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:

***** 2018 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 incaccurate 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

MOON PHASES FOR 2018, 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 17 22 31	Dec 26 1 20	Jan 01 18 25	Jan 08 14 27
Jan 16 18 18	Jan 24 14 21	Jan 31 5 28	Feb 07 7 56
Feb 15 13 07	Feb 23 0 09	Mar 01 16 52	Mar 09 3 23
Mar 17 6 14	Mar 24 8 36	Mar 31 5 38	Apr 08 0 21
Apr 15 19 00	Apr 22 14 47	Apr 29 17 59	May 07 19 12
May 15 4 50	May 21 20 51	May 29 7 21	Jun 06 11 34
Jun 13 12 45	Jun 20 3 53	Jun 27 21 55	Jul 06 0 53
Jul 12 19 50	Jul 19 12 54	Jul 27 13 22	Aug 04 11 20
Aug 11 2 59	Aug 18 0 50	Aug 26 4 58	Sep 02 19 39
Sep 09 11 03	Sep 16 16 16	Sep 24 19 55	Oct 02 2 47
Oct 08 20 48	Oct 16 11 02	Oct 24 9 48	Oct 31 9 42
Nov 07 8 03	Nov 15 6 54	Nov 22 21 41	Nov 29 16 21
Dec 06 23 22	Dec 15 3 50	Dec 22 9 50	Dec 29 1 37
Jan 05 17 30	Jan 13 22 46	Jan 20 21 17	Jan 27 13 12

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.

***** 2018 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
Mon Jan 01/Tue Jan 02	6 50	16 58	18 25	5 38	7 04	1 14	12 29	16 47	7 43	100	7 05.0	19 40	11.2
Tue Jan 02/Wed Jan 03	6 54	16 59	18 25	5 39	7 05	1 18	12 33	17 53	.....	98	8 10.3	18 25	11.2
Wed Jan 03/Thu Jan 04	6 58	17 00	18 26	5 39	7 05	1 23	12 38	19 03	.....	92	9 13.1	15 51	11.2
Thu Jan 04/Fri Jan 05	7 02	17 01	18 27	5 39	7 05	1 28	12 42	20 13	.....	85	10 12.2	12 17	11.2
Fri Jan 05/Sat Jan 06	7 06	17 02	18 28	5 39	7 05	1 33	12 46	21 20	.....	76	11 07.7	8 06	11.2
Sat Jan 06/Sun Jan 07	7 10	17 03	18 28	5 39	7 05	1 37	12 50	22 25	.....	66	11 59.9	3 37	11.2
Sun Jan 07/Mon Jan 08	7 14	17 04	18 29	5 39	7 05	1 42	12 54	23 27	.....	55	12 49.7	- 0 53	11.2
Mon Jan 08/Tue Jan 09	7 18	17 04	18 30	5 39	7 05	1 47	12 58	0 27	.....	45	13 37.8	- 5 12	11.2
Tue Jan 09/Wed Jan 10	7 22	17 05	18 31	5 39	7 04	1 52	13 02	1 25	.....	35	14 25.2	- 9 12	11.1
Wed Jan 10/Thu Jan 11	7 26	17 06	18 32	5 39	7 04	1 56	13 05	2 22	.....	27	15 12.4	-12 44	11.1
Thu Jan 11/Fri Jan 12	7 29	17 07	18 33	5 39	7 04	2 01	13 09	3 17	.....	19	16 00.0	-15 42	11.1
Fri Jan 12/Sat Jan 13	7 33	17 08	18 33	5 39	7 04	2 06	13 13	4 11	.....	12	16 48.2	-18 00	11.1
Sat Jan 13/Sun Jan 14	7 37	17 09	18 34	5 39	7 04	2 11	13 17	5 04	.....	7	17 37.2	-19 33	11.1
Sun Jan 14/Mon Jan 15	7 41	17 10	18 35	5 39	7 03	2 16	13 21	5 54	.....	3	18 26.7	-20 16	11.1
Mon Jan 15/Tue Jan 16	7 45	17 11	18 36	5 38	7 03	2 20	13 25	6 40	16 18	1	19 16.5	-20 08	11.0
Tue Jan 16/Wed Jan 17	7 49	17 12	18 37	5 38	7 03	2 25	13 28	7 23	17 09	0	20 06.2	-19 08	11.0
Wed Jan 17/Thu Jan 18	7 53	17 13	18 38	5 38	7 02	2 30	13 32	8 03	18 03	1	20 55.4	-17 18	11.0
Thu Jan 18/Fri Jan 19	7 57	17 14	18 39	5 38	7 02	2 35	13 36	.....	18 58	4	21 43.9	-14 45	11.0
Fri Jan 19/Sat Jan 20	8 01	17 15	18 40	5 37	7 01	2 40	13 39	.....	19 55	9	22 31.7	-11 32	11.0
Sat Jan 20/Sun Jan 21	8 05	17 16	18 41	5 37	7 01	2 45	13 43	.....	20 52	16	23 19.1	- 7 48	10.9
Sun Jan 21/Mon Jan 22	8 09	17 17	18 41	5 37	7 00	2 49	13 46	.....	21 51	23	0 06.5	- 3 42	10.9
Mon Jan 22/Tue Jan 23	8 13	17 18	18 42	5 36	7 00	2 54	13 50	.....	22 51	33	0 54.5	0 39	10.9
Tue Jan 23/Wed Jan 24	8 17	17 19	18 43	5 36	6 59	2 59	13 53	.....	23 52	43	1 43.9	5 04	10.9
Wed Jan 24/Thu Jan 25	8 21	17 21	18 44	5 35	6 59	3 04	13 57	.....	0 56	54	2 35.4	9 21	10.8
Thu Jan 25/Fri Jan 26	8 25	17 22	18 45	5 35	6 58	3 09	14 00	.....	2 02	65	3 29.9	13 15	10.8
Fri Jan 26/Sat Jan 27	8 29	17 23	18 46	5 34	6 57	3 14	14 04	.....	3 09	75	4 27.7	16 29	10.8
Sat Jan 27/Sun Jan 28	8 33	17 24	18 47	5 34	6 57	3 19	14 07	.....	4 17	85	5 29.0	18 43	10.8
Sun Jan 28/Mon Jan 29	8 36	17 25	18 48	5 33	6 56	3 24	14 10	.....	5 21	92	6 32.8	19 41	10.8
Mon Jan 29/Tue Jan 30	8 40	17 26	18 49	5 32	6 55	3 29	14 14	.....	6 20	98	7 37.7	19 11	10.7
Tue Jan 30/Wed Jan 31	8 44	17 27	18 50	5 32	6 55	3 33	14 17	16 36	7 13	100	8 41.9	17 16	10.7
Wed Jan 31/Thu Feb 01	8 48	17 28	18 51	5 31	6 54	3 38	14 20	17 46	7 59	99	9 43.7	14 08	10.7

***** 2018 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
Thu Feb 01/Fri Feb 02	8 52	17 29	18 52	5 30	6 53	3 43	14 24	18 57	.....	95	10 42.4	10 06	10.6
Fri Feb 02/Sat Feb 03	8 56	17 30	18 53	5 30	6 52	3 48	14 27	20 05	.....	89	11 37.8	5 35	10.6
Sat Feb 03/Sun Feb 04	9 00	17 31	18 54	5 29	6 51	3 53	14 30	21 11	.....	81	12 30.4	0 53	10.6
Sun Feb 04/Mon Feb 05	9 04	17 32	18 55	5 28	6 50	3 58	14 33	22 14	.....	72	13 20.9	- 3 41	10.6
Mon Feb 05/Tue Feb 06	9 08	17 33	18 56	5 27	6 49	4 03	14 36	23 14	.....	62	14 10.0	- 7 57	10.5
Tue Feb 06/Wed Feb 07	9 12	17 35	18 56	5 27	6 48	4 08	14 39	0 13	.....	52	14 58.5	-11 45	10.5
Wed Feb 07/Thu Feb 08	9 16	17 36	18 57	5 26	6 47	4 13	14 42	1 10	.....	43	15 46.9	-14 57	10.5
Thu Feb 08/Fri Feb 09	9 20	17 37	18 58	5 25	6 46	4 17	14 46	2 05	.....	34	16 35.5	-17 29	10.4
Fri Feb 09/Sat Feb 10	9 24	17 38	18 59	5 24	6 45	4 22	14 49	2 58	.....	25	17 24.5	-19 15	10.4
Sat Feb 10/Sun Feb 11	9 28	17 39	19 00	5 23	6 44	4 27	14 52	3 49	.....	17	18 14.1	-20 11	10.4
Sun Feb 11/Mon Feb 12	9 32	17 40	19 01	5 22	6 43	4 32	14 55	4 36	.....	11	19 03.9	-20 17	10.3
Mon Feb 12/Tue Feb 13	9 36	17 41	19 02	5 21	6 42	4 37	14 57	5 21	.....	6	19 53.8	-19 30	10.3
Tue Feb 13/Wed Feb 14	9 40	17 42	19 03	5 20	6 41	4 42	15 00	6 02	.....	2	20 43.3	-17 53	10.3
Wed Feb 14/Thu Feb 15	9 44	17 43	19 04	5 19	6 40	4 47	15 03	6 40	16 51	0	21 32.3	-15 29	10.2
Thu Feb 15/Fri Feb 16	9 47	17 44	19 05	5 18	6 39	4 52	15 06	7 15	17 48	0	22 20.7	-12 23	10.2
Fri Feb 16/Sat Feb 17	9 51	17 45	19 06	5 17	6 38	4 57	15 09	7 48	18 46	2	23 08.6	- 8 44	10.2
Sat Feb 17/Sun Feb 18	9 55	17 46	19 07	5 16	6 36	5 01	15 12	.....	19 45	6	23 56.3	- 4 40	10.1
Sun Feb 18/Mon Feb 19	9 59	17 47	19 08	5 15	6 35	5 06	15 15	.....	20 45	11	0 44.2	- 0 20	10.1
Mon Feb 19/Tue Feb 20	10 03	17 48	19 09	5 13	6 34	5 11	15 18	.....	21 46	19	1 33.0	4 04	10.1
Tue Feb 20/Wed Feb 21	10 07	17 49	19 10	5 12	6 33	5 16	15 20	.....	22 49	28	2 23.3	8 21	10.0
Wed Feb 21/Thu Feb 22	10 11	17 50	19 11	5 11	6 31	5 21	15 23	.....	23 53	38	3 15.8	12 16	10.0
Thu Feb 22/Fri Feb 23	10 15	17 51	19 12	5 10	6 30	5 26	15 26	.....	0 58	49	4 10.9	15 37	10.0
Fri Feb 23/Sat Feb 24	10 19	17 52	19 13	5 09	6 29	5 31	15 28	.....	2 03	61	5 08.9	18 05	9.9
Sat Feb 24/Sun Feb 25	10 23	17 53	19 14	5 07	6 28	5 36	15 31	.....	3 06	72	6 09.5	19 27	9.9
Sun Feb 25/Mon Feb 26	10 27	17 54	19 14	5 06	6 26	5 41	15 34	.....	4 06	82	7 11.6	19 30	9.9
Mon Feb 26/Tue Feb 27	10 31	17 55	19 15	5 05	6 25	5 45	15 36	.....	5 00	90	8 14.1	18 12	9.8
Tue Feb 27/Wed Feb 28	10 35	17 56	19 16	5 03	6 24	5 50	15 39	.....	5 48	96	9 15.5	15 37	9.8
Wed Feb 28/Thu Mar 01	10 39	17 57	19 17	5 02	6 22	5 55	15 42	16 32	6 31	99	10 14.9	12 00	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.

***** 2018 MARCH *****

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
Thu Mar 01/Fri Mar 02	10 43	17 58	19 18	5 01	6 21	6 00	15 44	17 41	7 10	100	11 11.8	7 39	9.7
Fri Mar 02/Sat Mar 03	10 47	17 59	19 19	4 59	6 20	6 05	15 47	18 49	.....	98	12 06.3	2 56	9.7
Sat Mar 03/Sun Mar 04	10 51	18 00	19 20	4 58	6 18	6 10	15 49	19 54	.....	93	12 58.7	- 1 51	9.6
Sun Mar 04/Mon Mar 05	10 54	18 01	19 21	4 57	6 17	6 15	15 52	20 58	.....	86	13 49.7	- 6 24	9.6
Mon Mar 05/Tue Mar 06	10 58	18 02	19 22	4 55	6 15	6 20	15 55	21 59	.....	78	14 39.8	-10 32	9.6
Tue Mar 06/Wed Mar 07	11 02	18 03	19 23	4 54	6 14	6 25	15 57	22 58	.....	70	15 29.6	-14 04	9.5
Wed Mar 07/Thu Mar 08	11 06	18 04	19 24	4 52	6 13	6 30	16 00	23 55	.....	60	16 19.2	-16 55	9.5
Thu Mar 08/Fri Mar 09	11 10	18 05	19 25	4 51	6 11	6 34	16 02	0 50	.....	51	17 09.1	-18 58	9.4
Fri Mar 09/Sat Mar 10	11 14	18 06	19 26	4 49	6 10	6 39	16 04	1 42	.....	41	17 59.1	-20 11	9.4
Sat Mar 10/Sun Mar 11*	11 18	18 06	19 27	5 48	7 08	6 44	16 07	3 31	.....	32	18 49.3	-20 31	9.4
Sun Mar 11/Mon Mar 12	10 22	19 07	20 28	5 47	7 07	6 49	16 09	4 17	.....	24	19 36.7	-19 59	9.3
Mon Mar 12/Tue Mar 13	10 26	19 08	20 29	5 45	7 05	6 54	16 12	4 59	.....	17	20 26.3	-18 38	9.3
Tue Mar 13/Wed Mar 14	10 30	19 09	20 30	5 43	7 04	6 59	16 14	5 38	.....	10	21 15.5	-16 28	9.2
Wed Mar 14/Thu Mar 15	10 34	19 10	20 31	5 42	7 02	7 04	16 17	6 14	16 38	5	22 04.2	-13 35	9.2
Thu Mar 15/Fri Mar 16	10 38	19 11	20 32	5 40	7 01	7 09	16 19	6 48	17 36	2	22 52.6	-10 03	9.1
Fri Mar 16/Sat Mar 17	10 42	19 12	20 33	5 39	6 59	7 14	16 21	7 21	18 36	0	23 40.8	- 6 02	9.1
Sat Mar 17/Sun Mar 18	10 46	19 13	20 34	5 37	6 58	7 19	16 24	.....	19 36	1	0 29.3	- 1 41	9.1
Sun Mar 18/Mon Mar 19	10 50	19 14	20 35	5 36	6 56	7 24	16 26	.....	20 38	3	1 18.5	2 49	9.0
Mon Mar 19/Tue Mar 20	10 53	19 15	20 36	5 34	6 55	7 29	16 29	.....	21 41	8	2 09.0	7 14	9.0
Tue Mar 20/Wed Mar 21	10 57	19 16	20 37	5 33	6 53	7 34	16 31	.....	22 46	15	3 01.4	11 21	8.9
Wed Mar 21/Thu Mar 22	11 01	19 17	20 38	5 31	6 52	7 38	16 33	.....	23 52	24	3 56.0	14 54	8.9
Thu Mar 22/Fri Mar 23	11 05	19 17	20 39	5 29	6 51	7 43	16 36	.....	0 57	34	4 53.0	17 38	8.8
Fri Mar 23/Sat Mar 24	11 09	19 18	20 40	5 28	6 49	7 48	16 38	.....	2 00	45	5 52.1	19 18	8.8
Sat Mar 24/Sun Mar 25	11 13	19 19	20 41	5 26	6 48	7 53	16 40	.....	3 00	57	6 52.5	19 44	8.8
Sun Mar 25/Mon Mar 26	11 17	19 20	20 42	5 24	6 46	7 58	16 42	.....	3 54	68	7 53.2	18 53	8.7
Mon Mar 26/Tue Mar 27	11 21	19 21	20 43	5 23	6 45	8 03	16 45	.....	4 43	78	8 53.2	16 46	8.7
Tue Mar 27/Wed Mar 28	11 25	19 22	20 44	5 21	6 43	8 08	16 47	.....	5 26	87	9 51.5	13 35	8.6
Wed Mar 28/Thu Mar 29	11 29	19 23	20 45	5 20	6 42	8 13	16 49	.....	6 05	94	10 47.9	9 33	8.6
Thu Mar 29/Fri Mar 30	11 33	19 24	20 46	5 18	6 40	8 18	16 52	17 30	6 41	98	11 42.3	5 00	8.5
Fri Mar 30/Sat Mar 31	11 37	19 25	20 47	5 16	6 39	8 23	16 54	18 36	.....	100	12 35.0	0 13	8.5
Sat Mar 31/Sun Apr 01	11 41	19 25	20 48	5 15	6 37	8 28	16 56	19 40	.....	99	13 26.5	- 4 30	8.4

***** 2018 APRIL *****

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
Sun Apr 01/Mon Apr 02	11 45	19 26	20 49	5 13	6 36	8 33	16 58	20 42	.....	96	14 17.4	- 8 55	8.4
Mon Apr 02/Tue Apr 03	11 49	19 27	20 50	5 11	6 34	8 38	17 01	21 43	.....	91	15 07.9	-12 49	8.4
Tue Apr 03/Wed Apr 04	11 53	19 28	20 51	5 10	6 33	8 43	17 03	22 42	.....	84	15 58.4	-16 03	8.3
Wed Apr 04/Thu Apr 05	11 57	19 29	20 52	5 08	6 31	8 48	17 05	23 39	.....	77	16 49.1	-18 29	8.3
Thu Apr 05/Fri Apr 06	12 00	19 30	20 53	5 06	6 30	8 53	17 08	0 33	.....	68	17 39.8	-20 04	8.2
Fri Apr 06/Sat Apr 07	12 04	19 31	20 55	5 05	6 28	8 59	17 10	1 24	.....	59	18 30.5	-20 46	8.2
Sat Apr 07/Sun Apr 08	12 08	19 32	20 56	5 03	6 27	9 04	17 12	2 12	.....	50	19 20.9	-20 33	8.1
Sun Apr 08/Mon Apr 09	12 12	19 33	20 57	5 01	6 25	9 09	17 14	2 55	.....	40	20 10.8	-19 27	8.1
Mon Apr 09/Tue Apr 10	12 16	19 33	20 58	5 00	6 24	9 14	17 17	3 35	.....	31	21 00.0	-17 31	8.0
Tue Apr 10/Wed Apr 11	12 20	19 34	20 59	4 58	6 23	9 19	17 19	4 12	.....	23	21 48.7	-14 51	8.0
Wed Apr 11/Thu Apr 12	12 24	19 35	21 00	4 56	6 21	9 24	17 21	4 46	.....	15	22 37.0	-11 30	7.9
Thu Apr 12/Fri Apr 13	12 28	19 36	21 01	4 55	6 20	9 29	17 23	5 19	.....	9	23 25.1	- 7 35	7.9
Fri Apr 13/Sat Apr 14	12 32	19 37	21 03	4 53	6 18	9 34	17 26	5 52	17 22	4	0 13.6	- 3 16	7.8
Sat Apr 14/Sun Apr 15	12 36	19 38	21 04	4 51	6 17	9 39	17 28	6 25	18 24	1	1 02.9	1 17	7.8
Sun Apr 15/Mon Apr 16	12 40	19 39	21 05	4 50	6 16	9 44	17 30	.....	19 28	0	1 53.6	5 52	7.7
Mon Apr 16/Tue Apr 17	12 44	19 40	21 06	4 48	6 14	9 49	17 33	.....	20 34	2	2 46.3	10 13	7.7
Tue Apr 17/Wed Apr 18	12 48	19 41	21 07	4 46	6 13	9 55	17 35	.....	21 41	6	3 41.3	14 04	7.6
Wed Apr 18/Thu Apr 19	12 52	19 42	21 09	4 45	6 12	10 00	17 37	.....	22 48	13	4 38.7	17 07	7.6
Thu Apr 19/Fri Apr 20	12 56	19 42	21 10	4 43	6 10	10 05	17 39	.....	23 54	21	5 38.1	19 06	7.6
Fri Apr 20/Sat Apr 21	13 00	19 43	21 11	4 41	6 09	10 10	17 42	.....	0 56	31	6 38.6	19 52	7.5
Sat Apr 21/Sun Apr 22	13 04	19 44	21 12	4 40	6 08	10 15	17 44	.....	1 52	42	7 39.3	19 19	7.5
Sun Apr 22/Mon Apr 23	13 08	19 45	21 13	4 38	6 06	10 20	17 46	.....	2 42	54	8 38.8	17 30	7.4
Mon Apr 23/Tue Apr 24	13 11	19 46	21 15	4 37	6 05	10 26	17 49	.....	3 26	65	9 36.5	14 36	7.4
Tue Apr 24/Wed Apr 25	13 15	19 47	21 16	4 35	6 04	10 31	17 51	.....	4 05	75	10 32.0	10 50	7.3
Wed Apr 25/Thu Apr 26	13 19	19 48	21 17	4 33	6 03	10 36	17 53	.....	4 41	84	11 25.5	6 28	7.3
Thu Apr 26/Fri Apr 27	13 23	19 49	21 18	4 32	6 01	10 41	17 56	.....	5 15	92	12 17.4	1 48	7.2
Fri Apr 27/Sat Apr 28	13 27	19 50	21 20	4 30	6 00	10 46	17 58	17 27	5 47	97	13 08.3	- 2 56	7.2
Sat Apr 28/Sun Apr 29	13 31	19 51	21 21	4 29	5 59	10 52	18 01	18 29	6 20	99	13 58.6	- 7 29	7.1
Sun Apr 29/Mon Apr 30	13 35	19 52	21 22	4 27	5 58	10 57	18 03	19 30	.....	100	14 48.9	-11 38	7.1
Mon Apr 30/Tue May 01	13 39	19 52	21 23	4 26	5 57	11 02	18 05	20 30	.....	98	15 39.5	-15 11	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.

***** 2018 MAY *****

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 May 01/Wed May 02	13 43	19 53	21 25	4 24	5 55	11 07	18 08	21 28	.....	94	16 30.5	-17 59	7.0
Wed May 02/Thu May 03	13 47	19 54	21 26	4 23	5 54	11 13	18 10	22 24	.....	89	17 21.9	-19 56	6.9
Thu May 03/Fri May 04	13 51	19 55	21 27	4 21	5 53	11 18	18 13	23 17	.....	83	18 13.3	-20 59	6.9
Fri May 04/Sat May 05	13 55	19 56	21 29	4 20	5 52	11 23	18 15	0 06	.....	75	19 04.3	-21 05	6.9
Sat May 05/Sun May 06	13 59	19 57	21 30	4 18	5 51	11 28	18 18	0 51	.....	66	19 54.8	-20 16	6.8
Sun May 06/Mon May 07	14 03	19 58	21 31	4 17	5 50	11 33	18 20	1 32	.....	57	20 44.4	-18 36	6.8
Mon May 07/Tue May 08	14 07	19 59	21 32	4 15	5 49	11 39	18 23	2 10	.....	48	21 33.1	-16 10	6.7
Tue May 08/Wed May 09	14 11	20 00	21 34	4 14	5 48	11 44	18 25	2 45	.....	38	22 21.1	-13 02	6.7
Wed May 09/Thu May 10	14 15	20 01	21 35	4 13	5 47	11 49	18 28	3 18	.....	29	23 08.7	- 9 19	6.6
Thu May 10/Fri May 11	14 18	20 01	21 36	4 11	5 46	11 54	18 31	3 50	.....	20	23 56.5	- 5 08	6.6
Fri May 11/Sat May 12	14 22	20 02	21 38	4 10	5 45	12 00	18 33	4 22	.....	13	0 45.0	- 0 38	6.5
Sat May 12/Sun May 13	14 26	20 03	21 39	4 09	5 44	12 05	18 36	4 55	.....	6	1 35.0	4 00	6.5
Sun May 13/Mon May 14	14 30	20 04	21 40	4 07	5 44	12 10	18 38	5 31	18 15	2	2 27.0	8 32	6.5
Mon May 14/Tue May 15	14 34	20 05	21 41	4 06	5 43	12 15	18 41	6 12	19 23	0	3 21.7	12 42	6.4
Tue May 15/Wed May 16	14 38	20 06	21 43	4 05	5 42	12 20	18 44	.....	20 32	1	4 19.3	16 10	6.4
Wed May 16/Thu May 17	14 42	20 07	21 44	4 04	5 41	12 26	18 47	.....	21 41	4	5 19.5	18 38	6.3
Thu May 17/Fri May 18	14 46	20 07	21 45	4 03	5 40	12 31	18 49	.....	22 47	11	6 21.3	19 51	6.3
Fri May 18/Sat May 19	14 50	20 08	21 46	4 02	5 40	12 36	18 52	.....	23 47	19	7 23.5	19 41	6.3
Sat May 19/Sun May 20	14 54	20 09	21 48	4 00	5 39	12 41	18 55	.....	0 40	29	8 24.5	18 10	6.2
Sun May 20/Mon May 21	14 58	20 10	21 49	3 59	5 38	12 46	18 58	.....	1 27	40	9 23.2	15 30	6.2
Mon May 21/Tue May 22	15 02	20 11	21 50	3 58	5 37	12 51	19 01	.....	2 08	51	10 19.4	11 54	6.1
Tue May 22/Wed May 23	15 06	20 12	21 51	3 57	5 37	12 57	19 04	.....	2 44	62	11 12.9	7 40	6.1
Wed May 23/Thu May 24	15 10	20 12	21 52	3 56	5 36	13 02	19 07	.....	3 18	72	12 04.4	3 05	6.1
Thu May 24/Fri May 25	15 14	20 13	21 53	3 55	5 36	13 07	19 10	.....	3 50	81	12 54.6	- 1 37	6.0
Fri May 25/Sat May 26	15 18	20 14	21 55	3 54	5 35	13 12	19 13	.....	4 22	89	13 44.0	- 6 12	6.0
Sat May 26/Sun May 27	15 22	20 15	21 56	3 54	5 35	13 17	19 16	.....	4 55	95	14 33.4	-10 28	6.0
Sun May 27/Mon May 28	15 26	20 15	21 57	3 53	5 34	13 22	19 19	18 20	5 30	98	15 23.3	-14 13	5.9
Mon May 28/Tue May 29	15 29	20 16	21 58	3 52	5 34	13 27	19 22	19 19	6 07	100	16 13.8	-17 18	5.9
Tue May 29/Wed May 30	15 33	20 17	21 59	3 51	5 33	13 32	19 25	20 16	.....	99	17 05.0	-19 35	5.9
Wed May 30/Thu May 31	15 37	20 18	22 00	3 50	5 33	13 37	19 28	21 10	.....	97	17 56.6	-20 59	5.8
Thu May 31/Fri Jun 01	15 41	20 18	22 01	3 50	5 32	13 42	19 32	22 01	.....	93	18 48.2	-21 25	5.8

***** 2018 JUNE *****

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 Jun 01/Sat Jun 02	15 45	20 19	22 02	3 49	5 32	13 47	19 35	22 48	.....	88	19 39.3	-20 55	5.8
Sat Jun 02/Sun Jun 03	15 49	20 20	22 03	3 49	5 32	13 52	19 38	23 30	.....	81	20 29.4	-19 31	5.8
Sun Jun 03/Mon Jun 04	15 53	20 20	22 04	3 48	5 31	13 56	19 42	0 09	.....	73	21 18.5	-17 19	5.7
Mon Jun 04/Tue Jun 05	15 57	20 21	22 05	3 47	5 31	14 01	19 45	0 45	.....	64	22 06.5	-14 24	5.7
Tue Jun 05/Wed Jun 06	16 01	20 21	22 05	3 47	5 31	14 06	19 49	1 18	.....	54	22 53.8	-10 53	5.7
Wed Jun 06/Thu Jun 07	16 05	20 22	22 06	3 47	5 31	14 11	19 52	1 49	.....	44	23 40.8	- 6 53	5.7
Thu Jun 07/Fri Jun 08	16 09	20 23	22 07	3 46	5 31	14 16	19 56	2 20	.....	35	0 28.1	- 2 32	5.7
Fri Jun 08/Sat Jun 09	16 13	20 23	22 08	3 46	5 30	14 20	19 59	2 52	.....	25	1 16.6	2 02	5.6
Sat Jun 09/Sun Jun 10	16 17	20 24	22 08	3 45	5 30	14 25	20 03	3 26	.....	16	2 06.9	6 36	5.6
Sun Jun 10/Mon Jun 11	16 21	20 24	22 09	3 45	5 30	14 30	20 07	4 03	.....	9	2 59.9	10 56	5.6
Mon Jun 11/Tue Jun 12	16 25	20 25	22 10	3 45	5 30	14 34	20 10	4 46	18 09	4	3 56.2	14 46	5.6
Tue Jun 12/Wed Jun 13	16 29	20 25	22 10	3 45	5 30	14 39	20 14	5 35	19 19	1	4 55.7	17 43	5.6
Wed Jun 13/Thu Jun 14	16 33	20 25	22 11	3 45	5 30	14 43	20 18	.....	20 28	0	5 57.9	19 31	5.6
Thu Jun 14/Fri Jun 15	16 36	20 26	22 11	3 45	5 30	14 48	20 22	.....	21 33	3	7 01.5	19 55	5.6
Fri Jun 15/Sat Jun 16	16 40	20 26	22 12	3 45	5 30	14 52	20 26	.....	22 32	9	8 04.6	18 52	5.5
Sat Jun 16/Sun Jun 17	16 44	20 27	22 12	3 45	5 30	14 56	20 30	.....	23 23	17	9 05.9	16 30	5.5
Sun Jun 17/Mon Jun 18	16 48	20 27	22 13	3 45	5 31	15 01	20 34	.....	0 07	26	10 04.2	13 04	5.5
Mon Jun 18/Tue Jun 19	16 52	20 27	22 13	3 45	5 31	15 05	20 38	.....	0 46	37	10 59.5	8 55	5.5
Tue Jun 19/Wed Jun 20	16 56	20 27	22 13	3 45	5 31	15 09	20 42	.....	1 21	48	11 52.0	4 21	5.5
Wed Jun 20/Thu Jun 21	17 00	20 28	22 14	3 45	5 31	15 13	20 46	.....	1 54	59	12 42.6	- 0 22	5.5
Thu Jun 21/Fri Jun 22	17 04	20 28	22 14	3 45	5 31	15 18	20 50	.....	2 26	69	13 31.9	- 5 00	5.5
Fri Jun 22/Sat Jun 23	17 08	20 28	22 14	3 46	5 32	15 22	20 54	.....	2 58	78	14 20.8	- 9 21	5.5
Sat Jun 23/Sun Jun 24	17 12	20 28	22 14	3 46	5 32	15 26	20 59	.....	3 31	86	15 09.9	-13 15	5.5
Sun Jun 24/Mon Jun 25	17 16	20 28	22 14	3 46	5 32	15 30	21 03	.....	4 08	92	15 59.7	-16 31	5.5
Mon Jun 25/Tue Jun 26	17 20	20 28	22 14	3 47	5 33	15 34	21 07	18 09	4 47	97	16 50.2	-19 03	5.5
Tue Jun 26/Wed Jun 27	17 24	20 28	22 14	3 47	5 33	15 38	21 12	19 04	5 30	99	17 41.4	-20 44	5.6
Wed Jun 27/Thu Jun 28	17 28	20 29	22 14	3 48	5 33	15 41	21 16	19 56	6 16	100	18 33.0	-21 29	5.6
Thu Jun 28/Fri Jun 29	17 32	20 29	22 14	3 48	5 34	15 45	21 21	20 45	.....	99	19 24.4	-21 17	5.6
Fri Jun 29/Sat Jun 30	17 36	20 29	22 14	3 49	5 34	15 49	21 25	21 29	.....	96	20 15.2	-20 10	5.6
Sat Jun 30/Sun Jul 01	17 40	20 28	22 14	3 49	5 35	15 53	21 30	22 09	.....	91	21 04.9	-18 11	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.

***** 2018 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
Sun Jul 01/Mon Jul 02	17 43	20 28	22 13	3 50	5 35	15 56	21 34	22 46	.....	85	21 53.3	-15 28	5.6
Mon Jul 02/Tue Jul 03	17 47	20 28	22 13	3 51	5 36	16 00	21 39	23 19	.....	78	22 40.7	-12 07	5.6
Tue Jul 03/Wed Jul 04	17 51	20 28	22 13	3 52	5 36	16 04	21 44	23 51	.....	69	23 27.4	- 8 16	5.6
Wed Jul 04/Thu Jul 05	17 55	20 28	22 12	3 52	5 37	16 07	21 48	0 21	.....	60	0 14.0	- 4 04	5.7
Thu Jul 05/Fri Jul 06	17 59	20 28	22 12	3 53	5 37	16 11	21 53	0 52	.....	50	1 01.1	0 22	5.7
Fri Jul 06/Sat Jul 07	18 03	20 28	22 11	3 54	5 38	16 14	21 58	1 23	.....	40	1 49.6	4 52	5.7
Sat Jul 07/Sun Jul 08	18 07	20 27	22 11	3 55	5 38	16 18	22 03	1 58	.....	29	2 40.3	9 14	5.7
Sun Jul 08/Mon Jul 09	18 11	20 27	22 10	3 56	5 39	16 21	22 07	2 36	.....	20	3 34.0	13 14	5.8
Mon Jul 09/Tue Jul 10	18 15	20 27	22 10	3 57	5 40	16 24	22 12	3 21	.....	11	4 31.2	16 32	5.8
Tue Jul 10/Wed Jul 11	18 19	20 26	22 09	3 57	5 40	16 28	22 17	4 13	18 04	5	5 31.7	18 51	5.8
Wed Jul 11/Thu Jul 12	18 23	20 26	22 08	3 58	5 41	16 31	22 22	5 13	19 12	1	6 34.8	19 53	5.8
Thu Jul 12/Fri Jul 13	18 27	20 25	22 08	3 59	5 41	16 34	22 27	6 20	20 15	0	7 38.9	19 27	5.9
Fri Jul 13/Sat Jul 14	18 31	20 25	22 07	4 00	5 42	16 37	22 32	.....	21 11	2	8 42.2	17 35	5.9
Sat Jul 14/Sun Jul 15	18 35	20 25	22 06	4 01	5 43	16 40	22 37	.....	22 00	7	9 43.1	14 28	5.9
Sun Jul 15/Mon Jul 16	18 39	20 24	22 05	4 03	5 44	16 43	22 42	.....	22 43	14	10 41.0	10 27	6.0
Mon Jul 16/Tue Jul 17	18 43	20 23	22 04	4 04	5 44	16 47	22 47	.....	23 20	23	11 35.8	5 52	6.0
Tue Jul 17/Wed Jul 18	18 47	20 23	22 03	4 05	5 45	16 50	22 52	.....	23 55	33	12 28.1	1 04	6.0
Wed Jul 18/Thu Jul 19	18 51	20 22	22 02	4 06	5 46	16 53	22 57	.....	0 28	44	13 18.6	- 3 41	6.1
Thu Jul 19/Fri Jul 20	18 54	20 22	22 01	4 07	5 47	16 55	23 02	.....	1 00	54	14 08.0	- 8 11	6.1
Fri Jul 20/Sat Jul 21	18 58	20 21	22 00	4 08	5 47	16 58	23 07	.....	1 34	65	14 57.2	-12 13	6.1
Sat Jul 21/Sun Jul 22	19 02	20 20	21 59	4 09	5 48	17 01	23 12	.....	2 09	74	15 46.7	-15 41	6.2
Sun Jul 22/Mon Jul 23	19 06	20 20	21 58	4 10	5 49	17 04	23 17	.....	2 47	82	16 36.7	-18 25	6.2
Mon Jul 23/Tue Jul 24	19 10	20 19	21 57	4 12	5 50	17 07	23 22	.....	3 28	89	17 27.4	-20 20	6.2
Tue Jul 24/Wed Jul 25	19 14	20 18	21 56	4 13	5 50	17 10	23 28	17 52	4 14	94	18 18.7	-21 22	6.3
Wed Jul 25/Thu Jul 26	19 18	20 17	21 55	4 14	5 51	17 12	23 33	18 42	5 02	98	19 10.1	-21 26	6.3
Thu Jul 26/Fri Jul 27	19 22	20 17	21 54	4 15	5 52	17 15	23 38	19 28	5 54	100	20 01.1	-20 35	6.4
Fri Jul 27/Sat Jul 28	19 26	20 16	21 52	4 16	5 53	17 18	23 43	20 09	.....	100	20 51.3	-18 50	6.4
Sat Jul 28/Sun Jul 29	19 30	20 15	21 51	4 18	5 54	17 21	23 48	20 47	.....	98	21 40.4	-16 18	6.4
Sun Jul 29/Mon Jul 30	19 34	20 14	21 50	4 19	5 55	17 23	23 53	21 21	.....	95	22 28.4	-13 05	6.5
Mon Jul 30/Tue Jul 31	19 38	20 13	21 48	4 20	5 55	17 26	23 59	21 53	.....	89	23 15.4	- 9 21	6.5
Tue Jul 31/Wed Aug 01	19 42	20 12	21 47	4 21	5 56	17 28	0 04	22 24	.....	82	0 02.0	- 5 13	6.6

***** 2018 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
Wed Aug 01/Thu Aug 02	19 46	20 11	21 46	4 22	5 57	17 31	0 09	22 54	.....	74	0 48.7	- 0 50	6.6
Thu Aug 02/Fri Aug 03	19 50	20 10	21 44	4 24	5 58	17 34	0 14	23 25	.....	65	1 36.1	3 37	6.7
Fri Aug 03/Sat Aug 04	19 54	20 09	21 43	4 25	5 59	17 36	0 19	23 57	.....	55	2 25.2	7 58	6.7
Sat Aug 04/Sun Aug 05	19 58	20 08	21 42	4 26	6 00	17 39	0 24	0 32	.....	44	3 16.6	12 01	6.7
Sun Aug 05/Mon Aug 06	20 01	20 07	21 40	4 27	6 00	17 41	0 30	1 13	.....	33	4 11.1	15 29	6.8
Mon Aug 06/Tue Aug 07	20 05	20 06	21 39	4 29	6 01	17 44	0 35	1 59	.....	23	5 08.8	18 08	6.8
Tue Aug 07/Wed Aug 08	20 09	20 05	21 37	4 30	6 02	17 46	0 40	2 54	.....	14	6 09.5	19 39	6.9
Wed Aug 08/Thu Aug 09	20 13	20 04	21 36	4 31	6 03	17 49	0 45	3 56	17 55	7	7 12.3	19 50	6.9
Thu Aug 09/Fri Aug 10	20 17	20 03	21 34	4 32	6 04	17 51	0 50	5 05	18 54	2	8 15.5	18 34	7.0
Fri Aug 10/Sat Aug 11	20 21	20 01	21 33	4 33	6 05	17 53	0 55	6 17	19 47	0	9 17.6	15 56	7.0
Sat Aug 11/Sun Aug 12	20 25	20 00	21 31	4 35	6 06	17 56	1 01	.....	20 33	1	10 17.4	12 13	7.1
Sun Aug 12/Mon Aug 13	20 29	19 59	21 30	4 36	6 06	17 58	1 06	.....	21 14	5	11 14.4	7 45	7.1
Mon Aug 13/Tue Aug 14	20 33	19 58	21 28	4 37	6 07	18 01	1 11	.....	21 51	11	12 08.9	2 53	7.2
Tue Aug 14/Wed Aug 15	20 37	19 57	21 26	4 38	6 08	18 03	1 16	.....	22 26	20	13 01.2	- 2 02	7.2
Wed Aug 15/Thu Aug 16	20 41	19 55	21 25	4 39	6 09	18 05	1 21	.....	22 59	29	13 52.1	- 6 45	7.2
Thu Aug 16/Fri Aug 17	20 45	19 54	21 23	4 41	6 10	18 08	1 26	.....	23 33	39	14 42.2	-11 02	7.3
Fri Aug 17/Sat Aug 18	20 49	19 53	21 22	4 42	6 11	18 10	1 31	.....	0 08	49	15 32.2	-14 44	7.3
Sat Aug 18/Sun Aug 19	20 53	19 52	21 20	4 43	6 11	18 12	1 37	.....	0 46	59	16 22.4	-17 43	7.4
Sun Aug 19/Mon Aug 20	20 57	19 50	21 18	4 44	6 12	18 15	1 42	.....	1 27	68	17 13.1	-19 53	7.4
Mon Aug 20/Tue Aug 21	21 01	19 49	21 17	4 45	6 13	18 17	1 47	.....	2 11	77	18 04.2	-21 09	7.5
Tue Aug 21/Wed Aug 22	21 05	19 48	21 15	4 47	6 14	18 19	1 52	.....	2 58	85	18 55.4	-21 29	7.5
Wed Aug 22/Thu Aug 23	21 09	19 46	21 13	4 48	6 15	18 21	1 57	17 25	3 49	91	19 46.5	-20 53	7.6
Thu Aug 23/Fri Aug 24	21 12	19 45	21 12	4 49	6 16	18 24	2 02	18 08	4 42	96	20 36.9	-19 23	7.6
Fri Aug 24/Sat Aug 25	21 16	19 43	21 10	4 50	6 16	18 26	2 07	18 47	5 38	99	21 26.5	-17 02	7.7
Sat Aug 25/Sun Aug 26	21 20	19 42	21 08	4 51	6 17	18 28	2 12	19 23	6 34	100	22 15.1	-13 58	7.7
Sun Aug 26/Mon Aug 27	21 24	19 41	21 07	4 52	6 18	18 30	2 17	19 56	.....	99	23 02.8	-10 19	7.8
Mon Aug 27/Tue Aug 28	21 28	19 39	21 05	4 53	6 19	18 33	2 22	20 27	.....	97	23 49.9	- 6 13	7.8
Tue Aug 28/Wed Aug 29	21 32	19 38	21 03	4 54	6 20	18 35	2 27	20 57	.....	92	0 36.9	- 1 49	7.9
Wed Aug 29/Thu Aug 30	21 36	19 36	21 02	4 55	6 21	18 37	2 32	21 27	.....	86	1 24.4	2 40	7.9
Thu Aug 30/Fri Aug 31	21 40	19 35	21 00	4 57	6 21	18 39	2 37	21 59	.....	78	2 13.0	7 05	7.9
Fri Aug 31/Sat Sep 01	21 44	19 34	20 58	4 58	6 22	18 42	2 42	22 33	.....	69	3 03.5	11 12	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.

***** 2018 SEPTEMBER *****

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 Sep 01/Sun Sep 02	21 48	19 32	20 56	4 59	6 23	18 44	2 47	23 10	.....	58	3 56.3	14 49	8.0
Sun Sep 02/Mon Sep 03	21 52	19 31	20 55	5 00	6 24	18 46	2 52	23 53	.....	47	4 52.0	17 39	8.1
Mon Sep 03/Tue Sep 04	21 56	19 29	20 53	5 01	6 25	18 48	2 57	0 43	.....	36	5 50.3	19 29	8.1
Tue Sep 04/Wed Sep 05	22 00	19 28	20 51	5 02	6 26	18 51	3 02	1 40	.....	26	6 50.8	20 05	8.2
Wed Sep 05/Thu Sep 06	22 04	19 26	20 50	5 03	6 26	18 53	3 07	2 44	.....	16	7 52.3	19 20	8.2
Thu Sep 06/Fri Sep 07	22 08	19 25	20 48	5 04	6 27	18 55	3 12	3 53	17 34	8	8 53.5	17 14	8.3
Fri Sep 07/Sat Sep 08	22 12	19 23	20 46	5 05	6 28	18 57	3 17	5 05	18 23	3	9 53.3	13 57	8.3
Sat Sep 08/Sun Sep 09	22 16	19 22	20 45	5 06	6 29	19 00	3 22	6 16	19 05	0	10 51.0	9 45	8.4
Sun Sep 09/Mon Sep 10	22 19	19 20	20 43	5 07	6 30	19 02	3 27	.....	19 44	0	11 46.5	4 58	8.4
Mon Sep 10/Tue Sep 11	22 23	19 19	20 41	5 08	6 31	19 04	3 32	.....	20 20	3	12 40.1	- 0 03	8.4
Tue Sep 11/Wed Sep 12	22 27	19 17	20 39	5 09	6 31	19 06	3 37	.....	20 55	9	13 32.3	- 4 59	8.5
Wed Sep 12/Thu Sep 13	22 31	19 16	20 38	5 10	6 32	19 09	3 42	.....	21 29	16	14 23.7	- 9 33	8.5
Thu Sep 13/Fri Sep 14	22 35	19 14	20 36	5 11	6 33	19 11	3 47	.....	22 05	24	15 14.6	-13 34	8.6
Fri Sep 14/Sat Sep 15	22 39	19 13	20 34	5 12	6 34	19 13	3 52	.....	22 42	33	16 05.6	-16 52	8.6
Sat Sep 15/Sun Sep 16	22 43	19 11	20 33	5 13	6 35	19 15	3 57	.....	23 22	43	16 56.8	-19 21	8.7
Sun Sep 16/Mon Sep 17	22 47	19 09	20 31	5 14	6 35	19 18	4 02	.....	0 06	53	17 48.2	-20 55	8.7
Mon Sep 17/Tue Sep 18	22 51	19 08	20 29	5 15	6 36	19 20	4 07	.....	0 52	62	18 39.6	-21 32	8.8
Tue Sep 18/Wed Sep 19	22 55	19 06	20 28	5 16	6 37	19 22	4 11	.....	1 42	71	19 30.7	-21 12	8.8
Wed Sep 19/Thu Sep 20	22 59	19 05	20 26	5 17	6 38	19 24	4 16	.....	2 35	79	20 21.2	-19 57	8.8
Thu Sep 20/Fri Sep 21	23 03	19 03	20 24	5 18	6 39	19 27	4 21	16 46	3 30	86	21 11.0	-17 51	8.9
Fri Sep 21/Sat Sep 22	23 07	19 02	20 23	5 18	6 40	19 29	4 26	17 23	4 26	92	21 59.8	-14 58	8.9
Sat Sep 22/Sun Sep 23	23 11	19 00	20 21	5 19	6 40	19 31	4 31	17 57	5 23	97	22 47.9	-11 26	9.0
Sun Sep 23/Mon Sep 24	23 15	18 59	20 20	5 20	6 41	19 34	4 36	18 28	6 21	99	23 35.6	- 7 23	9.0
Mon Sep 24/Tue Sep 25	23 19	18 57	20 18	5 21	6 42	19 36	4 41	18 59	7 19	100	0 23.1	- 2 58	9.1
Tue Sep 25/Wed Sep 26	23 23	18 56	20 16	5 22	6 43	19 38	4 46	19 29	.....	98	1 11.1	1 37	9.1
Wed Sep 26/Thu Sep 27	23 26	18 54	20 15	5 23	6 44	19 41	4 50	20 01	.....	95	2 00.2	6 11	9.1
Thu Sep 27/Fri Sep 28	23 30	18 53	20 13	5 24	6 45	19 43	4 55	20 34	.....	89	2 50.9	10 30	9.2
Fri Sep 28/Sat Sep 29	23 34	18 51	20 12	5 25	6 45	19 45	5 00	21 10	.....	81	3 43.7	14 19	9.2
Sat Sep 29/Sun Sep 30	23 38	18 50	20 10	5 26	6 46	19 48	5 05	21 51	.....	72	4 38.9	17 24	9.3
Sun Sep 30/Mon Oct 01	23 42	18 48	20 08	5 27	6 47	19 50	5 10	22 38	.....	62	5 36.3	19 29	9.3

***** 2018 OCTOBER *****

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
Mon Oct 01/Tue Oct 02	23 46	18 47	20 07	5 28	6 48	19 53	5 15	23 32	.....	51	6 35.6	20 23	9.3
Tue Oct 02/Wed Oct 03	23 50	18 45	20 05	5 28	6 49	19 55	5 19	0 32	.....	39	7 35.7	19 59	9.4
Wed Oct 03/Thu Oct 04	23 54	18 44	20 04	5 29	6 50	19 57	5 24	1 37	.....	28	8 35.6	18 17	9.4
Thu Oct 04/Fri Oct 05	23 58	18 42	20 02	5 30	6 50	20 00	5 29	2 46	.....	19	9 34.2	15 23	9.5
Fri Oct 05/Sat Oct 06	0 02	18 41	20 01	5 31	6 51	20 02	5 34	3 56	17 00	11	10 31.1	11 31	9.5
Sat Oct 06/Sun Oct 07	0 06	18 39	19 59	5 32	6 52	20 05	5 39	5 05	17 39	5	11 26.2	6 57	9.5
Sun Oct 07/Mon Oct 08	0 10	18 38	19 58	5 33	6 53	20 07	5 44	6 14	18 15	1	12 19.6	2 01	9.6
Mon Oct 08/Tue Oct 09	0 14	18 36	19 57	5 34	6 54	20 10	5 48	7 20	18 50	0	13 11.9	- 3 00	9.6
Tue Oct 09/Wed Oct 10	0 18	18 35	19 55	5 35	6 55	20 12	5 53	.....	19 24	2	14 03.5	- 7 48	9.7
Wed Oct 10/Thu Oct 11	0 22	18 34	19 54	5 35	6 56	20 15	5 58	.....	19 59	6	14 55.0	-12 08	9.7
Thu Oct 11/Fri Oct 12	0 26	18 32	19 52	5 36	6 57	20 17	6 03	.....	20 36	11	15 46.6	-15 48	9.7
Fri Oct 12/Sat Oct 13	0 30	18 31	19 51	5 37	6 58	20 20	6 08	.....	21 15	18	16 38.4	-18 39	9.8
Sat Oct 13/Sun Oct 14	0 34	18 29	19 50	5 38	6 58	20 22	6 13	.....	21 58	27	17 30.3	-20 35	9.8
Sun Oct 14/Mon Oct 15	0 37	18 28	19 48	5 39	6 59	20 25	6 17	.....	22 44	36	18 22.2	-21 33	9.8
Mon Oct 15/Tue Oct 16	0 41	18 27	19 47	5 40	7 00	20 28	6 22	.....	23 33	45	19 13.7	-21 33	9.9
Tue Oct 16/Wed Oct 17	0 45	18 25	19 46	5 41	7 01	20 30	6 27	.....	0 25	54	20 04.4	-20 35	9.9
Wed Oct 17/Thu Oct 18	0 49	18 24	19 44	5 42	7 02	20 33	6 32	.....	1 19	64	20 54.2	-18 45	10.0
Thu Oct 18/Fri Oct 19	0 53	18 23	19 43	5 42	7 03	20 36	6 37	.....	2 15	73	21 43.0	-16 07	10.0
Fri Oct 19/Sat Oct 20	0 57	18 21	19 42	5 43	7 04	20 38	6 41	.....	3 11	81	22 31.1	-12 47	10.0
Sat Oct 20/Sun Oct 21	1 01	18 20	19 41	5 44	7 05	20 41	6 46	16 29	4 09	88	23 18.6	- 8 52	10.1
Sun Oct 21/Mon Oct 22	1 05	18 19	19 40	5 45	7 06	20 44	6 51	16 59	5 08	93	0 06.1	- 4 31	10.1
Mon Oct 22/Tue Oct 23	1 09	18 18	19 38	5 46	7 07	20 47	6 56	17 30	6 08	98	0 54.2	0 07	10.1
Tue Oct 23/Wed Oct 24	1 13	18 16	19 37	5 47	7 08	20 49	7 01	18 01	7 10	100	1 43.5	4 50	10.2
Wed Oct 24/Thu Oct 25	1 17	18 15	19 36	5 48	7 09	20 52	7 06	18 33	.....	99	2 34.6	9 24	10.2
Thu Oct 25/Fri Oct 26	1 21	18 14	19 35	5 49	7 10	20 55	7 10	19 09	.....	97	3 27.9	13 33	10.2
Fri Oct 26/Sat Oct 27	1 25	18 13	19 34	5 50	7 11	20 58	7 15	19 49	.....	92	4 23.9	16 59	10.3
Sat Oct 27/Sun Oct 28	1 29	18 12	19 33	5 50	7 12	21 01	7 20	20 35	.....	84	5 22.2	19 26	10.3
Sun Oct 28/Mon Oct 29	1 33	18 11	19 32	5 51	7 13	21 04	7 25	21 27	.....	75	6 22.1	20 40	10.3
Mon Oct 29/Tue Oct 30	1 37	18 09	19 31	5 52	7 14	21 07	7 30	22 25	.....	65	7 22.7	20 34	10.4
Tue Oct 30/Wed Oct 31	1 41	18 08	19 30	5 53	7 15	21 10	7 35	23 29	.....	54	8 22.7	19 09	10.4
Wed Oct 31/Thu Nov 01	1 44	18 07	19 29	5 54	7 16	21 13	7 39	0 35	.....	42	9 21.1	16 31	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.

***** 2018 NOVEMBER *****

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
Thu Nov 01/Fri Nov 02	1 48	18 06	19 28	5 55	7 17	21 16	7 44	1 43	.....	31	10 17.4	12 54	10.5
Fri Nov 02/Sat Nov 03	1 52	18 05	19 27	5 56	7 18	21 19	7 49	2 51	.....	22	11 11.6	8 34	10.5
Sat Nov 03/Sun Nov 04*	1 56	18 04	19 26	4 57	6 19	21 22	7 54	2 58	16 14	13	12 04.0	3 46	10.5
Sun Nov 04/Mon Nov 05	3 00	17 03	18 25	4 58	6 20	21 25	7 59	4 04	.....	6	12 58.2	- 1 24	10.5
Mon Nov 05/Tue Nov 06	3 04	17 02	18 24	4 58	6 21	21 28	8 04	5 09	16 21	2	13 49.0	- 6 16	10.6
Tue Nov 06/Wed Nov 07	3 08	17 01	18 24	4 59	6 22	21 31	8 08	6 13	16 55	0	14 39.8	-10 46	10.6
Wed Nov 07/Thu Nov 08	3 12	17 00	18 23	5 00	6 23	21 34	8 13	7 16	17 30	1	15 31.0	-14 41	10.6
Thu Nov 08/Fri Nov 09	3 16	17 00	18 22	5 01	6 24	21 37	8 18	.....	18 09	3	16 22.7	-17 51	10.7
Fri Nov 09/Sat Nov 10	3 20	16 59	18 21	5 02	6 25	21 41	8 23	.....	18 50	7	17 14.8	-20 07	10.7
Sat Nov 10/Sun Nov 11	3 24	16 58	18 21	5 03	6 26	21 44	8 28	.....	19 35	13	18 06.9	-21 25	10.7
Sun Nov 11/Mon Nov 12	3 28	16 57	18 20	5 04	6 27	21 47	8 33	.....	20 23	20	18 58.7	-21 43	10.7
Mon Nov 12/Tue Nov 13	3 32	16 56	18 19	5 05	6 28	21 50	8 38	.....	21 15	29	19 49.7	-21 03	10.8
Tue Nov 13/Wed Nov 14	3 36	16 56	18 19	5 06	6 29	21 54	8 42	.....	22 08	37	20 39.6	-19 28	10.8
Wed Nov 14/Thu Nov 15	3 40	16 55	18 18	5 07	6 30	21 57	8 47	.....	23 03	47	21 28.2	-17 05	10.8
Thu Nov 15/Fri Nov 16	3 44	16 54	18 18	5 07	6 31	22 00	8 52	.....	23 59	56	22 15.7	-14 00	10.8
Fri Nov 16/Sat Nov 17	3 48	16 54	18 17	5 08	6 32	22 04	8 57	.....	0 56	65	23 02.5	-10 18	10.9
Sat Nov 17/Sun Nov 18	3 52	16 53	18 17	5 09	6 33	22 07	9 02	.....	1 53	74	23 49.1	- 6 08	10.9
Sun Nov 18/Mon Nov 19	3 56	16 52	18 16	5 10	6 34	22 11	9 07	.....	2 52	83	0 36.2	- 1 36	10.9
Mon Nov 19/Tue Nov 20	4 00	16 52	18 16	5 11	6 35	22 14	9 11	.....	3 53	90	1 24.6	3 07	10.9
Tue Nov 20/Wed Nov 21	4 04	16 51	18 15	5 12	6 36	22 18	9 16	.....	4 56	95	2 14.9	7 50	10.9
Wed Nov 21/Thu Nov 22	4 07	16 51	18 15	5 13	6 37	22 21	9 21	16 05	6 02	99	3 07.9	12 16	11.0
Thu Nov 22/Fri Nov 23	4 11	16 50	18 15	5 14	6 38	22 25	9 26	16 43	7 09	100	4 04.1	16 07	11.0
Fri Nov 23/Sat Nov 24	4 15	16 50	18 14	5 14	6 39	22 29	9 31	17 27	8 17	98	5 03.3	19 04	11.0
Sat Nov 24/Sun Nov 25	4 19	16 49	18 14	5 15	6 40	22 32	9 35	18 18	.....	94	6 05.1	20 47	11.0
Sun Nov 25/Mon Nov 26	4 23	16 49	18 14	5 16	6 41	22 36	9 40	19 16	.....	87	7 07.9	21 06	11.0
Mon Nov 26/Tue Nov 27	4 27	16 49	18 14	5 17	6 42	22 40	9 45	20 20	.....	78	8 10.2	19 57	11.1
Tue Nov 27/Wed Nov 28	4 31	16 48	18 13	5 18	6 43	22 43	9 50	21 27	.....	68	9 10.6	17 30	11.1
Wed Nov 28/Thu Nov 29	4 35	16 48	18 13	5 19	6 44	22 47	9 55	22 35	.....	57	10 08.3	13 59	11.1
Thu Nov 29/Fri Nov 30	4 39	16 48	18 13	5 20	6 45	22 51	9 59	23 43	.....	46	11 03.1	9 42	11.1
Fri Nov 30/Sat Dec 01	4 43	16 48	18 13	5 20	6 46	22 55	10 04	0 50	.....	35	11 55.6	4 57	11.1

***** 2018 DECEMBER *****

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 Dec 01/Sun Dec 02	4 47	16 47	18 13	5 21	6 47	22 59	10 09	1 55	.....	25	12 46.4	0 01	11.1
Sun Dec 02/Mon Dec 03	4 51	16 47	18 13	5 22	6 48	23 03	10 14	2 58	.....	16	13 36.3	- 4 50	11.2
Mon Dec 03/Tue Dec 04	4 55	16 47	18 13	5 23	6 48	23 07	10 18	4 01	.....	9	14 26.1	- 9 25	11.2
Tue Dec 04/Wed Dec 05	4 59	16 47	18 13	5 24	6 49	23 11	10 23	5 04	15 29	4	15 16.2	-13 30	11.2
Wed Dec 05/Thu Dec 06	5 03	16 47	18 13	5 24	6 50	23 15	10 28	6 04	16 05	1	16 07.1	-16 55	11.2
Thu Dec 06/Fri Dec 07	5 07	16 47	18 13	5 25	6 51	23 19	10 33	7 03	16 45	0	16 58.6	-19 30	11.2
Fri Dec 07/Sat Dec 08	5 11	16 47	18 13	5 26	6 52	23 23	10 37	7 59	17 28	1	17 50.6	-21 08	11.2
Sat Dec 08/Sun Dec 09	5 14	16 47	18 13	5 27	6 53	23 27	10 42	.....	18 15	4	18 42.6	-21 47	11.2
Sun Dec 09/Mon Dec 10	5 18	16 47	18 13	5 27	6 53	23 31	10 47	.....	19 05	8	19 34.0	-21 27	11.2
Mon Dec 10/Tue Dec 11	5 22	16 47	18 14	5 28	6 54	23 35	10 51	.....	19 58	14	20 24.3	-20 10	11.2
Tue Dec 11/Wed Dec 12	5 26	16 48	18 14	5 29	6 55	23 39	10 56	.....	20 53	21	21 13.1	-18 03	11.2
Wed Dec 12/Thu Dec 13	5 30	16 48	18 14	5 29	6 56	23 43	11 00	.....	21 48	29	22 00.6	-15 12	11.3
Thu Dec 13/Fri Dec 14	5 34	16 48	18 14	5 30	6 56	23 48	11 05	.....	22 44	38	22 47.0	-11 45	11.3
Fri Dec 14/Sat Dec 15	5 38	16 48	18 15	5 31	6 57	23 52	11 10	.....	23 40	48	23 32.7	- 7 48	11.3
Sat Dec 15/Sun Dec 16	5 42	16 49	18 15	5 31	6 58	23 56	11 14	.....	0 37	57	0 18.4	- 3 28	11.3
Sun Dec 16/Mon Dec 17	5 46	16 49	18 15	5 32	6 58	0 01	11 19	.....	1 36	67	1 04.9	1 06	11.3
Mon Dec 17/Tue Dec 18	5 50	16 49	18 16	5 32	6 59	0 05	11 23	.....	2 37	76	1 53.1	5 45	11.3
Tue Dec 18/Wed Dec 19	5 54	16 50	18 16	5 33	6 59	0 09	11 28	.....	3 40	85	2 43.9	10 17	11.3
Wed Dec 19/Thu Dec 20	5 58	16 50	18 17	5 33	7 00	0 14	11 32	.....	4 47	92	3 38.0	14 26	11.3
Thu Dec 20/Fri Dec 21	6 02	16 51	18 17	5 34	7 01	0 18	11 37	.....	5 55	97	4 35.9	17 53	11.3
Fri Dec 21/Sat Dec 22	6 06	16 51	18 18	5 34	7 01	0 22	11 41	16 04	7 03	100	5 37.5	20 16	11.3
Sat Dec 22/Sun Dec 23	6 10	16 52	18 18	5 35	7 01	0 27	11 46	16 59	8 07	99	6 41.7	21 15	11.3
Sun Dec 23/Mon Dec 24	6 14	16 52	18 19	5 35	7 02	0 31	11 50	18 03	.....	96	7 46.6	20 42	11.3
Mon Dec 24/Tue Dec 25	6 18	16 53	18 19	5 36	7 02	0 36	11 54	19 11	.....	90	8 50.3	18 39	11.3
Tue Dec 25/Wed Dec 26	6 21	16 53	18 20	5 36	7 03	0 40	11 59	20 22	.....	82	9 51.3	15 20	11.3
Wed Dec 26/Thu Dec 27	6 25	16 54	18 20	5 37	7 03	0 45	12 03	21 33	.....	72	10 49.0	11 06	11.3
Thu Dec 27/Fri Dec 28	6 29	16 55	18 21	5 37	7 03	0 50	12 07	22 41	.....	61	11 43.5	6 18	11.3
Fri Dec 28/Sat Dec 29	6 33	16 55	18 22	5 37	7 04	0 54	12 12	23 48	.....	50	12 35.6	1 18	11.3
Sat Dec 29/Sun Dec 30	6 37	16 56	18 22	5 38	7 04	0 59	12 16	0 52	.....	39	13 26.0	- 3 39	11.3
Sun Dec 30/Mon Dec 31	6 41	16 57	18 23	5 38	7 04	1 03	12 20	1 55	.....	29	14 15.6	- 8 19	11.2
Mon Dec 31/Tue Jan 01	6 45	16 57	18 24	5 38	7 04	1 08	12 24	2 56	.....	20	15 05.2	-12 31	11.2