



$$\sin \frac{\Delta \text{Lat}}{2} = \frac{\text{chord}}{R}$$

$$\tan \alpha = \frac{\text{chord}}{\text{dist} - R \cdot \cos \frac{\Delta \text{Lat}}{2}}$$

$$\sin \alpha_{\text{max}} = \frac{R}{\text{dist}}$$

$$\tan \alpha_{\text{max}} = \frac{\text{chord}_{\text{max}}}{\text{dist} - R \cdot \cos \frac{\Delta \text{Lat}}{2}}$$

$$\text{magn} = \frac{\text{chord}_{\text{max}}}{\text{chord}} = \frac{\tan \alpha_{\text{max}}}{\tan \alpha}$$