Coriolis Parameter

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

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

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

$$f = 2\Omega \sin\phi = 1.458\ 423\ 00\ x\ 10^{-4}\sin\phi\ s^{-1},\tag{D.2}$$

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