

Heliacal Rising of Sirius

Observed at the old Mart site, Pennsauken, NJ

Located 1.8 miles SW of 40°N, 75°W

August	2016 Rise Time (am, EDT)			
	Sirius	Sun	Delta	
1	5:59	5:59	0:00	Sirius rise = Sunrise
2	5:55	6:00	0:05	Sirius rises before Sun
3	5:52	6:01	0:09	
4	5:48	6:02	0:14	2016 - Sirius spotted at 6:03 am w/16x70*
5	5:44	6:03	0:19	
6	5:40	6:04	0:24	
7	5:36	6:04	0:28	
8	5:32	6:05	0:33	2015 - Sirius spotted at 5:39 am w/16x70
9	5:28	6:06	0:38	
10	5:24	6:07	0:43	
11	5:20	6:08	0:48	2013 - Sirius spotted at 5:25 am
12	5:16	6:09	0:53	
13	5:12	6:10	0:58	2012 - Sirius spotted at 5:23 am
14	5:08	6:11	1:03	
15	5:04	6:12	1:08	2014 - Sirius spotted at 5:25 am

* For several minutes starting at 6:10 am, Sirius was observed through the binoculars while the orange risen sun was visible with peripheral vision of my left eye. This is also the first time I've seen Sirius in the daytime (between sunrise and sunset). Procyon was also spotted with the 16x70s, at 5:39 am; it rose at 5:26 am.

On August 13, 2016, Sirius was seen with unaided eyes at 5:38 am (no attempt was made to observe Sirius between August 4 and 13, 2016).

On August 25, 2016, Sirius was obvious to unaided eyes at 5:25 am (in moderately dark twilight while putting out the trash at home).

Note: Rise times for both Sirius and the Sun vary slightly from year-to-year, if for no other reason than the year is a quarter-day longer than exactly 365 days. The sightings listed for 2012, 2013 and 2014 are with binoculars, but I do not have the binocular size well documented. Sirius may have been seen later with unaided eyes.

Finally, rise and set times were generated with the U.S. Naval Observatory's MICA software. The USNO maintains that due to unpredictable variations in atmospheric temperature and pressure (which affect refraction near the horizon), rise and set times cannot be predicted accurately to better than a minute.