

DARK SKIES for September 2018:

S/S Sep. 1/2	9:16 p.m. - 11:05 p.m.
S/M Sep. 2/3	9:14 p.m. - 11:45 p.m.
M/T Sep. 3/4	9:12 p.m. - 12:32 a.m.
T/W Sep. 4/5	9:10 p.m. - 1:28 a.m.
W/T Sep. 5/6	9:08 p.m. - 2:32 a.m.
T/F Sep. 6/7	9:06 p.m. - 3:43 a.m.
F/S Sep. 7/8	9:04 p.m. - 4:53 a.m.
S/S Sep. 8/9	9:01 p.m. - 4:55 a.m.
S/M Sep. 9/10	8:59 p.m. - 4:56 a.m.
M/T Sep. 10/11	8:57 p.m. - 4:57 a.m.
T/W Sep. 11/12	8:55 p.m. - 4:59 a.m.
W/T Sep. 12/13	9:17 p.m. - 5:00 a.m.
T/F Sep. 13/14	9:49 p.m. - 5:01 a.m.
F/S Sep. 14/15	10:23 p.m. - 5:03 a.m.
S/S Sep. 15/16	11:01 p.m. - 5:04 a.m.
S/M Sep. 16/17	11:42 p.m. - 5:05 a.m.
M/T Sep. 17/18	12:28 a.m. - 5:06 a.m.
T/W Sep. 18/19	1:18 a.m. - 5:08 a.m.
W/T Sep. 19/20	2:12 a.m. - 5:09 a.m.
T/F Sep. 20/21	3:08 a.m. - 5:10 a.m.
F/S Sep. 21/22	4:07 a.m. - 5:12 a.m.
S/S Sep. 22/23	5:07 a.m. - 5:13 a.m.
S/M Sep. 23/24	none
M/T Sep. 24/25	none
T/W Sep. 25/26	none
W/T Sep. 26/27	none
T/F Sep. 27/28	8:24 p.m. - 8:33 p.m.
F/S Sep. 28/29	8:22 p.m. - 9:06 p.m.
S/S Sep. 29/30	8:20 p.m. - 9:44 p.m.
S/M Sep. 30/1	8:18 p.m. - 10:28 p.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

Truly, if the nuclei of comets be incandescent, the smallness of their mass would eliminate from the danger of their contact with the Earth only one element of destruction; the temperature of the terrestrial atmosphere would be raised to an elevation inimical to the existence of organised beings; and we should only escape the danger of a mechanical shock to run into a not less frightful one of being calcined in a many days' passage through an immense furnace.

If we enlarge on these considerations, which are merely hypothetical, it is not with the intention of reviving the fears or superstitious terrors of another age. We but wish to show to what conjectures science is still reduced on the problem, so interesting from so many points of view, of the physical constitution of comets.

[The spectroscopic observations made by Mr. Huggins on the light of three faint comets show that a certain portion at least of the light of these objects is inherent. the outer part of each gave a continuous spectrum, in which dark lines may have existed but could not be recognised owing to the extreme faintness of the light. The nucleus gave in each case three bands of light, indicating that the substance of the nucleus consisted of glowing vapour. In the case of the third comet thus examined by Mr. Huggins—that known as Brorsen's—the spectrum of the nucleus closely resembled, or was in fact practically identical with that of carbon as shown when the electric spark is taken through olefiant gas. But in what condition the carbon of the comet's nucleus may be, in order to account for this result, it is difficult indeed to say. Carbon, as we know, is of a remarkably 'fixed' character, and it seems difficult to conceive that the heat to which Brorsen's comet was actually subjected at the time could be sufficient to volatilize such an element. Mr. Huggins remarks that probably the carbon exists in the nucleus in a state of excessively minute division. 'In such a form,' he says, 'it would be able to take in nearly the whole of the Sun's energy, and thus acquire more speedily a temperature high enough for its conversion into vapour.' But he admits that the whole subject is full of difficulty, and doubtless we must wait until some bright comet shall have presented itself for examination with the powerful spectroscopic appliances recently placed at Mr. Huggins's disposal.—R.A.P.]

The Heavens: An Illustrated Handbook of Popular Astronomy (1872) by Amedée Guillemin (1826-1893)

Edited by J. Norman Lockyer (1836-1920)
4th Edition revised by Richard Proctor (1837-1888)

Proposition 4.

That the Moone is a solid, compacted, opacous body.

I Shall not need to stand long in the prooffe of this proposition, since it is a truth already agreed on by the generall consent of the most and the best Philosophers.

1. It is solid in opposition to fluid, as is the ayre, for how otherwise could it beare backe the light which it receives from the Sunne?

But here it may be questioned, whether or no the Moone bestow her light upon us by the reflection of the Sunne-beames from the superficies of her body, or else by her owne illumination. Some there are who affirme this latter part.

THE DISCOVERY OF A WORLD IN THE MOONE. (1638)
OR, A DISCOVERSE Tending TO PROVE that 'tis probable there may be another habitable World in that Planet.

John Wilkins (1614-1672)