

I slightly modified Thorstensen's code to print out the time between evening twilight and morning twilight. For Okie-Tex site (site code = o) near Kenton OK I used same time zone as for Oklahoma City.

W. Romanishin- August 2013 - email: wromanishin at ou.edu - Here is stuff from John T. intro:

***** 2025 Night-time Astronomical Calendar for CA iTel *****

By John Thorstensen, Dartmouth College

This calendar is designed to provide information useful for the planning of nighttime observations. The format should minimize confusion; each line gives the phenomena for a single (local!) night, and each line is labeled with both evening and morning (local) day and date. Note that all times given are LOCAL CIVIL (zone) times. DAYLIGHT SAVINGS time is used using conventions for the USA; for 2007+, 2nd Sunday in March to first Sunday in November.

The rise/set times printed are the times at which the center of the object is 50 arcminutes below the geometrical horizon. At the given twilight, the center of the sun is 0.0 degrees below the geometrical horizon.

The moon positions (and rise/set times) are generated by an implementation of the Low-Precision formulae in the Astronomical Almanac. The Almanac states that the error seldom exceeds 0.3 degrees. Topocentric corrections are included. Comparisons with tables for Kitt Peak in the NOAO Newsletter indicate that the rise-set times are good to +/- 2 min or so. The moon's RA, Dec, and illuminated fraction are given for local midnight, regardless of whether the moon is actually up at that time. Note that the moonrise and moonset times are not printed if they occur near mid-day.

The LST at evening and morning twilight are tabulated. This gives an accurate idea of the range of RA's accessible during the night.

The JD is given (severely rounded off) for local midnight. Again, this avoids any ambiguity.

Some credits: The sidereal time and Julian date routines were originally coded in PL/I by Steve Maker of Dartmouth College. The algorithms originated in the old American Ephemeris. The routine to convert JD back to calendar date is adapted from Numerical Recipes in C, by Press et al.

CAUTIONS: I believe that the program which generates these tables is reasonably accurate. However, it has not been exhaustively tested, so you should be sure to run 'sanity checks' on the results. Also, in view of the approximations used, the results should not be used when high precision is needed. Extension to dates far from the present (1990) should be done with great caution. The code has not been tested for the eastern or southern hemishpheres. Rise/set times are slightly inaccurate and rather confusing at circumpolar latitudes, where the concept of a 'night' is blurry.

The daylight savings time conventions (if used) are quite specific (to U. S., post-1986) and subject to change. I know that the code has many infelicities; if you should find actual errors, please notify John.Thorstensen@dartmouth.edu

[This output comes from a (hopefully) portable, completely self-contained program in the c language. It is available from the author and may be used freely for scientific or educational purposes. If you use it for profit, please contact the author to arrange a (modest!) fee. Source code is copyright John Thorstensen, 1990.]

MOON PHASES FOR 2025, at CA iTel

Times and dates are given in local time, zone = 8 hr West.
 They are generally better than +- 2 minutes.
 Daylight savings time used.

The end of the previous year and the beginning of the next
 are included for continuity.

NEW		1ST		FULL		LAST	
Dec 30	14 28	Jan 06	15 58	Jan 13	14 28	Jan 21	12 32
Jan 29	4 37	Feb 05	0 04	Feb 12	5 54	Feb 20	9 35
Feb 27	16 47	Mar 06	8 34	Mar 13	23 56	Mar 22	4 32
Mar 29	4 00	Apr 04	19 17	Apr 12	17 24	Apr 20	18 38
Apr 27	12 33	May 04	6 53	May 12	9 58	May 20	5 01
May 26	20 04	Jun 02	20 42	Jun 11	0 46	Jun 18	12 21
Jun 25	3 34	Jul 02	12 30	Jul 10	13 39	Jul 17	17 40
Jul 24	12 12	Aug 01	5 41	Aug 09	0 57	Aug 15	22 14
Aug 22	23 07	Aug 30	23 26	Sep 07	11 11	Sep 14	3 35
Sep 21	12 55	Sep 29	16 55	Oct 06	20 49	Oct 13	11 15
Oct 21	5 26	Oct 29	9 22	Nov 05	5 20	Nov 11	21 30
Nov 19	22 48	Nov 27	23 00	Dec 04	15 15	Dec 11	12 53
Dec 19	17 44	Dec 27	11 11	Jan 03	2 04	Jan 10	7 49

Calendar for CA iTel, west longitude (h.m.s) = 7 57 36, latitude (d.m) = 37 04.2
 Rise/set times in Pacific time (8 hr W), for 1405 m above surroundings, DAYLIGHT time used, * shows clock reset.
 Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2025 JANUARY *****

Date (eve/morn)			LMST	----- Sun: -----				LST twilight:		----- Moon: -----					Twi-Twi
			midn	set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Wed	Jan 01/Thu	Jan 02	6 51	16 59	18 25	5 38	7 04	1 15	12 31	.....	18 56	7	21 00.6	-21 07	11.2
Thu	Jan 02/Fri	Jan 03	6 55	16 59	18 26	5 39	7 05	1 20	12 35	.....	20 07	13	21 53.8	-16 03	11.2
Fri	Jan 03/Sat	Jan 04	6 59	17 00	18 26	5 39	7 05	1 25	12 39	.....	21 17	21	22 44.8	-10 07	11.2
Sat	Jan 04/Sun	Jan 05	7 03	17 01	18 27	5 39	7 05	1 29	12 43	.....	22 26	31	23 34.5	- 3 40	11.2
Sun	Jan 05/Mon	Jan 06	7 07	17 02	18 28	5 39	7 05	1 34	12 47	.....	23 35	42	0 23.8	3 00	11.2
Mon	Jan 06/Tue	Jan 07	7 11	17 03	18 29	5 39	7 05	1 39	12 51	.....	0 45	53	1 14.1	9 34	11.2
Tue	Jan 07/Wed	Jan 08	7 15	17 04	18 29	5 39	7 05	1 43	12 55	.....	1 57	64	2 06.6	15 41	11.2
Wed	Jan 08/Thu	Jan 09	7 19	17 05	18 30	5 39	7 05	1 48	12 59	.....	3 11	75	3 02.4	20 59	11.1
Thu	Jan 09/Fri	Jan 10	7 23	17 06	18 31	5 39	7 04	1 53	13 03	.....	4 25	84	4 01.9	25 05	11.1
Fri	Jan 10/Sat	Jan 11	7 27	17 07	18 32	5 39	7 04	1 58	13 07	.....	5 35	91	5 04.4	27 35	11.1
Sat	Jan 11/Sun	Jan 12	7 31	17 08	18 33	5 39	7 04	2 03	13 10	.....	6 38	97	6 08.2	28 17	11.1
Sun	Jan 12/Mon	Jan 13	7 35	17 08	18 34	5 39	7 04	2 07	13 14	15 36	7 30	99	7 10.9	27 08	11.1
Mon	Jan 13/Tue	Jan 14	7 39	17 09	18 35	5 39	7 04	2 12	13 18	16 44	8 11	100	8 10.4	24 22	11.1
Tue	Jan 14/Wed	Jan 15	7 43	17 10	18 35	5 38	7 03	2 17	13 22	17 53	.....	98	9 05.5	20 18	11.1
Wed	Jan 15/Thu	Jan 16	7 46	17 11	18 36	5 38	7 03	2 22	13 26	19 00	.....	93	9 56.2	15 21	11.0
Thu	Jan 16/Fri	Jan 17	7 50	17 12	18 37	5 38	7 03	2 27	13 29	20 04	.....	88	10 43.2	9 51	11.0
Fri	Jan 17/Sat	Jan 18	7 54	17 14	18 38	5 38	7 02	2 32	13 33	21 04	.....	80	11 27.5	4 06	11.0
Sat	Jan 18/Sun	Jan 19	7 58	17 15	18 39	5 37	7 02	2 36	13 37	22 03	.....	72	12 10.3	- 1 41	11.0
Sun	Jan 19/Mon	Jan 20	8 02	17 16	18 40	5 37	7 01	2 41	13 40	23 00	.....	63	12 52.6	- 7 21	11.0
Mon	Jan 20/Tue	Jan 21	8 06	17 17	18 41	5 37	7 01	2 46	13 44	23 58	.....	54	13 35.6	-12 42	10.9
Tue	Jan 21/Wed	Jan 22	8 10	17 18	18 42	5 36	7 00	2 51	13 47	0 57	.....	45	14 20.2	-17 37	10.9
Wed	Jan 22/Thu	Jan 23	8 14	17 19	18 43	5 36	7 00	2 56	13 51	1 58	.....	36	15 07.3	-21 54	10.9
Thu	Jan 23/Fri	Jan 24	8 18	17 20	18 44	5 36	6 59	3 01	13 54	3 00	.....	27	15 57.7	-25 20	10.9
Fri	Jan 24/Sat	Jan 25	8 22	17 21	18 44	5 35	6 59	3 06	13 58	4 02	.....	19	16 51.5	-27 41	10.8
Sat	Jan 25/Sun	Jan 26	8 26	17 22	18 45	5 35	6 58	3 10	14 01	5 02	.....	11	17 48.2	-28 43	10.8
Sun	Jan 26/Mon	Jan 27	8 30	17 23	18 46	5 34	6 57	3 15	14 05	5 56	.....	6	18 46.7	-28 14	10.8
Mon	Jan 27/Tue	Jan 28	8 34	17 24	18 47	5 33	6 57	3 20	14 08	6 43	.....	2	19 45.4	-26 10	10.8
Tue	Jan 28/Wed	Jan 29	8 38	17 25	18 48	5 33	6 56	3 25	14 11	7 23	16 38	0	20 42.7	-22 34	10.7
Wed	Jan 29/Thu	Jan 30	8 42	17 26	18 49	5 32	6 55	3 30	14 15	7 56	17 50	1	21 37.7	-17 41	10.7
Thu	Jan 30/Fri	Jan 31	8 46	17 27	18 50	5 32	6 54	3 35	14 18	.....	19 03	4	22 30.5	-11 49	10.7
Fri	Jan 31/Sat	Feb 01	8 50	17 28	18 51	5 31	6 53	3 40	14 21	.....	20 14	10	23 21.5	- 5 18	10.7

***** 2025 FEBRUARY *****

Date (eve/morn)			LMST	----- Sun: -----				LST twilight:		----- Moon: -----					Twi-Twi
			midn	set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Sat	Feb 01/Sun	Feb 02	8 53	17 29	18 52	5 30	6 53	3 45	14 25	.....	21 25	18	0 11.7	1 30	10.6
Sun	Feb 02/Mon	Feb 03	8 57	17 31	18 53	5 29	6 52	3 50	14 28	.....	22 36	27	1 02.3	8 13	10.6
Mon	Feb 03/Tue	Feb 04	9 01	17 32	18 54	5 29	6 51	3 54	14 31	.....	23 48	38	1 54.4	14 30	10.6
Tue	Feb 04/Wed	Feb 05	9 05	17 33	18 55	5 28	6 50	3 59	14 34	.....	1 02	49	2 49.1	19 59	10.6
Wed	Feb 05/Thu	Feb 06	9 09	17 34	18 56	5 27	6 49	4 04	14 37	.....	2 15	60	3 46.8	24 19	10.5
Thu	Feb 06/Fri	Feb 07	9 13	17 35	18 57	5 26	6 48	4 09	14 40	.....	3 26	71	4 47.3	27 10	10.5
Fri	Feb 07/Sat	Feb 08	9 17	17 36	18 58	5 25	6 47	4 14	14 43	.....	4 30	81	5 49.4	28 19	10.5
Sat	Feb 08/Sun	Feb 09	9 21	17 37	18 59	5 24	6 46	4 19	14 46	.....	5 24	88	6 51.0	27 42	10.4
Sun	Feb 09/Mon	Feb 10	9 25	17 38	19 00	5 24	6 45	4 24	14 49	.....	6 08	94	7 50.4	25 26	10.4
Mon	Feb 10/Tue	Feb 11	9 29	17 39	19 01	5 23	6 44	4 29	14 52	.....	6 44	98	8 46.1	21 48	10.4
Tue	Feb 11/Wed	Feb 12	9 33	17 40	19 02	5 22	6 43	4 34	14 55	16 45	7 14	100	9 37.7	17 08	10.3
Wed	Feb 12/Thu	Feb 13	9 37	17 41	19 02	5 21	6 42	4 38	14 58	17 50	7 39	99	10 25.8	11 46	10.3
Thu	Feb 13/Fri	Feb 14	9 41	17 42	19 03	5 20	6 41	4 43	15 01	18 51	.....	97	11 11.1	6 02	10.3
Fri	Feb 14/Sat	Feb 15	9 45	17 43	19 04	5 19	6 40	4 48	15 04	19 51	.....	92	11 54.6	0 09	10.2
Sat	Feb 15/Sun	Feb 16	9 49	17 44	19 05	5 18	6 38	4 53	15 07	20 49	.....	87	12 37.3	- 5 39	10.2
Sun	Feb 16/Mon	Feb 17	9 53	17 45	19 06	5 16	6 37	4 58	15 10	21 47	.....	79	13 20.3	-11 11	10.2
Mon	Feb 17/Tue	Feb 18	9 57	17 46	19 07	5 15	6 36	5 03	15 13	22 45	.....	71	14 04.4	-16 18	10.1
Tue	Feb 18/Wed	Feb 19	10 00	17 47	19 08	5 14	6 35	5 08	15 16	23 45	.....	62	14 50.7	-20 50	10.1
Wed	Feb 19/Thu	Feb 20	10 04	17 48	19 09	5 13	6 34	5 13	15 18	0 46	.....	53	15 39.7	-24 34	10.1
Thu	Feb 20/Fri	Feb 21	10 08	17 49	19 10	5 12	6 32	5 18	15 21	1 48	.....	44	16 31.9	-27 17	10.0
Fri	Feb 21/Sat	Feb 22	10 12	17 50	19 11	5 11	6 31	5 23	15 24	2 48	.....	34	17 27.0	-28 47	10.0
Sat	Feb 22/Sun	Feb 23	10 16	17 51	19 12	5 09	6 30	5 27	15 27	3 43	.....	25	18 24.4	-28 52	10.0
Sun	Feb 23/Mon	Feb 24	10 20	17 52	19 13	5 08	6 29	5 32	15 29	4 33	.....	16	19 22.6	-27 23	9.9
Mon	Feb 24/Tue	Feb 25	10 24	17 53	19 14	5 07	6 27	5 37	15 32	5 16	.....	9	20 20.2	-24 22	9.9
Tue	Feb 25/Wed	Feb 26	10 28	17 54	19 15	5 06	6 26	5 42	15 35	5 52	.....	4	21 16.3	-19 56	9.8
Wed	Feb 26/Thu	Feb 27	10 32	17 55	19 16	5 04	6 25	5 47	15 37	6 24	16 39	1	22 10.4	-14 20	9.8
Thu	Feb 27/Fri	Feb 28	10 36	17 56	19 17	5 03	6 23	5 52	15 40	6 52	17 52	0	23 02.9	- 7 52	9.8
Fri	Feb 28/Sat	Mar 01	10 40	17 57	19 18	5 02	6 22	5 57	15 42	7 20	19 06	2	23 54.5	- 0 56	9.7

Calendar for CA iTel, west longitude (h.m.s) = 7 57 36, latitude (d.m) = 37 04.2
 Rise/set times in Pacific time (8 hr W), for 1405 m above surroundings, DAYLIGHT time used, * shows clock reset.
 Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2025 MARCH *****

Date (eve/morn)	LMST midn	----- Sun: -----				LST twilight:		----- Moon: -----				Twilight	
		set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Sat Mar 01/Sun Mar 02	10 44	17 58	19 19	5 00	6 21	6 02	15 45	.....	20 19	7	0 46.3	6 05	9.7
Sun Mar 02/Mon Mar 03	10 48	17 59	19 19	4 59	6 19	6 07	15 48	.....	21 33	14	1 39.3	12 44	9.7
Mon Mar 03/Tue Mar 04	10 52	18 00	19 20	4 58	6 18	6 11	15 50	.....	22 49	24	2 34.5	18 37	9.6
Tue Mar 04/Wed Mar 05	10 56	18 01	19 21	4 56	6 16	6 16	15 53	.....	0 05	34	3 32.5	23 22	9.6
Wed Mar 05/Thu Mar 06	11 00	18 02	19 22	4 55	6 15	6 21	15 55	.....	1 18	45	4 32.9	26 37	9.5
Thu Mar 06/Fri Mar 07	11 04	18 03	19 23	4 53	6 14	6 26	15 58	.....	2 25	56	5 34.7	28 10	9.5
Fri Mar 07/Sat Mar 08	11 08	18 04	19 24	4 52	6 12	6 31	16 00	.....	3 22	67	6 36.1	27 57	9.5
Sat Mar 08/Sun Mar 09*	11 11	18 05	19 25	5 51	7 11	6 36	16 03	.....	5 08	77	7 35.3	26 05	9.4
Sun Mar 09/Mon Mar 10	10 15	19 06	20 26	5 49	7 09	6 41	16 05	.....	5 46	85	8 29.4	23 02	9.4
Mon Mar 10/Tue Mar 11	10 19	19 07	20 27	5 48	7 08	6 46	16 08	.....	6 17	91	9 21.5	18 42	9.3
Tue Mar 11/Wed Mar 12	10 23	19 08	20 28	5 46	7 06	6 51	16 10	16 39	6 43	96	10 09.9	13 36	9.3
Wed Mar 12/Thu Mar 13	10 27	19 09	20 29	5 45	7 05	6 56	16 13	17 41	7 06	99	10 55.6	8 00	9.3
Thu Mar 13/Fri Mar 14	10 31	19 10	20 30	5 43	7 03	7 00	16 15	18 41	.....	100	11 39.3	2 09	9.2
Fri Mar 14/Sat Mar 15	10 35	19 10	20 31	5 41	7 02	7 05	16 17	19 40	.....	99	12 22.1	- 3 42	9.2
Sat Mar 15/Sun Mar 16	10 39	19 11	20 32	5 40	7 00	7 10	16 20	20 37	.....	96	13 04.9	- 9 22	9.1
Sun Mar 16/Mon Mar 17	10 43	19 12	20 33	5 38	6 59	7 15	16 22	21 36	.....	92	13 48.7	-14 41	9.1
Mon Mar 17/Tue Mar 18	10 47	19 13	20 34	5 37	6 58	7 20	16 25	22 35	.....	86	14 34.3	-19 27	9.0
Tue Mar 18/Wed Mar 19	10 51	19 14	20 35	5 35	6 56	7 25	16 27	23 35	.....	78	15 22.2	-23 29	9.0
Wed Mar 19/Thu Mar 20	10 55	19 15	20 36	5 34	6 55	7 30	16 29	0 36	.....	70	16 13.0	-26 34	9.0
Thu Mar 20/Fri Mar 21	10 59	19 16	20 37	5 32	6 53	7 35	16 32	1 36	.....	61	17 06.5	-28 30	8.9
Fri Mar 21/Sat Mar 22	11 03	19 17	20 38	5 30	6 52	7 40	16 34	2 33	.....	51	18 02.1	-29 07	8.9
Sat Mar 22/Sun Mar 23	11 06	19 18	20 39	5 29	6 50	7 45	16 36	3 24	.....	41	18 58.9	-28 17	8.8
Sun Mar 23/Mon Mar 24	11 10	19 19	20 40	5 27	6 49	7 50	16 39	4 08	.....	31	19 55.6	-25 57	8.8
Mon Mar 24/Tue Mar 25	11 14	19 19	20 41	5 26	6 47	7 55	16 41	4 47	.....	22	20 51.2	-22 12	8.7
Tue Mar 25/Wed Mar 26	11 18	19 20	20 42	5 24	6 46	8 00	16 43	5 20	.....	14	21 45.2	-17 11	8.7
Wed Mar 26/Thu Mar 27	11 22	19 21	20 43	5 22	6 44	8 05	16 45	5 49	.....	7	22 37.9	-11 09	8.7
Thu Mar 27/Fri Mar 28	11 26	19 22	20 44	5 21	6 43	8 10	16 48	6 17	17 39	2	23 29.8	- 4 23	8.6
Fri Mar 28/Sat Mar 29	11 30	19 23	20 45	5 19	6 41	8 15	16 50	6 45	18 53	0	0 21.9	2 42	8.6
Sat Mar 29/Sun Mar 30	11 34	19 24	20 46	5 17	6 40	8 20	16 52	.....	20 08	1	1 15.3	9 43	8.5
Sun Mar 30/Mon Mar 31	11 38	19 25	20 47	5 16	6 38	8 25	16 55	.....	21 26	5	2 11.0	16 10	8.5
Mon Mar 31/Tue Apr 01	11 42	19 26	20 48	5 14	6 37	8 30	16 57	.....	22 45	11	3 09.7	21 35	8.4

***** 2025 APRIL *****

Date (eve/morn)	LMST midn	----- Sun: -----				LST twilight:		----- Moon: -----				Twilight	
		set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Tue Apr 01/Wed Apr 02	11 46	19 27	20 49	5 12	6 35	8 35	16 59	.....	0 02	20	4 11.3	25 33	8.4
Wed Apr 02/Thu Apr 03	11 50	19 27	20 51	5 11	6 34	8 40	17 01	.....	1 14	30	5 14.6	27 46	8.3
Thu Apr 03/Fri Apr 04	11 54	19 28	20 52	5 09	6 32	8 45	17 04	.....	2 17	41	6 17.8	28 06	8.3
Fri Apr 04/Sat Apr 05	11 58	19 29	20 53	5 07	6 31	8 50	17 06	.....	3 07	52	7 18.6	26 41	8.2
Sat Apr 05/Sun Apr 06	12 02	19 30	20 54	5 06	6 29	8 55	17 08	.....	3 48	62	8 15.6	23 47	8.2
Sun Apr 06/Mon Apr 07	12 06	19 31	20 55	5 04	6 28	9 00	17 10	.....	4 21	72	9 08.4	19 43	8.2
Mon Apr 07/Tue Apr 08	12 10	19 32	20 56	5 02	6 26	9 05	17 13	.....	4 48	81	9 57.4	14 49	8.1
Tue Apr 08/Wed Apr 09	12 14	19 33	20 57	5 01	6 25	9 10	17 15	.....	5 11	88	10 43.2	9 23	8.1
Wed Apr 09/Thu Apr 10	12 17	19 34	20 58	4 59	6 24	9 15	17 17	.....	5 33	93	11 26.9	3 39	8.0
Thu Apr 10/Fri Apr 11	12 21	19 35	20 59	4 57	6 22	9 20	17 20	17 33	5 54	97	12 09.6	- 2 11	8.0
Fri Apr 11/Sat Apr 12	12 25	19 36	21 01	4 56	6 21	9 25	17 22	18 30	6 16	100	12 52.3	- 7 54	7.9
Sat Apr 12/Sun Apr 13	12 29	19 36	21 02	4 54	6 19	9 31	17 24	19 28	6 39	100	13 35.8	-13 20	7.9
Sun Apr 13/Mon Apr 14	12 33	19 37	21 03	4 52	6 18	9 36	17 26	20 27	.....	98	14 20.9	-18 17	7.8
Mon Apr 14/Tue Apr 15	12 37	19 38	21 04	4 51	6 17	9 41	17 29	21 27	.....	95	15 08.4	-22 33	7.8
Tue Apr 15/Wed Apr 16	12 41	19 39	21 05	4 49	6 15	9 46	17 31	22 28	.....	90	15 58.7	-25 55	7.7
Wed Apr 16/Thu Apr 17	12 45	19 40	21 06	4 47	6 14	9 51	17 33	23 28	.....	84	16 51.6	-28 11	7.7
Thu Apr 17/Fri Apr 18	12 49	19 41	21 08	4 46	6 12	9 56	17 36	0 26	.....	76	17 46.5	-29 10	7.6
Fri Apr 18/Sat Apr 19	12 53	19 42	21 09	4 44	6 11	10 01	17 38	1 18	.....	67	18 42.6	-28 45	7.6
Sat Apr 19/Sun Apr 20	12 57	19 43	21 10	4 42	6 10	10 07	17 40	2 03	.....	57	19 38.4	-26 53	7.5
Sun Apr 20/Mon Apr 21	13 01	19 44	21 11	4 41	6 09	10 12	17 42	2 43	.....	47	20 33.2	-23 39	7.5
Mon Apr 21/Tue Apr 22	13 05	19 45	21 13	4 39	6 07	10 17	17 45	3 17	.....	37	21 26.3	-19 10	7.4
Tue Apr 22/Wed Apr 23	13 09	19 45	21 14	4 38	6 06	10 22	17 47	3 47	.....	27	22 18.0	-13 38	7.4
Wed Apr 23/Thu Apr 24	13 13	19 46	21 15	4 36	6 05	10 27	17 49	4 15	.....	17	23 08.8	- 7 18	7.4
Thu Apr 24/Fri Apr 25	13 17	19 47	21 16	4 34	6 03	10 32	17 52	4 42	.....	9	23 59.7	- 0 28	7.3
Fri Apr 25/Sat Apr 26	13 21	19 48	21 18	4 33	6 02	10 38	17 54	5 10	17 39	4	0 51.9	6 32	7.3
Sat Apr 26/Sun Apr 27	13 24	19 49	21 19	4 31	6 01	10 43	17 57	5 41	18 56	0	1 46.6	13 16	7.2
Sun Apr 27/Mon Apr 28	13 28	19 50	21 20	4 30	6 00	10 48	17 59	6 18	20 15	0	2 44.5	19 13	7.2
Mon Apr 28/Tue Apr 29	13 32	19 51	21 21	4 28	5 59	10 53	18 01	.....	21 36	3	3 46.2	23 53	7.1
Tue Apr 29/Wed Apr 30	13 36	19 52	21 23	4 27	5 57	10 58	18 04	.....	22 53	9	4 50.6	26 51	7.1
Wed Apr 30/Thu May 01	13 40	19 53	21 24	4 25	5 56	11 04	18 06	.....	0 03	17	5 55.7	27 53	7.0

Calendar for CA iTel, west longitude (h.m.s) = 7 57 36, latitude (d.m) = 37 04.2
 Rise/set times in Pacific time (8 hr W), for 1405 m above surroundings, DAYLIGHT time used, * shows clock reset.
 Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2025 MAY *****

Date (eve/morn)	LMST midn	----- Sun: -----			LST twilight:		----- Moon: -----				Twilight		
		set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Thu May 01/Fri May 02	13 44	19 54	21 25	4 24	5 55	11 09	18 09	.....	1 00	26	6 59.1	27 01	7.0
Fri May 02/Sat May 03	13 48	19 55	21 26	4 22	5 54	11 14	18 11	.....	1 46	36	7 58.7	24 28	6.9
Sat May 03/Sun May 04	13 52	19 55	21 28	4 21	5 53	11 19	18 14	.....	2 22	47	8 53.6	20 39	6.9
Sun May 04/Mon May 05	13 56	19 56	21 29	4 19	5 52	11 25	18 16	.....	2 51	57	9 44.1	15 55	6.8
Mon May 05/Tue May 06	14 00	19 57	21 30	4 18	5 51	11 30	18 19	.....	3 16	67	10 30.8	10 36	6.8
Tue May 06/Wed May 07	14 04	19 58	21 32	4 16	5 50	11 35	18 21	.....	3 38	76	11 15.0	4 57	6.7
Wed May 07/Thu May 08	14 08	19 59	21 33	4 15	5 49	11 40	18 24	.....	4 00	83	11 57.7	- 0 50	6.7
Thu May 08/Fri May 09	14 12	20 00	21 34	4 14	5 48	11 45	18 26	.....	4 21	90	12 40.2	- 6 33	6.7
Fri May 09/Sat May 10	14 16	20 01	21 35	4 12	5 47	11 51	18 29	.....	4 44	95	13 23.2	-12 02	6.6
Sat May 10/Sun May 11	14 20	20 02	21 37	4 11	5 46	11 56	18 31	18 20	5 09	98	14 07.9	-17 06	6.6
Sun May 11/Mon May 12	14 24	20 03	21 38	4 10	5 45	12 01	18 34	19 20	5 38	100	14 54.9	-21 34	6.5
Mon May 12/Tue May 13	14 28	20 03	21 39	4 08	5 44	12 06	18 37	20 21	6 12	99	15 44.7	-25 11	6.5
Tue May 13/Wed May 14	14 32	20 04	21 40	4 07	5 43	12 12	18 39	21 21	.....	97	16 37.4	-27 45	6.4
Wed May 14/Thu May 15	14 35	20 05	21 42	4 06	5 42	12 17	18 42	22 20	.....	93	17 32.3	-29 04	6.4
Thu May 15/Fri May 16	14 39	20 06	21 43	4 05	5 42	12 22	18 45	23 14	.....	88	18 28.5	-28 58	6.4
Fri May 16/Sat May 17	14 43	20 07	21 44	4 03	5 41	12 27	18 47	0 01	.....	81	19 24.5	-27 27	6.3
Sat May 17/Sun May 18	14 47	20 08	21 45	4 02	5 40	12 32	18 50	0 42	.....	72	20 19.2	-24 33	6.3
Sun May 18/Mon May 19	14 51	20 09	21 47	4 01	5 39	12 38	18 53	1 17	.....	62	21 12.1	-20 26	6.2
Mon May 19/Tue May 20	14 55	20 09	21 48	4 00	5 39	12 43	18 56	1 47	.....	52	22 03.0	-15 17	6.2
Tue May 20/Wed May 21	14 59	20 10	21 49	3 59	5 38	12 48	18 59	2 15	.....	41	22 52.7	- 9 20	6.2
Wed May 21/Thu May 22	15 03	20 11	21 50	3 58	5 37	12 53	19 02	2 41	.....	30	23 42.0	- 2 50	6.1
Thu May 22/Fri May 23	15 07	20 12	21 51	3 57	5 37	12 58	19 05	3 08	.....	20	0 32.2	3 56	6.1
Fri May 23/Sat May 24	15 11	20 13	21 53	3 56	5 36	13 03	19 08	3 36	.....	12	1 24.5	10 36	6.1
Sat May 24/Sun May 25	15 15	20 13	21 54	3 55	5 35	13 08	19 11	4 09	17 46	5	2 20.0	16 46	6.0
Sun May 25/Mon May 26	15 19	20 14	21 55	3 54	5 35	13 13	19 14	4 49	19 05	1	3 19.7	21 56	6.0
Mon May 26/Tue May 27	15 23	20 15	21 56	3 53	5 34	13 18	19 17	5 39	20 25	0	4 23.1	25 37	6.0
Tue May 27/Wed May 28	15 27	20 16	21 57	3 53	5 34	13 23	19 20	.....	21 40	2	5 28.8	27 27	5.9
Wed May 28/Thu May 29	15 31	20 16	21 58	3 52	5 33	13 28	19 23	.....	22 45	7	6 34.3	27 17	5.9
Thu May 29/Fri May 30	15 35	20 17	21 59	3 51	5 33	13 33	19 26	.....	23 37	13	7 36.7	25 16	5.9
Fri May 30/Sat May 31	15 39	20 18	22 00	3 50	5 33	13 38	19 29	.....	0 18	22	8 34.6	21 46	5.8
Sat May 31/Sun Jun 01	15 42	20 18	22 01	3 50	5 32	13 43	19 33	.....	0 51	31	9 27.5	17 12	5.8

***** 2025 JUNE *****

Date (eve/morn)	LMST midn	----- Sun: -----			LST twilight:		----- Moon: -----				Twilight		
		set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Sun Jun 01/Mon Jun 02	15 46	20 19	22 02	3 49	5 32	13 48	19 36	.....	1 18	41	10 16.1	11 57	5.8
Mon Jun 02/Tue Jun 03	15 50	20 20	22 03	3 48	5 32	13 53	19 39	.....	1 42	51	11 01.5	6 20	5.8
Tue Jun 03/Wed Jun 04	15 54	20 20	22 04	3 48	5 31	13 58	19 43	.....	2 04	61	11 44.8	0 33	5.7
Wed Jun 04/Thu Jun 05	15 58	20 21	22 05	3 47	5 31	14 03	19 46	.....	2 25	70	12 27.4	- 5 11	5.7
Thu Jun 05/Fri Jun 06	16 02	20 22	22 06	3 47	5 31	14 08	19 50	.....	2 48	78	13 10.2	-10 43	5.7
Fri Jun 06/Sat Jun 07	16 06	20 22	22 06	3 46	5 31	14 12	19 53	.....	3 12	85	13 54.3	-15 53	5.7
Sat Jun 07/Sun Jun 08	16 10	20 23	22 07	3 46	5 31	14 17	19 57	.....	3 39	91	14 40.6	-20 30	5.6
Sun Jun 08/Mon Jun 09	16 14	20 23	22 08	3 46	5 30	14 22	20 00	18 13	4 12	96	15 29.7	-24 22	5.6
Mon Jun 09/Tue Jun 10	16 18	20 24	22 09	3 45	5 30	14 26	20 04	19 14	4 51	99	16 21.9	-27 14	5.6
Tue Jun 10/Wed Jun 11	16 22	20 24	22 09	3 45	5 30	14 31	20 08	20 13	5 37	100	17 16.8	-28 53	5.6
Wed Jun 11/Thu Jun 12	16 26	20 25	22 10	3 45	5 30	14 35	20 11	21 09	.....	99	18 13.4	-29 08	5.6
Thu Jun 12/Fri Jun 13	16 30	20 25	22 11	3 45	5 30	14 40	20 15	21 59	.....	96	19 10.3	-27 55	5.6
Fri Jun 13/Sat Jun 14	16 34	20 26	22 11	3 45	5 30	14 44	20 19	22 42	.....	91	20 06.0	-25 17	5.6
Sat Jun 14/Sun Jun 15	16 38	20 26	22 12	3 45	5 30	14 49	20 23	23 19	.....	84	20 59.6	-21 23	5.6
Sun Jun 15/Mon Jun 16	16 42	20 26	22 12	3 45	5 30	14 53	20 27	23 50	.....	76	21 51.0	-16 26	5.5
Mon Jun 16/Tue Jun 17	16 46	20 27	22 12	3 45	5 30	14 58	20 31	0 18	.....	66	22 40.6	-10 40	5.5
Tue Jun 17/Wed Jun 18	16 49	20 27	22 13	3 45	5 31	15 02	20 35	0 44	.....	55	23 29.2	- 4 22	5.5
Wed Jun 18/Thu Jun 19	16 53	20 27	22 13	3 45	5 31	15 06	20 39	1 09	.....	44	0 18.0	2 12	5.5
Thu Jun 19/Fri Jun 20	16 57	20 27	22 13	3 45	5 31	15 10	20 43	1 36	.....	33	1 08.2	8 45	5.5
Fri Jun 20/Sat Jun 21	17 01	20 28	22 14	3 45	5 31	15 15	20 47	2 06	.....	23	2 01.2	14 55	5.5
Sat Jun 21/Sun Jun 22	17 05	20 28	22 14	3 46	5 31	15 19	20 51	2 41	.....	14	2 57.9	20 18	5.5
Sun Jun 22/Mon Jun 23	17 09	20 28	22 14	3 46	5 32	15 23	20 56	3 25	18 00	7	3 58.7	24 26	5.5
Mon Jun 23/Tue Jun 24	17 13	20 28	22 14	3 46	5 32	15 27	21 00	4 19	19 16	2	5 02.8	26 54	5.5
Tue Jun 24/Wed Jun 25	17 17	20 28	22 14	3 47	5 32	15 31	21 04	5 24	20 26	0	6 08.2	27 28	5.5
Wed Jun 25/Thu Jun 26	17 21	20 28	22 14	3 47	5 33	15 35	21 09	.....	21 24	1	7 12.1	26 06	5.5
Thu Jun 26/Fri Jun 27	17 25	20 29	22 14	3 47	5 33	15 39	21 13	.....	22 11	4	8 12.3	23 04	5.6
Fri Jun 27/Sat Jun 28	17 29	20 29	22 14	3 48	5 33	15 43	21 17	.....	22 48	10	9 07.7	18 47	5.6
Sat Jun 28/Sun Jun 29	17 33	20 29	22 14	3 48	5 34	15 46	21 22	.....	23 18	17	9 58.6	13 39	5.6
Sun Jun 29/Mon Jun 30	17 37	20 29	22 14	3 49	5 34	15 50	21 27	.....	23 43	26	10 45.6	8 01	5.6
Mon Jun 30/Tue Jul 01	17 41	20 28	22 13	3 50	5 35	15 54	21 31	.....	0 06	35	11 30.1	2 12	5.6

Calendar for CA iTel, west longitude (h.m.s) = 7 57 36, latitude (d.m) = 37 04.2
 Rise/set times in Pacific time (8 hr W), for 1405 m above surroundings, DAYLIGHT time used, * shows clock reset.
 Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2025 JULY *****

Date (eve/morn)		LMST	----- Sun: -----				LST twilight:		----- Moon: -----				Twi-Twi	
		midn	set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Tue Jul 01/Wed Jul 02		17 45	20 28	22 13	3 50	5 35	15 58	21 36	.....	0 28	45	12 13.2	- 3 37	5.6
Wed Jul 02/Thu Jul 03		17 49	20 28	22 13	3 51	5 36	16 01	21 40	.....	0 50	54	12 56.0	- 9 15	5.6
Thu Jul 03/Fri Jul 04		17 53	20 28	22 12	3 52	5 36	16 05	21 45	.....	1 14	64	13 39.7	-14 32	5.7
Fri Jul 04/Sat Jul 05		17 57	20 28	22 12	3 53	5 37	16 08	21 50	.....	1 40	72	14 25.1	-19 19	5.7
Sat Jul 05/Sun Jul 06		18 00	20 28	22 12	3 53	5 37	16 12	21 54	.....	2 11	80	15 13.2	-23 24	5.7
Sun Jul 06/Mon Jul 07		18 04	20 27	22 11	3 54	5 38	16 15	21 59	.....	2 47	87	16 04.4	-26 34	5.7
Mon Jul 07/Tue Jul 08		18 08	20 27	22 11	3 55	5 38	16 19	22 04	18 04	3 31	93	16 58.7	-28 35	5.7
Tue Jul 08/Wed Jul 09		18 12	20 27	22 10	3 56	5 39	16 22	22 09	19 02	4 23	97	17 55.2	-29 16	5.8
Wed Jul 09/Thu Jul 10		18 16	20 27	22 09	3 57	5 40	16 25	22 14	19 54	5 23	99	18 52.8	-28 28	5.8
Thu Jul 10/Fri Jul 11		18 20	20 26	22 09	3 58	5 40	16 29	22 19	20 40	6 28	100	19 49.8	-26 10	5.8
Fri Jul 11/Sat Jul 12		18 24	20 26	22 08	3 59	5 41	16 32	22 24	21 19	.....	98	20 45.0	-22 29	5.8
Sat Jul 12/Sun Jul 13		18 28	20 25	22 07	4 00	5 42	16 35	22 28	21 52	.....	93	21 37.9	-17 40	5.9
Sun Jul 13/Mon Jul 14		18 32	20 25	22 06	4 01	5 42	16 38	22 33	22 21	.....	87	22 28.6	-11 57	5.9
Mon Jul 14/Tue Jul 15		18 36	20 24	22 06	4 02	5 43	16 41	22 38	22 48	.....	79	23 17.8	- 5 39	5.9
Tue Jul 15/Wed Jul 16		18 40	20 24	22 05	4 03	5 44	16 44	22 43	23 13	.....	69	0 06.7	0 56	6.0
Wed Jul 16/Thu Jul 17		18 44	20 23	22 04	4 04	5 45	16 47	22 48	23 39	.....	58	0 56.2	7 29	6.0
Thu Jul 17/Fri Jul 18		18 48	20 23	22 03	4 05	5 45	16 50	22 53	0 07	.....	47	1 47.8	13 42	6.0
Fri Jul 18/Sat Jul 19		18 52	20 22	22 02	4 06	5 46	16 53	22 59	0 40	.....	35	2 42.5	19 12	6.1
Sat Jul 19/Sun Jul 20		18 56	20 22	22 01	4 07	5 47	16 56	23 04	1 19	.....	25	3 40.9	23 35	6.1
Sun Jul 20/Mon Jul 21		19 00	20 21	22 00	4 08	5 48	16 59	23 09	2 07	.....	15	4 42.7	26 29	6.1
Mon Jul 21/Tue Jul 22		19 04	20 20	21 59	4 10	5 48	17 02	23 14	3 06	18 10	8	5 46.5	27 36	6.2
Tue Jul 22/Wed Jul 23		19 07	20 19	21 58	4 11	5 49	17 05	23 19	4 14	19 12	3	6 50.0	26 50	6.2
Wed Jul 23/Thu Jul 24		19 11	20 19	21 57	4 12	5 50	17 08	23 24	5 26	20 03	0	7 50.9	24 21	6.3
Thu Jul 24/Fri Jul 25		19 15	20 18	21 56	4 13	5 51	17 11	23 29	.....	20 43	0	8 47.7	20 27	6.3
Fri Jul 25/Sat Jul 26		19 19	20 17	21 54	4 14	5 52	17 13	23 34	.....	21 16	3	9 40.1	15 32	6.3
Sat Jul 26/Sun Jul 27		19 23	20 16	21 53	4 15	5 52	17 16	23 39	.....	21 44	7	10 28.7	9 59	6.4
Sun Jul 27/Mon Jul 28		19 27	20 15	21 52	4 17	5 53	17 19	23 45	.....	22 08	13	11 14.3	4 08	6.4
Mon Jul 28/Tue Jul 29		19 31	20 15	21 51	4 18	5 54	17 21	23 50	.....	22 30	21	11 58.0	- 1 46	6.5
Tue Jul 29/Wed Jul 30		19 35	20 14	21 49	4 19	5 55	17 24	23 55	.....	22 52	29	12 41.1	- 7 31	6.5
Wed Jul 30/Thu Jul 31		19 39	20 13	21 48	4 20	5 56	17 27	0 00	.....	23 15	38	13 24.5	-12 58	6.5
Thu Jul 31/Fri Aug 01		19 43	20 12	21 47	4 22	5 56	17 29	0 05	.....	23 40	47	14 09.3	-17 55	6.6

***** 2025 AUGUST *****

Date (eve/morn)		LMST	----- Sun: -----				LST twilight:		----- Moon: -----				Twi-Twi	
		midn	set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Fri Aug 01/Sat Aug 02		19 47	20 11	21 45	4 23	5 57	17 32	0 10	.....	0 09	57	14 56.2	-22 14	6.6
Sat Aug 02/Sun Aug 03		19 51	20 10	21 44	4 24	5 58	17 34	0 16	.....	0 43	66	15 46.0	-25 42	6.7
Sun Aug 03/Mon Aug 04		19 55	20 09	21 43	4 25	5 59	17 37	0 21	.....	1 24	75	16 38.9	-28 07	6.7
Mon Aug 04/Tue Aug 05		19 59	20 08	21 41	4 27	6 00	17 39	0 26	.....	2 12	83	17 34.4	-29 15	6.8
Tue Aug 05/Wed Aug 06		20 03	20 07	21 40	4 28	6 01	17 42	0 31	17 46	3 09	90	18 31.6	-28 58	6.8
Wed Aug 06/Thu Aug 07		20 07	20 06	21 38	4 29	6 02	17 44	0 36	18 35	4 13	95	19 29.2	-27 10	6.8
Thu Aug 07/Fri Aug 08		20 11	20 05	21 37	4 30	6 02	17 47	0 41	19 16	5 21	99	20 25.6	-23 53	6.9
Fri Aug 08/Sat Aug 09		20 15	20 03	21 35	4 31	6 03	17 49	0 47	19 52	6 30	100	21 20.2	-19 19	6.9
Sat Aug 09/Sun Aug 10		20 18	20 02	21 34	4 33	6 04	17 52	0 52	20 23	.....	99	22 12.6	-13 42	7.0
Sun Aug 10/Mon Aug 11		20 22	20 01	21 32	4 34	6 05	17 54	0 57	20 51	.....	95	23 03.4	- 7 22	7.0
Mon Aug 11/Tue Aug 12		20 26	20 00	21 31	4 35	6 06	17 57	1 02	21 17	.....	89	23 53.5	- 0 38	7.1
Tue Aug 12/Wed Aug 13		20 30	19 59	21 29	4 36	6 07	17 59	1 07	21 43	.....	81	0 43.8	6 08	7.1
Wed Aug 13/Thu Aug 14		20 34	19 58	21 28	4 37	6 07	18 01	1 12	22 10	.....	71	1 35.7	12 34	7.2
Thu Aug 14/Fri Aug 15		20 38	19 56	21 26	4 39	6 08	18 04	1 18	22 41	.....	60	2 30.0	18 19	7.2
Fri Aug 15/Sat Aug 16		20 42	19 55	21 24	4 40	6 09	18 06	1 23	23 18	.....	49	3 27.6	22 58	7.3
Sat Aug 16/Sun Aug 17		20 46	19 54	21 23	4 41	6 10	18 08	1 28	0 03	.....	37	4 28.2	26 12	7.3
Sun Aug 17/Mon Aug 18		20 50	19 52	21 21	4 42	6 11	18 11	1 33	0 57	.....	27	5 30.7	27 42	7.4
Mon Aug 18/Tue Aug 19		20 54	19 51	21 19	4 43	6 12	18 13	1 38	2 00	.....	17	6 33.4	27 24	7.4
Tue Aug 19/Wed Aug 20		20 58	19 50	21 18	4 45	6 13	18 15	1 43	3 10	17 57	10	7 33.9	25 23	7.4
Wed Aug 20/Thu Aug 21		21 02	19 49	21 16	4 46	6 13	18 18	1 48	4 21	18 40	4	8 31.0	21 53	7.5
Thu Aug 21/Fri Aug 22		21 06	19 47	21 15	4 47	6 14	18 20	1 53	5 30	19 15	1	9 23.9	17 17	7.5
Fri Aug 22/Sat Aug 23		21 10	19 46	21 13	4 48	6 15	18 22	1 59	6 37	19 44	0	10 13.1	11 56	7.6
Sat Aug 23/Sun Aug 24		21 14	19 44	21 11	4 49	6 16	18 24	2 04	.....	20 09	1	10 59.3	6 10	7.6
Sun Aug 24/Mon Aug 25		21 18	19 43	21 10	4 50	6 17	18 27	2 09	.....	20 32	4	11 43.5	0 14	7.7
Mon Aug 25/Tue Aug 26		21 22	19 42	21 08	4 51	6 18	18 29	2 14	.....	20 55	9	12 26.7	- 5 37	7.7
Tue Aug 26/Wed Aug 27		21 25	19 40	21 06	4 53	6 18	18 31	2 19	.....	21 17	15	13 10.0	-11 12	7.8
Wed Aug 27/Thu Aug 28		21 29	19 39	21 04	4 54	6 19	18 33	2 24	.....	21 41	23	13 54.2	-16 20	7.8
Thu Aug 28/Fri Aug 29		21 33	19 37	21 03	4 55	6 20	18 36	2 29	.....	22 09	31	14 40.2	-20 52	7.9
Fri Aug 29/Sat Aug 30		21 37	19 36	21 01	4 56	6 21	18 38	2 34	.....	22 40	40	15 28.6	-24 37	7.9
Sat Aug 30/Sun Aug 31		21 41	19 35	20 59	4 57	6 22	18 40	2 39	.....	23 18	50	16 19.8	-27 23	8.0
Sun Aug 31/Mon Sep 01		21 45	19 33	20 58	4 58	6 23	18 42	2 44	.....	0 02	59	17 13.7	-28 58	8.0

Calendar for CA iTel, west longitude (h.m.s) = 7 57 36, latitude (d.m) = 37 04.2
 Rise/set times in Pacific time (8 hr W), for 1405 m above surroundings, DAYLIGHT time used, * shows clock reset.
 Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2025 SEPTEMBER *****

Date (eve/morn)	LMST midn	----- Sun: -----				LST twilight:		----- Moon: -----				Twilight	
		set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Mon Sep 01/Tue Sep 02	21 49	19 32	20 56	4 59	6 23	18 45	2 49	.....	0 55	69	18 09.5	-29 13	8.1
Tue Sep 02/Wed Sep 03	21 53	19 30	20 54	5 00	6 24	18 47	2 54	.....	1 55	78	19 06.3	-28 00	8.1
Wed Sep 03/Thu Sep 04	21 57	19 29	20 53	5 01	6 25	18 49	2 59	17 10	3 01	86	20 02.7	-25 19	8.1
Thu Sep 04/Fri Sep 05	22 01	19 27	20 51	5 02	6 26	18 51	3 04	17 48	4 10	92	20 57.8	-21 15	8.2
Fri Sep 05/Sat Sep 06	22 05	19 26	20 49	5 03	6 27	18 54	3 09	18 21	5 20	97	21 51.4	-15 59	8.2
Sat Sep 06/Sun Sep 07	22 09	19 24	20 47	5 04	6 27	18 56	3 14	18 51	6 30	100	22 43.5	- 9 48	8.3
Sun Sep 07/Mon Sep 08	22 13	19 23	20 46	5 05	6 28	18 58	3 19	19 18	.....	100	23 34.8	- 3 00	8.3
Mon Sep 08/Tue Sep 09	22 17	19 21	20 44	5 06	6 29	19 00	3 24	19 44	.....	97	0 26.4	4 01	8.4
Tue Sep 09/Wed Sep 10	22 21	19 20	20 42	5 07	6 30	19 02	3 29	20 12	.....	91	1 19.4	10 50	8.4
Wed Sep 10/Thu Sep 11	22 25	19 18	20 41	5 08	6 31	19 05	3 34	20 42	.....	83	2 14.7	17 01	8.5
Thu Sep 11/Fri Sep 12	22 29	19 17	20 39	5 09	6 32	19 07	3 39	21 18	.....	73	3 13.0	22 08	8.5
Fri Sep 12/Sat Sep 13	22 33	19 15	20 37	5 10	6 32	19 09	3 44	22 00	.....	62	4 14.2	25 48	8.5
Sat Sep 13/Sun Sep 14	22 36	19 14	20 36	5 11	6 33	19 11	3 48	22 52	.....	51	5 17.3	27 44	8.6
Sun Sep 14/Mon Sep 15	22 40	19 12	20 34	5 12	6 34	19 14	3 53	23 53	.....	40	6 20.2	27 48	8.6
Mon Sep 15/Tue Sep 16	22 44	19 11	20 32	5 13	6 35	19 16	3 58	1 00	.....	29	7 21.1	26 08	8.7
Tue Sep 16/Wed Sep 17	22 48	19 09	20 31	5 14	6 36	19 18	4 03	2 10	.....	20	8 18.3	22 59	8.7
Wed Sep 17/Thu Sep 18	22 52	19 07	20 29	5 15	6 36	19 21	4 08	3 19	17 17	12	9 11.4	18 40	8.8
Thu Sep 18/Fri Sep 19	22 56	19 06	20 27	5 16	6 37	19 23	4 13	4 25	17 47	6	10 00.8	13 33	8.8
Fri Sep 19/Sat Sep 20	23 00	19 04	20 26	5 17	6 38	19 25	4 18	5 29	18 13	2	10 47.0	7 56	8.9
Sat Sep 20/Sun Sep 21	23 04	19 03	20 24	5 18	6 39	19 27	4 23	6 30	18 36	0	11 31.2	2 05	8.9
Sun Sep 21/Mon Sep 22	23 08	19 01	20 22	5 19	6 40	19 30	4 28	.....	18 58	0	12 14.3	- 3 46	8.9
Mon Sep 22/Tue Sep 23	23 12	19 00	20 21	5 20	6 41	19 32	4 32	.....	19 21	2	12 57.3	- 9 26	9.0
Tue Sep 23/Wed Sep 24	23 16	18 58	20 19	5 21	6 41	19 34	4 37	.....	19 44	6	13 41.0	-14 42	9.0
Wed Sep 24/Thu Sep 25	23 20	18 57	20 17	5 22	6 42	19 37	4 42	.....	20 10	11	14 26.3	-19 25	9.1
Thu Sep 25/Fri Sep 26	23 24	18 55	20 16	5 22	6 43	19 39	4 47	.....	20 40	17	15 13.7	-23 24	9.1
Fri Sep 26/Sat Sep 27	23 28	18 54	20 14	5 23	6 44	19 41	4 52	.....	21 15	25	16 03.5	-26 27	9.2
Sat Sep 27/Sun Sep 28	23 32	18 52	20 13	5 24	6 45	19 44	4 57	.....	21 56	33	16 55.8	-28 24	9.2
Sun Sep 28/Mon Sep 29	23 36	18 51	20 11	5 25	6 46	19 46	5 02	.....	22 45	43	17 50.0	-29 06	9.2
Mon Sep 29/Tue Sep 30	23 40	18 49	20 10	5 26	6 46	19 48	5 06	.....	23 41	52	18 45.2	-28 26	9.3
Tue Sep 30/Wed Oct 01	23 43	18 48	20 08	5 27	6 47	19 51	5 11	.....	0 43	62	19 40.4	-26 21	9.3

***** 2025 OCTOBER *****

Date (eve/morn)	LMST midn	----- Sun: -----				LST twilight:		----- Moon: -----				Twilight	
		set	twi.end	twi.beg	rise	eve	morn	rise	set	%illum	RA	Dec	hours
Wed Oct 01/Thu Oct 02	23 47	18 46	20 06	5 28	6 48	19 53	5 16	.....	1 49	72	20 34.8	-22 55	9.4
Thu Oct 02/Fri Oct 03	23 51	18 45	20 05	5 29	6 49	19 56	5 21	.....	2 57	81	21 27.9	-18 14	9.4
Fri Oct 03/Sat Oct 04	23 55	18 43	20 03	5 30	6 50	19 58	5 26	16 48	4 06	89	22 19.8	-12 30	9.4
Sat Oct 04/Sun Oct 05	23 59	18 42	20 02	5 30	6 51	20 01	5 31	17 16	5 17	95	23 11.2	- 5 58	9.5
Sun Oct 05/Mon Oct 06	0 03	18 40	20 00	5 31	6 52	20 03	5 35	17 43	6 29	99	0 03.0	1 02	9.5
Mon Oct 06/Tue Oct 07	0 07	18 39	19 59	5 32	6 52	20 06	5 40	18 10	.....	100	0 56.3	8 07	9.6
Tue Oct 07/Wed Oct 08	0 11	18 37	19 58	5 33	6 53	20 08	5 45	18 40	.....	98	1 52.3	14 48	9.6
Wed Oct 08/Thu Oct 09	0 15	18 36	19 56	5 34	6 54	20 11	5 50	19 14	.....	93	2 51.6	20 34	9.6
Thu Oct 09/Fri Oct 10	0 19	18 35	19 55	5 35	6 55	20 13	5 55	19 55	.....	86	3 54.3	24 55	9.7
Fri Oct 10/Sat Oct 11	0 23	18 33	19 53	5 36	6 56	20 16	6 00	20 45	.....	76	4 59.4	27 28	9.7
Sat Oct 11/Sun Oct 12	0 27	18 32	19 52	5 37	6 57	20 18	6 04	21 45	.....	66	6 04.6	28 03	9.7
Sun Oct 12/Mon Oct 13	0 31	18 30	19 51	5 37	6 58	20 21	6 09	22 52	.....	54	7 07.6	26 45	9.8
Mon Oct 13/Tue Oct 14	0 35	18 29	19 49	5 38	6 59	20 23	6 14	0 02	.....	43	8 06.5	23 51	9.8
Tue Oct 14/Wed Oct 15	0 39	18 28	19 48	5 39	7 00	20 26	6 19	1 11	.....	33	9 00.7	19 44	9.9
Wed Oct 15/Thu Oct 16	0 43	18 26	19 47	5 40	7 01	20 29	6 24	2 18	.....	24	9 50.7	14 47	9.9
Thu Oct 16/Fri Oct 17	0 47	18 25	19 45	5 41	7 01	20 31	6 28	3 21	16 17	16	10 37.2	9 18	9.9
Fri Oct 17/Sat Oct 18	0 50	18 24	19 44	5 42	7 02	20 34	6 33	4 22	16 41	9	11 21.4	3 33	10.0
Sat Oct 18/Sun Oct 19	0 54	18 22	19 43	5 43	7 03	20 37	6 38	5 21	17 03	4	12 04.3	- 2 14	10.0
Sun Oct 19/Mon Oct 20	0 58	18 21	19 42	5 44	7 04	20 39	6 43	6 20	17 25	1	12 46.9	- 7 54	10.0
Mon Oct 20/Tue Oct 21	1 02	18 20	19 40	5 45	7 05	20 42	6 48	7 19	17 48	0	13 30.1	-13 14	10.1
Tue Oct 21/Wed Oct 22	1 06	18 19	19 39	5 45	7 06	20 45	6 53	.....	18 13	1	14 14.7	-18 04	10.1
Wed Oct 22/Thu Oct 23	1 10	18 17	19 38	5 46	7 07	20 47	6 57	.....	18 41	3	15 01.4	-22 13	10.1
Thu Oct 23/Fri Oct 24	1 14	18 16	19 37	5 47	7 08	20 50	7 02	.....	19 14	7	15 50.4	-25 30	10.2
Fri Oct 24/Sat Oct 25	1 18	18 15	19 36	5 48	7 09	20 53	7 07	.....	19 53	12	16 41.7	-27 43	10.2
Sat Oct 25/Sun Oct 26	1 22	18 14	19 35	5 49	7 10	20 56	7 12	.....	20 39	19	17 34.8	-28 44	10.2
Sun Oct 26/Mon Oct 27	1 26	18 12	19 34	5 50	7 11	20 59	7 17	.....	21 32	27	18 28.8	-28 28	10.3
Mon Oct 27/Tue Oct 28	1 30	18 11	19 32	5 51	7 12	21 02	7 22	.....	22 31	36	19 22.7	-26 51	10.3
Tue Oct 28/Wed Oct 29	1 34	18 10	19 31	5 52	7 13	21 05	7 26	.....	23 34	45	20 15.7	-23 56	10.3
Wed Oct 29/Thu Oct 30	1 38	18 09	19 30	5 52	7 14	21 08	7 31	.....	0 39	56	21 07.5	-19 50	10.4
Thu Oct 30/Fri Oct 31	1 42	18 08	19 29	5 53	7 15	21 10	7 36	.....	1 46	66	21 58.1	-14 41	10.4
Fri Oct 31/Sat Nov 01	1 46	18 07	19 29	5 54	7 16	21 13	7 41	.....	2 53	76	22 48.0	- 8 40	10.4

Calendar for CA iTel, west longitude (h.m.s) = 7 57 36, latitude (d.m) = 37 04.2
 Rise/set times in Pacific time (8 hr W), for 1405 m above surroundings, DAYLIGHT time used, * shows clock reset.
 Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2025 NOVEMBER *****

Date (eve/morn)	LMST midn	----- Sun: ----- set twi.end twi.beg rise				LST twilight: eve morn		----- Moon: ----- rise set %illum RA Dec				Twi-Twi hours	
Sat Nov 01/Sun Nov 02*	1 50	18 06	19 28	4 55	6 17	21 16	7 46	.....	3 03	85	23 38.2	- 2 02	10.5
Sun Nov 02/Mon Nov 03	2 54	17 05	18 27	4 56	6 18	21 19	7 51	.....	4 15	92	0 31.4	5 13	10.5
Mon Nov 03/Tue Nov 04	2 58	17 04	18 26	4 57	6 19	21 23	7 55	.....	5 30	98	1 25.9	12 04	10.5
Tue Nov 04/Wed Nov 05	3 02	17 03	18 25	4 58	6 20	21 26	8 00	16 07	6 50	100	2 24.3	18 20	10.5
Wed Nov 05/Thu Nov 06	3 06	17 02	18 24	4 59	6 21	21 29	8 05	16 45	.....	99	3 27.3	23 26	10.6
Thu Nov 06/Fri Nov 07	3 10	17 01	18 23	5 00	6 22	21 32	8 10	17 32	.....	95	4 34.0	26 49	10.6
Fri Nov 07/Sat Nov 08	3 13	17 00	18 23	5 01	6 23	21 35	8 15	18 30	.....	88	5 42.4	28 08	10.6
Sat Nov 08/Sun Nov 09	3 17	16 59	18 22	5 01	6 24	21 38	8 20	19 37	.....	79	6 49.2	27 21	10.7
Sun Nov 09/Mon Nov 10	3 21	16 58	18 21	5 02	6 25	21 41	8 24	20 49	.....	69	7 51.9	24 44	10.7
Mon Nov 10/Tue Nov 11	3 25	16 58	18 20	5 03	6 26	21 45	8 29	22 01	.....	59	8 49.2	20 44	10.7
Tue Nov 11/Wed Nov 12	3 29	16 57	18 20	5 04	6 27	21 48	8 34	23 10	.....	48	9 41.4	15 48	10.7
Wed Nov 12/Thu Nov 13	3 33	16 56	18 19	5 05	6 28	21 51	8 39	0 15	.....	38	10 29.3	10 19	10.8
Thu Nov 13/Fri Nov 14	3 37	16 55	18 19	5 06	6 29	21 55	8 44	1 16	.....	28	11 14.2	4 33	10.8
Fri Nov 14/Sat Nov 15	3 41	16 55	18 18	5 07	6 30	21 58	8 49	2 16	.....	20	11 57.4	- 1 14	10.8
Sat Nov 15/Sun Nov 16	3 45	16 54	18 17	5 08	6 31	22 01	8 54	3 14	.....	13	12 40.0	- 6 54	10.8
Sun Nov 16/Mon Nov 17	3 49	16 53	18 17	5 09	6 32	22 05	8 58	4 13	.....	7	13 22.9	-12 15	10.9
Mon Nov 17/Tue Nov 18	3 53	16 53	18 16	5 09	6 33	22 08	9 03	5 12	.....	3	14 07.2	-17 08	10.9
Tue Nov 18/Wed Nov 19	3 57	16 52	18 16	5 10	6 34	22 12	9 08	6 12	15 44	1	14 53.4	-21 22	10.9
Wed Nov 19/Thu Nov 20	4 01	16 52	18 16	5 11	6 35	22 15	9 13	7 12	16 16	0	15 41.9	-24 45	10.9
Thu Nov 20/Fri Nov 21	4 05	16 51	18 15	5 12	6 36	22 19	9 18	8 11	16 53	1	16 32.8	-27 08	10.9
Fri Nov 21/Sat Nov 22	4 09	16 51	18 15	5 13	6 37	22 22	9 22	.....	17 37	4	17 25.4	-28 20	11.0
Sat Nov 22/Sun Nov 23	4 13	16 50	18 14	5 14	6 38	22 26	9 27	.....	18 28	8	18 18.9	-28 15	11.0
Sun Nov 23/Mon Nov 24	4 17	16 50	18 14	5 15	6 39	22 30	9 32	.....	19 25	14	19 12.2	-26 52	11.0
Mon Nov 24/Tue Nov 25	4 20	16 49	18 14	5 16	6 40	22 33	9 37	.....	20 26	21	20 04.4	-24 14	11.0
Tue Nov 25/Wed Nov 26	4 24	16 49	18 14	5 16	6 41	22 37	9 42	.....	21 29	30	20 55.1	-20 28	11.0
Wed Nov 26/Thu Nov 27	4 28	16 49	18 13	5 17	6 42	22 41	9 46	.....	22 34	39	21 44.2	-15 44	11.1
Thu Nov 27/Fri Nov 28	4 32	16 48	18 13	5 18	6 43	22 45	9 51	.....	23 38	50	22 32.2	-10 10	11.1
Fri Nov 28/Sat Nov 29	4 36	16 48	18 13	5 19	6 44	22 48	9 56	.....	0 44	60	23 20.2	- 4 00	11.1
Sat Nov 29/Sun Nov 30	4 40	16 48	18 13	5 20	6 45	22 52	10 01	.....	1 52	71	0 09.1	2 34	11.1
Sun Nov 30/Mon Dec 01	4 44	16 48	18 13	5 21	6 46	22 56	10 06	.....	3 03	81	1 00.4	9 14	11.1

***** 2025 DECEMBER *****

Date (eve/morn)	LMST midn	----- Sun: ----- set twi.end twi.beg rise				LST twilight: eve morn		----- Moon: ----- rise set %illum RA Dec				Twi-Twi hours	
Mon Dec 01/Tue Dec 02	4 48	16 47	18 13	5 21	6 47	23 00	10 10	.....	4 18	89	1 55.4	15 37	11.1
Tue Dec 02/Wed Dec 03	4 52	16 47	18 13	5 22	6 48	23 04	10 15	.....	5 38	96	2 55.2	21 12	11.2
Wed Dec 03/Thu Dec 04	4 56	16 47	18 13	5 23	6 49	23 08	10 20	.....	6 58	99	4 00.1	25 25	11.2
Thu Dec 04/Fri Dec 05	5 00	16 47	18 13	5 24	6 50	23 12	10 25	16 09	8 13	100	5 08.9	27 45	11.2
Fri Dec 05/Sat Dec 06	5 04	16 47	18 13	5 25	6 50	23 16	10 29	17 13	.....	97	6 18.5	27 53	11.2
Sat Dec 06/Sun Dec 07	5 08	16 47	18 13	5 25	6 51	23 20	10 34	18 26	.....	92	7 25.4	25 56	11.2
Sun Dec 07/Mon Dec 08	5 12	16 47	18 13	5 26	6 52	23 24	10 39	19 41	.....	84	8 27.3	22 16	11.2
Mon Dec 08/Tue Dec 09	5 16	16 47	18 13	5 27	6 53	23 28	10 43	20 54	.....	75	9 23.4	17 25	11.2
Tue Dec 09/Wed Dec 10	5 20	16 47	18 14	5 27	6 54	23 32	10 48	22 03	.....	65	10 14.4	11 52	11.2
Wed Dec 10/Thu Dec 11	5 24	16 48	18 14	5 28	6 54	23 36	10 53	23 07	.....	55	11 01.4	5 59	11.2
Thu Dec 11/Fri Dec 12	5 27	16 48	18 14	5 29	6 55	23 41	10 57	0 08	.....	45	11 45.9	0 04	11.2
Fri Dec 12/Sat Dec 13	5 31	16 48	18 14	5 29	6 56	23 45	11 02	1 08	.....	35	12 29.2	- 5 42	11.3
Sat Dec 13/Sun Dec 14	5 35	16 48	18 15	5 30	6 57	23 49	11 06	2 06	.....	26	13 12.4	-11 10	11.3
Sun Dec 14/Mon Dec 15	5 39	16 48	18 15	5 31	6 57	23 53	11 11	3 05	.....	19	13 56.5	-16 09	11.3
Mon Dec 15/Tue Dec 16	5 43	16 49	18 15	5 31	6 58	23 58	11 16	4 05	.....	12	14 42.3	-20 31	11.3
Tue Dec 16/Wed Dec 17	5 47	16 49	18 16	5 32	6 58	0 02	11 20	5 05	.....	7	15 30.4	-24 05	11.3
Wed Dec 17/Thu Dec 18	5 51	16 49	18 16	5 33	6 59	0 06	11 25	6 04	.....	3	16 20.9	-26 40	11.3
Thu Dec 18/Fri Dec 19	5 55	16 50	18 16	5 33	7 00	0 11	11 29	7 01	15 34	1	17 13.3	-28 07	11.3
Fri Dec 19/Sat Dec 20	5 59	16 50	18 17	5 34	7 00	0 15	11 34	7 52	16 23	0	18 07.0	-28 17	11.3
Sat Dec 20/Sun Dec 21	6 03	16 51	18 17	5 34	7 01	0 19	11 38	.....	17 19	2	19 00.7	-27 08	11.3
Sun Dec 21/Mon Dec 22	6 07	16 51	18 18	5 35	7 01	0 24	11 42	.....	18 20	5	19 53.3	-24 42	11.3
Mon Dec 22/Tue Dec 23	6 11	16 52	18 18	5 35	7 02	0 28	11 47	.....	19 23	10	20 44.2	-21 08	11.3
Tue Dec 23/Wed Dec 24	6 15	16 52	18 19	5 35	7 02	0 33	11 51	.....	20 27	16	21 33.2	-16 36	11.3
Wed Dec 24/Thu Dec 25	6 19	16 53	18 19	5 36	7 02	0 37	11 56	.....	21 31	24	22 20.6	-11 16	11.3
Thu Dec 25/Fri Dec 26	6 23	16 54	18 20	5 36	7 03	0 42	12 00	.....	22 35	34	23 07.3	- 5 22	11.3
Fri Dec 26/Sat Dec 27	6 27	16 54	18 21	5 37	7 03	0 46	12 04	.....	23 40	44	23 54.3	0 55	11.3
Sat Dec 27/Sun Dec 28	6 31	16 55	18 21	5 37	7 03	0 51	12 09	.....	0 47	55	0 42.8	7 19	11.3
Sun Dec 28/Mon Dec 29	6 35	16 55	18 22	5 37	7 04	0 55	12 13	.....	1 58	66	1 34.1	13 32	11.3
Mon Dec 29/Tue Dec 30	6 38	16 56	18 23	5 38	7 04	1 00	12 17	.....	3 12	77	2 29.7	19 13	11.3
Tue Dec 30/Wed Dec 31	6 42	16 57	18 23	5 38	7 04	1 05	12 21	.....	4 30	86	3 30.3	23 52	11.2
Wed Dec 31/Thu Jan 01	6 46	16 58	18 24	5 38	7 04	1 09	12 25	.....	5 46	93	4 35.8	26 58	11.2