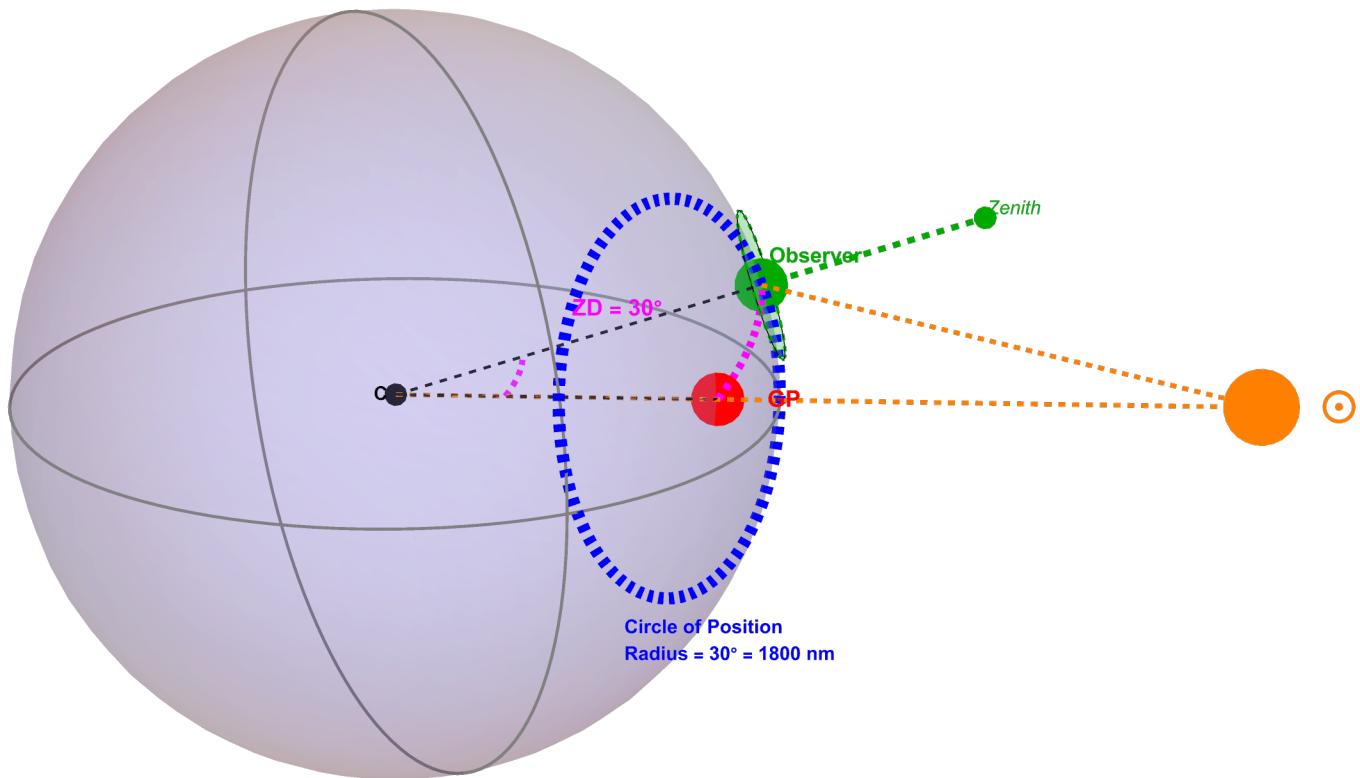


# Celestial Navigation: Zenith Distance and Circle of Position



## 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 =  $ZD \times 60$  nautical miles

## In this diagram:

Altitude =  $60^\circ$   
ZD =  $30^\circ$   
Radius =  $1800 \text{ nm}$