$$o_{i'k} = \begin{bmatrix} o_{1'1} & o_{1'2} & o_{1'3} \\ o_{2'1} & o_{2'2} & o_{2'3} \\ o_{3'1} & o_{3'2} & o_{3'3} \end{bmatrix} = \begin{bmatrix} \boldsymbol{e}'_1 \bullet \boldsymbol{e}_1 & \boldsymbol{e}'_1 \bullet \boldsymbol{e}_2 & \boldsymbol{e}'_1 \bullet \boldsymbol{e}_3 \\ \boldsymbol{e}'_2 \bullet \boldsymbol{e}_1 & \boldsymbol{e}'_2 \bullet \boldsymbol{e}_2 & \boldsymbol{e}'_2 \bullet \boldsymbol{e}_3 \\ \boldsymbol{e}'_3 \bullet \boldsymbol{e}_1 & \boldsymbol{e}'_3 \bullet \boldsymbol{e}_2 & \boldsymbol{e}'_3 \bullet \boldsymbol{e}_3 \end{bmatrix} = \begin{bmatrix} \cos\measuredangle(\boldsymbol{e}'_1, \boldsymbol{e}_1) & \cos\measuredangle(\boldsymbol{e}'_1, \boldsymbol{e}_2) & \cos\measuredangle(\boldsymbol{e}'_1, \boldsymbol{e}_3) \\ \cos\measuredangle(\boldsymbol{e}'_2, \boldsymbol{e}_1) & \cos\measuredangle(\boldsymbol{e}'_2, \boldsymbol{e}_2) & \cos\measuredangle(\boldsymbol{e}'_2, \boldsymbol{e}_3) \\ \cos\measuredangle(\boldsymbol{e}'_3, \boldsymbol{e}_1) & \cos\measuredangle(\boldsymbol{e}'_3, \boldsymbol{e}_2) & \cos\measuredangle(\boldsymbol{e}'_3, \boldsymbol{e}_3) \end{bmatrix}$$

$$\left(o_{i'k}\right)^{\mathsf{T}} = \begin{bmatrix} o_{1'1} & o_{2'1} & o_{3'1} \\ o_{1'2} & o_{2'2} & o_{3'2} \\ o_{1'3} & o_{2'3} & o_{3'3} \end{bmatrix} = \begin{bmatrix} \boldsymbol{e}'_1 \bullet \boldsymbol{e}_1 & \boldsymbol{e}'_2 \bullet \boldsymbol{e}_1 & \boldsymbol{e}'_3 \bullet \boldsymbol{e}_1 \\ \boldsymbol{e}'_1 \bullet \boldsymbol{e}_2 & \boldsymbol{e}'_2 \bullet \boldsymbol{e}_2 & \boldsymbol{e}'_3 \bullet \boldsymbol{e}_2 \\ \boldsymbol{e}'_1 \bullet \boldsymbol{e}_3 & \boldsymbol{e}'_2 \bullet \boldsymbol{e}_3 & \boldsymbol{e}'_3 \bullet \boldsymbol{e}_3 \end{bmatrix} = \begin{bmatrix} \cos\measuredangle(\boldsymbol{e}'_1, \boldsymbol{e}_1) & \cos\measuredangle(\boldsymbol{e}'_2, \boldsymbol{e}_1) & \cos\measuredangle(\boldsymbol{e}'_3, \boldsymbol{e}_1) \\ \cos\measuredangle(\boldsymbol{e}'_1, \boldsymbol{e}_2) & \cos\measuredangle(\boldsymbol{e}'_2, \boldsymbol{e}_2) & \cos\measuredangle(\boldsymbol{e}'_3, \boldsymbol{e}_2) \\ \cos\measuredangle(\boldsymbol{e}'_1, \boldsymbol{e}_3) & \cos\measuredangle(\boldsymbol{e}'_2, \boldsymbol{e}_3) & \cos\measuredangle(\boldsymbol{e}'_3, \boldsymbol{e}_3) \end{bmatrix}$$