

Longitude : λ . Latitude : ϕ .

$$X' = \frac{\cos(\phi) \times \cos(\lambda)}{1 + \sin(\phi)}$$

$$Y' = \frac{\cos(\phi) \times \sin(\lambda)}{1 + \sin(\phi)}$$

$$dX' = -\frac{+\cos(\lambda) \times d\phi + \sin(\lambda) \times \cos(\phi) \times d\lambda}{1 + \sin(\phi)}$$

$$dY' = +\frac{-\sin(\lambda) \times d\phi + \cos(\lambda) \times \cos(\phi) \times d\lambda}{1 + \sin(\phi)}$$

$$dX = \cos(\phi) \times d\lambda$$

$$dY = d\phi$$

$$\begin{bmatrix} dX' \\ dY' \end{bmatrix} = \frac{1}{1 + \sin(\phi)} \times \begin{bmatrix} +\sin(\lambda) & +\cos(\lambda) \\ +\cos(\lambda) & -\sin(\lambda) \end{bmatrix} \times \begin{bmatrix} dX \\ dY \end{bmatrix}$$