

(GPS-SV) GPS SV Antenna Angles

β Angle off of **GPS SV** boresight, used to Index into **SV** Antenna Pattern

$$\beta = 90 - \theta - \alpha$$

β

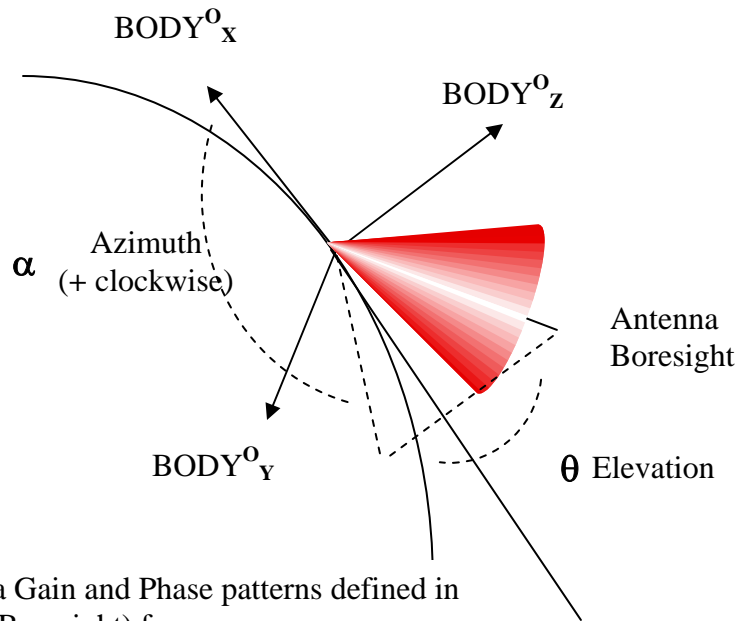
θ

\vec{R}_U

α

$$\alpha = \frac{\text{COS-1}(\vec{R}_U \cdot \vec{R}_S)}{R_U R_S}$$

(UE) User Equipment Antenna Angles



(UE) Antenna Gain and Phase patterns defined in ANTENNA (Boresight) frame.

α and β computed in BODY frame and transformed into ANTENNA (Boresight) frame.