

**What to look for in the night sky over the next few weeks.**

**Presented to Ewell Astronomical Society by Ron Canham  
At Nonsuch High School for Girls, Cheam  
Friday 13<sup>th</sup> March 2020**

**Topic: Constellation Leo**

**<https://ewellastronomy.org/>**

# Regulus (Cor Leonis - Rex - Kabeleced)

$\alpha$  Leo - 32 Leo - HIP 49669 - SAO 98967 - HD 87901 - HR 3982 - WDS J10084+1158AB

Type: **double star**  
Magnitude: **1.35**  
Absolute Magnitude: **-0.58**  
Colour Index (B-V): **-0.09**  
RA/Dec (J2000.0): 10h08m21.96s/+11°58'03.0"  
RA/Dec (on date): 10h09m27.82s/+11°51'58.8"  
HA/Dec: 23h05m54.15s/+11°51'58.8"  
Az./Alt.: +159°34'58.3"/+49°00'04.6"  
Gal. long./lat.: -133°34'26.7"/+48°55'59.5"  
Supergal. long./lat.: +89°14'43.0"/-34°44'26.7"  
Ecl. long./lat. (J2000.0): +149°49'39.7"/+0°27'52.6"  
Ecl. long./lat. (on date): +150°06'52.6"/+0°27'56.7"  
Ecliptic obliquity (on date): +23°26'11.9"  
Mean Sidereal Time: 9h15m23.0s  
Apparent Sidereal Time: 9h15m22.0s  
Rise: 15h41m  
Transit: 22h43m  
Set: 5h45m  
IAU Constellation: Leo  
Distance: 79.30±0.67 ly  
Spectral Type: B8IVn  
Parallax: 41.130±0.350 mas  
Position angle (2015): 307.00°  
Separation (2015): 175.100" (+0°02'55")  
Proper motions by axes: -312.3 45.9 (mas/yr)  
Position angle of the proper motion: 278.9°  
Angular speed of the proper motion: 315.7 (mas/yr)



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 HA/Dec: 23h06m58.32s/+11°51'58.8"  
 Az./Alt.: +159°58'19.7"/+49°03'32.4"  
 Gal. long./lat.: -133°34'26.7"/+48°55'59.5"  
 Supergal. long./lat.: +89°14'43.0"/-34°44'26.7"  
 Ecl. long./lat. (J2000.0): +149°49'39.7"/+0°27'52.6"  
 Ecl. long./lat. (on date): +150°06'52.6"/+0°27'56.7"  
 Ecliptic obliquity (on date): +23°26'11.9"  
 Mean Sidereal Time: 9h16m27.2s  
 Apparent Sidereal Time: 9h16m26.1s  
 Rise: 15h41m  
 Transit: 22h43m  
 Set: 5h45m  
 IAU Constellation: Leo  
 Distance: 79.30±0.67 ly  
 Spectral Type: B8IVn  
 Parallax: 41.130±0.350 mas  
 Position angle (2015): 307.00°  
 Separation (2015): 175.100" (+0°02'55")  
 Proper motions by axes: -312.3 45.9 (mas/yr)  
 Position angle of the proper motion: 278.4°  
 Angular speed of the proper motion: 315.7 (mas/yr)





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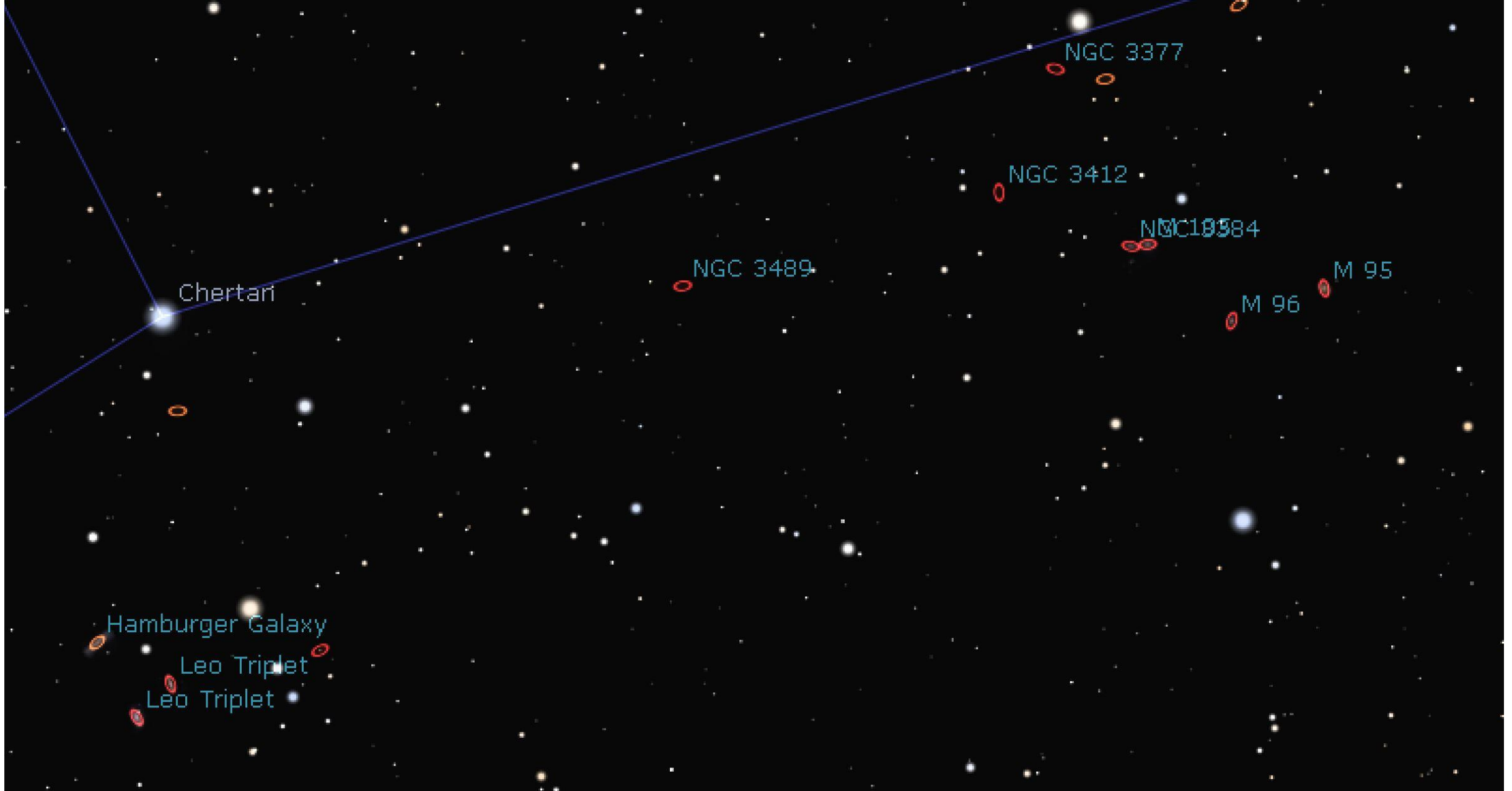
Algieba: Double yellow giants mag 2.0 and 3.2,  
170 light years.

Denebola: In Arabic means the Lion's tail.

Leo: One of the oldest constellations. Representing the Nemean Lion that Hercules defeated as one of his 12 labours. The lion's flesh could not be pierced by iron, stone or bronze, Hercules strangled it to death.

Regulus: Blue-white Mag 1.4, 80 light years distant, and has a companion mag 7.8 that can sometimes be seen with binoculars.

Regulus spins in 16 hours, giving an equatorial bulge.



Below Leo is a collection of deep sky objects, realistically only visible with a telescope.

Moon: New 24<sup>th</sup> March. Full 8<sup>th</sup> April. With respect to Gary Walker, this is a slightly better than ordinary Moon. (Not 'super' at all.) Just closer at 357,029km thus the brightest Moon this year. Both Astronomy Now and BBC Sky at Night magazines for March include features on observing the Moon.

March 20<sup>th</sup> is the Spring Equinox.

March 20<sup>th</sup> 05:00 Mars passes Jupiter and Saturn.

March 23<sup>rd</sup> 04:30-05:30 if you look at Mars, Pluto is 50 arcseconds away at mag 15 so you will need a large telescope.

March 29<sup>th</sup> we continue with the annoying change to the clocks from Universal Time to BST.

Advance planning: The night of 21 April is the Lyrid meteor shower and should be good this year, assuming a clear sky.

Please see the current issue of Janus for details of the planets.

(My thanks to Stellarium 0.19.3, Philip's 2020 Stargazing, Collins 2020 Guide to the Night Sky, Astronomy Now magazine, BBC Sky at Night magazine, Janus and numerous other sources.)