Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 1 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3400 Feb 27 j 06:58 11°≈21'54 -0°56'38 -3396 Nov 17 j 21:55 0° m conjunction -3400 Feb 27 j 09:13 11°≈25'59 0°56'43 -3395 Jan 03 j 14:02 0∘**⊽** minimum elong -3400 Mar 24 j 11:16 0°**)**€ -3395 Feb 21 j 14:37 0°M max. Earth dist. -3400 Apr 07 j 02:25 9°**升**28'31 2.51668 AU -3395 Mar 29 j 05:00 18°M44'32 desc. node 0°**∡**™ morning rise -3400 Apr 25 j 10:19 21°**)**59'01 -3395 May 01 j 05:32 $0^{\circ}\Upsilon$ -3400 May 07 j 09:07 1°**∡**³31'49 retrograde -3395 May 16 j 18:53 26°**Y**10'48 asc. node -3400 Jun 16 j 11:36 -3395 Jun 01 j 05:35 30°RM -3400 Jun 22 j 11:21 0°8 min. Earth dist. -3395 Jun 14 j 19:47 26°M46'25 0.37691 AU -3400 Aug 09 j 21:22 Π °0 opposition -3395 Jun 16 j 10:34 26°M20'31 -5°18'58 -3400 Oct 01 j 01:28 0ಂತಾ greatest brilliancy -3395 Jun 16 j 01:19 26° ML 26° 42 -2.9m -3400 Dec 08 j 16:17 0° Ω direct -3395 Jul 16 j 07:39 21°M21'59 retrograde -3399 Jan 04 j 19:26 3°**Ω**58′12 -3395 Aug 23 j 20:59 0°**∡**7 -3395 Oct 19 j 14:26 0°₹ -3399 Jan 29 j 21:03 30°Rூ opposition -3399 Feb 10 j 15:37 25°955'10 4°57'40 -3395 Dec 06 j 08:58 0°≈ greatest brilliancy -3399 Feb 11 j 20:12 25°528'21 -1.7m -3394 Jan 22 j 01:45 0°**)**€ min. Earth dist. -3399 Feb 17 j 14:02 23°9519'35 0.57614 AU asc. node -3394 Feb 06 j 04:10 9°\ 40'06 direct -3399 Mar 22 j 22:51 16°9518'37 -3394 Mar 10 j 02:37 $0^{\circ}\Upsilon$ -3399 May 13 j 02:57 $0^{\circ}\Omega$ -3394 Apr 26 j 13:20 0°8 desc. node -3399 Jun 24 j 03:52 23°**Ω**23'58 evening set -3394 May 19 j 20:21 14°843'28 -3399 Jul 04 j 10:27 0° m -3394 Jun 12 j 21:32 $0^{\circ}\Pi$ -3399 Aug 16 j 09:54 0∘**⊽** max. Earth dist. -3394 Jun 25 j 02:39 7°**Ц**48'23 2.66226 AU -3399 Sep 25 i 07:12 0°M -3399 Nov 03 i 05:16 0°×7 conjunction -3394 Jul 05 i 10:40 14°**I**I26'32 1°05'32 -3399 Dec 12 j 11:20 0°정 minimum elong -3394 Jul 05 i 09:46 14°**Ⅱ**25′05 1°05'40 -3398 Jan 21 j 23:31 0°≈ -3394 Jul 29 i 10:52 0ಂತಾ 23°≈11'59 -3394 Aug 19 j 14:50 13°954'16 -3398 Feb 23 j 12:42 evening set morning rise -3398 Mar 05 j 07:01 0°**)**€ -3394 Sep 12 j 17:55 $0^{\circ}\Omega$ -3394 Oct 26 j 15:25 O° m -3398 Apr 18 j 14:19 0°Y01'21 -0°09'09 -3394 Dec 08 j 06:42 0∘Ω conjunction -3398 Apr 18 j 14:45 0°Y02'03 0°09'10 -3393 Jan 19 j 00:33 oom. minimum elong -3398 Apr 17 j 20:58 29°\ 32'33 -3393 Feb 14 j 05:21 18°M57'11 behind sun begin desc. node 0° **Y**31'33 -3398 Apr 19 j 08:33 -3393 Mar 01 j 13:41 0°×7 behind sun end $0^{\circ}\Upsilon$ -3398 Apr 18 j 13:31 -3393 Apr 13 j 13:00 0°ಕ -3398 May 04 j 09:21 10°**Y**26′23 -3393 Jun 02 j 16:18 asc. node 0°≈ -3398 May 08 j 10:16 13°**Y**05'00 -3393 Jul 21 j 00:15 max. Earth dist. 2.61778 AU retrograde 13°≈44'27 -3398 Jun 03 j 12:55 -3393 Aug 18 j 08:03 0° 8 min. Earth dist. 8°≈14'49 0.46743 AU morning rise -3398 Jun 07 j 13:56 2°**8**35'43 greatest brilliancy -3393 Aug 25 j 01:28 5°≈53'35 -2.3m -3398 Jul 20 j 18:29 Π $^{\circ}0$ -3393 Aug 26 j 10:08 5°≈24'46 -5°14'48 opposition -3398 Sep 07 j 00:18 0ಂತಾ -3393 Sep 14 j 05:08 30°Rる -3398 Oct 26 j 21:19 $0^{\circ}\Omega$ direct -3393 Sep 28 j 08:17 28°る39'10 -3398 Dec 20 j 20:55 0° m -3393 Oct 12 j 23:49 0°≈ -3397 Feb 28 j 22:10 21° My 14'20-3393 Dec 25 j 03:08 29°≈53'16 retrograde asc. node -3397 Apr 03 j 00:50 14° m 58'32 2°22'35 -3393 Dec 25 j 08:09 0°) opposition -3397 Apr 03 j 20:56 14° Mp 42'24 -2.4 m -3392 Feb 16 j 02:08 $0^{\circ}\Upsilon$ greatest brilliancy -3397 Apr 11 j 07:02 12° m/20'08 0.44971 AU -3392 Apr 05 j 23:56 0° 8 min. Earth dist. direct -3397 May 09 j 04:48 7° m 23'22 -3392 May 24 i 09:30 $0^{\circ}II$ desc. node -3397 May 12 j 03:15 7° **m** 26'55-3392 Jun 26 i 02:36 20°II51'59 evening set -3397 Jul 13 j 13:41 0∘**⊽** -3392 Jul 10 i 03:36 0ಂತಾ -3397 Aug 28 j 21:47 0°M max. Earth dist. -3392 Jul 19 j 18:53 6°520'16 2.60433 AU -3397 Oct 09 i 18:46 0°×7 -3397 Nov 20 j 00:26 0°궁 -3392 Aug 12 j 04:46 21°959'04 1°08'23 conjunction -3392 Aug 12 j 05:29 -3396 Jan 01 j 01:44 minimum elong 22°900'17 1°08'30 0°≈≈ 0°**₩** -3392 Aug 23 j 23:29 $0^{\circ}\Omega$ -3396 Feb 13 j 14:30 -3392 Sep 28 j 23:44 -3396 Mar 21 j 07:03 24°**)** 27'32 morning rise 25°Ω06'52 asc. node $0^{\circ}\Upsilon$ 0° m -3396 Mar 29 j 17:50 -3392 Oct 05 j 20:16 7°**Υ**21'47 -3396 Apr 10 j 00:50 -3392 Nov 15 j 23:50 0∘∙თ evening set -3396 May 15 j 03:14 0°8 -3392 Dec 25 j 21:29 0°M -3391 Jan 01 j 04:04 4°M46'20 desc. node -3396 May 28 j 19:35 8°**8**45'07 0°36'49 0°**∡**7 conjunction -3391 Feb 03 j 04:56 -3396 May 28 j 18:24 8°**8**43'13 0°36'53 -3391 Mar 14 j 19:21 0°る minimum elong 11°**8**11'00 2.66718 AU max. Earth dist. -3396 Jun 01 j 14:57 -3391 Apr 25 j 00:11 0°≈ -3396 Jul 01 j 03:06 $0^{\circ}II$ -3391 Jun 09 j 07:54 0°**)**€ morning rise -3396 Jul 13 j 19:58 8°**Ⅱ**06'07 -3391 Aug 12 j 03:57 $0^{\circ}\Upsilon$ -3396 Aug 17 j 01:41 0 \circ \odot retrograde -3391 Sep 02 j 14:38 2°Y55'38 -3396 Oct 02 j 14:57 0° Ω -3391 Sep 22 j 20:31 30°**₹**₩

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3391 Oct 06 j 08:32 25°**)** 19'26 0.58697 AU -3386 Oct 25 j 17:38 0°M min. Earth dist. -3391 Oct 11 j 23:50 23°\colon 05'40 -1°16'38 -3386 Nov 29 j 07:55 27°M13'49 opposition evening set -3391 Oct 11 j 18:00 23°**)** 11′26 -1.7m 0°**∡**7 greatest brilliancy -3386 Dec 02 j 20:26 -3385 Jan 10 j 08:36 0°정 -3391 Nov 11 j 03:50 14° **\(** 52'51 asc. node -3391 Nov 17 j 20:59 direct 14°**)** 35'04 $0^{\circ}\Upsilon$ -3385 Feb 02 j 19:18 -3390 Jan 14 j 22:47 conjunction 17°る50'39 -1°06'27 -3390 Mar 14 j 15:21 0°8 minimum elong -3385 Feb 02 j 20:16 17°る52'26 1°06'34 -3390 May 04 j 18:22 $0^{\circ}II$ -3385 Feb 19 j 02:29 0°≈ 0ಂತಾ 22°≈20'13 2.46585 AU -3390 Jun 21 j 11:02 max. Earth dist. -3385 Mar 21 j 21:17 -3390 Aug 05 j 08:55 $0^{\circ}\Omega$ -3385 Apr 01 j 17:19 0°**)**€ evening set -3390 Aug 06 j 07:53 0°**£**39′30 morning rise -3385 Apr 06 j 07:35 3°**¥**13′10 $0^{\circ}\Upsilon$ -3385 May 15 j 13:59 max. Earth dist. -3390 Aug 21 j 21:26 11°**Ω**29'02 2.49960 AU -3390 Sep 16 j 19:43 0° M -3385 Jun 30 j 21:45 0°8 asc. node -3385 Jul 04 j 03:17 2°801'46 conjunction -3390 Sep 26 j 12:27 7° mg 04'33 0°35'06 -3385 Aug 19 j 07:16 $0^{\circ}\Pi$ minimum elong -3390 Sep 26 j 14:08 7°m/07'38 0°35'08 -3385 Oct 14 j 08:24 0ಂತಾ -3390 Oct 27 j 06:19 0∘**⊽** retrograde -3385 Dec 19 j 19:36 19°906'27 desc. node -3390 Nov 19 j 02:15 17°**£**26'05 opposition -3384 Jan 26 j 15:55 10°934'22 5°00'31 morning rise -3390 Nov 21 j 14:54 19°**£**22'54 greatest brilliancy -3384 Jan 27 j 13:59 10°5513'08 -1.5m -3390 Dec 05 j 08:11 0°M min. Earth dist. -3384 Feb 01 i 05:56 8°925'39 0.61436 AU -3389 Jan 12 j 19:48 0°×7 direct -3384 Mar 07 j 14:15 0°9540'44 -3389 Feb 20 i 13:35 0°정 -3384 May 28 j 19:49 $0^{\circ}\Omega$ -3389 Apr 01 j 12:06 0°≈ desc. node -3384 Jul 10 j 21:03 27°Ω13'58 -3389 May 13 j 17:32 0°**)**€ -3384 Jul 14 j 22:08 0° m -3389 Jun 29 j 00:26 $0^{\circ}\Upsilon$ -3384 Aug 25 j 13:49 0∘**⊽** -3389 Aug 25 j 08:03 0°8 -3384 Oct 03 j 20:47 0°M -3389 Sep 29 j 04:12 9°**8**50'02 -3384 Nov 11 j 09:25 0°×7 asc. node -3389 Oct 09 j 01:51 10°827'11 -3384 Dec 20 j 07:21 0°궁 retrograde -3389 Nov 16 j 02:49 min. Earth dist. 1°**8**21'56 0.65883 AU -3383 Jan 29 j 11:46 0°≈≈ 2°≈39'04 -3389 Nov 18 j 02:52 -3383 Feb 02 j 02:59 0°**8**33'31 1°51'36 opposition evening set -3389 Nov 17 j 22:43 greatest brilliancy 0°**8**37'43 -1.4m -3383 Mar 12 j 12:24 0°**∀** -3389 Nov 19 j 12:13 30°**Ŗ**♈ 21°**Y**'04'16 -3383 Mar 31 j 07:44 -3389 Dec 27 j 17:18 12°\dagger 58'24 -0°28'57 direct conjunction -3388 Feb 08 j 08:31 0°8 -3383 Mar 31 j 09:11 minimum elong 13°**₭**00'51 0°28'58 -3388 Apr 10 j 23:53 $0^{\circ}\Pi$ -3383 Apr 25 j 13:49 $0^{\circ}\Upsilon$ -3388 May 31 j 10:33 -3383 Apr 27 j 13:30 1°Υ19'18 2.58403 AU 0ಂತಾ max. Earth dist. -3388 Jul 16 j 04:12 16°**Y**46′21 0° Ω asc. node -3383 May 21 j 01:06 -3388 Aug 27 j 16:43 0° m morning rise -3383 May 22 j 21:33 17°Y58'41 evening set -3388 Sep 24 j 17:33 20° m 46'53 -3383 Jun 10 j 12:16 0°8 desc. node -3388 Oct 06 j 00:02 29° m 19'44 -3383 Jul 28 j 00:47 $0^{\circ}\Pi$ -3388 Oct 06 j 21:09 0∘**⊽** -3383 Sep 15 j 06:28 0ಂತಾ max. Earth dist. -3388 Nov 01 j 11:45 19°**≏**45'34 2.38219 AU -3383 Nov 07 j 02:36 $0^{\circ}\Omega$ -3388 Nov 14 j 14:13 -3382 Jan 22 j 23:43 0° M 0° M -3382 Feb 04 j 19:22 0° m 58'15 retrograde -3388 Nov 24 j 06:07 7°M35'08 -0°33'39 -3382 Feb 17 j 05:26 30°R€ conjunction -3388 Nov 24 i 03:32 minimum elong 7°M30'03 0°33'41 -3382 Mar 11 j 15:32 23°Ω53'54 3°57'48 opposition -3388 Dec 22 j 17:30 0°×7 greatest brilliancy -3382 Mar 12 j 22:13 23°Ω27'08 -2.1m -3387 Jan 30 i 04:31 0°정 min. Earth dist. -3382 Mar 20 j 02:11 20°**Ω**58'19 0.50203 AU 0°る42'02 -3387 Jan 31 i 02:20 direct -3382 Apr 18 j 23:47 15°Ω14'18 morning rise -3387 Mar 10 i 19:54 0°**≈** desc. node -3382 May 28 j 21:11 24°Ω32'50 -3387 Apr 21 j 10:03 0°**₩** -3382 Jun 09 j 17:35 0° m -3387 Jun 04 j 16:20 $0^{\circ}\Upsilon$ -3382 Jul 29 j 15:02 0∘**⊽** -3387 Jul 22 j 19:22 0°8 -3382 Sep 09 j 16:59 oom. -3387 Aug 16 j 03:29 13°**8**47'31 -3382 Oct 19 j 19:57 00 🗸 asc. node -3387 Sep 17 j 21:07 $\mathbb{I}^{\circ 0}$ -3382 Nov 28 j 23:17 0°정 -3387 Nov 11 j 20:16 14°**Ⅲ**12'54 -3381 Jan 09 j 04:59 0°≈ retrograde -3387 Dec 21 j 07:55 4°**Ⅱ**48'24 3°59'19 -3381 Feb 21 j 03:01 0°**)**€ opposition -3387 Dec 21 j 12:08 4°**耳**44'13 -1.3m -3381 Mar 25 j 03:09 21° ¥ 35'28 greatest brilliancy evening set 4°**Д**05'32 0.66873 AU $0^{\circ}\Upsilon$ min. Earth dist. -3387 Dec 23 j 02:59 -3381 Apr 06 j 19:55 -3386 Jan 02 j 22:48 0°\dagger42'31 30°₽**८** asc. node -3381 Apr 07 j 21:44 24°**8**50'25 direct -3386 Jan 31 j 08:21 -3386 Mar 03 j 11:29 Π °0 conjunction -3381 May 14 j 13:35 24°**Y**34'37 0°20'36 -3386 May 07 j 15:33 0 \circ \odot minimum elong -3381 May 14 j 12:47 24°**Y**33'20 0°20'37 -3386 Jun 25 j 06:08 0° Ω -3381 May 22 j 23:47 0°8 -3386 Aug 07 j 15:21 0° m max. Earth dist. -3381 May 24 j 04:22 0°**8**45'56 2.65437 AU

desc. node

-3386 Aug 23 j 21:34

-3386 Sep 17 j 00:41

11° m 52'20

0∘**⊽**

-3381 Jun 30 j 17:24

-3381 Jul 08 j 23:57

morning rise

24°**8**44'32

 $0^{\circ}\Pi$

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Earth dist. -3380 May 19 j 02:08 25°**≏**01'37 0.38688 AU -3380 Jun 15 j 23:09 -3375 Sep 07 j 15:44 direct 20°**₽**28'21 conjunction 18°**Ω**19′29 0°52'58 -3375 Sep 07 j 17:23 -3380 Jul 25 j 22:19 0°M minimum elong 18°**Ω**22'26 0°53'02 -3380 Sep 17 j 20:12 0°**√** -3375 Sep 23 j 23:21 0° m -3380 Nov 02 j 05:11 0°ರ morning rise -3375 Oct 29 j 15:17 26° Mp 14'17 -3380 Dec 16 j 13:38 0°**≈** -3375 Nov 03 j 15:38 0∘**⊽** -3379 Jan 30 j 13:36 0°**)**€ desc. node -3375 Dec 05 j 19:32 24°**£**28'11 asc. node -3379 Feb 22 j 19:56 15°**)** 14′04 -3375 Dec 12 j 23:56 0°M -3379 Mar 17 j 15:22 $0^{\circ}\Upsilon$ -3374 Jan 20 j 17:36 0°×7 -3379 May 03 j 13:33 0°8 -3374 Feb 28 j 16:56 0°정 evening set -3379 May 04 j 19:42 0°847'57 -3374 Apr 09 j 22:12 0°≈ max. Earth dist. -3379 Jun 16 j 02:13 27°841'45 2.67058 AU -3374 May 22 j 18:41 0°) -3379 Jun 19 j 16:53 $\mathbb{I}^{\circ 0}$ -3374 Jul 10 i 05:19 -3374 Sep 25 i 09:02 26°Y47'58 retrograde -3379 Jun 20 j 23:03 0°II48'08 0°57'01 asc. node -3374 Oct 15 j 18:56 23°Y54'43 conjunction -3379 Jun 20 j 21:50 0°II46'11 0°57'07 -3374 Oct 31 j 21:02 18°Υ13'55 0.63781 AU min. Earth dist. minimum elong -3379 Aug 05 j 02:36 29°**I**I50′54 -3374 Nov 04 j 08:22 16°**Y**50′09 0°46'11 morning rise opposition -3379 Aug 05 j 08:13 0ಂತಾ greatest brilliancy -3374 Nov 04 j 05:38 16°**Y**52'55 -1.5m -3379 Sep 20 j 00:20 $0^{\circ}\Omega$ -3374 Dec 13 j 01:25 7°Y39'43 direct 0° My -3379 Nov 03 j 14:25 -3373 Feb 24 j 15:51 0°8 -3379 Dec 17 j 06:52 0∘∙თ -3373 Apr 21 j 05:02 $0^{\circ}\Pi$ -3378 Jan 29 j 12:23 -3373 Jun 09 j 05:33 0°M 000 -3378 Mar 02 j 21:32 22°M15'34 -3373 Jul 24 j 13:04 0° Ω desc. node -3378 Mar 14 j 09:42 -3373 Sep 04 j 11:38 29°**Ω**38′05 0° **₹** evening set -3378 May 02 j 00:36 0°궁 -3373 Sep 04 j 23:41 0° m -3378 Jun 28 j 21:56 18°**る**40'54 -3373 Sep 22 j 18:29 retrograde max. Earth dist. 13° Mp 05'10 2.42294 AU -3378 Jul 25 j 15:56 min. Earth dist. 13°る58'58 0.41982 AU -3373 Oct 15 j 05:39 0∘ଫ greatest brilliancy -3378 Jul 31 j 14:29 12°る06'58 -2.6m desc. node -3373 Oct 23 j 17:32 6°**£**29'39 -3378 Aug 02 j 03:21 11°る37'46 -6°25'03 opposition -3378 Sep 02 j 05:45 5°**る**46'46 conjunction -3373 Oct 30 j 19:17 11° 256'08 -0° 05'01 direct -3378 Nov 14 j 09:19 0°**≈** -3373 Oct 30 j 18:55 11°**≏**55'26 0°05'02 minimum elong -3377 Jan 06 j 07:16 0°**)**€ -3373 Oct 29 j 18:27 11°**≏**08'18 behind sun begin -3377 Jan 10 j 19:12 2°**)** 40′54 -3373 Oct 31 j 19:23 12°**-**42'36 asc. node behind sun end -3377 Feb 24 j 20:36 $0^{\circ}\Upsilon$ -3373 Nov 23 j 01:13 0°M -3377 Apr 14 j 12:34 0°8 -3373 Dec 31 j 06:46 0°×7 -3377 Jun 01 i 09:33 $\mathbb{I}^{\circ 0}$ morning rise -3372 Jan 02 j 22:29 2°×104'59 evening set -3377 Jun 12 i 03:32 6°**I**I50′08 -3372 Feb 07 i 19:18 0°정 max. Earth dist. -3377 Jul 10 j 08:10 24°**П**59'28 2.63312 AU -3372 Mar 18 j 11:44 0°≈ -3377 Jul 18 j 00:24 0ಂತಾ -3372 Apr 29 j 04:41 0°) -3372 Jun 12 j 21:29 $0^{\circ}\Upsilon$ -3377 Jul 28 j 16:49 7°501'20 1°10'57 -3372 Aug 01 j 16:57 0°8 conjunction -3377 Jul 28 j 16:49 7°501'19 1°11'05 -3372 Sep 01 j 19:10 15°850'12 minimum elong asc. node -3377 Aug 31 j 23:31 $0^{\circ}\Omega$ -3372 Oct 13 j 23:23 0°π -3377 Sep 12 j 22:58 8°Ω11'59 -3372 Oct 29 j 05:28 1°**I**I23′06 morning rise retrograde -3377 Oct 14 j 04:09 0° m -3372 Nov 12 j 15:25 30°R8 -3377 Nov 24 j 18:55 0∘∇ opposition -3372 Dec 08 j 01:34 21°844'25 3°16'48 -3376 Jan 04 j 05:23 0°M greatest brilliancy -3372 Dec 08 j 00:49 21°**8**45'11 -1.3m -3376 Jan 18 j 21:41 11°ML01'19 -3372 Dec 08 j 08:27 21°**8**37'31 0.67260 AU desc. node min. Earth dist. 0° ×7 -3371 Jan 17 j 16:40 11°**8**54'35 -3376 Feb 13 j 02:44 direct 0°₹ $0^{\circ}\Pi$ -3376 Mar 24 j 10:14 -3371 Mar 22 j 23:08 -3371 May 17 j 10:17 0ಂತಾ -3376 May 05 j 22:29 0°≈ -3376 Jun 24 j 19:20 0°**)**€ -3371 Jul 03 j 12:10 0° Ω retrograde -3376 Aug 17 j 17:35 15°**)** 59'58 -3371 Aug 15 j 10:27 0° m min. Earth dist. -3376 Sep 18 j 11:12 9°**₭**08'42 0.54420 AU desc. node -3371 Sep 09 j 16:29 18° m 38'18 opposition -3376 Sep 25 j 08:33 6°****29'33 -2°46'21 -3371 Sep 24 j 16:35 0∘**⊽** 6°**)** 44'19 -1.9m -3371 Nov 02 j 02:21 29°**₽**48'02 greatest brilliancy -3376 Sep 24 j 17:14 evening set

-3371 Nov 02 j 08:26

0°M

-3376 Oct 16 j 05:22

30°R≈

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 4 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

1.00	Attention, astronom	ical year style is used: Th	ie year -3400 i	in astronomical co	unting style is the year	3401 BCE in historical c	ounting style.	
minimimento 3730 May 60 j.178 2742 May 1972 M		-3371 Dec 10 j 10:15	0° ∡ ¹		morning rise	-3366 Jun 16 j 04:34	11° 8 05'23	
minimum om						-3366 Jul 15 j 23:33	Π $^{\circ}0$	
Manus. Earth M. 3370 May 19 2006 1	conjunction	-3370 Jan 06 j 17:38	21° ₹ °23′02	-1°04'22		-3366 Sep 01 j 19:18	0 \circ	
max. Earth diff. 3370 Feb 2 big 1017 252 Sts 1 big 101 4 certagende 3350 Sts 1 big 105 0 certagende 3350 Sts 1 big 105 0 certagende 3350 Skar li 10 piloz 22 miloz 0 certagende 3350 Aug 20 piloz 0 certagende 0 certagende 3350 Aug 20 piloz 0 certagende 0 ce	minimum elong		21° ₹ 19'31	1°04'29		-3366 Oct 20 j 14:12	0 $^{\circ}\Omega$	
1907 1908		-3370 Jan 17 j 20:44	5°0			-3366 Dec 11 j 02:28	0° m	
Manuming the 3370 Mail 61955 1948 3978 4900	max. Earth dist.	-3370 Feb 24 j 09:17	28° る 25'38	2.41344 AU		-3365 Feb 15 j 01:59	0∘ ⊽	
1971 1972		-3370 Feb 26 j 12:10	0° ≈		retrograde	-3365 Mar 16 j 08:06	4° ≏ 41'01	
1970 1970	morning rise	-3370 Mar 14 j 08:56	11° ≈ 38′32			-3365 Apr 13 j 15:38	30°₽, MD	
1971 1981 1981 1982		-3370 Apr 09 j 00:59			opposition	-3365 Apr 17 j 09:22	28° m 52'59	1°00'13
1981 1982 1983 1984		-3370 May 22 j 22:33			greatest brilliancy	-3365 Apr 17 j 17:42	28° Mp 46'39	-2.6m
270 Aug 28 1611 0"T 0"E 0"E 335 Aug 22 01-35 22 0"E 20 335 Aug 22 01-35 22 0"E 20 335 Aug 20 01-56 0"E 20 20 0"E 20 20 0"E 20 20 0"E		-3370 Jul 08 j 16:18			min. Earth dist.	-3365 Apr 24 j 17:28	26° m 39'19	0.42309 AU
1908 1908	asc. node	-3370 Jul 20 j 17:56	7° 8 23'55		desc. node	-3365 May 02 j 13:47	24° m 30'49	
Secong and 3,300 be 0,4 9001 5°29173		-3370 Aug 28 j 16:11	Π °0		direct	-3365 May 22 j 01:43	22° Mp 00° 46	
opposition 3.98 Im 10 j 0.90 kg 1.90		-3370 Nov 02 j 16:57	0 \circ			-3365 Jun 26 j 23:24	0∘ ত	
opposition of protest brillings 338 Jan 1 j 2312 j 6°E 10718 s Jan 2 and 10 a	retrograde	-3370 Dec 04 j 08:01	5° © 17'23			-3365 Aug 20 j 01:26	0° M	
		-3369 Jan 02 j 05:26	30°RⅡ			-3365 Oct 02 j 19:15	0° ∡	
min Earth dist 3369 Jan 6 j 02.00 24° H 500 0.6435 AU 3364 AP 19 10.61 10.024 10.02	opposition	-3369 Jan 11 j 23:12	26° Ⅲ 21'36	4°46'17		-3365 Nov 13 j 23:32	ರ°0	
direct 4369 Feb ≥ 19329 6°ID110 asc. node 3364 Mar 1 1 1 21.2 12°F 1273 12°F 1273 </td <td>greatest brilliancy</td> <td>-3369 Jan 12 j 13:49</td> <td>26°Ⅲ07′18</td> <td>-1.4m</td> <td></td> <td>-3365 Dec 26 j 14:53</td> <td>0°≈</td> <td></td>	greatest brilliancy	-3369 Jan 12 j 13:49	26° Ⅲ 07′18	-1.4m		-3365 Dec 26 j 14:53	0° ≈	
Seed	min. Earth dist.	-3369 Jan 16 j 02:00	24° Ⅱ 45′00	0.64335 AU		-3364 Feb 08 j 13:16	0°) €	
Section 19 19 19 19 19 19 19 1	direct	-3369 Feb 22 j 03:29	16° Ⅲ 21′10		asc. node	-3364 Mar 11 j 12:11	21°) 12′33	
Composition		-3369 Apr 16 j 01:49	0 \circ \odot			-3364 Mar 24 j 22:49	0° Y	
Company Comp		-3369 Jun 10 j 02:44	$0^{\circ}\Omega$		evening set	-3364 Apr 19 j 06:14	16° Ƴ 22'49	
Second 3.49 of 2.5 1.49 2.5 1.49 2.5 1.49 2.5		-			C			
0.4500 0.4500	desc. node	-	2° m 29'30					
1986 1910					conjunction	-3364 Jun 06 j 08:13	17° 8 08'15	0°45'07
Part			0°M₊		minimum elong		17° 8 06'13	0°45'10
evening set 3369 Dec 29 jou? 1 o°B I morning rise 3364 Jun 2 jol.216 O°B I morning rise 3364 Jun 2 jol.216 O°B I morning rise 3364 Aug 12 jol.236 O°B I morning rise 3364 Aug 12 jol.236 O°B I morning rise 3364 Aug 12 jol.236 O°B I morning rise 3368 Mar 10 jol.221 23°8 Aug 11 jol.35 O°P I morning rise 3368 Mar 19 jol.758 O°P I morning rise 3368 May 02 jol.314 23°P (100 s.) O°B I morning rise 3368 May 05 jol.141 23°P (100 s.) O°B I morning rise 3368 May 06 jol.241 22°P (100 s.) retrograde 3363 Jun 02 jol.030 O°B I morning rise 3368 May 06 jol.241 22°P (100 s.) retrograde 3363 Jun 02 jol.030 O°B I min Earth dist 3363 Jun 02 jol.030 O°B I min Earth dist 3363 Jun 02 jol.030 O°B I min Earth dist 3363 Jun 02 jol.030 O°B I min Earth dist 3363 Jun 02 jol.030 O°B I min Earth dist 3363 Jun 02 jol.030 O°B I min Earth dist 3363 Jun 02 jol.030 O°B I min Earth dist 3363 Jun 02 jol.030 O°B I min Earth di		-			_		17° 8 33'02	2.67066 AU
cenning set .3368 Jan 10 j 01:18 9°B 1017 moming rise .3364 Aug 12 j 02:30 16°I 115°I 115°I · · · · · · · · · · · · · · · · · · ·		-						
0.368 Feb 06 j 22:52 0°≈	evening set	-			morning rise			
conjunction -3368 Mar 10 j 22:21 23 **s4738 -0*4737 -3364 Nov 12 j 01:36 0°€Q	8					·		
conjunction 3368 Mar 10 j 10 22.2 23°se4738 0°4737 3364 Nov 12 j 0137 0°% *** minimum elon 3368 Mar 10 j 10758 0°4740 -3364 Dec 27 j 0909 0°Δ *** max. Earth dist. 3368 Mar 10 j 1758 18° ½2010 2.54230 AU desc. node 3363 Mar 10 j 14:17 22°uL08*5 1.00 % % ** -3368 May 05 j 21:41 2°0°1002 7°0°2 1.00 % % ** -3363 Mar 0 j 17:40 0°2% 0°2% 0°2% 0°2% 0°363 Mar 10 j 14:70 0°2% 0°2% 0°363 Mar 10 j 14:70 0°363 Mar 10 j 14:70 0°36 Mar			* -					
minimum elong	conjunction	-3368 Mar 10 i 22:21	23°≈47'38	-0°47'37				
max. Earth dist. -3368 Mar 19 j 17:58 0°H -3368 Agn 15 j 07:55 18 H2010 2.54230 AU desc. node -3368 Mar 19 j 14:75 2°FUR08*5 -368 May 02 j 15:30 0°PV -3363 Mar 19 j 14:75 0°PZ -368 May 02 j 15:30 0°PV -3363 Jun 02 j 11:30 0°PZ -368 May 03 j 15:31 0°PY -3368 Jun 06 j 16:52 2°PY5928 min. Earth dist. -3363 Jun 02 j 11:30 19 *26:28 1 × 20*11 2 × 20*12	·	-						
max. Earth dist. -3368 Apr 15 j 07:55 18° ¥ 20°10 2.54230 AU desc. node -3363 Mar 19 j 14:17 22° 10:85 S						·		
moming rise 3368 May 02 j 15:37 2°P 10°2 retrograde 3363 Jun 02 j 17:50 10°R 18°S	max Earth dist	,		2 54230 AU	desc node	•		
moming rise ase, node as	max. Lartii dist.			2.34230710	dese. Hode			
Sec. node -3368 Jun 0 6 j 16:52 22°√75928 min. Earth dist. -3363 Jun 29 j 20:52 14° ₹75831 0.38531 AU -3368 Jun 17 j 14:55 0°B greatest brilliancy -3363 Jul 0 3 j 06:31 14° ₹70121 -2.8m opposition -3368 Aug 0 4 j 14:33 0°H opposition -3363 Jul 0 4 j 05:47 14° ₹70121 -2.8m opposition -3368 Nov 2 2 j 09:14 0°Ω -3363 Nov 2 2 j 09:14 0°Ω -3363 Nov 2 2 j 09:14 0°Ω -3363 Nov 2 2 j 09:24 0°Ω -3363 Nov 2 2 j 09:26 0°≈ -3367 Jun 15 j 07:22 15° ₹0.4600 4°45′02 -3363 Nov 2 2 j 00:26 0°≈ -3367 Feb 2 2 j 11:29 5° ₹0.1735 -1.8m asc. node -3362 Jun 16 j 06:01 0°₹ -3367 Mar 0 9 j 03:35 0°₹ \$0.5148 AU -3362 Jun 16 j 06:01 0°₹ -3367 Mar 0 9 j 03:35 0°₹ \$0.5148 AU -3362 Jun 16 j 06:01 0°₹ -3367 Jun 12 j 13:11 0°₹ \$0.07 -3362 Jun 16 j 06:01 0°₹ -3367 Jun 12 j 13:11 0°₹ \$0.07 -3362 Jun 12 j 13:14 0°₹ -3367 Jun 12 j 13:11 0°₹ \$0.07 -3362 Jun 12 j 13:14 0°₹ -3367 Jun 12 j 13:14 0°₹	morning rise				retrograde			
3368 Jun 17 j 14:55 0°B Fee Greatest brilliancy 3363 Jul 0 3 j 06:31 14°R'012 2.8m 13°R'4501 6°R'51 13°R'4502 6	•				•	·		0.38531 AII
\$\begin{align** \$\operator*{\text{opposition} \qq \qua	asc. node	•						
Signature Sig					-			
retrograde		• •						-0 1031
ctrograde -3367 Jan 15 j 07:22 13° Ω3020 -3363 Nov 29 j 02:36 0°% -4 copposition -3367 Feb 20 j 12:23 5° Ω4600 4°4502 -3362 Jan 16 j 06:01 0°% -4 copposition -3367 Feb 20 j 12:23 5° Ω4600 4°4502 -3362 Jan 16 j 06:01 0°% -4 copposition -3367 Feb 20 j 12:23 5° Ω4600 4°4502 -3362 Jan 16 j 06:01 0°% -4 copposition -3367 Feb 28 j 03:30 2° Ω5027 -1 copposition -3362 Jan 27 j 10:34 7° H 0708					direct			
opposition -3367 Feb 20 j 12:23 5° Ω46'00 4° 45'02 -3362 Jan 16 j 06:01 0° € greatest brilliancy -3367 Feb 21 j 19:19 5° Ω17'35 1.8m asc. node -3362 Jan 27 j 10:34 7° €02'08 - min. Earth dist. -3367 Feb 28 j 03:03 2° Ω58'58 0.55148 AU -3362 Mar 04 j 23:27 0°° ♀ - direct -3367 Apr 01 j 06:48 26° 52'44' - evening set -3362 Jun 08 j 07:03 20° € desc. node -3367 Jun 14 j 13:18 22° Ω39'21 - max. Earth dist. -3362 Jun 08 j 07:03 0° ¶ 2.65408 AU desc. node -3367 Jun 14 j 13:18 22° Ω39'21 - max. Earth dist. -3362 Jun 13 j 19:19 22° ∏47'54 108'45 -3367 Sep 19 j 14:41 0° ¶ - conjunction -3362 Jul 13 j 19:19 22° ∏47'54 108'45 -3367 Sep 19 j 14:41 0° ¶ - - -3362 Jul 13 j 19:19 22° ∏46'53 108'45 -3367 Dec 07 j 08:20 0° № - - -3362 Jul 13 j 19:19 22° ∏46'53 108'45 <	ratrograda	•						
greatest brilliancy min. Earth dist.	•	-		4°45'02				
Min. Earth dist. -3367 Feb 28 j 03:03 2° Q 58'58 0.55148 AU -3362 Mar 04 j 23:27 0° Y -362 Mar 09 j 03:35 30° R	**				asc node			
3367 Mar 09 j 03:35 30°R2 evening set -3362 Apr 21 j 18:54 0°B 3367 Apr 01 j 06:48 26°22447 evening set -3362 May 28 j 08:02 23°B02'31 3367 Apr 25 j 13:17 0°Q max. Earth dist. -3362 Jun 08 j 07:03 0°H 3367 Jun 14 j 13:18 22°Q39'21 max. Earth dist. -3362 Jun 30 j 13:48 14°H 15'17 2.65408 AU 3367 Aug 10 j 04:02 0°P		•			asc. node	,		
direct	iiiii. Eartii dist.	-		0.55146 AU				
Conjunction	direct	-			avaning sat			
Max. Earth dist. -3367 Jun 14 j 13:18 22° Ω39'21 max. Earth dist. -3362 Jun 30 j 13:48 14° Π15'17 2.65408 AU -3367 Jun 26 j 18:10 0° \(\tau\)	direct				evening set	• •		
-3367 Jun 26 j 18:10 0° th -3367 Aug 10 j 04:02 0° Ω conjunction -3362 Jul 13 j 19:19 22° II 47'54 1° 08'45 -3367 Sep 19 j 14:41 0° th minimum elong -3362 Jul 13 j 18:41 22° II 46'53 1° 08'52 -3367 Oct 28 j 20:28 0° X -3362 Jul 24 j 20:49 0° © -3367 Dec 07 j 08:20 0° ♥ morning rise -3362 Aug 28 j 05:07 22° ©42'59 -3366 Jun 17 j 01:05 0° № -3366 Sep 08 j 00:56 0° Ω -3366 Feb 28 j 12:22 0° ₩ -3366 Apr 13 j 21:14 0° Ψ -3366 Apr 13 j 21:14 0° Ψ -3366 Apr 24 j 15:04 7° Ψ05'25 desc. node -3361 Feb 04 j 14:05 16° II 34'19 evening set -3366 Apr 28 j 08:32 9° Ψ32'17 0° 02'12 -3361 Apr 05 j 11:26 0° ♥ minimum elong -3366 Apr 28 j 08:32 9° Ψ32'14 0° 02'12 -3361 Apr 05 j 11:26 0° ♥ minimum elong -3366 Apr 29 j 05:19 10° Ψ06'16 retrograde -3361 Aug 01 j 02:06 26° ≈35'59 behind sun end -3366 Apr 29 j 05:19 10° Ψ06'16 min. Earth dist3361 Aug 01 j 02:06 26° ≈35'59 max. Earth dist3366 May 14 j 09:04 19° Ψ59'13 2.63297 AU greatest brilliancy -3361 Sep 06 j 08:33 18° ≈08'37 -2.2m	daga nada				may Earth dist			2 65409 ATT
Conjunction	desc. flode	-			max. Earth dist.	-3302 Juli 30 J 13.46	14 Д131/	2.03406 AU
3367 Sep 19 j 14:41 0°M minimum elong -3362 Jul 13 j 18:41 22° H46'53 1°08'52 -3367 Oct 28 j 20:28 0° \$\frac{1}{2}\$ 0° \$\frac{1}{2}\$ 0° \$\frac{1}{2}\$ 0° \$\frac{1}{2}\$ 0° \$\frac{1}{2}\$ 0° \$\frac{1}{2}\$ -3367 Dec 07 j 08:20 0° \$\frac{1}{2}\$ 0°					agniumation	2262 Jul 12 ; 10:10	22°T/17'5/	1000145
-3367 Oct 28 j 20:28 0° ₹ morning rise -3362 Jul 24 j 20:49 0° € morning rise -3362 Aug 28 j 05:07 22° € 42'59 -3366 Jan 17 j 01:05 0° ≈ -3366 Feb 28 j 12:22 0° ₹ -3366 Feb 28 j 12:22 0° ₹ -3366 Mar 06 j 17:40 4° ₹ 17'00 -3366 Apr 13 j 21:14 0°° ↑ -3366 Apr 24 j 15:04 7° ↑ 05'25 desc. node -3361 Feb 04 j 14:05 16° ₹ 3361 Apr 05 j 11:26 0° ₹ -3366 Apr 28 j 08:32 9° ↑ 32'14 0°02'12 -3361 Apr 05 j 11:26 0° ₹ -3361 Aug 01 j 02:06 26° ≈ 35'59 behind sun end -3366 Apr 29 j 05:19 10° ↑ 06'16 min. Earth dist3361 Aug 30 j 15:43 20° ≈ 35'3 -2.2m		• .			·			
-3367 Dec 07 j 08:20 0° ₹ morning rise -3362 Aug 28 j 05:07 22° € 42'59 -3366 Jan 17 j 01:05 0° ≈ -3362 Sep 08 j 00:56 0° Ω -3366 Feb 28 j 12:22 0° ₹ -3362 Dec 02 j 115:47 0° № evening set -3366 Mar 06 j 17:40 4° ₹ 17'00 -3366 Apr 13 j 21:14 0° ↑ -3361 Jan 13 j 01:32 0° № asc. node -3366 Apr 24 j 15:04 7° ↑ 05'25 desc. node -3361 Feb 04 j 14:05 16° № ₹ conjunction -3366 Apr 28 j 08:40 9° ↑ 32'12 0°02'12 -3361 Apr 05 j 11:26 0° ₹ minimum elong -3366 Apr 28 j 08:32 9° ↑ 32'14 0°02'12 -3361 Aug 01 j 02:06 26° ≈ 35'59 behind sun end -3366 Apr 29 j 05:19 10° ↑ 06'16 min. Earth dist3361 Aug 30 j 15:43 20° ≈ 35'46 0.49566 AU max. Earth dist3366 May 14 j 09:04 19° ↑ 59'13 2.63297 AU greatest brilliancy -3361 Sep 06 j 08:33 18° ≈ 08'37 -2.2m					minimum elong			1 08 32
-3366 Jan 17 j 01:05 0°≈ -3362 Sep 08 j 00:56 0°Ω -3366 Feb 28 j 12:22 0°		-			mamina risa			
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evening set		-						
-3366 Apr 13 j 21:14 0° γ desc. node -3361 Jan 13 j 01:32 0° 1 desc. node -3361 Feb 04 j 14:05 16° 1 desc. node -3361 Feb 04 j 14:05 16° 1 desc. node -3361 Feb 02 j 20:27 0° ₹ conjunction -3366 Apr 28 j 08:30 9° γ 32'27 0° 02'12 -3361 Apr 05 j 11:26 0° ₹ behind sun begin -3366 Apr 28 j 08:32 9° γ 32'14 0° 02'12 -3361 Apr 05 j 11:31 0° ≈ behind sun begin -3366 Apr 27 j 11:45 8° γ 58'10 retrograde -3361 Aug 01 j 02:06 26° ≈ 35'59 behind sun end -3366 Apr 29 j 05:19 10° γ 06'16 min. Earth dist3361 Aug 30 j 15:43 20° ≈ 35'46 0.49566 AU max. Earth dist3366 May 14 j 09:04 19° γ 59'13 2.63297 AU greatest brilliancy -3361 Sep 06 j 08:33 18° ≈ 08'37 -2.2 m	oveniet							
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conjunction -3366 Apr 28 j 08:40 9°γ32'27 0°02'12 -3361 Apr 05 j 11:26 0°₹ 0°₹ minimum elong -3366 Apr 28 j 08:32 9°γ32'14 0°02'12 -3361 May 21 j 01:31 0°≈ behind sun begin -3366 Apr 27 j 11:45 8°γ58'10 retrograde -3361 Aug 01 j 02:06 26°≈35'59 behind sun end -3366 Apr 29 j 05:19 10°γ06'16 min. Earth dist. -3361 Aug 30 j 15:43 20°≈35'46 0.49566 AU max. Earth dist. -3366 May 14 j 09:04 19°γ59'13 2.63297 AU greatest brilliancy -3361 Sep 06 j 08:33 18°≈08'37 -2.2m	000 mc J-				daga (r - J -			
conjunction -3366 Apr 28 j 08:40 9° γ32'27 0°02'12 -3361 Apr 05 j 11:26 0° ₹ minimum elong -3366 Apr 28 j 08:32 9° γ32'14 0°02'12 -3361 May 21 j 01:31 0° ≈ behind sun begin -3366 Apr 27 j 11:45 8° γ58'10 retrograde -3361 Aug 01 j 02:06 26° ≈ 35'59 behind sun end -3366 Apr 29 j 05:19 10° γ06'16 min. Earth dist. -3361 Aug 30 j 15:43 20° ≈ 35'46 0.49566 AU max. Earth dist. -3366 May 14 j 09:04 19° γ59'13 2.63297 AU greatest brilliancy -3361 Sep 06 j 08:33 18° ≈08'37 -2.2m	asc. node	-3300 Apr 24 J 15:04	/ TUS'25		desc. node			
minimum elong	t	2266 A 20:00 40	0000000	0000110		·		
behind sun begin behind sun end behind sun end behind sun end max. Earth dist3366 Apr 29 j 05:19 10°γ°06'16 min. Earth dist3361 Aug 01 j 02:06 26°≈35'46 0.49566 AU max. Earth dist3366 May 14 j 09:04 19°γ°59'13 2.63297 AU greatest brilliancy -3361 Sep 06 j 08:33 18°≈08'37 -2.2m								
behind sun end max. Earth dist3366 Apr 29 j 05:19 10° γ ′06′16 min. Earth dist3361 Aug 30 j 15:43 20°≈35′46 0.49566 AU greatest brilliancy -3361 Sep 06 j 08:33 18°≈08′37 -2.2m	•			0*02/12				
max. Earth dist3366 May 14 j 09:04 19° γ ′59'13 2.63297 AU greatest brilliancy -3361 Sep 06 j 08:33 18°≈08'37 -2.2m	•				•			0.40566.417
				2 (2207 43)				
-3301 Sep 0/111:1/ 1/°≈44'01 -4°22'03	max. Earth dist.			2.6329 / AU	-			
		-3300 May 29 J 21:09	0.0		opposition	-3301 Sep U/J11:17	1 / ⁻≈44′01	-4°22'03

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 5 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -3400 i	n astronomical co	unting style is the year	3401 BCE in historical c	ounting style.	
direct	-3361 Oct 11 j 07:44	10° ≈ 30′26		conjunction	-3356 Dec 09 j 15:31	23°M27'04	-0°47'57
asc. node	-3361 Dec 15 j 10:10	29° ≈ 48′23		minimum elong	-3356 Dec 09 j 12:20	23°M20'47	0°48'00
	-3361 Dec 15 j 19:52	0° ∀			-3356 Dec 17 j 23:04	0° ∡ ¹	
	-3360 Feb 09 j 21:33	0° Y		max. Earth dist.	-3356 Dec 23 j 20:28	4° ∡ ³37'56	2.37599 AU
	-3360 Mar 31 j 19:41	0° 8			-3355 Jan 25 j 09:30	0°ප	
	-3360 May 19 j 15:15	Π °0		morning rise	-3355 Feb 16 j 02:08	16° පි 34'44	
evening set	-3360 Jul 04 j 19:28	29° Ⅱ 30′56			-3355 Mar 06 j 00:06	0° ≈	
	-3360 Jul 05 j 13:17	0 \circ			-3355 Apr 16 j 12:26	0° ∀	
max. Earth dist.	-3360 Jul 26 j 05:00		2.58541 AU		-3355 May 30 j 13:29	0° Ƴ	
	-3360 Aug 19 j 09:38	0 $^{\circ}\Omega$			-3355 Jul 16 j 23:44	0°8	
				asc. node	-3355 Aug 06 j 09:51	12° 8 01'18	
conjunction	-3360 Aug 21 j 09:55	1° Ω 22'49			-3355 Sep 08 j 20:30	0°II	
minimum elong	-3360 Aug 21 j 11:02	1° Ω 24'44	1°04'35	retrograde	-3355 Nov 19 j 20:16	22° Ⅱ 05'09	
	-3360 Oct 01 j 04:09	0° m)		opposition	-3355 Dec 29 j 02:01	12° Ⅱ 49'46	
morning rise	-3360 Oct 09 j 09:52	5° m 56'08		greatest brilliancy	-3355 Dec 29 j 09:37	12° Ⅱ 42'15	
	-3360 Nov 11 j 03:43	0∘ w		min. Earth dist.	-3355 Dec 31 j 16:41		0.66249 AU
	-3360 Dec 20 j 20:06	0°M		direct	-3354 Feb 08 j 05:48	2° Ⅱ 49'27	
desc. node	-3360 Dec 22 j 14:11	1°M20'28			-3354 Apr 30 j 10:54	$0 {\circ} \mathcal{U}$	
	-3359 Jan 28 j 21:36	0°⋜			-3354 Jun 19 j 15:42	0° m)	
	-3359 Mar 09 j 04:56 -3359 Apr 18 j 21:46	0°≈		desc. node	-3354 Aug 02 j 12:26 -3354 Aug 14 j 07:41	0 iy 8°Mo 31′57	
	-3359 Apr 18 j 21:40	0 ≈ 0° ∺		desc. node		0∘ ⊽	
	-3359 Jul 01 j 22.28 -3359 Jul 25 j 14:56	0 K 0°Υ			-3354 Sep 12 j 02:19 -3354 Oct 20 j 21:05	0° M ₊	
retrograde	-3359 Sep 11 j 03:50	12° Υ 16'31			-3354 Nov 28 j 00:44	0° ⊼	
min. Earth dist.	-3359 Oct 15 j 22:37		0.60763 AU	evening set	-3354 Nov 28 j 00:44 -3354 Dec 14 j 18:22	13° ∡ ¹06′20	
opposition	-3359 Oct 13 j 22:37	2° Υ 21'03		evening set	-3353 Jan 05 j 13:39	0°る	
greatest brilliancy	-3359 Oct 20 j 20:20	2° Υ 22'54			-3353 Feb 14 j 08:14	0° ≈	
greatest orimancy	-3359 Oct 26 j 21:31	30° R X	-1.7111		-5555100 14100.14	0 ~	
asc. node	-3359 Nov 01 j 09:29	28°) €03'06		conjunction	-3353 Feb 17 j 00:06	1° ≈ 57'45	-1°01'57
direct	-3359 Nov 27 j 10:56	23°) (34'31		minimum elong	-3353 Feb 17 j 02:02	2°≈01'18	
	-3358 Jan 01 j 13:05	0° Υ		g	-3353 Mar 27 j 23:29	0° ∀	1 02 02
	-3358 Mar 08 j 04:21	0°8		max. Earth dist.	-3353 Apr 01 j 11:18		2.49448 AU
	-3358 Apr 29 j 12:53	0°II		morning rise	-3353 Apr 18 j 01:37	14°) 37′51	
	-3358 Jun 16 j 15:50	0°©		C	-3353 May 10 j 19:17	0° Y	
	-3358 Jul 31 j 17:27	$0^{\circ}\Omega$		asc. node	-3353 Jun 24 j 08:57	29° Y ′00'58	
evening set	-3358 Aug 16 j 09:42	10° Q 52'50			-3353 Jun 25 j 22:10	0°B	
max. Earth dist.	-3358 Aug 31 j 15:27	21° Ω 40′33	2.47279 AU		-3353 Aug 13 j 15:24	$\Pi^{\circ}0$	
	-3358 Sep 12 j 04:36	0° m)			-3353 Oct 06 j 00:40	0ංම	
				retrograde	-3353 Dec 29 j 07:01	27° 9 54'30	
conjunction	-3358 Oct 08 j 03:09	19° m 07'02	0°22'03	opposition	-3352 Feb 04 j 15:09	19° 5 37'38	5°00'52
minimum elong	-3358 Oct 08 j 04:25	19° m 09'25	0°22'04	greatest brilliancy	-3352 Feb 05 j 16:57	19° © 13'08	-1.6m
	-3358 Oct 22 j 14:02	0∘ ⊽		min. Earth dist.	-3352 Feb 10 j 23:32	17°513'21	0.59436 AU
desc. node	-3358 Nov 09 j 11:54	13° ≏ 41'02		direct	-3352 Mar 16 j 06:28	9° © 52'11	
	-3358 Nov 30 j 13:48	0° M			-3352 May 19 j 23:20	$0^{\circ}\Omega$	
morning rise	-3358 Dec 05 j 23:18	4°M12'15		desc. node	-3352 Jul 01 j 06:37	25° Ω 09'47	
	-3357 Jan 07 j 22:58	0° ∡			-3352 Jul 08 j 13:47	0° m)	
	-3357 Feb 15 j 14:12	6°0			-3352 Aug 19 j 22:55	0∘ ⊽	
	-3357 Mar 27 j 09:08	0° ≈			-3352 Sep 28 j 13:47	0° M	
	-3357 May 08 j 07:31	0° ∀			-3352 Nov 06 j 07:04	0° ∡ ¹	
	-3357 Jun 22 j 18:43	0° Υ			-3352 Dec 15 j 08:36	0°ප	
	-3357 Aug 14 j 21:36	0°8			-3351 Jan 24 j 15:56	0° ≈	
asc. node	-3357 Sep 19 j 09:20	14° 8 11'55		evening set	-3351 Feb 14 j 13:16	15°≈03'09	
retrograde	-3357 Oct 16 j 19:32	18° 8 28'32			-3351 Mar 07 j 18:54	0° ℋ	
opposition	-3357 Nov 25 j 20:16	8° 8 39'01	2°25'38		2251 4 10 : 22 54	2201/20142	0017122
min. Earth dist.	-3357 Nov 24 j 15:20	9° 8 08'08	0.66645 AU	conjunction	-3351 Apr 10 j 22:54	23° ¥ 20'43	
greatest brilliancy	-3357 Nov 25 j 16:34	8° 8 42'44	-1.4m	minimum elong	-3351 Apr 10 j 23:45	23° ¥ 22'09 0° Ƴ	0°1/32
direct	-3357 Dec 23 j 13:25	30° ₹Υ 29° Υ 01'17		may Forth 3:-4	-3351 Apr 20 j 21:45	0°γ' 8° Υ 43'31	2.60361 AU
direct	-3356 Jan 04 j 21:20	0° 8		max. Earth dist. asc. node	-3351 May 04 j 02:10 -3351 May 11 j 06:31	8°° \ ′43'31 13° \ ′26'14	2.00301 AU
	-3356 Apr 04 i 07:08	0° U			, ,	13° γ 26·14 26° Υ 54'29	
	-3356 Apr 04 j 07:08 -3356 May 26 j 02:29	0₀ऌ 0∘щ		morning rise	-3351 Jun 01 j 00:17 -3351 Jun 05 j 19:34	0° 8	
	-3356 Jul 11 j 06:36	0°€ 0°€			-3351 Jul 03 j 19.34 -3351 Jul 23 j 02:59	0°II	
	-3356 Aug 22 j 22:34	0°mp			-3351 Sep 09 j 17:27	0°©	
desc. node	-3356 Sep 26 j 09:15	25° Mp 36'21			-3351 Sep 09 j 17.27 -3351 Oct 30 j 15:02	0° U	
acce. node	-3356 Oct 02 j 03:50	0° ت			-3351 Dec 28 j 19:50	0° m)	
evening set	-3356 Oct 07 j 20:41	4° Ω 21'53		retrograde	-3350 Feb 17 j 23:17	12° m) 30'40	
	-3356 Nov 09 j 20:32	0°M.		opposition	-3350 Mar 23 j 21:14	5° m 52'30	3°10'07
	j 20. 52			· r r	j !		

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3350 Mar 24 j 23:28 5° m 30'36 -2.3m -3345 May 27 j 16:46 $0^{\circ}II$ greatest brilliancy min. Earth dist. -3350 Apr 01 j 10:04 3° Mp 02'12 0.47288 AU -3345 Jun 20 j 16:36 15°**Ⅱ**16'18 evening set -3350 Apr 11 j 23:55 -3345 Jul 13 j 10:12 30°RΩ 0ംഉ 27°**Ω**45'47 -3345 Jul 16 j 05:57 direct -3350 Apr 30 j 03:38 max. Earth dist. 1°950'57 2.61822 AU 0° m -3350 May 18 j 14:12 -3350 May 19 j 05:28 0°m/09'05 -3345 Aug 06 j 11:13 desc. node conjunction 15°**©**53'44 1°10'05 -3350 Jul 20 j 19:18 0∘ଫ minimum elong -3345 Aug 06 j 11:36 15°**©**54'24 1°10'12 -3350 Sep 02 j 19:07 0°M -3345 Aug 27 j 08:26 0° Ω -3350 Oct 13 j 18:07 0°**∡** morning rise -3345 Sep 22 j 11:14 18°**Ω**03'01 -3350 Nov 23 j 10:08 0°궁 -3345 Oct 09 j 09:31 0° M -3349 Jan 04 j 00:55 0°≈ -3345 Nov 19 j 18:38 0°Ω -3349 Feb 16 j 05:30 0°**)**€ -3345 Dec 29 j 22:12 0°M 7°M50'27 asc. node -3349 Mar 29 j 04:15 27°**)** 24'21 desc. node -3344 Jan 09 j 06:52 -3349 Apr 02 j 02:52 $0^{\circ}\Upsilon$ -3344 Feb 07 j 11:18 0°**⊼** evening set -3349 Apr 03 j 22:17 1°Υ11'17 -3344 Mar 18 j 07:54 0°ರ -3349 May 18 j 08:58 0°8 -3344 Apr 28 j 22:22 0°≈ -3344 Jun 14 j 12:03 0°**)**€ conjunction -3349 May 23 j 09:19 3°812'58 0°30'18 retrograde -3344 Aug 26 j 23:11 26°**¥**19'32 minimum elong -3349 May 23 j 08:15 3°**8**11'17 0°30'21 min. Earth dist. -3344 Sep 28 j 19:59 19°**)** €03'08 0.56861 AU max. Earth dist. -3349 May 29 j 16:48 7°**8**15'31 2.66252 AU opposition -3344 Oct 05 j 01:52 16°¥36'32 -1°53'35 -3349 Jul 04 j 08:28 $0^{\circ}\Pi$ greatest brilliancy -3344 Oct 04 j 16:20 16°**)** ₹45′52 -1.8m morning rise -3349 Jul 08 i 20:29 2°II51'54 direct -3344 Nov 10 j 08:33 8°¥20'25 -3349 Aug 20 j 10:38 0000 asc. node -3344 Nov 18 i 00:35 8° **\(**42'12 -3349 Oct 06 i 08:43 $0^{\circ}\Omega$ -3343 Jan 20 j 16:46 $0^{\circ}\Upsilon$ -3349 Nov 22 j 08:59 0° m -3343 Mar 17 j 19:27 0°8 -3348 Jan 09 j 12:34 0∘**⊽** -3343 May 07 j 07:50 $0^{\circ}\Pi$ -3348 Mar 02 j 17:15 -3343 Jun 23 j 20:34 0ಂತಾ oom. -3348 Apr 05 j 07:05 -3343 Jul 30 j 00:07 desc. node 13°M54'24 24°900'11 evening set -3348 May 02 j 22:13 18°M22'44 -3343 Aug 07 j 18:56 $0^{\circ}\Omega$ retrograde -3348 Jun 02 j 06:08 -3343 Aug 15 j 08:36 13°M21'09 -4°05'59 max. Earth dist. 5°**Ω**13'18 2.52079 AU opposition greatest brilliancy -3348 Jun 02 j 06:51 13°ML20'41 -2.9m -3348 Jun 03 j 03:16 -3343 Sep 18 j 02:57 min. Earth dist. 13°M07'09 0.37731 AU conjunction 29°**Ω**07'16 0°43'32 8° ML 14'41 -3348 Jul 02 j 14:27 -3343 Sep 18 j 04:43 29°**Ω**10'27 0°43'34 direct minimum elong -3348 Sep 05 j 20:39 -3343 Sep 19 j 08:09 0° **₹** 0° m -3348 Oct 25 j 08:33 0°궁 -3343 Oct 29 j 22:04 0∘⊽ -3348 Dec 10 j 07:11 -3343 Nov 11 j 05:32 0°≈ morning rise 9°**£**19'52 0°**)**€ -3347 Jan 25 j 02:56 desc. node -3343 Nov 26 j 05:07 20°**2**48'11 -3347 Feb 13 j 01:41 12°**升** 16'30 -3343 Dec 08 j 03:12 0°M asc. node -3347 Mar 12 j 16:07 $0^{\circ}\Upsilon$ -3342 Jan 15 j 17:16 0°**⊼** -3347 Apr 28 j 20:39 0° 8 -3342 Feb 23 j 12:51 0°ರ -3347 May 13 j 11:42 9°**8**16'18 -3342 Apr 04 j 12:57 0°≈ evening set -3347 Jun 15 j 02:31 -3342 May 16 j 22:03 0°**)** $0^{\circ}\Pi$ max. Earth dist. -3347 Jun 21 j 10:28 2.66707 AU -3342 Jul 02 j 19:47 $0^{\circ}\Upsilon$ $4^{\circ}\Pi02'28$ -3342 Sep 03 j 07:40 0° 8 -3347 Jun 29 j 06:18 9°II03'00 1°02'24 -3342 Oct 03 j 06:49 5°809'18 conjunction retrograde minimum elong -3347 Jun 29 i 05:15 9°**Ⅱ**01'18 1°02'30 asc. node -3342 Oct 06 i 01:11 5°806'11 -3347 Jul 31 i 17:09 0ಂತಾ -3342 Oct 30 i 23:42 30°RY morning rise -3347 Aug 13 j 08:34 8°9515'26 min. Earth dist. -3342 Nov 09 i 15:52 26°Υ17'47 0.65062 AU -3347 Sep 15 i 04:43 $0^{\circ}\Omega$ -3342 Nov 12 j 08:10 25°**Y**13′07 1°25'25 opposition -3347 Oct 29 j 09:49 0°m -3342 Nov 12 i 04:08 25°**Y**17'11 -1.4m greatest brilliancy -3347 Dec 11 j 11:56 0∘**⊽** -3342 Dec 21 j 14:08 15°**Y**51'45 direct -3346 Jan 22 j 19:49 0°M -3341 Feb 15 j 06:32 0°8 -3346 Feb 21 j 08:08 20°ML57'38 -3341 Apr 15 j 07:01 $0^{\circ}\Pi$ desc node -3346 Mar 06 j 04:33 0°×7 -3341 Jun 04 j 03:33 000 -3346 Apr 19 j 17:37 0°ರ -3341 Jul 19 j 18:14 $0^{\circ}\Omega$ -3346 Jun 18 j 02:25 0°≈ -3341 Aug 31 j 07:12 0° m -3346 Jul 11 j 22:10 3°≈47'54 evening set -3341 Sep 16 j 05:11 11° mp 41'23 retrograde -3341 Oct 10 j 13:19 0∘Ω -3346 Aug 04 j 04:56 30°Ŗる min. Earth dist. 28°る41'19 0.44513 AU max. Earth dist. -3346 Aug 08 j 09:27 -3341 Oct 11 j 09:13 0°**♀**37'55 2.39817 AU -3341 Oct 14 j 03:07 greatest brilliancy -3346 Aug 14 j 21:59 26°**る**30'10 -2.5m desc. node 2°**₽**43'41 opposition -3346 Aug 16 j 09:51 25°**る**59'50 -5°50'41 direct -3346 Sep 17 j 12:38 19°**る**38'23 conjunction -3341 Nov 13 j 19:19 26° **2**27'33 -0°21'26 -3346 Oct 31 j 16:30 0°≈ minimum elong -3341 Nov 13 j 17:38 26°**2**24'15 0°21'27 -3346 Dec 30 j 01:05 0°**)**€ -3341 Nov 18 j 08:00 0°M asc. node -3345 Jan 01 j 00:25 1°**)** 07'07 -3341 Dec 26 j 12:07 0°**∡**7 -3345 Feb 19 j 04:44 $0^{\circ}\Upsilon$ -3340 Jan 19 j 08:07 18°**∡**39'34

morning rise

-3340 Feb 02 j 23:12

0°정

0°8

-3345 Apr 09 j 12:36

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3340 Mar 13 i 13:56 0°≈ desc. node -3335 Jun 04 j 23:46 23°Ω15'53 -3340 Apr 24 j 03:31 0°**₩** -3335 Jun 17 j 13:16 0° m $0^{\circ}\Upsilon$ -3340 Jun 07 j 11:55 -3335 Aug 03 j 09:24 0∘**⊽** -3335 Sep 13 j 15:36 0°8 0°M -3340 Jul 26 j 02:40 -3340 Aug 23 j 00:50 15°**8**17'32 -3335 Oct 23 j 07:36 0°×7 asc. node -3340 Sep 24 j 11:28 -3335 Dec 02 j 02:32 0°궁 $0^{\circ}\Pi$ 9°**Ⅱ**11'41 -3334 Jan 12 j 00:57 retrograde -3340 Nov 06 j 00:20 0°≈ 0°**)**€ -3340 Dec 14 j 20:53 30°R₩ -3334 Feb 23 j 16:35 -3334 Mar 17 j 10:29 29°840'20 3°42'36 14° **)** 48'27 opposition -3340 Dec 15 j 16:36 evening set $0^{\circ}\Upsilon$ greatest brilliancy -3340 Dec 15 j 18:21 29°**8**38'35 -1.3m -3334 Apr 09 j 04:43 min. Earth dist. -3340 Dec 16 j 19:08 29°**8**13'51 0.67170 AU asc. node -3334 Apr 14 j 19:33 3°**Y**42'30 19°**8**45'35 direct -3339 Jan 25 j 13:58 -3334 May 07 j 18:30 18°**Ƴ**42'43 -3339 Mar 12 j 09:14 $0^{\circ}\Pi$ conjunction 0°13'05 -3339 May 11 j 06:34 0ಂತಾ minimum elong -3334 May 07 j 17:58 18°**Y**41′50 0°13'07 -3339 Jun 28 j 05:46 $0^{\circ}\Omega$ behind sun begin -3334 May 07 j 06:26 18°Y23'09 -3339 Aug 10 j 11:21 0° m behind sun end -3334 May 08 j 05:30 19°**Y**00'32 desc. node -3339 Aug 31 j 00:49 15° Mp 04'18 max. Earth dist. -3334 May 20 j 03:30 26°\bar{Y}43'01 2.64591 AU -3339 Sep 19 j 20:17 0∘**⊽** -3334 May 25 j 05:52 0°8 -3339 Oct 28 j 13:17 0°M morning rise -3334 Jun 24 j 14:22 19°**8**24'46 evening set -3339 Nov 17 j 07:48 15°M33'35 -3334 Jul 11 j 06:24 $0^{\circ}\Pi$ -3339 Dec 05 j 15:33 0°×7 -3334 Aug 27 j 18:28 0ಂತಾ -3338 Jan 13 j 02:25 0°정 -3334 Oct 14 i 17:34 $0^{\circ}\Omega$ -3334 Dec 03 i 02:02 0° m conjunction -3338 Jan 22 j 06:05 7°る01'33 -1°07'16 -3333 Jan 26 j 16:16 0∘**⊽** minimum elong -3338 Jan 22 j 05:56 7°る01'16 1°07'23 -3333 Apr 01 j 21:47 19°**£**28'33 retrograde -3338 Feb 21 j 18:13 -3333 Apr 22 j 23:40 16°**£**49'04 0°≈≈ desc. node -3338 Mar 12 j 10:09 13°**≈**40'31 2.44210 AU opposition -3333 May 03 j 03:33 max Earth dist 14° \overline 05'26 -0°42'43 -3338 Mar 27 j 17:38 -3333 May 03 j 06:57 24°≈39'49 greatest brilliancy 14° \(\Omega\) 03'00 -2.8m morning rise -3338 Apr 04 j 06:40 0°**₩** -3333 May 08 j 19:02 min. Earth dist. 12°**£**28'24 0.40058 AU $0^{\circ}\Upsilon$ -3338 May 18 j 02:06 -3333 Jun 05 j 02:09 7°**£**58'05 direct -3338 Jul 03 j 11:57 0° M 0° 8 -3333 Aug 08 j 11:11 -3338 Jul 11 j 00:36 -3333 Sep 24 j 21:46 4°841'19 0°**⊼** asc. node 0°ರ -3338 Aug 22 j 09:31 $0^{\circ}II$ -3333 Nov 07 j 12:28 -3338 Oct 20 j 01:06 -3333 Dec 20 j 23:14 000 0°≈ -3338 Dec 13 j 00:25 -3332 Feb 03 j 09:30 0°\ retrograde 13°932'05 -3337 Jan 20 j 06:12 -3332 Mar 01 j 17:36 opposition 4°55'56 asc. node 18°**)**€02'12 $0^{\circ}\Upsilon$ greatest brilliancy -3337 Jan 21 j 00:55 4°€30'30 -1.5m -3332 Mar 20 j 02:42 min. Earth dist. -3337 Jan 25 j 04:34 2°554'01 0.62855 AU -3332 Apr 28 j 06:20 25°Y10'05 evening set -3337 Feb 02 j 02:35 30°R∏ -3332 May 05 j 20:00 0°8 direct -3337 Mar 02 j 08:32 24°**Ⅲ**51′04 max. Earth dist. -3332 Jun 12 j 08:54 23°854'56 2.67173 AU -3337 Apr 01 j 18:15 0ಂತಾ -3337 Jun 03 j 07:10 $0^{\circ}\Omega$ -3332 Jun 14 j 18:22 25°**8**26'32 0°52'25 conjunction desc. node -3337 Jul 18 j 23:41 29°**Ω**42'01 -3332 Jun 14 j 17:06 25°**8**24'30 0°52'30 minimum elong -3337 Jul 19 j 10:02 0° m -3332 Jun 21 j 21:49 $0^{\circ}\Pi$ -3337 Aug 29 j 18:49 -3332 Jul 30 j 01:05 24°**Ⅲ**27'12 0∘**⊽** morning rise -3337 Oct 07 j 22:32 0°M -3332 Aug 07 j 15:10 0ಂತಾ -3337 Nov 15 j 08:17 0°×7 -3332 Sep 22 i 12:51 $0^{\circ}\Omega$ -3337 Dec 24 i 03:04 0°정 -3332 Nov 06 j 12:59 0° m 23°る15'49 -3336 Jan 24 j 00:38 -3332 Dec 20 i 20:54 0∘**⊽** evening set -3336 Feb 02 j 03:52 0°**≈** -3331 Feb 03 i 02:22 0°M -3336 Mar 15 j 00:41 0°**)**€ -3331 Mar 10 j 00:17 23°M06'31 desc node -3331 Mar 20 j 20:21 0°×7 -3336 Mar 22 j 19:48 5°\ 25'40 -0°37'10 -3331 May 16 j 05:04 0°궁 conjunction -3331 Jun 17 j 23:54 minimum elong -3336 Mar 22 j 21:39 5°**H**28'52 0°37'12 retrograde 6°₹46'45 max. Earth dist. -3336 Apr 22 j 16:15 26°**)** €27'40 2.56637 AU min. Earth dist. -3331 Jul 14 j 14:43 2°る17'36 0.40187 AU $0^{\circ}\Upsilon$ 0°る47'11 -2.7m -3336 Apr 27 j 23:12 greatest brilliancy -3331 Jul 19 j 16:23 -3336 May 15 j 19:14 morning rise 11°**Y**48'11 -3331 Jul 21 j 01:47 0°**ප**22'13 -6°36'10 opposition 19°**Y**44'13 -3336 May 27 j 22:55 -3331 Jul 22 j 07:43 30°R.✓ asc. node -3336 Jun 12 j 20:38 0°8 -3331 Aug 20 j 10:52 24°**х** 54′19 direct -3336 Jul 30 j 12:28 $0^{\circ}\Pi$ -3331 Sep 18 j 20:48 0°정 0ಂತಾ -3331 Nov 20 j 16:15 -3336 Sep 18 j 07:07 0°≈ -3336 Nov 12 j 00:46 0° Ω -3330 Jan 10 j 00:50 0°**)**€ retrograde -3335 Jan 26 j 12:47 23°**Ω**34'28 asc. node -3330 Jan 17 j 16:50 4°**)**41'52 $0^{\circ}\Upsilon$ opposition -3335 Mar 03 j 00:58 16°Ω11'07 4°22'14 -3330 Feb 27 j 16:21 greatest brilliancy -3335 Mar 04 j 08:35 15°**Ω**42'50 -2.0m -3330 Apr 16 j 22:23 0°8 min. Earth dist. -3335 Mar 11 j 05:15 13°**Ω**16'32 0.52489 AU -3330 Jun 03 j 15:28 $0^{\circ}\Pi$

-3335 Apr 11 j 03:16

direct

7°**Ω**10′19

-3330 Jun 05 j 20:01

evening set

1°**Ⅲ**23′26

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. max. Earth dist. -3330 Jul 06 j 05:13 20°**I**51'48 2.64354 AU -3325 Mar 22 j 07:36 0°≈ -3330 Jul 20 j 06:32 -3325 May 03 j 01:04 0°**₩** 000 $0^{\circ}\Upsilon$ -3325 Jun 16 j 22:39 -3330 Jul 22 j 07:00 1°519'15 1°10'34 -3325 Aug 06 j 16:57 0°8 conjunction -3330 Jul 22 j 06:42 1°9518'46 -3325 Sep 09 j 16:20 16°**8**05'59 minimum elong 1°10'40 asc. node -3330 Sep 03 j 08:37 $0^{\circ}\Omega$ -3325 Oct 24 j 12:04 retrograde 26°**8**21'23 -3330 Sep 06 j 02:07 1° \$\Omega 51'08 -3325 Dec 03 j 11:15 morning rise opposition 16°**8**37'24 2°56'28 greatest brilliancy -3330 Oct 16 j 18:36 0° mb -3325 Dec 03 j 08:52 16°**8**39'47 -1.3m -3330 Nov 27 j 16:09 0∘ଫ min. Earth dist. -3325 Dec 03 j 01:54 16°**8**46'47 0.67114 AU -3329 Jan 07 j 10:29 0°M direct -3324 Jan 12 j 21:18 6°**8**52'31 13°M50'37 desc. node -3329 Jan 26 j 00:25 -3324 Mar 27 j 18:46 $0^{\circ}\Pi$ 0°×7 -3324 May 20 j 13:09 0ಂತಾ -3329 Feb 16 j 16:07 0°₹ -3324 Jul 06 j 06:39 -3329 Mar 29 j 10:23 0° Ω -3329 May 11 j 20:12 0°**≈** -3324 Aug 18 j 03:30 0° m -3329 Jul 05 j 07:27 0°**)**€ desc. node -3324 Sep 16 j 19:20 21° m 56'47 retrograde -3329 Aug 11 j 09:05 8°\ 24'51 -3324 Sep 27 j 10:05 0∘**⊽** min. Earth dist. -3329 Sep 11 j 03:52 1°**¥**56′08 0.52291 AU evening set -3324 Oct 21 j 18:50 18°**£**47'42 -3329 Sep 16 j 07:03 30°R≈ -3324 Nov 05 j 02:46 0°M opposition -3329 Sep 18 j 13:03 29°≈08'47 -3°27'00 -3324 Dec 13 j 04:42 0°×7 greatest brilliancy -3329 Sep 17 j 16:48 29°≈27'56 -2.0m direct -3329 Oct 23 j 07:01 21°≈30'32 conjunction -3324 Dec 25 j 11:39 9°**х** 39'44 -0°58'56 -3329 Dec 02 j 14:23 0°) minimum elong -3324 Dec 25 i 08:52 9°**х** 34'16 0°59'00 -3329 Dec 05 i 16:00 1°\(\mathbf{0}\)9'23 -3323 Jan 20 j 14:24 0°정 asc. node -3328 Feb 03 i 03:19 0° max. Earth dist. -3323 Feb 06 i 15:56 13°る04'33 2.39243 AU -3328 Mar 26 j 10:17 0°8 -3323 Mar 01 j 04:24 0°≈ -3328 May 14 j 18:21 $0^{\circ}II$ -3323 Mar 03 j 09:01 1°≈37'29 morning rise -3328 Jun 30 j 21:22 0ಂತಾ -3323 Apr 11 j 15:27 0°\ -3328 Jul 13 j 18:20 8°927'11 -3323 May 25 j 12:43 $0^{\circ}\Upsilon$ evening set -3328 Aug 02 j 01:39 21°521'15 2.56406 AU -3323 Jul 11 j 10:40 0°8 max. Earth dist. -3328 Aug 14 j 18:32 -3323 Jul 27 j 15:15 9°847'22 0° Ω asc. node -3323 Sep 01 j 07:41 $0^{\circ}\Pi$ -3328 Aug 31 j 01:44 11°Ω16'42 0°58'35 -3323 Nov 25 j 08:20 0ಂತಾ conjunction -3328 Aug 31 j 03:12 11°**Ω**19'16 0°58'40 -3323 Nov 28 j 01:05 0°902'43 minimum elong retrograde -3328 Sep 26 j 11:32 0° m -3323 Nov 30 j 17:07 30°R∏ -3328 Oct 20 j 14:02 17° m 33'35 -3322 Jan 05 j 23:42 20°**I**57'36 4°36'12 morning rise opposition -3328 Nov 06 j 07:48 -3322 Jan 06 j 11:04 20°**I**I46′25 -1.4m 0∘**⊽** greatest brilliancy 27°**₽**46'29 -3322 Jan 09 j 10:17 19°**Д**36'25 0.65325 AU desc. node -3328 Dec 12 j 22:37 min. Earth dist. -3328 Dec 15 j 20:13 0° M direct -3322 Feb 16 j 05:03 10°**Ⅲ**56'36 -3327 Jan 23 j 17:16 0°**√** -3322 Apr 22 j 01:39 0ಂತಾ -3327 Mar 03 j 19:21 0°ರ -3322 Jun 13 j 17:15 $0^{\circ}\Omega$ -3327 Apr 13 j 04:00 0°**≈** -3322 Jul 28 j 05:50 0° m -3327 May 26 j 08:16 0°**)**€ -3322 Aug 04 j 17:38 5° m 21'13 desc. node -3327 Jul 15 j 04:45 $0^{\circ}\Upsilon$ -3322 Sep 07 j 01:43 0∘**ত** -3327 Sep 19 j 09:15 21° Y 09'50 -3322 Oct 15 j 23:24 0°M retrograde -3327 Oct 22 j 15:48 13°Y50'39 -3322 Nov 23 j 04:42 0°**∡**7 asc. node -3327 Oct 25 i 03:40 28°**х** 29'40 min. Earth dist. 12°**Υ**51'32 0.62538 AU -3322 Dec 29 i 19:45 evening set -3327 Oct 29 i 06:55 11°\bar{\gamma}12'09 0°16'02 -3322 Dec 31 i 18:47 0°궁 opposition greatest brilliancy -3327 Oct 29 i 05:50 11°**Y**13'14 -1.6m -3321 Feb 09 j 14:26 0°≈ 2°Υ11'44 direct -3327 Dec 06 i 13:19 -3326 Mar 01 j 00:44 0°8 -3321 Mar 02 j 08:11 15°≈07'13 -0°54'30 conjunction -3326 Apr 24 j 02:21 $0^{\circ}II$ -3321 Mar 02 i 10:29 15°≈11'21 0°54'33 minimum elong -3326 Jun 11 j 18:27 0ಂತಾ -3321 Mar 23 j 06:18 0°\ -3326 Jul 27 j 00:35 $0^{\circ}\Omega$ max. Earth dist. -3321 Apr 10 j 11:59 12°**)** 40′19 2.52153 AU -3326 Aug 27 j 00:24 21°**Ω**42'15 morning rise -3321 Apr 29 j 01:49 25°¥18'41 evening set -3326 Sep 07 j 12:38 $0^{\circ}\Upsilon$ 0° m -3321 May 06 j 01:37 25°**Y**52'13 max. Earth dist. -3326 Sep 11 j 23:22 3° Mp 14'20 2.44493 AU -3321 Jun 14 j 13:56 asc. node -3326 Oct 17 j 20:54 0∘ଫ -3321 Jun 21 j 00:49 0°8 -3321 Aug 08 j 06:00 $0^{\circ}\Pi$ -3326 Oct 20 j 15:02 2°**2**05'44 0°07'11 -3321 Sep 28 j 21:27 0ಂತಾ conjunction -3326 Oct 20 j 15:31 -3321 Dec 02 j 02:55 minimum elong 2°**£**06'39 0°07'10 0 \circ Ω behind sun begin -3326 Oct 19 j 17:10 1°**≏**24'08 retrograde -3320 Jan 08 j 06:38 7°**Ω**03′18 behind sun end -3326 Oct 21 j 13:53 2°**₽**49'12 -3320 Feb 11 j 11:55 30°Rூ desc. node -3326 Oct 30 j 20:22 9°**£**54'42 opposition -3320 Feb 14 j 01:05 29°**©**03'30 4°54'19 -3326 Nov 25 j 18:49 0°M greatest brilliancy -3320 Feb 15 j 06:03 28°**9**36'28 -1.7m morning rise -3326 Dec 21 j 10:39 20° M 05'25min. Earth dist. -3320 Feb 21 j 03:32 26°925'06 0.57168 AU

-3320 Mar 25 j 06:57

-3320 May 08 j 04:34

direct

19°9529'48

 $0^{\circ}\Omega$

-3325 Jan 03 j 01:53

-3325 Feb 10 j 15:03

0°×7

0°る

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	ical year style is used: Th		n astronomicai coi				2 ((000 AII
desc. node	-3320 Jun 21 j 15:53	23° Ω 43'19		max. Earth dist.	-3315 Jun 26 j 19:37	10°Щ25′08	2.66089 AU
	-3320 Jul 01 j 14:28	0° m)			2215 7 1 25 1 1 22	150H20126	1006122
	-3320 Aug 14 j 00:34	0∘ 亚		conjunction	-3315 Jul 07 j 14:02	17° Ⅱ 20′26	1°06'33
	-3320 Sep 23 j 02:01	0° M ₊		minimum elong	-3315 Jul 07 j 13:13	17° Ⅱ 19'06	1°06'39
	-3320 Nov 01 j 01:37	0° ∡ ¹			-3315 Jul 27 j 02:49	0°9	
	-3320 Dec 10 j 07:48	0°ප		morning rise	-3315 Aug 21 j 19:01	16°952'37	
_	-3319 Jan 19 j 19:09	0° ≈			-3315 Sep 10 j 10:40	0 $^{\circ}\Omega$	
evening set	-3319 Feb 26 j 06:38	26°≈40'40			-3315 Oct 24 j 08:13	0° m)	
	-3319 Mar 03 j 01:14	0° ∀			-3315 Dec 05 j 22:31	0∘ 亚	
	-3319 Apr 16 j 06:06	0° Y			-3314 Jan 16 j 14:09	0° M	
				desc. node	-3314 Feb 11 j 16:33	18° M 57'10	
conjunction	-3319 Apr 21 j 01:51	3° Y 11′59			-3314 Feb 26 j 22:53	0° ∡ ¹	
minimum elong	-3319 Apr 21 j 02:07	3° Y 12′26	0°06'04		-3314 Apr 10 j 11:57	0°ರ	
behind sun begin	-3319 Apr 20 j 06:07	2° Ƴ 39'19			-3314 May 28 j 20:22	0° ≈	
behind sun end	-3319 Apr 21 j 22:07	3° Y 45'32		retrograde	-3314 Jul 23 j 17:23	17° ≈ 37'09	
asc. node	-3319 May 01 j 12:22	10° Y 05′04		min. Earth dist.	-3314 Aug 21 j 08:20	12° ≈ 00′59	0.47292 AU
max. Earth dist.	-3319 May 10 j 06:06	15° Ƴ 48'18	2.62076 AU	greatest brilliancy	-3314 Aug 28 j 01:33	9° ≈ 38'14	-2.3m
	-3319 Jun 01 j 03:51	9° 8		opposition	-3314 Aug 29 j 09:00	9° ≈ 10′12	-5°02'35
morning rise	-3319 Jun 09 j 19:52	5° 8 33'52		direct	-3314 Oct 01 j 10:29	2° ≈ 18'58	
	-3319 Jul 18 j 07:35	Π $^{\circ}$ 0			-3314 Dec 21 j 17:45	0° ∀	
	-3319 Sep 04 j 10:13	0ංම		asc. node	-3314 Dec 22 j 07:20	0°) 17'47	
	-3319 Oct 23 j 23:25	$0^{\circ}\Omega$			-3313 Feb 13 j 06:12	$0^{\circ}\mathbf{\Upsilon}$	
	-3319 Dec 16 j 19:06	0° m)			-3313 Apr 04 j 10:09	0° ႘	
retrograde	-3318 Mar 04 j 07:44	24° m 58'50			-3313 May 22 j 23:09	$\Pi^{\circ}0$	
opposition	-3318 Apr 06 j 04:31	18° m)48'14	2°04'09	evening set	-3313 Jun 29 j 06:50	23° Ⅱ 47'32	
greatest brilliancy	-3318 Apr 06 j 22:10	18° m) 34'11	-2.5m	C	-3313 Jul 08 j 19:58	0°9	
min. Earth dist.	-3318 Apr 14 j 07:22	16° m 13'32	0.44456 AU	max. Earth dist.	-3313 Jul 22 j 09:46	8°955'32	2.60108 AU
desc. node	-3318 May 09 j 15:59	11° m/22'50					
direct	-3318 May 12 j 03:17	11° mp 20'17		conjunction	-3313 Aug 15 j 10:35	25° © 01'19	1°07'30
	-3318 Jul 09 j 08:11	0∘ ⊽		minimum elong	-3313 Aug 15 j 11:24	25°902'41	1°07'36
	-3318 Aug 26 j 00:32	0° M		minimum crong	-3313 Aug 22 j 18:06	0°Ω	1 07 30
	-3318 Oct 07 j 06:12	0° ∡ 7		morning rise	-3313 Oct 02 j 10:34	28° Ω 23'47	
	-3318 Nov 17 j 15:06	°ਤ ਹ°ਤ		morning rise	-3313 Oct 04 j 16:31	0° my	
	-3318 Dec 29 j 17:24	0° ≈			-3313 Nov 14 j 20:50	0∘ ⊽	
	-3317 Feb 11 j 06:05	0° ∺			-3313 Nov 14 j 20:30	0° ™	
asc. node	-3317 Feb 11 j 00:03	24° ∺ 06'41		desc. node	-3313 Dec 24 j 18:20	4°M30'45	
asc. nouc	-3317 Mar 19 j 09:37	24 χω41 0° Υ		desc. node	-3312 Feb 02 j 00:34	4 11 6 30 43	
	-3317 Mar 28 j 09:00 -3317 Apr 13 j 09:35	0 ¶ 10° Υ 26′24				0°る	
evening set	1 3				-3312 Mar 12 j 12:22		
	-3317 May 13 j 18:03	0°8			-3312 Apr 22 j 11:51	0° ≈	
	2217 1 01:01:02	110 41150	0020114		-3312 Jun 06 j 05:50	0°) €	
conjunction	-3317 Jun 01 j 01:02		0°39'14		-3312 Aug 03 j 23:26	0° Υ	
minimum elong	-3317 May 31 j 23:49	11° 8 39'56	0°39'18	retrograde	-3312 Sep 04 j 19:10	6° ℃ 05'33	
max. Earth dist.	-3317 Jun 04 j 02:44	13° 8 39'32	2.66806 AU		-3312 Oct 04 j 15:46	30° ₹	
	-3317 Jun 29 j 17:43	0°II		min. Earth dist.	-3312 Oct 08 j 18:17		0.59129 AU
morning rise	-3317 Jul 16 j 23:11	10° Ⅱ 59'31		opposition	-3312 Oct 14 j 07:08	26° 米 14'11	
	-3317 Aug 15 j 15:52	0ංම		greatest brilliancy	-3312 Oct 14 j 02:26	26° ¥ 18′50	-1.7m
	-3317 Oct 01 j 03:43	$0^{\circ}\Omega$		asc. node	-3312 Nov 08 j 06:28	18° ¥ 38'18	
	-3317 Nov 16 j 07:11	0° m)		direct	-3312 Nov 20 j 08:48	17° ∺ 40′19	
	-3316 Jan 01 j 15:28	0∘ ⊽			-3311 Jan 10 j 04:44	0° Υ	
	-3316 Feb 18 j 19:06	0° M ₊			-3311 Mar 11 j 15:20	0° 8	
desc. node	-3316 Mar 26 j 16:55	20°M21'12			-3311 May 02 j 04:18	$\Pi^{\circ}0$	
	-3316 Apr 18 j 04:41	0° ∡ ¹			-3311 Jun 19 j 02:03	0°€	
retrograde	-3316 May 20 j 12:23	6° ≯ 14'22			-3311 Aug 03 j 03:28	$0^{\circ}\Omega$	
min. Earth dist.	-3316 Jun 18 j 05:46	1° ∡ ³33'33	0.37786 AU	evening set	-3311 Aug 08 j 17:36	3° Ω 50'47	
opposition	-3316 Jun 20 j 09:40	0° х 58′32	-5°36'32	max. Earth dist.	-3311 Aug 24 j 01:41	14° Ω 32'50	2.49488 AU
greatest brilliancy	-3316 Jun 19 j 21:45	1° ≯ 06'35	-2.9m		-3311 Sep 14 j 16:51	0° m)	
-	-3316 Jun 24 j 01:05	30°RM₊			-		
direct	-3316 Jul 20 j 06:31	25°M59'36		conjunction	-3311 Sep 29 j 04:06	10° m 33'51	0°32'01
	-3316 Aug 14 j 16:37	0° ∡ 7		minimum elong	-3311 Sep 29 j 05:42	10° m) 36'49	0°32'03
	-3316 Oct 16 j 01:24	0°₹		3	-3311 Oct 25 j 05:09	0∘ ⊽	
	-3316 Dec 03 j 13:12	0° ≈		desc. node	-3311 Nov 16 j 14:58	17° ≏ 05'33	
	-3315 Jan 19 j 11:45	0° ₩		morning rise	-3311 Nov 24 j 18:18	23° ≏ 22'08	
asc. node	-3315 Feb 03 j 07:47	9° ∺ 28′23		0	-3311 Dec 03 j 07:47	0° M	
	-3315 Mar 07 j 14:55	0° Υ			-3310 Jan 10 j 19:06	0° ∡ 7	
	-3315 Apr 24 j 02:54	0°8			-3310 Feb 18 j 11:28	0°ਰੋ	
evening set	-3315 May 22 j 00:47	17° 8 38'00			-3310 Mar 30 j 07:15	0° ≈	
croming sec	-3315 Jun 10 j 12:16	0°Ⅱ			-3310 May 11 j 07:51	0° ∺	
	5515 Juli 10 J 12.10	V н			5510 iviay 11 J 07.51	υ / (

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 10 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. $0^{\circ}\Upsilon$ -3310 Jun 26 j 04:33 -3305 Aug 24 j 08:19 0∘**⊽** -3310 Aug 20 j 13:53 0°8 -3305 Oct 02 j 18:17 0°M -3310 Sep 26 j 06:16 11°**8**58'07 -3305 Nov 10 j 07:53 0°×7 asc. node -3310 Oct 11 j 01:49 0°궁 13°**8**19'29 -3305 Dec 19 j 05:27 retrograde -3310 Nov 18 j 07:06 min. Earth dist. 4°**8**11'37 0.66064 AU -3304 Jan 28 j 08:38 0°≈ opposition -3310 Nov 20 j 04:05 3°**8**26'23 2°01'41 evening set -3304 Feb 06 j 02:18 6°≈21'51 greatest brilliancy -3310 Nov 19 j 23:49 3°**8**30'40 -1.4m -3304 Mar 10 j 07:30 0°**∀** -3310 Nov 28 j 24:00 30°**₹**Υ 23°Y55'21 direct -3310 Dec 29 j 22:01 conjunction -3304 Apr 02 j 23:04 16° **★**18'02 -0°25'57 -3309 Feb 02 j 04:52 0°8 minimum elong -3304 Apr 03 j 00:22 16°**¥**20'15 0°25'58 -3309 Apr 08 j 22:45 $0^{\circ}\Pi$ -3304 Apr 23 j 07:00 $0^{\circ}\Upsilon$ -3304 Apr 29 j 13:19 4°**Υ**09'56 -3309 May 29 j 21:56 0ಂತಾ max. Earth dist. 2.58787 AU -3304 May 18 j 04:05 16°**Y**24'57 -3309 Jul 14 j 21:26 $0^{\circ}\Omega$ asc. node -3309 Aug 26 j 13:28 0° m morning rise -3304 May 25 j 05:34 21° Y 00' 47 evening set -3309 Sep 28 j 16:29 24° m/34'24 -3304 Jun 08 j 03:27 0°8 desc. node -3309 Oct 04 j 12:22 28° m 59'49 -3304 Jul 25 j 13:20 $0^{\circ}\Pi$ -3309 Oct 05 j 19:58 0∘**⊽** -3304 Sep 12 j 13:40 0ಂತಾ max. Earth dist. -3309 Nov 09 j 16:39 26°**≏**57'13 2.37943 AU -3304 Nov 03 j 17:46 $0^{\circ}\Omega$ -3309 Nov 13 j 14:04 0°M -3303 Jan 10 j 06:03 0° m retrograde -3303 Feb 07 j 19:37 4° m 25'02 conjunction -3309 Nov 28 j 15:30 11°ML49'43 -0°37'13 -3303 Mar 06 j 16:35 30°R€ -3309 Nov 28 j 12:42 11°M44'12 0°37'15 -3303 Mar 14 i 11:28 27°Ω25'50 3°46'30 minimum elong opposition -3309 Dec 21 i 17:22 0°×7 greatest brilliancy -3303 Mar 15 i 17:18 27°Ω00'04 -2.1m -3308 Jan 29 i 03:30 0°궁 min. Earth dist. -3303 Mar 22 j 23:43 24°**Ω**30'13 0.49636 AU -3308 Feb 04 i 17:15 5°る03'43 direct -3303 Apr 21 j 16:14 18°Ω52'07 morning rise -3308 Mar 08 j 17:06 desc. node -3303 May 26 j 08:09 26°**Ω**07'34 0°≈≈ -3308 Apr 19 j 04:26 0°**₩** -3303 Jun 04 j 14:35 O° m -3308 Jun 02 j 06:18 $0^{\circ}\Upsilon$ -3303 Jul 26 j 15:59 0∘**⊽** -3308 Jul 20 j 00:32 0°8 -3303 Sep 07 j 05:09 0°M -3308 Aug 13 j 07:03 13°**8**57'12 -3303 Oct 17 j 12:28 0°×7 asc. node -3303 Nov 26 j 17:26 -3308 Sep 13 j 16:10 0°궁 $0^{\circ}\Pi$ -3308 Nov 13 j 21:13 17°**Ⅲ**01'44 -3302 Jan 06 j 23:17 0°22 retrograde 0°) -3308 Dec 23 j 08:46 7°**I**38'40 4°05'11 -3302 Feb 18 j 20:35 opposition 24°**)** 44′29 -3308 Dec 23 j 13:34 7°**I**33'54 -1.3m -3302 Mar 27 j 13:41 greatest brilliancy evening set -3308 Dec 25 j 07:10 $0^{\circ}\Upsilon$ min. Earth dist. 6°**I**52'34 0.66792 AU -3302 Apr 04 j 12:28 -3307 Jan 14 j 12:05 -3302 Apr 05 j 02:04 0°Y22'25 30°₹**८** asc. node 27°**8**40'18 direct -3307 Feb 02 j 11:04 -3307 Feb 22 j 17:47 $0^{\circ}II$ conjunction -3302 May 16 j 19:11 27°**Y**31'34 0°23'18 -3307 May 04 j 13:53 0ಂತಾ minimum elong -3302 May 16 j 18:18 27°**Y**30'09 0°23'22 -3307 Jun 22 j 19:03 $0^{\circ}\Omega$ -3302 May 20 j 15:26 0°8 -3307 Aug 05 j 10:25 0° m max. Earth dist. -3302 May 25 j 17:55 3°816'42 2.65610 AU -3307 Aug 21 j 10:37 11° mp 38'29 -3302 Jul 02 j 19:30 27°**8**34'41 desc. node morning rise -3307 Sep 14 j 22:54 -3302 Jul 06 j 14:55 $0^{\circ}\Pi$ 0∘**⊽** -3307 Oct 23 j 17:15 0°M -3302 Aug 22 j 20:58 0ಂತಾ -3307 Nov 30 j 20:09 -3302 Oct 09 j 05:03 0°×7 0° Ω evening set -3307 Dec 02 j 19:13 1°**х** 32'31 -3302 Nov 26 i 02:16 0° m -3306 Jan 08 j 07:26 0°정 -3301 Jan 15 i 06:03 0∘**⊽** -3301 Mar 18 j 22:47 0°M -3306 Feb 06 i 02:55 21°る54'19 -1°05'38 desc. node -3301 Apr 13 j 09:30 5°M26'23 conjunction -3306 Feb 06 i 04:11 21°**ප**56'42 1°05'44 -3301 Apr 19 i 18:24 5°M41'21 minimum elong retrograde -3306 Feb 16 i 23:43 -3301 May 20 j 06:46 0°ML36'26 -2°38'58 0°≈≈ opposition -3306 Mar 24 j 20:33 25°≈59'57 2.47136 AU -3301 May 20 j 12:39 0°ML32'28 -2.9m max. Earth dist. greatest brilliancy -3301 May 22 j 12:33 -3306 Mar 30 j 12:24 0°₩ 30°R <u>Ω</u> 0.38409 AU morning rise -3306 Apr 09 j 04:32 6° **)** 46'18 min. Earth dist. -3301 May 23 j 13:03 29°**₽**43'29 $0^{\circ}\Upsilon$ -3301 Jun 20 j 13:38 -3306 May 13 j 06:25 direct 25°**2**09'06 0° M -3306 Jun 28 j 10:29 0°8 -3301 Jul 18 j 08:33 -3306 Jul 01 j 06:28 1°**8**47'15 -3301 Sep 15 j 06:32 0°×7 asc. node -3306 Aug 16 j 12:41 $0^{\circ}\Pi$ -3301 Oct 31 j 09:01 0°정 -3306 Oct 10 j 11:56 0ಂತಾ -3301 Dec 14 j 23:52 0°≈ -3300 Jan 29 j 02:28 0°**)**€ retrograde -3306 Dec 22 j 02:42 22°9504'27 14° **X** 58'07 opposition -3305 Jan 28 j 21:39 13°**©**34'57 5°00'28 asc. node -3300 Feb 20 j 23:40 $0^{\circ}\Upsilon$ greatest brilliancy -3305 Jan 29 j 20:23 13°9513'09 -3300 Mar 15 j 05:20 -1.6m min. Earth dist. -3305 Feb 03 j 15:26 11°9523'10 0.61088 AU -3300 May 01 j 04:08 0°8 direct -3305 Mar 10 j 19:35 3°9542'54 evening set -3300 May 07 j 01:07 3°**8**44'05 -3305 May 26 j 12:24 0° Ω -3300 Jun 17 j 08:07 Π $^{\circ}0$ desc. node -3305 Jul 09 j 09:26 27°**Ω**16'43 max. Earth dist. -3300 Jun 17 j 17:11 0°**I**14'28 2.67026 AU

-3305 Jul 13 j 09:52

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Earth dist. -3294 Sep 26 j 04:29 17° Mp 11'12 2.41821 AU -3299 Apr 27 j 13:47 0°궁 -3294 Oct 13 j 04:31 0∘**⊽** -3299 Jul 02 j 02:09 22°る58'08 -3294 Oct 21 j 06:17 retrograde desc. node 6°**△**09'43 min. Earth dist. -3299 Jul 28 j 22:04 18°**る**11'45 0.42409 AU greatest brilliancy -3299 Aug 03 j 23:37 16°る15'56 -2.6m conjunction -3294 Nov 02 j 21:43 15°**2**53'34 -0°08'55 opposition -3299 Aug 05 j 12:22 15°**る**46'23 -6°19'20 minimum elong -3294 Nov 02 j 21:03 15°**£**52'17 0°08'56 direct -3299 Sep 05 j 20:10 9°**る**49'49 behind sun begin -3294 Nov 01 j 23:15 15° 210'09 -3299 Nov 10 j 03:01 0°≈ behind sun end -3294 Nov 03 j 18:51 16°**△**34'26 -3298 Jan 03 j 06:59 0°**)**€ -3294 Nov 21 j 01:02 asc. node -3298 Jan 07 j 21:54 2°\ 43'40 -3294 Dec 29 j 06:27 0°×7 -3298 Feb 22 j 04:34 $0^{\circ}\Upsilon$ morning rise -3293 Jan 06 j 12:47 6°×29'01 -3298 Apr 12 j 00:14 0°8 -3293 Feb 05 j 17:49 0°정 -3298 May 29 j 23:44 $\mathbb{I}^{\circ 0}$ -3293 Mar 17 j 08:07 0°≈ -3298 Jun 14 j 08:06 9°**Ⅱ**45'16 -3293 Apr 27 j 21:43 0°) evening set max. Earth dist. -3298 Jul 11 j 23:04 27°**Д**33'51 2.63058 AU -3293 Jun 11 j 08:52 0° -3298 Jul 15 j 16:42 0ಂತಾ -3293 Jul 30 j 14:37 0°8 -3293 Aug 30 j 22:11 16°823'30 asc. node -3298 Jul 30 j 21:36 9°959'46 1°10'52 -3293 Oct 04 j 19:14 0°π conjunction -3298 Jul 30 j 21:42 9°959'56 1°10'58 -3293 Nov 01 j 05:38 4°**I**I12′04 minimum elong retrograde -3298 Aug 29 j 17:30 $0^{\circ}\Omega$ -3293 Nov 26 j 13:20 30°R₩ -3298 Sep 15 j 06:31 11°**Ω**20'00 -3293 Dec 11 j 02:04 24°**8**34'39 3°24'25 opposition morning rise -3298 Oct 11 j 23:17 0° m -3293 Dec 11 j 01:44 greatest brilliancy 24°**8**34'59 -1.3m 0∘∙თ -3298 Nov 22 j 14:27 min. Earth dist. -3293 Dec 11 j 12:32 24°**8**24'12 0.67268 AU -3297 Jan 02 j 00:33 0°M -3292 Jan 20 j 19:41 14°**8**43'49 direct 10° ML48'37-3297 Jan 16 j 09:43 -3292 Mar 18 j 18:52 desc. node $0^{\circ}\Pi$ -3297 Feb 10 j 20:27 -3292 May 14 j 15:02 0° **₹** 0ಂತಾ 0°궁 -3292 Jul 01 j 02:21 -3297 Mar 23 j 00:33 0 \circ Ω -3297 May 04 j 04:22 0°≈ -3292 Aug 13 j 05:30 0° m -3297 Jun 21 j 16:17 0°**)**€ -3292 Sep 07 j 03:53 18° Mp 20'20 desc. node -3297 Aug 21 j 00:56 19°**¥**19'39 -3292 Sep 22 j 14:28 0∘**⊽** retrograde -3297 Sep 21 j 23:41 12°**升**24′24 0.54878 AU -3292 Oct 31 j 07:50 0°M min. Earth dist. -3297 Sep 28 j 19:15 9°\(\)46'40 -2°32'31 -3292 Nov 05 j 12:43 4°ML05'08 opposition evening set -3297 Sep 28 j 05:22 10°**⊁**00'03 -1.9m -3292 Dec 08 j 10:02 greatest brilliancy 0°×7 -3297 Nov 03 j 10:33 1°**)** 46'33 direct -3297 Nov 25 j 21:38 4°**)**€41'06 -3291 Jan 10 j 07:02 25°**х** 43′10 -1°05′28 asc. node conjunction -3296 Jan 26 j 13:39 $0^{\circ}\Upsilon$ -3291 Jan 10 j 05:36 25°**х** 40′23 1°05′33 minimum elong -3296 Mar 20 j 19:37 0°8 -3291 Jan 15 i 19:50 0°궁 -3296 May 09 j 19:45 $\mathbb{I}^{\circ 0}$ -3291 Feb 24 i 09:42 0°≈ -3296 Jun 26 i 05:05 0ಂತಾ max. Earth dist. -3291 Feb 28 i 07:38 2°≈53'57 2.41868 AU evening set -3296 Jul 22 i 22:07 17°537'46 morning rise -3291 Mar 17 j 13:07 15°≈30'03 -3296 Aug 09 j 08:41 29°526'44 2.54095 AU -3291 Apr 06 i 20:07 0°\ max Earth dist -3296 Aug 10 j 04:06 $0^{\circ}\Omega$ -3291 May 20 j 14:24 $0^{\circ}\Upsilon$ -3291 Jul 06 j 03:09 0°8 7°**8**15'56 -3296 Sep 10 j 02:53 21°Ω36'43 0°50'44 -3291 Jul 17 j 21:43 conjunction asc node minimum elong -3296 Sep 10 j 04:35 21°Ω39'43 0°50'47 -3291 Aug 25 j 15:27 $0^{\circ}II$ -3296 Sep 21 j 20:03 0ಂತಾ 0° m -3291 Oct 27 j 06:47 -3291 Dec 06 j 11:19 -3296 Nov 01 j 11:13 29° m 55'34 8°908'53 morning rise retrograde -3290 Jan 12 j 03:39 -3296 Nov 01 j 13:34 0∘**⊽** 30°R,Ⅲ 24°**♀**09'27 -3290 Jan 14 j 01:49 29°II15'08 4°48'57 desc. node -3296 Dec 03 j 08:04 opposition 0°M -3290 Jan 14 j 17:14 -3296 Dec 10 j 22:13 greatest brilliancy 29°**Ⅱ**00'05 -1.4m -3290 Jan 18 j 08:29 0.64081 AU -3295 Jan 18 j 15:21 0° **₹** min. Earth dist. 27°**Ⅲ**35′03 0°궁 19°**Ⅲ**15′09 -3295 Feb 26 j 13:05 direct -3290 Feb 24 j 07:06 -3295 Apr 07 j 15:19 0°≈ -3290 Apr 11 j 07:43 0 \circ \odot -3295 May 20 j 05:39 0°**)**€ -3290 Jun 07 j 07:30 0° Ω -3295 Jul 06 j 23:15 $0^{\circ}\Upsilon$ -3290 Jul 22 j 17:25 0° m retrograde -3295 Sep 27 j 10:13 29°**Y**44'18 desc. node -3290 Jul 26 j 02:12 2° m 22'02 -3295 Oct 12 j 22:12 28° Y 04'51 -3290 Sep 01 j 21:11 0°**⊽** asc. node

min. Earth dist.

-3295 Nov 03 j 02:50

21°**Υ**07'17 0.64047 AU

-3290 Oct 10 j 22:24

0°M

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recention, astronom	-3290 Nov 18 j 06:01	0° ⊼	ii ustronomicui cot	max. Earth dist.	-3285 Jun 09 j 12:37		2.67121 AU
	-3290 Dec 26 j 22:03	0°ਤ		max. Earth dist.	-3285 Jun 25 j 03:24	0°II	2.07121110
evening set	-3289 Jan 13 j 09:36	13°る17'33		morning rise	-3285 Jul 25 j 01:22	19° Ⅱ 07'55	
evening set	-3289 Feb 04 j 19:27	0° ≈		morning rise	-	0°©	
	-3289 FCU 04 J 19.27	0 &			-3285 Aug 10 j 22:54		
. ,.	2200 M 14:20 42	27025102	0045101		-3285 Sep 26 j 02:54	0° Ω	
conjunction	-3289 Mar 14 j 20:43	27°≈25'03			-3285 Nov 10 j 14:16	0° m)	
minimum elong	-3289 Mar 14 j 22:52	27°≈28'50	0°45'03		-3285 Dec 25 j 16:51	0∘ 亚	
T 4 F	-3289 Mar 18 j 12:53	0° \	0.54505.444		-3284 Feb 09 j 06:09	0°M	
max. Earth dist.	-3289 Apr 18 j 08:57		2.54725 AU	desc. node	-3284 Mar 17 j 02:42	23° M .03'41	
	-3289 May 01 j 08:30	0° Υ			-3284 Mar 29 j 01:41	0° ∡ ¹	
morning rise	-3289 May 09 j 09:46	5° Y 21'41		retrograde	-3284 Jun 06 j 03:21	24° ∡ ¹07'00	
asc. node	-3289 Jun 04 j 20:24	22° Y 40'45		min. Earth dist.	-3284 Jul 03 j 05:21	19° ∤ 741'01 –	
	-3289 Jun 16 j 05:23	0°8		greatest brilliancy	-3284 Jul 07 j 00:45	18° ∡ 736'34	-2.8m
	-3289 Aug 03 j 01:15	$\Pi^{\circ}0$		opposition	-3284 Jul 08 j 02:32	18° ∡ 18'19	-6°26'54
	-3289 Sep 22 j 11:07	0ಂಣ		direct	-3284 Aug 06 j 23:38	13° ∡ 08'47	
	-3289 Nov 18 j 19:35	$0 ^{\circ} \Omega$			-3284 Oct 03 j 11:41	0°ಕ	
retrograde	-3288 Jan 18 j 21:05	16° Ω 39'28			-3284 Nov 26 j 00:05	0°≈	
opposition	-3288 Feb 24 j 00:10	8° Ω 58'49	4°39'15		-3283 Jan 13 j 13:31	0° ∀	
greatest brilliancy	-3288 Feb 25 j 07:14	8° Ω 30′28	-1.9m	asc. node	-3283 Jan 24 j 13:58	6° ¥ 53'52	
min. Earth dist.	-3288 Mar 02 j 18:45	6° Ω 09'17	0.54670 AU		-3283 Mar 02 j 10:41	0 ° Υ	
	-3288 Mar 27 j 20:40	30° ₹ ∽			-3283 Apr 19 j 07:58	$_{0\circ}$ 8	
direct	-3288 Apr 03 j 17:18	29° 5 40'59		evening set	-3283 May 30 j 13:08	25° 8 58'07	
	-3288 Apr 10 j 16:17	$0^{\circ}\Omega$		•	-3283 Jun 05 j 21:37	$\Pi^{\circ}0$	
desc. node	-3288 Jun 12 j 02:17	23° Ω 15′04		max. Earth dist.	-3283 Jul 02 j 08:24		2.65235 AU
	-3288 Jun 23 j 14:41	0° m)			3		
	-3288 Aug 07 j 16:22	0∘ <u>v</u>		conjunction	-3283 Jul 15 j 23:38	25° Ⅱ 44'01	1°09'23
	-3288 Sep 17 j 08:18	0° M		minimum elong	-3283 Jul 15 j 23:06	25° I I43'10	1°09'29
	-3288 Oct 26 j 15:58	0° ⊼ ⊓		minimum ciong	-3283 Jul 22 j 12:54	0°99	1 0,2,
	-3288 Dec 05 j 04:00	0°ਤ		morning rise	-3283 Aug 30 j 10:38	25°9544'34	
	-3287 Jan 14 j 19:59	0° ≈		morning risc	-3283 Sep 05 j 18:23	0°Ω	
	-3287 Feb 26 j 06:02	0° ∺			-3283 Oct 19 j 10:01	0° m)	
evening set	-3287 Mar 09 j 10:30	7° ∺ 41'36			-3283 Nov 30 j 15:19	0∘ ত اللا	
evening set	·	0° Υ			-3282 Jan 10 j 18:32	0 == 0° M	
aca mada	-3287 Apr 11 j 13:36	6° Υ '42'20		desc. node	-3282 Feb 02 j 02:52	16°M28'56	
asc. node	-3287 Apr 21 j 17:08	6 1 42 20		desc. node	3		
:	2207 A 20: 10.55	1200020120	0005115		-3282 Feb 20 j 10:36	0° ∡ ¹	
conjunction	-3287 Apr 30 j 18:55	12° Y 39'39	0°05'15		-3282 Apr 02 j 19:02	0° ට	
minimum elong	-3287 Apr 30 j 18:42	12° Y 39'18	0°05'17		-3282 May 17 j 13:27	0° ≈	
behind sun begin	-3287 Apr 29 j 22:50	12° Y ′06'49			-3282 Jul 28 j 16:35	0° \	
behind sun end	-3287 May 01 j 14:34	13° Y 11'45		retrograde	-3282 Aug 03 j 15:09	0° ¥ 15'21	
max. Earth dist.	-3287 May 16 j 03:59		2.63578 AU		-3282 Aug 09 j 12:05	30°R≈	
	-3287 May 27 j 12:22	0°8		min. Earth dist.	-3282 Sep 02 j 10:42		0.50075 AU
morning rise	-3287 Jun 18 j 09:26	14° 8 00'56		greatest brilliancy	-3282 Sep 09 j 04:03	21° ≈ 41'32	
	-3287 Jul 13 j 13:35	Π °0		opposition	-3282 Sep 10 j 05:26	21° ≈ 18′05	-4°08'30
	-3287 Aug 30 j 07:09	0 \circ \odot		direct	-3282 Oct 14 j 05:30	13° ≈ 59'53	
	-3287 Oct 17 j 20:42	0 \circ Ω			-3282 Dec 11 j 09:10	0° ∀	
	-3287 Dec 07 j 17:17	0° m)		asc. node	-3282 Dec 12 j 13:10	0°) 31′54	
	-3286 Feb 06 j 22:10	0∘ 亚			-3281 Feb 06 j 21:21	0° Y	
retrograde	-3286 Mar 19 j 20:58	8° ≏ 40'02			-3281 Mar 30 j 04:10	9° 8	
opposition	-3286 Apr 20 j 19:20	2° £ 56'39	0°37'15		-3281 May 18 j 03:56	Π \circ 0	
greatest brilliancy	-3286 Apr 21 j 00:25	2° ₽ 52'48	-2.7m		-3281 Jul 04 j 04:53	0ංම	
min. Earth dist.	-3286 Apr 27 j 20:24	0° ഫ 49'33	0.41860 AU	evening set	-3281 Jul 08 j 02:01	2° © 32'05	
desc. node	-3286 Apr 30 j 02:13	0° ჲ 10'50		max. Earth dist.	-3281 Jul 28 j 22:41	16° ഇ 20'14	2.58149 AU
	-3286 Apr 30 j 17:42	30° ₽, M)			-3281 Aug 18 j 03:35	$0^{\circ}\Omega$	
direct	-3286 May 25 j 03:05	26° Mp 12'38					
	-3286 Jun 18 j 05:34	0∘ ⊽		conjunction	-3281 Aug 24 j 19:02	4° Ω 33'38	1°03'04
	-3286 Aug 16 j 16:27	0°M		minimum elong	-3281 Aug 24 j 20:14	4° Ω 35'42	1°03'09
	-3286 Sep 30 j 02:28	0° ∡ ¹		Č	-3281 Sep 29 j 23:55	0° m/	
	-3200 SCP 30 1 02.20			morning rise		-•	
		0°ಕ		11101111112 1150	-3281 Oct 13 1 01:20	9°11025'06	
	-3286 Nov 11 j 12:20	್ಲಿ 0°≈		morning risc	-3281 Oct 13 j 01:20 -3281 Nov 10 j 00:37	9° ™ 25'06 0° ₽	
	-3286 Nov 11 j 12:20 -3286 Dec 24 j 05:41	0° ≈		morning risc	-3281 Nov 10 j 00:37	0∘ ⊽	
asc node	-3286 Nov 11 j 12:20 -3286 Dec 24 j 05:41 -3285 Feb 06 j 04:28	0° ∺		-	-3281 Nov 10 j 00:37 -3281 Dec 19 j 17:25	0° ™	
asc. node	-3286 Nov 11 j 12:20 -3286 Dec 24 j 05:41 -3285 Feb 06 j 04:28 -3285 Mar 09 j 14:51	0° ≈ 0° 光 20° ਮ 52'07		desc. node	-3281 Nov 10 j 00:37 -3281 Dec 19 j 17:25 -3281 Dec 21 j 01:23	0° ቤ 1° ጤ 01'06	
	-3286 Nov 11 j 12:20 -3286 Dec 24 j 05:41 -3285 Feb 06 j 04:28 -3285 Mar 09 j 14:51 -3285 Mar 23 j 13:51	0°≈ 0°¥ 20°¥52'07 0°Υ		-	-3281 Nov 10 j 00:37 -3281 Dec 19 j 17:25 -3281 Dec 21 j 01:23 -3280 Jan 27 j 18:26	0° ™ 0° ™ 1° ™ 01'06 0° <i>×</i>	
asc. node evening set	-3286 Nov 11 j 12:20 -3286 Dec 24 j 05:41 -3285 Feb 06 j 04:28 -3285 Mar 09 j 14:51 -3285 Mar 23 j 13:51 -3285 Apr 22 j 14:32	0°≈ 0°₩ 20°₩52'07 0°Υ 19°Υ25'06		-	-3281 Nov 10 j 00:37 -3281 Dec 19 j 17:25 -3281 Dec 21 j 01:23 -3280 Jan 27 j 18:26 -3280 Mar 07 j 00:02	0° ट 0° ड 0°ड 0°ड	
	-3286 Nov 11 j 12:20 -3286 Dec 24 j 05:41 -3285 Feb 06 j 04:28 -3285 Mar 09 j 14:51 -3285 Mar 23 j 13:51	0°≈ 0°¥ 20°¥52'07 0°Υ		-	-3281 Nov 10 j 00:37 -3281 Dec 19 j 17:25 -3281 Dec 21 j 01:23 -3280 Jan 27 j 18:26 -3280 Mar 07 j 00:02 -3280 Apr 16 j 12:56	0°™ 1°™01'06 0°₹ 0°उ 0°≈	
evening set	-3286 Nov 11 j 12:20 -3286 Dec 24 j 05:41 -3285 Feb 06 j 04:28 -3285 Mar 09 j 14:51 -3285 Mar 23 j 13:51 -3285 Apr 22 j 14:32 -3285 May 09 j 02:47	0°≈ 0° ₩ 20° ₩ 52'07 0° Υ 19° Υ 25'06 0° ℧	0°47'14	-	-3281 Nov 10 j 00:37 -3281 Dec 19 j 17:25 -3281 Dec 21 j 01:23 -3280 Jan 27 j 18:26 -3280 Mar 07 j 00:02 -3280 Apr 16 j 12:56 -3280 May 30 j 04:12	0°™ 0°™ 0°™ 0°≈ 0°≈ 0°÷	
	-3286 Nov 11 j 12:20 -3286 Dec 24 j 05:41 -3285 Feb 06 j 04:28 -3285 Mar 09 j 14:51 -3285 Mar 23 j 13:51 -3285 Apr 22 j 14:32	0°≈ 0°₩ 20°₩52'07 0°Υ 19°Υ25'06		-	-3281 Nov 10 j 00:37 -3281 Dec 19 j 17:25 -3281 Dec 21 j 01:23 -3280 Jan 27 j 18:26 -3280 Mar 07 j 00:02 -3280 Apr 16 j 12:56	0°™ 1°™01'06 0°₹ 0°उ 0°≈	

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 13 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -3400 i	n astronomical cou	unting style is the year	3401 BCE in historical c	ounting style.	
min. Earth dist.	-3280 Oct 18 j 06:06		0.61115 AU		-3274 Jan 03 j 12:31	8°0	
opposition	-3280 Oct 23 j 00:49	5° Y 22'30			-3274 Feb 12 j 05:24	0° ≈	
greatest brilliancy	-3280 Oct 22 j 23:51	5° Y 23′27	-1.6m				
asc. node	-3280 Oct 29 j 12:36	2° Y 51′21		conjunction	-3274 Feb 20 j 04:18	5° ≈ 51'34	
	-3280 Nov 06 j 22:50	30° ₹		minimum elong	-3274 Feb 20 j 06:25	5°≈55'27	1°00'22
direct	-3280 Nov 29 j 19:27	26°) 33′10			-3274 Mar 25 j 18:23	0° ∀	
	-3280 Dec 24 j 17:03	0° Ƴ		max. Earth dist.	-3274 Apr 03 j 22:59		2.49959 AU
	-3279 Mar 04 j 23:18	0° B		morning rise	-3274 Apr 20 j 19:35	18°) €03'45	
	-3279 Apr 26 j 21:09	0°II		,	-3274 May 08 j 11:32	0°Υ 28°Υ43'34	
	-3279 Jun 14 j 06:01 -3279 Jul 29 j 11:23	0 ಂ Ω		asc. node	-3274 Jun 21 j 11:12	28° 1°43°34 0° と	
evening set	-3279 Jul 29 j 11.23 -3279 Aug 18 j 22:42	14° Ω 12'51			-3274 Jun 23 j 11:12 -3274 Aug 10 j 22:51	0°II	
max. Earth dist.	-3279 Sep 03 j 00:14		2.46734 AU		-3274 Oct 02 j 15:54	0°©	
max. Dartii dist.	-3279 Sep 10 j 01:05	0° m)	2.10731710		-3274 Dec 19 j 03:58	0°Ω	
	5277 5 0 p 10 j 01.00	v x		retrograde	-3274 Dec 31 j 15:41	0° Ω 55'01	
conjunction	-3279 Oct 11 j 00:43	22° m 51'36	0°18'28		-3273 Jan 12 j 15:50	30° ₹©	
minimum elong	-3279 Oct 11 j 01:50	22° m 53'41		opposition	-3273 Feb 06 j 22:20	22° © 41'10	4°59'04
_	-3279 Oct 20 j 12:02	0∘ ⊽		greatest brilliancy	-3273 Feb 08 j 00:47	22°516'11	-1.6m
desc. node	-3279 Nov 06 j 23:13	13° ≏ 19'46		min. Earth dist.	-3273 Feb 13 j 11:16	20°913'22	0.59034 AU
	-3279 Nov 28 j 12:25	0°M		direct	-3273 Mar 19 j 13:24	12° 9 57'45	
morning rise	-3279 Dec 09 j 10:55	8°M31'43			-3273 May 17 j 00:13	$0^{\circ}\Omega$	
	-3278 Jan 05 j 21:21	0° ∡ ¹		desc. node	-3273 Jun 29 j 18:40	25° Ω 20'32	
	-3278 Feb 13 j 11:29	0°ಕ			-3273 Jul 06 j 21:35	0° m	
	-3278 Mar 25 j 04:16	0° ≈			-3273 Aug 18 j 15:16	0∘ ⊽	
	-3278 May 05 j 22:56	0° ∀			-3273 Sep 27 j 09:39	0° M ₊	
	-3278 Jun 20 j 02:35	0° Υ			-3273 Nov 05 j 04:18	0° ∡ ¹	
	-3278 Aug 11 j 03:58	0°8			-3273 Dec 14 j 05:51	0°ප	
asc. node	-3278 Sep 16 j 13:27	15° 8 32'23		. ,	-3272 Jan 23 j 12:16	0°≈	
retrograde	-3278 Oct 18 j 18:47	21° 8 17'23	2024140	evening set	-3272 Feb 18 j 09:31	18°≈37'42	
opposition min. Earth dist.	-3278 Nov 27 j 20:24	11° 8 28'56 11° 8 54'17	2°34'40 0.66771 AU		-3272 Mar 05 j 13:44	0° ℋ	
greatest brilliancy	-3278 Nov 26 j 19:08 -3278 Nov 27 j 16:50	11° 8 32'30	-1.4m	conjunction	-3272 Apr 13 j 12:07	26° ∺ 35'01	0°14'27
direct	-3277 Jan 07 j 00:21	1° 8 49'42	-1.4111	minimum elong	-3272 Apr 13 j 12:07	26°\(\frac{1}{3501}\)	
direct	-3277 Apr 02 j 00:01	0°Ⅱ		behind sun begin	-3272 Apr 13 j 03:57	26° ∺ 21'21	0 1427
	-3277 May 24 j 12:11	0°©		behind sun end	-3272 Apr 13 j 21:40	26° \ 51'01	
	-3277 Jul 09 j 23:12	0°N		0	-3272 Apr 18 j 14:48	0°Υ	
	-3277 Aug 21 j 19:06	0° m)		max. Earth dist.	-3272 May 05 j 23:34	11° Ƴ 29'27	2.60696 AU
desc. node	-3277 Sep 24 j 22:10	25° m/18'10		asc. node	-3272 May 08 j 09:54	13° Y 05′11	
	-3277 Oct 01 j 02:36	0∘ ⊽		morning rise	-3272 Jun 03 j 07:10	29° Ƴ 54'10	
evening set	-3277 Oct 11 j 23:01	8° 亞 18'50			-3272 Jun 03 j 10:47	$0^{\circ}S$	
	-3277 Nov 08 j 20:11	0° M.			-3272 Jul 20 j 16:02	Π °0	
					-3272 Sep 07 j 02:36	0 \circ	
conjunction	-3277 Dec 14 j 04:57	27°M50'52			-3272 Oct 27 j 14:02	0 $^{\circ}$ Ω	
minimum elong	-3277 Dec 14 j 01:44	27° M 44'32	0°50'56		-3272 Dec 23 j 19:36	0° m)	
	-3277 Dec 16 j 22:32	0° ∡ ¹		retrograde	-3271 Feb 21 j 04:03	16° Mp 03'53	
max. Earth dist.	-3276 Jan 05 j 16:09		2.37742 AU	opposition	-3271 Mar 26 j 20:09	9° m/30'50	2°55'11
	-3276 Jan 24 j 07:50	0°る 20°る54'19		greatest brilliancy	-3271 Mar 27 j 20:42	9° Mp 10'28	-2.3m
morning rise	-3276 Feb 20 j 16:54 -3276 Mar 03 j 20:29	20° ⇔		min. Earth dist. direct	-3271 Apr 04 j 07:29 -3271 May 02 j 21:44	6° Mp 42'42 1° Mp 30'22	0.46749 AU
	-3276 Apr 14 j 06:11	0 ≈ 0° ∺		desc. node	-3271 May 02 j 21:44 -3271 May 16 j 18:32	2° Mp 48'21	
	-3276 Apr 14 j 00.11 -3276 May 28 j 03:28	0° Υ		desc. node	-3271 Jul 17 j 09:06	ე∘ 亞	
	-3276 Jul 14 j 07:01	0°8			-3271 Aug 31 j 03:25	0° ™	
asc. node	-3276 Aug 03 j 12:53	12° 8 02'28			-3271 Oct 11 j 08:24	0° ⊼ ¹	
	-3276 Sep 05 j 06:58	0°II			-3271 Nov 21 j 02:38	0°ප	
retrograde	-3276 Nov 21 j 21:55	24° Ⅱ 54'37			-3270 Jan 01 j 17:54	0° ≈	
opposition	-3276 Dec 31 j 03:27	15° Ⅱ 41'01	4°24'16		-3270 Feb 13 j 22:08	0° ∀	
greatest brilliancy	-3276 Dec 31 j 11:45	15° Ⅱ 32'48	-1.3m	asc. node	-3270 Mar 26 j 07:40	27°) €03'34	
min. Earth dist.	-3275 Jan 02 j 21:59	14° Ⅲ 35′20	0.66115 AU		-3270 Mar 30 j 18:50	0° Υ	
direct	-3275 Feb 10 j 08:49	5° Ⅱ 40'36		evening set	-3270 Apr 06 j 07:47	4° Ƴ 17'26	
	-3275 Apr 27 j 00:53	0° ©			-3270 May 16 j 00:22	0° 8	
	-3275 Jun 17 j 02:02	0 $^{\circ}$ Ω					
	-3275 Jul 31 j 06:12	0° m)		conjunction	-3270 May 25 j 14:46	6° 8 09'24	
desc. node	-3275 Aug 11 j 20:36	8° m 20'43		minimum elong	-3270 May 25 j 13:39	6° 8 07'36	
	-3275 Sep 09 j 23:50	ია ო 0∘ ⊽		max. Earth dist.	-3270 May 31 j 05:07		2.66373 AU
	-3275 Oct 18 j 20:22	0°M 0°. 7			-3270 Jul 01 j 23:24	0°Ⅱ 5°Ⅲ42!20	
evening set	-3275 Nov 26 j 00:23 -3275 Dec 18 j 04:08	0° ∡¹ 17° ∡¹ 20'30		morning rise	-3270 Jul 10 j 23:16 -3270 Aug 18 j 00:49	5°∏43'39 0°©	
evening set	-3213 Dec 16 J 04.08	17 8.2030			-3210 Aug 10 J 00.49	وت ∪	

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 14 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3270 Oct 03 j 21:01 $0^{\circ}\Omega$ -3264 Jan 17 j 16:00 $0^{\circ}\Upsilon$ -3270 Nov 19 j 16:39 0°m -3264 Mar 14 j 22:19 0°8 -3269 Jan 06 j 09:01 0∘**⊽** -3264 May 04 j 18:50 $0^{\circ}II$ -3264 Jun 21 j 12:01 0ಂತಾ -3269 Feb 26 j 22:20 o°m. -3269 Apr 03 j 19:46 -3264 Aug 01 j 08:19 desc. node 16°M22'37 evening set 27°907'02 retrograde -3269 May 07 j 19:41 23°M₀₀'12 -3264 Aug 05 j 13:39 0 \circ Ω -3269 Jun 07 j 05:26 max. Earth dist. opposition 17°M57'19 -4°29'29 -3264 Aug 17 j 07:50 8°**Ω**06'47 2.51622 AU -3269 Jun 07 j 04:17 greatest brilliancy 17°M58'05 -2.9m -3264 Sep 17 j 05:16 0° m min. Earth dist. -3269 Jun 07 j 13:06 17°M52'13 0.37668 AU 0°40'49 direct -3269 Jul 07 j 12:04 12°M53'34 conjunction -3264 Sep 20 j 15:57 2°m/29'29 -3269 Sep 02 j 00:59 0°**∡**7 minimum elong -3264 Sep 20 j 17:41 2° m 32'38 0°40'51 -3269 Oct 23 j 06:01 0°₹ -3264 Oct 27 j 20:48 0°Ω -3269 Dec 08 j 15:13 0°≈ morning rise -3264 Nov 14 j 04:57 13°**♀**09'24 -3268 Jan 23 j 14:52 0°**)**€ desc. node -3264 Nov 23 j 18:09 20°**£**28'29 asc. node -3268 Feb 11 j 05:24 12°**₭**01'57 -3264 Dec 06 j 02:33 0°M -3268 Mar 10 j 05:37 $0^{\circ}\Upsilon$ -3263 Jan 13 j 16:14 0°**⊼** -3268 Apr 26 j 11:05 0°8 -3263 Feb 21 j 10:19 0°ರ evening set -3268 May 15 j 16:21 12°810'25 -3263 Apr 02 j 07:27 0°≈ -3268 Jun 12 j 17:54 $0^{\circ}\Pi$ -3263 May 14 j 11:13 0°) max. Earth dist. -3268 Jun 23 j 01:40 6°**Д**35'20 2.66611 AU -3263 Jun 29 j 20:36 $0^{\circ}\Upsilon$ -3263 Aug 27 j 22:17 0°8 conjunction -3268 Jul 01 i 09:29 11°**II**55'18 1°03'40 -3263 Oct 03 i 03:28 8°801'53 asc. node -3268 Jul 01 i 08:29 11°**I**I53'42 1°03'46 -3263 Oct 05 i 07:38 8°803'45 minimum elong retrograde -3268 Jul 29 i 09:25 0000 -3263 Nov 09 j 18:33 30°RY -3268 Aug 15 j 12:06 11°9510'57 min. Earth dist. -3263 Nov 11 i 21:35 29°Υ09'04 0.65289 AU morning rise -3268 Sep 12 j 21:31 -3263 Nov 14 j 10:16 28°**Y**′08′05 1°36'06 $0^{\circ}\Omega$ opposition -3268 Oct 27 j 02:18 0°m greatest brilliancy -3263 Nov 14 j 05:58 28°Y12'25 -1 4m -3268 Dec 09 j 03:00 0∘**⊽** -3263 Dec 23 j 19:44 18° **Y**44'36 direct -3267 Jan 20 j 07:55 0°M -3262 Feb 10 j 11:13 0°8 -3267 Feb 18 j 19:20 21°M02'31 -3262 Apr 12 j 08:20 $0^{\circ}II$ desc. node -3267 Mar 03 j 10:45 -3262 Jun 01 j 15:24 0°×7 000 -3267 Apr 16 j 08:24 0°정 -3262 Jul 17 j 11:25 0° Ω -3267 Jun 09 j 15:45 0°≈ -3262 Aug 29 j 03:42 0° m -3267 Jul 14 j 17:58 -3262 Sep 19 j 01:01 retrograde 7°≈49'30 evening set 15° m 21'08 2°≈36'38 0.45037 AU -3267 Aug 11 j 12:13 -3262 Oct 08 j 11:54 min. Earth dist. 0∘ଫ -3267 Aug 18 j 01:19 greatest brilliancy 0°**≈**23'07 -2.4m desc. node -3262 Oct 11 j 15:37 2°**£**24'10 29°る53'05 -5°40'24 opposition -3267 Aug 19 j 12:22 max. Earth dist. -3262 Oct 16 j 14:53 6°**£**12'11 2.39409 AU -3267 Aug 19 j 04:16 30°Ŗ⋜ -3262 Nov 16 j 07:37 0°M direct -3267 Sep 20 j 18:48 23°る25'46 -3267 Oct 24 j 23:33 0°**≈** conjunction -3262 Nov 17 j 01:38 0°M35'16 -0°25'15 -3267 Dec 26 j 19:06 0°**)**€ -3262 Nov 16 j 23:41 0°M31'26 0°25'17 minimum elong -3267 Dec 29 j 04:36 1°\(\frac{1}{20}\)'11 -3262 Dec 24 j 11:47 0°**∡**7 asc. node -3266 Feb 16 j 11:26 $0^{\circ}\Upsilon$ -3261 Jan 22 j 23:42 23°**∡**¹04'57 morning rise -3266 Apr 07 j 00:07 0° 8 -3261 Jan 31 j 22:00 0°정 -3266 May 25 j 07:13 $\Pi^{\circ}0$ -3261 Mar 12 j 10:51 0°≈ -3266 Jun 22 j 20:31 18°**Ⅱ**09'53 -3261 Apr 22 j 21:25 0°) evening set $0^{\circ}\Upsilon$ -3266 Jul 11 i 03:02 -3261 Jun 06 i 00:54 max. Earth dist. -3266 Jul 17 j 21:34 4°526'02 2.61525 AU -3261 Jul 24 i 05:13 0°8 -3261 Aug 21 i 04:13 15°**8**35'44 asc. node -3266 Aug 08 j 16:15 18°952'46 1°09'32 -3261 Sep 20 j 10:19 $0^{\circ}II$ conjunction -3266 Aug 08 j 16:45 18°953'37 1°09'38 -3261 Nov 09 j 00:30 12°**Ⅱ**00'42 minimum elong retrograde -3266 Aug 25 j 03:19 $0^{\circ}\Omega$ -3261 Dec 18 j 17:06 2°II30'51 3°49'12 opposition -3266 Sep 24 j 20:31 21°Ω14'49 -3261 Dec 18 j 19:25 2°**I**I28'32 -1.3m morning rise greatest brilliancy -3266 Oct 07 j 05:45 0° m min. Earth dist. -3261 Dec 19 j 23:38 2°**Д**00'26 0.67135 AU -3266 Nov 17 j 15:23 0∘**⊽** -3261 Dec 25 j 02:12 30°R₩ -3266 Dec 27 j 18:31 0°M direct -3260 Jan 28 j 16:45 22°835'15 desc. node -3265 Jan 06 j 19:06 7°M35'35 -3260 Mar 06 j 18:30 $0^{\circ}II$ -3265 Feb 05 j 06:10 0° ×7 -3260 May 08 j 07:51 0ಂತಾ 0°₹ -3260 Jun 25 j 19:14 $0^{\circ}\Omega$ -3265 Mar 16 j 23:47 -3265 Apr 27 j 07:55 0°≈ -3260 Aug 08 j 06:22 0° m 0°**)**€ 14° m/49'05 -3265 Jun 12 j 03:14 desc. node -3260 Aug 28 j 13:20 -3265 Aug 30 j 05:16 29°**X**33'31 -3260 Sep 17 j 18:15 0∘**⊽** retrograde min. Earth dist. -3265 Oct 02 j 07:30 22°**升**12'53 0.57329 AU -3260 Oct 26 j 12:34 0°M opposition -3265 Oct 08 j 10:51 19°**)** 48'41 -1°39'52 evening set -3260 Nov 20 j 19:15 19°M53'40 greatest brilliancy -3265 Oct 08 j 02:37 19°**¥**56'43 -1.8m -3260 Dec 03 j 14:57 0°**∡**7 11°**)**€28'48 -3259 Jan 11 j 00:59 0°정 -3265 Nov 13 j 22:30

-3265 Nov 16 j 03:53

asc. node

11°**)** 30′40

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 15 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronom	nical year style is used: Th	ie year -3400 i	n astronomical co	unting style is the year	3401 BCE in historical c	counting style.	-
conjunction	-3259 Jan 25 j 17:04	11° る 15'05	-1°07'12	desc. node	-3254 Apr 20 j 11:30	22° ჲ 28'36	
minimum elong	-3259 Jan 25 j 17:16	11° る 15'29	1°07'18	opposition	-3254 May 06 j 21:35	18° ≏ 28'48	-1°09'36
	-3259 Feb 19 j 15:10	0° ≈		greatest brilliancy	-3254 May 07 j 02:31	18° ≏ 25'19	
max. Earth dist.	-3259 Mar 15 j 19:18		2.44767 AU	min. Earth dist.	-3254 May 12 j 04:23	16° ≏ 59'29	0.39665 AU
morning rise	-3259 Mar 30 j 18:17	28° ≈ 22'38		direct	-3254 Jun 08 j 10:41	12° ≏ 30'30	
	-3259 Apr 02 j 01:23	0° ∀			-3254 Aug 03 j 16:49	0°M	
	-3259 May 15 j 17:55	0° Υ			-3254 Sep 21 j 18:48	0° ∡ 7	
	-3259 Jun 30 j 23:31	0° 8			-3254 Nov 04 j 20:16	8°0	
asc. node	-3259 Jul 08 j 03:50	4° 8 29'46			-3254 Dec 18 j 11:25	0° ≈	
	-3259 Aug 19 j 12:14	0° I I		,	-3253 Jan 31 j 23:27	0°) {	
ratra ara da	-3259 Oct 15 j 14:32 -3259 Dec 15 j 05:58	0°ഇ 16° ഇ 28'26		asc. node	-3253 Feb 27 j 21:12	17°) 44'33 0° °	
retrograde opposition	-3258 Jan 22 j 10:46	7°\$47'29	1057105	evening set	-3253 Mar 18 j 17:17	28° Υ '08'23	
greatest brilliancy	-3258 Jan 23 j 06:16	7°528'38	-1.5m	evening set	-3253 May 01 j 12:54 -3253 May 04 j 10:55	0° 8	
min. Earth dist.	-3258 Jan 27 j 13:28	5°9549'08	0.62554 AU	max. Earth dist.	-3253 Jun 14 j 21:11		2.67178 AU
iiiii. Lattii dist.	-3258 Feb 14 j 11:28	30°RⅡ	0.02334 AO	max. Lartii dist.	-3233 Juli 14 j 21.11	20 023 13	2.0/1/6 AC
direct	-3258 Mar 04 j 13:37	27° Ⅱ 50'49		conjunction	-3253 Jun 17 j 22:02	28° 8 19'21	0°54'14
	-3258 Mar 23 j 14:55	0°9		minimum elong	-3253 Jun 17 j 20:47	28° 8 17'21	
	-3258 May 31 j 05:26	0°N			-3253 Jun 20 j 13:08	0°II	
desc. node	-3258 Jul 16 j 12:08	29° Ω 40'47		morning rise	-3253 Aug 02 j 03:27	27° Ⅱ 19'13	
	-3258 Jul 16 j 23:17	0° m)			-3253 Aug 06 j 06:57	0ಂಣ	
	-3258 Aug 27 j 13:57	0∘ ⊽			-3253 Sep 21 j 04:41	$0^{\circ}\Omega$	
	-3258 Oct 05 j 20:16	0° M			-3253 Nov 05 j 03:45	0° ™	
	-3258 Nov 13 j 06:44	0° ∡ 7			-3253 Dec 19 j 08:47	0∘ ⊽	
	-3258 Dec 22 j 00:59	0°ප			-3252 Feb 01 j 07:56	0° M	
evening set	-3257 Jan 27 j 03:00	27° る 08'00		desc. node	-3252 Mar 07 j 13:22	23°M36'02	
	-3257 Jan 31 j 00:23	0° ≈			-3252 Mar 17 j 10:06	0° ∡ ¹	
	-3257 Mar 13 j 19:19	0° ∀			-3252 May 08 j 23:17	0° ろ	
				retrograde	-3252 Jun 21 j 10:34	11° る 16'43	
conjunction	-3257 Mar 26 j 13:39	8° ¥ 52'41		min. Earth dist.	-3252 Jul 17 j 23:36	6° る 45'00	0.40543 AU
minimum elong	-3257 Mar 26 j 15:22	8° ¥ 55'39		greatest brilliancy	-3252 Jul 23 j 06:31	5° る 09'36	
max. Earth dist.	-3257 Apr 25 j 15:41		2.57060 AU	opposition	-3252 Jul 24 j 16:48	4°る43'35	-6°35'34
	-3257 Apr 26 j 15:46	0°Υ 140 % 55110		ľ	-3252 Aug 13 j 02:51	30°₹ ⋌ ¹	
morning rise	-3257 May 19 j 05:04	14° Υ 55'19 19° Υ 23'44		direct	-3252 Aug 24 j 06:59	29° х 10'45	
asc. node	-3257 May 26 j 01:30 -3257 Jun 11 j 11:01	0° 8			-3252 Sep 04 j 14:20 -3252 Nov 17 j 01:16	% ⊗°0 š0	
	-3257 Jul 28 j 23:45	0°II			-3251 Jan 07 j 04:12	0 ∞ 0° ∺	
	-3257 Sep 16 j 11:46	0 . ಪ		asc. node	-3251 Jan 14 j 19:03	4°) 38′00	
	-3257 Nov 09 j 07:01	0°N		asc. node	-3251 Feb 25 j 01:53	0°Υ	
retrograde	-3256 Jan 30 j 09:40	26° Ω 55'43			-3251 Apr 14 j 10:54	0°8	
opposition	-3256 Mar 05 j 18:09	19° Ω 37'05	4°13'25		-3251 Jun 01 j 06:04	0°II	
greatest brilliancy	-3256 Mar 07 j 01:28	19° Ω 09'18	-2.0m	evening set	-3251 Jun 08 j 00:44	4° Ⅱ 18′05	
min. Earth dist.	-3256 Mar 14 j 00:35	16° Ω 41'38	0.51941 AU	max. Earth dist.	-3251 Jul 07 j 22:56	23° Ⅱ 29'57	2.64137 AU
direct	-3256 Apr 13 j 17:33	10° Ω 41'01			-3251 Jul 17 j 22:58	0 \circ \mathfrak{s}	
desc. node	-3256 Jun 02 j 10:58	24° Ω 19′52					
	-3256 Jun 13 j 14:05	0° m		conjunction	-3251 Jul 24 j 11:14	4° © 15'34	1°10'46
	-3256 Jul 31 j 15:27	0∘ ⊽		minimum elong	-3251 Jul 24 j 11:03	4° © 15'17	1°10'53
	-3256 Sep 11 j 06:04	0° M			-3251 Sep 01 j 02:34	0 ° Ω	
	-3256 Oct 21 j 01:25	0° ∡ ¹		morning rise	-3251 Sep 08 j 08:23	4° Ω 55'09	
	-3256 Nov 29 j 21:27	600			-3251 Oct 14 j 13:31	0° my	
	-3255 Jan 09 j 19:38	0° ≈			-3251 Nov 25 j 11:20	0∘ 亚	
	-3255 Feb 21 j 10:17	0°) €			-3250 Jan 05 j 05:06	0°M	
evening set	-3255 Mar 19 j 23:03	18°) €02'55 0° °		desc. node	-3250 Jan 23 j 12:19	13°M39'13	
aga mada	-3255 Apr 06 j 21:10	3° Υ 22'11			-3250 Feb 14 j 08:56	0° ∡ ¹ 0° ≥	
asc. node	-3255 Apr 11 j 23:31	3 1 44 11			-3250 Mar 26 j 22:57 -3250 May 08 j 21:25	% ⊗°0 š0	
conjunction	-3255 May 10 j 01:34	21° Y ′43'17	0°15'57		-3250 Jun 29 j 18:47	0 ∞ 0° ∺	
minimum elong	-3255 May 10 j 01:55	21° Υ 4317	0°15'59	retrograde	-3250 Aug 13 j 19:19	11° 米 51'51	
max. Earth dist.	-3255 May 21 j 21:12		2.64800 AU	min. Earth dist.	-3250 Sep 13 j 19:06		0.52774 AU
diot.	-3255 May 22 j 21:14	0°8		greatest brilliancy	-3250 Sep 20 j 08:10	2° ¥ 50′08	
morning rise	-3255 Jun 26 j 17:27	22° 8 17'07		opposition	-3250 Sep 21 j 02:53	2°) 32'24	
Č	-3255 Jul 08 j 20:49	0°Щ		• •	-3250 Sep 28 j 02:09	30°R≈	
	-3255 Aug 25 j 07:25	0ಂತಾ		direct	-3250 Oct 26 j 01:41	24° ≈ 49'59	
	-3255 Oct 12 j 02:51	$0^{\circ}\Omega$			-3250 Nov 25 j 14:00	0°) €	
	-3255 Nov 30 j 01:31	0° m/		asc. node	-3250 Dec 02 j 18:34	2° ¥ 22'40	
	-3254 Jan 22 j 04:27	0∘ ⊽			-3249 Jan 30 j 21:31	0° Y	
retrograde	-3254 Apr 05 j 19:56	23° ≏ 47'11			-3249 Mar 24 j 17:14	0° 8	

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 16 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. morning rise -3249 May 13 j 06:46 $0^{\circ}\Pi$ -3244 Mar 06 j 16:24 5°≈38'00 -3249 Jun 29 j 13:24 0ಂತಾ -3244 Apr 09 j 10:24 0°**₩** -3249 Jul 17 j 01:05 11°528'43 -3244 May 23 j 04:11 $0^{\circ}\Upsilon$ evening set max. Earth dist. -3244 Jul 08 j 20:31 0°8 -3249 Aug 04 j 19:52 24°9503'39 2.55993 AU -3244 Jul 24 j 19:00 9°842'43 -3249 Aug 13 j 13:20 0° Ω asc. node -3244 Aug 29 j 03:12 Π $^{\circ}0$ 14°**Ω**29'09 conjunction -3249 Sep 03 j 11:29 0°56'44 -3244 Nov 07 j 10:53 0ಂತಾ -3249 Sep 03 j 13:01 minimum elong 14°**Ω**31′50 0°56'47 retrograde -3244 Nov 30 j 03:23 2°952'56 -3249 Sep 25 j 08:17 0° m -3244 Dec 21 j 07:13 30°Ŗ**Ⅱ** morning rise -3249 Oct 24 j 07:15 21°M 07'11 opposition -3243 Jan 08 j 01:41 23°II49'50 4°39'45 -3249 Nov 05 j 05:40 0∘**⊽** greatest brilliancy -3243 Jan 08 j 13:53 23°**Ⅲ**37′52 -1.4m -3243 Jan 11 j 16:40 desc. node -3249 Dec 11 j 10:40 27°**₽**27'04 min. Earth dist. 22°**Ⅲ**24'35 0.65114 AU -3249 Dec 14 j 18:23 0° M direct -3243 Feb 18 j 08:21 13°**Ⅲ**48'51 -3248 Jan 22 j 14:53 0°**√** -3243 Apr 18 j 01:15 0ಂತಾ -3248 Mar 01 j 15:22 0°ರ -3243 Jun 11 j 00:15 $0^{\circ}\Omega$ -3248 Apr 10 j 20:44 0°**≈** -3243 Jul 25 j 21:41 0° m -3248 May 23 j 17:56 0°**)**€ desc. node -3243 Aug 02 j 04:48 5° Mp 11'06 -3248 Jul 11 j 15:47 $0^{\circ}\Upsilon$ -3243 Sep 04 j 21:37 0°Ω retrograde -3248 Sep 21 j 11:39 24° **Y**07' 50 -3243 Oct 13 j 21:12 0°M asc. node -3248 Oct 19 j 19:07 18°**Y**41'43 -3243 Nov 21 j 03:01 0°**∡**7 min. Earth dist. -3248 Oct 27 j 10:39 15°**Y**46′03 0.62845 AU -3243 Dec 29 j 16:40 0°궁 opposition -3248 Oct 31 i 10:19 14°**Y**10′21 0°27'56 -3242 Jan 02 i 06:13 2°る44'06 evening set greatest brilliancy -3248 Oct 31 i 08:28 14°**Υ**12'12 -3242 Feb 07 j 11:07 0°≈ -1.6m direct -3248 Dec 08 j 20:10 5°**℃**07'23 -3247 Feb 25 j 11:39 0° 8 -3242 Mar 05 i 09:02 18°≈51'55 -0°52'13 conjunction -3247 Apr 21 j 08:31 $0^{\circ}II$ -3242 Mar 05 j 11:22 18°≈56'06 0°52'17 minimum elong -3247 Jun 09 j 07:58 0ಂತಾ -3242 Mar 21 j 01:12 0°\ -3247 Jul 24 j 18:37 $0^{\circ}\Omega$ -3242 Apr 12 j 12:33 15°**)** 36'30 2.52677 AU max. Earth dist. -3242 May 01 j 15:39 -3247 Aug 29 j 15:10 25°**Ω**06'49 28° ¥ 35'02 evening set morning rise -3247 Sep 05 j 09:46 -3242 May 03 j 18:22 0° 0° mb -3242 Jun 11 j 17:52 25°Y35'18 max. Earth dist. -3247 Sep 14 j 19:34 6° m 51'24 2.43998 AU asc. node -3247 Oct 15 j 19:59 -3242 Jun 18 j 14:51 0∘ଫ 0°8 -3242 Aug 05 j 15:38 $0^{\circ}\Pi$ -3247 Oct 23 j 14:31 5°**£**54'52 0°03'23 -3242 Sep 25 j 20:01 0ംഉ conjunction -3242 Nov 26 j 04:05 minimum elong -3247 Oct 23 j 14:46 5°**£**55'19 0°03'22 0 \circ Ω -3241 Jan 10 j 17:22 behind sun begin -3247 Oct 22 j 14:25 5°**₽**08'53 retrograde 10°**Ω**07'01 -3241 Feb 16 j 09:56 behind sun end -3247 Oct 24 j 15:06 6°**£**41'48 opposition 2°Ω10'42 4°50'26 desc. node -3247 Oct 28 j 09:15 9°**£**34'22 greatest brilliancy -3241 Feb 17 j 15:26 1°**Ω**43'20 -1.8m -3247 Nov 23 j 18:44 0° M -3241 Feb 22 j 06:50 30°Rூ morning rise -3247 Dec 24 j 23:11 24°M25'40 min. Earth dist. -3241 Feb 23 j 16:34 29°**©**29'10 0.56725 AU -3246 Jan 01 j 01:34 0°**√** direct -3241 Mar 28 j 14:56 22°539'21 -3246 Feb 08 j 13:30 0°る -3241 May 03 j 11:28 $0^{\circ}\Omega$ -3246 Mar 20 j 03:49 desc. node -3241 Jun 20 j 04:54 24°Ω06'35 0°≈ -3246 Apr 30 j 17:43 0°**)**€ -3241 Jun 29 j 17:01 0° m -3246 Jun 14 j 08:58 $0^{\circ}\Upsilon$ -3241 Aug 12 j 14:47 0°Ω 0°8 -3246 Aug 03 j 10:14 -3241 Sep 21 i 20:28 0°M asc. node -3246 Sep 06 j 19:30 16°**8**54'58 -3241 Oct 30 j 21:30 0°×7 retrograde -3246 Oct 26 j 12:05 29°810'14 -3241 Dec 09 i 03:41 0°정 -3246 Dec 05 i 11:41 19°**8**27'33 3°04'42 -3240 Jan 18 j 14:10 0°≈ opposition -3246 Dec 05 j 09:39 19°**8**29'35 -1.3m -3240 Feb 29 j 18:56 0° **H** greatest brilliancy -3246 Dec 05 j 06:26 19°**8**32'49 0.67170 AU -3240 Mar 01 j 01:52 0° ¥ 12'01 min. Earth dist. evening set -3245 Jan 15 j 00:10 9°841'18 -3240 Apr 13 j 22:26 $0^{\circ}\Upsilon$ direct $\mathbb{I}^{\circ 0}$ -3245 Mar 25 j 01:09 -3245 May 18 j 19:52 0000 conjunction -3240 Apr 23 j 13:36 6°Υ23'12 -0°02'58 -3245 Jul 04 j 21:39 $0^{\circ}\Omega$ -3240 Apr 23 j 13:43 6°**Y**23′25 0°02'58 minimum elong -3245 Aug 16 j 22:58 0° m -3240 Apr 22 j 16:45 5°**Y**48'47 behind sun begin desc. node -3245 Sep 15 j 06:56 21° m/38'02 -3240 Apr 24 j 10:42 6°Y58'01 behind sun end 9°**Υ**43'19 -3245 Sep 26 j 08:15 0∘<u>ଫ</u> -3240 Apr 28 j 15:01 asc. node -3245 Oct 26 j 02:06 22° 257'10 -3240 May 12 j 02:04 18°**Y**31'55 2.62401 AU evening set max. Earth dist. 0°M 0°8 -3245 Nov 04 j 02:21 -3240 May 29 j 18:51 -3240 Jun 12 j 01:16 8°**8**31'05 -3245 Dec 12 j 04:33 0° **₹** morning rise -3240 Jul 15 j 21:02 $0^{\circ}\Pi$ conjunction -3245 Dec 30 j 01:02 14°**∡**01'37 -1°00'51 -3240 Sep 01 j 20:53 0ಂತಾ minimum elong -3245 Dec 29 j 22:30 13°**∡** 56'40 1°00'57 -3240 Oct 21 j 03:09 0° Ω -3244 Jan 19 j 13:32 0°궁 -3240 Dec 12 j 23:44 0° m max. Earth dist. -3244 Feb 12 j 14:22 18°る23'18 2.39699 AU -3239 Mar 07 j 15:54 28° m/45'12 retrograde

-3239 Apr 09 j 08:51

opposition

22° m/39'24 1°44'51

-3244 Feb 28 j 01:52

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 17 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ne year -3400 i	in astronomical cou	unting style is the year	3401 BCE in historical c	ounting style.	
greatest brilliancy	-3239 Apr 09 j 23:43	22° m 27'38		conjunction	-3234 Aug 17 j 18:26	28° © 07'46	
min. Earth dist.	-3239 Apr 17 j 06:59	-	0.43960 AU	minimum elong	-3234 Aug 17 j 19:21	28° 5 09'20	1°06'34
desc. node	-3239 May 07 j 05:06	15° Mp 44'28			-3234 Aug 20 j 12:21	0 $^{\circ}$ Ω	
direct	-3239 May 14 j 23:49	15° m) 18'54			-3234 Oct 02 j 12:29	0° m	
	-3239 Jul 04 j 15:01	0∘ ⊽		morning rise	-3234 Oct 04 j 23:31	1° m/45'26	
	-3239 Aug 23 j 01:25	0°M			-3234 Nov 12 j 17:50	0∘ 亚	
	-3239 Oct 04 j 17:09	0° ∡ 7			-3234 Dec 22 j 15:38	0°M	
	-3239 Nov 15 j 05:40	% ⊗°0 š0		desc. node	-3234 Dec 28 j 04:22	4° ጤ 12'38 0° <i>ጆ</i>	
	-3239 Dec 27 j 09:05 -3238 Feb 08 j 21:39	0 ≈ 0° ∺			-3233 Jan 30 j 21:12	0°る	
asa nada	-3238 Mar 16 j 12:38	23°) 46'40			-3233 Mar 11 j 06:59 -3233 Apr 21 j 01:52	0° ≈	
asc. node	-3238 Mar 26 j 00:05	23 χ 4640 0° Υ			-3233 Apr 21 j 01.32 -3233 Jun 04 j 08:01	0 ≈ 0° ∺	
evening set	-3238 Apr 15 j 18:30	13° Υ 31'02			-3233 Jul 29 j 23:07	0°Υ	
evening set	-3238 May 11 j 08:49	0°8		retrograde	-3233 Sep 07 j 23:30	9° Υ 10'36	
	3230 May 11 J 00.19	ů O		min. Earth dist.	-3233 Oct 12 j 03:25	1° Υ 26'39	0.59514 AU
conjunction	-3238 Jun 03 j 06:00	14° 8 37'51	0°41'35	min. Eurin dist.	-3233 Oct 15 j 19:06	30° ₹	0.37311110
minimum elong	-3238 Jun 03 j 04:45	14° 8 35'50		opposition	-3233 Oct 17 j 13:02	29° ¥ 18′27	-0°50'10
max. Earth dist.	-3238 Jun 05 j 15:31		2.66897 AU	greatest brilliancy	-3233 Oct 17 j 09:26	29°) 22′01	
	-3238 Jun 27 j 08:29	0°II		asc. node	-3233 Nov 06 j 09:59	22°) (41'12	
morning rise	-3238 Jul 19 j 01:35	13° Ⅱ 51'22		direct	-3233 Nov 23 j 18:46	20°) 41′20	
C	-3238 Aug 13 j 06:33	0∘ ©			-3232 Jan 05 j 22:19	0° Y	
	-3238 Sep 28 j 17:25	$0^{\circ}\Omega$			-3232 Mar 08 j 14:22	0°8	
	-3238 Nov 13 j 17:55	0° m			-3232 Apr 29 j 14:01	$\Pi^{\circ}0$	
	-3238 Dec 29 j 19:19	0∘ ⊽			-3232 Jun 16 j 16:57	0 \circ \mathfrak{S}	
	-3237 Feb 15 j 05:22	0° M.			-3232 Jul 31 j 21:45	$0^{\circ}\Omega$	
desc. node	-3237 Mar 25 j 05:21	21°M46'13		evening set	-3232 Aug 11 j 04:52	7° Ω 05′21	
	-3237 Apr 11 j 07:12	0° ∡ ¹		max. Earth dist.	-3232 Aug 26 j 07:02	17° Ω 39′23	2.48954 AU
retrograde	-3237 May 25 j 07:06	10° ∡ 57'42			-3232 Sep 12 j 13:30	0° ™	
min. Earth dist.	-3237 Jun 22 j 14:17	6° ₹ 22'15	0.37906 AU				
opposition	-3237 Jun 25 j 09:04	5° ∡ ³36'57		conjunction	-3232 Oct 01 j 22:34	14° m 09'46	
greatest brilliancy	-3237 Jun 24 j 18:06	5° ∡ ¹47'06	-2.9m	minimum elong	-3232 Oct 02 j 00:04	14° m) 12'33	0°28'46
direct	-3237 Jul 25 j 03:03	0° ∡ ³37'24			-3232 Oct 23 j 03:17	0∘ ত	
	-3237 Oct 13 j 06:57	0°る		desc. node	-3232 Nov 14 j 02:20	16° ≏ 43'58	
	-3237 Dec 01 j 15:59	0° ≈		morning rise	-3232 Nov 28 j 01:35	27° △ 30'47	
	-3236 Jan 17 j 21:15	0°) {			-3232 Dec 01 j 06:34	0°M	
asc. node	-3236 Feb 01 j 11:23	9°){ 17'16			-3231 Jan 08 j 17:43	0° ∡ ¹	
	-3236 Mar 05 j 03:04	0° ∀			-3231 Feb 16 j 09:03	8°0	
avanina aat	-3236 Apr 21 j 16:26 -3236 May 24 j 05:49				-3231 Mar 28 j 02:41 -3231 May 08 j 23:13	0° ₩	
evening set	-3236 May 24 J 03.49 -3236 Jun 08 j 03:02	20 O 33 13			-3231 May 08 j 23.13 -3231 Jun 23 j 11:06	0° Υ	
max. Earth dist.	-3236 Jun 28 j 12:54		2.65960 AU		-3231 Juli 23 j 11:00 -3231 Aug 16 j 08:26	0°8	
max. Lattii uist.	-3230 Juli 20 J 12.34	13 1102 13	2.03700 AC	asc. node	-3231 Aug 10 j 08:20 -3231 Sep 23 j 10:42	13° 8 49'42	
conjunction	-3236 Jul 09 j 17:46	20° Ⅱ 14'49	1°07'27	retrograde	-3231 Oct 13 j 01:58	16° 8 08'39	
minimum elong	-3236 Jul 09 j 17:00	20° Ⅱ 13'36		min. Earth dist.	-3231 Nov 20 j 11:45	6° 8 57'37	0.66230 AU
g	-3236 Jul 24 j 18:56	0.2 2	1 0, 5.	opposition	-3231 Nov 22 j 04:40	6° 8 16'32	
morning rise	-3236 Aug 23 j 23:20	19° © 50'53		greatest brilliancy	-3231 Nov 22 j 00:24	6° 8 20'50	
8	-3236 Sep 08 j 03:56	$0^{\circ}\Omega$		8	-3231 Dec 09 j 13:15	30° ₽ Υ	
	-3236 Oct 22 j 02:00	0° m/		direct	-3230 Jan 01 j 01:01	26° Ƴ 43'41	
	-3236 Dec 03 j 15:52	0∘ ⊽			-3230 Jan 25 j 10:47	9° 8	
	-3235 Jan 14 j 05:47	0° M			-3230 Apr 05 j 20:15	Π °0	
desc. node	-3235 Feb 09 j 05:31	18°M56'03			-3230 May 27 j 09:04	0 \circ \odot	
	-3235 Feb 24 j 10:42	0° ∡ 7			-3230 Jul 12 j 14:42	0 $^{\circ}$ Ω	
	-3235 Apr 07 j 14:49	5°0			-3230 Aug 24 j 10:20	0° m)	
	-3235 May 24 j 14:22	0° ≈		evening set	-3230 Oct 01 j 15:54	28° m 23° 01	
retrograde	-3235 Jul 26 j 09:03	21° ≈ 25′18		desc. node	-3230 Oct 02 j 01:02	28° Mp 40'22	
min. Earth dist.	-3235 Aug 24 j 05:38	15° ≈ 44'13	0.47804 AU		-3230 Oct 03 j 18:55	0∘ ⊽	
greatest brilliancy	-3235 Aug 31 j 00:08	13° ≈ 19′05			-3230 Nov 11 j 13:51	0°M₊	
opposition	-3235 Sep 01 j 06:25	12° ≈ 51'57	-4°49'55	max. Earth dist.	-3230 Nov 19 j 16:25	6° M 21′33	2.37692 AU
direct	-3235 Oct 04 j 11:38	5°≈55'40					
_	-3235 Dec 17 j 22:52	0°) {		conjunction	-3230 Dec 02 j 03:02	16°M09'05	
asc. node	-3235 Dec 19 j 10:31	0°) (45'19		minimum elong	-3230 Dec 02 j 00:04	16°M03'14	0°40'44
	-3234 Feb 10 j 09:13	0°Ƴ			-3230 Dec 19 j 16:56	0° ∡ ¹	
	-3234 Apr 01 j 19:58	8°0			-3229 Jan 27 j 01:58	0°る	
avanie+	-3234 May 20 j 12:32	0°Ⅱ 26°Ⅲ46!12		morning rise	-3229 Feb 08 j 10:49	9° る 30'59	
evening set	-3234 Jul 01 j 12:47	26° ∏ 46′13 0° ©			-3229 Mar 07 j 13:44	0° ≈ 0° ∀	
max. Earth dist.	-3234 Jul 06 j 12:01 -3234 Jul 24 j 04:15		2.59753 AU		-3229 Apr 17 j 22:25 -3229 May 31 j 20:19	0° \ 0° Υ	
man. Barui Uist.	525+3u1 2+3 04.13	11 / CV 112	2.37133 AU		3227 Iviay 31 J 20.19	v I	

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, page 18 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3229 Jul 18 j 06:48 0°8 -3224 Nov 24 j 10:38 0°정 -3229 Aug 11 j 10:28 14°803'47 -3223 Jan 04 j 16:37 0°**≈** asc. node -3229 Sep 10 j 18:38 $0^{\circ}\Pi$ -3223 Feb 16 j 13:15 0°\ -3223 Mar 30 j 00:58 19°**Ⅱ**49'32 27° ¥ 55'39 -3229 Nov 16 j 22:10 retrograde evening set -3223 Apr 02 j 05:19 0°Y01'46 -3229 Dec 26 j 09:32 10°**Ⅲ**28′19 4°10'35 opposition asc. node $0^{\circ}\Upsilon$ greatest brilliancy -3229 Dec 26 j 15:02 10°**I**I22'52 -1.3m -3223 Apr 02 j 04:14 0°8 min. Earth dist. -3229 Dec 28 j 12:16 9°**Ⅲ**38′03 0.66704 AU -3223 May 18 j 06:20 direct -3228 Feb 05 j 13:26 0°**I**I29'24 -3228 May 01 j 09:50 0ಂತಾ conjunction -3223 May 19 j 01:50 0°**8**31'22 0°26'03 -3228 Jun 20 j 07:08 $0^{\circ}\Omega$ minimum elong -3223 May 19 j 00:53 0°**8**29'50 0°26'05 -3228 Aug 03 j 05:05 0° M max. Earth dist. -3223 May 27 j 10:10 5°**8**52'58 2.65768 AU -3223 Jul 04 j 22:59 desc. node -3228 Aug 18 j 23:22 11° Mp 24'42morning rise $0^{\circ}\Pi 28'28$ -3223 Jul 04 j 05:05 $0^{\circ}\Pi$ -3228 Sep 12 j 21:00 0∘**⊽** -3228 Oct 21 j 17:00 0°M -3223 Aug 20 j 10:02 0ಂತಾ -3228 Nov 28 j 20:08 0°**√** -3223 Oct 06 j 15:34 $0^{\circ}\Omega$ evening set -3228 Dec 06 j 06:17 5°**х** 50′12 -3223 Nov 23 j 06:34 0° m -3227 Jan 06 j 06:31 0°ರ -3222 Jan 11 j 17:23 0∘**⊽** -3222 Mar 10 j 21:24 0°M conjunction -3227 Feb 09 j 10:53 25°る57'49 -1°04'34 desc. node -3222 Apr 10 j 21:59 9°M10'18 minimum elong -3227 Feb 09 j 12:24 26° ති00'41 1°04'40 retrograde -3222 Apr 23 j 18:09 10°M10'33 -3227 Feb 14 j 21:03 0°**≈** opposition -3222 May 24 j 03:45 5°ML07'24 -3°05'31 max. Earth dist. -3227 Mar 27 j 11:55 29°≈25'40 2.47664 AU greatest brilliancy -3222 May 24 j 09:19 5°ML03'39 -2.9m -3227 Mar 28 i 07:21 0°**∀** min. Earth dist. -3222 May 26 j 22:35 4°M22'22 0.38203 AU -3227 Apr 12 j 01:56 10°**)** € 20'13 -3222 Jun 18 i 05:55 30°R<u>₽</u> morning rise -3227 May 10 j 22:35 $0^{\circ}\Upsilon$ direct -3222 Jun 24 j 06:37 29°**-**45′38 -3227 Jun 25 j 23:00 0°8 -3222 Jun 30 j 06:35 0°M -3227 Jun 28 j 08:28 1°831'03 -3222 Sep 11 j 13:08 0°×7 asc node -3227 Aug 13 j 18:35 $0^{\circ}II$ -3222 Oct 28 j 12:07 0°궁 -3227 Oct 06 j 20:13 0ಂತಾ -3222 Dec 12 j 09:43 0°≈≈ -3227 Dec 24 j 09:55 -3221 Jan 26 j 14:54 0°) 25°902'16 retrograde -3226 Jan 31 j 03:33 -3221 Feb 18 j 02:40 14° **)** 41'47 16°935'40 4°59'59 opposition asc. node -3226 Feb 01 j 03:05 $0^{\circ}\Upsilon$ greatest brilliancy 16°513'13 -1.6m -3221 Mar 13 j 18:48 0°8 min. Earth dist. -3226 Feb 06 j 02:01 14°9519'59 0.60728 AU -3221 Apr 29 j 18:12 -3226 Mar 13 j 01:36 6°9544'57 -3221 May 10 j 07:01 6°**8**41'29 direct evening set -3226 May 23 j 01:03 $0^{\circ}\Omega$ -3221 Jun 15 j 22:52 $0^{\circ}\Pi$ -3226 Jul 06 j 21:31 27°**Ω**21'10 -3221 Jun 20 j 05:29 2°**Ц**43'40 2.66965 AU desc. node max. Earth dist. -3226 Jul 10 j 20:19 0° M -3226 Aug 22 j 01:54 0∘**⊽** conjunction -3221 Jun 26 j 05:58 6°**耳**34'26 1°00'08 -3226 Sep 30 j 14:59 0° M minimum elong -3221 Jun 26 j 04:49 6°**Ⅲ**32'37 1°00'14 -3226 Nov 08 j 05:41 0°⊀ -3221 Aug 01 j 15:31 0ಂತಾ -3226 Dec 17 j 03:02 0°ರ morning rise -3221 Aug 10 j 08:25 5°539'26 -3225 Jan 26 j 05:07 0°≈ -3221 Sep 16 j 08:09 $0^{\circ}\Omega$ -3225 Feb 09 j 01:03 10°≈03'51 -3221 Oct 30 j 21:01 0° M evening set -3225 Mar 09 j 02:15 0°**)**€ -3221 Dec 13 j 09:28 0∘**ত** -3220 Jan 25 j 06:43 0°M 22°M46'11 conjunction -3225 Apr 06 j 14:15 19°\(\)37'52 -0°22'54 desc. node -3220 Feb 26 i 21:41 minimum elong -3225 Apr 06 j 15:23 19°**)** ₹39'49 0°22'54 -3220 Mar 08 i 09:42 0°×7 -3225 Apr 21 j 23:47 -3220 Apr 23 j 11:34 0°정 max. Earth dist. -3225 May 02 j 09:39 6°Υ55'31 2.59159 AU retrograde -3220 Jul 05 i 02:24 27°る12'35 -3225 May 16 i 07:11 16°**Y**′04′26 min. Earth dist. -3220 Aug 01 i 03:59 22°る20'41 0.42893 AU asc node -3225 May 28 j 13:52 24°Y04'10 -3220 Aug 07 j 07:18 20°る21'30 -2.5m morning rise greatest brilliancy -3225 Jun 06 j 18:09 0°8 -3220 Aug 08 j 19:54 19° ප් 51'36 -6°12'11 opposition -3225 Jul 24 j 01:30 $\mathbb{I}^{\circ 0}$ direct -3220 Sep 09 j 07:28 13°る49'04 -3220 Nov 05 j 12:00 -3225 Sep 10 j 21:02 0ಂತಾ 0°22 $0^{\circ}\Omega$ 0°**₩** -3225 Nov 01 j 11:30 -3220 Dec 31 j 05:45 -3224 Jan 03 j 12:39 0° m -3219 Jan 05 j 01:33 2°\ 48'55 asc. node $0^{\circ}\Upsilon$ retrograde -3224 Feb 11 j 20:43 7° m 51'34 -3219 Feb 19 j 12:25 0° m 57'11 3°34'29 -3219 Apr 09 j 11:52 0°8 opposition -3224 Mar 17 j 07:14 -3219 May 27 j 13:51 0° My 32'26-2.2m $0^{\circ}\Pi$ greatest brilliancy -3224 Mar 18 j 12:04 30°R€ -3219 Jun 16 j 12:00 12°**Ⅲ**39'15 -3224 Mar 20 j 01:40 evening set 28°**Ω**02'31 0.49092 AU -3219 Jul 13 j 08:58 min. Earth dist. -3224 Mar 25 j 19:20 0ಂತಾ direct -3224 Apr 24 j 07:44 22°**Ω**28'48 max. Earth dist. -3219 Jul 13 j 16:59 0°9513'04 2.62790 AU desc. node -3224 May 23 j 21:03 27°**Ω**55′02 -3224 May 29 j 13:38 0° m conjunction -3219 Aug 02 j 02:05 12°957'47 1°10'38 -3224 Jul 23 j 14:58 0∘**⊽** minimum elong -3219 Aug 02 j 02:18 12°**©**58'08 1°10'45 0°M -3219 Aug 27 j 11:34 $0^{\circ}\Omega$ -3224 Sep 04 j 16:28

-3219 Sep 17 j 14:28

morning rise

14°**Ω**28'55

-3224 Oct 15 j 04:11

0°×7

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Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3219 Oct 09 j 18:31 0° m -3214 Dec 06 i 11:57 30°R₩ -3219 Nov 20 j 09:59 -3214 Dec 13 j 02:22 27°**8**24'13 3°31'41 0∘ഹ opposition -3219 Dec 30 j 19:30 0°M -3214 Dec 13 j 02:33 27°**8**24'02 greatest brilliancy -1 3m 10°MJ35'38 min. Earth dist. -3214 Dec 13 j 17:17 desc. node -3218 Jan 13 j 21:19 27°**8**09'20 0.67280 AU 0°**√** -3213 Jan 22 j 21:51 -3218 Feb 08 j 13:44 direct 17°**8**32'06 0°정 -3218 Mar 20 j 14:22 -3213 Mar 15 j 06:56 $0^{\circ}\Pi$ -3213 May 12 j 19:34 -3218 May 01 j 10:26 0°≈ 0ಂತಾ 0°**)**€ -3218 Jun 17 j 19:28 -3213 Jun 29 j 17:08 0° Ω retrograde -3218 Aug 23 j 09:42 22°**)** 40'17 -3213 Aug 12 j 01:15 0° m min. Earth dist. -3218 Sep 24 j 13:46 15°**¥**40'13 0.55385 AU desc. node -3213 Sep 05 j 16:08 18° Mp 02'56 opposition -3218 Oct 01 j 06:42 13°**升**04'44 -2°18'23 -3213 Sep 21 j 12:52 0°Ω -3213 Oct 30 j 07:28 greatest brilliancy -3218 Sep 30 j 18:21 13°**升** 16′40 -1.9m 0°M direct -3218 Nov 06 j 03:06 5°**¥**00′21 evening set -3213 Nov 09 j 22:25 8°M20'38 asc. node -3218 Nov 23 j 01:09 6°¥42'53 -3213 Dec 07 j 09:46 0°**⊼** -3217 Jan 22 j 22:37 $0^{\circ}\Upsilon$ -3217 Mar 19 j 00:15 0°8 conjunction -3212 Jan 14 j 19:42 0°る01'49 -1°06'15 -3217 May 08 j 07:14 $0^{\circ}II$ minimum elong -3212 Jan 14 j 18:40 29°**₹**59'50 1°06'22 -3217 Jun 24 j 20:40 0ಂಣ -3212 Jan 14 j 18:46 evening set -3217 Jul 26 j 05:11 20°9541'25 -3212 Feb 23 j 07:04 -3217 Aug 08 j 22:44 $0^{\circ}\Omega$ max. Earth dist. -3212 Mar 04 j 13:16 7°≈35'04 2.42412 AU max. Earth dist. -3217 Aug 12 j 05:40 2°**Ω**15'11 2.53658 AU morning rise -3212 Mar 20 j 17:06 19°≈20'53 -3212 Apr 04 j 15:16 0°) conjunction -3217 Sep 13 j 14:04 24°Ω53'49 0°48'23 -3212 May 18 j 06:32 $0^{\circ}\Upsilon$ minimum elong -3217 Sep 13 i 15:47 24° Ω56'53 0°48'26 -3212 Jul 03 j 14:34 0°8 -3217 Sep 20 j 17:02 0° m -3212 Jul 15 j 01:09 7°**8**06'17 asc. node -3217 Oct 31 j 12:00 0∘**⊽** -3212 Aug 22 j 16:18 $\Pi^{\circ}0$ -3217 Nov 05 j 07:36 3°**£**37'20 -3212 Oct 21 j 20:56 0ംഉ morning rise -3217 Dec 01 j 20:52 -3212 Dec 08 j 15:40 23°<u>₽</u>49'57 11°901'49 desc. node retrograde -3217 Dec 09 j 21:12 -3211 Jan 16 j 05:13 oom. 2°510'24 4°51'04 opposition 0°×7 -3211 Jan 16 j 21:28 -3216 Jan 17 j 13:50 greatest brilliancy 1°954'36 -1.4m -3216 Feb 25 j 09:57 0°정 -3211 Jan 20 j 16:28 min. Earth dist. 0°926'12 0.63830 AU -3211 Jan 21 j 19:42 -3216 Apr 05 j 09:03 0°≈ 30°R,Ⅲ 0°**)**€ direct -3211 Feb 26 j 11:05 -3216 May 17 j 17:23 22°**Ⅱ**10'45 $0^{\circ}\Upsilon$ -3216 Jul 03 j 19:45 -3211 Apr 05 j 20:23 0ಂತಾ -3216 Sep 08 j 13:25 0°8 -3211 Jun 04 j 10:43 0° Ω -3216 Sep 29 j 12:23 -3211 Jul 20 j 08:41 retrograde 2°**8**40'40 0° m -3211 Jul 23 j 14:53 asc. node -3216 Oct 10 j 00:35 1°**8**55'27 desc. node 2° Mp 16'33 -3216 Oct 19 j 06:28 30°**₹**Υ -3211 Aug 30 j 17:29 0°Ω min. Earth dist. -3216 Nov 05 j 09:48 23°Υ59'47 0.64322 AU -3211 Oct 08 j 20:57 0°M -3216 Nov 08 j 13:50 22°**Y**43'30 1°08'52 -3211 Nov 16 j 05:07 0°**⊼** opposition greatest brilliancy -3216 Nov 08 j 10:05 22°**Y**47'16 -1.5m -3211 Dec 24 j 20:29 0°정 -3216 Dec 17 j 13:25 13°**Y**28'22 -3210 Jan 16 j 14:49 17°る17'20 direct evening set -3215 Feb 16 j 15:38 0°8 -3210 Feb 02 j 16:27 0°≈ -3215 Apr 15 j 12:58 $\Pi^{\circ}0$ -3210 Mar 16 j 07:57 0°**)**€ -3215 Jun 04 j 06:55 0ಂತಾ -3215 Jul 20 j 00:10 $0^{\circ}\Omega$ conjunction -3210 Mar 17 j 17:10 0°\\$58'20 -0°42'18 -3215 Aug 31 i 17:19 0° m minimum elong -3210 Mar 17 j 19:15 1°\(\frac{1}{1}\)01'59 0°42'21 evening set -3215 Sep 09 i 21:55 6° m 41'37 max. Earth dist. -3210 Apr 20 i 07:30 24° ¥ 06'42 2.55188 AU max. Earth dist. -3215 Sep 30 j 08:00 21° m 50'27 2.41346 AU -3210 Apr 29 j 01:28 $0^{\circ}\Upsilon$ -3215 Oct 11 j 03:24 0∘**⊽** -3210 May 11 j 21:26 8°Y32'26 morning rise desc. node -3215 Oct 18 j 18:40 5°**£**49'05 -3210 Jun 01 j 23:01 22°Y20'19 asc. node -3210 Jun 13 j 19:59 0°8 -3215 Nov 06 j 01:04 19°**♀**53'05 -0°12'50 -3210 Jul 31 j 12:17 $0^{\circ}\Pi$ conjunction 19°**≙**51'12 0°12'51 -3215 Nov 06 j 00:05 -3210 Sep 19 j 14:01 000 minimum elong -3215 Nov 05 j 07:53 19°**♀**19'47 -3210 Nov 14 j 14:00 $0^{\circ}\Omega$ behind sun begin -3215 Nov 06 j 16:18 20°**£**22'37 -3209 Jan 21 j 14:14 19°**Ω**52'46 behind sun end retrograde -3215 Nov 19 j 00:57 0°M -3209 Feb 26 j 13:40 12°Ω16'24 4°32'45 opposition -3215 Dec 27 j 06:25 0° ×7 -3209 Feb 27 j 20:51 greatest brilliancy 11°**Ω**48′07 -1.9m 10°**х** 54′10 -3209 Mar 06 j 10:51 0.54161 AU morning rise -3214 Jan 10 j 03:55 min. Earth dist. 9°**Ω**25'12 0°궁 -3209 Apr 07 j 04:19 -3214 Feb 03 j 16:49 direct 3°**Ω**02'07 -3209 Jun 10 j 14:01 -3214 Mar 15 j 05:08 0°≈ desc. node 23°**Ω**57′00 -3214 Apr 25 j 15:29 0°**)**€ -3209 Jun 21 j 05:49 0° m $0^{\circ}\Upsilon$ -3214 Jun 08 j 21:12 -3209 Aug 06 j 02:44 0∘**⊽** -3214 Jul 27 j 14:33 0°8 -3209 Sep 16 j 01:08 0°M asc. node -3214 Aug 28 j 01:09 16°**8**51'24 -3209 Oct 25 j 11:25 0°**∡**7 $\mathbb{I}^{\circ 0}$ -3209 Dec 04 j 00:06 0°정 -3214 Sep 27 j 21:46

-3214 Nov 03 j 05:53

retrograde

7°**I**100'11

-3208 Jan 13 j 15:33

0°**≈**

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:22, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3208 Feb 25 j 00:22 0°**∀** -3203 Jan 08 j 11:57 0°M -3208 Mar 12 j 01:04 11°**)**(00'44 -3203 Jan 30 j 15:19 16°ML21'42 desc. node evening set $0^{\circ}\Upsilon$ -3208 Apr 09 j 06:31 -3203 Feb 18 j 01:40 0°×7 6°Y21'31 -3203 Mar 31 j 04:30 0°궁 -3208 Apr 18 j 21:06 asc. node -3203 May 14 j 06:37 0°28 -3208 May 03 j 03:15 15°**Y**42'47 0°08'13 -3203 Jul 13 j 02:57 0°**∀** conjunction -3208 May 03 j 02:54 3°¥50'18 minimum elong 15°**Y**42'12 0°08'14 retrograde -3203 Aug 06 j 03:47 -3208 May 02 j 08:56 15°**Y**12'53 behind sun begin -3203 Aug 29 j 08:31 30°R≈ behind sun end -3208 May 03 j 20:51 16°**Y**11'30 min. Earth dist. -3203 Sep 05 j 03:50 27°**≈**40'49 0.50567 AU 25°**Y**′21′04 max. Earth dist. -3208 May 17 j 23:13 2.63826 AU opposition -3203 Sep 12 j 21:51 24°≈48'47 -3°54'49 -3208 May 25 j 03:59 0°8 greatest brilliancy -3203 Sep 11 j 22:02 25°**≈**10'51 -2.1m -3208 Jun 20 j 12:57 16°**8**53'56 -3203 Oct 17 j 02:55 morning rise direct 17°≈25'59 -3208 Jul 11 j 03:56 $0^{\circ}\Pi$ -3203 Dec 06 j 11:22 0°**)**€ -3208 Aug 27 j 19:28 0ಂತಾ asc. node -3203 Dec 09 j 15:49 1°\ 21'57 -3208 Oct 15 j 04:09 $0^{\circ}\Omega$ -3202 Feb 03 j 19:21 $0^{\circ}\Upsilon$ -3208 Dec 04 j 11:00 0° m -3202 Mar 27 j 12:01 0°8 -3207 Jan 31 j 13:33 0∘**⊽** -3202 May 15 j 16:31 $0^{\circ}\Pi$ retrograde -3207 Mar 23 j 12:48 12°**-**45′06 -3202 Jul 01 j 20:46 0ಂತಾ opposition -3207 Apr 24 j 07:50 7°**2**07'04 0°13'12 evening set -3202 Jul 10 j 07:59 5°931'44 greatest brilliancy -3207 Apr 24 j 09:39 7°**Ω**05'44 -2.7m max. Earth dist. -3202 Jul 30 j 17:25 19°503'03 2.57764 AU desc. node -3207 Apr 27 j 13:55 6°**£**08'51 -3202 Aug 15 j 22:01 $0^{\circ}\Omega$ min. Earth dist. -3207 May 01 j 02:46 5°**ഫ**06'30 0.41384 AU direct -3207 May 28 i 06:05 0°**£**32'28 -3202 Aug 27 i 03:22 7°**Ω**42'28 1°01'34 conjunction -3207 Aug 13 j 00:03 0°M minimum elong -3202 Aug 27 i 04:40 7°**Ω**44'42 1°01'39 -3207 Sep 27 j 06:27 0°×7 -3202 Sep 27 j 20:09 0° m -3207 Nov 08 j 23:22 0°궁 -3202 Oct 15 j 15:47 12° m 52'02 morning rise -3207 Dec 21 j 19:37 0°**≈** -3202 Nov 07 j 21:51 0∘**⊽** -3206 Feb 03 j 19:23 0°₩ -3202 Dec 17 j 14:52 0°M 20°\ 34'30 -3202 Dec 18 j 13:39 0°M43'35 -3206 Mar 06 j 19:09 desc node asc node $0^{\circ}\Upsilon$ -3201 Jan 25 j 15:17 0°×7 -3206 Mar 21 j 04:54 22°**Y**'24'12 -3201 Mar 05 j 19:10 0°정 -3206 Apr 24 j 21:09 evening set -3201 Apr 15 j 04:25 -3206 May 06 j 17:47 0°8 0°≈ -3201 May 28 j 11:15 0°) -3206 Jun 11 j 16:31 22°**8**56'00 0°49'17 -3201 Jul 18 j 02:27 $0^{\circ}\Upsilon$ conjunction -3206 Jun 11 j 15:14 -3201 Sep 16 j 10:17 18°**Y**19'24 minimum elong 22°**8**53'57 0°49'22 retrograde 10°Y13'39 0.61455 AU -3206 Jun 11 j 00:20 22°**8**30'12 2.67160 AU -3201 Oct 21 j 14:27 max. Earth dist. min. Earth dist. $8^{\circ}\Upsilon23'25 -0^{\circ}03'38$ -3206 Jun 22 j 18:34 $0^{\circ}\Pi$ opposition -3201 Oct 26 j 05:04 morning rise -3206 Jul 27 j 02:49 21°II58'13 greatest brilliancy -3201 Oct 26 j 04:55 8°**Y**23'34 -1.6m -3206 Aug 08 j 14:17 0ಂತಾ -3201 Oct 27 j 16:33 7°**Υ**48'10 asc. node -3206 Sep 23 j 17:58 $0^{\circ}\Omega$ -3201 Nov 24 j 12:48 30°**₹**₩ -3206 Nov 08 j 03:39 0° m direct -3201 Dec 03 j 02:52 29°\ 31'12 -3206 Dec 23 j 02:03 0∘**⊽** -3201 Dec 11 j 23:25 $0^{\circ}\Upsilon$ -3205 Feb 06 j 05:53 0°M -3200 Mar 01 j 15:38 0°8 -3205 Mar 15 j 15:49 23°M51'43 -3200 Apr 24 j 04:33 $0^{\circ}\Pi$ desc. node -3205 Mar 25 j 20:51 -3200 Jun 11 j 19:54 0ಂತಾ 0°×7 retrograde -3205 Jun 10 j 19:45 28°×746'43 -3200 Jul 27 i 05:24 $0^{\circ}\Omega$ min. Earth dist. -3205 Jul 07 i 15:20 24° ₹21'11 0.39043 AU evening set -3200 Aug 21 i 10:56 17°**Ω**31'11 -3205 Jul 12 j 22:33 opposition 22°**₹**50'41 -6°33'01 max. Earth dist. -3200 Sep 05 i 12:23 28° Ω16'00 2.46233 AU greatest brilliancy -3205 Jul 11 j 18:47 23°**х** 10′32 -2.8m -3200 Sep 07 j 22:02 0° m -3205 Aug 11 j 22:34 17°**∡**³37'50 direct -3205 Sep 28 j 22:18 0°궁 -3200 Oct 13 j 20:35 26° m 32'02 0°14'55 conjunction -3205 Nov 23 j 17:57 0°**≈** -3200 Oct 13 j 21:31 26° m 33'47 0°14'54 minimum elong -3204 Jan 11 j 19:23 0°**)**€ -3200 Oct 13 j 11:39 26° m 15'13 behind sun begin -3204 Jan 22 j 16:36 6°\ 46'38 behind sun end -3200 Oct 14 j 07:23 26° m 52'22 asc. node $0^{\circ}\Upsilon$ -3204 Feb 28 j 21:07 -3200 Oct 18 j 10:49 0∘∙თ -3204 Apr 16 j 20:45 -3200 Nov 04 j 12:21 0° 8 desc. node 13°**△**00'20 -3204 Jun 01 j 17:31 28°852'23 -3200 Nov 26 j 11:57 0°M evening set -3204 Jun 03 j 12:09 $0^{\circ}\Pi$ -3200 Dec 12 j 19:55 12°M44'38 morning rise -3204 Jul 04 j 01:21 19°**Ц**31'54 2.65061 AU -3199 Jan 03 j 20:38 0°**∡**7 max. Earth dist. -3199 Feb 11 j 09:32 0°る -3204 Jul 18 j 03:02 28°**Ⅲ**38'40 1°09'53 conjunction -3199 Mar 23 j 00:03 0°≈ 0°**)**€ minimum elong -3204 Jul 18 j 02:36 28°**Ⅲ**37'57 1°10'00 -3199 May 03 j 14:57 $0^{\circ}\Upsilon$ -3204 Jul 20 j 05:01 0ಂತಾ -3199 Jun 17 j 11:25 morning rise -3204 Sep 01 j 15:25 28°9545'13 -3199 Aug 07 j 14:50 0°8 -3204 Sep 03 j 11:48 0° Ω asc. node -3199 Sep 13 j 16:56 16°**8**42'57 -3204 Oct 17 j 04:15 0° m -3199 Oct 20 j 19:40 24°807'02 retrograde

-3199 Nov 29 j 21:06

opposition

14°819'48 2°43'31

-3204 Nov 28 j 09:37

0∘**⊽**

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•	ical year style is used: Th		•	, ·		, ,	<i>J 2</i> 1
min. Earth dist.	-3199 Nov 29 j 00:17	-	0.66872 AU	conjunction	-3193 Apr 17 j 01:24	29°) 49'43	-0°11'19
greatest brilliancy	-3199 Nov 29 j 17:46	14° 8 23'08	-1.3m	minimum elong	-3193 Apr 17 j 01:57	29° ¥ 50'37	0°11'19
direct	-3198 Jan 09 j 02:47	4° 8 38'54		behind sun begin	-3193 Apr 16 j 10:33	29°) 24′54	
	-3198 Mar 29 j 13:12	$\Pi^{\circ}0$		behind sun end	-3193 Apr 17 j 17:21	0° Y 16′18	
	-3198 May 21 j 20:20	0ಂತ			-3193 Apr 17 j 07:35	0° Y	
	-3198 Jul 07 j 14:45	$0^{\circ}\Omega$		asc. node	-3193 May 06 j 12:48	12° Y ′43'27	
	-3198 Aug 19 j 14:56	0° ™		max. Earth dist.	-3193 May 08 j 17:41	14° Ƴ 10'14	2.61062 AU
desc. node	-3198 Sep 22 j 10:04	24° m 58'48			-3193 Jun 02 j 02:04	$0^{\circ}S$	
	-3198 Sep 29 j 01:04	0∘ ⊽		morning rise	-3193 Jun 06 j 13:32	2° 8 53'00	
evening set	-3198 Oct 15 j 02:42	12° ≏ 19'01			-3193 Jul 19 j 05:27	Π \circ 0	
	-3198 Nov 06 j 20:01	0° M ₊			-3193 Sep 05 j 12:30	0°99	
	-3198 Dec 14 j 22:38	0° ∡ ¹			-3193 Oct 25 j 14:53	0° Ω	
	2100 D 15:15.12	20 711105	0050100		-3193 Dec 20 j 07:20	0° m)	
conjunction	-3198 Dec 17 j 17:13	2° 🗷 11'05		retrograde	-3192 Feb 25 j 08:23	19° Mp 40'19	2020111
minimum elong	-3198 Dec 17 j 14:05	2° x ⁷ 04'56		opposition	-3192 Mar 29 j 20:28	13° TD 11'52	
max. Earth dist.	-3197 Jan 16 j 06:07	25°X'18'55	2.37994 AU	greatest brilliancy min. Earth dist.	-3192 Mar 30 j 18:54	12° M 53'22	-2.4m 0.46230 AU
marning rigg	-3197 Jan 22 j 07:07 -3197 Feb 24 j 03:43	0°8 25° る 03'55			-3192 Apr 07 j 05:15 -3192 May 05 j 15:17	5° Mg 18'01	0.46230 AU
morning rise	-3197 Feb 24 J 03.43	25 3 05 55 0° ≈		direct desc. node	-3192 May 03 j 13.17	5°Mp49'16	
	-3197 Mar 02 j 18.03	0 ≈ 0° ∺		desc. node	-3192 May 14 j 07.43	0∘ ⊽	
	-3197 Apr 13 j 01:11	0° Υ			-3192 Jul 13 j 17:43	0° m .	
	-3197 May 20 j 18:40 -3197 Jul 12 j 15:55	0°8			-3192 Aug 28 j 10:32 -3192 Oct 08 j 22:15	0° ∡ 7	
asc. node	-3197 Aug 01 j 16:14	12° 8 01'03			-3192 Oct 08 j 22:13	0° ਨ	
ase. Hode	-3197 Sep 02 j 21:44	0°Ⅱ			-3192 Dec 30 j 10:38	0° ≈	
retrograde	-3197 Nov 24 j 23:52	27° I I43'26			-3191 Feb 11 j 14:25	0°) €	
opposition	-3196 Jan 03 j 04:47	18° Ⅱ 31'52	4°28'39	asc. node	-3191 Mar 23 j 10:07	26°) 41′51	
greatest brilliancy	-3196 Jan 03 j 13:57	18° Ⅲ 22'50	-1.4m	use. noue	-3191 Mar 28 j 10:23	0°Υ	
min. Earth dist.	-3196 Jan 06 j 04:03	17° Ⅱ 21'40	0.65946 AU	evening set	-3191 Apr 08 j 18:17	7° Y °25'30	
direct	-3196 Feb 13 j 11:05	8° Ⅲ 31'01		Ü	-3191 May 13 j 15:23	0° ႘	
	-3196 Apr 23 j 10:55	0ಂತ			, ,		
	-3196 Jun 14 j 11:08	$0^{\circ}\Omega$		conjunction	-3191 May 27 j 20:47	9° 8 07'11	0°35'24
	-3196 Jul 28 j 23:01	0° m)		minimum elong	-3191 May 27 j 19:37	9° 8 05'19	0°35'27
desc. node	-3196 Aug 09 j 07:27	8° m 07'34		max. Earth dist.	-3191 Jun 01 j 21:27	12° 8 20'03	2.66503 AU
	-3196 Sep 07 j 20:26	0∘ 亚			-3191 Jun 29 j 14:10	Π $^{\circ}0$	
	-3196 Oct 16 j 18:49	0°M₊		morning rise	-3191 Jul 13 j 02:09	8° Ⅱ 35'57	
	-3196 Nov 23 j 23:25	0° ∡ ¹			-3191 Aug 15 j 15:08	0ಂಣ	
evening set	-3196 Dec 21 j 16:32	21° ∡ ¹40′04			-3191 Oct 01 j 09:48	0 \circ Ω	
	-3195 Jan 01 j 11:07	0°ಕ			-3191 Nov 17 j 01:18	0° m)	
	-3195 Feb 10 j 02:45	0° ≈			-3190 Jan 03 j 07:44	0∘ 亚	
	2105 F. 1. 22:00.15	00 40150	0050100		-3190 Feb 22 j 13:55	0°M	
conjunction	-3195 Feb 23 j 08:15	9°≈43'53		desc. node	-3190 Apr 01 j 07:27	18°M32'58	
minimum elong	-3195 Feb 23 j 10:28	9° ≈ 47'55	0°58'32	retrograde	-3190 May 11 j 16:13	27°M40'54	4051140
may Earth dist	-3195 Mar 23 j 13:52 -3195 Apr 06 j 00:55	0° ∺ 9° ∺ 25'26	2.50495 AU	opposition	-3190 Jun 11 j 05:24	22°M36'03 22°M38'25	-4-31-40 -2.9m
max. Earth dist. morning rise	-3195 Apr 00 j 00.35	9 X 25 26 21° X 25'10	2.30493 AU	greatest brilliancy min. Earth dist.	-3190 Jun 11 j 01:51 -3190 Jun 10 j 21:44	22°M41'10	0.37643 AU
morning risc	-3195 May 06 j 04:37	21 γ (23 10		direct	-3190 Jul 10 j 21:44	17°M34'29	0.57045 AU
asc. node	-3195 Jun 18 j 15:16	28° Y ′27′24		uncet	-3190 Jul 11 j 07:30	0° √	
ase. Hode	-3195 Jun 21 j 01:13	0°8			-3190 Oct 19 j 23:57	° ਨ ਹ	
	-3195 Aug 08 j 07:42	0°II			-3190 Dec 05 j 21:45	0° ≈	
	-3195 Sep 29 j 10:38	0ංම _			-3189 Jan 21 j 01:56	0° ∀	
	-3195 Dec 07 j 04:31	$0^{\circ}\Omega$		asc. node	-3189 Feb 08 j 08:29	11°) (47'41	
retrograde	-3194 Jan 03 j 00:53	3° Ω 54'41			-3189 Mar 08 j 18:27	0° Υ	
C	-3194 Jan 27 j 23:25	30° ₹ 5			-3189 Apr 25 j 00:53	0°8	
opposition	-3194 Feb 09 j 05:30	25° © 44'04	4°56'43	evening set	-3189 May 18 j 22:16	15° 8 07'17	
greatest brilliancy	-3194 Feb 10 j 08:39	25°518'31	-1.7m		-3189 Jun 11 j 08:40	Π $^{\circ}$ 0	
min. Earth dist.	-3194 Feb 15 j 22:38	23°9512'46	0.58622 AU	max. Earth dist.	-3189 Jun 25 j 15:44	9° Ⅱ 07'16	2.66517 AU
direct	-3194 Mar 21 j 19:43	16° © 02'12					
	-3194 May 12 j 17:38	$0^{\circ}\Omega$		conjunction	-3189 Jul 04 j 13:39	14° Ⅱ 50′06	1°04'51
desc. node	-3194 Jun 27 j 07:24	25° Ω 33'48		minimum elong	-3189 Jul 04 j 12:42	14° Ⅱ 48'36	1°04'56
	-3194 Jul 04 j 04:32	0° m			-3189 Jul 28 j 01:16	0 \circ	
	-3194 Aug 16 j 07:22	0∘ ⊽		morning rise	-3189 Aug 18 j 16:05	14° © 07'59	
	-3194 Sep 25 j 05:16	0° M -			-3189 Sep 11 j 14:12	0 \circ Ω	
	-3194 Nov 03 j 01:04	0° ∡ ¹			-3189 Oct 25 j 19:04	0° m)	
	-3194 Dec 12 j 02:27	0°ප			-3189 Dec 07 j 18:46	0∘ ⊽	
	-3193 Jan 21 j 07:55	0°≈			-3188 Jan 18 j 21:09	0°M	
evening set	-3193 Feb 21 j 07:02	22°≈15'00		desc. node	-3188 Feb 17 j 07:40	21°M06'45	
	-3193 Mar 04 j 08:01	0° ∀			-3188 Feb 29 j 18:42	0° ∡ ¹	

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3188 Apr 13 j 03:02 0°궁 -3183 Apr 09 i 08:21 $0^{\circ}II$ -3188 Jun 03 j 08:50 -3183 May 30 j 02:51 0ಂತಾ 0°≈≈ -3188 Jul 17 j 13:38 -3183 Jul 15 j 04:28 $0^{\circ}\Omega$ 11°2050'13 retrograde -3188 Aug 14 j 12:46 6°≈32'46 0.45544 AU -3183 Aug 27 j 00:10 O° m min. Earth dist. -3188 Aug 21 j 04:16 -3183 Sep 21 j 22:05 19° m 03'48 greatest brilliancy 4°≈15'47 -2.4m evening set -3183 Oct 06 j 10:20 -3188 Aug 22 j 14:34 opposition 3°≈46'10 -5°29'21 0∘ಹ -3188 Sep 03 j 16:55 30°Rる desc. node -3183 Oct 09 j 03:36 2°**₽**04'04 -3188 Sep 24 j 00:09 direct 27°る13'27 max. Earth dist. -3183 Oct 21 j 09:19 11°**≏**26'37 2.38972 AU -3188 Oct 15 j 12:37 0°≈ -3183 Nov 14 j 06:49 0°M -3188 Dec 23 j 09:01 0°**)**€ asc. node -3188 Dec 26 j 07:35 1°**)** 36'29 conjunction -3183 Nov 20 j 11:02 4°M50'13 -0°29'06 $0^{\circ}\Upsilon$ -3183 Nov 20 j 08:46 -3187 Feb 13 j 16:18 minimum elong 4°ML45'48 0°29'08 -3183 Dec 22 j 10:47 -3187 Apr 04 j 10:18 0°8 0°×7 -3187 May 22 j 20:24 $0^{\circ}II$ morning rise -3182 Jan 26 j 18:55 27°**х** 38′40 evening set -3187 Jun 25 j 02:01 21°**Ⅲ**07'57 -3182 Jan 29 j 19:56 0°정 -3187 Jul 08 j 18:36 0ಂತಾ -3182 Mar 10 j 06:55 0°≈ max. Earth dist. -3187 Jul 19 j 18:19 7°9511'33 2.61209 AU -3182 Apr 20 j 14:45 0°**)**€ -3182 Jun 03 j 13:54 $0^{\circ}\Upsilon$ conjunction -3187 Aug 10 j 23:00 21°956'52 1°08'51 -3182 Jul 21 j 09:11 0°8 minimum elong -3187 Aug 10 j 23:37 21°957'54 1°08'57 asc. node -3182 Aug 18 j 07:40 15°850'10 -3187 Aug 22 j 20:58 $0^{\circ}\Omega$ -3182 Sep 15 j 22:30 $0^{\circ}\Pi$ -3187 Sep 27 i 07:20 24°Ω31'38 retrograde -3182 Nov 11 i 01:22 14°**Ⅱ**48'10 morning rise -3187 Oct 05 i 00:59 0° m opposition -3182 Dec 20 j 17:23 5°II20'06 3°55'21 -3187 Nov 15 i 11:35 0∘**⊽** greatest brilliancy -3182 Dec 20 j 20:23 5°**Ⅱ**17'07 -1.3m -3187 Dec 25 j 14:50 0°M min. Earth dist. -3182 Dec 22 j 04:28 4°**П**45'13 0.67093 AU desc. node -3186 Jan 04 j 07:07 7°M20'04 -3181 Jan 03 j 21:38 30°R8 -3186 Feb 03 j 01:36 0°×7 -3181 Jan 30 j 18:06 25°**8**23'33 direct -3186 Mar 14 j 16:46 0°る -3181 Mar 01 j 00:06 Π °0 -3181 May 06 j 07:43 -3186 Apr 24 j 19:17 0°≈≈ 0ംഉ -3186 Jun 08 j 22:51 0°) -3181 Jun 24 j 08:26 $0^{\circ}\Omega$ -3186 Aug 11 j 20:09 0° -3181 Aug 07 j 01:26 0° m -3186 Sep 01 j 12:21 2°Y45'21 -3181 Aug 27 j 02:12 14° m 34'15 retrograde desc. node -3186 Sep 21 j 03:50 30°**₹** -3181 Sep 16 j 16:29 0∘ಹ 25°**¥**20'05 0.57756 AU 0°M -3186 Oct 04 j 19:08 -3181 Oct 25 j 12:15 min. Earth dist. 22°**X**59'01 -1°26'14 -3186 Oct 10 j 19:00 -3181 Nov 25 j 05:48 24°M11'17 opposition evening set -3186 Oct 10 j 12:05 greatest brilliancy 23°**¥**05'48 -1.8m -3181 Dec 02 j 14:45 0° ×7 asc. node -3186 Nov 13 j 07:13 14°**)** 39'18 -3180 Jan 09 j 23:50 0°궁 direct -3186 Nov 16 j 10:33 14° # 35'27 -3185 Jan 13 j 07:27 $0^{\circ}\Upsilon$ conjunction -3180 Jan 30 j 03:50 15°る27'20 -1°06'52 -3185 Mar 12 j 23:16 0° 8 minimum elong -3180 Jan 30 j 04:26 15°る28'29 1°06'59 -3185 May 03 j 04:40 $0^{\circ}II$ -3180 Feb 18 j 12:13 0°≈ -3185 Jun 20 j 02:30 0ಂತಾ -3180 Mar 18 j 19:58 21°≈26'27 2.45309 AU max. Earth dist. -3185 Aug 04 j 18:22 0°**Ω**18'51 -3180 Mar 30 j 20:04 0°) evening set -3185 Aug 04 j 07:19 -3180 Apr 02 j 19:14 2°\(\)05'39 $0^{\circ}\Omega$ morning rise -3185 Aug 20 j 11:24 11°**Ω**09'37 2.51108 AU -3180 May 13 j 09:44 $0^{\circ}\Upsilon$ max. Earth dist. -3185 Sep 16 j 01:14 0° m -3180 Jun 28 j 11:26 0°8 asc. node -3180 Jul 05 i 05:47 4°815'25 conjunction -3185 Sep 24 i 08:11 6° m 00'03 0°37'54 -3180 Aug 16 j 16:23 $0^{\circ}II$ minimum elong -3185 Sep 24 i 09:53 6° m 03'09 0°37'55 -3180 Oct 11 j 12:51 0ಂತಾ -3185 Oct 26 j 18:15 0∘**⊽** -3180 Dec 17 j 11:59 19°523'22 retrograde -3185 Nov 18 j 08:39 17°**♀**10'01 -3179 Jan 24 j 15:24 10°9545'08 4°57'43 morning rise opposition -3185 Nov 22 j 05:03 20°**₽**07'09 -3179 Jan 25 j 11:48 10°925'30 -1.5m desc node greatest brilliancy 8°542'48 0.62243 AU -3185 Dec 05 j 00:41 0°M -3179 Jan 29 j 22:34 min. Earth dist. -3184 Jan 12 j 14:16 0°×7 direct -3179 Mar 06 j 18:08 0°9549'12 -3184 Feb 20 j 07:18 0°정 -3179 May 28 j 01:34 $0^{\circ}\Omega$ -3184 Mar 31 j 02:05 0°22 desc. node -3179 Jul 14 j 00:28 29°**Ω**40'24 -3184 May 12 j 01:18 0°**)**€ -3179 Jul 14 j 11:56 0° m 0°Υ -3184 Jun 26 j 23:58 -3179 Aug 25 j 08:47 0∘**⊽** -3184 Aug 22 j 16:15 0°8 -3179 Oct 03 j 17:51 0°M -3184 Sep 30 j 07:37 10°**8**36'13 -3179 Nov 11 j 05:17 0°**∡**7 asc. node -3184 Oct 07 j 08:56 10°**8**55'19 0°정 retrograde -3179 Dec 19 j 23:13 -3184 Nov 14 j 02:57 1°**8**57'03 0.65494 AU -3178 Jan 28 j 21:21 0°≈ min. Earth dist. opposition -3184 Nov 16 j 11:16 1°**8**00'28 1°46'23 evening set -3178 Jan 30 j 04:19 0°≈57'00 greatest brilliancy -3184 Nov 16 j 06:47 1°**8**04'59 -1.4m -3178 Mar 11 j 14:27 0°**)**€ -3184 Nov 18 j 23:40 30°**₹**Υ -3184 Dec 25 j 22:28 21° Y 34'53 -3178 Mar 29 j 07:01 12°**)** 17'49 -0°31'19 direct conjunction

-3178 Mar 29 j 08:36

minimum elong

12°**升**20'33 0°31'20

-3183 Feb 05 j 02:13

0°8

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23

2	nical year style is used: Th			//		, ,	t 23
Attention, astronom	-3178 Apr 24 j 08:48	0° Υ	n astronomicai co	min. Earth dist.	-3173 Jul 22 j 07:36		0.40960 AU
may Farth dist	-3178 Apr 24 j 08:48		2.57468 AU			9° る 25'17	
max. Earth dist.		2 1 04 33 18° Υ 01'40	2.37408 AU	greatest brilliancy	-3173 Jul 27 j 18:05		
morning rise asc. node	-3178 May 21 j 14:52	18 γ 01 40 19° γ 03'01		opposition direct	-3173 Jul 29 j 05:02 -3173 Aug 28 j 23:24	8°る58'17 3°る19'53	-0 32 39
asc. node	-3178 May 23 j 04:26			direct	C 3		
	-3178 Jun 09 j 01:52	0° ∀			-3173 Nov 14 j 07:01	0° Ж	
	-3178 Jul 26 j 11:44	0°II		1	-3172 Jan 05 j 07:24	0° X 4° X 36'47	
	-3178 Sep 13 j 17:58	0° ©		asc. node	-3172 Jan 12 j 22:56	4°π3647 0°Υ	
	-3178 Nov 05 j 18:50	0° N			-3172 Feb 23 j 11:36		
. 1	-3177 Jan 27 j 03:32	0° m)			-3172 Apr 11 j 23:34	8°0	
retrograde	-3177 Feb 02 j 06:36	0° m 13'26			-3172 May 29 j 20:48	0°П 7°П 10122	
***	-3177 Feb 08 j 06:17	30°R€ 220 O 50112	400 4107	evening set	-3172 Jun 10 j 04:18	7° I 10'33	2 (2006 AII
opposition	-3177 Mar 09 j 09:55	22° Ω 59'13	4°04'07	max. Earth dist.	-3172 Jul 09 j 16:10	26° Ⅱ 07'01	2.63906 AU
greatest brilliancy	-3177 Mar 10 j 16:46	22° Ω 31'58			-3172 Jul 15 j 15:32	0_{\circ}	
min. Earth dist.	-3177 Mar 17 j 17:22	20° Ω 03'31	0.51414 AU		2172 1 26:14.50	70010154	1010150
direct	-3177 Apr 17 j 05:29	14°Ω07'26		conjunction	-3172 Jul 26 j 14:58	7°510'54	
desc. node	-3177 May 31 j 23:43	25° Ω 30'48		minimum elong	-3172 Jul 26 j 14:53	7° © 10'46	1°10'58
	-3177 Jun 10 j 08:33	0° m)			-3172 Aug 29 j 20:41	0°N	
	-3177 Jul 29 j 20:59	0∘ ⊽		morning rise	-3172 Sep 10 j 14:49	7° Ω 59'34	
	-3177 Sep 09 j 20:25	0° ™			-3172 Oct 12 j 08:30	0° m/y	
	-3177 Oct 19 j 19:05	0° ∡			-3172 Nov 23 j 06:23	0∘ ত	
	-3177 Nov 28 j 16:13	0°ප			-3171 Jan 02 j 23:17	0° M	
	-3176 Jan 08 j 14:15	0° ≈		desc. node	-3171 Jan 21 j 00:01	13°M28'26	
	-3176 Feb 20 j 04:04	0° ∀			-3171 Feb 12 j 01:07	0° ∡	
evening set	-3176 Mar 22 j 11:59	21° ¥ 17'15			-3171 Mar 24 j 11:01	0°る	
	-3176 Apr 04 j 13:50	0° Υ			-3171 May 05 j 23:30	0° ≈	
asc. node	-3176 Apr 09 j 03:00	3° Y ′00'38			-3171 Jun 24 j 23:42	0° ∀	
				retrograde	-3171 Aug 16 j 05:59	15° ∺ 17'35	
conjunction	-3176 May 12 j 09:10	24° Y ′44′15	0°18'48	min. Earth dist.	-3171 Sep 16 j 10:47		0.53301 AU
minimum elong	-3176 May 12 j 08:25	24° Y '43'02	0°18'50	opposition	-3171 Sep 23 j 16:06	5°) 54'48	
	-3176 May 20 j 12:49	$0^{\circ}S$		greatest brilliancy	-3171 Sep 22 j 23:05	6° ₩ 11'01	-2.0m
max. Earth dist.	-3176 May 23 j 15:05		2.64997 AU		-3171 Oct 12 j 03:32	30°R ≈	
morning rise	-3176 Jun 28 j 20:59	25° 8 10'05		direct	-3171 Oct 28 j 20:04	28° ≈ 07'42	
	-3176 Jul 06 j 11:22	Π °0			-3171 Nov 15 j 11:46	0° ∀	
	-3176 Aug 22 j 20:29	0 \circ \odot		asc. node	-3171 Nov 29 j 22:43	3°) 47'41	
	-3176 Oct 09 j 12:37	0 $^{\circ}$ Ω			-3170 Jan 27 j 13:38	0° Y	
	-3176 Nov 27 j 02:56	0° m			-3170 Mar 21 j 23:45	$0^{\circ}S$	
	-3175 Jan 18 j 02:31	0∘ ⊽			-3170 May 10 j 19:01	Π °0	
retrograde	-3175 Apr 09 j 17:47	28° ഫ 02'11			-3170 Jun 27 j 05:19	0	
desc. node	-3175 Apr 18 j 00:25	27° ≏ 36'31		evening set	-3170 Jul 19 j 06:59	14° © 28'54	
opposition	-3175 May 10 j 13:57	22° ≏ 47'41	-1°35'52	max. Earth dist.	-3170 Aug 06 j 16:35	26° © 50'16	2.55583 AU
greatest brilliancy	-3175 May 10 j 20:06	22° ≏ 43'23	-2.8m		-3170 Aug 11 j 08:08	$0^{\circ}\Omega$	
min. Earth dist.	-3175 May 15 j 12:04	21° ≏ 25'17	0.39335 AU				
direct	-3175 Jun 11 j 21:09	16° ≏ 56'56		conjunction	-3170 Sep 05 j 20:50	17° Ω 40'56	0°54'45
	-3175 Jul 29 j 09:18	0° M		minimum elong	-3170 Sep 05 j 22:25	17° Ω 43'43	0°54'49
	-3175 Sep 18 j 14:58	0° ∡ ¹			-3170 Sep 23 j 05:12	0° m y	
	-3175 Nov 02 j 04:17	0°ප		morning rise	-3170 Oct 27 j 00:19	24° m 40'28	
	-3175 Dec 15 j 23:48	0° ≈			-3170 Nov 03 j 03:53	0∘ ⊽	
	-3174 Jan 29 j 13:26	0° ∀		desc. node	-3170 Dec 08 j 23:52	27° ≏ 09'09	
asc. node	-3174 Feb 25 j 00:27	17° ∺ 26′23			-3170 Dec 12 j 16:55	0° M	
	-3174 Mar 16 j 07:46	0° Υ			-3169 Jan 20 j 12:44	0° ∡	
	-3174 May 02 j 01:43	$0^{\circ}S$			-3169 Feb 28 j 11:26	0°₹	
evening set	-3174 May 03 j 18:50	1° 8 05'30			-3169 Apr 09 j 13:20	0° ≈	
max. Earth dist.	-3174 Jun 16 j 08:09	28° 8 49'31	2.67154 AU		-3169 May 22 j 03:43	0° ∀	
	-3174 Jun 18 j 04:21	Π $^{\circ}0$			-3169 Jul 09 j 05:53	0 ° Υ	
				retrograde	-3169 Sep 24 j 15:04	27° Y ′06'48	
conjunction	-3174 Jun 20 j 01:37	1° Ⅱ 12'10	0°56'00	asc. node	-3169 Oct 17 j 22:18	23° Y 21'58	
minimum elong	-3174 Jun 20 j 00:23	1° Ⅱ 10′13	0°56'04	min. Earth dist.	-3169 Oct 30 j 18:43	18° Ƴ 40'36	0.63160 AU
	-3174 Aug 03 j 22:33	0 \circ 60		opposition	-3169 Nov 03 j 13:51	17° Y ′09'19	0°39'47
morning rise	-3174 Aug 04 j 06:10	0° © 12'19		greatest brilliancy	-3169 Nov 03 j 11:18	17° Ƴ 11'52	-1.5m
	-3174 Sep 18 j 20:10	0 $^{\circ}$ Ω		direct	-3169 Dec 12 j 02:05	8° Y 03'37	
	-3174 Nov 02 j 18:04	0° m			-3168 Feb 22 j 18:35	9° 8	
	-3174 Dec 16 j 20:19	0∘ ⊽			-3168 Apr 18 j 13:52	Π °0	
	-3173 Jan 29 j 13:52	0° M			-3168 Jun 06 j 21:03	0 \circ \odot	
desc. node	-3173 Mar 06 j 00:26	23°M59'30			-3168 Jul 22 j 12:12	$0^{\circ}\Omega$	
	-3173 Mar 15 j 03:02	0° ∡ ¹		evening set	-3168 Sep 01 j 05:23	28° Ω 31'34	
	-3173 May 04 j 05:50	ರ∘ರ			-3168 Sep 03 j 06:24	0° ™	
retrograde	-3173 Jun 25 j 14:59	15° る 40'54		max. Earth dist.	-3168 Sep 18 j 02:50	10° m 49'56	2.43502 AU

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 24 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

-3168 Oct 13 j 18:39 0° Ω morning rise -3163 May 04 j 05:23 1° Υ 51'19 desc. node -3168 Oct 25 j 21:51 9° Ω 14'21 asc. node -3163 Jun 08 j 20:45 25° Υ 16'46

Attention, astronom	ical year style is used: Th	-	n astronomical cou	0 ,		0 ,	
	-3168 Oct 13 j 18:39	0∘ ⊽		morning rise	-3163 May 04 j 05:23	1° Y 51'19	
desc. node	-3168 Oct 25 j 21:51	9° ≏ 14'21		asc. node	-3163 Jun 08 j 20:45	25° Y 16'46	
					-3163 Jun 16 j 04:46	0°8	
conjunction	-3168 Oct 26 j 13:47	9° Ω 44'49			-3163 Aug 03 j 01:20	Π °0	
minimum elong	-3168 Oct 26 j 13:45	9° Ω 44'45	0°00'30		-3163 Sep 22 j 19:32	0°9	
behind sun begin	-3168 Oct 25 j 12:59	8° ≏ 57'22			-3163 Nov 20 j 23:10	0°Ω	
behind sun end	-3168 Oct 27 j 14:31	10° ≏ 32'11		retrograde	-3162 Jan 13 j 08:14	13° Ω 15'56	40.45147
	-3168 Nov 21 j 18:24	0°M		opposition	-3162 Feb 18 j 21:00	5° Ω 23'27	4°45'47
morning rise	-3168 Dec 28 j 11:41	28°M46'17		greatest brilliancy	-3162 Feb 20 j 02:51	4° £ 55'51	-1.8m
	-3168 Dec 30 j 01:15	0° ∡ ¹		min. Earth dist.	-3162 Feb 26 j 06:28	2° £ 39'43	0.56254 AU
	-3167 Feb 06 j 12:10	0° ට		r	-3162 Mar 06 j 01:57	30°R≌	
	-3167 Mar 18 j 00:21	0° ≈		direct	-3162 Mar 30 j 23:46	25°954'42	
	-3167 Apr 28 j 10:43	0° \			-3162 Apr 26 j 00:28	0°N	
	-3167 Jun 11 j 19:50	0° Υ		desc. node	-3162 Jun 17 j 16:55	24° Ω 34'19	
1	-3167 Jul 31 j 05:50	0°8			-3162 Jun 26 j 15:54	0° Mp	
asc. node	-3167 Sep 03 j 22:15	17° 8 37'30			-3162 Aug 10 j 03:46	0∘ ⊽	
. 1	-3167 Oct 10 j 04:16	0°II			-3162 Sep 19 j 14:45	0°M 0°. ₹	
retrograde	-3167 Oct 28 j 13:04	1° Ⅱ 59'31			-3162 Oct 28 j 17:50	0° ∡ 7	
***	-3167 Nov 14 j 21:20	30°R8	2012141		-3162 Dec 07 j 00:20	0° ට	
opposition	-3167 Dec 07 j 12:06	22° 8 18'09			-3161 Jan 16 j 10:01	0° ≈	
greatest brilliancy	-3167 Dec 07 j 10:29				-3161 Feb 27 j 13:21	0°) €	
min. Earth dist.	-3167 Dec 07 j 11:22	22° 8 18'53	0.67226 AU	evening set	-3161 Mar 04 j 18:16	3° 升 36'42 0° Ƴ	
direct	-3166 Jan 17 j 01:40	12° 8 30'23			-3161 Apr 12 j 15:16	0λ.	
	-3166 Mar 21 j 02:15	0° Ⅱ			21(1 A 2(:22.17	9° Ƴ 30'02	0°00'07
	-3166 May 16 j 01:50	0°©		conjunction	-3161 Apr 26 j 23:17		
	-3166 Jul 02 j 12:33	0° Ω		minimum elong	-3161 Apr 26 j 23:18	9° Υ 30'03	0°00'08
1 1	-3166 Aug 14 j 18:27	0° Mp		behind sun begin	-3161 Apr 26 j 02:28	8° Υ 55'45	
desc. node	-3166 Sep 12 j 19:05	21° m/20'28		behind sun end	-3161 Apr 27 j 20:08	10° Y 04'20 9° Y 22'20	
	-3166 Sep 24 j 06:21	0° 亞		asc. node	-3161 Apr 26 j 18:35	9 γ 22 20 21° Υ 10'44	2 (2(00 AII
evening set	-3166 Oct 29 j 09:01	27° ₽ 06'32		max. Earth dist.	-3161 May 14 j 19:28	0° 8	2.62688 AU
	-3166 Nov 02 j 01:39 -3166 Dec 10 j 04:00	0° ™ 0° <i>≯</i> 7		morning rise	-3161 May 28 j 10:13	11° 8 26'20	
	-3100 Dec 10 J 04.00	0 x		morning rise	-3161 Jun 15 j 05:46	0° Ⅱ	
conjunction	-3165 Jan 02 j 14:12	18° ∡ ¹23'41	1902/21		-3161 Jul 14 j 10:53	0°©	
-	3	18° x 19'20			-3161 Aug 31 j 08:08	0° U	
minimum elong	-3165 Jan 02 j 11:59 -3165 Jan 17 j 12:15	0°る	1 02 30		-3161 Oct 19 j 08:00 -3161 Dec 10 j 08:32	0° m p	
max. Earth dist.	-3165 Feb 18 j 00:51		2.40182 AU		-3160 Feb 18 j 12:57	0° ت	
max. Earth dist.	-3165 Feb 25 j 23:02	24 00409 0°≈	2.40162 AU	retrograde	-3160 Mar 11 j 02:58	0 = 2° £ 39'57	
morning rise	-3165 Mar 10 j 23:57	0 ≈ 9° ≈ 38'46		retrograde	-3160 Apr 01 j 00:54	2 ==3937 30°R, Mp	
morning rise	-3165 Apr 08 j 05:15	0° ∺		opposition	-3160 Apr 01 j 00:34	26° Mp 39'29	1°24'00
	-3165 May 21 j 19:45	0° Υ		greatest brilliancy	-3160 Apr 13 j 04:51	26° Mp 30'14	-2.6m
	-3165 Jul 07 j 06:42	0°8		min. Earth dist.	-3160 Apr 20 j 11:33	24° m) 14'35	0.43432 AU
asc. node	-3165 Jul 22 j 22:24	9° 8 36'40		desc. node	-3160 May 04 j 16:11	20° m) 41'37	0.43432 AU
asc. node	-3165 Aug 27 j 00:23	0°Ⅱ		direct	-3160 May 17 j 23:16	19° m 28'01	
	-3165 Oct 31 j 07:00	0ංම 0 ප		direct	-3160 Jun 28 j 22:49	೧° ೮	
retrograde	-3165 Dec 03 j 06:54	5°9544'31			-3160 Aug 19 j 21:26	0° m	
renograde	-3164 Jan 02 j 12:10	30°RⅡ			-3160 Oct 02 j 01:49	0° ⊼ ¹	
opposition	-3164 Jan 11 j 03:57	26° Ⅱ 43'42	∆° ∆2'53		-3160 Nov 12 j 19:14	0°ਤ	
greatest brilliancy	-3164 Jan 11 j 17:02	26° Ⅱ 30'54			-3160 Dec 25 j 00:36	0° ≈	
min. Earth dist.	-3164 Jan 14 j 23:27	25° Ⅱ 14'11	0.64906 AU		-3159 Feb 06 j 13:34	0° ∺	
direct	-3164 Feb 21 j 10:48	16° Ⅱ 42'34	0.04700 AC	asc. node	-3159 Mar 13 j 16:47	23°) €27'33	
direct	-3164 Apr 13 j 16:06	0°9		asc. node	-3159 Mar 23 j 15:45	23 γ 2733	
	-3164 Jun 08 j 06:08	0° U		evening set	-3159 Apr 18 j 02:05	16° Ƴ 32'14	
	-3164 Jul 23 j 13:40	0° m)		evening set	-3159 May 09 j 00:10	0° 8	
desc. node	-3164 Jul 30 j 17:33	5° Mp 03'29			-3139 May 09 J 00.10	00	
dese. Hode	-3164 Sep 02 j 18:10	0∘ ರ		conjunction	-3159 Jun 05 j 09:53	17° 8 31'05	0°43'48
	-3164 Oct 11 j 19:47	0° ™		minimum elong	-3159 Jun 05 j 08:37	17° 8 29'04	
	-3164 Nov 19 j 02:04	0° ⊼		max. Earth dist.	-3159 Jun 07 j 06:33		2.66969 AU
	-3164 Dec 27 j 15:01	0°る		max. Darui dist.	-3159 Jun 24 j 23:44	0° Ⅱ	2.00707 AU
evening set	-3163 Jan 05 j 14:21	6° る 52'37		morning rise	-3159 Jul 21 j 03:17	0 Ⅱ 16°Ⅱ41'26	
evening set	-3163 Feb 05 j 07:58	0°≈		morning 1150	-3159 Aug 10 j 21:47	10 ப 41 20 0°9	
	5105 FCU 05 J 07.38	∪ ~			-3159 Sep 26 j 07:53	0° U	
conjunction	-3163 Mar 08 j 08:34	22° ≈ 33'47	-0°49'49		-3159 Sep 26 J 07:53 -3159 Nov 11 j 05:51	0° m	
minimum elong	-3163 Mar 08 j 10:52	22 ≈33 47 22°≈37'52			-3159 Dec 27 j 01:13	0∘ रु ० ॥५	
minimum ciong	-3163 Mar 18 j 20:03	22 ≈ 3732 0° H	U 7/34		-3158 Feb 11 j 20:20	0° M	
max. Earth dist.	2102 Iviai 10 J 20.03				51561°C0 11 J 20.20	O IIG	
	-3163 Apr 14 i 12:22	18°#31'31	2 53163 ATT	desc node	-3158 Mar 22 i 17-28	23°M.00'1/	
max. Earth dist.	-3163 Apr 14 j 12:22 -3163 May 01 j 10:57	18° ¥ 31'31 0° Ƴ	2.53163 AU	desc. node	-3158 Mar 22 j 17:38 -3158 Apr 05 j 03:46	23° M .00'14 0° ⋌ ¹	

 $Planetary\ Phenomena\ of\ Mars\ from\ -3400\ through\ -2898\ (UT),\ A strodienst\ AG\ 18-Feb-2025\ 14:23,\qquad page\ 25$ $Attention,\ a stronomical\ year\ style\ is\ used:\ The\ year\ -3400\ in\ a stronomical\ counting\ style\ is\ the\ year\ 3401\ BCE\ in\ historical\ counting\ style.$

Attention, astronom	ical year style is used: Th	e year -3400 i	n astronomical cou	inting style is the year	3401 BCE in historical c	ounting style.	
retrograde	-3158 May 29 j 05:17	15° ∡ °43′01		max. Earth dist.	-3153 Aug 29 j 14:31	20° Ω 49'30	2.48457 AU
min. Earth dist.	-3158 Jun 26 j 01:12	11° ∡ 11'36	0.38036 AU		-3153 Sep 11 j 10:28	0° ™	
opposition	-3158 Jun 29 j 09:03	10° ∡ 17′18	-6°05'59				
greatest brilliancy	-3158 Jun 28 j 15:23	10° ₹ ¹29'20	-2.9m	conjunction	-3153 Oct 05 j 15:58	17° m 43'18	
direct	-3158 Jul 29 j 01:58	5° ∡ 16'55		minimum elong	-3153 Oct 05 j 17:21	17° m 45'53	0°25'30
	-3158 Oct 09 j 04:08	0°ರ			-3153 Oct 22 j 01:55	0∘ ত	
	-3158 Nov 28 j 16:08	0° ≈		desc. node	-3153 Nov 12 j 14:51	16° ≙ 23'37	
	-3157 Jan 15 j 05:39	0° \			-3153 Nov 30 j 05:52	0°M	
asc. node	-3157 Jan 29 j 14:02	9° ₩ 05'59		morning rise	-3153 Dec 02 j 07:37	1°M36'30	
	-3157 Mar 03 j 14:54	0° Υ			-3152 Jan 07 j 16:42	0°る	
evening set	-3157 Apr 20 j 06:05 -3157 May 27 j 10:45	23° 8 27'44			-3152 Feb 15 j 06:46 -3152 Mar 25 j 22:02	0°≈	
evening set	-3157 Jun 06 j 18:05	0°Ⅱ			-3152 May 06 j 14:27	0 ≈ 0° ∺	
max. Earth dist.	-3157 Jul 01 j 02:47		2.65819 AU		-3152 Jun 20 j 18:02	0° Υ	
max. Lartii dist.	3137 Jul 01 J 02.47	15 11 55 25	2.03017710		-3152 Aug 12 j 09:26	0°8	
conjunction	-3157 Jul 12 j 21:19	23° II 08'28	1°08'15	asc. node	-3152 Sep 20 j 13:57	15° 8 29'05	
minimum elong	-3157 Jul 12 j 20:39	23° I 107'24		retrograde	-3152 Oct 15 j 03:42	18° 8 59'42	
	-3157 Jul 23 j 11:17	0°9		min. Earth dist.	-3152 Nov 22 j 17:17	9° 8 45'11	0.66375 AU
morning rise	-3157 Aug 27 j 03:22	22° 5 48'41		opposition	-3152 Nov 24 j 05:39	9° 8 08'39	
	-3157 Sep 06 j 21:20	$0^{\circ}\Omega$		greatest brilliancy	-3152 Nov 24 j 01:27	9° 8 12'52	-1.4m
	-3157 Oct 20 j 19:55	0° m)			-3152 Dec 25 j 22:09	30° ₹Ƴ	
	-3157 Dec 02 j 09:29	0∘ ⊽		direct	-3151 Jan 03 j 03:08	29° Y '34'02	
	-3156 Jan 12 j 22:01	0°M₊			-3151 Jan 11 j 14:43	$0^{\circ}S$	
desc. node	-3156 Feb 07 j 17:53	18°M52'09			-3151 Apr 02 j 14:06	Π °0	
	-3156 Feb 22 j 23:41	0° ∡ ¹			-3151 May 24 j 18:18	0 \circ \odot	
	-3156 Apr 04 j 20:07	0°ಕ			-3151 Jul 10 j 06:38	0 $^{\circ}$ Ω	
	-3156 May 20 j 17:36	0° ≈			-3151 Aug 22 j 06:21	0° m)	
retrograde	-3156 Jul 29 j 01:34	25°≈10'41		desc. node	-3151 Sep 29 j 12:54	28° m 20'16	
min. Earth dist.	-3156 Aug 27 j 01:58	19° ≈ 25'18	0.48304 AU		-3151 Oct 01 j 17:29	0∘ ⊽	
greatest brilliancy	-3156 Sep 02 j 22:15	16°≈57'55		evening set	-3151 Oct 04 j 16:32	2° 2 15'07	
opposition	-3156 Sep 04 j 03:05	16°≈31'56	-4°36′51	Fauth diet	-3151 Nov 09 j 13:42	0°M	2 27552 ATT
direct	-3156 Oct 07 j 13:31	9° ≈ 30'37 0° 升		max. Earth dist.	-3151 Nov 28 j 09:23	14*11646'39	2.37553 AU
asc. node	-3156 Dec 13 j 21:41 -3156 Dec 16 j 12:53	0 X 1° ¥ 17'30		conjunction	-3151 Dec 05 j 13:42	20°M26'21	00/3/58
asc. Houe	-3155 Feb 07 j 10:40	0° Υ		minimum elong	-3151 Dec 05 j 10:36	20°M20'14	
	-3155 Mar 30 j 05:08	0°8		minimum ciong	-3151 Dec 03 j 10:50	0°×7	0 4401
	-3155 May 18 j 01:43	0°II			-3150 Jan 25 j 00:59	0°ਤ	
evening set	-3155 Jul 03 j 18:08	29° Ⅱ 43'45		morning rise	-3150 Feb 12 j 00:33	13° る 49'30	
<i>Ş</i>	-3155 Jul 04 j 04:08	0ంత		5 5	-3150 Mar 05 j 10:53	0° ≈	
max. Earth dist.	-3155 Jul 26 j 00:46		2.59399 AU		-3150 Apr 15 j 16:45	0° ∀	
	-3155 Aug 18 j 06:46	$0^{\circ}\Omega$			-3150 May 29 j 10:38	0° Y	
					-3150 Jul 15 j 13:44	$0^{\circ}B$	
conjunction	-3155 Aug 20 j 01:34	1° £ 12′53	1°05'20	asc. node	-3150 Aug 08 j 13:10	14° 8 07'33	
minimum elong	-3155 Aug 20 j 02:35	1° Ω 14'37	1°05'25		-3150 Sep 07 j 01:48	Π °0	
	-3155 Sep 30 j 08:32	0° m)		retrograde	-3150 Nov 19 j 00:15	22° Ⅱ 38'24	
morning rise	-3155 Oct 07 j 11:43	5° Mp 06'05		opposition	-3150 Dec 28 j 10:31	13° Ⅱ 19'10	
	-3155 Nov 10 j 14:47	0∘ ⊽		greatest brilliancy	-3150 Dec 28 j 16:51	13° Ⅱ 12'54	-1.3m
	-3155 Dec 20 j 12:44	0°M		min. Earth dist.	-3150 Dec 30 j 18:00	12° Ⅱ 24'15	0.66579 AU
desc. node	-3155 Dec 25 j 16:25	3°M55'27		direct	-3149 Feb 07 j 14:41	3° Ⅱ 19'31	
	-3154 Jan 28 j 17:36	0° ∡ ¹			-3149 Apr 29 j 02:00	0°€	
	-3154 Mar 09 j 01:28 -3154 Apr 18 j 16:09	ರ°0 ⊗°0			-3149 Jun 18 j 17:21 -3149 Aug 01 j 22:10	0° Ω 0° m	
	-3154 Jun 01 j 11:50	0 ≈ 0° ∺		desc. node	-3149 Aug 01 j 22.10	11° m) 10'36	
	-3154 Jul 24 j 21:23	0° Υ		desc. Hode	-3149 Sep 11 j 17:37	0ം ರ	
retrograde	-3154 Sep 10 j 05:27	12° Υ 16'00			-3149 Oct 20 j 15:25	0° ™	
min. Earth dist.	-3154 Oct 14 j 13:42	4° Υ 27'15	0.59896 AU		-3149 Nov 27 j 19:06	0° ⊼ ¹	
opposition	-3154 Oct 19 j 18:56	2° Υ 23'05		evening set	-3149 Dec 10 j 18:57	10° ∡ 12'30	
greatest brilliancy	-3154 Oct 19 j 16:22	2° Y 25'38	-1.7m	S	-3148 Jan 05 j 05:01	0°ප	
3	-3154 Oct 25 j 22:38	30° ₹ ₩			· J	-	
asc. node	-3154 Nov 03 j 13:38	27° ₩ 05'21		conjunction	-3148 Feb 13 j 17:33	29° る 58'44	-1°03'19
direct	-3154 Nov 26 j 03:24	23°) 42′48		minimum elong	-3148 Feb 13 j 19:20	0° ≈ 02'04	1°03'24
	-3154 Dec 30 j 16:39	0° Y			-3148 Feb 13 j 18:14	0° ≈	
	-3153 Mar 06 j 10:51	9° 8			-3148 Mar 26 j 02:31	0° ∀	
	-3153 Apr 27 j 22:38	Π°		max. Earth dist.	-3148 Mar 29 j 18:34	2° ∺ 35′26	2.48213 AU
	-3153 Jun 15 j 07:20	0ංම		morning rise	-3148 Apr 14 j 20:53	13° ¥ 49′04	
	-3153 Jul 30 j 16:00	0°N			-3148 May 08 j 15:10	0° Υ	
evening set	-3153 Aug 14 j 15:29	10° Ω 18'53			-3148 Jun 23 j 12:10	0°B	

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th	ie year -3400 i	in astronomical co	unting style is the year	3401 BCE in historical c	ounting style.	
asc. node	-3148 Jun 25 j 12:31	1° 8 16'55			-3143 Dec 09 j 19:17	0° ≈	
	-3148 Aug 11 j 01:40	Π °0			-3142 Jan 24 j 03:24	0° ∀	
	-3148 Oct 03 j 08:50	0 \circ		asc. node	-3142 Feb 15 j 06:00	14° ¥ 25'49	
retrograde	-3148 Dec 26 j 17:58	27° © 59'28			-3142 Mar 11 j 08:23	0° Υ	
opposition	-3147 Feb 02 j 09:13	19° © 35'52	4°59'02		-3142 Apr 27 j 08:23	0°8	
greatest brilliancy	-3147 Feb 03 j 09:36	19° © 12'40	-1.6m	evening set	-3142 May 12 j 12:41	9° 8 38'04	
min. Earth dist.	-3147 Feb 08 j 11:39	17°5016'35	0.60356 AU	P. d. P.	-3142 Jun 13 j 13:49	0°П	0.00011.177
direct	-3147 Mar 15 j 06:03	9° © 46'06		max. Earth dist.	-3142 Jun 21 j 17:36	5°Щ12′11	2.66911 AU
	-3147 May 19 j 09:11	0°Ω			21.42 1 20 : 00 22	00Т27141	1001124
desc. node	-3147 Jul 04 j 09:51 -3147 Jul 08 j 05:37	27° Ω 27'57 0° m		conjunction	-3142 Jun 28 j 09:32	9° Ⅱ 27'41 9° Ⅱ 25'57	1°01'34 1°01'40
	-3147 Jul 08 j 03.37 -3147 Aug 19 j 18:42	0∘ ত المار		minimum elong	-3142 Jun 28 j 08:27 -3142 Jul 30 j 07:24	9 11 23 37	1 01 40
	-3147 Aug 19 j 18:42 -3147 Sep 28 j 10:51	0° ™		morning rise	-3142 Jul 30 j 07.24 -3142 Aug 12 j 11:11	8°933'23	
	-3147 Nov 06 j 02:33	0° ∡ 7		morning 1130	-3142 Sep 14 j 00:36	0° Ω	
	-3147 Nov 66 j 62:33	0°ਤੇ			-3142 Oct 28 j 13:13	0° m)	
	-3146 Jan 24 j 00:46	0° ≈			-3142 Dec 11 j 00:02	0∘ ⊽	
evening set	-3146 Feb 12 j 01:00	13° ≈ 48'47			-3141 Jan 22 j 17:44	0° M	
<i>8</i>	-3146 Mar 06 j 20:27	0°) €		desc. node	-3141 Feb 24 j 10:11	22° M 57'45	
					-3141 Mar 06 j 13:08	0° ∡ ¹	
conjunction	-3146 Apr 09 j 05:19	22°) 57'44	-0°19'48		-3141 Apr 20 j 17:21	ರ°0	
minimum elong	-3146 Apr 09 j 06:19	22° ¥ 59'24	0°19'49		-3141 Jun 24 j 23:27	0° ≈	
_	-3146 Apr 19 j 16:24	0° Υ		retrograde	-3141 Jul 09 j 01:27	1° ≈ 24'12	
max. Earth dist.	-3146 May 04 j 02:01	9° Y '34'39	2.59564 AU		-3141 Jul 23 j 01:13	30°Ŗる	
asc. node	-3146 May 13 j 10:31	15° Y '44'08		min. Earth dist.	-3141 Aug 05 j 07:09	26° පි 28'16	0.43372 AU
morning rise	-3146 May 30 j 21:17	27° Y °05'55		greatest brilliancy	-3141 Aug 11 j 14:06	24° る 24'31	-2.5m
	-3146 Jun 04 j 09:03	0° 8		opposition	-3141 Aug 13 j 02:36	23° る 54'25	-6°03'45
	-3146 Jul 21 j 14:13	Π °0		direct	-3141 Sep 13 j 17:03	17° පි 46'12	
	-3146 Sep 08 j 05:30	0 \circ			-3141 Nov 01 j 06:46	0° ≈	
	-3146 Oct 29 j 08:08	0 ° Ω			-3141 Dec 29 j 02:33	0° ∀	
	-3146 Dec 28 j 11:17	0° m)		asc. node	-3140 Jan 03 j 05:06	2° ¥ 56′23	
retrograde	-3145 Feb 14 j 20:21	11° m) 18'07			-3140 Feb 17 j 19:43	0° Υ	
opposition	-3145 Mar 21 j 02:41	4° m) 28'05	3°21'43		-3140 Apr 06 j 23:19	0° B	
greatest brilliancy	-3145 Mar 22 j 06:05				-3140 May 25 j 03:50	0°П	
min. Earth dist.	-3145 Mar 29 j 14:02		0.48570 AU	evening set	-3140 Jun 18 j 16:48	15° Ⅱ 34'44	
direct	-3145 Apr 03 j 14:22 -3145 Apr 27 j 21:06	30°R Ω 26° Ω 05'12		may Earth dist	-3140 Jul 11 j 01:07	0°©	2.62520 AU
desc. node	-3145 May 22 j 10:19	20 δι 03 12 29° Ω 55'29		max. Earth dist.	-3140 Jul 15 j 13:06	2 903002	2.02320 AU
desc. node	-3145 May 22 j 16:25	0°m)		conjunction	-3140 Aug 04 j 07:36	15° © 57'43	1010/18
	-3145 Jul 21 j 11:44	0∘ ত المارة			-3140 Aug 04 j 07:55		
	-3145 Sep 03 j 03:24	0° ™		minimum ciong	-3140 Aug 25 j 05:38	0° Ω	1 1024
	-3145 Oct 13 j 19:53	0° × 7		morning rise	-3140 Sep 19 j 23:03	17° Ω 39'06	
	-3145 Nov 23 j 03:55	0°ප			-3140 Oct 07 j 14:04	0° m/y	
	-3144 Jan 03 j 09:57	0° ≈			-3140 Nov 18 j 06:17	0∘ <u>⊽</u>	
	-3144 Feb 15 j 05:52	0° ∀			-3140 Dec 28 j 15:44	0° M	
asc. node	-3144 Mar 30 j 07:41	29°) 39'43		desc. node	-3139 Jan 11 j 10:10	10°ML22'15	
	-3144 Mar 30 j 19:58	0° Y			-3139 Feb 06 j 08:46	0° ∡ ¹	
evening set	-3144 Apr 01 j 12:59	1° Y ′07'42			-3139 Mar 18 j 06:27	ರ°0	
	-3144 May 15 j 21:21	0° 8			-3139 Apr 28 j 19:36	0° ≈	
					-3139 Jun 14 j 06:31	0° ∀	
conjunction	-3144 May 21 j 08:38	3° 8 31'03	0°28'44	retrograde	-3139 Aug 25 j 18:32	25° ¥ 56′28	
minimum elong	-3144 May 21 j 07:36	3° 8 29'23		min. Earth dist.	-3139 Sep 27 j 03:10	18° ¥ 51′08	0.55839 AU
max. Earth dist.	-3144 May 29 j 04:29		2.65941 AU	opposition	-3139 Oct 03 j 16:28	16° 米 18'36	
	-3144 Jul 01 j 19:36	0°П		greatest brilliancy	-3139 Oct 03 j 05:35	16°) 29'11	-1.9m
morning rise	-3144 Jul 07 j 01:41	3° Ⅱ 20'36		direct	-3139 Nov 08 j 16:40	8° ¥ 10′12	
	-3144 Aug 17 j 23:46	0°©		asc. node	-3139 Nov 20 j 04:45	8°) 59'14	
	-3144 Oct 04 j 03:08	0° N			-3138 Jan 19 j 03:37	0°Υ •••	
	-3144 Nov 20 j 12:37 -3143 Jan 08 j 08:53	0 ்⊽ 0° ™			-3138 Mar 16 j 04:04	0°B 0°B	
	-3143 Jan 08 j 08:33	0° ™			-3138 May 05 j 18:24 -3138 Jun 22 j 11:58	0ം© 0∘T	
desc. node	-3143 Mar 04 j 13.22 -3143 Apr 08 j 09:55	12°M28'12		evening set	-3138 Jul 28 j 13:55	0 95 23°9548'31	
retrograde	-3143 Apr 08 j 09:33	14°M42'07		ovening set	-3138 Aug 06 j 16:59	23 3 48 31	
opposition	-3143 May 28 j 01:23	9°M39'46	-3°31'23	max. Earth dist.	-3138 Aug 14 j 08:50		2.53175 AU
greatest brilliancy	-3143 May 28 j 05:59			Zurur dist.	5.55.1ug 11 j 00.50	5 U G 1 T 5 T	2.00170110
min. Earth dist.	-3143 May 30 j 05:52	9°M04'25	0.38030 AU	conjunction	-3138 Sep 16 j 03:54	28° Ω 16'50	0°45'50
direct	-3143 Jun 27 j 23:22	4°M22'52	-	minimum elong	-3138 Sep 16 j 05:37	28° Ω 19'55	
	-3143 Sep 07 j 13:12	0° ∡ ¹		Č	-3138 Sep 18 j 13:28	0° m)	
	-3143 Oct 25 j 13:47	ರ∘ರ			-3138 Oct 29 j 09:50	0∘ ⊽	
					-		

mominging 3138 Nov 39 job.53 "\$\frac{2}{2} \text{ lengths} 3132 hav 39 job.53 \$\frac{2}{2} \text{ lengths} 3132 hav 39 job.53 \$\frac{2}{2} \text{ lengths} \$	•	omena of Mars fron ical year style is used: Th		•	* *			•
desc. node -3138 Nov. 29 (908) 22 Δ2354 greatest brilliamo, -3132 Jan. 29 (31-24) 49 4907. 1 -49 4908. 2 -49 4907. 1			-					4°52'50
3438 Res	-					-		-1.4m
		-			-	·	3° © 17'40	0.63560 AU
1.317 Apr 0.6 0.543 0.784 1.312 Apr 0.6 0.523 0.784 1.312 Apr 0.6 0.523 0.784 1.312 Apr 0.6 0.524 0.784 1.312 Apr 0.6 0.524 0.784 0.312 Apr 0.524 0.784 0.		-	0° ∡ 7			-	30°RⅡ	
1317 May 16 j 06:53 O'P. 1317 May 16 j 06:53 O'P. 1317 May 16 j 10:20 O'P.		-3137 Feb 23 j 07:08	ರ°0		direct	-3132 Feb 29 j 13:49	25° Ⅱ 06′29	
1313 Apr 1 13 2012 0mP 1313 Apr 2 1022 2mP 1313 Apr 2 1022 2mP 1253 2mP 2mP		-3137 Apr 04 j 03:43				-3132 Mar 30 j 04:33		
1.13 1.12						-		
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ase, node 3137 Oct 08 j 6500 5°E20731 -3132 Oct 1 66 j 1902 0°III. 0°P min. Earth dist. -3137 Oct 1 8 j 6329 0°P -3132 Oct 1 60 j 6329 0°P min. Earth dist. -3137 Nov 1 1 j 1121 25°P 3622 1°P 1943 evening set -3131 Jun 1 9 j 1902 2°F 16/139 greatest brilliane -3137 Nov 1 j 1 j 111 25°P 3622 1°P 1975 -3131 Jun 1 9 j 1902 0°R -3136 Apr 1 2 j 15-57 0°II -3136 Jun 1 9 j 1902 0°B -3131 Mar 20 j 1505 4°H 3031 -3136 Apr 1 2 j 15-57 0°II -3136 Apr 10 j 1929 0°B -3131 Mar 20 j 1500 4°H 3031 -3136 Apr 1 j 1929 0°B 0°II -3131 Mar 20 j 1500 4°H 3031 -3136 Apr 1 j 1912 0°B 0°II -3131 Mar 20 j 1500 0°H 3433 -3136 Apr 2 j 1617 0°IP 0°B -3131 Mar 20 j 1500 0°H 3433 evening set -3136 Apr 20 j 10157 0°R -6004 -3131 Mar 20 j 1500 0°H evening set -3136 Nov 0 j 0604 2°P 2371 2.40841 AU asc. node					desc. node	•		
min Farth dist. 3137 Nov 915 1534 26° 26° 24° 28° 28° 28° 28° 28° 28° 28° 28° 28° 28	•	-						
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opposition of periodic opposition of call of Nov 1 j 11 j 12 j 25 γ 36 32 j 1943 of the call of call o	min Farth dist	-		0.64560 ATT		-		
greatest brillianey -3137 Nov 1 1 j 11-11 25°Q*4042 -1.5m -3131 Mar 14 j 02-58 0°% direct -3136 Feb 13 j 06-14 0°K 10°K 10°K 1313 Mar 14 j 02-58 0°K -3136 Feb 13 j 06-14 0°B conjunction -3131 Mar 20 j 15-05 4°¥3031 0°K -3136 Aug 19 j 19-29 0°B minimum elong -3131 Mar 20 j 15-06 4°¥3038 0° -3136 Aug 19 j 19-10 0°B morning rise -3131 Mar 20 j 15-04 26°¥3500 28°¥3500 28°¥3500 28°¥3500 28°¥3500 28°¥3500 28°¥3500 28°¥3500 28°¥3500 28°¥3500 28°¥3500 28°¥3500 28°¥3500 3313 Mar 20 j 15:00 28°¥3500 28°¥3500 28°¥3500 3313 Mar 20 j 15:00 28°¥3500 28°¥3500 3313 Mar 20 j 15:00 28°¥3500 28°¥3500 3313 Mar 20 j 15:00 28°¥3500 28°¥3500 28°¥3500 3313 Mar 20 j 10:00 28°¥3500 28°¥3500 3313 Mar 20 j 10:00 28°¥3500 28°¥3500 3313 Mar 20 j 10:00 28°¥3500 28°¥3500 28°¥3500 3313 Mar 20 j 10:00 28°¥3500 28					evening set	-		
direct -3137 Dec 20 j 1613 16°Y 1915 -3131 Mar 14 j 02-58 0°H -3136 Feb 13 j 06:14 0°B 0°B -3136 Mar 12 j 15:57 0°H conjunction -3131 Mar 20 j 13:05 4°H 3031 0°H 313 Mar 20 j 13:05 4°H 3031 0°J 31 Mar 20 j 13:05 4°H 3031 0°J 31:05 13:		,			evening set	,		
1316 13 15 15 15 15 15 15 15		,		1.5111		-		
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1315 131 13		·			conjunction	-3131 Mar 20 j 13:05	4°) 30'31	-0°39'32
3.13 for 17 j.17.3 0.0					-	3	4°) 33′58	0°39'33
evening set		-3136 Jul 17 j 17:43	$0^{\circ}\Omega$		max. Earth dist.	-	26°) 56′04	2.55618 AU
max. Earth dist. -3136 Oct 04 j 07:16 26° m 23'11 2.40841 AU asc. node -3131 May 30 j 02:02 22°°γ0100 closes. node -3136 Oct 16 j 06:16 5° m 27.73 closes. node -3131 May 30 j 02:02 22°°γ0100 closes. node -3136 Oct 16 j 06:16 5° m 27.73 closes. node -3131 May 30 j 02:02 22°°γ0100 closes. node -3130 Mar 20 j 02:09 closes. node -3131 Nov 10 j 15:21 0° m 2 closes. node -3131 Nov 10 j 15:21 0° m 2 closes. node -3130 Nov 10 j 15:20 0° m 2 closes. node -3130 Mar 20 j 03:43 23° m 28' m 2 closes. node -3130 Mar 20 j 03:44 22° m 2 closes. node -3130 Mar 20 j 03:44 22° m 2 closes. node -3130 Mar 20 j 03:44 22° m 2 closes. node -3130 Mar 20 j 03:44 22° m 2 closes. node -3130 Mar 20 j 03:44 22° m 2 closes. node -3130 Mar 20 j 03:44 22° m 2 closes. node -3130 Mar 20 j 03:44 22° m 2 closes. node -3130 Mar 20 j 03:44 22° m 2 closes. node -3130 Mar 20 j 03:45 22° m 2 closes. node -3130 Mar 20 j 03:45 22° m 2 closes. node -3130 Mar 20 j 03:45 22° m 2 closes. node -3130 Mar 20 j 03:45 22° m 2 closes. node -3130 Mar 20 j 03:45 22° m 2 closes. node -3130 Mar 20 j 03:45 22° m 2 closes. node -3130 Mar 20 j 03:45 closes. node -31320 Mar 20 j 03:45 closes. node -31320 Mar 20 j 03:45 closes. node -3133 M		•						
desc. node	evening set	-3136 Sep 12 j 16:04	10° Mp 16'02		morning rise	-3131 May 14 j 08:49		
desc. node	max. Earth dist.	-3136 Oct 04 j 07:16	26° m $23'11$	2.40841 AU	asc. node	-3131 May 30 j 02:02		
conjunction -3136 Nov 09 j 06.46 23° ± 58′ 38 -01647 retrograde -3131 Nov 10 j 152.10 0° € minimum elong -3136 Nov 09 j 06.59 23° ± 58′ 38 -01647 retrograde -3131 Nov 10 j 152.11 0° € -3136 Nov 17 j 00.17 0° III. opposition -3130 Mar 01 j 02.39 15° £ (35° 28)		-				-		
conjunction	desc. node	-3136 Oct 16 j 06:16	5° ≏ 27'45			-		
minimum elong			_					
1316 Nov 17 j 00:17		-				-		
Second	minimum elong	-		0°16'49	-			4005141
moming rise						-		4°25'41 -1.9m
3135 Feb 01 j 15:00 0° ₹ direct 3130 Apr 09 j 13:40 6° Ω2243 4° Ω4457 3135 Mar 13 j 01:31 0° ∞	morning rise	,			-	•		-1.9m 0.53653 AU
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3135 Apr 23 j 09:02 0° H 3130 Jun 17 j 16:39 0° M 6		3						
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asc. node -3135 Jul 24 j 16:34 0° 8 -3136 Neg 13 j 16:56 0° IL asc. node -3135 Aug 25 j 05:01 17° 81'80'6 -3130 Occ 23 j 05:53 0° % retrograde -3135 Nov 05 j 07:00 9° IL 65'7 -3130 Dec 0 j 19:16 0° % opposition -3135 Dec 15 j 02:22 0° IL 15'2 -1.3m evening set -3129 Mar 15 j 15:26 14° ½ 2001 -3135 Dec 15 j 03:07 0° IL 15'2 -1.3m evening set -3129 Mar 15 j 15:26 14° ½ 2001 -3135 Dec 15 j 14:59 30° Rb -3129 Apr 07 j 22:35 0° YL min. Earth dist. -3135 Dec 15 j 14:59 30° Rb -3129 Apr 07 j 22:35 0° YL direct -3134 Jan 24 j 22:17 20° 81922 -3134 Mar 10 j 07:23 0° IL -3134 Mar 10 j 07:23 0° IL -3134 Mar 10 j 07:24 0° YL -3129 Mar 06 j 11:56 18° Y4272 1						•		
Part			0°B			• •	0° M .	
retrograde	asc. node	-3135 Aug 25 j 05:01	17° 8 15'06			-3130 Oct 23 j 05:53	0° ∡ ¹	
opposition		-3135 Sep 22 j 08:08	$\Pi^{\circ}0$			-3130 Dec 01 j 19:16	0°ಕ	
greatest brilliancy	retrograde	-3135 Nov 05 j 07:00				-3129 Jan 11 j 10:20		
3135 Dec 15 14:59 30°R8	* *	-				-		
min. Earth dist.	greatest brilliancy	-		-1.3m	evening set			
direct		-						
-3134 May 10 j 07:23 0°표		-		0.67282 AU	asc. node	-3129 Apr 17 j 00:44	6° Υ' 00'57	
-3134 May 09 j 22:37 0°Φ minimum elong -3129 May 06 j 11:28 18°Ψ46'27 0°Ω behind sun begin -3129 May 05 j 20:40 18°Ψ22'21 -3134 Aug 09 j 20:49 0°ႃM behind sun end -3129 May 07 j 02:15 19°Ψ10'31 19°Ψ10'3	direct	-				2120 14 06:11 56	1000045110	0011110
-3134 Jun 27 j 07:21 0° Ω behind sun begin -3129 May 05 j 20:40 18° Ψ 22'21 -3134 Aug 09 j 20:49 0° Ψ behind sun end -3129 May 07 j 02:15 19° Ψ 10'31 19° Ψ 10'31					-			
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desc. node		-						
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evening set -3134 Oct 28j 07:17 0° M -3134 Nov 13j 07:30 12° M:34'52 -3134 Dec 05j 09:37 0° A -3133 Jan 12j 17:38 0° B -3133 Jan 12j 17:38 0° B -3129 Oct 13j 11:39 0° B -3129 Dec 02j 06:51 0° M -3129 Dec 02j 06:51 0° M -3128 Jan 27j 05:17 0° A -3128 Mar 27j 06:30 16° A 49'39 -3133 Feb 21j 04:10 0° A max. Earth dist3133 Mar 09j 07:20 11° \$\infty\$54'48 2.42948 AU opposition morning rise -3133 Mar 24j 21:57 23° \$\infty\$13'27 greatest brilliancy -3133 May 16j 22:16 0° Y -3133 May 20j 18:19 0° M max. earch dist3133 May 20j 18:19 0° M -3133 May 20j 18:19 0° M morning rise -3133 May 20j 18:19 0° M morning rise -3133 May 20j 18:19 0° M morning rise -3138 May 20j 18:19 0° M morning rise -3128 May 23j 17:06 19° 848'58 -3129 Jul 09j 17:42 0° M -3129 Jul 09j 17:40 0° M -3129 Jul 09j 17:40 0° M -3128 Jul 09j 17:40 10° M -3128 Jul 09j 17:40 10°	aose. node				max. Lartii dist.			2.0-1002 AU
evening set -3134 Nov 13 j 07:30					morning rise	, ,		
-3134 Dec 05 j 09:37 0°\$ -3129 Aug 26 j 07:18 0°\$ -3129 Oct 13 j 11:39 0°\$ -3129 Dec 02 j 06:51 0°\$ conjunction -3133 Jan 18 j 08:37 4°\$\frac{1}{2}\$20'44 -1°06'46 minimum elong -3133 Jan 18 j 07:59 4°\$\frac{1}{2}\$19'30 1°06'52 retrograde -3128 Mar 27 j 06:30 16°\$\frac{1}{2}\$49'39 -3133 Feb 21 j 04:10 0°\$\infty\$ desc. node -3128 Apr 25 j 02:38 12°\$\frac{1}{2}\$04'04 max. Earth dist3133 Mar 09 j 07:20 11°\$\infty\$54'48 2.42948 AU opposition -3128 Apr 27 j 19:59 11°\$\frac{1}{2}\$16'37 -0°\$\infty\$ min. Earth dist3133 Mar 24 j 21:57 23°\$\infty\$13'27 greatest brilliancy -3128 Apr 27 j 21:06 11°\$\frac{1}{2}\$15'48 -2-3133 May 16 j 22:16 0°\$\frac{1}{2}\$ direct -3128 May 04 j 09:26 9°\$\frac{1}{2}\$21'36 0. asc. node -3133 Jul 02 j 01:55 0°\$\frac{1}{2}\$ direct -3128 May 09 j 02:39 0°\$\frac{1}{2}\$ asc. node -3133 May 20 j 18:19 0°\$\frac{1}{2}\$ do 0°\$\frac{1}{2}\$ asc. node -3128 Nov 06 j 09:52 0°\$\frac{1}{2}\$	evening set	-			morning 115¢	-		
-3133 Jan 12 j 17:38 0°δ -3129 Oct 13 j 11:39 0°δ -3129 Dec 02 j 06:51 0° to 2 i 0°	8	-				-		
conjunction -3133 Jan 18 j 08:37 4°\320'44 -1°06'46 -3128 Jan 27 j 05:17 0°\100 (-3128 Jan 27 j 06:30 16°\100 (-349'39 -3133 Jan 18 j 07:59 4°\100 (-3128 Jan 27 j 06:30 16°\100 (-3128 Jan 27 j 06:30 16°\100 (-349'39 -3128 Jan 27 j 06:30 16°\100 (-3128 Jan 27 j 06:30 16°\100 (-312								
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max. Earth dist.	minimum elong	-3133 Jan 18 j 07:59	4° る 19'30	1°06'52	retrograde		16° ≏ 49'39	
morning rise		-3133 Feb 21 j 04:10	0° ≈		desc. node		12° ≏ 04'04	
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asc. node -3133 Jul 13 j 03:22 6°と54'25 -3128 Sep 24 j 09:22 0°ズ -3133 Aug 20 j 18:19 0°耳 -3128 Nov 06 j 09:52 0°る					direct			
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	asc. node	-						
2122 Oot 19:00:05 0005 2100 D== 10:00:01 00==							0° &	
-3133 Oct 18 j 02:25 0°5 -3128 Dec 19 j 09:01 0°≈ retrograde -3133 Dec 11 j 20:50 13°554'34 -3127 Feb 01 j 09:43 0°₩	retrograde	-						

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 28 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3127 Mar 03 j 22:04 20°¥15'34 -3123 Nov 05 i 19:38 0∘**⊽** asc. node -3127 Mar 18 j 19:20 $0^{\circ}\Upsilon$ -3123 Dec 15 j 12:49 0°M -3127 Apr 27 j 03:59 25°**Y**24'20 -3123 Dec 16 j 02:27 0°M26'03 evening set desc. node -3127 May 04 j 08:14 0°×7 0°8 -3122 Jan 23 j 12:27 -3122 Mar 03 j 14:20 0°궁 -3122 Apr 12 j 19:48 conjunction -3127 Jun 13 j 20:45 25°**8**50'42 0°51'16 0°≈ -3127 Jun 13 j 19:28 0°**∀** minimum elong 25°**8**48'40 0°51'21 -3122 May 25 j 18:40 -3127 Jun 12 j 13:59 25°**8**01'41 2.67172 AU -3122 Jul 14 j 06:45 0° max. Earth dist. 21°Y22'05 -3127 Jun 20 j 09:12 $0^{\circ}\Pi$ retrograde -3122 Sep 18 j 15:00 morning rise -3127 Jul 29 j 05:41 24°**Ⅲ**51'55 min. Earth dist. -3122 Oct 23 j 23:47 13°**Y**11'33 0.61822 AU -3127 Aug 06 j 05:02 0ಂತಾ asc. node -3122 Oct 24 j 19:36 12°**Υ**51'51 -3127 Sep 21 j 08:17 -3122 Oct 28 j 09:59 11° Y25'26 $0^{\circ}\Omega$ opposition 0°08'49 -3127 Nov 05 j 16:17 0° M greatest brilliancy -3122 Oct 28 j 09:24 11°**Y**26'01 -1.6m -3127 Dec 20 j 10:48 0∘**⊽** direct -3122 Dec 05 j 09:53 2°Y30'15 -3126 Feb 03 j 06:31 0°M -3121 Feb 27 j 05:28 0°8 desc. node -3126 Mar 13 j 02:51 24°M31'42 -3121 Apr 22 j 11:36 $0^{\circ}\Pi$ -3126 Mar 21 j 23:12 0°**√** -3121 Jun 10 j 09:45 0ಂತಾ -3126 May 22 j 13:31 0°る -3121 Jul 25 j 23:26 $0^{\circ}\Omega$ retrograde -3126 Jun 14 j 06:16 3°**ට**21'44 evening set -3121 Aug 24 j 23:10 20°**Ω**49'44 -3126 Jul 07 j 01:56 30°R*x*7 -3121 Sep 06 j 19:01 0° m min. Earth dist. -3126 Jul 11 j 01:38 28°**₹**′54′16 0.39361 AU max. Earth dist. -3121 Sep 09 j 09:37 1° m 52'59 2.45736 AU greatest brilliancy -3126 Jul 15 i 10:29 27°**∡**°38'31 -2.8m opposition -3126 Jul 16 i 15:51 27°**∡**17'08 -6°36'42 conjunction -3121 Oct 17 j 16:54 0°**₽**13'29 0°11'17 direct -3126 Aug 15 j 20:01 21°×759'53 minimum elong -3121 Oct 17 i 17:38 0°**£**14'51 0°11'18 -3126 Sep 22 j 07:08 0°궁 behind sun begin -3121 Oct 16 j 23:59 29° m 41'34 -3126 Nov 20 j 10:02 -3121 Oct 18 j 11:16 0°**£**48′10 0°≈≈ behind sun end -3125 Jan 09 j 01:07 0°**₩** -3121 Oct 17 j 09:46 0∘**⊽** -3125 Jan 19 j 20:14 6°¥41'05 -3121 Nov 03 j 00:31 12°**£**38'35 desc. node asc node -3125 Feb 26 j 07:38 $0^{\circ}\Upsilon$ -3121 Nov 25 j 11:53 oom. -3125 Apr 15 j 09:34 0° 8 -3121 Dec 17 j 06:01 16°M59'08 morning rise -3125 Jun 02 j 02:42 -3120 Jan 02 j 20:32 0°×7 Π °0 -3120 Feb 10 j 08:19 0°정 evening set -3125 Jun 04 j 21:41 1°**Ⅱ**46'11 -3125 Jul 06 j 15:15 22°**Ⅱ**03'53 2.64859 AU -3120 Mar 20 j 20:33 0°≈ max. Earth dist. -3125 Jul 18 j 21:08 -3120 May 01 j 07:38 0°\ 0ಂತಾ -3120 Jun 14 j 21:09 $0^{\circ}\Upsilon$ -3125 Jul 21 j 06:58 1°534'08 1°10'17 -3120 Aug 04 j 05:19 0°8 conjunction minimum elong -3125 Jul 21 j 06:38 1°533'35 1°10'24 asc. node -3120 Sep 10 j 18:58 17°**8**43'35 -3125 Sep 02 j 05:10 $0^{\circ}\Omega$ -3120 Oct 22 j 21:22 26°856'58 retrograde -3125 Sep 04 j 21:03 1°**Ω**47'45 -3120 Dec 01 j 21:49 17°**8**10'46 2°52'12 morning rise opposition -3125 Oct 15 j 22:14 0° M min. Earth dist. -3120 Dec 01 j 05:11 17°**8**27'28 0.66974 AU -3125 Nov 27 j 03:21 0∘**⊽** greatest brilliancy -3120 Dec 01 j 18:44 17°**8**13'52 -1.3m -3124 Jan 07 j 04:32 0°M -3119 Jan 11 j 04:18 7°**8**28'17 direct -3124 Jan 29 j 02:22 16°M13'31 -3119 Mar 25 j 23:15 $0^{\circ}\Pi$ desc. node -3124 Feb 16 j 15:50 0°×7 -3119 May 19 j 04:17 0ಂತಾ -3124 Mar 28 j 13:32 0°る -3119 Jul 05 j 06:32 $0^{\circ}\Omega$ -3124 May 11 j 01:51 0°≈ -3119 Aug 17 j 11:00 0° m -3124 Jul 05 i 06:43 0°**)**€ desc. node -3119 Sep 19 i 21:53 24° m 39'11 -3124 Aug 08 j 17:45 7° **)** 24'52 -3119 Sep 26 i 23:37 0∘**⊽** retrograde min. Earth dist. -3124 Sep 07 i 22:39 1°**升**09'37 0.51112 AU -3119 Oct 18 j 07:02 16°**£**20'42 evening set -3124 Sep 11 j 02:11 30°R≈ -3119 Nov 04 j 19:47 0°M -3124 Sep 15 j 14:20 28°≈18'54 -3°40'45 -3119 Dec 12 j 22:33 0°×7 opposition -3124 Sep 14 j 16:16 28°≈39'29 -2.1m greatest brilliancy -3124 Oct 20 j 00:54 20°≈50'56 -3119 Dec 21 j 06:15 6°\$\square\$33'06 -0°56'01 direct conjunction -3124 Nov 30 j 21:34 0°**∀** minimum elong -3119 Dec 21 j 03:15 6°**≯**27'11 0°56'05 asc. node -3124 Dec 06 j 19:58 2°\ 20'46 -3118 Jan 20 j 06:17 0°정 $0^{\circ}\Upsilon$ -3123 Jan 31 j 16:12 max. Earth dist. -3118 Jan 25 j 03:00 3°る45'43 2.38323 AU -3123 Mar 24 j 19:48 0° 8 -3118 Feb 27 j 14:33 29°る13'14 morning rise $0^{\circ}\Pi$ -3118 Feb 28 j 15:35 -3123 May 13 j 05:10 0°≈ -3123 Jun 29 j 12:45 000 0°) -3118 Apr 10 j 20:16 -3123 Jul 12 j 12:59 -3118 May 24 j 10:14 $0^{\circ}\Upsilon$ evening set 8°9529'33 -3118 Jul 10 j 01:18 0°8 max. Earth dist. -3123 Aug 01 j 15:14 21°950'42 2.57382 AU -3123 Aug 13 j 16:39 0° Ω -3118 Jul 29 j 19:16 11°**8**57'54 asc. node -3118 Aug 30 j 15:03 $0^{\circ}\Pi$ conjunction -3123 Aug 29 j 11:16 10°Ω50'14 0°59'58 -3118 Nov 17 j 12:12 0ಂತಾ minimum elong -3123 Aug 29 j 12:38 10°**Ω**52'37 1°00'02 retrograde -3118 Nov 27 j 03:09 0°533'11 -3118 Dec 06 j 10:46 30°R∏ -3123 Sep 25 j 16:48 16° Mp 18'46 -3117 Jan 05 j 06:23 21°II23'44 4°32'41 morning rise -3123 Oct 18 j 06:21 opposition

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Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

greatest brilliancy -3117 Jan 05 j 16:23 21° II 13'54 -1.4m asc. node -3112 Mar 20 j 14:18 26° H 22'21

Attention, astronomi	ical year style is used: Th	e year -3400 i	n astronomical cou	nting style is the year	3401 BCE in historical co	ounting style.	
greatest brilliancy	-3117 Jan 05 j 16:23	21° Ⅱ 13'54	-1.4m	asc. node	-3112 Mar 20 j 14:18	26° ∺ 22'21	
min. Earth dist.	-3117 Jan 08 j 09:48	20° Ⅱ 09'29	0.65782 AU		-3112 Mar 26 j 02:17	$0^{\circ}\mathbf{\Upsilon}$	
direct	-3117 Feb 15 j 12:28	11° Ⅲ 22'27		evening set	-3112 Apr 11 j 02:54	10° Ƴ 29'37	
	-3117 Apr 20 j 16:05	0 \circ \odot			-3112 May 11 j 06:41	0°B	
	-3117 Jun 12 j 19:44	$0^{\circ}\Omega$					
	-3117 Jul 27 j 16:11	0° m p		conjunction	-3112 May 30 j 01:09	12° 8 01'47	0°37'48
desc. node	-3117 Aug 07 j 20:18	7° m 57'19		minimum elong	-3112 May 29 j 23:56	11° 8 59'51	0°37'52
	-3117 Sep 06 j 17:36	0∘ ⊽		max. Earth dist.	-3112 Jun 03 j 14:42	14° 8 56'46	2.66612 AU
	-3117 Oct 15 j 17:48	0° M ,			-3112 Jun 27 j 05:08	$\Pi^{\circ}0$	
	-3117 Nov 22 j 22:46	0° ∡ ¹		morning rise	-3112 Jul 15 j 03:33	11° Ⅱ 25'43	
evening set	-3117 Dec 26 j 02:40	25° ₹ ′54'29		-	-3112 Aug 13 j 05:43	0ಂತಾ	
	-3117 Dec 31 j 09:44	0°రె			-3112 Sep 28 j 23:08	$0^{\circ}\Omega$	
	-3116 Feb 08 j 23:52	0° ≈			-3112 Nov 14 j 11:03	0° m	
	v				-3112 Dec 31 j 08:47	0∘ ⊽	
conjunction	-3116 Feb 27 j 11:00	13° ≈ 33'57	-0°56'27		-3111 Feb 18 j 13:42	0°M	
minimum elong	-3116 Feb 27 j 13:18	13° ≈ 38′09		desc. node	-3111 Mar 29 j 19:44	20°M28'31	
Č	-3116 Mar 21 j 09:00	0°)			-3111 Apr 25 j 22:53	0° ∡ ¹	
max. Earth dist.	-3116 Apr 08 j 04:51		2.51012 AU	retrograde	-3111 May 15 j 16:52	2° ∡ 25'37	
morning rise	-3116 Apr 26 j 04:06	24°) (47'11	2.01012110	renograde	-3111 Jun 04 j 16:17	30°RM₁	
morning not	-3116 May 03 j 21:23	0°Υ		min. Earth dist.	-3111 Jun 14 j 07:47		0.37620 AU
asc. node	-3116 Jun 15 j 18:21	28° Y 09'51		opposition	-3111 Jun 15 j 06:41	27°M18'55	
use. Hode	-3116 Jun 18 j 15:03	0°8		greatest brilliancy	-3111 Jun 15 j 00:26	27°M23'04	
	-3116 Aug 05 j 16:37	0°II		direct	-3111 Jul 15 j 03:43	22°M19'45	-2.7III
	-3116 Sep 26 j 06:44	0°9		direct	-3111 Aug 20 j 05:47	0° ₹	
	-3116 Nov 29 j 14:03	0°Ω			-3111 Oct 16 j 12:26	°ਤ ਹ°ਤ	
ratragrada		6° £ 58'47			3	0°≈	
retrograde	-3115 Jan 05 j 13:29				-3111 Dec 03 j 01:58	0 ≈ 0° H	
	-3115 Feb 08 j 12:27	30°R©	4052146		-3110 Jan 18 j 11:52		
opposition	-3115 Feb 11 j 14:20	28°951'33	4°53'46	asc. node	-3110 Feb 05 j 11:51	11° 升 35'14 0° ⋎	
greatest brilliancy	-3115 Feb 12 j 18:01	28°925'33	-1.7m		-3110 Mar 06 j 06:49		
min. Earth dist.	-3115 Feb 18 j 10:09		0.58201 AU		-3110 Apr 22 j 14:34	0°8	
direct	-3115 Mar 24 j 02:12	19° © 11'37		evening set	-3110 May 21 j 02:41	18° 8 01'40	
1 1	-3115 May 07 j 20:28	0°N		D d E i	-3110 Jun 08 j 23:28	0°II	2 ((410 41)
desc. node	-3115 Jun 24 j 19:38	25° Ω 50'44		max. Earth dist.	-3110 Jun 27 j 03:21	П°Щ35′14	2.66418 AU
	-3115 Jul 01 j 08:50	0° mp				. = . =	
	-3115 Aug 13 j 22:36	0° ™		conjunction	-3110 Jul 06 j 16:26		1°05'53
	-3115 Sep 23 j 00:49	0° M		minimum elong	-3110 Jul 06 j 15:34	17° Ⅱ 41'11	1°06'00
	-3115 Oct 31 j 22:16	0° ∡			-3110 Jul 25 j 17:09	0°©	
	-3115 Dec 09 j 23:40	0°⋜		morning rise	-3110 Aug 20 j 18:46	17°503'04	
	-3114 Jan 19 j 04:06	0°≈			-3110 Sep 09 j 07:00	0° N	
evening set	-3114 Feb 24 j 01:46	25°≈46'05			-3110 Oct 23 j 12:09	0° m/y	
	-3114 Mar 02 j 02:38	0° ∀			-3110 Dec 05 j 11:10	0∘ ⊽	
	-3114 Apr 15 j 00:28	0 ° Υ			-3109 Jan 16 j 11:29	0°M₊	
				desc. node	-3109 Feb 14 j 20:43	21°M09'26	
conjunction	-3114 Apr 19 j 12:59	3° Y 01′04			-3109 Feb 27 j 04:31	0° ∡	
minimum elong	-3114 Apr 19 j 13:23	3° Y 01'43	0°08'14		-3109 Apr 11 j 01:35	0° ට	
behind sun begin	-3114 Apr 18 j 18:37	2° Y 30'30			-3109 May 30 j 04:37	0° ≈	
behind sun end	-3114 Apr 20 j 08:08	3° Y 32'55		retrograde	-3109 Jul 21 j 09:41	15° ≈ 47′02	
asc. node	-3114 May 03 j 16:07	12° Y 22′16		min. Earth dist.	-3109 Aug 18 j 11:53	10° ≈ 25′21	0.46038 AU
max. Earth dist.	-3114 May 10 j 09:22	16° Ƴ 46'56	2.61390 AU	greatest brilliancy	-3109 Aug 25 j 06:07	8° ≈ 05'06	-2.4m
	-3114 May 30 j 17:21	$8^{\circ 0}$		opposition	-3109 Aug 26 j 15:18	7° ≈ 36′16	-5°17'35
morning rise	-3114 Jun 08 j 19:14	5° 8 50'48		direct	-3109 Sep 28 j 06:22	0° ≈ 58′08	
	-3114 Jul 16 j 18:56	$\Pi^{\circ}0$			-3109 Dec 20 j 18:59	0° ∀	
	-3114 Sep 02 j 22:42	0 \circ \odot		asc. node	-3109 Dec 24 j 10:20	1° ¥ 56'41	
	-3114 Oct 22 j 16:48	$0 {\circ} \Omega$			-3108 Feb 11 j 20:01	0 ° Υ	
	-3114 Dec 16 j 02:35	0° m			-3108 Apr 01 j 20:10	9° 8	
retrograde	-3113 Feb 28 j 14:20	23° Mp 23'21			-3108 May 20 j 09:43	Π $^{\circ}0$	
opposition	-3113 Apr 02 j 23:15	17° Mp 00'06	2°21'58	evening set	-3108 Jun 27 j 06:35	24° Ⅱ 03'56	
greatest brilliancy	-3113 Apr 03 j 19:17	16° Mp 43'43	-2.4m		-3108 Jul 06 j 10:32	0ಂ ತಾ	
min. Earth dist.	-3113 Apr 11 j 06:27	14° m 18'24	0.45677 AU	max. Earth dist.	-3108 Jul 21 j 14:18	9° © 55'07	2.60898 AU
direct	-3113 May 09 j 10:11	9° m ∤14′20					
desc. node	-3113 May 12 j 18:33	9° m 18′59		conjunction	-3108 Aug 13 j 04:52	24°\$58'52	1°08'04
	-3113 Jul 10 j 16:13	0∘ ত		minimum elong	-3108 Aug 13 j 05:36	25° © 00'06	1°08'09
	-3113 Aug 26 j 14:00	0° M ₊			-3108 Aug 20 j 15:02	$0^{\circ}\Omega$	
	-3113 Oct 07 j 10:16	0° ∡ ¹		morning rise	-3108 Sep 29 j 17:14	27° Ω 46'34	
	-3113 Nov 17 j 10:22	0°ප			-3108 Oct 02 j 20:36	0° m	
	-3113 Dec 29 j 03:15	0° ≈			-3108 Nov 13 j 08:03	0∘ ⊽	
	2112 F 1 10:06 50	001/			2100 D 22:11.22	oo m	

-3108 Dec 23 j 11:23 0°ML

-3112 Feb 10 j 06:58 0°**米**

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 30 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

*	ical year style is used: Th	-	ii astronomicai cc	runting style is the year		0 ,	
desc. node	-3107 Jan 01 j 19:28	7° ጤ 04'41 –			-3102 Jan 16 j 03:31	30° R 8	
	-3107 Jan 31 j 21:22	0° ∡ 7		direct	-3102 Feb 01 j 18:36	28° 8 12'19	
	-3107 Mar 12 j 10:20	6°0			-3102 Feb 19 j 10:57	0°II	
	-3107 Apr 22 j 07:51	0° ≈			-3102 May 03 j 04:54	0°©	
	-3107 Jun 05 j 21:51	0°) €			-3102 Jun 21 j 20:11	0° N	
	-3107 Aug 03 j 13:21	0° Υ 5° Υ 54'54		4 4-	-3102 Aug 04 j 19:24	0° Mp	
retrograde	-3107 Sep 03 j 19:06			desc. node	-3102 Aug 24 j 13:26	14° ™ 18'25 0° ≏	
min. Earth dist.	-3107 Oct 03 j 01:43	30°₹ 光	0.58163 AU		-3102 Sep 14 j 13:50 -3102 Oct 23 j 11:22	0° ™	
opposition	-3107 Oct 07 j 06:28 -3107 Oct 13 j 02:00	26°\(\)\(\)\(\)\(\)\(\)\(\)		evening set	-3102 Oct 23 j 11:22 -3102 Nov 28 j 17:44	28°MJ31'55	
greatest brilliancy	-3107 Oct 13 j 02:00	26° X 12'42		evening set	-3102 Nov 28 j 17.44 -3102 Nov 30 j 14:28	20 IIG31 33 0° ⊼ ¹	
asc. node	-3107 Nov 10 j 10:51	18°) (1242	-1.0111		-3101 Jan 07 j 23:06	0°ਤ	
direct	-3107 Nov 18 j 19:57	17°) 40'10			-5101 Jan 07 J 25.00	0 0	
direct	-3106 Jan 08 j 13:16	0° Υ		conjunction	-3101 Feb 02 j 12:58	19° る 34'38	-1°06'20
	-3106 Mar 09 j 22:57	0°8		minimum elong	-3101 Feb 02 j 13:53	19° る 36'23	
	-3106 Apr 30 j 14:18	0°II			-3101 Feb 16 j 10:08	0° ≈	
	-3106 Jun 17 j 17:18	0° ©		max. Earth dist.	-3101 Mar 22 j 09:00	24° ≈ 48'27	2.45862 AU
	-3106 Aug 02 j 01:43	$0^{\circ}\Omega$			-3101 Mar 29 j 15:55	0°)	
evening set	-3106 Aug 07 j 03:30	3° Ω 28′03		morning rise	-3101 Apr 06 j 17:16	5°) 41′05	
max. Earth dist.	-3106 Aug 22 j 16:55	14° Ω 14'32	2.50626 AU	C	-3101 May 12 j 02:50	0° Y	
	-3106 Sep 13 j 22:09	0° m)			-3101 Jun 27 j 00:45	9° 8	
				asc. node	-3101 Jul 03 j 09:59	4° 8 02'12	
conjunction	-3106 Sep 26 j 22:58	9° m 26'33	0°34'57		-3101 Aug 14 j 22:29	$\Pi^{\circ}0$	
minimum elong	-3106 Sep 27 j 00:36	9° ™ 29'32	0°34'59		-3101 Oct 08 j 18:06	0 \circ \odot	
	-3106 Oct 24 j 16:42	0∘ ⊽		retrograde	-3101 Dec 20 j 19:09	22°517'17	
desc. node	-3106 Nov 19 j 17:35	19° ≏ 47'11		opposition	-3100 Jan 27 j 19:40	13° 5 641'49	4°58'03
morning rise	-3106 Nov 21 j 10:25	21° ≏ 05'34		greatest brilliancy	-3100 Jan 28 j 16:56	13° © 21'22	-1.5m
	-3106 Dec 02 j 23:41	0° M		min. Earth dist.	-3100 Feb 02 j 06:33	11° © 35'57	0.61903 AU
	-3105 Jan 10 j 12:57	0° ∡		direct	-3100 Mar 08 j 20:49	3° ≤ 46′30	
	-3105 Feb 18 j 04:42	0°る			-3100 May 24 j 18:46	0 $^{\circ}\Omega$	
	-3105 Mar 29 j 21:03	0° ≈		desc. node	-3100 Jul 11 j 12:17	29° Ω 40'55	
	-3105 May 10 j 15:53	0°) €			-3100 Jul 11 j 23:33	0° m)	
	-3105 Jun 25 j 04:50	0° Υ			-3100 Aug 23 j 02:47	0° ∞	
,	-3105 Aug 19 j 01:08	0°8			-3100 Oct 01 j 14:36	0° M 0°. ⊼	
asc. node	-3105 Sep 28 j 11:21	12° 8 53'37			-3100 Nov 09 j 02:58	0° ∡ ¹	
retrograde	-3105 Oct 10 j 11:03	13° 8 47'18 4° 8 45'36	0.65677 AU		-3100 Dec 17 j 20:42	0°る š0	
min. Earth dist.	-3105 Nov 17 j 08:23 -3105 Nov 19 j 12:30	3° 8 53'08	1°56'28	avanina aat	-3099 Jan 26 j 17:49 -3099 Feb 02 j 07:02	0°≈ 4°≈48'49	
opposition	-3105 Nov 19 j 12.30	3° 8 57'48		evening set	-3099 Mar 09 j 09:25	4 ≈ 4849 0° ∺	
greatest brilliancy	-3105 Nov 19 j 07.33	30°RY	-1.4111		-3099 Wai 09 J 09.23	0 /	
direct	-3105 Nov 29 j 13:38 -3105 Dec 29 j 00:52	24° Υ 25'48		conjunction	-3099 Mar 31 j 23:57	15° ¥ 41'52	-0°28'19
direct	-3104 Jan 30 j 17:07	0°8		minimum elong	-3099 Apr 01 j 01:23	15°) 44'20	
	-3104 Apr 06 j 06:14	0°П		minimum ciong	-3099 Apr 22 j 02:00	0°Υ	0 20 20
	-3104 May 27 j 13:22	0°50		max. Earth dist.	-3099 Apr 29 j 04:30	4° Υ 45'09	2.57898 AU
	-3104 Jul 12 j 21:04	0°N		asc. node	-3099 May 20 j 08:34	18° Ƴ 43'37	
	-3104 Aug 24 j 20:37	0° m/		morning rise	-3099 May 23 j 23:10	21° Y 05'02	
evening set	-3104 Sep 24 j 19:04	22° m/46'02		Č	-3099 Jun 06 j 17:07	0°B	
•	-3104 Oct 04 j 09:15	0∘ ⊽			-3099 Jul 24 j 00:20	$\Pi^{\circ}0$	
desc. node	-3104 Oct 06 j 15:49	1° ≏ 43'33			*****	0°©	
max. Earth dist.					-3099 Sep 11 j 01:18	· -	
	-3104 Oct 27 j 03:10	17° ≏ 25'57	2.38618 AU		-3099 Sep 11 J 01:18 -3099 Nov 02 j 10:19	0°Ω	
	-3104 Oct 27 j 03:10 -3104 Nov 12 j 06:56	17° £ 25'57 0° ™	2.38618 AU				
	3		2.38618 AU	retrograde	-3099 Nov 02 j 10:19	$0^{\circ}\Omega$	
conjunction	3			retrograde	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59	0° N 0° M	
conjunction minimum elong	-3104 Nov 12 j 06:56	0° M ,	-0°32'44	retrograde opposition	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57	0° Ω 0° m/ 3° m/32′08	3°54'04
	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00	0°M. 8°M.59'28 8°M.54'35 0°⊀	-0°32'44	-	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 13 j 08:00	0° N 0° M 3° M 32'08 30° R N 26° N 21'59 25° N 55'32	-2.1m
minimum elong	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11	0°M 8°M59'28 8°M54'35 0°ズ 0°उ	-0°32'44	opposition greatest brilliancy min. Earth dist.	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 13 j 08:00 -3098 Mar 20 j 09:51	0° N 0° M 3° M32'08 30° R N 26° N21'59 25° N55'32 23° N26'41	
	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50	0°M 8°M59'28 8°M54'35 0°ズ 0°る 2°る01'13	-0°32'44	opposition greatest brilliancy min. Earth dist. direct	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 13 j 08:00 -3098 Mar 20 j 09:51 -3098 Apr 19 j 15:56	0° N 0° M 3° M32'08 30° R Ω 26° Ω21'59 25° Ω55'32 23° Ω26'41 17° Ω34'52	-2.1m
minimum elong	-3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50 -3103 Mar 08 j 04:15	0°M 8°M59'28 8°M54'35 0°ダ 0°उ 2°उ01'13 0°≈	-0°32'44	opposition greatest brilliancy min. Earth dist.	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 13 j 08:00 -3098 Mar 20 j 09:51 -3098 Apr 19 j 15:56 -3098 May 29 j 12:44	0° N 0° M 3° M32'08 30° R N 26° N21'59 25° N55'32 23° N26'41 17° N34'52 26° N50'57	-2.1m
minimum elong	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50 -3103 Mar 08 j 04:15 -3103 Apr 18 j 09:13	0°M 8°M59'28 8°M54'35 0°ダ 0°उ 2°उ01'13 0°≈ 0°⊁	-0°32'44	opposition greatest brilliancy min. Earth dist. direct	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 20 j 09:51 -3098 Mar 20 j 15:56 -3098 May 29 j 12:44 -3098 Jun 05 j 15:32	0°N 0°M 3°M32'08 30°R 26°N21'59 25°N55'32 23°N26'41 17°N34'52 26°N50'57 0°M	-2.1m
minimum elong	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50 -3103 Mar 08 j 04:15 -3103 Apr 18 j 09:13 -3103 Jun 01 j 04:00	0°M 8°M59'28 8°M54'35 0°ズ 0°उ 2°उ01'13 0°≈ 0°升 0°Υ	-0°32'44	opposition greatest brilliancy min. Earth dist. direct	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 20 j 09:51 -3098 Mar 20 j 09:51 -3098 May 29 j 12:44 -3098 Jun 05 j 15:32 -3098 Jul 27 j 00:53	0°N 0°M 3°M32'08 30°R 26°N21'59 25°N55'32 23°N26'41 17°N34'52 26°N50'57 0°M 0°Ω	-2.1m
minimum elong morning rise	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50 -3103 Mar 08 j 04:15 -3103 Apr 18 j 09:13 -3103 Jun 01 j 04:00 -3103 Jul 18 j 14:49	0°M. 8°M.59'28 8°M.54'35 0°፟፟፟҂ 0°♂ 2°♂01'13 0° ≈ 0° 升 0° 9 0° 9	-0°32'44	opposition greatest brilliancy min. Earth dist. direct	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 20 j 09:51 -3098 Mar 20 j 09:51 -3098 May 29 j 12:44 -3098 Jun 05 j 15:32 -3098 Jul 27 j 00:53 -3098 Sep 07 j 10:11	0° N 0° M 3° M32'08 30° R 26° N21'59 25° N55'32 23° N26'41 17° N34'52 26° N50'57 0° M 0° Ω 0° M	-2.1m
minimum elong	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50 -3103 Mar 08 j 04:15 -3103 Apr 18 j 09:13 -3103 Jun 01 j 04:00 -3103 Jul 18 j 14:49 -3103 Aug 15 j 10:29	0°M 8°M59'28 8°M54'35 0°ズ 0°℧ 2°℧01'13 0°≈ 0°ዣ 0°ዣ 0°ዣ 0°℧	-0°32'44	opposition greatest brilliancy min. Earth dist. direct	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 20 j 09:51 -3098 Mar 20 j 09:51 -3098 Mar 20 j 12:44 -3098 Jun 05 j 15:32 -3098 Jul 27 j 00:53 -3098 Sep 07 j 10:11 -3098 Oct 17 j 12:20	0° N 0° M 3° M32'08 30° R 26° N21'59 25° N55'32 23° N26'41 17° N34'52 26° N50'57 0° M 0° Ω 0° M 0° №	-2.1m
minimum elong morning rise asc. node	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50 -3103 Mar 08 j 04:15 -3103 Apr 18 j 09:13 -3103 Jun 01 j 04:00 -3103 Jul 18 j 14:49 -3103 Aug 15 j 10:29 -3103 Sep 11 j 19:40	0°M. 8°M.59'28 8°M.54'35 0°♂ 0°♂ 2°♂01'13 0°≈ 0°∀ 0°∀ 0°∀ 0°∀ 0°B	-0°32'44	opposition greatest brilliancy min. Earth dist. direct	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 20 j 09:51 -3098 Mar 20 j 09:51 -3098 Jun 05 j 15:32 -3098 Jun 05 j 15:32 -3098 Jul 27 j 00:53 -3098 Sep 07 j 10:11 -3098 Oct 17 j 12:20 -3098 Nov 26 j 10:29	0° N 0° M 3° M32'08 30° R N 26° N21'59 25° N55'32 23° N26'41 17° N34'52 26° N50'57 0° M 0° ⊆ 0° M 0° ₹ 0° ₹	-2.1m
minimum elong morning rise asc. node retrograde	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50 -3103 Mar 08 j 04:15 -3103 Apr 18 j 09:13 -3103 Jun 01 j 04:00 -3103 Jul 18 j 14:49 -3103 Aug 15 j 10:29 -3103 Sep 11 j 19:40 -3103 Nov 13 j 03:38	0°M. 8°M.59'28 8°M.54'35 0° ৵ 0°℧ 2°℧01'13 0°≈ 0°ℋ 0°❤ 0°℧ 16°℧00'08 0°Ⅲ 17°Ⅲ36'06	-0°32'44 0°32'46	opposition greatest brilliancy min. Earth dist. direct	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 13 j 08:00 -3098 Mar 20 j 09:51 -3098 Apr 19 j 15:56 -3098 May 29 j 12:44 -3098 Jun 05 j 15:32 -3098 Jul 27 j 00:53 -3098 Sep 07 j 10:11 -3098 Oct 17 j 12:20 -3098 Nov 26 j 10:29 -3097 Jan 06 j 08:15	0° N 0° M 3° M32'08 30° R 26° N21'59 25° N55'32 23° N26'41 17° N34'52 26° N50'57 0° M 0° Ω 0° M 0° Л 0° Ж 0° Ж 0° Ж	-2.1m
minimum elong morning rise asc. node retrograde opposition	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50 -3103 Mar 08 j 04:15 -3103 Apr 18 j 09:13 -3103 Jun 01 j 04:00 -3103 Jul 18 j 14:49 -3103 Aug 15 j 10:29 -3103 Sep 11 j 19:40 -3103 Nov 13 j 03:38 -3103 Dec 22 j 18:00	0°M. 8°M.59'28 8°M.54'35 0° √ 0° ♂ 2° ♂01'13 0° ≈ 0° ∀ 0° ∀ 0° ∀ 16° ∀ 00'08 0° II 17° II 36'06 8° II 09'44	-0°32'44 0°32'46 4°01'18	opposition greatest brilliancy min. Earth dist. direct desc. node	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 13 j 08:00 -3098 Mar 20 j 09:51 -3098 Apr 19 j 15:56 -3098 May 29 j 12:44 -3098 Jun 05 j 15:32 -3098 Jul 27 j 00:53 -3098 Sep 07 j 10:11 -3098 Oct 17 j 12:20 -3098 Nov 26 j 10:29 -3097 Jan 06 j 08:15 -3097 Feb 17 j 21:12	0° N 0° M 3° M32'08 30° R 26° N21'59 25° N55'32 23° N26'41 17° N34'52 26° N50'57 0° M 0° Ω 0° M 0° № 0° N 0° N 0° N	-2.1m
minimum elong morning rise asc. node retrograde	-3104 Nov 12 j 06:56 -3104 Nov 23 j 18:20 -3104 Nov 23 j 15:51 -3104 Dec 20 j 11:00 -3103 Jan 27 j 19:11 -3103 Jan 30 j 09:50 -3103 Mar 08 j 04:15 -3103 Apr 18 j 09:13 -3103 Jun 01 j 04:00 -3103 Jul 18 j 14:49 -3103 Aug 15 j 10:29 -3103 Sep 11 j 19:40 -3103 Nov 13 j 03:38	0°M. 8°M.59'28 8°M.54'35 0° 0° 0° 2° 0° 0° 0° 16° 0° 17° 17° 136'06 8° 109'44 8° 106'03	-0°32'44 0°32'46	opposition greatest brilliancy min. Earth dist. direct	-3099 Nov 02 j 10:19 -3098 Jan 10 j 15:59 -3098 Feb 05 j 02:23 -3098 Feb 28 j 21:04 -3098 Mar 12 j 01:57 -3098 Mar 13 j 08:00 -3098 Mar 20 j 09:51 -3098 Apr 19 j 15:56 -3098 May 29 j 12:44 -3098 Jun 05 j 15:32 -3098 Jul 27 j 00:53 -3098 Sep 07 j 10:11 -3098 Oct 17 j 12:20 -3098 Nov 26 j 10:29 -3097 Jan 06 j 08:15	0° N 0° M 3° M32'08 30° R 26° N21'59 25° N55'32 23° N26'41 17° N34'52 26° N50'57 0° M 0° Ω 0° M 0° Л 0° Ж 0° Ж 0° Ж	-2.1m

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 31

Attention, astronom	ical year style is used: Th	ie year -3400 i	n astronomical co	ounting style is the year	3401 BCE in historical c	ounting style.	
asc. node	-3097 Apr 07 j 05:25	2° Y 38'11			-3092 Mar 22 j 00:34	0°ರ	
					-3092 May 03 j 04:02	0° ≈	
conjunction	-3097 May 15 j 16:56	27° Ƴ 45'56	0°21'38		-3092 Jun 20 j 16:55	0° ∀	
minimum elong	-3097 May 15 j 16:05	27° Ƴ 44'34	0°21'40	retrograde	-3092 Aug 18 j 17:36	18°) √ 42'59	
	-3097 May 19 j 04:03	0°B		min. Earth dist.	-3092 Sep 19 j 03:20		0.53786 AU
max. Earth dist.	-3097 May 26 j 07:26	4° 8 35'49	2.65215 AU	opposition	-3092 Sep 26 j 04:58	9° ∺ 16'48	
morning rise	-3097 Jul 02 j 00:07	28° 8 02'46		greatest brilliancy	-3092 Sep 25 j 13:31	9° 米 31'36	-2.0m
	-3097 Jul 05 j 01:51	0°II		direct	-3092 Oct 31 j 12:41	1° ¥ 25'19	
	-3097 Aug 21 j 09:46	0° ©		asc. node	-3092 Nov 27 j 01:58	5° ¥ 25′28	
	-3097 Oct 07 j 22:56	0° N			-3091 Jan 24 j 01:47	0° ႘	
	-3097 Nov 25 j 05:42	0 ்⊽ 0 ்மி			-3091 Mar 19 j 04:34	0°I	
	-3096 Jan 15 j 06:22 -3096 Mar 24 j 10:31	0° M ₊			-3091 May 08 j 06:01 -3091 Jun 24 j 20:03	0°©	
retrograde	-3096 Apr 13 j 14:50	2°M23'15		evening set	-3091 Jul 21 j 14:38	17° 9 34'05	
desc. node	-3096 Apr 15 j 12:24	2°M21'52		max. Earth dist.	-3091 Jul 21 j 14:38	29°950'43	2.55137 AU
dese. Hode	-3096 May 03 j 11:06	30°R <u>₽</u>		max. Earth dist.	-3091 Aug 09 j 01:41	0° Ω	2.33137710
opposition	-3096 May 14 j 08:23	27° £ 11'45	-2°02'39		30)111 ug 0) j 01.11	V 00	
greatest brilliancy	-3096 May 14 j 15:19	27° £ 06'56		conjunction	-3091 Sep 08 j 08:43	20° Ω 59'37	0°52'35
min. Earth dist.	-3096 May 18 j 18:51		0.39036 AU	minimum elong	-3091 Sep 08 j 10:21	21° Ω 02'29	
direct	-3096 Jun 15 j 10:19	21° ≏ 27'50		Č	-3091 Sep 21 j 00:53	0° m)	
	-3096 Jul 22 j 20:37	0°M		morning rise	-3091 Oct 29 j 20:18	28° m 21'44	
	-3096 Sep 15 j 07:10	0° ∡ ¹			-3091 Nov 01 j 01:01	0∘ ⊽	
	-3096 Oct 30 j 10:47	ರ∘ರ		desc. node	-3091 Dec 06 j 10:58	26° ≏ 48'43	
	-3096 Dec 13 j 11:23	0° ≈			-3091 Dec 10 j 14:43	0°M₊	
	-3095 Jan 27 j 02:51	0°) €			-3090 Jan 18 j 10:19	0° ∡ ¹	
asc. node	-3095 Feb 22 j 03:20	17°) €08'33			-3090 Feb 26 j 07:46	5°0	
	-3095 Mar 13 j 21:42	0° Y			-3090 Apr 07 j 06:48	0° ≈	
	-3095 Apr 29 j 15:57	0° 8			-3090 May 19 j 15:09	0° ∀	
evening set	-3095 May 06 j 01:14	4° 8 04'07			-3090 Jul 06 j 00:27	0° Y	
	-3095 Jun 15 j 19:07	Π °0			-3090 Sep 23 j 16:39	0° 8	
max. Earth dist.	-3095 Jun 17 j 22:41	1° Ⅱ 22'11	2.67137 AU	retrograde	-3090 Sep 26 j 18:12	0° 8 03'44	
	2005 1 22:05 40	40\T0<122	0057140	Ī	-3090 Sep 29 j 18:50	30° ₹ Υ	
conjunction	-3095 Jun 22 j 05:40	4° Ⅱ 06′22	0°57'40	asc. node	-3090 Oct 15 j 01:52	27° Y 43'12	0.62442.411
minimum elong	-3095 Jun 22 j 04:28	4°Ⅱ04'27 0° ©	0°57'45	min. Earth dist.	-3090 Nov 02 j 01:15 -3090 Nov 05 j 16:29	21° Y 33'43 20° Y 06'07	0.63443 AU 0°51'18
morning rise	-3095 Aug 01 j 13:59 -3095 Aug 06 j 08:54	0 ৩ 3°©05'57		opposition greatest brilliancy	-3090 Nov 05 j 13:18	20 1 00 07 20° Υ 09'18	-1.5m
morning risc	-3095 Sep 16 j 11:52	0° Ω		direct	-3090 Nov 03 j 13:18	10° Υ 58'08	-1.5111
	-3095 Oct 31 j 08:58	0° m/y		uncet	-3089 Feb 18 j 20:47	0°8	
	-3095 Dec 14 j 08:47	0∘ ⊽			-3089 Apr 16 j 18:07	0°II	
	-3094 Jan 26 j 21:11	0° M ₊			-3089 Jun 05 j 09:37	0°©	
desc. node	-3094 Mar 03 j 12:31	24°M21'22			-		
					-3089 Jul 21 ₁ 05:23	$0^{\circ}\Omega$	
	-3094 Mar 11 j 22:53	0° ∡ ¹			-3089 Jul 21 j 05:23 -3089 Sep 02 j 02:34	0° Ω 0° m	
	-3094 Mar 11 j 22:53 -3094 Apr 29 j 06:51	⋝ °0 ⋝ °0		evening set	-		
retrograde	-			evening set max. Earth dist.	-3089 Sep 02 j 02:34	0° Mp 2° Mp 01'13	2.42965 AU
retrograde min. Earth dist.	-3094 Apr 29 j 06:51	ე∘ჳ	0.41382 AU	•	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42	0° mp 2° mp 01'13	2.42965 AU
•	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00	0°ප 20°ප05'49		•	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55	0° m/ 2° m/01'13 14° m/57'05	2.42965 AU
min. Earth dist.	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54	0°පි 20°පි05'49 15°පි27'10	-2.6m	max. Earth dist.	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39	0° m/ 2° m/01'13 14° m/57'05 0° <u>∩</u>	2.42965 AU
min. Earth dist. greatest brilliancy	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31	0°ප 20°ප05'49 15°ප27'10 13°ප41'56 13°ප13'54 7°ප30'06	-2.6m	max. Earth dist. desc. node conjunction	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44	0° m/ 2° m/01'13 14° m/57'05 0° Ω 8° Ω 52'05	-0°04'29
min. Earth dist. greatest brilliancy opposition	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58	0°ප 20°ප05'49 15°ප27'10 13°ප41'56 13°ප13'54 7°ප30'06 0°≈	-2.6m	max. Earth dist. desc. node conjunction minimum elong	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25	0° m/ 2° m/01'13 14° m/57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05	-0°04'29
min. Earth dist. greatest brilliancy opposition direct	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14	0°ප 20°ප05'49 15°ප27'10 13°ප41'56 13°ප13'54 7°ප30'06 0°≈ 0°¥	-2.6m	max. Earth dist. desc. node conjunction minimum elong behind sun begin	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01	0° m/ 2° m/01'13 14° m/57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14	-0°04'29
min. Earth dist. greatest brilliancy opposition	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31	0°式 20°式05'49 15°式27'10 13°式41'56 13°式13'54 7°式30'06 0°≈ 0°∺ 4°∺38'19	-2.6m	max. Earth dist. desc. node conjunction minimum elong	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57	-0°04'29
min. Earth dist. greatest brilliancy opposition direct	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00	0°る 20°る05'49 15°る27'10 13°る41'56 13°る13'54 7°る30'06 0°≈ 0°米 4°升38'19 0°Υ	-2.6m	max. Earth dist. desc. node conjunction minimum elong behind sun begin	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 30 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° M	-0°04'29
min. Earth dist. greatest brilliancy opposition direct	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14	0°云 20°云05'49 15°云27'10 13°云41'56 13°云13'54 7°云30'06 0°≈ 0°ዧ 4°ዧ38'19 0°Ƴ	-2.6m	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° m 0° 🖈	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34	0°式 20°式05'49 15°式27'10 13°式41'56 13°式13'54 7°式30'06 0°≈ 0°光 4°光38'19 0°Υ 0°႘ 0°Ⅱ	-2.6m	max. Earth dist. desc. node conjunction minimum elong behind sun begin	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° M 0° ズ 3° ズ 18'13	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21	0°式 20°式05'49 15°式27'10 13°式41'56 13°式13'54 7°式30'06 0°≈ 0°光 4°光38'19 0°Ƴ 0°╏ 10°П06'45	-2.6m -6°28'46	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° M 0° ズ 3° ズ 18'13 0° ጜ	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21 -3093 Jul 12 j 08:57	0°式 20°式05'49 15°式27'10 13°式41'56 13°式13'54 7°式30'06 0°≈ 0°) 4°\38'19 0°\0' 0°\0' 0°\0' 0°\0' 10°\0'05'45 28°\0'45'50	-2.6m	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° M 0° ズ 3° ズ 18'13 0° ℧ 0° ∞	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21	0°式 20°式05'49 15°式27'10 13°式41'56 13°式13'54 7°式30'06 0°≈ 0°光 4°光38'19 0°Ƴ 0°╏ 10°П06'45	-2.6m -6°28'46	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° m 0° ズ 3° ズ 18'13 0° ⋈ 0° ⋈ 0° ⋈	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node evening set max. Earth dist.	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21 -3093 Jul 12 j 08:57 -3093 Jul 14 j 07:13	0°式 20°式05'49 15°式27'10 13°式41'56 13°式13'54 7°式30'06 0°≈ 0°狀 4°狀38'19 0°Ƴ 0°出 10°用06'45 28°用44'50 0°쯠	-2.6m -6°28'46 2.63671 AU	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45 -3088 Jun 09 j 07:30	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 229'57 0° m 0° 🛪 3° 🛪 18'13 0° ጜ 0° ※ 0° ጕ 0° Υ	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node evening set max. Earth dist. conjunction	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21 -3093 Jul 12 j 08:57 -3093 Jul 29 j 20:07	0°式 20°式05'49 15°式27'10 13°式41'56 13°式13'54 7°式30'06 0°≈ 0°光 4°光38'19 0°Y 0°Ы 10°П06'45 28°П44'50 0°亞	-2.6m -6°28'46 2.63671 AU 1°10'51	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end morning rise	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45 -3088 Jun 09 j 07:30 -3088 Jul 28 j 04:19	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° m 0° ズ 3° ズ 18'13 0° ℧ 0° ※ 0° ℋ 0° ϒ 0° ϒ	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node evening set max. Earth dist.	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21 -3093 Jul 12 j 08:57 -3093 Jul 29 j 20:07 -3093 Jul 29 j 20:09	0°式 20°式05'49 15°式27'10 13°式41'56 13°式13'54 7°式30'06 0°≈ 0°光 4°光38'19 0°Ƴ 0°出 10°П06'45 28°П44'50 0°亞	-2.6m -6°28'46 2.63671 AU	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45 -3088 Jun 09 j 07:30 -3088 Jul 28 j 04:19 -3088 Sep 01 j 01:55	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° m 0° ¾ 3° ¾ 18'13 0° ♂ 0° № 0° भ 0° भ 0° भ 18° ♂ 13'57	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node evening set max. Earth dist. conjunction minimum elong	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21 -3093 Jul 12 j 08:57 -3093 Jul 14 j 07:13 -3093 Jul 29 j 20:07 -3093 Jul 29 j 20:09 -3093 Aug 28 j 14:06	0°₹ 20°₹05'49 15°₹27'10 13°₹41'56 13°₹13'54 7°₹30'06 0°≈ 0°¥ 4°¥38'19 0°Υ 0°\$ 0°\$ 10°\$106'45 28°\$144'50 0°\$ 10°\$09'59 10°\$10'02 0°\$	-2.6m -6°28'46 2.63671 AU 1°10'51	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end morning rise asc. node	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45 -3088 Jun 09 j 07:30 -3088 Jul 28 j 04:19 -3088 Sep 01 j 01:55 -3088 Oct 01 j 04:22	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° m 0° ズ 3° ズ 18'13 0° ♂ 0° ⋈ 0° ϒ	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node evening set max. Earth dist. conjunction	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21 -3093 Jul 12 j 08:57 -3093 Jul 12 j 08:57 -3093 Jul 29 j 20:07 -3093 Jul 29 j 20:09 -3093 Aug 28 j 14:06 -3093 Sep 13 j 21:54	0°₹ 20°₹05'49 15°₹27'10 13°₹41'56 13°₹13'54 7°₹30'06 0°≈ 0°¥ 4°¥38'19 0°Υ 0°\$ 0°\$ 10°\$106'45 28°\$144'50 0°\$ 10°\$09'59 10°\$10'02 0°\$ 11°\$\O6'29	-2.6m -6°28'46 2.63671 AU 1°10'51	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end morning rise	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45 -3088 Jun 09 j 07:30 -3088 Jul 28 j 04:19 -3088 Sep 01 j 01:55 -3088 Oct 01 j 04:22 -3088 Oct 30 j 14:28	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° m 0° ¾ 3° ¾ 18'13 0° ♂ 0° № 0° भ 0° भ 0° भ 18° ♂ 13'57	-0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node evening set max. Earth dist. conjunction minimum elong	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21 -3093 Jul 12 j 08:57 -3093 Jul 14 j 07:13 -3093 Jul 29 j 20:07 -3093 Jul 29 j 20:09 -3093 Aug 28 j 14:06	0°₹ 20°₹05'49 15°₹27'10 13°₹41'56 13°₹13'54 7°₹30'06 0°≈ 0°¥ 4°¥38'19 0°Υ 0°\$ 0°\$ 10°\$106'45 28°\$144'50 0°\$ 10°\$09'59 10°\$10'02 0°\$	-2.6m -6°28'46 2.63671 AU 1°10'51	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end morning rise asc. node	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45 -3088 Jun 09 j 07:30 -3088 Jul 28 j 04:19 -3088 Sep 01 j 01:55 -3088 Oct 01 j 04:22	0° m 2° m 01'13 14° m 57'05 0° Ω 8° Ω 52'05 13° Ω 43'41 13° Ω 43'05 12° Ω 56'14 14° Ω 29'57 0° m 0° ズ 3° ズ 18'13 0° ℧ 0° ϒ 0° ϒ 0° ϒ 0° ϒ 0° ϒ 0° ϒ 18° ℧ 13'57 0° Π 4° Π 47'17	-0°04'29 0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node evening set max. Earth dist. conjunction minimum elong	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jul 12 j 08:57 -3093 Jul 12 j 08:57 -3093 Jul 29 j 20:09 -3093 Aug 28 j 14:06 -3093 Sep 13 j 21:54 -3093 Oct 11 j 03:10	0°₹ 20°₹05'49 15°₹27'10 13°₹41'56 13°₹13'54 7°₹30'06 0°≈ 0°¥ 4°¥38'19 0°Υ 0°\$ 0°\$ 10°\$10'05 10°\$09'59 10°\$10'02 0°\$ 11°\$\O6'29 0°\$\$	-2.6m -6°28'46 2.63671 AU 1°10'51	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end morning rise asc. node retrograde	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45 -3088 Jul 28 j 04:19 -3088 Sep 01 j 01:55 -3088 Oct 01 j 04:22 -3088 Oct 30 j 14:28 -3088 Nov 26 j 15:09	0° m 2° m01'13 14° m57'05 0° Ω 8° Ω52'05 13° Ω43'41 13° Ω43'05 12° Ω56'14 14° Ω29'57 0° M 0° ¾ 3° ¾18'13 0° ♂ 0° № 0° ¥ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 0° ¥	-0°04'29 0°04'29
min. Earth dist. greatest brilliancy opposition direct asc. node evening set max. Earth dist. conjunction minimum elong	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Jul 31 j 05:18 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jun 02 j 08:14 -3093 Jun 10 j 02:31 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21 -3093 Jul 12 j 08:57 -3093 Jul 12 j 08:57 -3093 Jul 29 j 20:07 -3093 Jul 29 j 20:07 -3093 Jul 29 j 20:09 -3093 Aug 28 j 14:06 -3093 Sep 13 j 21:54 -3093 Oct 11 j 03:10 -3093 Nov 22 j 01:37	0°₹ 20°₹05'49 15°₹27'10 13°₹41'56 13°₹13'54 7°₹30'06 0°≈ 0°¥ 4°¥38'19 0°Υ 0°\$ 0°\$ 10°\$10'05 10°\$09'59 10°\$10'02 0°\$ 11°\$06'29 0°\$ 0°\$ 0°\$ 10°\$06'29	-2.6m -6°28'46 2.63671 AU 1°10'51	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end morning rise asc. node retrograde opposition	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45 -3088 Jun 09 j 07:30 -3088 Jul 28 j 04:19 -3088 Sep 01 j 01:55 -3088 Oct 01 j 04:22 -3088 Oct 30 j 14:28 -3088 Nov 26 j 15:09 -3088 Dec 09 j 12:07	0° m 2° m01'13 14° m57'05 0° Ω 8° Ω52'05 13° Ω43'41 13° Ω43'05 12° Ω56'14 14° Ω29'57 0° m 0° ¾ 3° ¾18'13 0° ♂ 0° ₩ 0° ϒ 0° ϒ 0° ϒ 0° ϒ 18° ℧13'57 0° Π 4° Π47'17 30° R℧ 25° ℧07'11	-0°04'29 0°04'29 3°20'15
min. Earth dist. greatest brilliancy opposition direct asc. node evening set max. Earth dist. conjunction minimum elong morning rise	-3094 Apr 29 j 06:51 -3094 Jun 28 j 19:00 -3094 Jul 25 j 13:54 -3094 Aug 01 j 17:08 -3094 Sep 01 j 13:31 -3094 Nov 10 j 04:58 -3093 Jan 02 j 08:14 -3093 Jan 10 j 02:31 -3093 Feb 20 j 20:00 -3093 Apr 10 j 11:14 -3093 May 28 j 10:34 -3093 Jun 13 j 09:21 -3093 Jun 12 j 08:57 -3093 Jul 12 j 08:57 -3093 Jul 29 j 20:07 -3093 Jul 29 j 20:07 -3093 Jul 29 j 20:09 -3093 Aug 28 j 14:06 -3093 Sep 13 j 21:54 -3093 Nov 22 j 01:37 -3092 Jan 01 j 18:06	0°₹ 20°₹05'49 15°₹27'10 13°₹41'56 13°₹13'54 7°₹30'06 0°≈ 0°¥ 4°¥38'19 0°Υ 0°\$ 10°\$106'45 28°\$144'50 0°\$ 10°\$09'59 10°\$10'02 0°\$ 11°\$06'29 0°\$ 0°\$ 0°\$ 11°\$06'29 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 11°\$06'29	-2.6m -6°28'46 2.63671 AU 1°10'51	max. Earth dist. desc. node conjunction minimum elong behind sun begin behind sun end morning rise asc. node retrograde opposition greatest brilliancy	-3089 Sep 02 j 02:34 -3089 Sep 04 j 21:42 -3089 Sep 22 j 13:55 -3089 Oct 12 j 16:39 -3089 Oct 24 j 08:35 -3089 Oct 30 j 16:44 -3089 Oct 30 j 16:25 -3089 Oct 29 j 16:01 -3089 Oct 31 j 16:49 -3089 Nov 20 j 17:15 -3089 Dec 29 j 00:02 -3088 Jan 02 j 05:01 -3088 Feb 05 j 10:04 -3088 Mar 15 j 20:25 -3088 Apr 26 j 03:45 -3088 Jun 09 j 07:30 -3088 Jul 28 j 04:19 -3088 Sep 01 j 01:55 -3088 Oct 01 j 04:22 -3088 Nov 26 j 15:09 -3088 Dec 09 j 12:07 -3088 Dec 09 j 10:53	0° m 2° m01'13 14° m57'05 0° Ω 8° Ω52'05 13° Ω43'41 13° Ω43'05 12° Ω56'14 14° Ω29'57 0° m 0° ¾ 3° ¾18'13 0° ੴ 0° ¾ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 0° ¥ 0° ¥	-0°04'29 0°04'29 3°20'15 -1.3m

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 32

-	ical year style is used: Th		•	· · ·		, ,	0 32
,	-3087 Mar 16 j 21:07	0° Ⅱ		asc. node	-3082 Apr 23 j 22:08	9° Υ '00'46	
	-3087 May 13 j 07:00	0ංම			r - j		
	-3087 Jun 30 j 03:25	$0^{\circ}\Omega$		conjunction	-3082 Apr 29 j 09:39	12° Y '37'22	0°03'13
	-3087 Aug 12 j 14:13	0° mp		minimum elong	-3082 Apr 29 j 09:29	12° Y '37'05	0°03'14
desc. node	-3087 Sep 10 j 07:44	21°m/03'11		behind sun begin	-3082 Apr 28 j 12:44	12° Y ′02'59	
	-3087 Sep 22 j 04:52	0∘ <u>⊽</u>		behind sun end	-3082 Apr 30 j 06:15	13° Y 11'10	
	-3087 Oct 31 j 01:23	0° M ₊		max. Earth dist.	-3082 May 16 j 09:51	23° Y '44'15	2.62965 AU
evening set	-3087 Nov 01 j 16:44	1°ML17'04			-3082 May 26 j 01:49	0° 8	
	-3087 Dec 08 j 03:43	0° ∡ ¹		morning rise	-3082 Jun 17 j 10:53	14° 8 22'21	
					-3082 Jul 12 j 00:58	$\Pi^{\circ}0$	
conjunction	-3086 Jan 06 j 04:56	22° ∡ ¹48'27	-1°03'55		-3082 Aug 28 j 19:52	0 \circ \odot	
minimum elong	-3086 Jan 06 j 03:03	22° ∡ ¹44'46	1°04'01		-3082 Oct 16 j 14:13	$0^{\circ}\Omega$	
	-3086 Jan 15 j 10:56	5°0			-3082 Dec 06 j 22:21	0° ™	
	-3086 Feb 23 j 19:56	0° ≈			-3081 Feb 08 j 14:35	0∘ ত	
max. Earth dist.	-3086 Feb 23 j 13:07	29° ප් 47'16	2.40671 AU	retrograde	-3081 Mar 15 j 14:34	6° ≏ 30'28	
morning rise	-3086 Mar 14 j 08:47	13° ≈ 41'54		opposition	-3081 Apr 16 j 23:38	0° ≏ 35'30	1°02'55
	-3086 Apr 05 j 23:45	0° ∀		greatest brilliancy	-3081 Apr 17 j 08:31	0° ჲ 28'39	-2.6m
	-3086 May 19 j 11:08	$0^{\circ}\mathbf{\Upsilon}$			-3081 Apr 18 j 21:35	30°R, Mp	
	-3086 Jul 04 j 17:16	0°8		min. Earth dist.	-3081 Apr 24 j 15:25	28° m 14'34	0.42938 AU
asc. node	-3086 Jul 20 j 00:45	9° 8 27'51		desc. node	-3081 May 03 j 04:49	25° m 54'22	
	-3086 Aug 23 j 23:41	Π°		direct	-3081 May 21 j 23:19	23° m/32'29	
	-3086 Oct 25 j 01:57	0ංම			-3081 Jun 23 j 01:08	0∘ ⊽	
retrograde	-3086 Dec 05 j 11:44	8°935'33			-3081 Aug 17 j 15:39	0°M	
C	-3085 Jan 12 j 07:04	30°RⅡ			-3081 Sep 30 j 10:06	0° ∡ ¹	
opposition	-3085 Jan 13 j 06:33	29° Ⅱ 37'05	4°45'35		-3081 Nov 11 j 08:33	ರ°0	
greatest brilliancy	-3085 Jan 13 j 20:30	29° Ⅲ 23'26	-1.4m		-3081 Dec 23 j 15:47	0° ≈	
min. Earth dist.	-3085 Jan 17 j 05:43	28° Ⅱ 03'58	0.64682 AU		-3080 Feb 05 j 05:10	0° ∀	
direct	-3085 Feb 23 j 12:30	19° Ⅲ 36′03		asc. node	-3080 Mar 10 j 19:39	23° ¥ 06'47	
	-3085 Apr 09 j 20:01	0ංම 			-3080 Mar 21 j 07:09	0° Υ	
	-3085 Jun 06 j 10:45	0°N		evening set	-3080 Apr 20 j 09:52	19° Ƴ 33'55	
	-3085 Jul 22 j 05:13	0° mp		evening sec	-3080 May 06 j 15:18	0°8	
desc. node	-3085 Jul 29 j 06:23	4° Mp 56'47			5000 11 11 00 j 10.10	. .	
door. Hode	-3085 Sep 01 j 14:35	0° ⊽		conjunction	-3080 Jun 07 j 14:29	20° 8 25'46	0°46'00
	-3085 Oct 10 j 18:31	0° M		minimum elong	-3080 Jun 07 j 13:12	20° 8 23'42	
	-3085 Nov 18 j 01:28	0° ⊼ ¹		max. Earth dist.	-3080 Jun 08 j 22:53	_	2.67023 AU
	-3085 Dec 26 j 13:53	°ਤ ਹ°ਤ		max. Earth dist.	-3080 Jun 22 j 14:44	0°П	2.07023710
evening set	-3084 Jan 09 j 21:14	00 10° ろ 57'18		morning rise	-3080 Jul 23 j 05:42	19° Ⅱ 33'23	
evening sec	-3084 Feb 04 j 05:21	0°≈		morning rise	-3080 Aug 08 j 12:38	0°95	
	-3004100 04103.21	0 ~			-3080 Sep 23 j 21:56	0°N	
conjunction	-3084 Mar 11 j 07:42	26°≈13'43	-0°47'17		-3080 Nov 08 j 17:33	0° m/y	
minimum elong	-3084 Mar 11 j 09:59				-3080 Dec 24 j 07:39	0∘ ⊽	
minimum clong	-3084 Mar 16 j 15:21	0° ∺	0 47 17		-3079 Feb 08 j 14:32	0° ™	
max. Earth dist.	-3084 Apr 16 j 15:02	21° X 30'40	2.53627 AU	desc. node	-3079 Mar 20 j 05:34	24°M03'24	
max. Earth dist.	-3084 Apr 29 j 03:53	0° Υ	2.33027 AU	desc. node	-3079 Mar 20 j 03:34 -3079 Mar 31 j 00:17	0° √	
morning rise	-3084 May 06 j 19:10	5° Υ '07'04		retrograde	-3079 Jun 01 j 22:14	20° × ⁷ 22'29	
asc. node	-3084 Jun 05 j 23:25	24° Υ 57'15		min. Earth dist.	-3079 Jun 29 j 12:01	15° ₹ 52'32	0.38221 AU
asc. node	-3084 Jun 13 j 19:02	0° 8		greatest brilliancy	-3079 Jul 29 j 12:01 -3079 Jul 02 j 10:08	15° x '32' 32' 15° x '04' 25	-2.9m
	-3084 Jul 31 j 11:45	0°II		opposition	-3079 Jul 02 j 10:08	13 × 04 23 14° × 50'40	
	-3084 Sep 19 j 21:07	0°©		direct	-3079 Aug 02 j 01:40	9° × ⁷ 48'12	0 1/11
	1 3	0°Ω		direct	C 3	0°る	
retrograde	-3084 Nov 16 j 08:57 -3083 Jan 15 j 23:03	0°31 16°Ω23'20			-3079 Oct 04 j 18:24 -3079 Nov 25 j 15:27	0° ∞	
•		8° Ω 34'24	4°40'41		-	0 ≈ 0° ∺	
opposition	-3083 Feb 21 j 07:45			1-	-3078 Jan 12 j 13:53		
greatest brilliancy	-3083 Feb 22 j 13:48	8° Ω 06'40	-1.8m	asc. node	-3078 Jan 26 j 17:48	8° ¥ 56'46 0° Ƴ	
min. Earth dist.	-3083 Feb 28 j 19:02	5° Ω 49'19	0.55783 AU		-3078 Mar 01 j 02:33		
T'	-3083 Mar 22 j 01:57	30°Rூ			-3078 Apr 17 j 19:29	0°8	
direct	-3083 Apr 02 j 06:43	29°508'28		evening set	-3078 May 29 j 14:38	26° 8 20'52	
1 1	-3083 Apr 13 j 19:14	0° Ω		m at the	-3078 Jun 04 j 08:51	0°II	2 (5(55 13)
desc. node	-3083 Jun 15 j 04:47	25° Ω 04'43		max. Earth dist.	-3078 Jul 02 j 13:51	18~Щ00'26	2.65655 AU
	-3083 Jun 23 j 12:37	0° m/y			2070 7 1 15 100 11	A (0 H 0	1000177
	-3083 Aug 07 j 16:03	0∘ 亚		conjunction	-3078 Jul 15 j 00:44	26° Ⅱ 02'17	1°08'56
	-3083 Sep 17 j 08:30	0° M		minimum elong	-3078 Jul 15 j 00:09	26° Ⅱ 01'20	1°09'02
	-3083 Oct 26 j 13:43	0° ∡ ¹			-3078 Jul 21 j 03:24	0.22	
	-3083 Dec 04 j 20:42	0°ප		morning rise	-3078 Aug 29 j 07:50	25° © 47'56	
	-3082 Jan 14 j 05:48	0° ≈			-3078 Sep 04 j 14:28	0° N	
	-3082 Feb 25 j 07:54	0° ∀			-3078 Oct 18 j 13:24	0° m)	
evening set	-3082 Mar 07 j 10:37	7° ∺ 00′30			-3078 Nov 30 j 02:26	0° ∞	
	-3082 Apr 10 j 08:19	0° Ƴ			-3077 Jan 10 j 13:26	0°M⊾	

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 33 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronomi	icai year style is used: In	e year -3400 i	n astronomical cou	nting style is the year	3401 BCE in historical co	ounting style.	
desc. node	-3077 Feb 05 j 04:59	18° M 47'17			-3072 Jul 07 j 22:26	$0^{\circ}\Omega$	
	-3077 Feb 20 j 12:02	0° ∡ ¹			-3072 Aug 20 j 02:09	0° m	
	-3077 Apr 03 j 01:46	0°₹		desc. node	-3072 Sep 27 j 00:56	28°M/01'10	
	-3077 May 18 j 02:22	0° ≈			-3072 Sep 29 j 15:43	0∘ ⊽	
retrograde	-3077 Aug 01 j 18:11	28° ≈ 53'14		evening set	-3072 Oct 07 j 17:17	6° ჲ 08'16	
min. Earth dist.	-3077 Aug 30 j 23:15		0.48855 AU		-3072 Nov 07 j 13:13	0°M	
opposition	-3077 Sep 07 j 22:23	20° ≈ 08'49					
greatest brilliancy	-3077 Sep 06 j 19:15	20° ≈ 33'28	-2.2m	conjunction	-3072 Dec 09 j 00:37	24°M44'44	
direct	-3077 Oct 11 j 14:27	13°≈01'57		minimum elong	-3072 Dec 08 j 21:29	24°M38'32	
	-3077 Dec 10 j 13:48	0° \		max. Earth dist.	-3072 Dec 11 j 13:03		2.37500 AU
asc. node	-3077 Dec 14 j 17:24	1°) 56′54			-3072 Dec 15 j 16:38	0°⊀⊓	
	-3076 Feb 05 j 11:17	0 ° ႘ 0∘ೡ		marning rise	-3071 Jan 23 j 00:01	0°る 18°る06'22	
	-3076 Mar 27 j 14:08	0°II		morning rise	-3071 Feb 15 j 13:42 -3071 Mar 03 j 08:16	18 000 22 0°≈	
	-3076 May 15 j 14:46 -3076 Jul 01 j 20:10	0°©			-3071 Mar 03 j 08.10	0 ≈ 0° H	
evening set	-3076 Jul 05 j 22:16	2°939'24			-3071 May 27 j 01:29	0° Υ	
max. Earth dist.	-3076 Jul 27 j 21:16		2.59051 AU		-3071 Jul 12 j 21:37	0°8	
max. Earth dist.	-3076 Aug 16 j 01:15	0°Ω	2.37031 110	asc. node	-3071 Aug 05 j 16:33	14° 8 10'04	
	5070 Mug 10 j 01.15	0 00		use. Houe	-3071 Sep 03 j 13:08	0°II	
conjunction	-3076 Aug 22 j 08:10	4° Ω 17'05	1°04'04	retrograde	-3071 Nov 21 j 03:05	25° I I27'30	
minimum elong	-3076 Aug 22 j 09:17	4° Ω 18'59		opposition	-3071 Dec 30 j 11:21	16° Ⅲ 10'01	4°20'38
	-3076 Sep 28 j 04:50	0° m/		greatest brilliancy	-3071 Dec 30 j 18:24	16° Ⅲ 03'01	-1.3m
morning rise	-3076 Oct 09 j 23:58	8° m 26'47		min. Earth dist.	-3070 Jan 01 j 22:20	15° Ⅱ 11'34	0.66462 AU
Č	-3076 Nov 08 j 12:02	0∘ <u>⊽</u>		direct	-3070 Feb 09 j 15:15	6° Ⅱ 09'47	
	-3076 Dec 18 j 10:01	0°M			-3070 Apr 25 j 15:15	0°©	
desc. node	-3076 Dec 23 j 05:01	3°M39'03			-3070 Jun 16 j 03:26	$0^{\circ}\Omega$	
	-3075 Jan 26 j 13:54	0°⊀			-3070 Jul 30 j 15:42	0° m	
	-3075 Mar 06 j 19:38	ರ°0		desc. node	-3070 Aug 14 j 23:08	10° m 58′56	
	-3075 Apr 16 j 06:04	0° ≈			-3070 Sep 09 j 14:50	0∘ ত	
	-3075 May 29 j 16:07	0° ∀			-3070 Oct 18 j 14:21	0° M	
	-3075 Jul 20 j 08:29	0° Υ			-3070 Nov 25 j 18:23	0°⊀	
retrograde	-3075 Sep 12 j 10:24	15° Y 21′59		evening set	-3070 Dec 14 j 06:22	14° ∡ ³31′29	
min. Earth dist.	-3075 Oct 16 j 23:23		0.60298 AU		-3069 Jan 03 j 03:39	0°₹	
opposition	-3075 Oct 22 j 00:38	5° Ƴ 27'49			-3069 Feb 11 j 15:27	0° ≈	
greatest brilliancy	-3075 Oct 21 j 23:01	5° Y 29′25	-1.7m				
asc. node	-3075 Oct 31 j 17:03	1° Y 47'58		conjunction	-3069 Feb 16 j 23:33	3°≈57'45	
	-3075 Nov 06 j 08:17	30° R ₩		minimum elong	-3069 Feb 17 j 01:31	4°≈01'23	1°01'55
direct	-3075 Nov 28 j 11:13	26°) 44'31 0° °			-3069 Mar 24 j 21:46	0° ∀	
	-3075 Dec 22 j 15:10			T 1 1 1		50\/ 5012 C	0 40555 AXX
	207434 02:05:22			max. Earth dist.	-3069 Apr 02 j 04:30		2.48755 AU
	-3074 Mar 03 j 05:23	0° 8		max. Earth dist. morning rise	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00	17°) (17′47	2.48755 AU
	-3074 Apr 25 j 06:43	0°B 8°0			-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59	17° ∺ 17'47 0° Ƴ	2.48755 AU
	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25	0°9 0°H 0°8		morning rise	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41	17°) 17'47 0° ° 0° 8	2.48755 AU
avaning sat	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59	0°Ω 0°Ω 0°8			-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09	17°¥17'47 0°°Y 0°8 1°801'26	2.48755 AU
evening set	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51	0°8 0°II 0°ತ 0°N 13°N32'33	2.47968 AU	morning rise	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23	17°光17'47 0°Y 0°8 1°801'26 0°耳	2.48755 AU
evening set max. Earth dist.	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37	0°8 0°11 0°5 0°0 13°032'33 24°013'36	2.47968 AU	morning rise	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08	17°¥17'47 0°Y 0°8 1°801'26 0°Ⅲ 0°©	2.48755 AU
•	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51	0°8 0°II 0°ತ 0°N 13°N32'33	2.47968 AU	morning rise asc. node	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32	17°¥17'47 0°Y 0°8 1°801'26 0°Ⅲ 0°9 0°Ω	2.48755 AU
max. Earth dist.	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15	0°8 0°1 0°9 0°8 13°832'33 24°813'36 0°1		morning rise	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21	17°米17'47 0°Y 0°8 1°801'26 0°Ⅲ 0°9 0°Ω 0°Ω	2.48755 AU
max. Earth dist.	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06	0°8 0°Π 0°Φ 0°Ω 13°Ω32'33 24°Ω13'36 0°M	0°22'09	morning rise asc. node retrograde	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12	17°¥17'47 0°°Y 0°8 1°801'26 0°II 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 30°\$	
max. Earth dist.	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15	0°8 0°1 0°9 0°8 13°832'33 24°813'36 0°1	0°22'09	asc. node retrograde opposition	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12 -3068 Feb 05 j 15:58	17°¥17'47 0°°Y 0°8 1°801'26 0°II 0°© 0°Ω 0°Ω 30°R© 22°©39'01	2.48755 AU 4°57'32 -1.6m
max. Earth dist.	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34	0°8 0°11 0°95 0°10 13°132'33 24°13'36 0°10 21°1016'55 21°1019'14	0°22'09	asc. node retrograde opposition greatest brilliancy	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12	17°¥17'47 0°°Y 0°8 1°801'26 0°II 0°© 0°Ω 0°Ω 30°R© 22°©39'01	4°57'32
max. Earth dist. conjunction minimum elong	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20	0°8 0°11 0°95 0°10 13°132'33 24°13'36 0°10 21°1016'55 21°1019'14 0°11	0°22'09	asc. node retrograde opposition	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 06 j 16:56	17°¥17'47 0°°Y 0°8 1°801'26 0°II 0°© 0°Ω 0°Ω 30°R© 22°©39'01 22°©15'16	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23	0°8 0°1 0°9 0°8 13°832'33 24°813'36 0°1 21°116'55 21°119'14 0°9 16°903'04	0°22'09	asc. node retrograde opposition greatest brilliancy min. Earth dist.	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 06 j 16:56 -3068 Feb 11 j 20:54	17° ¥ 17'47 0° Υ 0° Υ 1° ႘ 01'26 0° Π 0° Φ 0° Ω 0° Ω 59'40 30° № 22° \$39'01 22° \$15'16 20° \$17'29	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25	0°8 0°11 0°9 0°13 13°132'33 24°13'36 0°10 21°1016'55 21°1019'14 0°9 16°903'04 0°11	0°22'09	asc. node retrograde opposition greatest brilliancy min. Earth dist.	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Feb 05 j 15:58 -3068 Feb 06 j 16:56 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27	17° ¥ 17'47 0° Υ 0° Υ 1° ႘ 01'26 0° Π 0° Φ 0° Ω 0° Ω 59'40 30° № 22° \$39'01 22° \$15'16 20° \$17'29 12° \$50'44	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24	0°8 0°1 0°9 0°8 13°832'33 24°813'36 0°m 21°m 16'55 21°m 19'14 0°9 16°903'04 0°m 5°m41'46	0°22'09	morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Feb 05 j 15:58 -3068 Feb 06 j 16:56 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27 -3068 May 15 j 10:05	17° ¥ 17'47 0° Υ 0° Υ 1° ႘ 01'26 0° Π 0° Ω 0° Ω 0° Ω 59'40 30° κ 22° \$39'01 22° \$15'16 20° \$17'29 12° \$50'44 0° Ω	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jan 05 j 16:05 -3073 Feb 13 j 04:56 -3073 Mar 24 j 17:47	0°\begin{align*} 0°\begin{align*} 0°\begin{align*} 0°\begin{align*} 0°\begin{align*} 0°\begin{align*} 21°\begin{align*} 0°\begin{align*} 21°\begin{align*} 0°\begin{align*} 0°\	0°22'09	morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 05 j 15:58 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27 -3068 May 15 j 10:05 -3068 Jul 01 j 22:16 -3068 Aug 17 j 11:32	17°¥17'47 0°°Y 0°°8 1°8'01'26 0°Ⅲ 0°\$ 0°\$ 0°\$ 0°\$ 22°\$39'01 22°\$15'16 20°\$17'29 12°\$50'44 0°\$ 27°\$37'08 0°¶ 0°\$ 0°\$	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jan 05 j 16:05 -3073 Feb 13 j 04:56 -3073 Mar 24 j 17:47 -3073 May 05 j 06:04	0°\begin{align*} 0°\begin{align*} 0°\begin{align*} 0°\begin{align*} 0°\begin{align*} 0°\begin{align*} 21°\begin{align*} 0°\begin{align*} 21°\begin{align*} 0°\begin{align*} 0°\	0°22'09	morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jun 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 05 j 15:58 -3068 Feb 11 j 20:54 -3068 May 15 j 10:05 -3068 Jul 01 j 22:16 -3068 Aug 17 j 11:32 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25	17° ¥17'47 0° Υ 0° ¥ 1° ¥01'26 0° Π 0° Φ 0° Ω 0° Ω59'40 30° ₹© 22° \$39'01 22° \$15'16 20° \$17'29 12° \$50'44 0° Ω 27° Ω37'08 0° № 0° № 0° №	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jan 05 j 16:05 -3073 Feb 13 j 04:56 -3073 Mar 24 j 17:47 -3073 May 05 j 06:04 -3073 Jun 19 j 01:44	0°8 0°1 0°9 0°8 13°832'33 24°813'36 0°1 21°116'55 21°119'14 0°1 16°103'04 0°1 5°114'46 0°1 0°1 0°1 0°1 0°1 0°1 0°1 0°1 0°1 0°1	0°22'09	morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 05 j 15:58 -3068 Feb 11 j 20:54 -3068 May 15 j 10:05 -3068 Jul 01 j 22:16 -3068 Aug 17 j 11:32 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25 -3068 Nov 04 j 00:25	17°¥17'47 0°°Y 0°8 1°8'01'26 0°Ⅲ 0°\$ 0°\$ 0°\$ 0°\$ 22°\$39'01 22°\$15'16 20°\$17'29 12°\$50'44 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node morning rise	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jan 05 j 16:05 -3073 Feb 13 j 04:56 -3073 May 05 j 06:04 -3073 Jun 19 j 01:44 -3073 Aug 09 j 15:48	0°8 0°1 0°9 0°8 13°832'33 24°813'36 0°1 21°116'55 21°119'14 0°1 16°103'04 0°1 5°114'46 0°1 0°1 0°1 0°1 0°1 0°1 0°1 0°1 0°1 0°1	0°22'09	morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jun 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 06 j 16:56 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27 -3068 May 15 j 10:05 -3068 Jul 01 j 22:16 -3068 Jul 05 j 13:36 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25 -3068 Nov 04 j 00:25 -3068 Dec 12 j 21:24	17°米17'47 0°Y 0°8 1°801'26 0°Ⅲ 0°9 0°\$ 0°\$ 0°\$ 0°\$ 22°\$39'01 22°\$15'16 20°\$17'29 12°\$50'44 0°\$ 27°\$37'08 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$ 0°\$	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node morning rise asc. node	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jan 05 j 16:05 -3073 Feb 13 j 04:56 -3073 May 05 j 06:04 -3073 Jun 19 j 01:44 -3073 Aug 09 j 15:48 -3073 Sep 18 j 16:18	0°8 0°11 0°9 0°13 13°1332'33 24°13'336 0°10 21°1016'55 21°1019'14 0°14 0°15 16°150'3'04 0°17 0°15 0°15 0°15 0°15 0°15 0°15 0°15 0°15	0°22'09	asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Feb 05 j 15:58 -3068 Feb 05 j 15:58 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27 -3068 Mar 17 j 10:27 -3068 Mar 17 j 10:05 -3068 Jul 01 j 22:16 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25 -3068 Nov 04 j 00:25 -3068 Dec 12 j 21:24 -3067 Jan 21 j 21:22	17° ¥ 17'47 0° Y 0° 8 1° 801'26 0° II 0° 9 0° \$\alpha\$ 0° \$\alpha\$ 0° \$\alpha\$ 22° \$\sigma 39'01 22° \$\sigma 15'16 20° \$\sigma 17'29 12° \$\sigma 50'44 0° \$\alpha\$ 27° \$\alpha 37'08 0° \$\mathred{\text{In}}	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node morning rise asc. node retrograde	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jun 05 j 16:05 -3073 Feb 13 j 04:56 -3073 Mar 24 j 17:47 -3073 May 05 j 06:04 -3073 Jun 19 j 01:44 -3073 Aug 09 j 15:48 -3073 Sep 18 j 16:18 -3073 Oct 18 j 05:40	0°8 0°11 0°9 0°13 13°132'33 24°13'36 0°10 21°1016'55 21°1019'14 0°1 16°103'04 0°11 5°114'46 0°17 0°18 0°18 0°19 16°18 21°18 21°18 21°16'16	0°22'09 0°22'09	morning rise asc. node retrograde opposition greatest brilliancy min. Earth dist. direct	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Feb 05 j 15:58 -3068 Feb 05 j 15:58 -3068 Feb 11 j 20:54 -3068 May 15 j 10:05 -3068 Jul 01 j 22:16 -3068 Jul 01 j 22:16 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25 -3068 Nov 04 j 00:25 -3068 Dec 12 j 21:24 -3067 Feb 14 j 22:25	17° ¥17'47 0° Y 0° 8 1° 801'26 0° II 0° 9 0° \$\alpha\$ 0° \$\alpha\$ 0° \$\alpha\$ 22° \$\sigma 39'01 22° \$\sigma 15'16 20° \$\sigma 17'29 12° \$\sigma 50'44 0° \$\alpha\$ 27° \$\alpha 37'08 0° \$\mathred{\text{In}}	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node morning rise asc. node retrograde min. Earth dist.	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jun 05 j 16:05 -3073 Feb 13 j 04:56 -3073 Mar 24 j 17:47 -3073 May 05 j 06:04 -3073 Jun 19 j 01:44 -3073 Aug 09 j 15:48 -3073 Oct 18 j 05:40 -3073 Nov 25 j 21:51	0°8 0°11 0°9 0°13 13°132'33 24°13'36 0°10 21°1016'55 21°1019'14 0°1 16°103'04 0°11 5°114'46 0°13 0°15 0°16 0°17 0°18 16°18 21°18 21°16'16 12°18 21°16 12°18	0°22'09 0°22'09	asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Feb 05 j 15:58 -3068 Feb 05 j 15:58 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27 -3068 Mar 17 j 10:27 -3068 Mar 17 j 10:05 -3068 Jul 01 j 22:16 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25 -3068 Nov 04 j 00:25 -3068 Dec 12 j 21:24 -3067 Jan 21 j 21:22	17° ¥ 17'47 0° Y 0° 8 1° 801'26 0° II 0° 9 0° \$\alpha\$ 0° \$\alpha\$ 0° \$\alpha\$ 22° \$\sigma 39'01 22° \$\sigma 15'16 20° \$\sigma 17'29 12° \$\sigma 50'44 0° \$\alpha\$ 27° \$\alpha 37'08 0° \$\mathred{\text{In}}	4°57'32 -1.6m
max. Earth dist. conjunction minimum elong desc. node morning rise asc. node retrograde min. Earth dist. opposition	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jun 05 j 16:05 -3073 Feb 13 j 04:56 -3073 May 05 j 06:04 -3073 Jun 19 j 01:44 -3073 Aug 09 j 15:48 -3073 Sep 18 j 16:18 -3073 Nov 25 j 21:51 -3073 Nov 27 j 06:36	0°8 0°π 0°9 0°Ω 13°Ω32'33 24°Ω13'36 0°m 21°m16'55 21°m19'14 0°Ω 16°Ω03'04 0°m 5°m41'46 0°% 0°% 0°% 0°% 0°% 16°856'18 21°851'16 12°833'51 12°800'52	0°22'09 0°22'09 0.66519 AU 2°30'07	asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 06 j 16:56 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27 -3068 Mar 17 j 10:27 -3068 Jul 01 j 22:16 -3068 Jul 01 j 22:16 -3068 Jul 05 j 13:36 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25 -3068 Nov 04 j 00:25 -3068 Dec 12 j 21:24 -3067 Jan 21 j 21:22 -3067 Feb 14 j 22:25 -3067 Mar 04 j 15:21	17° ¥17'47 0° Y 0° Y 0° Y 1° 8'01'26 0° II 0° S 0° N 0° N 59'40 30° RS 22° S39'01 22° S15'16 20° S17'29 12° S50'44 0° N 27° N 37'08 0° II 0° I 0° I 0° I 0° I 0° I 0° I 0°	4°57'32 -1.6m 0.59975 AU
max. Earth dist. conjunction minimum elong desc. node morning rise asc. node retrograde min. Earth dist. opposition greatest brilliancy	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jan 05 j 16:05 -3073 Feb 13 j 04:56 -3073 Mar 24 j 17:47 -3073 May 05 j 06:04 -3073 Jun 19 j 01:44 -3073 Aug 09 j 15:48 -3073 Oct 18 j 05:40 -3073 Nov 25 j 21:51 -3073 Nov 27 j 06:36 -3073 Nov 27 j 06:36	0°と 0°の 13°の32'33 24°の13'36 0°で 13°0,13'36 0°で 21°で16'55 21°で19'14 0°丘 16°凸03'04 0°爪 5°爪41'46 0°ズ 0°云 0°ン 0°ン 16°ひ56'18 21°ひ51'16 12°ひ33'51 12°と00'52 12°と05'03	0°22'09 0°22'09	asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set conjunction	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 05 j 15:58 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27 -3068 Mar 17 j 10:27 -3068 Jul 01 j 22:16 -3068 Jul 01 j 22:16 -3068 Jul 05 j 13:36 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25 -3068 Nov 04 j 00:25 -3068 Dec 12 j 21:24 -3067 Jan 21 j 21:22 -3067 Mar 04 j 15:21	17° ¥17'47 0° ↑ 0° ♥ 1° ♥01'26 0° Ⅲ 0° ♥ 0° Ω 0° Ω59'40 30° № 22° № 39'01 22° № 15'16 20° № 17'29 12° № 50'44 0° Ω 27° Ω 37'08 0° № 0° № 0° № 0° № 17° ≈ 26'58 0° ₩ 26° ¥ 13'33	4°57'32 -1.6m 0.59975 AU
max. Earth dist. conjunction minimum elong desc. node morning rise asc. node retrograde min. Earth dist. opposition	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jan 05 j 16:05 -3073 Feb 13 j 04:56 -3073 Mar 24 j 17:47 -3073 May 05 j 06:04 -3073 Jun 19 j 01:44 -3073 Aug 09 j 15:48 -3073 Oct 18 j 05:40 -3073 Nov 25 j 21:51 -3073 Nov 27 j 06:36 -3073 Nov 27 j 06:36 -3073 Jan 06 j 05:10	0°8 0°11 0°9 0°13 13°132'33 24°13'36 0°10 21°1016'55 21°1019'14 0°11 0°11 0°11 0°11 0°11 0°11 0°11 0°	0°22'09 0°22'09 0.66519 AU 2°30'07	asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 06 j 16:56 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27 -3068 Mar 17 j 10:27 -3068 Jul 01 j 22:16 -3068 Jul 01 j 22:16 -3068 Jul 05 j 13:36 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25 -3068 Nov 04 j 00:25 -3068 Dec 12 j 21:24 -3067 Jan 21 j 21:22 -3067 Feb 14 j 22:25 -3067 Apr 11 j 18:43 -3067 Apr 11 j 19:33	17° ¥17'47 0° ↑ 0° ♥ 1° ♥01'26 0° Ⅲ 0° № 0° № 0° № 20° № 22° № 39'01 22° № 15'16 20° № 17'29 12° № 50'44 0° № 27° № 37'08 0° № 0° № 0° № 0° № 17° ≈ 26'58 0° ₩ 26° ¥13'33 26° ¥14'57	4°57'32 -1.6m 0.59975 AU
max. Earth dist. conjunction minimum elong desc. node morning rise asc. node retrograde min. Earth dist. opposition greatest brilliancy	-3074 Apr 25 j 06:43 -3074 Jun 12 j 21:25 -3074 Jul 28 j 09:59 -3074 Aug 17 j 01:51 -3074 Sep 01 j 05:37 -3074 Sep 09 j 07:15 -3074 Oct 08 j 09:06 -3074 Oct 08 j 10:20 -3074 Oct 20 j 00:34 -3074 Nov 10 j 03:23 -3074 Nov 28 j 05:25 -3074 Dec 05 j 13:24 -3073 Jan 05 j 16:05 -3073 Feb 13 j 04:56 -3073 Mar 24 j 17:47 -3073 May 05 j 06:04 -3073 Jun 19 j 01:44 -3073 Aug 09 j 15:48 -3073 Oct 18 j 05:40 -3073 Nov 25 j 21:51 -3073 Nov 27 j 06:36 -3073 Nov 27 j 06:36	0°と 0°の 13°の32'33 24°の13'36 0°で 13°0,13'36 0°で 21°で16'55 21°で19'14 0°丘 16°凸03'04 0°爪 5°爪41'46 0°ズ 0°云 0°ン 0°ン 16°ひ56'18 21°ひ51'16 12°ひ33'51 12°と00'52 12°と05'03	0°22'09 0°22'09 0.66519 AU 2°30'07	asc. node retrograde opposition greatest brilliancy min. Earth dist. direct desc. node evening set conjunction	-3069 Apr 02 j 04:30 -3069 Apr 18 j 16:00 -3069 May 07 j 07:59 -3069 Jun 22 j 01:41 -3069 Jun 23 j 16:09 -3069 Aug 09 j 09:23 -3069 Oct 01 j 00:08 -3069 Dec 17 j 01:32 -3069 Dec 30 j 04:21 -3068 Jan 11 j 16:12 -3068 Feb 05 j 15:58 -3068 Feb 05 j 15:58 -3068 Feb 11 j 20:54 -3068 Mar 17 j 10:27 -3068 Mar 17 j 10:27 -3068 Jul 01 j 22:16 -3068 Jul 01 j 22:16 -3068 Jul 05 j 13:36 -3068 Aug 17 j 11:32 -3068 Sep 26 j 07:25 -3068 Nov 04 j 00:25 -3068 Dec 12 j 21:24 -3067 Jan 21 j 21:22 -3067 Mar 04 j 15:21	17° ¥17'47 0° ♀ 0° ¥ 1° ¥01'26 0° Ⅲ 0° ♀ 0° Ω 0° Ω59'40 30° № 22° ♀39'01 22° ♀15'16 20° ♀17'29 12° ♀50'44 0° Ω 27° Ω37'08 0° № 0° № 0° № 17° ≈ 26'58 0° ¥ 26° ¥13'33 26° ¥14'57 0° ♀	4°57'32 -1.6m 0.59975 AU

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 34 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronom	ical year style is used: Th		in astronomical co	ounting style is the year	3401 BCE in historical c	counting style.	
asc. node	-3067 May 10 j 13:57	15° Y ′23'15			-3062 Aug 10 j 03:49	30°Ŗる	
morning rise	-3067 Jun 02 j 03:54	0° 8 05'46		greatest brilliancy	-3062 Aug 14 j 20:39	28° පි 26'13	
	-3067 Jun 02 j 00:20	0°B		opposition	-3062 Aug 16 j 08:41	27° ප් 56'15	-5°54'21
	-3067 Jul 19 j 03:21	0°Щ		direct	-3062 Sep 17 j 03:48	21° る 42'35	
	-3067 Sep 05 j 14:35	0°©			-3062 Oct 26 j 01:12	0° ≈	
	-3067 Oct 26 j 06:27	$\Omega^{\circ}\Omega$			-3062 Dec 25 j 20:10	0°) {	
. 1	-3067 Dec 23 j 05:08	0° Mp		asc. node	-3062 Dec 31 j 07:48	3° ¥ 06'30 0° Υ	
retrograde	-3066 Feb 17 j 21:50	14° Mp 51'32	2007145		-3061 Feb 15 j 01:50	0.8 0.4.	
opposition	-3066 Mar 24 j 01:16	8°	3°07'45 -2.2m		-3061 Apr 05 j 10:20	0°II	
greatest brilliancy min. Earth dist.	-3066 Mar 25 j 02:59 -3066 Apr 01 j 12:44		-2.2m 0.48007 AU	evening set	-3061 May 23 j 17:44 -3061 Jun 21 j 21:31	18° Ⅱ 30'02	
iiiii. Eartii dist.	-3066 Apr 25 j 18:57	30°RΩ	0.48007 AU	evening set	-3061 Jul 09 j 17:17	0°95	
direct	-3066 Apr 30 j 13:11	29° Ω 50'29		max. Earth dist.	-3061 Jul 18 j 05:56		2.62240 AU
uncet	-3066 May 05 j 08:45	0° m/y		max. Bartii dist.	3001341 10 3 03.20	J 3 555.	2.022 10 110
desc. node	-3066 May 19 j 21:04	2° m/ 15'58		conjunction	-3061 Aug 07 j 12:54	18° © 57'21	1°09'50
dese. node	-3066 Jul 18 j 02:41	0∘ ⊽		minimum elong	-3061 Aug 07 j 13:19	18°958'03	1°09'56
	-3066 Aug 31 j 12:04	0° M			-3061 Aug 23 j 23:38	0°N	
	-3066 Oct 11 j 10:41	0° ∡ ¹		morning rise	-3061 Sep 23 j 07:15	20° Ω 49'10	
	-3066 Nov 20 j 21:09	ರ°0		C	-3061 Oct 06 j 09:27	0° m	
	-3065 Jan 01 j 03:48	0° ≈			-3061 Nov 17 j 02:22	0∘ ⊽	
	-3065 Feb 12 j 23:16	0°) €			-3061 Dec 27 j 11:48	0° M	
asc. node	-3065 Mar 28 j 11:53	29°) 19'18		desc. node	-3060 Jan 09 j 22:09	10°ML07'23	
	-3065 Mar 29 j 12:30	0° Y			-3060 Feb 05 j 03:50	0° ∡ ¹	
evening set	-3065 Apr 04 j 22:35	4° Υ 14'08			-3060 Mar 15 j 22:56	8°0	
	-3065 May 14 j 13:05	0° 8			-3060 Apr 26 j 05:57	0° ≈	
					-3060 Jun 10 j 22:07	0°) €	
conjunction	-3065 May 24 j 13:48	6° 8 26'48	0°31'19	retrograde	-3060 Aug 28 j 02:52	29°) 12'31	
minimum elong	-3065 May 24 j 12:43	6° 8 25'03		min. Earth dist.	-3060 Sep 29 j 16:32		0.56275 AU
max. Earth dist.	-3065 May 31 j 19:53		2.66091 AU	opposition	-3060 Oct 06 j 01:56	19° ¥ 32′20	
	-3065 Jun 30 j 10:49	0°Щ		greatest brilliancy	-3060 Oct 05 j 16:25	19°) 41'38	-1.9m
morning rise	-3065 Jul 10 j 03:28	6° Ⅱ 10'17		direct	-3060 Nov 11 j 04:23	11°) € 20′24	
	-3065 Aug 16 j 14:17	0°©		asc. node	-3060 Nov 17 j 07:42	11°) (34'41	
	-3065 Oct 02 j 15:44	$\Omega^{\circ}\Omega$			-3059 Jan 15 j 02:07	0° Υ	
	-3065 Nov 18 j 20:14	0° m)			-3059 Mar 13 j 06:06	0° B	
	-3064 Jan 06 j 03:42	0∘ 亚			-3059 May 03 j 04:41	0° Ⅱ	
desc. node	-3064 Feb 28 j 07:32	0°M		evening set	-3059 Jun 20 j 02:52	0°ഇ 26°ഇ54'38	
	-3064 Apr 05 j 21:49 -3064 May 01 j 15:34	15°M25'39 19°M20'59		evening set	-3059 Jul 30 j 21:52 -3059 Aug 04 j 11:11	20° ω 34'38 0° Ω	
retrograde opposition	-3064 Jun 01 j 02:04	19 IIL2039	3°57'00	max. Earth dist.	-3059 Aug 04 j 11.11 -3059 Aug 16 j 12:52		2.52715 AU
greatest brilliancy	-3064 Jun 01 j 05:09	14°M17'33		max. Earth dist.	-3059 Sep 16 j 10:01	0°m)	2.32/13 AO
min. Earth dist.	-3064 Jun 02 j 15:33	13°M54'34			-3037 Sep 10 j 10.01	עוו ט	
direct	-3064 Jul 01 j 16:19	9°M.08'02	0.57000110	conjunction	-3059 Sep 18 j 16:40	1° m/38'04	0°43'15
uncet	-3064 Sep 03 j 01:09	0° ∡ 7		minimum elong	-3059 Sep 18 j 18:23	1° mp 41'09	0°43'16
	-3064 Oct 22 j 11:43	8°0		8	-3059 Oct 27 j 07:49	0∘ ⊽	
	-3064 Dec 07 j 03:13	0° ≈		morning rise	-3059 Nov 11 j 05:28	11° ≏ 13'56	
	-3063 Jan 21 j 15:19	0° ∀		desc. node	-3059 Nov 26 j 20:07	23° ഫ 08'30	
asc. node	-3063 Feb 12 j 09:32	14° ¥ 10′39			-3059 Dec 05 j 18:12	0° M	
	-3063 Mar 08 j 21:59	0° Y			-3058 Jan 13 j 10:20	0° ∡ ¹	
	-3063 Apr 24 j 22:52	$0^{\circ}B$			-3058 Feb 21 j 03:59	8°0	
evening set	-3063 May 14 j 17:31	12° 8 32'42			-3058 Apr 01 j 22:01	0° ≈	
	-3063 Jun 11 j 05:07	Π °0			-3058 May 13 j 20:16	0°) €	
max. Earth dist.	-3063 Jun 23 j 07:02	7° Ⅱ 42'10	2.66848 AU		-3058 Jun 28 j 21:47	0° Y	
					-3058 Aug 26 j 07:20	0° 8	
conjunction	-3063 Jun 30 j 12:33	12° Ⅱ 19′28	1°02'53	retrograde	-3058 Oct 04 j 16:59	8° 8 28'03	
minimum elong	-3063 Jun 30 j 11:31	12° Ⅱ 17'49	1°02'57	asc. node	-3058 Oct 05 j 08:15	8° 8 27'54	
	-3063 Jul 27 j 23:35	0 \circ			-3058 Nov 10 j 01:24	30°Ŗ Ƴ	
morning rise	-3063 Aug 14 j 13:38	11°526'30		min. Earth dist.	-3058 Nov 10 j 21:16	29° Y 40′05	0.64790 AU
	-3063 Sep 11 j 17:27	0° N		opposition	-3058 Nov 13 j 17:16	28° Y 31'37	1°30'29
	-3063 Oct 26 j 06:00	0° m)		greatest brilliancy	-3058 Nov 13 j 12:46	28° Y 36'09	-1.5m
	-3063 Dec 08 j 15:33	ი∘ ო 0∘ ত		direct	-3058 Dec 22 j 19:48	19° Y 12'32	
dogo rada	-3062 Jan 20 j 06:12	0°M			-3057 Feb 08 j 08:16	0° Η	
desc. node	-3062 Feb 21 j 23:14	23°M.06'43 0°⊀			-3057 Apr 10 j 16:17	0°© 0°∏	
	-3062 Mar 03 j 19:01 -3062 Apr 17 j 05:19	0° ਨ 0°ਰ			-3057 May 31 j 06:34 -3057 Jul 16 j 10:22	0°€	
	-3062 Apr 17 j 03:19 -3062 Jun 13 j 00:00	0°≈			-3057 Aug 28 j 10:19	0°mp	
retrograde	-3062 Jul 13 j 00:00	5° ≈ 33'51		evening set	-3057 Sep 16 j 10:35	13° Mp 51'49	
min. Earth dist.	-3062 Jul 12 j 02:33	0°≈34'25	0.43837 AU	overning sec	-3057 Oct 08 j 00:35	0∘ ʊ	
Darm dist.	5002.1ug 00 j 07.27	U - U - Z - Z - Z - Z - Z - Z - Z - Z -	0007/110		505, 5 c t 00 j 00.55	· -	

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3057 Oct 08 i 23:34 0°**2**43'31 2.40399 AU -3052 Jun 09 j 00:56 0°8 max. Earth dist. -3057 Oct 14 j 18:21 5°**£**07'05 -3052 Jul 26 j 10:48 $\Pi^{\circ}0$ desc. node -3052 Sep 13 j 22:52 0ಂತಾ -3052 Nov 06 j 22:40 -3057 Nov 13 j 11:31 28°**♀**01'59 -0°20'39 $0^{\circ}\Omega$ conjunction -3057 Nov 13 j 09:56 27°**♀**58'53 0°20'39 -3051 Jan 27 j 00:22 minimum elong retrograde 26°**Ω**18'33 -3057 Nov 16 j 00:05 0°M -3051 Mar 03 j 15:45 opposition 18°**Ω**49'49 4°17'59 greatest brilliancy -3057 Dec 24 j 05:24 0°×7 -3051 Mar 04 j 22:30 18°**Ω**22'04 -1.9m 19°**∡** 54'08 morning rise -3056 Jan 18 j 14:19 min. Earth dist. -3051 Mar 11 j 16:07 15°**Ω**56'55 0.53158 AU -3056 Jan 31 j 13:47 0°ಕ direct -3051 Apr 11 j 22:01 9°**Ω**42'48 -3056 Mar 10 j 22:18 0°≈ desc. node -3051 Jun 05 j 14:54 25°**Ω**38'26 -3056 Apr 21 j 02:45 0°**)**€ -3051 Jun 13 j 22:42 0° m -3056 Jun 03 j 22:52 $0^{\circ}\Upsilon$ -3051 Jul 31 j 19:54 0∘**ত** -3056 Jul 21 j 19:20 0° 8 -3051 Sep 11 j 08:27 0°M asc. node -3056 Aug 22 j 07:38 17°**8**34'32 -3051 Oct 21 j 00:03 0°**⊼** -3056 Sep 17 j 10:15 $0^{\circ}II$ -3051 Nov 29 j 14:03 0°ರ retrograde -3056 Nov 07 j 09:29 12°**Ⅲ**36'14 -3050 Jan 09 j 04:39 0°≈ opposition -3056 Dec 17 j 03:00 3°**I**03'18 3°45'16 -3050 Feb 20 j 11:24 0°**)**€ greatest brilliancy -3056 Dec 17 j 04:18 3°**Ⅱ**02'00 -1.3m evening set -3050 Mar 18 j 06:48 17°**)**41'05 min. Earth dist. -3056 Dec 18 j 01:51 2°**Ⅱ**40′28 0.67251 AU -3050 Apr 05 j 15:05 $0^{\circ}\Upsilon$ -3056 Dec 24 j 21:28 30°R₩ asc. node -3050 Apr 14 j 02:58 5°Y38'11 direct -3055 Jan 26 j 22:58 23°809'15 -3055 Mar 04 j 11:20 $\mathbb{I}^{\circ 0}$ conjunction -3050 May 08 j 21:14 21°Y52'18 0°14'08 -3055 May 06 j 22:34 0000 -3050 May 08 j 20:39 21°**Y**51'21 0°14'10 minimum elong -3055 Jun 24 i 19:39 $0^{\circ}\Omega$ behind sun begin -3050 May 08 j 11:30 21°Y36'30 -3055 Aug 07 j 14:52 0° m behind sun end -3050 May 09 j 05:48 22°Y06'13 -3055 Aug 31 j 16:24 17° m 30'30 -3050 May 21 j 10:16 desc node 0°X -3055 Sep 17 j 08:40 0∘**⊽** -3050 May 22 j 05:08 0°**と**30'28 2.64326 AU max Earth dist -3055 Oct 26 j 06:20 0°M -3050 Jun 25 j 21:06 22°**8**43'10 morning rise -3055 Nov 16 j 18:28 16°M54'02 -3050 Jul 07 j 08:01 0°Π evening set -3055 Dec 03 j 09:11 0°×7 -3050 Aug 23 j 20:00 000 0°ರ -3050 Oct 10 j 20:30 $0^{\circ}\Omega$ -3054 Jan 10 j 16:37 -3050 Nov 29 j 05:30 0° m -3049 Jan 22 j 12:19 -3054 Jan 21 j 20:04 8°る35'59 -1°07'01 0∘ಹ conjunction -3054 Jan 21 j 19:51 8°る35'32 1°07'07 -3049 Apr 01 j 01:02 20°**♀**56'24 minimum elong retrograde -3054 Feb 19 j 01:41 -3049 Apr 23 j 14:54 0°≈ desc. node 17°**♀**52'18 -3054 Mar 12 j 06:52 -3049 May 02 j 09:07 max. Earth dist. 15°≈39'21 2.43488 AU opposition 15°**2**27'51 -0°36'08 -3054 Mar 27 j 23:24 -3049 May 02 j 12:21 morning rise 26°≈58'35 greatest brilliancy 15°**£**25'30 -2.8m -3054 Apr 01 j 05:13 0°**)**€ min. Earth dist. -3049 May 08 j 14:03 13°**2**39'46 0.40556 AU -3054 May 14 j 14:31 $0^{\circ}\Upsilon$ direct -3049 Jun 04 j 19:04 9°**£**09'34 -3054 Jun 29 j 13:56 0° 8 -3049 Aug 05 j 21:24 0°M -3054 Jul 10 j 07:12 6°843'49 -3049 Sep 22 j 10:51 0°**⊼** asc. node -3054 Aug 17 j 21:45 $\mathbb{I}^{\circ 0}$ -3049 Nov 04 j 20:06 0°정 -3054 Oct 13 j 18:16 0ಂತಾ -3049 Dec 17 j 22:31 0°**≈** -3054 Dec 14 j 03:30 16°9547'57 -3048 Jan 31 j 00:13 0°) retrograde -3053 Jan 21 j 12:09 8°501'38 4°54'14 -3048 Mar 01 j 00:39 19°**)** 55'45 opposition asc. node $0^{\circ}\Upsilon$ greatest brilliancy -3053 Jan 22 j 06:10 7°5944'08 -1.5m -3048 Mar 16 j 09:58 28°Y24'35 min. Earth dist. -3053 Jan 26 i 06:50 6°510'18 0.63260 AU evening set -3048 Apr 29 j 11:14 -3053 Feb 14 i 11:17 30°RⅡ -3048 May 01 j 22:54 0°8 28°**Ⅱ**02'48 direct -3053 Mar 03 j 15:43 max. Earth dist. -3048 Jun 14 i 07:29 27°838'41 2.67197 AU -3053 Mar 21 i 19:46 0ಂತಾ -3053 May 30 i 09:39 $0^{\circ}\Omega$ -3048 Jun 16 i 01:03 28°**8**44'54 0°53'11 conjunction -3053 Jul 16 j 11:22 0°m -3048 Jun 15 i 23:48 28°842'53 0°53'14 minimum elong desc. node -3053 Jul 19 j 14:45 2°m09'39 -3048 Jun 18 j 00:11 $0^{\circ}\Pi$ -3048 Jul 31 j 07:55 27°**II**43'50 -3053 Aug 27 j 07:12 0∘∙თ morning rise 0°M -3053 Oct 05 j 15:48 -3048 Aug 03 j 20:27 000 -3048 Sep 18 j 23:38 -3053 Nov 13 j 01:41 0°×7 $0^{\circ}\Omega$ -3053 Dec 21 j 16:22 0°정 -3048 Nov 03 j 06:18 0° m -3052 Jan 24 j 00:34 25°る15'16 -3048 Dec 17 j 21:25 0∘**⊽** evening set 0°≈ -3047 Jan 31 j 09:52 0°M -3052 Jan 30 j 09:55 -3052 Mar 11 j 21:49 0°**)**€ -3047 Mar 10 j 15:05 25°M07'15 desc. node 0°**∡**7 -3047 Mar 18 j 08:00 conjunction -3052 Mar 23 j 08:41 8° **★**01'53 -0°36'40 -3047 May 12 j 19:59 0°궁 minimum elong -3052 Mar 23 j 10:34 8° **★**05'09 0°36'42 retrograde -3047 Jun 17 j 14:59 7°**る**55'54 max. Earth dist. -3052 Apr 24 j 02:34 29°**¥**45'36 2.56078 AU min. Earth dist. -3047 Jul 14 j 09:55 3°**る**27'37 0.39690 AU -3052 Apr 24 j 11:07 $0^{\circ}\Upsilon$ greatest brilliancy -3047 Jul 19 j 01:40 2°る05'34 -2.8m -3052 May 16 j 18:53 14°Y51'09 -3047 Jul 20 j 08:52 1°る42'30 -6°38'27 morning rise opposition -3052 May 27 j 06:13 21°**Y**42'46 -3047 Jul 26 j 08:25 30°R*x*7 asc. node

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 36 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronomi	cal year style is used: Th	e year -3400 i	n astronomical cou	nting style is the year	3401 BCE in historical co	ounting style.	
direct	-3047 Aug 19 j 14:52	26° ₹ ¹20'46		conjunction	-3042 Oct 20 j 16:22	4° ≏ 02'58	0°07'31
	-3047 Sep 13 j 02:57	8°0		minimum elong	-3042 Oct 20 j 16:51	4° £ 03'54	0°07'30
	-3047 Nov 16 j 22:31	0° ≈		behind sun begin	-3042 Oct 19 j 19:01	3° £ 22'33	
	-3046 Jan 06 j 05:51	0°) €		behind sun end	-3042 Oct 21 j 14:41	4° £ 45'18	
asc. node	-3046 Jan 17 j 00:08	6°) 37′13		desc. node	-3042 Oct 31 j 11:19	12° ≏ 16′08	
	-3046 Feb 23 j 17:47	0° Y			-3042 Nov 23 j 10:47	0°M	
	-3046 Apr 12 j 22:13	0°8		morning rise	-3042 Dec 20 j 19:34	21°M22'46	
	-3046 May 30 j 17:09	0° I I		Ü	-3042 Dec 31 j 19:27	0° ∡ ¹	
evening set	-3046 Jun 07 j 02:13	4° Ⅱ 40'33			-3041 Feb 08 j 06:22	0°₹	
max. Earth dist.	-3046 Jul 08 i 04:54	24° ∏ 35′26	2.64667 AU		-3041 Mar 19 j 16:47	0° ≈	
max. Larm dist.	-3046 Jul 16 j 13:19	0°95	2.04007710		-3041 Apr 30 j 00:42	0° ℋ	
	-3040 Jul 10 j 13.17	0 3			-3041 Jun 13 j 08:11	0° Υ	
conjunction	-3046 Jul 23 j 11:17	4° © 30'09	1°10'34		-3041 Aug 02 j 00:01	0°8	
-				1			
minimum elong	-3046 Jul 23 j 11:02	4° © 29'45	1°10'40	asc. node	-3041 Sep 08 j 23:24	18° 8 36'48	
	-3046 Aug 30 j 22:55	0°N		retrograde	-3041 Oct 25 j 22:25	29° 8 44'38	2000125
morning rise	-3046 Sep 07 j 02:36	4° Ω 49'45		opposition	-3041 Dec 04 j 21:43	19° 8 59'24	3°00'25
	-3046 Oct 13 j 17:03	0° m		min. Earth dist.	-3041 Dec 04 j 08:22	20° 8 12'49	0.67056 AU
	-3046 Nov 24 j 22:25	0∘ ⊽		greatest brilliancy	-3041 Dec 04 j 18:52	20° 8 02'16	-1.3m
	-3045 Jan 04 j 22:52	0° M		direct	-3040 Jan 14 j 05:12	10° 8 15'49	
desc. node	-3045 Jan 26 j 15:12	16° M $05'00$			-3040 Mar 22 j 05:22	Π $^{\circ}0$	
	-3045 Feb 14 j 08:05	0° ∡ ¹			-3040 May 16 j 11:25	0 \circ \odot	
	-3045 Mar 27 j 01:06	0°る			-3040 Jul 02 j 22:00	$0^{\circ}\Omega$	
	-3045 May 09 j 01:20	0° ≈			-3040 Aug 15 j 06:56	0° m	
	-3045 Jun 30 j 08:26	0°) €		desc. node	-3040 Sep 17 j 10:30	24° m) 21'22	
retrograde	-3045 Aug 12 j 06:59	10°) 56'48			-3040 Sep 24 j 22:03	0∘ <u>⊽</u>	
min. Earth dist.	-3045 Sep 11 j 17:24	4°) €35'08	0.51620 AU	evening set	-3040 Oct 21 j 11:58	20° £ 24'14	
greatest brilliancy	-3045 Sep 18 j 09:14	2°) €05'29		evening set	-3040 Nov 02 j 19:20	0°M	
opposition	-3045 Sep 19 j 05:40	1°) (46'16			-3040 Nov 02 j 17:20 -3040 Dec 10 j 22:06	0° ⊼ ¹	
opposition			-3 20 33		-3040 Dec 10 J 22.00	0 🗴	
1.	-3045 Sep 24 j 01:26	30°R≈			2040 D 24:20 50	100 7 50110	0050116
direct	-3045 Oct 23 j 19:51	24°≈13'29		conjunction	-3040 Dec 24 j 20:59	10° ∡ 759'19	
	-3045 Nov 25 j 03:52	0°) (minimum elong	-3040 Dec 24 j 18:11	10° ∡ 53'49	0°58'20
asc. node	-3045 Dec 04 j 23:27	3° ∺ 27'36			-3039 Jan 18 j 04:51	0° ට	
	-3044 Jan 29 j 10:50	0 ° $\mathbf{\Upsilon}$		max. Earth dist.	-3039 Feb 01 j 19:39	11° ♂ 16'47	2.38681 AU
	-3044 Mar 22 j 02:48	8° 0			-3039 Feb 26 j 12:26	0° ≈	
	-3044 May 10 j 17:18	Π $\circ 0$		morning rise	-3039 Mar 03 j 02:50	3° ≈ 25'58	
	-3044 Jun 27 j 04:11	0 \circ \odot			-3039 Apr 08 j 14:42	0° ∀	
evening set	-3044 Jul 14 j 19:34	11° © 30'55			-3039 May 22 j 01:23	0° Y	
max. Earth dist.	-3044 Aug 03 j 16:32	24°\$345'10	2.56978 AU		-3039 Jul 07 j 11:04	8° 0	
	-3044 Aug 11 j 10:43	$0^{\circ}\Omega$		asc. node	-3039 Jul 26 j 22:37	11° 8 53'47	
	e y				-3039 Aug 27 j 11:00	0° I I	
conjunction	-3044 Aug 31 j 21:19	14° Ω 02'55	0°58'10		-3039 Nov 04 j 13:17	0ಂಣ	
minimum elong	-3044 Aug 31 j 22:45	14° Ω 05'25		retrograde	-3039 Nov 29 j 06:59	3° 5 22'33	
minimum ciong	-3044 Sep 23 j 12:55	0°m)	0 30 13	retrograde	-3039 Dec 22 j 03:11	30°RⅡ	
morning rise	-3044 Oct 20 j 23:13	19° m 50'53		opposition	-3038 Jan 07 j 07:49	24° Ⅱ 15'05	4°36'15
morning rise					-		
	-3044 Nov 03 j 17:08	0∘ ⊽		greatest brilliancy	-3038 Jan 07 j 18:36	24° I I04'27	-1.4m
desc. node	-3044 Dec 13 j 13:51	0°M05'35		min. Earth dist.	-3038 Jan 10 j 14:30	22° I 57'34	0.65611 AU
	-3044 Dec 13 j 10:55	0°M		direct	-3038 Feb 17 j 13:02	14° Ⅱ 13'46	
	-3043 Jan 21 j 10:16	0° ∡			-3038 Apr 16 j 14:44	0ංම	
	-3043 Mar 01 j 10:41	0°ප			-3038 Jun 10 j 02:50	0 $^{\circ}\Omega$	
	-3043 Apr 10 j 12:56	0° ≈			-3038 Jul 25 j 08:35	0° m	
	-3043 May 23 j 04:42	0°) €		desc. node	-3038 Aug 05 j 09:19	7° ₯ 48'38	
	-3043 Jul 10 j 18:19	0° Y			-3038 Sep 04 j 14:23	0。 ত	
retrograde	-3043 Sep 20 j 18:02	24° Y 20′51			-3038 Oct 13 j 16:40	0° M	
asc. node	-3043 Oct 21 j 23:02	17° Ƴ 47'34			-3038 Nov 20 j 22:12	0° ∡ ¹	
min. Earth dist.	-3043 Oct 26 j 06:28	16° Y 06′38	0.62139 AU	evening set	-3038 Dec 29 j 11:59	0° る 06'39	
opposition	-3043 Oct 30 j 13:18	14° Ƴ 23'37	0°20'55	Ü	-3038 Dec 29 j 08:32	0° ਰ	
greatest brilliancy	-3043 Oct 30 j 11:49	14° Υ 25'06	-1.6m		-3037 Feb 06 j 21:09	0° ≈	
direct	-3043 Dec 07 j 15:22	5° Y 26′05					
direct	-3042 Feb 23 j 16:27	0°8		conjunction	-3037 Mar 02 j 13:35	17° ≈ 23'13	-0°54'17
		0°II		-	-		
	-3042 Apr 19 j 17:57			minimum elong	-3037 Mar 02 j 15:56	17°≈27'27	0 34 20
	-3042 Jun 07 j 23:13	0°©		no at 11	-3037 Mar 20 j 04:09	0° ∀	0.51500 : **
	-3042 Jul 23 j 17:03	0°N		max. Earth dist.	-3037 Apr 11 j 14:38	15°) √41'43	2.51508 AU
evening set	-3042 Aug 27 j 13:35	24° Ω 13'18		morning rise	-3037 Apr 29 j 20:29	28°) €09'22	
	-3042 Sep 04 j 15:24	0° m			-3037 May 02 j 14:03	0° Υ	
max. Earth dist.	-3042 Sep 12 j 09:51	5°M 36'54	2.45187 AU	asc. node	-3037 Jun 13 j 21:02	27° Y 51'42	
	-3042 Oct 15 j 07:51	0∘ ⊽			-3037 Jun 17 j 04:48	9° 8	
					-3037 Aug 04 j 01:52	Π °0	
					=		

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -3037 Sep 24 j 04:52 0ಂಣ -3032 Aug 10 j 02:01 0°×7 -3037 Nov 24 j 14:21 $0^{\circ}\Omega$ -3032 Oct 12 j 22:15 0°궁 -3036 Jan 09 j 01:29 10°**Ω**02'21 -3032 Nov 30 j 05:49 0°≈ retrograde -3031 Jan 15 j 21:46 0°\ -3036 Feb 14 j 22:50 1°Ω58'17 4°50'18 opposition -3031 Feb 02 j 15:17 -3036 Feb 16 j 02:53 11°\ 23'02 greatest brilliancy 1°**Ω**31'59 -1.7m asc. node $0^{\circ}\Upsilon$ -3036 Feb 20 j 04:51 30°R95 -3031 Mar 03 j 19:07 29°**5**22'58 min. Earth dist. -3036 Feb 21 j 20:49 0.57766 AU -3031 Apr 20 j 04:09 0°8 20°856'03 direct -3036 Mar 26 j 07:14 22°520'44 evening set -3031 May 23 j 07:08 -3036 May 02 j 04:51 0° Ω -3031 Jun 06 j 14:12 Π $^{\circ}$ 0 desc. node -3036 Jun 22 j 07:25 26°**Ω**10′12 max. Earth dist. -3031 Jun 28 j 15:44 14°**Ц**04'24 2.66288 AU -3036 Jun 28 j 11:01 0° m -3031 Jul 08 j 20:11 1°06'52 -3036 Aug 11 j 12:41 0∘**⊽** conjunction 20°**Ⅲ**36'39 -3031 Jul 08 j 19:23 -3036 Sep 20 j 19:30 0° M minimum elong 20°**Ⅲ**35′22 1°06'57 -3036 Oct 29 j 18:47 0°**√** -3031 Jul 23 j 09:00 0ಂತಾ -3036 Dec 07 j 20:25 0°ರ morning rise -3031 Aug 22 j 23:00 20°901'05 -3035 Jan 17 j 00:04 0°**≈** -3031 Sep 06 j 23:39 $0^{\circ}\Omega$ evening set -3035 Feb 26 j 20:15 29°≈16'25 -3031 Oct 21 j 04:51 0° m -3035 Feb 27 j 21:09 0°**)**€ -3031 Dec 03 j 03:01 0∘**ত** -3035 Apr 12 j 17:14 $0^{\circ}\Upsilon$ -3030 Jan 14 j 01:16 0°M desc. node -3030 Feb 12 j 07:30 21°ML08'35 conjunction -3035 Apr 22 j 00:39 6°Y12'30 -0°05'09 -3030 Feb 24 j 14:17 0°×7 minimum elong -3035 Apr 22 j 00:54 6°**Y**12'53 0°05'08 -3030 Apr 08 i 01:55 0°정 behind sun begin -3035 Apr 21 i 04:17 5°Y38'40 -3030 May 25 j 15:52 0°≈ behind sun end -3035 Apr 22 j 21:30 6°**Y**47′05 retrograde -3030 Jul 24 i 05:52 19°≈39'58 -3035 Apr 30 j 19:49 12°\cappa01'50 min. Earth dist. -3030 Aug 21 j 11:56 14°≈12'14 0.46576 AU asc. node max. Earth dist. -3035 May 12 j 00:55 19°**Y**23'41 2.61696 AU -3030 Aug 28 j 06:56 greatest brilliancy 11°≈50'08 -2.3m -3035 May 28 j 08:26 -3030 Aug 29 j 14:38 0°8 11° \$22'17 -5° 05'13 opposition -3035 Jun 11 j 00:53 8°848'55 -3030 Oct 01 j 11:27 direct 4°≈38'16 morning rise -3035 Jul 14 j 08:13 $0^{\circ}II$ -3030 Dec 17 j 01:57 0°\ -3035 Aug 31 j 09:03 0000 -3030 Dec 21 j 14:45 2°#21'28 asc. node $0^{\circ}\Omega$ -3035 Oct 19 j 20:04 -3029 Feb 08 j 23:40 $0^{\circ}\Upsilon$ 0° 8 -3035 Dec 12 j 05:26 0° mb -3029 Mar 31 j 06:21 -3029 May 18 j 23:20 -3034 Mar 03 j 20:12 27° m 03'59 $0^{\circ}\Pi$ retrograde 20° Mp 46'12 $2^{\circ}04'14$ -3034 Apr 06 j 01:17 -3029 Jun 30 j 10:44 26°**I**58'40 opposition evening set -3034 Apr 06 j 19:01 20°My31'55 -3029 Jul 05 j 02:46 greatest brilliancy -2.4m 0.00 -3034 Apr 14 j 08:10 -3029 Jul 24 j 07:03 12°532'49 2.60573 AU min. Earth dist. 18° Mp 06'45 0.45139 AU max. Earth dist. desc. node -3034 May 10 j 07:06 13° Mp 09'56 direct -3034 May 12 j 06:42 13° Mp 08'18 conjunction -3029 Aug 16 j 10:45 28°900'26 1°07'09 -3034 Jul 06 j 06:37 0∘**⊽** -3029 Aug 16 j 11:34 28°**©**01'49 1°07'14 minimum elong -3034 Aug 23 j 16:03 0°M -3029 Aug 19 j 09:27 $0^{\circ}\Omega$ -3034 Oct 04 j 21:31 0°**√** -3029 Oct 01 j 16:35 0° m -3034 Nov 15 j 01:05 0°る -3029 Oct 03 j 03:43 1° m/02'15 morning rise -3034 Dec 26 j 19:08 -3029 Nov 12 j 04:47 0∘**ত** 0°≈ -3033 Feb 07 j 22:52 0°**)**€ -3029 Dec 22 j 07:59 0°M 26°**₭**01'58 desc. node -3029 Dec 31 j 07:12 6°M48'05 asc. node -3033 Mar 18 j 17:27 $0^{\circ}\Upsilon$ -3033 Mar 24 j 17:43 -3028 Jan 30 j 16:56 0°×7 13°Y34'18 -3033 Apr 14 j 11:36 -3028 Mar 10 j 03:33 0°정 evening set -3033 May 09 j 21:38 0°8 -3028 Apr 19 j 20:17 0°**≈** -3028 Jun 02 j 22:14 0°) -3033 Jun 02 j 06:24 14°**8**58'16 0°40'11 -3028 Jul 28 i 08:21 $0^{\circ}\Upsilon$ conjunction -3033 Jun 02 i 05:10 14°**8**56'17 0°40'14 -3028 Sep 06 i 01:02 9°Y05'22 minimum elong retrograde -3033 Jun 06 j 05:58 17°**8**30'51 2.66709 AU min. Earth dist. -3028 Oct 09 j 17:27 1°Υ30'11 0.58603 AU max. Earth dist. -3033 Jun 25 j 19:44 $0^{\circ}\Pi$ -3028 Oct 13 j 12:50 30°₽**₩** 14°**Ⅱ**18'06 morning rise -3033 Jul 18 j 06:07 opposition -3028 Oct 15 j 09:36 29°\(\)\(\)\(\)15'38\(\)\(\)-0°59'19 -3033 Aug 11 j 19:53 000 -3028 Oct 15 j 05:03 29°**∺**20′09 -1.8m greatest brilliancy -3033 Sep 27 j 12:05 $0^{\circ}\Omega$ -3028 Nov 07 j 14:11 22°\ 00'46 asc. node -3033 Nov 12 j 20:50 0° m direct -3028 Nov 21 j 06:11 20°\ 45'32 $0^{\circ}\Upsilon$ -3033 Dec 29 j 11:10 0∘**⊽** -3027 Jan 03 j 05:00 0°M -3027 Mar 06 j 21:28 0°8 -3032 Feb 15 j 20:08 22° ML 07'40-3027 Apr 27 j 23:43 $0^{\circ}\Pi$ desc. node -3032 Mar 27 j 08:12 -3027 Jun 15 j 08:00 0ಂತಾ -3032 Apr 14 j 17:00 0° **₹** retrograde -3032 May 19 j 15:39 7°**х** 05′39 -3027 Jul 30 j 20:03 0° Ω min. Earth dist. -3032 Jun 17 j 18:57 2°**≯**19'02 0.37663 AU evening set -3027 Aug 09 j 12:14 6°**Ω**36'45 opposition -3032 Jun 19 j 05:38 1°**х** 55′59 -5°30′57 max. Earth dist. -3027 Aug 25 j 02:24 17°**Ω**26'28 2.50156 AU greatest brilliancy -3032 Jun 18 j 21:08 2°**х** 01'37 -2.9m -3027 Sep 11 j 19:10 -3032 Jun 26 j 16:49 -3032 Jul 19 j 01:36 26°M57'42 -3027 Sep 29 j 13:36 12° m 52'53 0°31'55 direct conjunction

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 38 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.							
minimum elong	-3027 Sep 29 j 15:10	12° m 55'45	0°31'56	opposition	-3021 Jan 30 j 01:10	16° 5 42'06	4°57'48
	-3027 Oct 22 j 15:29	0∘ ⊽		greatest brilliancy	-3021 Jan 30 j 23:05	16° 5 21'01	-1.5m
desc. node	-3027 Nov 17 j 06:04	19° ≏ 26'14		min. Earth dist.	-3021 Feb 04 j 14:28	14°934'00	0.61568 AU
morning rise	-3027 Nov 24 j 12:48	25° ₽ 01'58		direct	-3021 Mar 12 j 00:17	6° 5 47'59	
	-3027 Nov 30 j 23:15	0° M			-3021 May 22 j 07:12	$0^{\circ}\Omega$	
	-3026 Jan 08 j 12:16	0° ∡		desc. node	-3021 Jul 10 j 00:46	29° Ω 44'21	
	-3026 Feb 16 j 02:43	8°0			-3021 Jul 10 j 10:06	0° m)	
	-3026 Mar 27 j 16:30	0° ≈			-3021 Aug 21 j 20:43	0∘ <u>⊽</u>	
	-3026 May 08 j 06:53	0° ∀			-3021 Sep 30 j 11:40	0° M	
	-3026 Jun 22 j 10:41	0° Y			-3021 Nov 08 j 01:05	0° ∡ ¹	
	-3026 Aug 14 j 19:29	0° ႘			-3021 Dec 16 j 18:30	ರ°0	
asc. node	-3026 Sep 25 j 13:22	14° 8 55'21			-3020 Jan 25 j 14:21	0° ≈	
retrograde	-3026 Oct 12 j 12:58	16° 8 40'20		evening set	-3020 Feb 06 j 07:37	8° ≈ 35'58	
min. Earth dist.	-3026 Nov 19 j 13:02	7° 8 35'49	0.65872 AU	C	-3020 Mar 07 j 04:13	0° ∀	
opposition	-3026 Nov 21 j 14:02	6° 8 46'28					
greatest brilliancy	-3026 Nov 21 j 09:16	6° 8 51'15		conjunction	-3020 Apr 03 j 16:08	19°) 04'43	-0°25'16
8	-3026 Dec 10 j 19:50	30°RY		minimum elong	-3020 Apr 03 j 17:25	19° ¥ 06'56	
direct	-3026 Dec 31 j 04:10	27° Y °17'27		8	-3020 Apr 19 j 18:50	0° Υ	
	-3025 Jan 22 j 07:33	0°8		max. Earth dist.	-3020 May 01 j 02:09		2.58295 AU
	-3025 Apr 04 j 02:26	0°П		asc. node	-3020 May 17 j 11:22	18° Y 22'38	2.302)3 110
	-3025 May 25 j 23:36	0°50		morning rise	-3020 May 26 j 07:38	24° Y 09'19	
	-3025 Jul 11 j 13:33	0°N		morning rise	-3020 Jun 04 j 07:57	0°8	
	-3025 Aug 23 j 16:51	0° mp			-3020 Jul 21 j 12:37	0°II	
evening set	-3025 Sep 28 j 17:04	26° mp 30'57			-3020 Sep 08 j 08:37	0°©	
evening set	-3025 Oct 03 j 07:52	ე∘ ი			-3020 Oct 30 j 03:23	0° U	
desc. node	-3025 Oct 05 j 07:32	1° ≏ 22'58			-3019 Jan 02 j 05:59	0° m)	
max. Earth dist.	-3025 Nov 04 j 06:41	24° £ 32'22	2.38302 AU	retrograde	-3019 Feb 07 j 23:53	6° Mp 57'42	
max. Latur dist.	-3025 Nov 11 j 06:49	0°M	2.36302 AC	opposition	-3019 Mar 14 j 20:34	$29^{\circ}\Omega51'56$	3°42'55
	-3023 NOV 11 J 00.49	O IIG		opposition	-3019 Mar 14 j 11:19	30°RΩ	3 42 33
conjunction	-3025 Nov 28 j 03:17	13°M12'29	0°26'10	greatest brilliancy	-3019 Mar 16 j 01:32	29° Ω 26'36	2.1m
minimum elong	-3025 Nov 28 j 00:34	13°M07'09		min. Earth dist.	-3019 Mar 23 j 06:09	26° Ω 56'42	0.50354 AU
minimum ciong	-3025 Nov 28 j 00.34 -3025 Dec 19 j 11:09	0° √	0 30 21	direct	-3019 Mar 22 j 05:46	20° Ω 10'36	0.30334 AU
	-3024 Jan 26 j 18:35	0°る		desc. node		21° Ω 24'34	
morning rise	-3024 Feb 04 j 01:38	6°る24'58		desc. node	-3019 May 26 j 23:31 -3019 May 30 j 23:45	0° Mp	
morning rise	-3024 Feb 04 j 01:58	0°≈				0∘ ت المال	
	·	0° ∺			-3019 Jul 24 j 00:40	0° ™	
	-3024 Apr 16 j 04:04	0° Υ			-3019 Sep 04 j 22:08 -3019 Oct 15 j 04:50	0° ⊼ ¹	
	-3024 May 29 j 18:30	0° 8			-3019 Oct 13 j 04:30	0°る	
	-3024 Jul 15 j 21:16	16° 8 08'09			3		
asc. node	-3024 Aug 12 j 13:33				-3018 Jan 04 j 02:29	0° ≈ 0°) €	
	-3024 Sep 07 j 22:48	0°П 20°П 2457			-3018 Feb 15 j 14:38		
retrograde	-3024 Nov 15 j 06:07	20° Ⅱ 24'57	4007150	evening set	-3018 Mar 28 j 12:41	27°) 44′23 0° °	
opposition	-3024 Dec 24 j 18:39	11° П 00'00 10° П 55'43	4°06'58	1-	-3018 Mar 31 j 22:15 -3018 Apr 04 j 09:07	0° γ 2° Υ 17'26	
greatest brilliancy min. Earth dist.	-3024 Dec 24 j 22:57	10 Д 3343	-1.3m 0.66945 AU	asc. node		0°8	
	-3024 Dec 26 j 13:01 -3023 Feb 03 j 19:27	10 П 1730 1° П 01'59	0.00943 AU		-3018 May 16 j 19:26	0.0	
direct	3	0°©			2010 M 17 : 22-21	00 45117	0924122
	-3023 Apr 29 j 23:58	0°€ 0-3		conjunction	-3018 May 17 j 23:31 -3018 May 17 j 22:36	0° 8 45'17	0°24'22
	-3023 Jun 19 j 07:49			minimum elong		0° 8 43'48	
JJ.	-3023 Aug 02 j 13:37	0° Mp		max. Earth dist.	-3018 May 27 j 20:24	7° О 06'23	2.65405 AU
desc. node	-3023 Aug 22 j 01:46	14° Mp 04'11			-3018 Jul 02 j 16:29	0° П 54'36	
	-3023 Sep 12 j 11:25	0∘ m		morning rise	-3018 Jul 04 j 02:49		
	-3023 Oct 21 j 10:30	0°M 0°. ₹			-3018 Aug 18 j 23:18	0° ⊙	
. ,	-3023 Nov 28 j 13:54	0° ∡7 20. 7 152112			-3018 Oct 05 j 09:49	0° N	
evening set	-3023 Dec 02 j 05:53	2° ≯ 53'13			-3018 Nov 22 j 09:44	0° m)	
	-3022 Jan 05 j 21:52	0°ಕ			-3017 Jan 11 j 14:50	0∘ 亚	
. ,.	2022 F. L. 05 : 22 10	220742124	1005121	1 1	-3017 Mar 14 j 05:14	0°M,	
conjunction	-3022 Feb 05 j 22:10	23° る 42'34		desc. node	-3017 Apr 13 j 23:48	6°M44'20	
minimum elong	-3022 Feb 05 j 23:26	23°₹44'57	1-05/36	retrograde	-3017 Apr 18 j 12:59	6°M52'12	2020150
	-3022 Feb 14 j 07:26	0°≈	2 46410 433	opposition	-3017 May 19 j 05:47	1°M43'51	
max. Earth dist.	-3022 Mar 25 j 04:16		2.46418 AU	greatest brilliancy	-3017 May 19 j 12:53	1°M38'57	
	-3022 Mar 27 j 11:12	0°) (0° ¥ 17!24		min. Earth dist.	-3017 May 23 j 02:41		0.38729 AU
morning rise	-3022 Apr 09 j 15:31	9°) 17'34		direct	-3017 May 25 j 14:01	30° ₹ Ω	
	-3022 May 09 j 19:28	0°Υ 0°¥		direct	-3017 Jun 19 j 22:48	26° ♀ 07'31	
aga nada	-3022 Jun 24 j 13:45	0°8			-3017 Jul 14 j 12:02	0°M√ 0°• 7	
asc. node	-3022 Jun 30 j 13:34	3° ႘ 48′21 0° Ⅱ			-3017 Sep 12 j 16:33	0°⋜	
	-3022 Aug 12 j 04:41 -3022 Oct 05 j 02:42	0₀ऌ 0∘щ			-3017 Oct 28 j 14:25 -3017 Dec 11 j 21:38	0° ≈	
retrograde	-3022 Oct 05 j 02:42 -3022 Dec 23 j 03:42	25°5015'00			-3017 Dec 11 j 21:38 -3016 Jan 25 j 15:47	0° ∺	
renograde	-3022 Dec 23 J 03.42	1300 دانت دے			-3010 Jan 23 J 13.4/	υ Λ	

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. asc. node -3016 Feb 20 i 07:09 16°**)** € 52'34 -3011 Feb 24 i 04:26 0°정 -3016 Mar 11 j 11:37 $0^{\circ}\Upsilon$ -3011 Apr 05 j 00:45 0°≈ -3016 Apr 27 j 06:19 0°8 -3011 May 17 j 03:36 0°**₩** -3011 Jul 02 j 22:15 7°800'31 $0^{\circ}\Upsilon$ -3016 May 08 j 06:31 evening set -3016 Jun 13 j 10:00 -3011 Sep 06 j 14:40 0°8 $0^{\circ}II$ -3011 Sep 28 j 19:57 max. Earth dist. -3016 Jun 19 j 14:57 3°**Ⅱ**57'16 2.67112 AU retrograde 2°**8**59'34 -3011 Oct 12 j 05:25 asc. node 1°**8**44'23 -3011 Oct 19 j 14:13 -3016 Jun 24 j 08:35 conjunction 6°**Ⅲ**58'29 0°59'13 30°**₹**Υ $24^{\circ} \Upsilon 26' 26$ minimum elong -3016 Jun 24 j 07:26 6°**I**I56'39 0°59'18 min. Earth dist. -3011 Nov 04 j 06:36 0.63713 AU $23^{\circ} \mathbf{Y} 01'52$ -3016 Jul 30 j 05:33 0ಂತಾ opposition -3011 Nov 07 j 18:43 1°02'38 23° Y05'39morning rise -3016 Aug 08 j 10:39 5°957'55 greatest brilliancy -3011 Nov 07 j 14:57 -1.5m -3016 Sep 14 j 03:51 -3011 Dec 16 j 10:51 13°Y51'56 $0^{\circ}\Omega$ direct -3016 Oct 29 j 00:28 -3010 Feb 14 j 16:54 0° M 0°8 -3016 Dec 11 j 22:21 0∘**⊽** -3010 Apr 13 j 21:23 $0^{\circ}\Pi$ -3015 Jan 24 j 06:23 0°M -3010 Jun 02 j 22:01 0ಂತಾ desc. node -3015 Mar 01 j 01:39 24° ML40'20-3010 Jul 18 j 22:52 $0^{\circ}\Omega$ -3015 Mar 08 j 22:16 0°**√** -3010 Aug 30 j 23:24 0° m -3015 Apr 24 j 21:33 0°る evening set -3010 Sep 07 j 13:36 5°m/29'05 retrograde -3015 Jul 02 j 00:53 24°る29'02 max. Earth dist. -3010 Sep 25 j 15:17 18° **m** 45'22 2.42476 AU min. Earth dist. -3015 Jul 28 j 18:50 19°**る**48'25 0.41794 AU -3010 Oct 10 j 15:38 0∘**ত** greatest brilliancy -3015 Aug 03 j 16:32 17°**る**57'18 -2.6m desc. node -3010 Oct 21 j 21:13 8°**£**31'36 opposition -3015 Aug 05 i 04:49 17°る28'40 -6°23'09 direct -3015 Sep 05 i 04:45 11°る39'44 conjunction -3010 Nov 02 j 17:48 17°**♀**37'22 -0°08'18 -3015 Nov 05 i 17:05 0°≈ minimum elong -3010 Nov 02 i 17:12 17°**≏**36'12 0°08'20 -3015 Dec 30 j 06:43 0°**)**€ behind sun begin -3010 Nov 01 j 19:02 16°**£**53'33 -3014 Jan 07 j 05:30 4° # 41'54 -3010 Nov 03 j 15:21 18°**♀**18'54 behind sun end asc node -3014 Feb 18 j 03:31 $0^{\circ}\Upsilon$ -3010 Nov 18 j 17:12 o°m. -3014 Apr 07 j 22:40 0°8 -3010 Dec 26 j 23:56 0°×7 -3014 May 26 j 00:29 -3009 Jan 05 j 19:04 $0^{\circ}\Pi$ 7°**х** 41′36 morning rise -3014 Jun 15 j 13:29 13°**Ⅲ**01'07 -3009 Feb 03 j 08:56 0°궁 evening set -3009 Mar 14 j 17:19 -3014 Jul 11 j 23:08 0°22 0.00 -3009 Apr 24 j 21:33 0°) max. Earth dist. -3014 Jul 13 j 22:12 1°516'28 2.63432 AU $0^{\circ}\Upsilon$ -3009 Jun 07 j 20:06 -3014 Aug 01 j 00:29 13°507'24 1°10'43 -3009 Jul 26 j 05:01 0°8 conjunction -3014 Aug 01 j 00:37 -3009 Aug 30 j 05:25 18°**8**44'46 minimum elong 13°907'38 1°10'48 asc. node -3014 Aug 26 j 07:45 -3009 Sep 25 j 15:52 0 $^{\circ}\Omega$ $0^{\circ}\Pi$ -3014 Sep 16 j 04:27 14°**Ω**12'24 -3009 Nov 02 j 16:14 morning rise retrograde 7°**Ⅲ**35'38 -3014 Oct 08 j 22:03 0° m -3009 Dec 07 j 08:17 30°R₩ -3014 Nov 19 j 21:06 0∘**⊽** opposition -3009 Dec 12 j 12:31 27°**8**56'38 3°27'39 -3014 Dec 30 j 13:25 0°M greatest brilliancy -3009 Dec 12 j 11:41 27°**8**57'28 desc. node -3013 Jan 17 j 00:42 13°M04'54 min. Earth dist. -3009 Dec 12 j 18:41 27°**8**50'27 0.67286 AU -3013 Feb 08 j 12:26 0°×7 -3008 Jan 22 j 03:15 18°**8**06'54 direct -3013 Mar 20 j 15:30 0°る -3008 Mar 12 j 06:23 $0^{\circ}\Pi$ -3013 May 01 j 11:10 -3008 May 10 j 10:16 0ಂತಾ 0°≈ -3013 Jun 17 j 19:59 0°**)**€ -3008 Jun 27 j 17:08 $0^{\circ}\Omega$ retrograde -3013 Aug 22 j 02:45 22°**)** (04'58 -3008 Aug 10 j 09:11 0° m min. Earth dist. -3013 Sep 22 j 18:00 15°**)** 15′28 0.54247 AU desc. node -3008 Sep 07 i 19:32 20° m 45'30 -3013 Sep 29 i 16:21 12°\(\)35'36 -2°30'29 -3008 Sep 20 i 02:57 0∘**⊽** opposition greatest brilliancy -3013 Sep 29 i 02:22 12°**)** 49′04 -1.9m -3008 Oct 29 i 01:07 0°M -3013 Nov 04 i 02:25 4°¥40'16 -3008 Nov 05 i 00:55 5°M28'46 direct evening set -3013 Nov 25 j 04:49 7° ¥ 15'50 -3008 Dec 06 j 03:54 0°×7 asc node -3012 Jan 21 j 10:35 $0^{\circ}\Upsilon$ -3012 Mar 16 j 08:49 0°8 -3007 Jan 09 j 17:19 27°**₹**06'44 -1°05'03 conjunction -3007 Jan 09 j 15:48 27°×703'47 1°05'07 -3012 May 05 j 17:09 $0^{\circ}II$ minimum elong 0°궁 -3012 Jun 22 j 11:18 0ಂತಾ -3007 Jan 13 j 10:32 -3007 Feb 21 j 17:58 -3012 Jul 23 j 21:28 20°536'49 0°22 evening set -3012 Aug 06 j 20:00 $0^{\circ}\Omega$ max. Earth dist. -3007 Feb 27 j 11:14 4°≈16'06 2.41176 AU -3012 Aug 10 j 20:38 2°**Ω**44'25 2.54705 AU -3007 Mar 17 j 13:31 17°≈34'54 max. Earth dist. morning rise -3007 Apr 03 j 19:27 0°) -3012 Sep 10 j 19:36 24°Ω15'25 0°50'21 -3007 May 17 j 03:43 $0^{\circ}\Upsilon$ conjunction 24°Ω18'21 0°50'24 -3007 Jul 02 j 05:12 0°8 minimum elong -3012 Sep 10 j 21:15 -3012 Sep 18 j 21:23 0° m -3007 Jul 17 j 04:44 9°**8**19'03 asc. node -3012 Oct 29 j 22:52 0∘**⊽** -3007 Aug 21 j 01:25 $0^{\circ}\Pi$ morning rise -3012 Nov 01 j 15:44 2°**2**01'04 -3007 Oct 19 j 20:29 0ಂತಾ desc. node -3012 Dec 03 j 22:48 26°**£**28'39 retrograde -3007 Dec 07 j 16:46 11°9526'06 -3012 Dec 08 j 13:02 0°M -3006 Jan 15 j 08:49 2°529'42 4°48'00 opposition

-3006 Jan 15 j 23:33

2°515'17 -1.4m

greatest brilliancy

-3011 Jan 16 j 08:18

0°×7

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. min. Earth dist. -3006 Jan 19 j 11:05 0°553'35 0.64431 AU asc. node -3001 Mar 08 j 22:18 22°\ 46'38 -3006 Jan 21 j 18:36 30°RⅡ -3001 Mar 19 j 21:56 $0^{\circ}\Upsilon$ -3006 Feb 25 j 13:37 22°**Ⅲ**28'59 -3001 Apr 23 j 17:59 22°Y36'45 direct evening set -3006 Apr 04 j 07:11 -3001 May 05 j 05:55 0.00 0°8 -3006 Jun 03 j 13:21 0° Ω -3006 Jul 19 j 19:31 -3001 Jun 10 j 19:15 0° mb conjunction 23°**8**21'13 0°48'06 -3001 Jun 10 j 17:58 desc. node -3006 Jul 26 j 17:24 4° Mp 49'05 minimum elong 23°**8**19'10 0°48'11 -3001 Jun 11 j 15:25 -3006 Aug 30 j 09:51 0∘ଫ max. Earth dist. 23°**8**53'22 2.67092 AU -3006 Oct 08 j 16:07 0°M -3001 Jun 21 j 05:27 0°II -3006 Nov 15 j 23:55 0° ×7 morning rise -3001 Jul 26 j 07:55 22°II25'16 -3006 Dec 24 j 12:10 0°궁 -3001 Aug 07 j 03:29 0ಂತಾ -3001 Sep 22 j 12:16 evening set -3005 Jan 13 j 05:22 15°**る**04'36 0° Ω -3001 Nov 07 j 05:52 -3005 Feb 02 j 02:37 0°≈ 0° M -3001 Dec 22 j 15:12 0∘**⊽** conjunction -3005 Mar 15 j 06:03 29°≈51'15 -0°44'40 -3000 Feb 06 j 11:18 0°M minimum elong -3005 Mar 15 j 08:15 29°≈55'08 0°44'41 desc. node -3000 Mar 17 j 17:43 24°M59'55 -3005 Mar 15 j 11:00 0°**)**€ -3000 Mar 26 j 10:05 0°**⊼** max. Earth dist. -3005 Apr 19 j 17:35 24°**¥**28′29 2.54115 AU retrograde -3000 Jun 05 j 11:38 25°×703'27 -3005 Apr 27 j 21:28 $0^{\circ}\Upsilon$ min. Earth dist. -3000 Jul 02 j 22:07 20°**₹**34'48 0.38436 AU morning rise -3005 May 10 j 07:03 8°Y18'23 greatest brilliancy -3000 Jul 06 j 04:25 19°**х** 40′12 -2.9m asc. node -3005 Jun 04 j 03:52 24° **Y**39'13 opposition -3000 Jul 07 j 02:51 19°**∡**°24′29 -6°26'10 -3005 Jun 12 j 10:08 0°8 direct -3000 Aug 05 i 23:59 14°**∡**19'12 -3005 Jul 29 j 23:13 $\mathbb{I}^{\circ 0}$ -3000 Sep 29 j 19:10 0°궁 -3005 Sep 18 i 00:38 0000 -3000 Nov 22 j 12:00 0°≈ -3005 Nov 13 j 04:40 $0^{\circ}\Omega$ -2999 Jan 09 j 20:52 0°) -3004 Jan 19 j 12:07 19°**Ω**29'56 -2999 Jan 23 j 21:33 8° **X** 49'17 retrograde asc node -3004 Feb 24 j 17:57 -2999 Feb 26 j 13:21 $0^{\circ}\Upsilon$ 11°Ω44'16 4°34'58 opposition greatest brilliancy -3004 Feb 25 j 23:59 -2999 Apr 15 j 08:10 0°8 11°Ω16'38 -1.8m -3004 Mar 03 j 07:47 -2999 May 31 j 19:25 29°**8**16'16 min. Earth dist. 8°**Ω**57'33 0.55312 AU evening set 2°**Ω**21′28 -3004 Apr 04 j 13:29 -2999 Jun 01 j 23:01 direct $0^{\circ}\Pi$ 25°**Ω**39'40 -3004 Jun 12 j 17:16 -2999 Jul 04 j 04:09 20°**Д**33'23 2.65499 AU desc. node max. Earth dist. -3004 Jun 20 j 06:31 0° m -2999 Jul 17 j 04:56 -3004 Aug 05 j 03:31 0∘ଫ 28° II 58′07 1°09′31 conjunction -2999 Jul 17 j 04:27 -3004 Sep 15 j 01:40 $0^{\circ}M$ minimum elong 28°**I**57′20 1°09'36 -3004 Oct 24 j 08:57 -2999 Jul 18 j 19:07 0°**∡** 0.00 -3004 Dec 02 j 16:18 0°궁 -2999 Aug 31 j 12:42 28°9548'15 morning rise -3003 Jan 12 j 00:45 -2999 Sep 02 j 07:33 0°≈ 0 $^{\circ}\Omega$ -3003 Feb 23 j 01:43 0°**)**€ -2999 Oct 16 j 07:16 0° m -3003 Mar 10 j 03:46 10°**¥**26′26 -2999 Nov 27 j 20:12 0∘**⊽** evening set -3003 Apr 08 j 00:52 $0^{\circ}\Upsilon$ -2998 Jan 08 j 05:59 0°M asc. node -3003 Apr 21 j 00:58 8°Y38'42 desc. node -2998 Feb 02 j 17:30 18°M42'36 -2998 Feb 18 j 01:47 0°**∡**7 -3003 May 01 j 19:48 15°Υ44'43 0°06'15 -2998 Mar 31 j 09:21 0°정 conjunction -3003 May 01 j 19:32 15°**Ƴ**44'17 -2998 May 14 j 16:08 minimum elong 0°06'17 0°≈ -3003 May 01 j 00:02 15°**Y**12'19 -2998 Jul 15 j 19:47 behind sun begin 0°\ behind sun end -3003 May 02 j 15:01 16°Y16'13 -2998 Aug 04 i 09:38 2° ****35'34 retrograde max. Earth dist. -3003 May 17 j 23:57 26°**Y**17'45 2.63262 AU -2998 Aug 23 i 04:55 30°R≈ -3003 May 23 j 17:11 0°8 min. Earth dist. -2998 Sep 02 i 20:41 26°≈37'26 0.49375 AU -3003 Jun 19 j 15:04 17°817'03 -2998 Sep 10 j 17:16 23°≈45'18 -4°09'29 morning rise opposition -3003 Jul 09 j 15:05 $0^{\circ}II$ -2998 Sep 09 j 15:42 24°≈08'45 -2.2m greatest brilliancy -3003 Aug 26 j 07:53 0ಂತಾ -2998 Oct 14 j 13:03 16°≈33'08 direct -3003 Oct 13 j 21:18 $0^{\circ}\Omega$ -2998 Dec 05 j 18:26 0°\ -3003 Dec 03 j 15:14 -2998 Dec 11 j 20:55 2°\ 42'37 0° mb asc node $0^{\circ}\Upsilon$ -3002 Feb 01 j 14:00 0∘**⊽** -2997 Feb 02 j 09:38 retrograde -3002 Mar 19 j 04:27 10°**£**24'15 -2997 Mar 25 j 21:56 0°8 -3002 Apr 20 j 07:33 4°**£**34'28 0°40'55 -2997 May 14 j 02:52 $0^{\circ}\Pi$ opposition -3002 Apr 20 j 13:21 4°**₽**30'03 -2997 Jun 30 j 11:13 0ಂತಾ greatest brilliancy -2.6m -3002 Apr 27 j 18:16 0.42463 AU -2997 Jul 09 j 04:25 min. Earth dist. 2°**£**18'34 evening set 5°939'55 1°**£**26'50 -2997 Jul 30 j 18:31 19°554'21 2.58681 AU desc. node -3002 Apr 30 j 17:36 max. Earth dist. -2997 Aug 14 j 18:46 -3002 May 06 j 06:28 30°R, Mp 0 $^{\circ}$ Ω direct -3002 May 25 j 02:02 27° m 39'24 -3002 Jun 12 j 19:15 0∘**⊽** conjunction -2997 Aug 25 j 16:43 7°**Ω**26'26 1°02'40 -3002 Aug 14 j 05:54 0°M minimum elong -2997 Aug 25 j 17:55 7°**Ω**28'30 1°02'43 -3002 Sep 27 j 17:05 0°⊀ -2997 Sep 27 j 00:17 0° m -3002 Nov 08 j 21:10 0°궁 morning rise -2997 Oct 13 j 14:04 11° m 52'33 -3002 Dec 21 j 06:25 0°**≈** -2997 Nov 07 j 08:49 0∘**ত**

-2997 Dec 17 j 07:20

0°M

-3001 Feb 02 j 20:11

0°**)**€

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. desc. node -2997 Dec 21 i 16:30 3°M20'18 -2991 Jun 13 j 12:54 $0^{\circ}\Omega$ -2996 Jan 25 j 10:49 0°×7 -2991 Jul 28 j 09:15 0° m 10°Mp47'01 -2996 Mar 04 j 14:54 0°궁 -2991 Aug 12 j 11:53 desc. node -2996 Apr 13 j 21:37 0°≈≈ -2991 Sep 07 j 12:23 0∘Ω -2996 May 26 j 23:03 0°**)**€ -2991 Oct 16 j 13:46 0°M $0^{\circ}\Upsilon$ -2996 Jul 16 j 06:36 -2991 Nov 23 j 18:11 0°×7 18°**Y**26′00 18°**∡** 49'07 retrograde -2996 Sep 14 j 14:08 evening set -2991 Dec 17 j 17:42 min. Earth dist. -2996 Oct 19 j 07:19 10°**Y**28′50 0.60655 AU -2990 Jan 01 j 02:42 0°ಕ opposition -2996 Oct 24 j 05:44 8°**Υ**30'46 -0°11'28 -2990 Feb 09 j 12:54 0°≈ greatest brilliancy -2996 Oct 24 j 05:02 8°**Y**31′28 -1.7m asc. node -2996 Oct 28 j 20:03 6°**Y**42'42 conjunction -2990 Feb 20 j 05:42 7°≈56'14 -1°00'09 -2990 Feb 20 j 07:51 -2996 Nov 24 j 13:59 30°**₹** minimum elong 8°≈00'11 1°00'13 29°\ 44'54 direct -2996 Nov 30 j 19:19 -2990 Mar 22 j 17:00 0°**)**€ $0^{\circ} \Upsilon$ -2996 Dec 07 j 05:05 max. Earth dist. -2990 Apr 04 j 22:55 9°**升**20′23 2.49279 AU -2995 Feb 27 j 21:20 0°8 morning rise -2990 Apr 21 j 11:25 20° **)** 46'52 -2995 Apr 22 j 13:48 $0^{\circ}II$ -2990 May 05 j 00:41 $0^{\circ}\Upsilon$ -2995 Jun 10 j 10:46 0ಂತಾ -2990 Jun 19 j 15:16 0°8 -2995 Jul 26 j 03:12 $0^{\circ}\Omega$ asc. node -2990 Jun 20 j 18:16 0°**8**43'16 evening set -2995 Aug 19 j 14:30 16°**Ω**51'45 -2990 Aug 06 j 17:49 $\Pi^{\circ}0$ max. Earth dist. -2995 Sep 03 j 20:51 27°**Ω**39'48 2.47432 AU -2990 Sep 27 j 18:32 0ಂತಾ -2995 Sep 07 j 03:09 -2990 Dec 05 j 08:10 $0^{\circ}\Omega$ -2989 Jan 01 i 14:15 3°**£**59′53 retrograde -2995 Oct 11 i 05:36 24° m 59'05 0°18'36 -2989 Jan 26 i 17:02 30°R55 conjunction minimum elong -2995 Oct 11 i 06:41 25° m 01'07 0°18'36 opposition -2989 Feb 07 i 23:11 25°5642'00 4°55'32 -2995 Oct 17 j 22:12 0∘**⊽** -2989 Feb 09 j 00:38 25°9517'49 greatest brilliancy -1.6m -2995 Nov 07 j 14:07 15°**£**41'05 -2989 Feb 14 i 06:48 23°518'15 0.59583 AU desc node min. Earth dist. -2995 Nov 26 j 03:56 -2989 Mar 20 j 15:06 15°955'44 oom. direct -2995 Dec 08 j 23:19 9°**™**57'28 -2989 May 12 j 02:59 $0^{\circ}\Omega$ morning rise -2994 Jan 03 j 14:39 -2989 Jun 30 j 10:03 0°×7 desc node 27°**Ω**47'31 -2994 Feb 11 j 02:42 0°정 -2989 Jul 03 j 20:11 0° m -2989 Aug 16 j 03:38 -2994 Mar 22 j 13:42 0°≈ 0∘Ω -2989 Sep 25 j 03:29 0°**)**€ -2994 May 02 j 22:32 0°M $0^{\circ}\Upsilon$ 0°×7 -2994 Jun 16 j 11:19 -2989 Nov 02 j 22:00 -2994 Aug 06 j 04:11 0°8 -2989 Dec 11 j 19:03 0°궁 -2994 Sep 15 j 20:29 18°**8**12'08 -2988 Jan 20 j 18:04 asc. node 0°≈ 21°≈04'05 -2994 Oct 20 j 06:04 retrograde 24°**8**40'24 evening set -2988 Feb 18 j 19:43 min. Earth dist. -2994 Nov 28 j 00:57 15°**8**20'40 0.66647 AU -2988 Mar 02 j 10:26 0°**)**€ -2994 Nov 29 j 06:44 14°**8**50'41 2°39'03 opposition greatest brilliancy -2994 Nov 29 j 02:39 14°**8**54'48 conjunction -2988 Apr 14 j 08:44 29°\ 29'50 -0°13'36 -1.4m -2993 Jan 08 j 07:12 5°**8**13'15 minimum elong -2988 Apr 14 j 09:24 29°\ 30'57 0°13'35 direct -2993 Mar 27 j 18:44 $0^{\circ}II$ behind sun begin -2988 Apr 13 j 22:02 29°**)** 11'52 -2993 May 20 j 11:37 0ಂತಾ behind sun end -2988 Apr 14 j 20:46 29°**升**50′02 -2993 Jul 06 j 14:18 $0^{\circ}\Omega$ -2988 Apr 15 j 02:42 $0^{\circ}\Upsilon$ -2993 Aug 18 j 22:08 -2988 May 07 j 16:54 15°**Y**01'23 0° M asc. node -2993 Sep 25 j 12:54 -2988 May 07 j 15:17 14°Υ58'44 2.60264 AU desc. node 27° Mp 41'47 max. Earth dist. -2993 Sep 28 i 14:06 0∘**⊽** -2988 May 30 j 15:39 0°8 evening set -2993 Oct 11 i 19:57 10°**♀**05'20 morning rise -2988 Jun 04 j 11:07 3°806'31 -2993 Nov 06 j 12:40 0°M -2988 Jul 16 j 16:35 $0^{\circ}II$ -2988 Sep 03 i 00:15 0ಂತಾ -2993 Dec 13 j 15:07 29°M10'47 -0°50'04 -2988 Oct 23 i 06:57 $0^{\circ}\Omega$ conjunction -2993 Dec 13 i 11:56 29°ML04'32 0°50'07 -2988 Dec 18 i 14:16 minimum elong O° m 18° m 22'25 -2993 Dec 14 j 16:05 0°**∡**¹ -2987 Feb 20 j 23:03 retrograde 7°**х** 43'31 2.37512 AU max Earth dist -2993 Dec 24 j 11:24 opposition -2987 Mar 26 j 23:03 11°Mp42'21 2°53'09 11°**m** 22'09 -2992 Jan 21 j 22:34 0°궁 greatest brilliancy -2987 Mar 27 j 23:09 -2.3m -2992 Feb 20 j 06:02 22°る29'46 min. Earth dist. -2987 Apr 04 j 12:01 8° m 51'29 0.47461 AU morning rise -2992 Mar 01 j 05:08 0°≈ direct -2987 May 03 j 06:33 3° Mp 33'16 -2992 Apr 11 j 05:56 0°**)**€ -2987 May 17 j 09:13 4° m 52'32 desc. node $0^{\circ}\Upsilon$ -2992 May 24 j 16:25 -2987 Jul 14 j 14:04 0∘**⊽** -2992 Jul 10 j 06:25 0°8 0°M -2987 Aug 28 j 19:43 14°**8**10'27 0°**∡**7 asc. node -2992 Aug 02 j 20:09 -2987 Oct 09 j 00:44 0°궁 -2992 Aug 31 j 04:30 Π $^{\circ}0$ -2987 Nov 18 j 13:36 -2992 Nov 23 j 05:59 28°**Ⅲ**16′02 -2987 Dec 29 j 20:53 0°≈ retrograde opposition -2991 Jan 01 j 12:18 19°**Ⅱ**00'09 4°25'05 -2986 Feb 10 j 16:02 0°**)**€ greatest brilliancy -2991 Jan 01 j 20:01 18°**Ⅱ**52'30 -1.3m asc. node -2986 Mar 25 j 14:59 28° **H** 57'47 min. Earth dist. -2991 Jan 04 j 02:17 17°**Ⅲ**58'45 0.66341 AU -2986 Mar 27 j 04:35 0° Υ -2991 Feb 11 j 16:03 8°**Ⅱ**59'46 7°**Y**22'01 direct evening set -2986 Apr 07 j 08:49

-2986 May 12 j 04:27

 0° 8

-2991 Apr 22 j 00:47

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Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 42 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.								
conjunction	-2986 May 26 j 20:13	9° 8 25'06			-2981 Aug 11 j 23:15	0° Υ		
minimum elong	-2986 May 26 j 19:04	9° 8 23'15		retrograde	-2981 Aug 31 j 09:15	2° Y 27'35		
max. Earth dist.	-2986 Jun 02 j 08:44		2.66229 AU		-2981 Sep 18 j 19:48	30° ₹		
	-2986 Jun 28 j 01:35	Π °0		min. Earth dist.	-2981 Oct 03 j 04:21		0.56748 AU	
morning rise	-2986 Jul 12 j 06:41	9° Ⅱ 03'04		opposition	-2981 Oct 09 j 10:49	22°) 44'59		
	-2986 Aug 14 j 04:18	0°99		greatest brilliancy	-2981 Oct 09 j 02:36	22° ¥ 53′01	-1.8m	
	-2986 Sep 30 j 03:58	0° Q		direct	-2981 Nov 14 j 16:37	14°) € 29'33		
	-2986 Nov 16 j 04:09	0° m/		asc. node	-2981 Nov 15 j 11:31	14°) €29'48		
	-2985 Jan 03 j 01:00	ია ო 0∘ ⊽			-2980 Jan 11 j 17:46	0° Υ		
11-	-2985 Feb 23 j 15:59	0°M 17°M 5712€			-2980 Mar 10 j 07:13	0°B		
desc. node	-2985 Apr 04 j 10:24 -2985 May 06 j 16:02	17°M57'36 23°M55'05			-2980 Apr 30 j 14:40	0° Ⅱ 0° ©		
retrograde opposition	-2985 Jun 06 j 00:24	18°M53'59	4°20'57	evening set	-2980 Jun 17 j 17:35 -2980 Aug 02 j 05:06	୦ ୬ 29° ୭ 59'41		
greatest brilliancy	-2985 Jun 06 j 01:56	18°M52'58		evening set	-2980 Aug 02 j 05:17	29 3 3941		
min. Earth dist.	-2985 Jun 07 j 01:29	18°M37'22	0.37751 AU	max. Earth dist.	-2980 Aug 02 j 03.17 -2980 Aug 18 j 15:57		2.52268 AU	
direct	-2985 Jul 06 j 08:44	13°M46'38	0.57751 AU	max. Earth dist.	-2980 Sep 14 j 06:41	0° m)	2.32208 AU	
direct	-2985 Aug 30 j 02:20	0° ₹			-2700 Sep 14 J 00.41	עווי ∨		
	-2985 Oct 20 j 08:12	0°ਤ		conjunction	-2980 Sep 21 j 05:00	4° m/58'42	0°40'34	
	-2985 Dec 05 j 10:37	0° ≈		minimum elong	-2980 Sep 21 j 05:40	5° m) 01'44		
	-2984 Jan 20 j 02:43	0°) €		minimum ciong	-2980 Oct 25 j 06:06	0ಂ ರ	0 1033	
asc. node	-2984 Feb 10 j 12:45	13° ¥ 55'51		morning rise	-2980 Nov 14 j 04:24	15° £ 02'15		
	-2984 Mar 06 j 11:01	0° Υ		desc. node	-2980 Nov 24 j 08:49	22° £ 48'59		
	-2984 Apr 22 j 12:43	0°8			-2980 Dec 03 j 17:09	0° M		
evening set	-2984 May 16 j 22:25	15° 8 28'11			-2979 Jan 11 j 08:54	0° ∡ ¹		
C	-2984 Jun 08 j 19:47	Π°			-2979 Feb 19 j 01:06	0°ರ		
max. Earth dist.	-2984 Jun 24 j 22:25	10° Ⅱ 16′10	2.66756 AU		-2979 Mar 30 j 16:24	0° ≈		
	· ·				-2979 May 11 j 09:45	0°)		
conjunction	-2984 Jul 02 j 16:08	15° Ⅱ 13'10	1°04'06		-2979 Jun 26 j 00:25	0° Y		
minimum elong	-2984 Jul 02 j 15:10	15° Ⅱ 11'38	1°04'11		-2979 Aug 21 j 02:08	$0^{\circ}B$		
	-2984 Jul 25 j 15:06	0 \circ \odot		asc. node	-2979 Oct 02 j 10:49	11° 8 15'32		
morning rise	-2984 Aug 16 j 17:08	14° 5 22'43		retrograde	-2979 Oct 06 j 18:04	11° 8 22'50		
	-2984 Sep 09 j 09:27	$0^{\circ}\Omega$		min. Earth dist.	-2979 Nov 13 j 01:45	2° 8 32'09	0.65036 AU	
	-2984 Oct 23 j 21:47	0° m		opposition	-2979 Nov 15 j 19:01	1° 8 26'26	1°41'02	
	-2984 Dec 06 j 06:02	0∘ ⊽		greatest brilliancy	-2979 Nov 15 j 14:12	1° 8 31'18	-1.4m	
	-2983 Jan 17 j 17:56	0° M			-2979 Nov 19 j 09:39	30° ₹ Υ		
desc. node	-2983 Feb 19 j 10:02	23°M11'55		direct	-2979 Dec 25 j 00:18	22° Y ′05′26		
	-2983 Mar 01 j 01:10	0° ∡ ¹			-2978 Feb 02 j 18:54	0° 8		
	-2983 Apr 13 j 21:04	600			-2978 Apr 07 j 15:36	0°II		
. 1	-2983 Jun 05 j 15:56	0° ≈			-2978 May 28 j 17:32	0° ©		
retrograde	-2983 Jul 15 j 02:23	9°≈38'21	0.44247.411		-2978 Jul 14 j 02:59	0° Ω		
min. Earth dist.	-2983 Aug 11 j 12:15	4°≈33'31	0.44347 AU		-2978 Aug 26 j 06:30	0°M)		
greatest brilliancy opposition	-2983 Aug 18 j 01:37 -2983 Aug 19 j 12:36	2°≈22'13 1°≈52'46		evening set	-2978 Sep 19 j 05:17 -2978 Oct 05 j 23:01	17°Mp28'27 0° ⊆		
opposition	-2983 Aug 19 j 12.30 -2983 Aug 25 j 06:59	1 ≈3240 30°Rる	-3 44 02	desc. node	-2978 Oct 03 j 23:01 -2978 Oct 12 j 06:49	0 == 4° £ 47'33		
direct	-2983 Sep 20 j 13:49	25°る33'06		max. Earth dist.	-2978 Oct 12 j 00:49	5° £ 39'52	2.39960 AU	
direct	-2983 Oct 18 j 02:16	0° ≈		max. Earth tist.	-2978 Nov 13 j 23:46	ე° ™	2.37700 110	
	-2983 Dec 22 j 11:47	0°) €			29701101 13 j 23.10	0 110		
asc. node	-2983 Dec 28 j 12:08	3° ¥ 20'54		conjunction	-2978 Nov 16 j 16:35	2°ML06'23	-0°24'26	
	-2982 Feb 12 j 07:27	0° Υ		minimum elong	-2978 Nov 16 j 14:43	2°ML02'44		
	-2982 Apr 02 j 21:00	0°B		Č	-2978 Dec 22 j 05:17	0° ∡ ¹		
	-2982 May 21 j 07:19	$\Pi^{\circ}0$		morning rise	-2977 Jan 22 j 05:55	24° ∡ 19'44		
evening set	-2982 Jun 24 j 01:08	21° Ⅲ 23'56		C	-2977 Jan 29 j 12:52	0°ರ		
	-2982 Jul 07 j 09:13	0ಂತಾ			-2977 Mar 09 j 19:35	0° ≈		
max. Earth dist.	-2982 Jul 19 j 18:49	8° 5 04'58	2.61947 AU		-2977 Apr 19 j 21:04	0°)		
					-2977 Jun 02 j 12:32	0° Y		
conjunction	-2982 Aug 09 j 17:53	21° 9 56'51	1°09'16		-2977 Jul 19 j 23:40	$0^{\circ}S$		
minimum elong	-2982 Aug 09 j 18:25	21° 9 57'45	1°09'20	asc. node	-2977 Aug 20 j 11:02	17° 8 51'04		
	-2982 Aug 21 j 17:32	$0^{\circ}\Omega$			-2977 Sep 14 j 00:13	Π °0		
morning rise	-2982 Sep 25 j 16:07	24° Ω 00'57		retrograde	-2977 Nov 10 j 10:41	15° Ⅱ 24'53		
	-2982 Oct 04 j 04:42	0° m		opposition	-2977 Dec 20 j 03:18	5° Ⅱ 53'03		
	-2982 Nov 14 j 22:09	0∘ ⊽		greatest brilliancy	-2977 Dec 20 j 05:03	5° Ⅱ 51'17		
	-2982 Dec 25 j 07:18	0°M		min. Earth dist.	-2977 Dec 21 j 04:55		0.67230 AU	
desc. node	-2981 Jan 07 j 09:15	9° ™ 52'06			-2976 Jan 05 j 00:44	30°R 8		
	-2981 Feb 02 j 22:07	0° ∡ ¹		direct	-2976 Jan 30 j 00:26	25° 8 58'19		
	-2981 Mar 14 j 14:36	0°る			-2976 Feb 26 j 07:38	0°II		
	-2981 Apr 24 j 16:00	0° ₩			-2976 May 03 j 21:39	0 ಂ ${f U}$		
	-2981 Jun 08 j 16:14	υ π			-2976 Jun 22 j 08:16	0 86		

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -2976 Aug 05 j 09:24 0° m -2971 Jul 04 j 22:52 $0^{\circ}II$ 17° m 15'01 -2976 Aug 29 j 04:38 -2971 Aug 21 j 09:21 0ಂತಾ desc. node -2976 Sep 15 j 06:20 0∘**⊽** -2971 Oct 08 j 06:19 $0^{\circ}\Omega$ -2976 Oct 24 j 05:33 0°M -2971 Nov 26 j 06:03 0° m -2976 Nov 20 j 05:11 21°M12'35 -2970 Jan 18 j 04:37 0∘**⊽** evening set -2976 Dec 01 j 08:43 0°**∡**¹ retrograde -2970 Apr 04 j 20:31 25° £12'10 -2975 Jan 08 j 15:31 0°궁 desc. node -2970 Apr 21 j 02:09 23°**£**34'34 opposition -2970 May 06 j 02:05 19° 248'07 -1°02'25 conjunction -2975 Jan 25 j 07:23 12°る50'34 -1°07'01 greatest brilliancy -2970 May 06 j 07:06 19°**£**44'30 -2.8m minimum elong -2975 Jan 25 j 07:32 12°る50'52 1°07'06 min. Earth dist. -2970 May 11 j 20:18 18°**2**08'44 0.40142 AU -2975 Feb 16 j 23:11 direct -2970 Jun 08 j 03:28 13°**£**38'32 max. Earth dist. -2975 Mar 15 j 14:07 19°≈37'15 2.44041 AU -2970 Aug 01 j 00:40 0°M -2975 Mar 30 j 00:38 0°**)**€ -2970 Sep 19 j 08:09 0°×7 morning rise -2975 Mar 31 j 00:36 0°\ 42'40 -2970 Nov 02 j 04:33 0°ರ $0^{\circ} \Upsilon$ -2975 May 12 j 07:11 -2970 Dec 15 j 11:24 0°≈ -2975 Jun 27 j 02:34 0°8 -2969 Jan 28 j 14:48 0°**)**€ asc. node -2975 Jul 07 j 11:07 6°**8**32'05 asc. node -2969 Feb 27 j 05:06 19°**¥**38'30 -2975 Aug 15 j 02:30 $\mathbb{I}^{\circ 0}$ -2969 Mar 15 j 01:01 $0^{\circ}\Upsilon$ -2975 Oct 09 j 17:39 0ಂತಾ -2969 Apr 30 j 14:03 0°8 retrograde -2975 Dec 16 j 09:13 19°**©**41'58 evening set -2969 May 02 j 16:59 1°**8**21'25 opposition -2974 Jan 23 j 15:42 10°957'46 4°55'08 -2969 Jun 16 j 15:37 $0^{\circ}\Pi$ greatest brilliancy -2974 Jan 24 j 10:23 10°939'39 -1.5m max. Earth dist. -2969 Jun 16 j 23:14 0°**I**12'09 2.67211 AU min. Earth dist. -2974 Jan 28 i 13:07 9°903'57 0.62980 AU direct -2974 Mar 05 i 18:16 0°959'47 conjunction -2969 Jun 19 i 04:02 1°**Д**36'17 0°54'56 -2974 May 27 j 05:49 $0^{\circ}\Omega$ -2969 Jun 19 i 02:48 1°**Ⅱ**34'18 0°55'01 minimum elong -2974 Jul 14 j 00:18 0°m -2969 Aug 02 j 12:17 0ಂತಾ -2974 Jul 17 j 03:21 2° m 08'00 -2969 Aug 03 j 09:22 0°933'58 desc node morning rise -2974 Aug 25 j 02:21 0∘**⊽** -2969 Sep 17 j 15:31 $0^{\circ}\Omega$ -2974 Oct 03 j 13:41 0°M -2969 Nov 01 j 21:11 O° m -2974 Nov 11 j 00:25 0°×7 -2969 Dec 16 j 09:21 0∘∙თ -2974 Dec 19 j 14:42 0°정 -2968 Jan 29 j 15:26 0°M -2973 Jan 27 j 04:13 -2968 Mar 08 j 04:00 29°る10'19 25°M38'28 evening set desc. node -2973 Jan 28 j 07:01 0°≈ -2968 Mar 14 j 21:53 0°**∡**7 -2973 Mar 10 j 17:08 0°**)**€ -2968 May 05 j 23:28 0°정 -2968 Jun 21 j 01:33 12°**る**29'52 retrograde 8°る01'23 0.40023 AU -2973 Mar 27 j 03:37 11°**∺**30′51 -0°33′44 -2968 Jul 17 j 17:09 conjunction min. Earth dist. minimum elong -2973 Mar 27 j 05:21 11°**¥**33′52 0°33′45 greatest brilliancy -2968 Jul 22 j 16:44 6°**る**32'40 -2.7m -2973 Apr 23 j 04:27 $0^{\circ}\Upsilon$ opposition -2968 Jul 24 j 01:37 6°る08'09 -6°38'19 max. Earth dist. -2973 Apr 27 j 04:35 2°Υ41'38 2.56513 AU direct -2968 Aug 23 j 08:39 0°る42'09 -2973 May 20 j 05:02 17°**Y**58'31 -2968 Nov 13 j 05:10 0°≈ morning rise -2973 May 25 j 09:00 21°**Y**21'33 -2967 Jan 03 j 08:36 0°**)**€ asc. node -2973 Jun 07 j 16:04 0° 8 -2967 Jan 14 j 03:12 6°**)** 34'37 asc. node -2973 Jul 24 j 22:57 $\mathbb{I}^{\circ 0}$ -2967 Feb 21 j 03:06 $0^{\circ}\Upsilon$ -2973 Sep 12 j 04:58 0ಂತಾ -2967 Apr 10 j 10:35 0° 8 -2973 Nov 04 j 09:37 $0^{\circ}\Omega$ -2967 May 28 j 07:33 $0^{\circ}\Pi$ retrograde -2972 Jan 30 i 17:47 29°**Ω**35'49 evening set -2967 Jun 09 i 06:23 7°**Ⅲ**34'17 opposition -2972 Mar 06 i 06:47 22°Ω11'02 4°09'18 max. Earth dist. -2967 Jul 09 i 18:16 27°**II**06'25 2.64462 AU greatest brilliancy -2972 Mar 07 j 13:00 21°Ω43'56 -2.0m -2967 Jul 14 j 05:29 0ಂತಾ min. Earth dist. -2972 Mar 14 j 09:42 19°**Ω**17'12 0.52645 AU direct -2972 Apr 14 i 09:39 13°Ω08'44 -2967 Jul 25 j 15:14 7°525'40 1°10'44 conjunction desc. node -2972 Jun 03 i 02:24 26°Ω40'23 -2967 Jul 25 j 15:06 7°\$25'26 1°10'50 minimum elong -2972 Jun 09 j 19:32 0° m -2967 Aug 28 j 16:35 $0^{\circ}\Omega$ -2972 Jul 29 j 02:06 0∘**⊽** -2967 Sep 09 j 08:09 7°**£**52′07 morning rise -2967 Oct 11 j 11:46 -2972 Sep 08 j 23:35 0°M 0° m -2972 Oct 18 j 18:41 0°×7 -2967 Nov 22 j 17:28 0∘**⊽** -2966 Jan 02 j 17:26 -2972 Nov 27 j 09:44 0°정 0°M -2971 Jan 07 j 00:03 0°22 -2966 Jan 24 j 03:18 15°M54'19 desc. node -2971 Feb 18 j 05:42 0°\ -2966 Feb 12 j 00:55 0°**∡**7 20°**)** 55'40 -2966 Mar 24 j 13:53 0°₹ evening set -2971 Mar 20 j 19:26 $0^{\circ}\Upsilon$ -2966 May 06 j 03:37 0°≈ -2971 Apr 03 j 08:06 5°Υ16'52 -2966 Jun 25 j 08:57 0°**)**€ asc. node -2971 Apr 11 j 06:51 retrograde -2966 Aug 14 j 17:55 14°****26'55 conjunction -2971 May 11 j 04:29 24°Υ52'52 0°17'00 min. Earth dist. -2966 Sep 14 j 10:16 7°**¥**59'50 0.52100 AU minimum elong -2971 May 11 j 03:47 24°**Υ**51'44 0°17'01 opposition -2966 Sep 21 j 20:02 5°\(\mathbf{1}2'10\) -3°12'14 -2971 May 19 j 02:07 0°8 greatest brilliancy -2966 Sep 21 j 01:05 5°**¥**30′05 -2.1m -2971 May 23 j 18:09 3°800'53 2.64546 AU -2966 Oct 07 j 16:56 max. Earth dist. -2971 Jun 27 j 23:59 25°**8**34'47 -2966 Oct 26 j 12:54 27°≈35'11 morning rise direct

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Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.								
recention, astronom	-2966 Nov 15 j 18:19	0° ∀	ii ustronomicui cot	conjunction	-2961 Dec 29 j 10:03	15° × ⁷ 21'11	-1°00'14	
asc. node	-2966 Dec 02 j 02:08	4°) 44′29		minimum elong	-2961 Dec 29 j 07:28	15° ∡ 16'06		
asc. node	-2965 Jan 26 j 02:21	0° Υ		minimum ciong	-2960 Jan 17 j 04:02	0° 궁	1 00 17	
	-2965 Mar 20 j 08:40	0°8		max. Earth dist.	-2960 Feb 10 j 02:34		2.39084 AU	
	-2965 May 09 j 04:56	0°II		max. Earth dist.	-2960 Feb 25 j 09:57	0° ≈	2.57004710	
	-2965 Jun 25 j 19:26	0°©		morning rise	-2960 Mar 06 j 11:46	0 ∞ 7° ≈ 30'41		
evening set	-2965 Jul 18 j 01:44	14°931'47		morning risc	-2960 Apr 06 j 09:43	0° ∺		
max. Earth dist.	-2965 Aug 06 j 12:36		2.56572 AU		-2960 May 19 j 17:01	0°Υ		
max. Earth dist.	-2965 Aug 10 j 04:41	0°Ω	2.30372 AU		-2960 Jul 04 j 21:24	0°8		
	-2903 Aug 10 J 04.41	0 86		asc. node	-2960 Jul 24 j 01:58	11° 8 48'25		
conjunction	-2965 Sep 04 i 06:29	17° Ω 14'30	0°56'10	asc. node	-2960 Aug 24 j 08:46	0°Ⅱ		
minimum elong	-2965 Sep 04 j 07:59	17° Ω 14'30			-2960 Oct 27 j 21:43	0 0 0		
minimum clong	-2965 Sep 22 j 08:55	0° m)	0 3021	retrograde	-2960 Dec 01 j 10:36	6°9513'33		
morning rise	-2965 Oct 24 j 15:36	23° m) 22'56		retrograde	-2959 Jan 01 j 21:50	30°RⅡ		
morning risc	-2965 Nov 02 j 14:21	0° ರ		opposition	-2959 Jan 09 j 09:39	27° Ⅱ 07'51	1°30'35	
desc. node	-2965 Dec 12 j 01:31	0 _ 29° ≏ 46′26		greatest brilliancy	-2959 Jan 09 j 21:08	26°II56'33		
dese. Hode	-2965 Dec 12 j 08:37	0°ML		min. Earth dist.	-2959 Jan 12 j 19:22		0.65407 AU	
	-2964 Jan 20 j 07:36	0° ⊼ ¹		direct	-2959 Feb 19 j 14:51	17° Ⅱ 06'41	0.05407 AU	
	-2964 Feb 28 j 06:40	0° ਠ		direct	-2959 Apr 12 j 03:58	0°95		
	-2964 Apr 08 j 05:57	0°≈			-2959 Jun 07 j 07:42	0° U		
	-2964 May 20 j 15:15	0° ∺			-2959 Jul 07 j 07:42 -2959 Jul 22 j 23:28	0°m)		
	-2964 Jul 07 j 09:33	0° Υ		desc. node	-2959 Aug 02 j 19:50	7°Mo 38'11		
rotrogrado	-	27° Υ 20'32		desc. node		0∘ ⊽		
retrograde asc. node	-2964 Sep 22 j 20:08	27 γ 20 32 22° γ 36'07			-2959 Sep 02 j 09:50	0°M		
min. Earth dist.	-2964 Oct 19 j 02:28 -2964 Oct 28 j 12:40	19° Υ 03'20	0.62450 AU		-2959 Oct 11 j 14:22 -2959 Nov 18 j 20:44	0° ⊼ ¹		
	-2964 Nov 01 j 16:51	19 γ 03 20 17° γ 22'58	0.02430 AU 0°32'52		-2959 Dec 27 j 06:49	0°る		
opposition greatest brilliancy	-2964 Nov 01 j 16.31 -2964 Nov 01 j 14:33	17° Y 25'16		evening set	-2958 Jan 01 j 22:13	0 3 4° る 21'09		
direct	-2964 Dec 09 j 21:53	8° Υ 23'15	-1.0111	evening set	-2958 Feb 04 j 18:18	4 O2109 0°≈		
direct	-2963 Feb 19 j 22:11	0° 8			-2936 FCU 04 J 16.16	0 🗢		
	•	0°II		conjunction	2059 Mar 05 : 14:40	2100000150	0052100	
	-2963 Apr 16 j 22:30 -2963 Jun 05 j 11:44	0°©		minimum elong	-2958 Mar 05 j 14:40 -2958 Mar 05 j 17:02	21°≈08'59 21°≈13'16		
	-2963 Jul 21 j 10:14	0° U		minimum clong	-2958 Mar 17 j 23:32	0° \	0 32 02	
evening set	-2963 Aug 30 j 03:12	27° Ω 35'47		max. Earth dist.	-2958 Apr 13 j 21:53		2.52021 AU	
evening set	-2963 Sep 02 j 11:48	0° m)		max. Earth dist.	-2958 Apr 30 j 07:10	16 γ (49 39	2.32021 AU	
max. Earth dist.	-2963 Sep 02 j 11:48 -2963 Sep 15 j 01:05		2.44684 AU	morning rise	-2958 May 02 j 10:35	1° Υ 26'44		
max. Earm dist.	-2963 Oct 13 j 06:15	0∘ ⊽	2.44064 AU	asc. node	-2958 Jun 11 j 01:02	27° Υ 34'35		
	-2903 Oct 13 j 00.13	0 ==		asc. node	-2958 Jun 14 j 19:11	0° 8		
conjunction	-2963 Oct 23 j 14:19	7° ≏ 49'27	0°03'47		-2958 Aug 01 j 12:04	0°II		
minimum elong	-2963 Oct 23 j 14:19	7° - 49'56			-2958 Sep 21 j 05:11	0 0 0		
behind sun begin	-2963 Oct 22 j 14:36	7° ≏ 04'25	0 05 47		-2958 Nov 19 j 11:24	0° U		
behind sun end	-2963 Oct 24 j 14:32	8° £ 35'30		retrograde	-2957 Jan 11 j 12:24	13° Ω 06'06		
desc. node	-2963 Oct 28 j 23:59	11° ≏ 56'33		opposition	-2957 Feb 17 j 07:33	5° Ω 05'02	4°46'20	
dese. Hode	-2963 Nov 21 j 10:05	0° ™		greatest brilliancy	-2957 Feb 18 j 11:52	4°Ω38'34		
morning rise	-2963 Dec 24 j 07:11	25°M42'11		min. Earth dist.	-2957 Feb 24 j 08:51		0.57324 AU	
morning rise	-2963 Dec 29 j 18:38	0° %		min. Dartii dist.	-2957 Mar 03 j 10:44	30°RS	0.57521710	
	-2962 Feb 06 j 04:30	0°ਤ		direct	-2957 Mar 29 j 13:58	25°930'03		
	-2962 Mar 17 j 12:55	0° ≈		ancet	-2957 Apr 26 j 04:27	0° Ω		
	-2962 Apr 27 j 17:34	0°) €		desc. node	-2957 Jun 20 j 19:27	26° Ω 32'48		
	-2962 Jun 10 j 19:15	0° Υ		desc. node	-2957 Jun 26 j 11:13	0° m)		
	-2962 Jul 29 j 20:23	0°8			-2957 Aug 10 j 01:59	0∘ ⊽		
asc. node	-2962 Sep 06 j 02:52	19° 8 23'33			-2957 Sep 19 j 13:30	0° M ₊		
use. Houe	-2962 Oct 06 j 22:15	0°II			-2957 Oct 28 j 14:33	0° ∡ 7		
retrograde	-2962 Oct 27 j 23:17	2° I I34'37			-2957 Dec 06 j 16:23	0° ਰ		
1011081440	-2962 Nov 16 j 13:58	30°R 8			-2956 Jan 15 j 19:20	0° ≈		
opposition	-2962 Dec 06 j 22:08	22° 8 50'22	3°08'29		-2956 Feb 26 j 15:13	0°) €		
min. Earth dist.	-2962 Dec 06 j 11:47		0.67123 AU	evening set	-2956 Mar 01 j 15:52	2°) 49′00		
greatest brilliancy	-2962 Dec 06 j 19:32	22° 8 52'58		3	-2956 Apr 10 j 09:56	0° Υ		
direct	-2961 Jan 16 j 07:19	13° 8 05'47						
	-2961 Mar 19 j 04:11	0°Ⅱ		conjunction	-2956 Apr 24 j 12:33	9° Ƴ 24'05	-0°02'01	
	-2961 May 14 j 16:07	0°ಅ		minimum elong	-2956 Apr 24 j 12:38	9° Υ 24'13	0°02'01	
	-2961 Jul 01 j 11:54	$0^{\circ}\Omega$		behind sun begin	-2956 Apr 23 j 15:22	8° Υ 49'02	· 	
	-2961 Aug 14 j 01:48	0° m)		behind sun end	-2956 Apr 25 j 09:53	9° Υ 59'24		
desc. node	-2961 Sep 15 j 22:12	24° m 03'09		asc. node	-2956 Apr 27 j 22:37	11° Y 39'49		
	-2961 Sep 23 j 19:56	0ಂ ರ		max. Earth dist.	-2956 May 13 j 18:59	22° Υ '04'16	2.62029 AU	
evening set	-2961 Oct 25 j 17:35	o — 24° Ω 29'55			-2956 May 25 j 23:45	0°8		
5	-2961 Nov 01 j 18:51	0°M		morning rise	-2956 Jun 13 j 06:10	11° 8 45'54		
	-2961 Dec 09 j 22:01	0° ∡ 7		<i>3</i>	-2956 Jul 11 j 22:01	0°II		
		-			j ==.v*			

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -2956 Aug 28 j 20:13 0ಂತಾ asc. node -2951 Dec 18 j 18:20 2° ¥ 50'26 -2956 Oct 17 j 00:55 $0^{\circ}\Omega$ -2950 Feb 06 j 01:43 $0^{\circ}\Upsilon$ -2956 Dec 08 j 13:49 0°m -2950 Mar 28 j 15:39 0°8 0∘**⊽** $0^{\circ}\Pi$ -2955 Feb 23 j 19:05 -2950 May 16 j 12:17 -2955 Mar 07 j 05:05 -2950 Jul 02 j 16:03 29°**Ⅲ**56'15 retrograde 0°**£**45'58 evening set -2950 Jul 02 j 18:22 -2955 Mar 18 j 06:51 30°R M 0°9 max. Earth dist. opposition -2955 Apr 09 j 04:05 24° Mp 33'281°45'34 -2950 Jul 25 j 23:57 15°511'45 2.60243 AU greatest brilliancy -2955 Apr 09 j 19:18 24° m 21'19 -2.5m -2950 Aug 17 j 03:20 $0^{\circ}\Omega$ min. Earth dist. -2955 Apr 17 j 08:32 21°M 57'10 0.44626 AU desc. node -2955 May 07 j 19:53 17° m 25'12 conjunction -2950 Aug 18 j 17:47 1°Ω05'02 1°06'06 17° Mp 02'44 direct -2955 May 15 j 04:46 minimum elong -2950 Aug 18 j 18:43 1°**Ω**06′37 1°06'10 -2955 Jul 01 j 08:21 -2950 Sep 29 j 12:17 0∘**⊽** 0° m -2950 Oct 05 j 15:20 -2955 Aug 20 j 16:33 0° M morning rise 4° m 20'47 -2955 Oct 02 j 08:26 0°**√** -2950 Nov 10 j 01:39 0∘**⊽** -2955 Nov 12 j 15:44 0°ರ -2950 Dec 20 j 05:12 0°M -2955 Dec 24 j 10:57 0°**≈** desc. node -2950 Dec 28 j 18:57 6°M30'12 -2954 Feb 05 j 14:41 0°**)**€ -2949 Jan 28 j 13:33 0°**⊼** asc. node -2954 Mar 15 j 19:50 25°\ 40'21 -2949 Mar 08 j 22:14 0°る -2954 Mar 22 j 09:06 $0^{\circ}\Upsilon$ -2949 Apr 18 j 10:37 0°**≈** evening set -2954 Apr 16 j 21:13 16°**Y**40′09 -2949 Jun 01 j 01:51 0°) -2954 May 07 j 12:42 0°8 -2949 Jul 24 j 05:27 $0^{\circ}\Upsilon$ -2949 Sep 09 i 05:02 12°Υ12'50 retrograde -2954 Jun 04 j 12:07 17°**8**55'02 0°42'31 min. Earth dist. -2949 Oct 13 i 02:18 4°**Υ**34'00 0.59001 AU conjunction -2954 Jun 04 i 10:51 17°**8**53'01 0°42'34 opposition -2949 Oct 18 j 16:00 2°Y21'42 -0°46'03 minimum elong max. Earth dist. -2954 Jun 07 i 19:29 20°801'42 2.66820 AU greatest brilliancy -2949 Oct 18 j 12:32 2°Υ25'08 -1.7m -2954 Jun 23 j 10:44 $0^{\circ}II$ -2949 Oct 24 j 19:19 30°R ¥ -2954 Jul 20 j 08:45 17°**Ⅲ**09'51 -2949 Nov 05 j 17:21 26°¥12'56 asc node morning rise -2954 Aug 09 j 10:41 0ಂತಾ -2949 Nov 24 j 16:18 23°**)**(48'40 direct -2954 Sep 25 j 01:53 $0^{\circ}\Omega$ -2949 Dec 28 j 22:09 $0^{\circ}\Upsilon$ 0° My -2954 Nov 10 j 07:46 -2948 Mar 03 j 17:58 0°8 -2954 Dec 26 j 15:25 0∘∙თ -2948 Apr 25 j 08:10 $0^{\circ}\Pi$ -2953 Feb 12 j 07:27 -2948 Jun 12 j 21:55 0°M 000 -2953 Mar 25 j 19:56 23°M34'10 -2948 Jul 28 j 13:32 $0^{\circ}\Omega$ desc. node -2953 Apr 08 j 05:53 -2948 Aug 11 j 23:07 0° **₹** evening set 9°Ω50'39 -2953 May 24 j 10:27 11°×747'47 retrograde max. Earth dist. -2948 Aug 27 j 09:59 20°**\Omega**36'53 2.49643 AU -2953 Jun 22 j 05:42 -2948 Sep 09 j 15:13 min. Earth dist. 7°**尽**05'31 0.37740 AU 0° m opposition -2953 Jun 24 j 04:58 6°**х** 33′46 -5°47′36 greatest brilliancy -2953 Jun 23 j 17:53 6° ₹ 41'13 -2.9m conjunction -2948 Oct 02 j 07:13 16° Mp 26'55 0°28'42 -2953 Jul 24 j 01:39 1°**х¹**35′17 minimum elong -2948 Oct 02 j 08:40 16° Mp 29'36 0°28'42 direct -2953 Oct 10 j 02:45 0°ರ -2948 Oct 20 j 13:14 0∘**⊽** -2953 Nov 28 j 08:27 0°**≈** desc. node -2948 Nov 14 j 17:04 19°**£**04'24 -2952 Jan 14 j 07:19 0°**)**€ -2948 Nov 27 j 18:35 29°**♀**07'20 morning rise -2952 Jan 31 j 18:47 11°**¥**11′20 -2948 Nov 28 j 21:51 0°M asc. node -2952 Mar 01 j 07:18 $0^{\circ}\Upsilon$ -2947 Jan 06 j 10:55 0°**∡**7 -2952 Apr 17 j 17:41 0° 8 -2947 Feb 14 j 00:28 0°정 23°**8**51'02 -2952 May 25 j 12:03 -2947 Mar 25 j 12:13 0°≈ evening set -2952 Jun 04 i 04:54 $\mathbb{I}^{\circ 0}$ -2947 May 05 j 22:47 0°) $0^{\circ}\Upsilon$ max. Earth dist. -2952 Jun 30 j 08:37 16°**Д**40'33 2.66169 AU -2947 Jun 19 j 18:30 -2947 Aug 10 j 22:38 0°8 -2952 Jul 10 j 23:49 23°II30'26 1°07'43 -2947 Sep 22 i 17:46 16°841'27 conjunction asc. node -2952 Jul 10 j 23:07 23°II29'17 1°07'49 -2947 Oct 14 j 12:19 19°830'09 minimum elong retrograde -2952 Jul 21 j 01:01 0ಂತಾ -2947 Nov 21 j 16:11 10°823'10 0.66046 AU min. Earth dist. 9°**8**36'50 -2952 Aug 25 j 02:48 22°957'57 -2947 Nov 23 j 14:13 2°15'58 morning rise opposition -2952 Sep 04 j 16:47 $0^{\circ}\Omega$ greatest brilliancy -2947 Nov 23 j 09:23 9°**8**41'41 -1.4m -2946 Jan 02 j 07:13 -2952 Oct 18 j 22:27 0° m 0°806'17 direct -2952 Nov 30 j 20:05 0∘**⊽** -2946 Mar 31 j 20:42 $0^{\circ}\Pi$ -2951 Jan 11 j 16:33 0°M -2946 May 23 j 09:19 0ಂತಾ -2951 Feb 09 j 19:40 21°M07'14 -2946 Jul 09 j 05:45 $0^{\circ}\Omega$ desc. node 0° ×7 -2946 Aug 21 j 12:48 -2951 Feb 22 j 01:47 0° m 0°る -2946 Oct 01 j 16:25 -2951 Apr 05 j 04:52 evening set 0°**£**19'41 -2951 May 21 j 13:22 0°≈ -2946 Oct 01 j 06:00 0∘ଫ -2951 Jul 27 j 00:08 23°≈32'29 desc. node -2946 Oct 02 j 15:33 1°**2**03′26 retrograde min. Earth dist. -2951 Aug 24 j 12:34 17°≈58'07 0.47102 AU -2946 Nov 09 j 05:57 0°M greatest brilliancy -2951 Aug 31 j 07:20 15°≈34'30 -2.3m max. Earth dist. -2946 Nov 11 j 01:36 1°M25'14 2.37974 AU opposition -2951 Sep 01 j 13:41 15°≈07'31 -4°52'13 -2951 Oct 04 j 14:37 8°≈17'48 -2946 Dec 01 j 14:55 17°M32'49 -0°39'50 direct conjunction

-2946 Dec 01 j 12:02

minimum elong

17°M27'10 0°39'52

-2951 Dec 13 j 02:53

0°**)**€

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -2946 Dec 17 i 10:17 0°×7 direct -2940 Apr 24 j 20:14 24° **Ω**43'56 -2945 Jan 24 j 16:51 0°궁 -2940 May 24 j 11:51 desc node 0° m 09'36 -2945 Feb 07 j 19:39 10°る54'48 -2940 May 24 j 00:30 0° m morning rise -2940 Jul 20 j 22:27 -2945 Mar 04 j 22:31 0°≈≈ 0∘Ω -2945 Apr 14 j 22:15 -2940 Sep 02 j 09:21 0°**)**€ 0°M $0^{\circ}\Upsilon$ -2940 Oct 12 j 20:47 0°×7 -2945 May 28 j 08:58 0° 8 0°궁 -2945 Jul 14 j 04:42 -2940 Nov 21 j 22:20 asc. node -2945 Aug 10 j 17:56 16°**8**15'06 -2939 Jan 01 j 20:21 0°≈ 0°**∀** -2945 Sep 05 j 07:34 $0^{\circ}\Pi$ -2939 Feb 13 j 07:54 $0^{\circ}\Upsilon$ retrograde -2945 Nov 18 j 07:16 23°**Ⅲ**12'38 -2939 Mar 29 j 14:30 0°**Υ**55'14 opposition -2945 Dec 27 j 18:55 13°**Ⅱ**49'04 4°12'06 evening set -2939 Mar 30 j 23:45 1°Y57'03 greatest brilliancy -2945 Dec 27 j 23:47 13°**Ⅱ**44'13 -1.3m asc. node -2939 Apr 01 j 13:00 min. Earth dist. -2945 Dec 29 j 16:18 13°**Ⅲ**03'56 0.66874 AU -2939 May 14 j 10:44 0°8 direct -2944 Feb 06 j 20:37 3°**I**I50'46 -2944 Apr 26 j 16:13 0ಂತಾ conjunction -2939 May 20 j 06:08 3°844'47 0°27'05 -2944 Jun 16 j 18:40 $0^{\circ}\Omega$ minimum elong -2939 May 20 j 05:08 3°**8**43'10 0°27'07 -2944 Jul 31 j 07:34 0° m max. Earth dist. -2939 May 29 j 08:56 9°**8**36'34 2.65574 AU desc. node -2944 Aug 19 j 14:33 13° **m** 51'08 -2939 Jun 30 j 06:56 $0^{\circ}\Pi$ -2944 Sep 10 j 09:01 0∘**ত** morning rise -2939 Jul 06 j 05:51 3°**I**I47'18 -2944 Oct 19 j 09:48 0°M -2939 Aug 16 j 12:43 0ಂತಾ -2944 Nov 26 j 13:30 0°×7 -2939 Oct 02 j 20:55 $0^{\circ}\Omega$ -2944 Dec 05 i 17:27 7°**х** 13′00 -2939 Nov 19 i 15:05 0° m evening set -2943 Jan 03 j 20:38 0°정 -2938 Jan 08 i 04:22 0∘∙თ -2938 Mar 06 j 21:17 0°M -2943 Feb 09 i 07:15 27°る50'12 -1°04'28 -2938 Apr 11 j 12:42 10°M32'16 conjunction desc. node -2943 Feb 09 j 08:47 -2938 Apr 22 j 11:26 27°る53'05 1°04'32 retrograde 11°M,16'20 minimum elong -2943 Feb 12 j 04:31 opposition -2938 May 23 j 01:17 0°≈≈ 6°M10'47 -2°56'13 -2943 Mar 25 j 06:04 0°**₩** -2938 May 23 j 08:16 greatest brilliancy 6°M-06'01 -2.9m -2938 May 26 j 11:12 max. Earth dist. -2943 Mar 28 j 07:53 2°**₭**11'13 2.46962 AU min. Earth dist. 5°M15'09 0.38480 AU -2943 Apr 12 j 13:51 -2938 Jun 23 j 09:59 0°M41'20 12°**)** 54'39 direct morning rise -2943 May 07 j 11:43 $0^{\circ}\Upsilon$ -2938 Sep 08 j 22:26 0°**⊼** -2943 Jun 22 j 02:39 0° 8 -2938 Oct 25 j 17:30 0°궁 -2943 Jun 27 j 15:49 3°**8**32'17 -2938 Dec 09 j 07:42 0°≈ asc. node -2943 Aug 09 j 11:37 -2937 Jan 23 j 04:33 0°**)**€ $0^{\circ}\Pi$ -2943 Oct 01 j 15:29 -2937 Feb 17 j 10:41 16°**)** 36'21 000 asc. node -2943 Dec 25 j 10:40 -2937 Mar 10 j 01:24 $0^{\circ}\Upsilon$ retrograde 28°9511'44 0°8 opposition -2942 Feb 01 j 06:11 19°5541'20 4°57'04 -2937 Apr 25 j 20:38 greatest brilliancy -2942 Feb 02 j 04:40 19°9519'45 -1.5m -2937 May 11 j 11:54 9°856'53 evening set min. Earth dist. -2942 Feb 06 j 22:47 17°530'29 0.61229 AU -2937 Jun 12 j 00:52 $0^{\circ}\Pi$ direct -2942 Mar 14 j 04:12 9°548'45 max. Earth dist. -2937 Jun 22 j 06:40 6°**Ц**31'29 2.67060 AU -2942 May 18 j 14:57 $0^{\circ}\Omega$ desc. node -2942 Jul 07 j 12:53 29°**Ω**49'09 -2937 Jun 27 j 12:07 9°**I**51'41 1°00'41 conjunction -2942 Jul 07 j 19:26 0° m -2937 Jun 27 j 11:00 9°**Ⅱ**49'54 minimum elong 1°00'46 -2942 Aug 19 j 13:59 -2937 Jul 28 j 20:59 0∘**⊽** 0ಂತಾ -2942 Sep 28 j 08:23 0°M -2937 Aug 11 j 13:42 8°952'23 morning rise -2942 Nov 05 j 23:08 0°×7 -2937 Sep 12 i 19:33 $0^{\circ}\Omega$ -2942 Dec 14 i 16:28 0°궁 -2937 Oct 27 i 15:36 0° m -2941 Jan 23 j 11:12 0°≈ -2937 Dec 10 j 11:40 0∘**⊽** -2941 Feb 09 i 07:37 12°≈20'55 -2936 Jan 22 j 15:55 0°M evening set -2941 Mar 05 j 23:19 0°**₩** -2936 Feb 27 i 12:42 24°M53'22 desc node -2936 Mar 05 j 23:45 0°×7 -2941 Apr 07 j 08:20 22°\ 26'51 -0°22'11 -2936 Apr 20 j 22:25 0°궁 conjunction -2941 Apr 07 j 09:28 22°\ 28'47 0°22'10 -2936 Jul 05 j 04:44 28°る43'48 minimum elong retrograde $0^{\circ}\Upsilon$ -2941 Apr 18 j 11:52 min. Earth dist. -2936 Jul 31 j 23:45 23°る58'48 0.42251 AU -2936 Aug 07 j 01:04 max. Earth dist. -2941 May 04 j 02:42 10°**Y**26'33 2.58671 AU greatest brilliancy 22°**る**03'40 -2.6m -2941 May 15 j 14:14 18°**Y**01′27 -2936 Aug 08 j 13:06 21°る34'50 -6°16'10 asc. node opposition 27°Υ13'24 morning rise -2941 May 29 j 16:08 direct -2936 Sep 08 j 18:49 15°る40'08 -2941 Jun 02 j 22:54 0° 8 -2936 Oct 31 j 20:03 0°≈ -2941 Jul 20 j 01:06 $0^{\circ}\Pi$ -2936 Dec 27 j 04:46 0°**)**€ 0ಂತಾ 4° **\(**47'13 -2941 Sep 06 j 16:43 asc. node -2935 Jan 04 j 09:31 -2941 Oct 27 j 23:28 $0^{\circ}\Omega$ $0^{\circ}\Upsilon$ -2935 Feb 15 j 11:18 -2941 Dec 27 j 22:02 0° m -2935 Apr 05 j 10:25 0°8 retrograde -2940 Feb 11 j 20:34 10° Mp 20'41-2935 May 23 j 14:42 $0^{\circ}\Pi$ opposition -2940 Mar 17 j 14:30 3° m 19'40 3°31'13 evening set -2935 Jun 17 j 17:15 15°**Ⅲ**54'14

greatest brilliancy

min. Earth dist.

-2940 Mar 18 j 18:31

-2940 Mar 26 j 02:25

-2940 Mar 27 j 07:15

2° M 55'24 -2.1m

30°R€

0° m 23'57 0.49813 AU

-2935 Jul 09 j 15:26

-2935 Jul 15 j 10:54

max. Earth dist.

0ಂತಾ

3°946'31 2.63165 AU

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 47 Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.

Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style.								
conjunction	-2935 Aug 03 j 05:06	16°904'47	1°10'27		-2930 Jul 23 j 06:56	9° 8		
minimum elong	-2935 Aug 03 j 05:21	16°ණ05'11	1°10'33	asc. node	-2930 Aug 27 j 08:09	19° 8 10'40		
	-2935 Aug 24 j 01:46	$0^{\circ}\Omega$			-2930 Sep 20 j 05:14	Π $^{\circ}0$		
morning rise	-2935 Sep 18 j 12:15	17° Ω 20′14		retrograde	-2930 Nov 04 j 16:19	10° Ⅱ 24'39		
	-2935 Oct 06 j 17:09	0° m		opposition	-2930 Dec 14 j 12:48	0° Ⅱ 46'42		
	-2935 Nov 17 j 16:30	0∘ ⊽		greatest brilliancy	-2930 Dec 14 j 12:22	0° Ⅱ 47'08		
	-2935 Dec 28 j 08:17	0° M ₊		min. Earth dist.	-2930 Dec 14 j 22:04		0.67314 AU	
desc. node	-2934 Jan 14 j 11:33	12°M50'43			-2930 Dec 16 j 11:31	30° ₹ 8		
	-2934 Feb 06 j 05:52	0° ∡ ¹		direct	-2929 Jan 24 j 05:54	20° 8 56'03		
	-2934 Mar 18 j 05:55	0° ප			-2929 Mar 08 j 02:27	0°II		
	-2934 Apr 28 j 18:42	0° ≈			-2929 May 08 j 12:14	0°©		
	-2934 Jun 14 j 04:47	0° \			-2929 Jun 26 j 06:31	0°O		
retrograde	-2934 Aug 24 j 10:15	25° ¥ 25′01	0.51516.133		-2929 Aug 09 j 03:56	0° Mp		
min. Earth dist.	-2934 Sep 25 j 07:27		0.54746 AU	desc. node	-2929 Sep 06 j 07:07	20° m/27'57		
opposition	-2934 Oct 02 j 03:20	15° ¥ 52'34			-2929 Sep 19 j 00:43	0∘ ™		
greatest brilliancy	-2934 Oct 01 j 14:48	16° 光 04'40 7° 光 53'22	-1.9m		-2929 Oct 28 j 00:24	0°M		
direct	-2934 Nov 06 j 17:25 -2934 Nov 22 j 09:05	9° H 21'13		evening set	-2929 Nov 09 j 09:58 -2929 Dec 05 j 03:33	9° M 43'12 0° ∡ 7		
asc. node	-2934 Nov 22 j 09.03 -2933 Jan 17 j 15:58	9 π 2113			-2929 Dec 03 j 03.33 -2928 Jan 12 j 09:35	0°る		
	-2933 Mar 14 j 12:49	0°8			-2926 Jan 12 J 09.33	0.0		
	-2933 May 04 j 04:23	0°II		conjunction	-2928 Jan 14 j 06:38	1° る 27'26	-1°05'54	
	-2933 Jun 21 j 02:40	0ಂ ತಾ		minimum elong	-2928 Jan 14 j 05:30	1°る25'15		
evening set	-2933 Jul 27 j 03:37	23°938'07		minimum clong	-2928 Feb 20 j 15:33	0°≈	1 03 37	
evening set	-2933 Aug 05 j 14:29	0° Ω		max. Earth dist.	-2928 Mar 03 j 06:49		2.41698 AU	
max. Earth dist.	-2933 Aug 13 j 17:58		2.54278 AU	morning rise	-2928 Mar 20 j 18:32	21°≈28'45	2.11070710	
man. Barur dige.	2,00 11ug 10 j 17.00	000230	2.0 .2, 0 110	morning rise	-2928 Apr 01 j 14:48	0° ₩		
conjunction	-2933 Sep 14 j 05:51	27° Ω 29'54	0°48'02		-2928 May 14 j 20:01	0° Υ		
minimum elong	-2933 Sep 14 j 07:31	27° Ω 32'52			-2928 Jun 29 j 16:55	0°8		
	-2933 Sep 17 j 18:12	0°m		asc. node	-2928 Jul 14 j 08:15	9° 8 09'36		
	-2933 Oct 28 j 21:10	0∘ ⊽			-2928 Aug 18 j 03:37	$\Pi^{\circ}0$		
morning rise	-2933 Nov 05 j 11:15	5° ≙ 40'19			-2928 Oct 15 j 03:27	0°©		
desc. node	-2933 Dec 02 j 11:29	26° ₽ 09'16		retrograde	-2928 Dec 09 j 20:37	14°519'02		
	-2933 Dec 07 j 11:51	0°M₊		opposition	-2927 Jan 17 j 11:31	5°524'32	4°49'54	
	-2932 Jan 15 j 06:37	0° ∡ ¹		greatest brilliancy	-2927 Jan 18 j 02:55	5°509'29	-1.4m	
	-2932 Feb 23 j 01:15	0°ರ		min. Earth dist.	-2927 Jan 21 j 16:59	3° 5 45'29	0.64197 AU	
	-2932 Apr 02 j 18:38	0° ≈			-2927 Feb 01 j 00:52	30°RⅡ		
	-2932 May 14 j 16:04	0°) €		direct	-2927 Feb 27 j 16:30	25° Ⅱ 24'19		
	-2932 Jun 29 j 21:28	$0^{\circ}\Upsilon$			-2927 Mar 28 j 11:11	0 \circ \odot		
	-2932 Aug 29 j 17:17	9° 8			-2927 May 31 j 13:59	0 $^{\circ}$ Ω		
retrograde	-2932 Sep 30 j 21:11	5° 8 56'26			-2927 Jul 17 j 09:35	0° m)		
asc. node	-2932 Oct 09 j 08:18	5° 8 26'45		desc. node	-2927 Jul 24 j 05:35	4° m 43'44		
	-2932 Oct 30 j 15:49	30° Ŗ ♈			-2927 Aug 28 j 05:23	0∘ ⊽		
min. Earth dist.	-2932 Nov 06 j 12:15	27° Y ′20′22	0.64007 AU		-2927 Oct 06 j 14:04	0° M ₊		
opposition	-2932 Nov 09 j 21:36	25° Y ′58′39	1°13'50		-2927 Nov 13 j 22:33	0° ⊼ ¹		
greatest brilliancy	-2932 Nov 09 j 17:20	26° Y 02'57	-1.5m		-2927 Dec 22 j 10:18	0°る		
direct	-2932 Dec 18 j 17:21	16° Y 46'31		evening set	-2926 Jan 16 j 11:50	19° る 08'37		
	-2931 Feb 10 j 04:46	0° B			-2926 Jan 30 j 23:24	0° ≈		
	-2931 Apr 10 j 23:28 -2931 May 31 j 09:55	0°© 0°∏			-2926 Mar 13 j 05:56	0° ℋ		
	-2931 May 31 J 09:33	0° U		conjunction	-2926 Mar 18 j 03:44	3° ∺ 28′20	0041155	
	-2931 Jul 10 j 15:50 -2931 Aug 28 j 19:51	0° m)		minimum elong	-2926 Mar 18 j 05:52	3° ∺ 32'04		
evening set	-2931 Aug 28 j 19.31 -2931 Sep 10 j 05:31	8° Mp 57'51		max. Earth dist.	-2926 Mar 18 j 05:32 -2926 Apr 21 j 22:25		2.54589 AU	
max. Earth dist.	-2931 Sep 10 j 03:31 -2931 Sep 28 j 20:30	22° Mp 41'50	2.41997 AU	max. Earth dist.	-2926 Apr 25 j 14:17	2/ γ (3119	2.34369 AU	
max. Earth dist.	-2931 Oct 08 j 14:20	ე∘ <u>ი</u>	2.41997 AU	morning rise	-2926 May 12 j 19:18	11° Υ 31'24		
desc. node	-2931 Oct 08 j 14:20 -2931 Oct 19 j 09:42	ა 8° 11'19		asc. node	-2926 Jun 01 j 06:29	24° Υ 19'16		
dese. Hode	-2731 Oct 17 j 07.42	0 -1117		asc. node	-2926 Jun 10 j 00:33	0°8		
conjunction	-2931 Nov 05 j 19:24	21° ≏ 32'42	-0°12'09		-2926 Jul 27 j 10:08	0°II		
minimum elong	-2931 Nov 05 j 18:30	21° ⊆ 30'58			-2926 Sep 15 j 04:05	0°©		
behind sun begin	-2931 Nov 05 j 01:07	20° £ 57'25	J 12 10		-2926 Nov 09 j 04:54	0°Ω		
behind sun end	-2931 Nov 06 j 11:53	22° ⊆ 04'32		retrograde	-2925 Jan 22 j 02:50	22° Ω 43'05		
	-2931 Nov 16 j 17:04	0°M		opposition	-2925 Feb 27 j 06:46	15° Ω 01'03	4°28'24	
	-2931 Dec 24 j 23:57	0° ⊼ ″		greatest brilliancy	-2925 Feb 28 j 12:42	14° Ω 33'40	-1.9m	
morning rise	-2930 Jan 09 j 09:38	12° ₹ 105'44		min. Earth dist.	-2925 Mar 06 j 23:50	12° Ω 12'31	0.54830 AU	
<i>2</i> ·	-2930 Feb 01 j 08:06	0°ಕ		direct	-2925 Apr 08 j 00:11	5° Ω 42'02	-	
	-2930 Mar 12 j 14:32	0° ≈		desc. node	-2925 Jun 11 j 05:02	26° Ω 21'59		
	-2930 Apr 22 j 15:38	0° ∀			-2925 Jun 17 j 18:09	0° m)		
	-2930 Jun 05 j 09:03	$0^{\circ}\mathbf{\Upsilon}$			-2925 Aug 03 j 13:02	0∘ ⊽		
	-				-			

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 48

Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. -2925 Sep 13 j 18:13 0°M -2920 Aug 31 j 00:48 $0^{\circ}\Omega$ 1°**Ω**47'22 -2925 Oct 23 j 04:14 0°×7 -2920 Sep 02 j 16:54 morning rise -2925 Dec 01 j 12:15 0°궁 -2920 Oct 14 j 01:23 0° m -2924 Jan 10 j 20:06 0°≈≈ -2920 Nov 25 j 14:27 0∘Ω 0°**)**€ -2924 Feb 21 j 19:47 -2919 Jan 05 j 23:21 0°M -2924 Mar 12 j 18:38 evening set 13°**)**(47'44 desc. node -2919 Jan 31 j 05:46 18°M35'28 $0^{\circ}\Upsilon$ -2924 Apr 05 j 17:25 -2919 Feb 15 j 16:48 0°×7 8°Y17'30 asc. node -2924 Apr 18 j 04:18 -2919 Mar 28 j 18:56 0°궁 -2919 May 11 j 10:35 0°≈ conjunction -2924 May 04 j 04:39 18°**Y**50′00 0°09'14 -2919 Jul 06 j 16:24 0°**)**€ minimum elong -2924 May 04 j 04:15 18°**Y**49′20 0°09'16 retrograde -2919 Aug 06 j 23:18 6°**)** 15'42 -2924 May 03 j 11:06 behind sun begin 18°**Y**21'17 min. Earth dist. -2919 Sep 05 j 16:32 0°**)** 11′59 0.49876 AU behind sun end -2924 May 04 j 21:23 19°**Y**17′22 -2919 Sep 06 j 05:50 30°R≈ max. Earth dist. -2924 May 19 j 16:49 28°**Y**55′56 2.63519 AU greatest brilliancy -2919 Sep 12 j 11:16 27°**≈**42'14 -2.2m -2924 May 21 j 08:23 0°8 opposition -2919 Sep 13 j 11:25 27°≈19'56 -3°55'18 morning rise -2924 Jun 21 j 19:08 20°811'54 direct -2919 Oct 17 j 10:12 20°≈03'07 -2924 Jul 07 j 04:59 $0^{\circ}II$ -2919 Nov 30 j 07:12 0°**)**€ -2924 Aug 23 j 19:51 0ಂತಾ asc. node -2919 Dec 08 j 23:24 3°**)** 34'48 -2924 Oct 11 j 04:38 $0^{\circ}\Omega$ -2918 Jan 30 j 06:03 $0^{\circ}\Upsilon$ -2924 Nov 30 j 09:43 0° m -2918 Mar 23 j 05:18 0°8 -2923 Jan 26 j 17:17 0∘**⊽** -2918 May 11 j 15:08 $0^{\circ}\Pi$ retrograde -2923 Mar 22 j 20:53 14°**£**28'17 -2918 Jun 28 i 02:47 0ಂತಾ -2923 Apr 23 j 19:19 8°**£**43'41 0°17'21 -2918 Jul 11 i 09:45 8°938'06 opposition evening set greatest brilliancy -2923 Apr 23 j 21:46 8°**£**41'50 max. Earth dist. -2918 Aug 01 j 10:19 22°931'57 2.58308 AU -2.7mdesc. node -2923 Apr 28 j 04:13 7°**£**24'03 -2918 Aug 12 j 12:52 $0^{\circ}\Omega$ -2923 Apr 30 j 22:08 6°**£**34'48 min Earth dist 0.41975 AU -2923 May 28 j 05:47 -2918 Aug 28 j 00:16 10°Ω33'21 1°01'09 direct 1°£57'14 conjunction -2918 Aug 28 j 01:33 1°01'13 -2923 Aug 10 j 12:00 oom. 10°**Ω**35'33 minimum elong -2923 Sep 24 j 20:54 -2918 Sep 24 j 20:16 0°×7 O° m -2923 Nov 06 j 08:19 0°정 -2918 Oct 16 j 03:44 15° m 17'08 morning rise -2918 Nov 05 j 05:58 -2923 Dec 18 j 20:33 0°22 0∘ಹ 0°) -2922 Jan 31 j 11:16 -2918 Dec 15 j 04:54 0°M -2922 Mar 06 j 02:46 22°**H**29'00 -2918 Dec 19 j 04:08 3°M01'22 asc. node desc. node $0^{\circ}\Upsilon$ -2917 Jan 23 j 07:59 -2922 Mar 17 j 13:03 0°×7 25°Y36'51 -2917 Mar 03 j 10:37 0°정 evening set -2922 Apr 26 j 00:54 -2922 May 02 j 20:52 0°8 -2917 Apr 12 j 13:59 0°≈ -2917 May 25 j 07:45 0°**₩** conjunction -2922 Jun 12 j 22:54 26°814'24 0°50'06 -2917 Jul 13 j 12:30 $0^{\circ}\Upsilon$ -2922 Jun 12 j 21:36 26°812'21 0°50'10 -2917 Sep 17 j 16:28 21°Y28'00 minimum elong retrograde -2922 Jun 13 j 04:11 26°**8**22'49 2.67142 AU min. Earth dist. -2917 Oct 22 j 14:17 13°**Y**27'46 0.61008 AU max. Earth dist. -2922 Jun 18 j 20:26 $0^{\circ}II$ asc. node -2917 Oct 26 j 23:35 11°Y42'52 -2922 Jul 28 j 09:35 25°**Ⅲ**15'58 -2917 Oct 27 j 10:13 11°**Y**32'16 0°01'06 morning rise opposition -2922 Aug 04 j 18:38 0ಂತಾ -2914 Jun 26 j 04:25 24°9542'12 greatest brilliancy -2922 Sep 20 j 03:04 -2917 Dec 04 j 03:33 2°Y43'45 $0^{\circ}\Omega$ direct -2922 Nov 04 j 18:57 -2916 Feb 25 j 10:37 0° M 0°8 -2922 Dec 20 i 00:03 0°Ω -2916 Apr 19 j 20:26 $0^{\circ}II$ -2921 Feb 03 i 10:34 0°M -2916 Jun 08 i 00:20 0ಂತಾ desc. node -2921 Mar 16 i 05:46 25°M49'54 -2916 Jul 23 j 21:06 $0^{\circ}\Omega$ -2921 Mar 23 i 05:18 0°×7 -2916 Aug 22 i 02:04 20°Ω07'42 evening set -2921 Jun 10 i 03:25 29°×747'55 -2916 Sep 05 j 00:01 retrograde O° m -2921 Jul 07 j 07:09 25° ₹ 21'56 0.38660 AU max. Earth dist. -2916 Sep 06 j 04:15 0° Mp 50'34 2.46928 AU min Earth dist -2921 Jul 10 j 23:37 24° **₹** 19'39 -2.8m greatest brilliancy -2921 Jul 12 j 00:48 24°**₹**01'52 -6°33'17 -2916 Oct 14 j 00:34 opposition conjunction 28° m 36'47 0°15'06 28° m 38'29 direct -2921 Aug 10 j 21:12 18°**х** 53′52 minimum elong -2916 Oct 14 j 01:28 0°15'05 -2921 Sep 24 j 21:04 0°궁 -2916 Oct 13 j 16:18 28° m 21'19 behind sun begin -2921 Nov 20 j 04:31 0°≈ -2916 Oct 14 j 10:38 28° m 55'39 behind sun end -2920 Jan 08 j 02:23 0°**)**€ -2916 Oct 15 j 20:56 0∘ಹ -2920 Jan 22 j 00:42 8° **\(**42'36 15°**£**20'42 asc. node desc. node -2916 Nov 05 j 02:43 $0^{\circ}\Upsilon$ -2920 Feb 24 j 23:43 -2916 Nov 24 j 03:28 0°M 0°8 14°ML08'21 -2920 Apr 12 j 20:52 morning rise -2916 Dec 12 j 07:29 -2920 May 30 j 13:22 Π °0 -2915 Jan 01 j 13:59 0°×7 -2920 Jun 02 j 23:24 2°**Ⅱ**09'53 -2915 Feb 09 j 00:58 0°궁 evening set max. Earth dist. -2920 Jul 05 j 20:00 23°**Ⅱ**08'22 2.65333 AU -2915 Mar 20 j 09:54 0°≈ -2920 Jul 16 j 11:00 0ಂತಾ -2915 Apr 30 j 15:16 0°**)**€ -2915 Jun 13 j 21:34 $0^{\circ}\Upsilon$ -2920 Jul 19 j 08:01 1°951'53 1°09'58 0°8 conjunction -2915 Aug 02 j 20:04 -2920 Jul 19 j 07:37 1°951'14 1°10'03 -2915 Sep 13 j 00:18 19°818'27 minimum elong asc. node

Planetary Phenomena of Mars from -3400 through -2898 (UT), Astrodienst AG 18-Feb-2025 14:23, Attention, astronomical year style is used: The year -3400 in astronomical counting style is the year 3401 BCE in historical counting style. 27°**8**29'43 -2915 Oct 22 j 05:48 -2910 Oct 31 i 18:31 0°×7 retrograde -2915 Nov 30 j 04:29 18°**8**07'37 0.66765 AU -2910 Dec 09 j 15:44 0°궁 min. Earth dist. -2915 Dec 01 j 07:03 17°**8**40'56 2°47'43 -2909 Jan 18 j 14:00 0°≈ opposition -2915 Dec 01 j 03:07 -2909 Feb 21 j 17:38 24°≈42'47 17°**8**44'53 -1 4m greatest brilliancy evening set -2914 Jan 10 j 10:13 8°**8**02'10 -2909 Mar 01 j 05:04 0°**)**€ direct $0^{\circ}II$ $0^{\circ}\Upsilon$ -2914 Mar 24 j 03:34 -2909 Apr 13 j 19:47 0ಂಣ -2914 May 17 j 18:48 2°**Y**45'00 -0°10'29 $0^{\circ}\Omega$ -2909 Apr 17 j 22:05 -2914 Jul 04 j 05:32 conjunction 2° Y45'52-2914 Aug 16 j 17:54 0° m minimum elong -2909 Apr 17 j 22:36 0°10'28 desc. node -2914 Sep 23 j 01:03 27° m/22'29 behind sun begin -2909 Apr 17 j 05:56 2°**Y**17'57 3°**Y**13'47 -2914 Sep 26 j 12:41 0∘**⊽** behind sun end -2909 Apr 18 j 15:16 -2914 Oct 14 j 21:38 -2909 May 05 j 20:31 14°\bar{Y}40'30 evening set 14°**£**00′19 asc. node 17° **Y**44'20-2914 Nov 04 j 12:44 0° M max. Earth dist. -2909 May 10 j 12:14 2.60630 AU -2914 Dec 12 j 16:25 0°**√** -2909 May 29 j 07:06 0°8 morning rise -2909 Jun 07 j 17:04 6°804'57 conjunction -2914 Dec 17 j 02:13 3°**₹**28'36 -0°52'46 -2909 Jul 15 j 06:07 $0^{\circ}\Pi$ minimum elong -2914 Dec 16 j 23:07 3°**₹**22'28 0°52'49 -2909 Sep 01 j 10:31 0ಂತಾ max. Earth dist. -2913 Jan 06 j 19:35 19°**∡**¹46'07 2.37645 AU -2909 Oct 21 j 09:05 $0^{\circ}\Omega$ -2913 Jan 19 j 22:07 0°る -2909 Dec 15 j 09:03 0° m morning rise -2913 Feb 23 j 17:44 26°る41'59 retrograde -2908 Feb 25 j 02:18 21° m 53'48 -2913 Feb 28 j 02:58 0°≈ opposition -2908 Mar 29 j 20:58 15° m 18'49 2°37'50 -2913 Apr 10 j 01:13 0°**)**€ greatest brilliancy -2908 Mar 30 j 19:21 15° M 00'13 -2.3m -2913 May 23 j 08:09 $0^{\circ}\Upsilon$ min. Earth dist. -2908 Apr 07 i 09:20 12° m 29'34 0.46930 AU -2913 Jul 08 j 16:13 0°8 direct -2908 May 06 i 00:36 7° m 15'51 -2913 Jul 31 j 23:26 14°**8**08'12 desc. node -2908 May 14 j 22:29 7° m 48'20 asc. node -2913 Aug 28 j 22:50 $0^{\circ}II$ -2908 Jul 10 j 20:17 0∘**⊽** -2913 Nov 12 j 18:21 0ಂತಾ -2908 Aug 26 j 02:13 0°M -2913 Nov 26 j 07:47 1°905'04 -2908 Oct 06 j 14:14 0°×7 retrograde -2913 Dec 09 j 05:30 -2908 Nov 16 j 05:36 0°궁 30°R∏ -2912 Jan 04 j 13:30 21°II50'49 4°29'13 -2908 Dec 27 j 13:27 0°28 opposition -2912 Jan 04 j 21:54 -2907 Feb 08 j 08:11 0°) 21°**I**I42'30 -1.3m greatest brilliancy min. Earth dist. 28°¥37'00 -2912 Jan 07 j 06:51 20°**I**46'14 0.66189 AU -2907 Mar 22 j 17:56 asc. node 11°**I**I50′24 $0^{\circ}\Upsilon$ -2912 Feb 14 j 18:26 -2907 Mar 24 j 20:03 direct 10°**Y**30'42 -2912 Apr 18 j 04:28 0ಂಣ evening set -2907 Apr 09 j 19:09 -2912 Jun 10 j 20:24 $0^{\circ}\Omega$ -2907 May 09 j 19:21 0° 8 -2912 Jul 26 j 01:20 0° m -2912 Aug 09 j 22:37 -2907 May 29 j 01:55 12°**8**22'48 0°36'22 desc. node 10° m 34'05 conjunction -2912 Sep 05 j 08:41 0∘**⊽** minimum elong -2907 May 29 j 00:43 12°**8**20'54 0°36'25 -2912 Oct 14 j 12:15 0°M max. Earth dist. -2907 Jun 03 j 20:57 16°**8**05'17 2.66376 AU greatest brilliancy -2912 Nov 06 j 11:52 18°ML00'39 -2907 Jun 25 j 16:10 $0^{\circ}II$ 1.2m -2912 Nov 21 j 17:27 0°**√** morning rise -2907 Jul 14 j 08:58 11°**Ⅲ**54'36 -2912 Dec 21 j 04:43 23°**∡**¹06′18 -2907 Aug 11 j 18:25 0ಂತಾ evening set -2912 Dec 30 j 01:40 0°る -2907 Sep 27 j 16:36 $0^{\circ}\Omega$ -2911 Feb 07 j 10:40 -2907 Nov 13 j 12:53 0° M 0°≈ -2907 Dec 31 j 00:17 0∘**ত** conjunction -2911 Feb 23 i 09:09 11°≈48'27 -0°58'21 -2906 Feb 19 i 09:55 0°M minimum elong -2911 Feb 23 i 11:24 11°≈52'35 0°58'23 desc. node -2906 Apr 01 j 22:22 20°M11'34 -2911 Mar 20 j 12:52 0°**∀** retrograde -2906 May 10 i 15:46 28°M32'53 max. Earth dist. -2911 Apr 07 i 09:24 12°**)** 34'54 2.49810 AU opposition -2906 Jun 09 i 23:40 23°M230'46 -4°43'36 -2911 Apr 24 j 03:41 24°**₩**09'07 -2906 Jun 09 i 23:28 23°M30'53 -2.9m morning rise greatest brilliancy 23°M22'24 0.37681 AU -2911 May 02 j 18:09 $0^{\circ}\Upsilon$ min. Earth dist. -2906 Jun 10 j 12:16 -2911 Jun 17 j 22:22 0°826'46 -2906 Jul 10 j 06:23 18°M26'21 asc node direct -2911 Jun 17 j 05:43 0°8 -2906 Aug 24 j 07:04 0°×7 $\Pi^{\circ}0$ -2906 Oct 17 j 01:36 0°る -2911 Aug 04 j 03:28 -2911 Sep 24 j 15:50 0ಂತಾ -2906 Dec 02 j 16:54 0°22 -2911 Nov 27 j 23:14 $0^{\circ}\Omega$ -2905 Jan 17 j 13:34 0°) -2910 Jan 03 j 22:11 6°**Ω**58'44 -2905 Feb 07 j 16:19 13°**)** 42'27 retrograde asc. node -2910 Feb 06 j 19:55 -2905 Mar 04 j 23:37 $0^{\circ}\Upsilon$ 30°Rூ -2910 Feb 10 j 05:33 -2905 Apr 21 j 02:14 0°8 opposition 28°9643'41 4°53'03 -2910 Feb 11 j 07:29 18°**8**24'24 greatest brilliancy 28°**©**19'07 -1.6m evening set -2905 May 20 j 03:38 $0^{\circ}\Pi$ min. Earth dist. -2910 Feb 16 j 17:03 26°516'55 0.59179 AU -2905 Jun 07 j 10:13 direct -2910 Mar 22 j 20:47 18°959'23 max. Earth dist. -2905 Jun 27 j 16:00 12°**Д**53'52 2.66679 AU -2910 May 07 j 08:57 0° Ω desc. node -2910 Jun 27 j 21:50 28°**Ω**00′28 conjunction -2905 Jul 05 j 19:29 18°**I**106'45 1°05'14 -2910 Jul 01 j 01:03 0° m minimum elong -2905 Jul 05 j 18:35 18°**Ⅲ**05′18 1°05'18 0∘**⊽** -2905 Jul 24 j 06:37 0ಂತಾ -2910 Aug 13 j 18:40 -2910 Sep 22 j 22:30 0°M -2905 Aug 19 j 20:14 17°9518'08 morning rise

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•	omena of Mars fron		•	* *			e 50
Attention, astronom	ical year style is used: Th	-	n astronomical co				
	-2905 Sep 08 j 01:51	0 $^{\circ}$ Ω		min. Earth dist.	-2900 Nov 15 j 06:06		0.65252 AU
	-2905 Oct 22 j 14:18	0° ™		opposition	-2900 Nov 17 j 20:11	4° 8 18'55	1°51'16
	-2905 Dec 04 j 21:33	0∘ ⊽		greatest brilliancy	-2900 Nov 17 j 15:08	4° 8 24'00	-1.4m
	-2904 Jan 16 j 06:55	0° M			-2900 Nov 29 j 03:42	30° ጺ ϒ	
desc. node	-2904 Feb 17 j 22:05	23°M16'44		direct	-2900 Dec 27 j 04:54	24° Y 56′00	
	-2904 Feb 27 j 08:59	0° ∡ ¹			-2899 Jan 27 j 04:24	9° 8	
	-2904 Apr 10 j 16:19	0°ප			-2899 Apr 04 j 13:28	$\Pi^{\circ}0$	
	-2904 May 30 j 20:50	0° ≈			-2899 May 26 j 04:05	0ಂ ತಾ	
retrograde	-2904 Jul 17 j 23:43	13° ≈ 42′00			-2899 Jul 11 j 19:23	0 $^{\circ}$ Ω	
min. Earth dist.	-2904 Aug 14 j 15:30	8° ≈ 30'45	0.44854 AU		-2899 Aug 24 j 02:25	O° Mp	
greatest brilliancy	-2904 Aug 21 j 05:28	6° ≈ 17'02	-2.4m	evening set	-2899 Sep 22 j 02:02	21°Mp09'54	
opposition	-2904 Aug 22 j 15:33	5° ≈ 47'56	-5°32'50		-2899 Oct 03 j 21:04	0∘ ত	
	-2904 Sep 14 j 06:01	30°Ŗる		desc. node	-2899 Oct 09 j 17:57	4° ≏ 26'24	
direct	-2904 Sep 23 j 21:08	29° පි 22'16		max. Earth dist.	-2899 Oct 18 j 19:29	11° ≏ 20'45	2.39498 AU
	-2904 Oct 03 j 17:39	0° ≈			-2899 Nov 11 j 22:51	0° M,	
	-2904 Dec 18 j 23:33	0° ∀					
asc. node	-2904 Dec 25 j 15:44	3° ¥ 38′20		conjunction	-2899 Nov 20 j 01:21	6°M19'37	-0°28'16
	-2903 Feb 09 j 11:43	0° Y		minimum elong	-2899 Nov 19 j 23:12	6°M15'25	0°28'18
	-2903 Mar 31 j 06:54	$_{0\circ}$ 8			-2899 Dec 20 j 04:27	0° ∡ 7	
	-2903 May 18 j 20:17	Π $^{\circ}0$					
evening set	-2903 Jun 26 j 06:15	24° Ⅲ 20′53					
	-2903 Jul 05 j 00:40	0 \circ \odot					
max. Earth dist.	-2903 Jul 21 j 10:53	10°5542'16	2.61652 AU				
conjunction	-2903 Aug 11 j 23:59	24° © 59'02	1°08'33				
minimum elong	-2903 Aug 12 j 00:37	25°900'05	1°08'38				
	-2903 Aug 19 j 11:08	$0^{\circ}\Omega$					
morning rise	-2903 Sep 28 j 01:49	27° Ω 14'36					
	-2903 Oct 01 j 23:58	0° m)					
	-2903 Nov 12 j 18:23	0∘ ⊽					
	-2903 Dec 23 j 03:42	0° M					
desc. node	-2902 Jan 04 j 21:35	9°M37'10					
	-2902 Jan 31 j 17:38	0° ∡ ¹					
	-2902 Mar 12 j 07:48	ರ°0					
	-2902 Apr 22 j 04:00	0° ≈					
	-2902 Jun 05 j 14:13	0° ∀					
	-2902 Aug 03 j 05:40	0° Y					
retrograde	-2902 Sep 02 j 14:28	5° Ƴ 40'48					
-	-2902 Oct 01 j 06:26	30° ₹					
min. Earth dist.	-2902 Oct 05 j 14:55	28° ¥ 21'33	0.57182 AU				
opposition	-2902 Oct 11 j 19:16	25° ¥ 56′18	-1°22'53				
greatest brilliancy	-2902 Oct 11 j 12:21	26° ∺ 03'05	-1.8m				
asc. node	-2902 Nov 12 j 15:01	17° ¥ 45'42					
direct	-2902 Nov 17 j 05:20	17°) 37′27					
	-2901 Jan 06 j 23:21	0° Y					
	-2901 Mar 08 j 06:43	0°8					
	-2901 Apr 28 j 23:50	$\Pi^{\circ}0$					
	-2901 Jun 16 j 07:34	0ಂಣ					
	-2901 Jul 31 j 22:36	$0^{\circ}\Omega$					
evening set	-2901 Aug 05 j 14:33	3° Ω 09′52					
max. Earth dist.	-2901 Aug 21 j 18:11	14° Ω 15′58	2.51781 AU				
	-2901 Sep 13 j 02:29	0° m)					
conjunction	-2901 Sep 24 j 19:51	8° m 25'45	0°37'41				
minimum elong	-2901 Sep 24 j 21:30	8° m 28'44	0°37'42				
	-2901 Oct 24 j 03:37	0∘ ⊽					
morning rise	-2901 Nov 18 j 05:53	18° ≏ 57'17					
desc. node	-2901 Nov 22 j 19:59	22° ≏ 27'41					
	-2901 Dec 02 j 15:35	0° M					
	-2900 Jan 10 j 07:23	0° ∡ ¹					
	-2900 Feb 17 j 22:40	ರ∘ರ					
	-2900 Mar 28 j 11:48	0° ≈					
	-2900 May 09 j 00:49	0° ∀					
	-2900 Jun 23 j 05:54	0° Y					
	-2900 Aug 16 j 13:11	0°8					
asc. node	-2900 Sep 29 j 14:57	13° 8 42'43					
retrograde	-2900 Oct 08 j 17:45	14° 8 14'51					