

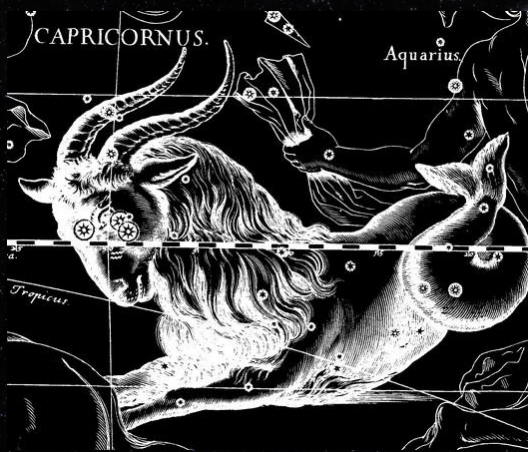
OCTOBER ŌKETOPA HIGHLIGHTS

Capricornus

The Greeks associated Capricornus with Aegipan, who was one of the Panes - a group of half-goat men who often had goat legs and horns.

Aegipan assumed the form of a fish-tailed goat and fled into the ocean to flee the great monster Typhon. Later, he aided Zeus in defeating Typhon and was rewarded by being placed in the stars.

To find Capricornus (highlighted in orange on the star chart), first locate the Aquarius constellation, then look to the south-west along the ecliptic line (the dotted line on the star chart).



Aquarius and Aquila

In Greek mythology, the Aquarius constellation is said to represent Ganymede, the handsome prince of Troy. His good looks attracted the attention of Zeus, who sent the eagle Aquila to kidnap him and carry him to Olympus to serve as a cupbearer to the gods. Because of this story, Ganymede was sometimes seen as the god of homosexual relations. He also gives his name to one of the moons of Jupiter, which are named after the lovers of Zeus.

To locate Aquarius, first find Altair, the brightest star in the Aquila constellation. Altair is one of the closest stars to Earth that can be seen with the naked eye, at a distance of 17 light years. From Altair, scan east-south-east to find Aquarius (highlighted in yellow on the star chart).

What's On in October?

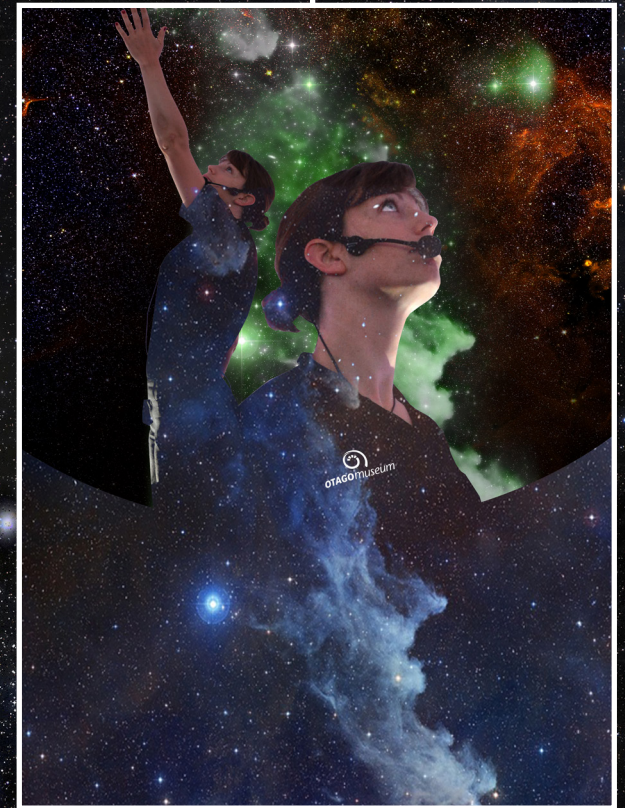
October shows at Perpetual Guardian Planetarium, book at Museum Shop or online. See website for show times and details: otagomuseum.nz

Capturing the Cosmos Planetarium show.

The Sky Tonight Planetarium show.

We Are Aliens! 3D Planetarium show.

THE SKY TONIGHT



OCTOBER ŌKETOPA SKY GUIDE

PERPETUAL
GUARDIAN
PLANETARIUM


OTAGOMUSEUM

MOON MARAMA PHASES

Phase

Date

3rd quarter

Tuesday 2 October

New moon

Tuesday 9 October

1st quarter

Wednesday 17 October

Full moon

Thursday 25 October

PLANETS WHETŪ AO

Venus

Meremere-tū-ahiahi

Early October before 11.00pm

Mid October before 9.58pm

Late October not visible

On Libra-Virgo border

Mars

Matawhero

Early October before 5.19am

Mid October before 4.46am

Late October before 3.53am

In Capricornus

Jupiter

Hine-i-tiweka

Early October before 11.37pm

Mid October before 10.56pm

Late October before 10.14pm

In Libra

Saturn

Pareārau

Early October before 2.56am

Mid October before 2.04am

Late October before 1.10am

In Sagittarius

OCTOBER ŌKETOPA 2018

SUN RĀ RISE / SUNSET

Date

Rise

Set

Monday 1

7.10 AM

7.45 PM

Monday 15

6.44 AM

8.04 PM

Wednesday 30

6.17 AM

8.26 PM

SPOOKY SPACE OBJECTS

Little Ghost Nebula

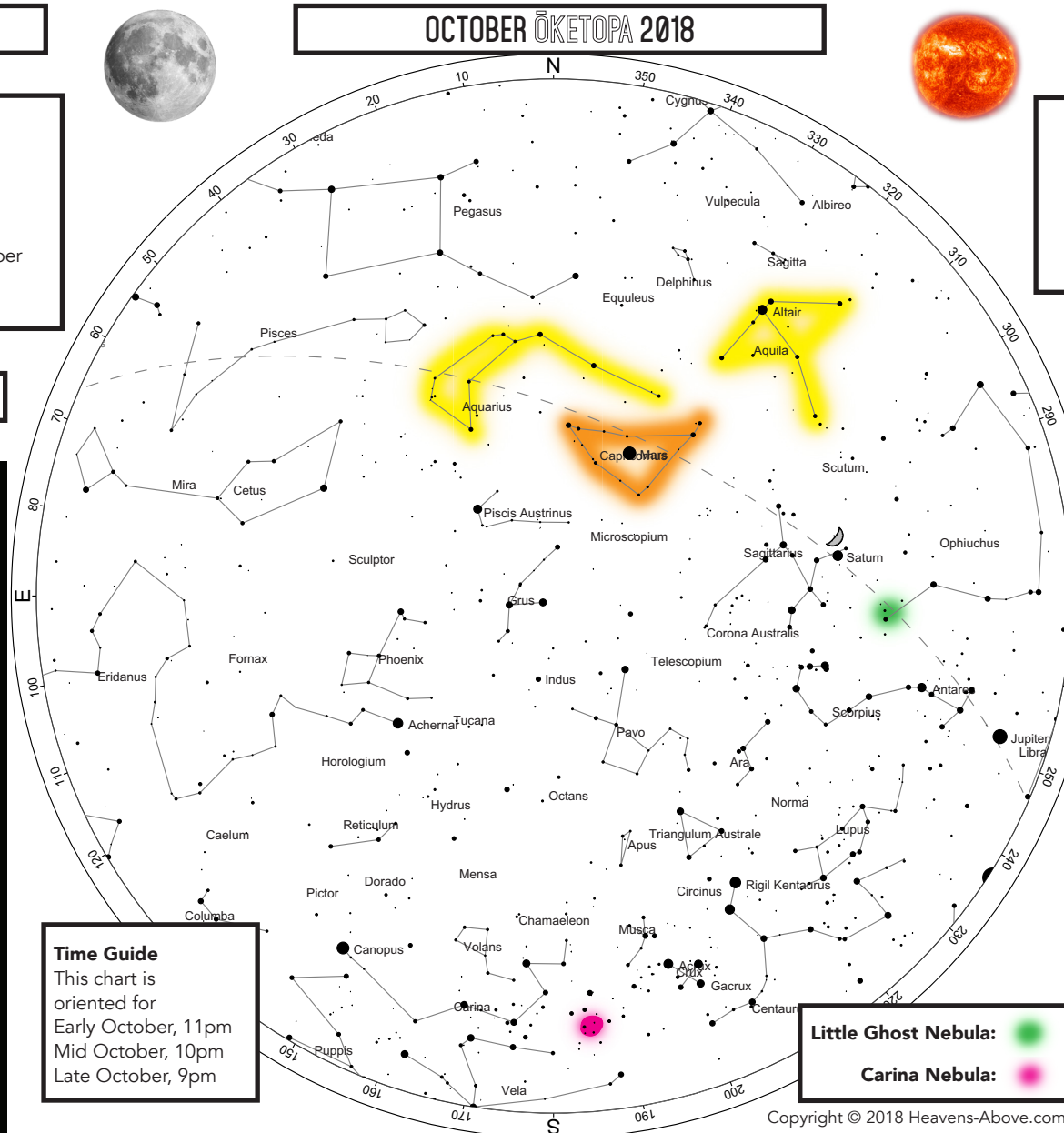
This nebula, named for its greenish glow, is the result of a dead star shedding its outer layer of gas, and gives us a glimpse at what may await our own sun when it dies in the next five billion years. The Little Ghost Nebula is located in Ophiuchus – find it where Ophiuchus touches the ecliptic line on our star chart.

Witch Head Nebula

Thought to be the remnants of an ancient supernova, this nebula resembles the profile of a witch. The nebula's eerie blue glow is due to its proximity to the blue supergiant star Rigel, located in the Orion constellation (shown on the cover). Rigel can be used to find the Witch Head Nebula: first find Rigel near the eastern horizon around midnight (**not visible on chart**) then look west to locate the Witch Head Nebula.

Vampire Stars

The **Carina Nebula** encompasses O-type stars, the biggest and hottest stars in our universe. These stars often come in binary pairs, where two stars orbit each other. Sometimes the larger star will become vampiric and suck the matter from the smaller star, extending the vampire star's lifespan. To find the Carina Nebula, first locate the Southern Cross then scan south-east until you find a bright orange star – this is Eta Carinae, a star in the centre of the nebula.



Time Guide

This chart is oriented for
Early October, 11pm
Mid October, 10pm
Late October, 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.

Little Ghost Nebula:

Carina Nebula: