## 2.10 Entropy

The specific entropy of seawater  $\eta$  is given by

$$\eta = \eta \left( S_{\mathbf{A}}, t, p \right) = -g_T = -\partial g / \partial T \big|_{S_{\mathbf{A}}, p}. \tag{2.10.1}$$

When taking derivatives with respect to  $in\ situ$  temperature, the symbol T will be used for temperature in order that these derivatives not be confused with time derivatives.

Entropy  $\eta$  has units of J kg<sup>-1</sup> K<sup>-1</sup> in both the SIA and GSW computer libraries.