

# Wellington Astronomical Society 2019-07 eNewsletter

# Wellington Astronomical Society Inc. email Newsletter for July 2019

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# 1. July 2019 SOCIETY MEETING

The next WAS meeting will be held on Wednesday 3<sup>rd</sup> of July at 7.30 pm at Space Place, Carter Observatory, 40 Salamanca Rd, Kelburn.

This month's meeting will contain the following:

- 1. Night sky in July
- 2. Astronomy News
- 3. Main talk at 8:00 pm



# Apollo Plus 50 - David Maclennan

Fifty years ago Neil Armstrong made that historic "giant leap for humankind" as he stepped onto the lunar surface on July 20, 1969. This presentation outlines what it took to get him there, and looks ahead to NASA's plans to return to the Moon with the Artemis project in the next decade.

David Maclennan's passion for space exploration was ignited by the Apollo Moon landings, and he has been lecturing and writing about space exploration ever since. A founder and former President of the NZ Spaceflight Association, he also edited the Association's journal Liftoff for many years.

This presentation is part of our celebration of International Astronomical Union Centenary Celebrations.

www.iau-100.org/moonlanding-celebrations-launch

#### 2. EVENTS

**Astronomy Night** – **The Stars of Matariki**, Naenae Library, Hillary Court, Naenae, Friday 5<sup>th</sup> July, 6 pm.

As we celebrate Matariki at this time of the year, what do we know about this group of stars? Also called the Pleiades or the Seven Sisters, where do we look for them in the night sky and why do the images of these stars look so beautiful surrounded in a bluish haze? Learn more about what makes them so special to astronomers with Antony Gomez from the Wellington Astronomical Society.

Followed by stargazing with the Wellington Astronomical Society if the sky is clear!

**WAS Astrophotography group / Dark Sky Observing** - Saturday 6<sup>th</sup> July 8.30 pm, Star Field - John Whitby's dark sky site.

Come along to this Astrophotography / Deep Sky event at a dark sky site in the Wairarapa. With no Moon, you will see some amazing dark skies with the Milky Way standing out.

As this is a private property, you will need to register if you want to come along by contacting us through Facebook Messenger or by emailing <a href="mailto:president@was.org.nz">president@was.org.nz</a>. Include your email and mobile phone in the text if you are using Facebook Messenger. Directions to the site and any updates will be emailed out. Preference will be given to members of the Society first. (To join the Society see <a href="https://www.was.org.nz/join-us/">https://www.was.org.nz/join-us/</a>)

What to bring for astrophotography:

- A DSLR or mirrorless camera
- A wide-angle lens (preferably)
- A tripod to fix the camera to
- Warm clothes as it gets pretty cold at night
- Snacks and warm drinks if you want

With people taking photos, keep lights to a minimum (red lights if you can) especially car headlights (use parking lights).

For those just interested in Deep Sky Observing, telescopes will be provided unless you want to bring your own.

For further details or cancellations contact Chris 021 890 222 or Antony 021 253 4979. This event will be updated by the afternoon on the day of the event if the weather forecast is not looking good.

This site is made available free to members of the Wellington Astronomical Society through the generosity of John Whitby from <a href="Star Field Limited">Star Field Limited</a> <a href="https://www.starfield.nz/">https://www.starfield.nz/</a>. Please support John by promoting his site to others.

**Movie Screening – The Dish** - Saturday 20<sup>th</sup> July, 6 pm, Walter Nash Centre, 20/22 Taine St, Taita, Lower Hutt



It's the 50th anniversary of the Apollo 11 moon landing!

The now iconic images of Commander Neil Armstrong and Lunar Module Pilot Buzz Aldrin were beamed around the world by Honeysuckle Creek Station and Parkes Observatory in Australia. Join us to watch a fictionalised account of Parkes Observatory's role in relaying humankind's first steps on the moon on live television. Based on a true story.

This presentation is part of our celebration of International Astronomical Union Centenary Celebrations.

www.iau-100.org/moonlanding-celebrations-launch

Run in conjunction with the Hutt City Libraries.

#### 3. SOCIETY NEWS

**Winter Solstice dinner** 



The Society had its Winter Solstice dinner on the 22<sup>nd</sup> June, the day of the Winter Solstice itself, to celebrate the solstice and the start of Matariki. Close to 40 of us were there celebrating with great company and food. Thanks to all that came and to many that helped clean and tidy up at the end. A great way to celebrate the shortest day and the start of the journey back into summer.

#### **Matariki Celebrations**



We are having a very busy time with the many Matariki celebrations taking place in the region. We have been to numerous schools, scouts, Zealandia, the Wainuiomata Recreation Area and Mount Victoria for a Dawn Viewing ceremony organised by Space Place. Over a hundred people booked for each of the events at Zealandia and the Wainuiomata Recreation Area organised by Greater Wellington. There were some stunningly clear nights

where we were able to show many of the school children Jupiter and Saturn through the telescopes and a couple of cloudy events where we caught glimpses of the Moon and planets. And we even got served a hangi at some schools. It may seem a lot of time and effort but it doesn't beat the joy and excitement of seeing children and adults observing the Moon, Jupiter and Saturn for the first time through a telescope.

## **New WAS Flag**



WAS has a new flag to promote our Society at our outreach events. We have already made use of it during the weekend at Zealandia, Mt Victoria and at the Wainuiomata Recreation Area. A special thanks to Gaby's sister Sylvia Perez for designing the flag at no cost to the Society.

# Wellington Astronomical Society Research Astronomy Group (WAS RAG)

New members of WAS (or perhaps even not-so-new members) may not be aware that we also run another group meeting once per month for members interested in doing research observations and analysis. This group is called WAS RAG (Wellington Astronomical Society Research Astronomy Group). Our current interests include occultations and variable stars, in particular eclipsing binary stars.

If you're interested in joining the group, please contact Roland Idaczyk (<a href="mailto:roland@cno.org.nz">roland@cno.org.nz</a>) to be added to our mailing list and come along to our next meeting. All our meetings are held the week after the Society's general

meeting, i.e. on the second Wednesday of the month. This means the next meeting will be on Wednesday 10th July.

The meeting runs from 5:30pm to 7:30pm and held at my workplace. This is WSP-Opus Research, at 33 The Esplanade in Petone. The map shows how you can get to it travelling either from Wellington (come along the Esplanade) or from Lower Hutt (come along Hutt Road). There are five visitor car parks (not surprisingly, labelled 'Opus visitors'), which will probably be free at that time of the day. Alternatively, you can park nearby on either the Esplanade or on Hutt Road.

The outside sliding doors are locked after 5pm so I'll be at reception between 5:00pm to 5:30pm to let everyone in. If you arrive outside these times, ring me on (4) 5870612 and I'll let you in.

When you arrive, for health & safety reasons, you need to sign-in. This is done using the large touch-screen at reception. The sign-in process includes a safety induction. I'll also run through that again before we begin the meeting. See you then - Murray Forbes.



(For a bigger version of the map please follow this link).

# \*ASTRONZ

It is coming up to the best time of the year for stargazing and astrophotography, with Jupiter, Saturn and the Milky Way rising high in the sky. So if you are interested in purchasing a telescope, binoculars or other astronomical items from ASTRONZ <a href="https://www.astronz.nz">www.astronz.nz</a>, please indicate in the Order Notes that you were referred by the Wellington Astronomical Society (WAS). WAS will then receive a commission on your purchase. ASTRONZ has charitable status and returns its profits back to astronomy in NZ

#### **ASTRONZ Binoculars for Sale**

WAS, in conjunction with ASTRONZ, has more pairs of 10x50 binoculars available at a reduced price to members. Binoculars are available for \$80

each (usually sell for \$99 excluding freight). Please email Antony Gomez, <a href="mailto:president@was.org.nz">president@was.org.nz</a>, if you would like to buy a pair.

If you spend more than \$500, you will in return receive from WAS a free ordinary membership to the Society for the following year. And if you bring your telescope or binoculars to one of our Observing evenings, we can show you how to get the best out of it and help you locate some of the spectacular objects in the night sky. If you have any questions, you can send us a message

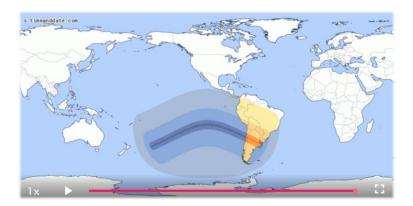


Wellington Astronomical Society is also now on Instagram, search was.nz in the Instagram Hashtags directory to find us. It would be great if members had photos or things they would like to share on this platform. Please email <a href="mailto:info@was.org.nz">info@was.org.nz</a> with photos.

#### 4. ASTRONOMY NEWS

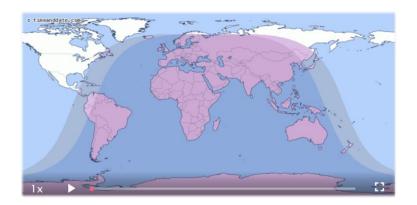
# Solar Eclipse 2 - July 2019

We will not be able to see it here in New Zealand but if you are interested in knowing more you can check this out <a href="https://www.timeanddate.com/eclipse/solar/2019-july-2">www.timeanddate.com/eclipse/solar/2019-july-2</a>



## Partial Lunar Eclipse – 17 July 2019

Again, we will not be able to see this as the main event happens after the Moon sets. More details are available at www.timeanddate.com/eclipse/lunar/2019-july-16



# Celebrating Apollo's 50th Anniversary



On 20 July 1969, a historical milestone took place: Neil Armstrong became the first person to set foot on the Moon. This event became the most watched TV programme up to that date, with over 500 million viewers worldwide, and has since had lasting impression in popular culture, including reference and portrayal in film, television, video games, folklore, literature and more.

This moment was integral and influential for astronomy and space travel research, as it allowed for the conception and development of more human spaceflight missions. IAU100 will be celebrating this important milestone in July 2019. We invite everyone to celebrate the milestone on and around 20 July 2019 by organising activities related to the moon, and IAU100 will aim to emphasise lunar science and the involvement of amateur astronomers by encouraging the organisation of large lunar observations in city centres and public places. More details at <a href="https://www.iau-100.org/moonlanding-celebrations-launch">www.iau-100.org/moonlanding-celebrations-launch</a>

Other up to date Astronomy News and Society events is available on the Society's Facebook page: Wellington Astronomical Society.

#### 5. NIGHT SKY FOR JULY 2019

The Night Sky for July 2019 courtesy of the University of Canterbury.



## NASA Night Sky Notes July 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 <a href="mailto:nightsky.jpl.nasa.org">nightsky.jpl.nasa.org</a> to find local clubs, events, and more!

## Observe the Moon and Beyond: Apollo 11 at 50 - David Prosper

**Saturn** is at opposition this month, beckoning to future explorers with its beautiful rings and varied, mysterious moons. The **Moon** prominently passes Saturn mid-month, just in time for the 50<sup>th</sup> anniversary of **Apollo 11**!

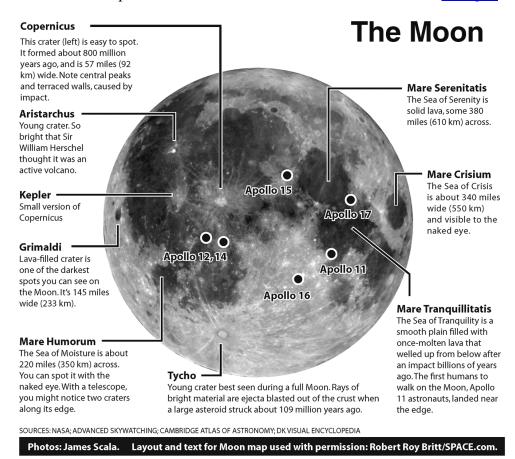
**Saturn** is in opposition on July 9, rising in the east as the Sun sets in the west. It is visible all night, hovering right above the teapot of Sagittarius. Saturn is not nearly as bright as Jupiter, nearby and close to Scorpius, but both giant planets are easily the brightest objects in their constellations, making them easy to identify. A full **Moon** scrapes by the ringed planet late in the evening of the 15<sup>th</sup> through the early morning of the 16<sup>th</sup>. Some observers in South America will even see the Moon occult, or pass in front of, Saturn. Observe how fast the Moon moves in relation to Saturn throughout the night by recording their positions every half hour or so via sketches or photos.

While observing the Saturn-Moon celestial dance the early morning of the 16<sup>th</sup>, you can also contemplate the 50<sup>th</sup> anniversary of the launch of the **Apollo 11** mission! On June 16, 1969, Apollo 11 blasted off from Cape Canaveral in Florida on a journey of almost a quarter million miles to our nearest celestial neighbor, a mission made possible by the tremendous power of the Saturn V rocket – still the most powerful rocket ever launched. Just a few days later, on July 20, 1969 at 10:56 pm EDT, Neil Armstrong and Buzz Aldrin set foot on the lunar surface and became the first people in history to walk on another world. The astronauts set up equipment including a solar wind sampler, laser ranging retroreflector, and seismometer, and gathered up almost 22 kilograms (48 pounds) of precious lunar rocks and soil samples.

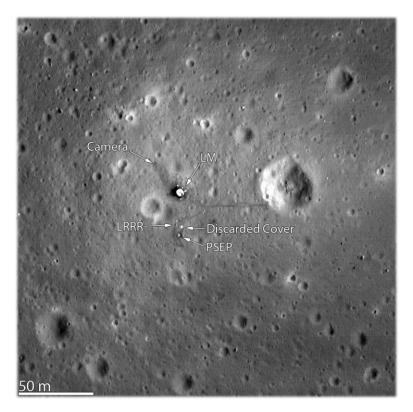
After spending less than a day on the Moon's surface, the duo blasted off and returned to the orbiting Columbia Command Module, piloted by Michael Collins. Just a few days later, on July 24, all three astronauts splashed down safely in the Pacific Ocean. You can follow the timeline of the Apollo 11 mission in greater detail at <a href="https://bit.ly/TimelineApollo11">bit.ly/TimelineApollo11</a> and dig deep into mission history and science on NASA's Apollo History Site: bit.ly/ApolloNASA.

Have you ever wanted to see the flag on the Moon left behind by the Apollo astronauts? While no telescope on Earth is powerful enough to see any items left behind the landing sites, you can discover how much you **can** observe with **the Flag on the Moon** handout: bit.ly/MoonFlag

You can catch up on all of NASA's current and future missions at nasa.gov



Caption: Observe the larger details on the Moon with help from this map, which also pinpoints the Apollo landing site. Full handout available at <a href="https://bit.ly/MoonHandout">bit.ly/MoonHandout</a>



Caption: Earth-based telescopes can't see any equipment left behind at the Apollo 11 landing site, but the cameras onboard NASA's Lunar Reconnaissance Orbiter (LRO) can. This is Tranquility Base as seen from the LRO, just 24 kilometers (15 miles) above the Moon's surface, with helpful labels added by the imaging team. Image Credit: NASA Goddard/Arizona State University. See more landing sites at: bit.ly/ApolloLRO

#### 6. CONTACTS

The following members were elected to Council at the Nov 2018 AGM

President: Antony Gomez (president@was.org.nz) - 021 253 4979

Vice President: Andrew Fuller (vice-president@was.org.nz)

Secretary: Matt Boucher (<a href="mailto:secretary@was.org.nz">secretary@was.org.nz</a>)
Treasurer: Duncan Hall (<a href="mailto:treasurer@was.org.nz">treasurer@was.org.nz</a>)

Membership Secretary: Shazia Gazi (<a href="membership@was.org.nz">membership@was.org.nz</a>)

 $Newsletter\ Editor:\ Antony\ Gomez\ (\underline{editor@was.org.nz})$ 

Website: Peter Woods (webmaster@was.org.nz)

Telescope custodian: Chris Monigatti

Research Group coordinator: Roland Idaczyk

Council: Shazia Gazi, Peter Woods, Chris Monigatti, Roland Idaczyk, Murray Forbes, John Homes, Becky Bateman, Gaby Perez, Lee Mauger

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Wellington 6140, New Zealand

Website: <a href="www.was.org.nz">www.was.org.nz</a>

Instagram: was.nz

Facebook page: Wellington Astronomical Society.

Facebook group: <u>WAS – Wellington Astronomical Society</u> (for members) Facebook Astrophotography group: <u>WAS Astrophotography Group</u> (for

members)