



Newsletter of the Pomona Valley Amateur Astronomers

Volume 39 Number 11

nightwatch

November 2019

Club Events Calendar

Nov 11 Transit of Mercury
 Nov 15 **General Meeting Apollo 12**
 Nov 23 Star Party – Mecca Beach

Dec 7 Christmas Party

Jan 8 **Board Meeting**
 Jan 10 **General Meeting**
 Jan 25 Star Party -- TBD

Jan 29 **Board Meeting**
 Feb 7 **General Meeting**
 Feb 22 Star Party -- TBD
 Feb 26 **Board Meeting**

Mar 6 **General Meeting**
 Mar 21 Star Party -- TBD

Apr 1 **Board Meeting**
 Apr 10 **General Meeting (presentation: TBD; Apollo 13)**
 Apr 25 Star Party -- TBD
 Apr 29 **Board Meeting**

May 8 **General Meeting**
 May 23 Star Party -- TBD
 May 27 **Board Meeting**

Jun 5 **General Meeting**
 Jun 20 Star Party – TBD

Jul 22 **Board Meeting**
 Jul 31 **General Meeting**

Aug 15 Star Party -- TBD
 Aug 19 **Board Meeting**
 Aug 28 **General Meeting**

Sep 12 Star Party -- TBD
 Sep 16 **Board Meeting**
 Sep 25 **General Meeting**

Oct 10 Star Party -- TBD

PVAA Officers and Board

Officers

President	Mathew Wedel	909-767-9851
Vice President ..	Joe Hillberg	909-949-3650
Secretary	Ken Elchert	626-541-8679
Treasurer	Gary Thompson	909-935-5509
VP Facilities	Jeff Felton	909-622-6726

Board

Jim Bridgewater (2018).....	909-599-7123
Richard Wismer(2018)	
Ron Hoekwater (2019).....	909-706-7453
Jay Zacks (2019)	

Directors

Membership / Publicity....	Gary Thompson ..	909-935-5509
Outreach	Jeff Schroeder	909-758-1840
Programs	Ron Hoekwater	909-391-1943

General Meeting 10/11/19

Mathew Wedel opened the meeting and talked a little about dinosaur bones being 'Shards of Excellence' and not being 'pieces of crap'. More can be seen at <https://sypow.com>. (Move down the page some to see Mr. Wedel.)

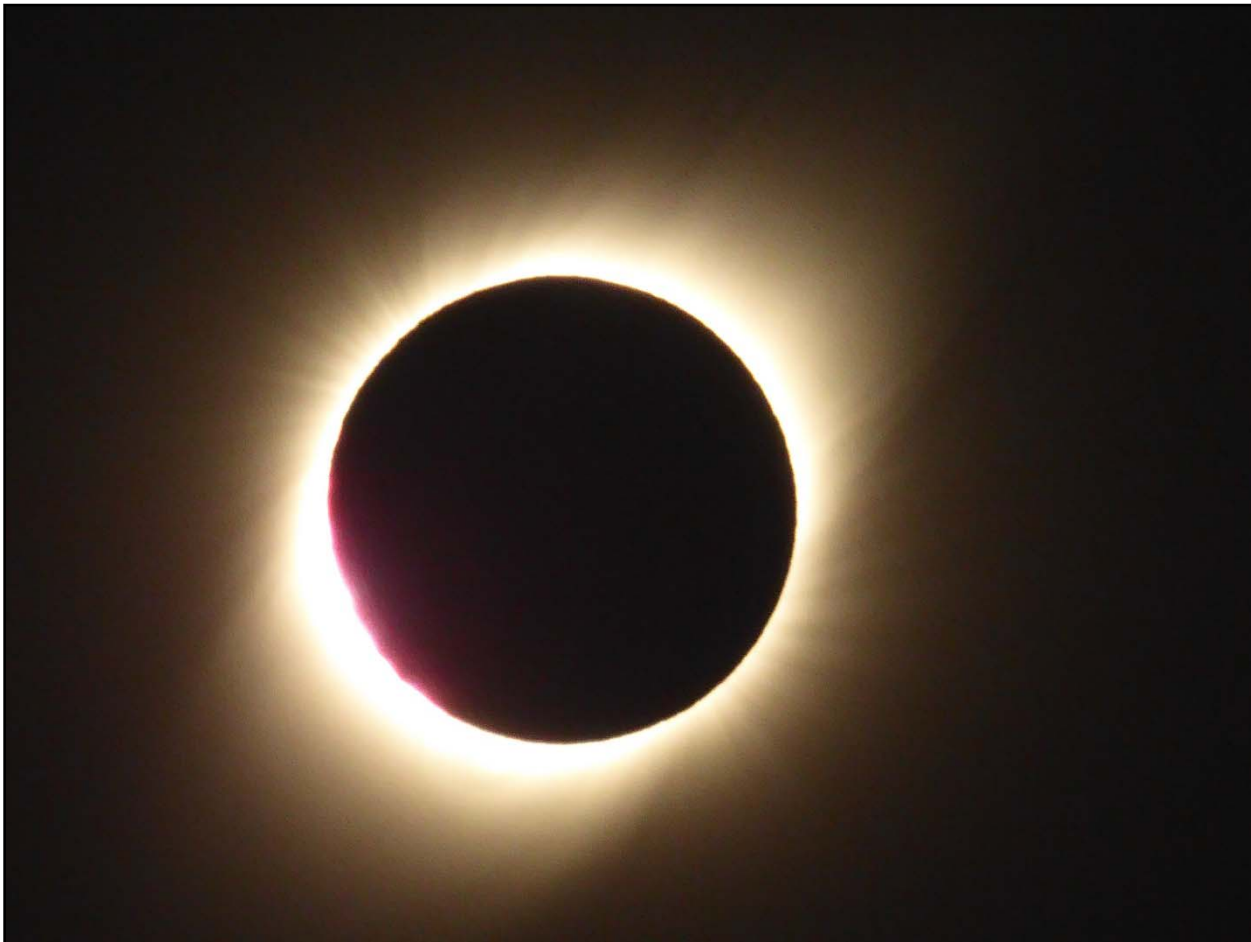
The speakers of the evening were Alson Wong & Bob Stephens of the Riverside Astronomical Society who gave a slide presentation of their trip to Chilean Eclipse titled: "Chile Eclipse Del Sol". They have seen 17 eclipses and 14 eclipses respectively. On this trip they also visited Lima, Peru and Santiago, Chile. To replace some of their equipment they ended up using a Corona Beer can as a counterweight - "Go with what 'cha got," being their motto. They used Travel Quest International and praised the bookings.

The eclipse lasted 2 minutes and 23 seconds and all their cameras were computer controlled. They liked their GoPro 7 camera which took several good shots. While this shot wasn't theirs, this is what they saw:

Gary Thompson

<https://commons.wikimedia.org/w/index.php?curid=80119703>

https://en.wikipedia.org/wiki/Solar_eclipse_of_July_2,_2019#/media/File:20190702_Totality_LaSerena_Chile.jpg



By Majolobe - Own work, CC BY-SA 4.0,

NASA Night Sky Notes

November 2019



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 nightsky.jpl.nasa.org to find local clubs, events, and more!

The Messenger Crosses the Sun: Mercury Transit 2019

By David Prosper

Did you know that there are two other objects in our skies that have phases like the Moon? They're the inner planets, found between Earth and the Sun: Mercury and Venus. You can see their phases if you observe them through a telescope. Like our Moon, you can't see the planets in their "new" phase, unless they are lined up perfectly between us Earthlings and the Sun. In the case of the Moon, this alignment results in a **solar eclipse**; in the case of Mercury and Venus, this results in a **transit**, where the small disc of the planet travels across the face of the Sun. Skywatchers are in for a treat this month, as Mercury transits the Sun the morning of **November 11!**

You may have seen the transit of Venus in 2012; you may have even watched it through eclipse glasses! However, this time you'll need a solar telescope to see anything, since eclipse glasses will only reveal the Sun's blank face. Why is that? Mercury is the smallest planet in our solar system, and closer to the Sun (and further away from Earth) during its transit than Venus was in its 2012 transit. This makes Mercury's disc too small to see without the extra power of a telescope. Make absolutely certain that you view the transit via a telescope equipped with a safe solar filter or projection setup. Do NOT combine binoculars with your eclipse glasses; this will instantly burn a hole through the glasses – and your eyes! While most people don't have solar telescopes handy, many astronomy clubs do! Look for clubs hosting Mercury transit observing events near you at bit.ly/findnsn (USA) or at bit.ly/awbtransit (worldwide).

What a fun opportunity to see another planet during the day! This transit is expected to last over five hours. Folks on the East Coast will be able to watch the entire transit, weather permitting, from approximately 7:35 am EST until around approximately 1:04 pm EST. Folks located in the middle of North America to the west coast will see the transit already in progress at sunrise. The transit takes hours, so if your weather is cloudy, don't despair; there will be plenty of time for skies to clear! You can find timing details and charts via eclipse guru Fred Espenak's website: bit.ly/mercurytransit2019

Mercury's orbit is small and swift, and so its position in our skies quickly changes; that's why it was named after the fleet-footed messenger god of Roman mythology. In fact, if you have a clear view of the eastern horizon, you'll be able to catch Mercury again this month! Look for it before dawn during the last week of November, just above the eastern horizon and below red Mars. Wake up early the morning of November 24th to see Mars, the Moon, and Mercury form a loose triangle right before sunrise.

Discover more about Mercury and the rest of our solar system at nasa.gov

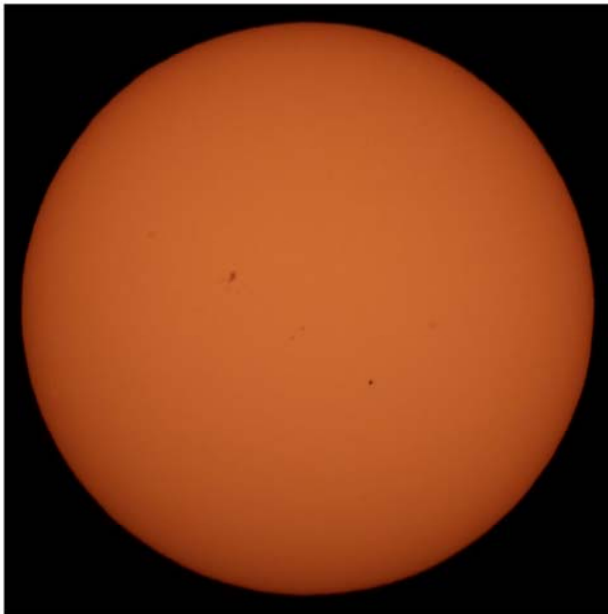
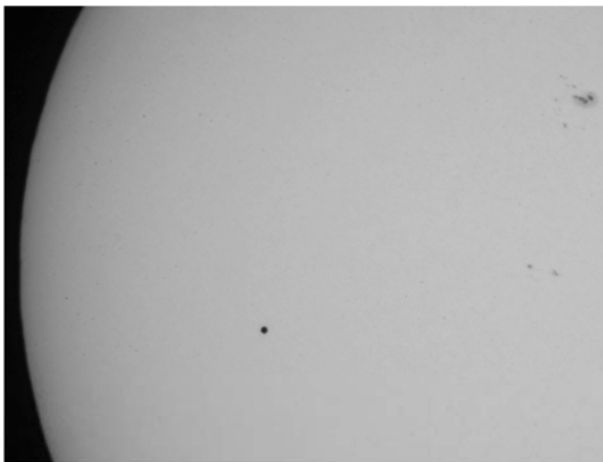


Photo of the May 9, 2016 transit of Mercury. Mercury is the small dot on the center right. Note how tiny it is, even compared to the small sunspot on the center left. Credit: Dave Huntz



This photo from the same 2016 transit event shows Mercury a bit larger, as it should; it was taken at a higher magnification through a large 16 inch telescope! Credit: J. A. Blackwell