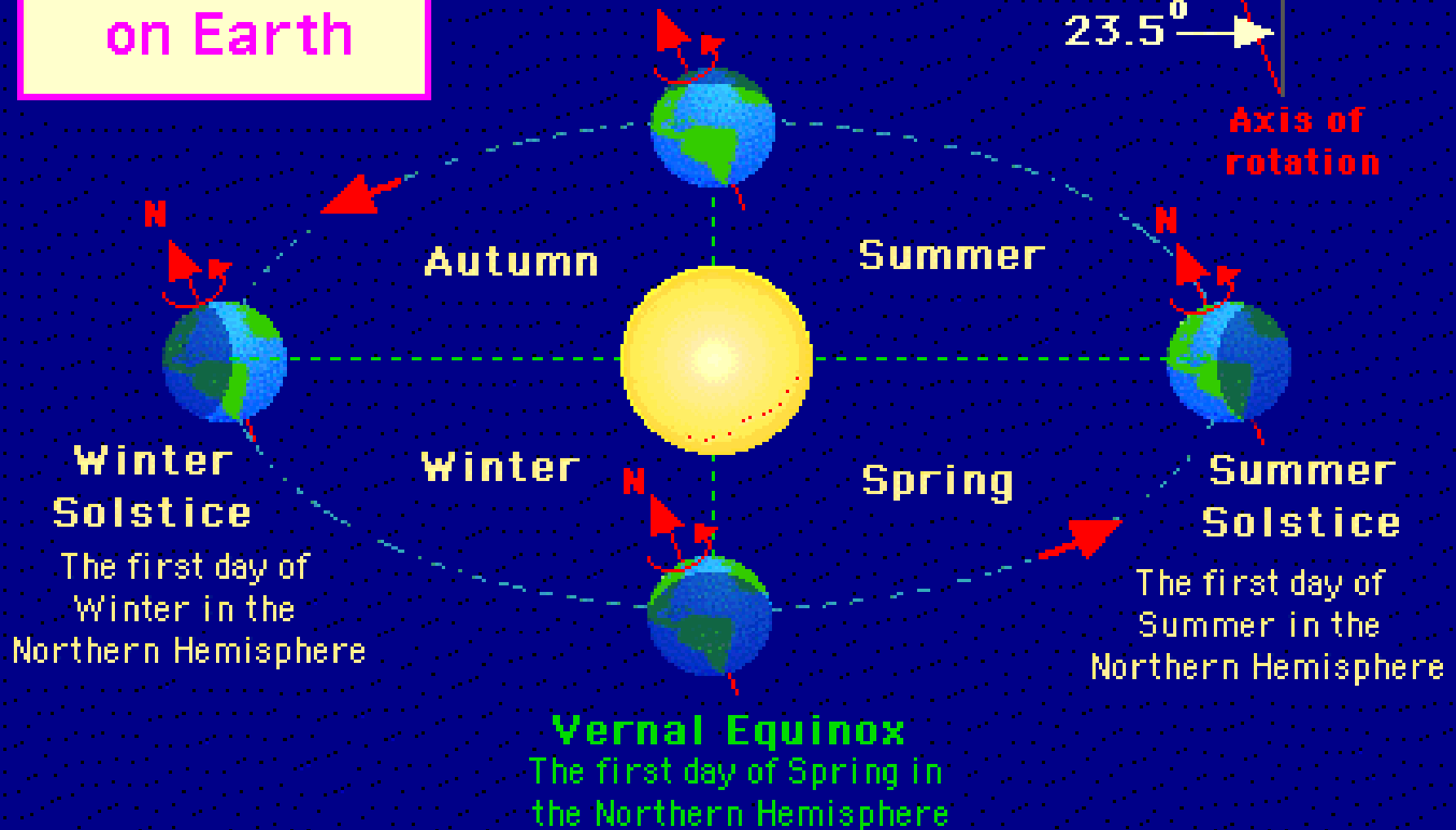
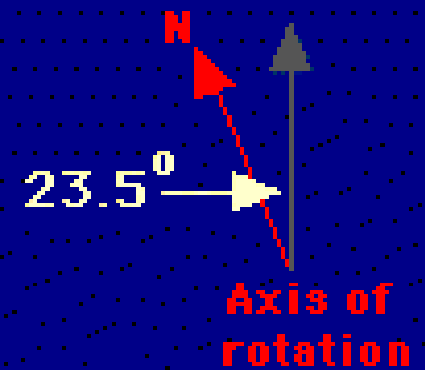


# The Seasons on Earth

## Autumnal Equinox

The first day of Autumn in the Northern Hemisphere



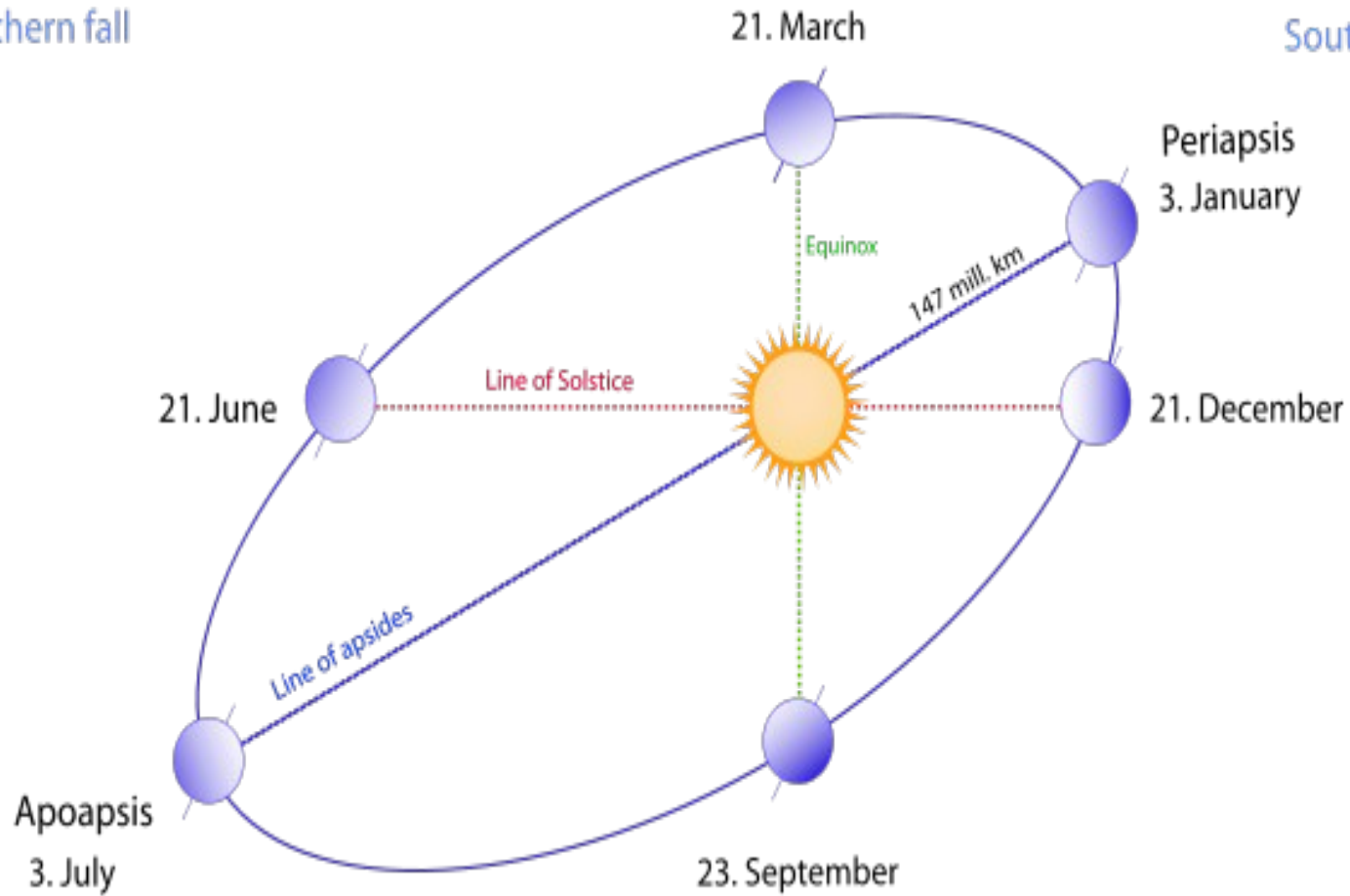
The Sun and the Earth are not to scale in this drawing.

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March 20 is the Vernal equinox.

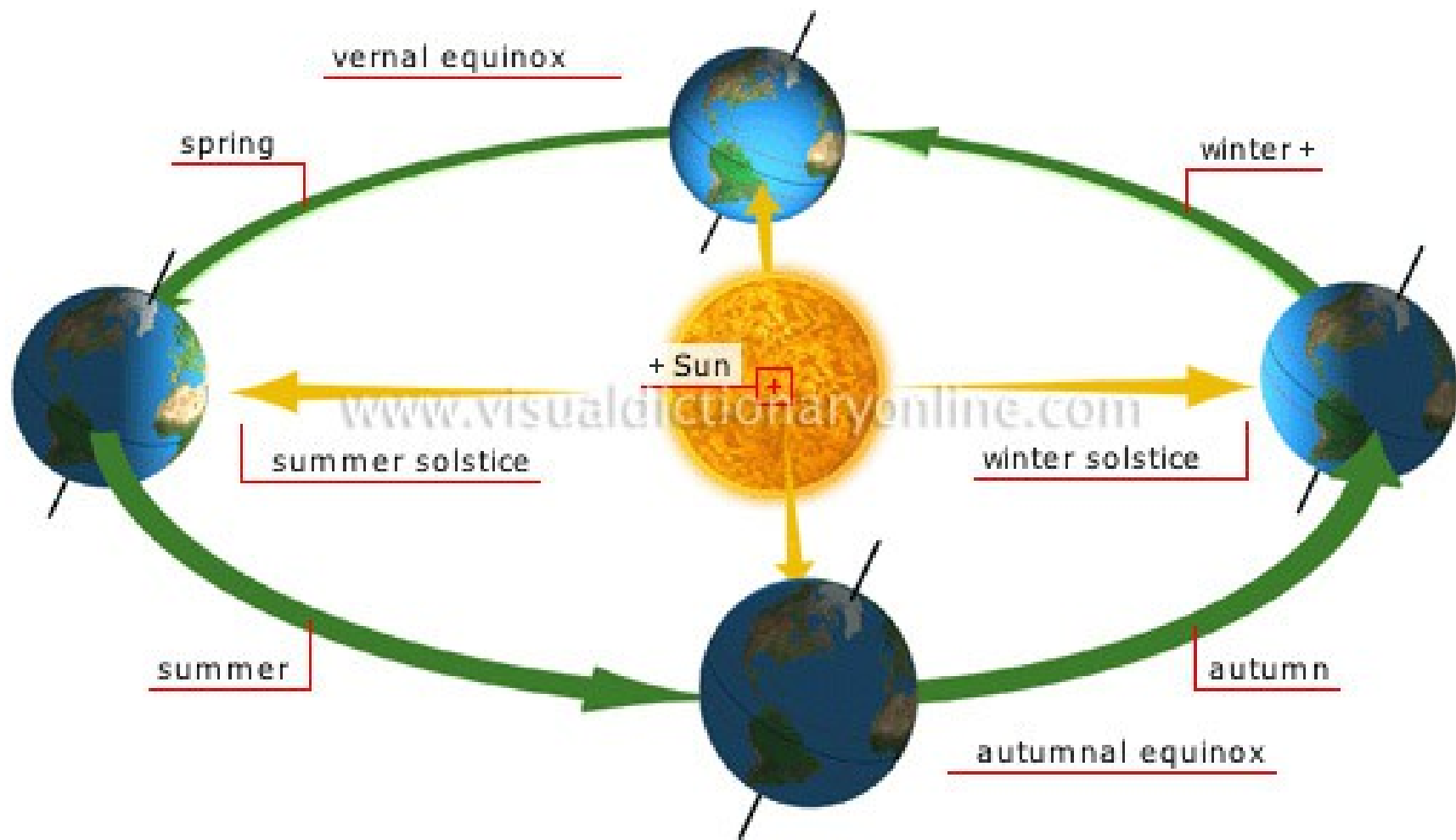
Northern spring/  
Southern fall

Northern winter/  
Southern summer

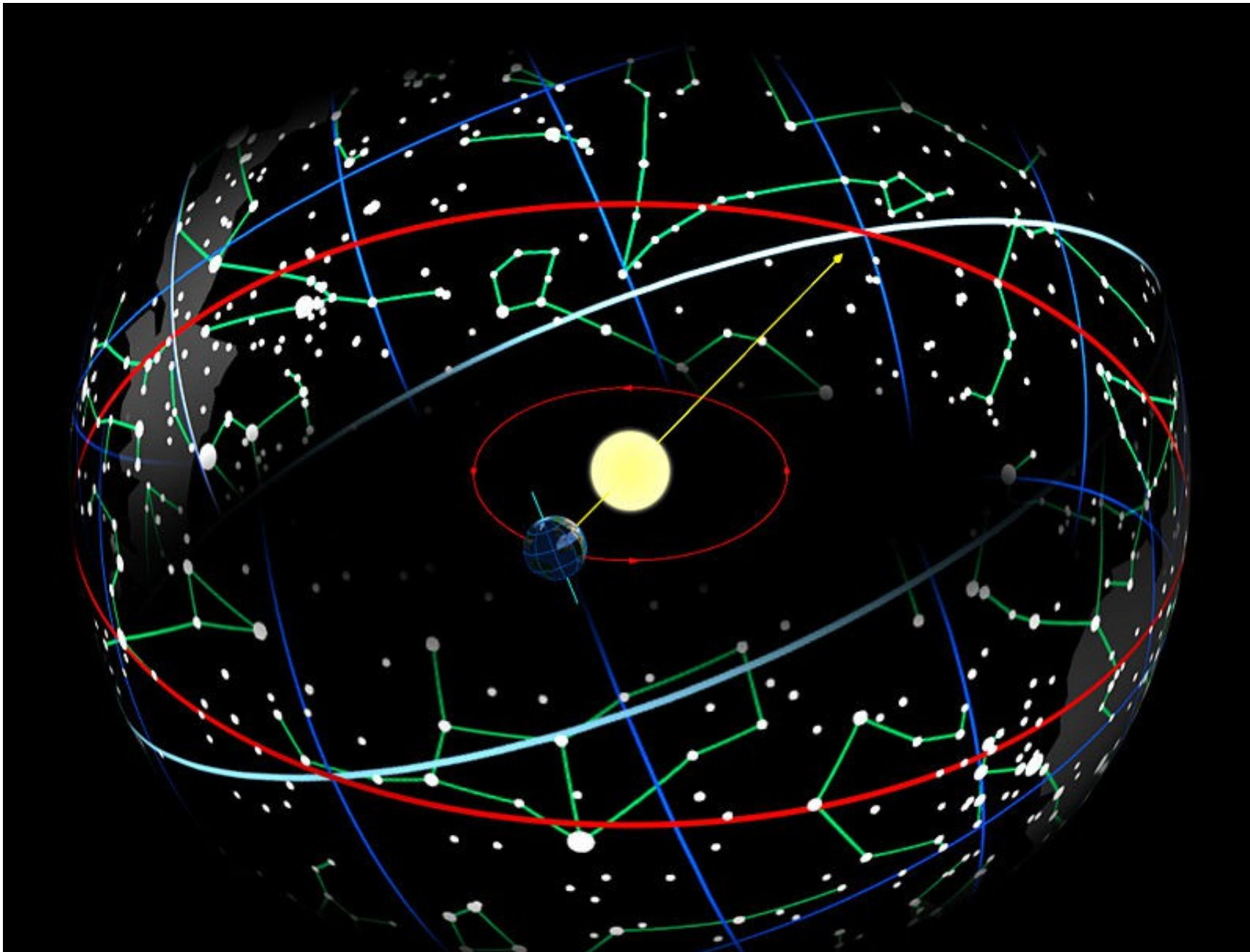


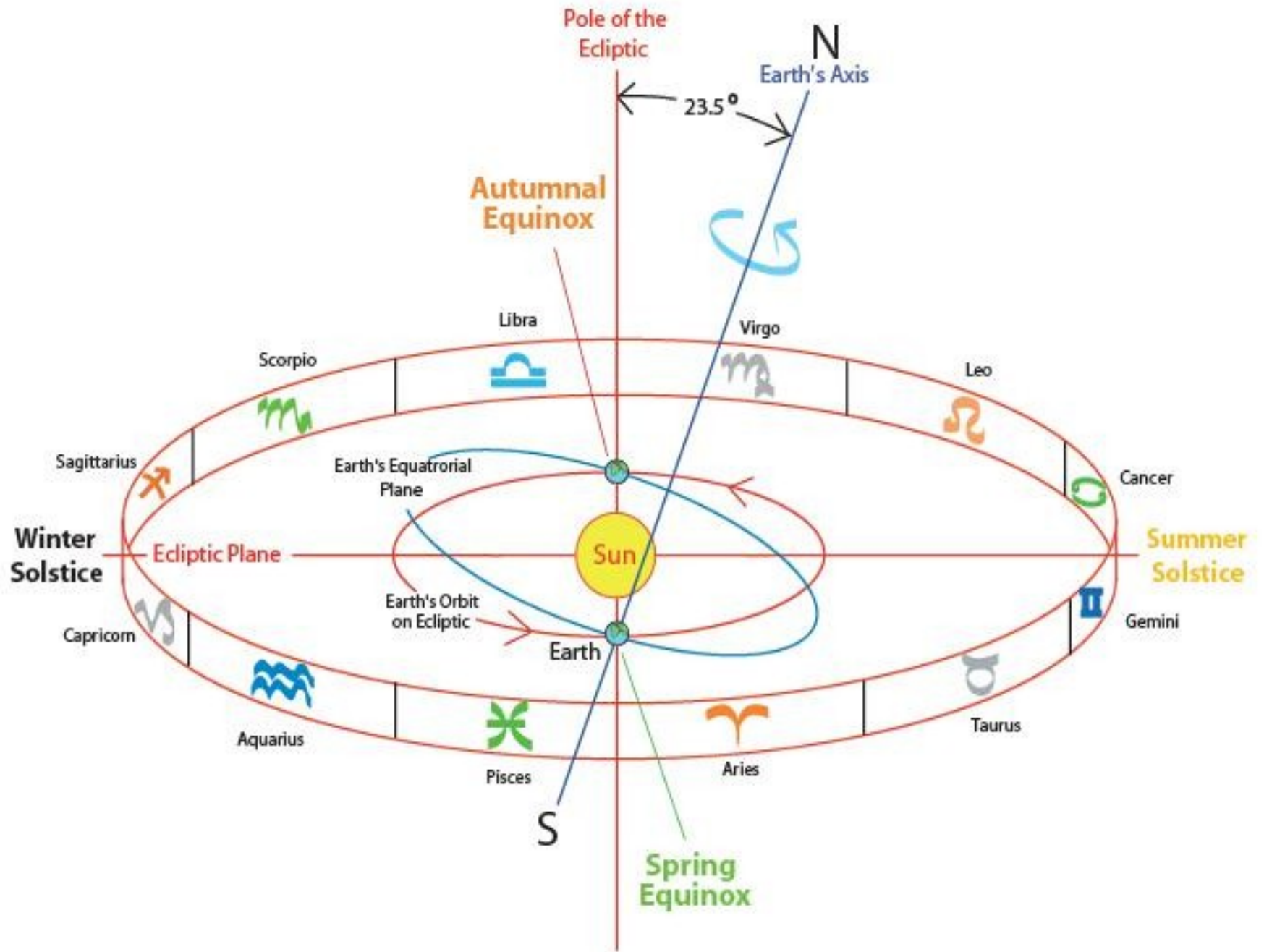
Northern summer/  
Southern winter

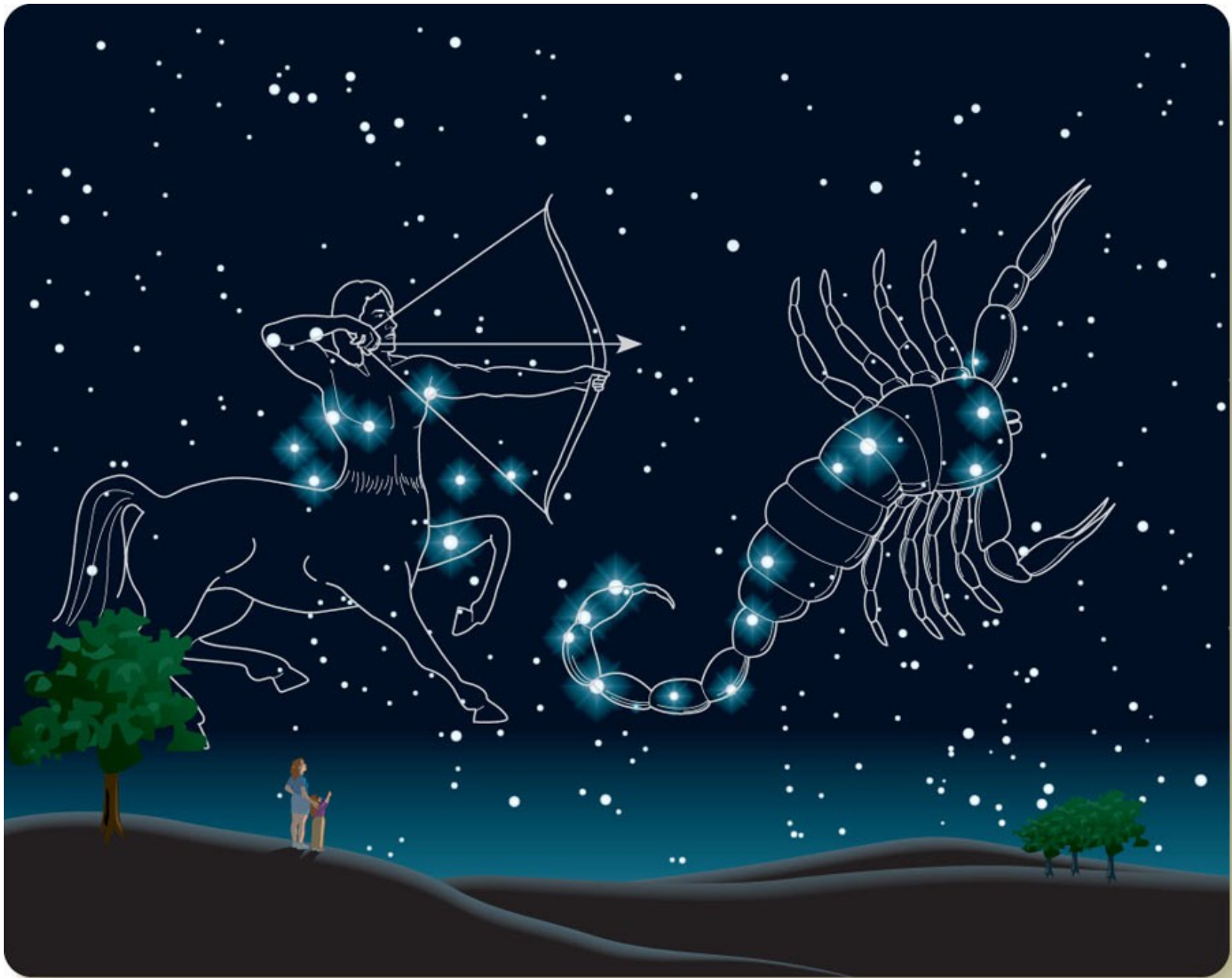
Northern fall/  
Southern spring

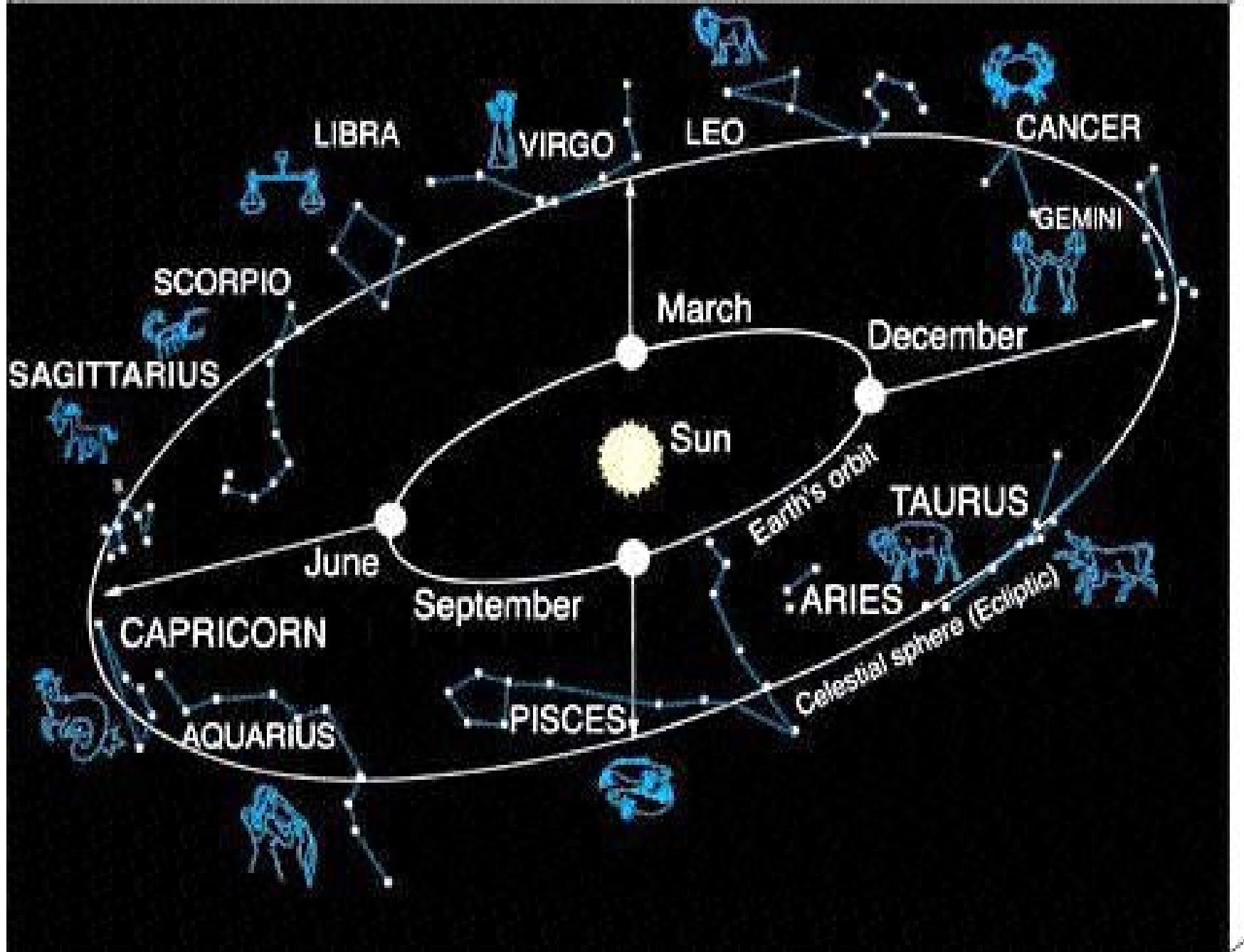


The ecliptic is in red and as a dashed line on your planet locator. The zodiac is a zone (18 degrees) centered on the ecliptic. The equator line is in blue. They don't match because the earth is tilted. The ecliptic plane includes the sun and the planets.



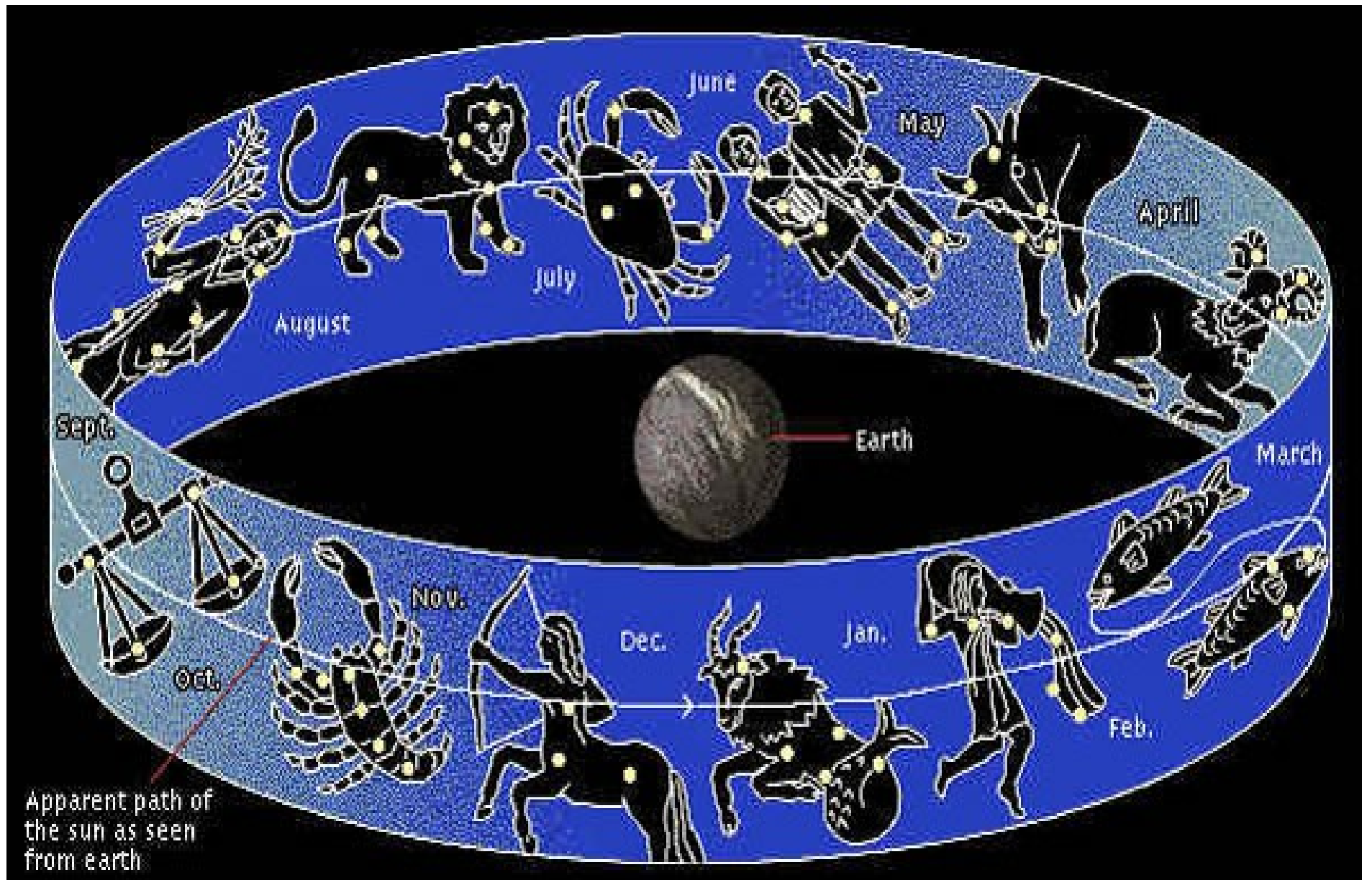






See applet !

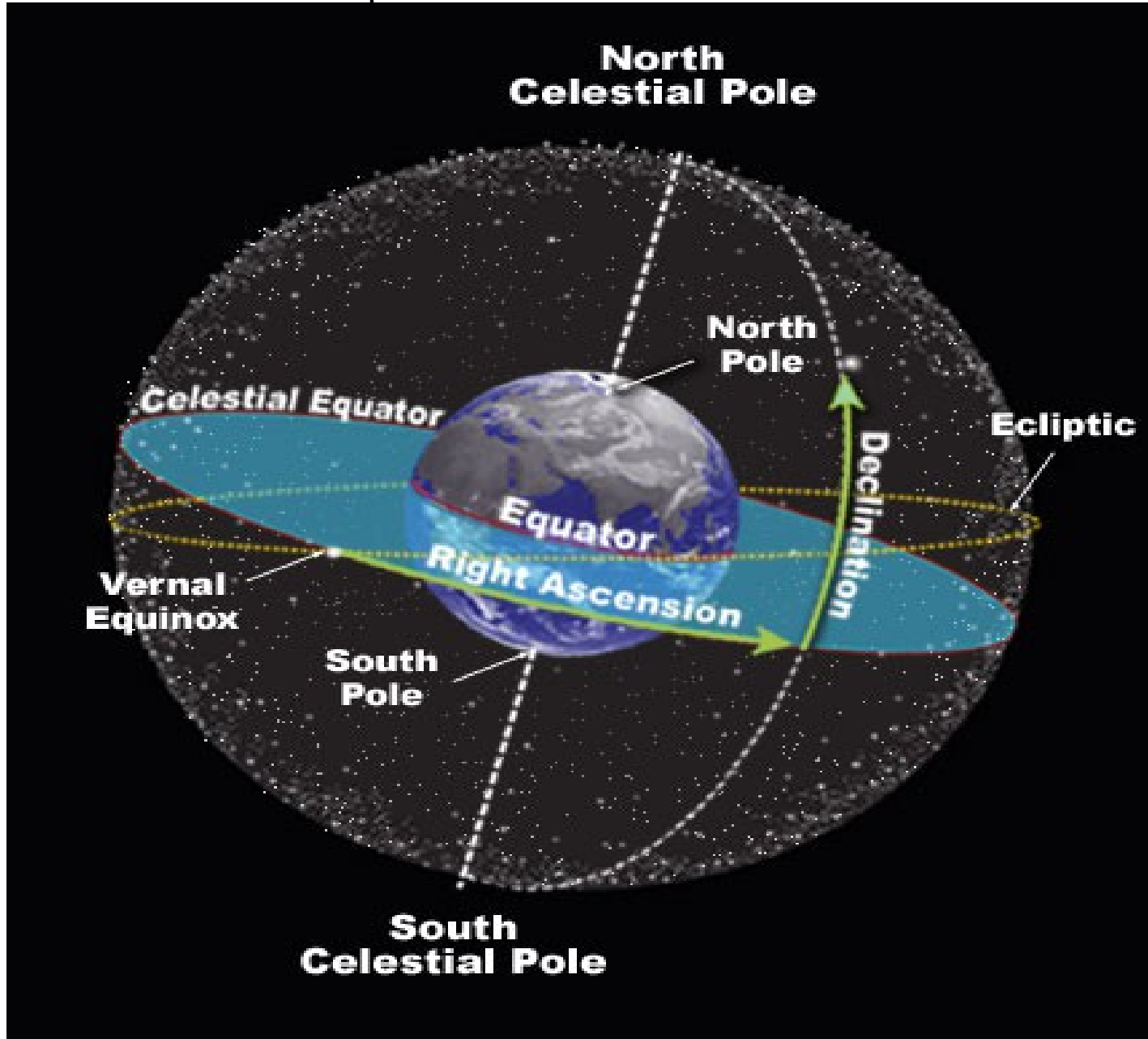
In January the Sun seems to be in the constellation of Capricorn. So the sign of the Babies born will be Capricorn. If you are born in July, what is your sign ?



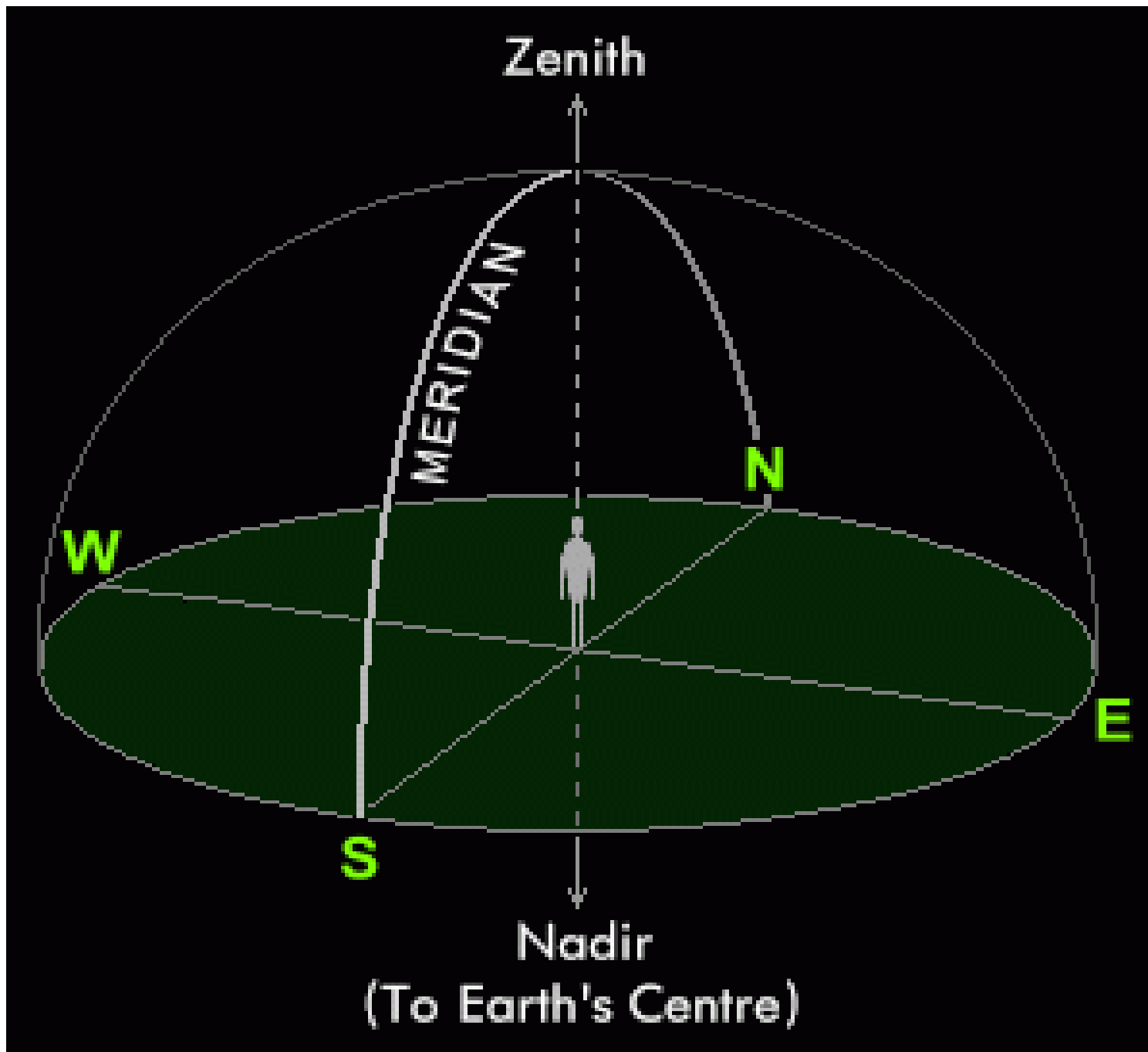
Apparent path of the sun as seen from earth

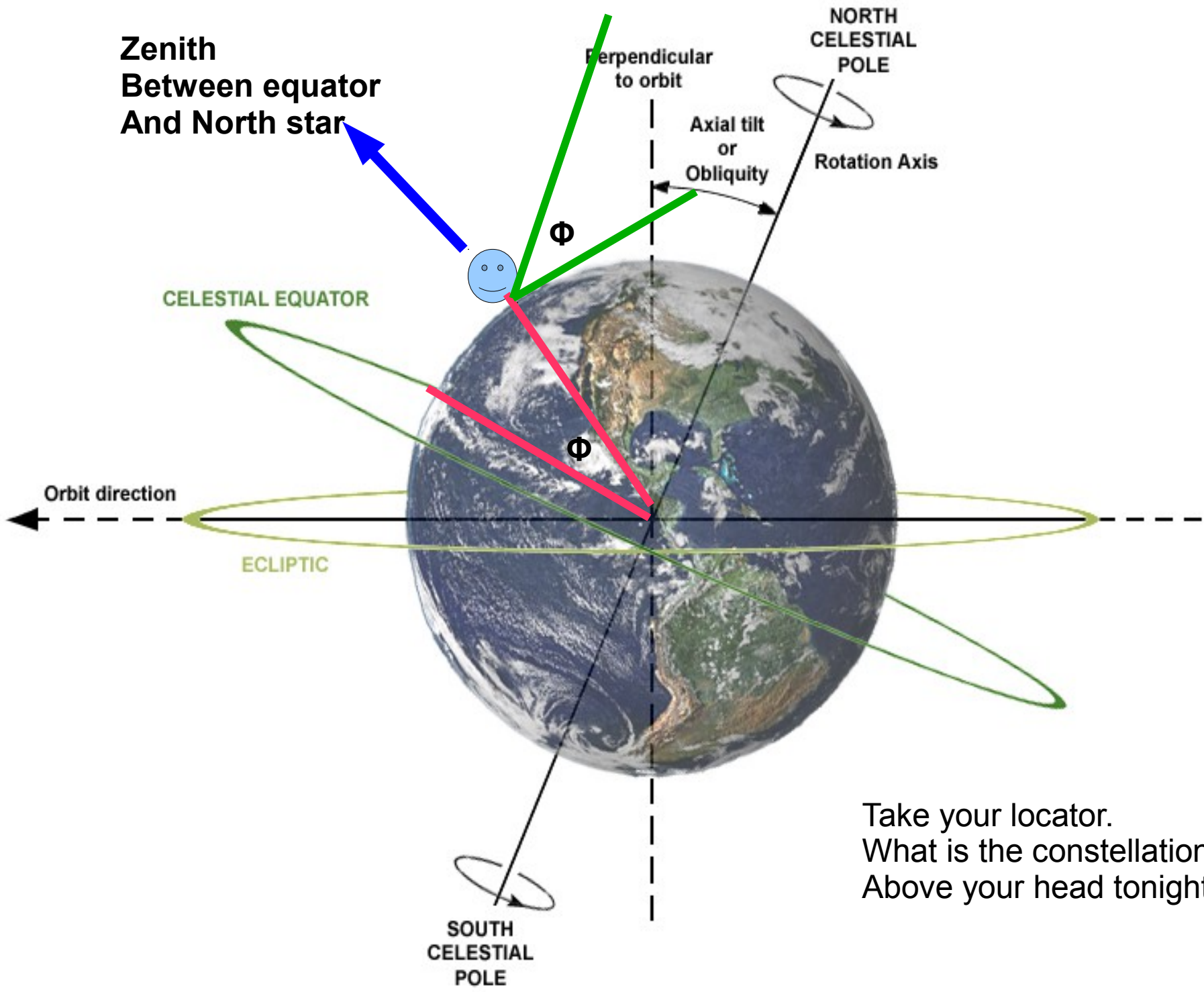


Take your locator. Find the intersections of the equator and the ecliptic lines. These intersections corresponds to which dates ?



Start from the vernal and go clockwise to find an object. Count in hours. Then go above the equator toward the North star . Count in degrees. Altair 19h49m +8.78





Zenith  
Between equator  
And North star

NORTH  
CELESTIAL  
POLE

Perpendicular  
to orbit

Axial tilt  
or  
Obliquity

Rotation Axis

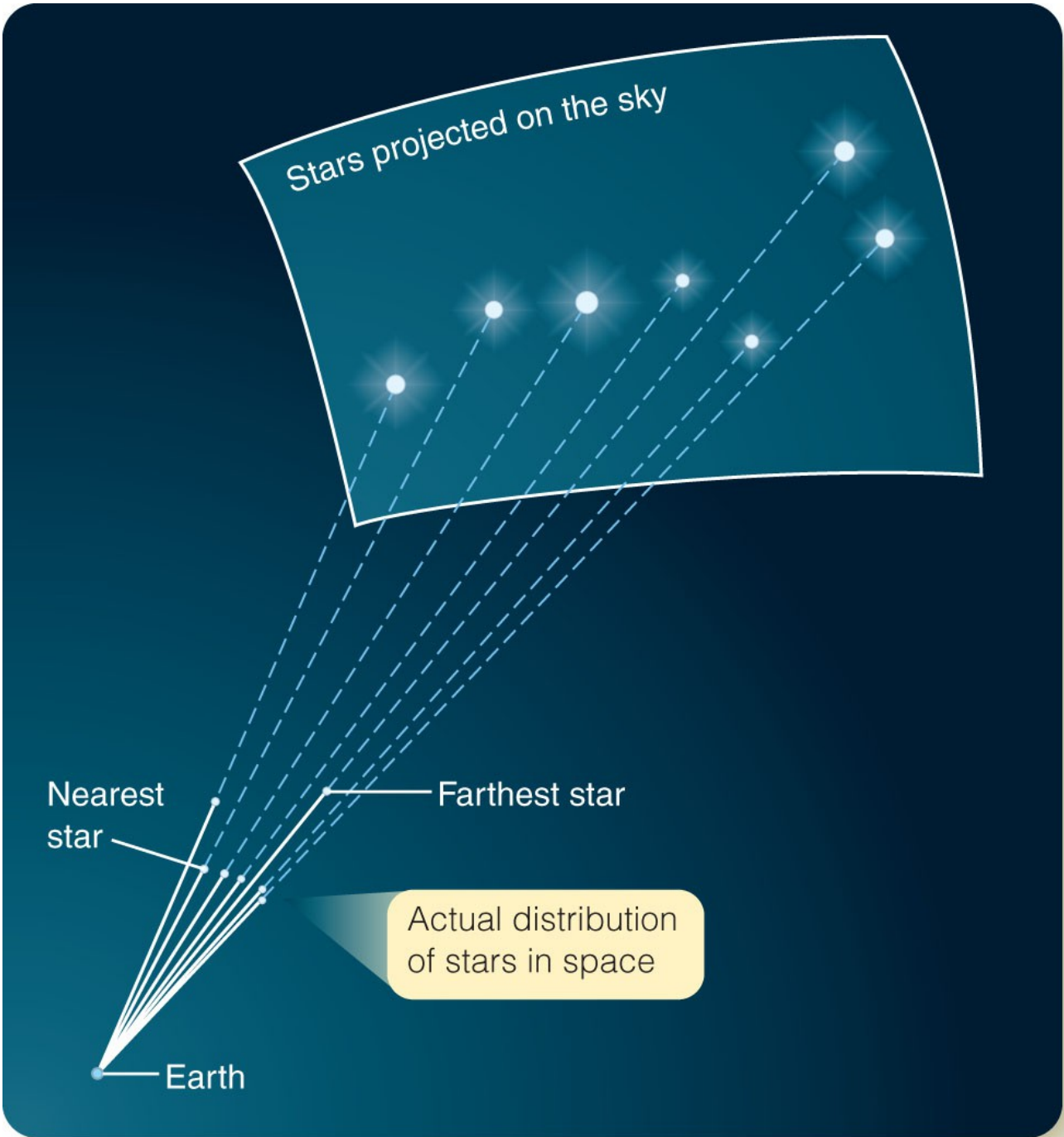
CELESTIAL EQUATOR

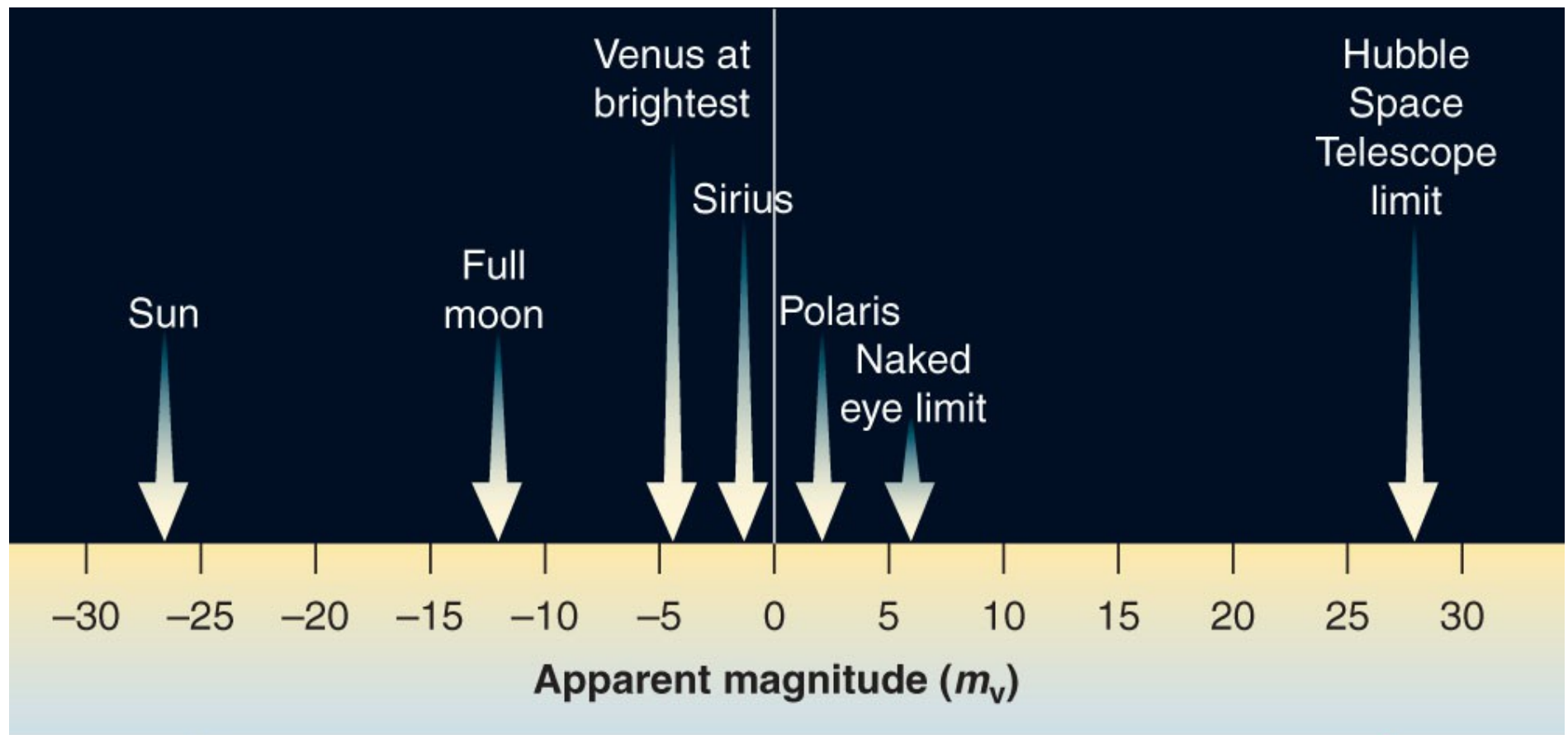
Orbit direction

ECLIPTIC

Take your locator.  
What is the constellation  
Above your head tonight?

SOUTH  
CELESTIAL  
POLE





Brighter ←

→ Fainter

