A: (α_A, δ_A), SA: $(\alpha_{SA}, \delta_{SA})$. SA: $\cos\delta_{SA}\cos\alpha_{SA}e_{chix} + \cos\delta_{SA}\sin\alpha_{SA}e_{chiy} + \sin\delta_{SA}e_{chiz}$, SA: $\cos\delta_{SA}\cos(\alpha_{SA}-\theta_1)e_{zhongx}+\cos\delta_{SA}\sin(\alpha_{SA}-\theta_1)e_{zhongy}+\sin\delta_{SA}e_{zhongz}$, nan->xi, $e_{zhongx} = \cos\theta_2 e_{diz} + \sin\theta_2 e_{dix}$, $e_{zhongz} = \sin\theta_2 e_{diz} - \cos\theta_2 e_{dix}$,

SA: $\cos\delta_{SA}\cos(\alpha_{SA}-\theta_1)(\cos\theta_2 e_{diz} + \sin\theta_2 e_{dix}) + \cos\delta_{SA}\sin(\alpha_{SA}-\theta_1)e_{diy} + \sin\delta_{SA}(\sin\theta_2 e_{diz} - \cos\theta_2 e_{dix})$, SA: $(\cos\delta_{SA}\cos(\alpha_{SA}-\theta_1)\sin\theta_2 - \sin\delta_{SA}\cos\theta_2)e_{dix} + \cos\delta_{SA}\sin(\alpha_{SA}-\theta_1)e_{diy} + (\cos\delta_{SA}\cos(\alpha_{SA}-\theta_1)\cos\theta_2 + \sin\delta_{SA}\sin\theta_2)e_{diz}$

$\sin\theta_3 = (\cos\delta_{SA}\cos(\alpha_{SA}-\theta_1)\cos\theta_2+\sin\delta_{SA}\sin\theta_2)$, $\cos(\alpha_{SA}-\theta_1) = \frac{\sin\theta_3-\sin\delta_{SA}\sin\theta_2}{\cos\delta_{SA}\cos\theta_2}$, $\cos\delta_{SA}\sin(\alpha_{SA}-\theta_1) > 0$, $\sin(\alpha_{SA}-\theta_1) > 0$, $\theta_1 = \alpha_{SA} - \arccos(\frac{\sin\theta_3-\sin\delta_{SA}\sin\theta_2}{\cos\delta_{SA}\cos\theta_2})$.

A: $(\cos\delta_A\cos(\alpha_A-\theta_1)\sin\theta_2-\sin\delta_A\cos\theta_2)e_{dix}+\cos\delta_A\sin(\alpha_A-\theta_1)e_{diy}+(\cos\delta_A\cos(\alpha_A-\theta_1)\cos\theta_2 + \sin\delta_A\sin\theta_2)e_{diz}$.