

**Meeting Date**

December 8, 2024

**Night Begins**

6:40 PM. EST

Note: Astronomical Twilight Ends

**Solar Noon / Midnight**

12:24 EST

Note: on Meeting Date

**Moon Quarters**

New 12/01, First 12/08, Full 12/15, Last 12/22, New 12/30

**Darkest Evenings**

11/20 – 12/06

12/20 – 01/04/25

Note: 2 days before Last thru 2 days before First

**Viewing Resources**

Evening Sky Maps

<http://skymaps.com/>

Astronomy Forecast

<https://clearoutside.com/forecast/42.82/-83.14>[http://oaklandastronomy.net/ambient\\_RH.html](http://oaklandastronomy.net/ambient_RH.html)

Peter Birren's Deep-Sky Fieldbooks

<http://www.birrendesign.com/astro.html>**Featured Constellation: Auriga**

A selection from Peter Birren's excellent deep-sky fieldbook, "Objects in the Heavens", pages 54-55

CONSTELLATION	COMMON NAME		SEASON,	ON MERIDIAN	ABBREVIATION	
ITEM IDENTIFIER	TYPE	DETAILS	☆☆ SEPARATION / SIZE	RA	DEC	MAG
<b>Auriga</b>		<i>the Charioteer</i>	Winter	Jan 30		<b>AUR</b>
"The objects are distant and differ in colour, maybe influencing size estimates."						
☆ <i>Capella</i>	α	<i>The She-Goat</i> ; gold-ish; 42LY		05:18.1	46°01'	.07
☆ <i>Almaaz</i>	ε	400x Sun; dims each 27 years		05:03.3	43°51'	3.02
☆☆ 37/Theta	θ	Bluish/bluish; difficult; 173LY	3.6"	06:01.1	37°13'	2.6/7
☆☆ Σ698/HR1779		Light yellow/blue in nice field	31.2"	05:26.6	34°52'	6.7/8
☆☆ 14		Close triple; pale yellow/blue	11-15"	05:16.7	32°42'	4.98
OO <b>M36</b> 1960	OC	60 ☆ very regularly arranged	10'	05:37.6	34°09'	<b>6.0</b>
		<i>Pinwheel Cluster</i> ; easy; 150 ☆ to mag12.5; 4,600LY				
OO <b>M37</b> 2099	OC	! 150 ☆; beautiful; dense	20'	05:53.6	32°33'	<b>5.6</b>
		Red ☆ center; area appears strewn with gold dust				
OO <b>M38</b> 1912	OC	100 ☆; <i>Starfish Cl.</i> ; NGC1907 near	21'	05:29.9	35°51'	<b>6.5</b>
○ NGC1664	OC	40 ☆; ☆ ☆ and chains	15'	04:37.7	43°42'	7.5
○ NGC1724	OC	Small half-ring of ☆	2'	05:05.1	49°31'	10.0
OO NGC1778	OC	2 rows of ☆; pretty ☆ ☆ Σ644	7'	05:09.4	37°02'	7.7
○ NGC1798	OC	12 ☆; tight group in rich area	5'	05:13.1	47°42'	10.0
○ NGC1857	OC	Splendid area; rich; red ☆	8'	05:21.4	39°21'	7.5
OO NGC1893	C/N	Triangular; inside IC410; 1MYO	8'	05:24.0	33°25'	7.5
OO NGC1907	OC	30 ☆ in curves; SW of M38	6'	05:29.4	35°20'	8.2
○ NGC1931	OC/ER	"The Fly"; haze around 4 close ☆	4'	05:32.7	34°16'	10.0
○ NGC2126	OC	20 ☆; faint; poor; blue-white	6'	06:04.0	49°55'	10.0
OO <b>NGC2281</b>	OC	36 ☆; circular; scattered	20'	06:49.7	41°03'	<b>6.0</b>
OO Star 4	Ast	<i>Flying Minnow</i> ; yellow/blue	75'	05:14.8	32°39'	5-11
○ IC 405	EN	<i>Flaming Star Neb</i> ; 15κLY; diffuse 18'x30'		05:17.5	34°17'	10.0
○ IC 410	EN	<i>Tadpole Nebula</i> ; holds NGC1893	11'	05:23.4	33°24'	7.8
OO <b>Cr 62</b>	OC	3 main + 30 dim ☆; near NGC1857	35'	05:24.3	41°05'	<b>4.2</b>
○ IC 417	ER	"Spider" to the "Fly" of NGC1931	10'x13'	05:29.4	34°27'	10.0
○ Stock 10	OC	15 ☆ m8; mini dipper inside arc	25'	05:40.4	37°57'	10.1
○ Basel 4	OC	15 ☆ at 126x; small; faint	4'	05:49.8	30°13'	9.1
○ IC 2149	PN	Small; well defined; blue	12"x6"	05:57.9	46°06'	10.4