

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|------------|------------|-------------------|-------------|-----------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 01-01-2010 | 19:36(-1T) | 58°53' 55" | 03:16 | +58°17' 07" | 10:55 | 301°11' 53" | 08:31 | 16:32 | 17:37 | 09:01 |
| 02-01-2010 | 19:31(-1T) | 58°44' 43" | 03:11 | +58°22' 29" | 10:51 | 301°21' 18" | 08:31 | 16:34 | 19:06 | 09:34 |
| 03-01-2010 | 19:26(-1T) | 58°35' 07" | 03:06 | +58°28' 05" | 10:47 | 301°31' 06" | 08:31 | 16:35 | 20:34 | 10:00 |
| 04-01-2010 | 19:20(-1T) | 58°25' 07" | 03:02 | +58°33' 53" | 10:43 | 301°41' 17" | 08:30 | 16:36 | 21:59 | 10:21 |
| 05-01-2010 | 19:15(-1T) | 58°14' 44" | 02:57 | +58°39' 54" | 10:39 | 301°51' 50" | 08:30 | 16:37 | 23:21 | 10:39 |
| 06-01-2010 | 19:10(-1T) | 58°03' 59" | 02:52 | +58°46' 07" | 10:35 | 302°02' 46" | 08:30 | 16:38 | --- | 10:56 |
| 07-01-2010 | 19:04(-1T) | 57°52' 53" | 02:47 | +58°52' 32" | 10:31 | 302°14' 02" | 08:30 | 16:39 | 00:41 | 11:15 |
| 08-01-2010 | 18:59(-1T) | 57°41' 26" | 02:43 | +58°59' 08" | 10:27 | 302°25' 38" | 08:29 | 16:41 | 01:59 | 11:35 |
| 09-01-2010 | 18:53(-1T) | 57°29' 40" | 02:38 | +59°05' 54" | 10:23 | 302°37' 33" | 08:29 | 16:42 | 03:16 | 12:00 |
| 10-01-2010 | 18:48(-1T) | 57°17' 35" | 02:33 | +59°12' 49" | 10:18 | 302°49' 46" | 08:28 | 16:43 | 04:29 | 12:30 |
| 11-01-2010 | 18:42(-1T) | 57°05' 13" | 02:28 | +59°19' 54" | 10:14 | 303°02' 57" | 08:28 | 16:45 | 05:37 | 13:10 |
| 12-01-2010 | 18:36(-1T) | 56°52' 36" | 02:23 | +59°27' 07" | 10:10 | 303°15' 45" | 08:27 | 16:46 | 06:36 | 13:59 |
| 13-01-2010 | 18:30(-1T) | 56°39' 43" | 02:18 | +59°34' 26" | 10:05 | 303°28' 47" | 08:26 | 16:48 | 07:23 | 14:57 |
| 14-01-2010 | 18:24(-1T) | 56°26' 38" | 02:12 | +59°41' 53" | 10:01 | 303°42' 01" | 08:26 | 16:49 | 08:01 | 16:02 |
| 15-01-2010 | 18:18(-1T) | 56°13' 21" | 02:07 | +59°49' 24" | 09:57 | 303°55' 25" | 08:25 | 16:51 | 08:29 | 17:10 |
| 16-01-2010 | 18:12(-1T) | 55°59' 55" | 02:02 | +59°57' 00" | 09:52 | 304°08' 58" | 08:24 | 16:52 | 08:52 | 18:18 |
| 17-01-2010 | 18:06(-1T) | 55°46' 20" | 01:57 | +60°04' 40" | 09:48 | 304°22' 38" | 08:23 | 16:54 | 09:10 | 19:27 |
| 18-01-2010 | 18:00(-1T) | 55°32' 39" | 01:51 | +60°12' 22" | 09:43 | 304°36' 24" | 08:22 | 16:55 | 09:26 | 20:34 |
| 19-01-2010 | 17:54(-1T) | 55°18' 53" | 01:46 | +60°20' 05" | 09:39 | 304°50' 13" | 08:21 | 16:57 | 09:40 | 21:41 |
| 20-01-2010 | 17:48(-1T) | 55°05' 04" | 01:41 | +60°27' 49" | 09:34 | 305°04' 03" | 08:20 | 16:58 | 09:54 | 22:49 |
| 21-01-2010 | 17:42(-1T) | 54°51' 14" | 01:35 | +60°35' 32" | 09:29 | 305°17' 53" | 08:19 | 17:00 | 10:09 | 23:58 |
| 22-01-2010 | 17:35(-1T) | 54°37' 26" | 01:30 | +60°43' 13" | 09:25 | 305°31' 41" | 08:18 | 17:02 | 10:26 | --- |
| 23-01-2010 | 17:29(-1T) | 54°23' 40" | 01:24 | +60°50' 51" | 09:20 | 305°45' 25" | 08:17 | 17:03 | 10:46 | 01:10 |
| 24-01-2010 | 17:23(-1T) | 54°09' 58" | 01:19 | +60°58' 26" | 09:15 | 305°59' 04" | 08:16 | 17:05 | 11:12 | 02:25 |
| 25-01-2010 | 17:17(-1T) | 53°56' 23" | 01:13 | +61°05' 56" | 09:11 | 306°12' 34" | 08:15 | 17:07 | 11:48 | 03:40 |
| 26-01-2010 | 17:10(-1T) | 53°42' 56" | 01:08 | +61°13' 20" | 09:06 | 306°25' 56" | 08:13 | 17:08 | 12:36 | 04:53 |
| 27-01-2010 | 17:04(-1T) | 53°29' 40" | 01:02 | +61°20' 37" | 09:01 | 306°39' 06" | 08:12 | 17:10 | 13:41 | 05:57 |
| 28-01-2010 | 16:58(-1T) | 53°16' 34" | 00:57 | +61°27' 47" | 08:56 | 306°52' 03" | 08:11 | 17:12 | 15:00 | 06:49 |
| 29-01-2010 | 16:51(-1T) | 53°03' 42" | 00:51 | +61°34' 48" | 08:52 | 307°04' 46" | 08:10 | 17:13 | 16:28 | 07:28 |
| 30-01-2010 | 16:45(-1T) | 52°51' 05" | 00:46 | +61°41' 40" | 08:47 | 307°17' 13" | 08:08 | 17:15 | 17:59 | 07:58 |

Aufgang/Untergang

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 Mars

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|------------|------------|------------|-------------------|-------------|------------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 31-01-2010 | 16:39(-1T) | 52°38' 44" | 00:40 | +61°48' 22" | 08:42 | 307°29' 23" | 08:07 | 17:17 | 19:29 | 08:22 |
| 01-02-2010 | 16:32(-1T) | 52°26' 41" | 00:34 | +61°54' 54" | 08:37 | 307°41' 15" | 08:05 | 17:19 | 20:55 | 08:42 |
| 02-02-2010 | 16:26(-1T) | 52°14' 57" | 00:29 | +62°01' 14" | 08:32 | 307°52' 46" | 08:04 | 17:20 | 22:19 | 09:01 |
| 03-02-2010 | 16:20(-1T) | 52°03' 33" | 00:23 | +62°07' 22" | 08:27 | 308°03' 56" | 08:02 | 17:22 | 23:41 | 09:19 |
| 04-02-2010 | 16:13(-1T) | 51°52' 30" | 00:18 | +62°13' 18" | 08:22 | 308°14' 44" | 08:01 | 17:24 | --- | 09:40 |
| 05-02-2010 | 16:07(-1T) | 51°41' 50" | 00:12 | +62°19' 00" | 08:17 | 308°25' 09" | 07:59 | 17:26 | 01:01 | 10:03 |
| 06-02-2010 | 16:01(-1T) | 51°31' 34" | 00:07 | +62°24' 29" | 08:13 | 308°35' 09" | 07:57 | 17:27 | 02:18 | 10:32 |
| 07-02-2010 | 15:55(-1T) | 51°21' 43" | 00:01 | +62°29' 44" | 08:08 | 308°44' 44" | 07:56 | 17:29 | 03:29 | 11:09 |
| 07-02-2010 | 15:49 | 51°12' 17" | 23:56 | +62°34' 45" | 08:03(+1T) | 308°53' 53" | 07:56 | 17:29 | 03:29 | 11:09 |
| 08-02-2010 | 15:43 | 51°03' 17" | 23:50 | +62°39' 30" | 07:58(+1T) | 309°02' 34" | 07:54 | 17:31 | 04:31 | 11:55 |
| 09-02-2010 | 15:37 | 50°54' 44" | 23:45 | +62°44' 01" | 07:53(+1T) | 309°10' 48" | 07:52 | 17:33 | 05:22 | 12:50 |
| 10-02-2010 | 15:31 | 50°46' 40" | 23:39 | +62°48' 16" | 07:48(+1T) | 309°18' 35" | 07:51 | 17:35 | 06:02 | 13:53 |
| 11-02-2010 | 15:25 | 50°39' 03" | 23:34 | +62°52' 16" | 07:43(+1T) | 309°25' 52" | 07:49 | 17:36 | 06:33 | 15:00 |
| 12-02-2010 | 15:20 | 50°31' 55" | 23:29 | +62°56' 00" | 07:38(+1T) | 309°32' 41" | 07:47 | 17:38 | 06:58 | 16:08 |
| 13-02-2010 | 15:14 | 50°25' 15" | 23:23 | +62°59' 28" | 07:33(+1T) | 309°39' 01" | 07:45 | 17:40 | 07:17 | 17:17 |
| 14-02-2010 | 15:08 | 50°19' 05" | 23:18 | +63°02' 41" | 07:28(+1T) | 309°44' 52" | 07:44 | 17:42 | 07:34 | 18:24 |
| 15-02-2010 | 15:03 | 50°13' 23" | 23:13 | +63°05' 38" | 07:24(+1T) | 309°50' 13" | 07:42 | 17:43 | 07:49 | 19:32 |
| 16-02-2010 | 14:57 | 50°08' 11" | 23:08 | +63°08' 19" | 07:19(+1T) | 309°55' 06" | 07:40 | 17:45 | 08:03 | 20:39 |
| 17-02-2010 | 14:52 | 50°03' 28" | 23:03 | +63°10' 45" | 07:14(+1T) | 309°59' 29" | 07:38 | 17:47 | 08:18 | 21:48 |
| 18-02-2010 | 14:46 | 49°59' 13" | 22:58 | +63°12' 55" | 07:09(+1T) | 310°03' 24" | 07:36 | 17:49 | 08:34 | 22:58 |
| 19-02-2010 | 14:41 | 49°55' 28" | 22:53 | +63°14' 50" | 07:04(+1T) | 310°06' 51" | 07:34 | 17:50 | 08:52 | --- |
| 20-02-2010 | 14:36 | 49°52' 10" | 22:48 | +63°16' 30" | 07:00(+1T) | 310°09' 49" | 07:32 | 17:52 | 09:16 | 00:11 |
| 21-02-2010 | 14:31 | 49°49' 20" | 22:43 | +63°17' 55" | 06:55(+1T) | 310°12' 20" | 07:30 | 17:54 | 09:46 | 01:24 |
| 22-02-2010 | 14:26 | 49°46' 58" | 22:38 | +63°19' 06" | 06:50(+1T) | 310°14' 24" | 07:28 | 17:56 | 10:28 | 02:36 |
| 23-02-2010 | 14:21 | 49°45' 02" | 22:33 | +63°20' 02" | 06:46(+1T) | 310°16' 02" | 07:26 | 17:57 | 11:23 | 03:42 |
| 24-02-2010 | 14:16 | 49°43' 33" | 22:28 | +63°20' 45" | 06:41(+1T) | 310°17' 13" | 07:24 | 17:59 | 12:32 | 04:37 |
| 25-02-2010 | 14:11 | 49°42' 30" | 22:24 | +63°21' 13" | 06:36(+1T) | 310°17' 59" | 07:22 | 18:01 | 13:54 | 05:21 |
| 26-02-2010 | 14:07 | 49°41' 52" | 22:19 | +63°21' 29" | 06:32(+1T) | 310°18' 20" | 07:20 | 18:02 | 15:22 | 05:55 |
| 27-02-2010 | 14:02 | 49°41' 38" | 22:15 | +63°21' 32" | 06:27(+1T) | 310°18' 17" | 07:18 | 18:04 | 16:51 | 06:21 |
| 28-02-2010 | 13:58 | 49°41' 49" | 22:10 | +63°21' 22" | 06:23(+1T) | 310°17' 50" | 07:16 | 18:06 | 18:20 | 06:43 |

Aufgang/Untergang

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Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|------------|-------------------|-------------|------------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 01-03-2010 | 13:53 | 49°42' 23" | 22:06 | +63°21' 00" | 06:18(+1T) | 310°17' 01" | 07:14 | 18:08 | 19:46 | 07:03 |
| 02-03-2010 | 13:49 | 49°43' 19" | 22:01 | +63°20' 26" | 06:14(+1T) | 310°15' 49" | 07:12 | 18:09 | 21:12 | 07:22 |
| 03-03-2010 | 13:44 | 49°45' 11" | 21:57 | +63°19' 40" | 06:09(+1T) | 310°14' 16" | 07:10 | 18:11 | 22:36 | 07:42 |
| 04-03-2010 | 13:40 | 49°46' 43" | 21:53 | +63°18' 43" | 06:05(+1T) | 310°12' 21" | 07:08 | 18:13 | 23:57 | 08:05 |
| 05-03-2010 | 13:36 | 49°48' 36" | 21:48 | +63°17' 34" | 06:00(+1T) | 310°10' 05" | 07:06 | 18:14 | --- | 08:33 |
| 06-03-2010 | 13:32 | 49°50' 50" | 21:44 | +63°16' 15" | 05:56(+1T) | 310°07' 29" | 07:04 | 18:16 | 01:13 | 09:08 |
| 07-03-2010 | 13:28 | 49°53' 24" | 21:40 | +63°14' 45" | 05:52(+1T) | 310°03' 58" | 07:01 | 18:18 | 02:20 | 09:51 |
| 08-03-2010 | 13:24 | 49°56' 18" | 21:36 | +63°13' 05" | 05:47(+1T) | 310°00' 46" | 06:59 | 18:19 | 03:16 | 10:44 |
| 09-03-2010 | 13:20 | 49°59' 31" | 21:32 | +63°11' 15" | 05:43(+1T) | 309°57' 16" | 06:57 | 18:21 | 04:01 | 11:45 |
| 10-03-2010 | 13:16 | 50°03' 03" | 21:28 | +63°09' 14" | 05:39(+1T) | 309°53' 28" | 06:55 | 18:23 | 04:35 | 12:50 |
| 11-03-2010 | 13:13 | 50°06' 54" | 21:24 | +63°07' 04" | 05:35(+1T) | 309°49' 21" | 06:53 | 18:24 | 05:02 | 13:58 |
| 12-03-2010 | 13:09 | 50°11' 41" | 21:20 | +63°04' 44" | 05:31(+1T) | 309°44' 57" | 06:51 | 18:26 | 05:23 | 15:06 |
| 13-03-2010 | 13:05 | 50°16' 14" | 21:16 | +63°02' 15" | 05:27(+1T) | 309°40' 15" | 06:48 | 18:28 | 05:41 | 16:14 |
| 14-03-2010 | 13:02 | 50°21' 05" | 21:12 | +62°59' 37" | 05:23(+1T) | 309°35' 17" | 06:46 | 18:29 | 05:56 | 17:21 |
| 15-03-2010 | 12:59 | 50°26' 12" | 21:09 | +62°56' 50" | 05:18(+1T) | 309°30' 02" | 06:44 | 18:31 | 06:11 | 18:29 |
| 16-03-2010 | 12:55 | 50°31' 35" | 21:05 | +62°53' 54" | 05:14(+1T) | 309°24' 32" | 06:42 | 18:33 | 06:26 | 19:38 |
| 17-03-2010 | 12:52 | 50°37' 15" | 21:01 | +62°50' 49" | 05:11(+1T) | 309°18' 45" | 06:40 | 18:34 | 06:42 | 20:48 |
| 18-03-2010 | 12:49 | 50°43' 10" | 20:58 | +62°47' 36" | 05:07(+1T) | 309°12' 43" | 06:37 | 18:36 | 07:00 | 22:00 |
| 19-03-2010 | 12:45 | 50°49' 20" | 20:54 | +62°44' 14" | 05:03(+1T) | 309°06' 26" | 06:35 | 18:37 | 07:22 | 23:14 |
| 20-03-2010 | 12:42 | 50°55' 46" | 20:51 | +62°40' 44" | 04:59(+1T) | 308°59' 54" | 06:33 | 18:39 | 07:50 | --- |
| 21-03-2010 | 12:39 | 51°02' 26" | 20:47 | +62°37' 06" | 04:55(+1T) | 308°53' 08" | 06:31 | 18:41 | 08:28 | 00:26 |
| 22-03-2010 | 12:36 | 51°09' 20" | 20:44 | +62°33' 21" | 04:51(+1T) | 308°46' 07" | 06:29 | 18:42 | 09:17 | 01:32 |
| 23-03-2010 | 12:33 | 51°16' 28" | 20:40 | +62°29' 27" | 04:47(+1T) | 308°38' 53" | 06:26 | 18:44 | 10:20 | 02:30 |
| 24-03-2010 | 12:30 | 51°23' 51" | 20:37 | +62°25' 26" | 04:44(+1T) | 308°31' 25" | 06:24 | 18:46 | 11:34 | 03:16 |
| 25-03-2010 | 12:28 | 51°31' 26" | 20:34 | +62°21' 17" | 04:40(+1T) | 308°23' 44" | 06:22 | 18:47 | 12:56 | 03:53 |
| 26-03-2010 | 12:25 | 51°39' 15" | 20:31 | +62°17' 01" | 04:36(+1T) | 308°15' 50" | 06:20 | 18:49 | 14:22 | 04:21 |
| 27-03-2010 | 12:22 | 51°47' 17" | 20:27 | +62°12' 38" | 05:32(+1T) | 308°07' 43" | 06:18 | 18:50 | 15:48 | 04:44 |
| 28-03-2010 | 13:19 | 51°55' 31" | 21:24 | +62°08' 07" | 05:29(+1T) | 307°59' 23" | 07:15 | 19:52 | 18:13 | 06:05 |
| 29-03-2010 | 13:17 | 52°03' 58" | 21:21 | +62°03' 30" | 05:25(+1T) | 307°50' 51" | 07:13 | 19:54 | 19:39 | 06:24 |
| 30-03-2010 | 13:14 | 52°12' 37" | 21:18 | +61°58' 45" | 05:21(+1T) | 307°41' 26" | 07:11 | 19:55 | 21:04 | 06:44 |

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| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 31-03-2010 | 13:12 | 52°21' 29" | 21:15 | +61°53' 53" | 05:18(+1T) | 307°32' 27" | 07:09 | 19:57 | 22:27 | 07:05 |
| 01-04-2010 | 13:09 | 52°30' 32" | 21:12 | +61°48' 55" | 05:14(+1T) | 307°23' 16" | 07:07 | 19:58 | 23:48 | 07:31 |
| 02-04-2010 | 13:07 | 52°39' 47" | 21:09 | +61°43' 49" | 05:11(+1T) | 307°13' 54" | 07:04 | 20:00 | --- | 08:04 |
| 03-04-2010 | 13:04 | 52°49' 14" | 21:06 | +61°38' 37" | 05:07(+1T) | 307°04' 19" | 07:02 | 20:02 | 01:01 | 08:44 |
| 04-04-2010 | 13:02 | 52°58' 53" | 21:03 | +61°33' 17" | 05:04(+1T) | 306°54' 33" | 07:00 | 20:03 | 02:04 | 09:35 |
| 05-04-2010 | 13:00 | 53°08' 43" | 21:00 | +61°27' 51" | 05:00(+1T) | 306°44' 36" | 06:58 | 20:05 | 02:55 | 10:34 |
| 06-04-2010 | 12:57 | 53°18' 45" | 20:57 | +61°22' 18" | 04:57(+1T) | 306°34' 27" | 06:56 | 20:06 | 03:33 | 11:39 |
| 07-04-2010 | 12:55 | 53°28' 59" | 20:54 | +61°16' 39" | 04:53(+1T) | 306°24' 06" | 06:54 | 20:08 | 04:03 | 12:46 |
| 08-04-2010 | 12:53 | 53°39' 23" | 20:52 | +61°10' 52" | 04:50(+1T) | 306°13' 34" | 06:51 | 20:10 | 04:26 | 13:54 |
| 09-04-2010 | 12:51 | 53°49' 59" | 20:49 | +61°04' 59" | 04:46(+1T) | 306°02' 51" | 06:49 | 20:11 | 04:46 | 15:02 |
| 10-04-2010 | 12:49 | 54°00' 47" | 20:46 | +60°58' 59" | 04:43(+1T) | 305°51' 57" | 06:47 | 20:13 | 05:02 | 16:09 |
| 11-04-2010 | 12:47 | 54°11' 45" | 20:43 | +60°52' 52" | 04:40(+1T) | 305°40' 52" | 06:45 | 20:14 | 05:17 | 17:17 |
| 12-04-2010 | 12:44 | 54°22' 55" | 20:41 | +60°46' 38" | 04:36(+1T) | 305°29' 35" | 06:43 | 20:16 | 05:32 | 18:25 |
| 13-04-2010 | 12:42 | 54°34' 16" | 20:38 | +60°40' 18" | 04:33(+1T) | 305°18' 08" | 06:41 | 20:18 | 05:48 | 19:35 |
| 14-04-2010 | 12:40 | 54°45' 48" | 20:35 | +60°33' 51" | 04:30(+1T) | 305°06' 30" | 06:39 | 20:19 | 06:06 | 20:48 |
| 15-04-2010 | 12:39 | 54°57' 30" | 20:33 | +60°27' 17" | 04:26(+1T) | 304°54' 40" | 06:37 | 20:21 | 06:27 | 22:01 |
| 16-04-2010 | 12:37 | 55°09' 24" | 20:30 | +60°20' 36" | 04:23(+1T) | 304°42' 40" | 06:35 | 20:22 | 06:54 | 23:15 |
| 17-04-2010 | 12:35 | 55°21' 28" | 20:27 | +60°13' 49" | 04:20(+1T) | 304°30' 29" | 06:32 | 20:24 | 07:29 | --- |
| 18-04-2010 | 12:33 | 55°33' 44" | 20:25 | +60°06' 55" | 04:16(+1T) | 304°18' 08" | 06:30 | 20:26 | 08:15 | 00:24 |
| 19-04-2010 | 12:31 | 55°46' 10" | 20:22 | +59°59' 54" | 04:13(+1T) | 304°05' 36" | 06:28 | 20:27 | 09:14 | 01:25 |
| 20-04-2010 | 12:29 | 55°58' 46" | 20:20 | +59°52' 47" | 04:10(+1T) | 303°52' 53" | 06:26 | 20:29 | 10:25 | 02:14 |
| 21-04-2010 | 12:28 | 56°11' 33" | 20:17 | +59°45' 33" | 04:07(+1T) | 303°40' 01" | 06:24 | 20:30 | 11:43 | 02:53 |
| 22-04-2010 | 12:26 | 56°24' 30" | 20:15 | +59°38' 13" | 04:03(+1T) | 303°26' 58" | 06:22 | 20:32 | 13:05 | 03:23 |
| 23-04-2010 | 12:24 | 56°37' 37" | 20:12 | +59°30' 46" | 04:00(+1T) | 303°13' 44" | 06:20 | 20:33 | 14:28 | 03:47 |
| 24-04-2010 | 12:22 | 56°50' 55" | 20:10 | +59°23' 12" | 03:57(+1T) | 303°00' 21" | 06:18 | 20:35 | 15:51 | 04:08 |
| 25-04-2010 | 12:21 | 57°04' 22" | 20:08 | +59°15' 32" | 03:54(+1T) | 302°46' 48" | 06:17 | 20:37 | 17:13 | 04:27 |
| 26-04-2010 | 12:19 | 57°18' 00" | 20:05 | +59°07' 46" | 03:51(+1T) | 302°33' 05" | 06:15 | 20:38 | 18:36 | 04:46 |
| 27-04-2010 | 12:18 | 57°31' 47" | 20:03 | +58°59' 53" | 03:47(+1T) | 302°19' 12" | 06:13 | 20:40 | 19:59 | 05:07 |
| 28-04-2010 | 12:16 | 57°45' 45" | 20:00 | +58°51' 54" | 03:44(+1T) | 302°05' 09" | 06:11 | 20:41 | 21:21 | 05:30 |
| 29-04-2010 | 12:15 | 57°59' 52" | 19:58 | +58°43' 48" | 03:41(+1T) | 301°50' 57" | 06:09 | 20:43 | 22:38 | 06:00 |

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|--------------|-------------------|---------------|------------|---------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 30-04-2010 | 12:13 | 58° 14 ' 09" | 19:56 | +58° 35 ' 36" | 03:38(+1T) | 301° 36 ' 35" | 06:07 | 20:44 | 23:47 | 06:37 |
| 01-05-2010 | 12:11 | 58° 28 ' 35" | 19:53 | +58° 27 ' 18" | 03:35(+1T) | 301° 22 ' 03" | 06:05 | 20:46 | --- | 07:24 |
| 02-05-2010 | 12:10 | 58° 43 ' 11" | 19:51 | +58° 18 ' 53" | 03:32(+1T) | 301° 07 ' 22" | 06:04 | 20:48 | 00:44 | 08:20 |
| 03-05-2010 | 12:09 | 58° 57 ' 57" | 19:49 | +58° 10 ' 22" | 03:28(+1T) | 300° 52 ' 31" | 06:02 | 20:49 | 01:28 | 09:24 |
| 04-05-2010 | 12:07 | 59° 12 ' 52" | 19:47 | +58° 01 ' 44" | 03:25(+1T) | 300° 37 ' 31" | 06:00 | 20:51 | 02:02 | 10:32 |
| 05-05-2010 | 12:06 | 59° 27 ' 57" | 19:44 | +57° 53 ' 00" | 03:22(+1T) | 300° 22 ' 21" | 05:58 | 20:52 | 02:28 | 11:40 |
| 06-05-2010 | 12:04 | 59° 43 ' 11" | 19:42 | +57° 44 ' 10" | 03:19(+1T) | 300° 07 ' 02" | 05:57 | 20:54 | 02:49 | 12:48 |
| 07-05-2010 | 12:03 | 59° 58 ' 35" | 19:40 | +57° 35 ' 13" | 03:16(+1T) | 299° 51 ' 33" | 05:55 | 20:55 | 03:07 | 13:56 |
| 08-05-2010 | 12:02 | 60° 14 ' 08" | 19:38 | +57° 26 ' 10" | 03:13(+1T) | 299° 35 ' 55" | 05:53 | 20:57 | 03:22 | 15:02 |
| 09-05-2010 | 12:00 | 60° 29 ' 51" | 19:35 | +57° 17 ' 00" | 03:10(+1T) | 299° 20 ' 08" | 05:52 | 20:58 | 03:37 | 16:10 |
| 10-05-2010 | 11:59 | 60° 45 ' 43" | 19:33 | +57° 07 ' 44" | 03:07(+1T) | 299° 04 ' 11" | 05:50 | 21:00 | 03:53 | 17:19 |
| 11-05-2010 | 11:58 | 61° 01 ' 44" | 19:31 | +56° 58 ' 22" | 03:04(+1T) | 298° 48 ' 05" | 05:49 | 21:01 | 04:10 | 18:30 |
| 12-05-2010 | 11:56 | 61° 17 ' 55" | 19:29 | +56° 48 ' 53" | 03:00(+1T) | 298° 31 ' 50" | 05:47 | 21:03 | 04:30 | 19:44 |
| 13-05-2010 | 11:55 | 61° 34 ' 15" | 19:27 | +56° 39 ' 18" | 02:57(+1T) | 298° 15 ' 26" | 05:46 | 21:04 | 04:55 | 20:59 |
| 14-05-2010 | 11:54 | 61° 50 ' 43" | 19:24 | +56° 29 ' 36" | 02:54(+1T) | 297° 58 ' 53" | 05:44 | 21:06 | 05:27 | 22:11 |
| 15-05-2010 | 11:53 | 62° 07 ' 21" | 19:22 | +56° 19 ' 49" | 02:51(+1T) | 297° 42 ' 10" | 05:43 | 21:07 | 06:10 | 23:17 |
| 16-05-2010 | 11:52 | 62° 24 ' 08" | 19:20 | +56° 09 ' 55" | 02:48(+1T) | 297° 25 ' 19" | 05:41 | 21:09 | 07:06 | --- |
| 17-05-2010 | 11:50 | 62° 41 ' 04" | 19:18 | +55° 59 ' 55" | 02:45(+1T) | 297° 08 ' 19" | 05:40 | 21:10 | 08:15 | 00:11 |
| 18-05-2010 | 11:49 | 62° 58 ' 08" | 19:16 | +55° 49 ' 48" | 02:42(+1T) | 296° 51 ' 11" | 05:39 | 21:11 | 09:33 | 00:53 |
| 19-05-2010 | 11:48 | 63° 15 ' 22" | 19:14 | +55° 39 ' 36" | 02:39(+1T) | 296° 33 ' 54" | 05:37 | 21:13 | 10:54 | 01:26 |
| 20-05-2010 | 11:47 | 63° 32 ' 43" | 19:12 | +55° 29 ' 17" | 02:36(+1T) | 296° 16 ' 28" | 05:36 | 21:14 | 12:17 | 01:52 |
| 21-05-2010 | 11:46 | 63° 50 ' 13" | 19:10 | +55° 18 ' 53" | 02:33(+1T) | 295° 58 ' 55" | 05:35 | 21:15 | 13:38 | 02:13 |
| 22-05-2010 | 11:45 | 64° 07 ' 52" | 19:08 | +55° 08 ' 23" | 02:30(+1T) | 295° 41 ' 12" | 05:34 | 21:17 | 14:59 | 02:32 |
| 23-05-2010 | 11:44 | 64° 25 ' 39" | 19:05 | +54° 57 ' 46" | 02:27(+1T) | 295° 23 ' 22" | 05:32 | 21:18 | 16:19 | 02:51 |
| 24-05-2010 | 11:43 | 64° 43 ' 33" | 19:03 | +54° 47 ' 04" | 02:24(+1T) | 295° 05 ' 24" | 05:31 | 21:19 | 17:40 | 03:10 |
| 25-05-2010 | 11:42 | 65° 01 ' 36" | 19:01 | +54° 36 ' 16" | 02:21(+1T) | 294° 47 ' 18" | 05:30 | 21:20 | 19:00 | 03:32 |
| 26-05-2010 | 11:41 | 65° 19 ' 47" | 18:59 | +54° 25 ' 22" | 02:18(+1T) | 294° 29 ' 04" | 05:29 | 21:22 | 20:18 | 03:59 |
| 27-05-2010 | 11:39 | 65° 38 ' 06" | 18:57 | +54° 14 ' 23" | 02:14(+1T) | 294° 10 ' 42" | 05:28 | 21:23 | 21:30 | 04:32 |
| 28-05-2010 | 11:38 | 65° 56 ' 32" | 18:55 | +54° 03 ' 18" | 02:11(+1T) | 293° 52 ' 12" | 05:27 | 21:24 | 22:32 | 05:14 |
| 29-05-2010 | 11:37 | 66° 15 ' 06" | 18:53 | +53° 52 ' 07" | 02:08(+1T) | 293° 33 ' 35" | 05:26 | 21:25 | 23:21 | 06:07 |

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|------------|-------------------|-------------|------------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 30-05-2010 | 11:36 | 66°33' 48" | 18:51 | +53°40' 50" | 02:05(+1T) | 293°14' 50" | 05:26 | 21:26 | --- | 07:08 |
| 31-05-2010 | 11:35 | 66°52' 38" | 18:49 | +53°29' 28" | 02:02(+1T) | 292°55' 57" | 05:25 | 21:27 | 00:00 | 08:16 |
| 01-06-2010 | 11:35 | 67°11' 35" | 18:47 | +53°18' 00" | 01:59(+1T) | 292°36' 57" | 05:24 | 21:28 | 00:29 | 09:25 |
| 02-06-2010 | 11:34 | 67°30' 40" | 18:45 | +53°06' 27" | 01:56(+1T) | 292°17' 50" | 05:23 | 21:29 | 00:52 | 10:34 |
| 03-06-2010 | 11:33 | 67°49' 52" | 18:43 | +52°54' 48" | 01:53(+1T) | 291°58' 35" | 05:23 | 21:30 | 01:11 | 11:41 |
| 04-06-2010 | 11:32 | 68°09' 11" | 18:41 | +52°43' 04" | 01:50(+1T) | 291°39' 13" | 05:22 | 21:31 | 01:27 | 12:48 |
| 05-06-2010 | 11:31 | 68°28' 38" | 18:39 | +52°31' 14" | 01:47(+1T) | 291°19' 43" | 05:21 | 21:32 | 01:42 | 13:54 |
| 06-06-2010 | 11:30 | 68°48' 13" | 18:37 | +52°19' 19" | 01:44(+1T) | 291°00' 06" | 05:21 | 21:33 | 01:57 | 15:02 |
| 07-06-2010 | 11:29 | 69°07' 54" | 18:35 | +52°07' 18" | 01:41(+1T) | 290°40' 22" | 05:20 | 21:34 | 02:13 | 16:11 |
| 08-06-2010 | 11:28 | 69°27' 43" | 18:33 | +51°55' 12" | 01:38(+1T) | 290°20' 31" | 05:20 | 21:35 | 02:32 | 17:24 |
| 09-06-2010 | 11:27 | 69°47' 38" | 18:31 | +51°43' 01" | 01:35(+1T) | 290°00' 33" | 05:19 | 21:36 | 02:54 | 18:38 |
| 10-06-2010 | 11:26 | 70°07' 41" | 18:29 | +51°30' 44" | 01:32(+1T) | 289°40' 28" | 05:19 | 21:36 | 03:23 | 19:52 |
| 11-06-2010 | 11:25 | 70°27' 51" | 18:27 | +51°18' 22" | 01:29(+1T) | 289°20' 16" | 05:19 | 21:37 | 04:02 | 21:01 |
| 12-06-2010 | 11:25 | 70°48' 08" | 18:26 | +51°05' 55" | 01:26(+1T) | 288°59' 57" | 05:19 | 21:38 | 04:53 | 22:02 |
| 13-06-2010 | 11:24 | 71°08' 31" | 18:24 | +50°53' 23" | 01:23(+1T) | 288°39' 32" | 05:18 | 21:38 | 05:58 | 22:50 |
| 14-06-2010 | 11:23 | 71°29' 01" | 18:22 | +50°40' 46" | 01:20(+1T) | 288°19' 00" | 05:18 | 21:39 | 07:15 | 23:27 |
| 15-06-2010 | 11:22 | 71°49' 38" | 18:20 | +50°28' 04" | 01:17(+1T) | 287°58' 21" | 05:18 | 21:39 | 08:38 | 23:55 |
| 16-06-2010 | 11:21 | 72°10' 21" | 18:18 | +50°15' 17" | 01:14(+1T) | 287°37' 36" | 05:18 | 21:40 | 10:03 | --- |
| 17-06-2010 | 11:20 | 72°31' 10" | 18:16 | +50°02' 25" | 01:11(+1T) | 287°16' 45" | 05:18 | 21:40 | 11:26 | 00:19 |
| 18-06-2010 | 11:20 | 72°52' 06" | 18:14 | +49°49' 28" | 01:08(+1T) | 286°55' 48" | 05:18 | 21:40 | 12:48 | 00:39 |
| 19-06-2010 | 11:19 | 73°13' 08" | 18:12 | +49°36' 27" | 01:05(+1T) | 286°34' 45" | 05:18 | 21:41 | 14:08 | 00:57 |
| 20-06-2010 | 11:18 | 73°34' 16" | 18:10 | +49°23' 21" | 01:02(+1T) | 286°13' 35" | 05:18 | 21:41 | 15:28 | 01:16 |
| 21-06-2010 | 11:17 | 73°55' 29" | 18:08 | +49°10' 11" | 00:59(+1T) | 285°52' 20" | 05:18 | 21:41 | 16:47 | 01:37 |
| 22-06-2010 | 11:17 | 74°16' 49" | 18:06 | +48°56' 56" | 00:56(+1T) | 285°31' 00" | 05:19 | 21:41 | 18:04 | 02:01 |
| 23-06-2010 | 11:16 | 74°38' 14" | 18:05 | +48°43' 36" | 00:53(+1T) | 285°09' 33" | 05:19 | 21:42 | 19:17 | 02:32 |
| 24-06-2010 | 11:15 | 74°59' 45" | 18:03 | +48°30' 13" | 00:50(+1T) | 284°48' 01" | 05:19 | 21:42 | 20:22 | 03:10 |
| 25-06-2010 | 11:14 | 75°21' 21" | 18:01 | +48°16' 45" | 00:47(+1T) | 284°26' 24" | 05:20 | 21:42 | 21:16 | 03:58 |
| 26-06-2010 | 11:14 | 75°43' 03" | 17:59 | +48°03' 13" | 00:44(+1T) | 284°04' 41" | 05:20 | 21:42 | 21:58 | 04:56 |
| 27-06-2010 | 11:13 | 76°04' 50" | 17:57 | +47°49' 36" | 00:41(+1T) | 283°42' 53" | 05:20 | 21:42 | 22:30 | 06:01 |
| 28-06-2010 | 11:12 | 76°26' 43" | 17:55 | +47°35' 56" | 00:38(+1T) | 283°21' 00" | 05:21 | 21:41 | 22:55 | 07:10 |

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|------------|-------------------|-------------|------------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 29-06-2010 | 11:11 | 76°48' 40" | 17:53 | +47°22' 11" | 00:35(+1T) | 282°59' 01" | 05:21 | 21:41 | 23:16 | 08:19 |
| 30-06-2010 | 11:11 | 77°10' 43" | 17:51 | +47°08' 23" | 00:32(+1T) | 282°36' 57" | 05:22 | 21:41 | 23:33 | 09:27 |
| 01-07-2010 | 11:10 | 77°32' 52" | 17:50 | +46°54' 31" | 00:29(+1T) | 282°14' 48" | 05:23 | 21:41 | 23:48 | 10:34 |
| 02-07-2010 | 11:09 | 77°55' 05" | 17:48 | +46°40' 34" | 00:26(+1T) | 281°52' 34" | 05:23 | 21:41 | --- | 11:41 |
| 03-07-2010 | 11:09 | 78°17' 23" | 17:46 | +46°26' 34" | 00:22(+1T) | 281°30' 16" | 05:24 | 21:40 | 00:03 | 12:47 |
| 04-07-2010 | 11:08 | 78°39' 46" | 17:44 | +46°12' 30" | 00:19(+1T) | 281°07' 52" | 05:25 | 21:40 | 00:19 | 13:55 |
| 05-07-2010 | 11:07 | 79°02' 14" | 17:42 | +45°58' 22" | 00:16(+1T) | 280°45' 23" | 05:26 | 21:39 | 00:36 | 15:04 |
| 06-07-2010 | 11:07 | 79°24' 47" | 17:40 | +45°44' 11" | 00:13(+1T) | 280°22' 50" | 05:26 | 21:39 | 00:56 | 16:16 |
| 07-07-2010 | 11:06 | 79°47' 25" | 17:39 | +45°29' 56" | 00:10(+1T) | 280°00' 12" | 05:27 | 21:38 | 01:21 | 17:29 |
| 08-07-2010 | 11:05 | 80°10' 07" | 17:37 | +45°15' 37" | 00:07(+1T) | 279°37' 29" | 05:28 | 21:38 | 01:54 | 18:41 |
| 09-07-2010 | 11:05 | 80°32' 54" | 17:35 | +45°01' 15" | 00:04(+1T) | 279°14' 42" | 05:29 | 21:37 | 02:38 | 19:46 |
| 10-07-2010 | 11:04 | 80°55' 46" | 17:33 | +44°46' 49" | 00:01(+1T) | 278°51' 51" | 05:30 | 21:36 | 03:37 | 20:40 |
| 11-07-2010 | 11:03 | 81°18' 41" | 17:31 | +44°32' 20" | 23:58 | 278°28' 55" | 05:31 | 21:36 | 04:49 | 21:23 |
| 12-07-2010 | 11:03 | 81°41' 42" | 17:29 | +44°17' 48" | 23:55 | 278°05' 55" | 05:32 | 21:35 | 06:12 | 21:56 |
| 13-07-2010 | 11:02 | 82°04' 46" | 17:28 | +44°03' 13" | 23:52 | 277°42' 50" | 05:33 | 21:34 | 07:39 | 22:22 |
| 14-07-2010 | 11:02 | 82°27' 54" | 17:26 | +43°48' 35" | 23:49 | 277°19' 42" | 05:34 | 21:33 | 09:06 | 22:43 |
| 15-07-2010 | 11:01 | 82°51' 07" | 17:24 | +43°33' 53" | 23:46 | 276°56' 30" | 05:35 | 21:32 | 10:31 | 23:03 |
| 16-07-2010 | 11:00 | 83°14' 23" | 17:22 | +43°19' 09" | 23:44 | 276°33' 14" | 05:36 | 21:31 | 11:54 | 23:22 |
| 17-07-2010 | 11:00 | 83°37' 43" | 17:20 | +43°04' 22" | 23:41 | 276°09' 55" | 05:38 | 21:30 | 13:15 | 23:43 |
| 18-07-2010 | 10:59 | 84°01' 06" | 17:19 | +42°49' 33" | 23:38 | 275°46' 32" | 05:39 | 21:29 | 14:36 | --- |
| 19-07-2010 | 10:59 | 84°24' 33" | 17:17 | +42°34' 40" | 23:35 | 275°23' 05" | 05:40 | 21:28 | 15:54 | 00:06 |
| 20-07-2010 | 10:58 | 84°48' 04" | 17:15 | +42°19' 46" | 23:32 | 274°59' 35" | 05:41 | 21:27 | 17:08 | 00:34 |
| 21-07-2010 | 10:58 | 85°11' 38" | 17:13 | +42°04' 48" | 23:29 | 274°36' 02" | 05:42 | 21:26 | 18:15 | 01:10 |
| 22-07-2010 | 10:57 | 85°35' 15" | 17:12 | +41°49' 49" | 23:26 | 274°12' 26" | 05:44 | 21:25 | 19:12 | 01:54 |
| 23-07-2010 | 10:56 | 85°58' 55" | 17:10 | +41°34' 47" | 23:23 | 273°48' 47" | 05:45 | 21:23 | 19:57 | 02:48 |
| 24-07-2010 | 10:56 | 86°22' 38" | 17:08 | +41°19' 43" | 23:20 | 273°25' 05" | 05:46 | 21:22 | 20:32 | 03:50 |
| 25-07-2010 | 10:55 | 86°46' 24" | 17:06 | +41°04' 37" | 23:17 | 273°01' 19" | 05:48 | 21:21 | 21:00 | 04:58 |
| 26-07-2010 | 10:55 | 87°10' 13" | 17:05 | +40°49' 29" | 23:14 | 272°37' 31" | 05:49 | 21:19 | 21:21 | 06:07 |
| 27-07-2010 | 10:54 | 87°34' 04" | 17:03 | +40°34' 18" | 23:11 | 272°13' 41" | 05:50 | 21:18 | 21:39 | 07:15 |
| 28-07-2010 | 10:54 | 87°57' 59" | 17:01 | +40°19' 06" | 23:08 | 271°49' 47" | 05:52 | 21:17 | 21:55 | 08:23 |

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|-------------|-------------------|-------------|-----------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 29-07-2010 | 10:53 | 88°21' 56" | 16:59 | +40°03' 53" | 23:05 | 271°25' 52" | 05:53 | 21:15 | 22:11 | 09:29 |
| 30-07-2010 | 10:53 | 88°45' 56" | 16:58 | +39°48' 37" | 23:02 | 271°01' 53" | 05:54 | 21:14 | 22:26 | 10:35 |
| 31-07-2010 | 10:52 | 89°09' 58" | 16:56 | +39°33' 20" | 22:59 | 270°37' 52" | 05:56 | 21:12 | 22:42 | 11:42 |
| 01-08-2010 | 10:52 | 89°34' 02" | 16:54 | +39°18' 01" | 22:56 | 270°13' 49" | 05:57 | 21:11 | 23:00 | 12:50 |
| 02-08-2010 | 10:51 | 89°58' 09" | 16:53 | +39°02' 41" | 22:53 | 269°49' 44" | 05:59 | 21:09 | 23:22 | 13:59 |
| 03-08-2010 | 10:51 | 90°22' 18" | 16:51 | +38°47' 19" | 22:50 | 269°25' 36" | 06:00 | 21:07 | 23:51 | 15:10 |
| 04-08-2010 | 10:51 | 90°46' 29" | 16:49 | +38°31' 56" | 22:47 | 269°01' 26" | 06:02 | 21:06 | --- | 16:21 |
| 05-08-2010 | 10:50 | 91°10' 42" | 16:47 | +38°16' 31" | 22:44 | 268°37' 15" | 06:03 | 21:04 | 00:29 | 17:28 |
| 06-08-2010 | 10:50 | 91°34' 57" | 16:46 | +38°01' 06" | 22:41 | 268°13' 01" | 06:05 | 21:02 | 01:19 | 18:26 |
| 07-08-2010 | 10:49 | 91°59' 14" | 16:44 | +37°45' 39" | 22:38 | 267°48' 46" | 06:06 | 21:01 | 02:23 | 19:14 |
| 08-08-2010 | 10:49 | 92°23' 33" | 16:42 | +37°30' 12" | 22:35 | 267°24' 29" | 06:07 | 20:59 | 03:41 | 19:51 |
| 09-08-2010 | 10:48 | 92°47' 54" | 16:41 | +37°14' 43" | 22:33 | 267°00' 10" | 06:09 | 20:57 | 05:06 | 20:21 |
| 10-08-2010 | 10:48 | 93°12' 15" | 16:39 | +36°59' 14" | 22:30 | 266°35' 50" | 06:10 | 20:55 | 06:34 | 20:45 |
| 11-08-2010 | 10:48 | 93°36' 39" | 16:37 | +36°43' 44" | 22:27 | 266°11' 29" | 06:12 | 20:54 | 08:02 | 21:07 |
| 12-08-2010 | 10:47 | 94°01' 03" | 16:36 | +36°28' 13" | 22:24 | 265°47' 06" | 06:13 | 20:52 | 09:29 | 21:27 |
| 13-08-2010 | 10:47 | 94°25' 29" | 16:34 | +36°12' 43" | 22:21 | 265°22' 43" | 06:15 | 20:50 | 10:54 | 21:47 |
| 14-08-2010 | 10:46 | 94°49' 55" | 16:32 | +35°57' 11" | 22:18 | 264°58' 18" | 06:16 | 20:48 | 12:18 | 22:10 |
| 15-08-2010 | 10:46 | 95°14' 23" | 16:31 | +35°41' 40" | 22:15 | 264°33' 53" | 06:18 | 20:46 | 13:40 | 22:38 |
| 16-08-2010 | 10:46 | 95°38' 51" | 16:29 | +35°26' 09" | 22:12 | 264°09' 27" | 06:19 | 20:44 | 14:57 | 23:11 |
| 17-08-2010 | 10:45 | 96°03' 19" | 16:28 | +35°10' 37" | 22:09 | 263°45' 01" | 06:21 | 20:42 | 16:07 | 23:53 |
| 18-08-2010 | 10:45 | 96°27' 48" | 16:26 | +34°55' 06" | 22:06 | 263°20' 34" | 06:22 | 20:40 | 17:08 | --- |
| 19-08-2010 | 10:45 | 96°52' 18" | 16:24 | +34°39' 35" | 22:04 | 262°56' 08" | 06:24 | 20:38 | 17:56 | 00:44 |
| 20-08-2010 | 10:44 | 97°16' 47" | 16:23 | +34°24' 04" | 22:01 | 262°31' 41" | 06:26 | 20:36 | 18:34 | 01:43 |
| 21-08-2010 | 10:44 | 97°41' 17" | 16:21 | +34°08' 34" | 21:58 | 262°07' 14" | 06:27 | 20:34 | 19:04 | 02:49 |
| 22-08-2010 | 10:44 | 98°05' 46" | 16:20 | +33°53' 05" | 21:55 | 261°42' 47" | 06:29 | 20:32 | 19:27 | 03:57 |
| 23-08-2010 | 10:43 | 98°30' 16" | 16:18 | +33°37' 36" | 21:52 | 261°18' 20" | 06:30 | 20:30 | 19:46 | 05:05 |
| 24-08-2010 | 10:43 | 98°54' 45" | 16:16 | +33°22' 08" | 21:49 | 260°53' 54" | 06:32 | 20:28 | 20:03 | 06:13 |
| 25-08-2010 | 10:43 | 99°19' 13" | 16:15 | +33°06' 40" | 21:46 | 260°29' 28" | 06:33 | 20:26 | 20:19 | 07:20 |
| 26-08-2010 | 10:42 | 99°43' 41" | 16:13 | +32°51' 14" | 21:44 | 260°05' 03" | 06:35 | 20:24 | 20:34 | 08:26 |
| 27-08-2010 | 10:42 | 100°08' 09" | 16:12 | +32°35' 49" | 21:41 | 259°40' 39" | 06:36 | 20:22 | 20:49 | 09:32 |

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|-------------|-------------------|-------------|-----------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 28-08-2010 | 10:42 | 100°32' 35" | 16:10 | +32°20' 25" | 21:38 | 259°16' 15" | 06:38 | 20:20 | 21:07 | 10:39 |
| 29-08-2010 | 10:41 | 100°57' 01" | 16:09 | +32°05' 02" | 21:35 | 258°51' 52" | 06:39 | 20:18 | 21:28 | 11:47 |
| 30-08-2010 | 10:41 | 101°21' 26" | 16:07 | +31°49' 41" | 21:32 | 258°27' 31" | 06:41 | 20:16 | 21:54 | 12:57 |
| 31-08-2010 | 10:41 | 101°45' 49" | 16:05 | +31°34' 21" | 21:30 | 258°03' 10" | 06:42 | 20:14 | 22:27 | 14:06 |
| 01-09-2010 | 10:41 | 102°10' 11" | 16:04 | +31°19' 03" | 21:27 | 257°38' 51" | 06:44 | 20:12 | 23:10 | 15:13 |
| 02-09-2010 | 10:40 | 102°34' 32" | 16:02 | +31°03' 47" | 21:24 | 257°14' 34" | 06:45 | 20:09 | --- | 16:13 |
| 03-09-2010 | 10:40 | 102°58' 51" | 16:01 | +30°48' 32" | 21:21 | 256°50' 18" | 06:47 | 20:07 | 00:07 | 17:04 |
| 04-09-2010 | 10:40 | 103°23' 08" | 15:59 | +30°33' 19" | 21:18 | 256°26' 04" | 06:48 | 20:05 | 01:16 | 17:45 |
| 05-09-2010 | 10:40 | 103°47' 24" | 15:58 | +30°18' 09" | 21:16 | 256°01' 52" | 06:50 | 20:03 | 02:35 | 18:18 |
| 06-09-2010 | 10:40 | 104°11' 37" | 15:56 | +30°03' 01" | 21:13 | 255°37' 42" | 06:51 | 20:01 | 04:00 | 18:45 |
| 07-09-2010 | 10:39 | 104°35' 48" | 15:55 | +29°47' 55" | 21:10 | 255°13' 35" | 06:53 | 19:58 | 05:28 | 19:07 |
| 08-09-2010 | 10:39 | 104°59' 57" | 15:54 | +29°32' 52" | 21:07 | 254°49' 30" | 06:54 | 19:56 | 06:56 | 19:29 |
| 09-09-2010 | 10:39 | 105°24' 03" | 15:52 | +29°17' 51" | 21:05 | 254°25' 28" | 06:56 | 19:54 | 08:23 | 19:50 |
| 10-09-2010 | 10:39 | 105°48' 06" | 15:51 | +29°02' 54" | 21:02 | 254°01' 28" | 06:57 | 19:52 | 09:50 | 20:12 |
| 11-09-2010 | 10:39 | 106°12' 07" | 15:49 | +28°47' 59" | 20:59 | 253°37' 32" | 06:59 | 19:50 | 11:15 | 20:38 |
| 12-09-2010 | 10:38 | 106°36' 04" | 15:48 | +28°33' 07" | 20:57 | 253°13' 39" | 07:00 | 19:47 | 12:37 | 21:10 |
| 13-09-2010 | 10:38 | 106°59' 57" | 15:46 | +28°18' 19" | 20:54 | 252°49' 49" | 07:02 | 19:45 | 13:53 | 21:50 |
| 14-09-2010 | 10:38 | 107°23' 47" | 15:45 | +28°03' 34" | 20:51 | 252°26' 03" | 07:03 | 19:43 | 14:59 | 22:39 |
| 15-09-2010 | 10:38 | 107°47' 33" | 15:44 | +27°48' 52" | 20:49 | 252°02' 21" | 07:05 | 19:41 | 15:52 | 23:37 |
| 16-09-2010 | 10:38 | 108°11' 15" | 15:42 | +27°34' 15" | 20:46 | 251°38' 44" | 07:07 | 19:38 | 16:34 | --- |
| 17-09-2010 | 10:38 | 108°34' 53" | 15:41 | +27°19' 41" | 20:43 | 251°15' 10" | 07:08 | 19:36 | 17:06 | 00:41 |
| 18-09-2010 | 10:38 | 108°58' 27" | 15:39 | +27°05' 11" | 20:41 | 250°51' 41" | 07:10 | 19:34 | 17:32 | 01:48 |
| 19-09-2010 | 10:38 | 109°21' 56" | 15:38 | +26°50' 45" | 20:38 | 250°28' 17" | 07:11 | 19:32 | 17:52 | 02:56 |
| 20-09-2010 | 10:37 | 109°45' 20" | 15:37 | +26°36' 23" | 20:35 | 250°04' 57" | 07:13 | 19:30 | 18:10 | 04:04 |
| 21-09-2010 | 10:37 | 110°08' 39" | 15:35 | +26°22' 06" | 20:33 | 249°41' 43" | 07:14 | 19:27 | 18:26 | 05:10 |
| 22-09-2010 | 10:37 | 110°31' 52" | 15:34 | +26°07' 54" | 20:30 | 249°18' 34" | 07:16 | 19:25 | 18:41 | 06:17 |
| 23-09-2010 | 10:37 | 110°55' 01" | 15:33 | +25°53' 46" | 20:28 | 248°55' 30" | 07:17 | 19:23 | 18:57 | 07:23 |
| 24-09-2010 | 10:37 | 111°18' 03" | 15:31 | +25°39' 42" | 20:25 | 248°32' 32" | 07:19 | 19:21 | 19:15 | 08:30 |
| 25-09-2010 | 10:37 | 111°41' 00" | 15:30 | +25°25' 44" | 20:22 | 248°09' 40" | 07:20 | 19:18 | 19:35 | 09:38 |
| 26-09-2010 | 10:37 | 112°03' 50" | 15:29 | +25°11' 51" | 20:20 | 247°46' 55" | 07:22 | 19:16 | 19:59 | 10:47 |

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|-------------|-------------------|-------------|-----------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 27-09-2010 | 10:37 | 112°26' 35" | 15:27 | +24°58' 03" | 20:17 | 247°24' 15" | 07:23 | 19:14 | 20:30 | 11:56 |
| 28-09-2010 | 10:37 | 112°49' 12" | 15:26 | +24°44' 21" | 20:15 | 247°01' 43" | 07:25 | 19:12 | 21:09 | 13:03 |
| 29-09-2010 | 10:37 | 113°11' 43" | 15:25 | +24°30' 44" | 20:12 | 246°39' 17" | 07:26 | 19:09 | 22:00 | 14:05 |
| 30-09-2010 | 10:37 | 113°34' 07" | 15:24 | +24°17' 13" | 20:10 | 246°16' 58" | 07:28 | 19:07 | 23:03 | 14:58 |
| 01-10-2010 | 10:37 | 113°56' 24" | 15:22 | +24°03' 48" | 20:07 | 245°54' 47" | 07:30 | 19:05 | --- | 15:41 |
| 02-10-2010 | 10:37 | 114°18' 33" | 15:21 | +23°50' 28" | 20:05 | 245°32' 43" | 07:31 | 19:03 | 00:16 | 16:16 |
| 03-10-2010 | 10:37 | 114°40' 34" | 15:20 | +23°37' 15" | 20:02 | 245°10' 48" | 07:33 | 19:01 | 01:35 | 16:44 |
| 04-10-2010 | 10:37 | 115°02' 27" | 15:19 | +23°24' 09" | 20:00 | 244°49' 00" | 07:34 | 18:58 | 02:59 | 17:08 |
| 05-10-2010 | 10:37 | 115°24' 11" | 15:17 | +23°11' 08" | 19:58 | 244°27' 21" | 07:36 | 18:56 | 04:24 | 17:29 |
| 06-10-2010 | 10:37 | 115°45' 47" | 15:16 | +22°58' 15" | 19:55 | 244°05' 50" | 07:37 | 18:54 | 05:49 | 17:50 |
| 07-10-2010 | 10:37 | 116°07' 14" | 15:15 | +22°45' 28" | 19:53 | 243°44' 29" | 07:39 | 18:52 | 07:16 | 18:12 |
| 08-10-2010 | 10:37 | 116°28' 32" | 15:14 | +22°32' 48" | 19:51 | 243°23' 17" | 07:41 | 18:50 | 08:42 | 18:37 |
| 09-10-2010 | 10:37 | 116°49' 40" | 15:13 | +22°20' 16" | 19:48 | 243°02' 15" | 07:42 | 18:48 | 10:08 | 19:07 |
| 10-10-2010 | 10:37 | 117°10' 39" | 15:12 | +22°07' 51" | 19:46 | 242°41' 22" | 07:44 | 18:46 | 11:29 | 19:44 |
| 11-10-2010 | 10:37 | 117°31' 27" | 15:10 | +21°55' 34" | 19:44 | 242°20' 40" | 07:46 | 18:43 | 12:41 | 20:31 |
| 12-10-2010 | 10:37 | 117°52' 04" | 15:09 | +21°43' 24" | 19:41 | 242°00' 09" | 07:47 | 18:41 | 13:42 | 21:26 |
| 13-10-2010 | 10:37 | 118°12' 31" | 15:08 | +21°31' 22" | 19:39 | 241°39' 48" | 07:49 | 18:39 | 14:29 | 22:30 |
| 14-10-2010 | 10:37 | 118°32' 46" | 15:07 | +21°19' 28" | 19:37 | 241°19' 39" | 07:50 | 18:37 | 15:06 | 23:37 |
| 15-10-2010 | 10:37 | 118°52' 50" | 15:06 | +21°07' 43" | 19:34 | 240°59' 42" | 07:52 | 18:35 | 15:34 | --- |
| 16-10-2010 | 10:37 | 119°12' 42" | 15:05 | +20°56' 06" | 19:32 | 240°39' 56" | 07:54 | 18:33 | 15:57 | 00:46 |
| 17-10-2010 | 10:37 | 119°32' 22" | 15:04 | +20°44' 37" | 19:30 | 240°20' 23" | 07:55 | 18:31 | 16:15 | 01:53 |
| 18-10-2010 | 10:37 | 119°51' 49" | 15:03 | +20°33' 18" | 19:28 | 240°01' 02" | 07:57 | 18:29 | 16:32 | 03:00 |
| 19-10-2010 | 10:37 | 120°11' 04" | 15:02 | +20°22' 07" | 19:26 | 239°41' 54" | 07:59 | 18:27 | 16:48 | 04:06 |
| 20-10-2010 | 10:37 | 120°30' 05" | 15:01 | +20°11' 05" | 19:24 | 239°22' 59" | 08:00 | 18:25 | 17:04 | 05:12 |
| 21-10-2010 | 10:37 | 120°48' 53" | 15:00 | +20°00' 13" | 19:22 | 239°04' 18" | 08:02 | 18:23 | 17:21 | 06:19 |
| 22-10-2010 | 10:37 | 121°07' 27" | 14:59 | +19°49' 30" | 19:19 | 238°45' 51" | 08:04 | 18:21 | 17:40 | 07:27 |
| 23-10-2010 | 10:37 | 121°25' 46" | 14:57 | +19°38' 57" | 19:17 | 238°27' 38" | 08:05 | 18:19 | 18:04 | 08:36 |
| 24-10-2010 | 10:37 | 121°43' 51" | 14:56 | +19°28' 33" | 19:15 | 238°09' 40" | 08:07 | 18:17 | 18:33 | 09:46 |
| 25-10-2010 | 10:37 | 122°01' 41" | 14:55 | +19°18' 20" | 19:13 | 237°51' 57" | 08:09 | 18:15 | 19:10 | 10:55 |
| 26-10-2010 | 10:37 | 122°19' 16" | 14:55 | +19°08' 16" | 19:11 | 237°34' 29" | 08:10 | 18:13 | 19:58 | 11:58 |

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|-------------|-------------------|-------------|-----------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 27-10-2010 | 10:37 | 122°36' 35" | 14:54 | +18°58' 23" | 19:09 | 237°17' 17" | 08:12 | 18:11 | 20:57 | 12:54 |
| 28-10-2010 | 10:37 | 122°53' 38" | 14:53 | +18°48' 40" | 19:07 | 237°00' 22" | 08:14 | 18:09 | 22:06 | 13:40 |
| 29-10-2010 | 10:37 | 123°10' 25" | 14:52 | +18°39' 08" | 19:05 | 236°43' 42" | 08:15 | 18:08 | 23:22 | 14:16 |
| 30-10-2010 | 10:37 | 123°26' 54" | 14:51 | +18°29' 47" | 19:04 | 236°27' 20" | 08:17 | 18:06 | --- | 14:46 |
| 31-10-2010 | 09:38 | 123°43' 07" | 13:50 | +18°20' 37" | 18:02 | 236°11' 15" | 07:19 | 17:04 | 00:42 | 14:10 |
| 01-11-2010 | 09:38 | 123°59' 02" | 13:49 | +18°11' 38" | 18:00 | 235°55' 28" | 07:20 | 17:02 | 01:03 | 14:32 |
| 02-11-2010 | 09:38 | 124°14' 39" | 13:48 | +18°02' 50" | 17:58 | 235°39' 58" | 07:22 | 17:01 | 02:25 | 14:52 |
| 03-11-2010 | 09:38 | 124°29' 57" | 13:47 | +17°54' 14" | 17:56 | 235°24' 47" | 07:24 | 16:59 | 03:48 | 15:13 |
| 04-11-2010 | 09:38 | 124°44' 57" | 13:46 | +17°45' 49" | 17:54 | 235°09' 55" | 07:26 | 16:57 | 05:12 | 15:36 |
| 05-11-2010 | 09:38 | 124°59' 37" | 13:45 | +17°37' 36" | 17:53 | 234°55' 23" | 07:27 | 16:55 | 06:36 | 16:03 |
| 06-11-2010 | 09:38 | 125°13' 58" | 13:44 | +17°29' 35" | 17:51 | 234°41' 10" | 07:29 | 16:54 | 08:00 | 16:36 |
| 07-11-2010 | 09:37 | 125°27' 59" | 13:44 | +17°21' 47" | 17:49 | 234°27' 17" | 07:31 | 16:52 | 09:17 | 17:19 |
| 08-11-2010 | 09:37 | 125°41' 39" | 13:43 | +17°14' 11" | 17:48 | 234°13' 45" | 07:32 | 16:51 | 10:25 | 18:12 |
| 09-11-2010 | 09:37 | 125°54' 59" | 13:42 | +17°06' 47" | 17:46 | 234°00' 33" | 07:34 | 16:49 | 11:19 | 19:13 |
| 10-11-2010 | 09:37 | 126°07' 57" | 13:41 | +16°59' 36" | 17:44 | 233°47' 43" | 07:36 | 16:48 | 12:02 | 20:21 |
| 11-11-2010 | 09:37 | 126°20' 34" | 13:40 | +16°52' 38" | 17:43 | 233°35' 14" | 07:37 | 16:46 | 12:34 | 21:31 |
| 12-11-2010 | 09:37 | 126°32' 49" | 13:39 | +16°45' 52" | 17:41 | 233°23' 08" | 07:39 | 16:45 | 12:59 | 22:40 |
| 13-11-2010 | 09:37 | 126°44' 41" | 13:39 | +16°39' 20" | 17:40 | 233°11' 24" | 07:41 | 16:43 | 13:19 | 23:47 |
| 14-11-2010 | 09:37 | 126°56' 11" | 13:38 | +16°33' 01" | 17:38 | 233°00' 03" | 07:42 | 16:42 | 13:37 | --- |
| 15-11-2010 | 09:37 | 127°07' 17" | 13:37 | +16°26' 56" | 17:37 | 232°49' 05" | 07:44 | 16:41 | 13:53 | 00:54 |
| 16-11-2010 | 09:37 | 127°18' 00" | 13:36 | +16°21' 04" | 17:36 | 232°38' 30" | 07:46 | 16:39 | 14:09 | 01:59 |
| 17-11-2010 | 09:37 | 127°28' 19" | 13:36 | +16°15' 26" | 17:34 | 232°28' 20" | 07:47 | 16:38 | 14:25 | 03:05 |
| 18-11-2010 | 09:37 | 127°38' 14" | 13:35 | +16°10' 02" | 17:33 | 232°18' 34" | 07:49 | 16:37 | 14:44 | 04:13 |
| 19-11-2010 | 09:36 | 127°47' 44" | 13:34 | +16°04' 51" | 17:32 | 232°09' 12" | 07:51 | 16:36 | 15:06 | 05:22 |
| 20-11-2010 | 09:36 | 127°56' 49" | 13:33 | +15°59' 55" | 17:30 | 232°00' 15" | 07:52 | 16:35 | 15:33 | 06:32 |
| 21-11-2010 | 09:36 | 128°05' 29" | 13:33 | +15°55' 13" | 17:29 | 231°51' 44" | 07:54 | 16:34 | 16:08 | 07:42 |
| 22-11-2010 | 09:36 | 128°13' 44" | 13:32 | +15°50' 45" | 17:28 | 231°43' 39" | 07:55 | 16:33 | 16:53 | 08:48 |
| 23-11-2010 | 09:36 | 128°21' 32" | 13:31 | +15°46' 32" | 17:27 | 231°35' 59" | 07:57 | 16:32 | 17:50 | 09:48 |
| 24-11-2010 | 09:35 | 128°28' 55" | 13:30 | +15°42' 34" | 17:25 | 231°28' 46" | 07:58 | 16:31 | 18:57 | 10:38 |
| 25-11-2010 | 09:35 | 128°35' 50" | 13:30 | +15°38' 50" | 17:24 | 231°21' 59" | 08:00 | 16:30 | 20:12 | 11:17 |

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|-------------|-------------------|-------------|-----------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 26-11-2010 | 09:35 | 128°42' 19" | 13:29 | +15°35' 21" | 17:23 | 231°15' 39" | 08:01 | 16:29 | 21:31 | 11:49 |
| 27-11-2010 | 09:34 | 128°48' 21" | 13:28 | +15°32' 08" | 17:22 | 231°09' 47" | 08:03 | 16:28 | 22:51 | 12:15 |
| 28-11-2010 | 09:34 | 128°53' 55" | 13:28 | +15°29' 09" | 17:21 | 231°04' 22" | 08:04 | 16:27 | --- | 12:37 |
| 29-11-2010 | 09:34 | 128°59' 01" | 13:27 | +15°26' 25" | 17:20 | 230°59' 25" | 08:06 | 16:26 | 00:11 | 12:57 |
| 30-11-2010 | 09:33 | 129°03' 40" | 13:26 | +15°23' 57" | 17:19 | 230°54' 56" | 08:07 | 16:26 | 01:31 | 13:17 |
| 01-12-2010 | 09:33 | 129°07' 50" | 13:26 | +15°21' 44" | 17:18 | 230°50' 55" | 08:09 | 16:25 | 02:52 | 13:38 |
| 02-12-2010 | 09:32 | 129°11' 32" | 13:25 | +15°19' 46" | 17:18 | 230°47' 22" | 08:10 | 16:25 | 04:14 | 14:02 |
| 03-12-2010 | 09:32 | 129°14' 45" | 13:24 | +15°18' 05" | 17:17 | 230°44' 18" | 08:11 | 16:24 | 05:35 | 14:32 |
| 04-12-2010 | 09:32 | 129°17' 29" | 13:24 | +15°16' 38" | 17:16 | 230°41' 43" | 08:13 | 16:24 | 06:54 | 15:10 |
| 05-12-2010 | 09:31 | 129°19' 45" | 13:23 | +15°15' 28" | 17:15 | 230°39' 38" | 08:14 | 16:23 | 08:06 | 15:57 |
| 06-12-2010 | 09:31 | 129°21' 31" | 13:22 | +15°14' 33" | 17:14 | 230°38' 01" | 08:15 | 16:23 | 09:06 | 16:55 |
| 07-12-2010 | 09:30 | 129°22' 47" | 13:22 | +15°13' 54" | 17:14 | 230°36' 54" | 08:16 | 16:23 | 09:54 | 18:01 |
| 08-12-2010 | 09:29 | 129°23' 35" | 13:21 | +15°13' 31" | 17:13 | 230°36' 16" | 08:17 | 16:22 | 10:31 | 19:11 |
| 09-12-2010 | 09:29 | 129°23' 52" | 13:21 | +15°13' 24" | 17:12 | 230°36' 08" | 08:18 | 16:22 | 11:00 | 20:22 |
| 10-12-2010 | 09:28 | 129°23' 40" | 13:20 | +15°13' 33" | 17:12 | 230°36' 30" | 08:20 | 16:22 | 11:22 | 21:31 |
| 11-12-2010 | 09:27 | 129°22' 59" | 13:19 | +15°13' 59" | 17:11 | 230°37' 21" | 08:21 | 16:22 | 11:41 | 22:39 |
| 12-12-2010 | 09:27 | 129°21' 47" | 13:19 | +15°14' 40" | 17:11 | 230°38' 42" | 08:22 | 16:22 | 11:58 | 23:45 |
| 13-12-2010 | 09:26 | 129°20' 06" | 13:18 | +15°15' 37" | 17:10 | 230°40' 34" | 08:22 | 16:22 | 12:14 | --- |
| 14-12-2010 | 09:25 | 129°17' 54" | 13:18 | +15°16' 51" | 17:10 | 230°42' 55" | 08:23 | 16:22 | 12:30 | 00:50 |
| 15-12-2010 | 09:25 | 129°15' 13" | 13:17 | +15°18' 20" | 17:09 | 230°45' 46" | 08:24 | 16:22 | 12:47 | 01:56 |
| 16-12-2010 | 09:24 | 129°12' 02" | 13:16 | +15°20' 06" | 17:09 | 230°49' 06" | 08:25 | 16:22 | 13:07 | 03:04 |
| 17-12-2010 | 09:23 | 129°08' 21" | 13:16 | +15°22' 09" | 17:09 | 230°52' 57" | 08:26 | 16:22 | 13:32 | 04:13 |
| 18-12-2010 | 09:22 | 129°04' 10" | 13:15 | +15°24' 27" | 17:08 | 230°57' 18" | 08:26 | 16:23 | 14:03 | 05:23 |
| 19-12-2010 | 09:21 | 128°59' 30" | 13:15 | +15°27' 02" | 17:08 | 231°02' 08" | 08:27 | 16:23 | 14:44 | 06:32 |
| 20-12-2010 | 09:20 | 128°54' 19" | 13:14 | +15°29' 53" | 17:08 | 231°07' 28" | 08:28 | 16:23 | 15:36 | 07:35 |
| 21-12-2010 | 09:19 | 128°48' 39" | 13:13 | +15°33' 00" | 17:07 | 231°13' 18" | 08:28 | 16:24 | 16:41 | 08:30 |
| 22-12-2010 | 09:18 | 128°42' 30" | 13:13 | +15°36' 23" | 17:07 | 231°19' 38" | 08:29 | 16:24 | 17:55 | 09:15 |
| 23-12-2010 | 09:17 | 128°35' 51" | 13:12 | +15°40' 03" | 17:07 | 231°26' 27" | 08:29 | 16:25 | 19:16 | 09:50 |
| 24-12-2010 | 09:16 | 128°28' 43" | 13:12 | +15°43' 59" | 17:07 | 231°33' 45" | 08:30 | 16:26 | 20:38 | 10:19 |
| 25-12-2010 | 09:15 | 128°21' 05" | 13:11 | +15°48' 11" | 17:07 | 231°41' 32" | 08:30 | 16:26 | 22:00 | 10:42 |

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 1°3'13"S
 Län.: 25°26' 6"W

Objekt

Planet:
 Mars

| Datum | Aufgang | | Meridiandurchgang | | Untergang | | Sonne | | Mond | |
|------------|----------|-------------|-------------------|-------------|-----------|-------------|---------|-----------|---------|-----------|
| | Ortszeit | Azm | Ortszeit | Höhe | Ortszeit | Azm | Aufgang | Untergang | Aufgang | Untergang |
| 26-12-2010 | 09:14 | 128°12' 59" | 13:10 | +15°52' 39" | 17:07 | 231°49' 49" | 08:30 | 16:27 | 23:20 | 11:03 |
| 27-12-2010 | 09:13 | 128°04' 23" | 13:10 | +15°57' 23" | 17:07 | 231°58' 34" | 08:31 | 16:28 | --- | 11:23 |
| 28-12-2010 | 09:12 | 127°55' 19" | 13:09 | +16°02' 23" | 17:07 | 232°07' 48" | 08:31 | 16:29 | 00:41 | 11:44 |
| 29-12-2010 | 09:11 | 127°45' 47" | 13:09 | +16°07' 40" | 17:07 | 232°17' 30" | 08:31 | 16:29 | 02:01 | 12:06 |
| 30-12-2010 | 09:10 | 127°35' 46" | 13:08 | +16°13' 12" | 17:07 | 232°27' 41" | 08:31 | 16:30 | 03:21 | 12:34 |
| 31-12-2010 | 09:08 | 127°25' 17" | 13:07 | +16°19' 01" | 17:07 | 232°38' 20" | 08:31 | 16:31 | 04:39 | 13:07 |