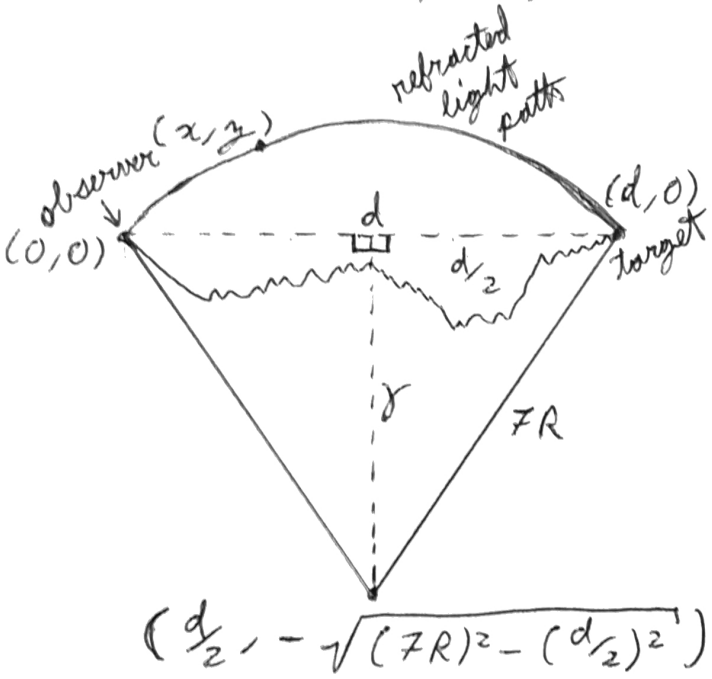
$$\left(x-\frac{d}{2}\right)^2+\left(y+\sqrt{(7R)^2-\left(\frac{d}{2}\right)^2}\right)^2=(7R)^2$$ Equation of a circle

$$x^2-x\,d+\frac{d^2}{4}+y^2+2y\sqrt{(7R)^2-\left(\frac{d}{2}\right)^2}+(7R)^2-\left(\frac{d}{2}\right)^2=(7R)^2$$

$$y^2+2\sqrt{(7R)^2-\left(\frac{d}{2}\right)^2}\,y+x(x-d)=0$$ quadratic formula

$$y=\frac{-2\sqrt{(7R)^2-\left(\frac{d}{2}\right)^2}\pm\sqrt{4\left[(7R)^2-\left(\frac{d}{2}\right)^2\right]-4x(x-d)}}{2}$$

$$y=-\sqrt{49R^2-d^2/4}+\sqrt{49R^2-d^2/4+x(d-x)}$$



Finding y in terms of x, d, & R, where R is the radius of the Earth.

x-axis: distance from observer line of sight

y-axis: distance from direct LOS

$$\gamma=\sqrt{49R^2-\frac{d^2}{4}}$$

$$y=\sqrt{\gamma^2+x(d-x)}-\gamma$$