

Andromeda M31: Great Andromeda Galaxy. Spiral. 3.28 mag. 2.54 Mly. (Plus M31 & M101).
Andromeda NGC 891: Spiral galaxy. Caldwell 23. 9.80 mag. 32 Mly.
Andromeda Upsilon And: Double Star. Four planets orbit primary. 4.09 mag. 44.0 ly.
Andromeda Gamma1,2 And: Double Star. (Almach). 2.17 mag. 390 ly.
Andromeda VX And: Carbon star. 8.51 mag. 1300 ly.

Aries Lambda Arietis: Double Star. 4.79 mag. 130 lys.
Aries Gamma Arietis: Double Star. (Mesarthim). 3.9 mag. 204 ly.

Augria B34: Dark Nebula. Two degrees west of M37. About ½ degree in size.
Auriga IC 405: (Flaming Star Nebula). Caldwell 31. 5 ly across. 1500 ly distant.
Auriga UU Aurigae Carbon star. 5.42 mag. 1800 ly

Bootes Mu1,Mu2: A fine triple. (Alkalurops). 6.5 mag. 120 ly.
Bootes Epsilon Boo: Double Star. (Izar). 5.12 mag. 203 ly.
Bootes Xi Bootis: Double Star. One of closest systems to Earth. 4.76 mag. 21.8 ly.
Bootes i Bootis: Double Star. 4.83 mag. 40.8 ly.
Bootes Delta Bootis: Double Star. 3.47 mag. 122ly.

Camelopardalis 1 Cam: Double Star. 6.94 mag. 2900 ly.
Camelopardalis NGC 2403: Intermediate spiral galaxy. Caldwell 7. 8.9 mag. 8 Mly. Northern spiral arm connects to the star forming region NGC 2404

Cancer Iota Cancri: Double Star. Mag 3.93. 300 ly.
Cancer Zeta Cancri: Multiple Star System. (Tegmen). 4.67 mag. 83 ly.
Cancer M67: Open Cluster. 6.90 mag. 2600 ly. 12 ly diameter. 4 billion yrs old.
Cancer M67 Open cluster. One of oldest. 6.90 mag. 2700 ly.
Cancer T Cancri: Carbon star. 8.68 mag.
Cancer M44 Open cluster. Beehive / Praesepe. One of nearest. 3.09 mag. 610 ly.

Canes Venatici M51: Spiral Galaxy. The Whirlpool Galaxy. 7.92 mag. 28 Mly.
Canes Venatici NGC4631: Barred Spiral Galaxy. Caldwell 32. Whale Galaxy. 8.89 mag. 24Mly.
Canes Venatici Cor Caroli: Double star. One of best. 2.85 mag. 120 ly.
Canes Venatici Beta CM: Sun like star. What the Sun would look like at stellar distance. 27 ly.
Canes Venatici M3 Globular cluster. Splendid sight. 6.19 mag. 34000 ly.

Canis Major 17 Cma: Double Star. 5.80 mag. 500 ly.
Canis Major h3934: Double Star.
Canis Major h3945: Double Star. Winter Alberio.
Canis Major M41: Open Cluster. A splendid sight. Approx 100 stars. 4.50 mag. 2350 ly.

Cassiopeia	Eta Cas:	Double Star. (Achird). 7.51 mag. 19.4 ly.
Cassiopeia	NGC 7789:	Open Cluster. (Caroline's Rose). 6.7 mag. 1.7 Billion years old. 8000 ly.
Cassiopeia	M52:	Open Cluster. Fine rich cluster. 7.3 mag. 200 stars. Approx 4000 ly.
Cassiopeia	NGC 457:	Open Cluster. (Owl Cluster). Caldwell 13. 6.40 mag. 7900 ly.
Cassiopeia	IC 1805, IC1848:	Heart & Soul nebulae. Complex of stars & nebulosity.
Cassiopeia	NGC 281:	Emission nebula. (Pacman Nebula). Includes IC1590 open cluster.
Cepheus	Mu Cephei:	The Garnet Star. Red Supergiant. North star on Mars. 4.01 mag. 1800 ly.
Cepheus	Gamma Cephei:	Star (Errai). Visually brightest with planet. 3.22 mag. 45 ly.
Cepheus	NGC 188:	Open cluster. Caldwell 1. 9 mag. 9 billion yrs old. Oldest Known.
Cepheus	NGC 7023	Open cluster & reflection nebula. Caldwell 4. (Iris Nebula). 7.19 mag. 1400 ly.
Cepheus	NGC 188:	Open cluster. Caldwell 1. Very old@5 billion yrs. 8.10 mag. 56000 ly.
Cepheus	NGC 6946	Spiral Galaxy (Fireworks Galaxy). Caldwell 12. 8.88 mag. 22Mly.
Cygnus	M39:	Open cluster. 4.59 mag. 1100 ly.
Cygnus	M29:	Open cluster. 6.59 mag. 30 stars 11 ly in diameter. 6000 ly.
Cygnus	NGC 6910:	Open Cluster. Located in Orion arm of Milky Way.
Cygnus	61 Cygni:	Double Star. (Piazzi's flying star). First star distance measured 6.05 mag. 11.4 ly.
Cygnus	Beta Cygni:	Double star. (Albireo). 4.67 mag. 430 ly.
Cygnus	U Cygni:	Carbon star. Double star. Mira-type. 8.48 mag. 1700 ly.
Cygnus	NGC 7027:	Planetary nebula. 600 years old. 10 mag. 3000 ly.
Cygnus	NGC 6826:	Planetary nebula. Caldwell 15. (blinking planetary). 8.89 mag. 4000 ly.
Cygnus	NGC 7000	Nebula (The North America Nebula) Caldwell 20. Bino's from a dark site. 4.00 mag. 2600 ly.
Cygnus	NGC 6900	Supernove remnant. (Veil nebula) Caldwell 34. 5.00 mag. 2600 ly.
Gemini	NGC2392:	Planetary nebula. (Eskimo nebula). Caldwell 39. 9.19 mag. 4200 ly.
Gemini	NGC 2392:	Planetary nebula. (Eskimo Nebula). Caldwell 39. 9.19 mag.
Gemini	Medusa Nebula:	Planetary nebula. (Abel 21).
Gemini	Alpha Gem:	Double Star. (Castor) mag 1.56. 51 ly. 1 st grav bound objs outside solar system.
Gemini	Delta Gem:	Double Star. (Wasat). 3.53 mag. 60.5 ly.
Gemini	M35:	Open Cluster. 5.09 mag. 3000 ly.
Gemini	NGC 2158:	Open Cluster. Near M35.
Gemini	NGC 2355:	Open cluster. 9.7 mag. 5400 ly.
Hercules	M13:	Globular cluster. 5.78 mag. 1 million stars approx. 145 ly diameter. 23,000 ly.
Hercules	M92:	Globular cluster. 6.44 mag. 100 ly diameter. 27,000 ly.
Hercules	Zeta Herculis:	Double star. 2.84 mag. 35 ly.
Hydra	M68:	Globular Cluster. 7.84 mag. 33,000 ly.
Hydra	M48:	Open cluster. 5.80 mag. 2500 ly.
Hydra	M83:	Spiral galaxy. (Southern Pinwheel). Very close and bright. 7.09 mag. 16 Mly.
Hydra	NGC 3242:	Planetary nebula. (Ghost of Jupiter). 7.30 mag. 3600 lys.
Hydra	V hydrae:	Carbon star. 7.59 mag. 2300 ly.

Leo	Gamma leonis:	Double Star. (Algieba). 2.23 mag. 130 ly.
Leo	54 Leonis:	Double Star. 4.48 mag. 287 ly.
Leo	Beta Leonis:	Double Star. (Denebola). 2.13 mag. 36 ly.
Leo	M105.	Elliptical galaxy. 9.25 mag. 36.6 million ly.
Leo	M96:	Intermediate spiral galaxy. (Forms pair with M95). 9.13 mag. 31 million ly.
Leo	M95:	Barred spiral galaxy. (Forms pair with M96). 9.72 mag. 32 million ly.
Leo	The Triplet:	M65 ,M66, NGC3628 galaxies.
Leo	NGC 2903:	Barred spiral galaxy. 9.7m mag. 30 million ly.
Lepus	M79:	Globular cluster. 7.73 mag. 40 000 ly.
Lepus	R leporis:	Hind's Crimson star. Rare carbon star. Coppery red colour. 8.07 mag. 1300 ly.
Lynx	NGC 2419:	Globular cluster. (Intergalactic Wander) Caldwell 25. 10.4 mag. (12-inch) 300,000 ly. Most distant globular cluster associated with Milky Way.
Lyra	NGC6791:	Open cluster. 8 - 9.5 Billion years old. 9.5 mag. 13 000 ly.
Lyra	M56:	Globular cluster. 8.27 mag. 31000 ly.
Lyra	M57:	Planetary nebula (Ring Nebula). 1 ly diameter.
Lyra	Epsilon Lyrae:	"Double Double"
Lyra	T lyrae:	Carbon star. 8.18 mag. 2300 ly.
Monoceros	NGC2349:	Open cluster.
Monoceros	Beta Monocerotis:	Double star, triplet. 5.01 mag. 680 ly.
Monoceros	Epsilon Monocerotis:	Double Star. 4.40 mag. 122 ly.
Monoceros	NGC 2238:	Rosette Nebula. Mag 5.50. 5500 ly.
Orion	32 Ori:	Double star. 4.23 mag. 303 ly.
Orion	Delta Ori:	Double star. (Mintaka). 2.41 mag. 2300 ly.
Orion	Zeta Ori	Double star. (Alnitak). 1.74 mag. 740 ly.
Orion	Iota Ori:	Double Star. (Nair al Saif). 7.73 mag. 2300 ly.
Orion	Beta Ori:	Double star. (Rigel). 0.28 mag. 860 ly.
Orion	BL Ori:	Carbon star. 6.30 mag. 1300 ly.
Orion	Sigma Ori:	Multiple star. 3.80 mag. 1100 ly.
Orion	Struve 761:	Multiple star.
Orion	Lambda Orionis:	Multiple star. (Meissa). 3.33 mag. 1100 ly.
Orion	NGC 2194:	Open Cluster. Mag 8.5. 12,320 ly.
Orion	NGC 2112:	Open cluster. 9.10 mag. 3064.4 ly.
Orion	NGC 2169:	Open Cluster. 5.9 mag. 3600 ly.
Orion	M78:	Bright nebula. 8.30 mag. 1600 ly.
Orion	Barnard's Loop.	
Orion	NGC 2174	Emission nebula. (Monkey Head Nebula). 6.8 mag. 6400 ly.

Perseus	Eta Persei:	Double Star. 3.75 mag. 880 ly.
Perseus	HR 890/891:	Double Star. 5.26 mag. 460 ly.
Perseus	NGC 1023:	Barred lenticular galaxy. 10.35 mag.
Perseus	NGC 1528 / 1545	Open cluster. (Running Man).
Perseus	NGC 869:	Open cluster. (Double Cluster) Caldwell 14. 5.30 mag. 6800 ly.
Perseus	NGC 884:	Open cluster (Double Cluster) Caldwell 14. 6.09 mag. 9600ly.
Perseus	M34:	Open Cluster. About 80 stars. 5.19 mag 1400 ly.
Perseus	M76:	Planetary nebulae. (Little Dumbell Nebula) 10.10 mag. 5600 ly.
Perseus	NGC 1499:	Emission nebula. (The California Nebula). 6.0 mag 1000 ly.
Pleiades	The Merope Nebula:	
Taurus	Alpha Tauri	Double star (Aldebaran). Orange giant 0.99 mag. 66.6 ly. Pioneer 10 will reach and pass Aldebaran in about two million years.
Taurus	118 Tauri:	Double Star. 5.84 mag. 430 ly.
Taurus	Chi Tauri:	Double Star. 5.38 mag. 291 ly.
Taurus	NGC 1514:	Planetary nebula. (Crystal ball nebula) 9.3 mag. 2200 ly.
Taurus	NGC 1746:	Asterism.
Taurus	NGC 1647:	Open cluster. 6.4 mag. 1800 ly. Visible with binoculars close to Aldebaran.
Taurus	M1:	Supernove remnant & Crab Pulsar. First noted 1054. 8.39 mag. 6200 ly.
Triangulum	6 Trianguli:	Double Star. 5.15 mag. 291 ly.
Triangulum	M33:	Spiral galaxy. (Pinwheel Galaxy). Clumps and knots visible 5.79 mag. 3M ly.
Ursa Major	NGC2841:	Spiral galaxy. 10.1 mag. 46 million ly.
Ursa Major	M101:	Spiral galaxy. (PinWheel Galaxy). 7.77 mag. 23 million ly.
Ursa Major	M97:	Planetary nebula. (Owl nebula). 9.80 mag. 1700 ly.
Ursa Major	M81:	Spiral galaxy. (Bode's Nebulae). 6.77 mag. 12 million ly.
Ursa Major	M82:	Spiral galaxy. (Bode's Nebulae). 8.02 mag. 12 million ly.
Virgo	NGC 4567/68:	Unbarred spiral galaxies. (The Siamese Twins /Butterfly Galaxies). 10.9 mag.
Virgo	NGC 4697:	Elliptical galaxy. Caldwell 52. 10.97 mag. 50 million ly.
Virgo	M59:	Elliptical galaxy. Contains 2000 globular clusters. 9.59 mag. 48 Mly.
Virgo	NGC4435/38:	Pairs of galaxies. (The Eyes Galaxies). 10 mag. 52 million ly.

Notes:

Alpha	A	α
Beta	B	β
Gamma	Γ	γ
Delta	Δ	δ
Epsilon	E	ϵ
Zeta	Z	ζ
Eta	H	η
Theta	Θ	$\theta \vartheta$
Iota	I	ι
Kappa	K	κ
Lambda	Λ	λ
Mu	M	μ
Nu	N	ν
Xi	Ξ	ξ
Omicron	O	o
Pi	Π	π
Rho	P	ρ
Sigma	Σ	$\sigma \varsigma$
Tau	T	τ
Upsilon	Y	υ
Phi	Φ	ϕ
Chi	X	χ
Psi	Ψ	ψ
Omega	Ω	ω