

Navigating the Night Sky

Student Name:

In professional astronomy, a great deal of our work is done by computer - and that is indeed what we will focus on for much of this class. However, having a fundamental understanding of the sky - terminology, motion, and how it relates to you and your observations - is an important step. It might help you figure out what objects to observe when conditions change, or help you judge how bad the light clouds really are for your observations. Even in Seattle, we can sometimes see enough of the sky to get our bearings and feel at home.

Part 1: Observing from where we are

Succinctly define the terms below:

Meridian

Zenith

Equinox

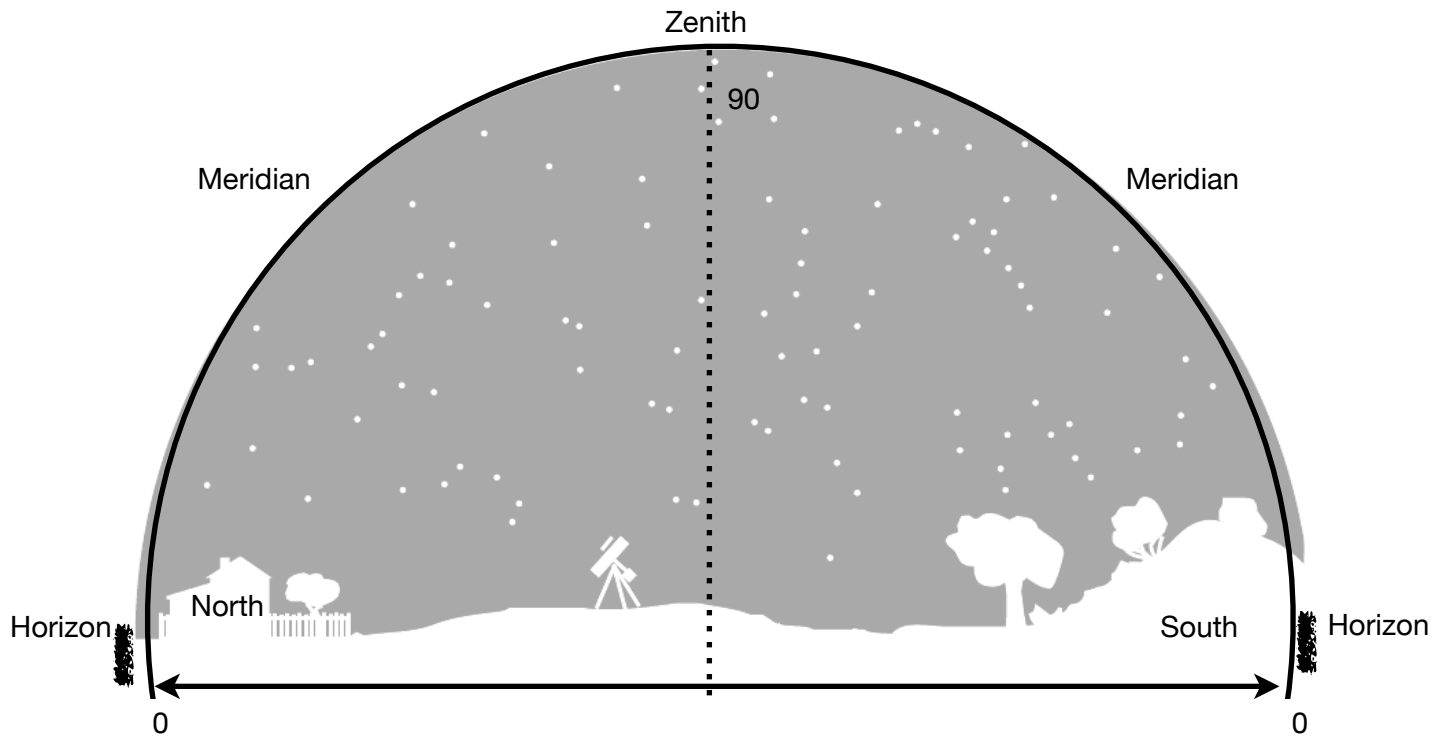
Summer Solstice

Airmass

Equatorial Coordinates

Galactic Coordinates

Solid Angle (on the Celestial sphere)



Draw & label lines on the above image to indicate the following features. Indicate the angles either on the picture or next to the feature name below.

Celestial North Pole

Celestial Equator

Altitude of the Sun at the summer solstice

Altitude of the Sun at the winter solstice

Altitude of the Sun at the equinoxes

You are observing a star that is the same number of degrees above the celestial equator as your latitude. Where is that star when it crosses the meridian?

“What’s the relationship between your latitude and the declination of a star that is due south and on the horizon?”