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:

***** 2020 Night-time Astronomical Calendar for DCT *****

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.

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 2020, at DCT

Times and dates are given in local time, zone = 7 hr West.
They are generally better than +- 2 minutes.

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

NEW	1ST	FULL	LAST
Dec 25 22 16	Jan 02 21 47	Jan 10 12 23	Jan 17 6 01
Jan 24 14 44	Feb 01 18 43	Feb 09 0 35	Feb 15 15 19
Feb 23 8 34	Mar 02 12 59	Mar 09 10 49	Mar 16 2 36
Mar 24 2 30	Apr 01 3 22	Apr 07 19 36	Apr 14 15 57
Apr 22 19 27	Apr 30 13 39	May 07 3 46	May 14 7 03
May 22 10 40	May 29 20 30	Jun 05 12 13	Jun 12 23 25
Jun 20 23 42	Jun 28 1 17	Jul 04 21 45	Jul 12 16 31
Jul 20 10 34	Jul 27 5 34	Aug 03 9 00	Aug 11 9 48
Aug 18 19 42	Aug 25 10 59	Sep 01 22 23	Sep 10 2 28
Sep 17 4 01	Sep 23 18 57	Oct 01 14 07	Oct 09 17 41
Oct 16 12 32	Oct 23 6 24	Oct 31 7 51	Nov 08 6 48
Nov 14 22 09	Nov 21 21 46	Nov 30 2 32	Dec 07 17 38
Dec 14 9 19	Dec 21 16 43	Dec 29 20 30	Jan 06 2 39

Calendar for DCT, west longitude (h.m.s) = 7 25 41, latitude (d.m) = 34 44.7
Rise/set times in Mountain time (7 hr W), for 500 m above surroundings, in standard time all year.
Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2020 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 20	17 29	18 56	6 03	7 29	1 15	12 24	.....	23 45	41	0 10.8	- 4 44	11.1
Thu Jan 02/Fri Jan 03	6 24	17 30	18 56	6 03	7 29	1 19	12 28	.....	0 39	50	0 54.4	- 0 05	11.1
Fri Jan 03/Sat Jan 04	6 28	17 31	18 57	6 04	7 30	1 24	12 32	.....	1 34	60	1 38.5	4 36	11.1
Sat Jan 04/Sun Jan 05	6 32	17 32	18 58	6 04	7 30	1 29	12 36	.....	2 31	69	2 24.0	9 11	11.1
Sun Jan 05/Mon Jan 06	6 36	17 33	18 58	6 04	7 30	1 33	12 41	.....	3 29	78	3 11.7	13 29	11.1
Mon Jan 06/Tue Jan 07	6 40	17 33	18 59	6 04	7 30	1 38	12 45	.....	4 30	86	4 02.6	17 18	11.1
Tue Jan 07/Wed Jan 08	6 44	17 34	19 00	6 04	7 30	1 43	12 49	.....	5 32	92	4 57.0	20 21	11.1
Wed Jan 08/Thu Jan 09	6 47	17 35	19 01	6 04	7 30	1 47	12 53	15 41	6 35	97	5 55.0	22 21	11.1
Thu Jan 09/Fri Jan 10	6 51	17 36	19 02	6 04	7 30	1 52	12 57	16 35	7 34	100	6 55.8	23 01	11.0
Fri Jan 10/Sat Jan 11	6 55	17 37	19 02	6 04	7 30	1 57	13 01	17 36	.....	100	7 58.0	22 12	11.0
Sat Jan 11/Sun Jan 12	6 59	17 38	19 03	6 04	7 29	2 02	13 04	18 42	.....	97	8 59.8	19 52	11.0
Sun Jan 12/Mon Jan 13	7 03	17 39	19 04	6 04	7 29	2 06	13 08	19 52	.....	91	9 59.7	16 13	11.0
Mon Jan 13/Tue Jan 14	7 07	17 40	19 05	6 04	7 29	2 11	13 12	21 02	.....	84	10 57.1	11 33	11.0
Tue Jan 14/Wed Jan 15	7 11	17 41	19 06	6 04	7 29	2 16	13 16	22 11	.....	74	11 52.0	6 15	11.0
Wed Jan 15/Thu Jan 16	7 15	17 41	19 06	6 04	7 29	2 21	13 20	23 19	.....	63	12 45.1	0 39	11.0
Thu Jan 16/Fri Jan 17	7 19	17 42	19 07	6 04	7 28	2 25	13 24	0 25	.....	52	13 37.2	- 4 54	10.9
Fri Jan 17/Sat Jan 18	7 23	17 43	19 08	6 03	7 28	2 30	13 27	1 31	.....	41	14 29.3	-10 07	10.9
Sat Jan 18/Sun Jan 19	7 27	17 44	19 09	6 03	7 28	2 35	13 31	2 37	.....	30	15 21.9	-14 45	10.9
Sun Jan 19/Mon Jan 20	7 31	17 45	19 10	6 03	7 27	2 40	13 35	3 41	.....	21	16 15.6	-18 33	10.9
Mon Jan 20/Tue Jan 21	7 35	17 46	19 11	6 03	7 27	2 45	13 39	4 44	.....	13	17 10.5	-21 21	10.9
Tue Jan 21/Wed Jan 22	7 39	17 47	19 11	6 02	7 26	2 49	13 42	5 44	.....	7	18 06.1	-22 59	10.8
Wed Jan 22/Thu Jan 23	7 43	17 48	19 12	6 02	7 26	2 54	13 46	6 38	15 55	3	19 01.6	-23 24	10.8
Thu Jan 23/Fri Jan 24	7 47	17 49	19 13	6 02	7 26	2 59	13 49	7 27	16 50	0	19 56.1	-22 38	10.8
Fri Jan 24/Sat Jan 25	7 51	17 50	19 14	6 01	7 25	3 04	13 53	8 09	17 48	0	20 48.7	-20 46	10.8
Sat Jan 25/Sun Jan 26	7 55	17 51	19 15	6 01	7 24	3 09	13 56	.....	18 46	2	21 39.0	-18 00	10.8
Sun Jan 26/Mon Jan 27	7 58	17 52	19 16	6 00	7 24	3 13	14 00	.....	19 43	5	22 26.9	-14 30	10.7
Mon Jan 27/Tue Jan 28	8 02	17 53	19 17	6 00	7 23	3 18	14 03	.....	20 40	10	23 12.7	-10 29	10.7
Tue Jan 28/Wed Jan 29	8 06	17 54	19 18	6 00	7 23	3 23	14 07	.....	21 35	17	23 56.9	- 6 06	10.7
Wed Jan 29/Thu Jan 30	8 10	17 55	19 18	5 59	7 22	3 28	14 10	.....	22 30	24	0 40.2	- 1 32	10.7
Thu Jan 30/Fri Jan 31	8 14	17 56	19 19	5 58	7 21	3 33	14 14	.....	23 24	33	1 23.5	3 06	10.7
Fri Jan 31/Sat Feb 01	8 18	17 57	19 20	5 58	7 21	3 38	14 17	.....	0 19	42	2 07.6	7 40	10.6

***** 2020 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 22	17 58	19 21	5 57	7 20	3 42	14 20	.....	1 16	51	2 53.4	12 00	10.6
Sun Feb 02/Mon Feb 03	8 26	17 59	19 22	5 57	7 19	3 47	14 24	.....	2 14	61	3 41.8	15 56	10.6
Mon Feb 03/Tue Feb 04	8 30	18 00	19 23	5 56	7 18	3 52	14 27	.....	3 15	71	4 33.4	19 14	10.6
Tue Feb 04/Wed Feb 05	8 34	18 01	19 24	5 55	7 17	3 57	14 30	.....	4 16	80	5 28.7	21 40	10.5
Wed Feb 05/Thu Feb 06	8 38	18 02	19 25	5 55	7 17	4 02	14 33	.....	5 16	88	6 27.5	22 55	10.5
Thu Feb 06/Fri Feb 07	8 42	18 03	19 25	5 54	7 16	4 06	14 37	.....	6 14	94	7 29.0	22 46	10.5
Fri Feb 07/Sat Feb 08	8 46	18 04	19 26	5 53	7 15	4 11	14 40	16 19	7 06	98	8 31.5	21 05	10.4
Sat Feb 08/Sun Feb 09	8 50	18 05	19 27	5 52	7 14	4 16	14 43	17 29	7 53	100	9 33.5	17 54	10.4
Sun Feb 09/Mon Feb 10	8 54	18 06	19 28	5 51	7 13	4 21	14 46	18 41	.....	98	10 33.8	13 27	10.4
Mon Feb 10/Tue Feb 11	8 58	18 07	19 29	5 51	7 12	4 26	14 49	19 54	.....	94	11 31.7	8 07	10.4
Tue Feb 11/Wed Feb 12	9 02	18 08	19 30	5 50	7 11	4 31	14 52	21 05	.....	87	12 27.6	2 20	10.3
Wed Feb 12/Thu Feb 13	9 05	18 09	19 31	5 49	7 10	4 35	14 55	22 14	.....	78	13 22.0	- 3 31	10.3
Thu Feb 13/Fri Feb 14	9 09	18 10	19 31	5 48	7 09	4 40	14 58	23 22	.....	67	14 15.8	- 9 03	10.3
Fri Feb 14/Sat Feb 15	9 13	18 11	19 32	5 47	7 08	4 45	15 01	0 29	.....	56	15 09.6	-13 58	10.2
Sat Feb 15/Sun Feb 16	9 17	18 12	19 33	5 46	7 07	4 50	15 04	1 35	.....	45	16 03.9	-18 01	10.2
Sun Feb 16/Mon Feb 17	9 21	18 13	19 34	5 45	7 06	4 55	15 07	2 39	.....	35	16 58.9	-21 03	10.2
Mon Feb 17/Tue Feb 18	9 25	18 14	19 35	5 44	7 05	4 59	15 10	3 39	.....	25	17 54.3	-22 55	10.2
Tue Feb 18/Wed Feb 19	9 29	18 15	19 36	5 43	7 04	5 04	15 13	4 34	.....	17	18 49.5	-23 34	10.1
Wed Feb 19/Thu Feb 20	9 33	18 16	19 37	5 42	7 03	5 09	15 16	5 24	.....	10	19 43.7	-23 02	10.1
Thu Feb 20/Fri Feb 21	9 37	18 17	19 37	5 41	7 02	5 14	15 19	6 08	.....	5	20 36.2	-21 24	10.1
Fri Feb 21/Sat Feb 22	9 41	18 18	19 38	5 40	7 00	5 19	15 22	6 46	16 38	2	21 26.6	-18 50	10.0
Sat Feb 22/Sun Feb 23	9 45	18 19	19 39	5 39	6 59	5 23	15 25	7 20	17 35	0	22 14.6	-15 30	10.0
Sun Feb 23/Mon Feb 24	9 49	18 19	19 40	5 38	6 58	5 28	15 27	.....	18 32	1	23 00.6	-11 35	10.0
Mon Feb 24/Tue Feb 25	9 53	18 20	19 41	5 36	6 57	5 33	15 30	.....	19 28	3	23 45.0	- 7 16	9.9
Tue Feb 25/Wed Feb 26	9 57	18 21	19 42	5 35	6 56	5 38	15 33	.....	20 22	6	0 28.4	- 2 43	9.9
Wed Feb 26/Thu Feb 27	10 01	18 22	19 43	5 34	6 54	5 43	15 36	.....	21 17	11	1 11.4	1 55	9.9
Thu Feb 27/Fri Feb 28	10 05	18 23	19 43	5 33	6 53	5 47	15 38	.....	22 12	18	1 54.8	6 30	9.8
Fri Feb 28/Sat Feb 29	10 09	18 24	19 44	5 32	6 52	5 52	15 41	.....	23 07	26	2 39.3	10 52	9.8
Sat Feb 29/Sun Mar 01	10 13	18 25	19 45	5 30	6 51	5 57	15 44	.....	0 04	34	3 25.9	14 52	9.8

Calendar for DCT, west longitude (h.m.s) = 7 25 41, latitude (d.m) = 34 44.7
Rise/set times in Mountain time (7 hr W), for 500 m above surroundings, in standard time all year.
Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2020 MARCH *****

Date (eve/morn)	LMST midn	Sun: set	Sun: twi.end	Sun: twi.beg	Sun: rise	LST twilight: eve	LST twilight: morn	Moon: rise	Moon: set	%illum	Moon: RA	Moon: Dec	Twi-Twi hours
Sun Mar 01/Mon Mar 02	10 16	18 26	19 46	5 29	6 49	6 02	15 46	.....	1 02	44	4 15.0	18 19	9.7
Mon Mar 02/Tue Mar 03	10 20	18 26	19 47	5 28	6 48	6 06	15 49	.....	2 02	54	5 07.4	21 00	9.7
Tue Mar 03/Wed Mar 04	10 24	18 27	19 48	5 27	6 47	6 11	15 52	.....	3 01	64	6 03.0	22 40	9.6
Wed Mar 04/Thu Mar 05	10 28	18 28	19 48	5 25	6 45	6 16	15 54	.....	3 58	74	7 01.7	23 06	9.6
Thu Mar 05/Fri Mar 06	10 32	18 29	19 49	5 24	6 44	6 21	15 57	.....	4 52	83	8 02.3	22 06	9.6
Fri Mar 06/Sat Mar 07	10 36	18 30	19 50	5 23	6 43	6 26	16 00	.....	5 41	91	9 03.7	19 36	9.5
Sat Mar 07/Sun Mar 08	10 40	18 31	19 51	5 21	6 41	6 30	16 02	.....	6 25	97	10 04.5	15 41	9.5
Sun Mar 08/Mon Mar 09	10 44	18 32	19 52	5 20	6 40	6 35	16 05	17 27	7 04	100	11 03.9	10 38	9.5
Mon Mar 09/Tue Mar 10	10 48	18 32	19 53	5 19	6 39	6 40	16 07	18 40	.....	99	12 01.9	4 50	9.4
Tue Mar 10/Wed Mar 11	10 52	18 33	19 54	5 17	6 37	6 45	16 10	19 53	.....	96	12 58.6	- 1 17	9.4
Wed Mar 11/Thu Mar 12	10 56	18 34	19 54	5 16	6 36	6 50	16 13	21 04	.....	90	13 54.8	- 7 16	9.4
Thu Mar 12/Fri Mar 13	11 00	18 35	19 55	5 14	6 35	6 54	16 15	22 15	.....	81	14 50.8	-12 42	9.3
Fri Mar 13/Sat Mar 14	11 04	18 36	19 56	5 13	6 33	6 59	16 18	23 24	.....	72	15 47.3	-17 16	9.3
Sat Mar 14/Sun Mar 15	11 08	18 37	19 57	5 12	6 32	7 04	16 20	0 30	.....	61	16 44.1	-20 43	9.2
Sun Mar 15/Mon Mar 16	11 12	18 37	19 58	5 10	6 31	7 09	16 23	1 33	.....	50	17 41.1	-22 56	9.2
Mon Mar 16/Tue Mar 17	11 16	18 38	19 59	5 09	6 29	7 14	16 25	2 31	.....	40	18 37.5	-23 52	9.2
Tue Mar 17/Wed Mar 18	11 20	18 39	20 00	5 07	6 28	7 19	16 28	3 23	.....	30	19 32.5	-23 33	9.1
Wed Mar 18/Thu Mar 19	11 23	18 40	20 01	5 06	6 26	7 23	16 30	4 08	.....	22	20 25.6	-22 06	9.1
Thu Mar 19/Fri Mar 20	11 27	18 41	20 01	5 04	6 25	7 28	16 32	4 48	.....	15	21 16.3	-19 41	9.0
Fri Mar 20/Sat Mar 21	11 31	18 41	20 02	5 03	6 24	7 33	16 35	5 22	.....	9	22 04.6	-16 29	9.0
Sat Mar 21/Sun Mar 22	11 35	18 42	20 03	5 01	6 22	7 38	16 37	5 54	.....	4	22 50.7	-12 39	9.0
Sun Mar 22/Mon Mar 23	11 39	18 43	20 04	5 00	6 21	7 43	16 40	6 22	17 22	1	23 35.1	- 8 23	8.9
Mon Mar 23/Tue Mar 24	11 43	18 44	20 05	4 58	6 19	7 48	16 42	6 49	18 17	0	0 18.4	- 3 51	8.9
Tue Mar 24/Wed Mar 25	11 47	18 45	20 06	4 57	6 18	7 52	16 45	7 16	19 11	1	1 01.3	0 49	8.8
Wed Mar 25/Thu Mar 26	11 51	18 45	20 07	4 55	6 17	7 57	16 47	.....	20 06	3	1 44.4	5 28	8.8
Thu Mar 26/Fri Mar 27	11 55	18 46	20 08	4 54	6 15	8 02	16 50	.....	21 01	7	2 28.5	9 55	8.8
Fri Mar 27/Sat Mar 28	11 59	18 47	20 09	4 52	6 14	8 07	16 52	.....	21 58	13	3 14.1	14 02	8.7
Sat Mar 28/Sun Mar 29	12 03	18 48	20 10	4 51	6 12	8 12	16 54	.....	22 55	20	4 02.0	17 37	8.7
Sun Mar 29/Mon Mar 30	12 07	18 49	20 11	4 49	6 11	8 17	16 57	.....	23 54	28	4 52.5	20 29	8.6
Mon Mar 30/Tue Mar 31	12 11	18 49	20 12	4 48	6 10	8 22	16 59	.....	0 52	38	5 45.9	22 26	8.6
Tue Mar 31/Wed Apr 01	12 15	18 50	20 12	4 46	6 08	8 27	17 02	.....	1 49	48	6 41.8	23 15	8.6

***** 2020 APRIL *****

Date (eve/morn)	LMST midn	Sun: set	Sun: twi.end	Sun: twi.beg	Sun: rise	LST twilight: eve	LST twilight: morn	Moon: rise	Moon: set	%illum	Moon: RA	Moon: Dec	Twi-Twi hours
Wed Apr 01/Thu Apr 02	12 19	18 51	20 13	4 44	6 07	8 31	17 04	.....	2 42	59	7 39.8	22 45	8.5
Thu Apr 02/Fri Apr 03	12 23	18 52	20 14	4 43	6 06	8 36	17 06	.....	3 31	69	8 38.7	20 52	8.5
Fri Apr 03/Sat Apr 04	12 27	18 52	20 15	4 41	6 04	8 41	17 09	.....	4 16	79	9 37.7	17 37	8.4
Sat Apr 04/Sun Apr 05	12 30	18 53	20 16	4 40	6 03	8 46	17 11	.....	4 56	88	10 36.1	13 07	8.4
Sun Apr 05/Mon Apr 06	12 34	18 54	20 17	4 38	6 02	8 51	17 13	.....	5 34	95	11 33.7	7 38	8.3
Mon Apr 06/Tue Apr 07	12 38	18 55	20 18	4 37	6 00	8 56	17 16	17 25	6 10	99	12 30.6	1 34	8.3
Tue Apr 07/Wed Apr 08	12 42	18 56	20 19	4 35	5 59	9 01	17 18	18 38	6 46	100	13 27.4	- 4 39	8.3
Wed Apr 08/Thu Apr 09	12 46	18 56	20 20	4 34	5 57	9 06	17 21	19 50	.....	98	14 24.7	-10 35	8.2
Thu Apr 09/Fri Apr 10	12 50	18 57	20 21	4 32	5 56	9 11	17 23	21 02	.....	93	15 22.8	-15 47	8.2
Fri Apr 10/Sat Apr 11	12 54	18 58	20 22	4 31	5 55	9 16	17 25	22 13	.....	85	16 21.8	-19 55	8.1
Sat Apr 11/Sun Apr 12	12 58	18 59	20 23	4 29	5 54	9 21	17 28	23 21	.....	76	17 21.3	-22 44	8.1
Sun Apr 12/Mon Apr 13	13 02	19 00	20 24	4 27	5 52	9 26	17 30	0 23	.....	66	18 20.2	-24 08	8.1
Mon Apr 13/Tue Apr 14	13 06	19 00	20 25	4 26	5 51	9 31	17 33	1 19	.....	56	19 17.7	-24 10	8.0
Tue Apr 14/Wed Apr 15	13 10	19 01	20 26	4 24	5 50	9 36	17 35	2 07	.....	46	20 12.8	-22 57	8.0
Wed Apr 15/Thu Apr 16	13 14	19 02	20 28	4 23	5 48	9 41	17 37	2 49	.....	36	21 04.9	-20 42	7.9
Thu Apr 16/Fri Apr 17	13 18	19 03	20 29	4 21	5 47	9 46	17 40	3 25	.....	27	21 54.2	-17 35	7.9
Fri Apr 17/Sat Apr 18	13 22	19 04	20 30	4 20	5 46	9 51	17 42	3 57	.....	19	22 41.0	-13 50	7.8
Sat Apr 18/Sun Apr 19	13 26	19 04	20 31	4 18	5 45	9 56	17 45	4 26	.....	13	23 25.7	- 9 37	7.8
Sun Apr 19/Mon Apr 20	13 30	19 05	20 32	4 17	5 43	10 01	17 47	4 54	.....	7	0 09.1	- 5 05	7.8
Mon Apr 20/Tue Apr 21	13 34	19 06	20 33	4 15	5 42	10 06	17 50	5 20	.....	3	0 51.9	- 0 23	7.7
Tue Apr 21/Wed Apr 22	13 38	19 07	20 34	4 14	5 41	10 11	17 52	5 47	18 01	1	1 34.9	4 19	7.7
Wed Apr 22/Thu Apr 23	13 41	19 08	20 35	4 12	5 40	10 16	17 55	6 15	18 56	0	2 18.6	8 53	7.6
Thu Apr 23/Fri Apr 24	13 45	19 08	20 36	4 11	5 39	10 21	17 57	.....	19 53	1	3 03.9	13 08	7.6
Fri Apr 24/Sat Apr 25	13 49	19 09	20 37	4 10	5 38	10 26	18 00	.....	20 50	4	3 51.3	16 54	7.5
Sat Apr 25/Sun Apr 26	13 53	19 10	20 38	4 08	5 36	10 31	18 02	.....	21 49	9	4 41.1	19 58	7.5
Sun Apr 26/Mon Apr 27	13 57	19 11	20 40	4 07	5 35	10 36	18 05	.....	22 47	16	5 33.5	22 09	7.5
Mon Apr 27/Tue Apr 28	14 01	19 12	20 41	4 05	5 34	10 41	18 07	.....	23 44	24	6 28.2	23 15	7.4
Tue Apr 28/Wed Apr 29	14 05	19 13	20 42	4 04	5 33	10 46	18 10	.....	0 38	33	7 24.6	23 07	7.4
Wed Apr 29/Thu Apr 30	14 09	19 13	20 43	4 02	5 32	10 51	18 12	.....	1 28	43	8 21.7	21 39	7.3
Thu Apr 30/Fri May 01	14 13	19 14	20 44	4 01	5 31	10 57	18 15	.....	2 12	54	9 18.8	18 54	7.3

Calendar for DCT, west longitude (h.m.s) = 7 25 41, latitude (d.m) = 34 44.7
Rise/set times in Mountain time (7 hr W), for 500 m above surroundings, in standard time all year.
Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2020 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
Fri May 01/Sat May 02	14 17	19 15	20 45	4 00	5 30	11 02	18 17	.....	2 53	65	10 15.2	14 55	7.2
Sat May 02/Sun May 03	14 21	19 16	20 46	3 58	5 29	11 07	18 20	.....	3 30	76	11 10.8	9 56	7.2
Sun May 03/Mon May 04	14 25	19 17	20 47	3 57	5 28	11 12	18 23	.....	4 05	85	12 06.0	4 13	7.2
Mon May 04/Tue May 05	14 29	19 17	20 49	3 56	5 27	11 17	18 25	.....	4 39	93	13 01.2	- 1 53	7.1
Tue May 05/Wed May 06	14 33	19 18	20 50	3 54	5 26	11 22	18 28	.....	5 15	98	13 57.3	- 7 58	7.1
Wed May 06/Thu May 07	14 37	19 19	20 51	3 53	5 25	11 27	18 30	18 36	5 54	100	14 54.8	-13 37	7.0
Thu May 07/Fri May 08	14 41	19 20	20 52	3 52	5 24	11 32	18 33	19 48	.....	99	15 54.0	-18 23	7.0
Fri May 08/Sat May 09	14 45	19 21	20 53	3 51	5 23	11 37	18 36	20 59	.....	95	16 54.7	-21 57	7.0
Sat May 09/Sun May 10	14 48	19 21	20 54	3 49	5 22	11 42	18 39	22 06	.....	89	17 55.9	-24 03	6.9
Sun May 10/Mon May 11	14 52	19 22	20 55	3 48	5 22	11 47	18 41	23 07	.....	81	18 56.2	-24 39	6.9
Mon May 11/Tue May 12	14 56	19 23	20 57	3 47	5 21	11 53	18 44	0 01	.....	72	19 54.3	-23 51	6.8
Tue May 12/Wed May 13	15 00	19 24	20 58	3 46	5 20	11 58	18 47	0 46	.....	62	20 49.2	-21 51	6.8
Wed May 13/Thu May 14	15 04	19 25	20 59	3 45	5 19	12 03	18 50	1 26	.....	52	21 40.7	-18 54	6.8
Thu May 14/Fri May 15	15 08	19 25	21 00	3 44	5 18	12 08	18 53	1 59	.....	43	22 29.0	-15 13	6.7
Fri May 15/Sat May 16	15 12	19 26	21 01	3 43	5 18	12 13	18 55	2 29	.....	33	23 14.7	-11 02	6.7
Sat May 16/Sun May 17	15 16	19 27	21 02	3 42	5 17	12 18	18 58	2 57	.....	25	23 58.6	- 6 30	6.7
Sun May 17/Mon May 18	15 20	19 28	21 03	3 41	5 16	12 23	19 01	3 24	.....	17	0 41.6	- 1 48	6.6
Mon May 18/Tue May 19	15 24	19 28	21 04	3 40	5 16	12 28	19 04	3 50	.....	11	1 24.4	2 57	6.6
Tue May 19/Wed May 20	15 28	19 29	21 06	3 39	5 15	12 33	19 07	4 18	.....	6	2 08.0	7 37	6.6
Wed May 20/Thu May 21	15 32	19 30	21 07	3 38	5 14	12 38	19 10	4 48	17 45	2	2 53.0	12 00	6.5
Thu May 21/Fri May 22	15 36	19 31	21 08	3 37	5 14	12 43	19 13	5 21	18 43	0	3 40.0	15 57	6.5
Fri May 22/Sat May 23	15 40	19 31	21 09	3 36	5 13	12 48	19 16	5 58	19 42	0	4 29.5	19 16	6.5
Sat May 23/Sun May 24	15 44	19 32	21 10	3 35	5 13	12 53	19 19	.....	20 42	2	5 21.7	21 43	6.4
Sun May 24/Mon May 25	15 48	19 33	21 11	3 34	5 12	12 58	19 23	.....	21 40	6	6 16.3	23 06	6.4
Mon May 25/Tue May 26	15 52	19 34	21 12	3 34	5 12	13 03	19 26	.....	22 36	12	7 12.4	23 15	6.4
Tue May 26/Wed May 27	15 56	19 34	21 13	3 33	5 11	13 08	19 29	.....	23 27	20	8 09.2	22 07	6.3
Wed May 27/Thu May 28	15 59	19 35	21 14	3 32	5 11	13 13	19 32	.....	0 12	29	9 05.7	19 40	6.3
Thu May 28/Fri May 29	16 03	19 36	21 15	3 31	5 10	13 18	19 35	.....	0 53	40	10 01.1	16 03	6.3
Fri May 29/Sat May 30	16 07	19 36	21 16	3 31	5 10	13 22	19 39	.....	1 30	51	10 55.3	11 27	6.3
Sat May 30/Sun May 31	16 11	19 37	21 16	3 30	5 10	13 27	19 42	.....	2 04	63	11 48.6	6 06	6.2
Sun May 31/Mon Jun 01	16 15	19 38	21 17	3 30	5 09	13 32	19 45	.....	2 38	74	12 41.7	0 17	6.2

***** 2020 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
Mon Jun 01/Tue Jun 02	16 19	19 38	21 18	3 29	5 09	13 37	19 49	.....	3 12	83	13 35.4	- 5 41	6.2
Tue Jun 02/Wed Jun 03	16 23	19 39	21 19	3 29	5 09	13 42	19 52	.....	3 47	91	14 30.6	-11 25	6.2
Wed Jun 03/Thu Jun 04	16 27	19 39	21 20	3 28	5 09	13 46	19 56	.....	4 27	97	15 27.8	-16 32	6.1
Thu Jun 04/Fri Jun 05	16 31	19 40	21 21	3 28	5 09	13 51	19 59	18 36	5 11	100	16 27.3	-20 39	6.1
Fri Jun 05/Sat Jun 06	16 35	19 40	21 21	3 27	5 08	13 56	20 03	19 46	6 01	100	17 28.5	-23 27	6.1
Sat Jun 06/Sun Jun 07	16 39	19 41	21 22	3 27	5 08	14 01	20 06	20 50	.....	97	18 30.2	-24 45	6.1
Sun Jun 07/Mon Jun 08	16 43	19 41	21 23	3 27	5 08	14 05	20 10	21 49	.....	92	19 30.6	-24 33	6.1
Mon Jun 08/Tue Jun 09	16 47	19 42	21 23	3 26	5 08	14 10	20 14	22 39	.....	85	20 28.3	-22 58	6.1
Tue Jun 09/Wed Jun 10	16 51	19 42	21 24	3 26	5 08	14 14	20 18	23 22	.....	77	21 22.5	-20 16	6.0
Wed Jun 10/Thu Jun 11	16 55	19 43	21 25	3 26	5 08	14 19	20 21	23 59	.....	68	22 13.1	-16 44	6.0
Thu Jun 11/Fri Jun 12	16 59	19 43	21 25	3 26	5 08	14 23	20 25	0 31	.....	59	23 00.6	-12 36	6.0
Fri Jun 12/Sat Jun 13	17 03	19 44	21 26	3 26	5 08	14 28	20 29	0 59	.....	49	23 45.7	- 8 05	6.0
Sat Jun 13/Sun Jun 14	17 06	19 44	21 26	3 26	5 08	14 32	20 33	1 26	.....	40	0 29.3	- 3 21	6.0
Sun Jun 14/Mon Jun 15	17 10	19 44	21 27	3 26	5 08	14 37	20 37	1 53	.....	31	1 12.3	1 26	6.0
Mon Jun 15/Tue Jun 16	17 14	19 45	21 27	3 26	5 08	14 41	20 41	2 20	.....	23	1 55.6	6 09	6.0
Tue Jun 16/Wed Jun 17	17 18	19 45	21 28	3 26	5 08	14 45	20 45	2 48	.....	15	2 40.1	10 40	6.0
Wed Jun 17/Thu Jun 18	17 22	19 45	21 28	3 26	5 08	14 50	20 49	3 20	.....	9	3 26.6	14 47	6.0
Thu Jun 18/Fri Jun 19	17 26	19 46	21 28	3 26	5 09	14 54	20 53	3 56	17 32	4	4 15.6	18 19	6.0
Fri Jun 19/Sat Jun 20	17 30	19 46	21 28	3 26	5 09	14 58	20 57	4 37	18 32	1	5 07.4	21 04	6.0
Sat Jun 20/Sun Jun 21	17 34	19 46	21 29	3 26	5 09	15 02	21 01	5 26	19 31	0	6 01.9	22 47	6.0
Sun Jun 21/Mon Jun 22	17 38	19 46	21 29	3 27	5 09	15 06	21 05	6 21	20 29	1	6 58.4	23 16	6.0
Mon Jun 22/Tue Jun 23	17 42	19 47	21 29	3 27	5 09	15 11	21 10	.....	21 23	4	7 55.9	22 26	6.0
Tue Jun 23/Wed Jun 24	17 46	19 47	21 29	3 27	5 10	15 15	21 14	.....	22 11	10	8 53.1	20 17	6.0
Wed Jun 24/Thu Jun 25	17 50	19 47	21 29	3 28	5 10	15 19	21 18	.....	22 54	18	9 49.1	16 54	6.0
Thu Jun 25/Fri Jun 26	17 54	19 47	21 29	3 28	5 10	15 23	21 22	.....	23 32	27	10 43.4	12 30	6.0
Fri Jun 26/Sat Jun 27	17 58	19 47	21 29	3 29	5 11	15 26	21 27	.....	0 07	38	11 36.3	7 21	6.0
Sat Jun 27/Sun Jun 28	18 02	19 47	21 29	3 29	5 11	15 30	21 31	.....	0 40	49	12 28.4	1 44	6.0
Sun Jun 28/Mon Jun 29	18 06	19 47	21 29	3 30	5 12	15 34	21 36	.....	1 13	60	13 20.4	- 4 04	6.0
Mon Jun 29/Tue Jun 30	18 10	19 47	21 29	3 30	5 12	15 38	21 40	.....	1 46	71	14 13.4	- 9 44	6.0
Tue Jun 30/Wed Jul 01	18 13	19 47	21 29	3 31	5 12	15 42	21 45	.....	2 23	81	15 08.2	-14 56	6.0

Calendar for DCT, west longitude (h.m.s) = 7 25 41, latitude (d.m) = 34 44.7
Rise/set times in Mountain time (7 hr W), for 500 m above surroundings, in standard time all year.
Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2020 JULY *****

Date (eve/morn)	LMST midn	Sun: set	Sun: twi.end	Sun: twi.beg	Sun: rise	LST twilight: eve	LST twilight: morn	Moon: rise	Moon: set	%illum	RA	Dec	Twi-Twi hours
Wed Jul 01/Thu Jul 02	18 17	19 47	21 28	3 31	5 13	15 45	21 49	.....	3 04	89	16 05.2	-19 19	6.0
Thu Jul 02/Fri Jul 03	18 21	19 47	21 28	3 32	5 13	15 49	21 54	.....	3 51	95	17 04.5	-22 34	6.1
Fri Jul 03/Sat Jul 04	18 25	19 47	21 28	3 33	5 14	15 53	21 59	18 34	4 43	99	18 05.2	-24 27	6.1
Sat Jul 04/Sun Jul 05	18 29	19 47	21 28	3 33	5 14	15 56	22 03	19 35	5 41	100	19 06.0	-24 51	6.1
Sun Jul 05/Mon Jul 06	18 33	19 46	21 27	3 34	5 15	16 00	22 08	20 29	.....	98	20 05.1	-23 48	6.1
Mon Jul 06/Tue Jul 07	18 37	19 46	21 27	3 35	5 15	16 03	22 13	21 15	.....	95	21 01.4	-21 30	6.1
Tue Jul 07/Wed Jul 08	18 41	19 46	21 26	3 36	5 16	16 07	22 17	21 55	.....	89	21 54.2	-18 12	6.2
Wed Jul 08/Thu Jul 09	18 45	19 46	21 26	3 36	5 17	16 10	22 22	22 29	.....	82	22 43.6	-14 11	6.2
Thu Jul 09/Fri Jul 10	18 49	19 45	21 25	3 37	5 17	16 14	22 27	23 00	.....	74	23 30.2	- 9 42	6.2
Fri Jul 10/Sat Jul 11	18 53	19 45	21 25	3 38	5 18	16 17	22 32	23 28	.....	65	0 14.8	- 4 57	6.2
Sat Jul 11/Sun Jul 12	18 57	19 45	21 24	3 39	5 18	16 20	22 36	23 54	.....	56	0 58.3	- 0 07	6.2
Sun Jul 12/Mon Jul 13	19 01	19 44	21 23	3 40	5 19	16 24	22 41	0 21	.....	47	1 41.7	4 40	6.3
Mon Jul 13/Tue Jul 14	19 05	19 44	21 23	3 41	5 20	16 27	22 46	0 48	.....	37	2 25.8	9 16	6.3
Tue Jul 14/Wed Jul 15	19 09	19 43	21 22	3 42	5 20	16 30	22 51	1 18	.....	28	3 11.4	13 31	6.3
Wed Jul 15/Thu Jul 16	19 13	19 43	21 21	3 43	5 21	16 33	22 56	1 52	.....	20	3 59.4	17 16	6.4
Thu Jul 16/Fri Jul 17	19 17	19 42	21 20	3 44	5 22	16 37	23 01	2 31	.....	13	4 50.3	20 17	6.4
Fri Jul 17/Sat Jul 18	19 21	19 42	21 20	3 45	5 22	16 40	23 06	3 16	.....	7	5 44.1	22 20	6.4
Sat Jul 18/Sun Jul 19	19 24	19 41	21 19	3 46	5 23	16 43	23 11	4 09	18 18	2	6 40.4	23 14	6.4
Sun Jul 19/Mon Jul 20	19 28	19 41	21 18	3 47	5 24	16 46	23 16	5 09	19 14	0	7 38.4	22 48	6.5
Mon Jul 20/Tue Jul 21	19 32	19 40	21 17	3 48	5 24	16 49	23 21	6 14	20 05	0	8 36.6	20 59	6.5
Tue Jul 21/Wed Jul 22	19 36	19 40	21 16	3 49	5 25	16 52	23 26	.....	20 51	3	9 34.0	17 52	6.5
Wed Jul 22/Thu Jul 23	19 40	19 39	21 15	3 50	5 26	16 55	23 30	.....	21 32	8	10 29.8	13 37	6.6
Thu Jul 23/Fri Jul 24	19 44	19 38	21 14	3 51	5 26	16 58	23 35	.....	22 08	16	11 23.8	8 33	6.6
Fri Jul 24/Sat Jul 25	19 48	19 38	21 13	3 52	5 27	17 01	23 40	.....	22 42	25	12 16.5	2 57	6.6
Sat Jul 25/Sun Jul 26	19 52	19 37	21 12	3 53	5 28	17 04	23 45	.....	23 15	36	13 08.5	- 2 51	6.7
Sun Jul 26/Mon Jul 27	19 56	19 36	21 11	3 54	5 29	17 06	23 51	.....	23 48	47	14 00.8	- 8 31	6.7
Mon Jul 27/Tue Jul 28	20 00	19 35	21 10	3 55	5 29	17 09	23 56	.....	0 24	58	14 54.3	-13 46	6.8
Tue Jul 28/Wed Jul 29	20 04	19 35	21 09	3 56	5 30	17 12	0 01	.....	1 02	69	15 49.5	-18 17	6.8
Wed Jul 29/Thu Jul 30	20 08	19 34	21 07	3 57	5 31	17 15	0 06	.....	1 46	79	16 46.8	-21 48	6.8
Thu Jul 30/Fri Jul 31	20 12	19 33	21 06	3 58	5 32	17 18	0 11	.....	2 35	87	17 45.8	-24 02	6.9
Fri Jul 31/Sat Aug 01	20 16	19 32	21 05	3 59	5 32	17 20	0 16	.....	3 30	94	18 45.4	-24 53	6.9

***** 2020 AUGUST *****

Date (eve/morn)	LMST midn	Sun: set	Sun: twi.end	Sun: twi.beg	Sun: rise	LST twilight: eve	LST twilight: morn	Moon: rise	Moon: set	%illum	RA	Dec	Twi-Twi hours
Sat Aug 01/Sun Aug 02	20 20	19 31	21 04	4 00	5 33	17 23	0 21	18 20	4 29	98	19 44.3	-24 18	6.9
Sun Aug 02/Mon Aug 03	20 24	19 30	21 03	4 01	5 34	17 26	0 26	19 09	5 30	100	20 41.1	-22 25	7.0
Mon Aug 03/Tue Aug 04	20 28	19 29	21 01	4 03	5 35	17 28	0 31	19 51	6 31	99	21 35.0	-19 26	7.0
Tue Aug 04/Wed Aug 05	20 31	19 28	21 00	4 04	5 35	17 31	0 36	20 27	.....	97	22 25.7	-15 37	7.1
Wed Aug 05/Thu Aug 06	20 35	19 27	20 59	4 05	5 36	17 34	0 41	20 59	.....	93	23 13.6	-11 13	7.1
Thu Aug 06/Fri Aug 07	20 39	19 26	20 57	4 06	5 37	17 36	0 46	21 28	.....	87	23 59.3	- 6 29	7.1
Fri Aug 07/Sat Aug 08	20 43	19 25	20 56	4 07	5 38	17 39	0 51	21 55	.....	80	0 43.5	- 1 35	7.2
Sat Aug 08/Sun Aug 09	20 47	19 24	20 55	4 08	5 38	17 41	0 56	22 22	.....	72	1 27.1	3 17	7.2
Sun Aug 09/Mon Aug 10	20 51	19 23	20 53	4 09	5 39	17 44	1 01	22 49	.....	63	2 10.9	7 59	7.3
Mon Aug 10/Tue Aug 11	20 55	19 22	20 52	4 10	5 40	17 47	1 06	23 17	.....	53	2 55.9	12 22	7.3
Tue Aug 11/Wed Aug 12	20 59	19 21	20 51	4 11	5 41	17 49	1 11	23 49	.....	44	3 42.8	16 16	7.3
Wed Aug 12/Thu Aug 13	21 03	19 20	20 49	4 12	5 41	17 52	1 16	0 25	.....	34	4 32.3	19 31	7.4
Thu Aug 13/Fri Aug 14	21 07	19 19	20 48	4 13	5 42	17 54	1 21	1 07	.....	25	5 24.6	21 55	7.4
Fri Aug 14/Sat Aug 15	21 11	19 18	20 46	4 14	5 43	17 57	1 26	1 56	.....	17	6 19.8	23 13	7.5
Sat Aug 15/Sun Aug 16	21 15	19 17	20 45	4 16	5 44	17 59	1 31	2 52	.....	10	7 17.1	23 15	7.5
Sun Aug 16/Mon Aug 17	21 19	19 15	20 43	4 17	5 44	18 02	1 36	3 55	17 54	4	8 15.6	21 54	7.6
Mon Aug 17/Tue Aug 18	21 23	19 14	20 42	4 18	5 45	18 04	1 41	5 04	18 43	1	9 13.9	19 10	7.6
Tue Aug 18/Wed Aug 19	21 27	19 13	20 40	4 19	5 46	18 06	1 46	6 14	19 26	0	10 11.1	15 11	7.6
Wed Aug 19/Thu Aug 20	21 31	19 12	20 39	4 20	5 47	18 09	1 51	.....	20 05	2	11 06.8	10 12	7.7
Thu Aug 20/Fri Aug 21	21 35	19 11	20 37	4 21	5 47	18 11	1 56	.....	20 41	7	12 01.0	4 34	7.7
Fri Aug 21/Sat Aug 22	21 39	19 09	20 36	4 22	5 48	18 14	2 01	.....	21 15	14	12 54.3	- 1 22	7.8
Sat Aug 22/Sun Aug 23	21 42	19 08	20 34	4 23	5 49	18 16	2 06	.....	21 49	23	13 47.5	- 7 14	7.8
Sun Aug 23/Mon Aug 24	21 46	19 07	20 33	4 24	5 50	18 18	2 11	.....	22 24	33	14 41.3	-12 41	7.9
Mon Aug 24/Tue Aug 25	21 50	19 05	20 31	4 25	5 50	18 21	2 16	.....	23 02	44	15 36.4	-17 26	7.9
Tue Aug 25/Wed Aug 26	21 54	19 04	20 30	4 26	5 51	18 23	2 21	.....	23 44	55	16 33.0	-21 10	7.9
Wed Aug 26/Thu Aug 27	21 58	19 03	20 28	4 27	5 52	18 26	2 26	.....	0 32	66	17 31.1	-23 41	8.0
Thu Aug 27/Fri Aug 28	22 02	19 02	20 26	4 28	5 53	18 28	2 31	.....	1 24	76	18 29.8	-24 51	8.0
Fri Aug 28/Sat Aug 29	22 06	19 00	20 25	4 29	5 53	18 30	2 35	.....	2 21	84	19 27.9	-24 37	8.1
Sat Aug 29/Sun Aug 30	22 10	18 59	20 23	4 30	5 54	18 33	2 40	17 06	3 21	91	20 24.4	-23 05	8.1
Sun Aug 30/Mon Aug 31	22 14	18 58	20 22	4 31	5 55	18 35	2 45	17 49	4 22	96	21 18.4	-20 24	8.1
Mon Aug 31/Tue Sep 01	22 18	18 56	20 20	4 31	5 56	18 37	2 50	18 27	5 22	99	22 09.6	-16 49	8.2

Calendar for DCT, west longitude (h.m.s) = 7 25 41, latitude (d.m) = 34 44.7
Rise/set times in Mountain time (7 hr W), for 500 m above surroundings, in standard time all year.
Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2020 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
Tue Sep 01/Wed Sep 02	22 22	18 55	20 19	4 32	5 56	18 40	2 55	19 00	6 20	100	22 58.0	-12 34	8.2
Wed Sep 02/Thu Sep 03	22 26	18 53	20 17	4 33	5 57	18 42	3 00	19 29	.....	99	23 44.2	- 7 52	8.3
Thu Sep 03/Fri Sep 04	22 30	18 52	20 15	4 34	5 58	18 45	3 05	19 57	.....	96	0 28.9	- 2 58	8.3
Fri Sep 04/Sat Sep 05	22 34	18 51	20 14	4 35	5 58	18 47	3 10	20 23	.....	91	1 12.8	1 59	8.4
Sat Sep 05/Sun Sep 06	22 38	18 49	20 12	4 36	5 59	18 49	3 15	20 50	.....	85	1 56.7	6 49	8.4
Sun Sep 06/Mon Sep 07	22 42	18 48	20 11	4 37	6 00	18 52	3 19	21 17	.....	78	2 41.3	11 21	8.4
Mon Sep 07/Tue Sep 08	22 46	18 46	20 09	4 38	6 01	18 54	3 24	21 47	.....	69	3 27.5	15 26	8.5
Tue Sep 08/Wed Sep 09	22 49	18 45	20 07	4 39	6 01	18 56	3 29	22 21	.....	60	4 15.8	18 54	8.5
Wed Sep 09/Thu Sep 10	22 53	18 44	20 06	4 40	6 02	18 59	3 34	22 59	.....	50	5 06.6	21 34	8.6
Thu Sep 10/Fri Sep 11	22 57	18 42	20 04	4 41	6 03	19 01	3 39	23 44	.....	40	6 00.1	23 14	8.6
Fri Sep 11/Sat Sep 12	23 01	18 41	20 03	4 41	6 03	19 03	3 43	0 36	.....	31	6 55.9	23 43	8.6
Sat Sep 12/Sun Sep 13	23 05	18 39	20 01	4 42	6 04	19 06	3 48	1 36	.....	21	7 53.2	22 52	8.7
Sun Sep 13/Mon Sep 14	23 09	18 38	20 00	4 43	6 05	19 08	3 53	2 41	.....	13	8 51.0	20 39	8.7
Mon Sep 14/Tue Sep 15	23 13	18 36	19 58	4 44	6 06	19 11	3 58	3 50	17 17	7	9 48.4	17 06	8.8
Tue Sep 15/Wed Sep 16	23 17	18 35	19 56	4 45	6 06	19 13	4 03	5 01	17 58	2	10 44.8	12 26	8.8
Wed Sep 16/Thu Sep 17	23 21	18 34	19 55	4 46	6 07	19 15	4 07	6 13	18 35	0	11 40.1	6 54	8.8
Thu Sep 17/Fri Sep 18	23 25	18 32	19 53	4 47	6 08	19 18	4 12	.....	19 11	1	12 34.7	0 52	8.9
Fri Sep 18/Sat Sep 19	23 29	18 31	19 52	4 47	6 08	19 20	4 17	.....	19 45	5	13 29.1	- 5 16	8.9
Sat Sep 19/Sun Sep 20	23 33	18 29	19 50	4 48	6 09	19 22	4 22	.....	20 21	12	14 24.1	-11 06	9.0
Sun Sep 20/Mon Sep 21	23 37	18 28	19 49	4 49	6 10	19 25	4 27	.....	20 59	20	15 20.2	-16 15	9.0
Mon Sep 21/Tue Sep 22	23 41	18 26	19 47	4 50	6 11	19 27	4 31	.....	21 41	30	16 17.8	-20 25	9.0
Tue Sep 22/Wed Sep 23	23 45	18 25	19 46	4 51	6 11	19 30	4 36	.....	22 27	41	17 16.5	-23 19	9.1
Wed Sep 23/Thu Sep 24	23 49	18 24	19 44	4 51	6 12	19 32	4 41	.....	23 19	52	18 15.6	-24 49	9.1
Thu Sep 24/Fri Sep 25	23 53	18 22	19 43	4 52	6 13	19 35	4 46	.....	0 16	62	19 14.0	-24 54	9.2
Fri Sep 25/Sat Sep 26	23 57	18 21	19 41	4 53	6 14	19 37	4 50	.....	1 15	72	20 10.7	-23 38	9.2
Sat Sep 26/Sun Sep 27	0 00	18 19	19 40	4 54	6 14	19 39	4 55	.....	2 15	81	21 04.8	-21 13	9.2
Sun Sep 27/Mon Sep 28	0 04	18 18	19 38	4 55	6 15	19 42	5 00	.....	3 15	88	21 56.0	-17 51	9.3
Mon Sep 28/Tue Sep 29	0 08	18 17	19 37	4 55	6 16	19 44	5 05	17 02	4 13	93	22 44.5	-13 45	9.3
Tue Sep 29/Wed Sep 30	0 12	18 15	19 35	4 56	6 17	19 47	5 09	17 32	5 10	97	23 30.9	- 9 09	9.3
Wed Sep 30/Thu Oct 01	0 16	18 14	19 34	4 57	6 17	19 49	5 14	18 00	6 06	99	0 15.6	- 4 16	9.4

***** 2020 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
Thu Oct 01/Fri Oct 02	0 20	18 12	19 33	4 58	6 18	19 52	5 19	18 26	7 01	100	0 59.6	0 44	9.4
Fri Oct 02/Sat Oct 03	0 24	18 11	19 31	4 59	6 19	19 54	5 23	18 53	.....	98	1 43.4	5 40	9.5
Sat Oct 03/Sun Oct 04	0 28	18 10	19 30	4 59	6 20	19 57	5 28	19 20	.....	95	2 27.9	10 22	9.5
Sun Oct 04/Mon Oct 05	0 32	18 08	19 28	5 00	6 20	20 00	5 33	19 48	.....	90	3 13.7	14 39	9.5
Mon Oct 05/Tue Oct 06	0 36	18 07	19 27	5 01	6 21	20 02	5 38	20 20	.....	83	4 01.4	18 21	9.6
Tue Oct 06/Wed Oct 07	0 40	18 05	19 26	5 02	6 22	20 05	5 42	20 56	.....	75	4 51.4	21 17	9.6
Wed Oct 07/Thu Oct 08	0 44	18 04	19 24	5 02	6 23	20 07	5 47	21 38	.....	66	5 43.7	23 15	9.6
Thu Oct 08/Fri Oct 09	0 48	18 03	19 23	5 03	6 24	20 10	5 52	22 26	.....	57	6 38.1	24 07	9.7
Fri Oct 09/Sat Oct 10	0 52	18 01	19 22	5 04	6 24	20 13	5 57	23 21	.....	47	7 33.9	23 43	9.7
Sat Oct 10/Sun Oct 11	0 56	18 00	19 20	5 05	6 25	20 15	6 01	0 22	.....	36	8 30.4	21 59	9.7
Sun Oct 11/Mon Oct 12	1 00	17 59	19 19	5 06	6 26	20 18	6 06	1 28	.....	26	9 26.7	18 58	9.8
Mon Oct 12/Tue Oct 13	1 04	17 58	19 18	5 06	6 27	20 21	6 11	2 37	.....	17	10 22.3	14 46	9.8
Tue Oct 13/Wed Oct 14	1 07	17 56	19 17	5 07	6 28	20 23	6 15	3 47	16 29	9	11 17.1	9 35	9.8
Wed Oct 14/Thu Oct 15	1 11	17 55	19 15	5 08	6 28	20 26	6 20	4 59	17 04	4	12 11.4	3 42	9.9
Thu Oct 15/Fri Oct 16	1 15	17 54	19 14	5 09	6 29	20 29	6 25	6 11	17 38	1	13 05.9	- 2 31	9.9
Fri Oct 16/Sat Oct 17	1 19	17 52	19 13	5 09	6 30	20 31	6 30	7 25	18 14	0	14 01.2	- 8 40	9.9
Sat Oct 17/Sun Oct 18	1 23	17 51	19 12	5 10	6 31	20 34	6 34	.....	18 51	3	14 58.0	-14 19	10.0
Sun Oct 18/Mon Oct 19	1 27	17 50	19 11	5 11	6 32	20 37	6 39	.....	19 32	9	15 56.6	-19 04	10.0
Mon Oct 19/Tue Oct 20	1 31	17 49	19 09	5 12	6 33	20 40	6 44	.....	20 18	17	16 56.7	-22 34	10.0
Tue Oct 20/Wed Oct 21	1 35	17 48	19 08	5 13	6 33	20 43	6 49	.....	21 10	26	17 57.5	-24 36	10.1
Wed Oct 21/Thu Oct 22	1 39	17 46	19 07	5 13	6 34	20 45	6 53	.....	22 07	36	18 57.7	-25 07	10.1
Thu Oct 22/Fri Oct 23	1 43	17 45	19 06	5 14	6 35	20 48	6 58	.....	23 07	46	19 55.9	-24 11	10.1
Fri Oct 23/Sat Oct 24	1 47	17 44	19 05	5 15	6 36	20 51	7 03	.....	0 08	57	20 51.2	-22 01	10.2
Sat Oct 24/Sun Oct 25	1 51	17 43	19 04	5 16	6 37	20 54	7 08	.....	1 08	67	21 43.2	-18 50	10.2
Sun Oct 25/Mon Oct 26	1 55	17 42	19 03	5 17	6 38	20 57	7 12	.....	2 07	76	22 32.2	-14 54	10.2
Mon Oct 26/Tue Oct 27	1 59	17 41	19 02	5 17	6 39	21 00	7 17	.....	3 05	83	23 18.7	-10 24	10.3
Tue Oct 27/Wed Oct 28	2 03	17 40	19 01	5 18	6 40	21 03	7 22	16 04	4 00	90	0 03.4	- 5 34	10.3
Wed Oct 28/Thu Oct 29	2 07	17 39	19 00	5 19	6 41	21 06	7 26	16 31	4 55	95	0 47.2	- 0 34	10.3
Thu Oct 29/Fri Oct 30	2 11	17 38	18 59	5 20	6 41	21 09	7 31	16 57	5 50	98	1 30.8	4 25	10.3
Fri Oct 30/Sat Oct 31	2 14	17 37	18 58	5 21	6 42	21 12	7 36	17 23	6 46	100	2 15.1	9 15	10.4
Sat Oct 31/Sun Nov 01	2 18	17 36	18 57	5 21	6 43	21 15	7 41	17 51	7 42	100	3 00.6	13 44	10.4

Calendar for DCT, west longitude (h.m.s) = 7 25 41, latitude (d.m) = 34 44.7
Rise/set times in Mountain time (7 hr W), for 500 m above surroundings, in standard time all year.
Moon info is for local midnight, even if moon is down. Program: John Thorstensen, Dartmouth College.

***** 2020 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
Sun Nov 01/Mon Nov 02	2 22	17 35	18 57	5 22	6 44	21 18	7 46	18 22	.....	97	3 48.1	17 40	10.4
Mon Nov 02/Tue Nov 03	2 26	17 34	18 56	5 23	6 45	21 21	7 50	18 56	.....	94	4 37.7	20 53	10.5
Tue Nov 03/Wed Nov 04	2 30	17 33	18 55	5 24	6 46	21 24	7 55	19 36	.....	88	5 29.7	23 10	10.5
Wed Nov 04/Thu Nov 05	2 34	17 32	18 54	5 25	6 47	21 28	8 00	20 22	.....	81	6 23.6	24 20	10.5
Thu Nov 05/Fri Nov 06	2 38	17 31	18 53	5 26	6 48	21 31	8 05	21 14	.....	72	7 18.8	24 18	10.5
Fri Nov 06/Sat Nov 07	2 42	17 30	18 53	5 26	6 49	21 34	8 09	22 11	.....	63	8 14.5	22 58	10.6
Sat Nov 07/Sun Nov 08	2 46	17 30	18 52	5 27	6 50	21 37	8 14	23 14	.....	52	9 09.7	20 23	10.6
Sun Nov 08/Mon Nov 09	2 50	17 29	18 51	5 28	6 51	21 41	8 19	0 19	.....	41	10 04.1	16 38	10.6
Mon Nov 09/Tue Nov 10	2 54	17 28	18 51	5 29	6 52	21 44	8 24	1 26	.....	31	10 57.5	11 53	10.6
Tue Nov 10/Wed Nov 11	2 58	17 27	18 50	5 30	6 53	21 47	8 28	2 35	.....	21	11 50.3	6 21	10.7
Wed Nov 11/Thu Nov 12	3 02	17 27	18 50	5 30	6 54	21 51	8 33	3 45	.....	12	12 43.2	0 21	10.7
Thu Nov 12/Fri Nov 13	3 06	17 26	18 49	5 31	6 55	21 54	8 38	4 56	16 07	5	13 37.0	- 5 49	10.7
Fri Nov 13/Sat Nov 14	3 10	17 25	18 48	5 32	6 56	21 57	8 43	6 10	16 42	1	14 32.6	-11 45	10.7
Sat Nov 14/Sun Nov 15	3 14	17 25	18 48	5 33	6 56	22 01	8 47	7 24	17 21	0	15 30.5	-17 00	10.7
Sun Nov 15/Mon Nov 16	3 18	17 24	18 48	5 34	6 57	22 04	8 52	.....	18 04	2	16 30.9	-21 10	10.8
Mon Nov 16/Tue Nov 17	3 22	17 23	18 47	5 35	6 58	22 08	8 57	.....	18 54	6	17 32.9	-23 56	10.8
Tue Nov 17/Wed Nov 18	3 25	17 23	18 47	5 35	6 59	22 11	9 02	.....	19 51	13	18 35.1	-25 06	10.8
Wed Nov 18/Thu Nov 19	3 29	17 22	18 46	5 36	7 00	22 15	9 07	.....	20 52	21	19 35.9	-24 42	10.8
Thu Nov 19/Fri Nov 20	3 33	17 22	18 46	5 37	7 01	22 18	9 11	.....	21 55	30	20 33.7	-22 53	10.9
Fri Nov 20/Sat Nov 21	3 37	17 21	18 46	5 38	7 02	22 22	9 16	.....	22 58	40	21 27.9	-19 56	10.9
Sat Nov 21/Sun Nov 22	3 41	17 21	18 45	5 39	7 03	22 26	9 21	.....	23 59	50	22 18.4	-16 08	10.9
Sun Nov 22/Mon Nov 23	3 45	17 21	18 45	5 40	7 04	22 29	9 26	.....	0 57	60	23 05.8	-11 44	10.9
Mon Nov 23/Tue Nov 24	3 49	17 20	18 45	5 40	7 05	22 33	9 30	.....	1 54	69	23 51.0	- 6 58	10.9
Tue Nov 24/Wed Nov 25	3 53	17 20	18 45	5 41	7 06	22 37	9 35	.....	2 49	78	0 34.7	- 1 59	10.9
Wed Nov 25/Thu Nov 26	3 57	17 20	18 44	5 42	7 07	22 41	9 40	.....	3 44	85	1 18.1	3 01	11.0
Thu Nov 26/Fri Nov 27	4 01	17 19	18 44	5 43	7 08	22 44	9 45	.....	4 39	91	2 01.9	7 55	11.0
Fri Nov 27/Sat Nov 28	4 05	17 19	18 44	5 44	7 09	22 48	9 49	15 54	5 36	96	2 46.9	12 32	11.0
Sat Nov 28/Sun Nov 29	4 09	17 19	18 44	5 44	7 10	22 52	9 54	16 23	6 33	99	3 33.9	16 42	11.0
Sun Nov 29/Mon Nov 30	4 13	17 19	18 44	5 45	7 10	22 56	9 59	16 57	7 31	100	4 23.3	20 11	11.0
Mon Nov 30/Tue Dec 01	4 17	17 19	18 44	5 46	7 11	23 00	10 04	17 35	.....	99	5 15.2	22 47	11.0

***** 2020 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
Tue Dec 01/Wed Dec 02	4 21	17 18	18 44	5 47	7 12	23 04	10 08	18 19	.....	96	6 09.3	24 19	11.0
Wed Dec 02/Thu Dec 03	4 25	17 18	18 44	5 47	7 13	23 08	10 13	19 09	.....	92	7 05.0	24 37	11.1
Thu Dec 03/Fri Dec 04	4 29	17 18	18 44	5 48	7 14	23 12	10 18	20 06	.....	85	8 01.0	23 36	11.1
Fri Dec 04/Sat Dec 05	4 32	17 18	18 44	5 49	7 15	23 16	10 22	21 06	.....	77	8 56.5	21 19	11.1
Sat Dec 05/Sun Dec 06	4 36	17 18	18 44	5 50	7 16	23 20	10 27	22 10	.....	68	9 50.7	17 52	11.1
Sun Dec 06/Mon Dec 07	4 40	17 18	18 44	5 50	7 16	23 24	10 32	23 15	.....	57	10 43.4	13 26	11.1
Mon Dec 07/Tue Dec 08	4 44	17 18	18 44	5 51	7 17	23 28	10 36	0 21	.....	46	11 35.1	8 13	11.1
Tue Dec 08/Wed Dec 09	4 48	17 19	18 45	5 52	7 18	23 32	10 41	1 28	.....	35	12 26.3	2 30	11.1
Wed Dec 09/Thu Dec 10	4 52	17 19	18 45	5 52	7 19	23 36	10 46	2 36	.....	25	13 17.9	- 3 28	11.1
Thu Dec 10/Fri Dec 11	4 56	17 19	18 45	5 53	7 19	23 40	10 50	3 45	.....	15	14 11.0	- 9 22	11.1
Fri Dec 11/Sat Dec 12	5 00	17 19	18 45	5 54	7 20	23 45	10 55	4 57	.....	8	15 06.5	-14 49	11.1
Sat Dec 12/Sun Dec 13	5 04	17 19	18 46	5 54	7 21	23 49	10 59	6 11	15 53	3	16 04.7	-19 26	11.1
Sun Dec 13/Mon Dec 14	5 08	17 20	18 46	5 55	7 21	23 53	11 04	7 23	16 39	0	17 05.7	-22 49	11.2
Mon Dec 14/Tue Dec 15	5 12	17 20	18 46	5 56	7 22	23 57	11 09	8 30	17 32	1	18 08.2	-24 43	11.2
Tue Dec 15/Wed Dec 16	5 16	17 20	18 47	5 56	7 23	0 02	11 13	.....	18 31	3	19 10.6	-24 59	11.2
Wed Dec 16/Thu Dec 17	5 20	17 21	18 47	5 57	7 23	0 06	11 18	.....	19 35	9	20 10.9	-23 42	11.2
Thu Dec 17/Fri Dec 18	5 24	17 21	18 47	5 57	7 24	0 10	11 22	.....	20 40	16	21 07.8	-21 07	11.2
Fri Dec 18/Sat Dec 19	5 28	17 21	18 48	5 58	7 24	0 15	11 27	.....	21 44	24	22 00.7	-17 31	11.2
Sat Dec 19/Sun Dec 20	5 32	17 22	18 48	5 58	7 25	0 19	11 31	.....	22 46	33	22 50.0	-13 13	11.2
Sun Dec 20/Mon Dec 21	5 36	17 22	18 49	5 59	7 25	0 24	11 35	.....	23 44	43	23 36.4	- 8 30	11.2
Mon Dec 21/Tue Dec 22	5 40	17 23	18 49	5 59	7 26	0 28	11 40	.....	0 41	52	0 20.8	- 3 32	11.2
Tue Dec 22/Wed Dec 23	5 43	17 23	18 50	6 00	7 26	0 32	11 44	.....	1 36	62	1 04.3	1 30	11.2
Wed Dec 23/Thu Dec 24	5 47	17 24	18 50	6 00	7 27	0 37	11 49	.....	2 31	71	1 47.7	6 26	11.2
Thu Dec 24/Fri Dec 25	5 51	17 24	18 51	6 01	7 27	0 41	11 53	.....	3 27	79	2 32.0	11 08	11.2
Fri Dec 25/Sat Dec 26	5 55	17 25	18 52	6 01	7 28	0 46	11 57	.....	4 23	86	3 18.1	15 27	11.2
Sat Dec 26/Sun Dec 27	5 59	17 26	18 52	6 02	7 28	0 51	12 02	.....	5 21	92	4 06.6	19 11	11.2
Sun Dec 27/Mon Dec 28	6 03	17 26	18 53	6 02	7 28	0 55	12 06	15 32	6 20	97	4 57.9	22 06	11.2
Mon Dec 28/Tue Dec 29	6 07	17 27	18 53	6 02	7 29	1 00	12 10	16 14	7 18	99	5 51.9	24 01	11.1
Tue Dec 29/Wed Dec 30	6 11	17 28	18 54	6 03	7 29	1 04	12 15	17 03	8 13	100	6 48.0	24 42	11.1
Wed Dec 30/Thu Dec 31	6 15	17 28	18 55	6 03	7 29	1 09	12 19	17 58	.....	98	7 45.1	24 04	11.1
Thu Dec 31/Fri Jan 01	6 19	17 29	18 55	6 03	7 29	1 14	12 23	18 59	.....	95	8 41.9	22 04	11.1