

Meeting Date

December 10, 2023

Night Begins

6:43 PM. EST

*Note: Astronomical Twilight Ends***Solar Noon / Midnight**

12:27 EST

*Note: on Meeting Date***Moon Quarters**

Last 12/05, New 12/12, First 12/19, Full 12/26

Darkest Evenings

12/03 – 12/17

*Note: 2 days before Last Quarter thru 2 days before First Quarter***Viewing Resources**

Evening Sky Maps

<http://skymaps.com/>

Astronomy Forecast

<https://clearoutside.com/forecast/42.82/-83.14>

RASC Finest NGC Objects

<https://www.rasc.ca/finest-ngc-objects>

A. Clarke's Discovering Astronomy

<https://discovering-astronomy.eu/index.html>**RASC Finest NGC****Focus: 03 Hours RA Thru 04 Hours RA***Note: West to East***Featured Objects**

Primary ID	RASC Number	Alternate ID	Con	Type	RA 2000	Decl 2000	Mag	Size
IC 289	10	PN G138.8+02.8	Cas	PN	03h10m19.3s	+61°19'01"	12	45"
		Dim oval smudge; use nebula filter!						
NGC 1501	20	PN G144.5+06.5	Cam	PN	04h06m59.2s	+60°55'14"	12	56"
		Faint; dark center; look for NGC 1502						
NGC 1491	19	Sh 2-206	Per	EN	04h03m20.6s	+51°19'17"		9.0'
		Visually small and faint emission nebula						
NGC 1514	23	Crystal Ball	Tau	PN	04h09m17.0s	+30°46'33"	10.8	2.0'
		Faint glow around 9.4 mag central star						
NGC 1535	22	Cleopatra's Eye	Eri	PN	04h14m15.8s	-12°44'22"	9.4	20"
		Bright planetary with blue-grey disk						
NGC 1232	21	Arp 41	Eri	Gal	03h09m45.3s	-20°34'51"	10.6	6.3'x 5.5'
		Face-on spiral; look for NGC 1300 nearby						

Urban & Small Scope Bonus**Focus: 03 Hours RA Thru 04 Hours RA***Note: West to East***A selection of double stars from Agnes Clarke's excellent book, *Discovering Double Stars (for Northern light-polluted skies)*****Featured Double Stars**

Primary ID	Magnitude	Separation	PA	Description
56 Per, page 72	5.9 8.7	4.2"	22	A bright yellow primary with a yellow companion.
STF 331, Page 71	5.3 6.7	12"	85	A bright and easily separated white-blue pair.
Chi Tau, page 81	5.5 7.6	19"	24	An easily separated white-blue pairing.
66 Cet, page 92	5.7 7.5	16"	234	A comfortably separated yellow-blue pair.
33 Eri, page 93	4.8 6.1	6.8"	347	A close double, yellow and white.
1 Cam, page 98	5.7 6.8	10"	308	A reasonably balanced white- blue pair.
STF 572, page 101	7.3 7.3	4.0"	194	A close and equal pair of yellow stars.
Omega Aur, pg 103	5.0 8.0	5.4"	359	A yellow primary with a faint orange companion.
55 Eri, page 120	6.7 6.8	9.2"	317	An equal pair of close, bright, yellow stars.