

Astronomy Club of Lompoc Presents The Sidereal Times



M20 Nebula (see page 5)

Meeting News:

The April meeting was cancelled due to the Corona-19 virus pandemic.

Reminder: ACL club meeting May 8th is Cancelled due to Corona virus and state mandate to stay home.



Lunar Calendar

New Moon 22nd
Full Moon 7th

Solar Days



Presidents Message

Hello, Fellow Skywatchers,

I will be brief this month. [I hear your enthusiastic support already!] Hoping some of you have been able to grab some good viewing across April, but the clouds were simply too competitive in town. I have been able, sporadically, to catch the morning dance of the Jupiter, Saturn and Mars, but even the highlight of our moon joining that show in the southeastern sky was thwarted two of the three mornings of its closest association. Still, today's predawn sky was quite clear and I was amazed to see how far Mars had wandered from the other two since my last view.

Speaking of the moon: I have succumbed to the "Stay-at-Home" distraction of working a jigsaw puzzle. This one has only 100 large pieces, so I thought it would be a snap, despite its eventual almost three-foot diameter size. The imagery is fantastic as it is composed of detailed NASA photos and, no, I am not looking at the image on the box to guide my way.

One highlight in April: Vahan and I met at the Observatory to check on things since it had been closed up since February. Happy to report there were no signs of rodent visits, even after all that rain. But the best part of all the careful distancing Vahan and I kept from each other was the visit we had after our survey, sitting in the sun outside the Observatory. The visit was medically advisable, as Vitamin D has been shown to fight viruses. Right? Works for me.

Can't say now when we will be okay to gather again. Hopefully June, but we will just have to "wait and see" at this point. I did inform our friend Joe Bassi that the May meeting was cancelled and that we will reschedule with him as soon as possible. Thank you all for your patience with what we must do to protect the well-being of us all.

Skyward,
Tom

Events

May 2 *Star Party at the Observatory. Cancelled / Corona Virus..*



Grrr!

May 6th Eta Aquarids Meteor Shower is an above average shower capable of producing up to 60 meteors per hour at its peak. Most of the activity is seen in the southern hemisphere, in the Northern Hemisphere the activity can reach 30 meteors per hour. It is produced by particles left behind by Comet Halley. The shower radiates from the Constellation of Aquarius but can appear anywhere in the sky.

May 7th Full Moon Super Moon. The Moon will be located on the opposite side of Earth and its face will be fully illuminated. This phase occurs at 10:45 UTC. This Moon was known by early native American tribes as the Full Flower Moon because it was when spring flowers appeared. The Moon will be at its closest approach to Earth and may look larger and brighter than usual.

May 16 *Star Party at the Observatory Cancelled / corona Virus*



Grrr!

May 23 *Star party at the Observatory Cancelled / Corona Virus..*



Grrr!

May 30 *Star party at the Observatory. Cancelled / Corona Virus.*



Grrr!

Solar days



Star party's and Events

April 18th Star Party at the Observatory cancelled due to Corona virus pandemic.



Nuts!

April 25th Star Party at the Observatory same as April 18th above.



Nuts!

Solar Display



Planetarium



May 2020 Moon



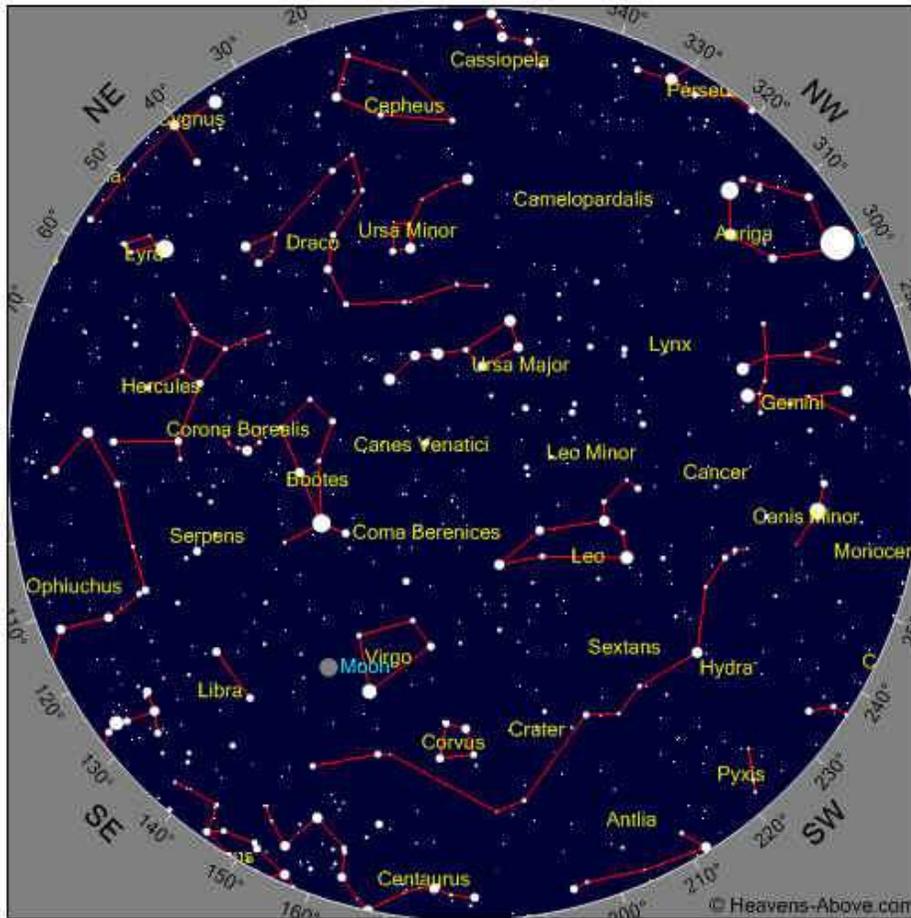
Full 7th, New 22nd, Last Quarter 14th, First Quarter 30th.

Moon Facts and folk lore

The Moon is the fifth largest natural satellite in the Solar System. At 3,475 km in diameter, the Moon is much smaller than the major moons of Jupiter and Saturn. Earth is about 80 times the volume than the Moon, but both are about the same age.

May 2020 Sky

Some Objects of interest, M13, M 57



Time

Year	2020	Month	5	Day	5	Hour	22	Minute	20
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Photo Courtesy of Craig Fair



Messier 20 the Trifid nebula NGC 6514 is located in constellation of Sagittarius and is 5200 light years from Earth. The name means divided in to three lobes. It is an unusual combination of open cluster stars, an emission nebula, and a reflection nebula and a dark nebula that are the gaps between. The apparent gaps within the emission nebula cause the truncated appearance, it is also designated Bernard 85. The nebula is a star forming region in the Scutum spiral arm of the Milky Way. The most massive star that has formed in this region is HD164492A an 07.5lll star with a mass 20 times greater than the Sun. The star is surrounded by a cluster of approximately 3100 young stars. The nebula was the subject of an investigation using the Hubble telescope using filters that isolate emission from hydrogen atoms, ionized sulfur atoms and doubly ionized oxygen atom. The combined images provided a false color composite picture suggesting how the nebula might look to the eye. The dense cloud of gas and dust is full of embryonic stars and is about 8 light years away from the nebula's central star. A jet protrudes from the head of the cloud and is about 0.75 light years long. Jets are the exhaust gasses of star formation and radiation from the nebula's central star makes the jet glow. The images also showed a finger like stalk that points directly toward the star that powers the Trifid nebula.

Image capture was with A Celestron 9.25 inch SCT, CGEM mount, and a Celestron Nightscape 8300 camera. 3 minute exposures: 10 lights 10 darks, and 10 bias files stacked in Celestron Astro FX program with additional processing with Lightroom and Topaz Detail3 & DeNoise.

For What its Worth

Lunar Seas and Lakes. (Latin Translation)

Name	Lat.	Long.	Diam. (km)	Translation
Mare Anguis	22.6N	67.7E	150.0	Serpent Sea
Mare Australe	38.9S	93.0E	603.0	Southern Sea
Mare Cognitum	10.0S	23.1W	376.0	Sea that has become known (Ranger 7 impact site, 31 July 1964)
Mare Crisium	17.0N	59.1E	418.0	Sea of Crises
Mare Fecunditatis	7.8S	51.3E	909.0	Sea of Fecundity
Mare Frigoris	56.0N	1.4E	1596.0	Sea of Cold
Mare Humboldtianum	56.8N	81.5E	273.0	Humboldt's Sea (German naturalist, 1769-1859)
Mare Humorum	24.4S	38.6W	389.0	Sea of Moisture
Mare Imbrium	32.8N	15.6W	1123.0	Sea of Showers
Mare Ingenii	33.7S	163.5E	318.0	Sea of Cleverness
Mare Insularum	7.5N	30.9W	513.0	Sea of Islands
Mare Marginis	13.3N	86.1E	420.0	Sea of the Edge
Mare Moscoviense	27.3N	147.9E	277.0	Sea of Muscovy
Mare Nectaris	15.2S	35.5E	333.0	Sea of Nectar
Mare Nubium	21.3S	16.6W	715.0	Sea of Clouds
Mare Orientale	19.4S	92.8W	327.0	Eastern sea
Oceanus Procellarum	18.4N	57.4W	2568.0	Ocean of Storms
Mare Serenitatis	28.0N	17.5E	707.0	Sea of Serenity
Mare Smythii	1.3N	87.5E	373.0	Smyth's Sea (British astronomer, 1788-1865)
Mare Spumans	1.1N	65.1E	139.0	Foaming Sea
Mare Tranquillitatis	8.5N	31.4E	873.0	Sea of Tranquility
Mare Undarum	6.8N	68.4E	243.0	Sea of Waves
Mare Vaporum	13.3N	3.6E	245.0	Sea of Vapors

Name	Lat.	Long.	Diam. (km)	Translation
Lacus Aestatis	15.0S	69.0W	90.0	Lake of Summer
Lacus Autumni	9.9S	83.9W	183.0	Lake of Autumn
Lacus Bonitatis	23.2N	43.7E	92.0	Lake of Goodness
Lacus Doloris	17.1N	9.0E	110.0	Lake of Sorrow
Lacus Excellentiae	35.4S	44.0W	184.0	Lake of Excellence
Lacus Felicitatis	19.0N	5.0E	90.0	Lake of Happiness
Lacus Gaudii	16.2N	12.6E	113.0	Lake of Joy
Lacus Hiemalis	15.0N	14.0E	50.0	Wintry Lake
Lacus Lenitatis	14.0N	12.0E	80.0	Lake of Softness
Lacus Luxuriae	19.0N	176.0E	50.0	Lake of Luxury
Lacus Mortis	45.0N	27.2E	151.0	Lake of Death
Lacus Oblivionis	21.0S	168.0W	50.0	Lake of Forgetfulness
Lacus Odii	19.0N	7.0E	70.0	Lake of Hatred
Lacus Perseverantiae	8.0N	62.0E	70.0	Lake of Perseverance
Lacus Solitudinis	27.8S	104.3E	139.0	Lake of Solitude
Lacus Somniorum	38.0N	29.2E	384.0	Lake of Dreams
Lacus Spei	43.0N	65.0E	80.0	Lake of Hope
Lacus Temporis	45.9N	58.4E	117.0	Lake of Time
Lacus Timoris	38.8S	27.3W	117.0	Lake of Fear
Lacus Veris	16.5S	86.1W	396.0	Lake of Spring

Astronomy Club Officers



President
Tom Gerald

Vice President &
Treasurer
Jana Hunking

ACL Support Personnel

ACL News letter Editor
Serf / Minion Vahan Yeterian



ACL Webmaster
Serf / Minion David McNally



Club Meeting

Reminder Club meeting May 8th **Cancelled.**

Star Parties (as always weather permitting)

Other Astronomy Club Meetings

Central Coast Astronomical Society

Link to web site...

<http://www.centralcoastastronomy.org/>

Santa Barbara Astronomical Unit

Link to web site...

[http:// www.sbau.org/#AU_EVENTS_Calendar](http://www.sbau.org/#AU_EVENTS_Calendar)

Night Time Bright Objects (no scope required)

The web site link below will take you to some Great Milky Way interactive images and how It was developed. (Type it in the search box.)

<http://skysurvey.org/>

*“Astronomy compels the soul to look upward,
and leads us from this world to another”.*
(Plato)

ACL Club Logo

