



$$\frac{\Delta L}{L} \approx \frac{R_{pl}}{R_*} \quad t_{\text{transit}} = \frac{T_{pl}}{\pi} \left( \frac{R_* \cos(\delta) + R_{pl}}{a_{pl}} \right) \quad \cos i = \frac{R_* \sin(\delta)}{a_{pl}}$$