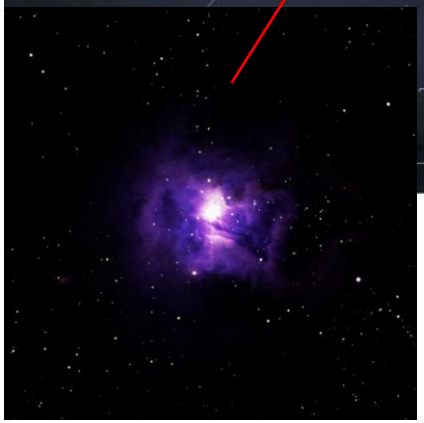
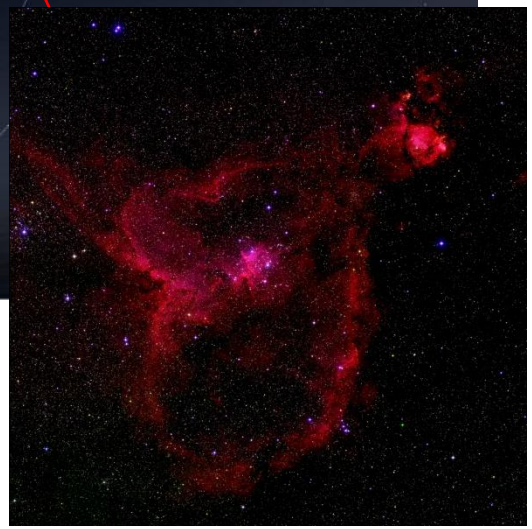
Nov11 Sky notes

View facing North 10:00pm on Nov 3thth 2011 (80deg Field of View)

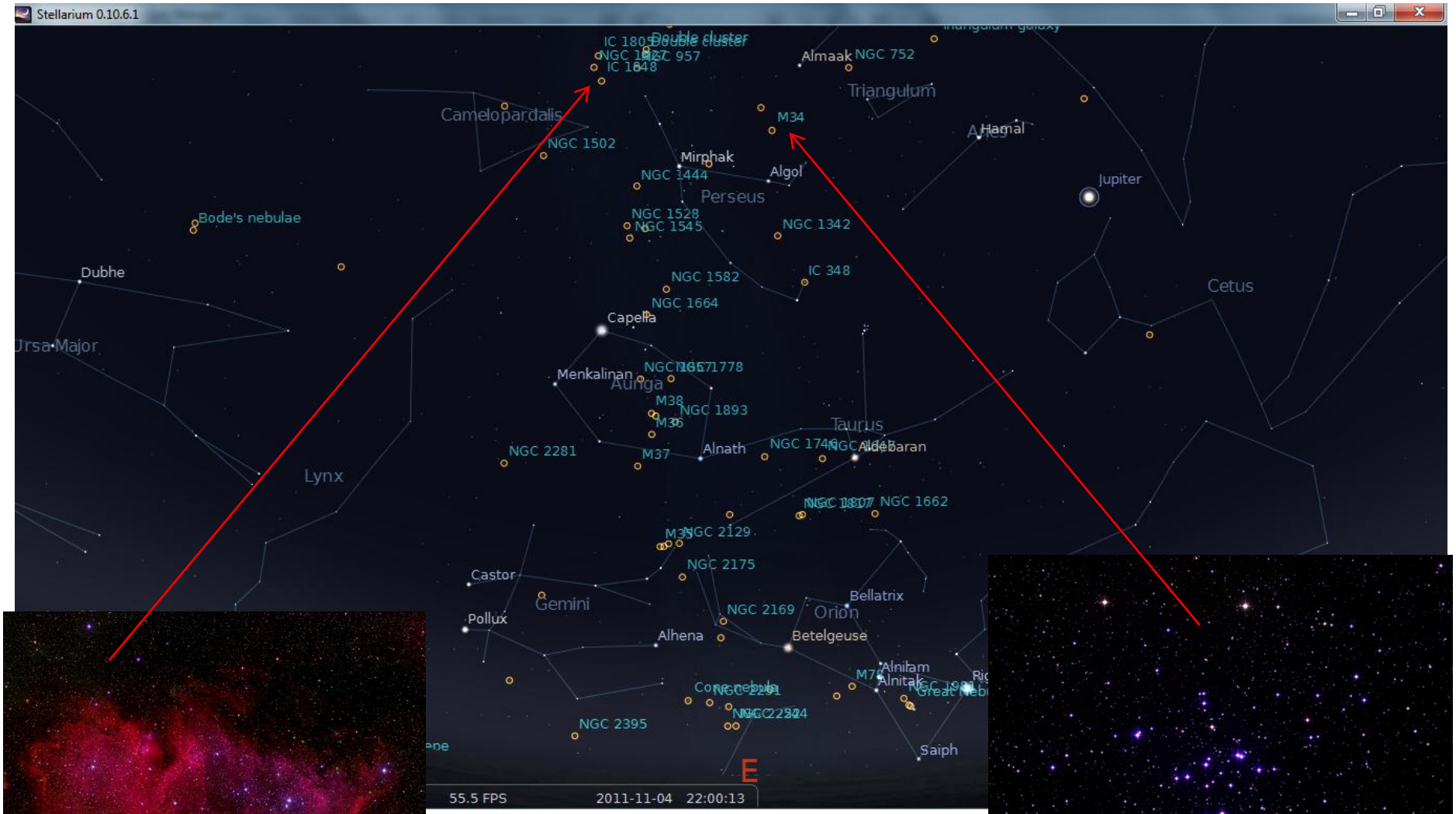


NGC7023 (Iris) (Reflection Nebula)
1300 light yrs away
- Bright star illuminates Nebula- dark dust clouds Surround nebula



IC1805(Heart nebula) (Emission nebula)
7500. light years away
Massive O/B stars illuminate Nebula – trigger new star formation

View facing East 10:00pm on Nov 3rd 2011 (80deg Field of View)



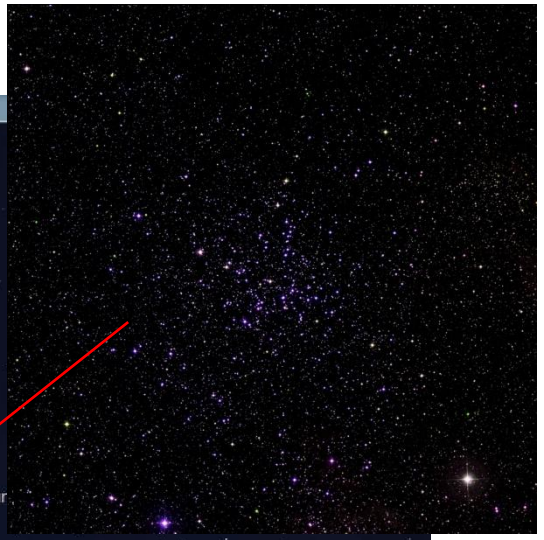
IC1848 (Soul) Nebula
Emission Nebula
7500 light years away
Close to the Heart (IC1805) Nebula

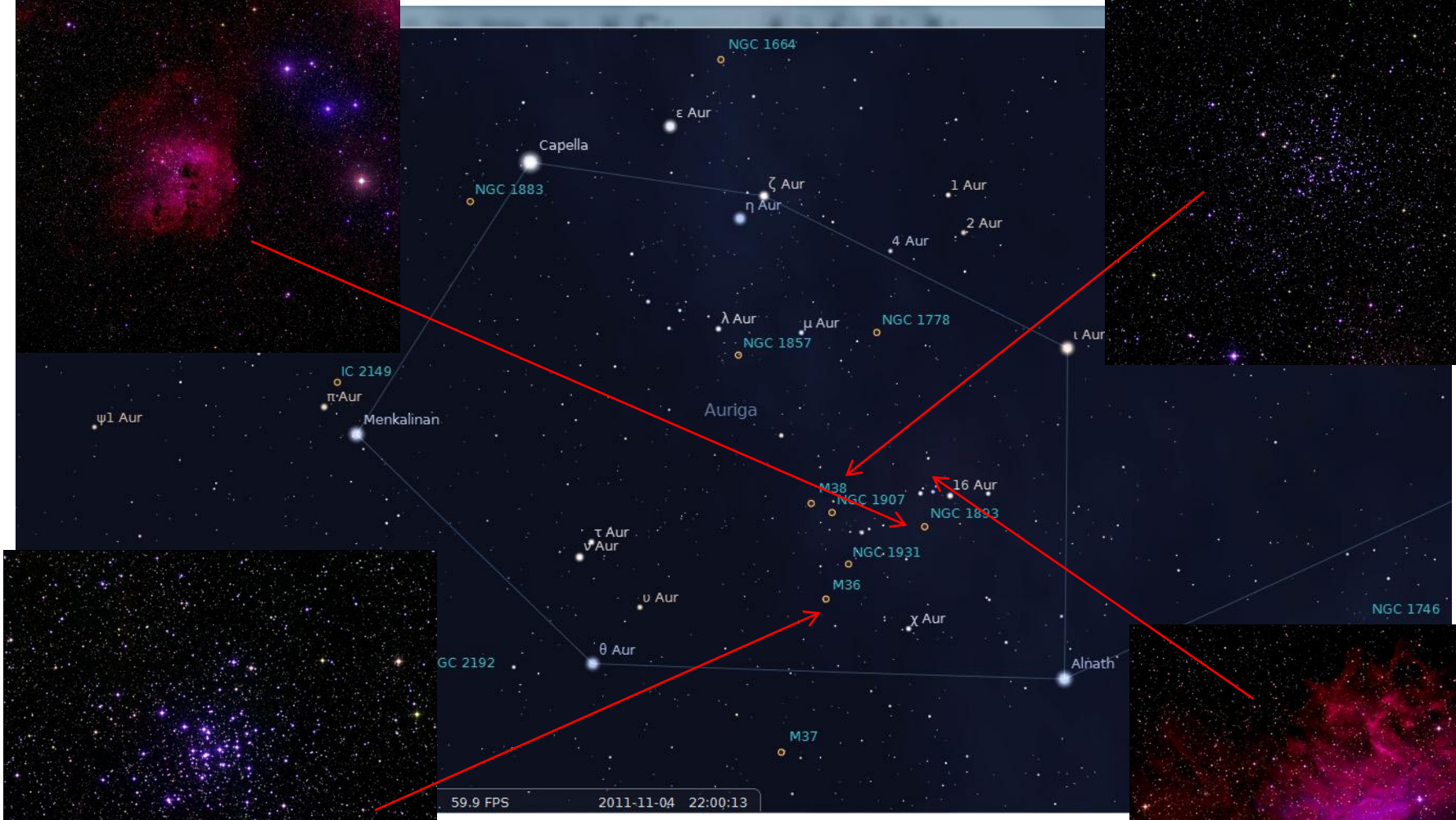
Open cluster M34
1500 light yrs away
(10 light yrs span)
250 million yrs old
Mainly hot blue stars
- Few red giants

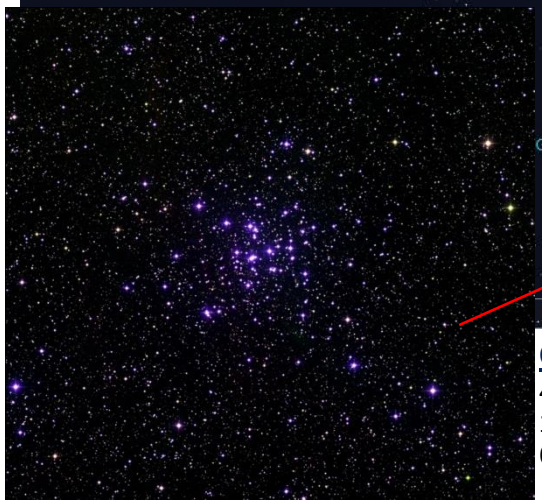
Constellation of the Month (Nov 11) : Auriga

IC410(Emission nebula)
Only 1.5 deg from IC405- faint nebulosity
Surrounding open cluster NGC1893

Open cluster M38
4200 light yrs away
25 light yrs span
220 million yrs old

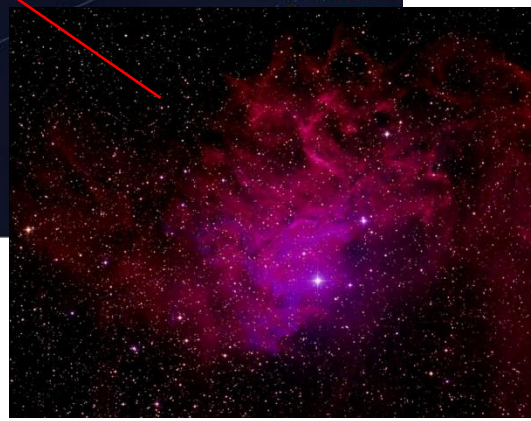




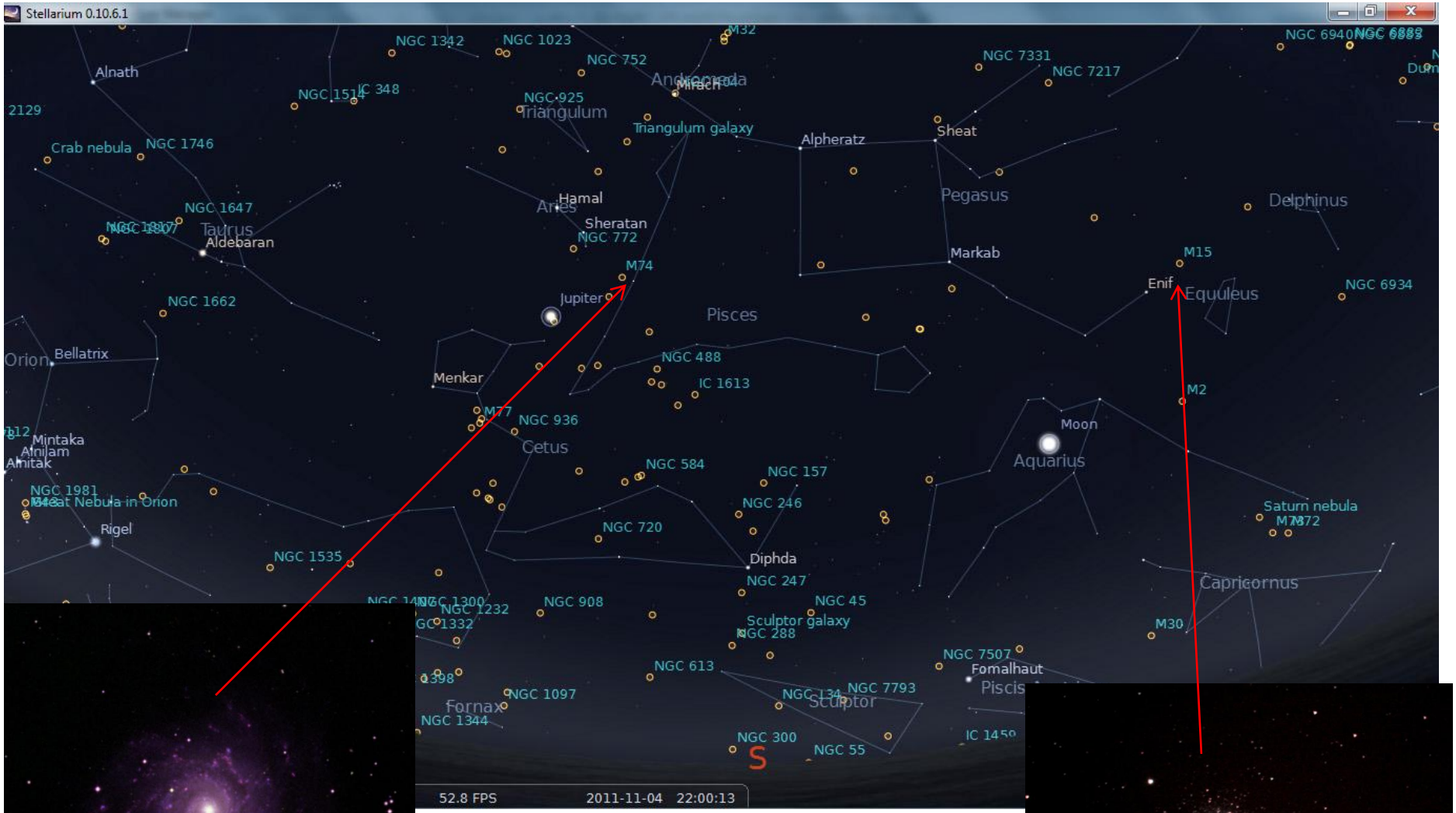


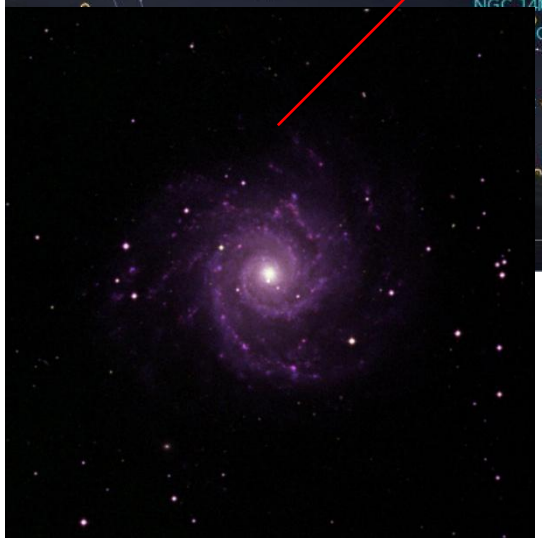
Open Cluster M36
4100 light yrs away
14 light yrs away
60 members in cluster

IC405(Flaming star nebula)
1500 light yrs away
Illuminated by brilliant O-type star
AE Aurigae – runaway star ejected
Near Trapezium cluster



View facing South 10:00pm on Nov 3rd 2011 (93deg Field of View)





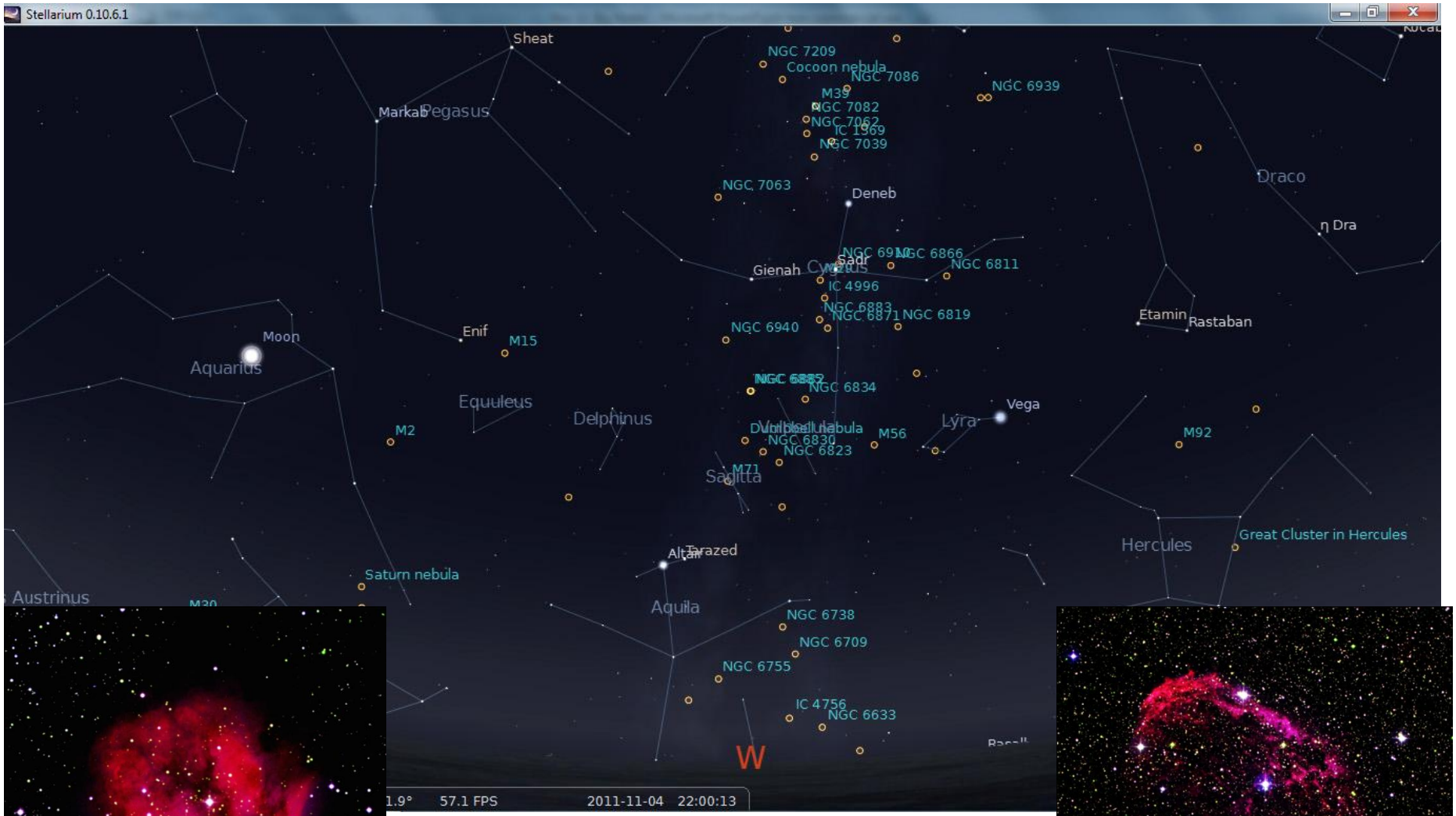
M74 (Grand Design spiral)

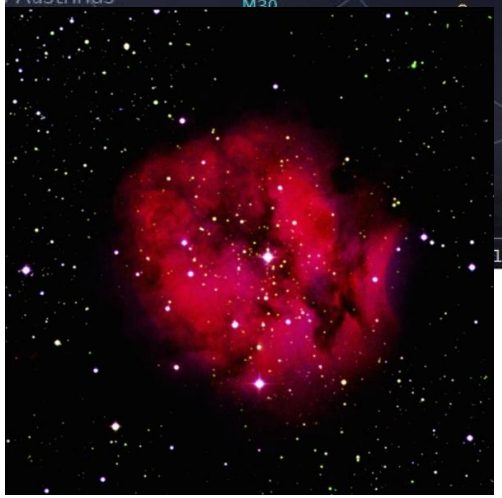
Symmetric spiral arms
Face on spiral galaxy
Abundant star HII regions
In spiral - higher rate of
Star formation than normal
(32 million lt yrs away)

M15 (Globular cluster

33,600 lt yrs away
One of the densest globulars

View facing West 10:00pm on Nov 3rd 2011 (64deg Field of View)





Cocoon Nebula(IC5146)

3900 light yrs away

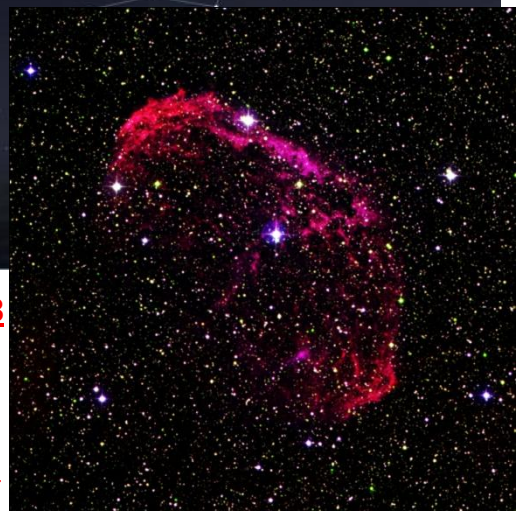
Beautiful emission/ reflection Nebula – surrounding massive ionizing star – surrounded by Dark dust clouds

Young stars at centre of nebula

Crescent nebula NGC6888

Illuminated by blue Wolf-Rayet star – material Forming nebula ejected during Red giant phase of star-

Clumps / filaments form nebula



Moon :1st quarter (Nov2nd),Full moon(Nov10th), Last quarter(Nov18th) , New(Nov25th)

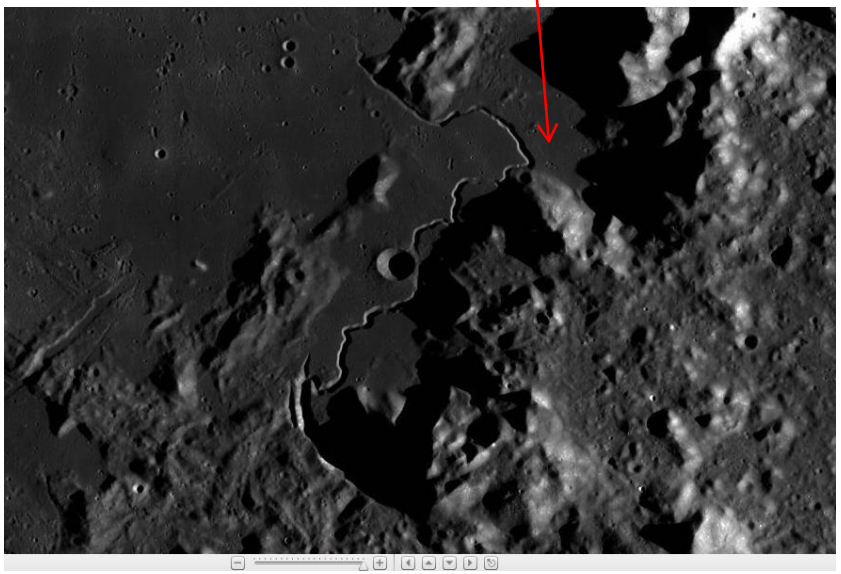
Lunar Rilles(one of the most interesting lunar features)

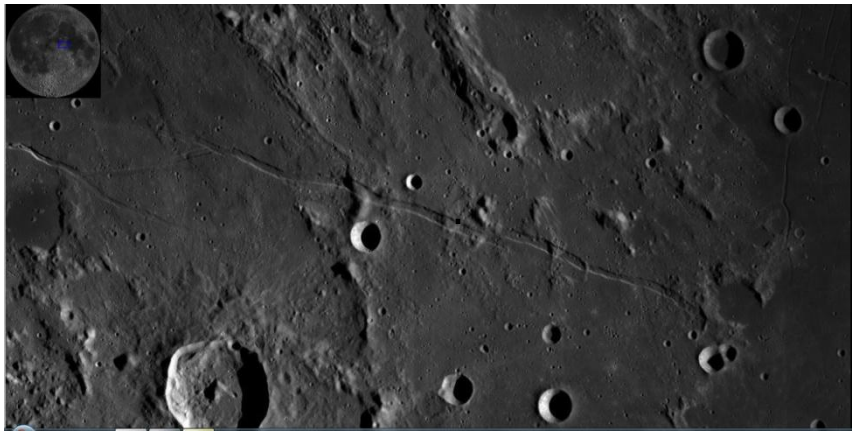
LRO imagery

Rille is a long, narrow depressions in the lunar surface that resemble a channel

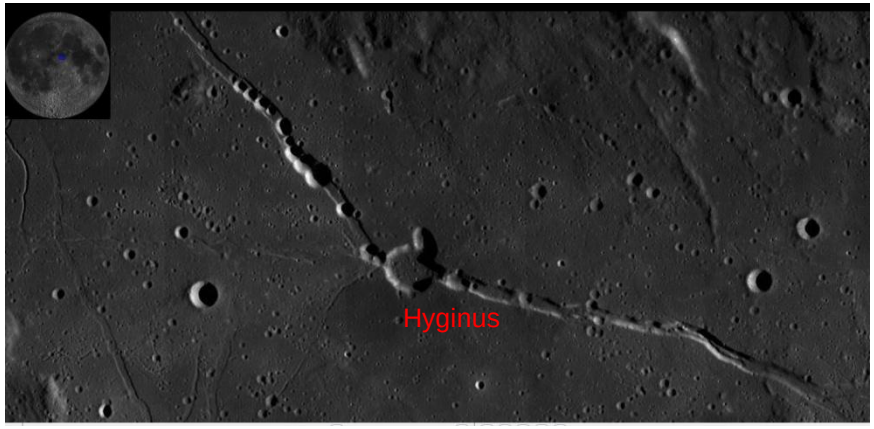
Types of Rille :
Sinuous rilles -the remains of collapsed lava tubes or extinct lava flows
Arcuate rilles – created by lava flows
Straight rilles - follow long, linear paths(grabens) – where crust has sunk

Hadley Rille(sinuous lava channel)
- Apollo 15 Landing site





Ariadaeus Rille – 220km long (4-5 km wide/0.8km deep)
(Example of graben fault)



Hyginus Rille - crater / pits along rille may be of volcanic origin

Schroter`s valley -sinuous rille (10km wide/160km long)
- Formed by rapidly flowing lava from Cobra`s Head

Planets (Nov 2011)

Mercury :best time to see – early November – only about 2 deg high (difficult)

Venus : best time to see – Nov 30th (30 min after sunset) – only 6deg high
Magn -3.8 (tricky target for telescope)

Mars : best time to see (Magn+1.1) – Nov 30th- in Leo only 5deg from Regulus(+1.3)
only 7" in size – so difficult to see features through telescope

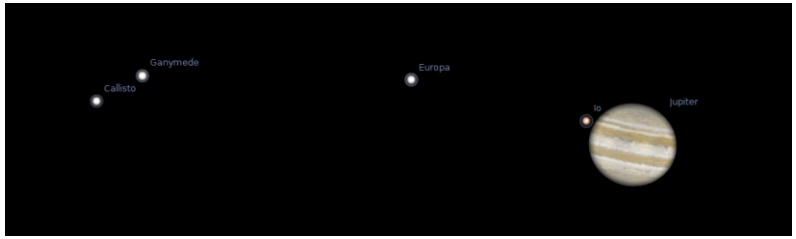
Jupiter: best time to see Nov 1st (opposition on Oct 29th) – .visible all night
almost 50" in diameter (magn -2.7) Interesting transits / occultations

Interesting transits / occultations :

Jupiter(SLOOH)
14" SCT oct29th

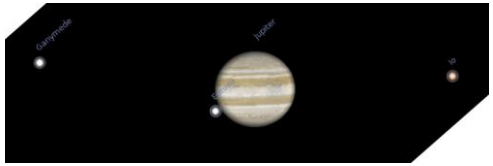
Nov 4th 9pm Europa reappears From transit

Nov 5th 11pm..Io starting transit



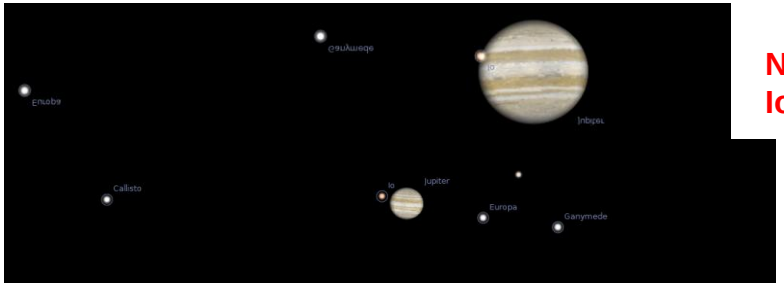
Nov6th 22:40pm
Io emerges from occultation

Nov7th 22:40pm
Ganymede enters transit



Nov18th 22:40pm
Europa enters transit

Nov20th 21:43pm
Europa exits occultation



Nov21st 22:40pm
Io enters transit

Nov22nd 20:57pm
Io exits occultation

Nov25th 21:05pm
Ganymede exits occultation

Nov25th 19:57pm
Io enters occultation

Meteor showers (Nov 2011)

North / South taurid meteor shower on Nov 5 / 6th and 11 / 12th

Leonid meteor shower on Nov 17 / 18th (Last quarter moon may affect display)