

# Starmap 2015

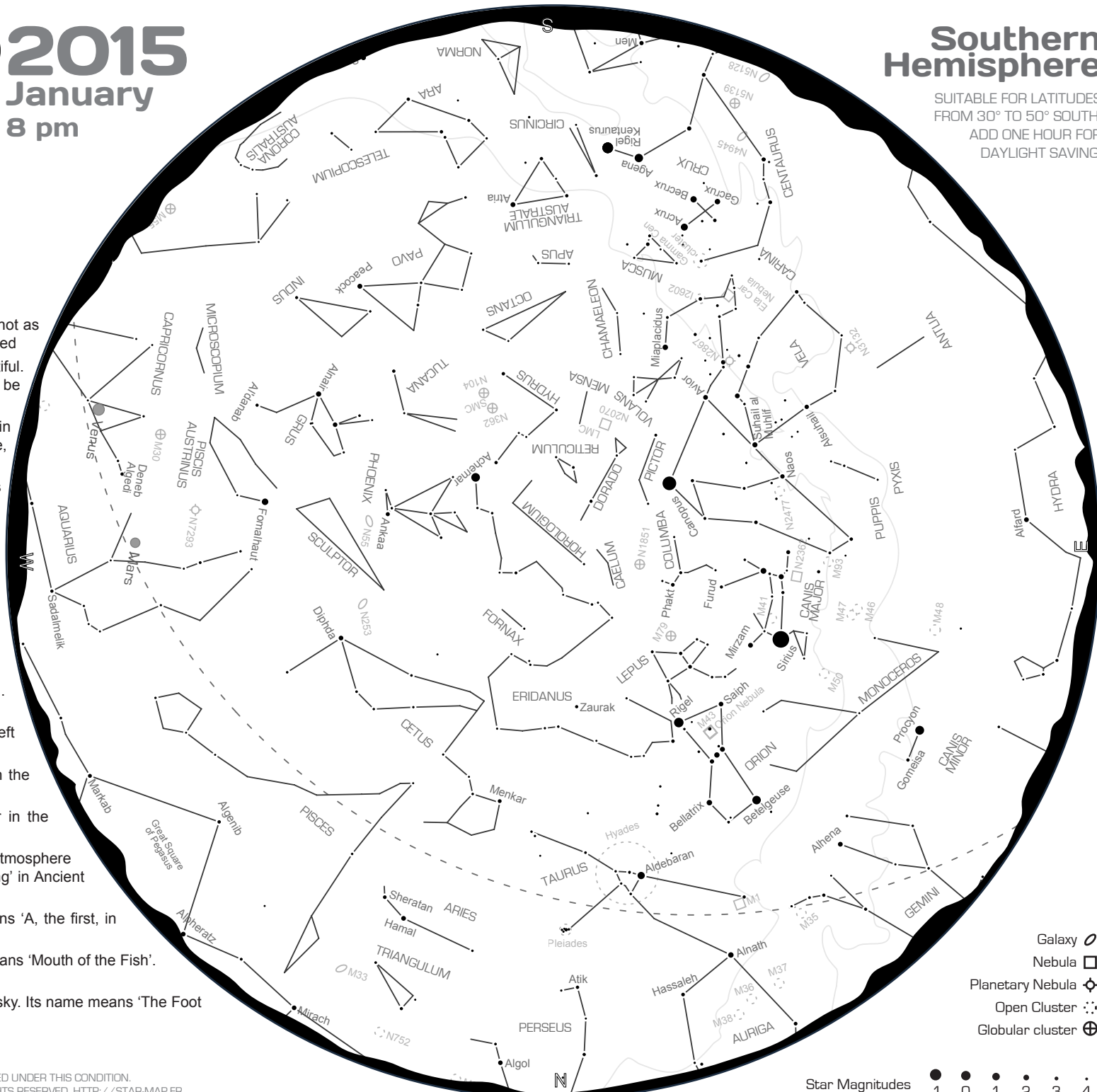
January  
8 pm

## Southern Hemisphere

SUITABLE FOR LATITUDES FROM 30° TO 50° SOUTH.  
ADD ONE HOUR FOR DAYLIGHT SAVING.

### 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 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.
- Eta Carina Nebula should not be missed. A must for beginners and for astrophotographers. Near the Southern Cross.
- ⋯ The Lambda Cen Nebula (or Running Chicken Nebula) is an open cluster with an emission nebula in Centaurus. Really worth a look.
- ⋯ 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.
- ★ Achernar. Brightest star in Eridanus. The ninth brightest star in the sky. Appears bluish.
- ★ Al Na'ir. Its name means 'The Bright One', the brightest star in the Crane.
- ★ 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.
- ★ Acrux. The brightest star in the Southern Cross. Its name means 'A, the first, in the cross'.
- ★ Fomalhaut. The brightest star in the Southern Fish. Its name means 'Mouth of the Fish'. The star is surrounded by a debris disk.
- ★ Rigel. The brightest star of Orion. The sixth brightest star in the sky. Its name means 'The Foot of the Giant'.



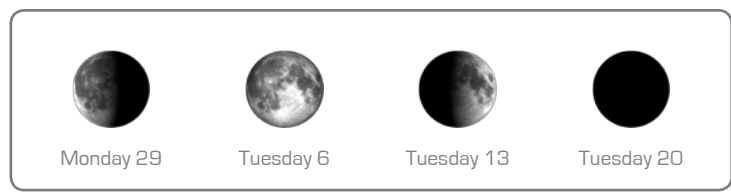
- Galaxy ○
- Nebula □
- Planetary Nebula ◇
- Open Cluster ⋯
- Globular cluster ⊕



# WITH BINOCULARS AND SMALL TELESCOPES

NGC104	⊕	47 Tucanae, an intense globular cluster containing millions of stars. Easy to locate. A nice object for beginners in astrophotography.
NGC2070	☐	The Tarantula Nebula, such a beautiful object in the Large Magellanic Cloud. Worth a trip to the southern hemisphere with your camera.
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.
IC2602	☼	The Theta Carinae Cluster or Southern Pleiades is fainter than the Pleiades. Best views with binoculars, from Miaplacidus.
NGC3132	⊕	The Eight-Burst Nebula looks like the ring nebula. Difficult to locate in Vela. PathFinder function from Suhail.
NGC253	🌀	Sculptor Galaxy, an intermediate spiral galaxy, almost edge-on. Not far from the south pole.
NGC7293	⊕	The Helix nebula is a blue eye with a red border. A huge object, one of the favorite of amateur astronomers.
NGC362	⊕	A nice little but bright globular cluster in the Toucan. Easily visible with small telescopes. Start from Achernar or β-Hyi.
NGC55	🌀	A barred irregular galaxy, edge on. Bluish with a fuzzy core. Close to the south pole. PathFinder from Ankaa.
NGC2362	☼	A faint cluster marked by the bright star τ-Canis Majoris. A massive open cluster close to the nebula sh2-310.
NGC2867	☼	An open cluster in Norma. Easy to locate beside Aspidiske in Carina.
NGC2477	☼	An open cluster in Puppis. Contains about 300 stars. Small and bright object. Needs high magnification.
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.

# 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 <sup>(1)</sup>

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.
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.
NGC300	🌀	A spiral galaxy in Sculptor. Yellow/white core with fuzzy blue arms.
NGC1097	🌀	A barred spiral galaxy in Fornax. Elongated white core with two bluish long arms.
NGC246	⊕	The Skull Nebula is a planetary nebula in Cetus. Bluish/purple ring around the central star.
SAO173446	●	The double star 30τ-CMa, both components of blue color.
SAO114258	●	The double star 15Mon, both components of blue color.
SAO132406	●	The double star 48σ-Ori, both components of blue color.
SAO197795	●	The double star π-Pup, both components of orange color.



## 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.



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