

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 5°15'43"N
 Län.: 86°54'27"W

Objekt

Zwergplanet:
 Pluto

Datum	Aufgang		Meridiandurchgang		Untergang		Sonne		Mond	
	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
01-01-2010	07:29	118°45' 17"	11:58	+21°14' 02"	16:27	241°14' 41"	08:31	16:32	17:37	09:01
02-01-2010	07:25	118°45' 20"	11:54	+21°14' 00"	16:23	241°14' 38"	08:31	16:34	19:06	09:34
03-01-2010	07:22	118°45' 22"	11:50	+21°13' 59"	16:19	241°14' 36"	08:31	16:35	20:34	10:00
04-01-2010	07:18	118°45' 24"	11:47	+21°13' 58"	16:16	241°14' 35"	08:30	16:36	21:59	10:21
05-01-2010	07:14	118°45' 25"	11:43	+21°13' 58"	16:12	241°14' 34"	08:30	16:37	23:21	10:39
06-01-2010	07:10	118°45' 27"	11:39	+21°13' 57"	16:08	241°14' 33"	08:30	16:38	---	10:56
07-01-2010	07:06	118°45' 27"	11:35	+21°13' 57"	16:04	241°14' 32"	08:30	16:39	00:41	11:15
08-01-2010	07:03	118°45' 28"	11:32	+21°13' 56"	16:01	241°14' 32"	08:29	16:41	01:59	11:35
09-01-2010	06:59	118°45' 28"	11:28	+21°13' 56"	15:57	241°14' 31"	08:29	16:42	03:16	12:00
10-01-2010	06:55	118°45' 28"	11:24	+21°13' 56"	15:53	241°14' 32"	08:28	16:43	04:29	12:30
11-01-2010	06:51	118°45' 28"	11:20	+21°13' 57"	15:49	241°14' 32"	08:28	16:45	05:37	13:10
12-01-2010	06:48	118°45' 28"	11:16	+21°13' 57"	15:45	241°14' 33"	08:27	16:46	06:36	13:59
13-01-2010	06:44	118°45' 27"	11:13	+21°13' 58"	15:42	241°14' 34"	08:26	16:48	07:23	14:57
14-01-2010	06:40	118°45' 26"	11:09	+21°13' 59"	15:38	241°14' 35"	08:26	16:49	08:01	16:02
15-01-2010	06:36	118°45' 24"	11:05	+21°14' 00"	15:34	241°14' 37"	08:25	16:51	08:29	17:10
16-01-2010	06:32	118°45' 23"	11:01	+21°14' 01"	15:30	241°14' 39"	08:24	16:52	08:52	18:18
17-01-2010	06:29	118°45' 21"	10:57	+21°14' 02"	15:26	241°14' 41"	08:23	16:54	09:10	19:27
18-01-2010	06:25	118°45' 18"	10:54	+21°14' 03"	15:23	241°14' 43"	08:22	16:55	09:26	20:34
19-01-2010	06:21	118°45' 16"	10:50	+21°14' 05"	15:19	241°14' 46"	08:21	16:57	09:40	21:41
20-01-2010	06:17	118°45' 13"	10:46	+21°14' 07"	15:15	241°14' 49"	08:20	16:58	09:54	22:49
21-01-2010	06:13	118°45' 10"	10:42	+21°14' 09"	15:11	241°14' 52"	08:19	17:00	10:09	23:58
22-01-2010	06:10	118°45' 07"	10:39	+21°14' 11"	15:07	241°14' 56"	08:18	17:02	10:26	---
23-01-2010	06:06	118°45' 04"	10:35	+21°14' 13"	15:04	241°14' 59"	08:17	17:03	10:46	01:10
24-01-2010	06:02	118°45' 00"	10:31	+21°14' 15"	15:00	241°15' 03"	08:16	17:05	11:12	02:25
25-01-2010	05:58	118°44' 56"	10:27	+21°14' 18"	14:56	241°15' 07"	08:15	17:07	11:48	03:40
26-01-2010	05:54	118°44' 52"	10:23	+21°14' 21"	14:52	241°15' 11"	08:13	17:08	12:36	04:53
27-01-2010	05:51	118°44' 47"	10:20	+21°14' 23"	14:49	241°15' 16"	08:12	17:10	13:41	05:57
28-01-2010	05:47	118°44' 43"	10:16	+21°14' 26"	14:45	241°15' 21"	08:11	17:12	15:00	06:49
29-01-2010	05:43	118°44' 38"	10:12	+21°14' 29"	14:41	241°15' 26"	08:10	17:13	16:28	07:28
30-01-2010	05:39	118°44' 33"	10:08	+21°14' 32"	14:37	241°15' 31"	08:08	17:15	17:59	07:58

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	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
31-01-2010	05:35	118°44' 28"	10:04	+21°14' 36"	14:33	241°15' 36"	08:07	17:17	19:29	08:22
01-02-2010	05:32	118°44' 22"	10:01	+21°14' 39"	14:30	241°15' 42"	08:05	17:19	20:55	08:42
02-02-2010	05:28	118°44' 17"	09:57	+21°14' 43"	14:26	241°15' 48"	08:04	17:20	22:19	09:01
03-02-2010	05:24	118°44' 11"	09:53	+21°14' 46"	14:22	241°15' 54"	08:02	17:22	23:41	09:19
04-02-2010	05:20	118°44' 05"	09:49	+21°14' 50"	14:18	241°16' 00"	08:01	17:24	---	09:40
05-02-2010	05:16	118°43' 59"	09:45	+21°14' 54"	14:14	241°16' 06"	07:59	17:26	01:01	10:03
06-02-2010	05:12	118°43' 52"	09:41	+21°14' 58"	14:11	241°16' 13"	07:57	17:27	02:18	10:32
07-02-2010	05:09	118°43' 46"	09:38	+21°15' 02"	14:07	241°16' 19"	07:56	17:29	03:29	11:09
08-02-2010	05:05	118°43' 39"	09:34	+21°15' 06"	14:03	241°16' 26"	07:54	17:31	04:31	11:55
09-02-2010	05:01	118°43' 32"	09:30	+21°15' 10"	13:59	241°16' 33"	07:52	17:33	05:22	12:50
10-02-2010	04:57	118°43' 25"	09:26	+21°15' 15"	13:55	241°16' 40"	07:51	17:35	06:02	13:53
11-02-2010	04:53	118°43' 18"	09:22	+21°15' 19"	13:51	241°16' 47"	07:49	17:36	06:33	15:00
12-02-2010	04:50	118°43' 11"	09:19	+21°15' 24"	13:48	241°16' 55"	07:47	17:38	06:58	16:08
13-02-2010	04:46	118°43' 03"	09:15	+21°15' 28"	13:44	241°17' 02"	07:45	17:40	07:17	17:17
14-02-2010	04:42	118°42' 56"	09:11	+21°15' 33"	13:40	241°17' 10"	07:44	17:42	07:34	18:24
15-02-2010	04:38	118°42' 48"	09:07	+21°15' 38"	13:36	241°17' 18"	07:42	17:43	07:49	19:32
16-02-2010	04:34	118°42' 40"	09:03	+21°15' 42"	13:32	241°17' 26"	07:40	17:45	08:03	20:39
17-02-2010	04:30	118°42' 33"	08:59	+21°15' 47"	13:29	241°17' 34"	07:38	17:47	08:18	21:48
18-02-2010	04:27	118°42' 25"	08:56	+21°15' 52"	13:25	241°17' 42"	07:36	17:49	08:34	22:58
19-02-2010	04:23	118°42' 16"	08:52	+21°15' 57"	13:21	241°17' 50"	07:34	17:50	08:52	---
20-02-2010	04:19	118°42' 08"	08:48	+21°16' 02"	13:17	241°17' 58"	07:32	17:52	09:16	00:11
21-02-2010	04:15	118°42' 00"	08:44	+21°16' 08"	13:13	241°18' 07"	07:30	17:54	09:46	01:24
22-02-2010	04:11	118°41' 52"	08:40	+21°16' 13"	13:09	241°18' 15"	07:28	17:56	10:28	02:36
23-02-2010	04:07	118°41' 43"	08:36	+21°16' 18"	13:06	241°18' 24"	07:26	17:57	11:23	03:42
24-02-2010	04:03	118°41' 35"	08:33	+21°16' 23"	13:02	241°18' 32"	07:24	17:59	12:32	04:37
25-02-2010	04:00	118°41' 26"	08:29	+21°16' 28"	12:58	241°18' 41"	07:22	18:01	13:54	05:21
26-02-2010	03:56	118°41' 17"	08:25	+21°16' 34"	12:54	241°18' 49"	07:20	18:02	15:22	05:55
27-02-2010	03:52	118°41' 09"	08:21	+21°16' 39"	12:50	241°18' 58"	07:18	18:04	16:51	06:21
28-02-2010	03:48	118°41' 00"	08:17	+21°16' 45"	12:46	241°19' 07"	07:16	18:06	18:20	06:43
01-03-2010	03:44	118°40' 51"	08:13	+21°16' 50"	12:43	241°19' 16"	07:14	18:08	19:46	07:03

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	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
02-03-2010	03:40	118°40'42"	08:09	+21°16'55"	12:39	241°19'24"	07:12	18:09	21:12	07:22
03-03-2010	03:36	118°40'34"	08:06	+21°17'01"	12:35	241°19'33"	07:10	18:11	22:36	07:42
04-03-2010	03:33	118°40'25"	08:02	+21°17'06"	12:31	241°19'42"	07:08	18:13	23:57	08:05
05-03-2010	03:29	118°40'16"	07:58	+21°17'12"	12:27	241°19'51"	07:06	18:14	---	08:33
06-03-2010	03:25	118°40'07"	07:54	+21°17'17"	12:23	241°20'00"	07:04	18:16	01:13	09:08
07-03-2010	03:21	118°39'58"	07:50	+21°17'23"	12:19	241°20'09"	07:01	18:18	02:20	09:51
08-03-2010	03:17	118°39'49"	07:46	+21°17'28"	12:16	241°20'18"	06:59	18:19	03:16	10:44
09-03-2010	03:13	118°39'40"	07:42	+21°17'34"	12:12	241°20'26"	06:57	18:21	04:01	11:45
10-03-2010	03:09	118°39'32"	07:39	+21°17'39"	12:08	241°20'35"	06:55	18:23	04:35	12:50
11-03-2010	03:05	118°39'23"	07:35	+21°17'45"	12:04	241°20'44"	06:53	18:24	05:02	13:58
12-03-2010	03:02	118°39'14"	07:31	+21°17'50"	12:00	241°20'53"	06:51	18:26	05:23	15:06
13-03-2010	02:58	118°39'05"	07:27	+21°17'55"	11:56	241°21'02"	06:48	18:28	05:41	16:14
14-03-2010	02:54	118°38'56"	07:23	+21°18'01"	11:52	241°21'10"	06:46	18:29	05:56	17:21
15-03-2010	02:50	118°38'48"	07:19	+21°18'06"	11:49	241°21'19"	06:44	18:31	06:11	18:29
16-03-2010	02:46	118°38'39"	07:15	+21°18'12"	11:45	241°21'28"	06:42	18:33	06:26	19:38
17-03-2010	02:42	118°38'31"	07:11	+21°18'17"	11:41	241°21'36"	06:40	18:34	06:42	20:48
18-03-2010	02:38	118°38'22"	07:08	+21°18'22"	11:37	241°21'44"	06:37	18:36	07:00	22:00
19-03-2010	02:34	118°38'14"	07:04	+21°18'27"	11:33	241°21'53"	06:35	18:37	07:22	23:14
20-03-2010	02:30	118°38'05"	07:00	+21°18'32"	11:29	241°22'01"	06:33	18:39	07:50	---
21-03-2010	02:27	118°37'57"	06:56	+21°18'38"	11:25	241°22'09"	06:31	18:41	08:28	00:26
22-03-2010	02:23	118°37'49"	06:52	+21°18'43"	11:21	241°22'17"	06:29	18:42	09:17	01:32
23-03-2010	02:19	118°37'41"	06:48	+21°18'48"	11:17	241°22'25"	06:26	18:44	10:20	02:30
24-03-2010	02:15	118°37'33"	06:44	+21°18'53"	11:14	241°22'33"	06:24	18:46	11:34	03:16
25-03-2010	02:11	118°37'25"	06:40	+21°18'58"	11:10	241°22'41"	06:22	18:47	12:56	03:53
26-03-2010	02:07	118°37'17"	06:36	+21°19'02"	11:06	241°22'49"	06:20	18:49	14:22	04:21
27-03-2010	02:03	118°37'09"	06:32	+21°19'07"	11:02	241°22'56"	06:18	18:50	15:48	04:44
28-03-2010	01:59	118°37'02"	07:29	+21°19'12"	11:58	241°23'04"	07:15	19:52	18:13	06:05
29-03-2010	02:55	118°36'54"	07:25	+21°19'16"	11:54	241°23'11"	07:13	19:54	19:39	06:24
30-03-2010	02:51	118°36'47"	07:21	+21°19'21"	11:50	241°23'18"	07:11	19:55	21:04	06:44
31-03-2010	02:47	118°36'40"	07:17	+21°19'25"	11:46	241°23'25"	07:09	19:57	22:27	07:05

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 Pluto

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	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
01-04-2010	02:44	118°36' 33"	07:13	+21°19' 30"	11:42	241°23' 32"	07:07	19:58	23:48	07:31
02-04-2010	02:40	118°36' 26"	07:09	+21°19' 34"	11:38	241°23' 39"	07:04	20:00	---	08:04
03-04-2010	02:36	118°36' 19"	07:05	+21°19' 38"	11:34	241°23' 46"	07:02	20:02	01:01	08:44
04-04-2010	02:32	118°36' 13"	07:01	+21°19' 42"	11:31	241°23' 52"	07:00	20:03	02:04	09:35
05-04-2010	02:28	118°36' 06"	06:57	+21°19' 46"	11:27	241°23' 58"	06:58	20:05	02:55	10:34
06-04-2010	02:24	118°36' 00"	06:53	+21°19' 50"	11:23	241°24' 05"	06:56	20:06	03:33	11:39
07-04-2010	02:20	118°35' 54"	06:49	+21°19' 54"	11:19	241°24' 11"	06:54	20:08	04:03	12:46
08-04-2010	02:16	118°35' 48"	06:45	+21°19' 58"	11:15	241°24' 16"	06:51	20:10	04:26	13:54
09-04-2010	02:12	118°35' 42"	06:41	+21°20' 01"	11:11	241°24' 22"	06:49	20:11	04:46	15:02
10-04-2010	02:08	118°35' 37"	06:38	+21°20' 05"	11:07	241°24' 27"	06:47	20:13	05:02	16:09
11-04-2010	02:04	118°35' 31"	06:34	+21°20' 08"	11:03	241°24' 33"	06:45	20:14	05:17	17:17
12-04-2010	02:00	118°35' 26"	06:30	+21°20' 12"	10:59	241°24' 38"	06:43	20:16	05:32	18:25
13-04-2010	01:56	118°35' 21"	06:26	+21°20' 15"	10:55	241°24' 42"	06:41	20:18	05:48	19:35
14-04-2010	01:52	118°35' 17"	06:22	+21°20' 18"	10:51	241°24' 47"	06:39	20:19	06:06	20:48
15-04-2010	01:48	118°35' 12"	06:18	+21°20' 21"	10:47	241°24' 51"	06:37	20:21	06:27	22:01
16-04-2010	01:44	118°35' 08"	06:14	+21°20' 24"	10:43	241°24' 56"	06:35	20:22	06:54	23:15
17-04-2010	01:40	118°35' 03"	06:10	+21°20' 26"	10:39	241°25' 00"	06:32	20:24	07:29	---
18-04-2010	01:37	118°35' 00"	06:06	+21°20' 29"	10:35	241°25' 03"	06:30	20:26	08:15	00:24
19-04-2010	01:33	118°34' 56"	06:02	+21°20' 31"	10:32	241°25' 07"	06:28	20:27	09:14	01:25
20-04-2010	01:29	118°34' 52"	05:58	+21°20' 33"	10:28	241°25' 10"	06:26	20:29	10:25	02:14
21-04-2010	01:25	118°34' 49"	05:54	+21°20' 35"	10:24	241°25' 13"	06:24	20:30	11:43	02:53
22-04-2010	01:21	118°34' 46"	05:50	+21°20' 37"	10:20	241°25' 16"	06:22	20:32	13:05	03:23
23-04-2010	01:17	118°34' 43"	05:46	+21°20' 39"	10:16	241°25' 19"	06:20	20:33	14:28	03:47
24-04-2010	01:13	118°34' 41"	05:42	+21°20' 41"	10:12	241°25' 21"	06:18	20:35	15:51	04:08
25-04-2010	01:09	118°34' 38"	05:38	+21°20' 43"	10:08	241°25' 23"	06:17	20:37	17:13	04:27
26-04-2010	01:05	118°34' 36"	05:34	+21°20' 44"	10:04	241°25' 25"	06:15	20:38	18:36	04:46
27-04-2010	01:01	118°34' 34"	05:30	+21°20' 45"	10:00	241°25' 27"	06:13	20:40	19:59	05:07
28-04-2010	00:57	118°34' 33"	05:26	+21°20' 46"	09:56	241°25' 28"	06:11	20:41	21:21	05:30
29-04-2010	00:53	118°34' 32"	05:22	+21°20' 47"	09:52	241°25' 29"	06:09	20:43	22:38	06:00
30-04-2010	00:49	118°34' 30"	05:18	+21°20' 48"	09:48	241°25' 30"	06:07	20:44	23:47	06:37

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	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
01-05-2010	00:45	118°34'30"	05:14	+21°20'49"	09:44	241°25'31"	06:05	20:46	---	07:24
02-05-2010	00:41	118°34'29"	05:10	+21°20'49"	09:40	241°25'31"	06:04	20:48	00:44	08:20
03-05-2010	00:37	118°34'29"	05:06	+21°20'50"	09:36	241°25'31"	06:02	20:49	01:28	09:24
04-05-2010	00:33	118°34'29"	05:02	+21°20'50"	09:32	241°25'31"	06:00	20:51	02:02	10:32
05-05-2010	00:29	118°34'29"	04:58	+21°20'50"	09:28	241°25'31"	05:58	20:52	02:28	11:40
06-05-2010	00:25	118°34'29"	04:54	+21°20'50"	09:24	241°25'30"	05:57	20:54	02:49	12:48
07-05-2010	00:21	118°34'30"	04:50	+21°20'50"	09:20	241°25'29"	05:55	20:55	03:07	13:56
08-05-2010	00:17	118°34'31"	04:46	+21°20'49"	09:16	241°25'28"	05:53	20:57	03:22	15:02
09-05-2010	00:13	118°34'32"	04:42	+21°20'49"	09:12	241°25'26"	05:52	20:58	03:37	16:10
10-05-2010	00:09	118°34'34"	04:38	+21°20'48"	09:08	241°25'24"	05:50	21:00	03:53	17:19
11-05-2010	00:05	118°34'36"	04:34	+21°20'47"	09:04	241°25'22"	05:49	21:01	04:10	18:30
12-05-2010	00:01	118°34'38"	04:30	+21°20'46"	09:00	241°25'20"	05:47	21:03	04:30	19:44
13-05-2010	23:57(-1T)	118°34'40"	04:26	+21°20'44"	08:56	241°25'17"	05:46	21:04	04:55	20:59
14-05-2010	23:53(-1T)	118°34'43"	04:22	+21°20'43"	08:52	241°25'14"	05:44	21:06	05:27	22:11
15-05-2010	23:49(-1T)	118°34'46"	04:18	+21°20'41"	08:48	241°25'11"	05:43	21:07	06:10	23:17
16-05-2010	23:45(-1T)	118°34'49"	04:14	+21°20'39"	08:44	241°25'08"	05:41	21:09	07:06	---
17-05-2010	23:41(-1T)	118°34'53"	04:10	+21°20'38"	08:40	241°25'04"	05:40	21:10	08:15	00:11
18-05-2010	23:37(-1T)	118°34'57"	04:06	+21°20'35"	08:36	241°25'00"	05:39	21:11	09:33	00:53
19-05-2010	23:33(-1T)	118°35'01"	04:02	+21°20'33"	08:32	241°24'56"	05:37	21:13	10:54	01:26
20-05-2010	23:29(-1T)	118°35'05"	03:58	+21°20'31"	08:28	241°24'51"	05:36	21:14	12:17	01:52
21-05-2010	23:25(-1T)	118°35'10"	03:54	+21°20'28"	08:24	241°24'46"	05:35	21:15	13:38	02:13
22-05-2010	23:21(-1T)	118°35'15"	03:50	+21°20'25"	08:20	241°24'41"	05:34	21:17	14:59	02:32
23-05-2010	23:17(-1T)	118°35'20"	03:46	+21°20'22"	08:16	241°24'35"	05:32	21:18	16:19	02:51
24-05-2010	23:13(-1T)	118°35'26"	03:42	+21°20'19"	08:12	241°24'29"	05:31	21:19	17:40	03:10
25-05-2010	23:09(-1T)	118°35'32"	03:38	+21°20'15"	08:08	241°24'23"	05:30	21:20	19:00	03:32
26-05-2010	23:05(-1T)	118°35'38"	03:34	+21°20'12"	08:04	241°24'17"	05:29	21:22	20:18	03:59
27-05-2010	23:01(-1T)	118°35'44"	03:30	+21°20'08"	08:00	241°24'10"	05:28	21:23	21:30	04:32
28-05-2010	22:57(-1T)	118°35'51"	03:26	+21°20'04"	07:56	241°24'03"	05:27	21:24	22:32	05:14
29-05-2010	22:53(-1T)	118°35'58"	03:22	+21°20'00"	07:52	241°23'56"	05:26	21:25	23:21	06:07
30-05-2010	22:49(-1T)	118°36'06"	03:18	+21°19'56"	07:48	241°23'48"	05:26	21:26	---	07:08

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 5°15'43"N
 Län.: 86°54'27"W

Objekt

Zwergplanet:
 Pluto

Datum	Aufgang		Meridiandurchgang		Untergang		Sonne		Mond	
	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
31-05-2010	22:45(-1T)	118°36' 13"	03:14	+21°19' 52"	07:44	241°23' 41"	05:25	21:27	00:00	08:16
01-06-2010	22:41(-1T)	118°36' 21"	03:10	+21°19' 47"	07:40	241°23' 32"	05:24	21:28	00:29	09:25
02-06-2010	22:37(-1T)	118°36' 29"	03:06	+21°19' 42"	07:36	241°23' 24"	05:23	21:29	00:52	10:34
03-06-2010	22:33(-1T)	118°36' 38"	03:02	+21°19' 37"	07:31	241°23' 15"	05:23	21:30	01:11	11:41
04-06-2010	22:29(-1T)	118°36' 47"	02:58	+21°19' 32"	07:27	241°23' 06"	05:22	21:31	01:27	12:48
05-06-2010	22:25(-1T)	118°36' 56"	02:54	+21°19' 27"	07:23	241°22' 57"	05:21	21:32	01:42	13:54
06-06-2010	22:21(-1T)	118°37' 05"	02:50	+21°19' 21"	07:19	241°22' 47"	05:21	21:33	01:57	15:02
07-06-2010	22:17(-1T)	118°37' 15"	02:46	+21°19' 16"	07:15	241°22' 38"	05:20	21:34	02:13	16:11
08-06-2010	22:13(-1T)	118°37' 25"	02:42	+21°19' 10"	07:11	241°22' 27"	05:20	21:35	02:32	17:24
09-06-2010	22:09(-1T)	118°37' 35"	02:38	+21°19' 04"	07:07	241°22' 17"	05:19	21:36	02:54	18:38
10-06-2010	22:05(-1T)	118°37' 45"	02:34	+21°18' 58"	07:03	241°22' 06"	05:19	21:36	03:23	19:52
11-06-2010	22:01(-1T)	118°37' 56"	02:30	+21°18' 51"	06:59	241°21' 55"	05:19	21:37	04:02	21:01
12-06-2010	21:57(-1T)	118°38' 07"	02:26	+21°18' 45"	06:55	241°21' 44"	05:19	21:38	04:53	22:02
13-06-2010	21:53(-1T)	118°38' 19"	02:22	+21°18' 38"	06:51	241°21' 32"	05:18	21:38	05:58	22:50
14-06-2010	21:49(-1T)	118°38' 30"	02:18	+21°18' 31"	06:47	241°21' 20"	05:18	21:39	07:15	23:27
15-06-2010	21:44(-1T)	118°38' 42"	02:14	+21°18' 24"	06:43	241°21' 08"	05:18	21:39	08:38	23:55
16-06-2010	21:40(-1T)	118°38' 54"	02:10	+21°18' 17"	06:39	241°20' 56"	05:18	21:40	10:03	---
17-06-2010	21:36(-1T)	118°39' 07"	02:06	+21°18' 10"	06:35	241°20' 43"	05:18	21:40	11:26	00:19
18-06-2010	21:32(-1T)	118°39' 20"	02:02	+21°18' 02"	06:31	241°20' 30"	05:18	21:40	12:48	00:39
19-06-2010	21:28(-1T)	118°39' 33"	01:58	+21°17' 54"	06:27	241°20' 17"	05:18	21:41	14:08	00:57
20-06-2010	21:24(-1T)	118°39' 46"	01:54	+21°17' 47"	06:23	241°20' 03"	05:18	21:41	15:28	01:16
21-06-2010	21:20(-1T)	118°40' 00"	01:50	+21°17' 39"	06:19	241°19' 49"	05:18	21:41	16:47	01:37
22-06-2010	21:16(-1T)	118°40' 14"	01:46	+21°17' 30"	06:15	241°19' 35"	05:19	21:41	18:04	02:01
23-06-2010	21:12(-1T)	118°40' 28"	01:41	+21°17' 22"	06:11	241°19' 21"	05:19	21:42	19:17	02:32
24-06-2010	21:08(-1T)	118°40' 42"	01:37	+21°17' 13"	06:07	241°19' 06"	05:19	21:42	20:22	03:10
25-06-2010	21:04(-1T)	118°40' 57"	01:33	+21°17' 05"	06:02	241°18' 51"	05:20	21:42	21:16	03:58
26-06-2010	21:00(-1T)	118°41' 12"	01:29	+21°16' 56"	05:58	241°18' 36"	05:20	21:42	21:58	04:56
27-06-2010	20:56(-1T)	118°41' 27"	01:25	+21°16' 47"	05:54	241°18' 21"	05:20	21:42	22:30	06:01
28-06-2010	20:52(-1T)	118°41' 42"	01:21	+21°16' 38"	05:50	241°18' 05"	05:21	21:41	22:55	07:10
29-06-2010	20:48(-1T)	118°41' 58"	01:17	+21°16' 29"	05:46	241°17' 49"	05:21	21:41	23:16	08:19

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
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 Br.: 5°15'43"N
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Objekt

Zwergplanet:
 Pluto

Datum	Aufgang		Meridiandurchgang		Untergang		Sonne		Mond	
	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
30-06-2010	20:44(-1T)	118°42'14"	01:13	+21°16'19"	05:42	241°17'33"	05:22	21:41	23:33	09:27
01-07-2010	20:40(-1T)	118°42'30"	01:09	+21°16'09"	05:38	241°17'17"	05:23	21:41	23:48	10:34
02-07-2010	20:36(-1T)	118°42'47"	01:05	+21°16'00"	05:34	241°17'00"	05:23	21:41	---	11:41
03-07-2010	20:32(-1T)	118°43'03"	01:01	+21°15'50"	05:30	241°16'43"	05:24	21:40	00:03	12:47
04-07-2010	20:28(-1T)	118°43'20"	00:57	+21°15'40"	05:26	241°16'26"	05:25	21:40	00:19	13:55
05-07-2010	20:24(-1T)	118°43'38"	00:53	+21°15'30"	05:22	241°16'09"	05:26	21:39	00:36	15:04
06-07-2010	20:20(-1T)	118°43'55"	00:49	+21°15'19"	05:18	241°15'51"	05:26	21:39	00:56	16:16
07-07-2010	20:16(-1T)	118°44'13"	00:45	+21°15'09"	05:14	241°15'33"	05:27	21:38	01:21	17:29
08-07-2010	20:12(-1T)	118°44'31"	00:41	+21°14'58"	05:10	241°15'15"	05:28	21:38	01:54	18:41
09-07-2010	20:08(-1T)	118°44'49"	00:37	+21°14'47"	05:06	241°14'57"	05:29	21:37	02:38	19:46
10-07-2010	20:04(-1T)	118°45'07"	00:33	+21°14'36"	05:02	241°14'38"	05:30	21:36	03:37	20:40
11-07-2010	20:00(-1T)	118°45'26"	00:29	+21°14'25"	04:58	241°14'19"	05:31	21:36	04:49	21:23
12-07-2010	19:56(-1T)	118°45'45"	00:25	+21°14'14"	04:54	241°14'00"	05:32	21:35	06:12	21:56
13-07-2010	19:52(-1T)	118°46'04"	00:21	+21°14'03"	04:50	241°13'41"	05:33	21:34	07:39	22:22
14-07-2010	19:48(-1T)	118°46'23"	00:17	+21°13'51"	04:45	241°13'22"	05:34	21:33	09:06	22:43
15-07-2010	19:44(-1T)	118°46'43"	00:13	+21°13'40"	04:41	241°13'02"	05:35	21:32	10:31	23:03
16-07-2010	19:40(-1T)	118°47'02"	00:09	+21°13'28"	04:37	241°12'42"	05:36	21:31	11:54	23:22
17-07-2010	19:36(-1T)	118°47'22"	00:05	+21°13'16"	04:33	241°12'22"	05:38	21:30	13:15	23:43
18-07-2010	19:32(-1T)	118°47'42"	00:01	+21°13'04"	04:29	241°12'02"	05:39	21:29	14:36	---
18-07-2010	19:28	118°48'03"	23:57	+21°12'52"	04:25(+1T)	241°11'41"	05:39	21:29	14:36	---
19-07-2010	19:24	118°48'23"	23:53	+21°12'40"	04:21(+1T)	241°11'21"	05:40	21:28	15:54	00:06
20-07-2010	19:20	118°48'44"	23:48	+21°12'27"	04:17(+1T)	241°11'00"	05:41	21:27	17:08	00:34
21-07-2010	19:16	118°49'05"	23:44	+21°12'15"	04:13(+1T)	241°10'39"	05:42	21:26	18:15	01:10
22-07-2010	19:12	118°49'26"	23:40	+21°12'02"	04:09(+1T)	241°10'17"	05:44	21:25	19:12	01:54
23-07-2010	19:08	118°49'47"	23:36	+21°11'50"	04:05(+1T)	241°09'56"	05:45	21:23	19:57	02:48
24-07-2010	19:04	118°50'09"	23:32	+21°11'37"	04:01(+1T)	241°09'34"	05:46	21:22	20:32	03:50
25-07-2010	19:00	118°50'30"	23:28	+21°11'24"	03:57(+1T)	241°09'12"	05:48	21:21	21:00	04:58
26-07-2010	18:56	118°50'52"	23:24	+21°11'11"	03:53(+1T)	241°08'51"	05:49	21:19	21:21	06:07
27-07-2010	18:52	118°51'14"	23:20	+21°10'58"	03:49(+1T)	241°08'28"	05:50	21:18	21:39	07:15
28-07-2010	18:48	118°51'36"	23:16	+21°10'45"	03:45(+1T)	241°08'06"	05:52	21:17	21:55	08:23

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 5°15'43"N
 Län.: 86°54'27"W

Objekt

Zwergplanet:
 Pluto

Datum	Aufgang		Meridiandurchgang		Untergang		Sonne		Mond	
	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
29-07-2010	18:44	118°51' 59"	23:12	+21°10' 31"	03:41(+1T)	241°07' 44"	05:53	21:15	22:11	09:29
30-07-2010	18:40	118°52' 21"	23:08	+21°10' 18"	03:37(+1T)	241°07' 21"	05:54	21:14	22:26	10:35
31-07-2010	18:36	118°52' 44"	23:04	+21°10' 04"	03:33(+1T)	241°06' 58"	05:56	21:12	22:42	11:42
01-08-2010	18:32	118°53' 07"	23:00	+21°09' 51"	03:29(+1T)	241°06' 35"	05:57	21:11	23:00	12:50
02-08-2010	18:28	118°53' 30"	22:56	+21°09' 37"	03:25(+1T)	241°06' 12"	05:59	21:09	23:22	13:59
03-08-2010	18:24	118°53' 53"	22:52	+21°09' 23"	03:21(+1T)	241°05' 49"	06:00	21:07	23:51	15:10
04-08-2010	18:20	118°54' 16"	22:48	+21°09' 09"	03:17(+1T)	241°05' 26"	06:02	21:06	---	16:21
05-08-2010	18:16	118°54' 39"	22:44	+21°08' 56"	03:13(+1T)	241°05' 02"	06:03	21:04	00:29	17:28
06-08-2010	18:12	118°55' 03"	22:40	+21°08' 41"	03:08(+1T)	241°04' 38"	06:05	21:02	01:19	18:26
07-08-2010	18:08	118°55' 27"	22:36	+21°08' 27"	03:04(+1T)	241°04' 15"	06:06	21:01	02:23	19:14
08-08-2010	18:04	118°55' 50"	22:32	+21°08' 13"	03:00(+1T)	241°03' 51"	06:07	20:59	03:41	19:51
09-08-2010	18:00	118°56' 14"	22:28	+21°07' 59"	02:56(+1T)	241°03' 27"	06:09	20:57	05:06	20:21
10-08-2010	17:56	118°56' 38"	22:24	+21°07' 45"	02:52(+1T)	241°03' 02"	06:10	20:55	06:34	20:45
11-08-2010	17:52	118°57' 03"	22:20	+21°07' 30"	02:48(+1T)	241°02' 38"	06:12	20:54	08:02	21:07
12-08-2010	17:48	118°57' 27"	22:16	+21°07' 16"	02:44(+1T)	241°02' 14"	06:13	20:52	09:29	21:27
13-08-2010	17:44	118°57' 51"	22:12	+21°07' 01"	02:40(+1T)	241°01' 49"	06:15	20:50	10:54	21:47
14-08-2010	17:40	118°58' 16"	22:08	+21°06' 46"	02:36(+1T)	241°01' 25"	06:16	20:48	12:18	22:10
15-08-2010	17:36	118°58' 40"	22:04	+21°06' 32"	02:32(+1T)	241°01' 00"	06:18	20:46	13:40	22:38
16-08-2010	17:32	118°59' 05"	22:00	+21°06' 17"	02:28(+1T)	241°00' 35"	06:19	20:44	14:57	23:11
17-08-2010	17:28	118°59' 30"	21:56	+21°06' 02"	02:24(+1T)	241°00' 10"	06:21	20:42	16:07	23:53
18-08-2010	17:24	118°59' 55"	21:52	+21°05' 47"	02:20(+1T)	240°59' 46"	06:22	20:40	17:08	---
19-08-2010	17:20	119°00' 20"	21:48	+21°05' 33"	02:16(+1T)	240°59' 21"	06:24	20:38	17:56	00:44
20-08-2010	17:16	119°00' 45"	21:44	+21°05' 18"	02:12(+1T)	240°58' 55"	06:26	20:36	18:34	01:43
21-08-2010	17:12	119°01' 10"	21:40	+21°05' 03"	02:08(+1T)	240°58' 30"	06:27	20:34	19:04	02:49
22-08-2010	17:08	119°01' 35"	21:36	+21°04' 48"	02:04(+1T)	240°58' 05"	06:29	20:32	19:27	03:57
23-08-2010	17:04	119°02' 00"	21:32	+21°04' 33"	02:00(+1T)	240°57' 40"	06:30	20:30	19:46	05:05
24-08-2010	17:00	119°02' 26"	21:28	+21°04' 17"	01:56(+1T)	240°57' 14"	06:32	20:28	20:03	06:13
25-08-2010	16:56	119°02' 51"	21:24	+21°04' 02"	01:52(+1T)	240°56' 49"	06:33	20:26	20:19	07:20
26-08-2010	16:53	119°03' 16"	21:20	+21°03' 47"	01:48(+1T)	240°56' 24"	06:35	20:24	20:34	08:26
27-08-2010	16:49	119°03' 42"	21:16	+21°03' 32"	01:44(+1T)	240°55' 58"	06:36	20:22	20:49	09:32

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 5°15'43"N
 Län.: 86°54'27"W

Objekt

Zwergplanet:
 Pluto

Datum	Aufgang		Meridiandurchgang		Untergang		Sonne		Mond	
	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
28-08-2010	16:45	119°04' 07"	21:12	+21°03' 17"	01:40(+1T)	240°55' 33"	06:38	20:20	21:07	10:39
29-08-2010	16:41	119°04' 33"	21:09	+21°03' 02"	01:36(+1T)	240°55' 07"	06:39	20:18	21:28	11:47
30-08-2010	16:37	119°04' 58"	21:05	+21°02' 46"	01:32(+1T)	240°54' 41"	06:41	20:16	21:54	12:57
31-08-2010	16:33	119°05' 24"	21:01	+21°02' 31"	01:28(+1T)	240°54' 16"	06:42	20:14	22:27	14:06
01-09-2010	16:29	119°05' 50"	20:57	+21°02' 16"	01:24(+1T)	240°53' 50"	06:44	20:12	23:10	15:13
02-09-2010	16:25	119°06' 15"	20:53	+21°02' 00"	01:20(+1T)	240°53' 24"	06:45	20:09	---	16:13
03-09-2010	16:21	119°06' 41"	20:49	+21°01' 45"	01:16(+1T)	240°52' 59"	06:47	20:07	00:07	17:04
04-09-2010	16:17	119°07' 07"	20:45	+21°01' 30"	01:12(+1T)	240°52' 33"	06:48	20:05	01:16	17:45
05-09-2010	16:13	119°07' 32"	20:41	+21°01' 14"	01:08(+1T)	240°52' 07"	06:50	20:03	02:35	18:18
06-09-2010	16:09	119°07' 58"	20:37	+21°00' 59"	01:04(+1T)	240°51' 42"	06:51	20:01	04:00	18:45
07-09-2010	16:05	119°08' 24"	20:33	+21°00' 44"	01:00(+1T)	240°51' 16"	06:53	19:58	05:28	19:07
08-09-2010	16:01	119°08' 49"	20:29	+21°00' 28"	00:57(+1T)	240°50' 50"	06:54	19:56	06:56	19:29
09-09-2010	15:58	119°09' 15"	20:25	+21°00' 13"	00:53(+1T)	240°50' 25"	06:56	19:54	08:23	19:50
10-09-2010	15:54	119°09' 41"	20:21	+20°59' 58"	00:49(+1T)	240°49' 59"	06:57	19:52	09:50	20:12
11-09-2010	15:50	119°10' 06"	20:17	+20°59' 42"	00:45(+1T)	240°49' 33"	06:59	19:50	11:15	20:38
12-09-2010	15:46	119°10' 32"	20:13	+20°59' 27"	00:41(+1T)	240°49' 08"	07:00	19:47	12:37	21:10
13-09-2010	15:42	119°10' 58"	20:09	+20°59' 12"	00:37(+1T)	240°48' 42"	07:02	19:45	13:53	21:50
14-09-2010	15:38	119°11' 23"	20:05	+20°58' 57"	00:33(+1T)	240°48' 17"	07:03	19:43	14:59	22:39
15-09-2010	15:34	119°11' 49"	20:01	+20°58' 41"	00:29(+1T)	240°47' 51"	07:05	19:41	15:52	23:37
16-09-2010	15:30	119°12' 14"	19:58	+20°58' 26"	00:25(+1T)	240°47' 26"	07:07	19:38	16:34	---
17-09-2010	15:26	119°12' 39"	19:54	+20°58' 11"	00:21(+1T)	240°47' 01"	07:08	19:36	17:06	00:41
18-09-2010	15:22	119°13' 05"	19:50	+20°57' 56"	00:17(+1T)	240°46' 35"	07:10	19:34	17:32	01:48
19-09-2010	15:18	119°13' 30"	19:46	+20°57' 41"	00:13(+1T)	240°46' 10"	07:11	19:32	17:52	02:56
20-09-2010	15:15	119°13' 55"	19:42	+20°57' 26"	00:09(+1T)	240°45' 45"	07:13	19:30	18:10	04:04
21-09-2010	15:11	119°14' 20"	19:38	+20°57' 11"	00:05(+1T)	240°45' 20"	07:14	19:27	18:26	05:10
22-09-2010	15:07	119°14' 46"	19:34	+20°56' 56"	00:01(+1T)	240°44' 55"	07:16	19:25	18:41	06:17
23-09-2010	15:03	119°15' 11"	19:30	+20°56' 41"	23:57	240°44' 30"	07:17	19:23	18:57	07:23
24-09-2010	14:59	119°15' 35"	19:26	+20°56' 26"	23:53	240°44' 05"	07:19	19:21	19:15	08:30
25-09-2010	14:55	119°16' 00"	19:22	+20°56' 11"	23:49	240°43' 40"	07:20	19:18	19:35	09:38
26-09-2010	14:51	119°16' 25"	19:18	+20°55' 57"	23:45	240°43' 16"	07:22	19:16	19:59	10:47

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 5°15'43"N
 Län.: 86°54'27"W

Objekt

Zwergplanet:
 Pluto

Datum	Aufgang		Meridiandurchgang		Untergang		Sonne		Mond	
	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
27-09-2010	14:47	119°16'50"	19:14	+20°55'42"	23:42	240°42'51"	07:23	19:14	20:30	11:56
28-09-2010	14:43	119°17'14"	19:11	+20°55'27"	23:38	240°42'27"	07:25	19:12	21:09	13:03
29-09-2010	14:40	119°17'39"	19:07	+20°55'13"	23:34	240°42'02"	07:26	19:09	22:00	14:05
30-09-2010	14:36	119°18'03"	19:03	+20°54'58"	23:30	240°41'38"	07:28	19:07	23:03	14:58
01-10-2010	14:32	119°18'27"	18:59	+20°54'44"	23:26	240°41'14"	07:30	19:05	---	15:41
02-10-2010	14:28	119°18'51"	18:55	+20°54'29"	23:22	240°40'50"	07:31	19:03	00:16	16:16
03-10-2010	14:24	119°19'15"	18:51	+20°54'15"	23:18	240°40'26"	07:33	19:01	01:35	16:44
04-10-2010	14:20	119°19'39"	18:47	+20°54'01"	23:14	240°40'02"	07:34	18:58	02:59	17:08
05-10-2010	14:16	119°20'03"	18:43	+20°53'47"	23:10	240°39'39"	07:36	18:56	04:24	17:29
06-10-2010	14:13	119°20'26"	18:39	+20°53'33"	23:06	240°39'15"	07:37	18:54	05:49	17:50
07-10-2010	14:09	119°20'50"	18:36	+20°53'19"	23:02	240°38'52"	07:39	18:52	07:16	18:12
08-10-2010	14:05	119°21'13"	18:32	+20°53'05"	22:59	240°38'29"	07:41	18:50	08:42	18:37
09-10-2010	14:01	119°21'36"	18:28	+20°52'51"	22:55	240°38'06"	07:42	18:48	10:08	19:07
10-10-2010	13:57	119°21'59"	18:24	+20°52'38"	22:51	240°37'43"	07:44	18:46	11:29	19:44
11-10-2010	13:53	119°22'22"	18:20	+20°52'24"	22:47	240°37'20"	07:46	18:43	12:41	20:31
12-10-2010	13:49	119°22'45"	18:16	+20°52'11"	22:43	240°36'58"	07:47	18:41	13:42	21:26
13-10-2010	13:46	119°23'07"	18:12	+20°51'57"	22:39	240°36'35"	07:49	18:39	14:29	22:30
14-10-2010	13:42	119°23'29"	18:08	+20°51'44"	22:35	240°36'13"	07:50	18:37	15:06	23:37
15-10-2010	13:38	119°23'51"	18:05	+20°51'31"	22:31	240°35'51"	07:52	18:35	15:34	---
16-10-2010	13:34	119°24'13"	18:01	+20°51'18"	22:27	240°35'30"	07:54	18:33	15:57	00:46
17-10-2010	13:30	119°24'35"	17:57	+20°51'05"	22:24	240°35'08"	07:55	18:31	16:15	01:53
18-10-2010	13:26	119°24'57"	17:53	+20°50'52"	22:20	240°34'47"	07:57	18:29	16:32	03:00
19-10-2010	13:22	119°25'18"	17:49	+20°50'39"	22:16	240°34'25"	07:59	18:27	16:48	04:06
20-10-2010	13:19	119°25'39"	17:45	+20°50'27"	22:12	240°34'04"	08:00	18:25	17:04	05:12
21-10-2010	13:15	119°26'00"	17:41	+20°50'14"	22:08	240°33'44"	08:02	18:23	17:21	06:19
22-10-2010	13:11	119°26'21"	17:38	+20°50'02"	22:04	240°33'23"	08:04	18:21	17:40	07:27
23-10-2010	13:07	119°26'41"	17:34	+20°49'50"	22:00	240°33'03"	08:05	18:19	18:04	08:36
24-10-2010	13:03	119°27'01"	17:30	+20°49'38"	21:56	240°32'43"	08:07	18:17	18:33	09:46
25-10-2010	12:59	119°27'22"	17:26	+20°49'26"	21:53	240°32'23"	08:09	18:15	19:10	10:55
26-10-2010	12:56	119°27'41"	17:22	+20°49'14"	21:49	240°32'03"	08:10	18:13	19:58	11:58

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 5°15'43"N
 Län.: 86°54'27"W

Objekt

Zwergplanet:
 Pluto

Datum	Aufgang		Meridiandurchgang		Untergang		Sonne		Mond	
	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
27-10-2010	12:52	119°28'01"	17:18	+20°49'02"	21:45	240°31'44"	08:12	18:11	20:57	12:54
28-10-2010	12:48	119°28'20"	17:14	+20°48'51"	21:41	240°31'24"	08:14	18:09	22:06	13:40
29-10-2010	12:44	119°28'40"	17:11	+20°48'39"	21:37	240°31'05"	08:15	18:08	23:22	14:16
30-10-2010	12:40	119°28'59"	17:07	+20°48'28"	21:33	240°30'47"	08:17	18:06	---	14:46
31-10-2010	11:37	119°29'17"	16:03	+20°48'17"	20:29	240°30'28"	07:19	17:04	00:42	14:10
01-11-2010	11:33	119°29'36"	15:59	+20°48'06"	20:26	240°30'10"	07:20	17:02	01:03	14:32
02-11-2010	11:29	119°29'54"	15:55	+20°47'55"	20:22	240°29'52"	07:22	17:01	02:25	14:52
03-11-2010	11:25	119°30'12"	15:51	+20°47'45"	20:18	240°29'34"	07:24	16:59	03:48	15:13
04-11-2010	11:21	119°30'30"	15:48	+20°47'34"	20:14	240°29'17"	07:26	16:57	05:12	15:36
05-11-2010	11:17	119°30'47"	15:44	+20°47'24"	20:10	240°28'59"	07:27	16:55	06:36	16:03
06-11-2010	11:14	119°31'04"	15:40	+20°47'14"	20:06	240°28'43"	07:29	16:54	08:00	16:36
07-11-2010	11:10	119°31'21"	15:36	+20°47'04"	20:03	240°28'26"	07:31	16:52	09:17	17:19
08-11-2010	11:06	119°31'38"	15:32	+20°46'54"	19:59	240°28'09"	07:32	16:51	10:25	18:12
09-11-2010	11:02	119°31'54"	15:29	+20°46'44"	19:55	240°27'53"	07:34	16:49	11:19	19:13
10-11-2010	10:58	119°32'10"	15:25	+20°46'35"	19:51	240°27'37"	07:36	16:48	12:02	20:21
11-11-2010	10:55	119°32'26"	15:21	+20°46'25"	19:47	240°27'22"	07:37	16:46	12:34	21:31
12-11-2010	10:51	119°32'41"	15:17	+20°46'16"	19:43	240°27'07"	07:39	16:45	12:59	22:40
13-11-2010	10:47	119°32'57"	15:13	+20°46'07"	19:40	240°26'52"	07:41	16:43	13:19	23:47
14-11-2010	10:43	119°33'11"	15:09	+20°45'58"	19:36	240°26'37"	07:42	16:42	13:37	---
15-11-2010	10:39	119°33'26"	15:06	+20°45'49"	19:32	240°26'22"	07:44	16:41	13:53	00:54
16-11-2010	10:36	119°33'41"	15:02	+20°45'41"	19:28	240°26'08"	07:46	16:39	14:09	01:59
17-11-2010	10:32	119°33'55"	14:58	+20°45'33"	19:24	240°25'54"	07:47	16:38	14:25	03:05
18-11-2010	10:28	119°34'08"	14:54	+20°45'24"	19:20	240°25'41"	07:49	16:37	14:44	04:13
19-11-2010	10:24	119°34'22"	14:50	+20°45'17"	19:17	240°25'28"	07:51	16:36	15:06	05:22
20-11-2010	10:21	119°34'35"	14:47	+20°45'09"	19:13	240°25'15"	07:52	16:35	15:33	06:32
21-11-2010	10:17	119°34'48"	14:43	+20°45'01"	19:09	240°25'02"	07:54	16:34	16:08	07:42
22-11-2010	10:13	119°35'01"	14:39	+20°44'54"	19:05	240°24'50"	07:55	16:33	16:53	08:48
23-11-2010	10:09	119°35'13"	14:35	+20°44'46"	19:01	240°24'38"	07:57	16:32	17:50	09:48
24-11-2010	10:05	119°35'25"	14:31	+20°44'39"	18:58	240°24'26"	07:58	16:31	18:57	10:38
25-11-2010	10:02	119°35'37"	14:28	+20°44'32"	18:54	240°24'14"	08:00	16:30	20:12	11:17

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 5°15'43"N
 Län.: 86°54'27"W

Objekt

Zwergplanet:
 Pluto

Datum	Aufgang		Meridiandurchgang		Untergang		Sonne		Mond	
	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
26-11-2010	09:58	119°35' 48"	14:24	+20°44' 26"	18:50	240°24' 03"	08:01	16:29	21:31	11:49
27-11-2010	09:54	119°35' 59"	14:20	+20°44' 19"	18:46	240°23' 52"	08:03	16:28	22:51	12:15
28-11-2010	09:50	119°36' 10"	14:16	+20°44' 13"	18:42	240°23' 42"	08:04	16:27	---	12:37
29-11-2010	09:46	119°36' 20"	14:12	+20°44' 07"	18:38	240°23' 32"	08:06	16:26	00:11	12:57
30-11-2010	09:43	119°36' 30"	14:09	+20°44' 01"	18:35	240°23' 22"	08:07	16:26	01:31	13:17
01-12-2010	09:39	119°36' 40"	14:05	+20°43' 55"	18:31	240°23' 12"	08:09	16:25	02:52	13:38
02-12-2010	09:35	119°36' 50"	14:01	+20°43' 49"	18:27	240°23' 03"	08:10	16:25	04:14	14:02
03-12-2010	09:31	119°36' 59"	13:57	+20°43' 44"	18:23	240°22' 54"	08:11	16:24	05:35	14:32
04-12-2010	09:27	119°37' 08"	13:53	+20°43' 39"	18:19	240°22' 45"	08:13	16:24	06:54	15:10
05-12-2010	09:24	119°37' 16"	13:50	+20°43' 34"	18:16	240°22' 37"	08:14	16:23	08:06	15:57
06-12-2010	09:20	119°37' 25"	13:46	+20°43' 29"	18:12	240°22' 29"	08:15	16:23	09:06	16:55
07-12-2010	09:16	119°37' 32"	13:42	+20°43' 24"	18:08	240°22' 21"	08:16	16:23	09:54	18:01
08-12-2010	09:12	119°37' 40"	13:38	+20°43' 20"	18:04	240°22' 14"	08:17	16:22	10:31	19:11
09-12-2010	09:09	119°37' 47"	13:35	+20°43' 15"	18:01	240°22' 07"	08:18	16:22	11:00	20:22
10-12-2010	09:05	119°37' 54"	13:31	+20°43' 11"	17:57	240°22' 00"	08:20	16:22	11:22	21:31
11-12-2010	09:01	119°38' 01"	13:27	+20°43' 07"	17:53	240°21' 54"	08:21	16:22	11:41	22:39
12-12-2010	08:57	119°38' 07"	13:23	+20°43' 04"	17:49	240°21' 48"	08:22	16:22	11:58	23:45
13-12-2010	08:53	119°38' 13"	13:19	+20°43' 00"	17:45	240°21' 42"	08:22	16:22	12:14	---
14-12-2010	08:50	119°38' 19"	13:16	+20°42' 57"	17:42	240°21' 37"	08:23	16:22	12:30	00:50
15-12-2010	08:46	119°38' 24"	13:12	+20°42' 54"	17:38	240°21' 31"	08:24	16:22	12:47	01:56
16-12-2010	08:42	119°38' 30"	13:08	+20°42' 51"	17:34	240°21' 27"	08:25	16:22	13:07	03:04
17-12-2010	08:38	119°38' 34"	13:04	+20°42' 48"	17:30	240°21' 22"	08:26	16:22	13:32	04:13
18-12-2010	08:35	119°38' 39"	13:00	+20°42' 45"	17:26	240°21' 18"	08:26	16:23	14:03	05:23
19-12-2010	08:31	119°38' 43"	12:57	+20°42' 43"	17:23	240°21' 14"	08:27	16:23	14:44	06:32
20-12-2010	08:27	119°38' 47"	12:53	+20°42' 41"	17:19	240°21' 10"	08:28	16:23	15:36	07:35
21-12-2010	08:23	119°38' 50"	12:49	+20°42' 39"	17:15	240°21' 07"	08:28	16:24	16:41	08:30
22-12-2010	08:19	119°38' 54"	12:45	+20°42' 37"	17:11	240°21' 04"	08:29	16:24	17:55	09:15
23-12-2010	08:16	119°38' 57"	12:42	+20°42' 35"	17:07	240°21' 01"	08:29	16:25	19:16	09:50
24-12-2010	08:12	119°38' 59"	12:38	+20°42' 34"	17:04	240°20' 59"	08:30	16:26	20:38	10:19
25-12-2010	08:08	119°39' 02"	12:34	+20°42' 33"	17:00	240°20' 57"	08:30	16:26	22:00	10:42

Aufgang/Untergang

Datum/Standort

Datum: 01-01-2010
 Zeitraum: 1 Jahr
 Br.: 5°15'43"N
 Län.: 86°54'27"W

Objekt

Zwergplanet:
 Pluto

Datum	Aufgang		Meridiandurchgang		Untergang		Sonne		Mond	
	Ortszeit	Azm	Ortszeit	Höhe	Ortszeit	Azm	Aufgang	Untergang	Aufgang	Untergang
26-12-2010	08:04	119°39'04"	12:30	+20°42'31"	16:56	240°20'55"	08:30	16:27	23:20	11:03
27-12-2010	08:01	119°39'05"	12:26	+20°42'30"	16:52	240°20'53"	08:31	16:28	---	11:23
28-12-2010	07:57	119°39'07"	12:23	+20°42'30"	16:49	240°20'52"	08:31	16:29	00:41	11:44
29-12-2010	07:53	119°39'08"	12:19	+20°42'29"	16:45	240°20'51"	08:31	16:29	02:01	12:06
30-12-2010	07:49	119°39'09"	12:15	+20°42'29"	16:41	240°20'51"	08:31	16:30	03:21	12:34
31-12-2010	07:45	119°39'09"	12:11	+20°42'28"	16:37	240°20'50"	08:31	16:31	04:39	13:07