

## SKYWATCHER NEWSLETTER

## LATEST NEWS



The countdown is on to Totality in the Americas! This eclipse in particular has distracted my attention for the past 2 years with planning. The question of which cameras to bring, lenses, how to operate the cameras without intervention and capture the scene... reading books, watching tutorial videos and asking advice from veteran eclipse chasers has been fun and enlightening! The online tools now available for simulators, weather statistics and probabilities as well as scouting locations with google maps and The Photographers Ephemeris has been invaluable.

The bottom line is that the weather will be what it will be, we can only prepare and wait with optimism. Hopefully by the next newsletter I'll be able to share images of success but if not, I can guarantee that there will be millions more people in the world who have looked up at the wonders of our solar system. Perhaps for the first time on the 8 April 2024!

Until next month... SLK

Left: Predicted coronal image for my selected viewing location. Fingers crossed!



## Constant Companions: Circumpolar Constellations, Part II

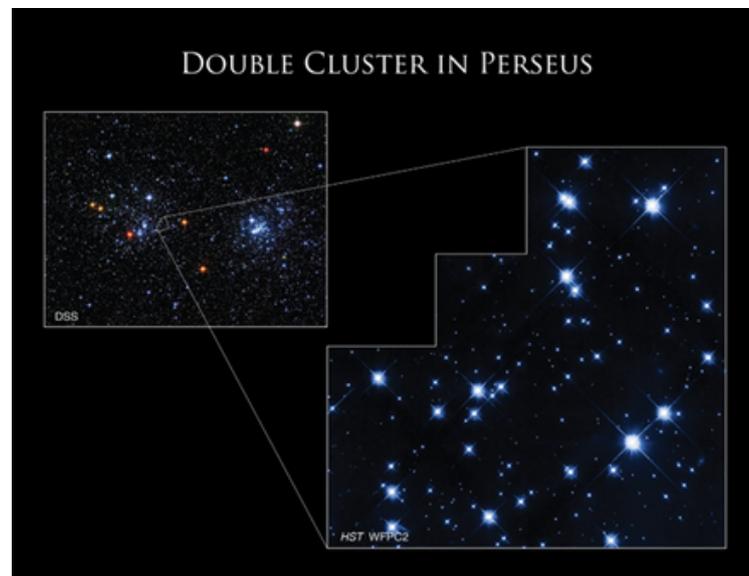
By: Kat Troche

As the seasons shift from Winter to Spring, heralding in the promise of warmer weather here in the northern hemisphere, our circumpolar constellations remain the same. Depending on your latitude, you will be able to see up to nine circumpolar constellations. This month, we'll focus on: Lynx, Camelopardalis, and Perseus. The objects within these constellations can all be spotted with a pair of binoculars or a small to medium-sized telescope, depending on your [Bortle scale](#) – the darkness of your night skies.

·Double Stars: The area that comprises the constellation Lynx is famous for its multiple star systems, all of which can be separated with a telescope under dark skies. Some of the notable stars in Lynx are the following:

- o 12 Lyncis – a triple star that can be resolved with a medium-sized telescope.
- o 10 Ursae Majoris – a double star that was once a part of Ursa Major.
- o 38 Lyncis – a double star that is described as blue-white and lilac.

·Kemble's Cascade: This [asterism](#) located in Camelopardalis, has over 20 stars, ranging in visible magnitude (brightness) and temperature. The stars give the appearance of flowing in a straight line leading to the Jolly Roger Cluster (NGC 1502). On the opposite side of this constellation, you find the asterism Kemble's Kite. All three objects can be spotted with a pair of binoculars or a telescope and require moderate dark skies.



·A ground-based image from the Digitized Sky Survey (DSS) in the upper left shows Caldwell 14, the Double Cluster in Perseus, with an outline of the region imaged by Hubble's Wide Field and Planetary Camera 2 (WFPC2).

·Double Cluster: The constellation Perseus contains the beautiful Double Cluster, two open star clusters (NGC 869 and 884) approximately 7,500 light-years from Earth. This object can be spotted with a small telescope or binoculars and is photographed by amateur and professional photographers alike. It can even be seen with the naked eye in very dark skies. Also in Perseus lies Algol, the Demon Star. Algol is a triple-star system that contains an eclipsing binary, meaning two of its three stars constantly orbit each other. Because of this orbit, you can watch the brightness dim every two days, 20 hours, 49 minutes – for 10-hour periods at a time. For a visual representation of this, revisit [NASA's What's Up: November 2019](#).

A ground-based image from the Digitized Sky Survey (DSS) in the upper left shows Caldwell 14, the Double Cluster in Perseus, with an outline of the region imaged by Hubble's Wide Field and Planetary Camera 2 (WFPC2).

Ground-based image: Digitized Sky Survey (DSS); Hubble image: NASA, ESA, and S. Casertano (Space Telescope Science Institute); Processing: Gladys Kober (NASA/Catholic University of America)

## LOCAL EVENTS

April 2 - WAS - Professor Dame Jocelyn Bell Burnell – "What is that?!" The Discovery of Pulsars: A Grad Student's Story  
 April 17 - FA Regular Meeting  
 April 17 - CADAS - TBC

May 7 - WAS - Bud Martin – The Life and Times of Galileo

May 15 - FA - Regular Meeting  
 May 15 - CADAS - Ask the Panel

June 4 - WAS - Kate Earl – The 88 Constellations  
 June 17 - CADAS - Terry Evans The Mexico Eclipse 2024

July 2 - WAS - Robert Harvey – Stumbling Around in the Dark – 2 hour Astrophoto Session

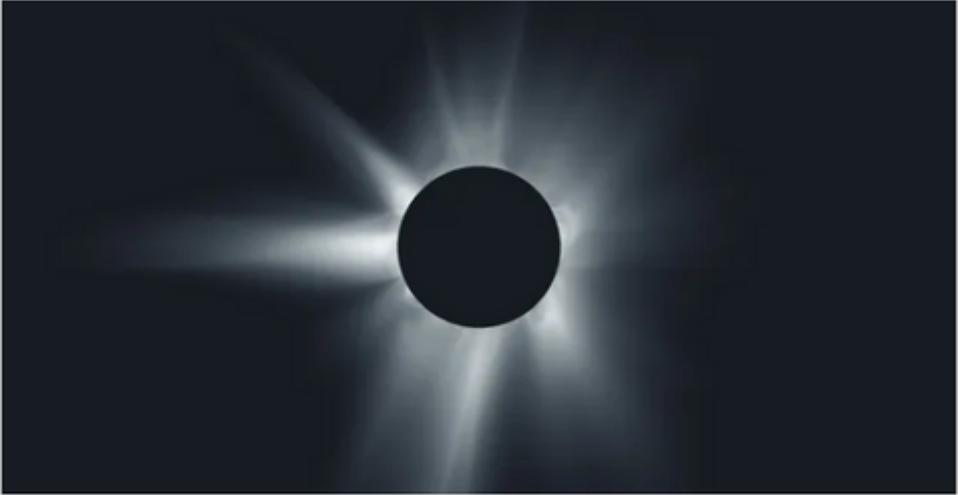
VISIT OUR WEBSITE FOR THE LATEST CLUB INFORMATION



**The Eclipse Daily**  
Welcome to The Eclipse Daily! Every day, we serve facts, fun, and inspiration for the two coming solar eclipses on October 14, 2023 and April 8, 2024. Starting April 8, 2023, these infographics and explanatory...

Great American Eclipse

8 April 2024 - The countdown to the 'Great American Eclipse' is underway with only 12 days to go as I write this.... A lot of planning and practicing with cameras in the background to try and get at least a decent eclipse image, weather permitting. There are some superb resources online to find out more about this eclipse as well as simulation tools and many sources allowing observers to watch from the comfort of their own home if they can't travel to the event or get clouded out. Several of the resources I have found very useful are included here for your perusal. Hope to have more stories to tell about the eclipse soon! Until then....SLK



**PSI | Total Solar Eclipse | 2024**  
predsci.com

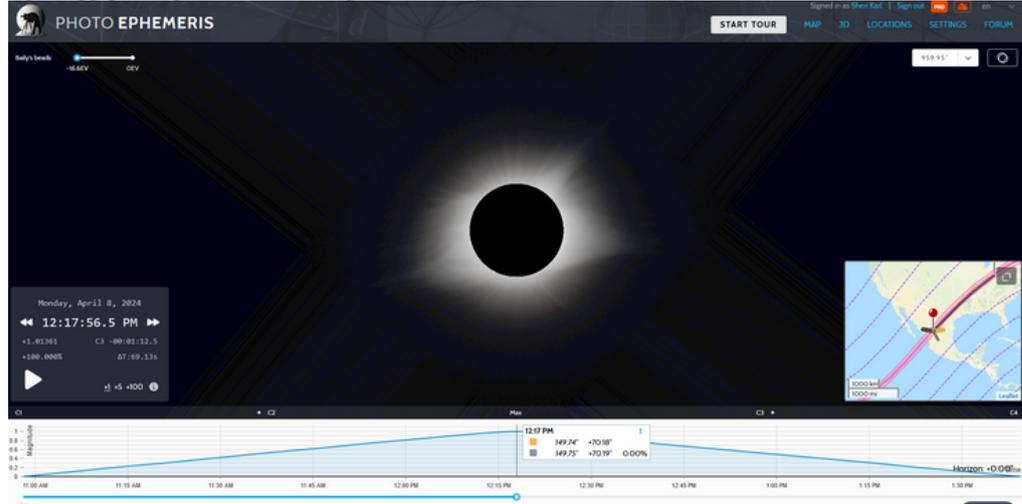


**Total Solar Eclipse 2024 US**  
The April 8 2024 total solar eclipse spanning Mexico, the United States, and Canada. Total solar eclipse in the US. See the 2024 eclipse path, eclipse times,...

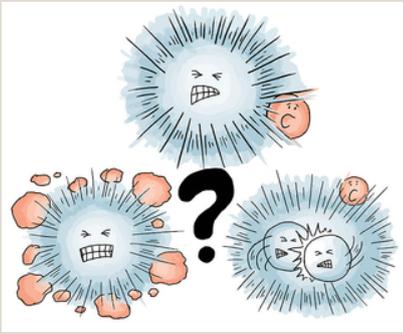
Great American Eclipse

**Slo PARTY**  
Welcome! You are invited to join a webinar: **The 2024 Great American Solar Eclipse!....**  
Zoom

<https://app.photoephemeris.com/eclipse-simulator>



**Total Solar Eclipse April 8, 2024**  
Eclipsophile.com presents climate studies of cloud cover and weather along the tracks of upcoming...  
Eclipsophile /



**WAC Upcoming Events**

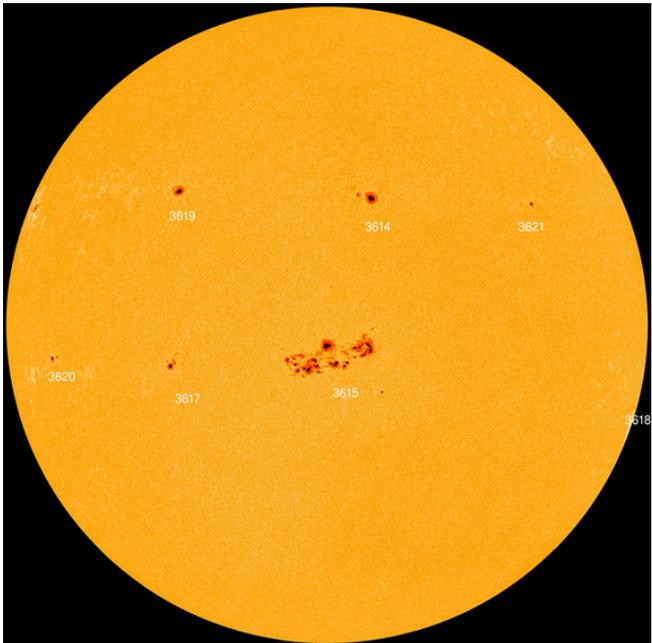
APRIL 12 - KEVIN QUINN: TBA (IN-PERSON ONLY)

MAY 10 - AGM FOLLOWED BY MARK RADICE: TBA (IN-PERSON ONLY)

JUNE 14 - STEVE TONKIN: ASTRONOMY THE BEGINNINGS: CHARLATANS AND FRAUDS (IN-PERSON AND ZOOM)

Continued from page 1:

In the appearance of left to right: constellations Perseus, Camelopardalis, and Lynx in the night sky. Also featured: Cassiopeia as a guide constellation, and various guide stars.  
Credit: Stellarium Web



### Member Images

A super sunspot photo taken by Ennio on 24 March. The image shows the amazing structure visible in whit light of Active Region 3615.

Above: Taken by Ennio with a 70mm refractor and planetary camera. This is a single from a 10s video.

Left: SDO image from 24 March showing the sunspots visible in the photosphere.

Skymaps.com—Feel free to download the full article directly each month.

## The Evening Sky Map

FREE! EACH MONTH FOR YOU TO EXPLORE, LEARN & ENJOY THE NIGHT SKY

### Sky Calendar – April 2024

- 2 Last Quarter Moon at 3:15 UT.
- 6 Moon near Mars at 6h UT (morning sky). Mag. 1.2.
- 6 Moon, Mars and Saturn within circle 3.0° diameter at 9h UT (morning sky). Mags. 1.2 and 1.1.
- 6 Moon near Saturn at 11h UT (morning sky).
- 7 Moon near Venus at 17h UT (15° from Sun, morning sky). Mag. -3.9.
- 7 Moon at perigee (closest to Earth) at 17:46 UT (distance 358,850km; angular size 33.3").
- 8 Total Solar Eclipse from 16:39 to 19:55 UT, greatest eclipse at 18:17 UT (duration 4m 28s). Totality visible along narrow path crossing Mexico, eastern USA and south-eastern Canada. Partial eclipse visible across all of North America (except Alaska), Hawaii and parts of Central America.
- 8 New Moon at 18:22 UT. Start of lunation 1253.
- 10 Moon near Jupiter at 20h UT (evening sky). Mag. -2.0.
- 10 Mars 0.44° NNW of Saturn at 21h UT (37° from Sun, morning sky). Mags. 1.2 and 1.1.
- 11 Moon near the Pleiades at 14h UT (evening sky).
- 11 Mercury at inferior conjunction with the Sun at 23h UT. The innermost planet passes into the morning sky.
- 15 First Quarter Moon at 19:13 UT.
- 18 Moon near Regulus at 16h UT (evening sky).
- 20 Moon at apogee (farthest from Earth) at 2h UT (distance 405,623km; angular size 29.5").
- 22 Lyrid meteor shower peaks at 7h UT (timing and activity is variable). Active April 14-30. Radiant is between Hercules and Lyra. Expect 10 to 20 bright, fast meteors per hour at peak.
- 23 Moon near Spica at 5h UT (evening sky).
- 23 Full Moon at 23:50 UT.
- 26 Moon near Antares at 22h UT (morning sky). Occultation visible from the Middle East, southern India and Indonesia.
- 29 Mars 0.04° SE of Neptune at 5h UT (morning sky). Mags. 1.1 and 7.9.

More sky events and links at <http://Skymaps.com/skycalendar/>  
All times in Universal Time (UT). (USA Eastern Daylight Time = UT - 4 hours.)

**NORTHERN HEMISPHERE APRIL 2024**

**SKY MAP SHOWS HOW THE NIGHT SKY LOOKS**

**EARLY APR 10 PM**  
**LATE APR 9 PM**  
**(MIDNIGHT)**

**SKY MAP DRAWN FOR A LATITUDE OF 40° NORTH AND IS SUITABLE FOR LATITUDES UP TO 15° NORTH OR SOUTH OF THIS**

**SKY MAPS.COM**

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