The Los Angeles Astronomical Society

March, 2022
Volume 96, Issue 3

THE BULLETIN

February 2, 2022

Orion (center) and Sirius (lower left). The 3 belt stars point to Sirius (Canis Major). Procyon (Canis Minor) is the bright star above Sirius and slightly to the left)

Photo Credit: Spencer SooHoo

Club Secretary

Upcoming Club Events

Dark Sky Night: March 5, 2022

Board Meeting: March 9, 2022

General Meeting: March 14, 2022

In This Issue

All members are encouraged to contribute articles of interest for publication in The Bulletin. Please send your articles and images to:

communications@laas.org

Update Your Contact Information

Please send any contact info changes to the club secretary at

secretary@laas.org.

News - The Garvey Ranch Park Observatory

Garvey Ranch Observatory will be open **only** to fully vaccinated members with proof of vaccination. Masks are required at all times, indoors and outdoors. Wednesday nights only from 7 PM to 10 PM, weather permitting.

Preserve The Dark Sky Petition

Dear LAAS Members,

Please consider signing this petition to help preserve our dark skies (link below). Light pollution is continuously encroaching onto our dark sky site in the Lockwood Valley as urban development continues. If it keeps up, it will be impossible to see the Milky Way from there. Many of us live in such light polluted areas that it's virtually impossible to see much in the night sky except the moon, bright planets, and a handful of bright stars. Not only is night-sky friendly lighting helping to preserve dark skies, it also helps lower energy costs and lessens the impact of bright nighttime skies on wildlife. We can all help stop the increase in light pollution and hopefully reverse the trend, but it will take a lot of effort and support. A starting point in this fight is to enhance the Los Angeles County dark sky friendly lighting ordinance that was passed in 2012.

https://www.change.org/SaveDarkSkies

Thank you for your consideration.

Rod Kaufman

John O'Bryan

Spencer SooHoo

60 and 100 Nights Schedule for 2022

Mt. Wilson Observatory

Session Schedule - 2022

The dates above are **all** scheduled on Saturday nights and are **all** half-night events.

April 2nd

April 30th

May 28th

June 18th

July 23rd

Aug. 27th

Sept. 24th -This is the only 100 Inch session.

Oct. 27th

Nov. 19th

The Cost per person, per session:

60 Inch Night - $65.00

100 Inch Night - $145.00

There will be 20 people, per session.

How to Make a Reservation?

Please contact Darrell Dooley BEFORE you pay for your reservation.

Darrell is our Mt. Wilson Coordinator and the ONLY contact available.

Darrell's Email Address:

Mtwilsoncoordinator@laas.org

Darrell will answer all of your questions and concerns.

Reserve your spot by paying by credit cards or PayPal using the following link:

https://fs30.formsite.com/LAAS/MtWilson/index.html

Learn more about these incredible events by visiting Mt. Wilson Observatory's website:

https://www.mtwilson.edu/60-telescope/

https://www.mtwilson.edu/100-telescope-observing/

NSN Webinar Series:

Webb Community Events: First Images

Join the NASA Night Sky Network on **Tuesday, March 15** at 6:00pm Pacific Time (9:00pm Eastern) to hear **Anita Dey and Holly Dyer** share with us how NSN clubs can share with their communities **Webb First Images**.

Date: Tuesday, 3/15/2022

Time: 6:00 PM - 7:00 PM PT

Later this year, the world will get a "first look" at images from the James Webb Space Telescope (Webb). Want to learn how to share this historic moment with your community? Join presenters Anita Dey and Holly Ryer to learn about Webb Community Events and how to get involved! NASA and its partners want to share the experience of Webb's first images with communities all over the United States, including yours. Our goal is that with your help, Webb's first images will captivate and inspire a new generation of space science enthusiasts, reaching a broader, more diverse audience than ever before.

About Anita Dey
Anita Dey is the Coordinator for the Webb Space Telescope Community Events in National Aeronautics and Space Administration's (NASA's) Science Mission Directorate. She joined NASA in 2018 in the Office of Communications. Previously, she worked at the Federal Communications Commission in various roles involving international diplomacy, policy and consumer outreach.

About Holly Ryer
Holly Ryer is a Principal Education Specialist at the Space Telescope Science Institute. She supports STEM engagement programming such as NASA's Universe of Learning, and outreach activities for the Hubble and James Webb space telescope missions. Holly is a former classroom teacher with teaching and curriculum development experience in Baltimore-area schools.

Registration
Night Sky Network members can pre-register for this webinar on Zoom on the Outreach Resource page (login required).

Public Viewing Options:
The event will stream live on YouTube.
Link: https://youtu.be/ieNFUmrY9Jc

JAMES WEBB SPACE TELESCOPE POSTER - JPL PRINTABLE

Credit: NASA/JPL-Caltech

View Large Image (12000px - .2 MB .JPG) |

Download English (34 MB PDF) |

Download Español (34 MB PDF)

For more printables, follow this link:

HTTPS://WEBB.NASA.GOV/CONTENT/FEATURES/EDUCATIONAL/PRINT.HTML

Embracing the Equinox

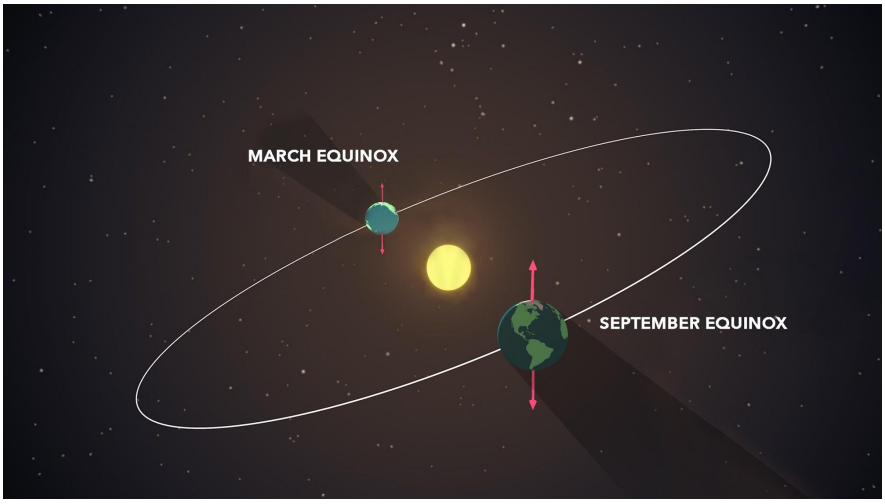
By David Prosper

Depending on your locale, equinoxes can be seen as harbingers of longer nights and gloomy weather, or promising beacons of nicer temperatures and more sunlight. Observing and predicting equinoxes is one of the earliest skills in humanity's astronomical toolkit. Many ancient observatories around the world observed equinoxes along with the more pronounced solstices. These days, you don't need your own observatory to know when an equinox occurs, since you'll see it marked on your calendar twice a year! The word "equinox" originates from Latin, and translates to equal (equi-) night (-nox). But what exactly is an equinox?

An equinox occurs twice every year, in March and September. In 2022, the equinoxes will occur on March 20, at exactly 15:33 UTC (or 11:33 am EDT), and again on September 23, at 01:04 UTC (or September 22 at 9:04 pm EDT). The equinox marks the exact moment when the center of the Sun crosses the plane of our planet's equator. The day of an equinox, observers at the equator will see the Sun directly overhead at noon. After the March equinox, observers anywhere on Earth will see the Sun's path in the sky continue its movement further north every day until the June solstice, after which it begins traveling south. The Sun crosses the equatorial plane again during the September equinox, and continues traveling south until the December solstice, when it heads back north once again. This movement is why some refer to the March equinox as the northward equinox, and the September equinox as the southward equinox.

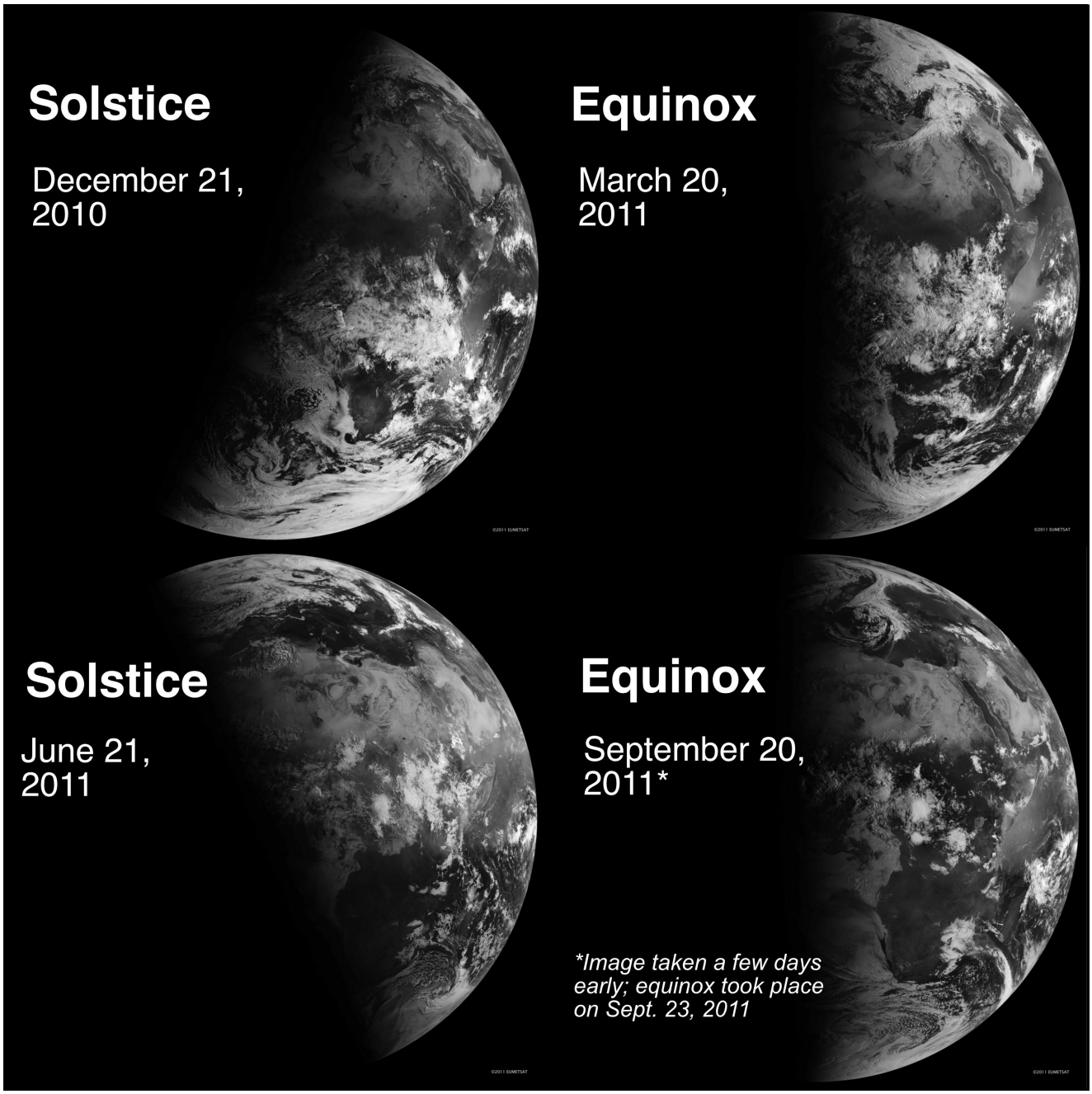
Our Sun shines equally on both the Northern and Southern Hemispheres during equinoxes, which is why they are the only times of the year when the Earth's North and South Poles are simultaneously lit by sunlight. Notably, the length of day and night on the equinox aren't precisely equal; the date for that split depends on your latitude, and may occur a few days earlier or later than the equinox itself. The complicating factors? Our Sun and atmosphere! The Sun itself is a sphere and not a point light source, so its edge is refracted by our atmosphere as it rises and sets, which adds several minutes of light to every day. The Sun doesn't neatly wink on and off at sunrise and sunset like a light bulb, and so there isn't a perfect split of day and night on the equinox - but it's very close.

Equinoxes are associated with the changing seasons. In March, Northern Hemisphere observers welcome the longer, warmer days heralded by their vernal, or spring, equinox, but Southern Hemisphere observers note the shorter days – and longer, cooler nights - signaled by their autumnal, or fall, equinox. Come September, the reverse is true. Discover the reasons for the seasons, and much more, with NASA at nasa.gov.



This (not to scale) image shows how our planet receives equal amounts of sunlight during equinoxes.

Credit: NASA/GSFC/Genna Duberstein



Scenes of Earth from orbit from season to season, as viewed by EUMETSAT. Notice how the terminator - the line between day and night - touches both the North and South Poles in the equinox images. See how the shadow is lopsided for each solstice, too: sunlight pours over the Northern Hemisphere for the June solstice, while the sunlight dramatically favors the Southern Hemisphere for the December solstice.

This article is distributed by NASA Night Sky Network

The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit night-sky.jpl.nasa.gov to find local clubs, events, and more!

Monthly Sky Report

By Dave Nakamoto

The planets, in the order they appear from the evening to the morning sky.

Neptune is too close to the sun all month long.

Uranus shines at magnitude +5.8. On the 1st, Uranus sets at 10:33 a.m., PDT, and on the 31st, the planet sets at 9:42 p.m., PDT. On the 15th, Uranus is at Right Ascension $2^h\ 38^m\ 0^s$ with a declination of +15° 1' 30". The disk of Uranus is only 3.5 arcseconds wide, and so a telescope with a magnification of 150x is needed. For Uranus, you might recognize the planet even if you don't see a disk by remembering the following. Uranus will be an unusual greyish green color, although the color will be pale. The planet also will not twinkle as the stars do. Finally, even at low magnifications, you might get the impression that they are not pinpoints of light.

Venus : On the 1st, the planet rises at 3:48 a.m., PST. On the 31st, Venus rises at 4:34 a.m., PDT, and the sun rises at 6:42 a.m., PDT. Venus changes from a quarter phase to slightly gibbous, 38-percent illuminated and 31 arcseconds wide on the 1st and 55-percent illuminated and 22 arcseconds wide on the 31st. Venus is joined by two planets in March. Mars passes south of Venus for most of the month. Between the 27th and the 31st, Venus passes north of Saturn and is directly north of Saturn on the 27th. Do not observe any planet when the sun is in the sky, for the danger to the eyes is great.

Mars rises next to rise in the morning sky. On the 1st, Mars rises at 4:09 a.m., PST. On the 31st, Mars rises at 4:26 a.m., PDT. The planet appears as a disk less than five arcseconds wide and will not show any surface features through a telescope.

Mercury begins March low in the east-southeast. On the 1st, Mercury rises at 5:20 a.m., PST, and the sun rises at 6:22 a.m., PST. Mercury is near the eastern horizon all throughout March and therefore hard to observe. At the end of March, Mercury is too close to the sun and unobservable. Do not observe any planet when it comes close to the sun, for the danger to the eyes is great.

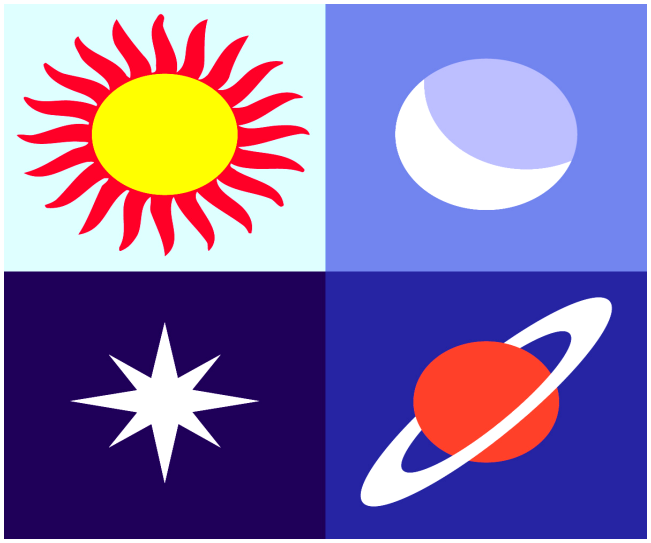
Saturn : On the 1st, Saturn rises at 5:23 a.m., PST, and the sun rises at 6:22 a.m., PST. By the 31st, Saturn rises in the morning sky at 4:34 a.m., PDT, and the sun rises at 6:42 a.m., PDT. The rings and Saturn's largest moon Titan may be seen with a telescope capable of magnification 50x.

Jupiter starts March too close to the sun to be observed. On the 31st, Jupiter rises at 5:55 a.m., PDT, and the sun rises at 6:42 a.m., PDTA telescope capable of magnification 50x will show the Red Spot, and the four bright Galilean moons can be seen moving back and forth, across and behind Jupiter.

The Moon is new on the 2nd, first quarter on the 10th, full on the 18th, last quarter on the 24th, and new again on the 31st. Unlike February, where due to the shortness of the month we didn't have a new moon, in March we have two.

David Nakamoto has been observing the heavens through various scopes since he was in the 5th grade. You can contact Dave by email at:

dinakamoto@hotmail.com.



Almanac

March 2 - New Moon. The Moon will located on the same side of the Earth as the Sun and will not be visible in the night sky. This phase occurs at 17:38 UTC. This is the best time of the month to observe faint objects such as galaxies and star clusters because there is no moonlight to interfere.

March 18 - Full Moon. The Moon will be located on the opposite side of the Earth as the Sun and its face will be will be fully illuminated. This phase occurs at 07:20 UTC. This full moon was known by early Native American tribes as the Worm Moon because this was the time of year when the ground would begin to soften and the earthworms would reappear. This moon has also been known as the Crow Moon, the Crust Moon, the Sap Moon, and the Lenten

March 20 - March Equinox. The March equinox occurs at 15:24 UTC. The Sun will shine directly on the equator and there will be nearly equal amounts of day and night throughout the world. This is also the first day of spring (vernal equinox) in the Northern Hemisphere and the first day of fall (autumnal equinox) in the Southern Hemisphere.

April 1 - New Moon. The Moon will located on the same side of the Earth as the Sun and will not be visible in the night sky. This phase occurs at 06:27 UTC. This is the best time of the month to observe faint objects such as galaxies and star clusters because there is no moonlight to interfere.

Source:
http://www.seasky.org/astronomy/astronomy-calendar-2021.html

Want to know what objects will be in tonight's sky in Los Angeles?

https://www.timeanddate.com/astronomy/night/usa/los-angeles

Fun Astronomy Links and Resources:

1. Learn about Light Pollution: https://www.darksky.org/light-pollution/

2. The James Webb Space Telescope: Where is it now?

https://webb.nasa.gov/content/webbLaunch/whereIsWebb.html

3. NASA/JPL Printouts (Posters, Calendars)

https://www.jpl.nasa.gov/edu/learn/toolkit/?resource_type=Printouts+and+Downloads

March 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5 Dark Sky Night
6	7	8	9 Board Meeting	10	11	12
13	14 General Meeting	15 NSN Webinar	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

April, 2022

April 2nd—Dark Sky Night

April 2nd—The first 60 Inch Night of the season at Mt. Wilson Observatory

Meet The New Members

Andy Sway and Family
James Turner and Family
Lalanka Karunaratne and Family
Danny Zeddy and Family
Christopher Messer and Family
Carol Ayers and Family
Drew York
Amber Castro
Leza Naydich
Danica Schwartz
Greg Shreve
Jeff Seidl
Marci Carlin and Family
Karim Elmahoudie
Iraneide De Olivera
Justin McKay

LAAS Board Meetings

.Due to the pandemic, all Board Meetings are now held online, live on Zoom. Please check the information posted in the IO Group Forum for any current news related to these meetings. If you wish to attend a board meeting, please send a request to secretary@laas.org for a link to Zoom.

Volunteer Opportunities

Every LAAS member is a volunteer at some point. Some members volunteer to share telescopes with the public, while others tackle administrative duties, help out at our community and public events, or join a club committee. Taking photos at our events and writing articles about events for our club newsletter are great ways to volunteer and become more involved in the LAAS as a member.

HOWEVER, due to Covid-19 restrictions in our area, all outreach events have been cancelled until further notice.

Volunteers are always welcome to write articles for our monthly newsletter or share images captured of the night sky. Members are also welcome to come up with new ideas and future activities for the membership which can be shared in Board meetings. If you are artistic and enjoy creating posters or flyers, or printable astro-educational handouts for further star parties, please let us know.

Time To Renew Your Membership?

Please remember to renew your membership once you receive notice from the Club Secretary in your email inbox.

Please send any new contact information to the club secretary at secretary@LAAS.org.

LAAS Outreach Program

The mission of LAAS is to promote interest in and advance the knowledge of astronomy, optics, telescope making and related subjects. In furtherance of its mission, LAAS conducts public star parties and other outreach events that are intended to enhance the public's understanding of astronomy and its enjoyment and appreciation of the beauty and wonders of our universe.

We provide outreach events at local schools, Griffith Observatory, Mt. Wilson Observatory, various state and county parks, and community events.
Join our Outreach team of volunteers today.
Contact Heven Renteria, our Outreach Coordinator at Outreach@LAAS.org

Want to include astronomy outreach at your school's science night or open house? Follow the link below to access the request form:

https://nightsky.jpl.nasa.gov/club-eventrequest.cfm?Club_ID=1344

LAAS Club Swag

LAAS T-Shirts, Hoodies, mugs, and more!

To find new merchandise from our store, please use the following link: https://www.laas.org/store

Please note all prices listed are subject to change and include all shipping and handling costs. All items will be shipped directly to the address you provide on your order form.

Please remember all LAAS Outreach activities are postponed due to the Covid-19 pandemic.

Amazon Smiles

The LAAS is now listed on Amazon Smiles. When you purchase any goods on Amazon.com, Amazon will donate a small percentage of the funds they receive from you, back to the LAAS. Here's some information to help bring in funds for our club projects:

What is AmazonSmile?

AmazonSmile is a simple and automatic way for you to support your favorite charitable organization every time you shop, at no cost to you, with the added bonus that Amazon will donate a portion of the purchase price to your favorite charitable organization., such as the LAAS!

Learn more by following this link:

http://smile.amazon.com/

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John O'Bryan, Jr.

Astronomy Magazine Discounts

Discounts for astronomy magazines can be found on the internet. Look for the best deals possible. Send a copy of your LAAS membership card with your check or payment to receive a club member discount.

Astronomy magazine

As a member of the Night Sky Network, you may use the above link to renew your Astronomy Magazine subscription (or enter a new subscription) at the club discount rate. If this is a renewal, Astronomy Magazine will match your entered name and address and extend your subscription. For inquiries, please contact Astronomy Magazine customer service & sales at 1-800-533-6644.

Click here to subscribe to Sky and Telescope Magazine.

Join the Astronomical Society of the Pacific and help support the cause of advancing science literacy through engagement in astronomy. Member benefits include a **subscription to the online *Mercury* Magazine**, published quarterly, and **Astronomy Beat**, a monthly on-line column written by "insiders" from the worlds of astronomy research and outreach.

Subscribe or renew to the McDonald Observatory's StarDate Magazine and receive a special discount. Go to this page and press "Add to Cart" under the kind of subscription you want:
http://stardate.org/store/subscribe
Then, on the Checkout form, enter "network" in the Coupon Code box.

Club Contact Information

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Club Communications: Andee Sherwood

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Mt. Wilson Coordinator: Darrell Dooley

mtwilsoncoordinator@laas.org

Bulletin Editor: Andee Sherwood

communications@laas.org

Find astronomy outreach activities by visiting NASA's Night Sky Network:

https://nightsky.jpl.nasa.gov/about.cfm

Club Contacts

Club Phone Numbers

LAAS Message Phone:

213- 673-7355 (Checked daily)

Griffith Observatory:

213-473-0800

Sky Report:

213-473-0880

Follow us on social media by clicking on one of the icons below:

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YouTube

twitter