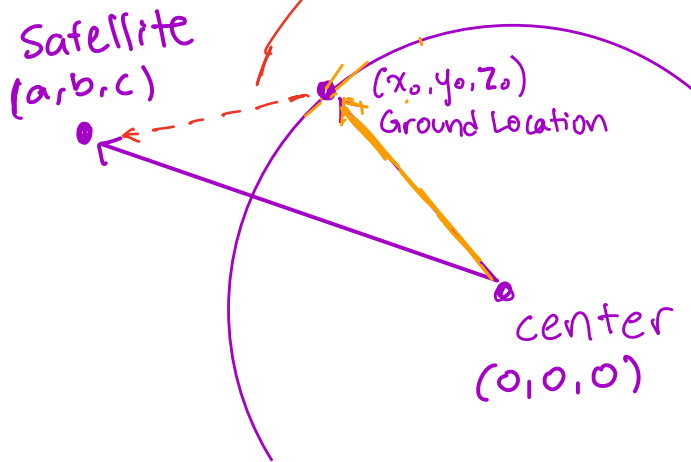
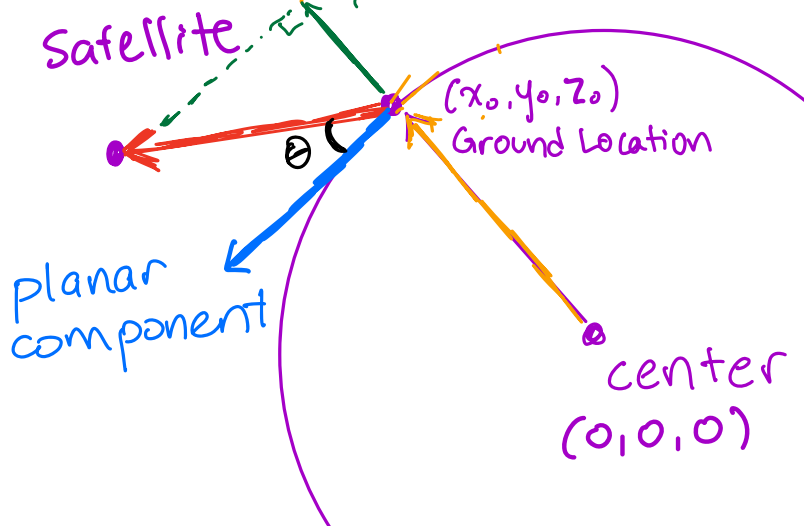


satellite position relative to ground station  
 $\langle a-x_0, b-y_0, c-z_0 \rangle$



relative  
 projection of satellite  
 onto ground station vector  
 $\text{proj}_{\vec{b}} \vec{a} = \frac{\vec{a} \cdot \vec{b}}{\vec{b} \cdot \vec{b}} \vec{b}$



In the program,  
 I use the planar  
 component and the  
 projection to  
 determine the angle  
 of elevation ( $\theta$ ).