Coriolis Parameter

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

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

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

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

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