

FEBRUARY PĒPUERE SKY GUIDE

Magellanic Clouds

The Small and Large Magellanic Clouds (SMC and LMC) are irregular dwarf galaxies named after Ferdinand Magellan, the first explorer to circumnavigate the Earth. Only visible in the southern hemisphere, the LMC is our third closest galaxy.

Australian Aboriginal storytellers equate the clouds with the campfires of an old man and his wife, known as the Jukara. Too old to find food for themselves, the stars feed them fish from the sky river, which we know as the Milky Way.

In South Africa, the LMC was said to be a puff of smoke from a pipe-smoking contest held on Cape Town's Table Mountain.

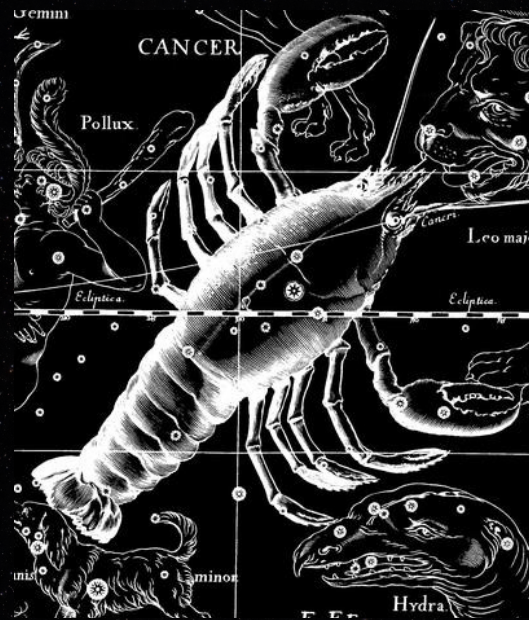
To find the Magellanic Clouds, first locate Canopus, the brightest star in the sky when facing south. From Canopus look south to find the LMC and from there, look south-west to find the SMC (both highlighted in **yellow** on the star chart).

Cancer

Cancer represents Karkinos, a giant crab sent to distract Heracles as he fought the great serpent Hydra. Heracles, however, proved too mighty and crushed the crab using only his foot. The goddess Hera, who had sent the crab, rewarded it for its service by placing it amongst the stars.

To the ancient Egyptians, Cancer was described as a Scarabaeus or scarab beetle. Scarabs were considered sacred, and symbolised immortality and the sun.

Cancer's small constellation which contains no bright stars is easy to overlook. To find Cancer, first look for the Gemini constellation and its bright pair of stars called Castor and Pollux. Look to the south-east of these stars to view the crab (highlighted in **orange** on the star chart).



Cancer from Uranographia by Johannes Hevelius. PUBLIC DOMAIN

THE SKY TONIGHT



FEBRUARY PĒPUERE SKY GUIDE

PERPETUAL
GUARDIAN
PLANETARIUM

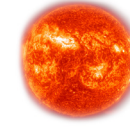

OTAGO museum

MOON MARAMA PHASES



Phase	Date
New moon	Tuesday 5 February
1st quarter	Wednesday 13 February
Full moon	Wednesday 20 February
3rd quarter	Wednesday 27 February

FEBRUARY PEPUERE 2019

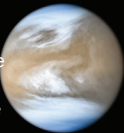


SUN RĀ RISE / SUNSET

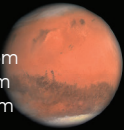
Date	Rise	Set
Tuesday 1	6.31AM	9.10PM
Tuesday 15	6.52AM	8.51PM
Thursday 31	7.11AM	8.28PM

PLANETS WHETŪ AO

Venus
Meremere-tū-ahiahi
Early February before sunrise
Mid February before sunrise
Late February before sunrise
In Libra



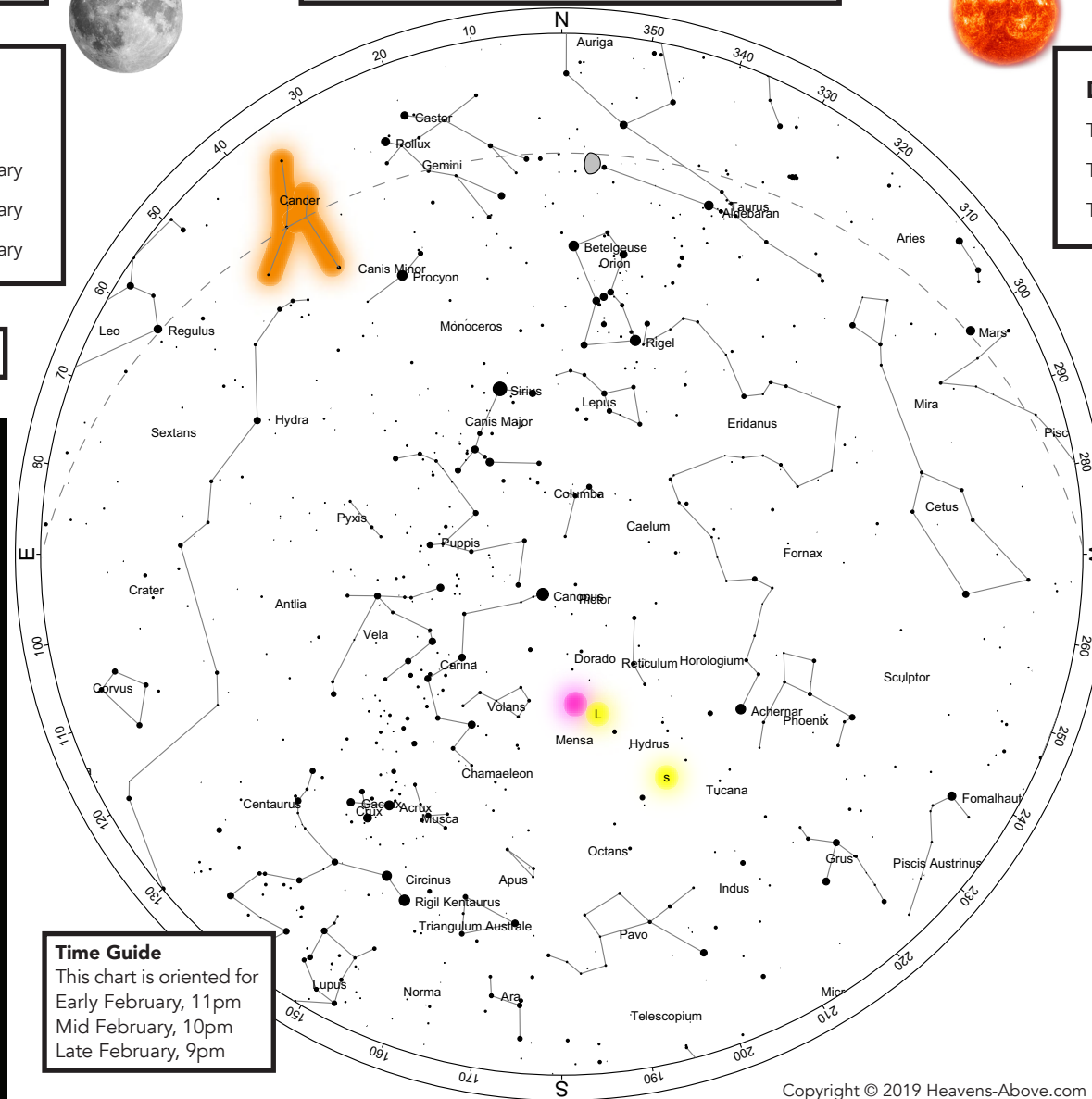
Mars
Matawhero
Early February before 11.40pm
Mid February before 11.00pm
Late February before 10.30pm
In Pisces



Jupiter
Hine-i-tiweka
Early February after 2.20am
Mid February after 1.30am
Late February after 12.50am
In Ophiuchus



The five brightest planets in our solar system are Mercury, Venus, Mars, Jupiter and Saturn. These have been known since ancient times and can be seen with the naked eye. They are visible through much of the year, except for a short period when they are too close to the sun to observe.






Time Guide
This chart is oriented for
Early February, 11pm
Mid February, 10pm
Late February, 9pm

How to use this chart: Hold the chart up to the sky and rotate it, so the direction you are looking matches the direction printed on the bottom. For example, if you are looking south, place "S" at the lower edge. Stars rise in the east and set in the west like the sun. As the Earth turns, the sky appears to rotate clockwise around the south celestial pole. The sky makes a small shift to the west every night, as the Earth rotates around the sun.

TARANTULA NEBULA

The Tarantula Nebula (cover image) is a massive star-forming region in the LMC. Lying 160,000 light years away from Earth, we can only just see it with our naked eye. It's so bright that even if it was one billion times farther away from Earth than the sun, it would still cast visible shadows on the ground!

Most pictures you'll see of the Tarantula Nebula are taken in the infrared spectrum and artificially coloured to bring out the details. To find the Tarantula Nebula (highlighted in pink on the star chart), find a brighter patch that looks like a star in the north-east portion of the LMC. Using binoculars or a telescope will provide the best viewing.

-  **Tarantula Nebula**
-  **Cancer**
-  **Magellanic Clouds**