

DARK SKIES for April 2019:

M/T Apr.	1/2	9:04 p.m.	-	5:03 a.m.
T/W Apr.	2/3	9:06 p.m.	-	5:01 a.m.
W/T Apr.	3/4	9:07 p.m.	-	4:59 a.m.
T/F Apr.	4/5	9:08 p.m.	-	4:57 a.m.
F/S Apr.	5/6	9:10 p.m.	-	4:55 a.m.
S/S Apr.	6/7	9:11 p.m.	-	4:53 a.m.
S/M Apr.	7/8	10:03 p.m.	-	4:50 a.m.
M/T Apr.	8/9	11:09 p.m.	-	4:48 a.m.
T/W Apr.	9/10	12:14 a.m.	-	4:46 a.m.
W/T Apr.	10/11	1:17 a.m.	-	4:44 a.m.
T/F Apr.	11/12	2:15 a.m.	-	4:42 a.m.
F/S Apr.	12/13	3:08 a.m.	-	4:40 a.m.
S/S Apr.	13/14	3:54 a.m.	-	4:38 a.m.
S/M Apr.	14/15	4:33 a.m.	-	4:36 a.m.
M/T Apr.	15/16	none		
T/W Apr.	16/17	none		
W/T Apr.	17/18	none		
T/F Apr.	18/19	none		
F/S Apr.	19/20	none		
S/S Apr.	20/21	none		
S/M Apr.	21/22	9:35 p.m.	-	10:34 p.m.
M/T Apr.	22/23	9:37 p.m.	-	11:38 p.m.
T/W Apr.	23/24	9:38 p.m.	-	12:37 a.m.
W/T Apr.	24/25	9:40 p.m.	-	1:28 a.m.
T/F Apr.	25/26	9:42 p.m.	-	2:13 a.m.
F/S Apr.	26/27	9:43 p.m.	-	2:52 a.m.
S/S Apr.	27/28	9:45 p.m.	-	3:25 a.m.
S/M Apr.	28/29	9:47 p.m.	-	3:55 a.m.
M/T Apr.	29/30	9:48 p.m.	-	4:05 a.m.
T/W Apr.	30/1	9:50 p.m.	-	4:03 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

PUPIL. Whence do they derive their name?

TUTOR. From *Cometa*, a *hairy star*, because they appear with long tails, somewhat resembling hair: some, however, have been seen without this appendage, as well defined and round as planets.

PUPIL. You say *our* system: what am I to understand by it?

TUTOR. The word system, in an astronomical sense, means a number of bodies moving round one common center or point: and, because the planets and comets revolve about the sun, it is called the *Solar System*; and we say *our* system, as the earth is one of the planets. Other systems have been invented for solving the appearances and motions of the

heavenly bodies, a description of which I shall leave till I next see you.

IALOGUE II.

PUPIL. I am afraid, Sir, I am come before you are prepared for me: but the very great pleasure I received yesterday, induced me to be with you as early as possible.

TUTOR. I am glad to see you, and happy to find you are so well pleased with your difficult study. It will, I assure you, give you more exalted ideas of the Deity than any that I know of. The Psalmist was undoubtedly of this opinion when he said, The Heavens declare the glory of God, and the Firmament sheweth his handy work.

PUPIL. I will no longer call it a difficult, but a pleasing study, and feel myself ashamed at having used the expression. I shall now beg you to explain to me the different systems.

TUTOR. The system I have been describing to you was known and taught by Pythagoras, a Greek philosopher, who flourished about 500 years before Christ, as he found it impossible, in any other way, to give a consistent account of the heavenly motions.

This system, however, was so extremely opposite to all the prejudices of sense and opinion, that it never made any great progress, nor was ever widely spread in the ancient world.

Ptolemy, an Egyptian philosopher, who flourished 130 years after Christ, supposed that the earth was fixed in the center, and that the sun and the rest of the heavenly bodies moved round it in twenty-four hours, or one natural day, as this seemed to correspond with the sensible appearances of the celestial motions. This system was maintained from the time of Ptolemy to the revival of learning in the sixteenth century.

At length, Copernicus, a native of Poland, a bold and original genius, adopted the Pythagorean system, and published it to the world in the year 1530. This doctrine had been so long in obscurity, that the restorer of it was considered as the inventor.

Europe, however, was still immersed in ignorance; and the general ideas of the world were not able to keep pace with those of a refined philosophy. This occasioned Copernicus to have few abettors, but many opponents. Tycho Brahe, in particular, a noble Dane, sensible of the defects of the Ptolemaic system, but unwilling to acknowledge the motion of the earth, endeavoured, about 1586, to establish a new system of his own; but, as this proved to be still more absurd than that of Ptolemy, it was soon exploded, and gave way to the Copernican or true Solar System.

The Study of Astronomy, by John Stedman (1796)

To be continued next month...