Visual Observer's Guide – July 2023 v0.1

Meeting Date July 9, 2023

Night Begins 11:25 PM. EDT *Note: Astronomical Twilight Ends*
Solar Noon / Midnight 1:39 EDT *Note: on Meeting Date*
Moon Quarters Full 07/03, Last 07/09, New 07/17, First 07/25
Darkest Evenings 07/07 – 07/23 *Note: 2 days before Last Quarter thru 2 days before First Quarter*

Viewing Resources

Evening Sky Maps	http://skymaps.com/
Astronomy Forecast	https://www.cleardarksky.com/
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 Featured Objects

Focus: 17 Hours RA Thru 18 Hours RA *Note: West to East*

Primary ID	RASC Number	Alternate ID	Con	Type	RA 2000	Decl 2000	Mag	Size
NGC 6503	88	MCG 12-17-9	Dra	Gal	17h49m26.5s	+70°08'40"	10.8	6.5'x 2.1'
		Bright elongated spiral						
NGC 6543	89	Cat's Eye Nebula	Dra	PN	17h58m33.4s	+66°37'59"	8.3	22"
		Cat's Eye Nebula; with 11 mag central star						
NGC 6572	92	Blue Racquetball	Oph	PN	18h12m06.4s	+06°51'12"	8	15"
		Tiny bright blue oval						
NGC 6633	93	Collinder 380	Oph	OC	18h27m15.0s	+06°30'30"	5.6	20.0'
		Sparse wide field cluster; IC 4756 nearby						
NGC 6712	94	"Black Widow"	Sct	GC	18h53m04.0s	-08°42'18"	8.1	9.8'
		Small globular; look for IC 1295 in field						
NGC 6445	102	He 2-290	Sgr	PN	17h49m15.1s	-20°00'34"	13	35"
		Small, bright and annular; near M23						
NGC 6369	91	Little Ghost Neb	Oph	PN	17h29m20.4s	-23°45'34"	11	30"
		"Little Ghost"; look for NGC 6309 nearby						
NGC 6520	103	Collinder 361	Sgr	OC	18h03m24.0s	-27°53'18"	7.6	5.0'
		60*; small; dark nebula. B86 in same field						

Urban & Small Scope Bonus

Focus: 17 Hours RA Thru 18 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
Rho Her, page 191	4.6 | 5.6	4.1"	316	A very close equally matched pair, white and fainter blue
Mu Her, page 194	5.6 | 5.7	1.9"	8	A tightly bound pair of yellow stars.
Delta Her, page 201	3.1 | 8.2	8.9	236	A close white-blue pairing. The primary is over 5 mag brighter
Alpha Her, page 203	3.5 | 5.4	4.7"	107	A reasonably balanced orange-blue pair,
100 Her, page 205	5.9 | 6.0	14"	93	Two almost identical bright white stars, headlights
STF 2404, page 208	6.9 | 8.1	3.6"	183	Two orange stars with very tight separation
70 Oph, page 209	4.2 | 6.0	6.7"	72	A brilliant yellow with a bright orange companion. 88 year period