31	2.67249 AU
desc. node	-2043 Jul 16 j 01:52	9° $\text{M}$ 23'36					
	-2043 Aug 14 j 20:40	0° $\text{E}$		conjunction	-2038 Jun 25 j 04:21	14° $\Pi$ 30'29	0°58'38
	-2043 Sep 24 j 08:41	0° $\text{M}$		minimum elong	-2038 Jun 25 j 03:12	14° $\Pi$ 28'38	0°58'40
	-2043 Nov 02 j 02:27	0° $\text{A}$			-2038 Jul 19 j 11:18	0° $\text{E}$	
	-2043 Dec 10 j 09:17	0° $\text{B}$		morning rise	-2038 Aug 09 j 09:20	13° $\text{E}$ 23'40	
	-2042 Jan 18 j 06:25	0° $\approx$			-2038 Sep 04 j 03:36	0° $\Omega$	
evening set	-2042 Jan 30 j 08:50	9° $\approx$ 08'31			-2038 Oct 20 j 02:29	0° $\text{M}$	
	-2042 Feb 27 j 13:36	0° $\text{H}$			-2038 Dec 04 j 08:43	0° $\text{E}$	
					-2037 Jan 18 j 06:31	0° $\text{M}$	
conjunction	-2042 Mar 31 j 15:17	22° $\text{H}$ 54'52	-0°29'05		-2037 Mar 04 j 17:49	0° $\text{A}$	
minimum elong	-2042 Mar 31 j 16:55	22° $\text{H}$ 57'43	0°29'05	desc. node	-2037 Mar 08 j 00:16	2° $\text{A}$ 06'32	
	-2042 Apr 10 j 19:13	0° $\Upsilon$			-2037 Apr 23 j 04:38	0° $\text{B}$	
max. Earth dist.	-2042 May 04 j 02:31	15° $\Upsilon$ 56'34	2.55296 AU	retrograde	-2037 Jun 24 j 09:24	20° $\text{B}$ 29'25	
asc. node	-2042 May 20 j 11:32	26° $\Upsilon$ 54'47		min. Earth dist.	-2037 Jul 21 j 04:44	16° $\text{B}$ 04'00	0.39004 AU
morning rise	-2042 May 25 j 15:21	0° $\text{B}$ 19'52		greatest brilliancy	-2037 Jul 25 j 09:03	14° $\text{B}$ 52'33	-2.8m
	-2042 May 25 j 03:20	0° $\text{B}$		opposition	-2037 Jul 26 j 12:24	14° $\text{B}$ 32'59	-6°44'33
	-2042 Jul 10 j 11:08	0° $\Pi$		direct	-2037 Aug 25 j 10:22	9° $\text{B}$ 20'25	
	-2042 Aug 27 j 17:48	0° $\text{E}$			-2037 Oct 29 j 14:53	0° $\approx$	
	-2042 Oct 17 j 21:45	0° $\Omega$			-2037 Dec 21 j 02:56	0° $\text{H}$	
	-2042 Dec 17 j 10:41	0° $\text{M}$		asc. node	-2036 Jan 10 j 07:51	12° $\text{H}$ 21'46	
retrograde	-2041 Feb 03 j 19:14	11° $\text{M}$ 12'55			-2036 Feb 07 j 18:08	0° $\Upsilon$	
opposition	-2041 Mar 11 j 20:03	3° $\text{M}$ 35'58	3°46'54		-2036 Mar 26 j 20:10	0° $\text{B}$	
greatest brilliancy	-2041 Mar 12 j 22:58	3° $\text{M}$ 11'33	-1.9m		-2036 May 13 j 19:29	0° $\Pi$	
min. Earth dist.	-2041 Mar 19 j 17:59	0° $\text{M}$ 44'15	0.54152 AU	evening set	-2036 Jun 15 j 05:02	20° $\Pi$ 25'14	
	-2041 Mar 21 j 20:40	30° $\text{R}$ $\Omega$			-2036 Jun 30 j 06:29	0° $\text{E}$	
direct	-2041 Apr 20 j 11:11	24° $\Omega$ 21'19		max. Earth dist.	-2036 Jul 17 j 07:02	10° $\text{E}$ 55'02	2.65134 AU
	-2041 May 21 j 04:27	0° $\text{M}$					
desc. node	-2041 Jun 03 j 00:51	4° $\text{M}$ 59'44		conjunction	-2036 Jul 31 j 09:17	20° $\text{E}$ 02'30	1°10'26
	-2041 Jul 18 j 15:56	0° $\text{E}$		minimum elong	-2036 Jul 31 j 09:22	20° $\text{E}$ 02'38	1°10'27
	-2041 Aug 31 j 09:53	0° $\text{M}$			-2036 Aug 15 j 14:52	0° $\Omega$	
	-2041 Oct 10 j 14:55	0° $\text{A}$		morning rise	-2036 Sep 14 j 18:04	20° $\Omega$ 02'23	
	-2041 Nov 18 j 21:34	0° $\text{B}$			-2036 Sep 29 j 11:04	0° $\text{M}$	

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2036 Nov 11 j 17:18	0°♊		opposition	-2031 Dec 13 j 05:52	5°♊51'39	3°27'01
	-2036 Dec 23 j 13:52	0°♋		greatest brilliancy	-2031 Dec 13 j 01:52	5°♊55'39	-1.3m
desc. node	-2035 Jan 22 j 23:24	22°♋16'29			-2031 Dec 29 j 03:33	30°♋♊	
	-2035 Feb 02 j 10:21	0°♋		direct	-2030 Jan 22 j 13:12	26°♋10'34	
	-2035 Mar 14 j 23:11	0°♌			-2030 Feb 18 j 03:22	0°♌	
	-2035 Apr 25 j 11:52	0°♍			-2030 Apr 28 j 04:13	0°♍	
	-2035 Jun 10 j 07:35	0°♎			-2030 Jun 18 j 01:35	0°♎	
retrograde	-2035 Aug 19 j 16:08	25°♎35'06			-2030 Aug 02 j 14:16	0°♏	
min. Earth dist.	-2035 Sep 18 j 16:50	19°♎24'31	0.50590 AU		-2030 Sep 13 j 17:49	0°♏	
opposition	-2035 Sep 26 j 10:37	16°♎32'09	-2°55'10	desc. node	-2030 Sep 14 j 20:28	0°♏49'01	
greatest brilliancy	-2035 Sep 25 j 16:28	16°♎49'00	-2.1m		-2030 Oct 23 j 13:37	0°♏	
direct	-2035 Oct 30 j 16:01	9°♎08'14		evening set	-2030 Oct 28 j 02:22	3°♏29'40	
asc. node	-2035 Nov 27 j 06:43	13°♎28'17			-2030 Dec 01 j 00:45	0°♏	
	-2034 Jan 07 j 07:26	0°♏					
	-2034 Mar 04 j 04:02	0°♐		conjunction	-2030 Dec 31 j 03:01	23°♏44'09	-1°00'19
	-2034 Apr 24 j 01:13	0°♑		minimum elong	-2030 Dec 31 j 00:34	23°♏39'20	1°00'21
	-2034 Jun 11 j 16:40	0°♒			-2029 Jan 08 j 02:01	0°♒	
evening set	-2034 Jul 23 j 12:51	26°♒52'32		max. Earth dist.	-2029 Jan 31 j 06:10	18°♒07'18	2.37907 AU
	-2034 Jul 28 j 06:57	0°♓			-2029 Feb 15 j 15:21	0°♓	
max. Earth dist.	-2034 Aug 12 j 20:29	10°♓20'36	2.57815 AU	morning rise	-2029 Mar 10 j 02:29	17°♓03'05	
					-2029 Mar 27 j 12:46	0°♔	
conjunction	-2034 Sep 09 j 04:21	28°♓56'05	0°52'46		-2029 May 08 j 10:51	0°♕	
minimum elong	-2034 Sep 09 j 05:49	28°♓58'35	0°52'46		-2029 Jun 21 j 23:25	0°♕	
	-2034 Sep 10 j 17:21	0°♖		asc. node	-2029 Jul 20 j 04:13	17°♕56'44	
	-2034 Oct 23 j 01:56	0°♗			-2029 Aug 08 j 23:58	0°♖	
morning rise	-2034 Oct 28 j 16:25	4°♗04'16			-2029 Oct 03 j 03:38	0°♗	
	-2034 Dec 02 j 16:42	0°♘		retrograde	-2029 Dec 08 j 07:08	19°♗11'23	
desc. node	-2034 Dec 10 j 21:54	6°♘11'43		opposition	-2028 Jan 16 j 12:52	9°♗59'35	4°41'02
	-2033 Jan 11 j 02:44	0°♙		greatest brilliancy	-2028 Jan 16 j 22:54	9°♗49'42	-1.3m
	-2033 Feb 19 j 01:05	0°♚		min. Earth dist.	-2028 Jan 19 j 12:37	8°♗48'58	0.66059 AU
	-2033 Mar 30 j 09:13	0°♛			-2028 Feb 24 j 22:55	30°♘♑	
	-2033 May 10 j 07:59	0°♜		direct	-2028 Feb 26 j 20:11	29°♘58'40	
	-2033 Jun 23 j 21:50	0°♝			-2028 Feb 28 j 17:45	0°♞	
	-2033 Aug 18 j 13:01	0°♞			-2028 May 23 j 00:05	0°♟	
retrograde	-2033 Sep 29 j 19:37	9°♞56'44			-2028 Jul 11 j 01:31	0°♠	
asc. node	-2033 Oct 15 j 06:09	8°♞16'32		desc. node	-2028 Aug 01 j 18:26	14°♠43'13	
min. Earth dist.	-2033 Nov 03 j 23:52	1°♞51'26	0.61566 AU		-2028 Aug 23 j 06:37	0°♑	
opposition	-2033 Nov 08 j 15:16	0°♞00'26	0°59'48		-2028 Oct 02 j 10:12	0°♒	
greatest brilliancy	-2033 Nov 08 j 10:41	0°♞05'00	-1.6m		-2028 Nov 09 j 23:46	0°♓	
	-2033 Nov 08 j 15:42	30°♞♑			-2028 Dec 18 j 03:11	0°♔	
direct	-2033 Dec 16 j 14:37	21°♑07'36		evening set	-2027 Jan 04 j 04:13	13°♔18'16	
	-2032 Jan 27 j 18:59	0°♒			-2027 Jan 25 j 20:20	0°♕	
	-2032 Mar 30 j 23:28	0°♑			-2027 Mar 06 j 22:51	0°♔	
	-2032 May 21 j 19:25	0°♒					
	-2032 Jul 08 j 11:07	0°♓		conjunction	-2027 Mar 09 j 04:51	1°♔38'36	-0°48'59
	-2032 Aug 22 j 00:47	0°♓		minimum elong	-2027 Mar 09 j 07:22	1°♔43'11	0°48'58
evening set	-2032 Sep 03 j 10:03	8°♓40'24			-2027 Apr 18 j 00:10	0°♕	
max. Earth dist.	-2032 Sep 18 j 07:21	19°♓17'35	2.46228 AU	max. Earth dist.	-2027 Apr 20 j 00:11	1°♕23'24	2.50573 AU
	-2032 Oct 03 j 00:52	0°♑		morning rise	-2027 May 07 j 08:16	13°♕17'48	
					-2027 Jun 01 j 06:13	0°♕	
conjunction	-2032 Oct 26 j 19:35	17°♑40'59	0°00'45	asc. node	-2027 Jun 06 j 03:45	3°♕13'42	
minimum elong	-2032 Oct 26 j 19:40	17°♑41'08	0°00'44		-2027 Jul 17 j 18:28	0°♖	
behind sun begin	-2032 Oct 25 j 19:54	16°♑56'26			-2027 Sep 04 j 21:21	0°♗	
behind sun end	-2032 Oct 27 j 19:26	18°♑25'53			-2027 Oct 29 j 01:30	0°♟	
desc. node	-2032 Oct 27 j 21:46	18°♑30'16		retrograde	-2026 Jan 16 j 07:33	25°♑19'03	
	-2032 Nov 12 j 01:05	0°♒		opposition	-2026 Feb 22 j 13:09	17°♑08'03	4°28'46
	-2032 Dec 20 j 18:50	0°♓		greatest brilliancy	-2026 Feb 23 j 14:36	16°♑44'08	-1.7m
morning rise	-2032 Dec 26 j 02:05	4°♓08'52		min. Earth dist.	-2026 Mar 01 j 06:53	14°♑36'21	0.58632 AU
	-2031 Jan 28 j 01:50	0°♔		direct	-2026 Apr 04 j 03:46	7°♑26'11	
	-2031 Mar 07 j 18:59	0°♕			-2026 Jun 12 j 01:20	0°♖	
	-2031 Apr 16 j 20:09	0°♜		desc. node	-2026 Jun 19 j 17:09	4°♖16'59	
	-2031 May 29 j 04:51	0°♝			-2026 Jul 30 j 08:56	0°♗	
	-2031 Jul 14 j 07:47	0°♞			-2026 Sep 10 j 04:53	0°♘	
asc. node	-2031 Sep 01 j 05:27	27°♞14'49			-2026 Oct 19 j 14:12	0°♙	
	-2031 Sep 07 j 00:59	0°♑			-2026 Nov 27 j 08:06	0°♒	
retrograde	-2031 Nov 03 j 03:33	15°♑38'54			-2025 Jan 05 j 15:11	0°♓	
min. Earth dist.	-2031 Dec 12 j 08:58	6°♑12'35	0.67018 AU		-2025 Feb 15 j 07:51	0°♔	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 38

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

evening set	-2025 Mar 07 j 00:58	14° $\text{X}$ 03'54				-2021 Nov 20 j 13:05	0° $\text{L}$		
	-2025 Mar 29 j 21:45	0° $\text{Y}$				-2020 Jan 02 j 05:45	0° $\text{M}$		
asc. node	-2025 Apr 24 j 02:29	17° $\text{Y}$ 07'32			desc. node	-2020 Feb 09 j 16:20	27° $\text{M}$ 29'55		
						-2020 Feb 13 j 03:55	0° $\text{X}$		
conjunction	-2025 Apr 30 j 19:12	21° $\text{Y}$ 36'30	0°03'58			-2020 Mar 26 j 03:58	0° $\text{Z}$		
minimum elong	-2025 Apr 30 j 19:02	21° $\text{Y}$ 36'13	0°03'59			-2020 May 09 j 11:13	0° $\approx$		
behind sun begin	-2025 Apr 29 j 21:52	21° $\text{Y}$ 00'54				-2020 Jul 08 j 00:50	0° $\text{X}$		
behind sun end	-2025 May 01 j 16:12	22° $\text{Y}$ 11'31			retrograde	-2020 Jul 31 j 03:48	3° $\text{X}$ 37'44		
	-2025 May 13 j 10:39	0° $\text{Z}$				-2020 Aug 22 j 20:02	30° $\text{R}$ $\approx$		
max. Earth dist.	-2025 May 22 j 07:22	5° $\text{Z}$ 49'44	2.61153 AU		min. Earth dist.	-2020 Aug 28 j 03:12	28° $\approx$ 18'48	0.45529 AU	
morning rise	-2025 Jun 20 j 02:12	24° $\text{Z}$ 30'27			greatest brilliancy	-2020 Sep 03 j 22:44	25° $\approx$ 57'51	-2.4m	
	-2025 Jun 28 j 15:47	0° $\text{II}$			opposition	-2020 Sep 05 j 04:31	25° $\approx$ 32'03	-4°45'47	
	-2025 Aug 15 j 03:27	0° $\text{Z}$			direct	-2020 Oct 07 j 14:53	18° $\approx$ 58'13		
	-2025 Oct 02 j 20:22	0° $\Omega$				-2020 Nov 22 j 15:58	0° $\text{X}$		
	-2025 Nov 22 j 22:16	0° $\text{M}$			asc. node	-2020 Dec 13 j 22:30	9° $\text{X}$ 42'33		
	-2024 Jan 22 j 02:14	0° $\text{L}$				-2019 Jan 20 j 22:20	0° $\text{Y}$		
retrograde	-2024 Mar 09 j 15:46	11° $\text{L}$ 01'05				-2019 Mar 13 j 06:37	0° $\text{Z}$		
opposition	-2024 Apr 12 j 03:26	4° $\text{L}$ 33'01	1°26'04			-2019 May 01 j 16:19	0° $\text{II}$		
greatest brilliancy	-2024 Apr 12 j 16:12	4° $\text{L}$ 22'30	-2.4m			-2019 Jun 18 j 17:55	0° $\text{Z}$		
min. Earth dist.	-2024 Apr 20 j 12:34	1° $\text{L}$ 47'53	0.46152 AU		evening set	-2019 Jul 08 j 09:20	12° $\text{Z}$ 32'50		
	-2024 Apr 26 j 11:59	30° $\text{R}$ $\text{M}$			max. Earth dist.	-2019 Aug 01 j 20:50	28° $\text{Z}$ 28'10	2.61294 AU	
desc. node	-2024 May 06 j 16:58	27° $\text{M}$ 41'30				-2019 Aug 04 j 04:39	0° $\Omega$		
direct	-2024 May 18 j 22:44	26° $\text{M}$ 39'12							
	-2024 Jun 10 j 13:46	0° $\text{L}$			conjunction	-2019 Aug 24 j 01:00	13° $\Omega$ 12'07	1°03'32	
	-2024 Aug 09 j 23:00	0° $\text{M}$			minimum elong	-2019 Aug 24 j 02:01	13° $\Omega$ 13'51	1°03'33	
	-2024 Sep 22 j 16:29	0° $\text{X}$				-2019 Sep 17 j 17:59	0° $\text{M}$		
	-2024 Nov 02 j 17:45	0° $\text{Z}$			morning rise	-2019 Oct 10 j 06:51	15° $\text{M}$ 41'30		
	-2024 Dec 13 j 17:05	0° $\approx$				-2019 Oct 30 j 09:37	0° $\text{L}$		
	-2023 Jan 24 j 18:25	0° $\text{X}$				-2019 Dec 10 j 09:57	0° $\text{M}$		
	-2023 Mar 09 j 10:38	0° $\text{Y}$			desc. node	-2019 Dec 27 j 16:00	12° $\text{M}$ 54'28		
asc. node	-2023 Mar 11 j 00:34	1° $\text{Y}$ 03'51				-2018 Jan 19 j 06:15	0° $\text{X}$		
evening set	-2023 Apr 22 j 11:23	29° $\text{Y}$ 10'03				-2018 Feb 27 j 14:56	0° $\text{Z}$		
	-2023 Apr 23 j 18:01	0° $\text{Z}$				-2018 Apr 08 j 10:56	0° $\approx$		
	-2023 Jun 09 j 06:20	0° $\text{II}$				-2018 May 20 j 06:33	0° $\text{X}$		
						-2018 Jul 06 j 12:56	0° $\text{Y}$		
conjunction	-2023 Jun 10 j 09:28	0° $\text{II}$ 43'24	0°47'21		retrograde	-2018 Sep 14 j 22:33	24° $\text{Y}$ 25'37		
minimum elong	-2023 Jun 10 j 08:09	0° $\text{II}$ 41'18	0°47'23		min. Earth dist.	-2018 Oct 18 j 05:13	17° $\text{Y}$ 00'43	0.57820 AU	
max. Earth dist.	-2023 Jun 15 j 05:52	3° $\text{II}$ 49'25	2.66600 AU		opposition	-2018 Oct 24 j 05:57	14° $\text{Y}$ 38'45	-0°19'59	
morning rise	-2023 Jul 26 j 09:06	0° $\text{Z}$ 02'29			greatest brilliancy	-2018 Oct 24 j 04:21	14° $\text{Y}$ 40'19	-1.8m	
	-2023 Jul 26 j 07:33	0° $\text{Z}$			asc. node	-2018 Oct 31 j 20:45	11° $\text{Y}$ 45'48		
	-2023 Sep 11 j 07:29	0° $\Omega$			direct	-2018 Nov 29 j 22:44	6° $\text{Y}$ 14'28		
	-2023 Oct 28 j 01:08	0° $\text{M}$				-2017 Feb 13 j 18:18	0° $\text{Z}$		
	-2023 Dec 13 j 19:14	0° $\text{L}$				-2017 Apr 10 j 07:28	0° $\text{II}$		
	-2022 Jan 30 j 13:16	0° $\text{M}$				-2017 May 30 j 12:07	0° $\text{Z}$		
	-2022 Mar 23 j 23:00	0° $\text{X}$				-2017 Jul 16 j 15:09	0° $\Omega$		
desc. node	-2022 Mar 24 j 16:16	0° $\text{X}$ 21'57			evening set	-2017 Aug 17 j 19:28	21° $\Omega$ 32'01		
retrograde	-2022 May 25 j 06:54	19° $\text{X}$ 16'34				-2017 Aug 30 j 02:35	0° $\text{M}$		
opposition	-2022 Jun 24 j 17:51	14° $\text{X}$ 12'39	-5°47'55		max. Earth dist.	-2017 Sep 02 j 11:11	2° $\text{M}$ 20'08	2.51164 AU	
min. Earth dist.	-2022 Jun 24 j 10:03	14° $\text{X}$ 17'51	0.37582 AU						
greatest brilliancy	-2022 Jun 24 j 14:43	14° $\text{X}$ 14'45	-2.9m		conjunction	-2017 Oct 07 j 06:18	27° $\text{M}$ 06'58	0°24'54	
direct	-2022 Jul 24 j 18:56	9° $\text{X}$ 12'23			minimum elong	-2017 Oct 07 j 07:31	27° $\text{M}$ 09'10	0°24'53	
	-2022 Sep 26 j 11:24	0° $\text{Z}$				-2017 Oct 11 j 05:18	0° $\text{L}$		
	-2022 Nov 15 j 17:06	0° $\approx$			desc. node	-2017 Nov 14 j 14:37	25° $\text{L}$ 34'46		
	-2021 Jan 01 j 05:00	0° $\text{X}$				-2017 Nov 20 j 10:33	0° $\text{M}$		
asc. node	-2021 Jan 26 j 23:33	16° $\text{X}$ 43'46			morning rise	-2017 Dec 01 j 08:29	8° $\text{M}$ 19'53		
	-2021 Feb 16 j 12:45	0° $\text{Y}$				-2017 Dec 29 j 09:42	0° $\text{X}$		
	-2021 Apr 04 j 11:06	0° $\text{Z}$				-2016 Feb 05 j 21:23	0° $\text{Z}$		
	-2021 May 21 j 20:26	0° $\text{II}$				-2016 Mar 15 j 18:25	0° $\approx$		
evening set	-2021 Jun 01 j 10:55	6° $\text{II}$ 42'33				-2016 Apr 25 j 00:08	0° $\text{X}$		
	-2021 Jul 08 j 02:11	0° $\text{Z}$				-2016 Jun 06 j 19:47	0° $\text{Y}$		
max. Earth dist.	-2021 Jul 08 j 23:40	0° $\text{Z}$ 34'20	2.66614 AU			-2016 Jul 24 j 12:37	0° $\text{Z}$		
					asc. node	-2016 Sep 17 j 20:37	26° $\text{Z}$ 25'06		
conjunction	-2021 Jul 17 j 20:32	6° $\text{Z}$ 15'21	1°09'00			-2016 Sep 30 j 09:34	0° $\text{II}$		
minimum elong	-2021 Jul 17 j 20:03	6° $\text{Z}$ 14'34	1°09'03		retrograde	-2016 Oct 20 j 17:32	2° $\text{II}$ 29'41		
	-2021 Aug 23 j 12:14	0° $\Omega$				-2016 Nov 08 j 21:42	30° $\text{R}$ $\text{Z}$		
morning rise	-2021 Aug 31 j 18:39	5° $\Omega$ 25'22			min. Earth dist.	-2016 Nov 27 j 11:56	23° $\text{Z}$ 31'47	0.65616 AU	
	-2021 Oct 07 j 16:37	0° $\text{M}$			opposition	-2016 Nov 29 j 20:42	22° $\text{Z}$ 34'48	2°39'18	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 39

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

greatest brilliancy	-2016 Nov 29 j 14:09	22° $\text{♄}$ 41'22	-1.4m		-2010 Feb 22 j 18:55	0° $\text{♄}$	
direct	-2015 Jan 08 j 09:40	13° $\text{♄}$ 08'52			-2010 Apr 06 j 02:10	0° $\text{♄}$	
	-2015 Mar 11 j 08:01	0° $\text{♄}$					
	-2015 May 07 j 19:55	0° $\text{♄}$		conjunction	-2010 Apr 12 j 03:29	4° $\text{♄}$ 10'40	-0°16'55
	-2015 Jun 26 j 00:25	0° $\text{♄}$		minimum elong	-2010 Apr 12 j 04:24	4° $\text{♄}$ 12'14	0°16'54
	-2015 Aug 10 j 01:21	0° $\text{♄}$		asc. node	-2010 May 10 j 17:54	23° $\text{♄}$ 33'12	
	-2015 Sep 21 j 02:20	0° $\text{♄}$		max. Earth dist.	-2010 May 11 j 04:28	23° $\text{♄}$ 50'49	2.57583 AU
desc. node	-2015 Oct 01 j 12:47	7° $\text{♄}$ 43'14			-2010 May 20 j 10:38	0° $\text{♄}$	
evening set	-2015 Oct 04 j 21:03	10° $\text{♄}$ 13'00		morning rise	-2010 Jun 04 j 06:04	9° $\text{♄}$ 44'00	
	-2015 Oct 30 j 23:10	0° $\text{♄}$			-2010 Jul 05 j 16:13	0° $\text{♄}$	
max. Earth dist.	-2015 Nov 03 j 06:21	2° $\text{♄}$ 32'16	2.38916 AU		-2010 Aug 22 j 13:53	0° $\text{♄}$	
					-2010 Oct 11 j 14:27	0° $\text{♄}$	
conjunction	-2015 Dec 03 j 14:06	26° $\text{♄}$ 08'11	-0°40'48		-2010 Dec 05 j 24:00	0° $\text{♄}$	
minimum elong	-2015 Dec 03 j 11:21	26° $\text{♄}$ 02'47	0°40'48	retrograde	-2009 Feb 15 j 12:28	21° $\text{♄}$ 34'48	
	-2015 Dec 08 j 12:11	0° $\text{♄}$		opposition	-2009 Mar 22 j 17:02	14° $\text{♄}$ 20'29	3°07'49
	-2014 Jan 15 j 14:58	0° $\text{♄}$		greatest brilliancy	-2009 Mar 23 j 17:46	13° $\text{♄}$ 58'39	-2.1m
morning rise	-2014 Feb 09 j 10:21	19° $\text{♄}$ 22'28		min. Earth dist.	-2009 Mar 31 j 01:22	11° $\text{♄}$ 24'14	0.51355 AU
	-2014 Feb 23 j 04:56	0° $\text{♄}$		direct	-2009 Apr 30 j 13:03	5° $\text{♄}$ 28'39	
	-2014 Apr 04 j 02:23	0° $\text{♄}$		desc. node	-2009 May 24 j 08:49	9° $\text{♄}$ 03'55	
	-2014 May 16 j 01:56	0° $\text{♄}$			-2009 Jul 09 j 11:19	0° $\text{♄}$	
	-2014 Jun 29 j 22:41	0° $\text{♄}$			-2009 Aug 24 j 12:44	0° $\text{♄}$	
asc. node	-2014 Aug 05 j 20:53	22° $\text{♄}$ 47'52			-2009 Oct 04 j 13:24	0° $\text{♄}$	
	-2014 Aug 18 j 07:49	0° $\text{♄}$			-2009 Nov 13 j 07:04	0° $\text{♄}$	
	-2014 Oct 20 j 22:48	0° $\text{♄}$			-2009 Dec 23 j 08:52	0° $\text{♄}$	
retrograde	-2014 Nov 24 j 08:54	6° $\text{♄}$ 17'31			-2008 Feb 02 j 17:26	0° $\text{♄}$	
	-2014 Dec 25 j 21:01	30° $\text{♄}$ 11			-2008 Mar 16 j 20:34	0° $\text{♄}$	
opposition	-2013 Jan 03 j 01:46	26° $\text{♄}$ 49'19	4°20'57	asc. node	-2008 Mar 27 j 16:40	7° $\text{♄}$ 20'36	
greatest brilliancy	-2013 Jan 03 j 05:25	26° $\text{♄}$ 45'41	-1.3m	evening set	-2008 Apr 05 j 06:55	13° $\text{♄}$ 06'55	
min. Earth dist.	-2013 Jan 04 j 13:07	26° $\text{♄}$ 14'12	0.67204 AU		-2008 Apr 30 j 18:38	0° $\text{♄}$	
direct	-2013 Feb 13 j 03:48	16° $\text{♄}$ 52'43					
	-2013 Apr 06 j 22:31	0° $\text{♄}$		conjunction	-2008 May 26 j 00:35	16° $\text{♄}$ 26'21	0°32'46
	-2013 Jun 03 j 11:25	0° $\text{♄}$		minimum elong	-2008 May 25 j 23:24	16° $\text{♄}$ 24'27	0°32'48
	-2013 Jul 20 j 14:24	0° $\text{♄}$		max. Earth dist.	-2008 Jun 06 j 01:14	23° $\text{♄}$ 32'56	2.65116 AU
desc. node	-2013 Aug 19 j 11:22	20° $\text{♄}$ 46'12			-2008 Jun 16 j 02:27	0° $\text{♄}$	
	-2013 Sep 01 j 05:52	0° $\text{♄}$		morning rise	-2008 Jul 12 j 06:15	16° $\text{♄}$ 41'25	
	-2013 Oct 11 j 04:51	0° $\text{♄}$			-2008 Aug 02 j 05:34	0° $\text{♄}$	
	-2013 Nov 18 j 16:13	0° $\text{♄}$			-2008 Sep 18 j 17:03	0° $\text{♄}$	
evening set	-2013 Dec 08 j 15:07	15° $\text{♄}$ 44'13			-2008 Nov 05 j 14:07	0° $\text{♄}$	
	-2013 Dec 26 j 17:38	0° $\text{♄}$			-2008 Dec 24 j 19:24	0° $\text{♄}$	
	-2012 Feb 03 j 08:10	0° $\text{♄}$			-2007 Feb 17 j 04:11	0° $\text{♄}$	
				desc. node	-2007 Apr 10 j 09:36	18° $\text{♄}$ 29'48	
conjunction	-2012 Feb 12 j 23:03	7° $\text{♄}$ 20'13	-1°03'03	retrograde	-2007 Apr 23 j 03:48	19° $\text{♄}$ 28'21	
minimum elong	-2012 Feb 13 j 00:51	7° $\text{♄}$ 23'37	1°03'05	opposition	-2007 May 23 j 23:16	14° $\text{♄}$ 14'58	-2°56'56
	-2012 Mar 14 j 07:26	0° $\text{♄}$		greatest brilliancy	-2007 May 24 j 10:16	14° $\text{♄}$ 07'17	-2.8m
max. Earth dist.	-2012 Apr 01 j 22:24	13° $\text{♄}$ 30'52	2.45389 AU	min. Earth dist.	-2007 May 28 j 20:14	12° $\text{♄}$ 53'35	0.39251 AU
morning rise	-2012 Apr 16 j 17:10	24° $\text{♄}$ 01'24		direct	-2007 Jun 25 j 03:38	8° $\text{♄}$ 25'32	
	-2012 Apr 25 j 05:59	0° $\text{♄}$			-2007 Aug 27 j 20:11	0° $\text{♄}$	
	-2012 Jun 08 j 12:08	0° $\text{♄}$			-2007 Oct 14 j 16:35	0° $\text{♄}$	
asc. node	-2012 Jun 22 j 19:11	9° $\text{♄}$ 20'27			-2007 Nov 27 j 18:27	0° $\text{♄}$	
	-2012 Jul 25 j 08:50	0° $\text{♄}$			-2006 Jan 10 j 17:34	0° $\text{♄}$	
	-2012 Sep 13 j 20:02	0° $\text{♄}$		asc. node	-2006 Feb 12 j 14:15	22° $\text{♄}$ 00'55	
	-2012 Nov 13 j 10:37	0° $\text{♄}$			-2006 Feb 24 j 16:15	0° $\text{♄}$	
retrograde	-2012 Dec 30 j 18:37	10° $\text{♄}$ 48'14			-2006 Apr 11 j 19:22	0° $\text{♄}$	
opposition	-2011 Feb 06 j 22:55	2° $\text{♄}$ 09'44	4°46'34	evening set	-2006 May 17 j 11:04	22° $\text{♄}$ 48'14	
greatest brilliancy	-2011 Feb 07 j 19:14	1° $\text{♄}$ 50'11	-1.5m		-2006 May 28 j 18:24	0° $\text{♄}$	
min. Earth dist.	-2011 Feb 12 j 06:49	0° $\text{♄}$ 06'48	0.62279 AU	max. Earth dist.	-2006 Jun 29 j 18:59	20° $\text{♄}$ 22'46	2.67261 AU
	-2011 Feb 12 j 13:58	30° $\text{♄}$ 58					
direct	-2011 Mar 20 j 02:18	22° $\text{♄}$ 13'47		conjunction	-2006 Jul 03 j 11:57	22° $\text{♄}$ 44'34	1°03'32
	-2011 Apr 27 j 01:22	0° $\text{♄}$		minimum elong	-2006 Jul 03 j 10:59	22° $\text{♄}$ 43'02	1°03'35
	-2011 Jun 24 j 22:07	0° $\text{♄}$			-2006 Jul 14 j 20:48	0° $\text{♄}$	
desc. node	-2011 Jul 06 j 09:48	7° $\text{♄}$ 12'22		morning rise	-2006 Aug 17 j 11:02	21° $\text{♄}$ 35'09	
	-2011 Aug 09 j 04:08	0° $\text{♄}$			-2006 Aug 30 j 10:28	0° $\text{♄}$	
	-2011 Sep 19 j 01:40	0° $\text{♄}$			-2006 Oct 15 j 02:06	0° $\text{♄}$	
	-2011 Oct 28 j 00:05	0° $\text{♄}$			-2006 Nov 28 j 18:27	0° $\text{♄}$	
	-2011 Dec 05 j 10:02	0° $\text{♄}$			-2005 Jan 11 j 17:17	0° $\text{♄}$	
	-2010 Jan 13 j 09:42	0° $\text{♄}$			-2005 Feb 24 j 11:36	0° $\text{♄}$	
evening set	-2010 Feb 12 j 23:22	22° $\text{♄}$ 49'40		desc. node	-2005 Feb 26 j 09:16	1° $\text{♄}$ 17'43	

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-2005 Apr 10 j 16:24	0°♁				-2000 Mar 24 j 02:33	0°♂		
	-2005 Jun 04 j 22:23	0°♂				-2000 May 16 j 10:35	0°♂		
retrograde	-2005 Jul 09 j 06:29	7°♂26'53				-2000 Jul 03 j 14:01	0°♂		
min. Earth dist.	-2005 Aug 04 j 21:23	2°♂51'00	0.40895 AU			-2000 Aug 17 j 07:59	0°♂		
greatest brilliancy	-2005 Aug 10 j 10:21	1°♂09'15	-2.7m	evening set		-2000 Sep 14 j 05:13	19°♂42'34		
opposition	-2005 Aug 11 j 19:20	0°♂43'45	-6°20'34			-2000 Sep 28 j 08:50	0°♂		
	-2005 Aug 14 j 04:34	30°♂		max. Earth dist.		-2000 Sep 30 j 17:15	1°♂43'37	2.43473 AU	
direct	-2005 Sep 11 j 13:05	25°♂05'24		desc. node		-2000 Oct 18 j 05:59	14°♂45'32		
	-2005 Oct 10 j 07:49	0°♂				-2000 Nov 07 j 08:19	0°♂		
	-2005 Dec 12 j 19:36	0°♂							
asc. node	-2005 Dec 31 j 13:14	10°♂48'53		conjunction		-2000 Nov 08 j 15:03	0°♂58'50	-0°14'32	
	-2004 Feb 01 j 14:36	0°♂		minimum elong		-2000 Nov 08 j 14:03	0°♂56'56	0°14'33	
	-2004 Mar 21 j 13:56	0°♂		behind sun begin		-2000 Nov 08 j 02:30	0°♂34'48		
	-2004 May 08 j 23:43	0°♂		behind sun end		-2000 Nov 09 j 01:37	1°♂19'04		
evening set	-2004 Jun 23 j 15:28	28°♂43'39				-2000 Dec 16 j 00:30	0°♂		
	-2004 Jun 25 j 15:27	0°♂		morning rise		-1999 Jan 10 j 22:13	20°♂20'17		
max. Earth dist.	-2004 Jul 22 j 21:42	17°♂30'40	2.63987 AU			-1999 Jan 23 j 05:39	0°♂		
						-1999 Mar 02 j 20:59	0°♂		
conjunction	-2004 Aug 08 j 20:29	28°♂34'12	1°09'15			-1999 Apr 11 j 19:32	0°♂		
minimum elong	-2004 Aug 08 j 20:56	28°♂34'56	1°09'17			-1999 May 23 j 22:46	0°♂		
	-2004 Aug 11 j 00:41	0°♂				-1999 Jul 08 j 10:13	0°♂		
morning rise	-2004 Sep 23 j 16:40	29°♂15'49		asc. node		-1999 Aug 22 j 11:35	26°♂24'23		
	-2004 Sep 24 j 18:32	0°♂				-1999 Aug 29 j 07:34	0°♂		
	-2004 Nov 06 j 19:13	0°♂		retrograde		-1999 Nov 10 j 20:29	23°♂29'29		
	-2004 Dec 18 j 07:59	0°♂		opposition		-1999 Dec 20 j 20:33	13°♂48'06	3°49'58	
desc. node	-2003 Jan 13 j 07:58	19°♂13'10		greatest brilliancy		-1999 Dec 20 j 18:52	13°♂49'47	-1.3m	
	-2003 Jan 27 j 18:34	0°♂		min. Earth dist.		-1999 Dec 20 j 19:54	13°♂48'45	0.67357 AU	
	-2003 Mar 08 j 19:03	0°♂		direct		-1998 Jan 30 j 11:49	4°♂00'13		
	-2003 Apr 18 j 12:07	0°♂				-1998 Apr 20 j 23:50	0°♂		
	-2003 Jun 01 j 03:34	0°♂				-1998 Jun 12 j 13:26	0°♂		
	-2003 Jul 27 j 03:56	0°♂				-1998 Jul 28 j 14:05	0°♂		
retrograde	-2003 Aug 29 j 17:04	6°♂59'58		desc. node		-1998 Sep 05 j 03:50	27°♂15'50		
min. Earth dist.	-2003 Sep 29 j 21:57	0°♂21'39	0.53311 AU			-1998 Sep 08 j 21:38	0°♂		
	-2003 Sep 30 j 21:01	30°♂				-1998 Oct 18 j 18:44	0°♂		
opposition	-2003 Oct 07 j 03:44	27°♂36'19	-1°54'49	evening set		-1998 Nov 11 j 13:02	18°♂27'05		
greatest brilliancy	-2003 Oct 06 j 16:29	27°♂47'01	-2.0m			-1998 Nov 26 j 05:58	0°♂		
direct	-2003 Nov 11 j 08:09	19°♂48'27				-1997 Jan 03 j 07:03	0°♂		
asc. node	-2003 Nov 17 j 13:03	20°♂03'02							
	-2003 Dec 26 j 04:55	0°♂		conjunction		-1997 Jan 16 j 05:40	10°♂08'53	-1°05'35	
	-2002 Feb 25 j 14:20	0°♂		minimum elong		-1997 Jan 16 j 04:43	10°♂07'02	1°05'38	
	-2002 Apr 18 j 17:51	0°♂				-1997 Feb 10 j 20:23	0°♂		
	-2002 Jun 06 j 20:56	0°♂		max. Earth dist.		-1997 Mar 04 j 13:03	16°♂28'36	2.40191 AU	
	-2002 Jul 23 j 15:45	0°♂				-1997 Mar 22 j 17:40	0°♂		
evening set	-2002 Aug 01 j 11:28	5°♂49'44		morning rise		-1997 Mar 24 j 23:59	1°♂39'45		
max. Earth dist.	-2002 Aug 19 j 19:25	18°♂08'03	2.55628 AU			-1997 May 03 j 14:39	0°♂		
	-2002 Sep 06 j 03:00	0°♂				-1997 Jun 16 j 23:04	0°♂		
				asc. node		-1997 Jul 10 j 11:22	15°♂09'13		
conjunction	-2002 Sep 18 j 21:47	8°♂55'03	0°44'08			-1997 Aug 03 j 09:44	0°♂		
minimum elong	-2002 Sep 18 j 23:19	8°♂57'45	0°44'08			-1997 Sep 25 j 04:22	0°♂		
	-2002 Oct 18 j 09:46	0°♂		retrograde		-1997 Dec 16 j 13:09	27°♂09'34		
morning rise	-2002 Nov 09 j 01:28	15°♂54'22		opposition		-1996 Jan 24 j 11:24	18°♂08'24	4°46'58	
	-2002 Nov 27 j 21:14	0°♂		greatest brilliancy		-1996 Jan 25 j 01:12	17°♂54'55	-1.4m	
desc. node	-2002 Dec 01 j 07:19	2°♂35'06		min. Earth dist.		-1996 Jan 28 j 07:35	16°♂38'19	0.64997 AU	
	-2001 Jan 06 j 03:03	0°♂		direct		-1996 Mar 05 j 19:32	8°♂07'10		
	-2001 Feb 13 j 20:50	0°♂				-1996 May 15 j 01:34	0°♂		
	-2001 Mar 24 j 23:47	0°♂				-1996 Jul 05 j 05:04	0°♂		
	-2001 May 04 j 13:53	0°♂		desc. node		-1996 Jul 23 j 03:23	11°♂54'01		
	-2001 Jun 17 j 06:06	0°♂				-1996 Aug 17 j 23:55	0°♂		
	-2001 Aug 07 j 07:47	0°♂				-1996 Sep 27 j 08:52	0°♂		
asc. node	-2001 Oct 05 j 12:11	18°♂39'36				-1996 Nov 05 j 00:50	0°♂		
retrograde	-2001 Oct 07 j 23:41	18°♂42'03				-1996 Dec 13 j 05:42	0°♂		
min. Earth dist.	-2001 Nov 13 j 03:27	10°♂16'28	0.63269 AU	evening set		-1995 Jan 19 j 06:54	28°♂41'06		
opposition	-2001 Nov 16 j 23:22	8°♂44'29	1°40'00			-1995 Jan 21 j 00:16	0°♂		
greatest brilliancy	-2001 Nov 16 j 17:01	8°♂50'51	-1.5m			-1995 Mar 02 j 04:11	0°♂		
	-2001 Dec 18 j 01:25	30°♂							
direct	-2001 Dec 25 j 13:16	29°♂38'18		conjunction		-1995 Mar 22 j 07:05	14°♂31'29	-0°37'55	
	-2000 Jan 02 j 06:14	0°♂		minimum elong		-1995 Mar 22 j 09:12	14°♂35'15	0°37'54	



Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-1995 Apr 13 j 06:33	0°♈				-1990 May 07 j 15:28	0°♊		
max. Earth dist.	-1995 Apr 28 j 08:56	10°♈24'14	2.53279 AU	retrograde		-1990 Jun 11 j 18:24	7°♊22'46		
morning rise	-1995 May 18 j 00:50	23°♈41'27		min. Earth dist.		-1990 Jul 09 j 13:40	2°♊51'56	0.37994 AU	
asc. node	-1995 May 27 j 09:18	29°♈54'55		opposition		-1990 Jul 12 j 22:06	1°♊57'08	-6°37'39	
	-1995 May 27 j 12:22	0°♉		greatest brilliancy		-1990 Jul 12 j 04:19	2°♊09'16	-2.9m	
	-1995 Jul 12 j 20:41	0°♊				-1990 Jul 20 j 08:24	30°♊♌		
	-1995 Aug 30 j 09:46	0°♋		direct		-1990 Aug 11 j 13:19	26°♊57'23		
	-1995 Oct 21 j 13:29	0°♌				-1990 Sep 02 j 17:24	0°♋		
	-1995 Dec 28 j 03:55	0°♍				-1990 Nov 06 j 08:19	0°♌		
retrograde	-1994 Jan 26 j 13:00	4°♍36'25				-1990 Dec 25 j 11:25	0°♌		
	-1994 Feb 22 j 18:50	30°♌♍		asc. node		-1989 Jan 17 j 05:39	14°♌21'56		
opposition	-1994 Mar 04 j 03:30	26°♌43'25	4°07'42			-1989 Feb 10 j 21:59	0°♈		
greatest brilliancy	-1994 Mar 05 j 06:20	26°♌18'38	-1.8m			-1989 Mar 30 j 10:10	0°♉		
min. Earth dist.	-1994 Mar 11 j 13:56	23°♌59'01	0.56259 AU			-1989 May 17 j 02:45	0°♊		
direct	-1994 Apr 13 j 07:08	17°♌14'26		evening set		-1989 Jun 09 j 22:45	15°♊02'40		
	-1994 Jun 01 j 00:37	0°♍				-1989 Jul 03 j 11:25	0°♋		
desc. node	-1994 Jun 10 j 02:46	4°♍23'17		max. Earth dist.		-1989 Jul 14 j 10:51	7°♋01'35	2.65900 AU	
	-1994 Jul 23 j 11:09	0°♎							
	-1994 Sep 04 j 06:39	0°♏		conjunction		-1989 Jul 26 j 04:00	14°♋34'17	1°10'19	
	-1994 Oct 14 j 02:12	0°♐		minimum elong		-1989 Jul 26 j 03:50	14°♋34'00	1°10'22	
	-1994 Nov 22 j 02:09	0°♑				-1989 Aug 18 j 21:05	0°♌		
	-1994 Dec 31 j 13:56	0°♒		morning rise		-1989 Sep 09 j 06:25	14°♌07'42		
	-1993 Feb 10 j 10:27	0°♓				-1989 Oct 02 j 21:36	0°♍		
evening set	-1993 Mar 18 j 14:02	25°♓28'54				-1989 Nov 15 j 10:36	0°♎		
	-1993 Mar 25 j 03:28	0°♈				-1989 Dec 27 j 16:08	0°♏		
asc. node	-1993 Apr 14 j 07:32	13°♈42'43		desc. node		-1988 Jan 31 j 01:15	24°♏56'49		
	-1993 May 08 j 18:25	0°♉				-1988 Feb 06 j 23:09	0°♐		
						-1988 Mar 19 j 00:48	0°♑		
conjunction	-1993 May 10 j 17:34	1°♉17'41	0°15'17			-1988 Apr 30 j 10:21	0°♒		
minimum elong	-1993 May 10 j 16:53	1°♉16'35	0°15'17			-1988 Jun 17 j 23:56	0°♓		
behind sun begin	-1993 May 10 j 11:46	1°♉08'08		retrograde		-1988 Aug 11 j 13:49	16°♓♈		
behind sun end	-1993 May 10 j 22:01	1°♉25'01		min. Earth dist.		-1988 Sep 09 j 15:15	11°♓10'17	0.48314 AU	
max. Earth dist.	-1993 May 28 j 09:24	12°♉50'48	2.62797 AU	opposition		-1988 Sep 17 j 16:02	8°♓16'36	-3°42'28	
	-1993 Jun 23 j 23:29	0°♊		greatest brilliancy		-1988 Sep 16 j 16:31	8°♓37'49	-2.3m	
morning rise	-1993 Jun 28 j 18:04	3°♊03'16		direct		-1988 Oct 21 j 02:41	1°♓14'08		
	-1993 Aug 10 j 06:51	0°♋		asc. node		-1988 Dec 04 j 04:17	11°♓19'19		
	-1993 Sep 27 j 10:50	0°♌				-1987 Jan 12 j 20:31	0°♈		
	-1993 Nov 16 j 01:11	0°♍				-1987 Mar 07 j 09:57	0°♉		
	-1992 Jan 09 j 01:55	0°♎				-1987 Apr 26 j 14:42	0°♊		
retrograde	-1992 Mar 24 j 10:23	23°♎58'53				-1987 Jun 14 j 00:18	0°♋		
opposition	-1992 Apr 25 j 23:19	17°♎58'43	0°04'07	evening set		-1987 Jul 17 j 00:21	21°♋07'44		
greatest brilliancy	-1993 Aug 04 j 23:40	26°♏39'57	1.8m			-1987 Jul 30 j 13:50	0°♌		
desc. node	-1992 Apr 27 j 01:33	17°♏38'09		max. Earth dist.		-1987 Aug 08 j 02:51	5°♌38'55	2.59454 AU	
min. Earth dist.	-1992 May 03 j 16:55	15°♏34'14	0.43375 AU						
direct	-1992 May 31 j 05:36	10°♏47'02		conjunction		-1987 Sep 02 j 03:26	22°♏29'02	0°57'56	
	-1992 Jul 29 j 08:34	0°♐		minimum elong		-1987 Sep 02 j 04:44	22°♏31'16	0°57'57	
	-1992 Sep 14 j 19:39	0°♑				-1987 Sep 13 j 02:33	0°♍		
	-1992 Oct 27 j 04:41	0°♒		morning rise		-1987 Oct 20 j 12:27	26°♍19'26		
	-1992 Dec 07 j 21:53	0°♓				-1987 Oct 25 j 15:06	0°♎		
	-1991 Jan 19 j 11:08	0°♔				-1987 Dec 05 j 10:45	0°♏		
asc. node	-1991 Mar 01 j 06:58	27°♔51'52		desc. node		-1987 Dec 17 j 23:36	9°♏24'55		
	-1991 Mar 04 j 11:26	0°♈				-1986 Jan 14 j 01:38	0°♐		
	-1991 Apr 19 j 00:07	0°♉				-1986 Feb 22 j 04:13	0°♑		
evening set	-1991 May 01 j 19:28	8°♉17'34				-1986 Apr 02 j 16:31	0°♒		
	-1991 Jun 04 j 15:13	0°♊				-1986 May 13 j 21:31	0°♓		
						-1986 Jun 28 j 05:51	0°♔		
conjunction	-1991 Jun 18 j 22:30	9°♊07'46	0°54'19			-1986 Aug 29 j 11:53	0°♕		
minimum elong	-1991 Jun 18 j 21:14	9°♊05'46	0°54'22	retrograde		-1986 Sep 23 j 14:35	3°♕54'34		
max. Earth dist.	-1991 Jun 20 j 15:54	10°♊13'46	2.67062 AU			-1986 Oct 17 j 05:29	30°♕♈		
	-1991 Jul 21 j 16:11	0°♋		asc. node		-1986 Oct 22 j 03:48	28°♕18'38		
morning rise	-1991 Aug 03 j 10:17	8°♋08'37		min. Earth dist.		-1986 Oct 27 j 23:00	26°♕06'25	0.59989 AU	
	-1991 Sep 06 j 11:54	0°♌		opposition		-1986 Nov 02 j 05:14	24°♕01'21	0°27'57	
	-1991 Oct 22 j 18:49	0°♍		greatest brilliancy		-1986 Nov 02 j 02:49	24°♕03'44	-1.7m	
	-1991 Dec 07 j 15:20	0°♎		direct		-1986 Dec 09 j 15:30	15°♕20'22		
	-1990 Jan 22 j 14:10	0°♏				-1985 Feb 04 j 03:05	0°♉		
	-1990 Mar 11 j 02:37	0°♐				-1985 Apr 04 j 07:30	0°♊		
desc. node	-1990 Mar 15 j 01:37	2°♐22'57				-1985 May 25 j 10:08	0°♋		

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 42

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-1985 Jul 11 j 21:20	0°♊		minimum elong	-1980 Feb 27 j 16:23	21°♐57'48	0°56'03
	-1985 Aug 25 j 11:19	0°♍			-1980 Mar 09 j 13:40	0°♋	
evening set	-1985 Aug 27 j 15:25	1°♍30'26		max. Earth dist.	-1980 Apr 12 j 19:47	24°♋37'09	2.48285 AU
max. Earth dist.	-1985 Sep 11 j 10:51	11°♍54'31	2.48465 AU		-1980 Apr 20 j 12:08	0°♍	
	-1985 Oct 06 j 13:34	0°♌		morning rise	-1980 Apr 28 j 18:36	5°♍44'05	
					-1980 Jun 03 j 16:37	0°♌	
conjunction	-1985 Oct 18 j 14:48	8°♌52'36	0°11'36	asc. node	-1980 Jun 13 j 01:03	6°♌09'12	
minimum elong	-1985 Oct 18 j 15:27	8°♌53'49	0°11'35		-1980 Jul 20 j 06:31	0°♍	
behind sun begin	-1985 Oct 17 j 22:57	8°♌23'15			-1980 Sep 07 j 19:40	0°♌	
behind sun end	-1985 Oct 19 j 07:58	9°♌24'25			-1980 Nov 02 j 20:59	0°♌	
desc. node	-1985 Nov 04 j 23:12	21°♌51'39		retrograde	-1979 Jan 09 j 00:22	19°♌24'22	
	-1985 Nov 15 j 16:44	0°♍		opposition	-1979 Feb 15 j 17:00	11°♌00'27	4°38'20
morning rise	-1985 Dec 15 j 11:16	22°♍55'53		greatest brilliancy	-1979 Feb 16 j 16:27	10°♌38'09	-1.6m
	-1985 Dec 24 j 13:12	0°♎		min. Earth dist.	-1979 Feb 21 j 20:28	8°♌40'26	0.60378 AU
	-1984 Jan 31 j 22:00	0°♏		direct	-1979 Mar 28 j 14:51	1°♌10'45	
	-1984 Mar 10 j 16:12	0°♐			-1979 Jun 17 j 08:43	0°♍	
	-1984 Apr 19 j 18:05	0°♋		desc. node	-1979 Jun 26 j 18:40	5°♍34'32	
	-1984 Jun 01 j 05:05	0°♍			-1979 Aug 03 j 04:30	0°♌	
	-1984 Jul 17 j 18:49	0°♌			-1979 Sep 13 j 14:25	0°♍	
asc. node	-1984 Sep 08 j 03:17	27°♌47'48			-1979 Oct 22 j 18:52	0°♎	
	-1984 Sep 13 j 08:37	0°♍			-1979 Nov 30 j 08:37	0°♏	
retrograde	-1984 Oct 28 j 11:25	10°♍32'31			-1978 Jan 08 j 11:28	0°♐	
min. Earth dist.	-1984 Dec 06 j 02:04	1°♍18'06	0.66520 AU		-1978 Feb 17 j 23:38	0°♋	
opposition	-1984 Dec 07 j 14:36	0°♍41'28	3°08'25	evening set	-1978 Feb 25 j 18:58	5°♋37'58	
greatest brilliancy	-1984 Dec 07 j 09:11	0°♍46'54	-1.4m		-1978 Apr 01 j 09:06	0°♍	
	-1984 Dec 09 j 07:59	30°♎♏					
direct	-1983 Jan 16 j 14:06	21°♏06'31		conjunction	-1978 Apr 23 j 00:09	14°♍46'33	-0°04'47
	-1983 Feb 28 j 02:29	0°♍		minimum elong	-1978 Apr 23 j 00:24	14°♍46'57	0°04'46
	-1983 May 01 j 16:22	0°♌		behind sun begin	-1978 Apr 22 j 02:57	14°♍10'43	
	-1983 Jun 20 j 20:31	0°♌		behind sun end	-1978 Apr 23 j 21:51	15°♍23'10	
	-1983 Aug 05 j 05:32	0°♍		asc. node	-1978 May 01 j 00:13	20°♍09'47	
	-1983 Sep 16 j 09:09	0°♌			-1978 May 15 j 18:45	0°♌	
desc. node	-1983 Sep 21 j 22:05	4°♌04'54		max. Earth dist.	-1978 May 17 j 17:52	1°♌17'52	2.59652 AU
evening set	-1983 Oct 17 j 15:04	23°♌23'36		morning rise	-1978 Jun 13 j 11:12	18°♌45'31	
	-1983 Oct 26 j 06:17	0°♍			-1978 Jun 30 j 22:47	0°♍	
	-1983 Dec 03 j 18:36	0°♎			-1978 Aug 17 j 13:30	0°♌	
max. Earth dist.	-1983 Dec 11 j 21:24	6°♎23'35	2.37432 AU		-1978 Oct 05 j 17:48	0°♌	
					-1978 Nov 27 j 05:51	0°♍	
conjunction	-1983 Dec 18 j 20:25	11°♎52'50	-0°53'11		-1977 Feb 06 j 06:17	0°♌	
minimum elong	-1983 Dec 18 j 17:26	11°♎46'58	0°53'12	retrograde	-1977 Feb 28 j 03:49	2°♌40'16	
	-1982 Jan 10 j 20:12	0°♏			-1977 Mar 20 j 18:55	30°♎♍	
	-1982 Feb 18 j 09:04	0°♐		opposition	-1977 Apr 03 j 10:20	25°♍50'27	2°15'21
morning rise	-1982 Feb 25 j 21:46	5°♐45'47		greatest brilliancy	-1977 Apr 04 j 05:39	25°♍33'59	-2.2m
	-1982 Mar 30 j 05:19	0°♋		min. Earth dist.	-1977 Apr 11 j 22:03	22°♍57'06	0.48495 AU
	-1982 May 11 j 02:17	0°♍		direct	-1977 May 11 j 05:25	17°♍27'30	
	-1982 Jun 24 j 16:11	0°♌		desc. node	-1977 May 14 j 18:24	17°♍32'44	
asc. node	-1982 Jul 27 j 01:46	20°♌25'08			-1977 Jun 26 j 23:19	0°♌	
	-1982 Aug 12 j 02:10	0°♍			-1977 Aug 16 j 19:36	0°♍	
	-1982 Oct 08 j 11:06	0°♌			-1977 Sep 28 j 02:38	0°♎	
retrograde	-1982 Dec 02 j 07:14	14°♌06'55			-1977 Nov 07 j 11:22	0°♏	
opposition	-1981 Jan 10 j 18:42	4°♌47'27	4°33'51		-1977 Dec 17 j 23:07	0°♐	
greatest brilliancy	-1981 Jan 11 j 01:51	4°♌40'22	-1.3m		-1976 Jan 28 j 15:19	0°♋	
min. Earth dist.	-1981 Jan 13 j 02:40	3°♌52'08	0.66702 AU		-1976 Mar 12 j 00:03	0°♍	
	-1981 Jan 23 j 09:16	30°♎♍		asc. node	-1976 Mar 17 j 22:21	4°♍00'26	
direct	-1981 Feb 21 j 00:28	24°♍47'43		evening set	-1976 Apr 15 j 06:26	22°♍53'36	
	-1981 Mar 24 j 04:31	0°♌			-1976 Apr 26 j 02:07	0°♌	
	-1981 May 27 j 23:27	0°♌					
	-1981 Jul 15 j 04:42	0°♍		conjunction	-1976 Jun 03 j 22:20	25°♌09'28	0°41'38
desc. node	-1981 Aug 09 j 20:00	17°♍34'20		minimum elong	-1976 Jun 03 j 21:02	25°♌07'23	0°41'39
	-1981 Aug 27 j 04:54	0°♌			-1976 Jun 11 j 11:36	0°♍	
	-1981 Oct 06 j 07:21	0°♍		max. Earth dist.	-1976 Jun 11 j 12:43	0°♍01'47	2.66040 AU
	-1981 Nov 13 j 20:20	0°♎		morning rise	-1976 Jul 20 j 09:55	24°♍49'38	
	-1981 Dec 21 j 22:34	0°♏			-1976 Jul 28 j 13:07	0°♌	
evening set	-1981 Dec 24 j 05:07	1°♏47'03			-1976 Sep 13 j 17:46	0°♌	
	-1980 Jan 29 j 13:47	0°♐			-1976 Oct 30 j 22:12	0°♍	
					-1976 Dec 17 j 14:11	0°♌	
conjunction	-1980 Feb 27 j 13:53	21°♐53'10	-0°56'02		-1975 Feb 05 j 09:35	0°♍	

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Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

desc. node	-1975 Mar 31 j 17:28	27° $\mathbb{M}$ 20'28			-1970 Apr 13 j 05:10	0° $\mathbb{I}$		
	-1975 Apr 07 j 22:25	0° $\mathbb{A}$			-1970 Jun 01 j 22:54	0° $\mathbb{C}$		
retrograde	-1975 May 11 j 05:37	6° $\mathbb{A}$ 15'24			-1970 Jul 18 j 23:27	0° $\Omega$		
opposition	-1975 Jun 10 j 13:18	1° $\mathbb{A}$ 14'18	-4°42'07	evening set	-1970 Aug 10 j 15:59	15° $\Omega$ 05'00		
greatest brilliancy	-1975 Jun 10 j 19:53	1° $\mathbb{A}$ 09'53	-2.9m	max. Earth dist.	-1970 Aug 27 j 08:06	26° $\Omega$ 26'15	2.53239 AU	
min. Earth dist.	-1975 Jun 12 j 17:30	0° $\mathbb{A}$ 39'15	0.37962 AU		-1970 Sep 01 j 12:00	0° $\mathbb{M}$		
	-1975 Jun 15 j 04:30	30° $\mathbb{R}$ $\mathbb{M}$						
direct	-1975 Jul 11 j 09:12	25° $\mathbb{M}$ 58'56		conjunction	-1970 Sep 29 j 02:28	19° $\mathbb{M}$ 26'11	0°33'45	
	-1975 Aug 05 j 11:05	0° $\mathbb{A}$		minimum elong	-1970 Sep 29 j 03:54	19° $\mathbb{M}$ 28'45	0°33'43	
	-1975 Oct 04 j 23:57	0° $\mathbb{C}$			-1970 Oct 13 j 17:41	0° $\mathbb{C}$		
	-1975 Nov 20 j 15:43	0° $\approx$		morning rise	-1970 Nov 21 j 06:30	28° $\mathbb{C}$ 36'50		
	-1974 Jan 04 j 19:25	0° $\mathbb{H}$		desc. node	-1970 Nov 21 j 16:13	28° $\mathbb{C}$ 55'11		
asc. node	-1974 Feb 02 j 20:54	19° $\mathbb{H}$ 11'00			-1970 Nov 23 j 02:28	0° $\mathbb{M}$		
	-1974 Feb 19 j 09:53	0° $\mathbb{Y}$			-1969 Jan 01 j 05:04	0° $\mathbb{A}$		
	-1974 Apr 06 j 22:25	0° $\mathbb{B}$			-1969 Feb 08 j 19:17	0° $\mathbb{C}$		
	-1974 May 24 j 02:31	0° $\mathbb{I}$			-1969 Mar 19 j 18:01	0° $\approx$		
evening set	-1974 May 26 j 02:52	1° $\mathbb{I}$ 16'40			-1969 Apr 29 j 01:42	0° $\mathbb{H}$		
max. Earth dist.	-1974 Jul 05 j 02:44	26° $\mathbb{I}$ 42'02	2.67006 AU		-1969 Jun 11 j 02:31	0° $\mathbb{Y}$		
	-1974 Jul 10 j 06:42	0° $\mathbb{C}$			-1969 Jul 29 j 17:57	0° $\mathbb{B}$		
				asc. node	-1969 Sep 25 j 17:44	24° $\mathbb{B}$ 40'45		
conjunction	-1974 Jul 11 j 17:52	0° $\mathbb{C}$ 56'13	1°07'10	retrograde	-1969 Oct 15 j 23:20	27° $\mathbb{B}$ 10'17		
minimum elong	-1974 Jul 11 j 17:09	0° $\mathbb{C}$ 55'04	1°07'14	min. Earth dist.	-1969 Nov 22 j 01:02	18° $\mathbb{B}$ 26'00	0.64686 AU	
morning rise	-1974 Aug 25 j 14:56	29° $\mathbb{C}$ 53'47		opposition	-1969 Nov 25 j 01:14	17° $\mathbb{B}$ 13'33	2°16'07	
	-1974 Aug 25 j 18:44	0° $\Omega$		greatest brilliancy	-1969 Nov 24 j 18:18	17° $\mathbb{B}$ 20'30	-1.5m	
	-1974 Oct 10 j 04:17	0° $\mathbb{M}$		direct	-1968 Jan 03 j 04:12	7° $\mathbb{B}$ 55'43		
	-1974 Nov 23 j 09:29	0° $\mathbb{C}$			-1968 Mar 16 j 07:11	0° $\mathbb{I}$		
	-1973 Jan 05 j 14:25	0° $\mathbb{M}$			-1968 May 10 j 20:01	0° $\mathbb{C}$		
desc. node	-1973 Feb 16 j 17:22	29° $\mathbb{M}$ 39'03			-1968 Jun 28 j 14:46	0° $\Omega$		
	-1973 Feb 17 j 05:15	0° $\mathbb{A}$			-1968 Aug 12 j 14:00	0° $\mathbb{M}$		
	-1973 Apr 01 j 06:14	0° $\mathbb{C}$			-1968 Sep 23 j 16:11	0° $\mathbb{C}$		
	-1973 May 18 j 00:59	0° $\approx$		evening set	-1968 Sep 25 j 15:08	1° $\mathbb{C}$ 26'15		
retrograde	-1973 Jul 22 j 16:51	23° $\approx$ 14'18		desc. node	-1968 Oct 08 j 14:22	11° $\mathbb{C}$ 03'06		
min. Earth dist.	-1973 Aug 18 j 22:40	18° $\approx$ 16'55	0.43344 AU	max. Earth dist.	-1968 Oct 17 j 00:10	17° $\mathbb{C}$ 21'44	2.40807 AU	
greatest brilliancy	-1973 Aug 25 j 08:37	16° $\approx$ 10'16	-2.5m		-1968 Nov 02 j 14:58	0° $\mathbb{M}$		
opposition	-1973 Aug 26 j 17:35	15° $\approx$ 42'59	-5°31'29					
direct	-1973 Sep 27 j 08:34	9° $\approx$ 33'58		conjunction	-1968 Nov 22 j 08:09	15° $\mathbb{M}$ 13'38	-0°29'48	
	-1973 Dec 02 j 12:28	0° $\mathbb{H}$		minimum elong	-1968 Nov 22 j 06:03	15° $\mathbb{M}$ 09'33	0°29'49	
asc. node	-1973 Dec 21 j 19:51	10° $\mathbb{H}$ 04'10			-1968 Dec 11 j 05:51	0° $\mathbb{A}$		
	-1972 Jan 25 j 23:39	0° $\mathbb{Y}$			-1967 Jan 18 j 09:33	0° $\mathbb{C}$		
	-1972 Mar 16 j 03:53	0° $\mathbb{B}$		morning rise	-1967 Jan 27 j 10:40	7° $\mathbb{C}$ 05'28		
	-1972 May 04 j 02:21	0° $\mathbb{I}$			-1967 Feb 25 j 23:26	0° $\approx$		
	-1972 Jun 20 j 23:48	0° $\mathbb{C}$			-1967 Apr 06 j 20:17	0° $\mathbb{H}$		
evening set	-1972 Jul 02 j 01:29	7° $\mathbb{C}$ 03'14			-1967 May 18 j 19:32	0° $\mathbb{Y}$		
max. Earth dist.	-1972 Jul 28 j 16:20	24° $\mathbb{C}$ 15'16	2.62604 AU		-1967 Jul 02 j 19:42	0° $\mathbb{B}$		
	-1972 Aug 06 j 10:44	0° $\Omega$		asc. node	-1967 Aug 12 j 18:13	24° $\mathbb{B}$ 51'19		
					-1967 Aug 21 j 22:16	0° $\mathbb{I}$		
conjunction	-1972 Aug 17 j 10:40	7° $\Omega$ 16'17	1°06'30		-1967 Nov 03 j 19:35	0° $\mathbb{C}$		
minimum elong	-1972 Aug 17 j 11:28	7° $\Omega$ 17'37	1°06'33	retrograde	-1967 Nov 18 j 14:23	1° $\mathbb{C}$ 18'09		
	-1972 Sep 20 j 02:57	0° $\mathbb{M}$			-1967 Dec 02 j 17:18	30° $\mathbb{R}$ $\mathbb{I}$		
morning rise	-1972 Oct 02 j 23:15	8° $\mathbb{M}$ 51'47		opposition	-1967 Dec 28 j 11:01	21° $\mathbb{I}$ 43'46	4°09'14	
	-1972 Nov 01 j 23:28	0° $\mathbb{C}$		greatest brilliancy	-1967 Dec 28 j 12:11	21° $\mathbb{I}$ 42'37	-1.3m	
	-1972 Dec 13 j 05:39	0° $\mathbb{M}$		min. Earth dist.	-1967 Dec 29 j 06:39	21° $\mathbb{I}$ 24'13	0.67398 AU	
desc. node	-1971 Jan 03 j 17:35	15° $\mathbb{M}$ 59'56		direct	-1966 Feb 07 j 08:49	11° $\mathbb{I}$ 50'25		
	-1971 Jan 22 j 08:16	0° $\mathbb{A}$			-1966 Apr 12 j 15:23	0° $\mathbb{C}$		
	-1971 Mar 02 j 22:59	0° $\mathbb{C}$			-1966 Jun 06 j 18:43	0° $\Omega$		
	-1971 Apr 12 j 01:59	0° $\approx$			-1966 Jul 23 j 11:16	0° $\mathbb{M}$		
	-1971 May 24 j 10:42	0° $\mathbb{H}$		desc. node	-1966 Aug 26 j 12:56	23° $\mathbb{M}$ 50'25		
	-1971 Jul 12 j 18:41	0° $\mathbb{Y}$			-1966 Sep 04 j 00:34	0° $\mathbb{C}$		
retrograde	-1971 Sep 08 j 05:35	17° $\mathbb{Y}$ 40'26			-1966 Oct 13 j 23:28	0° $\mathbb{M}$		
min. Earth dist.	-1971 Oct 10 j 14:13	10° $\mathbb{Y}$ 35'20	0.55898 AU		-1966 Nov 21 j 11:09	0° $\mathbb{A}$		
opposition	-1971 Oct 17 j 04:27	8° $\mathbb{Y}$ 01'51	-0°58'09	evening set	-1966 Nov 26 j 14:30	4° $\mathbb{A}$ 03'00		
greatest brilliancy	-1971 Oct 16 j 23:14	8° $\mathbb{Y}$ 06'56	-1.9m		-1966 Dec 29 j 12:08	0° $\mathbb{C}$		
asc. node	-1971 Nov 07 j 18:17	1° $\mathbb{Y}$ 16'35						
	-1971 Nov 17 j 21:32	30° $\mathbb{R}$ $\mathbb{H}$		conjunction	-1965 Feb 01 j 02:01	26° $\mathbb{C}$ 10'36	-1°05'52	
direct	-1971 Nov 22 j 06:07	29° $\mathbb{H}$ 52'33		minimum elong	-1965 Feb 01 j 02:48	26° $\mathbb{C}$ 12'07	1°05'54	
	-1971 Nov 26 j 16:06	0° $\mathbb{Y}$			-1965 Feb 06 j 01:20	0° $\approx$		
	-1970 Feb 18 j 07:05	0° $\mathbb{B}$			-1965 Mar 17 j 22:38	0° $\mathbb{H}$		

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 44

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

max. Earth dist.	-1965 Mar 23 j 12:55	4° $\text{X}$ 06'08	2.43003 AU	opposition	-1960 May 11 j 03:54	2° $\text{M}$ 39'48	-1°34'08
morning rise	-1965 Apr 07 j 20:16	15° $\text{X}$ 10'56		greatest brilliancy	-1960 May 11 j 12:24	2° $\text{M}$ 33'34	-2.7m
	-1965 Apr 28 j 18:58	0° $\text{Y}$		min. Earth dist.	-1960 May 17 j 16:09	0° $\text{M}$ 45'45	0.40868 AU
	-1965 Jun 12 j 00:24	0° $\text{B}$			-1960 May 20 j 09:30	30° $\text{R}$ 00	
asc. node	-1965 Jun 30 j 16:55	12° $\text{B}$ 09'54		direct	-1960 Jun 13 j 17:03	26° $\text{A}$ 14'37	
	-1965 Jul 29 j 00:32	0° $\text{II}$			-1960 Jul 07 j 18:19	0° $\text{M}$	
	-1965 Sep 18 j 05:05	0° $\text{E}$			-1960 Sep 05 j 06:14	0° $\text{X}$	
	-1965 Nov 23 j 08:03	0° $\text{O}$			-1960 Oct 19 j 22:13	0° $\text{Z}$	
retrograde	-1965 Dec 25 j 03:17	5° $\text{O}$ 20'31			-1960 Dec 01 j 17:37	0° $\approx$	
	-1964 Jan 23 j 07:53	30° $\text{R}$ 00			-1959 Jan 13 j 23:00	0° $\text{X}$	
opposition	-1964 Feb 01 j 16:20	26° $\text{E}$ 31'26	4°48'14	asc. node	-1959 Feb 19 j 12:26	24° $\text{X}$ 44'24	
greatest brilliancy	-1964 Feb 02 j 09:51	26° $\text{E}$ 14'27	-1.4m		-1959 Feb 27 j 09:55	0° $\text{Y}$	
min. Earth dist.	-1964 Feb 06 j 08:45	24° $\text{E}$ 42'29	0.63617 AU		-1959 Apr 14 j 05:31	0° $\text{B}$	
direct	-1964 Mar 13 j 22:50	16° $\text{E}$ 32'04		evening set	-1959 May 10 j 20:49	17° $\text{B}$ 07'51	
	-1964 May 05 j 03:51	0° $\text{O}$			-1959 May 31 j 00:18	0° $\text{II}$	
	-1964 Jun 28 j 21:21	0° $\text{M}$		max. Earth dist.	-1959 Jun 25 j 23:10	16° $\text{II}$ 32'04	2.67283 AU
desc. node	-1964 Jul 13 j 11:45	9° $\text{M}$ 23'53					
	-1964 Aug 12 j 12:15	0° $\text{A}$		conjunction	-1959 Jun 27 j 07:43	17° $\text{II}$ 23'54	1°00'07
	-1964 Sep 22 j 04:47	0° $\text{M}$		minimum elong	-1959 Jun 27 j 06:36	17° $\text{II}$ 22'07	1°00'09
	-1964 Oct 31 j 00:38	0° $\text{X}$			-1959 Jul 17 j 01:57	0° $\text{E}$	
	-1964 Dec 08 j 07:57	0° $\text{Z}$		morning rise	-1959 Aug 11 j 10:53	16° $\text{E}$ 15'07	
	-1963 Jan 16 j 04:23	0° $\approx$			-1959 Sep 01 j 18:25	0° $\text{O}$	
evening set	-1963 Feb 02 j 13:09	13° $\approx$ 06'12			-1959 Oct 17 j 16:45	0° $\text{M}$	
	-1963 Feb 25 j 10:03	0° $\text{X}$			-1959 Dec 01 j 20:59	0° $\text{A}$	
					-1958 Jan 15 j 14:15	0° $\text{M}$	
conjunction	-1963 Apr 03 j 10:19	26° $\text{X}$ 25'14	-0°25'58		-1958 Mar 01 j 15:19	0° $\text{X}$	
minimum elong	-1963 Apr 03 j 11:47	26° $\text{X}$ 27'46	0°25'57	desc. node	-1958 Mar 05 j 10:58	2° $\text{X}$ 29'57	
	-1963 Apr 08 j 13:39	0° $\text{Y}$			-1958 Apr 18 j 16:36	0° $\text{Z}$	
max. Earth dist.	-1963 May 05 j 22:42	18° $\text{Y}$ 43'36	2.55742 AU	retrograde	-1958 Jun 27 j 22:01	25° $\text{Z}$ 05'26	
asc. node	-1963 May 17 j 15:24	26° $\text{Y}$ 33'46		min. Earth dist.	-1958 Jul 24 j 14:52	20° $\text{Z}$ 38'28	0.39292 AU
	-1963 May 22 j 19:35	0° $\text{B}$		greatest brilliancy	-1958 Jul 29 j 01:28	19° $\text{Z}$ 21'33	-2.8m
morning rise	-1963 May 28 j 01:37	3° $\text{B}$ 28'17		opposition	-1958 Jul 30 j 05:59	19° $\text{Z}$ 00'47	-6°42'28
	-1963 Jul 08 j 00:55	0° $\text{II}$		direct	-1958 Aug 29 j 08:30	13° $\text{Z}$ 44'03	
	-1963 Aug 25 j 03:35	0° $\text{E}$			-1958 Oct 24 j 18:20	0° $\approx$	
	-1963 Oct 14 j 21:38	0° $\text{O}$			-1958 Dec 17 j 23:16	0° $\text{X}$	
	-1963 Dec 12 j 09:46	0° $\text{M}$		asc. node	-1957 Jan 07 j 10:41	12° $\text{X}$ 23'25	
retrograde	-1962 Feb 06 j 13:51	14° $\text{M}$ 27'19			-1957 Feb 05 j 00:27	0° $\text{Y}$	
opposition	-1962 Mar 14 j 10:00	6° $\text{M}$ 54'50	3°37'12		-1957 Mar 25 j 06:27	0° $\text{B}$	
greatest brilliancy	-1962 Mar 15 j 12:29	6° $\text{M}$ 30'55	-1.9m		-1957 May 12 j 08:00	0° $\text{II}$	
min. Earth dist.	-1962 Mar 22 j 09:47	4° $\text{M}$ 01'59	0.53610 AU	evening set	-1957 Jun 18 j 09:19	23° $\text{II}$ 20'13	
	-1962 Apr 04 j 14:02	30° $\text{R}$ 00			-1957 Jun 28 j 20:50	0° $\text{E}$	
direct	-1962 Apr 22 j 21:43	27° $\text{O}$ 43'55		max. Earth dist.	-1957 Jul 19 j 23:08	13° $\text{E}$ 31'27	2.64952 AU
	-1962 May 11 j 18:24	0° $\text{M}$					
desc. node	-1962 May 31 j 10:23	6° $\text{M}$ 18'40		conjunction	-1957 Aug 03 j 12:50	22° $\text{E}$ 58'13	1°10'13
	-1962 Jul 15 j 11:42	0° $\text{A}$		minimum elong	-1957 Aug 03 j 13:01	22° $\text{E}$ 58'30	1°10'16
	-1962 Aug 28 j 20:40	0° $\text{M}$			-1957 Aug 14 j 06:54	0° $\text{O}$	
	-1962 Oct 08 j 07:08	0° $\text{X}$		morning rise	-1957 Sep 17 j 23:11	23° $\text{O}$ 04'35	
	-1962 Nov 16 j 15:58	0° $\text{Z}$			-1957 Sep 28 j 04:20	0° $\text{M}$	
	-1962 Dec 26 j 10:15	0° $\approx$			-1957 Nov 10 j 11:07	0° $\text{A}$	
	-1961 Feb 05 j 12:09	0° $\text{X}$			-1957 Dec 22 j 07:26	0° $\text{M}$	
	-1961 Mar 20 j 09:17	0° $\text{Y}$		desc. node	-1956 Jan 21 j 09:47	22° $\text{M}$ 04'39	
evening set	-1961 Mar 29 j 10:51	6° $\text{Y}$ 10'35			-1956 Feb 01 j 02:44	0° $\text{X}$	
asc. node	-1961 Apr 04 j 14:40	10° $\text{Y}$ 20'30			-1956 Mar 12 j 12:49	0° $\text{Z}$	
	-1961 May 04 j 02:57	0° $\text{B}$			-1956 Apr 22 j 19:09	0° $\approx$	
					-1956 Jun 06 j 18:57	0° $\text{X}$	
conjunction	-1961 May 20 j 04:14	10° $\text{B}$ 30'39	0°25'44	retrograde	-1956 Aug 22 j 04:51	29° $\text{X}$ 08'16	
minimum elong	-1961 May 20 j 03:13	10° $\text{B}$ 29'00	0°25'45	min. Earth dist.	-1956 Sep 21 j 09:57	22° $\text{X}$ 52'47	0.51106 AU
max. Earth dist.	-1961 Jun 03 j 03:45	19° $\text{B}$ 34'34	2.64180 AU	greatest brilliancy	-1956 Sep 28 j 09:48	20° $\text{X}$ 16'31	-2.1m
	-1961 Jun 19 j 08:30	0° $\text{II}$		opposition	-1956 Sep 29 j 02:09	20° $\text{X}$ 01'17	-2°39'36
morning rise	-1961 Jul 07 j 03:09	11° $\text{II}$ 21'18		direct	-1956 Nov 02 j 13:05	12° $\text{X}$ 32'32	
	-1961 Aug 05 j 12:52	0° $\text{E}$		asc. node	-1956 Nov 24 j 10:35	15° $\text{X}$ 22'09	
	-1961 Sep 22 j 06:45	0° $\text{O}$			-1955 Jan 03 j 00:43	0° $\text{Y}$	
	-1961 Nov 09 j 19:16	0° $\text{M}$			-1955 Mar 01 j 04:05	0° $\text{B}$	
	-1961 Dec 30 j 15:03	0° $\text{A}$			-1955 Apr 21 j 09:38	0° $\text{II}$	
	-1960 Mar 01 j 01:14	0° $\text{M}$			-1955 Jun 09 j 05:26	0° $\text{E}$	
retrograde	-1960 Apr 09 j 14:46	8° $\text{M}$ 11'57		evening set	-1955 Jul 25 j 18:49	29° $\text{E}$ 53'12	
desc. node	-1960 Apr 17 j 10:54	7° $\text{M}$ 49'12			-1955 Jul 25 j 22:58	0° $\text{O}$	

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Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

max. Earth dist.	-1955 Aug 14 j 17:17	13° $\Omega$ 07'47	2.57431 AU	morning rise	-1950 Mar 13 j 14:12	21° $\approx$ 14'49	
	-1955 Sep 08 j 11:54	0° $\mathbb{M}$			-1950 Mar 25 j 09:20	0° $\mathbb{H}$	
					-1950 May 06 j 04:47	0° $\mathbb{Y}$	
conjunction	-1955 Sep 11 j 12:57	2° $\mathbb{M}$ 06'18	0°50'38		-1950 Jun 19 j 13:26	0° $\mathcal{B}$	
minimum elong	-1955 Sep 11 j 14:26	2° $\mathbb{M}$ 08'53	0°50'38	asc. node	-1950 Jul 17 j 08:50	17° $\mathcal{B}$ 47'49	
	-1955 Oct 20 j 22:17	0° $\underline{\mathcal{A}}$			-1950 Aug 06 j 06:35	0° $\mathbb{I}$	
morning rise	-1955 Oct 31 j 07:16	7° $\underline{\mathcal{A}}$ 32'47			-1950 Sep 29 j 09:36	0° $\mathcal{C}$	
	-1955 Nov 30 j 13:56	0° $\mathbb{M}$		retrograde	-1950 Dec 10 j 09:06	21° $\mathcal{C}$ 59'57	
desc. node	-1955 Dec 08 j 08:53	5° $\mathbb{M}$ 52'10		opposition	-1949 Jan 18 j 13:56	12° $\mathcal{C}$ 50'13	4°42'44
	-1954 Jan 08 j 24:00	0° $\mathbb{X}$		greatest brilliancy	-1949 Jan 19 j 00:48	12° $\mathcal{C}$ 39'33	-1.4m
	-1954 Feb 16 j 21:25	0° $\mathcal{Z}$		min. Earth dist.	-1949 Jan 21 j 18:16	11° $\mathcal{C}$ 35'12	0.65883 AU
	-1954 Mar 28 j 03:22	0° $\approx$		direct	-1949 Feb 28 j 21:47	2° $\mathcal{C}$ 48'48	
	-1954 May 07 j 21:47	0° $\mathbb{H}$			-1949 May 20 j 17:50	0° $\Omega$	
	-1954 Jun 21 j 01:22	0° $\mathbb{Y}$			-1949 Jul 09 j 12:52	0° $\mathbb{M}$	
	-1954 Aug 13 j 15:08	0° $\mathcal{B}$		desc. node	-1949 Jul 31 j 04:40	14° $\mathbb{M}$ 34'39	
retrograde	-1954 Oct 01 j 23:43	12° $\mathcal{B}$ 58'25			-1949 Aug 22 j 00:32	0° $\underline{\mathcal{A}}$	
asc. node	-1954 Oct 12 j 10:10	12° $\mathcal{B}$ 12'52			-1949 Oct 01 j 07:13	0° $\mathbb{M}$	
min. Earth dist.	-1954 Nov 06 j 08:35	4° $\mathcal{B}$ 48'35	0.61911 AU		-1949 Nov 08 j 22:05	0° $\mathbb{X}$	
opposition	-1954 Nov 10 j 19:33	3° $\mathcal{B}$ 01'51	1°11'29		-1949 Dec 17 j 01:33	0° $\mathcal{Z}$	
greatest brilliancy	-1954 Nov 10 j 14:17	3° $\mathcal{B}$ 07'07	-1.6m	evening set	-1948 Jan 08 j 18:03	17° $\mathcal{Z}$ 41'34	
	-1954 Nov 18 j 15:35	30° $\mathbb{R}$ $\mathbb{Y}$			-1948 Jan 24 j 17:49	0° $\approx$	
direct	-1954 Dec 18 j 21:11	24° $\mathbb{Y}$ 06'07			-1948 Mar 04 j 18:51	0° $\mathbb{H}$	
	-1953 Jan 21 j 09:43	0° $\mathcal{B}$		conjunction	-1948 Mar 12 j 09:39	5° $\mathbb{H}$ 33'20	-0°46'16
	-1953 Mar 28 j 19:29	0° $\mathbb{I}$		minimum elong	-1948 Mar 12 j 12:07	5° $\mathbb{H}$ 37'49	0°46'16
	-1953 May 20 j 03:42	0° $\mathcal{C}$			-1948 Apr 15 j 18:12	0° $\mathbb{Y}$	
	-1953 Jul 07 j 01:12	0° $\Omega$		max. Earth dist.	-1948 Apr 22 j 02:01	4° $\mathbb{Y}$ 23'33	2.51125 AU
evening set	-1953 Aug 20 j 18:44	0° $\mathbb{M}$		morning rise	-1948 May 10 j 00:41	16° $\mathbb{Y}$ 40'30	
max. Earth dist.	-1953 Sep 06 j 23:28	12° $\mathbb{M}$ 02'45			-1948 May 29 j 21:57	0° $\mathcal{B}$	
	-1953 Sep 22 j 02:46	22° $\mathbb{M}$ 53'02	2.45722 AU	asc. node	-1948 Jun 03 j 07:14	2° $\mathcal{B}$ 53'59	
	-1953 Oct 01 j 21:34	0° $\underline{\mathcal{A}}$			-1948 Jul 15 j 07:03	0° $\mathbb{I}$	
desc. node	-1953 Oct 26 j 07:44	18° $\underline{\mathcal{A}}$ 07'49			-1948 Sep 02 j 03:58	0° $\mathcal{C}$	
					-1948 Oct 25 j 13:30	0° $\Omega$	
conjunction	-1953 Oct 30 j 17:17	21° $\underline{\mathcal{A}}$ 26'45	-0°03'02	retrograde	-1947 Jan 18 j 18:15	28° $\Omega$ 20'45	
minimum elong	-1953 Oct 30 j 17:07	21° $\underline{\mathcal{A}}$ 26'25	0°03'02	opposition	-1947 Feb 24 j 21:03	20° $\Omega$ 13'08	4°23'11
behind sun begin	-1953 Oct 29 j 17:20	20° $\underline{\mathcal{A}}$ 41'33		greatest brilliancy	-1947 Feb 25 j 22:48	19° $\Omega$ 49'00	-1.7m
behind sun end	-1953 Oct 31 j 16:54	22° $\underline{\mathcal{A}}$ 11'20		min. Earth dist.	-1947 Mar 03 j 18:14	17° $\Omega$ 38'30	0.58211 AU
	-1953 Nov 10 j 23:32	0° $\mathbb{M}$		direct	-1947 Apr 06 j 10:17	10° $\Omega$ 32'58	
	-1953 Dec 19 j 18:03	0° $\mathbb{X}$			-1947 Jun 08 j 07:36	0° $\mathbb{M}$	
morning rise	-1953 Dec 30 j 13:07	8° $\mathbb{X}$ 26'57		desc. node	-1947 Jun 17 j 04:25	4° $\mathbb{M}$ 47'22	
	-1952 Jan 27 j 00:45	0° $\mathcal{Z}$			-1947 Jul 27 j 18:06	0° $\underline{\mathcal{A}}$	
	-1952 Mar 05 j 16:32	0° $\approx$			-1947 Sep 07 j 21:50	0° $\mathbb{M}$	
	-1952 Apr 14 j 15:12	0° $\mathbb{H}$			-1947 Oct 17 j 10:11	0° $\mathbb{X}$	
	-1952 May 26 j 19:38	0° $\mathbb{Y}$			-1947 Nov 25 j 04:55	0° $\mathcal{Z}$	
	-1952 Jul 11 j 14:06	0° $\mathcal{B}$			-1946 Jan 03 j 11:31	0° $\approx$	
asc. node	-1952 Aug 29 j 09:09	27° $\mathcal{B}$ 42'45			-1946 Feb 13 j 02:55	0° $\mathbb{H}$	
	-1952 Sep 03 j 00:25	0° $\mathbb{I}$		evening set	-1946 Mar 09 j 21:55	17° $\mathbb{H}$ 39'59	
retrograde	-1952 Nov 05 j 04:38	18° $\mathbb{I}$ 28'31			-1946 Mar 27 j 15:12	0° $\mathbb{Y}$	
opposition	-1952 Dec 15 j 06:21	8° $\mathbb{I}$ 42'26	3°33'57	asc. node	-1946 Apr 21 j 05:13	16° $\mathbb{Y}$ 44'22	
greatest brilliancy	-1952 Dec 15 j 02:47	8° $\mathbb{I}$ 45'59	-1.3m				
min. Earth dist.	-1952 Dec 14 j 13:57	8° $\mathbb{I}$ 58'51	0.67105 AU	conjunction	-1946 May 03 j 08:13	24° $\mathbb{Y}$ 51'10	0°07'08
	-1951 Jan 12 j 02:42	30° $\mathbb{R}$ $\mathcal{B}$		minimum elong	-1946 May 03 j 07:52	24° $\mathbb{Y}$ 50'35	0°07'09
direct	-1951 Jan 24 j 14:48	28° $\mathcal{B}$ 59'41		behind sun begin	-1946 May 02 j 12:21	24° $\mathbb{Y}$ 18'07	
	-1951 Feb 06 j 17:29	0° $\mathbb{I}$		behind sun end	-1946 May 04 j 03:23	25° $\mathbb{Y}$ 23'01	
	-1951 Apr 24 j 23:03	0° $\mathcal{C}$			-1946 May 11 j 02:30	0° $\mathcal{B}$	
	-1951 Jun 15 j 11:20	0° $\Omega$		max. Earth dist.	-1946 May 24 j 01:21	8° $\mathcal{B}$ 31'03	2.61501 AU
	-1951 Jul 31 j 06:23	0° $\mathbb{M}$		morning rise	-1946 Jun 22 j 08:28	27° $\mathcal{B}$ 29'53	
	-1951 Sep 11 j 13:36	0° $\underline{\mathcal{A}}$			-1946 Jun 26 j 06:05	0° $\mathbb{I}$	
desc. node	-1951 Sep 12 j 05:27	0° $\underline{\mathcal{A}}$ 29'03			-1946 Aug 12 j 15:48	0° $\mathcal{C}$	
	-1951 Oct 21 j 11:34	0° $\mathbb{M}$			-1946 Sep 30 j 04:39	0° $\Omega$	
evening set	-1951 Oct 31 j 09:04	7° $\mathbb{M}$ 38'04			-1946 Nov 19 j 19:20	0° $\mathbb{M}$	
	-1951 Nov 28 j 23:45	0° $\mathbb{X}$			-1945 Jan 16 j 15:59	0° $\underline{\mathcal{A}}$	
conjunction	-1950 Jan 03 j 18:37	28° $\mathbb{X}$ 12'51	-1°02'00	retrograde	-1945 Mar 13 j 21:29	14° $\underline{\mathcal{A}}$ 42'47	
minimum elong	-1950 Jan 03 j 16:27	28° $\mathbb{X}$ 08'37	1°02'01	opposition	-1945 Apr 16 j 05:46	8° $\underline{\mathcal{A}}$ 19'38	1°07'04
	-1950 Jan 06 j 01:05	0° $\mathcal{Z}$		greatest brilliancy	-1945 Apr 16 j 15:45	8° $\underline{\mathcal{A}}$ 11'28	-2.4m
max. Earth dist.	-1950 Feb 09 j 10:01	26° $\mathcal{Z}$ 48'22	2.38286 AU	min. Earth dist.	-1945 Apr 24 j 12:13	5° $\underline{\mathcal{A}}$ 38'11	0.45620 AU
	-1950 Feb 13 j 13:35	0° $\approx$		desc. node	-1945 May 05 j 03:04	2° $\underline{\mathcal{A}}$ 40'46	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 46

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

direct	-1945 May 22 j 17:03	0°♄33'21		conjunction	-1940 Aug 26 j 07:47	16°♄17'12	1°02'09
	-1945 Aug 07 j 11:56	0°♍		minimum elong	-1940 Aug 26 j 08:53	16°♄19'04	1°02'10
	-1945 Sep 20 j 23:54	0°♎			-1940 Sep 15 j 11:34	0°♎	
	-1945 Nov 01 j 07:19	0°♏		morning rise	-1940 Oct 12 j 18:24	19°♎01'04	
	-1945 Dec 12 j 08:54	0°♐			-1940 Oct 28 j 04:30	0°♑	
	-1944 Jan 23 j 10:42	0°♒			-1940 Dec 08 j 05:28	0°♒	
	-1944 Mar 07 j 02:25	0°♓		desc. node	-1940 Dec 25 j 01:16	12°♒35'03	
asc. node	-1944 Mar 08 j 04:26	0°♓43'50			-1939 Jan 17 j 01:42	0°♓	
	-1944 Apr 21 j 09:04	0°♈			-1939 Feb 25 j 09:21	0°♈	
evening set	-1944 Apr 24 j 21:02	2°♈16'46			-1939 Apr 06 j 02:41	0°♈	
	-1944 Jun 06 j 20:52	0°♉			-1939 May 17 j 16:04	0°♈	
					-1939 Jul 03 j 02:46	0°♐	
conjunction	-1944 Jun 12 j 14:58	3°♉40'46	0°49'26	retrograde	-1939 Sep 17 j 05:15	27°♐35'48	
minimum elong	-1944 Jun 12 j 13:39	3°♉38'40	0°49'27	min. Earth dist.	-1939 Oct 20 j 16:42	20°♐05'49	0.58250 AU
max. Earth dist.	-1944 Jun 16 j 23:41	6°♉27'57	2.66712 AU	opposition	-1939 Oct 26 j 13:12	17°♐47'37	-0°06'30
	-1944 Jul 23 j 21:51	0°♊		greatest brilliancy	-1940 Apr 18 j 01:44	23°♈14'47	1.6m
morning rise	-1944 Jul 28 j 11:47	2°♊55'06		asc. node	-1939 Oct 29 j 01:08	16°♐49'01	
	-1944 Sep 08 j 21:18	0°♋		direct	-1939 Dec 02 j 09:03	9°♐19'48	
	-1944 Oct 25 j 13:11	0°♌			-1938 Feb 09 j 21:06	0°♈	
	-1944 Dec 11 j 02:39	0°♍			-1938 Apr 07 j 10:28	0°♉	
	-1943 Jan 27 j 09:23	0°♎			-1938 May 27 j 22:55	0°♊	
	-1943 Mar 19 j 04:41	0°♏			-1938 Jul 14 j 06:25	0°♋	
desc. node	-1943 Mar 22 j 02:35	1°♏33'56		evening set	-1938 Aug 20 j 04:27	24°♋42'18	
retrograde	-1943 May 29 j 05:52	24°♏01'55			-1938 Aug 27 j 20:55	0°♌	
opposition	-1943 Jun 28 j 19:04	18°♏55'42	-6°03'26	max. Earth dist.	-1938 Sep 04 j 14:02	5°♌21'57	2.50645 AU
min. Earth dist.	-1943 Jun 27 j 19:43	19°♏11'15	0.37576 AU				
greatest brilliancy	-1943 Jun 28 j 13:01	18°♏59'44	-2.9m	conjunction	-1938 Oct 09 j 22:12	0°♍37'19	0°21'38
direct	-1943 Jul 28 j 15:05	13°♏57'24		minimum elong	-1938 Oct 09 j 23:18	0°♍39'19	0°21'37
	-1943 Sep 21 j 09:30	0°♐			-1938 Oct 09 j 01:44	0°♍	
	-1943 Nov 12 j 12:09	0°♑		desc. node	-1938 Nov 12 j 00:16	25°♍12'25	
	-1943 Dec 29 j 11:22	0°♒			-1938 Nov 18 j 08:08	0°♎	
asc. node	-1942 Jan 24 j 03:02	16°♒34'32		morning rise	-1938 Dec 04 j 13:16	12°♎23'31	
	-1942 Feb 13 j 23:23	0°♓			-1938 Dec 27 j 07:33	0°♏	
	-1942 Apr 01 j 23:33	0°♈			-1937 Feb 03 j 18:41	0°♈	
	-1942 May 19 j 09:55	0°♉			-1937 Mar 14 j 14:12	0°♈	
evening set	-1942 Jun 03 j 16:22	9°♉39'20			-1937 Apr 23 j 17:08	0°♈	
	-1942 Jul 05 j 16:39	0°♊			-1937 Jun 05 j 07:33	0°♐	
max. Earth dist.	-1942 Jul 10 j 13:02	3°♊06'02	2.66498 AU		-1937 Jul 22 j 11:17	0°♑	
				asc. node	-1937 Sep 16 j 00:47	27°♑35'57	
conjunction	-1942 Jul 20 j 00:32	9°♊10'48	1°09'30		-1937 Sep 23 j 00:27	0°♒	
minimum elong	-1942 Jul 20 j 00:07	9°♊10'08	1°09'32	retrograde	-1937 Oct 23 j 19:04	5°♒22'00	
	-1942 Aug 21 j 03:43	0°♋			-1937 Nov 21 j 04:39	30°♒♄	
morning rise	-1942 Sep 02 j 22:49	8°♋23'58		min. Earth dist.	-1937 Nov 30 j 17:39	26°♒20'19	0.65825 AU
	-1942 Oct 05 j 08:48	0°♌		opposition	-1937 Dec 02 j 21:48	25°♒27'56	2°48'00
	-1942 Nov 18 j 05:18	0°♍		greatest brilliancy	-1937 Dec 02 j 15:21	25°♒34'24	-1.4m
	-1942 Dec 30 j 20:57	0°♎		direct	-1936 Jan 11 j 12:12	16°♒00'04	
desc. node	-1941 Feb 07 j 02:44	27°♎25'19			-1936 Mar 06 j 22:33	0°♒	
	-1941 Feb 10 j 16:36	0°♏			-1936 May 04 j 22:33	0°♊	
	-1941 Mar 24 j 11:01	0°♐			-1936 Jun 23 j 12:54	0°♋	
	-1941 May 07 j 02:59	0°♑			-1936 Aug 07 j 19:03	0°♌	
	-1941 Jun 30 j 12:39	0°♒			-1936 Sep 18 j 23:20	0°♍	
retrograde	-1941 Aug 03 j 22:57	7°♒35'14		desc. node	-1936 Sep 28 j 23:35	7°♒23'11	
min. Earth dist.	-1941 Sep 01 j 02:18	2°♒12'06	0.46032 AU	evening set	-1936 Oct 07 j 17:35	13°♒55'12	
	-1941 Sep 07 j 10:32	30°♒♌			-1936 Oct 28 j 22:02	0°♎	
greatest brilliancy	-1941 Sep 08 j 00:47	29°♌47'32	-2.4m	max. Earth dist.	-1936 Nov 08 j 11:03	8°♎07'26	2.38517 AU
opposition	-1941 Sep 09 j 05:18	29°♌22'41	-4°30'47				
direct	-1941 Oct 11 j 20:15	22°♌43'34		conjunction	-1936 Dec 06 j 22:58	0°♏22'08	-0°43'58
	-1941 Nov 17 j 04:53	0°♒		minimum elong	-1936 Dec 06 j 20:05	0°♏16'28	0°43'59
asc. node	-1941 Dec 12 j 01:32	10°♒27'41			-1936 Dec 06 j 11:42	0°♏	
	-1940 Jan 18 j 15:28	0°♓			-1935 Jan 13 j 14:02	0°♈	
	-1940 Mar 10 j 12:07	0°♈		morning rise	-1935 Feb 13 j 04:54	23°♈54'20	
	-1940 Apr 29 j 02:43	0°♉			-1935 Feb 21 j 02:34	0°♈	
	-1940 Jun 16 j 07:17	0°♊			-1935 Apr 01 j 21:45	0°♈	
evening set	-1940 Jul 10 j 14:18	15°♊30'39			-1935 May 13 j 18:04	0°♐	
	-1940 Aug 01 j 20:22	0°♋			-1935 Jun 27 j 09:46	0°♑	
max. Earth dist.	-1940 Aug 03 j 17:25	1°♋14'07	2.60953 AU	asc. node	-1935 Aug 02 j 23:14	22°♑45'48	
					-1935 Aug 15 j 07:40	0°♒	

## Planetary Phenomena of Mars from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 47

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-1935 Oct 15 j 00:24	0°☿				-1930 Oct 02 j 04:18	0°♊		
retrograde	-1935 Nov 26 j 10:28	9°☿06'27				-1930 Nov 11 j 00:40	0°♊		
	-1934 Jan 04 j 06:20	30°♈II				-1930 Dec 21 j 03:07	0°♋		
opposition	-1934 Jan 05 j 02:27	29°♈40'03	4°24'46			-1929 Jan 31 j 11:15	0°♌		
greatest brilliancy	-1934 Jan 05 j 06:53	29°♈35'39	-1.3m			-1929 Mar 15 j 13:25	0°♍		
min. Earth dist.	-1934 Jan 06 j 18:30	29°♈00'18	0.67145 AU	asc. node		-1929 Mar 25 j 20:14	6°♍58'38		
direct	-1934 Feb 15 j 05:02	19°♈42'31		evening set		-1929 Apr 08 j 19:22	16°♍20'50		
	-1934 Apr 02 j 00:49	0°☿				-1929 Apr 29 j 10:26	0°♎		
	-1934 May 31 j 14:20	0°♏							
desc. node	-1934 Jul 18 j 04:21	0°♐		conjunction		-1929 May 29 j 07:31	19°♎26'45	0°35'20	
	-1934 Aug 16 j 21:52	20°♐33'03		minimum elong		-1929 May 29 j 06:18	19°♎24'47	0°35'21	
	-1934 Aug 30 j 01:03	0°♑		max. Earth dist.		-1929 Jun 08 j 18:01	26°♎10'00	2.65311 AU	
	-1934 Oct 09 j 02:51	0°♒				-1929 Jun 14 j 17:21	0°♓		
	-1934 Nov 16 j 15:33	0°♊		morning rise		-1929 Jul 15 j 09:09	19°♓33'59		
evening set	-1934 Dec 12 j 01:56	20°♊03'14				-1929 Jul 31 j 19:31	0°☿		
	-1934 Dec 24 j 17:04	0°♋				-1929 Sep 17 j 05:17	0°♏		
	-1933 Feb 01 j 06:36	0°♌				-1929 Nov 03 j 22:16	0°♐		
						-1929 Dec 22 j 17:19	0°♑		
conjunction	-1933 Feb 16 j 08:29	11°♌29'12	-1°01'37			-1928 Feb 13 j 14:13	0°♒		
minimum elong	-1933 Feb 16 j 10:33	11°♌33'07	1°01'38	desc. node		-1928 Apr 07 j 19:04	21°♒40'27		
	-1933 Mar 13 j 04:02	0°♌		retrograde		-1928 Apr 27 j 03:08	23°♒52'02		
max. Earth dist.	-1933 Apr 05 j 13:14	16°♌57'36	2.45923 AU	opposition		-1928 May 27 j 18:34	18°♒41'52	-3°22'07	
morning rise	-1933 Apr 20 j 16:05	27°♌40'00		greatest brilliancy		-1928 May 28 j 05:47	18°♒34'07	-2.8m	
	-1933 Apr 24 j 00:05	0°♍		min. Earth dist.		-1928 Jun 01 j 04:42	17°♒28'27	0.38957 AU	
	-1933 Jun 07 j 03:07	0°♎		direct		-1928 Jun 28 j 17:49	12°♒59'33		
asc. node	-1933 Jun 20 j 22:26	9°♎03'16				-1928 Aug 23 j 01:11	0°♊		
	-1933 Jul 23 j 19:21	0°♓				-1928 Oct 11 j 14:17	0°♋		
	-1933 Sep 11 j 21:00	0°☿				-1928 Nov 25 j 02:48	0°♌		
	-1933 Nov 09 j 13:21	0°♏				-1927 Jan 08 j 05:53	0°♍		
retrograde	-1932 Jan 03 j 01:18	13°♏43'59		asc. node		-1927 Feb 09 j 18:37	21°♍45'47		
opposition	-1932 Feb 10 j 03:36	5°♏08'14	4°44'14			-1927 Feb 22 j 06:00	0°♎		
greatest brilliancy	-1932 Feb 11 j 00:36	4°♏48'03	-1.5m			-1927 Apr 09 j 09:34	0°♏		
min. Earth dist.	-1932 Feb 15 j 15:45	3°♏01'24	0.61950 AU	evening set		-1927 May 19 j 16:09	25°♏44'15		
	-1932 Feb 24 j 00:42	30°♏☿				-1927 May 26 j 08:57	0°♓		
direct	-1932 Mar 22 j 06:22	25°☿12'51		max. Earth dist.		-1927 Jul 01 j 06:13	22°♓49'50	2.67232 AU	
	-1932 Apr 20 j 07:21	0°♏							
	-1932 Jun 21 j 22:49	0°♐		conjunction		-1927 Jul 05 j 14:45	25°♓36'27	1°04'41	
desc. node	-1932 Jul 03 j 20:19	7°♐20'34		minimum elong		-1927 Jul 05 j 13:51	25°♓35'00	1°04'42	
	-1932 Aug 06 j 17:56	0°♑				-1927 Jul 12 j 11:55	0°☿		
	-1932 Sep 16 j 20:34	0°♒		morning rise		-1927 Aug 19 j 13:05	24°☿27'31		
	-1932 Oct 25 j 21:09	0°♊				-1927 Aug 28 j 02:03	0°♏		
	-1932 Dec 03 j 07:41	0°♋				-1927 Oct 12 j 17:28	0°♐		
	-1931 Jan 11 j 06:50	0°♌				-1927 Nov 26 j 08:22	0°♑		
evening set	-1931 Feb 16 j 00:30	26°♌38'46				-1926 Jan 09 j 03:53	0°♒		
	-1931 Feb 20 j 14:49	0°♍				-1926 Feb 21 j 15:44	0°♊		
	-1931 Apr 03 j 20:22	0°♍		desc. node		-1926 Feb 23 j 18:41	1°♊27'27		
						-1926 Apr 07 j 05:11	0°♋		
conjunction	-1931 Apr 14 j 19:56	7°♍34'17	-0°13'42			-1926 May 28 j 23:17	0°♌		
minimum elong	-1931 Apr 14 j 20:41	7°♍35'33	0°13'40	retrograde		-1926 Jul 12 j 10:44	11°♌54'45		
behind sun begin	-1931 Apr 14 j 09:02	7°♍15'37		min. Earth dist.		-1926 Aug 08 j 05:21	7°♌14'55	0.41347 AU	
behind sun end	-1931 Apr 15 j 08:19	7°♍55'28		greatest brilliancy		-1926 Aug 13 j 22:51	5°♌27'46	-2.7m	
asc. node	-1931 May 07 j 21:56	23°♍12'01		opposition		-1926 Aug 15 j 08:12	5°♌01'35	-6°10'55	
max. Earth dist.	-1931 May 12 j 21:07	26°♍31'02	2.57994 AU			-1926 Sep 04 j 22:47	30°♌♊		
	-1931 May 18 j 02:53	0°♎		direct		-1926 Sep 15 j 05:06	29°♊17'15		
morning rise	-1931 Jun 06 j 14:51	12°♎48'52				-1926 Sep 25 j 16:28	0°♋		
	-1931 Jul 03 j 06:15	0°♓				-1926 Dec 09 j 05:30	0°♌		
	-1931 Aug 20 j 00:41	0°☿		asc. node		-1926 Dec 28 j 17:33	11°♌02'02		
	-1931 Oct 08 j 18:09	0°♏				-1925 Jan 29 j 18:28	0°♍		
	-1931 Dec 02 j 02:51	0°♐				-1925 Mar 19 j 23:42	0°♎		
retrograde	-1930 Feb 18 j 09:31	24°♐55'18				-1925 May 07 j 12:20	0°♓		
opposition	-1930 Mar 25 j 09:32	17°♐45'12	2°55'13			-1925 Jun 24 j 06:10	0°☿		
greatest brilliancy	-1930 Mar 26 j 09:05	17°♐24'30	-2.1m	evening set		-1925 Jun 26 j 18:36	1°☿36'05		
min. Earth dist.	-1930 Apr 02 j 17:59	14°♐49'27	0.50835 AU	max. Earth dist.		-1925 Jul 25 j 14:23	20°☿07'31	2.63762 AU	
direct	-1930 May 03 j 00:31	8°♐57'48				-1925 Aug 09 j 17:20	0°♏		
desc. node	-1930 May 21 j 19:50	11°♐15'07							
	-1930 Jul 05 j 16:59	0°♑		conjunction		-1925 Aug 11 j 23:47	1°♑29'29	1°08'37	
	-1930 Aug 21 j 20:16	0°♒		minimum elong		-1925 Aug 12 j 00:19	1°♑30'22	1°08'40	

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-1925 Sep 23 j 12:47	0°♎		greatest brilliancy	-1920 Dec 22 j 19:44	16°♊40'11	-1.3m
morning rise	-1925 Sep 26 j 22:40	2°♎20'03		min. Earth dist.	-1920 Dec 23 j 00:34	16°♊35'21	0.67392 AU
	-1925 Nov 05 j 14:27	0°♎		direct	-1919 Feb 01 j 12:50	6°♊49'53	
	-1925 Dec 17 j 03:17	0°♎			-1919 Apr 17 j 10:08	0°♎	
desc. node	-1924 Jan 11 j 19:12	18°♎59'02			-1919 Jun 09 j 21:15	0°♎	
	-1924 Jan 26 j 12:54	0°♎			-1919 Jul 26 j 05:47	0°♎	
	-1924 Mar 06 j 11:04	0°♎		desc. node	-1919 Sep 02 j 14:32	26°♎59'35	
	-1924 Apr 15 j 23:13	0°♎			-1919 Sep 06 j 17:35	0°♎	
	-1924 May 29 j 02:22	0°♎			-1919 Oct 16 j 16:59	0°♎	
	-1924 Jul 21 j 02:42	0°♎		evening set	-1919 Nov 14 j 21:06	22°♎39'49	
retrograde	-1924 Sep 01 j 04:42	10°♎26'56			-1919 Nov 24 j 05:08	0°♎	
min. Earth dist.	-1924 Oct 02 j 14:22	3°♎42'59	0.53832 AU		-1918 Jan 01 j 06:02	0°♎	
opposition	-1924 Oct 09 j 16:59	0°♎59'56	-1°39'25				
greatest brilliancy	-1924 Oct 09 j 07:24	1°♎09'06	-2.0m	conjunction	-1918 Jan 19 j 19:49	14°♎33'30	-1°06'03
	-1924 Oct 12 j 08:11	30°♎		minimum elong	-1918 Jan 19 j 19:16	14°♎32'26	1°06'05
direct	-1924 Nov 14 j 02:12	23°♎07'24			-1918 Feb 08 j 18:18	0°♎	
asc. node	-1924 Nov 14 j 16:14	23°♎07'32		max. Earth dist.	-1918 Mar 09 j 22:01	22°♎05'45	2.40702 AU
	-1924 Dec 19 j 22:31	0°♎			-1918 Mar 20 j 13:44	0°♎	
	-1923 Feb 22 j 09:23	0°♎		morning rise	-1918 Mar 28 j 07:25	5°♎40'37	
	-1923 Apr 16 j 00:58	0°♎			-1918 May 01 j 08:14	0°♎	
	-1923 Jun 04 j 09:24	0°♎			-1918 Jun 14 j 13:09	0°♎	
	-1923 Jul 21 j 07:43	0°♎		asc. node	-1918 Jul 07 j 14:44	14°♎56'09	
evening set	-1923 Aug 03 j 17:53	8°♎52'08			-1918 Jul 31 j 17:48	0°♎	
max. Earth dist.	-1923 Aug 21 j 18:54	21°♎00'42	2.55200 AU		-1918 Sep 21 j 19:48	0°♎	
	-1923 Sep 03 j 21:39	0°♎			-1918 Dec 16 j 01:54	0°♎	
				retrograde	-1918 Dec 18 j 17:48	0°♎02'36	
conjunction	-1923 Sep 21 j 07:54	12°♎09'48	0°41'34		-1918 Dec 21 j 09:09	30°♎	
minimum elong	-1923 Sep 21 j 09:26	12°♎12'29	0°41'35	opposition	-1917 Jan 26 j 14:13	21°♎03'55	4°47'19
	-1923 Oct 16 j 06:25	0°♎		greatest brilliancy	-1917 Jan 27 j 04:51	20°♎49'39	-1.4m
morning rise	-1923 Nov 11 j 19:32	19°♎31'14		min. Earth dist.	-1917 Jan 30 j 14:43	19°♎29'42	0.64753 AU
	-1923 Nov 25 j 19:06	0°♎		direct	-1917 Mar 08 j 21:49	11°♎02'44	
desc. node	-1923 Nov 28 j 17:54	2°♎13'38			-1917 May 12 j 05:44	0°♎	
	-1922 Jan 04 j 01:16	0°♎			-1917 Jul 03 j 12:40	0°♎	
	-1922 Feb 11 j 18:27	0°♎		desc. node	-1917 Jul 21 j 13:29	11°♎50'57	
	-1922 Mar 22 j 19:31	0°♎			-1917 Aug 16 j 16:12	0°♎	
	-1922 May 02 j 05:49	0°♎			-1917 Sep 26 j 05:17	0°♎	
	-1922 Jun 14 j 14:03	0°♎			-1917 Nov 03 j 23:07	0°♎	
	-1922 Aug 03 j 13:15	0°♎			-1917 Dec 12 j 04:20	0°♎	
asc. node	-1922 Oct 02 j 15:30	21°♎19'00			-1916 Jan 19 j 22:07	0°♎	
retrograde	-1922 Oct 10 j 03:11	21°♎40'51		evening set	-1916 Jan 23 j 14:34	2°♎48'32	
min. Earth dist.	-1922 Nov 15 j 10:57	13°♎11'08	0.63559 AU		-1916 Feb 29 j 00:23	0°♎	
opposition	-1922 Nov 19 j 02:31	11°♎43'19	1°50'46				
greatest brilliancy	-1922 Nov 18 j 19:46	11°♎50'06	-1.5m	conjunction	-1916 Mar 25 j 05:17	18°♎10'37	-0°34'55
direct	-1922 Dec 27 j 18:16	2°♎34'42		minimum elong	-1916 Mar 25 j 07:16	18°♎14'07	0°34'55
	-1921 Mar 21 j 15:52	0°♎			-1916 Apr 11 j 00:39	0°♎	
	-1921 May 14 j 17:20	0°♎		max. Earth dist.	-1916 Apr 30 j 08:22	13°♎18'40	2.53752 AU
	-1921 Jul 02 j 03:44	0°♎		morning rise	-1916 May 20 j 13:08	26°♎55'25	
	-1921 Aug 16 j 01:52	0°♎		asc. node	-1916 May 24 j 13:08	29°♎35'08	
evening set	-1921 Sep 17 j 20:38	23°♎10'59			-1916 May 25 j 04:07	0°♎	
	-1921 Sep 27 j 05:26	0°♎			-1916 Jul 10 j 09:37	0°♎	
max. Earth dist.	-1921 Oct 05 j 05:58	5°♎54'02	2.42952 AU		-1916 Aug 27 j 17:58	0°♎	
desc. node	-1921 Oct 16 j 16:01	14°♎24'00			-1916 Oct 18 j 09:00	0°♎	
	-1921 Nov 06 j 06:34	0°♎			-1916 Dec 20 j 21:14	0°♎	
				retrograde	-1915 Jan 29 j 05:04	7°♎46'41	
conjunction	-1921 Nov 12 j 16:23	4°♎54'51	-0°18'16	opposition	-1915 Mar 06 j 15:07	29°♎57'40	3°59'53
minimum elong	-1921 Nov 12 j 15:08	4°♎52'26	0°18'16		-1915 Mar 06 j 12:34	30°♎	
	-1921 Dec 14 j 23:25	0°♎		greatest brilliancy	-1915 Mar 07 j 17:51	29°♎33'03	-1.8m
morning rise	-1920 Jan 15 j 13:27	24°♎48'11		min. Earth dist.	-1915 Mar 14 j 03:44	27°♎11'36	0.55748 AU
	-1920 Jan 22 j 04:22	0°♎		direct	-1915 Apr 15 j 15:17	20°♎31'35	
	-1920 Feb 29 j 18:34	0°♎			-1915 May 26 j 17:45	0°♎	
	-1920 Apr 09 j 14:55	0°♎		desc. node	-1915 Jun 07 j 11:53	5°♎16'33	
	-1920 May 21 j 14:30	0°♎			-1915 Jul 20 j 12:48	0°♎	
	-1920 Jul 05 j 19:04	0°♎			-1915 Sep 01 j 19:41	0°♎	
asc. node	-1920 Aug 19 j 15:42	26°♎39'11			-1915 Oct 11 j 19:40	0°♎	
	-1920 Aug 25 j 20:38	0°♎			-1915 Nov 19 j 21:24	0°♎	
retrograde	-1920 Nov 12 j 21:46	26°♎19'02			-1915 Dec 29 j 09:29	0°♎	
opposition	-1920 Dec 22 j 20:50	16°♎39'05	3°55'47		-1914 Feb 08 j 05:18	0°♎	



Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

evening set	-1914 Mar 21 j 06:26	28° $\text{X}$ 53'34			-1909 Mar 17 j 12:29	0° $\text{Z}$		
	-1914 Mar 22 j 21:03	0° $\text{Y}$			-1909 Apr 28 j 13:22	0° $\approx$		
asc. node	-1914 Apr 11 j 12:25	13° $\text{Y}$ 22'27			-1909 Jun 14 j 17:43	0° $\text{X}$		
	-1914 May 06 j 10:32	0° $\text{B}$		retrograde	-1909 Aug 15 j 06:22	20° $\text{X}$ 39'39		
				min. Earth dist.	-1909 Sep 13 j 11:34	14° $\text{X}$ 47'48	0.48833 AU	
conjunction	-1914 May 13 j 02:44	4° $\text{B}$ 23'47	0°18'11	opposition	-1909 Sep 21 j 11:25	11° $\text{X}$ 54'02	-3°26'48	
minimum elong	-1914 May 13 j 01:58	4° $\text{B}$ 22'30	0°18'13	greatest brilliancy	-1909 Sep 20 j 13:42	12° $\text{X}$ 13'46	-2.2m	
max. Earth dist.	-1914 May 30 j 00:10	15° $\text{B}$ 25'39	2.63083 AU	direct	-1909 Oct 25 j 03:37	4° $\text{X}$ 46'23		
	-1914 Jun 21 j 14:15	0° $\text{II}$		asc. node	-1909 Dec 02 j 07:46	12° $\text{X}$ 37'20		
morning rise	-1914 Jun 30 j 21:42	5° $\text{II}$ 57'30			-1908 Jan 10 j 03:03	0° $\text{Y}$		
	-1914 Aug 07 j 20:05	0° $\text{G}$			-1908 Mar 04 j 12:48	0° $\text{B}$		
	-1914 Sep 24 j 21:09	0° $\text{Q}$			-1908 Apr 24 j 00:14	0° $\text{II}$		
	-1914 Nov 13 j 04:06	0° $\text{P}$			-1908 Jun 11 j 13:38	0° $\text{G}$		
	-1913 Jan 05 j 03:38	0° $\text{A}$		evening set	-1908 Jul 19 j 05:35	24° $\text{G}$ 06'00		
retrograde	-1913 Mar 28 j 22:30	27° $\text{A}$ 53'35			-1908 Jul 28 j 06:05	0° $\text{Q}$		
desc. node	-1913 Apr 25 j 11:58	23° $\text{A}$ 26'18		max. Earth dist.	-1908 Aug 10 j 00:29	8° $\text{Q}$ 26'20	2.59103 AU	
opposition	-1913 Apr 30 j 07:26	21° $\text{A}$ 59'08	-0°18'20					
greatest brilliancy	-1913 Apr 30 j 09:34	21° $\text{A}$ 57'29	-2.6m	conjunction	-1908 Sep 04 j 10:43	25° $\text{Q}$ 35'13	0°56'07	
min. Earth dist.	-1913 May 07 j 22:00	19° $\text{A}$ 39'04	0.42847 AU	minimum elong	-1908 Sep 04 j 12:04	25° $\text{Q}$ 37'32	0°56'08	
direct	-1913 Jun 04 j 05:34	14° $\text{A}$ 56'32			-1908 Sep 10 j 21:09	0° $\text{P}$		
	-1913 Jul 25 j 12:30	0° $\text{M}$		morning rise	-1908 Oct 23 j 00:56	29° $\text{P}$ 41'23		
	-1913 Sep 12 j 17:47	0° $\text{J}$			-1908 Oct 23 j 11:17	0° $\text{A}$		
	-1913 Oct 25 j 13:15	0° $\text{Z}$			-1908 Dec 03 j 07:42	0° $\text{M}$		
	-1913 Dec 06 j 10:35	0° $\approx$		desc. node	-1908 Dec 15 j 10:16	9° $\text{M}$ 05'27		
	-1912 Jan 18 j 01:27	0° $\text{X}$			-1907 Jan 11 j 22:28	0° $\text{J}$		
asc. node	-1912 Feb 27 j 10:13	27° $\text{X}$ 32'34			-1907 Feb 19 j 23:59	0° $\text{Z}$		
	-1912 Mar 02 j 02:12	0° $\text{Y}$			-1907 Mar 31 j 09:56	0° $\approx$		
	-1912 Apr 16 j 14:50	0° $\text{B}$			-1907 May 11 j 09:56	0° $\text{X}$		
evening set	-1912 May 04 j 03:25	11° $\text{B}$ 20'10			-1907 Jun 25 j 05:25	0° $\text{Y}$		
	-1912 Jun 02 j 05:54	0° $\text{II}$			-1907 Aug 22 j 05:54	0° $\text{B}$		
				retrograde	-1907 Sep 25 j 20:14	7° $\text{B}$ 00'14		
conjunction	-1912 Jun 21 j 02:36	12° $\text{II}$ 02'07	0°56'04	asc. node	-1907 Oct 19 j 07:48	3° $\text{B}$ 07'42		
minimum elong	-1912 Jun 21 j 01:22	12° $\text{II}$ 00'10	0°56'05		-1907 Oct 28 j 02:56	30° $\text{R}$ $\text{Y}$		
max. Earth dist.	-1912 Jun 22 j 07:05	12° $\text{II}$ 47'30	2.67137 AU	min. Earth dist.	-1907 Oct 30 j 09:09	29° $\text{Y}$ 07'10	0.60378 AU	
	-1912 Jul 19 j 06:57	0° $\text{G}$		opposition	-1907 Nov 04 j 10:58	27° $\text{Y}$ 06'07	0°40'32	
morning rise	-1912 Aug 05 j 12:01	10° $\text{G}$ 59'40		greatest brilliancy	-1907 Nov 04 j 07:34	27° $\text{Y}$ 09'30	-1.7m	
	-1912 Sep 04 j 02:33	0° $\text{Q}$		direct	-1907 Dec 11 j 23:15	18° $\text{Y}$ 22'02		
	-1912 Oct 20 j 08:31	0° $\text{P}$			-1906 Jan 30 j 06:19	0° $\text{B}$		
	-1912 Dec 05 j 02:11	0° $\text{A}$			-1906 Apr 01 j 06:41	0° $\text{II}$		
	-1911 Jan 19 j 18:30	0° $\text{M}$			-1906 May 22 j 19:28	0° $\text{G}$		
	-1911 Mar 07 j 14:30	0° $\text{J}$			-1906 Jul 09 j 11:54	0° $\text{Q}$		
desc. node	-1911 Mar 12 j 12:16	3° $\text{J}$ 01'27			-1906 Aug 23 j 05:32	0° $\text{P}$		
	-1911 Apr 30 j 08:52	0° $\text{Z}$		evening set	-1906 Aug 30 j 02:56	4° $\text{P}$ 47'14		
retrograde	-1911 Jun 15 j 13:35	12° $\text{Z}$ 05'05		max. Earth dist.	-1906 Sep 14 j 00:33	15° $\text{P}$ 17'17	2.47969 AU	
min. Earth dist.	-1911 Jul 13 j 00:52	7° $\text{Z}$ 36'12	0.38152 AU		-1906 Oct 04 j 10:24	0° $\text{A}$		
opposition	-1911 Jul 16 j 20:02	6° $\text{Z}$ 33'39	-6°43'01					
greatest brilliancy	-1911 Jul 16 j 00:04	6° $\text{Z}$ 47'24	-2.9m	conjunction	-1906 Oct 21 j 09:32	12° $\text{A}$ 30'12	0°08'04	
direct	-1911 Aug 15 j 12:46	1° $\text{Z}$ 32'07		minimum elong	-1906 Oct 21 j 10:00	12° $\text{A}$ 31'03	0°08'02	
	-1911 Nov 02 j 11:57	0° $\approx$		behind sun begin	-1906 Oct 20 j 13:28	11° $\text{A}$ 52'54		
	-1911 Dec 22 j 12:51	0° $\text{X}$		behind sun end	-1906 Oct 22 j 06:31	13° $\text{A}$ 09'14		
asc. node	-1910 Jan 14 j 07:58	14° $\text{X}$ 16'45		desc. node	-1906 Nov 02 j 09:01	21° $\text{A}$ 28'26		
	-1910 Feb 08 j 06:25	0° $\text{Y}$			-1906 Nov 13 j 15:15	0° $\text{M}$		
	-1910 Mar 27 j 21:36	0° $\text{B}$		morning rise	-1906 Dec 18 j 18:56	27° $\text{M}$ 05'50		
	-1910 May 14 j 16:00	0° $\text{II}$			-1906 Dec 22 j 12:21	0° $\text{J}$		
evening set	-1910 Jun 12 j 03:46	17° $\text{II}$ 58'10			-1905 Jan 29 j 20:46	0° $\text{Z}$		
	-1910 Jul 01 j 02:12	0° $\text{G}$			-1905 Mar 09 j 13:31	0° $\approx$		
max. Earth dist.	-1910 Jul 15 j 23:38	9° $\text{G}$ 31'52	2.65751 AU		-1905 Apr 18 j 12:41	0° $\text{X}$		
					-1905 May 30 j 18:59	0° $\text{Y}$		
conjunction	-1910 Jul 28 j 07:43	17° $\text{G}$ 29'06	1°10'26		-1905 Jul 15 j 22:41	0° $\text{B}$		
minimum elong	-1910 Jul 28 j 07:39	17° $\text{G}$ 28'59	1°10'27	asc. node	-1905 Sep 06 j 06:31	28° $\text{B}$ 29'46		
	-1910 Aug 16 j 13:13	0° $\text{Q}$			-1905 Sep 09 j 14:48	0° $\text{II}$		
morning rise	-1910 Sep 11 j 10:41	17° $\text{Q}$ 06'56		retrograde	-1905 Oct 31 j 13:16	13° $\text{II}$ 23'47		
	-1910 Sep 30 j 14:42	0° $\text{P}$		min. Earth dist.	-1905 Dec 09 j 07:09	4° $\text{II}$ 06'04	0.66653 AU	
	-1910 Nov 13 j 03:59	0° $\text{A}$		opposition	-1905 Dec 10 j 15:26	3° $\text{II}$ 33'37	3°16'12	
	-1910 Dec 25 j 08:59	0° $\text{M}$		greatest brilliancy	-1905 Dec 10 j 10:18	3° $\text{II}$ 38'47	-1.4m	
desc. node	-1909 Jan 28 j 11:20	24° $\text{M}$ 46'44			-1905 Dec 19 j 18:35	30° $\text{R}$ $\text{B}$		
	-1909 Feb 04 j 14:22	0° $\text{J}$		direct	-1904 Jan 19 j 15:51	23° $\text{B}$ 57'00		

Attention, astronomical year style is used: The year -2399 in astronomical counting style is the year 2400 BCE in historical counting style.

	-1904 Feb 22 j 22:01	0°♐	minimum elong	-1899 Apr 25 j 15:21	18°♑07'06	0°01'29
	-1904 Apr 28 j 14:25	0°♑	behind sun begin	-1899 Apr 24 j 17:21	17°♑30'03	
	-1904 Jun 18 j 07:01	0°♒	behind sun end	-1899 Apr 26 j 13:22	18°♑44'07	
	-1904 Aug 02 j 21:53	0°♓	asc. node	-1899 Apr 28 j 02:55	19°♑47'16	
	-1904 Sep 14 j 05:01	0°♈		-1899 May 13 j 10:19	0°♈	
desc. node	-1904 Sep 19 j 07:06	3°♈44'12	max. Earth dist.	-1899 May 19 j 11:12	3°♈59'26	2.60045 AU
evening set	-1904 Oct 20 j 18:30	27°♈23'25	morning rise	-1899 Jun 15 j 18:44	21°♈48'16	
	-1904 Oct 24 j 04:18	0°♍		-1899 Jun 28 j 12:40	0°♐	
	-1904 Dec 01 j 17:38	0°♊		-1899 Aug 15 j 01:01	0°♑	
				-1899 Oct 03 j 00:16	0°♒	
				-1899 Nov 23 j 21:14	0°♓	
conjunction	-1904 Dec 22 j 10:18	16°♊18'27	-0°55'39			
minimum elong	-1904 Dec 22 j 07:26	16°♊12'48	0°55'40			
max. Earth dist.	-1904 Dec 25 j 18:51	18°♊57'16	2.37391 AU			
	-1903 Jan 08 j 19:16	0°♋				
	-1903 Feb 16 j 07:12	0°♌				
morning rise	-1903 Mar 01 j 12:24	10°♌06'26				
	-1903 Mar 28 j 01:35	0°♍				
	-1903 May 08 j 19:43	0°♎				
	-1903 Jun 22 j 05:14	0°♏				
asc. node	-1903 Jul 24 j 06:05	20°♏19'23				
	-1903 Aug 09 j 06:34	0°♐				
	-1903 Oct 04 j 05:12	0°♑				
retrograde	-1903 Dec 04 j 09:17	16°♑55'23				
opposition	-1902 Jan 12 j 19:23	7°♑37'52	4°36'30			
greatest brilliancy	-1902 Jan 13 j 03:21	7°♑29'58	-1.3m			
min. Earth dist.	-1902 Jan 15 j 07:36	6°♑38'19	0.66568 AU			
	-1902 Feb 03 j 21:25	30°♒♐				
direct	-1902 Feb 23 j 01:10	27°♐37'27				
	-1902 Mar 15 j 11:36	0°♑				
	-1902 May 24 j 21:23	0°♒				
	-1902 Jul 12 j 16:52	0°♓				
desc. node	-1902 Aug 07 j 06:06	17°♓23'54				
	-1902 Aug 24 j 22:51	0°♈				
	-1902 Oct 04 j 04:11	0°♍				
	-1902 Nov 11 j 18:23	0°♊				
	-1902 Dec 19 j 20:40	0°♋				
evening set	-1902 Dec 27 j 20:00	6°♋15'06				
	-1901 Jan 27 j 11:04	0°♌				
conjunction	-1901 Mar 02 j 21:56	25°♌57'32	-0°53'46			
minimum elong	-1901 Mar 03 j 00:29	26°♌02'16	0°53'46			
	-1901 Mar 08 j 09:28	0°♍				
max. Earth dist.	-1901 Apr 16 j 02:56	27°♍48'44	2.48861 AU			
	-1901 Apr 19 j 05:57	0°♎				
morning rise	-1901 May 02 j 13:46	9°♎14'02				
	-1901 Jun 02 j 07:55	0°♏				
asc. node	-1901 Jun 11 j 05:09	5°♏51'51				
	-1901 Jul 18 j 18:14	0°♐				
	-1901 Sep 06 j 00:15	0°♑				
	-1901 Oct 31 j 00:12	0°♒				
retrograde	-1900 Jan 12 j 09:21	22°♒22'53				
opposition	-1900 Feb 18 j 22:59	14°♒01'56	4°34'11			
greatest brilliancy	-1900 Feb 19 j 22:55	13°♒39'13	-1.6m			
min. Earth dist.	-1900 Feb 25 j 05:32	11°♒39'05	0.60004 AU			
direct	-1900 Mar 30 j 19:06	4°♒13'20				
	-1900 Jun 14 j 00:53	0°♓				
desc. node	-1900 Jun 24 j 05:53	5°♓54'06				
	-1900 Jul 31 j 15:52	0°♈				
	-1900 Sep 11 j 08:12	0°♍				
	-1900 Oct 20 j 15:10	0°♊				
	-1900 Nov 28 j 05:29	0°♋				
	-1899 Jan 06 j 07:43	0°♌				
	-1899 Feb 15 j 18:30	0°♍				
evening set	-1899 Feb 28 j 18:39	9°♍22'19				
	-1899 Mar 30 j 02:20	0°♎				
conjunction	-1899 Apr 25 j 15:16	18°♎06'58	-0°01'30			