Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 1 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -4400 i	n astronomical cou	nting style is the year	4401 BCE in historical c	ounting style.	
conjunction	-4400 Sep 18 j 19:24	22° <b>Ω</b> 59'48	0°41'22		-4395 Nov 15 j 03:47	0ಂತಾ	
minimum elong	-4400 Sep 18 j 21:22	23° <b>Ω</b> 03′25	0°41'29	retrograde	-4395 Dec 11 j 00:12	3° <b>©</b> 39'21	
	-4400 Sep 28 j 05:43	0° <b>m</b>			-4394 Jan 04 j 00:20	30°RⅡ	
	-4400 Nov 06 j 17:29	0∘ <b>⊽</b>		opposition	-4394 Jan 17 j 16:43	25° <b>Ⅱ</b> 13'01	5°05'06
morning rise	-4400 Nov 14 j 18:33	6° <b>£</b> 12'55		greatest brilliancy	-4394 Jan 18 j 15:56	24° <b>Ⅱ</b> 50′52	-1.6m
desc. node	-4400 Nov 20 j 20:08	10° <b>£</b> 55′06		min. Earth dist.	-4394 Jan 23 j 14:15	22° <b>Ⅱ</b> 58′04	0.60673 AU
	-4400 Dec 15 j 07:51	0°M₊		direct	-4394 Feb 27 j 13:52	15° <b>Ⅱ</b> 22'18	
	-4399 Jan 22 j 20:36	0° <b>∡</b> ¹			-4394 Apr 22 j 11:13	$0$ $\circ$ $\odot$	
	-4399 Mar 03 j 05:06	0°₹			-4394 Jun 14 j 07:08	$0 {\circ} \Omega$	
	-4399 Apr 13 j 09:03	0° <b>≈</b>		desc. node	-4394 Jul 13 j 12:42	19° <b>Ω</b> 45'46	
	-4399 May 27 j 15:09	0° <b>∀</b>			-4394 Jul 27 j 20:50	0° <b>m</b> )	
	-4399 Jul 17 j 01:12	0°Υ			-4394 Sep 06 j 00:25	0° <b>™</b>	
retrograde	-4399 Sep 29 j 14:29	24° <b>Υ</b> 36'50			-4394 Oct 14 j 19:22	0° <b>M</b>	
asc. node	-4399 Oct 06 j 05:29	24° <b>Y</b> 19′22	0.66001 ATT		-4394 Nov 22 j 13:10	0° <b>∡</b> ¹	
min. Earth dist.	-4399 Nov 06 j 23:52	15° <b>Y</b> 25'29	0.66091 AU		-4393 Jan 01 j 05:33	0°る	
opposition	-4399 Nov 08 j 16:18	14° <b>Y</b> 44'50 14° <b>Y</b> 47'22	1°15'38	evening set	-4393 Jan 26 j 03:05	18°る14'18 0°≈	
greatest brilliancy	-4399 Nov 08 j 13:48 -4399 Dec 18 j 10:48	5°Υ12'28	-1.4111		-4393 Feb 11 j 13:23	0 🌤	
direct	-4399 Mar 06 j 20:52	0°8		conjunction	-4393 Mar 23 j 14:15	27° <b>≈</b> 46'52	0°36'53
	-4398 Mar 00 j 20.32	0°II		minimum elong	-4393 Mar 23 j 15:55	27 ≈40 32 27°≈49'43	
	-4398 Jun 16 j 06:17	0°9		minimum ciong	-4393 Mar 26 j 20:46	0° <b>\</b>	0 37 00
	-4398 Jul 29 j 23:09	0°N		max. Earth dist.	-4393 Apr 18 j 13:09		2.59058 AU
	-4398 Sep 08 j 23:10	0° <b>m</b> )		max. Earth dist.	-4393 May 11 j 02:51	0°Υ	2.59050710
evening set	-4398 Sep 18 j 13:39	7° mp 15'10		morning rise	-4393 May 14 j 18:15	2° <b>Υ</b> 21'55	
desc. node	-4398 Oct 08 j 17:19	22° m/41'40		asc. node	-4393 May 29 j 03:05	11° <b>Y</b> 38'14	
	-4398 Oct 18 j 03:22	0∘ <b>⊽</b>			-4393 Jun 27 j 00:01	0°8	
max. Earth dist.	-4398 Nov 06 j 07:58	15° <b>≏</b> 00'17	2.37813 AU		-4393 Aug 14 j 07:52	$0^{\circ}\Pi$	
					-4393 Oct 03 j 19:23	0ංම	
conjunction	-4398 Nov 18 j 17:30	24° <b>≏</b> 45'10	-0°28'55		-4393 Nov 29 j 23:20	$0^{\circ}\Omega$	
minimum elong	-4398 Nov 18 j 15:06	24° <b>≏</b> 40'27	0°28'57	retrograde	-4392 Jan 29 j 10:12	16° <b>Ω</b> 29'56	
	-4398 Nov 25 j 09:29	0°M		opposition	-4392 Mar 03 j 19:48	9° <b>Ω</b> 35'31	4°29'45
	-4397 Jan 02 j 15:20	0° <b>∡</b> ¹		greatest brilliancy	-4392 Mar 05 j 06:29	9° <b>Ω</b> 05'40	
morning rise	-4397 Jan 25 j 11:07	17° <b>∡</b> ³37'42		min. Earth dist.	-4392 Mar 12 j 06:52	6° <b>Ω</b> 41'28	0.49157 AU
	-4397 Feb 10 j 17:59	0°ප		direct	-4392 Apr 10 j 19:36	1° <b>Ω</b> 07'04	
	-4397 Mar 23 j 12:33	0° <b>≈</b>		desc. node	-4392 May 30 j 14:01	15° <b>Ω</b> 01'29	
	-4397 May 05 j 15:29	0° <b>∀</b>			-4392 Jun 26 j 13:44	0° <b>m</b> )	
	-4397 Jun 20 j 22:14	0° <b>Υ</b>			-4392 Aug 10 j 08:59	0° <b>™</b>	
ī	-4397 Aug 11 j 13:38	0°8			-4392 Sep 20 j 07:43	0°M	
asc. node	-4397 Aug 24 j 06:19	6° <b>8</b> 31'52			-4392 Oct 30 j 12:52	0° <b>∡¹</b> 0° <b>⋜</b>	
retrograde opposition	-4397 Nov 03 j 11:32	28° <b>8</b> 22'36	2020157		-4392 Dec 10 j 10:08	0°る 0°≈	
greatest brilliancy	-4397 Dec 12 j 22:00 -4397 Dec 13 j 02:36	19° <b>8</b> 01'28	3°38'57 -1.3m		-4391 Jan 21 j 18:28 -4391 Mar 06 j 20:57	0 <b>≈</b> 0° <b>∺</b>	
min. Earth dist.	-4397 Dec 15 j 02:36	18° <b>8</b> 11'20	0.66570 AU	evening set	-4391 Mar 16 j 03:52	6° <b>∺</b> 10′24	
direct	-4396 Jan 23 j 00:29	9° <b>8</b> 02'38	0.00370 AC	asc. node	-4391 Apr 14 j 23:25	25° <b>)</b> (43'18	
direct	-4396 Apr 01 j 09:35	0°Ⅱ		use. Houe	-4391 Apr 21 j 13:46	0° <b>Υ</b>	
	-4396 May 24 j 06:55	0°9			.55111p1 21 j 15.10	•	
	-4396 Jul 08 j 12:33	$0^{\circ}\Omega$		conjunction	-4391 May 05 j 07:20	8° <b>Ƴ</b> 51'50	0°11'31
	-4396 Aug 18 j 23:45	0° m/p		minimum elong	-4391 May 05 j 06:52	8° <b>Y</b> 51′05	0°11'31
desc. node	-4396 Aug 25 j 14:38	4° m 58'06		behind sun begin	-4391 May 04 j 16:56	8° <b>Y</b> 28'42	
	-4396 Sep 27 j 06:23	0∘ <b>⊽</b>		behind sun end	-4391 May 05 j 20:48	9° <b>Ƴ</b> 13′29	
	-4396 Nov 04 j 12:46	0°M		max. Earth dist.	-4391 May 13 j 20:51	14° <b>Ƴ</b> 21'53	2.65670 AU
evening set	-4396 Nov 22 j 16:53	14°ML17'19			-4391 Jun 07 j 07:47	$0^{\circ}$ 8	
	-4396 Dec 12 j 19:36	0°⊀		morning rise	-4391 Jun 21 j 09:54	8° <b>8</b> 58'18	
	-4395 Jan 21 j 00:37	0° <b>ට</b>			-4391 Jul 24 j 11:44	$\Pi$ °0	
					-4391 Sep 09 j 16:25	0ංම	
conjunction	-4395 Jan 26 j 10:48	4° <b>る</b> 03'45			-4391 Oct 27 j 01:45	$0$ $^{\circ}$ $\Omega$	
minimum elong	-4395 Jan 26 j 11:10	4° <b>る</b> 04'26	1°08'13		-4391 Dec 14 j 16:49	0° <b>m</b> )	
	-4395 Mar 02 j 21:20	0° <b>≈</b>		_	-4390 Feb 06 j 12:08	0° <b>⊽</b>	
max. Earth dist.	-4395 Mar 13 j 05:34		2.47586 AU	retrograde	-4390 Apr 10 j 00:41	18° <b>2</b> 39'26	
morning rise	-4395 Mar 28 j 23:06	18°≈23'15		desc. node	-4390 Apr 17 j 16:04	18° <b>£</b> 17'01	1040100
	-4395 Apr 14 j 20:49	0° <b>₩</b>		opposition	-4390 May 10 j 12:19	13° <b>△</b> 34'59	
aga node	-4395 May 30 j 04:28	0°Υ 26°Υ24'56		greatest brilliancy	-4390 May 10 j 15:28		-2.9m
asc. node	-4395 Jul 11 j 05:04	26° <b>Y</b> 24'56		min. Earth dist.	-4390 May 13 j 08:39	12° <b>♀</b> 48'44 8° <b>♀</b> 11'33	0.38283 AU
	-4395 Jul 17 j 02:19 -4395 Sep 07 j 01:15	0°∏ 8°0		direct	-4390 Jun 10 j 18:17 -4390 Aug 14 j 12:24	8° <b>±</b> 211′33	
	тэлэ ыср	ν <b>д</b>			7570 Aug 14 J 12.24	O IIG	

,	ical year style is used: Th		•	//		, ,	3 2
Attention, astronom		e year -4400 r 0° <b>∡</b> 7	n astronomicai cou			$3^{\circ}\Omega 44'35$	0050107
	-4390 Oct 02 j 05:54			conjunction	-4385 Aug 31 j 11:28		
	-4390 Nov 16 j 07:56	0° <b>ට</b>		minimum elong	-4385 Aug 31 j 13:07	3° <b>Ω</b> 47'32	0°58'17
	-4390 Dec 31 j 07:10	0° <b>≈</b>			-4385 Oct 06 j 12:42	0°M)	
	-4389 Feb 15 j 02:54	0° <b>∀</b>		morning rise	-4385 Oct 23 j 04:05	12° <b>m</b> 26'54	
asc. node	-4389 Mar 02 j 19:37	10° <b>)</b> €07'42			-4385 Nov 15 j 06:16	0° <b>™</b>	
	-4389 Apr 02 j 20:52	0° <b>Υ</b>		desc. node	-4385 Dec 08 j 14:42	17° <b>≙</b> 59'34	
evening set	-4389 Apr 26 j 12:28	15° <b>Y</b> 02'40			-4385 Dec 24 j 02:18	0° <b>M</b> ₊	
	-4389 May 20 j 01:10	0°8			-4384 Jan 31 j 20:07	0° <b>∡</b> ¹	
max. Earth dist.	-4389 Jun 06 j 15:48	11° <b>8</b> 13'14	2.66884 AU		-4384 Mar 11 j 09:52	0°₹	
					-4384 Apr 21 j 23:10	0° <b>≈</b>	
conjunction	-4389 Jun 12 j 16:39	15° <b>8</b> 04'37	0°51'12		-4384 Jun 06 j 08:23	0° <b>∀</b>	
minimum elong	-4389 Jun 12 j 15:22	15° <b>8</b> 02'34	0°51'20		-4384 Aug 01 j 07:26	$0^{\circ}$ Y	
	-4389 Jul 05 j 22:33	$\Pi$ $^{\circ}$ 0		retrograde	-4384 Sep 15 j 23:58	11° <b>Y</b> 04'15	
morning rise	-4389 Jul 28 j 00:08	14° <b>Ⅱ</b> 18′06		asc. node	-4384 Oct 22 j 20:10	2° <b>Ƴ</b> 23'48	
	-4389 Aug 20 j 22:32	$0$ . $\odot$		min. Earth dist.	-4384 Oct 22 j 20:57	2° <b>Y</b> 23'01	0.64199 AU
	-4389 Oct 04 j 18:44	$0 {\circ} \mathcal{N}$		opposition	-4384 Oct 26 j 00:22	1° <b>Ƴ</b> 07'18	0°07'29
	-4389 Nov 17 j 13:07	0° <b>m</b>		greatest brilliancy	-4384 Oct 26 j 00:01	1° <b>Ƴ</b> 07'38	-1.5m
	-4389 Dec 30 j 13:14	0。 <b>ಹ</b>			-4384 Oct 28 j 19:43	30° <b>₹</b> ₩	
	-4388 Feb 11 j 12:05	0° <b>M</b> .		direct	-4384 Dec 03 j 21:59	21° <b>¥</b> 52′50	
desc. node	-4388 Mar 04 j 16:44	15° <b>M</b> ₊10'22			-4383 Jan 13 j 03:00	$0$ ° $\Upsilon$	
	-4388 Mar 27 j 07:13	0° <b>∡</b> ¹			-4383 Mar 17 j 19:03	$8^{\circ}$ 0	
	-4388 May 23 j 12:33	8°0			-4383 May 08 j 01:22	$\Pi^{\circ}0$	
retrograde	-4388 Jun 21 j 06:54	5° <b>ರ</b> 24'46			-4383 Jun 23 j 18:35	0°©	
min. Earth dist.	-4388 Jul 18 j 09:15	0° <b>ප</b> 33'50	0.42908 AU		-4383 Aug 06 j 06:38	$0^{\circ}\Omega$	
	-4388 Jul 20 j 03:51	30°R. <b>✓</b>		evening set	-4383 Aug 27 j 19:58	15° <b>Ω</b> 34'17	
greatest brilliancy	-4388 Jul 24 j 10:46	28° <b>∡</b> ³36'18	-2.5m	8.11	-4383 Sep 16 j 07:03	0° m/	
opposition	-4388 Jul 26 j 01:20	28° <b>₹</b> '04'53		max. Earth dist.	-4383 Sep 17 j 16:33	•	2.41380 AU
direct	-4388 Aug 26 j 12:26	22° <b>×</b> 102'52	0 22 3 /	max. Larm dist.	1303 Sep 17 j 10.33	1 10/0231	2.11300710
uncet	-4388 Oct 03 j 08:47	0°පි		conjunction	-4383 Oct 23 j 21:27	28° <b>m</b> ) 42'17	0°01'10
	-4388 Dec 03 j 01:44	0°≈		minimum elong	-4383 Oct 23 j 21:35	28° <b>m</b> ) 42'31	0°01'10
asc. node	-4387 Jan 17 j 18:22	0 ∞ 26°≈50'15		behind sun begin	-4383 Oct 22 j 19:59	27° My 52'57	0 01 10
asc. node	-4387 Jan 23 j 00:17	0° <b>\</b>		behind sun end	-4383 Oct 24 j 23:10	29° m <sub>2</sub> 32'07	
	-4387 Mar 13 j 04:19	0°Υ		desc. node	-4383 Oct 25 j 11:16	29° <b>m</b> 55'35	
	•	0°8		desc. Hode	-4383 Oct 25 j 11:10	0∘ <b>⊽</b>	
	-4387 Apr 30 j 11:54				3		
evening set	-4387 Jun 02 j 22:39	21° <b>8</b> 10'09 0° <b>I</b> I			-4383 Dec 02 j 22:05	0°M	
F 41 F 4	-4387 Jun 16 j 16:30		2 (2721 ATT	morning rise	-4383 Dec 27 j 13:34	19°M20'11	
max. Earth dist.	-4387 Jun 30 j 10:13	8°Д34'36	2.62721 AU		-4382 Jan 10 j 05:42	0° <b>⊼</b>	
					-4382 Feb 18 j 09:15	0° <b>ප</b>	
conjunction	-4387 Jul 19 j 18:19	21° <b>Ⅱ</b> 38'17			-4382 Mar 31 j 05:03	0° <b>≈</b>	
minimum elong	-4387 Jul 19 j 17:59	21° <b>Ⅲ</b> 37'43	1°10'57		-4382 May 13 j 13:30	0° <b>)</b> €	
	-4387 Aug 01 j 07:12	0ං <b>ව</b>			-4382 Jun 29 j 17:24	0° <b>Ƴ</b>	
morning rise	-4387 Sep 04 j 09:51	23°515'22			-4382 Aug 24 j 10:32	0° <b>8</b>	
	-4387 Sep 14 j 02:19	$0$ $\circ$ $\Omega$		asc. node	-4382 Sep 09 j 21:13	6° <b>8</b> 50'43	
	-4387 Oct 26 j 04:17	0° <b>m</b> ∕		retrograde	-4382 Oct 20 j 18:29	15° <b>8</b> 29'25	
	-4387 Dec 05 j 21:18	0∘ <b>⊽</b>		opposition	-4382 Nov 29 j 14:06		2°49'04
	-4386 Jan 14 j 18:42	0°M₊		greatest brilliancy	-4382 Nov 29 j 14:05	5° <b>8</b> 53'24	-1.3m
desc. node	-4386 Jan 20 j 16:20	4°M27'21		min. Earth dist.	-4382 Nov 30 j 04:54	_	0.67154 AU
	-4386 Feb 23 j 15:55	0° <b>⊼</b>			-4382 Dec 15 j 11:17	30° <b>₹Ƴ</b>	
	-4386 Apr 05 j 19:55	0°₹		direct	-4381 Jan 09 j 07:55	26° <b>Y</b> 01′25	
	-4386 May 21 j 00:15	0° <b>≈</b>			-4381 Feb 05 j 09:00	$9^{\circ}$ 8	
	-4386 Jul 28 j 23:32	0° <b>∀</b>			-4381 Apr 14 j 06:47	$\Pi$ $\circ$ 0	
retrograde	-4386 Aug 09 j 18:56	0° <b>)</b> 56′54			-4381 Jun 03 j 02:08	$0$ $\circ$ $\odot$	
	-4386 Aug 21 j 05:56	30° <b>₹</b> ≈			-4381 Jul 17 j 12:15	$0^{\circ}\Omega$	
min. Earth dist.	-4386 Sep 10 j 22:22	23° <b>≈</b> 57'21	0.55332 AU		-4381 Aug 27 j 17:05	0° <b>m</b> )	
opposition	-4386 Sep 17 j 15:01	21° <b>≈</b> 22'21	-3°18'36	desc. node	-4381 Sep 12 j 08:36	11° <b>m</b> 50'30	
greatest brilliancy	-4386 Sep 16 j 21:39	21° <b>≈</b> 39′08	-1.9m		-4381 Oct 05 j 21:31	0∘ <b>ত</b>	
direct	-4386 Oct 23 j 10:27	13° <b>≈</b> 19′00		evening set	-4381 Oct 27 j 14:38	17° <b>≏</b> 00'04	
asc. node	-4386 Dec 05 j 19:06	22° <b>≈</b> 53'02		-	-4381 Nov 13 j 02:41	0° <b>M</b> .	
	-4386 Dec 22 j 18:27	0° <b>)</b>			-4381 Dec 21 j 08:07	0° <b>∡</b> ¹	
	-4385 Feb 18 j 14:17	0°Υ			<i>y</i>		
	-4385 Apr 10 j 18:50	0°8		conjunction	-4380 Jan 01 j 01:15	8° <b>∡</b> 18'40	-1°03'05
	-4385 May 29 j 01:02	0°II		minimum elong	-4381 Dec 31 j 23:00	8° <b>∡</b> 14'20	
evening set	-4385 Jul 12 j 22:33	29° <b>Ⅱ</b> 24'27			-4380 Jan 29 j 11:09	0°る	
	-4385 Jul 13 j 19:41	0°ම		max. Earth dist.	-4380 Feb 19 j 05:08		2.42391 AU
max. Earth dist.	-4385 Jul 30 j 01:18	11°902'20	2.53607 AU	morning rise	-4380 Mar 06 j 15:15	27° <b>る</b> 24'39	
Durin dist.	-4385 Aug 26 j 05:13	0°Ω	2.00007 110		-4380 Mar 10 j 05:38	27 <b>⊙</b> 2∓37	
	1505 11ug 20 J 05.15	~ O C			-4380 Mar 10 j 05:38 -4380 Apr 22 j 04:28	0° <b>∺</b>	
					1500 Apr 22 J 04.20	υ <b>Λ</b>	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.  $0^{\circ}\Upsilon$ -4380 Jun 06 j 16:48 -4375 Oct 14 j 12:48 0°×7 -4380 Jul 25 j 11:30 0°8 -4375 Nov 26 j 04:34 0°궁 -4380 Jul 27 j 21:03 1°824'23 -4374 Jan 08 j 18:18 0°≈ asc. node  $\mathbb{I}^{\circ 0}$ -4374 Feb 22 j 17:16 0°\ -4380 Sep 18 j 23:33 -4380 Nov 25 j 05:16 19°**Ⅲ**36'23 -4374 Mar 19 j 12:39 16°**₩**11'04 retrograde asc. node  $0^{\circ}\Upsilon$ -4379 Jan 02 j 17:54 opposition 10°**Ⅱ**45′08 4°40'16 -4374 Apr 09 j 22:39 -4379 Jan 03 j 09:04 -4374 Apr 11 j 00:38 0°Y41'41 greatest brilliancy 10°**Ⅲ**30′23 -1.4m evening set min. Earth dist. -4379 Jan 07 j 04:15 9°**Ⅱ**01'41 0.63758 AU -4374 May 26 j 21:09 0°8 direct -4379 Feb 12 j 22:41 0°**I**I45'30 max. Earth dist. -4374 May 28 j 11:03 1°**8**00'24 2.67047 AU 0ಂತಾ -4379 May 07 j 05:12 -4379 Jun 24 j 07:58  $0^{\circ}\Omega$ conjunction -4374 May 29 j 01:17 1°**8**23'05 0°37'38 -4379 Jul 30 j 07:30 25°Ω17'51 -4374 May 29 j 00:05 1°821'11 0°37'44 desc. node minimum elong -4374 Jul 12 j 19:26 -4379 Aug 05 j 17:33 0° M  $0^{\circ}\Pi$ -4379 Sep 14 j 09:31 0∘**⊽** morning rise -4374 Jul 13 j 17:46 0°**I**I35'53 -4379 Oct 22 j 21:14 0°M -4374 Aug 28 j 03:42 0ಂತಾ -4379 Nov 30 j 08:49 0°**√** -4374 Oct 12 j 17:26  $0^{\circ}\Omega$ evening set -4378 Jan 02 j 18:18 25°**х** 28'59 -4374 Nov 26 j 17:14 0° m -4378 Jan 08 j 18:55 0°る -4373 Jan 10 j 16:29 0∘**ত** -4378 Feb 18 j 20:38 -4373 Feb 26 j 05:01 0°M desc. node -4373 Mar 22 j 09:35 14°**™**17'04 conjunction -4378 Mar 03 j 16:40 9°≈05'10 -0°53'33 -4373 Apr 24 j 01:38 0°**∡**7 minimum elong -4378 Mar 03 j 18:48 9°≈08'55 0°53'41 retrograde -4373 May 28 i 00:51 7°**х** 04′07 -4378 Apr 02 j 23:18 0°**)**€ min. Earth dist. -4373 Jun 23 j 22:44 2°**∡**³37′28 0.39094 AU max. Earth dist. -4378 Apr 06 j 10:09 2°**)** 20'27 2.55066 AU greatest brilliancy -4373 Jun 28 i 01:36 1°**≯**27'14 -2.8m morning rise -4378 Apr 27 j 23:54 16°**)** 46'37 opposition -4373 Jun 29 j 04:25 1° ₹ 08'02 -6°02'56 -4378 May 18 j 03:51  $0^{\circ}\Upsilon$ -4373 Jul 03 j 04:52 30°RML -4378 Jun 14 j 18:25 17°**Y**43'17 -4373 Jul 29 j 07:03 25°M54'28 direct asc node -4378 Jul 04 j 06:44 0°8 -4373 Aug 24 j 06:26 0°×7  $0^{\circ}II$ -4373 Oct 26 j 21:39 0°정 -4378 Aug 22 j 12:23 -4378 Oct 14 j 21:56 0000 -4373 Dec 15 j 17:01 0°28 -4377 Jan 08 j 04:52 -4372 Feb 01 j 19:34 0°) 28°931'32 retrograde -4377 Feb 13 j 02:46 -4372 Feb 04 j 09:49 20°955'26 5°07'06 1°**)** 37'24 opposition asc. node greatest brilliancy  $0^{\circ}\Upsilon$ -4377 Feb 14 j 12:37 20°9524'41 -4372 Mar 20 j 18:14 -1.9m -4377 Feb 20 j 22:32 18°905'15 0.54192 AU -4372 May 07 j 12:19 0°8 min. Earth dist. -4377 Mar 24 j 16:45 -4372 May 19 j 01:43 7°**8**18'55 direct 11°9541'11 evening set 28°**8**07'31 2.64963 AU -4377 May 23 j 06:21 0 $^{\circ}\Omega$ max. Earth dist. -4372 Jun 20 j 14:55 14°**£**22′27 -4372 Jun 23 j 12:37 desc. node -4377 Jun 17 j 07:01  $0^{\circ}\Pi$ -4377 Jul 11 j 06:10 0° m -4377 Aug 22 j 04:03 0∘**⊽** conjunction -4372 Jul 04 j 17:20 7°II15'40 1°06'14 -4377 Sep 30 j 21:05  $0^{\circ}$ M minimum elong -4372 Jul 04 j 16:25 7°**Ⅱ**14'11 1°06'25 -4377 Nov 09 j 06:57 0°**√** -4372 Aug 08 j 05:28 0ಂತಾ -4377 Dec 19 j 13:02 0°る -4372 Aug 19 j 10:08 7°930'30 morning rise -4376 Jan 30 j 08:44 -4372 Sep 21 j 08:22  $0^{\circ}\Omega$ 0°≈ -4376 Feb 27 j 02:19 19°≈11'20 -4372 Nov 02 j 22:42 evening set 0° m -4376 Mar 14 j 01:29 0°**)**€ -4372 Dec 14 j 07:37 0∘**ত** -4371 Jan 23 i 23:32 0°M 23°**¥**59'25 -0°07'06 9°ML54'19 conjunction -4376 Apr 19 i 06:45 desc. node -4371 Feb 06 i 09:24 minimum elong -4376 Apr 19 i 07:03 23°**)** 59'54 0°07'08 -4371 Mar 05 j 20:23 0°×7 0°る behind sun begin -4376 Apr 18 j 12:13 23°¥29'08 -4371 Apr 17 j 18:31 behind sun end -4376 Apr 20 j 01:53 24° ¥ 30'39 -4371 Jun 08 i 05:27 0°**≈** -4376 Apr 28 j 12:09  $0^{\circ}\Upsilon$ -4371 Jul 23 j 12:06 12°≈05'39 retrograde asc. node -4376 May 01 j 15:39 2°Y02'28 -4371 Aug 22 j 11:20 5°≈57'20 0.50568 AU min. Earth dist. max. Earth dist. -4376 May 04 j 08:02 3°**Y**46'46 2.63701 AU -4371 Aug 29 j 01:04 3°≈31'58 -2.1m greatest brilliancy -4376 Jun 06 j 22:28 25°**Y**21′28 morning rise opposition -4371 Aug 30 j 05:35 3°≈05'36 -4°44'11 0°8 -4376 Jun 14 j 05:23 -4371 Sep 08 j 01:53 30°Rる  $\Pi^{\circ}0$ -4376 Jul 31 j 16:38 direct -4371 Oct 03 j 10:39 25°る43'46 -4376 Sep 17 j 18:13 0ಂತಾ -4371 Oct 30 j 17:54 0°≈ -4376 Nov 06 j 04:41  $0^{\circ}\Omega$ -4371 Dec 22 j 09:30 22°≈20'32 asc. node -4376 Dec 30 j 11:40 0° m -4370 Jan 05 j 21:59 0°) -4370 Feb 27 j 15:50  $0^{\circ}\Upsilon$ retrograde -4375 Mar 10 j 00:22 21°M 22'55 -4370 Apr 18 j 09:19 0°8 opposition -4375 Apr 10 j 19:53 15° Mp 44'12 1°36'23 greatest brilliancy -4375 Apr 11 j 08:07 15° Mp 35'06 -2.7m -4370 Jun 05 j 02:58  $0^{\circ}\Pi$ min. Earth dist. -4375 Apr 17 j 16:32 13° Mp 42'28 0.41492 AU evening set -4370 Jun 26 j 21:28 14°**Ⅲ**07'39 desc. node -4375 May 04 j 07:42 9° m 54'21 max. Earth dist. -4370 Jul 17 j 10:43 27°**I**I45'32 2.57700 AU direct -4375 May 14 j 19:20 9° m 09'00 -4370 Jul 20 j 18:48 0ಂತಾ -4375 Jul 16 j 01:40 0∘**⊽** 

conjunction

-4370 Aug 13 j 22:04 16°\$27'46 1°07'47

-4375 Sep 01 j 11:38

0°M

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 4 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ne year -4400	in astronomical co	unting style is the year	4401 BCE in historical c	ounting style.	
minimum elong	-4370 Aug 13 j 22:58	16° <b>5</b> 29'19	1°07'59	retrograde	-4365 Nov 11 j 13:42	6° <b>Ⅱ</b> 17'20	
	-4370 Sep 02 j 07:02	$0^{\circ}\Omega$			-4365 Dec 13 j 04:18	30° <b>₹</b> 8	
morning rise	-4370 Oct 02 j 12:13	21° <b>Ω</b> 41′19		opposition	-4365 Dec 20 j 17:35	27° <b>8</b> 05'50	4°04'08
	-4370 Oct 13 j 20:20	0° <b>™</b>		greatest brilliancy	-4365 Dec 21 j 01:36	26° <b>8</b> 57'56	-1.4m
	-4370 Nov 22 j 21:20	0∘ <b>⊽</b>		min. Earth dist.	-4365 Dec 23 j 16:12	25° <b>8</b> 56'11	0.65842 AU
desc. node	-4370 Dec 25 j 07:54	24° <b>≏</b> 49'57		direct	-4364 Jan 30 j 22:35	17° <b>8</b> 04'57	
	-4369 Jan 01 j 00:59	$0^{\circ}$ M.			-4364 Mar 22 j 15:11	$\Pi^{\circ}$ 0	
	-4369 Feb 09 j 02:17	0°⊀			-4364 May 18 j 03:38	0°€	
	-4369 Mar 21 j 01:05	0°る			-4364 Jul 03 j 04:43	$0^{\circ}\Omega$	
	-4369 May 02 j 07:35	0°≈			-4364 Aug 13 j 22:52	0° <b>m</b> y	
	-4369 Jun 18 j 23:28	0° <b>∀</b>		desc. node	-4364 Aug 16 j 00:14	1° <b>m</b> y31'54	
retrograde	-4369 Sep 02 j 21:44	26° <b>)</b> 42'47			-4364 Sep 22 j 08:33	0∘ <b>ত</b>	
min. Earth dist.	-4369 Oct 08 j 01:54	18° <b>)</b> 36′31	0.61387 AU		-4364 Oct 30 j 16:26	0° <b>M</b> .	
opposition	-4369 Oct 12 j 15:43	16° <b>)</b> 47′01		evening set	-4364 Dec 07 j 22:55	29°M57'05	
greatest brilliancy	-4369 Oct 12 j 11:40	16° <b>)</b> 51′04	-1.6m		-4364 Dec 08 j 00:25	0° <b>∡</b> ¹	
asc. node	-4369 Nov 09 j 10:47	8° <b>)</b> 35′16			-4363 Jan 16 j 06:34	0°ප	
direct	-4369 Nov 19 j 11:43	7° <b>¥</b> 55′29			·		
	-4368 Jan 31 j 04:59	$0^{\circ}\mathbf{Y}$		conjunction	-4363 Feb 09 j 06:55	17° <b>♂</b> 47'14	-1°05'12
	-4368 Mar 27 j 02:13	0°8		minimum elong	-4363 Feb 09 j 08:23	17° <b>る</b> 49'56	1°05'25
	-4368 May 15 j 19:32	$\Pi^{\circ}0$		Č	-4363 Feb 26 j 04:01	0° <b>≈</b>	
	-4368 Jul 01 j 01:29	0ം <b>ತಾ</b>		max. Earth dist.	-4363 Mar 22 j 22:04	17° <b>≈</b> 27'57	2.50388 AU
evening set	-4368 Aug 08 j 06:14	26°517'42		morning rise	-4363 Apr 09 j 10:56	29° <b>≈</b> 31'51	
Č	-4368 Aug 13 j 11:37	$0^{\circ}\Omega$		S	-4363 Apr 10 j 03:28	0° <b>∀</b>	
max. Earth dist.	-4368 Aug 23 j 13:10		2.46240 AU		-4363 May 25 j 08:20	$0^{\circ}\Upsilon$	
	-4368 Sep 23 j 14:02	0° m/2		asc. node	-4363 Jul 01 j 11:00	23° <b>Y</b> '33'47	
		. 1			-4363 Jul 11 j 20:46	0°8	
conjunction	-4368 Sep 30 j 17:00	5° <b>m</b> 20′36	0°28'35		-4363 Aug 31 j 12:29	0°II	
minimum elong	-4368 Sep 30 j 18:42	5° m/23'47			-4363 Oct 30 j 00:36	0°©	
mmmum viong	-4368 Nov 02 j 00:01	0° <b>⊽</b>	0 20 .0	retrograde	-4363 Dec 20 j 16:07	12° <b>©</b> 33'46	
desc. node	-4368 Nov 11 j 06:25	7° <b>♀</b> 10'55		opposition	-4362 Jan 26 j 19:18	4°523'26	5°11'52
morning rise	-4368 Nov 29 j 11:07	21° <b>Ω</b> 21'58		greatest brilliancy	-4362 Jan 27 j 22:54	3°957'26	
morning rise	-4368 Dec 10 j 11:53	0°M		min. Earth dist.	-4362 Feb 02 j 10:55		0.58605 AU
	-4367 Jan 17 j 22:02	0° <b>∡</b> 7		mm. Eurin dist.	-4362 Feb 07 j 17:07	30°RⅡ	0.50005710
	-4367 Feb 26 j 03:39	0° <b>ප</b>		direct	-4362 Mar 08 j 08:34	24° <b>II</b> 41'36	
	-4367 Apr 08 j 02:43	0° <b>≈</b>		direct	-4362 Apr 07 j 14:35	0°95	
	-4367 May 21 j 21:30	0° <b>∀</b>			-4362 Jun 07 j 03:23	0° <b>Ω</b>	
	-4367 Jul 09 j 15:09	0°Υ		desc. node	-4362 Jul 03 j 23:39	17° <b>Ω</b> 28'19	
	-4367 Sep 16 j 07:28	% 8°0		dese. Hode	-4362 Jul 21 j 22:39	0° m)	
asc. node	-4367 Sep 26 j 11:12	1° <b>8</b> 52'21			-4362 Aug 31 j 13:35	0∘ <b>ಹ</b>	
retrograde	-4367 Oct 07 j 08:44	2° <b>8</b> 36'19			-4362 Oct 09 j 14:24	0° <b>™</b>	
retrograde	-4367 Oct 27 j 02:01	30°RΥ			-4362 Nov 17 j 12:20	0° <b>×</b> 7	
opposition	-4367 Nov 16 j 09:11	22° <b>Υ</b> 48'58	1°52'06		-4362 Dec 27 j 08:12	0°ਤ	
greatest brilliancy	-4367 Nov 16 j 06:48	22° <b>Υ</b> 51'21	-1.4m		-4361 Feb 06 j 18:52	0° <b>≈</b>	
min. Earth dist.	-4367 Nov 15 j 12:31	23°Υ09'43	0.66750 AU	evening set	-4361 Feb 07 j 07:22	0°≈22'05	
direct	-4367 Dec 26 j 12:58	13° <b>Υ</b> 08'22	0.00730710	evening set	-4361 Mar 22 j 04:31	0° <b>₩</b>	
uncer	-4366 Feb 26 j 06:33	0°8			1301 Mar 22 j 0 1.31	٥٨	
	-4366 Apr 24 j 00:26	0°II		conjunction	-4361 Apr 03 j 01:56	7° <b>¥</b> 59'41	-0°26'10
	-4366 Jun 11 j 04:36	0°95		minimum elong	-4361 Apr 03 j 03:08	8° <b>₩</b> 01'41	
	-4366 Jul 25 j 03:31	$0^{\circ}\Omega$		max. Earth dist.	-4361 Apr 24 j 22:42		2.60941 AU
	-4366 Sep 04 j 05:36	0° mp		man. Darum dibu.	-4361 May 06 j 11:07	0° <b>Υ</b>	2.009 11110
desc. node	-4366 Sep 29 j 03:13	18° Mp 56'20		asc. node	-4361 May 19 j 08:15	8° <b>Υ</b> 20'38	
evening set	-4366 Oct 01 j 22:20	21° m) 05'37		morning rise	-4361 May 23 j 19:46	11° <b>Υ</b> 13'51	
evening set	-4366 Oct 13 j 10:11	0° <b>⊡</b>		morning rise	-4361 Jun 22 j 05:46	0°8	
	-4366 Nov 20 j 15:51	0°M			-4361 Aug 09 j 04:09	0°II	
	4500 NOV 20 J 15.51	O IIO			-4361 Sep 27 j 13:03	0°®	
conjunction	-4366 Dec 04 j 03:39	10°M37'28	-0°44'15		-4361 Nov 19 j 15:50	0° <b>U</b>	
minimum elong	-4366 Dec 04 j 00:24	10°M31'04		retrograde	-4360 Feb 11 j 21:54	28° <b>Ω</b> 22'29	
mminum ciong	-4366 Dec 28 j 21:07	0° <b>⊼</b>	0 1120	opposition	-4360 Mar 16 j 10:25	21° <b>Ω</b> 53'53	3°45'49
max. Earth dist.	-4365 Jan 01 j 01:54	2° <b>∡</b> ¹29'22	2.38062 AU	greatest brilliancy	-4360 Mar 17 j 16:38	$21^{\circ}\Omega 28'55$	-2.3m
max. Darui dist.	-4365 Feb 05 j 23:04	0°る	2.50002 AU	min. Earth dist.	-4360 Mar 24 j 18:54	19° <b>Ω</b> 09'19	0.46307 AU
morning rise	-4365 Feb 10 j 01:55	3°ප06'00		direct	-4360 Apr 22 j 04:21	14°Ω00'23	5.10507 AU
11101111115 1130	-4365 Mar 18 j 16:12	0°≈		desc. node	-4360 May 21 j 00:32	19° <b>Ω</b> 14'33	
	-4365 Apr 30 j 15:52	0° <b>∺</b>		dose. Hode	-4360 Jun 14 j 17:33	0° <b>m</b> )	
	-4365 Jun 15 j 12:45	0°Υ			-4360 Aug 02 j 15:16	0∘ <b>ت</b> المار	
	-4365 Aug 04 j 17:58	0°8			-4360 Sep 13 j 20:45	0° <b>™</b>	
asc. node	-4365 Aug 14 j 11:18	5° <b>8</b> 20'20			-4360 Oct 24 j 18:09	0° <b>⊼</b> ¹	
	-4365 Oct 07 j 23:40	0°Ⅱ			-4360 Dec 05 j 02:25	0°ਤੇ	
	1505 500 07 j 25.40	ν д			1500 <b>Dec</b> 05 j 02.25	v <b>O</b>	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4359 Jan 16 j 18:25 0°≈ -4355 Nov 30 j 18:38 0∘**⊽** -4359 Mar 02 j 02:25 0°**₩** -4354 Jan 09 j 08:53 0°M -4359 Mar 25 j 20:17 15°**)** 38'43 -4354 Jan 11 j 02:57 1°M20'05 evening set desc. node 22°\ 23'22 -4354 Feb 17 j 21:12 0°×7 -4359 Apr 05 j 04:36 asc. node  $0^{\circ}\Upsilon$ -4354 Mar 30 j 10:53 0°궁 -4359 Apr 16 j 22:27 -4354 May 13 j 01:58 0°≈ -4359 May 14 j 02:28 -4354 Jul 05 j 16:21 17°**Y**′27'54 0°21'39 0°**)**€ conjunction -4359 May 14 j 01:40 minimum elong 17°**Y**26'37 0°21'41 retrograde -4354 Aug 18 j 22:48 11°**X**05'39 -4359 May 19 j 08:28 20°**Y**49′21 3°**)** 40′24 0.57685 AU max. Earth dist. 2.66391 AU min. Earth dist. -4354 Sep 21 j 05:09 -4359 Jun 02 j 17:23 0°8 opposition -4354 Sep 27 j 04:22 1°¥19'58 -2°29'19 morning rise -4359 Jun 29 j 13:51 17°**8**07'00 greatest brilliancy -4354 Sep 26 j 16:38 1°**¥**31′29 -1.8m -4359 Jul 19 j 18:37  $0^{\circ}\Pi$ -4354 Sep 30 j 14:45 30°R≈ -4359 Sep 04 j 14:37 0ಂತಾ direct -4354 Nov 02 j 18:14 22°≈57'25 -4359 Oct 21 j 05:05  $0^{\circ}\Omega$ asc. node -4354 Nov 26 j 00:35 26°≈02'47 -4359 Dec 07 j 03:00 0° m -4354 Dec 09 j 09:03 0°**)**€ -4358 Jan 25 j 00:07 0∘**⊽** -4353 Feb 12 j 00:12  $0^{\circ}\Upsilon$ -4358 Mar 26 j 10:43 0°M -4353 Apr 05 j 11:46 0°8 desc. node -4358 Apr 08 j 01:11 3°M42'38 -4353 May 24 j 05:16  $0^{\circ}\Pi$ retrograde -4358 Apr 27 j 23:55 6°M10'40 -4353 Jul 09 j 03:55 opposition -4358 May 28 j 14:48 1°ML04'52 -3°41'57 evening set -4353 Jul 22 j 12:23 9°902'56 greatest brilliancy -4358 May 28 j 11:28 1°ML07'05 -2.9m max. Earth dist. -4353 Aug 07 j 07:57 19°558'13 2.51088 AU min. Earth dist. -4358 May 28 i 07:36 1°ML09'40 0.37704 AU -4353 Aug 21 j 14:03  $0^{\circ}\Omega$ -4358 Jun 01 j 17:02 direct -4358 Jun 27 j 18:27 26°**₽**02'09 conjunction -4353 Sep 11 i 04:48 14°**Ω**49'08 0°49'26 -4358 Jul 23 j 00:26 0°M -4353 Sep 11 i 06:43 14°**Ω**52'37 0°49'34 minimum elong -4358 Sep 22 j 17:08 0°×7 -4353 Oct 01 j 19:53 O° m -4358 Nov 09 j 09:54 0°궁 -4353 Nov 05 j 02:31 25° m 53'50 morning rise -4358 Dec 25 j 13:07 -4353 Nov 10 j 10:54 0°≈≈ 0∘Ω 0°**)**€ -4353 Nov 29 j 00:09 14°**£**19'42 -4357 Feb 09 j 23:56 desc node -4357 Feb 21 j 01:50 7° **)** 05'34 -4353 Dec 19 j 03:54 0°M asc. node -4352 Jan 26 j 18:30 -4357 Mar 29 j 02:05  $0^{\circ}\Upsilon$ 0°×7 23°Y28'41 -4352 Mar 06 j 04:23 -4357 May 05 j 03:46 0°궁 evening set 0°≈ -4357 May 15 j 10:31 0°8 -4352 Apr 16 j 10:18 -4357 Jun 12 j 02:09 17°**8**37'01 -4352 May 30 j 23:52 0° H max. Earth dist. 2.66440 AU -4352 Jul 21 j 21:37  $0^{\circ}\Upsilon$ -4357 Jun 21 j 00:36 23°**8**20'45 0°57'42 -4352 Sep 23 j 21:29 19°**Y**21′58 conjunction retrograde -4352 Oct 13 j 02:13 minimum elong -4357 Jun 20 j 23:22 23°**8**18'46 0°57'51 asc. node 16°**Y**50′55 -4357 Jul 01 j 08:43  $0^{\circ}II$ min. Earth dist. -4352 Oct 31 j 14:47 10°**Y**23'25 0.65355 AU morning rise -4357 Aug 05 j 07:54 22°II46'59 -4352 Nov 02 j 22:39 9°Y27'13 0°48'00 opposition -4357 Aug 16 j 06:01 0ಂತಾ greatest brilliancy -4352 Nov 02 j 20:36 9°**Y**29'16 -1.4m -4357 Sep 29 j 19:42  $0^{\circ}\Omega$ -4352 Dec 12 j 07:45 0°Y02'17 direct -4357 Nov 12 j 02:40 0° m -4351 Mar 10 j 22:55 0°8 -4357 Dec 24 j 09:58 -4351 May 02 j 16:33  $0^{\circ}\Pi$ 0∘**⊽** -4356 Feb 04 j 06:54 0°M -4351 Jun 18 j 21:03 0ಂತಾ -4356 Feb 24 j 03:15 14°ML06'08 -4351 Aug 01 j 13:15 desc. node 0° $\Omega$ -4356 Mar 18 j 00:13 0°×7 evening set -4351 Sep 08 i 19:40 27°Ω55'01 -4356 May 04 j 13:33 0°정 -4351 Sep 11 j 14:27 0° m -4356 Jul 03 i 20:42 retrograde 20°る05'50 max. Earth dist. -4351 Oct 08 j 13:14 20° m 29'31 2.39067 AU min. Earth dist. -4356 Jul 31 i 18:45 14°る50'11 0.45553 AU desc. node -4351 Oct 15 j 21:14 26° m 09'09 -4356 Aug 07 j 08:01 12°る35'38 -2.4m -4351 Oct 20 j 20:20 0∘**⊽** greatest brilliancy -4356 Aug 08 j 21:42 12°る03'14 -5°57'49 opposition direct -4356 Sep 10 j 07:21 5°₹31'21 -4351 Nov 07 j 03:22 13°**2**29'50 -0°15'59 conjunction -4356 Nov 23 j 23:30 -4351 Nov 07 j 02:02 13°**2**27'13 0°16'01 0°≈≈ minimum elong asc. node -4355 Jan 08 j 00:15 24°≈53'10 behind sun begin -4351 Nov 06 j 20:47 13°**£**16'56 0°**₩** -4355 Jan 16 j 18:57 behind sun end -4351 Nov 07 j 07:18 13°**♀**37'31  $0^{\circ}\Upsilon$  $0^{\circ}$ M -4355 Mar 07 j 22:41 -4351 Nov 28 j 03:34 -4355 Apr 25 j 16:43  $0^{\circ}$ 8 -4350 Jan 05 j 09:44 0°×7 -4355 Jun 11 j 13:17 29°840'01 -4350 Jan 12 j 21:49 5°**х** 49'39 evening set morning rise -4355 Jun 12 j 01:42  $0^{\circ}\Pi$ -4350 Feb 13 j 11:57 0°정 15°**耳**53'33 2.61154 AU max. Earth dist. -4355 Jul 06 j 11:33 -4350 Mar 26 j 05:37 0°≈ 0°**)**€ -4355 Jul 27 j 16:54 0ಂತಾ -4350 May 08 j 08:57  $0^{\circ}\Upsilon$ -4350 Jun 23 j 21:14 conjunction -4355 Jul 28 j 15:27 0°537'52 1°11'12 -4350 Aug 15 j 17:02 0°8 minimum elong -4355 Jul 28 j 15:31 0°537'59 1°11'26 asc. node -4350 Aug 31 j 03:17 7°**8**26'46 -4355 Sep 09 j 09:56 0° $\Omega$ retrograde -4350 Oct 28 j 15:07 23°**8**19'43 -4355 Sep 14 j 02:14 3°**Ω**17'28 -4350 Dec 07 j 05:49 13°**8**51'38 3°18'55 morning rise opposition

-4350 Dec 07 j 08:08

greatest brilliancy

13°**8**49'19

-1.3m

-4355 Oct 21 j 07:28

,	omena of Mars fron		•	//		, ,	5 0
	ical year style is used: Th		in astronomical cot 0.66955 AU	inting style is the year		ounting style. $0^{\circ}\mathbf{Y}$	
min. Earth dist.	-4350 Dec 08 j 16:33		0.00933 AU		-4344 Apr 23 j 21:10	0 1	
direct	-4349 Jan 17 j 04:35	3° <b>8</b> 55'13 0° <b>Ⅱ</b>		agnismation	4244 Apr. 29 : 12:40	3° <b>Y</b> ′02'31	0°03'52
	-4349 Apr 07 j 00:25 -4349 May 28 j 11:54	0. о п		conjunction minimum elong	-4344 Apr 28 j 13:49 -4344 Apr 28 j 13:39	3° <b>Υ</b> 02'16	0°03'51
	-4349 Jul 12 j 10:22	0°€ 0°€		behind sun begin	-4344 Apr 27 j 17:43	2° <b>Υ</b> 30'01	0 03 31
	-4349 Aug 22 j 19:50	0°mp		behind sun begin	-4344 Apr 29 j 09:35	3° <b>Υ</b> 34'29	
desc. node	-4349 Aug 22 j 19.30 -4349 Sep 02 j 18:34	8° Mp 14'17		max. Earth dist.	-4344 May 10 j 00:15	10° <b>Υ</b> 25'20	2.64899 AU
desc. Hode	-4349 Oct 01 j 02:15	ე∘ <u>ი</u>		max. Earth dist.	-4344 Jun 09 j 14:12	0° <b>8</b>	2.04699 AU
	-4349 Nov 08 j 08:09	0° <b>m</b>		morning rise	-4344 Jun 15 j 07:08	3° <b>8</b> 38'01	
evening set	-4349 Nov 11 j 18:44	2°M42'40		morning rise	-4344 Jul 26 j 20:47	0°Ⅱ	
evening set	-4349 Dec 16 j 13:49	2 11C42 40 0° 🗷			-4344 Sep 12 j 09:44	0°ಅ	
	-4349 Dec 10 j 13.49	0 🗴			-4344 Oct 30 j 13:40	0° <b>U</b>	
conjunction	-4348 Jan 16 j 05:02	23° <b>∡</b> ³34'22	1007121		-4344 Dec 20 j 00:44	0° <b>m</b> )	
minimum elong	-4348 Jan 16 j 04:17	23° <b>x</b> 34 22 23° <b>x</b> 32'56			-4344 Dec 20 j 00:44 -4343 Feb 20 j 07:30	0∘ <b>ਦ</b> رااا	
minimum clong	-4348 Jan 24 j 17:04	23 x 32 30 0°る	1 0/43	retrograde	-4343 Mar 27 j 03:17	6° <b>£</b> 35'43	
max. Earth dist.	•		2.45250 AU	desc. node	•	1° <b>⊆</b> 57'10	
max. Earm dist.	-4348 Mar 04 j 09:27	29 <b>⊘</b> 13 20	2.43230 AU		-4343 Apr 24 j 19:07 -4343 Apr 27 j 00:31	1° <b>£</b> 20'03	0000144
	-4348 Mar 05 j 11:25	0 ≈ 10°≈05'46		opposition	1 3		
morning rise	-4348 Mar 19 j 15:48			greatest brilliancy	-4343 Apr 27 j 01:14	1° <b>₽</b> 19'32	-2.9m
	-4348 Apr 17 j 09:04	0° <b>){</b>		· r d r d	-4343 May 01 j 18:48	30°RM)	0.20420 411
1	-4348 Jun 01 j 16:53	0°Υ 200 <b>%</b> 5 (10.5		min. Earth dist.	-4343 May 01 j 23:57	29° Mp 56'26	0.39428 AU
asc. node	-4348 Jul 18 j 02:27	28° <b>Y</b> 56'05		direct	-4343 May 29 j 10:29	25° m/27'51	
	-4348 Jul 19 j 20:58	0° <b>X</b>			-4343 Jun 25 j 01:34	0∘ <b>亚</b>	
	-4348 Sep 10 j 22:25	0°II			-4343 Aug 22 j 22:42	0° <b>M</b> ○	
retrograde	-4348 Dec 04 j 02:40	27° <b>∏</b> 59'02	1055156		-4343 Oct 07 j 08:52	0° <b>∡</b> ¹	
opposition	-4347 Jan 11 j 04:32	19° <b>Ⅱ</b> 21'04			-4343 Nov 20 j 03:35	0°ප	
greatest brilliancy	-4347 Jan 12 j 00:11	19° <b>Ⅲ</b> 02'08	-1.5m		-4342 Jan 03 j 09:13	0° <b>≈</b>	
min. Earth dist.	-4347 Jan 16 j 10:33	17° <b>Ⅱ</b> 19'38	0.62164 AU		-4342 Feb 17 j 18:06	0° <b>∺</b>	
direct	-4347 Feb 21 j 05:51	9° <b>Ⅱ</b> 25'09		asc. node	-4342 Mar 09 j 16:58	12° <b>)</b> 57′14	
	-4347 Apr 28 j 17:39	0°®			-4342 Apr 05 j 05:29	0° <b>Υ</b>	
	-4347 Jun 18 j 04:31	$0$ ° $\Omega$		evening set	-4342 Apr 19 j 23:53	9° <b>Υ</b> 25'53	
desc. node	-4347 Jul 20 j 16:24	22° <b>Ω</b> 22'08			-4342 May 22 j 06:57	0°8	
	-4347 Jul 31 j 05:51	0° m/y		max. Earth dist.	-4342 Jun 02 j 19:29	7° <b>8</b> 20'38	2.67068 AU
	-4347 Sep 09 j 04:46	0∘ <b>⊽</b>				4.	
	-4347 Oct 17 j 20:27	0° <b>™</b>		conjunction	-4342 Jun 06 j 11:48	9° <b>8</b> 41'27	
	-4347 Nov 25 j 10:53	0° <b>∡</b>		minimum elong	-4342 Jun 06 j 10:31	9° <b>8</b> 39'24	0°45'58
	-4346 Jan 03 j 23:33	0° <b>ろ</b>			-4342 Jul 08 j 04:47	0°II	
evening set	-4346 Jan 16 j 07:07	9° <b>る</b> 07'14		morning rise	-4342 Jul 21 j 21:40	8° <b>Ⅱ</b> 50'34	
	-4346 Feb 14 j 03:18	0° <b>≈</b>			-4342 Aug 23 j 08:39	0ංම	
					-4342 Oct 07 j 12:40	$0$ $^{\circ}$ $\Omega$	
conjunction	-4346 Mar 15 j 06:16	20° <b>≈</b> 23'56			-4342 Nov 20 j 19:09	0° <b>m</b> y	
minimum elong	-4346 Mar 15 j 08:13	20° <b>≈</b> 27'19	0°44'29		-4341 Jan 03 j 13:27	0∘ <b>⊽</b>	
	-4346 Mar 29 j 07:13	0° <b>∀</b>			-4341 Feb 16 j 16:48	0° <b>M</b> .	
max. Earth dist.	-4346 Apr 13 j 13:13		2.57358 AU	desc. node	-4341 Mar 12 j 19:45	15°M45'22	
morning rise	-4346 May 07 j 17:42	26° <b>¥</b> 15'41			-4341 Apr 05 j 06:00	0° <b>∡</b> ¹	
	-4346 May 13 j 11:13	$0^{\circ}$ Y		retrograde	-4341 Jun 11 j 19:23	23° <b>∡</b> ¹54'59	
asc. node	-4346 Jun 05 j 00:43	14° <b>Ƴ</b> 33'07		min. Earth dist.	-4341 Jul 08 j 13:23	19° <b>∡</b> 19'41	0.40983 AU
	-4346 Jun 29 j 09:41	0°8		greatest brilliancy	-4341 Jul 13 j 22:54	17° <b>∡</b> ¹40'40	-2.7m
	-4346 Aug 17 j 01:02	$\Pi$ °0		opposition	-4341 Jul 15 j 10:34	17° <b>∡</b> 13′09	-6°27'18
	-4346 Oct 07 j 12:19	0ა <b>ௐ</b>		direct	-4341 Aug 15 j 05:05	11° <b>∡</b> ³34'51	
	-4346 Dec 08 j 16:59	$0$ ° $\Omega$			-4341 Oct 15 j 13:45	0°ಕ	
retrograde	-4345 Jan 19 j 20:38	8° <b>Ω</b> 51'34			-4341 Dec 08 j 16:36	0° <b>≈</b>	
opposition	-4345 Feb 23 j 22:52	1° <b>Ω</b> 37'27		asc. node	-4340 Jan 25 j 15:21	29° <b>≈</b> 03'13	
greatest brilliancy	-4345 Feb 25 j 10:04	1° <b>Ω</b> 06'17	-2.0m		-4340 Jan 27 j 04:20	0° <b>∀</b>	
	-4345 Feb 28 j 12:39	30° <b>₹</b> 5			-4340 Mar 15 j 18:01	0° <b>Υ</b>	
min. Earth dist.	-4345 Mar 04 j 05:04	28° <b>©</b> 42'37	0.51455 AU		-4340 May 02 j 19:31	0°8	
direct	-4345 Apr 03 j 17:17	22° <b>©</b> 45'46		evening set	-4340 May 27 j 14:41	15° <b>8</b> 41'18	
	-4345 May 08 j 13:25	$0$ $\circ$ $\Omega$			-4340 Jun 18 j 22:39	$\Pi$ °0	
desc. node	-4345 Jun 07 j 17:03	14° <b>Ω</b> 23′28		max. Earth dist.	-4340 Jun 26 j 07:35	4° <b>Ⅱ</b> 46′13	2.63830 AU
	-4345 Jul 03 j 11:23	0° <b>™</b>					
	-4345 Aug 15 j 18:06	0∘ <b>⊽</b>		conjunction	-4340 Jul 13 j 06:57	15° <b>Ⅱ</b> 51'14	1°09'23
	-4345 Sep 25 j 01:52	$0^{\circ}$ M		minimum elong	-4340 Jul 13 j 06:20	15° <b>II</b> 50'13	1°09'35
	-4345 Nov 03 j 20:52	0° <b>∡</b> 7			-4340 Aug 03 j 15:01	0ංම	
	-4345 Dec 14 j 10:01	ರ°0		morning rise	-4340 Aug 28 j 10:02	16°9346'05	
	-4344 Jan 25 j 11:16	0° <b>≈</b>			-4340 Sep 16 j 14:24	$0^{\circ}\Omega$	
						0000	
evening set	-4344 Mar 08 j 14:24	29° <b>≈</b> 30'13			-4340 Oct 28 j 22:16	0° <b>m</b> þ	
evening set	-4344 Mar 09 j 08:11	29° <b>≈</b> 30'13 0° <b>米</b>			-4340 Oct 28 j 22:16 -4340 Dec 08 j 22:25	0∘ <b>⊽</b>	
evening set asc. node	•						

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. desc. node -4339 Jan 27 j 19:34 7°**ጤ**14'44 direct -4334 Jan 03 j 11:36 20°Y59'43 -4339 Feb 27 j 09:07 0°×7 -4334 Feb 15 j 03:34 0°8 -4339 Apr 10 j 02:37 0°궁 -4334 Apr 17 j 20:16  $\Pi^{\circ}0$ 0ಂತಾ -4339 May 26 j 21:46 0°≈≈ -4334 Jun 05 j 23:06 -4339 Aug 02 j 15:35 -4334 Jul 20 j 05:42  $0^{\circ}\Omega$ retrograde 23°≈34'46 -4339 Sep 02 j 19:39 min. Earth dist. 16°≈57'09 0.53262 AU -4334 Aug 30 j 10:16 0° m -4339 Sep 09 j 02:29 -4334 Sep 19 j 11:54 greatest brilliancy 14°**≈**34'07 -2.0m desc. node 15° m 12'42 opposition -4339 Sep 10 j 00:32 14°≈13′08 -3°55'31 -4334 Oct 08 j 15:22 0∘**⊽** direct -4339 Oct 15 j 03:31 6°≈27'06 evening set -4334 Oct 16 j 04:38 5°**£**53'22 asc. node -4339 Dec 12 j 15:49 22°≈27'07 -4334 Nov 15 j 20:52 0°M -4339 Dec 28 j 13:34 0°**)**€  $0^{\circ}\Upsilon$ -4334 Dec 19 j 23:27 -4338 Feb 21 j 19:29 conjunction  $26^{\circ}$ ML $48'13 -0^{\circ}56'33$  $0^{\circ}$ 8 -4338 Apr 13 j 08:13 minimum elong -4334 Dec 19 j 20:23  $26^{\circ}$ M42'13  $0^{\circ}56'42$ -4338 May 31 j 09:34  $0^{\circ}II$ -4334 Dec 24 j 01:46 0°**⊼** evening set -4338 Jul 05 j 23:26 23°**Ⅲ**11'10 -4333 Feb 01 j 03:29 0°정 -4338 Jul 16 j 04:02 0ಂತಾ max. Earth dist. -4333 Feb 03 j 15:25 1°**る**52'52 2.40198 AU max. Earth dist. -4338 Jul 24 j 13:35 5°540'26 2.55526 AU morning rise -4333 Feb 24 j 22:42 17°る43'17 -4333 Mar 13 j 20:12 conjunction -4338 Aug 23 j 17:54 26°931'48 1°03'02 -4333 Apr 25 j 17:43 0°) minimum elong -4338 Aug 23 j 19:16 26°934'11 1°03'13 -4333 Jun 10 j 07:38  $0^{\circ}\Upsilon$ -4338 Aug 28 j 16:01  $0^{\circ}\Omega$ -4333 Jul 29 j 12:51 0°8 -4338 Oct 09 i 02:58 0° m asc. node -4333 Aug 04 j 18:02 3°834'01 -4338 Oct 13 j 21:33 3° m 32'15 -4333 Sep 25 i 08:36  $\Pi^{\circ}0$ morning rise -4338 Nov 18 j 00:25 0∘**⊽** -4333 Nov 19 i 20:58 14°**Ⅱ**18'13 retrograde desc. node -4338 Dec 15 j 18:21 21°**♀**19'01 -4333 Dec 28 i 16:43 5°**I**17'30 4°26'03 opposition -4338 Dec 26 j 23:56 0°M -4333 Dec 29 j 04:37 5°**I**I05'51 -1.4m greatest brilliancy -4337 Feb 03 j 20:25 0°×7 -4332 Jan 01 j 11:14 3°**Ⅱ**48'47 0.64818 AU min. Earth dist. 0°る -4332 Jan 11 j 19:38 30°R8 -4337 Mar 15 j 12:50 -4332 Feb 07 j 22:04 25°**8**16'22 -4337 Apr 26 j 06:46 0°≈≈ direct 0°**₩** -4337 Jun 11 j 07:33 -4332 Mar 08 j 04:11  $\Pi$  $^{\circ}0$ -4337 Aug 11 j 08:26  $0^{\circ}$ -4332 May 11 j 11:18 000 -4332 Jun 27 j 15:52 -4337 Sep 11 j 02:55 5°Y30'59 0° $\Omega$ retrograde -4337 Oct 09 j 14:49 30°**₹** -4332 Aug 06 j 10:57 28°**Ω**16′00 desc. node -4337 Oct 17 j 06:00 27°**₭**04'25 0.63050 AU -4332 Aug 08 j 19:19 min. Earth dist. 0° m -4337 Oct 21 j 00:32 25°\(\frac{1}{25}\)33'36 -0°23'08 -4332 Sep 17 j 08:56 opposition 0∘ଫ -4337 Oct 20 j 23:27 25°**升**34'42 -1.6m -4332 Oct 25 j 18:52 greatest brilliancy 0°M -4332 Dec 03 j 04:07 asc. node -4337 Oct 30 j 16:47 21°**X**50'37 0° ×7 direct -4337 Nov 28 j 10:42 16°**¥**28'40 -4332 Dec 22 j 19:47 15°**х** 07'34 evening set -4336 Jan 21 j 11:47  $0^{\circ}\Upsilon$ -4331 Jan 11 j 11:24 0°₹ -4336 Mar 21 j 02:30  $0^{\circ}$ 8 -4331 Feb 21 j 09:57 0°≈ -4336 May 10 j 16:56  $0^{\circ}II$ -4336 Jun 26 j 06:22 0ಂತಾ -4331 Feb 22 j 08:35 0°≈40'30 -0°59'19 conjunction -4336 Aug 08 j 18:58  $0^{\circ}\Omega$ -4331 Feb 22 j 10:38 0°≈44'08 0°59'30 minimum elong -4336 Aug 19 j 03:38 7°**Ω**25'03 -4331 Mar 31 j 14:48 26°≈43'57 2.53056 AU evening set max. Earth dist. -4336 Sep 05 j 11:51 20°**Ω**03'19 2.43511 AU -4331 Apr 05 j 09:42 0°**)**€ max. Earth dist. -4336 Sep 18 j 21:18 0° m morning rise -4331 Apr 20 j 07:10 10°¥03'19 -4331 May 20 j 13:02  $0^{\circ}\Upsilon$ 18° m 38'18 0°13'35 20°Y33'02 conjunction -4336 Oct 13 j 12:00 asc. node -4331 Jun 21 i 15:56 -4336 Oct 13 j 12:57 18° m 40'08 0°13'38 -4331 Jul 06 i 18:27 0°8 minimum elong -4336 Oct 12 j 23:02 18° m 13'30 -4331 Aug 25 j 11:30  $0^{\circ}\Pi$ behind sun begin behind sun end -4336 Oct 14 j 02:52 19° 1006'46 -4331 Oct 19 j 17:20 0ಂತಾ -4336 Oct 28 j 06:05 0∘**⊽** -4331 Dec 30 j 23:06 21°953'44 retrograde desc. node 3°**₽**23'09 -4330 Feb 05 j 10:21 -4336 Nov 01 j 14:57 opposition 14°501'23 5°11'42 -4336 Dec 05 j 16:25 0°M greatest brilliancy -4330 Feb 06 j 17:44 13°**©**32'18 -1.8m 7°M21'41 11°9518'58 morning rise -4336 Dec 15 j 01:36 min. Earth dist. -4330 Feb 12 j 18:04 0.56271 AU -4335 Jan 13 j 00:48 0°×7 direct -4330 Mar 17 j 11:52 4°532'39 -4335 Feb 21 j 04:24 0°ರ -4330 May 29 j 17:59 0° $\Omega$ 0°≈ -4330 Jun 24 j 10:26 15°**Ω**45'18 -4335 Apr 03 j 00:07 desc. node -4335 May 16 j 10:25 0°**)**€ -4330 Jul 15 j 13:33 0° m 0°Υ -4335 Jul 03 j 01:00 0∘**⊽** -4330 Aug 25 j 20:33 0°8 0°M -4335 Aug 30 j 15:04 -4330 Oct 04 j 05:47 -4335 Sep 16 j 17:34 5°**8**59'09 -4330 Nov 12 j 09:16 0°**∡**7 asc. node retrograde -4335 Oct 15 j 02:06 10°**8**28'42 -4330 Dec 22 j 09:27 0°궁 opposition -4335 Nov 23 j 23:58 0°**8**47'13 2°26'08 -4329 Feb 01 j 23:41 0°≈ greatest brilliancy -4335 Nov 23 j 22:36 0°**8**48'35 -1.3m evening set -4329 Feb 18 j 19:42 11°≈46'10 min. Earth dist. -4335 Nov 23 j 23:04 0°848'06 0.67093 AU -4329 Mar 17 j 11:46 0°)

-4335 Nov 25 j 23:04

30°**₹**Υ

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4329 Apr 13 j 02:20 17°**)**(44'33 -0°15'07 desc. node -4324 Feb 14 j 13:00 12°M13'28 conjunction -4329 Apr 13 j 03:01 -4324 Mar 10 j 06:19 0°×7 minimum elong 17°**)** 45'40 0°15'10 -4329 Apr 12 j 21:14 17°**)** 36'09 -4324 Apr 23 j 12:14 0°궁 behind sun begin -4329 Apr 13 j 08:48 -4324 Jun 22 j 21:10 0°**≈** 17°**)** 55'12 behind sun end max. Earth dist. -4329 May 01 j 02:24 29°**)** 32'09 2.62570 AU -4324 Jul 15 j 09:22 retrograde 3°≈24'13  $0^{\circ}\Upsilon$ -4329 May 01 j 19:31 -4324 Aug 06 j 04:54 30°Ŗる 5°**Y**00'43 asc. node -4329 May 09 j 12:47 min. Earth dist. -4324 Aug 13 j 08:45 27°**る**39'58 0.48318 AU 19°**Y**51′27 greatest brilliancy morning rise -4329 Jun 01 j 14:34 -4324 Aug 20 j 00:59 25°**る**16'42 -2.2m -4329 Jun 17 j 12:31 0°8 opposition -4324 Aug 21 j 10:02 24°る47'00 -5°18'51 -4329 Aug 04 j 03:43  $0^{\circ}\Pi$ direct -4324 Sep 23 j 20:36 17°る46'32 -4329 Sep 21 j 17:09 0ಂತಾ -4324 Nov 12 j 00:53 0°≈ -4329 Nov 11 j 10:05  $0^{\circ}\Omega$ -4324 Dec 29 j 06:32 23°≈26'59 asc. node -4328 Jan 09 j 20:33 0° M -4323 Jan 10 j 01:39 0°**)**€ retrograde -4328 Feb 26 j 14:42 11° Mp 17'18 -4323 Mar 02 j 13:18  $0^{\circ}\Upsilon$ opposition -4328 Mar 30 j 05:21 5° Mp 16'30 2°41'14 -4323 Apr 20 j 20:13 0°8 greatest brilliancy -4328 Mar 31 j 02:57 4° m 59'38 -2.5m -4323 Jun 07 j 10:31  $0^{\circ}\Pi$ min. Earth dist. -4328 Apr 07 j 01:13 2° m 50'46 0.43534 AU evening set -4323 Jun 20 j 06:33 8°**Ⅲ**17'40 -4328 Apr 17 j 17:39 30°RΩ max. Earth dist. -4323 Jul 12 j 18:21 23°**Ⅲ**04'39 2.59332 AU direct -4328 May 04 j 12:24 28°**Ω**04'52 -4323 Jul 23 j 03:01 desc. node -4328 May 11 j 10:42 28°**Ω**24'31 -4328 May 21 j 12:56 0° m conjunction -4323 Aug 06 j 19:37 9°956'45 1°09'56 -4328 Jul 24 i 06:42 0∘**⊽** minimum elong -4323 Aug 06 j 20:09 9°957'40 1°10'08 -4328 Sep 06 i 16:53 0°M -4323 Sep 04 i 18:15  $0^{\circ}\Omega$ -4328 Oct 18 j 14:30 0°×7 -4323 Sep 24 j 08:10 13°**Ω**55'09 morning rise -4328 Nov 29 j 13:33 0°정 -4323 Oct 16 j 11:55 0° m -4327 Jan 11 j 15:45 0°**≈** -4323 Nov 25 j 17:43 0∘**⊽** -4327 Feb 25 j 06:28 0°**₩** -4322 Jan 01 j 11:34 28°**♀**00'14 desc node -4327 Mar 26 j 09:50 19°**)** 05'19 -4322 Jan 04 j 02:05 0°M asc. node -4322 Feb 12 j 07:31 0°×7 -4327 Apr 04 j 05:27 24° **)** 48'08 evening set -4327 Apr 12 j 06:39  $0^{\circ}\Upsilon$ -4322 Mar 24 j 11:04 0°궁 -4322 May 06 j 03:20 0°22 25°Υ55'52 0°31'13 -4327 May 22 j 17:57 -4322 Jun 24 j 08:45 0°**∀** conjunction -4327 May 22 j 16:54 25°**Υ**54'10 0°31'16 -4322 Aug 27 j 16:11 20°**)** 37'41 minimum elong retrograde 12°**)** 48'40 0.59833 AU -4327 May 24 j 18:47 27°**Υ**13'44 2.66853 AU -4322 Oct 01 j 00:17 max. Earth dist. min. Earth dist. 10°**¥**45′04 -1°41′25 -4327 May 29 j 03:03 -4322 Oct 06 j 04:52  $0^{\circ}$ 8 opposition -4327 Jul 07 j 17:18 25°**8**16'31 -4322 Oct 05 j 21:54 morning rise greatest brilliancy 10° **★**51'59 -1.7m 2°**升**05'42 -4327 Jul 15 j 02:25  $\Pi$ °0 direct -4322 Nov 12 j 11:19 -4327 Aug 30 j 15:55 0ಂತಾ -4322 Nov 16 j 07:34 2° # 11'19 asc. node -4327 Oct 15 j 15:57  $0^{\circ}\Omega$ -4321 Feb 04 j 18:07  $0^{\circ}\Upsilon$ -4327 Nov 30 j 09:39 0° m -4321 Mar 31 j 00:35 0°8 -4326 Jan 15 j 17:18 0∘**⊽** -4321 May 19 j 08:01  $\Pi^{\circ}0$ -4326 Mar 06 j 10:15 0°M -4321 Jul 04 j 12:01 0ಂತಾ desc. node -4326 Mar 29 j 12:28 11°ML46'06 -4321 Aug 01 j 10:07 19°904'07 evening set -4326 May 15 j 10:54 24°M02'26 retrograde -4321 Aug 16 j 23:21  $0^{\circ}\Omega$ -4326 Jun 12 j 09:27 max. Earth dist. min. Earth dist. 19°M29'20 0.38092 AU -4321 Aug 16 j 14:07 29°5643'37 2.48446 AU opposition -4326 Jun 15 i 15:29 18°M36'18 -5°16'53 greatest brilliancy -4326 Jun 14 j 23:10 18°**M**47′25 -2.9m conjunction -4321 Sep 22 i 12:36 26° **Ω**32'27 0°38'25 direct -4326 Jul 15 j 11:02 13°MJ34'54 minimum elong -4321 Sep 22 j 14:31 26° Ω36'00 0°38'31 -4326 Sep 09 j 15:38 0°×7 -4321 Sep 27 j 04:15 0° m -4326 Nov 01 j 14:20 0°궁 -4321 Nov 05 i 16:53 0∘**⊽** -4326 Dec 19 j 10:48 0°**≈** -4321 Nov 19 j 00:29 10°**£**18′00 morning rise -4325 Feb 04 j 17:06 0°**₩** -4321 Nov 19 j 10:08 10°**£**36'44 desc. node 4°**₩**10'10 -4321 Dec 14 j 07:06 0°M asc node -4325 Feb 11 j 07:13  $0^{\circ}\Upsilon$ -4325 Mar 24 j 05:38 -4320 Jan 21 j 18:42 00 🗸 -4325 May 10 j 19:13  $0^{\circ}$ 8 -4320 Mar 01 j 01:03 0°궁 -4325 May 13 j 17:46 1°851'43 -4320 Apr 11 j 01:23 0°22 evening set 24°**8**04'48 2.65724 AU -4325 Jun 17 j 14:07 -4320 May 25 j 00:49 0°**∀** max. Earth dist. -4325 Jun 26 j 18:44  $0^{\circ}\Pi$ -4320 Jul 13 j 16:16  $0^{\circ}\Upsilon$ -4320 Oct 01 j 16:43 27°Y28'18 retrograde -4325 Jun 29 j 10:32 1°II43'01 1°03'06 27° **Y**27'14 conjunction asc. node -4320 Oct 03 j 08:17 -4325 Jun 29 j 09:27 18°**Y**13'42 minimum elong 1°**Ⅱ**41'16 1°03'16 min. Earth dist. -4320 Nov 09 j 05:13 0.66252 AU -4325 Aug 11 j 14:10 0 $\circ$  $\odot$ opposition -4320 Nov 10 j 17:33 17°**Y**37′06 1°26'12 morning rise -4325 Aug 13 j 21:22 1°931'55 greatest brilliancy -4320 Nov 10 j 14:55 17°**Y**39'46 -1.4m -4325 Sep 24 j 22:20 0° $\Omega$ direct -4320 Dec 20 j 13:03 8°**Y**03'00 -4325 Nov 06 j 20:20 0° m -4319 Mar 03 j 05:35 0°8 -4325 Dec 18 j 14:47 0∘**⊽** -4319 Apr 27 j 02:12 0°Щ

-4319 Jun 13 j 21:16

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-4324 Jan 28 j 18:15

0°M

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Attention, astronomi	cal year style is used: Th	-	n astronomical cou				2 50 42 4 4 7 7
	-4319 Jul 27 j 18:38	$0$ $\circ$ $\Omega$		max. Earth dist.	-4314 Apr 20 j 06:04		2.59434 AU
	-4319 Sep 06 j 21:29	0° <b>m</b> )			-4314 May 08 j 18:42	0° <b>Υ</b>	
evening set	-4319 Sep 21 j 12:47	11° <b>m</b> 03'35		morning rise	-4314 May 17 j 02:10	5° <b>Y</b> 23'54	
desc. node	-4319 Oct 06 j 07:16	22° Mg 23'00		asc. node	-4314 May 26 j 05:58	11° <b>Y</b> 18'34	
	-4319 Oct 16 j 03:17	0∘ <b>ट</b>			-4314 Jun 24 j 13:47	$_{0\circ}$ 8	
max. Earth dist.	-4319 Nov 14 j 20:56	23° <b>≏</b> 16'47	2.37669 AU		-4314 Aug 11 j 18:02	$\Pi$ $^{\circ}0$	
					-4314 Sep 30 j 20:46	$0$ $\circ$	
conjunction	-4319 Nov 22 j 02:47	28° <b>≙</b> 58'51	-0°32'39		-4314 Nov 25 j 13:26	$0^{\circ}\Omega$	
minimum elong	-4319 Nov 22 j 00:08	28° <b>♀</b> 53'37	0°32'43	retrograde	-4313 Feb 01 j 10:32	20° <b>Ω</b> 00'01	
C	-4319 Nov 23 i 09:51	0° <b>M</b> .		opposition	-4313 Mar 07 j 16:53	13° <b>Ω</b> 09'58	4°19'36
	-4319 Dec 31 j 15:03	0° <b>∡</b> ¹		greatest brilliancy	-4313 Mar 09 j 02:31	12° <b>Ω</b> 41'10	-2.2m
morning rise	-4318 Jan 29 j 00:35	21° <b>х</b> 55'05		min. Earth dist.	-4313 Mar 16 j 03:49	10° <b>Ω</b> 17'21	0.48632 AU
morning 1130	-4318 Feb 08 j 16:04	0°る		direct	-4313 Apr 14 j 10:29	4°Ω47'35	0.40032 AC
	v						
	-4318 Mar 21 j 08:02	0° <b>≈</b>		desc. node	-4313 May 29 j 03:47	16° <b>Ω</b> 19'03	
	-4318 May 03 j 07:13	0° <b>∀</b>			-4313 Jun 24 j 00:17	0° mp	
	-4318 Jun 18 j 07:53	0° <b>Ƴ</b>			-4313 Aug 08 j 17:24	0∘ <b>ত</b>	
	-4318 Aug 08 j 07:46	$_{0\circ}$ 8			-4313 Sep 18 j 22:59	$0^{\circ}$ M	
asc. node	-4318 Aug 21 j 08:19	6° <b>8</b> 51'55			-4313 Oct 29 j 06:40	0° <b>⊼</b>	
	-4318 Oct 22 j 08:16	$\Pi$ $^{\circ}0$			-4313 Dec 09 j 04:28	8°0	
retrograde	-4318 Nov 05 j 14:11	1° <b>Ⅱ</b> 11'42			-4312 Jan 20 j 12:18	0° <b>≈</b>	
	-4318 Nov 19 j 04:00	30° <b>₹</b> ႘			-4312 Mar 04 j 13:49	0° <b>)</b> €	
opposition	-4318 Dec 14 j 23:09	21° <b>8</b> 52'22	3°46'05	evening set	-4312 Mar 18 j 14:27	9° <b>₩</b> 18'51	
greatest brilliancy	-4318 Dec 15 i 04:28	21° <b>8</b> 47'06	-1.3m	asc. node	-4312 Apr 12 j 02:01	25° <b>)</b> €21'23	
min. Earth dist.	-4318 Dec 17 j 05:45	20° <b>8</b> 58'12			-4312 Apr 19 j 05:44	0°Υ	
direct	-4317 Jan 25 j 01:38	11° <b>8</b> 52'43	0.00107110		131211pt 17 j 03.11	• •	
direct	-4317 Mar 29 j 13:30	0°Ⅱ		conjunction	-4312 May 07 j 13:39	11° <b>Ƴ</b> 49'38	0°14'22
	•	0ಂ <b>ತಾ</b>		-	, ,	11° <b>Y</b> 4936	0°14'23
	-4317 May 22 j 14:43			minimum elong	-4312 May 07 j 13:06		0-14-23
	-4317 Jul 07 j 04:59	0° <b>N</b>		behind sun begin	-4312 May 07 j 04:49	11° <b>Υ</b> 35'26	
	-4317 Aug 17 j 20:22	0° <b>m</b> )		behind sun end	-4312 May 07 j 21:22	12° <b>Y</b> 02'01	
desc. node	-4317 Aug 24 j 04:10	4° <b>m</b> 43'54		max. Earth dist.	-4312 May 15 j 14:16	16° <b>Ƴ</b> 58'38	2.65827 AU
	-4317 Sep 26 j 05:08	0∘ <b>⊽</b>			-4312 Jun 04 j 23:07	$9^{\circ}$ 8	
	-4317 Nov 03 j 12:18	0° <b>M</b>		morning rise	-4312 Jun 23 j 12:54	11° <b>8</b> 49'56	
evening set	-4317 Nov 27 j 03:35	18°M34'29			-4312 Jul 22 j 02:21	$\Pi$ $^{\circ}0$	
	-4317 Dec 11 j 18:50	0° <b>∡</b>			-4312 Sep 07 j 05:15	$0$ $\circ$	
	-4316 Jan 19 j 22:43	8°0			-4312 Oct 24 j 10:05	$0^{\circ}\Omega$	
	v				-4312 Dec 11 j 13:52	0° <b>m</b>	
conjunction	-4316 Jan 30 j 17:04	8° <b>ට</b> 03'07	-1°07'36		-4311 Feb 01 j 17:48	$0$ $\circ$ $\overline{f v}$	
minimum elong	-4316 Jan 30 j 17:45	8° <b>ට</b> 04'24		retrograde	-4311 Apr 13 j 23:26	23° <b>£</b> 16'31	
minimum crong	-4316 Feb 29 j 17:36	0°≈	1 0/ 1/	desc. node	-4311 Apr 15 j 04:07	23° <b>⊆</b> 15'58	
max. Earth dist.	-4316 Mar 15 j 13:57	0 ∞ 10°≈34'05	2.48122 AU	opposition	-4311 May 14 j 12:38	18° <b>♀</b> 12'52	2011/12
	v		2.46122 AU				
morning rise	-4316 Mar 31 j 19:18	21°≈53'41		greatest brilliancy	-4311 May 14 j 15:22	18° <b>£</b> 11'01	
	-4316 Apr 12 j 14:37	0° <b>∀</b>		min. Earth dist.	-4311 May 16 j 17:26		0.38109 AU
	-4316 May 27 j 19:05	0° <b>Υ</b>		direct	-4311 Jun 14 j 11:57	12° <b>⊆</b> 54'36	
asc. node	-4316 Jul 08 j 08:16	26° <b>Y</b> 14′02			-4311 Aug 09 j 15:19	0°M	
	-4316 Jul 14 j 11:48	$9^{\circ}$ 8			-4311 Sep 29 j 02:59	0° <b>∡</b> ¹	
	-4316 Sep 03 j 22:02	$\Pi$ $^{\circ}0$			-4311 Nov 13 j 16:13	0°₹	
	-4316 Nov 07 j 12:23	$0$ . $\odot$			-4311 Dec 28 j 19:41	0° <b>≈</b>	
retrograde	-4316 Dec 13 j 09:14	6° <b>©</b> 37'40			-4310 Feb 12 j 17:00	0° <b>∀</b>	
	-4315 Jan 15 j 05:45	30°RⅡ		asc. node	-4310 Feb 27 j 23:11	9° <b>∺</b> 50'20	
opposition	-4315 Jan 19 j 22:51	28° <b>Ⅲ</b> 14'15	5°06'44		-4310 Mar 31 j 11:38	$0^{\circ}$ $\Upsilon$	
greatest brilliancy	-4315 Jan 20 j 23:00	27° <b>I</b> 51'13	-1.6m	evening set	-4310 Apr 28 j 17:36	17° <b>Ƴ</b> 57'25	
min. Earth dist.	-4315 Jan 25 j 23:29	25° <b>Ⅱ</b> 56'24	0.60318 AU		-4310 May 17 j 16:34	$9^{\circ}$ 8	
direct	-4315 Mar 01 j 18:19	18° <b>Ⅲ</b> 24'33		max. Earth dist.	-4310 Jun 08 j 04:41	13° <b>8</b> 41'55	2.66826 AU
	-4315 Apr 17 j 19:52	0°ಅ					
	-4315 Jun 11 j 12:57	0°N		conjunction	-4310 Jun 14 j 20:00	17° <b>8</b> 56'29	0°53'06
desc. node	-4315 Jul 11 j 03:04	19° <b>Ω</b> 46'58		minimum elong	-4310 Jun 14 j 18:43	17° <b>8</b> 54'26	0°53'14
desc. Hode				minimum clong		0° <b>Ⅱ</b>	0 33 14
	-4315 Jul 25 j 12:58	0° <b>m</b> )			-4310 Jul 03 j 14:47		
	-4315 Sep 03 j 20:41	0∘ <b>亚</b>		morning rise	-4310 Jul 30 j 02:57	17° <b>Ⅱ</b> 11'15	
	-4315 Oct 12 j 17:11	0°M			-4310 Aug 18 j 15:29	0°©	
	-4315 Nov 20 j 11:02	0° <b>∡</b> ¹			-4310 Oct 02 j 11:39	$0^{\circ}\Omega$	
	-4315 Dec 30 j 02:28	0°ප			-4310 Nov 15 j 04:45	0° <b>m</b>	
evening set	-4314 Jan 29 j 01:49	21° <b>る</b> 55'39			-4310 Dec 28 j 01:45	0∘ <b>ত</b>	
	-4314 Feb 09 j 08:48	0° <b>≈</b>			-4309 Feb 08 j 18:13	$0^{\circ}$ M	
	-4314 Mar 24 j 14:26	0° <b>)</b>		desc. node	-4309 Mar 03 j 05:56	15°M32'29	
					-4309 Mar 24 j 21:28	0° <b>∡</b> ¹	
conjunction	-4314 Mar 26 j 05:04	1° <b>)</b> €05'26	-0°34'05		-4309 May 16 j 20:37	ರ°0	
minimum elong	-4314 Mar 26 j 06:38	1° <b>₩</b> 08'06	0°34'11	retrograde	-4309 Jun 25 j 08:41	9° <b>ප්</b> 40'21	
	<i>J</i>			-	3		

 $Planetary\ Phenomena\ of\ Mars\ from\ -4400\ through\ -3898\ (UT),\ A strodienst\ AG\ 18-Feb-2025\ 14:22,\qquad page\ 10$   $Attention,\ a stronomical\ year\ style\ is\ used:\ The\ year\ -4400\ in\ a stronomical\ counting\ style\ is\ the\ year\ 4401\ BCE\ in\ historical\ counting\ style.$ 

Attention, astronom	ical year style is used: Th	ie year -4400 i	n astronomical cou	inting style is the year	4401 BCE in historical c	ounting style.	
min. Earth dist.	-4309 Jul 22 j 13:14	4° <b>ප</b> 46'07	0.43393 AU		-4304 Aug 04 j 02:34	0°N	
greatest brilliancy	-4309 Jul 28 j 19:04	2° <b>る</b> 43'48	-2.5m	evening set	-4304 Aug 30 j 14:08	19° <b>Ω</b> 08'31	
opposition	-4309 Jul 30 j 09:56	2° <b>る</b> 11'52	-6°19'13		-4304 Sep 14 j 05:22	0° <b>m</b> )	
	-4309 Aug 06 j 10:07	30°R <b>✓</b>		max. Earth dist.	-4304 Sep 21 j 08:56	5° <b>m</b> 22'20	2.40906 AU
direct	-4309 Aug 31 j 00:29	26° <b>₹</b> '04'15		desc. node	-4304 Oct 23 j 00:34	29° <b>m</b> 35'48	
	-4309 Sep 25 j 19:14	ರ°0			-4304 Oct 23 j 13:03	0∘ <b>⊽</b>	
	-4309 Nov 30 j 16:00	0° <b>≈</b> ≈					
asc. node	-4308 Jan 15 j 21:34	26° <b>≈</b> 48′13		conjunction	-4304 Oct 27 j 01:49	2° <b>£</b> 44'29	-0°02'58
	-4308 Jan 21 j 05:45	0° <b>∀</b>		minimum elong	-4304 Oct 27 j 01:33	2° <b>₽</b> 43'59	0°02'57
	-4308 Mar 10 j 15:14	$0^{\circ}$ Y		behind sun begin	-4304 Oct 25 j 23:54	1° <b>≙</b> 54'11	
	-4308 Apr 28 j 01:42	$0$ $\circ$ 8		behind sun end	-4304 Oct 28 j 03:13	ვ° <b>ჲ</b> 33'49	
evening set	-4308 Jun 05 j 03:42	24° <b>8</b> 05'23			-4304 Nov 30 j 21:46	0°M₊	
	-4308 Jun 14 j 08:30	$\Pi$ °0		morning rise	-4304 Dec 31 j 05:52	23°M48'07	
max. Earth dist.	-4308 Jul 02 j 04:43	11° <b>Ⅱ</b> 34'35	2.62453 AU		-4303 Jan 08 j 04:36	0° <b>∡</b> ¹	
		_			-4303 Feb 16 j 06:28	0°ಕ	
conjunction	-4308 Jul 21 j 23:46	24° <b>Ⅱ</b> 37'26			-4303 Mar 28 j 23:37	0° <b>≈</b>	
minimum elong	-4308 Jul 21 j 23:31	24° <b>Ⅱ</b> 37'01	1°11'13		-4303 May 11 j 03:48	0° <b>∺</b>	
	-4308 Jul 30 j 01:08	$0$ $\circ$ $\odot$			-4303 Jun 26 j 23:18	0° <b>Υ</b>	
morning rise	-4308 Sep 06 j 17:55	26° <b>©</b> 24'13			-4303 Aug 20 j 09:13	0° <b>8</b>	
	-4308 Sep 11 j 21:47	$0$ ° $\Omega$		asc. node	-4303 Sep 06 j 23:54	7° <b>8</b> 46'05	
	-4308 Oct 24 j 00:41	0° <b>m</b> )		retrograde	-4303 Oct 22 j 21:10	18° <b>8</b> 19'01	
	-4308 Dec 03 j 17:49	0∘ <b>⊽</b>		opposition	-4303 Dec 01 j 15:01	8° <b>8</b> 44'35	
	-4307 Jan 12 j 14:20	0° <b>M</b> ₊		greatest brilliancy	-4303 Dec 01 j 15:26	8° <b>8</b> 44'10	
desc. node	-4307 Jan 18 j 06:25	4° <b>ጤ</b> 17'20		min. Earth dist.	-4303 Dec 02 j 09:42		0.67138 AU
	-4307 Feb 21 j 09:05	0° <b>∡</b>			-4303 Dec 29 j 03:04	30° <b>₹</b> Υ	
	-4307 Apr 03 j 07:30	0°ප		direct	-4302 Jan 11 j 08:49	28° <b>Y</b> ′51′40	
	-4307 May 17 j 20:26	0° <b>≈</b>			-4302 Jan 25 j 08:01	0° <b>8</b>	
	-4307 Jul 17 j 05:23	0° <b>∀</b>			-4302 Apr 11 j 02:30	0°II	
retrograde	-4307 Aug 12 j 05:01	4° <b>)</b> 16′29			-4302 May 31 j 13:11	0°99	
	-4307 Sep 05 j 17:23	30°R≈			-4302 Jul 15 j 05:57	$0$ $^{\circ}\Omega$	
min. Earth dist.	-4307 Sep 13 j 13:15		0.55782 AU		-4302 Aug 25 j 14:32	0° <b>m</b> )	
greatest brilliancy	-4307 Sep 19 j 10:09	24°≈54'50		desc. node	-4302 Sep 09 j 22:08	11° mp 33'35	
opposition	-4307 Sep 20 j 02:04	24°≈39'21	-3°05'37		-4302 Oct 03 j 20:57	0∘ <b>⊽</b>	
direct	-4307 Oct 26 j 00:27	16°≈32'05		evening set	-4302 Oct 30 j 23:52	21° <b>♀</b> 14'22	
asc. node	-4307 Dec 02 j 21:15	24°≈03'44			-4302 Nov 11 j 02:44	0° <b>M</b> ○0. <b>7</b>	
	-4307 Dec 18 j 02:48	0° <b>)</b> €			-4302 Dec 19 j 07:36	0° <b>∡</b> ¹	
	-4306 Feb 15 j 14:07	0°Ƴ			4201 I 04:12 20	100 700140	1004120
	-4306 Apr 08 j 04:16	$\mathfrak{B}_{\circ 0}$		conjunction minimum elong	-4301 Jan 04 j 12:29		
	-4306 May 26 j 15:19			minimum elong	-4301 Jan 04 j 10:32	12° <b>渘</b> 29'59 0°る	1°04'41
evening set	-4306 Jul 11 j 13:18	0°ഇ 2° <b>ഇ</b> 31'03		may Earth dist	-4301 Jan 27 j 09:06		2.42912 AU
max. Earth dist.	-4306 Jul 15 j 07:04	2 931 03 14°904'30	2 521/2 ATT	max. Earth dist.	-4301 Feb 22 j 17:14 -4301 Mar 09 j 01:23	0°≈	2.42912 AU
max. Earm dist.	-4306 Aug 01 j 06:01 -4306 Aug 24 j 01:17	14 304 30 0°Ω	2.53143 AU	morning rise	-4301 Mar 10 j 18:22	0 ≈ 1°≈13'39	
	-4300 Aug 24 J 01.17	0 86		morning rise	-4301 Mar 10 j 18.22	0° <b>∺</b>	
conjunction	-4306 Sep 03 j 00:30	7° <b>Ω</b> 05'53	0°56'06		-4301 Apr 20 j 21:21 -4301 Jun 05 j 05:49	0° <b>Υ</b>	
minimum elong	-4306 Sep 03 j 00:30	7° <b>Ω</b> 08'59			-4301 Jul 23 j 17:16	0°8	
minimum ciong	-4306 Oct 04 j 10:24	0° m)	0 30 13	asc. node	-4301 Jul 25 j 23:31	1° <b>8</b> 20'18	
morning rise	-4306 Oct 26 j 02:18	16° Mp 13'20		ase. node	-4301 Sep 16 j 04:45	0°II	
morning rise	-4306 Nov 13 j 04:48	0° <b>⊽</b>		retrograde	-4301 Nov 28 j 12:03	22° <b>Ⅱ</b> 30'54	
desc. node	-4306 Dec 06 j 03:49	ა <b>_</b> 17° <b>ჲ</b> 41'06		opposition	-4300 Jan 05 j 22:04	13° <b>∏</b> 42'19	4°44'33
dese. Hode	-4306 Dec 22 j 00:51	0°M		greatest brilliancy	-4300 Jan 06 j 14:13		-1.5m
	-4305 Jan 29 j 17:44	0° <b>×</b> 7		min. Earth dist.	-4300 Jan 10 j 12:05	11° <b>II</b> 55'19	0.63464 AU
	-4305 Mar 10 j 05:18	0°₹		direct	-4300 Feb 16 j 01:33	3° <b>Ⅱ</b> 43'07	0.03 10 1710
	-4305 Apr 20 j 14:16	0° <b>≈</b>		uncer	-4300 May 03 j 21:05	0°9	
	-4305 Jun 04 j 13:37	0° <b>)</b> €			-4300 Jun 21 j 18:40	0°N	
	-4305 Jul 28 j 16:26	0° <b>Υ</b>		desc. node	-4300 Jul 27 j 20:06	25° <b>Ω</b> 10'14	
retrograde	-4305 Sep 19 j 03:08	13° <b>Y</b> ′59'57			-4300 Aug 03 j 11:06	0° m)	
asc. node	-4305 Oct 20 j 22:35	7° <b>Υ</b> 17'47			-4300 Sep 12 j 06:21	0∘ <b>⊽</b>	
min. Earth dist.	-4305 Oct 26 j 03:22	5° <b>Υ</b> 15'08	0.64435 AU		-4300 Oct 20 j 19:30	0° <b>M</b> ₊	
opposition	-4305 Oct 29 j 02:48	4° <b>Υ</b> 03'15	0°19'11		-4300 Nov 28 j 07:11	0° <b>∡</b> 7	
greatest brilliancy	-4305 Oct 29 j 01:51	4° <b>Υ</b> 04'13	-1.5m	evening set	-4299 Jan 05 j 23:05	29° <b>∡</b> ¹27'37	
J	-4305 Nov 08 j 16:27	30° <b>Ŗ</b> ₩		S	-4299 Jan 06 j 16:24	್ತಿ	
direct	-4305 Dec 07 j 01:37	24° <b>)</b> 46'45			-4299 Feb 16 j 16:30	0° <b>≈</b>	
	-4304 Jan 07 j 12:36	0° <b>Υ</b>			<b>,</b>		
	-4304 Mar 14 j 16:14	0°8		conjunction	-4299 Mar 06 j 12:25	12° <b>≈</b> 36'42	-0°51'17
	-4304 May 05 j 11:25	0°II		minimum elong	-4299 Mar 06 j 14:32	12° <b>≈</b> 40′25	0°51'26
	-4304 Jun 21 j 10:43	0°€			-4299 Mar 31 j 17:05	0° <b>∀</b>	

•	cal year style is used: Th		•	* * ·		, ,	<i>J</i> 11
max. Earth dist.	-4299 Apr 08 j 07:13	-	2.55512 AU	retrograde	-4294 May 31 j 10:19	11° <b>∡</b> 36'41	
morning rise	-4299 Apr 30 j 10:51	19° <b>)</b> 55'58	2.00012110	min. Earth dist.	-4294 Jun 27 j 08:09		0.39389 AU
morning rise	-4299 May 15 j 19:22	0°Υ		opposition	-4294 Jul 02 j 21:31	5° <b>∡</b> ³32′21	
asc. node	-4299 Jun 11 j 21:52	17° <b>Y</b> 26'35		greatest brilliancy	-4294 Jul 01 j 16:35	5° × 53'26	
asc. node	-4299 Jul 01 j 19:20	0°8		direct	-4294 Aug 02 j 02:48	0° <b>⊀</b> 14'45	2.0111
	-4299 Aug 19 j 19:32	0°II		direct	-4294 Oct 23 j 06:02	0°ਤ	
	-4299 Aug 19 j 19:32 -4299 Oct 11 j 12:29	0°ಅ			-4294 Oct 23 j 00:02 -4294 Dec 12 j 20:42	0°≈	
	-4299 Dec 24 j 10:09	$0 {\circ} \Omega$			-4293 Jan 30 j 05:23	0° <b>∺</b>	
retrograde	-4298 Jan 10 j 22:42	1° <b>Ω</b> 44'36		asc. node	-4293 Feb 01 j 12:36	1° <b>∺</b> 26′07	
renograde	-4298 Jan 27 j 10:53	30°RS		asc. Houc	-4293 Mar 19 j 06:46	0° <b>Υ</b>	
opposition	-4298 Feb 15 j 16:08	24°9512'18	5002101		-4293 May 06 j 02:43	0°8	
opposition	•		-1.9m	avanina aat	, ,	10° <b>8</b> 13'45	
greatest brilliancy	-4298 Feb 17 j 02:12	23°541'26		evening set	-4293 May 22 j 06:50	0° <b>I</b>	
min. Earth dist.	-4298 Feb 23 j 13:34	21°521'09	0.53679 AU	F 41 11 4	-4293 Jun 22 j 04:44		2 (4707 ATT
direct	-4298 Mar 27 j 01:44	15° <b>©</b> 01'39		max. Earth dist.	-4293 Jun 23 j 04:16	0°Д3/58	2.64787 AU
	-4298 May 18 j 22:58	0°N			1202 1 1 07:21 52	100 <b>T</b> 11101	1007114
desc. node	-4298 Jun 14 j 19:50	14° <b>Ω</b> 50'56		conjunction	-4293 Jul 07 j 21:52	10° <b>Ⅱ</b> 11'21	
	-4298 Jul 08 j 11:21	0° <b>т</b> р		minimum elong	-4293 Jul 07 j 21:02	10° <b>Ⅱ</b> 10′00	1°07'24
	-4298 Aug 19 j 18:14	0∘ <b>⊽</b>			-4293 Aug 06 j 23:11	0°9	
	-4298 Sep 28 j 14:44	0° <b>M</b> -		morning rise	-4293 Aug 22 j 15:34	10°531'35	
	-4298 Nov 07 j 01:48	0° <b>∡</b>			-4293 Sep 20 j 03:07	$0$ $\circ$ $\Omega$	
	-4298 Dec 17 j 07:50	0°ප			-4293 Nov 01 j 17:41	0° m/	
	-4297 Jan 28 j 02:48	0° <b>≈</b>			-4293 Dec 13 j 01:51	0∘ <b>⊽</b>	
evening set	-4297 Mar 01 j 17:53	22° <b>≈</b> 32'35			-4292 Jan 22 j 15:51	0°M	
	-4297 Mar 12 j 18:29	0° <b>∀</b>		desc. node	-4292 Feb 04 j 22:56	9°M51'05	
					-4292 Mar 03 j 08:34	0° <b>∡</b> ¹	
conjunction	-4297 Apr 22 j 16:05	27° <b>)</b> €04'14	-0°04'07		-4292 Apr 14 j 20:33	ව°0	
minimum elong	-4297 Apr 22 j 16:16	27° <b>)</b> €04'32	0°04'07		-4292 Jun 03 j 09:50	0° <b>≈</b>	
behind sun begin	-4297 Apr 21 j 20:04	26° <b>∺</b> 31'38		retrograde	-4292 Jul 26 j 02:28	15° <b>≈</b> 39′24	
behind sun end	-4297 Apr 23 j 12:28	27° <b>)</b> € 37′26		min. Earth dist.	-4292 Aug 25 j 06:46	9° <b>≈</b> 24'46	0.51089 AU
	-4297 Apr 27 j 04:05	$0^{\circ}\mathbf{\Upsilon}$		opposition	-4292 Sep 01 j 22:00	6° <b>≈</b> 34'39	-4°32'29
asc. node	-4297 Apr 29 j 18:29	1° <b>Y</b> 41'20		greatest brilliancy	-4292 Aug 31 j 19:06	6° <b>≈</b> 59'44	-2.1m
max. Earth dist.	-4297 May 06 j 22:19	6° <b>Ƴ</b> 19'44	2.63970 AU		-4292 Sep 24 j 22:44	30°R₹	
morning rise	-4297 Jun 10 j 02:41	28° <b>Y</b> 15'34		direct	-4292 Oct 06 j 07:33	29° <b>る</b> 07'42	
-	-4297 Jun 12 j 20:15	0°8			-4292 Oct 18 j 02:15	0° <b>≈</b>	
	-4297 Jul 30 j 06:03	0° <b>I</b> I		asc. node	-4292 Dec 19 j 12:46	22° <b>≈</b> 47'26	
	-4297 Sep 16 j 04:28	0ಂ <b>ತಾ</b>			-4291 Jan 02 j 12:48	0° <b>∀</b>	
	-4297 Nov 04 j 06:31	$0^{\circ}\Omega$			-4291 Feb 24 j 21:46	$0^{\circ}\mathbf{\Upsilon}$	
	-4297 Dec 27 j 07:52	0° <b>m</b>			-4291 Apr 15 i 20:55	0°8	
retrograde	-4296 Mar 13 j 18:03	25° m 24'53			-4291 Jun 02 j 18:05	0°II	
opposition	-4296 Apr 14 j 07:28	19° m 51'08	1°13'13	evening set	-4291 Jun 29 j 04:17	17° <b>Ⅲ</b> 08'31	
greatest brilliancy	-4296 Apr 14 j 16:40	19° m 44'22	-2.7m		-4291 Jul 18 j 12:46	0 ಲ	
min. Earth dist.	-4296 Apr 20 j 22:03	17° m 55'01	0.41052 AU	max. Earth dist.	-4291 Jul 19 j 11:46	0°938'36	2.57325 AU
desc. node	-4296 May 01 j 21:54	15° mp 07'41	0.11032710	max. Earth dist.	12)1 341 17 11.10	0 3030	2.57525110
direct	-4296 May 18 j 01:22	13° m/ 24'03		conjunction	-4291 Aug 16 j 07:36	19° <b>5</b> 38'16	1°06'43
direct	-4296 Jul 11 j 10:11	0° <u>م</u>		minimum elong	-4291 Aug 16 j 08:36	19°540'01	1°06'55
	-4296 Aug 29 j 11:01	0° <b>m</b> .		minimum ciong	-4291 Aug 31 j 03:18	0°Ω	1 00 33
	-4296 Oct 11 j 22:09	0° <b>⊼</b> 7		morning rise	-4291 Oct 05 j 03:39	25° <b>Ω</b> 09'14	
	-4296 Nov 23 j 17:42	°ਤ ਹ°ਤ		morning 1130	-4291 Oct 11 j 18:10	0° m	
	-4295 Jan 06 j 08:48	0°≈			-4291 Nov 20 j 19:51	0° <del>ت</del> رااہ	
	-4295 Feb 20 j 08:05	0 <b>≈</b> 0° <b>H</b>		desc. node	-4291 Nov 20 j 19:31 -4291 Dec 22 j 22:05	0 <b>==</b> 24° <b>£</b> 34'14	
asa nada	-4295 Mar 16 j 14:18	15° <b>)</b> 49'38		desc. Hode	-4291 Dec 29 j 23:13	0°M	
asc. node		15 <b>π</b> 4938			-		
. ,	-4295 Apr 07 j 13:35				-4290 Feb 06 j 23:07	0° <b>∡</b> ¹	
evening set	-4295 Apr 13 j 08:49	3° <b>Y</b> 43′22			-4290 Mar 18 j 18:52	5°0	
P 4 P	-4295 May 24 j 12:19	0°8	2 (5004 477		-4290 Apr 29 j 19:08	0° <b>≈</b>	
max. Earth dist.	-4295 May 30 j 02:59	3° <b>8</b> 34'34	2.67084 AU		-4290 Jun 15 j 17:34	0° <b>∺</b>	
	420535 21:25:5	406 34	0040102	retrograde	-4290 Sep 05 j 02:02	29° <b>)</b> 43'53	0.61515 : **
conjunction	-4295 May 31 j 06:10		0°40'02	min. Earth dist.	-4290 Oct 10 j 10:20		0.61717 AU
minimum elong	-4295 May 31 j 04:57	4° <b>8</b> 15'56	0°40'07	opposition	-4290 Oct 14 j 20:09	19° <b>)</b> 47'24	
	-4295 Jul 10 j 10:56	0°Ⅱ 2°Ⅲ2515.4		greatest brilliancy	-4290 Oct 14 j 16:57	19° <b>¥</b> 50′36	-1.6m
morning rise	-4295 Jul 15 j 20:17	3° <b>Ⅱ</b> 27'54		asc. node	-4290 Nov 06 j 13:34	12° <b>₩</b> 25'18	
	-4295 Aug 25 j 19:11	0°©		direct	-4290 Nov 21 j 18:02	10° <b>)</b> 53′13	
	-4295 Oct 10 j 07:49	$0^{\circ}\Omega$			-4289 Jan 27 j 07:14	0° <b>Υ</b>	
	-4295 Nov 24 j 04:39	0° <b>m</b> )			-4289 Mar 25 j 06:23	0°B	
	-4294 Jan 07 j 21:29	0∘ <b>⊽</b>			-4289 May 14 j 07:48	0° <b>I</b> I	
	-4294 Feb 22 j 18:06	0°M			-4289 Jun 29 j 18:18	0ංම	
desc. node	-4294 Mar 19 j 22:59	15°M20'10		evening set	-4289 Aug 11 j 20:57	29°5541'11	
	-4294 Apr 16 j 20:48	0° <b>∡</b> ¹			-4289 Aug 12 j 07:33	$0$ $^{\circ}$ $\Omega$	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 12 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -4400 i	n astronomical cou	unting style is the year	4401 BCE in historical c		
max. Earth dist.	-4289 Aug 27 j 14:47	10° <b>Ω</b> 57'57	2.45723 AU		-4284 May 22 j 22:59	$0^{\circ}$ Y	
	-4289 Sep 22 j 12:07	0° <b>™</b>		asc. node	-4284 Jun 28 j 13:31	23° <b>Y</b> 19'18	
					-4284 Jul 09 j 07:29	0°8	
conjunction	-4289 Oct 04 j 15:32	9° <b>m</b> 07'00	0°25'03		-4284 Aug 28 j 14:14	$\Pi$ °0	
minimum elong	-4289 Oct 04 j 17:05	9° <b>m</b> 09'54	0°25'07		-4284 Oct 25 j 09:13	0ංම	
	-4289 Oct 31 j 23:20	0∘ <b>⊽</b>		retrograde	-4284 Dec 23 j 04:30	15° <b>©</b> 36'33	
desc. node	-4289 Nov 09 j 18:58	6° <b>Ω</b> 49'40		opposition	-4283 Jan 29 j 03:41		5°11'40
morning rise	-4289 Dec 03 j 22:01	25° <b>£</b> 38'37		greatest brilliancy	-4283 Jan 30 j 08:00		-1.7m
	-4289 Dec 09 j 11:33	0°M.		min. Earth dist.	-4283 Feb 04 j 21:37 -4283 Feb 20 j 14:59		0.58195 AU
	-4288 Jan 16 j 21:06 -4288 Feb 25 j 01:01	0°⋜		direct	-4283 Feb 20 j 14:59 -4283 Mar 10 j 13:59	30°RⅡ 27°Ⅱ49'38	
	-4288 Apr 05 j 21:03	0° <b>≈</b>		direct	-4283 Mar 29 j 09:22	27 H4938 0°9	
	-4288 May 19 j 10:24	0° <b>∺</b>			-4283 Jun 04 j 01:55	0° <b>U</b>	
	-4288 Jul 06 j 15:00	0°Υ		desc. node	-4283 Jul 01 j 13:56	17° <b>Ω</b> 36'58	
	-4288 Sep 08 j 03:39	0°8		desc. node	-4283 Jul 19 j 12:04	0° m)	
asc. node	-4288 Sep 23 j 14:32	3° <b>8</b> 54'40			-4283 Aug 29 j 08:28	0∘ <b>⊽</b>	
retrograde	-4288 Oct 09 j 10:18	5° <b>8</b> 24'45			-4283 Oct 07 j 11:28	0° <b>M</b> .	
C	-4288 Nov 07 j 02:44	30° <b>₹</b> Υ			-4283 Nov 15 j 09:47	0° <b>∡</b> ¹	
opposition	-4288 Nov 18 j 09:34	25° <b>Ƴ</b> 38'25	2°02'00		-4283 Dec 25 j 04:50	0°ರ	
greatest brilliancy	-4288 Nov 18 j 07:15	25° <b>Y</b> '40'44	-1.4m		-4282 Feb 04 j 13:57	0° <b>≈</b>	
min. Earth dist.	-4288 Nov 17 j 16:40	25° <b>Y</b> ′55'24	0.66833 AU	evening set	-4282 Feb 10 j 03:24	3° <b>≈</b> 55'43	
direct	-4288 Dec 28 j 14:06	15° <b>Y</b> 56′29			-4282 Mar 19 j 21:46	0° <b>∀</b>	
	-4287 Feb 21 j 23:37	$0^{\circ}$ 8					
	-4287 Apr 21 j 04:54	$\Pi$ °0		conjunction	-4282 Apr 05 j 15:04	11° <b>∺</b> 14'02	
	-4287 Jun 08 j 18:37	$0$ $\circ$		minimum elong	-4282 Apr 05 j 16:09	11° <b>∺</b> 15'50	
	-4287 Jul 22 j 22:22	$0$ $\circ$ $\Omega$		max. Earth dist.	-4282 Apr 26 j 15:27		2.61265 AU
	-4287 Sep 02 j 03:15	0° <b>™</b>			-4282 May 04 j 02:38	0° <b>Υ</b>	
desc. node	-4287 Sep 26 j 15:38	18° Mp 36'35		asc. node	-4282 May 16 j 10:17	7° <b>Y</b> 59'35	
evening set	-4287 Oct 05 j 04:11	25° m 10'54		morning rise	-4282 May 26 j 02:39	14° <b>Y</b> 14'00	
	-4287 Oct 11 j 09:16	0∘ <b>亚</b>			-4282 Jun 19 j 19:35	0°B	
	-4287 Nov 18 j 15:19	0°M₊			-4282 Aug 06 j 15:27	0°II	
conjunction	-4287 Dec 07 j 18:31	15°M03'56	0°47'20		-4282 Sep 24 j 18:25 -4282 Nov 16 j 02:15	$0$ ಂ $\Omega$	
minimum elong	-4287 Dec 07 j 18:31	13 11603 30 14°M57'28			-4281 Jan 27 j 07:38	0° <b>m</b> )	
minimum ciong	-4287 Dec 07 j 13.14 -4287 Dec 26 j 20:04	0° <b>√</b>	0 4/3/	retrograde	-4281 Feb 15 j 02:52	2° Mp 02'30	
max. Earth dist.	-4286 Jan 10 j 01:04		2.38393 AU	retrograde	-4281 Mar 05 j 06:25	2 11,02 30 30°R <b>Ω</b>	
max. Dartii dist.	-4286 Feb 03 j 20:42	0°る	2.30373710	opposition	-4281 Mar 20 j 12:17	25° <b>Ω</b> 39'09	3°31'25
morning rise	-4286 Feb 13 j 14:10	7° <b>る</b> 18'47		greatest brilliancy	-4281 Mar 21 j 16:45	25° <b>Ω</b> 15'54	
	-4286 Mar 16 j 11:46	0° <b>≈</b>		min. Earth dist.	-4281 Mar 28 j 20:34		0.45765 AU
	-4286 Apr 28 j 08:26	0° <b>∀</b>		direct	-4281 Apr 25 j 23:45	17° <b>Ω</b> 53'35	
	-4286 Jun 13 j 00:30	$0^{\circ}$ Y		desc. node	-4281 May 19 j 13:43	21° <b>£</b> 28′22	
	-4286 Aug 01 j 18:40	$9^{\circ}$ 8			-4281 Jun 10 j 15:11	0° <b>m</b> )	
asc. node	-4286 Aug 11 j 15:16	5° <b>8</b> 30'04			-4281 Jul 31 j 15:02	0∘ <b>⊽</b>	
	-4286 Oct 02 j 02:00	$\Pi$ °0			-4281 Sep 12 j 07:38	$0^{\circ}$ M.	
retrograde	-4286 Nov 13 j 17:11	9° <b>Ⅱ</b> 05'57			-4281 Oct 23 j 09:14	0° <b>∡</b> ¹	
opposition	-4286 Dec 22 j 18:52	29° <b>8</b> 56'26	4°10'12		-4281 Dec 03 j 19:00	0°ಕ	
	-4286 Dec 22 j 15:15	30° <b>₹</b> 8			-4280 Jan 15 j 11:06	0° <b>≈</b>	
greatest brilliancy	-4286 Dec 23 j 03:41	29° <b>8</b> 47'45	-1.4m		-4280 Feb 28 j 18:30	0° <b>∺</b>	
min. Earth dist.	-4286 Dec 25 j 21:09	28° <b>8</b> 43'08	0.65686 AU	evening set	-4280 Mar 28 j 05:48	18° <b>)</b> 44′38	
direct	-4285 Feb 01 j 23:08	19° <b>8</b> 55'13		asc. node	-4280 Apr 02 j 07:21	22° <b>米</b> 02'36 0° <b>Ƴ</b>	
	-4285 Mar 18 j 18:22	0°© 11°0			-4280 Apr 14 j 13:49	Os. A.	
	-4285 May 16 j 08:11	0°€ 0°€		conjunction	-4280 May 16 j 08:36	20° <b>Y</b> 25'35	0°24'23
	-4285 Jul 01 j 20:12 -4285 Aug 12 j 19:13	0° <b>m</b> y		minimum elong	-4280 May 16 j 07:43	20 <b>γ</b> 23 33 20° <b>γ</b> 24'10	0°24'27
desc. node	-4285 Aug 14 j 14:35	1° Mp 20'26		max. Earth dist.	-4280 May 21 j 02:10	23° <b>Y</b> 27'05	2.66496 AU
acoc. node	-4285 Sep 21 j 07:09	ე∘ <b>ഹ</b>		max. Durin tilot.	-4280 May 31 j 08:16	0°8	2.00770 AU
	-4285 Oct 29 j 15:42	0°M		morning rise	-4280 Jul 01 j 17:03	20° <b>8</b> 00'02	
	-4285 Dec 06 j 23:11	0° <b>×</b> 7			-4280 Jul 17 j 09:09	0°II	
evening set	-4285 Dec 12 j 10:11	4° <b>∡</b> 13'58			-4280 Sep 02 j 04:15	0°©	
Č	-4284 Jan 15 j 03:59	0°₹			-4280 Oct 18 j 16:03	0°N	
	,				-4280 Dec 04 j 07:31	0° <b>m</b> )	
conjunction	-4284 Feb 13 j 11:38	21° <b>る</b> 41'28	-1°03'55		-4279 Jan 21 j 11:25	0∘ <b>⊽</b>	
minimum elong	-4284 Feb 13 j 13:18	21° <b>る</b> 44'31	1°04'06		-4279 Mar 18 j 13:44	0° <b>M</b> .	
	-4284 Feb 24 j 23:33	0° <b>≈</b>		desc. node	-4279 Apr 05 j 15:14	6° <b>M</b> ₊39'10	
max. Earth dist.	-4284 Mar 25 j 07:15	20° <b>≈</b> 40′39	2.50919 AU	retrograde	-4279 May 01 j 23:53	10°M50'02	
_	-4284 Apr 07 j 20:46	0° <b>∀</b>		opposition	-4279 Jun 01 j 14:25	5°M42'20	
morning rise	-4284 Apr 12 j 05:06	2° <b>)</b> 57′30		greatest brilliancy	-4279 Jun 01 j 08:57	5°M45'58	-2.9m

,	ical year style is used: Th			//		, ,	0 10
min. Earth dist.	-4279 May 31 j 17:36	-	0.37696 AU	conjunction	-4274 Sep 13 j 19:59	18° <b>Ω</b> 15'46	0°46'52
direct	-4279 Jul 01 j 13:48	0°M41'41	0.5 / 0 / 0 / 120	minimum elong	-4274 Sep 13 j 21:55	18° <b>Ω</b> 19'17	
ancer	-4279 Sep 18 j 22:02	0°× <b>7</b>		minimum ciong	-4274 Sep 29 j 18:19	0° m)	0 17 00
	-4279 Nov 06 j 12:25	∘ੰਤ		morning rise	-4274 Nov 08 j 05:35	29° m 51'22	
	-4279 Dec 22 j 22:39	0° <b>≈</b>		morning rise	-4274 Nov 08 j 05:55	0° <b>ت</b>	
	-4278 Feb 07 j 12:14	0° <b>\</b>		desc. node	-4274 Nov 26 j 13:26	ა <u> </u>	
asc. node	-4278 Feb 18 j 04:42	6° <b>∺</b> 49'55		uese. Houe	-4274 Nov 20 j 13:20 -4274 Dec 17 j 02:51	0°M	
asc. node	-4278 Mar 26 j 15:42	0° <b>Υ</b>			-4273 Jan 24 j 16:17	0° <b>∡</b> 7	
evening set	-4278 May 07 j 09:11	26° <b>Y</b> 24'34			-4273 Mar 04 j 23:58	0°ਤੇ	
evening set	-4278 May 13 j 01:06	0° <b>8</b>			-4273 Mar 04 j 25:38 -4273 Apr 15 j 02:04	0°≈	
max. Earth dist.	-4278 Jun 13 j 15:06	_	2.66316 AU		-4273 May 29 j 08:08	0 <b>≈</b> 0° <b>∺</b>	
max. Earth dist.	-4276 Juli 13 j 13.00	20 007 04	2.00310 AU		-4273 Jul 19 j 05:21	0°Υ	
conjunction	-4278 Jun 23 j 05:16	26° <b>8</b> 16'13	0°50'10	retrograde	-4273 Sep 26 j 23:55	22° <b>Υ</b> 14'50	
				•			
minimum elong	-4278 Jun 23 j 04:05	26° <b>႘</b> 14'18 0° <b>Ⅱ</b>	0-39.28	asc. node	-4273 Oct 11 j 04:59	20° <b>Υ</b> 51'49 13° <b>Υ</b> 13'05	0 (55(( AII
	-4278 Jun 29 j 00:18			min. Earth dist.	-4273 Nov 03 j 20:16		0.65566 AU
morning rise	-4278 Aug 07 j 12:47	25° <b>II</b> 45'57		opposition	-4273 Nov 06 j 00:28	12° <b>Υ</b> 20'28	0°59'06
	-4278 Aug 13 j 22:28	0°©		greatest brilliancy	-4273 Nov 05 j 22:04	12° <b>Y</b> 22'53	-1.4m
	-4278 Sep 27 j 12:30	$\Omega^{\circ}\Omega$		direct	-4273 Dec 15 j 11:04	2° <b>Υ</b> ′53'44	
	-4278 Nov 09 j 18:58	0° mp			-4272 Mar 07 j 14:12	0° <b>8</b>	
	-4278 Dec 22 j 00:38	0° <b>⊡</b>			-4272 Apr 30 j 01:17	0°II	
	-4277 Feb 01 j 18:04	0°M			-4272 Jun 16 j 12:50	0°©	
desc. node	-4277 Feb 21 j 16:17	14°M14'39			-4272 Jul 30 j 09:14	$0$ ° $\Omega$	
	-4277 Mar 16 j 03:11	0° <b>∡</b>			-4272 Sep 09 j 13:09	0° <b>m</b> )	
	-4277 May 01 j 11:48	0°ප		evening set	-4272 Sep 11 j 16:22	1° <b>m</b> )35'54	
retrograde	-4277 Jul 07 j 17:16	24° <b>පි</b> 00'12		desc. node	-4272 Oct 13 j 10:48	25° Mp 48'50	
min. Earth dist.	-4277 Aug 04 j 18:20		0.46062 AU	max. Earth dist.	-4272 Oct 14 j 17:09	26° Mp 47'30	2.38713 AU
greatest brilliancy	-4277 Aug 11 j 09:27	16° <b>පි</b> 22'44	-2.4m		-4272 Oct 18 j 20:33	0∘ <b>ಹ</b>	
opposition	-4277 Aug 12 j 22:05	15° <b>る</b> 50'58	-5°49'53				
direct	-4277 Sep 14 j 13:42	9° <b>る</b> 13'30		conjunction	-4272 Nov 10 j 10:55	17° <b>≏</b> 38'42	-0°19'59
	-4277 Nov 20 j 22:47	0° <b>≈</b>		minimum elong	-4272 Nov 10 j 09:15	17° <b>≏</b> 35′26	0°20'00
asc. node	-4276 Jan 06 j 03:40	24° <b>≈</b> 58′27			-4272 Nov 26 j 04:09	0° <b>M</b>	
	-4276 Jan 14 j 20:56	0° <b>∀</b>			-4271 Jan 03 j 09:36	0° <b>∡</b> ″	
	-4276 Mar 05 j 08:10	$0$ ° $\mathbf{\gamma}$		morning rise	-4271 Jan 16 j 14:03	10° <b>∤</b> 14'16	
	-4276 Apr 23 j 05:49	$9^{\circ}$ 8			-4271 Feb 11 j 10:04	0°ರ	
	-4276 Jun 09 j 17:23	$\Pi$ $^{\circ}$ 0			-4271 Mar 24 j 00:59	0° <b>≈</b>	
evening set	-4276 Jun 13 j 18:43	2° <b>Ⅲ</b> 36'44			-4271 May 06 j 00:20	0° <b>∀</b>	
max. Earth dist.	-4276 Jul 08 j 06:11	18° <b>Ⅲ</b> 34′24	2.60813 AU		-4271 Jun 21 j 05:42	$0^{\circ}$ Y	
	-4276 Jul 25 j 10:41	0ං <b>ව</b>			-4271 Aug 12 j 05:46	$9^{\circ}$ 8	
				asc. node	-4271 Aug 28 j 05:03	7° <b>と</b> 58'09	
conjunction	-4276 Jul 30 j 22:43	3°541'49	1°11'02	retrograde	-4271 Oct 30 j 17:53	26° <b>8</b> 08'51	
minimum elong	-4276 Jul 30 j 22:54	3°542'08	1°11'13	opposition	-4271 Dec 09 j 06:55	16° <b>8</b> 42'16	3°26'48
	-4276 Sep 07 j 05:14	$0^{\circ}\Omega$		greatest brilliancy	-4271 Dec 09 j 09:49	16° <b>8</b> 39'23	-1.3m
morning rise	-4276 Sep 16 j 13:52	6° <b>Ω</b> 35'29		min. Earth dist.	-4271 Dec 10 j 21:14	16° <b>8</b> 04'04	0.66899 AU
	-4276 Oct 19 j 03:37	0° <b>m</b>		direct	-4270 Jan 19 j 05:48	6° <b>8</b> 45'04	
	-4276 Nov 28 j 14:53	0∘ <b>⊽</b>			-4270 Apr 03 j 12:45	$\Pi^{\circ}0$	
	-4275 Jan 07 j 04:28	0°M			-4270 May 25 j 21:29	0∘©	
desc. node	-4275 Jan 08 j 14:54	1°ML05'39			-4270 Jul 10 j 03:32	$0^{\circ}\Omega$	
	-4275 Feb 15 j 15:02	0° <b>∡</b> ¹			-4270 Aug 20 j 16:55	0° <b>m</b> )	
	-4275 Mar 28 j 00:50	5°0		desc. node	-4270 Aug 31 j 07:52	7° m/58'12	
	-4275 May 10 j 06:17	0° <b>≈</b>			-4270 Sep 29 j 01:23	0∘ <u>⊽</u>	
	-4275 Jun 30 j 23:11	0° <b>)</b>			-4270 Nov 06 j 08:00	0° <b>M</b>	
retrograde	-4275 Aug 21 j 05:38	14° <b>)</b> 15′27		evening set	-4270 Nov 15 j 05:46	7° <b>M</b> 00'56	
min. Earth dist.	-4275 Sep 23 j 16:56		0.58112 AU	0.0000	-4270 Dec 14 j 13:21	0° <b>∡</b> 7	
opposition	-4275 Sep 29 j 12:02	4° <b>)</b> €28'01			1270 200 11, 13.21	· ,.	
greatest brilliancy	-4275 Sep 29 j 01:33	4° <b>)</b> (38′22		conjunction	-4269 Jan 19 j 14:15	27° <b>х</b> 42′00	-1°07'51
greatest offinancy	-4275 Oct 11 j 18:59	4 7(30 22 30°R≈	1.0111	minimum elong	-4269 Jan 19 j 13:52	27° <b>х</b> 42'00	
direct	-4275 Nov 05 j 04:14	26°≈02'11		minimum ciong	-4269 Jan 22 j 15:20	0°る	1 00 05
asc. node	-4275 Nov 23 j 04:14	20 ≈02 11 27°≈55'56			-4269 Mar 04 j 07:40	0°≈	
asc. nouc	-4275 Dec 01 j 21:12	27 <b>≈</b> 33 36 0° <b>H</b>		max. Earth dist.	-4269 Mar 08 j 02:56		2.45787 AU
	-4274 Feb 08 j 19:35	0° <b>Υ</b>		morning rise	-4269 Mar 23 j 15:13	2 ≈43 32 13°≈44'17	2.73/0/ AU
	v	0° <b>8</b>		morning rise	•	13°≈44°17 0° <b>∺</b>	
	-4274 Apr 02 j 20:09				-4269 Apr 16 j 02:40		
	-4274 May 21 j 19:24	0° <b>I</b>		ogo mg J-	-4269 May 31 j 06:56	0°Υ 20°Υ 47!11	
avanina sat	-4274 Jul 06 j 21:51	೧ಂಲ 13ಂಲ 1116		asc. node	-4269 Jul 16 j 05:03	28° <b>Y</b> 47'11	
evening set	-4274 Jul 24 j 21:23	12°5011'16	2 50500 411		-4269 Jul 18 j 05:08	0° <b>Β</b>	
max. Earth dist.	-4274 Aug 09 j 15:14	23°©05'33	2.50599 AU		-4269 Sep 08 j 14:29	0°II	
	-4274 Aug 19 j 10:42	$0$ ° $\Omega$			-4269 Nov 24 j 20:41	0°©	
				retrograde	-4269 Dec 07 j 10:46	0° <b>©</b> 55'19	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 14

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

-4269 Dec 19 j 11:00 30°RII -4264 Dec 31 j 22:46 0°≈

Attention, astronom		-					
	-4269 Dec 19 j 11:00	30°RⅡ			-4264 Dec 31 j 22:46	0° <b>≈</b>	
opposition	-4268 Jan 14 j 09:38	22° <b>Ⅱ</b> 19'58			-4263 Feb 15 j 08:32	0° <b>∀</b>	
greatest brilliancy	-4268 Jan 15 j 06:13	22° <b>Ⅱ</b> 00′08	-1.5m	asc. node	-4263 Mar 06 j 20:26	12° <b>∺</b> 39′20	
min. Earth dist.	-4268 Jan 19 j 18:39	20° <b>Ⅱ</b> 15'40	0.61848 AU		-4263 Apr 02 j 20:09	$0^{\circ}$ $\Upsilon$	
direct	-4268 Feb 24 j 09:10	12° <b>Ⅱ</b> 24'51		evening set	-4263 Apr 22 j 05:42	12° <b>Y</b> 22'51	
	-4268 Apr 24 j 20:41	$0$ $\circ$ $\odot$			-4263 May 19 j 21:59	$_{0\circ}$ 8	
	-4268 Jun 15 j 13:08	$0^{\circ}\Omega$		max. Earth dist.	-4263 Jun 04 j 11:28	9° <b>8</b> 54'54	2.67044 AU
desc. node	-4268 Jul 18 j 06:23	22° <b>Ω</b> 19'16			-		
	-4268 Jul 28 j 22:57	0° <b>m</b> )		conjunction	-4263 Jun 08 j 15:19	12° <b>8</b> 34'08	0°47'57
	-4268 Sep 07 j 01:27	0∘ <u>⊽</u>		minimum elong	-4263 Jun 08 j 14:02	12° <b>8</b> 32'05	0°48'05
	-4268 Oct 15 j 18:26	0° <b>M</b>		minimum erong	-4263 Jul 05 j 20:26	0°II	0 10 00
	-4268 Nov 23 j 08:49	0° <b>⊼</b> ¹		morning rise	-4263 Jul 23 j 23:58	11° <b>II</b> 42'58	
	·	0°る		morning rise		0°95	
	-4267 Jan 01 j 20:30				-4263 Aug 21 j 00:43		
evening set	-4267 Jan 19 j 08:53	12° <b>る</b> 57'19			-4263 Oct 05 j 04:17	0°N	
	-4267 Feb 11 j 22:41	0° <b>≈</b>			-4263 Nov 18 j 08:46	0° <b>m</b> y	
					-4263 Dec 31 j 22:42	0∘ <b>⊽</b>	
conjunction	-4267 Mar 17 j 23:46	23° <b>≈</b> 49′24	-0°41'43		-4262 Feb 13 j 16:45	0° <b>M</b> ₊	
minimum elong	-4267 Mar 18 j 01:40	23° <b>≈</b> 52'38	0°41'50	desc. node	-4262 Mar 10 j 08:46	16°M22'37	
	-4267 Mar 27 j 00:45	0° <b>∀</b>			-4262 Apr 01 j 02:24	0°⊀	
max. Earth dist.	-4267 Apr 15 j 09:33	13° <b>¥</b> 02'38	2.57771 AU	retrograde	-4262 Jun 15 j 01:57	28° <b>х</b> 23'54	
morning rise	-4267 May 10 j 03:27	29° <b>)</b> 22'01		min. Earth dist.	-4262 Jul 11 j 20:21	23° <b>҂</b> 746'35	0.41411 AU
	-4267 May 11 j 02:44	0°Υ		greatest brilliancy	-4262 Jul 17 j 11:40	22° <b>×7</b> 01'46	
asc. node	-4267 Jun 02 j 03:08	14° <b>Υ</b> 13'54		-	-4262 Jul 19 j 00:44	21° <b>×</b> <sup>7</sup> 32'54	
asc. node	•			opposition	•		-0 28 34
	-4267 Jun 26 j 22:43	0°B		direct	-4262 Aug 18 j 21:20	15° <b>∡</b> ¹49'22	
	-4267 Aug 14 j 09:44	$\Pi$ $^{\circ}$ 0			-4262 Oct 10 j 12:15	0°ප	
	-4267 Oct 04 j 09:42	$0$ $\circ$ $\odot$			-4262 Dec 05 j 13:16	0° <b>≈</b>	
	-4267 Dec 02 j 23:54	$0 {\circ} \Omega$		asc. node	-4261 Jan 22 j 18:59	28° <b>≈</b> 57'58	
retrograde	-4266 Jan 22 j 17:02	12° <b>Ω</b> 14′23			-4261 Jan 24 j 11:38	0° <b>∀</b>	
opposition	-4266 Feb 26 j 16:21	5° <b>Ω</b> 04'14	4°42'55		-4261 Mar 14 j 05:29	$0$ ° $\Upsilon$	
greatest brilliancy	-4266 Feb 28 j 03:02	4° <b>Ω</b> 33'39	-2.1m		-4261 May 01 j 09:22	0°B	
min. Earth dist.	-4266 Mar 06 j 23:40	2° <b>Ω</b> 09'33	0.50950 AU	evening set	-4261 May 30 j 19:00	18° <b>8</b> 35'20	
	-4266 Mar 13 j 17:29	30°Rூ	***************************************	**************************************	-4261 Jun 17 j 14:30	0°II	
direct	-4266 Apr 06 j 05:35	26°9517'35		max. Earth dist.	-4261 Jun 28 j 21:59		2.63606 AU
uncci		20 <b>3</b> 1733		max. Earth dist.	-4201 Juli 20 j 21.39	/ 11903	2.03000 AU
	-4266 Apr 30 j 13:44						
	40.00 T 05:00 40	15001455			40 C1 T 1 1 C : 11 00	100TT 47155	1000157
desc. node	-4266 Jun 05 j 06:40	15° <b>Ω</b> 14'55		conjunction	-4261 Jul 16 j 11:20	18° <b>Ⅱ</b> 47'55	1°09'57
desc. node	-4266 Jun 30 j 08:37	0° <b>m</b>		conjunction minimum elong	-4261 Jul 16 j 10:49	18° <b>Ⅱ</b> 47'05	1°09'57 1°10'08
desc. node	,	0 <b>ಂ</b> ರ 0ಂ⊯		,	·	18°∏47'05 0°©	
desc. node	-4266 Jun 30 j 08:37	0° <b>m</b>		,	-4261 Jul 16 j 10:49	18° <b>П</b> 47'05 0°ഇ 19° <b>©</b> 50'31	
desc. node	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53	0 <b>ಂ</b> ರ 0ಂ⊯		minimum elong	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40	18°∏47'05 0°©	
desc. node	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40	0° <b>L</b> 0° <b>L</b> 0°M		minimum elong	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20	18° <b>П</b> 47'05 0°ഇ 19° <b>©</b> 50'31	
desc. node	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39	0° ₹ 0° ™ 0° ™		minimum elong	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07	18°∏47'05 0°© 19°©50'31 0°Ω	
desc. node	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04	0° <b>™</b> 0° <b>™</b> 0° <b>™</b> 0° <b>™</b> 0° <b>™</b>		minimum elong	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08	18°∏47'05 0°© 19°©50'31 0°Ω 0°™ 0°Ω	
	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49	0°₩ 0°∞ 0°™ 0°≈ 0°× 0°× 0°×		minimum elong morning rise	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52	18°∏47'05 0°© 19°©50'31 0°Ω 0°™ 0°• 0°™	
evening set	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52	0° m 0° Ω 0° M 0° ¾ 0° ♂ 0° ≈ 0° ₩ 2° ₩ 444'08		minimum elong	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51	18° ∏47'05 0° © 19° ©50'31 0° Ω 0° ™ 0° Ω 0° ™ 7° ™07'55	
	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52 -4265 Apr 19 j 23:11	0° m 0° Ω 0° M 0° % 0° % 0° % 0° % 2° % 44'08 28° % 19'56		minimum elong morning rise	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30	18° ∏47'05 0° © 19° © 50'31 0° Ω 0° M 0° Ω 0° M 7° M 07'55 0° ⊀	
evening set	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52	0° m 0° Ω 0° M 0° ¾ 0° ♂ 0° ≈ 0° ₩ 2° ₩ 444'08		minimum elong morning rise	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55	18° \$\Pi47'05 0° \$\Sigma\$ 19° \$\Sigma50'31 0° \$\Omega\$ 0° \$\Pi\$ 0° \$\Pi\$ 0° \$\Pi\$ 0° \$\Sigma\$	
evening set asc. node	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46	0°™ 0°™ 0°™ 0°₹ 0°₹ 0°≈ 0°¥ 2°¥44'08 28°¥19'56 0°Υ		minimum elong morning rise  desc. node	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58	18° \$\Pi47'05\\ 0° \$\Sigma\$ 19° \$\Sigma 50'31\\ 0° \$\Omega\$ 0° \$\mi\$ 0° \$\Omega\$ 0° \$\mi\$ 7° \$\mi 07'55\\ 0° \$\struct \Sigma\$ 0° \$\Sigma\$	
evening set asc. node	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46	0° m 0° Ω 0° M 0° ℤ 0° ℤ 0° ℤ 0° ℤ 0° ℤ 0° Ϫ 0° Ϫ 0° Ϫ 0° ℋ 2° ℋ 44'08 28° ℋ 19'56 0° Υ 6° ϒ 04'15	0°06'49	minimum elong morning rise  desc. node	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09	18° \$\Pi47'05\\ 0° \$\Pi\$\) 19° \$\Pi50'31\\ 0° \$\Pi\$\) 0° \$\Pi\$\\ 0° \$\Pi\$\\ 7° \$\Pi07'55\\ 0° \$\Z^*\\ 0° \$\Z^*\\ 27° \$\approx 01'30\]	1°10′08
evening set asc. node  conjunction minimum elong	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46 -4265 May 01 j 21:42 -4265 May 01 j 21:42	0° m 0° Ω 0° M 0° ℤ 0° ℤ 0° ℤ 0° ℤ 0° ℤ 0° Ϫ 0° Ϫ 2° ℋ 44'08 28° ℋ 19'56 0° Υ 6° ϒ 04'15 6° ϒ 03'48	0°06'49 0°06'49	minimum elong morning rise  desc. node  retrograde min. Earth dist.	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09 -4260 Sep 05 j 12:42	18° \$\Pi47'05\\ 0° \$\Pi\$\) 19° \$\Pi50'31\\ 0° \$\Pi\$\) 0° \$\Pi\$\\ 27° \$\approx 01'30\\ 20° \$\approx 17'49\\	1°10′08 0.53746 AU
evening set asc. node	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46	0° m 0° Ω 0° M 0° % 0° % 0° % 0° % 0° % 2° ¥44'08 28° ¥19'56 0° Υ 6° Υ 04'15 6° Υ 03'48 5° Υ 33'48		minimum elong morning rise  desc. node	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57	18° \$\Pi47'05\\ 0° \$\Pi\$\) 19° \$\Pi50'31\\ 0° \$\Pi\$\) 0° \$\Pi\$\\ 0° \$\Pi\$\\ 7° \$\Pi07'55\\ 0° \$\Z^*\\ 0° \$\Z^*\\ 27° \$\approx 01'30\]	1°10′08 0.53746 AU
evening set asc. node  conjunction minimum elong	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46 -4265 May 01 j 21:42 -4265 May 01 j 21:42	0° m 0° Ω 0° M 0° ℤ 0° ℤ 0° ℤ 0° ℤ 0° ℤ 0° Ϫ 0° Ϫ 2° ℋ 44'08 28° ℋ 19'56 0° Υ 6° ϒ 04'15 6° ϒ 03'48		minimum elong morning rise  desc. node  retrograde min. Earth dist.	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09 -4260 Sep 05 j 12:42	18° \$\Pi47'05\\ 0° \$\Pi\$\) 19° \$\Pi50'31\\ 0° \$\Pi\$\) 0° \$\Pi\$\\ 27° \$\approx 01'30\\ 20° \$\approx 17'49\\	1°10′08 0.53746 AU -3°42′47
evening set asc. node conjunction minimum elong behind sun begin	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46 -4265 May 01 j 21:42 -4265 May 01 j 21:25 -4265 May 01 j 02:50	0° m 0° Ω 0° M 0° % 0° % 0° % 0° % 0° % 2° ¥44'08 28° ¥19'56 0° Υ 6° Υ 04'15 6° Υ 03'48 5° Υ 33'48		minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57	18° \$\Pi47'05\\ 0° \$\sigma\$ 19° \$\Sigma50'31\\ 0° \$\Omega\$ 0° \$\mathbf{m}\\ 0° \$\mathbf{m}\\ 7° \$\mathbf{m}.07'55\\ 0° \$m\\ 0° \$m\\ 0° \$m\\ 27° \$\approx 01'30\\ 20° \$\approx 17'49\\ 17° \$\approx 36'10	1°10′08 0.53746 AU -3°42′47
evening set asc. node  conjunction minimum elong behind sun begin behind sun end	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46 -4265 May 01 j 21:42 -4265 May 01 j 21:25 -4265 May 01 j 02:50 -4265 May 02 j 16:00	0° m 0° Ω 0° M 0° % 0° % 0° % 0° % 0° % 0° % 2° % 44'08 28° ¥ 19'56 0° Υ 6° Υ 04'15 6° Υ 03'48 5° Υ 33'48	0°06'49	minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition greatest brilliancy	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57 -4260 Sep 11 j 17:21	18° \$\Pi47'05\\ 0° \$\sigma\$ 19° \$\Sigma50'31\\ 0° \$\Omega\$ 0° \$\min\$ 0° \$\Omega\$ 0° \$\min\$ 7° \$\min\$07'55\\ 0° \$\nightarrow{\sigma}\$ 0° \$\nightarrow{\sigma}\$ 20° \$\approx 17'49\\ 17° \$\approx 55'53	1°10′08 0.53746 AU -3°42′47
evening set asc. node conjunction minimum elong behind sun begin behind sun end max. Earth dist.	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46 -4265 May 01 j 21:42 -4265 May 01 j 21:25 -4265 May 01 j 02:50 -4265 May 02 j 16:00 -4265 May 12 j 15:16 -4265 Jun 08 j 04:59	0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 2°₩44'08 28°₩19'56 0°Ψ 6°Ψ04'15 6°Ψ03'48 5°Ψ33'48 6°Ψ33'48	0°06'49	minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition greatest brilliancy direct	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57 -4260 Sep 11 j 17:21 -4260 Oct 17 j 19:56 -4260 Dec 09 j 18:07	18° II47'05 0° II 19° II50'31 0° II 0° II 0° II 7° II.07'55 0° II 0° II 0° II 17° II.07'55 0° II 17° II.07'55 0° II 0° II 17° II.07'55 0° II 0° II 17° II.07'55 0° II 0° II 0° II 0° II 17° II.07'55 0° II 0° II 0° II 0° II 17° II.07'55 0° II 17° II.07'55 0° II 17° II.07'55 0° II 17° II.07'55 0° II 17° II.07'55 0° II 17° II.07'55 0° II 17° II.07'55 17'49 17° II.07'55 17'49 17° II.07'55 17'49 17° II.07'55 18' II.07'5	1°10′08 0.53746 AU -3°42′47
evening set asc. node  conjunction minimum elong behind sun begin behind sun end	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46 -4265 May 01 j 21:25 -4265 May 01 j 21:25 -4265 May 01 j 02:50 -4265 May 02 j 16:00 -4265 May 12 j 15:16 -4265 Jun 08 j 04:59 -4265 Jun 18 j 11:06	0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 2°₩ 44'08 28°₩19'56 0°Υ 6°Υ04'15 6°Υ03'48 5°Υ33'48 6°Υ33'48 12°Υ59'22 0°₩ 6°♥31'58	0°06'49	minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition greatest brilliancy direct	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57 -4260 Sep 11 j 17:21 -4260 Oct 17 j 19:56 -4260 Dec 09 j 18:07 -4260 Dec 24 j 14:15	18° II47'05 0° © 19° © 50'31 0° II 0° III 0° III 7° III.07'55 0° ズ 0° III 0° ズ 0° III. 17° ※ 501'30 20° ※ 17'49 17° ※ 36'10 17° ※ 55'53 9° ※ 45'48 23° ※ 15'41 0° 光	1°10′08 0.53746 AU -3°42′47
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evening set asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46  -4265 May 01 j 21:42 -4265 May 01 j 21:25 -4265 May 01 j 02:50 -4265 May 02 j 16:00 -4265 May 12 j 15:16 -4265 Jun 08 j 04:59 -4265 Jun 18 j 11:06 -4265 Jul 25 j 10:31 -4265 Oct 28 j 18:58 -4265 Dec 17 j 13:34 -4264 Feb 13 j 18:30 -4264 Mar 31 j 01:15 -4264 Apr 22 j 07:03	0° m 0° • • • • • • • • • • • • • • • • • • •	0°06'49 2.65102 AU	minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition greatest brilliancy direct asc. node  evening set max. Earth dist.	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57 -4260 Sep 11 j 17:21 -4260 Oct 17 j 19:56 -4260 Dec 09 j 18:07 -4260 Dec 24 j 14:15 -4259 Feb 18 j 22:03 -4259 May 29 j 00:17 -4259 Jul 08 j 06:41 -4259 Jul 13 j 21:50 -4259 Jul 26 j 16:21	18° \$\Pi 47'05 0° \$\sigma\$ 19° \$\Sigma 50'31 0° \$\Omega\$ 0° \$\mathbf{m}\$ 17° \$\mathbf{m}\$ 36'10 17° \$\mathbf{m}\$ 55'53 9° \$\mathbf{m}\$ 45'48 23° \$\mathbf{m}\$ 15'41 0° \$\mathbf{m}\$ 0° \$\mathbf{m}\$ 0° \$\mathbf{m}\$ 0° \$\mathbf{m}\$ 26° \$\mathbf{m}\$ 14'05 0° \$\mathbf{m}\$ 8° \$\mathbf{m}\$ 37'43	0.53746 AU -3°42'47 -2.0m
evening set asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node opposition	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46  -4265 May 01 j 21:42 -4265 May 01 j 21:25 -4265 May 01 j 02:50 -4265 May 02 j 16:00 -4265 May 12 j 15:16 -4265 Jun 08 j 04:59 -4265 Jun 18 j 11:06 -4265 Jul 25 j 10:31 -4265 Sep 10 j 21:02 -4265 Oct 28 j 18:58 -4266 Dec 17 j 13:34 -4264 Feb 13 j 18:30 -4264 Mar 31 j 01:15 -4264 Apr 22 j 07:03 -4264 Apr 30 j 21:00	0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 2°™ 44'08 28°₩19'56 0°Ψ 6°Ψ04'15 6°Ψ03'48 5°Ψ33'48 12°Ψ59'22 0°₩ 6°₩31'58 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 11°Ф01'43 8°Ф05'27 5°Ф49'04	0°06'49 2.65102 AU -0°37'43	minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition greatest brilliancy direct asc. node  evening set max. Earth dist. conjunction	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57 -4260 Sep 11 j 17:21 -4260 Oct 17 j 19:56 -4260 Dec 09 j 18:07 -4260 Dec 24 j 14:15 -4259 Feb 18 j 22:03 -4259 Apr 10 j 18:39 -4259 Jul 08 j 06:41 -4259 Jul 13 j 21:50 -4259 Aug 26 j 04:50	18° \$\Pi47'05\\ 0° \$\sigma\$ 19° \$\Sigma50'31\\ 0° \$\Omega\$ 0° \$\mathbf{m}\\ 20° \$\infty 17'49\\ 17° \$\infty 36'10\\ 17° \$\infty 55'53\\ 9° \$\infty 45'48\\ 23° \$\infty 15'41\\ 0° \$\mathbf{m}\\ 0° \$\mathbf{m}\\ 0° \$\mathbf{m}\\ 0° \$\mathbf{m}\\ 26° \$\mathbf{m}\\ 14'05\\ 0° \$\mathbf{g}\\ 8° \$\mathbf{g} 37'43\\ 29° \$\mathbf{g} 47'03\\	0.53746 AU -3°42'47 -2.0m 2.55101 AU 1°01'26
evening set asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node opposition greatest brilliancy	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46  -4265 May 01 j 21:42 -4265 May 01 j 21:25 -4265 May 01 j 21:25 -4265 May 02 j 16:00 -4265 May 12 j 15:16 -4265 Jun 08 j 04:59 -4265 Jun 18 j 11:06 -4265 Jul 25 j 10:31 -4265 Sep 10 j 21:02 -4265 Oct 28 j 18:58 -4264 Feb 13 j 18:30 -4264 Mar 31 j 01:15 -4264 Apr 22 j 07:03 -4264 Apr 30 j 21:00 -4264 Apr 30 j 21:00 -4264 Apr 30 j 23:14	0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 2°™ 44'08 28°₩19'56 0°Ψ 6°Ψ04'15 6°Ψ03'48 5°Ψ33'48 12°Ψ59'22 0°℧ 6°℧31'58 0°Ⅲ 0°™ 0°™ 0°™ 0°™ 0°™ 11°Ф01'43 8°Ф05'27 5°Ф49'04 5°Ф47'30	0°06'49  2.65102 AU  -0°37'43 -2.9m	minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition greatest brilliancy direct asc. node  evening set max. Earth dist. conjunction	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Aug 05 j 03:09 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57 -4260 Sep 11 j 17:21 -4260 Oct 17 j 19:56 -4260 Dec 09 j 18:07 -4260 Dec 24 j 14:15 -4259 Feb 18 j 22:03 -4259 Apr 10 j 18:39 -4259 Jul 08 j 06:41 -4259 Jul 08 j 06:41 -4259 Jul 26 j 16:21 -4259 Aug 26 j 04:50 -4259 Aug 26 j 04:50 -4259 Aug 26 j 06:17	18° \$\Pi47'05\\ 0° \$\sigma\$ 19° \$\Sigma50'31\\ 0° \$\Omega\$ 0° \$\mathbb{m}\\ 20° \$\infty 17'49\\ 17° \$\infty 36'10\\ 17° \$\infty 55'53\\ 9° \$\infty 45'48\\ 23° \$\infty 15'41\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}\\ 26° \$\mathbb{m}\\$14'05\\ 0° \$\mathbb{m}\\ 29° \$\mathre{m}\\$47'03\\ 29° \$\mathre{m}\\$49'36	0.53746 AU -3°42'47 -2.0m 2.55101 AU 1°01'26
evening set asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node opposition greatest brilliancy min. Earth dist.	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46 -4265 May 01 j 21:42 -4265 May 01 j 21:25 -4265 May 01 j 21:25 -4265 May 02 j 16:00 -4265 May 12 j 15:16 -4265 Jun 08 j 04:59 -4265 Jun 18 j 11:06 -4265 Jul 25 j 10:31 -4265 Sep 10 j 21:02 -4265 Oct 28 j 18:58 -4265 Dec 17 j 13:34 -4264 Feb 13 j 18:30 -4264 Apr 30 j 21:00 -4264 Apr 30 j 21:00 -4264 Apr 30 j 23:14 -4264 May 05 j 07:27 -4264 Jun 02 j 00:29	0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 2°™ 44'08 28°₩19'56 0°Υ 6°Υ04'15 6°Υ03'48 5°Υ33'48 12°Υ59'22 0°₩ 6°₩31'58 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 11°™01'43 8°™05'27 5°™49'04 5°™49'04 5°™40'00	0°06'49  2.65102 AU  -0°37'43 -2.9m	minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition greatest brilliancy direct asc. node  evening set max. Earth dist. conjunction minimum elong	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57 -4260 Sep 12 j 13:57 -4260 Oct 17 j 19:56 -4260 Dec 09 j 18:07 -4260 Dec 24 j 14:15 -4259 Feb 18 j 22:03 -4259 Apr 10 j 18:39 -4259 May 29 j 00:17 -4259 Jul 08 j 06:41 -4259 Jul 13 j 21:50 -4259 Aug 26 j 04:50 -4259 Aug 26 j 04:50 -4259 Aug 26 j 06:17 -4259 Aug 26 j 12:11 -4259 Oct 07 j 00:45	18° \$\Pi47'05\\ 0° \$\sigma\$ 19° \$\Sigma50'31\\ 0° \$\Omega\$ 0° \$\mathbb{m}\\ 20° \$\infta 17'49\\ 17° \$\infta 36'10\\ 17° \$\infta 55'53\\ 9° \$\infta 45'48\\ 23° \$\infta 15'41\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}\\ 26° \$\mathbb{m} 14'05\\ 0° \$\mathbb{m}\\ 8° \$\mathbb{m} 37'43\\ 29° \$\mathbb{m} 49'36\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}	0.53746 AU -3°42'47 -2.0m 2.55101 AU 1°01'26
evening set asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node opposition greatest brilliancy min. Earth dist.	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46 -4265 May 01 j 21:42 -4265 May 01 j 21:25 -4265 May 01 j 02:50 -4265 May 02 j 16:00 -4265 May 12 j 15:16 -4265 Jun 08 j 04:59 -4265 Jun 18 j 11:06 -4265 Jul 25 j 10:31 -4265 Sep 10 j 21:02 -4265 Oct 28 j 18:58 -4265 Dec 17 j 13:34 -4264 Feb 13 j 18:30 -4264 Apr 30 j 21:00 -4264 Apr 30 j 21:00 -4264 Apr 30 j 23:14 -4264 May 05 j 07:27 -4264 Jun 02 j 00:29 -4264 Aug 19 j 05:01	0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 2°™ 44'08 28°₩ 19'56 0°Υ 6°Ψ04'15 6°Ψ03'48 5°Ψ33'48 12°Ψ59'22 0°₩ 6°₩31'58 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 11°™01'43 8°™05'27 5°™49'04 5°™47'30 4°™34'55 0°™00°™	0°06'49  2.65102 AU  -0°37'43 -2.9m	minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition greatest brilliancy direct asc. node  evening set max. Earth dist. conjunction	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57 -4260 Sep 11 j 17:21 -4260 Oct 17 j 19:56 -4260 Dec 09 j 18:07 -4260 Dec 24 j 14:15 -4259 Feb 18 j 22:03 -4259 Apr 10 j 18:39 -4259 May 29 j 00:17 -4259 Jul 08 j 06:41 -4259 Jul 13 j 21:50 -4259 Aug 26 j 04:50 -4259 Aug 26 j 04:50 -4259 Aug 26 j 04:50 -4259 Aug 26 j 06:17 -4259 Aug 26 j 12:11 -4259 Oct 07 j 00:45 -4259 Oct 16 j 16:22	18° \$\Pi 47'05\\ 0° \$\sigma\$ 19° \$\Sigma 50'31\\ 0° \$\Omega\$ 0° \$\mathbb{n}\\ 20° \$\infty 17'49\\ 17° \$\infty 36'10\\ 17° \$\infty 55'53\\ 9° \$\infty 45'48\\ 23° \$\infty 15'41\\ 0° \$\mathbb{n}\\ 0° \$\mathbb{n}\\ 0° \$\mathbb{n}\\ 0° \$\mathbb{n}\\ 0° \$\mathbb{n}\\ 26° \$\mathbb{n} 14'05\\ 0° \$\mathbb{n}\\ 8° \$\mathbb{n} 37'43\\ 29° \$\mathbb{n} 49'36\\ 0° \$\mathbb{n}\\ 0° \$	0.53746 AU -3°42'47 -2.0m 2.55101 AU 1°01'26
evening set asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node opposition greatest brilliancy min. Earth dist.	-4266 Jun 30 j 08:37 -4266 Aug 13 j 05:53 -4266 Sep 22 j 18:40 -4266 Nov 01 j 15:25 -4266 Dec 12 j 04:39 -4265 Jan 23 j 05:04 -4265 Mar 08 j 00:49 -4265 Mar 12 j 02:52 -4265 Apr 19 j 23:11 -4265 Apr 22 j 12:46 -4265 May 01 j 21:42 -4265 May 01 j 21:25 -4265 May 01 j 21:25 -4265 May 02 j 16:00 -4265 May 12 j 15:16 -4265 Jun 08 j 04:59 -4265 Jun 18 j 11:06 -4265 Jul 25 j 10:31 -4265 Sep 10 j 21:02 -4265 Oct 28 j 18:58 -4265 Dec 17 j 13:34 -4264 Feb 13 j 18:30 -4264 Apr 30 j 21:00 -4264 Apr 30 j 21:00 -4264 Apr 30 j 23:14 -4264 May 05 j 07:27 -4264 Jun 02 j 00:29	0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 2°™ 44'08 28°₩19'56 0°Υ 6°Υ04'15 6°Υ03'48 5°Υ33'48 12°Υ59'22 0°₩ 6°₩31'58 0°™ 0°™ 0°™ 0°™ 0°™ 0°™ 11°™01'43 8°™05'27 5°™49'04 5°™49'04 5°™40'00	0°06'49  2.65102 AU  -0°37'43 -2.9m	minimum elong morning rise  desc. node  retrograde min. Earth dist. opposition greatest brilliancy direct asc. node  evening set max. Earth dist. conjunction minimum elong	-4261 Jul 16 j 10:49 -4261 Aug 02 j 08:40 -4261 Aug 31 j 16:20 -4261 Sep 15 j 09:30 -4261 Oct 27 j 18:07 -4261 Dec 07 j 18:08 -4260 Jan 16 j 21:52 -4260 Jan 26 j 09:51 -4260 Feb 26 j 00:30 -4260 Apr 07 j 10:55 -4260 May 23 j 07:58 -4260 Sep 05 j 12:42 -4260 Sep 12 j 13:57 -4260 Sep 12 j 13:57 -4260 Oct 17 j 19:56 -4260 Dec 09 j 18:07 -4260 Dec 24 j 14:15 -4259 Feb 18 j 22:03 -4259 Apr 10 j 18:39 -4259 May 29 j 00:17 -4259 Jul 08 j 06:41 -4259 Jul 13 j 21:50 -4259 Aug 26 j 04:50 -4259 Aug 26 j 04:50 -4259 Aug 26 j 06:17 -4259 Aug 26 j 12:11 -4259 Oct 07 j 00:45	18° \$\Pi47'05\\ 0° \$\sigma\$ 19° \$\Sigma50'31\\ 0° \$\Omega\$ 0° \$\mathbb{m}\\ 20° \$\infta 17'49\\ 17° \$\infta 36'10\\ 17° \$\infta 55'53\\ 9° \$\infta 45'48\\ 23° \$\infta 15'41\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}\\ 26° \$\mathbb{m} 14'05\\ 0° \$\mathbb{m}\\ 8° \$\mathbb{m} 37'43\\ 29° \$\mathbb{m} 49'36\\ 0° \$\mathbb{m}\\ 0° \$\mathbb{m}	0.53746 AU -3°42'47 -2.0m 2.55101 AU 1°01'26

-	nical year style is used: Th		•	* * * · · · · · · · · · · · · · · · · ·		, ,	0 13
Attention, astronom	-4259 Dec 24 j 22:31	0°M	in astronomicai co	greatest brilliancy	-4254 Dec 31 j 08:29	7° <b>∏</b> 59'08	-1 /m
		0° <b>⊼</b> ¹		min. Earth dist.	-4253 Jan 03 j 17:24	7 <b>П</b> 3908 6° <b>П</b> 39'47	
	-4258 Feb 01 j 17:59	0°る		IIIII. Eartii tist.	3		0.04378 AU
	-4258 Mar 13 j 07:59			4:	-4253 Jan 24 j 08:58 -4253 Feb 09 j 23:52	30°R <b>႘</b>	
	-4258 Apr 23 j 20:56	0° <b>₩</b>		direct	-4253 Feb 09 j 23:32 -4253 Feb 27 j 14:37	28° <b>႘</b> 10'45	
	-4258 Jun 08 j 09:40	0° <b>π</b> 0° <b>Υ</b>			3	0° <b>∏</b>	
. 1	-4258 Aug 05 j 03:46				-4253 May 09 j 09:15	0°©	
retrograde	-4258 Sep 13 j 05:55	8° <b>Υ</b> 28'29		1 1	-4253 Jun 26 j 04:41	0°N	
: E 4 E 4	-4258 Oct 19 j 10:49	30° <b>₹</b> ₩	0.62225.411	desc. node	-4253 Aug 04 j 24:00	28° <b>Ω</b> 05'44	
min. Earth dist.	-4258 Oct 19 j 12:16	29° <b>¥</b> 58'33	0.63325 AU		-4253 Aug 07 j 14:12	0° <b>m</b> )	
opposition	-4258 Oct 23 j 03:31	28° <b>)</b> (30′51			-4253 Sep 16 j 06:52	0∘ <b>亚</b>	
greatest brilliancy	-4258 Oct 23 j 03:04	28° <b>)</b> (31'18	-1.5m		-4253 Oct 24 j 18:06	0°M√	
asc. node	-4258 Oct 27 j 19:07	26° <b>)</b> (40'14		. ,	-4253 Dec 02 j 03:23	0° <b>⊼</b> ¹	
direct	-4258 Nov 30 j 15:31	19° <b>)</b> €23'47		evening set	-4253 Dec 27 j 02:34	19° <b>∡</b> 11'32	
	-4257 Jan 16 j 13:17	0°Ƴ			-4252 Jan 10 j 09:42	0° <b>ප</b>	
	-4257 Mar 19 j 03:13	0°B			-4252 Feb 20 j 06:30	0° <b>≈</b>	
	-4257 May 09 j 04:24	0° <b>I</b>			4252 F. 1. 26: 06 50	40 4010.5	0055105
	-4257 Jun 24 j 23:19	0°©		conjunction	-4252 Feb 26 j 06:58	4°≈18'05	
	-4257 Aug 07 j 15:26	0°Ω		minimum elong	-4252 Feb 26 j 09:04	4°≈21'50	
evening set	-4257 Aug 22 j 19:29	10° <b>Ω</b> 51'57		max. Earth dist.	-4252 Apr 02 j 17:28		2.53526 AU
max. Earth dist.	-4257 Sep 09 j 14:45	23° <b>Ω</b> 53'31	2.43000 AU		-4252 Apr 03 j 04:06	0° <b>∀</b>	
	-4257 Sep 17 j 19:57	0° <b>m</b>		morning rise	-4252 Apr 22 j 20:10	13° <b>¥</b> 16'33	
					-4252 May 18 j 04:54	0° <b>Υ</b>	
conjunction	-4257 Oct 17 j 12:45	22° TD 30'48	0°09'45	asc. node	-4252 Jun 18 j 19:05	20° <b>Y</b> 16′18	
minimum elong	-4257 Oct 17 j 13:27	22° m 32'09	0°09'46		-4252 Jul 04 j 06:59	0°B	
behind sun begin	-4257 Oct 16 j 17:02	21° m 52'59			-4252 Aug 22 j 17:20	$\Pi$ $\circ 0$	
behind sun end	-4257 Oct 18 j 09:52	23° Mp 11'21			-4252 Oct 16 j 00:17	$0$ $\circ$	
	-4257 Oct 27 j 05:50	0∘ <b>⊽</b>		retrograde	-4251 Jan 02 j 13:50	25° <b>©</b> 01'31	
desc. node	-4257 Oct 31 j 04:21	3° <b>ჲ</b> 02'59		opposition	-4251 Feb 07 j 21:18	17° <b>©</b> 12'40	5°09'33
	-4257 Dec 04 j 16:17	0°M₊		greatest brilliancy	-4251 Feb 09 j 05:10	16° <b>95</b> 43'13	-1.8m
morning rise	-4257 Dec 19 j 15:19	11° <b>M</b> 44'26		min. Earth dist.	-4251 Feb 15 j 07:10	14° <b>©</b> 28'46	0.55783 AU
	-4256 Jan 11 j 23:55	0° <b>∡</b>		direct	-4251 Mar 19 j 18:57	7° <b>9</b> 47'04	
	-4256 Feb 20 j 01:53	8°0			-4251 May 26 j 03:32	$0$ $^{\circ}\Omega$	
	-4256 Mar 31 j 18:52	0° <b>≈</b>		desc. node	-4251 Jun 21 j 22:51	16° <b>Ω</b> 02'14	
	-4256 May 14 j 00:38	0° <b>∀</b>			-4251 Jul 12 j 22:29	0° <b>m</b> y	
	-4256 Jun 30 j 05:25	$0^{\circ}$ Y			-4251 Aug 23 j 12:40	0∘ <b>ত</b>	
	-4256 Aug 25 j 22:00	$9^{\circ}$ 8			-4251 Oct 02 j 00:48	0° <b>M</b>	
asc. node	-4256 Sep 13 j 20:56	7° <b>8</b> 17'04			-4251 Nov 10 j 05:13	0° <b>∡</b> ¹	
retrograde	-4256 Oct 17 j 04:27	13° <b>8</b> 17'33			-4251 Dec 20 j 05:13	0°ප	
opposition	-4256 Nov 26 j 00:42	3° <b>8</b> 37'17	2°35'22		-4250 Jan 30 j 18:30	0° <b>≈</b>	
greatest brilliancy	-4256 Nov 25 j 23:34	3° <b>8</b> 38'26	-1.3m	evening set	-4250 Feb 21 j 12:47	15° <b>≈</b> 11'30	
min. Earth dist.	-4256 Nov 26 j 03:01	3° <b>8</b> 34'58	0.67121 AU		-4250 Mar 15 j 05:18	0° <b>)</b>	
	-4256 Dec 05 j 07:12	30° <b>₹Ƴ</b>					
direct	-4255 Jan 05 j 12:50	23° <b>Y</b> '48'53		conjunction	-4250 Apr 15 j 12:30	20° <b>∺</b> 51′28	-0°12'08
	-4255 Feb 09 j 02:27	$9^{\circ}$ 8		minimum elong	-4250 Apr 15 j 13:03	20° <b>)</b> 52′22	0°12'10
	-4255 Apr 14 j 20:21	$\Pi$ $^{\circ}0$		behind sun begin	-4250 Apr 14 j 23:24	20° <b>∺</b> 29'56	
	-4255 Jun 03 j 11:51	$0 \circ \mathfrak{S}$		behind sun end	-4250 Apr 16 j 02:42	21° <b>∺</b> 14'47	
	-4255 Jul 18 j 00:27	$0^{\circ}\Omega$			-4250 Apr 29 j 11:40	$0$ ° $\Upsilon$	
	-4255 Aug 28 j 08:29	0° <b>m</b>		max. Earth dist.	-4250 May 02 j 15:50	2° <b>Y</b> 03'56	2.62863 AU
desc. node	-4255 Sep 17 j 02:00	14° <b>m</b> 55'02		asc. node	-4250 May 06 j 16:16	4° <b>Υ</b> 40'31	
	-4255 Oct 06 j 15:26	0∘ <b>⊽</b>		morning rise	-4250 Jun 03 j 19:00	22° <b>Y</b> '46'04	
evening set	-4255 Oct 19 j 10:58	9° <b>ჲ</b> 59'52			-4250 Jun 15 j 03:19	$9^{\circ}$ 8	
	-4255 Nov 13 j 21:27	0°M			-4250 Aug 01 j 16:37	$\Pi$ $^{\circ}0$	
	-4255 Dec 22 j 01:44	0° <b>∡</b> 7			-4250 Sep 19 j 01:54	$0$ $\circ$ $\odot$	
					-4250 Nov 08 j 07:19	$0^{\circ}\Omega$	
conjunction	-4255 Dec 23 j 11:15	1° <b>∡</b> 05′20	-0°58'46		-4249 Jan 04 j 10:06	0° <b>m</b> y	
minimum elong	-4255 Dec 23 j 08:23	0° <b>∡</b> ¹59'45	0°58'55	retrograde	-4249 Mar 02 j 03:41	15° <b>m</b> 07'55	
	-4254 Jan 30 j 01:56	0°ප		opposition	-4249 Apr 03 j 12:15	9° <b>™</b> 12'39	2°22'05
max. Earth dist.	-4254 Feb 08 j 17:00	7° <b>る</b> 14'21	2.40666 AU	greatest brilliancy	-4249 Apr 04 j 07:21	8° <b>m</b> 57'55	-2.6m
morning rise	-4254 Feb 28 j 05:03	21° <b>る</b> 40'09		min. Earth dist.	-4249 Apr 11 j 05:04	6° Mp 50′50	0.43023 AU
	-4254 Mar 11 j 16:23	0° <b>≈</b>		direct	-4249 May 08 j 13:34	2° <b>m</b> 09'14	
	-4254 Apr 23 j 10:58	0° <b>)</b> €		desc. node	-4249 May 10 j 00:40	2° <b>m</b> 10'07	
	-4254 Jun 07 j 20:39	$0$ ° $\Upsilon$			-4249 Jul 21 j 15:47	0∘ <b>⊽</b>	
	-4254 Jul 26 j 17:25	$9^{\circ}$ 8			-4249 Sep 04 j 22:15	$0^{\circ}$ M	
asc. node	-4254 Aug 01 j 20:51	3° <b>8</b> 33'58			-4249 Oct 17 j 02:24	0° <b>∡</b> ¹	
	-4254 Sep 21 j 02:54	$\Pi$ °0			-4249 Nov 28 j 03:59	ರ°ರ	
retrograde	-4254 Nov 22 j 02:42	17° <b>Ⅱ</b> 10′05			-4248 Jan 10 j 06:56	0° <b>≈</b>	
		00 T					
opposition	-4254 Dec 30 j 19:44	8° <b>Ⅱ</b> 11'38	4°31'11		-4248 Feb 23 j 21:38	0° <b>∀</b>	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4248 Mar 23 j 12:10 18°**)**(44'39 -4243 Jan 01 j 23:10 asc. node 0°M -4248 Apr 06 j 14:09 27°**)** 51'45 -4243 Feb 10 j 03:00 0°×7 evening set -4248 Apr 09 j 21:39  $0^{\circ}\Upsilon$ 0°궁 -4243 Mar 22 j 03:09 0°**≈** -4243 May 03 j 11:59 -4243 Jun 20 j 17:22 28°**Y**51'34 0°**)**€ conjunction -4248 May 24 j 23:09 0°33'45 28°**Ƴ**49'48 23°\ 44'11 minimum elong -4248 May 24 j 22:02 0°33'50 retrograde -4243 Aug 29 j 21:13 29°**Y**49′07 max. Earth dist. -4248 May 26 j 11:15 2.66933 AU min. Earth dist. -4243 Oct 03 j 09:57 15°**¥** 50'49 0.60207 AU -4248 May 26 j 18:04 0°8 opposition -4243 Oct 08 j 11:06 13°**¥**50'13 -1°28'39 morning rise -4248 Jul 09 j 19:45 28°**8**08'21 greatest brilliancy -4243 Oct 08 j 05:08 13°**¥**56′09 -1.7m -4248 Jul 12 j 17:29  $0^{\circ}\Pi$ asc. node -4243 Nov 13 j 10:10 5°**)**€08'49 -4248 Aug 28 j 06:32 0ಂತಾ direct -4243 Nov 14 j 20:02 5°**)**€08'03 -4248 Oct 13 j 04:53  $0^{\circ}\Upsilon$  $0^{\circ}\Omega$ -4242 Feb 01 j 04:09 -4248 Nov 27 j 18:25 0° M -4242 Mar 28 j 05:54 0°8 -4247 Jan 12 j 16:36 0∘**⊽** -4242 May 16 j 20:21  $0^{\circ}\Pi$ -4247 Mar 02 j 04:50 0°M -4242 Jul 02 j 04:33 0ಂತಾ desc. node -4247 Mar 27 j 02:14 13°M25'35 evening set -4242 Aug 03 j 22:56 22°9522'54 retrograde -4247 May 19 j 02:46 28°M41'18 -4242 Aug 14 j 18:58  $0^{\circ}\Omega$ min. Earth dist. -4247 Jun 15 j 20:06 24°ML09'48 0.38267 AU max. Earth dist. -4242 Aug 19 j 07:48 3°**Ω**13'13 2.47944 AU opposition -4247 Jun 19 j 12:22 23°M09'01 -5°33'34 greatest brilliancy -4247 Jun 18 j 17:38 23°M21'58 -2.9m conjunction -4242 Sep 25 j 08:11 0° mp 11'29 0°35'16 direct -4247 Jul 19 j 10:32 18°M05'30 minimum elong -4242 Sep 25 j 10:01 0° m 14'55 0°35'22 -4247 Sep 04 i 00:26 0°×7 -4242 Sep 25 i 02:00 0° m -4247 Oct 29 i 08:34 0°정 -4242 Nov 03 j 15:54 0∘**⊽** -4247 Dec 16 i 17:07 0°≈ desc. node -4242 Nov 16 j 22:45 10°**£**16′07 -4246 Feb 02 j 03:44 0°**)**€ -4242 Nov 22 j 07:59 14°**£**27'05 morning rise -4246 Feb 08 j 09:54 3°**¥**57′02 -4242 Dec 12 j 06:27 oom. asc node  $0^{\circ}\Upsilon$ -4241 Jan 19 j 17:21 0°×7 -4246 Mar 21 j 18:17 0°8 -4241 Feb 27 j 21:54 0°궁 -4246 May 08 j 09:22 -4246 May 15 j 23:05 4°**8**47'33 -4241 Apr 09 j 18:56 0°≈≈ evening set -4241 May 23 j 12:13 0°) max. Earth dist. -4246 Jun 19 j 02:45 26°**8**34'35 2.65579 AU  $0^{\circ}$ -4246 Jun 24 j 10:24  $0^{\circ}II$ -4241 Jul 11 j 11:21  $0^{\circ}$ 8 -4241 Sep 27 j 16:54 -4246 Jul 01 j 15:03 4°**II**38'46 1°04'22 -4241 Oct 01 j 11:06 0°**8**14'42 conjunction asc. node -4246 Jul 01 j 14:03 4° II 37'08 1° 04'32 -4241 Oct 04 j 18:22 0°**8**18'54 minimum elong retrograde -4241 Oct 11 j 14:57 -4246 Aug 09 j 07:10 000 30°**Ŗ**♈ 21°**Υ**01'39 0.66383 AU morning rise -4246 Aug 16 j 02:16 4°931'45 min. Earth dist. -4241 Nov 12 j 09:22 -4246 Sep 22 j 16:06 0 $\circ$  $\Omega$ opposition -4241 Nov 13 j 18:27 20°**Υ**28'18 1°36'38 -4246 Nov 04 j 13:58 0° m greatest brilliancy -4241 Nov 13 j 15:40 20°**Y**31′06 -1.4m -4246 Dec 16 j 07:17 0∘**⊽** -4241 Dec 23 j 15:23 10°**Y**52'46 direct -4245 Jan 26 j 08:11 0°M -4240 Feb 28 j 09:47 0°8 desc. node -4245 Feb 12 j 02:10 12°M15'09 -4240 Apr 24 j 08:15  $0^{\circ}\Pi$ -4245 Mar 08 j 14:50 0°×7 -4240 Jun 11 j 11:39 0ಂತಾ -4245 Apr 21 j 06:06 0°る -4240 Jul 25 j 13:32  $0^{\circ}\Omega$ -4245 Jun 15 j 11:49 -4240 Sep 04 j 19:05 0° M -4245 Jul 19 j 02:27 7°≈08'07 -4240 Sep 24 j 16:13 retrograde evening set 15° m 01'58 min. Earth dist. -4245 Aug 17 i 07:07 1°≈17'14 0.48848 AU desc. node -4240 Oct 03 j 19:08 22° m 01'54 -4245 Aug 20 j 21:25 30°Rる -4240 Oct 14 i 02:23 0∘**⊽** greatest brilliancy -4245 Aug 23 j 22:21 28°る53'37 -2.2m -4240 Nov 21 j 09:25 0°M -4245 Aug 25 i 05:54 28° **ප්**24'57 -5°08'13 opposition direct -4245 Sep 27 j 21:22 21°る18'59 -4240 Nov 25 j 16:52 3°ML23'41 -0°36'27 conjunction -4245 Nov 07 j 05:52 -4240 Nov 25 i 13:59 3°ML18'00 0°36'31 0°≈≈ minimum elong -4245 Dec 27 j 09:45 23°≈43'35 -4240 Nov 27 j 23:49 5°ML11'54 2.37617 AU asc node max. Earth dist. -4244 Jan 07 j 21:29 0°**₩** -4240 Dec 29 j 14:11 0°×7 -4244 Feb 28 j 20:20  $0^{\circ}\Upsilon$ morning rise -4239 Feb 01 j 16:20 26° **₹**17'05 -4244 Apr 18 j 07:58  $0^{\circ}$ 8 -4239 Feb 06 j 13:55 0°궁 -4244 Jun 05 j 01:24  $0^{\circ}II$ -4239 Mar 19 j 03:43 0°≈ evening set -4244 Jun 22 j 12:58 11°**Ⅲ**17'42 -4239 Apr 30 j 23:39 0°) 25°**Ц**51'46 2.58985 AU -4239 Jun 15 j 18:50  $0^{\circ}\Upsilon$ max. Earth dist. -4244 Jul 14 j 15:54 0°8 -4244 Jul 20 j 20:31 0ಂತಾ -4239 Aug 05 j 05:10 7°**8**09'09 asc. node -4239 Aug 18 j 11:59 conjunction -4244 Aug 09 j 03:53 13°904'23 1°09'15 -4239 Oct 11 j 17:34  $\Pi$  $^{\circ}0$ minimum elong -4244 Aug 09 j 04:33 13°**©**05'31 1°09'26 -4239 Nov 07 j 17:23 3°**Ⅲ**59'49 retrograde -4244 Sep 02 j 13:53 0° $\Omega$ -4239 Dec 02 j 12:34 30°R₩ morning rise -4244 Sep 26 j 21:12 17°**Ω**17'34 opposition -4239 Dec 17 j 00:07 24°**8**42'07 3°52'55 -4244 Oct 14 j 08:56 0° m greatest brilliancy -4239 Dec 17 j 06:04 24°**8**36'12 -1.3m 0∘**⊽** min. Earth dist. -4239 Dec 19 j 09:51 23°**8**44'49 -4244 Nov 23 j 15:16 0.66356 AU

direct

-4238 Jan 27 j 02:18

14°842'05

desc. node

27°**-**46′15

-4244 Dec 30 j 01:25

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4238 Mar 25 j 11:32  $0^{\circ}\Pi$ conjunction -4233 May 10 j 21:03 14°**Y**49′20 0°17'14 -4238 May 19 j 21:54 0ಂತಾ -4233 May 10 j 20:23 14°**℃**48'17 0°17'16 minimum elong -4238 Jul 04 j 21:30  $0^{\circ}\Omega$ -4233 May 18 j 05:30 19°**Ƴ**32'14 2.65978 AU max. Earth dist. 0°m -4233 Jun 03 j 14:16 -4238 Aug 15 j 17:14 0°8 -4238 Aug 21 j 17:50 4° m 29'34 -4233 Jun 26 j 16:49 14°843'27 desc. node morning rise -4238 Sep 24 j 04:06 -4233 Jul 20 j 16:52 0∘ଫ  $\Pi$  $^{\circ}0$ -4238 Nov 01 j 11:50 0°M -4233 Sep 05 j 18:24 0ಂತಾ 22°M56'59 -4233 Oct 22 j 19:34 evening set -4238 Nov 30 j 17:00 0 $\circ$  $\Omega$ -4238 Dec 09 j 17:49 0°**∡** -4233 Dec 09 j 14:04 0° m -4237 Jan 17 j 20:22 0°궁 -4232 Jan 29 j 12:07 0∘**⊽** desc. node -4232 Apr 12 j 17:53 27°**₽**39'29 -4237 Feb 03 j 01:20 12°る06'35 -1°06'56 -4232 Apr 17 j 23:46 conjunction retrograde 27°**₽**49'50 minimum elong -4237 Feb 03 j 02:19 12°**る**08'25 1°07'07 opposition -4232 May 18 j 11:26 22°**₽**47'17 -2°39'02 -4237 Feb 27 j 13:21 greatest brilliancy -4232 May 18 j 13:23 22°**-**45'59 -2.9m max. Earth dist. -4237 Mar 19 j 06:57 14°≈01'57 2.48678 AU min. Earth dist. -4232 May 20 j 02:40 22°**₽**21'05 0.37947 AU morning rise -4237 Apr 04 j 16:21 25°≈26'02 direct -4232 Jun 18 j 03:19 17°**2**34'14 -4237 Apr 11 j 08:05 0°**)**€ -4232 Aug 04 j 00:02 0°M -4237 May 26 j 09:43  $0^{\circ}\Upsilon$ -4232 Sep 25 j 20:46 0°**∡**7 asc. node -4237 Jul 06 j 10:37 26°**Y**00'47 -4232 Nov 10 j 22:49 0°정 -4237 Jul 12 j 21:58 0°8 -4232 Dec 26 j 07:05 0°≈ -4237 Sep 01 j 21:10  $0^{\circ}\Pi$ -4231 Feb 10 j 06:15 0°**)**€ -4237 Nov 02 j 12:16 0ಂತಾ asc. node -4231 Feb 25 i 02:00 9° ★33'02 -4237 Dec 16 i 19:43 9°937'00 -4231 Mar 29 i 01:41  $0^{\circ}\Upsilon$ retrograde opposition -4236 Jan 23 i 05:53 1°9516'22 5°07'55 -4231 Apr 30 j 23:34 20°Y54'26 evening set greatest brilliancy -4236 Jan 24 j 06:47 0°952'39 -4231 May 15 j 07:16 0°8 -1.6m -4236 Jan 26 j 13:54 -4231 Jun 09 j 20:40 16°**8**16'42 2.66742 AU 30°R ∏ max. Earth dist. -4236 Jan 29 j 09:01 28°**Ⅲ**56′21 0.59949 AU min Earth dist -4236 Mar 03 j 22:53 21°**II**28'22 -4231 Jun 17 j 00:34 20°851'31 0°54'56 direct conjunction 0ಂತಾ -4231 Jun 16 j 23:18 20°**8**49'29 -4236 Apr 12 j 12:21 0°55'05 minimum elong -4236 Jun 08 j 16:56  $0^{\circ}\Omega$ -4231 Jul 01 j 06:12  $\Pi^{\circ}0$ -4236 Jul 08 j 17:14 19°**Ω**49'15 -4231 Aug 01 j 07:01 20° II 08'01 desc. node morning rise -4231 Aug 16 j 07:33 -4236 Jul 23 j 04:31  $0^{\circ}$  mb 0ಂತಾ -4236 Sep 01 j 16:51 0∘ଫ -4231 Sep 30 j 03:49 0° $\Omega$ -4236 Oct 10 j 15:10 0°M -4231 Nov 12 j 20:01 0° m -4236 Nov 18 j 09:09 0° ×7 -4231 Dec 25 j 14:41 0∘ଫ -4236 Dec 27 j 23:39 0°궁 -4230 Feb 06 j 02:08 0°M 25°**る**36'52 15°M50'48 evening set -4235 Feb 01 j 00:57 desc. node -4230 Feb 28 j 19:38 -4235 Feb 07 j 04:20 0°**≈** -4230 Mar 21 j 16:50 0°**⊼** -4235 Mar 22 j 08:04 0°**)**€ -4230 May 11 j 01:05 0°정 retrograde -4230 Jun 28 j 09:55 13°る47'27 conjunction -4235 Mar 28 j 20:48 4°¥25'17 -0°31'10 min. Earth dist. -4230 Jul 25 j 15:55 8°る49'08 0.43870 AU -4235 Mar 28 j 22:15 4°**)**€27'44 0°31'15 -4230 Aug 01 j 00:55 6°る43'14 -2.5m minimum elong greatest brilliancy -4235 Apr 22 j 02:31 20°**)** 35'44 2.59799 AU -4230 Aug 02 j 15:27 6°**ට**11'16 -6°14'24 max. Earth dist. opposition -4235 May 06 j 10:30  $0^{\circ}\Upsilon$ -4230 Sep 01 j 07:22 30°₽**⋌** -4235 May 19 j 10:46 8°Y27'03 direct -4230 Sep 03 j 11:37 29°**₹**′58′08 morning rise 10°**Y**56′24 asc. node -4235 May 23 i 07:19 -4230 Sep 05 i 16:06 0°궁 0°8 -4230 Nov 27 i 03:02 -4235 Jun 22 i 03:38 0°≈  $0^{\circ}II$ -4235 Aug 09 j 04:48 asc. node -4229 Jan 13 j 00:42 26°≈47'57 -4235 Sep 27 i 23:59 0ಂತಾ -4229 Jan 18 j 10:03 0°) -4235 Nov 21 i 12:22  $0^{\circ}\Omega$ -4229 Mar 09 i 01:19  $0^{\circ}\Upsilon$ -4234 Feb 04 j 11:06 23°Ω30'47 -4229 Apr 26 j 14:49 0°8 retrograde -4234 Mar 10 j 14:47 16°**Ω**45'35 4°08'27 -4229 Jun 08 j 08:39 27°801'21 opposition evening set 16°**Ω**17'59 -4229 Jun 12 j 23:54  $0^{\circ}II$ greatest brilliancy -4234 Mar 11 j 23:20 -2.2m -4229 Jul 04 j 19:25 min. Earth dist. -4234 Mar 19 j 02:53 13°**Ω**53'51 0.48089 AU max. Earth dist. 14°**Д**09'02 2.62155 AU direct -4234 Apr 17 j 02:59 8°**\29**'59 desc. node -4234 May 26 j 16:33 17°**Ω**46'25 conjunction -4229 Jul 25 j 06:04 27° II 39'10 1°11'10 -4234 Jun 20 j 04:06 0° m minimum elong -4229 Jul 25 j 05:56 27°**I**38'58 1°11'22 -4229 Jul 28 j 18:27 -4234 Aug 05 j 23:38 0∘**⊽** 0ംഉ 0°M -4229 Sep 10 j 03:43 29°537'43 -4234 Sep 16 j 13:01 morning rise -4234 Oct 26 j 23:41 0° ×7 -4229 Sep 10 j 16:29  $0^{\circ}\Omega$ 0°₹ -4229 Oct 22 j 20:07 0° M -4234 Dec 06 j 22:21 -4233 Jan 18 j 05:52 0°≈ -4229 Dec 02 j 13:16 0∘**⊽** -4233 Mar 03 j 06:30 0°**)**€ -4228 Jan 11 j 09:00 0°M evening set -4233 Mar 22 j 01:35 12°**H**28'12 desc. node -4228 Jan 16 j 18:20 4°M04'55 asc. node -4233 Apr 10 j 04:31 24°**)** 59'33 -4228 Feb 20 j 01:43 0°**∡**7 -4233 Apr 17 j 21:31  $0^{\circ}\Upsilon$ -4228 Mar 31 j 19:30 0°정

-4228 May 14 j 19:44

0°**≈** 

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4228 Jul 10 j 02:42 0°**)**€ -4223 Jul 12 j 23:34  $0^{\circ}\Omega$ -4228 Aug 14 j 12:24 7°**)**€31'40 -4223 Aug 23 j 11:51 O° m retrograde 0°**)** 21'17 0.56238 AU -4228 Sep 16 j 02:12 -4223 Sep 07 j 11:49 11° mp 17'18 min. Earth dist. desc. node -4223 Oct 01 j 20:18 -4228 Sep 17 j 00:18 30°R≈ 0∘ଫ opposition -4228 Sep 22 j 11:18 27°≈52'07 -2°52'47 evening set -4223 Nov 03 j 08:50 25°**2**28'13  $0^{\circ}$ M greatest brilliancy -4228 Sep 21 j 20:40 28°≈06'23 -1.8m -4223 Nov 09 j 02:51 direct -4228 Oct 28 j 12:15 19°≈41'22 -4223 Dec 17 j 07:24 0°**∡**7 asc. node -4228 Nov 30 j 00:43 25°≈24'07 -4228 Dec 12 j 23:31 0°**)** conjunction -4222 Jan 07 j 23:09 16°**х** 46'24 -1°05'39  $0^{\circ}\Upsilon$ -4227 Feb 12 j 12:51 minimum elong -4222 Jan 07 j 21:34 16°**х** 43′23 1°05′50 -4227 Apr 05 j 13:21 0°8 -4222 Jan 25 j 07:36 0°ಕ -4222 Feb 25 j 20:09 -4227 May 24 j 05:26  $0^{\circ}\Pi$ max. Earth dist. 23°る25'17 2.43432 AU -4227 Jul 09 j 06:56 0ಂತಾ -4222 Mar 06 j 21:47 0°≈ evening set -4227 Jul 17 j 14:52 5°536'29 morning rise -4222 Mar 13 j 20:35 4°≈59'31 max. Earth dist. -4227 Aug 03 j 09:00 17°903'35 2.52678 AU -4222 Apr 18 j 14:55 0°**)**€ -4227 Aug 21 j 21:30  $0^{\circ}\Omega$ -4222 Jun 02 j 19:33  $0^{\circ}\Upsilon$ -4222 Jul 21 j 00:15 0°8 conjunction -4227 Sep 05 j 13:38 10°**Ω**27'25 0°53'58 asc. node -4222 Jul 23 j 02:05 1°814'23 minimum elong -4227 Sep 05 j 15:25 10°**Ω**30'37 0°54'05 -4222 Sep 12 j 14:55  $0^{\circ}\Pi$ -4227 Oct 02 j 08:16 retrograde -4222 Nov 30 j 18:26 25°**Ⅲ**24'21 morning rise -4227 Oct 29 j 02:01 20° m 02'57 opposition -4221 Jan 08 j 01:38 16°**Ⅲ**37'55 4°48'20 -4227 Nov 11 i 03:19 0∘**⊽** greatest brilliancy -4221 Jan 08 j 18:38 16°**I**I21'24 -1.5m desc. node -4227 Dec 03 i 16:47 17°**£**22'42 min. Earth dist. -4221 Jan 12 j 18:35 14°**Ⅱ**48′07 0.63197 AU -4227 Dec 19 j 23:07 0°M direct -4221 Feb 18 i 03:44 6°**Ⅱ**39'16 -4226 Jan 27 j 14:47 0°×7 -4221 May 01 j 10:42 0ಂತಾ -4226 Mar 08 j 00:02 0°궁 -4221 Jun 20 j 05:40  $0^{\circ}\Omega$ 0°**≈** -4221 Jul 26 j 09:50 -4226 Apr 18 j 04:52 25°**Ω**03'37 desc node -4226 Jun 01 j 19:24 0°**₩** -4221 Aug 02 j 05:18 O° m  $0^{\circ}\Upsilon$ -4221 Sep 11 j 03:44 -4226 Jul 24 j 11:28 0∘Ω  $0^{\circ}$ M -4226 Sep 21 j 04:57 16°**Y**54'39 -4221 Oct 19 j 18:07 retrograde -4226 Oct 18 j 01:48 -4221 Nov 27 j 05:45 0°×7 12°**Y**01′11 asc. node min. Earth dist. 0°궁 -4226 Oct 28 j 08:35 8°**Y**06'48 0.64688 AU -4220 Jan 05 j 14:01 -4226 Oct 31 j 04:51 6°**Υ**58'02 0°30'35 -4220 Jan 10 j 03:22 3°る24'21 opposition evening set -4226 Oct 31 j 03:20 6°**Y**59'33 -1.5m -4220 Feb 15 j 12:36 greatest brilliancy 0°≈ -4226 Nov 20 j 09:40 30°**₹**₩ 27°**)** 39'39 -4220 Mar 09 j 08:20 direct -4226 Dec 09 j 06:04 conjunction 16°≈07'33 -0°48'55  $0^{\circ}\Upsilon$ -4220 Mar 09 j 10:26 -4226 Dec 29 j 16:08 minimum elong 16°≈11'13 0°49'01 -4225 Mar 12 j 11:48  $0^{\circ}$ 8 -4220 Mar 29 j 11:16 0°**)**€ -4225 May 03 j 21:07  $0^{\circ}II$ max. Earth dist. -4220 Apr 10 j 08:11 8°**升**02'43 2.55955 AU -4225 Jun 20 j 02:45 0ಂತಾ -4220 May 02 j 22:11 23°¥05'08 morning rise -4225 Aug 02 j 22:34  $0^{\circ}\Omega$ -4220 May 13 j 11:21  $0^{\circ}\Upsilon$ -4225 Sep 03 j 07:58 22°**Ω**42'00 -4220 Jun 09 j 00:31 17°**Y**07'47 evening set asc. node -4225 Sep 13 j 03:57 -4220 Jun 29 j 08:26 0°8 -4225 Sep 26 j 01:52 9° m/42'54 2.40456 AU -4220 Aug 17 j 03:24  $0^{\circ}\Pi$ max. Earth dist. -4225 Oct 21 j 14:41 29° m 16'44 -4220 Oct 08 j 05:40 0ಂತಾ desc. node -4225 Oct 22 j 13:02 -4220 Dec 13 j 23:58  $0^{\circ}\Omega$ -4219 Jan 13 j 15:05 4°£59'34 retrograde 6°**2**45'13 -0°06'57 -4225 Oct 31 i 05:44 -4219 Feb 11 i 02:08 30°R55 conjunction -4225 Oct 31 i 05:09 6°**£**44'06 0°06'57 opposition -4219 Feb 18 i 06:13 27°530'54 4°58'03 minimum elong -4225 Oct 30 j 05:07 5°**£**57'20 -4219 Feb 19 j 16:16 27°900'09 behind sun begin greatest brilliancy -1 9m -4225 Nov 01 j 05:12 7°**♀**30'54 min. Earth dist. -4219 Feb 26 j 05:41 24°938'55 0.53194 AU behind sun end -4225 Nov 29 j 22:01 0°M direct -4219 Mar 29 j 11:45 18°924'24 -4219 May 14 j 03:29  $0^{\circ}\Omega$ -4224 Jan 04 j 21:25 28°M13'31 morning rise -4224 Jan 07 j 04:02 0°×7 desc. node -4219 Jun 12 j 09:43 15°**Ω**24'05 -4219 Jul 05 j 15:43 -4224 Feb 15 j 04:05 0°정 0° m -4224 Mar 26 j 18:25 0°≈ -4219 Aug 17 j 09:04 0∘**⊽** -4224 May 08 j 18:20 0°**)**€ -4219 Sep 26 j 09:26 0°M 0°Υ -4224 Jun 24 j 06:01 -4219 Nov 04 j 21:44 0°**∡**7 0°8 0°정 -4224 Aug 16 j 13:58 -4219 Dec 15 j 03:32 8°**8**33'43 asc. node -4224 Sep 04 j 02:15 -4218 Jan 25 j 21:30 0°≈ 21°**8**08'18 25°≈49'50 retrograde -4224 Oct 24 j 23:23 evening set -4218 Mar 04 j 07:46 -4224 Dec 03 j 15:55 11°**8**35'01 3°06'10 -4218 Mar 10 j 11:51 0°**)**€ opposition greatest brilliancy -4224 Dec 03 j 16:44 11°**8**34'13 -1.3m -4218 Apr 24 j 20:13  $0^{\circ}\Upsilon$ min. Earth dist. -4224 Dec 04 j 13:41 11°**8**13'14 0.67130 AU direct -4223 Jan 13 j 10:27 1°**8**41'21 conjunction -4218 Apr 25 j 00:45 0°Υ07'20 -0°01'05  $\mathbb{I}^{\circ 0}$ -4218 Apr 25 j 00:47 0°**Υ**07'23 0°01'06 -4223 Apr 07 j 20:26 minimum elong

-4218 Apr 24 j 04:15

behind sun begin

29°\ 33'59

0ಂತಾ

-4223 May 28 j 23:59

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 19 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ie year -4400 i	n astronomical co	unting style is the year	4401 BCE in historical c	ounting style.	
behind sun end	-4218 Apr 25 j 21:19	0° <b>Ƴ</b> 40'45		opposition	-4213 Sep 05 j 14:40	10° <b>≈</b> 05′24	-4°20'09
asc. node	-4218 Apr 26 j 21:01	1° <b>Y</b> 19'18		greatest brilliancy	-4213 Sep 04 j 13:10	10° <b>≈</b> 29′21	-2.1m
max. Earth dist.	-4218 May 08 j 11:47	8° <b>Y</b> 50'58	2.64204 AU	direct	-4213 Oct 10 j 03:27	2° <b>≈</b> 33'43	
	-4218 Jun 10 j 11:21	$0$ $\circ$ 8		asc. node	-4213 Dec 17 j 15:13	23° <b>≈</b> 19'43	
morning rise	-4218 Jun 12 j 06:49	1° <b>8</b> 09'14			-4213 Dec 30 j 23:19	0° <b>∀</b>	
	-4218 Jul 27 j 19:42	$\Pi$ $\circ 0$			-4212 Feb 23 j 02:29	$0^{\circ}$ Y	
	-4218 Sep 13 j 14:59	$0$ $\circ$ $\odot$			-4212 Apr 13 j 08:03	$0$ $\circ$ 8	
	-4218 Nov 01 j 09:05	$0 {\circ} \mathcal{\Omega}$			-4212 May 31 j 08:56	$\Pi$ °0	
	-4218 Dec 23 j 09:11	0° <b>m</b> y		evening set	-4212 Jul 01 j 10:53	20° <b>Ⅱ</b> 09'31	
retrograde	-4217 Mar 18 j 13:42	29° <b>m</b> 37'04			-4212 Jul 16 j 06:24	$0$ $\circ$	
opposition	-4217 Apr 18 j 23:09	•	0°48'19	max. Earth dist.	-4212 Jul 21 j 10:40	3° <b>5</b> 28'40	2.56930 AU
greatest brilliancy	-4217 Apr 19 j 05:05	24° Mp 03'22	-2.8m				
min. Earth dist.	-4217 Apr 25 j 03:53	22° <b>m</b> 19'32	0.40641 AU	conjunction	-4212 Aug 18 j 16:51	22° <b>5</b> 49'15	1°05'32
desc. node	-4217 Apr 30 j 10:17	20° <b>m</b> 53'19		minimum elong	-4212 Aug 18 j 17:59	22° <b>©</b> 51'13	1°05'42
direct	-4217 May 22 j 10:21	17° <b>m</b> 48'45			-4212 Aug 28 j 23:06	$0^{\circ}\Omega$	
	-4217 Jul 06 j 22:46	0∘ <b>⊽</b>		morning rise	-4212 Oct 07 j 19:30	28° <b>N</b> 39'10	
	-4217 Aug 27 j 07:10	0° <b>M</b> ₊			-4212 Oct 09 j 15:32	0° <b>m</b> y	
	-4217 Oct 10 j 06:53	0° <b>∡</b> ¹			-4212 Nov 18 j 17:58	0∘ <b>ত</b>	
	-4217 Nov 22 j 07:09	0° <b>ප</b>		desc. node	-4212 Dec 20 j 11:20	24° <b>₽</b> 17'09	
	-4216 Jan 04 j 23:59	0°≈			-4212 Dec 27 j 21:15	0° <b>M</b>	
	-4216 Feb 18 j 23:35	0° <b>∀</b>			-4211 Feb 04 j 19:59	0° <b>∡</b> ¹	
asc. node	-4216 Mar 13 j 18:11	15° <b>∺</b> 30′52			-4211 Mar 16 j 13:00	0°ಕ	
	-4216 Apr 05 j 05:02	$0$ ° $\Upsilon$			-4211 Apr 27 j 07:29	0° <b>≈</b>	
evening set	-4216 Apr 15 j 15:02	6° <b>Ƴ</b> 40′50			-4211 Jun 12 j 14:24	0° <b>∀</b>	
	-4216 May 22 j 03:54	$8^{\circ}$ 0			-4211 Aug 17 j 02:34	$0^{\circ}$ Y	
max. Earth dist.	-4216 May 31 j 20:00	6° <b>8</b> 09'44	2.67099 AU	retrograde	-4211 Sep 07 j 05:38	2° <b>Y</b> 45'53	
					-4211 Sep 27 j 01:31	30° <b>₹</b> ₩	
conjunction	-4216 Jun 02 j 09:56	7° <b>8</b> 10'11	0°42'19	min. Earth dist.	-4211 Oct 12 j 17:33	24° <b>)</b> 32′04	0.62034 AU
minimum elong	-4216 Jun 02 j 08:41	7° <b>8</b> 08'11	0°42'25	opposition	-4211 Oct 17 j 00:42	22° <b>)</b> 48'45	-0°42'44
	-4216 Jul 08 j 02:51	$\Pi$ $\circ$ 0		greatest brilliancy	-4211 Oct 16 j 22:17	22° <b>升</b> 51′10	-1.6m
morning rise	-4216 Jul 17 j 22:30	6° <b>Ⅱ</b> 18'53		asc. node	-4211 Nov 03 j 15:36	16° <b>¥</b> 38′16	
	-4216 Aug 23 j 11:08	0ංම		direct	-4211 Nov 24 j 01:17	13° <b>¥</b> 52′16	
	-4216 Oct 07 j 22:45	$0^{\circ}\Omega$			-4210 Jan 23 j 02:06	$0^{\circ}$ Y	
	-4216 Nov 21 j 16:40	0° <b>m</b> )			-4210 Mar 22 j 08:53	$9^{\circ}$ 8	
	-4215 Jan 05 j 03:15	0० <b>ट</b>			-4210 May 11 j 19:25	$\Pi$ $^{\circ}0$	
	-4215 Feb 19 j 09:32	0°M₊			-4210 Jun 27 j 10:54	$0$ $\circ$	
desc. node	-4215 Mar 17 j 11:42	16°M17'55			-4210 Aug 10 j 03:27	$0$ $^{\circ}$ $\Omega$	
	-4215 Apr 10 j 23:11	0° <b>∡</b> ¹		evening set	-4210 Aug 14 j 10:51	3° <b>Ω</b> 03′29	
retrograde	-4215 Jun 03 j 21:40	16° <b>∡</b> 15'41		max. Earth dist.	-4210 Aug 30 j 09:35		2.45205 AU
min. Earth dist.	-4215 Jun 30 j 17:12		0.39734 AU		-4210 Sep 20 j 10:09	0° <b>m</b> )	
greatest brilliancy	-4215 Jul 05 j 09:24	10° <b>∡</b> ¹25'37					
opposition	-4215 Jul 06 j 16:40	10° <b>∡</b> ¹02'35	-6°20'06	conjunction	-4210 Oct 07 j 13:25		0°21'29
direct	-4215 Aug 05 j 23:06	4° <b>∡</b> ¹40'34		minimum elong	-4210 Oct 07 j 14:47	-•	0°21'32
	-4215 Oct 19 j 07:09	0°ಕ			-4210 Oct 29 j 22:26	0∘ <b>ত</b>	
	-4215 Dec 09 j 22:39	0° <b>≈</b>		desc. node	-4210 Nov 07 j 08:05	6° <b>≏</b> 30'04	
	-4214 Jan 27 j 14:47	0° <b>∀</b>		morning rise	-4210 Dec 07 j 09:12	29° <b>≙</b> 56'50	
asc. node	-4214 Jan 29 j 16:25	1° <b>∺</b> 17'07			-4210 Dec 07 j 10:49	0° <b>M</b> ₊	
	-4214 Mar 16 j 19:18	0° <b>Υ</b>			-4209 Jan 14 j 19:39	0° <b>∡</b> ¹	
	-4214 May 03 j 17:09	0°8			-4209 Feb 22 j 21:54	0°ರ	
evening set	-4214 May 24 j 11:03	13° <b>8</b> 06'56			-4209 Apr 04 j 15:05	0° <b>≈</b>	
	-4214 Jun 19 j 20:53	0°II			-4209 May 17 j 23:19	0° <b>∺</b>	
max. Earth dist.	-4214 Jun 24 j 17:33	3°Щ08′12	2.64597 AU		-4209 Jul 04 j 16:05	0° <b>Υ</b>	
					-4209 Sep 02 j 21:58	0°8	
conjunction	-4214 Jul 10 j 01:53	13° <b>Ⅱ</b> 06'11	1°08'05	asc. node	-4209 Sep 21 j 17:31	5° <b>8</b> 44'13	
minimum elong	-4214 Jul 10 j 01:08	13° <b>Ⅱ</b> 04'57	1°08'17	retrograde	-4209 Oct 12 j 12:02	8° <b>8</b> 15'23	
	-4214 Aug 04 j 16:57	0°©			-4209 Nov 17 j 16:33	30°₹ <b>Υ</b>	2011115
morning rise	-4214 Aug 24 j 21:01	13°932'46		opposition	-4209 Nov 21 j 10:22	28° <b>Y</b> 29'59	2°11'45
	-4214 Sep 17 j 22:05	0° <b>N</b>		greatest brilliancy	-4209 Nov 21 j 08:07	28° <b>Y</b> 32'14	-1.4m
	-4214 Oct 30 j 13:05	0° <b>m</b> )		min. Earth dist.	-4209 Nov 20 j 20:19	28° <b>Y</b> '44'07	0.66911 AU
	-4214 Dec 10 j 20:42	0∘ <b>w</b>		direct	-4209 Dec 31 j 16:21	18° <b>Y</b> 47'00	
1 1	-4213 Jan 20 j 08:53	0°M			-4208 Feb 18 j 05:02	0°B	
desc. node	-4213 Feb 02 j 13:03	9°M47'32			-4208 Apr 18 j 07:07	0°∏	
	-4213 Mar 01 j 21:36	0° <b>∡</b> ¹			-4208 Jun 06 j 07:44	0°©	
	-4213 Apr 13 j 00:12	5°0 8°0			-4208 Jul 20 j 16:59	0° <b>Ω</b>	
ratro ana d-	-4213 May 31 j 01:33	0°≈ 10°≈≈15'03		doga mad-	-4208 Aug 31 j 01:10	0°M)	
retrograde min. Earth dist.	-4213 Jul 29 j 16:09 -4213 Aug 29 j 02:35	19°≈15'03 12°≈54'00	0.51599 AU	desc. node evening set	-4208 Sep 24 j 05:28 -4208 Oct 08 j 08:30	18° Mp 18'42 29° Mp 12'35	
iiiii. Latui Uist.	7213 Mug 29 J 02.33	12 ~5400	0.21377 AU	evening set	7200 Oct 00 J 00.30	20 کا ہیں رک	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4208 Oct 09 i 08:56 0∘**⊽** -4203 Sep 22 j 01:22 0ಂತಾ -4208 Nov 16 j 15:27 -4203 Nov 12 j 17:11  $0^{\circ}\Omega$ oom. -4202 Jan 16 j 17:35 0° m -4208 Dec 11 j 07:07 19°M24'43 -0°50'28 -4202 Feb 18 j 10:14 5° m 42'40 conjunction retrograde -4208 Dec 11 j 03:49 19°M18'15 0°50'34 -4202 Mar 21 j 18:38 minimum elong 30°R€ 29°**Ω**24'50 -4208 Dec 24 j 19:34 0°**∡**¹ opposition -4202 Mar 23 j 14:37 3°16'00 max. Earth dist. 2.38725 AU -4207 Jan 17 j 16:47 18°**∡**30′16 greatest brilliancy -4202 Mar 24 j 17:22 29°**Ω**03'16 -2.4m -4207 Feb 01 j 18:38 ਾਤ min. Earth dist. -4202 Mar 31 j 22:11 26°**Ω**44'45 0.45218 AU morning rise -4207 Feb 17 j 00:49 11°る27'30 direct -4202 Apr 28 j 21:14 21°Ω46'44 -4207 Mar 14 j 07:23 0°≈ desc. node -4202 May 17 j 03:08 23°N58'56 -4207 Apr 26 j 00:53 0°**)**€ -4202 Jun 04 j 14:03 0° M  $0^{\circ}\Upsilon$ -4202 Jul 28 j 12:02 -4207 Jun 10 j 12:13 0∘**⊽** -4207 Jul 29 j 20:11 -4202 Sep 09 j 17:08 0°8 0°M asc. node -4207 Aug 08 j 17:46 5°836'22 -4202 Oct 20 j 23:16 0°**⊼** -4207 Sep 26 j 22:44  $0^{\circ}II$ -4202 Dec 01 j 10:43 0°ರ retrograde -4207 Nov 15 j 21:58 11°**Ⅲ**58′02 -4201 Jan 13 j 03:11 0°≈ opposition -4207 Dec 24 j 21:22  $2^{\circ} \Pi 50'26$ 4°16'07 -4201 Feb 26 j 10:21 0°**)**€ greatest brilliancy -4207 Dec 25 j 06:54 2°**Ⅱ**41'01 -1.4m evening set -4201 Mar 31 j 15:55 21°**X**51'09 min. Earth dist. -4207 Dec 28 j 02:30 1°**I**I34′20 0.65496 AU asc. node -4201 Mar 31 j 09:47 21° + 41'10 -4206 Jan 01 j 03:47 30°R₩ -4201 Apr 13 j 05:22  $0^{\circ}\Upsilon$ direct -4206 Feb 04 j 01:06 22°849'24 -4206 Mar 13 i 00:57  $\Pi$ °0 conjunction -4201 May 19 j 14:47 23°**Y**22'40 0°27'05 -4206 May 13 j 09:30 0000 -4201 May 19 j 13:50 23°**Y**21'08 0°27'08 minimum elong -4206 Jun 29 i 09:56  $0^{\circ}\Omega$ max. Earth dist. -4201 May 23 j 16:14 25°**Y**58′20 2.66620 AU -4206 Aug 10 j 14:30 0° m -4201 May 29 j 23:37 0°8 -4206 Aug 12 j 03:31 1° m 08'21 -4201 Jul 04 j 20:00 22°851'48 desc node morning rise -4206 Sep 19 j 05:17 0∘**⊽** -4201 Jul 16 j 00:18  $0^{\circ}\Pi$ -4206 Oct 27 j 15:01 0°M -4201 Aug 31 j 18:36 0ಂತಾ 0°×7 -4201 Oct 17 j 04:00 -4206 Dec 04 j 22:25  $0^{\circ}\Omega$ -4201 Dec 02 j 13:43 -4206 Dec 15 j 19:20 8°**х** 25′26 0° m evening set -4200 Jan 19 j 03:09 -4205 Jan 13 j 02:04 0°궁 0∘Ω -4200 Mar 12 j 11:26 0°M -4205 Feb 16 j 13:01 25°**ප්**27'57 -1°02'29 -4200 Apr 03 j 05:14 9°**IL**12'47 conjunction desc. node -4205 Feb 16 j 14:51 -4200 May 05 j 21:44 minimum elong 25°る31'17 1°02'40 retrograde 15°M28'51 -4205 Feb 22 j 19:45 -4200 Jun 04 j 04:53 0°≈ min. Earth dist. 10°M39'55 0.37722 AU -4205 Mar 28 j 17:10 -4200 Jun 05 j 13:30 max. Earth dist. 23°≈53'19 2.51414 AU opposition 10°M18'09 -4°29'41 -4200 Jun 05 j 05:53 -4205 Apr 06 j 14:38 0°**∀** greatest brilliancy 10°M23'14 -2.9m morning rise -4205 Apr 15 j 20:33 6°¥17'23 -4200 Jul 05 j 12:44 5°M18'22 direct -4205 May 21 j 14:08  $0^{\circ}\Upsilon$ -4200 Sep 14 j 20:38 0°**⊼** -4205 Jun 26 j 15:57 23°Y03'43 -4200 Nov 03 j 13:29 0°ರ asc. node -4205 Jul 07 j 18:49  $0^{\circ}$ 8 -4200 Dec 20 j 07:38 0°≈ -4205 Aug 26 j 17:24  $\mathbb{I}^{\circ 0}$ -4199 Feb 05 j 00:18 0°) -4205 Oct 22 j 03:06 -4199 Feb 15 j 06:54 6°**)**€33'32 0ಂತಾ asc. node -4205 Dec 26 j 16:52 -4199 Mar 24 j 05:14  $0^{\circ}\Upsilon$ retrograde 18°9541'47 -4204 Feb 01 j 13:16 -4199 May 09 j 14:56 29°Y20'35 opposition 10°937'50 5°11'07 evening set greatest brilliancy -4204 Feb 02 j 18:12 10°9510'40 -1.7m -4199 May 10 j 15:49 0°8 min. Earth dist. -4204 Feb 08 i 09:52 8°503'44 0.57740 AU max. Earth dist. -4199 Jun 15 i 06:18 22°840'07 2.66208 AU direct -4204 Mar 12 j 20:34 1°9500'44 -4199 Jun 25 i 09:32 -4204 May 31 j 20:16  $0^{\circ}\Omega$ conjunction 29°810'31 1°00'50 desc. node -4204 Jun 29 j 01:51 17°Ω45'48 -4199 Jun 25 i 08:23 29°**8**08'39 1°00'59 minimum elong -4204 Jul 16 j 23:18 0° m -4199 Jun 26 j 16:17  $0^{\circ}\Pi$ 0∘**⊽** -4199 Aug 09 j 16:48 28°**Ⅱ**42'41 -4204 Aug 27 j 01:40 morning rise -4204 Oct 05 j 07:12 0°M -4199 Aug 11 j 15:32 0ಂತಾ -4199 Sep 25 j 06:03 -4204 Nov 13 j 06:20 0°×7  $0^{\circ}\Omega$ 0° m -4204 Dec 23 j 01:03 0°정 -4199 Nov 07 j 12:05 -4203 Feb 02 j 09:08 0°22 -4199 Dec 19 j 16:08 0∘**⊽** -4198 Jan 30 j 06:12 -4203 Feb 12 j 22:53 7°≈27'32 0°M evening set -4203 Mar 17 j 15:28 0°**)**€ -4198 Feb 19 j 05:26 14°M21'22 desc. node -4198 Mar 13 j 07:53 0°**∡**7 -4203 Apr 08 j 03:09 -4198 Apr 27 j 17:09 0°ರ conjunction 14°**¥**25′26 -0°20′13 -4198 Jul 10 j 13:56 minimum elong -4203 Apr 08 j 04:05 14°**¥**26′59 0°20′16 retrograde 27°**る**54'09 max. Earth dist. -4203 Apr 28 j 08:21 27°**¥**45′20 2.61589 AU min. Earth dist. -4198 Aug 07 j 19:51 22°る27'07 0.46584 AU -4203 May 01 j 18:47  $0^{\circ}\Upsilon$ greatest brilliancy -4198 Aug 14 j 10:43 20°る08'50 -2.3m asc. node -4203 May 13 j 13:34 7°**Y**39′26 opposition -4198 Aug 15 j 22:12 19°る37'40 -5°41'06 morning rise -4203 May 28 j 08:21 17°**Y**11'12 direct -4198 Sep 17 j 18:41 12°る54'26 -4203 Jun 17 j 10:06 0°8 -4198 Nov 16 j 13:48 0°≈

-4197 Jan 03 j 06:30

asc. node

25°**≈**05'41

-4203 Aug 04 j 03:39

 $0^{\circ}\Pi$ 

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4197 Jan 11 j 21:13 0°**)**€ -4192 Jan 02 i 08:43 0°×7 -4197 Mar 03 j 16:52  $0^{\circ}\Upsilon$ -4192 Jan 21 j 06:29 14°**₹**'40'12 morning rise -4197 Apr 21 j 18:27 0°8 -4192 Feb 10 j 07:53 0°궁  $\mathbb{I}^{\circ 0}$ -4197 Jun 08 j 08:51 -4192 Mar 21 j 20:32 0°≈ -4197 Jun 17 j 00:24 0°**∀** evening set 5°**Ⅲ**34′09 -4192 May 03 j 16:23  $0^{\circ}\Upsilon$ 21°**II**12'15 2.60507 AU -4192 Jun 18 j 15:31 max. Earth dist. -4197 Jul 10 j 22:59 0ಂತಾ 0°8 -4197 Jul 24 j 04:35 -4192 Aug 08 j 22:35 asc. node -4192 Aug 25 j 09:02 8°**8**26'11 conjunction -4197 Aug 03 j 05:41 6°545'10 1°10'43 retrograde -4192 Nov 01 j 19:55 28°**8**56'40 minimum elong -4197 Aug 03 j 06:00 6°9545'42 1°10'55 opposition -4192 Dec 11 j 07:25 19°**8**31'26 3°34'13 -4197 Sep 06 j 01:04  $0^{\circ}\Omega$ greatest brilliancy -4192 Dec 11 j 10:49 19°**8**28'02 -1.3m -4197 Sep 20 j 00:42 -4192 Dec 13 j 00:34 morning rise 9°**Ω**51′20 min. Earth dist. 18°**8**50'25 0.66828 AU -4197 Oct 18 j 00:39 0° M direct -4191 Jan 21 j 06:48 9°**8**33'47 -4197 Nov 27 j 12:15 0∘**⊽** -4191 Mar 30 j 21:07  $0^{\circ}\Pi$ -4196 Jan 06 j 01:11 0°M -4191 May 23 j 06:10 0ಂತಾ desc. node -4196 Jan 07 j 04:30  $0^{\circ}$ ML52'08 -4191 Jul 07 j 20:16  $0^{\circ}\Omega$ -4196 Feb 14 j 09:56 0°**√** -4191 Aug 18 j 13:39 0° m -4196 Mar 25 j 15:51 0°る desc. node -4191 Aug 28 j 21:12 7° m 43'02 -4196 May 07 j 12:15 -4191 Sep 27 j 00:03 0∘**⊽** -4196 Jun 26 j 17:04 0°**)**€ -4191 Nov 04 j 07:14 0°M retrograde -4196 Aug 23 j 11:00 17°**¥**25'35 evening set -4191 Nov 18 j 19:10 11°ML24'59 min. Earth dist. -4196 Sep 26 i 03:21 9°**升**50′55 0.58526 AU -4191 Dec 12 j 12:06 0°×7 opposition -4196 Oct 01 i 19:37 7°\ 36'21 -2°03'29 -4190 Jan 20 j 12:48 0°정 greatest brilliancy -4196 Oct 01 i 10:17 7°**)** 45'34 -1.7m -4196 Oct 27 j 03:57 30°R≈ -4190 Jan 23 i 01:08 1°る53'49 -1°07'57 conjunction -4196 Nov 07 j 14:49 29°≈07'25 -4190 Jan 23 i 01:08 1°る53'49 1°08'08 direct minimum elong -4196 Nov 19 j 16:41 0°**₩** -4190 Mar 02 j 03:15 0°≈ -4196 Nov 20 j 06:50 0° \(\frac{1}{2}\) 05'04 -4190 Mar 11 j 04:48 max. Earth dist. 6°≈30'10 2.46359 AU asc node  $0^{\circ}\Upsilon$ -4190 Mar 26 j 14:47 -4195 Feb 05 j 11:53 17°≈23'45 morning rise -4195 Mar 31 j 03:07  $0^{\circ}$ 8 -4190 Apr 13 j 19:54 0°) -4195 May 19 j 08:26  $\mathbb{I}^{\circ 0}$ -4190 May 28 j 21:06  $0^{\circ}\Upsilon$ -4195 Jul 04 j 14:48 -4190 Jul 13 j 08:02 28°Y37'32 0.00 asc. node -4195 Jul 27 j 08:29 15°924'46 -4190 Jul 15 j 14:08 0°8 evening set -4190 Sep 05 j 09:38  $0^{\circ}\Pi$ max. Earth dist. -4195 Aug 12 j 01:42 26°920'03 2.50125 AU -4190 Nov 13 j 01:48 -4195 Aug 17 j 06:36 0° $\Omega$ 0.00 -4190 Dec 09 j 18:14 retrograde 3°951'23 -4195 Sep 16 j 12:44 -4189 Jan 03 j 07:53 conjunction 21°**Ω**46'46 0°44'09 30°Ŗ**Ⅱ** -4195 Sep 16 j 14:40 21°Ω50'17 0°44'15 -4189 Jan 16 j 14:33 25°**I**18'26 5°01'03 minimum elong opposition -4195 Sep 27 j 16:20 0° m greatest brilliancy -4189 Jan 17 j 11:52 24°**I**57'54 -1.5m -4195 Nov 06 j 09:17 0∘**⊽** min. Earth dist. -4189 Jan 22 j 02:17 23°**Ⅱ**11'45 0.61529 AU morning rise -4195 Nov 11 j 09:07 3°**£**50'22 direct -4189 Feb 26 j 12:34 15°**Ⅲ**24'36 -4195 Nov 24 j 02:29 13°**£**40'19 -4189 Apr 21 j 16:04 0ಂತಾ desc. node -4195 Dec 15 j 02:17 -4189 Jun 13 j 20:25  $0^{\circ}\Omega$ 0°M -4194 Jan 22 j 14:55 -4189 Jul 16 j 20:33 22°Ω17'45 0°×7 desc. node -4194 Mar 02 j 20:36 0°る -4189 Jul 27 j 15:38 0° m -4194 Apr 12 j 19:03 0°≈ -4189 Sep 05 i 22:06 0∘**⊽** -4194 May 26 j 18:02 0°**)**€ -4189 Oct 14 i 16:36 0°M -4194 Jul 15 i 18:09 -4189 Nov 22 i 07:00 0°×7 retrograde -4194 Sep 29 i 00:54 25°Y06'46 -4189 Dec 31 i 17:40 0°정 -4194 Oct 08 i 07:52 24°Y31'26 -4188 Jan 23 j 10:56 16°**ප**47'00 asc node evening set min. Earth dist. -4194 Nov 06 j 00:18 16°Υ02'28 0.65741 AU -4188 Feb 10 j 18:09 0°≈ -4194 Nov 08 j 01:38 15°Υ12'45 1°09'58 opposition -4194 Nov 07 j 22:56 15°**Y**15′28 -1.4m -4188 Mar 20 j 17:53 27°≈15'30 -0°38'58 greatest brilliancy conjunction 5°**Υ**44'25 direct -4194 Dec 17 j 14:30 minimum elong -4188 Mar 20 j 19:41 27°≈18'34 0°39'03 -4193 Mar 05 j 01:58 0°8 -4188 Mar 24 j 18:17 0°) -4193 Apr 28 j 08:47  $0^{\circ}II$ max. Earth dist. -4188 Apr 17 j 10:36 15°**¥**56'39 2.58175 AU -4193 Jun 15 j 03:39 0ಂತಾ -4188 May 08 j 18:16  $0^{\circ}$ -4193 Jul 29 j 04:10  $0^{\circ}\Omega$ -4188 May 12 j 13:26 2°Y28'39 morning rise -4193 Sep 08 j 10:41 13°Y53'11 0° m asc. node -4188 May 30 j 04:47 -4188 Jun 24 j 12:01  $0^{\circ}$ 8 evening set -4193 Sep 15 j 16:34 5° m 25'53  $0^{\circ}\Pi$ desc. node -4193 Oct 11 j 23:01 25° m 28'17 -4188 Aug 11 j 19:15 -4193 Oct 17 j 19:33 0∘**⊽** -4188 Oct 01 j 09:29 0 $\circ$  $\odot$ max. Earth dist. -4193 Oct 22 j 15:12 3°**£**44'31 2.38388 AU -4188 Nov 28 j 01:23 0° $\Omega$ retrograde -4187 Jan 25 j 13:29 15°**Ω**37'20 conjunction -4193 Nov 14 j 21:43 21°**£**56'30 -0°24'03 opposition -4187 Mar 01 j 10:22 8°**Ω**31'40 4°34'47 -4193 Nov 14 j 19:43 21°**£**52'35 0°24'06 -4187 Mar 02 j 20:37 8°**Ω**01'44 -2.1m minimum elong greatest brilliancy -4193 Nov 25 j 03:39 0°M min. Earth dist. -4187 Mar 09 j 20:04 5°**Ω**36'32 0.50417 AU Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	e year -4400 i	n astronomical cou	inting style is the year	4401 BCE in historical c	ounting style.	
	-4187 Apr 04 j 01:36	30°Rூ			-4182 Apr 28 j 23:10	0°8	
direct	-4187 Apr 08 j 19:49	29° <b>©</b> 50'40		evening set	-4182 Jun 01 j 23:58	21° <b>8</b> 30'22	
	-4187 Apr 13 j 15:17	$0^{\circ}\Omega$			-4182 Jun 15 j 06:17	$\Pi$ °0	
desc. node	-4187 Jun 02 j 19:49	16° <b>Ω</b> 13'07		max. Earth dist.	-4182 Jun 30 j 11:21	9° <b>Ⅱ</b> 50′20	2.63341 AU
	-4187 Jun 27 j 02:00	0° <b>m</b> )					
	-4187 Aug 10 j 16:14	0∘ <b>⊽</b>		conjunction	-4182 Jul 18 j 17:11	21° <b>Ⅱ</b> 47′20	
	-4187 Sep 20 j 10:47	0°M₊		minimum elong	-4182 Jul 18 j 16:46		1°10'36
	-4187 Oct 30 j 09:43	0° <b>∡</b>			-4182 Jul 31 j 02:09	0° <b>©</b>	
	-4187 Dec 09 j 23:20	0° <b>ට</b>		morning rise	-4182 Sep 03 j 00:59	22° <b>©</b> 59'47	
	-4186 Jan 20 j 23:04	0° <b>≈</b>			-4182 Sep 13 j 04:12	0° <b>N</b>	
	-4186 Mar 05 j 17:41	0° <b>∀</b>			-4182 Oct 25 j 13:24	0° <b>m</b> )	
evening set	-4186 Mar 14 j 15:00	5° <b>¥</b> 56′52			-4182 Dec 05 j 13:17	ია <b>ო</b> 0∘ <b>⊽</b>	
asc. node	-4186 Apr 17 j 02:19	27° <b>¥</b> 59'19 0° <b>Ƴ</b>		11.	-4181 Jan 14 j 15:59	0°M	
	-4186 Apr 20 j 04:30	U- Y		desc. node	-4181 Jan 23 j 21:49 -4181 Feb 23 j 16:11	6° <b>IL</b> 57'06 0° <b>∡'</b>	
conjunction	-4186 May 04 j 05:25	9° <b>Υ</b> 05'25	0°00'44		-4181 Apr 05 j 20:49	0°る	
minimum elong	-4186 May 04 j 05:23	9° <b>Υ</b> 04'47	0°09'46		-4181 May 21 j 00:07	0°≈	
behind sun begin	-4186 May 03 j 12:52	8° <b>Υ</b> 38'44	0 0740		-4181 Aug 01 j 04:56	0° <b>₩</b>	
behind sun end	-4186 May 04 j 21:10	9° <b>Υ</b> 30'49		retrograde	-4181 Aug 08 j 11:40	0° <b>∺</b> 22'24	
max. Earth dist.	-4186 May 14 j 04:42		2.65286 AU	renograde	-4181 Aug 15 j 14:42	30°R≈	
	-4186 Jun 05 j 19:52	0°8		min. Earth dist.	-4181 Sep 09 j 03:13		0.54224 AU
morning rise	-4186 Jun 20 j 14:52	9° <b>8</b> 25'29		greatest brilliancy	-4181 Sep 15 j 06:17	21° <b>≈</b> 12'16	
C	-4186 Jul 23 j 00:32	0° <b>I</b> I		opposition	-4181 Sep 16 j 01:29	20° <b>≈</b> 53'48	
	-4186 Sep 08 j 09:08	0ಂತ		direct	-4181 Oct 21 j 10:22	12° <b>≈</b> 59'38	
	-4186 Oct 26 j 02:08	$0^{\circ}\Omega$		asc. node	-4181 Dec 07 j 21:37	24° <b>≈</b> 10'47	
	-4186 Dec 14 j 07:17	0° <b>m</b>			-4181 Dec 21 j 09:50	0° <b>)</b>	
	-4185 Feb 07 j 20:46	0∘ <b>⊽</b>			-4180 Feb 17 j 00:13	$0^{\circ}$ $\Upsilon$	
retrograde	-4185 Apr 04 j 22:13	15° <b>≏</b> 25'26			-4180 Apr 08 j 05:07	$0^{\circ}S$	
desc. node	-4185 Apr 20 j 20:49	13° <b>♀</b> 52'52			-4180 May 26 j 15:07	$\Pi$ °0	
opposition	-4185 May 05 j 16:55	10° <b>≙</b> 15'59	-1°05'34	evening set	-4180 Jul 10 j 13:49	29° <b>Ⅱ</b> 16'36	
greatest brilliancy	-4185 May 05 j 20:07	10° <b>≏</b> 13'46			-4180 Jul 11 j 15:47	$0$ $\circ$ $\odot$	
min. Earth dist.	-4185 May 09 j 15:11		0.38821 AU	max. Earth dist.	-4180 Jul 28 j 14:35		2.54652 AU
direct	-4185 Jun 06 j 10:56	4° <b>≙</b> 38'30			-4180 Aug 24 j 08:27	$0$ $\circ$ $\Omega$	
	-4185 Aug 16 j 04:34	0° <b>M</b> .					
	-4185 Oct 02 j 13:55	0° <b>∡</b> ¹		conjunction	-4180 Aug 28 j 16:14	3° <b>Ω</b> 03'18	
	-4185 Nov 16 j 00:06	0° <b>ට</b>		minimum elong	-4180 Aug 28 j 17:47	3° <b>Ω</b> 06'03	0°59'52
	-4185 Dec 30 j 11:43	0° <b>≈</b>			-4180 Oct 04 j 22:29	0° M)	
aga mada	-4184 Feb 13 j 22:41 -4184 Mar 03 j 23:46	0° <b>∺</b> 12° <b>∺</b> 21'31		morning rise	-4180 Oct 19 j 12:59 -4180 Nov 13 j 21:21	10° നു 50'48 0° <u>മ</u>	
asc. node	-4184 Mar 31 j 10:45	12 <b>π</b> 2131 0° <b>Υ</b>		desc. node	-4180 Nov 13 j 21.21 -4180 Dec 10 j 20:03	0 <u>₽</u> 20° <b>₽</b> 41'57	
evening set	-4184 Mar 31 j 10.43	15° <b>Y</b> 20′27		desc. node	-4180 Dec 10 j 20:03	20 <b>=</b> 41 37 0° <b>M</b>	
evening set	-4184 May 17 j 12:57	0°8			-4179 Jan 30 j 14:50	0° <b>⊼</b>	
max. Earth dist.	-4184 Jun 06 j 04:51	12° <b>8</b> 31'29	2.67004 AU		-4179 Mar 11 j 02:29	0°ਤ ਹ ×	
man. Barur dige.		12 (312)	2.0,001110		-4179 Apr 21 j 10:55	0° <b>≈</b>	
conjunction	-4184 Jun 10 j 19:47	15° <b>8</b> 28'30	0°50'00		-4179 Jun 05 j 13:06	0° <b>)</b> €	
minimum elong	-4184 Jun 10 j 18:30	15° <b>8</b> 26'26	0°50'07		-4179 Jul 30 j 23:30	$0^{\circ}$ Y	
-	-4184 Jul 03 j 11:56	$\Pi^{\circ}$		retrograde	-4179 Sep 15 j 07:41	11° <b>Y</b> 25'06	
morning rise	-4184 Jul 26 j 03:29	14° <b>Ⅱ</b> 37'44		min. Earth dist.	-4179 Oct 21 j 18:13	2° <b>Y</b> 52'09	0.63621 AU
	-4184 Aug 18 j 16:37	0ංම		asc. node	-4179 Oct 24 j 22:34	1° <b>Y</b> 35'25	
	-4184 Oct 02 j 20:00	$0^{\circ}\Omega$		opposition	-4179 Oct 25 j 06:36	1° <b>Y</b> 27'21	0°00'48
	-4184 Nov 15 j 23:04	0° <b>™</b>		greatest brilliancy	-4179 Oct 25 j 06:38		-1.5m
	-4184 Dec 29 j 09:37	0∘ <b>⊽</b>			-4179 Oct 28 j 22:26	30° <b>₹</b> ₩	
	-4183 Feb 10 j 20:20	0°M₊		direct	-4179 Dec 02 j 21:47	22° <b>升</b> 18′14	
desc. node	-4183 Mar 07 j 22:54	16°M53'32			-4178 Jan 10 j 22:38	0° <b>Υ</b>	
	-4183 Mar 28 j 08:58	0° <b>∡</b>			-4178 Mar 16 j 02:31	0° <b>8</b>	
	-4183 May 29 j 07:47	0°る			-4178 May 06 j 15:18	0°II	
retrograde	-4183 Jun 18 j 07:47	2°る42'14			-4178 Jun 22 j 15:53	0° <b>ಲ</b>	
i r at ii a	-4183 Jul 08 j 03:27	30°₹ <b>҂</b> 7	0.41022.411	. ,	-4178 Aug 05 j 11:42	0°N	
min. Earth dist.	-4183 Jul 15 j 01:02	28° <b>×</b> 102'20	0.41833 AU	evening set	-4178 Aug 25 j 10:55	14° <b>Ω</b> 18'29	2 42512 411
greatest brilliancy	-4183 Jul 20 j 21:31 -4183 Jul 22 j 11:08	26° <b>₹</b> 12'39	-2.6m	max. Earth dist.	-4178 Sep 12 j 14:05	27° <b>Ω</b> 37'33 0° <b>m</b>	2.42512 AU
opposition direct	-4183 Jul 22 j 11:08 -4183 Aug 22 j 12:17	25° <b>х</b> 43′03 19° <b>х</b> 54′19	-0 400/		-4178 Sep 15 j 18:40	U IIJ	
ancei	-4183 Aug 22 j 12:17 -4183 Oct 04 j 17:51	19・×・54・19		conjunction	-4178 Oct 20 j 13:45	26° m 23'47	0°05'53
	-4183 Oct 04 j 17.31 -4183 Dec 02 j 08:21	0°≈		minimum elong	-4178 Oct 20 j 13:43	26° m) 24'37	0°05'55
asc. node	-4182 Jan 19 j 21:51	0 <b>∞</b> 28° <b>≈</b> 52'16		behind sun begin	-4178 Oct 19 j 14:18	25° My 38'38	5 00 00
	-4182 Jan 21 j 18:28	0° <b>∺</b>		behind sun end	-4178 Oct 21 j 14:05	27° <b>m</b> ) 10'37	
	-4182 Mar 11 j 16:45	ο°Υ			-4178 Oct 25 j 05:52	0∘ <b>ত</b>	
	J				J		

,	ical year style is used: Th		`	//		, ,	t 23
desc. node	-4178 Oct 28 j 18:24	2° <b>£</b> 43'33	ii astronomicai co	min. Earth dist.	-4172 Feb 18 j 22:07		0.55326 AU
dese. Hode	-4178 Dec 02 j 16:28	2 <b>—</b> →3 33		direct	-4172 Mar 22 j 04:12	11°504'32	0.55520 AC
morning rise	-4178 Dec 23 j 05:57	16°ML08'31		direct	-4172 May 22 j 07:02	0°Ω	
morning rise	-4177 Jan 09 j 23:13	0° <b>∡</b> 7		desc. node	-4172 Jun 19 j 12:39	16° <b>Ω</b> 23'51	
	-4177 Feb 17 j 23:20	0°ਤ		dese. Hode	-4172 Jul 10 j 06:36	0° m)	
	-4177 Mar 30 j 13:25	0° <b>≈</b>			-4172 Aug 21 j 04:51	0∘ <b>⊽</b>	
	-4177 May 12 j 14:39	0° <b>)</b> €			-4172 Sep 29 j 20:02	0° <b>™</b>	
	-4177 Jun 28 j 10:22	0° <b>Υ</b>			-4172 Nov 08 j 01:17	0° <b>∡</b> ¹	
	-4177 Aug 22 j 14:41	0°B			-4172 Dec 18 j 00:51	ರ°0	
asc. node	-4177 Sep 11 j 23:07	8° <b>8</b> 24'58			-4171 Jan 28 j 12:57	0° <b>≈</b>	
retrograde	-4177 Oct 20 j 05:41	16° <b>8</b> 07'02		evening set	-4171 Feb 24 j 05:09	18° <b>≈</b> 35'58	
opposition	-4177 Nov 29 j 01:31	6° <b>8</b> 27'47	2°44'21	•	-4171 Mar 12 j 22:19	0° <b>∀</b>	
greatest brilliancy	-4177 Nov 29 j 00:39	6° <b>8</b> 28'39	-1.3m		, and the second		
min. Earth dist.	-4177 Nov 29 j 06:55	6° <b>8</b> 22'22	0.67163 AU	conjunction	-4171 Apr 17 j 22:59	23° <b>¥</b> 59'35	-0°09'06
	-4177 Dec 16 j 21:22	30° <b>ŖƳ</b>		minimum elong	-4171 Apr 17 j 23:24	24° <b>)</b> €00'15	0°09'07
direct	-4176 Jan 08 j 15:17	26° <b>Ƴ</b> 38'29		behind sun begin	-4171 Apr 17 j 05:58	23° <b>)</b> €31'39	
	-4176 Feb 02 j 10:04	$0^{\circ}$ 8		behind sun end	-4171 Apr 18 j 16:50	24° <b>¥</b> 28′51	
	-4176 Apr 11 j 18:26	$\Pi^{\circ}0$			-4171 Apr 27 j 03:17	$0^{\circ}$ Y	
	-4176 May 31 j 23:46	$0$ $\circ$ $\odot$		asc. node	-4171 May 03 j 18:34	4° <b>Y</b> 19'13	
	-4176 Jul 15 j 18:30	$0$ $^{\circ}$ $\Omega$		max. Earth dist.	-4171 May 04 j 08:06	4° <b>Υ</b> 41'12	2.63136 AU
	-4176 Aug 26 j 06:04	0° <b>™</b>		morning rise	-4171 Jun 06 j 00:23	25° <b>Y</b> 43'01	
desc. node	-4176 Sep 14 j 15:28	14° <b>m</b> 37'24			-4171 Jun 12 j 17:37	$9^{\circ}$ 8	
	-4176 Oct 04 j 15:00	0∘ <b>亚</b>			-4171 Jul 30 j 05:03	$\Pi$ °0	
evening set	-4176 Oct 22 j 18:15	14° <b>≙</b> 09'16			-4171 Sep 16 j 10:20	0	
	-4176 Nov 11 j 21:46	0°M₊			-4171 Nov 05 j 05:10	$0$ ° $\Omega$	
	-4176 Dec 20 j 01:41	0° <b>∡</b> ¹			-4171 Dec 30 j 12:32	0° <b>™</b>	
				retrograde	-4170 Mar 05 j 19:08	19° <b>m</b> 07'26	
conjunction	-4176 Dec 26 j 23:44	5° <b>∡</b> ¹23'31		opposition	-4170 Apr 06 j 22:22	13° <b>m</b> 17'13	2°01'05
minimum elong	-4176 Dec 26 j 21:05	5° <b>∡</b> 18'23	1°00'55	greatest brilliancy	-4170 Apr 07 j 14:34	13° <b>TD</b> 04'50	-2.6m
	-4175 Jan 28 j 00:31	0°ಕ		min. Earth dist.	-4170 Apr 14 j 08:36	11° <b>m</b> 01'23	0.42547 AU
max. Earth dist.	-4175 Feb 12 j 16:31		2.41149 AU	desc. node	-4170 May 07 j 13:18	6° Mp 29′03	
morning rise	-4175 Mar 03 j 11:23	25° <b>る</b> 36'22		direct	-4170 May 11 j 17:54	6° Mp 21'46	
	-4175 Mar 09 j 12:41	0° <b>≈</b>			-4170 Jul 17 j 17:06	0∘ <b>⊽</b>	
	-4175 Apr 21 j 04:11	0° <b>)</b> €			-4170 Sep 02 j 01:47	0° <b>™</b>	
	-4175 Jun 05 j 09:35	0° <b>Ƴ</b>			-4170 Oct 14 j 13:57	0° <b>∡</b>	
	-4175 Jul 23 j 22:25	0°8			-4170 Nov 25 j 18:37	್ತಿ	
asc. node	-4175 Jul 29 j 22:47	3° <b>8</b> 31'48			-4169 Jan 07 j 22:27	0° <b>≈</b>	
. 1	-4175 Sep 17 j 03:31	0°II		,	-4169 Feb 21 j 13:05	0° <b>)</b> €	
retrograde	-4175 Nov 24 j 07:35	20° <b>Ⅱ</b> 02'43	4°35'53	asc. node	-4169 Mar 21 j 15:28	18° <b>¥</b> 25'13 0° <b>Ƴ</b>	
opposition	-4174 Jan 01 j 22:36	11° <b>Ⅱ</b> 06'08		avanina aat	-4169 Apr 08 j 12:49		
greatest brilliancy min. Earth dist.	-4174 Jan 02 j 12:08	10° <b>I</b> 52'53	-1.4m 0.64354 AU	evening set	-4169 Apr 09 j 21:49	0° <b>Υ</b> 53'12	
	-4174 Jan 05 j 23:21 -4174 Feb 12 j 02:16	9° <b>П</b> 31'25 1° <b>П</b> 05'38	0.04334 AU		-4169 May 25 j 09:10	0°8	
direct	-	0ஃ ப <b>ப</b> ரு 2%		agniumation	4160 May 29 ; 02:59	1° <b>8</b> 46'31	0°36'14
	-4174 May 06 j 05:00 -4174 Jun 23 j 17:03	0°€ 0°€		conjunction minimum elong	-4169 May 28 j 03:58 -4169 May 28 j 02:49	1° <b>8</b> 44'40	0°36'18
desc. node	-4174 Aug 02 j 13:02	27° <b>Ω</b> 56'03		max. Earth dist.	-4169 May 29 j 01:58	2° <b>8</b> 21'35	2.66990 AU
uese. Hout	-4174 Aug 02 j 13:02 -4174 Aug 05 j 08:49	0°m)		max. Earth tist.	-4169 May 29 J 01:58	2° <b>О</b> 21'33	4.00990 AU
	-4174 Aug 03 j 08.49 -4174 Sep 14 j 04:24	0∘ <b>ت</b> رااا		morning rise	-4169 Jul 12 j 22:32	0 П 1°П00'38	
	-4174 Oct 22 j 16:44	0° <b>™</b>		morning 1150	-4169 Aug 26 j 21:24	0°95	
	-4174 Nov 30 j 01:54	0° <b>∡</b> ⊓			-4169 Oct 11 j 18:07	0°N	
evening set	-4174 Dec 30 j 09:35	23° <b>∡</b> 16'47			-4169 Nov 26 j 03:34	0° <b>m</b> y	
5. cg 50t	-4173 Jan 08 j 07:14	23×1047 0°る			-4168 Jan 10 j 16:50	ەر <u>م</u> ەن	
	-4173 Feb 18 j 02:23	0° <b>≈</b>			-4168 Feb 27 j 04:54	0°M	
				desc. node	-4168 Mar 24 j 14:22	14°M 55'24	
conjunction	-4173 Mar 01 j 05:35	7° <b>≈</b> 56'46	-0°55'23	dese. node	-4168 Apr 29 j 12:23	0° <b>∡</b> 7	
minimum elong	-4173 Mar 01 j 07:45	8°≈00'36		retrograde	-4168 May 22 j 18:30	3° <b>∡</b> 28′20	
	-4173 Apr 01 j 21:54	0° <b>)</b> €			-4168 Jun 15 j 12:57	30°RM	
max. Earth dist.	-4173 Apr 05 j 23:20	2° <b>)</b> 46′06	2.54001 AU	min. Earth dist.	-4168 Jun 19 j 06:57	28°M59'20	0.38491 AU
morning rise	-4173 Apr 26 j 09:32	16° <b>∺</b> 31'13	, ,	opposition	-4168 Jun 23 j 11:55	27°M48'50	
<b>5</b>	-4173 May 16 j 20:14	0° <b>Υ</b>		greatest brilliancy	-4168 Jun 22 j 14:08	28°M04'05	
asc. node	-4173 Jun 16 j 21:36	19° <b>Ƴ</b> 59'14		direct	-4168 Jul 23 j 10:05	22°M42'39	
	-4173 Jul 02 j 19:01	0°8			-4168 Aug 27 j 20:38	0° <b>∡</b> ¹	
	-4173 Aug 20 j 23:06	0°II			-4168 Oct 25 j 22:41	0°8	
	-4173 Oct 13 j 10:17	0ಂತಾ			-4168 Dec 13 j 22:25	0° <b>≈</b>	
retrograde	-4172 Jan 06 j 03:38	28°512'17			-4167 Jan 30 j 14:20	0° <b>∀</b>	
opposition	-4172 Feb 11 j 09:12	20°526'45	5°06'32	asc. node	-4167 Feb 05 j 13:22	3° <b>)</b> 45′09	
greatest brilliancy	-4172 Feb 12 j 17:21	19° <b>©</b> 57'09	-1.8m		-4167 Mar 19 j 07:10	$0$ ° $\Upsilon$	
,	-				-		

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4167 May 05 j 23:46 0°8 -4162 Feb 25 i 19:04 0°정 evening set -4167 May 18 j 03:24 7°841'16 -4162 Apr 07 j 13:03 0°≈ -4167 Jun 20 j 18:23 29°**8**08'40 2.65423 AU -4162 May 21 j 00:38 0°**₩** max. Earth dist. -4167 Jun 22 j 02:17 -4162 Jul 08 j 09:18  $0^{\circ}\Upsilon$ 0°π -4162 Sep 13 j 12:39 0°8 -4162 Sep 28 j 14:10 -4167 Jul 03 j 18:33 conjunction 7°**I**32'33 1°05'30 asc. node 2°**8**43'40 -4162 Oct 06 j 18:52 minimum elong -4167 Jul 03 j 17:36 7°**Ⅲ**31'01 1°05'40 retrograde 3°**8**09'09 -4167 Aug 07 j 00:28 0°9 -4162 Oct 28 j 09:54 30°**₹**Υ 23°**Y**19'19 morning rise -4167 Aug 18 j 06:39 7°930'20 opposition -4162 Nov 15 j 19:10 1°46'54  $23^{\circ}\mathbf{\Upsilon}49{}^{\shortmid}48$ -4167 Sep 20 j 10:26  $0^{\circ}\Omega$ min. Earth dist. -4162 Nov 14 j 12:53 0.66508 AU -4167 Nov 02 j 08:26 0° M greatest brilliancy -4162 Nov 15 j 16:19 23°**Y**22'12 -1.4m -4162 Dec 25 j 18:36 13°Y42'27 -4167 Dec 14 j 00:50 0∘**⊽** direct -4161 Feb 24 j 07:59 -4166 Jan 23 j 23:17 0°M 0°8 desc. node -4166 Feb 09 j 15:56 12°M15'43 -4161 Apr 22 j 13:25  $0^{\circ}\Pi$ -4166 Mar 06 j 00:44 0°**√** -4161 Jun 10 j 02:07 0ಂತಾ -4166 Apr 18 j 02:51 0°ರ -4161 Jul 24 j 08:59  $0^{\circ}\Omega$ -4166 Jun 09 j 04:51 0°≈ -4161 Sep 03 j 17:30 0° m retrograde -4166 Jul 21 j 18:46 10°≈54'10 evening set -4161 Sep 28 j 17:28 18° m 54'59 min. Earth dist. -4166 Aug 20 j 05:54 4°≈56'51 0.49376 AU desc. node -4161 Oct 02 j 09:08 21° mp 43'17 greatest brilliancy -4166 Aug 26 j 20:14 2°≈32'33 -2.2m -4161 Oct 13 j 02:22 0∘**ত** opposition -4166 Aug 28 j 02:33 2°≈04'45 -4°56'50 -4161 Nov 20 j 09:47 0°M -4166 Sep 02 j 23:31 30°Rる direct -4166 Sep 30 j 21:05 24°る53'36 conjunction -4161 Nov 30 i 03:49 7°ML40'59 -0°39'58 -4166 Oct 30 i 22:45 0°≈ minimum elong -4161 Nov 30 i 00:46 7°M34'59 0°40'03 asc. node -4166 Dec 24 j 12:07 24°≈03'25 max. Earth dist. -4161 Dec 10 i 01:55 15°M29'39 2.37624 AU -4165 Jan 04 j 14:37 0°**₩** -4161 Dec 28 j 13:54 0°×7 -4165 Feb 26 j 02:48  $0^{\circ}\Upsilon$ -4160 Feb 05 j 12:07 0°궁 -4165 Apr 16 j 19:47 0°8 -4160 Feb 06 j 05:22 0°る32'39 morning rise -4165 Jun 03 j 16:33 -4160 Mar 16 j 23:38 0°π 0°≈≈ 14°**Ⅱ**16′15 -4165 Jun 25 j 18:47 -4160 Apr 28 j 16:19 0°) evening set max. Earth dist. -4160 Jun 13 j 06:19  $0^{\circ}\Upsilon$ -4165 Jul 17 j 10:01 28°**Ⅲ**32'46 2.58628 AU -4160 Aug 02 j 04:25 -4165 Jul 19 j 14:15 0°9 0°8 -4160 Aug 15 j 14:56 7°**8**22'25 asc. node -4165 Aug 12 j 11:40 16°9510'59 -4160 Oct 04 j 15:14 conjunction 1°08'26  $0^{\circ}\Pi$ -4165 Aug 12 j 12:26 16°9512'18 -4160 Nov 09 j 20:22 minimum elong 1°08'37 retrograde 6°**Ⅱ**49'53 -4165 Sep 01 j 09:44 -4160 Dec 12 j 19:43 0 $^{\circ}\Omega$ 30°₹**८** -4165 Sep 30 j 10:29 20°**Ω**40′20 -4160 Dec 19 j 01:53 morning rise opposition 27°**8**33'50 3°59'31 -4165 Oct 13 j 06:15 0° m greatest brilliancy -4160 Dec 19 j 08:28 27°**8**27'18 -4165 Nov 22 j 13:18 0∘**⊽** min. Earth dist. -4160 Dec 21 j 14:36 26°**8**33'39 0.66217 AU desc. node -4165 Dec 28 j 14:40 27°**2**29'35 -4159 Jan 29 j 04:33 17°**8**33'51 direct -4165 Dec 31 j 21:03 0°M -4159 Mar 20 j 23:16  $0^{\circ}\Pi$ -4164 Feb 08 j 23:33 0°×7 -4159 May 17 j 02:39 0ಂತಾ -4164 Mar 19 j 20:37 0°る -4159 Jul 02 j 12:42  $0^{\circ}\Omega$ -4164 Apr 30 j 22:35 -4159 Aug 13 j 13:26 0° M -4164 Jun 17 j 07:24 0°**)**€ -4159 Aug 19 j 07:04 4° m 15'36 desc. node -4164 Sep 01 i 01:04 retrograde 26°**)**(49'13 -4159 Sep 22 i 02:57 0∘**⊽** -4164 Oct 05 i 18:00 -4159 Oct 30 i 11:45 min. Earth dist. 18°**)** 52'38 0.60566 AU 0°M -4164 Oct 10 j 16:49 16° \(\frac{1}{54}\)'18 -1°15'48 -4159 Dec 04 i 03:07 27°M11'31 opposition evening set greatest brilliancy -4164 Oct 10 j 11:50 16°**¥**59'16 -1.7m -4159 Dec 07 i 17:31 0°×7 -4164 Nov 10 i 12:12 8° # 27'01 -4158 Jan 15 j 18:52 0°궁 asc node direct -4164 Nov 17 j 05:22 8° ¥ 09'26 -4163 Jan 28 j 10:19  $0^{\circ}\Upsilon$ -4158 Feb 06 j 05:20 16°පි00'08 -1°06'05 conjunction 0°8 -4158 Feb 06 j 06:36 16°る02'28 1°06'15 -4163 Mar 25 j 10:46 minimum elong -4163 May 14 j 09:00  $0^{\circ}II$ -4158 Feb 25 j 09:53 0°22 -4163 Jun 29 j 21:42 0°9 max. Earth dist. -4158 Mar 21 j 23:31 17°≈27'28 2.49195 AU -4163 Aug 06 j 11:10 25°539'38 -4158 Apr 07 j 10:07 28°≈51'17 evening set morning rise -4163 Aug 12 j 15:13 0° $\Omega$ -4158 Apr 09 j 02:12 0°) -4163 Aug 21 j 18:12 6°**\$\Omega**29'03 2.47433 AU -4158 May 24 j 00:56  $0^{\circ}\Upsilon$ max. Earth dist. -4158 Jul 03 j 13:10 25°Y46'40 -4163 Sep 23 j 00:16 0° m asc. node -4158 Jul 10 j 08:53 0°8  $0^{\circ}\Pi$ conjunction -4163 Sep 28 j 03:21 3° m/49'13 0°32'03 -4158 Aug 29 j 22:05 minimum elong -4163 Sep 28 j 05:06 3° m 52'30 0°32'06 -4158 Oct 28 j 08:39 0ಂತಾ -4163 Nov 01 j 15:16 0∘**⊽** retrograde -4158 Dec 19 j 04:58 12°537'39 desc. node -4163 Nov 14 j 11:46 9°**£**55'44 opposition -4157 Jan 25 j 13:10 4°9519'56 5°08'42 morning rise -4163 Nov 25 j 15:44 18°**△**36'34 greatest brilliancy -4157 Jan 26 j 14:48 3°**©**55'34 -1.6m -4163 Dec 10 j 06:00 0°M min. Earth dist. -4157 Jan 31 j 19:37 1°557'18 0.59539 AU

-4157 Feb 06 j 05:26

30°R∏

-4162 Jan 17 j 16:11

0°×7

,	ical year style is used: Th		•	//		, ,	<b>C</b> 23
direct	-4157 Mar 07 j 04:18	24° <b>∏</b> 34'05		max. Earth dist.	-4152 Jun 11 j 13:38		2.66675 AU
	-4157 Apr 07 j 00:26	0ංම			,		
	-4157 Jun 06 j 17:25	$0^{\circ}\Omega$		conjunction	-4152 Jun 19 j 04:33	23° <b>8</b> 45'39	0°56'41
desc. node	-4157 Jul 07 j 05:07	19° <b>Ω</b> 51'44		minimum elong	-4152 Jun 19 j 03:19	23° <b>8</b> 43'41	0°56'49
	-4157 Jul 21 j 17:55	0° <b>m</b> )			-4152 Jun 28 j 21:43	$\Pi^{\circ}0$	
	-4157 Aug 31 j 11:19	0∘ <b>⊽</b>		morning rise	-4152 Aug 03 j 10:21	23° <b>Ⅱ</b> 03'24	
	-4157 Oct 09 j 11:52	0°M₊			-4152 Aug 13 j 23:54	$0$ $\circ$ $\odot$	
	-4157 Nov 17 j 06:30	0° <b>∡</b> ¹			-4152 Sep 27 j 20:22	$0^{\circ}\Omega$	
	-4157 Dec 26 j 20:36	0°ಕ			-4152 Nov 10 j 11:44	0° <b>™</b>	
evening set	-4156 Feb 04 j 22:41	29° <b>る</b> 14'42			-4152 Dec 23 j 04:11	0∘ <b>ত</b>	
	-4156 Feb 06 j 00:05	0° <b>≈</b>			-4151 Feb 03 j 11:02	$0^{\circ}$ M	
	-4156 Mar 20 j 02:11	0° <b>)</b> €		desc. node	-4151 Feb 26 j 08:47	16°M05'48	
					-4151 Mar 18 j 14:57	0° <b>∡</b> ¹	
conjunction	-4156 Mar 31 j 10:31	7° <b>)</b> 40′34	-0°28'18		-4151 May 06 j 02:26	8°0	
minimum elong	-4156 Mar 31 j 11:50	7° <b>)</b> 42′48		retrograde	-4151 Jul 01 j 09:40	17° <b>る</b> 52'06	
max. Earth dist.	-4156 Apr 23 j 23:23		2.60155 AU	min. Earth dist.	-4151 Jul 28 j 19:31		0.44362 AU
	-4156 May 04 j 02:48	$0^{\circ}$ Y		greatest brilliancy	-4151 Aug 04 j 05:36	10° <b>る</b> 39'36	
asc. node	-4156 May 20 j 11:05	10° <b>Ƴ</b> 37'14		opposition	-4151 Aug 05 j 19:27	10° <b>る</b> 07'44	-6°08'25
morning rise	-4156 May 21 j 17:20	11° <b>Y</b> 26'03		direct	-4151 Sep 06 j 20:48	3° <b>る</b> 48'40	
	-4156 Jun 19 j 18:01	0° <b>8</b>			-4151 Nov 23 j 09:35	0° <b>≈</b>	
	-4156 Aug 06 j 16:16	$\Pi$ $^{\circ}$ 0		asc. node	-4150 Jan 10 j 03:20	26° <b>≈</b> 49'00	
	-4156 Sep 25 j 04:43	0ංම			-4150 Jan 15 j 13:05	0° <b>∀</b>	
	-4156 Nov 17 j 17:51	$0$ $^{\circ}\Omega$			-4150 Mar 06 j 10:45	0° <b>Υ</b>	
retrograde	-4155 Feb 07 j 13:29	27° <b>Ω</b> 01'34			-4150 Apr 24 j 03:35	0° <b>8</b>	
opposition	-4155 Mar 13 j 12:44	20° <b>Ω</b> 21'40		evening set	-4150 Jun 10 j 14:04	29° <b>8</b> 58'09	
greatest brilliancy	-4155 Mar 14 j 20:19	19° <b>Ω</b> 55'10	-2.3m		-4150 Jun 10 j 15:13	0°Щ	
min. Earth dist.	-4155 Mar 22 j 02:00	17° <b>Ω</b> 30′29	0.47524 AU	max. Earth dist.	-4150 Jul 06 j 09:58	16° <b>Ⅱ</b> 43'04	2.61878 AU
direct	-4155 Apr 19 j 21:10	12° <b>Ω</b> 12'34			-4150 Jul 26 j 12:00	0∘დ	
desc. node	-4155 May 24 j 06:00	19° <b>Ω</b> 25'59					
	-4155 Jun 15 j 23:30	0° <b>m</b> )		conjunction	-4150 Jul 27 j 12:13	0°5540'26	
	-4155 Aug 03 j 03:24	0∘ <b>亚</b>		minimum elong	-4150 Jul 27 j 12:13	0°9540'25	1°11'23
	-4155 Sep 14 j 01:19	0° <b>M</b> 0° <b>⊼</b>			-4150 Sep 08 j 11:49	0°N	
	-4155 Oct 24 j 15:12	0° <b>∡</b>		morning rise	-4150 Sep 12 j 12:59	2° <b>Ω</b> 49'35	
	-4155 Dec 04 j 14:59	5°0			-4150 Oct 20 j 16:25	0° my	
	-4154 Jan 15 j 22:29	0° <b>≈</b>			-4150 Nov 30 j 09:41	0∘ <b>m</b>	
avanina aat	-4154 Feb 28 j 22:36	0° <b>)</b> 15°₩27!12		daga mada	-4149 Jan 09 j 04:35	0°M 2°M 52124	
evening set asc. node	-4154 Mar 24 j 12:16	15° <b>)</b> 37'13 24° <b>)</b> 39'38		desc. node	-4149 Jan 14 j 07:43	3°M53'34 0°⊀	
asc. node	-4154 Apr 07 j 07:54	24° <b>π</b> 39'38 0° <b>Υ</b>			-4149 Feb 17 j 19:09 -4149 Mar 30 j 08:24		
	-4154 Apr 15 j 13:02	U- Y			·	0°≷	
conjunction	-4154 May 13 j 03:07	17° <b>Ƴ</b> 47'07	0°20'00		-4149 May 12 j 21:05 -4149 Jul 05 j 10:40	0 ≈ 0° <b>∺</b>	
-	-4154 May 13 j 02:22	17° <b>Y</b> 45'54	0°20'03	ratrograda	-4149 Aug 17 j 18:46	0 <b>X</b> 10° <b>¥</b> 47'10	
minimum elong max. Earth dist.	-4154 May 19 j 17:16	17 <b>γ</b> 43 34 22° <b>Υ</b> 00'30	2.66136 AU	retrograde min. Earth dist.	-4149 Aug 17 j 18.46	3° <b>¥</b> 32'31	0.56685 AU
max. Earm dist.	-4154 Jun 01 j 05:20	0°8	2.00130 AU	opposition	-4149 Sep 19 j 13:33	1° <b>X</b> 05'15	
morning rise	-4154 Jun 28 j 19:18	17° <b>8</b> 34'45		greatest brilliancy	-4149 Sep 25 j 07:24	1° <b>X</b> (0313	
morning risc	-4154 Jul 18 j 07:25	0°Ⅱ		greatest offinality	-4149 Sep 28 j 16:18	30°R≈	-1.0111
	-4154 Sep 03 j 07:45	0°©		direct	-4149 Nov 01 j 01:28	22°≈50'58	
	-4154 Oct 20 j 05:41	0° <b>U</b>		asc. node	-4149 Nov 28 j 03:49	22 ≈50 38 26°≈56'23	
	-4154 Dec 06 j 16:08	0° <b>m</b> )		450. HOUC	-4149 Dec 07 j 23:27	0° <b>∺</b>	
	-4153 Jan 25 j 14:13	0∘ <b>ರ</b>			-4148 Feb 10 j 09:24	0°Υ	
	-4153 Jan 23 j 14:13	0° <b>™</b>			-4148 Apr 02 j 21:26	%8 0°B	
desc. node	-4153 Apr 11 j 08:21	1°ML32'55			-4148 May 21 j 18:48	0°II	
retrograde	-4153 Apr 23 j 00:43	2°M23'27			-4148 Jul 06 j 23:54	0°50	
ronogrado	-4153 May 12 j 20:57	30°R <b>≏</b>		evening set	-4148 Jul 20 j 00:31	8° <b>5</b> 346'04	
opposition	-4153 May 23 j 09:59	27° <b>£</b> 21'12	-3°06'04	max. Earth dist.	-4148 Aug 05 j 13:11	20°505'50	2.52226 AU
greatest brilliancy	-4153 May 23 j 10:54	27° <b>£</b> 20'35			-4148 Aug 19 j 17:17	0°N	
min. Earth dist.	-4153 May 24 j 13:19	27° <b>£</b> 03'03	0.37819 AU				
direct	-4153 Jun 22 j 21:18	22° <b>₽</b> 12'21		conjunction	-4148 Sep 08 j 03:44	13° <b>Ω</b> 51'38	0°51'39
	-4153 Jul 29 j 01:22	0°M		minimum elong	-4148 Sep 08 j 05:33	13° <b>Ω</b> 54'56	
	-4153 Sep 23 j 10:55	0° <b>∡</b> ¹			-4148 Sep 30 j 06:05	0° my	
	-4153 Nov 09 j 03:55	0°ਤ ਹ ×		morning rise	-4148 Nov 01 j 01:38	23° m 52'31	
	-4153 Dec 24 j 17:29	0° <b>≈</b>		5	-4148 Nov 09 j 02:16	0° <b>⊽</b>	
	-4152 Feb 08 j 18:47	0° <b>₩</b>		desc. node	-4148 Dec 01 j 06:11	ა <b>—</b> 17° <b>ჲ</b> 03'47	
asc. node	-4152 Feb 23 j 04:20	9° <b>₩</b> 16'02		· · · <del>- v · · ·</del>	-4148 Dec 17 j 22:15	0°M	
× <del></del>	-4152 Mar 26 j 15:16	0°Υ			-4147 Jan 25 j 13:02	0° <b>∡</b> 7	
evening set	-4152 May 03 j 05:32	23° <b>Y</b> ′51'39			-4147 Mar 05 j 20:10	0°ਰ	
<i>3</i>	-4152 May 12 j 21:47	0°8			-4147 Apr 15 j 21:02	0° <b>≈</b>	
	J J	_			1 3		

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,	-4147 May 30 j 03:18	0° <b>∀</b>			-4142 Oct 17 j 16:53	0° <b>M</b> ₊	
	-4147 Jul 20 j 14:31	$0^{\circ}$ Y			-4142 Nov 25 j 04:20	0° <b>∡</b> ¹	
retrograde	-4147 Sep 23 j 05:57	19° <b>Ƴ</b> 48'54			-4141 Jan 03 j 11:27	ರ°0	
asc. node	-4147 Oct 15 j 04:39	16° <b>Ƴ</b> 31'19		evening set	-4141 Jan 13 j 08:39	7° <b>る</b> 22'39	
min. Earth dist.	-4147 Oct 30 j 13:30	10° <b>Y</b> 58'24	0.64910 AU		-4141 Feb 13 j 08:18	0° <b>≈</b>	
opposition	-4147 Nov 02 j 07:01	9° <b>Ƴ</b> 52'28	0°42'01				
greatest brilliancy	-4147 Nov 02 j 05:00	9° <b>Ƴ</b> 54'30	-1.5m	conjunction	-4141 Mar 13 j 05:11	19° <b>≈</b> 40′21	-0°46'21
direct	-4147 Dec 11 j 11:17	0° <b>Υ</b> 32'10		minimum elong	-4141 Mar 13 j 07:14	19° <b>≈</b> 43'55	0°46'28
	-4146 Mar 09 j 04:48	0°B			-4141 Mar 28 j 04:57	0° <b>∀</b>	
	-4146 May 01 j 05:46	0°Щ		max. Earth dist.	-4141 Apr 13 j 12:44		2.56405 AU
	-4146 Jun 17 j 17:55	0°©		morning rise	-4141 May 06 j 10:07	26° <b>¥</b> 15'51	
	-4146 Jul 31 j 17:39	0°N			-4141 May 12 j 02:57	0°Υ 1.69 <b>Ω</b> 1.7122	
evening set	-4146 Sep 06 j 05:13	26° <b>Ω</b> 23'49		asc. node	-4141 Jun 07 j 02:08	16° <b>Y</b> 47'32	
Fauth diet	-4146 Sep 11 j 01:35	0° M)	2 40011 411		-4141 Jun 27 j 21:30	0° <b>Β</b>	
max. Earth dist.	-4146 Oct 01 j 04:05	15° Mp 09'05	2.40011 AU		-4141 Aug 15 j 11:55	0° <b>Ⅱ</b> 0° <b>©</b>	
desc. node	-4146 Oct 19 j 02:57 -4146 Oct 20 j 12:10	28° M 55'46 0° <u>₽</u>			-4141 Oct 06 j 01:31 -4141 Dec 07 j 20:58	0° <b>U</b>	
	-4140 Oct 20 j 12.10	0 ==		retrograde	-4140 Jan 17 j 08:53	8° <b>Ω</b> 16'18	
conjunction	-4146 Nov 03 j 13:20	10° <b>≏</b> 54'57	-0°11'05	opposition	-4140 Feb 21 j 21:40	0°Ω51'45	4°52'16
minimum elong	-4146 Nov 03 j 13:26	10° <b>⊆</b> 53'11		greatest brilliancy	-4140 Feb 23 j 07:42	0° <b>Ω</b> 21'15	
behind sun begin	-4146 Nov 02 j 16:44	10° <b>⊆</b> 3311	0 11 00	greatest offinancy	-4140 Feb 24 j 07:21	30°R9	-2.0111
behind sun end	-4146 Nov 04 j 08:07	11° <b>⊆</b> 31'36		min. Earth dist.	-4140 Mar 01 j 00:27	27°958'12	0.52686 AU
bennia sun ena	-4146 Nov 27 j 21:44	0°M		direct	-4140 Apr 01 j 00:47	21°9549'54	0.32000710
	-4145 Jan 05 j 03:23	0° <b>⊼</b> ⊓			-4140 May 08 j 11:23	0°Ω	
morning rise	-4145 Jan 08 j 14:14	2° <b>∡</b> '41'29		desc. node	-4140 Jun 09 j 23:06	16° <b>Ω</b> 02'26	
3	-4145 Feb 13 j 02:08	ලංප			-4140 Jul 02 j 17:09	0° <b>m</b> )	
	-4145 Mar 25 j 14:09	0° <b>≈</b>			-4140 Aug 14 j 22:30	0∘ <u>⊽</u>	
	-4145 May 07 j 10:16	0° <b>∀</b>			-4140 Sep 24 j 03:20	0° <b>M</b> .	
	-4145 Jun 22 j 14:51	$0^{\circ}$ Y			-4140 Nov 02 j 17:11	0° <b>∡</b> ¹	
	-4145 Aug 14 j 00:53	$0^{\circ}$ 8			-4140 Dec 12 j 22:58	ರ°0	
asc. node	-4145 Sep 02 j 05:39	9° <b>8</b> 14'15			-4139 Jan 23 j 15:59	0° <b>≈</b>	
retrograde	-4145 Oct 28 j 00:03	23° <b>8</b> 55'35		evening set	-4139 Mar 06 j 22:08	29° <b>≈</b> 07'58	
opposition	-4145 Dec 06 j 16:07	14° <b>8</b> 23'33	3°14'17		-4139 Mar 08 j 04:57	0° <b>∀</b>	
greatest brilliancy	-4145 Dec 06 j 17:21	14° <b>8</b> 22'20	-1.3m		-4139 Apr 22 j 12:02	$0^{\circ}$ Y	
min. Earth dist.	-4145 Dec 07 j 16:57	13° <b>8</b> 58'45	0.67102 AU	asc. node	-4139 Apr 23 j 23:30	0° <b>Ƴ</b> 57'45	
direct	-4144 Jan 16 j 12:23	4° <b>8</b> 29'10					
	-4144 Apr 04 j 12:01	$\Pi$ °0		conjunction	-4139 Apr 27 j 10:02	3° <b>Y</b> 11′56	0°02'00
	-4144 May 26 j 10:22	0°®		minimum elong	-4139 Apr 27 j 09:55	3° <b>Y</b> 11'46	0°02'01
	-4144 Jul 10 j 17:00	0° <b>N</b>		behind sun begin	-4139 Apr 26 j 13:31	2° <b>Y</b> 38'38	
	-4144 Aug 21 j 08:57	0° m)		behind sun end	-4139 Apr 28 j 06:19	3° <b>Y</b> 44′52	0.64406.477
desc. node	-4144 Sep 05 j 00:19	10° m 59'23		max. Earth dist.	-4139 May 10 j 04:10	11° <b>Y</b> 27'32	2.64426 AU
	-4144 Sep 29 j 19:14	0° <b>⊽</b>			-4139 Jun 08 j 02:03	0°8	
evening set	-4144 Nov 06 j 22:07 -4144 Nov 07 j 02:24	29° <b>£</b> 51'34 0° <b>™</b>		morning rise	-4139 Jun 14 j 11:39 -4139 Jul 25 j 09:13	4° <b>႘</b> 04'40 0°Ⅱ	
	-4144 Nov 07 j 02.24 -4144 Dec 15 j 06:31	0° <b>⊼</b>			-4139 Sep 11 j 01:56	0°©	
	-4144 DCC 13 J 00.31	0 ^			-4139 Oct 29 j 13:24	0° <b>U</b>	
conjunction	-4143 Jan 11 j 13:11	21° <b>∡</b> ¹06′20	-1°06'35		-4139 Oct 29 j 13:24 -4139 Dec 19 j 17:02	0° <b>m</b> )	
minimum elong	-4143 Jan 11 j 11:58	21° <b>x</b> 00'20' 21° <b>x</b> 04'01			-4138 Feb 24 j 09:13	0∘ <b>ت</b> راا	
mmmum viong	-4143 Jan 23 j 05:30	0°ප	1 00 10	retrograde	-4138 Mar 22 j 07:06	ა — 3° <b>ჲ</b> 48'56	
max. Earth dist.	-4143 Mar 01 j 11:09	27° <b>ප</b> 37'31	2.44004 AU	8	-4138 Apr 16 j 21:51	30°R, Mp	
	-4143 Mar 04 j 17:50	0° <b>≈</b>		opposition	-4138 Apr 22 j 14:31	28° <b>m</b> 24'01	0°22'52
morning rise	-4143 Mar 16 j 23:49	8° <b>≈</b> 47'25		greatest brilliancy	-4138 Apr 22 j 17:15	28° m/22'03	-2.8m
C	-4143 Apr 16 j 08:29	0° <b>∀</b>		desc. node	-4138 Apr 27 j 23:31	26° m 51'09	
	-4143 May 31 j 09:44	$0^{\circ}$ Y		min. Earth dist.	-4138 Apr 28 j 09:35	26° Mp 44'02	0.40236 AU
	-4143 Jul 18 j 08:25	0°8		direct	-4138 May 25 j 16:28	22° m 13'36	
asc. node	-4143 Jul 20 j 05:08	1° <b>8</b> 07'16			-4138 Jun 30 j 05:01	0∘ <b>⊽</b>	
	-4143 Sep 09 j 05:18	$\Pi^{\circ}0$			-4138 Aug 23 j 22:58	$0^{\circ}$ M	
retrograde	-4143 Dec 02 j 23:36	28° <b>Ⅱ</b> 17'40			-4138 Oct 07 j 13:22	0° <b>∡</b> ¹	
opposition	-4142 Jan 10 j 05:24	19° <b>Ⅱ</b> 33'23	4°51'41		-4138 Nov 19 j 19:02	ರ∘8	
greatest brilliancy	-4142 Jan 10 j 23:10	19° <b>Ⅱ</b> 16′08	-1.5m		-4137 Jan 02 j 13:58	0° <b>≈</b>	
min. Earth dist.	-4142 Jan 15 j 01:32	17° <b>Ⅱ</b> 40'46	0.62923 AU		-4137 Feb 16 j 14:11	0° <b>∀</b>	
direct	-4142 Feb 20 j 07:21	9°Ⅱ35'36		asc. node	-4137 Mar 11 j 21:00	15° <b>¥</b> 11'39	
	-4142 Apr 27 j 19:59	0°99		_	-4137 Apr 03 j 19:43	0° <b>Υ</b>	
	-4142 Jun 17 j 15:55	$0^{\circ}\Omega$		evening set	-4137 Apr 18 j 22:37	9° <b>Ƴ</b> 41'26	
, ,	-	240 2 2			410737 20110 :-	0063	
desc. node	-4142 Jul 23 j 23:35	24° <b>Q</b> 57'23		TO 41 11 1	-4137 May 20 j 18:43	0°8	2 (7102 11)
desc. node	-	24° <b>Ω</b> 57'23 0° <b>m</b> 0° <b>Ω</b>		max. Earth dist.	-4137 May 20 j 18:43 -4137 Jun 03 j 11:30		2.67102 AU

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conjunction	-4137 Jun 05 j 15:09	10° <b>8</b> 06'05		min. Earth dist.	-4132 Oct 15 j 00:13		0.62369 AU
minimum elong	-4137 Jun 05 j 13:53	10° <b>8</b> 04'05	0°44'41	opposition	-4132 Oct 19 j 04:27	25° <b>)</b> 47′53	-0°30'29
C	-4137 Jul 06 j 17:56	0° <b>I</b> I		greatest brilliancy	-4132 Oct 19 j 02:49	25° <b>¥</b> 49'31	-1.6m
morning rise	-4137 Jul 21 j 02:13	9° <b>Ⅱ</b> 13'46		asc. node	-4132 Oct 31 j 19:20	21° <b>)</b> €06'17	
•	-4137 Aug 22 j 02:22	0ಂತಾ		direct	-4132 Nov 26 j 08:51	16° <b>¥</b> 48'57	
	-4137 Oct 06 j 13:19	$0^{\circ}\Omega$			-4131 Jan 18 j 13:26	$0^{\circ}$ Y	
	-4137 Nov 20 j 05:04	0° <b>m</b>			-4131 Mar 19 j 10:32	$9^{\circ}$ 8	
	-4136 Jan 03 j 10:46	0∘ <b>⊽</b>			-4131 May 09 j 06:47	$\Pi$ °0	
	-4136 Feb 17 j 05:40	$0^{\circ}$ M			-4131 Jun 25 j 03:29	$0$ $\circ$ $\odot$	
desc. node	-4136 Mar 15 j 01:33	17° <b>M</b> 07'17			-4131 Aug 07 j 23:32	$0^{\circ}\Omega$	
	-4136 Apr 06 j 00:58	0° <b>∡</b> ¹		evening set	-4131 Aug 17 j 00:21	6° <b>Ω</b> 24'51	
retrograde	-4136 Jun 07 j 08:29	20° <b>∡</b> ¹46′17		max. Earth dist.	-4131 Sep 01 j 21:42	17° <b>£</b> 53′03	2.44697 AU
min. Earth dist.	-4136 Jul 04 j 00:02	16° <b>∡</b> 18′06	0.40071 AU		-4131 Sep 18 j 08:34	0° <b>m</b> )	
greatest brilliancy	-4136 Jul 08 j 23:30	14° <b>х</b> 49'49	-2.7m				
opposition	-4136 Jul 10 j 08:32	14° <b>∡</b> ¹25′16	-6°25'42	conjunction	-4131 Oct 10 j 11:46	16° <b>m</b> 39'04	0°17'51
direct	-4136 Aug 09 j 16:55	8° <b>∡</b> 759′05		minimum elong	-4131 Oct 10 j 12:56	16°Mp41'18	0°17'52
	-4136 Oct 15 j 00:51	0° <b>ට</b>			-4131 Oct 27 j 22:01	0∘ <b>亚</b>	
	-4136 Dec 06 j 22:28	0° <b>≈</b>		desc. node	-4131 Nov 04 j 21:54	6° <b>£</b> 10'56	
	-4135 Jan 24 j 22:51	0° <b>∀</b>			-4131 Dec 05 j 10:30	$0^{\circ}$ M	
asc. node	-4135 Jan 26 j 18:38	1° <b>)</b> €07'46		morning rise	-4131 Dec 10 j 21:41	4°M17′04	
	-4135 Mar 14 j 06:46	$0^{\circ}\Upsilon$			-4130 Jan 12 j 18:24	0° <b>∡</b> 7	
	-4135 May 01 j 06:38	0°8			-4130 Feb 20 j 18:44	0°ರ	
evening set	-4135 May 26 j 16:09	16° <b>8</b> 02'54			-4130 Apr 02 j 08:56	0° <b>≈</b>	
	-4135 Jun 17 j 12:03	$\Pi^{\circ}$			-4130 May 15 j 12:15	0° <b>∀</b>	
max. Earth dist.	-4135 Jun 26 j 08:59	5° <b>Ⅱ</b> 43'26	2.64367 AU		-4130 Jul 01 j 18:26	$0^{\circ}$ Y	
	-				-4130 Aug 28 j 16:13	0°B	
conjunction	-4135 Jul 12 j 07:09	16° <b>Ⅱ</b> 04'51	1°08'52	asc. node	-4130 Sep 18 j 20:03	7° <b>8</b> 19'52	
minimum elong	-4135 Jul 12 j 06:29	16° <b>Ⅱ</b> 03'46	1°09'02	retrograde	-4130 Oct 14 j 12:04	11° <b>8</b> 04'58	
C	-4135 Aug 02 j 09:37	0°9		opposition	-4130 Nov 23 j 10:59	1° <b>8</b> 20'29	2°21'16
morning rise	-4135 Aug 27 j 04:23	16°539'25		greatest brilliancy	-4130 Nov 23 j 08:53	1° <b>8</b> 22'35	
C	-4135 Sep 15 j 15:49	$0^{\circ}\Omega$		min. Earth dist.	-4130 Nov 23 j 00:16		0.67003 AU
	-4135 Oct 28 j 07:18	0° mp			-4130 Nov 26 j 19:31	30° <b>Ŗ</b> ♈	
	-4135 Dec 08 j 14:36	0∘ <u>⊽</u>		direct	-4129 Jan 02 j 19:36	21° <b>Υ</b> 36'15	
	-4134 Jan 18 i 01:31	0°M			-4129 Feb 12 j 21:08	$0^{\circ}B$	
desc. node	-4134 Jan 31 j 01:06	9°M40'23			-4129 Apr 16 j 08:28	0°II	
	-4134 Feb 27 j 11:08	0° <b>∡</b> ¹			-4129 Jun 04 j 20:42	0ං <b>ම</b>	
	-4134 Apr 10 j 06:06	0°⋜			-4129 Jul 19 j 11:31	$0^{\circ}\Omega$	
	-4134 May 27 j 03:49	0° <b>≈</b>			-4129 Aug 29 j 23:01	0° m/	
retrograde	-4134 Aug 01 j 02:39	22° <b>≈</b> 44'44		desc. node	-4129 Sep 22 j 19:14	18° <b>m</b> 00'44	
min. Earth dist.	-4134 Aug 31 j 19:11	16° <b>≈</b> 18'37	0.52097 AU		-4129 Oct 08 j 08:38	0∘ <u>⊽</u>	
greatest brilliancy	-4134 Sep 07 j 05:10	13° <b>≈</b> 53'40	-2.0m	evening set	-4129 Oct 12 j 12:37	3° <b>≙</b> 14'08	
opposition	-4134 Sep 08 j 05:17	13° <b>≈</b> 30'54	-4°07'49	Z .	-4129 Nov 15 j 15:51	0° <b>M</b> .	
direct	-4134 Oct 12 j 21:06	5°≈55'02			<b>,</b>		
asc. node	-4134 Dec 14 j 18:20	23° <b>≈</b> 57'20		conjunction	-4129 Dec 15 j 19:08	23°M43'22	-0°53'12
	-4134 Dec 27 j 06:15	0° <b>)</b> €		minimum elong	-4129 Dec 15 j 15:54	23°M37'03	
	-4133 Feb 20 j 06:13	0° <b>Υ</b>			-4129 Dec 23 j 19:33	0° <b>∡</b> ¹	
	-4133 Apr 11 j 18:37	0°8		max. Earth dist.	-4128 Jan 26 j 00:28		2.39109 AU
	-4133 May 29 j 23:22	0°II			-4128 Jan 31 j 17:11	ರ°0	
evening set	-4133 Jul 04 j 17:28	23° <b>Ⅱ</b> 10'57		morning rise	-4128 Feb 21 j 10:18	15° <b>පි</b> 32'29	
8	-4133 Jul 14 j 23:45	0°ಲಾ		3 2	-4128 Mar 12 j 03:38	0° <b>≈</b>	
max. Earth dist.	-4133 Jul 24 j 04:23		2.56506 AU		-4128 Apr 23 j 17:57	0° <b>)</b> €	
man. Darm dige.	1155 Vai 21, 01.25	0 01002	2.00000110		-4128 Jun 08 j 00:42	0° <b>Υ</b>	
conjunction	-4133 Aug 22 j 02:56	26°502'31	1°04'11		-4128 Jul 26 j 23:24	0°8	
minimum elong	-4133 Aug 22 j 04:10	26°504'40	1°04'21	asc. node	-4128 Aug 05 j 19:44	5° <b>8</b> 39'03	
mmmum vieng	-4133 Aug 27 j 18:35	0° <b>Ω</b>	. 0.21	use. Houe	-4128 Sep 22 j 09:19	0°II	
	-4133 Oct 08 j 12:23	0° <b>m</b>		retrograde	-4128 Nov 18 j 00:55	14° <b>Ⅱ</b> 48'35	
morning rise	-4133 Oct 11 j 13:34	2° m/ 14'36		opposition	-4128 Dec 26 j 23:25	5° <b>∏</b> 42'39	4°21'38
morning rist	-4133 Nov 17 j 15:21	0∘ <b>ರ</b>		greatest brilliancy	-4128 Dec 27 j 09:41	5° <b>Ⅱ</b> 32'32	-1.4m
desc. node	-4133 Nov 17 j 13.21 -4133 Dec 18 j 23:06	23° <b>£</b> 58'56		min. Earth dist.	-4128 Dec 30 j 08:01		0.65321 AU
4550. HOW	-4133 Dec 26 j 18:23	0°M		Lartii dist.	-4127 Jan 11 j 09:04	30°R <b>8</b>	5.05521 AU
	-4132 Feb 03 j 15:58	0° <b>⊼</b> ¹		direct	-4127 Feb 06 j 04:00	25° <b>8</b> 41'41	
	-4132 Mar 14 j 06:30	0°る		anoci	-4127 Mar 06 j 02:12	0°Ⅱ	
	-4132 Mai 14 j 00.30	0°≈			-4127 May 10 j 10:07	0°©	
	-4132 Apr 24 j 19.33	0 <b>≈</b> 0° <b>H</b>			-4127 May 10 j 10.07 -4127 Jun 26 j 23:52	0°€ 0°€	
	-4132 Juli 09 j 13.42 -4132 Aug 08 j 23:30	0° <b>Υ</b>			-4127 Aug 08 j 09:58	0° <b>m</b> )	
retrograde	-4132 Sep 09 j 07:21	5° <b>Υ</b> 45'15		desc. node	-4127 Aug 08 j 09.38	0°Mp56'04	
ronograuc	-4132 Sep 09 j 07.21 -4132 Oct 08 j 10:42	30° <b>₹</b>		uese. Houe	-4127 Sep 17 j 03:26	0° <b>⊽</b>	
	4152 Oct 00 J 10.42	20 JV			412/ Sep 1/ J 03.20	v <del>==</del>	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4127 Oct 25 j 14:14 0°M -4122 Aug 29 j 09:08 0ಂತಾ -4127 Dec 02 j 21:32 -4122 Oct 14 j 16:10  $0^{\circ}\Omega$ 0°×7 -4122 Nov 29 j 20:19 12°**∡**35'48 0° m -4127 Dec 19 j 04:06 evening set -4121 Jan 15 j 20:34 0∘**⊽** -4126 Jan 11 j 00:12 0°궁 -4121 Mar 08 j 04:09  $0^{\circ}M$ conjunction -4126 Feb 19 j 14:05 29°る12'52 -1°00'54 desc. node -4121 Apr 01 j 17:20 11°MJ31'07 minimum elong -4126 Feb 19 j 16:04 29°**る**16'26 1°01'02 retrograde -4121 May 10 j 18:04 20°M16'29 -4126 Feb 20 j 16:14 0°≈ min. Earth dist. -4121 Jun 08 j 16:20 15°**M**⋅32'59 0.37804 AU 2.51919 AU max. Earth dist. -4126 Mar 31 j 01:09 27°**≈**01'45 opposition -4121 Jun 10 j 15:20 15°M01'17 -4°51'46 -4126 Apr 04 j 08:56 0°**)**€ greatest brilliancy -4121 Jun 10 j 04:57  $15^{\circ}$  ML 08'17-2.9m morning rise -4126 Apr 18 j 11:51 9°**∺**36′02 direct -4121 Jul 10 j 14:13 10°M01'25  $0^{\circ}\Upsilon$ -4121 Sep 11 j 08:02 -4126 May 19 j 05:50 0°**∡**7 22° **Y**47'47 asc. node -4126 Jun 23 j 18:53 -4121 Nov 01 j 12:13 0°ಕ -4126 Jul 05 j 06:50 0°8 -4121 Dec 18 j 16:05 0°≈ -4126 Aug 23 j 21:59  $0^{\circ}II$ -4120 Feb 03 j 12:24 0°**)**€ -4126 Oct 18 j 04:31 0ಂತಾ asc. node -4120 Feb 13 j 10:39 6°¥19'32 retrograde -4126 Dec 29 j 03:20 21°9545'40 -4120 Mar 21 j 18:58  $0^{\circ}\Upsilon$ opposition -4125 Feb 03 j 22:08 13°5544'46 5°09'49 -4120 May 08 j 06:39 0°8 greatest brilliancy -4125 Feb 05 j 03:40 13°9517'10 -1.7m evening set -4120 May 11 j 19:14 2°813'55 min. Earth dist. -4125 Feb 10 j 22:43 11°9507'49 0.57322 AU max. Earth dist. -4120 Jun 16 j 23:44 25°**8**16'29 2.66090 AU direct -4125 Mar 16 j 04:23 4°9510'10 -4120 Jun 24 j 08:19  $0^{\circ}\Pi$ -4125 May 29 j 12:39  $0^{\circ}\Omega$ desc. node -4125 Jun 27 i 15:46 17°**Ω**57'39 -4120 Jun 27 j 12:32 2°**Ⅱ**02'40 1°02'13 conjunction -4125 Jul 15 j 11:04 0° m minimum elong -4120 Jun 27 j 11:26 2°**I**100'55 1°02'23 -4125 Aug 25 j 19:45 0∘**⊽** -4120 Aug 09 j 08:46 0ಂತಾ -4125 Oct 04 j 03:45 0°M -4120 Aug 11 j 20:19 1°938'33 morning rise -4125 Nov 12 j 03:28 0°×7 -4120 Sep 22 j 23:56  $0^{\circ}\Omega$ 0°궁 -4120 Nov 05 j 05:45 -4125 Dec 21 j 21:37 O° m -4120 Dec 17 j 08:16 -4124 Feb 01 j 04:29 0°≈≈ 0∘Ω -4119 Jan 27 j 19:02 -4124 Feb 16 j 17:35 10°≈57'14 0°M evening set -4119 Feb 16 j 18:50 14°M27'11 -4124 Mar 15 j 09:19 0°**)** desc. node -4119 Mar 10 j 13:42 0°×7 -4124 Apr 10 j 15:08 17°**¥**36'13 -0°17'12 -4119 Apr 24 j 03:04 0°ಕ conjunction -4124 Apr 10 j 15:55 -4119 Jun 27 j 02:17 minimum elong 17°**¥**37'32 0°17'15 0°≈ -4124 Apr 29 j 11:07  $0^{\circ}\Upsilon$ -4119 Jul 13 j 08:22 retrograde 1°≈50'01 0°**Υ**27'47 2.61901 AU -4119 Jul 29 j 03:26 max. Earth dist. -4124 Apr 30 j 04:08 30°Rる 7°**Y**18'02 -4119 Aug 10 j 21:00 asc. node -4124 May 10 j 16:18 min. Earth dist. 26°る16'44 0.47113 AU morning rise -4124 May 30 j 14:25 20°**Y**08'40 greatest brilliancy -4119 Aug 17 j 11:50 23°る56'46 -2.3m -4124 Jun 15 j 00:50  $0^{\circ}$ 8 -4119 Aug 18 j 22:23 23°る26'06 -5°31'18 opposition -4124 Aug 01 j 16:02  $0^{\circ}II$ direct -4119 Sep 20 j 22:14 16°る37'18 -4124 Sep 19 j 08:45 0ಂತಾ -4119 Nov 11 j 15:52 0°≈ -4124 Nov 09 j 10:17  $0^{\circ}\Omega$ -4119 Dec 31 j 09:15 25°≈16'29 asc. node -4123 Jan 09 j 10:32 -4118 Jan 08 j 19:13 0°) -4123 Feb 21 j 20:32 -4118 Mar 01 j 00:47  $0^{\circ}\Upsilon$ retrograde 9°m/28'13 -4118 Apr 19 j 06:45 opposition -4123 Mar 26 j 19:00 3° m 15'29 2°59'16 0°8 greatest brilliancy -4123 Mar 27 j 19:37 2° m 55'48 -2.4m -4118 Jun 06 i 00:04  $0^{\circ}II$ min. Earth dist. -4123 Apr 03 j 22:57 0° Mp 39'20 0.44706 AU evening set -4118 Jun 19 i 05:42 8° II 31'10 -4123 Apr 06 j 02:36 30°RΩ max. Earth dist. -4118 Jul 12 j 14:54 23°II49'03 2.60183 AU direct -4123 May 01 j 20:28 25°**Ω**44'35 -4118 Jul 21 j 22:13 0ಂತಾ desc. node -4123 May 14 j 16:41 26°Ω52'02 -4123 May 27 j 12:17 0°m -4118 Aug 05 j 12:17 9°548'34 1°10'16 conjunction -4123 Jul 25 j 05:59 -4118 Aug 05 j 12:43 9°549'18 1°10'27 0∘ഹ minimum elong 0°M -4118 Sep 03 j 20:38 -4123 Sep 07 j 02:23  $0^{\circ}\Omega$ -4118 Sep 22 j 11:49 -4123 Oct 18 j 13:52 0°×7 13°**Ω**08'29 morning rise 0°る -4118 Oct 15 j 21:33 0° m -4123 Nov 29 j 03:13 -4122 Jan 10 j 19:57 0°22 -4118 Nov 25 j 09:41 0∘**⊽** -4122 Feb 24 j 02:38 0°**)**€ -4117 Jan 03 j 22:15 0°M 21°**)** 20'48 -4117 Jan 04 j 18:13 0°M38'09 asc. node -4122 Mar 28 j 13:08 desc. node 24°**)** 53'50 0°**∡**7 evening set -4122 Apr 03 j 00:09 -4117 Feb 12 j 05:23  $0^{\circ}\Upsilon$ 0°₹ -4122 Apr 10 j 21:07 -4117 Mar 24 j 07:38 -4117 May 05 j 19:40 0°≈ -4122 May 21 j 19:32 26°**Y**17'14 0°29'41 -4117 Jun 23 j 18:53 0°**)**€ conjunction minimum elong -4122 May 21 j 18:31 26°**Y**15'36 0°29'45 retrograde -4117 Aug 26 j 15:55 20°\(\dagger)35'38 max. Earth dist. -4122 May 25 j 04:06 28°**Y**25'53 2.66712 AU min. Earth dist. -4117 Sep 29 j 13:05 12°**¥**57′25 0.58924 AU 10°**)** 45′06 -1°50′26 -4122 May 27 j 15:04 0°8 opposition -4117 Oct 05 j 03:02 -4122 Jul 06 j 22:26 25°842'41 -4117 Oct 04 j 18:50 morning rise greatest brilliancy 10°**¥**53'11 -1.7m

direct

2°¥13'04

-4117 Nov 11 j 02:35

-4122 Jul 13 j 15:34

 $\mathbb{I}^{\circ 0}$ 

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 29 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -4400 i	n astronomical co	unting style is the year	4401 BCE in historical c	ounting style.	
asc. node	-4117 Nov 18 j 09:16	2° <b>)</b> 32'36		minimum elong	-4111 Jan 26 j 08:57	5° <b>る</b> 57'47	1°07'59
	-4116 Feb 03 j 00:48	$0^{\circ}$ Y			-4111 Feb 27 j 23:33	0° <b>≈</b>	
	-4116 Mar 28 j 09:12	0°B		max. Earth dist.	-4111 Mar 14 j 05:29		2.46888 AU
	-4116 May 16 j 21:11	$\Pi$ °0		morning rise	-4111 Mar 29 j 11:56	20° <b>≈</b> 57'37	
	-4116 Jul 02 j 07:37	0°®			-4111 Apr 11 j 13:38	0° <b>∀</b>	
evening set	-4116 Jul 29 j 19:01	18° <b>©</b> 37'40		_	-4111 May 26 j 11:39	0° <b>Υ</b>	
max. Earth dist.	-4116 Aug 14 j 05:44		2.49628 AU	asc. node	-4111 Jul 10 j 10:17	28° <b>Y</b> °25'49	
	-4116 Aug 15 j 02:17	$0 {\circ} \Omega$			-4111 Jul 12 j 23:43	0° <b>B</b>	
. ,.	4116 G 10:05 02	250 0 17151	0041110		-4111 Sep 02 j 06:44	0° <b>Ⅱ</b>	
conjunction	-4116 Sep 19 j 05:03	25° <b>Ω</b> 17'51			-4111 Nov 05 j 14:34	0°ତ୍ତ 6° <b>ତ୍ତ</b> 49'57	
minimum elong	-4116 Sep 19 j 06:57	25° <b>Ω</b> 21'21	0°41′25	retrograde	-4111 Dec 12 j 01:40	6°9949'57 30°R∏	
	-4116 Sep 25 j 13:59 -4116 Nov 04 j 08:02	0 <b>்⊽</b> 0∘∭		opposition	-4110 Jan 14 j 10:25 -4110 Jan 18 j 20:36	30°KⅡ 28°Ⅱ19'41	5002105
morning rise	-4116 Nov 14 j 12:57	0 <u>ჲ</u> 7° <b>ჲ</b> 51'19		greatest brilliancy	-4110 Jan 19 j 18:46	28 Щ1941 27°Щ58'24	-1.6m
desc. node	-4116 Nov 21 j 15:36	13° <b>£</b> 21'15		min. Earth dist.	-4110 Jan 24 j 12:22	26° <b>Ⅱ</b> 09'38	0.61165 AU
dese. Hode	-4116 Dec 13 j 01:16	0°M		direct	-4110 Feb 28 j 18:12	18° <b>Ⅲ</b> 27'23	0.01103 AC
	-4115 Jan 20 j 13:15	0° <b>∡</b> 7		uncet	-4110 Apr 16 j 23:11	0°95	
	-4115 Feb 28 j 17:10	0°₹			-4110 Jun 11 j 00:53	0°€0	
	-4115 Apr 10 j 12:17	0° <b>≈</b>		desc. node	-4110 Jul 14 j 08:22	22° <b>Ω</b> 15'27	
	-4115 May 24 j 04:42	0° <b>)</b> €		desc. node	-4110 Jul 25 j 06:37	0° m)	
	-4115 Jul 12 j 10:21	0° <b>Υ</b>			-4110 Sep 03 j 17:34	0∘ <b>⊽</b>	
retrograde	-4115 Oct 01 j 01:12	27° <b>Y</b> ′59'18			-4110 Oct 12 j 14:02	0°M₊	
asc. node	-4115 Oct 05 j 10:47	27° <b>Y</b> ′51'30			-4110 Nov 20 j 04:57	0° <b>∡</b> 7	
min. Earth dist.	-4115 Nov 08 j 04:43	18° <b>Y</b> ′52'32	0.65911 AU		-4110 Dec 29 j 15:01	0°ප	
opposition	-4115 Nov 10 j 02:59	18° <b>Y</b> ′05'59	1°20'44	evening set	-4109 Jan 26 j 11:07	20° <b>る</b> 31'57	
greatest brilliancy	-4115 Nov 10 j 00:02	18° <b>Ƴ</b> 08'56	-1.4m	Ü	-4109 Feb 08 j 14:08	0° <b>≈</b>	
direct	-4115 Dec 19 j 19:07	8° <b>Y</b> 35'59			-4109 Mar 23 j 12:27	0° <b>∀</b>	
	-4114 Mar 01 j 09:04	0°B			J		
	-4114 Apr 25 j 15:05	$\Pi^{\circ}0$		conjunction	-4109 Mar 24 j 09:36	0° <b>¥</b> 36′03	-0°36'12
	-4114 Jun 12 j 18:10	0ಂತಾ		minimum elong	-4109 Mar 24 j 11:17	0° <b>)</b> 38′56	0°36'17
	-4114 Jul 26 j 23:17	$0^{\circ}\Omega$		max. Earth dist.	-4109 Apr 20 j 10:11	18° <b>)</b> 47′02	2.58568 AU
	-4114 Sep 06 j 08:39	0° <b>m</b>			-4109 May 07 j 10:29	$0^{\circ}$ Y	
evening set	-4114 Sep 18 j 15:00	9° <b>m</b> 12'10		morning rise	-4109 May 15 j 21:37	5° <b>Y</b> 31'10	
desc. node	-4114 Oct 09 j 12:44	25° <b>m</b> 09'50		asc. node	-4109 May 28 j 08:19	13° <b>Y</b> '34'19	
	-4114 Oct 15 j 18:59	0∘ <b>亚</b>			-4109 Jun 23 j 02:02	$9^{\circ}$ 8	
max. Earth dist.	-4114 Oct 29 j 05:32	10° <b>≏</b> 27'16	2.38085 AU		-4109 Aug 10 j 05:47	$\Pi$ °0	
					-4109 Sep 29 j 11:22	$0$ $\circ$	
conjunction	-4114 Nov 18 j 06:42				-4109 Nov 24 j 14:58	$0^{\circ}\Omega$	
minimum elong	-4114 Nov 18 j 04:25		0°27'58	retrograde	-4108 Jan 29 j 12:44	19° <b>Ω</b> 01'35	
	-4114 Nov 23 j 03:26	0° <b>M</b> ₊		opposition	-4108 Mar 04 j 05:32	12° <b>Ω</b> 00'52	
	-4114 Dec 31 j 07:53	0° <b>∡</b> ¹		greatest brilliancy	-4108 Mar 05 j 15:25	11° <b>Ω</b> 31'31	-2.1m
morning rise	-4113 Jan 24 j 21:53	19° <b>∡</b> 03'46		min. Earth dist.	-4108 Mar 12 j 17:21	9° <b>Ω</b> 05'11	0.49853 AU
	-4113 Feb 08 j 05:36	್ತಿ		direct	-4108 Apr 11 j 11:46	3° <b>Ω</b> 25'20	
	-4113 Mar 20 j 15:57	0° <b>≈</b>		desc. node	-4108 May 31 j 08:43	17° <b>Ω</b> 19'17	
	-4113 May 02 j 08:24	0° <b>ℋ</b> 0° <b>Ƴ</b>			-4108 Jun 23 j 14:38	0° <b>m</b> )	
	-4113 Jun 17 j 01:40	0°8			-4108 Aug 08 j 00:33 -4108 Sep 18 j 01:22	0° <b>Մ</b>	
asc. node	-4113 Aug 06 j 17:35 -4113 Aug 23 j 11:44	8° <b>8</b> 49'10			-4108 Sep 18 j 01.22 -4108 Oct 28 j 02:45	0° <b>⊼</b> '	
asc. Houe	-4113 Aug 23 j 11.44	0°Ⅱ			-4108 Oct 28 j 02.43	0°る	
retrograde	-4113 Nov 04 j 21:22	1° <b>Ⅱ</b> 46'39			-4107 Jan 18 j 16:33	0° <b>≈</b>	
retrograde	-4113 Nov 04 j 21:22	30°R <b>8</b>			-4107 Mar 03 j 10:28	0° <b>∺</b>	
opposition	-4113 Dec 14 j 08:36	22° <b>8</b> 23'01	3°41'32	evening set	-4107 Mar 17 j 03:23	9° <b>∺</b> 09'38	
greatest brilliancy	-4113 Dec 14 j 12:34		-1.3m	asc. node	-4107 Apr 14 j 05:23	27° <b>)</b> 38'14	
min. Earth dist.	-4113 Dec 16 j 05:13	21° <b>8</b> 38'39	0.66738 AU	use. Itsue	-4107 Apr 17 j 20:27	0°Υ	
direct	-4112 Jan 24 j 09:42	12° <b>8</b> 25'03	0.00750710		110 / 11p1 1 / j 20.2 /	V 1	
	-4112 Mar 26 j 22:40	0°Ⅱ		conjunction	-4107 May 06 j 12:33	12° <b>Y</b> °05'08	0°12'38
	-4112 May 20 j 12:52	0°20		minimum elong	-4107 May 06 j 12:03	12° <b>Υ</b> '04'19	0°12'39
	-4112 Jul 05 j 12:04	0°N		behind sun begin	-4107 May 05 j 23:52	11° <b>Y</b> '44'41	
	-4112 Aug 16 j 10:08	0° m/		behind sun end	-4107 May 07 j 00:14	12° <b>Y</b> °23'56	
desc. node	-4112 Aug 26 j 10:22	7° <b>m</b> 27'48		max. Earth dist.	-4107 May 15 j 18:39		2.65479 AU
	-4112 Sep 24 j 23:01	0∘ <b>⊽</b>			-4107 Jun 03 j 11:07	0°8	
	-4112 Nov 02 j 07:09	0°M		morning rise	-4107 Jun 22 j 18:07	12° <b>8</b> 17'35	
evening set	-4112 Nov 22 j 06:16	15°M42'52		-	-4107 Jul 20 j 15:01	$\Pi$ °0	
	-4112 Dec 10 j 11:45	0° <b>∡</b> ¹			-4107 Sep 05 j 21:55	$0$ $\circ$ $\odot$	
	-4111 Jan 18 j 11:08	ರ∘ರ			-4107 Oct 23 j 10:34	$0^{\circ}\Omega$	
					-4107 Dec 11 j 04:14	0° <b>m</b>	
conjunction	-4111 Jan 26 j 08:37	5° <b>る</b> 57'10	-1°07'47		-4106 Feb 02 j 20:01	0∘ <b>⊽</b>	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4106 Apr 08 j 22:09 19°**≏**48'38 -4101 Apr 06 j 14:07 0°8 retrograde -4106 Apr 18 j 10:54 19°**₽**14'49 -4101 May 25 j 04:48  $\Pi^{\circ}0$ desc. node -4106 May 09 j 12:29 14°**£**42'05 -1°33'19 -4101 Jul 10 j 08:50 0ಂತಾ opposition -4106 May 09 j 16:19 greatest brilliancy -4101 Jul 13 j 22:22 14°**♀**39'29 -2.9m 2°9522'56 evening set -4101 Jul 31 j 13:14 -4106 May 13 j 00:33 min. Earth dist. 13°**≏**44'59 0.38554 AU max. Earth dist. 14°**©**18'39 2.54225 AU -4106 Jun 09 j 23:13 direct 9°**₽**11'25 -4101 Aug 23 j 04:09  $0^{\circ}\Omega$ -4106 Aug 11 j 19:42 0°M -4106 Sep 29 j 13:16 0°**√** -4101 Sep 01 j 04:22 conjunction 6°**£**22′06 0°57'50 0°ರ -4101 Sep 01 j 05:59 -4106 Nov 13 j 08:41 minimum elong 6°**Ω**24'58 0°57'58 -4106 Dec 27 j 23:53 0°≈ -4101 Oct 03 j 20:05 0° m -4105 Feb 11 j 12:18 0°**)**€ morning rise -4101 Oct 23 j 09:27 14° m/32'22 -4101 Nov 12 j 19:59 asc. node -4105 Mar 02 j 01:27 12°**)** 01'43 0∘**⊽**  $0^{\circ}\Upsilon$ -4105 Mar 30 j 01:04 desc. node -4101 Dec 09 j 09:28 20°**£**23'50 evening set -4105 Apr 27 j 19:09 18°**Y**19'25 -4101 Dec 21 j 19:13 0°M -4105 May 16 j 03:56 0°8 -4100 Jan 29 j 12:31 0°**⊼** max. Earth dist. -4105 Jun 08 j 20:13 15°**8**04'40 2.66977 AU -4100 Mar 08 j 21:52 0°ರ -4100 Apr 19 j 01:51 0°≈ conjunction -4105 Jun 14 j 00:23 18°**8**22'53 0°51'59 -4100 Jun 02 j 18:12 0°) minimum elong -4105 Jun 13 j 23:06 18°**8**20'51 0°52'07 -4100 Jul 26 j 09:28  $0^{\circ}\Upsilon$ -4105 Jul 02 j 03:39  $0^{\circ}II$ retrograde -4100 Sep 17 j 09:05 14°**Y**21'52 morning rise -4105 Jul 29 j 06:52 17°**Ⅲ**31'59 asc. node -4100 Oct 22 j 01:26 6°Y32'25 -4105 Aug 17 j 08:50 0ಂತಾ min. Earth dist. -4100 Oct 24 i 00:14 5°**Υ**45'52 0.63890 AU -4105 Oct 01 j 12:00  $0^{\circ}\Omega$ -4100 Oct 27 i 09:31 4°**Υ**24'17 0°12'37 opposition -4105 Nov 14 j 13:42 0° m greatest brilliancy -4100 Oct 27 j 08:51 4°**Υ**24'58 -1.5m -4105 Dec 27 j 21:08 0∘**⊽** -4100 Nov 08 j 00:51 30°R**)**€ -4104 Feb 09 j 01:19 0°M -4100 Dec 05 j 04:16 25°**升**12'50 direct -4104 Mar 05 j 11:36 17°ML18'32 -4099 Jan 04 j 02:27  $0^{\circ}\Upsilon$ desc node -4104 Mar 24 j 20:43 0°×7 -4099 Mar 12 j 23:07 0°8 -4104 May 19 j 09:21 0°る -4099 May 04 j 00:38  $0^{\circ}II$ -4104 Jun 21 j 12:04 -4099 Jun 20 j 07:06 000 6°る58'26 retrograde -4104 Jul 18 j 07:29 -4099 Aug 03 j 06:39 2°る13'49 0.42277 AU  $0^{\circ}\Omega$ min. Earth dist. greatest brilliancy -4104 Jul 24 j 06:34 -4099 Aug 28 j 05:39 0°**る**20'41 -2.6m 17°**Ω**53'37 evening set -4099 Sep 13 j 16:08 -4104 Jul 25 j 20:18 29°**х** 50'31 -6°26'16 opposition 0° m 1° m 53'25 2.42016 AU -4104 Jul 25 j 08:25 -4099 Sep 16 j 05:02 30°₽**⋌**7 max. Earth dist. -4104 Aug 26 j 03:04 23°**х** 56′04 direct -4104 Sep 27 j 13:49 -4099 Oct 23 j 18:10 0°**2**5'44 0°01'50 0°궁 conjunction -4104 Nov 29 j 00:30 -4099 Oct 23 j 18:20 0°≈ minimum elong 0°**£**26'03 0°01'50 -4103 Jan 16 j 23:55 28°≈47'14 behind sun begin -4099 Oct 22 j 16:58 29° m 37'08 asc. node -4103 Jan 19 j 00:09 0°**)**€ behind sun end -4099 Oct 24 j 19:41 1°**£**15′01 -4103 Mar 09 j 03:19  $0^{\circ}\Upsilon$ -4099 Oct 23 j 04:49 0∘**⊽** -4103 Apr 26 j 12:25  $0^{\circ}$ 8 desc. node -4099 Oct 26 j 06:41 2°**£**22'41 -4103 Jun 04 j 05:17 24°826'21 -4099 Nov 30 j 15:57 0°M evening set -4103 Jun 12 j 21:47  $\mathbb{I}^{\circ 0}$ -4099 Dec 26 j 21:42 20°M35'46 morning rise max. Earth dist. -4103 Jul 02 j 03:28 12°II26'17 2.63095 AU -4098 Jan 07 j 22:17 0°**∡**7 -4098 Feb 15 j 21:00 0°정 -4103 Jul 20 i 22:33 conjunction 24°**II**46'14 1°10'47 -4098 Mar 28 i 08:31 0°≈ -4103 Jul 20 i 22:15 minimum elong 24°II45'44 1°10'58 -4098 May 10 j 05:34 0°) -4103 Jul 28 i 19:39  $0^{\circ}\Upsilon$ 0ಂತಾ -4098 Jun 25 i 17:02 morning rise -4103 Sep 05 i 08:49 26°907'35 -4098 Aug 18 j 15:41 0°8 -4103 Sep 10 i 23:13  $0^{\circ}\Omega$ asc. node -4098 Sep 09 i 02:16 9°824'03 -4103 Oct 23 j 09:09 0°m -4098 Oct 22 i 05:18 18°**8**54'53 retrograde -4103 Dec 03 j 08:56 0∘**⊽** -4098 Dec 01 j 01:34 9°816'52 2°53'01 opposition -4102 Jan 12 j 10:32 0°M -4098 Dec 01 j 01:01 9°**8**17'24 -1.3m greatest brilliancy desc. node -4102 Jan 21 j 10:44 6°M47'16 min. Earth dist. -4098 Dec 01 j 10:28 9°**8**07'57 0.67181 AU -4102 Feb 21 j 08:13 0°×7 -4097 Jan 01 j 08:50 30°RY 29°Y26'29 -4102 Apr 03 j 07:17 0°정 direct -4097 Jan 10 j 17:57 -4097 Jan 20 j 10:53 -4102 May 17 j 19:02 0°& 0°8 -4102 Jul 17 j 19:39 0°**)**€ -4097 Apr 09 j 14:24  $0^{\circ}\Pi$ -4102 Aug 10 j 20:01 -4097 May 30 j 10:53 0ಂತಾ retrograde 3°**)** 44'14 -4102 Sep 02 j 17:29 -4097 Jul 14 j 11:53  $0^{\circ}\Omega$ 30°R≈ min. Earth dist. -4102 Sep 11 j 17:03 26°≈50'54 0.54708 AU -4097 Aug 25 j 02:49 0° m -4102 Sep 18 j 13:28 24°≈12'39 -3°17'01 -4097 Sep 13 j 03:38 14° m 19'07 opposition desc. node greatest brilliancy -4102 Sep 17 j 19:40 24°≈29'47 -1.9m -4097 Oct 03 j 13:32 0∘**⊽** direct -4102 Oct 24 j 02:49 16°≈14'31 evening set -4097 Oct 27 j 05:20 18°**£**28'27 asc. node -4102 Dec 05 j 00:37 25°≈15'14 -4097 Nov 10 j 20:51 0°M -4102 Dec 16 j 19:14 0°**)**€ -4097 Dec 19 j 00:25 0°**∡**7

-4101 Feb 14 j 00:01

 $0^{\circ}\Upsilon$ 

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

	ical year style is used: Th	ie year -4400 i	in astronomical co	unting style is the year	4401 BCE in historical c	ounting style.	
conjunction	-4097 Dec 31 j 15:02	9° <b>х</b> 49′05			-4092 Dec 26 j 04:04	0° <b>™</b>	
minimum elong	-4097 Dec 31 j 12:43	9° <b>х</b> 44′35	1°02'43	retrograde	-4091 Mar 09 j 08:17	23° Mp 06'00	
	-4096 Jan 26 j 22:06	0°ಕ		opposition	-4091 Apr 10 j 08:17	17° <b>m</b> 20'40	1°39'31
max. Earth dist.	-4096 Feb 17 j 22:08	16° <b>පි</b> 29'53	2.41697 AU	greatest brilliancy	-4091 Apr 10 j 21:24	17° <b>m</b> ) 10'44	-2.6m
morning rise	-4096 Mar 06 j 17:51	29° <b>る</b> 33'38		min. Earth dist.	-4091 Apr 17 j 11:44	15° <b>m</b> ) 11'18	0.42070 AU
	-4096 Mar 07 j 08:24	0° <b>≈</b>		desc. node	-4091 May 05 j 02:43	11° Mp 12'42	
	-4096 Apr 18 j 21:22	0° <b>)</b> €		direct	-4091 May 14 j 19:03	10° m 33'40	
	-4096 Jun 02 j 23:03	0°Υ •••			-4091 Jul 13 j 09:46	0∘ <b>亚</b>	
1	-4096 Jul 21 j 04:50	0°8			-4091 Aug 30 j 03:09	0°M 0°. <b>⊼</b>	
asc. node	-4096 Jul 27 j 02:21	3° <b>႘</b> 29'34			-4091 Oct 12 j 00:31	0° <b>∡</b> ¹	
	-4096 Sep 13 j 10:23	0°П 22°П 5 4110			-4091 Nov 23 j 08:48	್ %°⊗	
retrograde	-4096 Nov 26 j 10:40	22° <b>Ⅱ</b> 54'10	4940107		-4090 Jan 05 j 13:52	0° <b>∺</b>	
opposition	-4095 Jan 04 j 01:11 -4095 Jan 04 j 15:31	13° <b>Ⅱ</b> 59'34		4.	-4090 Feb 19 j 04:36		
greatest brilliancy min. Earth dist.	-	13° <b>∏</b> 45'34 12° <b>∏</b> 21'31	-1.4m 0.64129 AU	asc. node	-4090 Mar 18 j 18:33	18° <b>)</b> €05'16 0° <b>°</b>	
	-4095 Jan 08 j 05:38 -4095 Feb 14 j 05:57	3° <b>П</b> 59'29	0.04129 AU	evening set	-4090 Apr 06 j 04:04 -4090 Apr 12 j 05:38	3° <b>Υ</b> 54'26	
direct	-4095 May 02 j 22:03	о°©		evening set	-4090 Apr 12 j 05:38	0° <b>と</b>	
	-4095 Jun 21 j 04:55	0° <b>U</b>			-4090 May 23 J 00.19	0.0	
desc. node	-4095 Jul 31 j 02:46	27° <b>Ω</b> 47'49		conjunction	-4090 May 30 j 08:49	4° <b>8</b> 41'26	0°38'38
dese. Hode	-4095 Aug 03 j 03:24	0°m)		minimum elong	-4090 May 30 j 07:37	4° <b>8</b> 39'31	
	-4095 Sep 12 j 02:02	0∘ <b>⊽</b>		max. Earth dist.	-4090 May 30 j 14:37		2.67033 AU
	-4095 Oct 20 j 15:24	0° <b>m</b>		man. Barur diot.	-4090 Jul 08 j 23:56	0°П	2.07033110
	-4095 Nov 28 j 00:19	0° <b>∡</b> 7		morning rise	-4090 Jul 15 j 01:34	3° <b>∏</b> 53'21	
evening set	-4094 Jan 02 j 17:40	27° <b>∡</b> ¹23'54			-4090 Aug 24 j 12:32	0° <b>©</b>	
8	-4094 Jan 06 j 04:28	8°0			-4090 Oct 09 j 08:10	0°N	
	-4094 Feb 15 j 21:51	0° <b>≈</b>			-4090 Nov 23 j 14:28	0° <b>m</b>	
	,				-4089 Jan 07 j 20:37	0∘ <u>v</u>	
conjunction	-4094 Mar 04 j 05:08	11° <b>≈</b> 37′20	-0°53'09		-4089 Feb 23 j 13:53	$0^{\circ}$ M	
minimum elong	-4094 Mar 04 j 07:19	11° <b>≈</b> 41'12	0°53'17	desc. node	-4089 Mar 23 j 04:18	16°M11'30	
_	-4094 Mar 30 j 15:22	0° <b>∀</b>			-4089 Apr 20 j 18:16	0° <b>∡</b> ¹	
max. Earth dist.	-4094 Apr 08 j 04:10	5° <b>)</b> 49′04	2.54497 AU	retrograde	-4089 May 27 j 10:11	8° <b>₺</b> 06'03	
morning rise	-4094 Apr 28 j 23:22	19° <b>)</b> 46′48		min. Earth dist.	-4089 Jun 23 j 14:47	3° <b>∡</b> ³39'35	0.38718 AU
	-4094 May 14 j 11:31	$0^{\circ}$ Y		greatest brilliancy	-4089 Jun 27 j 07:42	2° <b>҂</b> ³37′08	-2.8m
asc. node	-4094 Jun 13 j 23:48	19° <b>Ƴ</b> 41'10		opposition	-4089 Jun 28 j 08:09	2° <b>҂</b> 19'55	-6°01'15
	-4094 Jun 30 j 07:31	$0^{\circ}$ 8			-4089 Jul 07 j 01:50	30°RM	
	-4094 Aug 18 j 06:10	$\Pi$ °0		direct	-4089 Jul 28 j 05:41	27°M11'10	
	-4094 Oct 10 j 00:42	$0$ $\circ$			-4089 Aug 18 j 14:32	0° <b>∡</b> ¹	
	-4094 Dec 24 j 09:00	$0^{\circ}\Omega$			-4089 Oct 23 j 09:27	8°0	
retrograde	-4093 Jan 08 j 17:38	1° <b>Ω</b> 22'14			-4089 Dec 12 j 02:43	0° <b>≈</b>	
	-4093 Jan 23 j 10:58	30° <b>₹</b> 5			-4088 Jan 29 j 00:30	0° <b>∀</b>	
opposition	-4093 Feb 13 j 21:08	23° <b>©</b> 40'28		asc. node	-4088 Feb 03 j 15:59	3° <b>)</b> 32′39	
greatest brilliancy	-4093 Feb 15 j 05:43	23°5510'42	-1.8m		-4088 Mar 16 j 19:53	0° <b>Υ</b>	
min. Earth dist.	-4093 Feb 21 j 13:56	20°952'16	0.54855 AU		-4088 May 03 j 14:04	0°8	
direct	-4093 Mar 25 j 14:52	14°9521'44		evening set	-4088 May 20 j 08:28	10° <b>8</b> 36'05	
	-4093 May 19 j 02:42	0°N		P. d. F.	-4088 Jun 19 j 18:00	0°П	0.65005.444
desc. node	-4093 Jun 18 j 02:32	16° <b>Ω</b> 48'49		max. Earth dist.	-4088 Jun 22 j 12:09	1°Щ46′24	2.65235 AU
	-4093 Jul 08 j 13:18 -4093 Aug 19 j 20:36	0 <b>்⊽</b> 0°™		conjunction	-4088 Jul 05 j 23:09	10° <b>Ⅲ</b> 28'32	1°06'33
	-4093 Aug 19 j 20.30	0° <b>™</b>		minimum elong	-4088 Jul 05 j 22:16	10 <b>H</b> 28 32 10° <b>H</b> 27'08	1°06'43
	-4093 Sep 28 j 13.17 -4093 Nov 06 j 21:38	0° <b>⊼</b> ¹		minimum ciong	-4088 Aug 04 j 17:26	10 <b>п</b> 2708	1 0043
	-4093 Dec 16 j 20:55	0°ਤੇ		morning rise	-4088 Aug 20 j 12:47	10° <b>©</b> 32'42	
	-4092 Jan 27 j 07:51	0° <b>≈</b>		11101111115 1130	-4088 Sep 18 j 04:19	0°Ω	
evening set	-4092 Feb 27 j 21:39	21° <b>≈</b> 59'36			-4088 Oct 31 j 02:35	0° mp	
evening sec	-4092 Mar 10 j 15:42	0° <b>\</b>			-4088 Dec 11 j 18:25	0∘ <b>ত</b>	
	10,2 Mar 10 j 15.12	۰۸			-4087 Jan 21 j 15:06	0°M	
conjunction	-4092 Apr 20 j 09:33	27° <b>¥</b> 07'15	-0°06'02	desc. node	-4087 Feb 07 j 04:32	12°ML12'03	
minimum elong	-4092 Apr 20 j 09:48	27° <b>₭</b> 07'39			-4087 Mar 03 j 12:33	0° <b>∡</b> 7	
behind sun begin	-4092 Apr 19 j 14:14	26° <b>)</b> ₹35'38			-4087 Apr 15 j 04:09	0°ප	
behind sun end	-4092 Apr 21 j 05:21	27° <b>)</b> €39'40			-4087 Jun 04 j 03:25	0° <b>≈</b>	
	-4092 Apr 24 j 19:11	0° <b>Υ</b>		retrograde	-4087 Jul 24 j 07:09	14° <b>≈</b> 30'38	
asc. node	-4092 Apr 30 j 20:53	3° <b>Y</b> ′57'27		min. Earth dist.	-4087 Aug 23 j 00:24	8° <b>≈</b> 28'16	0.49879 AU
max. Earth dist.	-4092 May 06 j 04:17	7° <b>Ƴ</b> 24'17	2.63397 AU	opposition	-4087 Aug 30 j 19:52	5° <b>≈</b> 36′08	-4°45'17
morning rise	-4092 Jun 08 j 05:43	28° <b>Y</b> ′39'26		greatest brilliancy	-4087 Aug 29 j 14:48	6° <b>≈</b> 02'53	-2.2m
	-4092 Jun 10 j 08:15	0°8			-4087 Sep 18 j 03:51	30°Ŗる	
	-4092 Jul 27 j 18:08	$\Pi$ °0		direct	-4087 Oct 03 j 17:53	28° <b>る</b> 20'25	
	-4092 Sep 13 j 20:05	$0$ $\circ$ $50$			-4087 Oct 20 j 06:56	0° <b>≈</b>	
	-4092 Nov 02 j 06:02	$0$ ° $\Omega$		asc. node	-4087 Dec 21 j 15:22	24° <b>≈</b> 26'41	

-	nical year style is used: Th		•	· · · · · · · · · · · · · · · · · · ·		, ,	C 32
Attention, astronom	-4086 Jan 01 j 06:05	0° <b>∺</b>	in astronomicai co	builting style is the year	-4082 Dec 26 j 13:43	ounting style. 0° <b>∡</b> ¹	
	-4086 Feb 23 j 08:59	0° <b>Υ</b>			-4082 Dec 20 j 13:43	0°る	
	-4086 Apr 14 j 07:33	0°8		morning rise	-4081 Feb 03 j 10.27	0 0 4° <b>ठ</b> 47'32	
	-4086 Jun 01 j 07:43	0°II		morning rise	-4081 Mar 15 j 19:34	4 O4/32 0°≈	
evening set	-4086 Jun 28 j 01:00	0 H 17°H15'16			-4081 Mar 13 j 19.34 -4081 Apr 27 j 08:54	0 <b>≈</b> 0° <b>∺</b>	
evening set	•	0°Θ				0 <del>Υ</del> 0° <b>Υ</b>	
may Forth dist	-4086 Jul 17 j 08:00 -4086 Jul 19 j 01:44	1°9509'43	2 50220 ATT		-4081 Jun 11 j 17:47	0°8	
max. Earth dist.	-4080 Jul 19 J 01.44	1 30943	2.58229 AU	asc. node	-4081 Jul 31 j 04:47 -4081 Aug 13 j 16:30	7° <b>8</b> 31'38	
conjunction	-4086 Aug 14 j 20:37	19° <b>©</b> 19'59	1°07'29	asc. node	-4081 Sep 29 j 21:06	0°П	
minimum elong	-4086 Aug 14 j 21:31	19° <b>©</b> 21'32	1°07'39	retrograde	-4081 Nov 12 j 22:01	9° <b>Ц</b> 40'00	
minimum clong	-4086 Aug 30 j 05:25	0°Ω	1 0/39	opposition	-4081 Dec 22 j 03:24	0° <b>I</b> I25'41	4°05'46
morning rise	-4086 Oct 03 j 02:01	24° <b>Ω</b> 08'21		greatest brilliancy	-4081 Dec 22 j 10:42	0° <b>Д</b> 18'28	-1.4m
morning risc	-4086 Oct 11 j 03:05	0° m)		greatest offinaley	-4081 Dec 23 j 05:21	30°R <b>8</b>	-1.4111
	-4086 Nov 20 j 10:35	0∘ <b>⊽</b>		min. Earth dist.	-4081 Dec 24 j 20:05		0.66087 AU
desc. node	-4086 Dec 26 j 02:36	ა <b>_</b> 27° <b>ჲ</b> 12'10		direct	-4080 Feb 01 j 07:51	20° <b>8</b> 25'24	0.00007 710
dese. Hode	-4086 Dec 29 j 17:59	0°M		direct	-4080 Mar 15 j 22:49	0°Ⅱ	
	-4085 Feb 06 j 19:16	0° <b>⊼</b> ¹			-4080 May 14 j 06:01	0°©	
	-4085 Mar 18 j 13:41	0°ਤ			-4080 Jun 30 j 03:17	0° <b>Ω</b>	
	-4085 Apr 29 j 09:49	0° <b>≈</b>			-4080 Aug 11 j 09:03	0° m/y	
	-4085 Jun 15 j 01:39	0° <b>)</b> €		desc. node	-4080 Aug 16 j 19:49	4° <b>m</b> ) 01'55	
retrograde	-4085 Sep 04 j 03:47	29° <b>¥</b> 50'43		dese. node	-4080 Sep 20 j 01:09	0∘ <b>⊽</b>	
min. Earth dist.	-4085 Oct 09 j 02:00	21° <b>)</b> 50'33	0.60934 AU		-4080 Oct 28 j 10:59	0° <b>M</b>	
opposition	-4085 Oct 13 j 21:39	19° <b>¥</b> 55'28		greatest brilliancy	-4080 Nov 10 j 08:05	10°ML07'50	1.2m
greatest brilliancy	-4085 Oct 13 j 17:38	19° <b>¥</b> 59′28		8	-4080 Dec 05 j 16:39	0° <b>∡</b> 7	
asc. node	-4085 Nov 08 j 16:27	12° <b>)</b> €03'31		evening set	-4080 Dec 07 j 13:39	1° <b>∡</b> ¹27'40	
direct	-4085 Nov 20 j 14:14	11° <b>)</b> €07'47		8	-4079 Jan 13 j 16:57	5°0	
	-4084 Jan 25 j 12:18	$0^{\circ}$ $\Upsilon$			,		
	-4084 Mar 22 j 15:01	$0^{\circ}B$		conjunction	-4079 Feb 09 j 09:38	19° <b>ට</b> 54'17	-1°05'01
	-4084 May 11 j 21:24	$\Pi^{\circ}0$		minimum elong	-4079 Feb 09 j 11:07	19° <b>る</b> 57'02	1°05'12
	-4084 Jun 27 j 14:44	$0$ $\circ$ $\odot$			-4079 Feb 23 j 06:09	0° <b>≈</b>	
evening set	-4084 Aug 08 j 22:40	28°955'15		max. Earth dist.	-4079 Mar 24 j 09:29	20° <b>≈</b> 41'43	2.49715 AU
	-4084 Aug 10 j 11:29	$0^{\circ}\Omega$			-4079 Apr 06 j 20:03	0° <b>∀</b>	
max. Earth dist.	-4084 Aug 24 j 00:14		2.46919 AU	morning rise	-4079 Apr 10 j 04:07	2° <b>∺</b> 17'10	
	-4084 Sep 20 j 22:38	0° <b>m</b>			-4079 May 21 j 15:50	0° <b>Υ</b>	
				asc. node	-4079 Jun 30 j 15:57	25° <b>Ƴ</b> 33'12	
conjunction	-4084 Sep 30 j 22:42	7° <b>m</b> 27'28	0°28'44		-4079 Jul 07 j 19:33	0° <b>8</b>	
minimum elong	-4084 Oct 01 j 00:20	7° <b>m</b> 30'33	0°28'48		-4079 Aug 26 j 23:37	$\Pi$ °0	
	-4084 Oct 30 j 14:42	0∘ <b>⊽</b>			-4079 Oct 23 j 17:22	0°©	
desc. node	-4084 Nov 12 j 01:25	9° <b>₽</b> 36'35		retrograde	-4079 Dec 21 j 13:34	15°939'00	5000153
morning rise	-4084 Nov 29 j 00:57	22° <b>₽</b> 49'21		opposition	-4078 Jan 27 j 20:25	7°524'09	5°08'53
	-4084 Dec 08 j 05:26	0° <b>M</b> 0°. <b>₹</b>		greatest brilliancy	-4078 Jan 28 j 22:50	6°959'09	-1.6m
	-4083 Jan 15 j 14:40	0°⋜		min. Earth dist.	-4078 Feb 03 j 07:24	4°957'57	0.59157 AU
	-4083 Feb 23 j 15:40	0° <b>≈</b>		direct	-4078 Feb 18 j 18:48	30°RⅡ 27°Ⅱ40'04	
	-4083 Apr 05 j 06:31 -4083 May 18 j 12:44	0 <b>≈</b> 0° <b>∺</b>		direct	-4078 Mar 09 j 11:40 -4078 Mar 29 j 02:00	27 <b>ഥ</b> 40 04 0°ഇ	
	-4083 Jul 05 j 08:38	0° <b>Υ</b>			-4078 Jun 03 j 16:15	0° <b>U</b>	
	-4083 Sep 05 j 20:28	0°8		desc. node	-4078 Jul 04 j 18:42	19° <b>Ω</b> 57'30	
asc. node	-4083 Sep 05 j 20:28	4° <b>8</b> 56'02		desc. node	-4078 Jul 19 j 07:17	0° m)	
retrograde	-4083 Oct 08 j 18:53	5° <b>8</b> 59'27			-4078 Aug 29 j 05:59	0∘ <b>⊽</b>	
retrograde	-4083 Nov 08 j 01:40	30°RY			-4078 Oct 07 j 08:36	0° <b>™</b>	
opposition	-4083 Nov 17 j 20:12	26° <b>Y</b> ′10′35	1°56'52		-4078 Nov 15 j 03:34	0° <b>∡</b> ¹	
min. Earth dist.	-4083 Nov 16 j 17:40	26° <b>Y</b> '37'14	0.66647 AU		-4078 Dec 24 j 16:58	0°ਤ	
greatest brilliancy	-4083 Nov 17 j 17:21	26° <b>Y</b> 13′27	-1.4m		-4077 Feb 03 j 19:08	0° <b>≈</b>	
direct	-4083 Dec 27 j 22:31	16° <b>Ƴ</b> 32'09		evening set	-4077 Feb 07 j 19:45	2° <b>≈</b> 52'07	
	-4082 Feb 19 j 22:22	$9^{\circ}$ 8		C	-4077 Mar 18 j 19:36	0° <b>∀</b>	
	-4082 Apr 19 j 17:07	$\Pi^{\circ}0$			·		
	-4082 Jun 07 j 15:44	$0$ $\circ$ $\odot$		conjunction	-4077 Apr 04 j 00:19	10° <b>¥</b> 56'57	-0°25'19
	-4082 Jul 22 j 03:46	$0^{\circ}\Omega$		minimum elong	-4077 Apr 04 j 01:30	10° <b>¥</b> 58'56	0°25'23
	-4082 Sep 01 j 15:27	0° <b>m</b> )		max. Earth dist.	-4077 Apr 26 j 20:56		2.60509 AU
desc. node	-4082 Sep 29 j 22:53	21° <b>m</b> 24'49			-4077 May 02 j 18:31	$0^{\circ}$ Y	
	4002 0 4 01 10 22	22° m 48'38		asc. node	-4077 May 18 j 13:47	10° <b>Ƴ</b> 17'11	
evening set	-4082 Oct 01 j 18:32	-			4000 16 05:00 50		
evening set	-4082 Oct 11 j 02:07	0∘ <b>⊽</b>		morning rise	-4077 May 25 j 00:50	14° <b>Y</b> °27′27	
evening set	•	0° <b>™</b>		morning rise	-4077 Jun 18 j 07:52	$0^{\circ}B$	
·	-4082 Oct 11 j 02:07 -4082 Nov 18 j 10:07	0° <b>M</b>	0042110	morning rise	-4077 Jun 18 j 07:52 -4077 Aug 05 j 03:14	0°B 8°0	
conjunction	-4082 Oct 11 j 02:07 -4082 Nov 18 j 10:07 -4082 Dec 03 j 14:44	0° <b>ጤ</b> 11° <b>ጤ</b> 58'17		morning rise	-4077 Jun 18 j 07:52 -4077 Aug 05 j 03:14 -4077 Sep 23 j 09:18	0ಂಲ 0∘∏ 0∘X	
·	-4082 Oct 11 j 02:07 -4082 Nov 18 j 10:07	0°M 11°M58'17 11°M51'59	-0°43'19 0°43'23 2.37741 AU	morning rise	-4077 Jun 18 j 07:52 -4077 Aug 05 j 03:14	0°B 8°0	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4076 Feb 11 i 19:39 0° m 38'46 -4071 Mar 03 j 20:03  $0^{\circ}\Upsilon$ retrograde -4076 Feb 21 j 22:47 30°RΩ -4071 Apr 21 j 16:29 0°8 -4076 Mar 16 j 13:10 24°Ω03'47 3°43'25 -4071 Jun 08 j 06:40  $0^{\circ}II$ opposition greatest brilliancy -4071 Jun 12 j 18:55 2°**I**53'37 -4076 Mar 17 j 19:23 23°**Ω**38'37 -2.3m evening set -4076 Mar 25 j 00:34 -4071 Jul 08 j 03:09 19°**Ⅲ**21'07 2.61587 AU min. Earth dist. 21°**Ω**15'04 0.46999 AU max. Earth dist. -4076 Apr 22 j 16:53 direct 16°**Ω**00′53 -4071 Jul 24 j 05:39 0ಂಲ desc. node -4076 May 21 j 19:38 21°Ω21'24 0° m -4071 Jul 29 j 17:44 -4076 Jun 11 j 06:26 conjunction 3°9540'37 1°11'05 -4071 Jul 29 j 17:51 -4076 Jul 31 j 05:28 0∘ଫ minimum elong 3°9540'48 1°11'17 -4076 Sep 11 j 13:34 0°M -4071 Sep 06 j 07:17  $0^{\circ}\Omega$ -4076 Oct 22 j 07:10 0°**∡**¹ morning rise -4071 Sep 14 j 22:16 6°£01'31 0°る -4071 Oct 18 j 13:04 -4076 Dec 02 j 08:05 0° M -4075 Jan 13 j 15:24 0°≈ -4071 Nov 28 j 06:41 0°Ω -4075 Feb 26 j 14:46 0°**)**€ -4070 Jan 07 j 00:59 0°M evening set -4075 Mar 26 j 22:12 18° **)** 44'43 desc. node -4070 Jan 11 j 21:25 3°ML41'11 asc. node -4075 Apr 04 j 10:17 24°¥18'16 -4070 Feb 15 j 13:34 0°**⊼** -4075 Apr 13 j 04:24  $0^{\circ}\Upsilon$ -4070 Mar 27 j 22:28 0°ರ -4070 May 10 j 00:37 0°≈ conjunction -4075 May 15 j 09:03 20°**Y**44'53 0°22'47 -4070 Jun 30 j 13:44 0°) minimum elong -4075 May 15 j 08:12 20°**Ƴ**43'32 0°22'49 retrograde -4070 Aug 20 j 01:52 14°¥02'58 max. Earth dist. -4075 May 21 j 06:40 24°**Y**31'36 2.66264 AU min. Earth dist. -4070 Sep 22 j 02:07 6°**)**44'15 0.57132 AU -4075 May 29 j 20:13 0°8 opposition -4070 Sep 28 i 06:35 4°\;\;\;\\\19'08\ -2°26'22 morning rise -4075 Jun 30 j 22:36 20°827'44 greatest brilliancy -4070 Sep 27 i 18:36 4°**)**€30'50 -1.8m -4075 Jul 15 j 21:51  $\Pi$ °0 -4070 Oct 10 i 05:00 30°R≈ -4075 Aug 31 j 20:59 0ಂತಾ direct -4070 Nov 03 j 16:09 26°≈01'09 -4075 Oct 17 j 15:42  $0^{\circ}\Omega$ -4070 Nov 25 j 06:04 28°≈42'17 asc. node -4075 Dec 03 j 18:28 0°m -4070 Nov 30 j 08:28 0°\ -4074 Jan 21 j 19:47 0∘**⊽** -4069 Feb 07 j 03:48  $0^{\circ}\Upsilon$ -4069 Apr 01 j 05:11 0°8 -4074 Mar 22 j 14:43 oom. desc. node -4069 May 20 j 08:20 -4074 Apr 08 j 19:51 5°M05'08  $0^{\circ}\Pi$ -4069 Jul 05 j 17:09 -4074 Apr 27 j 01:10 7°**IL**07'22 000 retrograde -4074 May 27 j 11:50 -4069 Jul 23 j 09:53 2°ML03'51 -3°32'59 evening set 11°954'44 opposition greatest brilliancy -4074 May 27 j 11:11 -4069 Aug 08 j 12:40 22°559'38 2.51749 AU 2°M04'17 -2.9m max. Earth dist. -4074 May 28 j 00:53 -4069 Aug 18 j 13:15 min. Earth dist. 1°ML55'09 0.37751 AU 0 $\circ$  $\Omega$ -4074 Jun 04 j 10:36 30°**₹**Ω -4069 Sep 11 j 17:55 17°**Ω**16'06 0°49'14 direct -4074 Jun 26 j 21:29 26°**£**57'54 conjunction -4074 Jul 18 j 16:43 0°M minimum elong -4069 Sep 11 j 19:47 17°**Ω**19'28 0°49'20 -4074 Sep 19 j 19:56 0°**√** -4069 Sep 29 j 03:55 0° m -4074 Nov 06 j 07:54 0°ರ morning rise -4069 Nov 05 j 02:11 27° Mp 44'26 -4074 Dec 22 j 03:57 0°**≈** -4069 Nov 08 j 01:11 0∘**⊽** -4073 Feb 06 j 07:45 0°**)**€ desc. node -4069 Nov 29 j 19:02 16°**£**43'51 -4073 Feb 20 j 07:38 8°\£59'53 -4069 Dec 16 j 21:25 0°M asc. node -4073 Mar 25 j 05:19  $0^{\circ}\Upsilon$ -4068 Jan 24 j 11:30 0°×7 -4073 May 06 j 10:52 26°Y46'56 -4068 Mar 03 j 16:46 0°정 evening set 0°8 -4068 Apr 13 j 13:58 -4073 May 11 j 12:40 0°≈ max. Earth dist. -4073 Jun 14 i 05:33 21°**8**27'04 2.66590 AU -4068 May 27 j 12:37 0°) -4068 Jul 16 j 23:28 22° Y 42' 28 conjunction -4073 Jun 22 j 08:02 26°**8**38'29 0°58'20 retrograde -4068 Sep 25 i 06:49 minimum elong -4073 Jun 22 i 06:50 26°**8**36'33 0°58'28 asc. node -4068 Oct 12 i 07:12 20°Y43'59 -4073 Jun 27 j 13:33  $0^{\circ}\Pi$ -4068 Nov 01 i 19:06 13°**Y**48'53 0.65125 AU min. Earth dist. -4073 Aug 06 j 13:47 25°**I**I58'33 -4068 Nov 04 j 08:58 12°**Y**46'43 0°53'16 morning rise opposition -4073 Aug 12 j 16:37 0ಂತಾ -4068 Nov 04 j 06:31 12°**Y**49′10 -1.5m greatest brilliancy -4073 Sep 26 j 13:23  $0^{\circ}\Omega$ -4068 Dec 13 j 16:34 3°Y24'21 direct -4073 Nov 09 j 03:59 0° m -4067 Mar 05 j 18:58 0°8 -4073 Dec 21 j 18:13 0∘∙თ -4067 Apr 28 j 13:58  $0^{\circ}\Pi$ 0ಂತಾ -4072 Feb 01 j 20:32 0°M -4067 Jun 15 j 09:20 desc. node -4072 Feb 24 j 21:10 16°M18'18 -4067 Jul 29 j 13:19  $0^{\circ}\Omega$ 0° ×7 -4067 Sep 08 j 23:52 -4072 Mar 15 j 14:29 0° m 0°궁 -4072 May 01 j 14:57 evening set -4067 Sep 09 j 01:18 0° Mp 02'40 22°**る**00'43 retrograde -4072 Jul 04 j 08:03 max. Earth dist. -4067 Oct 06 j 03:56 20° Tp 30'50 2.39574 AU min. Earth dist. -4072 Aug 01 j 00:24 16°**る**50'28 0.44882 AU desc. node -4067 Oct 16 j 16:06 28° m 35'33 greatest brilliancy -4072 Aug 07 j 11:17 14°**る**39'32 -2.4m -4067 Oct 18 j 11:49 0∘**⊽** opposition -4072 Aug 09 j 00:45 14°る07'36 -6°01'09 direct -4072 Sep 10 j 05:48 7°る42'35 conjunction -4067 Nov 06 j 20:02 15° 202'35 -0°15'07 -4072 Nov 19 j 09:30 0°≈ minimum elong -4067 Nov 06 j 18:48 15°**♀**00'10 0°15'09 -4071 Jan 07 j 06:12 26°≈52'31 -4067 Nov 06 j 08:45 14°**£**40'32 asc. node behind sun begin

behind sun end

-4067 Nov 07 j 04:52

15°**2**19'49

-4071 Jan 12 j 14:53

0°**)**€

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 34 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -4400 i	n astronomical co	unting style is the year	4401 BCE in historical c	ounting style.	
	-4067 Nov 25 j 21:41	$0^{\circ}$ M		min. Earth dist.	-4061 Mar 04 j 18:44	1° <b>Ω</b> 18′36	0.52139 AU
	-4066 Jan 03 j 02:40	0° <b>∡</b> ¹			-4061 Mar 08 j 16:19	30°R∽	
morning rise	-4066 Jan 12 j 06:35	7° <b>∡</b> °08'34		direct	-4061 Apr 04 j 13:36	25° <b>©</b> 16'09	
	-4066 Feb 10 j 23:57	5°0			-4061 May 02 j 06:55	$0$ $^{\circ}\Omega$	
	-4066 Mar 23 j 09:37	0° <b>≈</b>		desc. node	-4061 Jun 08 j 11:38	16° <b>Ω</b> 46'11	
	-4066 May 05 j 02:05	0° <b>∀</b>			-4061 Jun 30 j 14:56	0° <b>m</b>	
	-4066 Jun 20 j 00:04	$0$ ° $\Upsilon$			-4061 Aug 13 j 09:48	0∘ <b>ত</b>	
	-4066 Aug 10 j 15:01	$9^{\circ}$ 8			-4061 Sep 22 j 19:31	$0^{\circ}$ M	
asc. node	-4066 Aug 30 j 08:25	9° <b>8</b> 49'09			-4061 Nov 01 j 11:16	0° <b>∡</b>	
retrograde	-4066 Oct 30 j 00:39	26° <b>8</b> 44'24			-4061 Dec 11 j 17:26	8°0	
opposition	-4066 Dec 08 j 16:56	17° <b>8</b> 14'01	3°22'09		-4060 Jan 22 j 09:59	0° <b>≈</b>	
greatest brilliancy	-4066 Dec 08 j 18:41	17° <b>8</b> 12'17	-1.3m		-4060 Mar 05 j 21:58	0° <b>)</b> €	
min. Earth dist.	-4066 Dec 09 j 21:50	16° <b>8</b> 45'13	0.67062 AU	evening set	-4060 Mar 09 j 12:04	2° <b>)</b> €25'10	
direct	-4065 Jan 18 j 15:19	7° <b>8</b> 18'53			-4060 Apr 20 j 03:58	$0^{\circ}$ Y	
	-4065 Apr 01 j 22:58	$\Pi^{\circ}$ 0		asc. node	-4060 Apr 21 j 02:55	0° <b>Ƴ</b> 37'25	
	-4065 May 24 j 19:18	0°©					
	-4065 Jul 09 j 09:54	$0^{\circ}\Omega$		conjunction	-4060 Apr 29 j 17:53	6° <b>Y</b> 13'51	0°04'58
	-4065 Aug 20 j 06:03	0° <b>m</b> )		minimum elong	-4060 Apr 29 j 17:41	6° <b>Y</b> 13'33	0°04'58
desc. node	-4065 Sep 03 j 13:47	10° <b>m</b> 43'01		behind sun begin	-4060 Apr 28 j 22:03	5° <b>Ƴ</b> 41'44	
	-4065 Sep 28 j 18:35	0∘ <u>⊽</u>		behind sun end	-4060 Apr 30 j 13:18	6° <b>Y</b> 45′20	
	-4065 Nov 06 j 02:32	0°M		max. Earth dist.	-4060 May 11 j 21:35	14° <b>Υ</b> '05'22	2.64650 AU
evening set	-4065 Nov 11 j 08:13	4° <b>™</b> 07'34			-4060 Jun 05 j 17:00	0°8	
evening sec	-4065 Dec 14 j 06:15	0° <b>∡</b> 7		morning rise	-4060 Jun 16 j 14:58	6° <b>8</b> 57'23	
	1005 Dec 111 00.15	٧,		morning rise	-4060 Jul 22 j 23:01	0°П	
conjunction	-4064 Jan 15 j 23:07	25° <b>∡</b> 17'03	-1°07'13		-4060 Sep 08 j 13:29	0°20	
minimum elong	-4064 Jan 15 j 22:19	25° × 17'03			-4060 Oct 26 j 19:08	0°N	
minimum clong	-4064 Jan 22 j 03:52	0°る	1 0/23		-4060 Dec 16 j 05:46	0°m)	
	-4064 Mar 02 j 14:08	0° <b>≈</b>			-4059 Feb 15 j 07:06	0∘ <b>ت</b> س	
max. Earth dist.	-4064 Mar 04 j 23:28		2.44538 AU	retrograde	-4059 Mar 26 j 01:30	0 <b>=</b> 7° <b>£</b> 59'59	
	·		2.44336 AU	•	•		
morning rise	-4064 Mar 20 j 00:26	12°≈29'52		desc. node	-4059 Apr 25 j 13:44	2° <b>♀</b> 50'35	0002140
	-4064 Apr 14 j 02:08	0° <b>)</b> €		opposition	-4059 Apr 26 j 05:21	2° <b>₽</b> 39'30	
	-4064 May 29 j 00:00	0°Υ •••		greatest brilliancy	-4059 Apr 26 j 05:38	2° <b>2</b> 39'18	
	-4064 Jul 15 j 16:58	0°8		min. Earth dist.	-4059 May 01 j 16:53		0.39852 AU
asc. node	-4064 Jul 17 j 07:32	0° <b>8</b> 58'26			-4059 May 05 j 19:12	30°R, Mp	
	-4064 Sep 05 j 22:06	0°II		direct	-4059 May 28 j 22:21	26° TQ 37'31	
	-4064 Nov 20 j 17:55	0°©			-4059 Jun 20 j 18:50	0∘ <b>亚</b>	
retrograde	-4064 Dec 05 j 05:27	1° <b>©</b> 13'30			-4059 Aug 20 j 10:41	0° <b>™</b>	
	-4064 Dec 19 j 01:08	30°RⅡ			-4059 Oct 04 j 18:10	0° <b>∡</b>	
opposition	-4063 Jan 12 j 10:13				-4059 Nov 17 j 05:48	0°ප	
greatest brilliancy	-4063 Jan 13 j 04:52	22° <b>Ⅱ</b> 13'44			-4059 Dec 31 j 03:07	0° <b>≈</b>	
min. Earth dist.	-4063 Jan 17 j 10:50		0.62611 AU		-4058 Feb 14 j 04:09	0° <b>∀</b>	
direct	-4063 Feb 22 j 12:32	12° <b>Ⅲ</b> 35′01		asc. node	-4058 Mar 08 j 23:05	14° <b>¥</b> 52′03	
	-4063 Apr 23 j 21:28	0ಂತಾ			-4058 Apr 01 j 10:04	0° <b>Υ</b>	
	-4063 Jun 14 j 23:24	$0$ $^{\circ}$ $\Omega$		evening set	-4058 Apr 21 j 05:51	12° <b>Y</b> ′41′34	
desc. node	-4063 Jul 21 j 11:54	24° <b>Ω</b> 52'04			-4058 May 18 j 09:28	$0^{\circ}S$	
	-4063 Jul 28 j 15:42	0° <b>m</b> y		max. Earth dist.	-4058 Jun 04 j 23:31	11° <b>8</b> 12'09	2.67116 AU
	-4063 Sep 06 j 21:33	0∘ <b>⊽</b>					
	-4063 Oct 15 j 14:58	0° <b>M</b>		conjunction	-4058 Jun 07 j 19:16	13° <b>8</b> 00'11	0°46'44
	-4063 Nov 23 j 02:44	0° <b>∡</b> ¹		minimum elong	-4058 Jun 07 j 17:59	12° <b>8</b> 58'09	0°46'50
	-4062 Jan 01 j 09:06	0°₹			-4058 Jul 04 j 09:11	$\Pi$ $^{\circ}0$	
evening set	-4062 Jan 16 j 11:12	11° <b>る</b> 14'50		morning rise	-4058 Jul 23 j 04:47	12° <b>Ⅱ</b> 06'35	
	-4062 Feb 11 j 04:25	0° <b>≈</b>			-4058 Aug 19 j 17:53	0°€	
					-4058 Oct 04 j 04:17	$0^{\circ}\Omega$	
conjunction	-4062 Mar 15 j 23:01	23° <b>≈</b> 06'46	-0°43'48		-4058 Nov 17 j 18:02	0° <b>™</b>	
minimum elong	-4062 Mar 16 j 01:00	23° <b>≈</b> 10′13	0°43'53		-4058 Dec 31 j 19:21	0∘ <b>⊽</b>	
	-4062 Mar 25 j 23:06	0° <b>)</b> €			-4057 Feb 14 j 04:33	0° <b>M</b>	
max. Earth dist.	-4062 Apr 15 j 11:50	13° <b>¥</b> 54'12	2.56835 AU	desc. node	-4057 Mar 13 j 14:41	17° <b>M</b> 49'08	
morning rise	-4062 May 08 j 19:56	29° <b>)</b> 22′14			-4057 Apr 02 j 16:03	0° <b>∡</b> ¹	
-	-4062 May 09 j 18:59	$0^{\circ}$ Y		retrograde	-4057 Jun 11 j 18:11	25° <b>х</b> 13′07	
asc. node	-4062 Jun 04 j 05:39	16° <b>Ƴ</b> 29'32		min. Earth dist.	-4057 Jul 08 j 08:03	20° <b>х</b> 42′11	0.40442 AU
	-4062 Jun 25 j 11:05	0°8		opposition	-4057 Jul 14 j 22:31	18° <b>∡</b> ′43′32	
	-4062 Aug 12 j 21:16	$\Pi^{\circ}0$		greatest brilliancy	-4057 Jul 13 j 12:28	19° <b>∡</b> °09'13	-2.7m
	-4062 Oct 02 j 23:44	0ಂತಾ		direct	-4057 Aug 14 j 12:08	13° <b>∡</b> 12'19	
	-4062 Dec 02 j 02:37	$0^{\circ}\Omega$			-4057 Oct 11 j 09:01	8°0	
retrograde	-4061 Jan 20 j 04:03	11° <b>Ω</b> 33'33			-4057 Dec 04 j 20:40	0° <b>≈</b>	
opposition	-4061 Feb 24 j 13:12	4° <b>Ω</b> 13'38	4°45'59		-4056 Jan 23 j 06:22	0° <b>)</b> €	
greatest brilliancy	-4061 Feb 25 j 23:25	3° <b>Ω</b> 43'12		asc. node	-4056 Jan 24 j 21:05	0° <b>¥</b> 59'38	
J	, , , j ==. <u>2</u> 0			2 22 2	j =		

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 35 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronom	nical year style is used: Th		in astronomical co	unting style is the year	4401 BCE in historical c	ounting style.	
	-4056 Mar 11 j 18:02	$0^{\circ}$ Y			-4052 Dec 03 j 10:22	$0^{\circ}$ M	
	-4056 Apr 28 j 20:09	$8^{\circ}$ 0		morning rise	-4052 Dec 14 j 10:39	8°M38'01	
evening set	-4056 May 28 j 21:14	18° <b>8</b> 58'19			-4051 Jan 10 j 17:49	0° <b>∡</b> 7	
	-4056 Jun 15 j 03:31	0°Π			-4051 Feb 18 j 16:39	0°ප	
max. Earth dist.	-4056 Jun 28 j 03:18	8° <b>Ⅲ</b> 22'35	2.64159 AU		-4051 Mar 31 j 04:09	0° <b>≈</b>	
	1056 7 1 11:11 10	100 T 01142	1000121		-4051 May 13 j 02:51	0° <b>)</b> €	
conjunction	-4056 Jul 14 j 11:43	19° <b>Ⅱ</b> 01'43			-4051 Jun 28 j 23:24	0° <b>Υ</b>	
minimum elong	-4056 Jul 14 j 11:09	19° <b>Ⅱ</b> 00'47	1°09'42	1	-4051 Aug 24 j 02:07	0°8	
	-4056 Jul 31 j 02:52	0°55		asc. node	-4051 Sep 15 j 22:58	8° <b>8</b> 42'48	
morning rise	-4056 Aug 29 j 10:50	19°543'35		retrograde	-4051 Oct 16 j 12:01 -4051 Nov 25 j 11:25	13° <b>8</b> 52'59	2020120
	-4056 Sep 13 j 10:22	0° <b>Ω</b> 0° <b>m</b>		opposition	3	4° <b>8</b> 09'44 4° <b>8</b> 11'36	
	-4056 Oct 26 j 02:24 -4056 Dec 06 j 09:20	0∘ <b>ت</b> رااا		greatest brilliancy min. Earth dist.	-4051 Nov 25 j 09:33 -4051 Nov 25 j 04:43		0.67064 AU
	-4055 Jan 15 j 18:54	0° <b>m</b>		min. Earth dist.	-4051 Dec 06 j 06:10	4 01027 30°RΥ	0.07004 AU
desc. node	-4055 Jan 28 j 14:05	9°M33'37		direct	-4050 Jan 04 j 22:31	24° <b>Υ</b> 24'02	
desc. node	-4055 Feb 25 j 01:28	9 IIC3337 0° <b>√</b>		direct	-4050 Feb 06 j 14:57	0°8	
	-4055 Apr 07 j 13:27	0°ਤੇ			-4050 Apr 13 j 08:17	0°II	
	-4055 May 23 j 12:26	0° <b>≈</b>			-4050 Jun 02 j 09:01	0°©	
retrograde	-4055 Aug 03 j 12:50	26°≈12'29			-4050 Jul 17 j 05:29	0° <b>U</b>	
min. Earth dist.	-4055 Sep 03 j 10:49	19° <b>≈</b> 41'41	0.52600 AU		-4050 Aug 27 j 20:12	0° m/	
opposition	-4055 Sep 10 j 19:20	16°≈54'58		desc. node	-4050 Sep 20 j 07:01	17° <b>m</b> ) 40'32	
greatest brilliancy	-4055 Sep 09 j 20:42	17° <b>≈</b> 16′22			-4050 Oct 06 j 07:33	0∘ <u>⊽</u>	
direct	-4055 Oct 15 j 16:09	9° <b>≈</b> 14'43		evening set	-4050 Oct 15 j 21:01	7° <b>≏</b> 25'47	
asc. node	-4055 Dec 11 j 21:40	24° <b>≈</b> 41'13		<i>8</i>	-4050 Nov 13 j 15:24	0° <b>M</b>	
	-4055 Dec 23 j 08:06	0° <b>)</b> €			,		
	-4054 Feb 17 j 08:51	$0^{\circ}$ $\Upsilon$		conjunction	-4050 Dec 19 j 10:45	28°M10'19	-0°55'49
	-4054 Apr 09 j 04:43	0°8		minimum elong	-4050 Dec 19 j 07:38	28°MJ04'13	0°55'56
	-4054 May 27 j 13:38	$\Pi$ $^{\circ}0$		-	-4050 Dec 21 j 18:49	0° <b>∡</b> 7	
evening set	-4054 Jul 07 j 01:04	26° <b>Ⅱ</b> 13'59			-4049 Jan 29 j 15:21	ರ∘ರ	
	-4054 Jul 12 j 17:10	$0$ $\circ$ $\odot$		max. Earth dist.	-4049 Jan 31 j 14:07	1° <b>る</b> 28'46	2.39584 AU
max. Earth dist.	-4054 Jul 26 j 00:21	8° <b>©</b> 55'56	2.56106 AU	morning rise	-4049 Feb 24 j 20:28	19° <b>る</b> 38'34	
					-4049 Mar 10 j 23:58	0° <b>≈</b>	
conjunction	-4054 Aug 24 j 13:17	29° <b>©</b> 15'50	1°02'43		-4049 Apr 22 j 11:35	0° <b>∀</b>	
minimum elong	-4054 Aug 24 j 14:38	29° <b>©</b> 18'11	1°02'53		-4049 Jun 06 j 14:13	$0^{\circ}$ Y	
	-4054 Aug 25 j 14:30	$0^{\circ}\Omega$			-4049 Jul 25 j 04:36	$0^{\circ}S$	
	-4054 Oct 06 j 10:02	0° <b>™</b>		asc. node	-4049 Aug 03 j 23:14	5° <b>8</b> 40'35	
morning rise	-4054 Oct 14 j 06:42	5° Mp 47′23			-4049 Sep 19 j 05:52	0°II	
	-4054 Nov 15 j 13:49	0∘ <b>⊽</b>		retrograde	-4049 Nov 21 j 02:56	17° <b>Ⅲ</b> 37'52	
desc. node	-4054 Dec 16 j 13:03			opposition	-4049 Dec 30 j 01:12	8° <b>Ⅲ</b> 33'58	
	-4054 Dec 24 j 16:46	0° <b>™</b>		greatest brilliancy	-4049 Dec 30 j 12:18	8° <b>Ⅱ</b> 23'03	
	-4053 Feb 01 j 13:12	0° <b>∡</b> 7		min. Earth dist.	-4048 Jan 02 j 14:07	7° <b>Ⅱ</b> 10'38	0.65134 AU
	-4053 Mar 13 j 01:13	% ප			-4048 Jan 25 j 08:23	30°R₩	
	-4053 Apr 23 j 09:43	0° <b>≈</b>		direct	-4048 Feb 09 j 07:14	28° <b>8</b> 32'57	
	-4053 Jun 07 j 15:32	0° <b>ℋ</b> 0° <b>Ƴ</b>			-4048 Feb 24 j 23:05 -4048 May 07 j 08:51	0ಂ <b>ಲ</b> 0∘∏	
ratra ara da	-4053 Aug 03 j 20:49 -4053 Sep 12 j 10:09	0 γ 8° <b>Υ</b> 44'14			-4048 Jun 24 j 13:24	0° <b>U</b>	
retrograde min. Earth dist.	-4053 Sep 12 j 10.09	0°Υ23'32	0.62678 AU		-4048 Aug 06 j 05:25	0°m)	
iiiii. Eartii dist.	-4053 Oct 18 j 07:43	30° <b>₹</b>	0.02078 AU	desc. node	-4048 Aug 07 j 05:49	0° Mp 44'43	
opposition	-4053 Oct 19 j 07:21 -4053 Oct 22 j 08:25	28° <b>)</b> 46'51	-0°18'15	dese. Hode	-4048 Sep 15 j 01:35	0∘ <b>ʊ</b>	
greatest brilliancy	-4053 Oct 22 j 07:30	28° <b>)</b> (47'46			-4048 Oct 23 j 13:20	0° <b>™</b>	
asc. node	-4053 Oct 29 j 22:36	25° <b>)</b> (49'57	1.0111		-4048 Nov 30 j 20:21	0° <b>∡</b> 7	
direct	-4053 Nov 29 j 16:26	19° <b>)</b> (45'11		evening set	-4048 Dec 22 j 15:14	16° <b>₹</b> <sup>7</sup> 50'56	
	-4052 Jan 14 j 13:00	0°Υ		0.0000g 000	-4047 Jan 08 j 21:47	0°ಕ	
	-4052 Mar 16 j 10:35	0°8			-4047 Feb 18 j 12:03	0° <b>≈</b>	
	-4052 May 06 j 17:20	0°II			,		
	-4052 Jun 22 j 19:19	0∘ <b>ௐ</b>		conjunction	-4047 Feb 22 j 16:56	3° <b>≈</b> 01'36	-0°59'04
	-4052 Aug 05 j 18:54	$0^{\circ}\Omega$		minimum elong	-4047 Feb 22 j 19:01	3° <b>≈</b> 05'20	
evening set	-4052 Aug 19 j 16:16	9° <b>Ω</b> 51'59		max. Earth dist.	-4047 Apr 02 j 06:03	0° <b>∺</b> 05'50	2.52445 AU
max. Earth dist.	-4052 Sep 04 j 22:21	21° <b>Ω</b> 38'46	2.44189 AU		-4047 Apr 02 j 02:39	0° <b>)</b> €	
	-4052 Sep 16 j 06:24	0° m		morning rise	-4047 Apr 21 j 03:56	12° <b>¥</b> 56'38	
					-4047 May 16 j 21:11	$0^{\circ}$ Y	
conjunction	-4052 Oct 13 j 12:18	20° Mp 30'38	0°14'03	asc. node	-4047 Jun 20 j 21:25	22° <b>Y</b> 31'10	
minimum elong	-4052 Oct 13 j 13:15	20° <b>m</b> 32'28	0°14'05		-4047 Jul 02 j 18:56	0°B	
behind sun begin	-4052 Oct 13 j 00:33	20° Mp 08'17			-4047 Aug 21 j 03:28	$\Pi$ °0	
behind sun end	-4052 Oct 14 j 01:56	20° Mp 56'40			-4047 Oct 14 j 11:12	$0$ $\circ$ $\odot$	
	-4052 Oct 25 j 21:20	0∘ <b>⊽</b>		retrograde	-4047 Dec 31 j 15:10	24° <b>©</b> 51'05	
desc. node	-4052 Nov 02 j 10:30	5° <b>Ω</b> 49'48		opposition	-4046 Feb 06 j 08:00	16° <b>©</b> 53'44	5°07'54

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4046 Feb 07 i 14:13 16°9525'40 -1.7m -4041 Mar 20 j 07:45  $0^{\circ}\Upsilon$ greatest brilliancy min. Earth dist. -4046 Feb 13 j 12:39 14°9513'47 -4041 May 06 j 20:37 0°8 0.56885 AU -4046 Mar 18 j 13:22 7°921'41 -4041 May 15 j 01:11 5°810'57 direct evening set -4041 Jun 19 j 16:48 -4046 May 25 j 23:57  $0^{\circ}\Omega$ max. Earth dist. 27°**8**53'46 2.65940 AU -4046 Jun 25 j 05:39 18°**Ω**12'41 -4041 Jun 22 j 23:25 desc. node  $\Pi$  $^{\circ}0$ 0° m -4046 Jul 12 j 21:22 -4041 Jun 30 j 17:21 4°П59'25 1°03'33 -4046 Aug 23 j 13:13 0∘ଫ conjunction 0°M minimum elong -4041 Jun 30 j 16:19 -4046 Oct 02 j 00:02 4°**Ⅲ**57'44 1°03'42 -4046 Nov 10 j 00:28 0°**∡** -4041 Aug 08 j 00:54 0ಂಲ -4046 Dec 19 j 18:02 0°궁 morning rise -4041 Aug 15 j 01:51 4°939'48 -4045 Jan 29 j 23:32 0°≈ -4041 Sep 21 j 16:44 0° $\Omega$ -4041 Nov 03 j 22:32 evening set -4045 Feb 19 j 12:20 14°≈27'12 0° M 0∘**ত** -4045 Mar 14 j 02:41 0°**)**€ -4041 Dec 16 j 00:03 -4040 Jan 26 j 08:24 0°M conjunction -4045 Apr 14 j 03:23 20°\dagger48'13 -0°14'08 desc. node -4040 Feb 15 j 07:28 14°M29'41 minimum elong -4045 Apr 14 j 04:01 20°\ 49'17 0°14'09 -4040 Mar 07 j 21:30 0°**⊼** behind sun begin -4045 Apr 13 j 18:31 20°¥33'34 -4040 Apr 20 j 19:03 0°ರ behind sun end -4045 Apr 14 j 13:31 21°**)** 04'59 -4040 Jun 16 j 14:15 0°≈ -4045 Apr 28 j 02:53  $0^{\circ}\Upsilon$ retrograde -4040 Jul 16 j 00:33 5°≈38'40 max. Earth dist. -4045 May 03 j 02:09 3°**Y**14'44 2.62208 AU -4040 Aug 13 j 19:22 30°Rる asc. node -4045 May 08 j 18:10 6°Y56'05 min. Earth dist. -4040 Aug 13 j 18:51 0°≈00'28 0.47620 AU morning rise -4045 Jun 02 j 21:00 23°Y07'50 greatest brilliancy -4040 Aug 20 j 10:34 27°る38'30 -2.3m -4045 Jun 13 i 15:06 0°8 opposition -4040 Aug 21 i 20:09 27°る08'31 -5°21'05 -4045 Jul 31 j 04:20  $\mathbb{I}^{\circ 0}$ direct -4040 Sep 23 i 23:26 20°る14'49 -4045 Sep 17 j 16:42 0ಂತಾ -4040 Nov 06 j 02:08 0°≈ -4045 Nov 07 j 05:59  $0^{\circ}\Omega$ -4040 Dec 28 j 12:10 25°≈30'21 asc node -4044 Jan 04 j 13:15 -4039 Jan 05 j 15:18 0°\  $0^{\circ}$  mb -4044 Feb 26 j 06:25 -4039 Feb 26 j 07:48  $0^{\circ}\Upsilon$ retrograde 13° m 17'21 -4044 Mar 30 j 00:56 -4039 Apr 16 j 18:22 0°8 7° Mp 09'40 2°41'22 opposition -4044 Mar 30 j 23:00  $6^{\circ}$  M 52'08 -2.5 m -4039 Jun 03 j 14:40  $0^{\circ}II$ greatest brilliancy -4044 Apr 07 j 00:08 -4039 Jun 21 j 11:34 min. Earth dist. 4° Mp 38'32 0.44186 AU evening set 11°**Ⅲ**29'55 -4044 Apr 29 j 03:29 -4039 Jul 14 j 08:06 30°R€ max. Earth dist. 26°**Ⅲ**28'52 2.59814 AU -4039 Jul 19 j 15:12 direct -4044 May 04 j 18:22 29°**Ω**46'37 0ಂಲ -4044 May 10 j 09:56 0° m -4044 May 12 j 05:32 -4039 Aug 07 j 20:13 12°955'32 1°09'41 desc. node 0° Mp 09'52 conjunction -4044 Jul 21 j 18:21 -4039 Aug 07 j 20:46 0∘**⊽** minimum elong 12°**©**56'28 1°09'52 -4044 Sep 04 j 09:11  $0^{\circ}M$ -4039 Sep 01 j 15:24 0 $^{\circ}\Omega$ -4044 Oct 16 j 02:57 0°**√** morning rise -4039 Sep 25 j 01:17 16° **Ω**31'52 -4044 Nov 26 j 18:42 0°ರ -4039 Oct 13 j 17:26 0° m -4043 Jan 08 j 11:59 0°**≈** -4039 Nov 23 j 05:57 0∘**⊽** -4043 Feb 21 j 18:18 0°**)**€ -4038 Jan 01 j 18:09 0°M -4043 Mar 25 j 15:37 20°¥59'59 -4038 Jan 02 j 05:55 0°M22'29 asc. node desc. node -4043 Apr 05 j 09:18 27°**)** 58'45 -4038 Feb 09 j 23:58 0°**∡**7 evening set -4043 Apr 08 j 12:12  $0^{\circ}\Upsilon$ -4038 Mar 21 j 23:10 0°궁 -4038 May 03 j 04:13 0°≈ 29° Y 14'27 0°32'17 -4038 Jun 20 i 03:42 conjunction -4043 May 24 i 01:15 0°) -4043 May 24 j 00:10 minimum elong 29°Υ12'43 0°32'21 retrograde -4038 Aug 28 i 20:52 23°\(\)42'22 -4043 May 25 i 05:47 0°8 min. Earth dist. -4038 Oct 01 i 23:05 15°**)** €59'59 0.59335 AU max. Earth dist. -4043 May 26 j 17:54 0°**8**57'38 2.66791 AU -4038 Oct 07 i 09:38 13°\ 51'00 -1°37'31 opposition -4038 Oct 07 j 02:37 -4043 Jul 09 i 01:57 28°**8**36'32 13°**¥**57'56 -1.7m morning rise greatest brilliancy -4043 Jul 11 j 06:11  $0^{\circ}II$ direct -4038 Nov 13 j 13:18 5°**H** 15'37 -4043 Aug 26 j 23:18 0ಂತಾ -4038 Nov 15 j 13:01 5° ¥ 17'07 asc. node -4043 Oct 12 j 04:34  $0^{\circ}\Omega$ -4037 Jan 30 j 10:59  $0^{\circ}\Upsilon$ -4043 Nov 27 j 04:13 0° m -4037 Mar 26 j 14:46 0°8 -4042 Jan 12 j 17:41 0∘**⊽** -4037 May 15 j 09:50  $0^{\circ}\Pi$ -4042 Mar 03 j 13:31 0°M -4037 Jul 01 j 00:33 0ಂತಾ desc. node -4042 Mar 30 j 06:32 13°M30'11 -4037 Aug 02 j 05:18 21°5649'49 evening set -4042 May 14 j 13:16  $0^{\circ}\Omega$ retrograde 24°M59'31 -4037 Aug 13 j 22:13 -4042 Jun 12 j 01:01 max. Earth dist. min. Earth dist. 20°M21'59 0.37895 AU -4037 Aug 17 j 08:17 2°**Ω**24'37 2.49116 AU opposition -4042 Jun 14 j 14:54 19°M40'04 -5°11'37

greatest brilliancy

direct

asc. node

-4042 Jun 14 j 01:33

-4042 Jul 14 j 10:28

-4042 Sep 06 j 05:17

-4042 Oct 29 j 07:40

-4042 Dec 15 j 22:47

-4041 Jan 31 j 23:18

-4041 Feb 10 j 13:08

19°**M**49′07 -2.9m

14°M40'10

0°**∡** 

0°궁

0°≈

0°**)**€

6°**)**€05'21

-4037 Sep 22 j 22:19

-4037 Sep 23 j 00:11

-4037 Sep 24 j 11:56

-4037 Nov 03 j 06:55

-4037 Nov 18 j 19:22

-4037 Nov 20 j 04:24

-4037 Dec 12 j 00:09

28°**Ω**50'33 0°38'22

28°Ω54'00 0°38'27

0° M

0∘**⊽** 

0°M

11°**£**57'33

13°**♀**01'29

conjunction

morning rise

desc. node

minimum elong

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.									
Attention, astronomi		-	n astronomical cou						
	-4036 Jan 19 j 11:12	0° <b>∡</b> ¹		min. Earth dist.	-4031 Jan 26 j 22:46	29° <b>Ⅱ</b> 05'36	0.60825 AU		
	-4036 Feb 27 j 13:11	0°ಕ		direct	-4031 Mar 03 j 00:19	21° <b>∏</b> 28'19			
	-4036 Apr 08 j 05:03	0° <b>≈</b>			-4031 Apr 11 j 16:35	$0$ $\circ$ $\odot$			
	-4036 May 21 j 15:28	0° <b>)</b> €			-4031 Jun 08 j 04:58	$0^{\circ}\Omega$			
	-4036 Jul 09 j 05:18	$0^{\circ}\mathbf{\Upsilon}$		desc. node	-4031 Jul 11 j 21:53	22° <b>Ω</b> 15′30			
	-4036 Sep 21 j 11:12	0°8			-4031 Jul 22 j 22:04	0° m/y			
asc. node	-4036 Oct 02 j 13:40	0° <b>8</b> 50'38			-4031 Sep 01 j 13:29	0∘ <u>v</u>			
retrograde	-4036 Oct 03 j 02:04	0° <b>8</b> 50'45			-4031 Oct 10 j 11:44	0°M₊			
retrograde	-4036 Oct 14 j 07:25	30°RY			-4031 Nov 18 j 02:54	0° <b>⊼</b> ¹			
min Earth dist	-4036 Nov 10 j 10:21	21° <b>Υ</b> 40'37	0.66096 AU		•	°ਤ			
min. Earth dist.	•	$20^{\circ}$ \begin{pmatrix}  \text{40.37} \\ 20^{\circ}\begin{pmatrix}  \text{58'23} \\  \text{20'} \end{pmatrix}			-4031 Dec 27 j 12:12				
opposition	-4036 Nov 12 j 04:24		1°31'16	evening set	-4030 Jan 29 j 10:35	24° <b>ප</b> 15'22			
greatest brilliancy	-4036 Nov 12 j 01:19		-1.4m		-4030 Feb 06 j 09:58	0° <b>≈</b>			
direct	-4036 Dec 21 j 23:04	11° <b>Y</b> 26′27			-4030 Mar 21 j 06:36	0° <b>∀</b>			
	-4035 Feb 25 j 11:56	0°8							
	-4035 Apr 22 j 20:50	$\Pi$ $^{\circ}0$		conjunction	-4030 Mar 27 j 01:20	3° <b>¥</b> 56′28			
	-4035 Jun 10 j 08:36	$0$ $\circ$ $\odot$		minimum elong	-4030 Mar 27 j 02:54	3° <b>¥</b> 59′09	0°33'25		
	-4035 Jul 24 j 18:32	$0^{\circ}\Omega$		max. Earth dist.	-4030 Apr 22 j 06:01	21° <b>)</b> 31′06	2.58964 AU		
	-4035 Sep 04 j 06:57	0° <b>m</b> )			-4030 May 05 j 02:48	$0^{\circ}$ Y			
evening set	-4035 Sep 21 j 13:24	12° <b>m</b> 58'01		morning rise	-4030 May 18 j 06:29	8° <b>Y</b> 34'38			
desc. node	-4035 Oct 07 j 02:14	24° m 50'00		asc. node	-4030 May 25 j 11:14	13° <b>Y</b> 14′09			
	-4035 Oct 13 j 18:58	0∘ <u>⊽</u>			-4030 Jun 20 j 16:13	0°8			
max. Earth dist.	-4035 Nov 07 j 04:40		2.37840 AU		-4030 Aug 07 j 16:34	0°II			
max. Earth dist.	4033 1101 07 j 04.40	17 =01 17	2.57040710		-4030 Sep 26 j 14:14	0°95			
conjunction	-4035 Nov 21 j 15:59	0°M23'47	0°31'42		-4030 Nov 20 j 12:15	0°N			
minimum elong	-4035 Nov 21 j 13:25	0°M18'45		retrograde	-4029 Feb 01 j 13:33	22° <b>Ω</b> 27'49			
minimum clong	·		0 31 43	•	•		4015155		
	-4035 Nov 21 j 03:54	0°M		opposition	-4029 Mar 08 j 01:12	15° <b>Ω</b> 31'43	4°15'55		
	-4035 Dec 29 j 07:44	0° <b>∡</b> 7		greatest brilliancy	-4029 Mar 09 j 10:25		-2.2m		
morning rise	-4034 Jan 28 j 13:24	23° <b>₹</b> 26'05		min. Earth dist.	-4029 Mar 16 j 12:50	12° <b>Ω</b> 36'58	0.49331 AU		
	-4034 Feb 06 j 03:49	0°ප		direct	-4029 Apr 15 j 03:24	7° <b>Ω</b> 01'16			
	-4034 Mar 18 j 11:40	0° <b>≈</b>		desc. node	-4029 May 29 j 22:33	18° <b>Ω</b> 34'41			
	-4034 Apr 30 j 00:36	0° <b>∀</b>			-4029 Jun 20 j 22:46	0° <b>™</b>			
	-4034 Jun 14 j 12:17	$0$ ° $\mathbf{\gamma}$			-4029 Aug 06 j 08:38	0∘ <b>⊽</b>			
	10011 00:1110	006							
	-4034 Aug 03 j 14:49	0°8			-4029 Sep 16 j 16:35	0°M			
asc. node	-4034 Aug 03 j 14:49 -4034 Aug 20 j 13:13	0°8 9°806'32			-4029 Sep 16 j 16:35 -4029 Oct 26 j 20:37	0° <b>™</b> 0° <b>४</b>			
asc. node	C J								
asc. node	-4034 Aug 20 j 13:13	9° <b>8</b> 06'32			-4029 Oct 26 j 20:37	0° <b>∡</b> 7			
	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46	9° <b>8</b> 06'32 0°Ⅱ			-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31	ರ°0 ರ°0			
retrograde	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23	9°806'32 0°II 4°II35'34 30°R8	3°48'27	evening set	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28	る。 る。0 る。0 る。0			
retrograde opposition	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51	9°806'32 0°II 4°II35'34 30°R8 25°813'42		C	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55	0°ダ 0°る 0°≈ 0°升 12°升20'26			
retrograde opposition greatest brilliancy	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31	9°806'32 0°II 4°II35'34 30°R8 25°813'42 25°809'04	-1.3m	evening set asc. node	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38	0°♂ 0°♂ 0°≈ 0°¥ 12°¥20'26 27°¥15'48			
retrograde opposition greatest brilliancy min. Earth dist.	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 18 j 10:56	9°806'32 0°Π 4°Π35'34 30°R8 25°813'42 25°809'04 24°825'02		C	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55	0°ダ 0°る 0°≈ 0°升 12°升20'26			
retrograde opposition greatest brilliancy	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44	9°806'32 0°∏ 4°∏35'34 30°R8 25°813'42 25°809'04 24°825'02 15°815'00	-1.3m	asc. node	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24	0°ダ 0°る 0°≈ 0°¥ 12°¥20'26 27°¥15'48 0°Ƴ	0°15'30		
retrograde opposition greatest brilliancy min. Earth dist.	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30	9°806'32 0°Ⅲ 4°Ⅲ35'34 30°R8 25°813'42 25°809'04 24°825'02 15°815'00 0°Ⅲ	-1.3m	asc. node	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24 -4028 May 08 j 19:17	0°ズ 0°る 0°≈ 0°米 12°¥20'26 27°¥15'48 0°℃	0°15'30		
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retrograde opposition greatest brilliancy min. Earth dist.	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30 -4033 May 18 j 19:11 -4033 Jul 04 j 03:54	9°806'32 0°Π 4°Π35'34 30°R8 25°813'42 25°809'04 24°825'02 15°815'00 0°Π 0°Φ 0°Ω	-1.3m	asc. node  conjunction minimum elong behind sun begin	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24 -4028 May 08 j 19:17 -4028 May 08 j 18:40 -4028 May 08 j 15:18	0°ズ 0°る 0°る 0°米 12°¥20'26 27°¥15'48 0°℃ 15°℃04'08 15°℃03'09 14°℃57'44			
retrograde opposition greatest brilliancy min. Earth dist. direct	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 May 18 j 19:11 -4033 Jul 04 j 03:54 -4033 Aug 15 j 06:34	9°806'32 0°∏ 4°∏35'34 30°R8 25°813'42 25°809'04 24°825'02 15°815'00 0°∏ 0°9 0°Ω 0°Ω	-1.3m	asc. node  conjunction minimum elong behind sun begin behind sun end	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24 -4028 May 08 j 19:17 -4028 May 08 j 18:40 -4028 May 08 j 15:18 -4028 May 08 j 22:03	0°ズ 0°る 0°る 0°米 12°¥20'26 27°¥15'48 0°℃ 15°℃04'08 15°℃04'08 15°℃04'08	0°15'31		
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retrograde opposition greatest brilliancy min. Earth dist. direct	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30 -4033 May 18 j 19:11 -4033 Aug 15 j 06:34 -4033 Aug 24 j 23:25 -4033 Sep 23 j 21:52	9°806'32 0°∏ 4°∏35'34 30°R8 25°813'42 25°809'04 24°825'02 15°815'00 0°∏ 0°Ω 0°Ω 0°Ω 7°™ 12'34 0°Ω	-1.3m	asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24 -4028 May 08 j 19:17 -4028 May 08 j 15:18 -4028 May 08 j 22:03 -4028 May 17 j 11:20 -4028 Jun 01 j 02:18	0°ズ 0°ズ 0°ズ 0°米 12°¥20'26 27°¥15'48 0°Y 15°Y04'08 15°Y03'09 14°Y57'44 15°Y08'35 20°Y38'22 0°℧	0°15'31		
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retrograde opposition greatest brilliancy min. Earth dist. direct  desc. node evening set	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30 -4033 May 18 j 19:11 -4033 Jul 04 j 03:54 -4033 Aug 24 j 23:25 -4033 Nov 01 j 07:01 -4033 Nov 26 j 16:48 -4033 Dec 09 j 11:29 -4032 Jan 17 j 09:47	9°806'32 0°∏ 4°∏35'34 30°R8 25°813'42 25°809'04 24°825'02 15°815'00 0°∏ 0°\$ 0°\$ 0°\$ 7°\$ 12'34 0°\$ 0°\$ 19°\$\$58'27	-1.3m 0.66655 AU	asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24  -4028 May 08 j 19:17 -4028 May 08 j 18:40 -4028 May 08 j 15:18 -4028 May 08 j 22:03 -4028 May 17 j 11:20 -4028 Jun 01 j 02:18 -4028 Jun 24 j 21:27 -4028 Jul 18 j 05:25 -4028 Sep 03 j 10:36 -4028 Oct 20 j 18:59 -4028 Dec 08 j 02:02	0°♥ 0°♥ 0°♥ 0°♥ 12°₩ 20'26 27°₩ 15°₩ 20'26 27°₩ 15°№ 30'9 14°₩ 57'44 15°₩ 08'35 20°₩ 8'22 0°♥ 15°♥ 10'05 0°Ⅲ 0°♥ 0°Ω 0°™ 0°♥ 0°№	0°15'31		
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retrograde opposition greatest brilliancy min. Earth dist. direct  desc. node evening set conjunction	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30 -4033 May 18 j 19:11 -4033 Jul 04 j 03:54 -4033 Aug 15 j 06:34 -4033 Aug 24 j 23:25 -4033 Nov 01 j 07:01 -4033 Nov 26 j 16:48 -4032 Jan 17 j 09:47 -4032 Jan 30 j 15:38 -4032 Jan 30 j 16:19	9°806'32 0°	-1.3m 0.66655 AU -1°07'24	asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist. morning rise	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24  -4028 May 08 j 19:17 -4028 May 08 j 18:40 -4028 May 08 j 15:18 -4028 May 08 j 22:03 -4028 May 17 j 11:20 -4028 Jun 01 j 02:18 -4028 Jun 24 j 21:27 -4028 Jul 18 j 05:25 -4028 Oct 20 j 18:59 -4028 Dec 08 j 02:02 -4027 Jan 29 j 05:30 -4027 Apr 12 j 23:47	0°ズ 0°ズ 0°ズ 0°ズ 12°¥20'26 27°¥15'48 0°Y 15°Y04'08 15°Y03'09 14°Y57'44 15°Y08'35 20°Y38'22 0°℧ 15°℧10'05 0°瓜 0°瓜 0°瓜 0°瓜	0°15'31 2.65643 AU		
retrograde  opposition greatest brilliancy min. Earth dist. direct  desc. node evening set  conjunction minimum elong	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30 -4033 May 18 j 19:11 -4033 Jul 04 j 03:54 -4033 Aug 15 j 06:34 -4033 Aug 24 j 23:25 -4033 Sep 23 j 21:52 -4033 Nov 01 j 07:01 -4033 Nov 26 j 16:48 -4033 Dec 09 j 11:29 -4032 Jan 30 j 15:38 -4032 Jan 30 j 16:19 -4032 Feb 26 j 20:18	9°806'32 0°	-1°3m 0.66655 AU -1°07'24 1°07'34	asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24  -4028 May 08 j 19:17 -4028 May 08 j 18:40 -4028 May 08 j 15:18 -4028 May 08 j 22:03 -4028 May 17 j 11:20 -4028 Jun 01 j 02:18 -4028 Jun 24 j 21:27 -4028 Jul 18 j 05:25 -4028 Sep 03 j 10:36 -4028 Oct 20 j 18:59 -4028 Dec 08 j 02:02 -4027 Jan 29 j 05:30 -4027 Apr 12 j 23:47 -4027 Apr 15 j 22:54	0°ズ 0°ズ 0°ズ 0°ズ 12°¥20'26 27°¥15'48 0°Y 15°Y04'08 15°Y03'09 14°Y57'44 15°Y08'35 20°Y38'22 0°℧ 15°℧10'05 0°瓜 0°瓜 0°瓜 0°瓜 0°瓜 0°瓜 24°至21'12 24°至17'52	0°15'31 2.65643 AU -2°01'44		
retrograde  opposition greatest brilliancy min. Earth dist. direct  desc. node evening set  conjunction minimum elong max. Earth dist.	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30 -4033 May 18 j 19:11 -4033 Jul 04 j 03:54 -4033 Aug 15 j 06:34 -4033 Aug 24 j 23:25 -4033 Nov 01 j 07:01 -4033 Nov 26 j 16:48 -4033 Dec 09 j 11:29 -4032 Jan 30 j 15:38 -4032 Jan 30 j 16:19 -4032 Feb 26 j 20:18 -4032 Mar 16 j 19:09	9°806'32 0° Π 4° Π35'34 30° R8 25° 813'42 25° 809'04 24° 825'02 15° 815'00 0° Π 0° Ω 0° Ω 0° Π 7° M 12'34 0° Ω 0° Π 19° M.59'29 0° π 0° π 19° M.59'29 0° π 13° 859'43 0° ≈	-1°3m 0.66655 AU -1°07'24 1°07'34	asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node opposition	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24  -4028 May 08 j 19:17 -4028 May 08 j 18:40 -4028 May 08 j 15:18 -4028 May 08 j 22:03 -4028 May 17 j 11:20 -4028 Jun 01 j 02:18 -4028 Jun 24 j 21:27 -4028 Jul 18 j 05:25 -4028 Dec 08 j 02:02 -4027 Jan 29 j 05:30 -4027 Apr 12 j 23:47 -4027 May 13 j 11:18	0°ズ 0°ズ 0°ズ 0°ズ 12°¥20'26 27°¥15'48 0°Y 15°Y04'08 15°Y03'09 14°Y57'44 15°Y08'35 20°Y38'22 0°℧ 15°℧10'05 0°瓜 0°瓜 0°瓜 0°瓜 0°瓜 0°瓜 24°至21'12 24°至17'52 19°至16'27	0°15'31 2.65643 AU -2°01'44		
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retrograde opposition greatest brilliancy min. Earth dist. direct  desc. node evening set  conjunction minimum elong max. Earth dist. morning rise  asc. node	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30 -4033 May 18 j 19:11 -4033 Jul 04 j 03:54 -4033 Aug 24 j 23:25 -4033 Nov 01 j 07:01 -4033 Nov 26 j 16:48 -4033 Dec 09 j 11:29 -4032 Jan 30 j 15:38 -4032 Jan 30 j 15:38 -4032 Feb 26 j 20:18 -4032 Mar 16 j 19:09 -4032 Apr 01 j 08:57 -4032 May 24 j 02:44 -4032 Jul 07 j 12:54 -4032 Jul 07 j 12:54 -4032 Aug 30 j 05:59 -4032 Oct 30 j 16:50	9°806'32 0°∏ 4°∏35'34 30°R8 25°813'42 25°809'04 24°825'02 15°815'00 0°∭ 0°∭ 0°∭ 0°∭ 19°∭12'34 0°™ 19°∭59'29 0°% 0°™ 19°™59'29 0°% 0°% 0°% 0°% 0°% 13°≈34'35 24°≈30'05 0°% 0°° 28°Y13'25 0°8 0°™ 0°9	-1°3m 0.66655 AU -1°07'24 1°07'34	asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node opposition greatest brilliancy min. Earth dist.	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24  -4028 May 08 j 19:17 -4028 May 08 j 18:40 -4028 May 08 j 15:18 -4028 May 08 j 22:03 -4028 May 17 j 11:20 -4028 Jun 01 j 02:18 -4028 Jun 24 j 21:27 -4028 Jul 18 j 05:25 -4028 Sep 03 j 10:36 -4028 Oct 20 j 18:59 -4028 Dec 08 j 02:02 -4027 Jan 29 j 05:30 -4027 Apr 12 j 23:47 -4027 Apr 15 j 22:54 -4027 May 13 j 11:18 -4027 May 13 j 15:17 -4027 May 16 j 11:12 -4027 Jun 13 j 17:42 -4027 Aug 06 j 20:23 -4027 Sep 26 j 10:09 -4027 Nov 10 j 16:53 -4027 Dec 25 j 12:16	0° ₹ 0° ₹ 0° ₹ 0° ₹ 12° ¥20'26 27° ¥15'48 0° Υ 15° Υ04'08 15° Υ03'09 14° Υ57'44 15° Υ08'35 20° Υ38'22 0° ₹ 15° ₹10'05 0° Π 0° \$ 0° Ω 0° \$ 0° Ω 0° \$ 15° \$ 11'2 24° \$ 17'52 19° \$ 13' \$ 18° \$ 27'50 13° \$ 13° \$ 13° \$ 0° \$ 0° \$ 0° \$ 0° \$ 0° \$ 0° \$ 0° \$ 0	0°15'31 2.65643 AU -2°01'44 -2.9m		
retrograde opposition greatest brilliancy min. Earth dist. direct  desc. node evening set  conjunction minimum elong max. Earth dist. morning rise  asc. node	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30 -4033 May 18 j 19:11 -4033 Jul 04 j 03:54 -4033 Aug 24 j 23:25 -4033 Nov 01 j 07:01 -4033 Nov 26 j 16:48 -4033 Dec 09 j 11:29 -4032 Jan 30 j 15:38 -4032 Jan 30 j 16:19 -4032 Feb 26 j 20:18 -4032 Mar 16 j 19:09 -4032 Apr 01 j 08:57 -4032 Apr 09 j 07:53 -4032 Jul 07 j 12:54 -4032 Jul 10 j 10:01 -4032 Aug 30 j 05:59 -4032 Oct 30 j 16:50 -4032 Dec 14 j 08:36	9°806'32 0°∏ 4°∏35'34 30°R8 25°803'04 24°825'02 15°815'00 0°∭ 0°™ 7°™12'34 0°™ 19°™.59'29 0°% 0°™ 19°™.59'43 0°≈ 13°≈34'35 24°≈30'05 0°Y 28°Y13'25 0°\$ 0°™ 0°© 9°© 13°≈34'35	-1°3m 0.66655 AU -1°07'24 1°07'34 2.47421 AU	asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node opposition greatest brilliancy min. Earth dist. direct	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24  -4028 May 08 j 19:17 -4028 May 08 j 18:40 -4028 May 08 j 15:18 -4028 May 08 j 22:03 -4028 May 17 j 11:20 -4028 Jun 01 j 02:18 -4028 Jun 24 j 21:27 -4028 Jul 18 j 05:25 -4028 Sep 03 j 10:36 -4028 Oct 20 j 18:59 -4028 Dec 08 j 02:02 -4027 Jan 29 j 05:30 -4027 Apr 12 j 23:47 -4027 Apr 15 j 22:54 -4027 May 13 j 11:18 -4027 May 13 j 15:17 -4027 May 16 j 11:12 -4027 Jun 13 j 17:42 -4027 Aug 06 j 20:23 -4027 Sep 26 j 10:09 -4027 Dec 25 j 12:16 -4026 Feb 09 j 02:14	0° ズ 0° ズ 0° ズ 0° ズ 12° 升20'26 27° 升15'48 0° Y 15° Y04'08 15° Y03'09 14° Y57'44 15° Y08'35 20° Y38'22 0° ℧ 15° ℧10'05 0° 爪 0° 亞 24° 亞21'12 24° 亞17'52 19° 亞16'27 19° 亞16'27 19° 亞13'45 18° 亞27'50 13° 亞51'36 0° 爪 0° ズ 0° ズ 0° ズ 0° ズ	0°15'31 2.65643 AU -2°01'44 -2.9m		
retrograde opposition greatest brilliancy min. Earth dist. direct  desc. node evening set  conjunction minimum elong max. Earth dist. morning rise  asc. node	-4034 Aug 20 j 13:13 -4034 Oct 08 j 22:46 -4034 Nov 06 j 22:39 -4034 Dec 03 j 15:23 -4034 Dec 16 j 09:51 -4034 Dec 16 j 14:31 -4034 Dec 18 j 10:56 -4033 Jan 26 j 12:44 -4033 Mar 23 j 18:30 -4033 May 18 j 19:11 -4033 Jul 04 j 03:54 -4033 Aug 24 j 23:25 -4033 Nov 01 j 07:01 -4033 Nov 26 j 16:48 -4033 Dec 09 j 11:29 -4032 Jan 30 j 15:38 -4032 Jan 30 j 15:38 -4032 Feb 26 j 20:18 -4032 Mar 16 j 19:09 -4032 Apr 01 j 08:57 -4032 May 24 j 02:44 -4032 Jul 07 j 12:54 -4032 Jul 07 j 12:54 -4032 Aug 30 j 05:59 -4032 Oct 30 j 16:50	9°806'32 0°∏ 4°∏35'34 30°R8 25°813'42 25°809'04 24°825'02 15°815'00 0°∭ 0°∭ 0°∭ 0°∭ 19°∭12'34 0°™ 19°∭59'29 0°% 0°™ 19°™59'29 0°% 0°% 0°% 0°% 0°% 13°≈34'35 24°≈30'05 0°% 0°° 28°Y13'25 0°8 0°™ 0°9	-1°3m 0.66655 AU -1°07'24 1°07'34	asc. node  conjunction minimum elong behind sun begin behind sun end max. Earth dist.  morning rise  retrograde desc. node opposition greatest brilliancy min. Earth dist.	-4029 Oct 26 j 20:37 -4029 Dec 06 j 11:31 -4028 Jan 17 j 10:28 -4028 Mar 01 j 03:23 -4028 Mar 19 j 14:55 -4028 Apr 11 j 07:38 -4028 Apr 15 j 12:24  -4028 May 08 j 19:17 -4028 May 08 j 18:40 -4028 May 08 j 15:18 -4028 May 08 j 22:03 -4028 May 17 j 11:20 -4028 Jun 01 j 02:18 -4028 Jun 24 j 21:27 -4028 Jul 18 j 05:25 -4028 Sep 03 j 10:36 -4028 Oct 20 j 18:59 -4028 Dec 08 j 02:02 -4027 Jan 29 j 05:30 -4027 Apr 12 j 23:47 -4027 Apr 15 j 22:54 -4027 May 13 j 11:18 -4027 May 13 j 15:17 -4027 May 16 j 11:12 -4027 Jun 13 j 17:42 -4027 Aug 06 j 20:23 -4027 Sep 26 j 10:09 -4027 Nov 10 j 16:53 -4027 Dec 25 j 12:16	0° ₹ 0° ₹ 0° ₹ 0° ₹ 12° ¥20'26 27° ¥15'48 0° Υ 15° Υ04'08 15° Υ03'09 14° Υ57'44 15° Υ08'35 20° Υ38'22 0° ₹ 15° ₹10'05 0° Π 0° \$ 0° Ω 0° \$ 0° Ω 0° \$ 15° \$ 11'2 24° \$ 17'52 19° \$ 13' \$ 18° \$ 27'50 13° \$ 13° \$ 13° \$ 0° \$ 0° \$ 0° \$ 0° \$ 0° \$ 0° \$ 0° \$ 0	0°15'31 2.65643 AU -2°01'44 -2.9m		

evening set

-4026 Apr 30 j 00:24 21°**Υ**14'51

-4031 Jan 24 j 13:30 30°RⅡ

3	omena of Mars from		•	//		, ,	<i>C 3</i> 6
Attention, astronom	iical year style is used: Th	0° <b>8</b> 0°8 0°8	n astronomical co	unting style is the year		ounting style. 0°	
max. Earth dist.	-4026 May 13 j 18:58 -4026 Jun 10 j 08:34		2.66931 AU		-4021 Jan 27 j 10:23 -4021 Mar 07 j 17:40	0°る	
max. Earm dist.	-4020 Juli 10 J 08.34	17 03230	2.00931 AU		-4021 Mar 07 j 17:40	0°≈	
conjunction	-4026 Jun 16 j 03:28	21° <b>8</b> 14'48	0°53'51		-4021 Jun 01 j 00:52	0° <b>∺</b>	
minimum elong	-4026 Jun 16 j 02:12	21° <b>8</b> 12'47			-4021 Jul 23 j 05:30	0° <b>Υ</b>	
8	-4026 Jun 29 j 19:26	0°II		retrograde	-4021 Sep 20 j 11:29	17° <b>Y</b> 18'18	
morning rise	-4026 Jul 31 j 09:31	20° <b>Ⅲ</b> 25′07		asc. node	-4021 Oct 20 j 03:59	11° <b>Y</b> ′24'28	
Č	-4026 Aug 15 j 01:14	0° <b>©</b>		min. Earth dist.	-4021 Oct 27 j 07:09	8° <b>Y</b> 38'39	0.64142 AU
	-4026 Sep 29 j 04:19	$0^{\circ}\Omega$		opposition	-4021 Oct 30 j 12:20	7° <b>Y</b> ′21′12	0°24'22
	-4026 Nov 12 j 04:39	0° <b>m</b> )		greatest brilliancy	-4021 Oct 30 j 11:01	7° <b>Y</b> ′22'32	-1.5m
	-4026 Dec 25 j 08:54	0∘ <b>⊽</b>			-4021 Nov 21 j 11:01	30° <b>₹</b> ₩	
	-4025 Feb 06 j 06:46	0° <b>M</b> ₊		direct	-4021 Dec 08 j 10:00	28° <b>)</b> €07'23	
desc. node	-4025 Mar 03 j 23:53	17° <b>M</b> 41'40			-4021 Dec 26 j 11:36	$0^{\circ}$ Y	
	-4025 Mar 22 j 10:55	0° <b>∡</b> ¹			-4020 Mar 09 j 17:36	$0^{\circ}$ 8	
	-4025 May 13 j 09:13	0°ಕ			-4020 May 01 j 09:39	$\Pi$ °0	
retrograde	-4025 Jun 25 j 14:37	11° <b>る</b> 18'55			-4020 Jun 17 j 22:32	0ංම	
min. Earth dist.	-4025 Jul 22 j 15:04	6° <b>る</b> 29'02	0.42766 AU		-4020 Aug 01 j 02:01	$0$ ° $\Omega$	
greatest brilliancy	-4025 Jul 28 j 16:22	4°る32'08		evening set	-4020 Aug 30 j 22:57	21° <b>Ω</b> 25'42	
opposition	-4025 Jul 30 j 06:22	4°る01'15	-6°22'38	P. d. P.	-4020 Sep 11 j 14:00	0° <b>m</b> )	0 41510 AXX
r.	-4025 Aug 13 j 09:48	30°₹ <b>⋌</b> ¹		max. Earth dist.	-4020 Sep 20 j 05:48	~	2.41519 AU
direct	-4025 Aug 30 j 16:58	28° <b>尽</b> 00'42		1 1	-4020 Oct 21 j 04:03	ე∘ <b>ত</b>	
	-4025 Sep 17 j 13:31 -4025 Nov 26 j 12:32	್ %%		desc. node	-4020 Oct 23 j 19:39	2° <b>≏</b> 02'45	
asc. node	-4024 Jan 15 j 03:38	0 ≈ 28°≈46'20		conjunction	-4020 Oct 26 j 21:27	4° <b>£</b> 25'30	0°02'14
asc. Houe	-4024 Jan 17 j 04:50	28 <b>≈</b> 40 20		minimum elong	-4020 Oct 26 j 21:18	4° <b>2</b> 25'14	
	-4024 Mar 06 j 13:39	0°Υ		behind sun begin	-4020 Oct 25 j 19:48	3° <b>£</b> 35'53	0 02 14
	-4024 Apr 24 j 01:38	0°8		behind sun end	-4020 Oct 25 j 15:48	5° <b>≏</b> 14'37	
evening set	-4024 Jun 06 j 09:35	27° <b>8</b> 20'38		bennia san ena	-4020 Nov 28 j 15:31	0°M	
evening sec	-4024 Jun 10 j 13:13	0°II		morning rise	-4020 Dec 30 j 13:06	25°M02'28	
max. Earth dist.	-4024 Jul 03 j 22:32		2.62844 AU		-4019 Jan 05 j 21:18	0° <b>∡</b> 7	
	,				-4019 Feb 13 j 18:34	ರ°0	
conjunction	-4024 Jul 23 j 03:01	27° <b>Ⅱ</b> 43'48	1°11'00		-4019 Mar 26 j 03:38	0° <b>≈</b>	
minimum elong	-4024 Jul 23 j 02:48	27° <b>Ⅱ</b> 43′28	1°11'11		-4019 May 07 j 20:46	0° <b>∀</b>	
	-4024 Jul 26 j 13:06	$0$ $\circ$ $\odot$			-4019 Jun 23 j 00:36	$0^{\circ}$ Y	
morning rise	-4024 Sep 07 j 16:18	29° <b>©</b> 14'58			-4019 Aug 14 j 22:06	$0^{\circ}$ 8	
	-4024 Sep 08 j 18:19	$0^{\circ}\Omega$		asc. node	-4019 Sep 06 j 05:11	10° <b>8</b> 15'51	
	-4024 Oct 21 j 05:15	0° <b>™</b>		retrograde	-4019 Oct 24 j 06:17	21° <b>8</b> 44'05	
	-4024 Dec 01 j 05:09	0∘ <b>⊽</b>		opposition	-4019 Dec 03 j 02:21	12° <b>8</b> 07'39	
	-4023 Jan 10 j 05:48	0° <b>M</b> ₊		greatest brilliancy	-4019 Dec 03 j 02:14		-1.3m
desc. node	-4023 Jan 19 j 00:51	6°M38'16		min. Earth dist.	-4019 Dec 03 j 15:41	11° <b>8</b> 54'19	0.67188 AU
	-4023 Feb 19 j 01:03	0° <b>∡</b> ¹		direct	-4018 Jan 12 j 20:23	2° <b>8</b> 16'06	
	-4023 Mar 31 j 18:45	5°0			-4018 Apr 06 j 07:05	0° <b>I</b> I	
	-4023 May 14 j 16:36	0° <b>≫</b> 0° <b>)</b> (			-4018 May 27 j 21:05	$0$ ಂ ${\cal O}$	
retrograde	-4023 Jul 10 j 03:01 -4023 Aug 13 j 05:16	0° <b>X</b> 7° <b>X</b> 06'19			-4018 Jul 12 j 05:14 -4018 Aug 23 j 00:08	0° <b>m</b> y	
min. Earth dist.	-4023 Aug 13 j 03:10	0° <b>∺</b> 08′27	0.55187 AU	desc. node	-4018 Sep 10 j 17:09	14° Mp 02'04	
iiiii. Eartii dist.	-4023 Sep 14 j 07:14	0 7(0827 30°R≈	0.55187 AU	desc. Hode	-4018 Oct 01 j 12:57	ე∘ <b>ഹ</b>	
greatest brilliancy	-4023 Sep 20 j 09:02	27° <b>≈</b> 47'53	-1.9m	evening set	-4018 Oct 30 j 13:52	22° <b>≏</b> 40'51	
opposition	-4023 Sep 21 j 01:19	27°≈32'09		evening sec	-4018 Nov 08 j 20:59	0°M	
direct	-4023 Oct 26 j 19:35	19° <b>≈</b> 29'51			-4018 Dec 17 j 00:08	0° <b>∡</b> ¹	
asc. node	-4023 Dec 02 j 03:12	26° <b>≈</b> 30'11			. <b>.</b>		
	-4023 Dec 11 j 14:39	0° <b>∀</b>		conjunction	-4017 Jan 04 j 03:02	14° <b>∡</b> °06′08	-1°04'02
	-4022 Feb 10 j 22:00	$0^{\circ}$ Y		minimum elong	-4017 Jan 04 j 01:01	14° <b>∡</b> °02'14	1°04'11
	-4022 Apr 03 j 22:43	$9^{\circ}$ 8			-4017 Jan 24 j 20:28	ರ∘ರ	
	4022 May 22 : 19.29	$\Pi^{\circ}0$		max. Earth dist.		210-721112	2.42212 AU
	-4022 May 22 j 18:28	О Д		max. Earth dist.	-4017 Feb 22 j 09:04	21° <b>6</b> 21'13	222.2
	-4022 May 22 J 18.28 -4022 Jul 08 j 01:55	0°€		max. Earth dist.	-4017 Feb 22 j 09:04 -4017 Mar 06 j 04:43	0° <b>≈</b>	2.1212110
evening set				morning rise		0° <b>≈</b> 3° <b>≈</b> 26'00	2.1212110
evening set max. Earth dist.	-4022 Jul 08 j 01:55 -4022 Jul 16 j 06:38 -4022 Aug 02 j 11:04	0°ഇ 5°ഇ28'44 17°ഇ08'48	2.53774 AU		-4017 Mar 06 j 04:43 -4017 Mar 10 j 22:29 -4017 Apr 17 j 14:59	0° <b>≈</b> 3° <b>≈</b> 26'00 0° <b>米</b>	<b></b>
•	-4022 Jul 08 j 01:55 -4022 Jul 16 j 06:38	0°ତ 5°ତ28'44	2.53774 AU		-4017 Mar 06 j 04:43 -4017 Mar 10 j 22:29 -4017 Apr 17 j 14:59 -4017 Jun 01 j 12:57	0°≈ 3°≈26'00 0°¥ 0°Υ	2.122.12
max. Earth dist.	-4022 Jul 08 j 01:55 -4022 Jul 16 j 06:38 -4022 Aug 02 j 11:04 -4022 Aug 20 j 23:47	0°S 5°S28'44 17°S08'48 0°Ω		morning rise	-4017 Mar 06 j 04:43 -4017 Mar 10 j 22:29 -4017 Apr 17 j 14:59 -4017 Jun 01 j 12:57 -4017 Jul 19 j 12:06	0°≈ 3°≈26'00 0°ℋ 0°Ƴ 0°℧	2.122.12
max. Earth dist.	-4022 Jul 08 j 01:55 -4022 Jul 16 j 06:38 -4022 Aug 02 j 11:04 -4022 Aug 20 j 23:47 -4022 Sep 03 j 16:26	0°\$ 5°\$28'44 17°\$08'48 0°\$Ω 9°\$\Omega41'08	0°55'49		-4017 Mar 06 j 04:43 -4017 Mar 10 j 22:29 -4017 Apr 17 j 14:59 -4017 Jun 01 j 12:57 -4017 Jul 19 j 12:06 -4017 Jul 25 j 04:43	0°≈ 3°≈26'00 0°升 0°Υ 0°∀ 3°824'07	2.121.2
max. Earth dist.	-4022 Jul 08 j 01:55 -4022 Jul 16 j 06:38 -4022 Aug 02 j 11:04 -4022 Aug 20 j 23:47 -4022 Sep 03 j 16:26 -4022 Sep 03 j 18:08	0°S 5°S28'44 17°S08'48 0°N 9°N41'08 9°N44'09		morning rise asc. node	-4017 Mar 06 j 04:43 -4017 Mar 10 j 22:29 -4017 Apr 17 j 14:59 -4017 Jun 01 j 12:57 -4017 Jul 19 j 12:06 -4017 Jul 25 j 04:43 -4017 Sep 10 j 21:10	0°≈ 3°≈26'00 0° ℋ 0° ℋ 0° ℧ 3°℧24'07	2.122.2
max. Earth dist.  conjunction minimum elong	-4022 Jul 08 j 01:55 -4022 Jul 16 j 06:38 -4022 Aug 02 j 11:04 -4022 Aug 20 j 23:47 -4022 Sep 03 j 16:26 -4022 Sep 03 j 18:08 -4022 Oct 01 j 17:32	0°5 5°528'44 17°508'48 0°N 9°N41'08 9°N44'09 0°M	0°55'49	morning rise asc. node retrograde	-4017 Mar 06 j 04:43 -4017 Mar 10 j 22:29 -4017 Apr 17 j 14:59 -4017 Jun 01 j 12:57 -4017 Jul 19 j 12:06 -4017 Jul 25 j 04:43 -4017 Sep 10 j 21:10 -4017 Nov 29 j 15:42	0°≈ 3°≈26'00 0° ℋ 0° ℉ 0° ❤ 3°♥24'07 0° Ⅲ 25° Ⅱ48'05	
max. Earth dist.	-4022 Jul 08 j 01:55 -4022 Jul 16 j 06:38 -4022 Aug 02 j 11:04 -4022 Aug 20 j 23:47 -4022 Sep 03 j 16:26 -4022 Sep 03 j 18:08 -4022 Oct 01 j 17:32 -4022 Oct 26 j 06:04	0°\$\\ 5°\$28'44\\ 17°\$08'48\\ 0°\$\lambda\\ 9°\$\lambda41'08\\ 9°\$\lambda44'09\\ 0°\$\lambda\\ 18°\$\lambda15'02	0°55'49	asc. node retrograde opposition	-4017 Mar 06 j 04:43 -4017 Mar 10 j 22:29 -4017 Apr 17 j 14:59 -4017 Jun 01 j 12:57 -4017 Jul 19 j 12:06 -4017 Jul 25 j 04:43 -4017 Sep 10 j 21:10 -4017 Nov 29 j 15:42 -4016 Jan 07 j 05:04	0°≈ 3°≈26'00 0° ℋ 0° ℉ 0° ❤ 3°♥24'07 0° Ⅲ 25° Ⅱ48'05 16° Ⅱ56'01	4°44'06
max. Earth dist.  conjunction minimum elong morning rise	-4022 Jul 08 j 01:55 -4022 Jul 16 j 06:38 -4022 Aug 02 j 11:04 -4022 Aug 20 j 23:47 -4022 Sep 03 j 16:26 -4022 Sep 03 j 18:08 -4022 Oct 01 j 17:32 -4022 Oct 26 j 06:04 -4022 Nov 10 j 18:28	0°50 5°528'44 17°508'48 0°N 9°N41'08 9°N44'09 0°M 18°M15'02 0°9	0°55'49	asc. node retrograde opposition greatest brilliancy	-4017 Mar 06 j 04:43 -4017 Mar 10 j 22:29 -4017 Apr 17 j 14:59 -4017 Jun 01 j 12:57 -4017 Jul 19 j 12:06 -4017 Jul 25 j 04:43 -4017 Sep 10 j 21:10 -4017 Nov 29 j 15:42 -4016 Jan 07 j 05:04 -4016 Jan 07 j 20:20	0°≈ 3°≈26'00 0° ); 0° ); 0° ); 0° ); 3° ); 3° ); 24'07 0° ); 16° ]; 16	4°44'06 -1.4m
max. Earth dist.  conjunction minimum elong	-4022 Jul 08 j 01:55 -4022 Jul 16 j 06:38 -4022 Aug 02 j 11:04 -4022 Aug 20 j 23:47 -4022 Sep 03 j 16:26 -4022 Sep 03 j 18:08 -4022 Oct 01 j 17:32 -4022 Oct 26 j 06:04	0°\$\\ 5°\$28'44\\ 17°\$08'48\\ 0°\$\lambda\\ 9°\$\lambda41'08\\ 9°\$\lambda44'09\\ 0°\$\lambda\\ 18°\$\lambda15'02	0°55'49	asc. node retrograde opposition	-4017 Mar 06 j 04:43 -4017 Mar 10 j 22:29 -4017 Apr 17 j 14:59 -4017 Jun 01 j 12:57 -4017 Jul 19 j 12:06 -4017 Jul 25 j 04:43 -4017 Sep 10 j 21:10 -4017 Nov 29 j 15:42 -4016 Jan 07 j 05:04	0°≈ 3°≈26'00 0° ℋ 0° ℉ 0° ❤ 3°♥24'07 0° Ⅲ 25° Ⅱ48'05 16° Ⅱ56'01	4°44'06

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -4016 Apr 29 j 09:50 0ಂಣ -4011 May 20 j 15:28 0°8 -4016 Jun 18 j 14:45  $0^{\circ}\Omega$ -4016 Jul 28 j 15:23 27°**Ω**39'43 -4011 Jun 01 j 13:36 7°**8**36'07 0°41'00 desc. node conjunction 0° M -4011 Jun 01 j 12:22 0°41'05 -4016 Jul 31 j 20:54 7°**8**34'09 minimum elong -4016 Sep 09 j 23:14 -4011 Jun 01 j 02:51 7°**8**19'00 0∘ଫ max. Earth dist. 2.67083 AU -4016 Oct 18 j 14:15 0°M -4011 Jul 06 j 15:21  $0^{\circ}\Pi$ 0°**∡**¹ -4011 Jul 17 j 04:24 6°II45'39 -4016 Nov 25 j 23:24 morning rise 0°정 -4015 Jan 04 j 02:40 -4011 Aug 22 j 03:53 0ಂತಾ evening set -4015 Jan 05 j 23:08 1°る23'43 -4011 Oct 06 j 22:30 0° $\Omega$ -4015 Feb 13 j 18:22 0°≈ -4011 Nov 21 j 01:55 0° m -4010 Jan 05 j 01:43 0∘**⊽** -4015 Mar 07 j 01:35 conjunction 15°≈10'13 -0°50'52 -4010 Feb 20 j 03:24 0°M minimum elong -4015 Mar 07 j 03:45 15°≈14'02 0°50'59 desc. node -4010 Mar 20 j 17:22 17°M17'05 -4015 Mar 28 j 09:47 0°**)**€ -4010 Apr 13 j 21:48 0°**⊼** max. Earth dist. -4015 Apr 10 j 02:29 8°**¥**39′18 2.54949 AU retrograde -4010 May 31 j 01:41 12°**₹**42'06 morning rise -4015 May 01 j 10:58 22° ¥ 57'09 min. Earth dist. -4010 Jun 27 j 00:11 8°**х** 15′59 0.38980 AU -4015 May 12 j 03:36  $0^{\circ}\Upsilon$ greatest brilliancy -4010 Jul 01 j 00:40 7°**∡**07'44 -2.8m asc. node -4015 Jun 11 j 02:59 19° Y 23'20 opposition -4010 Jul 02 j 03:14 6°**∡**¹48'50 -6°11'46 -4015 Jun 27 j 20:47 0°8 direct -4010 Aug 01 j 03:21 1°×36'49 -4015 Aug 15 j 14:21  $\mathbb{I}^{\circ 0}$ -4010 Oct 19 j 15:01 -4015 Oct 06 j 18:16 0ಂತಾ -4010 Dec 09 j 05:21 0°≈ -4015 Dec 13 i 05:56  $0^{\circ}\Omega$ -4009 Jan 26 i 09:44 0°) -4014 Jan 11 i 10:42 4°Ω34'30 -4009 Jan 31 j 18:09 3°¥20'53 retrograde asc. node -4014 Feb 07 i 14:25 30°R55 -4009 Mar 15 i 07:58  $0^{\circ}\Upsilon$ -4014 Feb 16 i 10:30 26°957'04 4°58'42 -4009 May 02 j 03:59 0°8 opposition -4014 Feb 17 j 19:34 -4009 May 23 j 14:13 13°**8**32'15 greatest brilliancy 26°927'01 -1 9m evening set -4014 Feb 24 j 06:24 24°506'44 0.54327 AU -4009 Jun 18 j 09:34 min. Earth dist. 0°π -4014 Mar 28 j 01:44 17°9541'48 -4009 Jun 25 j 05:43 4°**Д**23'59 2.65061 AU direct max. Earth dist. -4014 May 14 j 09:44  $0^{\circ}\Omega$ -4009 Jul 09 j 03:46 -4014 Jun 15 j 14:24 17°**Ω**16'23 13°**I**24'44 1°07'31 desc. node conjunction -4014 Jul 05 j 16:58 -4009 Jul 09 j 02:58 0° m 13°**Ⅲ**23'27 1°07'39 minimum elong -4009 Aug 03 j 10:28 0∘**⊽** -4014 Aug 17 j 10:27 0ಂತಾ -4009 Aug 23 j 18:23 -4014 Sep 26 j 09:05 0°M 13°534'19 morning rise -4014 Nov 04 j 16:59 0° ×7 -4009 Sep 16 j 22:21 0 $^{\circ}\Omega$ -4014 Dec 14 j 16:27 0°궁 -4009 Oct 29 j 20:50 0° m -4013 Jan 25 j 02:42 -4009 Dec 10 j 12:00 0°≈ 0∘ଫ -4008 Jan 20 j 06:52 evening set -4013 Mar 02 j 13:12 25°**≈**20'40 0°M -4013 Mar 09 j 09:24 0°**)**€ desc. node -4008 Feb 05 j 17:08 12°M08'26 -4008 Mar 01 j 00:28 0°**⊼** conjunction -4013 Apr 23 j 18:36 0°Y11'25 -0°03'03 -4008 Apr 12 j 06:40 0°ರ -4013 Apr 23 j 18:45 0°Y11'40 0°03'03 -4008 May 30 j 15:20 0°≈ minimum elong -4013 Apr 22 j 22:13 29°**)** 38'07 -4008 Jul 26 j 20:45 18°≈07'47 behind sun begin retrograde -4013 Apr 24 j 15:17 0°Y45'12 -4008 Aug 25 j 18:58 12°≈00'41 0.50400 AU behind sun end min. Earth dist. -4013 Apr 23 j 11:35  $0^{\circ}\Upsilon$ -4008 Sep 01 j 09:59 9°≈34'10 -2.1m greatest brilliancy -4013 Apr 29 j 00:23 3°**Y**36'39 -4008 Sep 02 j 13:34 9°≈08'41 -4°33'12 asc. node opposition -4013 May 08 j 23:20 max. Earth dist. 10°**Υ**'04'34 2.63661 AU direct -4008 Oct 06 i 16:46 1°≈48'10 -4013 Jun 08 j 23:28 0°8 asc. node -4008 Dec 18 i 18:20 24°≈55'29 morning rise -4013 Jun 11 i 09:52 1°833'08 -4008 Dec 28 i 17:16 0°)  $0^{\circ}\Upsilon$ -4013 Jul 26 i 07:53  $\mathbb{I}^{\circ 0}$ -4007 Feb 20 i 13:26 -4013 Sep 12 j 06:48 0ಂತಾ -4007 Apr 11 j 18:06 0°8 -4013 Oct 31 j 08:55  $0^{\circ}\Omega$ -4007 May 29 j 21:58  $0^{\circ}\Pi$ 20°**Ⅱ**16′18 -4013 Dec 23 j 04:03 0°m -4007 Jun 30 j 07:44 evening set -4012 Mar 12 j 22:12 -4007 Jul 15 j 01:09 retrograde 27° m 06'20 0ംഉ -4012 Apr 13 j 19:13 21° Mp 26'06 1°16'57 max. Earth dist. -4007 Jul 20 j 22:28 3°955'56 2.57859 AU opposition greatest brilliancy -4012 Apr 14 j 05:12 21° Mp 18'37 -2.7m min. Earth dist. -4012 Apr 20 j 17:24 19° Mp 22'33 0.41599 AU conjunction -4007 Aug 17 j 05:28 22°\$29'33 1°06'25 desc. node -4012 May 02 j 16:08 16° m 22'19 minimum elong -4007 Aug 17 j 06:28 22°931'17 1°06'35 -4012 May 17 j 20:54 14° m 47'57 -4007 Aug 28 j 00:55 0° $\Omega$ direct -4012 Jul 08 j 13:36 0∘**⊽** -4007 Oct 05 j 16:37 27°**Ω**34'57 morning rise 0°M -4012 Aug 27 j 01:30 -4007 Oct 09 j 00:10 0° m -4012 Oct 09 j 09:24 0°**√** -4007 Nov 18 j 08:21 0∘**⊽** -4012 Nov 20 j 21:46 0°궁 desc. node -4007 Dec 23 j 16:14 26°**£**56'58 -4011 Jan 03 j 04:22 0°≈ -4007 Dec 27 j 15:28 0°M -4011 Feb 16 j 19:32 0°**)**€ -4006 Feb 04 j 15:25 0°**∡**7 asc. node -4011 Mar 15 j 20:30 17°**)** 44'03 -4006 Mar 16 j 07:03 0°궁 -4011 Apr 03 j 19:04  $0^{\circ}\Upsilon$ -4006 Apr 26 j 21:26 0°**≈** 

6°Y56'21

-4011 Apr 14 j 13:54

evening set

-4006 Jun 11 j 21:59

0°)

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 40 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.  $0^{\circ}\Upsilon$ -4006 Aug 15 j 18:42 -4001 Aug 10 j 04:34 0° m -4006 Sep 06 j 08:50 2°Y54'29 -4001 Aug 15 j 09:00 desc. node 3°m49'21 retrograde -4006 Sep 26 j 17:41 -4001 Sep 18 j 23:11 0∘**⊽** 30°**₹** -4006 Oct 11 j 11:37 24°**)**(49'50 0.61294 AU -4001 Oct 27 j 09:53 min. Earth dist. oom. 22°**)** 58'45 -0°50'35 -4001 Dec 04 j 15:14 -4006 Oct 16 j 03:08 0°×7 opposition 5°**х** 49′07 -4006 Oct 16 j 00:03 -1.6m greatest brilliancy 23°**₭**01'50 evening set -4001 Dec 12 j 02:35 16°**)**€04'36 -4000 Jan 12 j 14:24 asc. node -4006 Nov 05 j 19:09 0°궁 direct -4006 Nov 22 j 23:05 14°**)** 07'56  $0^{\circ}\Upsilon$ -4005 Jan 21 j 06:11 conjunction -4000 Feb 13 j 15:45 23°る52'17 -1°03'44 -4005 Mar 20 j 16:54 0°8 minimum elong -4000 Feb 13 j 17:28 23°る55'25 1°03'53 -4005 May 10 j 08:12  $0^{\circ}\Pi$ -4000 Feb 22 j 01:52 0°**≈** -4005 Jun 26 j 06:24 -4000 Mar 26 j 16:03 0ಂತಾ max. Earth dist. 23°≈50'32 2.50271 AU -4005 Aug 09 j 06:33  $0^{\circ}\Omega$ -4000 Apr 04 j 13:39 0°**)**€ evening set -4005 Aug 12 j 12:37 2°Ω17'24 morning rise -4000 Apr 12 j 22:50 5° **)** 44'22 max. Earth dist. -4005 Aug 27 j 16:45 13°**Ω**06′19 2.46415 AU -4000 May 19 j 06:53  $0^{\circ}\Upsilon$ -4005 Sep 19 j 20:08 asc. node -4000 Jun 27 j 18:50 25°**Y**18'47 -4000 Jul 05 j 06:56 0°8 conjunction -4005 Oct 04 j 20:16 11° m 11'41 0°25'16 -4000 Aug 24 j 03:01  $0^{\circ}\Pi$ minimum elong -4005 Oct 04 j 21:47 11° Mp 14'32 0°25'18 -4000 Oct 19 j 12:13 0ಂತಾ -4005 Oct 29 j 13:42 0∘**⊽** retrograde -4000 Dec 23 j 23:25 18°9540'08 desc. node -4005 Nov 10 j 13:50 9°**£**15'36 opposition -3999 Jan 30 j 04:13 10°9528'32 5°08'25 morning rise -4005 Dec 03 j 11:10 27°**₽**04'33 greatest brilliancy -3999 Jan 31 i 07:31 10°9502'49 -1.7m -4005 Dec 07 i 04:56 0°M min. Earth dist. -3999 Feb 05 i 19:13 7°959'00 0.58765 AU -4004 Jan 14 i 13:37 0°×7 direct -3999 Mar 11 j 18:32 0°9546'06 -4004 Feb 22 j 12:58 0°정 -3999 May 31 j 12:30  $0^{\circ}\Omega$ -4004 Apr 03 j 00:50 0°**≈** -3999 Jul 02 j 08:47 20°**Ω**05'27 desc node -4004 May 16 j 01:52 0°**₩** -3999 Jul 16 j 20:11 O° m -4004 Jul 02 j 10:05  $0^{\circ}\Upsilon$ -3999 Aug 27 j 00:46 0∘**⊽** -4004 Aug 30 j 21:08 0°8 -3999 Oct 05 j 05:42 oom. -4004 Sep 22 j 19:23 -3999 Nov 13 j 01:06 0°×7 6°**8**52'55 asc. node -4004 Oct 10 j 19:59 -3999 Dec 22 j 13:46 0°궁 8°**8**49'41 retrograde -3998 Feb 01 j 14:27 30°**Ŗ**Υ -4004 Nov 17 j 11:15 0°≈ -4004 Nov 19 j 21:07 29°**Υ**02'00 2°06'46 -3998 Feb 10 j 17:04 6°≈28'56 opposition evening set 29°**Υ**24'13 0.66752 AU -4004 Nov 18 j 22:58 -3998 Mar 16 j 13:12 0°\ min. Earth dist. -4004 Nov 19 j 18:21 29°**Y**′04'46 greatest brilliancy -1.4m 19°**Y**21'49 -4004 Dec 30 j 01:20 -3998 Apr 06 j 14:33 14°**)** 13'30 -0°22'17 direct conjunction -4003 Feb 15 j 01:37  $0^{\circ}$ 8 minimum elong -3998 Apr 06 j 15:36 14° **★**15'15 0°22'20 -4003 Apr 16 j 18:56  $0^{\circ}II$ max. Earth dist. -3998 Apr 28 j 17:18 28°**升**52'28 2.60865 AU -4003 Jun 05 j 04:15 0ಂತಾ -3998 Apr 30 j 10:28  $0^{\circ}\Upsilon$ -4003 Jul 19 j 21:33  $0^{\circ}\Omega$ asc. node -3998 May 15 j 15:31 9°Y55'00 -4003 Aug 30 j 12:20 0° m -3998 May 27 j 08:40 17°Y28'57 morning rise -4003 Sep 27 j 10:21 21°Mp04'10 -3998 Jun 15 j 22:12 0°8 desc. node -4003 Oct 05 j 00:14 26° m 53'40 -3998 Aug 02 j 15:10  $0^{\circ}\Pi$ evening set -4003 Oct 09 j 00:46 0∘**⊽** -3998 Sep 20 j 15:47 0ಂತಾ -4003 Nov 16 j 09:25 -3998 Nov 11 j 15:50  $0^{\circ}\Omega$  $0^{\circ}$ M -3997 Jan 18 j 00:41 0° m -4003 Dec 07 i 05:36 16°M25'07 -0°46'37 conjunction -3997 Feb 15 i 00:37 4° m 16'06 retrograde -4003 Dec 07 i 02:21 minimum elong 16°M18'42 0°46'42 -3997 Mar 13 j 12:41 30°RΩ -4003 Dec 24 j 12:44 0°×7 opposition -3997 Mar 20 j 13:57 27°**Ω**45'59 3°29'23 max. Earth dist. -4002 Jan 02 i 04:19 6° ₹ 45'13 2.37975 AU greatest brilliancy -3997 Mar 21 j 18:25  $27^{\circ}\Omega 22'25 - 2.3m$ -4002 Feb 01 j 08:20 0°궁 min. Earth dist. -3997 Mar 28 j 23:00 25°Ω00'23 0.46460 AU -4002 Feb 13 j 07:34 9°る02'59 direct -3997 Apr 26 j 10:44 19°Ω49'59 morning rise -4002 Mar 13 j 15:27 0°**≈** desc. node -3997 May 20 j 08:27 23°**Ω**31'14 0°**₩** -4002 Apr 25 j 01:52 -3997 Jun 06 j 19:34 0° m -4002 Jun 09 j 06:07  $0^{\circ}\Upsilon$ -3997 Jul 29 j 04:54 0∘**⊽** -3997 Sep 10 j 00:53 -4002 Jul 28 j 07:14 0°8 0°M -3997 Oct 20 j 22:52 -4002 Aug 10 j 19:56 7°**8**39'47 0°×7 asc. node -4002 Sep 24 j 22:17  $0^{\circ}\Pi$ -3997 Dec 01 j 01:21 0°る -4002 Nov 14 j 23:57 12°**Ⅲ**28'52 -3996 Jan 12 j 08:43 0°≈ retrograde -4002 Dec 24 j 04:45 -3996 Feb 25 j 07:23 0°**)**€ opposition 3°**I**16'35 4°11'39 greatest brilliancy -4002 Dec 24 j 12:53 3°**I**08'33 -1.4m evening set -3996 Mar 29 j 08:36 21°**X**51'53 min. Earth dist. -4002 Dec 27 j 02:07 2°**I**08'11 0.65939 AU asc. node -3996 Apr 01 j 12:47 23°\ 56'20 -4001 Jan 01 j 14:57 30°R₩ -3996 Apr 10 j 20:11  $0^{\circ}\Upsilon$ direct -4001 Feb 03 j 10:16 23°**8**15'49 -4001 Mar 11 j 04:06  $0^{\circ}II$ conjunction -3996 May 17 j 15:16 23°**Y**'42'27 0°25'30 -4001 May 12 j 08:08 0ಂತಾ -3996 May 17 j 14:20 23°**Y**40'59 minimum elong 0°25'33 -4001 Jun 28 j 17:36  $0^{\circ}\Omega$ max. Earth dist. -3996 May 22 j 23:52 27°**Y**08'09 2.66380 AU Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 41 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.									
	-3996 May 27 j 11:27	$0^{\circ}$ 8			-3991 Oct 25 j 13:18	30° <b>R</b> ≈			
morning rise	-3996 Jul 03 j 01:49	23° <b>8</b> 20'08		direct	-3991 Nov 06 j 03:56	29° <b>≈</b> 06′21			
	-3996 Jul 13 j 12:43	$\Pi$ °0			-3991 Nov 18 j 06:19	0° <b>)</b> €			
	-3996 Aug 29 j 11:03	$0$ $\circ$ $\odot$		asc. node	-3991 Nov 22 j 09:48	0° <b>)</b> (40'48			
	-3996 Oct 15 j 03:18	$0^{\circ}\Omega$			-3990 Feb 03 j 20:29	$0^{\circ}$ Y			
	-3996 Nov 30 j 23:46	0° <b>m</b>			-3990 Mar 29 j 12:34	$0^{\circ}S$			
	-3995 Jan 18 j 08:24	0∘ <b>⊽</b>			-3990 May 17 j 21:46	$\Pi$ °0			
	-3995 Mar 15 j 05:00	0° <b>M</b> ₊			-3990 Jul 03 j 10:25	$0$ $\circ$			
desc. node	-3995 Apr 06 j 09:16	8°ML07'46		evening set	-3990 Jul 25 j 19:04	15° <b>©</b> 03'07			
retrograde	-3995 Apr 30 j 22:17	11°M46'43		max. Earth dist.	-3990 Aug 10 j 13:41		2.51247 AU		
opposition	-3995 May 31 j 11:58	6° <b>M</b> .41′55			-3990 Aug 16 j 09:16	$0$ $\circ$ $\Omega$			
greatest brilliancy	-3995 May 31 j 09:14	6°M₊43'44				0			
min. Earth dist.	-3995 May 31 j 09:34		0.37686 AU	conjunction	-3990 Sep 14 j 09:00	20° <b>Ω</b> 42′29			
direct	-3995 Jun 30 j 17:02	1°MJ38'53		minimum elong	-3990 Sep 14 j 10:53	20° <b>Ω</b> 45'54	0°46'47		
	-3995 Sep 15 j 23:17	0° <b>∡</b> ¹			-3990 Sep 27 j 01:42	0° <b>m</b> y			
	-3995 Nov 03 j 10:09	0° <b>ප</b>			-3990 Nov 05 j 23:48	0° <b>ʊ</b>			
	-3995 Dec 19 j 13:38	0° <b>≈</b>		morning rise	-3990 Nov 08 j 04:37	1° <b>Ω</b> 40'58			
	-3994 Feb 03 j 20:21	0° <b>∀</b>		desc. node	-3990 Nov 27 j 07:36	16° <b>≏</b> 24'18			
asc. node	-3994 Feb 17 j 10:40	8° <b>)</b> 43′48			-3990 Dec 14 j 19:58	0°M			
. ,	-3994 Mar 22 j 19:11	0° <b>Υ</b>			-3989 Jan 22 j 09:05	0° <b>∡</b> 7			
evening set	-3994 May 08 j 16:33	29° <b>Y</b> 42'49			-3989 Mar 02 j 12:27	್ತ			
F 4 F	-3994 May 09 j 03:24	0°8	2 ((107 11)		-3989 Apr 12 j 06:14	0° <b>≈</b>			
max. Earth dist.	-3994 Jun 15 j 19:09	23° <b>8</b> 57'42	2.66487 AU		-3989 May 25 j 22:07	0° <b>)</b> €			
	2004 1 24:12.10	200 422152	0050154		-3989 Jul 14 j 12:37	0°Υ 25° <b>Ω</b> 25'00			
conjunction	-3994 Jun 24 j 12:18	29° <b>8</b> 32'53		retrograde	-3989 Sep 28 j 08:58	25° <b>Y</b> 35'09			
minimum elong	-3994 Jun 24 j 11:08	29° <b>8</b> 31'01	1°00'02	asc. node	-3989 Oct 10 j 10:41	24° <b>Y</b> 35'52	0.65245.411		
	-3994 Jun 25 j 05:12	0°II		min. Earth dist.	-3989 Nov 05 j 01:24	16° <b>Y</b> 37'53	0.65345 AU		
morning rise	-3994 Aug 08 j 18:10	28° <b>I</b> 55'51		opposition	-3989 Nov 07 j 10:49	15° <b>Υ</b> 40'12	1°04'16		
	-3994 Aug 10 j 09:08	0.ಲ		greatest brilliancy	-3989 Nov 07 j 08:02	15° <b>Y</b> 43'00	-1.4m		
	-3994 Sep 24 j 06:22	0° <b>N</b>		direct	-3989 Dec 16 j 20:14	6° <b>℃</b> 15'44			
	-3994 Nov 06 j 20:35	0° <b>m</b> )			-3988 Mar 02 j 05:51	0°B 0°B			
	-3994 Dec 19 j 09:17	0∘ <b>ル</b> 0∘ಹ			-3988 Apr 25 j 21:12	0ಂಣ ೧.π			
daga mada	-3993 Jan 30 j 08:09 -3993 Feb 22 j 10:38	16°ML27'37			-3988 Jun 13 j 00:10 -3988 Jul 27 j 08:38	0°€ 0°€			
desc. node	•	10°1162/3/ 0° <b>√</b>			-3988 Jul 2/j 08:38 -3988 Sep 06 j 22:02				
	-3993 Mar 13 j 18:09 -3993 Apr 28 j 16:12	0°る		evening set	-3988 Sep 11 j 20:35	0° <b>т</b> р 3° <b>т</b> р 40'39			
retrograde	-3993 Apr 28 j 10.12 -3993 Jul 08 j 03:33	0 8 25° <b>る</b> 59'11		max. Earth dist.	-3988 Oct 10 j 13:41	25° Mp 26'37	2.39175 AU		
min. Earth dist.	-3993 Jul 08 j 03:33		0.45375 AU	desc. node	-3988 Oct 10 j 15:41	28° m) 16'00	2.39173 AU		
greatest brilliancy	-3993 Aug 03 j 00:44 -3993 Aug 11 j 13:40	18°る30'23		desc. node	-3988 Oct 14 j 05:41	28 IIV 10 00 0° <b>ჲ</b>			
opposition	-3993 Aug 11 j 13:40 -3993 Aug 13 j 02:35	18 <b>3</b> 5023			-5988 Oct 10 j 11.30	0 ==			
direct	-3993 Sep 14 j 10:32	11° <b>る</b> 28'24	3 33 01	conjunction	-3988 Nov 10 j 02:22	19° <b>≏</b> 09'29	-0°19'05		
ancer	-3993 Nov 16 j 03:17	0°≈		minimum elong	-3988 Nov 10 j 00:48	19° <b>⊆</b> 06'25			
asc. node	-3992 Jan 05 j 09:26	26°≈58'12		minimum ciong	-3988 Nov 23 j 21:53	0°M	0 17 00		
use. Houe	-3992 Jan 10 j 15:38	0° <b>∀</b>			-3987 Jan 01 j 02:11	0° <b>⊼</b>			
	-3992 Mar 01 j 04:57	0° <b>Υ</b>		morning rise	-3987 Jan 15 j 23:02	11° <b>∡</b> ³35'11			
	-3992 Apr 19 j 05:09	0°8		morning 115¢	-3987 Feb 08 j 21:48	0°る			
	-3992 Jun 05 j 21:54	0°II			-3987 Mar 21 j 04:52	0° <b>≈</b>			
evening set	-3992 Jun 15 j 00:17	5° <b>Ⅱ</b> 50'08			-3987 May 02 j 17:37	0° <b>)</b> €			
max. Earth dist.	-3992 Jul 09 j 22:43		2.61258 AU		-3987 Jun 17 j 09:20	0°Υ			
	-3992 Jul 21 j 22:59	0ಂತ			-3987 Aug 07 j 07:37	0° <b>႘</b>			
	· j ==-37			asc. node	-3987 Aug 27 j 10:22	10° <b>8</b> 18'35			
conjunction	-3992 Aug 01 j 00:38	6°9543'47	1°10'52	retrograde	-3987 Nov 01 j 02:17	29° <b>8</b> 33'29			
minimum elong	-3992 Aug 01 j 00:52	6°9544'10	1°11'02	opposition	-3987 Dec 10 j 17:58	20° <b>8</b> 04'49	3°29'45		
0	-3992 Sep 04 j 02:15	0°N		greatest brilliancy	-3987 Dec 10 j 20:19	20° <b>8</b> 02'29	-1.3m		
morning rise	-3992 Sep 17 j 09:38	9° <b>Ω</b> 18'28		min. Earth dist.	-3987 Dec 12 j 03:27	19° <b>8</b> 31'30	0.67025 AU		
<b>U</b> -	-3992 Oct 16 j 09:02	0° m/y		direct	-3986 Jan 20 j 17:26	10° <b>8</b> 08'38			
	-3992 Nov 26 j 02:59	0∘ <u>⊽</u>			-3986 Mar 29 j 05:25	0°Щ			
	-3991 Jan 04 j 20:48	0° <b>M</b> .			-3986 May 22 j 03:03	0ಂಣ			
desc. node	-3991 Jan 09 j 09:28	3°M26'38			-3986 Jul 07 j 02:01	$0^{\circ}\Omega$			
	-3991 Feb 13 j 07:50	0° <b>∡</b> 7			-3986 Aug 18 j 02:28	0° m)			
	-3991 Mar 25 j 13:13	0°ರ		desc. node	-3986 Sep 01 j 03:01	10° m/27'33			
	-3991 May 07 j 06:37	0° <b>≈</b>			-3986 Sep 26 j 17:23	0∘ <u>⊽</u>			
	-3991 Jun 26 j 07:25	0° <b>∀</b>			-3986 Nov 04 j 02:21	0°M			
retrograde	-3991 Aug 22 j 08:43	17° <b>¥</b> 13'13		evening set	-3986 Nov 14 j 18:08	8°M23'50			
min. Earth dist.	-3991 Sep 24 j 13:39	9° <b>)</b> 49'47	0.57567 AU		-3986 Dec 12 j 05:54	0° <b>∡</b> ¹			
opposition	-3991 Sep 30 j 14:28	7° <b>∺</b> 27'59	-2°13'20						
greatest brilliancy	-3991 Sep 30 j 03:51	7° <b>)</b> 38′24	-1.8m	conjunction	-3985 Jan 19 j 08:45	29° <b>∡</b> ¹26′28	-1°07'35		

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. 29°**х** 25′37 1°07′46 -3985 Jan 19 j 08:18 -3981 Oct 25 i 00:55  $0^{\circ}\Omega$ minimum elong -3985 Jan 20 j 02:25 0°궁 -3981 Dec 13 j 20:18 0° m -3985 Mar 01 j 10:41 -3980 Feb 09 j 10:35 0∘**⊽** 0°≈≈ max. Earth dist. -3985 Mar 08 j 21:55 5°≈24'04 2.45073 AU -3980 Mar 30 j 01:54 12°**2**21'10 retrograde -3980 Apr 23 j 01:42 morning rise -3985 Mar 24 j 00:58 16°≈11'22 desc. node 8°**£**57'28 0°**)**€ -3985 Apr 12 j 20:00 opposition -3980 Apr 30 j 00:19 7°**£**04'29 -0°30'02  $0^{\circ}\Upsilon$ -3980 Apr 30 j 02:25 -3985 May 27 j 14:24 greatest brilliancy 7°**≙**03'00 -2.8m  $0^{\circ}$ 8 -3985 Jul 14 j 01:51 min. Earth dist. -3980 May 05 j 02:30 5°**£**38'51 0.39521 AU asc. node -3985 Jul 15 j 09:53 0°**8**48'52 direct -3980 Jun 01 j 11:19 1°**₽**10′10 -3985 Sep 03 j 17:03  $0^{\circ}\Pi$ -3980 Aug 16 j 16:34 0°M -3985 Nov 10 j 19:12 0ಂತಾ -3980 Oct 01 j 21:55 0°**∡**7 0°₹ retrograde -3985 Dec 08 j 11:30 4°909'02 -3980 Nov 14 j 16:47 -3984 Jan 03 j 01:37 30°RⅡ -3980 Dec 28 j 16:52 0°≈ opposition -3984 Jan 15 j 14:49 25°II30'01 4°57'16 -3979 Feb 11 j 18:45 0°**)**€ greatest brilliancy -3984 Jan 16 j 10:30 25°**Ⅲ**11′02 -1.5m asc. node -3979 Mar 06 j 02:14 14° # 33'18 min. Earth dist. -3984 Jan 20 j 19:59 23°**Ⅲ**29′25 0.62304 AU -3979 Mar 30 j 00:53  $0^{\circ}\Upsilon$ direct -3984 Feb 25 j 17:09 15°**Ⅲ**33'46 evening set -3979 Apr 23 j 12:02 15°**Y**39'03 0°8 -3984 Apr 19 j 16:00 0ಂತಾ -3979 May 16 j 00:35 -3984 Jun 12 j 06:08  $0^{\circ}\Omega$ max. Earth dist. -3979 Jun 06 j 11:18 13°**8**39'35 2.67103 AU desc. node -3984 Jul 19 j 01:06 24°**Ω**48'47 -3984 Jul 26 j 07:50 0° m conjunction -3979 Jun 09 j 23:06 15°**8**53'11 0°48'49 -3984 Sep 04 i 17:41 0∘**⊽** minimum elong -3979 Jun 09 i 21:48 15°**8**51'08 0°48'55 -3984 Oct 13 i 12:45 0°M -3979 Jul 02 i 00:49  $\Pi^{\circ}0$ -3984 Nov 21 i 00:43 0°×7 -3979 Jul 25 i 07:44 14°**I**59'37 morning rise -3984 Dec 30 j 06:19 0°정 -3979 Aug 17 i 09:53 0ಂತಾ -3983 Jan 19 j 13:33 15°**る**06'48 -3979 Oct 01 j 19:45  $0^{\circ}\Omega$ evening set -3983 Feb 09 j 00:11 -3979 Nov 15 j 07:25 0°≈≈ O° m -3979 Dec 29 j 04:18 0∘**⊽** -3978 Feb 11 j 04:17 -3983 Mar 18 j 16:50 26°≈33'22 -0°41'08 oom. conjunction -3983 Mar 18 j 18:44 -3978 Mar 11 j 02:23 18°M26'37 26°≈36'38 0°41'13 minimum elong desc. node -3978 Mar 29 j 13:33 -3983 Mar 23 j 17:00 0°**)**€ 0°×7 -3978 Jun 15 j 01:55 max. Earth dist. -3983 Apr 17 j 06:14 16°**¥**37'29 2.57256 AU retrograde 29°**х** 46′13  $0^{\circ}\Upsilon$ min. Earth dist. -3983 May 07 j 10:49 -3978 Jul 11 j 18:35 25°**∡**11'38 0.40865 AU 2°Y29'26 -3983 May 11 j 06:01 -3978 Jul 17 j 03:04 morning rise greatest brilliancy 23°**₹**33'51 -2.7m -3983 Jun 01 j 08:43 16°**Y**11′03 -3978 Jul 18 j 14:22 asc. node opposition 23°**₹**06'43 -6°31'00 -3983 Jun 23 j 00:25 -3978 Aug 18 j 08:21  $0^{\circ}$ 8 direct 17°**∡** 29'49  $0^{\circ}\Pi$ -3978 Oct 05 j 23:58 -3983 Aug 10 j 06:31 0°ಕ -3983 Sep 29 j 22:55 0ಂತಾ -3978 Dec 01 j 16:35 0°≈ -3983 Nov 27 j 01:23  $0^{\circ}\Omega$ -3977 Jan 20 j 13:39 0°**)**€ retrograde -3982 Jan 23 j 01:33 14°**Ω**53′28 -3977 Jan 22 j 00:53 0° **X** 53'58 asc. node -3982 Feb 27 j 05:39 7°**Ω**37'52 4°38'41 -3977 Mar 10 j 05:37  $0^{\circ}\Upsilon$ opposition -3982 Feb 28 j 15:41 7°**Ω**07'43 -2.0m -3977 Apr 27 j 10:04 0°8 greatest brilliancy min. Earth dist. -3982 Mar 07 j 12:08 4°**Ω**42'37 0.51625 AU -3977 Jun 01 j 01:52 21°852'16 evening set -3982 Mar 24 j 13:27 30°Rூ -3977 Jun 13 j 19:19  $0^{\circ}\Pi$ -3982 Apr 07 j 02:24 28°5544'32 max. Earth dist. -3977 Jun 30 j 21:44 11°**I**I01'24 2.63941 AU direct -3982 Apr 20 j 21:35  $0^{\circ}\Omega$ -3977 Jul 17 i 15:55 desc. node -3982 Jun 06 i 01:09 17°**Ω**36'34 conjunction 21°II57'30 1°10'03 -3982 Jun 27 j 10:22 0° m minimum elong -3977 Jul 17 i 15:27 21°II56'44 1°10'13 -3982 Aug 10 j 21:05 0∘**⊽** -3977 Jul 29 i 20:27 0ಂತಾ -3982 Sep 20 j 12:10 0°M -3977 Sep 01 j 17:04 22°947'05 morning rise -3982 Oct 30 j 05:48 0°×7 -3977 Sep 12 j 05:22  $0^{\circ}\Omega$ -3982 Dec 09 j 12:11 0°궁 -3977 Oct 24 j 22:07 0° m -3981 Jan 20 j 04:00 -3977 Dec 05 j 04:52 0∘**⊽** 0°≈≈  $0^{\circ}$ M -3981 Mar 04 j 14:50 0°**)**€ -3976 Jan 14 j 13:06 -3981 Mar 13 j 01:17 5°**)**(40'52 desc. node -3976 Jan 27 j 03:45 9°M26'32 evening set  $0^{\circ}\Upsilon$ -3976 Feb 23 j 16:35 -3981 Apr 18 j 19:45 0°×7 asc. node -3981 Apr 19 j 05:10  $0^{\circ}$ **Y**15'22 -3976 Apr 04 j 21:53 0°정 -3976 May 20 j 01:08 0°≈ -3981 May 03 j 01:54 9°Υ16'09 0°07'55 29°≈42'54 conjunction retrograde -3976 Aug 06 j 01:31 -3981 May 03 j 01:33 9°**Y**15'37 minimum elong 0°07'56 min. Earth dist. -3976 Sep 06 j 04:11 23°**≈**07'06 0.53114 AU 8°**Y**46'40 behind sun begin -3981 May 02 j 07:40 opposition -3976 Sep 13 j 10:38 20°≈21'47 -3°41'50 behind sun end -3981 May 03 j 19:27 9°**Y**44'33 greatest brilliancy -3976 Sep 12 j 13:36 20°**≈**41'46 -2.0m max. Earth dist. -3981 May 14 j 15:43 16°**Y**44'31 2.64860 AU direct -3976 Oct 18 j 12:38 12°≈36'49 -3981 Jun 04 j 07:51 0°8 asc. node -3976 Dec 09 j 00:01 25°≈32'28 morning rise -3981 Jun 19 j 19:03 9°**8**51'37 -3976 Dec 19 j 02:19 0°**)**€ -3981 Jul 21 j 12:44  $\Pi^{\circ}0$ -3975 Feb 14 j 10:09  $0^{\circ}\Upsilon$ 

-3975 Apr 06 j 14:33

0°8

0ಂತಾ

-3981 Sep 07 j 00:53

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 43 Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.									
	-3975 May 25 j 03:51	$\Pi$ °0		minimum elong	-3971 Dec 22 j 21:00	2° <b>∡</b> ¹25'54	0°58'15		
evening set	-3975 Jul 09 j 08:14	29° <b>Ⅱ</b> 16′20			-3970 Jan 27 j 13:31	ರ∘ರ			
	-3975 Jul 10 j 10:31	$0$ $\circ$ $\odot$		max. Earth dist.	-3970 Feb 06 j 04:43	7° <b>る</b> 17'50	2.40027 AU		
max. Earth dist.	-3975 Jul 27 j 23:00	11° <b>5</b> 45'56	2.55688 AU	morning rise	-3970 Feb 28 j 04:46	23° <b>る</b> 41'00			
	-3975 Aug 23 j 10:18	$0^{\circ}\Omega$			-3970 Mar 08 j 20:02	0° <b>≈</b>			
					-3970 Apr 20 j 04:48	0° <b>∀</b>			
conjunction	-3975 Aug 26 j 23:34	2° <b>Ω</b> 29'25			-3970 Jun 04 j 03:24	$0^{\circ}$ Y			
minimum elong	-3975 Aug 27 j 01:00	2° <b>Ω</b> 31'55	1°01'15		-3970 Jul 22 j 10:03	0° <b>8</b>			
	-3975 Oct 04 j 07:35	0° <b>m</b> y		asc. node	-3970 Aug 01 j 01:47	5° <b>8</b> 40'01			
morning rise	-3975 Oct 17 j 00:19	9° <b>m</b> 21'41			-3970 Sep 15 j 07:45	0°II			
	-3975 Nov 13 j 12:21	0° <b>⊽</b>		retrograde	-3970 Nov 23 j 07:41	20° <b>Ⅱ</b> 30'35	1001101		
desc. node	-3975 Dec 14 j 02:10	23° <b>£</b> 24'03		opposition	-3969 Jan 01 j 04:26	11° <b>Ⅱ</b> 29'11			
	-3975 Dec 22 j 15:24	0° <b>M</b> ○○ <b>T</b>		greatest brilliancy	-3969 Jan 01 j 16:28	11° <b>Ⅱ</b> 17'24			
	-3974 Jan 30 j 10:55	0° <b>∡</b> ¹		min. Earth dist.	-3969 Jan 04 j 21:58		0.64909 AU		
	-3974 Mar 10 j 20:36	0° <b>ට</b>		direct	-3969 Feb 11 j 10:24	1° <b>Ⅱ</b> 28'13 0° <b>©</b>			
	-3974 Apr 21 j 00:25	0° <b>≈</b> 0° <b>∀</b>			-3969 May 05 j 03:06	0° <b>U</b>			
	-3974 Jun 04 j 19:17 -3974 Jul 29 j 17:10	0 <del>Υ</del> 0° <b>Υ</b>			-3969 Jun 23 j 00:52 -3969 Aug 04 j 23:37	0° <b>m</b> p			
retrograde	-3974 Sep 14 j 14:21	11° <b>Υ</b> 43'52		desc. node	-3969 Aug 04 j 25.57 -3969 Aug 05 j 18:53	0° Mg 35'07			
min. Earth dist.	-3974 Sep 14 j 14.21 -3974 Oct 20 j 16:17		0.62979 AU	desc. node	-3969 Sep 13 j 23:09	0∘ <b>ʊ</b>			
opposition	-3974 Oct 20 j 10:17 -3974 Oct 24 j 12:29	1° <b>Υ</b> 46'31			-3969 Oct 22 j 12:23	0° <b>™</b>			
greatest brilliancy	-3974 Oct 24 j 12:15	1° <b>Υ</b> 46'45			-3969 Nov 29 j 19:29	0° <b>∡</b> ⊓			
asc. node	-3974 Oct 24 j 12:13	0° <b>Υ</b> 46'56	-1.0111	evening set	-3969 Dec 26 j 23:03	0 <b>x</b> 20° <b>x</b> 58'17			
ase. Houe	-3974 Oct 29 j 00:04	30° <b>₹</b>		evening set	-3968 Jan 07 j 19:54	0°る			
direct	-3974 Dec 01 j 22:46	22° <b>)</b> 42'11			-3968 Feb 17 j 08:25	0° <b>≈</b>			
	-3973 Jan 08 j 17:43	0° <b>Υ</b>							
	-3973 Mar 14 j 08:51	0°8		conjunction	-3968 Feb 26 j 16:27	6° <b>≈</b> 42'58	-0°57'08		
	-3973 May 05 j 03:32	0°II		minimum elong	-3968 Feb 26 j 18:36	6° <b>≈</b> 46'50			
	-3973 Jun 21 j 11:16	0° <b>©</b>			-3968 Mar 30 j 20:45	0° <b>)</b> €			
	-3973 Aug 04 j 14:29	$0^{\circ}\Omega$		max. Earth dist.	-3968 Apr 04 j 06:01		2.52924 AU		
evening set	-3973 Aug 23 j 07:39	13° <b>Ω</b> 18′07		morning rise	-3968 Apr 23 j 17:56	16° <b>¥</b> 13'04			
max. Earth dist.	-3973 Sep 09 j 05:36	25° <b>Ω</b> 36'38	2.43669 AU		-3968 May 14 j 12:47	$0^{\circ}$ Y			
	-3973 Sep 15 j 04:22	0° <b>m</b> )		asc. node	-3968 Jun 18 j 00:06	22° <b>Y</b> 14'20			
					-3968 Jun 30 j 07:17	$0^{\circ}S$			
conjunction	-3973 Oct 17 j 12:53	24° <b>m</b> 22'45			-3968 Aug 18 j 09:42	$\Pi$ °0			
minimum elong	-3973 Oct 17 j 13:35	24° Mp 24'06	0°10'14		-3968 Oct 10 j 21:50	$0$ $\circ$ $\odot$			
behind sun begin	-3973 Oct 16 j 17:56	23° Mp 46'32		retrograde	-3967 Jan 03 j 06:04	27° <b>©</b> 59'13			
behind sun end	-3973 Oct 18 j 09:14	25° <b>m</b> 01'42		opposition	-3967 Feb 08 j 19:02	20°905'48			
	-3973 Oct 24 j 20:38	0∘ <b>⊽</b>		greatest brilliancy	-3967 Feb 10 j 01:57	19° <b>©</b> 37'11			
desc. node	-3973 Oct 31 j 22:52	5° <b>₾</b> 28'20		min. Earth dist.	-3967 Feb 16 j 02:54		0.56398 AU		
	-3973 Dec 02 j 10:04	0° <b>M</b> ₊		direct	-3967 Mar 20 j 21:58	10° <b>©</b> 36'21			
morning rise	-3973 Dec 19 j 00:44	13° <b>M</b> .01'47			-3967 May 22 j 03:41	0°N			
	-3972 Jan 09 j 16:59	0° <b>∡</b> ¹		desc. node	-3967 Jun 22 j 17:19	18° <b>Ω</b> 29'40			
	-3972 Feb 17 j 14:21	0°₹			-3967 Jul 10 j 04:41	0° <b>m</b> )			
	-3972 Mar 28 j 23:16	0° <b>≈</b>			-3967 Aug 21 j 04:34	0∘ <b>亚</b>			
	-3972 May 10 j 17:36 -3972 Jun 26 j 05:11	0° <b>ℋ</b> 0° <b>Ƴ</b>			-3967 Sep 29 j 18:44 -3967 Nov 07 j 20:24	0° <b>™</b> 0° <i>≯</i> 7			
		0°8			-3967 Nov 07 j 20.24 -3967 Dec 17 j 13:55	0°る			
asc. node	-3972 Aug 19 j 20:51 -3972 Sep 13 j 01:33	9° <b>8</b> 56'17			-3966 Jan 27 j 18:34	0°≈			
retrograde	-3972 Sep 13 J 01.33	16° <b>8</b> 42'41		evening set	-3966 Feb 22 j 05:48	0 ≈ 17°≈54'09			
opposition	-3972 Oct 18 j 13.47 -3972 Nov 27 j 12:20	7° <b>8</b> 00'54	2°39'38	evening set	-3966 Mar 11 j 20:21	0° <b>\</b>			
greatest brilliancy	-3972 Nov 27 j 12:20	7° <b>8</b> 02'29	-1.3m		-5700 Mai 11 j 20.21	0 /			
min. Earth dist.	-3972 Nov 27 j 10:07	7° <b>8</b> 03'08	0.67115 AU	conjunction	-3966 Apr 16 j 13:59	23° <b>¥</b> 56'33	-0°11'07		
mm. zarm aist.	-3972 Dec 17 j 07:47	30° <b>₹</b> Υ	0.07110110	minimum elong	-3966 Apr 16 j 14:29	23° <b>¥</b> 57′23			
direct	-3971 Jan 07 j 00:22	27° <b>Y</b> 13'49		behind sun begin	-3966 Apr 15 j 23:13	23° <b>¥</b> 32′12			
	-3971 Jan 29 j 07:43	0°8		behind sun end	-3966 Apr 17 j 05:45	24° <b>)</b> 22'34			
	-3971 Apr 10 j 05:23	0°II			-3966 Apr 25 j 19:07	0° <b>Υ</b>			
	-3971 May 30 j 20:31	0ಂತಾ		max. Earth dist.	-3966 May 04 j 19:13	5° <b>Y</b> ′52'53	2.62514 AU		
	-3971 Jul 14 j 23:25	0°N		asc. node	-3966 May 05 j 21:44	6° <b>Ƴ</b> 36'03			
	-3971 Aug 25 j 17:47	0° <b>m</b> )		morning rise	-3966 Jun 05 j 02:05	26° <b>Y</b> ′03'54			
desc. node	-3971 Sep 17 j 20:22	17° <b>m</b> 22'20		-	-3966 Jun 11 j 05:53	$9^{\circ}$ 8			
	-3971 Oct 04 j 07:03	0∘ <b>⊽</b>			-3966 Jul 28 j 17:17	$\Pi^{\circ}0$			
evening set	-3971 Oct 19 j 03:45	11° <b>≙</b> 33'19			-3966 Sep 15 j 01:47	$0$ $\circ$ $\odot$			
	-3971 Nov 11 j 15:31	$0^{\circ}$ M			-3966 Nov 04 j 04:31	$0^{\circ}\Omega$			
	-3971 Dec 19 j 18:24	0° <b>∡</b> 7			-3966 Dec 30 j 12:28	0° <b>m</b> )			
				retrograde	-3965 Mar 01 j 15:01	17° <b>m</b> )06'11			
conjunction	-3971 Dec 22 j 23:54	2° <b>∡</b> 31'35	-0°58'07	opposition	-3965 Apr 03 j 06:36	11° <b>m</b> 03'45	2°22'49		

•	nical year style is used: Th		•	* *			e 44
greatest brilliancy	-3965 Apr 04 j 02:05	10° Mp 48'27		max. Earth dist.	-3960 Jul 16 j 06:02		2.59479 AU
min. Earth dist.	-3965 Apr 11 j 03:17	8° m) 36'38	0.43655 AU	max. Lartii dist.	-3960 Jul 17 j 08:44		2.5)+1) AO
direct	-3965 May 08 j 15:40	3° m/ 49'16	0.43033 AC		-5700 Jul 17 J 00.44	0 3	
desc. node	-3965 May 10 j 18:32	3° m/51'09		conjunction	-3960 Aug 10 j 03:44	16°900'43	1°08'59
dese. node	-3965 Jul 19 j 00:55	0∘ <del>⊽</del>		minimum elong	-3960 Aug 10 j 04:24	16°901'52	
	-3965 Sep 02 j 13:42	0°M		g	-3960 Aug 30 j 11:06	0°Ω	1 0, 0,
	-3965 Oct 14 j 14:29	0° <b>∡</b> ¹		morning rise	-3960 Sep 27 j 13:29	19° <b>Ω</b> 51'32	
	-3965 Nov 25 j 09:01	ರ°0		C	-3960 Oct 11 j 14:34	0° <b>m</b> )	
	-3964 Jan 07 j 03:15	0° <b>≈</b>			-3960 Nov 21 j 03:35	0∘ <del>⊽</del>	
	-3964 Feb 20 j 09:36	0° <b>)</b>		desc. node	-3960 Dec 30 j 19:24	0° <b>M</b> ₊07'40	
asc. node	-3964 Mar 22 j 18:07	20° <b>)</b> 39′21			-3960 Dec 30 j 15:23	0° <b>M</b> .	
	-3964 Apr 06 j 03:18	$0^{\circ}$ Y			-3959 Feb 07 j 19:44	0° <b>∡</b> ¹	
evening set	-3964 Apr 07 j 18:21	1° <b>Y</b> 03'09			-3959 Mar 19 j 15:48	0° <b>ප</b>	
	-3964 May 22 j 20:46	$0$ $\circ$ 8			-3959 Apr 30 j 14:11	0° <b>≈</b>	
					-3959 Jun 16 j 17:19	0° <b>∀</b>	
conjunction	-3964 May 26 j 06:11	2° <b>8</b> 09'56		retrograde	-3959 Aug 31 j 03:06	26° <b>)</b> 48′38	
minimum elong	-3964 May 26 j 05:03	2° <b>8</b> 08'07		min. Earth dist.	-3959 Oct 04 j 09:54	19° <b>米</b> 01'10	
max. Earth dist.	-3964 May 28 j 09:05	3° <b>8</b> 31'05	2.66878 AU	opposition	-3959 Oct 09 j 16:01	16° <b>¥</b> 56'13	
	-3964 Jul 08 j 21:10	0°Щ		greatest brilliancy	-3959 Oct 09 j 10:07	17° <b>)</b> €02'04	-1.7m
morning rise	-3964 Jul 11 j 04:12	1° <b>Ⅱ</b> 27'59		asc. node	-3959 Nov 12 j 15:57	8° <b>)</b> €21'40	
	-3964 Aug 24 j 13:56	0° <b>©</b>		direct	-3959 Nov 15 j 22:35	8° <b>ℋ</b> 17'28 0° <b>Ƴ</b>	
	-3964 Oct 09 j 17:41 -3964 Nov 24 j 13:25	0° <b>N</b>			-3958 Jan 26 j 16:54 -3958 Mar 23 j 19:17		
	-3963 Jan 09 j 17:43	0 <b>்⊽</b> 0∘ <b>மி</b>			-3958 May 12 j 21:53	0°H 0°B	
	-3963 Feb 27 j 10:01	0° <b>™</b>			-3958 Jun 28 j 17:03	0ಂಣ ೧ π	
desc. node	-3963 Mar 27 j 20:26	15°M-13'12		evening set	-3958 Aug 04 j 17:22	25° <b>©</b> 05'48	
retrograde	-3963 May 18 j 09:46	29°M39'09		evening set	-3958 Aug 04 j 17:22	0°Ω	
min. Earth dist.	-3963 Jun 15 j 10:32	25°M05'40	0.38015 AU	max. Earth dist.	-3958 Aug 19 j 19:39	5° <b>Ω</b> 41'30	2.48623 AU
opposition	-3963 Jun 18 j 13:02	24°M15'09		max. Dartii dist.	-3958 Sep 22 j 09:56	0° <b>m</b> )	2.10023710
greatest brilliancy	-3963 Jun 17 j 21:05	24°M25'59			correct == j control	* '%	
direct	-3963 Jul 18 j 07:11	19° <b>M</b> ₊14'36		conjunction	-3958 Sep 25 j 16:39	2°m/25'29	0°35'16
	-3963 Aug 31 j 06:13	0° <b>∡</b> ¹		minimum elong	-3958 Sep 25 j 18:27	2° m 28'48	0°35'21
	-3963 Oct 26 j 00:29	ರ∘ರ			-3958 Nov 01 j 06:17	0∘ <b>亚</b>	
	-3963 Dec 13 j 04:32	0° <b>≈</b> ≈		desc. node	-3958 Nov 17 j 17:18	12° <b>≏</b> 40'38	
	-3962 Jan 29 j 09:45	0° <b>)</b> €		morning rise	-3958 Nov 22 j 01:05	16° <b>≏</b> 01'37	
asc. node	-3962 Feb 07 j 15:32	5° <b>¥</b> 51'43			-3958 Dec 09 j 23:55	0°M₊	
	-3962 Mar 17 j 20:22	$0^{\circ}$ Y			-3957 Jan 17 j 10:21	0° <b>∡</b> ¹	
	-3962 May 04 j 10:44	0°8			-3957 Feb 25 j 10:36	0°る	
evening set	-3962 May 17 j 06:37	8° <b>8</b> 06'41			-3957 Apr 06 j 23:20	0° <b>≈</b>	
P. d. P.	-3962 Jun 20 j 14:58	0°II	2 (5010 177		-3957 May 20 j 04:02	0° <b>∀</b>	
max. Earth dist.	-3962 Jun 21 j 06:36	0°Щ25'05	2.65810 AU		-3957 Jul 07 j 03:42	0°Υ	
. ,.	20/2 1 1 02:21 24	70 T 5 410 4	1004147	1	-3957 Sep 10 j 22:39	0°8	
conjunction	-3962 Jul 02 j 21:24	7° <b>П</b> 54'04 7° <b>П</b> 52'30	1°04'46 1°04'55	asc. node retrograde	-3957 Sep 30 j 16:25	3° <b>8</b> 29'56 3° <b>8</b> 41'25	
minimum elong	-3962 Jul 02 j 20:25 -3962 Aug 05 j 17:45	7 <b>ப</b> 3230	1 04 33	retrograde	-3957 Oct 06 j 04:05 -3957 Oct 29 j 14:20	30°RY	
morning rise	-3962 Aug 03 j 17:43	7° <b>9</b> 38'14		min. Earth dist.	-3957 Nov 13 j 16:05	24° <b>Y</b> 27'49	0.66238 AU
morning risc	-3962 Sep 19 j 10:21	0°Ω		opposition	-3957 Nov 15 j 10:03	23° <b>Υ</b> 49'59	1°41'39
	-3962 Nov 01 j 16:08	0° m/		greatest brilliancy	-3957 Nov 15 j 02:33	23° <b>Y</b> ′53'11	-1.4m
	-3962 Dec 13 j 16:38	0∘ <b>⊽</b>		direct	-3957 Dec 25 j 01:36	14° <b>Υ</b> 16'12	
	-3961 Jan 23 j 22:40	0° <b>™</b>			-3956 Feb 22 j 08:42	0°8	
desc. node	-3961 Feb 12 j 20:24	14° <b>M</b> 30'45			-3956 Apr 20 j 01:15	0°II	
	-3961 Mar 06 j 06:44	0° <b>∡</b> ¹			-3956 Jun 07 j 22:08	0°99	
	-3961 Apr 18 j 14:56	ರ°0			-3956 Jul 22 j 12:51	$0^{\circ}\Omega$	
	-3961 Jun 10 j 16:51	0° <b>≈</b>			-3956 Sep 02 j 04:16	0° <b>m</b> ∕	
retrograde	-3961 Jul 19 j 16:51	9° <b>≈</b> 23'52		evening set	-3956 Sep 24 j 15:33	16° <b>m</b> 53'09	
min. Earth dist.	-3961 Aug 17 j 15:30	3° <b>≈</b> 40'55	0.48141 AU	desc. node	-3956 Oct 04 j 13:58	24° <b>m</b> 28'41	
greatest brilliancy	-3961 Aug 24 j 08:38	1° <b>≈</b> 16'57			-3956 Oct 11 j 18:01	0∘ <b>ಹ</b>	
opposition	-3961 Aug 25 j 16:51	0° <b>≈</b> 48'03	-5°10'09	max. Earth dist.	-3956 Nov 16 j 04:41	27° <b>♀</b> 40′20	2.37691 AU
	-3961 Aug 27 j 23:03	30°Ŗる			-3956 Nov 19 j 03:41	0° <b>M</b> ₊	
direct	-3961 Sep 28 j 01:28	23° <b>る</b> 49'05			205623	, a see	000 5:50
	-3961 Oct 31 j 09:08	0° <b>≈</b>		conjunction	-3956 Nov 25 j 04:20	4°M44'38	
asc. node	-3961 Dec 26 j 15:18	25°≈47'22		minimum elong	-3956 Nov 25 j 01:33	4°M39'08	0~35'31
	-3960 Jan 03 j 09:28	0° <b>ℋ</b> 0° <b>Ƴ</b>		morning rig-	-3956 Dec 27 j 07:20	0°⊀ 27°√146'55	
	-3960 Feb 24 j 14:23	0° <b>႘</b>		morning rise	-3955 Feb 01 j 04:29	27° <b>メ</b> 146'55 0°る	
	-3960 Apr 14 j 05:56 -3960 Jun 01 j 05:30	0° <b>U</b>			-3955 Feb 04 j 02:16 -3955 Mar 16 j 08:04	0° <b>&amp;</b>	
evening set	-3960 Jun 23 j 17:25	0 Ⅱ 14°Ⅱ28'05			-3955 Apr 27 j 17:52	0 <b>≈</b> 0° <b>∺</b>	
o ronning soc	5,00 Jun 25 J 17.25	1. 11.2003			5,55 rspr 2/ j 17.52	· //	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.  $0^{\circ}\Upsilon$ -3955 Jun 12 j 00:24 -3950 Aug 03 j 14:08 0∘**⊽** -3955 Jul 31 j 15:04 0°8 -3950 Sep 14 j 06:23 0°M -3955 Aug 17 j 16:59 9°821'50 -3950 Oct 24 j 13:35 0°×7 asc. node -3955 Oct 02 j 07:05  $\mathbb{I}^{\circ 0}$ -3950 Dec 04 j 05:23 0°궁 7°**Ⅲ**22'55 -3949 Jan 15 j 03:58 0°28 retrograde -3955 Nov 09 j 00:36 -3949 Feb 27 j 19:54 0°) -3955 Dec 13 j 11:03 30°R₩ 28°**8**02'58 3°55'02 15° X 31'54 opposition -3955 Dec 18 j 10:38 evening set -3949 Mar 23 j 02:41 greatest brilliancy -3955 Dec 18 j 16:03 27°**8**57'35 -1.3m asc. node -3949 Apr 09 j 10:06 26° **X** 54'23  $0^{\circ}\Upsilon$ min. Earth dist. -3955 Dec 20 j 16:17 27°**8**09'47 0.66547 AU -3949 Apr 14 j 03:54 direct -3954 Jan 28 j 13:48 18°**8**03'27 18°**Y**′04'38 -3954 Mar 19 j 05:46  $0^{\circ}\Pi$ conjunction -3949 May 12 j 02:33 0°18'21 0ಂತಾ -3949 May 12 j 01:51  $18^{\circ}$  $\Upsilon 03'30$ 0°18'23 -3954 May 16 j 00:20 minimum elong -3954 Jul 01 j 19:12 -3949 May 20 j 06:42  $23^{\circ}$ Y19'22 $0^{\circ}\Omega$ max. Earth dist. 2.65804 AU -3954 Aug 13 j 02:33 0° m -3949 May 30 j 17:02 0°8 desc. node -3954 Aug 22 j 12:10 6° m 57'44 morning rise -3949 Jun 28 j 01:06 18°803'51 -3954 Sep 21 j 20:09 0∘**⊽** -3949 Jul 16 j 19:32  $0^{\circ}\Pi$ -3954 Oct 30 j 06:08 0°M -3949 Sep 01 j 23:26 0ಂತಾ evening set -3954 Nov 30 j 06:52 24°M24'20 -3949 Oct 19 j 04:20  $0^{\circ}\Omega$ -3954 Dec 07 j 10:24 0°×7 -3949 Dec 06 j 02:28 0° m -3953 Jan 15 j 07:38 0°る -3948 Jan 26 j 01:30 0∘**ত** desc. node -3948 Apr 13 j 11:52 28° 250'21 -3953 Feb 03 i 01:05 14°る05'00 -1°06'46 retrograde -3948 Apr 16 j 22:32 28°**£**54'56 conjunction -3953 Feb 03 i 02:04 14°る06'49 1°06'56 opposition -3948 May 17 i 10:13 23°**2**51'33 -2°29'45 minimum elong -3953 Feb 24 i 16:30 0°22 greatest brilliancy -3948 May 17 j 13:50 23°**♀**49'07 -2.9m max. Earth dist. -3953 Mar 20 i 05:46 16°≈51'36 2.47999 AU min. Earth dist. -3948 May 19 j 19:39 23°**♀**12'46 0.38132 AU -3953 Apr 05 j 06:36 28°≈03'46 -3948 Jun 17 j 11:25 18°**£**32'12 direct morning rise -3953 Apr 08 j 01:56 0°**₩** -3948 Jul 31 j 23:12 0°M -3953 May 22 j 17:59  $0^{\circ}\Upsilon$ -3948 Sep 23 j 02:44 0°×7 -3953 Jul 05 j 16:13 28°Y01'00 -3948 Nov 07 j 22:56 0°궁 asc node -3953 Jul 08 j 21:00  $0^{\circ}$ 8 -3948 Dec 22 j 23:19 0°22 -3953 Aug 28 j 07:07  $\mathbb{I}^{\circ 0}$ -3947 Feb 06 j 15:13 0°) -3953 Oct 26 j 15:00 -3947 Feb 24 j 07:57 0°9 11°**)** 27'43 asc. node  $0^{\circ}\Upsilon$ -3953 Dec 17 j 17:06 12°544'35 -3947 Mar 25 j 05:20 retrograde 24° Y 13'00 -3952 Jan 24 j 08:25 4°920'05 5°05'23 -3947 May 02 j 06:45 opposition evening set -3952 Jan 25 j 08:27 -3947 May 11 j 09:17 greatest brilliancy 3°957'11 -1.6m 0°8 -3952 Jan 30 j 08:40 -3947 Jun 11 j 21:17 20°**8**02'58 2.66867 AU min. Earth dist. 2°502'40 0.60467 AU max. Earth dist. -3952 Feb 04 j 23:07 30°Ŗ**Ⅱ** direct -3952 Mar 05 j 05:05 24°**Ⅲ**29'56 conjunction -3947 Jun 18 j 08:10 24°**8**10'25 0°55'39 -3952 Apr 05 j 07:38 0ಂತಾ -3947 Jun 18 j 06:55 24°**8**08'25 0°55'46 minimum elong -3952 Jun 05 j 06:51  $0^{\circ}\Omega$ -3947 Jun 27 j 10:28  $0^{\circ}II$ desc. node -3952 Jul 09 j 11:50 22°Ω17'52 morning rise -3947 Aug 02 j 13:43 23°**Ⅲ**22'08 -3952 Jul 20 j 12:48 0° m -3947 Aug 12 j 16:58 0ಂತಾ -3952 Aug 30 j 09:09 0∘**⊽** -3947 Sep 26 j 20:15  $0^{\circ}\Omega$ -3952 Oct 08 j 09:20 0°M -3947 Nov 09 j 19:47 0° m -3952 Nov 16 j 00:45 -3947 Dec 22 j 21:41 0°×7 0°Ω -3952 Dec 25 i 09:09 0°정 -3946 Feb 03 i 14:33 0°M 28°る00'26 -3951 Feb 01 i 10:52 desc. node -3946 Mar 01 i 13:27 18°M01'21 evening set -3951 Feb 04 i 05:21 0°≈ -3946 Mar 19 i 06:26 0°×7 -3951 Mar 19 j 00:09 0°) -3946 May 07 j 20:41 0°정 -3946 Jun 28 j 14:30 15°る31'34 retrograde -3951 Mar 29 i 17:31 7°\ 18'20 -0°30'24 -3946 Jul 25 j 18:44 10°る38'00 0.43221 AU conjunction min. Earth dist. -3951 Mar 29 i 18:57 7°**¥**20'46 0°30'27 -3946 Jul 31 j 23:22 8°**る**36'53 -2.5m minimum elong greatest brilliancy max. Earth dist. -3951 Apr 24 j 00:45 24°**)** 14'17 2.59357 AU -3946 Aug 02 j 13:39 8°중05'29 -6°17'54 opposition  $0^{\circ}\Upsilon$ -3951 May 02 j 18:32 direct -3946 Sep 03 j 02:48 1°る59'37 11° \bolday 38' 48 morning rise -3951 May 20 j 15:15 -3946 Nov 22 j 20:19 0°≈ 12°**Y**52'57 -3951 May 22 j 13:04 asc. node -3945 Jan 12 j 06:31 28°≈46'22 asc. node -3951 Jun 18 j 06:03  $0^{\circ}$ 8 -3945 Jan 14 j 08:06 0°) -3951 Aug 05 j 03:28  $\mathbb{I}^{\circ 0}$ -3945 Mar 04 j 23:09  $0^{\circ}\Upsilon$ -3951 Sep 23 j 18:12 0ಂತಾ -3945 Apr 22 j 14:14 0°8 -3951 Nov 16 j 15:46  $0^{\circ}\Omega$ -3945 Jun 09 j 15:11 0°**I**17'51 evening set 25°**Ω**57'06 -3945 Jun 09 j 04:02 retrograde -3950 Feb 04 j 14:52  $\Pi$ °0 -3950 Mar 10 j 22:10 19°**Ω**05'39 4°05'03 max. Earth dist. -3945 Jul 06 j 18:05 17°**Ц**49'38 2.62549 AU opposition greatest brilliancy -3950 Mar 12 j 06:18 18°**Ω**38′06 -2.2m -3945 Jul 25 j 05:47 0ಂತಾ min. Earth dist. -3950 Mar 19 j 09:00 16°**Ω**12'36 0.48787 AU direct -3950 Apr 17 j 18:01 10°**Ω**41'11 conjunction -3945 Jul 26 j 09:27 0°945'55 1°11'07 -3950 May 27 j 11:16 20°**Ω**00'56 -3945 Jul 26 j 09:22 0°545'47 1°11'17 desc. node minimum elong -3950 Jun 16 j 22:29 0° m -3945 Sep 07 j 12:29  $0^{\circ}\Omega$ 

3	iical year style is used: Th		•	//		, ,	t 40
morning rise	-3945 Sep 11 j 02:00	$2^{\circ}\Omega$ 28'13	n astronomicai co	opposition	-3940 Dec 05 j 03:22	14° <b>8</b> 58'02	3000144
morning rise	-3945 Oct 20 j 00:20			greatest brilliancy	-3940 Dec 05 j 03:44		-1.3m
	,	0° <b>m</b> )			-3940 Dec 05 j 21:03		
	-3945 Nov 30 j 00:29	0∘ <b>w</b>		min. Earth dist.		14° <b>8</b> 40'21	0.67197 AU
JJ.	-3944 Jan 09 j 00:32 -3944 Jan 17 j 12:40	0°M		direct	-3939 Jan 14 j 21:55 -3939 Apr 02 j 21:14	5° <b>8</b> 05'17 0°Ⅱ	
desc. node	3	6°M25'40			1 3		
	-3944 Feb 17 j 18:01	0° <b>∡</b> ¹			-3939 May 25 j 06:50	0°©	
	-3944 Mar 29 j 07:25	0°る			-3939 Jul 09 j 22:24	0° <b>N</b>	
	-3944 May 11 j 17:46	0° <b>≈</b> 0° <b>)</b> €		JJ.	-3939 Aug 20 j 21:20	0° Mp	
. 1	-3944 Jul 04 j 07:27			desc. node	-3939 Sep 08 j 06:26	13° <b>m</b> 44'47	
retrograde	-3944 Aug 15 j 14:53	10° <b>)</b> €23'55	0.55640.411		-3939 Sep 29 j 12:24	0° <b>⊽</b>	
min. Earth dist.	-3944 Sep 16 j 21:31		0.55649 AU	evening set	-3939 Nov 02 j 22:36	26° <b>♀</b> 53'30	
opposition	-3944 Sep 23 j 11:47	0° <b>)</b> 47′28			-3939 Nov 06 j 21:20	0°M√	
greatest brilliancy	-3944 Sep 22 j 20:59	1° <b>米</b> 01'49	-1.9m		-3939 Dec 15 j 00:15	0° <b>∡</b> ¹	
1	-3944 Sep 25 j 13:05	30°R≈			2020 1 07:14.26	100 701100	1005115
direct	-3944 Oct 29 j 09:57	22°≈41'08		conjunction	-3938 Jan 07 j 14:36	18° <b>~</b> 21'09	
asc. node	-3944 Nov 29 j 06:14	27°≈54'34		minimum elong	-3938 Jan 07 j 12:58	18° <b>∡</b> 17'59	1°05′23
	-3944 Dec 05 j 15:32	0° <b>)</b> €			-3938 Jan 22 j 19:21	0°る	
	-3943 Feb 07 j 18:36	0° <b>Υ</b>		max. Earth dist.	-3938 Feb 26 j 01:51		2.42727 AU
	-3943 Apr 01 j 06:52	0°B			-3938 Mar 04 j 01:28	0° <b>≈</b>	
	-3943 May 20 j 07:55	0°Щ		morning rise	-3938 Mar 14 j 02:31	7°≈16'02	
	-3943 Jul 05 j 18:54	0°€			-3938 Apr 15 j 08:57	0° <b>∀</b>	
evening set	-3943 Jul 18 j 14:49	8° <b>5</b> 34'38			-3938 May 30 j 03:10	0° <b>Υ</b>	
max. Earth dist.	-3943 Aug 04 j 12:27		2.53293 AU		-3938 Jul 16 j 20:07	0°8	
	-3943 Aug 18 j 19:20	$0$ $\circ$ $\Omega$		asc. node	-3938 Jul 22 j 06:43	3° <b>8</b> 16'44	
					-3938 Sep 07 j 11:36	$\Pi$ °0	
conjunction	-3943 Sep 06 j 05:48	13° <b>Ω</b> 03′00	0°53'40	retrograde	-3938 Dec 01 j 21:21	28° <b>Ⅱ</b> 41'15	
minimum elong	-3943 Sep 06 j 07:33	13° <b>Ω</b> 06′07	0°53'46	opposition	-3937 Jan 09 j 08:58	19° <b>Ⅲ</b> 51'44	
	-3943 Sep 29 j 14:46	0° <b>m</b>		greatest brilliancy	-3937 Jan 10 j 01:14		-1.4m
morning rise	-3943 Oct 29 j 05:26	22° Mp 04'05		min. Earth dist.	-3937 Jan 13 j 22:22	18° <b>Ⅱ</b> 05'23	0.63592 AU
	-3943 Nov 08 j 16:30	0∘ <b>⊽</b>		direct	-3937 Feb 19 j 13:34	9° <b>Ⅱ</b> 52'17	
desc. node	-3943 Dec 04 j 10:31	19° <b>≏</b> 45'44			-3937 Apr 26 j 18:05	$0$ $\circ$	
	-3943 Dec 17 j 15:51	$0^{\circ}$ M.			-3937 Jun 17 j 00:16	$0^{\circ}\Omega$	
	-3942 Jan 25 j 07:29	0° <b>∡</b> ¹		desc. node	-3937 Jul 27 j 04:23	27° <b>Ω</b> 32'31	
	-3942 Mar 05 j 12:50	0°ප			-3937 Jul 30 j 14:20	0° <b>m</b> y	
	-3942 Apr 15 j 09:02	0° <b>≈</b>			-3937 Sep 08 j 20:13	0∘ <b>ত</b>	
	-3942 May 29 j 08:33	0° <b>∀</b>			-3937 Oct 17 j 12:43	0° <b>M</b> ₊	
	-3942 Jul 19 j 09:20	$0^{\circ}$ Y			-3937 Nov 24 j 22:03	0° <b>∡</b> 7	
retrograde	-3942 Sep 22 j 14:37	20° <b>Y</b> 13'10			-3936 Jan 03 j 00:32	0°ರ	
asc. node	-3942 Oct 17 j 07:04	16° <b>Ƴ</b> 03′28		evening set	-3936 Jan 10 j 04:08	5° <b>る</b> 22'45	
min. Earth dist.	-3942 Oct 29 j 14:05	11° <b>Y</b> 29'35	0.64406 AU		-3936 Feb 12 j 14:44	0° <b>≈</b>	
opposition	-3942 Nov 01 j 14:49	10° <b>Y</b> 16′29	0°35'51				
greatest brilliancy	-3942 Nov 01 j 12:56	10° <b>Y</b> 18′22	-1.5m	conjunction	-3936 Mar 09 j 22:06	18° <b>≈</b> 43′00	-0°48'27
direct	-3942 Dec 10 j 13:51	1° <b>Y</b> ′00'24		minimum elong	-3936 Mar 10 j 00:15	18° <b>≈</b> 46'45	0°48'32
	-3941 Mar 07 j 10:12	$0^{\circ}$ 8			-3936 Mar 26 j 04:11	0° <b>∀</b>	
	-3941 Apr 29 j 18:20	$\Pi^{\circ}0$		max. Earth dist.	-3936 Apr 11 j 22:37	11° <b>∺</b> 25'47	2.55398 AU
	-3941 Jun 16 j 13:59	$0$ $\circ$ $\odot$		morning rise	-3936 May 03 j 22:55	26° <b>∺</b> 08′00	
	-3941 Jul 30 j 21:37	$0^{\circ}\Omega$			-3936 May 09 j 19:43	$0^{\circ}$ $\Upsilon$	
evening set	-3941 Sep 03 j 16:07	24° <b>Q</b> 57'09		asc. node	-3936 Jun 08 j 05:45	19° <b>Y</b> ′04'42	
	-3941 Sep 10 j 12:20	0° <b>m</b> )			-3936 Jun 25 j 10:04	0°B	
max. Earth dist.	-3941 Sep 24 j 23:37	10°M)48'26	2.41047 AU		-3936 Aug 12 j 22:50	$\Pi^{\circ}0$	
	-3941 Oct 20 j 03:54	0∘ <b>⊽</b>			-3936 Oct 03 j 13:57	$0$ $\circ$ $\odot$	
desc. node	-3941 Oct 22 j 08:48	1° <b>≏</b> 42'01			-3936 Dec 05 j 22:18	$0^{\circ}\Omega$	
				retrograde	-3935 Jan 14 j 04:29	7° <b>Ω</b> 47'09	
conjunction	-3941 Oct 31 j 01:29	8° <b>≏</b> 26'01	-0°06'14	opposition	-3935 Feb 18 j 23:40	0° <b>Ω</b> 13'34	4°53'43
minimum elong	-3941 Oct 31 j 00:59	8° <b>ഫ</b> 25'03	0°06'15		-3935 Feb 19 j 14:39	30° <b>₹</b> ∽	
behind sun begin	-3941 Oct 30 j 00:44	7° <b>≙</b> 37'59		greatest brilliancy	-3935 Feb 20 j 08:57	29° <b>5</b> 43'23	-1.9m
behind sun end	-3941 Nov 01 j 01:15	9° <b>ي</b> 12'09		min. Earth dist.	-3935 Feb 26 j 21:07	27° <b>5</b> 22'14	0.53845 AU
	-3941 Nov 27 j 15:42	$0^{\circ}$ M.		direct	-3935 Mar 30 j 11:21	21° <b>©</b> 01'30	
morning rise	-3940 Jan 04 j 06:08	29°M31'22			-3935 May 09 j 01:10	$0^{\circ}\Omega$	
	-3940 Jan 04 j 20:47	0° <b>∡</b> ¹		desc. node	-3935 Jun 13 j 03:48	17° <b>Ω</b> 48'38	
	-3940 Feb 12 j 16:22	ರ∘ರ			-3935 Jul 02 j 19:47	0° <b>™</b>	
	-3940 Mar 23 j 22:46	0° <b>≈</b>			-3935 Aug 15 j 00:35	0∘ <b>⊽</b>	
	-3940 May 05 j 11:57	0° <b>)</b> €			-3935 Sep 24 j 03:18	$0^{\circ}$ M	
	-3940 Jun 20 j 08:42	$0^{\circ}$ Y			-3935 Nov 02 j 12:32	0° <b>∡</b> ¹	
	-3940 Aug 11 j 08:56	$9^{\circ}$ 8			-3935 Dec 12 j 11:55	ರ∘ರ	
asc. node	-3940 Sep 03 j 07:12	10° <b>8</b> 59'42			-3934 Jan 22 j 21:14	0°≈	
retrograde	-3940 Oct 26 j 08:20	24° <b>8</b> 32'56		evening set	-3934 Mar 05 j 04:25	28° <b>≈</b> 41'19	

Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -3934 Mar 07 i 02:44 0°**)**€ -3930 Dec 08 i 06:14 0∘**⊽** -3934 Apr 21 j 03:42  $0^{\circ}\Upsilon$ -3929 Jan 17 j 23:17 0°M -3929 Feb 03 j 06:35 12°ML05'11 desc. node 3°**Y**16'57 0°00'02 -3929 Feb 27 j 13:04 0°×7 -3934 Apr 26 j 04:16 conjunction -3934 Apr 26 j 04:12 3°Υ16'52 0°00'02 -3929 Apr 10 j 10:31 0°궁 minimum elong -3934 Apr 25 j 10:05 2° Y 47'20 behind sun begin -3929 May 27 j 12:08 0°≈ 3°Y46'23 -3929 Jul 30 j 12:05 behind sun end -3934 Apr 26 j 22:19 retrograde 21°≈46'26 3°Y14'25 asc. node -3934 Apr 26 j 02:41 min. Earth dist. -3929 Aug 29 j 14:49 15°≈33'42 0.50936 AU 12°**Y**40′23 max. Earth dist. -3934 May 10 j 15:17 2.63917 AU greatest brilliancy -3929 Sep 05 j 05:32 13°**≈**06'43 -2.1m -3934 Jun 06 j 14:25 0°8 opposition -3929 Sep 06 j 07:28 12°**≈**42'35 -4°20'27 morning rise -3934 Jun 13 j 14:47 4°**8**28'37 direct -3929 Oct 10 j 16:09 5°≈16'50 -3929 Dec 16 j 21:09 -3934 Jul 23 j 21:21  $0^{\circ}\Pi$ asc. node 25°≈30'03 -3934 Sep 09 j 17:16 0ಂತಾ -3929 Dec 25 j 23:51 0°**)**€ -3934 Oct 28 j 12:04  $0^{\circ}\Omega$ -3928 Feb 18 j 16:55  $0^{\circ}\Upsilon$ -3934 Dec 19 j 08:24 0° m -3928 Apr 09 j 04:28 0°8 -3933 Mar 03 j 09:15 0∘**⊽** -3928 May 27 j 12:09  $0^{\circ}\Pi$ retrograde -3933 Mar 17 j 16:37 1°**£**12'34 evening set -3928 Jul 02 j 13:44 23°II16'10 -3933 Mar 31 j 16:46 30°R M -3928 Jul 12 j 18:14 0ಂತಾ opposition -3933 Apr 18 j 08:16 25° m 37'17 0°53'06 max. Earth dist. -3928 Jul 22 j 21:58 6°≌46'50 2.57479 AU greatest brilliancy -3933 Apr 18 j 15:05 25° Mp 32'16 -2.7m 25°938'57 min. Earth dist. -3933 Apr 25 j 00:46 23° m 39'31 0.41175 AU conjunction -3928 Aug 19 j 14:04 1°05'12 desc. node -3933 May 01 j 04:37 21° m 58'55 minimum elong -3928 Aug 19 j 15:12 25°9540'54 1°05'21 direct -3933 May 22 j 03:18 19° m 07'42 -3928 Aug 25 j 20:22  $0^{\circ}\Omega$ -3933 Jul 03 j 21:02 0∘**⊽** -3928 Oct 06 j 21:18 0° m -3933 Aug 24 j 21:19 0°M -3928 Oct 08 j 07:22 1° m 02'10 morning rise -3933 Oct 07 j 17:56 0°×7 -3928 Nov 16 j 06:25 0∘**⊽** -3933 Nov 19 j 11:00 0°궁 -3928 Dec 21 j 05:28 26°**£**39'55 desc node -3932 Jan 01 j 19:13 -3928 Dec 25 j 13:32 0°M 0°≈≈ 0°**)**€ -3927 Feb 02 j 12:23 0°×7 -3932 Feb 15 j 10:40 17°**)** 24'34 -3927 Mar 14 j 01:23 0°궁 -3932 Mar 12 j 23:33 asc. node  $0^{\circ}\Upsilon$ -3927 Apr 24 j 10:20 -3932 Apr 01 j 10:01 0°22 9°**Υ**55'55 -3927 Jun 08 j 21:12 0°) -3932 Apr 16 j 20:47 evening set -3927 Aug 07 j 17:07  $0^{\circ}$ -3932 May 18 j 06:27 0°8 5°**Y**57'28 -3927 Sep 08 j 13:41 retrograde -3932 Jun 03 j 17:38 10°**8**29'49 0°43'16 -3927 Oct 08 j 03:54 conjunction 30°**₹** 27°**¥**48′20 0.61631 AU -3932 Jun 03 j 16:23 10°**8**27'48 0°43'21 -3927 Oct 13 j 20:38 minimum elong min. Earth dist. -3932 Jun 02 j 17:08 9°**8**50'46 2.67105 AU max. Earth dist. opposition -3927 Oct 18 j 07:57 26°**₭**01'09 -0°37'58 -3932 Jul 04 j 06:36  $0^{\circ}II$ greatest brilliancy -3927 Oct 18 j 05:43 26°**₭**03'22 -1.6m morning rise -3932 Jul 19 j 06:51 9°**Ⅲ**37'50 asc. node -3927 Nov 02 j 21:01 20°**¥**26′09 -3932 Aug 19 j 19:08 0ಂತಾ direct -3927 Nov 25 j 05:48 17°**₩**07'28 -3932 Oct 04 j 12:44  $0^{\circ}\Omega$ -3926 Jan 16 j 15:17  $0^{\circ}\Upsilon$ -3932 Nov 18 j 13:16 0° m -3926 Mar 17 j 17:51  $0^{\circ}$ 8 -3931 Jan 02 j 06:58 0∘**⊽** -3926 May 07 j 19:07  $0^{\circ}\Pi$ -3931 Feb 16 j 18:44 -3926 Jun 23 j 22:27 0ಂತಾ 0°M -3931 Mar 18 j 05:21 18°M16'49 -3926 Aug 07 j 01:59 desc. node 0° $\Omega$ -3931 Apr 08 i 04:35 0°×7 evening set -3926 Aug 15 i 01:59 5°**Ω**38'11 retrograde -3931 Jun 03 j 15:33 17°**∡**24'17 max. Earth dist. -3926 Aug 30 i 14:38 16° Ω44'50 2.45889 AU min. Earth dist. -3931 Jun 30 j 12:26 12°**₹**56'51 0.39301 AU -3926 Sep 17 j 17:49 0° m -3931 Jul 05 i 23:47 11°**₹**22'14 -6°20'15 opposition -3931 Jul 04 j 19:11 11°**₹**'42'58 -2.8m -3926 Oct 07 j 17:23 14° m 55'21 0°21'44 greatest brilliancy conjunction -3926 Oct 07 j 18:44 -3931 Aug 05 j 04:15 6°**₹**05'51 14° m 57'53 0°21'46 direct minimum elong -3931 Oct 15 j 13:10 0°궁 -3926 Oct 27 j 12:41 0∘**⊽** -3931 Dec 06 j 06:23 -3926 Nov 08 j 02:26 8°**£**55'07 0°≈≈ desc node 0°**₩** -3930 Jan 23 j 18:37 -3926 Dec 05 j 04:19 0°M -3930 Jan 28 j 22:11 3°**¥**12'35 morning rise -3926 Dec 06 j 21:27 1°M20'27 asc. node  $0^{\circ}\Upsilon$ -3930 Mar 12 j 20:00 -3925 Jan 12 j 12:33 0°×7 -3930 Apr 29 j 17:52  $0^{\circ}$ 8 -3925 Feb 20 j 10:28 0°정 -3930 May 25 j 18:17 16°**8**25'39 -3925 Apr 01 j 19:38 0°≈ evening set  $0^{\circ}\Pi$ -3925 May 14 j 15:55 0°) -3930 Jun 16 j 01:06 -3930 Jun 26 j 20:05 6°**П**56'24 2.64885 AU -3925 Jun 30 j 13:34  $0^{\circ}\Upsilon$ max. Earth dist. 0°8 -3925 Aug 26 j 19:18 conjunction -3930 Jul 11 j 07:16 16°**Ⅲ**19'07 1°08'19 -3925 Sep 20 j 22:29 8°**8**36'01 asc. node minimum elong -3930 Jul 11 j 06:33 16°**Ⅱ**17'57 1°08'29 retrograde -3925 Oct 13 j 22:04 11°**8**39'47 -3930 Aug 01 j 03:35 0ಂತಾ opposition -3925 Nov 22 j 22:00 1°**8**53'14 2°16'24 morning rise -3930 Aug 25 j 23:16 16°934'47 min. Earth dist. -3925 Nov 22 j 03:56 2°**8**11'23 0.66842 AU  $0^{\circ}\Omega$ -3925 Nov 22 j 19:21 1°**8**55'54 -1.4m -3930 Sep 14 j 16:41 greatest brilliancy

-3925 Nov 27 j 15:32

30°RY

-3930 Oct 27 j 15:36

0° m

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direct	ical year style is used: Th -3924 Jan 02 j 02:48	22° <b>Y</b> 11'36	in astronomicai co	conjunction	-3919 Apr 09 j 02:25	17° <b>H</b> 24'35	0910!10
direct	-3924 Jah 02 j 02.48 -3924 Feb 10 j 12:58	0°8		minimum elong	-3919 Apr 09 j 02:23	17° <b>X</b> 24'33	
	,	0°II		minimum elong	1 3	17 <b>π</b> 2003	0 1920
	-3924 Apr 13 j 19:27 -3924 Jun 02 j 16:45	0ಂಣ ೧.π		Fauth diat	-3919 Apr 28 j 03:07		2.61199 AU
	-3924 Jul 02 j 16.43			max. Earth dist.	-3919 Apr 30 j 08:25	9° <b>Υ</b> 34'46	2.01199 AU
	,	0° <b>N</b>		asc. node	-3919 May 12 j 19:11	9° γ 34'46 20° γ 25'46	
daga mada	-3924 Aug 28 j 10:00	0° M)		morning rise	-3919 May 29 j 14:15	0° <b>8</b>	
desc. node	-3924 Sep 24 j 23:52	20° <b>™</b> 45'52 0° <b>₽</b>			-3919 Jun 13 j 13:11 -3919 Jul 31 j 03:53	0°II	
avanina aat	-3924 Oct 07 j 00:16	0° <b>ჲ</b> 53'31			•	0°©	
evening set	-3924 Oct 08 j 03:58				-3919 Sep 17 j 23:36	0°€ 0°€	
	-3924 Nov 14 j 09:29	0° <b>M</b>			-3919 Nov 08 j 09:13	0°m)	
conjunction	-3924 Dec 10 j 18:16	20°M46'16	0040120	retrograde	-3918 Jan 09 j 23:55 -3918 Feb 18 j 05:24	0 mg/54'55	
minimum elong	-3924 Dec 10 j 18:10	20°M39'50		opposition	-3918 Mar 23 j 15:34	1° Mg 30'00	2014/26
minimum clong	-3924 Dec 10 j 14:39	20 11 <b>6</b> 3930	0 4943	greatest brilliancy	-3918 Mar 24 j 18:08	1°My08'13	
max. Earth dist.	-3923 Jan 12 j 10:38		2.38256 AU	greatest offinality	-3918 Mar 28 j 05:06	30°RΩ	-2.4111
max. Earth dist.	-3923 Jan 30 j 06:37	0°81 % 01	2.36230 AU	min. Earth dist.	-3918 Mar 31 j 23:48		0.45891 AU
morning rise	-3923 Feb 16 j 18:54	13°る13'54		direct	-3918 Apr 29 j 04:37	23° <b>Ω</b> 41'51	0.43671 AC
morning risc	-3923 Mar 11 j 11:38	0°≈		desc. node	-3918 May 17 j 20:58	25° <b>Ω</b> 59'13	
	-3923 Apr 22 j 19:09	0° <b>∺</b>		desc. node	-3918 May 31 j 00:50	0° m)	
	-3923 Jun 06 j 19:02	0° <b>Υ</b>			-3918 Jul 26 j 00:17	0∘ <del>ত</del> س	
	-3923 Jul 25 j 11:09	0°8			-3918 Sep 07 j 09:52	0° <b>m</b> .	
asc. node	-3923 Aug 07 j 23:09	7° <b>8</b> 45'00			-3918 Oct 18 j 12:47	0° <b>∡</b> 7	
asc. node	-3923 Sep 20 j 11:03	0°Ⅱ			-3918 Nov 28 j 17:14	°ੇਤ	
retrograde	-3923 Nov 17 j 04:01	15° <b>Ⅱ</b> 19'21			-3917 Jan 10 j 01:05	0° <b>≈</b>	
opposition	-3923 Dec 26 j 06:53	6° <b>Ⅱ</b> 09'18	4°17'15		-3917 Feb 22 j 23:32	0° <b>)</b> €	
greatest brilliancy	-3923 Dec 26 j 15:51	6°П00'28	-1.4m	asc. node	-3917 Mar 30 j 15:51	23° <b>)</b> ₹35'32	
min. Earth dist.	-3923 Dec 29 j 08:23	4° <b>∏</b> 56'51	0.65765 AU	evening set	-3917 Apr 01 j 18:33	24° <b>)</b> 58'17	
mm. Darm dist.	-3922 Jan 12 j 01:17	30°R <b>8</b>	0.03703710	evening sec	-3917 Apr 09 j 11:53	0°Υ	
direct	-3922 Feb 05 j 11:54	26° <b>8</b> 08'14			5517 11pt 05 j 11.55	· 1	
ancer	-3922 Mar 03 j 20:42	0°Ⅱ		conjunction	-3917 May 20 j 20:51	26° <b>Ƴ</b> 38'45	0°28'09
	-3922 May 09 j 07:31	0°©		minimum elong	-3917 May 20 j 20:51	26° <b>Y</b> '37'09	0°28'12
	-3922 Jun 26 j 06:54	0°N		max. Earth dist.	-3917 May 25 j 16:59	29° <b>Υ</b> 44'19	2.66507 AU
	-3922 Aug 07 j 23:50	0° mp			-3917 May 26 j 02:48	0°8	
desc. node	-3922 Aug 12 j 22:15	3°m/37'19		morning rise	-3917 Jul 06 j 04:08	26° <b>8</b> 11'01	
	-3922 Sep 16 j 21:33	0∘ <u>⊽</u>		5 5	-3917 Jul 12 j 03:46	0°II	
	-3922 Oct 25 j 09:33	0° <b>M</b> .			-3917 Aug 28 j 01:21	0° <b>©</b>	
	-3922 Dec 02 j 14:55	0° <b>∡</b> ¹			-3917 Oct 13 j 15:25	$0^{\circ}\Omega$	
evening set	-3922 Dec 15 j 12:30	10° <b>∡</b> '02'05			-3917 Nov 29 j 06:24	0° m)	
C	-3921 Jan 10 j 13:04	ರ∘ರ			-3916 Jan 16 j 01:03	0∘ <mark>⊽</mark>	
	·				-3916 Mar 09 j 08:07	0° <b>M</b>	
conjunction	-3921 Feb 16 j 18:35	27° <b>ප්</b> 41'37	-1°02'17	desc. node	-3916 Apr 03 j 23:15	10°M46'54	
minimum elong	-3921 Feb 16 j 20:28	27° <b>る</b> 45'02	1°02'25	retrograde	-3916 May 04 j 20:52	16°M24'46	
_	-3921 Feb 19 j 22:43	0° <b>≈</b>		opposition	-3916 Jun 04 j 11:09	11°ML18'23	-4°22'09
max. Earth dist.	-3921 Mar 29 j 20:12	26° <b>≈</b> 53'12	2.50774 AU	greatest brilliancy	-3916 Jun 04 j 06:10	11°M21'42	-2.9m
	-3921 Apr 03 j 08:14	0° <b>)</b> €		min. Earth dist.	-3916 Jun 03 j 18:25	11° <b>M</b> 29'30	0.37656 AU
morning rise	-3921 Apr 16 j 15:27	9° <b>)</b> €06′10		direct	-3916 Jul 04 j 10:44	6° <b>™</b> 17'45	
	-3921 May 17 j 22:47	$0^{\circ}$ Y			-3916 Sep 11 j 18:56	0° <b>∡</b>	
asc. node	-3921 Jun 25 j 21:20	25° <b>Y</b> ′02'21			-3916 Oct 31 j 09:59	8°0	
	-3921 Jul 03 j 19:10	$0^{\circ}$ 8			-3916 Dec 16 j 21:53	0° <b>≈</b>	
	-3921 Aug 22 j 07:51	$\Pi^{\circ}0$			-3915 Feb 01 j 07:53	0° <b>∀</b>	
	-3921 Oct 16 j 13:55	$0$ $\circ$ $\odot$		asc. node	-3915 Feb 14 j 12:43	8° <b>¥</b> 27'44	
retrograde	-3921 Dec 27 j 12:20	21° <b>5</b> 643'38			-3915 Mar 20 j 08:18	$0^{\circ}\Upsilon$	
opposition	-3920 Feb 02 j 13:14	13° <b>©</b> 35'35	5°07'39		-3915 May 06 j 17:42	0°B	
greatest brilliancy	-3920 Feb 03 j 17:18	13° <b>5</b> 09'11	-1.7m	evening set	-3915 May 10 j 22:29	2° <b>8</b> 39'34	
min. Earth dist.	-3920 Feb 09 j 07:12	11° <b>©</b> 03'29	0.58315 AU	max. Earth dist.	-3915 Jun 17 j 07:16	26° <b>8</b> 26'15	2.66394 AU
direct	-3920 Mar 14 j 00:58	3° <b>©</b> 55'11			-3915 Jun 22 j 20:40	$\Pi$ °0	
	-3920 May 28 j 03:47	$0^{\circ}\Omega$					
desc. node	-3920 Jun 29 j 20:27	20° <b>Ω</b> 13'41		conjunction	-3915 Jun 26 j 16:39	2° <b>Ⅱ</b> 27'38	1°01'22
	-3920 Jul 14 j 06:49	0° <b>m</b>		minimum elong	-3915 Jun 26 j 15:31	2° <b>Ⅱ</b> 25'49	1°01'30
	-3920 Aug 24 j 18:03	0∘ <b>⊽</b>			-3915 Aug 08 j 01:38	$0$ $\circ$ $\odot$	
	-3920 Oct 03 j 01:52	0°M₊		morning rise	-3915 Aug 10 j 22:12	1°952'56	
	-3920 Nov 10 j 22:16	0° <b>∡</b>			-3915 Sep 21 j 23:22	$0$ $\circ$ $\Omega$	
	-3920 Dec 20 j 10:43	0°ರ			-3915 Nov 04 j 13:12	0° m)	
	-3919 Jan 30 j 10:19	0° <b>≈</b>			-3915 Dec 17 j 00:24	0∘ <b>⊽</b>	
					20117		
evening set	-3919 Feb 13 j 12:37	10°≈01'00			-3914 Jan 27 j 20:03	0°M	
evening set	-3919 Feb 13 j 12:37 -3919 Mar 14 j 07:32	10°≈01'00 0° <b>米</b>		desc. node	-3914 Jan 27 j 20:03 -3914 Feb 19 j 23:25 -3914 Mar 10 j 23:04	0°ጤ 16°ጤ34'39 0° <i>ጃ</i>	

,	nical year style is used: Th		`	//		, ,	C 49
Attention, astronom	-3914 Apr 24 j 23:46	ic year -++00 i 0°る	n astronomicai co	unting style is the year	-3909 Oct 15 j 10:22	0° <b>Ω</b>	
retrograde	-3914 Jul 10 j 23:49	29° <b>ප</b> 55'51		max. Earth dist.	-3909 Oct 17 j 13:53		2.38808 AU
min. Earth dist.	-3914 Aug 08 j 00:25	24° <b>る</b> 36'36	0.45880 AU				
greatest brilliancy	-3914 Aug 14 j 15:39	22° <b>る</b> 19'39		conjunction	-3909 Nov 14 j 12:16	23° <b>Ω</b> 25'10	-0°23'08
opposition	-3914 Aug 16 j 03:39	21° <b>る</b> 48'31	-5°44'05	minimum elong	-3909 Nov 14 j 10:23	23° <b>≏</b> 21'28	0°23'10
direct	-3914 Sep 17 j 17:02	15° <b>る</b> 12'48			-3909 Nov 22 j 21:26	$0^{\circ}$ M	
	-3914 Nov 11 j 10:23	0° <b>≈</b>			-3909 Dec 31 j 01:30	0° <b>∡</b> 7	
asc. node	-3913 Jan 02 j 12:01	27° <b>≈</b> 06′22		morning rise	-3908 Jan 20 j 15:57	16° <b>∡</b> °02'30	
	-3913 Jan 07 j 14:06	0° <b>\</b>			-3908 Feb 07 j 19:56	0°ප	
	-3913 Feb 27 j 12:39	0° <b>Υ</b>			-3908 Mar 19 j 00:47	0° <b>≈</b>	
	-3913 Apr 17 j 16:57	0° <b>B</b>			-3908 Apr 30 j 10:04	0° <b>∀</b> 0° <b>Υ</b>	
evening set	-3913 Jun 04 j 12:32 -3913 Jun 18 j 05:59	0°П 8°П48'00			-3908 Jun 14 j 19:55 -3908 Aug 04 j 03:32	0°Y	
max. Earth dist.	-3913 Jul 12 j 19:49	24° <b>П</b> 48'50	2.60954 AU	asc. node	-3908 Aug 04 j 03:32	10° <b>8</b> 44'06	
max. Earth dist.	-3913 Jul 20 j 16:02	0°95	2.00934 AU	asc. Houc	-3908 Oct 13 j 21:43	0°Ⅱ	
	3)13 3ul 20 j 10.02	0 3		retrograde	-3908 Nov 03 j 04:30	2° <b>∏</b> 21'40	
conjunction	-3913 Aug 04 j 07:19	9° <b>5</b> 47'03	1°10'31		-3908 Nov 22 j 03:56	30°R₩	
minimum elong	-3913 Aug 04 j 07:39	9° <b>5</b> 47'37	1°10'41	opposition	-3908 Dec 12 j 18:36	22° <b>8</b> 54'39	3°37'03
_	-3913 Sep 02 j 21:15	$0^{\circ}\Omega$		greatest brilliancy	-3908 Dec 12 j 21:34	22° <b>8</b> 51'41	-1.3m
morning rise	-3913 Sep 20 j 19:54	12° <b>Ω</b> 33'49		min. Earth dist.	-3908 Dec 14 j 08:12	22° <b>8</b> 17'12	0.66960 AU
	-3913 Oct 15 j 05:13	0° <b>™</b>		direct	-3907 Jan 22 j 18:05	12° <b>8</b> 57'31	
	-3913 Nov 24 j 23:32	0∘ <b>⊽</b>			-3907 Mar 25 j 06:44	$\Pi$ °0	
	-3912 Jan 03 j 16:50	0°M			-3907 May 19 j 09:54	0°99	
desc. node	-3912 Jan 07 j 22:16	3°M13'06			-3907 Jul 04 j 17:42	0° <b>N</b>	
	-3912 Feb 12 j 02:13 -3912 Mar 23 j 04:04	0°る		desc. node	-3907 Aug 15 j 22:26	0°M)	
	-3912 May 04 j 13:16	0°≈		desc. node	-3907 Aug 29 j 15:08 -3907 Sep 24 j 15:32	10°№11'00 0°Ω	
	-3912 Jun 22 j 08:13	0° <b>∺</b>			-3907 Nov 02 j 01:19	0° <b>m</b> .	
retrograde	-3912 Aug 24 j 16:40	20° <b>)</b> 25'45		evening set	-3907 Nov 18 j 08:19	12°M50'09	
min. Earth dist.	-3912 Sep 27 j 02:30		0.57994 AU	C	-3907 Dec 10 j 04:39	0° <b>∡</b> ¹	
opposition	-3912 Oct 02 j 22:52	10° <b>)</b> 38'44	-2°00'04		-3906 Jan 18 j 00:09	ರ°ರ	
greatest brilliancy	-3912 Oct 02 j 13:31	10° <b>)</b> 47′56	-1.8m				
direct	-3912 Nov 08 j 14:54	2° <b>¥</b> 13'33		conjunction	-3906 Jan 22 j 20:55	3° <b>⋜</b> 41'34	-1°07'44
asc. node	-3912 Nov 19 j 12:24	2° <b>¥</b> 57'16		minimum elong	-3906 Jan 22 j 20:52	3° <b>る</b> 41'29	1°07'53
	-3911 Jan 31 j 08:55	0° <b>Υ</b>		T	-3906 Feb 27 j 06:45	0° <b>≈</b>	0 15cco 177
	-3911 Mar 26 j 17:57	$^{0\circ}$ H		max. Earth dist.	-3906 Mar 11 j 15:38	8°≈56'18	2.45660 AU
	-3911 May 15 j 09:43 -3911 Jul 01 j 02:28	0ം©		morning rise	-3906 Mar 27 j 01:36 -3906 Apr 10 j 13:49	19° <b>≈</b> 53'06 0° <b>)</b> €	
evening set	-3911 Jul 28 j 05:25	18° <b>©</b> 15'26			-3906 Apr 10 j 15:49	0°Υ	
max. Earth dist.	-3911 Aug 12 j 22:44	29°508'06	2.50777 AU		-3906 Jul 11 j 11:48	0°8	
	-3911 Aug 14 j 04:26	$0^{\circ}\Omega$		asc. node	-3906 Jul 12 j 13:17	0° <b>8</b> 39'06	
	•				-3906 Aug 31 j 14:54	$\Pi^{\circ}0$	
conjunction	-3911 Sep 17 j 00:45	24° <b>Ω</b> 11′25	0°43'59		-3906 Nov 03 j 14:55	$0$ $\circ$ $\odot$	
minimum elong	-3911 Sep 17 j 02:38	24° <b>Ω</b> 14'50	0°44'04	retrograde	-3906 Dec 10 j 19:10	7° <b>5</b> 04'08	
	-3911 Sep 24 j 23:05	0° <b>m</b>			-3905 Jan 13 j 18:35	30°Ŗ <b>Ⅱ</b>	
	-3911 Nov 03 j 22:31	0∘ <b>ত</b>		opposition	-3905 Jan 17 j 19:43	28° <b>Ⅱ</b> 27'49	4°59'17
morning rise	-3911 Nov 11 j 06:43	5° <b>Ω</b> 37'08		greatest brilliancy	-3905 Jan 18 j 16:19	28° <b>I</b> 107'59	-1.5m
desc. node	-3911 Nov 24 j 20:28 -3911 Dec 12 j 19:00	16° <b>ჲ</b> 04'42 0° <b>ጤ</b>		min. Earth dist. direct	-3905 Jan 23 j 04:24 -3905 Feb 27 j 20:32	26° <b>П</b> 23'54 18° <b>П</b> 32'15	0.61989 AU
	-3910 Jan 20 j 07:24	0° <b>⊼</b> ¹		direct	-3905 Apr 16 j 00:43	0°95	
	-3910 Jan 20 j 07:24 -3910 Feb 28 j 08:55	0° <b>ਠ</b>			-3905 Apr 10 j 00:45	0°Ω	
	-3910 Apr 09 j 23:17	0° <b>≈</b>		desc. node	-3905 Jul 17 j 14:45	24° <b>Ω</b> 46'25	
	-3910 May 23 j 08:39	0° <b>∀</b>			-3905 Jul 24 j 23:58	0° <b>m</b>	
	-3910 Jul 11 j 05:05	$0^{\circ}$ Y			-3905 Sep 03 j 14:04	0∘ <b>⊽</b>	
retrograde	-3910 Sep 30 j 11:37	28° <b>Y</b> 28'56			-3905 Oct 12 j 10:47	$0^{\circ}$ M	
asc. node	-3910 Oct 07 j 12:58	28° <b>Y</b> ′08′51			-3905 Nov 19 j 22:50	0° <b>∡</b>	
min. Earth dist.	-3910 Nov 07 j 07:25	19° <b>Y</b> 28′08	0.65534 AU		-3905 Dec 29 j 03:29	0°る	
opposition	-3910 Nov 09 j 12:40	18° <b>Υ</b> 34'31	1°15'12	evening set	-3904 Jan 23 j 17:02	19° <b>る</b> 00'32	
greatest brilliancy	-3910 Nov 09 j 09:35	18° <b>Y</b> 37'37 9° <b>Y</b> 08'07	-1.4m		-3904 Feb 07 j 19:47	0° <b>≈</b>	
direct	-3910 Dec 18 j 23:20 -3909 Feb 27 j 11:42	9°Y'08'07		conjunction	-3904 Mar 21 j 11:43	0° <b>)</b> 01'40	-0°38'19
	-3909 Feb 27 j 11.42 -3909 Apr 24 j 02:39	0°I		minimum elong	-3904 Mar 21 j 11:43	0° <b>∺</b> 04'46	
	-3909 Jun 11 j 13:38	0°©			-3904 Mar 21 j 10:45	0° <b>)</b>	3 33 23
	-3909 Jul 26 j 02:38	0° <b>U</b>		max. Earth dist.	-3904 Apr 19 j 02:40		2.57689 AU
	-3909 Sep 05 j 18:59	0° m/y			-3904 May 05 j 02:40	0° <b>Υ</b>	
evening set	-3909 Sep 15 j 19:56	7° Mp 28'44		morning rise	-3904 May 13 j 16:25	5° <b>Ƴ</b> 37'04	
desc. node	-3909 Oct 12 j 17:26	27° <b>m</b> 54'59		asc. node	-3904 May 29 j 10:17	15° <b>Ƴ</b> 49'47	

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Planetary Phenomena of Mars from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 50
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Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style. -3904 Jun 20 j 14:08 0°8 direct -3899 Aug 21 j 22:33 21°×39'58 -3904 Aug 07 j 16:45  $\mathbb{I}^{\circ 0}$ -3899 Sep 29 j 15:04 0°궁 -3904 Sep 27 j 00:27 0ಂತಾ -3899 Nov 28 j 09:46 0°**≈** -3904 Nov 22 j 13:23  $0^{\circ}\Omega$ -3903 Jan 25 j 22:17 18°**Ω**14'01 retrograde -3903 Mar 01 j 22:38 opposition 11°**Ω**02'32 4°30'38 -3903 Mar 03 j 08:10 greatest brilliancy 10°**Ω**32'55 -2.1m min. Earth dist. -3903 Mar 10 j 05:30 8°**Ω**07'46 0.51108 AU direct -3903 Apr 09 j 13:43 2°**Ω**14′03 desc. node -3903 Jun 03 j 14:08 18°**Ω**32'55 -3903 Jun 24 j 02:01 0° M -3903 Aug 08 j 07:22 0∘**⊽** -3903 Sep 18 j 04:33  $0^{\circ}$ M -3903 Oct 28 j 00:26 0°**√** -3903 Dec 07 j 07:12 0°ರ -3902 Jan 17 j 22:21 0°**≈** -3902 Mar 02 j 08:02 0°**)**€ evening set -3902 Mar 15 j 14:54 8°**¥**56′20 asc. node -3902 Apr 16 j 07:18 29°¥52'38 -3902 Apr 16 j 11:48  $0^{\circ}\Upsilon$ conjunction -3902 May 05 i 10:38 12°Υ18'59 0°10'53 minimum elong -3902 May 05 j 10:12 12°**Y**18'15 0°10'55 behind sun begin -3902 May 04 j 19:17 11°Y54'10 behind sun end -3902 May 06 i 01:06 12° Y 42'20 max. Earth dist. -3902 May 16 j 09:24 19°**Y**22'30 2.65068 AU -3902 Jun 01 j 23:01 0°8 -3902 Jun 21 j 23:23 12°**8**45'48 morning rise -3902 Jul 19 j 03:00  $0^{\circ}\Pi$ -3902 Sep 04 j 13:21 000 -3902 Oct 22 j 08:42  $0^{\circ}\Omega$ -3902 Dec 10 j 15:22 0° m -3901 Feb 03 j 21:07 0∘**⊽** -3901 Apr 04 j 00:01 16°**♀**42'07 retrograde -3901 Apr 21 j 14:34 desc. node 14°**£**47'47 11°**≏**28'58 -0°57'26 -3901 May 04 j 19:19 opposition -3901 May 04 j 22:48 greatest brilliancy 11°**≏**26'33 -2.9m min. Earth dist. -3901 May 09 j 09:52 10°**£**11'55 0.39185 AU direct -3901 Jun 06 j 00:35 5°**-**42'07 -3901 Aug 13 j 14:59  $0^{\circ}M$ -3901 Sep 29 j 23:24 0°⊀ -3901 Nov 13 j 02:43 0°る -3901 Dec 27 j 06:06 0°≈ -3900 Feb 10 j 09:06 0°**)**€ -3900 Mar 03 j 05:15 14°**)** 14'36 asc. node -3900 Mar 27 j 15:32  $0^{\circ}\Upsilon$ -3900 Apr 25 i 18:43 18° **Y**37'25 evening set 0°8 -3900 May 13 j 15:30 -3900 Jun 08 i 02:32 max. Earth dist. 16°**8**12'48 2.67077 AU -3900 Jun 12 j 03:39 18°**8**47'38 0°50'50 conjunction -3900 Jun 12 j 02:22 18°**8**45'35 0°50'56 minimum elong -3900 Jun 29 j 16:13  $0^{\circ}II$ -3900 Jul 27 j 11:02 17°**I**53'45 morning rise -3900 Aug 15 j 01:45 000 -3900 Sep 29 j 11:29  $0^{\circ}\Omega$ -3900 Nov 12 j 21:47 0° M -3900 Dec 26 j 15:18 0∘**⊽** -3899 Feb 08 j 07:55 0°M -3899 Mar 08 j 16:19 18°M59'01 desc. node 0°**∡**¹ -3899 Mar 25 j 20:48 -3899 May 24 j 04:57 0°궁 retrograde -3899 Jun 18 j 06:39 4°る10'08 -3899 Jul 13 j 13:04 30°₽**⋌**7 min. Earth dist. -3899 Jul 15 j 01:03 29°**✗**33'12 0.41257 AU -3899 Jul 20 j 14:25 27°**∡**750'11 -2.7m greatest brilliancy

-3899 Jul 22 j 02:54

opposition

27°**₹**21'48 -6°31'00