

GREENWICH  
MERIDIAN

$$\theta = 0$$
$$\varphi \in \left(-\frac{\pi}{2}, \frac{\pi}{2}\right)$$

$$N = (0, 0, 1)$$

DATE LINE

$$\theta = \pi$$
$$\varphi \in \left(-\frac{\pi}{2}, \frac{\pi}{2}\right)$$

EQUATOR  
LINE

$$\varphi = 0$$
$$\theta \in (-\pi, \pi)$$

$$S = (0, 0, -1)$$

