

DARK SKIES for August 2019:

T/F Aug.	1/2	10:19 p.m.	-	3:55 a.m.
F/S Aug.	2/3	10:17 p.m.	-	3:56 a.m.
S/S Aug.	3/4	10:20 p.m.	-	3:58 a.m.
S/M Aug.	4/5	10:51 p.m.	-	4:00 a.m.
M/T Aug.	5/6	11:21 p.m.	-	4:02 a.m.
T/W Aug.	6/7	11:50 p.m.	-	4:03 a.m.
W/T Aug.	7/8	12:22 a.m.	-	4:05 a.m.
T/F Aug.	8/9	12:56 a.m.	-	4:07 a.m.
F/S Aug.	9/10	1:35 a.m.	-	4:08 a.m.
S/S Aug.	10/11	2:19 a.m.	-	4:10 a.m.
S/M Aug.	11/12	3:09 a.m.	-	4:12 a.m.
M/T Aug.	12/13	4:03 a.m.	-	4:13 a.m.
T/W Aug.	13/14	none		
W/T Aug.	14/15	none		
T/F Aug.	15/16	none		
F/S Aug.	16/17	none		
S/S Aug.	17/18	none		
S/M Aug.	18/19	9:45 p.m.	-	9:49 p.m.
M/T Aug.	19/20	9:43 p.m.	-	10:13 p.m.
T/W Aug.	20/21	9:41 p.m.	-	10:37 p.m.
W/T Aug.	21/22	9:39 p.m.	-	11:03 p.m.
T/F Aug.	22/23	9:37 p.m.	-	11:32 p.m.
F/S Aug.	23/24	9:35 p.m.	-	12:06 a.m.
S/S Aug.	24/25	9:33 p.m.	-	12:48 a.m.
S/M Aug.	25/26	9:31 p.m.	-	1:38 a.m.
M/T Aug.	26/27	9:29 p.m.	-	2:39 a.m.
T/W Aug.	27/28	9:27 p.m.	-	3:48 a.m.
W/T Aug.	28/29	9:24 p.m.	-	4:39 a.m.
T/F Aug.	29/30	9:22 p.m.	-	4:40 a.m.
F/S Aug.	30/31	9:20 p.m.	-	4:42 a.m.
S/S Aug.	31/1	9:18 p.m.	-	4:43 a.m.

Times listed are for Dodgeville, Wisconsin when

(1) Moon is below the horizon

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

Please minimize your use of outdoor lighting during these times to give everyone the best possible view of the night sky.

Time Travel

conducted by David Oesper

TUTOR. Can you then have any doubt about their being inhabited?

PUPIL. No, Sir.—But you say that the stars are suns, each of which is the center of a system of planets or worlds.

TUTOR. If you are satisfied that the planets belonging to our system are inhabited, and that the fixed stars are suns, the centers of other systems, what reasonable objection can you have to all the planets in the universe being so?

PUPIL. It is what I cannot comprehend.

TUTOR. It may be so.—But is not the same Almighty Power,

who does nothing in vain, as capable of making ten thousand worlds if he pleased, as well as one?

PUPIL. I will not presume to dispute his power; but are we not told that all mankind descended from Adam?

TUTOR. Yes; Moses wrote concerning this earth, he has not made us acquainted with the inhabitants of the other planets: for aught we know they might descend from other Adams.—To-morrow evening, I hope to see you again.

DIALOGUE III.

PUPIL. I recollect, Sir, you mentioned last night, that the planets appear like stars. Our earth is a planet; how can it have the appearance of a star?

TUTOR. If you were on the planet Venus, the earth would have as much the appearance of a star as Venus has to us.

PUPIL. But Venus appears amongst the fixed stars.

TUTOR. Yes. And so would the earth appear from Venus.

PUPIL. How can it be?

TUTOR. Because, in whatever part of the universe we are, we appear to be in the center of a concave, that is hollow, sphere, where remote objects appear at equal distances from us: so that, whether we are on the planet Venus or on the earth, in this particular the effect will be the same.

PUPIL. Then the light *we* receive from the sun is by reflection conveyed to the other planets.

TUTOR. No doubt of it. And our earth appears as a moon to the inhabitants of the moon, and undergoes the various changes of that planet.

PUPIL. Have you any proof of this, Sir?

TUTOR. Nothing can be clearer; for, on a fine evening, soon after the change of the moon, when the earth appears nearly as a full moon to the moon, and we see a faint streak of light, the whole body of the moon is visible to us.

PUPIL. I remember to have seen it.

TUTOR. You do?—The earth then will appear there thirteen times as large as the moon does to us; of course it must reflect a strong light on the body of the moon, and it is by that light we see that part of the moon which is turned from the sun.

The Study of Astronomy, by John Stedman (1796)

To be continued next month...