

What's on Jun/Jul 2024

by Tony Cook

Night Sky: Late Jun @ 11PM BST

Mercury sets 21:20-22:20BST

Venus sets 21:20-21:50BST

Mars rises 02:50-01:20BST

Jupiter rises 04:00-02:10BST

Saturn rises 01:40-23:30BST

Uranus rises 03:40-01:20BST

Neptune rises 01:50-23:40BST

N.B. the times are for the current NAS meeting until next month's meeting

Useful

http://britastro.org/computing/applets_ecliptic.html

This chart has come from:

<http://astronomynow.com/uk-sky-chart/>

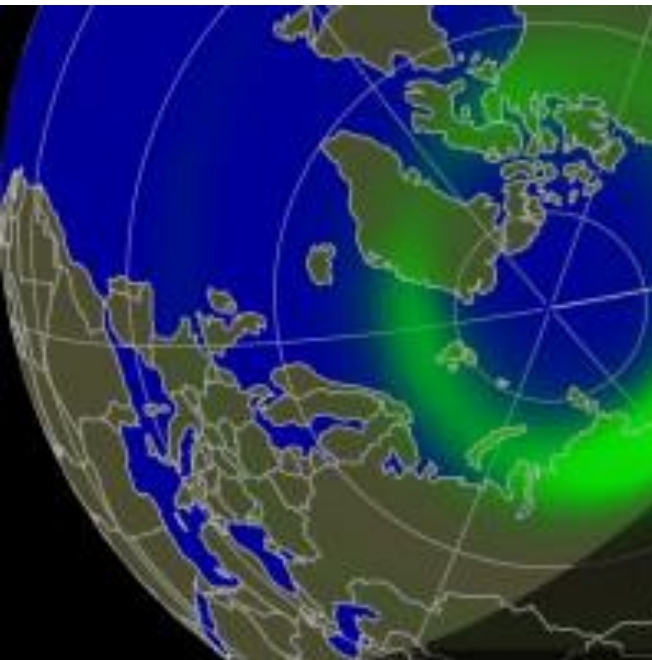
Aurora / Satellites

Aurora: Keep on watching the spaceweather.com web site – and also keep a look out for Noctilucent Clouds – silvery clouds at night on the edge of Space (76-85km)!

See: <http://spaceweather.com>

Satellites: Keep a check on the Heavens Above website (Times are in **GMT**): This tells you when exactly the ISS or other bright space orbiting objects will be passing overhead

<http://www.heavens-above.com/>



Date	Brightness (mag)	Start			Highest point		
		Time	Alt.	Az.	Time	Alt.	Az.
24 Jun	0.0	19:15:22	10°	N	19:17:10	15°	NE
25 Jun	-0.1	19:50:01	10°	NW	19:51:40	28°	WNW
26 Jun	-1.4	18:49:19	10°	NNW	18:52:14	37°	NE
27 Jun	-0.3	19:25:22	10°	W	19:27:55	23°	SW



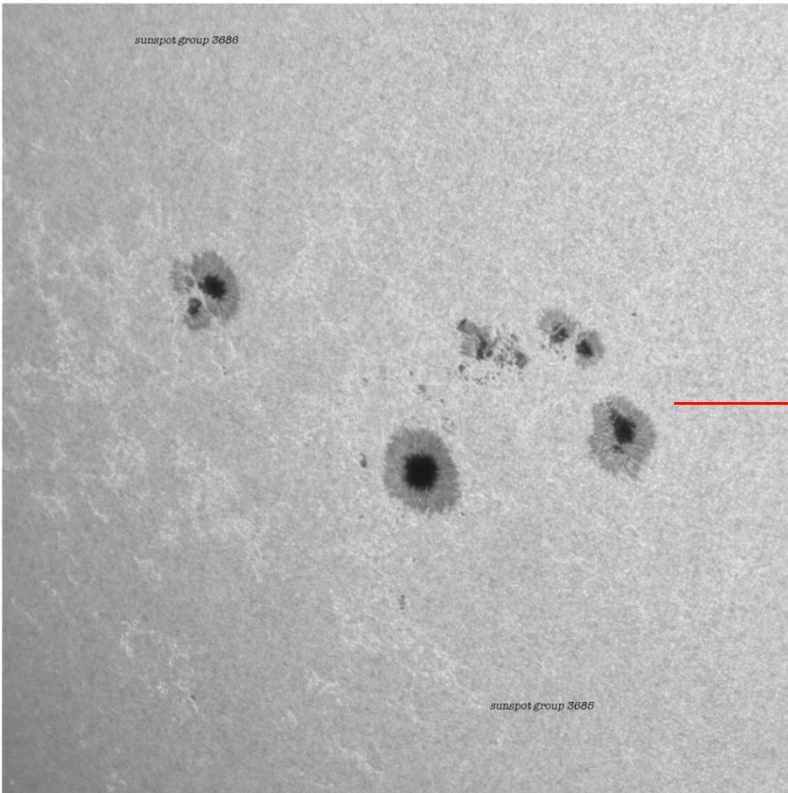
Bill Anders – one of the Apollo 8 behind the iconic moonrise image of the Earth above the Moon ha passed away



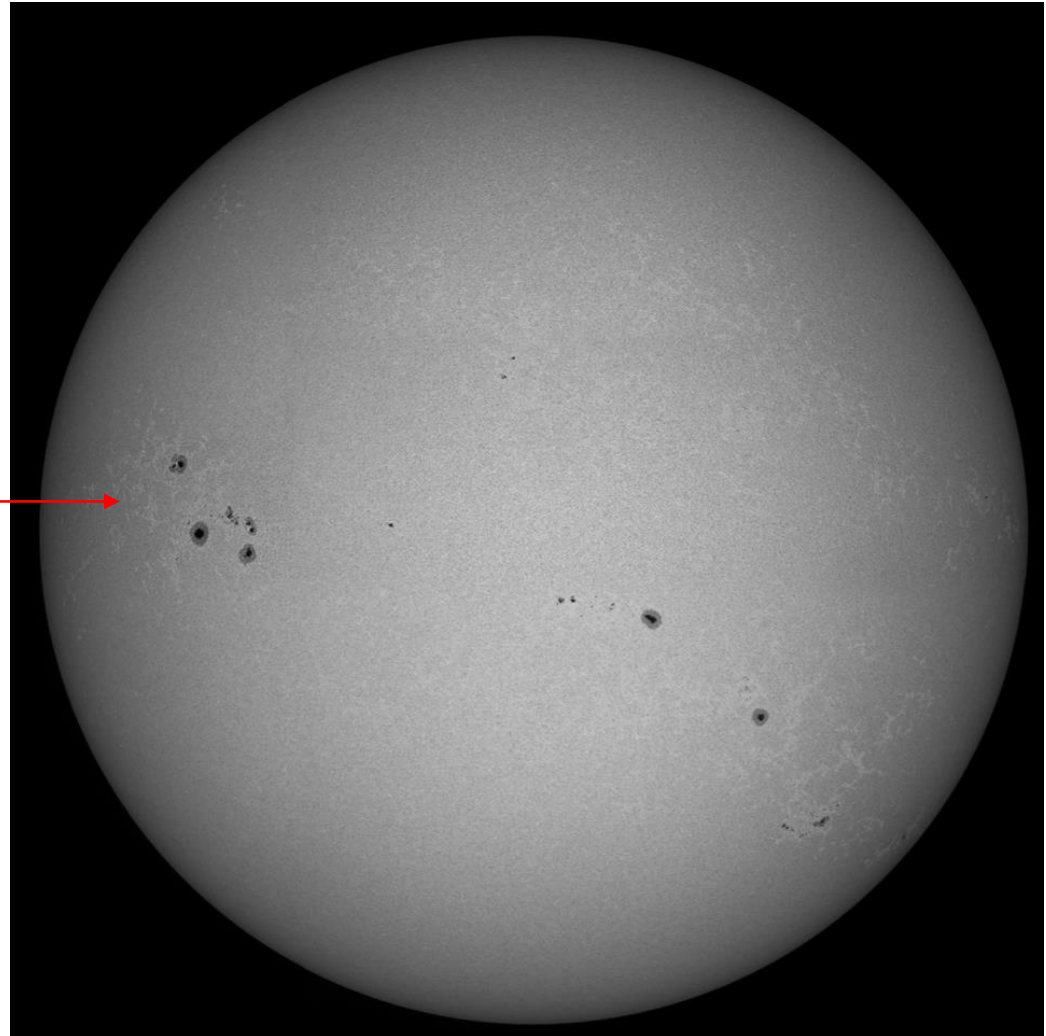
The 90 year old failed to pull up fast enough in his T-34 aircraft after making a loop over the sea

- Sat Jun 8th Virgin Galactic sub-orbital launch(ed) of 4 passengers
- Sun 9th Jun [Birmingham Astro Soc](#) – Solar Observing at New Hall Mill
- Mon Jun 10th 00:00-01:30 Quest NASA's Unexplained Files
- Mon Jun 10th 22:00-22:30 BBC4 Sky at Night: Cosmic Ghosts
- Tue Jun 11th 13:00-14:05 PBS America Asteroid Rush
- Fri Jun 14th First Quarter Moon
- Sat Jun 15th Webb Society Deep Sky Annual Meeting - Cambridge
- Mon Jun 17th Venus near Mercury
- Mon Jun 17th Wolverhampton Astro Soc Free [Lecture](#): Chris Lintott
- Thu Jun 20th (PM) Summer Solstice
- Thu Jun 20th 01:20'ish BST HIP 78650 5th mag star occulted by Moon
- Sat Jun 22nd Full Moon
- Tue Jun 25th Change' 6 soil lunar soil sample lands in Mongolia
- Thu Jun 27th June Bootid meteor shower (?/h) but did 100/h in 1998
- Thu Jun 27th Saturn close to Moon in sky
- Fri Jun 28th Last Quarter Moon
- Fri Jul 5th New Moon
- Tue Jul 9th Ariane 6 launch from French Guyana

Bob and Sophie Stuart Enjoying the Sun



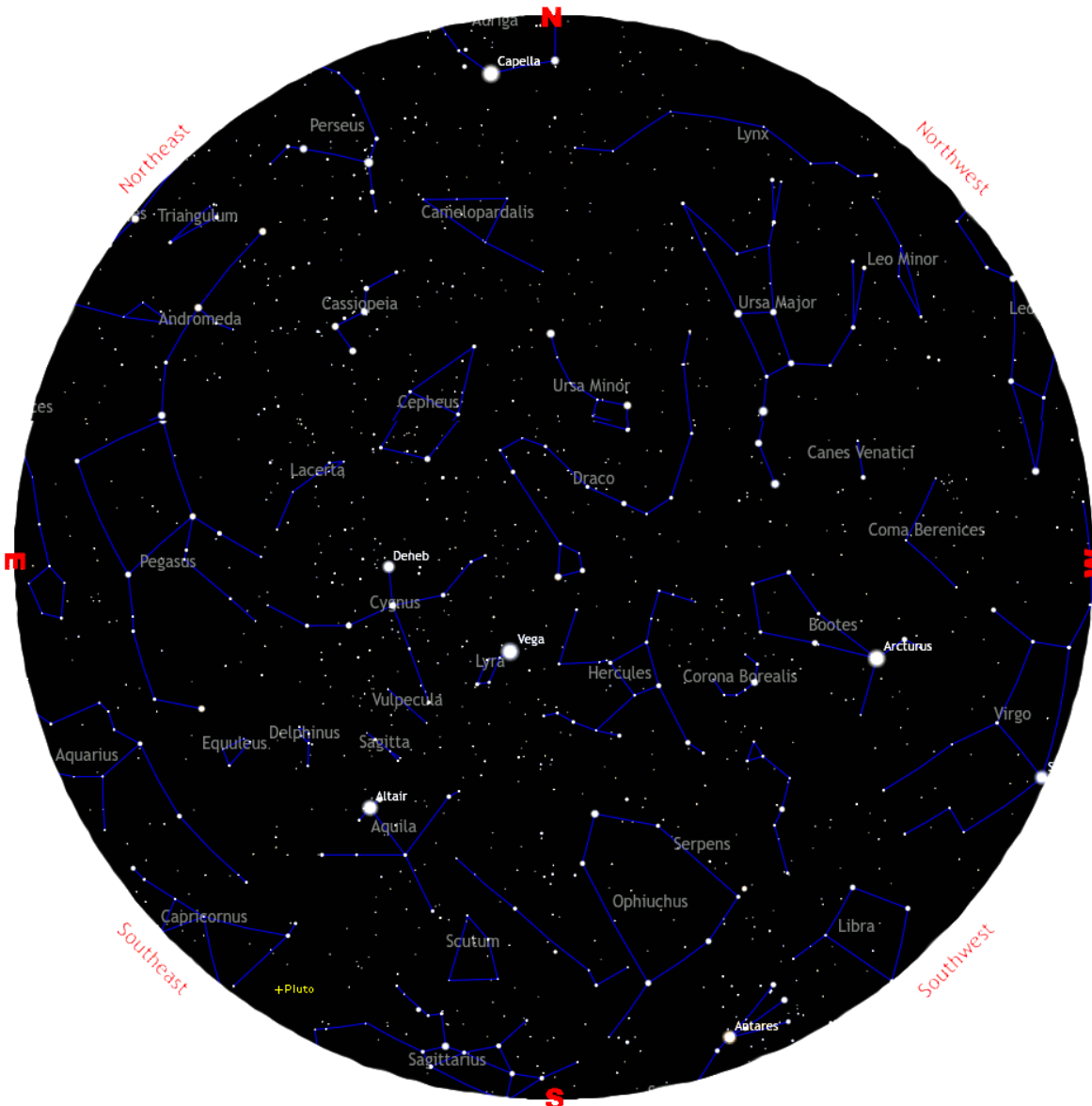
Close Up of Sunspot group
at 11:40UT on 2024 May 19



Sun Montage 19th May 2024

What's on Jul/Aug 2024

by Tony Cook



Night Sky: Late Jul @ 11PM BST

Mercury sets 22:20-20:40BST

Venus sets 21:50-21:20BST

Mars rises 01:20-00:25BST

Jupiter rises 02:10-00:25BST

Saturn rises 23:30-21:30BST

Uranus rises 01:20-23:25BST

Neptune rises 23:40-21:40BST

Useful

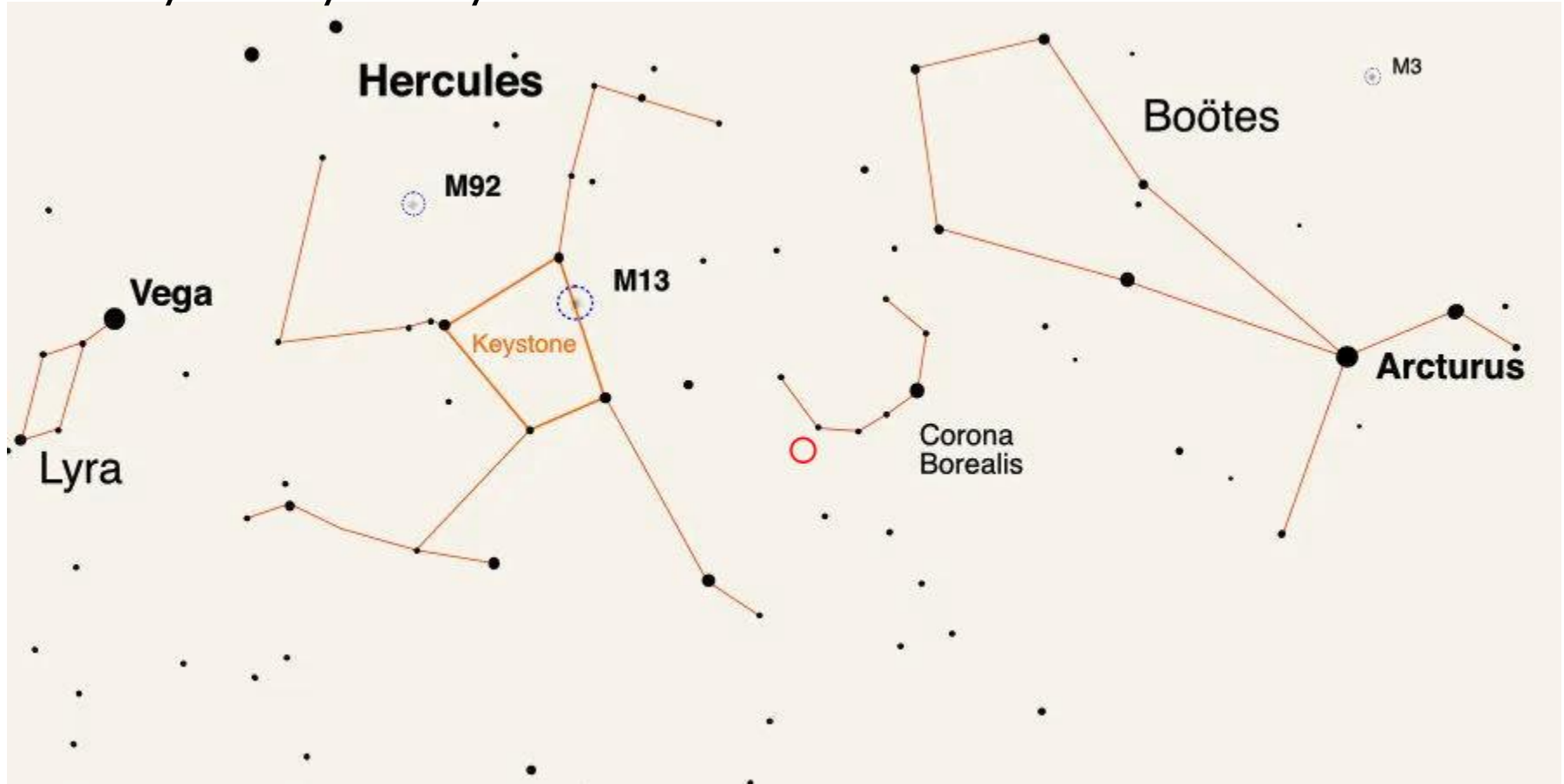
http://britastro.org/computing/applets_ecliptic.html

This chart has come from:

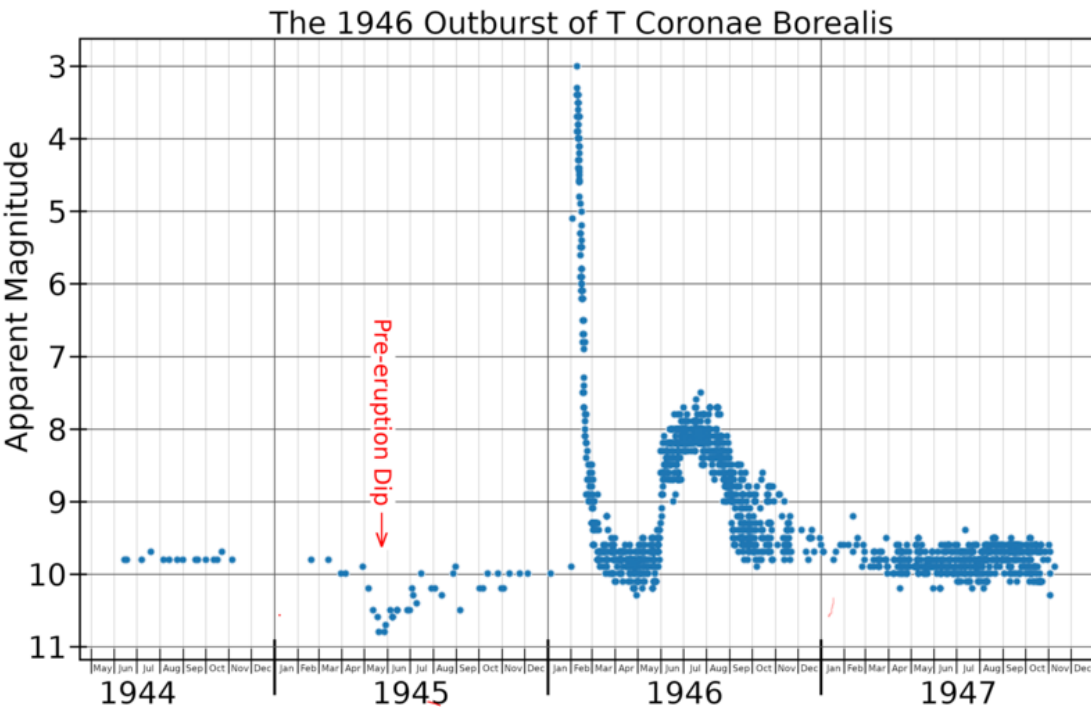
<http://astronomynow.com/uk-sky-chart/>

Solar System Physics
Ffiseg Cysawd yr Haul

Sometime between now and Sep 2024 a variable star called T Corona Borealis will go nova, brightening from 10th mag to visibility with your eyes and it is located here – see red circle.



Finder Chart from [Spaceweather.Com](https://www.spaceweather.com) from 7th June 2024



So do we know this? Last time it did this in 1946 it made a dip the year before. The same dip has been seen now. So time for a new flare up?

From: https://en.wikipedia.org/wiki/T_Coronae_Borealis

Finder Chart from [Spaceweather.Com](https://www.spaceweather.com) from 7th June 2024

Why is it a recurrent nova?

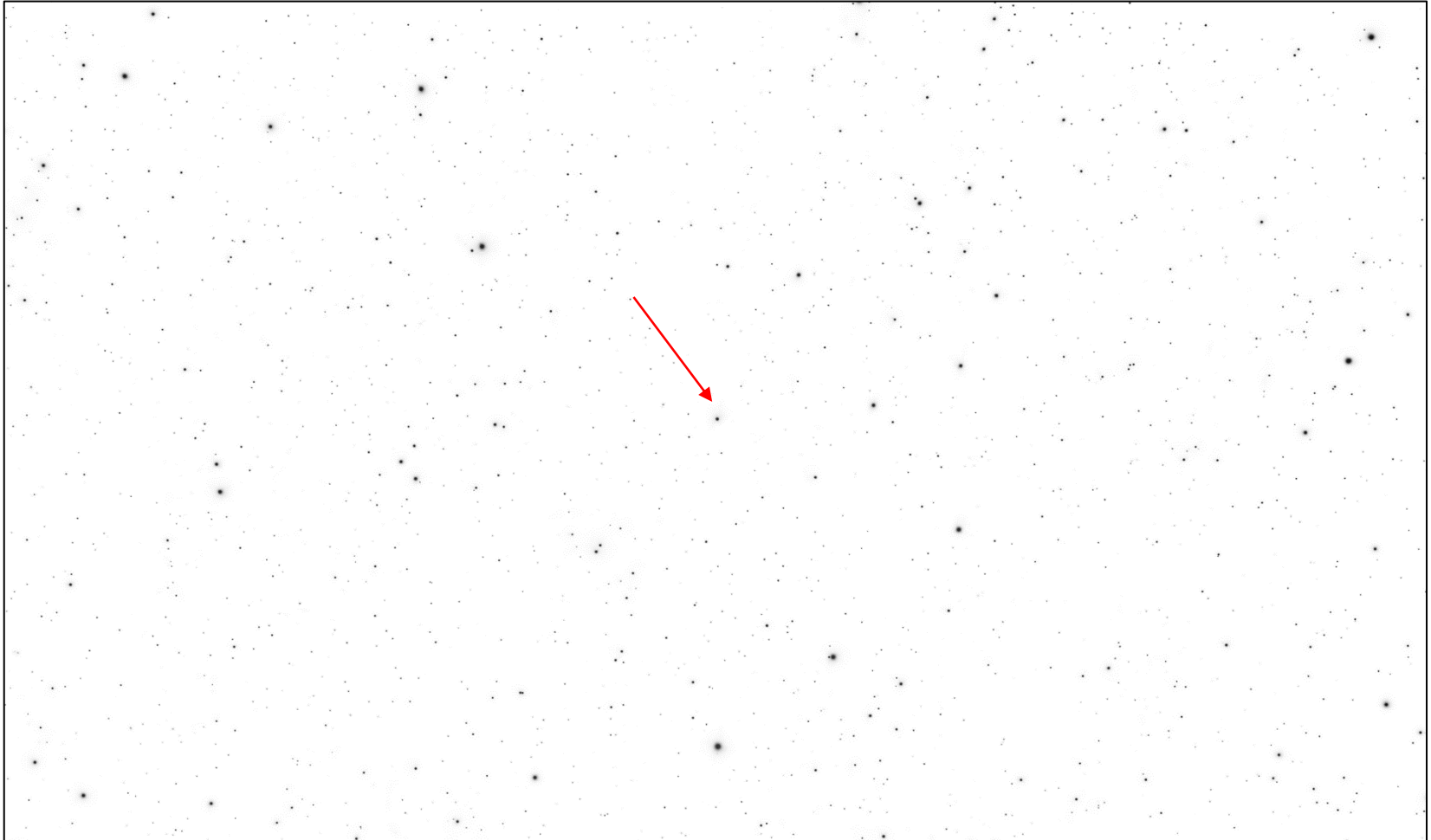


A NASA artist's concept of the T CrB binary star system from [Spaceweather.Com](https://www.spaceweather.com)

- Fortunately it is 3000 light years away
- Consists of a binary system a hot white dwarf and an enveloped cool red giant
- The white dwarf pulls material of the tenuous atmosphere of the red giant into an accretion disk
- Once enough material has fallen onto the white dwarf it reaches a critical mass and partly explodes
- This makes the recurrent nova

From: https://en.wikipedia.org/wiki/T_Coronae_Borealis

Finder Chart from [Spaceweather.Com](https://www.spaceweather.com) from 7th June 2024

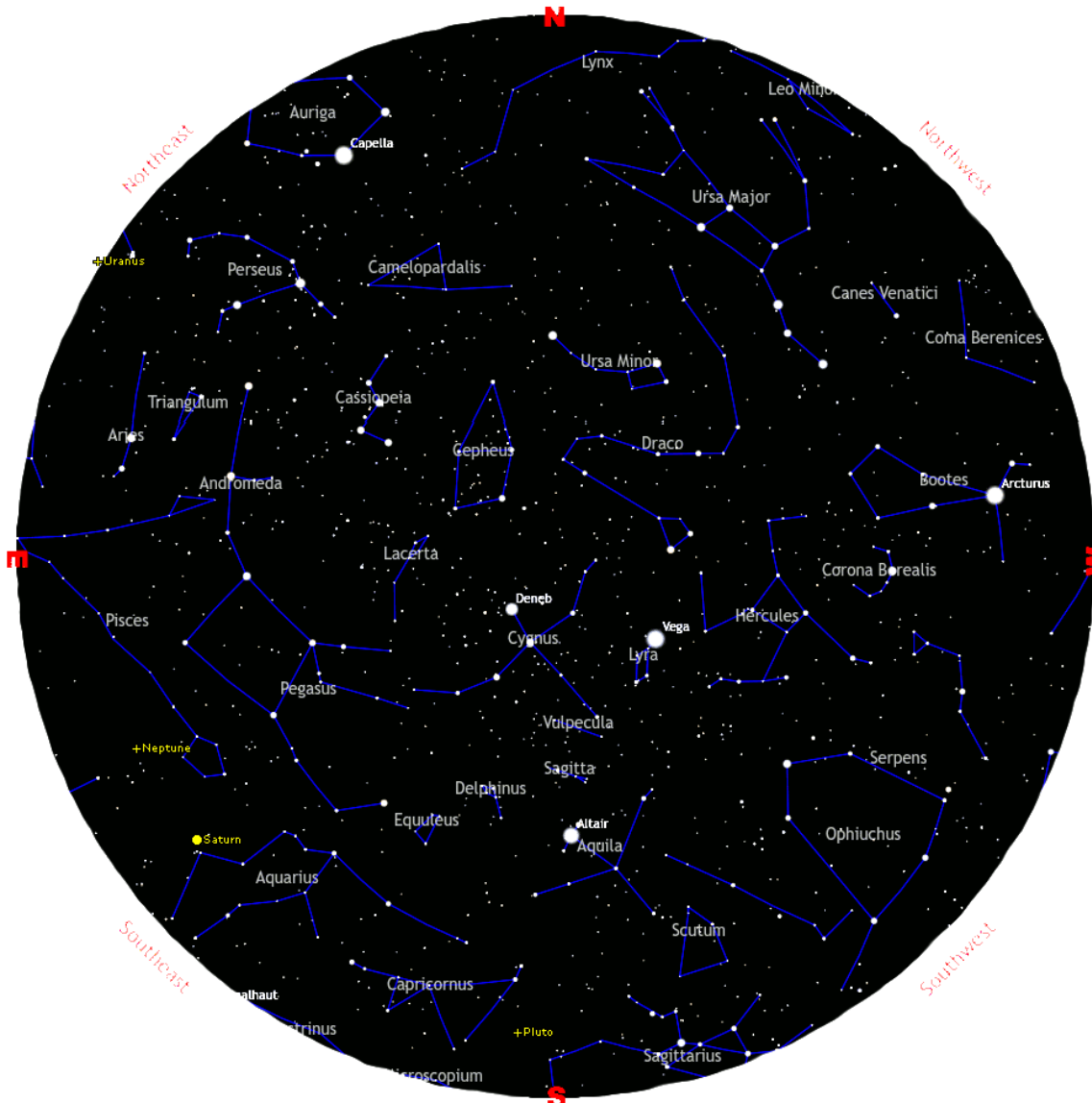


This is a “telescope view” R-Band Image/Finder Chart kindly put together by Jane Clarke

Wed Jul 10th 20:10'ish BST 4th mag Chi Leonis occulted by Moon
Wed Jul 10th 21:21'ish BST Ch Leonis reappears from Moon east limb
Fri Jul 12th Crew Dragon launch to low earth orbit with spaceflight
Fri Jul 13th Lunar First Quarter
Sun-Fri Jul 14-19 National Astronomy Meeting of RAS at Hull Uni
Mon Jul 15th Mars near Uranus in sky
Sat Jul 20th Visit Rhayader Carnival & see NAS display
Sun Jul 21st Full Moon
Mon Jul 22nd Mercury at greatest elongation from Sun in evening sky
Wed Jul 24th Saturn near Moon in Sky
Sat Jul 27th Society for Popular Astronomy Meeting UCL London
Sun Jul 28th Last Quarter
Wed Jul 31st Southern Delta Aquarid meteor shower 20/h in S.hemi.
Thu Aug 1st 01:52'ish 4th mag 136 Tau occulted by Moon
Sun Aug 4th [Birmingham Astrosoc](#) Solar Observing at New Hall Mill
Sun Aug 4th New Moon
Mon Aug 5th Venus near Moon in sky
Sat Aug 10th 03:11 BST asteroid 207 Helda may occult mag 10 star
Thu Aug 12th Perseid Meteor Shower 80 per hour

What's on Aug/Sep 2024

by Tony Cook



Night Sky: Late Aug @ 11PM BST

Mercury rises 05:55-05:00BST

Venus sets 21:20-20:10BST

Mars rises 00:25-23:40BST

Jupiter rises 00:25-22:40BST

Saturn rises 21:30-19:00BST

Uranus rises 23:25-21:10BST

Neptune rises 21:40-19:20BST

Useful

http://britastro.org/computing/applets_ecliptic.html

This chart has come from:

<http://astronomynow.com/uk-sky-chart/>

Starship Test Launch 4 Success



Image: Adam Bernstein/Spaceflight Now



Image: SpaceX

- Blasted off on June 6th. One engine failed but rest worked.
- First stage (bottom two thirds) splashed down in Atlantic
- Steering fins on the Starship almost ripped off by heat of re-entry
- Starship landed vertically in Indian Ocean off coast of Australia then tipped over when engine switched off

Thu Aug 12th First Quarter Moon
Fri Aug 13th 20:51'ish BST 5th mag HIP 79050 occulted by Moon
Sat Aug 14th Mars near Jupiter in sky
Sun Aug 15th 20:50'ish BST W Sgr 5th mag star occulted by Moon
Mon Aug 19th Full Moon
Wed Aug 21st 04:30'ish BST Saturn Occulted by Full Moon on NW limb
Wed Aug 21st 05:10'ish BST Saturn reappears on E limb of Full Moon
Fri Aug 23rd Juice gravity assist from Earth & Moon enroute to Jupiter
Mon Aug 26th Last Quarter Moon
Wed Aug 28th 03:55 BST Lanheisis may occult mag 11 star
Wed Aug 28th New Long March 12 Chinese Rocket launch
Sat Aug 31st Alpha Aurigid Meteor Shower (5/h) -can have outbursts?
Sun Sep 1st Soyuz-2.1b launch to put mice into Van Allen Belt
Tue Sep 3rd New Moon
Thu Sep 5th BepiColumbo gravity assist of Mercury
Thu Sep 5th Mercury at greatest elongation from Sun in morning sky
Thu Sep 5th Venus near Moon in sky
Sun Sep 11th First Quarter Moon
Sun Sep 11th 02:55 BST asteroid Emanuela may occult 12th mag star