



What's Up – Solar System



DATE	SOLAR SYSTEM SKY EVENTS
May 15	Full Moon in Scorpius - Normally Flower Moon, but this year a Blood Moon!
May 15	Total Lunar Eclipse - Penumbra Begins 9:32 PM EDT, Total Eclipse Begins at 11:38 PM EDT
May 18	Mars passes 0.6°S of Neptune at 11pm May 17, still very close next morning
May 22	Moon passes 4°S of Saturn at 1am EDT, still very close at 5am EDT (nice sight #1)
May 22	Moon at Last Quarter in Aquarius
May 25	Moon, Mars and Jupiter within 4° in morning sky (nice sight #2)
May 28	Moon passes very close to Venus in morning sky
May 29	Mars and Jupiter less than 1° apart in morning sky (nice telescopic sight #3!)
May 30	New Moon in Taurus
Jun. 01	Moon occults Ceres at 5pm EDT (in daylight, sadly), remains close in evening sky
Jun. 07	Moon at First Quarter

Most of the Night

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Mars – AQR Uranus - ARI Venus - PSC Neptune - AQR Saturn - CAP Vesta – AQR Jupiter – PSC Juno - AQR

Morning Sky

Mercury - TAU Ceres - GEM

Evening Sky

Grey = Close to Sun



What's Up - Lunar Librations









Nice Sight No. 1

Line of Planets With Moon

Sun. May 22

5:00 AM

View to SE

Graphic created with Stellarium

Sunrise: 5:51 AM



Nice Sight No. 2

Moon Mars & Jupiter

Wed. May 25

5:00 AM

View to E-SE

Graphic created with Stellarium

Sunrise: 5:48 AM



Nice Sight No. 3

Mars & Jupiter

Sun. May 29

5:00 AM

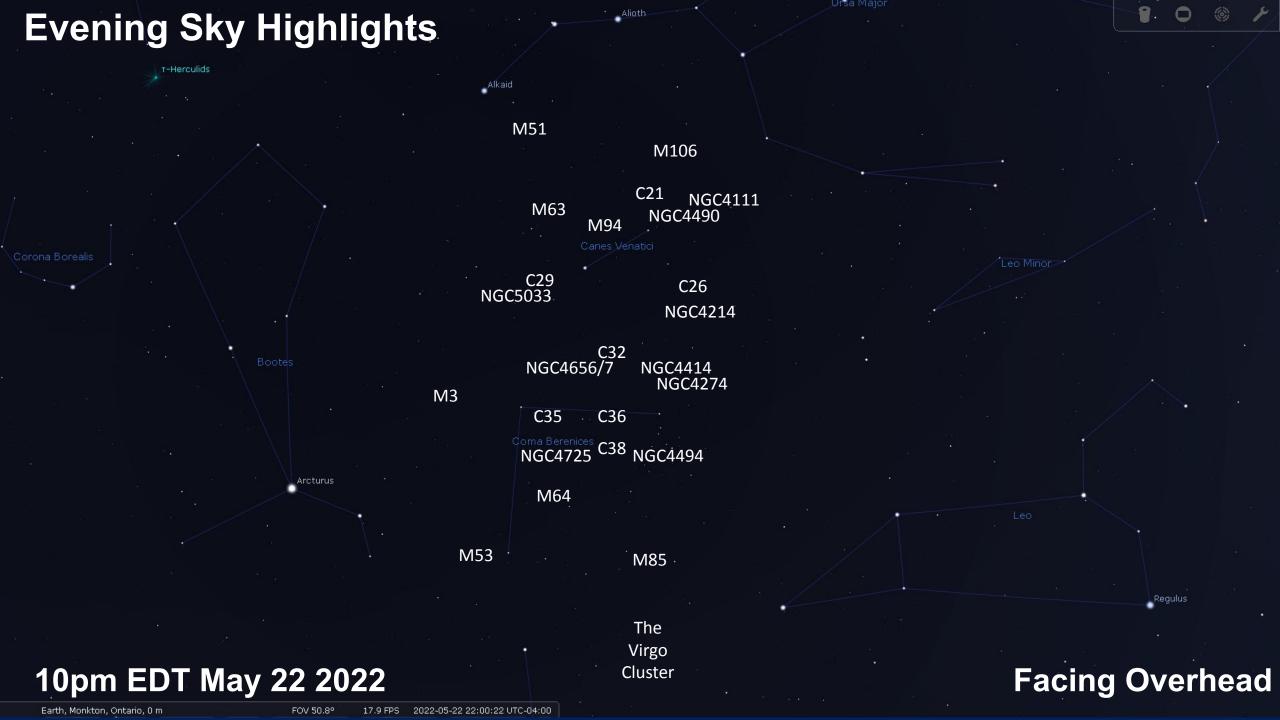
View to SE

Sunrise: 5:46 AM











May Deep Sky Highlights

Galaxy Season Continues! * = RASC Finest NGC

Catalogue #	Туре	Cons	Details	Difficulty
M83	g(SAB(s)c)	Hya	Southern Pinwheel - bright and beautiful but low in southern sky	moderate
M68	gcl	Hya	Very compact, highly mottled globular in a cup-like asterism	moderate
C60/NGC4038*	g(IrrBPm)	Crv	Antennae - northwestern component - tough in small scopes	difficult
C61/NGC4039*	g(IrrPm)	Crv	Antennae - southwestern component - tough in small scopes	difficult
NGC4361*	pn	Crv	Lawn Sprinkler Nebula - look for spiral pattern in the circular glow	difficult
M104	g(SA(s)a)	Vir	Sombrero Galaxy - look for prominent dust lane	easy
C52/NGC4697	g(E6/S0)	Vir	Dense, fuzzy core surrounded by fainter circular glow and oval halo	moderate
M53	gcl	Com	13' irregularly round globular; some see tangerine hue	moderate
M64	g(RSA(rs)ab)	Com	Black Eye Galaxy - elegant milky oval, structure/dust in large scopes	easy
M85	g(SA0+pec)	Com	Glowing oval mass with distinct core, NGC4394 to the northeast	moderate
C38/NGC4565*	g(Sb)	Com	Needle/UFO Galaxy - thin edge on galaxy with dust lane in the bulge	moderate
M3	gcl	CVn	Jellyfish Cluster - look for small dark spots in nucleus and peach tint	easy
C32/NGC4631*	g(SBd)	CVn	Whale Galaxy - mottled edge-on; look for nearby Hockey Stick Galaxy	moderate
C26/NGC4244*	g(Scd)	CVn	Silver Needle Galaxy - edge on with elongated nucleus	moderate
M94	g(RSA(r)ab)	CVn	Croc's Eye Galaxy - look for ring surrounding the nucleus	easy
C21/NGC4449*	g(IrrBm)	CVn	Box Galaxy - rectangular glow with dappled texture	moderate
M63	g(SAbc)	CVn	Sunflower Galaxy - mottled outer disc with tack-sharp core	easy
M51	g(SAbc)	CVn	Whirlpool Galaxy - beautiful spiral interacting with NGC5195	easy
M106	g(SAB(s)bc)	CVn	S-shaped main arms with bright core	moderate



May Deep Sky Highlights

The Virgo Cluster

* = RASC Finest NGC

Catalogue #	Туре	Cons	Details	Difficulty
M61	g(SAB(rs)bc)	Vir	Swelling Spiral - face on spiral, structure obvious in larger scopes	moderate
M49	g(E2)	Vir	Virgo B - Tight core surrounded by diffuse halo, nearby star to E	easy
M59	g(E5)	Vir	Sharp, star-like nucleus surrounded by mottled halo	moderate
M60	g(E2)	Vir	Stellar core, note faint tiny companion NGC4647 to NW	moderate
M58	g(SAB(rs)b)	Vir	Stellar nucleus, mottled halo, structure comes with large aperture	moderate
NGC4567&68*	g(SAbc)	Vir	The Twins - Interesting pair of interacting galaxies	difficult
M89	g(E0-1)	Vir	Sharp nucleus surrounded by misty oval glow	moderate
M90	g(SAB(rs)ab)	Vir	Elongated NE-SW, but bar across nucleus N-S, outer arms faint	moderate
M91	g(SB(rs)b)	Com	Central bar, knots and hazy arcs outline the round halo	difficult
M88	g(SA(rs)b)	Com	Spindle-shaped bulge, hazy outer regions with hints of structure	moderate
M87	g(cD Pec)	Vir	Virgo A - hazy orb that gradually brightens to star-like point	easy
NGC4435&38*	g(SA(s)0/a)	Vir	The Eyes - 35 stellar with 1' halo, 38 a larger fuzzy 2' oval	difficult
M86	g(E3)	Vir	Stellar nucleus and tightly packed core more obvious than M84	easy
NGC4388	g(SAb)	Vir	Near edge-on system south of M86 and M84	moderate
M84	g(E1)	Vir	Soft glowing disk with condensed centre giving way to diffuse halo	easy
NGC4216*	g(SABb)	Vir	Silver Streak - 5' long silver streak, dust lane in large aperture	moderate
M98	g(SAB(s)ab)	Vir	Highly elongated, fan of brightness SW of nucleus, hints of spiral	moderate
M99	g(SA(s)c)	Com	Coma Pinwheel - bead-like nucleus in round glow, hint of arms	difficult
M100	g(SAB(s)bc)	Com	Mirror of M99 - pale orb with faint traces of ghostly arms	difficult



What's Up? Resources

RASC Observer's Handbook - The Sky By Month

NASA SVS Moon Viewer: https://svs.gsfc.nasa.gov/4955

Stellarium: https://www.stellarium.org

The Sky Live: https://theskylive.com/

Time and Date: https://www.timeanddate.com/

Thank you!