

DARK SKIES for November 2021:

M/T Nov.	1/2	7:28 p.m.	-	4:37 a.m.
T/W Nov.	2/3	7:27 p.m.	-	5:53 a.m.
W/T Nov.	3/4	7:26 p.m.	-	6:02 a.m.
T/F Nov.	4/5	7:25 p.m.	-	6:03 a.m.
F/S Nov.	5/6	7:24 p.m.	-	6:04 a.m.
S/S Nov.	6/7	7:23 p.m.	-	5:05 a.m.
S/M Nov.	7/8	7:01 p.m.	-	5:06 a.m.
M/T Nov.	8/9	8:04 p.m.	-	5:07 a.m.
T/W Nov.	9/10	9:13 p.m.	-	5:08 a.m.
W/T Nov.	10/11	10:26 p.m.	-	5:09 a.m.
T/F Nov.	11/12	11:39 p.m.	-	5:11 a.m.
F/S Nov.	12/13	12:48 a.m.	-	5:12 a.m.
S/S Nov.	13/14	1:55 a.m.	-	5:13 a.m.
S/M Nov.	14/15	3:00 a.m.	-	5:14 a.m.
M/T Nov.	15/16	4:03 a.m.	-	5:15 a.m.
T/W Nov.	16/17	5:06 a.m.	-	5:16 a.m.
W/T Nov.	17/18	none		
T/F Nov.	18/19	none		
F/S Nov.	19/20	none		
S/S Nov.	20/21	none		
S/M Nov.	21/22	none		
M/T Nov.	22/23	6:11 p.m.	-	6:49 p.m.
T/W Nov.	23/24	6:10 p.m.	-	7:44 p.m.
W/T Nov.	24/25	6:10 p.m.	-	8:44 p.m.
T/F Nov.	25/26	6:10 p.m.	-	9:48 p.m.
F/S Nov.	26/27	6:09 p.m.	-	10:55 p.m.
S/S Nov.	27/28	6:09 p.m.	-	12:03 a.m.
S/M Nov.	28/29	6:09 p.m.	-	1:13 a.m.
M/T Nov.	29/30	6:08 p.m.	-	2:26 a.m.
T/W Nov.	30/1	6:08 p.m.	-	3:41 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

THE DISAPPEARANCE OF DARKNESS

NORMAN SPERLING

Chabot Observatory
Oakland, CA U.S.A.

Continued from last month...

Major differences remain between the professional and amateur astronomers' advocacies. Professional astronomers, who do lots of spectroscopy, emphasize narrow-spectrum lighting and early-morning turnoffs. Amateurs, whose work is usually broad-band in the evening, campaign for hooding lights.

CHABOT OBSERVATORY

Chabot Observatory's experience reflects these trends. Only a few gas lights lit Oakland, California, when Anthony Chabot gave the city its public observatory in 1883. Over the following three decades, however, its downtown site suffered increasingly from light pollution, so during World War I it was moved to a then-remote site in nearby hills—quite dark, and isolated from houses, traffic, and industry.

Development since World War II has surrounded the site with houses, street lights, and freeways. Public policy has flooded Oakland's skies with waste lighting, particularly from the adjacent freeways, and also from the shipping Port. Since the early 1970s astronomers have been trying to move the observatory yet again, this time to the middle of a ridgetop park where lights can never encroach too near. The new site's advantages also include tree, ridge, and fog shielding from the bulk of city lights.

Local governments' internal politics have stymied the move for 15 years. Just now, however, they are approving a new charter making the observatory an independent public entity, with authority to rebuild at the new site. Major fund raising will start shortly after the new board begins operations. The new facility is expected to retain all the present major telescopes—3 of them long refractors—with an enlarged and updated planetarium, library, computer and optical facilities, and much else. Planners hope to take maximum advantage of electronics, including computers, to facilitate public telescope use. The public will continue to be reminded that the light pollution they generate prevents them from seeing celestial objects optimally.

THE DEVELOPING WORLD

Much of the second and third world has yet to follow the path to development and pollution. Even now there are many places where light pollution is still minimal—amateur observers I have visited in Arusha, Tanzania, and Faaa, Tahiti, are blissfully unaffected. The towns are small and concentrated, and use relatively low technology. They have no history of light pollution.

Elsewhere, different political systems impose different attitudes. I recently visited a very nice amateur club observatory in the capital city of a military dictatorship. Street lights glare almost all the way up to their doorstep. But they adamantly refuse to approach officials because “it is best if the government doesn't notice you at all.” There, too, the solution is political rather than scientific, but necessitates terminating the dictatorship—obviously a bigger problem than light pollution.

Light Pollution, Radio Interference, and Space Debris, ASP Conference Series, Vol. 17, IAU Colloquium 112, 1991, D.L. Crawford, Ed., p. 101.

To be continued next month...