

Starmap2019

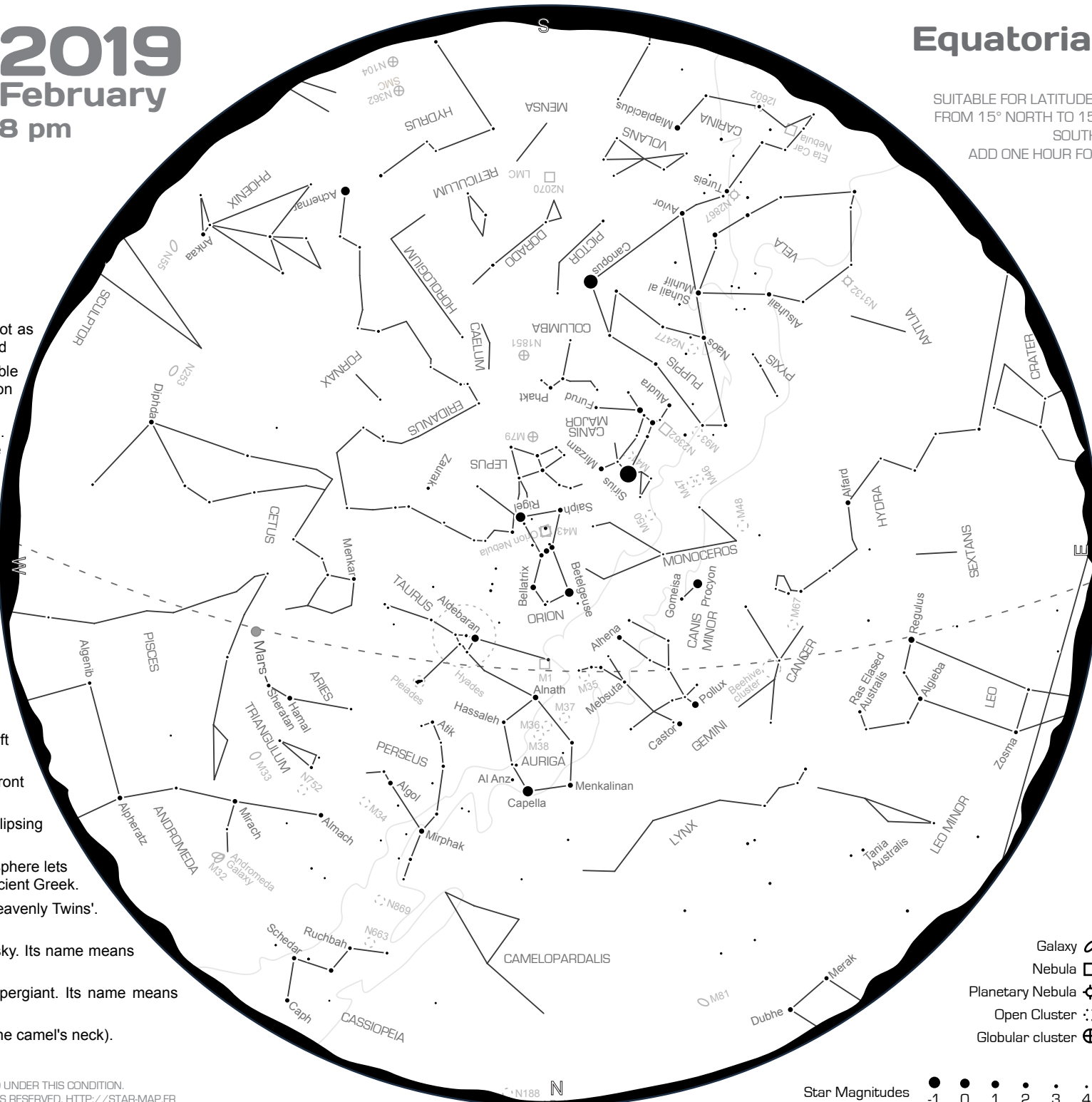
February
8 pm

Equatorial

SUITABLE FOR LATITUDES
FROM 15° NORTH TO 15°
SOUTH.
ADD ONE HOUR FOR

VISIBLE TONIGHT TO THE NAKED EYE

- Mars, the Red Planet, is the fourth planet of the Solar System, not as bright as other planets but a distinct reddish glow can be observed
- ✱ The Gamma Normids, a medium meteor shower in Norma. Visible from the 25th of February to the 22nd of March, with a maximum on the 13th of March.
- The Orion Nebula is one of the must-see object. Simply beautiful. Generally the first deep sky object observed by beginners. Can be seen with the naked eye even in bad conditions.
- ⋯ The Pleiades or Seven Sisters is one of the nicest objects visible in the northern Hemisphere. Very easy to spot with the naked eye, even without reference star.
- ⋯ Beehive Cluster, or Praesepe, a cluster in the Cancer. Wonderful with the naked eye in very dark skies.
- ⋯ The Hyades, the closest open cluster in Taurus. With very dark skies, the cluster is amazingly crowded. Not really visible with light pollution.
- ★ Alcyone. A blue star belonging to the Pleiades. Best observed with binoculars to see the haze of the cluster.
- ★ Aldebaran. A red giant in Taurus. Its name means 'The Follower'. Close to the Hyades.
- ★ Bellatrix. Bellatrix means 'Female Warrior'. It is located at the 'Left Shoulder' of Orion.
- ★ Regulus. Means 'Little Prince'. The brightest star in Leo, at the front paw of the Lion.
- ★ Algol. The 'Demon' star. A bright star in Perseus. The best known eclipsing binary.
- ★ Sirius. The brightest star in the sky. So bright that the Earth atmosphere lets it twinkle in a spectacular manner. Its name means 'glowing' in Ancient Greek.
- ★ Pollux. The brightest star of Gemini. Castor and Pollux are the 'Heavenly Twins'. Pollux has a confirmed exoplanet.
- ★ Rigel. The brightest star of Orion. The sixth brightest star in the sky. Its name means 'The Foot of the Giant'.
- ★ Betelgeuse. The eighth brightest star in the night sky. A red supergiant. Its name means 'Armpit of the central one'.
- ★ Alhena. The third brightest star of Gemini. Mean 'The Brand' (on the camel's neck).



Galaxy ○

Nebula □

Planetary Nebula ◇

Open Cluster ⋯

Globular cluster ⊕

Star Magnitudes -1 0 1 2 3 4

WITH BINOCULARS AND SMALL TELESCOPES

NGC2070	☐	The Tarantula Nebula, such a beautiful object in the Large Magellanic Cloud. Worth a trip to the southern hemisphere with your camera.
M1	✧	A supernova remnant, observed in 1054 by Chinese, Arab and Japanese astronomers. A hazy patch of nebulosity near the star ζ-Tauri.
M43	☐	The companion of the Orion Nebula. Best observed with small telescopes. Appears as a nebulosity surrounding 5 stars.
M47	☼	Beautiful open cluster in Puppis. Very bright and rich field. A medium-sized fuzzy patch. Near Sirius.
NGC752	☼	Large number of bright stars over one degree. Large and dense cluster. Close to Almach in Andromeda.
NGC2362	☼	A faint cluster marked by the bright star τ-Canis Majoris. A massive open cluster close to the nebula sh2-310.
NGC2477	☼	An open cluster in Puppis. Contains about 300 stars. Small and bright object. Needs high magnification.
M33	🌀	One of the nicest galaxy to be observed from Earth. Nebulous, moderate in size, faint in the middle and brighter at the edge. A must for astrophotography. Needs a large field.
M34	☼	An open cluster with many faint stars. Contains about 100 stars. Use Algol as a reference in the PathFinder.
M35	☼	Faint but easy object for binoculars. Composed of approximately 40 stars. Large and scattered.
M36	☼	An open cluster, less impressive than M37, one of the three Messier clusters in Auriga.
M37	☼	An open cluster best observed with a telescope. A medium-brightness fuzzy patch with a brighter center.
M38	☼	M38 is easy to find by star hopping from Elnath. Intermediate between M36 and M37 in terms of the number of stars.
M41	☼	An open cluster just below Sirius. A beautiful cluster composed of bright stars. It appears as a small area overflowing with faint stars
M46	☼	A nice open cluster. Well observed with binoculars or a wide-angle telescope field. Compare its contrast with M47.



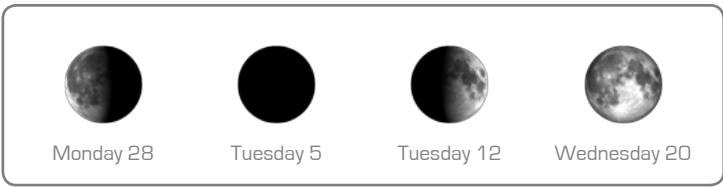
Available on the
App Store

Starmap

A PLANETARIUM IN YOUR POCKET

The most informative and interactive hand-held planetarium App ! Starmap is available on the iPhone™, iPad™, and iTouch™. When your device has a compass, Starmap displays exactly the portion of the sky you are pointing at. Hold the device parallel to your line of vision and discover the map smoothly scanning the sky as you move.

MOON CALENDAR



HOW TO USE THE MAP

The map shows what you see looking at the zenith. The apparent inversion of East and West compared to road maps is normal. Hold the map face down above your head, and the cardinal points will be oriented as usual.

As a starting point, face North, holding the map in your eyesight direction, with its North down. As you change the direction, rotate the map accordingly.

The objects listed on the first page can be observed with naked eyes, in clear skies, with moderate light pollution. Close your eyes one minute and let them adapt to darkness. You will be surprised how many more details will be apparent.

Using binoculars, preferably with a tripod, will considerably enhance your star gazing experience. Many deep sky objects like galaxies and clusters will be within reach. Jupiter satellites and Saturn's rings will also be visible. A spectacular experience for beginners in astronomy...

Avoid the nights when the Moon is too bright as its light would make the observation of faint objects difficult.

FOR LARGER TELESCOPES ^[1]

NGC2244	☼	The open cluster located in the Rosette Nebula.
NGC2237	☐	The Rosette Nebula is a very good candidate for large field astrophotography. Bluish center surrounded by red clouds.
NGC2261	🌀	The Hubble's Variable Nebula is a reflection nebula illuminated by R Monocerotis. A small comet-shaped fuzzy patch.
IC405	☐	The Flaming Star Nebula is a wonderful object in Auriga. Appears as a haze in the eyepiece. Will need a long exposure.
M74	🌀	A beautiful spiral galaxy best observed with astrophotography. Beautiful color. A nice but difficult target.
M77	🌀	A nice spiral galaxy with a faint core. It appears as a large spiral with broad arms. Best revealed though long exposures.
M78	✧	A faint and small planetary nebula in Orion. A small object best observed with astrophotography. Appears as a nebulosity surrounding 2 stars in the eye piece.
NGC2392	✧	The Eskimo Nebula is one of the most amazing planetary nebula. Difficult object but really worth a long exposure.
NGC1097	🌀	A barred spiral galaxy in Fornax. Elongated white core with two bluish long arms.
NGC891	🌀	An edge-on galaxy with a thin and contrasted dust ring. Clear elongated shape with visual observation.
NGC2403	🌀	An intermediate spiral galaxy, with a luminous central core and bright contrasted regions on a fainter galaxy background. Small field required.
NGC3115	🌀	The Spindle Galaxy is an elongated elliptical and an edge-on spiral galaxy in the Sextans.

[1] In order to keep the map readability, these objects are not displayed on the map