## Coriolis Parameter

The rotation rate of the earth $\Omega$ is (in radians per second)

$$
\begin{equation*}
\Omega=7.2921150 \times 10^{-5} \mathrm{~s}^{-1}, \tag{D.1}
\end{equation*}
$$

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

$$
\begin{equation*}
f=2 \Omega \sin \phi=1.45842300 \times 10^{-4} \sin \phi \mathrm{~s}^{-1} \tag{D.2}
\end{equation*}
$$

where $\phi$ is latitude ( $\phi$ has opposite signs in the two hemispheres).

