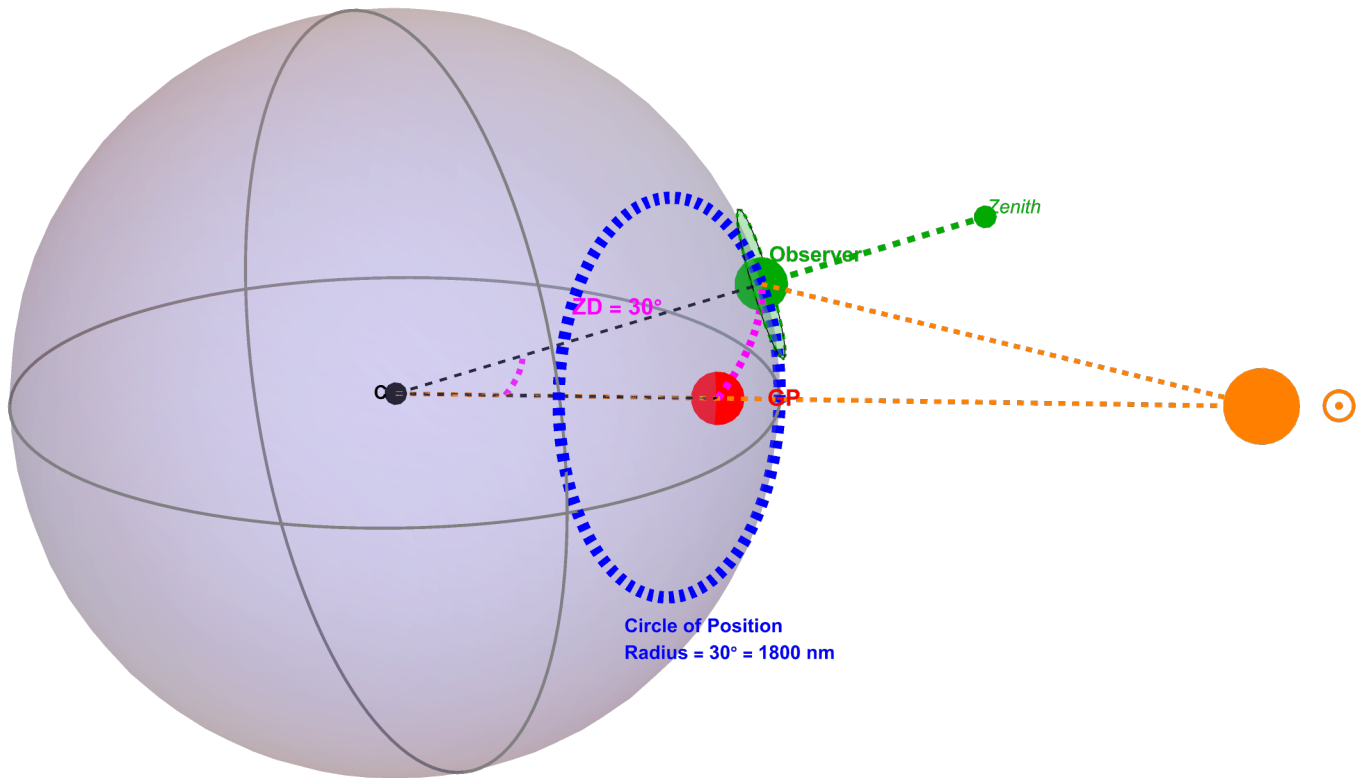


Celestial Navigation: Zenith Distance and Circle of Position



KEY RELATIONSHIPS:

- GP = Geographic Position (sub-stellar point)
- GP is the CENTER of the circle
- Observer is ON the circle
- Zenith Distance (ZD) = $90^\circ - \text{Altitude}$
- Circle radius = $\text{ZD} \times 60$ nautical miles

In this diagram:

Altitude = 60°

ZD = 30°

Radius = 1800 nm