

# 2018 CELESTIAL VIEWING GUIDE



## FULL MOON

Just a regular full moon, here for reference.



## SUPER MOON

A full moon that occurs when the moon makes its closest approach to Earth. Supermoons are up to 14% larger and 30% brighter than a full moon.



## LUNAR ECLIPSE

Also called a "Blood Moon," this phenomenon occurs when the moon enters the Earth's shadow, taking on a rusty red hue.



## BLUE MOON

Spoiler: it's not really blue. The term "Blue Moon" just refers to the second full moon in the same calendar month.



## BLACK MOON

A month with no full moon is called a "Black Moon." It's a great time to view faint deep sky objects that are overpowered by the bright light of a full moon.



## JUPITER

Evening Sky: June - October  
Morning Sky: January-April  
Both Skies: May  
Opposition: **May 9**



BEST NIGHT TO VIEW!

## SATURN

Evening Sky: July-December  
Morning Sky: January-May  
Both Skies: June  
Opposition: **June 28**



## MARS

Evening Sky: August-December  
Morning Sky: January-June  
Both Skies: July  
Opposition: **July 27**

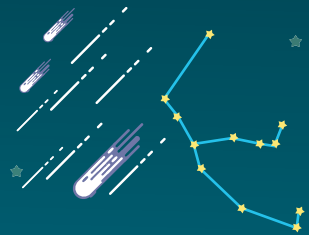


## VENUS

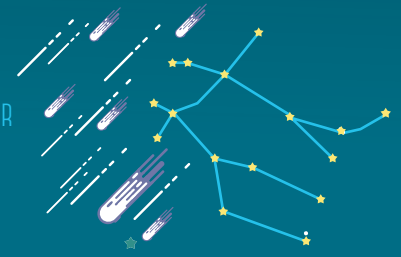
Evening Sky: March-October  
Morning Sky: November-December  
Greatest Eastern Elongation: **Aug 17**



**Delta Aquarids Meteor Shower**  
July 12 - August 23  
Peak: July 28-29 after midnight  
Up to 20 meteors per hour



**Perseids Meteor Shower**  
July 17 - August 24  
Peak: August 12-13 after midnight  
Up to 60 meteors per hour



BEST METEOR SHOWER OF THE YEAR!

**Geminids Meteor Shower**  
December 7 - 17  
Peak: December 13  
Up to 120 meteors per hour

## DEEP SKY CHECKLIST

### SPRING

- Beehive Cluster (M44)
- Leo Triplet Galaxies (M65, M66, & NGC 3628)
- Whirlpool Galaxy (M51)
- Bode's Galaxy (M81)
- Cigar Galaxy (M82)
- Double Star, Mizar & Alcor
- Sombrero Galaxy (M104)
- Globular Cluster (M3)

### SUMMER

- Milky Way
- Hercules Cluster (M13)
- Ring Nebula (M57)
- Lagoon Nebula (M8)
- Trifid Nebula (M20)
- Sagittarius Cluster (M22)
- Eagle Nebula (M16)
- Omega Nebula (M17)
- Dumbbell Nebula (M27)
- Albireo Double Star
- Wild Duck Cluster (M11)

### AUTUMN

- Andromeda Galaxy (M31)
- Double Cluster (NGC869, NGC884)
- Globular Cluster (M15)

### WINTER

- Orion Nebula (M42)
- Pleiades Cluster (M45)
- Beehive Cluster (M44)
- Auriga Open Clusters (M36, M37, M38)
- Lepus Globular Cluster (M79)
- Hyades Cluster (M25)

## MONTHLY HIGHLIGHTS

<b>JAN 31</b> 	<b>FEB 01-28</b> 	<b>MAY 09</b> 	<b>JUNE 21</b> SUMMER SOLSTICE 	<b>JUNE 27</b> 	<b>JULY 27</b> 
<b>JULY 28-29</b> 	<b>AUG 12-13</b> 	<b>AUG 17</b> 	<b>DEC 13-14</b> 	<b>DEC 21</b> LONGEST NIGHT OF THE YEAR! WINTER SOLSTICE 	