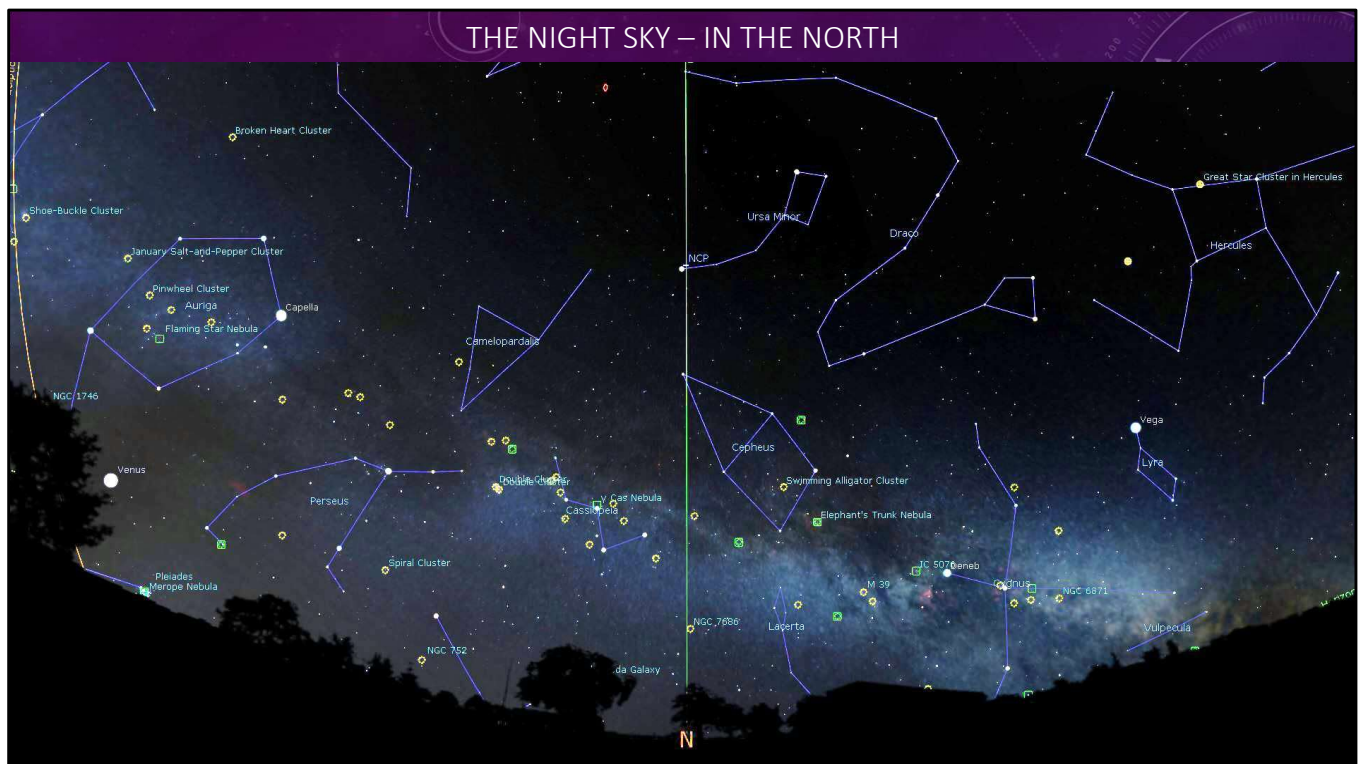


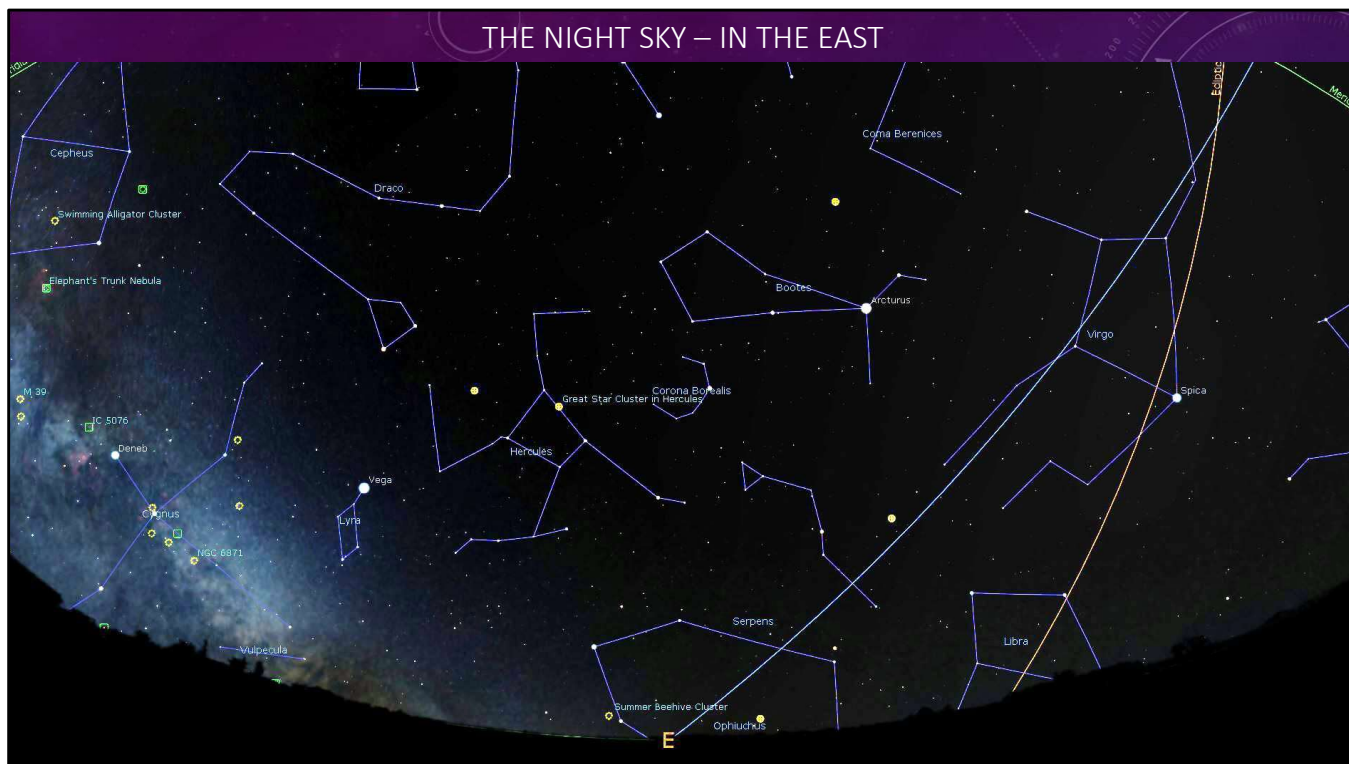
The background of the top section is a deep blue gradient with faint, stylized astronomical charts. These charts include concentric circles, dashed lines, and numerical scales (e.g., 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) that suggest celestial coordinates or orbital paths. The text is overlaid on the right side of this section.

# RUGBY & DISTRICT ASTRONOMICAL SOCIETY

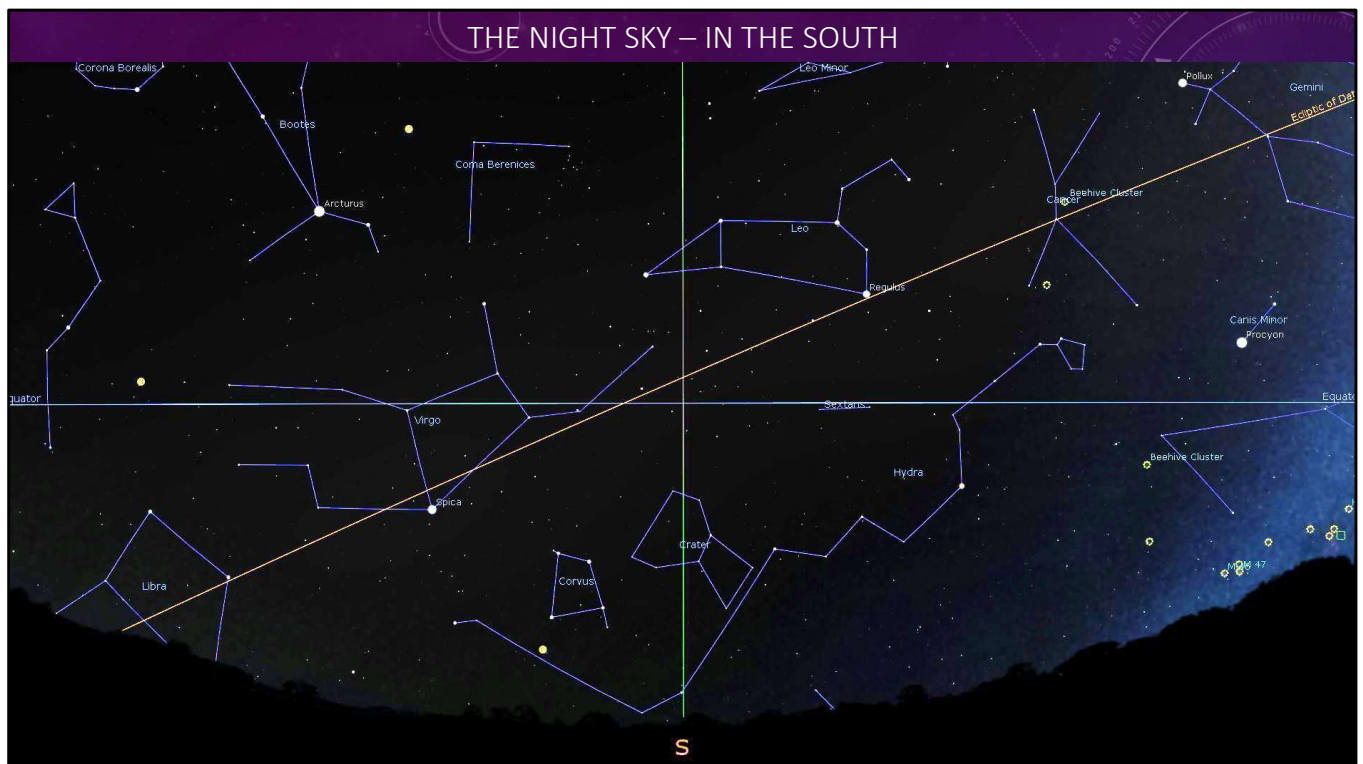
SKY NOTES, APRIL 2020



In the north, the milky way skirts the horizon, with Cepheus immediately above. Cassiopeia is to the west and Ursa Minor and Draco to the east.



In the east, Hercules is prominent along with Boötes and Virgo. Coma Berenices is well risen (lots of galaxies here) and the globular clusters M3, M13 and M92 well placed for observation.

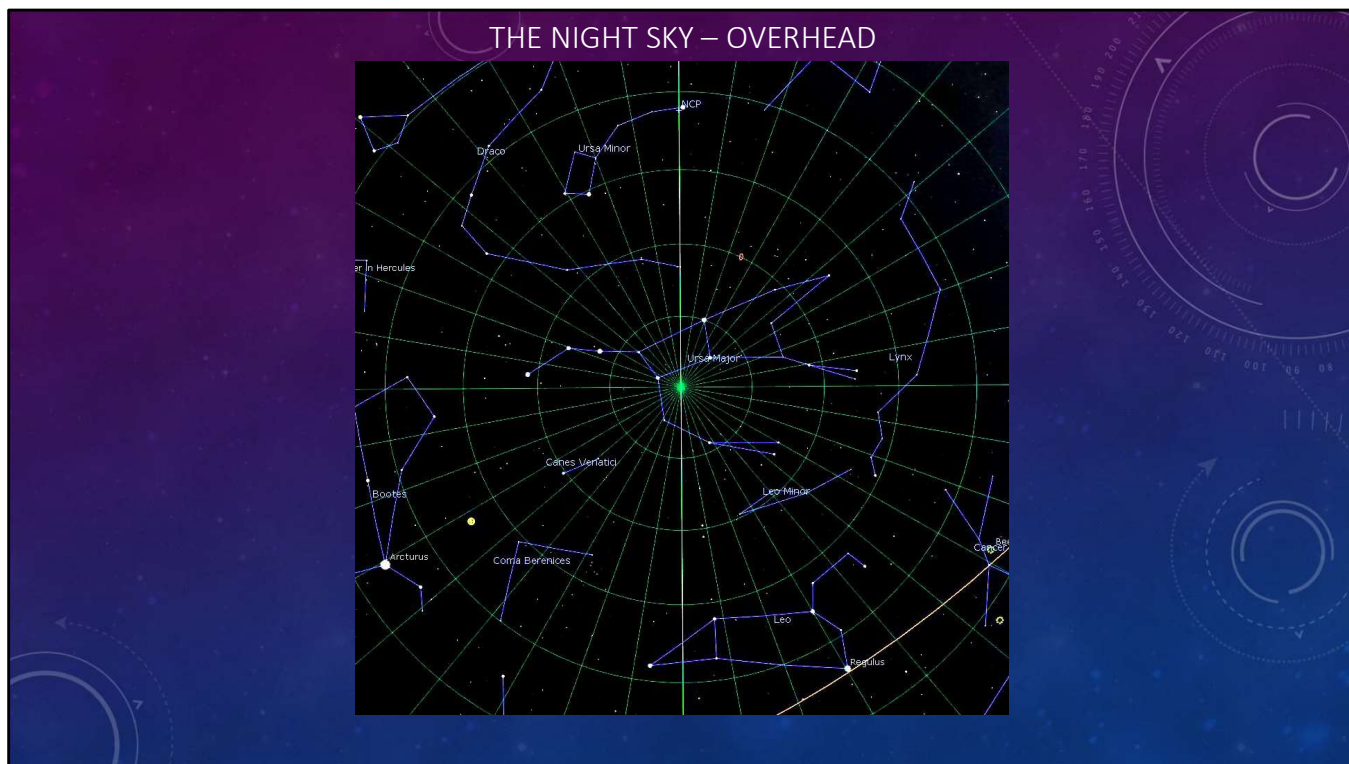


In the south Leo is on the meridian with Virgo to it's left and Cancer to it's right. Below Leo, Hydra, Corvus and Crater occupy the horizon.



In the west Orion has more or less set along with Taurus although these constellations are still well placed earlier in the evening. Auriga is still fairly high in the west as is Perseus. The milky way arcs above this horizon from south to north.





Overhead the zenith is completely surrounded by Ursa Major

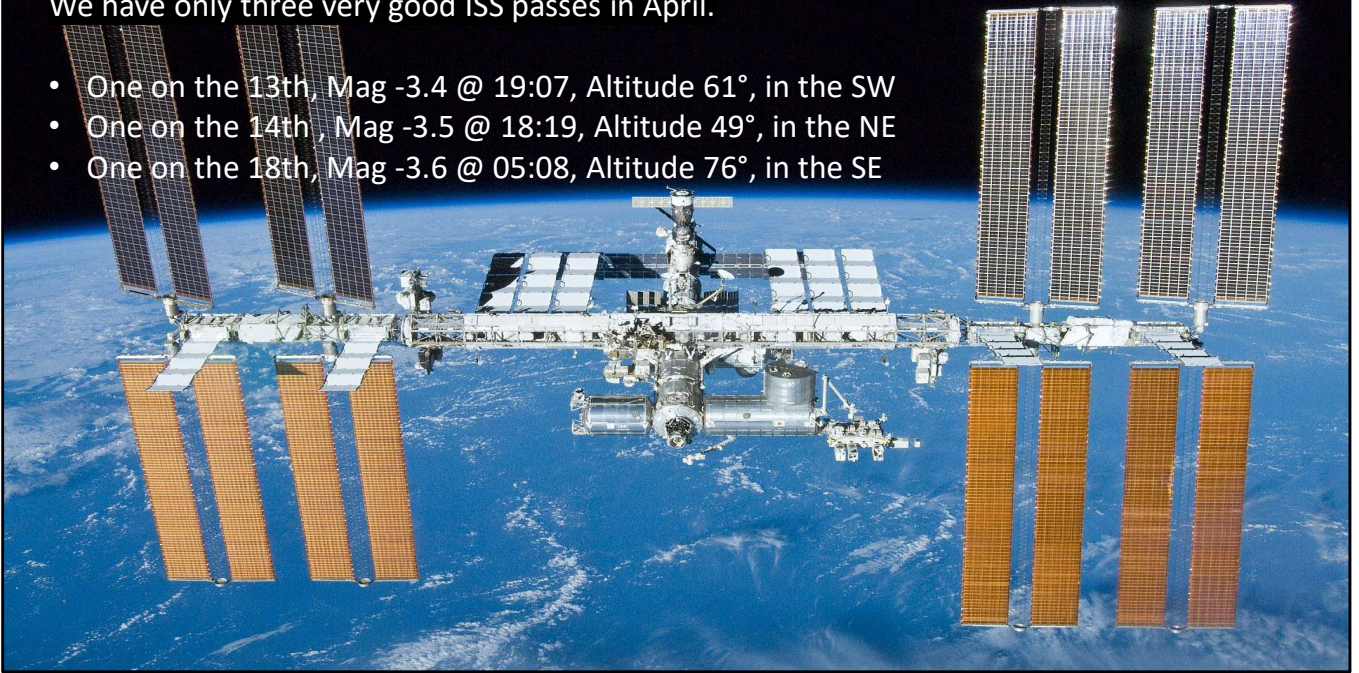
# APRIL'S EVENTS – SUNRISE & SUNSET

2020	Sunrise/Sunset		Astronomical Twilight		Nautical Twilight		Civil Twilight	
Apr	Sunrise	Sunset	Start	End	Start	End	Start	End
1	06:40	19:40	04:39	21:42	05:24	20:56	06:06	20:14
5	06:31	19:46	04:27	21:51	05:14	21:04	05:56	20:22
10	06:20	19:55	04:12	22:04	05:00	21:15	05:44	20:31
15	06:08	20:04	03:56	22:17	04:47	21:26	05:32	20:40
20	05:57	20:13	03:39	22:32	04:34	21:37	05:20	20:50
25	05:47	20:21	03:22	22:48	04:20	21:48	05:09	20:59
30	05:37	20:30	03:03	23:05	04:07	22:00	04:58	21:09

## APRIL'S EVENTS – ISS

We have only three very good ISS passes in April.

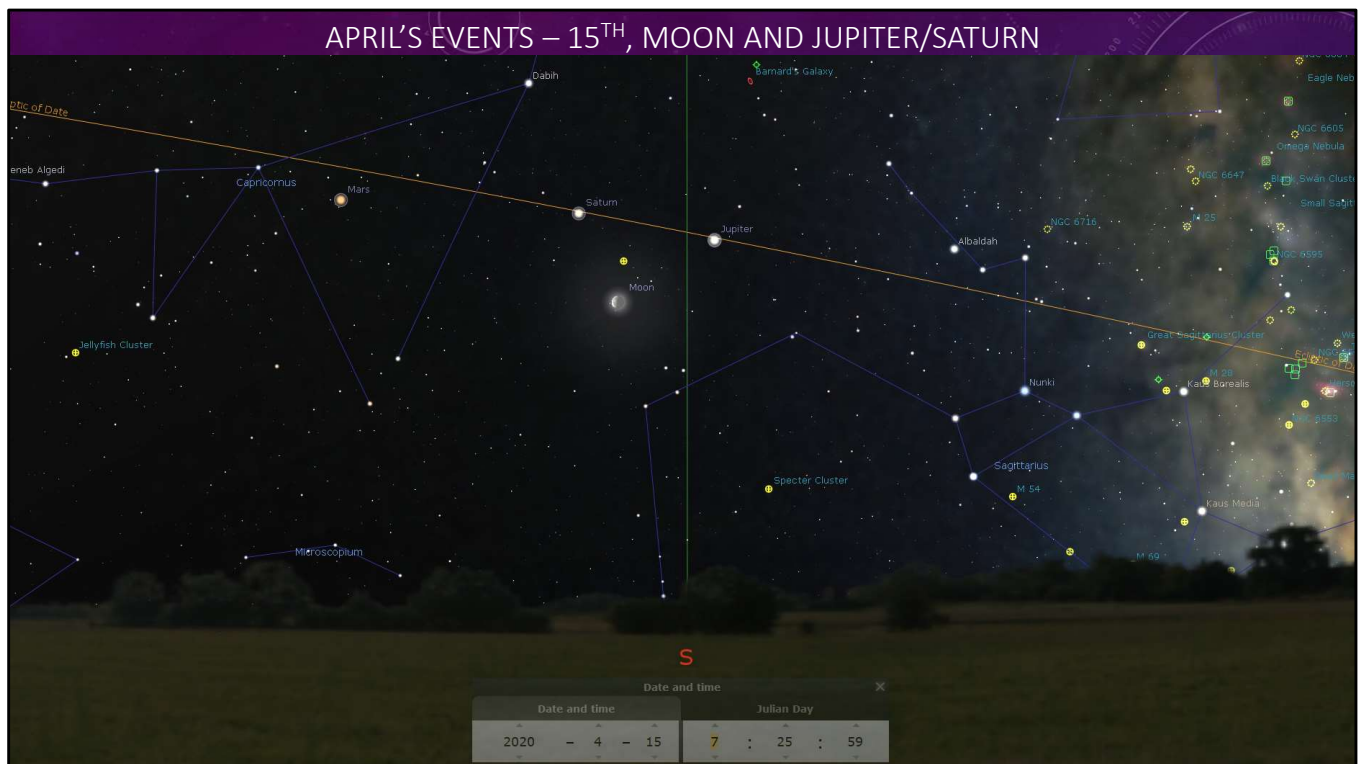
- One on the 13th, Mag -3.4 @ 19:07, Altitude 61°, in the SW
- One on the 14th, Mag -3.5 @ 18:19, Altitude 49°, in the NE
- One on the 18th, Mag -3.6 @ 05:08, Altitude 76°, in the SE



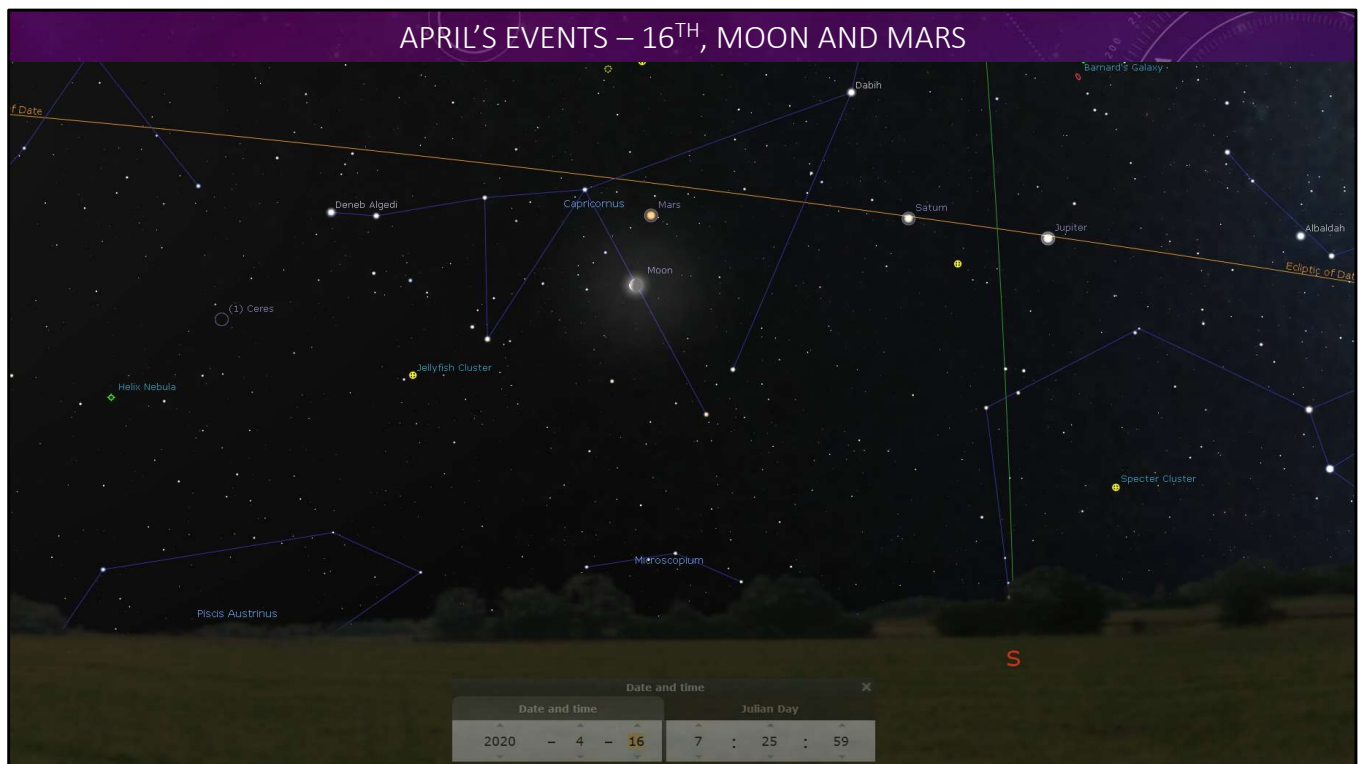




On the 3<sup>rd</sup>, Venus is in the Pleiades, so this will be spectacular view through a telescope

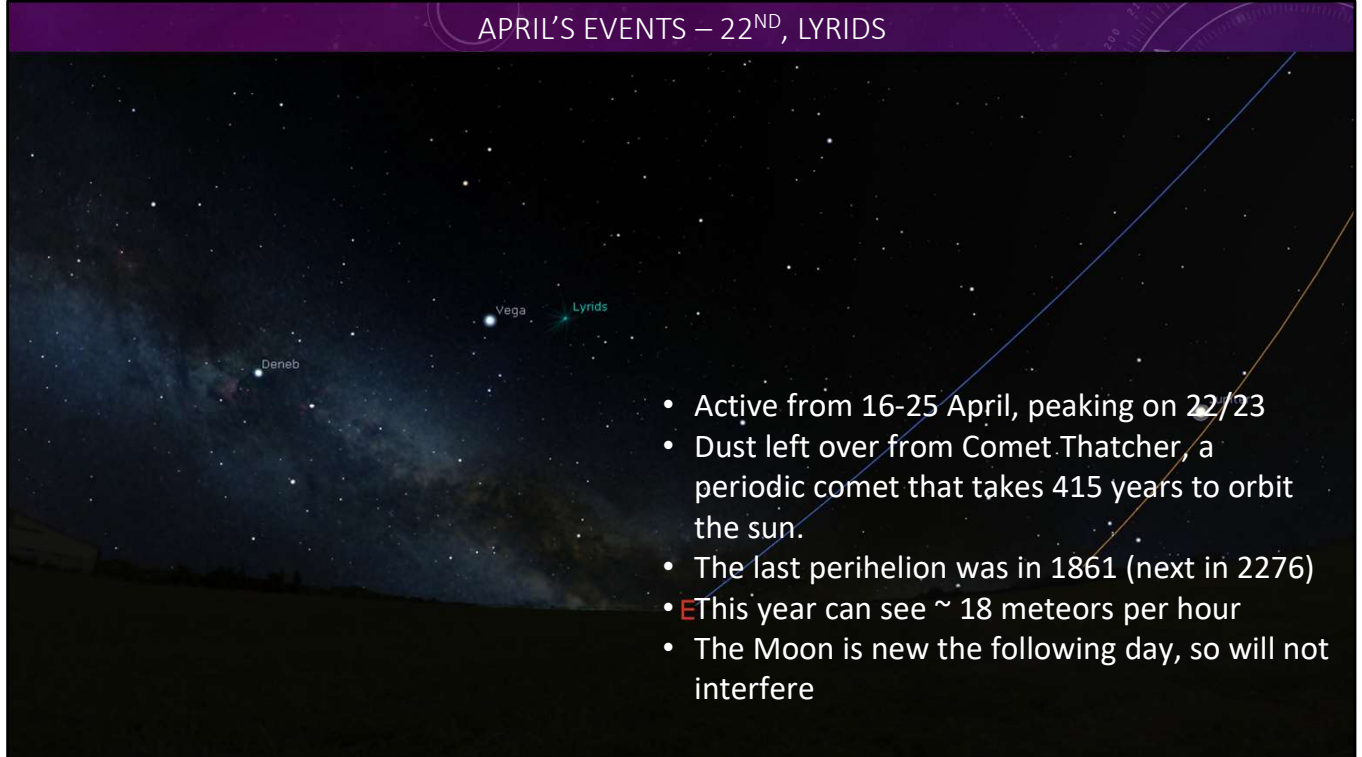


The Moon is near to Saturn and Jupiter on the 15<sup>th</sup> and..

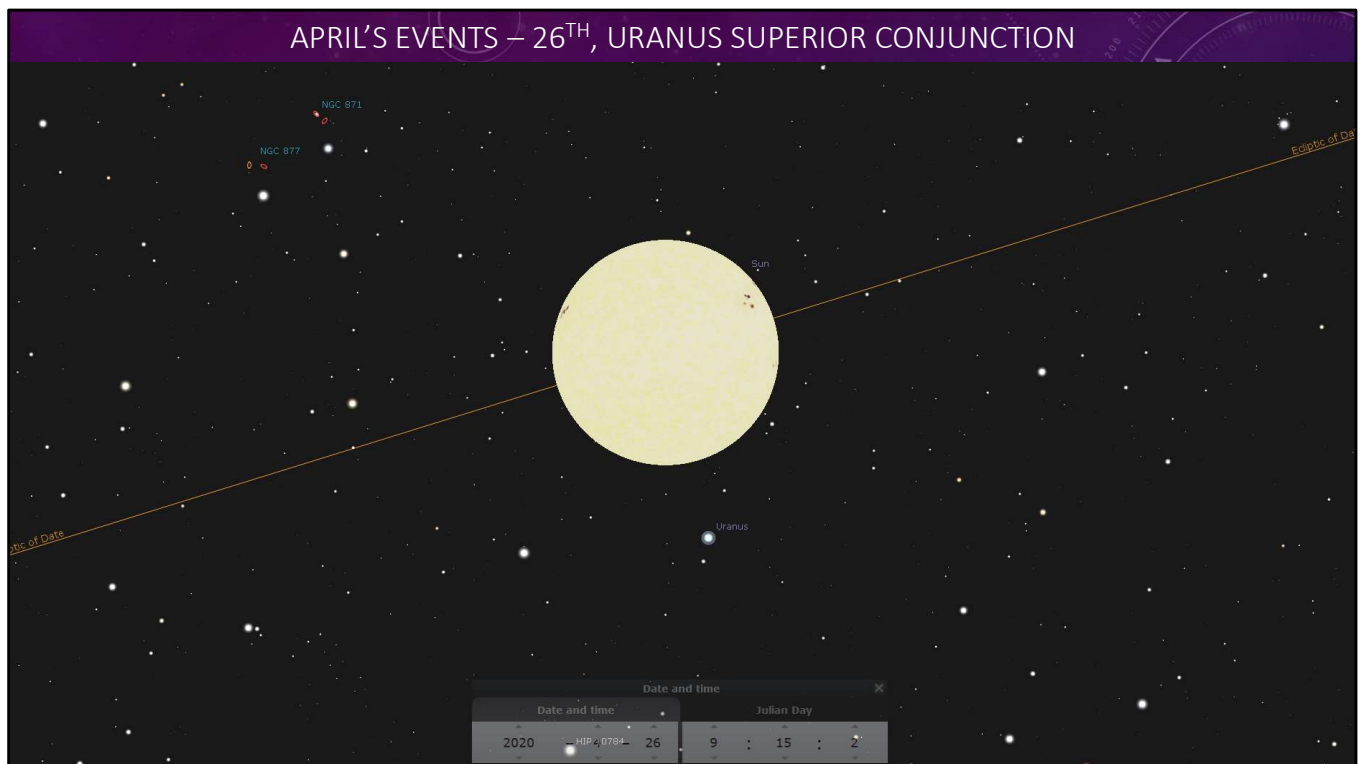


Then Mars on 16th

## APRIL'S EVENTS – 22<sup>ND</sup>, LYRIDS

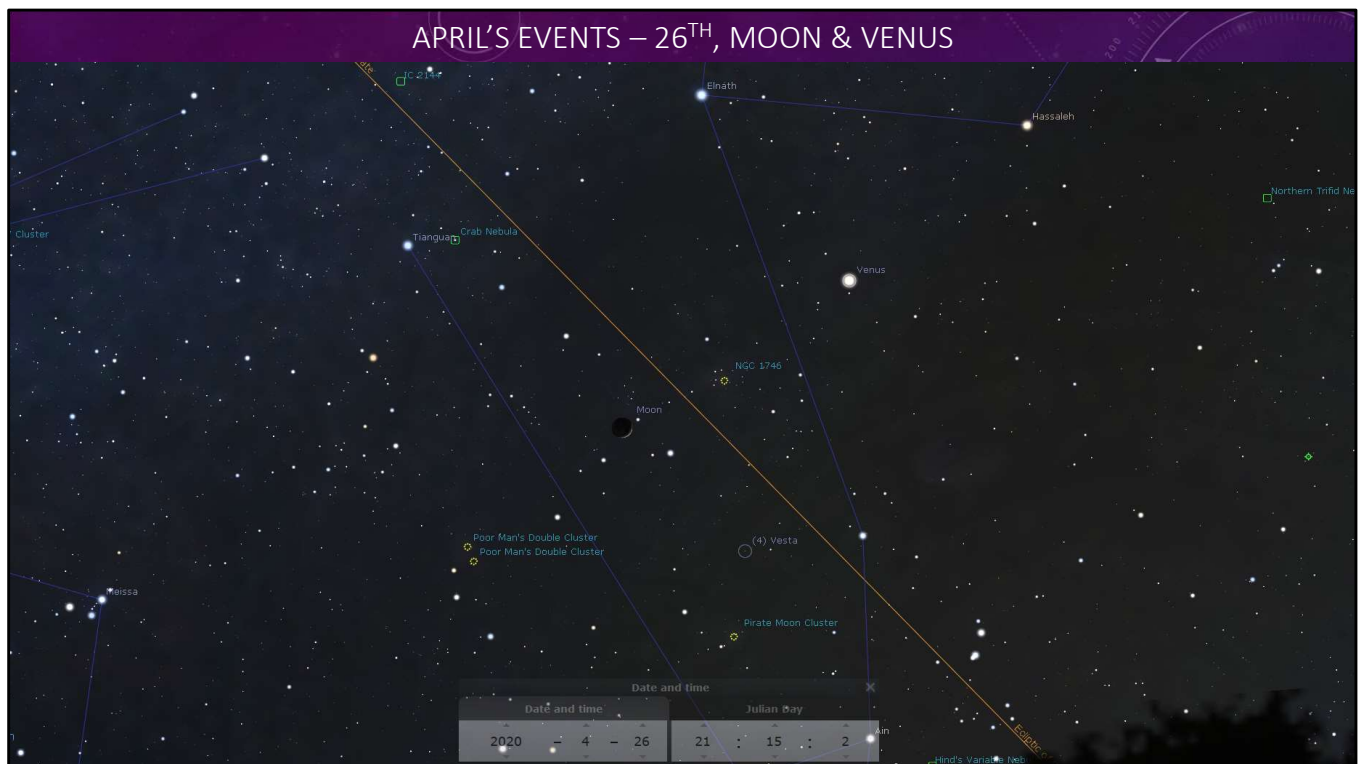


- Active from 16-25 April, peaking on 22/23
- Dust left over from Comet Thatcher, a periodic comet that takes 415 years to orbit the sun.
- The last perihelion was in 1861 (next in 2276)
- This year can see ~ 18 meteors per hour
- The Moon is new the following day, so will not interfere

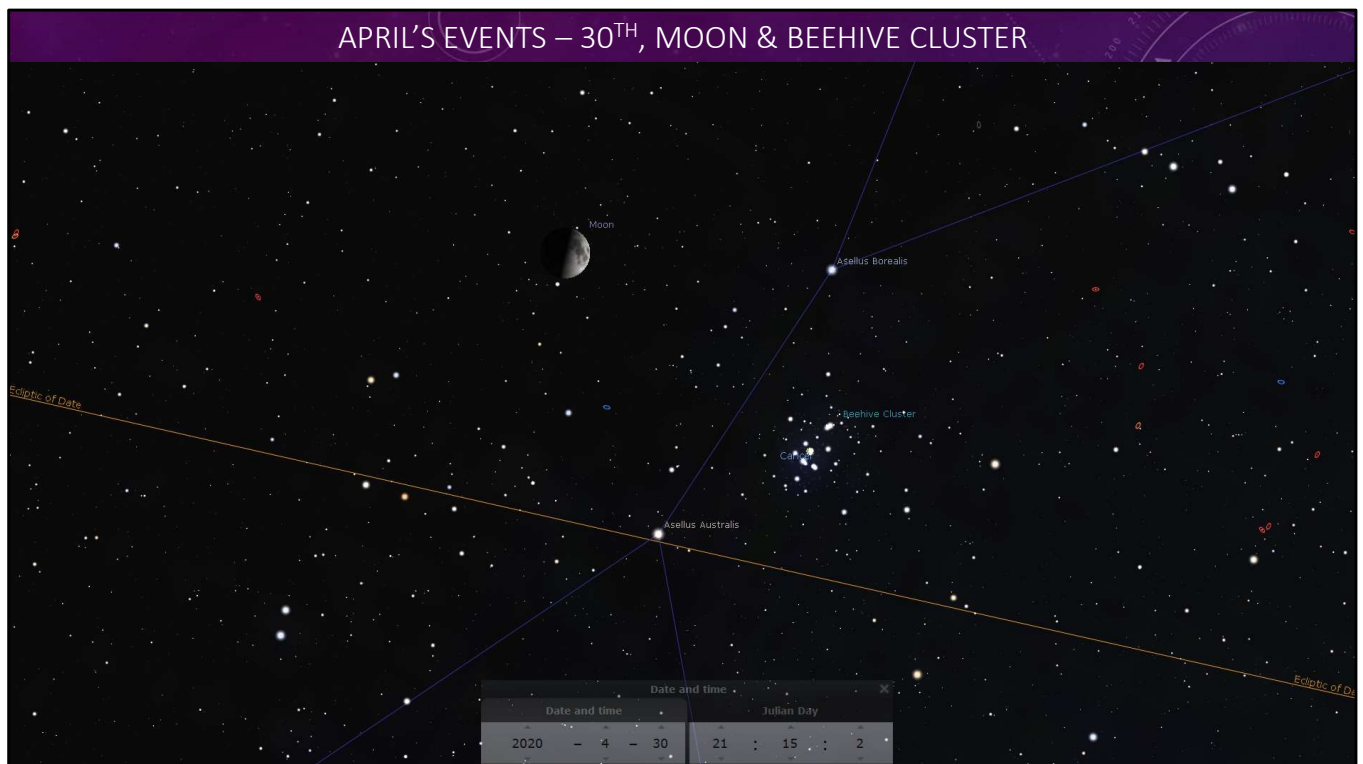


Not one to observe, but Uranus is at Superior Conjunction on 26<sup>th</sup> April

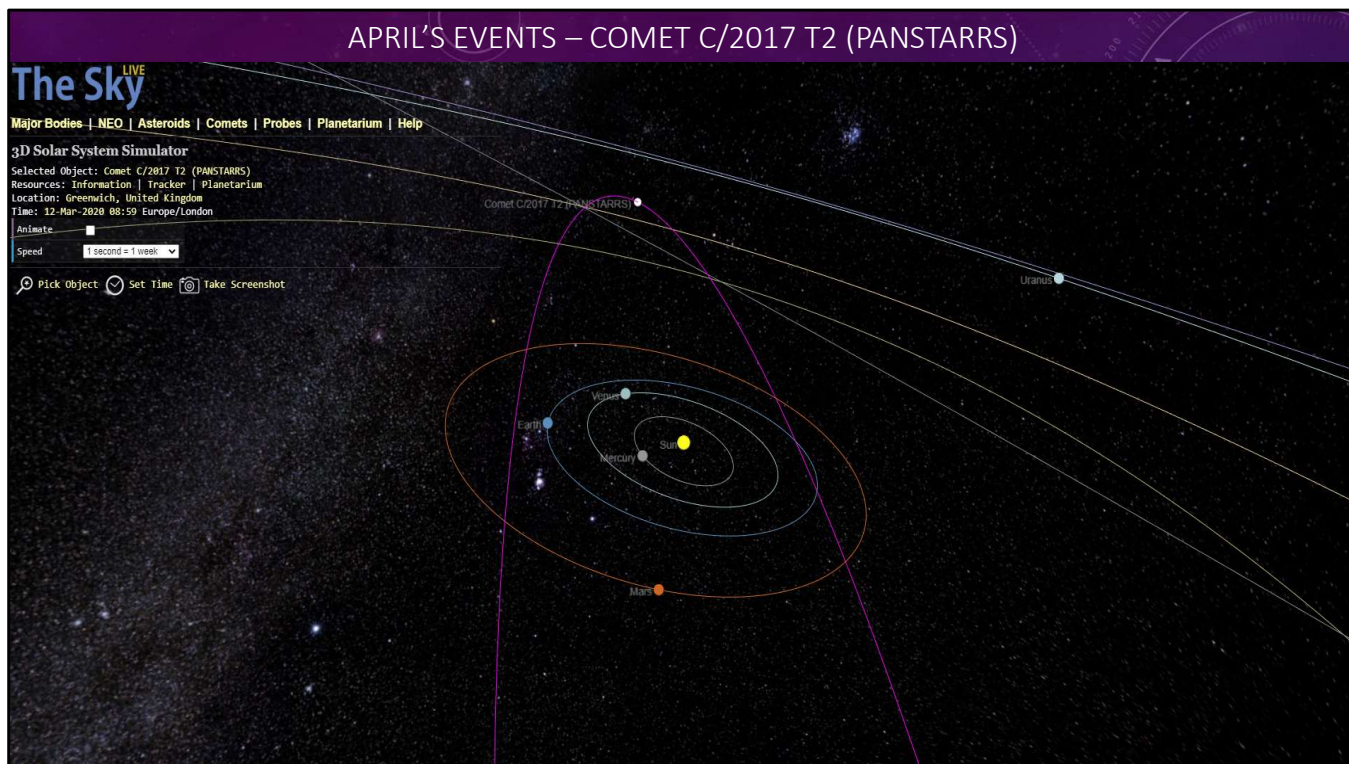




Also on the 26<sup>th</sup> in the evening a slim crescent moon can be observed close to Venus



On the 30<sup>th</sup> in the evening a first quarter moon can be observed close to the beehive cluster



This shows the path of the comet.

MEMBERS IMAGES – SARAH WALKER



Aurora in Iceland

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2. M81 ( Bode's Galaxy) and M82 (Cigar Galaxy) in Ursa Major. Photo taken 6th Feb - 183 x 1 min exposures @ ISO 800.

MEMBERS IMAGES – SARAH WALKER





The End, Thankyou