StarView
Visible Object Listing for:

February 15, 2018	Local Time (Z-5): 21:30	Lat: 41.5	Minimum Criteria: Elev: 5° / Mag: 6 Sep: 10 arcmin / Size: 2 arcsec
	Sidereal Time: 06:48	Lon: -81.5	

Name	Con	Type	Mag	Sep/Size	Elev
M31 - Andromeda Galaxy	And	Spiral Galaxy	3.44	190 arcmin	25°
Little Fish	Aur	Open Cluster	4.5	30x75 arcmin	71°
kappa Bootes - Asellus Tertius	Boo	Double Star	4.5, 6.6	13.4 arcsec	21°
Iota Cancri	Can	Double Star	4.2, 6.6	30.6 arcsec	63°
M44 - Beehive Cluster, Praesepe	Can	Open Cluster	3.7	95 arcmin	58°
Eta Cassiopeiae - Achrid	Cas	Double Star	3.4, 7.5	13 arcsec	34°
Delta Cephei	Cep	Star	4		20°
145 Canis Majoris - h3945	Cma	Double Star	4.8, 6.8	27 arcsec	25°
Beta Canis Majoris - Murzim	Cma	Star	2		30°
Delta Canis Majoris - Wezen	Cma	Star	1.8		22°
Eta Canis Majoris - Aludra	Cma	Star	2.4		19°
Gamma Canis Majoris - Muliphein	Cma	Star	4.1		33°
M41	Cma	Open Cluster	4.5	38 arcmin	28°
Zeta Canis Majoris - Phurud	Cma	Star	3.02		18°
24 Comae Berenices	Com	Double Star	5.2, 6.7	20.3 arcsec	14°
35 Comae Berenices	Com	Double Star	4.91	29 arcsec	13°
Alpha Canum Venaticorum - Cor Caroli	CVn	Double Star	2.9, 5.5	19.6 arcsec	23°

Y Cvn - La Superba	Cvn	Star	5		28°
M39	Cyg	Open Cluster	4.6	32 arcmin	7°
Nu Draconis	Dra	Double Star	4.88	63.4 arcsec	8°
Omicron 2 Eridani - Keid, Beid, 40 Eri	Eri	Double Star	4.5. 9.9	83, 9 arcsec	30°
Alpha Geminorum - Castor	Gem	Double Star	1.9, 2.9	4, 71 arcsec	76°
M35 - Collinder 82	Gem	Open Cluster	5.3	28 arcmin	71°
M48	Hyd	Open Cluster	5.5	54 arcmin	39°
Gamma Leporis	Lep	Double Star	3.7, 6.3	96 arcsec	24°
19 Lyncis - Struve 1062	Lyn	Double Star	5.6	14.8 arcsec	75°
Beta Monocerotis	Mon	Double Star	4.7, 5.2	7.3, 10 arcsec	41°
Caldwell 50	Mon	Open Cluster	4.8	24 arcmin	53°
Christmas Tree - Cone Nebula	Mon	Nebula	3.9	20 arcmin	58°
M50	Mon	Open Cluster	5.9	16 arcmin	40°
Beta Orionis - Rigel	Ori	Double Star	0.1, 6.8	10 arcsec	36°
Delta Orinis - Mintaka	Ori	Double Star	2.2, 6.3	53 arcsec	45°
M42 - Orion Nebula	Ori	Nebula	4	65 arcmin	40°
Sigma Orionis	Ori	Double Star	4.0, 7.5,6.5	13 arcsec	43°
Theta Orionis - Trapezium	Ori	Double Star	4, 6, 8	19 arcsec	40°
Beta Perseus - Algol	Per	Double Star	2.1		49°
Double Cluster - Caldwell 14, Chi	Per	Open	3.7, 3.8	60 arcmin	46°

Persei		Cluster			
M34	Per	Open Cluster	5.5	35 arcmin	46°
M47	Pup	Open Cluster	5.2	30 arcmin	33°
Aldebaran	Tau	Star	0.87		52°
M45 - Pleiades, Seven Sisters	Tau	Open Cluster	1.6	110 arcmin	49°
Theta Tauri - in Hyades	Tau	Double Star	3.4, 3.8	300 arcsec	51°
M33 - Triangulum Galaxy	Tri	Spiral Galaxy	5.7	50 arcmin	28°
Zeta Ursae Majoris - Mizar	Uma	Double Star	2.3, 4.0	14 arcsec	28°
Alpha Ursae Minoris - Polaris	Umi	Double Star	2.1, 9	18 arcsec	42°

End of Listing: 45 of 134 Stars matched criteria

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M31 - Andromeda Galaxy (And)		
RA: 0h 43m	Mag(v): 3.44	Type: Spiral Galaxy (NGC: 224)
Dec: 41d 16m	Size: 190 arcmin	
Distance: 2.5M ly		Mag: Binoculars El: 25° / Az: 304°
The Andromeda galaxy (M31) is the closest galaxy to our Milky Way at 2.5Mly away. Andromeda is a spiral galaxy that contains some 1 trillion stars. It is about six times as wide as the full Moon. On clear nights away from the city, it can be seen without a telescope as small hazy spot in the sky.		

Little Fish (Aur)		
RA: 5h 18m	Mag(v): 4.5	Type: Open Cluster
Dec: 33d 30m	Size: 30x75 arcmin	
Distance: ly		El: 71° / Az: 253°
More than a dozen stars in this cluster.		

kappa Bootes - Asellus Tertius (Boo)		
RA: 14h 14m	Mag(v): 4.5, 6.6	Type: Double Star
Dec: 51° 47'	Sep: 13.4 arcsec	SP Class: A8IV
Distance: 155 ly		PA: 236° El: 21° / Az: 38°
This is a double star viewable by a small telescope. It's traditional name,		

Asellus Tertius is Latin for 'third donkey colt'.

Iota Cancri (Can)		
RA: 8h 47m	Mag(v): 4.2, 6.6	Type: Double Star
Dec: 28° 46'	Sep: 30.6 arcsec	SP Class: G8II, A3V
Distance: 298 ly	Sep (AU): 2785	PA: 307° El: 63° / Az: 108°

Iota Cancri is a double star consisting of a brighter yellow giant and white, dimmer, dwarf star. The brighter star is about 200 times brighter than our Sun. The distance between these stars is over 2500 AU and takes at least 65,000 years to orbit each other. Even at this distance the brighter star would seem as bright as our Moon. It is sometimes referred to as the "spring Albireo" due to the similar color contrast of the two stars.

M44 - Beehive Cluster, Praesepe (Can)		
RA: 8h 40m	Mag(v): 3.7	Type: Open Cluster (NGC: 2632)
Dec: 19° 59'	Size: 95 arcmin	SP Class: A, F, G, K, M
Distance: 525 ly		Mag: Low El: 58° / Az: 123°

This is an open cluster containing over 1000 stars with a total mass of over 500 Solar masses. The nebulous area can be seen without a telescope in a dark sky. It was recognized by the ancient Greeks and Chinese and studied by Galileo in 1609 where he resolved 40 stars. This cluster is estimated to be 600 million years old. The center area of this cluster is about 23 light years across. Two planets orbiting separate stars were discoverd in 2012 by ground based telescopes. The Beehive is high over head during winter months.

Eta Cassiopeiae - Achrid (Cas)		
RA: 0h 49m	Mag(v): 3.4, 7.5	Type: Double Star
Dec: 57° 49'	Sep: 13 arcsec	SP Class: G0V, K7V
Distance: 19.4 ly	Sep (AU): 76	PA: 317° Mag: 133x El: 34° / Az: 320°

Achrid is a binary star system in the constellation Cassiopeia that is about 20 light years from earth. The brighter star is similar to our Sun along with a dimmer magnitude 7 class K dwarf star. It was discovered in 1779 by Sir William Herschel who also discovered the planet Uranus in 1781. He was later appointed the private astronmer to the King of England in 1782.

Delta Cephei (Cep)		
RA: 22h 29m	Mag(v): 4	Type: Star
Dec: 58° 25'		SP Class: F8, B7
Distance: 887 ly		El: 20° / Az: 333°

A binary star that is also a variable star. It varies from magnitude 3.48 to

4.37 over a 5.36 day period. The name of this star is used to describe the class of variable stars, Cepheid Variables, that change brightness over a regular time period.

145 Canis Majoris - h3945 (Cma)		
RA: 7h 17m	Mag(v): 4.8, 6.8	Type: Double Star
Dec: -23° -19'	Sep: 27 arcsec	SP Class: K0, F0
Distance: 385 ly		PA: 65° Mag: 50x El: 25° / Az: 173°

Also known as the Winter Albireo. There is a bright orange star with a second white blue star.

Beta Canis Majoris - Murzim (Cma)		
RA: 6h 23m	Mag(v): 2	Type: Star
Dec: -17° -57'		SP Class: B1
Distance: 500 ly		El: 30° / Az: 187°

Murzim is a variable star varying from 1.95 to 2.00 over a six-hour period.

Delta Canis Majoris - Wezen (Cma)		
RA: 7h 8m	Mag(v): 1.8	Type: Star
Dec: -26° -24'		SP Class: F
Distance: 1600 ly		El: 22° / Az: 175°

A yellow-white F-type supergiant star about 230 times the size of the sun and 17 times more mass. It has stopped fusing hydrogen in its core. Its outer envelope is beginning to expand and cool, and in the next 100,000 years it will become a red supergiant as its core fuses heavier elements. Once it has a core of iron, it will collapse and explode as a supernova.

Eta Canis Majoris - Aludra (Cma)		
RA: 7h 24m	Mag(v): 2.4	Type: Star
Dec: -29° -18'		SP Class: B5
Distance: 2000 ly		El: 19° / Az: 172°

A blue-white supergiant that is 80 times as bright as the sun. It will eventually become a supernova in the next few million years.

Gamma Canis Majoris - Muliphein (Cma)		
RA: 7h 4m	Mag(v): 4.1	Type: Star
Dec: -15° -38'		SP Class: B8
Distance: 402 ly		El: 33° / Az: 175°

A blue-white B-type bright giant star about 5 times the size of our sun.

M41 (Cma)		

RA: 6h 46m	Mag(v): 4.5	Type: Open Cluster (NGC: 2287)
Dec: -20° -44'	Size: 38 arcmin	
Distance: 2.3k ly		Mag: Low El: 28° / Az: 180°

This cluster covers an area about the size of the full moon. It contains about 100 stars including several red giants, one of which is the bright star at the center of the cluster.

Zeta Canis Majoris - Phurud (Cma)		
RA: 6h 20m	Mag(v): 3.02	Type: Star
Dec: -30° -4'		SP Class: B2
Distance: 362 ly		El: 18° / Az: 186°

A spectroscopic binary system. The pair of stars has only been determined from doppler color shifts.

24 Comae Berenices (Com)		
RA: 12h 35m	Mag(v): 5.2, 6.7	Type: Double Star
Dec: 18° 23'	Sep: 20.3 arcsec	SP Class: K2III, A7
Distance: 614 ly	Sep (AU): 3819	PA: 271° Mag: 50x El: 14° / Az: 78°

The primary star is an orange giant with a blue secondary star. Given the large separation, this is likely an optical double star.

35 Comae Berenices (Com)		
RA: 12h 53m	Mag(v): 4.91	Type: Double Star
Dec: 21° 15'	Sep: 29 arcsec	SP Class: G8III
Distance: 324 ly		PA: 144° El: 13° / Az: 73°

A double star with a giant yellow G8 class star.

Alpha Canum Venaticorum - Cor Caroli (CVn)		
RA: 12h 56m	Mag(v): 2.9, 5.5	Type: Double Star
Dec: 38° 19'	Sep: 19.6 arcsec	SP Class: A0, B8p to A7p
Distance: 114 ly	Sep (AU): 655	PA: 229° El: 23° / Az: 58°

Cor Caroli is a favorite of amateur astronomers. It is the brighter star of a binary system. The two stars are easy to see in a small telescope even though they are separated by about 650 AU. There is a slight color difference between the two with one reddish and the other blue. The brighter star is 60 times brighter than our sun. Cor Caroli also varies in spectral brightness over a period of 5.5 days. It is believed there is a strong magnetic field that produces starspots of enormous extent causing the change in brightness as the stars rotate. The star was named after King Charles of England in 1660. Cor Caroli means "Charles Heart."

Y Cvn - La Superba (Cvn)		
RA: 12h 45m	Mag(v): 5	Type: Star
Dec: 45° 26'		SP Class: C
Distance: 711 ly		El: 28° / Az: 53°
This is a variable star whose brightness varies from a magnitude of 4.8 to 6.3 over a period of 160 days. This star is a bright, red giant "carbon star" with a surface temperature of about 2800K. Near the end of its life, carbon compounds migrate to the outer layer of the star and absorb the shorter wavelength blue light thus giving it such a red color. The radius of this star is about 2 AU which would be from our Sun to beyond the orbit of Mars.		

M39 (Cyg)		
RA: 21h 32m	Mag(v): 4.6	Type: Open Cluster (NGC: 7092)
Dec: 48° 25'	Size: 32 arcmin	
Distance: 824 ly		Mag: Low El: 7° / Az: 334°
M39 is a beautiful open cluster with about 10 bright blue stars that stand out in a roughly triangular shape. Four of the brighter stars form the corners and side of the triangle. There are about 30 stars spread out over an area about the size of the full moon. M39 is actually about 8 light years in diameter and 900 light years from earth. It is a good view in binoculars since it is about ½ degree across.		

Nu Draconis (Dra)		
RA: 17h 32m	Mag(v): 4.88	Type: Double Star
Dec: 55° 11'	Sep: 63.4 arcsec	SP Class: A6, A4
Distance: 99 ly	Sep (AU): 1900	PA: 312° Mag: 10-50x El: 8° / Az: 11°
A double star, with nearly equal magnitudes, and a 44,000 year rotation period.		

Omicron 2 Eridani - Keid, Beid, 40 Eri (Eri)		
RA: 4h 15m	Mag(v): 4.5. 9.9	Type: Double Star
Dec: -7° -39'	Sep: 83, 9 arcsec	SP Class: K1V, DA4, M4
Distance: 125 ly	Sep (AU): 418, 45	PA: 105, 330° El: 30° / Az: 225°
This triple star system contains the most easily seen white dwarf star. While only 17,000 miles in diameter it is so dense that one cubic inch would weigh two tons. A very dim red dwarf with only 16% the mass of our Sun.		

Alpha Geminorum - Castor (Gem)		
RA: 7h 35m	Mag(v): 1.9, 2.9	Type: Double Star

Dec: 31° 53'	Sep: 4, 71 arcsec	SP Class: A0IV
Distance: 52 ly	Sep (AU): 60, 1145	PA: 61, 164° Mag: 50-100x El: 76° / Az: 132°
Discovered as a visual binary in 1678, there are three visible stars that orbit with period of 19 hours and 10 days. Each of the two stars are also an eclipsing binary system. A nearby binary system is also gravitationally linked making this a sextuple star system.		

M35 - Collinder 82 (Gem)		
RA: 6h 9m	Mag(v): 5.3	Type: Open Cluster (NGC: 2168)
Dec: 24° 21'	Size: 28 arcmin	
Distance: 2800 ly		Mag: Low El: 71° / Az: 208°
This open cluster is next to NGC 2158, a globular cluster, and makes for a double treat.		

M48 (Hyd)		
RA: 8h 14m	Mag(v): 5.5	Type: Open Cluster (NGC: 2548)
Dec: -5° -48'	Size: 54 arcmin	
Distance: 1500 ly		Mag: Low El: 39° / Az: 152°
This open cluster has about 80 stars greater than magnitude 13. This cluster is about 300 million years old.		

Gamma Leporis (Lep)		
RA: 5h 44m	Mag(v): 3.7, 6.3	Type: Double Star
Dec: -22° -27'	Sep: 96 arcsec	SP Class: F6V
Distance: 29 ly	Sep (AU): 863	PA: 350° Mag: 7x El: 24° / Az: 196°
This yellow/orange double star has a good color contrast and wide separation. With this star's proximity and mass of only 1.3 times the Sun's mass and was a primary focus of the NASA Terrestrial Plant Finder mission.		

19 Lyncis - Struve 1062 (Lyn)		
RA: 7h 23m	Mag(v): 5.6	Type: Double Star
Dec: 55° 17'	Sep: 14.8 arcsec	SP Class: B4V
Distance: 468 ly		PA: 315° Mag: 100x El: 75° / Az: 20°
A blue double star.		

Beta Monocerotis (Mon)		
RA: 6h 29m	Mag(v): 4.7, 5.2	Type: Double Star
Dec: -7° -2'	Sep: 7.3, 10 arcsec	SP Class: B3Ve
Distance: 700	Sep (AU): 1545,	PA: 132, 124° Mag: 50x El: 41° / Az:

ly	2117	186°
A triple star system. The stars appear as a curved line of three pale blue stars		

Caldwell 50 (Mon)		
RA: 6h 32m	Mag(v): 4.8	Type: Open Cluster (NGC: 2244)
Dec: 4° 56'	Size: 24 arcmin	
Distance: 5200 ly		El: 53° / Az: 186°
An open cluster in the Rosette Nebula.		

Christmas Tree - Cone Nebula (Mon)		
RA: 6h 41m	Mag(v): 3.9	Type: Nebula (NGC: 2264)
Dec: 9° 53'	Size: 20 arcmin	
Distance: 2600 ly		El: 58° / Az: 183°
A very young open cluster with 150 members		

M50 (Mon)		
RA: 7h 3m	Mag(v): 5.9	Type: Open Cluster (NGC: 2323)
Dec: -8° -20'	Size: 16 arcmin	
Distance: 3200 ly		El: 40° / Az: 175°
This open cluster is about 3,200 light years from earth with a diameters of about 20 light years		

Beta Orionis - Rigel (Ori)		
RA: 5h 15m	Mag(v): 0.1, 6.8	Type: Double Star
Dec: -8° -12'	Sep: 10 arcsec	SP Class: B8Ia
Distance: 773 ly	Sep (AU): 2250	PA: 202° Mag: 100x El: 36° / Az: 209°
Rigel is a violet-blue supergiant star in the constellation Orion. At 854 light years away, it is the 7th brightest star in the Earth's sky, where it shines at an apparent visual magnitude of 0.18. Rigel is a component of a multiple-star system and an intrinsic variable star that varies between magntitudes 0.17 and 0.22 over a period of 2.07 days.		

Delta Orinis - Mintaka (Ori)		
RA: 5h 32m	Mag(v): 2.2, 6.3	Type: Double Star
Dec: 0° -18'	Sep: 53 arcsec	SP Class: O9.5II, B0.5II
Distance: 690 ly		Mag: 10x El: 45° / Az: 207°
This star called Mintaka means bell in Arabic. It is the rightmost of the three belt stars in Orion. A magnitude 7 star orbits it on 5.7 day period.		

M42 - Orion Nebula (Ori)		
RA: 5h 35m	Mag(v): 4	Type: Nebula (NGC: 1976)

Dec: -5° -27'	Size: 65 arcmin	
Distance: 1300 ly		Mag: Low El: 40° / Az: 204°

One of the brightest and most photographed nebula it is visible to the naked eye. It is a treat through binoculars or a small telescope. The Orion Nebula contains a very young open cluster, known as the Trapezium due to the asterism of its primary four stars. Two of these can be resolved into their component binary systems on nights with good seeing, giving a total of six stars. The stars of the Trapezium, along with many other stars, are still in their early years.

Sigma Orionis (Ori)		
RA: 5h 39m	Mag(v): 4.0, 7.5,6.5	Type: Double Star
Dec: -2° -36'	Sep: 13 arcsec	SP Class: O9, B0, A2, B2
Distance: 1148 ly	Sep (AU): 90	Mag: 50x El: 43° / Az: 204°

Quintuple star system

Theta Orionis - Trapezium (Ori)		
RA: 5h 35m	Mag(v): 4, 6, 8	Type: Double Star
Dec: -5° -23'	Sep: 19 arcsec	SP Class: B, O
Distance: 1600 ly	Sep (AU): 5111, 12500	PA: 31, 132, 96° Mag: 100x El: 40° / Az: 204°

These stars are in the center and illuminate the Great Orion Nebula, M42. There are more than 300 very young stars in this stellar nursery at roughly 300,000 years old. Four main stars should be visible.

Beta Perseus - Algol (Per)		
RA: 3h 8m	Mag(v): 2.1	Type: Double Star
Dec: 40° 57'		SP Class: B8V, K0
Distance: 93 ly	Sep (AU): 0.062	El: 49° / Az: 288°

An eclipsing binary star dropping from magnitude 2.1 to 3.4 about every 2.8 days.

Double Cluster - Caldwell 14, Chi Persei (Per)		
RA: 2h 20m	Mag(v): 3.7, 3.8	Type: Open Cluster (NGC: 869, 884)
Dec: 57° 8'	Size: 60 arcmin	SP Class: B0
Distance: 7500 ly		Mag: Binoculars El: 46° / Az: 314°

This open cluster has over 300 blue-white super-giant stars in each cluster.

M34 (Per)		
RA: 2h 42m	Mag(v): 5.5	Type: Open Cluster (NGC: 1039)

Dec: 42° 46'	Size: 35 arcmin	
Distance: 1500 ly		Mag: Low El: 46° / Az: 293°
This loose open cluster contains about 20 brighter stars.		

M47 (Pup)		
RA: 7h 37m	Mag(v): 5.2	Type: Open Cluster (NGC: 2422)
Dec: -14° -30'	Size: 30 arcmin	
Distance: 1600 ly		Mag: Low El: 33° / Az: 166°
This open cluster of about 50 stars has two bright orange giant stars that contrast with the other blue/white stars.		

Aldebaran (Tau)		
RA: 4h 36m	Mag(v): 0.87	Type: Star
Dec: 16° 31'		SP Class: K5III
Distance: 65 ly		El: 52° / Az: 238°
This orange giant is one of the brightest stars in the night sky.		

M45 - Pleiades, Seven Sisters (Tau)		
RA: 3h 47m	Mag(v): 1.6	Type: Open Cluster
Dec: 24° 7'	Size: 110 arcmin	SP Class: B
Distance: 444 ly		Mag: Eyes El: 49° / Az: 259°
One of the nearest star clusters to Earth and most obvious to the naked eye it has been mentioned since antiquity in cultures around the world. A faint reflection nebulosity is seen around the stars from interstellar dust.		

Theta Tauri - in Hyades (Tau)		
RA: 4h 29m	Mag(v): 3.4, 3.8	Type: Double Star
Dec: 15° 52'	Sep: 300 arcsec	SP Class: K0, A7
Distance: 154 ly		Mag: naked eye El: 51° / Az: 240°
A white class A giant star next to a dimmer orange type K. The brighter star varies in magnitude from 3.35 to 3.4 over a period of 1.8 hours.		

M33 - Triangulum Galaxy (Tri)		
RA: 1h 34m	Mag(v): 5.7	Type: Spiral Galaxy (NGC: 0598)
Dec: 30° 40'	Size: 50 arcmin	
Distance: 3M ly		El: 28° / Az: 288°
The third largest member of the Local Group of galaxies, which includes the Milky Way galaxy and the Andromeda galaxy.		

Zeta Ursae Majoris - Mizar (Uma)		
RA: 13h 24m	Mag(v): 2.3, 4.0	Type: Double Star

Dec: 54° 56'	Sep: 14 arcsec	SP Class: A1V, A5V
Distance: 83 ly	Sep (AU): 345, 16	PA: 152, 71° Mag: 10-50x El: 28° / Az: 40°

Mizar and it's neighbor Alcor are a binary star system that is 80 light years away in the constellation Ursa Major, the Great Bear, otherwise known as the Big Dipper. These stars are found in the middle of the handle of the Big Dipper. In the past, some have used the two stars as a test of your eyesight if you can see both stars. Mizar, the brighter star, is itself a double star, though you won't see this in a telescope. Spectroscopic analysis shows Mizar has two additional stars and Alcor has three. Spectroscopy gives us the color spectrum of each star which astronomers can use to determine if it is coming from a single star or more than one. You are really looking at a total of seven stars.

Alpha Ursae Minoris - Polaris (Umi)		
RA: 2h 32m	Mag(v): 2.1, 9	Type: Double Star
Dec: 89° 16'	Sep: 18 arcsec	SP Class: F7Ib
Distance: 325 ly	Sep (AU): 2430	PA: 218° Mag: 50x El: 42° / Az: 359°

The North Star as used in celestial navigation. It has two companion stars that orbit at 18 and 2400 AU. Polaris is a 4.5 solar mass F7 yellow supergiant.