Coriolis Parameter

The rotation rate of the earth Ω is (in radians per second)

$$\Omega = 7.292\,1150 \; x \; 10^{-5} \; \text{s}^{-1}, \tag{D.1}$$

(Groten (2004)) and the Coriolis parameter f is (in radians per second)

$$f = 2\Omega \sin\phi = 1.458\,423\,00 \; x10^{-4} \sin\phi \; \text{s}^{-1}, \tag{D.2}$$

where ϕ is latitude (ϕ has opposite signs in the two hemispheres).