

## DARK SKIES for June 2021:

T/W	June	1/2	10:44 p.m.	-	2:04 a.m.
W/T	June	2/3	10:45 p.m.	-	2:27 a.m.
T/F	June	3/4	10:47 p.m.	-	2:48 a.m.
<b>F/S</b>	<b>June</b>	<b>4/5</b>	<b>10:48 p.m.</b>	-	<b>3:08 a.m.</b>
<b>S/S</b>	<b>June</b>	<b>5/6</b>	<b>10:49 p.m.</b>	-	<b>3:07 a.m.</b>
<b>S/M</b>	<b>June</b>	<b>6/7</b>	<b>10:50 p.m.</b>	-	<b>3:07 a.m.</b>
<b>M/T</b>	<b>June</b>	<b>7/8</b>	<b>10:52 p.m.</b>	-	<b>3:06 a.m.</b>
<b>T/W</b>	<b>June</b>	<b>8/9</b>	<b>10:53 p.m.</b>	-	<b>3:05 a.m.</b>
<b>W/T</b>	<b>June</b>	<b>9/10</b>	<b>10:54 p.m.</b>	-	<b>3:05 a.m.</b>
<b>T/F</b>	<b>June</b>	<b>10/11</b>	<b>10:55 p.m.</b>	-	<b>3:04 a.m.</b>
<b>F/S</b>	<b>June</b>	<b>11/12</b>	<b>10:55 p.m.</b>	-	<b>3:04 a.m.</b>
<b>S/S</b>	<b>June</b>	<b>12/13</b>	<b>10:56 p.m.</b>	-	<b>3:03 a.m.</b>
S/M	June	13/14	11:38 p.m.	-	3:03 a.m.
M/T	June	14/15	12:13 a.m.	-	3:03 a.m.
T/W	June	15/16	12:44 a.m.	-	3:03 a.m.
W/T	June	16/17	1:10 a.m.	-	3:02 a.m.
T/F	June	17/18	1:34 a.m.	-	3:02 a.m.
F/S	June	18/19	1:58 a.m.	-	3:02 a.m.
S/S	June	19/20	2:24 a.m.	-	3:02 a.m.
S/M	June	20/21	2:52 a.m.	-	3:03 a.m.
M/T	June	21/22	none		
T/W	June	22/23	none		
W/T	June	23/24	none		
T/F	June	24/25	none		
F/S	June	25/26	none		
S/S	June	26/27	none		
S/M	June	27/28	11:01 p.m.	-	11:35 p.m.
M/T	June	28/29	11:01 p.m.	-	12:05 a.m.
T/W	June	29/30	11:00 p.m.	-	12:30 a.m.
W/T	June	30/1	11:00 p.m.	-	12:53 a.m.

Times listed are for Dodgeville, Wisconsin when

(1) Moon is below the horizon

(2) Sun is > 18° below the horizon  
(astronomical twilight)

## Time Travel

conducted by David Oesper

**TUTOR.** As the twelve signs correspond with the months of the year, the earth must pass over nearly one degree every day, one sign every month, and in twelve months complete a whole circle, or 360 degrees; therefore every sign must contain 30 degrees, because 30 multiplied by 12 is equal to 360.

**PUPIL.** It must be so.

**TUTOR.** You must remember, that when the earth is in any sign, as seen from the sun, the sun will be in the opposite sign, as seen from the earth: for instance, if the earth be in Aries, the sun will be in Libra; if in Taurus, the sun will be in Scorpio, &c. therefore, as by the earth's annual motion, the sun *appears* to move, we always speak of the sun's, not the earth's place, in the ecliptic.—You do not seem to understand me?

**PUPIL.** Not perfectly, Sir.

**TUTOR.** Take this orange, and put it in the middle of the round table before us, and place an apple on the opposite side next the window: the orange may represent the sun, the apple the earth, and the window the sign Aries. Now go round the table to the apple; look at the orange, and tell me to what part of the room the eye will be directed.

**PUPIL.** To the part opposite to the window, Sir.

**TUTOR.** If then you suppose the door, which is opposite to the window, to be the sign Libra, the sun will be in Libra when the earth is in Aries—will it not?







**PUPIL.** It is very plain.

**TUTOR.** I shall now give you a table of the signs, their characters, the corresponding months, and the days of the month the sun enters each sign, by means of which, if you reckon a degree for a day, you may find the sun's place, nearly, for any day in the year.







**PUPIL.** This will give me much pleasure, and I shall be happy to have it.

### THE TABLE.

#### NORTHERN SIGNS.

Aries,	Taurus,	Gemini,	Cancer,	Leo,	Virgo.
					
March,	April,	May,	June,	July,	Aug.
20,	20,	21,	21,	23,	23.

#### SOUTHERN SIGNS.

Libra,	Scorpio,	Sagittarius,	Capricorn,	Aqua.	Pisces.
					
Sept.	October,	November,	Decem.	Jan.	Feb.
23,	23,	21,	21,	20,	18.

**PUPIL.** Why do you write northern and southern signs, Sir?

**TUTOR.** Because they are situated north and south of a circle in the heavens, called the equinoctial, which circle crosses the ecliptic in the points Aries and Libra, and extends 23-1/2 degrees on each side of it; and which I shall have occasion to mention to you another time.

**PUPIL.** When you think proper, Sir, I shall be glad to have it explained to me.

The Study of Astronomy, by John Stedman (1796)

*To be continued next month...*