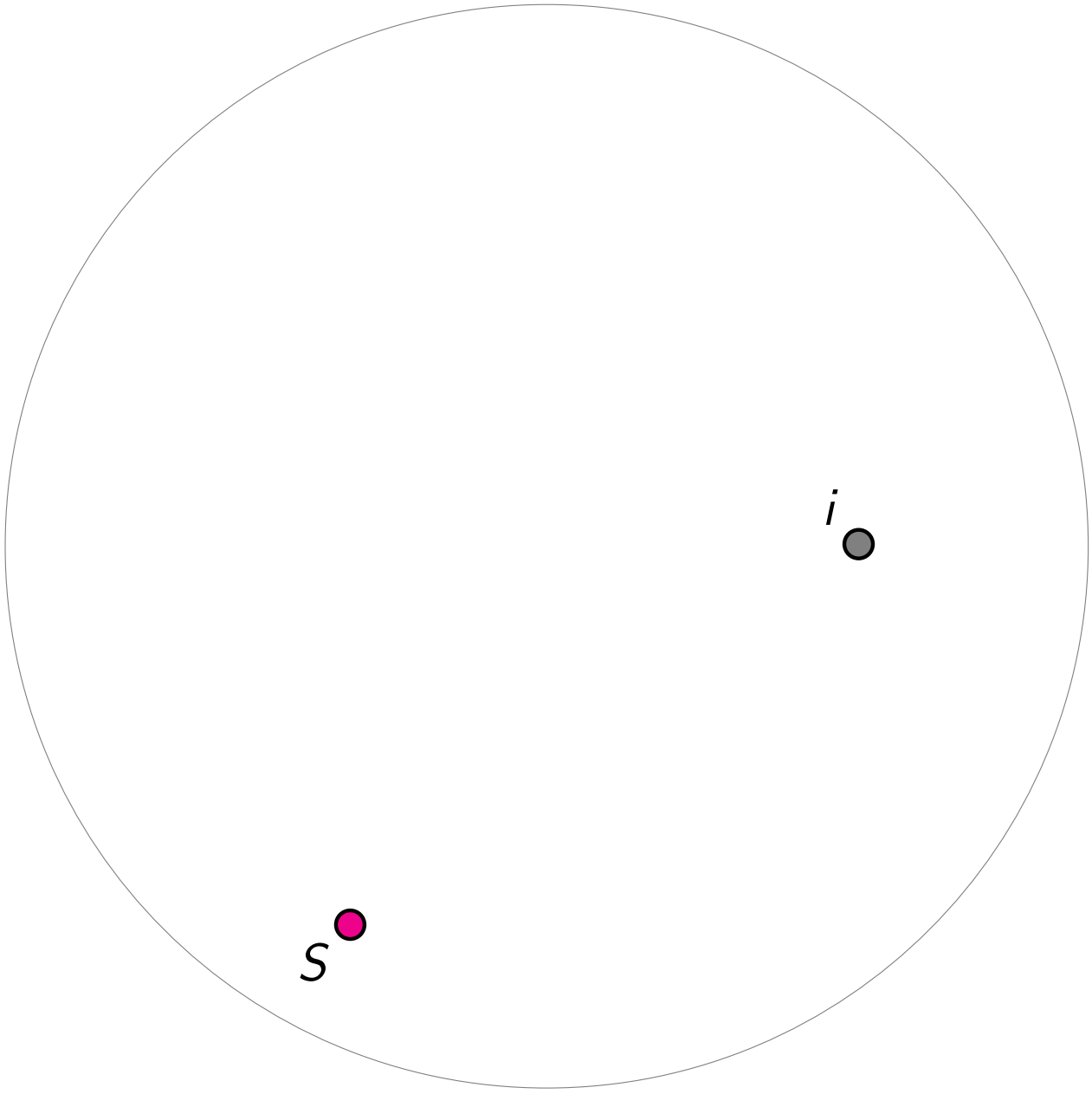
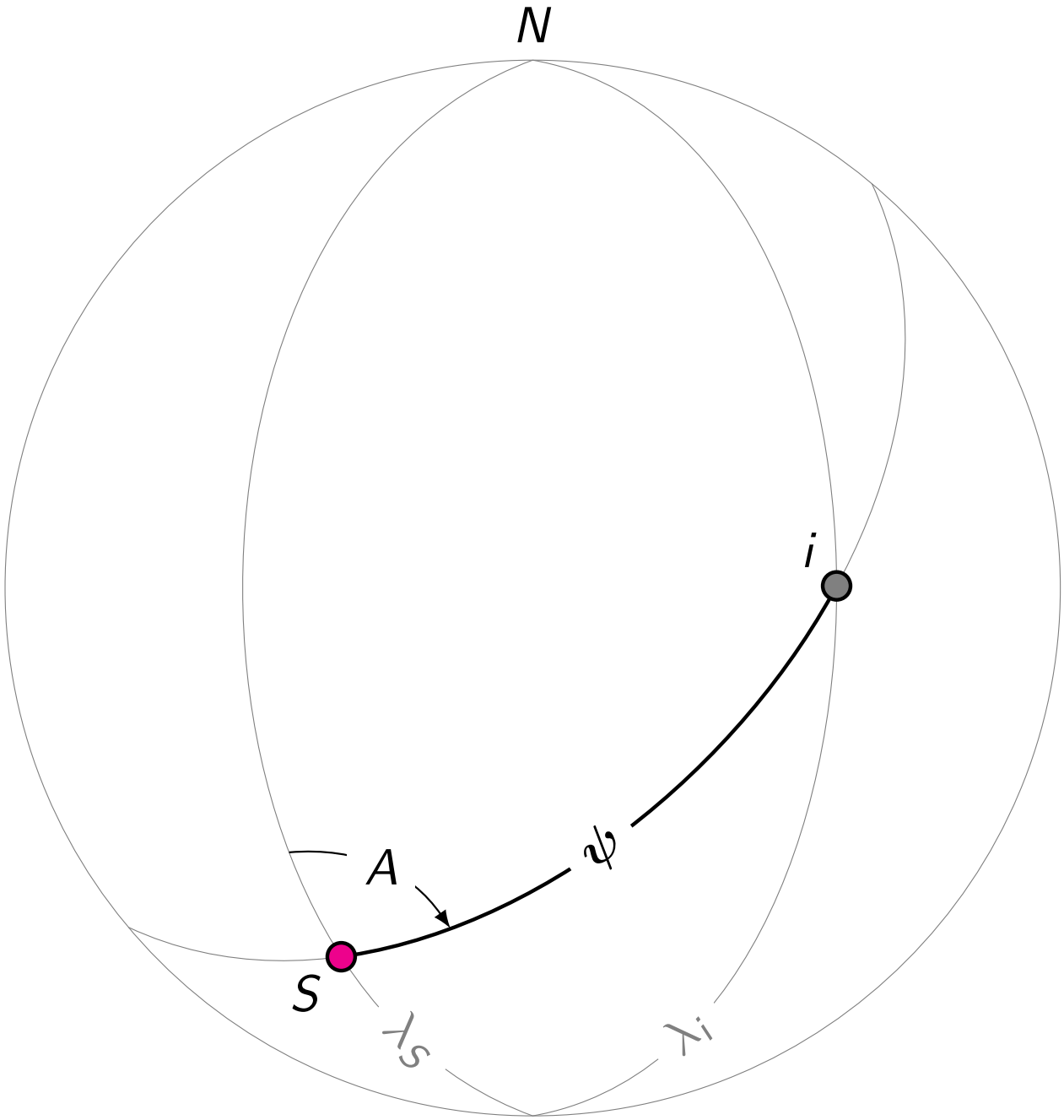
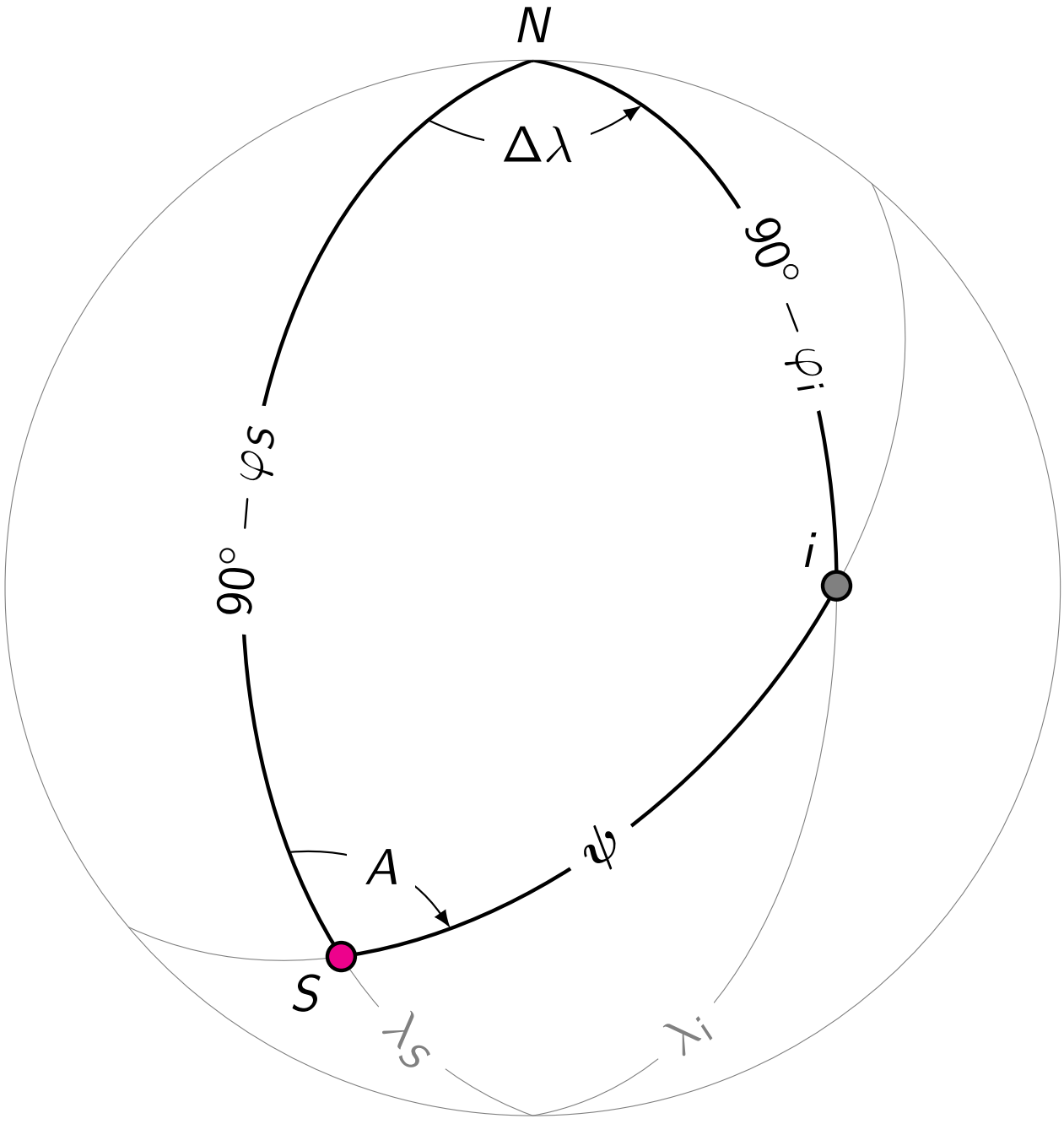
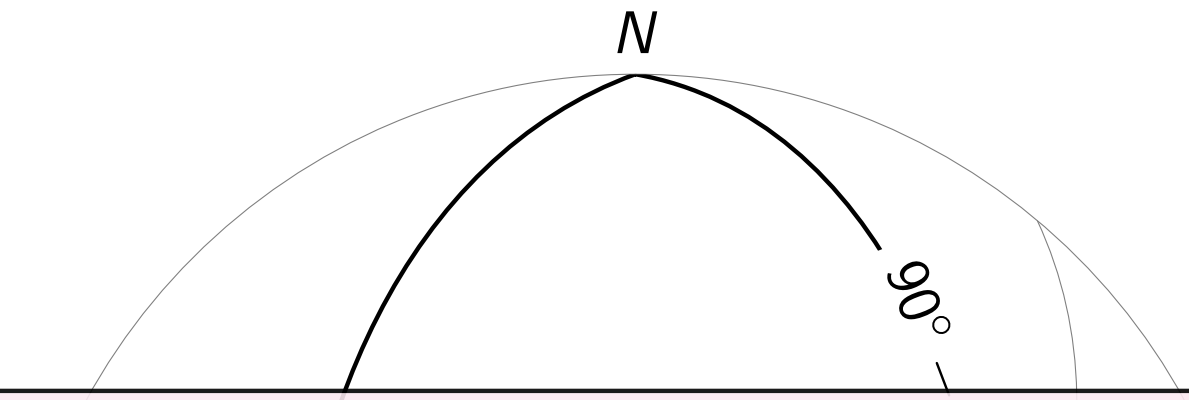

i
S


N
i
ψ
A
S
λS
λi


N
Δλ
90° − φi
90° − φs
i
A
ψ
S
λs
λi



$$\psi = 2 \arcsin \left(\sqrt{\sin^2 \left(\frac{\Delta\varphi}{2} \right) + \cos \varphi_S \cos \varphi_i \sin^2 \left(\frac{\Delta\lambda}{2} \right)} \right)$$

lub

$$\psi = \arccos \left(\sin \varphi_S \sin \varphi_i + \cos \varphi_S \cos \varphi_i \cos \Delta\lambda \right)$$

$$A = \arcsin \left(\frac{\cos \varphi_i \cdot \sin \Delta\lambda}{\sin \psi} \right)$$