CADAS Astronomy News

**March Night Sky 2018**

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| **Sunrise** | **Sunset** | **Mercury Sets** | **Venus Sets** |
| 1st – 6:56am  5th – 6:47am  10th – 6:36am  15th – 6:25am  20th – 6:14am  25th – 7:03am  30th – 6:52am | 1st – 5:52pm  5th – 5:59pm  10th – 6:07pm  15th – 6:15pm  20th – 6:24pm  25th – 7:32pm  30th – 7:40pm | 1st – 6:43pm  5th – 7:10pm  10th – 7:40pm  15th – 7:59pm  20th – 8:00pm  25th – 8:40pm  30th – 8:03pm | 1st – 6:51pm  5th – 7:03pm  10th – 7:19pm  15th – 7:35pm  20th – 7:51pm  25th – 9:06pm  30th – 9:22pm |
| **Moon Rise** | **Moon Set** | **Moon Rise** | **Moon Set** |
| - - - - - - -  1st – 5:17pm  2nd – 6:35pm **(Full)**  3rd – 7:51pm  4th – 9:05pm  5th – 10:16pm  6th – 11:24pm  8th – 12:30am  9th – 1:32am **(LQ)**  10th – 2:29am  11th – 3:21am  12th – 4:07am  13th – 4:46am  14th – 5:20am  15th – 5:50am  16th – 6:17am  17th – 6:41am **(New)**  18th – 7:05am | 1st – 6:50am  2nd – 7:21am **(Full)**  3rd – 7:48am  4th – 8:13am  5th – 8:38am  6th – 9:03am  7th – 9:30am  8th – 10:00am  9th – 10:35am **(LQ)**  10th – 11:15am  11th – 12:01pm  12th – 12:54pm  13th – 1:51pm  14th – 2:53pm  15th – 3:59pm  16th – 5:07pm  17th – 6:16pm **(New)**  18th – 7:27pm | 19th – 7:28am  20th – 7:54am  21st – 8:22am  22nd – 8:54am  23rd – 9:34am  24th – 10:22am **(FQ)**  25th – 12:19pm  26th – 1:25pm  27th – 2:38pm  28th – 3:54pm  29th – 5:11pm  30th - 6:27pm  31st - 7:42pm **(Full)**  **Clocks + 1Hr**  **on the night of**  **24th March** | 19th – 8:40pm  20th – 9:53pm  21st – 11:07pm  23rd – 12:20am  24th – 1:29am **(FQ)**  25th – 3:32am  26th – 4:26am  27th – 5:11am  28th – 5:49am  29th – 6:20am  30th - 6:48am  31st – 7:13am **(Full)**  - - - - - - -  **All times in notes**  **are set for**  **Somerton,**  **unless stated.** |
| A useful site: [www.heavens-above.com](http://www.heavens-above.com/) | A S Zielonka |  |  |

There is a scheduled launch soon after **midnight\*** on the **28th February\*** of an **Atlas V**rocket from **Cape Canaveral, Florida**. It will be the second satellite in a series of next-generation **NOAA** **Geostationary Operational Environmental Satellites (GOES)**.

There is a planned launch sometime this month from the **Baikonur Cosmodrome** in **Kazakhstan** of the **Russian Soyuz MS-08**spacecraft. It will carry the new **'Expedition 55'** crew members to the **International Space Station (ISS)**. They are **NASA** astronauts **A J (Drew) Feustal** and **Ricky Arnold** and of the Russian space agency Roscosmos, **Oleg Artemyev**. (See below for details)

An **Occultation of Regulus** by the **Moon**occurs on the morning of the **1st**. It will disappear behind the **Moon** at approximately **6:09:58am**(as set from **Yeovilton**). The **Moon** will be setting at**6:50am** as the **Sun** rises at **6:56am**. By **9:00pm** the **Moon** will be **11 degrees** from **Regulus**.

In the west at **9:00pm** from the **1st - 3rd**, **Comet C/2016 R2 Panstarrs** will be **2 – 2 ½ degrees** to the left of the **2.84 magnitude** star **Zeta Persei** in the constellation of the **Perseids**. Its last observed magnitude was **11.5**(Feb 12th). It will be at perihelion in early May. For further information please see **'Comets'** and **'Constellations'**in the website above.

In the south between **5:00 – 6:00am** from the **1st - 4th**, **Comet 24P Schaumasse** will be **1½ - 2 degrees** below the **2.5 magnitude** star **Zeta Ophiuchi** in the constellation of **Ophiuchus**. Its last known magnitude was **12** (Feb 12th). For further information please see **'Comets'** and **'Constellations'**in the website above.

**Mercury**will be no more than **4 degrees** away from **Venus** during the first three weeks of **March**.They will be low in the west from **6:45pm** at the start of the month. You will be have to be very unlucky not to see **Mercury** this period. From the **1st - 6th** they will be no more than **2 degrees** apart. On the **4th** they will be at their closest at just **1 degree**. For further information please see **'Sky Chart'**in the website above.

Low in the east between **5:00 – 6:00pm** from the **2nd - 4th**, **Comet C/2017 T1 Heinze** will be **2 – 2½ degrees** from the **2.38 magnitude**star **Enif** in the constellation of **Pegasus**. Its last known magnitude was**9** (Feb 12th). For further information please see **'Comets'** and **'Constellations'**in the website above.

At **11:00pm** on the night **3rd**, the **2.74 magnitude** star **Porrima** in the constellation of **Virgo** will be **1½ degrees** below the **Moon**. At midnight they will be just **1 degree** apart.

**Neptune** is at superior conjunction with the **Sun** on the **4th**.

On the **4th** at **11:00pm** the **Moon** will be in between the bright stars **Spica** (1st Magnitude) and **Zeta Virginis** (3.38 magnitude) in the constellation of **Virgo**.

On the night of the **5th** at **12:20am**, **Jupiter** will be just **1 degree** above the **ESE** horizon with the **Moon 18 degrees** to the upper right of it.

On the night of the **6th**at **12:20am**, **Jupiter** will be just **2 degrees** above the **ESE** horizon with the **Moon 6 degrees** above it.

At **12:45am** on the night of the **7th** the **Moon** will be just above the **ESE** horizon with **Jupiter** **11 degrees** to the upper right of it.

On the **8th** around **6:00am** looking southwards you will see in a staggered line, **Saturn**, **Mars**, **Moon**and **Jupiter** between the **SSE** and the **SSW**.

At **5:45am**on the **9th**, **Mars** will be **11 degrees** to the lower left of the **Moon**.

**Mercury** is at perihelion (closest to the Sun in its orbit) on the **10th**.

The **Moon** on the **10th** at **5:30am**will be in the **SSE** with **Saturn**, **10 degrees** to the lower left and **Mars**, **3½ degrees** to the lower right of it.

At **5:30am** on the **11th**, **Saturn** will be just **2½ degrees** to the right of the crescent **Moon**.

On the **12th** at **5:10am** the crescent **Moon** will be due south east with **Saturn**, **15½ degrees** to the upper right of it.

**Comet C/2016 N6 Panstarrs** is at it closest to **Earth** during **11th** and **12th** when it will be in the constellation of **Camelopardalis** and 2.601AU from us. Its last observable magnitude was 13 (12th Feb) It reaches perihelion this July. For further information please see **'Comets'** and **'Constellations'**in the website above.

At **6:00am** on the **13th** the thin crescent **Moon** will be due south east.

**Comet 62P Tsuchinshan**will be in the constellation of **Virgo** this month. It will be at its closest to earth from **14th - 19th March** at a distance of **1.025AU**. Its last known observed magnitude was **12**.

On the **14th** very thin crescent **Moon** will be just above the **ESE** horizon from **5:30pm**.

**Mercury** is at maximum eastern elongation from the **Sun** on the **15th**.

There is a scheduled launch on the **18th**\* from **Vandenberg Air Force Base**, **California** of a **SpaceX Falcon 9** rocket. Its payload are ten **Iridium-NEXT** mobile communications satellites which will be put into Low Earth Orbit in the continued effort to replace the entire heritage Iridium constellation with upgraded satellites supporting global communications, aeronautical monitoring and ship tracking.

From **6:50pm**on the **18th** and low in the **west**, a very thin crescent **Moon** will be slowly setting with **Venus**, **5 degrees** to the upper right of it, and **Mercury 4 degrees** to the upper right of **Venus**. This will be a very good chance to see the inner planets near the **Moon**.

In the west on the **18th**and **19th** between **9:00pm** and **midnight**, **Comet 185P Petriew** will be just a couple of degrees to the left of the **3.61 magnitude** star **Omicron Tauri** in the constellation of **Taurus**. Its last known observable magnitude was **11.5** (12th Feb).

As the sky darkens around **7:00pm** on the **19th** the thin crescent **Moon** will be less than a degree to the left of the **4.45 magnitude** star **Nu Piscium** in the **Pisces** constellation. (For further information please see**'Constellations'** in the website above).

At **7:00pm** on the **19th**, **Uranus** will be **5½ degrees** to the upper right of the thin crescent **Moon**. **Uranus** will be approximately **1½ degrees** to the right of the **4.2 magnitude** star **Omicron Piscium** in the constellation of **Pisces**. (For further information please see **'Constellations'** in the website above). The **Moon** will also be **12½ degrees** to the upper left of **Venus** which is due west. **Mercury** will be **4 degrees** to the upper right of **Venus**.

There is a scheduled launch aboard a **SpaceX Falcon 9** rocket from **Cape Canaveral, Florida**. The targeted date for launch is the **20th**\*. Its payload is **NASA's** **Transiting Exoplanet Survey Satellite (TESS)**. Its an all-sky survey mission that will discover thousands of exoplanets around nearby bright stars.

On the **20th** from **7:00pm** till when the **Moon** sets it will be in the constellation of **Cetus** between the two **4th magnitude** stars **Mu Ceti**and **Xi Ceti**which are 5 degrees apart. (For further information please see**'Constellations'** in the website above).

The **Pleiades** star cluster will be **13 degrees** above the **Moon** at **7:00pm** on the **21st**.

From **10:00pm** on the on the **22nd** the **Moon**will be **1 degree** or less from **Aldebaran** in **Taurus**. An **Occultation of Aldebaran** by the **Moon** occurs this evening. It disappears behind the **Moon** at **11:40:56pm** (as set from **Yeovilton**) when the **Moon** is just 5 degrees above the **WNW** horizon.

On the **24th** at **10:00pm** the **Moon** will be just **1 degree** to the left of the **4th magnitude** star **Nu Geminorum** in the constellation of **Gemini**. (For further information please see**'Constellations'** in the website above).

From **8:30pm** on the **28th** low in the west there is a very close conjunction between **Venus** and **Uranus**. The star **Omicron Piscium (4.2 magnitude)**in the constellation of **Pisces**will be 1 degree to the left of **Venus**.

The **Moon** will be **4½ degrees** to the lower left of the bright star**Regulus** in the constellation of **Leo** at **9:00pm** on the **28th**. There is also an **Occultation of Regulus** by the **Moon**which will only be seen from parts of **Scandinavia and Russia**.

At **6:00am** on the **31st**, **Saturn** will be just **2 degrees** to the upper left of **Mars** low in the **SSE**.

At **11:00pm** on the **31st** the **Moon** will be **3 degrees** above the **4th magnitude**star **Theta Virginis** in the constellation of **Virgo**.

There are further launches also planned from **Satish Dhawan, India**; **French Guiana**; **Xi Chang, China**.

\* = Dates and times are subject to change.

**Fact**: The **Dominion Astrophysical Observatory** in **Saanich**, **British Columbia**, **Canada** was completed in 1918. The glass mirror, 73 inches in diameter and 12 inches thick, weighed approximately 4,340lbs and was made by the **Saint-Gobain** company in **Antwerp**,**Belgium** and shipped just a week before the start of **World War 1**. It was then ground in the **United States** at the **John A Brashear**company in **Pittsburgh**. The mirror had to be reground twice which added 2 years to the completion time of the telescope. The completed mirror was hauled up **Little Saanich Mountain** by horse and wagon.

N**ews**: The satellite **Hayabusa 2** which was launched in **December 2014** for the asteroid**Ryugu** is expected to arrive at its target in July this year. It will survey the asteroid for 1½ years, then in **December 2019** it will leave for Earth. Operations at the asteroid will be similar to those of the previous **Hayabusa**, but with an explosive device to dig the surface for fresh sample material to bring back to Earth in 2020.

**NASA News**: **Andrew J Feustal** has a Ph.D in the **Geological** sciences, specializing in **Seismology**, and is a veteran of two spaceflights. His first was on the final space shuttle mission to the **Hubble Space Telescope** that improved the observatories capabilities.

**Richard R Arnold** worked in the marine sciences and as a teacher in places like **Morocco, Saudi Arabia** and **Indonesia**. He currently serves as the assistant to the **Chief for EVA and Robotics** in the Astronaut Office

**Oleg Artemyev** was born in **Riga**, present-day **Latvia** in December 1970 and is married to **Malikhova Anna Sergeevna** and they have a son. He was involved in developing testing procedures for **Extra-vehicular Activity (EVA)** equipment in neutral buoyancy at the hydrodynamics laboratory, **Yuri Gagarin Cosmonaut Training Centre**.